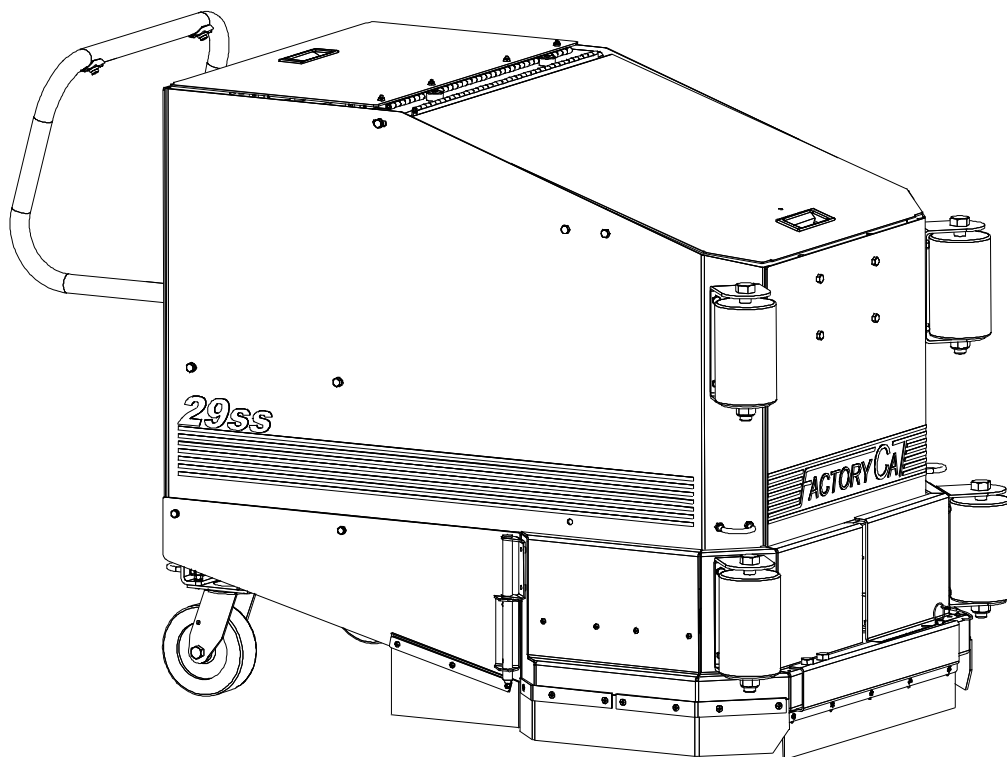


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Operator, Parts, &  
Service Manual  
*29", 33" Disk Scrubber*  
*28", 32" Cylindrical*



R.P.S. Corporation  
P.O. Box 368  
Racine, Wisconsin 53401

Phone: 1-800-634-4060  
Fax: 1-866-901-3335

[www.factorycat.com](http://www.factorycat.com)

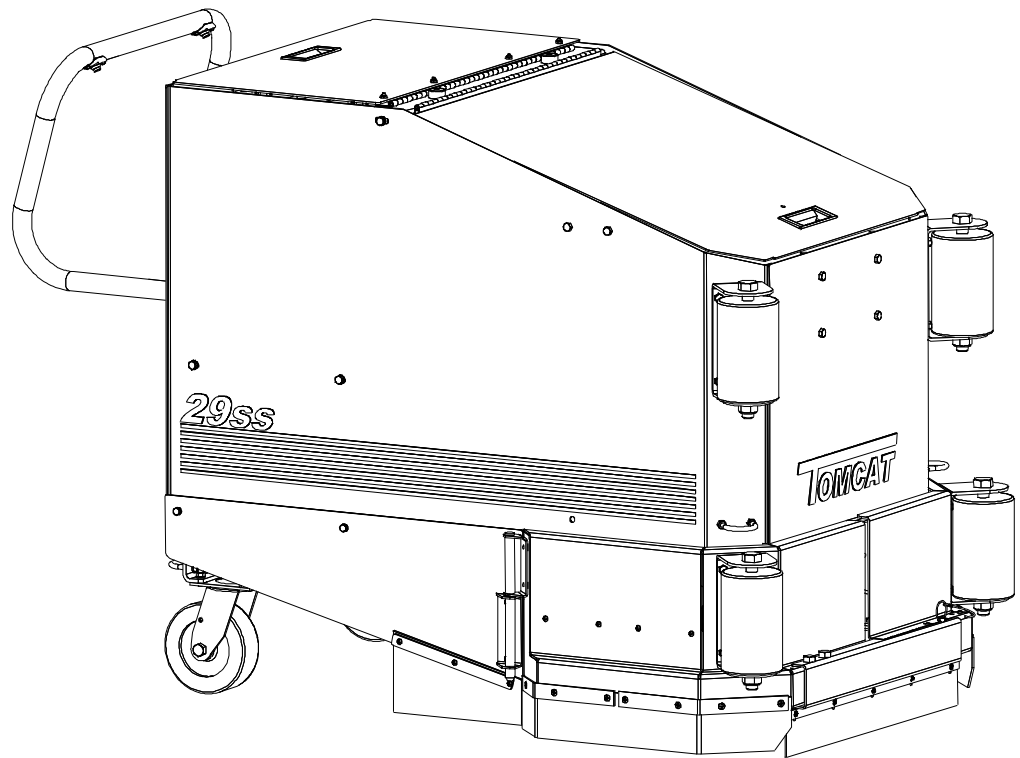
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# ***TOMCAT***

Operator, Parts, &  
Service Manual

*29", 33" Disk Scrubber*  
*28", 32" Cylindrical*



Mid-Central Corporation  
P.O. Box 241  
Racine, Wisconsin 53401

Phone: 1-800-450-9824  
Fax: 1-866-632-6961

[www.tomcatequip.com](http://www.tomcatequip.com)

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## *MACHINE INFORMATION*

Please fill out at the time of installation and store in a safe place for future reference.

Model Number: \_\_\_\_\_

Serial Number \_\_\_\_\_

Installation Date: \_\_\_\_\_

---

## *DEALER INFORMATION*

Installing Dealer: \_\_\_\_\_

Dealer Contact: \_\_\_\_\_

Address: \_\_\_\_\_

City, State, & Zip: \_\_\_\_\_

Phone Number: \_\_\_\_\_

This Operator, Parts, and Service Manual should be considered a permanent part of the unit, and should remain with the unit at all times. You may find descriptions and features that are not on your particular model. The information and specifications included in this publication were in effect at the time of printing. The manufacturer reserves the right to make changes without notice and without incurring any obligation.

**TO REGISTER FOR WARRANTY, FAX YOUR DELIVERY FORM TODAY!**

# MACHINE DELIVERY FORM

Dealer: \_\_\_\_\_

Serial Number: \_\_\_\_\_

Location: (City, ST): \_\_\_\_\_

Install Date: \_\_\_\_\_

\_\_\_\_\_

Hour Meter: \_\_\_\_\_

Customer: \_\_\_\_\_

Installed By: \_\_\_\_\_

Contact: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

Model Number: \_\_\_\_\_

Options: 1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

Brushes: \_\_\_\_\_

Broom: \_\_\_\_\_

Soap: \_\_\_\_\_

Buyer's Representative Has:

1. Received instruction in proper operation of this machine.
2. Received operator's manual for this machine.
3. Been made aware that any operator read the manual before operating this machine.

Dealer Rep: (Print) \_\_\_\_\_

(Sign) \_\_\_\_\_

Customer: (Print) \_\_\_\_\_

(Sign) \_\_\_\_\_

# **SPECIFICATIONS**

## **BODY CONSTRUCTION/DIMENSIONS**

Tank Construction:  
Frame Construction:  
Drive Wheel:  
Casters:  
Height:  
Length:  
Width (body):  
Width (squeegee):  
Weight (w/out batteries):  
Weight (w/ batteries):

## **29ss**

(7/16") Roto-Poly  
3/16" (Stainless Steel)  
(2) 11" diameter x 4"  
(2) 6" Diameter x 2"  
43 inches  
57 inches  
30 inches  
32", 35" or 38"  
766 pounds  
1,246 pounds

## **35ss**

(7/16") Roto-poly  
3/16" (Stainless Steel)  
(2) 11" diameter x 4"  
(2) 6" Diameter x 2"  
43 inches  
59 inches  
35 inches  
38" or 45"  
786 pounds  
1,266 pounds

## **BRUSH/PAD SYSTEM**

Brush/Pad Diameter (Disk):  
Motor (Disk):  
Brush Pressure (Disk):

(2) 15.5 inches  
(2) 1.0 hp / 350 rpm  
0-300 pounds

(2) 17.0 inches  
(2) 1.0 hp / 350 rpm  
0-300 pounds

Brush Size (Cylindrical):  
Motor (Cylindrical):  
Brush Pressure:

(2) 28" long x 5.5"  
(1) 2.0 hp / 800 rpm  
0-250 pounds

(2) 32" long x 5.5"  
(1) 2.0 hp / 800 rpm  
0-250 pounds

## **BATTERY SYSTEM**

Battery AH Rating:  
Battery description:  
Battery Run Time:  
Charger (110v):

396 amp hour  
6-volt deep cycle  
Up to 5 hours  
36 amp automatic

396 amp hour  
6-volt deep cycle  
Up to 5 hours  
36 amp automatic

## **SOLUTION SYSTEM**

Solution Tank Capacity:  
Solution Flow Rate:

30 gallons  
Up to .75 gal/min.

30 gallons  
Up to .75 gal/min.

## **RECOVERY SYSTEM**

Recovery Tank Capacity:  
Vacuum Horsepower:  
Water Lift:  
Airflow (Cubic Feet / Minute):

30 gallons  
1.0 hp, 3-stage  
70 inches  
72 cfm

30 gallons  
1.0 hp, 3-stage  
70 inches  
72 cfm

## **DRIVE SYSTEM**

Transaxle Description:  
Speed Control:

.75 hp, Differential  
Variable 0-275 ft/min

.75 hp, Differential  
Variable 0-275 ft/min

## **PRODUCTIVITY**

Cleaning Width:  
  
Cleaning Rate/Hour  
(W/2" Overlap)

Disk - 29 Inches  
Cylindrical – 28 Inches

Disk - 33 Inches  
Cylindrical – 32 Inches

35,640 sq. ft./hour

43,560 sq. ft./hour

**AUTHORIZED DISTRIBUTOR**

# COMMON WEAR PARTS

ITEM	Model 29ss	Model 29ss	Model 35ss	Model 35ss
<i>Brush Type</i>	<i>Disk</i>	<i>Cylindrical</i>	<i>Disk</i>	<i>Cylindrical</i>
<b><u>BRUSHES</u></b>				
Super-Grit	15-421SS	NA	17-421SS	NA
Tough-Grit	15-421S	28-521S	17-421S	32-521S
Midi-Grit	15-421C	28-521C	17-421C	32-521C
Light-Grit	15-421PS	28-521PS	17-421PS	32-521PS
Poly (.028)	15-421P	NA	17-421P	NA
Nylon (.012)	15-421N	28-521N	17-421N	32-521N
Tam Pico	15-421T	28-521T	17-421T	32-521T
Butcher Wire	15-421BW	NA	17-421BW	NA
Pad Driver	15-421D	NA	17-421PD	NA

## **PADS**

Super Black	15-422BB	NA	17-422BB	NA
Black	15-422B	NA	17-422B	NA
Brown	15-422BR	NA	17-422BR	NA
Green	15-422G	NA	17-422G	NA
Blue	15-422BL	NA	17-422BL	NA
Red	15-422R	NA	17-422R	NA
White	15-422W	NA	17-422W	NA

	<u>SIZE</u>	<u>GUM RUBBER</u>	<u>NEOPRENE</u>	<u>LINATEX</u>
Squeegee Kits:	32":	22-770G	22-770N	22-770L
	35":	25-770G	25-770N	25-770L
	38":	28-770G	28-770N	28-770L
	45":	290-770G	290-770N	290-770L

Kit Includes: (2) rear blades, (1) front blade, and (2) backup wheels w/ hardware

**NOTE:** CHECK YOUR SQUEEGEE BODY FOR THE SIZE NUMBER. IT IS STAMPED INTO THE TOP OF THE STEEL SQUEEGEE BLANK. THE STANDARD SIZES ARE AS FOLLOWS:

MODEL 29ss	38" (Unless other size is specially ordered at time of purchase)
MODEL 35ss	45" (Unless other size is specially ordered at time of purchase)

**NOTE:** The 32" & 35" squeegee is designed for narrow isles and may not have the same water control around tight turns as the larger squeegees.

## **SOAP**

Heavy Duty Degreaser  
Citrus  
Freezer  
Tire Mark Remover

**CALL LOCAL DEALER FOR INFORMATION**

---

# **!! SAFETY MESSAGES !!**

---

Your safety, and the safety of others, is very important, and operating this unit safely is an important responsibility.

To help you make informed decisions about safety, we have provided operating procedures and other safety information in the manual. This information informs you of potential hazards that could hurt you or others.

It is not practical or possible to warn you of all the hazards associated with operating this unit. You must use your own good judgment.

This unit is intended for commercial use. It is designed to clean hard floors in an indoor environment, with the recommended pads/ brushes, and cleaning solutions.

## **1. DO NOT OPERATE UNIT:**

- \* Unless trained and authorized.
- \* Unless operator manual is read, and understood.
- \* If unit is not in proper condition.

## **2. WHEN OPERATING UNIT:**

- \* Remove loose objects from the floor that may be projected from the revolving brushes.
- \* Keep hands and feet away from revolving brushes and brooms.
- \* Do not run machine where flammable liquids are present.
- \* Use extreme caution when maneuvering.

## **3. BEFORE LEAVING:**

- \* Make sure machine is turned off.
- \* Stop on level surfaces.
- \* Disconnect batteries.

## **4. BEFORE SERVICING:**

- \* Stop on level surfaces, and secure machine.
- \* Disconnect batteries.

---

# !! SAFETY PRECAUTIONS !!

---

**WARNING:** Hazardous voltage. Shock or electrocution can result. Always disconnect the batteries before servicing this machine.

**WARNING:** Batteries emit hydrogen gases, explosion or fire can result. Keep sparks and open flames away.

**WARNING:** Charge unit only in a well-ventilated area, and keep battery compartment open when charging. Explosion or fire could result.

**WARNING:** Battery acid can cause burns. Wear protective eyewear and gloves when servicing batteries.

**WARNING:** Do not store outdoors or pressure wash. Prevent from getting electronic components wet.

**WARNING:** The use of parts and solutions other than recommended by the manufacturer may cause damage.

**WARNING:** Dress Safely. Do not wear rings or metal wristwatches while working on this machine. They can cause an electrical short, which can cause serious burns. Do not work on this machine while wearing a tie, scarf or other loose, dangling neckwear or clothing. These loose items can tangle in the rotating parts and cause serious injury or even death.

**WARNING:** Do not use the machine as a step ladder or chair.

**WARNING:** Do not ride on this machine. It was not designed to carry passengers.

**WARNING:** Do not operate this machine on ramps or uneven surfaces. When climbing a ramp, always drive the machine in forward straight up or down the ramp. Never drive across the incline. **DO NOT BACK DOWN RAMPS!**

**WARNING:** Do not use machine to apply or pick up flammable liquids. **Fire or Explosion Hazard!**

**WARNING:** Always use the charger provided by the manufacturer to charge the machine. It is an automatic charger, specifically designed to charge at the appropriate rate. If you must use a different charger, disconnect the batteries before charging. This will prevent damage to the electronic speed controller.

**WARNING:** Understand the dynamic braking system before you operate the machine on slick ramps. Machine does not coast. Releasing the handlebar "green" drive buttons, will automatically apply braking force, and stop the machine.

**WARNING:** Do not park the machine on ramps or slopes. This machine does not have a parking brake. It must always be parked on level ground.

**WARNING:** Do not operate the machine if any parts have been removed or damaged.

**WARNING:** Do not remove, paint over, or destroy Warning Decals. If Warning Decals become damaged, they must be replaced.

**WARNING:** Do not operate machine in unsafe condition. If the machine is in need of repair or is in any way unsafe to operate, the matter should be reported immediately to the shift supervisor. Do not operate the machine until it is returned to proper operating condition.

**WARNING:** This machine must only be operated by a trained operator. As part of his or her training, they must read this manual thoroughly. If extra copies are needed contact your local dealer.

