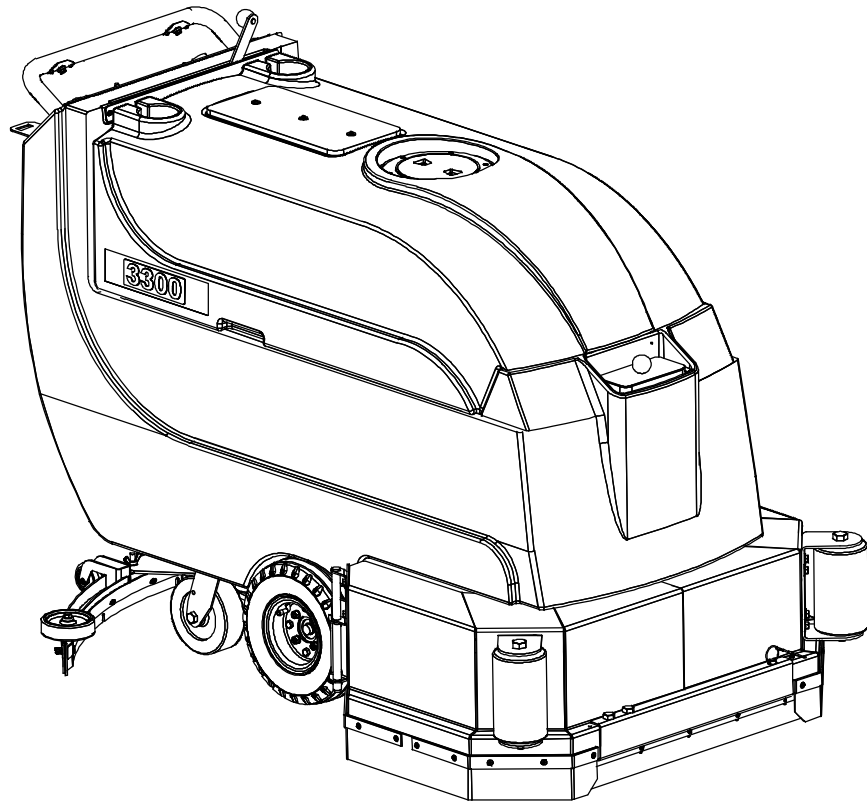


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*Operator and Parts Manual*  
*29,33 Walk-Behind Scrubber*  
*28,32 Cylindrical*



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)



## 3000 SERIES WALK-BEHIND SCRUBBERS

FACTORY CAT SCRUBBERS ARE DESIGNED AND BUILT TO CLEAN SCHOOLS, MALLS, WAREHOUSES, RETAIL OUTLETS OR JUST ABOUT ANY APPLICATION WHERE EXTRA CLEANING PERFORMANCE IS DESIRED AND DURABILITY IS DEMANDED.

THE FACTORY CAT 3000 SERIES COMES STANDARD WITH A CLASS LEADING BATTERY PACKAGE (395 AH) FOR SUPERIOR RUN TIME. THE PLATFORM IS AVAILABLE WITH FOUR DIFFERENT SCRUB HEADS, IN BOTH DISK AND CYLINDRICAL CONFIGURATIONS. OUR MACHINES ARE DESIGNED TO WITHSTAND THE DAILY USE OF CONTRACT CLEANERS.

THE TWO "DISK" MACHINES WITH 29" AND 33" SCRUB PATHS OFFER NEARLY 50% MORE CLEANING POWER THAN OTHER MACHINES. THE DISK DECK IS PROTECTED BY HEAVY STEEL GUARDS OR LOW MOUNTED SHROUDS AT NO EXTRA COST. BOTH BRUSHES ARE GIMBAL-MOUNTED, WHICH IMPROVES CLEANING ON UNEVEN FLOORS. EACH BRUSH IS DIRECTLY DRIVEN BY 1.0 HP - 350 RPM MOTOR, FOR UNMATCHED SCRUBBING PERFORMANCE.

THE TWO "CYLINDRICAL" MACHINES HAVE THE ADDED BENEFIT OF SWEEPING UP DEBRIS WHILE SCRUBBING. THIS MAY ELIMINATE A NEED TO DUST MOP, AND GREATLY INCREASE PRODUCTIVITY.

ON BOTH DISK AND CYLINDRICAL MACHINES, THE BRUSH PRESSURE IS MAINTAINED AT ONE OF FIVE SETTINGS BY THE CENTRAL COMMAND II, AND OUR "MANAGEMENT LOCKOUT" ALLOWS YOU TO LOCKOUT ANY ADJUSTMENT.

THE HEAVY STEEL CONSTRUCTION, 100% STAINLESS STEEL FASTENERS AND POLYURETHANE ROLLERS OFFER SUPERB PROTECTION. WHILE OFFERING THE TOUGHNESS YOU ARE LOOKING FOR, YOUR OPERATORS WILL FIND THEM EASY TO MANUEVER INTO TIGHT AREAS, AND SIMPLE TO SERVICE. THE 3000S EASILY PASS THROUGH 32" DOORS, INTO CONGESTED AREAS AND SMALL ELEVATORS.

THE 3000 HAS A POWERFUL, TOTALLY SEALED, ALL-GEAR TRANSAXLE FOR CLIMBING STEEP RAMPS; AND FOAM FILLED, NO-MARKING TIRES AND CASTERS TO PROTECT THE FLOOR. THE DRIVE TIRES AND CASTER WHEELS ARE OVERSIZED, WHICH PERMITS BETTER CLEARANCE AND NAVIGATION OF OBSTACLES. THE TRANSPORT SPEED OF 4 MPH CAN AUTOMATICALLY ADJUST TO 3 MPH ANY TIME THE OPERATOR BEGINS SCRUBBING; AND OVER-SIZED MOTORS ARE STANDARD, FOR SUPERIOR CLEANING.

FACTORY CAT CONTINUES TO BUILD EQUIPMENT TO LAST. ON FURTHER INSPECTION, YOU WILL NOTICE THAT OUR TRANSAXLE, CASTERS, SCRUB DECK, SQUEEGEE LINKAGE, AND BATTERY PACKAGE ALL BOLT DIRECTLY TO A 1/4" STEEL FRAME. ALTHOUGH OUR TANKS HAVE THE THICKEST WALLS IN THE INDUSTRY, WE DO NOT TRANSMIT ANY STRUCTURAL FORCES TO THEM OR ALLOW NORMAL COLLISION DAMAGE TO IMPACT THEM. THE 3000 SERIES, IS BUILT WITH 100% STAINLESS STEEL FASTENERS, WHICH SIMPLIFIES SERVICE IN THE FUTURE.

WITH OVER 150 PROGRAMMABLE FEATURES, WE WILL GLADLY SET THE MACHINE UP TO SATISFY YOUR NEEDS. THE PROGRAMMABLE FEATURES INCLUDE, BUT ARE NOT LIMITED TO TOP SPEED, REVERSE SPEED, SCRUBBING SPEED, AND FIVE PRESSURE SETTINGS. THE DIAGNOSTICS INCLUDE 3 HOUR METERS FOR BETTER MANAGER OVERSIGHT (KEYSWITCH, TRANSPORT, SCRUBBING), AND ILLUSTRATES ERROR CODES FOR SYSTEM THAT IS ENCOUNTERING DIFFICULTY. THE UNIT WILL AUTOMATICALLY SHUT DOWN "NONVITAL" SYSTEMS, BUT ALLOW THE MACHINE TO CONTINUE DRIVING, WHEN THE BATTERY POWER GETS TOO LOW.

THIS UNIT IS QUIET, AND CAN CLEAN OVER 150,000 SQ. FEET ON A CHARGE. MOST PARTS ARE INTERCHANGEABLE WITH OUR FAMILY OF MACHINES INCLUDING 2000 SERIES WALK BEHINDS, 290 RIDER SCRUBBER, 296 CARPET EXTRACTOR, 297 RIDER SWEEPER, 298 DUAL PURPOSE, AND 295 RIDER BURNISHER. CALL (800) 450-9824 FOR A DEMONSTRATION OF THESE TOMCAT MACHINES.

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## MACHINE INFORMATION

PLEASE FILL THIS AREA OUT AT THE TIME OF INSTALLATION FOR FUTURE REFERENCE.

MODEL NUMBER: \_\_\_\_\_

SERIAL NUMBER: \_\_\_\_\_

INSTALLATION DATE: \_\_\_\_\_

INSTALLING DEALER: \_\_\_\_\_

DEALER CONTACT: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

CITY, STATE, ZIP: \_\_\_\_\_

PHONE NUMBER: \_\_\_\_\_

THIS OPERATOR AND PARTS MANUAL SHOULD BE CONSIDERED A PERMANENT PART OF THE UNIT AND SHOULD REMAIN WITH THE UNIT AT ALL TIMES. THIS OPERATOR AND PARTS MANUAL COVERS ALL THE TOMCAT 290/350 SERIES SCRUBBERS. 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. MID-CENTRAL RESERVES THE RIGHT TO MAKE CHANGES WITHOUT NOTICE INCURRING ANY OBLIGATION.

TO REGISTER FOR WARRANTY, FAX YOUR WARRANTY REGISTRATION FORM TODAY!



R.P.S. CORPORATION  
 P.O. BOX 368  
 RACINE, WI 53401  
 PHONE: 800-634-4060  
 FAX 866-901-3335  
 WWW.FACTORYCAT.COM

# WARRANTY REGISTRATION FORM

\*\*\*COMPLETE FORM IMMEDIATELY AND FAX BACK TO (886)-901-3335\*\*\*

DEALER: \_\_\_\_\_

SERIAL NUMBER: \_\_\_\_\_

LOCATION (CITY, STATE): \_\_\_\_\_

INSTALL DATE: \_\_\_\_\_

CUSTOMER: \_\_\_\_\_

HOUR METER: \_\_\_\_\_

CONTACT: \_\_\_\_\_

INSTALLED BY: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

CITY: \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

PHONE: \_\_\_\_\_ FAX: \_\_\_\_\_

FACTORY CAT MODEL NUMBER: \_\_\_\_\_

OPTIONS: 1. \_\_\_\_\_

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

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

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

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

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

PADS: \_\_\_\_\_

BRUSHES: \_\_\_\_\_

SQUEEGEE SIZE: \_\_\_\_\_

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 SHOULD READ THE MANUAL BEFORE OPERATING THIS MACHINE.

DEALER REP. PRINT: \_\_\_\_\_

SIGN: \_\_\_\_\_

CUSTOMER PRINT: \_\_\_\_\_

SIGN: \_\_\_\_\_

# MODEL

# 3000

# 3400

## BODY CONSTRUCTION/DIMENSIONS

TANK MATERIAL:	(7/16")ROTO-POLY	(7/16" ROTO-POLY
CHASSIS CONSTRUCTION:	3/16" (PLATED STEEL)	3/16" (PLATED STEEL)
DRIVE WHEELS:	(2) 11" DIAMETER X 4"	(2) 11" DIAMETER X 4"
CASTER WHEEL:	(2) 6" DIAMETER X 2"	(2) 6" DIAMETER X 2"
SIZE (L X W X H):	57" X 25" X 43"	57" X 25" X 43"
SQUEEGEE SIZE:	32", 35", OR 38"	38", OR 45"
WEIGHT (WITHOUT BATTERIES):	491 LBS.	494 LBS.
WEIGHT (WITH BATTERIES):	971 LBS	974 LBS.

## BRUSH/PAD SYSTEM

BRUSH/PAD DIAMETER (DISK):	(2) 15.5 INCHES	(2) 17 INCHES
DRIVE TO BRUSH (DISK):	DIRECT	DIRECT
SCRUBBING PATH (DISK):	29 INCHES	33 INCHES
BRUSH MOTOR POWER (DISK):	(2) 1.0 HP	(2) 1.0 HP
BRUSH MOTOR SPEED(DISK):	350 RPM	350 RPM
BRUSH SPEED (DISK):	350 RPM	350 RPM
BRUSH SIZE(CYLINDRICAL):	(2) 28 INCHES	(2) 32 INCH
DRIVE TO BRUSH (CYLINDRICAL):	CHAIN	CHAIN
SCRUBBING PATH (CYLINDRICAL):	28 INCHES	32 INCHES
BRUSH MOTOR POWER (CYLINDRICAL):	2.0 HP	2.0 HP
BRUSH MOTOR SPEED (CYLINDRICAL):	800 RPM	800 RPM
BRUSH SPEED (CYLINDRICAL):	800 RPM	800 RPM
BRUSH DOWN PRESSURE:	0-200 LB.	0-200 LB.
BRUSH ADJUSTMENT:	(5) AUTOMATIC SETTINGS	(5) AUTOMATIC SETTINGS

## SOLUTION SYSTEM

SOL. TANK CAP:	30 GAL	30 GAL
SOLUTION FLOW RATE:	0-1.75 GPM	0-1.75 GPM

## RECOVERY SYSTEM

REC. TANK CAP:	30 GAL	30 GAL
VACUUM POWER (STANDARD):	1.0 HP	1.0 HP
VACUUM POWER (OPTIONAL):	2.0 HP	2.0 HP
DRAIN HOSE:	2.0 INCHES	2.0 INCHES
CLEANOUT DOOR (OPTIONAL)	5.0 INCHES	5.0 INCHES
WATERLIFT:	70 INCHES	70 INCHES

## BATTERY SYSTEM

BATTERY AH RATING:	(4) 396 AH	(4) 396 AH
BATTERY RUN TIME:	UP TO 6 HRS.	UP TO 6 HRS.
CHARGER (AUTOMATIC):	36 AMP, 110 VOLT	36 AMP, 110 VOLT

## DRIVE SYSTEM

TRANSAXLE DESCRIPTION:	.75 HP, SEALED	.75 HP, SEALED
SPEED CONTROL:	0-5 MPH	0-5 MPH

## PRODUCTIVITY

SCRUBBING WIDTH:	DISK 29 INCHES CYLINDRICAL 28 INCHES	DISK 33 INCHES CYLINDRICAL 32 INCHES
SCRUBBING RATE/HOUR (NORMAL):	DISK 29,000 FT/HR CYLINDRICAL 28,000 FT/HR	DISK 33,000 FT/HR CYLINDRICAL 32,000 FT/HR

## WARRANTY

PARTS:	3 YEARS	3 YEARS
LABOR:	1 YEAR	1 YEAR
TANKS:	10 YEARS	10 YEARS

# COMMON WEAR PARTS

<u>ITEM</u>	<u>MODEL</u> <u>3000-D</u>	<u>MODEL</u> <u>3000-C</u>	<u>MODEL</u> <u>3400-D</u>	<u>MODEL</u> <u>3400-C</u>
<u>BRUSH TYPE</u>	<u>DISK</u>	<u>CYLINDRICAL</u>	<u>DISK</u>	<u>CYLINDRICAL</u>

## BRUSHES

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	28-521P	17-421P	32-521P
NYLON (.016)	15-421N	28-521N	17-421N	32-521N
TAMPICO	15-421T	28-521T	17-421T	32-521T
BUTCHER WIRE	15-421BW	NA	17-421BW	NA
PAD DRIVER	15-412D	NA	17-412D	NA

EXTRA PAD DRIVER RETAINING CLIP: 40-433

BRUSH REPAIR KIT: 40-423 REPLACEMENT LOCATING CLIP FOR ALL DISK BRUSHES

## 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

## SQUEEGEE KITS

<u>SIZE</u>	<u>GUM RUBBER</u>	<u>NEOPRENE</u>	<u>LINATEX</u>
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	7-770L

KIT INCLUDES: (1) REAR BLADE, (1) FRONT BLADE, AND (2) BACKUP WHEELS WITH HARDWARE

NOTE: IT IS STAMPED INTO THE TOP OF THE PLATED STEEL SQUEEGEE BLANK, ON 32", 35", AND 38" SQUEEGEES. THE 45" IS PAINTED BLACK.

MODEL 290: HAS A 38" SQUEEGEE UNLESS OTHER SIZE IS SPECIALLY ORDERED AT TIME OF PURCHASE

MODEL 350: HAS A 45" SQUEEGEE UNLESS OTHER SIZE IS SPECIALLY ORDERED AT TIME OF PURCHASE

NOTE: THE 32" AND 35" SQUEEGEES ARE 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 YOUR LOCAL DEALER FOR MORE SOAP 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 JUDGEMENT.

THIS IS INTENDED FOR COMMERCIAL USE. IT IS DESIGNED TO BE USED ON HARD FLOORS IN AN INDOOR ENVIRONMENT, WITH THE RECOMMENDED PADS OR BRUSHES.

