



# Electronic Service Manuals

This electronic document is provided as a service to our customers. We do not create the contents of the information contained in this document. Should you have detailed questions pertaining to the information contained in this document, you may contact Michco, or the manufacturer which provided the original information in this electronic deliverable. Michco's only part in this electronic deliverable was the electronic assembly process.

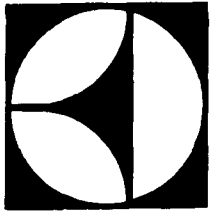
You may contact Michco through the following methods:  
Phone (517) 484-9312 or (800) 331-3339 MI, OH, IN only  
2011 N. High St. -- Lansing, Michigan -- 48906  
Fax: (517) 484-9836  
Email: [CustServ@Michco.com](mailto:CustServ@Michco.com)  
Web site: [www.Michco.Com](http://www.Michco.Com)  
Parts Web site: [www.FloorMachineParts.Com](http://www.FloorMachineParts.Com)

Order Parts on Line at:  
**[www.FloorMachineParts.Com](http://www.FloorMachineParts.Com)**

Directly to Parts & Service:  
By Email: **[Shop@Michco.com](mailto:Shop@Michco.com)**  
By Fax: (517) 702-2041  
By Voice: Use numbers above.

**Serving the Cleaning Industry Since 1922**

Notice: All copyrighted material remains property of original owners, all trademarks are property of respective owners. Manuals are subject to Manufacturer's reproduction limitations. Originals or reproductions were provided by manufacturers through a request. We make no warranty as to the correctness of information provided in this document and you assume all risk.



# KENT

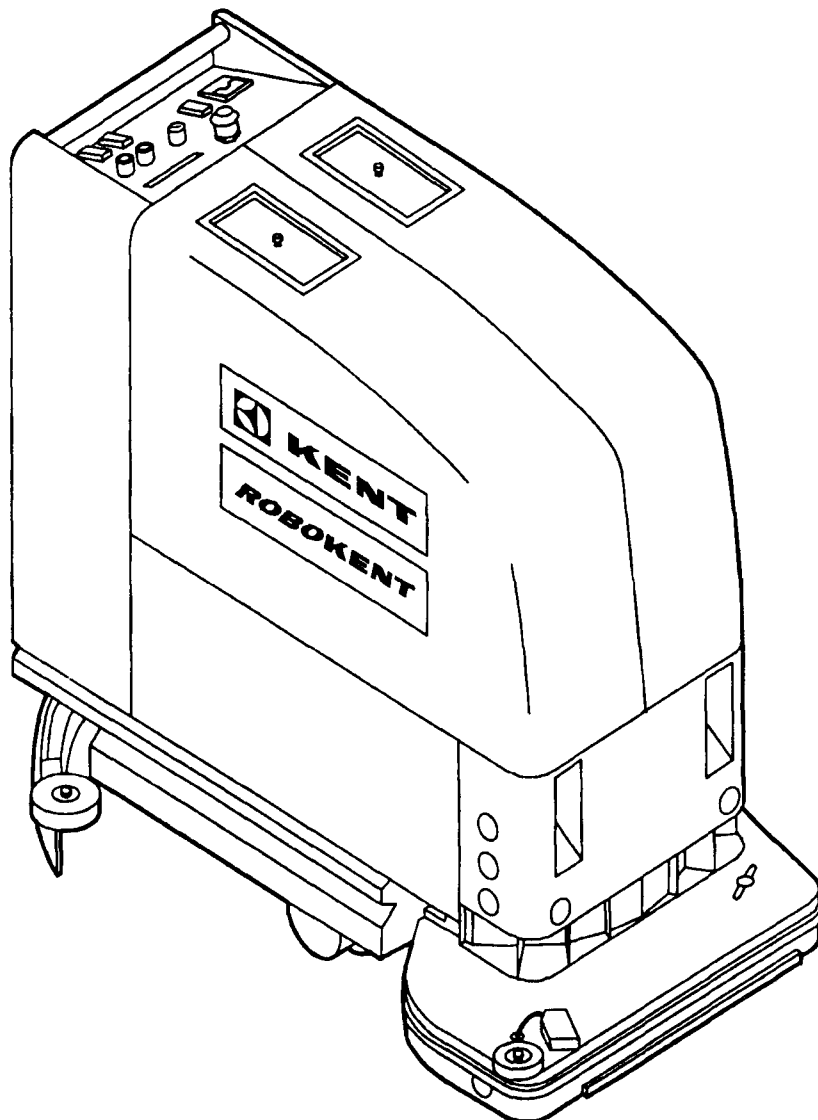
## SERVICE MANUAL

MAINTENANCE • PARTS LIST

ROBOKENT™ SCRUBBERVAC

**KA-262BR**

24 VOLT DC



THE KENT COMPANY • 2310 INDUSTRIAL PARKWAY • P.O. BOX 1665 • ELKHART, IN 46515, U.S.A.  
TEL: (219)293-8661 • (800)334-1083 • FAX: (219)295-8610 • TELEX: 25-8331 KENT CO EKR

# TABLE OF CONTENTS

---

MACHINE SPECIFICATIONS .....	2
SERVICE ACCESSORIES .....	3
SERVICE INFORMATION .....	4
IMPORTANT SAFETY INSTRUCTIONS .....	4
TROUBLE SHOOTING GUIDE .....	5
MAINTENANCE SCHEDULE .....	8
GREASE CHART .....	8
SOFTWARE UPDATE .....	9
FINAL ASSEMBLY .....	13
SOLUTION TANK ASSEMBLY .....	15
RECOVERY TANK ASSEMBLY .....	17
LEFT HORIZONTAL PANEL ASSEMBLY .....	19
RIGHT HORIZONTAL PANEL ASSEMBLY .....	20
BRUSH HEAD ASSEMBLY .....	23
LOWER CHASSIS ASSEMBLY .....	25
HANDLE BAR ASSEMBLY .....	27
PNEUMATIC MANIFOLD ASSEMBLY .....	28
AIR COMPRESSOR ASSEMBLY .....	29
BRUSH HEAD CYLINDER ASSEMBLY .....	30
AIR TANK ASSEMBLY .....	31
WATER VALVE ASSEMBLY .....	32
SQUEEGEE ASSEMBLY .....	33
DRIVE ASSEMBLY .....	35
DRIVE ENCODER ASSEMBLY .....	36
VACUUM MOTOR ASSEMBLY .....	37
RECYCLE DOOR ASSEMBLY .....	38
PNEUMATIC SYSTEM .....	39
FUSES .....	40
SQUEEGEE ADJUSTMENTS .....	41
NOTES .....	42

# MACHINE SPECIFICATIONS

CONTROLS .....	Manual and electronic controls with pneumatic and gravity operation.
MAIN COMPUTER .....	Monitors all data, and computes the AutoLearning sequence.
DRIVE SubSYSTEM .....	Monitors and controls the machines movement and positioning.
DRIVE MOTORS .....	Two 24VDC servo type with high traction water displacement tread.
AUXILIARY SubSYSTEM .....	Monitors operating information, i.e. Control Panel, Pneumatic Valves.
VACUUM MOTOR .....	24VDC, 3/4 HP, 2-stage bypass type.
BRUSH DRIVE MOTOR .....	24VDC, 3/4 HP, 1150 RPM permanent magnet type, belt driven to self leveling scrub system.
OBSTACLE AVOIDANCE .....	10 point sonar sensing system is the frontal "eyes" of the machine.
WALL REGISTRATION .....	6 point sonar sensing system informs the machine of its orientation to the hall.
OVERHEAD .....	2 point sonar sensing system "looks" above the machine for overhangs and ledges.
CASTERS .....	Two 3 1/2" (8.9 cm) polyurethane swivel type.
BRUSH HEAD .....	Cast aluminum with bumper wheel, wall hug sensor, stair detection capability and touch sense bumpers.
SCRUBBING WIDTH .....	26" (66 cm).
SCRUBBING PRESSURE .....	55 lbs. (25 kg)
STRIP PRESSURE (Manual Operation) .....	146 lbs (66.2 kg).
SQUEEGEE .....	32" (81.2cm) arc-shaped, swing type with self-centering device and gum rubber reversible blades.
SOLUTION/RECOVERY TANKS .....	25 gal. (94.6 L) high density molded seamless linear polyethylene
BATTERIES .....	Four heavy-duty deep cycle, 6V, 200 AH, series connected
SOLUTION FEED .....	Manually adjustable flow rate to center of each brush
FRAME .....	All welded stainless steel, 11 ga. (0.3 cm) plate with 1/4" (0.6 cm) flat bar.
OUTER SHELL .....	High density molded seamless linear polyethylene
CHARGER UNIT .....	Electronic, 20 Amp, 24V, 115 VAC
LENGTH (OVERALL) .....	55" (139.7 cm).
HEIGHT (OVERALL) .....	42-1/2" (107.9 cm).
WIDTH (BODY) .....	19" (48.3 cm).
WIDTH (BRUSH HEAD) .....	28" (71.7 cm).
WIDTH (SQUEEGEE) .....	32" (81.2 cm).
WEIGHT (W/BATTERIES) .....	688 lbs. (312.1 kg).
SHIPPING WEIGHT (TOTAL) .....	670 lbs. (303.9 kg).
SHIPPING WEIGHT (BATTERY PACK) .....	260 lbs. (117.9 kg).
SHIPPING WEIGHT (BATTERY CART) .....	65 lbs. (29.5 kg)

# SERVICE ACCESSORIES

## PADS

PADHOLDER-RIGHT SIDE (Left-Hand Thread)	20376
PADHOLDER-LEFT SIDE (Right-Hand Thread)	20347
13" SCRUB PAD (2 Req'd)	R50200
13" POLISH PAD (2 Req'd)	R50201
13" STRIP PAD (Manual Operation Only/2 Req'd)	15659

## BRUSHES

13 1/2" SCRUB BRUSH (2 Req'd)	20274
13 1/2" POLISH BRUSH (2 Req'd)	20275
13 1/2" POLYPROPYLENE BRUSH (2 Req'd)	20276
13 1/2" STEEL WIRE BRUSH (Manual Operation Only/2 Req'd)	20278
13 1/2" KEN-GRIT BRUSH (Manual Operation Only/2 Req'd)	20297

## SQUEEGEE BLADES

PRESQUEEGEE LEFT AND RIGHT	R50107
SQUEEGEE, FRONT (SLOTTED)	54557
SQUEEGEE, REAR	54558

## FILTER

MICROSTAT FILTER KIT	38303
FILTER BAG-150 MICRON (RECOVERY TANK)	56185
STEEL FILTER-100 MICRON (RECOVERY TANK)	56235
REPLACEMENT FILTER CARTRIDGES:	
5 MICRON	49867
10 MICRON (Standard)	49870
30 MICRON	55592
50 MICRON	55593
VACUUM FILTER	46817

## BATTERIES

INDIVIDUAL	
WET	26408
DRY	26441
WET BATTERY PACK	
INCLUDES, 4 Wet Batteries, Poly Container,	
All Necessary Wiring, Loading Platform	R26083
DRY BATTERY PACK	
INCLUDES, 4 Dry Batteries, Poly Container,	
All Necessary Wiring, Loading Platform	R26137

## BATTERY CHARGER

ONE(1) 20 AMP, 24V, 115VAC	31355
----------------------------	-------

# SERVICE INFORMATION

To obtain consistent performance over the life of your Kent equipment, read through these instructions and save them for future reference. If you require service, contact the dealer from which the machine was purchased or an authorized service station. Always refer to your limited warranty for complete service information.

<b>THE KENT CO.</b> ELKHART, INDIANA U.S.A.			
SERIAL NO.		MODEL	
VOLTS	PHASE	Hz.	
MOTOR 1	AMP.	H.P.	URC
MOTOR 2	AMP.	H.P.	

The model, type, and serial number are indicated on the data plate located on the steel panel, inside the rear compartment. For prompt and accurate information, refer to these numbers when inquiring about service.

**Write the model and serial number of your unit in the space provided. Refer to the rating plate on unit.**

**MODEL #                      SERIAL #**  
Retain this owner's manual for future reference.

# IMPORTANT SAFETY INSTRUCTIONS

When using an electrical appliance, basic precautions should always be followed, including the following:

**READ ALL INSTRUCTIONS BEFORE USING THE MACHINE!**



**WARNING:**



**FAILURE TO FOLLOW THESE SAFETY INSTRUCTIONS COULD RESULT IN DAMAGE TO THE MACHINE, DAMAGE TO PROPERTY, BODILY INJURY, OR DEATH.**

- Do not leave the machine when powered on. Remove the key from the keylock when not in use and before servicing.
- When working with or near batteries, always wear eye protection and protective clothing, and

remove all jewelry to prevent accidental electrical sparks and/or shock.

- Do not place tools or other metal objects on or near the tops of the batteries to prevent accidental arcing between the battery terminals.
- Explosive hydrogen gas is formed during battery charging. Avoid charging the batteries around any open flame or anything which could produce an electrical spark. Always charge the batteries in a well ventilated area. Do not disconnect the battery charger from the batteries while charging, this may produce an electrical spark. Always keep the battery pack out while charging.
- Do not use a charger that has a damaged power cord. Serious or fatal injury could occur due to a damaged power cord.
- Operate the machine only from the rear of the machine. Operating it from any other position may result in injury or damage.
- Do not attempt to transport the machine without assistance. Use two or more people to help guide the machine while on a ramp or incline. Move cautiously and slowly. Do not turn the machine on a ramp. Do not stop and leave the machine on the ramp or incline. Failure to follow these instructions, while transporting the machine, may result in serious bodily injury and or damage to the machine or other property.
- Store your machine indoors in a cool, dry area. Do not expose the machine to temperatures in excess of 120°F or lower than 35°F for extended periods of time. Freezing solution can result in damage to the pump, solution plumbing, and tanks.
- Keep your work area well lighted.

# TROUBLE SHOOTING GUIDE

## PROBLEM

## CORRECTION

### MACHINE WILL NOT POWER UP

- |  |                             |
|--|-----------------------------|
| 1. KEY SWITCH NOT ON .....                     | 1. TURN KEYSWITCH ON        |
| 2. E-STOP BUTTON DEPRESSED .....               | 2. PULL UP ON E-STOP SWITCH |
| 3. BATTERY PACK NOT CONNECTED .....            | 3. CONNECT BATTERY PACK     |
| 4. BATTERY LEVEL LOW .....                     | 4. CHARGE BATTERIES         |
| 5. BATTERY LEVEL OK NO DISPLAY ON SCREEN ..... | 5. CALL SERVICE REP.        |
| 6. ELECTRONICS POWER SUPPLY FUSE BLOWN .....   | 6. CALL SERVICE REP         |
| 7. ELECTRONICS POWER SUPPLY BAD .....          | 7. CALL SERVICE REP         |
| 8. BAD CONNECTION IN WIRING .....              | 8. REPAIR BAD CONNECTIONS   |
| 9. BAD MAIN POWER SOLENOID .....               | 9. REPLACE BAD SOLENOID     |
| 10. BAD KEY SWITCH OR E-STOP SWITCH .....      | 10. REPLACE BAD SWITCH      |

### DISPLAY SAYS MANUAL BUT MACHINE WILL NOT MOVE

- |   |                              |
|---|------------------------------|
| 1. SPEED CONTROL TURNED DOWN .....  | 1. TURN SPEED CONTROL UP     |
| 2. LOOSE WIRE IN HANDLE BAR SWITCH CIRCUIT .....                          | 2. RECONNECT WIRE            |
| 3. MOTOR POWER PLUG DISCONNECTED UNDER CHASSIS .....                      | 3. RECONNECT PLUG            |
| 4. WIRE HARNESS CONNECTORS LOOSE ON BOTTOM OF ..<br>ELECTRONICS BOX ..... | 4. TIGHTEN THESE CONNECTIONS |
| 5. DRIVE SUBSYSTEM FAILURE .....  | 5. CALL SERVICE REP          |

### DISPLAY SAYS R-F BUMPER STUCK (RIGHT FRONT)

NOTE: RIGHT FRONT AND BOTTOM CENTER BUMPERS ARE ELECTRICALLY THE SAME.  
BUMPERS ARE LOCATED AROUND THE FRONT AND SIDES OF BRUSH HEAD

- |  |                               |
|--|-------------------------------|
| 1. RIGHT FRONT BUMPER OR .....             | 1. CORRECT PINCHED BUMPER AND |
| CENTER BUMPER IS PINCHED .....             | CYCLE POWER                   |
| 2. IF PROBLEM REMAINS .....                | 2. REPLACE BUMPER             |
| 3. PROBLEM REMAINS AFTER REPLACEMENT ..... | 3. CALL SERVICE REP           |

### DISPLAY SAYS L-F BUMPER STUCK (LEFT FRONT)

1. SAME PROCEDURE AS R-F BUMPER STUCK

### DISPLAY SAYS R-R BUMPER STUCK (RIGHT REAR)

1. SAME PROCEDURE AS R-F BUMPER STUCK

### DISPLAY SAYS L-R BUMPER STUCK

1. SAME PROCEDURE AS R-F BUMPER STUCK

### DISPLAY SAYS STAIRCASE DETECTED (STAIRCASE DETECTORS, LOCATED UNDERNEATH BRUSH HEAD ON THE FRONT EDGE)

- |   |                                 |
|---|---------------------------------|
| 1. MACHINE WILL NOT MOVE .....              | 1. WIPE STAIRCASE DETECTORS     |
|   | OFF WITH DAMP CLOTH CYCLE POWER |
| 2. MACHINE PARKED ON GRATING OR LEDGE ..... | 2. MOVE MACHINE, CYCLE POWER    |

