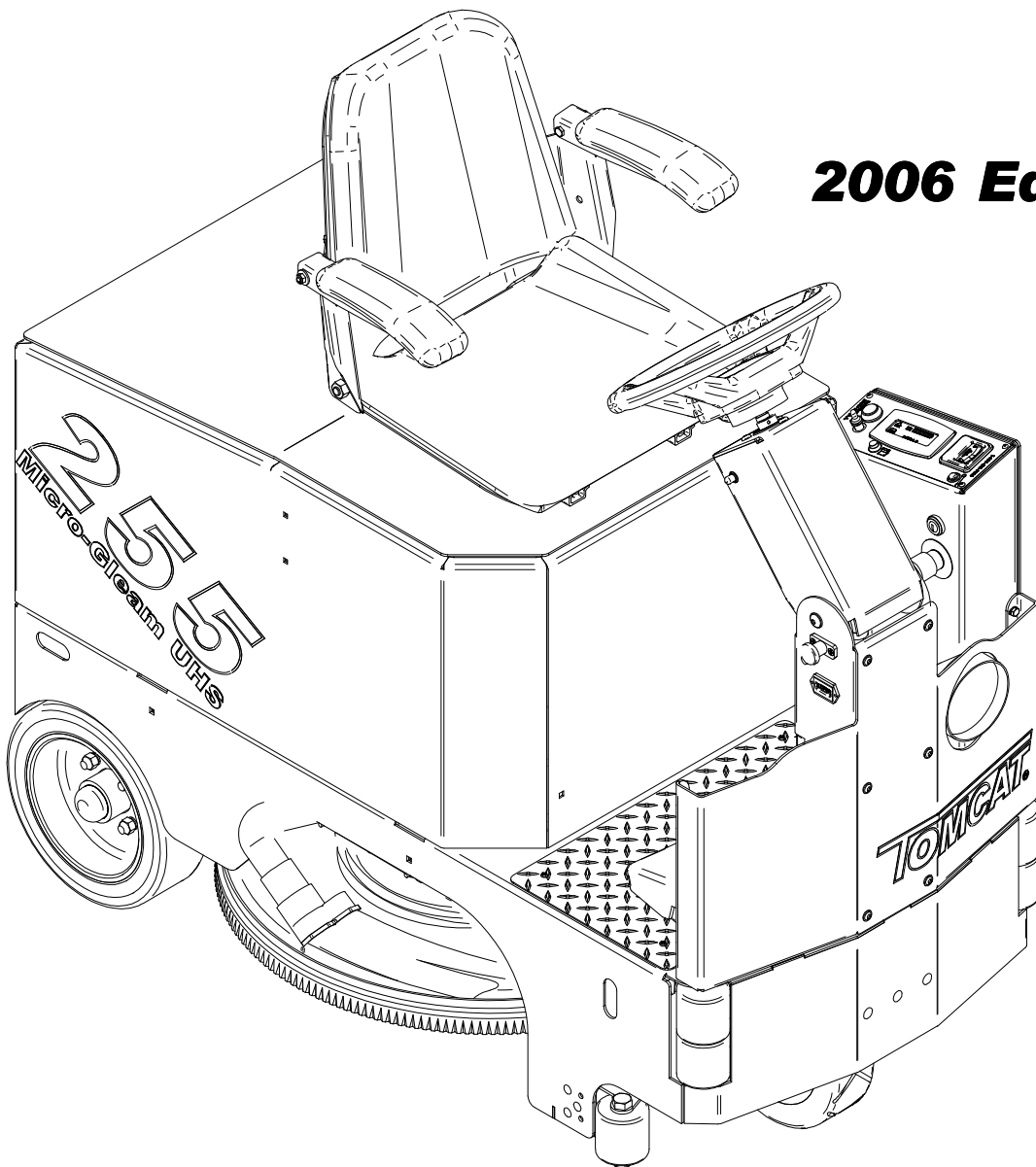


# 255 Burnisher

# Model 255

## *Operator and Parts Manual* *255 Rider Burnisher*

**2006 Edition: 1**



**R.P.S. Corporation**  
**P.O. Box 241**  
**Racine, Wisconsin 53401**

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

# How to use this manual

This manual contains the following sections:

- **HOW TO USE THIS MANUAL**
- **SAFETY**
- **OPERATIONS**
- **MAINTENANCE**
- **PARTS LIST**

The **HOW TO USE THIS MANUAL** section will tell you how to find important information for ordering the correct replacement parts.

Parts may be ordered from authorized dealers. When placing an order for parts, the machine model and serial number are important.

Refer to **MACHINE INFORMATION** on page one of this manual, which is filled out during the installation of your machine.

The serial number of your machine is located on the lower half of steering tower of the machine. **(See Picture Below)**



The **SAFETY** section contains important information regarding hazardous or unsafe practices of the machine.

Levels of hazards are identified that could result in product or personal injury, or severe injury resulting in death.

The **OPERATIONS** section is to familiarize the operator with the operation and function of the machine.

The **MAINTENANCE** section contains preventative maintenance information to keep the machine and its components in good working condition. They are listed in this general order:

- Batteries
- Burnising Pads
- Cleaning Filter
- Service Schedule
- Machine Trouble Shooting

The **PARTS LIST** section contains assembled parts illustrations and corresponding parts list. The parts lists include the following columns of information:

- **ITEM** - Refers to the reference number on the parts illustration.
- **PART NO.** - Lists the part number for the part.
- **QTY** - Lists the quantity of the part used in that area of the machine.
- **DESCRIPTION** - Is a brief description of the part.
- **COMMENTS** - For information not noted by the other columns.

**NOTE:** If a service or option kit is installed on your machine, be sure to keep the **KIT INSTRUCTIONS** which came with the kit. It contains replacement part numbers needed for ordering future parts.

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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 255 Series burnishers. You may find descriptions and features that are not on your particular model. The information and specification included in this publication were in effect at the time of printing. R.P.S. Corporation reserves the right to make changes without notice incurring any obligation.

***To register for warranty, fax your warranty registration form today!***

# Warranty registration form

Complete form immediately and fax back to (886)-632-6961

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Pads: \_\_\_\_\_

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

Squeegee Size: \_\_\_\_\_

Side Brooms: \_\_\_\_\_

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: \_\_\_\_\_

# Specifications

# 255

## **CONSTRUCTION**

Frame:	(10-gauge) 1/8" steel
Rear Axle Capacity:	5,200 pounds
Rear Wheels (non-marking):	(2) 12" x 3.5"
Front Wheel Drive Capacity:	2,300 pounds
Front Wheel (non-marking):	(1) 10" x 3"
Dimensions: (L x W x H):	54.5" x 25" x 50"
Weight (w/ batteries):	1,072 pounds
Weight (w/out batteries):	714 pounds

## **BURNISHING SYSTEM**

Pad Diameter:	(1) 20 inches or 27 inches
Pad Motor Power (standard):	(1) 4.0 hp
Pad Motor Power (optional):	(1) 4.0 hp
Pad Speed:	2000 rpm
Pad Engagement:	Direct on 20" and Dual Belt on 27"
Pad Pressure:	0 - 75 pounds
Pad Pressure Settings:	Infinite

## **BATTERY SYSTEM**

Battery ah rating: (std)	(6) 245 ah
Battery ah rating: (opt)	(6) 325ah or 395 ah
Battery Run Time:	Up to 4 hours
Charger (110v / 60 Hz / automatic):	36 volt / 25 amp

## **FILTERING SYSTEM**

Vacuum Description:	PASSIVE or ACTIVE
Filtering Material:	Paper
Filter Rating:	1 Micron
Vacuum Power:	0.75 hp (optional)
Airflow Rating:	70 cfm

## **DRIVE SYSTEM**

Transport Power:	1.0 hp
Forward Speed Control:	0-4.5 mph
Reverse Speed Control:	0-3 mph
Braking System:	Dynamic w/ Auto Parking Brake
Minimum Aisle for U-Turn:	56"

## **PRODUCTIVITY**

Cleaning Rate/Hour (Max):	45,000 sq. ft./hr
Cleaning Rate/Hour (Normal):	34,817 sq. ft./hr

## **GENERAL**

Sound Level:	70 dBA at Driver's Position
Gradeability:	11 degrees / 19%

# Common wear parts

<u>Pad</u>	<u>Pad Function</u>	<u>Results</u>	<u>20" Part Number</u>	<u>27" Part Number</u>
Image ultra high speed - beige	Ultra high speed High speed buffing And burnishing.	For high speed buffing and burnishing. For frequent burnishing on soft to medium finishes.	20-4221	27-4221
Luster lite - blue	Ultra high speed buffing and burnishing.	For burnishing soft floor finishes. May be used on a daily basis. Ideally suited for top dressing highly polished floors.	20-4222	27-4222
Combo ultra high speed	Ultra high speed buffing and burnishing.	Blended polyester and natural fibers. For frequent burnishing on medium finishes.	20-4223	27-4223
Porko ultra high speed	Ultra high speed buffing and burnishing.	Blended natural fiber pad. For frequent minimal burnishing on hard finishes.	20-4224	27-4224
Porko elite	Ultra high speed buffing and burnishing.	Blended natural fiber pad works on all UHS machines. For minimal burnishing on medium to hard finishes.	20-4225	27-4225
Porko plus	Ultra high speed buffing and burnishing.	High content of natural fibers. Ideal for minimal burnishing on hard finishes.	20-4226	27-4226

# **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 this 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 is intended for commercial use. It is designed to be used on hard floors in an indoor environment, with the recommended pads.

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

Unless trained and authorized.  
Unless operator manual is read and understood.  
If unit is not in proper operating condition.

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

Remove loose objects from the floor that may be projected from the revolving burnisher pad.  
Keep hands and feet away from revolving pads.  
Do not operate machine where flammable liquids or gasses 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 surface, and secure machine.  
Disconnect batteries.

# !! Safety Precaution!!

**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 electronic components from getting wet.

**WARNING:** The use of parts and solutions other than that 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 position. 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 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 ramps. Machine does not coast.

**WARNING:** Do not park the machine on ramps or slopes.

**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.

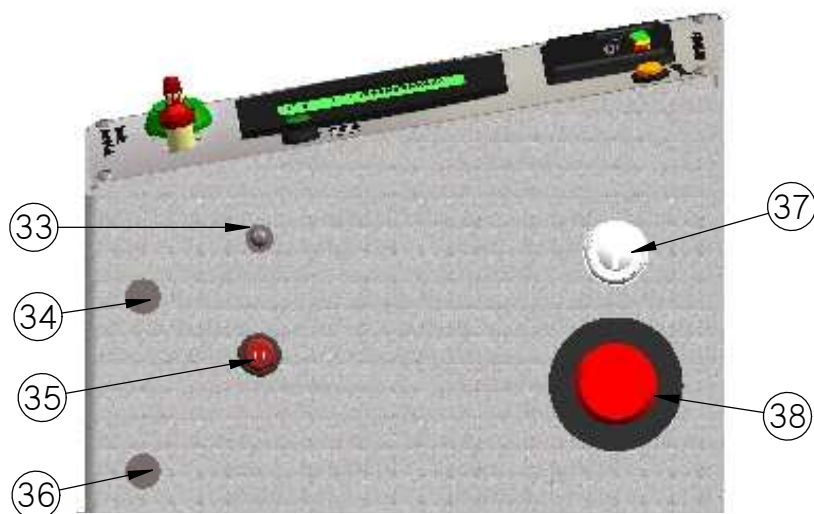
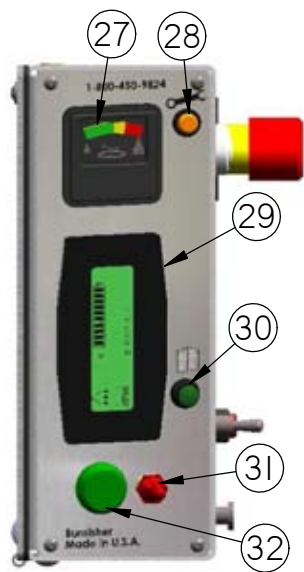
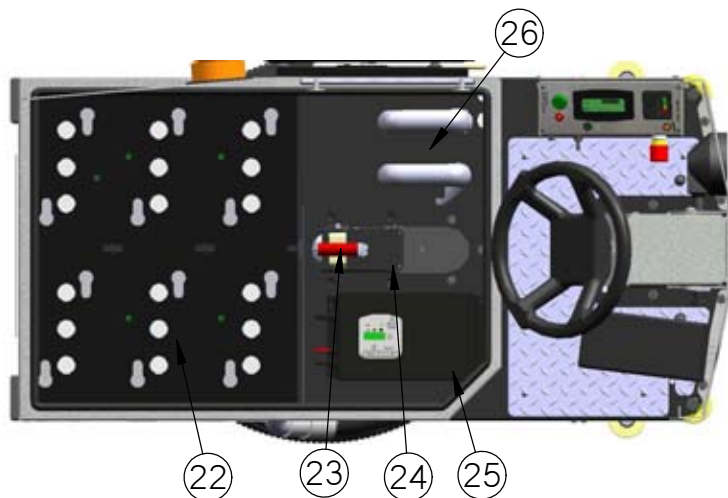
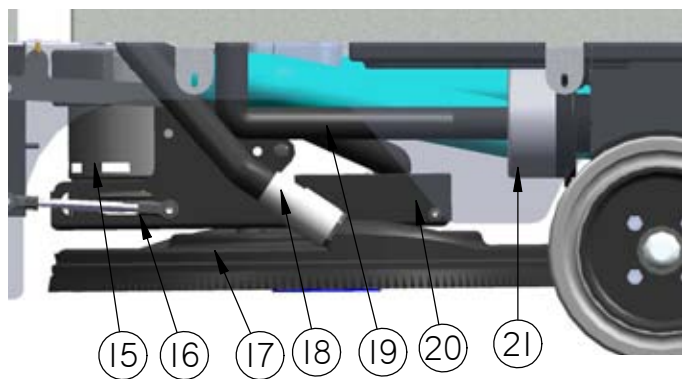
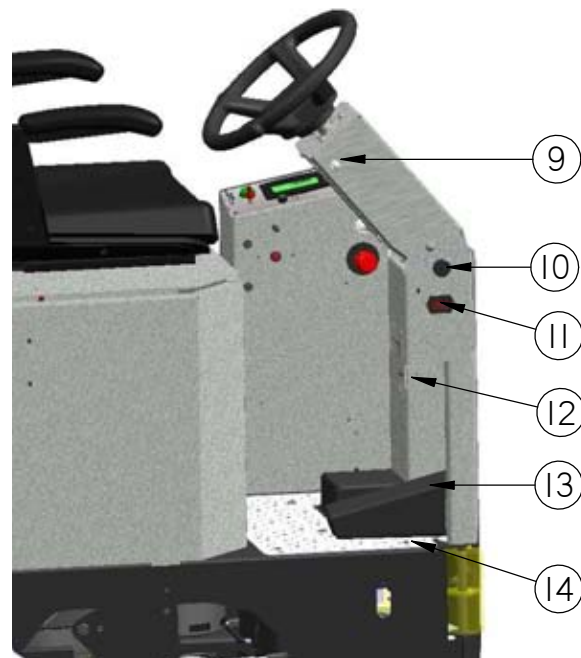
**WARNING:** Do not operate machine in unsafe condition. If the machine is in need of repair or is in any way unsafe to operate, the matter should be reported immediately to the shift supervisor. Do not operate the machine until it is returned to proper operating condition.

