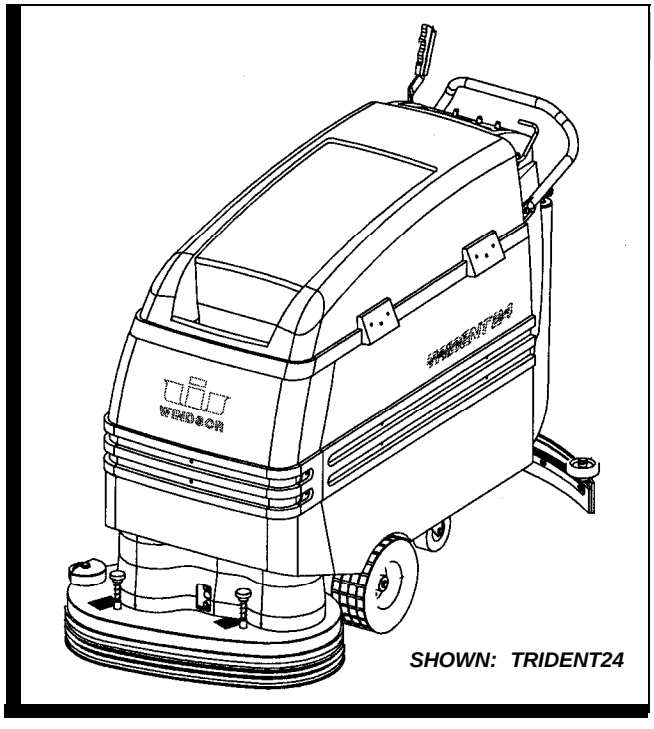
TRIDENT™20
TRIDENT™24

HARD FLOOR SCRUBBERS

WINDSOR®

Operating Instructions **(GB/USA)**



SHOWN: TRIDENT24

MODELS:	*POWER SOURCE*	*SCRUB HEADS*
TR20	***BATTERY***	***1-20”***
TR24	***BATTERY***	***2-12”***

QUEST . . . for Continuous Improvement.
Windsor's Quality Management System is Certified ISO 9001.

Read these instructions before operating machine

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MACHINE DATA LOG

MODEL - _____

DATE OF PURCHASE - _____

SERIAL NUMBER - _____

SALES REPRESENTATIVE - _____

DISTRIBUTOR NAME -

OPERATIONS GUIDE NUMBER - 98412

TABLE OF CONTENTS

The following symbols are used throughout this guide as indicated in their descriptions:

HAZARD INTENSITY LEVEL

There are three levels of hazard intensity identified by signal words **-WARNING** and **CAUTION** and ***FOR SAFETY.*** The level of hazard intensity is determined by the following definitions:

⚠ WARNING

WARNING - Hazards or unsafe practices which COULD result in severe personal injury or death.

⚠ CAUTION

CAUTION - Hazards or unsafe practices which could result in minor personal injury or product or property damage.

FOR SAFETY: To Identify actions which must be followed for safe operation of equipment.

The following information signals indicate potentially dangerous conditions to the operator or equipment. Read this guide carefully. Know when these conditions can exist. Locate all safety devices on the machine. Then, take necessary steps to train machine operator. Report machine damage or faulty operation immediately. Do not use the machine if it is not in proper operating condition.

For SAFETY:

DO NOT OPERATE MACHINE:

- Unless Trained and Authorized.
- Unless Operation Guide is Read and understood.
- In Flammable or Explosive areas.

WHEN USING MACHINE:

- Go slow on grades and slippery surfaces.
- Use care when backing machine.
- Do not carry riders on machine.
- Always follow basic safety and traffic rules.

BEFORE LEAVING OR SERVICING MACHINE:

- Stop on level surfaces.
- Turn off machine.

WHEN SERVICING MACHINE:

- Avoid moving parts. Do not wear loose jackets, shirts, or sleeves when working on machine.
- Block machine tires before jacking machine up.
- Use hoist or jack of adequate capacity to lift machine.
- Disconnect battery connection before working on machine.
- Avoid contact with battery acid.
- Use Windsor approved replacement parts.

WHEN TRANSPORTING MACHINE IN A TRAILER:

- Make sure the ramp is no more than at a 10° angle, and is strong enough to support the machine.
- Make sure ramp is clean and dry.
- Put ramp into position.
- Remove squeegee assembly & brushes before loading.
- Align the machine on a level surface ten (10) feet behind the ramp.
- Turn main switch on.
- Turn the speed control knob to half speed.
- Squeeze the propel levers slowly, propelling the machine into position.
- Turn the main switch off.
- Securely fasten the machine to the trailer.

⚠ WARNING

Batteries emit hydrogen gas. Explosion or fire can result. Keep sparks and open flame away. Charge in a well ventilated area.

⚠ WARNING

flammable materials can cause an explosion or fire. Do not use flammable materials in tank(s).

⚠ WARNING

flammable materials or reactive metals can cause explosion or fire. Do not pick up.

INFORMATION IN THIS GUIDE

This Owner's Guide contains valuable information about the operation , maintenance , service and part numbers for repairs of your Windsor machine. Please read this introductory page throughly to become familiar with the contents of the owner's guide, making the information you are looking for easier to locate.

The owner's guide consists of multiple sections of reference information , and the remainder contains part number information for ordering parts for the machine. At the top of each page is the name of the particular section. This way you can quickly locate each section more easily.

REFERENCE SECTIONS

The reference information sections of this guide are as follows; General Information, Operation, Maintenance.

GENERAL INFORMATION

This section of the guide contains safety precautions. The Safety Precautions are an overview of the safety measures to be observed when operating and maintaining the machine.

OPERATION

The Operation section of the guide contains the information needed to operate the machine. There is a complete list of instruments and controls on the machine, an overview of machine operation, and information on how to transport and store the machine.

MAINTENANCE

The Maintenance section contains the information on the suggested maintenance procedures and adjustments to keeping the machine in top operating condition. The section includes a maintenance schedule and the areas of the machine to be addressed. Each subject of maintenance is covered in more detail in such areas as Lubrication, Motors and Electrical System.

PART SECTIONS

To easily locate the part needed, please refer to page 2 for component locations to find the general area where the part is located. Use the information to quickly locate the correct component. The remaining sections of the guide contain part number information for ordering repair parts for the machine. The guide contains part number information on every model of machine model available. Therefore there will be part number information in your guide which you will not need to refer to when placing an order

ORDERING REPAIR PARTS

If you are in need of technical assistance contact your WINDSOR Distributor or Service Center for further assistance.
Once you have located a part to order, call your local WINDSOR distributor. Make sure to have the machine's serial number and your Owner's Guide with you to aid in ordering the correct component.

NOTES:

WINDSOR®

HOW IT OPERATES

The **TRIDENT** is a battery powered walk-behind scrubber. The machine is propelled by a DC motor.

The main scrubbing components include a solution /recovery tank, disc-type brushes, a rear squeegee and a vacuum fan. Detergent solution and water flow from the solution tank to the scrub brushes. The rotating brushes scrub the floor. As the machine moves forward, the rear squeegee collects the dirty solution and channels it into the vacuum of the squeegee pickup hose. The pickup hose deposits the dirty solution into the recovery tank.

INSTALL BRUSH(ES) OR PAD DRIVERS:

1. Make sure power is off.
2. For Pad Driver(s) install pad to driver back and secure with center lock.
3. Raise scrub deck **(15).** Standing behind the machine raise the scrub deck with the foot pedal.
4. Using the sight hole in the deck, place the hexdriver of the motor against the hex plate of the brush. Rotate the brush counterclockwise, aligning the hex plate and the hex receiver in the brush with the hex driver. Then raise the brush up into place, allowing the hex plate to spring back into the locked position. This same procedure applies to pad driver installation.

Fill Solution Tank

1 Push open lid and fill.
2. Use a clean bucket or hose to fill the tank with water.

⚠ CAUTION

Do not use water temperatures in excess of 1405 F (605 C). Water which is too hot may distort the polyethylene tanks.

3. Add a cleaning concentrate for use in automatic floor scrubbers. Use the cleaning chemical measuring recess in the solution fill door, or any other measuring container to achieve the correct ratio. Closely follow the manufacturer's instructions found on container. Read ingredients listed on the container to ensurecompatible chemicals are used.

⚠ CAUTION

Use only the suitable chemicals listed below. Using incompatible chemicals may damage the machine. Damag es of this type are not covered under the WINDSOR Three Year Protection Plan. Carefully read ingredients on manufacturer's label before using any product in this machine..

SUITABLE CHEMICALS	INCOMPATIBLE, CHEMICALS
Alkalis	Aldehydes
Defoaming Agents	Carbon Tetrachloride
Detergents	Chlorinated Hydrocarbons
Hydroxides	Methyls (MEK)
	Perchlorethylene(perc)
	Phenols
	Trichlorethylene

BEFORE OPERATING MACHINE

*Perform Daily Maintenance Procedure *(See page 7).*

- Install brush(es) or Pad driver(s).

NOTE: SEE PAGE 6 FOR LOCATION OF CONTROLS.

Turn on power

1 Place main power switch (1) to on position.
2. Place brush switch (2) to on position.
3. Place solution switch (3) to on position.

Note: Brushes and solution will only turn on when machine is propelling.

Lower Scrub Deck and Squeegee

1 Lower the scrub deck to the ground with the foot pedal (15)

Note: For heavy scrub, lock the pedal in by lifting it into the top notch.

2. Lower the squeegee to the ground and turn on the vac lever (10).

Begin cleaning

1 Slowly squeeze the propel levers. The machine will begin to move, the brush(es) will begin to spin and the solution will start to flow.
2. Adjust the speed using the control knob (14)
3. Set amount of solution flow with solution lever (11).

When solution tank is empty or recovery tank is full or when job is finished.

1 Drive machine to proper dirty solution dump sight.
2. Use the recovery drain hose (12) to drain the dirty solution.
3. Open the main top cover. Remove the vac motor, and the float shut off screen. Rinse off the float shut off screen assembly.
4. After the dirty solution has drained, rinse out the recovery tank through the opening in the top. Carefully remove any larger objects from the recovery tank that will not drain out through the hose.
5. Install the float shut off screen assembly back into the recovery tank.

Note: Align the flat surface of the screen assembly with the flat cutout in the recovery tank.

6. Install the vac motor back into position

Note: Make sure that the rubber vac motor gasket is seated in its proper position.

7. Install the plug in the recovery drain hose (12) and attach the assembly to its hanger.

- If job is finished, preform the daily ending maintenance procedure. See page 7
- *If more cleaning is to be done go back to the beginning of the operations manual and follow the same step for cleaning.*
- For problems during these procedures see Trouble Shooting Section
- For any necessary adjustments to the squeegee or anything else see the Maintenance Section.

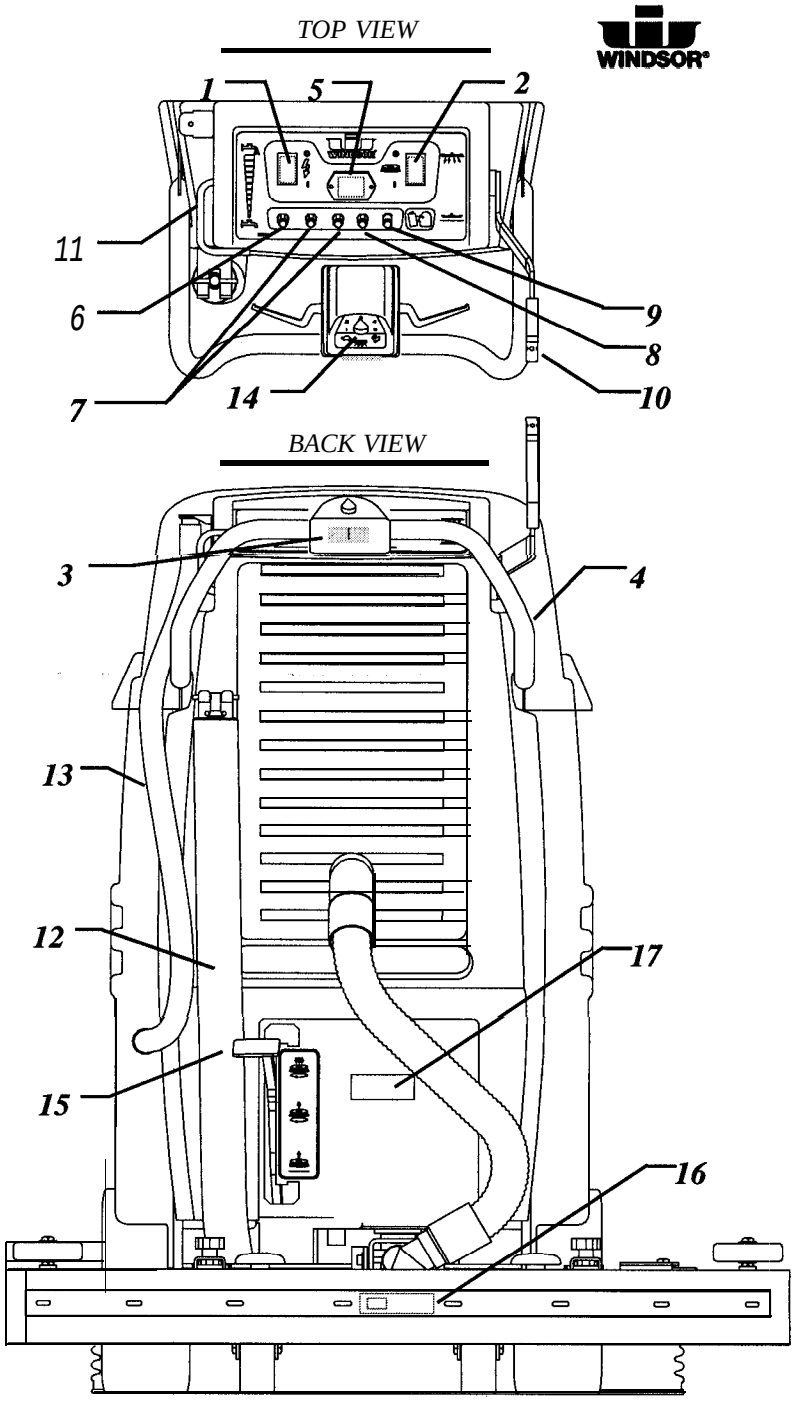
TO SCRUB:

Plan your scrubbing route in advance. Try to arrange long runs with minimum stopping and starting. Do an entire floor section at a time. Pick up any debris that is oversized and remove bulky debris from aisles before scrubbing. Pick up pieces of wire, string etc., which could become entangled in the scrub brushes. Then sweep or dust mop the area.