**WARNING:** Always turn off the machine before leaving it unattended.

**WARNING:** Do not operate this scrubber over floor outlets. **SEVERE INJURY!**



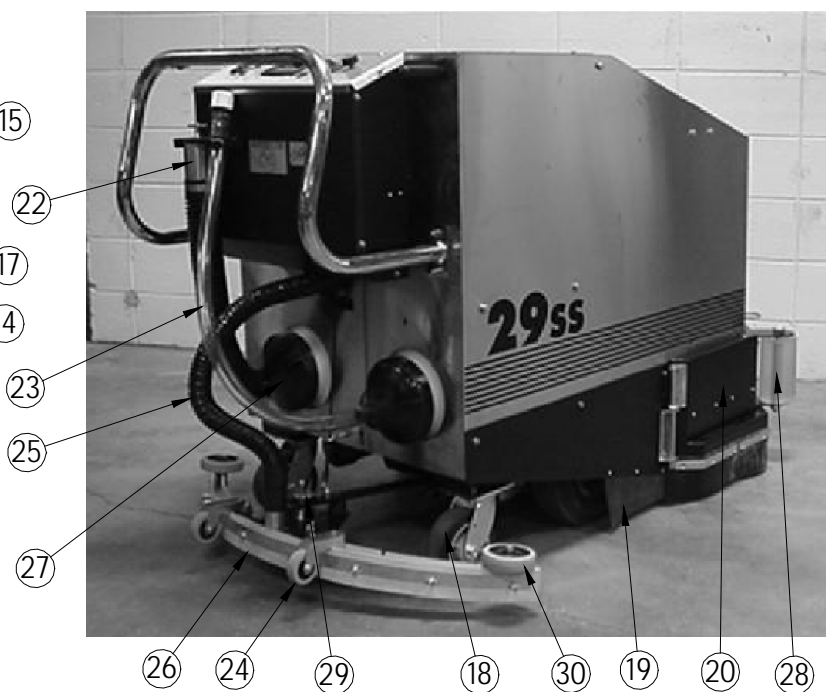
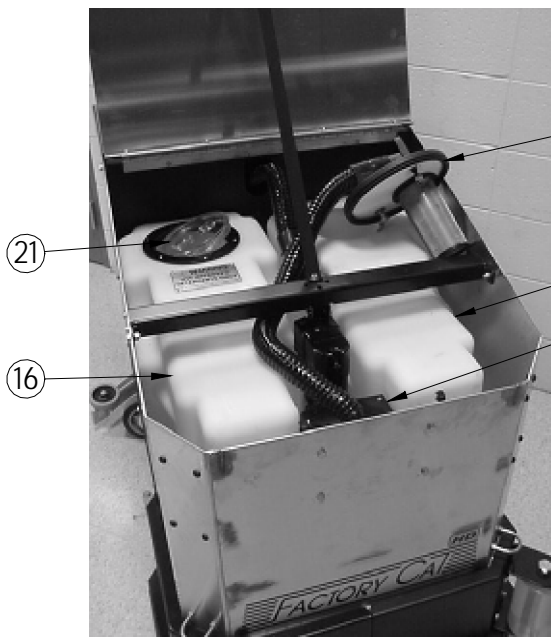
# CONTROL FUNCTIONS

1. Serial Number Plate: Used to identify the date of manufacture & customer information.
2. Main Power Switch: Turns the machine on and off.
3. Speed Control Knob: Controls the drive speed on the machine. Rotate (clockwise) to increase speed.
4. Reverse Switch: Depress down to drive in reverse. Reverse is set at 50% speed for safety.
5. LCD: Contains Battery Gauge, (3) Hour Meters, Down Pressure Gauge, Operation Icons.
6. Recharge Plug: Use only 24-V/36-amp charger provided with the machine.
7. LCD Menu Select: Changes the LCD from screen #1 to #2 or #3.
8. Brush Pressure Switch: Controls brush pressure (1-5) 5 being the highest.
9. Brush Up/Down Switch: Brushes will only run when in the down position. Raise to transport only.
10. Solution Control Knob: Controls the solution flow rate, when the solution switch is on.
11. Drive Control Buttons: Depress either of the (2) switches to drive forward, and release to stop.
12. Handle Bar: Use both hands to operate at all times.
13. Squeegee Lift Lever: Rotate to the right to lower squeegee & engage the vacuum motor.
14. Vacuum Motor Cover: Mounts Vacuum Motor & Seals to hose.
15. Recovery Tank Access: Used to flush out buildup that may accumulate inside of tank.
16. Solution Tank: Holds 30 gallons of cleaning detergent. Max temp is 140 F or 60 C.
17. Recovery Tank: Holds 30 gallons of dirty recovery water. Max temp is 140 F or 60 C.
18. Rear Casters: Twin casters for stability.
19. Drive Wheels: Provide propulsion for machine.
20. Brush Shrouds: Protect scrub brushes from damage, and control splashing. Open to change brushes.
21. Solution Fill Door: Used to refill the solution tank with cleaning solutions.
22. Rec. Drain Hose used to completely drain dirty recovery water from tank. Always flush out completely.
23. Sol. Drain Hose used to drain cleaning solution, and as a level indicator of remaining solution onboard.
24. Backup Wheels.
25. Vacuum Hose: Vacuumizes squeegee. Keep free and clear of blockage for optimum performance.
26. Squeegee: Recovers dirty water from floor. Keep clean and replace blades when worn.
27. Recovery Tank Cleanout Door: Provides access to Recovery Tank floor for sludge removal.
28. Wall Rollers: Protects machine and walls from some collision damage.
29. Adjustment Knob: Adjusts pitch of squeegee. The deflection should be even across entire blade.
30. Corner Wheels.

# MACHINE CONTROLS AND FEATURES



- |                            |                          |                                |
|----------------------------|--------------------------|--------------------------------|
| 1. Serial Number Plate     | 11. Drive Buttons        | 21. Solution Fill Door         |
| 2. Main Power Switch       | 12. Handle Bar           | 22. Rec. Drain Hose            |
| 3. Speed Control Knob      | 13. Squeegee Lift Lever  | 23. Sol. Drain Hose/Sight Tube |
| 4. Reverse Switch          | 14. Vacuum Motor Cover   | 24. Backup Wheels              |
| 5. LCD (Guages & Meters)   | 15. Recovery Tank Access | 25. Squeegee Hose              |
| 6. Recharge Plug           | 16. Solution Tank        | 26. Squeegee                   |
| 7. LCD Menu Select         | 17. Recovery Tank        | 27. Rec. Tank Cleanout Door    |
| 8. Brush Pressure Switch   | 18. Rear Casters         | 28. Wall Rollers               |
| 9. Brush On/Off Switch +/- | 19. Drive Wheels         | 29. Squeegee Knob              |
| 10. Solution Control Knob  | 20. Brush Guards         | 30. Corner Wheels              |



# MACHINE PREP

## UNCRATING MACHINE

Carefully check the crate for any signs of damage. Check the crate to ensure that all accessories are included. Batteries are in the unit. The squeegee, brushes, and other items are in the crate.

To uncrate the machine, remove banding from around the crate. Take off the top and sides and dispose of properly. Remove banding from machine. Remove the chocks around the drive wheels. Fold down ramp, and roll machine off of the base.

**NOTIFY THE CARRIER IMMEDIATELY IF CONCEALED DAMAGE IS DISCOVERED.**

## CONNECTING BATTERIES

Your machine is equipped with (4) 6 volt, deep cycle, 395 amp hour batteries, which form a 24 volt system.

1. Turn all switches to the OFF position.
2. Hinge open the rear compartment lid to access the batteries.
3. All four cables should be tightly connected to the batteries. Locate any loose one's and tighten. This require's a 9/16" wrench. Do not leave connection loose. Loose connections burn cable. (See Fig. 1)
4. Turn on main power switch and check the battery condition meter to ensure correct installation. Charge batteries if needed. (See BATTERY CHARGING)



Fig. 1

# MACHINE SETUP

## ATTACHING SQUEEGEE

1. Lower the squeegee mounting plate by releasing the lever. (See Fig. 2)

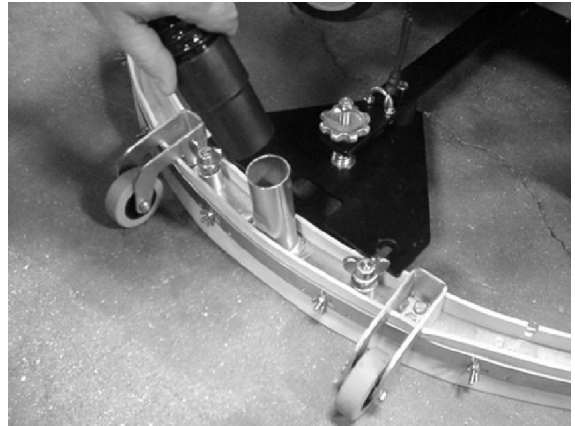


Fig. 2

2. Loosen the two wingnuts on the squeegee and slide them into the slots in the squeegee mounting plate. The squeegee trail wheels should face outward.
3. Tighten the two wingnuts, and connect vacuum hose from the machine to the squeegee. (See Fig. 3)
4. You may need to adjust the squeegee pitch, by using the pitch adjustment knob.

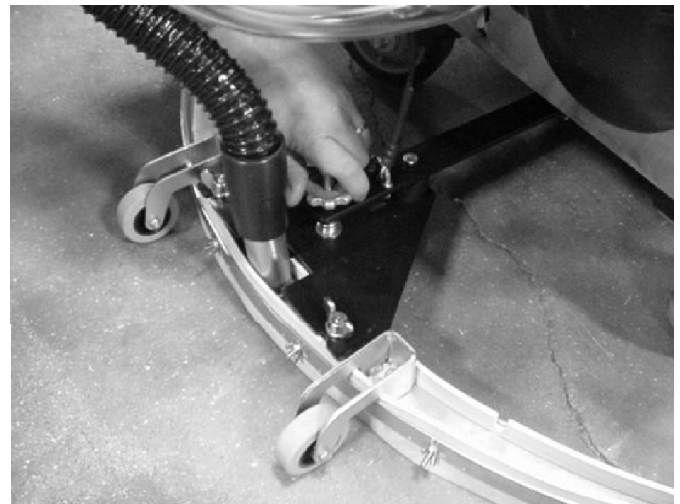


Fig. 3

# WARNING: TURN OFF MACHINE BEFORE INSTALLING BRUSHES.

## INSTALLING DISK BRUSH OR PAD

1. Raise scrub head. Turn the machine on and press the bottom half of the brush up/down on/off switch (o).
2. Pull pin on channel & open brush guards to access the drivers. (See Fig. 4)



Fig. 4

3. Select the correct pads or brushes that best meet your cleaning application. Consult your local dealer for assistance. (See Fig. 5 on page 12)
4. **PAD INSTALLATION** Attach pads to pad drivers before connecting drivers to motor hub. Remove the centerlock ring from the pad driver and position the pad on the pad driver, and replace the center locking ring.
5. Attach brushes or pads to motor hubs. Squeeze the scissor locking device and lift brush up on to the motor drive hub. Make sure the scissors close and lock once the brushes are on. (See Fig. 6)

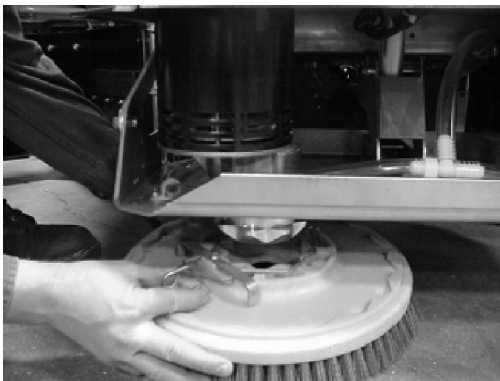


Fig. 6

6. Close the brush shrouds and tighten the wingnuts on either side.

## INSTALLING CYLINDRICAL BRUSH

1. Unscrew the three wingnuts on the brush access door and remove the door. Be careful not to lose the wingnuts and lock washers. (See Fig. 7)

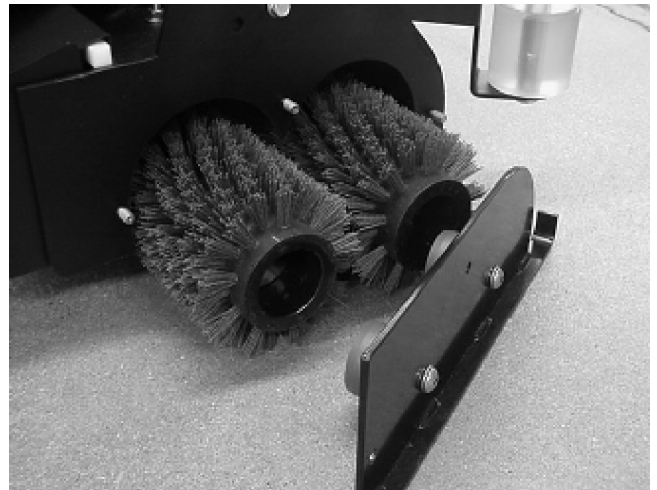


Fig. 7

2. Slide the brushes in, one at a time. When you get the brush on the driver, spin it with your hand until you feel it catch and drop in. When both brushes are in, replace the door and the fasteners. (See Fig. 8)



Fig. 8

**NOTE: IF BRUSHES ARE NOT FULLY ENGAGED WITH THE DRIVERS. THE BRUSHES WILL BE DAMAGED. DO NOT FORCE THE ACCESS DOOR BACK ON. THIS USUALLY INDICATES IMPROPER INSTALLATION.**



## FILLING SOLUTION TANK

1. Transport the machine to the filling station. Raise the scrub head and squeegee when transporting.
2. Turn machine off.
3. Open front lid at the front of the machine and unscrew clear solution lid to fill the tank with up to 30 gallons of clean water. The clear tube at the rear of the machine indicates the amount of water in the tank. (See Fig.9)
4. Add cleaning chemical. Use the proper dilution ratio indicated on the bottle. A proportioning system is preferred.

\*Use only nonflammable commercial cleaning chemicals. If you need assistance in selecting a proper chemical call 1-800-634-4060.



Fig. 9

## OPERATION

Read and understand the safety section on Page 6 & 7 before operating machine.

### PRE-CLEANING CHECK LIST

- \* Check battery condition gauge to make sure batteries are fully charged.
- \* Check condition of pads or brushes.
- \* Check condition of squeegee blades.

## ONE PASS SCRUBBING

STEPS: (See Fig. 10)

1. Turn machine on, make sure the speed knob is at a low setting.
2. Lower squeegee by moving the lift lever all the way to the right.
3. Set brush pressure using Black Toggle (#1). Start on #1 or #2.
4. Lower scrub head to the floor using Black Rocker (#2).
5. Adjust the solution control knob to the desired setting (#3).
6. Begin scrubbing by holding the green drive buttons. Adjust the speed control knob to the desired setting.
7. To operate machine in reverse, simply pull the reverse switch back towards the handlebar. Do not push green buttons when reversing.
8. To stop the machine, let go of the green control buttons or reverse switch.



Fig. 10

## OPERATING HINTS

1. Observe the amount of solution the machine is dispensing on the floor and adjust to the desired flow. To increase the solution flow rate, rotate the solution control knob clockwise. To shut the solution off completely just release the drive buttons. Solution stops when brushes stop.
2. Keep an eye on foam buildup in the recovery tank. If excess foam begins to develop, pour a recommended foam control solution into the recovery tank. Foam is usually an indication of excessive soap, so a better answer may be to use less chemical.
3. Always operate at lower speeds when scrubbing around walls and objects. You should also reduce the speed to maintain control when turning.
4. If the squeegee starts to streak, raise and wipe the blades with a clean cloth. If the problem continues, check the blades for wear or damage, and rotate if needed. You need to presweep before scrubbing if you are using a disk machine. Always be sure to check the squeegee hose for clog's at the recovery tank elbow.
5. Change or turn over pads when dirty. Rotate the scrub brushes every week.
6. Stay clear of objects protruding from the floor, such as sockets, grates, pipes, for they will damage the pads and squeegee blades, or create dangerous situations.
7. During brief stops, you do not have to turn anything off. The brushes and solution will automatically stop when the green control buttons are released.
8. Always keep an eye on your LCD window. They are there to help you scrub more efficiently, by letting you know the status of that particular system at a glance. If the battery gauge is reading low, you must stop immediately and recharge. Running the battery dead will result in damage to the battery.
9. When you run out of solution, raise the brushes, and continue to vacuum the remaining water until it is consumed. The solution drain hose is also used to indicate the level of detergent remaining in the tank.
10. When you are ready to stop, pick up the brushes, turn off the solution switch, pick up the squeegee, and drive the machine back to the charging area. Be sure to drain both tanks before storing machine for an extended period of time.

