



## Electronic Service Manuals

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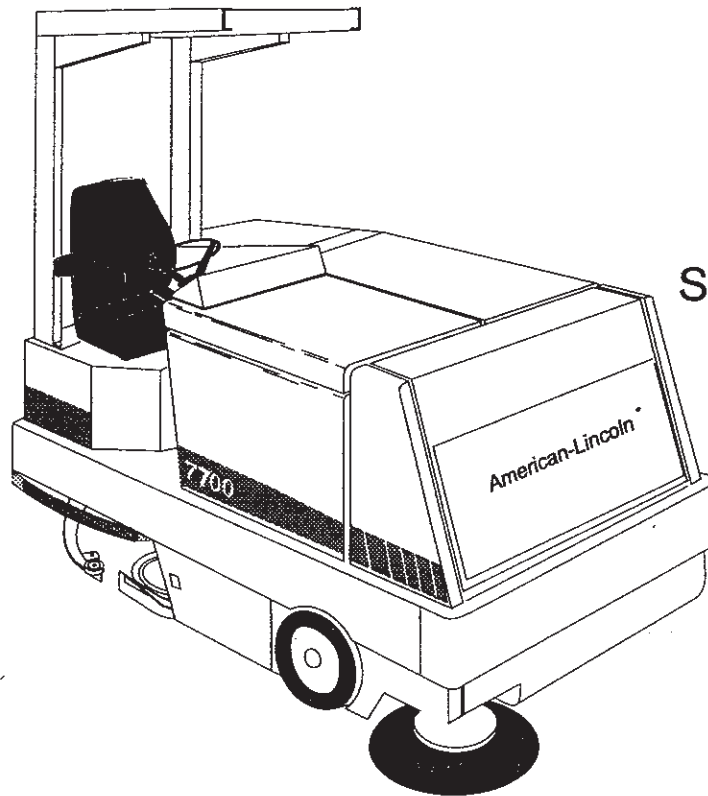
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## AMERICAN-LINCOLN TECHNOLOGY

Operator's Manual  
Instruction Book  
and Parts List



Model 7700  
Sweeper/scrubber

Beginning with Serial No. 751382

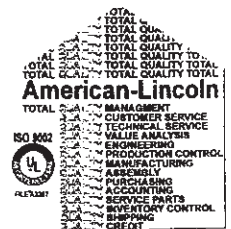
### READ THIS BOOK

This book has important information for the use and safe operation of this machine. Failure to read this book prior to operating or attempting any service or maintenance procedure to your machine could result in injury to you or to other personnel; damage to the machine or to other property could occur as well. you must have training in the operation of this machine before using it. If you or your operator (s) cannot read English, have this manual explained fully before attempting to operate this machine.

Si Ud. o sus operadores no pueden leer el Inglés, se hacen explicar este manual completamente antes de tratar el manejo o servicio de esta máquina.

All directions given in this book are as seen from the operator's position at the rear of the machine.

For new books, write to: Alto U.S., Inc., 1100 Haskins Road, Bowling Green, Ohio 43402





## TABLE OF CONTENTS

|                                                   |             |
|---------------------------------------------------|-------------|
| <b>SPECIFICATIONS</b>                             | <b>1-5</b>  |
| <b>MACHINE DIMENSIONS</b>                         | <b>1-7</b>  |
| <b>STANDARD HARDWARE &amp; TORQUE VALUES</b>      | <b>1-8</b>  |
| <b>HYDRAULIC TORQUE REQUIREMENTS</b>              | <b>1-9</b>  |
| <b>DECIMAL - METRIC CONVERSION TABLE</b>          | <b>1-10</b> |
| <b>MACHINE OPERATION</b>                          | <b>1-11</b> |
| <b>SAFETY INSTRUCTIONS</b>                        | <b>1-12</b> |
| <b>OPERATION OF CONTROLS AND GAUGES</b>           | <b>1-13</b> |
| IGNITION SWITCH                                   | 1-13        |
| LIGHT SWITCH                                      | 1-13        |
| GLOW PLUG SWITCH                                  | 1-14        |
| HORN PUSH BUTTON                                  | 1-14        |
| CHECK ENGINE (WARNING LIGHT)                      | 1-14        |
| SIDE BROOM LIFT LEVER                             | 1-14        |
| MAIN BROOM SWITCH                                 | 1-15        |
| SIDE BROOM SWITCH                                 | 1-15        |
| DUST CONTROL SWITCH                               | 1-15        |
| FILTER SHAKER SWITCH                              | 1-15        |
| WATER TEMPERATURE GAUGE                           | 1-16        |
| HOUR METER                                        | 1-16        |
| FUEL GAUGE                                        | 1-16        |
| OIL PRESSURE GAUGE                                | 1-16        |
| VOLT METER                                        | 1-16        |
| SCRUB BRUSHES SWITCH                              | 1-16        |
| BRUSH ROTATION SWITCH                             | 1-17        |
| BRUSH PRESSURE SWITCH                             | 1-17        |
| SQUEEGEE BLADE SWITCH                             | 1-17        |
| HIGH RECOVERY WARNING LIGHT                       | 1-17        |
| LOW SOLUTION WARNING LIGHT                        | 1-17        |
| HOPPER LIFT                                       | 1-18        |
| HOPPER DUMP DOOR                                  | 1-18        |
| MANUAL DUMP HOPPER                                | 1-18        |
| SOLUTION CONTROL                                  | 1-18        |
| SWEEPING BROOM LIFT                               | 1-18        |
| TURN SIGNAL (OPTION)                              | 1-18        |
| THROTTLE                                          | 1-19        |
| CHOKE                                             | 1-19        |
| PARKING BRAKE                                     | 1-19        |
| FOOT BRAKE                                        | 1-19        |
| ACCELERATOR & DIRECTIONAL CONTROL PEDAL           | 1-20        |
| BACKUP ALARM SWITCH                               | 1-20        |
| SEAT ADJUSTMENT                                   | 1-20        |
| <b>CAMEL SYSTEM CONTROLS &amp; OPERATION</b>      | <b>1-21</b> |
| SOLUTION HIGH WARNING LIGHT                       | 1-21        |
| DETERGENT LOW WARNING LIGHT                       | 1-21        |
| DETERGENT FLOW KNOB                               | 1-21        |
| HOPPER SAFETY LOCK ARM                            | 1-21        |
| THE SCRUBBING SYSTEM - HOW IT WORKS               | 1-22        |
| NON-RECYCLING SCRUBBING SYSTEM - HOW IT WORKS     | 1-22        |
| RECOVERY OR CAMEL SYSTEM - HOW IT WORKS           | 1-23        |
| THE SWEEPING & DUST CONTROL SYSTEM - HOW IT WORKS | 1-25        |
| <b>OPERATING INSTRUCTIONS</b>                     | <b>1-27</b> |
| FILLING THE SOLUTION TANK - STANDARD              | 1-27        |
| FILLING THE SOLUTION TANK - CAMEL                 | 1-27        |
| PRE-START CHECKLIST                               | 1-27        |
| BEFORE STARTING ENGINE                            | 1-27        |
| TO START ENGINE                                   | 1-27        |
| POST START CHECKLIST                              | 1-28        |
| TO TRANSPORT MACHINE                              | 1-28        |
| TO BEGIN CLEANING OPERATION                       | 1-28        |

## TABLE OF CONTENTS

|                                                   |             |
|---------------------------------------------------|-------------|
| TO STOP CLEANING OPERATION .....                  | 1-28        |
| POST OPERATION CHECKLIST .....                    | 1-29        |
| TO DRAIN SOLUTION TANK - CAMEL .....              | 1-29        |
| TO CLEAN SOLUTION TANK - CAMEL .....              | 1-29        |
| TO DRAIN RECOVERY TANK .....                      | 1-30        |
| TO CLEAN RECOVERY TANK .....                      | 1-30        |
| DOUBLE LID RECOVERY TANK .....                    | 1-30        |
| OIL COOLER .....                                  | 1-30        |
| EMPTYING THE DEBRIS HOPPER - VARIABLE DUMP .....  | 1-31        |
| EMPTYING THE DEBRIS HOPPER - MANUAL DUMP .....    | 1-31        |
| TOWING INSTRUCTIONS .....                         | 1-31        |
| <b>SERVICE CHART .....</b>                        | <b>1-32</b> |
| <b>HELPFUL HINTS FOR CLEANING OPERATION .....</b> | <b>1-34</b> |
| <b>GENERAL MACHINE MAINTENANCE .....</b>          | <b>1-35</b> |
| LUBRICATION .....                                 | 1-35        |
| HOW TO OPEN THE ENGINE COVER .....                | 1-35        |
| HYDRAULICS .....                                  | 1-36        |
| HOW TO FILL THE HYDRAULIC RESERVOIR .....         | 1-36        |
| HOW TO CLEAN THE HYDRAULIC SYSTEM .....           | 1-36        |
| HOW TO REPLACE THE RETURN FILTER ELEMENT .....    | 1-36        |
| HYDRAULIC SCHEMATIC - VARIABLE DUMP .....         | 1-37        |
| HYDRAULIC SCHEMATIC - MANUAL DUMP .....           | 1-38        |
| ENGINE .....                                      | 1-39        |
| TO REMOVE MAIN SWEEPING BROOM .....               | 1-39        |
| MAIN BROOM LEVEL ADJUSTMENT .....                 | 1-40        |
| HOW TO ADJUST MAIN BROOM WEAR PATTERN .....       | 1-40        |
| SIDE BROOM LEVEL ADJUSTMENT .....                 | 1-40        |
| SIDE BROOM REPLACEMENT .....                      | 1-40        |
| FLAPS .....                                       | 1-41        |
| SCRUB BRUSH REPLACEMENT .....                     | 1-42        |
| SPLASH SKIRTS .....                               | 1-42        |
| COVERS AND LATCHES .....                          | 1-42        |
| SOLUTION WARNING LIGHT .....                      | 1-42        |
| RECOVERY WARNING LIGHT .....                      | 1-42        |
| SOLUTION CONTROL - STANDARD .....                 | 1-42        |
| SOLUTION CONTROL - CAMEL .....                    | 1-42        |
| RECYCLING PUMP & MOTOR - CAMEL .....              | 1-43        |
| RECYCLING PUMP & MOTOR - STORAGE .....            | 1-43        |
| SEPARATOR - CAMEL .....                           | 1-43        |
| SQUEEGEE .....                                    | 1-43        |
| RECOVERY TANK LID & TANK ACCESS .....             | 1-43        |
| BRAKE ADJUSTMENT .....                            | 1-44        |
| AIR INTAKE SYSTEM .....                           | 1-45        |
| AIR FILTER .....                                  | 1-45        |
| TO REPLACE THE AIR FILTER .....                   | 1-45        |
| REMOVING THE AIR FILTER ELEMENT .....             | 1-46        |
| CLEANING THE AIR FILTER ELEMENT .....             | 1-46        |
| INSPECTING THE AIR FILTER ELEMENT .....           | 1-46        |
| DUST CAP .....                                    | 1-46        |
| COOLING SYSTEM .....                              | 1-47        |
| COOLANT LEVEL .....                               | 1-47        |
| RADIATOR .....                                    | 1-47        |
| DRIVE BELTS .....                                 | 1-48        |
| BATTERY .....                                     | 1-48        |
| GAS TANK .....                                    | 1-48        |
| LP GAS SYSTEM .....                               | 1-49        |
| LP GAS VAPORIZER-REGULATOR QUICK CHECK .....      | 1-49        |
| LP GAS FUEL TANK .....                            | 1-49        |
| NEUTRAL ADJUSTMENT .....                          | 1-49        |
| <b>PARTS LEGEND .....</b>                         | <b>1-50</b> |

## TABLE OF CONTENTS

|                                                                   |             |
|-------------------------------------------------------------------|-------------|
| <b>TROUBLESHOOTING TABLE .....</b>                                | <b>1-51</b> |
| <b>SCHEMATIC DIAGRAM OPTIONS .....</b>                            | <b>1-52</b> |
| <b>ORDERING PARTS .....</b>                                       | <b>1-53</b> |
| <b>CHAPTER 2 TABLE OF CONTENTS.....</b>                           | <b>2-1</b>  |
| MAIN BROOM .....                                                  | 2-2         |
| MAIN BROOM LIFT LINKAGE .....                                     | 2-4         |
| SIDE BROOM (VARIABLE & LOW DUMPS) .....                           | 2-6         |
| BROOM AND BRUSH CHAMBER DOOR .....                                | 2-8         |
| HOPPER SYSTEM (MANUAL DUMP) .....                                 | 2-10        |
| HOPPER (LOW DUMP) .....                                           | 2-12        |
| HOPPER AND FLAPS (VARIABLE DUMP) .....                            | 2-14        |
| HOPPER FILTER AND IMPELLER .....                                  | 2-16        |
| HOPPER CONTROL VALVE & DUMP LINKAGE (VARIABLE DUMP) .....         | 2-18        |
| HOPPER CONTROL VALVE & DUMP LINKAGE (LOW DUMP) .....              | 2-19        |
| SCRUB DECK AND BRUSHES .....                                      | 2-20        |
| SQUEEGEE LIFT .....                                               | 2-22        |
| SOLUTION TANK .....                                               | 2-24        |
| SOLUTION FEED LINKAGE .....                                       | 2-26        |
| RECOVERY TANK .....                                               | 2-28        |
| RECOVERY TANK LID .....                                           | 2-30        |
| VACUUM MOTOR & FLOAT .....                                        | 2-32        |
| FRONT WHEEL AND BRAKE .....                                       | 2-34        |
| REAR WHEEL .....                                                  | 2-36        |
| BRAKE LINKAGE .....                                               | 2-38        |
| FORWARD/REVERSE CONTROL - FORD .....                              | 2-40        |
| FORWARD/REVERSE CONTROL - PERKINS .....                           | 2-42        |
| MAIN FRAME .....                                                  | 2-44        |
| DRIVER COMPARTMENT .....                                          | 2-46        |
| HYDRAULIC HOSE SYSTEM (MANUAL DUMP) .....                         | 2-48        |
| HYDRAULIC HOSE SYSTEM (LOW DUMP) .....                            | 2-50        |
| HYDRAULIC HOSE SYSTEM (VARIABLE DUMP) .....                       | 2-52        |
| SUCTION & RETURN HOSES (MANUAL DUMP) .....                        | 2-54        |
| SUCTION & RETURN HOSES (LOW DUMP) .....                           | 2-56        |
| MAIN BROOM AND FITTINGS .....                                     | 2-58        |
| SIDE BROOM AND FITTINGS .....                                     | 2-59        |
| SCRUB MOTORS & FITTINGS .....                                     | 2-60        |
| SQUEEGEE & SCRUB DECK CYLINDERS & FITTINGS .....                  | 2-61        |
| POWER STEERING UNIT AND FITTINGS .....                            | 2-62        |
| POWER STEERING, HOPPER DUMP & HOPPER LIFT CYL'S. & FITTINGS ..... | 2-63        |
| REAR WHEEL MOTOR & FITTINGS .....                                 | 2-64        |
| DRIVE PUMP & FITTINGS .....                                       | 2-65        |
| HYDRAULIC RESERVOIR, FILTER & FITTINGS .....                      | 2-66        |
| VACUUM MOTOR & FITTINGS .....                                     | 2-68        |
| DUST CONTROL IMPELLER AND FITTINGS .....                          | 2-69        |
| MAIN CONTROL VALVE AND FITTINGS .....                             | 2-70        |
| CYLINDER CONTROL VALVE AND FITTINGS .....                         | 2-71        |
| RETURN MANIFOLD AND FITTINGS .....                                | 2-72        |
| OIL COOLER & FITTINGS .....                                       | 2-74        |
| AUXILIARY PUMP & FITTINGS .....                                   | 2-75        |
| AUXILIARY PUMP & FITTINGS FORD .....                              | 2-76        |
| AUXILIARY PUMP & FITTINGS PERKINS .....                           | 2-77        |
| BATTERY .....                                                     | 2-78        |
| ENGINE COVER .....                                                | 2-80        |
| FORD 425 ENGINE .....                                             | 2-82        |
| LP FORD ENGINE .....                                              | 2-84        |
| PERKINS DIESEL ENGINE .....                                       | 2-86        |
| THROTTLE CHOKE AND FUEL PUMP .....                                | 2-88        |
| FUEL TANK .....                                                   | 2-89        |
| LP TANK SYSTEM .....                                              | 2-90        |
| FUEL AND WATER EXTRACTOR (DIESEL) .....                           | 2-92        |

## TABLE OF CONTENTS

|                                                     |       |
|-----------------------------------------------------|-------|
| AIR INTAKE (FORD) .....                             | 2-94  |
| AIR INTAKE (PERKINS) .....                          | 2-96  |
| RADIATOR AND SHROUD .....                           | 2-97  |
| EXHAUST SYSTEM (GAS AND LP FORD) .....              | 2-98  |
| EXHAUST SYSTEM (DIESEL PERKINS) .....               | 2-99  |
| STEERING AND INSTRUMENT PANEL .....                 | 2-100 |
| INSTRUMENT PANEL .....                              | 2-102 |
| INSTRUMENT PANEL (MANUAL DUMP) .....                | 2-104 |
| WIRING - FORD 425 (MANUAL DUMP) .....               | 2-106 |
| WIRING - PERKINS (MANUAL DUMP) .....                | 2-108 |
| WIRING - FORD 425 (VARIABLE DUMP) .....             | 2-110 |
| WIRING - PERKINS (VARIABLE DUMP) .....              | 2-112 |
| DECALS .....                                        | 2-114 |
| CHAPTER 3 TABLE OF CONTENTS .....                   | 3-1   |
| NOTES .....                                         | 3-2   |
| ELECTRICAL SCHEMATIC (GAS - VARIABLE DUMP) .....    | 3-3   |
| ELECTRICAL SCHEMATIC (DIESEL - VARIABLE DUMP) ..... | 3-4   |
| ELECTRICAL SCHEMATIC (GAS - MANUAL DUMP) .....      | 3-5   |
| ELECTRICAL SCHEMATIC (DIESEL - MANUAL DUMP) .....   | 3-6   |
| CONNECTION DIAGRAM (GAS - VARIABLE DUMP) .....      | 3-7   |
| CONNECTION DIAGRAM (DIESEL - VARIABLE DUMP) .....   | 3-8   |
| CONNECTION DIAGRAM (GAS - MANUAL DUMP) .....        | 3-9   |
| CONNECTION DIAGRAM (DIESEL - MANUAL DUMP) .....     | 3-10  |
| BROOM OPTIONS .....                                 | 3-11  |
| SIDE BROOM OPTION (MANUAL DUMP) .....               | 3-12  |
| BRUSH OPTIONS .....                                 | 3-14  |
| CENTER SQUEEGEES .....                              | 2-16  |
| SIDE SQUEEGEES .....                                | 3-18  |
| OVERHEAD GUARD .....                                | 3-19  |
| BACK-UP ALARM .....                                 | 3-20  |
| LIGHTS OPTIONS .....                                | 3-21  |
| TURN SIGNAL .....                                   | 3-22  |
| WARNING LIGHTS (STANDARD) .....                     | 3-24  |
| WARNING LIGHTS with OVERHEAD GUARD .....            | 3-26  |
| FIRE EXTINGUISHER OPTION .....                      | 3-28  |
| FLAME ARRESTING GAS CAP .....                       | 3-29  |
| SAFETY AIR CLEANER .....                            | 3-30  |
| DEBRIS BASKET OPTION .....                          | 3-31  |
| DETERGENT METERING PUMP (CAMEL) .....               | 3-32  |
| SOLUTION TANK (CAMEL) .....                         | 3-34  |
| RECOVERY TANK (CAMEL) .....                         | 3-36  |
| RECOVERY SYSTEM (CAMEL) .....                       | 3-38  |
| INSTRUMENT PANEL (CAMEL) .....                      | 3-40  |
| WIRING (CAMEL) .....                                | 3-42  |
| ENGINE SHUTDOWN (FORD) .....                        | 3-44  |
| ENGINE SHUTDOWN (PERKINS) .....                     | 3-46  |
| SUSPENSION SEAT .....                               | 3-48  |
| TIRE OPTIONS .....                                  | 3-49  |
| VACUUM WAND .....                                   | 3-50  |
| WET SWEEP BYPASS .....                              | 3-51  |
| SPARE PARTS KIT (GAS/L - MANUAL) .....              | 3-52  |
| SPARE PARTS KIT (DIESEL - MANUAL) .....             | 3-53  |
| SPARE PARTS KIT (GAS/LP - VARIABLE) .....           | 3-54  |
| SPARE PARTS KIT (DIESEL - VARIABLE) .....           | 3-55  |
| INDEX .....                                         | 3-56  |
| WARRANTY .....                                      | 3-60  |

**DIMENSIONS**

|                   |                          |
|-------------------|--------------------------|
| Length            | 101.5 Inches - 257.8 cm. |
| Width             | 59.0 Inches - 149.9 cm.  |
| Height            | 61.5 Inches - 156.2 cm.  |
| Wheel Base        | 56.4 Inches - 143.2 cm.  |
| Height With Guard | 85.5 Inches - 217.2 cm.  |

**DRIVES**

|                        |                                                    |
|------------------------|----------------------------------------------------|
| Propelling             | Variable Displacement Pump - Hydraulic Drive Motor |
| Sweeping               | (1) Hydraulic Motor                                |
| Scrubbing              | (3) Hydraulic Motors                               |
| Vacuum - Water Pick Up | (1) Hydraulic Motor                                |

**HYDRAULIC CONTROL**

Single foot pedal controls forward, neutral, reverse & dynamic braking.  
All electro-hydraulic controls to both sweeping and scrubbing functions.

**MECHANICAL SYSTEM**

|          |                                              |
|----------|----------------------------------------------|
| Steering | Power Steering with Rack and Pinion Gear.    |
| Brakes   | Parking/Foot Operated and Locked Disc Brakes |
| Brooms   | Lift and Height Adjustment                   |

**SWEEPING SYSTEM**

|            |                                                                                                                                                                                                                        |
|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Type       | Direct Throw                                                                                                                                                                                                           |
| Hopper     | 1200 Lbs. - 544 Kg. (Variable and Low Dump)                                                                                                                                                                            |
| Main Broom | 50 Inches Long X 14 Inch Diameter - 127 cm. X 35.6 cm.<br>3.25 Inch Bristle Length - 8.3 cm.<br>Features Broom Lift and Adjustable Broom Height for wear Compensation, Standard Poly-Fiber Broom, Quick Change System. |

**BRUSHES & SQUEEGEE**

|           |                                                                                                                                                         |
|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| Brush     | (3) 17 Inch (43.2 Cm.) Diameter Poly-Fiber Discs                                                                                                        |
| Squeegees | (1) 53 Inch (134.6 Cm.) Wide Contoured Rear Squeegee with<br>(2) 29 Inch (73.7 Cm.) Floating Squeegees, One On Either Side of the Scrubbing Compartment |

**TANK CAPACITY (Standard)**

|                                         |
|-----------------------------------------|
| 100 Gallon (378.5 Liters) Solution Tank |
| 100 Gallon (375.5 Liters) Recovery Tank |

**TANK CAPACITY (Camel System)**

Interconnected Tanks Provide A Total Camel System Capacity of 190 Gallons (719 Liters) Along With 5 Gallons (18.9 Liters) Of Detergent.

**FUEL SYSTEM**

|                              |                                                          |
|------------------------------|----------------------------------------------------------|
| <b>Engine Cooling System</b> | Radiator And Hoses (Approximately) 3 Quarts (2.8 Liters) |
| Gas/LP System Total          | 6.75 Quarts - 6.4 Liters                                 |
| Diesel System Total          | 6.6 Quarts - 6.2 Liters                                  |
| Gas, Diesel Fuel Tank        | 9.7 Gallons - 36.71 Liters                               |
| LPG Tank                     | 33 Pounds                                                |
| <b>Engine Oil System</b>     |                                                          |
| Gas And LPG                  | 4 Quarts - 3.8 Liters                                    |
| Diesel                       | 5 Quarts - 4.7 Liters                                    |
| <b>Hydraulic System</b>      |                                                          |
| Total System                 | 11 Gallons - 41.6 Liters                                 |

## SPECIFICATIONS

---

### SWEEPING WIDTH

50 Inch (125.0 Cm.) Sweeping  
60 Inch (152.4 Cm.) Sweeping with Side Broom

### SPEEDS

Maximum Travel 7 Mph - 11.3 Km./Hr.

Recommended Maximum  
Sweeping And  
Scrubbing Speed 4.0 Mph - 6.4 Km./Hr.

### TURNING RADIUS

Left 82 Inches - 208.3 cm.  
Right 82 Inches - 208.3 cm.  
Minimum Aisle Width For 180° Turn 120 Inches - 305 Cm.  
Scrubbing Width 50 Inches (127 cm.) Provided by (3) 17 Inch (43.2 cm.)  
Diameter Disc Brushes

### WEIGHTS

#### 7700

Net  
Shipping W/ Crate

#### Variable Dump

4150 Lbs. - 1882 Kg.  
4600 Lbs. - 2087 Kg.

#### Manual Dump

3700 Lbs. - 1678 Kg.  
4150 Lbs. - 1882 Kg.

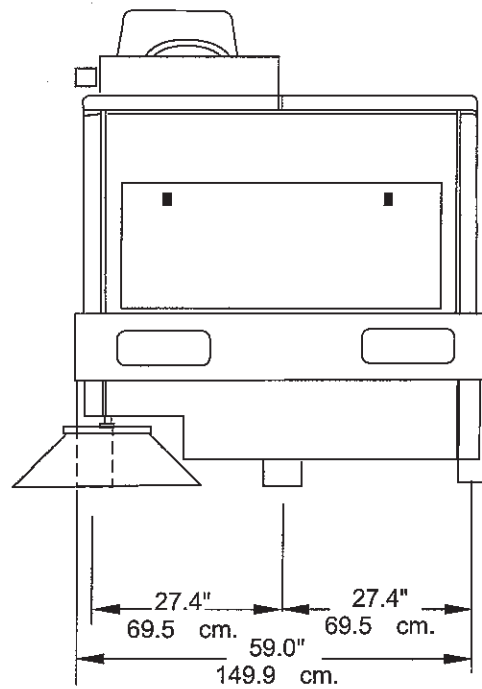
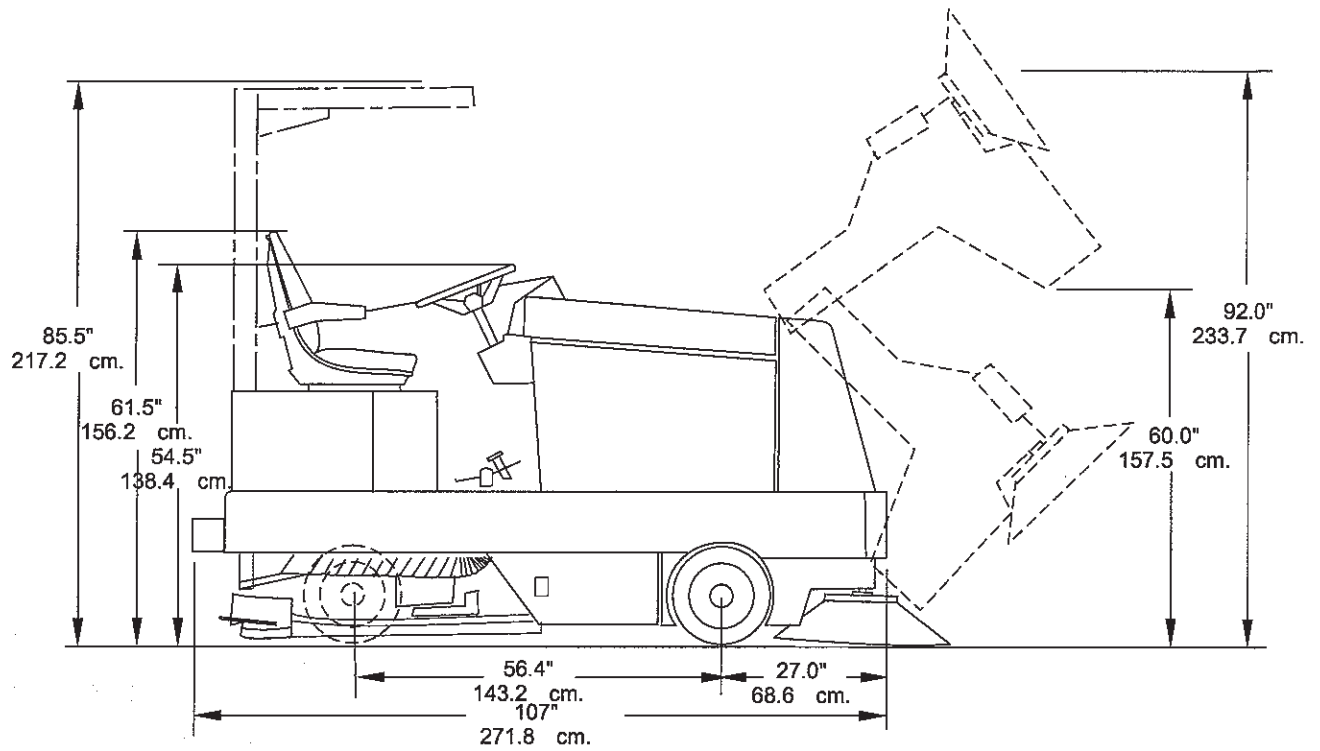
### ENGINE DATA

#### Ford LSG - 423

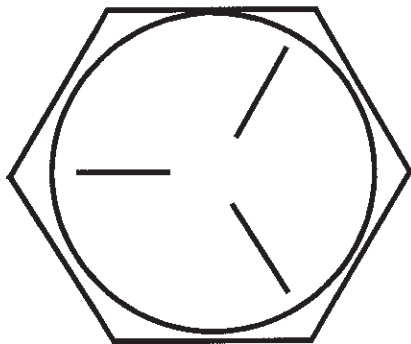
Bore And Stroke 3.78 X 3.126 In. - 9.60 X 7.94 Cm.  
Oil Capacity 4 Quarts - 3.8 Liters  
Displacement 4 Cylinders - 2.3 Liters (140 Cid)  
Fuel "Regular" Unleaded Gasoline

#### Perkins 104.19

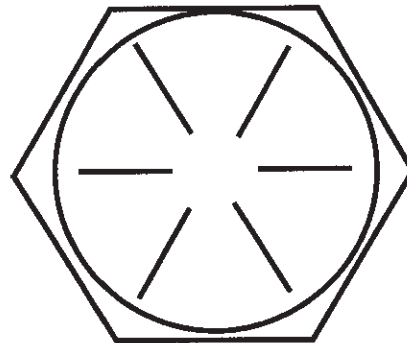
Bore And Stroke 8.307" X 3.543 (8.4 Cm X 9.0 Cm)  
Oil Capacity 6.5 Qts. (6.2 Liters)  
Displacement 4 Cylinders (2 Liters) (122 Cid)  
Fuel Oil Minimum Cetane Number 40



## BOLT IDENTIFICATION



SAE - Grade 5



SAE - Grade 8

| Screw Size | Grade 5 Plated |     | Grade 8 Plated |     | 410H Stainless |     | Brass | Type F & T & BT |     | Type B, AB |
|------------|----------------|-----|----------------|-----|----------------|-----|-------|-----------------|-----|------------|
|            | C              | F   | C              | F   | C              | F   |       | C               | F   |            |
| *6         | 14             | 15  | -              | -   | 18             | 20  | 5     | 20              | 23  | 21         |
| *8         | 27             | 28  | -              | -   | 33             | 35  | 9     | 37              | 41  | 34         |
| *10        | 39             | 43  | -              | -   | 47             | 54  | 13    | 49              | 64  | 49         |
| *1/4       | 86             | 108 | 130            | 151 | 114            | 132 | 32    | 120             | 156 | 120        |
| 5/16       | 15             | 17  | 22             | 24  | 19             | 22  | 6     | -               | -   | -          |
| 3/8        | 28             | 31  | 40             | 44  | 34             | 39  | 10    | -               | -   | -          |
| 7/16       | 44             | 49  | 63             | 70  | 55             | 62  | 16    | -               | -   | -          |
| 1/2        | 68             | 76  | 95             | 108 | 85             | 95  | -     | -               | -   | -          |
| 9/16       | 98             | 110 | 138            | 155 | -              | -   | -     | -               | -   | -          |
| 5/8        | 135            | 153 | 191            | 216 | -              | -   | -     | -               | -   | -          |
| 3/4        | 239            | 267 | 338            | 378 | -              | -   | -     | -               | -   | -          |
| 7/8        | 387            | -   | 545            | -   | -              | -   | -     | -               | -   | -          |
| 1          | 579            | -   | 818            | -   | -              | -   | -     | -               | -   | -          |

C = Coarse Thread

F = Fine Thread

\* = Torque values for #6 through 1/4 are lb./in. All others are lb./ft.

### NOTE

Decrease the torque by 20% when using thread lubricant  
The torque tolerance is  $\pm$  on torque values.

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C2000/9905

## HYDRAULIC TORQUE REQUIREMENTS

### HYDRAULIC TORQUE REQUIREMENTS

Refer to the following chart for torque values on all hydraulic hoses and fittings.

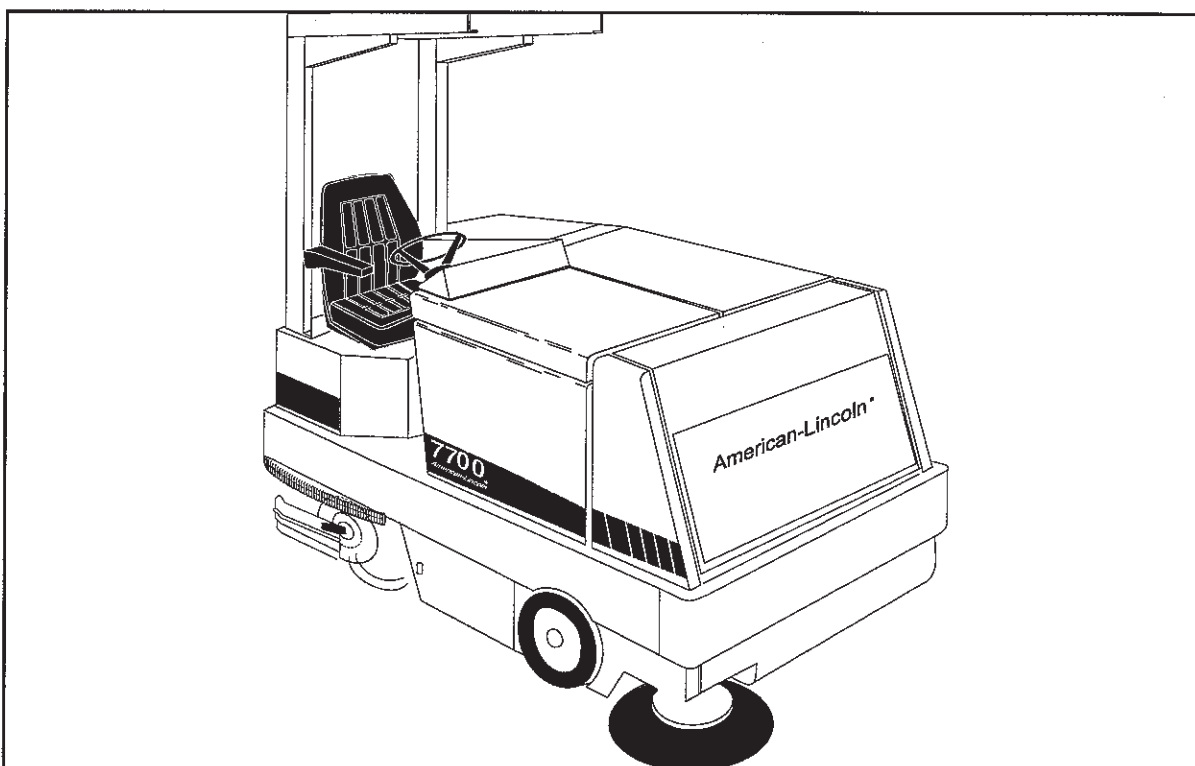
| Nominal<br>SAE<br>Dash<br>Size                                                                                                             | O-Ring Face Seal End   |                         | SAE O-Ring Boss End    |                                      |
|--------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-------------------------|------------------------|--------------------------------------|
|                                                                                                                                            | Thread<br>Size<br>Inch | Swivel<br>Nut<br>Torque | Thread<br>Size<br>Inch | Str. Fitting<br>or Locknut<br>Torque |
|                                                                                                                                            |                        | LB-FT                   |                        | LB-FT                                |
| -3                                                                                                                                         | *                      | *                       | 3/8-24                 | 8-10                                 |
| -4                                                                                                                                         | 9/16-18                | 10-12                   | 7/16-20                | 14-16                                |
| -5                                                                                                                                         | *                      | *                       | 1/2-20                 | 18-20                                |
| -6                                                                                                                                         | 11/16-16               | 18-20                   | 9/16-18                | 24-25                                |
| -8                                                                                                                                         | 13/16-16               | 32-35                   | 3/4-16                 | 50-60                                |
| -10                                                                                                                                        | 1-14                   | 46-50                   | 7/8-14                 | 72-80                                |
| -12                                                                                                                                        | 1 3/16-12              | 65-70                   | 1 1/16-12              | 125-135                              |
| -14                                                                                                                                        | 1 3/16-12              | 65-70                   | 1 3/16-12              | 160-180                              |
| -16                                                                                                                                        | 1 7/16-12              | 92-100                  | 1 5/16-12              | 200-220                              |
| -20                                                                                                                                        | 1 11/16-12             | 125-140                 | 1 5/8-12               | 210-280                              |
| -24                                                                                                                                        | 2-12                   | 150-165                 | 1 7/8-12               | 270-360                              |
| * O-Ring face seal type end not defined for this tube size.                                                                                |                        |                         |                        |                                      |
| <p style="text-align: center;"><b>NOTE</b></p> <p style="text-align: center;"><b>Parts must be lightly oiled with hydraulic fluid.</b></p> |                        |                         |                        |                                      |

C-2002

# DECIMAL-METRIC CONVERSION TABLE

| FRACTION        | DECIMAL  | MILLIMETER | FRACTION        | DECIMAL  | MILLIMETER |
|-----------------|----------|------------|-----------------|----------|------------|
| $\frac{1}{64}$  | 0.015625 | 0.3969     | $\frac{33}{64}$ | 0.515625 | 13.0969    |
| $\frac{1}{32}$  | 0.03125  | 0.7938     | $\frac{17}{32}$ | 0.53125  | 13.4938    |
| $\frac{3}{64}$  | 0.046875 | 1.1906     | $\frac{35}{64}$ | 0.546875 | 13.8906    |
| $\frac{1}{16}$  | 0.0625   | 1.5875     | $\frac{9}{16}$  | 0.5625   | 14.2875    |
| $\frac{5}{64}$  | 0.078125 | 1.9844     | $\frac{37}{64}$ | 0.578125 | 14.6844    |
| $\frac{3}{32}$  | 0.09375  | 2.3813     | $\frac{19}{32}$ | 0.59375  | 15.0813    |
| $\frac{7}{64}$  | 0.109375 | 2.7781     | $\frac{39}{64}$ | 0.609375 | 15.4781    |
| $\frac{1}{8}$   | 0.125    | 3.1750     | $\frac{5}{8}$   | 0.625    | 15.8750    |
| $\frac{9}{64}$  | 0.140625 | 3.5719     | $\frac{41}{64}$ | 0.640625 | 16.2719    |
| $\frac{5}{32}$  | 0.15625  | 3.9688     | $\frac{21}{32}$ | 0.65625  | 16.6688    |
| $\frac{11}{64}$ | 0.171875 | 4.3656     | $\frac{43}{64}$ | 0.671875 | 17.0656    |
| $\frac{3}{16}$  | 0.1875   | 4.7625     | $\frac{11}{16}$ | 0.6875   | 17.4625    |
| $\frac{13}{64}$ | 0.203125 | 5.1594     | $\frac{45}{64}$ | 0.703125 | 17.8594    |
| $\frac{7}{32}$  | 0.21875  | 5.5563     | $\frac{23}{32}$ | 0.71875  | 18.2563    |
| $\frac{15}{64}$ | 0.234375 | 5.9531     | $\frac{47}{64}$ | 0.734375 | 18.6531    |
| $\frac{1}{4}$   | 0.25     | 6.3500     | $\frac{3}{4}$   | 0.75     | 19.0500    |
| $\frac{17}{64}$ | 0.265625 | 6.7469     | $\frac{49}{64}$ | 0.765625 | 19.4469    |
| $\frac{9}{32}$  | 0.28125  | 7.1438     | $\frac{25}{32}$ | 0.78125  | 19.8438    |
| $\frac{19}{64}$ | 0.296875 | 7.5406     | $\frac{51}{64}$ | 0.796875 | 20.2406    |
| $\frac{5}{16}$  | 0.3125   | 7.9375     | $\frac{13}{16}$ | 0.8125   | 20.6375    |
| $\frac{21}{64}$ | 0.328125 | 8.3344     | $\frac{53}{64}$ | 0.828125 | 21.0344    |
| $\frac{11}{32}$ | 0.34375  | 8.7313     | $\frac{27}{32}$ | 0.84375  | 21.4313    |
| $\frac{23}{64}$ | 0.359375 | 9.1281     | $\frac{55}{64}$ | 0.859375 | 21.8281    |
| $\frac{3}{8}$   | 0.375    | 9.5250     | $\frac{7}{8}$   | 0.875    | 22.2250    |
| $\frac{25}{64}$ | 0.390625 | 9.9219     | $\frac{57}{64}$ | 0.890625 | 22.6219    |
| $\frac{13}{32}$ | 0.40625  | 10.3188    | $\frac{29}{32}$ | 0.90625  | 23.0188    |
| $\frac{27}{64}$ | 0.421875 | 10.7156    | $\frac{59}{64}$ | 0.921875 | 23.4156    |
| $\frac{7}{16}$  | 0.4375   | 11.1125    | $\frac{15}{16}$ | 0.9375   | 23.8125    |
| $\frac{29}{64}$ | 0.453125 | 11.5094    | $\frac{61}{64}$ | 0.953125 | 24.2094    |
| $\frac{15}{32}$ | 0.46875  | 11.9063    | $\frac{31}{32}$ | 0.96875  | 24.6063    |
| $\frac{31}{64}$ | 0.484375 | 12.3031    | $\frac{63}{64}$ | 0.984375 | 25.0031    |
| $\frac{1}{2}$   | 0.5      | 12.7000    | $\frac{1}{1}$   | 1.0000   | 25.4000    |

C-2001/9907



P4723

FIGURE 1

YOUR 7700 MACHINE HAS BEEN SHIPPED COMPLETE, BUT DO NOT ATTEMPT TO OPERATE WITHOUT FOLLOWING THESE INSTRUCTIONS.

## PREPARING THE MACHINE FOR OPERATION

1. Connect and tighten battery cables.
2. Fill the tank with REGULAR GRADE gasoline. (Diesel fuel if equipped with diesel engine.)



## WARNING

**Never fill tank while engine is running. Always be sure gasoline container and sweeper are electrically connected before pouring gasoline. This can easily be done by providing an insulated wire (permanently attached to container) with battery clip on the other end.**

3. Check engine crankcase oil level. Although properly lubricated at factory, check before starting engine. No special break in oil is used and recommended number of operating hours before the initial oil change is the same as normal. See Maintenance.
4. Check radiator coolant level. Permanent type antifreeze is added at the factory to provide protection to approximately -35° F (37° C). To retain this protection level, always add 1/2 part water to 1/2 part antifreeze.
5. Check oil level in the hydraulic reservoir located at center of machine beside the engine. Oil fill level should be two (2) inches (5 cm.) below filler neck assembly. If oil is required, add HYDRAULIC FLUID ONLY, automatic transmission fluid FORD type "F". After the first 50 operating hours, service must be performed on your engine to insure future high performance and trouble free operation. See Maintenance.

## **SAFETY PRECAUTIONS**

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FOR SAFETY, OBSERVE THE FOLLOWING WARNINGS. FAILURE TO COMPLY MAY CREATE A SERIOUS RISK OF INJURY TO YOURSELF AND OTHERS. THIS MACHINE SHOULD NOT BE USED IN HAZARDOUS LOCATIONS INCLUDING AREAS OF VOLATILE DUST OR VAPOR CONCENTRATIONS.



### **WARNING**

**Operators must be trained, qualified and understand the operator's manual before starting.**

**Use caution when mounting or dismounting the machine particularly on wet slippery surfaces.**

**Operate only from the designated operators position. Keep inside the body of the machine. Keep hands and feet on the designated controls. Always operate in well lighted areas.**

**Do not dump the hopper over an open pit or dock. Do not dump the hopper when positioned on a grade (ramp). The machine must be level (horizontal).**

**The operator must exhibit extreme caution when negotiating, turning and traveling across grades or ramps.**

**Start, stop, change direction, travel and brake smoothly. Slow down when turning. Avoid uneven surfaces and loose materials.**

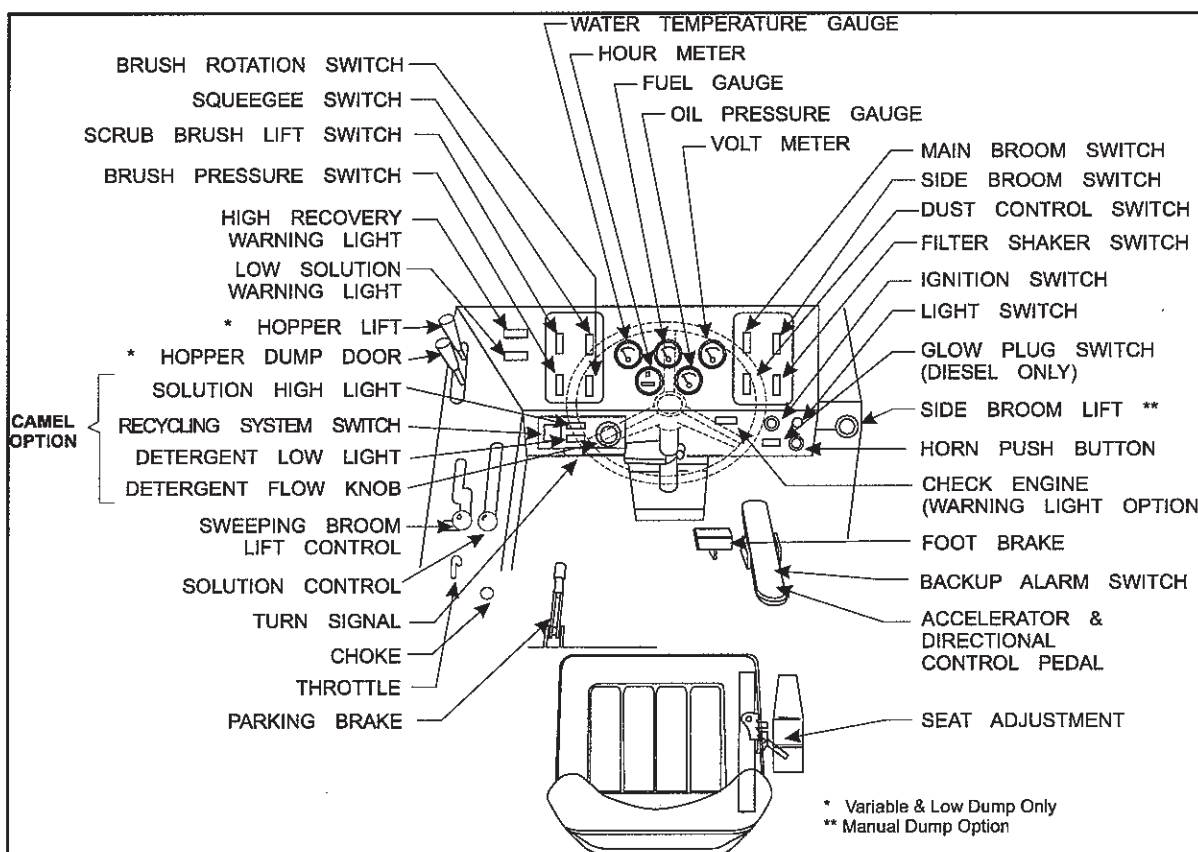
**Watch out for obstructions, especially overhead.**

**Carry no passengers of the machine.**

**Set parking brake when leaving the machine. Chock (block) the wheels if the machine is to be parked on a grade (ramp), or is to be worked on.**

**Never leave the operator's seat with the engine running.**

**Report damage or faulty operation immediately. Do not operate the machine until repairs have been completed.**



P4728

FIGURE 2

## IGNITION SWITCH

The keyed ignition switch is located to the right of the steering column on the front face of the instrument console. It has four positions.

1. The key turned to the center "OFF" position will shut off the engine. The following items can be activated in the "OFF" position.
  - (A.) Horn
  - (B.) Light Options
2. The key turned to the left "ACCESSORY" position will allow the following additional items to be activated:
  - (A.) Turn Signals
  - (B.) Instrument Gauges
3. The key turned to the right "IGN/ON" position will allow all the items listed above to be activated. This position will not start the engine.
4. The key turned to the far right "START" position will start the engine. This position is a momentary position. The key will revert to the "IGN/ON" position when it is released.

## LIGHT SWITCH

The light switch is located above the horn button to the right of the steering wheel. It will work various light options that are available for this machine, such as:

- \* HEAD LIGHTS
- \* TAIL LIGHTS
- \* INSTRUMENT LIGHTS

All gauges, with the exception of the hour meter can have an optional internal instrument light.

## OPERATION OF CONTROLS AND GAUGES

### GLOW PLUG SWITCH (Diesel)

It should be noted that in no circumstances should either or any other unauthorized starting aids be used at the same time as Glow Plugs. The Glow Plug Switch is located to the right of the steering column on the front face of the instrument console. To operate the following procedure should be adopted.

1. Before operating the starter motor, press the "GLOW PLUG" button for 20 to 30 seconds.
2. With the "GLOW PLUG" button still depressed, engage the starter motor until the engine starts.
3. Continue to press the "GLOW PLUG" button for a few seconds after the engine has started until even running has been obtained.
4. If the engine does not start, disengage the starter motor, but keep the "GLOW PLUG" button depressed for a further 10 to 15 seconds, when a further attempt should be made to start the engine, keeping the Glow Plugs energized while starting and for a few seconds after the engine has fired until it is running smoothly.

### HORN PUSH BUTTON

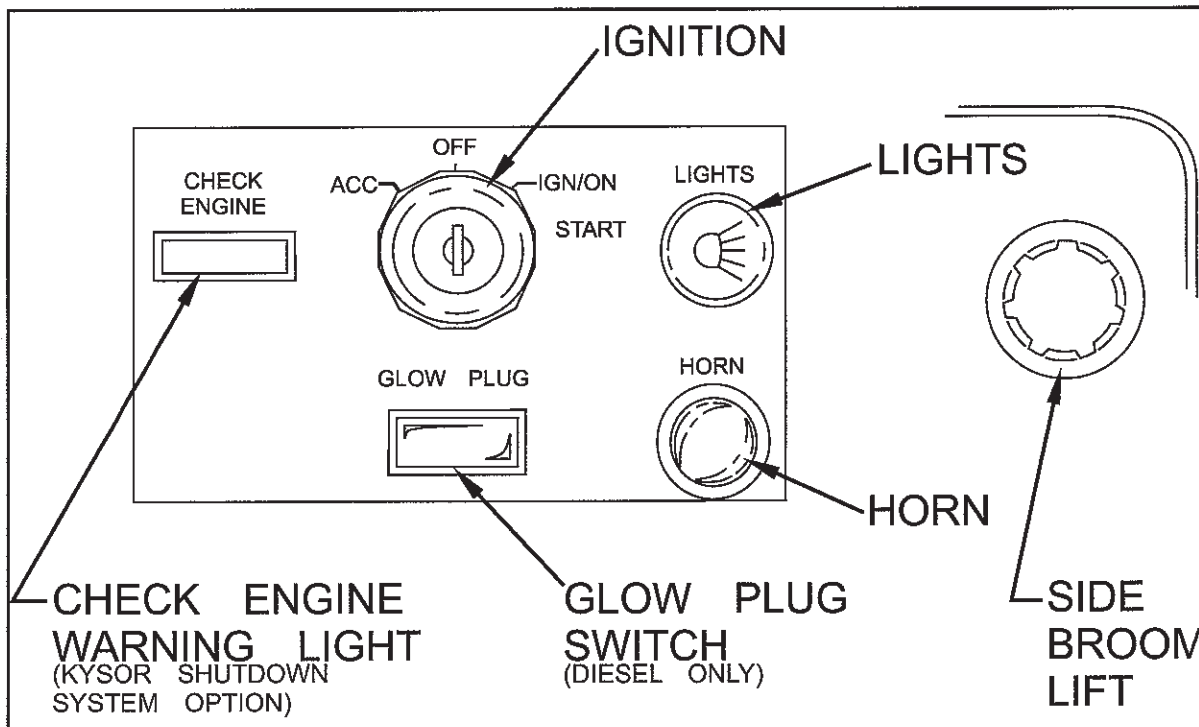
The horn button is located to the right of the steering column on the front face of instrument console. The horn button is always active. Push the horn button to sound the horn.

### CHECK ENGINE (WARNING LIGHT OPTION)

This engine has a low oil pressure and low water shutdown option. If the engine oil pressure or the water level drops too low, the engine will shut down. Add engine oil until the oil is brought up to the correct level, or water to the radiator to the correct level.

### SIDE BROOM LIFT (OPTIONAL FOR MANUAL DUMP)

The Side Broom Lift Lever is located to the right of the instrument console. The handle pulled back and turned to the right will raise the side broom and lock it in position.



P4853

FIGURE 3

### MAIN BROOM SWITCH

The Main Broom Switch is located on the console to the right of the steering wheel in the SWEEPING section. This switch will activate the Main Broom. This switch has two positions "ON" and "OFF". See Sweeping Broom Lift Control.

### SIDE BROOM SWITCH (Option For Manual Dump Machines)

The Side Broom Switch is located on the console to the right of the steering wheel in the SWEEPING section. This switch will activate the Side Broom. This switch has two positions "ON" and "OFF". See Side Broom Lift Control.

### DUST CONTROL SWITCH (Wet Sweep Bypass Option - Option for Manual Dump Machine)

The Dust Control Switch is located on the console to the right of the steering wheel in the SWEEPING section. This switch will activate the dust control system.

### FILTER SHAKER SWITCH (Variable and Low Dump Machines Only)

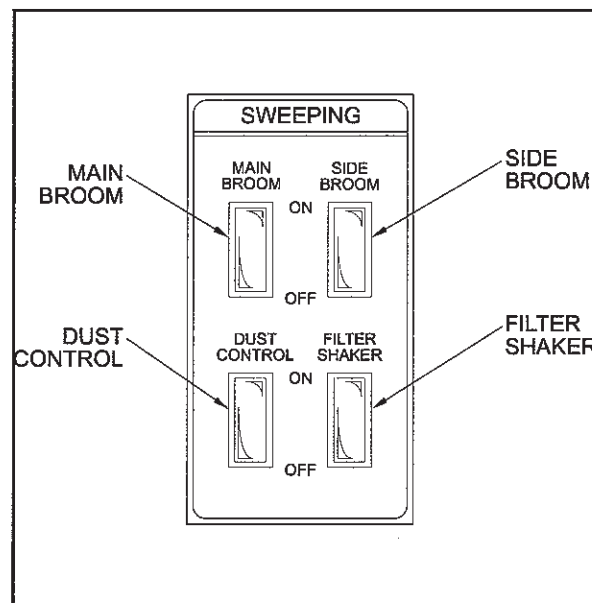
The Filter Shaker Switch is located on the console to the right of the steering wheel in the SWEEPING section.

#### NOTE - (Variable and Low Dump Machines Only)

**MAIN BROOM DRIVE LEVER MUST ALWAYS BE PLACED IN OFF POSITION BEFORE SHAKING FILTER. FAILURE TO DO SO WILL RESULT IN DUST REMAINING ON THE SURFACE OF THE FILTER ENVELOPES INSTEAD OF DROPPING INTO THE HOPPER.**

The button can be used when the ignition key is in the "ignition" position. The filter shaker control button is used during the sweeping cycle and the hopper unloading cycle. Use the filter shaker control button to remove dust from the filter. Use the following procedures to operate the filter shaker control button.

1. After the machine has made a long sweeping run, turn the broom switch to the "OFF" position.
2. Push the filter shaker control button for 5 to 15 seconds to allow the filter to unload.
3. Turn the broom switch to the "ON" position. Repeat this procedure after each long sweeping run.



P4862

FIGURE 4

#### NOTE - (Variable and Low Dump Machines Only)

The main broom, side broom, dust control and filter shaker turn off automatically when the hopper is dumping and/or the dump door is in a closed position. SEE HOPPER LIFT and HOPPER DUMP DOOR.

## OPERATION OF CONTROLS AND GAUGES

### WATER TEMPERATURE GAUGE

The Water Temperature Gauge is located on the console panel above the steering wheel in the gauge cluster. The gauge is mechanical and activated by a sender in the engine. It displays the engine coolant temperature in F.

### HOURL METER

The Hour Meter is located on the console panel above the steering wheel in the gauge cluster. This meter is activated when the key switch is in the "ignition" position. The meter indicates actual "run" time of the machine. The meter is used to indicate when maintenance should be done to the machine.

### FUEL GAUGE

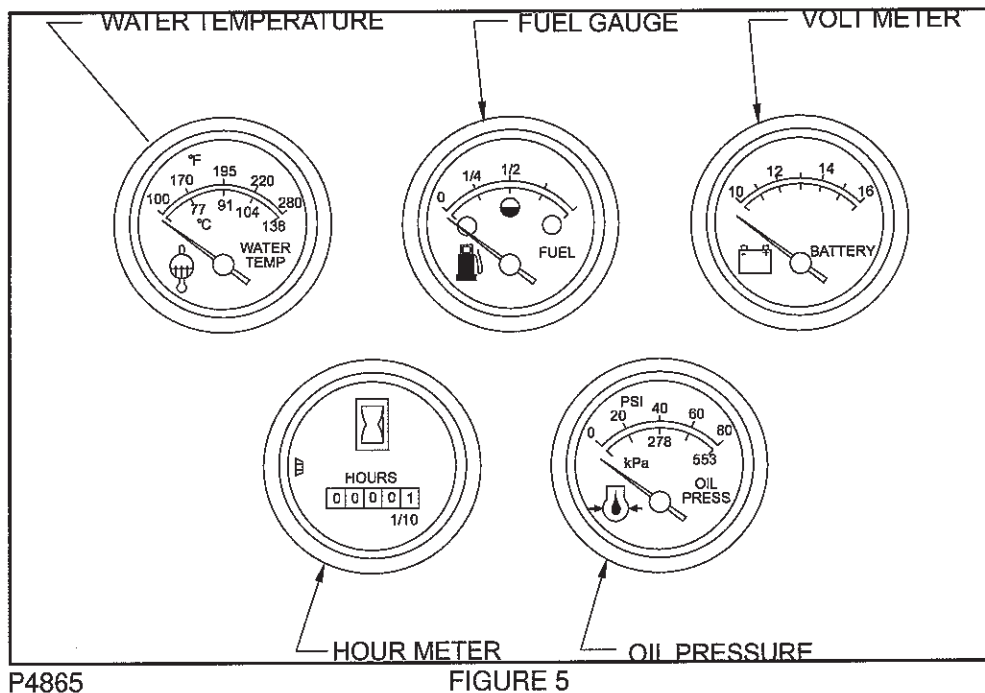
The Fuel Gauge is located on the console panel above the steering wheel in the gauge cluster. This gauge indicates the level of fuel contained in the fuel tank.

### OIL PRESSURE GAUGE

The Oil Pressure Gauge is located on the console panel above the steering wheel in the gauge cluster. The gauge is mechanical and activated by a sender in the engine. It displays the engine oil pressure in PSI.

### VOLT METER

The Volt Meter is located on the console panel above the steering wheel in the gauge cluster. The gauge indicates the charging or discharging of the battery.



P4865

FIGURE 5

### SCRUB BRUSHES SWITCH

The Brushes Switch is located on the console to the left of the steering wheel in the "SCRUBBING" section. This switch in the position marked "LOWER" will lower the scrub brush deck and activate the three scrub brushes. The Brush Rotation Switch and The Brush Pressure switch can not be activated unless this switch is in the "LOWER" position. This switch in the "RAISE" position will stop the brushes from rotating and raise the scrub brush deck.

### BRUSH ROTATION SWITCH

The Brush Rotation Switch is located on the console to the left of the steering wheel in the "SCRUBBING" section. This switch reverses the rotation of the scrub brushes. This switch has two positions "NORMAL" and "REVERSED". This switch can not be activated unless the Scrub Brush Lift Switch is in the "LOWER" position, the switch will light when activated.

### BRUSH PRESSURE SWITCH

The Brush Pressure Switch is located on the console to the left of the steering wheel in the "SCRUBBING" section. This switch applies additional downward pressure to the scrub brushes. This switch has two positions "NORMAL" and "HEAVY". This switch can not be activated unless the Scrub Brush Lift Switch is in the "LOWER" position, the switch will light when the switch can be activated.

### SQUEEGEE BLADE SWITCH

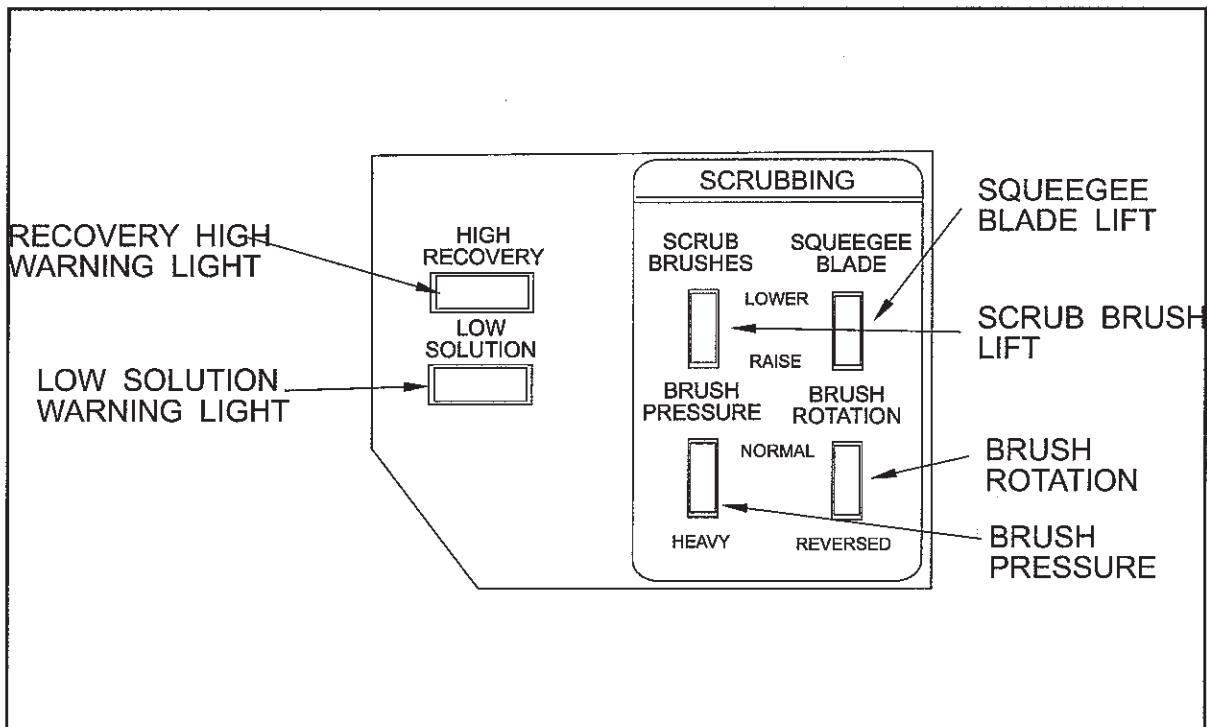
The Squeegee Blade Switch is located on the console to the left of the steering wheel in the "SCRUBBING" section. This switch in the position marked "LOWER" will lower the squeegee and activate the squeegee vacuum. This switch in the "RAISE" position will stop the squeegee vacuum and raise the squeegee. A switch activated by the forward-reverse foot pedal will automatically raise the squeegee if it is in the lowered position and the machine is in reverse.

### HIGH RECOVERY WARNING LIGHT

The High Recovery Warning Light is located on the console to the left of the steering wheel beside the "SCRUBBING" section. The recovery warning light will illuminate approximately 5 minutes before the recovery tank is full, giving ample time to complete the scrubbing cycle before the mechanical float shuts off the vacuum to the recovery tank.

### LOW SOLUTION WARNING LIGHT

The Low Solution Warning Light is located on the console to the left of the steering wheel beside the "SCRUBBING" section. The Solution Warning Light will illuminate when the solution tank is empty, marking the end of the scrubbing cycle.



## OPERATION OF CONTROLS AND GAUGES

### HOPPER LIFT - (Variable and Low Dump Machines Only)

The Hopper Lift Lever is located to the left of the steering wheel on the left side of the drivers compartment. This lever, which is marked "HOPPER", raises and lowers the debris hopper to facilitate unloading. .

### HOPPER DUMP DOOR - (Variable and Low Dump Machines Only)

The Hopper Dump Door Lever is located to the left of the steering wheel on the left of the drivers compartment. This lever opens and closes the hopper door. This lever is located below the Hopper Lift Door and is marked "DUMP DOOR".

### MANUAL DUMP HOPPER - (Manual Dump Hopper Only)

The Manual Dump Hopper Lever is located under the front bumper. To Dump debris, pull the Manual dump lever all the way to the position marked open. Leave the handle in the dump position and back the machine off the pile of debris. When clear of the debris, pull the manual dump lever to the position marked closed.

### SOLUTION CONTROL

To apply solution to the scrubbing brushes, push the solution control lever forward until the desired setting is reached. The solution rate is continuously variable from off to approximately 1-3/4 GPM at low and 3-1/2 GPM at high. To stop application of solution, pull back on the lever until it stops at the "off" position.

### NOTE

**For best results, discontinue application of solution 10 feet before making a 90 and 180 turn or stopping the machine.**

The solution warning light will illuminate when the solution tank is empty, marking the end of the scrubbing cycle.

### SWEETING BROOM LIFT CONTROL

The main broom lift control is located to the left of the drivers seat.

To lower the main broom, grasp the lever and pull back to clear the locking notch. Move the lever forward to the first or second notch in the elongated slot. The first notch, "SWEEP", is for normal sweeping (2 to 3 inch [5 to 8 cm.] broom pattern). The second notch, "FLOAT", is for heavy sweeping (4 to 5 inch [10 to 13 cm.] broom pattern).

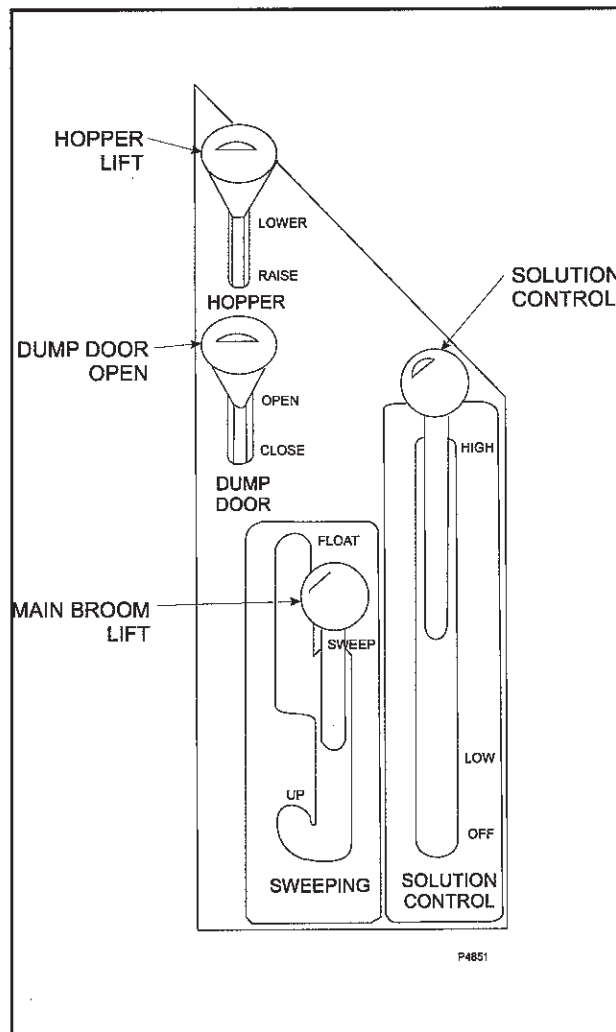
To raise the main broom, pull the lever back and slide into the locking notch. You may operate the main broom in either the "SWEEP" or "FLOAT" position. However, the "SWEEP" position should be used for normal sweeping and will result in increased broom life. The "FLOAT" position should be used only when sweeping extremely uneven areas.

### NOTE - (Variable Dump Machines Only)

**A switch triggered by the hopper and dump door's position control the sweeping functions, main broom, side broom, dust control, and filter shaker. The hopper must be down and the dump door open before these functions will work.**

### TURN SIGNAL - 4 Way (Option)

The turn signal option is located on the steering column and works as automotive turn signals work, forward on the lever for right and back on the lever for left. The 4 way flasher will activate when the turn signal lever is pulled out.



P4851

FIGURE 7

### THROTTLE

The throttle control is located on the steering column. Pull the knob out and twist to lock for full governed speed. The throttle will tend to return to idle if it is not twisted to lock in governed position. The engine must be operating at full governed speed of 2150 "no load" RPM (broom control off and machine sitting still), to maintain optimum machine travel speed, hopper loading and dust control. Before turning off the key and stopping the engine twist the knob to unlock and push it in.

### CHOKE

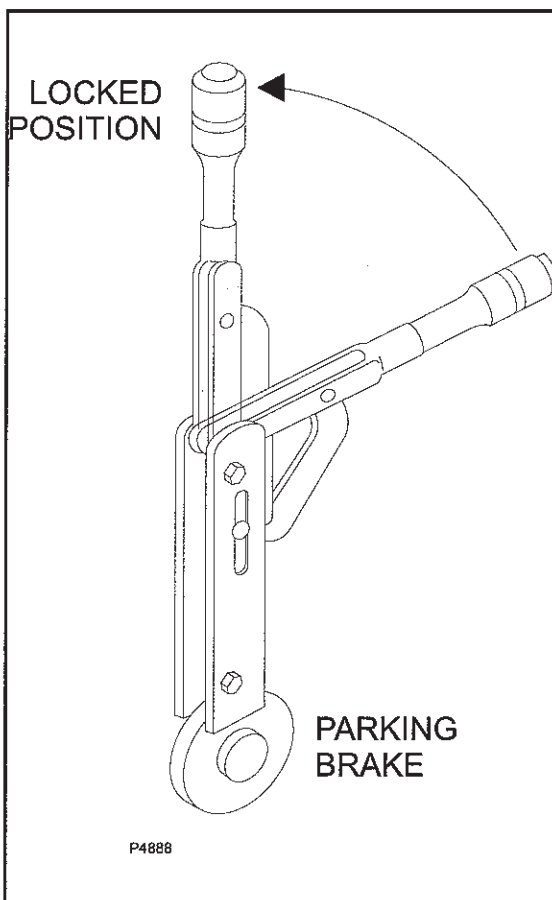
LP and Diesel powered engines do not have a choke. The choke is located on the steering column. The choke governs the mixture of air and fuel during the combustion cycle of the engine operation. The choke should be pulled out during the start of the engine and then gradually pushed back in after engine warm up.

### PARKING BRAKE

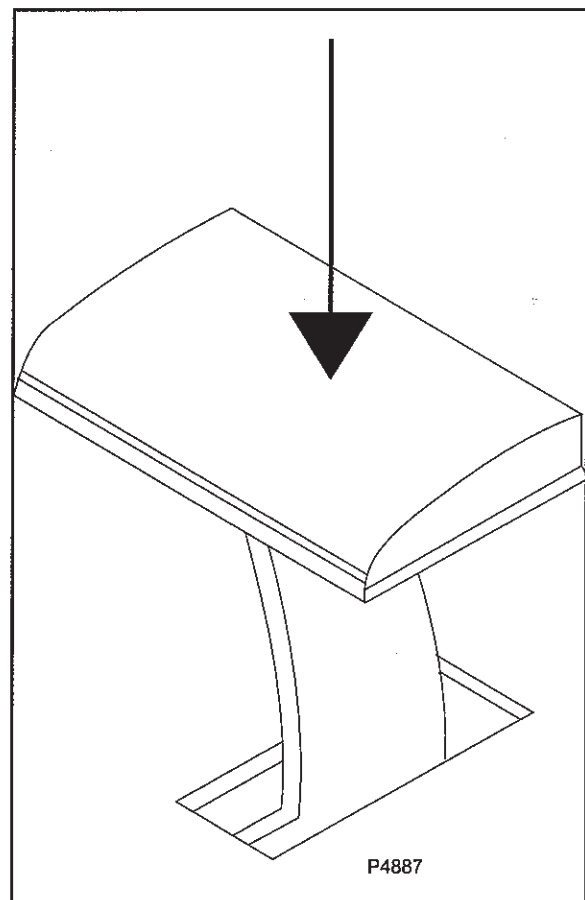
The parking brake lever is located in the left side of the driver compartment floor. This lever when raised to the upright position will "lock" the foot brake pedal in the down position.

### FOOT BRAKE

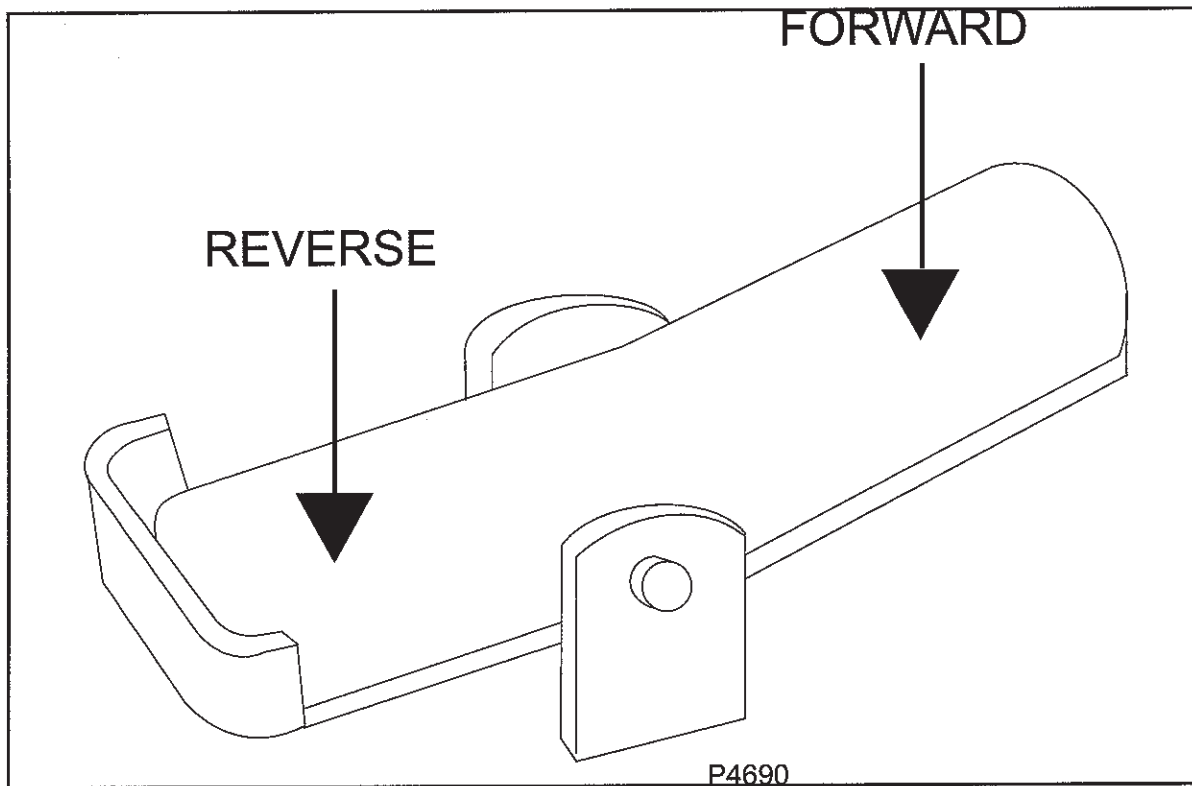
The foot brake pedal is located to the right of the steering column on the floor of the driver compartment. The foot brake on front wheels is a mechanical system actuated by the brake pedal.



P4888 FIGURE 8



P4887 FIGURE 9



P4690

FIGURE 10

### ACCELERATOR & DIRECTIONAL CONTROL PEDAL

The accelerator and directional control pedal is located on the floor of the operator's area, to the right of the brake pedal. The accelerator and directional control pedal controls the machine direction and travel speed.

1. Put foot pressure on the upper portion of the pedal. The machine will move forward.
2. Increase the foot pressure on the upper portion of the pedal to increase the forward speed.
3. Put foot pressure on the lower portion of the pedal. The machine will move in reverse.
4. Increase the foot pressure on the lower portion of the pedal to increase the reverse speed.
4. To stop the machine, put light foot pressure on the opposite end of the accelerator and directional control pedal. If the machine is moving forward, put light foot pressure on the lower portion of the pedal. If the machine is moving in reverse, put light foot pressure on the upper portion of the pedal.

### BACKUP ALARM SWITCH

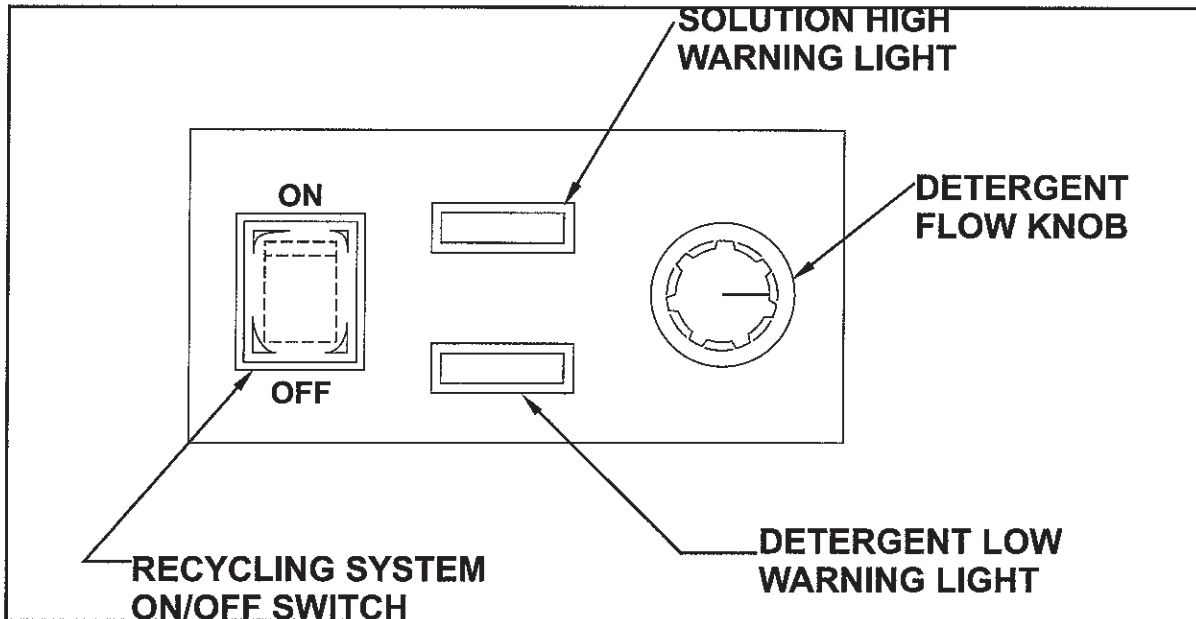
A switch that is located under the lower section of the Accelerator and directional control pedal operates the back up alarm. The alarm makes a loud audible noise when the machine is being driven in reverse.

### SEAT ADJUSTMENT

This lever is located on the right of the seat. This lever allows the seat to be adjusted forward or back when the lever is moved.

## CAMEL SYSTEM OPERATING INSTRUCTIONS

### THE CAMEL RECYCLING SYSTEM CONTROL PANEL



P4895

FIGURE 11

#### THE CAMEL RECYCLING SYSTEM ON/OFF SWITCH

This switch turns the camel recycling system on and off.

#### SOLUTION HIGH WARNING LIGHT

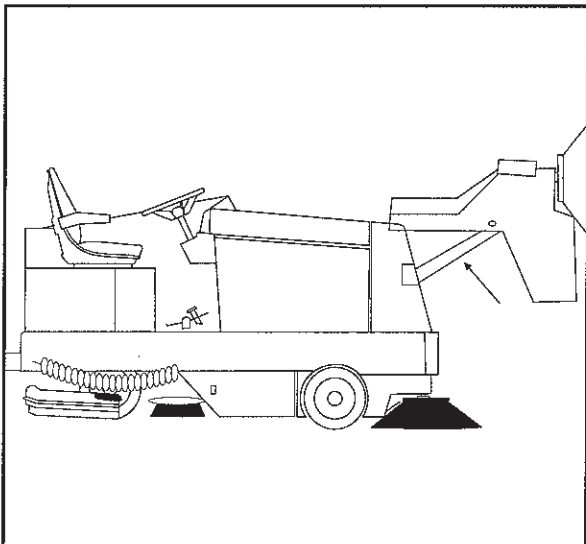
The solution high warning light will come on if the solution tank is too full of water from the recycling system.

#### DETERGENT LOW WARNING LIGHT

The detergent light will illuminate when the detergent tank is low, warning the operator to add detergent.

#### DETERGENT FLOW KNOB

This rotary knob controls the detergent flow into the scrubbing solution. The operator may choose from any detergent setting, for light to heavy cleaning applications. The detergent light will illuminate when the detergent tank is low, warning the operator to add detergent.



P4928

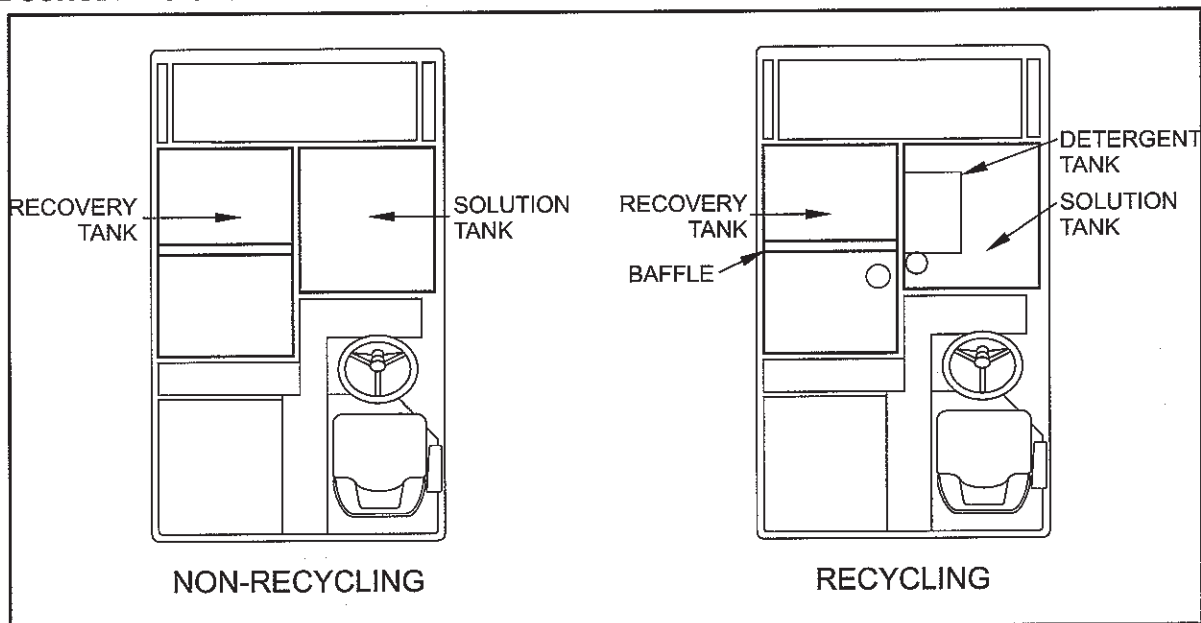
FIGURE 12

#### HOPPER SAFETY LOCK ARM (Variable Dump Only)

The Hopper Safety Lock Arm is located under the hopper assembly. When the hopper is raised, the Safety Arm must be engaged before any work can be done under the hopper. After the work is complete the safety arm must be disengaged.

# CAMEL SYSTEM OPERATING INSTRUCTIONS

## THE SCRUBBING SYSTEM - HOW IT WORKS



P4795

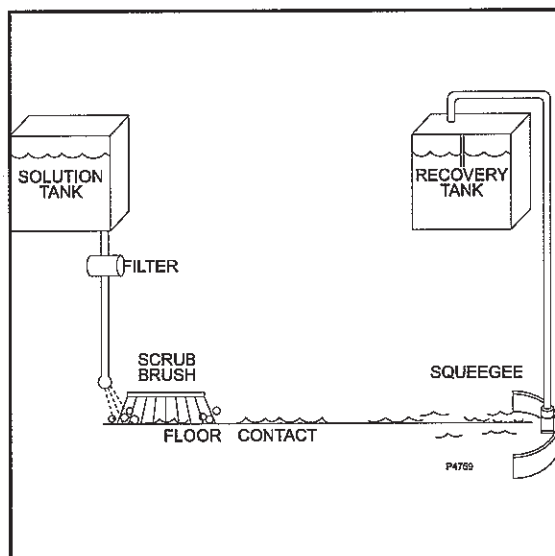
FIGURE 13

There are two scrubbing systems available for the 7700 machine, the non-recycling or standard scrubbing system and the recycling or camel scrubbing system.

### THE NON-RECYCLING OR STANDARD SCRUBBING SYSTEM - HOW IT WORKS

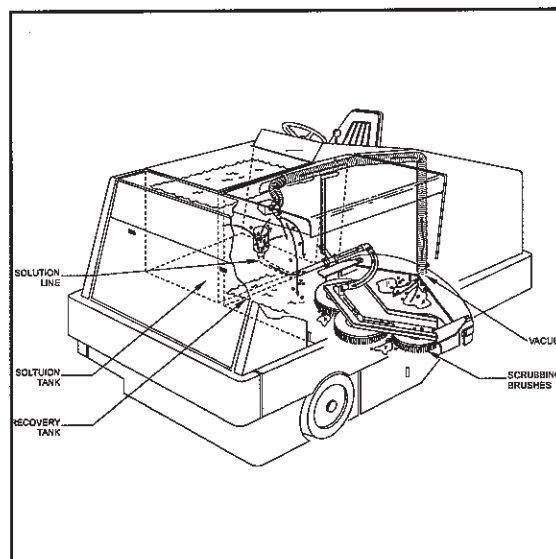
During the scrubbing process (shown in Figure 14), detergent solution water from the solution tank is fed to the solution line, where it is fed to the floor where three disc scrubbing brushes aggressively work to dislodge soilage.

After scrubbing, the dirty solution is vacuumed from the floor and discharged into the containment chamber in the forward portion of the recovery tank, where a system of baffles helps to clarify the solution. Sensors in each tank will indicate by lights on the control panel when the water in the solution tank is too low or when the water in the recovery tank is too high.



P4759

FIGURE 14



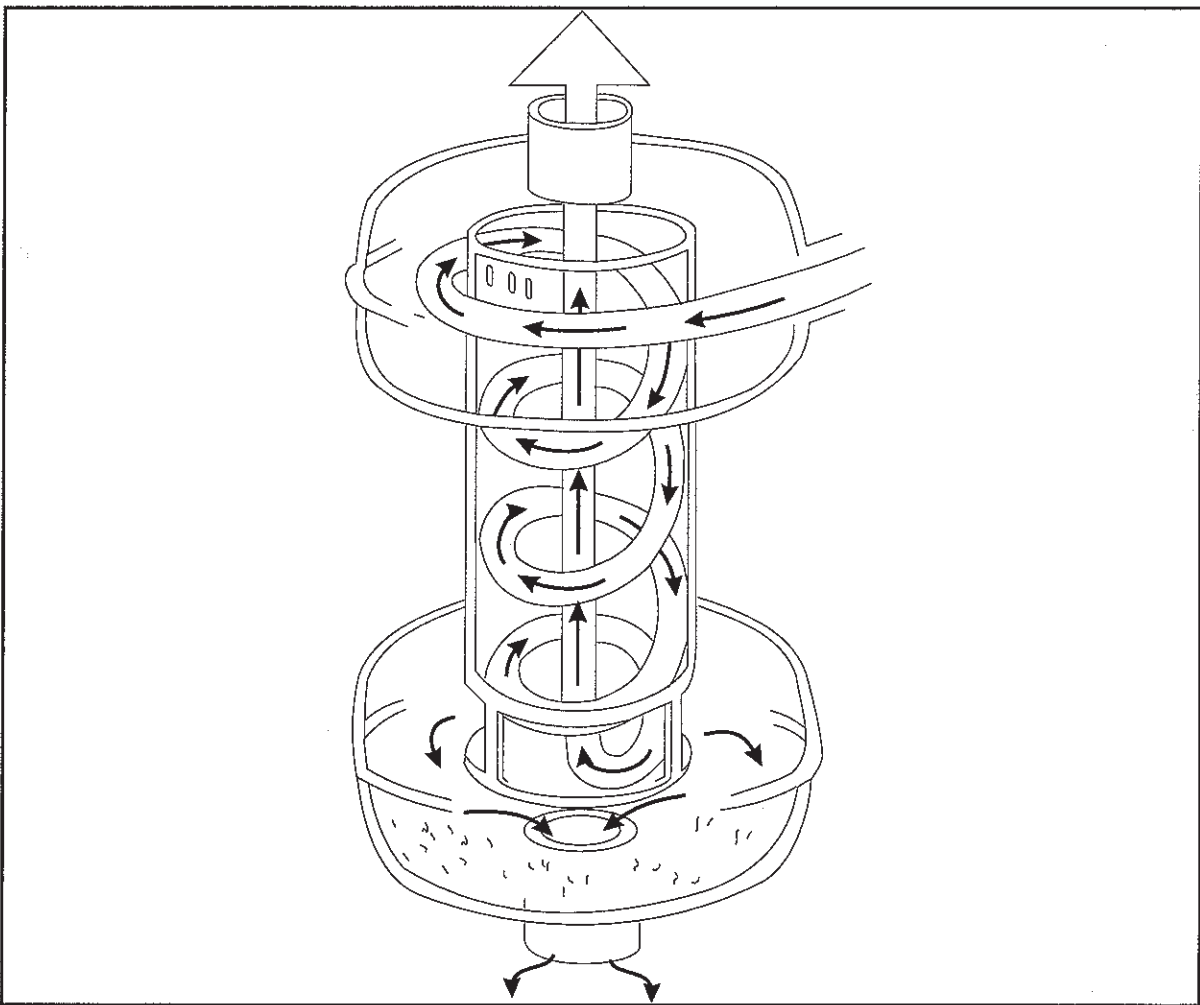
P5103

FIGURE 15

### THE RECOVERY OR CAMEL SYSTEM - HOW IT WORKS

During the scrubbing process (shown in Figure 17), filtered water from the solution tank is fed to the solution line, where it combines with detergent from the metering pump. This mixture is then fed to the floor where three disc scrubbing brushes aggressively work to dislodge soilage.

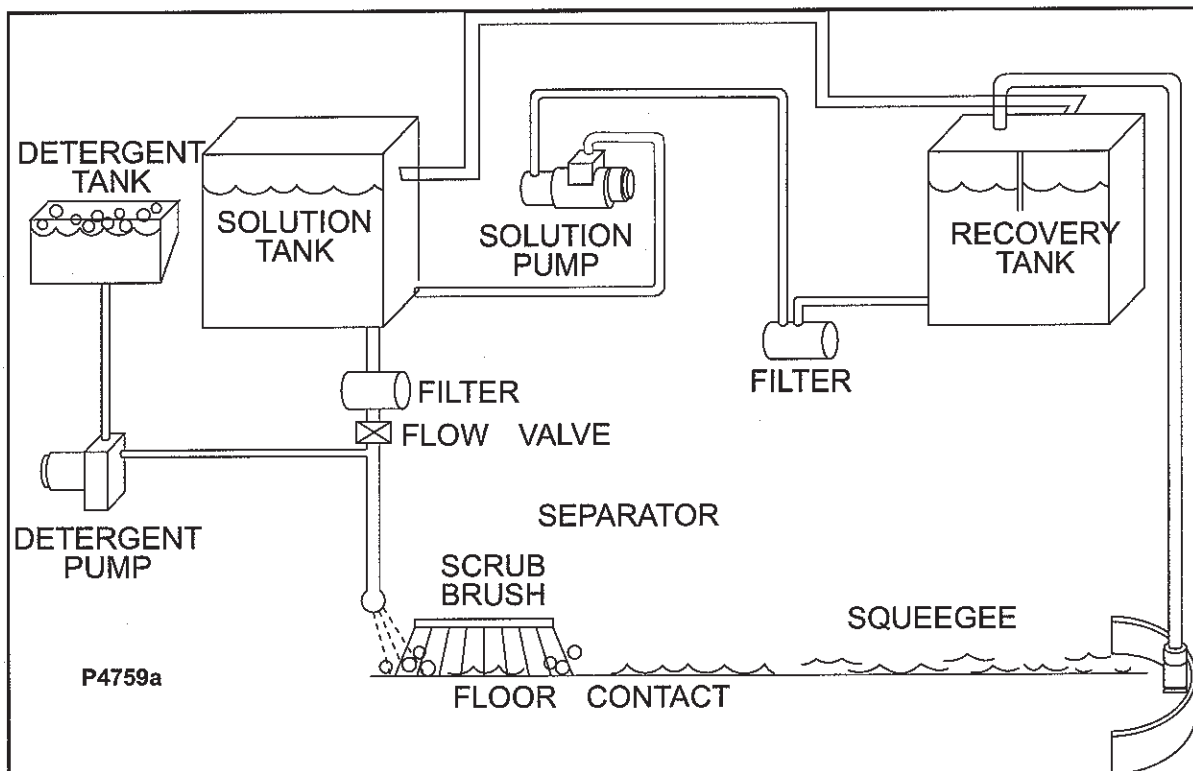
After scrubbing, the dirty solution is vacuumed from the floor and discharged into the containment chamber in the forward portion of the recovery tank, where a system of baffles helps to clarify the solution on its way to the pumping chamber in the rear of the recovery tank. At intervals, a system of sensors activates the recycling pump, which sends filtered solution from the pumping chamber on its way to the centrifugal separator which aids in clarifying the solution for reuse. In the separator, (shown in Figure 16), solids in the solution are centrifugal forced to the perimeter of the separation chamber on their way to the collection chamber where they lose their velocity and are purged into the containment chamber. The solids free solution is now drawn to the separators vortex and up through the separators outlet routed to the solution tank. Here, it is ready to be mixed with fresh, metered detergent and repeat the cycle.



P4177

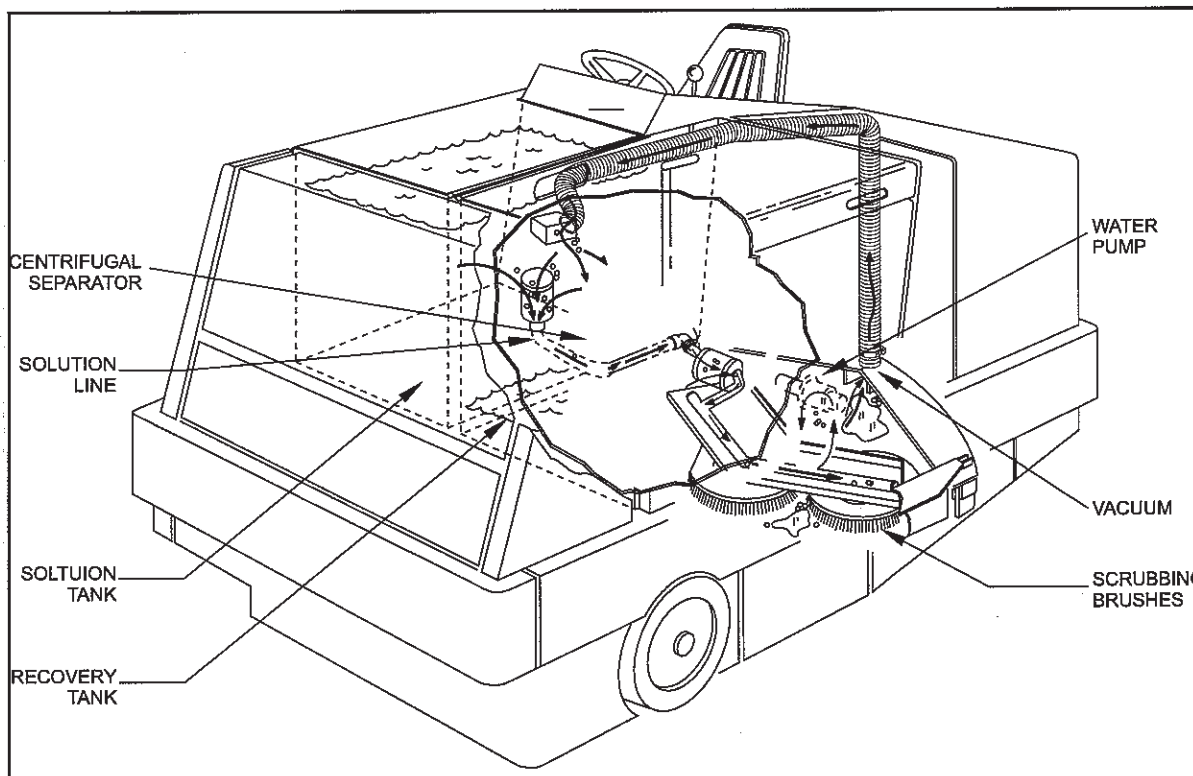
FIGURE 16

# CAMEL SYSTEM OPERATING INSTRUCTIONS



P4759a

FIGURE 17



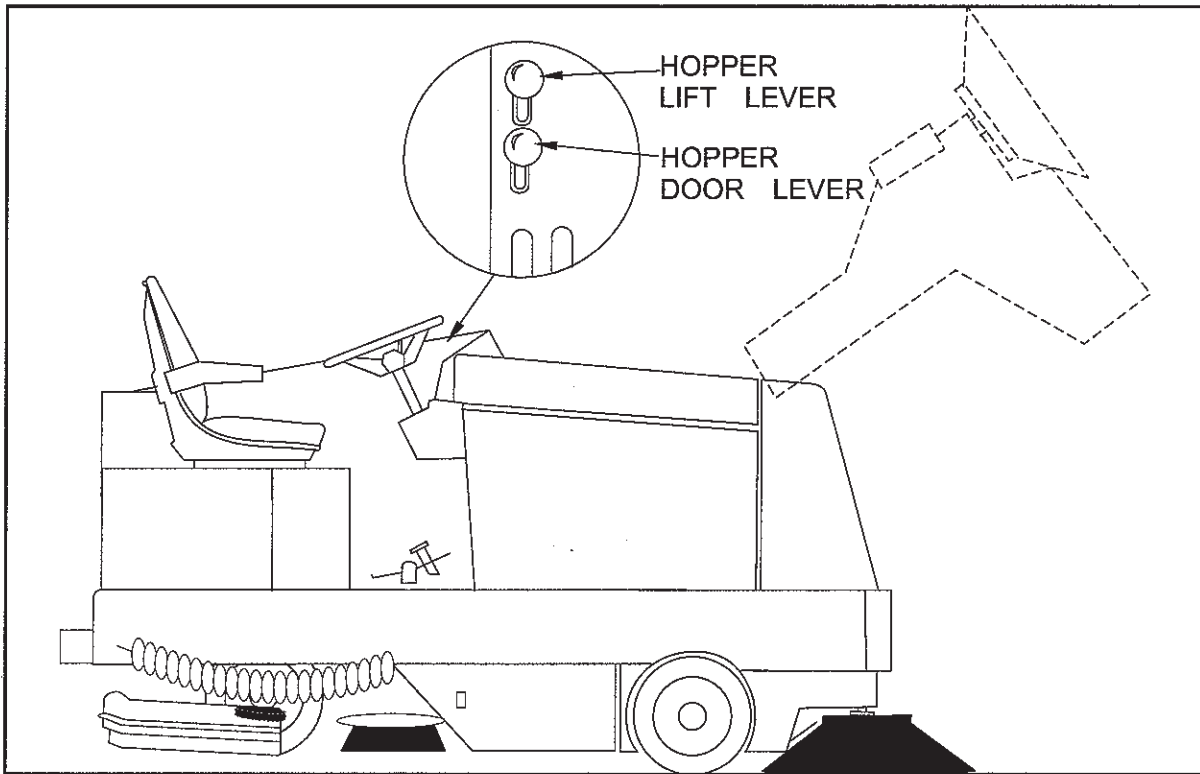
P4754

FIGURE 18

## CAMEL SYSTEM OPERATING INSTRUCTIONS

### THE VARIABLE DUMP SWEEPING AND DUST CONTROL SYSTEMS - HOW THEY WORK

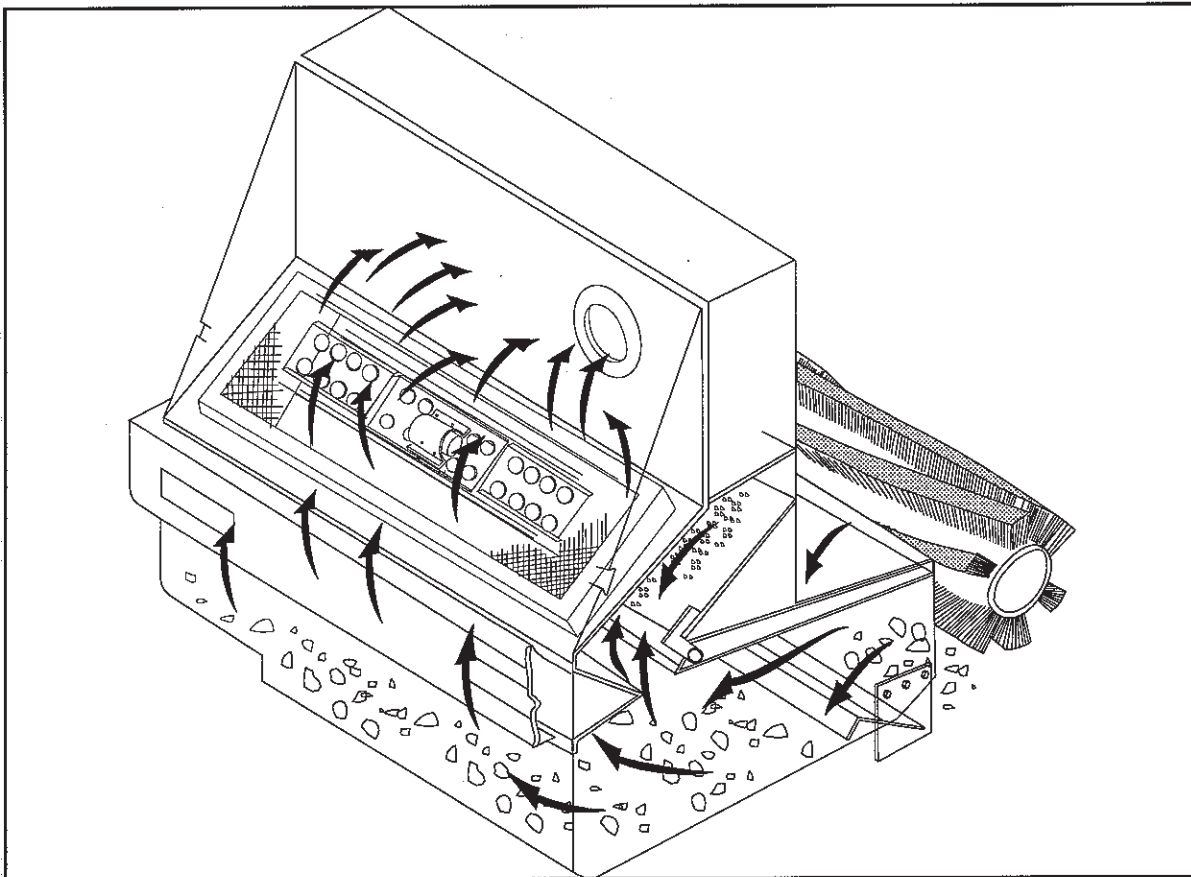
Variable Dump 7700 machines are equipped with a sweeping and dust control system. The sweeping system has two versions, the variable dump system and the low dump system. These systems relate to what level the debris hopper can be emptied. Figure 19 shows the low dump position and the highest position for the variable dump.