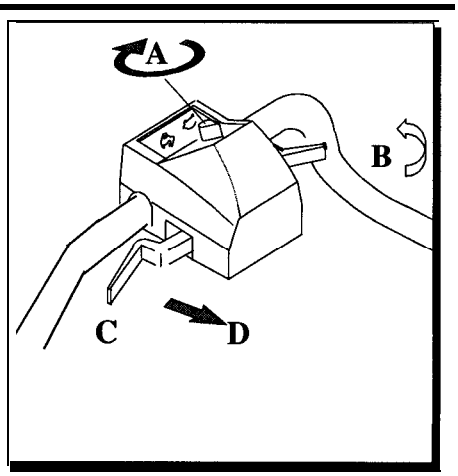
Adjust the machine speed, scrub deck pressure, and solution flow as required. Use minimum scrub brush pressure and solution flow required for the best possible scrubbing results.

OPERATION CONTROLS

1. ***Main Power Switch.*** Turns on and off the main power to the machine.
2. ***Brush Switch.*** Turns the brushes on/off.
3. ***Solution Switch.*** Located on the main handle, turns on and off the solution system.
4. ***Main Handle.***
5. ***Battery Charge Level Indicator.*** Indicates the amount of energy left in the batteries.
6. ***Main Switch Circuit Breaker.*** Protects the electrical controls.
7. ***Brush Motor Circuit Breakers.*** Protects brush motor system.
6. ***Vac Motor Circuit Breaker.*** Protects the vac motor from system.
9. ***Drive Motor Circuit Breaker.*** Protects drive motor from system.
10. Squeegee ***Lift & Vac Lever.*** Raises and lowers the squeegee, and turns the vacuum motor on/off.
11. ***Solution Lever.*** Controls the amount of flow of solution to the floor.
12. ***Recovery Tank Drain Hose.***
13. ***Solution Tank Drain Hose.***
14. ***Speed Control.*** Adjusts the drive motor speed.
15. ***Brush Pedal.*** Lowers and raises the scrub deck. Lock in for heavy scrub pressure.
16. ***Squeegee Blade Release Latch.*** Releases the rear squeegee blade for adjustment or replacement.
17. ***Serial # Plate.*** Indicates serial number and model of machine.



TRACTION DRIVE CONTROLS



A The speed the machine will travel is regulated by the knob ***(14)*** located on the propel control, on the main handle. Turn the knob to the right to increase the speed of the machine.

B Squeezing one or both of the control levers will propel the machine forward, at the selected speed.

C Releasing both control levers will stop the machine. Also it will stop the brushes from turning and the solution from flowing.

D Pressing forward on the levers moves the machine backwards, at the selected speed.

	Maintenance Item	Daily	Weekly	Monthly	Annually
Before Starting the Work Period	Check Battery water level	*			
	Check Vac Hose Connections	*			
	Clean the Squeegee Blades	*			
	Inspect Brushes or Pads	*			
	Inspect Vac fan shut off float screen	*			
End of Work Period Before Storing	Drain & Rinse Tanks	*			
	Raise Squeegee Assembly	*			
	Raise Scrub Deck Assembly	*			
	Charge the Batteries	*			
	Remove the Pad Drivers/Brushes	*			
	Check the Brushes/Padsfor Damage and or wear	*			
	Clean Squeegee blades	*			
	Clean recovery tank vac shutoff & screen	*			
	Check Battery Cells w/Hydrometer		*		
	Check Solution Strainer		*		
	Check Chain,Pivot Points, Caster, and Squeegee for proper lubrication		*		
	Inspect tank and hoses		*		
	Clean tops of Batteries and Tray			*	
	Check Battery Cable Clamps			*	
	Use a Vacuum to remove lint from the motor windings			*	
	Grease Squeegee pivot and Casters			*	
	Inspect all motors for carbon Motor Brush Wear.				*

NOTE: Details on these maintenance items can be found on the following pages.

LUBRICATION:

The following symbols are found throughout the manual indicating the items requiring lubrication:

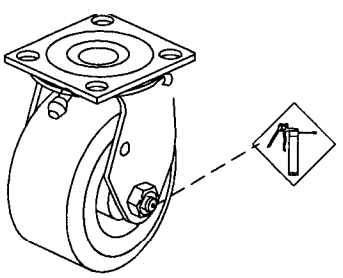
Apply Grease

Use Spray Lubricant.

Thread Locking Adhesive (Red or blue).

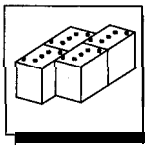
Use Anti-Seize when repairing.

EXAMPLE:



⚠ CAUTION **Do not use pressure washers to clean sealed gearboxes or bearings. If it becomes necessary to clean under machine with a pressure washer, ensure all items noted are relubricated.**

BATTERIES



1. When cleaning batteries use a solution of baking soda and water. (Do not allow cleaning fluid to enter inside battery cells.)
2. Keep proper electrolyte level in battery cells.
3. Wipe down the battery tops at least once a week. If a cell should accidently overflow, clean immediately.
4. Test battery condition with a hydrometer at least once a week.
5. Ensure that all connections are tight and that all corrosion is removed.
6. Every 4 to 6 months remove batteries from the machine and clean the battery compartment.las baterias de las máquinas y limpie su compartimento.

Battery Charging Procedure:

Charge the batteries once the amber charge level light comes on. The amber light indicates that there is about 20% charge left in the batteries. **Do not let the batteries completely drain before charging.** Avoid charging the batteries before the amber light comes on. The machine will run four hours on fully charged, well maintained batteries.

⚠ WARNING

DO NOT SMOKE, HAVE OPEN FLAMES, OR SPARK NEAR BATTERIES AT ANY TIME

⚠ WARNING

WEAR EYE PROTECTION AND PROTECTIVE CLOTHING WHEN WORKING WITH BATTERIES.

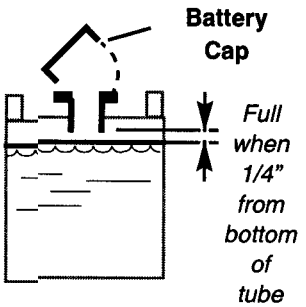
⚠ WARNING

CHARGE BATTERIES IN A WELL VENTILATED AREA

1. Use a 24 volt, 18 amp max. output, D.C. charger For 250 NH batteries. Select a charger which turns itself off when the batteries are fully charged. The charger must have a connector that matches the machines battery connection.
2. Read the instructions and warnings provided by the battery charger manufacturer.
3. Set the charger in a well ventilated area on a level surface. Make sure cords will easily reach outlets on both machine and wall.
4. Connect charger to D.C. outlet on batteries first.
5. Connect the A.C. power cord to properly grounded wall socket. **NEVER MAKE THE A.C. CONNECTION FIRST, HAZARDOUSSPARKS MAY RESULT.**
6. After the batteries are completely charged disconnect the charger from the A.C. wall socket. Once the charger is disconnected from the A.C. wall socket it is safe to disconnect the charger from the batteries.

Battery Charging Procedure:
(Continued)

7. When the batteries are fully charged, check the electrolyte level by removing the caps on top of the batteries. If necessary fill the cells with distilled water as shown in the diagram to the right. Be careful not to overfill cells.

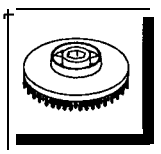


BRUSHES

Brush Installation:

See page 5 under "Install Brush(es) or 'ad Drivers", steps through 4

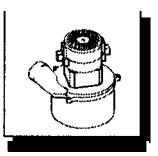
Brush Removal:



1 Turn off the main power switch.
2. Raise the scrub deck using the pedal at the rear of the machine.
3. Depress the brush release arm knobs on the scrub deck.
4. Using the sight holes in the scrub deck rotate the brush clockwise until one of the legs of the brush release plate is engaged by the brush release arm knob.
5. Continue to rotate the brush plate leg back and aligning the hex in the plate with the hex in the brush.
6. Lower the brush down off of the motor hex driver, and release the brush release asm knob.

VACUUM MOTOR

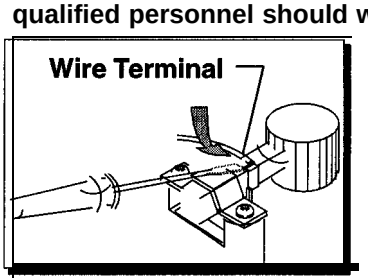
The vacuum motor is mounted under the battery hood at the rear of the machine. Tilt the main cover open to gain access to the vacuum motor.



After the machine has been used for any wet pick-up, Allow the vacuum motor to run 1-2 minutes, to help reduce moisture build-up in the vacuum motor. Drying out the vacuum motor after each use will extend the life of your vacuum motor.

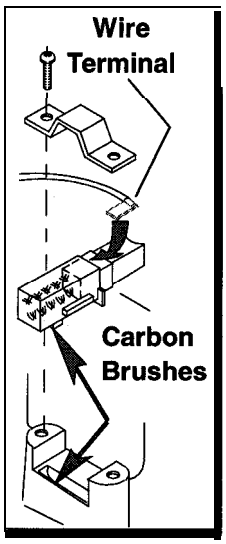
⚠ WARNING

Hazardous Voltage. Shock can result. Disconnect batteries before working on machine. Only qualified personnel should work inside machine.



Important:
When replacing carbon vac motor brushes loosen wire terminal BEFORE removing screws on bracket.

BRUSH REPLACEMENT PROCEDURE cont.

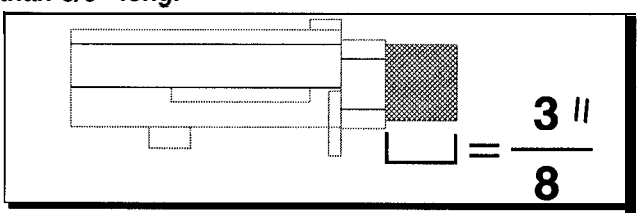


Important:
Replace carbon vac motor brushes if worn down to 3/8" in length. These brushes wear quicker as the length shortens due to increased heat.

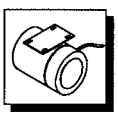
Spring inside brush housing will damage motor if brushes are allowed to completely wear away.

Note: Place stop in groove.

NOTE: Periodically check the length of the carbon brushes. Replace carbon brushes which are less than 3/8" long.



DRIVE MOTOR

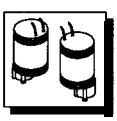


If a problem arises with the drive motor please contact your WINDSOR distributor. The Trident achieves its forward and backward motion by a direct drive connection between the drive motor and a chain driven differential.

DRIVE AXLE BEARINGS:
The drive axle bearings are sealed and do not need to be lubricated to ensure their smooth operation.

BRUSH MOTORS

⚠ WARNING



Hazardous Voltage. Shock can result. Disconnect batteries before working on machine. Only qualified personnel should work inside machine.

The brush motors turn the pad drivers/brushes at 200 rpm. The motors are counter-rotating . This action aides to channel the solution to the center of the machine to improve solution recovery.

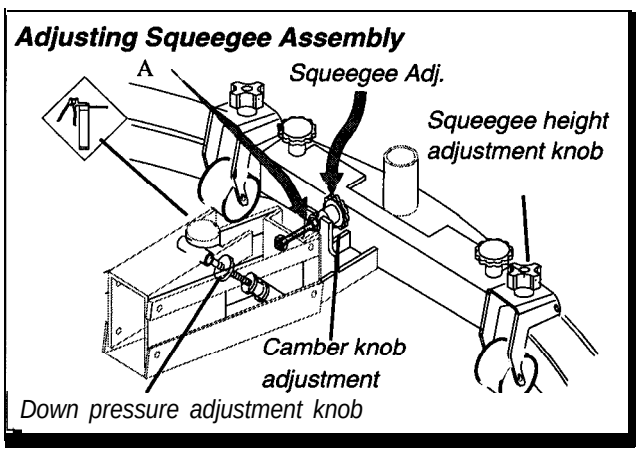
The carbon brush life of the drive motors is estimated at 2000 hours. At 500 hours of use, carbon brushes should be checked; replace them at the length of 3/8".

SQUEEGEE ASSEMBLY

Before and during use of machine, use a damp cloth to wipe the outside and inside of squeegee to remove buildup of foreign material on the squeegee blades. This prevents streaking and residue on the floor.

Squeegee wear:
After extended use, the squeegee blades will wear. To improve squeegee performance and extended wear. Proceed as follows

1. Turn off all switches and place the machine on a level surface. Raise the squeegee.
2. Loosen the knobs on the left and right hand sides of squeegee until the squeegee asm can be removed from the squeegee bracket.
3. Loosen the fasteners on front of squeegee to replace or flip the front blade.
4. Unlatch the rear squeegee straps to replace or flip the rear blade.

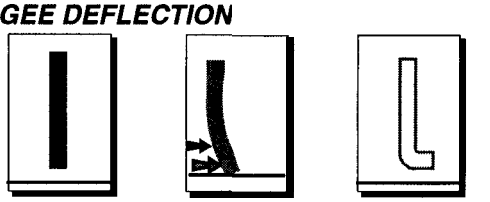


1 Lower the rear squeegee and move the machine forward.
2. Observe the level of the squeegee for an even curl along the length of the blade.
3. Loosen the jam nut (A) and turn knob for appropriate squeegee deflection. (Shown below)
4. Adjust the down pressure adjustment knob.
5. Adjust each squeegee height adjustment knobs for proper squeegee deflection.

