



Electronic Service Manuals

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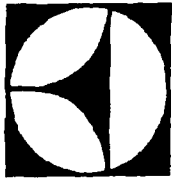
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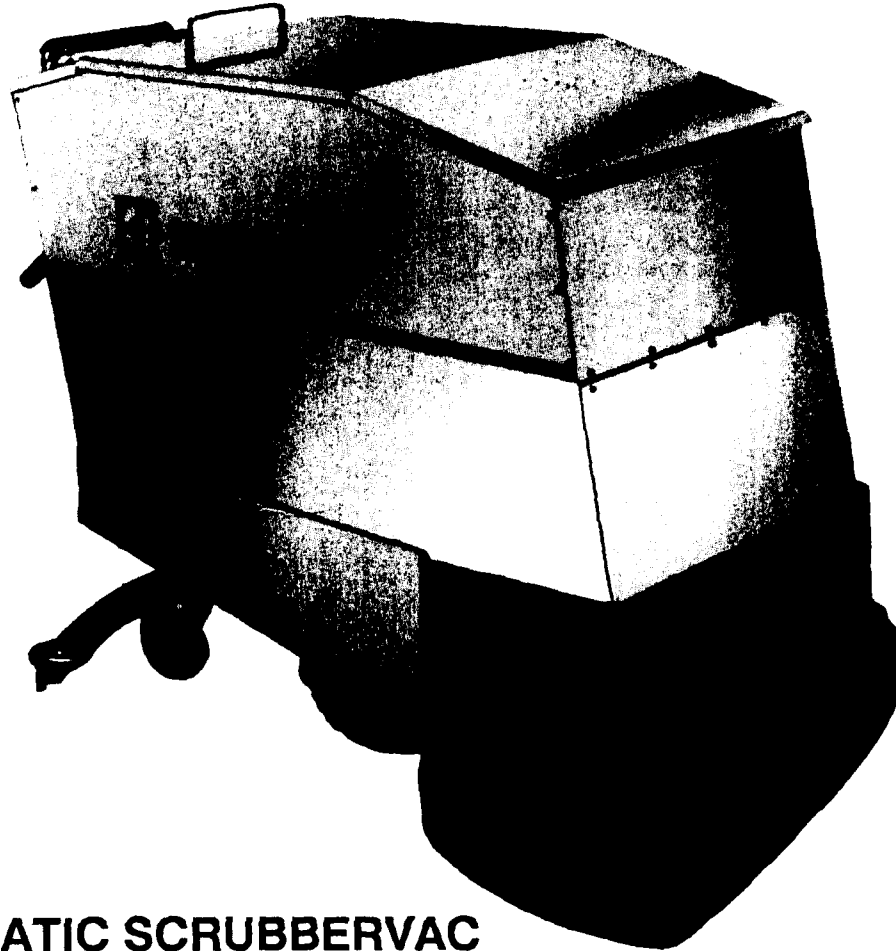
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Serving the Cleaning Industry Since 1922

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KENT



AUTOMATIC SCRUBBERVAC

MODEL: **KA-380B**

**OPERATING,
MAINTENANCE
INSTRUCTIONS
& ILLUSTRATED
PARTS LIST**

THE KENT COMPANY
2310 INDUSTRIAL PARKWAY
P.O. BOX 1665
ELKHART, IN 46515
TELEX: 258331 KENT CO EKR
FAX: 219-295-8610
WATS: 800-334-1083 (OUTSIDE INDIANA)
219-293-8661

MAY 1989

MACHINE SPECIFICATIONS:

KA-380B

CONTROLS.....	Light effort push/pull for forward or reverse operation. All switches, manual water control, and manual brush lift lever easy to reach, hand operable.
TRACTION MOTOR.....	36V, 3/4HP, 700 RPM Permanate Magnet type.
VACUUM MOTOR.....	36V, 3/4HP, 2-stage bypass type.
BRUSH DRIVE MOTORS (2).....	36V 1HP, 195 RPM Permanate Magnet type gear motor. Direct Drive to self-leveling brushes.
TRACTION DRIVE.....	Slipping disc clutch thru chain to differential.
BRUSHES.....	Dual 20" (50.8 cm) dia., self-leveling counter-rotating, 195RPM.
SCRUBBING WIDTH.....	38" (96.5 cm).
BRUSH PRESSURE.....	115 lbs.(52.1 kg) floating 200 lbs. (90.7 kg) strip
TANKS.....	27 gal. (102.2L) capacity each, high density, molded seamless linear polyethylene with 2" (5.1 cm) dump valve for each.
BATTERIES.....	Six heavy-duty deep cycle type, 6V, 270AH series connected.
SQUEEGEE.....	45.25" (114.9 cm) wide, swinger type with cast-in vacuum tube, easily replaceable gum rubber blades (reversible for extended wear), arcuate shape, new superior tracking center wheel design, new positive height adjustment and new pivot makes squeegee self-leveling on turns.
WHEELS.....	Two 11" (27.9 cm) dia. pneumatic traction tires - front. Two 5" (12.7 cm) dia. polyurethane swivels - rear.
SOLUTION FEED.....	Adjustable flow rate to center of each brush.
FLOAT.....	20 amp hermetically sealed, mercury type with PVC outer shell.
FRAME.....	All welded steel 1/4" (0.6 cm) flat plates, angle and square stock.
OUTER SHELL.....	All exterior panels 16 Ga. brushed stainless steel.
BRUSH COVER.....	High density molded seamless linear polyethylene.
BATTERY CHARGER.....	Exterior - Electronic, 20 Amp, 36V
LENGTH (OVERALL).....	65-1/2" (166.4 cm)
HEIGHT (OVERALL).....	39-1/2" (100.3 cm)
WIDTH (BODY).....	25-1/2" (64.8 cm)
WIDTH (BRUSH COVER).....	41.25" (104.8 cm)
WIDTH (SQUEEGEE).....	45.25" (114.9 cm)
WEIGHT (MACHINE W/BATTERIES).....	1,075 lbs. (487.5 kg)
WEIGHT (CHARGER).....	22 lbs. (9.9 kg)
SHIPPING WEIGHT (TOTAL).....	1,300 lbs. (589.6 Kg)

THE KENT CO.		
ELKHART, INDIANA USA		
SERIAL NO		MODEL
VOLTS	PHASE	Hz
MOTOR 1	A.M.P.	H.P.
MOTOR 2	A.M.P.	H.P.

The model, type and serial number are indicated on the data plate. For prompt and complete information, always refer to these numbers when inquiring about service.

WRITE THE MODEL AND SERIAL NUMBER OF YOUR UNIT IN THE SPACE PROVIDED.

MODEL # _____ SERIAL # _____

RETAIN THIS OWNER'S GUIDE FOR FUTURE REFERENCE.

**AUTOMATIC SCRUBBER ACCESSORIES
KA-380B**

PADHOLDER.....	20364
PADHOLDER SERVICE PARTS:	
.....CENTER PLATE (ATTACHED).....	38881
.....CLAMPING PLATE (LOOSE).....	38662
STRIP PAD.....	15687
SCRUB PAD.....	15688
POLISH PAD.....	15689
SCRUB BRUSH.....	20365
POLISH BRUSH.....	20366
NYLON BRUSH.....	20367
STEEL WIRE BRUSH.....	20368
PALMETTO BRUSH.....	20369
KEN-GRIT BRUSH.....	20370
MICROSTAT FILTER KIT.....	38303
FILTER BAG (DRY PICKUP ONLY).....	47351
SLUDGE TRAP (WET PICKUP).....	49844
BATTERY:	
.....WET.....	26512
.....DRY.....	26551
CHARGERS:	
.....120V 60HZ.....	31360
.....100V 50HZ.....	31361
.....230V 50HZ.....	31362
.....230V 60HZ.....	31364
DUMP HOSE KIT.....	36369
DUMP HOSE INSTALLED.....	38328
KEYLOCK SWITCH.....	25295
FOAM FILLED TIRE.....	38660
PUMP-OVER ASSEMBLY.....	33608
NEOPRENE SQUEEGEE BLADE.....	38986
SQUEEGEE BLADE SET.....	38965

INTRODUCTION

Your automatic has been especially engineered and manufactured to give the maximum in performance during scrubbing and polishing of large floor areas.

With careful maintenance according to the instructions outlined in the following pages, a high standard of operation throughout its use will be insured.

Carefully inspect all components to insure that there is no concealed freight damage. If such damage is discovered, file a "CONCEALED DAMAGE REPORT" immediately with the delivering carrier.

The contents of this manual are based on the latest product information available at the time of publication. The right is reserved to make changes at any time without notice, in materials, equipment, price, color, specifications and models.

IMPORTANT SAFEGUARDS: ACCIDENTS DUE TO MISUSE CAN ONLY BE PREVENTED BY THOSE USING THE MACHINE. TO GUARD AGAINST INJURY, BASIC SAFETY PRECAUTIONS AS SHOWN IN THIS MANUAL SHOULD BE OBSERVED.

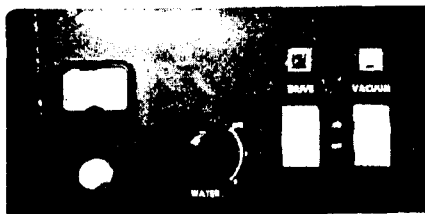


CAUTION:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS.

CONTROL PANEL

1. Battery meter. The needle must be within the **GREEN** area for efficient operation.
2. Water flow control knob.
3. Main **DRIVE "ON/OFF"** switch with red indicator light.
4. "**ON/OFF**" switch for **VACUUM** motor. Red light indicates a full recovery tank.

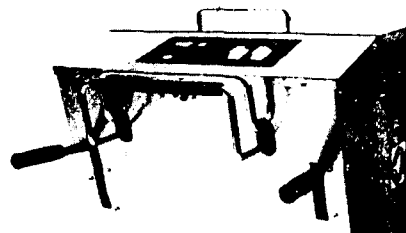


MOTOR PROTECTION

There are three circuit breakers located on the rear panel of the machine directly beneath the traction control handles. These circuit breakers protect the motors in your machine by shutting them off in the event that they become overheated during operation. There is one circuit breaker to protect the brush drive motors, one to protect the traction drive motor, and one to protect the vacuum motor. If any of these motors will not turn on during operation, check to see if one of the circuit breaker buttons has popped out. If so, once the motor has been allowed to cool for a moment, push the button in and resume operation.

TRACTION DRIVE OPERATION

To move the machine in forward or reverse first push the drive switch "**ON**." The forward motion of the machine is controlled by squeezing the control bar lightly for creeping motion, firmly for full speed. Reverse motion is controlled by pulling the control rod backwards, again lightly for creeping action, firmly for full reverse speed. The machine is equipped with a differential drive for easy turning in either direction.



SQUEEGEE OPERATION

On the rear panel, the right handle raises and lowers the squeegee. To raise the squeegee, pull the handle up and set it on the top of the ramp.

Push the squeegee handle down to lower the squeegee. This automatic is equipped with a squeegee which is capable of swinging nine (9") inches to either side of the machine. This permits picking up of water on a turn because the squeegee will follow the pattern of the brushes. When up against a wall, the squeegee will ride tight to it until the machine pulls away. Should the squeegee encounter an obstruction, it will shift laterally until the obstruction has been passed.

BRUSH CONTROL

To start and lower brushes:

1. Push drive switch "ON."
2. The left handle is lowered for scrubbing operation.
3. For heavy scrubbing and stripping operations, push the handle all the way down and set it on the bottom of the ramp.

INSTALLING THE BRUSHES



CAUTION:

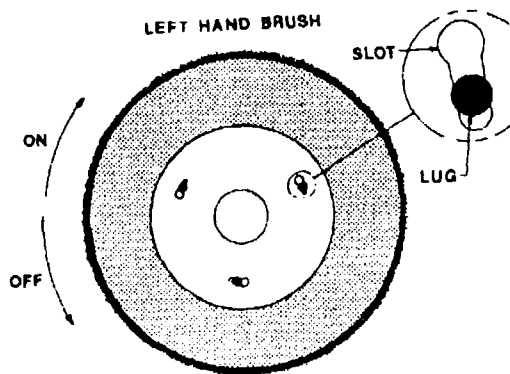
PLACE MAIN SWITCH IN OFF POSITION BEFORE APPROACHING BRUSH COVER.