**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 result in serious injury.

# Machine Controls and Features



# Controls and Functions

See figures (1-6) on page 7

1. **Seat:** Adjustable seat for operator comfort and ease of entry.
2. **Steering wheel:** Used to steer the machine.
3. **Headlight:** Helps you see in low light areas and to warn oncoming traffic.
4. **Front wheel:** Steers and propels machine.
5. **Corner roller bumpers:** helps prevent damage to machine when cleaning close to walls and other objects.
6. **Lower roller bumpers:** Helps prevent damage to deck.
7. **Rear tires:** Non-marking and extra wide tires for stability.
8. **Battery compartment lid:** Holds batteries, on board battery charger, vac box, and actuator tower
  
9. **Horn button:** sounds horn.
10. **Adjustable steering:** adjustable steering wheel for comfort and ease of entry.
11. **Hour Meter:** Keeps track of how many hours are on the machine.
12. **Charge port:** Gray 50 used to receive charger input. (Note: only use charger provided)
13. **Foot pedal:** Makes machine go and release pedal to stop.
14. **Non slip floor plate:** helps prevent slipping when getting on and off of machine.
  
15. **Burnisher motor:** This motor drives the burnishing deck.
16. **Adjustable Arm:** Adjusts the pitch of the burnishing deck.
17. **Shroud:** The shroud contains dust created from burnishing.
18. **Dust control hose:** Two dust control hoses pull dust and debris from shroud to filter box.
19. **Actuator:** The actuator lifts and lowers the deck.
20. **Belt Guard:** The belt guard protects the belts and pulleys from debris.
21. **Vacuum motor:** Provides suction to vac box.
  
22. **Batteries:** The machine comes with one set of six batteries.
23. **Spring Adjustment Knob:** Increases or decreases the pad pressure.
24. **Actuator tower:** Provides down pressure adjustment.
25. **Onboard Charger:** Plug charger into outlet to charge machine.
26. **Vacuum box:** Collects dust created from burnishing.
  
27. **Burnishing deck pressure gauge:** Settings green (safe operating range) - red (overload).
28. **Burnishing motor bursh indicator:** Indicates when the burnisher motor needs new brushes.
29. **LCD screen display:** Lists functions and settings of the machine.
30. **Menu control:** Scrolls through different options on the LCD display.
31. **Forward/Reverse switch:** Controls the direction of the traction motor.
32. **One touch button:** Activates the burnishing deck, and dust control system simultaneously.
  
33. **Vacuum switch:** Allows you to turn on vacuum motor seperate from the one touch botton.
34. **Resetable 80 amp burnisher motor circuit breaker:**
35. **(+) 15 amp resetable circuit breaker:** (15 amp) positive bus bar.
36. **(-) 15 amp resetable circuit breaker:** (15 amp) negative buss bar.
37. **Key switch:** Turns power to machine on and off.
38. **Emergence shut off:** (*optional*) Shuts machine down in a emergency.

# Machine Preparation

## Uncrating machine

Carefully check the crate for any sign of damage. Batteries are in the unit.

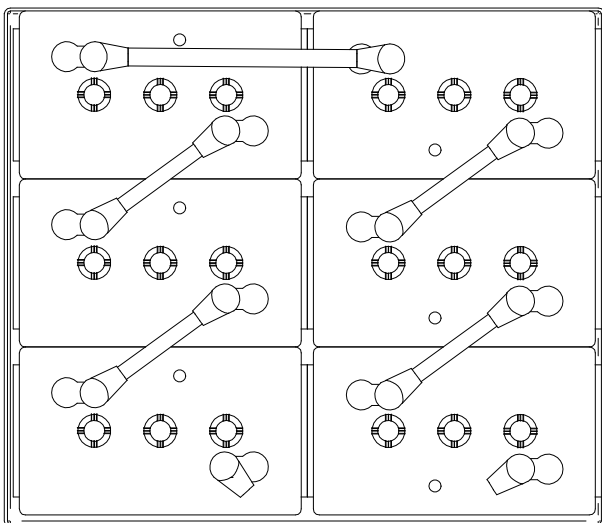
To uncrate the machine, remove banding from around the crate. Take off the top and sides and dispose of properly. Remove banding from machine. Remove the chocks around the drive wheels. Fold down ramp, and roll machine off of the base. Notify the carrier immediately if concealed damage is discovered.



## Connecting batteries

Your machine is equipped with (six) 6 volt, Deep cycle batteries, which Form a 36 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 battery access lid to access the battery compartment.
3. All of the six battery cables are connected to the batteries. Locate any loose ones and connect to the open terminal. Tighten with 9/16" wrench. **(see below)**
4. Turn on main power switch and check the battery condition meter to ensure correct installation. Charge batteries if needed. **(see: battery charging)**

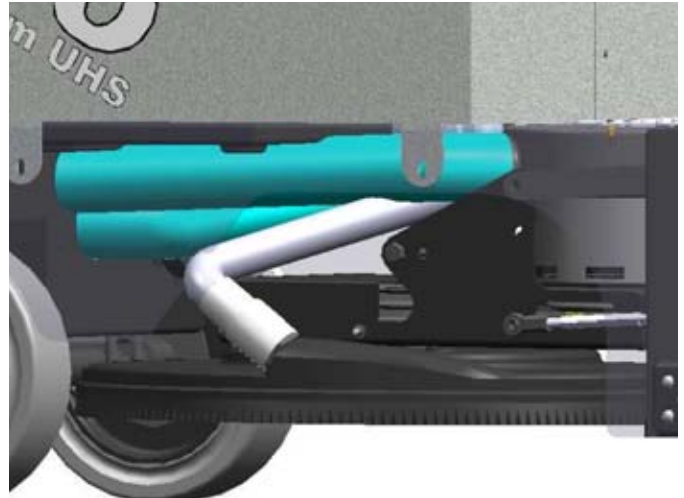


Front

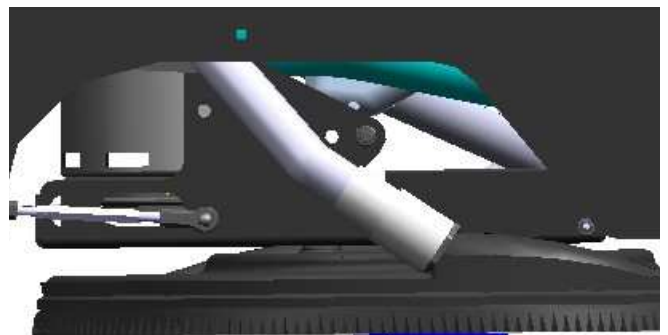
## Connecting hoses

Your machine is also equipped with two vacuum hoses which need to be connected for the dust control to work properly.

1. Turn all switches to the off position.
2. Hinge open the battery access lid to access the rear of the filter box and fan connections.
3. Check to see if hoses are clamped down to the shroud and the filter box securely. (you should not be able to pull them off easily) if hoses are loose tighten the hose clamp with a screwdriver. **(see below)**



4. Check to see if hoses are clamped down to the shroud. Hose should have just enough slack to move up and down with the scrub deck and not interfere with other moving parts. **(See below)**



# MACHINE SETUP

## ATTACHING PAD

1. Turn on machine power

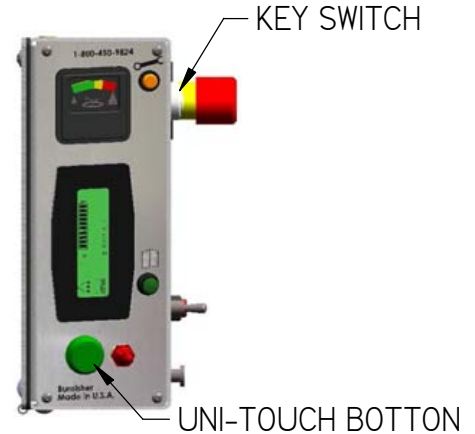
2. Assure that the deck is raised to the up position by verifying that the uni-touch button is not depressed (**A yellow ring will appear around the side of the uni-touch button**). Turn machine power back off and remove key. (**See right**)

3. Remove blue big mouth from pad holder.

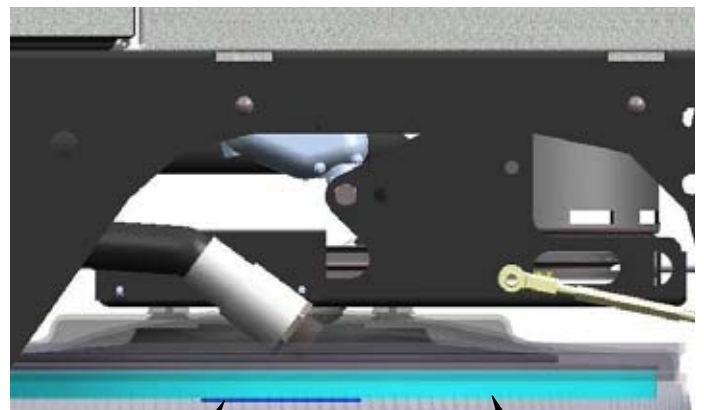
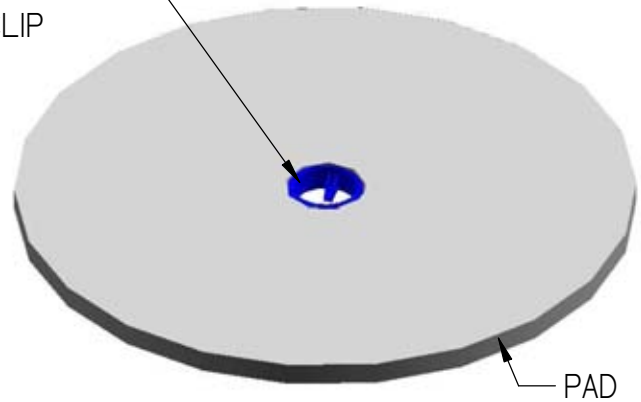
4. Place pad on top of locking clip and slide both below burnishing deck directly into the center of one burnishing disk. (**see below**)

5. With pad and clip directly in the center of the burnishing disk push up and screw in the pad clip. (Hand tighten only) (**see below**)

6. Run machine and check for vibrations. If deck vibrates badly the pad may not be centered on disk correctly. Remove pad and reinstall pad in the center of disk.