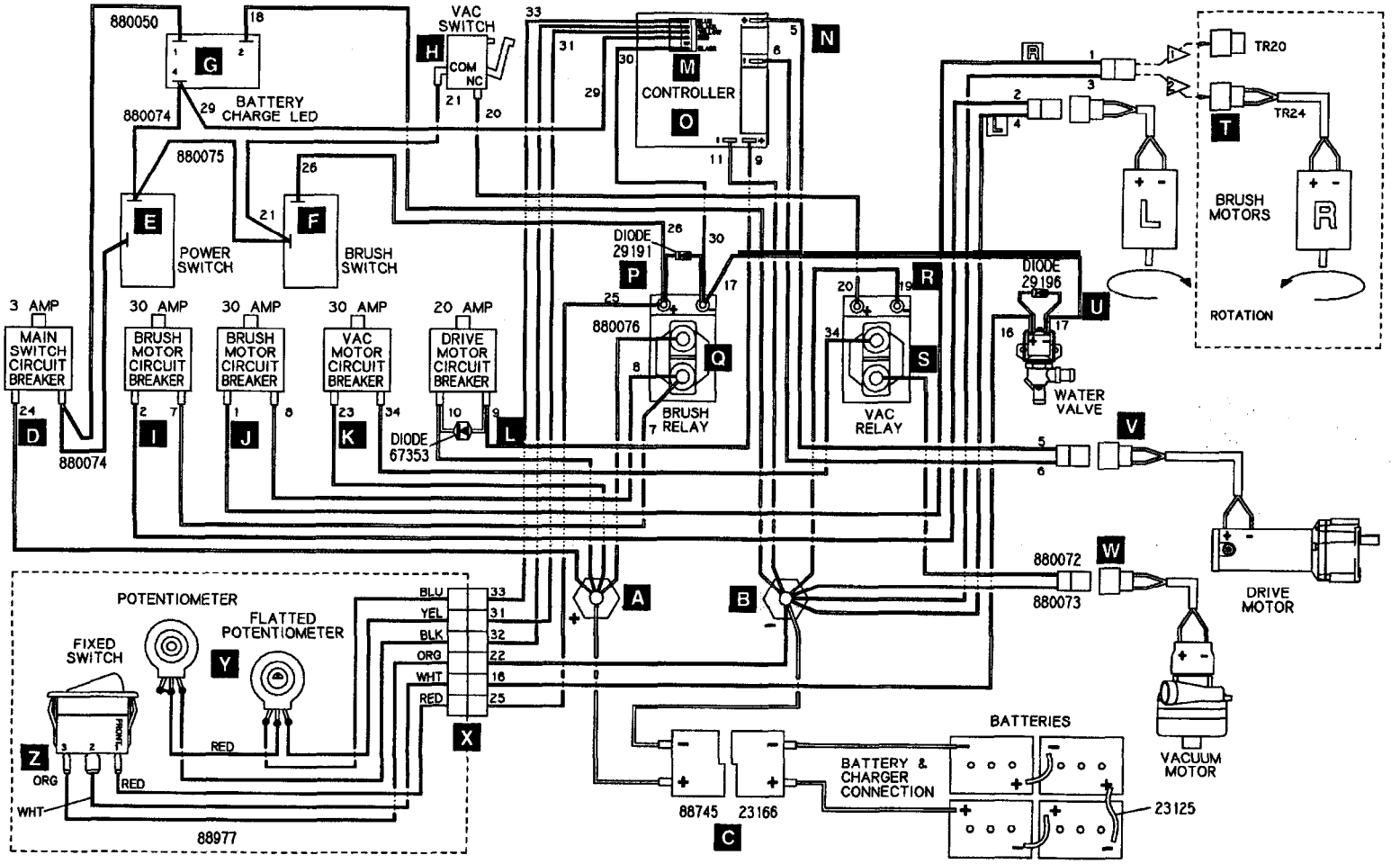
Lubricating Squeegee Pivot

1 Locate squeegee pivot assembly (shown above) and grease at zert.
2. Wipe any excess from the assembly.

SQUEEGEE DEFLECTION



WIRING DIAGRAM



WIRE #	1	2	3	4	5	6	7	8	9	10	11	16	17	18	19	20	21	22	23	24
COLOR	RED	RED	BLK	BLK	ORG	BRN	BLU	BLU	RED	RED	BLK	YLW	BLK	BLK	BLK	GRN	GRN	BLK	RED	RED
WIRE #	25	26	29	30	31	32	33	34												
COLOR	BLU	BLU	RED	BLK	YLW	BLK	BLU	RED												

TROUBLE SHOOTING GUIDE

Note: Proceed through trouble shooting list from start to finish. Do not start anywhere else.

⚠ WARNING **Hazardous Voltage. Shock can result. Disconnect batteries before working on machine. Only qualified personnel should work inside machine.**

TRACTION DRIVE CONTROL SYSTEM *REFERENCE WIRING DIAGRAM PAGE 10*

PROBLEM: NO power to machine.
Note: Batteries must be plugged in, main power switch on, and battery meter should read Voltage,

CHECK:	*Corrective Action*
Check main switch breaker 3A	Reset breaker.
Check connections at C, **A, B, D, E,** G and at batteries.	Secure connection; clean connection.
Check voltage at each battery. Should be 6V each and 24V	Check water level of batteries and charge. Replace if problem remains.
Check voltage at A & B; should be 24 volts.	Bad wires to battery.
Check voltage at both sides of **D,** should be 24 volts.	Reset breaker, if still no voltage unplug batteries and wires at D and check continuity of breaker. Replace if necessary.
Check voltage at both sides of **E,** should be 24 volts.	Turn switch on and off, if still no voltage, unplug batteries, check continuity of switch in on and off position. Replace if bad.

PROBLEM: Brush motors do not run.
Note: Batteries must be connected, main power switch on, brush switch on and propel fevers engaged,

CHECK:	*Corrective Action*
Check brush circuit breakers two 30 Amp	Reset breaker.
Check connections at **E, F, I, J, M, P, Q, T.**	Secure connection; clean connection.
Unplug connections at **T** and check to see if brushes and motors rotate freely.	Fix or replace as necessary.
Check for voltage at both sides of F.	If not disconnect batteries and wires at **F** and check for continuity. Replace if necessary.
Check for positive and negative voltage at P when the propel levers are engaged, unplug the propel motor at V if necessary.	If no voltage, go back to propel trouble shooting and replace components as necessary.
Check for voltage at both sides of **Q** with propel lever engaged.	If not on both sides replace components as necessary.

TROUBLE SHOOTING GUIDE

Note: Proceed through trouble shooting list from start to finish. *Do not start anywhere else.*

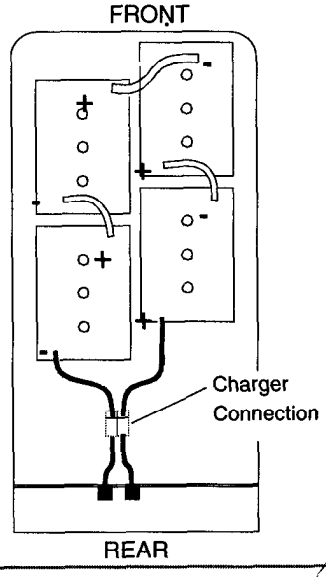
⚠ WARNING **Hazardous Voltage. Shock can result. Disconnect batteries before working on machine. Only qualified personnel should work inside machine.**

TRACTION DRIVE CONTROL SYSTEM *REFERENCE WIRING DIAGRAM PAGE 10*

PRQBLEM: NO PROPEL MOTION. **Note:** Batteries must be connected, main powe switch on, speed knob turned up, and propel levers engaged.	
CHECK:	***CORRECTIVE ACTION***
Check propel circuit breaker 20 Amp.	Reset breaker.
Check connections at G, M, 0, N, **V,** X, Y.	Secure connection; clean connection.
Unplug connection V, try to roll machine, check ease of operation of wheels, differential, chain and motor.	Fix or replace as necessary.
Unplug connection V, check voltage at harness side of plug. With the speed control set to fast squeeze the propel levers and measure the voltage at **V,** should be 20 to 24 volts.	If voltage, replace propel motor
Check voltage at both sides of **L,** should be 24 volts.	Reset breaker. If still no voltage unplug batteries and wiresat L and check for continuity of breaker. Replace if necessary.
Check voltage at harness side of 0 and voltage at board side of N.	If voltage at 0 and no voltage at N. Replace propel control board.
PROBLEM: VACUUM MOTOR DOESN'T RUN	
CHECK:	***CORRECTIVE ACTION***
Circuit breaker tripped.	Reset vacuum motor breaker (30 amp).
Faulty vac motor circuit breaker.	With main switch on, and vac switch on; check voltage at both sides of K. Voltage should be 24 VDC (nominal). If not, remove leads check continuity between circuit breaker terminals. Replace if necessary.
Loose connection.	Check connections at Vac relay. Keep all connections tight.
Faculty vac switch.	Check for continuity. Replace.
Faculty vac relay.	With main switch on, and vac switch on; check voltage across **R** and both sides of S and across **W** Voltage should be 24 VDC (nominal).
Worn motor brushes.	Replace.
PROBLEM: SQUEEGEE WILL NOT TRACK P	
See page 10 for proper adjustment details on greasing of pivot assembly.	

Ref	Part No.	Description	Serial No. From	Serial No. To
1	78343	*Tray, Battery liner*		
2	78344	*Tray Assembly, Battery*		
3	23166	*Cable Assembly, Battery connection*		
4	23125	*Cable Assembly, Battery jumper x 15.0*		

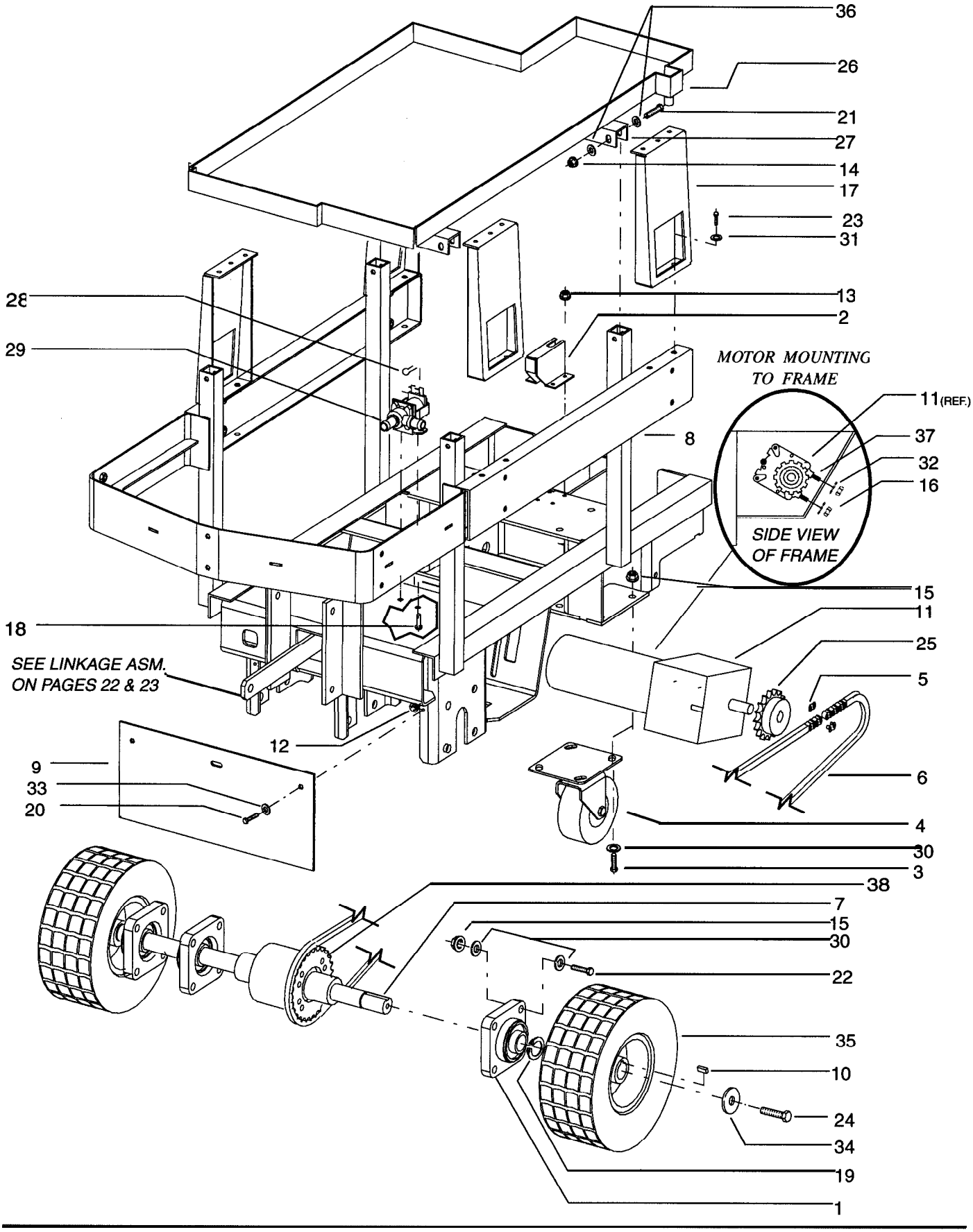
VIEW: Looking down on machine.
recomendado de la batteria para la TR20/24
NOTE: Following you will find the recommended battery arrangement for the TR20/24.