The automatics come equipped with two scrub brushes which mount to the brush drive as follows:

Each brush has three (3) lugs located around a hole.

To install brushes:

1. Raise the brush mechanism to full up position.
2. Remove brush cover by loosening two black knobs at front of machine.
3. There are two aluminum pins chained to the two traction motors. Insert each pin through the holes provided in the brush head plate.
4. Under each brush drive pulley is a slotted brush drive plate. Place the three (3) lugs on brush into the slotted brush drive plate.



5. Raise and rotate each brush with a sharp jerk toward the side of the machine. This will lock the brush lugs into the drive plate.

6. Remove the aluminum pins, turn them over and store in holes in brush plate. **Failure to remove pins will result in circuit breaker tripping or damage to the brush head.**

SOLUTION TANKS

Raise the lid at the front of the machine. The fresh solution and the recovery tanks are mounted side by side. The right-hand tank is the fresh solution tank and is marked "FILL HERE." The left is the recovery tank, it has the vacuum motor mounted to it.

DO NOT USE HOT WATER (OVER 125 DEGREES F) IN EITHER TANK.

VACUUM MOTOR AND LINT FILTER



The vacuum motor and lint filter are located in the vac well of the recovery tank. To inspect:

1. Turn off all switches.
2. Disconnect the vacuum motor plug.
3. Remove the two (2) vacuum motor tie down screws.
4. Lift the vacuum motor and filter off the two (2) studs.
5. Remove the motor filter and clean the foam material and any lint on motor fan or louvers.

MICROSTAT FILTER

(Optional) Package of 12 (Part 38303)

Installation:

1. Remove the vacuum motor as in steps 1 thru 4 in instructions under Vacuum Motor.
2. Place the Microstat Filter into the vacuum motor pot. Be sure to cover the entire gasket that is on the bottom of the pot. Replace and secure the vacuum motor.



SCRUBBING OPERATIONS

To apply solution to the floor, scrub and immediately recover the liquid and soil. The following sequence of operations is followed:

1. Press the main drive switch to the "ON" position.
2. Turn the vacuum switch "ON."
3. Lower the squeegee.
4. Turn water knob to desired flow rate.
5. Lower the brushes to the desired position; brush drive motors automatically turn "ON."
6. Squeeze the control rod for forward motion. Various speeds of forward or reverse motion can be obtained by changes in force on the central rod. An infinite number of speeds are available. **DO NOT REVERSE MACHINE WITH SQUEEGEE DOWN.**

TURNS IN THE NORMAL SCRUBBING PATTERN

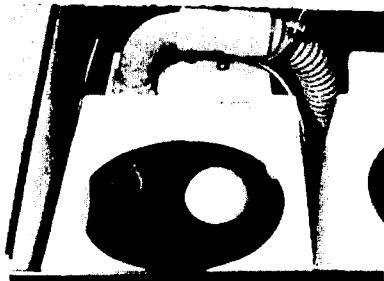
In order to reduce an over abundance of solution during operation on sharp turns:

- (A) Turn water knob to "OFF" six (6) feet before the turn.
- (B) Return the water knob to "ON" in the middle of the turn.

Our automatics can be easily controlled and maneuvered with one hand leaving the other hand free to manipulate the water flow.

WET FLOAT SHUT-OFF AND INDICATOR LIGHT

The wet float shut-off is located in the recovery tank. To inspect and clean, remove the vacuum motor pot from the recovery tank. **NEVER RESTRICT THE WET FLOAT SHUT-OFF OR VACUUM MOTOR; FLOODING AND DAMAGE MAY OCCUR.**



When the recovery tank is full, the float shut-off will turn on the red vacuum light. When the red vacuum light comes on:

1. Turn the vacuum "OFF."
2. Take the machine to a dumping area and empty the recovery tank.
3. Flush out the tank with clean water and check to see that the wet float is not restricted.

TO DUMP SOLUTION

Go to the right side of the machine, reach DOWN TO THE RIGHT DUMP VALVE (red handle) and pull up.

NOTE: Stand well away from the valve for the soil will dump very fast.

The left dump valve is for releasing the clean solution. (Directions are from operators position.)

DUMP HOSE KIT

For conditions where a drain is not accessible, a dump hose kit (Part 38369) is available.

MACHINE CARE

Please read and follow the daily, weekly, and monthly maintenance schedule located on THE UNDERSIDE OF THE LID OVER THE BATTERY COMPARTMENT.

At the end of the day's operation, the machine should be completely cleaned and prepared for the next shift's operations. Careful maintenance will insure effective performance throughout a long period of service.

1. Open the access to the recovery tank and completely rinse with clean water. If this is done at the end of each day, there will be no soil build-up to the surface of the polyethylene tank.
2. Clean the fresh water tank using the same procedure as in No. 1 above.
3. Do not store the machine with the brushes in down position because of the possible set in the brushes and possible discoloration of the floor due to moisture in the brushes.
4. Tilt the battery compartment lid full forward and inspect the battery compartment to insure that no large amount of water or solution has gathered in the battery compartment tray.
5. Remove the brushes from the machine; clean and dry them as necessary and wipe down exterior of the machine.

MAINTENANCE INSTRUCTIONS

A sound Preventative Maintenance Program will insure long, reliable and effective performance from your machine. We would strongly suggest that responsibility for the machine be assigned to a reliable individual in your organization.

DAILY

1. Clean and flush fresh and recovery solution tanks.
2. Clean lint filter on vac fan.
3. Wipe squeegee blades and machine wheels clean.
4. Wipe clean all interior and exterior surfaces.
5. Check battery water level and clean tops with damp cloth - connect battery charger.
6. Charge batteries.
7. Check pick-up tube for any obstruction.

WEEKLY

1. Lubricate chain and check for tension.
2. Lubricate all linkage and hinge parts. See lubrication chart.
3. Lubricate caster bearings and axle. See lubrication chart.
4. Replace Microstat Filter (where applicable).

MONTHLY

1. Check belt and chain for tension and wear. (See adjustments.)
2. Check sprockets for wear.
3. Check alignment of chain and belt.
4. Check all gaskets, vacuum motor, vacuum pot, tank inlet tube, and water valve.
5. Check proper clutch adjustments.
6. Check traction bar control spacing.
7. Check all wiring connections for cleanliness.
8. Lubricate caster bearings and axle. (See lubrication chart.)
9. Replace Microstat Filter (where applicable).
10. Check tire pressure (60 PSI).

SIX MONTHS

1. Inspect vacuum motor carbon brushes, replace if worn to 3/8" length or less.
2. Inspect traction motor carbon brushes, replace if worn to 3/8".
3. Inspect brush drive motor carbon brushes, replace if worn to 3/8".

ADJUSTMENTS

CLUTCH

The transmission in this automatic scrubber uses a clutch to engage and disengage the power to the drive wheels. When the clutch is properly adjusted the machine will start smoothly in both forward and reverse. If the machine starts with a sudden jerk when the control bar is slowly squeezed, the clutch adjustment is too tight. At the other extreme if slipping occurs when the control bar is squeezed tight, the clutch adjustment is too loose. This can promote premature clutch wear.

To adjust the clutch simply turn the wing nut on the adjustment screw on the lower right-hand side of the rear of the machine (Item 57 on lower Chassis Figure). Turn clockwise to tighten the clutch adjustment, counterclockwise to loosen the adjustment.

MAIN BELT

The drive belt on this automatic scrubber may be adjusted by turning the adjustment screw at the lower left-hand side of the rear of the machine (Item 2 on Lower Chassis Figure). The belt should never slip, but avoid excessive tightening which can damage bearings. To tighten the belt, first loosen the four (4) motor mounting bolts, next turn the adjustment screw clockwise. To loosen, turn counterclockwise. Retighten motor mounting bolts.

CONTROL BAR SWITCH

The traction drive motor in this automatic scrubber is controlled by two switches which are activated when the control bar is squeezed tight or pulled back. These switches are triggered by cams which are mounted to the activator pivot linkage. The adjustment of these cams on the pivot linkage and the mounting position of the switches must be correct in order for the traction drive motor to function properly.

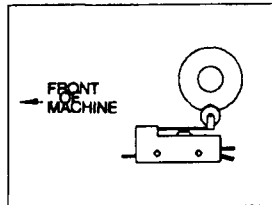
To adjust the switches and cams:

1. Turn all switches off.
2. Open battery compartment.
3. Disconnect forward battery cable and place lead so that it will not come in contact with any battery post.
4. Cover battery tops with cardboard or other non-conducting material.
5. Remove instrument panel and carefully lay out on the cardboard sheet. **DO NOT TOUCH ANY OF THE BATTERY TERMINALS.**

The switches and cams are located about 2 inches left and 6 inches beneath the control panel voltmeter. The switches are mounted together under the pivot linkage. The switch nearest the center of the machine is the traction motor ON/OFF switch. Adjust this switch first. To adjust:

1. Loosen the set screw on the cam nearest the center of the machine. The cam has a V-groove on one side. With the control bar released in neutral position, this cam should be directly above the switch and the V-groove should be down so that the switch roller rests in the center of the groove (see Figure). With the cam in this position, tighten the cam set screw.

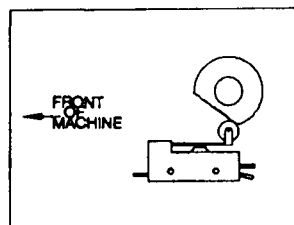
Cam-Switch Configuration with Control Bar in Neutral Position



2. The mounting position of the switches must be at a height which allows the operator to move the control bar about 1/2-3/4 inch in both forward and reverse before the ON/OFF switch (the switch nearest center of machine) is activated. If this height is not correct, loosen the switch mounting screws and move the switches up or down until the ON/OFF switch is set correctly. After this is set, check to make sure the roller rests in the center of the cam V-groove when the control bar is in the neutral position.

3. The left cam activates the forward-reverse traction motor switch. This cam should be set so that even the slightest backward movement of the control bar will activate the forward/reverse switch. When the control bar is pulled back from the neutral position this switch **MUST** activate before the ON/OFF switch (referred to above) activates. If it doesn't, loosen the left cam set screws and index it on the shaft to the correct setting (see Figure). Then retighten the cam set screw. In some cases it may be necessary to bend the switch lever.

Approximate Cam switch Configuration with Control Bar in Neutral Position



DRIVE CHAIN ADJUSTMENTS

1. Locate access hole on lower chassis assembly on left side of machine.
2. Loosen bolt in access hole with 1/2" socket.
3. Slide idler sprocket down until chain is snug.
4. Retighten idler sprocket bolt.

SQUEEGEE PRESSURE ADJUSTMENT

Squeegee pressure adjustment is required if squeegee wheels will not stay on the floor when squeegee is down. At the rear of the machine, mounted directly above the traction drive motor is a nut that adjusts the squeegee pressure.

To increase squeegee pressure:

1. Use a 1/2" deep socket wrench.
2. Turn the nut clockwise to increase squeegee pressure.

NOTE: Increasing squeegee pressure will increase effort required to lift squeegee.

SQUEEGEE LIFT ADJUSTMENT

This adjustment is necessary when the squeegee will not clear the floor when the squeegee is in the "UP" position.