Fig. 5

<b>BRUSH TYPE</b>	<b>DISK</b>	<b>CYLINDRICAL</b>	<b>LEVEL (10 The highest)</b>	<b>COLOR</b>
Super-Grit	##-421SS	NA	Very High 10	Red/Orange
Tough-Grit	##-421S	##-521S	High 9	Black
Midi-Grit	##-421C	##-521C	High 8	Blue/Grey
Light-Grit	##-421PS	##-521PS	Moderate 6	Grey
Poly (.028)	##-421P	NA	Moderate 5	Black
Nylon (.012)	##-421N	##-521N	Light 2	White
Tampico	##-421T	##-521T	Light 1	Tan
Pad Driver	##-421D	NA	Not Applicable	NA

<b>PADS</b>	<b>DISK</b>	<b>CYLINDRICAL</b>	<b>LEVEL (10 The highest)</b>	<b>COLOR</b>
Super Black	##-422BB	NA	Very High 10	Black
Black	##-422B	NA	High 8	Black
Brown	##-422BR	NA	High 7	Brown
Green	##-422G	NA	Medium 6	Green
Blue	##-422BL	NA	Moderate 4	Blue
Red	##-422R	NA	Moderate 3	Red
White	##-422W	NA	Light 1	White

NOTE: These are only approximations. The customer should always try any brush in an inconspicuous area.

# DRAINING TANKS

## DRAINING RECOVERY TANK

Always empty recovery tank when refilling the solution tank. To drain the recovery tank, perform the following steps.

1. Remove drain hose from the expansion plug holder by turning the T-Handle counter clockwise, lower to drain.  
(See Fig.11A & 11B)



Fig. 11A



Fig. 11B

2. Rinse the recovery tank after every use.  
This will prevent heavy buildup on the bottom of the tank, foul odors, and clogging of the drain hose. (See Fig. 11C)
3. Once tank is empty, put drain hose back on the plug and tighten by turning clockwise.
4. You may use the cleanout port for sludge removal. (See Fig. 11D)



Fig. 11C

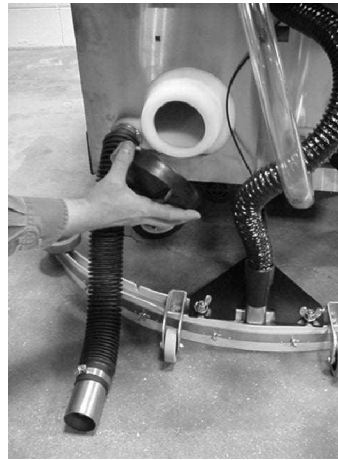


Fig. 11D

## DRAINING SOLUTION TANK

To drain leftover cleaning solution from the solution tank, perform the following steps.

1. Remove end cap and clear sight tube/drain hose off the bracket, lower to drain. (See Fig. 12A & 12B)
2. Rinse out tank and solution flow system with clean water.
3. Reconnect the cap & hose to bracket.



Fig. 12A



Fig. 12B

# BATTERY CHARGING

**CAUTION:** The following instructions are intended for the 24V charger supplied with the machine. (Part # 7-244)

## CHARGER SPECIFICATIONS

- \* Output voltage of 24 Volts.
- \* Output current of 36 Amps.
- \* Input 110v/60hz
- \* Automatic shutoff circuit.
- \* Made for deep cycle batteries.

**DANGER:** Always charge batteries in a well ventilated area. Batteries emit hydrogen gas. Explosion or fire can result. Keep sparks and flame away. Shield eyes when servicing batteries and avoid contact with battery acid.

1. Transport machine to a well ventilated area for charging.
2. Turn the machine off.
3. Open the rear lid to access batteries.
4. Check the water level in each battery. Do not charge the machine if the water is not slightly higher than the plates. If needed, add enough distilled water to 3/4" over the plates. Do not overfill! Batteries can overflow during charging. Replace caps before charging.
5. Connect the red charger plug into the battery charging port located at the rear of the machine. (See Fig.12)
6. With the red charger plug disconnected from the machine, plug the charger power cord into a grounded wall outlet.



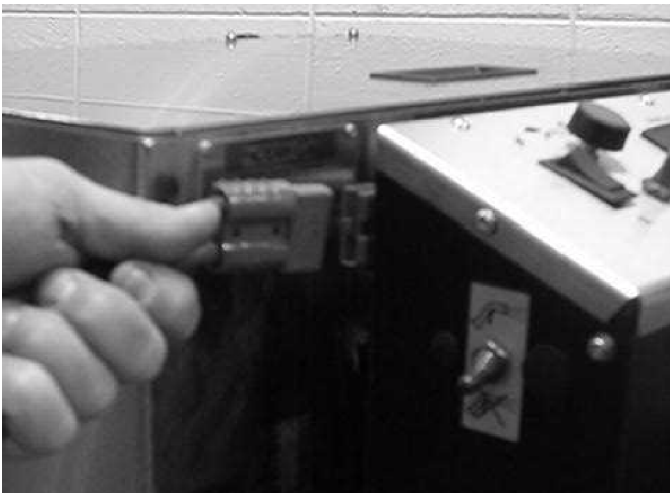


Fig. 12

7. The charger will automatically begin charging, and automatically shut off when fully charged. (See charger gauge)
8. After the charger has turned off, unplug the red plug from the machine and disconnect charger from the wall outlet.
9. Recheck the cell levels after charging. If needed, add distilled water up to the correct level. Be certain to replace the caps securely and to wipe off the top of the batteries with a clean cloth. Discard cloth.

## MAINTENANCE

### DAILY MAINTENANCE

1. Remove and clean pads or brushes. Never use soiled pads when cleaning. Replace pads frequently.
2. Remove and clean debris from the float shut-off screen located inside the recovery tank.
3. Drain and rinse tanks thoroughly. Inspect vacuum hose for any objects obstructing the air flow.
4. Raise squeegee and wipe blades with a clean cloth. Store squeegee in the raised position to prevent damage or settling of the blades.

5. Wipe down machine if needed. Use a non-abrasive, non-solvent cleaner, or a clean damp cloth.
6. Recharge the batteries if needed.

### WEEKLY MAINTENANCE

1. Check water level in each cell of the batteries, and fill as needed. Always use distilled water to refill batteries. Batteries **SHOULD NOT** be filled to the tops of the caps.

FILL BATTERIES APPROXIMATELY 3/4" TO 1" ABOVE THE LEAD PLATES. OVERFILLING WILL CAUSE THE BATTERIES TO LEAK DURING CHARGING. THE CHARGING PROCESS CREATES GAS BUBBLES INSIDE THE BATTERY. WHICH EFFECTIVELY INCREASES THE VOLUME OF THE ELECTROLITE.

2. Clean battery tops to prevent corrosion.
3. Rotate brushes. Rotate the left to right and right to left. On cylindrical models from front to back.

### MONTHLY MAINTENANCE

1. Lubricate rear casters with a waterproof grease.
2. Check machine for water leaks and loose nuts and bolts.

## STORING MACHINE

1. Be sure to flush the tanks out completely, and to drain all water from the machine.
2. Remove the recovery tank lid to promote air circulation.
3. Raise brushes and squeegee.

# PREVENTATIVE MAINTENANCE RECORDS

USE THIS FORM TO MAKE COPIES FOR YOUR INTERNAL RECORDS

<u>PREVENTATIVE MAINTENANCE</u>	<u>CHECKED</u>	<u>NOTE</u>
Rotate Brushes / Replace Pads	_____	_____
Rotate Side Brooms	_____	_____
Drain Solution Tank	_____	_____
Flush Solution System	_____	_____
Clean Solution Screen	_____	_____
Drain Recovery Tank	_____	_____
Flush Recovery Tank	_____	_____
Clean Vacuum Screen	_____	_____
Rotate Rear Squeegee Blade	_____	_____
Check Battery Water Level	_____	_____
Check Battery Voltage	_____	_____
Check Charger Condition	_____	_____
Check Battery Connections	_____	_____
Check Chemical Level	_____	_____
Check Machine Performance	_____	_____
Check Scrubbing Power	_____	_____
Check Vacuum Power	_____	_____
Water Control on Turns	_____	_____
Gauges and Controls function smoothly	_____	_____

<u>HOURLY METER</u>	<u>CURRENT</u>	<u>LAST</u>
Keyswitch:	_____	_____
Brushhead:	_____	_____
Transport:	_____	_____

Past Hour Meter Reading: \_\_\_\_\_

Current Hour Meter Reading: \_\_\_\_\_

Average Weekly Usage: \_\_\_\_\_

Technician Print: \_\_\_\_\_

Date: \_\_\_\_\_

Technician Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Manager Signature: \_\_\_\_\_

Date: \_\_\_\_\_

# **TROUBLE SHOOTING**

## **PROBLEM**

## **CAUSE**

## **SOLUTION**

No power, nothing operates	Faulty main switch Batteries need charging Faulty battery(s) Loose battery cable Interrupt switch on charger plug is stuck	Contact local servicing dealer See CHARGING BATTERIES Replace battery(s) Tighten loose cable  Unstick switch
Brush motor(s) do not operate	Brush deck is not down Drive buttons are not engaged Brush deck current overload  Carbon brushes worn Faulty brush motor or wires	Put brush deck down w/ switch Engage drive buttons Turn power off for 5 second's Then turn back on Contact local servicing dealer Contact local servicing dealer
Drive motor does not operate	Speed control turned down Recharge switch misadjusted Faulty speed controller or wires Faulty drive motor Faulty wiring Carbon brushes worn	Turn up speed control Contact local servicing dealer Contact local servicing dealer Contact local servicing dealer Contact local servicing dealer Contact local servicing dealer
Vacuum motor does not operate	Squeegee is in the up position Faulty vacuum switch Vacuum current overload  Faulty vacuum motor Carbon brushes worn	Rotate squeegee lift lever down Contact local servicing dealer Turn main power off and then turn on  Contact local servicing dealer Contact local servicing dealer
Drive motor runs incorrectly	Faulty speed controller or wires Faulty potentiometer Loose wires	Contact local servicing dealer Contact local servicing dealer Contact local servicing dealer
Insufficient solution flow	Solution tank low Flow knob turned down Solution filter clogged Solution line clogged  Solution valve clogged	Refill Sol. tank, drain Rec. tank Turn knob counter-clockwise Remove cover and clean Remove and blow out with compressed air Remove cover and clean

# **TROUBLE SHOOTING**

## **PROBLEM**

## **CAUSE**

## **SOLUTION**

No solution flow

No solution in tank  
Solution knob OFF

Faulty solution valve  
Faulty solution reostat

Fill solution tank  
Turn solution knob counter-clockwise  
Contact local servicing dealer  
Contact local servicing dealer

Poor water recovery

Recovery tank is full  
Ball/Screen in recovery  
Tank is clogged  
Vacuum hose is clogged  
Squeegee is clogged  
Squeegee blades worn  
Faulty vacuum hose  
Vac motor gasket torn  
Vac motor to tank hose leaks  
Drain plug loose  
Rec. tank lid loose  
Vac motor faulty  
Battery charge is low

Empty recovery tank  
Remove screen and clean  
  
Remove debris  
Remove debris  
Rotate or Replace blades  
Contact local servicing dealer  
Contact local servicing dealer  
  
Contact local servicing dealer  
Tighten drain plug  
Tighten lid  
Contact local servicing dealer  
Charge batteries overnight

Poor water recovery on turns

Squeegee swing binding  
Incorrect squeegee size

Contact local servicing dealer  
Contact local servicing dealer

Casters noisy

Bearings dry  
Faulty caster

Grease caster bearings  
Contact local servicing dealer

Poor Traction

Excessive brush pressure  
Worn drive tires  
Heavy soap concentration  
Tires damaged from chemical

Reduce pressure with switch  
Contact local servicing dealer  
Reduce detergent ratio  
Change chemical or change to black tires

# ***SPARE PARTS BOOK***

## ***Walk-Behind Scrubbers***

Spare parts are sold through authorized Dealers. If you have forgotten your dealer's name, or you have moved the machine to a new location, please **Call us at: 1 (800) 634-4060, or Fax us at: 1 (866) 901-3335** and we will re-establish a dealer contact for you.

### **TO ORDER PARTS:**

Please provide the machine's Serial No. with your order. Normally, ordinary parts orders are shipped out the same day the order is received.

### **EMERGENCY ORDERS:**

Within the Continental United States, We can supply any part that weighs under 70lbs within 3 business days, not counting weekends or National Holidays.

However, if parts are ordered on an "Emergency" basis, this means that we will ship them by fastest means, generally by air courier service, at the customers expense.

### **FREIGHT:**

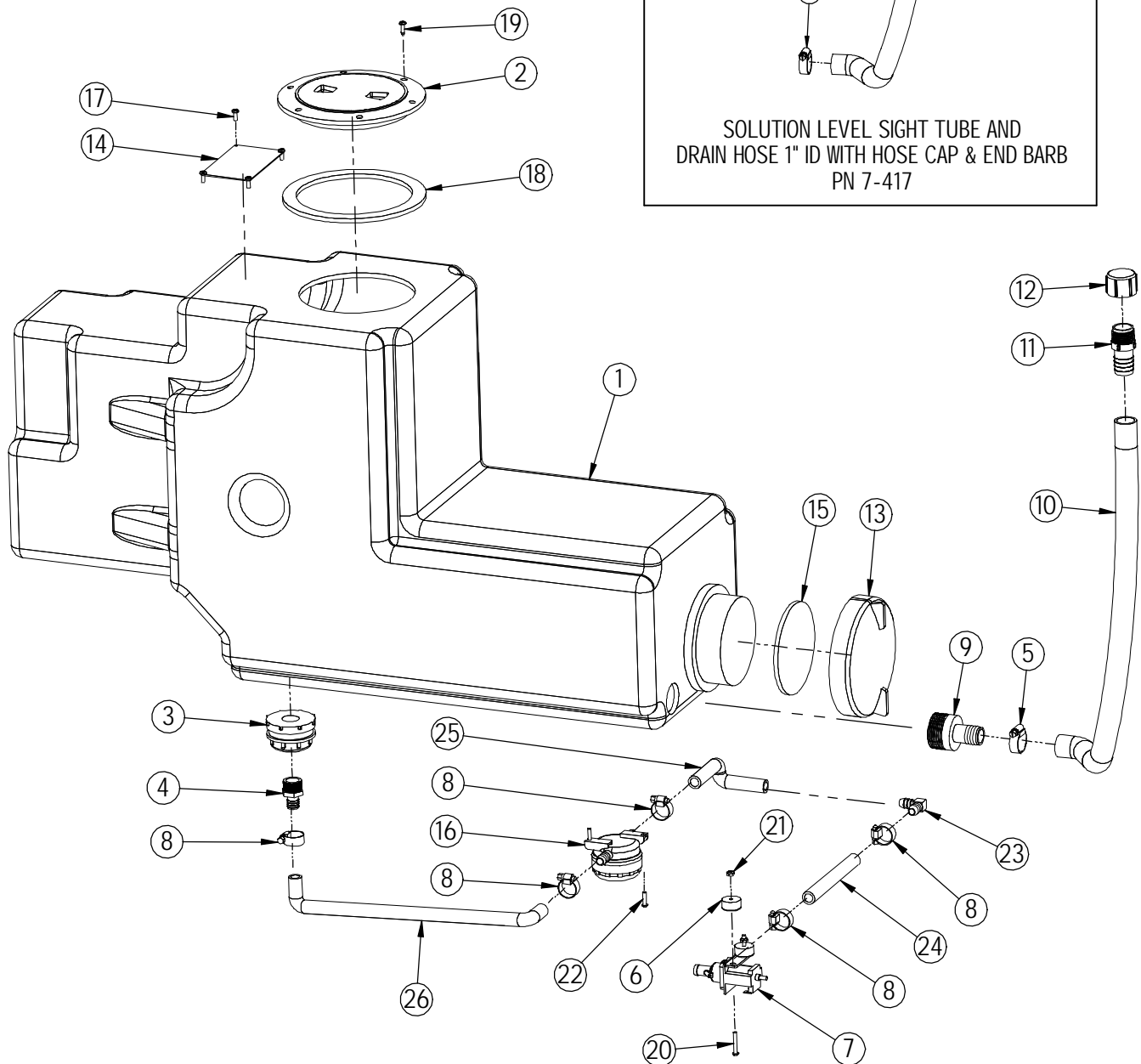
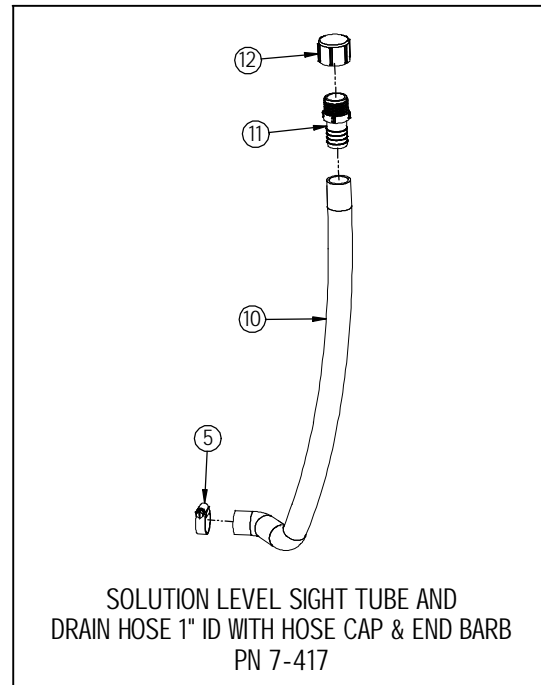
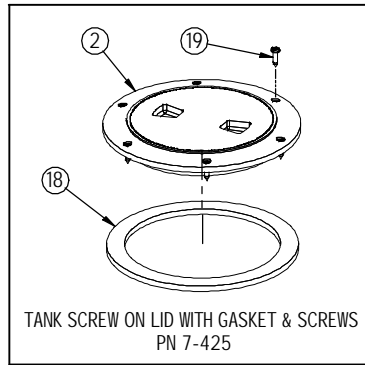
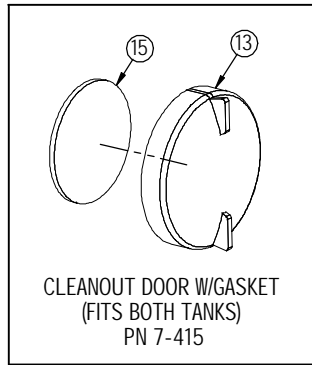
Within the United States, the normal shipment method is by customer choice, while the emergency shipment method is by R.P.S. choice - normally by fastest means. This means that emergency orders will generally cost the customer more than normal orders.