Red = + (POSITIVE)

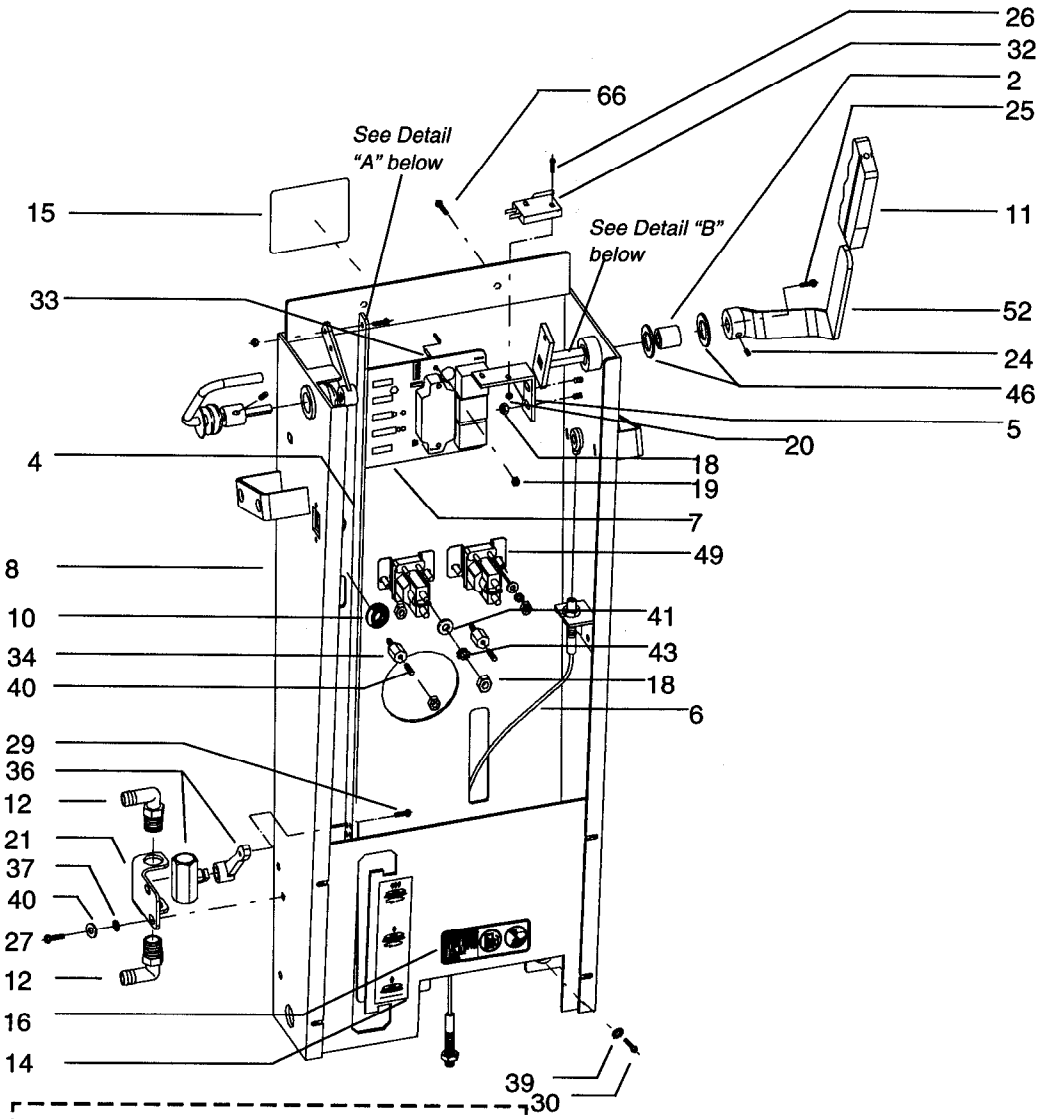
Black = - (NEGATIVE)

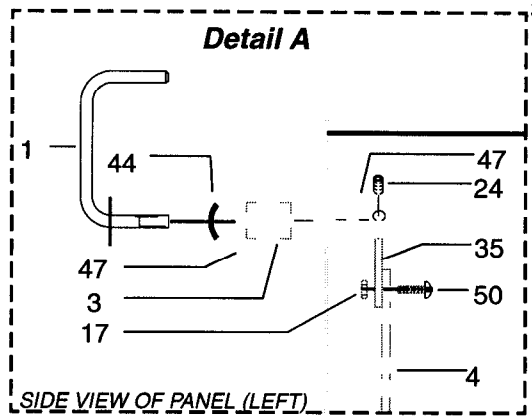
MAIN FRAME ASSEMBLIES

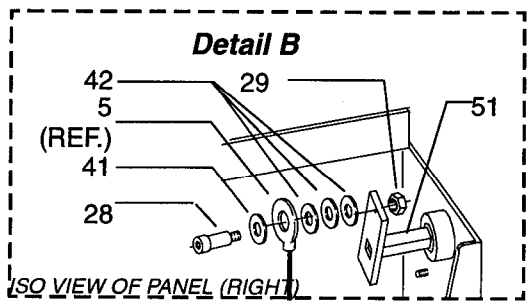


Ref	Part No.	Qty	Description	Serial No. From	Serial No. To	Notes:
1	09118	3	BEARING, DIFFERENTIAL			
2	14919	1	BRACKET, LIFT CABLE PULLEY			
3	70266	8	SCR, 3/8-16 X 1 .O HHCS GR5 PLTD			
4	18027	2	CASTER, 4.0 POLY. SWIVEL			
5	27343	1	CHAIN, #40, 1/2 P MASTER LINK			
6	27700	1	CHAIN, #40, 1/2 P, 23.5 L			
7	29187	1	DIFFERENTIAL, 1 .0 OD X 19.62 L			
8	34297	1	FRAME ASM, TR20/24			
9	36180	1	GUARD, SPLASH TR20/24			
10	48040	2	KEY, 1/4 X 1/4 X 1.0			
11	53607	1	MOTOR, 24 VDC 1/2 HP, 101 RPM			
12	57030	11	NUT, 10-32 NYLOCK			
13			OPEN			
14	57047	4	NUT, 1/4-20 NYLOCK PLTD.			
15	57119	33	NUT, 3/8-l6 HEX NYLOCK PLT			
16	57128	4	NUT, 5/l6-24 LOCK PLTD			
17	62578	4	PLATE, PANEL BRACKET TR20/24			
18	66116	2	PIN, CLEVIS 1/4" X 3/4" PLTD.			
19	67270	2	RING 1 .O EXT. SNAP			
20	70066	3	SCREW, 10-32 X 3/4 PPHMS			
21	70022	4	SCREW, 1/4-20 X 2.00 HHCS PLTD.			
22	70255	12	SCREW, 3/8-16 X 1.5 HHMS PLTD			
23	70270	8	SCREW, 1/4-20 X .75 HHCS PLTD			
24	70432	2	SCREW, 5/16-24 X .75 HHCS SS			
25	73793	1	SPROCKET, #40, 112 P, 17 T, 5/8 B			
26	78343	1	TRAY, BATTERY LINER TR20/24			
27	78344	1	TRAY ASM, BATTERY TR20/24			
28	80604	2	RING, RUE COTTER 1/4" PLTD.			
29	84141	1	VALVE, SOLND. 24 VDC, 112 HOSEBARB			
30	87003	32	WASHER, 3/8 ID X 718 OD SS			
31	87025	8	WASHER, .25 LOCK EXT. STAR SS			
32	87120	4	WASHER, 0.32ID X 0.75 OD GRADE 8			
33	87093	3	WASHER, 310 X 1 .O FENDER PLTD.			
34	87102	2	WASHER, 5/16 X 1.25 OD			
35	89098	2	WHEEL, 8.0 DIA, 1 .O B, 1/4 KEYWAY			
36	87013	8	WASHER, 1/4 ID X 5/8 OD SS			
37	70611	4	SCREW, 5/16-24 X 1.25 SHSS PLTD			
38	73965	1	SPROCKET, #40 1/2P 27 TEETH			SERVICE ITEM