### DISPLAY SAYS "CHECK DRIVE"

1. CALL SERVICE REP

### DISPLAY SAYS "CHECK AUX"

1. CALL SERVICE REP

### DISPLAY SAYS "CHECK PROX"

1. CALL SERVICE REP



**MACHINE PULLS TO ONE SIDE**

- 1. CASTOR WHEEL DRAGGING ..... 1. REPLACE DEFECTIVE CASTOR
- 2. ONE OF THE DRIVE MOTORS NOT TURNING ..... 2. CHECK ELECTRICAL CONNECTIONS TO MOTOR  
IF OK CALL SERVICE REP

**CHARGER WILL NOT COME ON**

- 1. DC OR AC CORDS NOT CONNECTED ..... 1. CONNECT
- 2. FUSE DEFECTIVE ..... 2. REPLACE FUSE WITH STANDARD 15 AMP FUSE

**MACHINE WHEELS LOSE TRACTION IN MANUAL OR AUTOMATIC**

- 1. PRE SQUEEGEE NOT PROPERLY ADJUSTED ..... 1. SEE PRE SQUEEGEE ADJUSTMENT
- 2. TOO MUCH DRAG FROM REAR SQUEEGEE ..... 2. SEE SQUEEGEE ADJUSTMENT

# MAINTENANCE SCHEDULE

## DAILY

1. Clean strainer screen and flush inside of solution tank.
2. Clean filters and flush inside of recovery tank.
3. Wipe squeegee blades clean.
4. Wipe clean all exterior surfaces.
5. Check battery water level and clean tops with a damp cloth and charge batteries.
6. Check pick-up tube for any obstruction.
7. Clean lint filter on vac fan.
8. Check recycle filters. (Where applicable)

## WEEKLY

1. Lubricate caster bearings. (See chart below)
2. Replace Microstat Filter. (Where applicable)

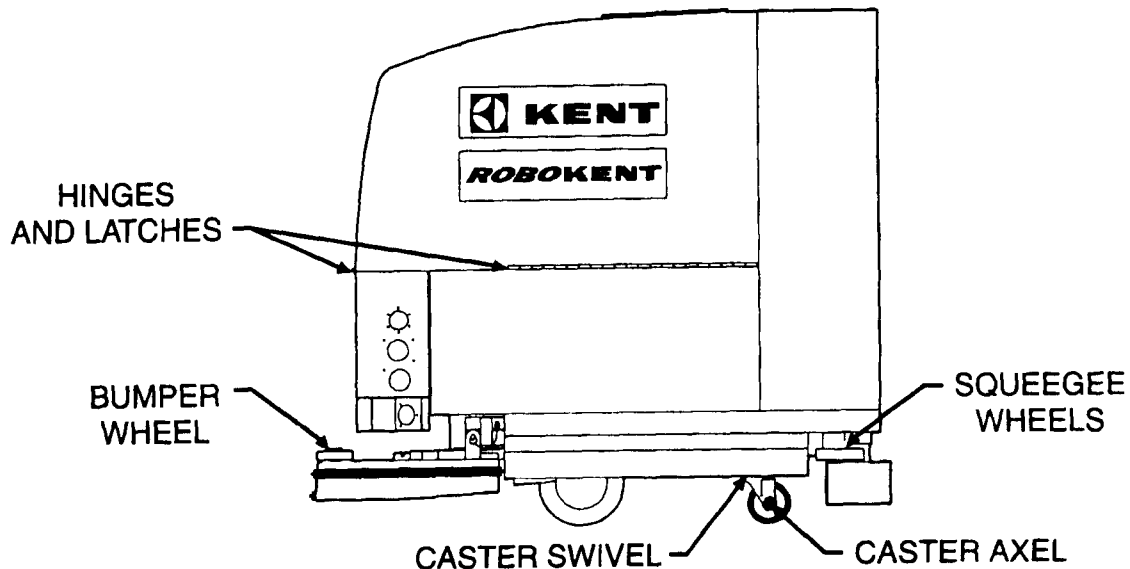
## MONTHLY

1. Check belts for tension, alignment, and wear.
2. Lubricate hinges. (See chart below)
3. Check all gaskets, vacuum motor, and recovery tank inlet tube.
4. Check recycle pump, water valve, and brush head lift for efficient operation.
5. Check presqueegee and pick-up squeegee blades for wear.
6. Check wire connections for cleanliness.

## SIX MONTHS

1. Inspect vacuum motor carbon brushes, replace if worn to 3/8" (10mm) length or less.
2. Inspect brush drive motor carbon brushes, replace if worn to 3/4" (19mm) length or less.

# GREASE CHART



# SOFTWARE UPDATE

## 68 K CPU

**ATTENTION:** Read ALL instructions BEFORE attempting the software update.

### Old Chip Removal

- STEPS:**
- 1) Turn the machine off, and remove the key.
  - 2) Using access key #4 on the control box door, turn each latch counterclockwise five (5) times and open the door.



Figure A

- 3) Loosen and remove the rails from the card cage by turning the thumb screws counterclockwise.  
(See Figure A)

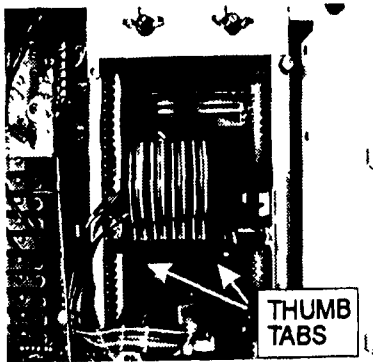


Figure B

- 4) On the second board from the top, marked GATEWAY CPU, press outward on the ribbon cable thumb tabs to release the ribbon cable connector.  
(See Figure B)

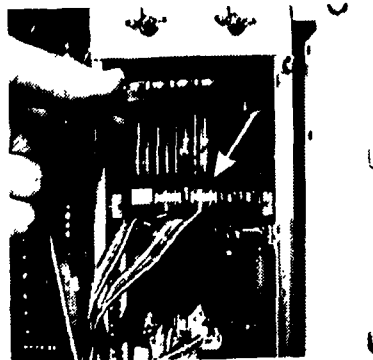


Figure C

- 5) Lifting the ribbon cable you will see two smaller ribbon cables plugged into the top board. If not already labeled, MARK the left plug with an "L" and the right with an "R". This will be an aid during reinstallation.  
(See Figure C)



Figure D

6) Now remove the TOP board (68KCPU) by grabbing behind the ribbon cable connector and pulling gently outward. When the board is 3/4 of the way out, grasp the sides of the board and remove it all of the way. Set the board on a clean, level surface. (See Figure D)

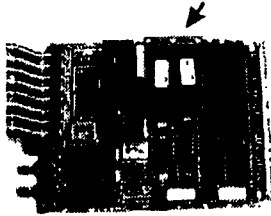


Figure E

7) Remove chip labeled U11 by using a small, straight screwdriver. Pry the chip loose while alternating end to end.

(See Figure E)

**\* be careful not to bend the chip pins or scratch the board surface.**

### New Chip Installation

- 8) Remove the new U11 from all anti-static packaging.
- 9) One end of the chip has an indentation. This indentation should ALWAYS point to the outside of the circuit board when the chip is mounted in the socket. The sockets are labeled on the circuit board in small white lettering.
- 10) Holding the chip by the ends, place it in the socket. If the pins do not line up, carefully adjust. Press the chip gently into the socket as far as it will go.
- 11) Repeat procedure 7 through 10 for the new chip labeled U15.
- 12) Replace the board back into the top slot marked 68K and replace all cables and rails in the opposite order from removal. Ensure that the board mates firmly with the connector at the back of the card cage.
- 13) Close the rear door and power up the robot. After a few seconds, the power-up diagnostic messages should appear on the screen. If they do not, check chip and circuit board installation.
- 14) Use the anti-static packaging to store the removed chips. After running the robot and becoming comfortable with the operation of the new software, return the old chips. A reasonable time is allowed for testing the new software, but please return the chips promptly. Send to:

**RoboKent Software Update Returns  
The Kent Company  
2310 Industrial Parkway  
Elkhart, IN 46516**

**ATTENTION:**

If you encounter difficulty with any of the above procedures, or if the machine does not operate properly after completion of the above procedures, contact The Kent Company Robotics Department for assistance at 1-800-334-1083.

## AUX CPU

**ATTENTION:** Read ALL instructions BEFORE attempting the software update.

### Old Chip Removal

- STEPS:**
- 1) Turn the machine off, and remove the key.
  - 2) Using access key #4 on the control box door, turn each latch counterclockwise (5) times and open the door.



Figure A

- 3) Loosen and remove the rails from the card cage by turning the thumb screws counterclockwise.  
(See Figure A)

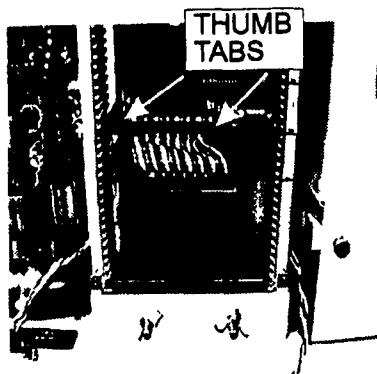


Figure B

- 4) On the second board from the bottom, marked AUX CPU, press outward on the ribbon cable thumb tabs to release the ribbon cable connector.  
(See Figure B)

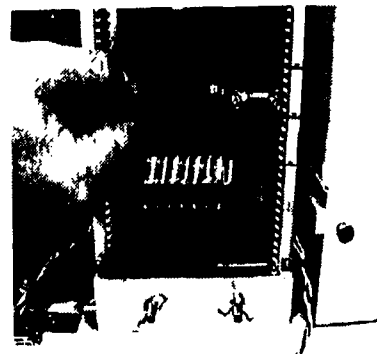


Figure C

- 5) Remove the AUX board (2nd board from the bottom) by *grabbing behind the ribbon cable connector and pulling gently outward*. When the board is 3/4 of the way out, grasp the sides of the board and remove it all of the way. Set the board on a clean, level surface.

(See Figure C)

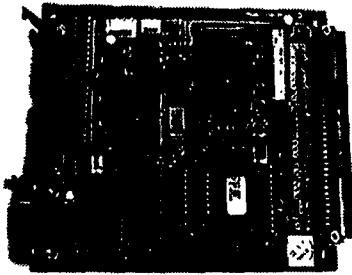


Figure D

6) Remove chip labeled AUX using a small, straight screwdriver. Pry the chip loose while alternating end to end. The socket is labeled U4 on the circuit board in white lettering.

(See Figure D)

**\* be careful not to bend the chip pins or scratch the board surface.**

### **New Chip Installation**

7) Remove the new AUX chip from all anti-static packaging.

8) One end of the chip has an indentation. This indentation should ALWAYS point to the outside of the circuit board when the chip is mounted in the socket.

9) Holding the chip by the ends, place it in the socket. If the pins do not line up, carefully adjust. Press the chip gently into the socket as far as it will go.

10) Replace the board into the slot marked AUX CPU and replace all cables and rails in the opposite order from removal. Ensure that the board mates firmly with the connector at the back of the card cage.

11) Close the rear door and power up the robot. After a few seconds, the power-up diagnostic messages will appear on the screen. If there is a problem, the AUX TEST will fail. Check your chip and board installation.

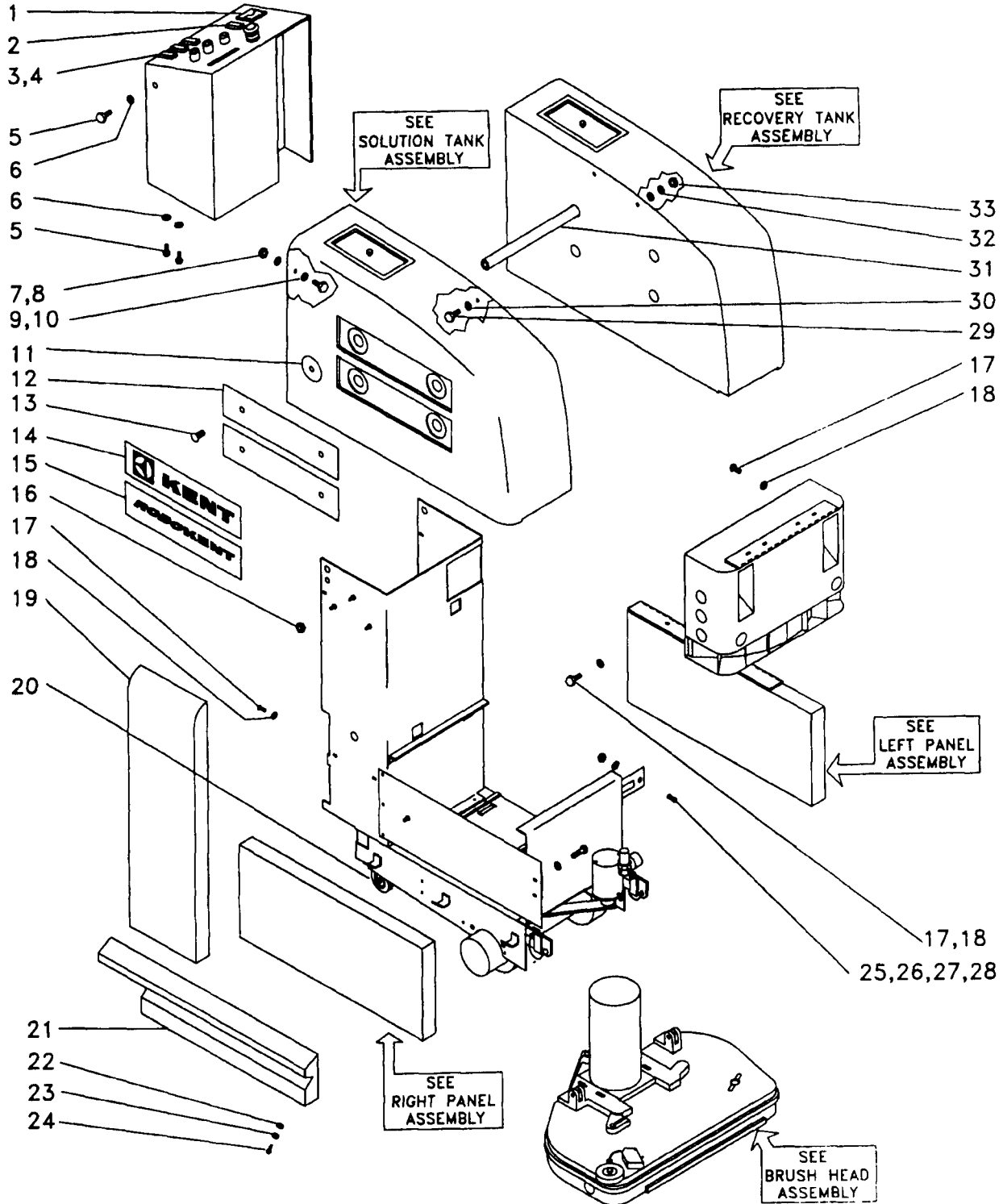
12) Use the anti-static packaging to store the removed chip. After running the robot and becoming comfortable with the operation of the new software, return the old chip. A reasonable time is allowed for testing, but please return the chip promptly. Send to:

**RoboKent Software Update Returns  
The Kent Company  
2310 Industrial Parkway  
Kirkhart, IN 46516**

### **ATTENTION:**

If you encounter difficulty with any of the above procedures, or if the machine does not operate properly after completion of the above procedures, contact The Kent Company Robotics Department for assistance at 1-800-334-1083.