In both cases, the customer is responsible for all freight costs.

***Model 29ss/35ss***

***Parts Breakdown***

# Solution System

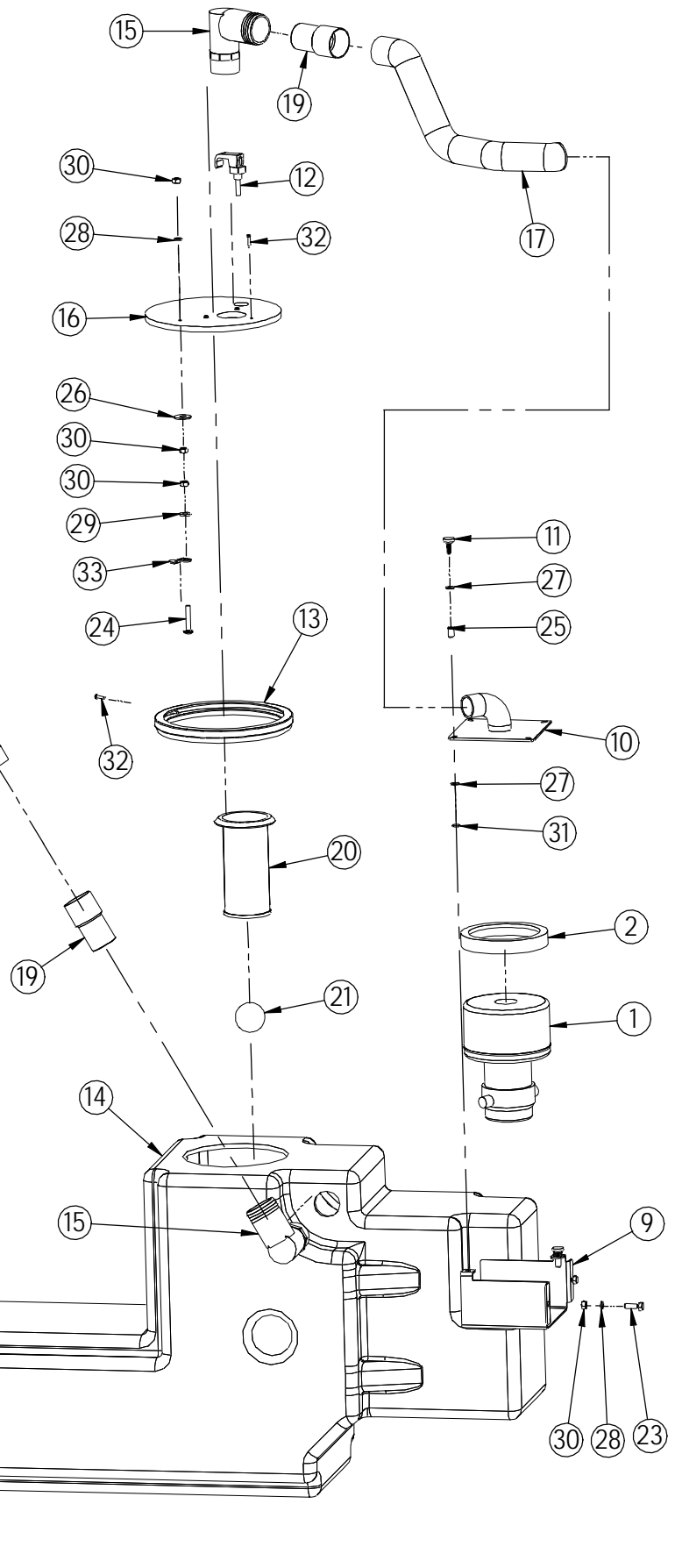
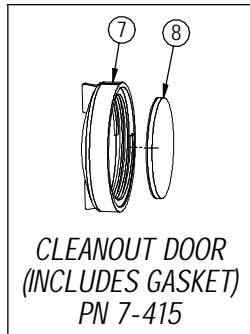
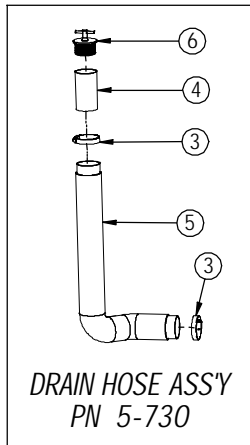


# Solution System

Item	Part No.	Part Description	Comments	Qty
1	7-414	SOLUTION TANK		1
2	7-425	TANK SCREW ON LID W/GASKET	PN 7-425 INCLUDES ITEMS 2,18,19	1
3	7-414A	BULKHEAD FITTING, 3/4" FNPT		1
4	7-454	3/4 NPT TO 5/8 STRAIGHT BARB		1
5	H-62005	CLAMP 5/8 - 1 1/2" SS	PN 7-417 INCLUDES ITEMS 5, 10, 11, 12	1
6	7-112C	1.0 OD X .50 GROMMET		2
7	21-4500	ADJUSTABLE SOLUTION FLOW VALVE		1
8	21-1612	HOSE CLAMP 1/2" - 29/32"		5
9	7-430	1-1/2" MNPT TO 1" BARB		1
10	7-417A	SOLUTION LEVEL SIGHT & DRAIN HOSE 1" ID	PN 7-417 INCLUDES ITEMS 5, 10, 11, 12	1
11	7-418	1" NPT TO 1" BARB	PN 7-417 INCLUDES ITEMS 5, 10, 11, 12	1
12	7-418A	1" FNPT PIPE CAP	PN 7-417 INCLUDES ITEMS 5, 10, 11, 12	1
13	7-415A	CLEANOUT DOOR	PN 7-415 INCLUDES ITEMS 13 & 15	1
14	5-728	DETERGENT WARNING PLATE		1
15	7-416	CLEANOUT DOOR GASKET	PN 7-415 INCLUDES ITEMS 13 & 15	1
16	5-913	INLINE FILTER		1
17	H-72904	PPH SMS #6 X 1/2" SS		4
18	38-742	SCREW ON LID GASKET		1
19	H-72916	PPH SMS #8 X 3/4" SS		6
20	H-73747	RPH #10-32 X 1 1/4" SS		2
21	H-70858	NYLOK #10-32 SS		2
22	H-72565	RPH #10-32 X 3/4" SS		2
23	H-095	.500 NYLON BARBED ELBOW		1
24	7-7046	1/2" ID X 5-1/2" LG CLEAR TUBE		1
25	7-7045	1/2" ID X 5.0" LG CLEAR TUBE		1
26	7-7044	1/2" ID X 21" LG CLEAR TUBE		1



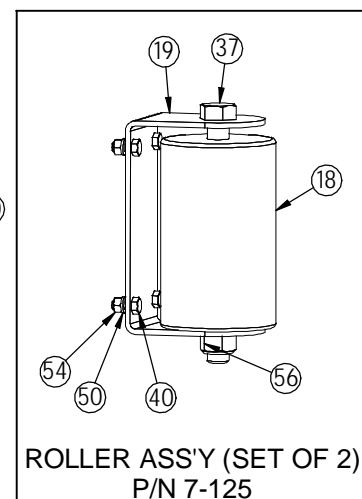
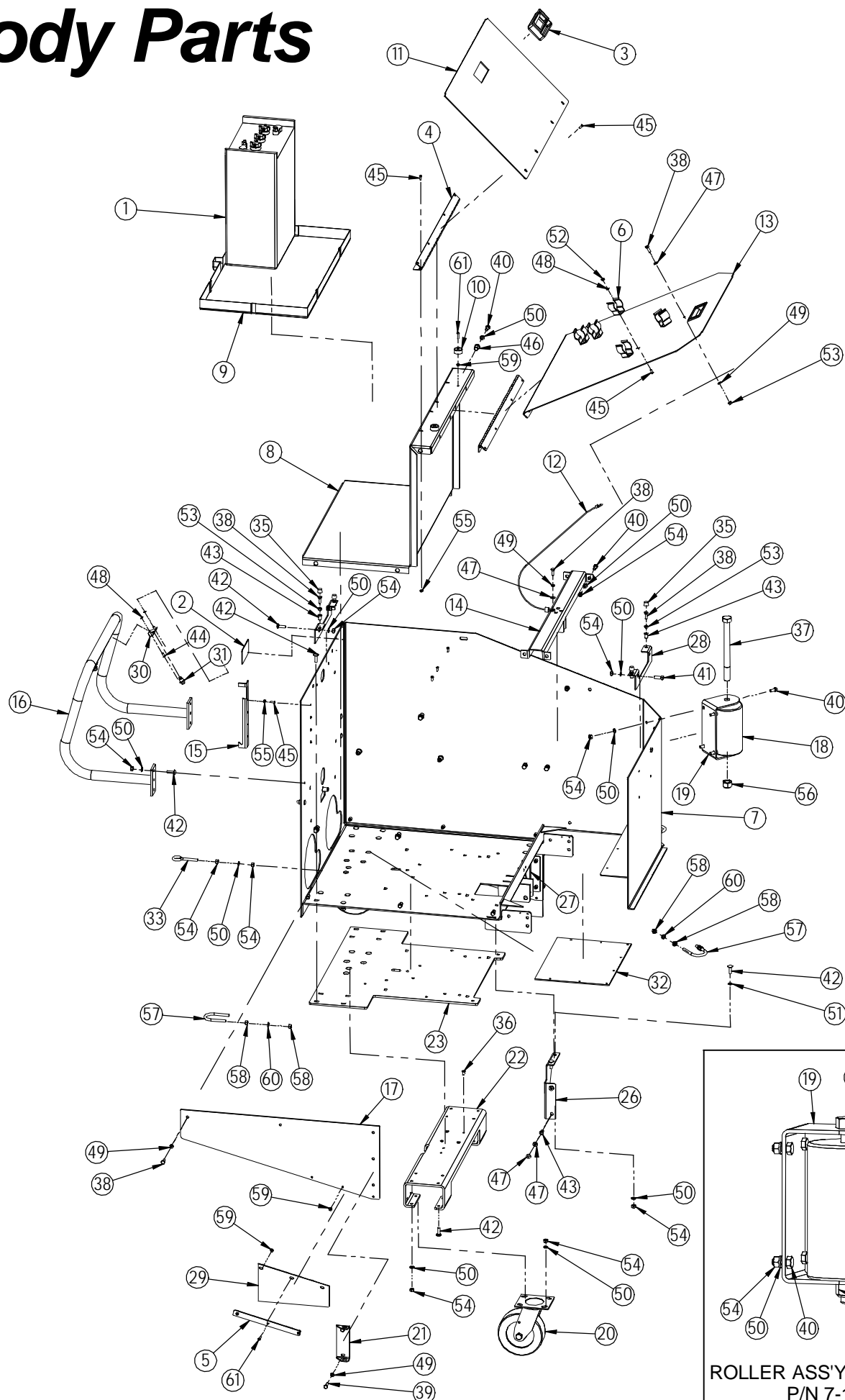
# Recovery System



# Recovery System

Item	Part No.	Part Description	Comments	Qty
1	5-225	VAC MOTOR	INCLUDES PN 5-708A	1
2	5-708A	VAC MOTOR GASKET		1
3	5-719	CLAMP 1 9/16 - 2 1/2 " SS	5-730 INCLUDES ITEMS 3,4,5,6	2
4	5-720	DRAIN HOSE END TUBE	5-730 INCLUDES ITEMS 3,4,5,6	1
5	5-721	TANK DRAIN HOSE	5-730 INCLUDES ITEMS 3,4,5,6	1
6	5-727	DRAIN HOSE PLUG	5-730 INCLUDES ITEMS 3,4,5,6 T-HANDLE AVAILABLE UNDER PN 5-727T	1
7	7-415A	CLEANOUT DOOR	PN 7-415 INCLUDES ITEMS 7 & 8	1
8	7-416	CLEANOUT DOOR GASKET	PN 7-415 INCLUDES ITEMS 7 & 8	1
9	7-419	VAC MOTOR MTG BOX		1
10	7-420	VAC MOTOR INLET		1
11	7-420B	1/4-20 X 3/4" W/KNOB		2
12	7-423B	LATCH FOR REC LID	7-423 INCLUDES ITEMS 12,13,15,20,21,24,28,29,30,32,33	1
13	7-426	RECOVERY LID GASKET	7-423 INCLUDES ITEMS 12,13,15,20,21,24,28,29,30,32,33	1
14	7-701	RECOVERY TANK		1
15	7-702	RECOVERY TANK ELBOW	7-423 INCLUDES ITEMS 12,13,15,20,21,24,28,29,30,32,33	2
16	7-703	REC TANK LID BLANK		1
17	7-704A	HOSE, VAC MOTOR TO TANK	7-704 INCLUDES PN 7-704A & 7-710	1
18	7-705A	HOSE - SQUEEGEE TO TANK	7-705 INCLUDES PN 7-705A & 7-710	1
19	7-710	HOSE CUFF, 1 1/2"	7-705 INCLUDES PN 7-705A & 7-710	2
20	7-711A	SCREEN STRAINER	7-423 INCLUDES ITEMS 12,13,15,20,21,24,28,29,30,32,33	1
21	7-712	OVERFILL SHUTOFF BALL	7-423 INCLUDES ITEMS 12,13,15,20,21,24,28,29,30,32,33	1
22	7-715	1-1/2" NPT PIPE NIPPLE		1
23	H-13055	HCS 5/16"-18 X 1"		2
24	H-21260	CB 5/16"- 18 X 1-3/4"	7-423 INCLUDES ITEMS 12,13,15,20,21,24,28,29,30,32,33	1
25	H-250RCN	RCN 1/4"- 20		2
26	H-33008	FW 3/8" SAE		1
27	H-33078	FW 1/4" SAE		4
28	H-33620	LW 5/16"	7-423 INCLUDES ITEMS 12,13,15,20,21,24,28,29,30,32,33	3
29	H-33622	LW 3/8"	7-423 INCLUDES ITEMS 12,13,15,20,21,24,28,29,30,32,33	1
30	H-36104	HN 5/16"-18	7-423 INCLUDES ITEMS 12,13,15,20,21,24,28,29,30,32,33	5
31	H-66802	#8 BUNA O-RING		2
32	H-72916	PPH SMS #8 X 3/4" SS	7-423 INCLUDES ITEMS 12,13,15,20,21,24,28,29,30,32,33	5
33	H-CAM	CAM LATCH	7-423 INCLUDES ITEMS 12,13,15,20,21,24,28,29,30,32,33	1