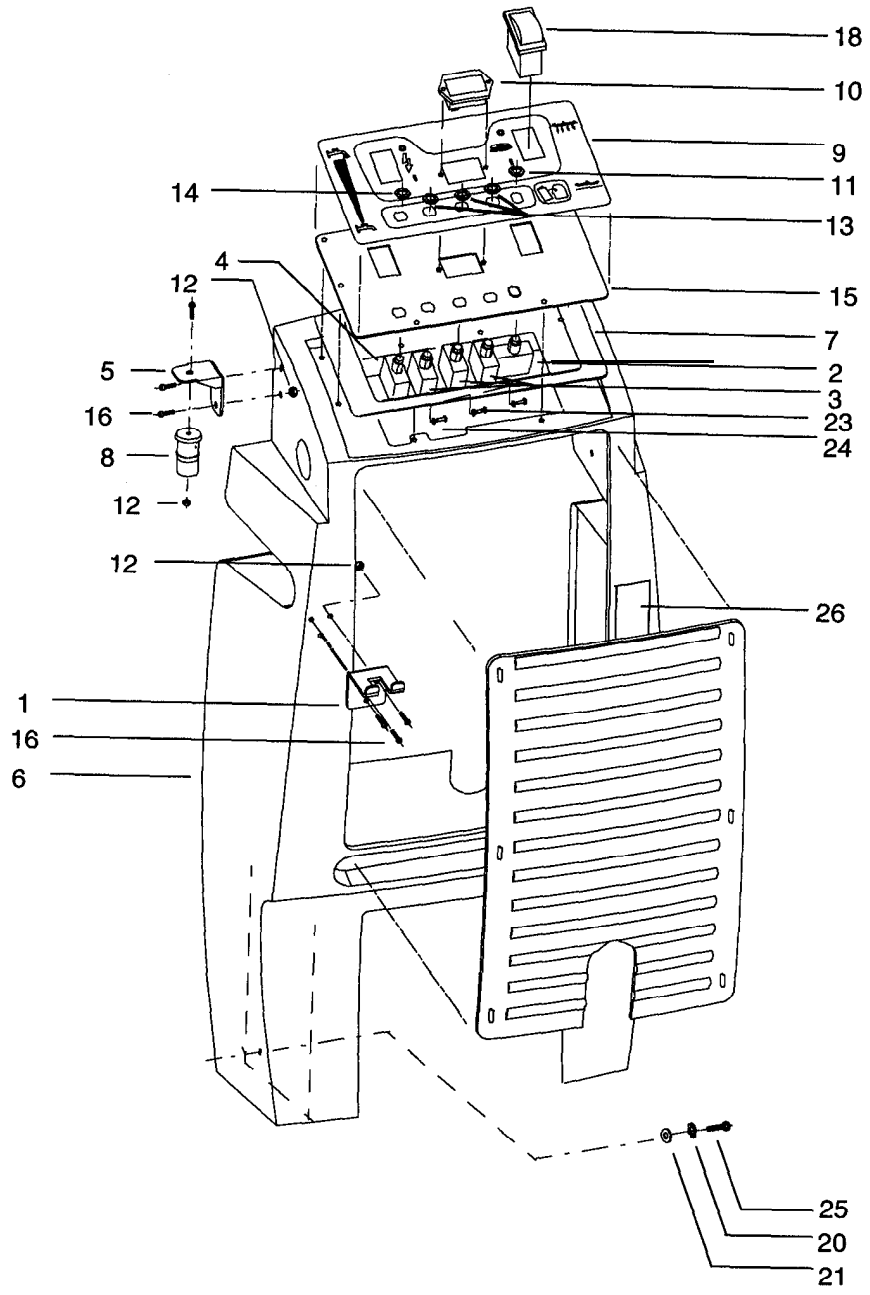
TOWER ASSEMBLY







Ref	Part No.	Qty	Description	Serial No. From	Serial No. To	Notes:
1	05098	1	ARM, 5/16 BENT			
2	140053	1	BUSHING, .75 OD X .376 SQ.			
3	140056	1	BUSHING, BRONZE .75 ODx.32 IDx.75 L			
4	140128	1	BRKT, LINK SOLUTION VALVE			
5	14995	1	BRKT, MICROSWITCH MTG.			
6	23666	1	CABLE ASM, TR20/24 SQG LIFT			
7	27695	1	CONTROLLER, 24 VDC PROPEL			
8	34299	1	FRAME ASM, REAR TOWER			
9	35191	1	GASKET, SWITCH PLATE TR20/24			
10	36020	1	GROMMET, 5/8 ID X 1.12 OD			
11	36133	1	GRIP, 3/16 X 1 .O FLAT BAR			
12	40027	2	HOSEBARB, 3/8 MPT X 1/2 NYLON			
13	41317	1	HARNESS, TR20/24			
14	50740	1	LABEL, SCRUB DECK INDECATOR			
15	50741	1	LABEL, CHARGE, WARNING			
16	50742	1	LABEL, SQUEEGEE WARNING			
17	57030	7	NUT, 10-32 NYLOCK PLTD			
18	57047	9	NUT, 1/4-20 NYLOCK PLTD			
19	57106	2	NUT, 8-32 W/STAR WASHER PLTD			
20	57233	2	NUT, 4-40 HEX NYLOCK PLTD.			
21	62613	1	PLATE, SOLUTION VALVE BRKT			
22	70067	6	SCREW, 6-32 X 3/8 PPHMS			
23	70088	2	SCREW, 10-32 X 1/2 PPHMS			
24	70119	2	SET SCREW, 1/4-20 X 3/8 KCP			
25	70190	1	SCREW, 1/4-20 X .50 BHCS			
26	70245	2	SCREW, 4-40 X .75 PHMS PLTD			
27	70270	2	SCREW, 1/4-20 X .75 HHCS			
28	70296	1	SHOULDER BOLT, 5/16 OD X 1/2 L			
29	70317	1	SCREW, #8A X .50 PHST			
30	70377	3	SCREW, 3/8-16 X 1.25 HHCS GR5 PLT			
31	70393	2	SET SCREW, 1/4-20 X 1.25L			
32	72139	1	SWITCH, MARINER VAC SHUTOFF			
33	73734	2	SPACER, 0.166IDX.0313ODX.375L			
34	73659	2	STANDOFF, INSULATOR			
35	73789	1	ARM ASM, SOLUTION STOP			
36	84075	1	VALVE, 3/8 FPT BALL			
37	87013	2	WASHER, 1/4 ID X 5/8 OD SS			
38	87018	2	WASHER, #10 X 9/16 OD			
39	87024	3	WASHER, 3/8 STAR SS			
40	87025	2	WASHER, 1/4 LOCK EXT. STAR SS			
41	87029	5	WASHER, 5/16 FLAT SAE SS			
42	87030	3	WASHER, 3/8 ID X .75 OD NYLON			
43	87067	4	WASHER, 5/16 LOCK INT STAR PLT			
44	87074	1	WASHER, 3/8 ID X .010 WAVE			
45	70586	2	SCR, 1/4-20 X 3/4 BLK PPHTC			
46	87183	2	WASHER, 1/2"ID X 1"D X .1/8"NYL			
47	87153	2	WASHER, 5/16 OD X 1.25 ID TEFLON			
48	*88745	1	WIRE ASM, TC17/20 POWER CONN.			
49	67118	2	RELAY, 24 VDC SOLENOID			
50	70066	2	RELAY, 24 VDC SOLENOID			
51	67317	1	LEVER, SQUEEGEE LIFT ARM			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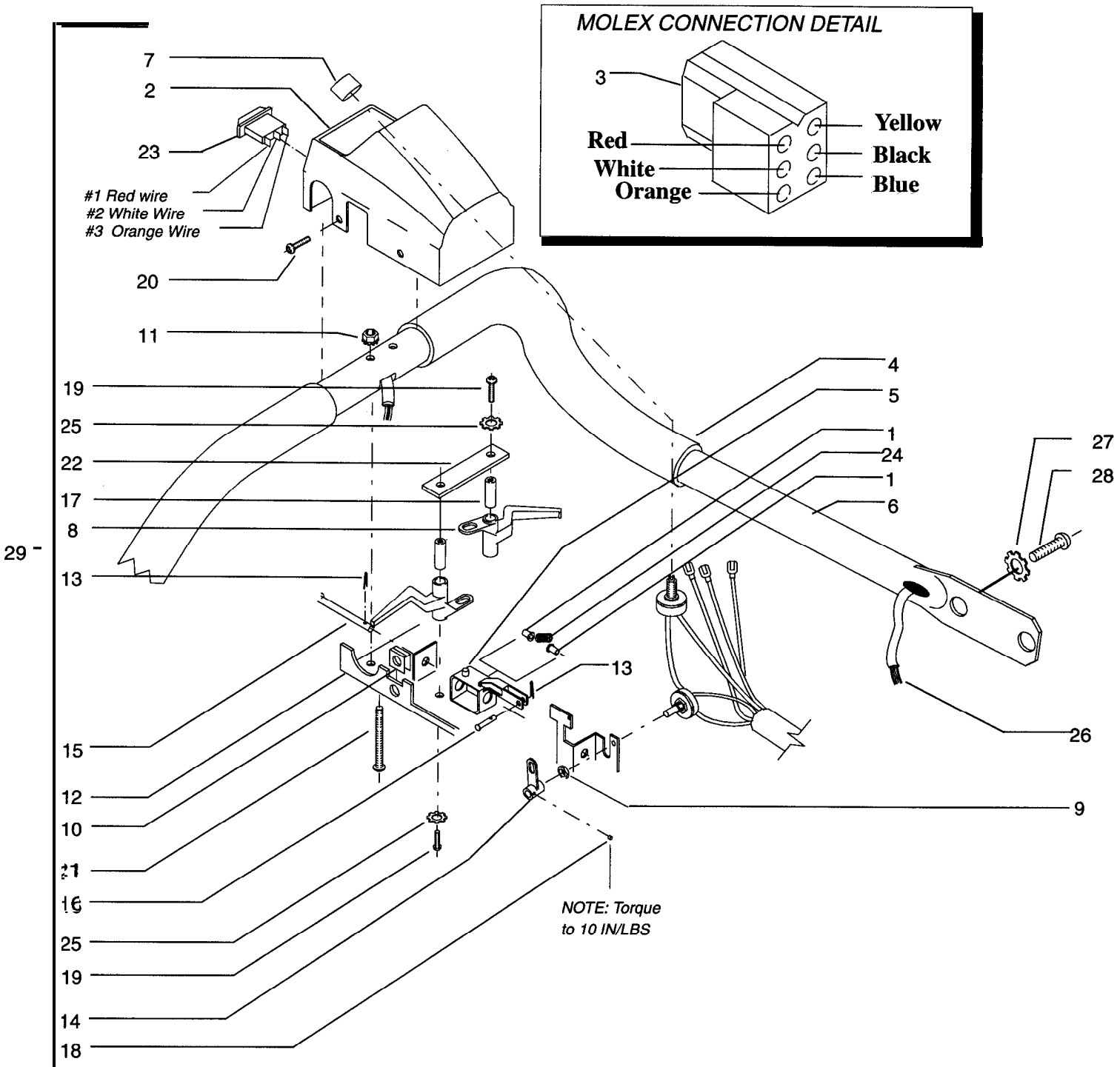
Ref	Part No.	Qty	Description	Serial No. From	Serial No. To	Notes:
1	140133	1	BRKT, RECOVERY HOSE MTG			
2	14503	1	BREAKER, 20 AMP 50 VDC/250 VAC			
3	14606	3	BREAKER, 30 AMP 50 VDC CIRCUIT			
4	14717	1	BREAKER, 3 AMP			
5	14610	1	BRKT, SOLUTION MOUNTING			
6	27697	1	CONTROL PANEL, TR20/24			
7	35191	1	GASKET, SWITCH PLATE TR20/24			
8	40048	1	HOSEBARB, 3/4 PLUG MCHD			
9	50668	1	LABEL, CONTROL PANEL TR20/24			
10	54145	1	METER, 24 V BATTERY CHARGE LVL.			
11	57017	1	NUT, 15/32-32 HEX PNL ZINC PLTD			
12	57030	7	NUT, 1O-32 NY LOCK PLTD			
13	57109	3	NUT, 7/16-28 PANEL			
14	57132	1	NUT, 3/8-27 DRESS PANEL			
15	62581	1	PLATE, CONTROL PANEL			
16	70066	9	SCREW, 10-32 X 3/4 PPHMS SS			
17	70190	1	SCREW, 1/4-20 X .50 BHCS			
18	72130	2	SWITCH, SPST 2 -POSITION RCKR			
19	87013	2	WASHER, 1/4 ID X 5/8 OD SS			
20	87016	2	WASHER, #10 LOCK EXT STAR SS			
21	87018	2	WASHER, #10 X 9/16 OD			
22	87025	2	WASHER, 1/4 LOCK EXT. STAR SS			
23	70066	9	SCREW, 10-32 X 3/4 PPHMS SS			
24	87134	6	WASHER, #6 LOCK			
25	70088	2	SCREW, 10-32 X 1/2 PPHMS			
26	50775	1	LABEL, WARNING EXPLOSION VERT.			

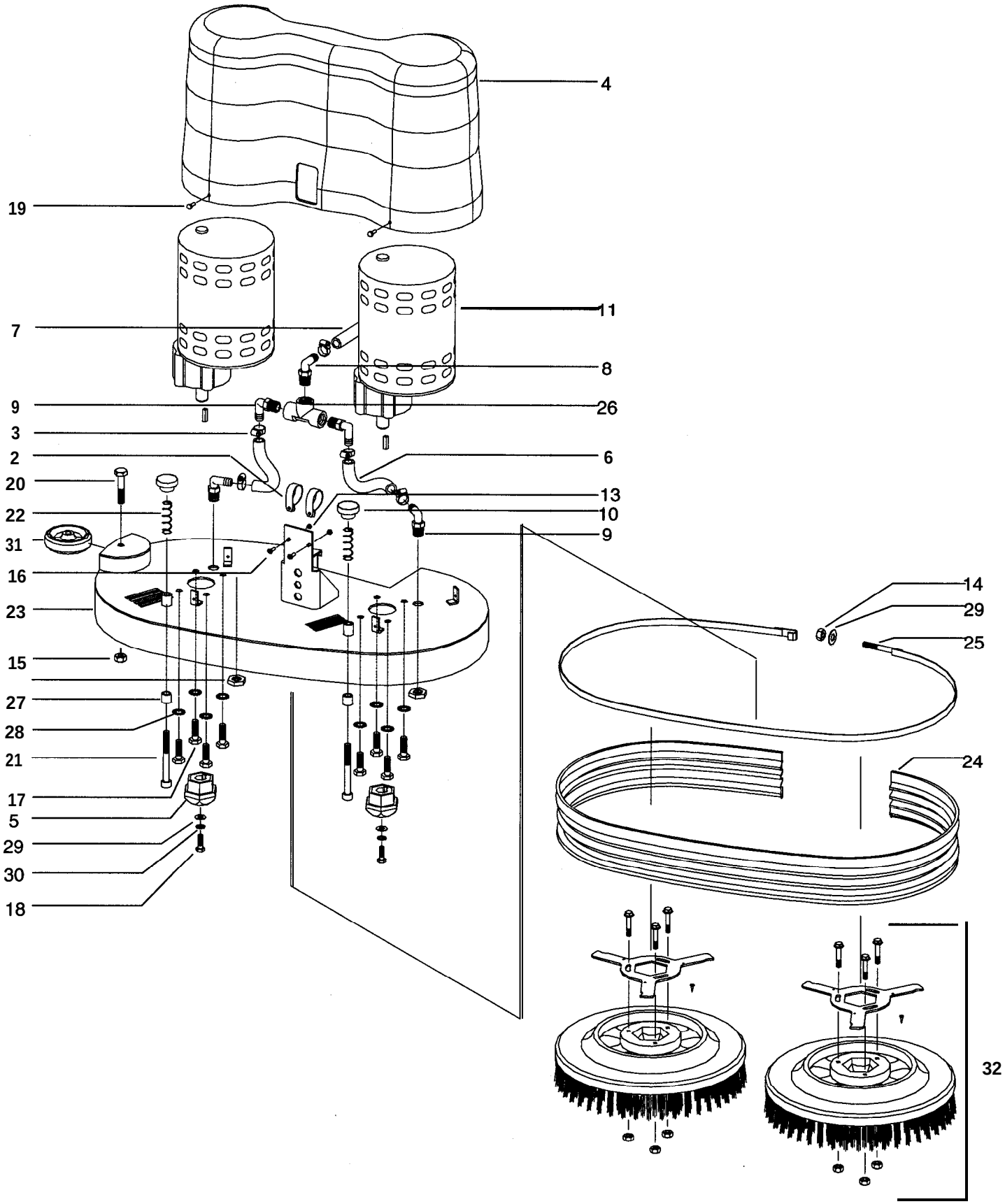


ADJUSTMENT OF POTENTIOMETERS FOR DRIVE CONTROL

1. *Turn the speed potentiometer **(Knob 48043)** fully clockwise. (Max. speed)*
2. *Loosen the set screw on **(Pivot 66183)** and adjust the direction potentiometer to center of travel.*
3. *Turn the main power switch on.*
4. *If the machine moves, adjust the direction potentiometer until movement stops.*
5. *Tighten the set screw on pivot.*

Ref	Part No.	Qty	Description	Serial No. From	Serial No. To	Notes:
1	14866	2	BUSHING, FLANGE .422 OD X .265 ID			
2	27551	1	COVER, PROPEL HANDLE			
3	27554	1	CONNECTOR, MOLEX (6)PIN RECEPTOR m			
4	36123	2	GRIP, HANDLE X 9.5			
5	36136	1	GUIDE, LEVER CENTERING			
6	38253	1	HANDLE, TRIDENT			
7	48043	1	KNOB, SPEED CONTROL W/SET SCR.			
8	51186	2	LEVER, PROPEL CONTROL HANDLE			
9	57024	1	NUT, 3/8-27 PANEL PLTD			
10	57028	4	NUT, 10-24 TINNERMAN			
11	57030	2	NUT, 10-32 NYLOCK PLTD			
12	62705	1	PLATE ASM, PROPEL CONTROL			
13	66073	2	PIN, COTTER 1/16 X 3/4 L PLTD			
14	66183	1	PIVOT, POTENTIOMETER			
15	66184	1	PIN, CLEVIS 1/4 X 2.437 PLTD			
16	66191	1	PIN, CLEVIS 3/16 X 1/2 PLTD”			
17	67271	2	ROD, HANDLE LEVER PIVOT			
18	70084	1	SET SCREW, 8-32 X 3/I6 KCP			
19	70088	4	SCREW, 10-32 X 1/2 PPHMS			
20	70406	4	SCREW, #10B X 3/8 PHSM BLK			
21	70209	2	SCREW, 10-32 X 1.75 PHMS PLTD.			
22	71116	1	SUPPORT, LEVER PIVOT			
23	72087	1	SWITCH, 36 VDC SPST ILLUM.			
24	73236	1	SPRING, COMP. .036 D X 1.12L X .04W			
25	87016	4	WASHER, #10 LOCK EXT STAR SS			
26	88977	1	WIRING HARNESS, PROPEL			
27	87024	4	WASHER, 3/8 STAR SS			
28	70266	4	SCREW, 3/8-16 X 1 .O HHCS GR5			
29	38259	REF	HANDLE PROPEL ASSEMBY, TRIDENT			
29	38259	REF	HANDLE PROPEL ASSEMBY, TRIDENT			