To adjust the squeegee higher, adjust the jam nuts on each side of the bracket at the bottom end of the squeegee cable:

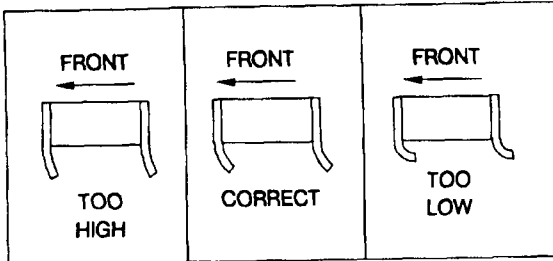
1. Put the squeegee handle in the "UP" position.
2. Loosen the bottom jam nut.
3. Turn the top jam nut clockwise until the squeegee is clear of the floor.
4. Tighten the bottom jam nut to lock the squeegee position.

SQUEEGEE TILT ADJUSTMENT

The squeegee on this machine pivots freely, allowing the pressure on each end of the squeegee to keep it level with the floor at all times. The right to left tilt adjustment is automatic. Front to rear tilt adjustment is correct if, as the machine is moved forward, there is an equal amount of squeegee flare at the ends of the squeegee rubber 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 squeegee flare is greater at the ends than at the center, loosen the two (2) black knobs, tighten the back two (2) set screws on the squeegee mounting plate equally and retighten the black knobs. If the squeegee flare is less at the ends than at the center, loosen the black knobs, tighten the front two (2) set screws on the squeegee mounting plate, and retighten the black knobs.

SQUEEGEE HEIGHT ADJUSTMENT

In order for the squeegee to pick up effectively, the height must be adjusted to give the correct amount of squeegee rubber contact with the floor. As the machine is moved forward the back squeegee rubber should flare back so that the corner of the leading edge is straight down as shown in the figure labeled "CORRECT" below.



If the squeegee is too high or too low it will not pick up properly.

To adjust the squeegee height:

1. Lower the squeegee to the floor.
2. Loosen the jam nut on the squeegee height adjustment screw (located on top of the squeegee bar, directly above the squeegee wheels).
3. To raise squeegee turn screw clockwise, to lower turn counterclockwise.
4. Retighten jam nut.

USE OF THE BATTERY CHARGER

The Kent Battery Charger is electronically controlled and will drop and hold a finish rate of 2 to 3 amps at which time the charger will stay on for another 2 hours before stopping. Timer often will not go to zero or off. The charger is equipped with a standard 15 amp fuse for protection from short circuit or reverse polarity of the batteries.

To operate the battery charger:

1. Open the battery compartment lid. Do not close this lid during charging operation.

Hydrogen gas is formed when the batteries approach the full charge state. This gas is explosive; therefore, when charging batteries with lid open, avoid any open flame or electric spark near batteries. This includes connecting or disconnecting charger with



CAUTION:

timer "ON." To avoid accumulation of gas, be sure batteries receive good air circulation while being charged.

2. Connect the charger plug into the machine firmly. The charger plug is mounted in the battery compartment and beneath the control panel.

3. Plug the battery charger into a normal electrical outlet and turn the timer to "ON."

NOTE: Set the battery charger on a flat, hard surface to insure that cooling air can circulate through the bottom louvers.

The battery charger is guaranteed against defective parts and workmanship. Any parts proving defective within six months will be repaired free of charge when the charger is returned prepaid to the manufacturer.

BATTERY CARE

Battery care determines the life span and efficiency of the units; therefore, for the longest possible useful life from these batteries, the following procedure should be followed:

1. Keep battery solution (electrolyte) level up in cells. Check daily - if cells need water, use only distilled or approved water.
2. Keep batteries fully charged.
3. Keep batteries and connection clean. When necessary, clean with baking soda solution, attach wires and coat terminals with grease to retard corrosion.

SERVICE & BATTERY GUARANTEE APPLYING TO SCRUBBER-VAC BATTERIES

SERVICE GUARANTEE: If a battery becomes unserviceable in normal use within 90 days of purchase, the purchaser is entitled to a new battery of a comparable size and type, without charge, or to the necessary repairs, without charge for either labor or materials, at the option of the manufacturer. Transportation, recharges, or the use of rental batteries are not classed as repairs and the battery owner is expected to pay for such services, if required.

ADJUSTMENT POLICY: If a battery becomes unserviceable in normal use after the expiration of the service guarantee, it will be repaired or replaced with another battery of a comparable size and type to the original purchaser, on a prorated price basis, in exchange for the unserviceable battery, the purchaser paying only for the service received, plus transportation charges.

LIMITATIONS: Failure in service due to fire, wreckage, explosion, freezing, abuse or neglect, use of battery "dopes," or the use of a battery of a group size smaller than of the battery used as original equipment is not covered by the Service & Battery Guarantee. The Service & Battery Guarantee will not apply if battery has been opened or repaired or manufacturer's identification markings has been obliterated before presentation for adjustment or if battery

has broken case or cover or if battery is discharged.

SCALE FOR PRO-RATING AFTER 90 DAYS

Months Operation Price Exchange
 Months Guarantee x 1 = Price

All batteries are guaranteed for twelve (12) months from date of receipt.

(Subject to change without notice)

SERVICE DIAGNOSIS - TROUBLESHOOTING CHECKLIST

PROBLEM

CORRECTION

MACHINE WILL NOT MOVE

1. Loose wire.
2. Battery condition low.
3. Clutch requires adjusting.
4. Drive belt slipping.

1. Reconnect.
2. Check voltmeter and charge batteries.
3. See Adjust Clutch.
4. Tighten belt.

BRUSH DRIVE MOTOR WILL NOT START

1. Brush Drive Switch faulty.
2. Loose wire.
3. Battery condition low.
4. Circuit breaker tripped.
5. Pins left in brush plate tripping circuit breaker.

1. Replace switch.
2. Reconnect.
3. Check voltmeter and charge batteries.
4. Reset by pushing circuit breaker button.
5. Remove pins and store in holes in frame.

MACHINE STREAKING A CLEANED FLOOR

1. Foreign materials lodged under rear squeegee blade.
2. Insufficient water flow to brushes.
3. Worn squeegee blades.
4. Worn brushes or pads.
5. Improper squeegee adjustment.

1. Raise squeegee and clean squeegee blade.
2. Clean screen and fresh solution tank and eliminate any restrictions in lines.
3. Replace squeegee blade
4. Replace brushes or pads.
5. See Squeegee Adjustments.

VACUUM SUCTION BLOCKED

1. Clogged pick-up tube.
2. Lint Filter dirty.
3. Air leaks around vac motor.
4. Clogging at elbows and hose entering recovery tank

1. Remove accumulations.
2. Clean lint filter.
3. Examine gasket for damage or warped motor well.
4. Remove elbow and clean.

SHORT OPERATING TIME

1. Battery charge condition very low.
2. Constant scrub operation in high pressure (strip) position.
3. Corroded wires or connectors.

1. Recharge batteries fully before beginning operation.
2. Use high pressure more sparingly.
3. Clean thoroughly.

CIRCUIT BREAKER KEEPS TRIPPING

1. Pins left in brush plate
2. Pads or brushes rubbing.

1. Remove pins and store in holes in frame.
2. Install original equipment accessories.

WATER WILL NOT COME ON

1. Water line disconnected.
2. Cable is loose on water valve.

1. Reconnect water solution line to brush head.
2. Tighten cable to valve.

MACHINE PULLS TO ONE SIDE

1. Low tire pressure.

1. Increase tire pressure to 60 lbs.

SQUEEGEE LEVER DOES NOT PICK UP

1. Squeegee cable off of pulleys.
2. Squeegee height requires adjustment.

1. Place cable in pulleys once again.
2. See adjustment instructions in catalog.

CHARGER WILL NOT COME ON

1. DC or AC cords not connected.
2. Fuse defective.
3. Polarity reversed

1. Connect.
2. Replace fuse with standard 15 Amp fuse.
3. Change polarity so voltmeter on instrument panel reads correctly.

TIRE MARKS ON FLOOR

1. Low tire pressure

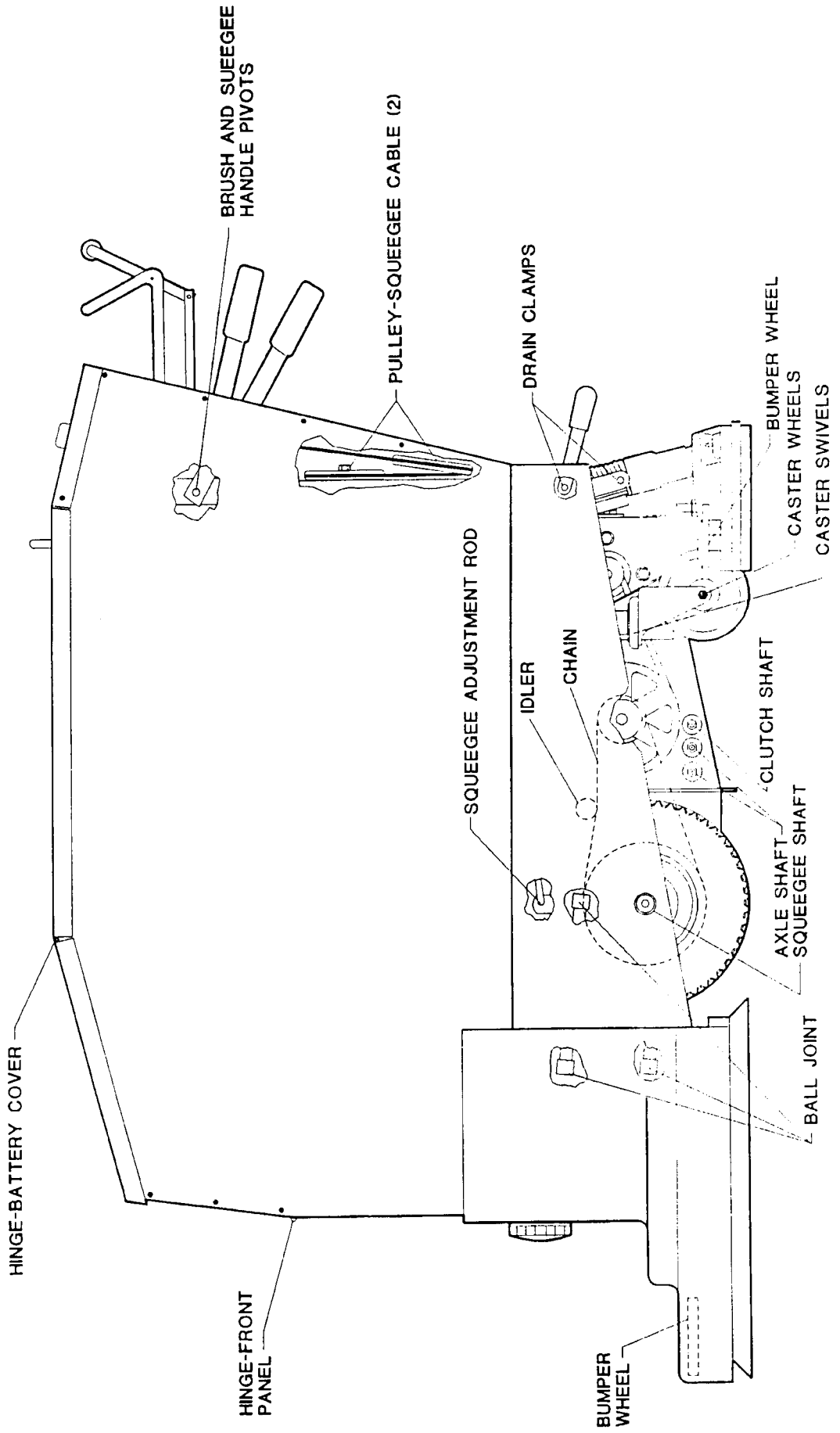
1. Pump tires to 60 lbs. of pressure or use optional foam filled tire (No. 38660).