P5104

FIGURE 19

## CAMEL SYSTEM OPERATING INSTRUCTIONS



P5105

FIGURE 20

The debris from sweeping is thrown into the hopper (Figure 20). The baffle system that is built into the variable dump debris hopper is designed to minimize dust in the air while the machine is sweeping. The impeller vacuum fan pulls the lighter dust up and through a baffle system. The Pre-Clean Flap separates the heavier dust particles to an area below the filters. The dust filters capture the lighter dust particles. This allows the dust filters to remain cleaner and need less shaking to remove dust. When the dust filters become clogged the filter shaker switch should be pushed to start the dust shaker cycle. This will extend the life of the filters.

### FILLING THE SOLUTION TANK

#### **NON-RECYCLING or Standard Scrubbing System**

1. Make sure the solution control lever is in the "Off" (rear) position.
2. Open the solution tank cover of the solution (right hand) tank.
3. Fill the tank with 100 gallons of water and the correct mixture of AMERICAN-LINCOLN #100 Industrial Cleaner for the job on hand.
4. Close the solution tank cover of the solution (right hand) tank.

#### **RECYCLING or Camel System**

1. Make sure the solution control lever is in the "Off" (rear) position.
2. Open the solution tank cover of the solution (right hand) tank.
3. Fill the solution tank as outlined above with 100 gallons of pure water.
4. Fill the detergent tank with 5 gallons of AMERICAN-LINCOLN #100 Industrial Cleaner.
5. Close the solution tank cover of the solution (right hand) tank.



#### **WARNING**

To prevent oversudsing and machine damage, use only AMERICAN-LINCOLN Industrial Cleaning Solution # 100.



#### **WARNING**

DO NOT put gasoline, combustible or flammable material in the solution, recovery or detergent tanks.

#### **NOTE**

Before starting the engine, perform the pre-start checks.

#### **PRE-START CHECKLIST**

1. Clean engine air filter element
2. Check engine oil level
3. Check radiator coolant level
4. Check hydraulic fluid level
5. Check fuel level
6. Check all systems for leaks
7. Check brakes and controls for proper operation

#### **BEFORE STARTING ENGINE**

1. Set parking brake
2. Make sure all controls are in the "Off" position

#### **TO START ENGINE**

1. Be sure accelerator and directional control pedal is in neutral.
2. Pull choke if engine is cold (Gas engine only). If machine is stored in extremely cold temperatures under, 32° f. (0° C.), pull choke and hold throttle open approximately halfway when starting engine.
3. Turn key to "On" position and hold it until the engine starts. Push choke in when engine starts.
4. If engine fails to start after following the above procedures, refer to Engine Manual Section.

## OPERATING INSTRUCTIONS

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### WARNING

It is not advisable to store the machine in below freezing temperatures unless all fluids have been drained from the detergent solution and recovery tanks and associated systems. When machine has been stored in below freezing temperatures, run engine at not over 1/2 throttle with machine standing still for 5-10 minutes to warm engine and hydraulic oil.

### POST START CHECKLIST (Engine Running)

1. Check broom pattern.
2. Check squeegee deflection.

### TO TRANSPORT MACHINE (No scrubbing or sweeping)

1. Be sure the sweeping broom, brushes and squeegee are in the "Up" position with all other controls in the "Off" position.
2. Release parking brake.
3. Pull throttle control full out and twist to lock.
4. Push forward on the directional control pedal to place the machine in motion.
5. Vary your foot pressure on the directional control pedal to obtain desired travel speed.
6. To stop, allow directional control pedal to return to neutral (centered) position. (Pedal will automatically return to neutral when foot pressure is released). FOR NORMAL OPERATION, DEPRESS DIRECTIONAL CONTROL PEDAL WITH HEEL INTO NEUTRAL.
7. Push engine throttle down. Turn key to "Off".
8. Set parking brake.

### TO BEGIN THE CLEANING OPERATION

1. Choose the mode of operation (recycling CAMEL or non-recycling STANDARD) as dictated by the machine fill or machine type.
2. Bring engine to full RPM.
3. Lower the main broom.
4. Lower the side broom.
5. Turn on the main and side brooms.
6. Sweep for the length of the machine.
7. Move recovery switch to the "On" position.
8. Lower the scrub brushes.
9. Lower squeegee to the "Lower" position.
10. Move solution control lever to the desired setting.
11. Turn on the Recovery Switch for the Camel Recycling system, if applicable.
12. Begin scrubbing operation.

Single sweep and scrub the average floor with light to medium soilage. In this operation the cleaning is accomplished in one pass, with simultaneous solution feed, sweeping, scrubbing and dirty water pick up. The rate of solution feed and the speed of travel required will vary with floor condition. This knowledge will come with operator experience.

### TO STOP THE CLEANING OPERATION

Discontinue the cleaning operation whenever a solution or recovery warning or stop light is illuminated.

The solution light will illuminate when the solution tank is empty. At this time, discontinue the scrubbing cycle, put all controls in position for transport and drive to the drain area. See Transport Machine Section Page 31.

The recovery warning light will illuminate approximately 5 minutes before loss of vacuum to the recovery tank. This warning period should give ample time to complete the scrubbing cycle and transport or scrub to the drain area.

### NOTE

After stopping the engine, perform these post operation checks.

#### POST OPERATION CHECKLIST

1. Clean debris hopper.
2. Check sweeping broom for wear or damage.
3. Check all flaps for wear, damage and adjustment.
4. Drain and clean solution tank (CAMEL system)
5. Clean solution filter screen (CAMEL system)
6. Drain and clean recovery tank.
7. Clean recovery tank screen and float.
8. Check manifold and vacuum hoses for debris or obstructions, back flush if necessary.
9. Check scrub brushes for wear or damage.
10. Check rear and side squeegees for wear, damage and adjustment.
11. Fill fuel tank.
12. Check all systems for leaks.

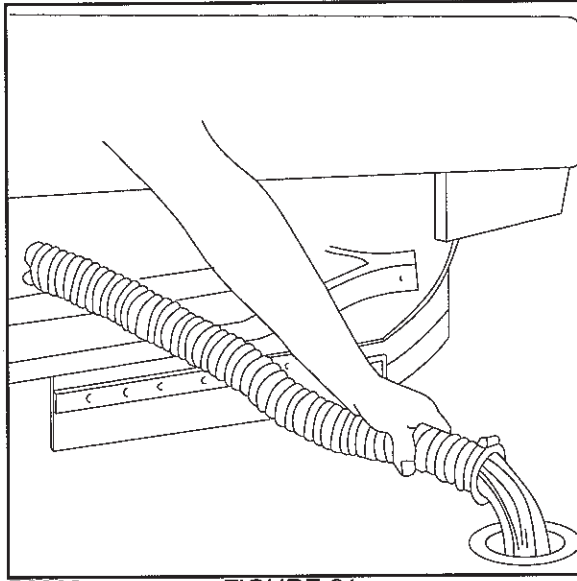
#### TO DRAIN SOLUTION TANK (RECYCLING OPERATION) (Camel System)

Draining the solution tank is accomplished by a 3 foot (92 cm.) long drain hose located behind the right hand brush chamber door. To drain the tank, completely open the brush chamber door so that it comes to rest against the machine, lower the hose, remove the plug and place in a suitable floor drain. When the draining operation is completed, clean the solution tank as outlined below.

#### TO CLEAN SOLUTION TANK (RECYCLING OPERATION) (Camel System)

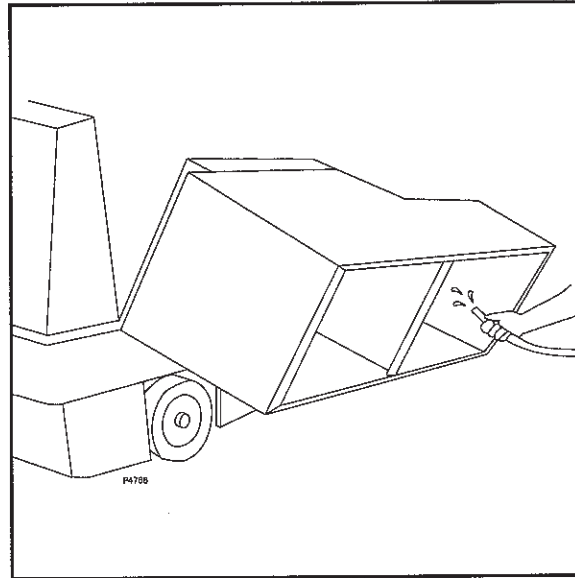
The large access cover facilitates cleaning the solution tank. Flush all deposits from the tank, also flush all probes and the solution line strainer to remove any deposits, remove strainer if necessary. When the cleaning operation is completed, plug and replace the hose. Close and secure door and covers.

## OPERATING INSTRUCTIONS



P3903a

FIGURE 21



P4766

FIGURE 22

### TO DRAIN RECOVERY TANKS

A 3 foot long drain hose for the recovery tank is located behind the left hand brush chamber door. To drain the tank, completely open the brush chamber door so that it comes to rest against the machine, lower the hose, remove the plug and place in a suitable floor drain. Open the recovery tank and remove the drain plug. When the draining operation is completed, flush and clean recovery tank as outlined below.

### TO CLEAN RECOVERY TANK

Clean out of the recovery tank is facilitated by the large access cover and tip out tank.

With the recovery tank in the tipped out position, flush all sand, sludge, debris, etc. out of the tank, then replace the tank and flush the manifold, ball float screen and level switch to remove any deposits.



### WARNING

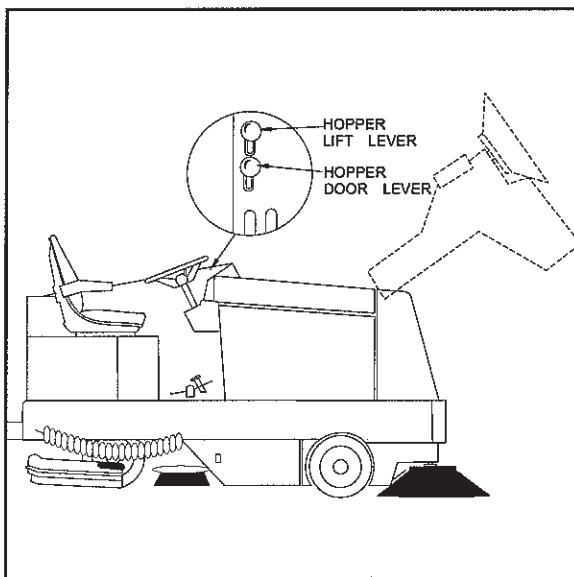
**Do not attempt to flush large amounts of tank debris through the drain hose, this will cause clogging and hamper future drainage. Always flush the recovery tank with clean water at the end of each cleaning cycle. Never let debris accumulate, settle and harden in the tank or on associated hardware.**

### DOUBLE LID RECOVERY TANK

The Recovery Lid is a double lid. Removing the four hex head bolts, located in handle holes on the lid can open the lid. The oil cooler and recovery tank vacuum pump are located in the lid.

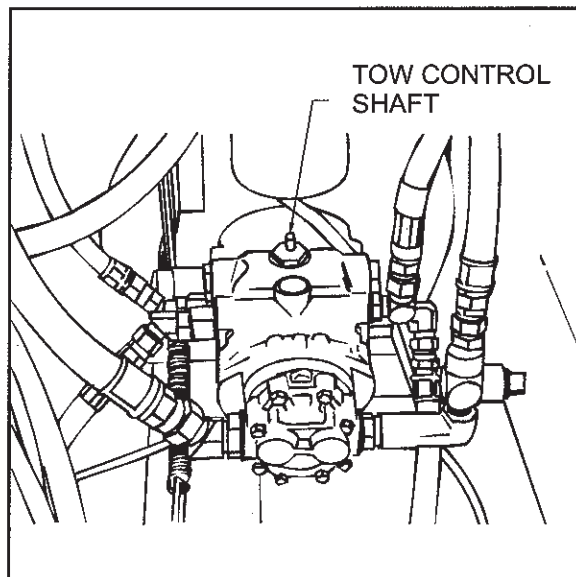
### OIL COOLER

The oil cooler is located in the recovery tank double lid.



P5104

FIGURE 23



P4183

FIGURE 24

## TO EMPTY DEBRIS HOPPER

1. Transport or sweep and scrub to the dump site.
2. Close the hopper dump door with the hopper dump lever.
3. Raise the hopper with the hopper lift lever to the desired level.
4. Move the machine forward, over the dumpster, if necessary.
5. Open the hopper dump door with the hopper dump lever.
6. Lower the hopper with the hopper lift lever to the normal operation position.

### NOTE (Variable and Low Dump Only)

The sweep functions - main broom, side broom, dust fan, and filter shakers - only work when the hopper is down and the dump door is open.

## TOWING INSTRUCTIONS (See Figure 24)

1. Locate tow control shaft extension as shown in Figure 24. (see arrow)
2. To open hydraulic circuit to wheel drive motor, turn shaft 90 so that the flats on the shaft are parallel to the front axle.
3. After towing, turn shaft 90 so that the flats on the shaft are parallel to the pump centerline.

## SERVICE CHART

For service assistance, consult the yellow pages under power sweepers and scrubbers. For best performance, replace worn parts with genuine AMERICAN-LINCOLN parts.

### EVERY 8 HOURS or DAILY operation check and clean/adjust if necessary:

1. Inspect panel filters for damage and clean.
2. Check engine oil level.
3. Hydraulic fluid level.
4. Check radiator core for blockage.
5. Check all flaps for wear or damage.
6. Check brooms for wear or damage, adjust as required.
7. Panel filters (clean side) for leakage.
8. Check brake pedal and parking brake.
9. Check for LPG odor at connections. LPG
10. Check water separator. Diesel
11. Check engine air cleaner.
12. Check hydraulic oil filter.
13. Check coolant level.

### 50 HOUR (WEEKLY) MAINTENANCE CHECKLIST

14. Solution tank (recycling or CAMEL system).
15. Solution filter screen (recycling or CAMEL system).
16. Recovery tank.
17. Recovery tank screens and filters.
18. Scrub brushes for wear or damage.
19. Rear and side squeegees for wear or damage.
20. Check tension on all belts.
21. Check battery electrolyte level. (Unless Maintenance Free Battery)
22. Check all hydraulic hoses for wear or cuts.
23. Rotate main brush (end for end).
24. Clean or replace panel filters.

Perform recommended engine maintenance (see engine manual if applicable).

### 100 HOUR MAINTENANCE CHECKLIST

25. Change crankcase oil.
26. Change engine oil filter.
27. Lubricate drive wheel swivel wheel bearings and steering rack guide (engine side above rear wheel).
28. Lubricate front wheel bearings.
29. Lubricate all moving joints.
30. Check brake pads for wear and adjust accordingly.
31. Lubricate all 6 DANHOUSER Bushings with NAPA #765-1363 or equivalent anti-seize lubricant. The bushings are located on the steering, scrub deck lift, squeegee lift, main broom lift, both threaded ends of the throttle cable and variable dump door cylinders. Perform recommended engine maintenance (see engine manual if applicable).

### 250 HOUR MAINTENANCE CHECKLIST

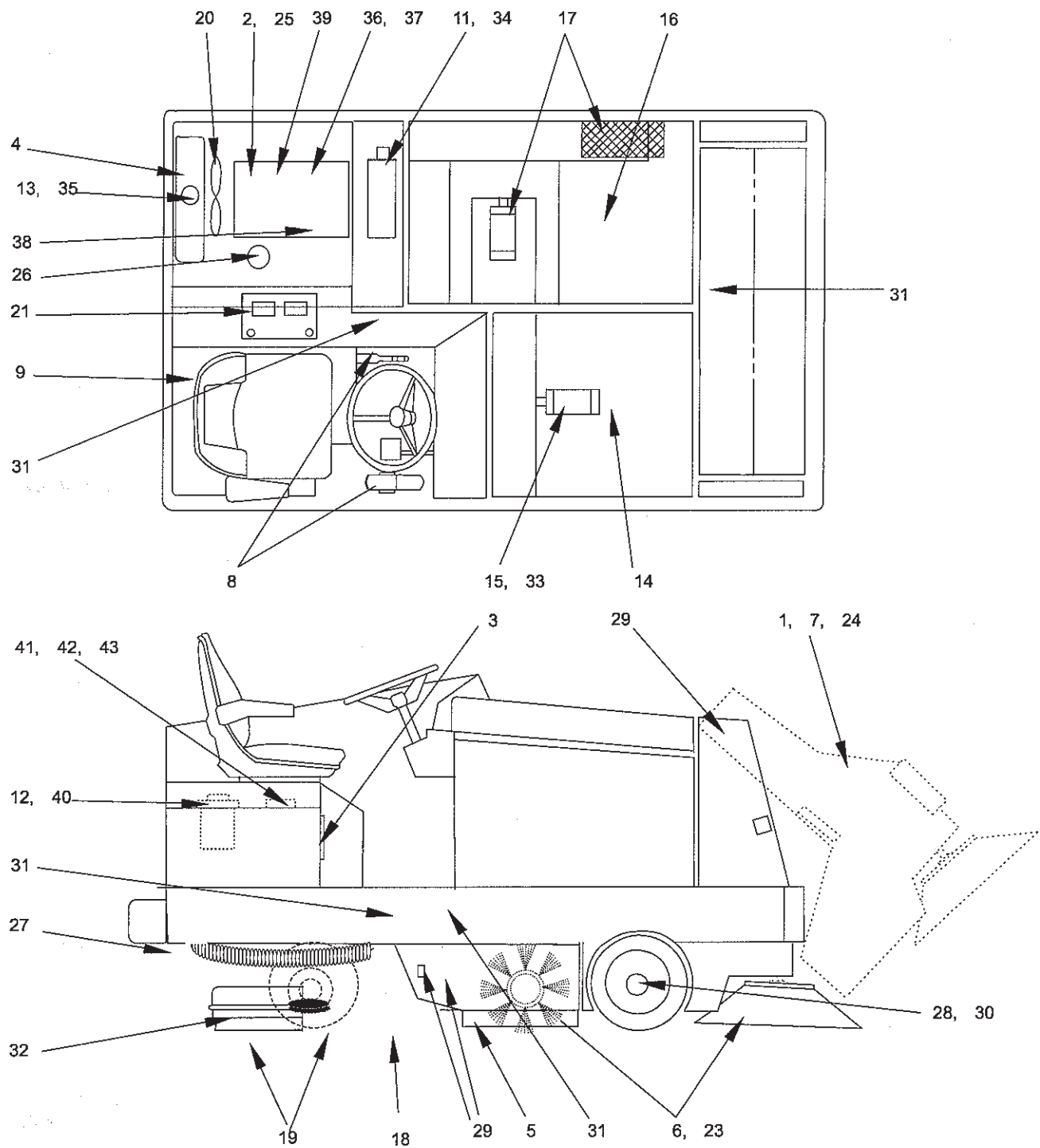
32. Lubricate squeegee casters.
33. Clean solution tank and filter screen.
34. Replace engine air filter element.
35. Flush radiator coolant system.
36. Remove spark plug - clean or replace. LPG, Gas
37. Check distributor and points - service or replace. LPG, Gas
38. Clean and lubricate governor & choke linkage. LPG, Gas
39. Replace fuel filter.
40. Replace hydraulic filter element.

Perform recommended engine maintenance (see engine manual if applicable).

### 400 HOUR MAINTENANCE CHECKLIST

41. Clean hydraulic reservoir.
42. Clean hydraulic intake strainer.
43. Change hydraulic fluid.

Perform recommended engine maintenance (see engine manual if applicable).



## HELPFUL HINTS FOR CLEANING OPERATION

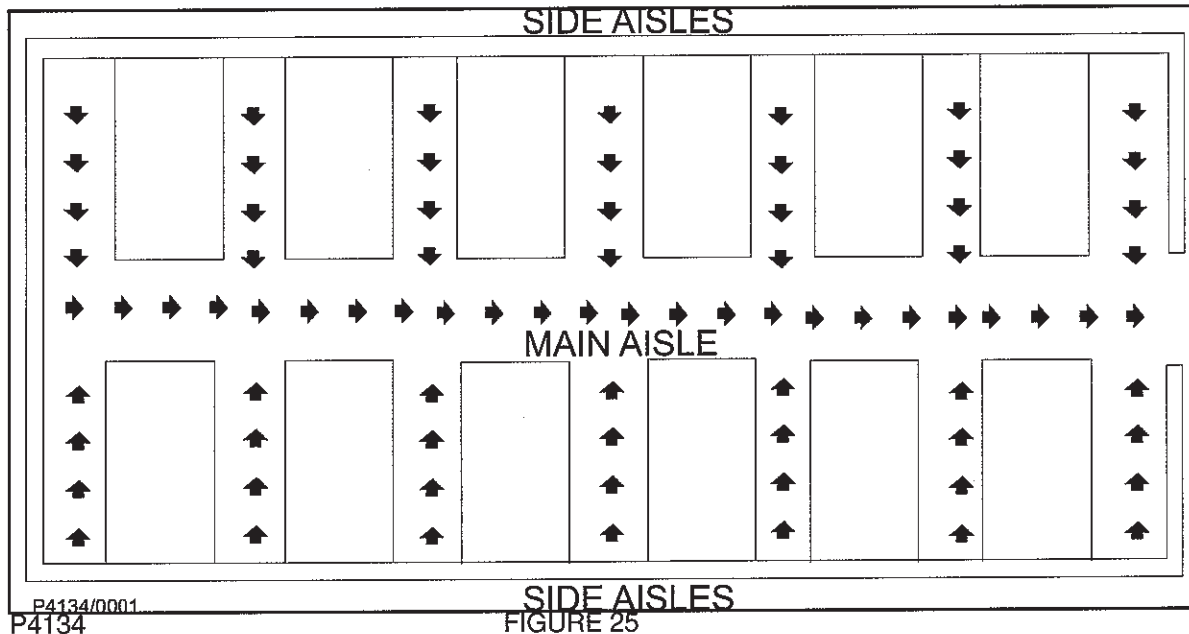


FIGURE 25



### WARNING

Do not turn the steering wheel sharply when the machine is in motion. The sweeper is very responsive to movement of the steering wheel. Do not make sudden turns.

Scrub in straight paths. Do not bump posts. Do not scrape the sides of the machine.

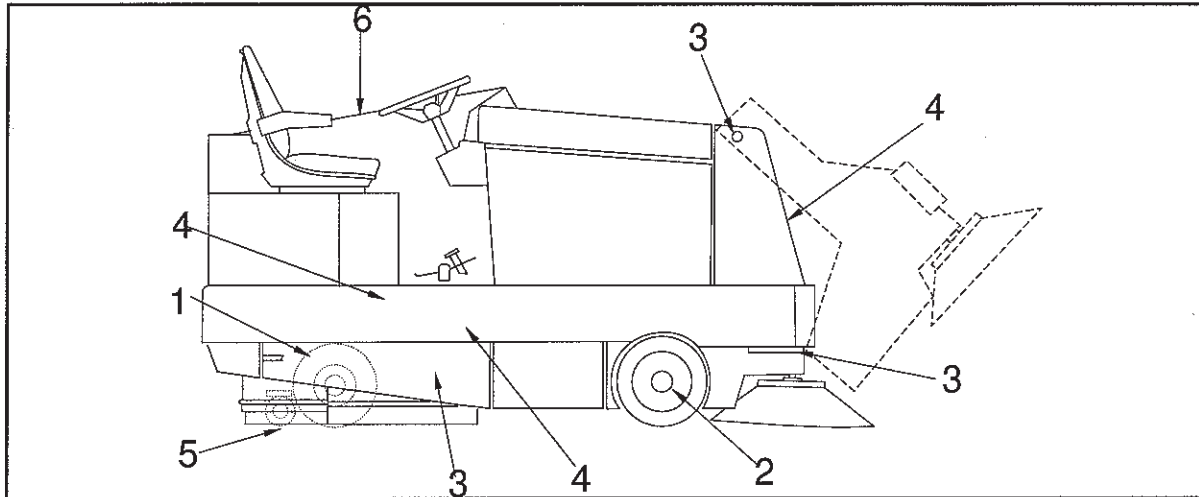
When the machine is in motion, do not push the directional/speed control pedal all the way forward. This is the same as starting in "High" and will put a strain on the motor and drive system.

1. Plan your sweeping and scrubbing in advance. Try to arrange long runs with minimum stopping and starting. Sweep debris from narrow aisles out into main aisle ahead of time. Do an entire floor, or section at one time.
2. Pick up oversize debris before sweeping.
3. Allow a few inches of overlap of sweep and scrub paths. This will eliminate leaving dirty patches.
4. Don't turn steering wheel too sharply when machine is in motion. The machine is very responsive to movement of the steering wheel - so avoid sudden turns.
5. Try to follow as straight a path as possible. Avoid bumping into posts or scraping the sides of the machine.
6. When placing the machine in motion, avoid slamming the directional control pedal all the way forward suddenly. This is equivalent to starting out in "HIGH" and puts needless strain on the engine and drive system.
7. Always allow the machine to warm up before operating in cold temperatures.
8. Periodically turn the sweeping broom end for end to prevent the bristles from "setting" in one direction.

### NOTE

Replace sweeping broom when bristles are worn to 3 inch (8 cm.) length. To order replacement brooms, see page 209. Replace disc brushes when bristles are reduced to 1/2 inch (1.3 cm.) in length. To order replacement brushes, see page 210. Replace squeegee rubbers when all usable edges have become rounded with wear, impairing the wiping action.

## LUBRICATION



P4727

FIGURE 26

**100 Hour Lubrication**

1. Lubricate drive wheel swivel, wheel bearings and steering rack guide.
2. Lubricate front wheel bearings.
3. Lubricate all moving joints.
4. Lubricate all 6 DANHOUSER Bushings with NAPA #765-1363 or equivalent anti-seize lubricant. The bushings are located on the steering, scrub deck lift, squeegee lift, main broom lift, both threaded ends of the throttle cable and the variable dump door cylinders.

**250 Hour Lubrication**

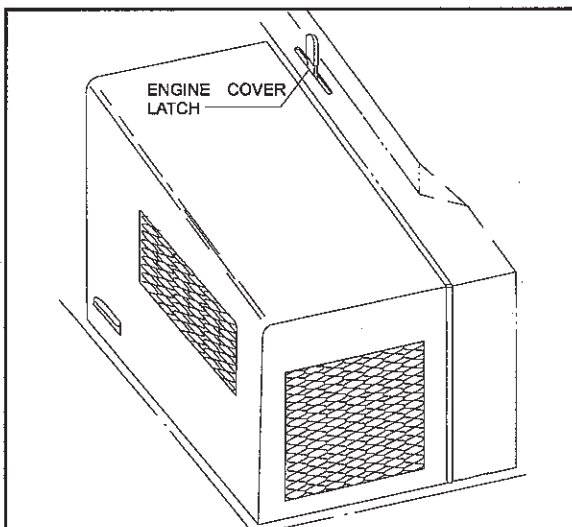
5. Lubricate squeegee casters.
6. Lubricate governor & choke linkage.

Use a good grade multipurpose grease. Avoid use of too much grease.

**WARNING**

Only grease these units while they are in the raised position. Application of grease while the squeegee and the scrub deck are lowered will fill an empty cavity. Avoid too much grease.

All other moving joints should receive a few drops of #10 oil every 100 hours to keep them from rusting and/or binding.



P5107

FIGURE 27

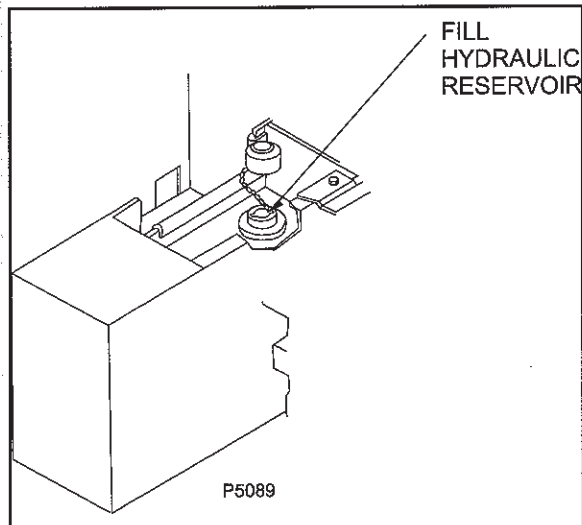
**HOW TO OPEN THE ENGINE COVER**

The engine cover encloses the entire engine, radiator and hydraulic reservoir assembly. The cover can be swung open to completely clear the assembly and allow easy access to the engine.

1. Release the engine cover latch.
2. Lift the cover slightly to clear the engine cover stop.
3. Swing the cover open.

## GENERAL MACHINE MAINTENANCE

### HYDRAULICS



P5089

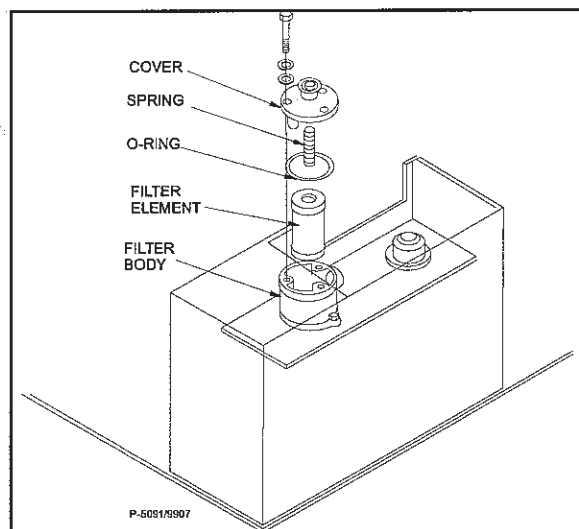
FIGURE 28

#### HOW TO FILL THE HYDRAULIC RESERVOIR

1. Access to the hydraulic reservoir is located beneath the driver's seat.
2. Open the hydraulic reservoir breather filter cap.
3. Remove any debris that is in the breather filter cap screen.
4. Fill the reservoir until the fluid shows at the "FULL" line on hydraulic fluid sight gauge. The sight gauge is located on the front of the hydraulic reservoir.
5. Close the hydraulic reservoir breather filler cap.
6. Put the driver's seat back into position.

#### HOW TO CLEAN THE HYDRAULIC SYSTEM

1. Put a drop cloth on the floor.
2. Drive the machine on to the drop cloth.
3. Set the parking brake.
4. Tip the seat to the side.
5. Put a container under the reservoir drain to catch the reservoir fluid.
6. Remove the drain plug. The reservoir fluid will drain. Do not use the drained reservoir fluid to refill the hydraulic reservoir. Dispose of the used fluid.
7. Flush the interior of the hydraulic reservoir with clean fluid.
8. Put the reservoir plug, removed in step six, back in the hydraulic tank drain and tighten. A pipe thread sealer is required on the plug.
9. Open the breather filter cap.
10. Fill the reservoir with new FORD type "F" automotive transmission fluid. The capacity of the tank is 10 gallons. Fill to the "FULL" line on hydraulic fluid sight gauge.
11. Close the breather filter cap.
12. Tip the seat back to its original position.



P5091

FIGURE 29

#### HOW TO REPLACE THE RETURN FILTER ELEMENT

1. Replace the return filter after 250 hours of machine run time.
2. Unscrew the fasteners from the filter assembly cover and retain.
3. Remove the cover and the compression spring and retain.
4. Discard old filter element.
5. Position new filter element inside the filter body.
6. Put the compression spring in position. Wipe the cover magnet free of any metal filings or debris.
7. Place O-ring (Moisten with clean hydraulic fluid) and cover into position.
8. Reattach fasteners to filter cover.
9. Wipe clean any hydraulic reservoir fluid spills. The fluid can damage painted surfaces of the machine.

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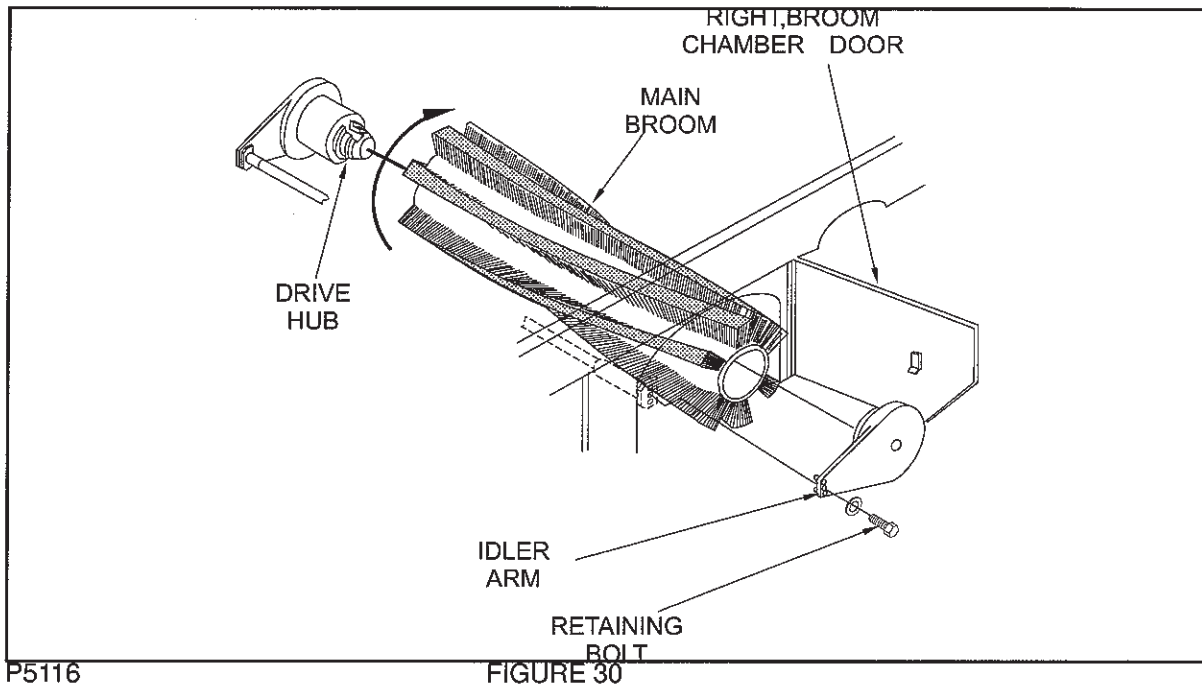
## HYDRAULIC SCHEMATIC - VARIABLE DUMP, P4882a

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**HYDRAULIC SCHEMATIC - LOW DUMP, P5113**

## ENGINE

Read and follow all the instructions in the Engine Manual Section. Due to the nature of work being done by the machine extra care must be taken to protect the engine from these elements. Check the oil each day before starting operations. Be sure to check and clean the air cleaner as conditions demand. Do not let the engine become coated with dust and dirt.



### TO REMOVE MAIN SWEEPING BROOM

1. Open the left broom chamber door.
2. Put the main broom control in the "SWEEP" position.
3. Remove the retaining bolt.
4. Remove the idler arm assembly.
5. Remove the main broom and discard.
6. Put a new main broom in the broom chamber.
7. Rotate the new broom to the right on the drive hub until it engages the drive hub broom tabs.
8. Put the idler arm assembly in place.
9. Put the retaining bolt in place and tighten.
10. Close the broom chamber door.
11. Start the engine.
12. Put the broom lever in the "SWEEP" position.
13. Let the broom sweep in place for 30 seconds.
14. Put the broom lever in the "UP" position.
15. Back the machine off the test spot.
16. Inspect the polished area where the broom swept, for broom bristle contact with the floor. The area of broom bristle contact with the floor should be 2 to 3 inches (5 to 8 cm.) wide.

## GENERAL MACHINE MAINTENANCE

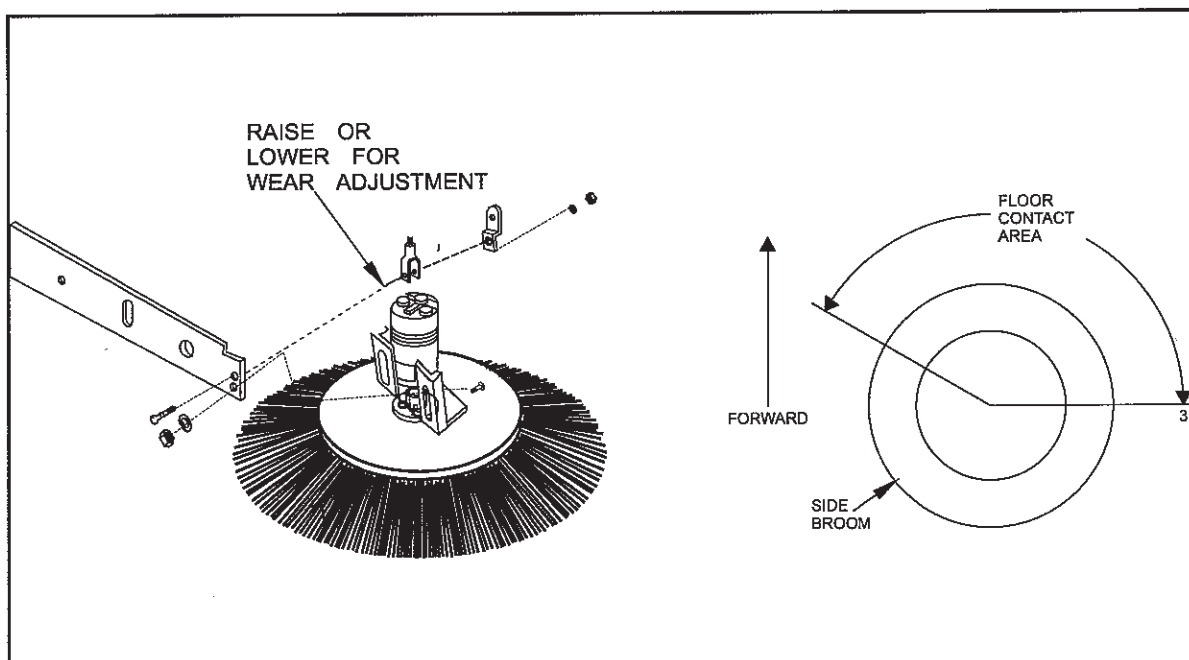
### MAIN BROOM LEVEL ADJUSTMENT

The main broom level is factory set and should not need adjustment, if the level gets out of adjustment and the broom bristle contact pattern is not an even 2" to 3" (5 to 8 cm.) wide, the broom arm lift frame (page 89, part number 7-03-04098) will have to be adjusted. The frame is supported by two flange bearings (part number 2-00-03997). These bearings are located inside the broom doors. The carriage bolts (part number 2-00-00196) on the two end flanges will have to be loosened. The frame can then be leveled and the bolts tightened.

### HOW TO ADJUST MAIN BROOM WEAR PATTERN

When the bristles of the broom begin to wear out the following adjustments may be made to keep a 2 inch (5 cm.) broom pattern.

1. Loosen the nut located in the engine compartment (See page 90, key number 8).
2. Set the broom lever to the "Sweep" position and adjust the lock nut (key number 8) to obtain a 2 inch (5 cm.) broom pattern. The lock nut will move the linkage rod (key number 3) that adjusts the sweeping pattern of the broom for wear.



P5117

FIGURE 31

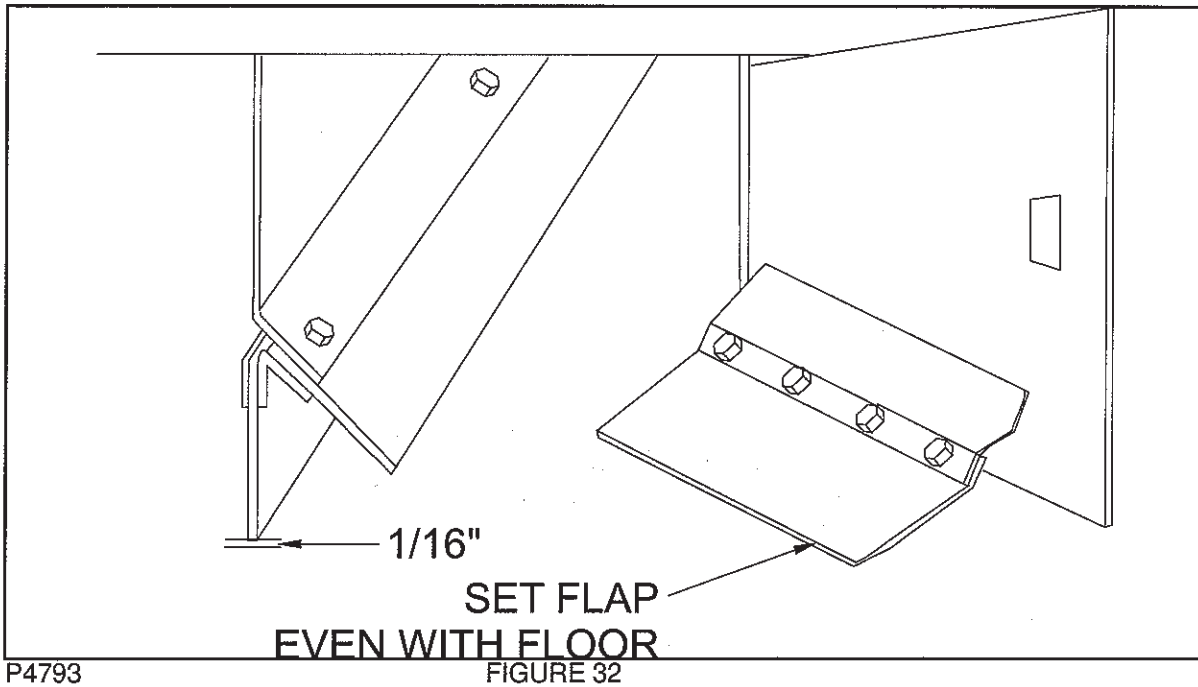
### SIDE BROOM LEVEL ADJUSTMENT

As the side broom wears, simply loosen the two wear adjusting bolt and slide the broom-motor assembly into a position so that the broom contacts the floor at a 3 degree angle when lowered as shown in Figure 31.

### SIDE BROOM REPLACEMENT

Put the side broom lift control in the "UP" position. Remove the retaining screw in the bottom middle of the side broom (Key #13 on page 92. Remove the side broom. Transfer the side broom flange spacer and screws to the replacement side broom (Keys #13, 14, 15, and 16. Put the replacement side broom on the shaft. Put the retaining screw (Key # 13) in position and tighten.

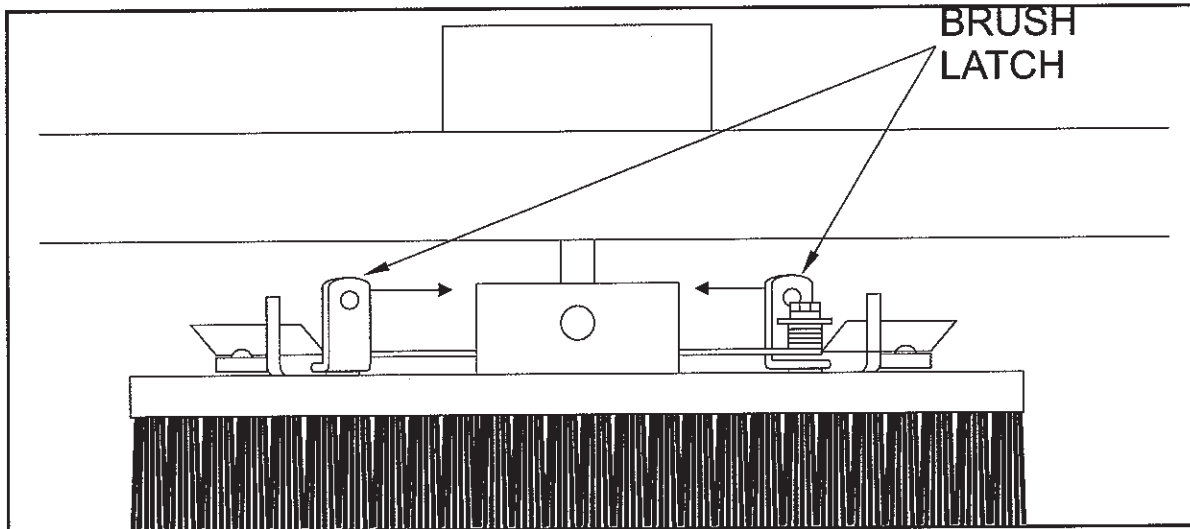
## FLAPS



The urethane and rubber flaps are susceptible to damage and should be inspected regularly and maintained in good condition. The side flaps are adjustable and should be maintained at approximately  $1/16"$  (16 mm.) above the floor. The front and rear flaps have no provision for adjustment.

All flaps should be replaced when worn or damaged to such an extent that they cannot perform their function.

## GENERAL MACHINE MAINTENANCE



P4762

FIGURE 33

### SCRUB BRUSH REPLACEMENT

1. Raise the scrub brush deck by pressing the "Scrub Brush" Switch on the instrument panel.
2. Press the brush latches inward to release the scrub brushes.
3. Remove old scrub brush.
4. Snap new brush into place.

### SPLASH SKIRTS

The splash skirts for the brush drive frame may be adjusted as required by loosening the attachment screws. Correct adjustment is just in contact with the floor.

### COVERS AND LATCHES

The covers have been designed to allow access, either by hinge or removal to all areas of the machine. No maintenance is required. For lubrication of latches see Lubrication Section.

### SOLUTION WARNING LIGHT

The solution warning light will illuminate when the solution tank is empty. This part of the level control system requires no maintenance. If the system fails to operate, consult the Electrical Troubleshooting Guide.

### RECOVERY WARNING LIGHT

The recovery warning will illuminate approximately 5 minutes before loss of vacuum to the recovery tank. This part of the level control system requires no maintenance, except for daily cleaning of the tank level switch. If the system fails to operate, consult the Electrical Troubleshooting Guide.

### SOLUTION CONTROL(Non-Recycling or Standard)

The solution control lever controls the amount of solution applied to the scrubbing brushes. Except for a few drops of oil applied to the lever pivot every 100 hours, the system should require no major maintenance.

The solution control should shut off completely with the lever in the (rear) "off" position. If complete shut off does not occur, the control cable should be adjusted.

### SOLUTION CONTROL (RECYCLING or Camel System)

In the recycling mode, the solution control lever is also used to activate the detergent pump. If the detergent pump fails to operate (engine running) when the solution control lever is moved into the low to high range, first check the circuit by manually activating the switch. If the detergent pump does not operate at this time, a further electrical or mechanical check is indicated. (See Electrical Troubleshooting Guide or Detergent Pump Troubleshooting).

### RECYCLING PUMP & MOTOR Camel System

The recycling pump and motor are located directly behind the broom chamber the solution and recovery tanks. The pump is a progressive cavity pump which is coupled to a totally enclosed non-ventilated motor. This pump and motor combination require no regular maintenance, except for daily cleaning of the pump intake screens.

#### NOTE

**Adjustment of the packing gland may be necessary upon startup due to leakage around the shaft. Adjustments may be made by using the following procedure:**

- Tighten gland bolts against packing gland evenly to insure that the packing gland does not cock.
- \* Tighten packing until only a slight leakage is noticed. (A slight leakage is required to help lubricate the shaft).

#### NOTE

**Do not run pump dry. The unit depends on the liquid pumped for lubrication.**

### RECYCLING PUMP & MOTOR - STORAGE

#### NOTE

**Always drain pump for extended storage, especially when freezing temperatures may be encountered.**

### SEPARATOR Camel System

The centrifugal separator, located in the containment chamber at the forward end of the recovery tank removes solids from liquids by its unique centrifugal action. The separator continuously removes solids from liquids without shutdowns for maintenance because of its self cleaning action in which debris are constantly removed from the separator by purging them into the containment chamber.

Should the purge orifice, located in the bottom of the separator become blocked due to excessive accumulation of sludge in the recovery tank, the purge orifice may be removed and the recycling system activated to clear the separator.

#### NOTE

**Never let accumulated sludge harden and dry in the separator. Once hardened this sludge will be impossible to remove.**

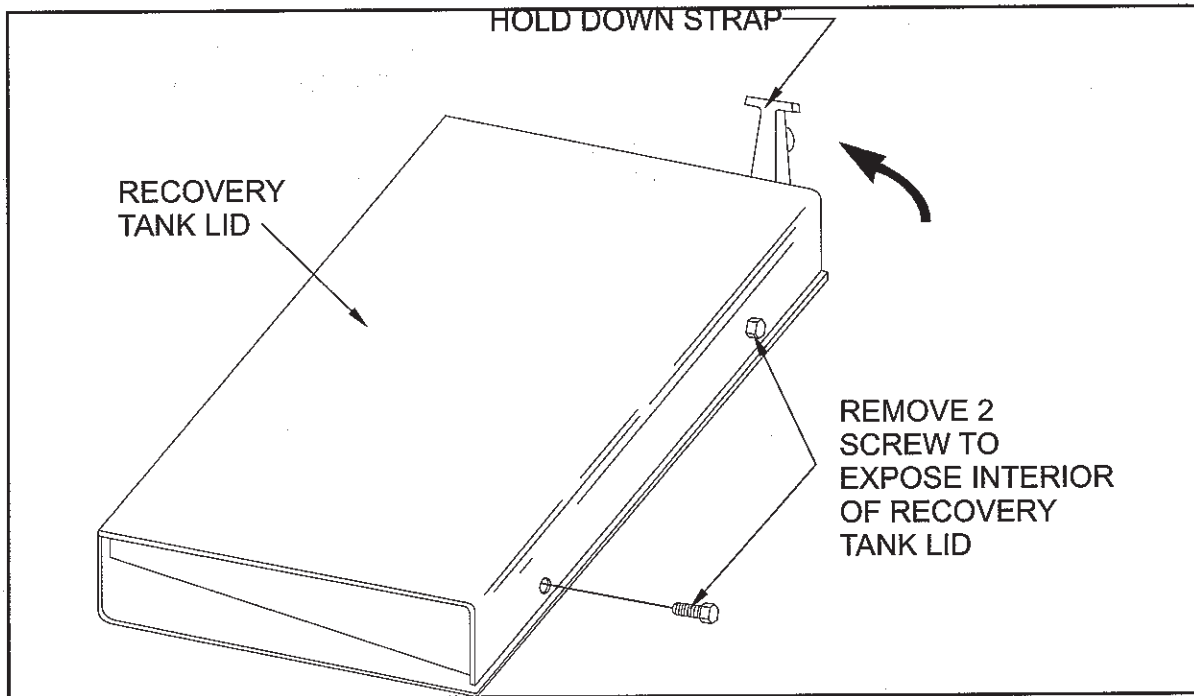
### SQUEEGEE

The squeegee will require service when the inner edge of the blade becomes rounded with wear, impairing the wiping action. At this time, the outer blade should be removed and remounted with one of the other unworn edges in contact with the floor. Squeegee operating height is determined and maintained by adjusting the caster wheel stems up or down in the squeegee lift frame and locking with the jam nut.

### RECOVERY TANK LID AND TANK ACCESS

Remove the two hex head screws to gain access to the inside of the recovery tank lid. The hydraulic oil cooler is located inside the lid. See figure 34. To gain access to the Recovery Tank, open the engine cover and loosen the hold down strap located on the side of the recovery tank.

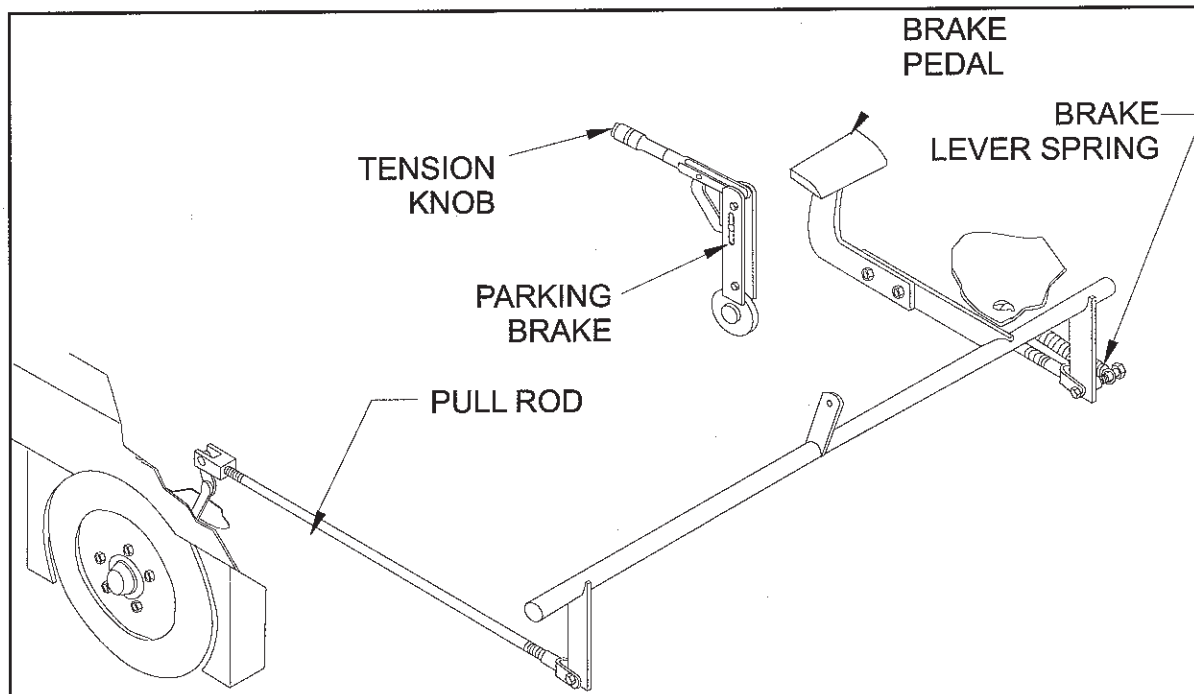
## GENERAL MACHINE MAINTENANCE



P4898

FIGURE 34

## BRAKE ADJUSTMENT



P4886

FIGURE 35

1. Connect pull rod, preset to 44.5 inch (113 cm.) clevis centerlines, to brake lever then adjust to fit with brake pedal full up and the spring attached.
2. Adjust tension knob on parking brake lever to hold machine on an 8 degree incline.

## AIR INTAKE SYSTEM

## NOTE

## Monitor the air filter indicator daily

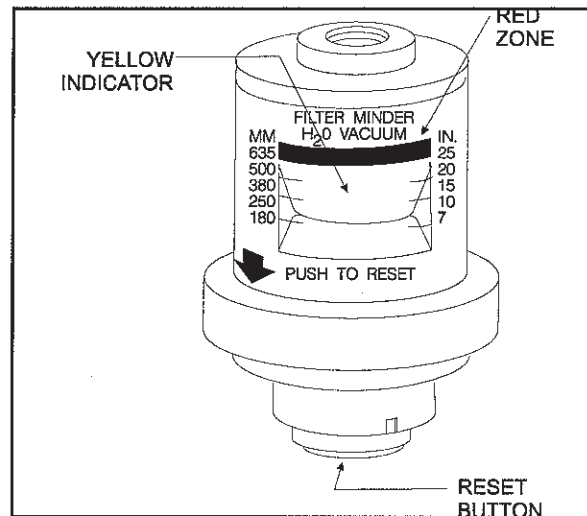
The importance of maintaining an air filter cannot be overemphasized. Dirt ingested through improperly installed, improperly serviced, or inadequate air filter elements wears out more engines than long hours of operation. Even a small amount of dirt will wear out a set of piston rings in just a few hours. Operating with a clogged air filter element also causes the fuel mixture to be richer, which can lead to formation of harmful sludge deposits in the engine. Always cover the air intake when the air filter is removed for servicing. Do not neglect servicing the air filter. Use only approved replacement parts. Keep all other air intake components such as hoses and clamps secure and in good condition to prevent entrance of unfiltered air.

Over maintenance can cause more damage than good. Removing the air filter element more often than is needed allows contaminants to enter the engine unnecessarily.

## AIR FILTER

The engine air filter housing includes a dust cap and a dry cartridge type air filter element. The dust cap must be emptied of dirt daily. The air filter element must be replaced every 75 to 100 hours. The filter element must be replaced if it is damaged or has been cleaned three times.

Replace the engine air filter only when the Yellow Filter Service Indicator reaches the red band at the top of the indicator. The yellow indicator will stay at the red band when the engine is off. Reset the indicator by depressing the black button at the bottom of the indicator.



P4713

FIGURE 36

## TO REPLACE AIR FILTER ELEMENT

1. Stop the engine and engage the machine parking brake.

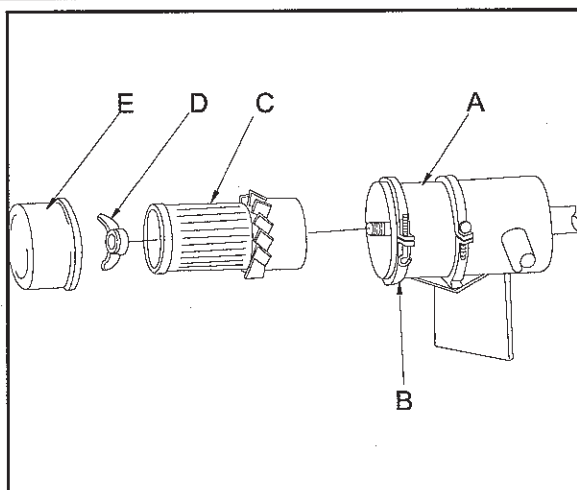


## WARNING

Always park on a level surface, stop the engine, and engage parking brake before working on the machine to keep it from creeping or rolling.

2. Unscrew the clamp ring on the filter.
3. Remove the dust cap.
4. Empty the dust cap.
5. Remove the filter wing nut.
6. Gently pull the filter element out of the filter housing.

## GENERAL MACHINE MAINTENANCE

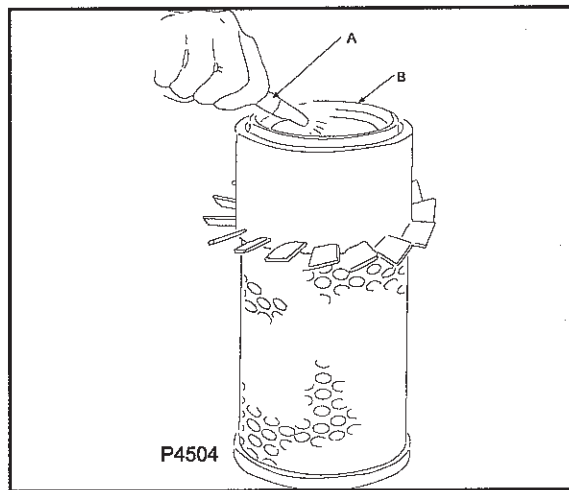


P4599a

FIGURE 37

### REMOVING AIR FILTER ELEMENT

- A. Filter Housing
- B. Clamp Ring
- C. Filter Element
- D. Wing Nut
- E. Dust Cap



P4504

FIGURE 38

### CLEANING AIR FILTER ELEMENT

- A. Air Hose
- B. Filter Element

7. Clean the interior of the air cleaner housing with a damp cloth. Clean the element housing sealing surfaces.
8. Using an air hose, direct dry, clean air maximum 30 PSI up and down pleats on the inside of the filter. Do not rap, tap, or pound dust out of the element.



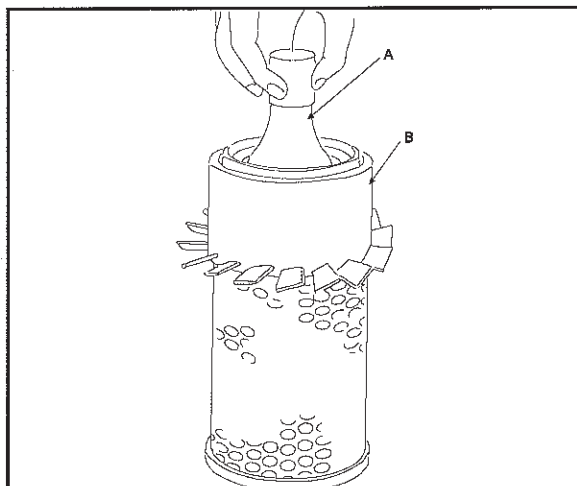
### WARNING

**Wear approved eye protection when using air or water hoses to prevent eye injury.**

9. After cleaning the air filter element, inspect it for damage by placing a bright light inside. The slightest rupture requires replacement of the filter. Clean and inspect the ends of the element. They should be unbroken and flexible. Remember, the element must be re-placed after it has been cleaned three times.

### INSPECTING AIR FILTER ELEMENT

- A. Bright Light
- B. Filter Element

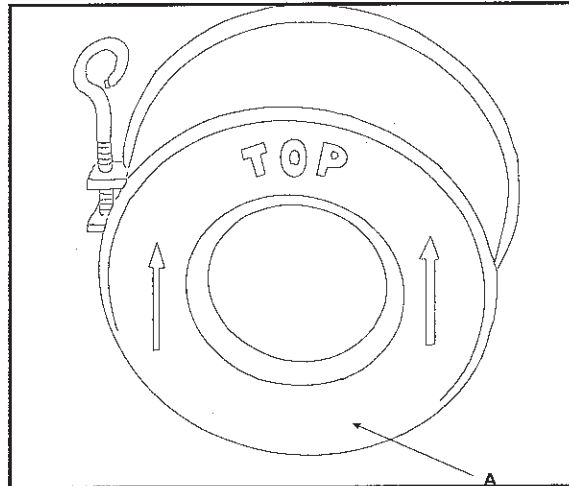


P4503

FIGURE 39

### DUST CAP

- A. Dust Cap

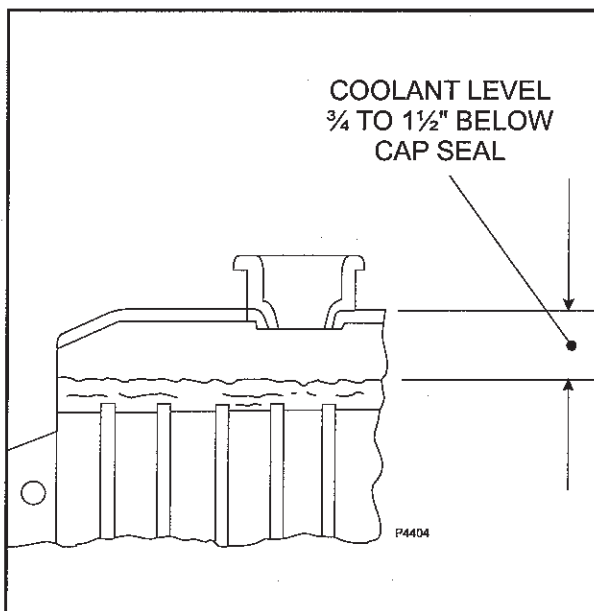


P4505

FIGURE 40

10. Install the new or cleaned filter element so that fins on the element are at the intake end of the air cleaner. Use care so the fins are not damaged. Tighten the wing nut attaching the element.
11. Install the dust cap with the arrows pointing up. Tighten the clamp ring to hold it in place. Check all intake hose connections for leaks or abrasion.
12. Reset filter monitor after any filter service.

### COOLING SYSTEM



P4404

FIGURE 41

#### COOLANT LEVEL

Check the coolant level in the radiator daily, only when the engine is cool.

Maintain the coolant level at approximately 3/4 inches (1.9 cm.) below the filler neck seat on the radiator when the coolant is cold.

Whenever coolant level checks are made, check condition of radiator cap rubber seal. Make sure it is clean and free of any dirt particles. Rinse off with clean water if necessary. When replacing cap on radiator, also make sure radiator filler neck is clean.



#### WARNING

Never remove the radiator cap under any conditions while the engine is operating. Failure to follow these instructions could result in damage to the cooling system or engine and/or personal injury. To avoid having scalding hot coolant or steam blow out of the radiator, use extreme care when removing the cap from a hot radiator, if possible, wait until the engine has cooled, then wrap a thick cloth around the radiator cap and turn it slowly to the first stop. Step back while the pressure is released from the cooling system. When you are sure all the pressure has been released, press down on the cap (still with a cloth), turn and remove it. Do not add coolant to an engine that has become overheated until the engine cools. Adding coolant to an extremely hot engine can result in a cracked block or cylinder head.

Use only a permanent type coolant that meets FORD specification ESE-M97B44-A such as FORD Cooling System Fluid. Refer to the coolant chart on the container for additional antifreeze protection information. Do not use alcohol or methanol antifreeze, or mix them with the specified coolant. Plain water may be used in an emergency, but replace it with the specified coolant as quickly as possible to avoid damage to the system. With only water in the system, do not let engine run hot.

#### RADIATOR

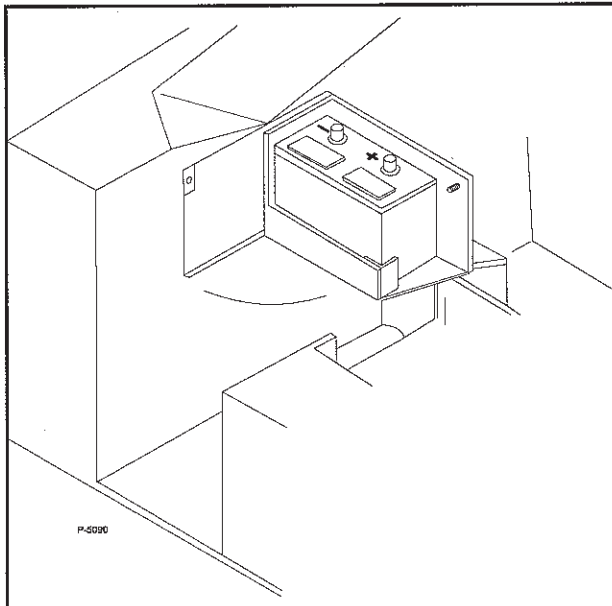
Inspect the exterior of the radiator for obstructions. Remove all bugs, dirt or foreign material with a soft brush or cloth. Use care to avoid damaging the fins. If available, use compressed air or a stream of water in the opposite direction to normal airflow. Open door for access.

Check all hoses and connections for leaks. If any of the hoses are cracked, frayed, or feel spongy, they should be replaced.

## GENERAL MACHINE MAINTENANCE

### DRIVE BELTS

The drive belt(s) should be properly adjusted at all times. A loose drive belt causes improper alternator, fan and water pump operation, and overheating. Overtightening the belt may result in excessive wear on the alternator and water pump bearings, as well as premature wear on the belt itself. Therefore, it is recommended that proper belt tension be maintained.



P5090

FIGURE 42

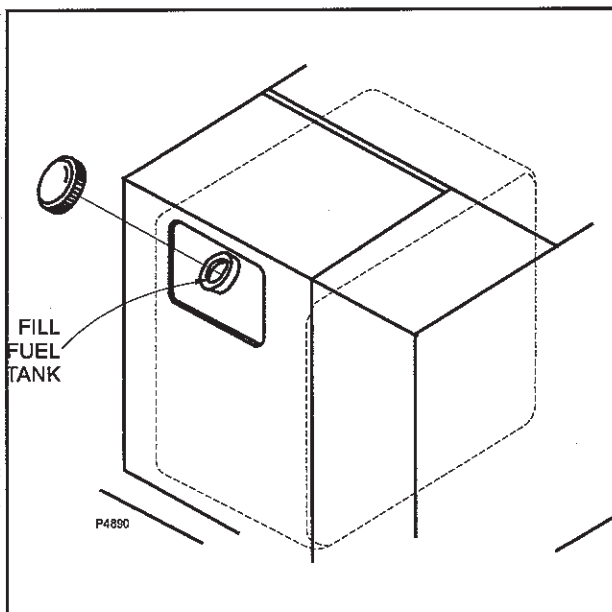
### BATTERY

1. Access to the battery is through the door located beside the driver's seat.
2. Open the seat cover and unscrew the access bolt to the battery door.
3. Swing the battery door out.
4. Keep the top of the battery clean and dry. Keep the terminals and connectors clean. To clean the tops of the batteries, use a damp cloth with a weak solution of ammonia or bicarbonate of soda solution. To clean the terminals and connectors, use a terminal and connector cleaning tool.
5. Swing the battery door closed and fasten the access bolt.
6. Put the seat into position.



### WARNING

**NEVER allow the soda solution to enter the cells. This will permanently discharge the battery.**



P4890

FIGURE 43

### GAS TANK

The gas tank is located under the drivers seat. It may be filled from the rear of the machine.

### LP GAS SYSTEM

The propane powered Model 7700 is identical to the "standard" gasoline powered 7700, except that its fuel system has been modified to operate on LP vapor fuel.

The LP fuel system consists of several components not found on the gasoline system. The LP fuel system also contains the associated mounting hardware and plumbing for the LP components. The major LP components are as follows: These components are factory set, attempts at adjusting these components should only be made by authorized service personnel.

1. An LP carburetor
2. A combination water heated vaporizer and regulator
3. A combination LP fuel line filter and lock off valve
4. LP fuel tank and fittings

### LP GAS VAPORIZER-REGULATOR QUICK CHECK

Turn on the ignition switch and open the radiator cap. Check the coolant for bubbles. If bubbles are present, the vaporizer may have a leaking gasket or may have developed a pinhole leak, allowing the LP fuel to enter the cooling system.

### LP GAS FUEL TANK

The LP tank is located under the drivers seat. Use only the proper size and type of LP tank. The 7700 LP powered sweeper uses 33.5 lb. liquid withdraw tank. The DOT designation of the tank is DOT 4BW-240.

### NEUTRAL ADJUSTMENT

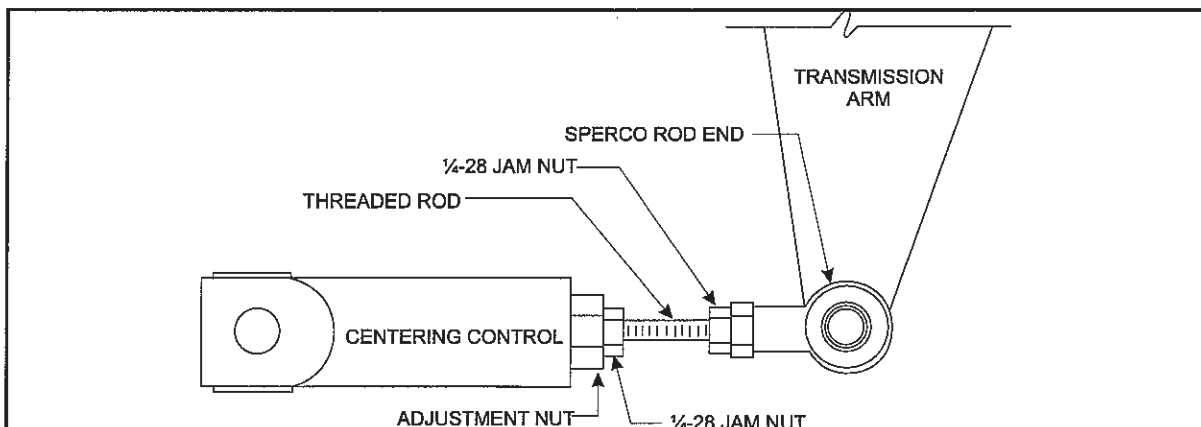
#### NOTE

Orientation of the transmission arm assembly depends upon which engine is installed in the 7700 Sweeper Scrubber. See pages 120 through 125 for proper identification.

#### NOTE

Adjustment directions given are as seen from the operator's position in the operator's seat.

1. Check engine no load RPM ; 7700, 2150 RPM. Check hydraulic reservoir oil level.
2. Raise rear of machine onto jack stands so rear wheel is off the ground.
3. Loosen the jam nut away from the adjustment nut.
4. If the rear drive wheel is turning forward, turn the adjustment nut clockwise (this will shorten the threaded shaft). If the rear drive wheel is turning in reverse, turn the adjustment nut counterclockwise (this will lengthen the threaded shaft).
5. Tighten the jam nut against the adjustment nut.
6. Test for operation of neutral with engine at full throttle. If the rear drive wheel turns, repeat adjustments Steps 3, 4 and 5.



P5093

FIGURE 44

## PARTS LIST LEGEND

---

### ABBREVIATIONS - SCREWS

|         |                                        |
|---------|----------------------------------------|
| ADJ     | = Adjusting Screw                      |
| ADJ.SP  | = Adjusting Plunger Screw              |
| BHM     | = Binding Head Machine Screw           |
| BHS     | = Button Head Socket Screw             |
| CAPT.SL | = Captivated Slotted Screw             |
| CAPT.WG | = Captivated Wing Screw                |
| FHM     | = Flat Head Machine Screw              |
| FIL.HM  | = Filister Head Machine Screw          |
| HHC     | = Hexagon Head Cap Screw               |
| HHM     | = Hexagon Head Machine Screw           |
| HIHD    | = 1/2 High Head Screw                  |
| HSHC    | = Hexagonal Socket Head Cap Screw      |
| HSFHC   | = Hexagonal Socket Flat Head Cap Screw |
| KNH     | = Knurled Head Screw                   |
| MHHC    | = Metric Hexagon Head Cap Screw        |
| PHM     | = Pan Head Machine Screw               |
| RHD     | = Round Head Drive Screw               |
| RHM     | = Round Head Machine Screw             |
| RHW     | = Round Head Wood Screw                |
| SHC     | = Shiny Crown Cap Screw                |
| SHTB    | = Shoulder Thumb Screw                 |
| SQ      | = Square Head Screw                    |
| TB      | = Thumb Screw                          |
| THM     | = Truss Head Machine Screw             |
| WELD    | = Weld Stud                            |
| WG      | = Wing Screw                           |

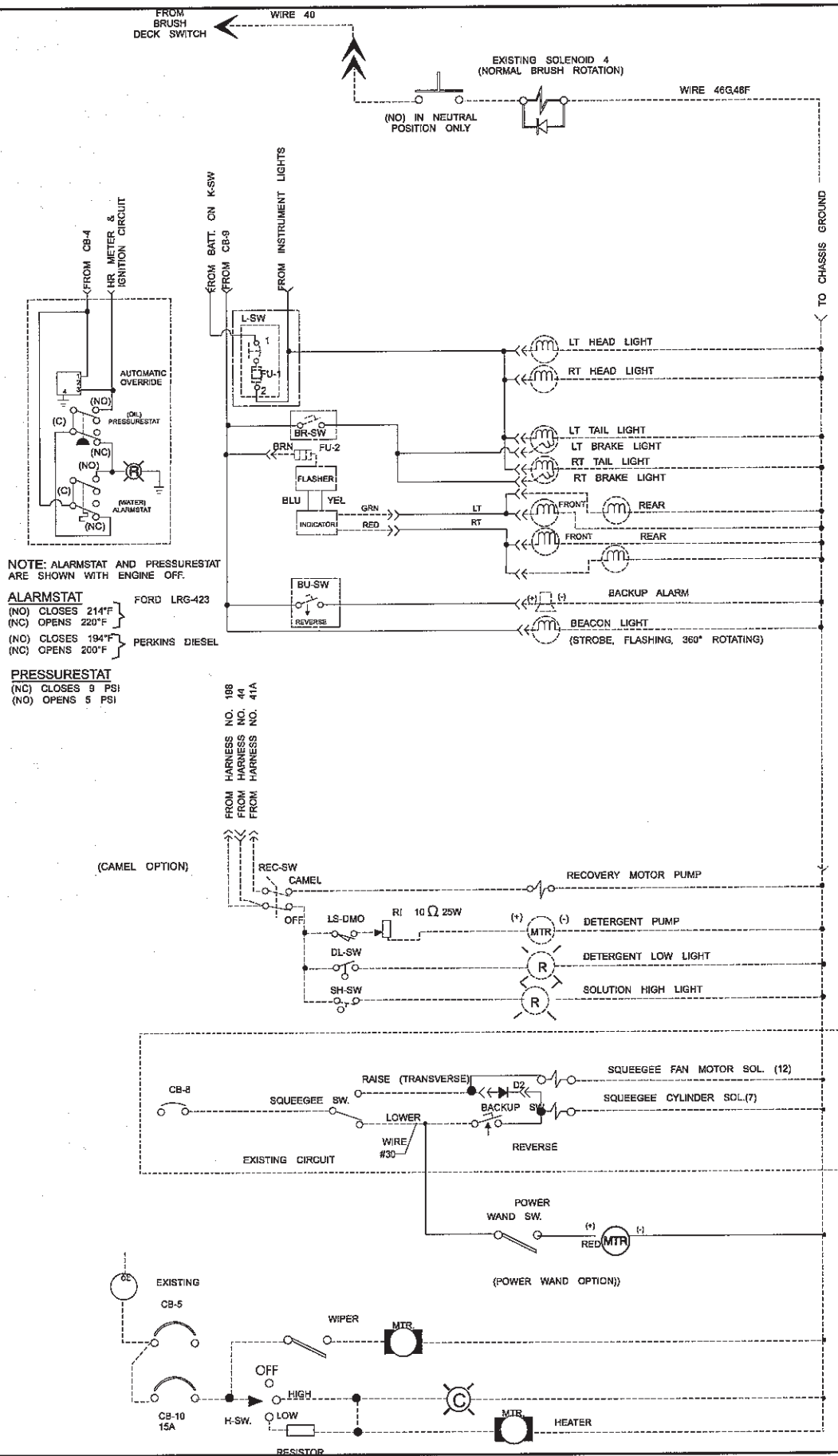
### ABBREVIATIONS - SETSCREWS

|      |                              |
|------|------------------------------|
| HS   | = Hexagonal Socket Setscrew  |
| S    | = Slotted Setscrew           |
| SH   | = Square Head Setscrew       |
| -KCP | = Knurled Cup Point Setscrew |
| -CP  | = Cup Point Setscrew         |
| -OP  | = Oval Point Setscrew        |
| -FDP | = Full Dog Point Setscrew    |
| -HDP | = Half Dog Point Setscrew    |
| -FP  | = Flat Point Setscrew        |
| -COP | = Cone Point Setscrew        |

## TROUBLESHOOTING TABLE

| <b>PROBLEM</b>                                         | <b>PROBABLE CAUSE</b>                                                                                                                                                                                                                                                                                                                                      | <b>REMEDY</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sweeping does not function                             | <ol style="list-style-type: none"> <li>1. Dump door closed</li> <li>2. Hopper is raised</li> <li>3. Hopper switch out of adjustment</li> </ol>                                                                                                                                                                                                             | <ol style="list-style-type: none"> <li>1. Open dump door</li> <li>2. Lower hopper</li> <li>3. Adjust hopper switch</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                          |
| Poor water pick up at squeegee                         | <ol style="list-style-type: none"> <li>1. Side or rear squeegee are worn or damaged</li> <li>2. Clogging in water pick up</li> <li>3. Air leaks in suction hose and connection</li> <li>4. Air leaks at recovery tank cover and/or manifold gasket</li> <li>5. Poor vacuum</li> <li>6. Drain hose or drain plug leakage or not closed properly.</li> </ol> | <ol style="list-style-type: none"> <li>1. Examine squeegee rubber blade for cuts or worn spots.</li> <li>2. Repair or replace hose and connection</li> <li>3. Repair or replace gaskets</li> <li>4. Check vacuum motor</li> <li>5. Check seal on recovery tank</li> <li>6. Close, repair or replace drain plug in recovery tank.</li> </ol>                                                                                                                                                                            |
| Water spill from squeegee                              | <ol style="list-style-type: none"> <li>1. Side squeegee blades, poor contact with floor</li> <li>2. Squeegee blades worn or damages</li> <li>3. Too much solution being applied before making urns</li> <li>4. Brushes rotating opposite direction</li> </ol>                                                                                              | <ol style="list-style-type: none"> <li>1. Readjust blades for proper contact</li> <li>2. Replace or adjust</li> <li>3. Shut off solution flow 5' to 10'</li> <li>4. Check position of switches.</li> </ol>                                                                                                                                                                                                                                                                                                             |
| Lack or suction at rear                                | <ol style="list-style-type: none"> <li>1. Clogged suction hose or pick up tool</li> <li>2. Loose connections between suction hose and squeegee or between hoses or manifold inlet</li> <li>3. Vacuum motor not operating</li> <li>4. Vacuum float cage clogged</li> <li>5. Vacuum float shut off</li> </ol>                                                | <ol style="list-style-type: none"> <li>1. Disconnect suction hose from squeegee; flush squeegee &amp; hoses.</li> <li>2. Check all hose connections for looseness or damage.</li> <li>3. Check hydraulic motor in recovery</li> <li>4. Clean perforated metal thoroughly</li> <li>5. Excessive solution in recovery drain tank. Excessive foam build up, change cleaning chemical mixture. Use A-L approved material</li> </ol>                                                                                        |
| Poor scrubbing                                         | <ol style="list-style-type: none"> <li>1. Worn scrubbing brushes</li> <li>2. Incorrect method of operation</li> <li>3. Wrong cleaning agent or mixture</li> <li>4. Poor solution distribution.</li> </ol>                                                                                                                                                  | <ol style="list-style-type: none"> <li>1. Inspect brushes. If they are worn to ½" (1.3 cm) or less, replace all 3 brushes.</li> <li>2. Check scrubbing procedures, brush pressure, type of brush solution flow &amp; cleaning chemical used. For extreme conditions double scrubbing may be necessary.</li> <li>3. Use A-L recommended material.</li> <li>4. Clean out distribution tube &amp; metering holes to brushes, Check feed hose &amp; clean if necessary. Check valve &amp; cable control system.</li> </ol> |
| Engine runs, but machine will not move on level ground | <ol style="list-style-type: none"> <li>1. Foot pedal and/or linkage jammed or not adjusted</li> <li>2. Front wheels jammed or brakes locked</li> <li>3. Hydraulic pump trouble</li> <li>4. Rear wheel hydraulic motor, broken shaft key, broken shaft, etc.</li> </ol>                                                                                     | <ol style="list-style-type: none"> <li>1. Check pedal linkage</li> <li>2. Check wheels &amp; brakes</li> <li>3. Check &amp; repair. See Cessna information</li> <li>4. Check &amp; repair. See Char-Lynn information</li> </ol>                                                                                                                                                                                                                                                                                        |
| Machine moves slowly                                   | <ol style="list-style-type: none"> <li>1. Low hydraulic oil level</li> <li>2. Brakes dragging</li> <li>3. Hydraulic oil temperature too high</li> <li>4. Worn hydraulic pump or motor drive</li> </ol>                                                                                                                                                     | <ol style="list-style-type: none"> <li>1. Add oil to reservoir.</li> <li>2. Check brakes</li> <li>3. Check oil level. Add SAE 5 ATF if required</li> <li>4. See Cessna or Char-Lynn information</li> </ol>                                                                                                                                                                                                                                                                                                             |
| Hydraulic pump making excessive noise                  | <ol style="list-style-type: none"> <li>1. Clogged inlet strainer or suction line.</li> <li>2. Air bubbles in hydraulic fluid</li> <li>3. Hydraulic pump os worn or damaged</li> </ol>                                                                                                                                                                      | <ol style="list-style-type: none"> <li>1. Clean inlet strainer line. Drain &amp; flush reservoir if oil is dirty. Refill with clean SAE 5 ATF.</li> <li>2. Check for low hydraulic fluid level, leaking fitting or hoses.</li> <li>3. See Cessna pump information</li> </ol>                                                                                                                                                                                                                                           |

# SCHEMATIC DIAGRAM OPTIONS



P-3660

Parts may be ordered from American-Lincoln authorized distributors. Inspect the Alto U.S. serial plate to avoid delays in filling you orders:

|                                                                                                                                                                                                                               |                                                                                              |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| <b>MODEL NO.</b><br><div style="border: 1px solid black; height: 40px; width: 100%;"></div>                                                                                                                                   | <b>SERIAL NO.</b><br><div style="border: 1px solid black; height: 40px; width: 100%;"></div> |
| <p>Manufactured By</p> <div style="text-align: center;">  </div> <hr/> <p><b>American Lincoln Technology®</b></p> <p>Bowling Green, Ohio</p> |                                                                                              |

1. Use the model number, catalog number, and serial number when ordering.
2. Give the part number, description, and quantity of parts needed.
3. Give shipping instructions for either freight, UPS, or parcel post.