SCRUB DECK ASSEMBLY

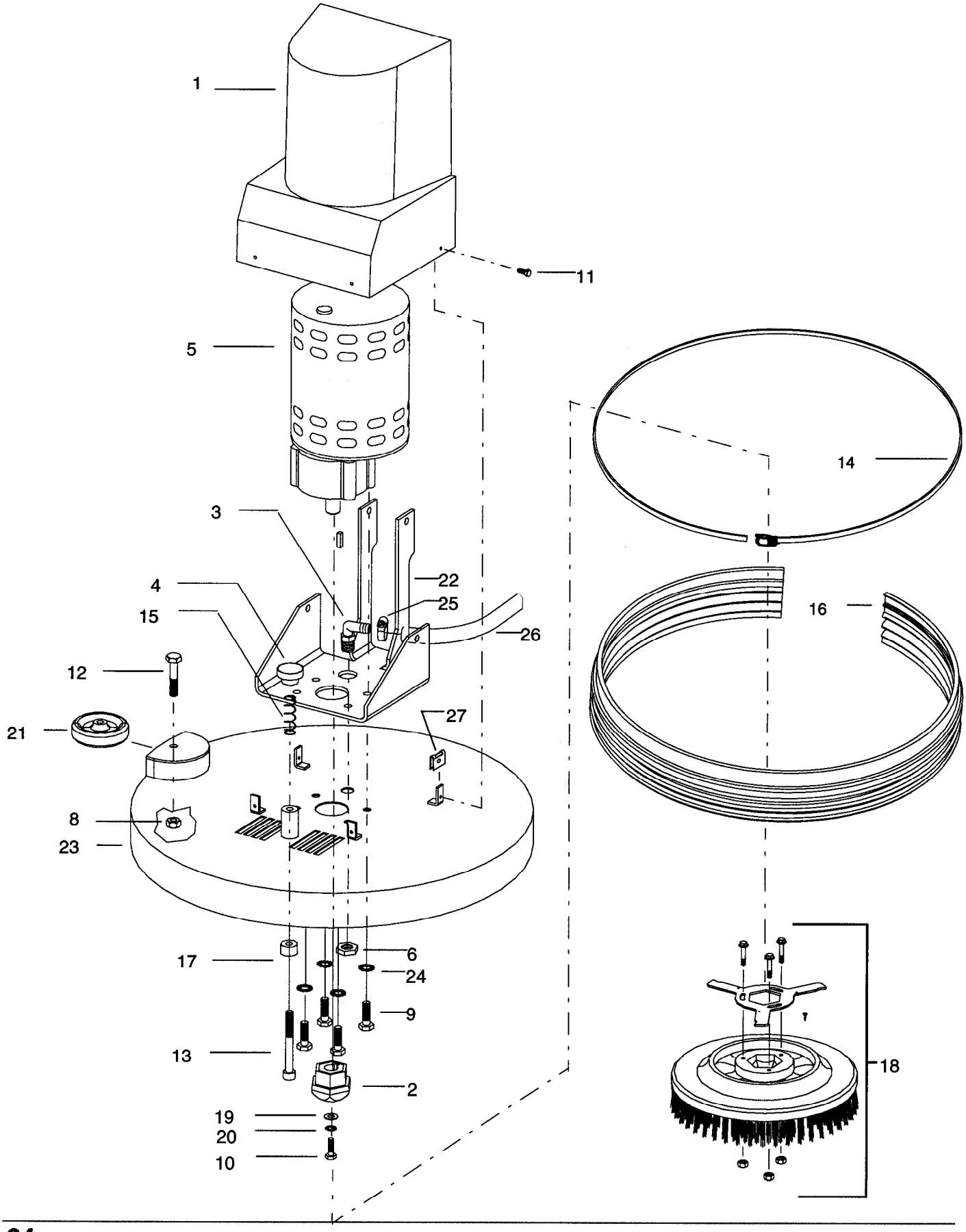


Ref	Part No.	Qty	Description	Serial No. From	Serial No. To	Notes:
1	-	-	OPEN			
2	20013	2	CLAMP, 1.O DIA NYLON			
3	20042	5	CLAMP, 3/8 HOSE (D-SLOT)			
4	27702	1	COVER, MOTOR TR24			
5	29119	2	DRIVE, BRUSH HEX			
6	39035	2	HOSE, 3/8 ID NYLOBRAID X 10"			
7	39301	1	HOSE, 1/2 ID NYLOBRAID X 12"			
8	40027	1	HOSEBARB, 3/8 MPT X 1/2 X 90D DL			
9	40043	2	HOSEBARB, 3/8 MPT X 3/8 X 90D			
10	48025R	2	KNOB, 1.75 X 3/8-16 F			
11	53618	2	MOTOR ASM., BRUSH 24V 200 RPM			
12	57044	2	NUT, 3/8 NPT HEX BRASS			
13	57030	2	NUT, 1O-32 HEX NYLOCK			
14	57113	1	NUT, 5/16-18 HEX NYLOCK			
15	57119	1	NUT, 3/8-16 HEX NYLOCK			
16	70066	2	SCREW, 10-32 X 3/4 PPHMS			
17	70266	8	SCREW, 3/8-16 X 1 .O HHCS GR5 PLTD DL			
18	70305	2	SCREW, 5/16-18 X 3/4 HHCS GR5 PLTD			
19	70351	4	SCREW, 10-32 X 3/8 HHTR W/STAR			
20	70368	1	SCREW, 3/8-16 X 1-3/4 HHCS PLTD			
21	70577	2	SCREW, 3/8-16 X 3.5 SCHS STL			
22	73576	2	SPRING, COMP. .60 OD X 2.0 L X .045 W			
23	73788	1	SCRUB DECK ASM, 24"			
24	73790	1	SKIRT, SHROUD 3.25 X 58.0L			
25	73792	1	STRAP, 0.44 X 0.048 X 57.0 SS			
26	78212	1	TEE, 3/8 FPT-PVC SCH 80			
27	78362	2	TUBE, .50 OD X .058 W X .85L DOM CRS			
28	87024	8	WASHER, 3/8 STAR SS			
29	87029	3	WASHER, 5/16 FLAT SS			
30	87067	2	WASHER, 5/16 LOCK INT STAR PLTD			
31	89059	1	WHEEL, BUMPER			
32	02336	2	PAD DRIVER, 12" HEX			

BRUSH AND PAD OPTION

P/N	*DESCRIPTION*
02336	PAD DRIVER, 12" HEX
02341	BRUSH, 12" POLYPROPYLENE HEX
02342	BRUSH, 12" NYLON HEX
02343	BRUSH, 12" MILD GRIT HEX

CUB DECK TR20 ASSEMBLY

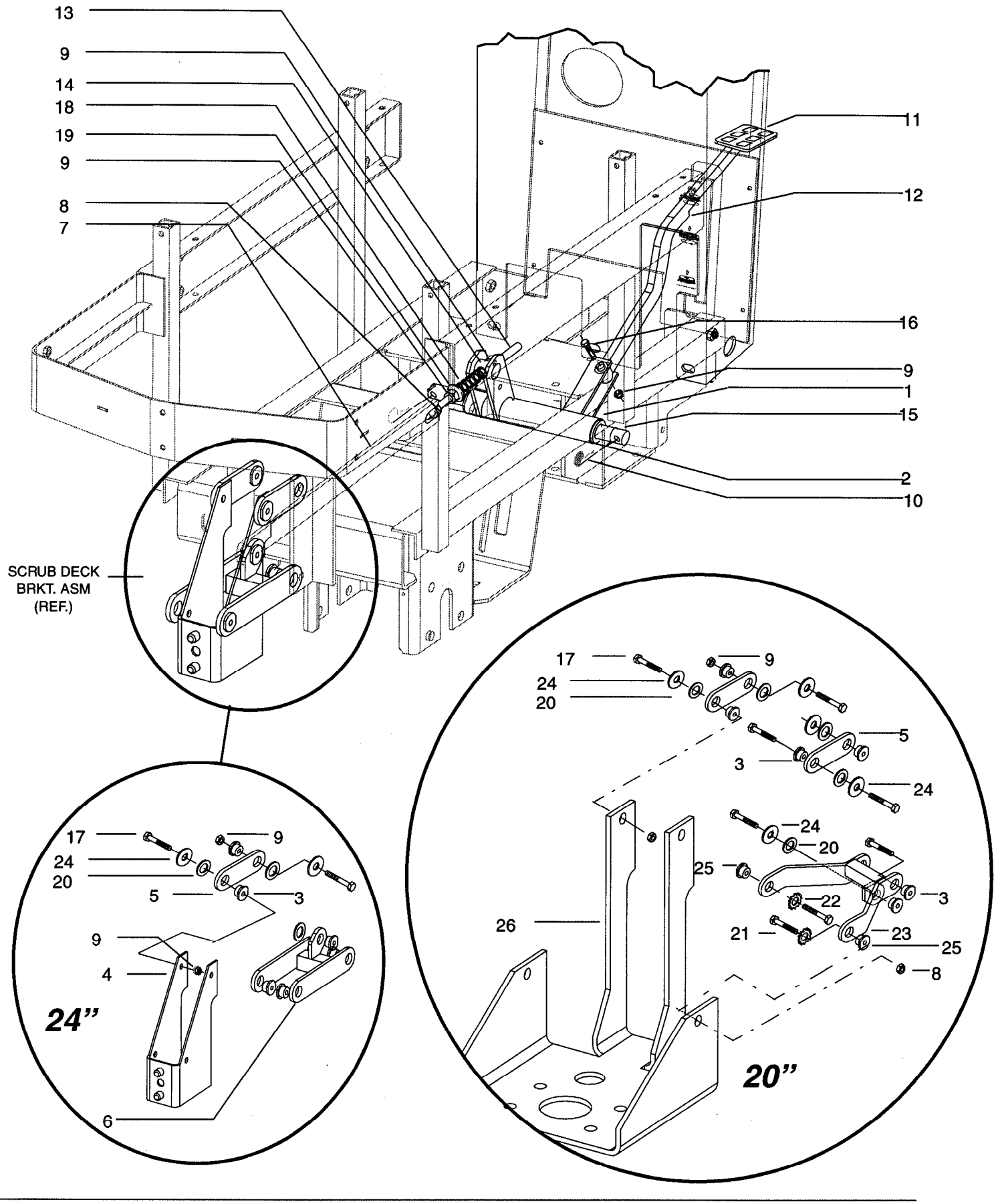


REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	27740	1	COVER, MOTOR TR20		
2	29119	1	DRIVER, BRUSH		
3	40027	1	HOSEBARB, 3/8MPT X 1/2 90D DL		
4	48025R	1	KNOB, 1.75 X 3/8-16F		
5	53618	1	MOTOR ASM, BRUSH 24V 200RPM		
6	57044	1	NUT, 3/8NPT HEX BRASS		
7	-	-	OPEN		
8	57119	1	NUT, 3/8-16 HEX NYLOCK		
9	70266	4	SCR, 3/8-16 X 1" HHCS GR5 PLTD		
10	70305	1	SCR, 5/16-18 X 3/4 HHCS GR5 PLTD DL		
11	70406	4	SCR, #10B X 3/8 PHSM BLK		
12	70368	1	SCR, 3/8-16 X 1 3/4 HHCS PLTD		
13	70577	1	SCR, 3/8-16 X 3.5 SCHS STL		
14	20077	1	CLAMP, WORM #HS356		
15	73576	1	SPRING, COMP. .60D X 2.0L X .045W		
16	73790	1	SKIRT, SHROUD 3.25 X 58.0L		
17	78362	1	TUBE, .5OD .058W .85L DOM CRS		
18	02340	1	PAD DRIVER, 20" HEX		
19	87029	1	WASHER, 5/16 FLAT SS		
20	87067	1	WASHER, 5/16 LOCK INT STAR PLTD		
21	89059	1	WHEEL, BUMPER		
22	62631	1	PLATE, SCRUB DECK MOUNT TR20		
23	73826	1	SHROUD ASM, TR20 SCRUB DECK		
24	87024	4	WASHER, 3/8 STAR SS		
25	20042	1	CLAMP, 3/8 HOSE (D-SLOT)		
26	39482	1	HOSE, 1/2 ID NYLOBRAID 15"L		
27	57028	4	NUT, 10-24 TINNERMAN		

BRUSH & PAD (20") OPTION LIST:

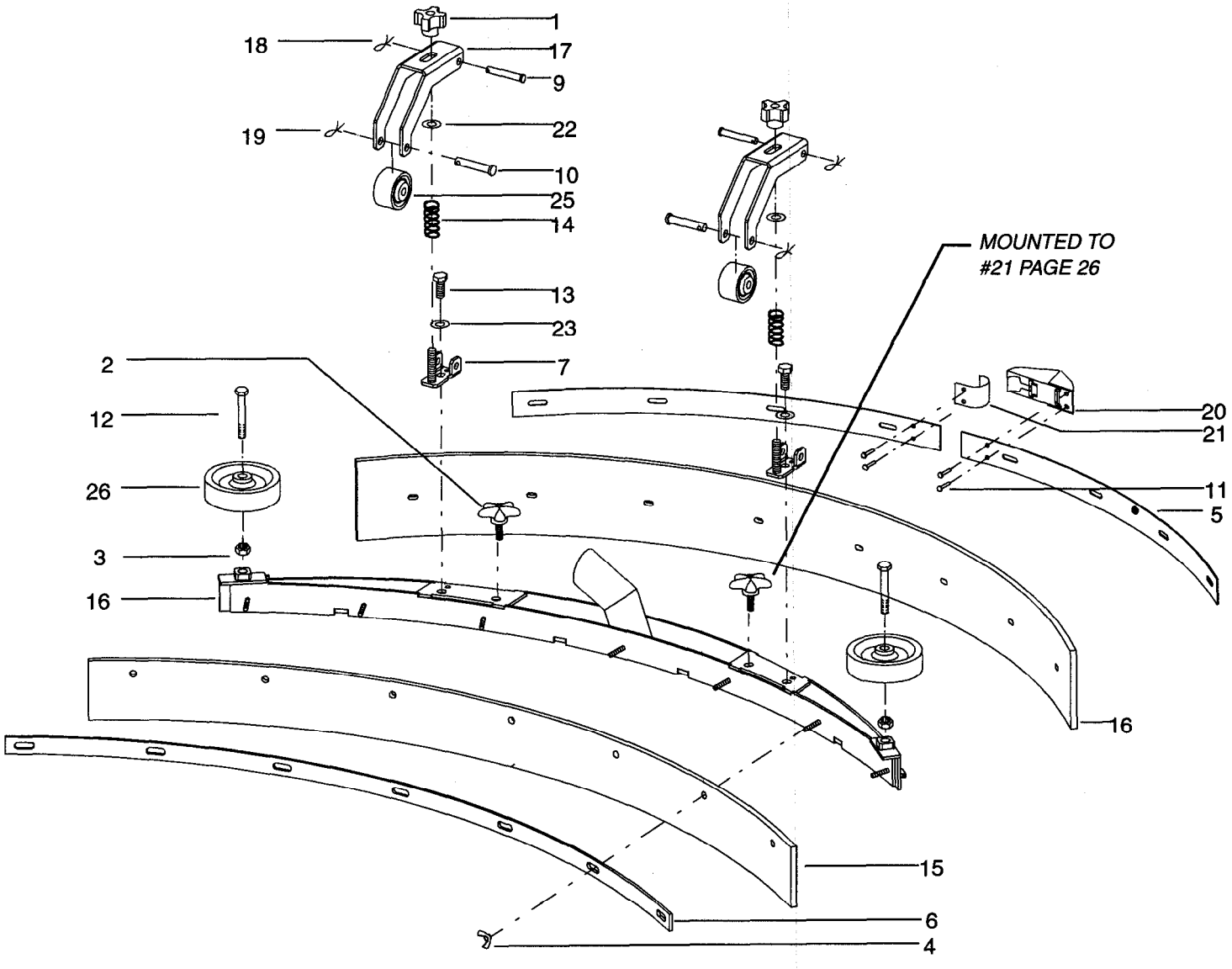
PART NO.	DESCRIPTION	SERIAL NO. FROM	NOTES:
02340	PAD DRIVER, 20" HEX		
02357	BRUSH, 20" POLYPROPYLENE HEX		
02358	BRUSH, 20" NYLON HEX		
02359	BRUSH, 20" NYLON POLISH HEX		
02360	BRUSH, 20" MILD GRIT HEX		
02361	BRUSH, 20" SUPER AGGRESSIVE HEX		