CONTROL BAR WON'T RETURN TO NEUTRAL

1. Return springs disconnected.
2. Return spring collar not adjusted properly.

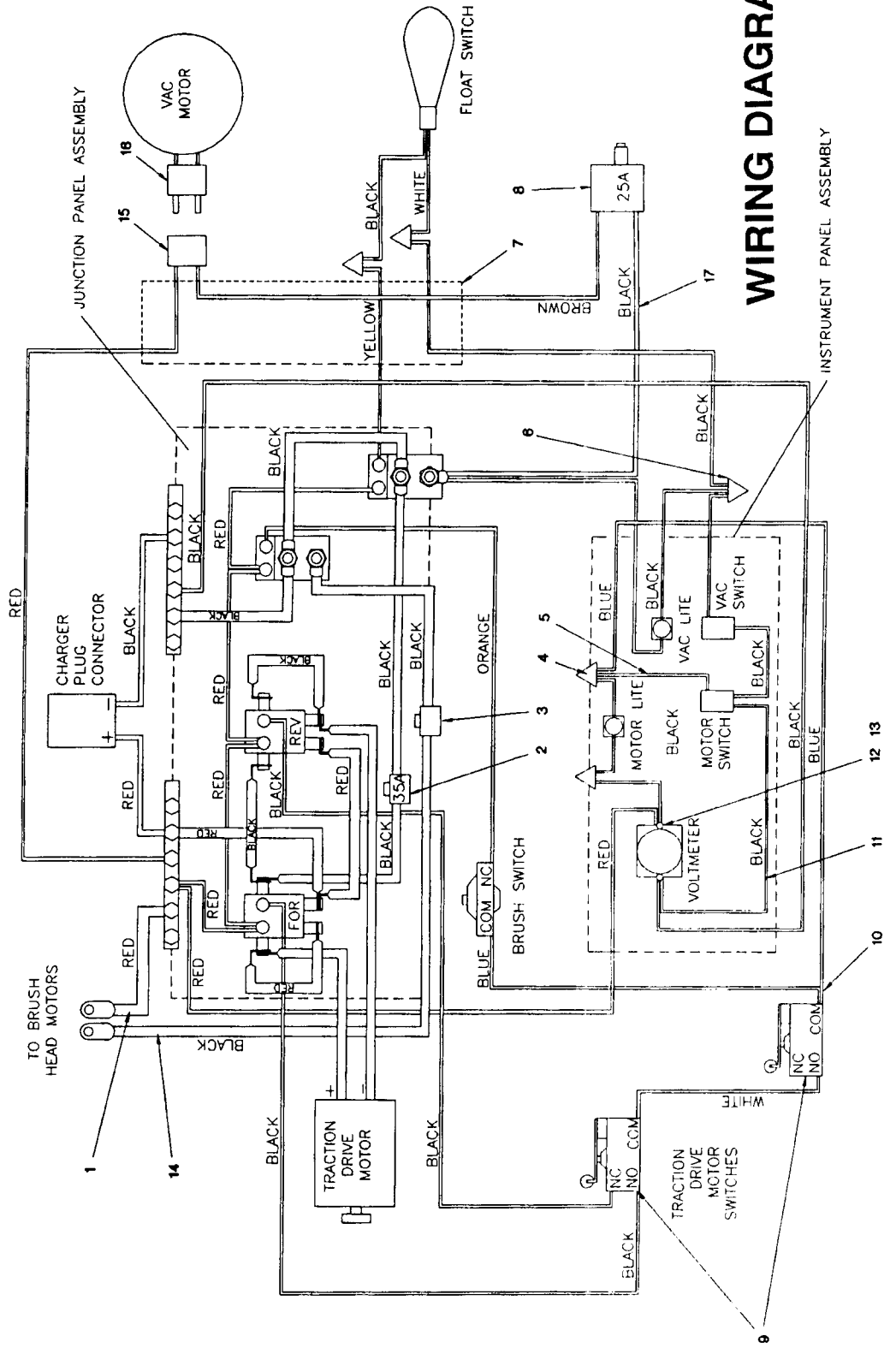
1. Reconnect spring.
2. Adjust collar.

LUBRICATION CHART



DET PART NO.	DESCRIPTION	QUANT
1	ASM,WIRE-6GA,RED,78.0L,RINGS	1
2	CIRCUIT-BREAKER-35A-THERMAL	1
3	CIRCUIT BREAKER-45 AMP	1
4	NUT,WIRE-IDEAL 74B	2
5	ASM,WIRE-16GA,BLK,7.0L,QD	1
6	NUT,WIRE-IDEAL 73B	4
7	ASM,WIRE-4 CNDCT,16GA,COMB	1
8	CIRCUIT BREAKER-25AMP,SPSTNC	1
9	SWITCH,PUSH-SPDT,20A,125-250V	1

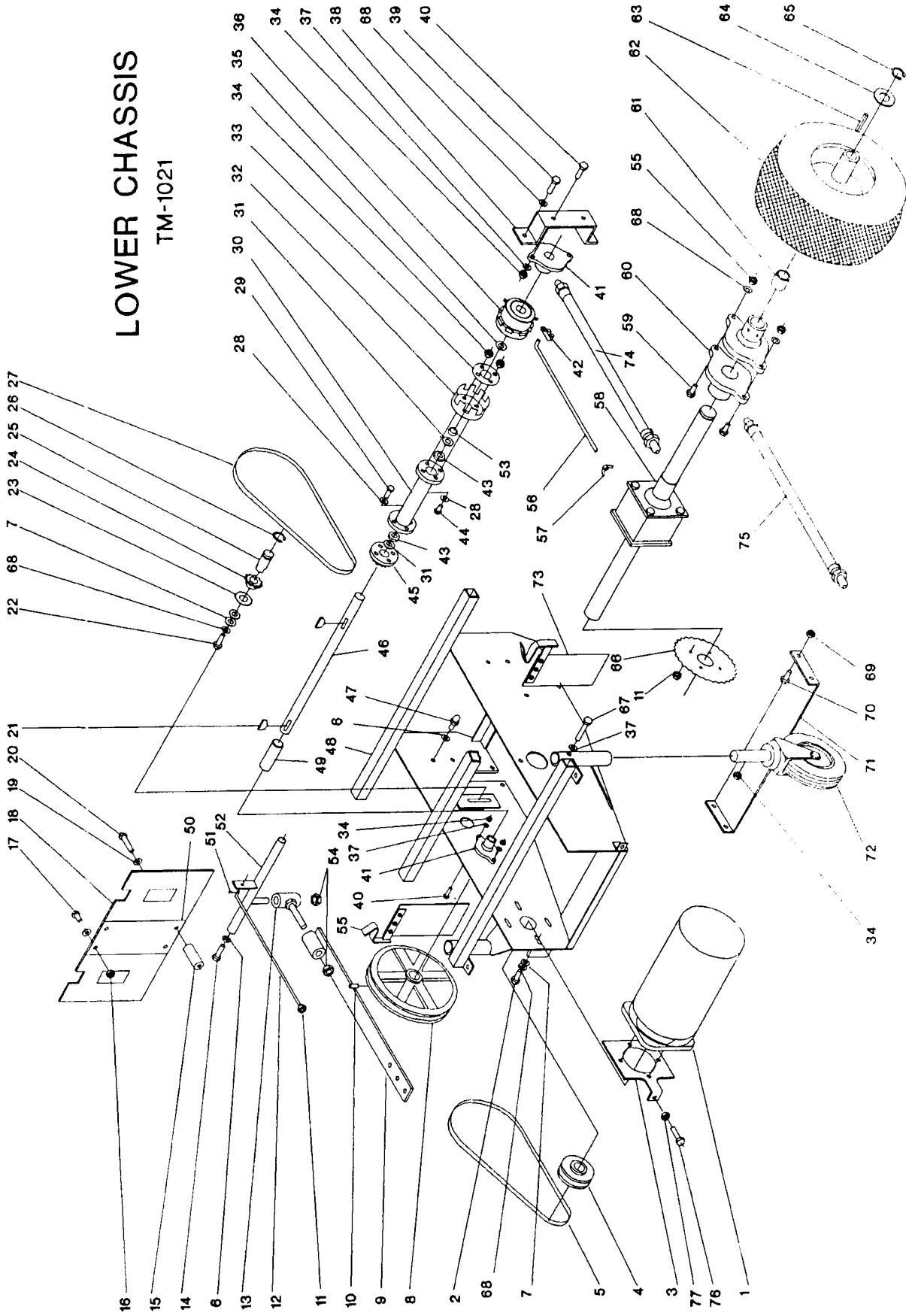
DET PART NO.	DESCRIPTION	QUANT
10	ASM,WIRE-2 CNDCT,16GA,BLU	1
11	ASM,WIRE-2 CNDCT,16GA,BLK	1
12	WSHR LK .200ID.334OD.047TSPLT	2
13	NUT,HEX-10-24 ZN PLT	2
14	ASM,WIRE-6GA,BLK,78.0L,RINGS	1
15	CONN,RCPT-2-WR,LINE CONN,FEM	1
16	CONN,PLUG-2-WR,LINE CONN,MALE	1
17	ASM,WIRE-14GA,BLK,12.00L,COMB	1