# FINAL ASSEMBLY

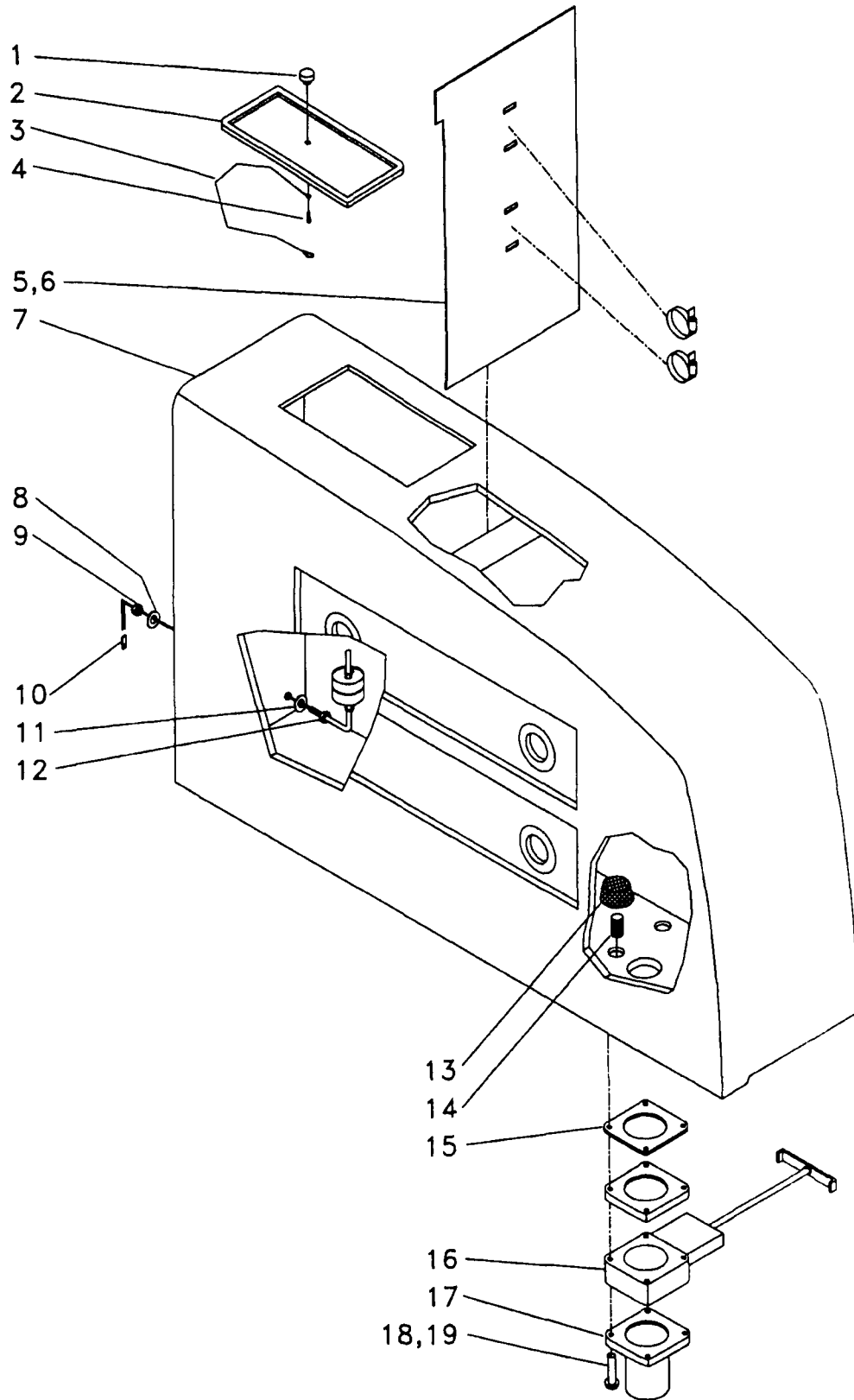


# FINAL ASSEMBLY PARTS LIST

DET. PART NO.	DESCRIPTION	QUANT.	
1	026448	VOLTMETER	1
2	026647	SWITCH,RKR—DPDT,6A,125V	1
3	026466	SWITCH,RKR—SPST,10A,250V,WHIT	3
4	048653	SWITCH PROTECTOR	4
5	001289	SCR MACH RD HD 10-24X 500L	6
6	004253	WSHR LK 204ID 410OD.025T EXT	22
7	222258	NUT,HEX— 250-20,SS	2
8	002278	WSHR LK 262ID 489OD 062TSPLT	2
9	224073	WSHR SEAL 250ID SS	2
10	005552	SCR CAP HEX HD 250-20X1 00L	2
11	004437	WSHR FLT 656ID1 87OD 100T STL	8
12	R50226	PANEL,COVER—SIDE,GRAY	4
13	002264	SCR MACH FLAT HD 250-20X1 25L	8
14	R50228	LABEL,IDENT—KENT,GRAY	2
15	R50280	LABEL,IDENT—ROBOKENT	2
16	R01033	NUT HEX FLANGE— 250-20,LOCK	7
17	001366	SCR MACH PAN HD 10-32X.500L	16
18	004253	WSHR LK 204ID 410OD 025T EXT	22

DET. PART NO.	DESCRIPTION	QUANT.	
19	R50223	PANEL,SIDE—VERT,LEFT MACH,GRY	1
19	R50225	PANEL,SIDE—VERT,RHT,MACH,GRAY	1
20	049376	CASTER WHEEL	2
21	R50212	SKIRT,LEFT—MACHINED,BLUE	1
21	R50213	SKIRT,RIGHT—MACHINED,BLUE	1
22	004200	WSHR FLT 156ID 375OD 065T BRS	6
23	004503	WSHR LK 109ID 250OD 015T EXT	6
24	223186	SCR MACH PAN HD 6-32X 375L	6
25	001288	SCR MACH FLAT HD 10-24X 500L	1
26	004443	WSHR LK 200ID 375OD 022T INT	1
27	048022	KNOB	1
28	R50219	BAR,STL— 19X1 25X14 CL,GRAY	1
29	005223	SCR CAP HEX HD 312-18X1 50L	2
30	004218	WSHR FLT 344ID 750OD 060T STL	4
31	R50126	ROD,ALUM— 50 DIA X 17 88"L	4
32	004212	WSHR LK 326ID 586OD 078TSPLT	2
33	003349	NUT,HEX— 312-18,ZN PLT	5

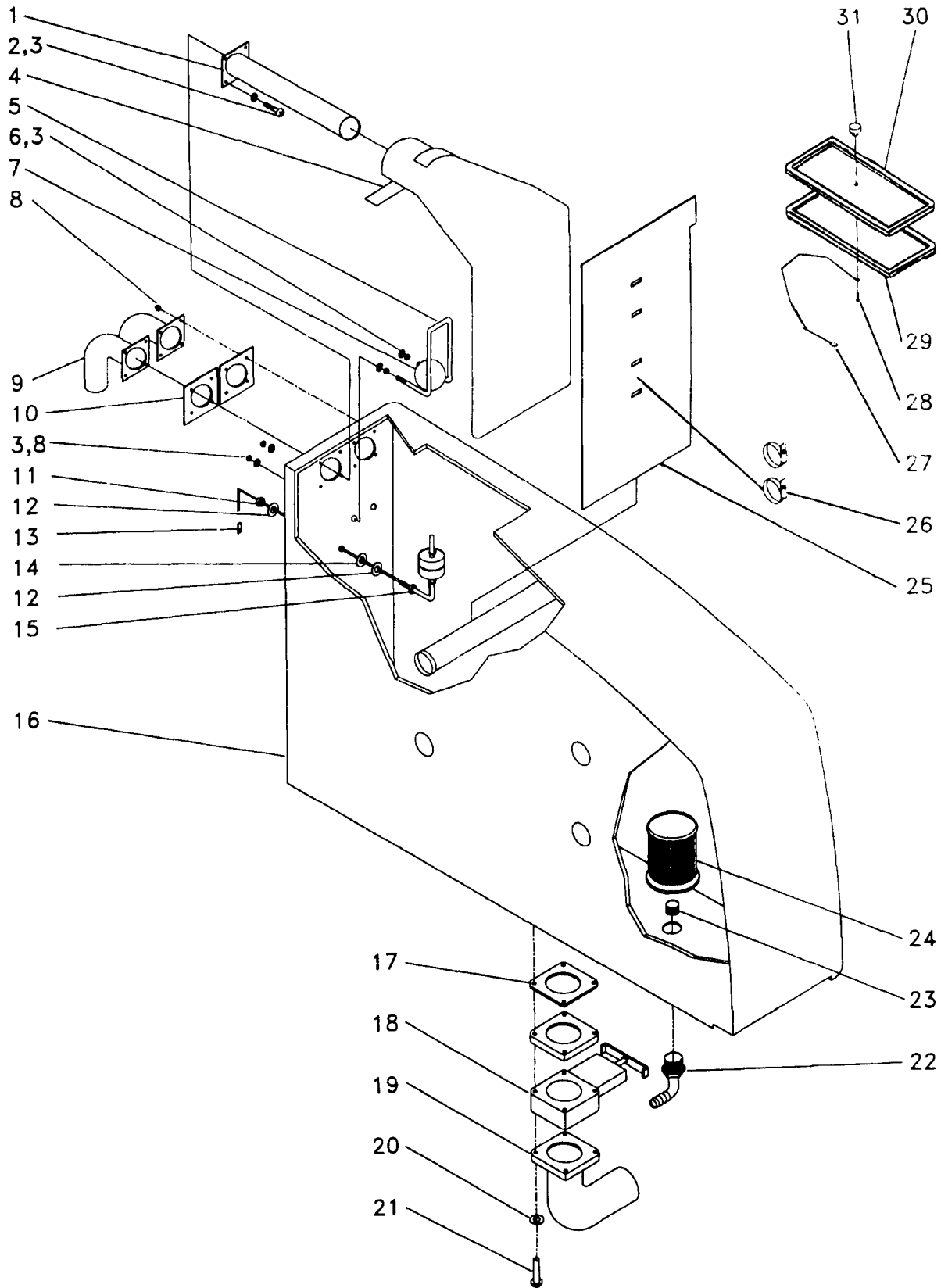
# SOLUTION TANK ASSEMBLY



# SOLUTION TANK PARTS LIST

	DET. PART NO.	DESCRIPTION	QUANT.
	R30064	ASM, TANK—SOLUTION, BLUE	1
1	048022	KNOB	1
2	049390	LID-TANK	1
3	053547	WIRE ROPE— 062 DIA X 20 0L	1
4	003467	SCR TPG F PAN HD, 10-24X 375, SS	1
5	R50039	BAFFLE, TANK—RECOVERY	1
6	056878	CABLE TIE—10 65L, SS	2
7	R50210	TANK, SOLUTION—MACHINED, BLUE	1
8	004225	WSHR FLT 406ID1 00OD 036T STL	1
9	003359	NUT, HEX— 375-24, ZN PLT	1
10	R26067	PLUG, MALE—2 CIRCUIT	1
11	053630	WSHR FLT 344ID1 18OD 12T, RUBB	1
12	R30037	ASM, SWITCH—LEVL INDICATOR, 6"	1
13	048848	LINE STRAINER	1
14	040129	NIPPLE, PIPE—1/4, CLOSE	1
15	054762	GASKET, FOAM— 187X2 87X2 87	1
16	R50139	VALVE, SLIDE—MODIFIED, 8 0 HNDL	1
17	R38002	ASM, TUBE—SOL TANK SLIDE VALVE	1
18	005323	WSHR FLT 203ID 500OD 036T STL	4
19	001418	SCR MACH RD HD 10-32X1 50L	4

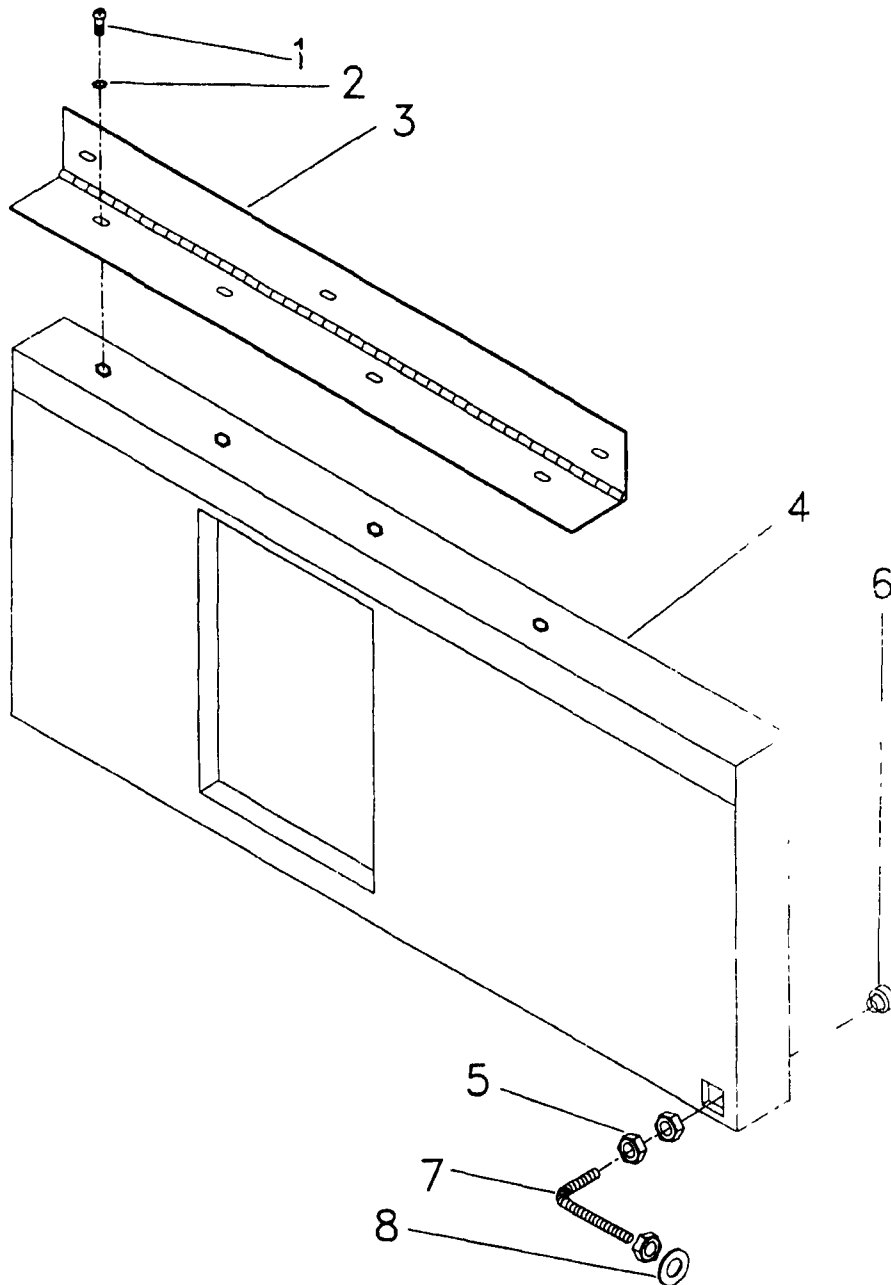
# RECOVERY TANK ASSEMBLY



# RECOVERY TANK PARTS LIST

DET. PART NO.	DESCRIPTION	QUANT.
R30063	ASM, TANK—RECOVERY, BLUE	1
1 R30000	WDMT, INLET—REC TANK	1
2 002309	SCR MACH PAN HD 10-24X1 25L	8
3 224074	WSHR SEAL 203ID SS	12
4 056185	FILTER, SOCK—150MICRON, 5' OPEN	1
5 R50009	CAGE, TRAP—	1
6 003406	NUT, HEX— 10-24, SS	2
7 049388	BALL-FLOAT	1
8 005480	NUT, HEX LOCK— 10-24, NYLOC	10
9 032542	ASM, ELBOW—INLET-TOP	2
10 048257	GASKET-INLET ELBOW	2
11 003359	NUT, HEX — 375-24, ZN PLT	1
12 004225	WSHR FLT 406ID1 00OD 036T STL	2
13 R26067	PLUG, MALE—2 CIRCUIT	1
14 050364	WSHR FLT 430ID1 20OD 143T RUB	1
15 R30036	ASM, SWITCH—LEVEL INDICATOR	1
16 R50208	TANK, RECOVERY—MACHINED BLUE	1
17 054762	GASKET, FOAM— 187X2 87X2 87	1
18 R50058	VALVE, SLIDE—MODIFIED	1
19 R38003	ASM, TUBE—REC TANK SLIDE VALVE	1
20 005323	WSHR FLT 203ID 500OD 036T STL	4
21 001418	SCR MACH RD HD 10-32X1 50L	4
22 056231	ELBOW, PLASTIC—1/2MPTX1/2BARB	1
23 R01054	FITTING, NIPPLE— 50 MPT, CL, BRS	1
24 056235	FILTER, RECYCLE—1/2NPT	1
25 R50039	BAFFLE, TANK—RECOVERY	1
26 056878	CABLE TIE—10 65L, SS	2
27 053547	WIRE ROPE— 062 DIA X 20 0L	1
28 003467	SCR TPG F PAN HD, 10-24X 375, SS	1
29 049443	GASKET-LID	1
30 049390	LID-TANK	1
31 048022	KNOB	1

# LEFT HORIZONTAL PANEL ASSEMBLY

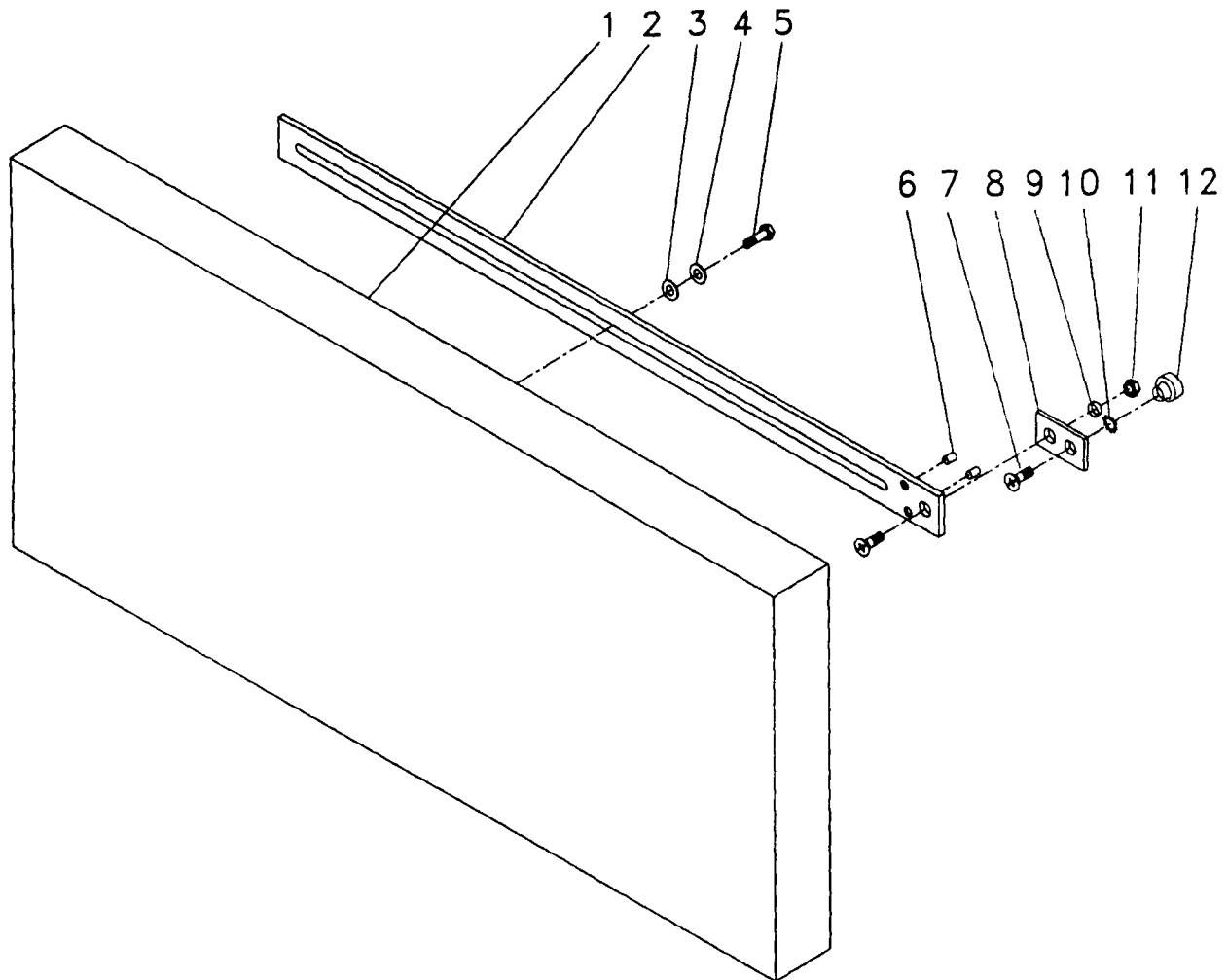


## LEFT HORIZONTAL PANEL PARTS LIST

DET. PART NO.	DESCRIPTION	QUANT.
1	001386 SCR MACH PAN HD 10-32X.500L	4
2	004253 WSHR LK .204ID.410OD.025T EXT	4
3	R50220 HINGE,21"L—GRAY	1
4	R30067 ASM,PANEL—HORIZONTAL,LFT,GRAY	1