BLUE BIG MOUTH PAD CLIP



BLUE BIG MOUTH PAD CLIP

SHROUD AND SHROUID CURTAIN

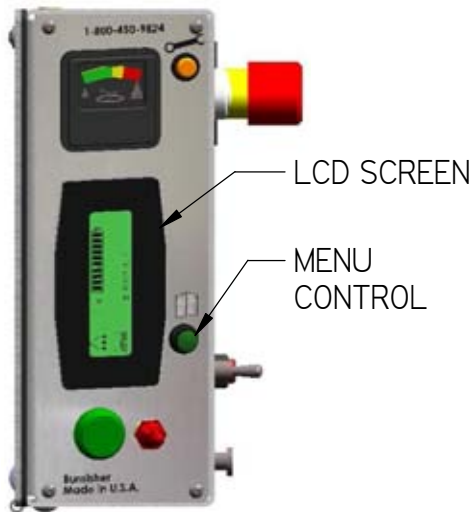
**\*\*\* FOR CORRECT PAD APPLICATION , CALL YOUR LOCAL DEALER\*\*\***

# Operation

Read and understand the safety section on page 5 and 6 before operating machine.

## Pre- burnishing Check list

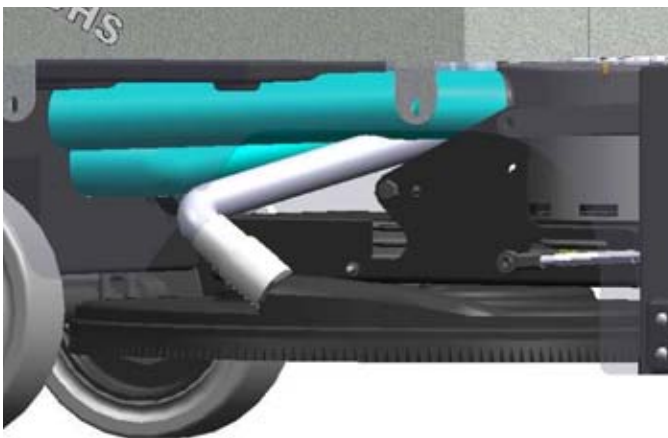
1. Check battery condition gauge on the central command II LCD screen. **(See below)** To check gauge push menu control button until battery gauge appears. Make sure batteries are fully charged before using.



2. Check condition of pad and make sure it is securely in place.

3. Check hose connections from filter box to fan and, from filter box to shroud. **(See below)**

5. Check condition of shroud curtain shroud curtain needs to be in good condition for dust control system to work properly. **(See below)**



# Operating hints

## One Pass Burnishing

**Steps: (see below)**

1. Turn machine on with the key switch.

2. Lower burnishing head to the floor by simply depressing the green "uni touch" button.

3. The dust control will activate automatically when you begin burnishing.

4. Begin burnishing by depressing the foot pedal slowly and then to the speed required, the headlight will illuminate.

6. Once the pad begins to move, check the pressure gauge. Start burnishing with in the green marks, do not use yellow marks without management approval.

7. To operate machine in reverse, simply switch the reverse switch to the reverse position, back up alarm will sound (**if equipped**) and your speed is reduce to roughly 50% of forward speed.

8. To stop the machine, let off the foot pedal, and the machine will stop automatically.



# Battery charging

*CAUTION: The following instructions are intended for the 36v charger supplied with the machine. Do not use any other charger with this machine.*

## Charger specifications

**Output voltage of 36 volts.**

**Output current of 25 amps max.**

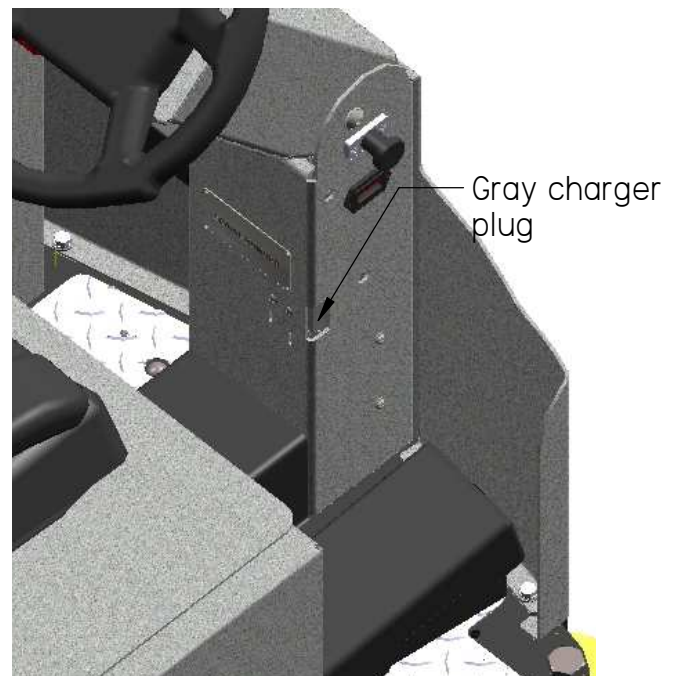
**Input voltage of 110 volts/60 Hz.**

**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 rear hood open when charging!**

1. Transport machine to a well ventilated area for charging.
2. Turn the machine off.
3. Hinge opens the battery access hood to expose the batteries. (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 grey charger plug disconnected from the machine, plug the charger power cord into a grounded 110 volt standard wall outlet.
6. Connect the grey 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 grey charger plug from the machine and disconnect the charger from the wall outlet.
9. Recheck the cell level 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.



# Maintenance

## Daily Maintenance

1. Check pad condition. (Replace if necessary)
2. Check battery charge.
3. Clean dust control filters.
4. Check hoses and verify there are no clogs.
5. Check pads for wear and replace if needed.
6. Charge unit and verify that charger is operating properly

## Monthly Maintenance

1. Check flex driver
2. Check to see if battery cables are tightened and clean. (Tighten if needed)
3. Check parking brake
4. Check condition of burnishing deck actuator.
5. Check condition of burnishing deck drive belts

## Weekly Maintenance

1. Check battery water level.
2. Check condition of all three tires.
3. Check condition of dust curtains on shroud.
4. Check condition of dust control hoses.
5. Check to see if vacuum exhaust is clear.

## Yearly Maintenance

1. Call your local dealer for yearly maintenance

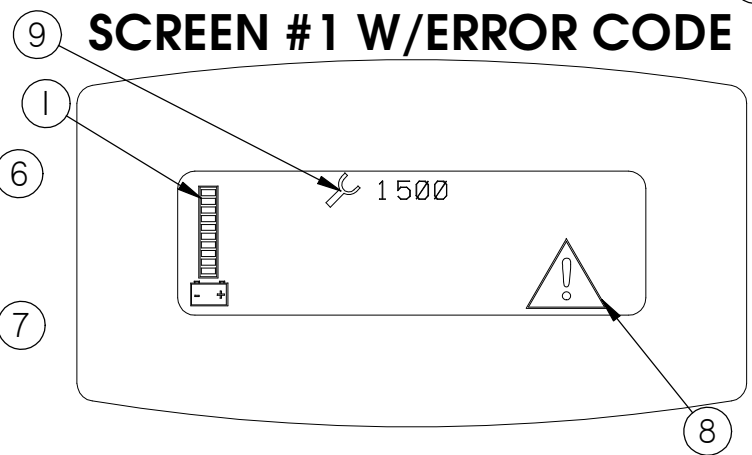
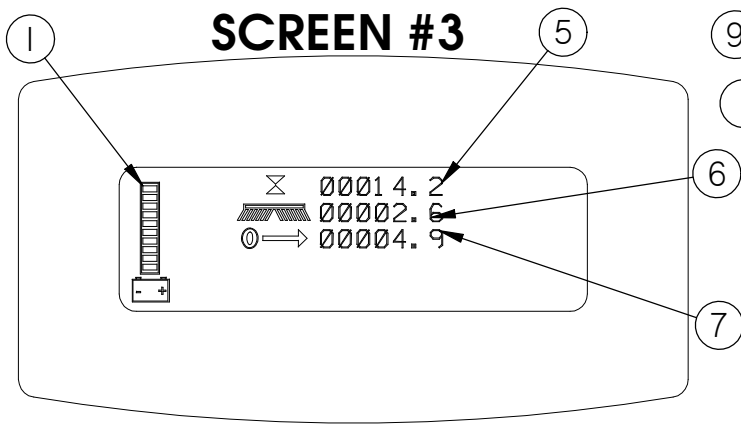
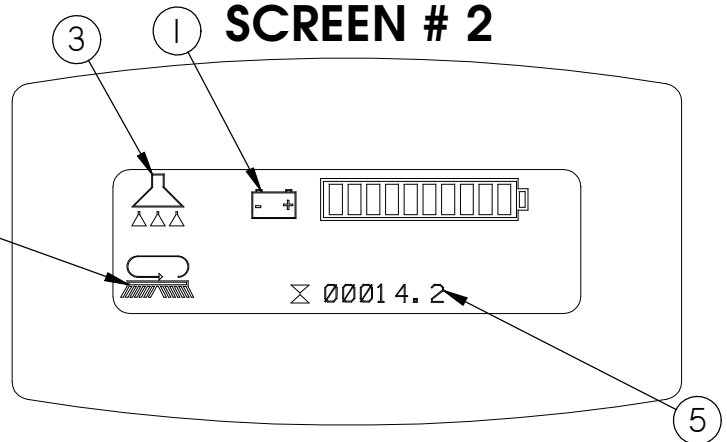
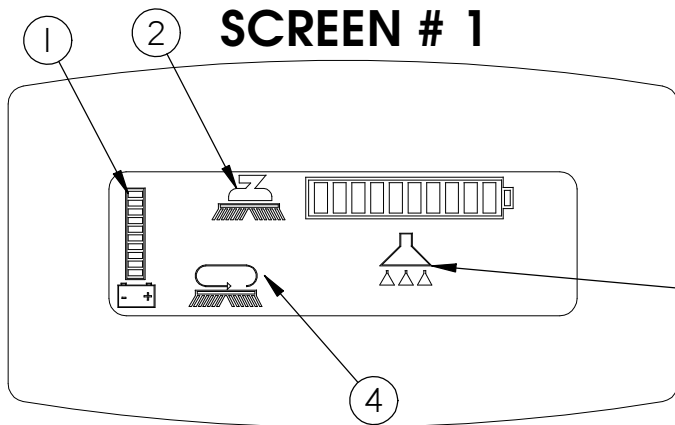


# Preventative maintenance records

PAD CONDITION							
Pad			Good	Worn	Needs Replacement		
Pad retainer			Good	Worn	Needs Replacement		
Pad Holder Condition			Good	Worn	Needs Replacement		
CLEAN AND/OR LUBRICATE			IN SPEC	REPAIR	PROBLEM		
Burnishing Deck Linkage							
CHECK OPERATION AND CONDITION OF:			IN SPEC	REPAIR	PROBLEM		
Steering wheel Tilt Mechanism							
Key Switch							
Horn							
Head Light							
LCD Display							
Page Button							
Pad Pressure Adjustment							
Foot Pedal							
Reverse Switch							
Back Up Alarm							
Burnish Switch							
Burnishing Deck Lift System							
Pad Motors & Motor Brushes							
Active Vacuum Switch							
Vacuum Motor performance							
Strobe Light							
Battery Charger Connectors							
Battery Charger							
VISUALLY INSPECT:			IN SPEC	REPAIR	PROBLEM		
Vacuum Motor Brushes							
Vacuum Hoses							
Brush skirts							
Pad Motor Brushes							
Pad Drive Belt Condition & Tension							
Pad Driver Condition							
Drive Wheel Condition							
Rear Wheels Condition							
All Rollers							



# LCD Screen Menu Displays



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

1. **Battery level indicator** - indicates the energy level remaining in the batteries. *(Shown on all menu displays)*
2. **Burnisher deck down pressure gauge** - Indicates pressure on the burnishing pads.
3. **Vacuum/fan on** - tells you when the active dust collection fan is on.
4. **Burnishing motors on** - tells you when the burnishing motor is running.
5. **Key switch hour meter** - tells you the total hours the machine has been on.
6. **Burnishing pad hour meter** - tells you the total hours the burnishing motors have been used.
7. **Transport hour meter** - tells you the total hours the drive system has been used.
8. **Error warning symbol** - indicates when there is machine fault,- Displays diagnostic error code.
9. **Diagnostic code** - when the machine has detected an error it will display the warning symbol and a diagnostic code which indicates what's wrong.