WIRING DIAGRAM

LOWER CHASSIS

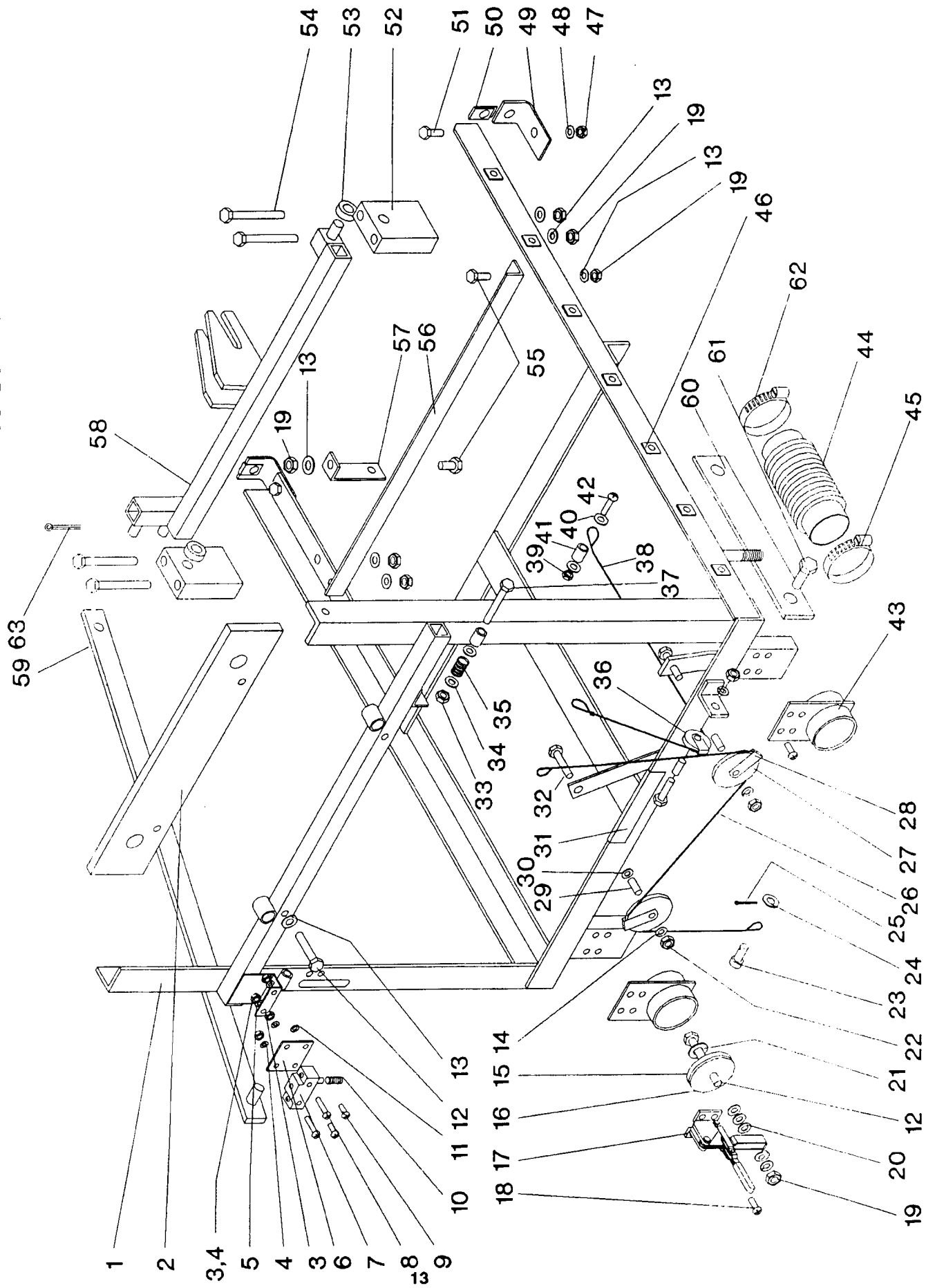
TM-1021



DET PART NO.	DESCRIPTION	QUANT
1	MTR,DC--36V.,750HP,700RPM,48F	1
1	BRUSH,MTR--FOR 23307 & 23308	4
1	ASM,RING--BRUSH	1
1	BRG,BALL--787ID,1.850OD,.551W	2
2	SCR CAP HEX HD .312-18X1.00L	4
3	BRACKET,STL--6.0X5.0,TENSIONER	1
4	SHEAVE--ZINC PLATED'OUT-SERV'	1
5	BELT,V--4L,30.3 PITCH LENGTH	1
6	WSHR LK .390ID,683OD,094T SPLT	6
7	WSHR FLT .344ID,750OD,060T STL	6
8	PULLEY,GRVD--7.00OD,.625 BR	1
9	ASM,SQUEEGEE BAR--WWHEELS	1
9	WDMT,SQUEEGEE BAP--PIVOT TUBE	1
10	SCR SET CUP PT .312-18X.500L	1
11	NUT,HEX LOCK--.312-18,ZN PLT	1
12	ROD,SQUEEGEE--.312 DIA X 13.3L	1
13	WDMT,PIVOT--SQUEEGEE	1
14	SCR CAP HEX HD .375-16X.875L	2
15	SPACER,PHEN--.250X.500,.375L	2
16	NUT,HEX LOCK-- 10-24,NYLOC	2
17	SCR MACH RD HD 10-24X.500L	2
18	RUBBER,SPLSH GUARD--8.18X14.75	1
19	WSHR FLT .187ID1.00OD,063T STL	4
20	SCR TPG F PAN HD 10-24X.875L	2
21	KEY,WOODRUFF--#606,.750D.,187W	2
22	ASM, GREASE FITTING 'AUTOS'	1
23	WSHR FLT .344ID1.00OD,036T STL	1
24	SPROCKET,CHAIN--#40,.500P,11T	1
25	IDLER SHAFT--MOTOR,1.339 LONG	1
26	RING,RTNG--EXT.,625 SHAFT,5100	1
27	CHAIN,ROLLER--#40,68LK & CONN	1
28	WSHR LK .267ID,510OD,028T EXT	8
29	SCR CAP HEX HD .250-20X1.00L	4
30	WDMT,CLUTCH DRIVE--AUTOMATICS	1
31	WSHR SPR TNSN .689ID1.25OD,010	2
32	CUP,DRIVE--CLUTCH,AUTO	1
33	WSHR FLT RS#04421 W/4 HOLES	1
34	NUT,HEX--.250-20,ZN PLT	6
35	WSHR SPR TNSN .625ID1.00OD,014	1
36	CLUTCH REBUILD KIT	1
36	ASM,CLUTCH--	1

DET PART NO.	DESCRIPTION	QUANT
37	WSHR LK .262ID,489OD,062T SPLT	6
38	BRACKET,STL--7.5X2.0,JACKSHAFT	1
39	SCR CAP HEX HD .312-18X.750L	2
40	SCR CAP HEX HD .250-20X1.00L	4
41	BRG,W/PB--.625ID,CAST IRON	2
42	CLIP-R H	1
43	BRG,BALL--.625ID,1.375OD,.344W	2
44	SCR CAP HEX HD .250-20X.875L	4
45	SPROCKET,CHAIN--#40,.500P,11T	1
46	SHAFT--CLUTCH DRIVE,.625ODX15	1
47	BALL JOINT	4
48	WDMT,CHASSIS--LOWER,26&32 AUTO	1
49	TUBE,STL--.750 OD,17 GA,3.406	1
50	PLATE,MTG--SPLASH GUARD 4.0X7	1
51	PIN,COTTER--.094X.750 LONG	1
52	WDMT,SQUEEGEE--ADJUSTMENT	1
53	SPACER,STL--.750X.640,.156,2	1
54	NUT,HEX LOCK--.500-13,ZN PLT	2
55	ASM,GUARD--SPLASH, LEFT	1
56	ROD,STL--.187X11.32L,THDD	1
57	NUT,WING-- 10-24,ZN PLT	1
58	DIFFERENTIAL,DRIVE--26&32 AUTO	1
59	SCR CAP HEX HD .312-18X1.75L	4
60	BRG,BALL,ANLR,SLD--SELF ALGN.	4
61	SPACER,STL--1.01X1.25,.563L	2
62	WHEEL,DRIVE--4,10/3,50X5,GRAY	2
63	KEY,SQUARE--.250 SQ,2.500 LONG	2
64	WSHR FLT 1.05ID1.50OD,036T STL	4
65	RING,RTNG--EXT.,984 SHAFT,5160	2
66	SPROCKET,CHAIN--#40,.500P,44T	1
67	SCR CAP HEX HD .250-20X1.75L	2
68	WSHR LK .326ID,586OD,078T SPLT	11
69	NUT,HEX LOCK--.375-16,NYLOC	4
70	SCR CAP HEX HD .375-16X.750L	4
71	SUPPORT,PLATE--LOWER 26&32AUTO	2
72	CASTER	2
73	ASM,GUARD--SPLASH, RIGHT	1
74	ASM,HOSE--GREASE, 8.50L HOSE	2
75	ASM,HOSE--GREASE, 10.25L HOSE	4
76	SCR CAP HEX HD .312-18X1.25L	1
77	NUT,HEX JAM--.312-18,ZN PLT	1

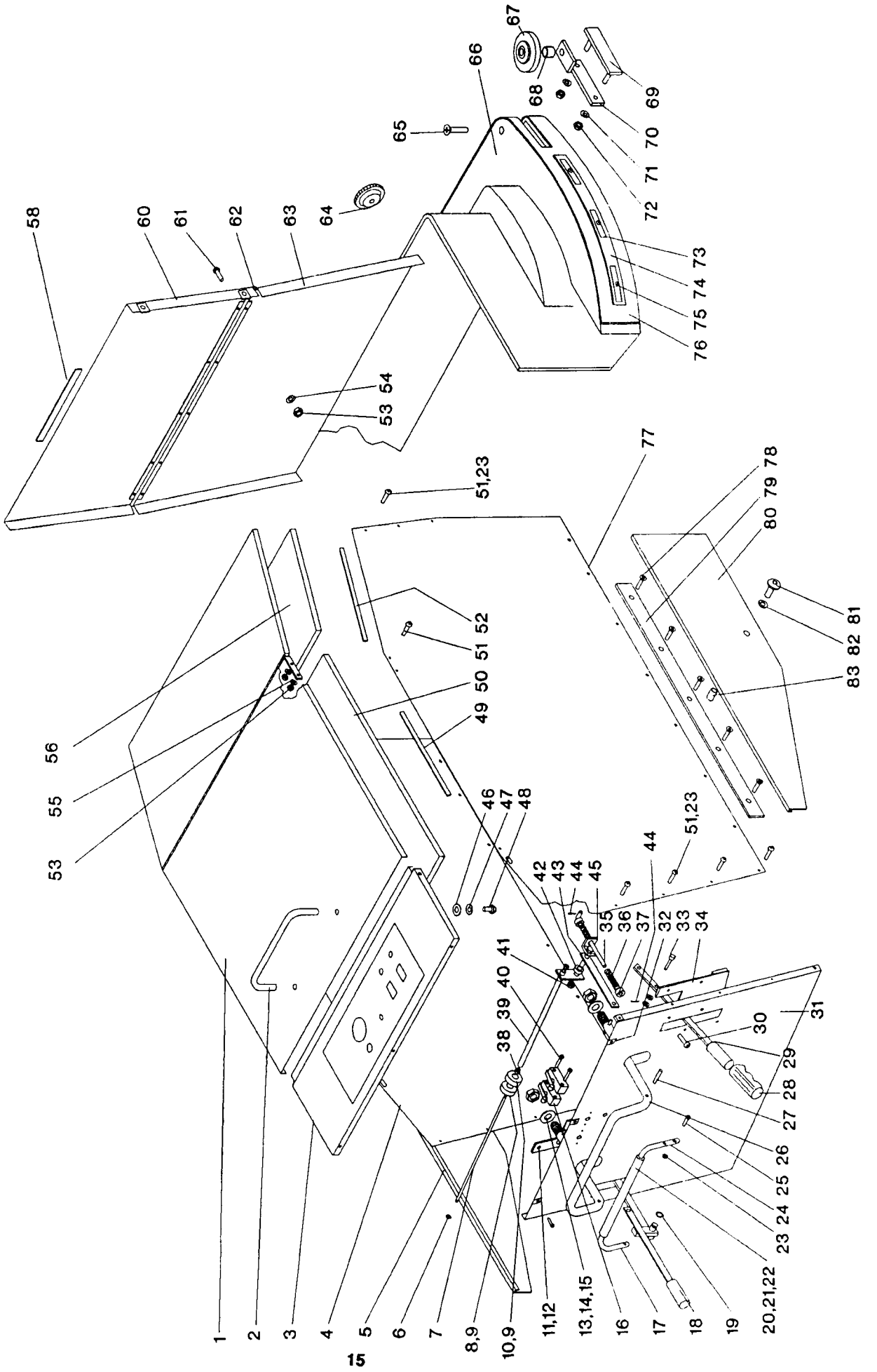
UPPER CHASSIS ASSEMBLY



DET PART NO.	DESCRIPTION	QUANT
1	WDMT,CHASSIS--UPPER,32 AUTO	1
2	ASM,BATTERY--SUPPORT	1
3	NUT,HEX-- 6-32,ZN PLT	4
4	WSHR LK .148ID,250OD,031TSPLT	4
5	WSHR FLT .156ID,375OD,065T BRS	2
6	PLATE,MOUNTING--SWITCH	1
7	SWITCH,PUSH--SPDT,21A,240V	1
8	SCR MACH RD HD 6-32X1.25L	2
9	SCR MACH RD HD 6-32X.750L	2
10	SPRING,COMP .344D .687L .032WD	1
11	WSHR LK .150ID,320OD,022T EXT	2
12	SCR CAP HEX HD .312-.18X1.75L	4
13	WSHR LK .326ID,586OD,078TSPLT	11
14	WSHR LK .262ID,489OD,062TSPLT	3
15	WSHR NEOPRENE .250X2.25X.187T	2
16	WSHR FLT .328ID2.27OD.120T STL	2
17	DRAIN CLAMP	2
18	SCR TPG F PAN HD .250-20X.500L	8
19	NUT,HEX--.312-18,ZN PLT	9
20	WSHR FLT .344ID,687OD,080T STL	4
21	WSHR FLT .406ID1.75OD,060T STL	2
22	NUT,HEX--.250-20,ZN PLT	3
23	PIN,CLEVIS--.375X .625 LONG	1
24	WSHR FLT .406ID,750OD,060T STL	1
25	PIN,COTTER--.125X .750 LONG	1
26	CABLE,STL--.125DIA,37.50L	1
27	PULLEY,CABLE--2.50OD,.378 BORE	2
28	GUARD-PULLEY	3
29	SPACER,STL--.253X,374, .530L,Z	3
30	WSHR FLT .281ID,750OD,120T STL	1
31	WEAR STRIP-CABLE 98256	1
32	SCR CAP HEX HD .250-20X1.25L	3