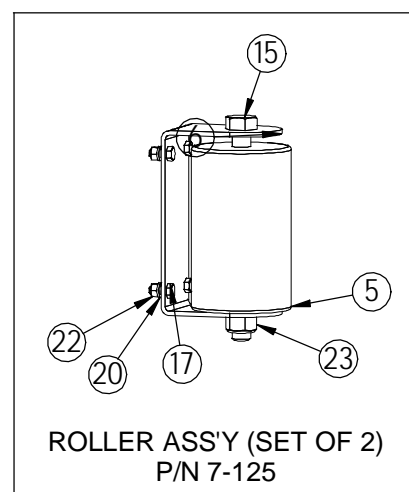
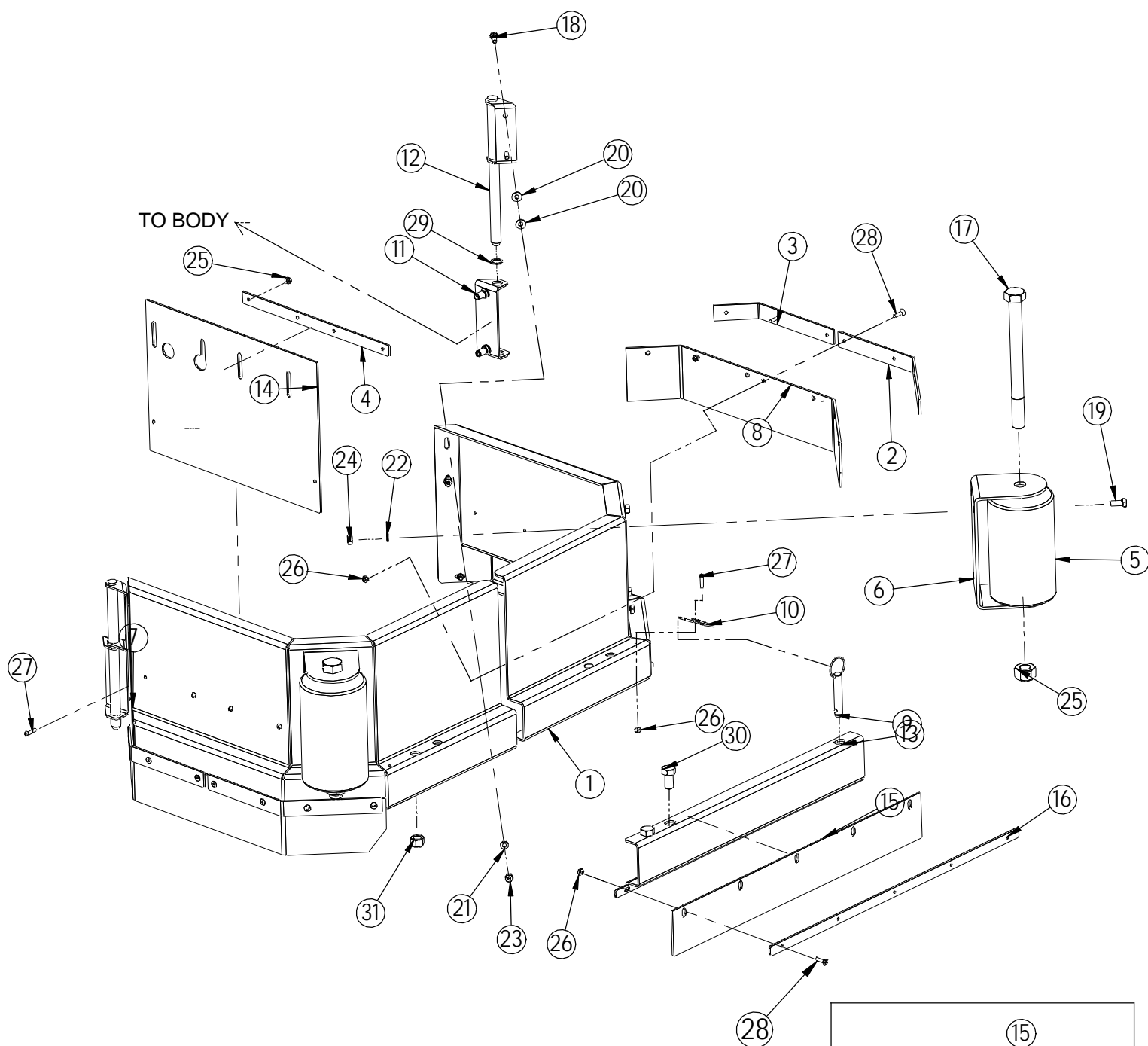
# Body Parts



# Body Parts

Item	Part No.	Part Description	Comments	Qty
1	290-2110	BATTERY 6 VOLT 395 AH		4
2	4-101	SERIAL NO. PL. (FACTORY CAT)		1
	21-0101	SERIAL NO. PL. (TOMCAT)		
3	4-127	HANDLE		2
4	4-131	HINGE 23 3/4" SS		2
5	4-529	CURTAIN CLAMP		2
6	5-886	WAND CLIP		5
7	7-110S	MAINFRAME		1
8	7-111	BATTERY BOX		1
9	7-111A	BATTERY BOX LINER		1
10	7-112C	1.0 OD X .50 GROMMET		2
11	7-112S	REAR HOOD S.S.	7-113S WITHOUT ATTACHMENTS	1
12	7-113B	HOOD STRAP	7-1135S WITH ATTACHMENTS	1
13	7-113S	FRONT HOOD		1
	7-1135S			
14	7-114	LATERAL GIRDER	INCLUDES ITEMS: 31,30,44	1
15	7-115	LIFT LEVER GUIDE		1
16	7-116	HANDLE BAR		1
17	7-119	QTR PANEL		2
18	7-125A	ROLLER		2
19	7-126	HD ROLLER BRACKET		2
20	7-130B	6" CASTER, BLACK		2
	7-130G	6" CASTER, GREY		
21	7-134	HINGE BRACKET		2
22	7-138	CASTER FOOT		1
23	7-139	REINFORCEMENT PLATE		1
24	7-151	MODEL 29 LH DECAL (NOT SHOWN)		1
25	7-152	MODEL 29 RH DECAL (NOT SHOWN)		1
26	7-155L	LH QTR PANEL GUSSET		1
27	7-155R	RH QTR PANEL GUSSET		1
28	7-156	HOOD REST ANGLE		2
29	7-161A	QUARTER PANEL CURTAIN		2
30	7-228	SWITCH MNT PLATE		2
31	7-229	PUSH BUTTON SWITCH		2
32	7-361	SPLASH CURTAIN		1
33	7-783A	TEB 5/16-18 X 2-1/4		1
34	8-152	FACTORY CAT DECAL (NOT SHOWN)		1
35	H-083	BOLT HEAD CAP		4
36	H-1032RCN	RCN #10-32		4
37	H-11380	HCS 3/4-10 X 8-1/2		2
38	H-13003	HCS 1/4"-20 X 3/4"		12
39	H-13005	HCS 1/4"-20 X 1"		4
40	H-13053	HCS 5/16"-18 X 3/4"		26
41	H-13055	HCS 5/16"-18 X 1"		2
42	H-21255	CB 5/16"-18 X 1"		26
43	H-250RCN	RCN 1/4"-20		16
44	H-28878	RPH #8-32 X 1/2" SMS		4
45	H-29048	RPH #10-32 X 1/2"		30
46	H-312RCN	RCN 5/16"-18		7
47	H-33078	FW 1/4" SAE		18
48	H-33614	LW #10		14
49	H-33618	LW 1/4"		12
50	H-33620	LW 5/16"		51
51	H-33738	5/16" STAR WASHER		4
52	H-36030	MSN #10-32		10
53	H-36102	HN 1/4"-20		5
54	H-36104	HN 5/16"-18		46
55	H-37015	NYLOK #10-32		17
56	H-37039	NYLOK 3/4"-10		2
57	H-42024	5/16-18 X 1-1/4" U BOLT		4
58	H-70711	HN 5/16"-18 SS		16
59	H-70858	NYLOK #10-32 SS		8
60	H-71065	LW 5/16" SS		8
61	H-72565	RPH #10-32 X 3/4" SS		8

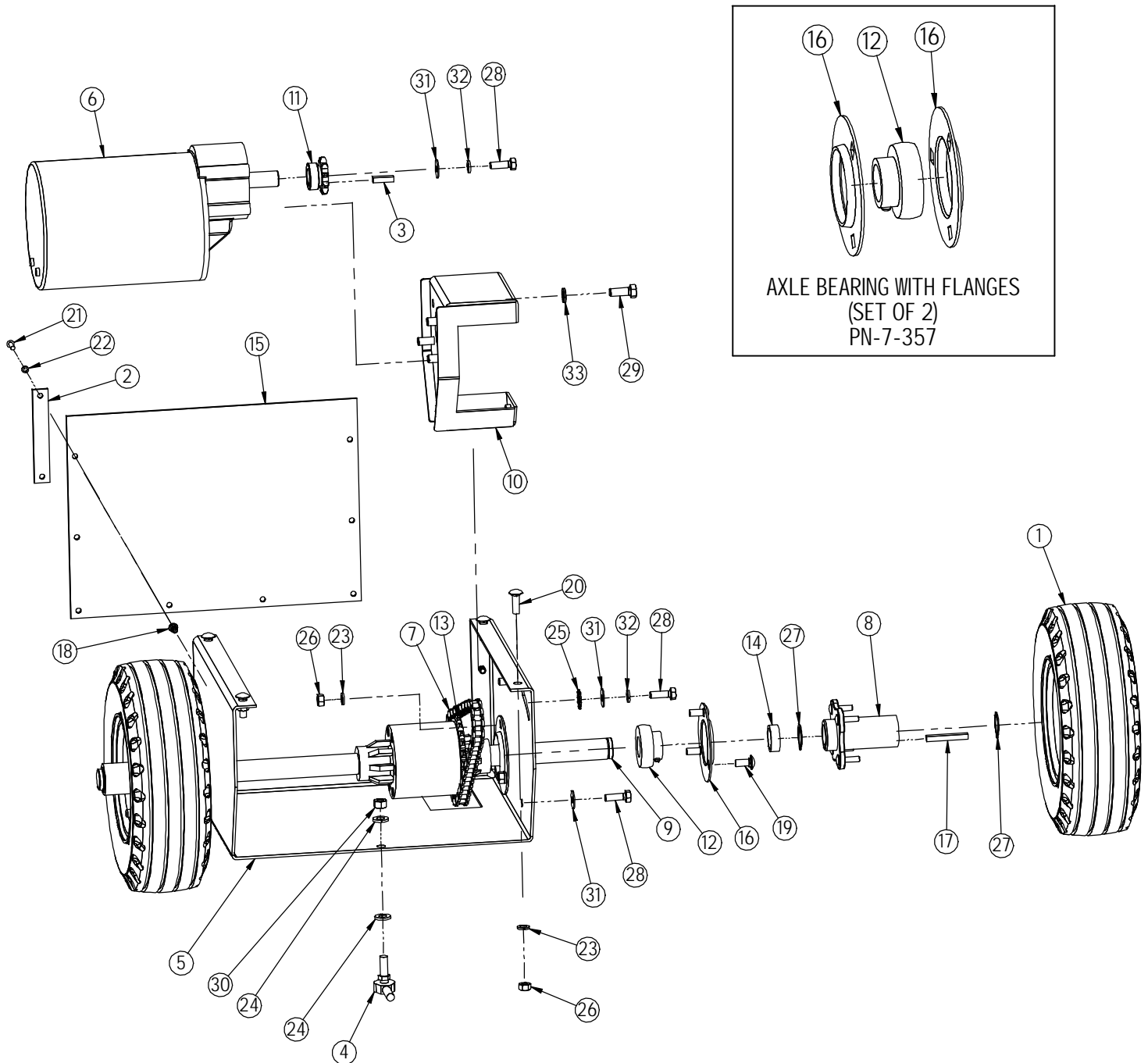
# Jaw Assembly



# Jaw Assembly

Item	Part No.	Part Description	Comments	Qty
1	7-120 7-135	LH JAW MODEL 29 LH JAW MODEL 35		1
2	7-122F	JAW CURT CLAMP FRT MODEL 35		2
3	7-122R	JAW CURTAIN CLAMP REAR		2
4	7-122S	INT SPL GUARD MNT		1
5	7-125A	ROLLER		2
6	7-126	HD ROLLER BRACKET		2
7	7-129 7-136	RH JAW MODEL 29 RH JAW MODEL 35		1
8	7-131A	SPLASH CURTAIN		2
9	7-133A	DET RING PIN, 1/2" X 2"		1
10	7-133B	RETAINING CABLE		1
11	7-134	HINGE BRACKET		1
12	7-134L	LH JAW HINGE		1
13	7-162	CHANNEL GUARD, FRONT		1
14	7-164	INT SPLASH CURTAIN		1
15	7-166	FRONT SPLASH CURTAIN		1
16	7-167	FRONT CURTAIN BAND		1
17	H-11380	HCS 3/4-10 X 8-1/2		2
18	H-13003	HCS 1/4"-20 X 3/4"		2
19	H-13053	HCS 5/16"-18 X 3/4"		8
20	H-33078	FW 1/4" SAE		10
21	H-33618	LW 1/4"		6
22	H-33620	LW 5/16"		8
23	H-36102	HN 1/4"-20		2
24	H-36104	HN 5/16"-18		8
25	H-37039	NYLOK 3/4"- 10		2
26	H-70858	NYLOK #10-32 SS		24
27	H-72565	RPH #10-32 X 3/4" SS		5
28	H-72684	FHP 10-32 X 3/4" SS		19
29	H-76065	FW 1/2" NYLON		2
30	H-77205	HCS 1/2"-13 X 1" SS		2
31	H-77864	NYLOK 1/2"-13 SS		2