Parts and supplies listed in this manual can be ordered from the following address:

| Alto U.S., Inc.<br>American Lincoln Technologies                 | Alto U.S., Inc.<br>Distributor |
|------------------------------------------------------------------|--------------------------------|
| 1100 Haskins Road<br>Bowling Green, Ohio 43402<br>(800) 331-7692 |                                |

### MACHINE CATALOG NUMBER

|         |                                     |
|---------|-------------------------------------|
| 505-202 | 7700 Gas Variable Dump - FORD       |
| 505-205 | 7700 Diesel Variable Dump           |
| 505-207 | 7700 Gas Low Dump - FORD            |
| 505-210 | 7700 Diesel Low Dump                |
| 505-212 | 7700 Gas Camel Variable Dump - FORD |
| 505-215 | 7700 Diesel Camel Variable Dump     |
| 505-217 | 7700 Gas Camel Low Dump - FORD      |
| 505-220 | 7700 Diesel Camel Low Dump          |
| 505-221 | 7700 Manual Dump - FORD             |
| 505-222 | 7700 Manual Dump - Diesel           |
| 505-223 | 7700 Manual Dump Camel - FORD       |
| 505-224 | 7700 Manual Dump Camel - Diesel     |

NOTES

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## TABLE OF CONTENTS - CHAPTER 2

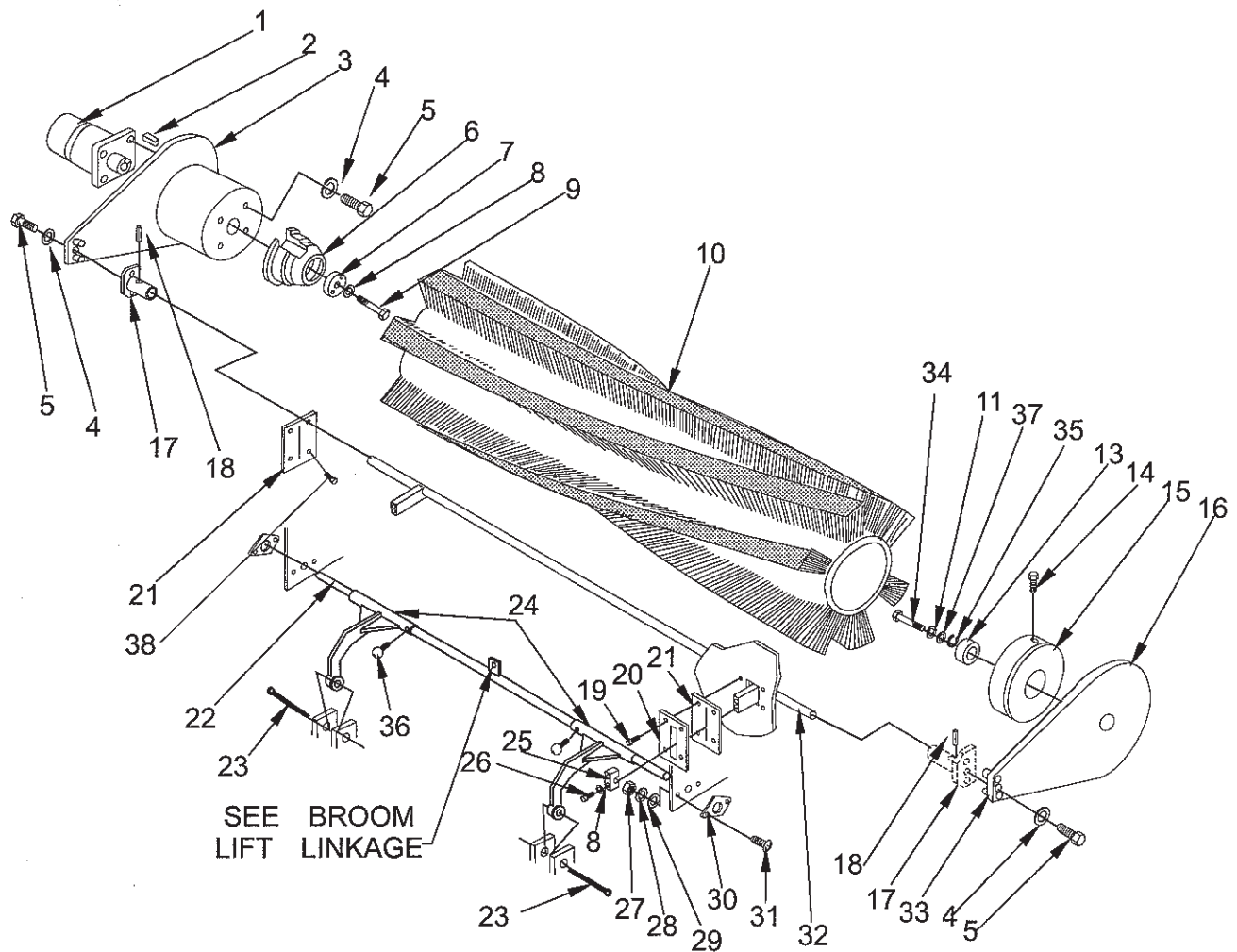
|                                                                   |       |
|-------------------------------------------------------------------|-------|
| MAIN BROOM .....                                                  | 2-2   |
| MAIN BROOM LIFT LINKAGE .....                                     | 2-4   |
| SIDE BROOM (VARIABLE & LOW DUMPS) .....                           | 2-6   |
| BROOM AND BRUSH CHAMBER DOOR .....                                | 2-8   |
| HOPPER SYSTEM (MANUAL DUMP) .....                                 | 2-10  |
| HOPPER (LOW DUMP) .....                                           | 2-12  |
| HOPPER AND FLAPS (VARIABLE DUMP) .....                            | 2-14  |
| HOPPER FILTER AND IMPELLER .....                                  | 2-16  |
| HOPPER CONTROL VALVE & DUMP LINKAGE (VARIABLE DUMP) .....         | 2-18  |
| HOPPER CONTROL VALVE & DUMP LINKAGE (LOW DUMP) .....              | 2-19  |
| SCRUB DECK AND BRUSHES .....                                      | 2-20  |
| SQUEEGEE LIFT .....                                               | 2-22  |
| SOLUTION TANK .....                                               | 2-24  |
| SOLUTION FEED LINKAGE .....                                       | 2-26  |
| RECOVERY TANK .....                                               | 2-28  |
| RECOVERY TANK LID .....                                           | 2-30  |
| VACUUM MOTOR & FLOAT .....                                        | 2-32  |
| FRONT WHEEL AND BRAKE .....                                       | 2-34  |
| REAR WHEEL .....                                                  | 2-36  |
| BRAKE LINKAGE .....                                               | 2-38  |
| FORWARD/REVERSE CONTROL - FORD .....                              | 2-40  |
| FORWARD/REVERSE CONTROL - PERKINS .....                           | 2-42  |
| MAIN FRAME .....                                                  | 2-44  |
| DRIVER COMPARTMENT .....                                          | 2-46  |
| HYDRAULIC HOSE SYSTEM (MANUAL DUMP) .....                         | 2-48  |
| HYDRAULIC HOSE SYSTEM (LOW DUMP) .....                            | 2-50  |
| HYDRAULIC HOSE SYSTEM (VARIABLE DUMP) .....                       | 2-52  |
| SUCTION & RETURN HOSES (MANUAL DUMP) .....                        | 2-54  |
| SUCTION & RETURN HOSES (LOW DUMP) .....                           | 2-56  |
| MAIN BROOM AND FITTINGS .....                                     | 2-58  |
| SIDE BROOM AND FITTINGS .....                                     | 2-59  |
| SCRUB MOTORS & FITTINGS .....                                     | 2-60  |
| SQUEEGEE & SCRUB DECK CYLINDERS & FITTINGS .....                  | 2-61  |
| POWER STEERING UNIT AND FITTINGS .....                            | 2-62  |
| POWER STEERING, HOPPER DUMP & HOPPER LIFT CYL'S. & FITTINGS ..... | 2-63  |
| REAR WHEEL MOTOR & FITTINGS .....                                 | 2-64  |
| DRIVE PUMP & FITTINGS .....                                       | 2-65  |
| HYDRAULIC RESERVOIR, FILTER & FITTINGS .....                      | 2-66  |
| VACUUM MOTOR & FITTINGS .....                                     | 2-68  |
| DUST CONTROL IMPELLER AND FITTINGS .....                          | 2-69  |
| MAIN CONTROL VALVE AND FITTINGS .....                             | 2-70  |
| CYLINDER CONTROL VALVE AND FITTINGS .....                         | 2-71  |
| RETURN MANIFOLD AND FITTINGS .....                                | 2-72  |
| OIL COOLER & FITTINGS .....                                       | 2-74  |
| AUXILIARY PUMP & FITTINGS .....                                   | 2-75  |
| AUXILIARY PUMP & FITTINGS FORD .....                              | 2-76  |
| AUXILIARY PUMP & FITTINGS PERKINS .....                           | 2-77  |
| BATTERY .....                                                     | 2-78  |
| ENGINE COVER .....                                                | 2-80  |
| FORD 425 ENGINE .....                                             | 2-82  |
| LP FORD ENGINE .....                                              | 2-84  |
| PERKINS DIESEL ENGINE .....                                       | 2-86  |
| THROTTLE CHOKE AND FUEL PUMP .....                                | 2-88  |
| FUEL TANK .....                                                   | 2-89  |
| LP TANK SYSTEM .....                                              | 2-90  |
| FUEL AND WATER EXTRACTOR (DIESEL) .....                           | 2-92  |
| AIR INTAKE (FORD) .....                                           | 2-94  |
| AIR INTAKE (PERKINS) .....                                        | 2-96  |
| RADIATOR AND SHROUD .....                                         | 2-97  |
| EXHAUST SYSTEM (GAS AND LP FORD) .....                            | 2-98  |
| EXHAUST SYSTEM (DIESEL PERKINS) .....                             | 2-99  |
| STEERING AND INSTRUMENT PANEL .....                               | 2-100 |
| INSTRUMENT PANEL .....                                            | 2-102 |
| INSTRUMENT PANEL (MANUAL DUMP) .....                              | 2-104 |
| WIRING - FORD 425 (MANUAL DUMP) .....                             | 2-106 |
| WIRING - PERKINS (MANUAL DUMP) .....                              | 2-108 |
| WIRING - FORD 425 (VARIABLE DUMP) .....                           | 2-110 |
| WIRING - PERKINS (VARIABLE DUMP) .....                            | 2-112 |
| DECALS .....                                                      | 2-114 |

## MAIN BROOM - PARTS LIST

| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>DESCRIPTION</u>                    | <u>QTY</u> |
|----------------|--------------------|---------------------------------------|------------|
| 1              | 0882-040           | Hydraulic Motor, Broom Drive          | 1          |
| 2              | 2-00-03838         | Key, .250 x 1.000 (#15) W             | 1          |
| 3              | 8-16-00041         | Drive Broom Arm                       | 1          |
| 4              | 2-00-02310         | Lock Washer, Helical Spring 3/8 Med   | 6          |
| 5              | 2-00-00232         | Screw, 3/8 - 14 x .750 HHC            | 6          |
| 6              | 8-33-09046-1       | Broom Driver Hub                      | 1          |
| 7              | 8-58-05160         | Hub Locking Plate                     | 1          |
| 8              | 2-00-00518         | Lock Washer, Helical Spring 1/4 Med   | 7          |
| 9              | 2-00-03039         | Screw, 1/4 - 20 x .625 HSHC           | 3          |
| 10             |                    | See Broom Options                     |            |
| 11             | 2-00-00522         | Lock Washer, Helical Spring 3/4 Light | 1          |
| 12             |                    |                                       |            |
| 13             | 2-00-04889         | Bearing                               | 1          |
| 14             | 2-00-04886         | Screw, 3/8 - 16 x .500 HSHC           | 2          |
| 15             | 8-33-09090         | Idler                                 | 1          |
| 16             | 8-16-00039         | Idler Arm                             | 1          |
| 17             | 7-15-01035         | Pivot Collar Weldment                 | 2          |
| 18             | 2-00-04943         | Spring Pin, 3/8 x 1 1/2               | 2          |
| 19             | 2-00-00221         | Screw, 1/4 - 20 x .750 HHC            | 8          |
| 20             | 7-16-07274         | Cover Plate Gasket                    | 2          |
| 21             | 7-29-00148         | Broom Arm Gasket                      | 2          |
| 22             | 7-70-05137         | Shaft                                 | 1          |
| 23             | 7-55-08119         | Lift Pin                              | 2          |
| 24             | 7-03-04098         | Scrub Deck Lift Arm                   | 2          |
| 25             | 7-13-07103         | End Clamp                             | 2          |
| 26             | 2-00-02587         | Screw, 1/4 - 20 x 1.250 HHC           | 4          |
| 27             | 2-00-00586         | Nut, Hex Jam 5/16 - 18 .500 x .187    | 4          |
| 28             | 2-00-00530         | Lock Washer, Helical Spring 5/16 Med  | 4          |
| 29             | 2-00-05103         | Flat Washer SS, .750 x .343 x .050    | 4          |
| 30             | 2-00-03997         | Flange Bearing, 3.750 x 1.000         | 2          |
| 31             | 2-00-00196         | Carriage Bolt, 5/16 - 18 x 1.000      | 4          |
| 32             | 7-70-05138         | Broom Chamber Shaft Weldment          | 1          |
| 33             | 8-55-08098         | Dowel Pin                             | 4          |
| 34             | 2-00-04887         | Screw, 3/4 - 10 x 1.250 HHC           | 1          |
| 35             | 2-00-04890         | Retaining Ring, 3.341 Int.            | 1          |
| 36             | 2-00-02558         | Lubrication Fitting, 45° 1/8 NPT      | 2          |

P4738/9510

# MAIN BROOM - EXPLODED VIEW



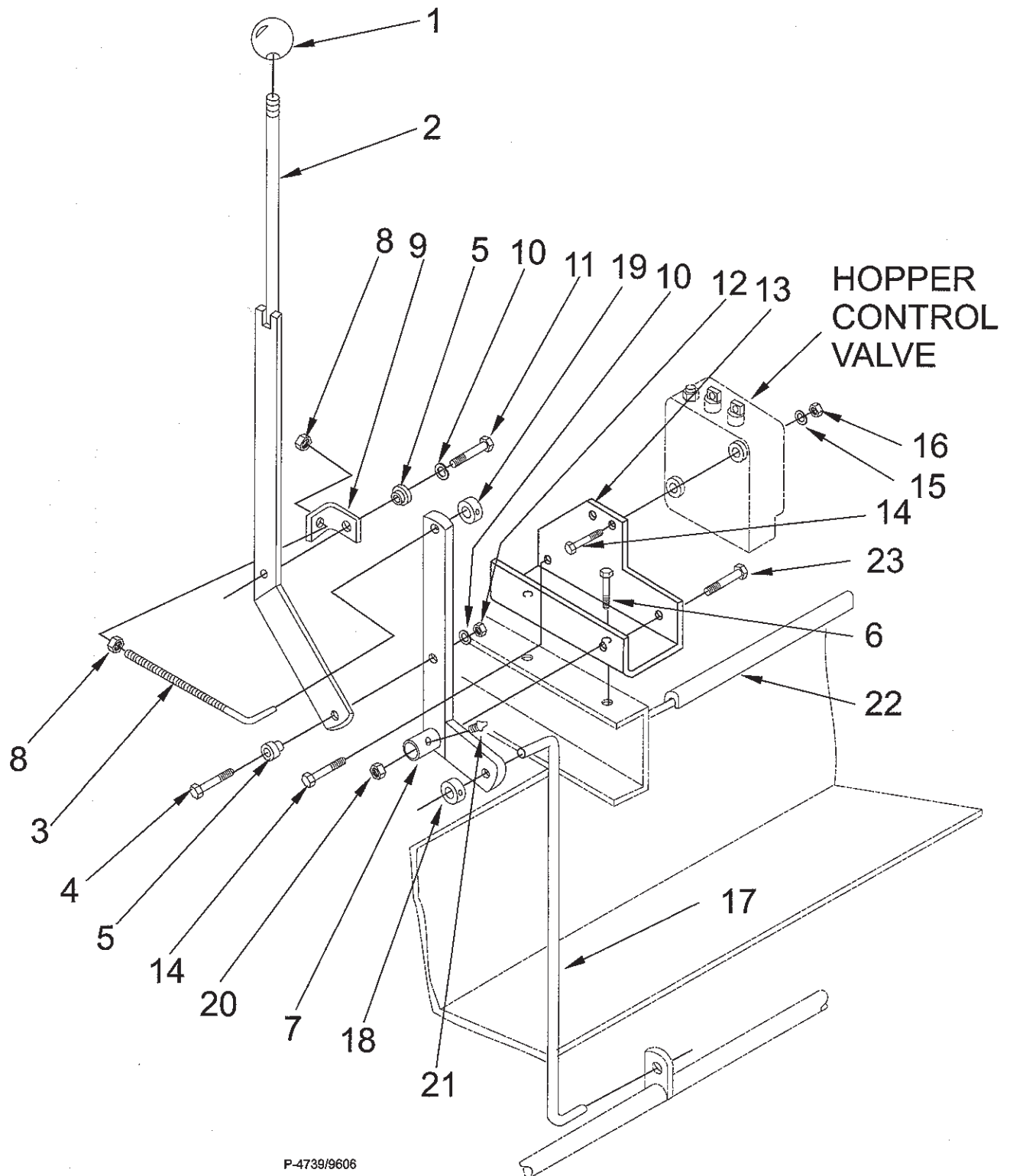
P4738/9606

## MAIN BROOM LIFT LINKAGE - PARTS LIST

| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>DESCRIPTION</u>                    | <u>QTY</u> |
|----------------|--------------------|---------------------------------------|------------|
| 1              | 8-39-00003         | Knob                                  | 2          |
| 2              | 7-41-05082         | Main Broom Lever                      | 1          |
| 3              | 7-66-00142         | Adjusting Rod                         | 1          |
| 4              | 2-00-02706         | Screw, 1/4-20 x 1.000 HHM             | 1          |
| 5              | 7-09-01057         | Spacer                                | 2          |
| 6              | 2-00-01255         | Screw, 5/16 - 18 x .875 HHC           | 2          |
| 7              | 7-17-00012         | Crank                                 | 1          |
| 8              | 2-00-02369         | Nut, Hex Jam 3/8 - 16 x .562 x .218   | 2          |
| 9              | 7-08-00493         | Broom Lever Bracket                   | 1          |
| 10             | 2-00-00530         | Lock Washer, Helical Spring 5/16 Med  | 4          |
| 11             | 2-00-00208         | Screw, 5/16 - 18 x .750 HHC           | 1          |
| 12             | 2-00-00585         | Nut, Hex 5/16 - 18 x .500 x .265      | 3          |
| 13             | 7-89-06700         | Hopper Valve Bracket                  | 1          |
| 14             | 2-00-02589         | Screw, 1/4 - 20 x 2.0 HHC             | 2          |
| 15             | 2-00-00518         | Lock Washer, Helical Spring 1/4 Med   | 2          |
| 16             | 2-00-00594         | Nut, Hex 1/4 - 20 x .437 x .218       | 2          |
| 17             | 7-42-05086         | Broom Lift Link                       | 1          |
| 18             | 8-15-01016         | Setscrew Collar, 1.000 x .5000 x .437 | 1          |
| 19             | 7-15-01022         | Setscrew Collar, .750 x .378 x .375   | 1          |
| 20             | 2-00-04936         | Nut, Hex Fiber Insert 1/2 - 13        | 1          |
| 21             | 2-00-00566         | Lubrication Fitting, Straight 1/8 NPT | 1          |
| 22             | 7-21-04030         | Edging                                | 1          |
| 23             | 2-00-05059         | Screw, 1/2-13 x 3.750 HHC             | 2          |

P4739/9510

# MAIN BROOM LIFT LINKAGE - EXPLODED VIEW



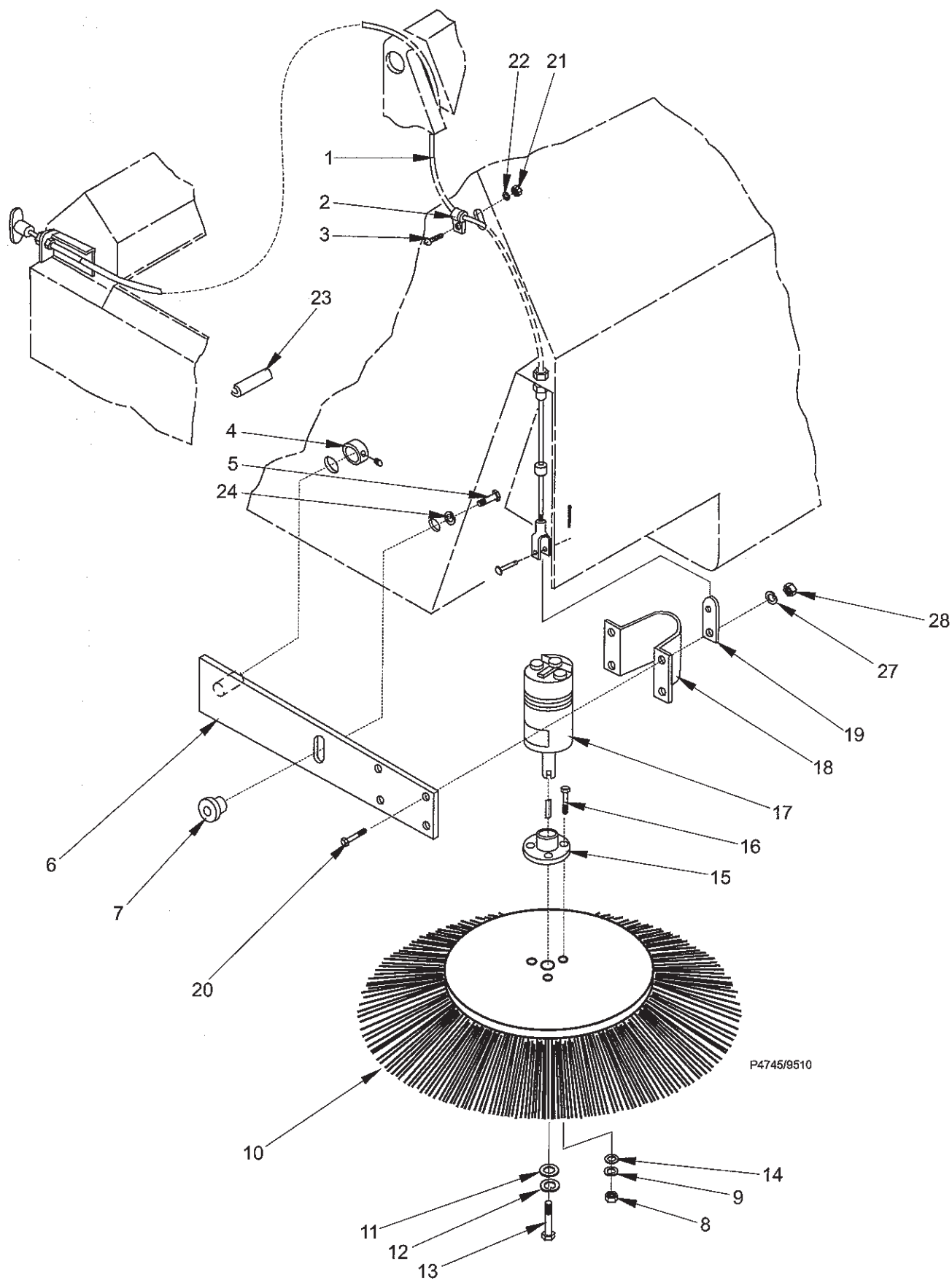
P-4739/9606

**SIDE BROOM (VARIABLE & LOW DUMPS) - PARTS LIST**

| <b>KEY NO.</b> | <b>PART NUMBER</b> | <b>DESCRIPTION</b>                   | <b>QTY</b> |
|----------------|--------------------|--------------------------------------|------------|
| 1              | 7-10-00020         | Cable                                | 1          |
| 2              | 2-95-04894         | Clamp                                | 1          |
| 3              | 2-00-00049         | Screw, #10 - 24 x .500 RHM           | 3          |
| 4              | 8-15-01003         | Setscrew Collar, 1.250 x .750 x .562 | 1          |
| 5              | 2-00-00232         | Screw, 3/8 - 16 x .750 HHC           | 1          |
| 6              | 7-03-04128         | Side Broom Arm Weldment              | 1          |
| 7              | 7-09-01134         | Bushing                              | 1          |
| 8              | 2-00-00585         | Nut, Hex 5/16 - 18 x .500 x .265     | 3          |
| 9              | 2-00-00530         | Lock Washer, Helical Spring 5/16 Med | 3          |
| 10             | 8-08-03107         | Side Broom                           | 1          |
| 11             | 2-00-00447         | Flat Washer, .562 x .265 x .187      | 1          |
| 12             | 2-00-00518         | Lock Washer, Helical Spring 1/4 Med  | 1          |
| 13             | 2-00-03537         | Screw, 1/4 - 28 x 2.000 HHC          | 1          |
| 14             | 2-00-00409         | Flat Washer, .687 x .343 x .062      | 3          |
| 15             | 7-25-06024         | Flange                               | 1          |
| 16             | 2-00-00218         | Screw, 5/16 - 18 x 2.000 HHC         | 3          |
| 17             | 0885-061           | Hydraulic Broom Drive Motor          | 1          |
| NS             | 0880-293           | Seal Kit for 0880-293                | 1          |
| NS             | 0780-144           | Seal Kit for 0880-293                | 1          |
| 18             | 7-13-07105         | Clamp                                | 1          |
| 19             | 7-79-00060         | Strap                                | 1          |
| 20             | 2-00-02708         | Screw, 5/16 - 18 x 1.00 HHC          | 4          |
| 21             | 2-00-00605         | Nut, Hex MS #10 - 24 x .375 x .125   | 3          |
| 22             | 2-00-00512         | Lock Washer, #10 Int.                | 3          |
| 23             | 8-21-04030         | Edging                               | 1          |
| 24             | 2-00-02310         | Lock Washer, Helical Spring 3/8 Med  | 1          |
| 25             | 2-00-04210         | Clamp                                | 2          |
| 26             | 2-00-00566         | Grease Fitting, 1/8 NPT Straight     | 1          |
| 27             | 2-00-00409         | Washer, Flat 5/16                    | 4          |
| 28             | 2-00-00644         | Nut, 5/16-18 Hex Fibre Lock          | 4          |

P4745/9510

# **SIDE BROOM (VARIABLE & LOW DUMPS) - EXPLODED VIEW**

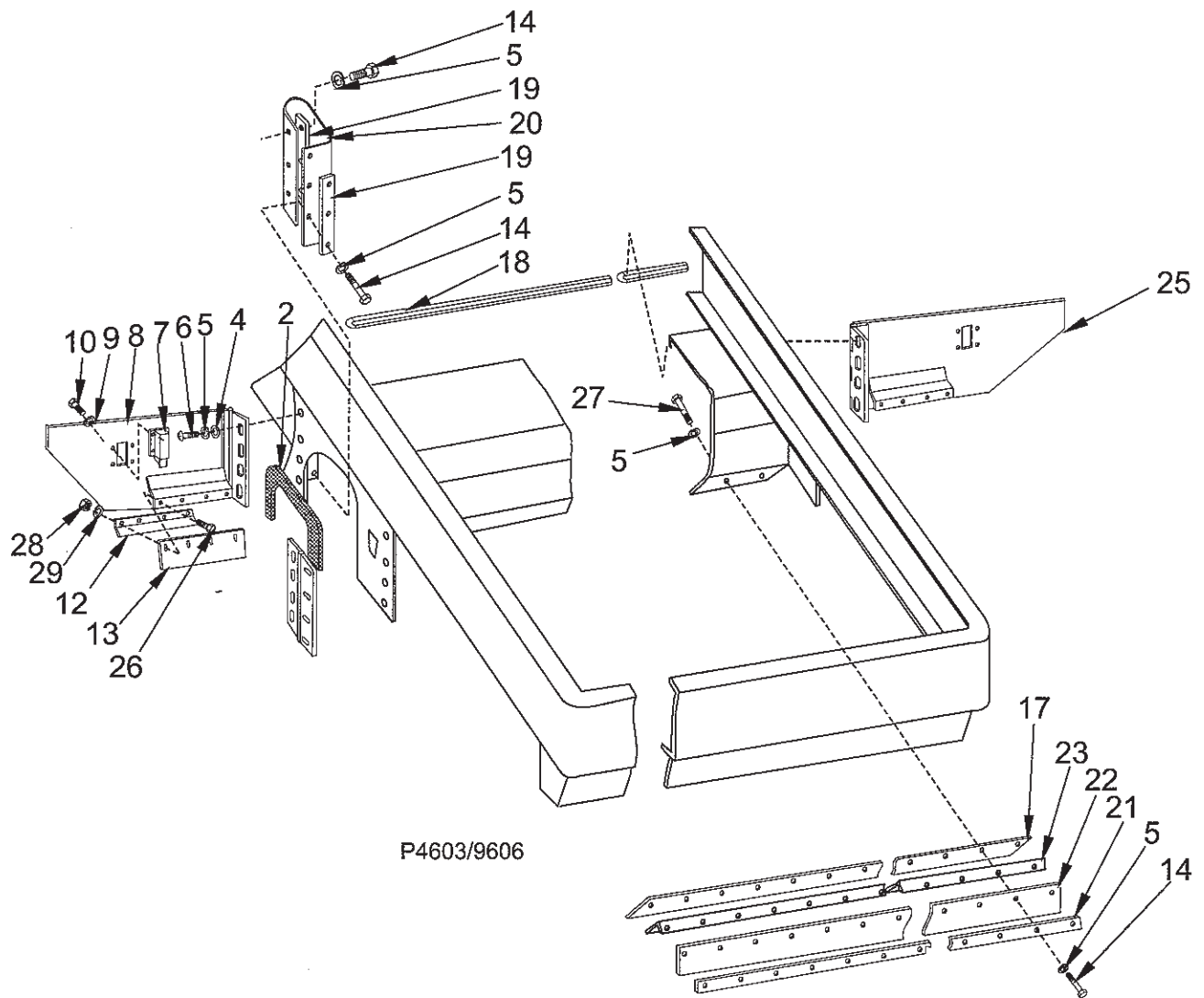


## BROOM AND BRUSH CHAMBER DOOR - PARTS LIST

| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>DESCRIPTION</u>                  | <u>QTY</u> |
|----------------|--------------------|-------------------------------------|------------|
| 1              | 2-00-00054         | Screw, 1/4 - 20 x .500 RHM          | 8          |
| 2              | 7-29-00226         | Main Broom Door Gasket              | 2          |
| 3              | 2-00-00589         | Nut, Hex Jam 1/4-20 x .437 x .156   | 8          |
| 4              | 2-00-00407         | Flat Washer, .687 x .343 x .062     | 24         |
| 5              | 2-00-00518         | Lock Washer, Helical Spring 1/4 Med | 50         |
| 6              | 2-00-04880         | Screw, 1/4 - 20 x .750 BHS          | 16         |
| 7              | 8-41-00032         | Flush Mount Latch                   | 4          |
| 8              | 7-19-08026         | Left Hand Broom Chamber Door        | 1          |
| 9              | 2-00-00529         | Lock Washer, Helical Spring #8 Med  | 16         |
| 10             | 2-00-01081         | Screw, #8 - 32 x .500 T/C RH        | 16         |
| 11             | 2-00-00594         | Nut, Hex 1/4 - 20 .437 x .218       | 16         |
| 12             | 7-79-00056         | Door Flap Strap                     | 2          |
| 13             | 7-25-08033         | Broom Chamber Door Flap             | 2          |
| 14             | 2-00-00221         | Screw, 1/4 - 20 x .750 HHC          | 25         |
| 15             | 7-19-08031         | Left Hand Scrubbing Access Door     | 1          |
| 16             | 7-32-00021         | Scrub Door Hinge                    | 2          |
| 17             | 7-25-08036         | Front Broom Chamber Flap            | 1          |
| 18             | 7-29-00147         | Gasket                              | 1          |
| 19             | 7-79-00055         | Broom Chamber Strap                 | 4          |
| 20             | 7-25-08034         | Broom Chamber Flap                  | 2          |
| 21             | 7-79-00054         | Broom Chamber Flap Strap            | 1          |
| 22             | 7-25-08032         | Broom Chamber Flap                  | 1          |
| 23             | 7-08-00487         | Flap Bracket Weldment               | 1          |
| 24             | 7-19-08032         | Right Hand Scrubbing Access Door    | 1          |
| 25             | 7-19-08025         | Right Hand Broom Chamber Door       | 1          |
| 26             | 2-00-04190         | Carriage Bolt, 1/4 - 20 x .63       | 8          |
| 27             | 2-00-01490         | Screw, 1/4 - 20 x .875 HHC          | 13         |
| 28             | 2-00-00589         | Nut, 1/4-20 Hex                     | 8          |
| 29             | 2-00-00501         | Washer, 1/4 Lock                    | 8          |

P4603/9510

## BROOM AND BRUSH CHAMBER DOOR - EXPLODED VIEW

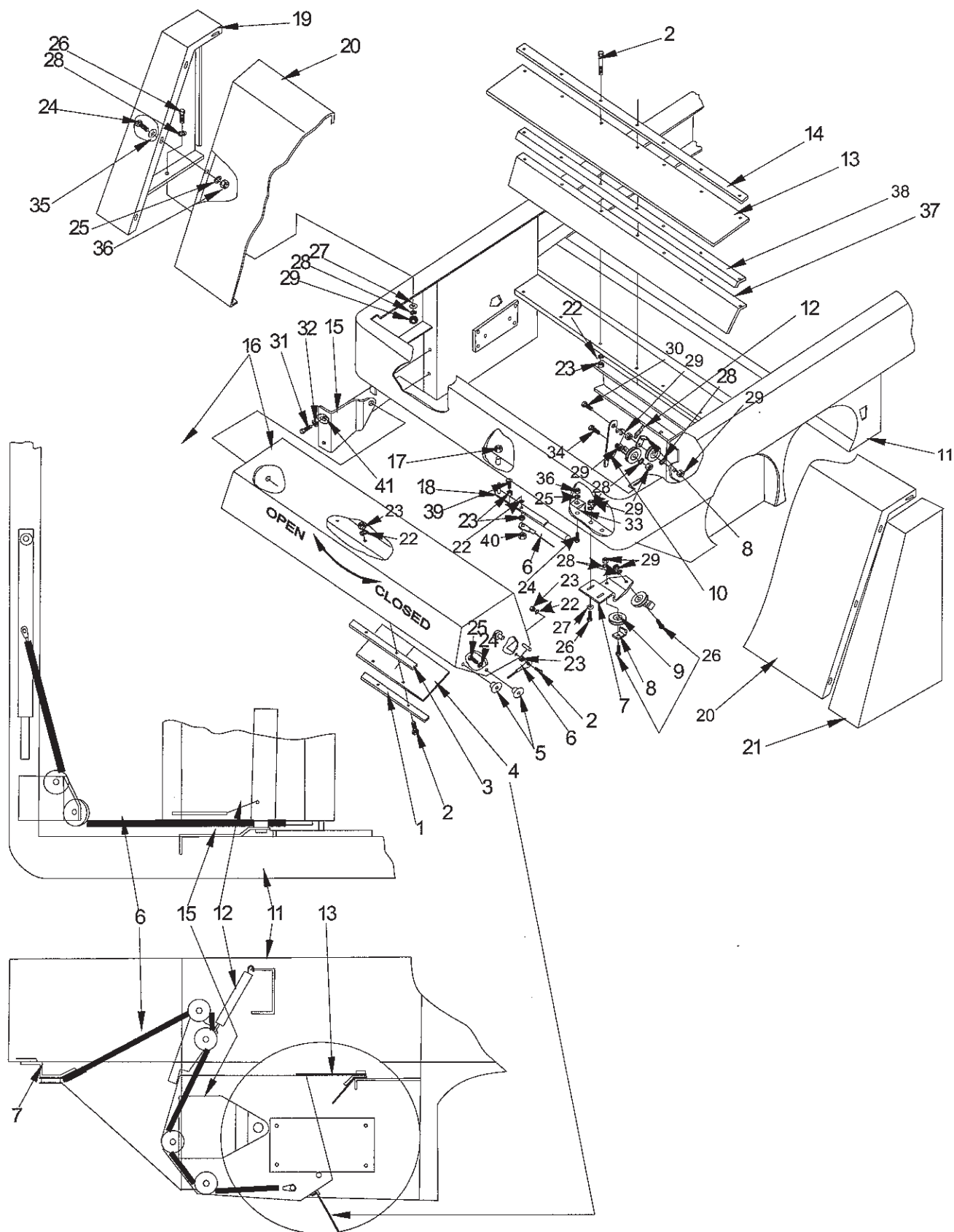


## HOPPER SYSTEM (MANUAL DUMP) - PARTS LIST

| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>DESCRIPTION</u>               | <u>QTY</u> |
|----------------|--------------------|----------------------------------|------------|
| 1              | 7-79-00072         | Hopper Flap Strap                | 4          |
| 2              | 2-00-00205         | Screw, 1/4-20 x 1.000 HHC        | 15         |
| 3              | 7-13-07129         | Hopper Flap Clamp                | 4          |
| 4              | 7-25-08050         | Hopper Flap                      | 4          |
| 5              | 7-30-08013         | Cable Gide                       | 2          |
| 6              | 7-10-00027         | Hopper Lift Cable                | 1          |
| 7              | 7-08-00706         | Pulley Mounting Bracket          | 1          |
| 8              | 7-13-07130         | Cable Retainer Clip              | 4          |
| 9              | 7-60-00160         | Cable Pulley                     | 4          |
| 10             | 7-41-00029         | Hopper Latch                     | 1          |
| 11             | 7-27-07160         | Main Frame                       | 1          |
| 12             | 8-76-00045         | Spring                           | 1          |
| 13             | 7-25-08051         | Baffle Flap                      | 1          |
| 14             | 7-13-07131         | Baffle Clamp                     | 1          |
| 15             | 7-08-00752         | Hopper Pivot Plate               | 2          |
| 16             | 7-32-06014         | Hopper                           | 1          |
| 17             | 8-15-01016         | Collar                           | 1          |
| 18             | 7-31-06069         | Hopper Dump Handle               | 1          |
| 19             | 7-16-07340         | Right Hand Cover                 | 1          |
| 20             | 7-16-07341         | Center Cover                     | 1          |
| 21             | 7-16-07339         | Left Hand Cover                  | 1          |
| 22             | 2-00-00518         | Lock Washer, 1/4 Helical Spring  | 17         |
| 23             | 2-00-00594         | Nut, Hex 1/4-20                  | 19         |
| 24             | 2-00-01255         | Screw, 5/16-18 x .875 HHC        | 11         |
| 25             | 2-00-00530         | Lock Washer, 5/16 Helical Spring | 11         |
| 26             | 2-00-00209         | Screw, 3/8-16 x 1.250 HHC        | 8          |
| 27             | 2-00-00402         | Flat Washer, 3/8 BS              | 10         |
| 28             | 2-00-02310         | Lock Washer, 3/8 Helical Spring  | 8          |
| 29             | 2-00-02360         | Nut, Hex 3/8-16                  | 14         |
| 30             | 2-00-02711         | Screw, 3/8-16 x2.750 HHM         | 1          |
| 31             | 2-00-00240         | Screw, 1/2-13 x 1.250 HHC        | 4          |
| 32             | 2-00-02312         | Lock Washer, 1/2 Helical Spring  | 4          |
| 33             | 7-41-00031         | Handle Latch                     | 1          |
| 34             | 2-00-00235         | Screw, 3/8-16 x 1.750 HHC        | 1          |
| 35             | 2-00-00409         | Flat Washer, 5/16 BS             | 8          |
| 36             | 2-00-00585         | Nut, Hex 5/16-18                 | 9          |
| 37             | 7-25-08052         | Lower Baffle Flap                | 1          |
| 38             | 7-13-07136         | Lower Baffle Clamp               | 1          |
| 39             | 2-00-00198         | Carriage Bolt, 1/4-20 x 2.000    | 1          |
| 40             | 2-00-00641         | Nut, Fiber Lock 1/4-20           | 1          |
| 41             | 2-00-00405         | Flat Washer 1/2 B.S              | 4          |

C0355/9510

# HOPPER SYSTEM (MANUAL DUMP) - EXPLODED VIEW



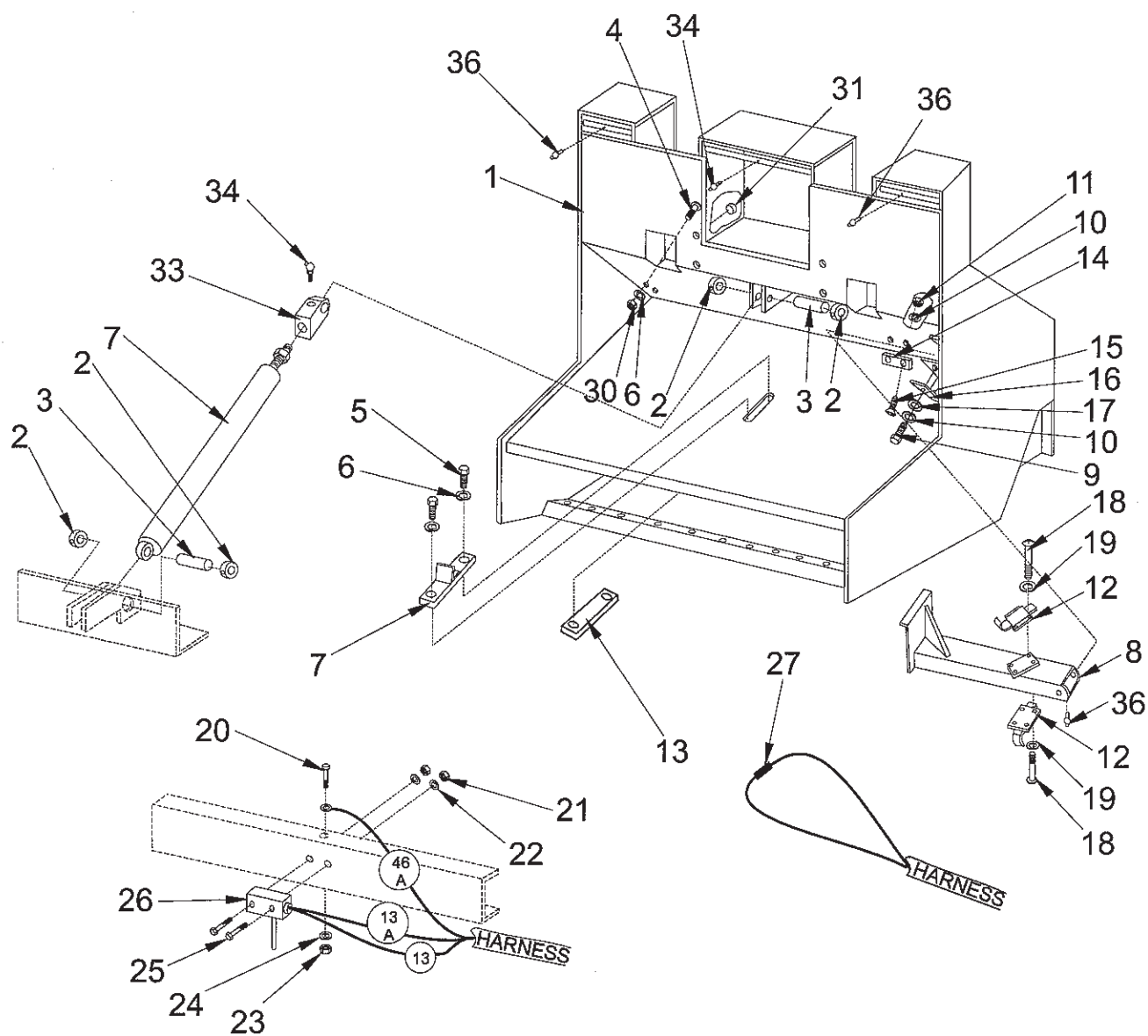
C0355/9606

## HOPPER (LOW DUMP) - PARTS LIST

| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>DESCRIPTION</u>                   | <u>QTY</u> |
|----------------|--------------------|--------------------------------------|------------|
| 1              | 7-32-06006         | Debris Hopper                        | 1          |
| 2              | 8-15-01003         | Setscrew Collar, 1.250 x .750 x .562 | 4          |
| 3              | 7-55-08117         | Lift Cylinder Pin                    | 2          |
| 4              | 2-00-00232         | Screw, 3/8 - 16 x .25                | 4          |
| 5              | 2-00-00233         | Screw, 3/8 - 16 x 1.000 HHC          | 2          |
| 6              | 2-00-02310         | Lock Washer, Helical Spring 3/8 Med  | 6          |
| 7              | 7-17-05013         | Lift Cylinder                        | 1          |
| 8              | 7-81-00136         | Support Arm                          | 1          |
| 9              | 2-00-00219         | Screw, 1/4 - 20 x .500 HHC           | 1          |
| 10             | 2-00-00518         | Lock Washer, Helical Spring 1/4 Med  | 4          |
| 11             | 2-00-00594         | Nut, Hex 1/4 - 20 x .437 x .218      | 4          |
| 12             | 7-41-00019         | Latch                                | 2          |
| 13             | 7-58-05218         | Strap                                | 1          |
| 14             | 7-41-00021         | Latch Plate                          | 1          |
| 15             | 2-00-02810         | Screw, 1/4 - 20 x 1.000 FHM          | 2          |
| 16             | 7-65-00031         | Retainer Pin                         | 1          |
| 17             | 2-00-00462         | Flat Washer, .562 x .250 x .031      | 1          |
| 18             | 2-00-00049         | Screw, #10 - 24 x .500 RHM           | 8          |
| 19             | 2-00-00519         | Lock Washer, Helical Spring #10 Med  | 8          |
| 20             | 2-00-00221         | Screw, 1/4 - 20 x .750 HHC           | 6          |
| 21             | 2-00-01372         | Nut, 8-32 Fibre Lock                 | 2          |
| 22             | 2-00-00519         | Lock Washer, Helical Spring #10 Med  | 2          |
| 23             | 2-00-00594         | Nut, Hex 1/4 - 20 x .437 x .218      | 2          |
| 24             | 2-00-00501         | Internal Lock Washer                 | 1          |
| 25             | 2-00-00049         | Screw, #10 - 24 x .500 RHM           | 2          |
| 26             | 8-82-00058         | Hopper Switch                        | 1          |
| 27             | 2-00-01128         | Butt Splice                          | 1          |
| 28             |                    |                                      |            |
| 29             |                    |                                      |            |
| 30             | 2-00-02360         | Nut, Hex 3/8 - 16 x .562 x .328      | 4          |
| 33             | 2-00-02371         | Nut, Hex Jam 1/2 - 13 x .750 x .312  | 4          |
| 32             |                    |                                      |            |
| 33             | 8-14-01010         | Dump Cylinder Clevis                 | 1          |
| 34             | 2-00-02557         | Lubrication Fitting, 45° 1/8 NPT     | 1          |
| 35             | 7-75-01122         | Spacer, Latch Plate (Safety Arm)     | 1          |
| 36             | 2-00-00566         | Grease Fitting                       |            |

P4820a

# HOPPER (LOW DUMP) - EXPLODED VIEW

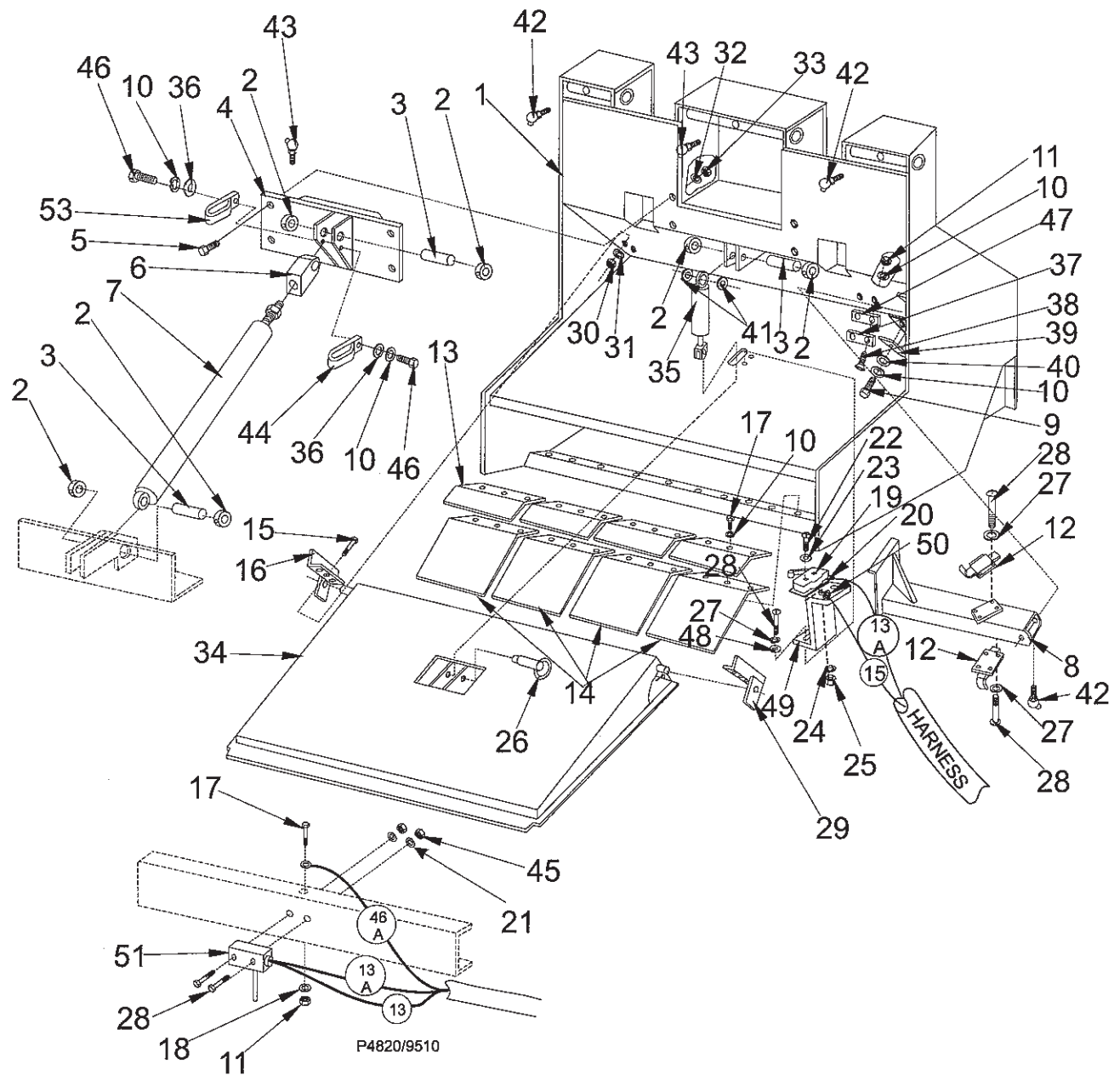


P4820A/9510

## HOPPER AND FLAPS (VARIABLE DUMP) - PARTS LIST

| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>DESCRIPTION</u>                   | <u>QTY</u> |
|----------------|--------------------|--------------------------------------|------------|
| 1              | 7-32-06006         | Debris Hopper                        | 1          |
| 2              | 8-15-01003         | Setscrew Collar, 1.250 x .750 x .562 | 6          |
| 3              | 7-55-08117         | Lift Cylinder Pin                    | 3          |
| 4              | 7-14-01018         | High Dump Clevis                     | 1          |
| 5              | 2-00-01254         | Screw, 1/2 - 13 x 1.500 HHCS         | 4          |
| 6              | 8-14-01010         | Dump Cylinder Clevis                 | 1          |
| 7              | 7-17-05013         | Lift Cylinder                        | 1          |
| 8              | 7-81-00135         | Support Arm                          | 1          |
| 9              | 2-00-00219         | Screw, 1/4 - 20 x .500 HHC           | 1          |
| 10             | 2-00-00518         | Lock Washer, Helical Spring 1/4 Med  | 18         |
| 11             | 2-00-00594         | Nut, Hex 1/4 - 20 x .437 x .218      | 11         |
| 12             | 7-41-00019         | Latch                                | 2          |
| 13             | 7-79-00052         | Hopper Flap Strap                    | 4          |
| 14             | 7-25-08030         | Hopper Flap                          | 4          |
| 15             | 2-00-00233         | Screw, 3/8 - 16 x 1.000 HHC          | 4          |
| 16             | 7-57-05028         | Right Hand Pivot                     | 1          |
| 17             | 2-00-00221         | Screw, 1/4 - 20 x .750 HHC           | 6          |
| 18             | 2-00-00501         | Internal Lock Washer                 | 6          |
| 19             | 7-82-00089         | Switch                               | 1          |
| 20             | 7-35-00013         | Insulator                            | 1          |
| 21             | 2-00-00090         | Screw, 8-32 x 1.500 RHM)             | 2          |
| 22             | 2-00-05060         | Screw, #6-32 x 1.250 RHM             | 2          |
| 23             | 2-00-00455         | Flat Washer, .375 x .156 x .046      | 2          |
| 24             | 2-00-01499         | Lock Washer, Helical Spring #6 Med   | 2          |
| 25             | 2-00-00624         | Nut, Hex MS #6 - 32 x .312 x .109    | 2          |
| 26             | 7-55-08121         | Lift Pin                             | 1          |
| 27             | 2-00-00519         | Lock Washer, Helical Spring #10 Med  | 12         |
| 28             | 2-00-00049         | Screw, #10 - 24 x .500 RHM           | 4          |
| 29             | 7-57-05027         | Left Hand Pivot                      | 1          |
| 30             | 2-00-02360         | Nut, Hex 3/8 - 16 x .562 x .328      | 4          |
| 31             | 2-00-02310         | Lock Washer, Helical Spring 3/8 Med  | 4          |
| 32             | 2-00-02312         | Lock Washer, 1/2 Int.                | 4          |
| 33             | 2-00-00596         | Nut, Hex Jam 1/2 - 13                | 4          |
| 34             | 7-19-08030         | Debris Door                          | 1          |
| 35             | 7-17-05011         | Hydraulic Cylinder                   | 1          |
| 36             | 2-00-03702         | Flat Washer, .625 x .281 x .062      | 2          |
| 37             | 7-41-00021         | Latch Plate                          | 1          |
| 38             | 2-00-02810         | Screw, 1/4 - 20 x 1.000 FHM          | 2          |
| 39             | 7-65-00031         | Retainer Pin                         | 1          |
| 40             | 2-00-00462         | Flat Washer, .562 x .250 x .031      | 1          |
| 41             | 7-75-01102         | Spacer                               | 2          |
| 42             | 2-00-00566         | Grease Fitting                       | 3          |
| 43             | 2-00-02558         | Grease Zerk                          | 2          |
| 44             | 2-00-04378         | Harness Clamp                        | 1          |
| 45             | 2-00-01372         | Nut, 8-32 Fibre Lock                 | 2          |
| 46             | 2-00-00220         | Screw, 1/4-20 x .625 HHC             | 1          |
| 47             | 7-75-01122         | Latch Plate Spacer                   | 1          |
| 48             | 2-00-00426         | Flat Washer, #10                     | 2          |
| 49             | 7-08-00711         | HD-SW Bracket                        | 1          |
| 50             | 2-00-00511         | Internal Washer, #6                  | 2          |
| 51             | 8-82-00058         | Hopper Switch                        | 1          |
| 52             |                    |                                      |            |
| 53             | 2-00-04603         | Clamp                                | 1          |

# HOPPER AND FLAPS (VARIABLE DUMP) - EXPLODED VIEW

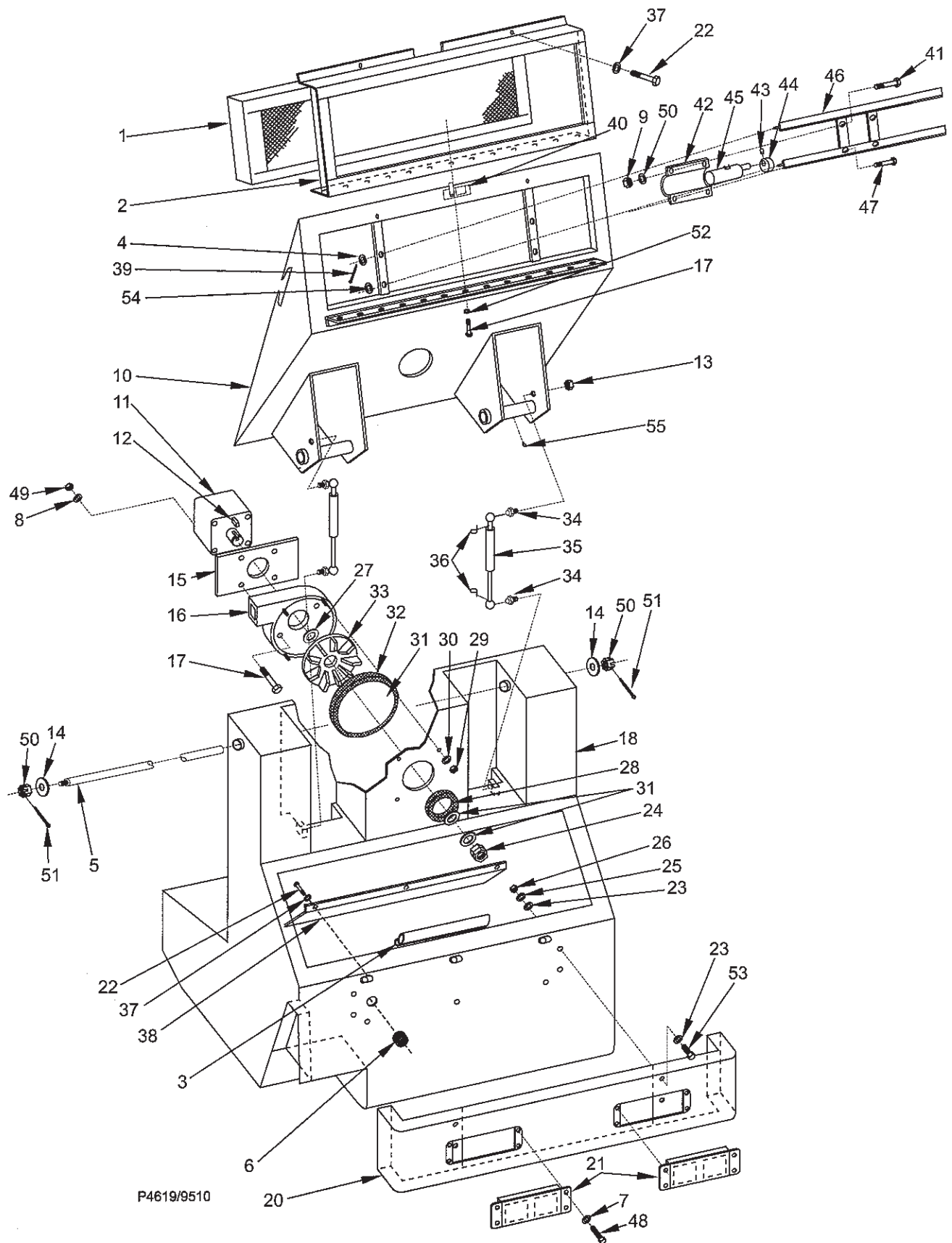


## HOPPER FILTER AND IMPELLER - PARTS LIST

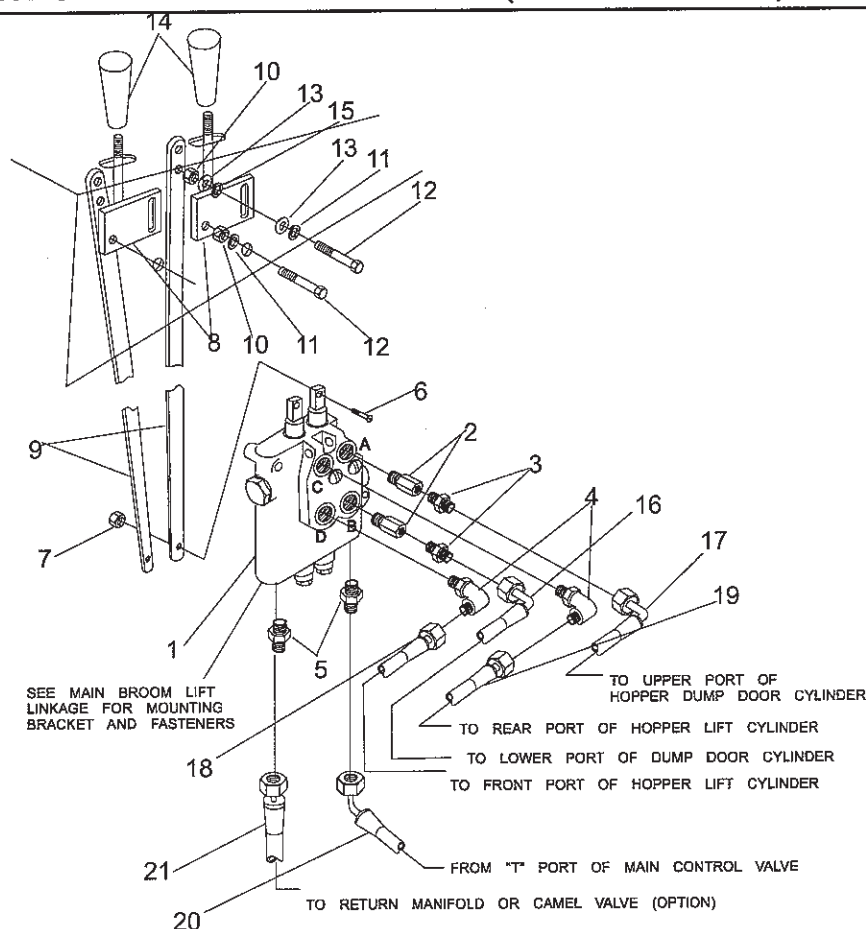
| KEY NO. | PART NUMBER  | DESCRIPTION                            | QTY |
|---------|--------------|----------------------------------------|-----|
| 1       | 7-24-04028-1 | Dust Filter                            | 1   |
| 2       | 7-32-03011   | Dust Filter Cradle                     | 1   |
| 3       | 7-29-00158   | Gasket                                 | 1   |
| 4       | 2-00-00409   | Flat Washer, .687 x .343 x .062        | 4   |
| 5       | 7-55-08127   | Hinge Pin                              | 1   |
| 6       | 2-00-04721   | Grommet, 1.750 x 1.125 x .500 x .125   | 1   |
| 7       | 2-00-00407   | Flat Washer, .562 x .265 x .062        | 8   |
| 8       | 2-00-00530   | Lock Washer, Helical Spring 5/16 Med   | 4   |
| 9       | 2-00-00641   | Nut, Hex Fiber Insert 1/4 - 20         | 4   |
| 10      | 7-16-07271   | Hopper Lid                             | 1   |
| 11      | 0882-041     | Impeller Motor                         | 1   |
| 12      | 2-00-02227   | Key, .125 x .750 SQ                    | 1   |
| 13      | 2-00-00644   | Nut, Hex Fiber Insert 5/16 - 18        | 4   |
| 14      | 2-00-03170   | Flat Washer, 1.500 x .750 x .125       | 2   |
| 15      | 7-75-01087   | Motor Spacer                           | 1   |
| 16      | 8-72-00005   | Impeller Shroud                        | 1   |
| 17      | 2-00-02655   | Screw, 5/16 - 18 x 4.500 HHC           | 4   |
| 18      | 7-32-06006   | Debris Hopper                          | 1   |
| 19      |              |                                        |     |
| 20      | 7-08-07053   | Bumper                                 | 1   |
| 21      | 8-08-00614   | Headlight Plate, With Knockout         | 2   |
| 22      | 2-00-00221   | Screw, 1/4 - 20 x .750 HHC             | 5   |
| 23      | 2-00-00405   | Flat Washer, 1.000 x .597              | 4   |
| 24      | 2-00-03412   | Nut, Lock 3/8 - 24 x .562 x .281       | 1   |
| 25      | 2-00-02312   | Lock Washer, Helical Spring 1/2 Med    | 4   |
| 26      | 2-00-00240   | Screw, 1/2-13 x 1.250 HHC              | 8   |
| 27      | 2-00-00484   | Flat Washer, .625 x .375 x .046        | 4   |
| 28      | 8-29-00093   | Fan Seal                               | 1   |
| 29      | 2-00-00594   | Nut, Hex 1/4 - 20 x .437 x .218        | 4   |
| 30      | 2-00-00501   | Lock Washer, 1/4 Int.                  | 4   |
| 31      | 2-00-00402   | Flat Washer, 3/8"                      | 1   |
| 32      | 8-29-00111   | Shroud Gasket                          | 1   |
| 33      | 8-23-00014   | Impeller                               | 1   |
| 34      | 7-80-05067   | Ball Stud                              | 4   |
| 35      | 7-76-00105   | Gas Spring                             | 2   |
| 36      | 7-13-07102   | Safety Clip                            | 4   |
| 37      | 2-00-00518   | Lock Washer, Helical Spring 1/4 Med    | 3   |
| 38      | 7-52-00085   | Panel Baffle                           | 1   |
| 39      | 2-00-00772   | Cotter Pin, .093 x 1.000               | 4   |
| 40      | 8-41-00040   | Latch                                  | 4   |
| 41      | 2-00-00221   | Screw, 1/4 - 20 x .750 HHC             | 2   |
| 42      | 8-16-07181   | Shaker Motor Cover                     | 1   |
| 43      | 2-95-01929   | Setscrew, 1/4 - 20 x .250 HS-CP        | 1   |
| 44      | 8-89-04017   | Shaker Weight                          | 1   |
| 45      | 0882-053-1   | Shaker Motor                           | 1   |
| 46      | 7-27-07128   | Shaker Motor Base                      | 1   |
| 47      | 2-00-02810   | Screw, 1/4 - 20 x 1.000 FHM            | 2   |
| 48      | 2-00-04877   | Screw, 1/4 - 20 x 1.000 BHS            | 8   |
| 49      | 2-00-00586   | Nut, Hex Jam 5/16 - 18 x .500 x .187   | 4   |
| 50      | 2-00-04841   | Nut, Hex Slotted 3/4-16 x 1.125 x .641 | 2   |
| 51      | 2-00-00776   | Cotter Pin, .125 x 1.500               | 2   |
| 52      | 2-00-00426   | Flat Washer                            | 13  |
| 53      | 2-00-02728   | Screw, 10-32 x .375 BHM                | 13  |
| 54      | 2-00-03702   | Flat Washer, 1/4 I.D.                  | 4   |
| 55      | 2-00-00566   | Fitting, Grease                        | 2   |

P-4619

# HOPPER FILTER AND IMPELLER - EXPLODED VIEW

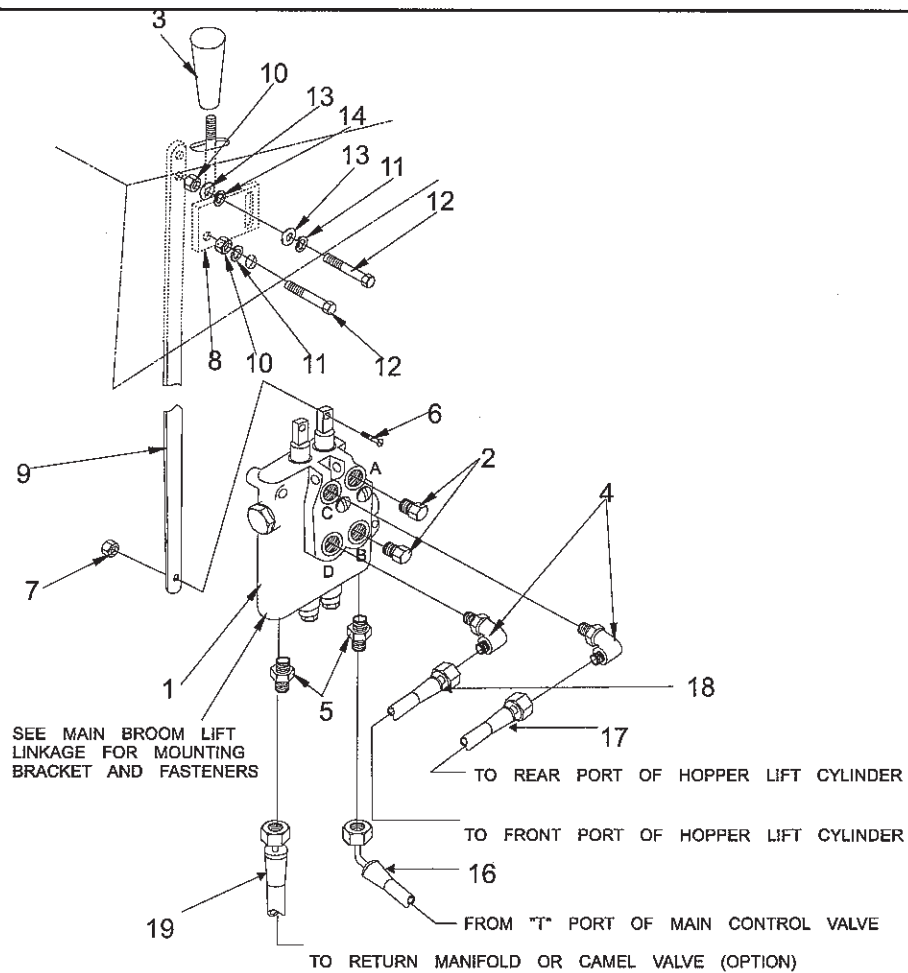


## HOPPER CONTROL VALVE & DUMP LINKAGE (VARIABLE DUMP)



| KEY NO. | PART NUMBER | DESCRIPTION                           | QTY  |
|---------|-------------|---------------------------------------|------|
| 1       | 8-88-00053  | Hopper Control Valve                  | 1    |
| 2       | 2-00-04917  | ORFS Boss Reducer, 9/16-18 to 7/16-20 | 2    |
| 3       | 2-00-04895  | ORFS Connector, 7/16-20 to 9/16-18    | 2    |
| 4       | 2-00-04926  | ORFS 90° Elbow, 9/16-18               | 2    |
| 5       | 2-00-04970  | Fitting - Straight                    | 2    |
| 6       | 2-00-00056  | Screw, #10 - 24 x .750 RHM            | 2    |
| 7       | 2-00-00605  | Nut, Hex MS #10 - 24 x .375 x .125    | 2    |
| 8       | 7-41-05084  | Lever                                 | 2    |
| 9       | 7-42-05089  | Link                                  | 2    |
| 10      | 2-00-00594  | Nut, Hex 1/4 - 20 x .437 x .218       | 4    |
| 11      | 2-00-00518  | Lock Washer, Helical Spring 1/4 Med   | 4    |
| 12      | 2-00-02706  | Screw, 1/4-20 x 1.000 HHM             | 4    |
| 13      | 2-00-03702  | Flat Washer, .625 x .281 x .062       | 4    |
| 14      | 7-31-06059  | Handle                                | 2    |
| 15      | 2-00-00498  | Lock Washer, .250 Ext                 | 2    |
| 16      | 7-33-02195  | Hose                                  | Ref. |
| 17      | 7-33-02194  | Hose                                  | Ref. |
| 18      | 7-33-02180  | Hose                                  | Ref. |
| 19      | 8-33-02187  | Hose                                  | Ref. |
| 20      | 8-33-02201  | Hose                                  | Ref. |
| 21      | 8-33-02214  | Hose                                  | Ref. |

## HOPPER CONTROL VALVE & DUMP LINKAGE (LOW DUMP)



| KEY NO. | PART NUMBER | DESCRIPTION                         | QTY |
|---------|-------------|-------------------------------------|-----|
| 1       | 8-88-00053  | Hopper Control Valve                | 1   |
| 2       | 2-00-04916  | ORFS Boss Plug, 9/16-18             | 2   |
| 3       | 7-31-06059  | Handle                              | 1   |
| 4       | 2-00-04926  | ORFS 90° Elbow, 9/16-18             | 2   |
| 5       | 2-00-04970  | Fitting - Straight                  | 2   |
| 6       | 2-00-00056  | Screw, #10 - 24 x .750 RHM          | 1   |
| 7       | 2-00-00605  | Nut, Hex MS #10 - 24 x .375 x .125  | 1   |
| 8       | 7-41-05084  | Lever                               | 1   |
| 9       | 7-42-05089  | Link                                | 1   |
| 10      | 2-00-00594  | Nut, Hex 1/4 - 20 x .437 x .218     | 2   |
| 11      | 2-00-00518  | Lock Washer, Helical Spring 1/4 Med | 2   |
| 12      | 2-00-02706  | Screw, 1/4-20 x 1.000 HHM           | 2   |
| 13      | 2-00-03702  | Flat Washer, .625 x .281 x .062     | 2   |
| 14      | 2-00-00498  | Lock Washer, .250 Ext               | 2   |

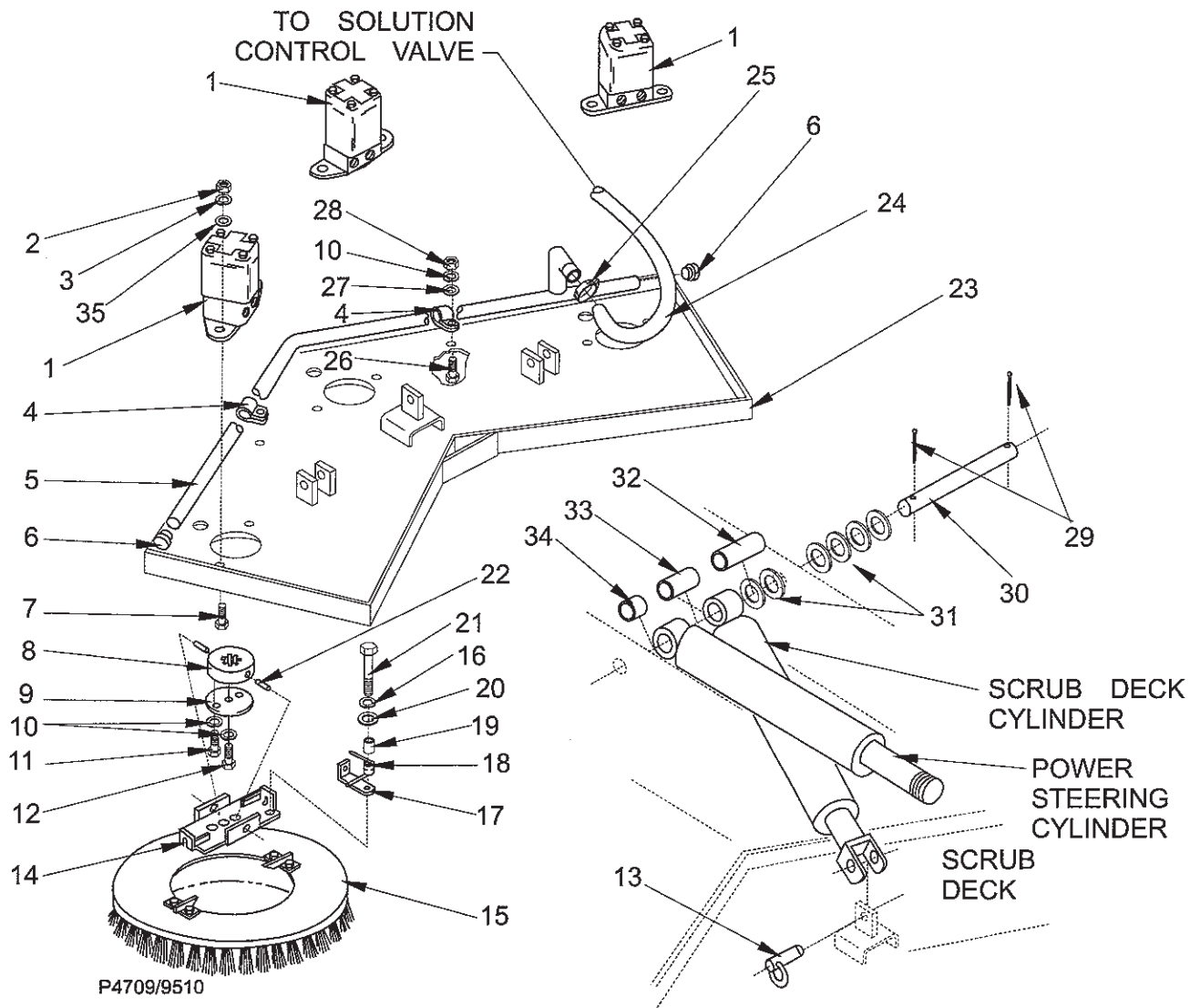
P4877a

## SCRUB DECK AND BRUSHES - PARTS LIST

| KEY NO. | PART NUMBER | DESCRIPTION                             | QTY |
|---------|-------------|-----------------------------------------|-----|
| 1       | 0782-111    | Brush Drive Motor                       | 3   |
|         | 0780-143    | Seal Kit                                |     |
| 2       | 2-00-00596  | Nut, Hex 1/2 - 13 x .750 x .437         | 6   |
| 3       | 2-00-02312  | Lock Washer, Helical Spring 1/2 Med     | 6   |
| 4       | 2-00-04564  | Cable Clamp,                            | 2   |
| 5       | 7-87-02123  | Solution Feed Tube                      | 1   |
| 6       | 7-25-02026  | Plug                                    | 2   |
| 7       | 2-00-00241  | Screw, 1/2 - 13 x 1.750 HHC             | 6   |
| 8       | 7-33-09013  | Drive Hub                               | 3   |
| 9       | 7-58-05181  | Hub Plate                               | 3   |
| 10      | 2-00-00530  | Lock Washer, Helical Spring 5/16 Med    | 11  |
| 11      | 2-00-00224  | Screw, 5/16 - 18 x .500 HHC             | 6   |
| 12      | 2-00-05087  | Screw, 5/16 - 18 x .750 HSHC            | 3   |
| 13      | 7-55-08121  | Lift Pin,                               | 1   |
| 14      | 7-03-04070  | Brush Disc Drive Arm                    | 3   |
| 15      |             | See Brush Options in Chapter 3          |     |
| 16      | 2-00-00518  | Lock Washer, 5/16 Med.                  | 6   |
| 17      | 7-41-00007  | Brush Latch                             | 6   |
| 18      | 7-76-00089  | Latch Spring                            | 6   |
| 19      | 7-09-01062  | Spacer,                                 | 6   |
| 20      | 2-00-04054  | Flat Washer, .875 x .265 x .062         |     |
| 21      | 2-00-02587  | Screw, 1/4 - 20 x 1.250 HHC             | 6   |
| 22      | 2-00-04222  | Radial Locking Spring Pin, .500 x 1.250 | 6   |
| 23      | 7-27-07127  | Scrub Deck Frame                        | 1   |
| 24      | 7-33-02153  | Hose                                    | 1   |
| 25      | 2-00-02220  | Hose Clamp, .812 - 1.500                | 1   |
| 26      | 2-00-01255  | Screw, 5/16 - 18 x .875 HHC             | 2   |
| 27      | 2-00-00409  | Flat Washer, .687 x .343 x .062         | 2   |
| 28      | 2-00-00585  | Nut, Hex 5/16 - 18 x .500 x .265        | 2   |
| 29      | 2-00-00776  | Cotter Pin, .125 x 1.500                | 2   |
| 30      | 7-55-08118  | Cylinder Pin,                           | 1   |
| 31      | 2-00-00432  | Flat Washer, 1.125 x .765 x .062        | 6   |
| 32      | 7-75-01092  | Spacer,                                 | 1   |
| 33      | 7-75-01091  | Spacer,                                 | 1   |
| 34      | 7-75-01093  | Spacer,                                 | 1   |
| 35      | 2-00-00405  | Washer Flat, 1/2                        | 6   |

P4709/9510

## SCRUB DECK AND BRUSHES - EXPLODED VIEW

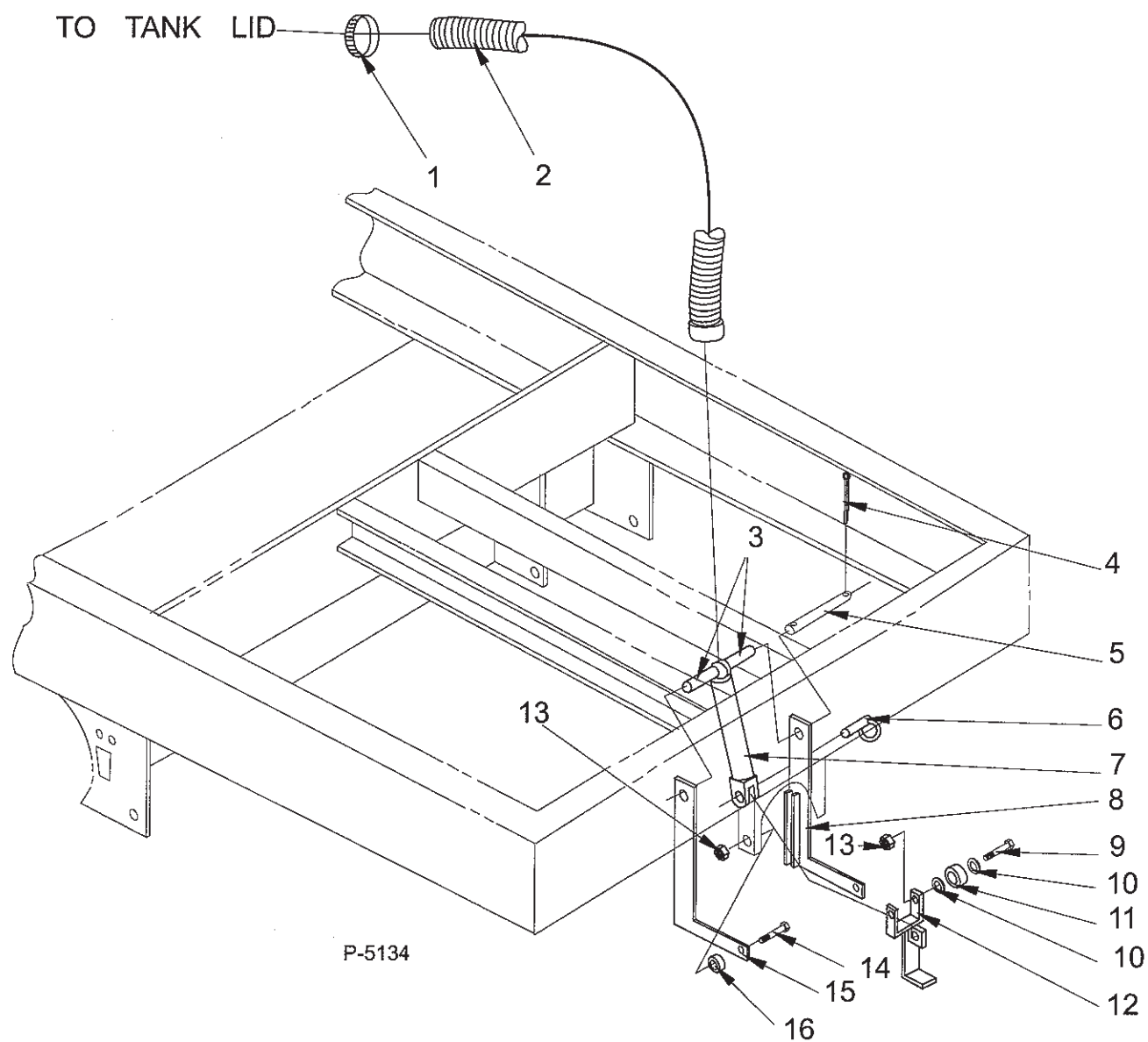


## SQUEEGEE LIFT - PARTS LIST

| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>DESCRIPTION</u>                    | <u>QTY</u> |
|----------------|--------------------|---------------------------------------|------------|
| 1              | 7-13-07104         | Hose Clamp                            | 1          |
| 2              | 7-33-02256         | Vacuum Hose                           | 1          |
| 3              | 7-75-01104         | Spacer                                | 2          |
| 4              | 2-00-00776         | Cotter Pin, .125 x 1.500              | 2          |
| 5              | 7-55-08118         | Cylinder Pin                          | 1          |
| 6              | 7-55-08121         | Lift Pin                              | 1          |
| 7              | 7-17-05011         | Hydraulic Cylinder                    | 1          |
| 8              | 7-08-00527         | Guide Rail (R.H.) Bracket             | 1          |
| 9              | 2-00-00209         | Screw, 3/8-16 x 1.250 HHC             | 4          |
| 10             | 2-00-00484         | Flat Washer, .625 x .375 x .046       | 8          |
| 11             | 2-00-01812         | Double Seal Ball Bearing, .875 x .281 | 4          |
| 12             | 7-08-00528         | Squeegee Lift Bracket                 | 1          |
| 13             | 2-95-04182         | Nut, Hex Fiber Insert 3/8 - 16        | 4          |
| 14             | 2-00-00234         | Screw, 3/8 - 16 x 1.500 HHC           | 2          |
| 15             | 7-08-00526         | Guide Rail (L.H.) Bracket             | 1          |
| 16             | 7-75-01105         | Spacer, Squeegee Lift                 | 2          |

P5134

## SQUEEGEE LIFT - EXPLODED VIEW



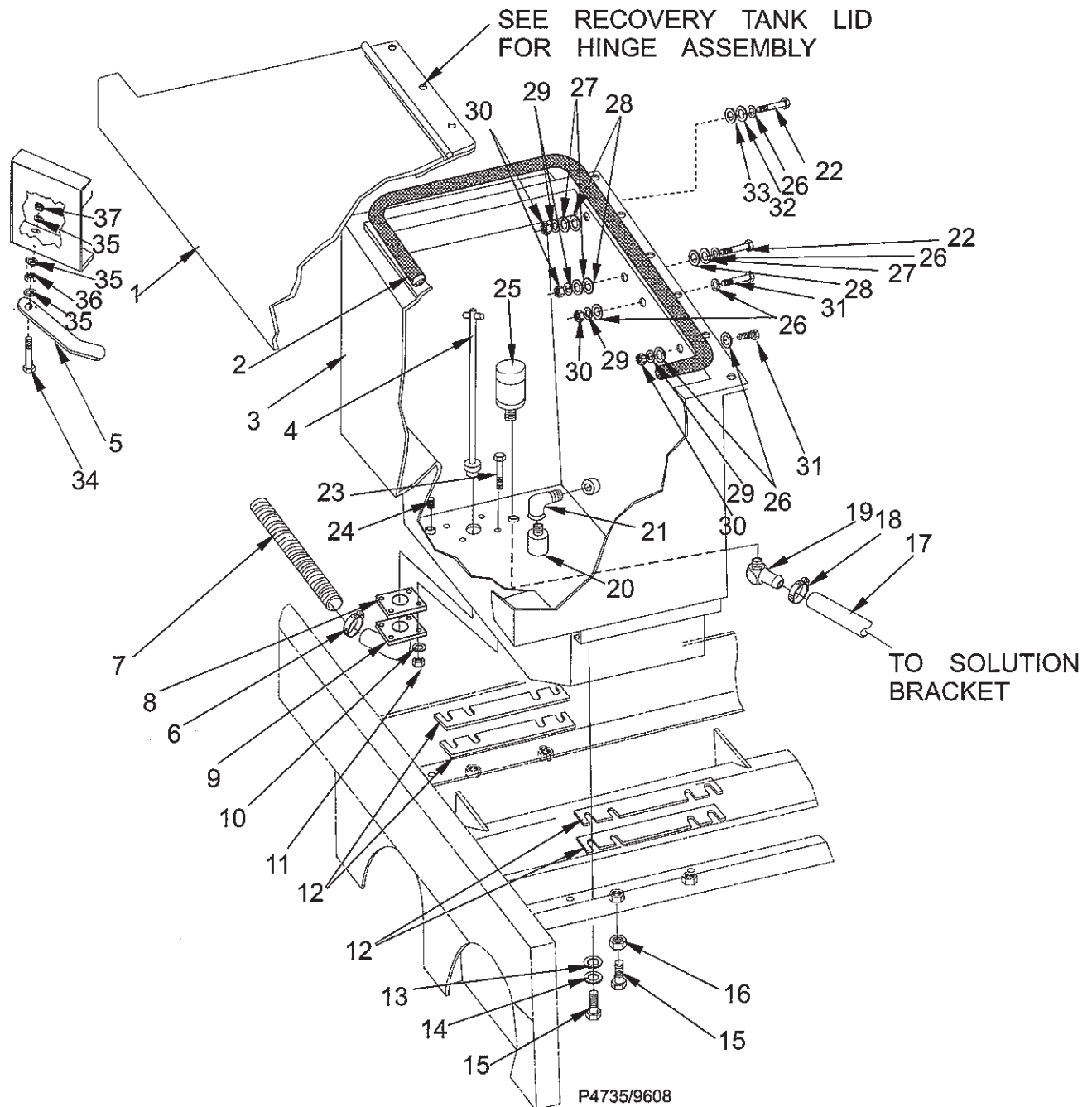
## SOLUTION TANK - PARTS LIST

| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>DESCRIPTION</u>                      | <u>QTY</u> |
|----------------|--------------------|-----------------------------------------|------------|
| 1              | 7-16-07275         | Solution Tank Cover                     | 1          |
| 2              | 7-29-00176         | Solution Tank Gasket 95.000 L           | 1          |
| 3              | 7-83-04094         | Solution Tank                           | 1          |
| *              | 7-83-04104         | Solution Tank, Stainless Steel (Option) | 1          |
| 4              | 0760-327           | Drain Plug Assembly                     | 1          |
| 5              | 7-87-02151         | Tube                                    | 1          |
| 6              | 2-00-02214         | Hose Clamp, 1.312 - 2.250               | 2          |
| 7              | 7-33-02026         | Drain Hose, 28.000                      | 1          |
| 8              | 7-29-00100         | Tank Drain Gasket                       | 1          |
| 9              | 7-25-02046         | Drain Fitting                           | 1          |
| 10             | 2-00-04691         | Lock Washer, Helical Spring 5/16 Med SS | 4          |
| 11             | 2-00-04692         | Nut, Hex 5/16 - 18 x .500 x .265 SS     | 4          |
| 12             | 7-75-01088         | Spacer                                  | 4          |
| 13             | 2-00-00405         | Flat Washer, 1.062 x .531 x .093        | 4          |
| 14             | 2-00-02312         | Lock Washer, Helical Spring 1/2 Med     | 4          |
| 15             | 2-00-01254         | Screw, 1/2 - 13 x 1.500 HHC             | 8          |
| 16             | 2-00-02371         | Nut, Hex Jam 1/2 - 13 x .750 x .312     | 4          |
| 17             | 7-33-02178         | Hose                                    | 1          |
| 18             | 2-00-02220         | Hose Clamp, .812 - 1.500                | 2          |
| 19             | 7-25-02038         | 90° Barb Stem Elbow 3/4 - 14            | 1          |
| 20             | 7-82-00017         | Float Switch                            | 1          |
| 21             | 2-00-05035         | Pipe Elbow, 90° 1/4 NPT                 | 1          |
| 22             | 2-00-04690         | Screw, 1/4 - 20 x 1.000 HHC SS          | 2          |
| 23             | 2-00-05235         | Screw, 5/16 - 18 x .875 HHC SS          | 4          |
| 24             | 2-00-02471         | Pipe Plug, 1/4 NPT                      | 1          |
| 25             | 7-24-04022         | Pump Inlet Strainer                     | 1          |
| 26             | 2-00-04590         | Sealing Washer, .625 x .250             | 4          |
| 27             | 2-00-05237         | Flat Washer, 1.062 x .265 x .062 SS     | 2          |
| 28             | 2-14-03197         | Rubber Washer, 1.000 x .187 x .125      | 2          |
| 29             | 2-00-04687         | Lock Washer, Helical Spring 1/4 Med SS  | 3          |
| 30             | 2-00-04688         | Nut, Hex 1/4 - 20 x .437 x .218 SS      | 3          |
| 31             | 2-00-00251         | Screw, 1/4 - 20 x .500 HHC SS           | 1          |
| 32             | 2-00-05236         | Flat Washer, 2.000 x .2812 x .078 SS    | 2          |
| 33             | 2-00-05028         | Rubber Washer, 2.000 x .2812 x .125     | 2          |

\* 0780-131 Stainless Steel Option

P4735/9510

# SOLUTION TANK - EXPLODED VIEW

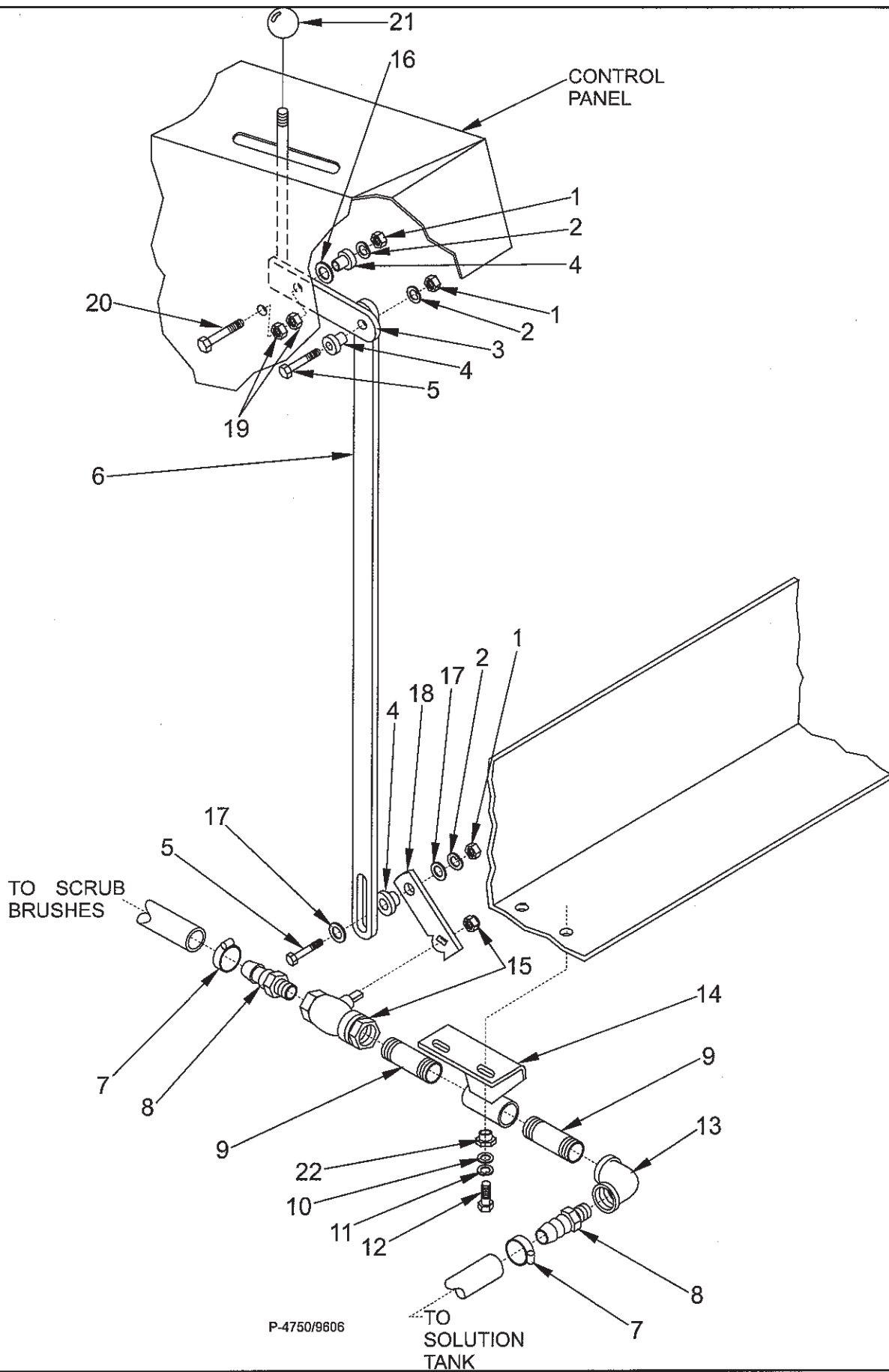


## SOLUTION FEED LINKAGE - PARTS LIST

| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>DESCRIPTION</u>                   | <u>QTY</u> |
|----------------|--------------------|--------------------------------------|------------|
| 1              | 2-00-00585         | Nut, Hex 5/16 - 18 x .500 x .265     | 3          |
| 2              | 2-00-00530         | Lock Washer, Helical Spring 5/16 Med | 3          |
| 3              | 7-41-05086         | Solution Control Lever               | 1          |
| 4              | 7-09-01057         | Bushing                              | 3          |
| 5              | 2-00-00207         | Screw, 5/16 - 18 x 1.250 HHC         | 2          |
| 6              | 7-42-05090         | Solution Control Link                | 1          |
| 7              | 2-00-02220         | Hose Clamp, .812 - 1.500             | 2          |
| 8              | 7-25-02012         | Hose Fitting, Barbed 3/4 14 NPT      | 2          |
| 9              | 2-00-03586         | Pipe Nipple, 3/4 NPT x 2.00 short    | 2          |
| 10             | 2-00-03702         | Flat Washer, .625 x .281 x .062      | 2          |
| 11             | 2-00-00518         | Lock Washer, Helical Spring 1/4 Med  | 2          |
| 12             | 2-00-00221         | Screw, 1/4 - 20 x .750 HHC           | 2          |
| 13             | 2-95-02528         | Pipe Elbow, 90° 3/4 NPT              | 1          |
| 14             | 7-08-00415         | Bracket                              | 1          |
| 15             | 7-88-00027         | Ball Valve                           | 1          |
| 16             | 2-00-03382         | Spring Washer, .875 x .500 x .015    | 1          |
| 17             | 2-00-00409         | Flat Washer, .687 x .343 x .0623     | 2          |
| 18             | 7-41-05085         | Solution Valve Lever                 | 1          |
| 19             | 2-00-00600         | Nut, Hex Hvy. 3/8 - 16 x .687 x .359 | 2          |
| 20             | 2-00-00211         | Screw, 5/16 - 18 x 1.750 HHC         | 1          |
| 21             | 8-39-00002         | Knob                                 | 1          |

P4750

# SOLUTION FEED LINKAGE - EXPLODED VIEW



P-4750/9606

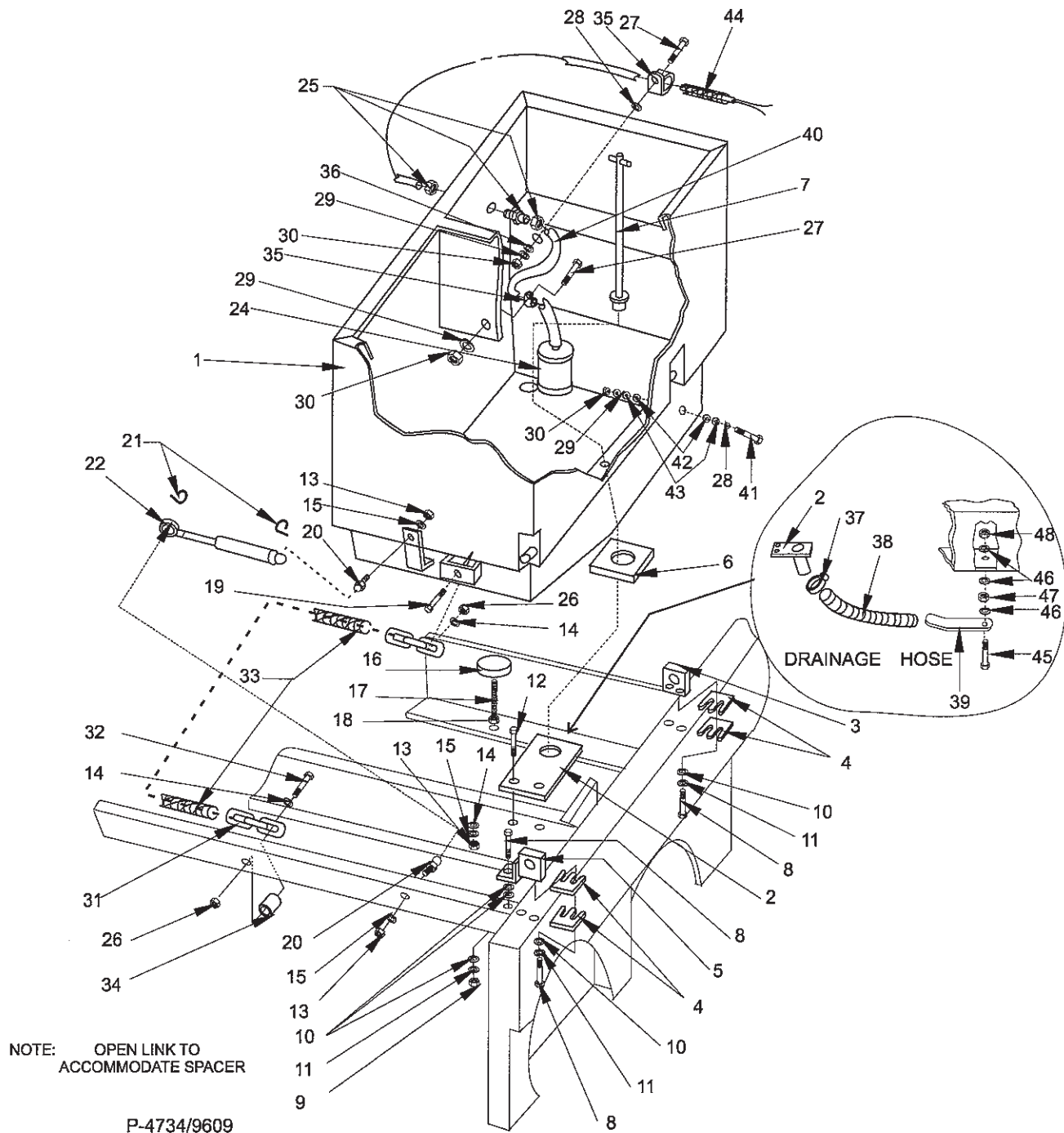
## RECOVERY TANK - PARTS LIST

| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>DESCRIPTION</u>                     | <u>QTY</u> |
|----------------|--------------------|----------------------------------------|------------|
| 1              | 2-00-04685         | Screw, 1/4 - 20 x .750 HHC SS          | 9          |
| 2              | 2-00-04602         | Float Switch Clamp                     | 3          |
| 3              | 2-00-04590         | Sealing Washer, .625 x .250            | 12         |
| 4              | 8-09-01083         | Float Switch Connector                 | 1          |
| 5              | 2-00-04689         | Flat Washer, .625 x .281 x .062 SS     | 1          |
| 6              | 2-00-04687         | Lock Washer, Helical Spring 1/4 Med SS | 12         |
| 7              | 2-00-04688         | Nut, Hex 1/4 - 20 x .437 x .218 SS     | 13         |
| 8              | 7-82-00021         | Float Switch                           | 3          |
| 9              | 7-83-04095         | Recovery Tank                          | 1          |
| 10             | 2-00-00585         | Nut, Hex 5/16 - 18 x .500 x .265       | 4          |
| 11             | 2-00-00530         | Lock Washer, Helical Spring 5/16 Med   | 4          |
| 12             | 7-80-05067         | Stud, Gas Spring Ball                  | 2          |
| 13             | 7-13-07102         | Gas Spring Safety Clip                 | 2          |
| 14             | 7-76-00103         | Recovery Tank Tilt Gas Spring          | 1          |
| 15             | 2-00-00206         | Screw, 5/16-18 x 1.000 HHC             | 4          |
| 16             | 2-00-00644         | Nut, Hex Fiber Insert 5/16-18          | 2          |
| 17             | 2-00-05103         | Flat Washer, .687 x .343 x .062 SS     | 4          |
| 18             |                    |                                        |            |
| 19             | 2-00-00196         | Carriage Bolt, 5/16 - 18 x 1.000       | 2          |
| 20             | 7-13-05058         | Chain                                  | 1          |
| 21             | 2-00-05028         | Rubber Washer, 2.000 x .28 x .125      | 6          |
| 22             | 2-00-05236         | Flat Washer, 2.000 x .28 x .08 SS      | 6          |
| 23             | 7-78-05009         | Stop                                   | 2          |
| 24             | 8-80-05014         | Stud, 1/2-13 UNF-2A x 2.50             | 2          |
| 25             | 2-00-02371         | Nut, Hex Jam 1/2 - 13 x .750 x .312    | 2          |
| 26             | 2-00-03979         | Flat Washer, 1.000 x .390 x .062       | 7          |
| 27             | 2-00-02310         | Lock Washer, Helical Spring 3/8 Med    | 5          |
| 28             | 2-00-02360         | Nut, Hex 3/8 - 16 x .562 x .328        | 1          |
| 29             | 2-00-00209         | Screw, 3/8 - 16 x 1.250 HHC            | 4          |
| 30             | 7-71-00009         | Shim                                   | 4          |
| 31             | 7-08-00486         | Bracket Weldment                       | 1          |
| 32             | 7-56-05011         | Fitting Weldment                       | 1          |
| 33             | 7-81-00126         | Support                                | 1          |
| 34             | 7-29-00146         | Gasket                                 | 1          |
| 35             | 0760-327           | Drain Plug Assembly                    | 1          |
| 36             | 8-43-00002         | Wire Loom                              | 1          |
| 37             | 2-00-02214         | Hose Clamp, 1.312 - 2.250              | 2          |
| 38             | 7-33-02026         | Hose                                   | 1          |
| 39             | 7-87-02151         | Recovery Tank Drain Hose Tube          | 1          |
| 40             | 8-08-07038         | Hose                                   | 1          |
| 41             | 2-00-04690         | Screw, 1/4 - 20 x 1.000 HHC            | 3          |
| 42             | 2-00-00207         | Screw, 5/16-18 x 1.250 HHC             | 1          |
| 43             | 7-75-01130         | Spacer, .500 x .370 x .375             | 1          |
| 44             | 7-34-09018         | Sleeve                                 | 1          |

Key No.s 12, 13 and 14 must be ordered together for proper fit.

P4734

# RECOVERY TANK - EXPLODED VIEW



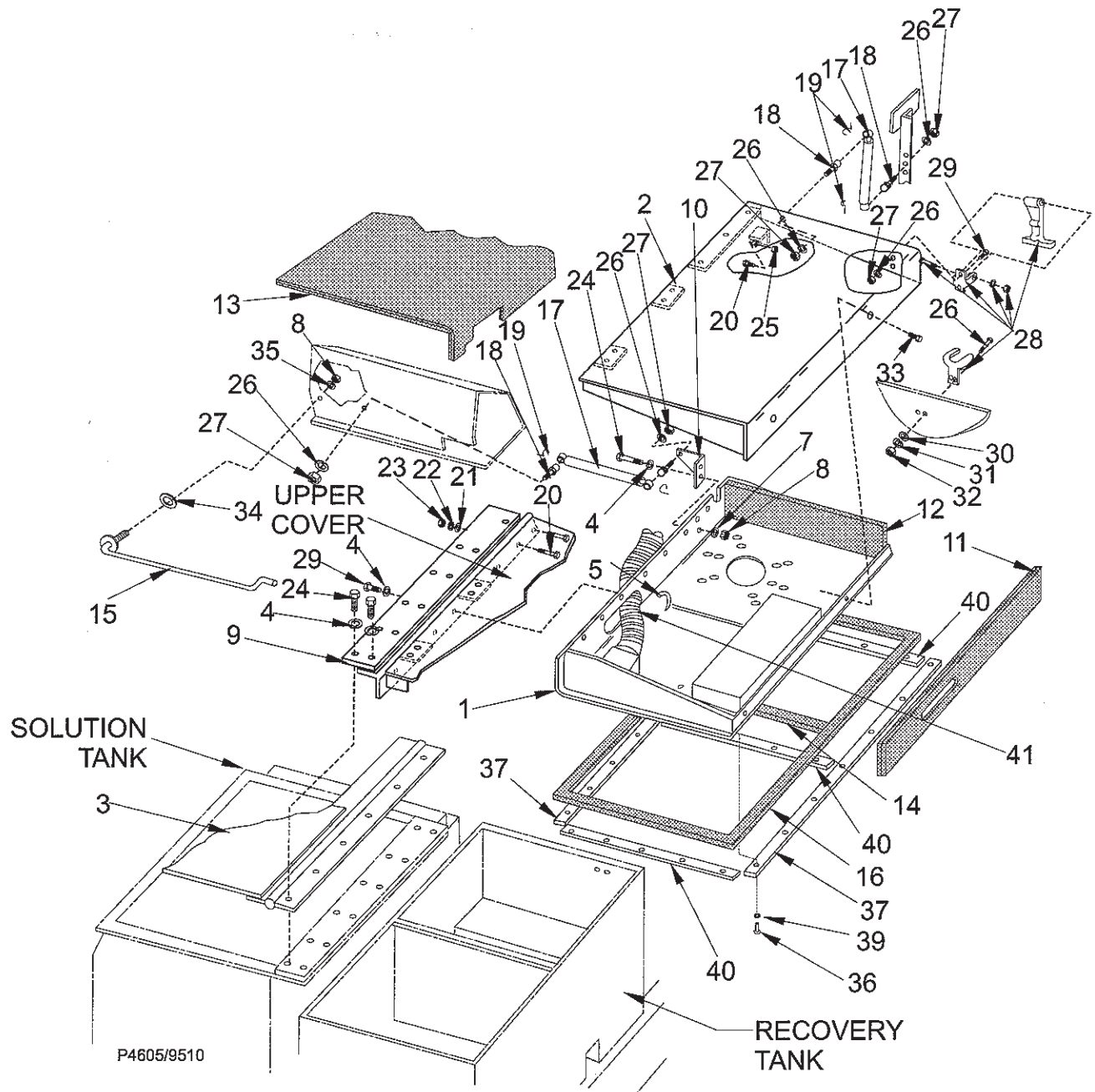
## RECOVERY TANK LID - PARTS LIST

| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>DESCRIPTION</u>                   | <u>QTY</u> |
|----------------|--------------------|--------------------------------------|------------|
| 1              | 7-16-07295         | Recovery Tank Upper Cover            | 1          |
| 2              | 7-16-07380         | Recovery Tank Lower Cover            | 1          |
| 3              | 7-16-07275         | Solution Tank Cover                  | 1          |
| 4              | 7-76-00104         | Gas Spring                           | 2          |
| 5              | 7-80-05067         | Stud                                 | 4          |
| 6              | 7-13-07102         | Safety Clip                          | 4          |
| 7              | 2-00-00518         | Lock Washer, Helical Spring 1/4 Med  | 14         |
| 8              | 2-00-00594         | Nut, Hex 1/4 - 20 x .437 x .218      | 18         |
| 9              | 7-08-00490         | Bracket                              | 1          |
| 10             | 2-00-00221         | Screw, 1/4 - 20 x .750 HHC           | 15         |
| 11             | 7-79-00057         | Strap                                | 1          |
| 12             | 2-00-04707         | Pop Rivet, .125 Dia.                 | 31         |
| 13             | 2-00-00455         | Flat Washer #6                       | 31         |
| 14             | 7-34-09021         | Lower Cover Insulation               | 1          |
| 15             | 7-34-09020         | Lower Cover Insulation               | 1          |
| 16             | 7-34-09019         | Lower Cover Insulation               | 1          |
| 17             | 2-00-01254         | Screw, 1/2-13 x 1.500 HHC            | 1          |
| 18             | 2-00-00596         | Nut, Hex 1/2 - 13 x .750 x .437      | 1          |
| 19             | 2-00-03702         | Flat Washer, .625 x .281 x .062      | 3          |
| 20             | 2-00-01255         | Screw, 5/16 - 18 x .875 HHC          | 2          |
| 21             | 2-00-01803         | Flat Washer, 1.062 x .328 x .062     | 2          |
| 22             | 2-00-00530         | Lock Washer, Helical Spring 5/16 med | 8          |
| 23             | 2-00-00585         | Nut, Hex 5/16 - 18 x .500 x .265     | 2          |
| 24             | 2-00-00644         | Nut, Hex Fiber Insert 5/16-18        | 1          |
| 25             | 7-66-00145         | Cover Support Rod                    | 1          |
| 26             | 8-21-04018         | Edging                               | 1          |
| 27             | 2-00-04876         | Screw, 1/4 - 20 x .500 BHS           | 8          |
| 28             | 8-41-00033         | Latch Assembly                       | 1          |
| 29             | 2-00-00118         | Screw, #10 - 24 x .625 RHM           | 4          |
| 30             | 2-00-01974         | Sealing Washer, .562 x #10 x .065    | 2          |
| 31             | 2-00-00519         | Lock Washer, Helical Spring #10 Med  | 4          |
| 32             | 2-00-00605         | Nut, Hex MS #10-24 x .375 x .125     | 4          |
| 33             | 2-00-00208         | Screw, 5/16-18 x .750 HHC            | 2          |
| 34             | 7-23-03048         | Spring Washer, .750 x .312 x .013    | 1          |
| 35             | 2-00-00409         | Flat Washer, .687 x .343 x .062      | 3          |
| 36             | 7-79-00084         | Strap Gasket Retainer                | 2          |
| 37             | 7-79-00083         | Strap Gasket Retainer                | 3          |
| 38             | 7-29-00232         | Gasket, Center Section               | 1          |
| 39             | 7-29-00231         | Gasket, Perimeter                    | 1          |

Key No.s 4, 5 and 6 must be ordered together for proper fit.