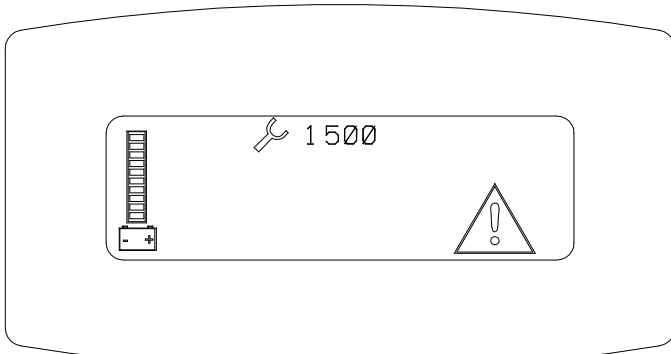
*( For common error codes and descriptions see page 18)*

# Troubleshooting Central Command

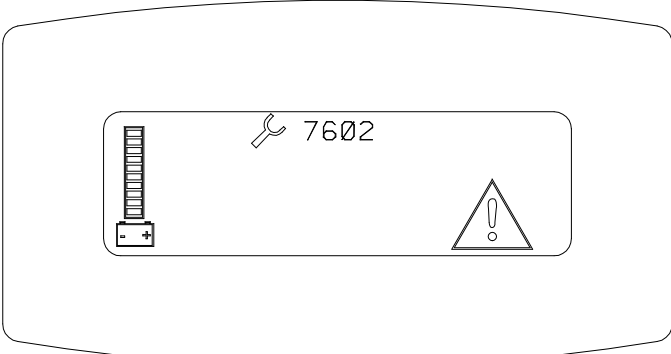
**NOTE:** This machine is operated by a sophisticated electronic "**controller**" that has many fail-safes within it. The controller analyzes problems and displays a four-digit numeric code of what is wrong in the LCD window.

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.

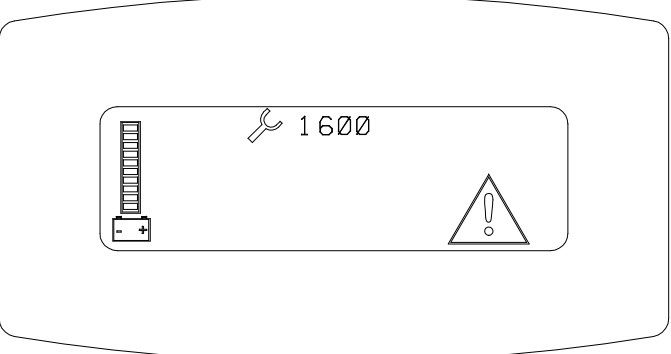
The complete list of codes is published in the simplified electronic troubleshooting manual, which is available to technical people. However, we have included the basic codes that you can usually resolve yourself.



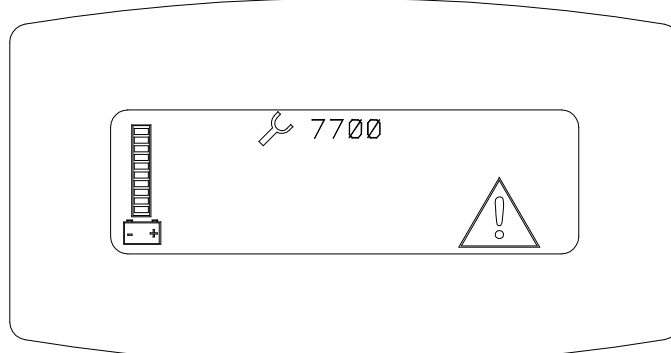
**1. 1500 ERROR.** Parking brake circuit fault. Call a technician.



**2. 7601 AND 7602 ERROR.** Pad current over load. This 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.

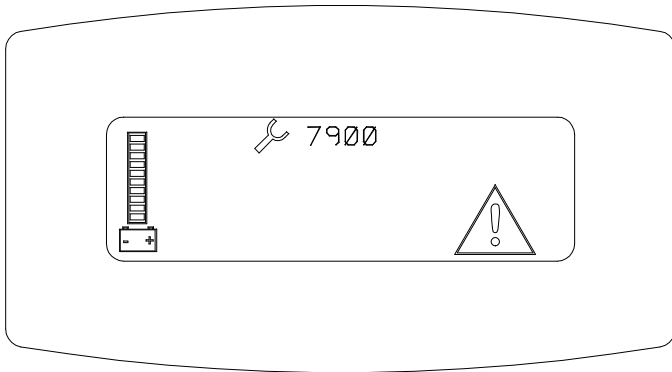


**3. 1600 ERROR.** Voltage exceeds the maximum. Either the batteries are mis-wired, or the charger is still plugged into the machine.



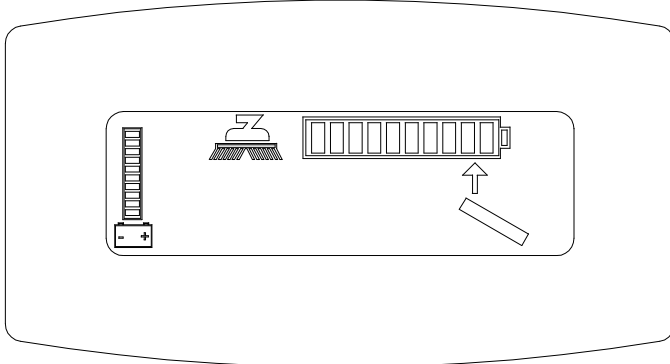
**4. 7700, 7701, 7702, AND 7703 ERROR.** The vacuum system has malfunctioned. Turn off key and turn on again to clear. If the code does not clear call a technician.

# Troubleshooting Central Command

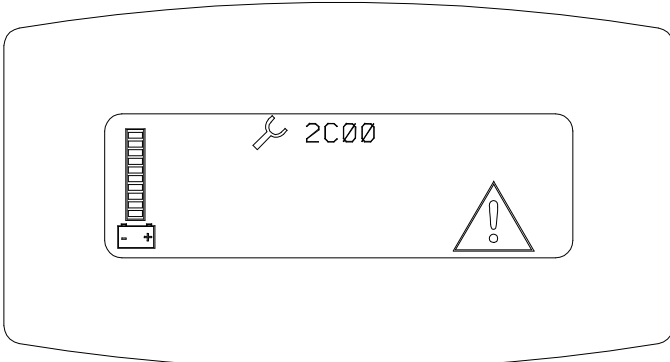


5. **7900 AND 7901 ERROR.** The emergency stop button is depressed.

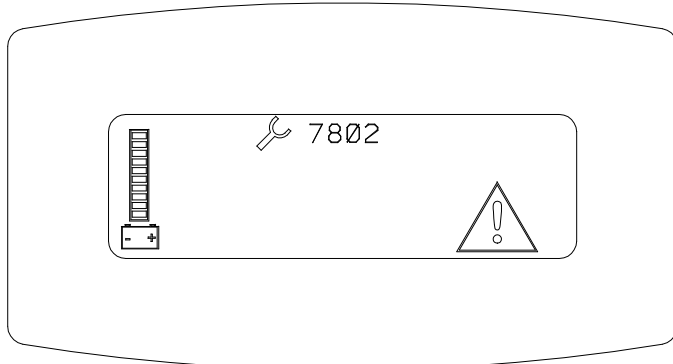
6. **HIGH THROTTLE ERROR.** You pressed the drive button before turning on the key. Turn off the key, release the drive button and try again.



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.



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 controller's on-board capacitor**). Reconnect the cables, being sure that they are tight, if they are loose you will burn the battery cables or the battery. If you overtighten the cables you can damage the battery's lead terminal.

10. If the problem cannot be solved by any of these solution's 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.
Burnishing motor does not operate.	Burnishing deck is not down. Foot pedal is not depressed. Burnishing circuit breaker tripped.  Carbon brushes worn. Faulty motor or wires.	Put deck down. Engage foot pedal. Wait 5 minutes 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.
Dust control fan does not operate.	Faulty vacuum switch. Vacuum circuit breaker tripped.  Faulty vacuum motor. Carbon brushes worn.	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.

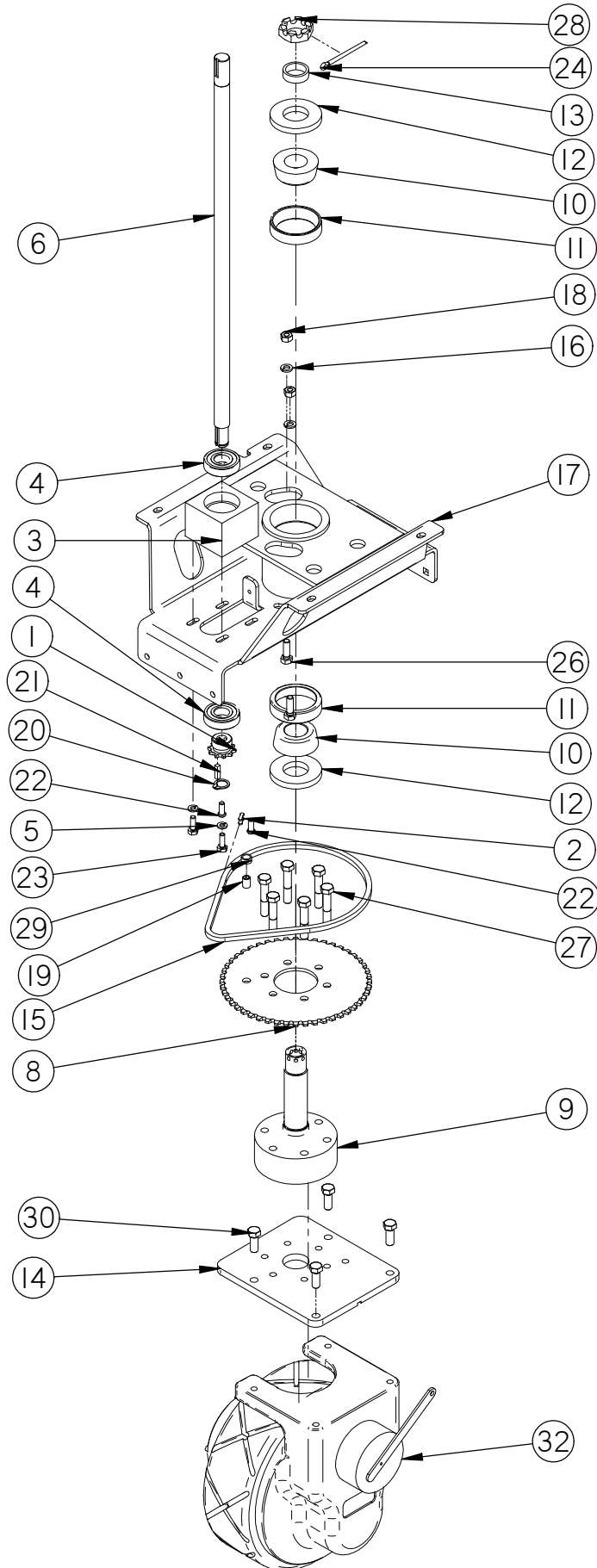
# Trouble Shooting

<u>Problem</u>	<u>Cause</u>	<u>Solution</u>
Poor dust control.	Main vacuum hose disconnected. Burnishing deck hose disconnected. Burnishing deck hose clogged. Damaged main vacuum hose. Damaged burnishing deck hose. Filter clogged. Filter door not closed tightly.  Filter door gasket faulty. Filter full. Torn shroud curtain. Faulty vacuum Motor. Battery charge is low.	Reconnect hose. Reconnect hose. Remove debris. Contact local servicing dealer. Contact local servicing dealer. Clean out filters. Adjust screw on door clamp to tighten seal. Contact local servicing dealer. Remove debris. Contact local servicing dealer. Contact local servicing dealer. Charge batteries overnight.
Poor burnishing quality.	Burnishing pads worn out. Debris stuck to burnishing pad. Torn burnishing pad. Faulty disk pad motor. Battery charge is low.	Replace pads. Remove debris. Replace pads. Contact local servicing dealer. Charge batteries overnight.
Burnishing scrub deck noisy.	Missing burnishing pad. Burnishing pad worn out. Torn curtain hitting burnishing disks. Damaged shroud.	Replace pads. Replace pads. Contact local servicing dealer. Fix or replace shroud.
Rear tires noisy.	Bearings dry. Faulty hubs.	Grease bearings. Contact local servicing dealer.
Poor traction.	Excessive burnishing pad. Pressure. Worn drive tire.	Reduce pressure with switch.  Contact local servicing dealer.
Short run time.	Batteries run down. Batteries still down. Batteries low on water.  Batteries 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 255 machine parts section

Front wheel drive	Pages 23-24
Wheels and Rollers	Pages 25-26
20" Burnisher Deck	Pages 27-28
27" Burnisher deck	Pages 29-30
Mounting deck	Pages 31-32
Steering Upright	Pages 33-34
Central Command	Pages 35-36
Top Front Components	Pages 37-38
Actuator Pivot	Pages 39-40
Actuator Vac box and Charger	Pages 41-42
Batteries and Covers	Pages 43-44