DET. PART NO.	DESCRIPTION	QUANT.
5	003349 NUT,HEX—.312-18,ZN PLT	3
6	R50252 KNOB,PLSTC— 31-18 BRS INSERT	1
7	R50251 ROD,THRD— 31-18,90DEG 2 0X3 0	1
8	004444 WSHR LK 332ID 610OD 034T EXT	1

# RIGHT HORIZONTAL PANEL ASSEMBLY

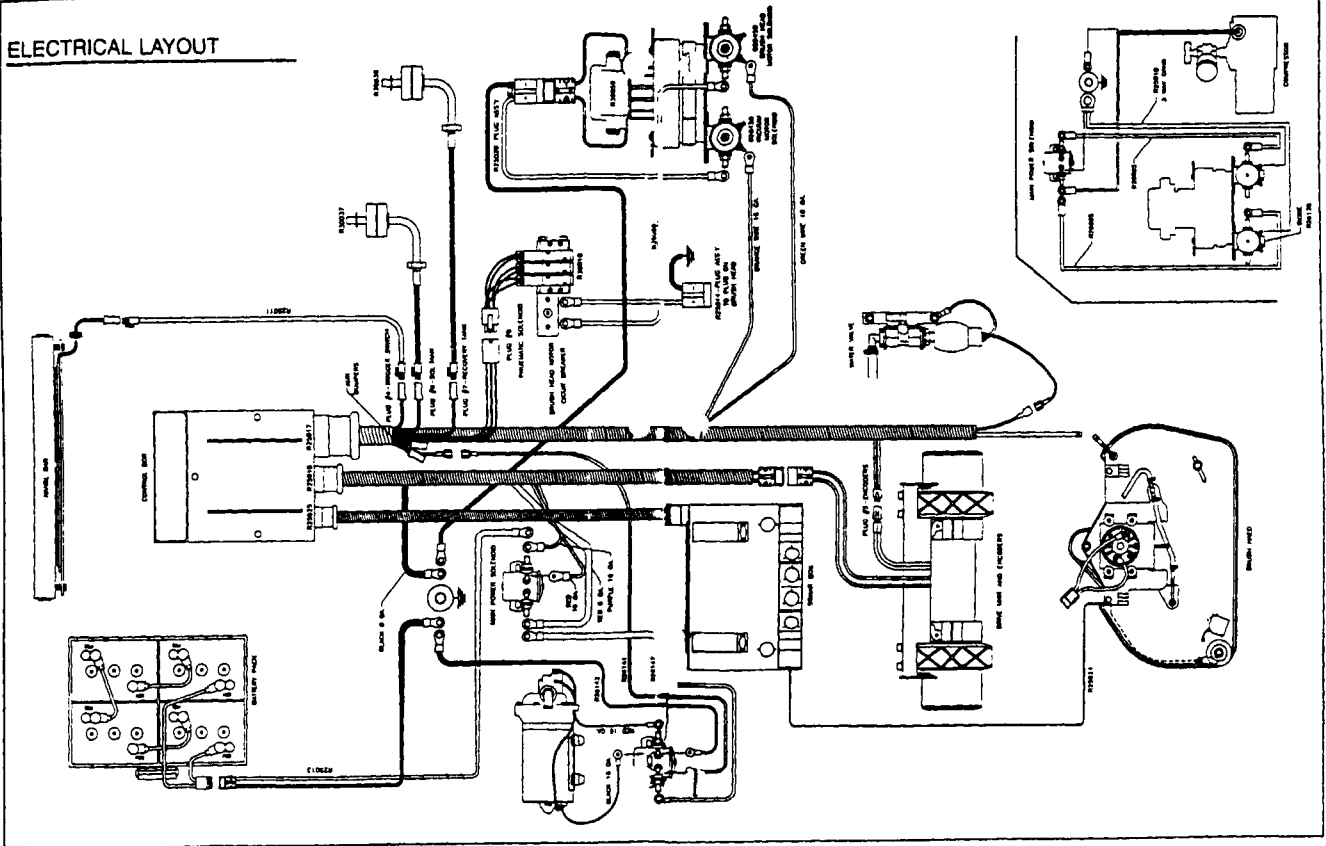


## RIGHT HORIZONTAL PANEL PARTS LIST

DET. PART NO.	DESCRIPTION	QUANT.
R30066	ASM,PANEL--HORIZONTAL,RHT,GRAY	1
1 R50224	PANEL,HORIZONTAL--MACH RIGHT	1
2 R50216	BAR,STL-- 187X1.25X24.0L,GRAY	1
3 005526	WSHR FLT 281ID1.25OD.063T STL	2
4 E44685	WSHR SPR TNSN .252ID.438OD.015	2
5 002254	SCR CAP HEX HD .250-20X.875L	2
6 222621	PIN,ROLL-- 250 DIA, .375L	2

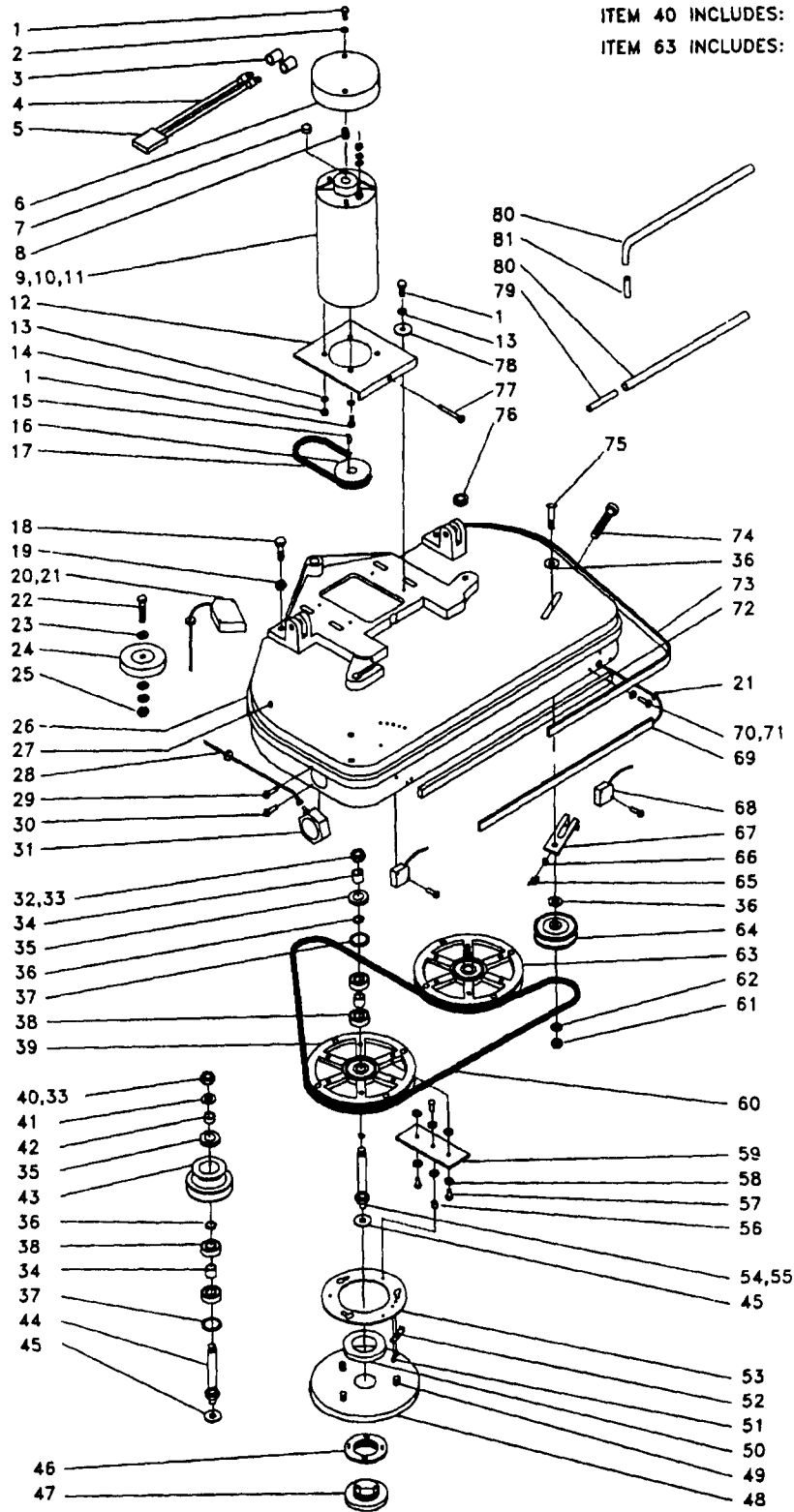
DET. PART NO.	DESCRIPTION	QUANT.
7 001288	SCR MACH FLAT HD 10-24X 500L	2
8 R50217	PLATE,STL--CAM,GRAY	1
9 R50173	SPACER,STL-- 212X 314X 135L	1
10 004443	WSHR LK .200ID 375OD 022T INT	1
11 005480	NUT,HEX LOCK-- 10-24,NYLOC	1
12 048022	KNOB	1

# ELECTRICAL LAYOUT



# BRUSH HEAD ASSEMBLY

ITEM 32 INCLUDES: 33-39, 45,  
50-59, 79  
ITEM 40 INCLUDES: 33-38, 41-45  
ITEM 63 INCLUDES: 33-39, 44-45,  
50-53, 56-59, 81

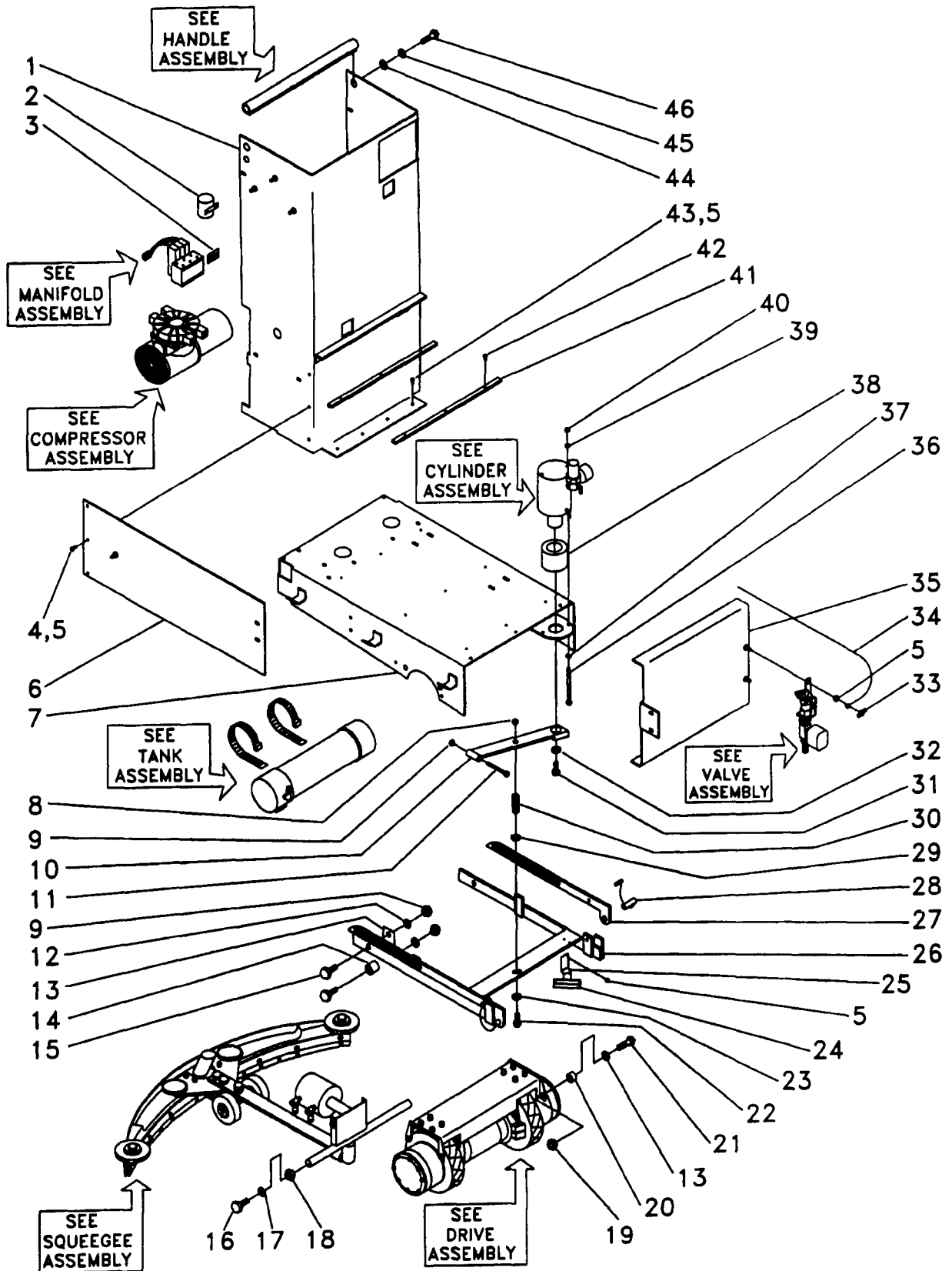


# BRUSH HEAD PARTS LIST

DET. PART NO.	DESCRIPTION	QUANT.	
	R30049	ASM, BRUSH HEAD	1
1	003243	SCR CAP HEX HD .312-18X 625L	2
2	053293	WASHER, SEALING—312 DIA, KA201	2
3	048607	TUBE, VINYL—500X.750, 1 50L	2
4	026719	ASM, WIRE—6GA, RED, 18 0L, RING	1
4	026720	ASM, WIRE—6GA, BLK, 18 0L, RING	1
5	026573	CHARGER PLUG	1
6	053294	COVER, MOTOR—MACHINED, KA-201	1
7	050113	PLUG-MOTOR	1
8	053290	STAND OFF-THRD, 312-18X 075L	2
9	024357	MTR, DC—24V, 750HP, 1200RPM	1
10	024082	ASM, BRUSH—	2
11	027177	BRG, BALL—669ID, 1 575OD, 472W	2
12	049398	MOTOR PLATE	1
13	004444	WSHR LK 332ID 610OD 034T EXT	8
14	003349	NUT, HEX—312-18, ZN PLT	2
15	049017	KEY, WOODRUFF—#606, .750D, 187W	1
16	002291	SCR SET CUP PT .312-18X 312L	1
16	052903	PULLEY, GRVD—10 GRV, 1 630 PD	1
17	054498	BELT, V—10V'S, 17 00 PITCH LENG	1
18	001419	SCR CAP HEX HD .375-16X1 25L	2
19	003438	NUT, HEX JAM—375-16, SST	2
20	R26002	SENSOR—PHOTOELECTRIC, 70A	1
21	049570	GROM—187ID, 375MHD, 187PA	4
22	002324	SCR CAP HEX HD 375-16X1 75L	1
23	004223	WSHR FLT 406ID 625OD 036T STL	3
24	049261	WHEEL—3 00DIA, 380BORE, 875HB	1
25	005279	NUT, HEX LOCK—375-16, NYLOC	1
26	R50234	CHANNEL, RUBBER—57.50"L	1
27	R50132	HEAD, BRUSH—MACHINED, KA-262BR	1
28	R25024	WIRE HARNESS—SONAR BRUSH HEAD	1
29	R01045	SCR MACH FLAT HD 4-40 X .50L	1
30	R01000	SCR MACH PAN HD 4-40X 500L	2
31	R26004	SENSOR, SONAR—	1
32	R38000	ASM, PULLEY—BRUSH DRIVE, RIGHT	1
33	003367	NUT, HEX LOCK—500-20, ZN PLT	3
34	048566	SPACER, STL—598X 750, 610L, Z	5
35	027218	SHAFT SEAL	3
36	048587	RING, RTNG—INT, 1 37 CYL, N5000	3
37	224021	WSHR FLT 1 06ID1 37OD 015T STL	5
38	027188	BRG, BALL—591ID, 1 378OD, 433W	6
39	048575	PULLEY, GRVD—4L, 8 00PD, W/HOLES	2
40	039060	ASM, PULLEY—STEP, 10V-V	1
41	004238	WSHR FLT 531ID1 00OD.071T STL	2