P4605/9510

# RECOVERY TANK LID - EXPLODED VIEW



## VACUUM MOTOR & FLOAT - PARTS LIST

| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>DESCRIPTION</u>                   | <u>QTY</u> |
|----------------|--------------------|--------------------------------------|------------|
| 1              | 7-34-04002         | Impeller                             | 1          |
| 2              | 2-00-00402         | Flat Washer, .750 x .390 x .093      | 1          |
| 3              | 2-00-03412         | Nut, Lock 3/8 - 24 x .562 x .281     | 1          |
| 4              | 2-00-00251         | Screw, 1/4 - 20 x .500 HHCBB         | 4          |
| 5              | 2-00-00518         | Lock Washer, Helical Spring 1/4 Med  | 16         |
| 6              | 2-00-03959         | Hose Clamp, 3.562 - 4.500            |            |
| 7              | 7-79-00061         | Strap-Float Ball                     | 2          |
| 8              | 2-00-04115         | Pop Rivet                            | 1          |
| 9              | 2-00-00594         | Nut, Hex 1/4 - 20 x .437 x .218      | 12         |
| 10             | 7-26-04011         | Ball Float                           | 1          |
| 11             | 2-00-00484         | Spacer, .625 x .375 x .046           | 1          |
| 12             | 2-00-00585         | Nut, Hex 5/16 - 18 x .50 x .265      | 4          |
| 13             | 2-00-00530         | Lock Washer, Helical Spring 5/16 Med | 4          |
| 14             | 7-68-00025         | Screen                               | 1          |
| 15             | 7-81-00134         | Support                              | 2          |
| 16             | 2-00-00222         | Screw, 1/4 - 20 x 1.250 HHC          | 12         |
| 17             | 7-20-06004         | Fan Duct                             | 1          |
| 18             | 2-00-00641         | Nut, Hex Fiber Insert 1/4 - 20       | 12         |
| 19             | 7-75-01159         | Spacer                               | 6          |
| 20             | 2-00-02653         | Screw, 5/16 - 18 x 3.500 HHC         | 4          |
| 21             | 7-16-07276         | Fan Cover                            | 1          |
| 22             | 0782-136           | Vacuum Motor                         | 1          |
| 23             | 7-21-04029         | Edging                               | 1          |
| 24             | 2-00-04707         | Rivet-Pop- 1/8 x .312 (alum)         | 31         |
| 25             | 7-79-00081         | Strap-Gasket Retainer                | 2          |
| 26             | 7-79-00082         | Strap-Gasket Retainer                | 1          |
| 27             | 2-00-00455         | Flatwasher, #10 Brass                | 31         |
| 28             | 7-79-00087         | Strap-Gasket Retainer                | 2          |

P4721/9908

AMERICAN LINCOLN TECHNOLOGY  
7700 Operator's Manual

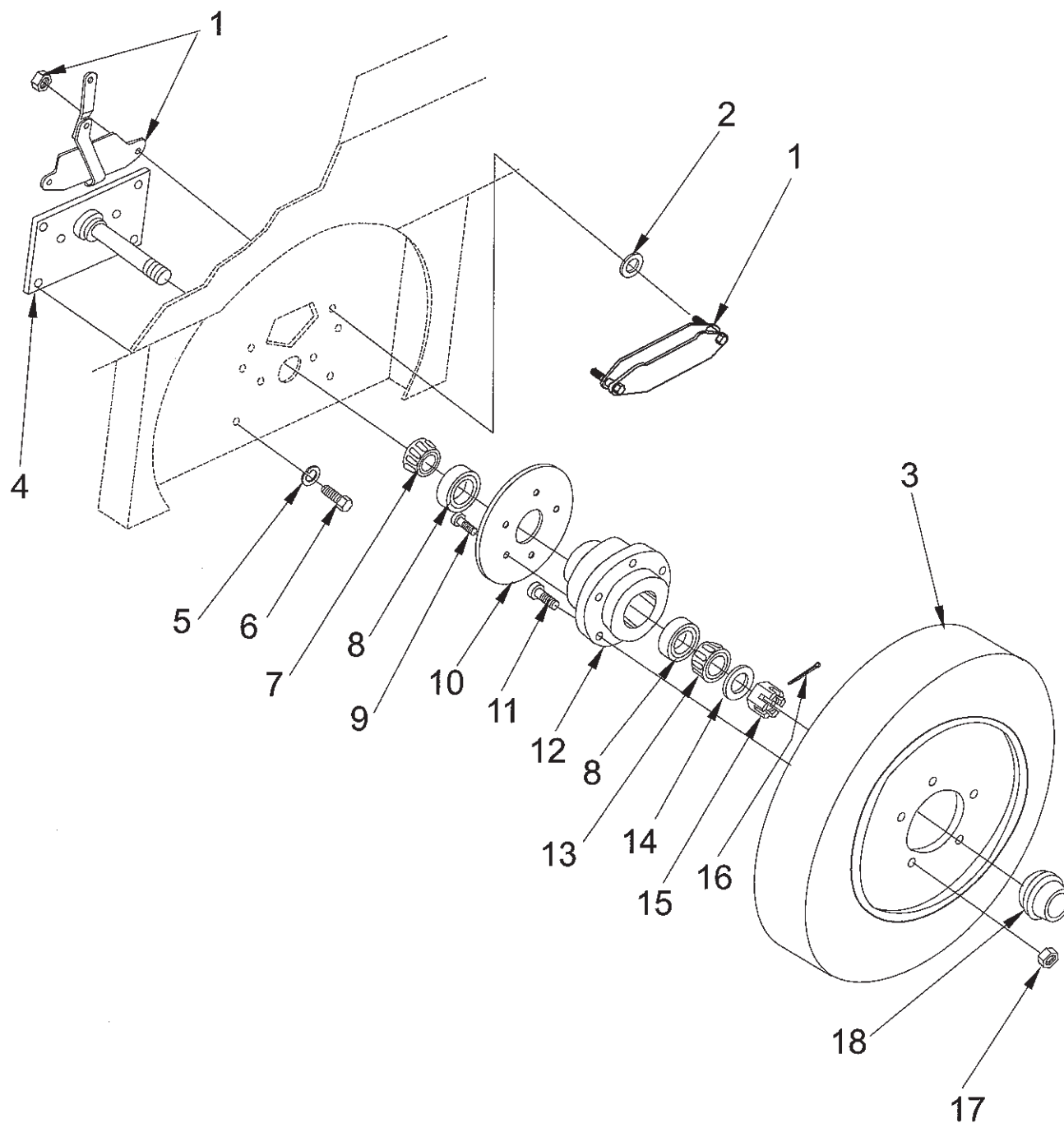


## FRONT WHEEL AND BRAKE - PARTS LIST

| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>DESCRIPTION</u>                   | <u>QTY</u> |
|----------------|--------------------|--------------------------------------|------------|
| 1              | 7-08-02006         | Brake Caliper Assembly Weldment      | 1          |
| 2              | 2-00-04953         | Flat Washer, 1.062 x .390 x .062     | 1          |
| 3              | 7-89-08042         | Molded Wheel                         | 1          |
| 4              | 7-03-09007         | Stub Axle Weldment                   | 1          |
| 5              | 2-00-02312         | Lock Washer, Helical Spring 1/2 Med  | 6          |
| 6              | 2-00-02689         | Screw, 1/2 - 20 x 1.000 HHC          | 6          |
| 7              | 2-00-02079         | Roller Bearing, 2.328 x 1.250 x .703 | 1          |
| 8              | 2-00-04621         | Roller Bearing, Cup Only             | 2          |
| 9              | 2-00-03051         | Screw, 1/4 - 20 .750 HSHC            | 5          |
| 10             | 7-08-02007         | Brake Disc                           | 1          |
| 11             | 8-80-05036         | Stud, 1/2 - 20 x 1.375               | 5          |
| 12             | 7-33-09027         | Front Wheel Hub                      | 1          |
| 13             | 2-00-04622         | Roller Bearing, Cone                 | 1          |
| 14             | 2-00-05024         | Washer, 1 1/16 x 2.00                | 1          |
| 15             | 2-00-05026         | Nut, Slotted Hex 1 - 14 UNF          | 1          |
| 16             | 2-00-02436         | Cotter Pin, .187 x 1.500             | 1          |
| 17             | 8-23-03065         | Nut, Chamfered 1/2 - 20 x .80 x .62  | 5          |
| 18             | 8-11-00030         | Dust Cap                             | 1          |

P4758/9510

## FRONT WHEEL AND BRAKE - EXPLODED VIEW



## REAR WHEEL - PARTS LIST

| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>DESCRIPTION</u>                     | <u>QTY</u> |
|----------------|--------------------|----------------------------------------|------------|
| 1              | 7-17-05010         | Power Steering Hydraulic Cylinder      | 1          |
| 2              | 2-00-04455         | Thrust Bearing (TIMKEN -#T581)         | 1          |
| 3              | 2-00-04456         | Cup Bearing (TIMKEN - #15245)          | 1          |
| 4              | 0885-051-1         | Hydraulic Motor                        | 1          |
| 5              | 7-29-05037         | Spur Gear                              | 1          |
| 6              | 7-62-00006         | Rack                                   | 1          |
| 7              | 7-30-08012         | Rack Guide                             | 1          |
| 8              | 7-58-05229         | Bearing Plate                          | 1          |
| 9              | 7-81-00125         | Rear Fork                              | 1          |
| 10             | 7-89-08046         | Wheel                                  | 1          |
| 11             | 2-00-00220         | Screw, 1/4 - 20 x .625 HHC             | 1          |
| 12             | 2-00-00518         | Lock Washer, Helical Spring 1/4 Med    | 2          |
| 13             | 2-00-00566         | Lubrication Fitting, Straight 1/8 NPT  | 1          |
| 14             | 2-00-00240         | Screw, 1/2 - 13 x 1.250 HHC            | 4          |
| 15             | 2-00-02312         | Lock Washer, Helical Spring 1/2 Med    | 8          |
| 16             | 2-00-00591         | Nut, Hex Jam 1/2 - 20 x .750 x .312    | 1          |
| 17             | 2-00-04841         | Nut, Hex Slotted 3/4-16 x 1.125 x .641 | 1          |
| 18             | 8-75-01157         | Flat Washer, 3/4 Series W              | 2          |
| 19             | 2-00-03761         | Key, .250 x 1.750 SQ                   | 1          |
| 20             | 2-00-00776         | Cotter Pin, .125 x 1.500               | 2          |
| 21             | 2-00-00242         | Screw, 1/2 - 13 x 2.250 HHC            | 4          |
| 22             | 2-00-00596         | Nut, Hex 1/2 - 13 x .750 x .437        | 4          |
| 23             | 2-00-02568         | Lubrication Fitting, 45° 1/8 NPT       | 1          |
| 24             | 2-00-01260         | Dowel Pin, .250 x .625                 | 2          |
| 25             | 2-00-03051         | Screw, 1/4-20 x .750 SHCS              | 1          |
| 26             | 7-21-04031         | Edging                                 | 1          |

P4637

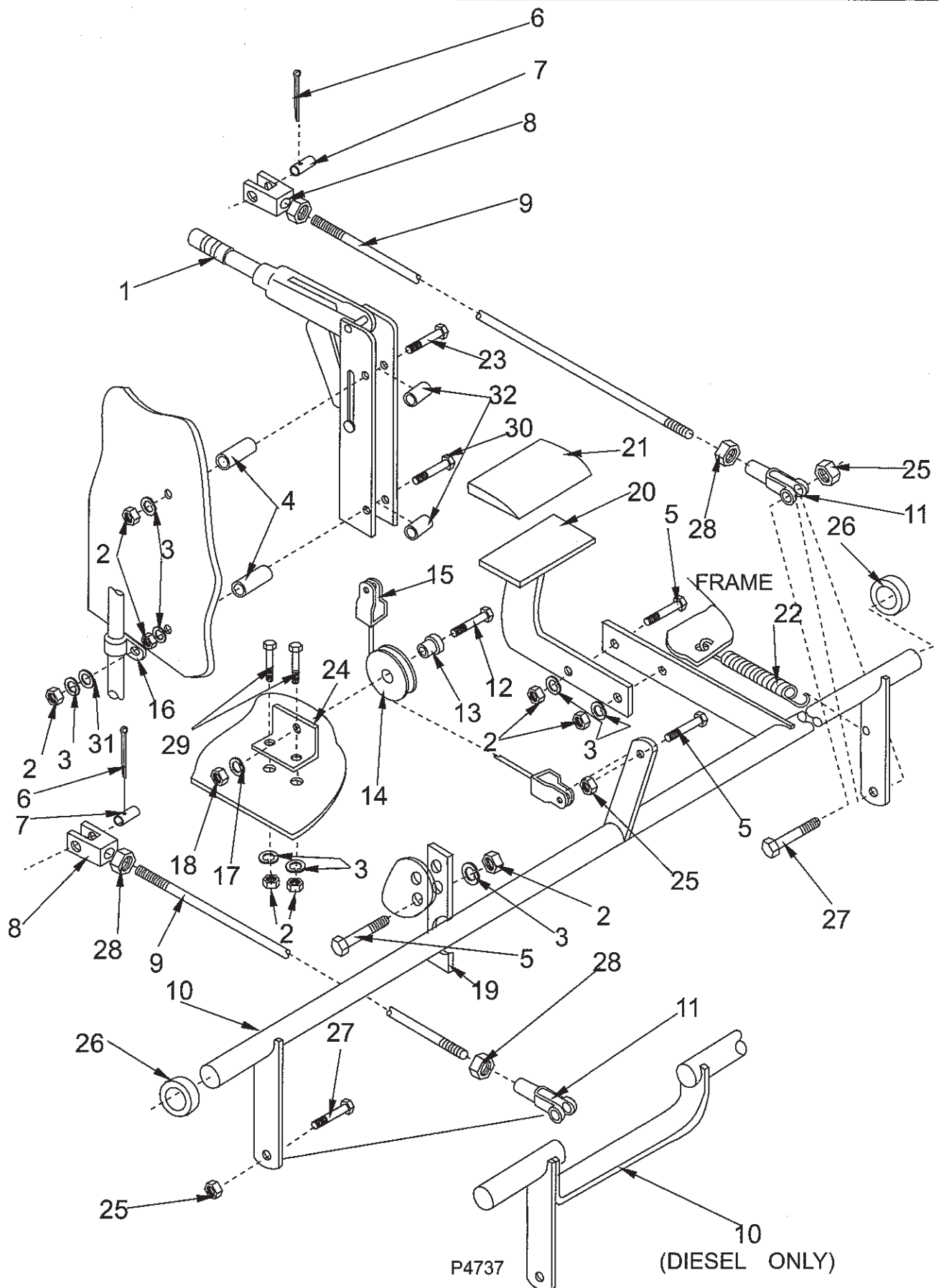


## BRAKE LINKAGE - PARTS LIST

| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>DESCRIPTION</u>                     | <u>QTY</u> |
|----------------|--------------------|----------------------------------------|------------|
| 1              | 7-41-05083         | Parking Brake Lever                    | 1          |
| 2              | 2-00-00585         | Nut, Hex 5/16 - 18 x .500 x .265       | 9          |
| 3              | 2-00-00530         | Lock Washer, Helical Spring 5/16 Med   | 9          |
| 4              | 7-75-01096         | Lever Mounting Spacer                  | 2          |
| 5              | 2-00-00206         | Screw, 5/16 - 18 x 1.000 HHC           | 5          |
| 6              | 2-00-02428         | Cotter Pin, .062 x .750                | 2          |
| 7              | 7-55-08122         | Brake Clevis Pin                       | 2          |
| 8              | 8-14-01007-1       | Brake Pedal Clevis                     | 2          |
| 9              | 7-66-00143         | Brake Rod                              | 2          |
| 10             | 7-70-05173         | Cross Shaft                            | 1          |
| 10             | 7-70-05145         | Cross Shaft (Diesel Only)              | 1          |
| 11             | 8-14-01001         | Clevis                                 | 2          |
| 12             | 2-00-00234         | Screw, 3/8 - 16 x 1.500 HHC            | 1          |
| 13             | 8-09-01065         | Bushing, Flanged .875 x .390 x .650    | 1          |
| 14             | 8-60-00140         | Pulley                                 | 1          |
| 15             | 7-10-00019         | Parking Brake Cable                    | 1          |
| 16             | 2-00-04873         | Cable Clamp, .500                      | 1          |
| 17             | 2-00-02310         | Lock Washer, Helical Spring 3/8 Med    | 1          |
| 18             | 2-00-02360         | Nut, Hex 3/8 - 16 x .562 x .328        | 1          |
| 19             | 7-08-00502         | Brake Cross Shaft Bracket              | 1          |
| 20             | 7-55-00009         | Brake Pedal                            | 1          |
| 21             | 7-50-05145         | Brake Pedal Pad                        | 1          |
| 22             | 7-76-00102         | Spring                                 | 1          |
| 23             | 2-00-01770         | Screw, 5/16 - 18 x 2.750 HHC           | 1          |
| 24             | 7-08-00501         | Brake Pulley Bracket                   | 1          |
| 25             | 2-00-00644         | Nut, Hex Fiber Insert 5/16 - 18        | 3          |
| 26             | 7-15-01014         | Setscrew Collar, 1.625 x 1.000 x .750  | 2          |
| 27             | 2-00-00207         | Screw, 5/16 - 18 x 1.250 HHC           | 2          |
| 28             | 2-00-02369         | Nut, Hex Jam 3/8-16 x .562 x .218      | 2          |
| 29             | 2-00-00208         | Screw, 5/16-18 x .750 HHC              | 2          |
| 30             | 2-00-02597         | Screw, 5/16-18 x 3.250 HHC             | 1          |
| 31             | 2-00-00409         | Flat Washer, .687 x .343 x .062        | 1          |
| 32             | 7-75-01126         | Spacer, .500 x .327 x .780 Part of #1) | 2          |

P4737/9510

# BRAKE LINKAGE - EXPLODED VIEW

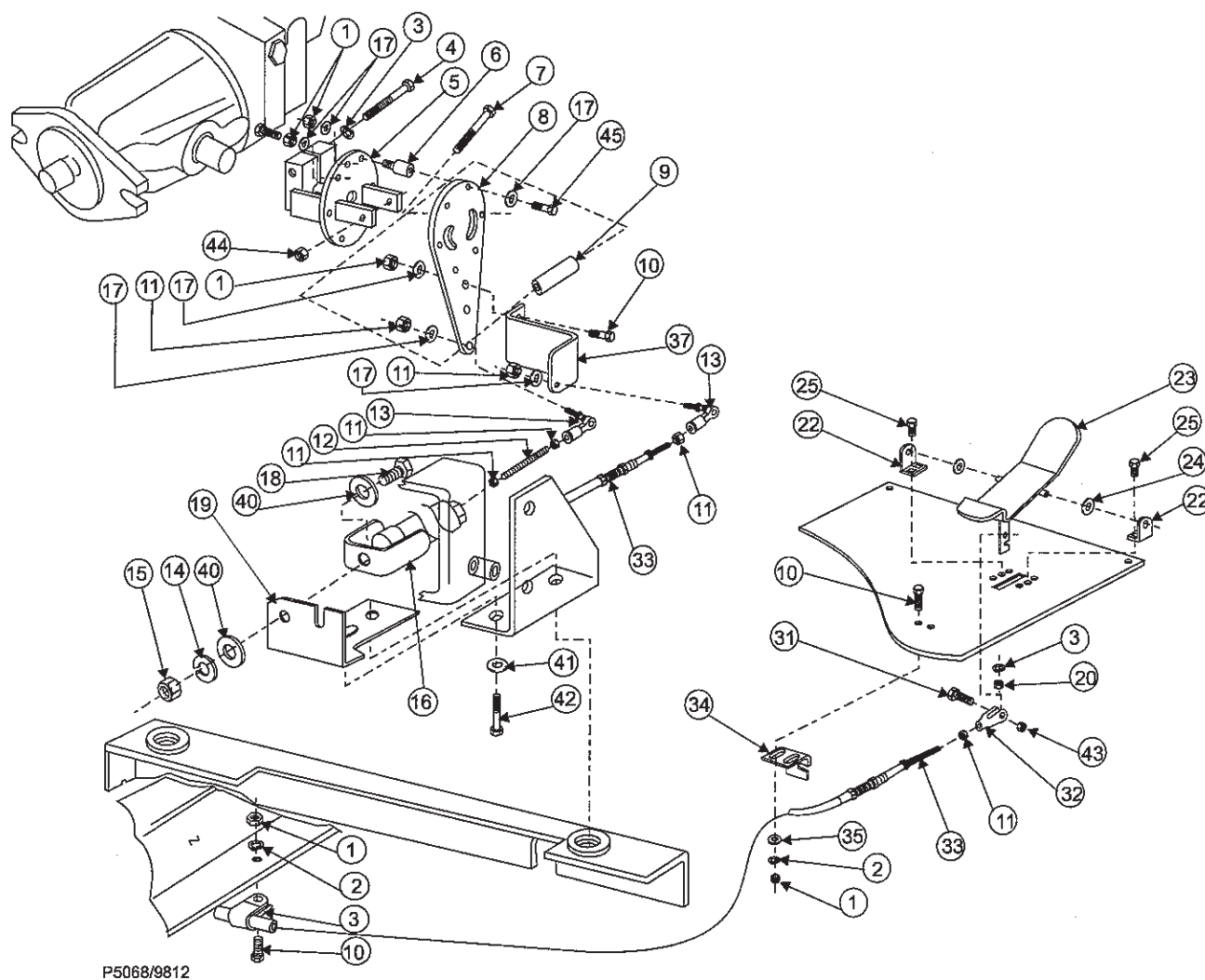


## FORWARD/REVERSE CONTROL (FORD 425) - PARTS LIST

| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>DESCRIPTION</u>                   | <u>QTY</u> |
|----------------|--------------------|--------------------------------------|------------|
| 1              | 2-00-00594         | Nut, Hex 1/4 - 20 x .437 x .218      | 13         |
| 2              | 2-00-00518         | Lock Washer, Helical Spring 1/4 Med  | 5          |
| 3              | 2-00-00530         | Lock Washer, Helical Spring 5/16 Med | 3          |
| 4              | 2-00-00225         | Screw, 5/16-18 x 1.500 HHC           | 1          |
| 5              | 7-03-04105         | Transmission Arm                     | 1          |
| 6              | 7-75-01089         | Isolator                             | 6          |
| 7              | 2-00-00246         | Screw, 1/4-20 x 2.250 HHC            | 1          |
| 8              | 7-58-05220         | Transmission Arm Plate               | 1          |
| 9              | 7-75-01110         | Spacer                               | 1          |
| 10             | 2-00-00221         | Screw, 1/4-20 x .750 HHC             | 3          |
| 11             | 2-95-01999         | Nut, Hex Jam 1/4-28 x .437 x .156    | 6          |
| 12             | 7-66-00147         | Rod, 1/4-28 x 3.000                  | 1          |
| 13             | 7-25-02050         | Rod End, 1/4-28                      | 2          |
| 14             | 2-00-02312         | Lock Washer, Helical Spring 1/2 Med  | 1          |
| 15             | 2-00-02352         | Nut, Hex 1/2-13 x .875 x .484        | 1          |
| 16             | 8-16-00025         | Centering Control                    | 1          |
| 17             | 2-00-00501         | Lock Washer, 1/4 Int.                | 16         |
| 18             | 2-00-00240         | Screw, 1/2-13 x 1.250 HHC            | 1          |
| 19             | 7-08-00537         | Centering Control Bracket            | 1          |
| 20             | 2-00-00585         | Nut, Hex 5/16-18 x .500 x .265       | 4          |
| 21             | 2-00-00491         | Grommet                              | 1          |
| 22             | 8-08-00327         | Forward Reverse Pedal Bracket        | 2          |
| 23             | 7-55-00010         | Forward Reverse Pedal                | 1          |
| 24             | 2-00-00402         | Flat Washer, .750 x .390 x .093      | 2          |
| 25             | 2-00-03569         | Carriage Bolt, 5/16 - 18 x .75       | 4          |
| 26             |                    |                                      |            |
| 27             |                    |                                      |            |
| 28             | 2-00-00244         | Screw, 1/4-20 x 1.00 HHC             | 1          |
| 29             |                    |                                      |            |
| 30             |                    |                                      |            |
| 31             | 2-00-04563         | Screw, #10-24 x .625 x .375 SH       | 1          |
| 32             | 8-14-01006         | Clevis                               | 1          |
| 33             | 7-16-00009         | Forward / Reverse Cable              | 1          |
| 34             | 8-08-00506         | Cable Mounting Bracket               | 1          |
| 35             | 2-00-00406         | Flat Washer, .750 x .281 x .062      | 2          |
| 36             | 2-00-04602         | Hose Clamp, .500                     | 1          |
| 37             | 7-08-00536         | Bracket                              | 1          |
| 38             | 7-08-00538         | Bracket                              | 1          |
| 39             | 2-00-00209         | Screw, 3/8-16 x 1.250 HHC            | 2          |
| 40             | 2-00-00405         | Flat Washer, .750 x .281 x .062      | 2          |
| 41             | 2-00-02310         | Lock Washer, Helical Spring 3/8 Med  | 2          |
| 42             | 2-00-02360         | Nut, Hex 3/8 - 16 x .562 x .328      | 2          |
| 43             | 2-00-01246         | Nut, Hex Fiber Insert #10-24         | 1          |
| 44             | 2-00-00641         | Nut, Hex Fiber Insert 1/4-20         | 1          |
| 45             | 2-00-00219         | Screw, 1/4-20 x .500 HHC             | 6          |
| 46             | 2-00-04801         | Flat Washer, .875 x .375 x .125      | 2          |
| 47             | 2-00-01490         | Screw, 1/4-20 x .875 HHC             | 2          |

P5068/9511

# FORWARD/REVERSE CONTROL (FORD 425) - EXPLODED VIEW

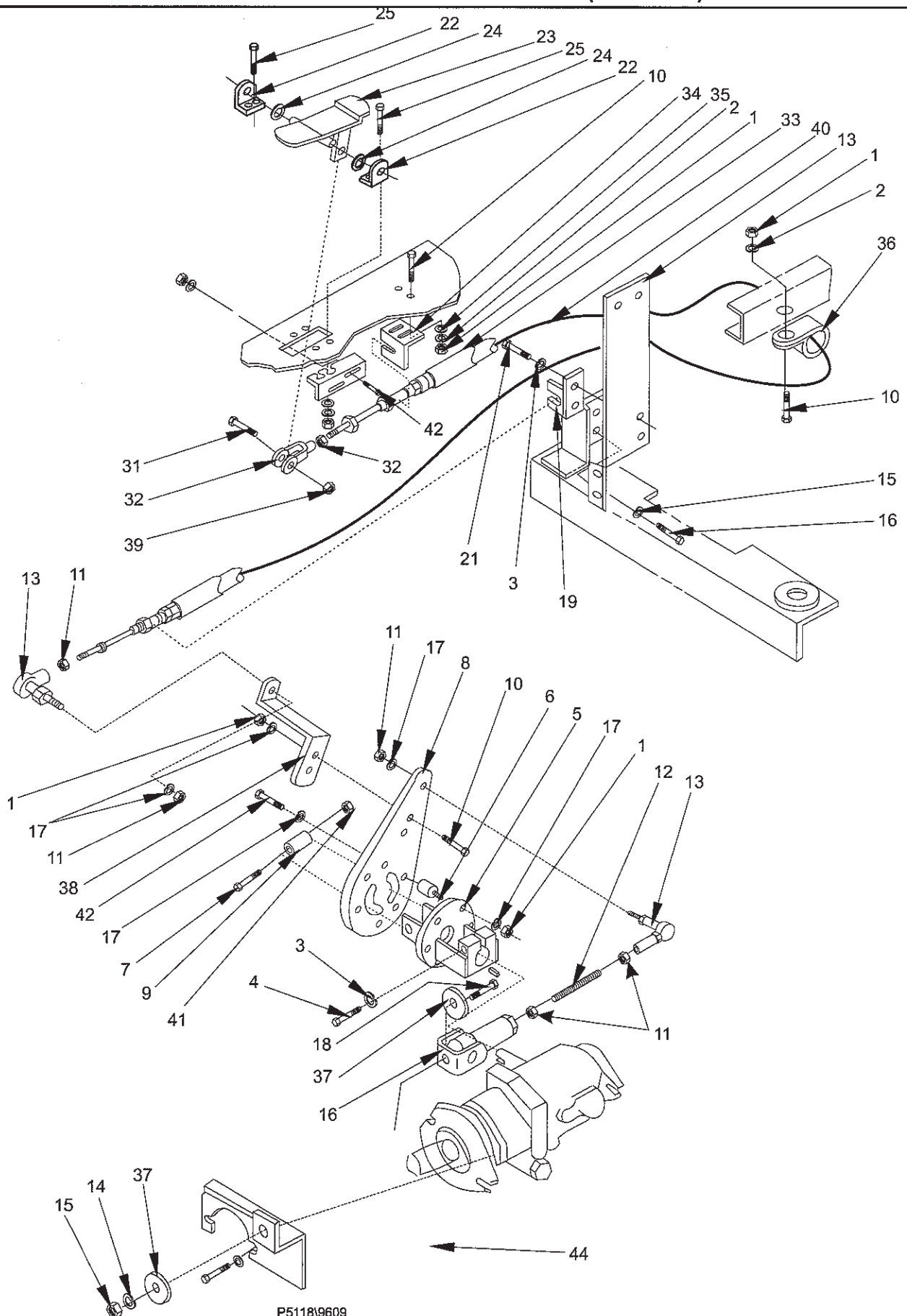


## FORWARD/REVERSE CONTROL (PERKINS) - PARTS LIST

| KEY NO. | PART NUMBER | DESCRIPTION                          | QTY |
|---------|-------------|--------------------------------------|-----|
| 1       | 2-00-00594  | Nut, Hex 1/4 - 20 x .437 x .218      | 11  |
| 2       | 2-00-00518  | Lock Washer, Helical Spring 1/4 Med  | 3   |
| 3       | 2-00-00530  | Lock Washer, Helical Spring 5/16 Med | 5   |
| 4       | 2-00-00225  | Screw, 5/16-18 x 1.500 HHC           | 1   |
| 5       | 7-03-04105  | Transmission Arm                     | 1   |
| 6       | 7-75-01089  | Isolator, 1/4-20                     | 6   |
| 7       | 2-00-00246  | Screw, 1/4-20 x 2.250 HHC            | 1   |
| 8       | 7-58-05220  | Transmission Arm Plate               | 1   |
| 9       | 7-75-01110  | Spacer, Transmission Arm             | 1   |
| 10      | 2-00-00221  | Screw, 1/4-20 x .750 HHC             | 5   |
| 11      | 2-95-01999  | Nut, Hex Jam 1/4-28 x .437 x .156    | 6   |
| 12      | 7-66-00147  | Rod, 1/4-28 x 3.000                  | 1   |
| 13      | 7-25-02050  | Rod End, 1/4-28                      | 2   |
| 14      | 2-00-02312  | Lock Washer, Helical Spring 1/2 Med  | 1   |
| 15      | 2-00-02352  | Nut, Hex 1/2-13 x .875 x .484        | 1   |
| 16      | 8-16-00025  | Centering Control                    | 1   |
| 17      | 2-00-00501  | Lock Washer, 1/4 Int.                | 16  |
| 18      | 2-00-00240  | Screw, 1/2-13 x 1.250 HHC            | 1   |
| 19      | 7-08-00583  | Centering Control Bracket            | 1   |
| 20      | 2-00-00585  | Nut, Hex 5/16-18 x .500 x .265       | 4   |
| 21      | 2-00-00208  | Screw, 5/16-18 x .750 HHC            | 2   |
| 22      | 8-08-00327  | Forward Reverse Pedal Bracket        | 2   |
| 23      | 7-55-00010  | Forward Reverse Pedal                | 1   |
| 24      | 2-00-00402  | Flat Washer, .750 x .390 x .093      | 2   |
| 25      | 2-00-03569  | Carriage Bolt, 5/16 - 18 x .75       | 4   |
| 26      |             |                                      |     |
| 27      |             |                                      |     |
| 28      |             |                                      |     |
| 29      |             |                                      |     |
| 30      |             |                                      |     |
| 31      | 2-00-04563  | Screw, #10-24 x .625 x .375 SH       | 1   |
| 32      | 8-14-01006  | Clevis                               | 1   |
| 33      | 7-16-00009  | Forward / Reverse Cable              | 1   |
| 34      | 8-08-00506  | Cable Mounting Bracket               | 1   |
| 35      | 2-00-00406  | Flat Washer, .750 x .281 x .062      | 2   |
| 36      | 2-00-04602  | Hose Clamp, .500                     | 1   |
| 37      | 2-00-00405  | Flat Washer, .500                    | 2   |
| 38      | 7-03-04106  | Transmission Arm                     | 1   |
| 39      | 2-00-01246  | Nut, Hex Fiber Insert #10-24         | 1   |
| 40      | 7-34-09018  | Insulating Sleeve                    | 1   |
| 41      | 2-00-00641  | Nut, Hex Fiber Insert 1/4-20         | 1   |
| 42      | 2-00-00219  | Screw, 1/4-20 x .500 HHC             | 6   |
| 43      | 2-00-00491  | Grommet                              | 1   |
| 44      | 7-08-00585  | Hydroback Bracket                    | 1   |
| 45      |             |                                      |     |

P5118

# FORWARD/REVERSE CONTROL (PERKINS) - EXPLODED VIEW



P5118/9609

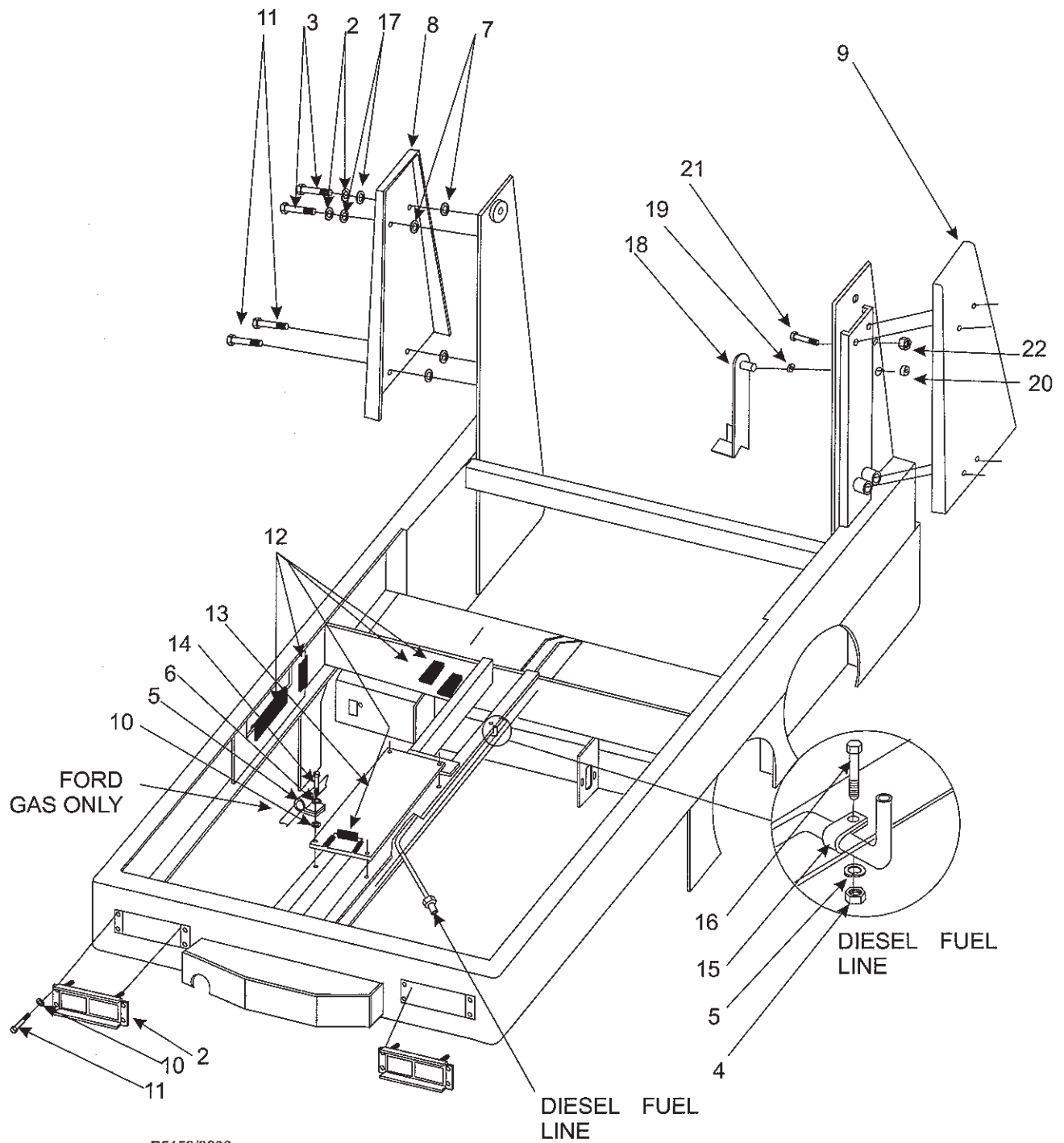
## MAIN FRAME - PARTS LIST

| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>DESCRIPTION</u>                   | <u>QTY</u> |
|----------------|--------------------|--------------------------------------|------------|
| 1              | 7-27-07139         | Main Frame                           | 1          |
|                | 7-27-07160         | Main Frame - Manual Dump             | 1          |
| 2*             | 2-00-00530         | Lock Washer, Helical Spring 5/16 Med | 8          |
| 3*             | 2-00-00208         | Screw, 5/16-18 x .750 HHC            | 4          |
| 4              | 2-00-00594         | Nut, Hex 1/4 - 20 x .437 x .218      | 2          |
| 5              | 2-00-00518         | Lock Washer, Helical Spring 1/4 Med  | 5          |
| 6              | 2-00-04602         | Hose Clamp, .500                     | 1          |
| 7*             | 2-00-00409         | Flat Washer, .687 x .343 x .062      | 8          |
| 8*             | 7-16-07313         | Support Wing Cover                   | 1          |
| 9*             | 7-16-07314         | Support Wing Cover                   | 1          |
| 10             | 2-00-00407         | Flat Washer, .562 x .265 x .062      | 16         |
| 11*            | 2-00-00225         | Screw, 5/16-18 x 1.500 HHC           | 4          |
| 12             | 7-21-04031         | Edging                               | 2          |
| 13             | 7-16-07304         | Steering Gear Cover                  | 1          |
| 14             | 2-00-00221         | Screw, 1/4 - 20 x .750 HHC           | 4          |
| 15             | 2-00-04378         | Clamp, .281                          | 1          |
| 16             | 2-00-00221         | Screw, 1/4 - 20 x .750 HHC           | 1          |

\*Not used with manual dump hopper.

P4755

## MAIN FRAME - EXPLODED VIEW

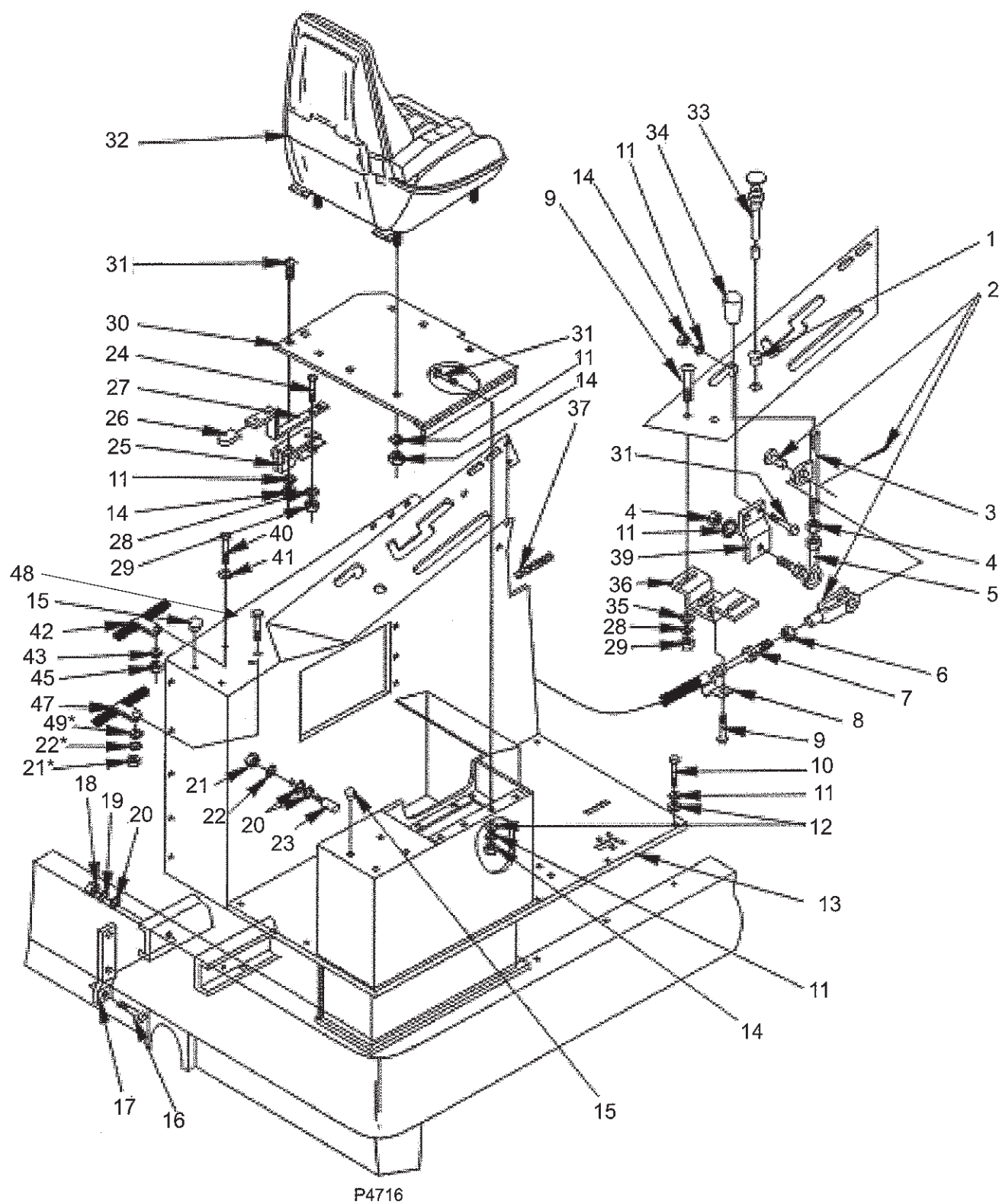


## DRIVER COMPARTMENT - PARTS LIST

| KEY NO. | PART NUMBER | DESCRIPTION                                 | QTY |
|---------|-------------|---------------------------------------------|-----|
| 1       | 2-00-02011  | Plastic Plug, .440 Dia. (LP & Diesel Only)  | 1   |
| 2       | 7-14-07006  | Clevis                                      | 1   |
| 3       | 7-41-05092  | Throttle Handle                             | 1   |
| 4       | 2-95-01999  | Nut, Hex Jam 1/4-28 x .437 x .156           | 2   |
| 5       | 7-25-02050  | Rod End, 1/4-28                             | 1   |
| 6       | 2-00-00626  | Nut, Hex MS #10-32 x .375 x .125            | 1   |
| 7       | 7-10-00024  | Throttle Cable, (Diesel Only)               | 1   |
| 7       | 8-10-00033  | Throttle Cable, (Gas Only)                  | 1   |
| 8       | 8-13-07094  | Clamp                                       | 1   |
| 9       | 2-00-03061  | Screw, #10-24 x .500 THM                    | 4   |
| 10      | 2-00-00205  | Screw, 1/4-20 x 1.000 HHC                   | 6   |
| 11      | 2-00-00518  | Lock Washer, Helical Spring 1/4 Med         | 14  |
| 12      | 2-00-03702  | Flat Washer, .625 x .281 x .062             | 10  |
| 13      | 7-70-08005  | Driver Compartment Cover                    | 1   |
| 14      | 2-00-00594  | Nut, Hex 1/4-20 x .437 x .218               | 8   |
| 15      | 2-00-04514  | Plastic Plug, .562 Dia. (Diesel only)       | 7   |
| 15      | 2-00-04514  | Plastic Plug, .562 Dia. (Gas/LP only)       | 8   |
| 16      | 2-00-00233  | Screw, 3/8-16 x 1.000 HHC                   | 1   |
| 17      | 7-08-00531  | Drive Compartment Support Bracket           | 1   |
| 18      | 2-00-02360  | Nut, Hex 3/8-16 x .562 x .328               | 1   |
| 19      | 2-00-02310  | Lock Washer, Helical Spring 3/8 Med         | 1   |
| 20      | 2-00-00402  | Flat Washer, .750 x .390 x .062             | 3   |
| 21      | 2-00-00585  | Nut, Hex 5/16-18 x .500 x .265              | 1   |
| 22      | 2-00-00530  | Lock Washer, Helical Spring 5/16 Med        | 1   |
| 23      | 7-55-08116  | Striker Pin                                 | 1   |
| 24      | 2-00-04794  | Screw, #10-24 x .625 BHS                    | 2   |
| 25      | 8-41-00037  | Rotary Latch                                | 1   |
| 26      | 7-31-06061  | Grip - Cover Latch                          | 1   |
| 27      | 7-31-06062  | Handle - Seat Cover Latch                   | 1   |
| 28      | 2-00-00519  | Lock Washer, Helical Spring #10 Med         | 6   |
| 29      | 2-00-00605  | Nut, Hex MS #10-24 x .375 x .125            | 4   |
| 30      | 7-16-07281  | Cover - Weldment                            | 1   |
| 31      | 2-00-00220  | Screw, 1/4-20 x .625 HHC                    | 5   |
| 32      | 7-69-00002  | Seat                                        | 1   |
| 33      | 7-16-00016  | Choke (Gas Only)                            | 1   |
| 34      | 7-39-00017  | Knob                                        | 1   |
| 35      | 2-00-00426  | Flat Washer, .500 x .218 x .062             | 2   |
| 36      | 7-08-00590  | Throttle Control Clamp                      | 1   |
| 37      | 8-21-04019  | Edging                                      | 1   |
| 38      | 2-00-00501  | Lock Washer, 1/4 Int                        | 1   |
| 39      | 7-08-00589  | Throttle Control Bracket                    | 1   |
| 40      | 2-00-00239  | Screw, 1/2-13 x 1.000 HHC                   | 1   |
| 41      | 2-00-00420  | Flat Washer, 1.000 x .515 x .062            | 1   |
| 42      | 2-00-04441  | Cable Clamp, .625                           | 1   |
| 43      | 2-00-02312  | Lock Washer, Helical Spring 1/2 Med         | 1   |
| 44      |             |                                             |     |
| 45      | 2-00-00596  | Nut, Hex 1/2-13 x .750 x .439 (Diesel Only) | 1   |
| 46      |             |                                             |     |
| 47      | 2-00-04873  | Clamp                                       | 1   |
| 48      | 2-00-00196  | Carriage Bolt, 5/16-18 x 1.000              | 1   |
| 49      | 2-00-00409  | Flat Washer, .687 x .344 x .062             | 1   |

P4716

## DRIVER COMPARTMENT - EXPLODED VIEW

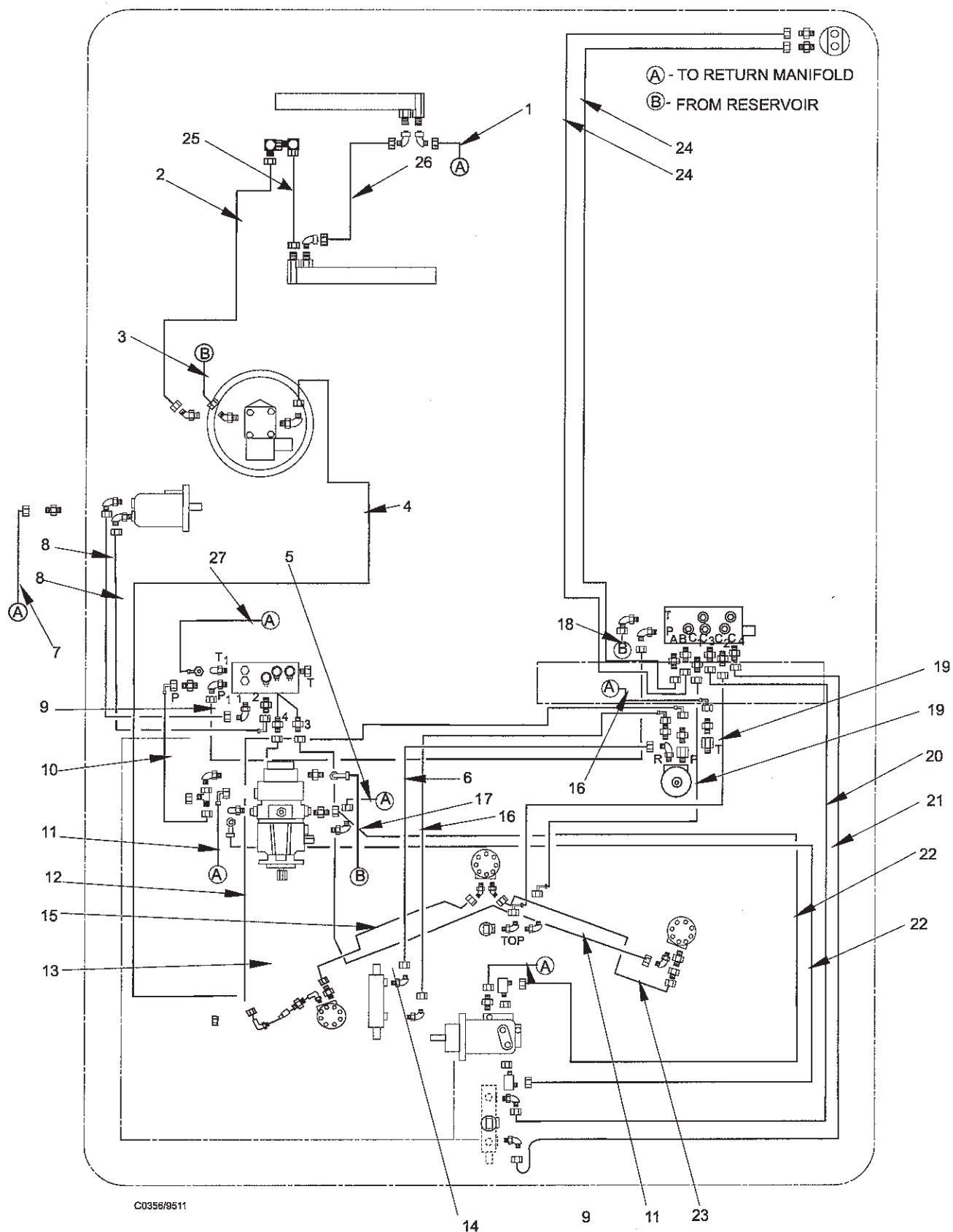


## HYDRAULIC HOSE SYSTEM (MANUAL DUMP) - PARTS LIST

| KEY NO. | PART NUMBER | DESCRIPTION                                 | QTY |
|---------|-------------|---------------------------------------------|-----|
| 1       | 7-33-02202  | Hydraulic Hose ORS 8 Str. to JIC 8 Str. 69" | 1   |
| 2       | 7-33-02201  | Hydraulic Hose ORS 8-Str. to JIC Str. 20.5" | 1   |
| 3       | 7-33-02224  | Hydraulic Hose ORS 4-90° to Str. 155"       | 1   |
| 4       | 8-33-02192  | Hydraulic Hose ORS 8-Str. to 8 Str. 80"     | 1   |
| 5       | 7-33-02186  | Hydraulic Hose ORS 4-Str. Ends 30"          | 1   |
| 6       | 7-33-02180  | Hydraulic Hose ORS 4-Str. Ends 37"          | 2   |
| 7       | 8-33-02200  | Hydraulic Hose ORS 4-90° to Str. 55"        | 1   |
| 8       | 8-33-02214  | Hydraulic Hose ORS 8-Str. Ends 29"          | 2   |
| 9       | 8-33-02184  | Hydraulic Hose ORS 4-Str. Ends 50.5"        | 2   |
| 10      | 8-33-02202  | Hydraulic Hose ORS 8-90° to Str. 20"        | 1   |
| 11      | 7-33-02197  | Hydraulic Hose ORS 8-45° to Str. 52.5"      | 2   |
| 12      | 7-33-02190  | Hydraulic Hose ORS 4-90° to Str. 67"        | 1   |
| 13      | 8-33-02201  | Hydraulic Hose ORS 8-45° to Str. 18"        | 2   |
| 14      | 7-33-02220  | Hydraulic Hose ORS 12-Str. Ends 42"         | 1   |
| 15      | 7-33-02206  | Hydraulic Hose ORS 8-90° to Str. 14.25"     | 1   |
| 16      | 7-33-02191  | Hydraulic Hose ORS 4-90° to Str. 42"        | 2   |
| 17      | 7-33-02221  | Hydraulic Hose ORS 12-Str. Ends 48"         | 1   |
| 18      | 7-33-02225  | Hydraulic Hose ORS 4-90° to Str. 38"        | 1   |
| 19      | 7-33-02189  | Hydraulic Hose ORS 4-90° to Str. 26"        | 2   |
| 20      | 8-33-02183  | Hydraulic Hose ORS 4-Str. Ends 49"          | 1   |
| 21      | 7-33-02185  | Hydraulic Hose ORS 4-Str. Ends 56"          | 1   |
| 22      | 7-33-02223  | Hydraulic Hose ORS 8-45° to Str. 87"        | 2   |
| 23      | 7-33-02205  | Hydraulic Hose ORS 8-90° to Str. 16.25"     | 1   |
| 24      | 8-33-02216  | Hydraulic Hose ORS 4-Str. Ends 88.0"        | 2   |
| 25      | 7-33-02244  | Hydraulic Hose, 1.000 dia. x 33.000" long   | 1   |
| 26      | 7-33-02316  | Hydraulic Hose, 8-Str. to JIC-8 Str. 69"    | 1   |

C0356/9511

# HYDRAULIC HOSE SYSTEM (MANUAL DUMP) - EXPLODED VIEW



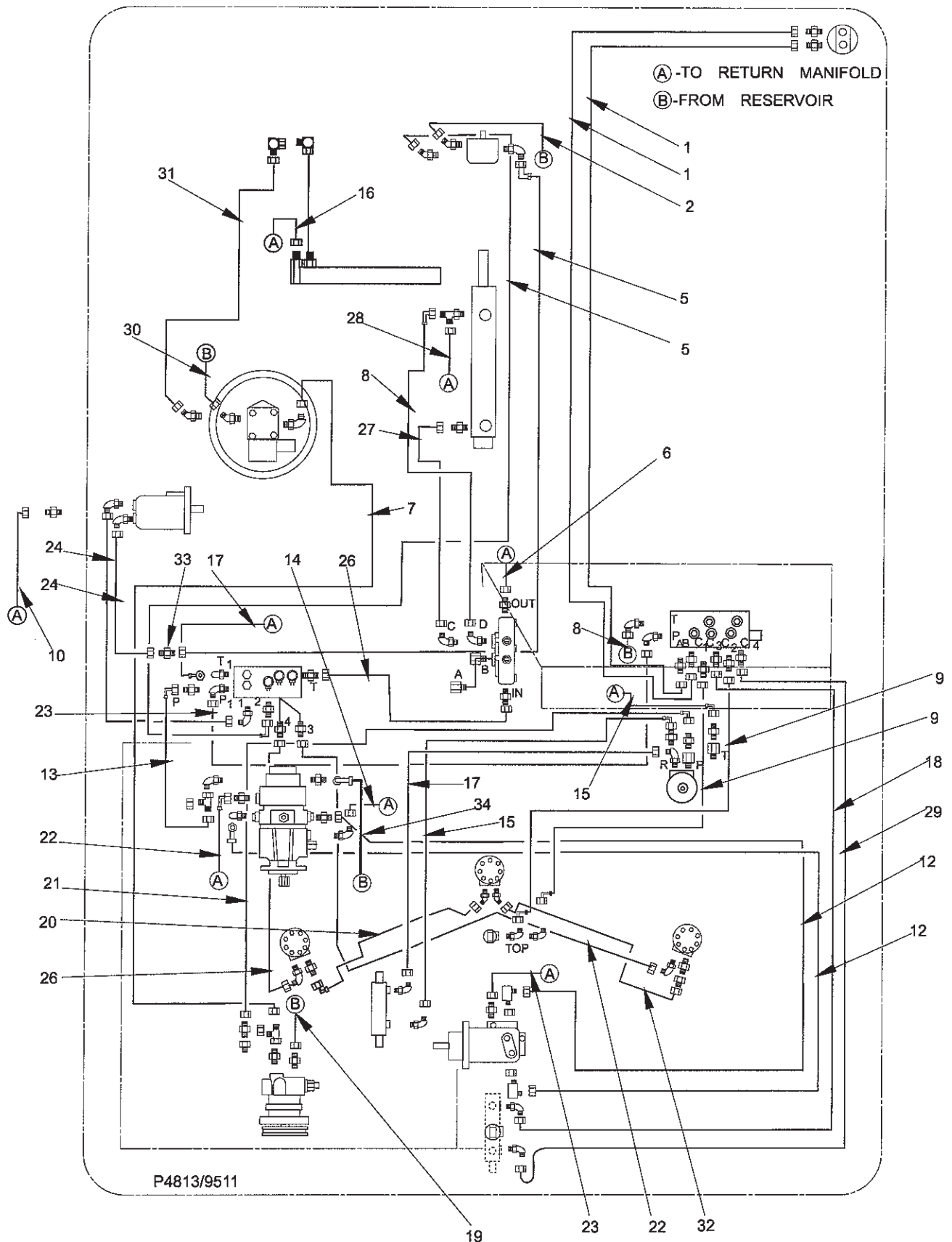
## HYDRAULIC HOSE SYSTEM (LOW DUMP) - PARTS LIST

| KEY NO. | PART NUMBER | DESCRIPTION                                     | QTY |
|---------|-------------|-------------------------------------------------|-----|
| 1       | 7-33-02181  | Hydraulic Hose ORS 4-Str. Ends 160"             | 2   |
| 2       | 8-33-02198  | Hydraulic Hose ORS 4-90° to Str. 107"           | 1   |
| 3       |             |                                                 |     |
| 4       |             |                                                 |     |
| 5       | 7-33-02192  | Hydraulic Hose ORS 8-90° to Str. 82"            | 2   |
| 6       | 7-33-02187  | Hydraulic Hose ORS 8-Str. Ends 42"              | 1   |
| 7       | 8-33-02192  | Hydraulic Hose ORS 8-Str. Ends 80"              | 1   |
| 8       | 7-33-02225  | Hydraulic Hose ORS 4-90° to Str. 38"            | 2   |
| 9       | 7-33-02189  | Hydraulic Hose ORS 4-90° to Str. 26"            | 2   |
| 10      | 8-33-02200  | Hydraulic Hose ORS 4-90° to Str. 55"            | 1   |
| 11      |             |                                                 |     |
| 12      | 7-33-02223  | Hydraulic Hose ORS 8-45° to Str. 87"            | 2   |
| 13      | 8-33-02202  | Hydraulic Hose ORS 8-90° to Str. 20"            | 1   |
| 14      | 7-33-02186  | Hydraulic Hose ORS 4-Str. Ends 30"              | 1   |
| 15      | 7-33-02191  | Hydraulic Hose ORS 4-90° to Str. 42"            | 2   |
| 16      | 8-33-02245  | Hydraulic Hose ORS 8 Str. to JIC 8 Str. 82"     | 1   |
| 17      | 7-33-02180  | Hydraulic Hose ORS 4-Str. Ends 37"              | 2   |
| 18      | 8-33-02183  | Hydraulic Hose ORS 4-Str. Ends 49"              | 1   |
| 19      | 7-33-02220  | Hydraulic Hose ORS 12-Str. Ends 42"             | 1   |
| 20      | 7-33-02206  | Hydraulic Hose ORS 8-90° to Str. 14.25"         | 1   |
| 21      | 7-33-02190  | Hydraulic Hose ORS 4-90° to Str. 67"            | 1   |
| 22*     | 7-33-02187  | Hydraulic Hose, 13/16-16-13/16-16.5 I.D. 42.00" | 2   |
| 23      | 8-33-02184  | Hydraulic Hose ORS 4-Str. Ends 50.5"            | 3   |
| 24      | 8-33-02214  | Hydraulic Hose ORS 8-Str. Ends 29"              | 2   |
| 25      |             |                                                 |     |
| 26*     | 8-33-02190  | Hydraulic Hose, 13/16-13/16-16.50 I.D. 21.00"   | 2   |
| 27      | 8-33-02178  | Hydraulic Hose ORS 4-Str. Ends 15"              | 1   |
| 28      | 7-33-02193  | Hydraulic Hose ORS 4-90° to Str. 49"            | 1   |
| 29      | 7-33-02185  | Hydraulic Hose ORS 4-Str. Ends 56"              | 1   |
| 30      | 7-33-02224  | Hydraulic Hose ORS 4-90° to Str. 155"           | 1   |
| 31      | 7-33-02201  | Hydraulic Hose ORS 8-Str. to JIC Str. 20.5"     | 1   |
| 32      | 7-33-02205  | Hydraulic Hose ORS 8-90° to Str. 16.25"         | 1   |
| 33      | 2-00-04987  | ORFS Union, 13/16-16                            | 1   |
| 34      | 7-33-02221  | Hydraulic Hose ORS 12-Str. Ends 48"             | 1   |

\*Used on Diesel Powered Machines Only

P4813

# HYDRAULIC HOSE SYSTEM (LOW DUMP) - EXPLODED VIEW



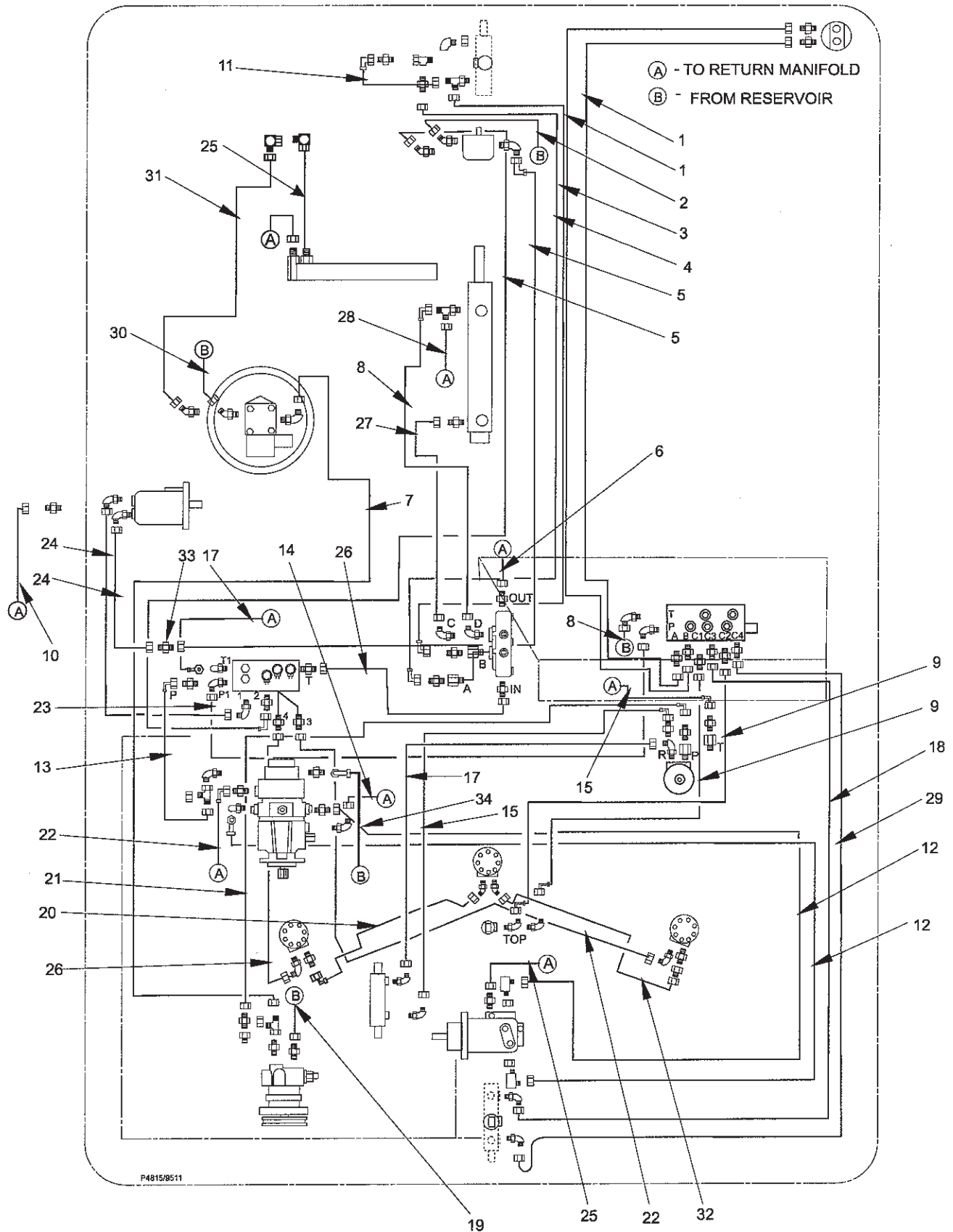
## HYDRAULIC HOSE SYSTEM (VARIABLE DUMP) - PARTS LIST

| KEY NO. | PART NUMBER | DESCRIPTION                                     | QTY |
|---------|-------------|-------------------------------------------------|-----|
| 1       | 7-33-02181  | Hydraulic Hose ORS 4-Str. Ends 160"             | 2   |
| 2       | 8-33-02198  | Hydraulic Hose ORS 4-90° to Str. 107"           | 1   |
| 3       | 7-33-02194  | Hydraulic Hose ORS 4-90° to Str. 80"            | 1   |
| 4       | 7-33-02195  | Hydraulic Hose ORS 4-90° to Str. 87"            | 1   |
| 5       | 7-33-02192  | Hydraulic Hose ORS 8-90° to Str. 82"            | 2   |
| 6       | 7-33-02187  | Hydraulic Hose ORS 8-Str. Ends 42"              | 1   |
| 7       | 8-33-02192  | Hydraulic Hose ORS 8-Str. Ends 80"              | 1   |
| 8       | 7-33-02225  | Hydraulic Hose ORS 4-90° to Str. 38"            | 2   |
| 9       | 7-33-02189  | Hydraulic Hose ORS 4-90° to Str. 26"            | 2   |
| 10      | 8-33-02200  | Hydraulic Hose ORS 4-90° to Str. 55"            | 1   |
| 11      | 8-33-02174  | Hydraulic Hose ORS 4-90° to Str. 16.5           | 1   |
| 12      | 7-33-02223  | Hydraulic Hose ORS 8-45° to Str. 87"            | 2   |
| 13      | 8-33-02202  | Hydraulic Hose ORS 8-90° to Str. 20"            | 1   |
| 14      | 7-33-02186  | Hydraulic Hose ORS 4-Str. Ends 30"              | 1   |
| 15      | 7-33-02191  | Hydraulic Hose ORS 4-90° to Str. 42"            | 2   |
| 16      | 8-33-02245  | Hydraulic Hose ORS 8 Str. to JIC 8 Str. 82"     | 1   |
| 17      | 7-33-02180  | Hydraulic Hose ORS 4-Str. Ends 37"              | 2   |
| 18      | 8-33-02183  | Hydraulic Hose ORS 4-Str. Ends 49"              | 1   |
| 19      | 7-33-02220  | Hydraulic Hose ORS 12-Str. Ends 42"             | 1   |
| 20      | 7-33-02206  | Hydraulic Hose ORS 8-90° to Str. 14.25"         | 1   |
| 21      | 7-33-02190  | Hydraulic Hose ORS 4-90° to Str. 67"            | 1   |
| 22*     | 7-33-02187  | Hydraulic Hose, 13/16-16-13/16-16.5 I.D. 42.00" | 2   |
| 23      | 8-33-02184  | Hydraulic Hose ORS 4-Str. Ends 50.5"            | 3   |
| 24      | 8-33-02214  | Hydraulic Hose ORS 8-Str. Ends 29"              | 2   |
| 25      |             |                                                 |     |
| 26*     | 8-33-02190  | Hydraulic Hose, 13/16-13/16-16.50 I.D. 21.00"   | 2   |
| 27      | 8-33-02178  | Hydraulic Hose ORS 4-Str. Ends 15"              | 1   |
| 28      | 7-33-02193  | Hydraulic Hose ORS 4-90° to Str. 49"            | 1   |
| 29      | 7-33-02185  | Hydraulic Hose ORS 4-Str. Ends 56"              | 1   |
| 30      | 7-33-02224  | Hydraulic Hose ORS 4-90° to Str. 155"           | 1   |
| 31      | 7-33-02201  | Hydraulic Hose ORS 8-Str. to JIC Str. 20.5"     | 1   |
| 32      | 7-33-02205  | Hydraulic Hose ORS 8-90° to Str. 16.25"         | 1   |
| 33      | 2-00-04987  | ORFS Union, 13/16-16                            | 1   |
| 34      | 7-33-02221  | Hydraulic Hose ORS 12-Str. Ends 48"             | 1   |

\*Used on Diesel Powered Machines Only

P4815

# HYDRAULIC HOSE SYSTEM (VARIABLE DUMP) - EXPLODED VIEW

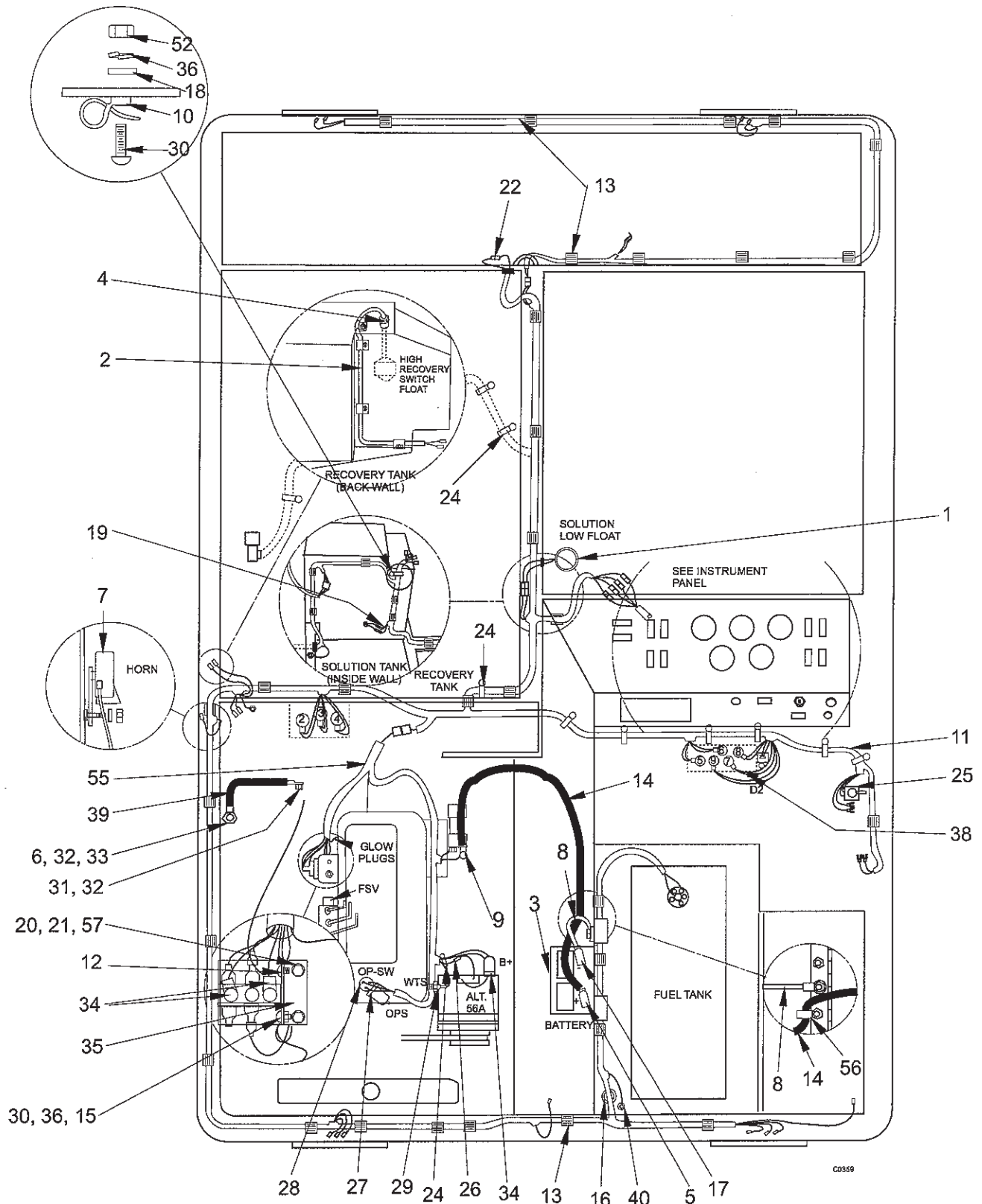


## SUCTION & RETURN HOSES (MANUAL DUMP) - PARTS LIST

| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>DESCRIPTION</u>                          | <u>QTY</u> |
|----------------|--------------------|---------------------------------------------|------------|
| 1              | 7-33-02202         | Hydraulic Hose ORS 8 Str. to JIC 8 Str. 69" | 1          |
| 2              | N/A                |                                             |            |
| 3              | 7-33-02224         | Hydraulic Hose ORS 4-90° to Str. 155"       | 1          |
| 4              | N/A                |                                             |            |
| 5              | 7-33-02186         | Hydraulic Hose ORS 4-Str. Ends 30"          | 1          |
| 6              | 7-33-02180         | Hydraulic Hose ORS 4-Str. Ends 37"          | 1          |
| 7              | 8-33-02200         | Hydraulic Hose ORS 4-90° to Str. 55"        | 1          |
| 8              | N/A                |                                             |            |
| 9              | 8-33-02184         | Hydraulic Hose ORS 4-Str. Ends 50.5"        | 1          |
| 10             | N/A                |                                             |            |
| 11             | 7-33-02197         | Hydraulic Hose ORS 8-45° to Str. 52.5"      | 1          |
| 12             | N/A                |                                             |            |
| 13             | N/A                |                                             |            |
| 14             | 7-33-02220         | Hydraulic Hose ORS 12-Str. Ends 42"         | 1          |
| 15             | N/A                |                                             |            |
| 16             | 7-33-02191         | Hydraulic Hose ORS 4-90° to Str. 42"        | 1          |
| 17             | 7-33-02221         | Hydraulic Hose ORS 12-Str. Ends 48"         | 1          |
| 18             | 7-33-02225         | Hydraulic Hose ORS 4-90° to Str. 38"        | 1          |
| 19             | N/A                |                                             |            |
| 20             | N/A                |                                             |            |
| 21             | N/A                |                                             |            |
| 22             | N/A                |                                             |            |
| 23             | N/A                |                                             |            |
| 24             | N/A                |                                             |            |
| 25             | 7-33-02244         | Hydraulic Hose, 1.000 dia. x 33.000" long   | 1          |

C0359

# SUCTION & RETURN HOSES (MANUAL DUMP) - EXPLODED VIEW

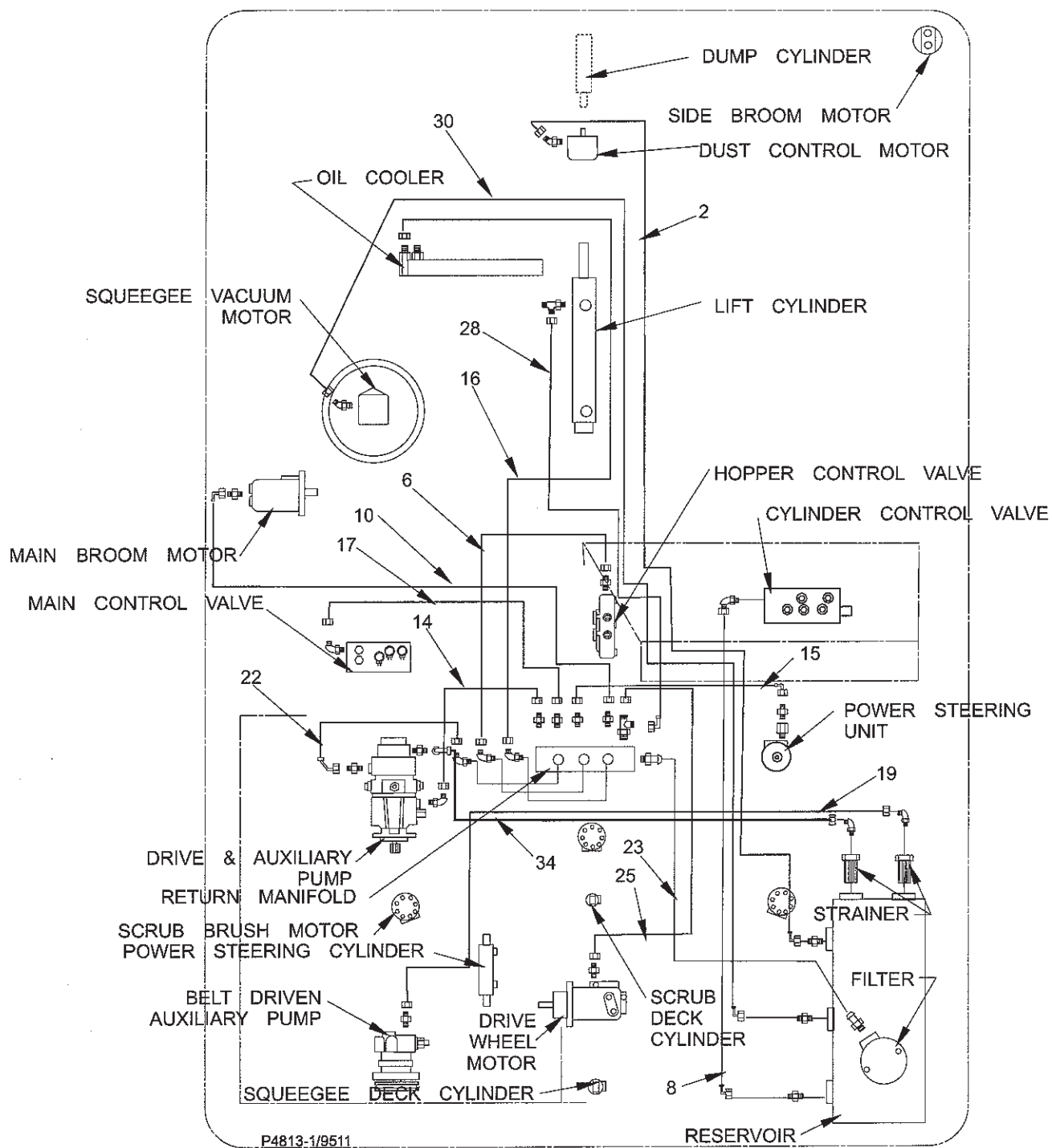


## SUCTION & RETURN HOSES (LOW DUMP) - PARTS LIST

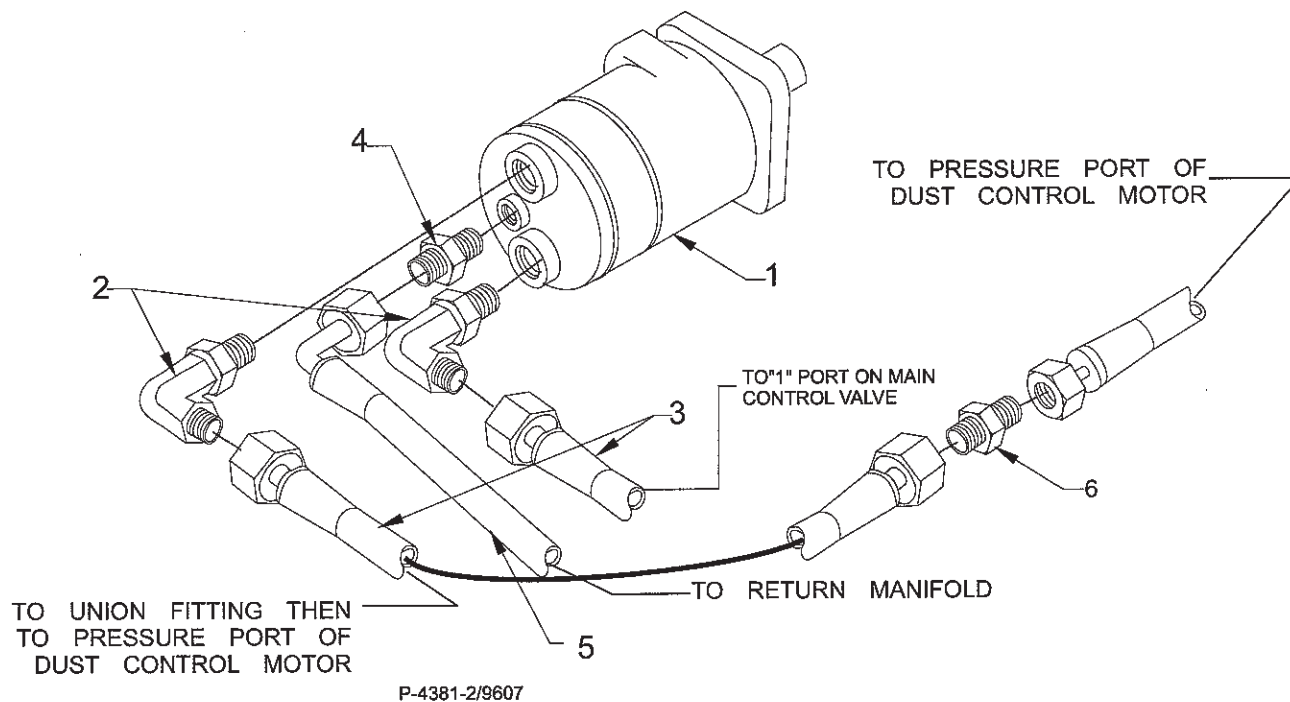
| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>DESCRIPTION</u>                          | <u>QTY</u> |
|----------------|--------------------|---------------------------------------------|------------|
| 1              |                    |                                             |            |
| 2              | 8-33-02198         | Hydraulic Hose ORS 4-90° to Str. 107"       | 1          |
| 3              |                    |                                             |            |
| 4              |                    |                                             |            |
| 5              |                    |                                             |            |
| 6              | 7-33-02187         | Hydraulic Hose ORS 8-Str. Ends 29"          | 3          |
| 7              |                    |                                             |            |
| 8              | 7-33-02225         | Hydraulic Hose ORS 4-90° to Str. 38"        | 2          |
| 9              |                    |                                             |            |
| 10             | 8-33-02200         | Hydraulic Hose ORS 4-90° to Str. 55"        | 1          |
| 11             |                    |                                             |            |
| 12             |                    |                                             |            |
| 13             |                    |                                             |            |
| 14             | 7-33-02186         | Hydraulic Hose ORS 4-Str. Ends 30"          | 1          |
| 15             | 7-33-02191         | Hydraulic Hose ORS 4-90° to Str. 42"        | 2          |
| 16             | 8-33-02245         | Hydraulic Hose ORS 8 Str. to JIC 8 Str. 82" | 1          |
| 17             | 7-33-02180         | Hydraulic Hose ORS 4-Str. Ends 37"          | 2          |
| 18             |                    |                                             |            |
| 19             | 7-33-02220         | Hydraulic Hose ORS 12-Str. Ends 42"         | 1          |
| 20             |                    |                                             |            |
| 21             |                    |                                             |            |
| 22             | 7-33-02197         | Hydraulic Hose ORS 8-45° to Str. 52.5"      | 2          |
| 23             | 8-33-02184         | Hydraulic Hose ORS 4-Str. Ends 50.5"        | 3          |
| 24             |                    |                                             |            |
| 25             | 7-33-02244         | Raw Ends 1" I.D. Hydraulic Hose             | 1          |
| 26             |                    |                                             |            |
| 27             |                    |                                             |            |
| 28             | 7-33-02193         | Hydraulic Hose ORS 4-90° to Str. 49"        | 1          |
| 29             |                    |                                             |            |
| 30             | 7-33-02224         | Hydraulic Hose ORS 4-90° to Str. 155"       | 1          |
| 31             |                    |                                             |            |
| 32             |                    |                                             |            |
| 33             |                    |                                             |            |
| 34             | 7-33-02221         | Hydraulic Hose ORS 12-Str. Ends 48"         | 1          |

P-4803/9511

## SUCTION & RETURN HOSES (LOW DUMP) - EXPLODED VIEW



## MAIN BROOM AND FITTINGS



| KEY NO. | PART NUMBER | DESCRIPTION                        | QTY  |
|---------|-------------|------------------------------------|------|
| 1       | 0882-040    | Main Broom Motor                   | 1    |
| 2       | 2-00-04885  | ORFS 90° Elbow, 3/4-16 to 13/16-16 | 2    |
| 3       | 8-33-02214  | Hose                               | Ref. |
| 4       | 2-00-04895  | ORFS Connector, 7/16-20 to 9/16-18 | 1    |
| 5       | 8-33-02200  | Hose                               | Ref. |
| 6       | 2-00-04987  | ORFS Union, 13/16 - 16             | Ref. |

P4381

Diagram illustrating the assembly of the P4379A/9809 side broom control valve. The diagram shows the main control block, the side broom motor, and the control valve assembly.

**Labels and Components:**

- FROM "P1" MAIN CONTROL BLOCK
- TO TOP OF RETURN BLOCK
- TO "B" PORT SIDE BROOM MOTOR
- TO "A" PORT SIDE BROOM MOTOR
- TO PORT "1" ON SIDE BROOM CONTROL VALVE
- TO PORT "3" ON SIDE BROOM CONTROL VALVE

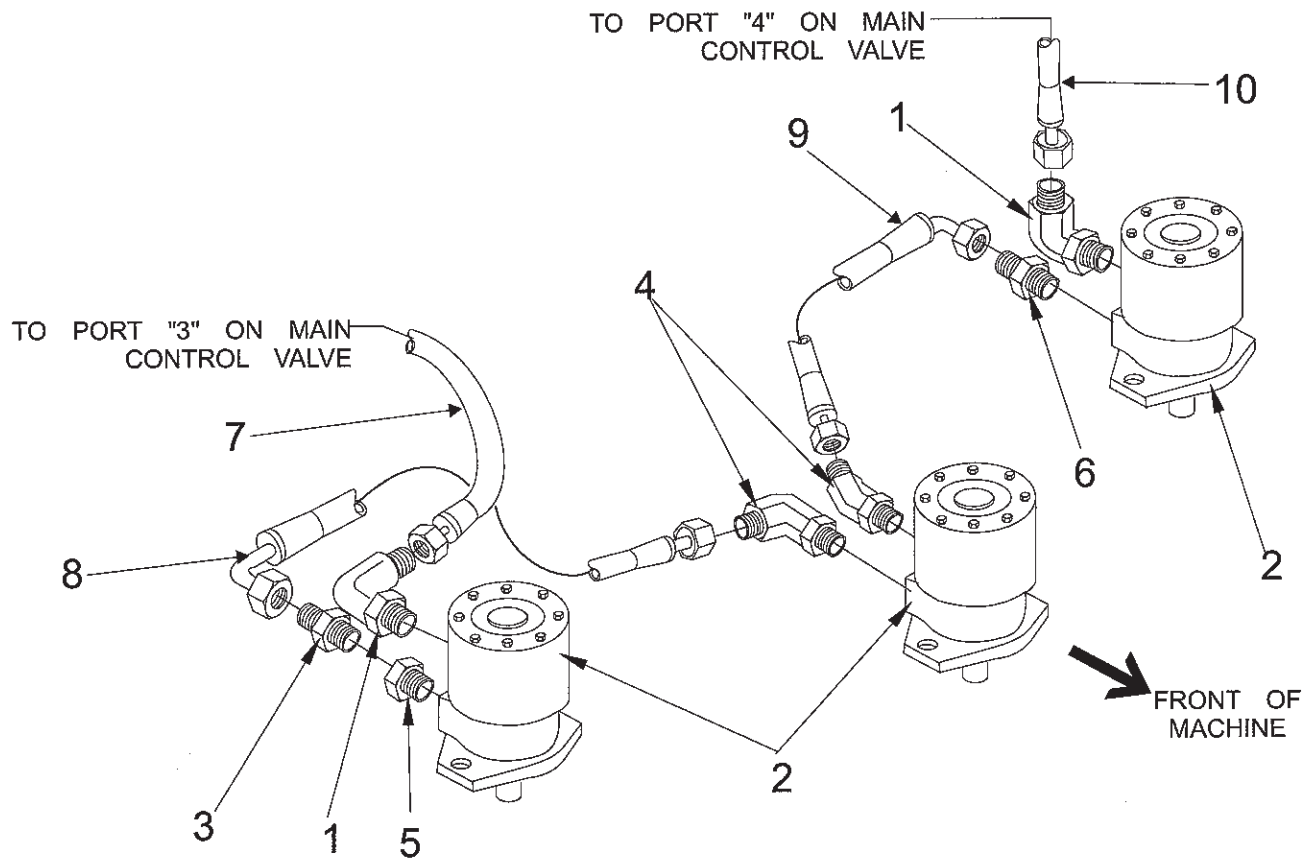
**Assembly Steps:**

1. Connect the main control block to the side broom motor.
2. Connect the side broom motor to the control valve.
3. Connect the control valve to the main control block.
4. Connect the control valve to the side broom motor.
5. Connect the control valve to the main control block.
6. Connect the control valve to the side broom motor.
7. Connect the control valve to the main control block.
8. Connect the control valve to the side broom motor.
9. Connect the control valve to the main control block.
10. Connect the control valve to the side broom motor.
11. Connect the control valve to the main control block.