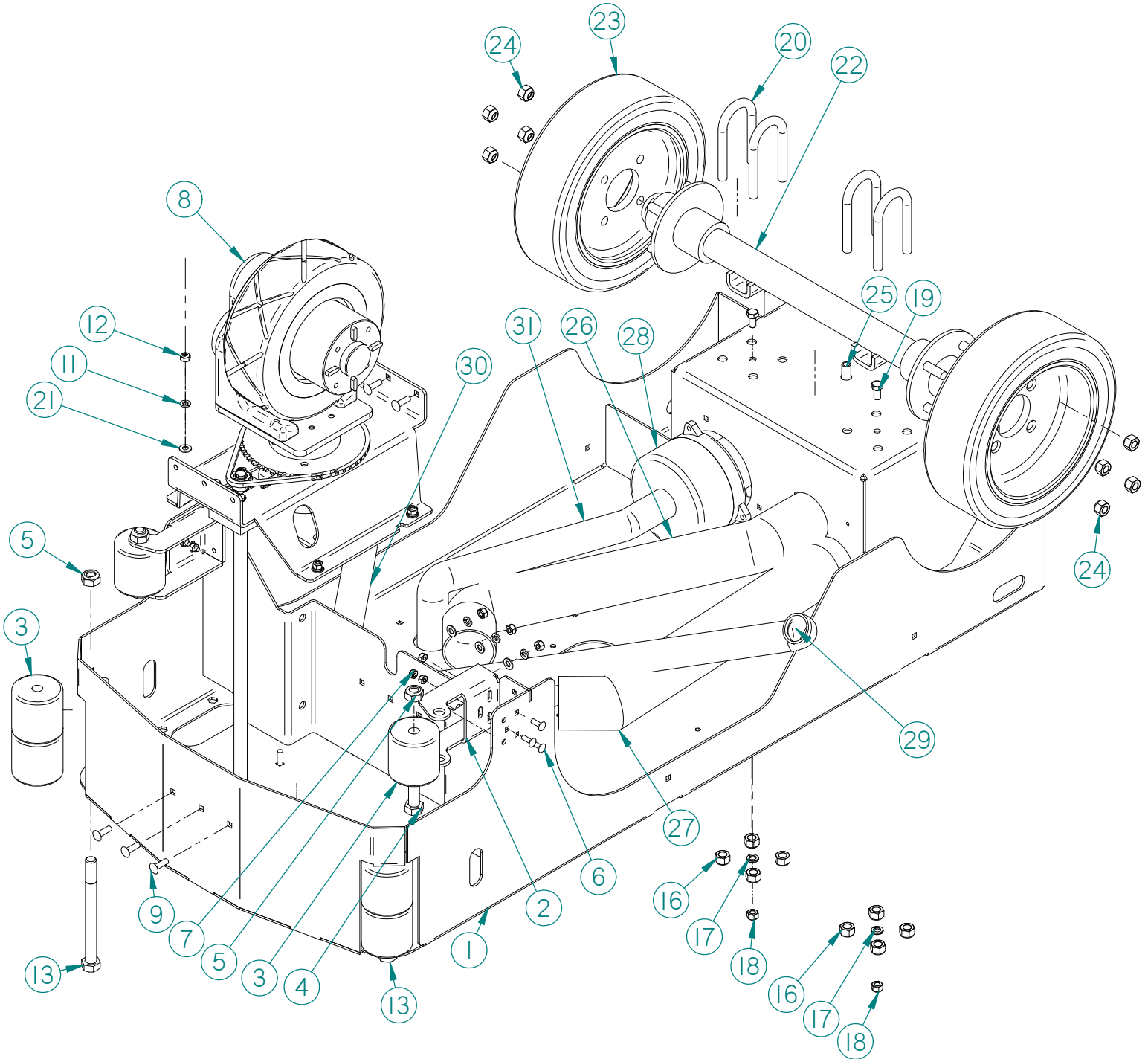
# FRONT WHEEL ASSEMBLY



# FRONT WHEEL ASSEMBLY

Item	Part No.	Part Description	Qty.
1	5-826	10 TOOTH SPROCKET	1
2	5-831	MASTER LINK	1
3	8-723	BEARING BLOCK	1
4	8-723B	BEARING	2
5	H-33618	LW 1/4"	2
6	250-7120	STEERING SHAFT, LOWER	1
8	250-7314	60 TOOTH STEERING SPROCKET	1
9	250-7332	STEERING SHAFT	1
10	37-7317	TAPERED ROLLER BEARING	2
11	37-7318	BEARING CAP	2
12	37-7319	STEERING SHAFT SEAL	2
13	37-7320	PRE LOAD SLEEVE	1
14	250-7326	PIVOT PLATE	1
15	250-7327	STEERING CHAIN	1
16	H-33620	LW 5/16"	2
17	250-7315	DROP PLATE	1
18	H-36104	HN 5/16"-18	2
19	H-25595	SS CP 3/8"- 24 X 1/2"	1
20	H-68013	SNAPRING 5/8"	1
21	H-00270	3/16" X 3/4" KEY	1
22	H-24617	SHCS, LOW HEAD, 1/4- 20 X 5/8"	2
23	H-13003	HCS 1/4"-20 X 3/4"	2
24	H-65129	3/16" X 2-1/2" COTTER PIN	1
26	H-13055	HCS 5/16"-18 X 1"	2
27	H-70146	HCS 3/8"- 24 X 2" SS	6
28	37-7321	SLOTTED NUT, 2.0 - 12	1
29	H-05233	PVC TUBING	1
30	H-70105	HCS 3/8"- 16 X 1" SS	4
31*	250-6181	10 INCH 36 VOLT FRONT WHEEL DRIVE	1
32	290-9566	36V ELECTRIC BRAKE	1

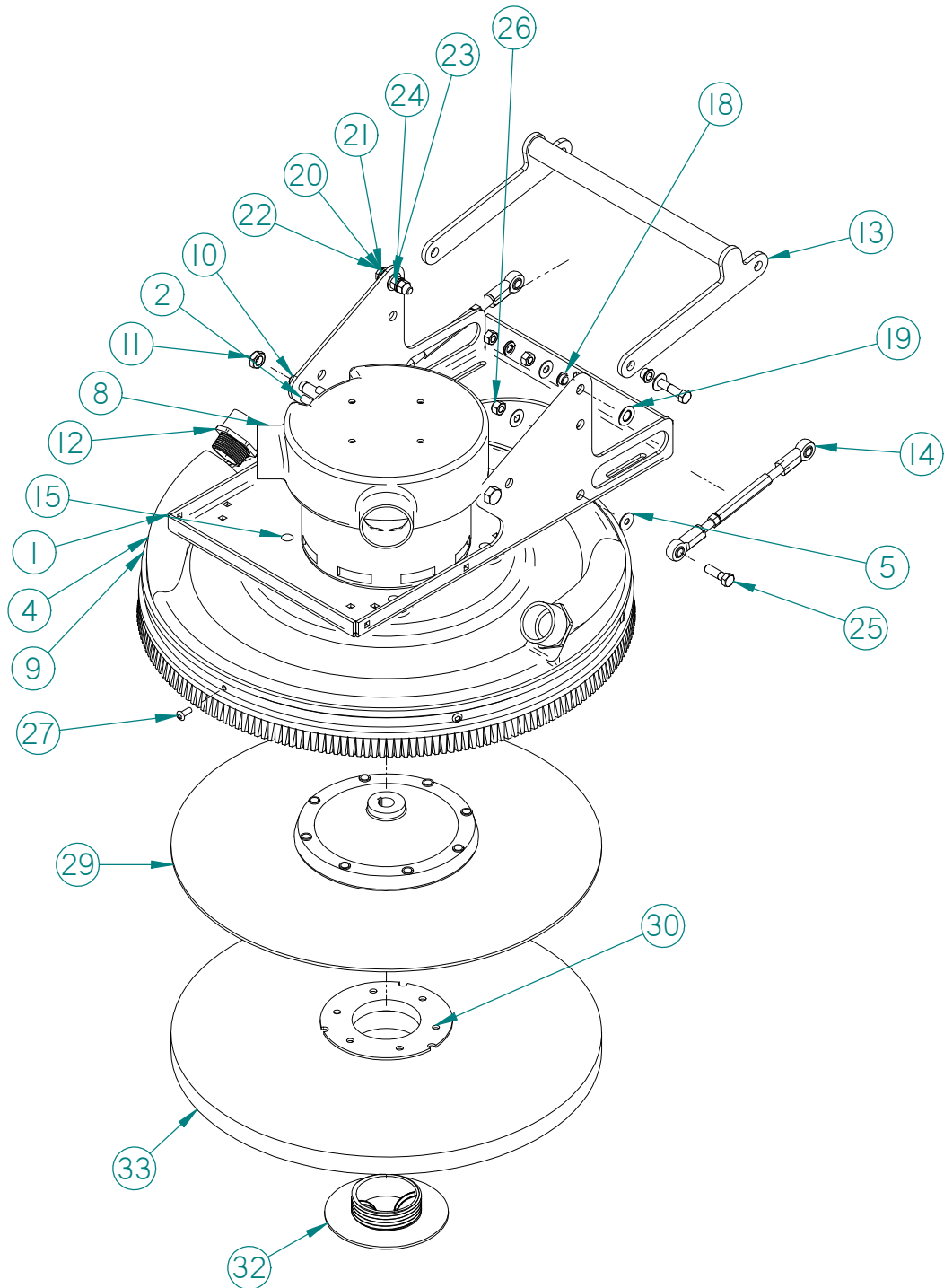
# WHEELS AND ROLLERS



# WHEELS AND ROLLERS

Item	Part No.	Part Description	Qty.
1	255-1100	MAIN FRAME	1
2	290-1128	LOWER ROLLER BRACKET	2
3	21-1127	ROLLER	6
4	H-11319	HB 5/8"- 11 X 4"	2
5	H-37036	NYL 5/8"- 11	3
6	H-74419	CB 1/4"- 20 X .75" SS	6
7	H-70860	NYLOK 1/4"- 20 SS	6
8	233	SUB #233 250 FRONT WHEEL ASSEMBLY	1
9	H-74430	CB 5/16"- 18 X 1" SS	10
11	H-71065	LW 5/16" SS	13
12	H-70861	NYLOK 5/16" - 18 SS	10
13	H-13327	HB 5/8"- 11 X 7.0"	2
16	H-77864	NYLOK 1/2"-13 SS	8
17	H-71067	LW 3/8" SS	2
18	H-70862	NYLOK 3/8"-16 SS	2
19	H-70103	HCS 3/8"-16 X 3/4" SS	2
20	290-6186	1/2-20 X 1-1/4 " U BOLT	4
21	H-33080	FW 5/16" SAE	10
22	250-6040	250 REAR AXLE	1
23	255-6180	REAR WHEEL (GRAY) (NO TREAD)	2
24	290-6187	LUG NUT, 1/2"- 20	8
25	255-0013	BATTERY DRAIN HOSE	1
26	255-0014	MOTOR INTAKE HOSE	1
27	255-0015	MOTOR INTAKE HOSE	1
28	255-5250	36V VAC MOTOR, TANGENTIAL W/SNORKEL	1
29	255-0011	VAC HOSE	1
30	255-0011	VAC HOSE	1
31	255-0010	VAC TO VAC BOX HOSE	1