## 1. DO NOT OPERATE UNIT:

UNLESS TRAINED AND AUTHORIZED.  
UNLESS OPERATOR MANUAL IS READ AND UNDERSTOOD.  
IF UNIT IS NOT 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.  
DO NOT OPERATE MACHINE WHERE FLAMMABLE LIQUIDS ARE PRESENT.  
USE EXTREME CAUTION WHEN MANUEVERING.

## 3. BEFORE LEAVING:

MAKE SURE MACHINE IS TURNED OFF.  
STOP ON LEVEL SURFACES.  
DISCONNECT BATTERIES.

## 4. BEFORE SERVICING:

STOP ON LEVEL SURFACE, AND SECURE MACHINE.  
DISCONNECT BATTERIES.

# !! SAFETY PRECAUTIONS!!

WARNING: HAZARDOUS VOLTAGE. SHOCK, BURNS OR ELECTROCUTION CAN RESULT. ALWAYS DISCONNECT THE BATTERIES BEFORE SERVICING MACHINE.

WARNING: BATTERIES EMIT HYDROGEN GASES, EXPLOSION OR FIRE CAN RESULT. KEEP SPARKS AND OPEN FLAMES AWAY.

WARNING: CHARGE UNIT 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 EYE WEAR 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 OR ENDANGER PEOPLE.

WARNING: DRESS SAFELY. DO NOT WEAR RINGS OR METAL WRIST WATCHES 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 NECKWARE 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: ONLY OPERATE THIS MACHINE FROM THE OPERATORS SEAT. 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 OR TURN ON RAMPS!

WARNING: ALWAYS USE THE CHARGER PROVIDED BY THE MAUFACTURER 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 RAMPS. MACHINE DOES NOT COAST. RELEASING THE FOOTPEDAL WILL AUTOMATICALLY APPLY BRAKING FORCE, AND STOP THE MACHINE.

WARNING: DO NOT PARK THE MACHINE ON RAMPS OR SLOPES. THE MACHINE HAS A PARKING BRAKE, BUT IT IS RECOMMENDED THAT IT IS ALWAYS 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.

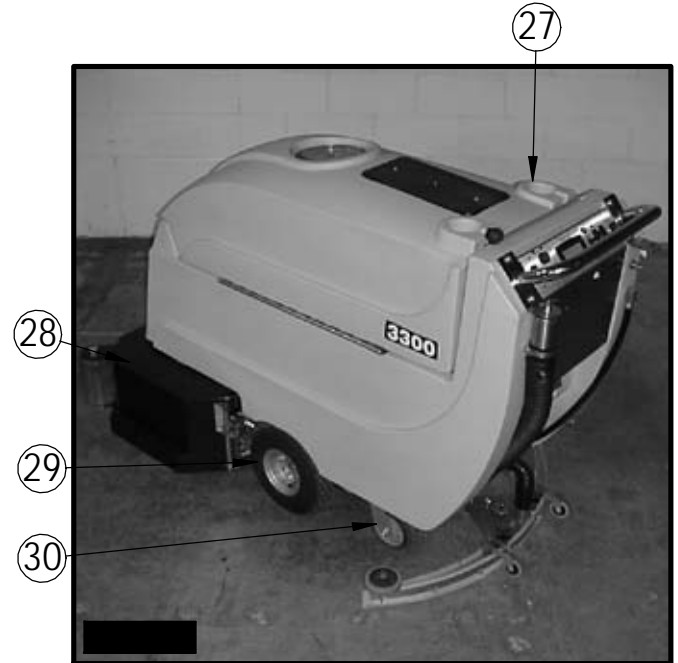
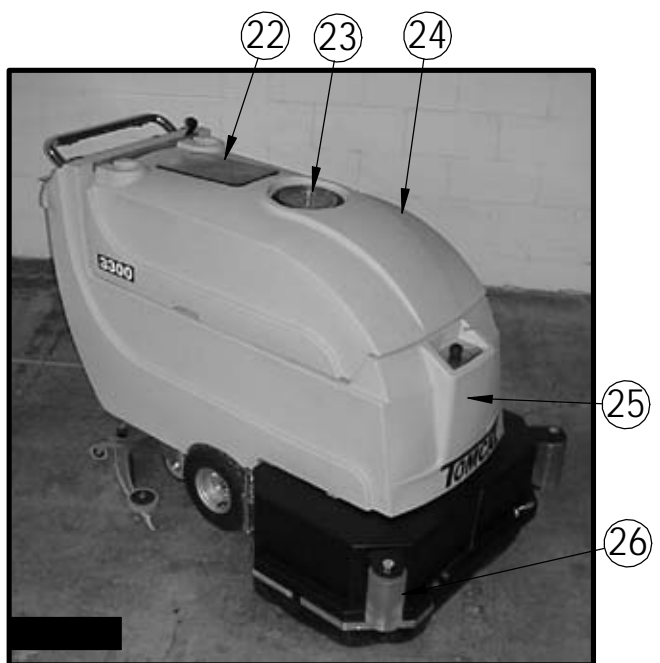
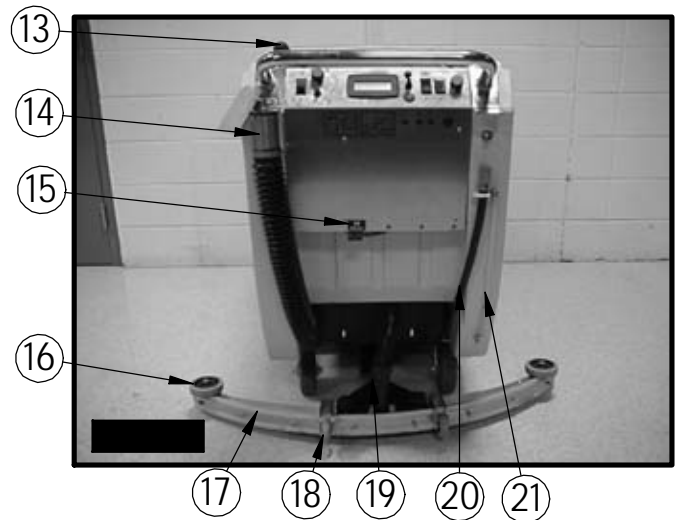
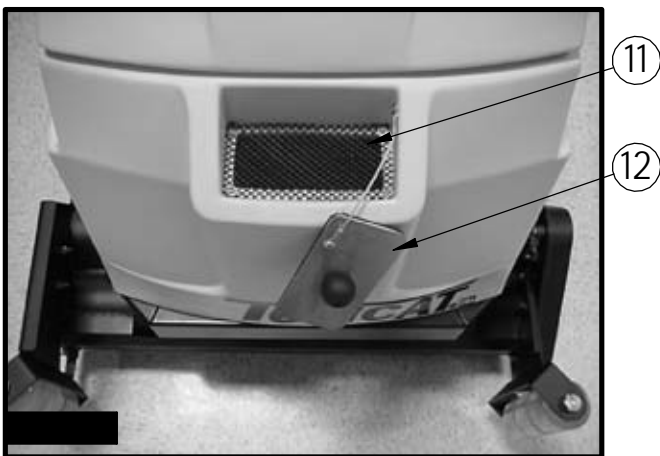
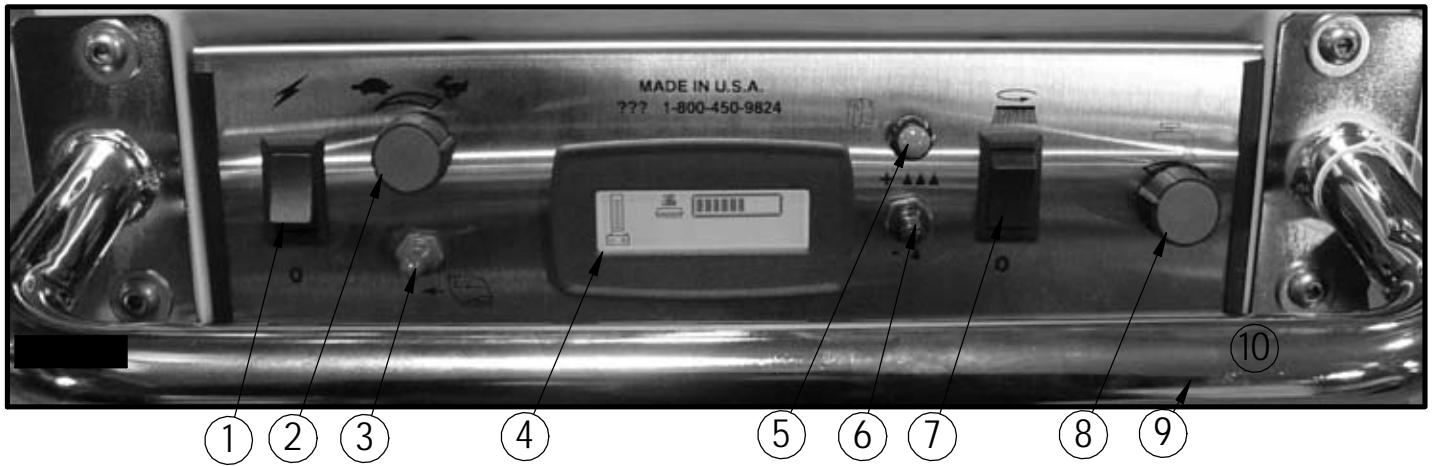
WARNING: THIS MACHINE MUST ONLY BE OPERATED BY TRAINED OPERATOR. AS PART OF HIS OR HER TRAINING, THEY MUST READ THIS MANUAL THOROUGHLY. IF EXTRA COPIES ARE NEEDED, CONTACT YOUR LOCAL DEALER.

WARNING: ALWAYS TURN OFF THE MACHINE, BEFORE LEAVING IT UNATTENDED.

WARNING: DO NOT OPERATE OVER ELECTRICAL FLOOR OUTLETS. MAY RESULTS IN SERIOUS INJURY.



# MACHINE CONTROLS AND FEATURES



# CONTROLS AND FUNCTIONS

## SEE FIGURES (1-5) ON PAGE 7

### SEE FIGURE 1

1. MAIN POWER SWITCH: TURNS THE MACHINE ON AND OFF.
2. SPEED CONTROL KNOB: CONTROLS THE DRIVE SPEED ON THE MACHINE
3. REVERSE SWITCH: DEPRESS DOWN TO DRIVE IN REVERSE. REVERSE IS SET AT 50% SPEED FOR SAFETY.
4. LCD SCREEN: LISTS FUNCTIONS AND SETTINGS OF THE MACHINE.
5. MENU CONTROL: SCROLLS THROUGH DIFFERENT OPTIONS ON THE LCD DISPLAY.
6. BRUSH PRESSURE SELECTOR: CONTROLS THE PRESSURE PUT ON THE SCRUB DECK.
7. SCRUB DECK SWITCH: RAISES AND LOWERS THE SCRUB DECK.
8. SOLUTION CONTROL KNOB: CONTROLS THE SOLUTION FLOW RATE, WHEN SOLUTION SWITCH IS ON.
9. HANDLE BAR: USE BOTH HANDS WHEN OPERATING MACHINE.
10. DRIVE CONTROL BUTTONS: DEPRESS TO DRIVE FORWARD, AND RELEASE TO STOP.

### SEE FIGURE 2

11. SOLUTION FILL SCREEN: PREVENTS DEBRIS FROM GETTING INTO SOLUTION TANK WHILE FILLING.
12. SOLUTION FILL LID: USED TO REFILL THE SOLUTION TANK WITH CLEANING SOLUTION.

### SEE FIGURE 3

13. SQUEEGEE LIFT LEVER: ROTATE TO LEFT TO RAISE SQUEEGEE, AND TO THE LEFT TO LOWER SQUEEGEE.
14. RECOVERY TANK DRAIN HOSE: USED TO DRAIN DIRTY RECOVERY WATER FROM TANK, ALWAYS FLUSH OUT COMPLETELY.
15. CHARGER PORT: RED 50 USED TO RECEIVE CHARGER INPUT. NOTE: ONLY USE CHARGER PROVIDED.
16. SQUEEGEE PROTECTION WHEELS: HELPS PREVENT DAMAGE TO SQUEEGEE WHEN CLEANING CLOSE TO WALLS.
17. SQUEEGEE: RECOVERS DIRTY WATER FROM FLOOR. KEEP CLEAN AND REPLACE BLADES WHEN WORN
18. SQUEEGEE TRAILING WHEELS: GUIDES SQUEEGEE AND PREVENTS SWAING.
19. VACUUM HOSE: VACUUMIZES SQUEEGEE. NOTE: KEEP FREE AND CLEAR OF BLOCKAGE.
20. SOLUTION DRAIN HOSE: USED TO DRAIN SOLUTION TANK.
21. SOLUTION LEVEL INDICATOR TUBE: SHOWS OPERATOR THE PRECISE LEVEL OF CLEANING SOLUTION IN TANK.

### SEE FIGURE 4

22. VACUUM COVER: PERMITS OPERATOR TO SEE FOAM, AND STOP BEFORE DAMAGE IS DONE TO VACUUM MOTOR .
23. FLUSH OUT TANK LID: PERMITS ACCESS TO FLUSH OUT RECOVERY TANK AFTER DRAINING.
24. RECOVERY TANK: HOLDS 30 GALLONS OF DIRTY RECOVERY WATER. MAX TEMP IS 140 F OR 60 C
25. BUMPER ROLLERS: HELP PROTECT THE MACHINE WHEN CLEANING CLOSE TO OBJECTS.

### SEE FIGURE 5

26. CUP HOLDER: THE MACHINE IS EQUIPED WITH TWO CUP HOLDERS.
27. JAWS: PROTECT THE SCRUB DECK FROM BEING DAMAGED AND CONTROL SPLASHING. OPEN TO CHANGE BRUSHES.
28. DRIVE WHEELS: PROVIDE PROPULTION FOR MACHINE.
29. REAR CASTERS: TWIN CASTERS FOR STABILITY.

# MACHINE SETUP

## UNCRATING MACHINE

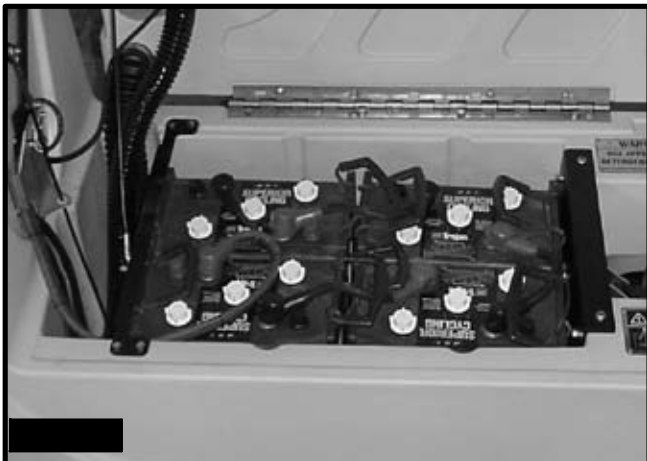
CAREFULLY CHECK THE CRATE FOR ANY SIGNS OF DAMAGE. BATTERIES ARE IN THE UNIT.

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

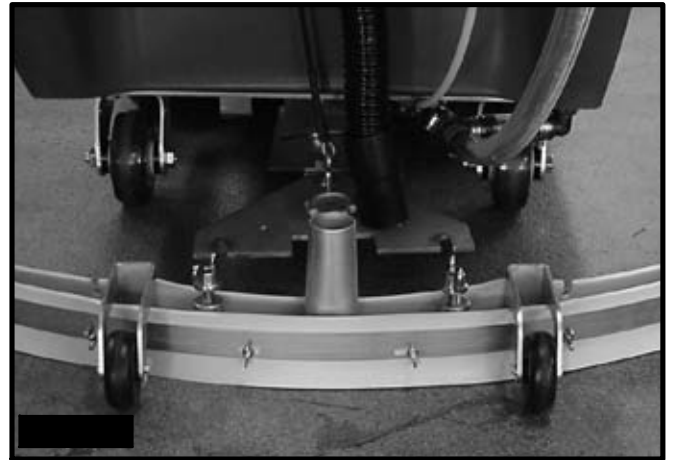
YOUR MACHINE IS EQUIPPED WITH (FOUR) 6 VOLT, DEEP CYCLE, 396 AMP HOURS BATTERIES, WHICH FORM A 24 VOLT SYSTEM. MAXIMUM BATTERY DIMENSIONS ARE 7"W X 15"L X 15"H.