# Traction Drive

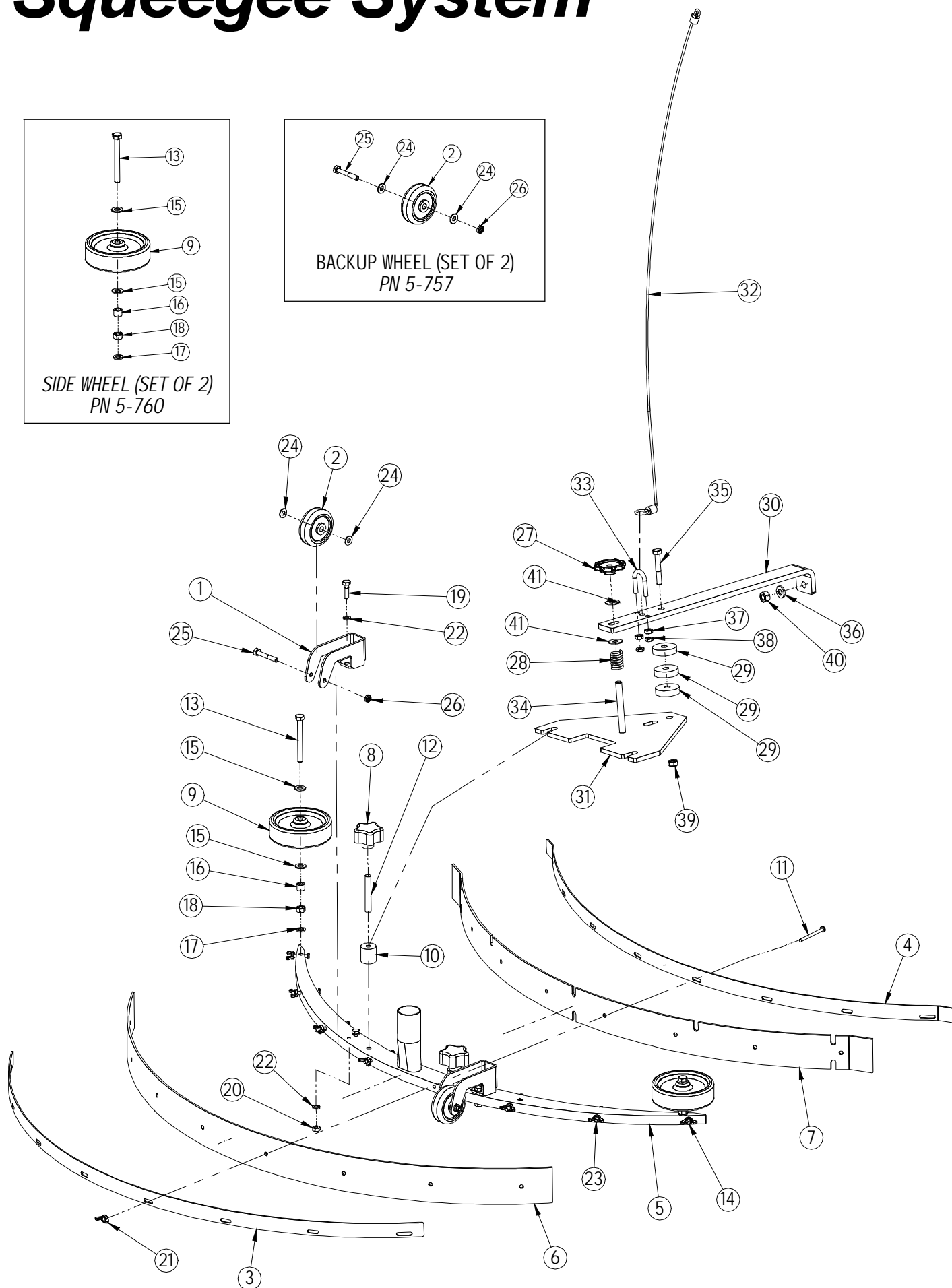
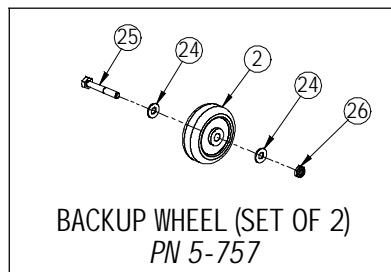
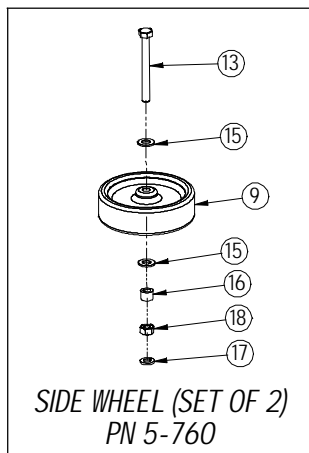


# Traction Drive

Item	Part Number	Part Description	Comments	Qty
1	32-3040 32-3045 32-3050 32-3055	TIRE, GRAY, PNEUMATIC, 4.10/3.50-5 TIRE, BLACK, PNEUMATIC, 4.10/3.50-5 TIRE, GRAY, FOAM, 4.10/3.50-5 TIRE, BLACK, FOAM, 4.10/3.50-5		2
2	5-131S	CURTAIN CLAMP		2
3	5-431A	1/4" X 1" KEY	INCLUDES ITEM 17, PN H-1032HCN	1
4	5-768	SQUEEGEE BALL JOINT		1
5	7-123	AXLE MTG BRACKET		1
6	7-222	3/4 HP X 200 RPM MOTOR		1
7	7-342	CHAIN, #40, WITH MASTERLINK		1
8	7-348	MODEL 29 HUB FOR 1" DIA. SHAFT		2
9	7-350	DIFFERENTIAL AXLE		1
10	7-352	DRIVE MOTOR BRACKET	NOT SOLD SEPARATELY, SOLD AS PN 7-357	1
11	7-354	SPROCKET, 10 TOOTH		1
12	7-357A	BEARING, 1"		2
13	7-358	DIFFERENTIAL AXLE SPROCKET		1
14	7-359A	REAR WHEEL BEARING SPACER	NOT SOLD SEPARATELY, SOLD AS PN 7-357	2
15	7-361	SPLASH CURTAIN		1
16	7-364	BEARING MTG FLANGE		4
17	8-625A	1/4" X 2" KEY		2
18	H-1032HCN	HCN #10-32		4
19	H-21253	CB 5/16"- 18 X 3/4"		6
20	H-21255	CB 5/16"- 18 X 1"		4
21	H-29060	RPH #10-32 X 3/4"		4
22	H-33614	LW #10		4
23	H-33620	LW 5/16"		10
24	H-33622	LW 3/8"		2
25	H-33762	LW, 3/8" INT/EXT TOOTH		2
26	H-36104	HN 5/16"-18		10
27	H-68019	SNAP RING 1"		4
28	H-70055	HCS 5/16"- 18 X 1" SS		4
29	H-70105	HCS 3/8"- 16 X 1" SS		4
30	H-70732	HN 3/8"- 24 SS		1
31	H-71016	FW 5/16" X 7/8" USS		4
32	H-71065	LW 5/16" SS		3
33	H-71067	LW 3/8" SS		4



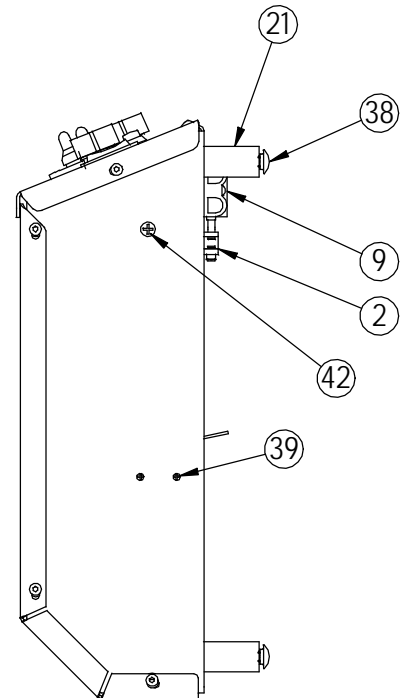
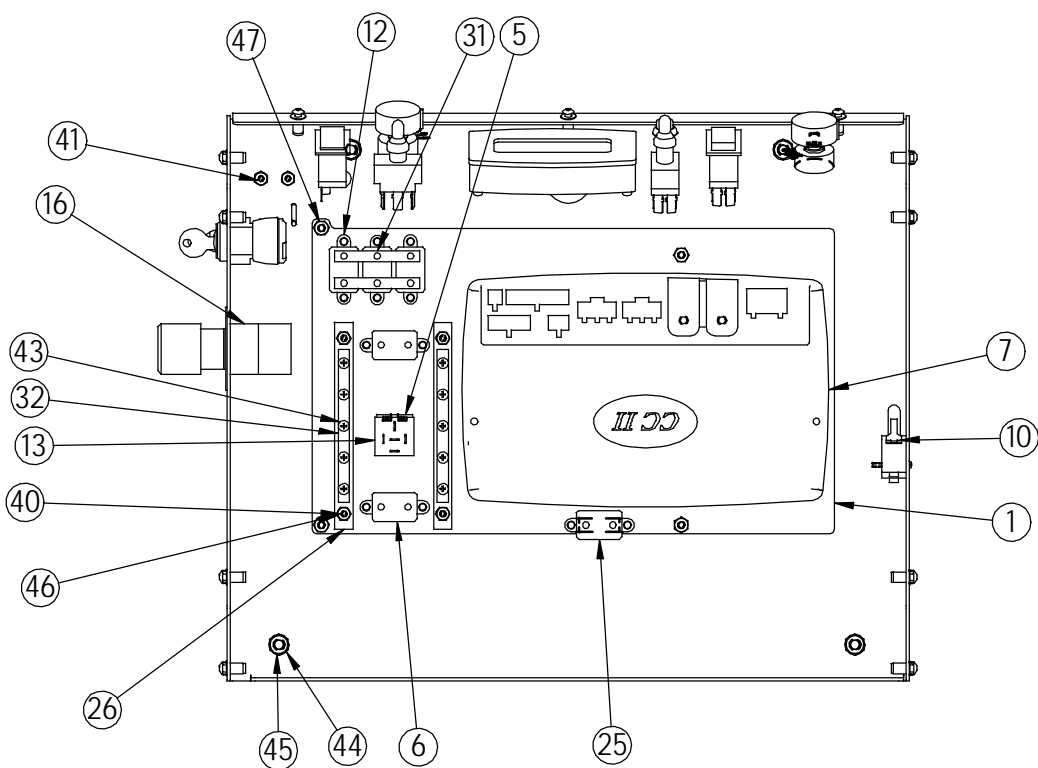
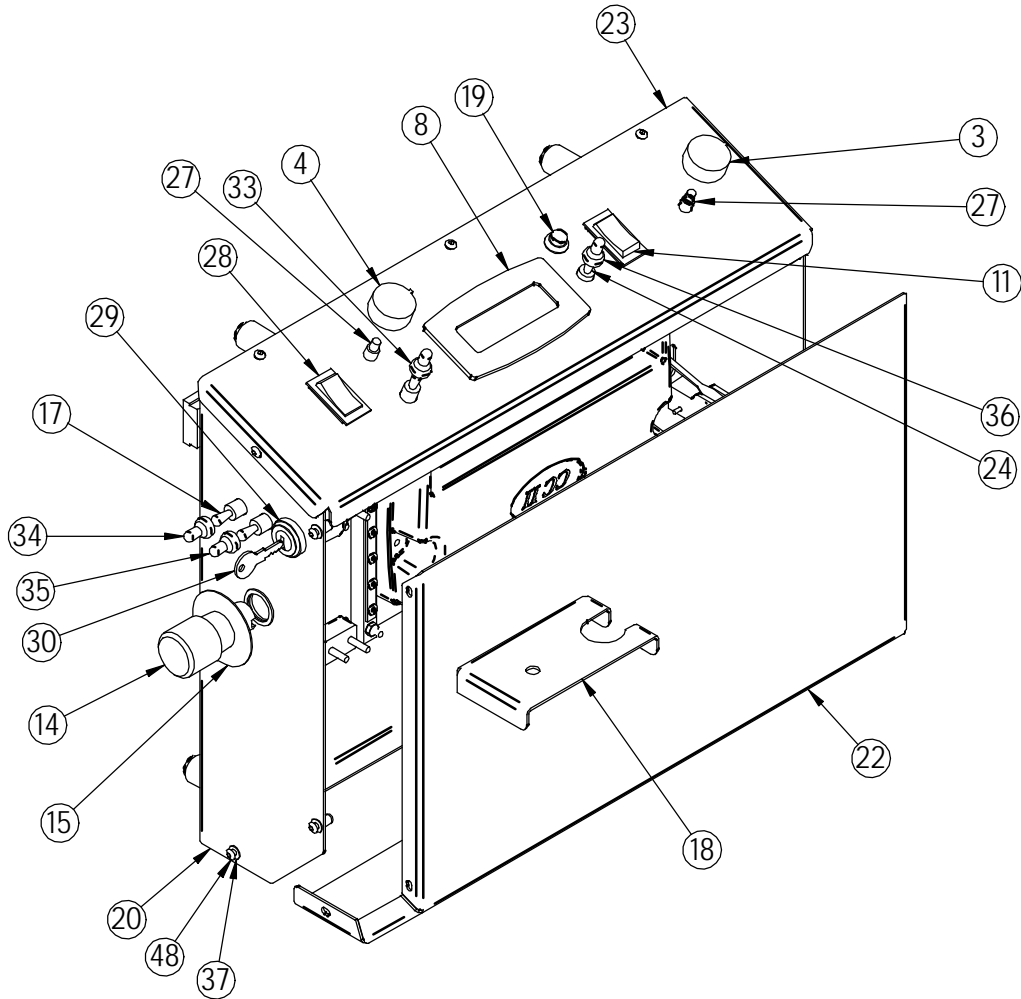
# Squeegee System



# Squeegee System

Item	Part Number	Part Description	Comments	Qty
1	21-7220	SQUEEGEE TRAIL MOUNTS		2
2	21-7570	BACK UP WHEEL (GREY)	21-7575 INCLUDES ITEMS 2,24,25,26	2
3	28-7160 290-7160	38" SQUEEGEE BAND, REAR 45" SQUEEGEE BAND, REAR		1
4	28-7170 290-7170	38" SQUEEGEE BAND, FRONT 45" SQUEEGEE BAND, FRONT		1
5	28-7181 290-7181	38" SQUEEGEE BODY 45" SQUEEGEE BODY		1
6	28-754G 7-753G	38 IN. REAR SQUEEGEE BLADE (GUM) 45 IN. REAR SQUEEGEE BLADE (GUM)	28-754N (NEOPRENE), 28-754L (LINATEX) 7-753N (NEOPRENE), 7-753L (LINATEX)	1
7	28-755G 290-756G	38 IN. FRNT SQUEEGEE BLADE (GUM) 45 IN. FRNT SQUEEGEE BLADE (GUM)	28-755N (NEOPRENE), 28-755L (LINATEX) 290-756N (NEOPRENE), 290-756L (LINATEX)	1
8	290-5786	STAR KNOB		2
9	5-760B	SIDE WHEEL (GREY)	5-760B INCLUDES ITEMS, 8,13,15,16,17,18	2
10	5-846	PIVOT SHAFT		2
11	H-00249	PPH #10-32 X 2 1/4" SS		4
12	H-00568	STUD 3/8"- 16 X 2 1/2" SS		2
13	H-10831	HCS 5/16"- 18 X 3" FT	5-760B INCLUDES ITEMS, 8,13,15,16,17,18	2
14	H-29049	PPH #10-32 X 1/2"		2
15	H-33080	FW 5/16" SAE	5-760B INCLUDES ITEMS, 8,13,15,16,17,18	4
16	H-33371	5/16" ID SHAFT COLLAR	5-760B INCLUDES ITEMS, 8,13,15,16,17,18	2
17	H-33620	LW 5/16"	5-760B INCLUDES ITEMS, 8,13,15,16,17,18	2
18	H-36104	HN 5/16"-18	5-760B INCLUDES ITEMS, 8,13,15,16,17,18	2
19	H-70005	HCS 1/4"- 20 X 1" SS		4
20	H-70710	HN 1/4"- 20 SS		4
21	H-70908	WINGNUT 10-32 SS		8
22	H-71063	LW 1/4" SS		8
23	H-72555	PPH #10-32 X 1 3/4" SS		2
24	H-76061	FW 1/4" NYLON	21-7575 INCLUDES ITEMS 2, 24, 25, 26	4
25	H-77010	HCS 1/4"- 20 X 1.75" SS	21-7575 INCLUDES ITEMS 2, 24, 25, 26	2
26	H-NJ04C	JNYL 1/4" - 20 SS	21-7575 INCLUDES ITEMS 2, 24, 25, 26	2
27	21-7205	PALM GRIP KNOB, 3/8-24		1
28	29-787	PITCH ADJUSTMENT HOLDING SPRING		1
29	4-446	GROMMET-3/8 ID X 1-1/2 OD X .375		3
30	7-760	SQUEEGEE DRAG BAR		1
31	7-761	SQUEEGEE MTG PLATE		1
32	7-762	SQUEEGEE LIFT CABLE 31-5/8" LG		1
33	7-836	1/4-20 X 1-1/4" U-BOLT		1
34	H-10055	HCS 3/8"- 24 X 3.5" SS		1
35	H-13061	HCS 5/16"- 18 X 2"		1
36	H-33622	LW 3/8"		1
37	H-36202	JN 1/4"- 20		2
38	H-37020	JNYL 1/4" - 20		2
39	H-37021	NYLOK 5/16"-18		1
40	H-70732	HN 3/8"- 24 SS		1
41	H-71017	FW 3/8" SS		2