DET PART NO.	DESCRIPTION	QUANT
33	NUT,HEX LOCK--.375-16,ZN PLT	2
34	WSHR FLT .438ID1.00OD,104T STL	4
35	SPRING,COMP .600D 1.00L .072WD	2
36	PULLEY,CABLE--1.62 OD,.375 ID	1
37	SCR CAP HEX HD .375-16X3.00L	2
38	WIRE ROPE--.125 DIA, X 32,75L	1
39	NUT,HEX LOCK-- 10-24,NYLOC	1
40	WSHR FLT .203ID,750OD,048T SS	2
41	SPACER,PHEN--.250X.437, .250L	1
42	SCR MACH PAN HD 10-24X.750L	1
43	WDMT,BRACKET--DUMP VALVE	2
44	HOSE,RBR,FLEX--4.37-7.50L	2
45	CLAMP,HOSE--2.25 MAX DIA,WORM	2
46	NUT,SELF RETAINING--.250-20	14
47	NUT,HEX--.375-16,ZN PLT	2
48	WSHR LK .390ID,683OD,094TSPLT	2
49	BRACKET,ANGLE--FRONT PANEL,MTG	2
50	NUT,SPEED,J--.250-20,.63X.96,Z	2
51	SCR CAP HEX HD .375-16X.875L	2
52	CASTING,MACH--RS97369,BLOCK	2
53	SPACER,STL--.500X.750, .187L	2
54	SCR CAP HEX HD .312-18X5.00L	4
55	SCR CAP HEX HD .312-18X.625L	3
56	ANGLE,STL--1.50X1.50X24.00L	1
57	BRACKET-CABLE CLAMP	1
58	WDMT,LIFT--BRUSH HEAD 32"AUTO	1
59	ASM,CONNECTING BAR--BRUSH LIFT	1
60	BAR-CASTER SUPPORT 26&32 AUTO	2
61	SCR CAP HEX HD .250-20X2.00L	2
62	CLAMP,HOSE--2.50 MAX DIA,WORM	2
63	PIN,COTTER--.094X .750 LONG	2

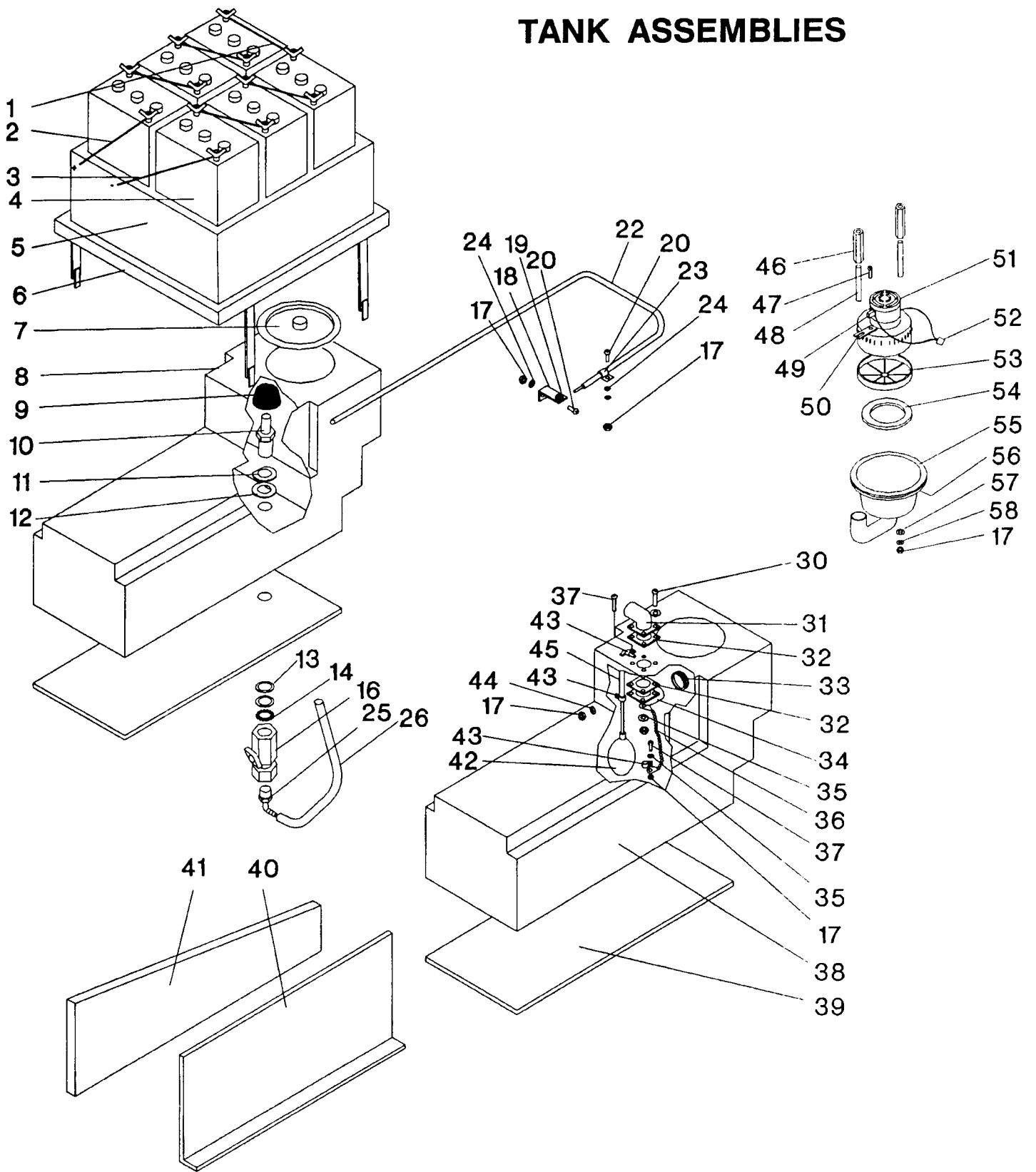
OUTER COVER ASSEMBLY



DET PART NO.	DESCRIPTION	QUANT
1	ASM,COVER-	1
2	HANDLE,STL	1
3	PANEL,INSTRUMENT-32IN AUTO	1
4	PANEL,SIDE-38 AUTO LEFT	1
5	PANEL,LOWER-LEFT	1
6	RING,RTNG-EXT.,250 SHAFT,5133	2
7	RD,STL-,250DIA,13.95 LONG	1
8	CAM,CONTROL-REVERSE SWITCH	1
9	SCR SET CUP PT 10-24X.250L	2
10	CAM,CONTROL-BRAKE SWITCH	1
11	PLATE,HANDLE LOCK	1
12	PLATE,HANDLE LOCK BOTTOM	1
13	NUT,HEX,JAM-625-11,ZN PLT	2
14	WSHR FLT .625ID1.25OD.120T STL	2
15	PIN,ROLL-,187 DIA,1.000L	2
16	SWITCH,PUSH-SPDT,20A,125-250V	2
17	BAR,HANDLE-LEFT,26&32 AUTO	1
18	ASM,HANDLE-BRUSH,26&32 AUTO	1
19	RING,RTNG-EXT.,500 SHAFT,"E"	1
20	ASM,SQUEEZE HANDLE-26&32 AUTO	1
21	HANDLE-TRACTION BAR	1
22	PIN,ROLL-,187 DIA, .880L	1
23	NUT,HEX LOCK- 10-24,NYLOC	15
24	BAR,HANDLE-RIGHT,26&32 AUTO	1
25	SCR MACH PAN HD 10-24X1.00L	1
26	WDMT,HANDLE-26&32 AUTO,CHROME	1
27	PIN,ROLL-,187 DIA,1.375L	2
28	HANDLE-GRIP	2
29	ASM,HANDLE-SQUEEGEE	1
30	SCR MACH RD HD .250-20X-500L	8
31	PANEL,REAR-SS,32IN AUTO	1
32	NUT,SPEED,J-,250-20,63X.96,Z	5
33	PIN,CLEVIS--375X1.000 LONG	1
34	ASM,LOCK-SQUEEGEE	1
35	ROD,STL-,312 DIA, 6.00 LONG	1
36	SPRING,COMP-,480D,2.75L,.059W	2
37	COLLAR-CENTERING SPRING	2
38	BRG,FLANGE-,250IDX.375ODX.37W	2
39	WDMT,CLUTCH ACTUATOR-W/C BORE	1
40	SCR MACH RD HD 6-32X1.75L	2
41	NUT,HEX LOCK-,250-20,NYLOC,ZN	1
42	SPACER,PHEN-,250X.437, .250L	1

DET PART NO.	DESCRIPTION	QUANT
43	BAR,STL-,188X.50X8.125L	1
44	PIN,COTTER-.094X.750 LONG	2
45	WDMT,BRACKET-CABLE,ACTUATOR	1
46	WSHR FLT .281ID.562OD.063T STL	2
47	WSHR LK .262ID.489OD.062TSPLT	2
48	SCR CAP HEX HD .250-20X.625L	2
49	WEAR STRIP-SIDE PANEL REAR	2
50	COVER-BATTERIES	1
51	SCR MACH PAN HD 10-24X.500L	16
52	WEAR STRIP-SIDE PANEL FRONT	2
53	NUT,HEX- 10-24,ZN PLT	14
54	WSHR LK .200ID.334OD.047TSPLT	10
55	WSHR LK .204ID.410OD.025T EXT	4
56	SOUND RETAINER - VAC FAN	1
58	WEAR STRIP-UPPER FRONT PANEL	1
60	PANEL,UPPER FRONT--S,STEEL,321	1
61	SCR TPG F PAN HD 10-24X.375L	10
62	HINGE,BUTT-1.25X24.50 LONG	1
63	PANEL,LOWER FRONT--SS,38 AUTO	1
64	KNOB	2
65	SCR MACH FLAT HD .375-16X2.00L	1
66	ASM,COVER-BRUSH,38 AUTO	1
67	COVER,BRUSH-MACHINED,38 AUTO	1
66	WHEEL-5.00DIA, 504BORE,1.12HB	1
68	SPACER,STL-,384X.500,1.000L,Z	1
69	WDMT,BAR,BUMPER WHEEL CLAMP	1
70	WDMT,BUMPER WHEEL MTG - AUTOS	1
71	WSHR LK .262ID.489OD.062TSPLT	2
72	NUT,HEX-,250-20,ZN PLT	2
73	STR,STL-,062X.437X1.50 LONG	12
74	CHNL,PLSTC-,750X.281,38, LONG	1
74	CHNL,PLSTC-,750X.281,38, SHORT	1
75	SCR TPG F PAN HD 8-10X.562L	12
76	GUARD,SPLASH-,12X4.50,38 AUTO	1
77	PANEL,SIDE-38 AUTO,RIGHT	1
78	SCR MACH FLAT HD .250-20X.750L	8
79	BAR,SPACER-27 LONG	2
80	PANEL-RIGHT-LOWER	1
81	SCR MACH BTN HD .500-13X2.50L	2
82	WSHR FLT .500ID1.500D.125T NYL	2
83	SPACER,STL-,506X.750,1.500L,Z	2