1. TURN ALL SWITCHES TO THE OFF POSITION AND REMOVE KEY.
2. HINGE OPEN THE RECOVERY TANK TO ACCESS THE BATTERY COMPARTMENT.
3. ALL OF THE FOUR BATTERY CABLES ARE CONNECTED TO THE BATTERIES. LOCATE ANY LOOSE ONES AND CONNECT TO THE OPEN TERMINAL. TIGHTEN WITH 9/16" WRENCH. (SEE FIGURE 6.)
4. TURN ON MAIN POWER SWITCH AND CHECK THE BATTERY CONDITION METER TO ENSURE CORRECT INSTALLATION. CHARGE BATTERIES IF NEEDED. (SEE: BATTERY CHARGING)

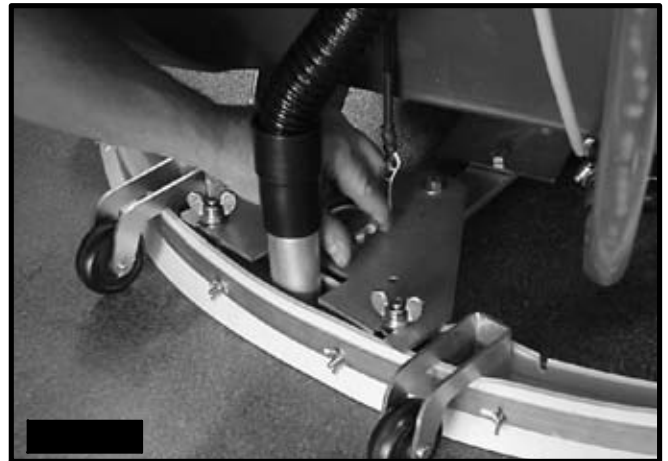


## ATTACHING SQUEEGEE

1. LOWER THE SQUEEGEE MOUNTING PLATE BY SLIDING THE LEVER ALL THE WAY TO THE RIGHT. (SEE FIGURE 7.)

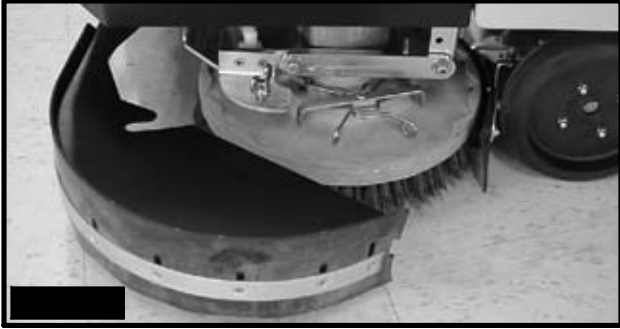


2. LOOSEN THE TWO WING NUTS ON THE SQUEEGEE AND SLIDE THEM INTO THE SLOTS IN THE SQUEEGEE MOUNTING PLATE. THE SQUEEGEE TRAIL WHEELS SHOULD FACE OUTWARD. (SEE FIGURE 8.)
3. TIGHTEN THE TWO WINGNUTS, AND CONNECT VACUUM HOSE FROM THE MACHINE TO THE SQUEEGEE. (SEE FIGURE 8.)
4. YOU MAY HAVE TO ADJUST THE SQUEEGEE PITCH, BY USING THE PITCH ADJUSTMENT. (SEE FIGURE 8.)



# ATTACHING DISK BRUSHES

1. TURN ON MACHINE POWER
2. RAISE THE SCRUB DECK BY DEPRESSING THE BRUSH SWITCH TO THE UP AND OFF POSITION AND TURN MACHINE POWER BACK OFF.
3. FOR MACHINES WITH SHROUDS UNSCREW THE TWO WINGNUTS ON EITHER SIDE OF THE SCRUB HEAD AND SWING THE SHROUDS (SEE FIGURE 9.)



4. FOR MACHINES EQUIPPED WITH JAWS, PULL OUT 2 INCH RING PIN IN FRONT OF MACHINE AND SWING BOTH JAWS. (SEE FIGURE 10.)



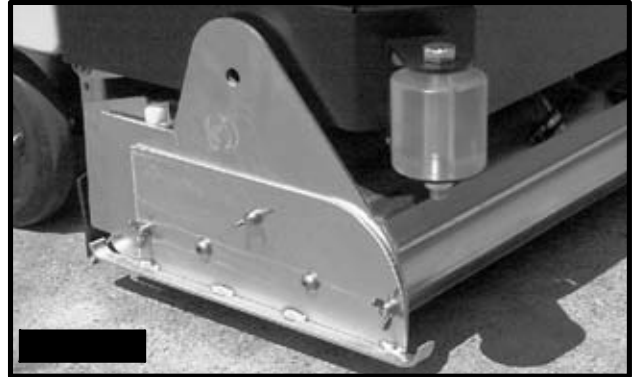
4. SELECT THE CORRECT PADS OR BRUSHES THAT BEST MEET YOUR CLEANING APPLICATION. CONSULT YOUR LOCAL DEALER FOR ASSISTANCE.
5. PAD INSTALLATION ATTACH PADS TO PAD DRIVERS BEFORE CONNECTING DRIVERS TO MOTOR HUB.
6. ATTACH BRUSHES OR PADS TO MOTOR HUBS. SQUEEZE THE SCISSOR LOCKING DEVICE AND LIFT BRUSH UP ON TO THE MOTOR DRIVE HUB. MAKE SURE THE SCISSORS CLOSE AND LOCK ONCE THE BRUSHES ARE ON. (SEE FIGURE 11.)



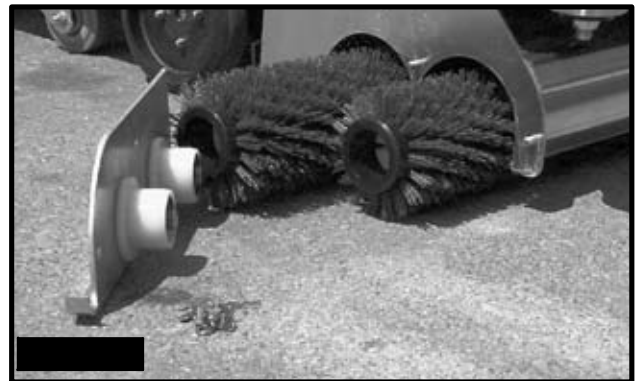
4. WITH BRUSHES LOCKED IN PLACE CLOSE SHROUDS AND TIGHTEN THE WINGNUTS ON EITHER SIDE, OR IF YOU HAVE JAWS CLOSE JAWS AND PUT PIN BACK IN.

# ATTACHING CYLINDRICAL BRUSHES

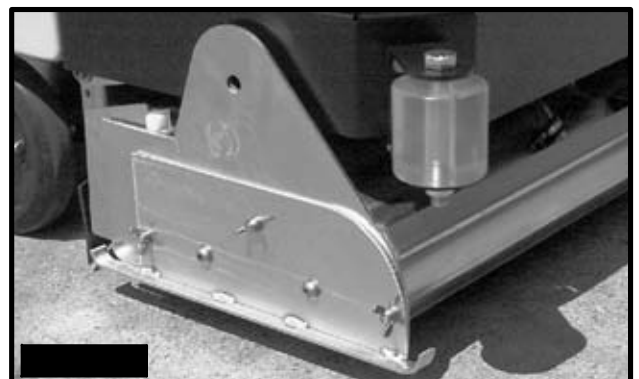
1. TURN ON MACHINE POWER
2. RAISE THE SCRUB DECK BY DEPRESSING THE BRUSH SWITCH TO THE UP AND OFF POSITION AND TURN MACHINE POWER BACK OFF.
3. UNSCREW THE THREE WINGNUTS ON THE BRUSH ACCESS DOOR AND REMOVE THE DOOR. (SEE FIGURE 12.)



5. 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 ENGAGE AND DROP IN. (SEE FIGURE 13.)



6. WHEN BOTH BRUSHES ARE ENGAGED REPLACE THE BRUSH ACCESS DOOR AND TIGHTEN IT BACK DOWN WITH THE WINGNUTS. (SEE FIGURE 14.)



\*\*\*FOR CORRECT PAD APPLICATION, CALL YOUR LOCAL DEALER\*\*\*

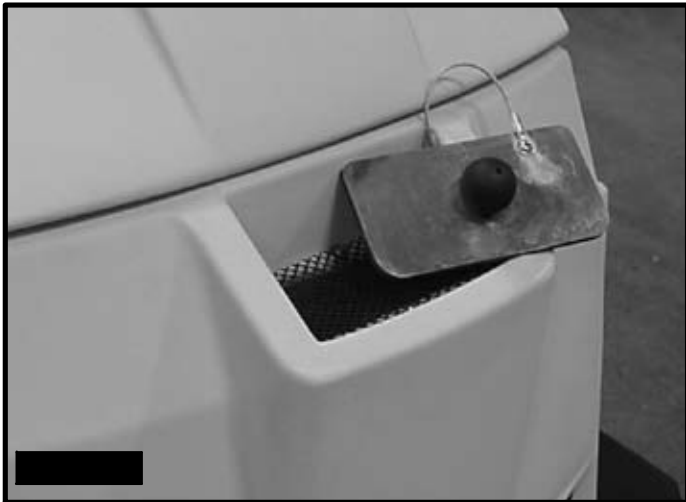
# OPERATION

## PRE-CLEANING CHECK LIST

READ AND UNDERSTAND THE SAFETY SECTION ON PAGE 5 AND 6 BEFORE OPERATING MACHINE.

1. CHECK BATTERY CONDITION GAUGE ON THE CENTRAL COMMAND II LCD SCREEN. TO CHECK GAUGE PUSH MENU CONTROL BUTTON UNTIL BATTERY GAUGE APPEARS. MAKE SURE BATTERIES ARE FULLY CHARGED BEFORE USING.
2. CHECK THE CONDITION OF PADS OR BRUSHES.
3. CHECK THE CONDITION OF THE SQUEEGEE BLADES.
4. TRANSPORT THE MACHINE TO THE FILLING STATION. RAISE THE SCRUBHEAD AND SQUEEGEE WHEN TRANSPORTING.
5. TURN MACHINE OFF.
6. OPEN SOLUTION FILL DOOR IN THE FRONT OF THE MACHINE AND 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.
7. ADD CLEANING CHEMICAL. USE THE PROPER DILUTION RATIO INDICATED ON THE BOTTLE.

**NOTE:** USE ONLY NONFLAMMABLE COMMERCIAL CLEANING CHEMICALS. YOUR AUTHORIZED DISTRIBUTOR CAN ASSIST YOU IN SELECTING A PROPER CHEMICAL.



## ONE PASS SCRUBBING

STEPS: (SEE FIGURE 16.)

1. TURN MACHINE ON, MAKE SURE THE SPEED KNOB IS AT THE LOWEST SETTING.
2. LOWER SQUEEGEE BY MOVING THE LIFT LEVER ALL THE WAY TO THE RIGHT
3. LOWER SCRUB HEAD TO THE FLOOR, USE THE TOP HALF (+) OF THE BRUSH SWITCH.
4. TURN ON THE SOLUTION SWITCH AND ADJUST THE SOLUTION LEVER TO THE DESIRED SETTING.
5. BEGIN SCRUBBING BY HOLDING THE GREEN CONTROL BUTTONS. ADJUST THE SPEED CONTROL KNOB TO THE DESIRED SETTING.
6. ONCE THE MACHINE BEGINS TO MOVE, CHECK THE DOWN PRESSURE GAUGE. START SCRUBBING AT THE #1 OR #2 MARKS, DO NOT USE THE #4 OR #5 MARKS WITHOUT MANAGEMENTS APPROVAL.
7. TO OPERATE MACHINE IN REVERSE, SIMPLY PULL THE REVERSE SWITCH BACK TOWARDS THE HANDLEBAR. YOUR REV SPEED IS SET TO ROUGHLY 50% OF FORWARD.
8. TO STOP THE MACHINE, LET GO OF THE GREEN CONTROL BUTTONS.



# 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, MOVE THE SOLUTION LEVER TO THE OPERATORS RIGHT. TO SHUT THE SOLUTION OFF COMPLETELY, USE THE SWITCH, OR JUST RELEASE THE FOOT PEDAL.
2. KEEP AN EYE ON THE REC FULL LIGHT TO MAKE SURE THERE IS NOT FOAMY 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.
3. ALWAYS OPERATE AT LOWER SPEEDS WHEN SCRUBBING AROUND WALLS AND OBJECTS. YOU SHOULD REDUCE THE SPEED, TO MAINTAIN CONTROL WHEN TURNING.
4. IF 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.
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, PIES, FOR THEY WILL DAMAGE THE PADS AND SQUEEGEE BLADES.
7. DURING BRIEF STOPS YOU DO NOT HAVE TO TURN ANYTHING OFF, THE BRUSHES AND SOLUTION WILL AUTOMATICALLY STOP WHEN THE FOOT PEDAL IS RELEASED.
8. ALWAYS KEEP AN EYE ON YOUR GAUGES. THEY LET YOU KNOW THE STATUS OF A PARTICULAR SYSTEM AT A GLANCE. IF YOUR BATTERY GAUGE IS READING LOW, YOU MUST STOP IMMEDIATELY, AND RECHARGE. RUNNING THE BATTERIES DEAD, WILL RESULT IN DAMAGE TO THE BATTERIES. EXCESSIVE SCRUBBING PRESSURE WILL BLOW A BREAKER.
9. WHEN YOU RUN OUT OF SOLUTION, RAISE THE BRUSHES, AND CONTINUE TO VACUUM THE REMAINING WATER UNTIL IT IS CONSUMED. THE SOLUTION SIGHT HOSE IS 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.

# 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. OPEN THE TOP "RECOVERY ACCESS LID" AND FLUSH OUT WITH WATER TO KEEP TANK CLEAN. (SEE FIGURE 18.)



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.
3. ONCE TANK IS EMPTY, PUT DRAIN HOSE BACK ON THE PLUG AND TIGHTEN BY TURNING THE T-HANDLE CLOCK WISE.

# DRAINING SOLUTION TANK

TO DRAIN LEFT OVER CLEANING SOLUTION FROM THE SOLUTION TANK, PERFORM THE FOLLOWING STEPS. (SEE FIGURE 19.)

1. ROTATE THE BLUE SOLUTION TANK DRAIN VALVE OUTWARDS.



# BATTERY CHARGING

CAUTION: THE FOLLOWING INSTRUCTIONS ARE INTENDED FOR THE 24V CHARGER SUPPLIED WITH THE MACHINE. DO NOT USE ANY OTHER CHARGER WITH THIS MACHINE.

## CHARGER SPECIFICATIONS

OUTPUT VOLTAGE OF 24 VOLTS.

OUTPUT CURRENT OF 36 AMPS MAX.

INPUT VOLTAGE OF 110 VOLTS/60 HZ.

AUTOMATIC SHUT OFF 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. LEAVE ACCESS PANEL OPEN WHEN CHARGING!

1. TRANSPORT MACHINE TO A WELL VENTILATED AREA FOR CHARGING.
2. TURN THE MACHINE OFF.
3. HINGE OPEN THE BATTERY ACCESS PANEL TO EXPOSE THE BATTERIES. (SEE FIGURE 20.)  
(CAUTION ALWAYS WEAR EYE PROTECTION WHEN BATTERIES ARE EXPOSED)



4. CHECK THE WATER LEVEL IN EACH BATTERY. DO NOT CHARGE THE MACHINE UNLESS THE WATER IS SLIGHTLY HIGHER THAN THE PLATES. IF NEEDED, ADD ENOUGH *DISTILLED* WATER TO JUST SLIGHTLY COVER THE PLATES. DO NOT OVER FILL. BATTERIES CAN OVERFLOW DURING CHARGING. REPLACE CAPS BEFORE CHARGING.
5. WITH THE RED CHARGER PLUG DISCONNECTED FROM THE MACHINE, PLUG THE CHARGER POWER CORD INTO A GROUNDED 110 VOLT STANDARD WALL OUTLET.  
(SEE FIGURE 21.)
6. CONNECT THE RED CHARGER PLUG INTO THE BATTERY CHARGING PORT LOCATED ON THE LOWER PORTION OF THE STEERING TOWER.