SCRUB DECK LINKAGE ASSEMBLY



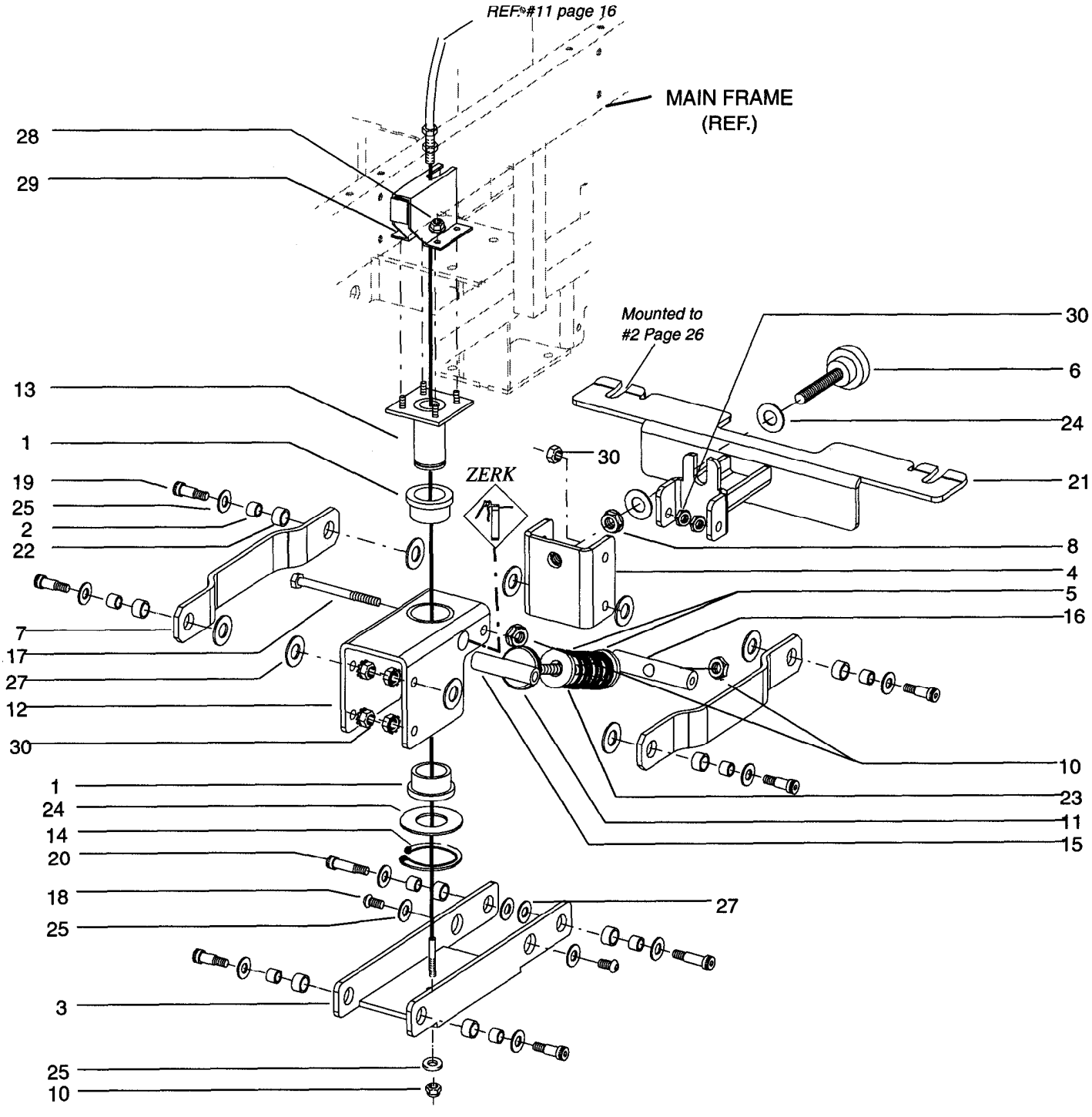
Ref	Part No.	Qty	Description	Serial No. From	Serial No. To	Notes:
1	05107	1	LINKAGE ASM., SCRUB DECK			
2	09111	2	BEARING, FLANGE .88OD x .75ID x .75			
3	140136	9	BUSHING, .740D X .385ID X .50 BRZ.			(QTY. 7, 20" MODEL)
4	51261	1	LINKAGE ASM., SCRUB DECK			
5	51262	2	LINKAGE, 3" ARM PLTD.			
6	51264	2	LINKAGE ASM., ARM BRACKET			
7	51271	1	LINKAGE, SCRUB DECK TR20/24			
8	57085	1	NUT, 3/8-16 HEX JAM PLT			(QTY. 2, 20" MODEL)
9	57119	1	NUT, 3/8-16 HEX NYLOCK PLTD.			(QTY. 7, 20" MODEL)
10	66092	2	PIN, COTTER HAIR .093" DIA.			
11	66109	1	PAD, PEDAL			
12	66258	1	PEDAL ASM., SCRUB DECK			
13	67154	1	ROD, DECK FRONT PIVOT SPRING			
14	67155	1	ROD, DECK LIFTING FRONT PIVOT			
15	67347	1	ROD, 3/4 OD X 8.70 CRS PLTD.			
16	70070	1	SCREW, 3/8-16 X 2 HHCS			
17	70255	9	SCREW, 3/8-16 X 1.5 HHCS GR5 PLTD.			(QTY. 7, 20" MODEL)
18	73372	1	SPRING, COMP. .75D X 2.0L X .090W			
19	87003	1	WASHER, 3/8ID X 7/8OD SS			
20	87156	5	WASHER, 0.75ID X 1.25OD X .125THK			
21	70266	2	SCR, 3/8-16 X 1 .O HHCS GR5 PLTD			(QTY. 2, 20" MODEL)
22	87024	2	WASHER, 3/8 STAR SS			(QTY. 2, 20" MODEL)
23	51274	1	LINKAGE ASM, SCRUB DECK			(QTY. 1, 20" MODEL)
24	87180	5	WASHER, .43 X 1 .O FLAT GR8 PLTD			
25	140054	2	BUSHING, .753D X .377ID X .50 BRONZE			(QTY. 2, 20" MODEL)
26	62631	1	PLATE, SCRUB DECK MTG.			(QTY. 1, 20" MODEL)

SQUEEGEE ASSEMBLY



Ref	Part No.	Qty	Description	Serial No. From	Serial No. To	Notes:
1	48012	2	KNOB, ADM HANDLE 5/16-18			
2	48069	2	KNOB, 2.25 OD, 5/l6-l8 X 1.O STUD			
3	57085	2	NUT, 3/8-16 JAM			
4	57254	7	NUT, WING 1/4-20 LOCKING			
5	62597	2	PLATE, SQGE. RTNG. REAR TR20/24			
6	62598	1	PLATE, SQGE. RTNG. FRONT TR20/24			
7	62628	2	PLATE, RIGHT ADJUST. SQUEEGEE			
8						
9	66275	2	PIN, CLEVIS 1/4 X 1.625 LG			
10	66276	2	PIN, CLEVIS 5/16 X 1.625 LG			
11	67380	4	RIVET, 5/32 X 1/8 GRIP ALUM.			
12	70255	2	SCREW, 3/8-16 X 1.5 HHCS PLT			
13	70305	2	SCREW, 5/l6-18 X 3/4 HHCS"			
14	73576	2	SPRING, COMP. .60 OD X 2.0 L X .045 W			
15	73802	1	BLADE, SQGE. TR20/24 DIE CUT FRONT			
16	73803	1	BLADE, SQGE. TR20/24 DIE CUT REAR			
17	73824	2	SQUEEGEE HEIGTH ADJUSTMENT			
18	80604	2	RING, RUE COTTER 1/4 PLTD			
19	80605	2	RING, RUE COTTER 5/16 PLTD			
20	81488	1	LATCH, SQEEGEE STRAP REAR			
21	81489	1	STRICKER, SQUEEGEE STRAP REAR			
22	87029	2	WASHER, 5/16 FLAT SAE			
23	87067	2	WASHER, 5/16 LOCK INT. STAR			
24						
25	89058	2	WHEEL, PT20 SQUEEGEE ROLLER			
26	89059	2	WHEEL, PT20 SQUEEGEE BUMPER			

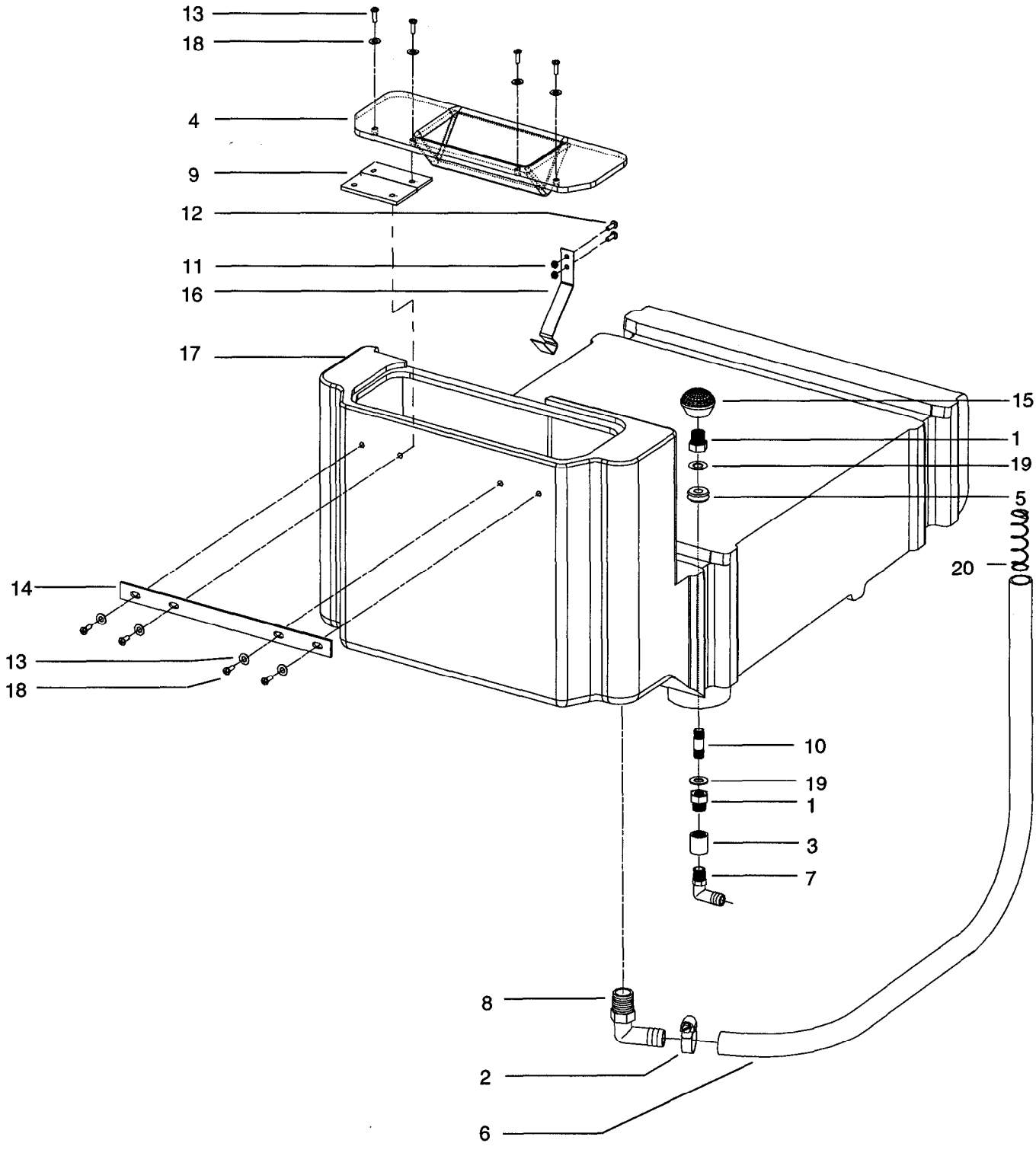
SQUEEGEE LINKAGE ASSEMBLY



SQUEEGEE LINKAGE ASSEMBLY PARTS LIST

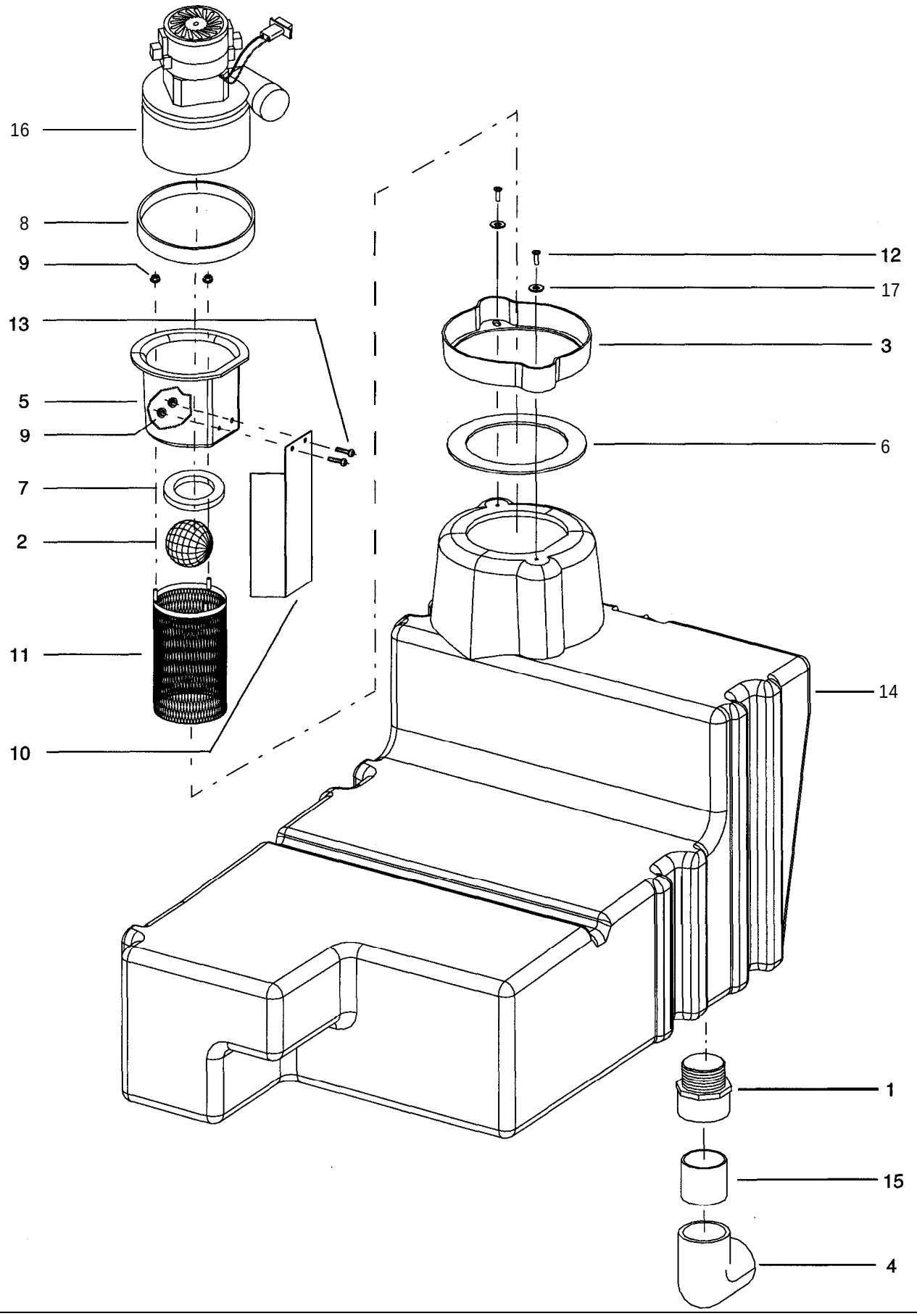
Ref	Part No.	Qty	Description	Serial No. From	Serial No. To	Notes:
1	09119	2	BEARING, FLANGE 1.253 ODx1.00 IDx.75 L			
2	14963	6	BUSHING, 9/l6 OD X 7/l6 ID X 5/l6 L			
3	14964	1	BRKT, SQUEEGEE LINKAGE			
4	14965	1	BRACKET, SQUEEGEE LIFT			
5	27717	2	CAP, SQUEEGEE SPRING .71 OD X .33 ID			
6	48057	1	KNOB, 1.38 OD, 3/8-16 X 2.25 STUD			
7	51208	2	LINKAGE, SQUEEGEE LIFT			
8	57032	1	NUT, 3/8-16 SERRATED FLG PLTD			
9						
10	57113	4	NUT, 5/l6-18 NYLOCK PLTD			
11	57124	1	NUT, SQUEEGEE CAMBER LOCK			
12	66264	1	PIVOT ASM, TR28/34 SQUEEGEE			
13	66265	1	PLATE ASM, PIVOT SQUEEGEE			
14	67270	1	RING, 1.O EXT. SNAP H-D			
15	67289	1	ROD ASM, SQUEEGEE SPRING			
16	67312	1	ROD, SPRING ADJUST			
17	70093	1	SCREW, 5/16-18 X 3.0 HHCS GR5 PLTD			
18	70190	2	SCREW, 1/4-20 X .50 BHCS			
19	70296	6	SHOULDER BOLT, 5/16 OD X 1/2 L, 1/4-20			
20	70488	2	SHOULDER BOLT, 5/16 OD X 3/4 L, 1/4-20			
21	71126	1	SUPPORT ASM, SQUEEGEE			
22	73656	8	SPACER, 7/16 OD X .315 ID X 21/64 L			
23	73688	1	SPRING, 1.1 OD X 3.5 L X .135 W			
24	80634	1	WASHER, 1.015 ID X 2.0 OD X .075 PLTD			
25	87029	11	WASHER, 5/16 FLAT SAE SS			
26	87086	2	WASHER, Ml0 X 30 PLTD			
27	87155	4	WASHER, SQUEEGEE PIVOT LINKAGE			
28	57104	4	NUT, 10-32 W/STAR WASHER PLTD.			
29	14919	1	BRKT, C17/20 LIFT CABLE PULLEY			
30	57030	4	NUT, 10-32 NYLOCK PLTD			
31	57047	8	NUT, 1/4-20 NYLOCK PLTD			