P4379A/9809

P4379

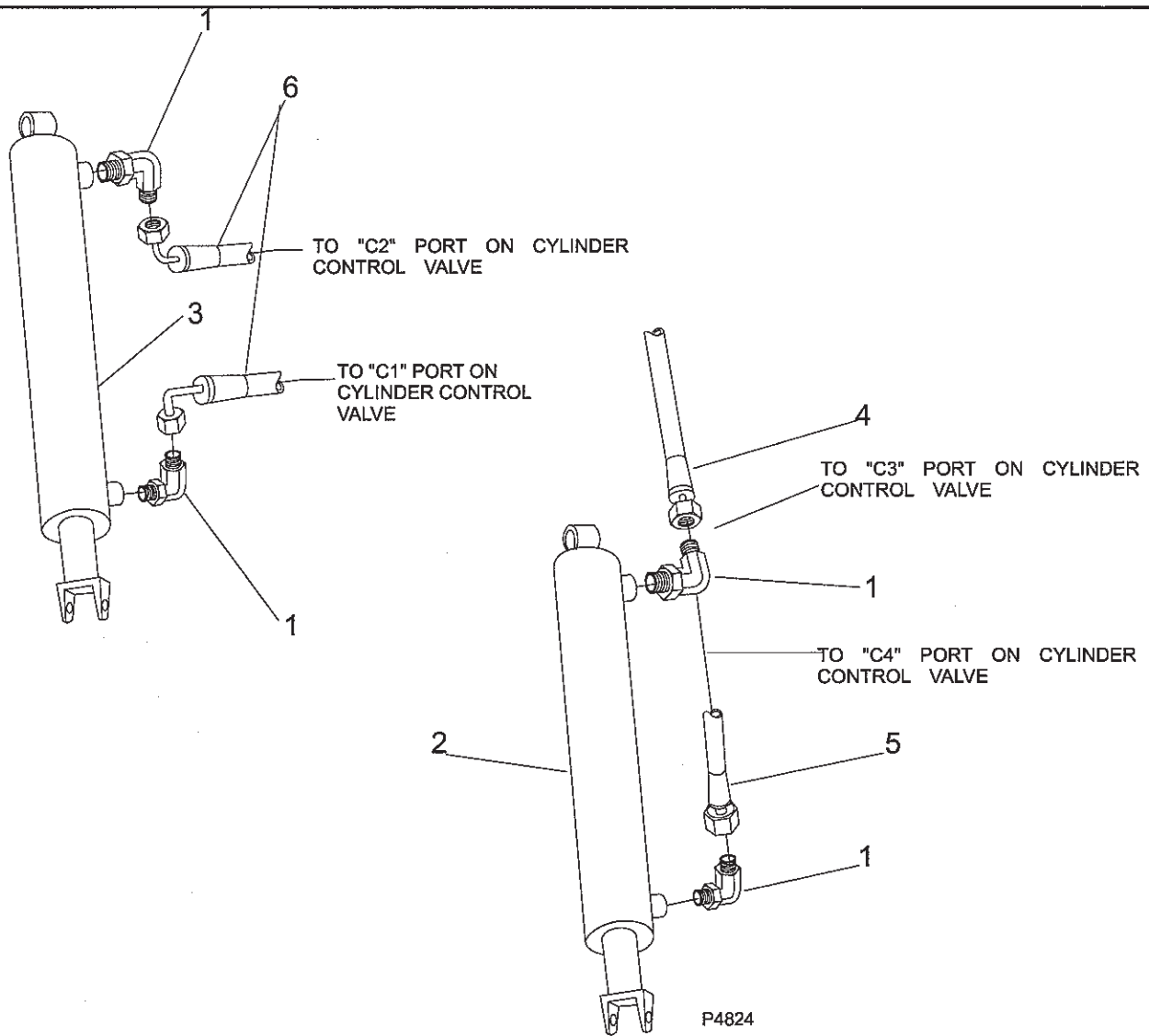
## SCRUB MOTORS & FITTINGS



| KEY NO. | PART NUMBER          | DESCRIPTION                            | QTY    |
|---------|----------------------|----------------------------------------|--------|
| 1       | 2-00-04921           | ORFS 90 Elbow, 7/16-20 to 9/16-18      | 2      |
| 2       | 0782-111<br>0780-143 | Scrub Motor (Hydraulic)<br>Seal Kit    | 3<br>- |
| 3       | 2-00-04970           | ORFS Connector, 3/4-16 to 13/16-16     | 1      |
| 4       | 2-00-04989           | ORFS 45° Elbow, 7/8-14 TO 13/16-16     | 2      |
| 5       | 2-00-04990           | ORFS Reducer Bushing, 7/8-14 to 3/4-16 | 1      |
| 6       | 2-00-04974           | ORFS Connector, 7/8-14 to 13/16-16     | 1      |
| 7       | 7-33-02187           | Hose                                   | Ref.   |
| 8       | 7-33-02205           | Hose                                   | Ref.   |
| 9       | 7-33-02206           | Hose                                   | Ref.   |
| 10      | 8-33-02190           | Hose                                   | Ref.   |

P3810a/9511

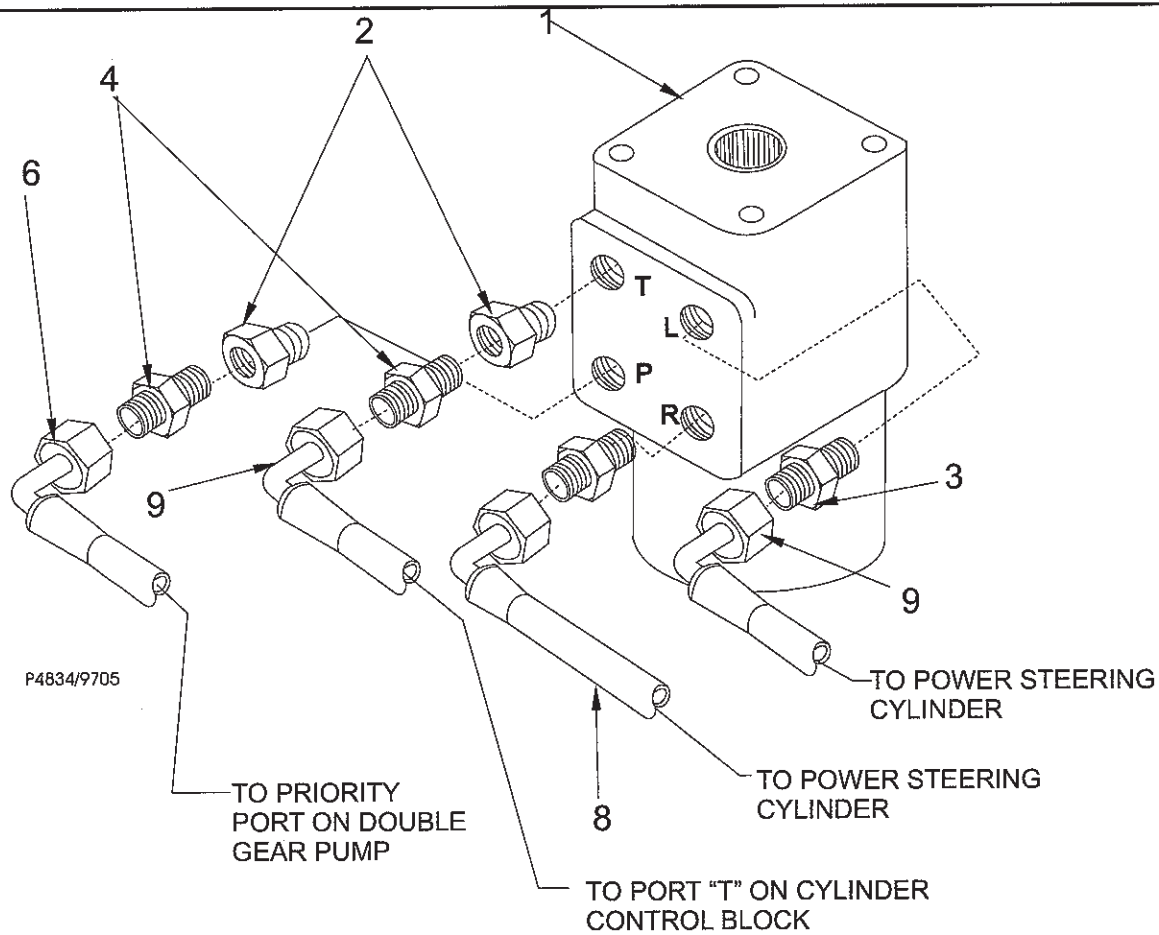
## SQUEEGEE, SCRUB DECK CYLINDERS & FITTINGS



| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>DESCRIPTION</u>                 | <u>QTY</u> |
|----------------|--------------------|------------------------------------|------------|
| 1              | 2-00-04892         | ORFS 90° Elbow, 7/16-20 to 9/16-18 | 4          |
| 2              | 7-17-05011         | Hydraulic Cylinder                 | 2          |
| 3              | 2-00-00205         | Screw, 1/4-20 x 1.000 HHC          | 1          |
| 4              | 2-00-04603         | Hose Clamp, .500                   | 1          |
| 5              | 2-00-00518         | Lock Washer, 1/4 Split             | 1          |
| 6              | 2-00-00594         | Nut, Hex 1/4-20 x .437 x .218      | 1          |
| 7              | 8-33-0218          | Hose                               | Ref.       |
| 8              | 8-33-02185         | Hose                               | Ref.       |
| 9              | 7-33-02189         | Hose                               | Ref.       |

P4824/951

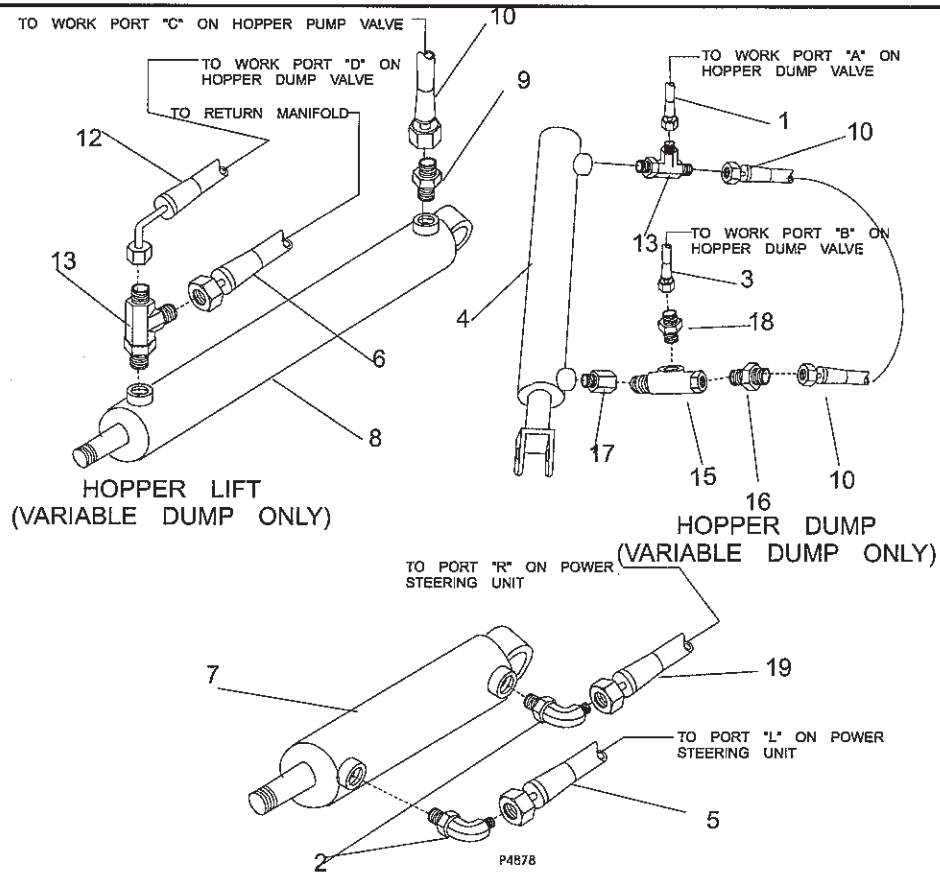
## POWER STEERING UNIT AND FITTINGS



| KEY NO. | PART NUMBER | DESCRIPTION                           | QTY  |
|---------|-------------|---------------------------------------|------|
| 1       | 7-60-05016  | Power Steering Unit                   | 1    |
| 2       | 2-00-04917  | ORFS Boss Reducer, 9/16-18 to 7/16-20 | 2    |
| 3       | 2-00-04895  | ORFS Connector, 7/16-20 to 9/16-18    | 2    |
| 4       | 2-00-04918  | ORFS Connector, 9/16-18               | 1    |
| 5       | 2-00-04926  | ORFS 90° Elbow, 9/16-18               | 1    |
| 6       | 7-33-02190  | Hose                                  | Ref. |
| 7       |             |                                       |      |
| 8       | 7-33-02180  | Hose                                  | Ref. |
| 9       | 7-33-02191  | Hose                                  | Ref. |

P4834/9511

## POWER STEERING, HOPPER DUMP & HOPPER LIFT CYL'S. & FITTINGS

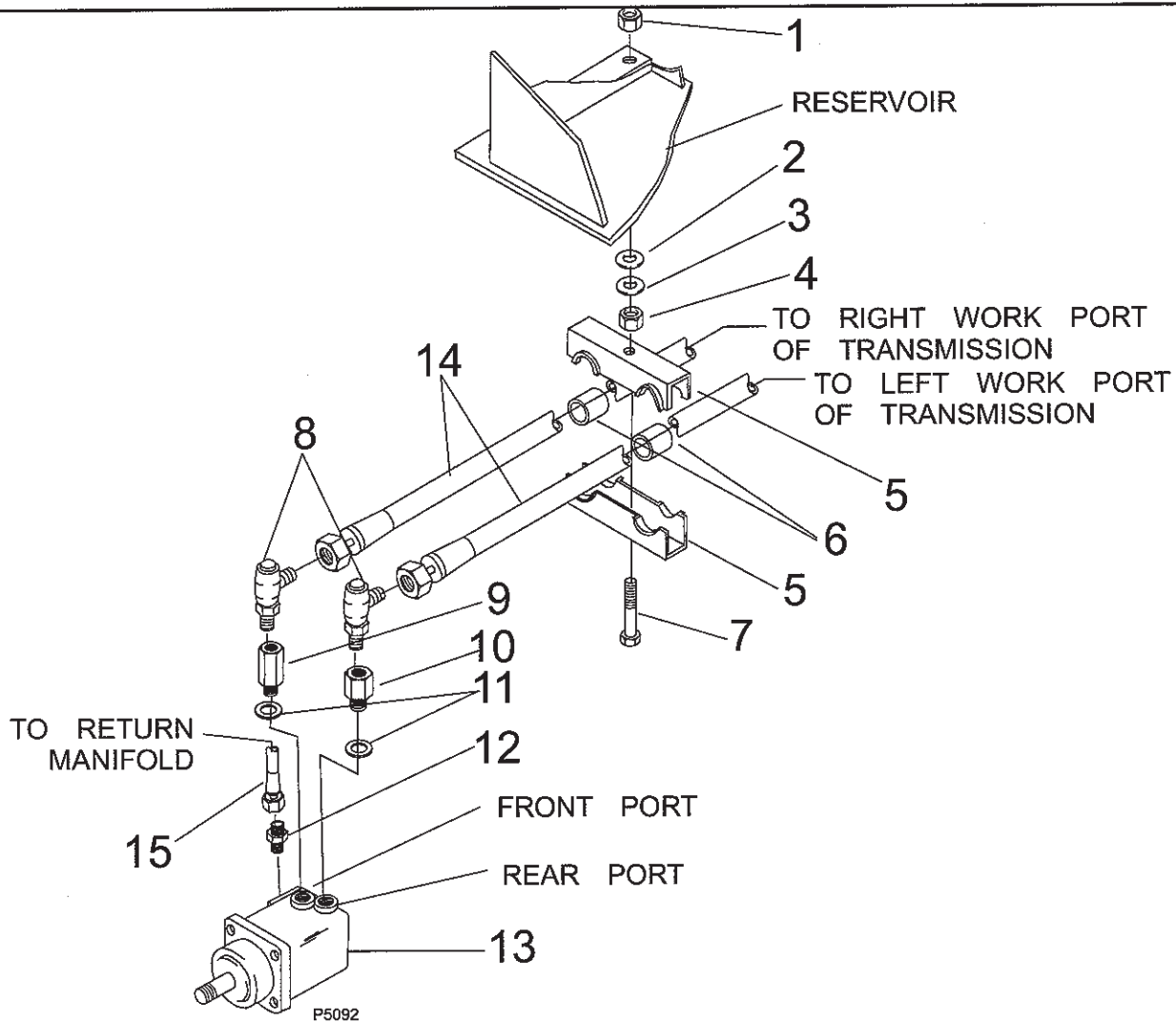


### POWER STEERING

| KEY NO. | PART NUMBER | DESCRIPTION                                | QTY  |
|---------|-------------|--------------------------------------------|------|
| 1       | 7-17-05012  | Lift Cylinder                              | 1    |
| NS      | 0880-506    | Lift Cylinder Seal Kit                     | 1    |
| 2       | 7-17-05011  | Dump Cylinder                              | 1    |
| 3       | 7-17-05010  | Steering Cylinder                          | 1    |
| NS      | 7-70-00021  | Dump and Steering Cylinders Seal Kit       | 2    |
| 4       | 2-00-04895  | ORFS Connector, 7/16-20 to 9/16-18         | 1    |
| 5       | 2-00-04927  | Run Tee Fitting                            | 2    |
| 6       | 2-00-05054  | Adapter Fitting                            | 1    |
| 7       | 2-00-04994  | Adapter Fitting                            | 1    |
| 8       | 2-00-04589  | Street Elbow, 90° 3/8-19 M-F               | 1    |
| 9       | 8-88-00045  | Fitting, Check Valve                       | 1    |
| 10      | 2-00-04997  | Fitting Adapter, 9/16-18 ORFS - 1/4-18 NPT | 1    |
| 11      | 2-00-04892  | ORFS 90° Elbow, 7/16-20 to 9/16-18         | 2    |
| 12      | 7-33-02225  | Hose                                       | Ref. |
| 13      | 8-33-02178  | Hose                                       | Ref. |
| 14      | 8-33-02174  | Hose                                       | Ref. |
| 15      | 7-33-02194  | Hose                                       | Ref. |
| 16      | 7-33-02180  | Hose                                       | Ref. |
| 17      | 7-33-02191  | Hose                                       | Ref. |
| 18      | 7-33-02193  | Hose                                       | Ref. |
| 19      | 7-33-02195  | Hose                                       | Ref. |

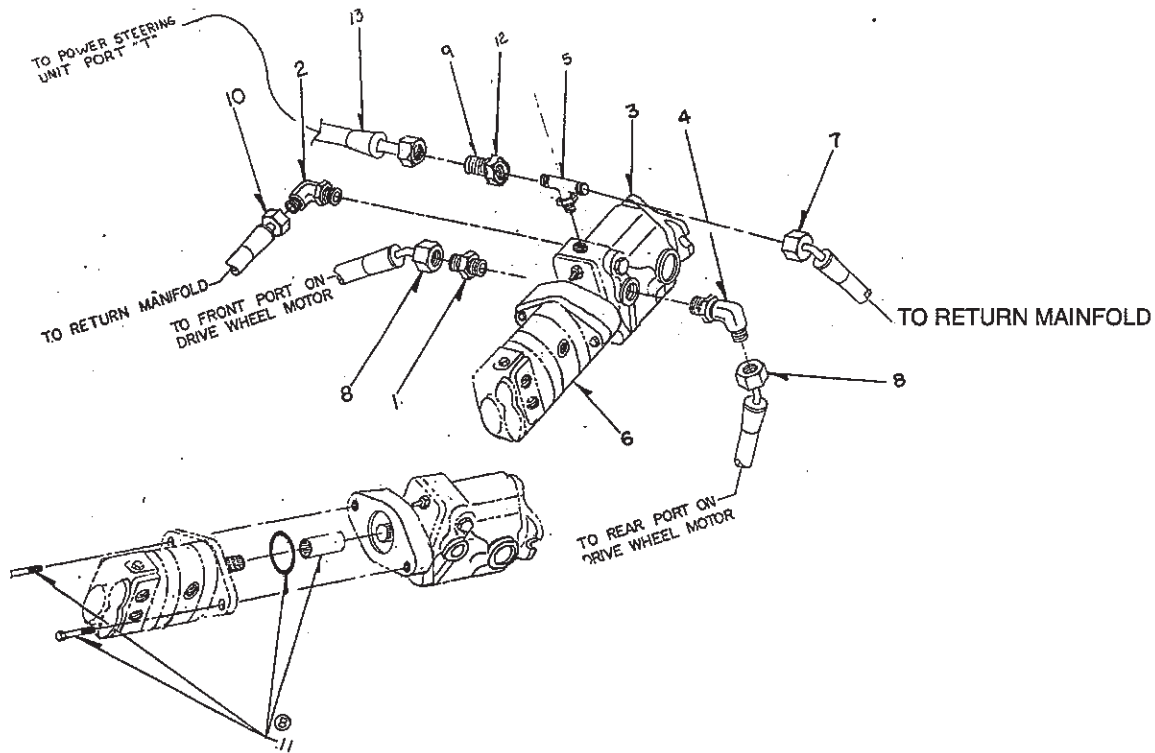
P4878

## REAR WHEEL MOTOR & FITTINGS



| KEY NO. | PART NUMBER | DESCRIPTION                                     | QTY  |
|---------|-------------|-------------------------------------------------|------|
| 1       | 2-00-00644  | Nut, Fiber Lock 5/16 - 18 THD's                 | 1    |
| 2       | 7-23-03048  | Spring Washer, .750 x .312 x .013               | 1    |
| 3       | 2-00-00409  | Flat Washer, For 5/16 Bolt (.687 x .343 x .062) | 1    |
| 4       | 2-00-00586  | Nut, Hex Jam 5/16-18 x .500 x .187              | 1    |
| 5       | 7-13-07110  | Hose Clamping Unit                              | 1    |
| 6       | 7-09-01121  | Split Hose Bushing                              | 2    |
| 7       | 2-00-01770  | Screw, 5/16-18 x 2.750 HHC                      | 1    |
| 8       | 2-00-05358  | Fitting                                         | 2    |
| 9       | 2-00-02035  | Fitting                                         | 1    |
| 10      | 8-03-02036  | Fitting                                         | 1    |
| 11      | 2-00-04620  | Seal                                            | 2    |
| 12      | 2-00-04895  | Fitting                                         | 1    |
| 13      | 0885-051-1  | Rear Wheel Motor                                | 1    |
| 14      | 7-33-02223  | Hose                                            | 2    |
| 15      | 8-33-02184  | Hose                                            | Ref. |

P5092/9511



| KEY NO. | PART NUMBER  | DESCRIPTION                           | QTY  |
|---------|--------------|---------------------------------------|------|
| 1       | 2-00-04926   | ORFS 90° Elbow, 9/16-18               | 1    |
| 2       | 2-00-04979   | ORFS Connector, 1 1/16-12 to 13/16-16 | 1    |
| 3*      | 8-60-05006-2 | Drive Pump (Piston)                   | 1    |
| 4       | 2-00-04922   | ORFS 90° Elbow, 1 1/16-12 to 13/16-16 | 1    |
| 5       | 2-00-04970   | ORFS Connector, 3/4-16 to 13/16-16    | 1    |
| 6*      | 0885-067     | Auxiliary Pump (Gear)                 | 1    |
| 7       | 0880-404     | Pump Assembly Kit                     | 1    |
| 8       | 7-33-02197   | Hose                                  | Ref. |
| 9       | 7-33-02223   | Hose                                  | Ref. |
| 10      | 7-33-02186   | Hose                                  | Ref. |

\* Piston Gear Pump Assembly #0885-063

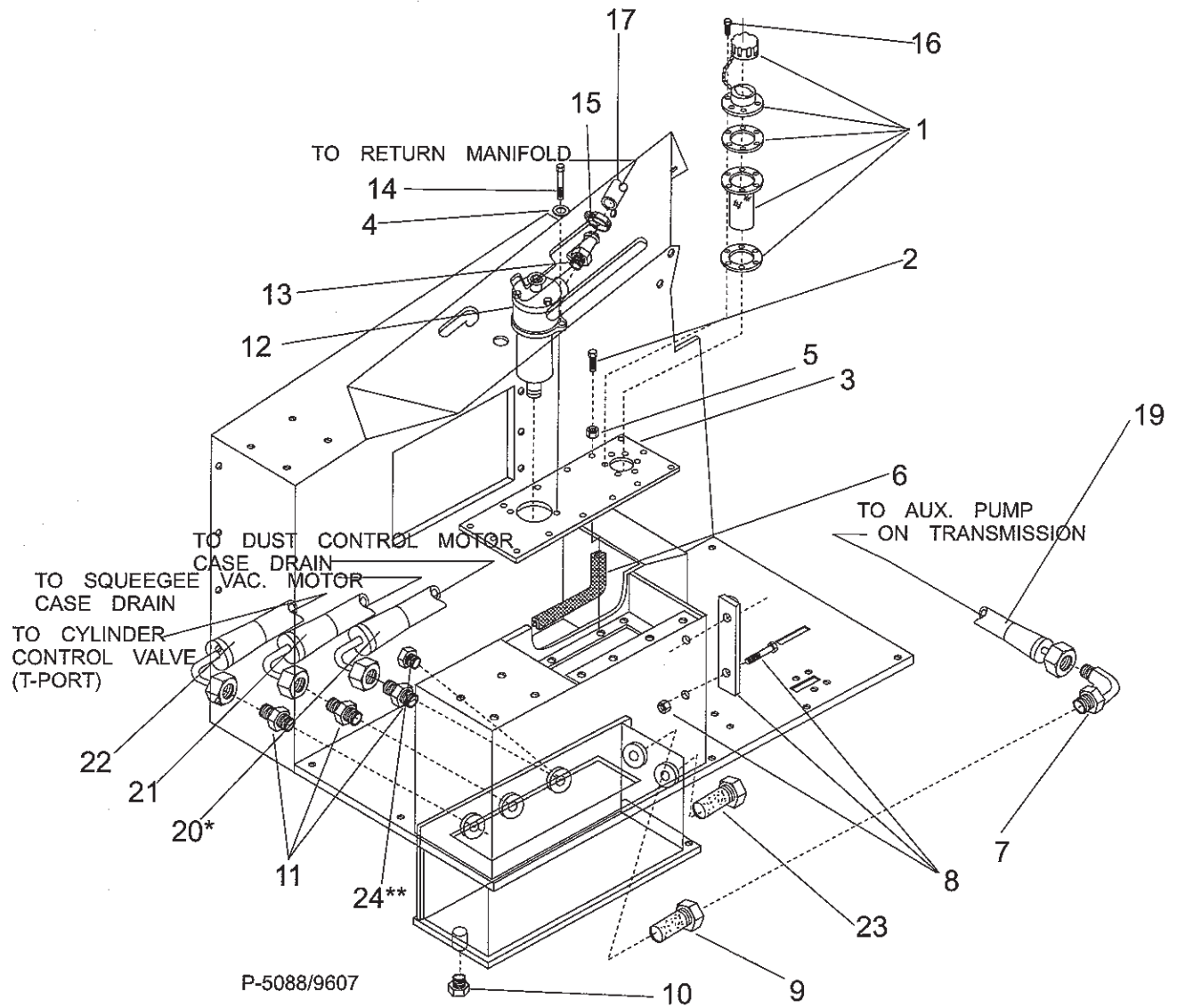
P5070/9511

## HYDRAULIC RESERVOIR, FILTER & FITTINGS - PARTS LIST

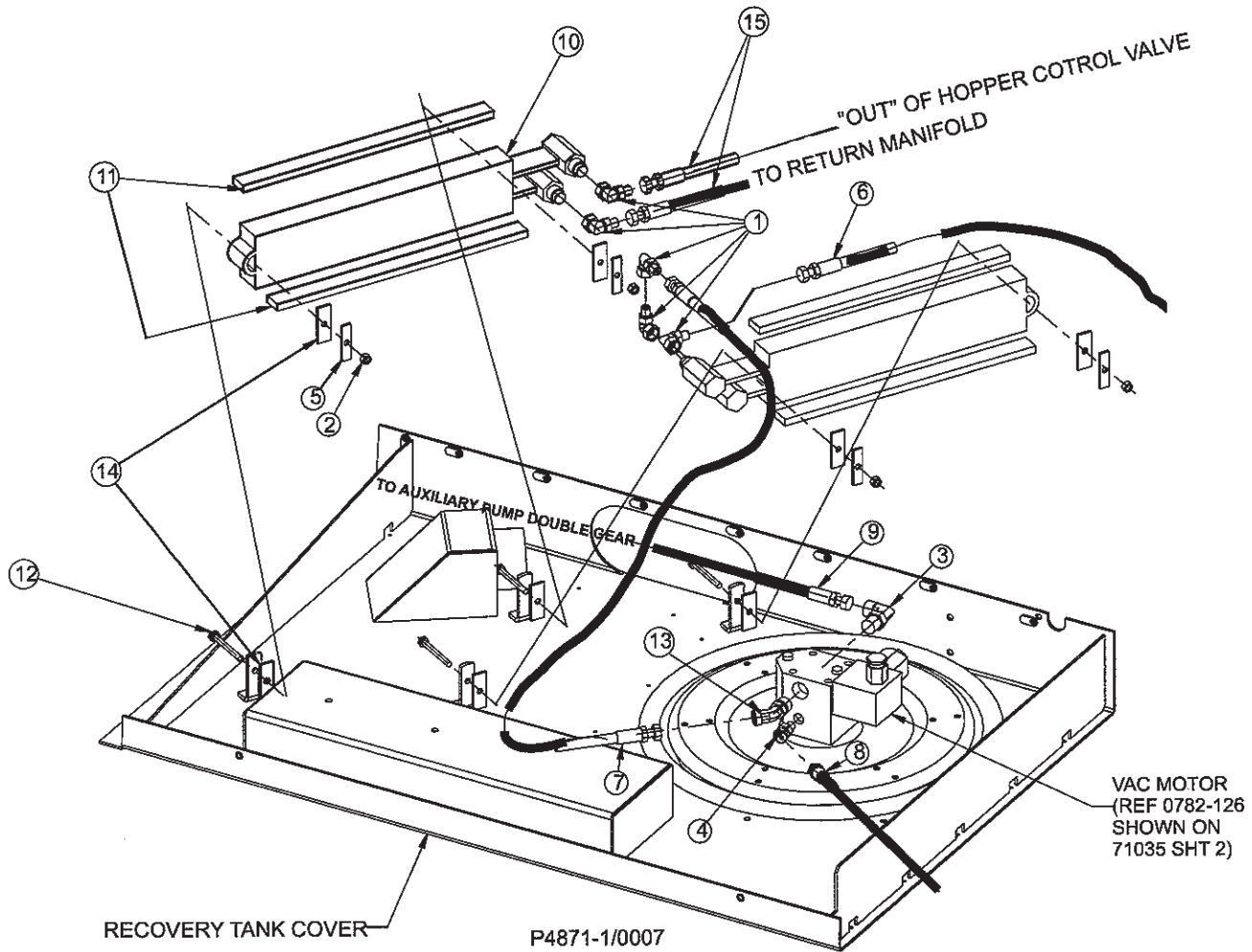
| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>DESCRIPTION</u>                               | <u>QTY</u> |
|----------------|--------------------|--------------------------------------------------|------------|
| 1              | 8-11-00026         | Reservoir Filter Cap                             | 1          |
| 2              | 2-00-00049         | Screw, #10-24 x .500 RHM                         | 14         |
| 3              | 7-16-07282         | Hydraulic Reservoir Cover                        | 1          |
| 4              | 2-00-00530         | Lock Washer, Helical Spring 5/16 Med             | 2          |
| 5              | 2-00-03940         | Screw, #10-24 x .500 TC/HH                       | 6          |
| 6              | 7-21-03003         | Edging                                           | 1          |
| 7              | 2-00-05074         | ORFS 90° Elbow, 1 3/16-12 to 3/4-14 NPT          | 2          |
| 8              | 8-48-05034         | Fluid Level Sight Gauge                          | 1          |
| 9              | 8-24-04115         | Strainer                                         | 2          |
| 10             | 2-00-02474         | Pipe Plug, 1/2 NPT                               | 1          |
| 11             | 2-00-04895         | ORFS Connector, 7/16-20 to 9/16-18               | 3          |
| 12             | 7-24-04031         | Return Filter Assembly                           | 1          |
| NS             | 7-24-04032         | Return Filter Replacement Filter                 | 1          |
| 13             | 2-00-05073         | Straight Barbed Stem, 1-11 1/2 to 1.375 x 2.87   | 1          |
| 14             | 2-00-02708         | Screw, 5/16-18 x 1.000 HHC                       | 1          |
| 15             | 2-00-02220         | Hose Clamp, .812 - 1.500                         | 1          |
| 16             | 2-00-05177         | Plug, 7/16-20 Str. Thd O-Ring (Manual Dump Only) | 1          |
| 17             | 7-33-02244         | Hose                                             | 1          |
| 18             | 7-33-02220         | Hose                                             | 1          |
| 19             | 7-33-02221         | Hose                                             | 1          |
| 20             | 8-33-02198         | Hose                                             | 1          |
| 21             | 7-33-02224         | Hose                                             | 1          |
| 22             | 7-33-02225         | Hose                                             | 1          |

P5088/9510

# HYDRAULIC RESERVOIR, FILTER & FITTINGS - EXPLODED VIEW



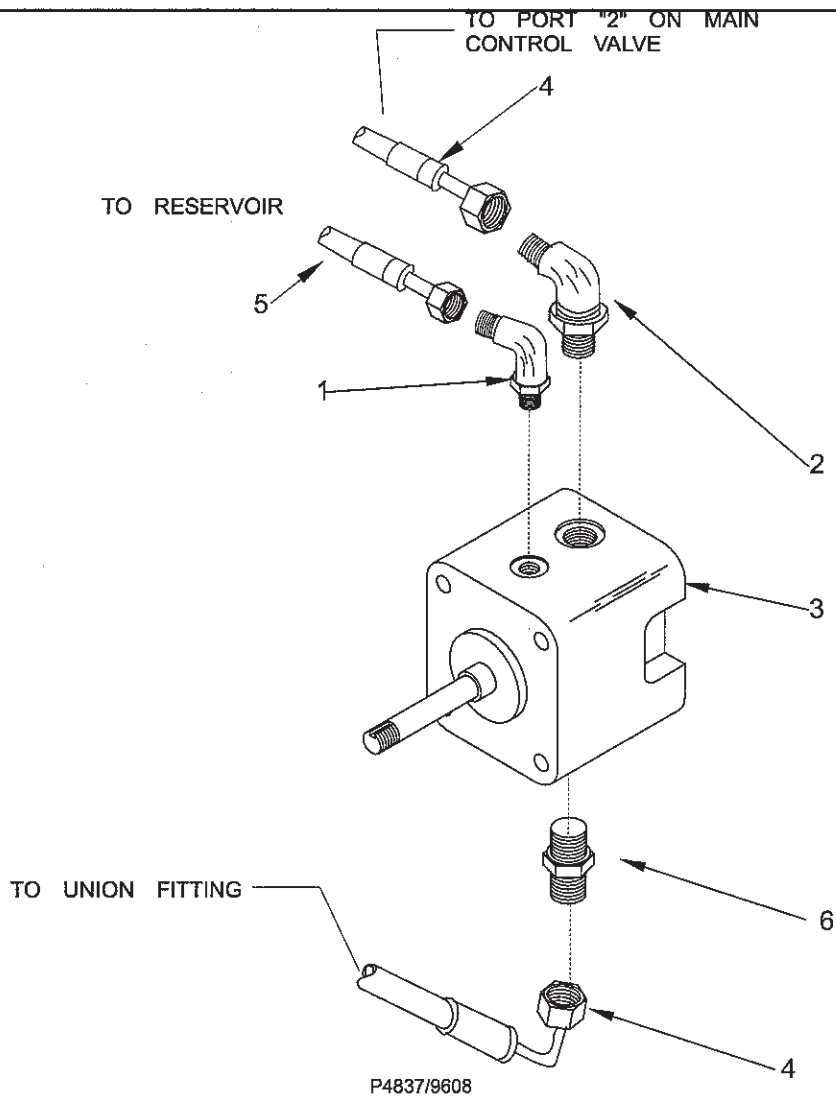
## VACUUM MOTOR & FITTINGS



| KEY NO. | PART NUMBER | DESCRIPTION                            | QTY |
|---------|-------------|----------------------------------------|-----|
| 1       | 2-00-04885  | ORFS 90° Elbow, 3/4-16 to 3/16-16      | 1   |
| 2       | 0782-118    | Hydraulic Motor                        | 1   |
|         | 7-14-07007  | Coil for 0782-118 Hydraulic Motor      | 1   |
|         | 7-12-02019  | Cartridge for 0782-118 Hydraulic Motor | 1   |
| 3       | 2-00-04975  | ORFS 45° Elbow, 3/4-16 to 13/16-16     | 1   |
| 4       | 2-00-04976  | ORFS 45° Elbow, 7/16-20 to 9/16-18     | 1   |

P4871a

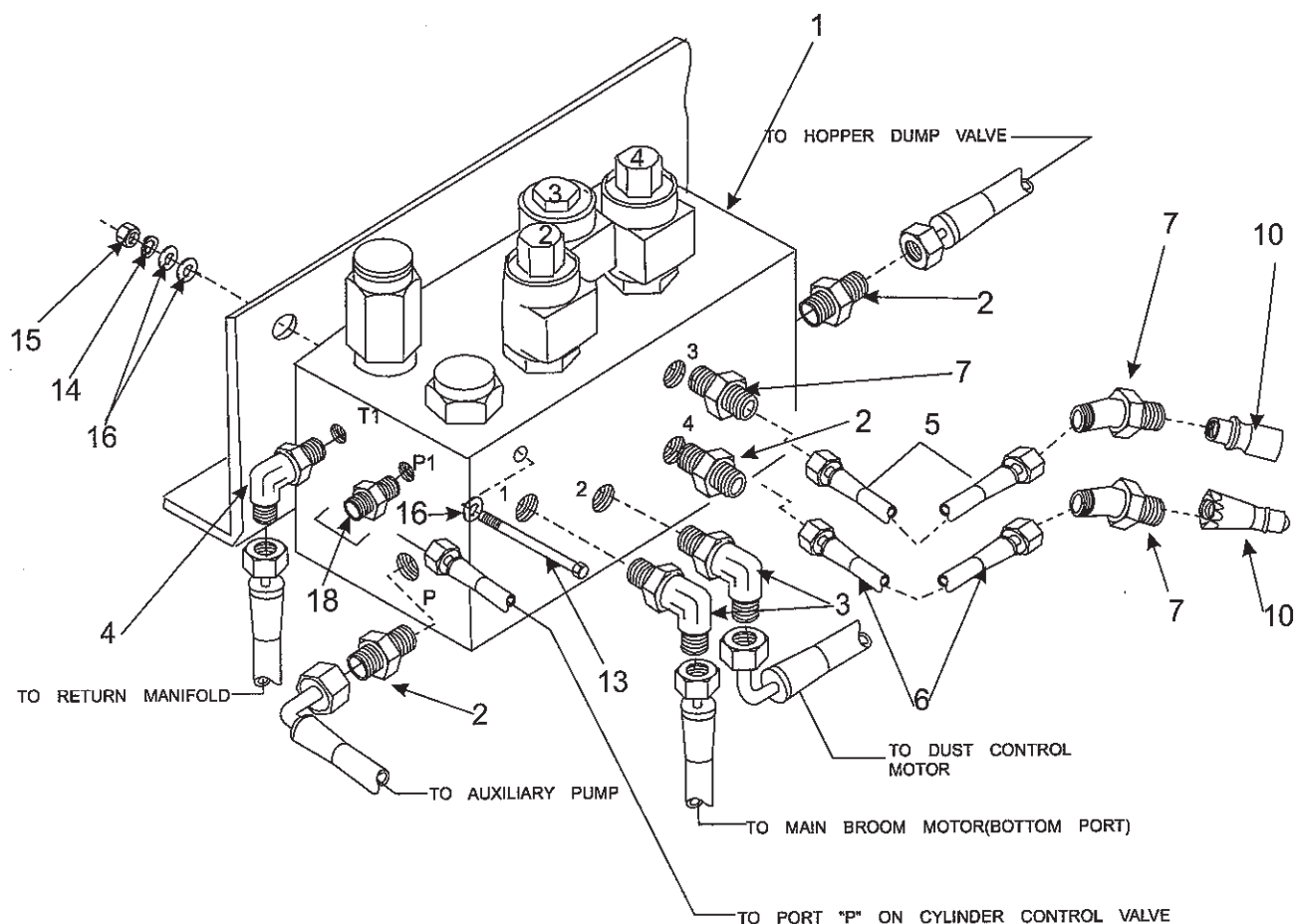
## DUST CONTROL IMPELLER AND FITTINGS



| KEY NO. | PART NUMBER | DESCRIPTION                         | QTY  |
|---------|-------------|-------------------------------------|------|
| 1       | 2-00-04976  | ORFS 45° Elbow, 7/16-20 to 9/16-180 | 1    |
| 2       | 2-00-04975  | ORFS 45° Elbow, 3/4-16 to 13/16-16  | 1    |
| 3       | 0882-041    | Dust Control Motor                  | 1    |
| 4       | 2-00-04885  | ORFS 90° Elbow, 3/4-16 to 13/16-16  | 1    |
| 5       | 8-33-02198  | Hose                                | Ref. |
| 6       | 7-33-02192  | Hose                                | Ref. |

P4837a/9511

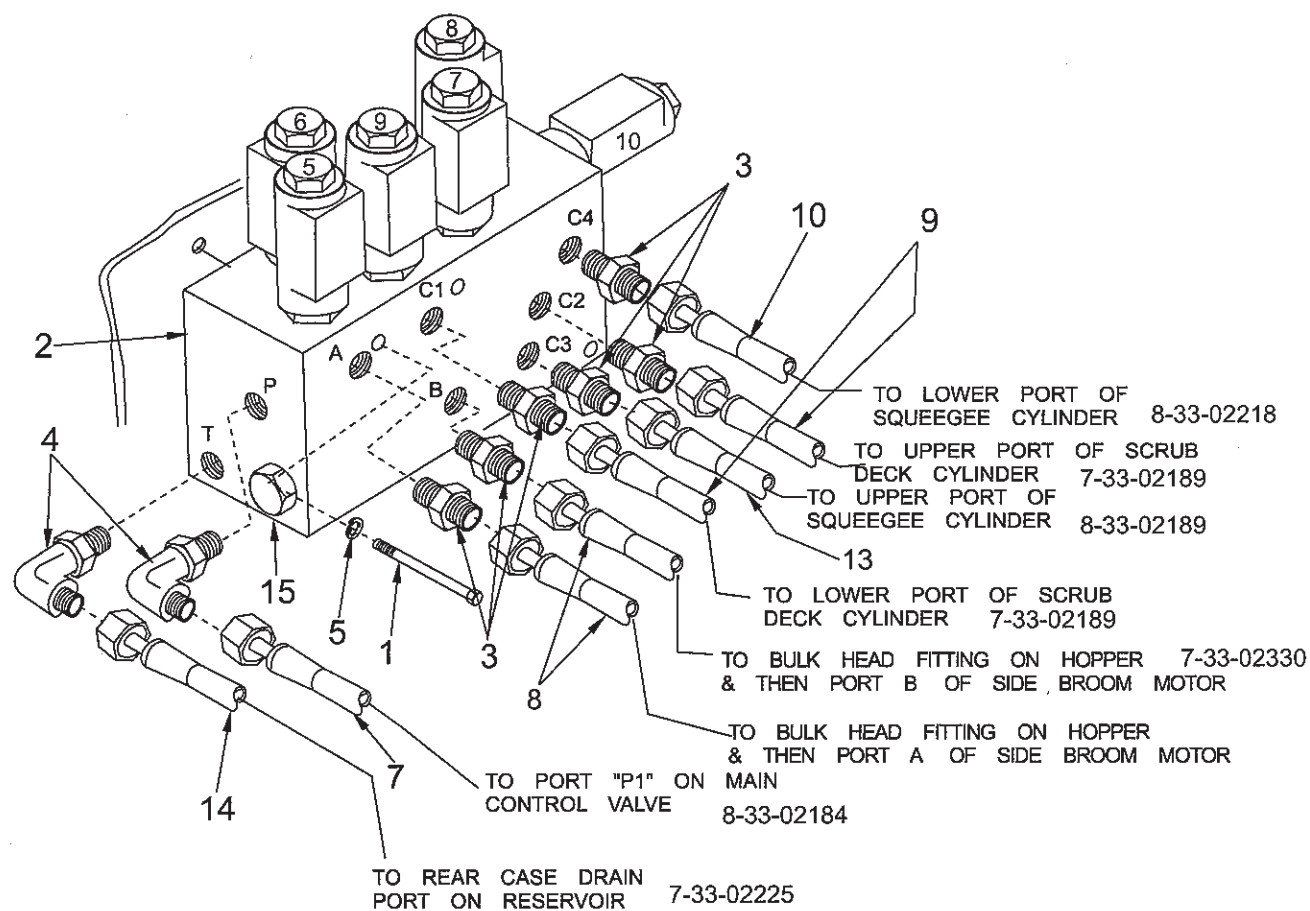
## MAIN CONTROL VALVE AND FITTINGS



| KEY NO. | PART NUMBER | DESCRIPTION                                      | QTY |
|---------|-------------|--------------------------------------------------|-----|
| 1       | 7-88-00035  | Valve                                            | 1   |
| 2       | 2-00-04970  | Fitting - Straight                               | 4   |
| 2A      | 2-00-04975  | Fitting - #8 ORS - #8 SAE - Str. Thd., .45° El.  | 4   |
| 3       | 2-00-04885  | ORFS 90° Elbow, 3/4-16 to 13/16-16               | 2   |
| 4       | 2-00-04892  | ORFS 90° Elbow, 7/16-20 to 9/16-18 (Gas Only)    | 2   |
| 4       | 2-00-04892  | ORFS 90° Elbow, 7/16-20 to 9/16-18 (Diesel only) | 1   |
| 5       | 2-00-04986  | Screw, 1/4 - 20 x 4.500 HHC                      | 2   |
| 6       | 2-00-03702  | Flat Washer For 1/4 Bolt                         | 6   |
| 7       | 2-00-00518  | Lock Washer, 1/4 Split                           | 2   |
| 8       | 2-00-00594  | Nut, Hex 1/4 - 20 x .437 x .218                  | 2   |
| 9       | 2-00-04895  | Fitting - Straight                               | 1   |
| 10      | 7-12-02002  | Cartridge, Relief Valve                          | 1   |
| 11      | 7-12-02001  | Cartridge, Priority Flow Valve                   | 1   |
| 12      | 7-12-02004  | Cartridge, Solenoid Valve 2 POS 4 Way            | 1   |
| 13      | 7-12-02003  | Cartridge, Solenoid Valve N.O.                   | 2   |

P4833/9511

## CYLINDER CONTROL VALVE AND FITTINGS



| KEY NO. | PART NUMBER | DESCRIPTION                        | QTY  |
|---------|-------------|------------------------------------|------|
| 1       | 2-00-04596  | Screw, 1/4-20 x 3.500 HHC          | 2    |
| 2       | 7-88-00037  | Valve                              | 1    |
| 3       | 2-00-04895  | Straight Fitting                   | 6    |
| 4       | 2-00-04892  | ORFS 90° Elbow, 7/16-20 to 9/16-18 | 2    |
| 5       | 2-00-00518  | Lock Washer, 1/4 Split             | 2    |
| 6       | 8-33-02184  | Hose                               | Ref. |
| 7       | 7-33-02181  | Hose                               | Ref. |
| 8       | 7-33-02189  | Hose                               | Ref. |
| 9       | 8-33-02185  | Hose                               | Ref. |
| 10      | 8-33-02183  | Hose                               | Ref. |
| 11      | 7-33-02225  | Hose                               | Ref. |

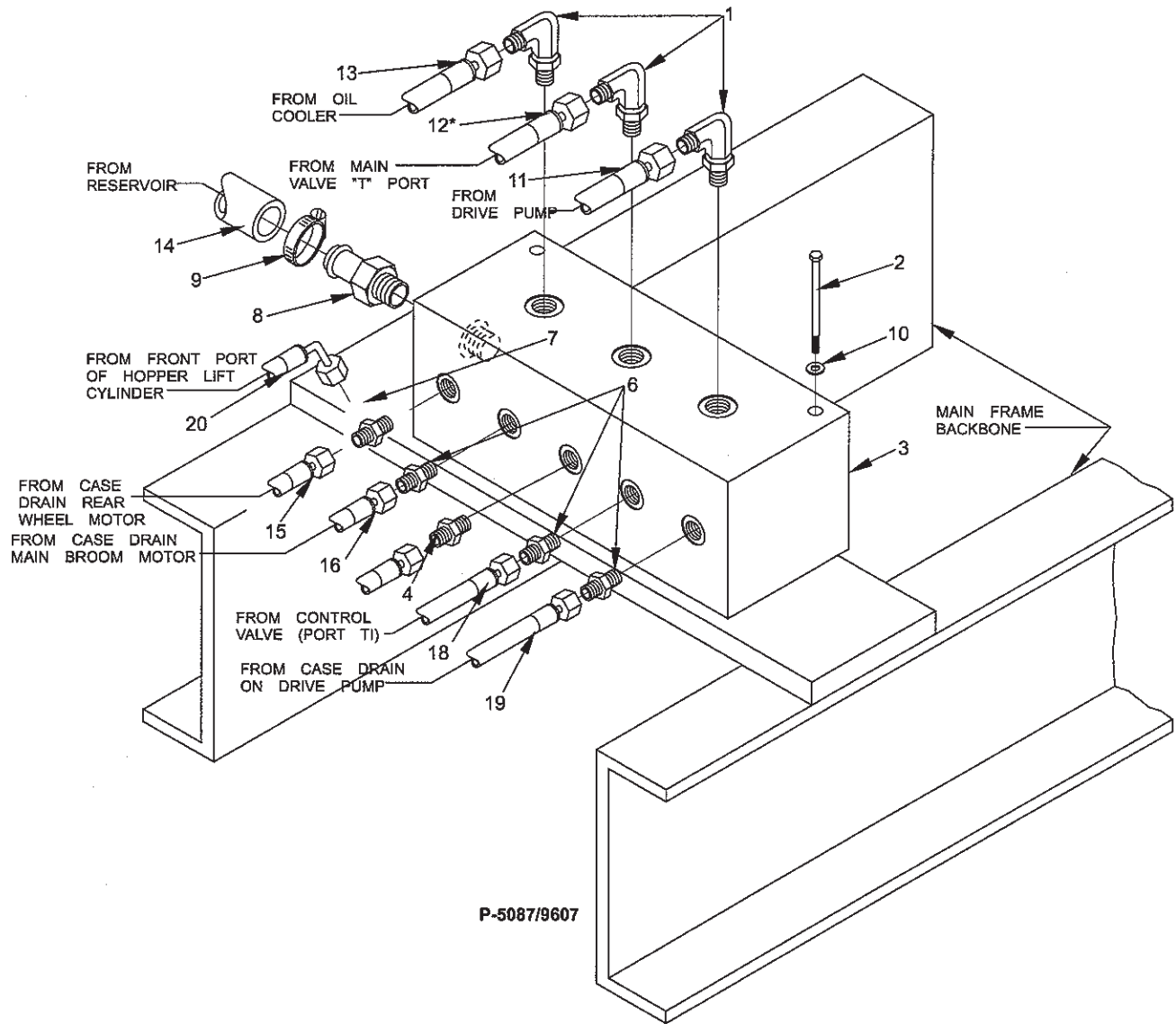
P4831/9511

## RETURN MANIFOLD AND FITTINGS - PARTS LIST

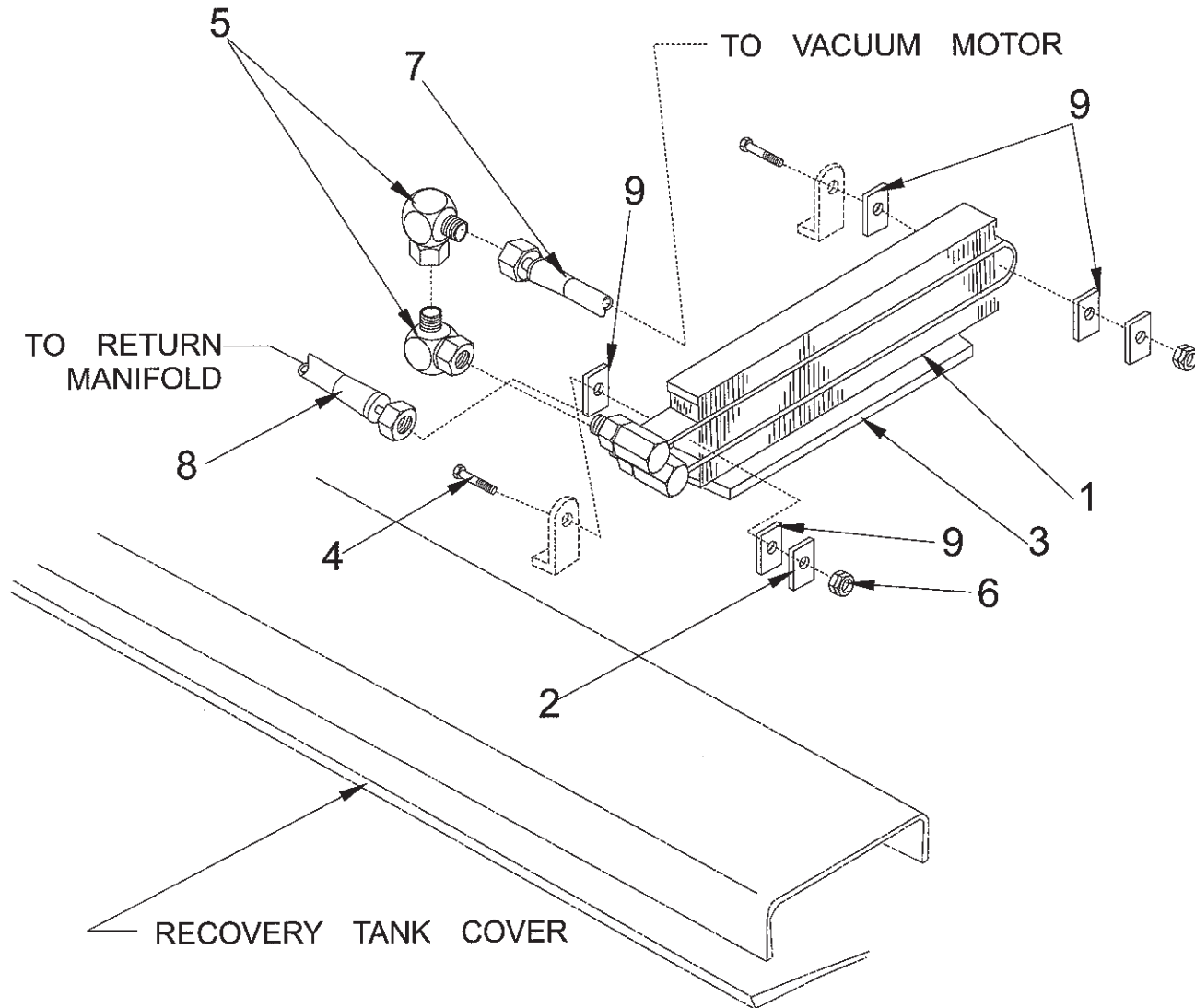
| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>DESCRIPTION</u>                          | <u>QTY</u> |
|----------------|--------------------|---------------------------------------------|------------|
| 1              | 2-00-04885         | ORFS 90° Elbow, 3/4-16 to 13/16-16          | 3          |
| 2              | 2-00-02638         | Screw, 1/4-20 x 3.000 HHC                   | 2          |
| 3              | 7-48-00019         | Return Manifold                             | 1          |
| 4              |                    |                                             |            |
| 5              |                    |                                             |            |
| 6              | 2-00-04895         | ORFS Connector, 7/16-20 to 9/16-18          | 4          |
| 7              | 2-00-04927         | ORFS Run Tee, 7/16-20 to 9/16-18            | 1          |
| 8              | 2-00-05073         | Straight Barbed Stem, 1-11 1/2 x .50 x 2.57 | 1          |
| 9              | 2-00-02220         | Hose Clamp, .812 - 1.500                    | 1          |
| 10             | 2-00-03702         | Flat Washer, .625 x .281 x .062             | 2          |
| 11             | 7-33-02197         | Hose                                        | Ref.       |
| 12             | 7-33-02187         | Hose                                        | Ref.       |
| 13             | 8-33-02245         | Hose                                        | Ref.       |
| 14             | 8-33-02251         | Hose                                        | Ref.       |
| 15             | 8-33-02184         | Hose                                        | Ref.       |
| 16             | 8-33-02200         | Hose                                        | Ref.       |
| 17             | 7-33-02191         | Hose                                        | Ref.       |
| 18             | 7-33-02180         | Hose                                        | Ref.       |
| 19             | 7-33-02186         | Hose                                        | Ref.       |
| 20             | 7-33-02193         | Hose                                        | Ref.       |

P5087/9511

## RETURN MANIFOLD AND FITTINGS - EXPLODED VIEW



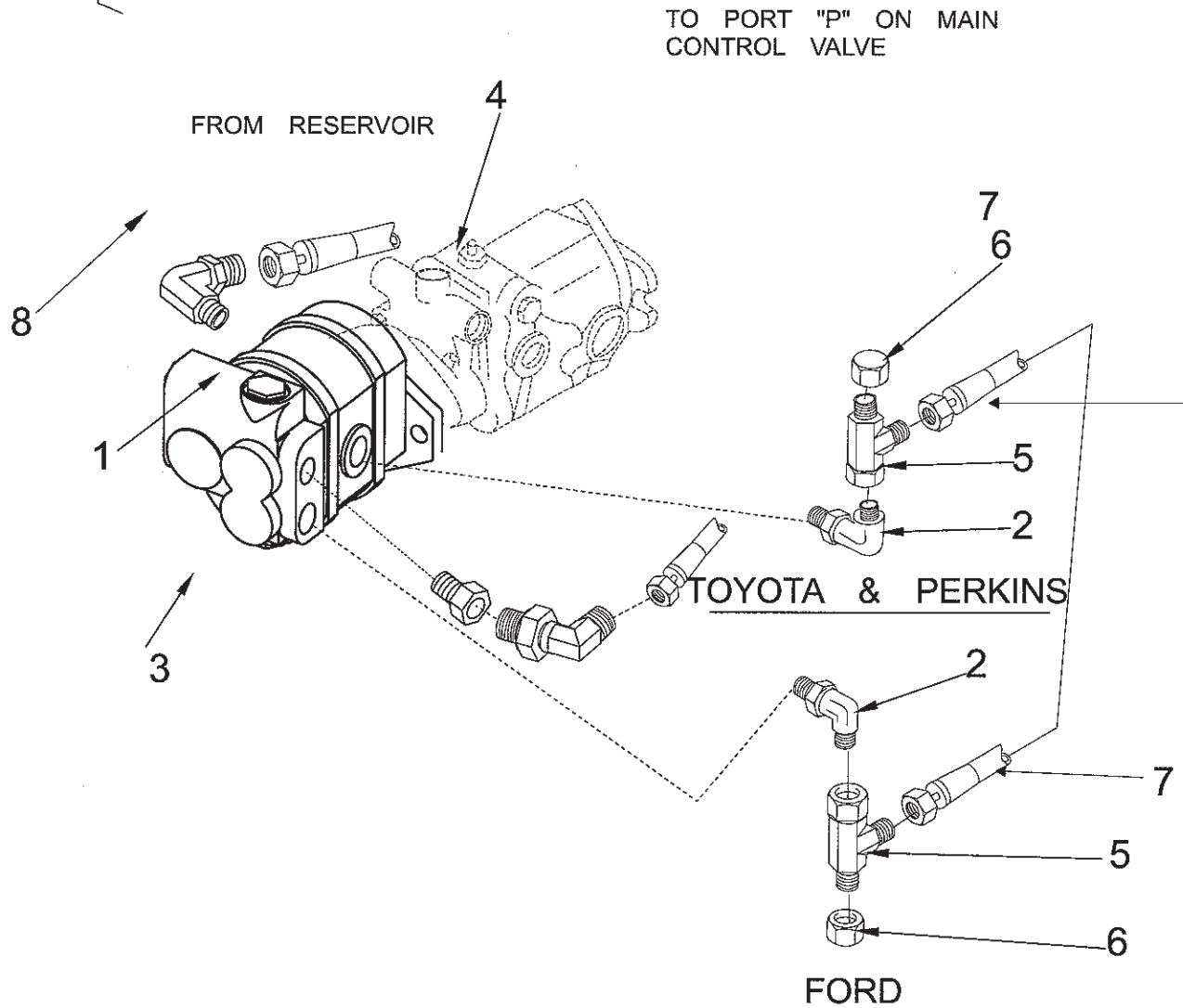
## OIL COOLER & FITTINGS



| KEY NO. | PART NUMBER | DESCRIPTION                                      | QTY  |
|---------|-------------|--------------------------------------------------|------|
| 1       | 8-62-01010  | Oil Cooler                                       | 1    |
| 2       | 8-13-07088  | Clip                                             | 2    |
| 3       | 7-29-00207  | Gasket                                           | 1    |
| 4       | 2-00-01980  | Screw, 1/4-20 x 2.500 HHC                        | 2    |
| 5       | 2-00-04822  | 37° JIC Flared Tube End 90° Swivel Elbow, 3/4-16 | 2    |
| 6       | 2-00-00641  | Nut, Hex Fiber Insert 1/4 - 20                   | 2    |
| 7       | 7-33-02201  | Hose                                             | Ref. |
| 8       | 7-33-02202  | Hose                                             | Ref. |

P4382c/9511

## AUXILIARY PUMP & FITTINGS

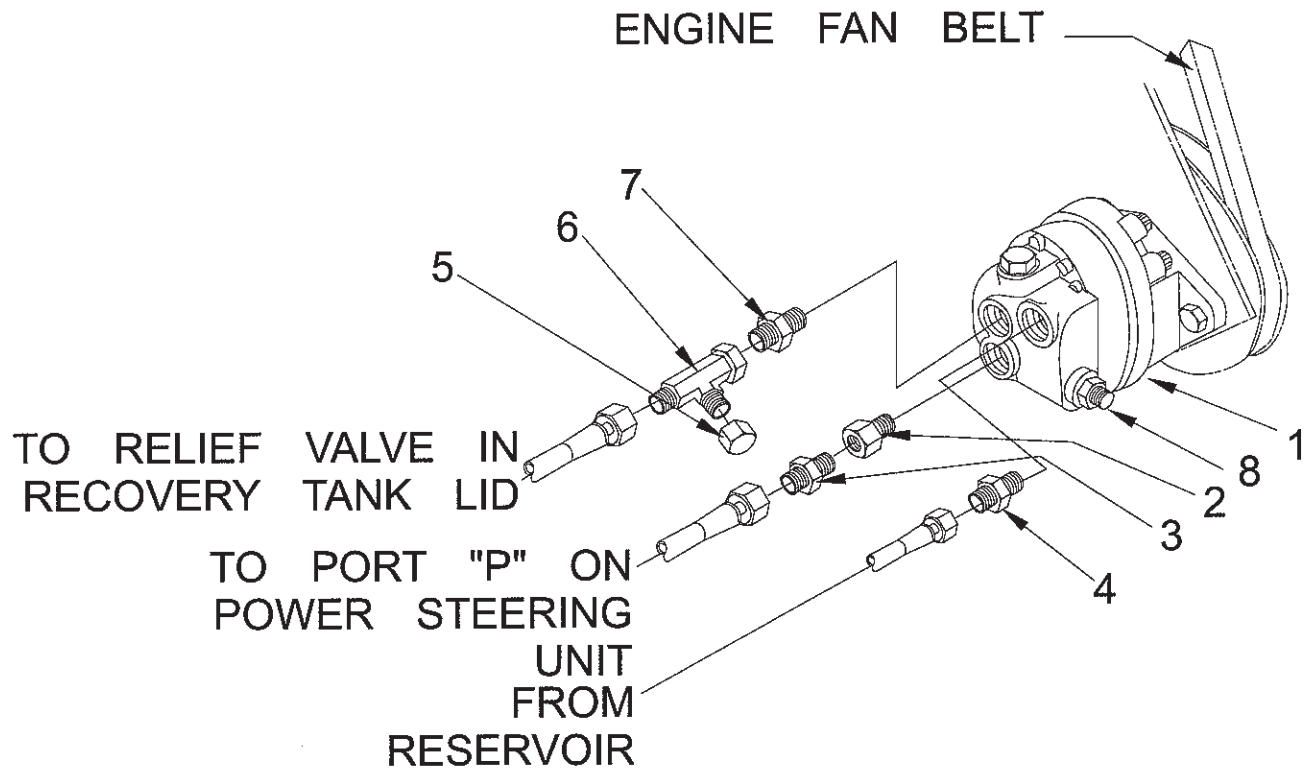


| KEY NO. | PART NUMBER  | DESCRIPTION                            | QTY  |
|---------|--------------|----------------------------------------|------|
| 1       | 2-00-04920   | ORFS 90° Elbow, 1 5/16-12 to 1 3/16-12 | 1    |
| 2       | 2-00-04921   | ORFS 90° Elbow, 7/16-20 to 9/16-18     | 1    |
| 3*      | 0885-067     | Auxiliary Pump                         | 1    |
| 4*      | 8-60-05006-2 | Drive Pump                             | 1    |
| 5       | 2-00-04928   | ORFS Swivel Tee, 13/16-16              | 1    |
| 6       | 2-00-04957   | ORFS Cap, #8 ORS                       | 1    |
| 7       | 8-33-02202   | Hose                                   | Ref. |
| 8       | 7-33-02220   | Hose                                   | Ref. |

\* Drive and Auxiliary Pump Assembly #0885-063

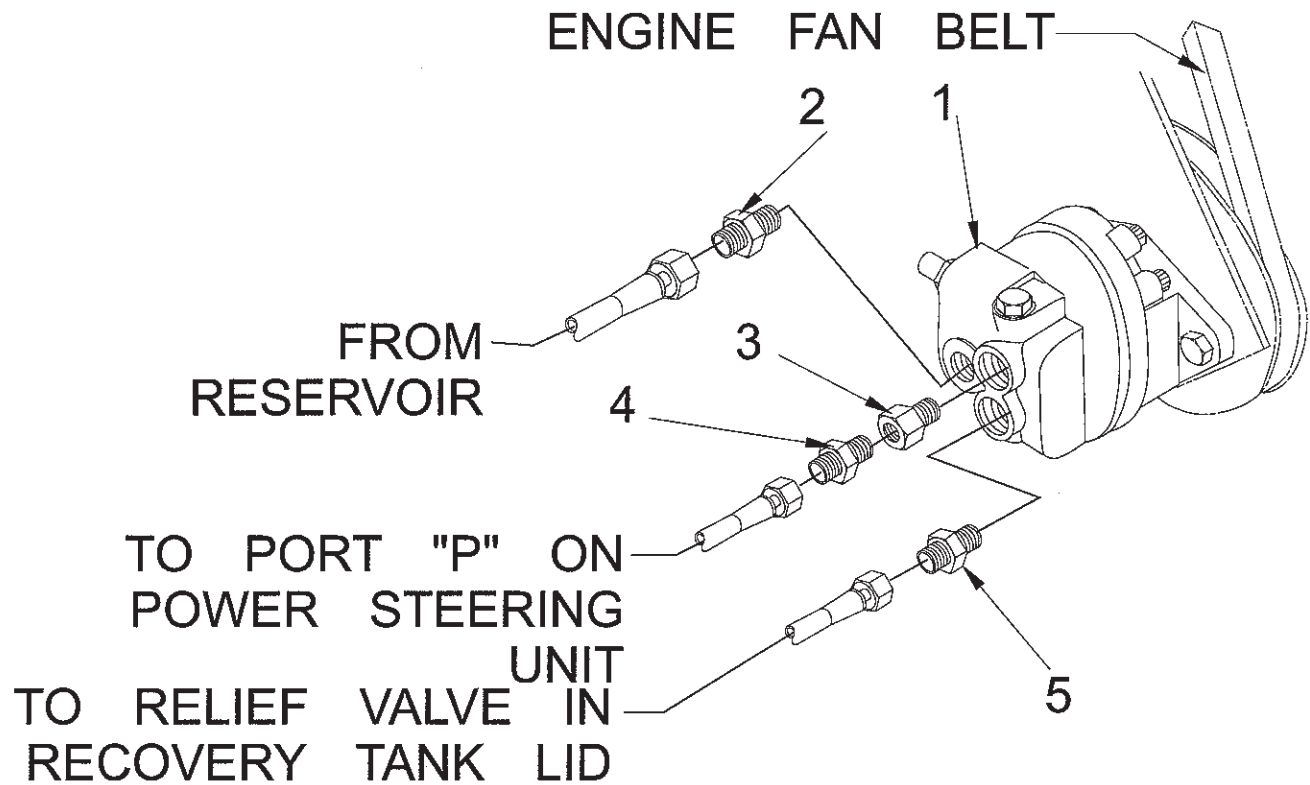
P3808e/9511

## AUXILIARY PUMP AND FITTINGS (FORD)



| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>DESCRIPTION</u>                    | <u>QTY</u> |
|----------------|--------------------|---------------------------------------|------------|
| 1              | 7-60-05011         | Gear Pump                             | 1          |
| NS             | 0780-152           | Seal Kit for 7-60-05011 Gear Pump     | 1          |
| 2              | 2-00-04932         | ORFS Boss Reducer, 3/4-16 to 9/16-18  | 1          |
| 3              | 2-00-04918         | ORFS Connector, 9/16 - 18             | 1          |
| 4              | 2-00-04971         | ORFS Connector, 1 5/16-12 - 1 3/16-12 | 1          |
| 5              | 2-00-04957         | ORFS Cap, #8 ORS                      | 1          |
| 6              | 2-00-04928         | ORFS Run Tee, 13/16 - 16              | 1          |
| 7              | 2-00-04974         | ORFS Connector, 7/8-14 to 13/16-16    | 1          |
| 8              | 7-88-00046         | Relief Valve Assembly                 | 1          |

P4880a



| KEY NO. | PART NUMBER | DESCRIPTION                              | QTY  |
|---------|-------------|------------------------------------------|------|
| 1       | 7-60-05011  | Gear Pump                                | 1    |
| NS      | 0780-152    | Seal Kit for 7-60-05011 Gear Pump        | 1    |
| 2       | 2-00-04932  | ORFS Boss Reducer, 3/4 - 16 to 9/16 - 18 | 1    |
| 3       | 2-00-04918  | Straight Fitting                         | 1    |
| 4       | 2-00-04971  | Straight Fitting                         | 1    |
| 5       | 2-00-04957  | Cap Fitting                              | 1    |
| 6       | 7-88-04928  | Fitting, Swivel Run Tee                  | 1    |
| 7       | 2-00-04974  | Connector, ORFS 7/8 - 14 to 13/16 - 16   | 1    |
| 8       | 7-88-00046  | Relief Valve Assembly                    | Ref. |

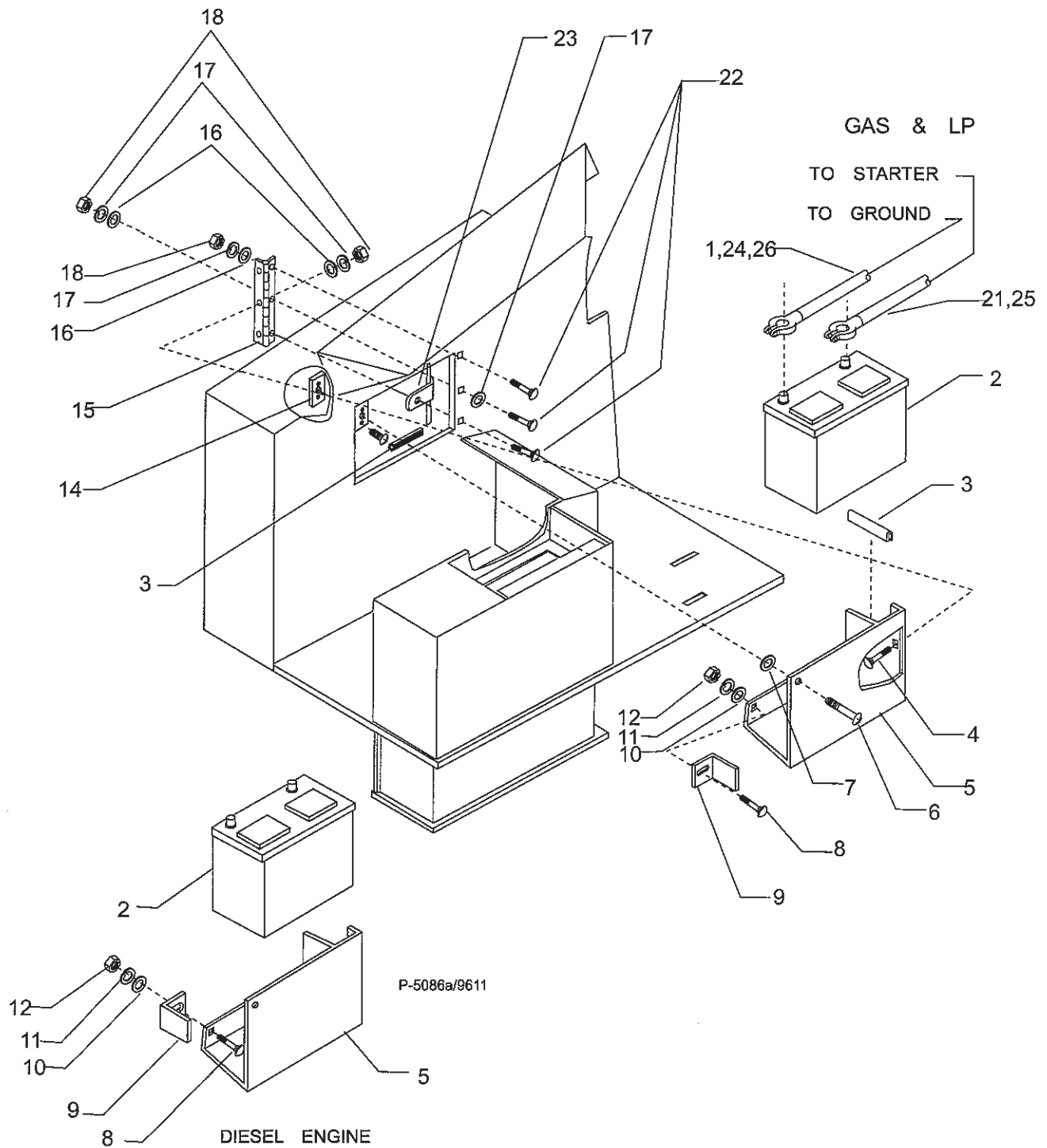
P4880/9511

## BATTERY - PARTS LIST

| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>DESCRIPTION</u>                   | <u>QTY</u> |
|----------------|--------------------|--------------------------------------|------------|
| 1              | 8-90-07167         | Wire, to Starter                     | 1          |
| 2              | 0875-008           | Battery (Gas & LP)                   | 1          |
| 2              | 0875-057           | Battery (Diesel)                     | 1          |
| 3              | 8-21-04016         | Edging                               | 2          |
| 4              | 2-00-03569         | Carriage Bolt, 5/16-18 x .750        | 3          |
| 5              | 7-19-08033         | Battery Access Door                  | 1          |
| 6              | 7-23-03113         | Screw, #17(.312) x 1.000 CAPT.SL.    | 1          |
| 7              | 7-23-03106         | Retainer Washer, .265 x .625 x .025  | 1          |
| 8              | 2-00-03575         | Carriage Bolt, 1/4-20 x .750         | 2          |
| 9              | 7-13-07109         | Battery Clamp                        | 1          |
| 10             | 2-00-03702         | Flat Washer, .625 x .281 x .062      | 1          |
| 11             | 2-00-00518         | Lock Washer, Helical Spring 1/4 Med  | 1          |
| 12             | 2-00-00594         | Nut, Hex 1/4-20 x .437 x .218        | 1          |
| 13             |                    |                                      |            |
| 14             | 7-23-03108         | Receptacle Bracket,                  | 1          |
| 15             | 7-32-00023         | Hinge,                               | 1          |
| 16             | 2-00-00409         | Flat Washer, .687 x .343 x .062      | 6          |
| 17             | 2-00-00530         | Lock Washer, Helical Spring 5/16 Med | 6          |
| 18             | 2-00-00585         | Nut, Hex 5/16-18 x .500 x .265       | 6          |
| 19             |                    |                                      |            |
| 20             |                    |                                      |            |
| 21             | 7-90-07262         | Wire, to Ground (Ford 423)           | 1          |
| 22             | 2-00-02708         | Screw, 5/16-18 x 1.000 HHC           | 3          |
| 23             | 2-00-05253         | Cable Clamp, .500                    | 1          |
| 24             | 2-00-05171         | Boot, Protective (Red)               | 1          |
| 25             | 2-00-05173         | Boot, Protective (Black)             | 1          |
| 26             | 7-90-07280         | Battery (+) Cable (Diesel Only)      | 1          |

P5086/9510

# BATTERY - EXPLODED VIEW

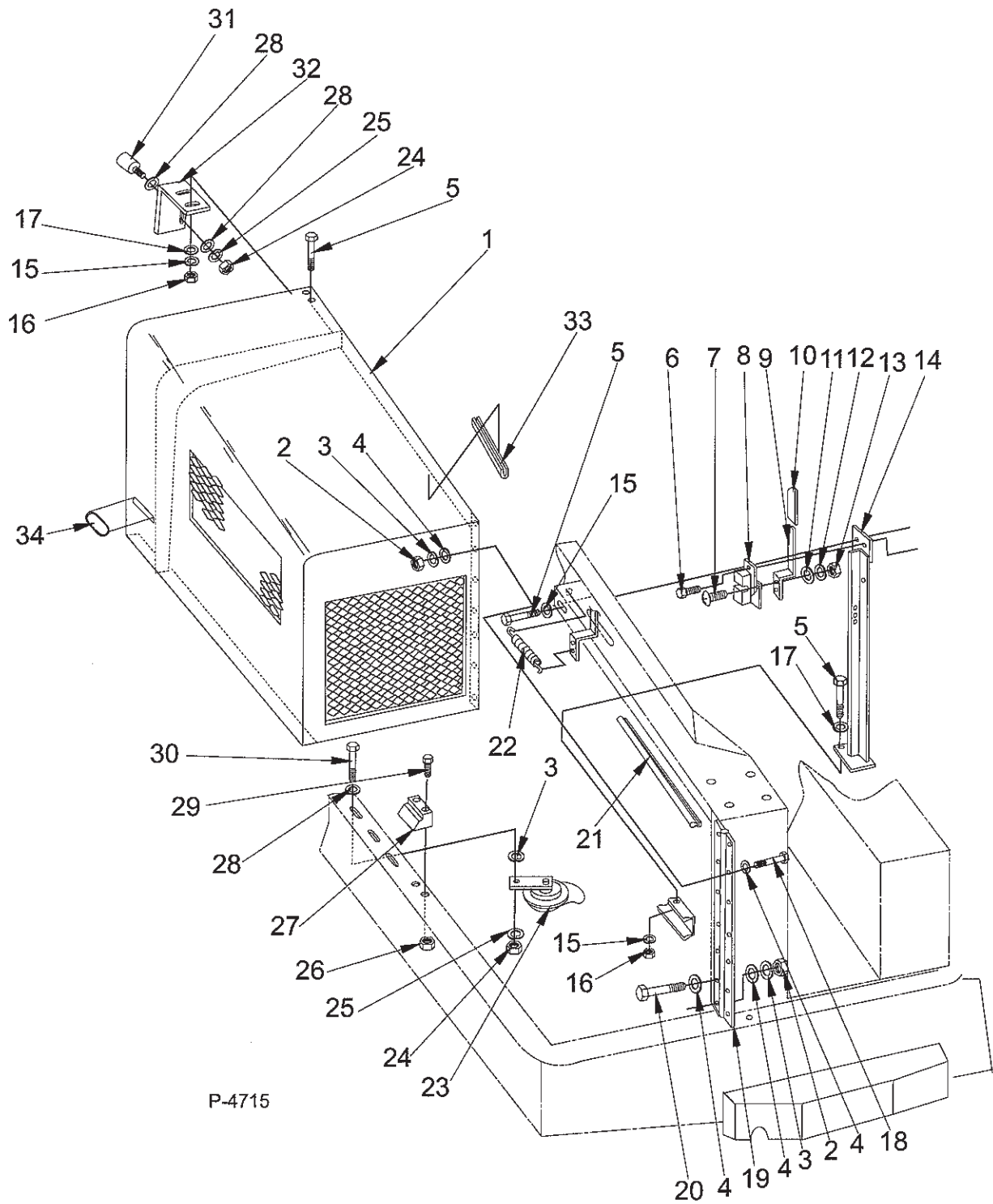


## ENGINE COVER - PARTS LIST

| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>DESCRIPTION</u>                   | <u>QTY</u> |
|----------------|--------------------|--------------------------------------|------------|
| 1              | 7-16-07279         | Engine Cover                         | 1          |
| 2              | 2-00-02360         | Nut, Hex 3/8-16 x .562 x .328        | 14         |
| 3              | 2-00-02310         | Lock Washer, Heli.Spr. 3/8 Med       | 14         |
| 4              | 2-00-00410         | Flat Washer, .875 x .375 x .062      | 28         |
| 5              | 2-00-01490         | Screw, 1/4 - 20 x .875 HHC           | 4          |
| 6              | 2-00-00221         | Screw, 1/4 - 20 x .750 HHC           | 2          |
| 7              | 2-00-04794         | Screw, #10-24 x .625 HHC             | 2          |
| 8              | 8-41-00037         | Engine Cover Latch                   | 1          |
| 9              | 7-31-06062         | Handle Cover Latch                   | 1          |
| 10             | 7-31-06061         | Cover Latch Grip                     | 1          |
| 11             | 2-00-00426         | Flat Washer, .500 x .218 x .062      | 2          |
| 12             | 2-00-00519         | Lock Washer, Helical Spring #10 Med  | 2          |
| 13             | 2-00-00605         | Nut, Hex MS #10 - 24 x .375 x .125   | 2          |
| 14             | 7-81-00138         | Center Support                       | 1          |
| 15             | 2-00-00518         | Lock Washer, Helical Spring 1/4 Med  | 6          |
| 16             | 2-00-00594         | Nut, 1/4-20 x .437 x .218            | 4          |
| 17             | 2-00-03702         | Flat Washer, .625 x .281 x .062      | 3          |
| 18             | 2-00-00233         | Screw, 3/8-16 x 1.000 HHC            | 12         |
| 19             | 7-32-00022         | Hinge                                | 1          |
| 20             | 2-00-00209         | Screw, 3/8-16 x 1.250 HHC            | 2          |
| 21             | 7-29-00157         | Gasket                               | 1          |
| 22             | 7-76-00106         | Spring                               | 1          |
| 23             | 8-32-09013         | Horn,                                | 1          |
| 24             | 2-00-00585         | Nut, Hex 5/16-18 x .500 x .265       | 3          |
| 25             | 2-00-00530         | Lock Washer, Helical Spring 5/16 Med | 3          |
| 26             | 2-00-00641         | Nut, Hex Fiber Insert 1/4 - 20       | 1          |
| 27             | 7-78-05016         | Engine Cover Stop                    | 1          |
| 28             | 2-00-00409         | Flat Washer, .687 x .343 x .062      | 3          |
| 29             | 2-00-00203         | Screw, 3/8-16 x 1.250 HHC            | 2          |
| 30             | 2-00-03564         | Screw, 5/16-18 x 1.000 HHC           | 1          |
| 31             | 7-55-08116         | Striker Pin                          | 2          |
| 32             | 7-08-00532         | Engine Cover Bracket                 | 1          |
| 33             | 8-08-07045         | Edging                               | 1          |
| 34             | 8-21-04038         | Edging                               | 1          |

P4715

# ENGINE COVER - EXPLODED VIEW

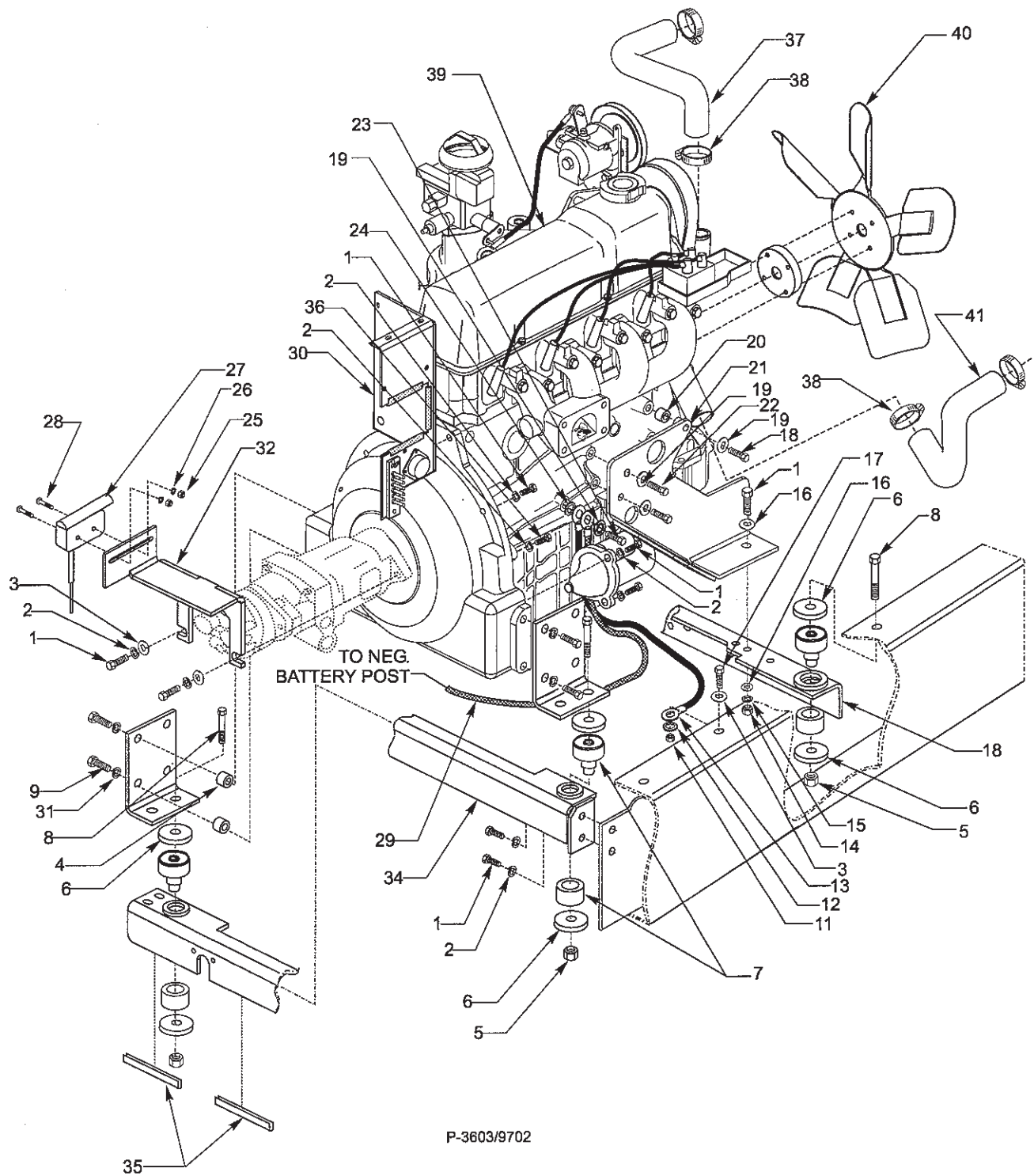


## FORD 425 ENGINE - PARTS LIST

| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>DESCRIPTION</u>              | <u>QTY</u> |
|----------------|--------------------|---------------------------------|------------|
| 1              | 2-00-00209         | Screw, 3/8-16 x 1.25 Lg. HHC    | 15         |
| 2              | 2-00-02309         | Lockwasher, 3/8 H. S. Med.      | 22         |
| 3              | 2-00-00402         | Flatwasher, .75 x .39 x .09     | 3          |
| 4              | 7-75-01099         | Spacer, Engine Mounting         | 2          |
| 5              | 2-00-04936         | Nut, 1/2-20 Fiber Lock          | 4          |
| 6              | 2-00-05067         | Spacer, Snubbing Washer         | 8          |
| 7              | 7-35-00017         | Isolator, Engine Mount          | 4          |
| 8              | 2-00-02617         | Screw, 1/2-20 x 3.50 lg. HHC    | 4          |
| 9              | 2-00-02689         | Screw, 1/2-20 x 1.00 HHC        | 2          |
| 10             | 7-08-00835         | Bracket - Engine Mounting       | 2          |
| 11             | 2-00-02360         | Nut, 3/8-16 Hex. x .56 x .33    | 11         |
| 12             | 2-00-03829         | Lockwasher, 3/8 int./ext. Tooth | 2          |
| 13             | 8-90-07328         | Cable, Ground                   | Ref.       |
| 14             | 2-00-02360         | Nut, 3/8-16 Hex. x .56 x .33    | 11         |
| 15             | 2-00-02310         | Lockwasher, 3/8 H. S. Med.      | 22         |
| 16             | 2-00-03979         | Flatwasher, 1.00 x .39 x .06    | 7          |
| 17             | 2-00-00232         | Screw, 3/8-16 x .75 HHC         | 1          |
| 18             | 2-00-05328         | Screw, M10 x 1.5 50 mm HHC      | 1          |
| 19             | 2-00-00505         | Lockwasher, 3/8 Int.            | 12         |
| 20             | 8-75-01210         | Spacer, Engine Mount            | 1          |
| 21             | 7-08-00829         | Motor Mount - Bracket           | 1          |
| 22             | 2-00-05005         | Screw, M10 x 1.5 - 30mm HHC     | 4          |
| 23             | 2-00-05006         | Screw, M10 x 1.5 20mm HHC       | 1          |
| 24             | 2-00-03830         | Lockwasher, 3/8 int./ext. Tooth | 2          |
| 25             | 2-00-01372         | Nut, Hex. #8-32 Fiber Lock      | 2          |
| 26             | 2-00-00455         | Flatwasher, .38 x .16 x .05     | 2          |
| 27             | 8-82-00058         | Switch                          | 1          |
| 28             | 2-00-00090         | Screw, #8-32 x 1.50 RHM         | 2          |
| 29             | 7-90-07262         | Cable, Battery (-)              | Ref.       |
| 30             | 7-08-00836         | Bracket - Air Cleaner           | 1          |
| 31             | 2-00-02312         | Lockwasher, 1/2 H. S. Med.      | 4          |
| 32             | 7-08-00825         | Bracket - Switch Mounting       | 1          |
| 33             | 7-81-00132         | Support, Front Engine           | 1          |
| 34             | 7-81-00140         | Support, Rear Engine            | 1          |
| 35             | 2-00-04210         | Edging                          | 2          |
| 36             | 2-00-00216         | Screw, 3/8-16 x 2.00 HHC        | 2          |
| 37             | 8-33-02337         | Hose, Upper Radiator            | 1          |
| 38             | 2-00-02215         | Clamp, Hose                     | 6          |
| 39             | 0877-060           | Engine - Ford LRG 423           | 1          |
| 40             | 7-23-00018         | Fan, Engine                     | 1          |
| 41             | 8-33-02336         | Hose, Lower Radiator            | 1          |

P3603/9511

# FORD 425 ENGINE - EXPLODED VIEW



P-3603/9702

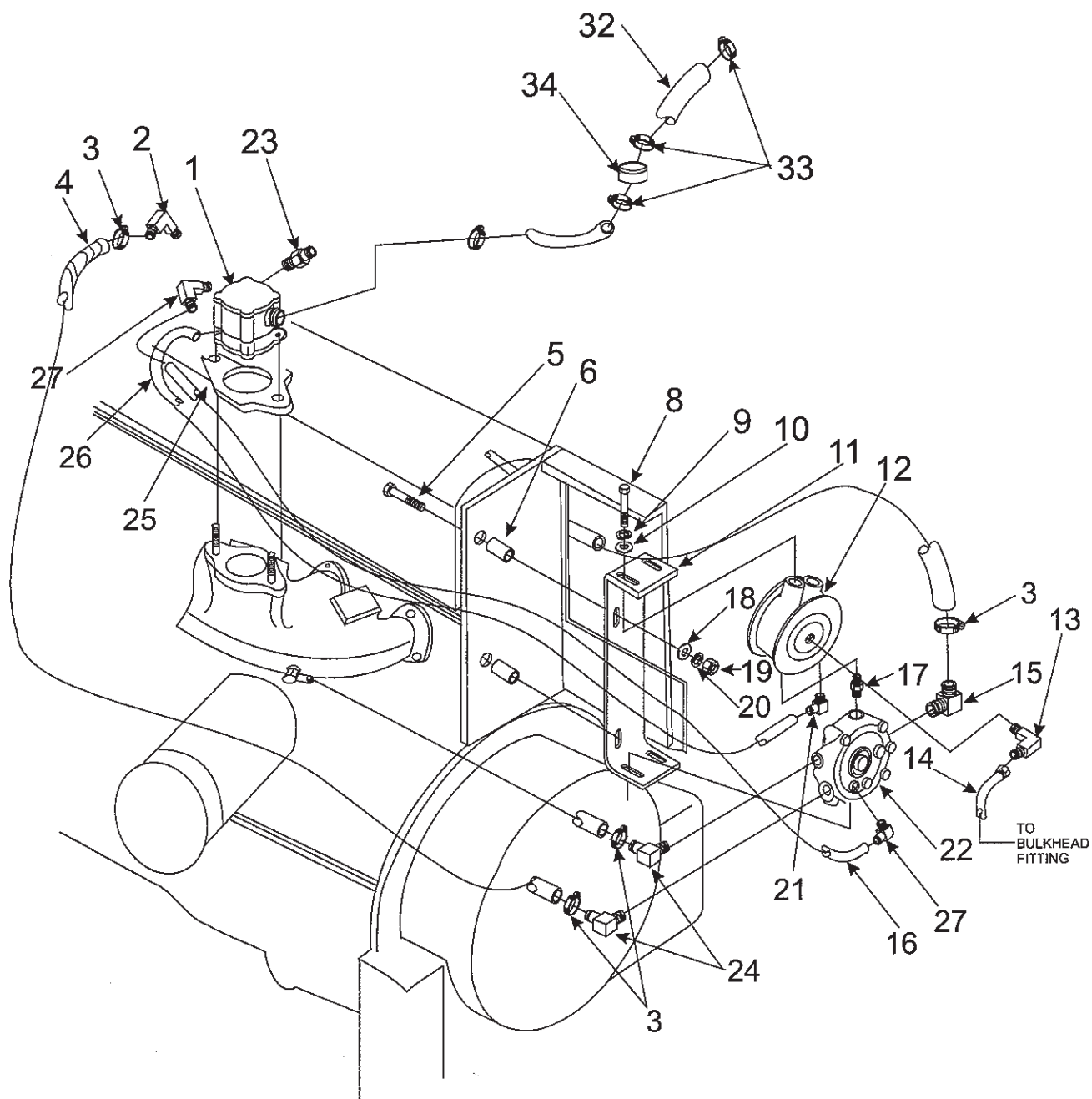
## LP FORD ENGINE - PARTS LIST

| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>DESCRIPTION</u>                     | <u>QTY</u> |
|----------------|--------------------|----------------------------------------|------------|
| 1*             |                    | OHG Carburetor                         | 1          |
| 2*             |                    | Fitting, 3/8 NPT x 3/8 Tube 90° Elbow  | 1          |
| 3*             |                    | Hose Clamp #8                          | 2          |
| 4*             |                    | Hose, 5/8 ID x 24 Lg.                  | 1          |
| 5              | 2-00-01769         | Screw, 1/4 - 20 x .750 HHC             | 2          |
| 6              | 7-75-01096         | Spacer, .750 x .343 x 1.13             | 2          |
| 7              |                    |                                        |            |
| 8              | 2-00-00220         | Screw, 1/4 - 20 x .625 HHC             | 4          |
| 9              | 2-00-00518         | Lock Washer, Helical Spring 1/4 Med    | 4          |
| 10             | 2-00-00416         | Flat Washer, .750 x .265 x .062        | 4          |
| 11*            |                    | Bracket,                               | 1          |
| 12*            |                    | Fuelock Filter                         | 1          |
| 13*            |                    | Fitting, 1/4 NPT x 3/8 SAE 90° Elbow   | 1          |
| 14             |                    | Clamp                                  | 1          |
| 15*            |                    | Fitting, 3/8 x 5/8 Hose                | 1          |
| 16*            |                    |                                        |            |
| 17*            |                    | Fitting, 1/4 NPT Nipple                | 1          |
| 18             | 2-00-00416         | Flat Washer, .750 x .265 x .062        | 2          |
| 19             | 2-00-00594         | Nut, 1/4 - 20 x .437 x .218            | 2          |
| 20             | 2-00-00518         | Lock Washer, Helical Spring 1/4 Med    | 2          |
| 21*            |                    | Fitting, 1/8 NPT x 7/32 Tube 90° Elbow | 1          |
| 22*            |                    | Regulator - Vaporizer                  | 1          |
| 23*            |                    |                                        |            |
| 24*            |                    | Fitting, 1/2 NPT x 5/8 Tube 90° Elbow  | 1          |
| 25*            |                    | Clamp, #6                              | 1          |
| 26*            |                    | Vac Hose, 1/4 ID x 27 Lg.              | 1          |
| 27*            |                    | Fuel Pump Cover Gasket                 | 1          |
| 28*            |                    |                                        |            |
| 29*            |                    | Gas Passage Plate Gasket               | 1          |
| 30             | 3-61-00189         | Wire, 16 Gauge Black                   | 1          |
| 31             | 2-00-00828         | Terminal, Ring .25                     | 1          |

### NOTE

All parts marked with an \* are contained in LP Engine Kit # 7-11-0414

P4918a/9510



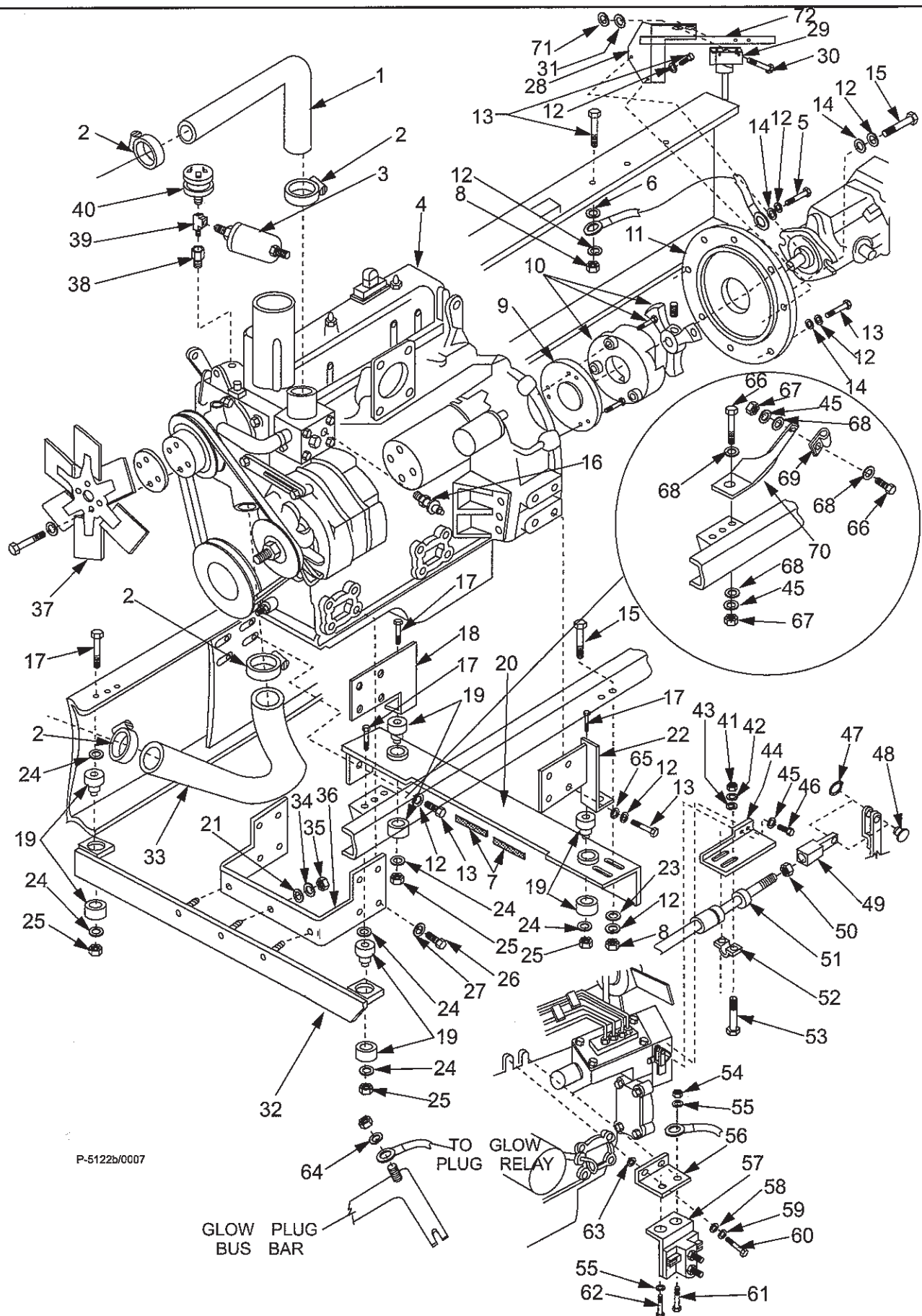
## PERKINS DIESEL ENGINE - PARTS LIST

| Key No. | Part No.   | Description                     | Qty. | Key No. | Part No.   | Description                     | Qty. |
|---------|------------|---------------------------------|------|---------|------------|---------------------------------|------|
| 1       | 8-33-02255 | Upper Radiator Hose             | 1    | 41      | 2-00-01246 | Nut, Hex Fiber Insert #10-24    | 2    |
| 2       | 2-00-03404 | Hose Clamp, 1.062 - 2.0004      |      | 42      | 2-00-00426 | Flat Washer, .500 x .218 x .062 | 2    |
| 3       | 8-69-00005 | Oil Pressure Sender             | 1    | 43      | 2-00-02296 | Lock Washer, #10 Ext            | 2    |
| 4       | 0877-048-1 | PERKINS 104.19 Diesel Engine    | 1    | 44      | 8-08-00714 | Throttle Cable Bracket          | 1    |
| 5       | 2-00-04705 | Screw, 3/8-16 x 1.250 HHC       | 1    | 45      | 2-00-00518 | Lock Washer, Hel Spr 1/4 Med.   | 2    |
| 6       | 8-90-07328 | Ground Cable                    | 1    | 46      | 2-00-05078 | Screw, M6-1.00 x 10 mm MHHC     | 2    |
| 7       | 2-00-03829 | Lock Washer, 3/8 Int/Ext        | 1    | 47      | 2-00-00546 | Snap Ring, .31 (Shaft)          | 1    |
| 8       | 2-00-02360 | Nut, Hex 3/8 - 16 x .562 x .328 | 3    | 48      | 8-55-08083 | Clevis Pin                      | 1    |
| 9       | 8-58-05259 | Adapter Plate                   | 1    | 49      | 8-14-01012 | Throttle Adjustment Clevis      | 1    |
| 10      | 0885-059   | Coupling                        | 1    | 50      | 2-00-00626 | Nut, Hex MS #10-32 .125         | 1    |
| 11      | 8-33-05107 | Pump Mounting Plate             | 1    | 51      | 7-10-00024 | Throttle Cable - 80"            | 1    |
| 12      | 2-00-02310 | Lock Washer, Hel Spr 3/8 Med    | 19   | 52      | 8-13-07094 | Conduit Clamp                   | 1    |
| 13      | 2-00-00233 | Screw, 3/8-16 x 1.000 HHC       | 19   | 53      | 2-00-04794 | Screw, #10-24 x .625 BHS        | 2    |
| 14      | 2-00-00402 | Flat Washer, .750 x .390 x .093 | 10   | 54      | 2-00-00605 | Nut, Hex MS #10-24              | 1    |
| 15      | 2-00-00209 | Screw, 3/8-16 x 1.250 HHC       | 4    | 55      | 2-00-00519 | Lock Washer, Hel Spr #10 Med    | 1    |
| 16      | 8-69-00014 | Water Temperature Sender        | 1    | 56      | 8-08-00604 | Glow Plug Solenoid Bracket      | 1    |
| 17      | 2-00-02617 | Screw, 1/2-20 x 3.500 HHC       | 4    | 57      | -          | Supplied with Engine            | 1    |
| 18      | 7-08-00580 | Outboard Eng. Mtg. Flwhl. End   | 1    | 58      | 2-00-00409 | Flat Washer, .687 x .343 x .062 | 2    |
| 19      | 7-35-00017 | Mounting Isolator               | 4    | 59      | 2-00-00530 | Lock Washer                     | 2    |
| 20      | 7-81-00140 | Rear Engine Support             | 1    | 60      | 2-00-04363 | Screw M8-1.25 x 20 mm MHHC      | 2    |
| 21      | 2-00-04159 | Flat Washer, .500               | 3    | 61      | 2-00-03063 | Screw, #10-24 x .750 THM        | 1    |
| 22      | 7-08-00581 | Inboard Eng. Mtg. Flwhl. End    | 1    | 62      | 2-00-03060 | Screw, #10-24 x .375 THM        | 1    |
| 23      | 2-00-03979 | Flat Washer                     | 2    | 63      | 2-00-02303 | Lock Washer, 5/16 Int           | 2    |
| 24      | 2-00-05067 | Snubbing Washer                 | 6    | 64      | 2-00-00507 | Lock Washer, #8 Int.            | 1    |
| 25      | 2-00-04936 | Nut, Hex Fiber Insert           | 4    | 65      | 2-00-00410 | Flat Washer, .875 x .375 x .062 | 8    |
| 26      | 2-00-05079 | Screw, M14-1.50 x 25mm          | 8    | 66      | 2-00-00221 | Screw, 1/4-20 x .750 HHC        | 2    |
| 27      | 2-00-05044 | Lock Washer, M14                | 8    | 67      | 2-00-00594 | Nut, Hex 1/4-20 x .437 x .218   | 2    |
| 28      | 7-08-00820 | Bracket, Squeegee Switch Mtg.   | 1    | 68      | 2-00-03702 | Flat Washer, .625 x .280 x .063 | 4    |
| 29      | 8-82-00058 | Switch                          | 1    | 69      | 2-00-04873 | Cable Clamp, .500               | 1    |
| 30      | 2-00-00090 | Screw, #8-32 x 1.500 RHM        | 2    | 70      | 7-08-00620 | FWD/RVS Cable Bracket           | 1    |
| 31      | 2-00-00441 | Flat Washer, .44 x .20 x .04    | 2    | 71      | 2-00-01372 | Nut, #8-32 Hex Fiber Lock       | 2    |
| 32      | 7-08-00586 | Engine Mount (Fan End)          | 1    | 72      | 7-21-04031 | Edging                          | 2    |
| 33      | -          | Lower Radiator Hose             | 1    |         |            |                                 |      |
| 34      | 2-00-02312 | Lock Washer, Hel Spr 1/2 Med.   | 3    |         |            |                                 |      |
| 35      | 2-00-00596 | Nut, Hex 1/2-13 x .750 x .437   | 3    |         |            |                                 |      |
| 36      | 7-08-00579 | Engine Mounting Bracket         | 1    |         |            |                                 |      |
| 37      | 7-23-00016 | Engine Fan                      | 1    |         |            |                                 |      |
| 38      | 2-00-05049 | Adapter, 1/8 BSPT x 1/8 NPTF    | 1    |         |            |                                 |      |
| 39      | 2-00-04982 | Street Tee, 1/8 Brass           | 1    |         |            |                                 |      |
| 40      | 8-82-00046 | Oil Pressure Switch             | 1    |         |            |                                 |      |