7. THE CHARGER WILL AUTOMATICALLY BEGIN CHARGING, AND AUTOMATICALLY SHUT OFF WHEN FULLY CHARGED (CHECK GAUGE)
8. AFTER THE CHARGER HAS TURNED OFF, UNPLUG THE RED CHARGER PLUG FROM THE MACHINE AND DISCONNECT THE CHARGER FROM THE WALL OUTLET.
9. RECHECK THE CELL LEVEL AFTER CHARGING. IF NEEDED, ADD DISTILED 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.

# MAINTENANCE

## DAILY MAINTENANCE

1. REMOVE AND CLEAN PADS OR BRUSHES. NEVER USE SOILED PADS WHEN CLEANING. REPLACE PADS WHEN THEY BECOME PACKED WITH RESIDUE.
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 SETTING OF THE BLADES.
5. WIPE DOWN MACHINE IF NEEDED. USE A NONABRASIVE, NON SOLVENT CLEANER, OR A CLEAN DAMP CLOTH.
6. RECHARGE THE BATTERIES IF NEEDED.

## WEEKLY MAINTENANCE

1. CHECK BATTERY WATER LEVEL IN EACH CELL OF THE BATTERIES, AND FILL AS NEEDED. ALWAYS USE DISTILLED WATER TO REFILL BATTERIES. BATTERIES SHOULD BE FILLED APPROXIMATELY 3/4" TO 1" ABOVE THE 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 THE RIGHT AND RIGHT TO LEFT. ON CYLINDRICAL MODELS FROM FRONT TO BACK, OR END TO END IF USING DIFFERENT MATERIALS.

## MONTHLY MAINTENANCE

1. CHECK SCRUB HEAD AND SQUEEGEE LIFTING CABLES FOR WEAR AND SPRING TENSION.
2. CHECK MACHINE FOR WATER LEAKS AND LOOSE NUTS AND BOLTS.
3. CHECK TO SEE IF BATTERY CABELS ARE TIGHTENED (TIGHTEN IF NEEDED)
4. CHECK PARKING BREAK
5. CHECK CONDITION OF SCRUB DECK LIFTING CABLE.

## YEARLY MAINTENANCE

1. CALL YOUR LOCAL DEALER FOR YEARLY MAINTENANCE

## 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

PREVENTATIVE MAINTENANCE

CHECKED

NOTE

ROTATE BRUSHES	_____	_____
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	_____	_____
SCRUBBING POWER	_____	_____
VACUUM POWER	_____	_____
CONTROLS WATER ON TURNS	_____	_____
GAUGES AND CONTROLS	_____	_____
CHECK WHEEL TRACTION	_____	_____

OTHER: \_\_\_\_\_

OTHER: \_\_\_\_\_

PAST HOUR METER READING: \_\_\_\_\_

CURRENT HOUR METER READING: \_\_\_\_\_

AVERAGE WEEKLY USAGE: \_\_\_\_\_

TECHNICIAN PRINT: \_\_\_\_\_

TECHNICIAN SIGNATURE: \_\_\_\_\_

MANAGER SIGNATURE: \_\_\_\_\_

DATE: \_\_\_\_\_

DATE: \_\_\_\_\_

# PREVENTATIVE MAINTENANCE RECORDS

USE THIS FORM TO MAKE COPIES FOR YOUR INTERNAL RECORDS

## PREVENTATIVE MAINTENANCE

## CHECKED

## NOTE

ROTATE BRUSHES	_____	_____
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	_____	_____
SCRUBBING POWER	_____	_____
VACUUM POWER	_____	_____
CONTROLS WATER ON TURNS	_____	_____
GAUGES AND CONTROLS	_____	_____
CHECK WHEEL TRACTION	_____	_____

OTHER: \_\_\_\_\_

OTHER: \_\_\_\_\_

PAST HOUR METER READING: \_\_\_\_\_

CURRENT HOUR METER READING: \_\_\_\_\_

AVERAGE WEEKLY USAGE: \_\_\_\_\_

TECHNICIAN PRINT: \_\_\_\_\_

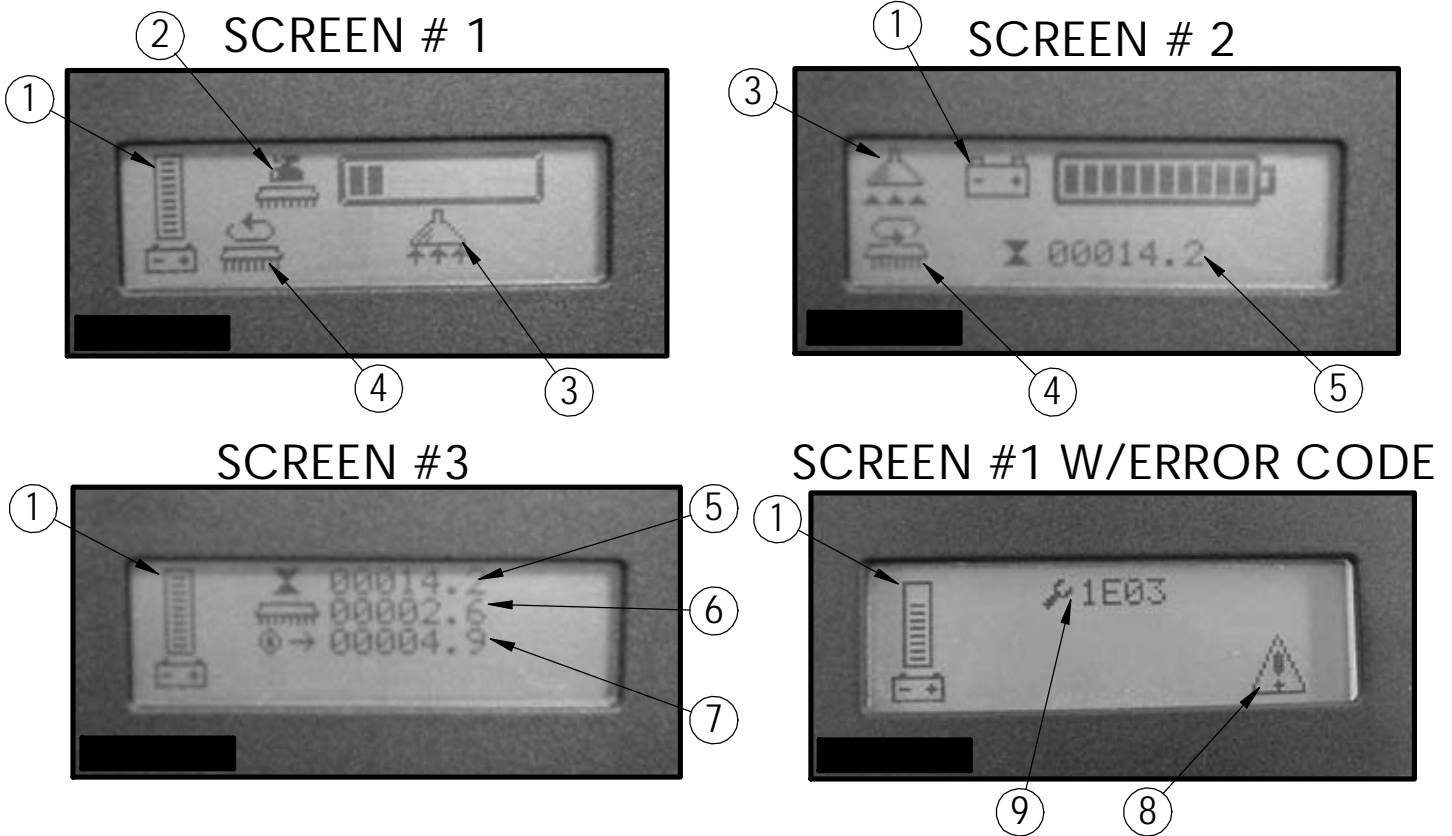
TECHNICIAN SIGNATURE: \_\_\_\_\_

MANAGER SIGNATURE: \_\_\_\_\_

DATE: \_\_\_\_\_

DATE: \_\_\_\_\_

# LCD SCREEN MENU DISPLAYS



\*\*\* USE GREEN MENU SELECTION BUTTON ON CONTROL PANEL TO CHANGE SCREENS\*\*\*

FIGURES 22-25.

1. BATTERY LEVEL INDICATOR - INDICATES THE ENERGY LEVEL REMAINING IN THE BATTERIES.  
(SHOWN ON ALL MENU DISPLAYS)
2. SCRUBBING DECK DOWN PRESSURE GAUGE - SETS THE DOWN PRESSURE ON THE BRUSHES. (SEE FIGURE 22.)
3. VACCUM ON - TELLS YOU WHEN THE VACCUM IS ON. (SEE FIGURES 22. AND 23)
4. SCRUBBING MOTORS ON - TELLS YOU WHEN THE BRUSH MOTORS ARE RUNNING. (SEE FIGURES 22. AND 23.)
5. KEY SWITCH HOUR METER - TELLS YOU THE TOTAL HOURS THE MACHINE HAS ON. (SEE FIGURES 23. AND 24.)
6. SCRUBBING BRUSH HOUR METER - TELLS YOU THE TOTAL HOURS THE BRUSH MOTORS HAVE BEEN USED.  
(SEE FIGURE 24.)
7. TRANSPORT HOUR METER - TELLS YOU THE TOTAL HOURS THE DRIVE SYSTEM HAS BEEN USED. (SEE FIGURE 24.)
8. ERROR WARNING SYMBOL - INDICATES WHEN THERE HAS BEEN A DIAGNOSTIC CODE ERROR. (SEE FIGURE 25.)
9. DIAGNOSTIC CODE - WHEN THE MACHINE HAS DETECTED AN ERROR IT WILL DISPLAY THE WARNING SYMBOL AND A DIAGNOSTIC CODE WHICH TELL YOU WHATS WRONG. (SEE FIGURE 25.)

(FOR COMMON ERROR CODES AND DISCRIPTIONS SEE PAGE 18. AND 19.)

# TROUBLESHOOTING CENTRAL COMMAND

NOTE: THIS MACHINE IS OPERATED BY A SOPHYSTICATED ELECTRONIC "BRAIN" THAT HAS MANY FAIL-SAFES WITHIN IT. THE BRAIN SELF-ANALYZES PROBLEMS AND FLASHES A FOUR-DIGIT NUMERIC CODE OF WHAT IS WRONG IN THE LCD WINDOW.

MOST OF THESE CODES REQUIRE A TECHNICIAN'S ATTENTION. YOU SHOULD NOT ATTEMPT REPAIRS YOU ARE UNCOMFORTABLE WITH, ESPECIALLY IF YOU ARE NOT USED TO WORKING ON ELECTRONICS.

THE COMPLETE LIST OF CODES IS PUBLISHED IN THE *SIMPLIFIED ELECTRONIC TROUBLESHOOTING MANUAL*, WHICH IS AVAILABLE TO TECNICAL PEOPLE. HOWEVER, WE HAVE INCLUDED THE BASIC CODES THAT YOU CAN USUALLY RESOLVE YOURSELF.



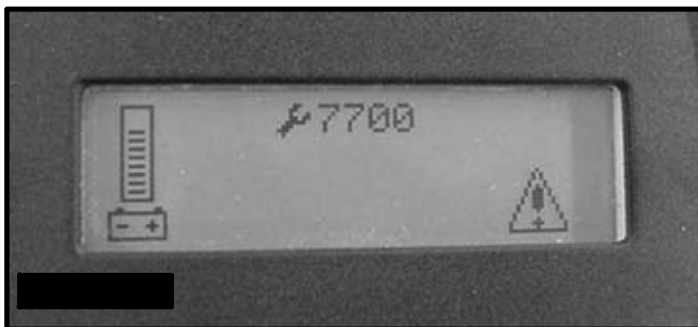
1. 1E03 AND 1E04 ERROR. CHECK THE SMALL SAFETY SWITCH NEXT TO THE RED PLUG BELOW THE DASHBOARD. THIS SWITCH WILL TURN OFF THE TRACTION DRIVE AND BRUSHES AS A SAFETY FEATURE WHILE THE CHARGER IS PLUGGED IN. THE SWITCH MAY BE STUCK, OR THE PLUG TWISTED AT AN ANGLE, ENGAGING THE SWITCH. THIS CODE WILL ALSO FLASH IF THE WIRING BECOMES VERY WET. IN THIS CASE, ETHER WAIT UNTIL THE WIRING DRIES OUT, OR CALL A TECHNICIAN.



2. 7601 AND 7602 ERROR. PAD CURRENT OVER LOAD. THIS CAN CAN OCCUR WHEN THE PADS HIT A BUMP IN THE FLOOR. TO RESTART THE PADS, TURN OFF THE KEY AND TURN IT ON AGAIN. TO AVOID THIS ERROR, EITHER SLOW DOWN ON BUMPY PARTS OF THE FLOOR, OR REDUCE DOWNPRESSURE ON THE PADS.



3. 1600 ERROR. VOLTAGE EXCEEDS THE MAXIMUM. EITHER THE BATTERIES ARE MIS-WIRED, OR THE CHARGER IS STILL PLUGGED INTO THE MACHINE.

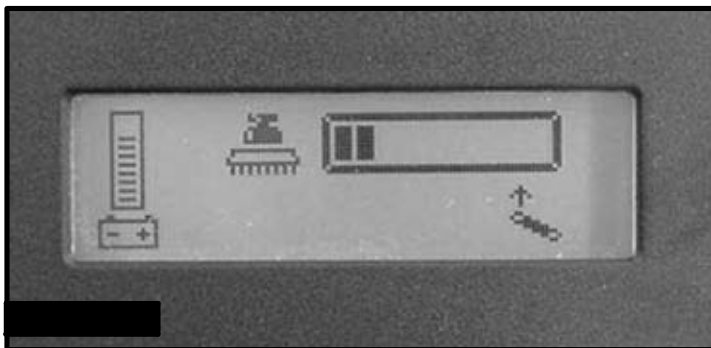


4. 7700, 7701, 7702, AND 7703 ERROR. THE VACUUM MOTOR HAS EXCEEDED THEIR AUTHORIZED POWER LIMITS. TURN OFF KEY AND TURN ON AGAIN TO CLEEAR.

# TROUBLESHOOTING CENTRAL COMMAND



5. 7900 AND 7901 ERROR. THE EMERGENCY STOP BUTTON IS OUT



6. 2FO1 ERROR. YOU PRESSED THE FOOT PEDAL BEFORE TURNING ON THE KEY. TURN OFF THE KEY AND TRY AGAIN, LEAVING FOOT OFF OF THE PEDAL.



7. 2C00 AND 2C01 ERROR. LOW VOLTAGE WARNING. VOLTAGE HAS DROPPED DOWN BELOW THE MINIMUM REQUIRED TO OPERATE THE MACHINE. IF YOU WAIT A FEW MINUTES, THE BATTERIES MAY COAST UP A BIT IN VOLTAGE, ALLOWING YOU TO DRIVE VERY SLOWLY TO THE RECHARGE STATION. IF NOT, YOU WILL HAVE TO RELEASE THE PARKING BRAKE ( ON THE FRONT WHEEL, PULL LEVER TOWARD THE FRONT OF THE MACHINE TO RELEASE) AND PUSH THE MACHINE TO RECHARGEING STATION.



8. 7802 ERROR. THE TRACTION MOTOR WAS USED TO CLIMB A RAMP, AND WAS RUNNING UP THE RAMP FOR MORE THAN THE 60 SECONDS ALLOWED FOR THIS. TURN OFF THE KEY, TURN ON AGAIN, AND CONTINUE. YOU SHOULD NOT USE THIS MACHINE TO CLIMB RAMPS SO STEEP AND SO LONG THAT THIS CODE COMES UP REPEATEDLY, OR YOU COULD OVERHEAT THE TRACTION MOTOR.

9. ALL OTHER ERROR CODES. TURN OFF THE KEY, AND DISCONNECT THE POSITIVE BATTERY CABLE FROM THE BATTERIES FOR MORE THAN ONE MINUTE (THE TIME IS NEEDED TO DRAIN THE BRAIN'S ON-BOARD CAPACITOR). RECONNECT CABLES, BEING SURE THAT IT IS TIGHT. TOO LOOSE AND YOU WILL BURN BATTERY. IF YOU OVERTIGHTEN THE CABLES YOU CAN DAMAGE THE BATTERY'S LEAD TERMINAL. TRY AGAIN.