DET. PART NO.	DESCRIPTION	QUANT.	
42	048608	SPACER, STL—594X 750, 375L, Z	1
43	054494	PULLEY, DOUBLE—4L-MULTI-V	1
44	048565	SHAFT-BRUSH DRIVE	2
45	050364	WSHR FLT 430ID1 20OD 143T RUB	3
46	038881	RING, PLASTIC—6OD, 3ID, RIGHT	1
46	039390	RING, PLASTIC—6 12OD, 3 00ID, LH	1
47	038882	RING, PLASTIC—4 80OD, 2 9ID, RIG	1
47	039391	RING, PLASTIC—4 81OD, 2 87ID, LH	1
48	020347	HOLDER, PAD—13 00 DIA	1
48	020376	ASM, PADHOLDER—13 00DIA LH THD	1
49	046746	BRUSH LUG	6
50	046764	BRUSH SUPPORT	2
51	004328	RIVET, TUBE—141 DIA, 281L	4
52	046898	SPRING-RETAINING	2
53	032231	ASM, DRIVE—BRUSH, RIGHT	1
53	032232	ASM, DRIVE—BRUSH, LEFT RING	1
54	R50119	SHAFT, STL—MODIFIED	1
55	R50140	BUTTON, PLUG—250 DIA, PLASTIC	1
56	046425	SPACER, PHEN—250X 437, 250L	6
57	004326	RIVET, TUBE—250 DIA, 719L	18
58	005373	WSHR FLT 281ID 625OD 062T STL	18
59	049631	STRAP-BRUSH RING	6
60	046788	BELT, DOUBLE-V—62 1 PITCH AA60	1
61	003368	NUT, HEX LOCK—375-16, ZN PLT	1
62	004225	WSHR FLT 406ID1 00OD 036T STL	1
63	032659	ASM, PULLEY—BRUSH DRV, LEFT, 20	1
64	053409	ASM, PULLEY & BRG—BRUSH HEAD	1
65	222256	NUT, WING—250-20, SS	1
66	004254	WSHR LK 267ID 510OD 028T EXT	1
67	054268	BRACKET, ANGLE—59X4 0X1 12, SS	1
68	R26003	SENSOR—PHOTOELECTRIC, 20A	2
69	R26134	SWITCH, TAPE—17"SW/36"LEAD	1
70	R01049	SCR MACH FLT HD -6-32 X 1"	15
71	003361	NUT, HEX LOCK—6-32, NYLOC	15
72	R50235	CHANNEL, RUBBER—18"	1
73	R26006	SWITCH, TAPE—32"SW/70"LEAD	1
73	R26087	SWITCH, TAPE—27"SW/12"LEAD	1
74	002283	SCR CAP SOC HD 250-20X2 50L	1
75	002336	BOLT, SQ NECK—375-16X1 75L	1
76	053372	GROM—500ID, 687MHD, 187PA	1
77	003215	SCR MACH RD HD 312-18X2 00L	1
78	004427	WSHR FLT 344ID1 25OD 120T STL	4
79	R01042	OBS, NO REPLACEMENT	1
80	R50277	TUBE, CLEAR—19ID X 31OD X 2'	2
81	046952	WATER TUBE-ROLL PIN	1

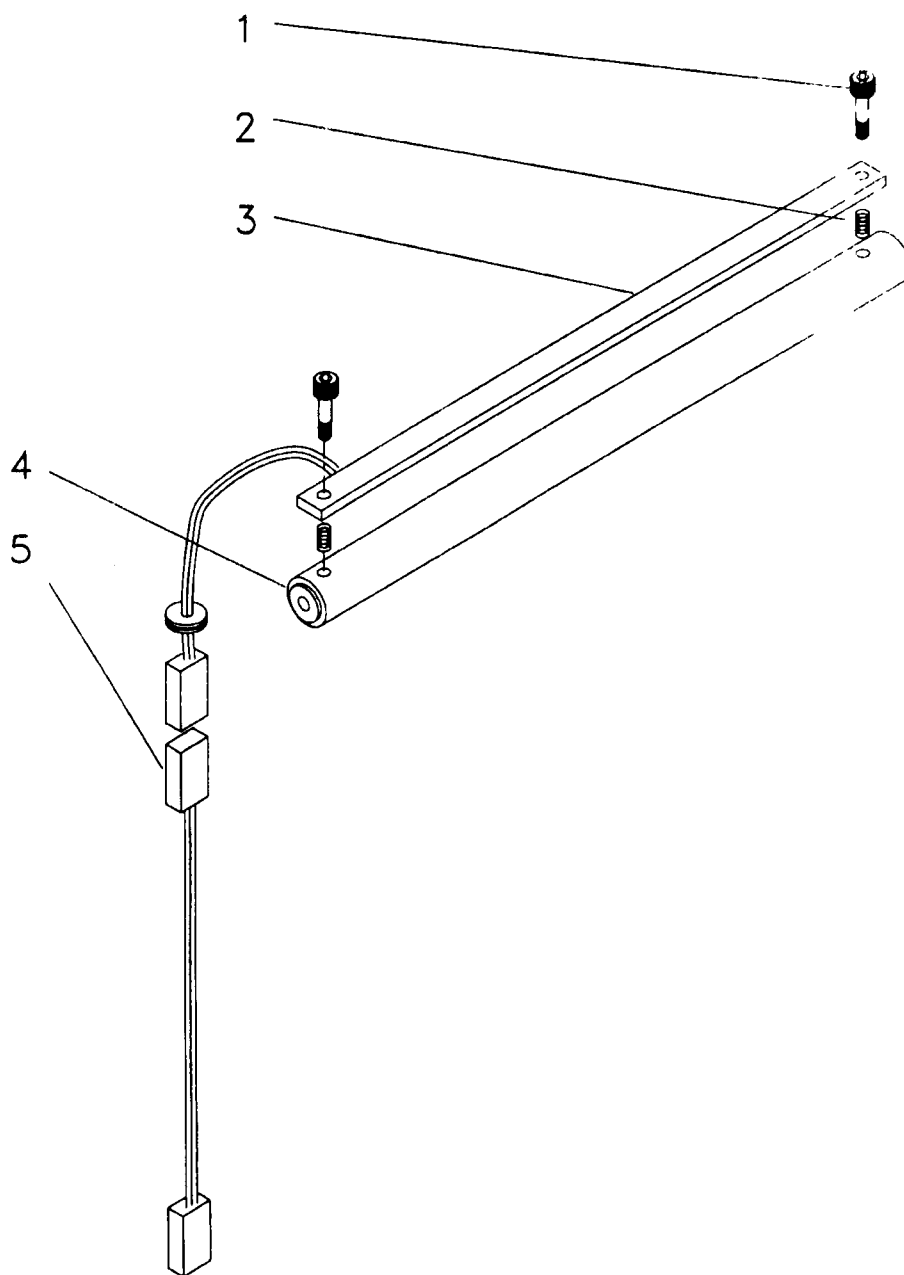
# LOWER CHASSIS ASSEMBLY



# LOWER CHASSIS PARTS LIST

DET. PART NO.	DESCRIPTION	QUANT.	
1	R30061	WDMT,PANEL—REAR,GRAY	1
2	026450	SOLENOID	3
3	026750	CIRCUIT BREAKER—40 AMP,THRM	1
4	005267	SCR MACH FLAT HD 250-20X 625L	3
5	005479	NUT,HEX LOCK— 250-20,NYLOC,ZN	24
6	R30034	WDMT,BRKT—BATTERY STOP	1
7	R30004	WDMT,CHASSIS—LOWER	1
8	003368	NUT,HEX LOCK— 375-16,ZN PLT	4
9	003378	NUT,HEX LOCK— 312-18,ZN PLT	7
10	R30003	WDMT,ARM—ACTUATOR	1
11	R01029	SCR SHLDR HEX HD 38DIA X2 0L	1
12	004212	WSHR LK 326ID 586OD 078TSPLT	4
13	R50035	BAR,STL— 25X1 00X2 50L	2
14	049377	SPACER,STL— 315X 500, 280L	4
15	002442	SCR CAP HEX HD 312-18X1 00L	4
16	003228	SCR CAP HEX HD 375-16X 875L	2
17	004214	WSHR LK 390ID 683OD 094TSPLT	6
18	003293	NUT,HEX— 375-16,ZN PLT	2
19	003368	NUT,HEX LOCK—,375-16,ZN PLT	4
20	R50081	SPACER,SS— 39 ID, 75OD, 50L	4
21	001419	SCR CAP HEX HD 375-16X1 25L	4
22	005391	SCR CAP HEX HD 375-16X1 37L	1
23	005219	WSHR FLT 406ID1 00OD.071T STL	2
24	R50107	RUBBER,SQUEEGEE— 19X2 12X4 0L	2
25	R30040	ASM,PRE-SQUEEGEE,LEFT	1
25	R30041	ASM,PRE-SQUEEGEE,RIGHT	1
26	R30007	WDMT—BRUSH LIFT	1
27	R30005	WDMT,STL—RETRACTION BAR	2
28	033103	ASM,PIN—SLIDE LOCK	2
29	005219	WSHR FLT 406ID1 00OD.071T STL	2
30	R01011	SPRING,COMP—,75LONG, 41ID,SS	1
31	R01043	SCR CAP HEX HD 50-20X1.00L	1
32	050979	WSHR FLT 625ID1.25OD 120T STL	1
33	222256	NUT,WING—,250-20,SS	1
34	055410	WIRE ROPE— 062DIA,26 8LONG	1
35	R30015	WDMT,PANEL—FRONT	1
36	001478	SCR CAP HEX HD .250-20X7.00L	2
37	224013	WSHR FLT .281ID 562OD.032T STL	4
38	R50078	ALUM,TUBE—2.50ODX 38WLX1 50L	1
39	002278	WSHR LK 262ID 489OD.062TSPLT	4
40	003283	NUT,HEX—,250-20,ZN PLT	4
41	R50117	BAR,NYLON—,25X.50 W/HOLES	3
42	001330	SCR MACH FL HD—10-24 X 62	8
43	R01055	SCR MACH TRS HD .25-20X.75L P	7
44	004318	WSHR FLT .375ID1 06OD 120T STL	2
45	004444	WSHR LK .332ID.610OD.034T EXT	2
46	003243	SCR CAP HEX HD .312-18X 625L	2

# HANDLE BAR ASSEMBLY

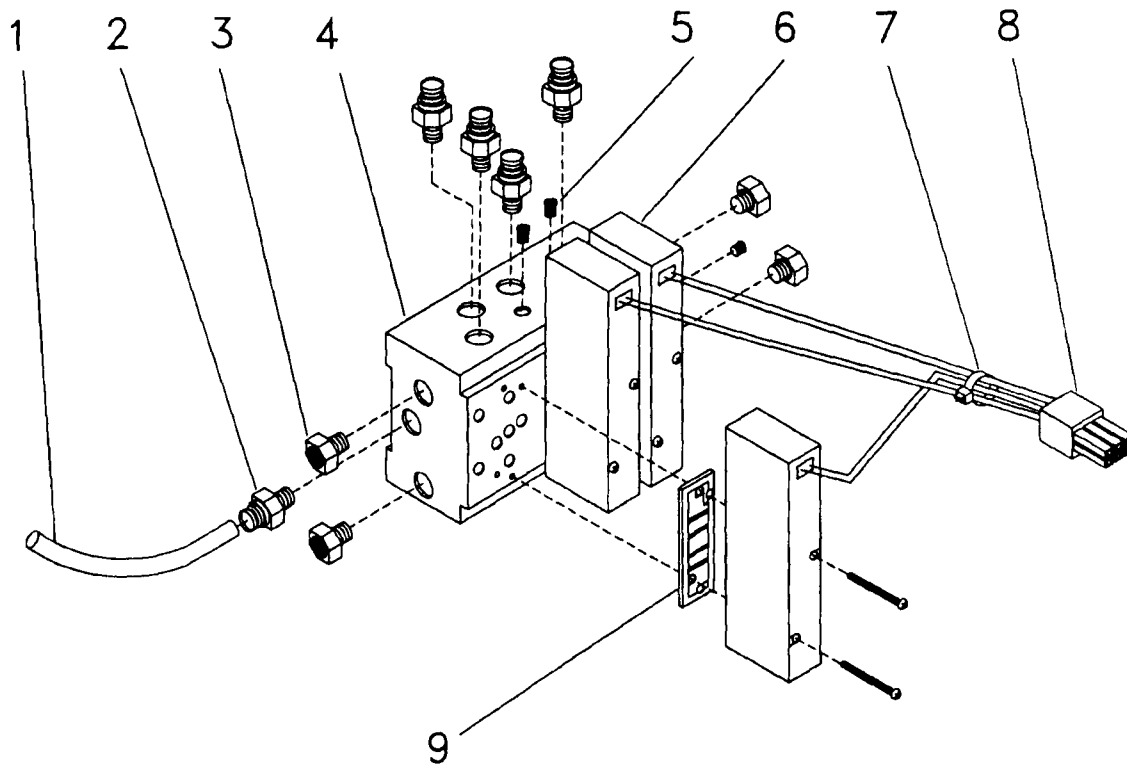


## HANDLE BAR PARTS LIST

DET. PART NO.	DESCRIPTION	QUANT.
R30089	ASM,HANDLE BAR—TRIGGER,GRAY	1
1 002433	SCR SHLDR SOC HD .250X.500L	2
2 4650752000	SPRING,COMP .360D .531L .037WD	2

DET. PART NO.	DESCRIPTION	QUANT.
3 R25021	ASM,SWITCH—TRIGGER,GRAY	1
4 R50214	BAR,ALUM—1 250DX15 22L,GRAY	1
5 R25011	ASM,CORD—EXTENSION	1

# PNEUMATIC MANIFOLD ASSEMBLY

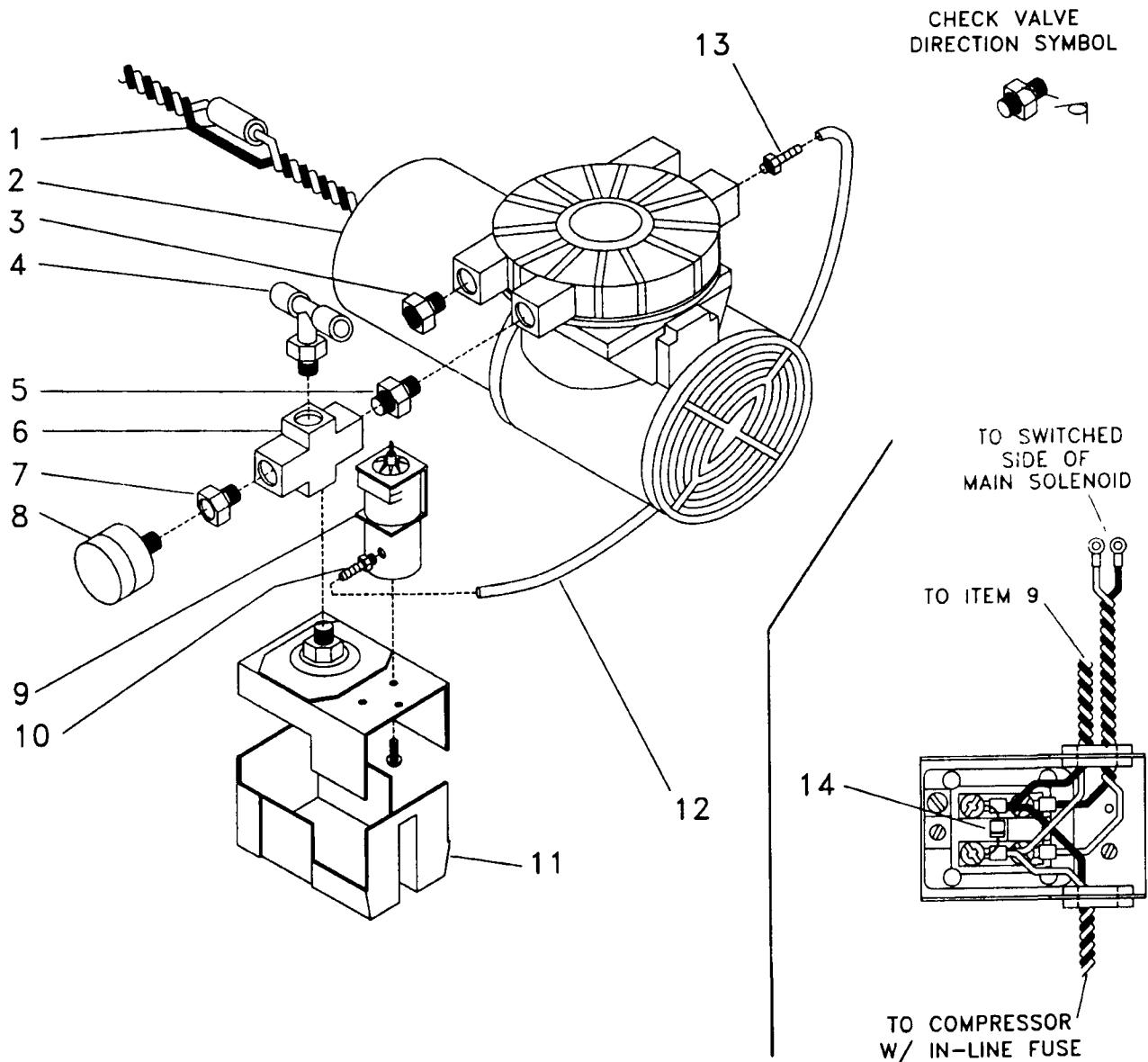


## PNEUMATIC MANIFOLD PARTS LIST

DET. PART NO.	DESCRIPTION	QUANT.
R30018	ASM,PNEUMATIC MANIFOLD—	1
1 R50061	HOSE,PNEUMATIC—6"	1
2 R01004	FITTING—QUICK DISCONNECT	5
3 R01005	MUFFLER,AIR—	4
4 R50017	MANIFOLD,AIR—BLOCK	1