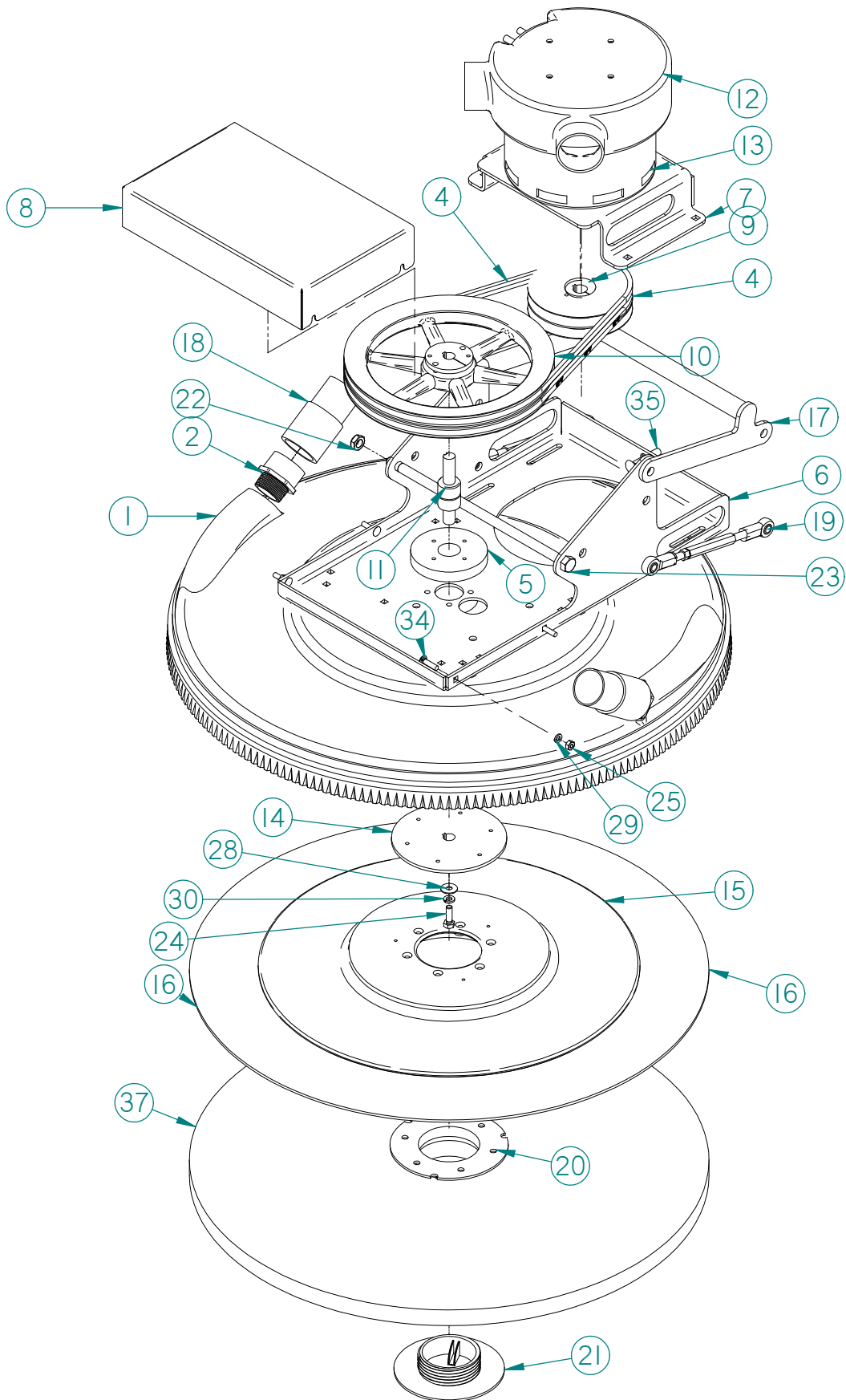
# 20" BURNISHER DECK



# 20" BURNISHER DECK

Item	Part No.	Part Description	Qty.
1	275-4020	SINGLE PAD BURNISHER DECK	1
2	290-9501	BURNISHER MOTOR 36V 2000 RPM 65 AMP	1
4	200-0001	20" BURNISHER SHROUD	1
5	H-71016	FW 5/16" X 7/8" SS	3
6*	H-71065	LW 5/16" SS	1
7*	H-70055	HCS 5/16"- 18 X 1" SS	1
8	275-9501	MOTOR COVER	1
9	200-0016	20" SHROUD CURTAIN	1
10	H-11219	HCS 1/2"- 13 X 7.0"	1
11	H-0129159	JNYL, 1/2"-13, 18-8 SS	1
12	275-0004	1-1/4 NPT TO 2" OD ADAPTER	2
13	275-9586	LATERAL LIFTING BRACKET	1
14	290-9587	ADJUSTABLE LATERAL ARM	2
15	H-74418	CB 1/4"- 20 X 5/8" S/S	4
16*	H-71212	FNW 1/4" X 1" SS	4
17*	H-NJ04C	JNYL 1/4" - 20 SS	11
18	290-1233	3/8" ID, 1/2" OD, 1/4" LG BEARING	2
19	290-1247	BRONZE THRUST BEARING, .50" ID X 1.0" OD X 1/16" TH	2
20	290-1245	3/8" ID, 1/2" OD, 3/8" LG, FLANGE BEARING	2
21	H-71017	FW 3/8" X 7/8" SS	6
22	H-70110	HCS 3/8"- 16 X 1-3/4" SS	2
23	H-70712	HN 3/8"-16 SS	4
24	H-71067	LW 3/8" SS	2
25	H-70107	HCS 3/8"- 16 X 1-1/4" SS	2
26	H-70862	NYLOK 3/8"-16 SS	2
27	H-73753	BHSCS 1/4 - 20 X 5/8" SS	7
29	200-9576	20" DRIVER PLATE	1
30	40-434A	DRIVER LOCK	1
32	40-434B	DRIVER SCREW IN PAD LOCK	1
33	SEE COMMON WEAR PARTS	BURNISHER PAD	1

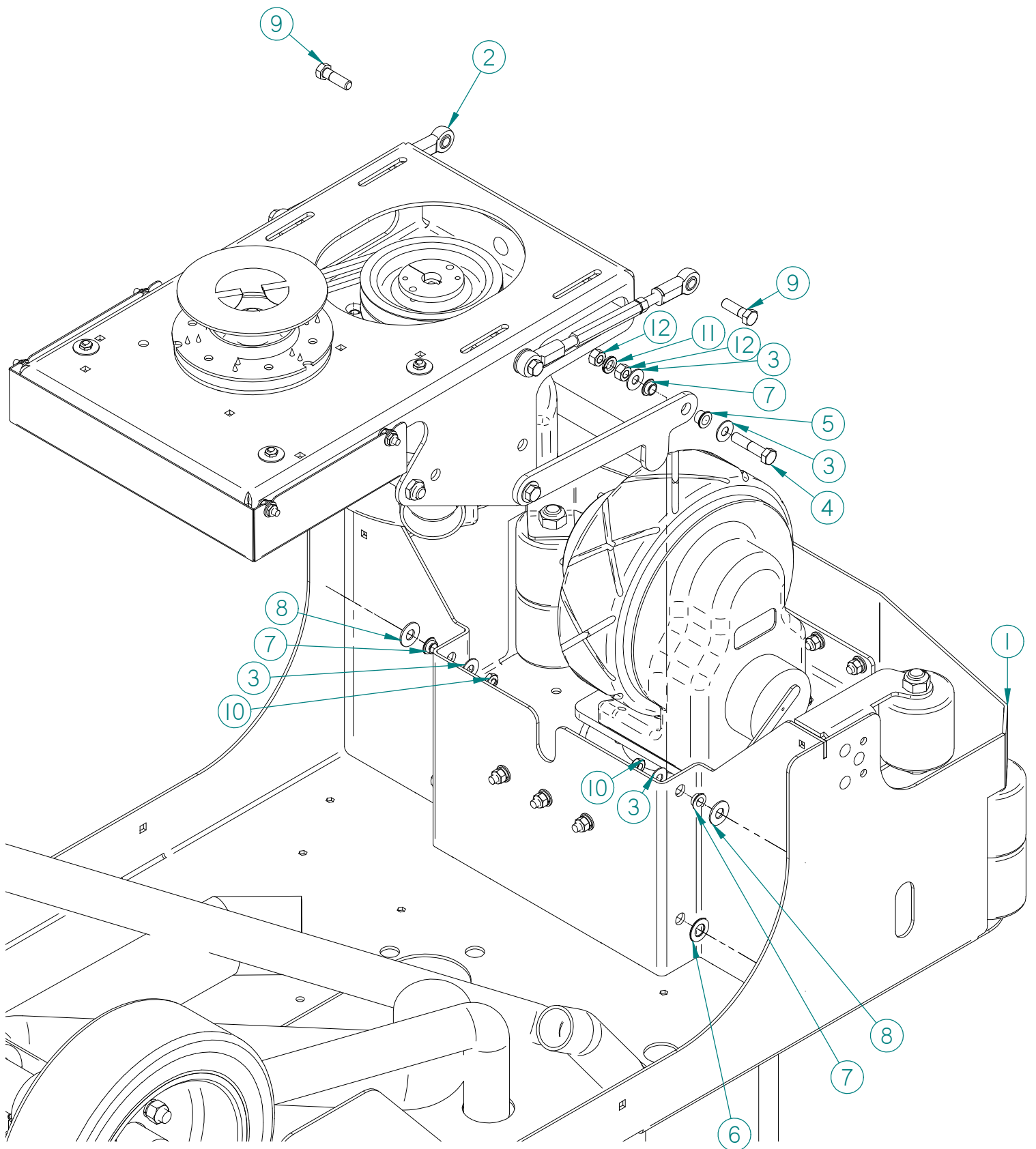
# 27" BURNISHER DECK



# 27" BURNISHER DECK

Item	Part No.	Part Description	Qty
1	275-0001	27" BURNISHER SHROUD	1
2	275-0004	1-1/4 NPT TO 2" OD ADAPTER	2
3*	275-0016	SHROUD CURTAIN	1
4	275-3010	PAD DRIVER BELT	2
5	275-3050	BEARING HOUSING	1
6	275-4020	SINGLE PAD BURNISHER DECK	1
7	275-4021	MOTOR ADJUSTMENT BRACKET	1
8	275-4022	BELT GUARD	1
9	275-8215	DH2550 5.5" PULLEY	1
10	275-8225	11" PULLEY	1
11	275-8240	DRIVE BEARING	1
12	275-9501	MOTOR COVER	1
13	275-9506	BURNISHER MOTOR 36V 2500 RPM 78 AMP	1
14	275-9568	PAD DRIVER	1
15	275-9569	DISK RISER	1
16	275-9576	27" DRIVER PLATE	1
17	275-9586	LATERAL LIFTING BRACKET	1
18	290-7212	1-1/2" - 2" HOSE CUFF	2
19	290-9587	ADJUSTABLE LATERAL ARM	2
20	40-434A	DRIVER LOCK	1
21	40-434B	DRIVER SCREW IN PAD LOCK	1
22	H-0129159	JNYL, 1/2"-13, 18-8 SS	1
23	H-11219	HCS 1/2"- 13 X 7.0"	1
24	H-70055	HCS 5/16"- 18 X 1" SS	1
25	H-70710	HN 1/4"- 20 SS	4
26*	H-70860	NYLOK 1/4"- 20 SS	1
27*	H-71013	FNW 1/4" X 5/8" SS	8
28	H-71016	FW 5/16" X 7/8" SS	1
29	H-71063	LW 1/4" SS	4
30	H-71065	LW 5/16" SS	1
31*	H-71212	FNW 1/4" X 1" SS	4
32*	H-72710	FHP 1/4"- 20 X 1" SS	1
33*	H-74418	CB 1/4"- 20 X 5/8" S/S	4
34	H-74420	CB 1/4"- 20 X 1.0" SS	4
35	H-74439	CB 3/8"- 16 X 2.0" SS	1
36*	H-NJ04C	JNYL 1/4" - 20 SS	8
37	SEE COMMON WEAR PARTS	27" BURNISHER PAD	1

# BURNISHER DECK



# ***BURNISHER DECK***

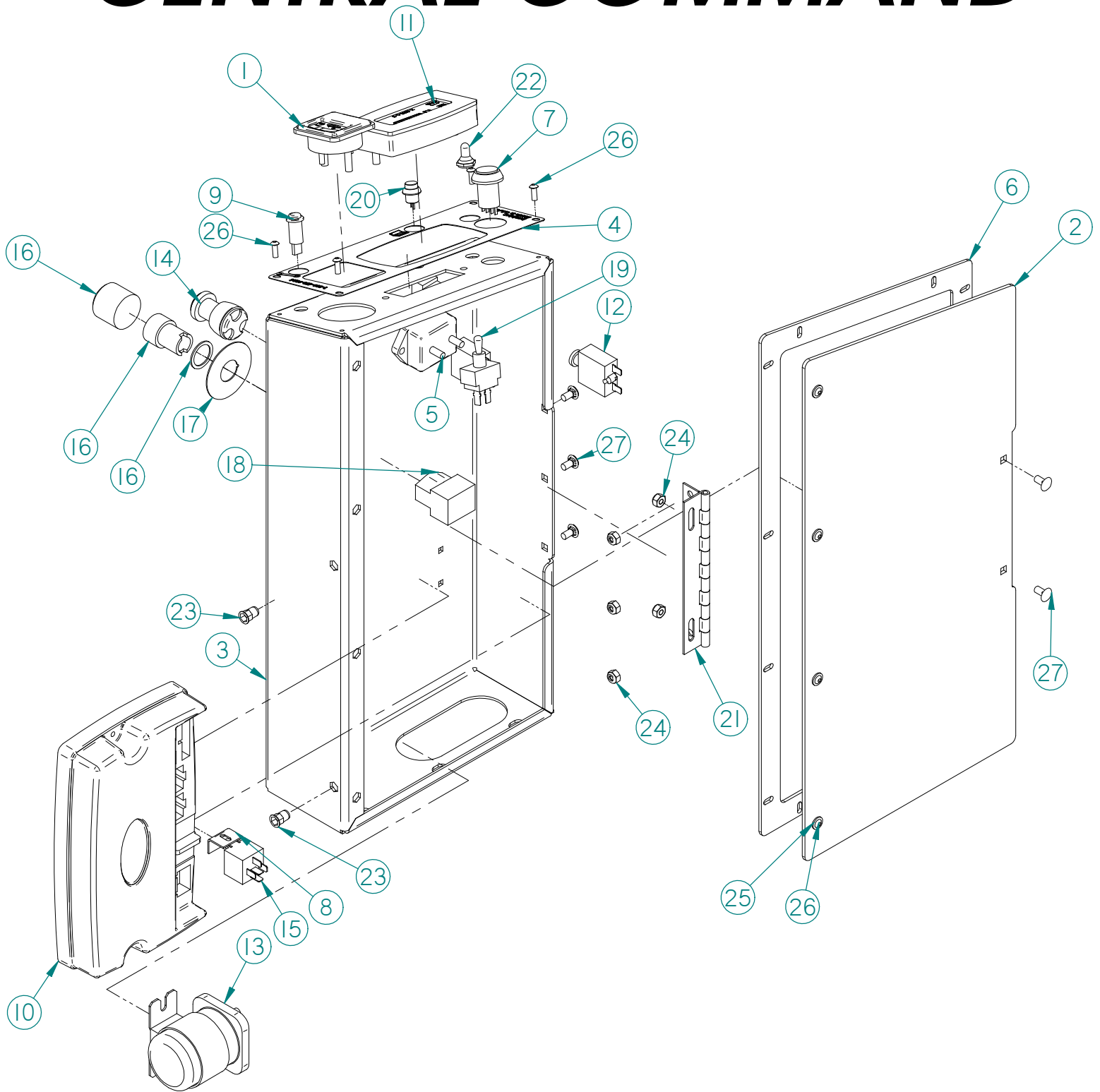
Item	Part No.	Part Description	Qty.
1	255-1100	MAIN FRAME	1
2	807	SUB #807 275 BURNISHER DECK	1
3	H-71017	FW 3/8" X 7/8" SS	6
4	H-70110	HCS 3/8"- 16 X 1-3/4" SS	2
5	290-1245	3/8" ID, 1/2" OD, 3/8" LG, FLANGE BEARING	2
6	290-1247	BRONZE THRUST BEARING, .50" ID X 1.0" OD X 1/16" TH	2
7	290-1233	3/8" ID, 1/2" OD, 1/4" LG BEARING	4
8	H-99001	FW 3/8" SS	2
9	H-70107	HCS 3/8"- 16 X 1-1/4" SS	2
10	H-NJ06C	JNYL 3/8- 16 SS	2
11	H-71067	LW 3/8" SS	2
12	H-70712	HN 3/8"-16 SS	4