10. IF THE PROBLEMS CANNOT BE SOLVED BY ANY OF THESE SOLUTION CALL YOUR LOCAL DEALER'S SERVICE DEPARTMENT.

# TROUBLE SHOOTING

<u>PROBLEM</u>	<u>CAUSE</u>	<u>SOLUTION</u>
NO POWER, NOTHING OPERATES	FAULTY KEY SWITCH BATTERIES NEED CHARGING FAULTY BATTERY LOOSE BATTERY CABLE MAIN CIRCUIT BREAKER TRIPPED	CONTACT LOCAL SERVICING DEALER SEE CHARGING BATTERIES REPLACE BATTERY TIGHTEN LOOSE CABLE WAIT 5 MINUTES FOR AUTO RESET DETERMINE CAUSE AND CORRECT
BRUSH MOTOR(S) DO NOT OPERATE	BRUSH DECK IS NOT DOWN FOOT PEDAL IS NOT DEPRESSED BRUSH CIRCUIT BREAKER TRIPPED  CARBON BRUSHES WORN FAULTY BRUSH MOTOR OR WIRES	PUT BRUSH DECK DOWN ENGAGE FOOT PEDAL WAIT 5 MINUTS FOR AUTO RESET DETERMINE CAUSE AND CORRECT CONTACT LOCAL SERVICING DEALER CONTACT LOCAL SERVICING DEALER
DRIVE MOTOR DOES NOT OPERATE	RECHARGE SWITCH MISADJUSTED FAULTY SPEED CONTROLLER OR WIRES FAULTY DRIVE MOTOR FAULTY WIRING CARBON BRUSHES WORN	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 CIRCUIT BREAKER TRIPPED  FAULTY VACUUM MOTOR CARBON BRUSHES WORN	ROTATE SQUEEGEE LIFT LEVER DOWN TRY OPERATING "WHITE " TOGGLE WAIT 5 MINUTES FOR AUTO RESET DETERMINE CAUSE AND CORRECT 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 SOLUTION TANK, DRAIN RECOVERY TANK MOVE LEVER TO ON REMOVE COVER AND CLEAN REMOVE AND BLOW OUT WITH COMPRESSED AIR REMOVE COVER AND CLEAN

# TROUBLE SHOOTING

<u>PROBLEM</u>	<u>CAUSE</u>	<u>SOLUTION</u>
NO SOLUTION FLOW	NO SOLUTION IN TANK SOLUTION VALVE OFF SOLUTION SWITCH OFF SOLUTION SCREEN CLOGGED FAULTY SOLUTION SOLENOID FAULTY SOLUTION SWITCH	FILL SOLUTION TANK ROTATE LEVER TO ON TURN SOLUTION SWITCH ON REMOVE AND CLEAN SCREEN 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 BLADE IS WORN FAULTY VACUUM HOSE VACUUM MOTOR GASKET TORN TANK GASKET FAULTY DRAIN PLUG LOOSE VAC MOTOR FAULTY BATTERY CHARGE 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 LID CONTACT LOCAL SERVICING DEALER CHARGE BATTERIES OVERNIGHT
POOR WATER RECOVERY ON TURNS	WIPERS WORN WIPERS CHATTER SQUEEGEE SWING IS BINDING INCORRECT SQUEEGEE SIZE	REPLACE WIPER MATERIAL TIGHTEN PIVOT POINTS CONTACT LOCAL SERVICING DEALER CONTACT LOCAL SERVICING DEALER
REAR TIRES NOISY	BEARING DRY FAULTY HUBS	GREASE BEARINGS CONTACT LOCAL SERVICING DEALER
POOR TRACTION	EXCESSIVE BRUSH PRESSURE WORN DRIVE TIRE HEAVY SOAP CONCENTRATION	REDUCE PRESSURE WITH SWITCH  CONTACT LOCAL SERVICING DEALER
SHORT RUN TIME	BATTERIES RUN DOWN BATTERIES STILL DOWN BATTERIES LOW ON WATER  BATERIES OVER CYCLED	CHARGE BATTERIES TWICE CONTACT LOCAL SERVICING DEALER FILL WITH DISTILLED WATER TO 3/4" ABOVE THE LEAD PLATES CONTACT LOCAL SERVICING DEALER

# MODEL 3000/3400

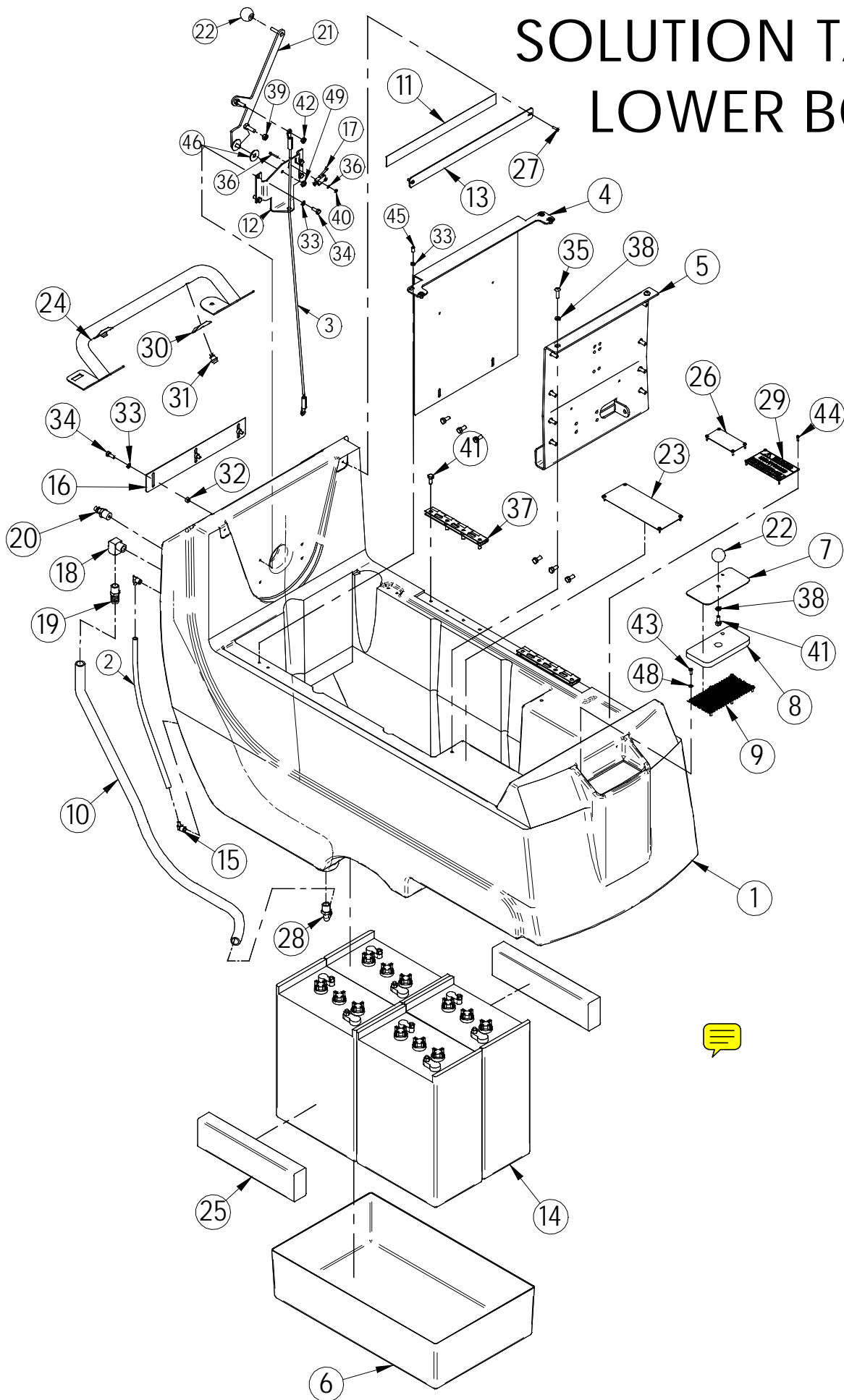
## MACHINE PARTS SECTION

*TANKS ARE MADE IN RED AND YELLOW. IF YOU NEED YELLOW USE THE ALTERNATE PART NUMBER. IF YOU NEED RED PARTS, USE THE NORMAL PART. IF THERE IS ONLY ONE PART NUMBER, THAT IS THE ONLY COLOR THAT PART COMES IN.*



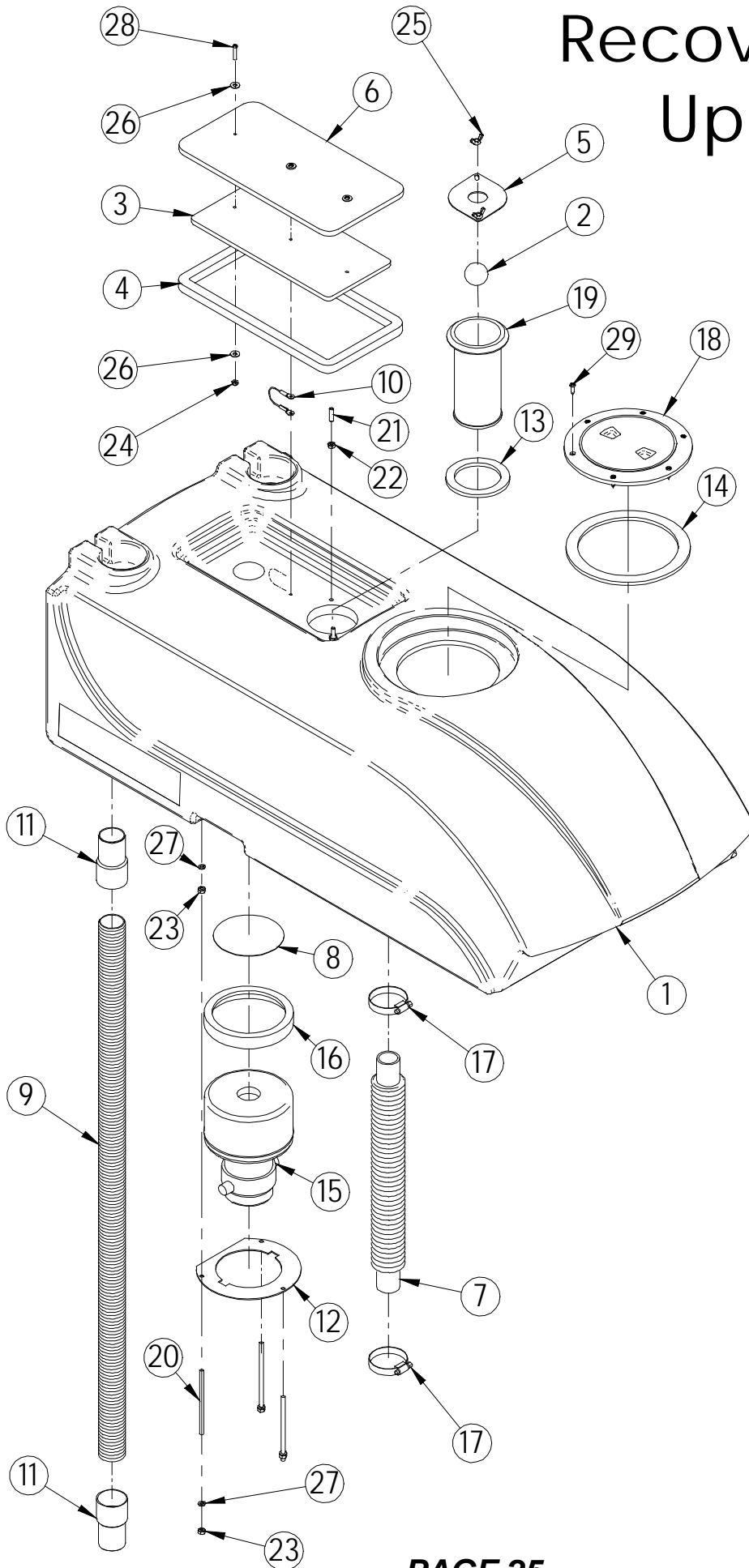
**BLANK**

# SOLUTION TANK LOWER BODY



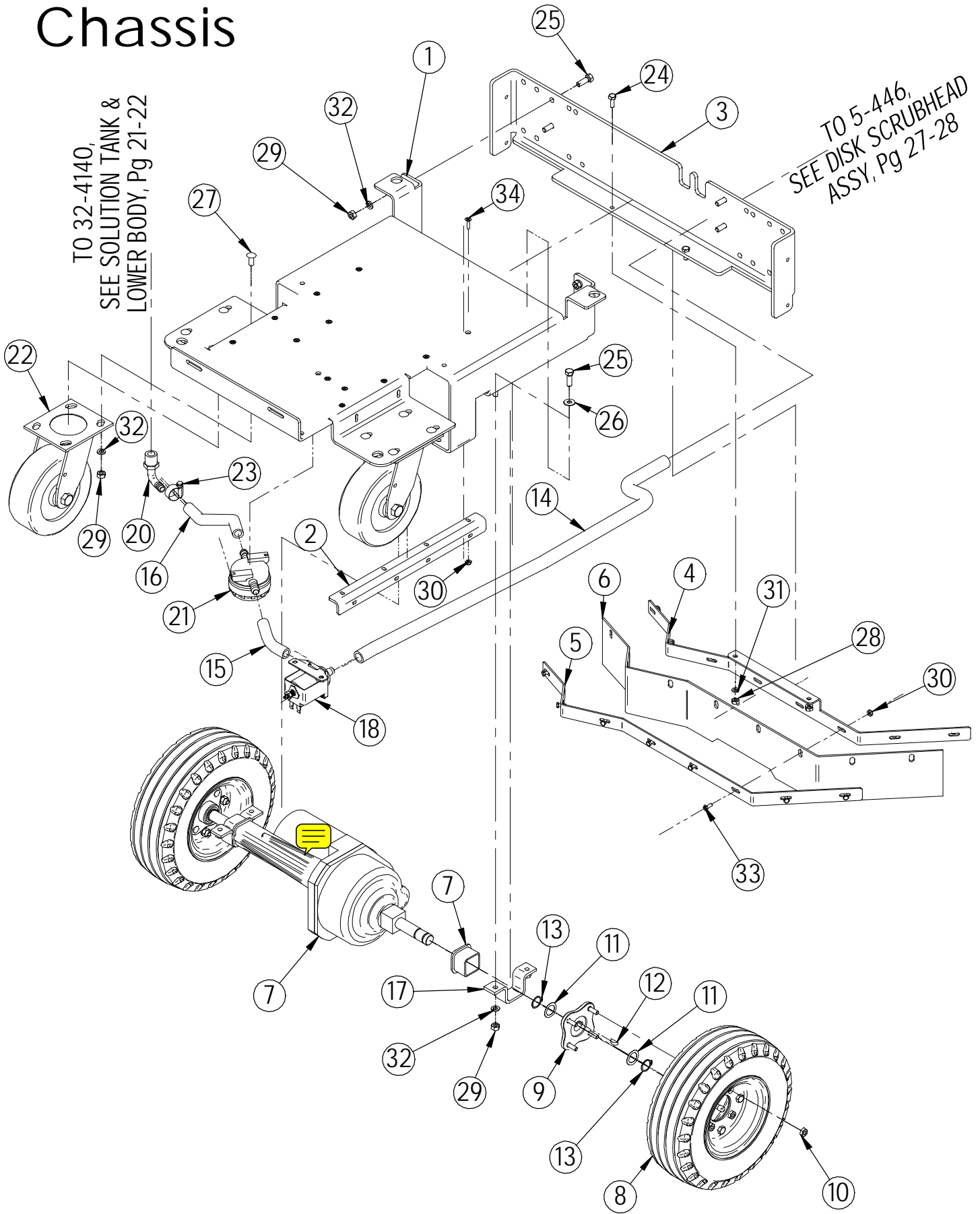
Item	Part No.	Alt. Part No.	Description	Comments	Qty
1	32-4141	32-4140	SOLUTION TANK		1
2	32-4150		1/4 ID X 18" TUBE		1
3	32-7190		TANK CABLE		1
4	32-1087		BATTERY WALL		1
5	32-1090		ACTUATOR MOUNT PANEL		1
6	32-1480		BATTERY TRAY LINER		1
7	32-4010		FILL DOOR		1
8	32-4020		FILL DOOR GASKET		1
9	32-4025		FILL DOOR SCREEN		1
10	32-4026		3/4 ID X 42" TUBE		1
11	21-7105		HDPE WEAR STRIP		1
12	21-7110		PIVOT & GUIDE		1
13	21-7120		LIFT LEVER RETAINER		1
14	290-2110		L 16 H BATTERY 6 VOLT 395 AH		4
15	290-4149		1/4" NPT X 1/4" BARB X 90 DEG		2
16	21-2030		LATCH BAR		1
17	21-2230		MICRO SWITCH		1
18	21-4042		1/2 STREET ELBOW		1
19	21-4043		1/2 NPT TO 3/4 BARB		1
20	21-4048		1/2 MNPT TO 3/8 PLUG, BR.		1
21	21-7100		SQUEEGEE LEVER		1
22	21-7101		LIFT KNOB		2
23	21-1032		WARNING PLATE		1
24	21-1180		HANDLEBAR	P/N 21-1180 COMES COMPLETE W/ 7-228 & 7-229	1
25	21-1381		14" 2 X 4 SPACER		2
26	4-101	21-0101	SERIAL NUMBER PLATE		1
27	H-71614		RPH #10-32 X 5/8" SS		2
28	5-447		1/2" NPT TO 1/2" BARBED ELBOW		1
29	5-728		DETERGENT WARNING PLATE		1
30	7-228		SWITCH MNT PLATE		2
31	7-229		PUSH BUTTON SWITCH		2
32	H-00302		SPACER		3
33	H-71063		LW 1/4" SS		11
34	H-70003		HCS 1/4"- 20 X 3/4" SS		7
35	H-73780		BHSCS 5/16-18 X 1		10
36	H-72493		RPH #4-40 X 1"		2
37	32-8000		8" CONTINUOUS HINGE		2
38	H-71065		LW 5/16" SS		11
39	H-70711		HN 5/16"- 18 SS		3
40	H-71004		FW #4 X .3125 SS		2
41	H-70053		HCS 5/16"- 18 X 3/4" SS		15
42	H-70711		JN 5/16"- 18 SS		1
43	H-72904		PPH SMS #6 X 1/2" SS		6
44	H-72904		PPH SMS #6 X 1/2" SS		12
45	H-73752		BHSCS 1/4-20 X 1/2"		4
46	H-76063		FW 5/16" NYLON		2
47	H-78009		FW 3/16" X 7/16" SS		6
48	H-70854		NYLOK #4-40 SS		2
49	H-NJ05C		JNYL 5/16"- 18 SS		1