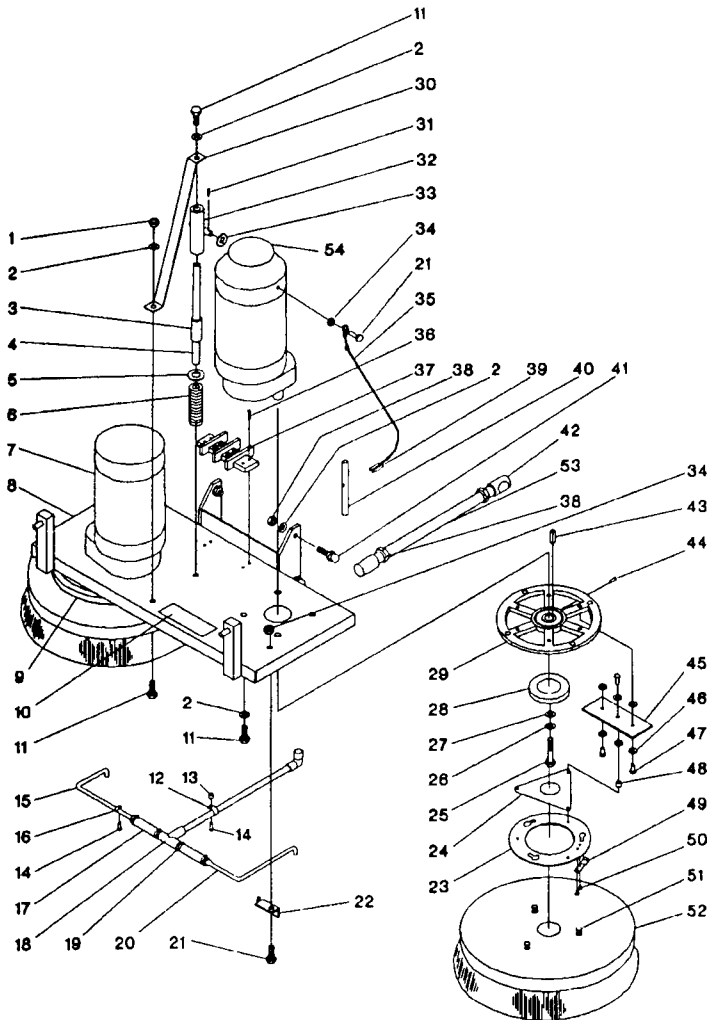
TANK ASSEMBLIES



DET	PART NO.	DESCRIPTION	QUANT
1	025274	ASM,WIRE-- 6GA,BLK,14.0L,RINGS	1
2	025275	ASM,WIRE-- 6GA,RED, 8.0L,RINGS	4
3	025085	ASM,WIRE-- 6GA,BLK,10.2L,RINGS	4
4	026512	BATTERY-- 6V,275AH,WET	6
4	026551	BATTERY-- 6V,275AH,DRY	6
5	053534	BOX,BATT--32" AUTO'S,MACHINED	1
6	032686	BATTERY SUPPORT FRAME	1
7	051107	LID-SOLUTION TANK	1
8	051449	SOLUTION TANK--'MACHINED'	1
9	048848	LINE STRAINER	1
10	048776	ADPTR,PP-BS--3/4 MPTX.500 BOSS	1
11	004472	WSHR FLT 1.08ID2.06OD W/FLAT	1
12	046980	ASM,GASKET--SCREEN	2
13	004330	WSHR FLT 1.05ID1.50OD.036T STL	2
14	006114	NUT,HEX LOCK--.750 IPT,CONDUIT	1
16	048654	VALVE-WATER V-75	1
17	003279	NUT,HEX-- 10-24,ZN PLT	11
18	051615	LEVER,WATER--VALVE	1
19	044826	CONNECTOR-WATER VALVE CABLE	1
20	001295	SCR MACH RD HD 10-24X.625L	1
22	032548	ASM,CABLE--WATER	1
24	004253	WSHR LK .204ID.410OD.025T EXT	3
25	006130	ELBOW,PP-HS--3/4 MPTX1/2HS,PLS	1
26	052862	TUBE,VINYL--.500X.750,13.00L	1
30	002210	SCR MACH RD HD 10-24X1.50L	4
31	032542	ASM,ELBOW--INLET-TOP	1
32	048257	GASKET-INLET ELBOW	2

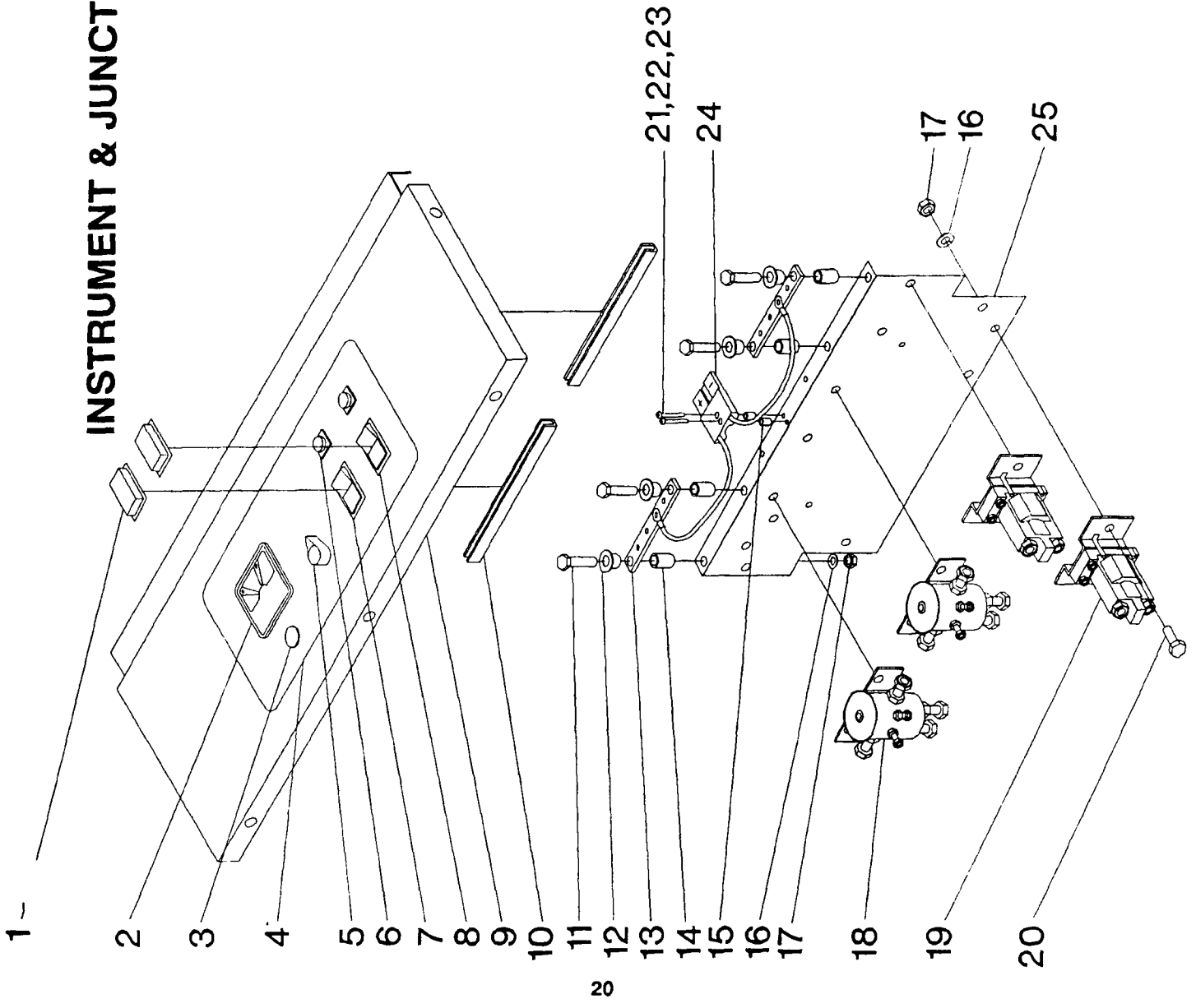
DET	PART NO.	DESCRIPTION	QUANT
33	046831	GROM--1.31 ID,1.50 MHD,.062 PA	1
34	032543	ELBOW ASM-INLET-BOTTOM	1
35	005297	WSHR LK .200ID.334OD.047TSPLT	5
36	033521	ASM,CHAIN-- BALL LINK 7.37L.	1
37	001327	SCR MACH PAN HD 10-24X.750L	3
38	051448	VAC TANK--'MACHINED',D.DRIVE	1
39	049028	TANK SUPPORT	2
40	048818	GUARD-BRUSH LIFT LEVER	1
41	048817	SUPPORT-TANK	1
42	026947	SWITCH,TILT--MERCURY	1
43	051466	CLAMP,LOOP--.297 CLOSED I.D.	3
44	224074	WSHR SEAL .203ID SS	4
45	051692	PIPE,PVC--.50 IDX.62 ODX6.87 L	1
46	048843	BAR,ALUM,HEX--.500, 3.00 LONG	2
47	002380	SCR TPG F PAN HD 10-B X.625L	2
48	047366	STUD-- 10-24X4.50L STL	2
49	038786	BRUSH,MTR--24 AND 36V DC VAC	2
50	047348	LUG MOTOR MOUNT	2
51	023956	MTR,VAC--36V,BYP,2 STG,PD	1
51	096773	MTR,VAC--24V,BYP,2 STG,PD	1
52	026555	CONN,PLUG--2-WR,LINE CONN,MALE	1
53	046817	LINT FILTER	1
54	049355	GASKET-VAC MOTOR	1
55	048239	VAC POT	1
56	048563	GASKET-VAC POT	1
57	048881	SPACER,RBR--.130X1.00, .187L	2
58	004226	WSHR FLT .234ID1.125OD.036TSTL	2