# STEERING UPRIGHT

Item	Part No.	Part Description	Qty.
1	290-1245	3/8" ID, 1/2" OD, 3/8" LG, FLANGE BEARING	2
2	290-1247	BRONZE THRUST BEARING, .50" ID X 1.0" OD X 1/16" TH	2
3	290-1248	FW BRONZE 1/2" ID X 1" OD X 1/8" TH	2
4	290-7050	INDEX PLUNGER	1
5	292-1170	LOWER STEERING TOWER	1
6	292-1171	UPPER STEERING TOWER	1
7	292-1172	COVER	1
8	4-101	SERIAL NUMBER PLATE	1
9	4-260	CONNECTOR, GREY 50	1
10	4-352	BEARING	1
11	4-364A	FLANGE, 1.75" ID	2
12	430-2910	36V HEADLIGHT	1
13	430-2940	36V HORN	1
14	8-262	HOUR METER	1
15	8-292	BACKUP ALARM	1
16	8-294B	PUSH BUTTON SWITCH, SILVER	1
17	H-21253	CB 5/16"- 18 X 3/4"	1
18	H-250HCN	HCN 1/4"-20	12
19	H-28902	RPH #8-32 X 1"	2
20	H-29060	RPH #10-32 X 3/4"	2
21	H-33620	LW 5/16"	3
22	H-36104	HN 5/16"-18	4
23	H-37015	NYLOK #10-32	2
24	H-37024	NYLOK 3/8"-16	2
25	H-37406	KN #8-32	2
26	H-71009	FW #10 SS	4
27	H-71017	FW 3/8" X 7/8" SS	4
28	H-72681	FHP #10-32 X 3/8" SS	2
29	H-73754	BHSCS 1/4 - 20 X 3/4 SS	6
30	H-73815	BHSCS 3/8"- 16 X 1" SS	2
31	H-76061	FW 1/4" NYLON	6
32	H-94071	BHSCS 5/16-18 X 1	3

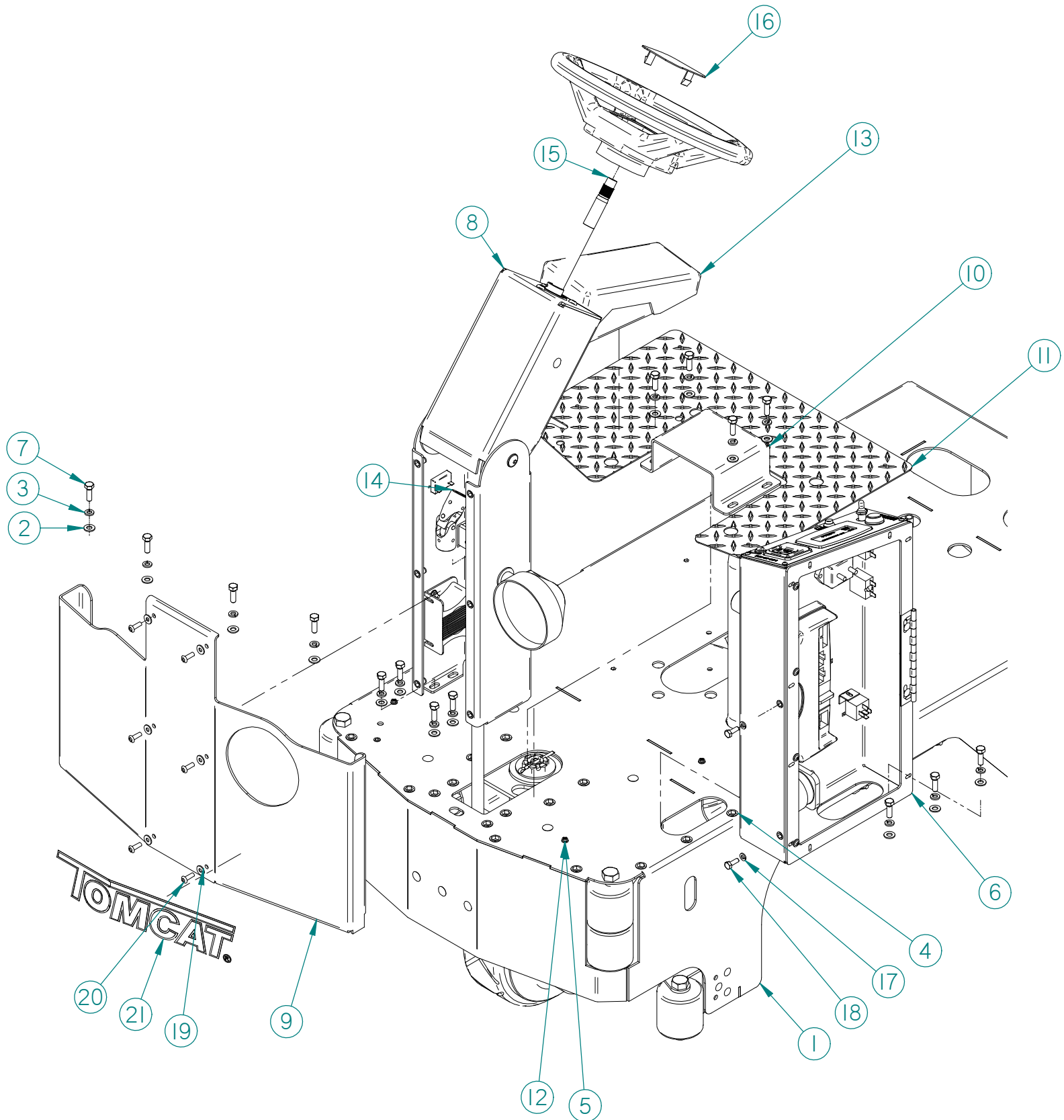
# CENTRAL COMMAND



# CENTRAL COMMAND

Item	Part No.	Part Description	Qty.
1	275-0013	0 TO 100 AMP GAUGE	1
2	275-2001	ACCESS COVER	1
3	275-2010	CONTROL PANEL	1
4	275-2013	CONTROL PANEL TOP PLATE	1
5	275-8000	80 AMP BREAKER	1
6	290-2004	ACCESS COVER GASKET	1
7	290-2015	ONE TOUCH BUTTON	1
8	290-2020	BRACKET	1
9	290-2300	LOW SOLUTION (AMBER)	1
10	290-2890	COMPUTER CONTROL V2	1
11	290-2891	LCD SCREEN	1
12	290-8370	FUSE, RESETTABLE, 50 AMP, 50V DC MAX	2
13	390-2331	36V 200 AMP RELAY	1
14	4-234	KEY SWITCH	1
15	5-293	15 AMP RELAY	1
16	5-300	EMERGENCY SHUT OFF	1
17	5-301	EMERGENCY LEGEND PLATE	1
18	5-302	EMERGENCY CONTACT BLACK	1
19	5-892	TOGGLE, ON-OFF SPST	2
20	7-229	PUSH BUTTON SWITCH	1
21	8-180	HINGE, 6-7/8" S/S	1
22	H-01196	PROTECTIVE BOOT, TOGGLE SWITCH, (RED)	1
23	H-250HCN	HCN 1/4"-20	2
24	H-70860	NYLOK 1/4"- 20 SS	5
25	H-71009	FW #10 SS	4
26	H-73743	BHSCS 10-32 X 1/2" SS	8
27	H-74417	CB 1/4"- 20 X .5" SS	5

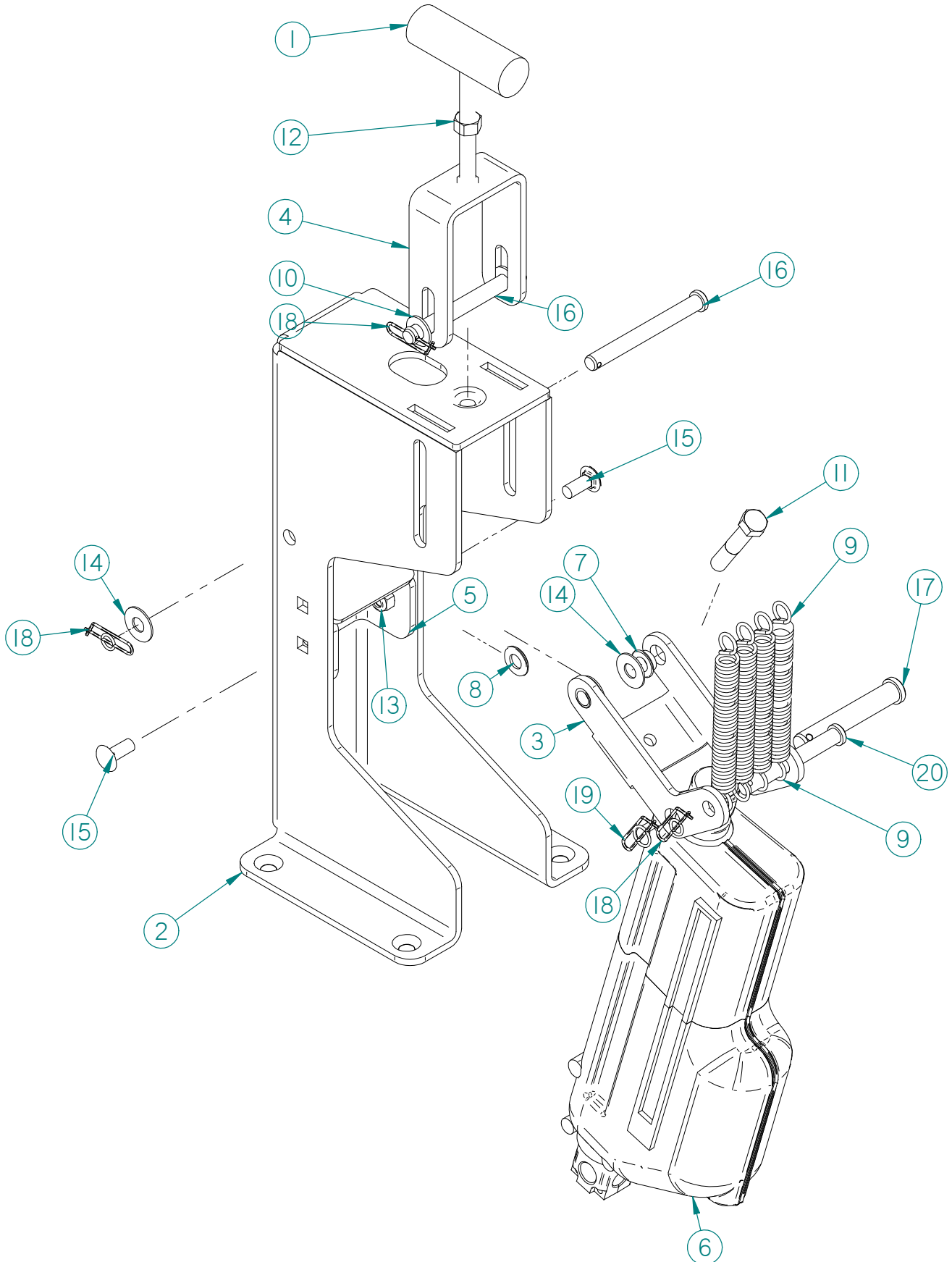
# TOP FRONT PARTS



# TOP FRONT PARTS

Item	Part No.	Part Description	Qty.
1	255-1100	MAIN FRAME	1
2	H-33080	FW 5/16" SAE	15
3	H-71065	LW 5/16" SS	15
4	H-312HCN	HCN 5/16"-18	15
5	H-1032HCN	HCN #10-32	6
6	809	SUB #809 275 BURNISHER CCM II	1
7	H-70055	HCS 5/16"- 18 X 1" SS	15
8	481	SUB #481 36 VOLT STEERING UPRIGHT	1
9	250-1180	FRONT APRON	1
10	290-1173	DRIVE COVER	1
11	250-1610	NON SKID FLOOR PLATE	1
12	H-29073	PPH #10-32 X 1"	4
13	8-290	FOOT PEDAL	1
14	290-7110	U-JOINT	1
15	290-7090	STEERING SHAFT, UPPER	1
16	8-703	STEERING WHEEL	1
17	H-71063	LW 1/4" SS	2
18	H-70003	HCS 1/4"- 20 X 3/4" SS	2
19	H-76061	FW 1/4" NYLON	6
20	H-73754	BHSCS 1/4 - 20 X 3/4" SS	6
21	250-7201	MOLD ON TOMCAT STICKER	1