DET. PART NO.	DESCRIPTION	QUANT.
5 R01009	PLUG—SLOT SCREW, 125	3
6 R50018	VALVE,AIR—24VDC	3
7 047085	STRAP,TIE,ELEC— 5 50L,NYLON	1
8 R26088	PLUG,MALE—6 CIRCUIT	1
9 R38001	GASKET,AIR VALVE—	3

# AIR COMPRESSOR ASSEMBLY

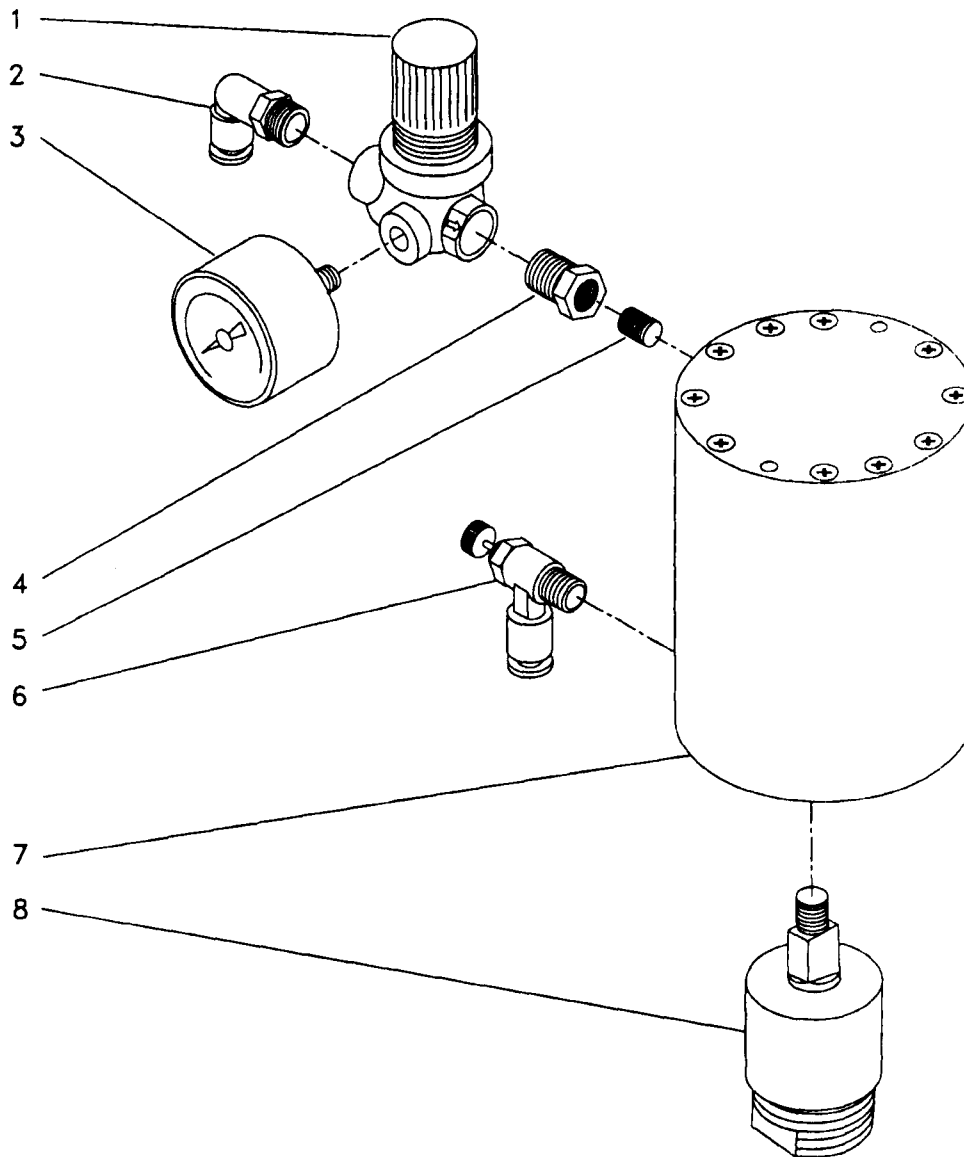


## AIR COMPRESSOR PARTS LIST

DET. PART NO.	DESCRIPTION	QUANT.
1 R30017	ASM,COMPRESSOR—AIR	1
2 R26129	FUSE—8A, SLOW BLOW	1
3 R01001	COMPRESSOR,AIR—24VDC	1
4 R01006	BREATHER—VENT,.250 NPT	1
5 R01007	FITTING,BRANCH TEE—BRS	1
6 R01013	VALVE,CHECK—.250 NPT	1
7 R01014	FITTING,4 WAY—BRS	1
8 R01015	FITTING,RDCR—.25NPT,.13NPT	1

DET. PART NO.	DESCRIPTION	QUANT.
8 R01016	GAUGE,AIR— 125 NPT	1
9 R26074	VALVE,AIR—SOLENOID,24VDC	1
10 R01035	ADPTR,BRS—.13MPTX 13 HOSE	1
11 R26059	SWITCH,PRESSURE	1
12 R50059	HOSE,PNEUMATIC—20"	1
13 R01034	ADPTR,BRS— 25MPTX 13 HOSE	1
14 R26128	DIODE—FLYBACK	1

# BRUSH HEAD CYLINDER ASSEMBLY

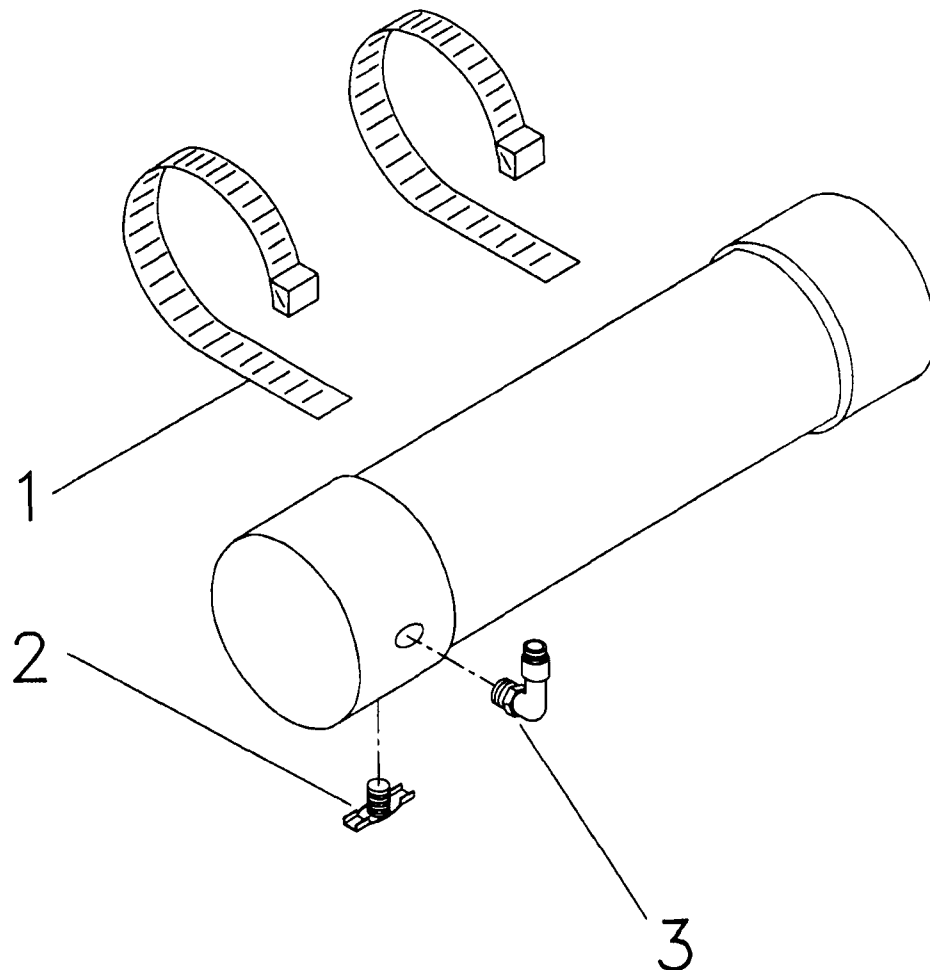


## BRUSH HEAD CYLINDER PARTS LIST

DET. PART NO.	DESCRIPTION	QUANT.
R30024	ASM,CYLINDER—BRUSH HEAD	1
1 R50077	REGULATOR,AIR—0-30 PSI	1
2 R01025	FITTING,QD— 25OD, 25MPT,90DEG	1
3 R01021	GAGE,AIR— 13MPT,0-60 PSI	1
4 R01015	FITTING,RDCR—.25NPT, 13NPT	1

DET. PART NO.	DESCRIPTION	QUANT.
5 R01022	FITTING,NIPPLE— 13MPTX 75L	1
6 R50023	VALVE,RELIEF—	1
7 R50024	CYLINDER,AIR—2"BORE,3"STROKE	1
8 R01010	PIVOT,CYL— .50-20THR,2DEG	1

# AIR TANK ASSEMBLY

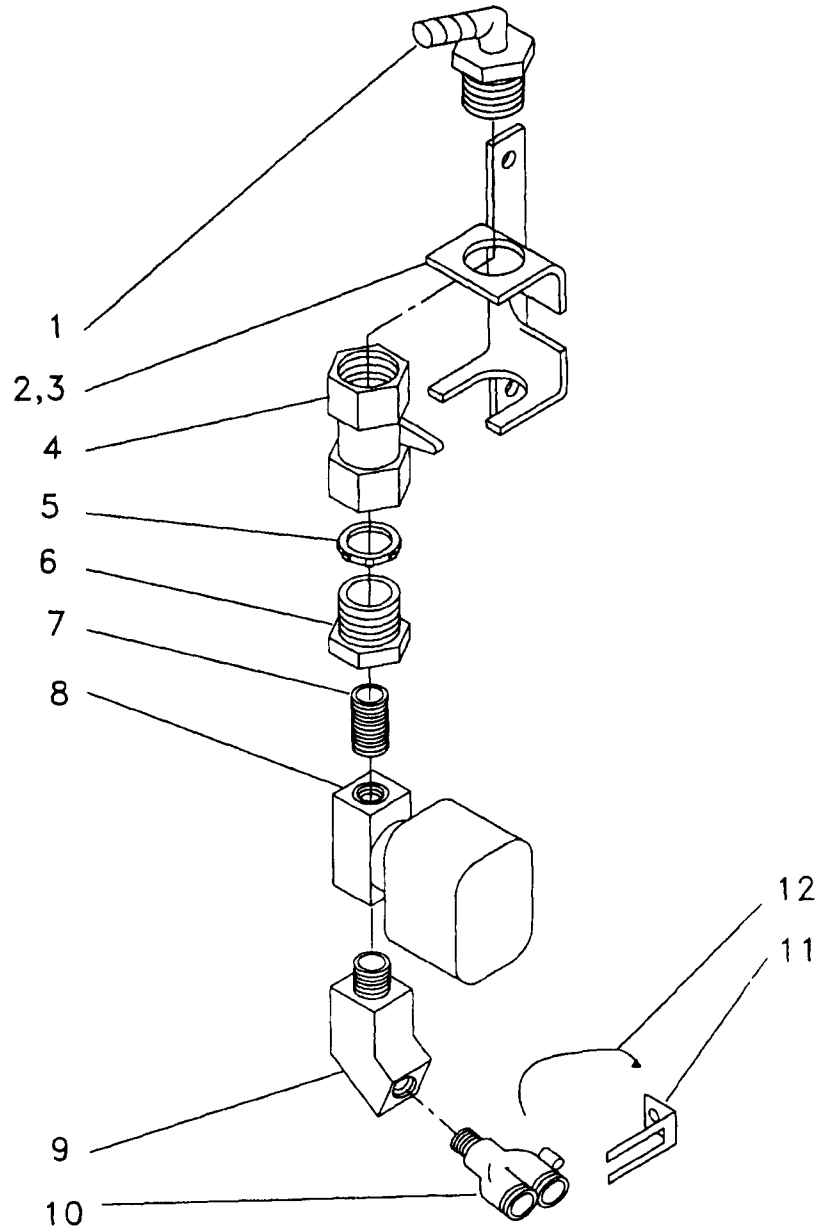


## AIR TANK PARTS LIST

DET. PART NO.	DESCRIPTION	QUANT.
R30009	ASM, TANK—PVC, 4" DIA, 14.88L	1
1 053288	CLAMP, HOSE—4.50 MAX DIA, WORM	2

DET. PART NO.	DESCRIPTION	QUANT.
2 R01026	FITTING, DRAIN— 250MPT, BRS	1
3 R01025	FITTING, QD—.25OD, 25MPT, 90DEG	1

# WATER VALVE ASSEMBLY



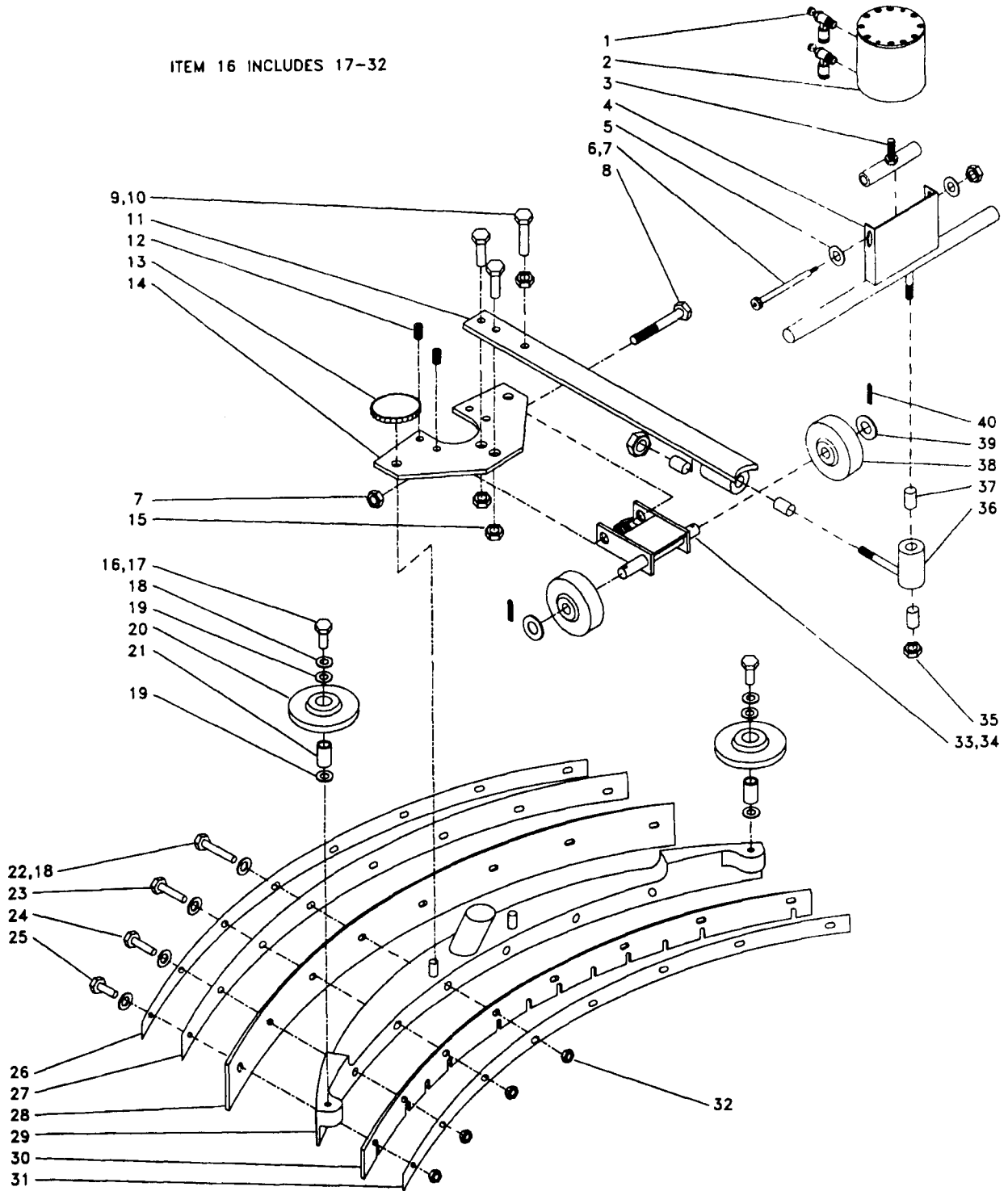
## WATER VALVE PARTS LIST

DET. PART NO.	DESCRIPTION	QUANT.
R30035	ASM, VALVE—WATER	1
1 049436	ELBOW— 500MPT X 375 HS, POLY	1
2 R50105	BRKT, ALUM—WATER SOLENOID	1
3 R50180	LABEL—WATER FLOW, ROBOSCRUBBER	1
4 049391	WATER VALVE	1
5 006108	NUT, SPECIAL— 500 PIPE, HEX LOC	1
6 006104	BSHG, PIPE—1/2 MPTX1/4 IPT, BRS	1