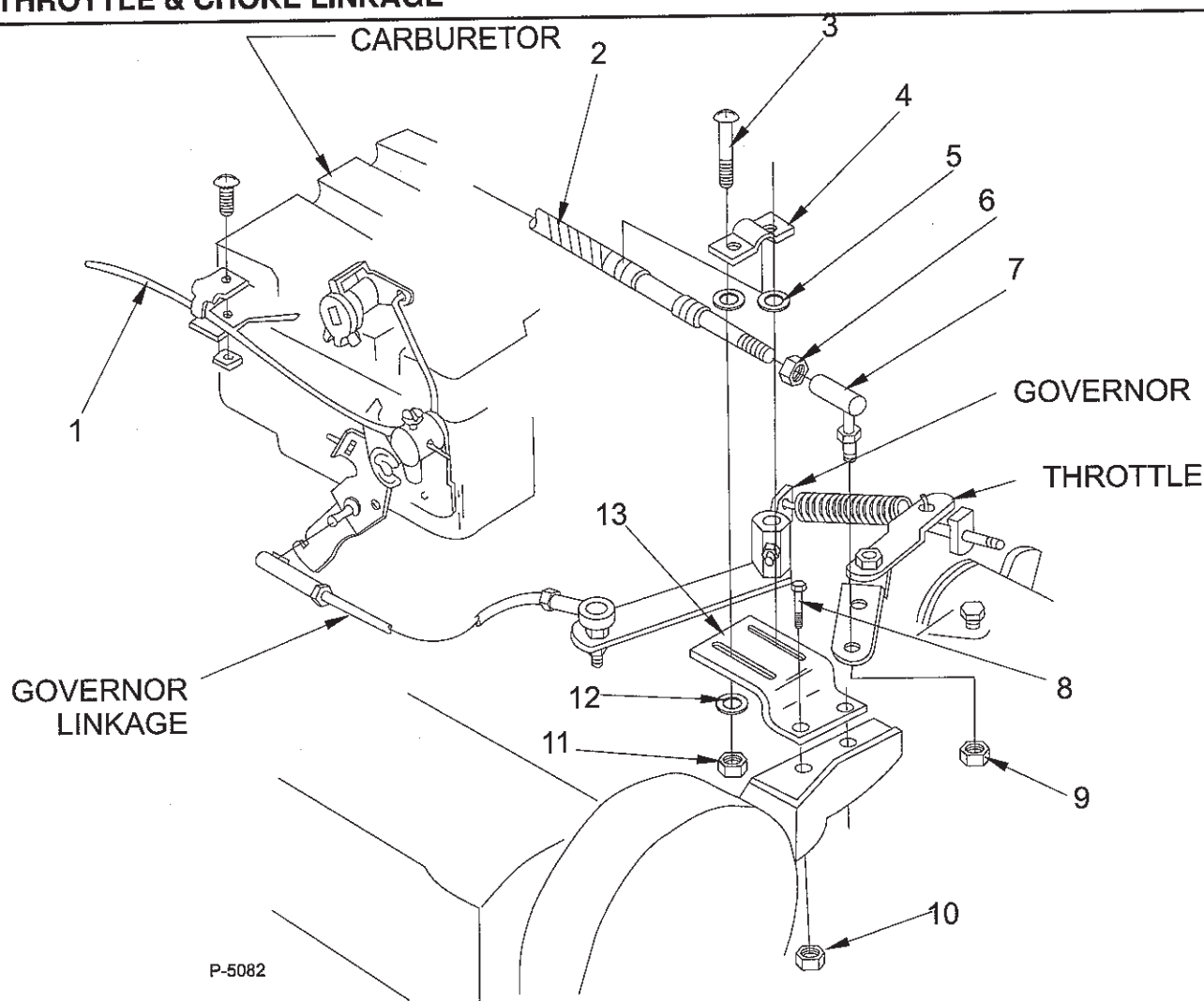
P5122btX

p5122btX

# PERKINS DIESEL ENGINE - EXPLODED VIEW

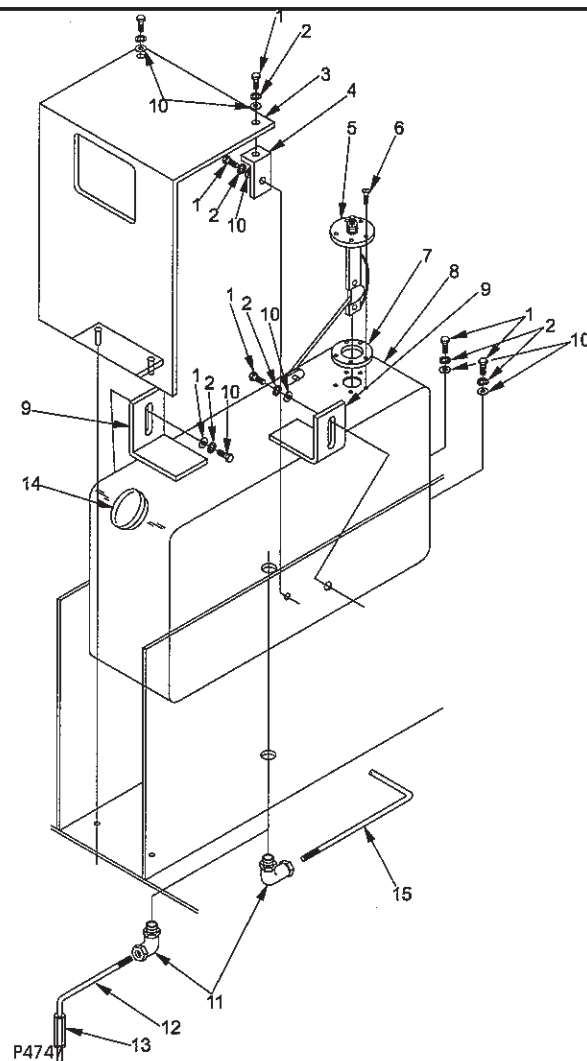


## THROTTLE & CHOKE LINKAGE



| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>DESCRIPTION</u>               | <u>QTY</u> |
|----------------|--------------------|----------------------------------|------------|
| 1              | 8-16-00021         | Choke Cable                      | 1          |
| 2              | 7-10-00024         | Throttle Cable                   | 1          |
| 3              | 2-00-04794         | Screw, #10-24 x .625 BHS         | 2          |
| 4              | 8-13-07094         | Clamp                            | 1          |
| 5              | 2-00-00498         | Lock Washer, 1/4 Ext.            | 2          |
| 6              | 2-00-00626         | Nut, Hex MS #10-32 x .375 x .125 | 1          |
| 7              | 8-25-02036         | Ball Joint                       | 1          |
| 8              | 2-00-02708         | Screw, 5/16-18 x 1.000 HHM       | 2          |
| 9              | 2-00-00633         | Nut, Hex Fiber Insert 1/4-28     | 2          |
| 10             | 2-00-00644         | Nut, Hex Fiber Insert 5/16-18    | 2          |
| 11             | 2-00-01246         | Nut, Hex Fiber Insert #10-24     | 2          |
| 12             | 2-00-00426         | Flat Washer, .500 x .218 x .062  | 2          |
| 13             | 8-08-00704         | Bracket                          | 1          |

P5082



| KEY NO. | PART NUMBER | DESCRIPTION                         | QTY |
|---------|-------------|-------------------------------------|-----|
| 1       | 2-00-00221  | Screw, 1/4-20 x .750 HHC            | 8   |
| 2       | 2-00-00518  | Lock Washer, Helical Spring 1/4 Med | 8   |
| 3       | 7-16-07280  | Cover                               | 1   |
| 4       | 7-08-00479  | Bracket                             | 2   |
| 5       | 8-26-04003  | Float                               | 1   |
| 6       | 2-00-04737  | Screw, #10-32 x .44 (Self Seal)     | 5   |
| 7       | 8-29-00131  | Gasket                              | 1   |
| 8       | 8-83-04029  | Fuel Tank                           | 1   |
| 9       | 7-13-07100  | Bracket                             | 2   |
| 10      | 2-00-01676  | Flat Washer, 1.062 x .265 x .062    | 8   |
| 11      | 2-00-04494  | Compression Male 90° Elbow, 1/8     | 1   |
| 12      | 7-87-02148  | Fuel Line (Gas Only)                | 1   |
| 13      | 8-08-07038  | Fuel Line Bumper (Gas Only)         | 3   |
| 14      | 7-11-00029  | Fuel Cap                            | 1   |
| 15      | 7-87-02160  | Fuel Line (Diesel Only)             | 1   |

P4747

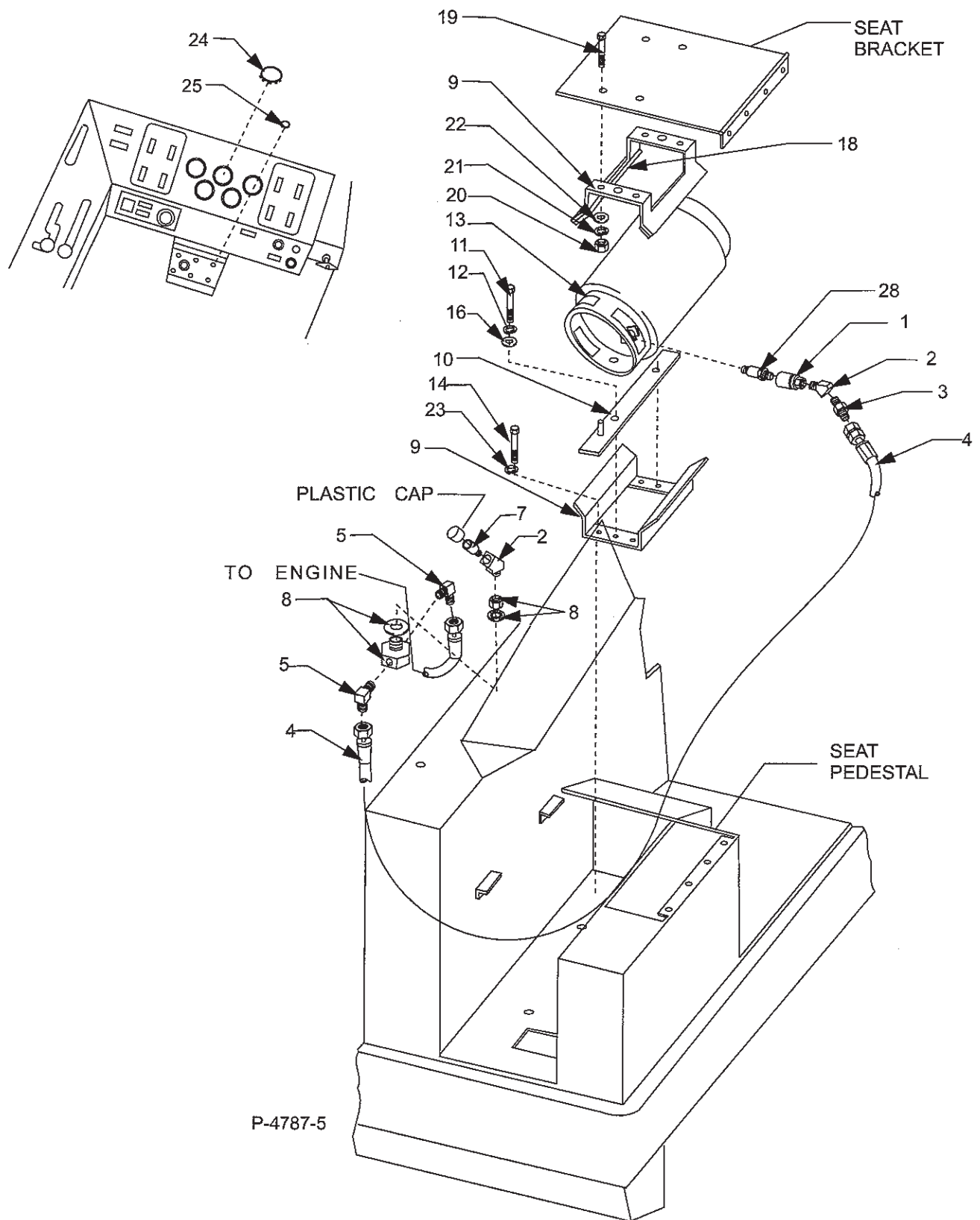
## LP TANK SYSTEM - PARTS LIST

| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>DESCRIPTION</u>                  | <u>QTY</u> |
|----------------|--------------------|-------------------------------------|------------|
| 1              | *                  | Coupling                            | 1          |
| 2              | *                  | Fitting, 1/4 NPT x 1/4 FM 45°       | 2          |
| 3              | *                  | Fitting, 1/4 NPT x 3/8 SAE Straight | 1          |
| 4              | *                  | Hose, 5/16 I.D. x 53" Lg. #6 UL     | 1          |
| 5              | *                  | Fitting, 1/4 NPT x 3/8 SAE 90°      | 2          |
| 6              |                    |                                     |            |
| 7              | *                  | Relief Valve                        | 1          |
| 8              | *                  | Fitting, Bulkhead                   | 1          |
| 9              | 7-15-01038         | Collar Weldment                     | 2          |
| 10             | 7-43-05004         | Lock Weldment                       | 1          |
| 11             | 2-00-00220         | Screw, 1/4-20 x .625 HHC            | 2          |
| 12             | 2-00-00518         | Lock Washer, 1/4                    | 2          |
| 13             | 8-83-04016         | LP Tank                             | 1          |
| 14             | 2-00-00233         | Screw, 3/8-16 x 1.000 HHC           | 4          |
| 15             |                    |                                     |            |
| 16             | 2-00-00416         | Flat Washer                         | 2          |
| 17             |                    |                                     |            |
| 18             | 7-50-05143         | Pad                                 | 2          |
| 19             | 2-00-02708         | Screw, 5/16-18 x 1.000 HHC          | 4          |
| 20             | 2-00-00585         | Nut, Hex 5/16-18                    | 4          |
| 21             | 2-00-00530         | Lock Washer, 5/16                   | 4          |
| 22             | 2-00-00409         | Flat Washer                         | 4          |
| 23             | 2-00-02310         | Lock Washer, 3/8                    | 4          |
| 24             | 2-00-04432         | Hole Plug (Fuel Gauge)              | 1          |
| 25             | 2-00-04757         | Hole Plug (Choke)                   | 1          |
| 26             |                    |                                     |            |
| 27             |                    |                                     |            |
| 28             |                    | Fitting, (Included with Key No. 13) | 1          |

\*Contained in the LP Tank Kit Part Number 7-11-04009

P4787e/9510

# LP TANK SYSTEM - EXPLODED VIEW



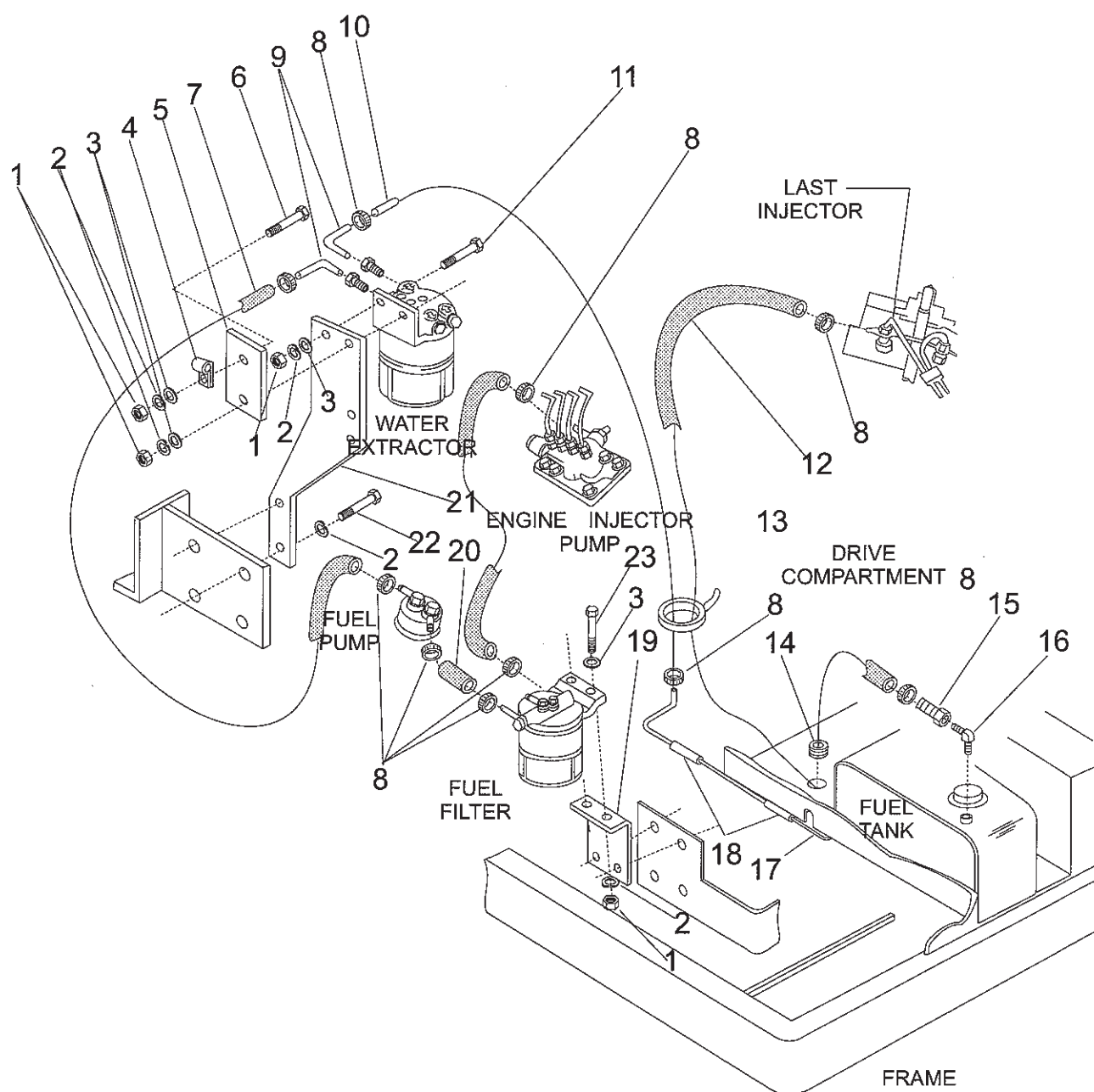
P-4787-5

## FUEL AND WATER EXTRACTOR (DIESEL) - PARTS LIST

| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>DESCRIPTION</u>                             | <u>QTY</u> |
|----------------|--------------------|------------------------------------------------|------------|
| 1              | 2-00-02360         | Nut, Hex 3/8 - 16 x .562 x .328                | 5          |
| 2              | 2-00-02310         | Lock Washer, Helical Spring 3/8 Med            | 7          |
| 3              | 2-00-00402         | Flat Washer, .750 x .390 x .093                | 5          |
| 4              | 2-00-04873         | Throttle Cable Clamp, .500                     | 1          |
| 5              | 7-08-00588         | Throttle Cable Support Bracket                 | 1          |
| 6              | 2-00-00233         | Screw, 3/8-16 x 1.000 HHC                      | 1          |
| 7              | 8-33-02145         | Hose, Fuel Line (Extractor to Filter)          | 1          |
| 8              | 2-95-04388         | Hose Clamp, .625                               | 8          |
| 9              | 8-87-02101         | Fuel Line                                      | 2          |
| 10             | 8-33-02172         | Hose, Ful Line                                 | 1          |
| 11             | 2-00-00235         | Screw, 3/8-16 x 1.750 HHC                      | 1          |
| 12             | 7-33-02241         | Hose, (Fuel Return)                            | 1          |
| 13             | 2-00-04345         | Ty-wrap,                                       | 3          |
| 14             | 2-00-03878         | Grommet, 1.125 x .625 x .437 x .187            | 1          |
| 15             | 2-00-04618         | Hose Fitting Barbed, Female 45° Swivel 7/16-20 | 1          |
| 16             | 8-56-05021         | Fitting, Tank                                  | 1          |
| 17             | 7-87-02160         | Fuel Line (Steel Tube)                         | 1          |
| 18             | 8-08-07050         | Fuel Line Bumper                               | 2          |
| 19             | 8-08-00710         | Fuel Filter Bracket                            | 1          |
| 20             | 8-33-02257         | Fuel Line (Pump to Filter)                     | 1          |
| 21             | 7-08-00584         | Water Extractor Mount Bracket                  | 1          |
| 22             | 2-00-00209         | Screw, 3/8-16 x 1.250 HHC                      | 2          |
| 23             | 2-00-00234         | Screw, 3/8-16 x 1.500 HHC                      | 3          |

P5125/9510

# FUEL AND WATER EXTRACTOR (DIESEL) - EXPLODED VIEW

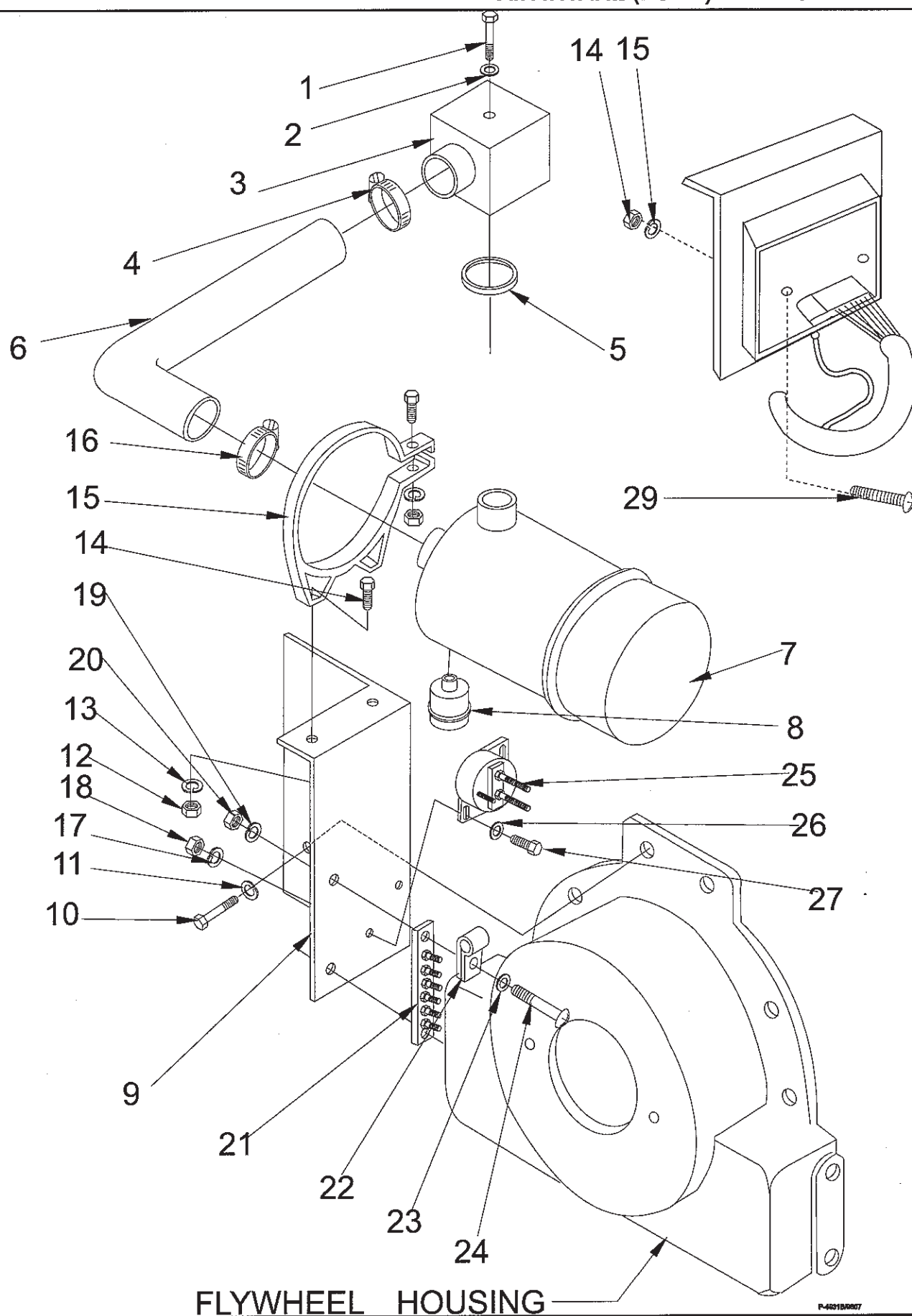


## AIR INTAKE (FORD) - PARTS LIST

| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>DESCRIPTION</u>              | <u>QTY</u> |
|----------------|--------------------|---------------------------------|------------|
| 1              | 2-00-01769         | Screw, 1/4-20 x 1.75 HHC        | 1          |
| 2              | 2-00-04590         | Washer, 1/4 Sealing             | 1          |
| 3              | 7-25-02076         | Adapter, Carburetor             | 1          |
| 4              | 2-00-02217         | Clamp                           | 2          |
| 5              | 7-33-02207         | Hose - Air Cleaner              | 1          |
| 6              | 8-24-04093         | Bracket, Air Cleaner            | 1          |
| 7              | 8-24-04100         | Air Cleaner Assembly            | 1          |
| 8              | 2-00-00208         | Screw, 5/16-18 x .75 HHC        | 2          |
| 9              | 8-24-04101         | Meter, Engine Cleaner           | 1          |
| 10             | 2-00-00530         | Lockwasher, 5/16 H. S. Med.     | 3          |
| 11             | 2-00-00585         | Nut, Hex. 5/16-18 .500 x .265   | 2          |
| 12             | 2-00-00594         | Nut, Hex. 1/4-20 x .437 x .218  | 3          |
| 13             | 2-00-00518         | Lockwasher, 1/4 H. S. Med.      | 10         |
| 14             | 2-00-00605         | Nut, Hex. MS #10-24 .375 x .125 | 4          |
| 15             | 2-00-00519         | Lockwasher, #10 H. S. Med.      | 4          |
| 16             | 2-00-00505         | Lockwasher, 3/8 Int.            | 12         |
| 17             | 2-00-05005         | Screw, M10 x 1.5 - 30mm HHC     | 4          |
| 18             | 8-21-04019         | Edging                          | 1          |
| 19             | 7-21-04028         | Edging                          | 2          |
| 20             | 2-00-03702         | Flatwasher, .625 x .281 x .063  | 9          |
| 21             | 2-00-00221         | Screw, 1/4-20 x .75 HHC         | 4          |
| 22             | 2-00-04210         | Clamp                           | 1          |
| 23             | 2-00-04345         | Tyrap                           | 10         |
| 24             | 8-06-05006         | Strip, Terminal                 | 1          |
| 25             | 2-00-00426         | Flatwasher, .50 x .22 x .06     | 4          |
| 26             | 2-00-00056         | Screw, #10-24 x .75 RHM         | 2          |
| 27             | 7-33-05089         | Housing, Flywheel               | 1          |

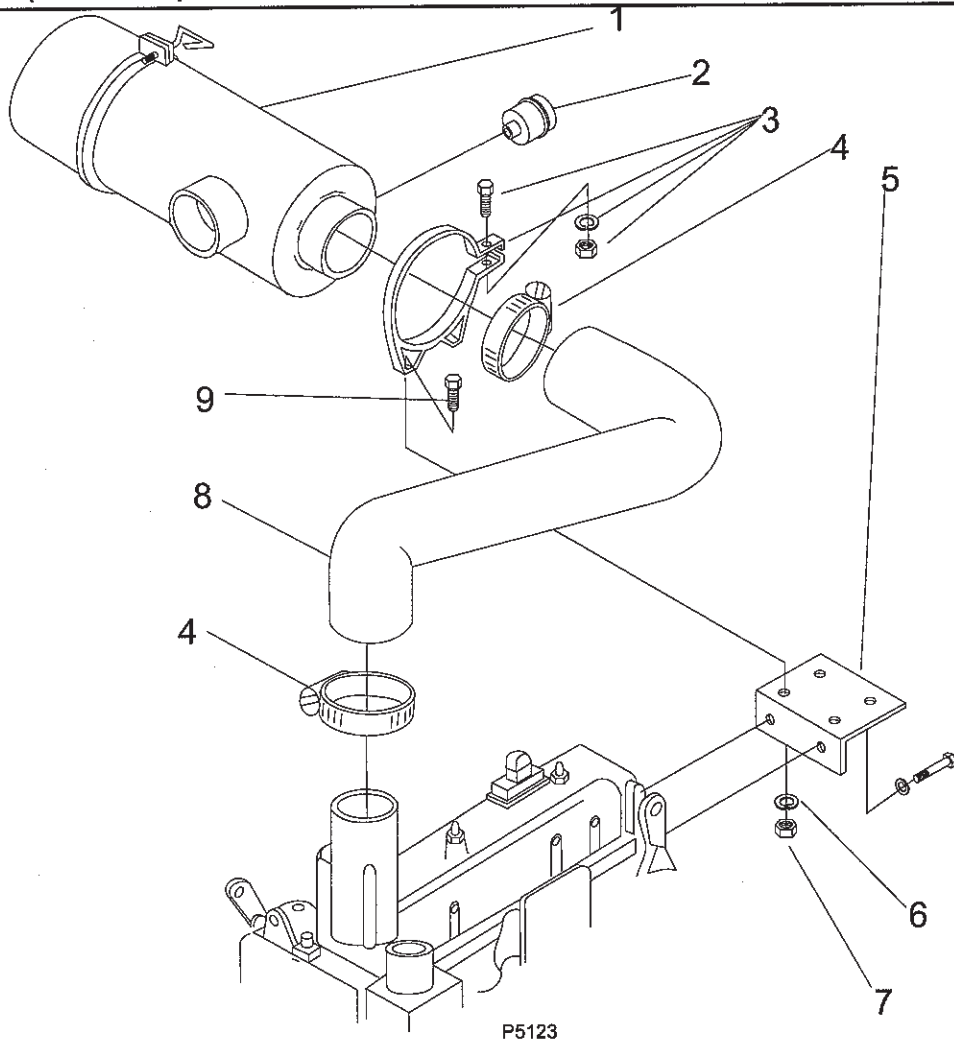
P4931A/9511

# AIR INTAKE (FORD) - EXPLODED VIEW



FLYWHEEL HOUSING

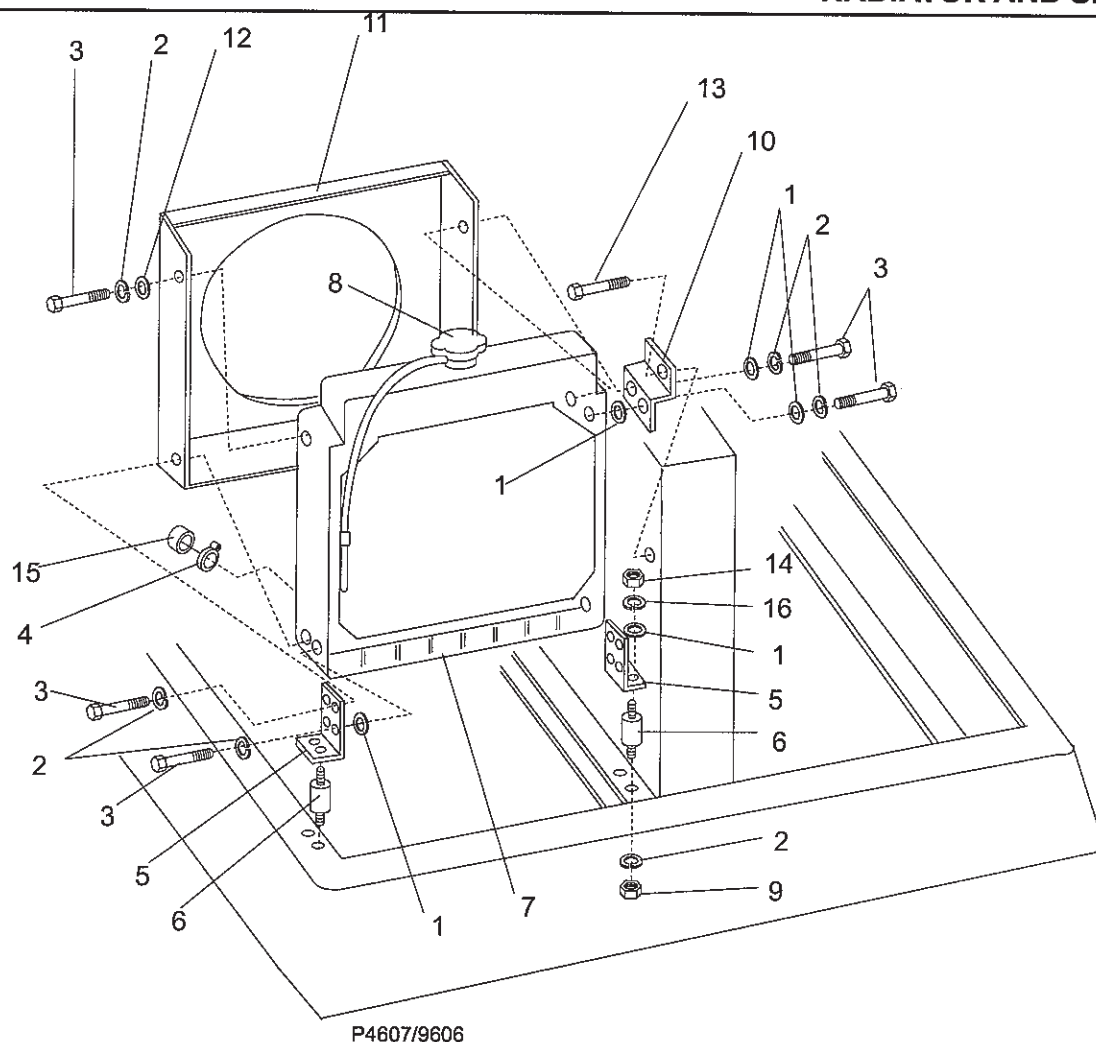
## AIR INTAKE (PERKINS)



| KEY NO. | PART NUMBER | DESCRIPTION                         | QTY |
|---------|-------------|-------------------------------------|-----|
| 1       | 8-24-04100  | Air Cleaner Assembly                | 1   |
| 2       | 8-24-04136  | Filter Service Indicator            | 1   |
| 3       | 8-24-04093  | Air Cleaner Mount Bracket           | 2   |
| 4       | 2-00-02215  | Hose Clamp, .875 - 2.750            | 1   |
| 5       | 7-08-00582  | Air Cleaner Mounting Bracket        | 1   |
| 6       | 2-00-00518  | Lock Washer, Helical Spring 1/4 Med | 4   |
| 7       | 2-00-00594  | Nut, Hex 1/4 - 20 x .437 x .21      | 4   |
| 8       | 7-33-02236  | Hose, Air Intake                    | 1   |
| 9       | 2-00-00221  | Screw, 1/4 - 20 x .750 HHC          | 6   |

P5123

## RADIATOR AND SHROUD

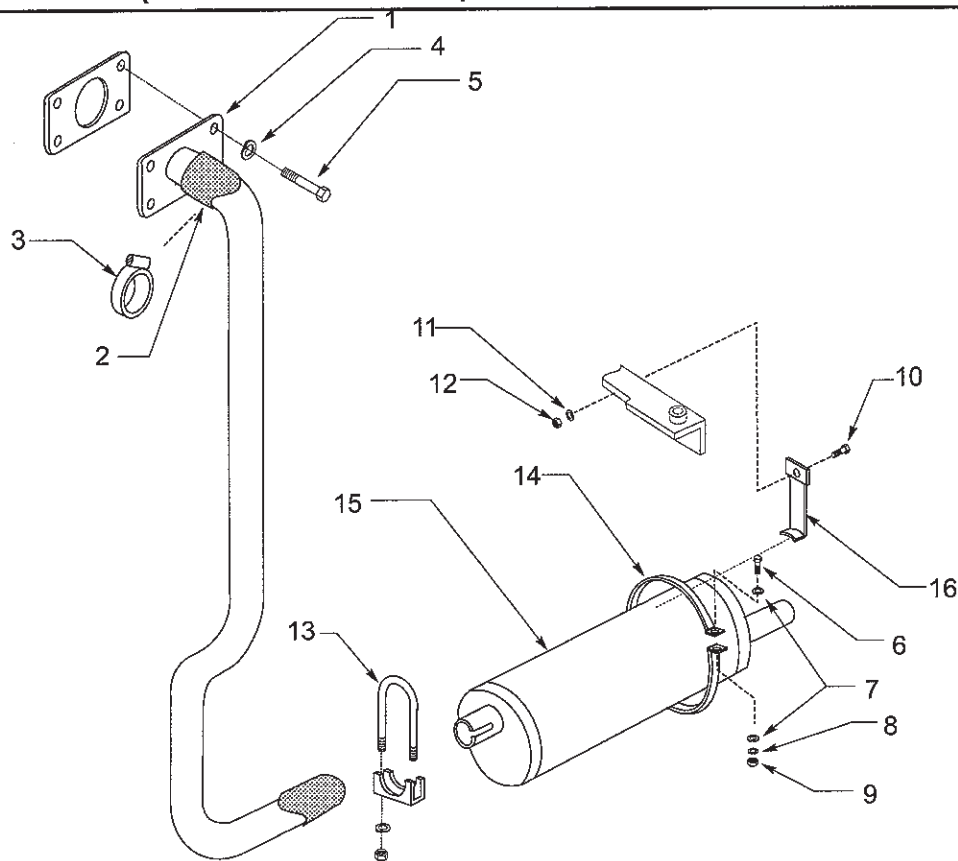


P4607/9606

| KEY NO. | PART NUMBER | DESCRIPTION                         | QTY  |
|---------|-------------|-------------------------------------|------|
| 1       | 2-00-03702  | Flat Washer, .625 x .281 x .062     | 7    |
| 2       | 2-00-00518  | Lock Washer, Helical Spring 1/4 Med | 16   |
| 3       | 2-00-00220  | Screw, 1/4 - 20 x .625 HHC          | 7    |
| 4       | 2-00-03404  | Hose Clamp, 1.062 - 2.000           | 1    |
| 5       | 7-08-00482  | Radiator Mounting Bracket           | 2    |
| 6       | 8-50-05053  | Pad, Radiator Mount                 | 4    |
| 7       | 8-62-01011  | Radiator                            | 1    |
| 8       | 8-11-00045  | Radiator Cap                        | 1    |
| 9       | 2-00-00501  | Lock Washer, 1/4 Int.               | 4    |
| 10      | 7-08-00483  | Radiator Mounting Bracket           | 1    |
| 11      | 7-72-00007  | Fan Shroud (Gas Only)               | 1    |
| 11      | 7-72-00008  | Fan Shroud (Diesel Only)            | 1    |
| 12      | 2-00-01676  | Flat Washer, 1.062 x .265 x .062    | 1    |
| 13      | 2-00-00209  | Screw, 3/8 - 16 x 1.250 HHC         | Ref. |
| 14      | 2-00-00589  | Nut, Hex Jam 1/4-20 x .437 x .156   | 4    |
| 15      | 2-00-04913  | Hose Plug                           | 1    |

P4607

## EXHAUST SYSTEM (GAS AND LP - FORD)

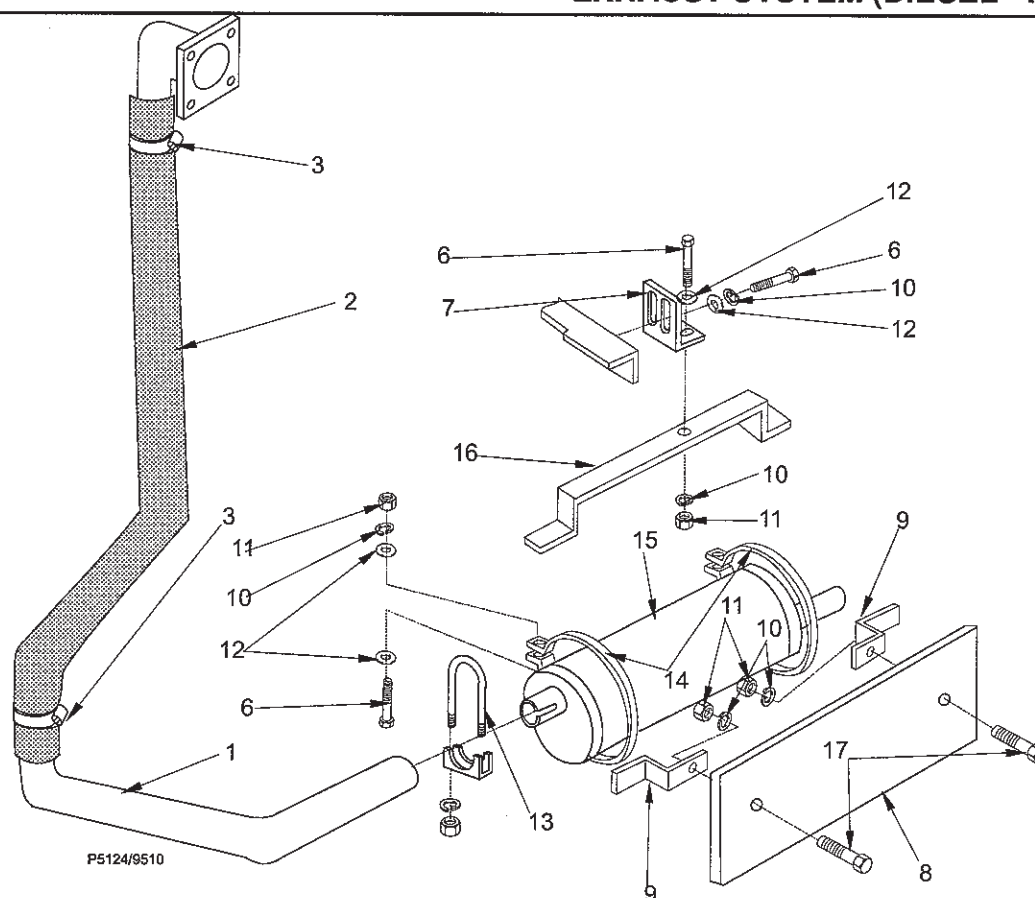


P3602/9511

| KEY NO. | PART NUMBER        | DESCRIPTION                          | QTY |
|---------|--------------------|--------------------------------------|-----|
| 1       | 8-56-04051         | Exhaust Pipe                         | 1   |
| 2       | 7-34-09016         | Insulating Sleeve                    | 1   |
| 3       | 2-00-02215         | Hose Clamp, .875 - 2.750             | 1   |
| 4       | 2-00-00505         | Lock Washer, Helical Spring 3/8 Int. | 4   |
| 5       | Supplied w/ Engine | Screw, M10 x 1.5 25mm MHHC           | 4   |
| 6       | 2-00-02587         | Screw, 1/4 - 20 x 1.250 HHC          | 5   |
| 7       | 2-00-03702         | Flat Washer, 5/8                     | 2   |
| 8       | 2-00-00518         | Lock Washer, Helical Spring 1/4 Med  | 7   |
| 9       | 2-00-00594         | Nut, Hex 1/4 - 20 x .437 x .21       | 3   |
| 10      | 2-00-00233         | Screw, 3/8-16 x 1.000                | 1   |
| 11      | 2-00-02310         | Lock Washer, 3/8                     | 1   |
| 12      | 2-00-02360         | Nut, 3/8-16                          | 1   |
| 13      | 2-00-04040         | Exhaust Clamp                        | 1   |
| 14      | 8-79-00071         | Muffler Strap                        | 2   |
| 15      | 7-49-00031         | Muffler                              | 1   |
| 16      | 7-31-07017         | Mufler Clamp                         | 1   |

P3602/9511

## EXHAUST SYSTEM (DIESEL - PERKINS)



| KEY NO. | PART NUMBER | DESCRIPTION                         | QTY |
|---------|-------------|-------------------------------------|-----|
| 1       | 7-56-04046  | Exhaust Pipe                        | 1   |
| 2       | 7-34-09015  | Insulating Sleeve                   | 1   |
| 3       | 2-00-03404  | Hose Clamp                          | 2   |
| 4       |             |                                     |     |
| 5       |             |                                     |     |
| 6       | 2-00-00221  | Screw, 1/4 - 20 x .750 HHC          | 6   |
| 7       | 7-31-07020  | Muffler Hanger                      | 1   |
| 8       | 7-30-05070  | Guard                               | 1   |
| 9       | 7-81-00165  | Muffler Guard Support               | 2   |
| 10      | 2-00-00518  | Lock Washer, Helical Spring 1/4 Med | 6   |
| 11      | 2-00-00594  | Nut, Hex 1/4 - 20 x .437 x .21      | 4   |
| 12      | 2-00-00407  | Flat Washer, .562 x .265 x .062     | 2   |
| 13      | 2-00-04040  | Exhaust Clamp                       | 1   |
| 14      | 7-79-00073  | Muffler Strap                       | 2   |
| 15      | 7-49-00031  | Muffler                             | 1   |
| 15      | 0780-146    | Purifier Muffler Option             | 1   |
| 16      | 7-08-00667  | Muffler Bracket,                    | 1   |
| 17      | 2-00-00220  | Screw, 1/4-20 x .63 HHC             | 2   |

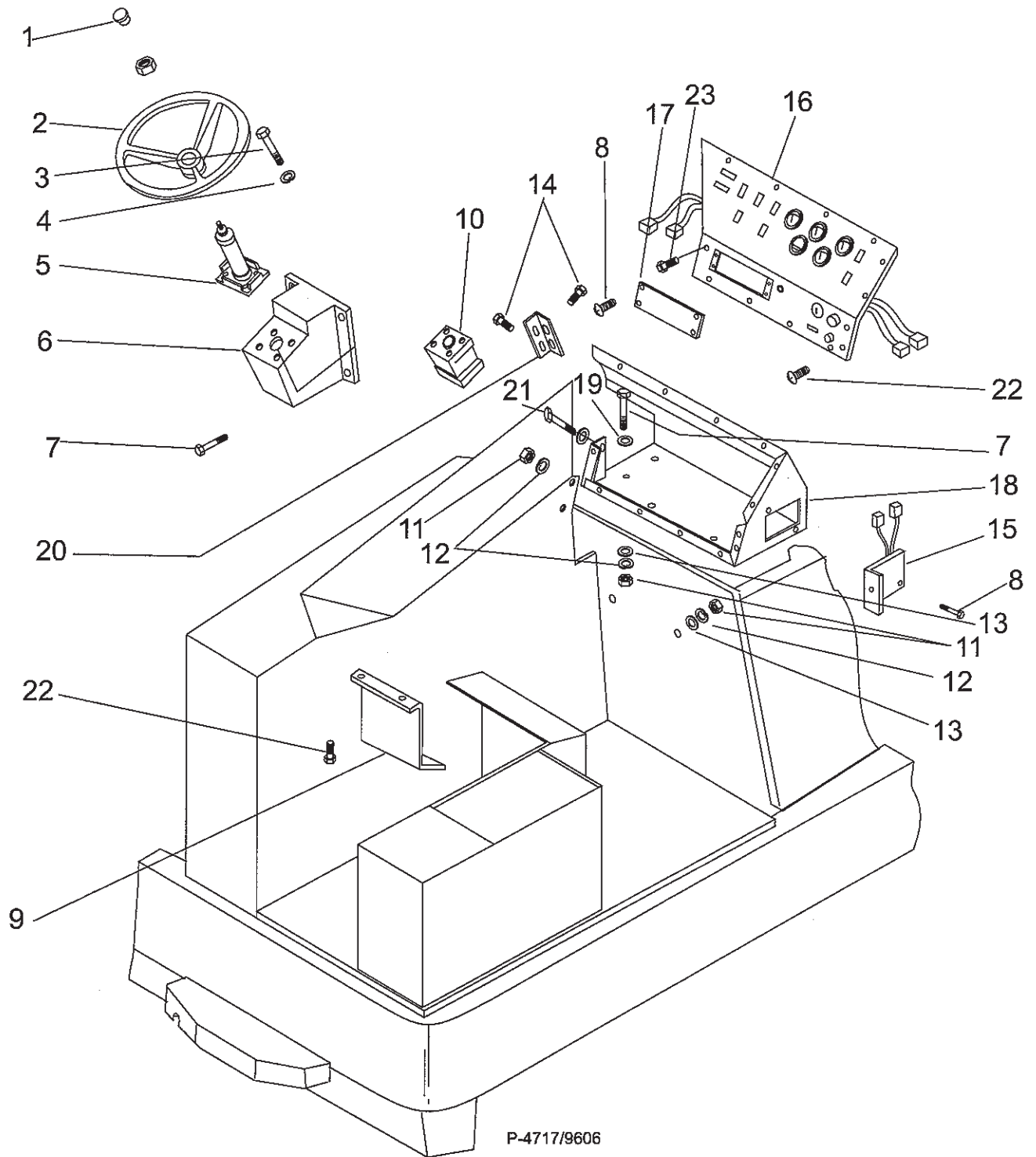
P5124/9510

## STEERING AND INSTRUMENT PANEL - PARTS LIST

| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>DESCRIPTION</u>                  | <u>QTY</u> |
|----------------|--------------------|-------------------------------------|------------|
| 1              | 8-11-00022         | Steering Wheel Cap                  | 1          |
| 2              | 7-89-08041         | Steering Wheel                      | 1          |
| 3              | 2-00-00232         | Screw, 3/8 - 16 x .750 HHC          | 4          |
| 4              | 2-00-02310         | Lock Washer, Helical Spring 3/8 Med | 4          |
| 5              | 7-70-05135         | Steering Column Assembly            | 1          |
| 6              | 7-33-05099         | Steering Housing                    | 1          |
| 7              | 2-00-04685         | Screw, 1/4-20 x .750 SS             | 8          |
| 8              | 2-00-03059         | Screw, #10 - 24 x .375 THM          | 6          |
| 9              | 7-16-07283         | Panel Cover                         | 1          |
| 10             | 7-60-05010         | Steering Control Unit Pump          | 1          |
|                | 0880-534           | Seal Kit                            | 1          |
| 11             | 2-00-04688         | Nut, Hex 1/4 - 20 SS                | 10         |
| 12             | 2-00-04687         | Lock Washer, 1/4 SS                 | 10         |
| 13             | 2-00-04590         | Sealing Washer, .63 x .250          | 8          |
| 14             | 2-00-04876         | Screw, 1/4 - 20 x .500 BHS          | 4          |
| 15             | 7-52-00081         | Circuit Breaker Panel               | 1          |
| 16             | 7-52-00080         | Instrument Panel                    | 1          |
| 17             | 7-52-00083         | Blank Panel                         | 1          |
| 18             | 7-33-05096         | Console Housing                     | 1          |
| 19             | 2-00-03702         | Flat Washer                         | 4          |
| 20             | 7-08-00510         | Console Support Bracket             | 1          |
| 21             | 2-00-00407         | Flat Washer, .562 x .265 x .062     | 2          |
| 22             | 2-00-03466         | Screw, #10-16 x .500 T/F RH         | 12         |

P4717

# STEERING AND INSTRUMENT PANEL - EXPLODED VIEW



P-4717/9606

## INSTRUMENT PANEL - PARTS LIST

| KEY NO. | PART NUMBER | DESCRIPTION                         | QTY |
|---------|-------------|-------------------------------------|-----|
| 1       | 7-82-00006  | Key Switch (K-SW)                   | 1   |
| 2       | 8-82-00024  | Horn, Push Button (H-PB)            | 1   |
| 3       | 8-64-00008  | Circuit Breaker (15 Amp)            | 8   |
| 4       | 0795-055    | Harness, Instrument Panel (IP-WM)   | 1   |
| 5       | 8-48-00016  | Voltmeter (VM)                      | 1   |
| 6       | 8-48-05027  | Gauge, Oil Pressure (OPG)           | 1   |
| 7       | 8-48-05023  | Gauge, Hour Meter (HM)              | 1   |
| 8       | 8-48-05028  | Gauge, Water Temp. (WTG)            | 1   |
| 9       | 7-40-05028  | Light, Rec High - Solution Low      | 2   |
| 10      | 8-82-00044  | Switch, Main Broom & Side Broom     | 2   |
| 11      | 7-82-00019  | Switch, SPST On/Off (L)             | 2   |
| 12      | 7-82-00020  | Switch, SPDT On/On                  | 2   |
| 13      |             |                                     |     |
| 14      | 2-00-03062  | Screw, #10-24 X .625 THM            | 1   |
| 15      | 2-00-00519  | Washer, #10 Lock Med. Hel. Spr.     | 3   |
| 16      | 2-00-00605  | Nut, #10-24 Hex                     | 5   |
| 17      | 8-90-07357  | Wire, WTG To FG (Gas & Diesel Only) | 2   |
| 18      | 8-48-05032  | Gauge, Fuel (Gas & Diesel Only)     | 1   |
| 19      |             |                                     |     |
| 20      | 8-64-00012  | Relay, Shaker Motor                 | 1   |
| 21      | 2-00-03063  | Screw, #10-24 X .750 THM            | 1   |
| 22      | 2-00-00466  | Washer, Flat 5/6 X 13/64 X 1/32     | 1   |
| 23      | 8-82-00045  | Switch, Shaker Motor (SM-SW)        | 1   |
| 24      | 2-00-04757  | Hole Plug                           | 2   |
| 25      | 2-00-04942  | Hole Plug (Light SW)                | 1   |
| 26      | 2-00-04432  | Hole Plug (LP Only)                 | 1   |
| 27      |             |                                     |     |
| 28      | 0795-056    | Harness, Circuit Breaker            | 1   |
| 29      | 7-52-00080  | Weldment, Instrument Panel          | 1   |
| 30      | 7-52-00081  | Panel, Circuit Breaker Mount        | 1   |
| 31      |             |                                     |     |
| 32      | 2-00-04345  | Tye Rap                             | 6   |
| 33      |             |                                     |     |
| 34      |             |                                     |     |
| 35      |             |                                     |     |
| 36      |             |                                     |     |
| 37      |             |                                     |     |
| 37A     | 2-00-05060  | Screw, 6-32 X 1.250 RHM             | 2   |
| 38      |             |                                     |     |
| 38A     | 2-00-00455  | Washer, #6 Flat                     | 2   |
| 39      |             |                                     |     |
| 39A     | 2-00-01499  | Washer, #6 Lock                     | 2   |
| 40      |             |                                     |     |
| 40A     | 2-00-00624  | Nut, 6-32 Hex                       | 2   |
| 41      | 7-90-07263  | Wire, Harness #4 - K-SW (ST)        | 1   |
| 42      | 2-00-03061  | Screw, #10-24 X .500 THM            | 2   |
| 43      | 8-08-00748  | Bracket, Relay                      | 1   |
| 44      | 8-64-05011  | Relay (20 Sec. Time Delay)          | 1   |
| 45      | 2-0-04479   | Connector, 3-Way                    | 3   |
| 46      | 8-90-07422  | Wire TD-2 #1 To Wire 11a            | 1   |
| 47      | 7-90-07324  | Wire TD-2 #2 To Gnd. Stud           | 1   |
| 48      | 7-90-07325  | Wire TD-2 #3 To Wire #10            | 1   |
| 49      | 7-90-07326  | Wire TD-2 #6 To Hr. Meter           | 1   |
| 50      | 2-00-02330  | Nut, #10-232 Hex                    | 4   |
| 51      | 2-00-00512  | Washer, #10 Int.                    | 5   |

P3650/9510

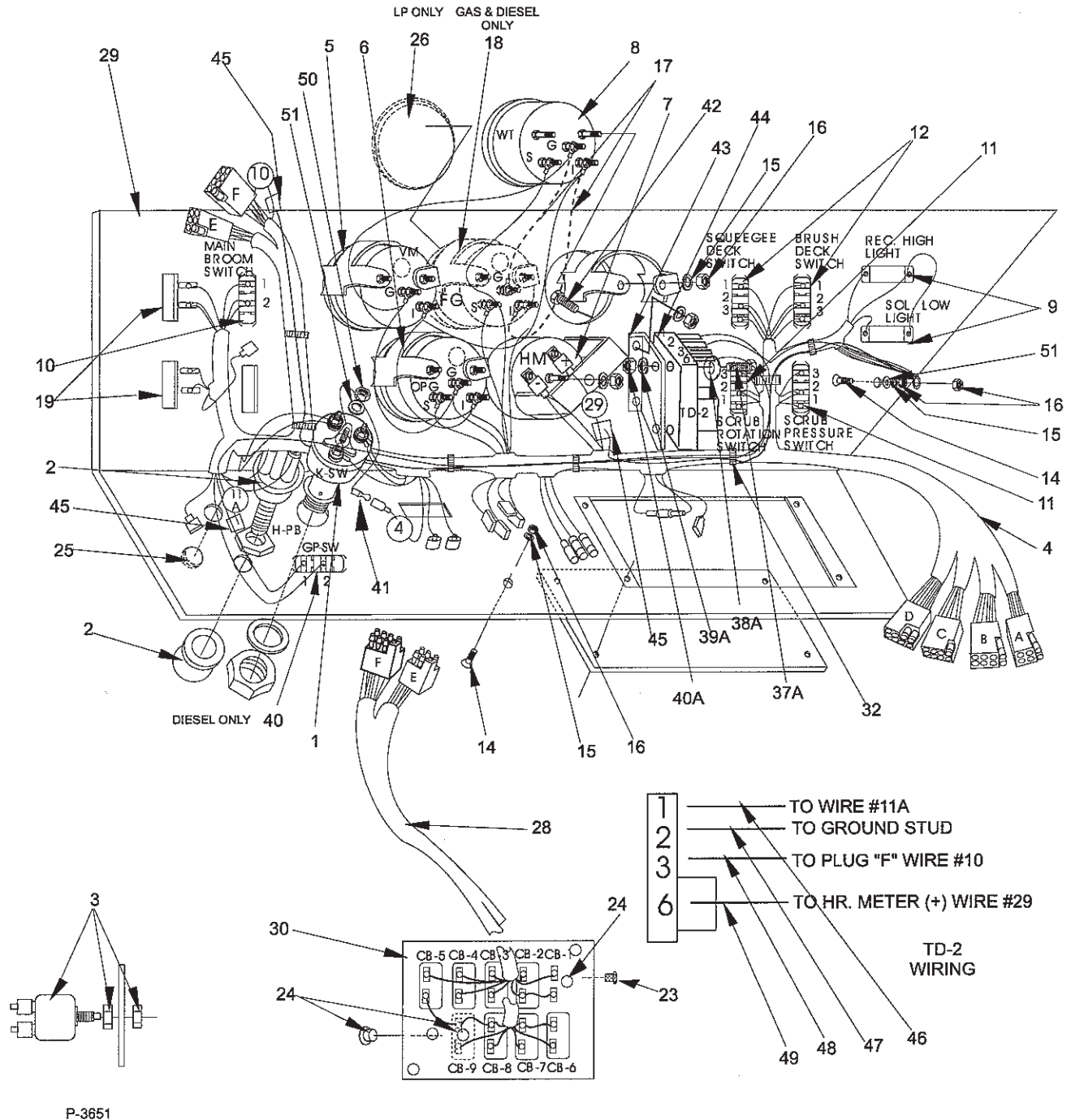


## INSTRUMENT PANEL (MANUAL DUMP) - PARTS LIST

| KEY NO. | PART NUMBER | DESCRIPTION                         | QTY |
|---------|-------------|-------------------------------------|-----|
| 1       | 7-82-00006  | Key Switch (K-SW)                   | 1   |
| 2       | 8-82-00024  | Horn, Push Button (H-PB)            | 7   |
| 3       | 8-64-00008  | Circuit Breaker (15 Amp)            | 8   |
| 4       | 0795-055    | Harness, Instrument Panel (IP-WM)   | 1   |
| 5       | 8-48-00016  | Voltmeter (VM)                      | 1   |
| 6       | 8-48-05027  | Gauge, Oil Pressure (OPG)           | 1   |
| 7       | 8-48-05023  | Gauge, Hour Meter (HM)              | 1   |
| 8       | 8-48-05028  | Gauge, Water Temp. (WTG)            | 1   |
| 9       | 7-40-05028  | Light, Rec High - Solution Low      | 2   |
| 10      | 8-82-00044  | Switch, Main Broom & Side Broom     | 1   |
| 11      | 7-82-00019  | Switch, SPST On/Off (L)             | 2   |
| 12      | 7-82-00020  | Switch, SPDT On/On                  | 2   |
| 13      |             |                                     |     |
| 14      | 2-00-03062  | Screw, #10-24 X .625 THM            | 2   |
| 15      | 2-00-00519  | Washer, #10 Lock Med. Hel. Spr.     | 3   |
| 16      | 2-00-00605  | Nut, #10-24 Hex                     | 5   |
| 17      | 8-90-07357  | Wire, WTG To FG (Gas & Diesel Only) | 2   |
| 18      | 8-48-05032  | Gauge, Fuel (Gas & Diesel Only)     | 1   |
| 19      | 2-00-04896  | Plug                                | 2   |
| 20      | 8-64-00012  | Relay, Shaker Motor                 | 1   |
| 21      |             |                                     |     |
| 22      |             |                                     |     |
| 23      | 2-00-04604  | Hole Plug                           | 1   |
| 24      | 2-00-04757  | Hole Plug                           | 3   |
| 25      | 2-00-04942  | Hole Plug (Light SW)                | 1   |
| 26      | 2-00-04432  | Hole Plug (LP Only)                 | 1   |
| 27      |             |                                     |     |
| 28      | 0795-056    | Harness, Circuit Breaker            | 1   |
| 29      | 7-52-00080  | Weldment, Instrument Panel          | 1   |
| 30      | 7-52-00081  | Panel, Circuit Breaker Mount        | 1   |
| 31      |             |                                     |     |
| 32      | 2-00-04345  | Tye Rap                             | 6   |
| 33      |             |                                     |     |
| 34      |             |                                     |     |
| 35      |             |                                     |     |
| 36      |             |                                     |     |
| 37      |             |                                     |     |
| 37A     | 2-00-05060  | Screw, 6-32 X 1.250 RHM             | 2   |
| 38      |             |                                     |     |
| 38A     | 2-00-00455  | Washer, #6 Flat                     | 2   |
| 39      |             |                                     |     |
| 39A     | 2-00-01499  | Washer, #6 Lock                     | 2   |
| 40      |             |                                     |     |
| 40A     | 2-00-00624  | Nut, 6-32 Hex                       | 2   |
| 41      | 7-90-07263  | Wire, Harness #4 - K-SW (ST)        | 1   |
| 42      | 2-00-03061  | Screw, #10-24 X .500 THM            | 2   |
| 43      | 8-08-00748  | Bracket, Relay                      | 1   |
| 44      | 8-64-05011  | Relay (20 Sec. Time Delay)          | 1   |
| 45      | 2-0-04479   | Connector, 3-Way                    | 3   |
| 46      | 8-90-07422  | Wire TD-2 #1 To Wire 11A            | 1   |
| 47      | 7-90-07324  | Wire TD-2 #2 To Gnd. Stud           | 1   |
| 48      | 7-90-07325  | Wire TD-2 #3 To Wire #10            | 1   |
| 49      | 7-90-07326  | Wire TD-2 #6 To Hr. Meter           | 1   |
| 50      | 2-00-02330  | Nut, #10-232 Hex                    | 4   |
| 51      | 2-00-00512  | Washer, #10 Int.                    | 5   |

P3651/9510

# INSTRUMENT PANEL (MANUAL DUMP) - EXPLODED VIEW

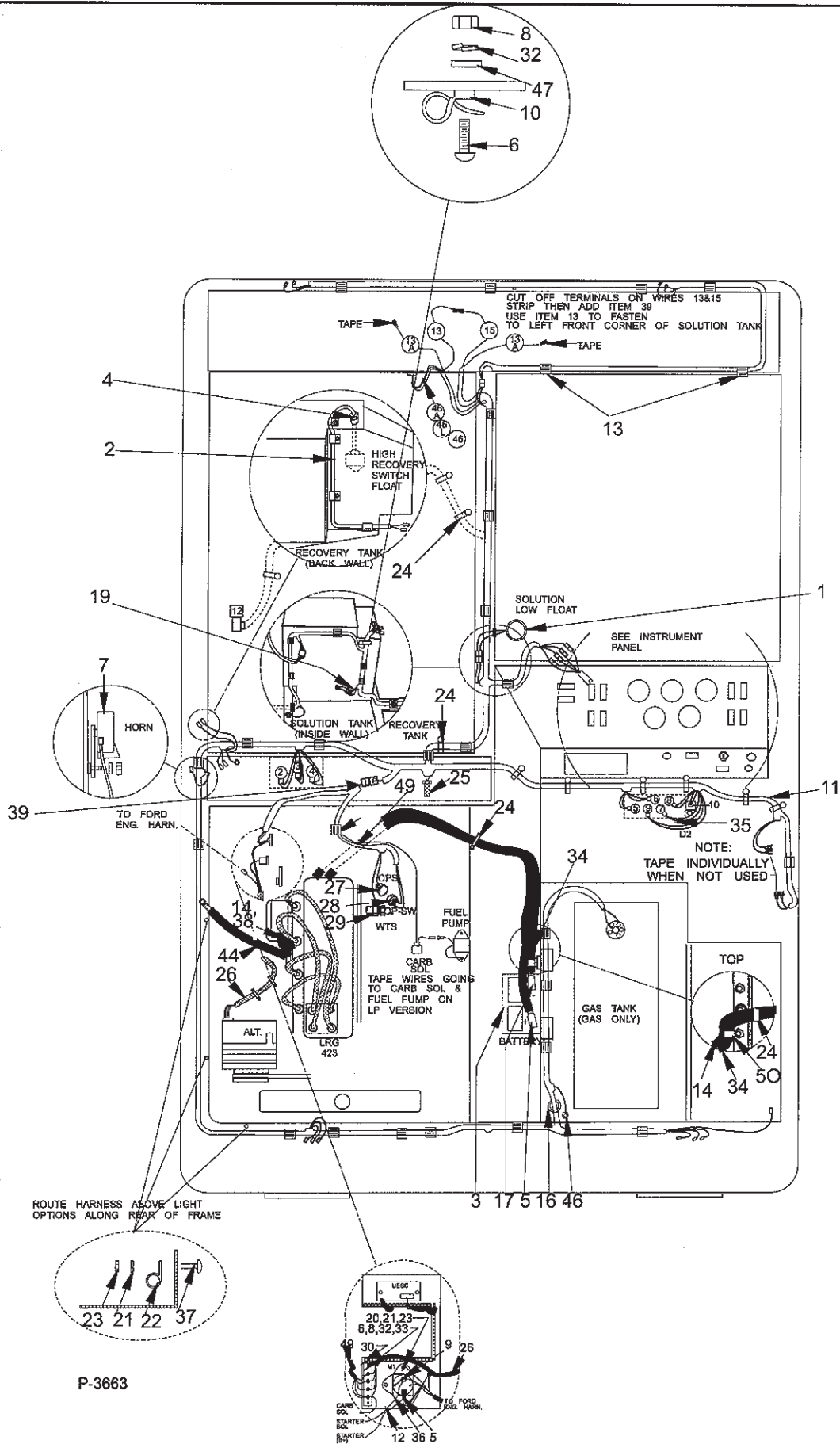


## WIRING - FORD 425 (MANUAL DUMP) - PARTS LIST

| KEY NO. | PART NUMBER | DESCRIPTION                       | QTY. |
|---------|-------------|-----------------------------------|------|
| 1       | 7-82-00017  | Float, Switch (Solution Low)      | Ref. |
| 2       | 7-82-00021  | Float, Switch (Rec. High)         | Ref. |
| 3       | 0875-008    | Battery                           | Ref. |
| 4       | 8-09-01083  | Bushing, Connector (Liquid Tight) | 1    |
| 5       | 2-00-05171  | Boot, Protective (Red)            | 2    |
| 6       | 2-00-03063  | Screw, #10-24 X 3/4 THM           | 4    |
| 7       | 8-32-09013  | Horn                              | Ref. |
| 8       | 2-00-00605  | Nut, #10-24                       | 4    |
| 9       | 2-00-04203  | Boot, Protective (Black)          | 1    |
| 10      | 2-00-04937  | Tie, Cable                        | 2    |
| 11      | 0795-082    | Harness, Machine                  | 1    |
| 12      | 8-90-07443  | Wire, M1 Sol. To Starter (B+)     | 1    |
| 13      | 7-13-07096  | Clamp, Adjustable                 | 38   |
| 14      | 8-90-07167  | Cable, Battery (Positive)         | 1    |
| 15      |             |                                   |      |
| 16      | 8-09-01081  | Bushing, Snap                     | 1    |
| 17      | 2-00-05173  | Boot, Protective (Black)          | 1    |
| 18      |             |                                   |      |
| 19      | 2-00-04551  | Terminal, .156 Bullet             | 2    |
| 20      | 2-00-00221  | Screw, 1/4-20 X 3/4 HHC           | 4    |
| 21      | 2-00-00518  | Washer, 1/4 Lock                  | 7    |
| 22      | 2-00-04602  | Clamp                             | 3    |
| 23      | 2-00-00594  | Nut, 1/4-20 Hex                   | 7    |
| 24      | 2-00-04345  | Tye-Rap                           | 35   |
| 25      | 8-82-00058  | Switch, Back-Up                   | Ref. |
| 26      | 0895-122    | Harness, 425 LRG Engine           | 1    |
| 27      | 8-69-00005  | Sender, Oil Pressure              | Ref. |
| 28      | 8-82-00046  | Switch, Oil Pressure              | Ref. |
| 29      | 8-69-00013  | Sender, Water Temp.               | Ref. |
| 30      | 2-00-04937  | Tie, Cable                        | 1    |
| 31      | 8-06-05006  | Block, Terminal                   | Ref. |
| 32      | 2-00-00519  | Washer, #10 Lock                  | 4    |
| 33      | 2-00-00466  | Washer, #10                       | 2    |
| 34      | 7-90-07262  | Cable, Battery (Negative)         | 1    |
| 35      | 0875-087    | Diode Assembly                    | 1    |
| 36      | 8-90-07442  | Wire, Start 11 Sol To Start Sol.  | 1    |
| 37      | 2-00-00183  | Screw, 1/4-20 X .750 THM          | 3    |
| 38      | 2-00-04952  | Boot, Protective (Red)            | 1    |
| 39      | 2-00-01128  | Butt Splice                       | 1    |
| 40      |             |                                   |      |
| 41      |             |                                   |      |
| 42      |             |                                   |      |
| 43      |             |                                   |      |
| 44      | 8-90-07328  | Cable, Ground                     | 1    |
| 45      |             |                                   |      |
| 46      | 2-00-00498  | Washer, 1/4 Ext. Lock             | 1    |
| 47      | 2-00-01974  | Washer, #10 Sealing               | 1    |
| 48      |             |                                   |      |
| 49      | 0895-099    | Harness, Engine                   | 1    |
| 50      | 2-00-04873  | Clamp                             | Ref. |

P3663

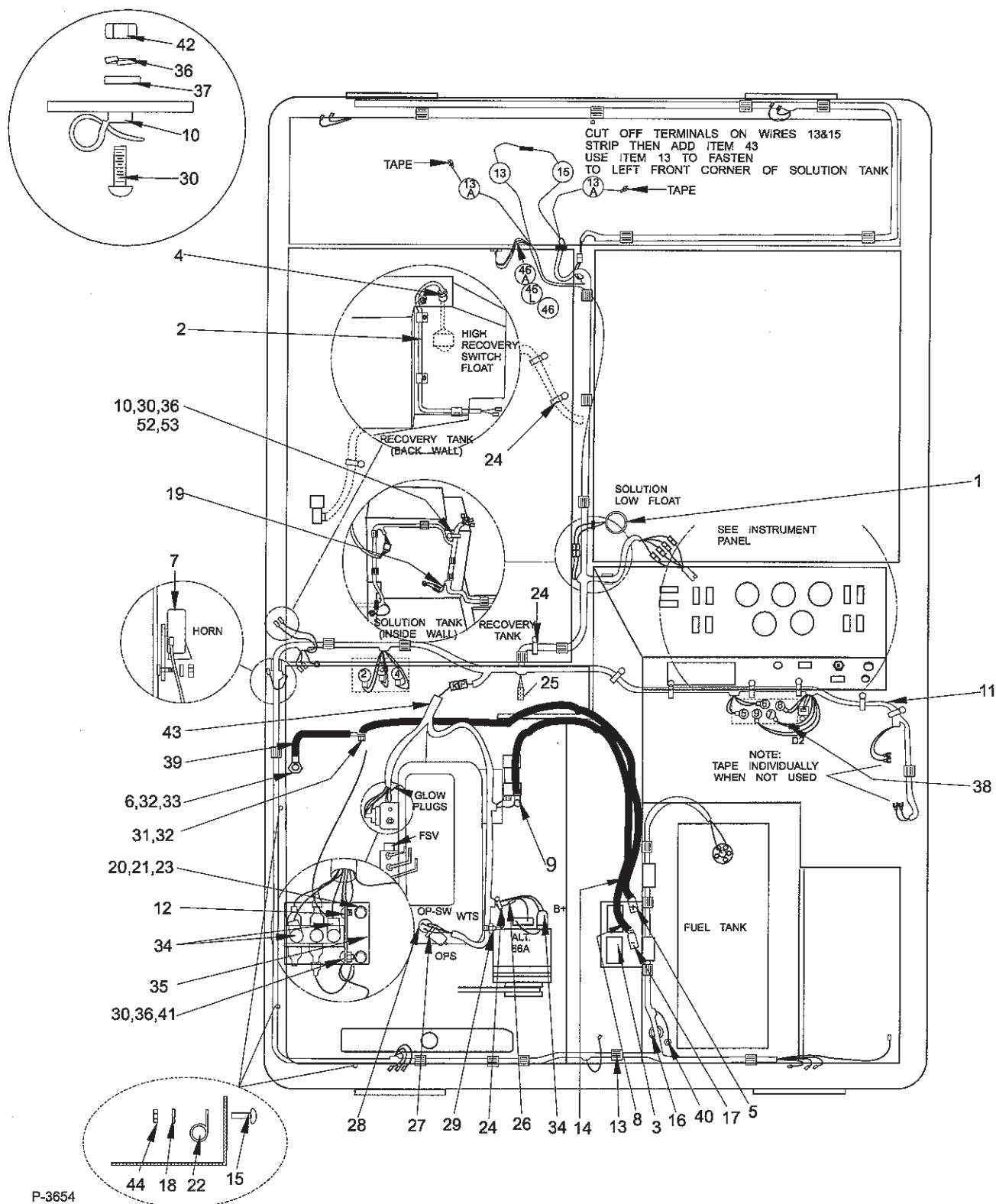
# WIRING - FORD 425 (MANUAL DUMP) - EXPLODED VIEW



## WIRING - PERKINS (MANUAL DUMP) - PARTS LIST

| KEY NO. | PART NUMBER | DESCRIPTION                       | QTY. |
|---------|-------------|-----------------------------------|------|
| 1       | 7-82-00017  | Float, Switch (Solution Low)      | Ref. |
| 2       | 7-82-00021  | Float, Switch (Rec. High)         | Ref. |
| 3       | 0875-057    | Battery                           | Ref. |
| 4       | 8-09-01083  | Bushing, Connector (Liquid Tight) | 1    |
| 5       | 2-00-05171  | Boot, Protective (Red)            | Ref. |
| 6       | 2-00-00232  | Screw, 3/8-16 x .750 HHC          | Ref. |
| 7       | 8-32-09013  | Horn                              | Ref. |
| 8       | 7-90-07262  | Cable, Battery (Negative)         | Ref. |
| 9       | 2-00-04952  | Boot, Protective (Red)            | 1    |
| 10      | 2-00-04937  | Tie, Cable                        | 1    |
| 11      | 0795-082    | Harness, Machine                  | 1    |
| 12      | 2-00-03060  | Screw, #10-24 x .250 THMS         | Ref. |
| 13      | 7-13-07096  | Clamp, Adjustable                 | 38   |
| 14      | 7-90-07280  | Cable, Battery (Positive)         | Ref. |
| 15      | 2-00-00183  | Screw, 1/4-20 Hex                 | 3    |
| 16      | 8-09-01081  | Bushing, Snap                     | 1    |
| 17      | 2-00-05173  | Boot, Protective (Black)          | Ref. |
| 18      | 2-00-00518  | Washer, Lock, 1/4 I.D. Hel. Spr.  | 3    |
| 19      | 2-00-04551  | Terminal, .156 Bullet             | 2    |
| 20      | 2-00-04363  | Screw, M8-1.250 x 20 mm           | Ref. |
| 21      | 2-00-00409  | Flat Washer, 5/16                 | Ref. |
| 22      | 2-00-04602  | Clamp, Adjustable                 | 3    |
| 23      | 2-00-03061  | Screw, #10-24 x .500 RHM          | Ref. |
| 24      | 2-00-04345  | Tye-Rap                           | 30   |
| 25      | 7-82-00008  | Switch, Back-Up                   | Ref. |
| 26      | 0895-092    | Wire Harness Assembly (D1)        | 1    |
| 27      | 8-69-00005  | Sender, Oil Pressure              | Ref. |
| 28      | 8-82-00046  | Switch, Oil Pressure              | Ref. |
| 29      | 8-69-00014  | Sender, Water Temperature         | Ref. |
| 30      | 2-00-00056  | Screw, #10-24 x .750 THM          | Ref. |
| 31      | 2-00-00233  | Screw, 3/8-16 x 1.000 HHC         | Ref. |
| 32      | 2-00-03829  | Lock Washer, 3/8 Int./Ext.        | Ref. |
| 33      | 2-00-02360  | Nut, 3/8-16 Hex                   | Ref. |
| 34      | 2-00-04203  | Boot, (Black)                     | 3    |
| 35      | 8-08-00604  | Bracket                           | Ref. |
| 36      | 2-00-00519  | Lock Washer, #10                  | 2    |
| 37      | 2-00-00460  | Flat Washer, #10                  | Ref. |
| 38      | 0875-087    | Diode Assembly (D2)               | 1    |
| 39      | 8-90-07328  | Cable, Ground                     | 1    |
| 40      | 2-00-00498  | Washer, Lock Ext.                 | 1    |
| 41      | 2-00-00605  | Nut, 10-24 Hex                    | 2    |
| 42      | 2-00-01974  | Washer, #10 Sealing               | 1    |
| 43      | 2-00-01128  | Butt Splice                       | 1    |
| 44      | 2-00-00594  | Nut, 1/4-20 Hex                   | 3    |

# WIRING - PERKINS (MANUAL DUMP) - EXPLODED VIEW

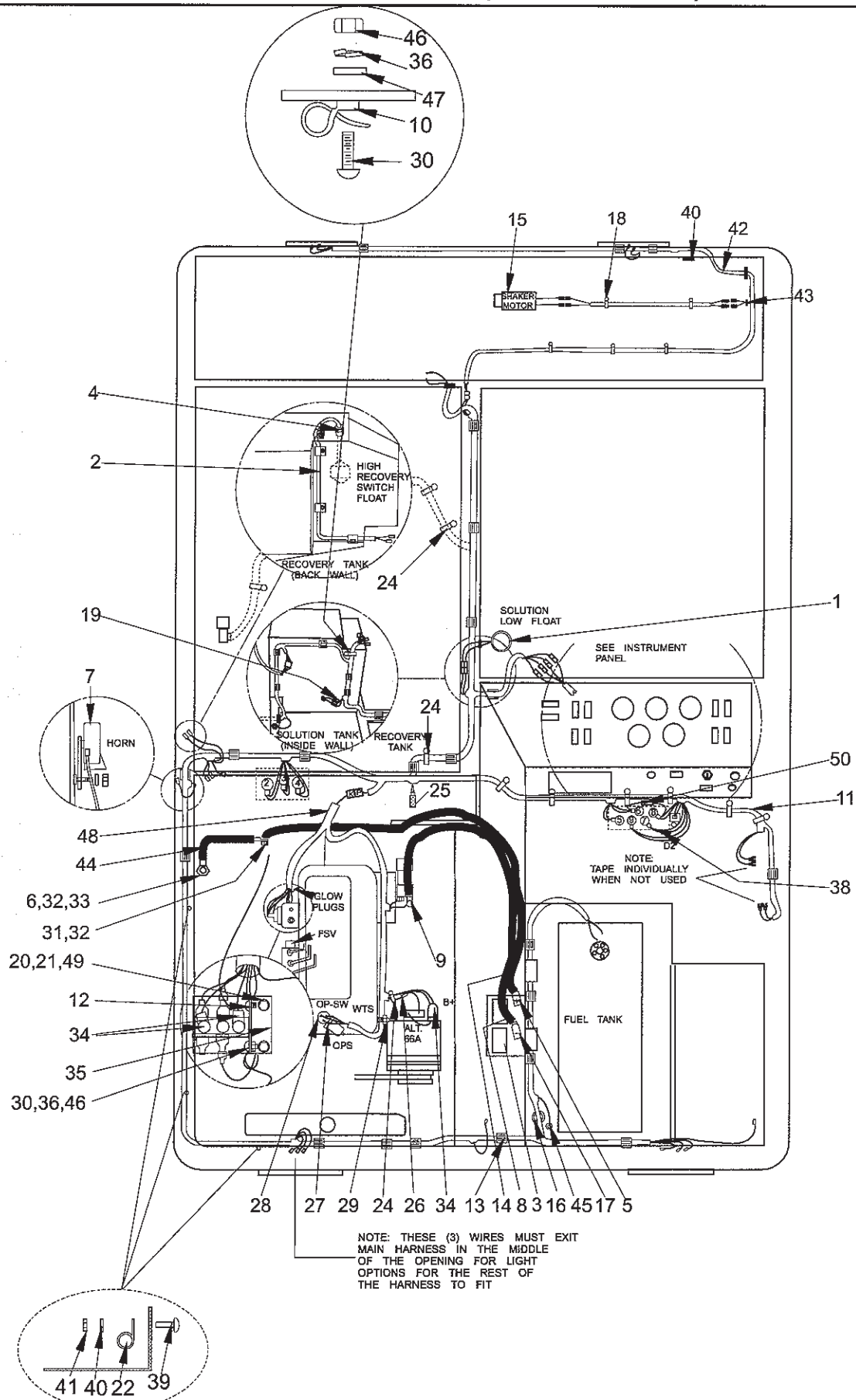


## WIRING - FORD 425 (VARIABLE DUMP) - PARTS LIST

| KEY NO. | PART NUMBER | DESCRIPTION                       | QTY  |
|---------|-------------|-----------------------------------|------|
| 1       | 7-82-00017  | Float, Switch (Solution Low)      | Ref. |
| 2       | 7-82-00021  | Float, Switch (Rec. High)         | Ref. |
| 3       | 0875-008    | Battery                           | Ref. |
| 4       | 8-09-01083  | Bushing, Connector (Liquid Tight) | 3    |
| 5       | 2-00-05171  | Boot, Protective (Red)            | 2    |
| 6       | 2-00-03063  | Screw, #10-24 X 3/4 THM           | 4    |
| 7       | 8-32-09013  | Horn                              | Ref. |
| 8       | 2-00-00605  | Nut, #10-24                       | 4    |
| 9       | 2-00-04203  | Boot, Protective (Black)          | 1    |
| 10      | 2-00-04937  | Tie, Cable                        | 2    |
| 11      | 0795-082    | Harness, Machine                  | 1    |
| 12      | 8-90-07443  | Wire, M1 Sol. To Starter (B+)     | 1    |
| 13      | 7-13-07096  | Clamp, Adjustable                 | 33   |
| 14      | 8-90-07167  | Cable, Battery (Positive)         | 1    |
| 15      | 0882-227    | Motor, Shaker                     | Ref. |
| 16      | 8-09-01081  | Bushing, Snap                     | 4    |
| 17      | 2-00-05173  | Boot, Protective (Black)          | 1    |
| 18      | 0775-162    | Wire Assy., Hopper (HO-WA)        | 1    |
| 19      | 2-00-04551  | Terminal, .156 Bullet             | 2    |
| 20      | 2-00-00221  | Screw, 1/4-20 X 3/4 HHC           | 4    |
| 21      | 2-00-00518  | Washer, 1/4 Lock                  | 7    |
| 22      | 2-00-04602  | Clamp                             | 3    |
| 23      | 2-00-00594  | Nut, 1/4-20 Hex                   | 7    |
| 24      | 2-00-04345  | Tye-Rap                           | 35   |
| 25      | 8-82-00058  | Switch, Back-Up                   | Ref. |
| 26      | 0895-122    | Harness, 423 LRG Engine           | 1    |
| 27      | 8-69-00005  | Sender, Oil Pressure              | Ref. |
| 28      | 8-82-00046  | Switch, Oil Pressure              | Ref. |
| 29      | 8-69-00013  | Sender, Water Temp.               | Ref. |
| 30      | 2-00-04937  | Tie, Cable                        | 1    |
| 31      | 8-06-05006  | Block, Terminal                   | Ref. |
| 32      | 2-00-00519  | Washer, #10 Lock                  | 4    |
| 33      | 2-00-00466  | Washer, #10                       | 2    |
| 34      | 7-90-07262  | Cable, Battery (Negative)         | 1    |
| 35      | 0875-087    | Diode Assembly                    | 1    |
| 36      | 8-90-07442  | Wire, Start 11 Sol To Start Sol.  | 1    |
| 37      | 2-00-00183  | Screw, 1/4-20 X .750 THM          | 3    |
| 38      | 2-00-04952  | Boot, Protective (Red)            | 1    |
| 39      |             |                                   |      |
| 40      |             |                                   |      |
| 41      |             |                                   |      |
| 42      |             |                                   |      |
| 43      |             |                                   |      |
| 44      | 8-90-07328  | Cable, Ground                     | 1    |
| 45      | 8-21-04015  | Edging                            | 1    |
| 46      | 2-00-00498  | Washer, 1/4 Ext. Lock             | 1    |
| 47      | 2-00-01974  | Washer, #10 Sealing               | 1    |
| 48      | 2-00-04721  | Grommet                           | 2    |
| 49      | 0895-099    | Harness, Engine                   | 1    |
| 50      | 2-00-04873  | Clamp                             | Ref. |

P3659/9510

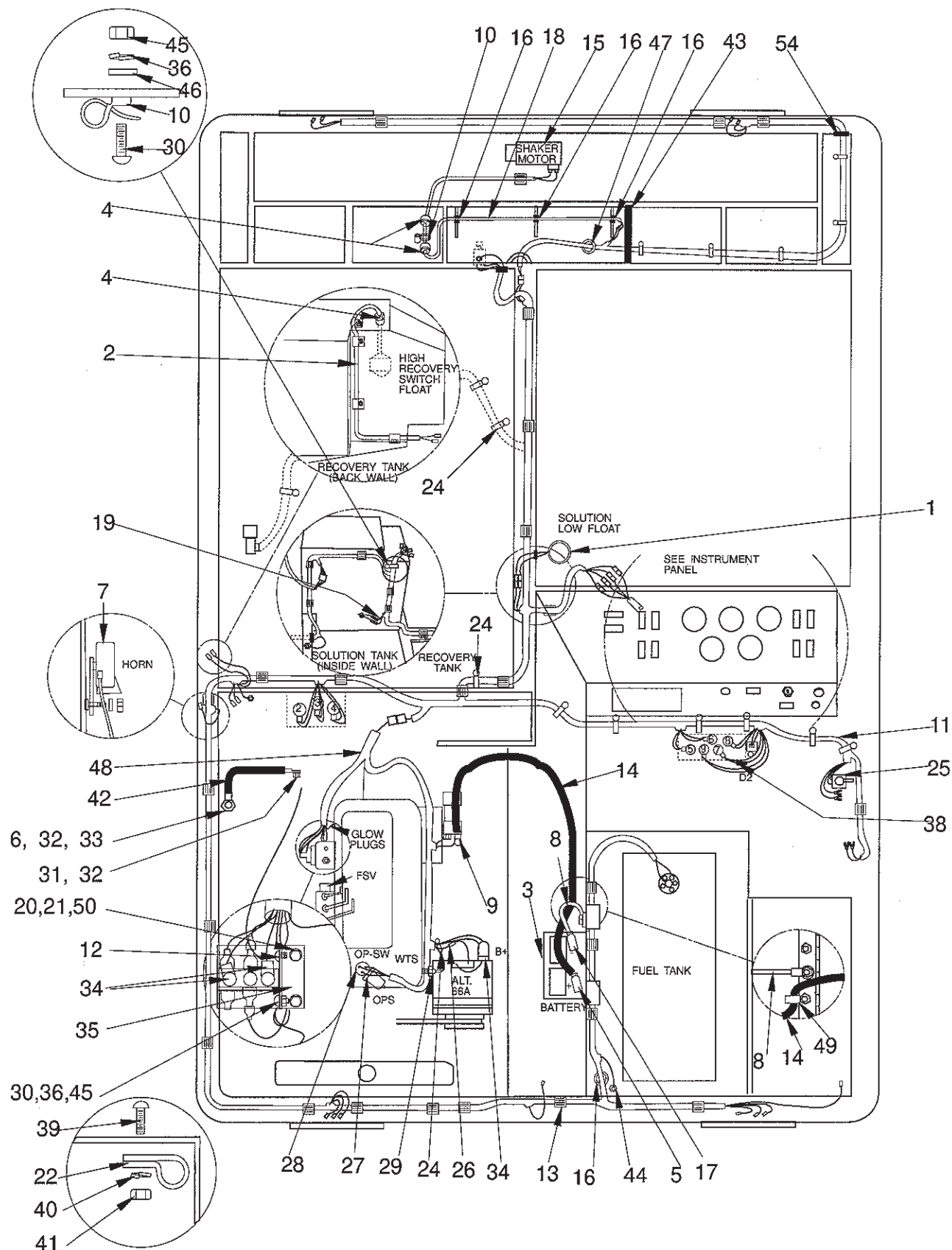
# WIRING - FORD 425 (VARIABLE DUMP) - EXPLODED VIEW



## WIRING (DIESEL) - PARTS LIST

| KEY NO. | PART NUMBER | DESCRIPTION                          | QTY. |
|---------|-------------|--------------------------------------|------|
| 1       | 7-82-00017  | Float, Switch (Solution Low)         | Ref. |
| 2       | 7-82-00021  | Float, Switch (Rec. High)            | Ref. |
| 3       | 0875-057    | Battery                              | Ref. |
| 4       | 8-09-01083  | Bushing, Connector (Liquid Tight)    | 3    |
| 5       | 2-00-05171  | Boot, Protective (Red)               | Ref. |
| 6       | 2-00-00232  | Screw, 3/8-16 x .750 HHC             | Ref. |
| 7       | 8-32-9013   | Horn                                 | Ref. |
| 8       | 7-90-07262  | Cable, Battery (Negative)            | Ref. |
| 9       | 2-00-04952  | Boot, Protective (Red)               | 1    |
| 10      | 2-00-04937  | Tie, Cable                           | 2    |
| 11      | 0795-082    | Harness, Machine                     | 1    |
| 12      | 2-00-03060  | Screw, #10-24 x .250 THMS            | Ref. |
| 13      | 7-13-07096  | Clamp, Adjustable                    | 33   |
| 14      | 7-90-07280  | Cable, Battery (Positive)            | Ref. |
| 15      | 0882-027    | Shaker Motor                         | Ref. |
| 16      | 8-09-01081  | Bushing, Snap                        | 4    |
| 17      | 2-00-05173  | Boot, Protective (Black)             | Ref. |
| 18      | 0775-162    | Hopper Wire Assembly (HO-WA)         | 1    |
| 19      | 2-00-04551  | Terminal, .156 Bullet                | 2    |
| 20      | 2-00-04363  | Screw, M8-1.250 x 20 mm              | Ref. |
| 21      | 2-00-00409  | Flat Washer, 5/16                    | Ref. |
| 22      | 2-00-04602  | Clamp, Adjustable                    | 3    |
| 23      |             |                                      |      |
| 24      | 2-00-04345  | Ty-Rap                               | 30   |
| 25      | 7-82-00008  | Switch, Back-Up                      | Ref. |
| 26      | 0895-092    | Wire Harness Assembly (D1)           | 1    |
| 27      | 8-69-00005  | Sender, Oil Pressure                 | Ref. |
| 28      | 8-82-00046  | Switch, Oil Pressure                 | Ref. |
| 29      | 8-69-00014  | Sender, Water Temperature            | Ref. |
| 30      | 2-00-00056  | Screw, #10-24 x .750 THM             | Ref. |
| 31      | 2-00-00233  | Screw, 3/8-16 x 1.000 HHC            | Ref. |
| 32      | 2-00-03829  | Lock Washer, 3/8 Int./Ext.           | Ref. |
| 33      | 2-00-02360  | Nut, 3/8-16 Hex                      | Ref. |
| 34      | 2-00-04203  | Boot, (Black)                        | 3    |
| 35      | 8-08-00604  | Bracket                              | Ref. |
| 36      | 2-00-00519  | Lock Washer, #10                     | 2    |
| 37      |             |                                      |      |
| 38      | 0875-087    | Diode Assembly (D2)                  | 1    |
| 39      | 2-00-00183  | Screw, 1/4-20 x .750 THM             | 3    |
| 40      | 2-00-00518  | Lock Washer, 1/4 I.D. Helical Spring | 3    |
| 41      | 2-00-00594  | Nut, 1/4-20 Hex                      | 3    |
| 42      |             |                                      |      |
| 43      |             |                                      |      |
| 44      |             |                                      |      |
| 45      |             |                                      |      |
| 46      |             |                                      |      |
| 47      |             |                                      |      |
| 48      |             |                                      |      |
| 49      | 8-90-07328  | Cable, Ground                        | Ref. |
| 50      | 8-21-04015  | Edging                               | 1    |
| 51      | 2-00-00498  | Lock Washer, 1/4 Ext.                | 1    |
| 52      | 2-00-00605  | Nut, #10-24 Hex                      | 2    |
| 53      | 2-00-01974  | Washer, #10 Sealing                  | 1    |
| 54      | 2-00-04721  | Grommet                              | 2    |
| 55      | 0895-105    | Harness, Engine                      | 1    |
| 56      |             |                                      |      |
| 57      | 2-00-00530  | Lock Washer, 5/16                    | Ref. |

# WIRING (DIESEL) - EXPLODED VIEW



## DECALS - PARTS LIST

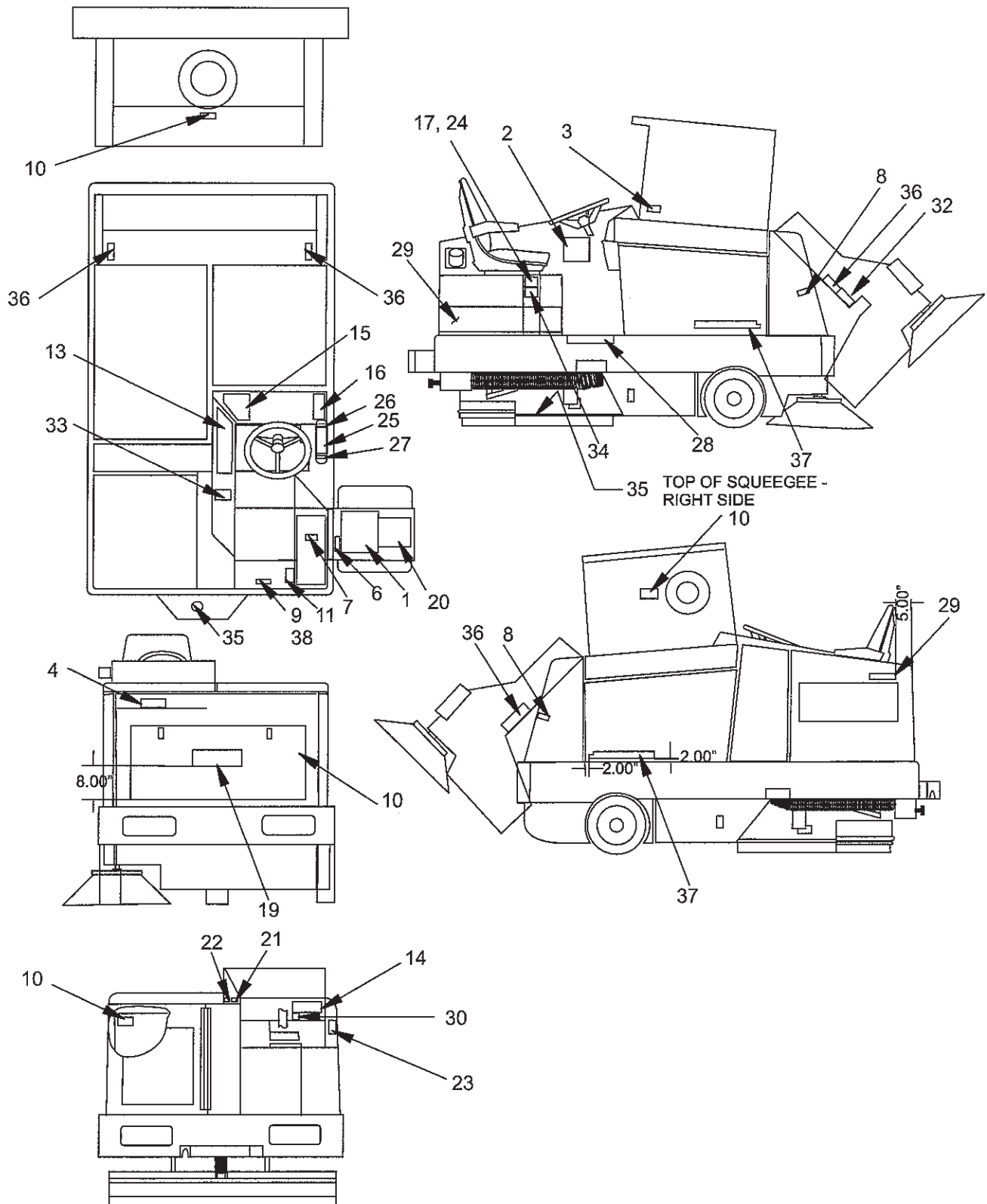
| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>DESCRIPTION</u>                | <u>QTY.</u> |
|----------------|--------------------|-----------------------------------|-------------|
| 1              | 7-18-00148         | Decal, Maintenance Chart          | 1           |
| 2              | 8-18-00396         | Decal, Warning - General          | 1           |
| 3              |                    |                                   |             |
| 4              | 7-18-00081         | Decal, Fill Level - Solution Tank | 1           |
| 5              | 8-18-00099         | Decal, Warning - Combustibles     | 1           |
| 6              | 8-18-00313         | Decal, Seat Adjustment            | 1           |
| 7              | 8-18-00306         | Decal, Hydraulic Fluid Only       | 1           |
| 8#             | 8-18-00305         | Decal, Pinch Point                | 2           |
| 9              | 8-18-00310         | Decal, Gas Only                   | 1           |
| 10             | 8-18-00399         | Decal, Warning - Fan & Belt       | 2           |
| 11             | 8-18-00277         | Decal, Warning - Fire Hazard      | 1           |
| 12             |                    |                                   |             |
| 13*            | 7-18-00213         | Decal, Levers                     | 1           |
| 14             | 7-18-00205         | Decal, Ignition                   | 1           |
| 15             | 7-18-00207         | Decal, Scrubbing                  | 1           |
| 16             | 7-18-00210         | Decal, Sweeping                   | 1           |
| 17             | 8-50-00014         | Serial Tag Number                 | 1           |
| 18             | 7-18-00264         | Decal, A-L                        | 1           |
| 19             | 8-18-00454         | Decal, ALTO                       | 1           |
| 20             | 7-18-00149         | Decal, Maintenance Diagram        | 1           |
| 21*            | 7-18-00216         | Decal, Choke                      | 1           |
| 22             | 7-18-00214         | Decal, Throttle                   | 1           |
| 23#            | 7-18-00215         | Decal, Side Broom                 | 1           |
| 24             | 2-00-04115         | Rivet                             | 2           |
| 25             | 8-50-05022         | Pad, Foot Pedal                   | 1           |
| 26             | 7-40-00005         | Decal, Forward                    | 1           |
| 27             | 7-40-00006         | Decal, Reverse                    | 1           |
| 28             | 7-50-05136         | Pad, Edge                         | 1           |
| 29             | 7-18-00125         | Decal, 7700                       | 2           |
| 30             | 8-18-00395         | Decal, Key Switch Warning         | 1           |
| 31             |                    |                                   |             |
| 32#            | 8-18-00398         | Decal, Warning - Hopper           | 1           |
| 33             | 8-18-00355         | Decal, Diesel Starting            | 1           |
| 34             | 7-18-00228         | Decal, Patent                     | 1           |
| 35             | 7-18-00236         | Decal, No Step                    | 3           |
| 36             | 8-18-00402         | Decal - Pinch Point               | 4           |
| 37             | 8-18-00452         | Decal A-L                         | 2           |
| 38             | 8-18-00311         | Decal, Diesel Only                | 1           |