# Recovery Tank Upper Body



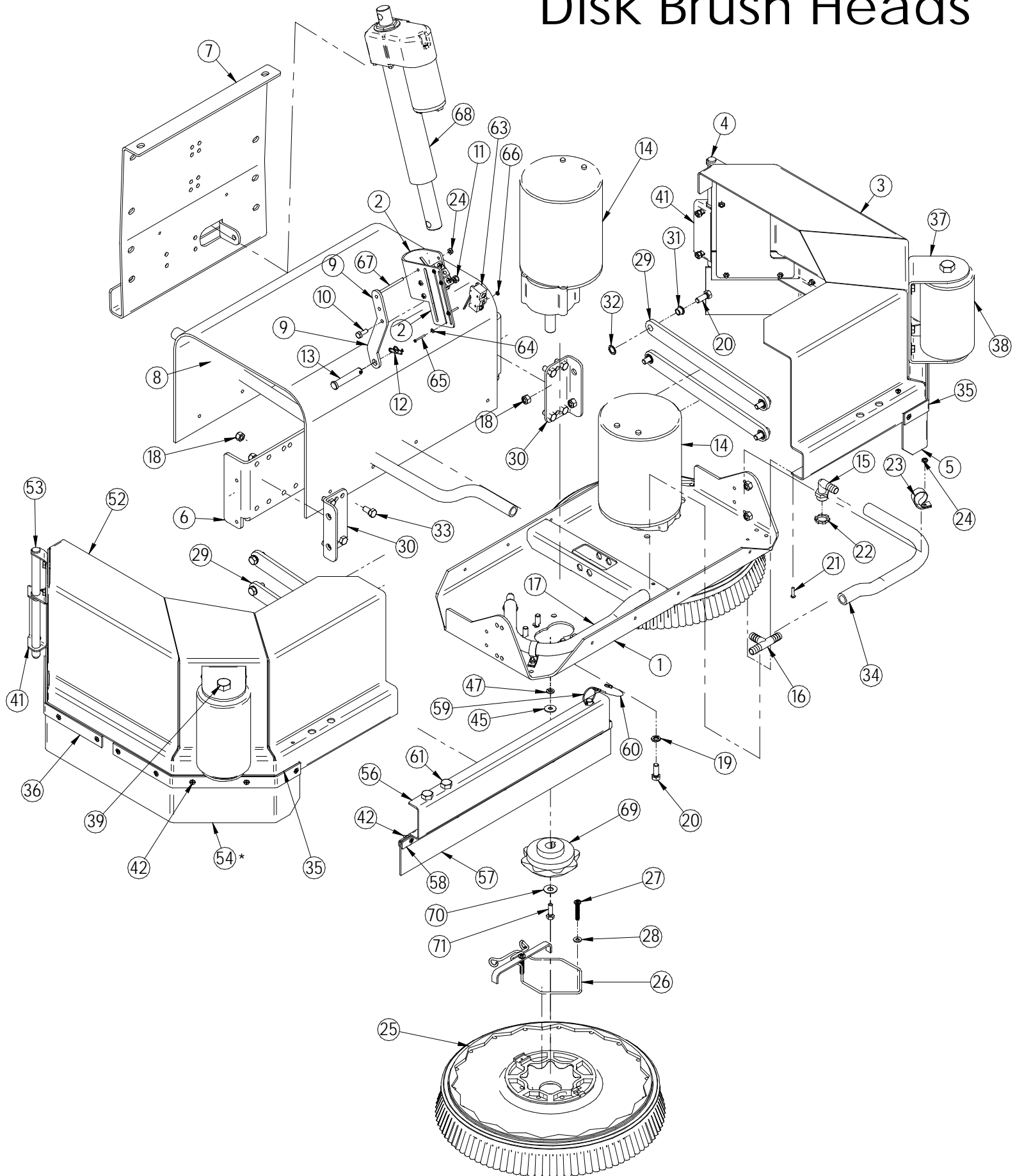
Item	Part No.	Alt. Part No.	Description	Qty
1	32-7010	32-7011	RECOVERY TANK	1
2	7-712		OVERFILL SHUTOFF BALL	1
3	32-4091		VACUUM COVER, LOWER	1
4	32-4090		VACCUUM LID GASKET	1
5	32-4080		VACUUM BALL PLATE	1
6	32-4050		VACUUM COVER, UPPER	1
7	290-7210		DRAIN HOSE	1
8	21-4095		VAC MOTOR SCREEN	1
9	21-4074		VAC HOSE, 31"	1
10	21-4060		6" LANYARD	1
11	21-4072		HOSE CUFF, 1 1/2"	2
12	38-734		BLOWER RING	1
13	38-738		STRAINER GASKET	1
14	38-742		SCREW ON LID GASKET	1
15	5-225		VAC MOTOR	1
16	5-708A		VAC MOTOR GASKET	1
17	5-719		CLAMP 1 9/16 - 2 1/2 " SS	2
18	7-425		TANK SCREW ON LID W/GASKET	1
19	7-711A		SCREEN STRAINER	1
20	H-00221		FTS 1/4"- 20 X 5" SS	3
21	H-255HD		STUD 1/4"- 20 X 1"	2
22	H-36202		JN 1/4"- 20	2
23	H-70710		HN 1/4"- 20 SS	6
24	H-70858		NYLOK #10-32 SS	1
25	H-70910		WINGNUT 1/4"- 20 SS	2
26	H-71009		FW #10 SS	4
27	H-71063		LW 1/4" SS	6
28	H-72566		RPH #10-32 X 1" SS	3
29	H-72916		PPH SMS #8 X 3/4" SS	6

# Chassis



Item	Part No.	Description	Comments	Qty
1	32-1000	MAINFRAME		1
2	32-1010	FRAME BRACE		2
3	32-1030	BRUSHHEAD PIVOT PLATE		1
4	32-1051	SPLASH BRACKET		1
5	32-1052	SPLASH BAND		1
6	32-1055	REAR SPLASH CURTAIN		1
7	32-3000	EUCLID TRANSAXLE MODEL 278		1
8	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
9	32-3042	HUB ASSEMBLY		2
10	32-3043	LUG NUT 5/16"-18 SS		8
11	32-3044	FW .75 ID X 1.13 OD X .01		4
12	32-3045	WOODRUFF KEY .188 X .625		2
13	32-3046	.75 SNAPRING		4
14	32-4031	1/2" ID CLEAR HOSE, 34" LG		1
15	32-4032	1/2" ID CLEAR HOSE, 4" LG		1
16	32-4033	1/2" ID CLEAR HOSE, 6" LG		1
17	21-1010	AXLE MOUNT		2
18	7-245	ADJ SOLUTION FLOW VALVE		1
20	5-447	1/2" NPT TO 1/2" BARBED ELBOW		1
21	5-913	INLINE FILTER		1
22	7-130	CASTER		2
23	H-081	CLAMP 7/16"- 25/32" SS		2
24	H-70003	HCS 1/4"- 20 X 3/4" SS		2
25	H-70055	HCS 5/16"- 18 X 1" SS		8
26	H-78015	FW 5/16" X 3/4" SS		4
27	H-74429	CB 5/16"- 18 X 3/4" SS		8
28	H-70710	HN 1/4"- 20 SS		2
29	H-70711	HN 5/16"- 18 SS		11
30	H-70858	NYLOK #10-32 SS		20
31	H-71063	LW 1/4" SS		2
32	H-71065	LW 5/16" SS		8
33	H-71671	HXMS #10-32 X 1/2" SS		8
34	H-72684	FHP 10-32 X 3/4" SS		12

# Disk Brush Heads





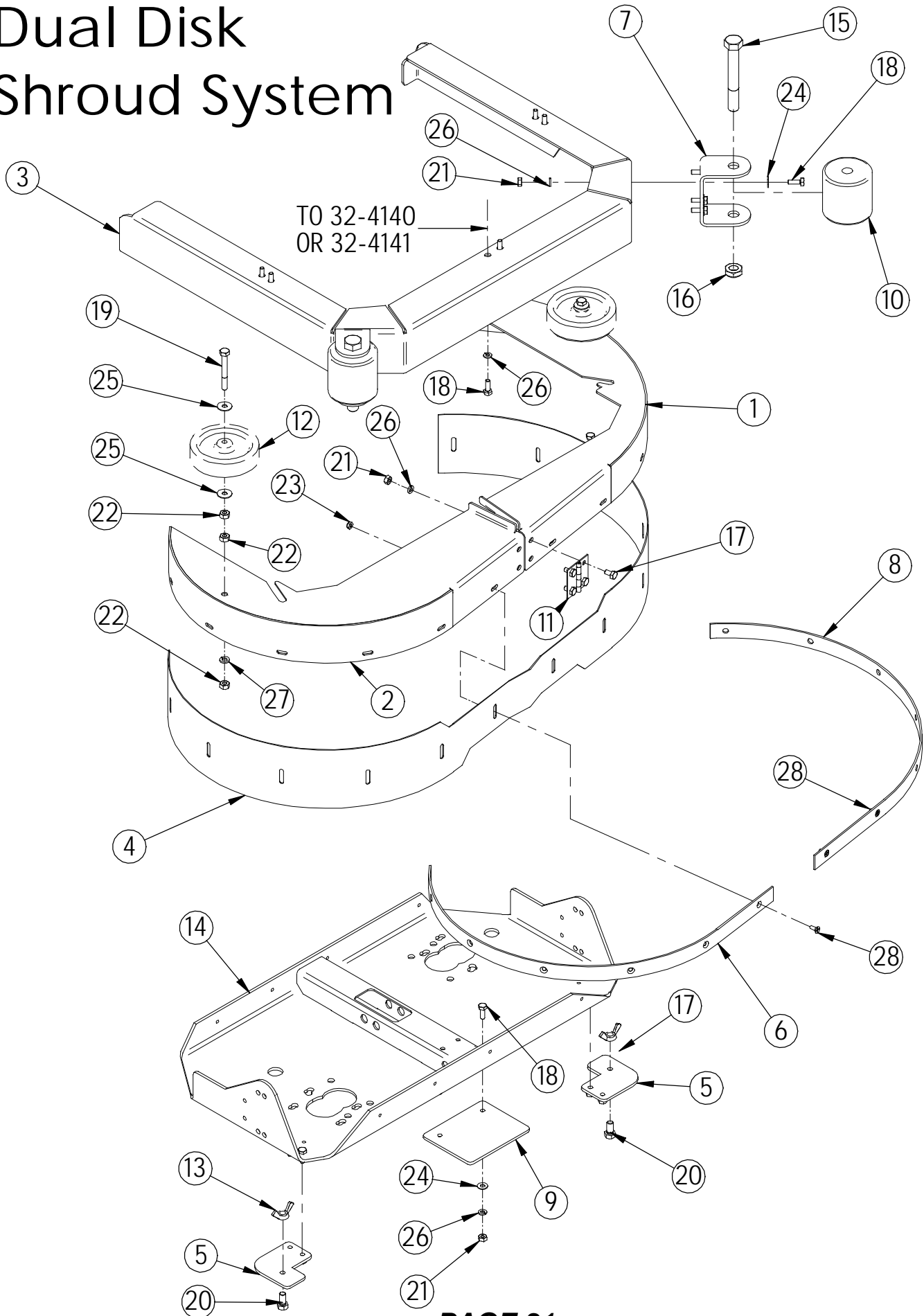
Item	Part No.	Description	Qty
1	7-402	SCRUB HEAD PLATFORM	1
2	7-165	SWITCH BRACKET	1
3	32-1350	MODEL 3000 LEFT JAW	1
4	7-134L	LH JAW HINGE	1
5	32-1310	33" JAW SPLASH CURTAIN	1
6	32-1030	BRUSHHEAD PIVOT PLATE	1
7	32-1090	ACTUATOR MOUNT PANEL	1
8	32-4031	1/2" ID CLEAR HOSE, 34" LG	1
9	7-169	SWITCH BRACKET ARM	1
10	H-70003	HCS 1/4"- 20 X 3/4" SS	7
11	H-70860	NYLOK 1/4"- 20 SS	1
12	H-RUE22	1/2" RUE RING COTTER	1
13	H-ZCP234	1/2" X 2 5/8" CLEVIS PIN	1
14	38-222	MOTOR 1 HP X 350 RPM	2
15	5-447	1/2 NPT X 1/2" BARB ELBOW	2
16	5-446	1/2 " PLASTIC BARB TEE	1
17	7-4034	REINF. HOSE 5/8 ID X 18" LG	1
18	H-77862	NYLOK 3/8"- 16 SS	11
19	H-71067	LW 3/8" SS	8
20	H-70105	HCS 3/8"- 16 X 1" SS	16
21	H-72565	RPH #10-32 X 3/4" SS	2
22	H-07005	1/2" NPT LOCKNUT	4
23	H-78LC	7/8 LOOP CLAMP	2
24	H-70858	NYLOK #10-32 SS	29
25	SEE PAGE 4	SCRUB BRUSH	2
26	40-423	BRUSH SCISSOR LOCK	2
27	H-72597	PPH 1/4-20 X 1.50 SS	4
28	H-71013	FW 1/4" X 5/8" SS	10
29	32-1240	LATERAL ARM	4
30	290-1265	SCRUB ARM BRACKET	2
31	290-1245	3/8" ID, 1/2" OD, 3/8" LG, FLANGE BEARING	8
32	290-1247	FW BRONZE .50" ID X 1.0" OD X .062	8
33	H-70103	HCS 3/8"-16 X 3/4" SS	8
34	7-4034	REINF. HOSE 5/8 ID X 18" LG	2
35	32-1220	33" JAW BAND	2
36	7-122F	JAW CURT CLAMP FRT MODEL 35	2