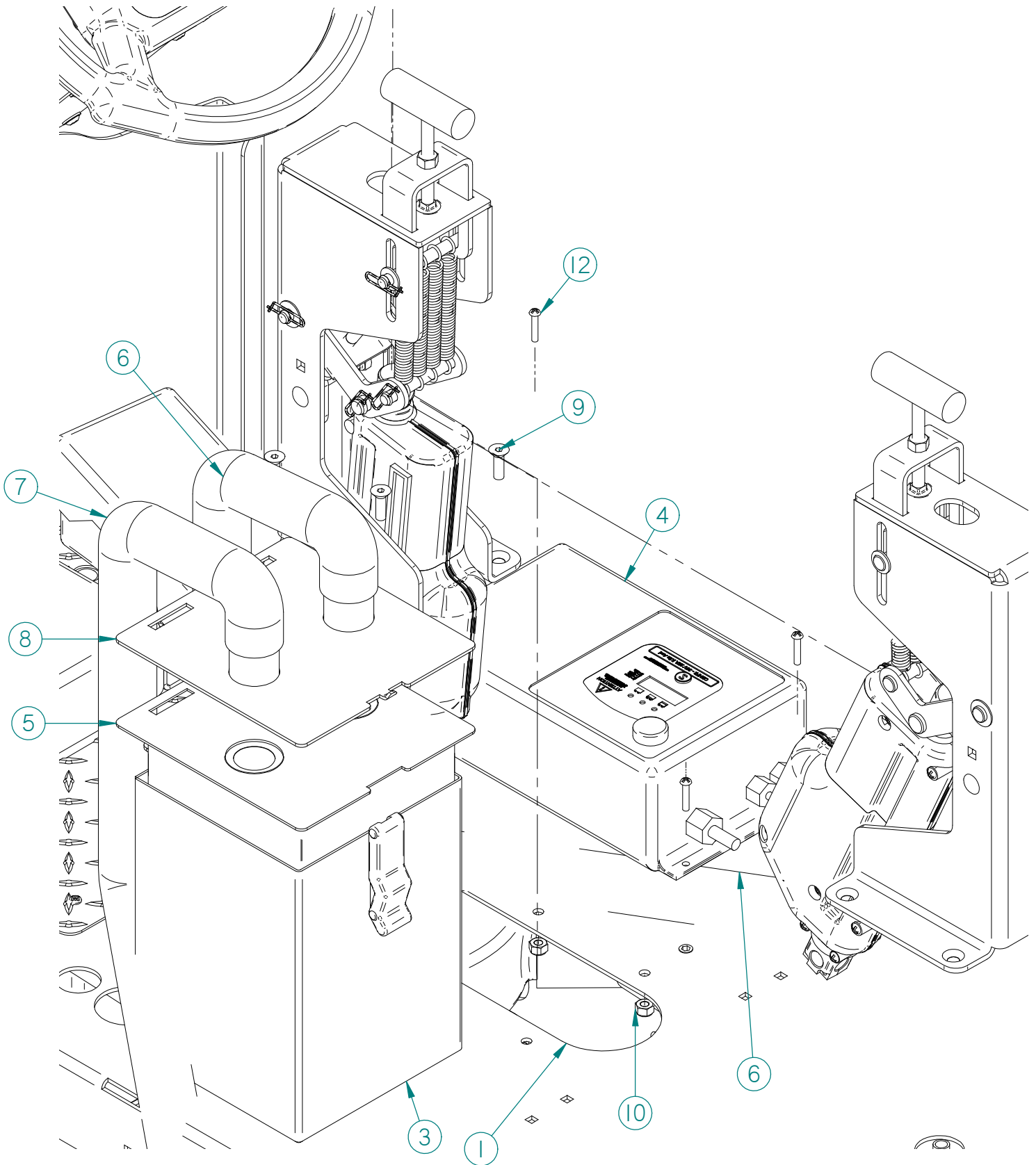
# ACTUATOR PIVIOT



# ACTUATOR PIVOT

Item	Part No.	Part Description	Qty
1	275-0999	SPRING ADJUSTMENT KNOB	1
2	275-1081	ACTUATOR UPRIGHT	1
3	275-1082	ACTUATOR PIVOT	1
4	275-1083	ACTUATOR SPRING AJUSTMENT BRACKET	1
5	275-1084	PIVOT ADJUSTMENT BRACKET	1
6	275-2210	6" STROKE 36V ACTUATOR 1000 LB LOAD	1
7	290-1233	3/8" ID, 1/2" OD, 1/4" LG BEARING	2
8	290-1247	FW BRONZE .75 OD X .375 ID X .0625 THK	2
9	390-7712	COMPRESSION SPRING	4
10	H-4440024	FW 3/8" X 3/4" NYLON	2
11	H-70111	HCS 3/8"- 16 X 2" SS	1
12	H-70712	HN 3/8"-16 SS	1
13	H-70861	NYLOK 5/16" - 18 SS	2
14	H-71017	FW 3/8" X 7/8" SS	4
15	H-74429	CB 5/16"- 18 X 3/4" SS	2
16	H-923902	3/8" X 4" CLEVIS PIN	2
17	H-CP238	1/2" X 3" CLEVIS PIN	1
18	H-RUE14	3/8" RUE RING COTTER	3
19	H-RUE22	1/2" RUE RING COTTER	1
20	H-ZCPI76	CLEVIS PIN 3/8" x 3.00"	1

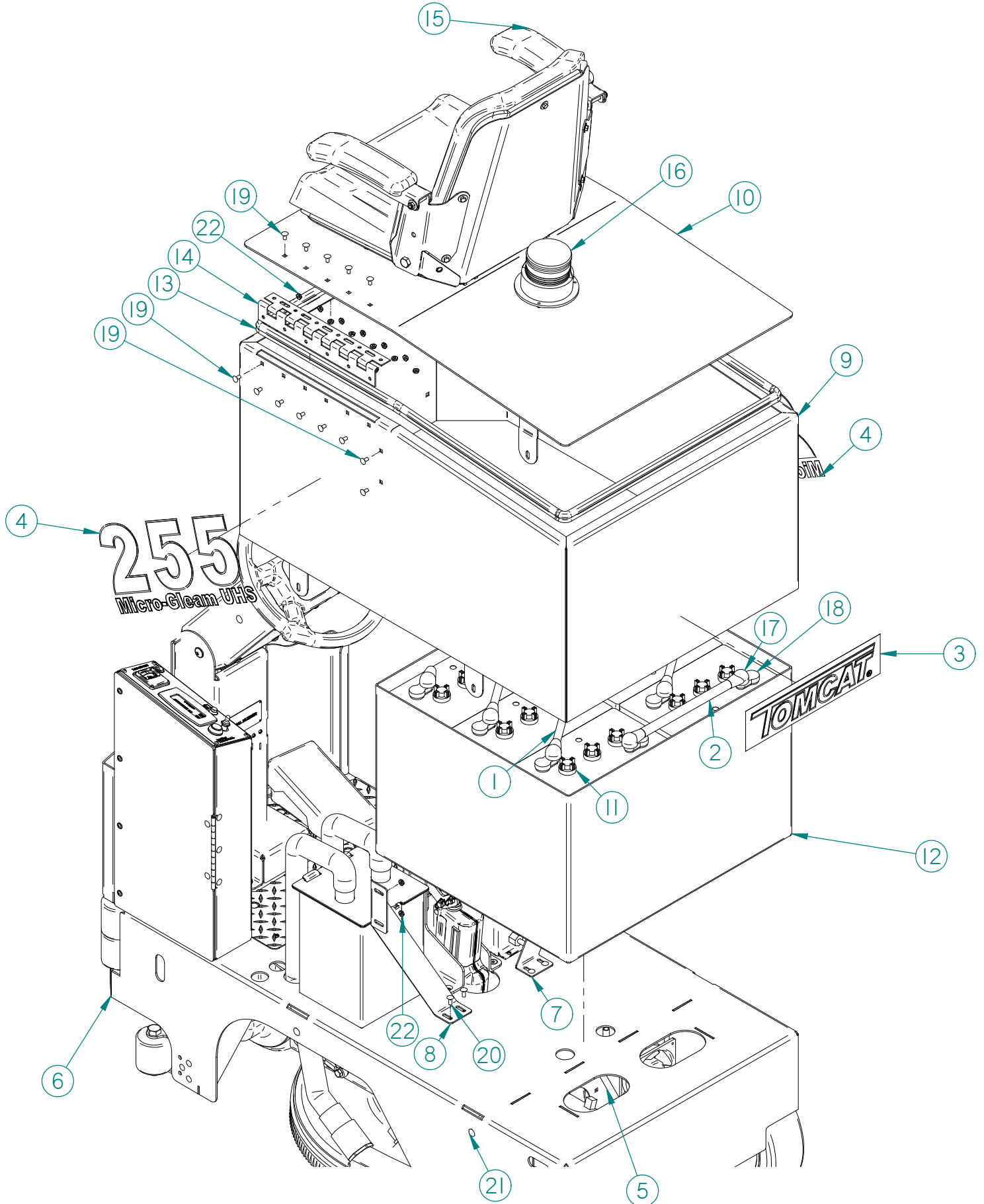
# TOP FRONT PARTS



# ***TOP FRONT PARTS***

Item	Part No.	Part Description	Qty.
1	255-1100	MAIN FRAME	1
2*	811	SUB #811 275 BURNISHER ACTUATOR PIVOT	2
3	255-1105	VAC BOX	1
4	200-2441	BATTERY CHARGER	1
5	255-1102	FILTER BAG	1
6	255-0011	VAC HOSE	1
7	255-0011	VAC HOSE	1
8	255-1106	VAC BOX LID	1
9	H-73908	FHSCS 5/16"- 18 X 1" SS	3
10	H-70861	NYLOK 5/16" - 18 SS	2
11*	H-1032HCN	HCN #10-32	1
12	H-72566	RPH #10-32 X 1" SS	3
13*	4-124	LATCH	1

# TOP REAR PARTS



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Item	Part No.	Part Description	Qty.
1		BATTERY JUMPER (4 GAUGE 5-1/2" LG)	4
2		BATTERY JUMPER	1
3		TOMCAT STICKER	1
4	255-0001	255 STICKER	2
5	255-0013	BATTERY DRAIN HOSE	1
6	255-1100	MAIN FRAME	1
7	255-1200	SUPPORT STRAP, (RH)	1
8	255-1201	SUPPRT STRAP (LH)	1
9	255-9514	BATTERY COMPARTMENT	1
10	255-9515	BATTERY COMPARTMENT LID	1
11	290-2110	L 16 H BATTERY 6 VOLT 395 AH	6
12	370-0000	370 BATTERY BOX	1
13	390-4101	PUSH-ON RUBBER GASKET 78" LG	1
14	430-1225	13" SS HINGE	1
15	8-143	SEAT WITH ARM RESTS	1
16	8-293	STROBE LIGHT	1
17	H-40031	BATTERY BOOT	12
18	H-400317	TERMINAL COVER	12
19	H-74417	CB 1/4"- 20 X .5" SS	15
20	H-74418	CB 1/4"- 20 X 5/8" S/S	6
21	H-74429	CB 5/16"- 18 X 3/4" SS	4
22	H-NJ04C	JNYL 1/4" - 20 SS	15