DET. PART NO.	DESCRIPTION	QUANT.
7 040129	NIPPLE, PIPE—1/4 CLOSE	1
8 R30038	ASM, SOLENOID—WATER VALVE	1
9 E49835	ELBOW, STREET—45DEG. 250NPT, BR	1
10 R01058	FITTING— 25-20 W/ 31 HOSE QD	1
11 R50278	CLIP, HOSE—QUICK CONNECT	1
12 R01060	STRAP, TIE, ELEC—5" L.	1

# SQUEEGEE ASSEMBLY

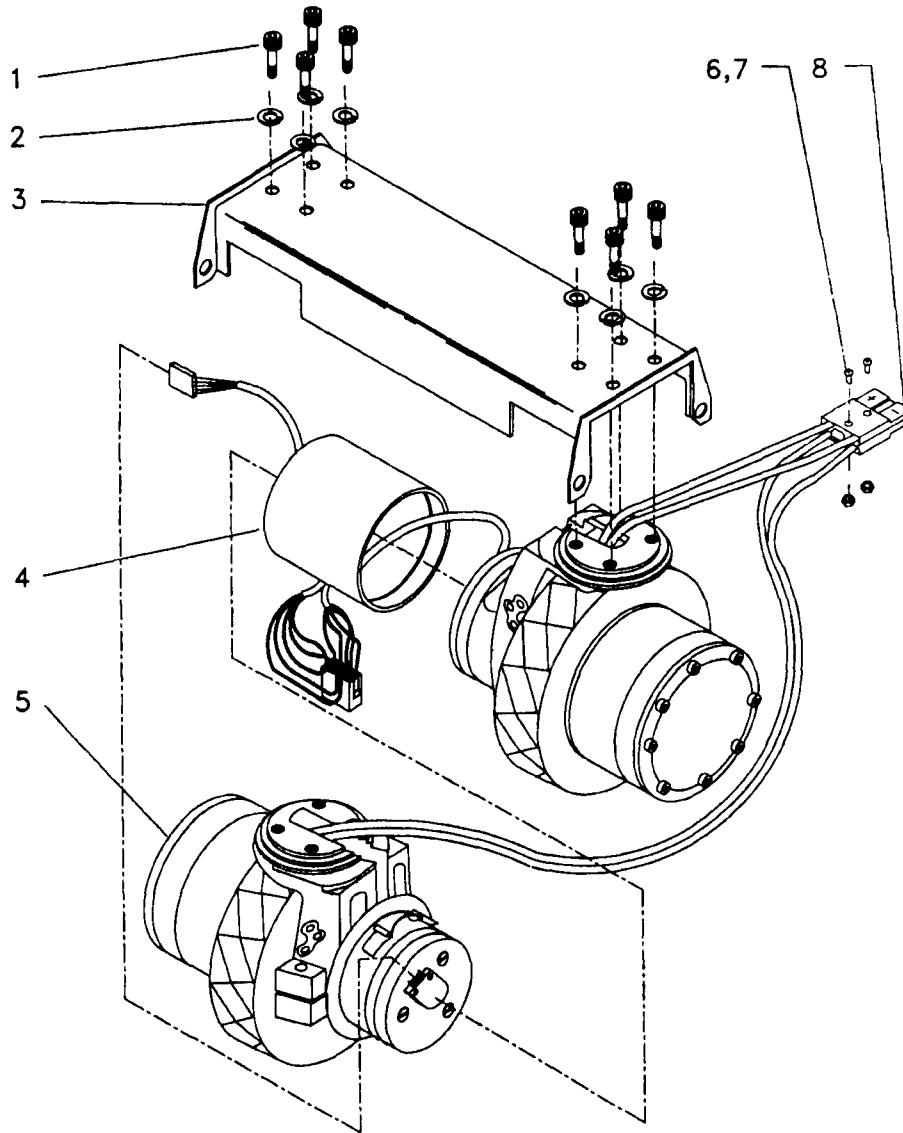
ITEM 16 INCLUDES 17-32



# SQUEEGEE PARTS LIST

DET. PART NO.	DESCRIPTION	QUANT.
1	R50023 VALVE,RELIEF—	2
2	R50016 CYLINDER,AIR—2"BR 2"STR FAB	1
3	R30023 WDMT,STL—SQUEEGEE CYLINDR ARM	1
4	R30022 WDMT,SQUEEGEE PIVOT	1
5	005320 WSHR FLT .406ID 750OD.060T STL	2
6	R01019 SCR SHLDR HEX HD 38X4 0L,STD	1
7	003378 NUT,HEX LOCK— 312-18,ZN PLT	2
8	003255 SCR CAP HEX HD .312-18X3.50L	1
9	003262 SCR CAP HEX HD 375-16X1.00L	3
10	003294 NUT,HEX JAM— 375-16,ZN PLT	1
11	R30019 WDMT,STL—SQUEEGEE SPRING BAR	1
12	002438 SCR SET CUP PT .375-16X 500L	4
13	047484 KNOB	2
14	034171 WDMT,PLATE—SQUEEGEE	1
15	003368 NUT,HEX LOCK— 375-16,ZN PLT	2
16	034501 ASM,SQUEEGEE—26 AUTO,NARROW	1
17	003246 SCR CAP HEX HD 312-18X1.00L	2
18	004212 WSHR LK 326ID.586OD 078TSPLT	2
19	004218 WSHR FLT 344ID 750OD 060T STL	12
20	053720 WHEEL—4 00DIA, 438BORE, 688HB	2
21	053669 TUBE,STL—1 062ODX 795IDX9 00L	2
22	001500 SCR CAP HEX HD 250-20X3 50L	2
23	002456 SCR CAP HEX HD 250-20X3 00L	2
24	002455 SCR CAP HEX HD 250-20X2.50L	2
25	002454 SCR CAP HEX HD .250-20X1.50L	2
26	054560 BAR,STL— 125X1.00,34 14 LONG	1
27	054559 RUBBER,BACKUP— 125X2 00,34 4L	1
28	054558 RUBBER,SQUEEGEE—.187X2 75,35L	1
29	054554 CASTING,SQUEEGEE—26 AUTO,HV	1
30	054557 RUBBER,SQUEEGEE— 125X1 75,33L	1
31	054556 BAR,STL— 125X1 00,31 31 LONG	1
32	005591 NUT,SELF RETAINING—.250-20	8
33	E36649 SPRING,TRSN 791D 1 09L .106WD	1
34	034172 WDMT,BRACKET—SQUEEGEE WHEEL	1
35	003370 NUT,HEX LOCK— 500-13,ZN PLT	2
36	034173 WDMT,PIVOT—SQUEEGEE	1
37	027171 BRG,SLV— 500ID, .625OD,.750W	4
38	049261 WHEEL—3 00DIA, 380BORE, 875HB	2
39	004223 WSHR FLT .406ID.625OD.036T STL	2
40	005383 PIN,COTTER—.094X1.000 LONG	2

# DRIVE ASSEMBLY

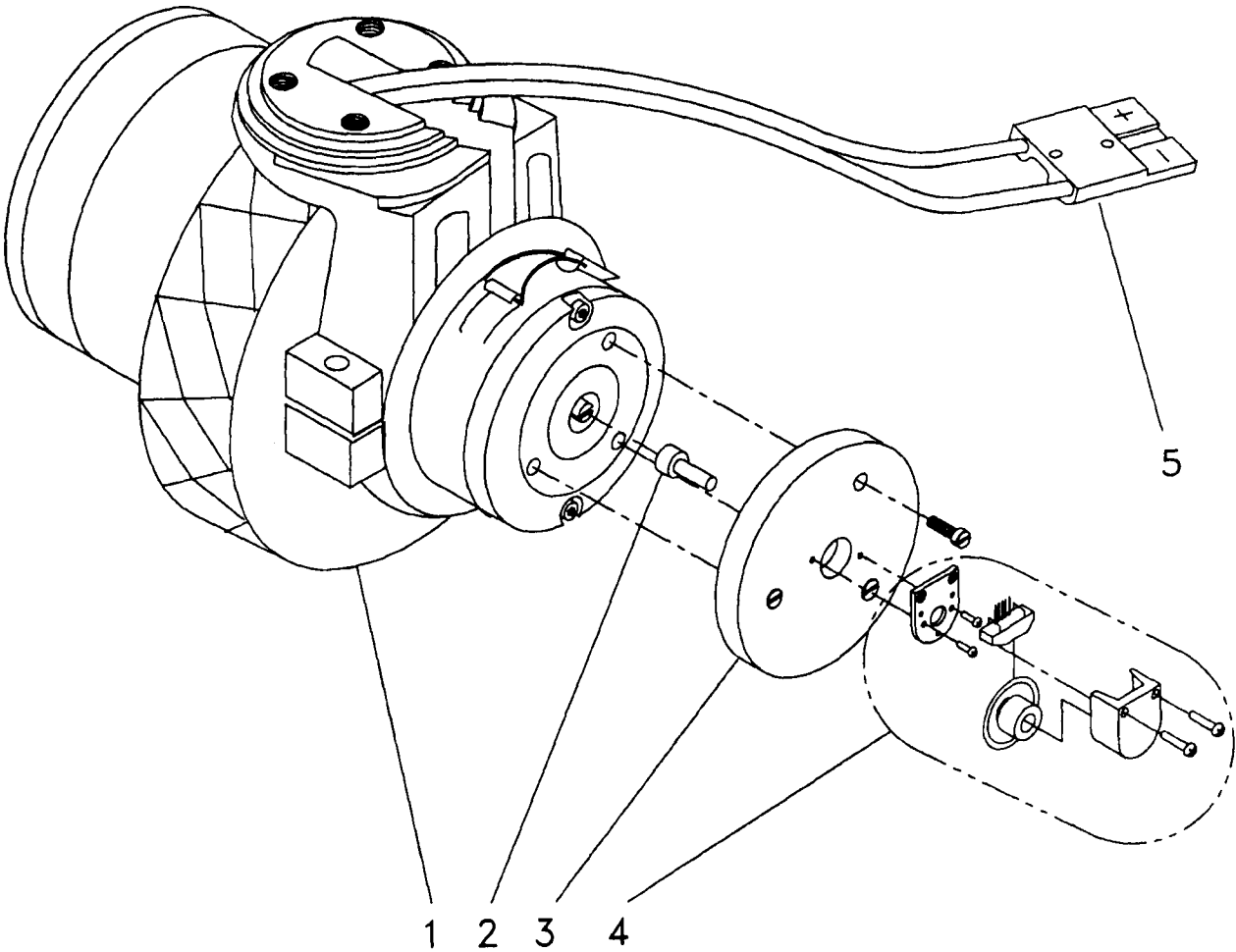


## DRIVE PARTS LIST

DET. PART NO.	DESCRIPTION	QUANT.
R30025	ASM,DRIVE UNIT—	1
1 R01027	SCR MTRC SOC HD M8 X10 ZN PLT	8
2 004212	WSHR LK 326ID 586OD.078TSPLT	8
3 R30026	WDMT,BRKT—DRIVE UNIT	1
4 R30042	ASM,CAP—PVC TUBE	1

DET. PART NO.	DESCRIPTION	QUANT.
5 R30044	ASM,MOTOR—ENCODER UNIT	2
6 001497	SCR MACH RD HD 6-32X1 50L	2
7 003361	NUT,HEX LOCK— 6-32,NYLOC	2
8 026573	CHARGER PLUG	2

# DRIVE ENCODER ASSEMBLY

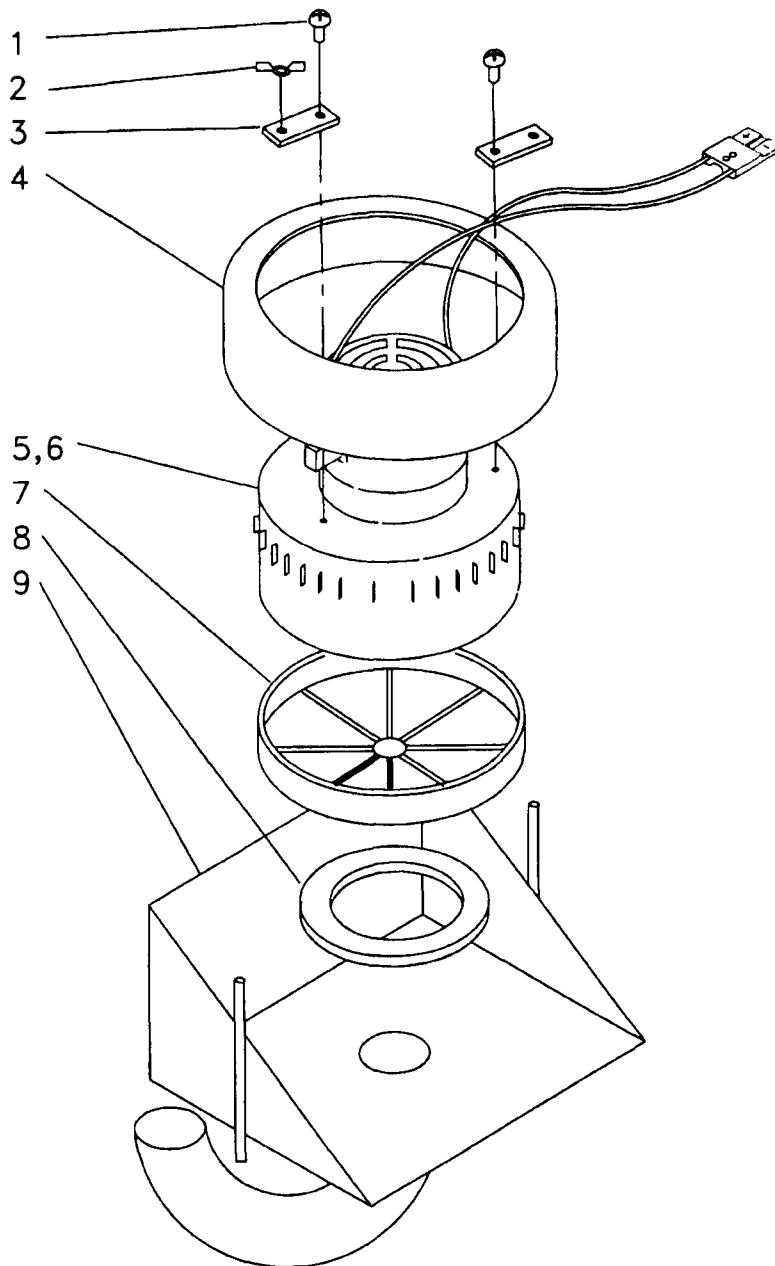


## DRIVE ENCODER PARTS LIST

DET. PART NO.	DESCRIPTION	QUANT.
R30044	ASM,MOTOR—ENCODER UNIT	1
1 R23000	MTR,DRIVE—	1
2 R30027	ASM,HUB—OPTIC DRIVE	1

DET. PART NO.	DESCRIPTION	QUANT.
3 R50057	BASE,ENCODER—	1
4 R26061	ENCLODER,QUICK ASSEMBLY—	1
5 026573	CHARGER PLUG	1

# VACUUM MOTOR ASSEMBLY

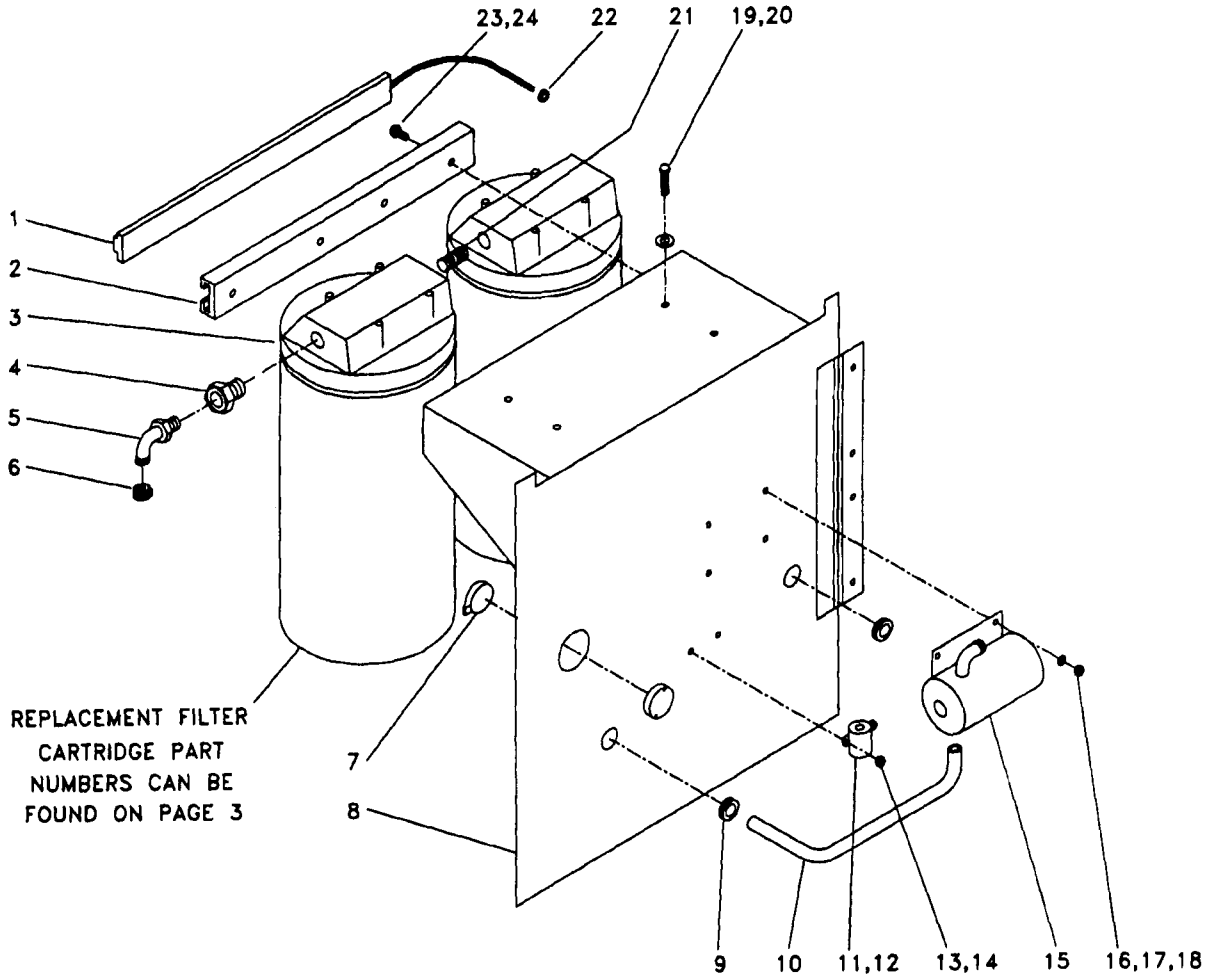


## VACUUM MOTOR PARTS LIST

DET. PART NO.	DESCRIPTION	QUANT.
R30059	ASM,VAC MOTOR	1
1 002380	SCR TPG F PAN HD 10-B X 625L	2
2 003281	NUT,WING— 10-24,ZN PLT	2
3 053408	BAR, STL— .125X.500X1.55L	2
4 051266	CAP,MOTOR-MOD.,UZB-880	1