Item	Part No.	Description	Qty
37	7-126	HD ROLLER BRACKET	2
38	7-125A	ROLLER	2
39	H-11380	HB 5/8"- 11 X 11"	2
40	H-37038	JNYL 5/8"- 11	2
41	7-134	HINGE BRACKET	2
42	H-72684	FHP 10-32 X 3/4" SS	23
43	H-70001	HCS 1/4"- 20 X 1/2" SS"	2
44	H-NJ04C	JNYL 1/4" - 20 SS	4
45	H-71016	FW 5/16" X 7/8" USS	10
46	H-70053	HCS 5/16"- 18 X 3/4" SS	4
47	H-71065	LW 5/16" SS	10
48	H-70711	HN 5/16"- 18 SS	8
49	H-71063	LW 1/4" SS	4
50	H-70710	HN 1/4"- 20 SS	4
51	H-29049	PPH #10-32 X 1/2"	1
52	32-1360	MODEL 3000 RIGHT JAW	1
53	7-134R	RH JAW HINGE	1
54*	32-1310	33" JAW SPLASH CURTAIN	1
55	H-13053	HCS 5/16"-18 X 3/4"	4
56	7-162	CHANNEL GUARD, FRONT	1
57	7-166	FRONT SPLASH CURTAIN	1
58	7-167	FRONT CURTAIN BAND	1
59	7-133A	DET RING PIN, 1/2" X 2"	1
60	7-133B	RETAINING CABLE	1
61	H-77205	HCS 1/2"-13 X 1" SS	2
62	H-77864	NYLOK 1/2"-13 SS	2
63	5-223	LIMIT SWITCH	2
64	H-33066	FW #4 SAE	4
65	H-28679	PPH #4-40 X 1"	4
66	H-37006	NYLOK #4-40	4
67	H-00288	PPH #10-32 X 2 1/2" SS	3
68	290-2210	ACTUATOR, 1000 LB. LOAD (20:1)	1
69	21-5000	BRUSH DRIVER	2
70	H-99001	FW 3/8" SS	2
71	H-70055	HCS 5/16"- 18 X 1" SS	2

\* 32-1311 - FITS 30" JAWS

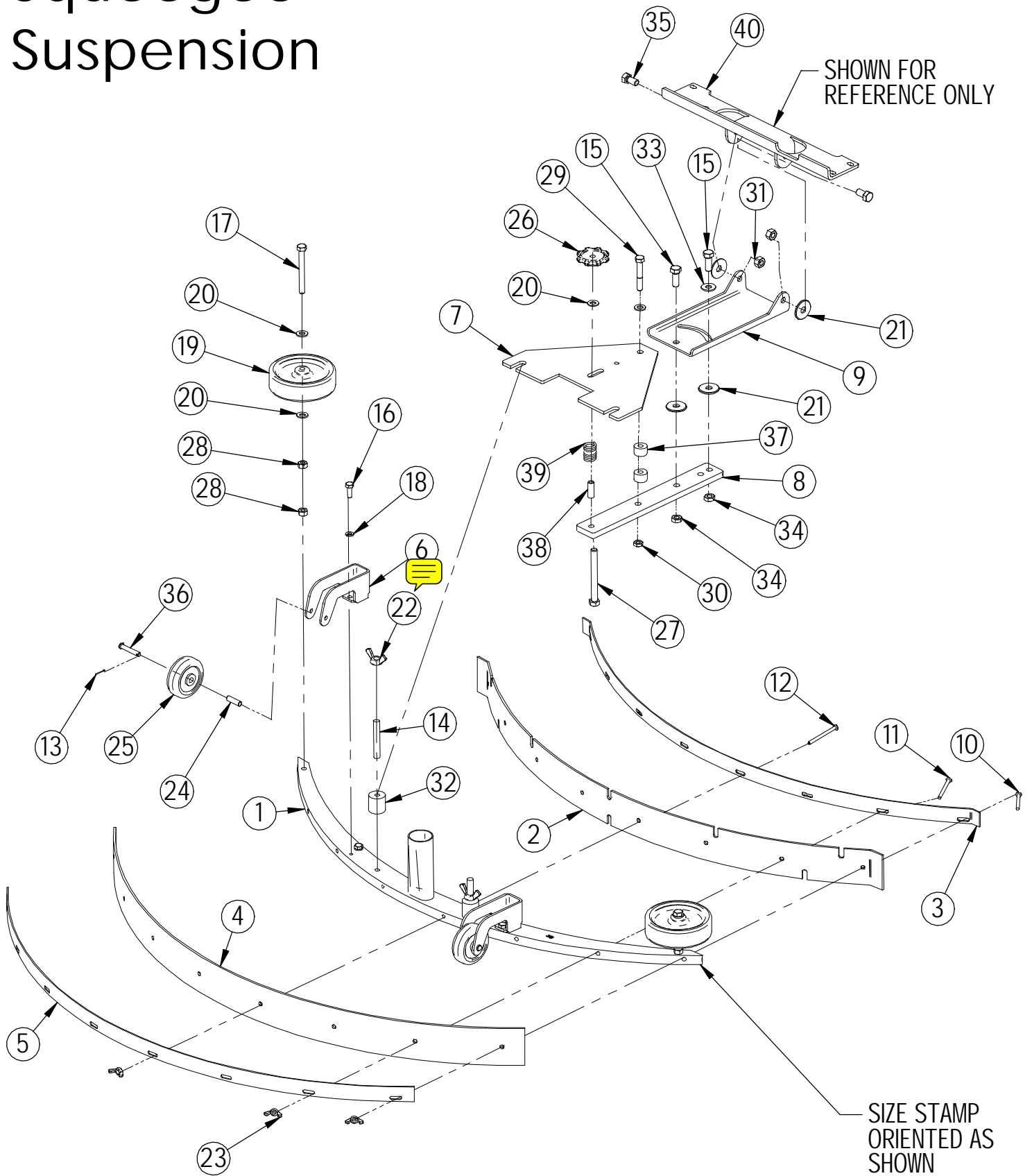
\* 32-1310 - FITS 33" JAWS

# Dual Disk Shroud System



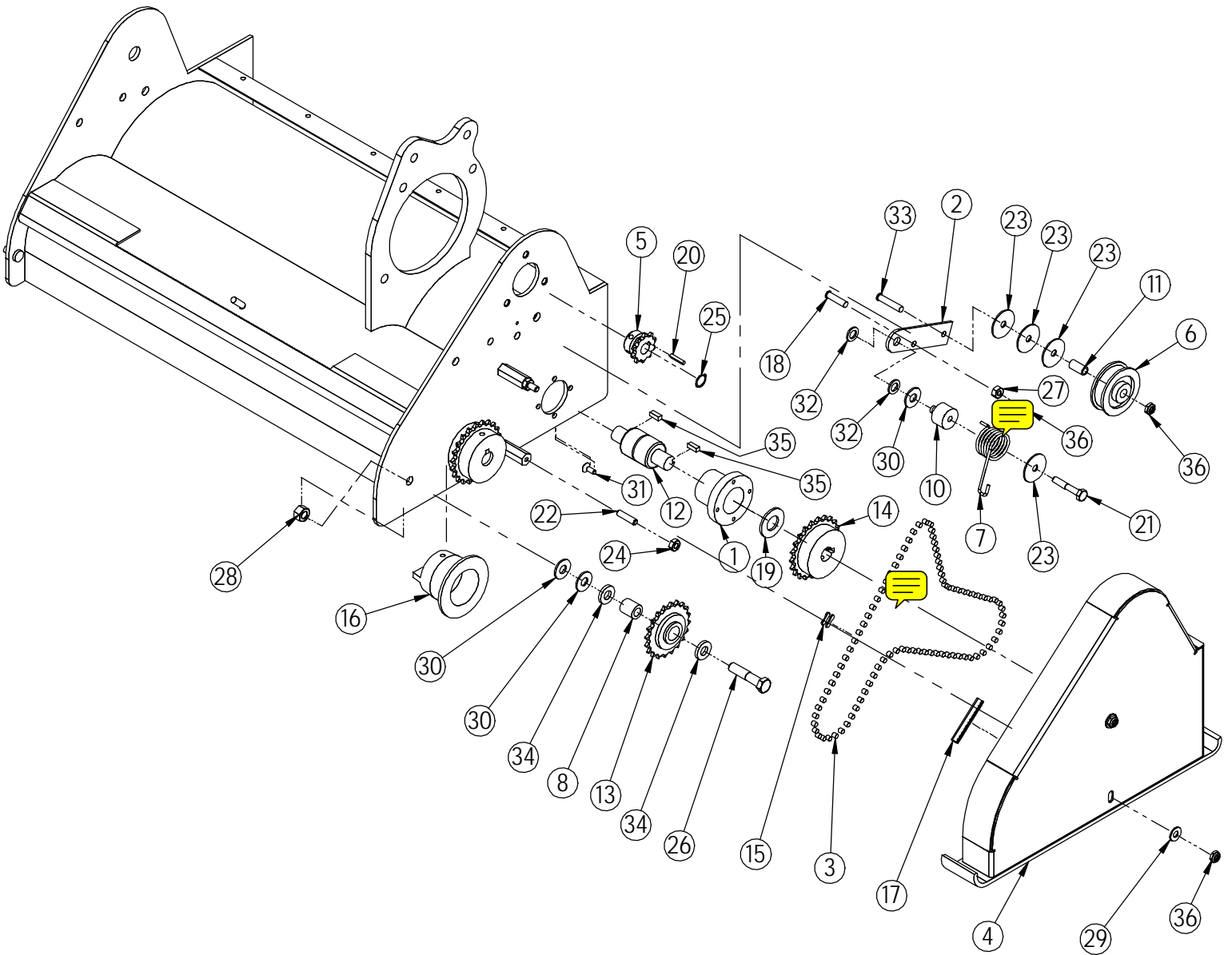
Item	Part No.	Description	Comments	Qty
1	32-1101	LEFT SHROUD (17")		1
2	32-1111	RIGHT SHROUD (17")		1
3	32-1142	BANDEAU COVER		1
4	32-1165	SHROUD SPLASH CURTAIN (17")		1
5	32-1120	END SHROUD SUPPORT		2
6	32-1124	RIGHT SHROUD BAND (17")		1
7	32-1126	ROLLER BRACKET		2
8	32-1136	LEFT SHROUD BAND (17")		1
9	32-1138	CENTER SHROUD SUPPORT		1
10	21-1127	ROLLER		2
11	21-1115	SHROUD HINGE		1
12	5-760B	SIDE WHEEL (GREY)		2
13	5-786	WINGNUT 3/8" - 16		2
14	7-402	SCRUB HEAD PLATFORM		1
15	H-11321	HB 5/8"- 11 X 4 1/2"		2
16	H-37038	JNYL 5/8"- 11		2
17	H-70001	HCS 1/4"-20 X 1/2 SS"		4
18	H-70003	HCS 1/4"- 20 X 3/4" SS		20
19	H-70065	HCS 5/16"- 18 X 3" SS		2
20	H-70103	HCS 3/8"-16 X 3/4" SS		2
21	H-70710	HN 1/4"- 20 SS		18
22	H-70711	HN 5/16"- 18 SS		6
23	H-70858	NYLOK #10-32 SS		13
24	H-71013	FW 1/4" X 5/8" SS		14
25	H-71016	FW 5/16" X 7/8" USS		4
26	H-71063	LW 1/4" SS		24
27	H-71065	LW 5/16" SS		2
28	H-72682	FHP #10-32 X 1/2" SS		13

# Squeegee Suspension



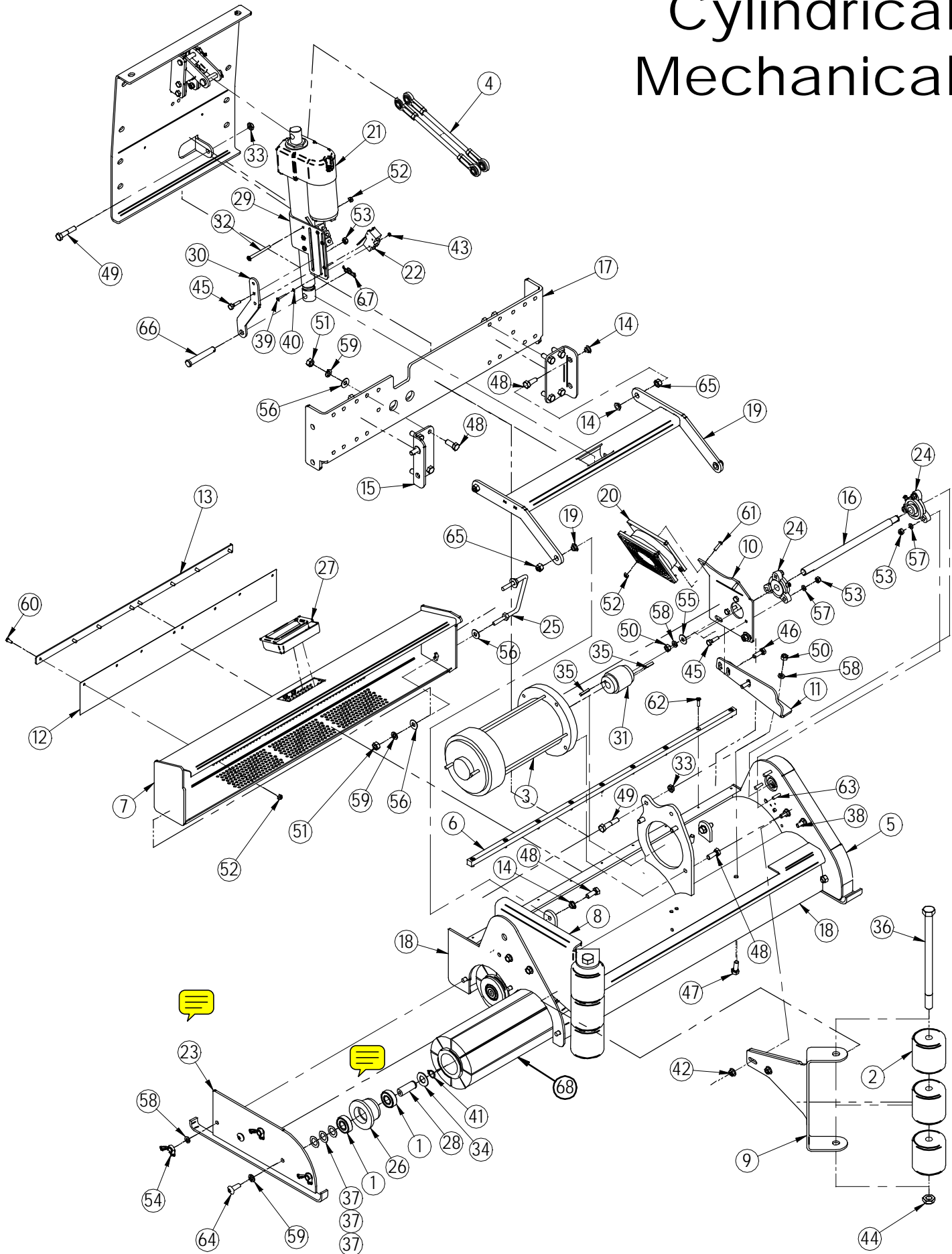
Item #	Part #	Description	Comments	Qty
1	22-7181 25-7181 28-7181 290-7181	30" SQUEEGEE WELDMENT 35" SQUEEGEE WELDMENT 38" SQUEEGEE WELDMENT 45" SQUEEGEE WELDMENT		1
2	22-755G 25-755G 28-755G 290-756G	30" SQUEEGEE BLADE, FRONT 35" SQUEEGEE BLADE, FRONT 38" SQUEEGEE BLADE, FRONT 45" SQUEEGEE BLADE, FRONT		1
3	22-7170 25-7170 28-7170 290-7170	30" SQUEEGEE BAND, FRONT 35" SQUEEGEE BAND, FRONT 38" SQUEEGEE BAND, FRONT 45" SQUEEGEE BAND, FRONT		1
4	22-754G 25-754G 28-754G 7-753G	30" SQUEEGEE BLADE, REAR 35" SQUEEGEE BAND, REAR 38" SQUEEGEE BLADE, REAR 45" SQUEEGEE BLADE, REAR		1
5	22-7160 25-7160 28-7160 290-7160	30" SQUEEGEE BAND, REAR 35" SQUEEGEE BAND, REAR 38" SQUEEGEE BAND, REAR 45" SQUEEGEE BAND, REAR		1
6	21-7220	SQUEEGEE TRAIL MOUNTS		2
7	21-7610	SQUEEGEE TRIANGLE PLATE		1
8	32-7150	SQUEEGEE TRAIL ARM		1
9	21-7140	SQUEEGEE SWING PLATE		1
10	H-72555	PPH #10-32 X 1 3/4" SS		2
11	H-00249	PPH #10-32 X 2 1/4" SS		4
12	H-00288	PPH #10-32 X 2 1/2" SS		2
13	H-RUE8	1/4" RUE RING COTTER		2
14	H-00568	STUD 3/8"- 16 X 2 1/2" SS		2
15	H-70105	HCS 3/8"- 16 X 1" SS		2
16	H-70003	HCS 1/4"- 20 X 3/4" SS		4
17	H-10831	HCS 5/16"- 18 X 3" FT		2
18	H-71063	LW 1/4" SS		4
19	5-760B	SIDE WHEEL (GREY)		2
20	H-33080	FW 5/16" SAE		6
21	H-76063	FW 5/16" NYLON		4
22	5-786	WINGNUT 3/8"-16 NICKEL		2
23	H-70908	WINGNUT 10-32 SS		8
24	5-757B	BUSHING .255" X 1.03"		2
25	21-7570	BACK UP WHEEL (GREY)		2
26	21-7205	PALM GRIP KNOB, 3/8-24		1
27	H-10055	HCS 3/8"- 24 X 3.5" SS		1
28	H-36104	HN 5/16"-18		4
29	H-13061	HCS 5/16"- 18 X 2"		1
30	H-70811	JAM NUT 5/16-18 SS		1
31	H-36106	HN 3/8"-16		2
32	5-846	PIVOT SHAFT		2
33	H-71017	FW 3/8" SS		1
34	H-70812	JAM NUT 3/8-16 SS		2
35	H-70103	HCS 3/8"-16 X 3/4" SS		2
36	HZCP44	CLEVIS PIN 1/4 X 1 1/2"		2
37	21-7690	POLYURETHANE SPRING		2
38	7-782C	5/16 CLEAR TUBING		1
39	21-7240	SPRING		1
40	21-7130	SQUEEGEE CROSS MEMBER		1