\*Gas Machines Only

^Diesel Machines Only

#Not Used on Manual Dump Machines

P5169



P-5169/9908

**NOTES**

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## TABLE OF CONTENTS - CHAPTER 3

|                                                     |      |
|-----------------------------------------------------|------|
| NOTES .....                                         | 3-2  |
| ELECTRICAL SCHEMATIC (GAS - VARIABLE DUMP) .....    | 3-3  |
| ELECTRICAL SCHEMATIC (DIESEL - VARIABLE DUMP) ..... | 3-4  |
| ELECTRICAL SCHEMATIC (GAS - MANUAL DUMP) .....      | 3-5  |
| ELECTRICAL SCHEMATIC (DIESEL - MANUAL DUMP) .....   | 3-6  |
| CONNECTION DIAGRAM (GAS - VARIABLE DUMP) .....      | 3-7  |
| CONNECTION DIAGRAM (DIESEL - VARIABLE DUMP) .....   | 3-8  |
| CONNECTION DIAGRAM (GAS - MANUAL DUMP) .....        | 3-9  |
| CONNECTION DIAGRAM (DIESEL - MANUAL DUMP) .....     | 3-10 |
| BROOM OPTIONS .....                                 | 3-11 |
| SIDE BROOM OPTION (MANUAL DUMP) .....               | 3-12 |
| BRUSH OPTIONS .....                                 | 3-14 |
| CENTER SQUEEGEES .....                              | 2-16 |
| SIDE SQUEEGEES .....                                | 3-18 |
| OVERHEAD GUARD .....                                | 3-19 |
| BACK-UP ALARM .....                                 | 3-20 |
| LIGHTS OPTIONS .....                                | 3-21 |
| TURN SIGNAL .....                                   | 3-22 |
| WARNING LIGHTS (STANDARD) .....                     | 3-24 |
| WARNING LIGHTS with OVERHEAD GUARD .....            | 3-26 |
| FIRE EXTINGUISHER OPTION .....                      | 3-28 |
| FLAME ARRESTING GAS CAP .....                       | 3-29 |
| SAFETY AIR CLEANER .....                            | 3-30 |
| DEBRIS BASKET OPTION .....                          | 3-31 |
| DETERGENT METERING PUMP (CAMEL) .....               | 3-32 |
| SOLUTION TANK (CAMEL) .....                         | 3-34 |
| RECOVERY TANK (CAMEL) .....                         | 3-36 |
| RECOVERY SYSTEM (CAMEL) .....                       | 3-38 |
| INSTRUMENT PANEL (CAMEL) .....                      | 3-40 |
| WIRING (CAMEL) .....                                | 3-42 |
| ENGINE SHUTDOWN (FORD) .....                        | 3-44 |
| ENGINE SHUTDOWN (PERKINS) .....                     | 3-46 |
| SUSPENSION SEAT .....                               | 3-48 |
| TIRE OPTIONS .....                                  | 3-49 |
| VACUUM WAND .....                                   | 3-50 |
| WET SWEEP BYPASS .....                              | 3-51 |
| SPARE PARTS KIT (GAS/L - MANUAL) .....              | 3-52 |
| SPARE PARTS KIT (DIESEL - MANUAL) .....             | 3-53 |
| SPARE PARTS KIT (GAS/LP - VARIABLE) .....           | 3-54 |
| SPARE PARTS KIT (DIESEL - VARIABLE) .....           | 3-55 |
| INDEX .....                                         | 3-56 |
| WARRANTY .....                                      | 3-60 |

## NOTES

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## **ELECTRICAL SCHEMATIC, GAS (VARIABLE & LOW DUMPS)    3-3 - P3657**

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## **ELECTRICAL SCHEMATIC, DIESEL (VARIABLE & LOW DUMPS)3-4    P5119**

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## **ELECTRICAL SCHEMATIC, GAS (MANUAL DUMP) 3-5 P3661**

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**ELECTRICAL SCHEMATIC, DIESEL (MANUAL DUMP)      3-6    P3652**

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**CONNECTION DIAGRAM, GAS (VARIABLE & LOW DUMPS)    3-7    P3658**

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**CONNECTION DIAGRAM, DIESEL, VARIABLE & LOW DUMPS) 3-8 P3656**

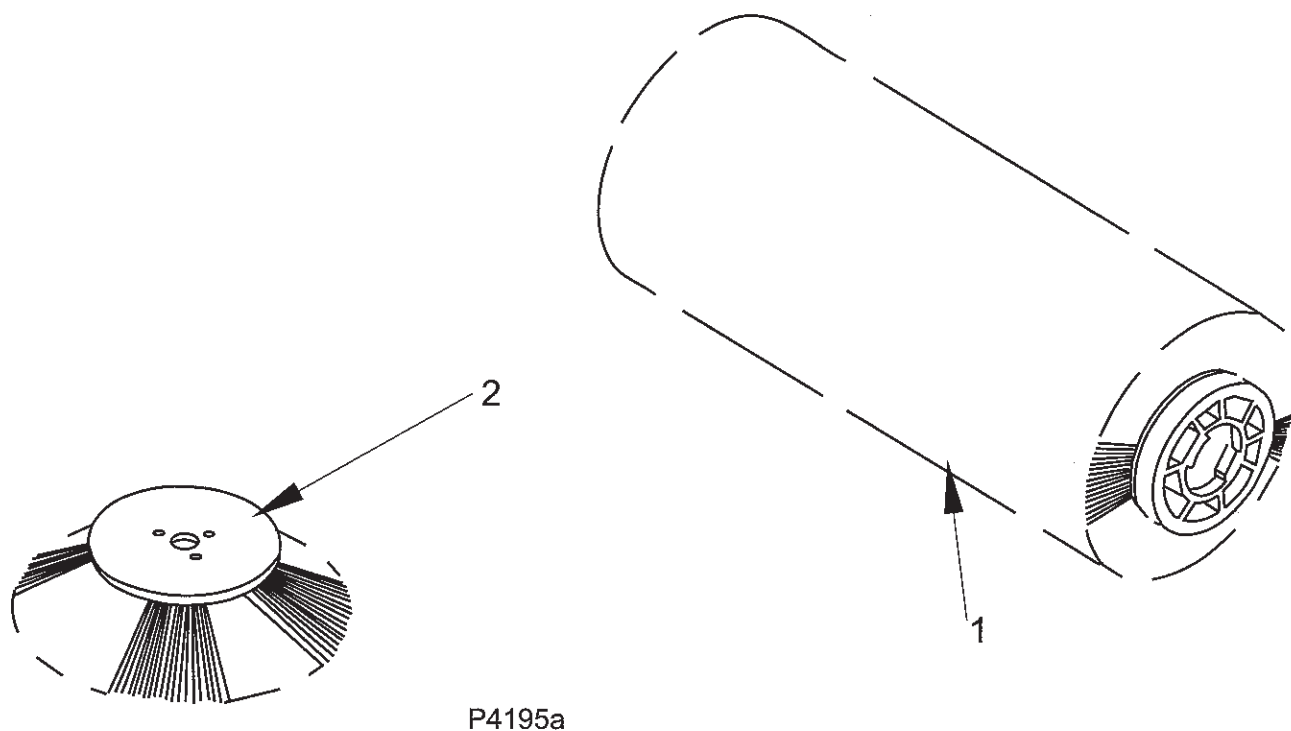
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## **CONNECTION DIAGRAM, GAS (MANUAL DUMP) 3-9 P3662**

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## CONNECTION DIAGRAM, DIESEL (MANUAL DUMP)

3-10 P3653



| KEY NO. | PART NUMBER | DESCRIPTION                  | QTY |
|---------|-------------|------------------------------|-----|
| 1       | 8-08-03180  | Proex and Wire               | 1   |
| 1       | 8-08-03190  | Proex                        | 1   |
| 1       | 8-08-03191  | Natural Fiber and Wire       | 1   |
| 1       | 8-08-03192  | Natural Fiber                | 1   |
| 1       | 8-08-03193  | Nylon                        | 1   |
| 1       | 8-08-03194  | Crimped Wire                 | 1   |
| 1       | 8-08-03195  | Nylon (Herringbone)          | 1   |
| 1       | 8-08-03196  | Nylon, High Density          | 1   |
| 1       | 8-08-03197  | Fiber, High Density          | 1   |
| 1       | 8-08-03198  | Fiber and Wire, High Density | 1   |
| 2       | 8-08-03176  | Black Prolene                | 1   |
| 2       | 8-08-03177  | Nylon                        | 1   |

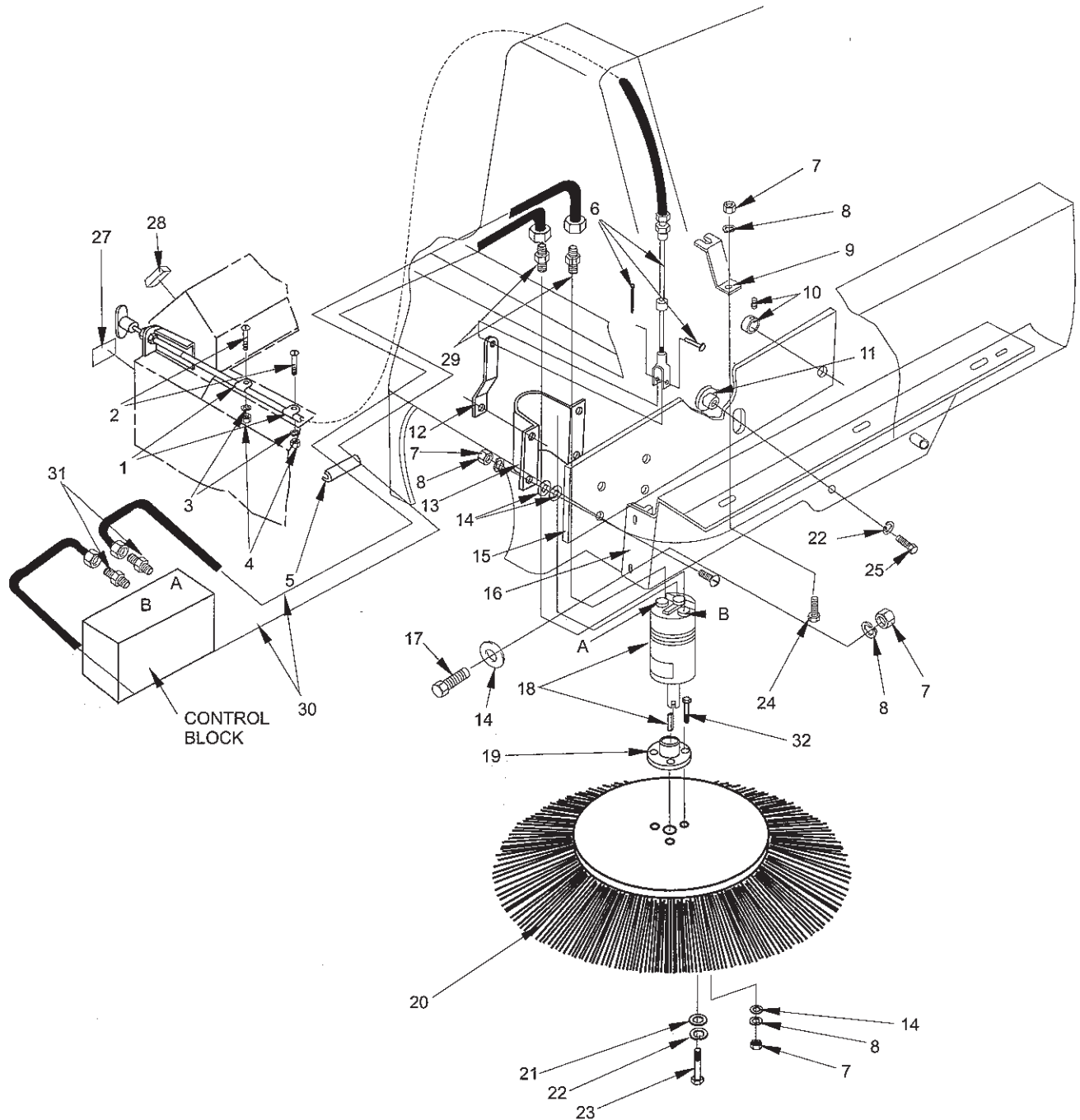
P4195a/9601

## SIDE BROOM OPTION (MANUAL DUMP) - PARTS LIST

| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>DESCRIPTION</u>                  | <u>QTY</u> |
|----------------|--------------------|-------------------------------------|------------|
| 1              | 2-00-04210         | Clamp                               | 2          |
| 2              | 2-00-00049         | Screw, #10-24 x .500                | 2          |
| 3              | 2-00-00512         | Lock Washer, #10                    | 2          |
| 4              | 2-00-00605         | Nut, Hex #10-24                     | 2          |
| 5              | 8-21-04030         | Edging                              | 1          |
| 6              | 7-10-00020         | Cable                               | 1          |
| 7              | 2-00-00585         | Nut, Hex 5/16-18                    | 12         |
| 8              | 2-00-00530         | Lock Washer, Helical Spring 5/16    | 12         |
| 9              | 7-08-00705         | Cable Bracket                       | 1          |
| 10             | 8-15-01003         | Collar, 3/4 ID w/setscrew           | 1          |
| 11             | 7-09-01134         | Bushing, 3/8-16 Thd.                | 1          |
| 12             | 7-79-00060         | Lift Cable Stray                    | 1          |
| 13             | 7-13-07105         | Motor Clamp                         | 1          |
| 14             | 2-00-00409         | Flat Washer, 5/16                   | 13         |
| 15             | 7-03-04129         | Side Broom Arm                      | 1          |
| 16             | 7-08-00717         | Side Broom Bracket                  | 1          |
| 17             | 2-00-03029         | Screw, 5/16-18 x 1.00 HSFHC         | 4          |
| 18             | 0885-061           | Hydraulic Broom Drive Motor, w/ Key | 1          |
| 19             | 7-25-06024         | Adapter Flange                      | 1          |
| 20             | 8-08-03107         | Side Broom                          | 1          |
| 21             | 2-00-00447         | Flat Washer 1.25 x .25              | 1          |
| 22             | 2-00-00518         | Lock Washer, 1/4                    | 1          |
| 23             | 2-00-03537         | Screw, 1/4-28 x 2.000 HHC           | 1          |
| 24             | 2-00-03564         | Screw, 1/4-28 x 1.000               | 5          |
| 25             | 2-00-02310         | Lock Washer, Helical Spring 3/8     | 1          |
| 26             | 2-00-00232         | Screw, 3/8-16 x .75- HHC            | 1          |
| 27             | 7-18-00215         | Side Broom Label                    | 1          |
| 28             | 8-82-00044         | Switch                              | 1          |
| 29             | 2-00-04918         | Fitting                             | 2          |
| 30             | 8-33-02216         | Hose, ORS-4-Str. Ends               | 2          |
| 31             | 2-00-04895         | Fitting                             | 2          |
| 32             | 2-00-00218         | Screw, 5/16-18 x 2.00 HHC           | 3          |

C0360/9601

# SIDE BROOM OPTION (MANUAL DUMP) - EXPLODED VIEW

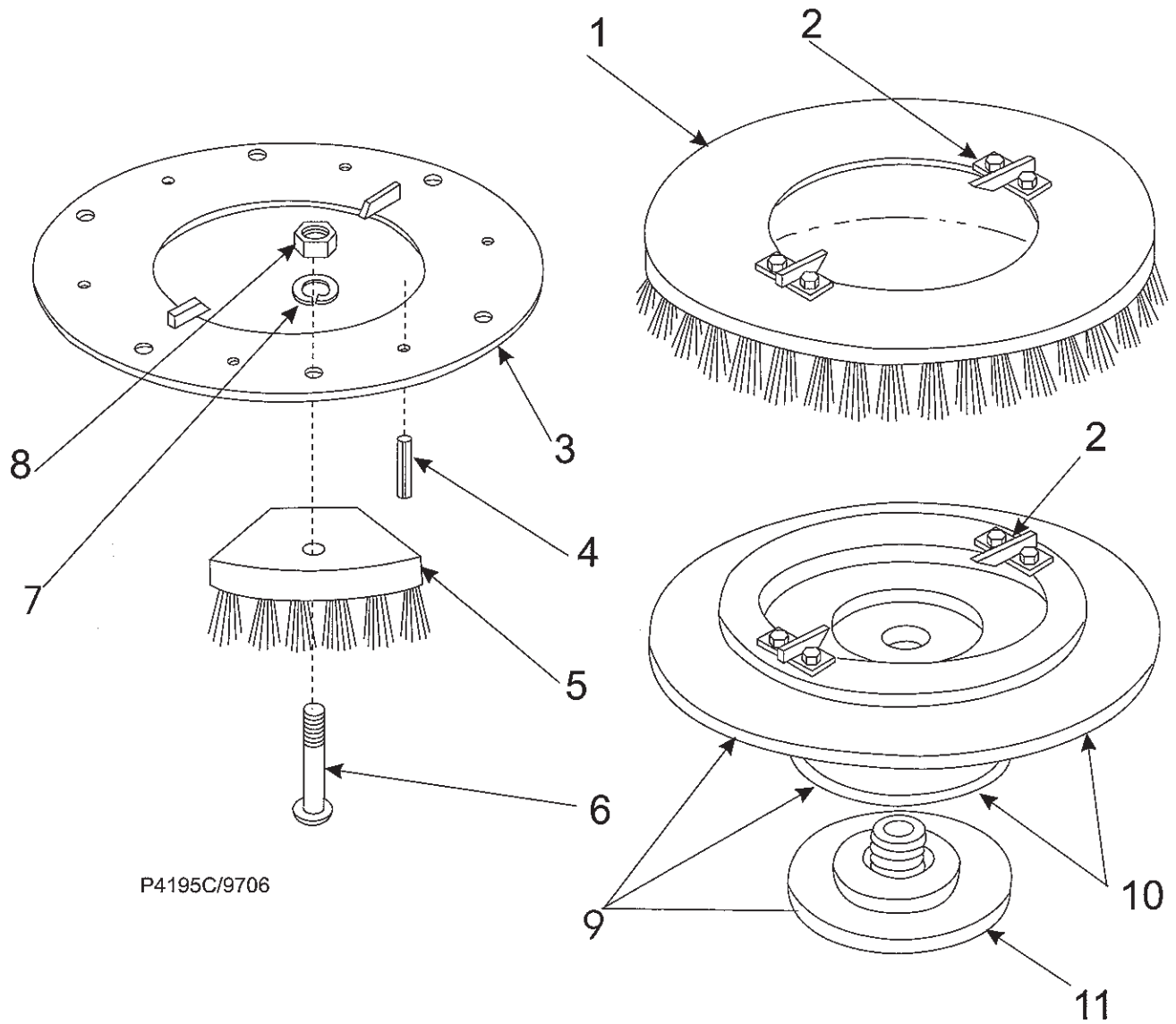


## BRUSH OPTIONS - PARTS LIST

| <u>KEY NO.</u>             | <u>PART NUMBER</u> | <u>DESCRIPTION</u>                          | <u>QTY</u> |
|----------------------------|--------------------|---------------------------------------------|------------|
| <b>Disc Brushes</b>        |                    |                                             |            |
| 1                          | 7-08-03174         | Amergrit                                    | 3          |
| 1                          | 7-08-03175         | Bassine                                     | 3          |
| 1                          | 7-08-03176         | Nylon (Black)                               | 3          |
| 1                          | 7-08-03177         | Amerfil (.025)                              | 3          |
| 1                          | 7-08-03178         | Amerfil (.040)                              | 3          |
| 1                          | 7-08-03179         | Straight Wire                               | 3          |
| 1                          | 7-08-03180         | Wire / Amerfil                              | 3          |
| 1                          | 7-08-03206         | Super Grit (60/45/25) Brown                 | 3          |
| 1                          | 7-08-03242         | Soft Nylon                                  | 3          |
| 2                          | 7-44-05026         | Lug                                         | 2          |
| <b>Sectional Brushes</b>   |                    |                                             |            |
| 3                          | 0760-283           | Brush Plate Attachments                     | 3          |
| 4                          | 2-00-04221         | Pin, Spring                                 | 6          |
| <b>Wood Back</b>           |                    |                                             |            |
| 5                          | 7-08-03070         | Bassine                                     | 18         |
| 5                          | 7-08-03071         | Straight Wire                               | 18         |
| 5                          | 7-08-03075         | Nylon (Black)                               | 18         |
| 5                          | 7-08-03098         | Amerfil (.025)                              | 18         |
| 5                          | 7-08-03117         | Amerfil (.040)                              | 18         |
| 5                          | 7-08-03144         | Amergrit                                    | 18         |
| 5                          | 7-08-03207         | Super Grit                                  | 18         |
| <b>Plastic Back</b>        |                    |                                             |            |
| 5                          | 7-08-03192         | Bassine                                     | 18         |
| 5                          | 7-08-03193         | Straight Wire                               | 18         |
| 5                          | 7-08-03194         | Nylon (Black)                               | 18         |
| 5                          | 7-08-03195         | Amerfil (.025)                              | 18         |
| 5                          | 7-08-03196         | Amerfil (.040)                              | 18         |
| 5                          | 7-08-03197         | Amergrit                                    | 18         |
| 6                          | 2-00-02706         | Screw, 1/4 - 20 x 1.000 HHM                 | 6          |
| 7                          | 2-00-00518         | Washer, Helical Spring 1/4 Med              | 6          |
| 8                          | 2-00-00594         | Nut, Hex 1/4 - 20 x .437 x .218             | 6          |
| <b>Pad Driver Assembly</b> |                    |                                             |            |
| 2                          | 7-44-05026         | Lug                                         | 2          |
| 9                          | 0772-065           | Pad Driver (Right Hand Thread - Black)      | 2          |
| 10                         | 7-32-03015         | Center-Lok II for Clockwise Rotation        | 2          |
| 11                         | 7-32-03016         | Holder for Clockwise Rotation               | 2          |
| 9                          | 0772-066           | Pad Driver (Left Hand Thread - Red)         | 1          |
| 10                         | 7-32-03013         | Center-Lok II for Counterclockwise Rotation | 1          |
| 11                         | 7-32-03014         | Holder for Counterclockwise Rotation        | 1          |

P4195c

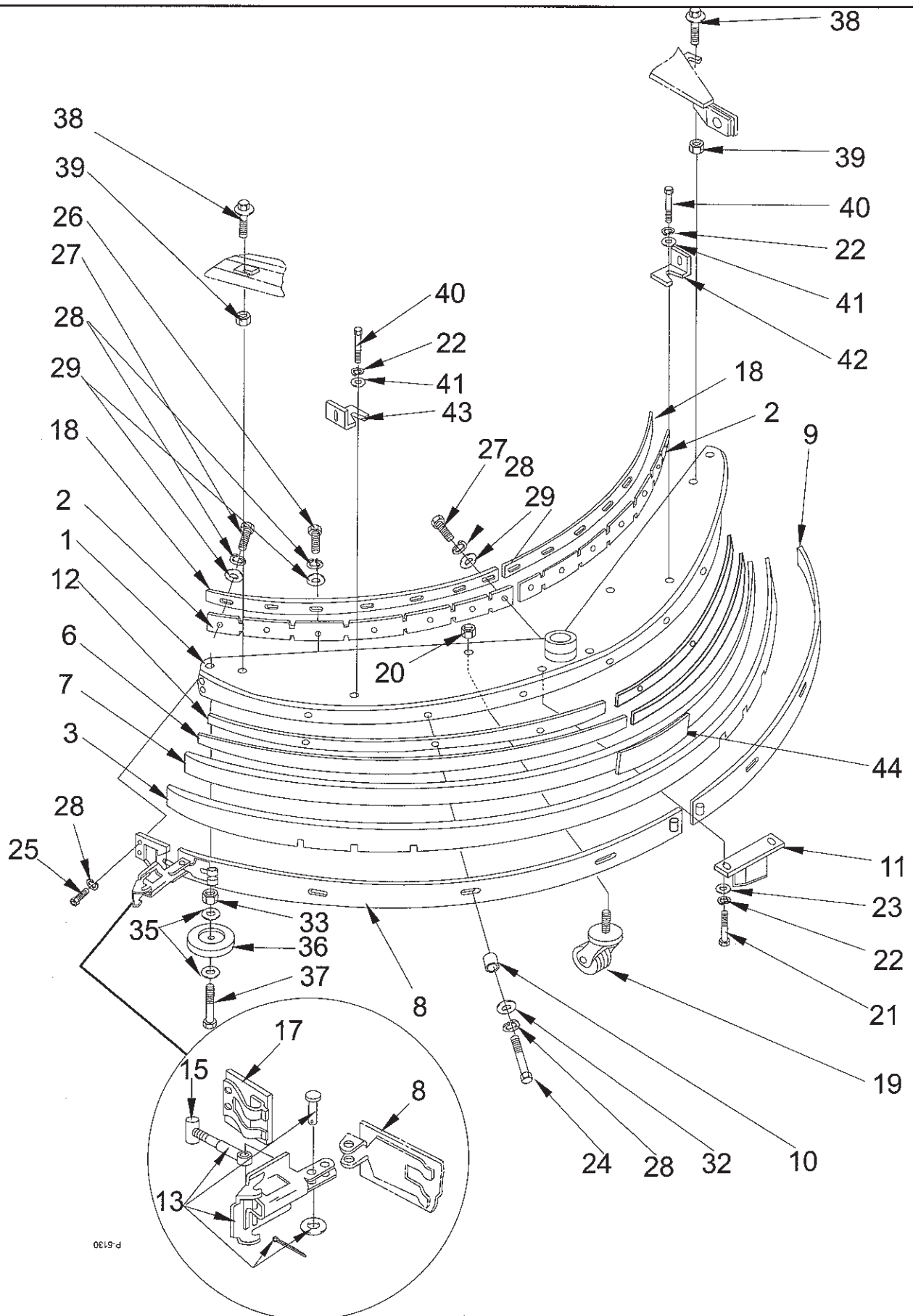
## BRUSH OPTIONS - EXPLODED VIEW



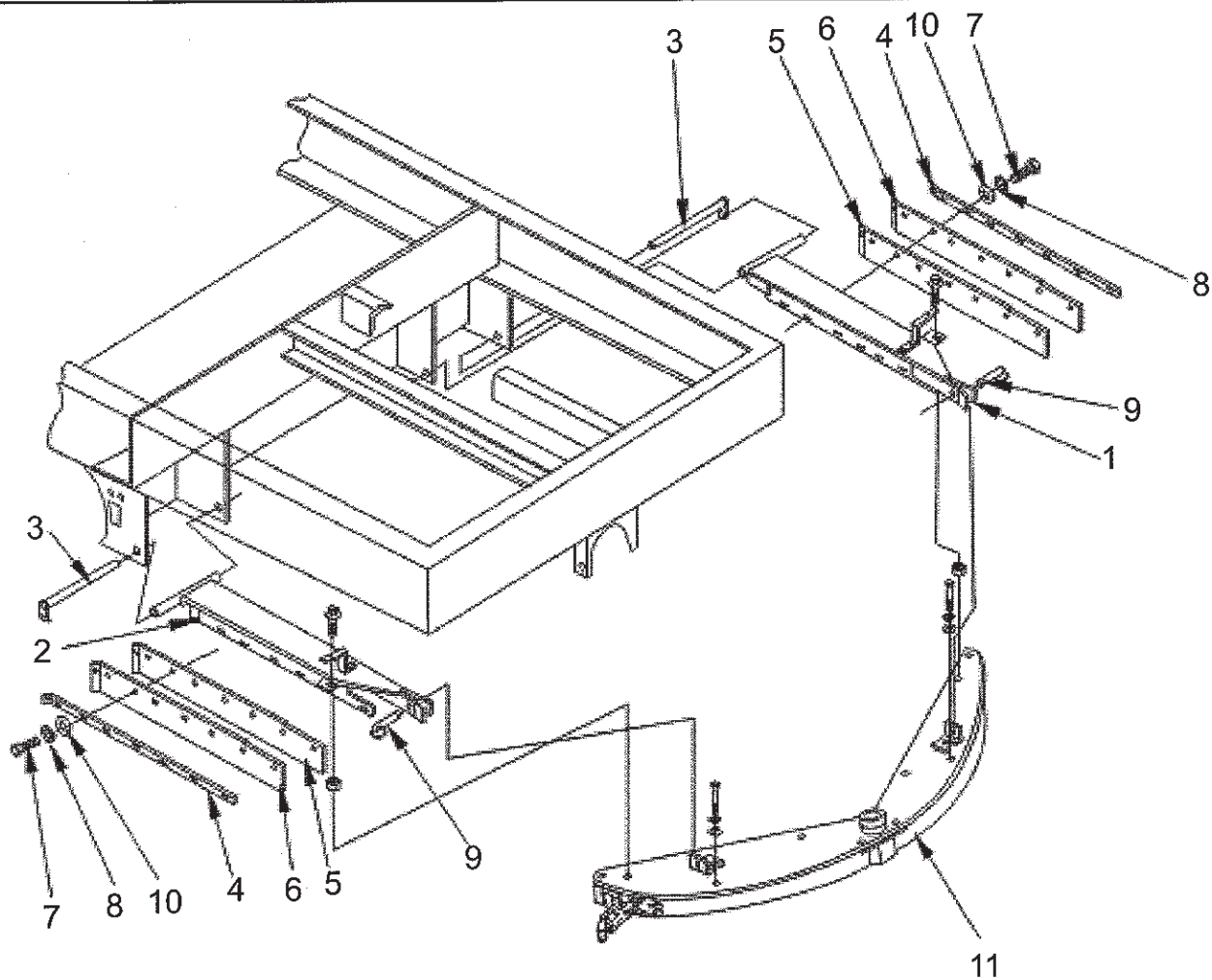
## CENTER SQUEEGEES - PARTS LIST

| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>DESCRIPTION</u>                            | <u>QTY</u> |
|----------------|--------------------|-----------------------------------------------|------------|
| 1              | 7-86-08020         | Wide Aisle Squeegee Tool                      | 1          |
|                | 7-86-08019         | Narrow Aisle Squeegee Tool                    | 1          |
| 2              | 7-77-00071         | Wide Aisle Inner Squeegee Rubber              | 2          |
|                | 7-77-00067         | Narrow Aisle Inner Squeegee Rubber            | 2          |
| 3              | 7-77-00068         | Back Up Squeegee Rubber                       | 1          |
| 4              |                    |                                               |            |
| 5              |                    |                                               |            |
| 6              | 7-50-05080         | Squeegee Grip Pad                             | 2          |
| 7              | 7-77-00057         | Outer Squeegee Rubber (Gum Rubber) - Standard | 1          |
| 8              | 7-79-00042         | Left Hand Squeegee Strap                      | 1          |
| 9              | 7-79-00043         | Right Hand Squeegee Strap                     | 1          |
| 10             | 7-75-01044         | Spacer, .375 x .250 x .500                    | 6          |
| 11             | 7-25-02031         | Squeegee Fitting                              | 1          |
| 12             | 7-75-01073-1       | Squeegee Position Spacer                      | 2          |
| 13             | 7-41-00009         | Latch Handle Assembly                         | 2          |
| 14             |                    |                                               |            |
| 15             | 7-55-08100         | Draw Hook Pin                                 | 2          |
| 16             |                    |                                               |            |
| 17             | 7-08-00395-1       | Squeegee Assembly Bracket                     | 2          |
| 18             | 7-79-00044         | Squeegee Strap                                | 2          |
| 19             | 7-89-08033         | Wheel Caster                                  | 2          |
| 20             | 2-00-00615         | Nut, Hex 5/8 - 11 x .937 x .546               | 2          |
| 21             | 2-00-00208         | Screw, 5/16 - 18 x .750 HHC                   | 2          |
| 22             | 2-00-00530         | Lock Washer, Helical Spring 5/16 Med          | 4          |
| 23             | 2-00-00409         | Flat Washer, .687 x .343 x .062               | 2          |
| 24             | 2-00-00205         | Screw, 1/4 - 20 x 1.000 HHC                   | 6          |
| 25             | 2-00-03038         | Screw, 1/4 - 20 x .500 HSHC                   | 4          |
| 26             | 2-00-00248         | Screw, 1/4 - 20 x .750 HHC                    | 10         |
| 27             | 2-00-00251         | Screw, 1/4 - 20 x .500 HHCS                   | 4          |
| 28             | 2-00-00518         | Lock Washer, Helical Spring 1/4 Med           | 24         |
| 29             | 2-00-03702         | Flat Washer, .625 x .281 x .062               | 14         |
| 30             |                    |                                               |            |
| 31             |                    |                                               |            |
| 32             | 2-00-00416         | Flat Washer, .750 x .265 x .062               | 6          |
| 33             | 2-00-02360         | Nut, Hex 3/8 - 16 x .562 x .328               | 2          |
| 34             |                    |                                               |            |
| 35             | 2-00-00402         | Flat Washer, .750 x .390 x .093               | 4          |
| 36             | 2-14-00184         | Wheel                                         | 2          |
| 37             | 2-00-00216         | Screw, 3/8 - 16 x 2.000 HHC                   | 2          |
| 38             | 7-80-05069         | Locator Stud                                  | 2          |
| 39             | 2-00-00596         | Nut, Hex 1/2-13 x .750 x .437                 | 2          |
| 40             | 2-00-01255         | Screw, 5/16-18 x .875 HHC                     | 2          |
| 41             | 2-95-04689         | Flat Washer, 2.000 x .406 x .162              | 2          |
| 42             | 7-08-00497         | Right Hand Squeegee Lift Bracket              | 1          |
| 43             | 7-08-00498         | Left Hand Squeegee Lift Bracket               | 1          |
| 44             | 8-50-05022         | Pad, Squeegee Grip                            | 2          |
|                | 0760-358           | Narrow Aisle Squeegee Deck Sub                |            |
|                | 0760-358-1         | Wide Aisle Squeegee Deck Sub                  |            |

# CENTER SQUEEGEES - EXPLODED VIEW



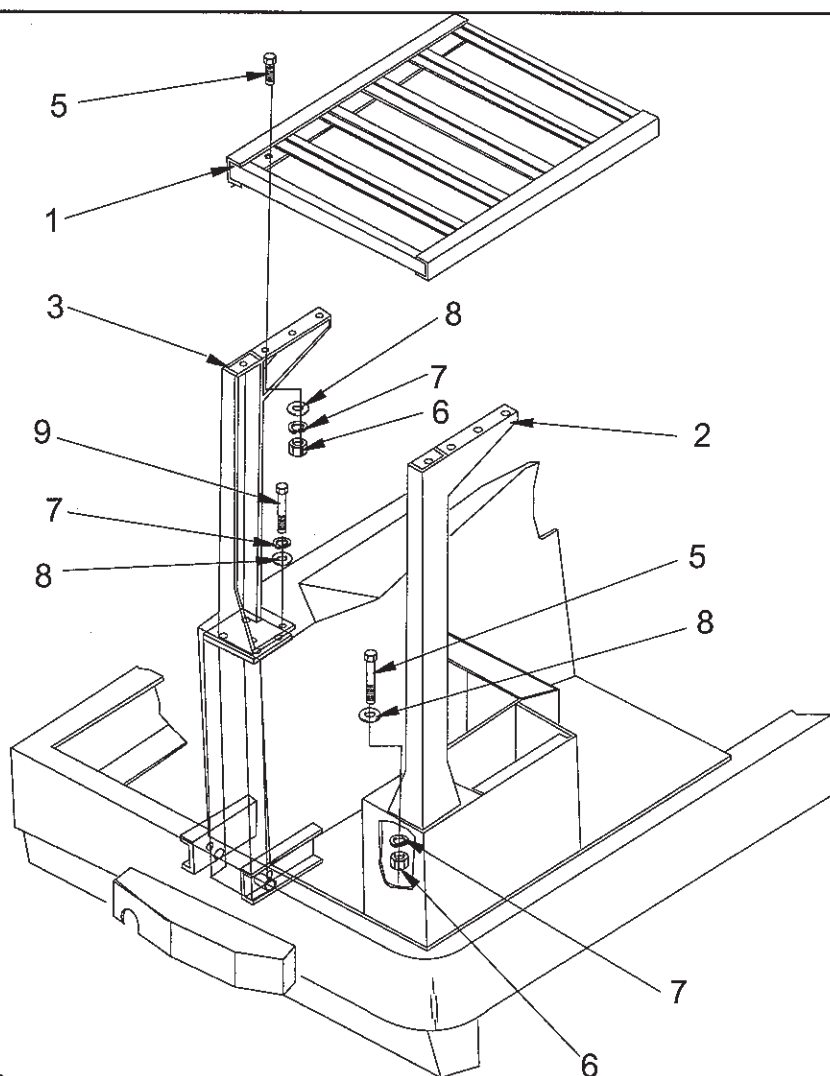
## SIDE SQUEEGEES



OPTION NO. 0780-145 NARROW AISLE SQUEEGEE  
OPTION NO. 0780-148 WIDE AISLE SQUEEGEE

| KEY NO. | PART NUMBER  | DESCRIPTION                         | QTY |
|---------|--------------|-------------------------------------|-----|
| 1       | 7-42-05097   | Right Hand Link - Wide Aisle        | 1   |
|         | 7-42-05112   | Right Hand Link - Narrow Aisle      | 1   |
| 2       | 7-42-05096   | Left Hand Link - Wide Aisle         | 1   |
|         | 7-42-05113   | Left Hand Link - Narrow Aisle       | 1   |
| 3       | 7-55-08120   | Squeegee Lift Pin                   | 2   |
| 4       | 7-79-00059-1 | Strap                               | 2   |
| 5       | 7-77-00069   | Side Squeegee Rubber                | 2   |
| 6       | 7-77-00070   | Side Squeegee Back-Up Rubber        | 2   |
| 7       | 2-00-02587   | Screw, 14 - 20 x 1.250 HHC          | 16  |
| 8       | 2-00-00518   | Lock Washer, Helical Spring 1/4 Med | 16  |
| 9       | 7-55-08121   | Lift Pin                            | 2   |
| 10      | 2-00-03702   | Flat Washer, .625 x .281 x .062     | 16  |
| 11      | 0760-358-1   | Squeegee Sub-Assembly, Wide Aisle   | 1   |
|         | 0780-358     | Squeegee Sub-Assembly, Narrow Aisle | 1   |

P5132/9601

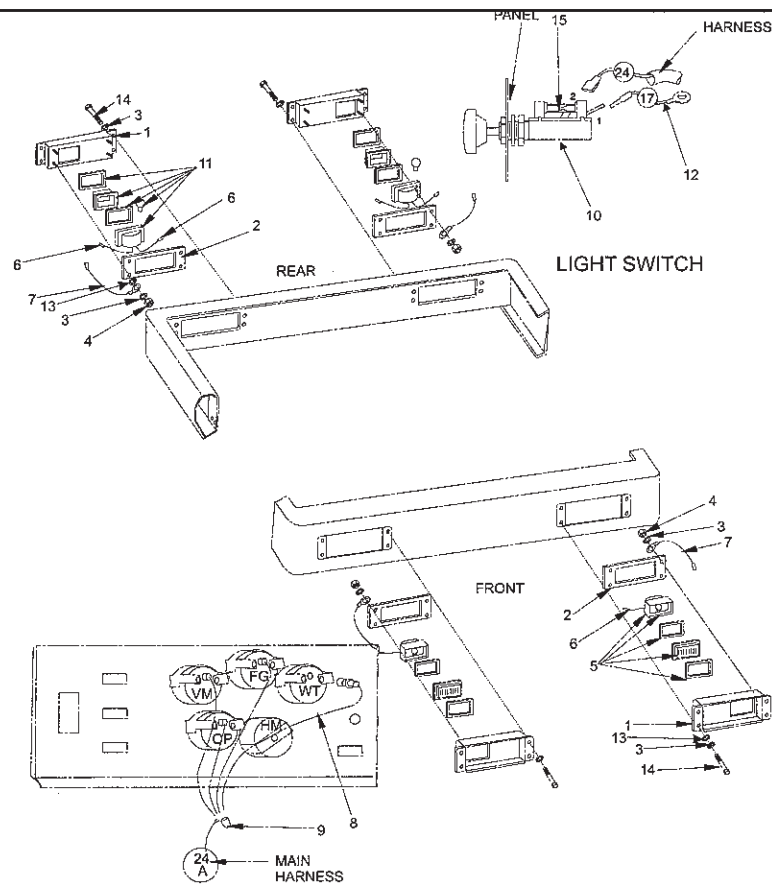


P4621A/9703

| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>DESCRIPTION</u>                   | <u>QTY</u> |
|----------------|--------------------|--------------------------------------|------------|
| 1              | 7-30-05086         | Guard (Weldment )                    | 1          |
| 2              | 7-81-00120         | Support (Weldment )                  | 1          |
| 3              | 7-81-00121         | Support-(Weldment )                  | 1          |
| 4              | 2-00-00240         | Screw, 1/2 - 13 x 1.250 HHC          | 4          |
| 5              | 2-00-00239         | Screw, 1/2 - 13 x 1.000 HHC          | 12         |
| 6              | 2-00-02352         | Nut, Hex 1/2 - 13 x .875 x .484      | 12         |
| 7              | 2-00-02312         | Lock Washer, Helical Spring 1/2 Med  | 16         |
| 8              | 2-00-01444         | Flat Washer, .750 x .520 x .062      | 16         |
| 9              | 7-81-00137         | Center Backbone Support ( Weldment ) | 1          |
| 10             | 2-00-00216         | Screw, 3/8-16 x 2.000 HHC            | 1          |
| 11             | 2-00-00402         | Flat Washer, .750 x .390 x .093      | 2          |
| 12             | 2-00-02310         | Lock Washer, Helical Spring, 3/8 Med | 2          |
| 13             | 2-00-02360         | Nut, Hex 3/8-16 x .562 x .328        | 2          |
| 14             | 2-00-00234         | Screw, 3/8-16 x 1.500 HHC            | 1          |

P4621/9511

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P4822/9609

## HEADLIGHTS/TAILLIGHTS/INSTRUMENT LIGHTS: 0880-351 HEADLIGHTS/TAILLIGHTS/BRAKE LIGHTS/INSTRUMENT LIGHTS: 0880-354

| KEY NO. | PART NUMBER | DESCRIPTION                     | QTY |
|---------|-------------|---------------------------------|-----|
| 1       | 8-08-00745  | Light Bracket with Knockouts    | 4   |
| 2       | 8-08-00599  | Backing Plate                   | 4   |
| 3       | 2-00-00501  | Lock Washer, 1/4 Int.           | 32  |
| 4       | 2-00-00594  | Nut, Hex 1/4 - 20 x .437 x .218 | 16  |
| 5       | 8-40-05028  | Headlight                       | 2   |
| 6       | 2-00-04578  | Male Bullet Plug                | 4   |
| 7       | 8-90-07358  | Ground Wire                     | 4   |
| 8       | 8-40-05030  | Instrument Light and Lead       | 4   |
| 9       | 2-00-04588  | Wire Nut                        | 1   |
| 10      | 8-82-00027  | Light Switch, Push/Pull         | 1   |
| 11      | 8-40-05029  | Taillight                       | 2   |
| 12      | 7-90-07229  | Wire                            | 1   |
| 13      | 2-00-00409  | Flat Washer, .687 x .343 x .062 | 2   |
| 14      | 2-00-04876  | Screw, 1/4 - 20 x .500 BHS      | 16  |
| 15      | 8-28-05011  | Fuse, FU-1 15 Amp               | 1   |

P4822/9510

## TURN SIGNAL - PARTS LIST

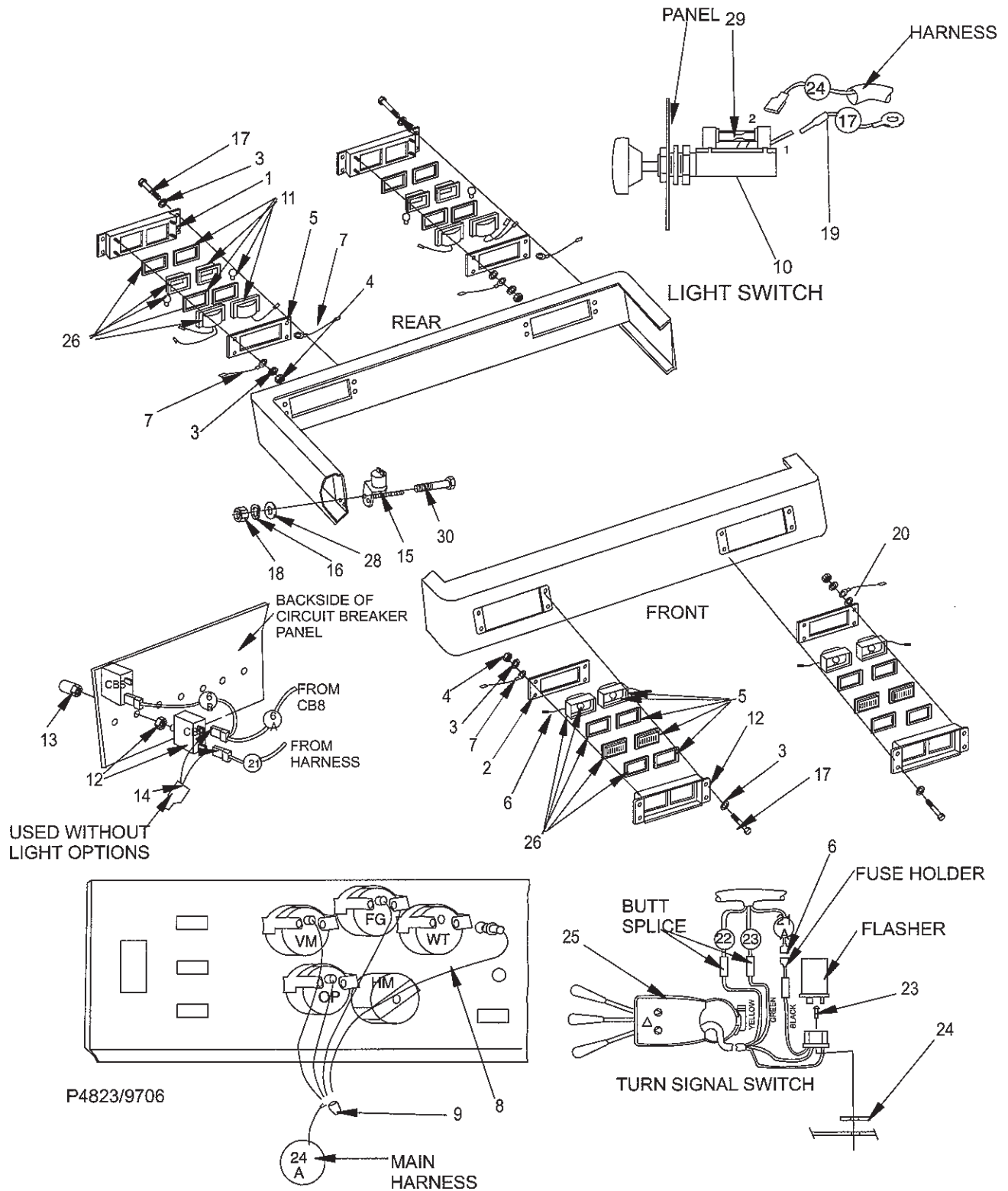
### HEADLIGHTS/TAILLIGHTS/INSTRUMENT LIGHTS/ BRAKE LIGHTS & TURN SIGNALS: 0880-355

#### HEADLIGHTS / TAILLIGHTS / BRAKE LIGHTS & TURN SIGNALS

| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>DESCRIPTION</u>                 | <u>QTY</u> |
|----------------|--------------------|------------------------------------|------------|
| 1              | 8-08-00745         | Knockout Light Bracket             | 4          |
| 2              | 8-08-00599         | Backing Plate                      | 4          |
| 3              | 2-00-00501         | Lock Washer, 1/4 Int.              | 32         |
| 4              | 2-00-00594         | Nut, Hex 1/4 - 20 x .437 x .218    | 16         |
| 5              | 8-40-05028         | Head Light                         | 2          |
| 6              | 2-00-04578         | Bullet Plug (Male)                 | 10         |
| 7              | 8-90-07358         | Ground Wire                        | 8          |
| 8              | 8-40-05030         | Instrument Light and Lead          | 4          |
| 9              | 2-00-04588         | Wire Nut                           | 1          |
| 10             | 8-82-00027         | Light Switch, Push/Pull            | 1          |
| 11             | 8-40-05029         | Tail Light / Brake Light           | 2          |
| 12             | 8-64-00008         | Circuit Breaker (15 Amp)           | 1          |
| 13             | 8-11-00044         | Boot                               | 1          |
| 14             | 8-11-00015         | Terminal                           | 1          |
| 15             | 8-82-00039         | Switch, Brake                      | 1          |
| 16             | 2-00-00519         | Lock Washer, # 10 Hel.             | 2          |
| 17             | 2-00-04876         | Screw, 1/4 - 20 x .500 BHS         | 16         |
| 18             | 2-00-00605         | Nut, Hex MS 1/4 - 20 x .437 x .187 | 2          |
| 19             | 7-90-07229         | Wire                               | 1          |
| 20             | 2-00-00409         | Flat Washer, .687 x .343 x .062    | 2          |
| 21             |                    |                                    |            |
| 22             |                    |                                    |            |
| 23             | 2-00-01994         | Screw, # 8 - - 15 x .750 T/F RH    | 1          |
| 24             | 2-14-03197         | Rubber Washer, 1.000 x .187 x .125 | 1          |
| 25             | 8-82-00025         | Turn Signal Switch                 | 1          |
| 26             | 8-40-05027         | Turn Signal Light                  | 4          |
| 27             |                    |                                    |            |
| 28             | 2-00-00455         | Flat Washer # 10                   | 2          |
| 29             | 8-28-05011         | Fuse, FU-1 15 Amp                  | 1          |
| 30             | 2-00-00220         | Screw, 1/1 - 20 x .625 HHC         | 2          |

P 4823/9510

## TURN SIGNAL - EXPLODED VIEW



## WARNING LIGHTS (STANDARD) - PARTS LIST

| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>ROTATING LIGHT DESCRIPTION</u> | <u>QTY</u> |
|----------------|--------------------|-----------------------------------|------------|
| 1              | 8-40-05033         | Red                               | 1          |
|                | 8-40-05041         | Yellow                            | 1          |
| 2              | 2-00-04578         | Connector                         | 1          |
| 3              | 2-00-00491         | Grommet                           | 1          |
| 4              | 2-00-00512         | Lock Washer, #10 Int              | 2          |

| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>FLASHING LIGHT DESCRIPTION</u>  | <u>QTY</u> |
|----------------|--------------------|------------------------------------|------------|
| 5              | 8-40-05033         | Red                                | 1          |
|                | 8-40-05041         | Yellow                             | 1          |
| 6              | 2-00-04578         | Connector                          | 1          |
| 7              | 2-00-00491         | Grommet                            | 1          |
| 8              | 2-00-00512         | Lock Washer, #10 Int               | 2          |
| 9              | 2-00-04897         | Screw, #10 - 24 x 1.250 THM        | 2          |
| 10             | 2-00-00605         | Nut, Hex MS #10 - 24 x .375 x .125 | 2          |

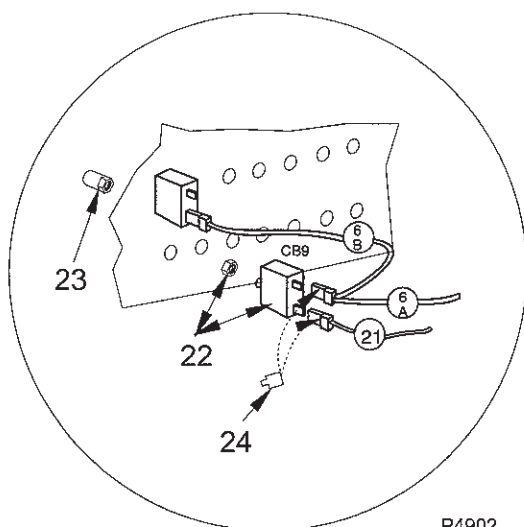
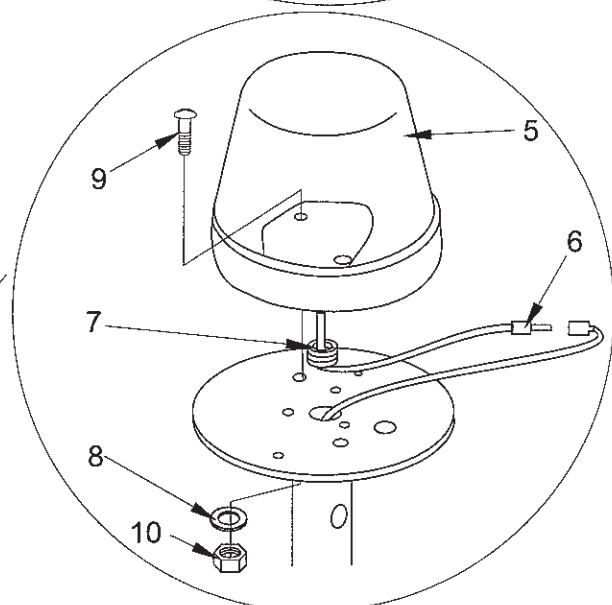
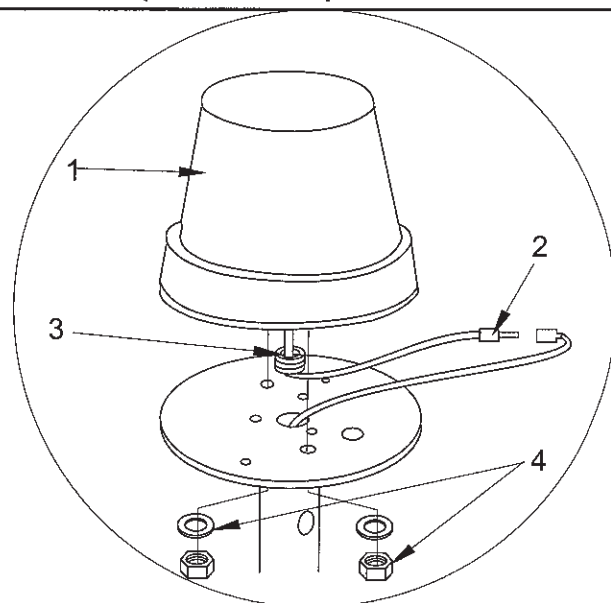
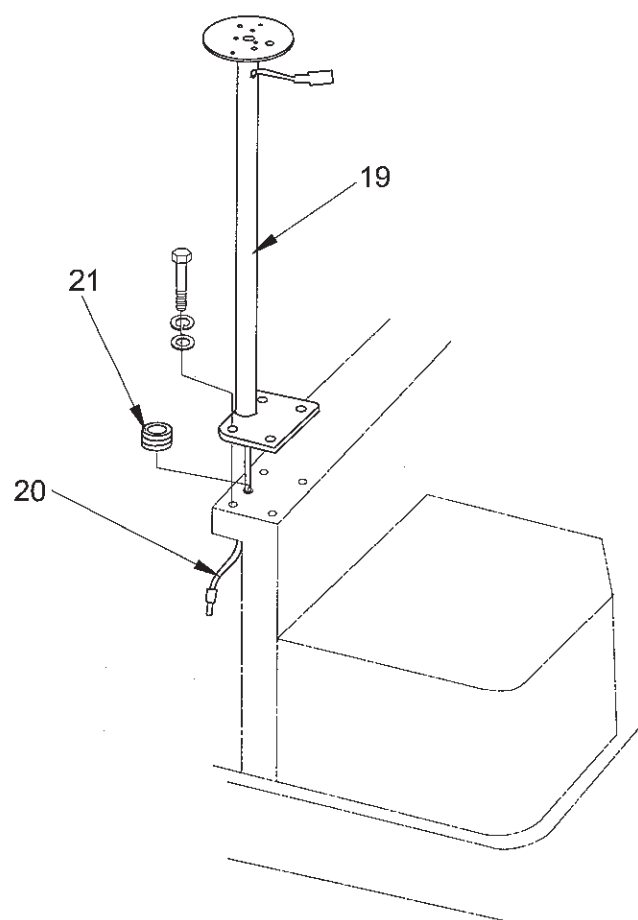
| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>STROBE LIGHT DESCRIPTION</u>    | <u>QTY</u> |
|----------------|--------------------|------------------------------------|------------|
| 11             | 8-40-05033         | Red                                | 1          |
|                | 8-40-05041         | Yellow                             | 1          |
| 12             | 2-00-00838         | Terminal                           | 1          |
| 13             | 2-00-00491         | Grommet                            | 1          |
| 14             | 2-00-00512         | Lock Washer, #10 Int               | 2          |
| 15             | 2-00-04578         | Connector                          | 1          |
| 16             | 2-00-04341         | Grommet                            | 1          |
| 17             | 2-00-03063         | Screw, #10 - 24 x .750 THM         | 2          |
| 18             | 2-00-00605         | Nut, Hex MS #10 - 24 x .375 x .125 | 2          |

| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>LIGHT SUPPORT DESCRIPTION</u> | <u>QTY</u> |
|----------------|--------------------|----------------------------------|------------|
| 19             | 8-81-00145         | Weldment                         | 1          |
| 20             | 8-90-07362         | Wire Assembly                    | 1          |
| 21             | 2-00-00491         | Grommet                          | 1          |

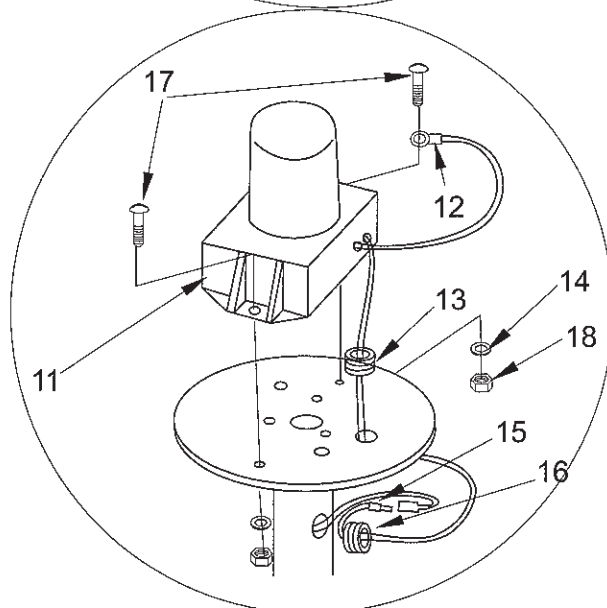
| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>CIRCUIT BREAKER DESCRIPTION</u> | <u>QTY</u> |
|----------------|--------------------|------------------------------------|------------|
| 22             | 8-64-00008         | Circuit Breaker (15AMP)            | 1          |
| 23             | 8-11-00044         | Boot                               | 1          |
| 24             | 8-11-00015         | Terminal                           | 1          |

P4902/9601

# WARNING LIGHTS (STANDARD) - EXPLODED VIEW



P4902



## WARNING LIGHTS with OVERHEAD GUARD - PARTS LIST

| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>ROTATING LIGHT DESCRIPTION</u> | <u>QTY</u> |
|----------------|--------------------|-----------------------------------|------------|
| 1              | 8-40-05033         | Red                               | 1          |
|                | 8-40-05041         | Amber                             | 1          |
| 2              | 2-00-04578         | Connector                         | 1          |
| 3              | 2-00-00491         | Grommet                           | 1          |
| 4              | 2-00-00512         | Lock Washer, #10 Int              | 2          |

| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>FLASHING LIGHT DESCRIPTION</u>  | <u>QTY</u> |
|----------------|--------------------|------------------------------------|------------|
| 5              | 8-40-05033         | Red                                | 1          |
|                | 8-40-05041         | Amber                              | 1          |
| 6              | 2-00-04578         | Connector                          | 1          |
| 7              | 2-00-00491         | Grommet                            | 1          |
| 8              | 2-00-00512         | Lock Washer, #10 Int               | 2          |
| 9              | 2-00-04897         | Screw, #10 - 24 x 1.250 THM        | 2          |
| 10             | 2-00-00605         | Nut, Hex MS #10 - 24 x .375 x .125 | 2          |

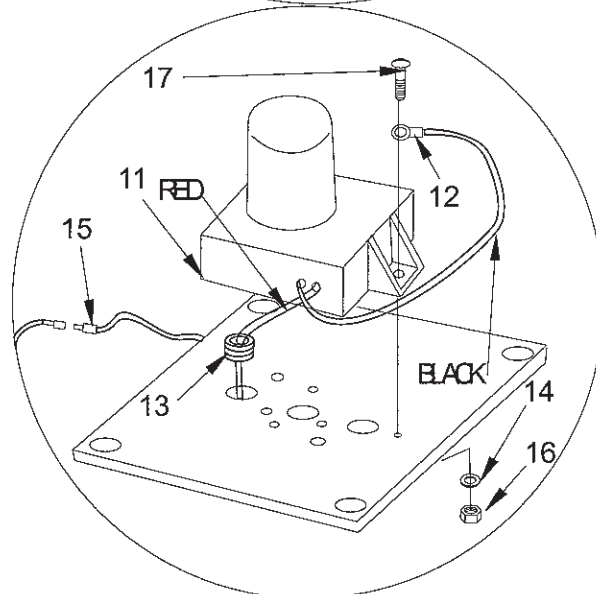
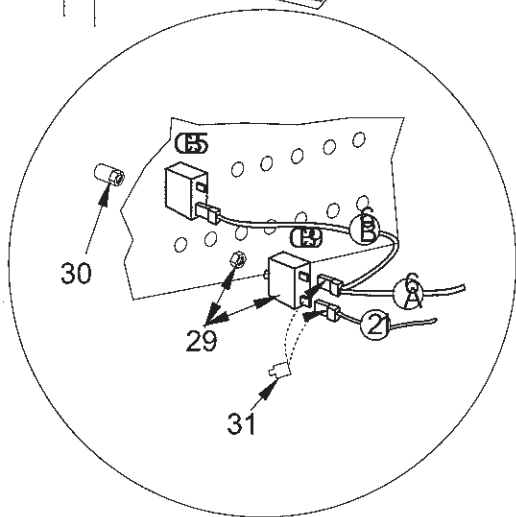
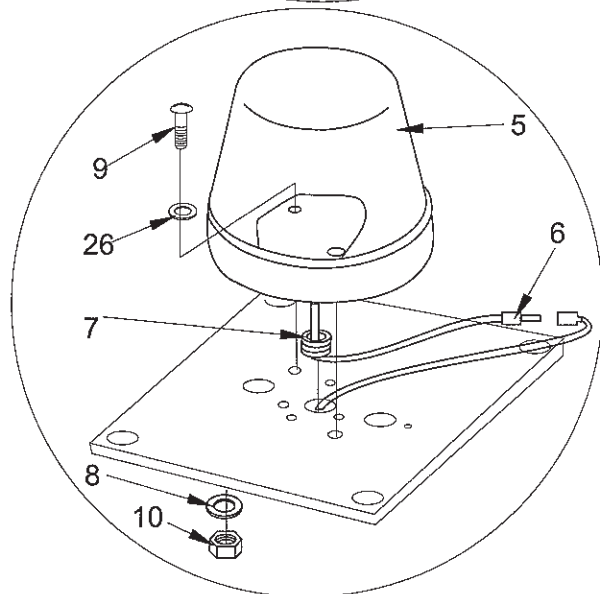
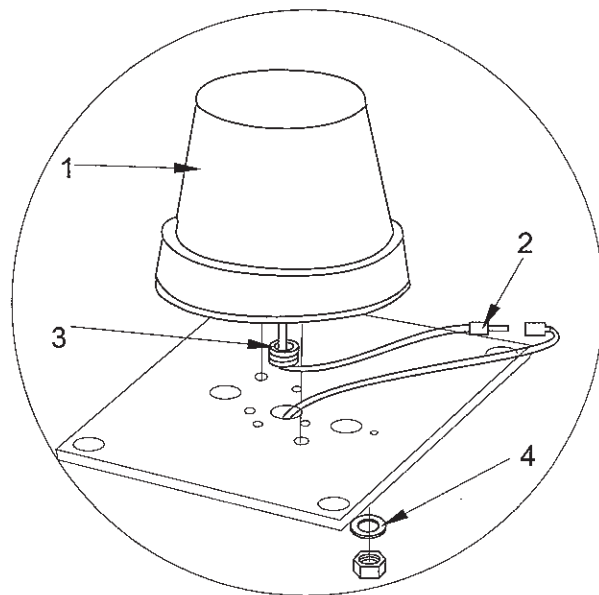
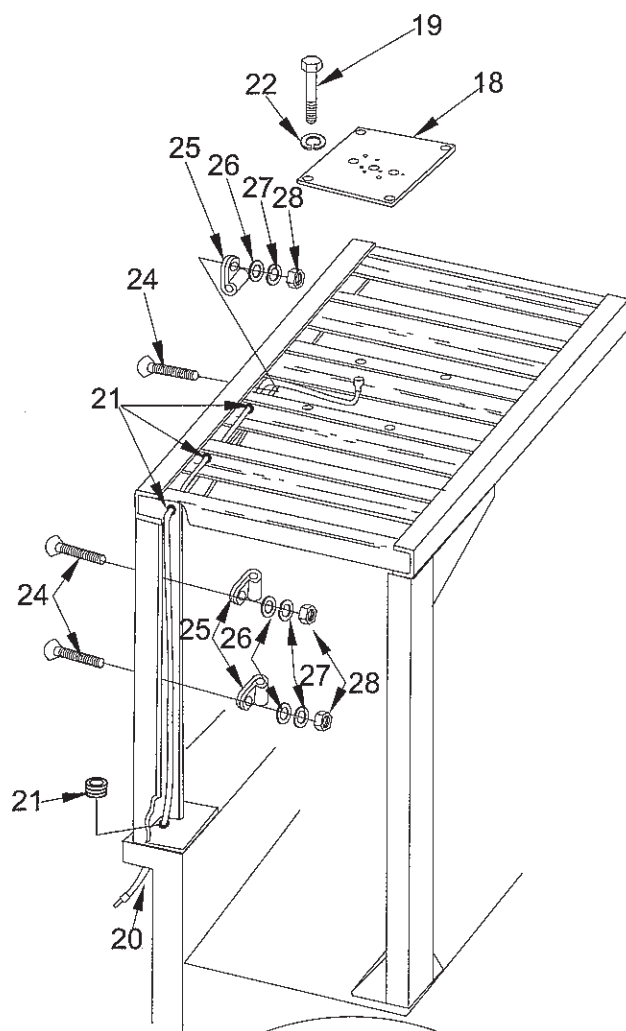
| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>STROBE LIGHT DESCRIPTION</u>    | <u>QTY</u> |
|----------------|--------------------|------------------------------------|------------|
| 11             | 8-40-05033         | Red                                | 1          |
|                | 8-40-05041         | Amber                              | 1          |
| 12             | 2-00-00838         | Terminal                           | 1          |
| 13             | 2-00-00491         | Grommet                            | 1          |
| 14             | 2-00-00512         | Lock Washer, #10 Int               | 2          |
| 15             | 2-00-04578         | Connector                          | 1          |
| 16             | 2-00-00605         | Nut, Hex MS #10 - 24 x .375 x .125 | 2          |
| 17             | 2-00-03063         | Screw, #10 - 24 x .750 THM         | 2          |

| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>GUARD WIRE &amp; SUPPORT ASSEMBLY DESCRIPTION</u> | <u>QTY</u> |
|----------------|--------------------|------------------------------------------------------|------------|
| 18             | 8-58-05228         | Light Support                                        | 1          |
| 19             | 2-00-00221         | Screw, 1/4 - 20 x .750 HHC                           | 4          |
| 20             | 8-90-07363         | Wire Assembly                                        | 1          |
| 21             | 2-00-00491         | Grommet                                              | 1          |
| 22             | 2-00-00518         | Lock Washer, Helical Spring 1/4 Med                  | 4          |
| 23             |                    |                                                      |            |
| 24             | 2-00-03063         | Screw, #10 - 24 x .750 THM                           | 3          |
| 25             | 2-00-04209         | Clamp                                                | 3          |
| 26             | 2-00-00426         | Flat Washer, .500 x .218 x .062                      | 3          |
| 27             | 2-00-00512         | Lock Washer, #10 Int                                 | 3          |
| 28             | 2-00-00605         | Nut, Hex MS #10 - 24 x .375 x .125                   | 3          |

| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>CIRCUIT BREAKER DESCRIPTION</u> | <u>QTY</u> |
|----------------|--------------------|------------------------------------|------------|
| 29             | 8-64-00008         | Circuit Breaker (15AMP)            | 1          |
| 30             | 8-11-00044         | Boot                               | 1          |
| 31             | 8-11-00015         | Terminal                           | 1          |

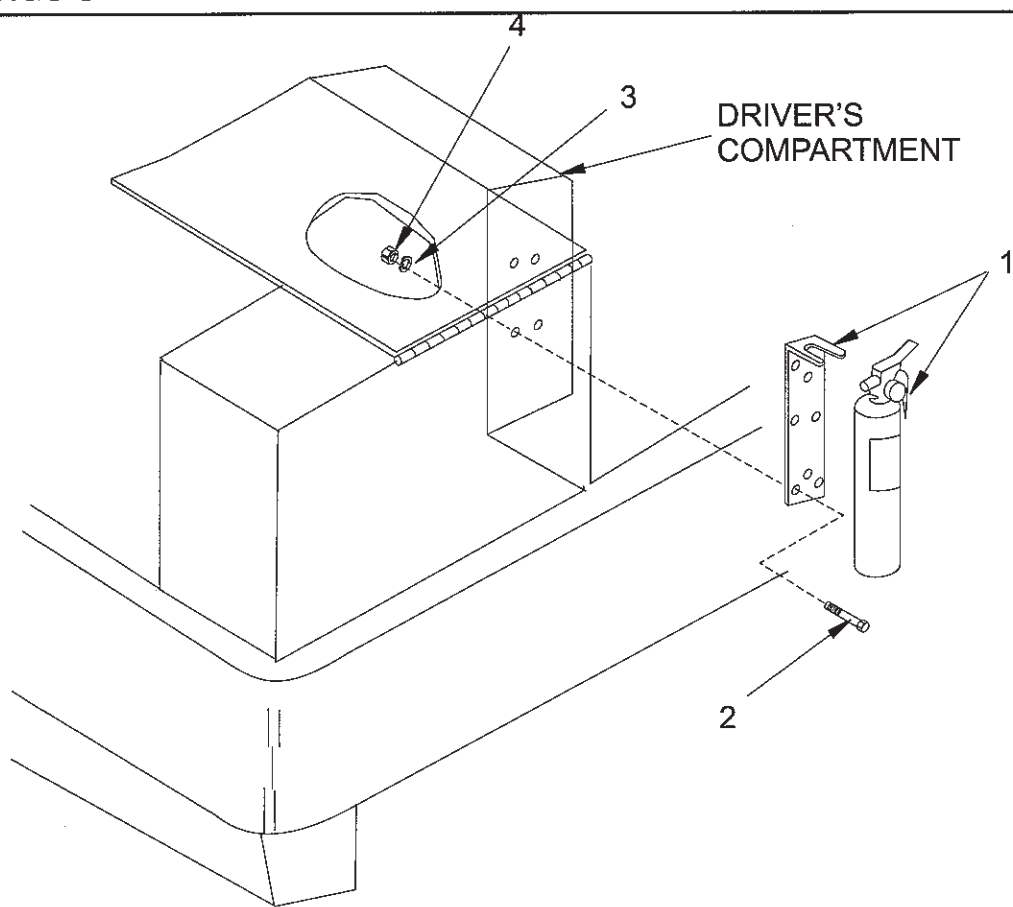
P4901/9601

# WARNING LIGHTS with OVERHEAD GUARD - EXPLODED VIEW



P4901/9511

## FIRE EXTINGUISHER

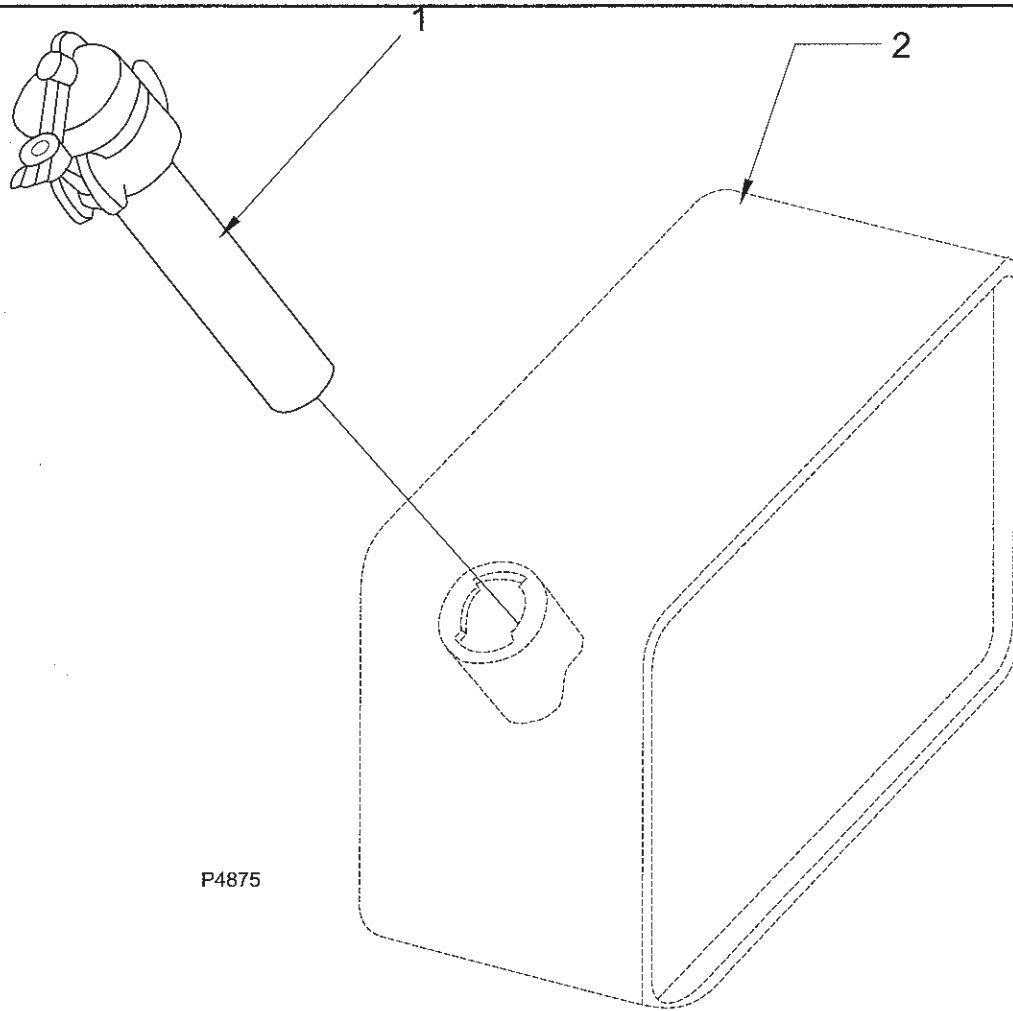


P4872-1/9704

| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>DESCRIPTION</u>              | <u>QTY</u> |
|----------------|--------------------|---------------------------------|------------|
| 1              | 8-83-04033         | Fire Extinguisher               | 1          |
| 2              | 2-00-00221         | Screw, 1/4 - 20 x .750 HHC      | 4          |
| 3              | 2-00-00518         | Lock Washer, 1/4 Split          | 4          |
| 4              | 2-00-00594         | Nut, Hex 1/4 - 20 x .437 x .218 | 4          |

P4872-1/9511

## FLAME ARRESTING GAS CAP



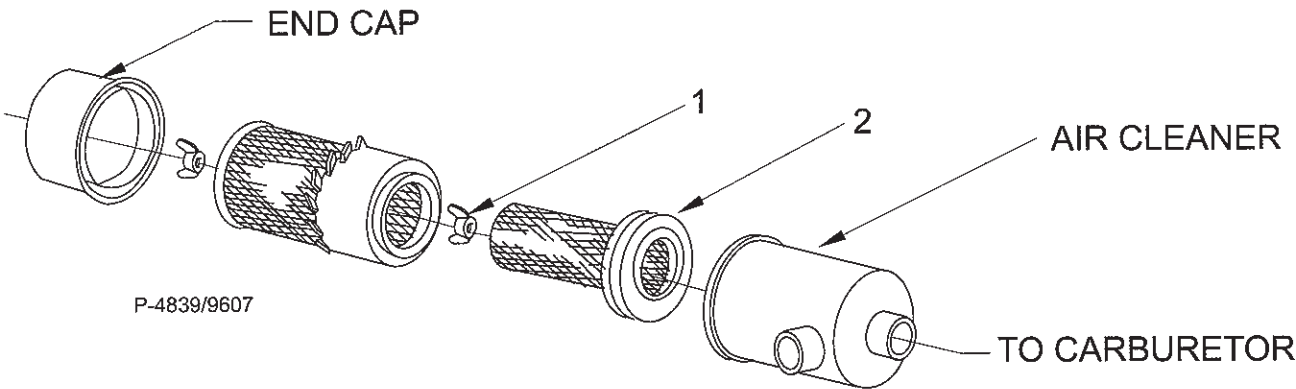
OPTION NO. 0880-105

| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>DESCRIPTION</u>      | <u>QTY</u> |
|----------------|--------------------|-------------------------|------------|
| 1              | 8-11-00024         | Flame Arresting Gas Cap | 1          |
| 2              | 8-83-04022         | Fuel Tank with Gauge    | 1          |

P4875/9601

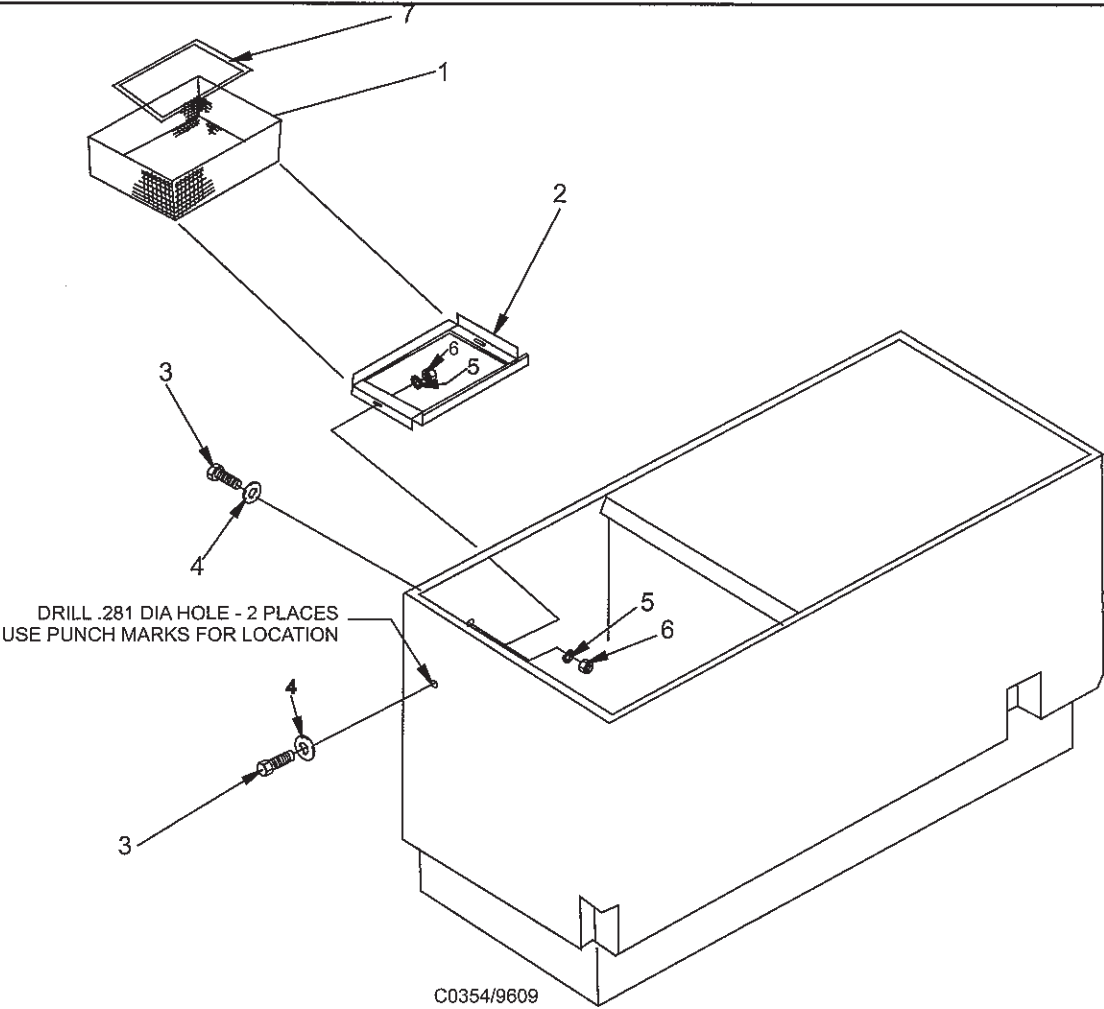
**SAFETY AIR CLEANER**

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| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>DESCRIPTION</u> | <u>QTY</u> |
|----------------|--------------------|--------------------|------------|
| 1              | 8-23-03064         | Wing Nut Assembly  | 1          |
| 2              | 8-24-04111         | Filter Element     | 1          |

P4839/9601



| KEY NO. | PART NUMBER | DESCRIPTION              | QTY   |
|---------|-------------|--------------------------|-------|
| 1       | 7-06-00001  | Debris Basket            | 1     |
| 2       | 7-27-07156  | Debris Basket Frame      | 1     |
| 3       | 2-00-04685  | Screw, 1/4-20 x .750 HHC | 2     |
| 4       | 2-00-04590  | Sealing Washer, 1/4      | 2     |
| 5       | 2-00-04686  | Lock Washer, 1/4         | 2     |
| 6       | 2-00-04688  | Nut, Hex 1/4-20          | 2     |
| 7       | 3-73-00024  | Edging                   | 3.75' |

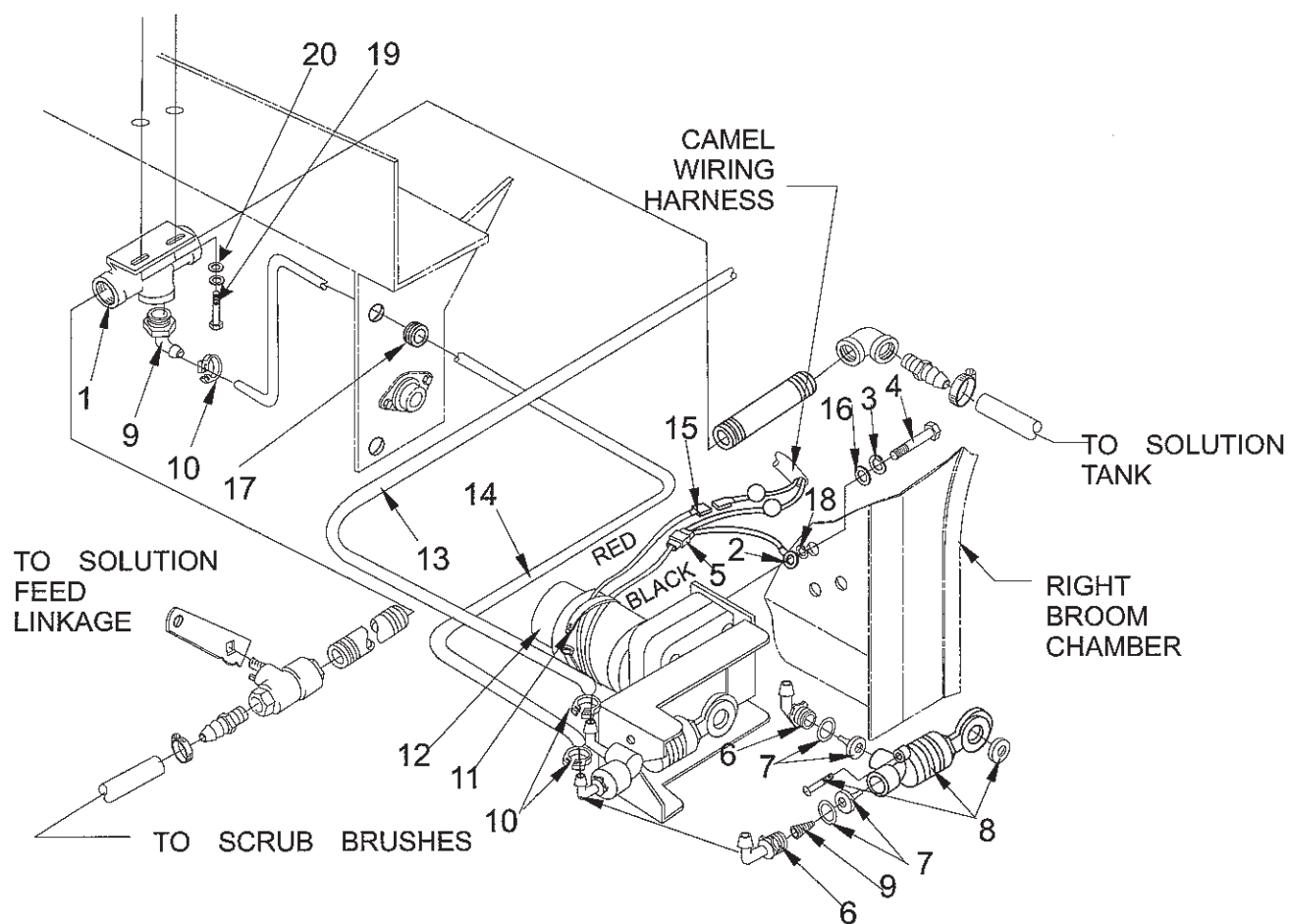
C0354/9511

## DETERGENT METERING PUMP (CAMEL) - PARTS LIST

| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>DESCRIPTION</u>                  | <u>QTY</u> |
|----------------|--------------------|-------------------------------------|------------|
| 1              | 7-08-00437         | Solution Pipe Bracket               | 1          |
| 2              | 2-00-00842         | Wing Terminal                       | 1          |
| 3              | 2-00-00519         | Lock Washer, Helical Spring #10 Med | 3          |
| 4              | 2-00-02848         | Screw, #10 - 32 x .500 RHM          | 3          |
| 5              | 2-00-04479         | Splice                              | 1          |
| 6              | 0780-071           | Tubing Connector Service Parts Kit  | Ref        |
| 7              | 0780-072           | Hi-Hat Poppet Service Parts Kit     | Ref        |
| 8              | 0780-073           | Bellows Module Service Parts Kit    | Ref        |
| 9              | 2-00-04655         | 90° Elbow, 3/4 NPT to Barb          | 1          |
| 10             | 7-13-07084         | Hose Clamp                          | 3          |
| 11             | 2-00-04345         | Ty-Rap                              | 1          |
| 12             | 7-60-05008         | Bellows Metering Pump               | 1          |
| 13             | 7-87-02147         | Detergent Feed Tube                 | 1          |
| 14             | 7-87-02129         | Detergent Feed Tube                 | 1          |
| 15             | 8-11-00015         | Terminal, 1/4 Male Blade Covered    | 1          |
| 16             | 2-00-00426         | Flat Washer, .500 x .219 x .063     | 1          |
| 17             | 2-00-03878         | Grommet, 1.062 x .500 x .437 x .187 | 1          |
| 18             | 2-00-02296         | Lock Washer, #10 Ext.               | 1          |
| 19             | 2-00-01081         | Screw 8-32 x .50 T/C-RHPH           | 1          |
| 20             | 2-00-00506         | Washer Lock Intl. #8                | 2          |

P4885/9510

# DETERGENT METERING PUMP (CAMEL) - EXPLODED VIEW

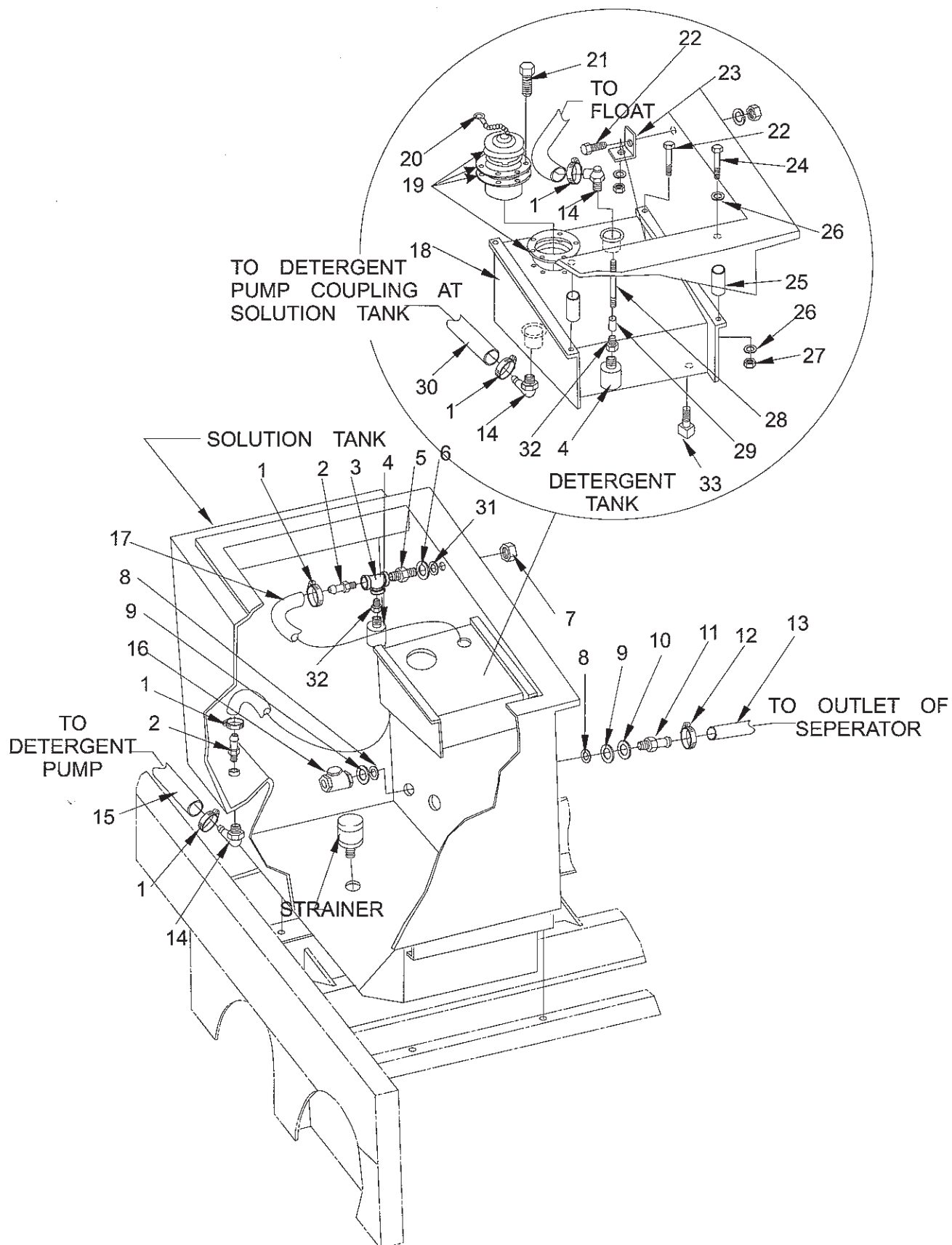


## SOLUTION TANK (CAMEL) - EXPLODED VIEW

| KEY NO. | PART NUMBER | DESCRIPTION                                  | QTY |
|---------|-------------|----------------------------------------------|-----|
| 1       | 7-13-07084  | Hose Clamp                                   | 4   |
| 2       | 2-74-00001  | Fitting                                      | 2   |
| 3       | 2-00-05022  | Female Pipe Tee, 1/4-18 NPT                  | 1   |
| 4       | 7-82-00017  | Float                                        | 2   |
| 5       | 2-00-04628  | Pipe Nipple 1/4-18 NPT to 3/8-18 NPT         | 1   |
| 6       | 2-00-05020  | Sealing Washer                               | 1   |
| 7       | 2-00-05018  | Nut                                          | 1   |
| 8       | 2-00-05014  | O-Ring, 1.255 x 1.049 x .103                 | 2   |
| 9       | 2-00-05015  | Sealing Washer                               | 2   |
| 10      | 2-00-05239  | Flat Washer, 2.000 x 1.062 x .125 S.S.       | 1   |
| 11      | 7-25-02039  | Hose Fitting Barbed, Male Swivel 3/4-14 NPTF | 1   |
| 12      | 2-00-02220  | Hose Clamp, .812 - 1.500                     | 1   |
| 13      | 7-33-02227  | Hose, Separator to Solution Tank             | 1   |
| 14      | 2-74-00001  | Fitting                                      | 3   |
| 15      | 7-87-02147  | Detergent Feed Tube                          | 1   |
| 16      | 7-88-00031  | Check Valve, 3/4NPT                          | 1   |
| 17      | 7-87-02128  | Tube                                         | 1   |
| 18      | 7-83-04112  | Detergent Tank                               | 1   |
| 19      | 7-11-00031  | Filler Assembly                              | 1   |
| 20      | 2-00-00830  | Terminal                                     | 1   |
| 21      | 2-00-05234  | Screw, #8 - 32 x .625 RHM S.S.               | 6   |
| 22      | 2-00-04685  | Screw, 1/4 - 20 x .750 HHC S.S.              | 2   |
| 23      | 7-08-00516  | Detergent Tank Bracket                       | 1   |
| 24      | 2-00-05122  | Screw, 1/4 - 20 x 2.000 HHC S.S.             | 2   |
| 25      | 7-09-01046  | Spacer, .500 x .375 x 1.250                  | 2   |
| 26      | 2-00-04687  | Lock Washer, Helical Spring 1/4 Med S.S.     | 4   |
| 27      | 2-00-04688  | Nut, Hex 1/4 - 20 x .437 x .218 S.S.         | 1   |
| 28      | 2-00-05021  | Pipe Nipple, 1/4 NPT x 2.500                 | 1   |
| 29      | 2-00-05011  | Pipe Coupling, 1/4 NPT                       | 1   |
| 30      | 7-87-02129  | Tube                                         | 1   |
| 31      | 2-00-05019  | O-Ring, .885 x .679 x .109                   | 1   |
| 32      | 2-00-05003  | Fitting, Reducer                             | 2   |
| 33      | 2-00-02471  | Pipe Plug, 1/4 NPT                           | 1   |

P4604/9510

## SOLUTION TANK (CAMEL) - EXPLODED VIEW

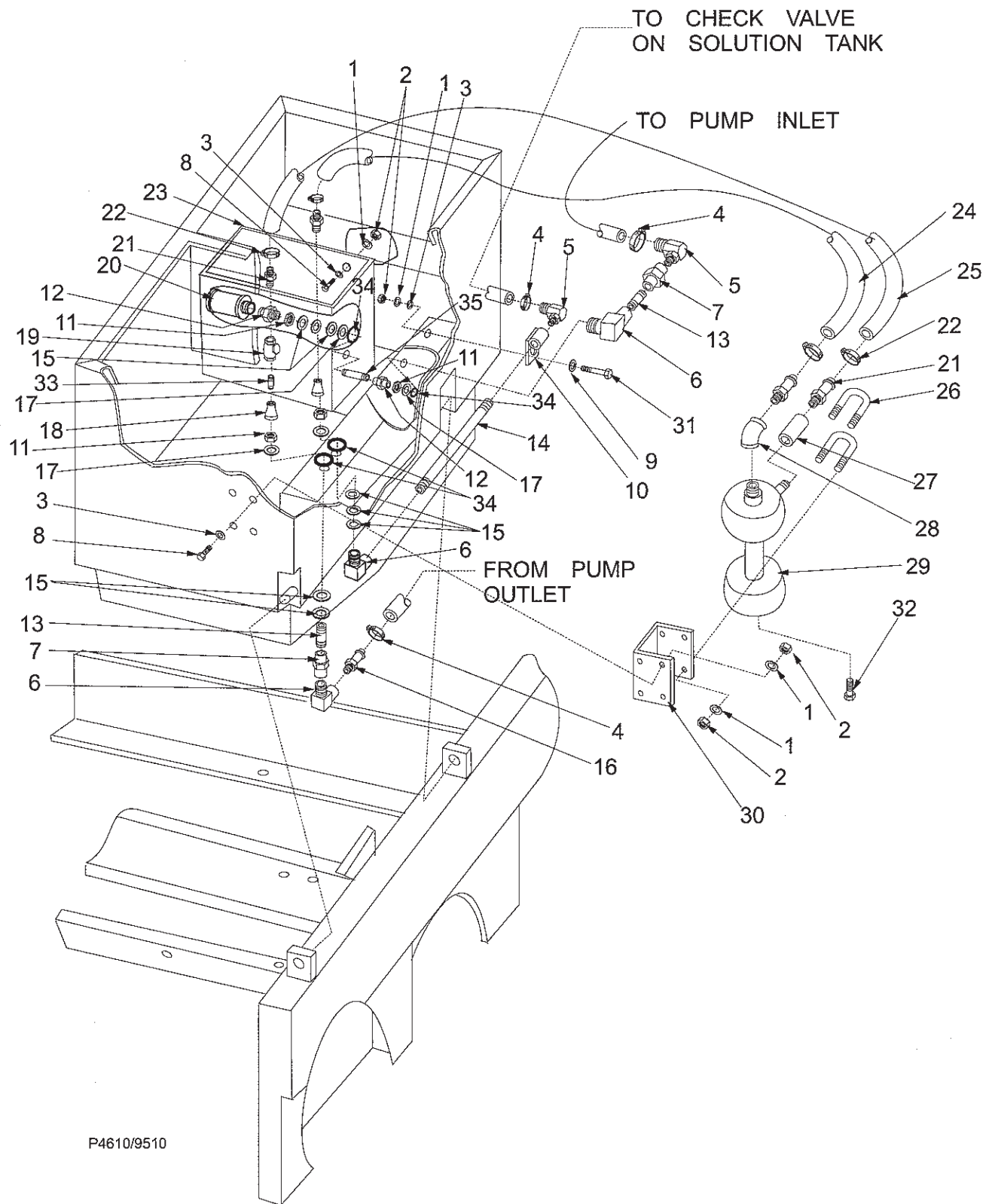


## RECOVERY TANK (CAMEL) - EXPLODED VIEW

| KEY NO. | PART NUMBER | DESCRIPTION                                     | QTY |
|---------|-------------|-------------------------------------------------|-----|
| 1       | 2-00-04687  | Lock Washer, Helical Spring 1/4 Med S.S.        | 11  |
| 2       | 2-00-04688  | Nut, Hex 1/4 - 20 x .437 x .218 S.S.            | 11  |
| 3       | 2-00-04590  | Sealing Washer, .63 x .250                      | 7   |
| 4       | 2-00-03407  | Hose Clamp, .812 - 1.500                        | 3   |
| 5       | 2-00-04751  | Hose Fitting 90° NPTF Swivel Male Elbow, 3/4-14 | 2   |
| 6       | 2-00-04469  | Fitting, 90° Elbow                              | 2   |
| 7       | 2-00-04608  | Pipe Coupling, 3/4-14 NPT                       | 3   |
| 8       | 2-00-04685  | Screw, 1/4 - 20 x .750 HHC S.S.                 | 7   |
| 9       | 2-00-00407  | Flat Washer, .562 x .265 x .062                 | 1   |
| 10      | 7-08-00517  | Pipe Coupling Bracket                           | 1   |
| 11      | 2-00-05013  | Nut, Hex 3/4 NPT                                | 4   |
| 12      | 2-00-04736  | Pipe Connector, 3/4-14 x 2.000 F-F              | 1   |
| 13      | 2-95-02518  | Pipe Nipple, 3/4 NPT x 1 3/8 Close              | 3   |
| 14      | 2-00-05012  | Pipe Nipple, 3/4 NPT x 10 1/2                   | 1   |
| 15      | 2-00-05239  | Flat Washer, 2.000 x 1.062 x .125 S.S.          | 2   |
| 16      | 7-25-02039  | Hose Fitting Barbed, Male Swivel 3/4-1/4 NPTF   | 2   |
| 17      | 2-00-05015  | Sealing Washer,                                 | 2   |
| 18      | 2-00-03893  | Pipe Reducer Coupling, 3/4 NPT - 1/2 NPT        | 2   |
| 19      | 7-88-00030  | Check Valve, 1/2 NPT                            | 1   |
| 20      | 7-24-04022  | Solution Inlet Filter                           | 1   |
| 21      | 7-25-02040  | Straight Barb Stem, 1/2 - 14                    | 4   |
| 22      | 2-00-03407  | Hose Clamp, .562 to 1.062                       | 4   |
| 23      | 7-83-04096  | Camel Sump Tank                                 | 1   |
| 24      | 7-33-02212  | Hose                                            | 1   |
| 25      | 7-33-02211  | Hose                                            | 1   |
| 26      | 2-00-04579  | U-Bolt, 5/16-18 x 2.000 x 2.687                 | 2   |
| 27      | 2-95-02547  | Pipe Coupling, 1/2 NPT                          | 1   |
| 28      | 2-95-02527  | Pipe Elbow, 90° 1/2 NPT                         | 1   |
| 29      | 7-24-04036  | In Line Filter                                  | 1   |
| 30      | 7-08-00519  | Camel Separator Bracket                         | 1   |
| 31      | 2-00-05233  | Screw, 1/4-20 x .875 HHC S.S.                   | 1   |
| 32      | 7-56-05012  | Fitting, Separator Purge                        | 1   |
| 33      | 2-95-02516  | Pipe Nipple, 1/2 NPT x 1 1/8 (Close)            | 1   |
| 34      | 2-00-05014  | O - Ring, 1.255 x 1.049 x .139                  | 4   |
| 35      | 2-95-04267  | Pipe Nipple, 3/4 NPT x 3                        | 1   |