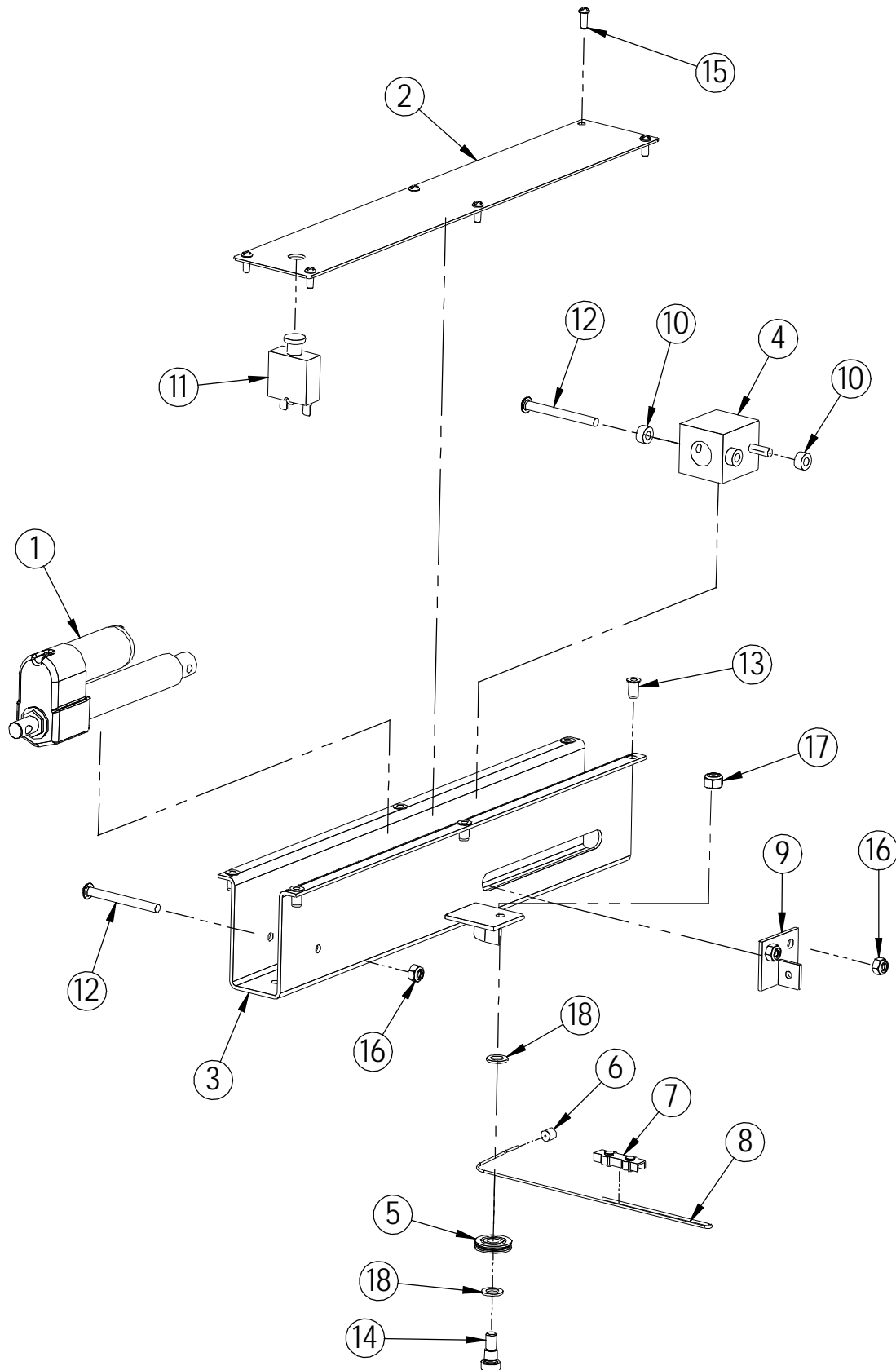
# CENTRAL COMMAND II



# CENTRAL COMMAND II

Item	Part No	Part Description	Comments	Qty
1	21-2007	COMPONENT PLATE		1
2	21-2230	MICRO SWITCH		1
3	21-4510	SOLUTION CONTROL KNOB, BLUE		1
4	21-4520	SPEED CONTROL KNOB, RED		1
5	290-2020	BRACKET		1
6	290-2815	CIR. BREAKER - 15A, 24V		2
7	290-2890	COMPUTER CONTROL		1
8	290-2891	LCD SCREEN		1
9	4-257	CONNECTOR, RED 50		1
10	5-223	LIMIT SWITCH		1
11	5-234	SWITCH, ROCKER, DPDT, ON/ON		1
12	5-289	CIR BREAKER 24V 50A		3
13	5-293	15 AMP RELAY		1
14	5-300	EMERGENCY SHUT OFF (OPT)		1
15	5-301	EMERG LEGEND PLATE (OPT)		1
16	5-302	EMERG CONTACT BLK (OPT)		1
17	5-892	TOGGLE, ON-OFF SPST		2
18	7-158	DRAIN PLUGS BRACKET		1
19	7-229	PUSH BUTTON SWITCH		1
20	7-269	CENTRAL COMMAND BOX		1
21	7-270B	SPACER		4
22	7-271	FRONT PANEL		1
23	7-278	CONTROL PANEL		1
24	7-283	SWITCH, TOGGLE, MOM/OFF/MOM (DPDT)		2
25	7-285A	CIRCUIT BREAKER - 30A		1
26	7-287	BUSS BAR UHMW		2
27	7-292	5K POTENTIOMETER		2
28	8-231	SWITCH, ON-OFF ROCKER SPST		1
29	8-234	KEY SWITCH		1
30	8-235	KEY SET (REPLACE)		1
31	E-3HBB	3 HOLE BUSS BAR		2
32	E-5HBB	5 HOLE BUSS BAR		2
33	H-01196	PROTECTIVE BOOT, TOGGLE SWITCH, (RED)		1
34	H-01198	PROTECTIVE BOOT, TOGGLE SWITCH, (GREEN)		1
35	H-01199	PROTECTIVE BOOT, TOGGLE SWITCH, (BLUE)		1
36	H-01200	PROTECTIVE BOOT, TOGGLE SWITCH, (BLACK)		1
37	H-1032RCN	RCN #10-32		12
38	H-21261	CB 5/16" - 18 X 2"		4
39	H-28678	RPH #4-40 X 1"		2
40	H-28902	RPH #8-32 X 1"		4
41	H-28902	RSL #8-32 X 1"		2
42	H-29048	RPH #10-32 X 1/2"		1
43	H-31290	PPH SMS #8 X 1/2"		10
44	H-33620	LW 5/16"		4
45	H-36104	HN 5/16"-18		4
46	H-37406	KN #8-32		6
47	H-37408	KEPS NUT 10-32		8
48	H-73743	BHSCS 10-32 X 1/2" SS		11

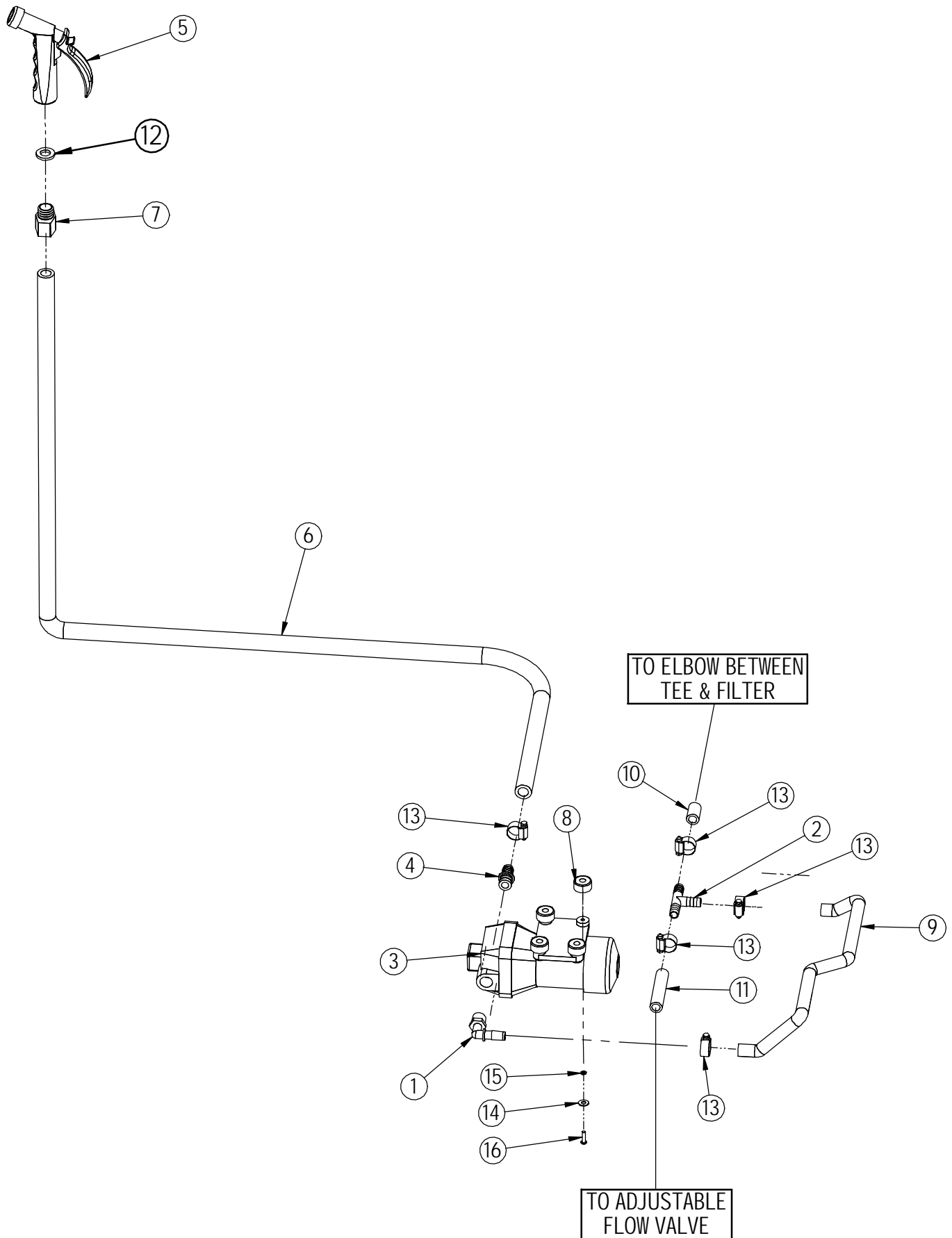
# ***Electric Squeegee Lift***



# ***Electric Squeegee Lift***

Item	Part No.	Part Description	Comments	Qty
1	7-224	ACTUATOR		1
2	7-822	TROLLEY FACE PLATE		1
3	7-823	LIFT TROLLEY		1
4	7-824	GUIDE BLOCK		1
5	7-827	CABLE PULLEY		1
6	7-828	CABLE STOP		1
7	7-829	CABLE ADJUSTER		1
8	7-830	LIFT CABLE		1
9	7-833	GUIDEBLOCK CABLE STOP		1
10	7-835	GUIDE BLOCK SPACER		4
11	7-837	FUSE RESETTABLE 2 AMP		1
12	H-00592	BHSCS 1/4 - 20 X 2-1/2 SS		3
13	H-1032RCN	RCN #10-32		6
14	H-25444	SB 3/8" X 3/8" SS		1
15	H-29048	RPH #10-32 X 1/2"		6
16	H-70860	NYLOK 1/4" - 20 SS		3
17	H-70861	NYLOK 5/16" - 18 SS		1
18	H-76063	FW 3/8" NYLON		2

# ***WATER JET SYSTEM***

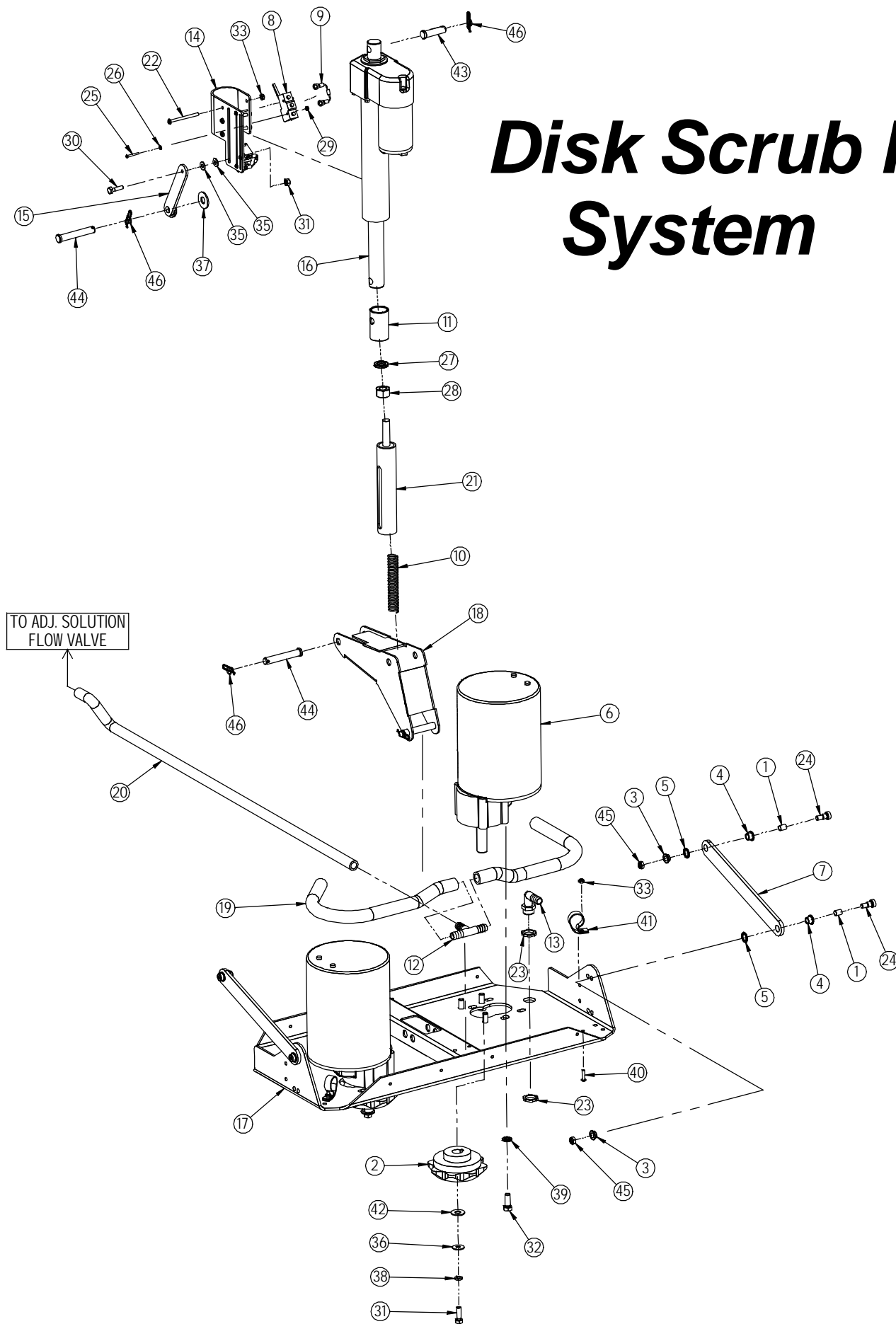


# ***WATER JET SYSTEM***

Item	Part Number	Part Description	Comments	Qty
1	21-1601	1/2" BARBED ELBOW	INCLUDES ITEM 7	1
2	5-446	1/2 " PLASTIC BARB TEE		1
3	5-891	PUMP, WATER JET		1
4	5-891B	FLO - JET		1
5	5-895	SPRAY NOZZLE		1
6	5-896	9FT GARDEN HOSE		1
7	5-898	HOSE ADAPTER		1
8	7-112C	1.0 OD X .50 GROMMET		4
9	7-4041	1/2" ID X 19.0" LG CLEAR TUBE		1
10	7-7042	1/2" ID X 2.0" LG CLEAR TUBE		1
11	7-7043	1/2" ID X 2-1/2" LG CLEAR TUBE		1
12	H-0491686	.625 ID X 1.125 OD RUBBER WASHER		1
13	H-081	CLAMP 7/16"- 25/32" SS		5
14	H-33078	FW 1/4" SAE		4
15	H-33614	LW #10		4
16	H-72565	RPH #10-32 X 3/4" SS		4