# Cylindrical Mechanical



Item	Part #	Description	Comments	Qty
1	1-305	BEARING HOUSING		2
2	22-7970	MOVABLE IDLER ARM		1
3	22-8300	DRIVE CHAIN		1
4	22-9021	CHAIN GUARD		1
5	290-8260	10 TOOTH SPROCKET		1
6	4-317	IDLER PULLEY		1
7	4-319	TENSION SPRING		1
8	5-793	IDLER SPACER		1
9	5-796	GREASE (USE ONLY OEM GREASE - NOT SHOWN)		1
10	5-798	SPRING PIVOT		1
11	5-822	Spacer, 1/4" ID, 3/8" OD, 11/16" Long		1
12	5-824	DRIVE BEARING		2
13	5-827	20 TOOTH SPROCKET		1
14	5-828	22 TOOTH SPROCKET		2
15	5-831	MASTER LINK		1
16	5-837	BROOM DRIVER		2
17	5-845A	WINDLACING - (WEATHER STRIPPING)		1
18	H-00272	SCS 1/4"- 20 X 1.0"		1
19	H-00279	WASHER 5/8 TEFLON		1
20	H-01343	1/8" X 1/8" X 3/4" KEY		1
21	H-15009	HCS 1/4"- 20 X 1-1/2" GRADE 8		1
22	H-255HD	STUD 1/4"- 20 X 1"		2
23	H-33208	F W 1/4" X 1 1/4"		4
24	H-36202	JN 1/4"- 20		2
25	H-68011	SNAPRING .5"		1
26	H-70145	HCS 3/8-24 X 1 3/4" SS		1
27	H-70710	HN 1/4"- 20 SS		1
28	H-70732	HN 3/8"- 24 SS		1
29	H-71013	FW 1/4" X 5/8" SS		2
30	H-71017	FW 3/8" SS		3
31	H-72682	FHP 10-32 X 1/2" SS		1
32	H-76063	FW 3/8" NYLON		2
33	H-93580	SCS 1/4"- 20 X 1 1/4"		1
34	H-98025	WASHER 3/8 GRADE 8		2
35	H-K1432	3/16" X 1/2" KEY		4
36	H-NJ04C	JNYL 1/4" - 20 SS		4

# Cylindrical Mechanical

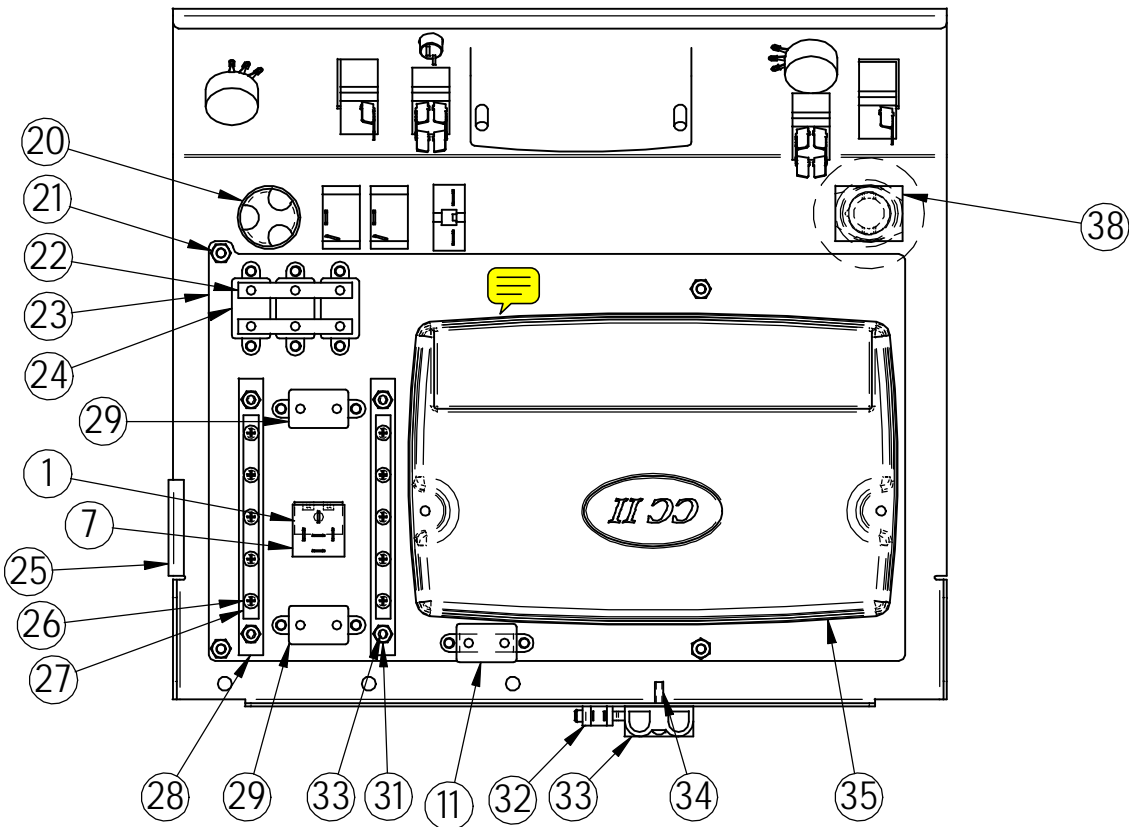
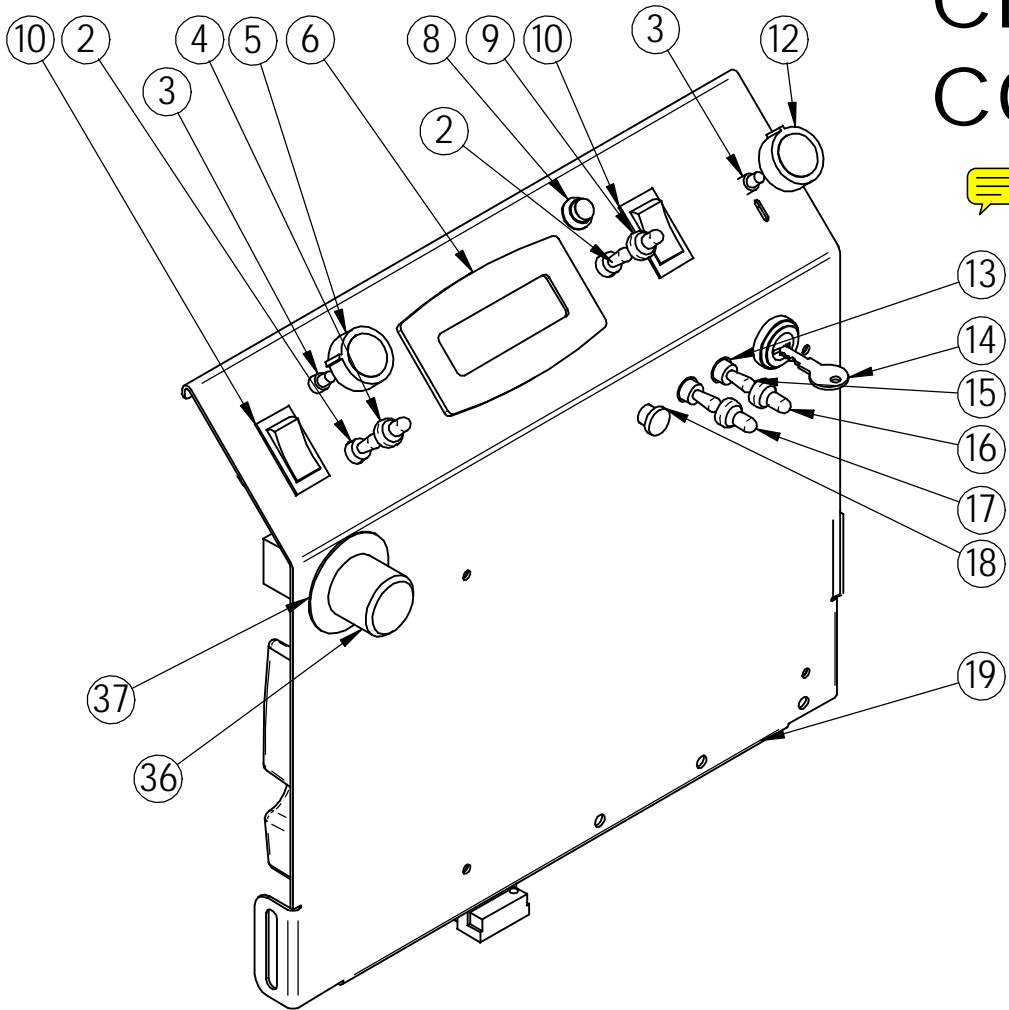




Item	Part No.	Description	Qty
1	1-421	IDLER BEARING	4
2	21-1127	ROLLER	6
3	22-2110	2 HP MOTOR	1
4	22-8430	ADJ. LATERAL ARM	2
5	22-9021	CHAIN GUARD	1
6	25-8320 28-8320 5-832	HOPPER RAIL, 25" HOPPER RAIL, 28" HOPPER RAIL, 32"	1
7	25-9050 28-9050 7-811	25" HOPPER 28" HOPPER 32" HOPPER	1
8	28-1126	RH ROLLER BRACKET	1
9	28-1127	LH ROLLER BRACKET	1
10	28-9001	FAN MOUNT PLATE	1
11	28-9005	FAN PLATE MOUNT	1
12	28-9060	HOPPER SPLASH SHIELD	1
13	28-9070	SPLASH SHIELD HOPPER STRIP	1
14	290-1243	3/8" ID, 1/2" OD, 1/4" LG BEARING	8
15	290-1265	SCRUB ARM BRACKET	2
16	290-8355 290-8360 290-8365	DRIVE SHAFT, 25" CYL DRIVE SHAFT, 28" CYL DRIVE SHAFT, 32" CLY	1
17	32-1030	BRUSHHEAD PIVOT PLATE	1
18	32-9000	32" CYL BRUSH HEAD	1
19	32-9020	CYLINDRICAL LIFT ARM	1
20	5-212	COOLING FAN	1
21	5-221	ACTUATOR; 1000 LB. LOAD (10:1)	1
22	5-223	LIMIT SWITCH	2
23	5-801	IDLER DOOR	1
24	5-829	FLANGE BEARING	2
25	5-834	HOPPER HANDLE	1
26	5-838	BRUSH IDLER	2
27	5-849	RECESSED HANDLE	1
28	5-858	IDLER SHAFT	2
29	7-165	SWITCH BRACKET	1
30	7-169	SWITCH BRACKET ARM	1
31	8-613	FLEXIBLE COUPLER	1
32	H-00288	PPH #10-32 X 2 1/2" SS	3
33	H-00531	JNYL 3/8- 24 SS	2
34	H-00797	FW 17.3mm X 33.2mm X 1.6mm	2
35	H-01125	3/16" X 1" KEY	2
36	H-11380	HB 5/8"- 11 X 11"	2
37	H-17002	FW 17mm NYLON	6
38	H-19918	FB CASHD 5/16"- 18 X 1"	4
39	H-28679	PPH #4-40 X 1"	4
40	H-33066	FW #4 SAE	4
41	H-35313	17mm SNAP RING	2
42	H-36104	FN 5/16"-18	6

Item	Part No.	Description	Qty
43	H-37006	NYLOK #4-40	4
44	H-37038	JNYL 5/8"- 11	2
45	H-70005	HCS 1/4"- 20 X 1" SS	4
46	H-70055	HCS 5/16"- 18 X 1" SS	2
47	H-70055	HB 5/16"- 18 X 1" SS	2
48	H-70105	HCS 3/8"- 16 X 1" SS	15
49	H-70145	HCS 3/8"- 24 X 1 3/4" SS	2
50	H-70711	HN 5/16"- 18 SS	4
51	H-70712	HN 3/8"-16 SS	10
52	H-70858	NYLOK #10-32 SS	11
53	H-70860	NYLOK 1/4"- 20 SS	6
54	H-70911	WINGNUT 5/16"- 18 SS	3
55	H-71016	FW 5/16" X 7/8" USS	2
56	H-71017	FW 3/8" SS	12
57	H-71063	LW 1/4" SS	4
58	H-71065	LW 5/16" SS	7
59	H-71067	LW 3/8" SS	15
60	H-72563	RPH #10-32 X 1/2" SS	8
61	H-72565	RPH #10-32 X 3/4" SS	2
62	H-72684	FHP 10-32 X 3/4" SS	9
63	H-72710	FHP 1/4"- 20 X 1" SS	3
64	H-73815	BHSCS 3/8"- 16 X 1" SS	2
65	H-77862	NYLOK 3/8"- 16 SS	4
66	H-CP238	1/2" X 3" CLEVIS PIN	1
67	H-RUE22	1/2" RUE RING COTTER	1
68	SEE PAGE 4	CYLINDRICAL BRUSH	2

# CENTRAL COMMAND II



Item	Part No	Part Description	Qty
1	290-2020	BRACKET	1
2	7-283	SWITCH, TOGGLE, MOM/OFF/MOM (DPDT)	2
3	7-292	5K POTENTIOMETER	2
4	H-01196	PROTECTIVE BOOT, TOGGLE SWITCH, (RED)	1
5	21-4520	SPEED CONTROL KNOB, RED	1
6	290-2891	LCD SCREEN	1
7	5-293	15 AMP RELAY	1
8	7-229	PUSH BUTTON SWITCH	1
9	H-01200	PROTECTIVE BOOT, TOGGLE SWITCH, (BLACK)	1
10	8-231	SWITCH, ON-OFF ROCKER SPST	2
11	7-285A	CIRCUIT BREAKER - 30A	1
12	21-4510	SOLUTION CONTROL KNOB, BLUE	1
13	H-85985	HOLE PLUG 1/2"	2
14	8-235	KEY SET (REPLACE)	1
15	5-892	TOGGLE, ON-OFF SPST	2
16	H-01199	PROTECTIVE BOOT, TOGGLE SWITCH, (BLUE)	1
17	H-01198	PROTECTIVE BOOT, TOGGLE SWITCH, (GREEN)	1
18	7-837	FUSE RESETTABLE 2 AMP	1
19	21-2008	CONTROL PANEL	1
20	4-234	KEY SWITCH	1
21	H-37408	KEPS NUT 10-32	8
22	E-3HBB	3 HOLE BUSS BAR	2
23	21-2007	COMPONENT PLATE	1
24	5-289	CIR BREAKER 24V 50A	3
25	21-2006	WINDLACING (NOT SHOWN) (WEATHER STRIP)	1
26	H-31290	PPH SMS #8 X 1/2"	10
27	E-5HBB	5 HOLE BUSS BAR	2
28	7-287	BUSS BAR UHMW	2
29	290-2815	CIR. BREAKER - 15A, 24V	2
30	H-28902	RPH #8-32 X 1"	4
31	H-37406	KN #8-32	4
32	21-2230	MICRO SWITCH	1
33	4-257	CONNECTOR, RED 50	1
34	H-28902	RHP MS #8-32 X 1"	1
35	290-2890	COMPUTER CONTROL	1
36	5-300	EMERGENCY SHUT OFF (OPT)	1
37	5-301	EMERG LEGEND PLATE (OPT)	1
38	5-302	EMERG CONTACT BLK (OPT)	1