SOLUTION TANK ASSEMBLY

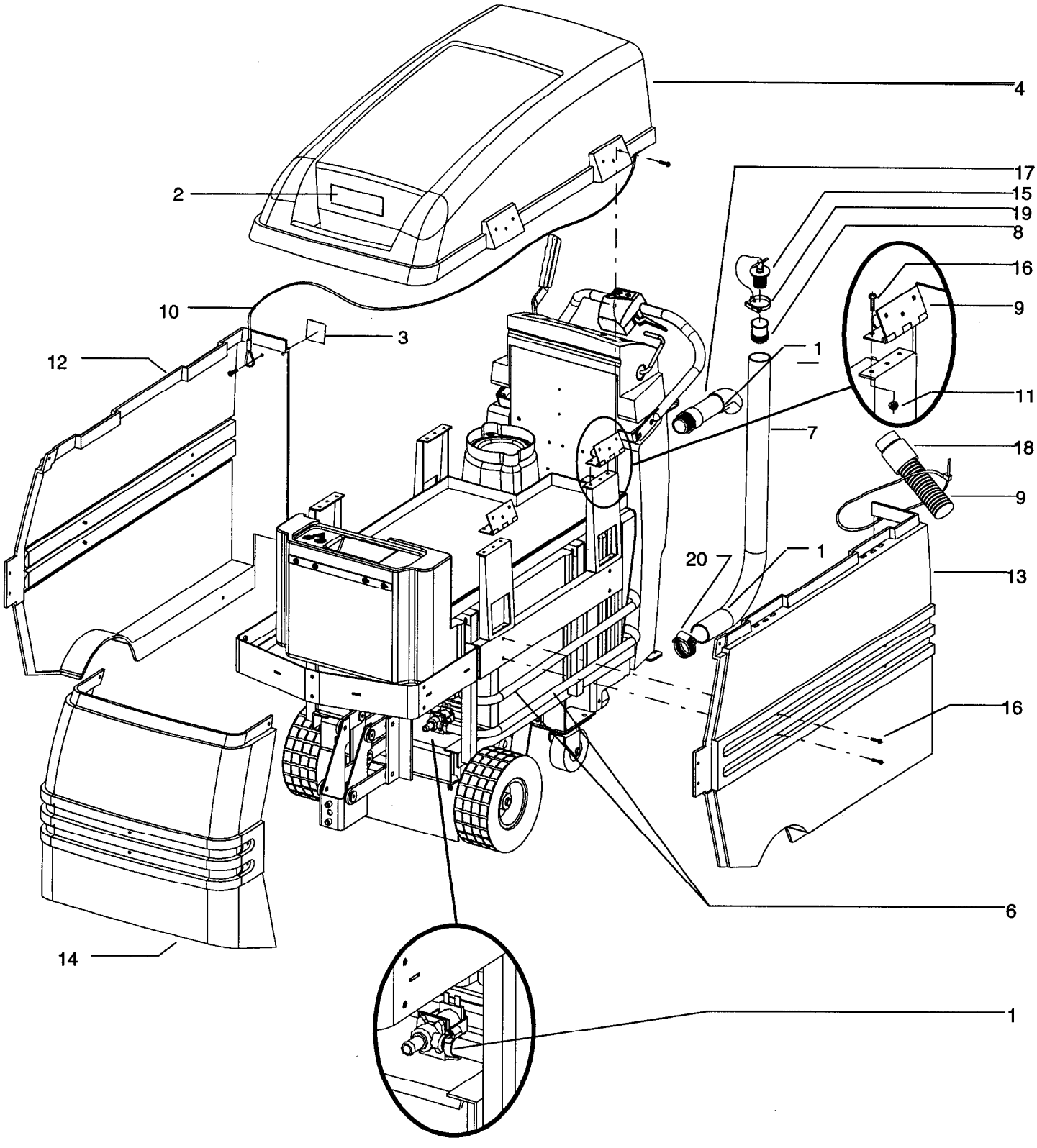


Ref	Part No.	Qty	Description	Serial No. From	Serial No. To	Notes:
1	14076	2	BUSHING, 3/8 MPT X 1/4 FPT			
2	20018	1	CLAMP, 1.0 WORM GEAR			
3	22003	1	COUPLER, 3/8 FPT X FPT PVC			
4	29146	1	DOOR, PT28/34 SOLUTION FILL			
5	36055	1	GROMMET, 1/2 ID X 1/4 GROOVE			
6	39392	1	HOSE, 3/4 ID X .12 WALL X 5 FT CLR			
7	40027	1	HOSEBARB, 3/8 MPT X 1/2 X 90 D NYLON			
8	40046	1	HOSEBARB, 3/4 MPT X 3/4 X 90 D NYLON			
9	41139	2	HINGE, PT20 SOLUTION DOOR			
10	56014	1	NIPPLE, 1/4 CLOSE			
11	57030	2	NUT, 10-32 NYLOCK PLTD			
12	70088	2	SCREW, 10-32 X 1/2 PPHMS SS			
13	70089	8	SCREW, #10AB X 3/4 PHST PLTD			
14	71058	1	STIFFENER, SOLUTION DOOR STRIP			
15	73086	1	STRAINER, 40 MESH X 3/8 FPT			
16	73302	1	SPRING, SOLUTION DOOR			
17	75180	1	TANK, SOLUTION MACHINED			
18	87018	8	WASHER, #10 FLAT PLTD			
19	87015	2	WASHER, 9/16 ID X 1.06 OD			
20	73244	1	SPRING, COMP .70D X 6.0L X .0060 W			

RECOVERY TANK ASSEMBLIES



Ref	Part No.	Qty	Description	Serial No. From	Serial No. To	Notes:
1	04032	1	ADPTR, 1.5 MPT X 1.5 FS PVC			
2	14844	1	BALL, FLOAT SHUT-OFF PT17			
3	08051	1	BASE, VAC MOTOR MOUNTING			
4	31002	1	ELBOW, 1.5 FPT X FS PVC			
5	34301	1	FLOAT SHUT-OFF HOUSING			
6	35089	1	GASKET, VAC BASE SEAL			
7	35066	1	GASKET, FLOAT SHUT-OFF			
8	35087	1	GASKET, 5.7 VACMOTOR			
9	57026	5	NUT, 8/32 NYLOCK			
10	62626	1	PLATE, FLOAT SHUT-OFF SHIELD			
11	73704	1	SCREEN, FLOAT			
12	70066	2	SCREW, 1O-32 X 3/4 PPHMS SS			
13	70052	2	SCREW, 8-32 X 3/8 PPHMS SS			
14	75227	1	TANK, RECOVERY			
15	78211	1	TUBE, 1.5 PVC X 3.31			
16	53772	1	VAC MOTOR ASM, 24 VDC 3 STAGE			
17	87018	2	WASHER, #10 X 9/16 OD			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Ref	Part No.	Qty	Description	Serial No. From	Serial No. To	Notes:
1	20042	2	CLAMP, 3/8 HOSE (D-SLOT)			
2	50742	1	LABEL, WARNING EXPLOSION VERT.			
3	50776	1	LABEL, FOR SAFETY			
4	27722	1	COVER, MAIN MCHND. ST24			
5	39275	1	HOSE, 1.5 BLUE VAC X 15 L			
6	39340	2	HOSE, 1/2 ID NYLOBRAID X 30.0 L			
7	39472	1	HOSE, 1.5 DRAIN X 24.0 L			
8	40019	1	HOSEBARB, 1.5 DOUBLE MCHND.			
9	41309	2	HINGE, HOOD TR20/24 PLTD.			
10	51272	1	LANDYARD, TANK			
11	57047	9	NUT, 1/4-20 NYLOCK			
12	61314	1	PANEL, RIGHT SIDE TR24			
13	61315	1	PANEL, LEFT SIDE TR24			
14	61316	1	PANEL, FRONT TR24			
15	66227	1	PLUG, DRAIN			
16	70586	28	SCREW, 1/4-20 x 3/4 HHCS GR5 PLTD.			
17	85035	1	VAC INLET ASM.			
18	27354	1	CUFF, BLUE S/C VAC HOSE			
19	20002	1	CLAMP, 2" NYLON RATCHET			
20	20046	1	CLAMP, 2.25" WORM GEAR			

LIMITEDD WARRANTY

Windsor Industries, Inc. warrants new machines against defects in material and workmanship under normal use and service to the original purchaser. The warranty period is subject to the conditions stated below.

3 YEARS FOR PARTS AND 1 YEAR FOR SERVICE LABOR

Exceptions: Rotationally molded polyethylene tanks carry a 6 **year** parts and 1 year service labor warranty. VERSAMATIC" models carry a 3 year warranty on brush motors, vacuum motors, and belts, and a 1 year service labor warranty. SENSOR" models carry a 2 year warranty on vacuum motors and belts, and a 1 year service labor warranty. Extractor brush motors, pump motors, pc boards and electronics, **vac** motors (other than VERSAMATIC" and SENSOR'), pumps, and **FLEXSOL™** diaphragms, all **RADIUS™,** all **AXCESS™** and **TITAN™1** carry a 1 year parts and service labor warranty. Propane equipment has a 1 year parts and service warranty. The **Onan®** engines have a 3 year manufacturers' warranty. The Honda@ engines have a 2 year manufacturers' warranty. The engine warranty is administered through the engine manufacturer and must be repaired at an authorized service center.

Normal wear items including, but not limited to, belts, brushes, capacitors, carbon brushes, casters, clutches, cords, filters, finishes, gaskets, hoses, light bulbs, rectifiers, switches, squeegees, bearings, pulleys, relays, actuating cables, tires and wheels will be warranted for manufacturing defects for 90 days from the purchase date.

The warranty commences on the purchase date by the original end user from an authorized Windsor Agent, subject to proof of purchase. The Machine Registration Card must be completed and returned immediately at the time of purchase. If proof of purchase cannot be identified, the warranty start date is 90 days after date of sale to an authorized Windsor distributor. Parts replaced or repaired under warranty are guaranteed for the remainder of the original warranty period.

90 DAY WARRANTY EXTENSION AVAILABLE

Upon receipt of the Machine Registration Card, Windsor will extend the warranty period an additionalonal90 days from the purchase date. Does not include items warranted 90 days for manufacturing defects.

STATED WARRANTIES ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED.

Any statutory implied warranties, including any warranty of merchantability or fitness for a particular purpose, are expressly limited to the duration of this written warranty. Windsor will not be liable for any other damages, including but not limited to indirect or special consequential damages arising out of or in connection with the furnishing; performance, use or inability to use the machine. This remedy shall be the exclusive remedy of the buyer.

This warr nty shall not apply to: 1 .damage in transit; 2.misuse or abuse(including the use of incompati le or corrosive chemicals or overloading of capacity); 3. failure due to lack of proper maintenance and care (including cleaning); 4.any design alterations performed by an organization not authorized or specified by Windsor; 5.batteries and chargers. 6. high pressure washing. 7.electrical components exposed to moisture.

If difficulty develops during the warranty period, contact the authorized Windsor Agent from whom the product was purchased. Windsor, Inc. may elect to require the return of components to validate a claim. Any defective part to be returned must be shipped freight pre-paid to an authorized Windsor Distributor/Service Center or to the Windsor factory.

USE OF PARTS NOT APPROVED BY WINDSOR, INC. WILL VOID ALL WARRANTIES.

This warranty is valid only for all products sold after July 1, 1995. A product sold before that date shall be covered by the limited Warranty in effect at the date of sale to the original purchaser.

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