BRUSH HEAD ASSEMBLY



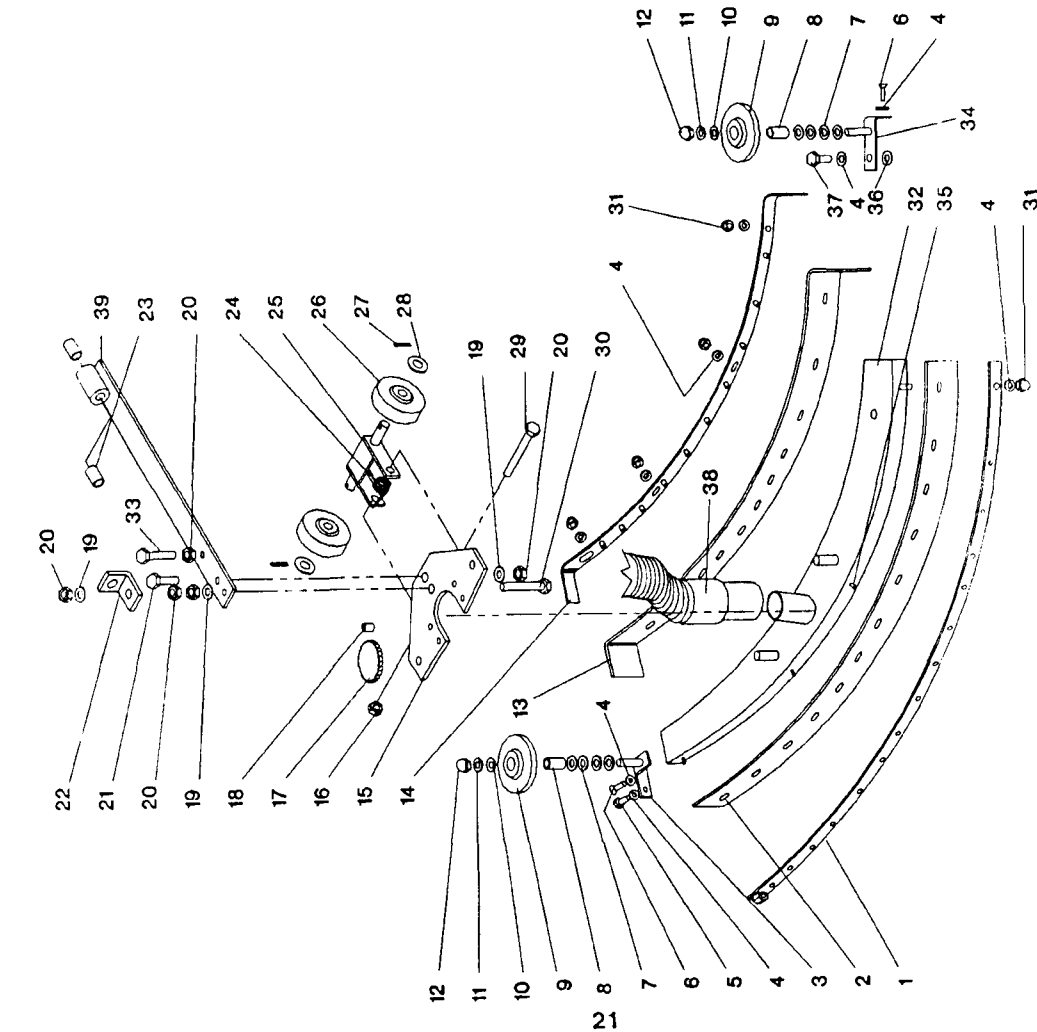
DET	PART NO.	DESCRIPTION	QUANT
1	003293	NUT,HEX--.375-16,ZN PLT	1
2	004214	WSHR LK .390ID.683OD.094TSPLT	10
3	053791	SPACER,STL--.657X.875, 2.50L	1
4	051485	SHAFT,SUPPORT--BRUSH HEAD	1
5	050979	WSHR FLT .625ID1.25OD.120T STL	3
6	053774	SPRING,COMP 1.09D 4.00L .135WD	1
7	024360	ASM,MOTOR&GEAR UNIT--1.0HP	2
8	034408	WDMT,BRUSH HEAD--38 AUTO	1
9	033996	ASM,HUB--BRUSH DRIVE,RIGHT	1
10	051549	LABEL,INSTR--WRN,AUTO	1
11	003262	SCR CAP HEX HD .375-16X1.00L	10
12	051474	CLAMP,LOOP--.609 CLOSED I.D.	1
13	046425	SPACER,PHEN--.250X.437, .250L	1
14	001331	SCR TPG C PAN HD 10-24X.750L	3
15	053261	TUBE,FORMED--AUTO,SOLN,RIGHT	1
16	051466	CLAMP,LOOP--.297 CLOSED I.D.	2
17	053262	TUBE,VINYL--.500X.750, 3.25L	2
18	034407	ASM,TUBE--SOLN,CNTR FEED,38'	1
19	047834	CLAMP,HOSE--.875 MAX DIA,WORM	4
20	053260	TUBE,FORMED--AUTO,SOLN,LEFT	1
21	002237	SCR CAP HEX HD .250-20X.500L	4
22	053277	BRACKET,SOLN TUBE--.75X.75X1.8	2
23	032231	ASM,DRIVE--BRUSH,RIGHT	1
23	032232	ASM,DRIVE--BRUSH,LEFT RING	1
23	046740	RING-BRUSH DRIVE	2
24	048414	PLATE-BRUSH RING SUPPORT	2
25	001494	SCR CAP HEX HD .312-18X2.00L	2
26	005358	WSHR LK--.326ID.586OD.078T SPL	2
27	004509	WSHR FLT .344ID1.00OD.109T,BRS	2
28	046764	BRUSH SUPPORT	2
29	033995	ASM,HUB--BRUSH DRIVE,LEFT	1
29	053221	CASTING--BRUSH DRIVE W/CENTER	2
30	051405	BRACE,SUPPORT--BRUSH HEAD	1
31	004297	PIN,COTTER--.094X .750 LONG	2
32	032614	ASM,YOKE--BRUSH LIFT	1
33	004238	WSHR FLT .531ID1.00OD.071T STL	2
34	003363	NUT,HEX LOCK--.250-20,ZN PLT	4
35	053793	WIRE ROPE--.062 DIA X 10.50L	2
36	005482	SCR TPG F PAN HD 10-24X.875L	4
37	026922	BLOCK,TERMINAL--2 POLE,70 AMPS	1
38	003359	NUT,HEX--.375-24,ZN PLT	12
39	004352	PIN,LOCK--.125 DIA WIRE	2
40	051486	PIN,ALUM.--.375" BRUSH LOCK'G	2
41	048953	BALL JOINT	4
42	049473	BALL JOINT BODY	8
43	044656	KEY,SQUARE--.250 SQ,2.500 LONG	2
44	003434	SCR SET CUP PT 10-24X.50SS	2
45	049631	STRAP-BRUSH RING	6
46	004513	WSHR FLT .281 ID.875OD.036T ZN	36
47	004326	RIVET,TUBE--.250 DIA, .719L	18
48	046425	SPACER,PHEN--.250X.437, .250L	6
49	046898	SPRING-RETAINING	2
50	004328	RIVET,TUBE--.141 DIA, .281L	4
51	046746	BRUSH LUG	6
52	020365	BRUSH,FLAT--20.00D,BASSINE	2
53	033809	ASM,ARM--GUIDE 26&32 BRUSH HD	4
53	052683	ROD STL--THR.,.375-24X4.18L	4
54	050959	LABEL,IDENT--WHT CIRCLE 4.5DIA	2

INSTRUMENT & JUNCTION PANEL ASSEMBLIES



DET PART NO.	DESCRIPTION	QUANT
1	SWITCH PROTECTOR	2
2	VOLTMETER	1
3	BUTTON PLUG	1
4	LABEL, INSTR-OPN,AUTO CONT	1
5	KNOB-WATER CONTROL	1
6	LIGHT, INDICATOR-RED, 36VDC	2
7	SWTCH,RKR-SPST, 10A, 250V, 3/4H	1
8	SWTCH,RKR-SPST, 10A, 250V, 3/4H	1
9	PANEL, INSTRUMENT-32IN AUTO	1
10	U-CHNL, PLSTC-RS 98251, 7.62 L	2
11	SCR CAP HEX HD .250-20X1.50L	4
12	WSHR SHLDR, 250ID, 562OD, 120T, NY	4
13	BAR, STL-.187X.750X 4.00 LONG	2
14	SPACER, PLSTC-.500X.625, .500L	4
15	SPACER, PHEN-.250X.437, .250L	2
16	WSHR LK .262ID, 489OD, .062TSPLT	12
17	NUT, HEX-.250-20, ZN PLT	12
18	SOLENOID, DOUBLE THROW-SWITCH	2
19	SOLENOID-SWITCH, SPNO, 36VDC	2
20	SCR CAP HEX HD .250-20X.500L	8
21	SCR MACH RD HD 6-32X1.25L	2
22	WSHR LK .148ID, 250OD, .031TSPLT	4
23	NUT, HEX- 6-32, ZN PLT	4
24	CHARGER PLUG	1
25	PANEL, JUNCTION-AUTOMATICS	1

SQUEEGEE ASSEMBLY



DET	PART NO.	DESCRIPTION	QUANT
1	034404	WDMT,CLAMP--SQUEEGEE,REAR,38	1
2	054316	RUBBER,SQUEEGEE--REAR,38 AUTO	1
3	034169	WDMT,BRACKET--SQUEEGEE WHEEL	1
4	004254	WSHR LK .267ID,510OD,028T EXT	11
5	006552	SCR CAP HEX HD .250-20X1.00L	1
6	002240	SCR MACH FLAT HD .250-20X.500L	2
7	004505	WSHR FLT .344ID,750OD,062T SS	4
8	053699	SPACER,STL--312X.437,.43L	2
9	053720	WHEEL--4.00DIA,438BORE,.688HB	2
10	004217	WSHR FLT .344ID,625OD,071T STL	2
11	004212	WSHR LK .326ID,586OD,078TSPLT	2
12	005232	NUT,ACORN--312-18,CHROME	2
13	054315	RUBBER,SQUEEGEE--FRONT,38 AUTO	1
14	034403	WDMT,CLAMP--SQUEEGEE,FRONT,38	1
15	034171	WDMT,PLATE--SQUEEGEE	1
16	003368	NUT,HEX LOCK--.375-16,ZN PLT	1
17	047484	KNOB	2
18	002438	SCR SET CUP PT .375-16X.500L	4
19	004214	WSHR LK .390ID,683OD,094TSPLT	3
20	003294	NUT,HEX JAM--.375-16,ZN PLT	5
21	003262	SCR CAP HEX HD .375-16X1.00L	1
22	049009	BRACKET,ANGLE--1.25X1.25X1.00L	1
23	027171	BRG.SLV--.500ID,.625OD,.750W	4
24	E36649	SPRING,TRSN .791D 1.09L .106WD	1
25	034172	WDMT,BRACKET--SQUEEGEE WHEEL	1
26	049261	WHEEL--3.00DIA,380BORE,.875HB	2
27	005383	PIN,COTTER--094X1.000 LONG	2
28	004223	WSHR FLT .406ID,625OD,036T STL	2
29	005443	SCR CAP HEX HD .375-16X3.50L	1
30	002445	SCR CAP HEX HD .375-16-2.50L	1
31	S50472	NUT,ACORN--250-20,NI PLT,HC	7
32	054314	CASTING,SQUEEGEE--38 AUTO	1
33	222620	PIN,ROLL--250 DIA, .875L	3
34	034168	WDMT,BRACKET--SQUEEGEE WHEEL	1
35	222620	PIN,ROLL--250 DIA, .875L	3
36	005373	WSHR FLT .281ID,625OD,062T STL	1
37	223218	SCR CAP HEX HD .250-20X.625L	1
38	033530	ASM,HOSE--VACUUM,GREY,5FT	1
39	034170	ASM,SQUEEGEE BAR--W/WHEELS	1
39	034174	WDMT,SQUEEGEE BAR--PIVOT TUBE	1

THE KENT LIMITED WARRANTY

Your Kent Equipment, which has been manufactured, tested and inspected in accordance with carefully specified engineering requirements, is warranted to be free from defects in material and workmanship.

This warranty is, however, subject to the following qualifications, conditions, and limitations which are set forth to provide you and all users of the Kent Equipment with information concerning 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.

DURATION OF WARRANTY AND TO WHOM EXTENDED

This warranty extends for a period of one year from the date of the original purchase of the Kent Equipment by the original purchaser.

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 cords, gaskets, switches, bumpers, carbon brushes, handle grips, bags, hoses, bearings, 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 not as 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 while in the possession of the purchaser are likewise excluded from this warranty.

If repair is done on your equipment by anyone other than those below 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.

Briggs & Stratton Corporation engines are guaranteed by Briggs & Stratton Corporation for a period of one year. Parts and service are available only through Briggs & Stratton Corporation servicing dealers.

Honda Engines are guaranteed by American Honda Motor Co., Inc. for a period of one year. Parts and service are available only through Honda servicing dealers.

Motor Appliance Corp. guarantees all Mac Battery Chargers to be free from defects in material or workmanship for a period of one year from date of manufacture. The nearest Mac authorized Service Facility should be contacted for service assistance.

FIVE YEAR POLY COMPONENT WARRANTY

Your Kent rotational molded polyethylene parts have been manufactured, tested and inspected in accordance with carefully specified engineering requirements and are warranted to be free from defects in material and workmanship.

This warranty extends for a period of five (5) years from the date of the original purchase of the Kent equipment by the original purchaser.

This warranty will not cover damage attributable to the following:

- (1) Improper, unreasonable or negligent use or abuse of the equipment.
- (2) Use of the equipment with hot water or high temperature above 130° Fahrenheit (54° 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.

PROCEDURE TO BE TAKEN TO OBTAIN PERFORMANCE OF WARRANTY

REPAIRS - To secure repair of the equipment or any warranted parts under this warranty, the following procedure should be taken.

The inoperative equipment or warranted parts, together with satisfactory evidence of the purchase date, must be delivered, with shipping and delivery charges prepaid, to one of the following:

- (1) The Dealer from whom purchased.
- (2) Any Kent Distributor's Service Department in the United States.
- (3) Any Kent Authorized Service Station in the United States.

If you are unable to locate any of the foregoing, you may write or otherwise communicate with The Kent Company for instructions before repair service is performed by anyone else. In such event, The Kent Company will provide either the location of a closely available Kent Distributor Service Department or Kent Authorized Service Station or other factory instructions.

Upon compliance with the above procedure, all warranted defects will be repaired, at no additional charge or cost to the customer, and the repaired product returned to the customer, with all shipping and delivery charges prepaid.

In following the procedures above set forth, PLEASE MAKE CERTAIN to state the Kent model, type and serial number as shown on the data plate of the equipment.

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 REQUESTS 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

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