DET. PART NO.	DESCRIPTION	QUANT.
5 096773	MTR,VAC—24V,BYP.2 STG,PD	1
6 026573	CHARGER PLUG	1
7 046817	LINT FILTER	1
8 049355	GASKET-VAC MOTOR	1
9 R30016	WDMT,BRKT—VAC MOTOR	1

# RECYCLE DOOR ASSEMBLY

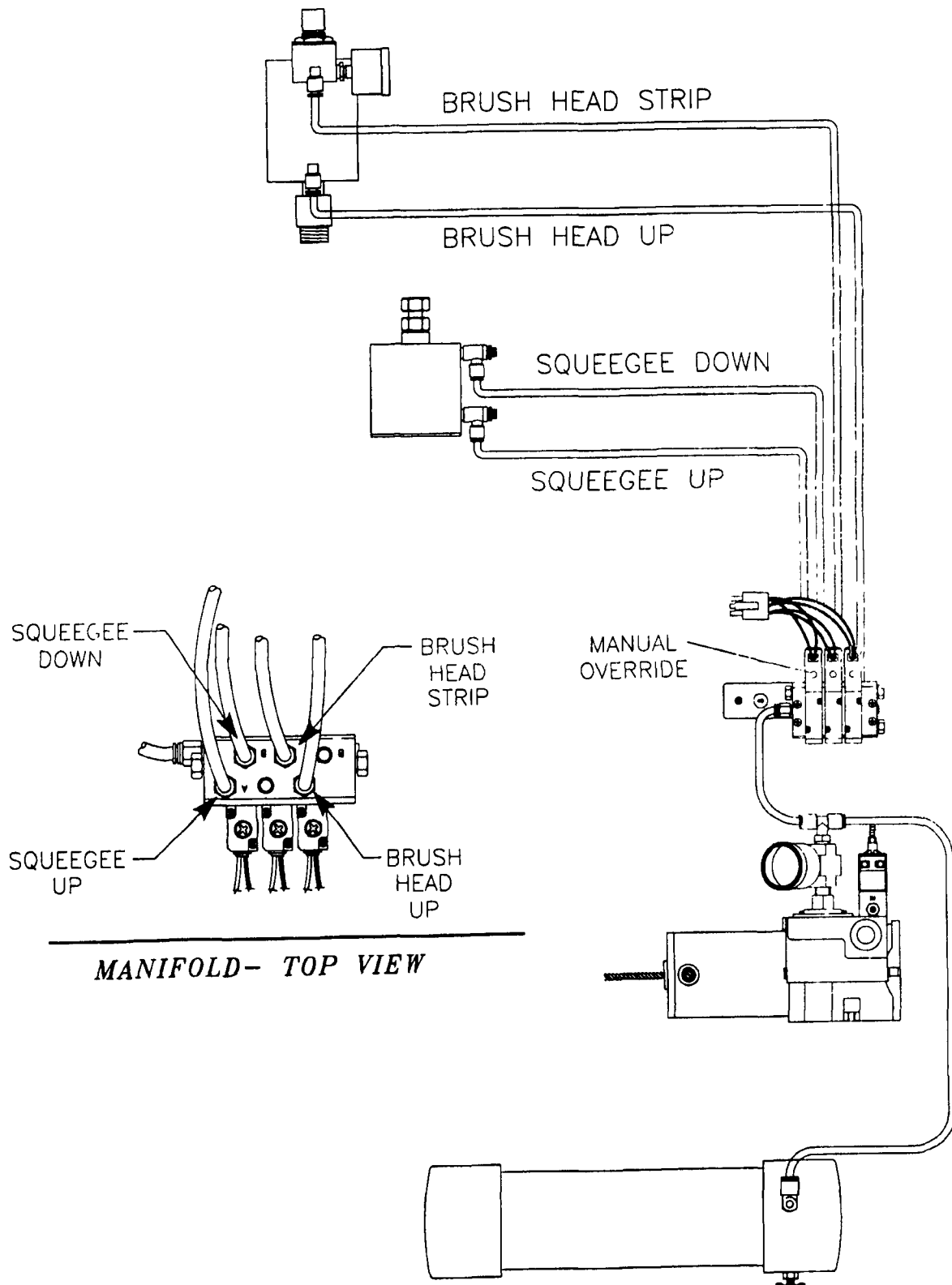


## RECYCLE DOOR PARTS LIST

DET. PART NO.	DESCRIPTION	QUANT.
	R30072 ASM.DOOR—REAR ACCESS,GRAY	1
1	R26007 SWITCH,TAPE—12"L W/40"LEADS	1
2	R50245 CHANNEL,RBR—12"L	1
3	055517 CHAMBER,FILTER—10"L,3/4IPT,PL	2
4	055511 BSHG,PIPE—3/4 MPT X 3/8IPT SS	2
5	055513 ELBOW,HSPP—3/8MPT X 3/8HS,BRS	2
6	051581 CLAMP,HOSE—.625 MAX DIA,WORM	2
7	R50232 LATCH,PLSTC—2",.08-.28PNL,BLK	1
8	R30060 WDMT,PANEL—REAR ACCESS,GRAY	1
9	049927 GROM—1.00ID,1.25MHD,.082PA	2
10	R50244 HOSE,PRESSURE—38X.63X19"L	1
11	026450 SOLENOID	1
12	R26128 DIODE—FLYBACK	1

DET. PART NO.	DESCRIPTION	QUANT.
13	002243 SCR CAP HEX HD 250-20X 625L	2
14	005479 NUT,HEX LOCK—.250-20,NYLOC,ZN	2
15	R30071 ASM,PUMP—LIQUID,100PSI	1
16	001388 SCR MACH PAN HD 10-32X1 00L	4
17	005323 WSHR FLT .203ID 500OD 036T STL	4
18	003415 NUT,HEX LOCK— 8-32,NYLOC,ZN	4
19	002256 SCR CAP HEX HD 250-20X1 00L	4
20	004206 WSHR FLT .281ID 562OD 063T STL	4
21	055512 NIPPLE,CLOSE—3/4MPT,BR	1
22	R01040 GROM—.13IDX.31MHDX.13PNL	1
23	E56435 SCR MACH FLAT HD 6-32X 500L	4
24	003361 NUT,HEX LOCK— 6-32,NYLOC	4

# PNEUMATIC SYSTEM



# FUSES

Inside the rear electronics box is a rack of modules (Located in the upper left corner) that controls different functions of the robot. Each one of these modules has a fuse on it. The rack also has a built in fuse tester and one spare fuse.

## To test a fuse:

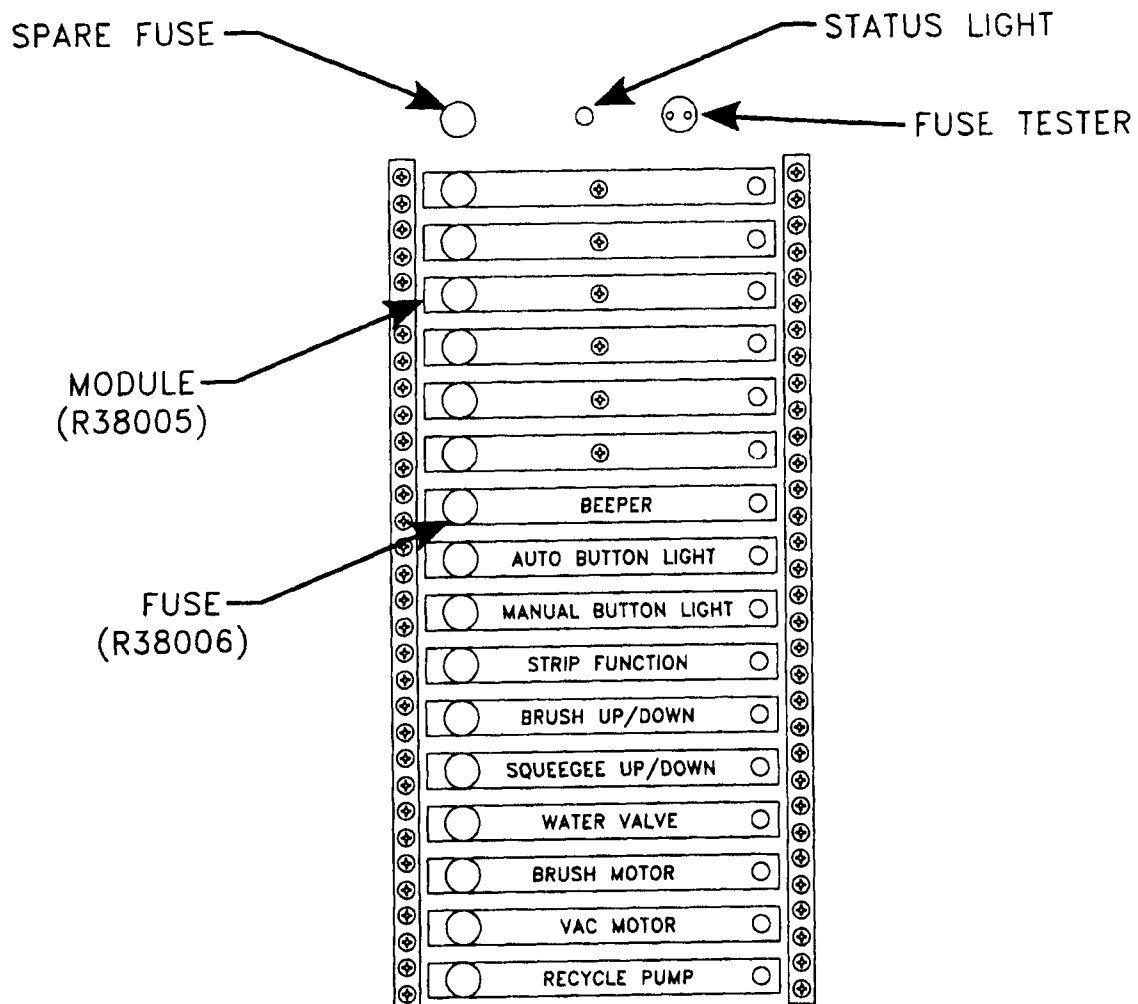
1. Power up robot.
2. Pull suspected fuse (Needle nose pliers or tweezers may be needed).
3. Plug into the tester (For location see below)
4. If status light goes on, fuse is good.

## To replace a module:

1. Loosen screw on module (See below).
2. Pull loosened module off board.
3. Remove and keep the fuse if good.
4. Discard bad module.
5. Reverse steps 1 and 2 to secure new module.

## Compressor

There is one in-line fuse for the compressor (See air compressor assembly).



# SQUEEGEE ADJUSTMENTS

---

## PRESQUEEGEE

---

The machine's presqueegees are located just in front of the Drive Wheels. Vertical adjustment is made by slots in the presqueegee bracket that is attached to the Brush Head lift by two(2) 1/4-20 hex Nylok nuts.

To adjust:

1. Turn water valve to OFF.
2. Unplug Brush Head Motor power plug.
3. Turn machine key to ON.
4. Check presqueegee blade deflection.
5. Pull Brush Head slide (small) pins and slide Brush Head Assembly out.
6. Loosen the nuts at the top of the bracket, adjust and retighten.
7. Resecure Brush Head in place.

Some horizontal adjustment can be made by existing slots in the gum rubber blade.

To adjust:

1. Follow above steps 1-5.
2. Loosen the three(3) nuts on the clamping bar that secures the blade in the bracket.
3. Adjust blade and retighten in place.
4. Resecure Brush Head in place.

## MAIN SQUEEGEE

---

### PRESSURE

Squeegee pressure adjustment is required if the squeegee wheels will not stay on the floor resulting in poor tracking, not properly picking up water, or streaks a cleaned floor. At the rear of the machine on the squeegee lift bar just before the pickup tube is a bolt with a jam nut that adjusts the pressure.

To increase squeegee pressure:

1. Loosen the jam nut on bolt.
2. Using a 1/2" wrench turn the bolt counterclockwise to increase pressure, clockwise to decrease pressure as needed.
3. Retighten the jam nut.

### TILT

The squeegee on this machine pivots freely, allowing the pressure on each end of the squeegee to keep it level at all times. The right-to-left tilt adjustment is automatic. Front-to-rear tilt is correct if, as the machine is moved forward, there is an equal amount of squeegee flare at the ends of the blade as there is at the center. The front-to-rear tilt is controlled by adjusting the four(4) set screws on the squeegee mounting plate.

If the amount of *flare is greater at the ends* than in the center, loosen the two(2) black knobs, equally tighten the back two(2) set screws and retighten the black knobs.

If the amount of *flare is less at the ends* than in the center, loosen the two(2) black knobs, equally tighten the front two(2) set screws and retighten the black knobs.

**NOTES**

---

# THE KENT LIMITED WARRANTY

---

Your Kent equipment is warranted to be free from defects in material and workmanship as set forth below. This warranty is subject to the qualifications, conditions, and limitations which are set forth below as to the duration, extent, availability, and applicability of this Kent limited warranty, the procedure to be taken to obtain its performance, and other information concerning the Kent warranty policy.

## **The Kent Limited Warranty is extended to the original end user as follows:**

The warranty coverage starts on the date of the original purchase. Electronic components of the navigation and control system along with other operable items (i.e. motors, meters, valves) are covered for the period of three (3) years. Warranty service on electronics is by Kent direct or a Kent Authorized Service station through Kent. All warranty service labor is covered for three (3) years.

The ten (10) year poly component warranty will cover replacement without charge. This warranty will not cover damage attributable to the following:

- (1) Improper, unreasonable or negligent use or abuse of the equipment.
- (2) Use of equipment with hot water or high temperature above 130 degrees Fahrenheit (54 degrees centigrade)
- (3) "Warpage", "Creepage", or "Distortion" of part so long as the same does not interfere with normal operation
- (4) Abrasions or punctures of the equipment.

## **PARTS OF KENT EQUIPMENT NOT COVERED BY WARRANTY**

Certain parts of Kent equipment require replacement in the ordinary course of use due to normal wear by reason of their characteristics. These are normal wear items such as gaskets, bumpers, carbon brushes, hoses, belts, scrub brushes and pads, squeegee blades, filters, etc.

## **EXCEPTIONS AND EXCLUSIONS FROM WARRANTY**

This equipment is required to be used on electric current as indicated on the data plate. Otherwise damage, defects, malfunctions or other failures of the equipment arising from use on electric current other than indicated are excepted and excluded from this warranty. Defects, malfunctions, failure or damage of the equipment caused by improper, unreasonable or negligent use or abuse after delivery to the purchaser are likewise excluded from this warranty. If repair is done on your equipment by anyone other than those designated as authorized to perform such work without first having obtained factory instructions. The Kent Company, at its sole option, may determine that this warranty will not apply and that reimbursement for such repair will not be made because of the failure to comply with such factory specified instructions.

## **PROCEDURE TO BE TAKEN TO OBTAIN PERFORMANCE OF WARRANTY REPAIR**

All service calls should be made to The Kent Company in Elkhart, IN. Kent will then determine if a local Kent authorized service station in that area will service the machine or if an in-house Kent technician will service it directly.

## **REPLACEMENT**

In the event of a defect, malfunction or failure of your Kent equipment or any warranted part to conform with this warranty, The Kent Company may, at its sole option and own expense, replace the equipment or any warranted part with another new identical or reasonably equivalent model or part in lieu of repairing the defect.

## **NO REFUND OF PURCHASE PRICE**

The Kent Company will not, as a matter of its warranty policy, refund the customer's purchase price.

## **WARRANTY REGISTRATION CARD FOR YOUR KENT EQUIPMENT AND REQUEST FOR INFORMATION**

Your Kent Company distributor from whom you purchased your equipment is responsible for the registration of your warranty with the factory. We ask that you cooperate with your distributor in supplying the necessary information on the warranty card so that we may better serve you. Any information or questions you may have concerning your Kent equipment or this warranty may likewise be secured from the factory. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

**THE KENT COMPANY**  
**P.O. BOX 1665 ELKHART, INDIANA 46515**