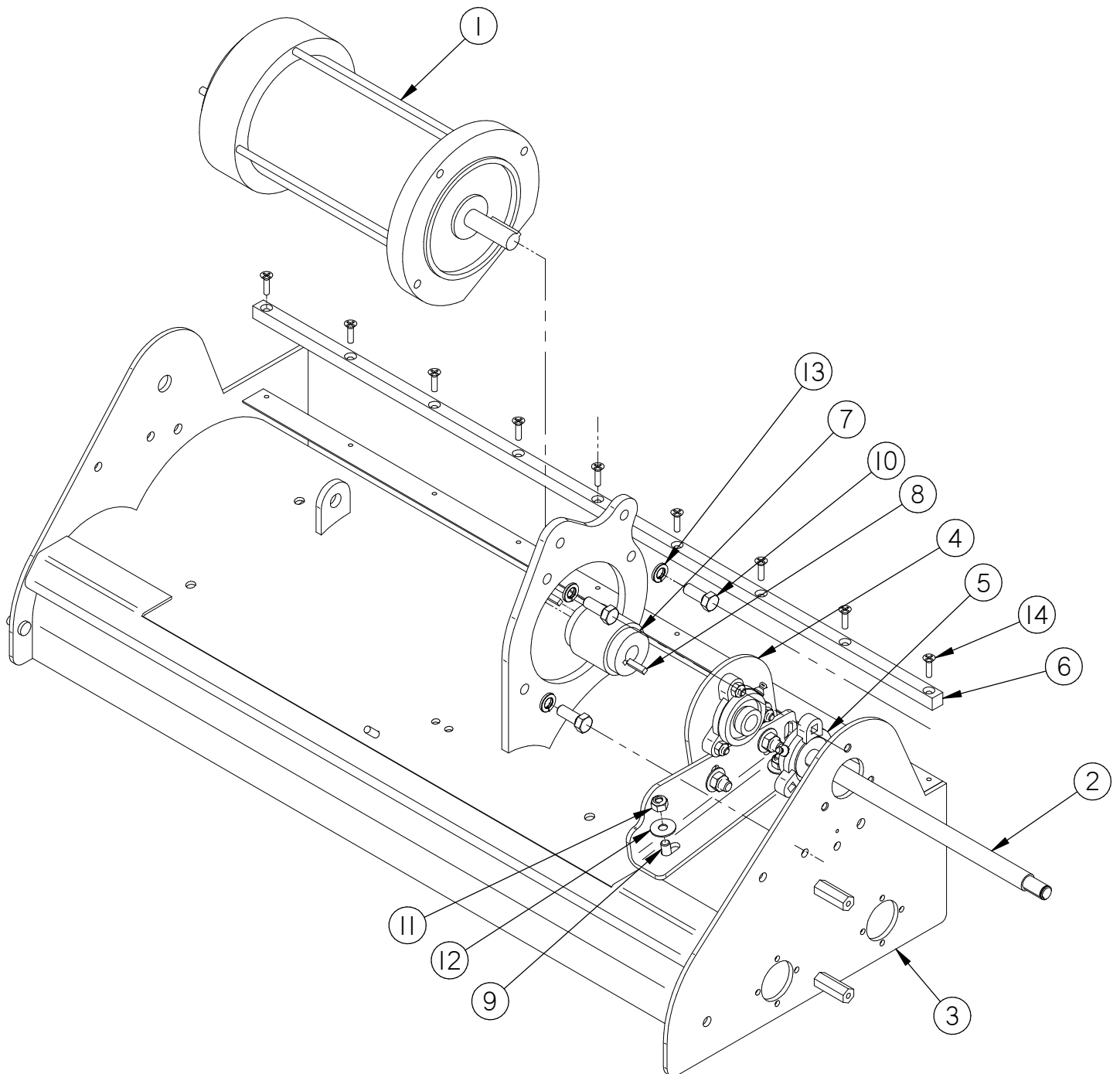
# Disk Scrub Head System



# Disk Scrub Head System

Item	Part Number	Part Description	Comments	Qty
1		.375 OD. X .31 ID. X .5 LG		4
2	21-5000	BRUSH DRIVER		2
3	290-1243	3/8" ID, 1/2" OD, 1/4" LG BEARING		4
4	290-1245	3/8" ID, 1/2" OD, 3/8" LG, FLANGE BEARING		4
5	290-1247	FW BRONZE .50" ID X 1.0" OD X .062		4
6	38-222	MOTOR 1 HP X 350 RPM		2
7	5-124	LATERAL ARM		2
8	5-223	LIMIT SWITCH		2
9	5-270	EMF SUPP DIODE		2
10	5-408	DN PRESSURE SPRING		1
11	5-409A	SPRING RETAINER		1
12	5-446	1/2 " PLASTIC BARB TEE		1
13	5-447	1/2 NPT X 1/2" BARB ELBOW		2
14	7-165	SWITCH BRACKET		1
15	7-168	SWITCH BRACKET ARM		1
16	7-221	ACTUATOR, 1000 LB. LOAD (20:1)		1
17	7-402S	SCRUB HEAD PLATFORM		1
18	7-403	CENTER LIFT ARM ASM		1
19	7-4038	REINF. HOSE 1/2 ID X 18" LG		2
20	7-4039 7-4040	PVC HOSE, 1/2" ID X 41.0" LG (MODEL 29) 44.0" LG (MODEL 35)		1
21	7-406	SPRING TUBE		1
22	H-00288	PPH #10-32 X 2 1/2" SS		3
23	H-07005	1/2" NPT LOCKNUT		4
24	H-25444	SB 3/8" X 3/8" SS		4
25	H-28679	PPH #4-40 X 1"		4
26	H-33066	FW #4 SAE		4
27	H-33630	LW 5/8"		1
28	H-36214	JN 5/8" - 11		1
29	H-37006	NYLOK #4-40		4
30	H-70005	HCS 1/4" - 20 X 1" SS		1
31	H-70055	HCS 5/16" - 18 X 1" SS		2
32	H-70105	HCS 3/8" - 16 X 1" SS		8
33	H-70858	NYLOK #10-32 SS		5
34	H-70860	NYLOK 1/4" - 20 SS		1
35	H-71013	FW 1/4" X 5/8" SS		2
36	H-71016	FW 5/16" X 7/8" USS		2
37	H-71021	FW 1/2" USS		3
38	H-71065	LW 5/16" SS		2
39	H-71067	LW 3/8" SS		8
40	H-72565	RPH #10-32 X 3/4" SS		2
41	H-78LC	7/8 LOOP CLAMP		2
42	H-99001	FW 3/8" SS		2
43	H-CP226	1/2" X 1-3/4" CLEVIS PIN		1
44	H-CP238	1/2" X 3" CLEVIS PIN		3
45	H-NJO5C	JNYL 5/16" - 18 SS		4
46	H-RUE22	1/2" RUE RING COTTER		4

# 32" CYLINDRICAL SCRUB DECK



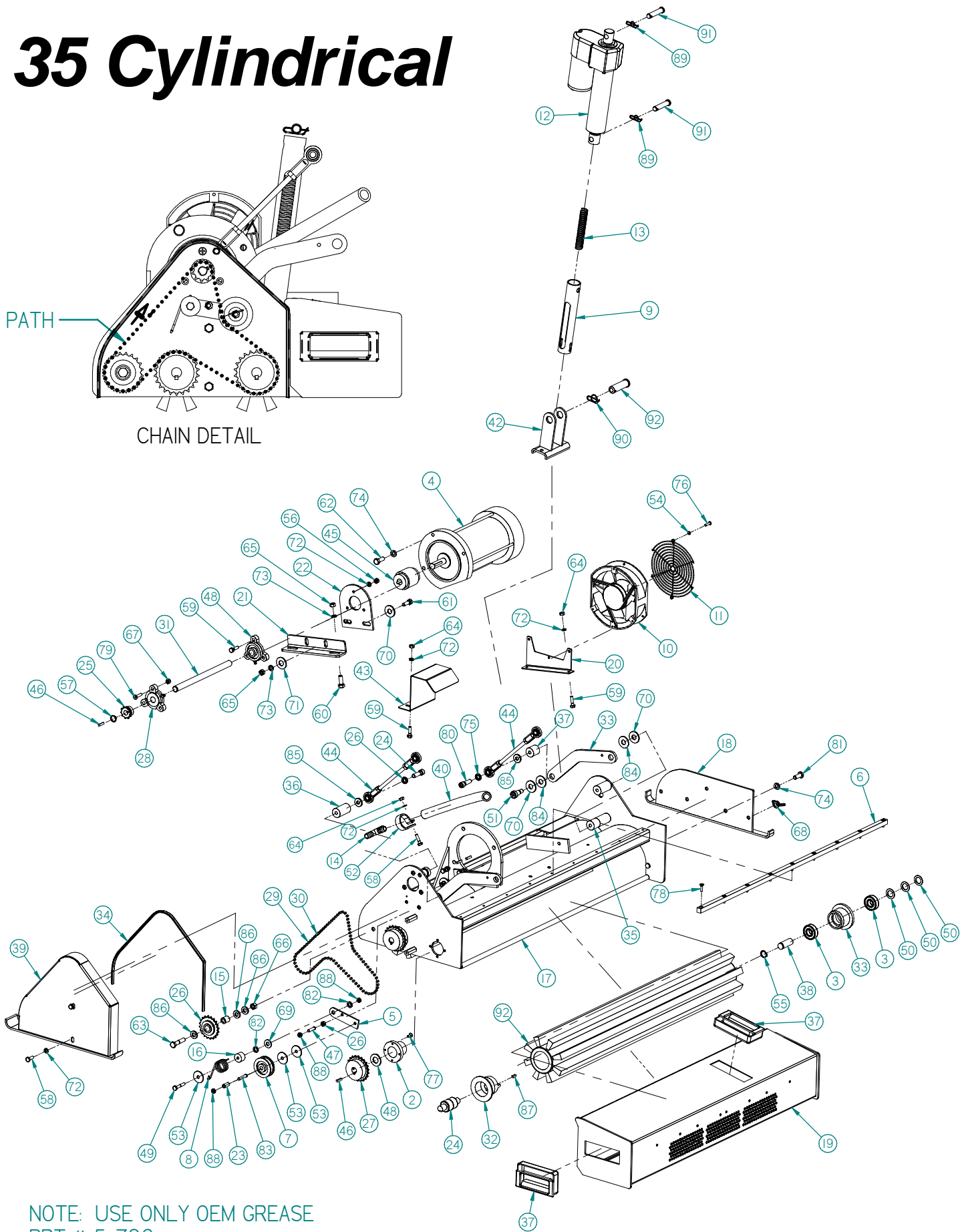
# **32" CYLINDRICAL SCRUB DECK**

Item	Part Number	Part Description	Qty
1	22-2110	2 HP MOTOR	1
2	290-8365	DRIVE SHAFT, 32" CLY	1
3	32-9000	32" CYL BRUSH HEAD	1
4	379	SUB # 379 CYLINDRICAL SHAFT BEARING	1
5	5-829	FLANGE BEARING	1
6	5-832	HOPPER RAIL, 32"	1
7	8-613	FLEXIBLE COUPLER	1
8	H-00270	3/16" X 3/4" KEY	2
9	H-70053	HCS 5/16"- 18 X 3/4" SS	2
10	H-70105	HCS 3/8"- 16 X 1" SS	3
11	H-70861	NYLOK 5/16" - 18 SS	2
12	H-71016	FW 5/16" X 7/8" SS	2
13	H-71067	LW 3/8" SS	3
14	H-72684	FHP 10-32 X 3/4" SS	9

35 Cylindrical

CHAIN PATH

CHAIN DETAIL



NOTE: USE ONLY OEM GREASE  
PRT # 5-796

Item	Part No.	Part Description	Comments	Qty
1		CYLINDRICAL BRUSH	SEE COMMON WEAR PARTS	2
2	1-305	BEARING HOUSING		2
3	1-421	IDLER BEARING		4
4	22-2110	2 HP MOTOR		1
5	22-7970	MOVABLE IDLER ARM		1
6	25-8320 28-8320 5-832	HOPPER RAIL, 25" HOPPER RAIL, 28" HOPPER RAIL, 32"		1
7	4-317	IDLER PULLEY		1
8	4-319	TENSION SPRING		1
9	5-1101	OT SPRING TUBE		1
10	5-214	24V COOLING FAN		1
11	5-214A	FAN GUARD		1
12	5-221	ACTUATOR, 1000 LB. LOAD (10.1)		1
13	5-408	DN PRESSURE SPRING		1
14	5-446	1/2" PLASTIC BARB TEE		1
15	5-793	IDLER SPACER		1
16	5-798	SPRING PIVOT		1
17	5-800	32" CYL. BRUSH HEAD		1
18	5-801	IDLER DOOR		1
19	5-802	32" HOPPER		1
20	5-8100	FAN MTG BRACKET		1
21	5-8101	BEARING MOUNT		1
22	5-8102	BEARING PLATE		1
23	5-822	Spacer, 1/4" ID, 3/8" OD, 11/16" Long		1
24	5-824	DRIVE BEARING		2
25	5-826	10 TOOTH SPROCKET		1
26	5-827	20 TOOTH SPROCKET		1
27	5-828	22 TOOTH SPROCKET		2
28	5-829	FLANGE BEARING		2
29	5-830	DRIVE CHAIN		1
30	5-831	MASTER LINK		1
31	5-836	DRIVE SHAFT		1
32	5-837	BROOM DRIVER		2
33	5-838	BRUSH IDLER		2
34	5-845A	WINDLACING		1
35	5-846	PIVOT SHAFT		2
36	5-847	STAND OFF(1.81)		2
37	5-849	RECESSED HANDLE		2
38	5-858	IDLER SHAFT		2
39	5-9021	CHAIN GUARD		1
40	7-4033	5/8 ID X 18"L CLEAR HOSE (VALVE TO BARB-TI/CYL)		1
41	7-809	LIFT ARM		2
42	7-810	LIFT SLIDE		1
43	7-815	DRIVE SHAFT GUARD		1
44	7-843	ADJ LATERAL ARM		2
45	8-613	FLEXIBLE COUPLER		1
46	H-00270	3/16" X 3/4" KEY		5
47	H-00272	SCS 1/4"- 20 X 1.0"		1
48	H-00279	WASHER 5/8 TEFLON		2
49	H-15009	HCS 1/4"- 20 X 1-1/2" GRADE 8		1
50	H-17002	FW 17mm NYLON		6
51	H-2S08C	SB 1/2" X 5/8" SS		2
52	H-322515	RUBBER LOOP CLAMP		1
53	H-33208	F W 1/4" X 1 1/4"		3
54	H-33614	LW #10		2
55	H-35313	17mm SNAP RING		2
56	H-37018	NYLOK 1/4"-20		3
57	H-68013	5/8 SNAP RING		1
58	H-70003	HCS 1/4"- 20 X 3/4" SS		2
59	H-70005	HCS 1/4"- 20 X 1" SS		8
60	H-70055	HB 5/16"- 18 X 1" SS		2
61	H-70055	HCS 5/16"- 18 X 1" SS		2
62	H-70105	HCS 3/8-16 X 1" SS		3
63	H-70145	HCS 3/8-24 X 1 3/4" SS		1
64	H-70710	HN 1/4"- 20 SS		6
65	H-70711	HN 5/16"- 18 SS		4
66	H-70732	HN 3/8"- 24 SS		1
67	H-70860	NYLOK 1/4"- 20 SS		3
68	H-70911	WINGNUT 5/16"- 18 SS		3
69	H-71017	FW 3/8" SS		1
70	H-71021	FW 1/2" USS		6
71	H-71021	FW 3/8" X 7/8" SS		2
72	H-71063	LW 1/4" SS		10
73	H-71065	LW 5/16" SS		5
74	H-71067	LOCKWASHER 3/8 SS		5
75	H-71067	LW 3/8" SS		2
76	H-72565	RPH #10-32 X 3/4" SS		2
77	H-72682	FHP 10-32 X 1/2" SS		8
78	H-72684	FHP 10-32 X 3/4" SS		9
79	H-72710	FHP 1/4"- 20 X 1" SS		3
80	H-73541	SHCS 3/8"- 16 X 1 1/4" SS		2
81	H-73815	BH SCHS 3/8-16 X 1" SS		2
82	H-76063	FW 3/8" NYLON		2
83	H-93580	SCS 1/4"- 20 X 1 1/4"		1
84	H-95611	FW 1/2" PVC		4
85	H-98025	FW 3/8" GRADE 8		2
86	H-98025	WASHER 3/8 GRADE 8		3
87	H-K1432	3/16" X 1/2" KEY		2
88	H-NJ04C	JNYL 1/4"- 20 SS		3
89	H-RUE22	1/2" RUE RING COTTER		2
90	H-RUE34	RUE RING COTTER		1
91	H-ZCP230	1/2" X 2 1/4" CLEVIS PIN		2
92	HZCP286	3/4" X 2 1/2" CLEVIS PIN		1