P4610/9510

# RECOVERY TANK (CAMEL) - EXPLODED VIEW

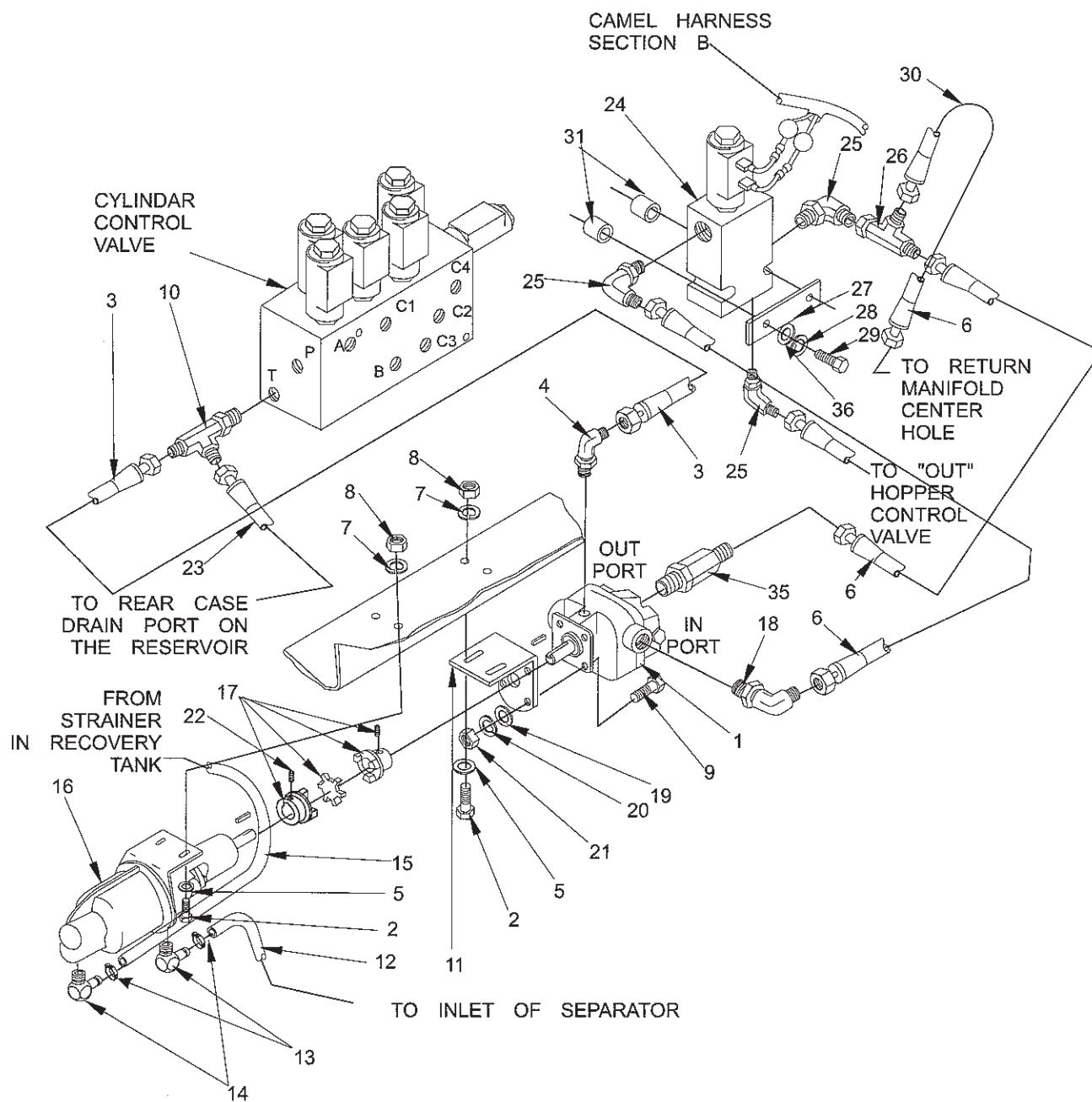


## RECOVERY SYSTEM (CAMEL) - PARTS LIST

| KEY NO. | PART NUMBER | DESCRIPTION                              | QTY. |
|---------|-------------|------------------------------------------|------|
| 1       | 0782-116    | Recycling Pump Motor                     | 1    |
| 2       | 2-00-00209  | Screw, 3/8 - 16 x 1.250 HHC              | 4    |
| 3       | 7-33-02226  | Hydraulic Hose, ORS 4 - Str. Ends 13.00" | 1    |
| 4       | 2-00-04892  | ORFS 90° Elbow, 7/16-20 to 9/16-18       | 1    |
| 5       | 2-00-00402  | Flat Washer, .750 x .390 x .093          | 4    |
| 6       | 8-33-02214  | Hose, Hydraulic ORS8 - 029.000 L         | 2    |
| 7       | 2-00-02310  | Lock Washer, Helical Spring 3/8 Med      | 4    |
| 8       | 2-00-02360  | Nut, Hex 3/8 - 16 x .562 x .328          | 4    |
| 9       | 2-00-00207  | Screw, 5/16-18 x 1.250 HHC               | 4    |
| 10      | 2-00-04927  | ORFS Branch Tee, 7/16-20 to 9/16-18      | 1    |
| 11      | 7-08-00518  | Bracket                                  | 1    |
| 12      | 7-33-02210  | Hose, Pump to Separator                  | 1    |
| 13      | 2-00-02220  | Hose Clamp, .812 - 1.500                 | 2    |
| 14      | 7-25-02038  | 90° Barb Stem Elbow, 3/4-14              | 2    |
| 15      | 7-33-02209  | Hose, Pump to Recovery                   | 1    |
| 16      | 7-60-05007  | Recycling Pump                           | 1    |
|         | 2-60-02271  | Repair Kit for 7-60-05007                | 1    |
| 17      | 7-16-05021  | Flexible Coupling                        | 1    |
| 18      | 2-00-04922  | Fitting, 90° Elbow                       | 1    |
| 19      | 2-00-00409  | Flat Washer, .687 x .343 x .062          | 4    |
| 20      | 2-00-00530  | Lock Washer, Helical Spring, 5/16 Med    | 4    |
| 21      | 2-00-00585  | Nut, Hex 5/16 - 18 x .500 x .265         | 4    |
| 22      | 2-00-00287  | Setscrew, 1/4 - 20 x .500 HS-KCP         | 4    |
| 23      | 7-33-02225  | Hose, Hydraulic ORS 4 90° to str. 38"    | Ref  |
| 24      | 7-88-00052  | Valve, Motor Shut Off                    | 1    |
|         | 7-12-02023  | Valve Cartridge                          | -    |
| 25      | 2-00-04885  | ORFS 90° Elbow, 3/4-16 to 13/16-16       | 3    |
| 26      | 2-00-04928  | ORFS 8 Run Tee, 13/16-16 Male            | 1    |
| 27      | 8-65-00043  | Retainer                                 | 1    |
| 28      | 2-00-00518  | Lock Washer, Helical Spring 1/4 Med      | 2    |
| 29      | 2-00-04986  | Screw, 1/4-20 x 4.500 HHC                | 2    |
| 30      | 7-33-02187  | Hose, Hydraulic                          | 1    |
| 31      | 2-00-05046  | Fitting, Swivel 90° Elbow                | 1    |
| 32      |             |                                          |      |
| 33      |             |                                          |      |
| 34      |             |                                          |      |
| 35      | 2-00-04979  | Connector, ORFS 1 1/16-12 to 13/16-16    | 1    |
| 36      | 2-00-00407  | Flat Washer 1/4                          | 2    |

P4849

# RECOVERY SYSTEM (CAMEL) - EXPLODED VIEW



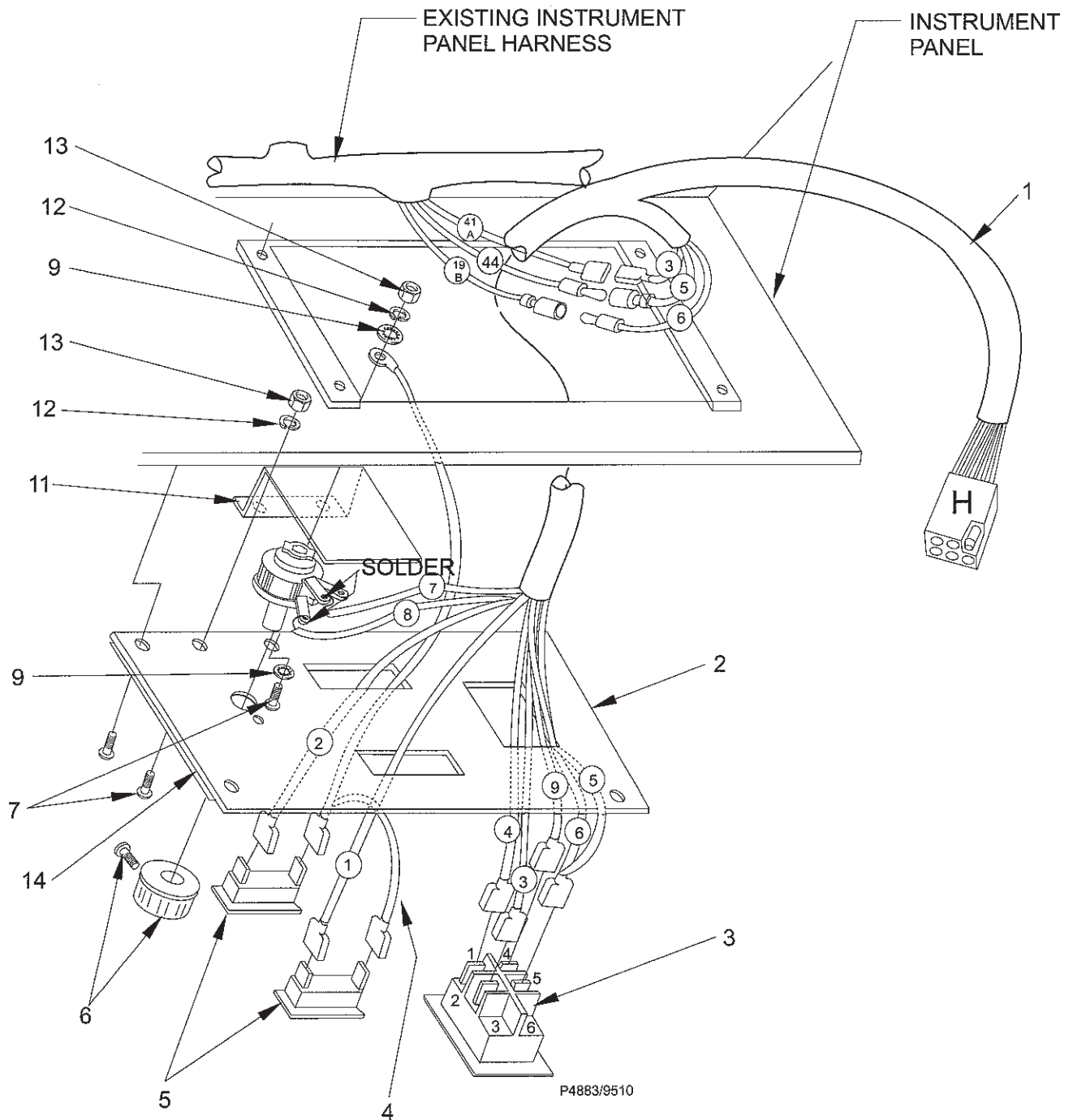
P4849

## INSTRUMENT PANEL (CAMEL) - PARTS LIST

| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>DESCRIPTION</u>                 | <u>QTY</u> |
|----------------|--------------------|------------------------------------|------------|
| 1              | 0795-081           | Camel Wiring Harness               | 1          |
| 2              | 7-52-00082         | Camel Instrument Panel             | 1          |
| 3              | 7-82-00022         | DPS ON/OFF Switch                  | 1          |
| 4              | 7-90-07233         | Wire Assembly                      | 1          |
| 5              | 7-40-05028         | Light                              | 2          |
| 6              | 7-39-00021         | Knob                               | 1          |
| 7              | 2-00-03059         | Screw, #10-32 x .375 RHM           | 2          |
| 8              |                    |                                    |            |
| 9              | 2-00-02296         | Lock Washer, #10 Ext.              | 2          |
| 10             | 7-64-05009         | Variable Resistor (Rheostat)       | 1          |
| 11             | 7-30-05057         | Guard (Rheostat)                   | 1          |
| 12             | 2-00-00529         | Lock Washer, Helical Spring #8 Med | 2          |
| 13             | 2-00-00602         | Nut, Hex MS #8-32 x .375 x .125    | 2          |
| 14             | 7-18-00136         | Decal, Detergent Flow              | 1          |

P4883

# INSTRUMENT PANEL (CAMEL) - EXPLODED VIEW

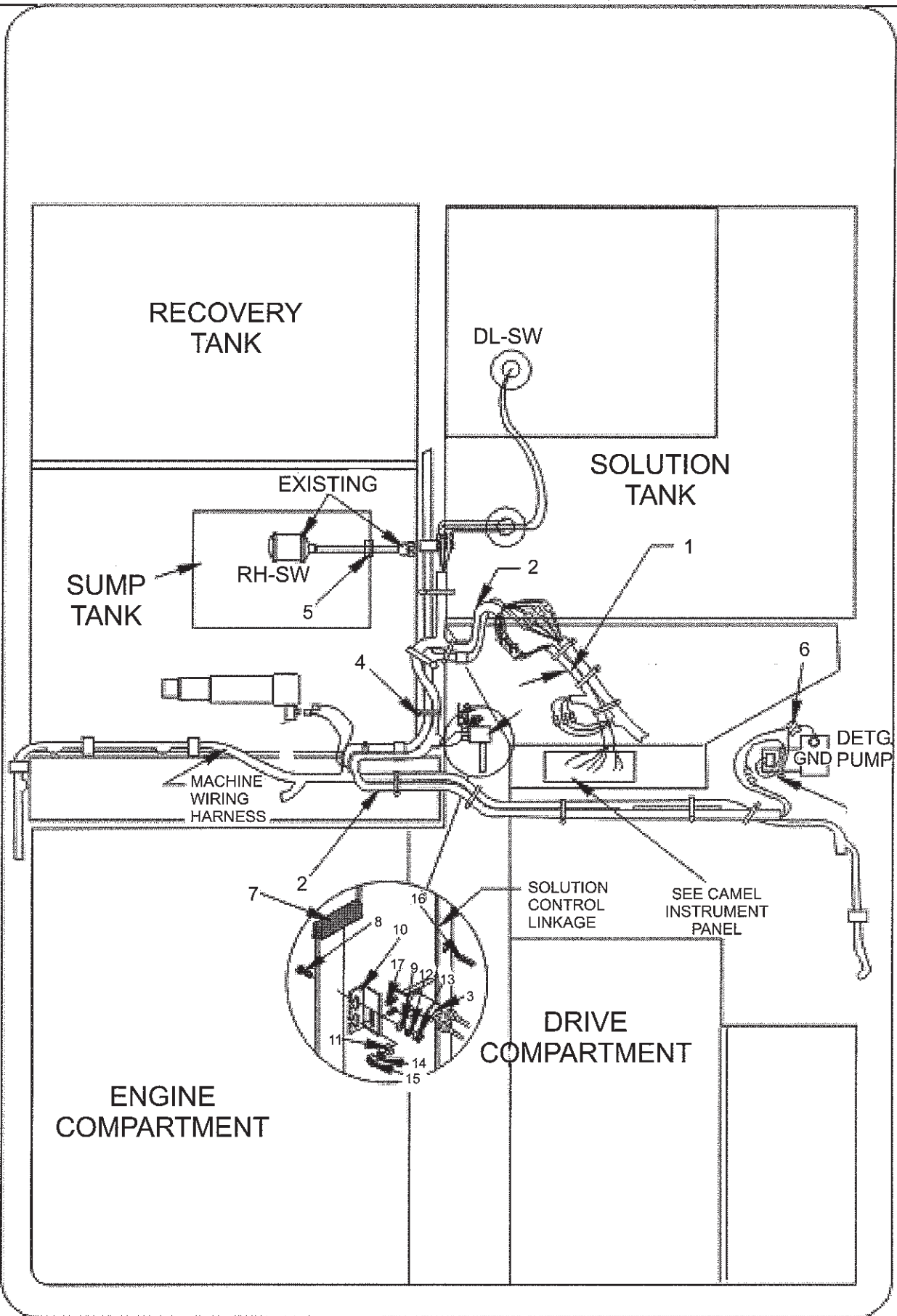


## WIRING (CAMEL) - PARTS LIST

| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>DESCRIPTION</u>                     | <u>QTY</u> |
|----------------|--------------------|----------------------------------------|------------|
| 1              | 0795-081           | Camel Wiring Harness, Section A        | 1          |
| 2              | 0795-081           | Camel Wiring Harness, Section B        | 1          |
| 3              | 8-82-00036         | LS-DMP Switch                          | 1          |
| 4              | 2-00-04345         | Wire Tie                               |            |
| 5              | 2-00-00491         | Grommet                                | 1          |
| 6              | 2-00-04479         | Splice                                 | 1          |
| 7              | 8-21-04019         | Edging                                 | 1          |
| 8              | 2-00-03575         | Carriage Bolt, 1/4-20 x .750           | 2          |
| 9              | 2-00-00407         | Flat Washer, .562 x .265 x .062        | 2          |
| 10             | 8-08-00532         | Bracket                                | 1          |
| 11             | 2-00-00426         | Flat Washer, .500 x .218 x .062        | 2          |
| 12             | 2-00-00518         | Lock Washer, Helical Spring 1/4 Med    | 2          |
| 13             | 2-00-00594         | Nut, Hex 1/4-20 X .437 X .218          | 2          |
| 14             | 2-00-00519         | Lock Washer Helical Spring #10 Med     | 2          |
| 15             | 2-00-00605         | Nut, Hex MS #10-24 x .375 x .125       | 2          |
| 16             | 2-00-04749         | Radial Locking Spring Pin .125 x 1.375 | 1          |
| 17             | 2-00-03059         | Screw, #10-24 x .375 THM               | 2          |

P4884

# WIRING (CAMEL) - EXPLODED VIEW



## ENGINE SHUTDOWN (FORD) - PARTS LIST

| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>DESCRIPTION</u>                 | <u>QTY</u> |
|----------------|--------------------|------------------------------------|------------|
| 1              | 8-64-00004         | Relay, Automatic Override          | 1          |
| 2              | 8-63-05013         | Regulator, Pressurestat            | 1          |
| 3              | 7-40-05028         | Light, Warning                     | 1          |
| 4              | 8-63-05011         | Regulator, Alarmstat               | 1          |
| 5              | 8-09-01070         | Bushing, 3/8 NPT x 1/2 NPT         | 1          |
| 6              | 2-95-02537         | Pipe Tee, 1/2 NPT (Galv.)          | 1          |
| 7              | 2-00-046.8         | Pipe, Nipple 1/2 NPT x 3/8 NPT     | 1          |
| 8              | 2-00-02474         | Plug, 1/2 NPT Hex HD               | 1          |
| 9              | 2-00-04808         | Terminal, Amp. 52936 or Equiv.     | 11         |
| 10             | 2-00-00838         | Terminal, Etc. B-337-10 or Equiv.  | 1          |
| 11             | 2-00-00049         | Screw, #10-24 x .500 RHM           | 2          |
| 12             | 2-00-04626         | Terminal, Holl. FP5336F or Equiv.  | 1          |
| 13             | 2-00-04576         | Terminal, Holl. XMP9654S or Equiv. | 1          |
| 14             | 2-00-01128         | Terminal, Butt Splice              | 1          |
| 15             | 2-00-00519         | Washer, #10 Lock                   | 2          |
| 16             | 2-00-04345         | Tye Rap                            | 10         |
| 17             | 3-61-00189         | Stranded, 16 awg. Black            | 20'        |
| 18             | 2-00-00605         | Nut, #10-24                        | 2          |

P4959

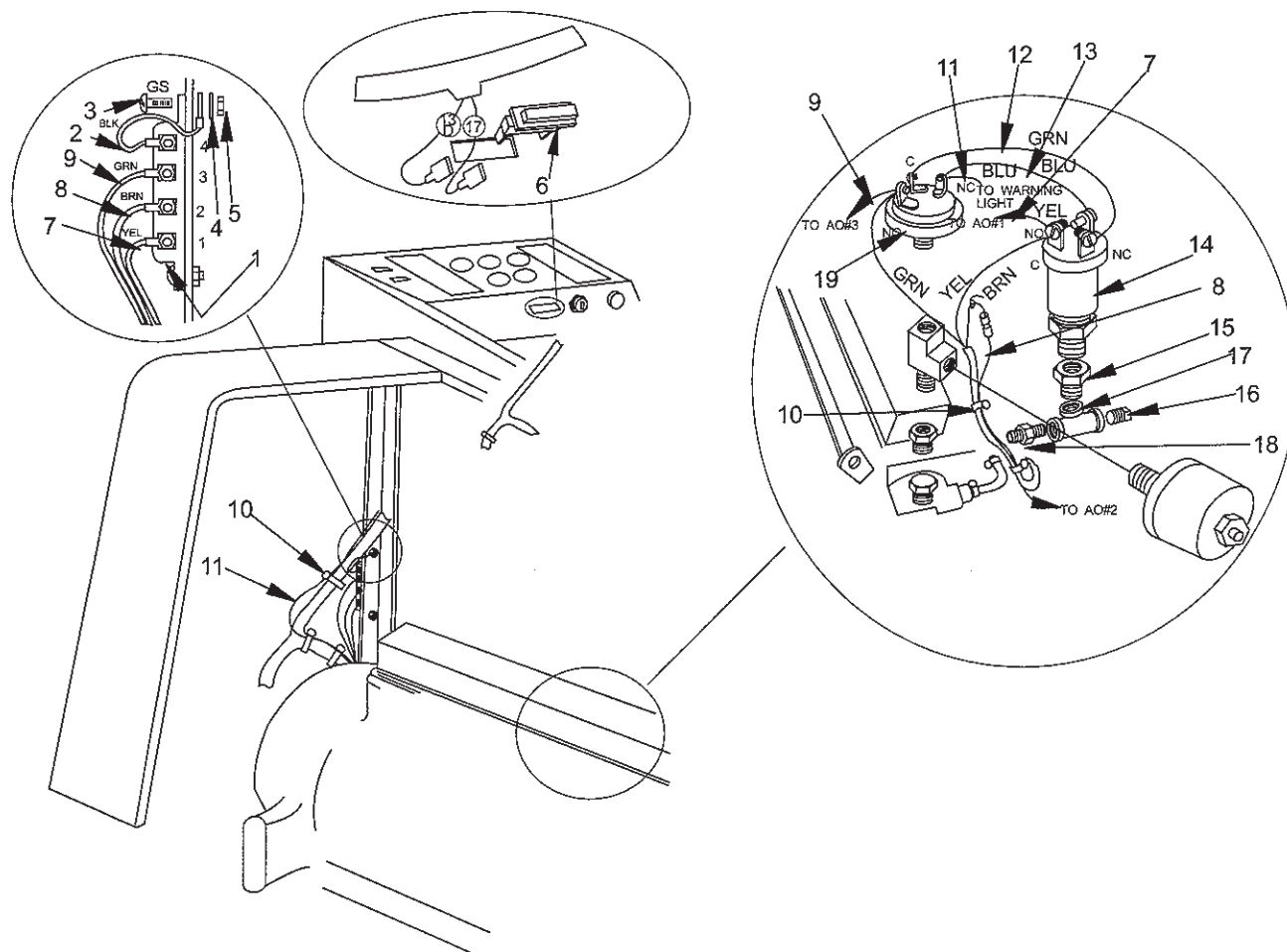


## ENGINE SHUTDOWN (PERKINS) - PARTS LIST

| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>DESCRIPTION</u>                      | <u>QTY</u> |
|----------------|--------------------|-----------------------------------------|------------|
| 1              | 8-64-00004         | Automatic Override Relay                | 1          |
| 2              | 8-90-07365         | Wire, (GS) to Automatic Override #4     | 1          |
| 3              |                    |                                         |            |
| 4              | 8-90-07364         | Wire, Warning Light to Bullet Plug      | 1          |
| 5              | 8-90-07361         | Wire, GS to Warning Light               | 1          |
| 6              | 7-40-05028         | Warning Light                           | 1          |
| 7              | 8-90-07398         | Wire, (A.O. #1) to Alarmstat C          | 1          |
| 8              | 8-90-07399         | Wire, (A.O. #2) to Butt Splice          | 1          |
| 9              | 8-90-07400         | Wire, (A.O. #3) to Pressurestat NO      | 1          |
| 10             | 2-00-04345         | Ty-Rap                                  | 11         |
| 11             | 8-90-07403         | Wire, Bullet recept. to Pressurestat NC | 1          |
| 12             | 8-90-07402         | Wire, Pressurestat C to Alarmstat NC    | 1          |
| 13             | 8-90-07401         | Wire, Pressurestat NC to Alarmstat NO   | 1          |
| 14             | 8-63-05012         | Alarmstat Regulator                     | 1          |
| 15             | 8-09-01070         | Alarmstat Bushing, 3/8-1/2 NPT          | 1          |
| 16             | 2-00-02474         | Pipe Plug, 1/2 NPT                      | 1          |
| 17             | 2-95-02537         | Tee                                     | 1          |
| 18             | 2-00-04638         | Reducer, 3/8 to 1/2                     | 1          |
| 19             | 8-63-05013         | Pressurestat Regulator                  | 1          |

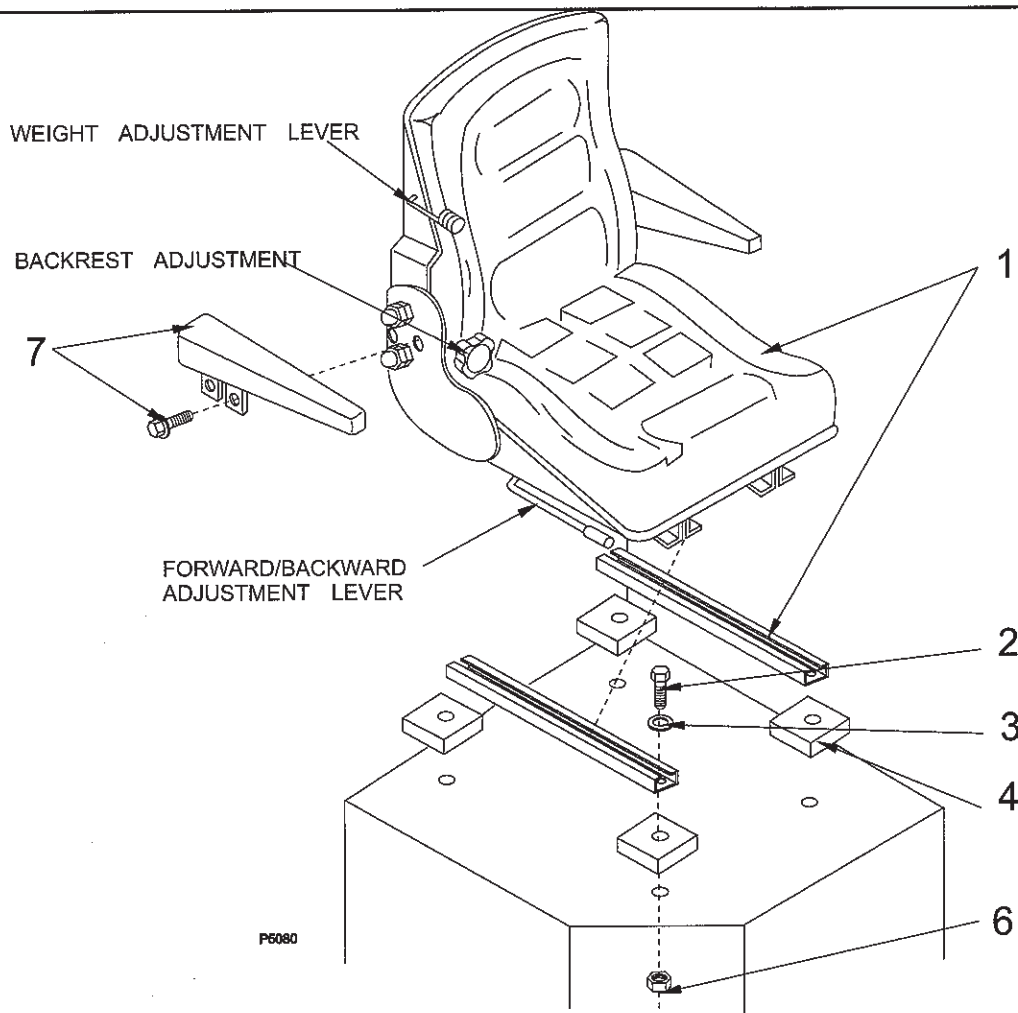
P5126

# ENGINE SHUTDOWN (PERKINS) - EXPLODED VIEW



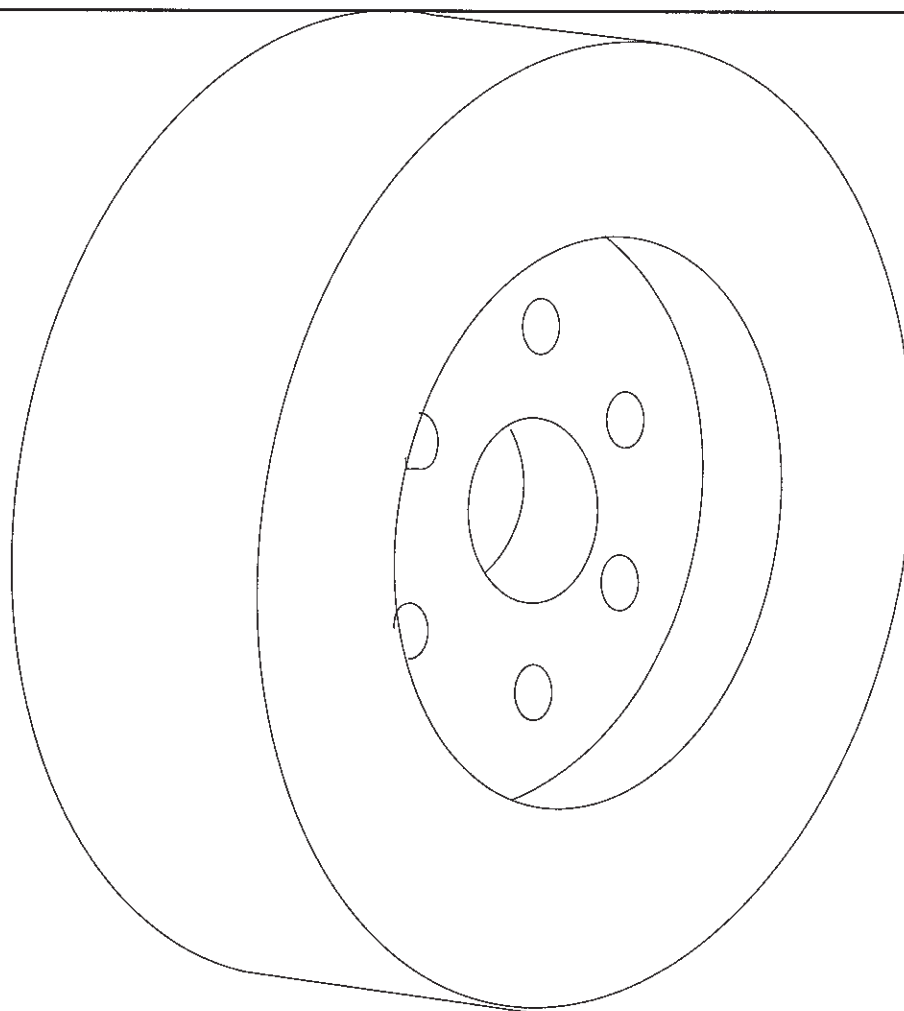
P5126/9706

## SUSPENSION SEAT



| KEY NO. | PART NUMBER | DESCRIPTION                                     | QTY |
|---------|-------------|-------------------------------------------------|-----|
| 1       | 8-69-00015  | Seat without armrests                           | 1   |
| 2       | 2-00-00225  | Screw, 5/16-18 x 1.500 HHC                      | 4   |
| 3       | 2-00-00409  | Flat Washer, .687 x .343 x .062                 | 4   |
| 4       | 8-71-00016  | Shim Block                                      | 4   |
| 5       |             |                                                 |     |
| 6       | 2-00-00644  | Nut, 5/16-18 Lock                               | 4   |
| 7       | 8-09-04272  | Armrest Kit (Includes both Armrests)            | 1   |
|         | 0880-474    | Suspension Seat Option (Includes all the Above) | 1   |

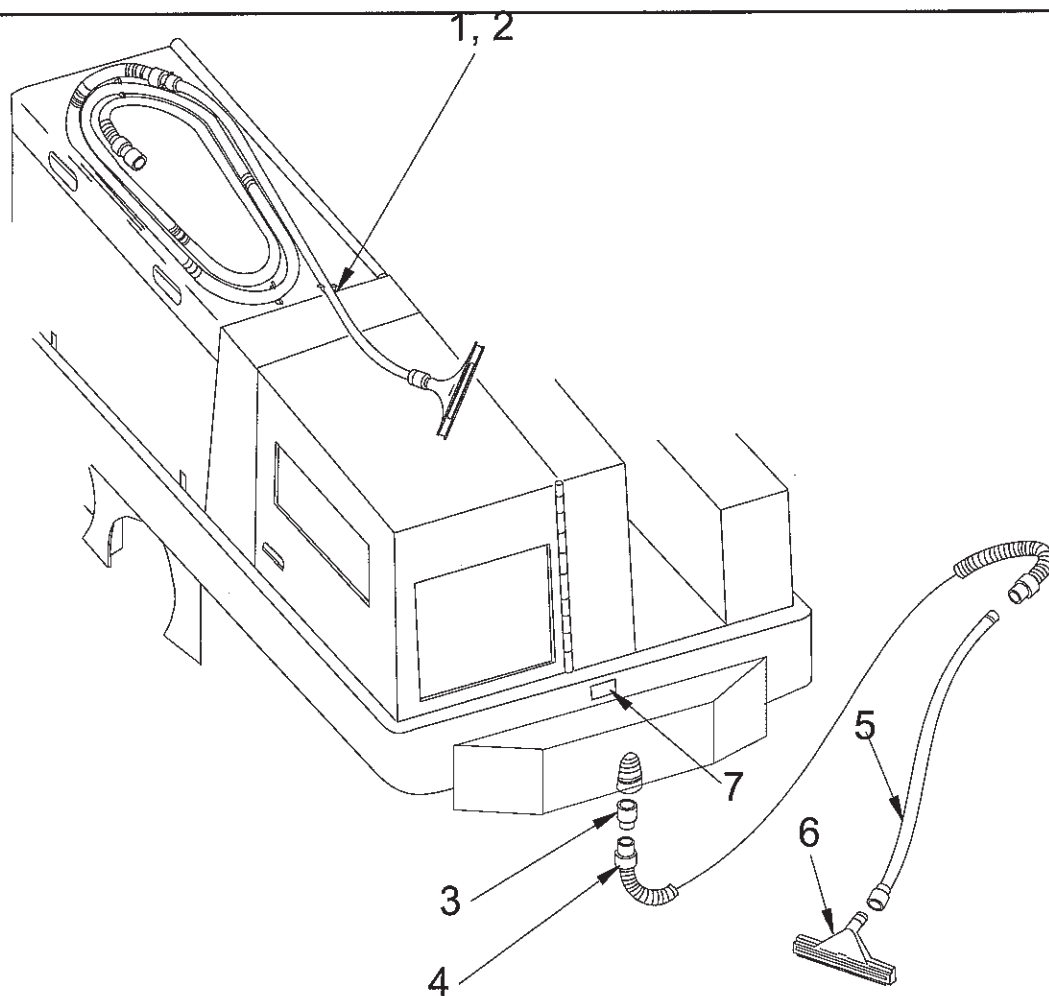
P5080/9601



| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>DESCRIPTION</u>    | <u>QTY</u> |
|----------------|--------------------|-----------------------|------------|
| 1              | 0780-081           | Siped Rear Drive Tire | 1          |
| 1              | 0780-098           | Front Tire, Urethane  | 2          |

P4554/9601

## VACUUM WAND

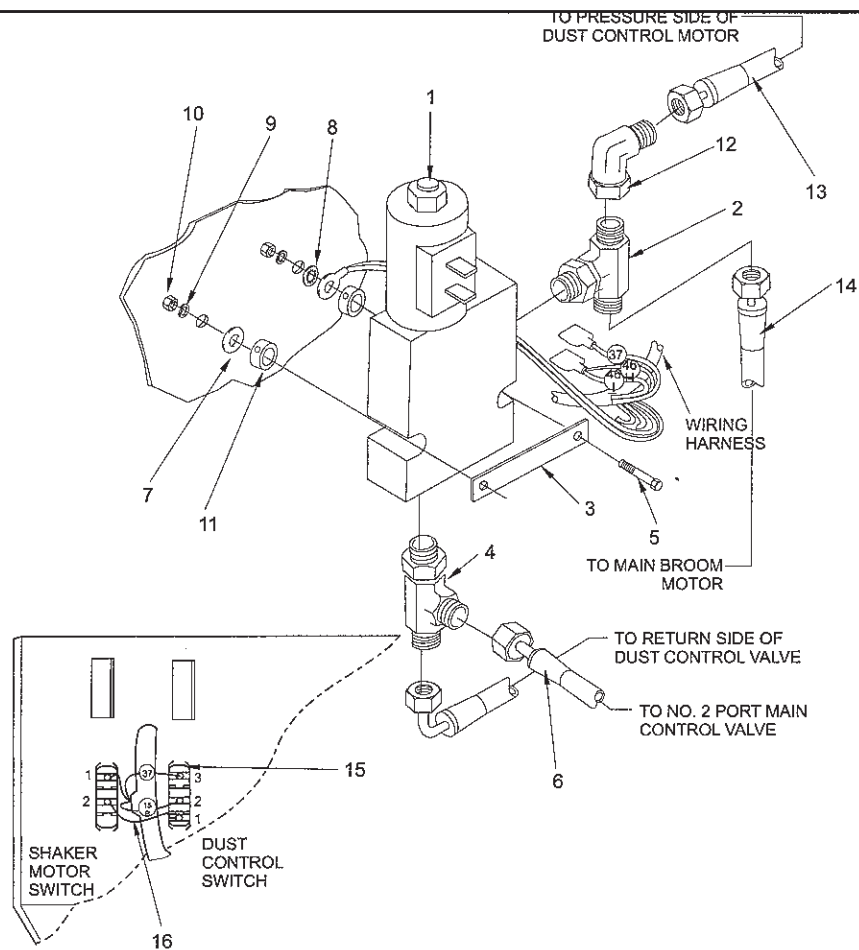


### OPTION NO. 0780-091

| <u>KEY NO.</u> | <u>PART NUMBER</u> | <u>DESCRIPTION</u>            | <u>QTY</u> |
|----------------|--------------------|-------------------------------|------------|
| 1              | 7-13-07097         | Clip                          | 10         |
| 2              | 2-00-04312         | Screw, #10 - 24 x .625 T/C HH | 10         |
| 3              | 7-03-00040         | Adapter                       | 1          |
| 4              | 7-33-02213         | Hose, 1 1/2 x 15' - 0"        | 1          |
| 5              | 0261-025           | Wand                          | 1          |
| 6              | 0261-024           | 14" Squeegee                  | 1          |
| 7              | 7-18-00121         | Decal, Warning                | 1          |

P4930/9601

# WET SWEEP BYPASS



P4881/9809

| KEY NO. | PART NUMBER | DESCRIPTION                         | QTY  |
|---------|-------------|-------------------------------------|------|
| 1       | 7-88-00038  | Solenoid Valve (N.O.)               | 1    |
| 2       | 2-00-04978  | ORFS Run Tee, 3/4-16 to 13/16-16    | 1    |
| 3       | 8-08-00590  | Bracket                             | 1    |
| 4       | 2-00-04924  | ORFS Run Tee, 3/4-16 to 13/16-16    | 1    |
| 5       | 2-00-01980  | Screw, 1/4 - 20 x 2.500 HHC         | 2    |
| 6       | 8-33-02190  | Hose (Gas)                          | 1    |
| 6       | 7-33-02205  | Hose (Diesel)                       | 1    |
| 7       | 2-00-03702  | Flat Washer, .625 x .281 x .062     | 1    |
| 8       | 2-00-00501  | Lock Washer, 1/4 Int.               | 1    |
| 9       | 2-00-00518  | Lock Washer, Helical Spring 1/4 Med | 2    |
| 10      | 2-00-00594  | Nut, Hex 1/4 - 20 x .437 x .218     | 2    |
| 11      | 8-15-01008  | Spacer                              | 2    |
| 12      | 2-00-05046  | Fitting, 90° Elbow                  | 1    |
| 13      | 7-33-02192  | Hose                                | Ref. |
| 14      | 8-33-02214  | Hose                                | Ref. |
| 15      | 7-82-00020  | Switch                              | 1    |
| 16      | 7-90-07228  | Wire, Jumper                        | 1    |

P4881/9601

## SPARE PARTS KIT (GAS/LP - MANUAL)

---

OPTION NO. 0780-363

| <u>KEY NO.</u>                        | <u>PART NUMBER</u> | <u>DESCRIPTION</u>              | <u>QTY.</u> |
|---------------------------------------|--------------------|---------------------------------|-------------|
| <b>BROOM and HOPPER COMPONENTS</b>    |                    |                                 |             |
|                                       | 7-25-08052         | Flap, Broom Chamber Front       | 1           |
|                                       | 7-25-08051         | Flap, Broom Chamber Upper       | 1           |
|                                       | 8-25-08050         | Flap, Hopper Lip                | 4           |
| <b>REAR SQUEEGEE COMPONENTS</b>       |                    |                                 |             |
|                                       | 7-77-00057         | Rubber Main Outer Squeegee      | 1           |
|                                       | 7-77-00069         | Side Squeegees                  | 2           |
|                                       | 7-77-00070         | Side Squeegee Back-up Rubber    | 2           |
| <b>FILTERS</b>                        |                    |                                 |             |
|                                       | 8-24-04106         | Engine Air Cleaner Element      | 1           |
|                                       | 7-24-04032         | Hydraulic Return Filter Element | 1           |
|                                       | 7-24-04028-1       | Hopper Panel Filter             | 1           |
| <b>ENGINE RELATED COMPONENTS</b>      |                    |                                 |             |
| <b>Perkins LSG 423 GAS/LPG Engine</b> |                    |                                 |             |
|                                       | 8-24-04128         | Engine Oil Filter               | 1           |
|                                       | 8-24-04129         | Fuel Filter                     | 1           |
|                                       | 2-00-05100         | Belt - Governor                 | 1           |
|                                       | 2-00-05099         | Belt - Alternator               | 1           |
|                                       | 2-00-05009         | Belt - Auxiliary Pump           | 1           |

## SPARE PARTS KIT (DIESEL - MANUAL)

OPTION NO. 0780-364

| <u>KEY NO.</u>                            | <u>PART NUMBER</u> | <u>DESCRIPTION</u>              | <u>QTY.</u> |
|-------------------------------------------|--------------------|---------------------------------|-------------|
| <b>BROOM and HOPPER COMPONENTS</b>        |                    |                                 |             |
|                                           | 7-25-08052         | Flap, Broom Chamber Front       | 1           |
|                                           | 7-25-08051         | Flap, Broom Chamber Upper       | 1           |
|                                           | 8-25-08050         | Flap, Hopper Lip                | 4           |
| <b>REAR SQUEEGEE COMPONENTS</b>           |                    |                                 |             |
|                                           | 7-77-00057         | Rubber Main Outer Squeegee      | 1           |
|                                           | 7-77-00069         | Side Squeegees                  | 2           |
|                                           | 7-77-00070         | Side Squeegee Back-up Rubber    | 2           |
| <b>FILTERS</b>                            |                    |                                 |             |
|                                           | 8-24-04106         | Engine Air Cleaner Element      | 1           |
|                                           | 7-24-04032         | Hydraulic Return Filter Element | 1           |
|                                           | 7-24-04028-1       | Hopper Panel Filter             | 1           |
| <b>ENGINE RELATED COMPONENTS</b>          |                    |                                 |             |
| <b>Perkins Model 104.19 Diesel engine</b> |                    |                                 |             |
|                                           | 2-60-02240         | Engine Oil Filter               | 1           |
|                                           | 2-60-02241         | Fuel Filter                     | 1           |
|                                           | 2-60-02242         | Belt - Alternator & Water Pump  | 1           |
|                                           | 2-00-05047         | Belt - Auxiliary Pump           | 1           |

## SPARE PARTS KIT (GAS/LP - VARIABLE)

OPTION NO. 0780-361

| <u>KEY NO.</u>                     | <u>PART NUMBER</u> | <u>DESCRIPTION</u>              | <u>QTY.</u> |
|------------------------------------|--------------------|---------------------------------|-------------|
| <b>BROOM and HOPPER COMPONENTS</b> |                    |                                 |             |
|                                    | 7-25-08036         | Flap - Broom Chamber Front      | 1           |
|                                    | 7-25-08032         | Flap - Broom Chamber            | 1           |
|                                    | 7-25-08034         | Flap - Broom Chamber Rear Sides | 2           |
|                                    | 7-25-08033         | Flap - Broom Door               | 2           |
|                                    | 7-29-00226         | Gasket - Broom Door             | 1           |
|                                    | 7-25-08030         | Flap - Hopper Lip               | 4           |
| <b>REAR SQUEEGEE COMPONENTS</b>    |                    |                                 |             |
|                                    | 7-77-00057         | Rubber Main Outer Squeegee      | 1           |
|                                    | 7-77-00069         | Side Squeegees                  | 2           |
|                                    | 7-77-00070         | Side Squeegee Back-up Rubber    | 2           |
| <b>FILTERS</b>                     |                    |                                 |             |
|                                    | 8-24-04106         | Engine Air Cleaner Element      | 1           |
|                                    | 7-24-04032         | Hydraulic Return Filter Element | 1           |
|                                    | 7-24-04028-1       | Hopper Panel Filter             | 1           |
| <b>ENGINE RELATED COMPONENTS</b>   |                    |                                 |             |
| <b>Ford LSG 423 gas/LPG engine</b> |                    |                                 |             |
|                                    | 8-24-04128         | Engine Oil Filter               | 1           |
|                                    | 8-24-04129         | Fuel Filter                     | 1           |
|                                    | 2-00-05100         | Belt - Governor                 | 1           |
|                                    | 2-00-05099         | Belt - Alternator               | 1           |
|                                    | 2-00-05009         | Belt - Auxiliary Pump           | 1           |

## SPARE PARTS KIT (DIESEL - VARIABLE)

OPTION NO. 0780-362

| KEY NO. | PART NUMBER | DESCRIPTION | QTY. |
|---------|-------------|-------------|------|
|---------|-------------|-------------|------|

### BROOM and HOPPER COMPONENTS

|            |                                 |   |
|------------|---------------------------------|---|
| 7-25-08036 | Flap - Broom Chamber Front      | 1 |
| 7-25-08032 | Flap - Broom Chamber            | 1 |
| 7-25-08034 | Flap - Broom Chamber Rear Sides | 2 |
| 7-25-08033 | Flap - Broom Door               | 2 |
| 7-29-00226 | Gasket - Broom Door             | 1 |
| 7-25-08030 | Flap - Hopper Lip               | 4 |

### REAR SQUEEGEE COMPONENTS

|            |                              |   |
|------------|------------------------------|---|
| 7-77-00057 | Rubber Main Outer Squeegee   | 1 |
| 7-77-00069 | Side Squeegees               | 2 |
| 7-77-00070 | Side Squeegee Back-up Rubber | 2 |

### FILTERS

|              |                                 |   |
|--------------|---------------------------------|---|
| 8-24-04106   | Engine Air Cleaner Element      | 1 |
| 7-24-04032   | Hydraulic Return Filter Element | 1 |
| 7-24-04028-1 | Hopper Panel Filter             | 1 |

### ENGINE RELATED COMPONENTS

Perkins Model 104.19 Diesel engine

|            |                                |   |
|------------|--------------------------------|---|
| 2-60-02240 | Engine Oil Filter              | 1 |
| 2-60-02241 | Fuel Filter                    | 1 |
| 2-60-02242 | Belt - Alternator & Water Pump | 1 |
| 2-00-05047 | Belt - Auxiliary Pump          | 1 |

## INDEX

|                                                     |       |
|-----------------------------------------------------|-------|
| ACCELERATOR & DIRECTIONAL CONTROL PEDAL .....       | 1-20  |
| AIR FILTER .....                                    | 1-45  |
| AIR FILTER ELEMENT, CLEANING THE .....              | 1-45  |
| AIR FILTER ELEMENT, INSPECTING THE .....            | 1-46  |
| AIR FILTER ELEMENT, REMOVING THE .....              | 1-46  |
| AIR FILTER, REPLACING THE .....                     | 1-45  |
| AIR INTAKE (FORD) .....                             | 2-94  |
| AIR INTAKE (PERKINS) .....                          | 2-96  |
| AIR INTAKE SYSTEM .....                             | 1-45  |
| AUXILIARY PUMP & FITTINGS .....                     | 2-75  |
| AUXILIARY PUMP AND FITTINGS (FORD) .....            | 2-76  |
| AUXILIARY PUMP AND FITTINGS (PERKINS) .....         | 2-77  |
|                                                     |       |
| BACKUP ALARM .....                                  | 3-20  |
| BACKUP ALARM SWITCH .....                           | 1-20  |
| BATTERY .....                                       | 1-48  |
| BATTERY .....                                       | 2-78  |
| BEFORE STARTING ENGINE .....                        | 1-27  |
| BRAKE ADJUSTMENT .....                              | 1-44  |
| BRAKE LINKAGE .....                                 | 2-38  |
| BROOM AND BRUSH CHAMBER DOOR .....                  | 2-8   |
| BROOM OPTIONS .....                                 | 3-11  |
| BRUSH OPTIONS .....                                 | 3-14  |
| BRUSH PRESSURE SWITCH .....                         | 1-17  |
| BRUSH ROTATION SWITCH .....                         | 1-17  |
|                                                     |       |
| CAMEL SYSTEM CONTROLS & OPERATION .....             | 1-21  |
| CENTER SQUEEGEES .....                              | 3-16  |
| CHAPTER 2 - TABLE OF CONTENTS .....                 | 2-1   |
| CHAPTER 3 - TABLE OF CONTENTS .....                 | 3-1   |
| CHECK ENGINE (WARNING LIGHT) .....                  | 1-14  |
| CHOKE .....                                         | 1-19  |
| CONNECTION DIAGRAM (DIESEL - MANUAL DUMP) .....     | 3-10  |
| CONNECTION DIAGRAM (DIESEL - VARIABLE DUMP) .....   | 3-8   |
| CONNECTION DIAGRAM (GAS - MANUAL DUMP) .....        | 3-9   |
| CONNECTION DIAGRAM (GAS - VARIABLE DUMP) .....      | 3-7   |
| COOLANT LEVEL .....                                 | 1-47  |
| COOLING SYSTEM .....                                | 1-47  |
| COVERS AND LATCHES .....                            | 1-42  |
| CYLINDER CONTROL VALVE AND FITTINGS .....           | 2-71  |
|                                                     |       |
| DEBRIS BASKET .....                                 | 3-31  |
| DECALS .....                                        | 2-114 |
| DECIMAL - METRIC CONVERSION TABLE .....             | 1-10  |
| DETERGENT FLOW KNOB .....                           | 1-21  |
| DETERGENT LOW WARNING LIGHT .....                   | 1-21  |
| DETERGENT METERING PUMP (CAMEL) .....               | 3-32  |
| DOUBLE LID RECOVERY TANK .....                      | 1-30  |
| DRIVE BELTS .....                                   | 1-48  |
| DRIVE PUMP & FITTINGS .....                         | 2-65  |
| DRIVER COMPARTMENT .....                            | 2-46  |
| DUST CAP .....                                      | 1-46  |
| DUST CONTROL IMPELLER AND FITTINGS .....            | 2-69  |
| DUST CONTROL SWITCH .....                           | 1-15  |
|                                                     |       |
| ELECTRICAL SCHEMATIC (DIESEL - MANUAL DUMP) .....   | 3-6   |
| ELECTRICAL SCHEMATIC (DIESEL - VARIABLE DUMP) ..... | 3-4   |
| ELECTRICAL SCHEMATIC (GAS - MANUAL DUMP) .....      | 3-5   |
| ELECTRICAL SCHEMATIC (GAS - VARIABLE DUMP) .....    | 3-3   |
| EMPTYING THE DEBRIS HOPPER - MANUAL DUMP .....      | 1-31  |
| EMPTYING THE DEBRIS HOPPER - VARIABLE DUMP .....    | 1-31  |
| ENGINE .....                                        | 1-39  |
| ENGINE COVER .....                                  | 2-80  |
| ENGINE SHUTDOWN (FORD) .....                        | 3-44  |
| ENGINE SHUTDOWN (PERKINS) .....                     | 3-46  |
| EXHAUST SYSTEM (DIESEL PERKINS) .....               | 2-99  |
| EXHAUST SYSTEM (GAS AND LP - FORD) .....            | 2-98  |

|                                                                  |       |
|------------------------------------------------------------------|-------|
| FILLING THE SOLUTION TANK - CAMEL .....                          | 1-27  |
| FILLING THE SOLUTION TANK - STANDARD .....                       | 1-27  |
| FILTER SHAKER SWITCH .....                                       | 1-15  |
| FIRE ARRESTING GAS CAP .....                                     | 3-29  |
| FIRE EXTINGUISHER .....                                          | 3-28  |
| FLAPS .....                                                      | 1-41  |
| FOOT BRAKE .....                                                 | 1-19  |
| FORD 425 ENGINE .....                                            | 2-82  |
| FORWARD/REVERSE CONTROL - FORD .....                             | 2-40  |
| FORWARD/REVERSE CONTROL - PERKINS .....                          | 2-42  |
| FRONT WHEEL AND BRAKE .....                                      | 2-34  |
| FUEL AND WATER EXTRACTOR (DIESEL) .....                          | 2-92  |
| FUEL GAUGE .....                                                 | 1-16  |
| FUEL TANK .....                                                  | 2-89  |
| GAS TANK .....                                                   | 1-48  |
| GENERAL MACHINE MAINTENANCE .....                                | 1-35  |
| GLOW PLUG SWITCH .....                                           | 1-14  |
| HELPFUL HINTS FOR CLEANING OPERATION .....                       | 1-34  |
| HIGH RECOVERY WARNING LIGHT .....                                | 1-17  |
| HOPPER (LOW DUMP) .....                                          | 2-12  |
| HOPPER AND FLAPS (VARIABLE DUMP) .....                           | 2-14  |
| HOPPER CONTROL VALVE & HOPPER DUMP LINKAGE (LOW DUMP) .....      | 2-19  |
| HOPPER CONTROL VALVE & HOPPER DUMP LINKAGE (VARIABLE DUMP) ..... | 2-18  |
| HOPPER DUMP DOOR .....                                           | 1-18  |
| HOPPER FILTER AND IMPELLER .....                                 | 2-16  |
| HOPPER LIFT .....                                                | 1-18  |
| HOPPER SAFETY LOCK ARM .....                                     | 1-21  |
| HORN PUSH BUTTON .....                                           | 1-14  |
| HOURLY METER .....                                               | 1-16  |
| HOW TO ADJUST MAIN BROOM WEAR PATTERN .....                      | 1-40  |
| HOW TO CLEAN THE HYDRAULIC SYSTEM .....                          | 1-36  |
| HOW TO FILL THE HYDRAULIC RESERVOIR .....                        | 1-36  |
| HOW TO OPEN THE ENGINE COVER .....                               | 1-35  |
| HOW TO REPLACE THE RETURN FILTER ELEMENT .....                   | 1-36  |
| HYDRAULIC HOSE SYSTEM (LOW DUMP) .....                           | 2-50  |
| HYDRAULIC HOSE SYSTEM (MANUAL DUMP) .....                        | 2-48  |
| HYDRAULIC RESERVOIR, FILTER & FITTINGS .....                     | 2-66  |
| HYDRAULIC SCHEMATIC - MANUAL DUMP .....                          | 1-38  |
| HYDRAULIC SCHEMATIC - VARIABLE DUMP .....                        | 1-37  |
| HYDRAULIC TORQUE REQUIREMENTS .....                              | 1-9   |
| HYDRAULICS .....                                                 | 1-36  |
| IGNITION SWITCH .....                                            | 1-13  |
| INDEX .....                                                      | 3-56  |
| INSTRUMENT PANEL (CAMEL) .....                                   | 3-40  |
| INSTRUMENT PANEL .....                                           | 2-102 |
| INSTRUMENT PANEL (MANUAL DUMP) .....                             | 2-104 |
| LIGHT OPTIONS .....                                              | 3-21  |
| LIGHT SWITCH .....                                               | 1-13  |
| LOW SOLUTION WARNING LIGHT .....                                 | 1-17  |
| LP FORD ENGINE .....                                             | 2-84  |
| LP GAS FUEL TANK .....                                           | 1-49  |
| LP GAS SYSTEM .....                                              | 1-49  |
| LP GAS VAPORIZER-REGULATOR QUICK CHECK .....                     | 1-49  |
| LP TANK SYSTEM .....                                             | 2-90  |
| LUBRICATION .....                                                | 1-35  |
| MACHINE DIMENSIONS .....                                         | 1-7   |
| MACHINE OPERATION .....                                          | 1-11  |
| MAIN BROOM AND FITTINGS .....                                    | 2-58  |
| MAIN BROOM LEVEL ADJUSTMENT .....                                | 1-40  |
| MAIN BROOM LIFT LINKAGE .....                                    | 2-4   |
| MAIN BROOM .....                                                 | 2-2   |
| MAIN BROOM SWITCH .....                                          | 1-15  |

## INDEX

|                                                                   |      |
|-------------------------------------------------------------------|------|
| MAIN CONTROL VALVE AND FITTINGS .....                             | 2-70 |
| MAIN FRAME .....                                                  | 2-44 |
| MANUAL DUMP HOPPER .....                                          | 1-18 |
| HOPPER SYSTEM (MANUAL) .....                                      | 2-10 |
| NEUTRAL ADJUSTMENT .....                                          | 1-49 |
| NON-RECYCLING SCRUBBING SYSTEM - HOW IT WORKS .....               | 1-22 |
| NOTES .....                                                       | 3-2  |
| OIL COOLER .....                                                  | 1-30 |
| OIL COOLER & FITTINGS .....                                       | 2-74 |
| OIL PRESSURE GAUGE .....                                          | 1-16 |
| OPERATING INSTRUCTIONS .....                                      | 1-27 |
| OPERATION OF CONTROLS AND GAUGES .....                            | 1-13 |
| ORDERING PARTS .....                                              | 1-53 |
| OVERHEAD GUARD .....                                              | 3-19 |
| PARKING BRAKE .....                                               | 1-19 |
| PARTS LEGEND .....                                                | 1-50 |
| PERKINS DIESEL ENGINE .....                                       | 2-86 |
| POST OPERATION CHECKLIST .....                                    | 1-29 |
| POST START CHECKLIST .....                                        | 1-28 |
| POWER STEERING UNIT AND FITTINGS .....                            | 2-62 |
| POWER STEERING, HOPPER DUMP & HOPPER LIFT CYL'S. & FITTINGS ..... | 2-63 |
| PRE-START CHECKLIST .....                                         | 1-27 |
| RADIATOR .....                                                    | 1-47 |
| RADIATOR AND SHROUD .....                                         | 2-97 |
| REAR WHEEL MOTOR & FITTINGS .....                                 | 2-64 |
| REAR WHEEL .....                                                  | 2-36 |
| RECOVERY OR CAMEL SYSTEM - HOW IT WORKS .....                     | 1-23 |
| RECOVERY SYSTEM (CAMEL) .....                                     | 3-38 |
| RECOVERY TANK (CAMEL) .....                                       | 3-36 |
| RECOVERY TANK LID .....                                           | 2-30 |
| RECOVERY TANK LID & TANK ACCESS .....                             | 1-43 |
| RECOVERY TANK .....                                               | 2-28 |
| RECOVERY WARNING LIGHT .....                                      | 1-42 |
| RECYCLING PUMP & MOTOR - CAMEL .....                              | 1-43 |
| RECYCLING PUMP & MOTOR - STORAGE .....                            | 1-43 |
| REMOVING THE AIR FILTER ELEMENT .....                             | 1-46 |
| RETURN MANIFOLD AND FITTINGS .....                                | 2-72 |
| SAFETY AIR CLEANER ELEMENT .....                                  | 3-30 |
| SAFETY INSTRUCTIONS .....                                         | 1-12 |
| SCHEMATIC DIAGRAM OPTIONS .....                                   | 1-52 |
| SCRUB BRUSH REPLACEMENT .....                                     | 1-42 |
| SCRUB BRUSHES SWITCH .....                                        | 1-16 |
| SCRUB DECK AND BRUSHES .....                                      | 2-20 |
| SCRUB MOTORS & FITTINGS .....                                     | 2-60 |
| SEAT ADJUSTMENT .....                                             | 1-20 |
| SEPARATOR - CAMEL .....                                           | 1-43 |
| SERVICE CHART .....                                               | 1-32 |
| SIDE BROOM (VARIABLE & LOW DUMPS) .....                           | 2-6  |
| SIDE BROOM AND FITTINGS .....                                     | 2-59 |
| SIDE BROOM LEVEL ADJUSTMENT .....                                 | 1-40 |
| SIDE BROOM LIFT LEVER .....                                       | 1-14 |
| SIDE BROOM OPTION (MANUAL DUMP) .....                             | 3-12 |
| SIDE BROOM REPLACEMENT .....                                      | 1-40 |
| SIDE BROOM SWITCH .....                                           | 1-15 |
| SIDE SQUEEGEES .....                                              | 3-18 |
| SOLUTION CONTROL .....                                            | 1-18 |
| SOLUTION CONTROL - CAMEL .....                                    | 1-42 |
| SOLUTION CONTROL - STANDARD .....                                 | 1-42 |
| SOLUTION FEED LINKAGE .....                                       | 2-26 |
| SOLUTION HIGH WARNING LIGHT .....                                 | 1-21 |
| SOLUTION TANK .....                                               | 2-24 |
| SOLUTION TANK (CAMEL) .....                                       | 3-34 |

|                                                             |       |
|-------------------------------------------------------------|-------|
| SOLUTION WARNING LIGHT .....                                | 1-42  |
| SPARE PARTS KIT (DIESEL - MANUAL DUMP) .....                | 3-53  |
| SPARE PARTS KIT (DIESEL - VARIABLE DUMP) .....              | 3-55  |
| SPARE PARTS KIT (GAS & LP - MANUAL DUMP) .....              | 3-52  |
| SPARE PARTS KIT (GAS & LP - VARIABLE DUMP) .....            | 3-54  |
| SPECIFICATIONS .....                                        | 1-5   |
| SPLASH SKIRTS .....                                         | 1-42  |
| SQUEEGEE .....                                              | 1-43  |
| SQUEEGEE & SCRUB DECK CYLINDERS & FITTINGS PARTS LIST ..... | 2-61  |
| SQUEEGEE BLADE SWITCH .....                                 | 1-17  |
| SQUEEGEE LIFT .....                                         | 2-22  |
| STANDARD HARDWARE & TORQUE VALUES .....                     | 1-8   |
| STEERING AND INSTRUMENT PANEL .....                         | 2-100 |
| SUCTION & RETURN HOSES (LOW DUMP) .....                     | 2-56  |
| SUCTION & RETURN HOSES (MANUAL DUMP) .....                  | 2-54  |
| SUCTION & RETURN HOSES (VARIABLE DUMP) .....                | 2-52  |
| SUSPENSION SEAT .....                                       | 3-48  |
| SWEEPING BROOM LIFT .....                                   | 1-18  |
| THE SCRUBBING SYSTEM - HOW IT WORKS .....                   | 1-22  |
| THE SWEEPING & DUST CONTROL SYSTEM - HOW IT WORKS .....     | 1-25  |
| THROTTLE .....                                              | 1-19  |
| THROTTLE, CHOKE, & FUEL PUMP .....                          | 2-88  |
| TIRE OPTIONS .....                                          | 3-49  |
| TO BEGIN CLEANING OPERATION .....                           | 1-28  |
| TO CLEAN RECOVERY TANK (CAMEL) .....                        | 1-30  |
| TO CLEAN SOLUTION TANK (CAMEL) .....                        | 1-29  |
| TO DRAIN RECOVERY TANK (CAMEL) .....                        | 1-30  |
| TO DRAIN SOLUTION TANK (CAMEL) .....                        | 1-29  |
| TO REMOVE MAIN SWEEPING BROOM .....                         | 1-39  |
| TO START ENGINE .....                                       | 1-27  |
| TO STOP CLEANING OPERATION .....                            | 1-28  |
| TO TRANSPORT MACHINE .....                                  | 1-28  |
| TOWING INSTRUCTIONS .....                                   | 1-31  |
| TROUBLESHOOTING TABLE .....                                 | 1-51  |
| TURN SIGNAL (OPTION) .....                                  | 1-18  |
| TURN SIGNAL .....                                           | 3-22  |
| VACUUM MOTOR & FITTINGS .....                               | 2-68  |
| VACUUM MOTOR AND FLOAT .....                                | 2-32  |
| VACUUM WAND .....                                           | 3-50  |
| VOLT METER .....                                            | 1-16  |
| WARNING LIGHT (STANDARD) .....                              | 3-24  |
| WARNING LIGHT w/OVERHEAD GUARD .....                        | 3-26  |
| WARRANTY .....                                              | 3-60  |
| WATER TEMPERATURE GAUGE .....                               | 1-16  |
| WET SWEEP BYPASS .....                                      | 3-51  |
| WIRING (CAMEL) .....                                        | 3-42  |
| WIRING - FORD 425 (MANUAL DUMP) .....                       | 2-106 |
| WIRING - FORD 425 (VARIABLE DUMP) .....                     | 2-110 |
| WIRING - PERKINS (MANUAL DUMP) .....                        | 2-108 |
| WIRING - PERKINS (VARIABLE DUMP) .....                      | 2-112 |



AMERICAN-LINCOLN TECHNOLOGY  
RIDER SWEEPER / SCRUBBER  
"BUMPER-TO-BUMPER" LIMITED WARRANTY

**I. COVERAGE**

A. Subject to the terms and limitations stated herein, American-Lincoln warrants, to the original purchaser only, to repair or replace, at its option and upon the terms set out below, this product or any parts thereof (excluding normal maintenance items) which are defective in materials or workmanship, for a period of (2) two years or 2,000 hours of normal operation from the date of purchase, whichever comes first, provided that the product is operated and maintained in accordance with American-Lincoln's Maintenance and Operations Instruction.

1. (a) During the first (90) ninety days from the date of purchase, American-Lincoln will provide, without charge, parts and on-site labor (including up to three (3) hours total round-trip travel time) to remedy a defective product or part.

(b) During the next (9) nine months or 1,000 hours (whichever come first) American-Lincoln will provide, without charge, parts and labor to remedy a defective product or part; however all labor, travel time for on-site remedy and all shipping and freight charges for off-site remedy of the product or parts thereof shall be the sole responsibility of the purchaser.

(c) During the next (12) twelve months or a total of 2000 hours (whichever comes first) American Lincoln will provide, without charge, parts to remedy a defective product or part, however all labor, travel time for on-site remedy and all shipping and freight charges for off-site remedy of the product or parts thereof shall be the sole responsibility of the purchaser.

B. In addition to the terms listed above, if applicable, the following additional warranty coverage is applied.

1. (a) American-Lincoln warrants to the original purchaser only, to repair or replace, at its option and upon the terms set out below, the drive line electrical components including the electric drive propulsion motor, electric wheel drive motor and electronic drive controller, and all hydraulic pumps and motors, to provide replacement parts which are defective in material or workmanship, for a period of (3) years or 3000 hours (whichever comes first) provided that the product is operated and maintained in accordance with American-Lincoln's Maintenance and Operations Instruction.

(b) American Lincoln warrants to the original purchaser only, to repair or replace, at its option and upon the terms set out below, the internal combustion liquid cooled engine, to provide replacement parts which are defective in material or workmanship, for a period of (5) five years or unlimited hours of normal operation. All labor, travel time, shipping and freight charges shall be the sole responsibility of the purchaser.

(c) American-Lincoln, warrants to the original purchaser only, to repair or replace, at its option and upon the terms set out below, the main frame, debris hopper, solution tank, and the recovery tank, for the life of the machine against failure caused by defects in workmanship or total rust through. For purposes of this coverage, cosmetic deterioration or surface rust does not constitute a failure.

(d) American-Lincoln, warrants to the original purchaser only, to repair or replace, at its option and upon the terms set out below, the batteries which becomes unserviceable under normal use within a period of ninety (90) days from date of sale to the original user with new batteries of equal value. After expiration of the above ninety (90) day period, any battery which fails under normal use will be adjusted to the original user with a new battery of equal specifications on an eighteen (18) months pro rate basis from the date of purchase. Adjustment will be determined using the then current list price, plus transportation costs. Warranty is rendered NULL and Void if battery is not kept filled to the proper level with DISTILLED WATER.

**II. EXCLUSIONS**

- This warranty **does not** cover normal maintenance parts and labor, including but not limited to, rubber parts, seals, flaps, brushes, engine maintenance parts, hoses, carbon motor brushes, fluids and routine adjustments.
- This warranty **does not** cover damage or failure of the product or any parts thereof which is the result of misuse, negligent operation, handling or repair, or which is the result of modification by any person other than an authorized American-Lincoln service representative.

**III. LIMITATIONS**

A. AMERICAN-LINCOLN MAKES NO WARRANTIES OTHER THAN THOSE SPECIFIED HEREIN. ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND OF FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED. AMERICAN-LINCOLN LIABILITY UNDER THIS WARRANTY IS LIMITED TO REPAIR AND/OR REPLACEMENT OF PRODUCTS OR PARTS AS SET OUT HEREIN. AMERICAN-LINCOLN SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES WHICH MAY RESULT FROM A PRODUCT OR PART DEFECT OR FAILURE. ANY EXTENSIONS OF OR MODIFICATIONS MADE TO THIS WARRANTY BY A DISTRIBUTOR OF AMERICAN-LINCOLN ARE THE SOLE RESPONSIBILITY OF THE DISTRIBUTOR.

IV. PROCEDURES AND CONDITIONS FOR WARRANTY CLAIMS AMERICAN-LINCOLN SHALL NOT BE LIABLE FOR REPAIR OR REPLACEMENT OF ANY DEFECTIVE PRODUCT OR PART THEREOF UNLESS AND UNTIL THE ORIGINAL PURCHASER FULFILLS THE FOLLOWING CONDITIONS PRECEDENT TO RECOVERY UNDER THIS WARRANTY:

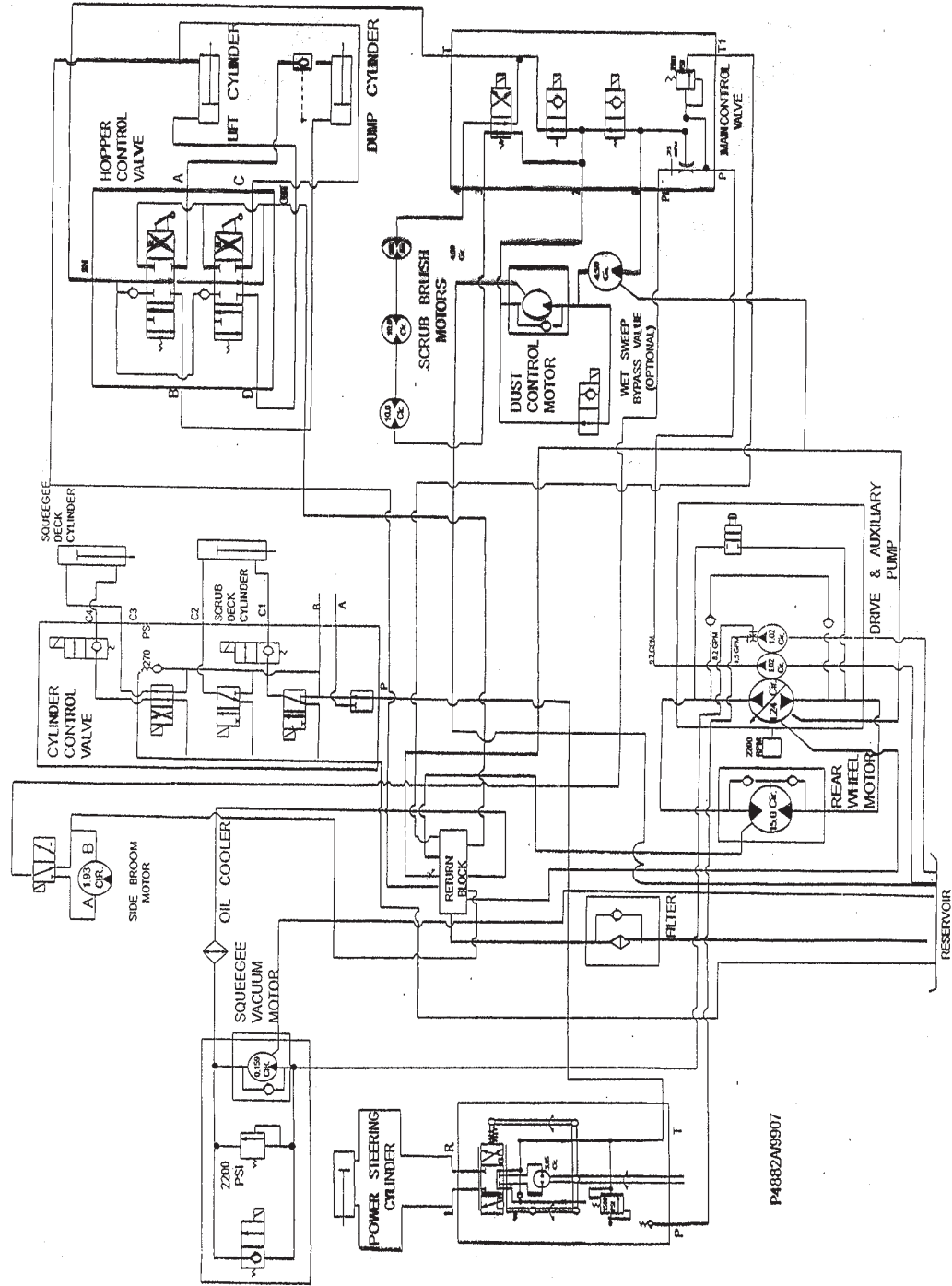
- The original purchaser shall promptly complete and return the warranty and installation registration form included with the product at the time of the purchase;
- Upon product or part failure, the original purchaser shall promptly provide notice thereof to his nearest authorized American-Lincoln Service Representative; and
- The original purchaser shall permit the product or part to be inspected by American-Lincoln or its authorized representatives, as necessary and expenses for shipping or travel time shall be borne by the parties itemized in paragraph I herein above.

American-Lincoln Technology reserves the right to make changes and improvements to its machines without notice. For best results, use only the correct American-Lincoln Service parts.

AMERICAN-LINCOLN TECHNOLOGY  
1100 HASKINS ROAD  
BOWLING GREEN, OHIO 43402



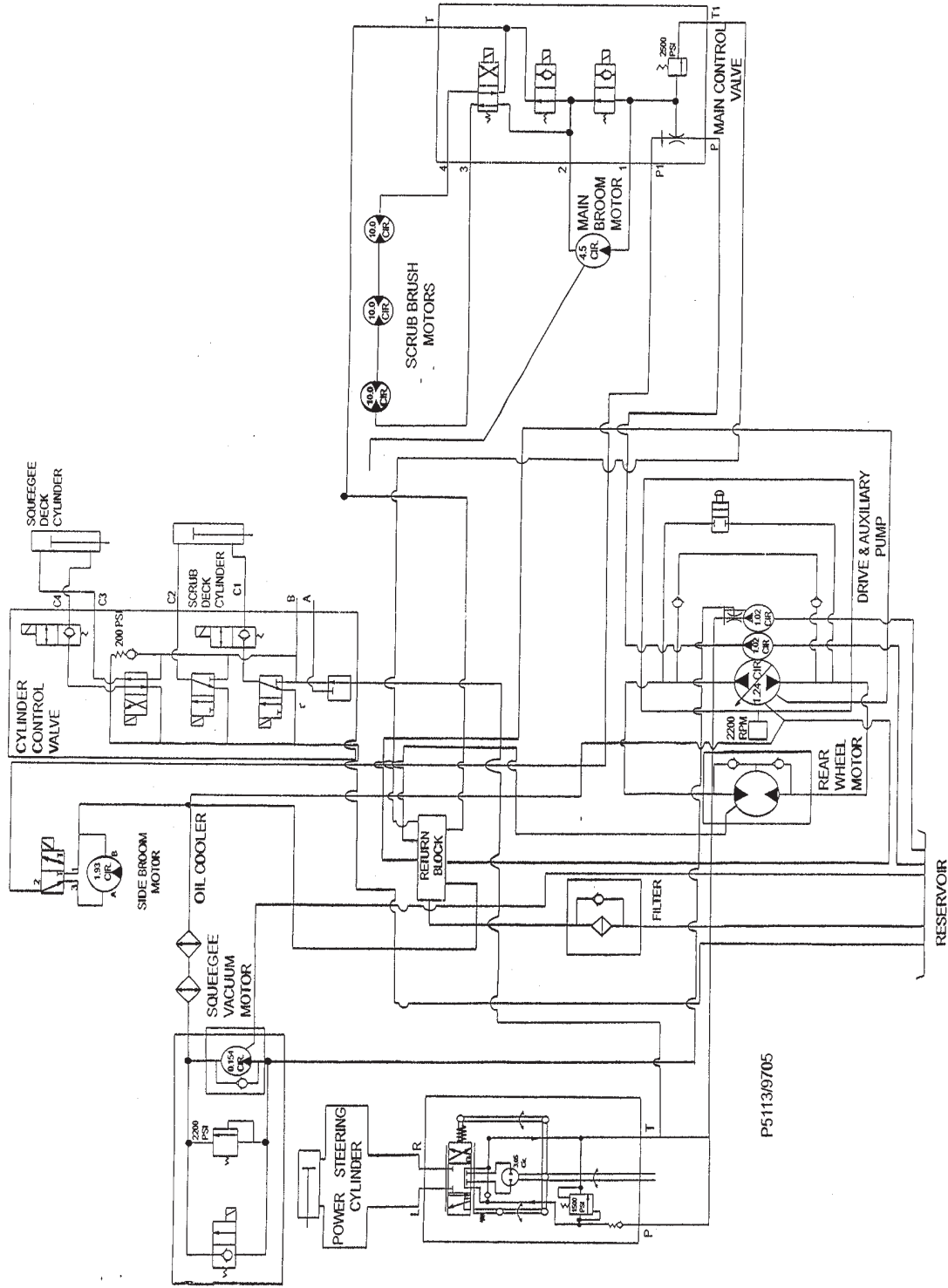
# HYDRAULIC SCHEMATIC - VARIABLE DUMP



P4882A9907



# HYDRAULIC SCHEMATIC - MANUAL DUMP

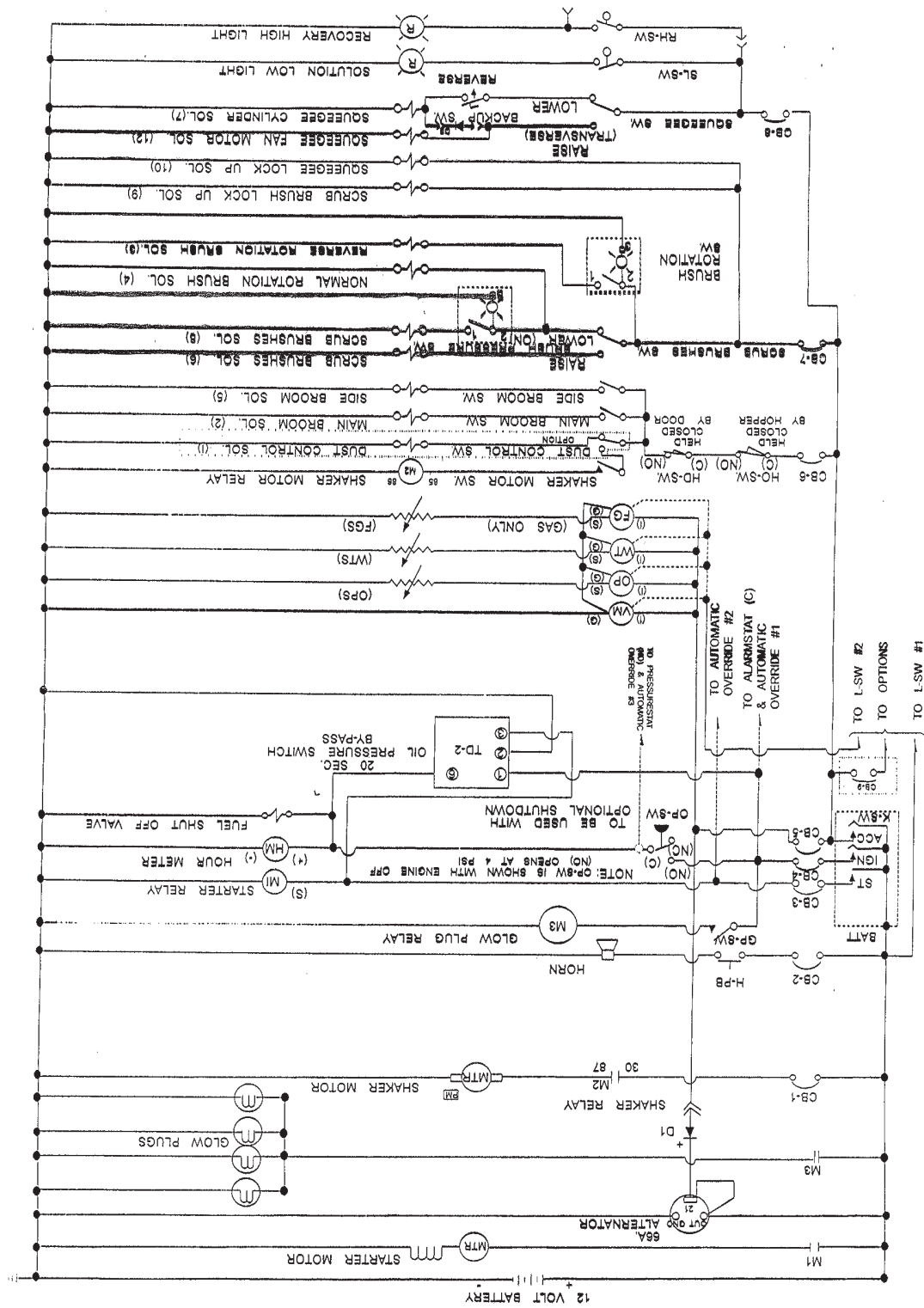






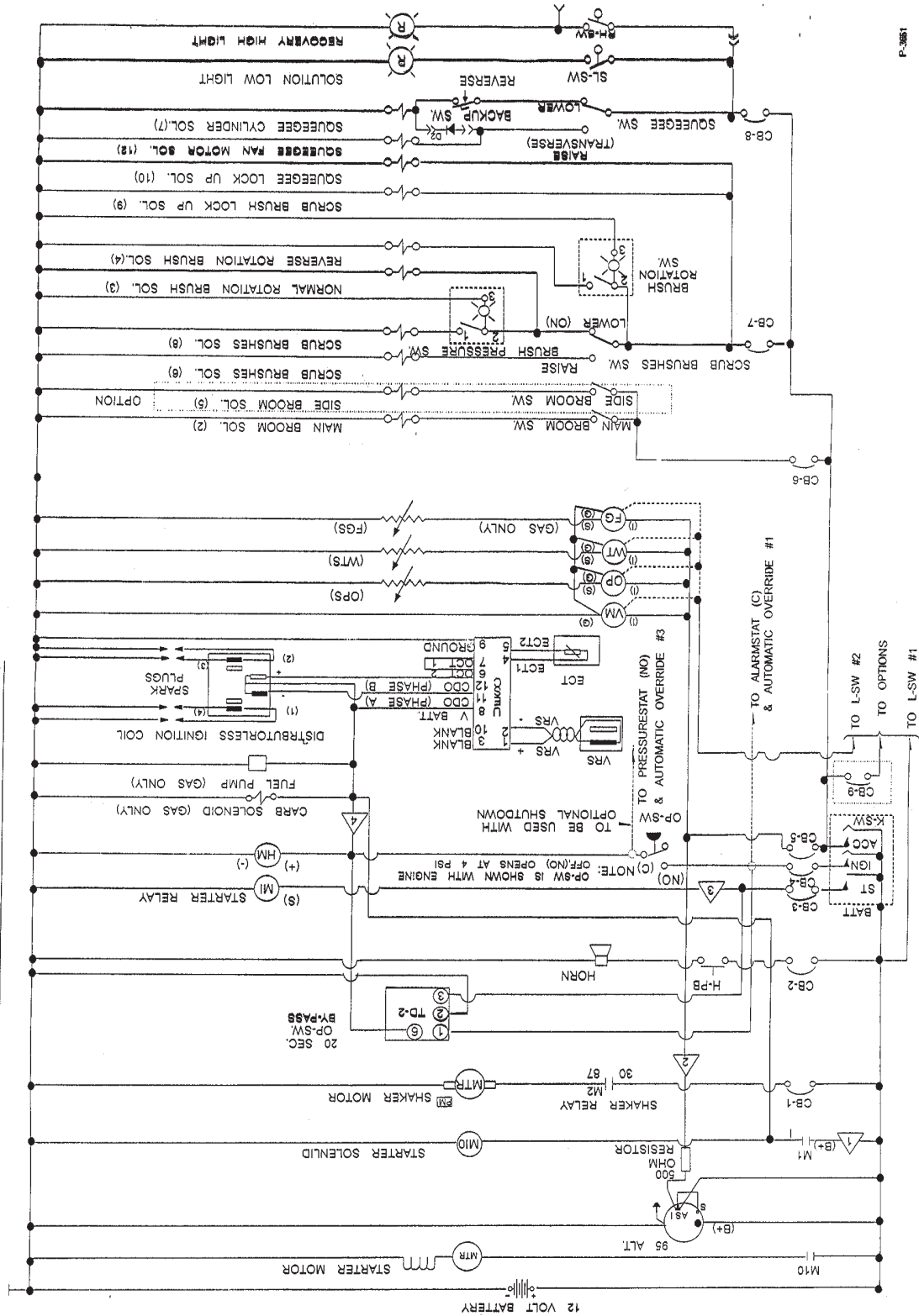


# ELECTRICAL SCHEMATIC (DIESEL - VARIABLE & LOW DUMPS)





ELECTRICAL SCHEMATIC (GAS - MANUAL DUMP)



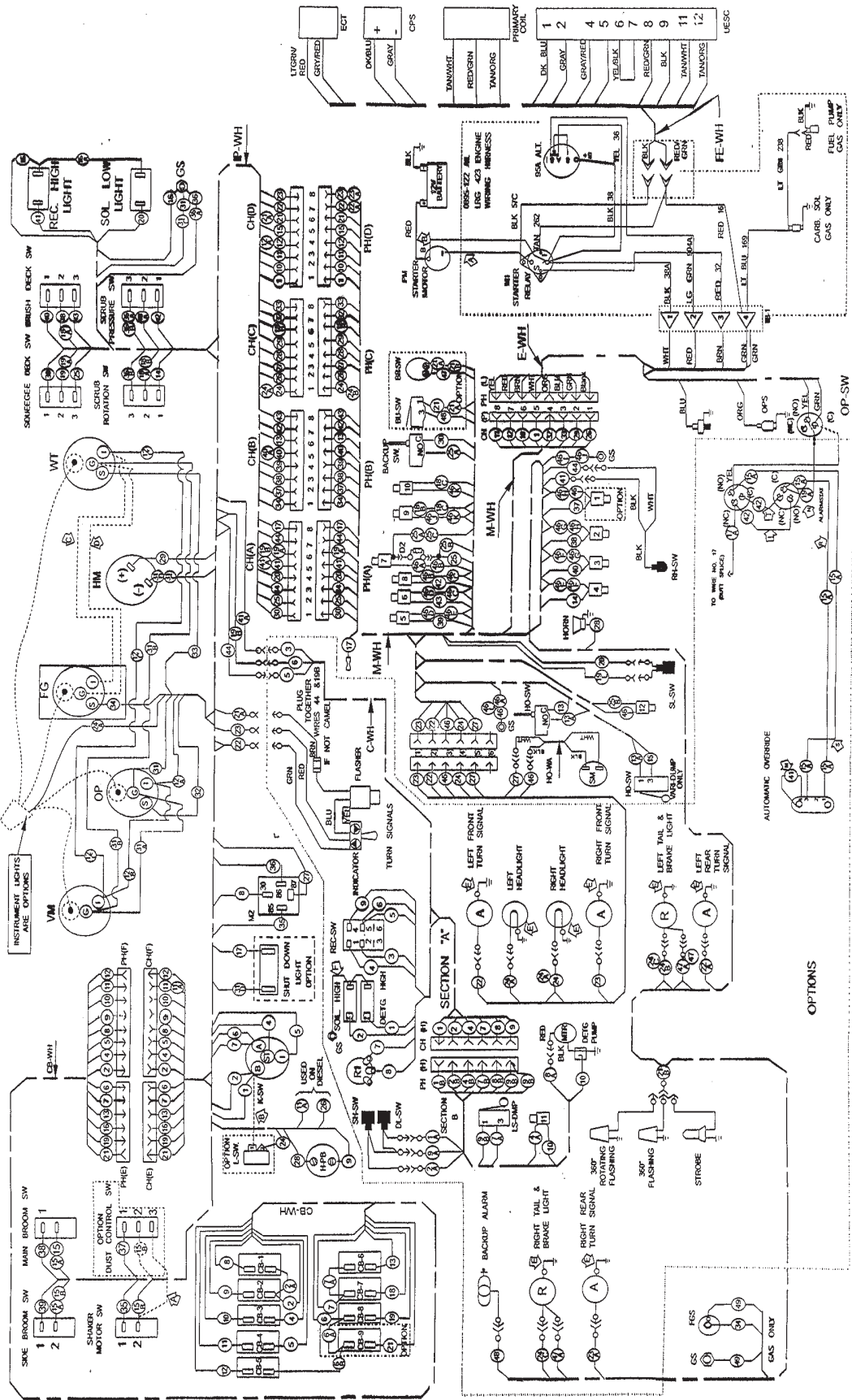


The diagram illustrates the electrical system for an engine, featuring a 12-volt battery connected to a starter motor and glow plugs. Key components include:

- Battery & Power Distribution:** A 12-volt battery at the top provides power to the starter motor (M1) and glow plugs (GLOW PLUGS).
- Starter System:** Includes a starter relay (MI), a fuel shut off valve, and an oil pressure switch (TD-2) with a 20-second delay.
- Engine Control Switches:** Multiple switches for engine operation, including "MAIN BROOM SW", "SIDE BROOM SW", "SCRUB BRUSHES SW", "NORMAL ROTATION BRUSH SOL.", "REVERSE ROTATION BRUSH SOL.", "SCRUB BRUSH LOCK UP SOL.", "SQUEEGEE LOOK UP SOL.", "SQUEEGEE FAN MOTOR SOL.", "LOWER BACKUP SW", "RAISE (TRANSLVERSE)", and "LOWER".
- Sensors & Indicators:** Includes a fuel meter (HM), a starter relay (MI), and a glow plug relay (M3).
- Relays & Fuses:** Various relays (CB-1, CB-2, CB-3, CB-4, CB-5, CB-6, CB-7) and fuses (F1, F2, F3, F4, F5, F6, F7, F8, F9, F10, F11, F12, F13, F14, F15, F16, F17, F18, F19, F20, F21, F22, F23, F24, F25, F26, F27, F28, F29, F30, F31, F32, F33, F34, F35, F36, F37, F38, F39, F40, F41, F42, F43, F44, F45, F46, F47, F48, F49, F50, F51, F52, F53, F54, F55, F56, F57, F58, F59, F60, F61, F62, F63, F64, F65, F66, F67, F68, F69, F70, F71, F72, F73, F74, F75, F76, F77, F78, F79, F80, F81, F82, F83, F84, F85, F86, F87, F88, F89, F90, F91, F92, F93, F94, F95, F96, F97, F98, F99, F100) are used throughout the circuit.
- Control Logic:** The diagram shows complex interlocking between switches and relays to ensure safe engine operation, including provisions for "TO AUTOMATIC OVERRIDE #2", "TO ALARMIST & AUTOMATIC OVERRIDE #1", and "TO L-SW #2 TO OPTIONS TO L-SW #1".



CONNECTION DIAGRAM (GAS - VARIABLE & LOW DUMPS)

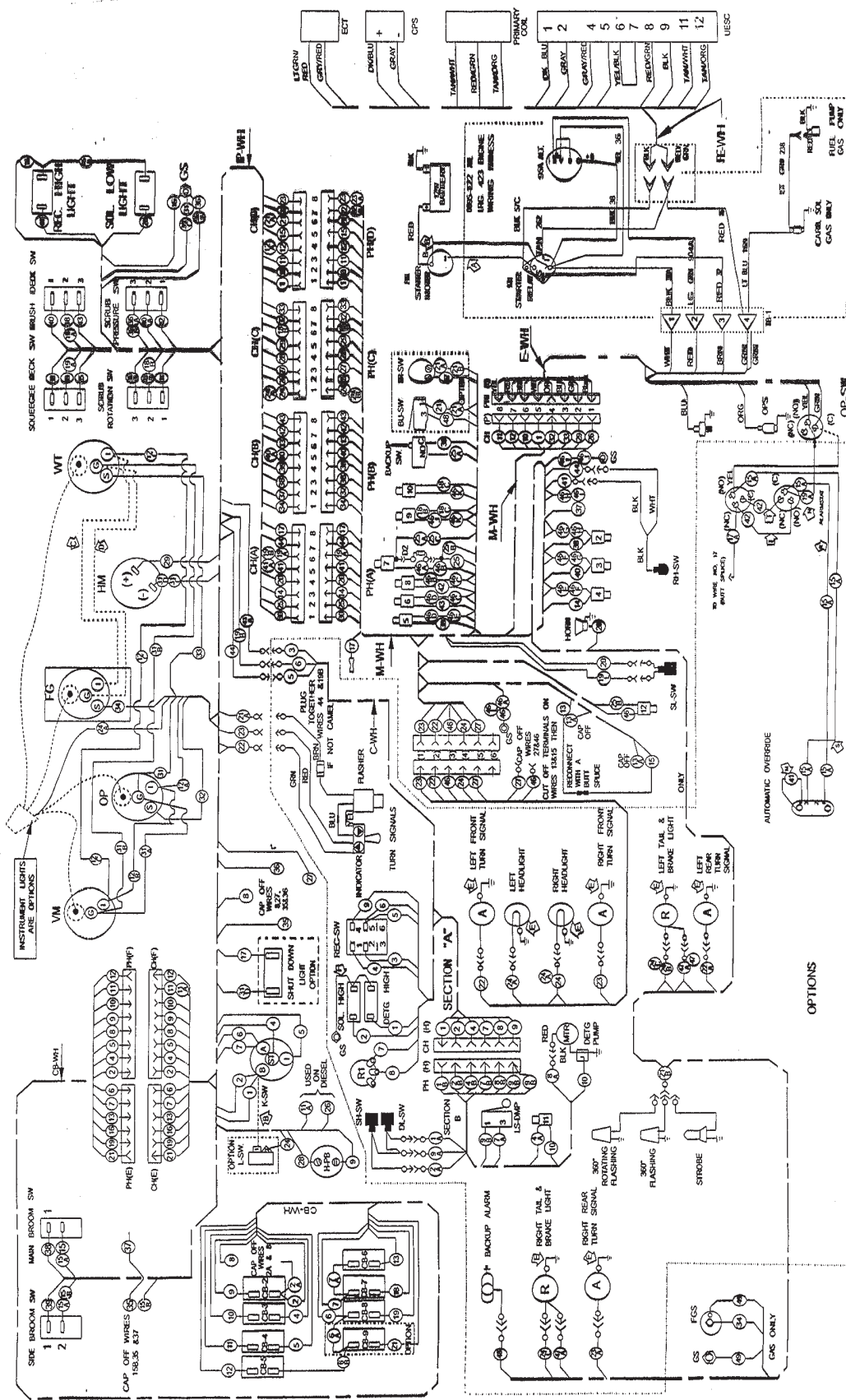








CONNECTION DIAGRAM (GAS - MANUAL DUMP)



P-3829511

American Lincoln Technology  
7700 Operator's Manual



CONNECTION DIAGRAM (DIESEL - MANUAL DUMP)

