

**PARTS AND
MAINTENANCE MANUAL
ELECTRIC MINUTE MISER™
MODELS: 898320A, 898320B, 898320EE,
898323, 898323EE**

Part No. 840505 Rev. J

1 ————— GENERAL INFORMATION



IMPORTANT!

THIS MANUAL WILL AID YOU IN THE SAFE OPERATION AND PROPER MAINTENANCE OF YOUR EQUIPMENT. READ MANUAL THOROUGHLY BEFORE ATTEMPTING OPERATION. IF ANY PORTION IS NOT CLEARLY UNDERSTOOD, CONTACT AN AUTHORIZED DEALER FOR CLARIFICATION.

To make sure you are fully aware of safety and service information, the following two symbols are used throughout this manual.



This symbol is used throughout the manual to alert you to information about unsafe actions or situations, and will be followed by the word DANGER, WARNING, or CAUTION. DANGER indicates immediate hazards that may result in severe injury or death. WARNING indicates unsafe actions or situations that may cause severe injury, death and/or major equipment or property damage. CAUTION indicates unsafe actions or situations that may cause injury, and/or minor equipment or property damage.

NOTE: This appears next to information or instructions which will help you operate and maintain your equipment the right way.



WARNING

- **The information and instructions included in this manual alert you to certain things you should do very carefully. If you do not, you could:**
 - hurt yourself or others
 - hurt the next person who operates the equipment
 - damage the equipment.
- **This manual contains essential operation and safety information and must remain with the unit at all times, within easy access of any operator.**

IMPORTANT!

THIS EQUIPMENT SHOULD NOT BE MODIFIED OR ADDED TO WITHOUT THE MANUFACTURER'S AUTHORIZATION.



WARNING

- **Altering this equipment in any manner which adversely affects the equipments operation, performance, durability or use, may cause hazardous conditions.**

Direct any inquiries to:

Textron Golf, Turf and Specialty Products
Attn: Director of Engineering Services
P.O. Box 82409
Lincoln, NE 68501-2409 USA

SPECIFICATION INFORMATION

All information contained in this manual is the latest available at the time of printing. Textron Golf, Turf and Specialty Products reserves the right to make changes at any time without notice.

Whenever a name brand product is specified, an equivalent product may be used unless stated otherwise.

CHANGE OF OWNERSHIP OR ADDRESS

Textron Golf, Turf and Specialty Products makes every effort to keep owners informed of all safety related information. Therefore, changes in ownership and/or address should be reported to the manufacturer.

Your dealer has REGISTRATION CHANGE FORMS which will be filled out and filed by the dealer for his records, and a copy will be sent to the manufacturer.

DEALER INFORMATION

For your nearest dealer location write to:

Textron Golf, Turf and Specialty Products
Attn: Sales Coordinator
P.O. Box 82409
Lincoln, NE 68501-2409 USA

In the USA and Canada call 1-888-922-8873 (dealer information only).

OPERATOR'S MANUALS

Model 898320A use Part No. 840504
Model 898320B use Part No. 841615
Model 898320EE use Part No. 841615
Model 898323 use Part No. 841615
Model 898323EE use Part No. 841615

SERVICE MANUAL

Models 898320A, 898320B,
898323 Part No. 2703178

Additional manuals are available through your dealer.

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2 IDENTIFICATION

2 IDENTIFICATION

THE PRODUCT MODEL NUMBER, MODEL YEAR AND SERIAL NUMBER MUST APPEAR ON ALL CORRESPONDENCE CONCERNING THIS UNIT. These identification numbers appear on the decal attached to the left side of the kick panel. See Figure 1.

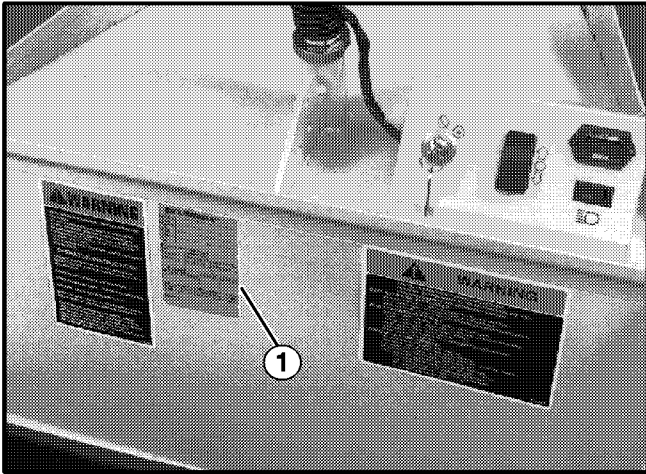


FIGURE 1

1. Model Number, Model Year and Serial Number

The model number is also stamped on top of the frame crossmember beneath the rear deck. The vehicle serial number and model number also appear on top of the rear crossmember under the deck. See Figure 2.

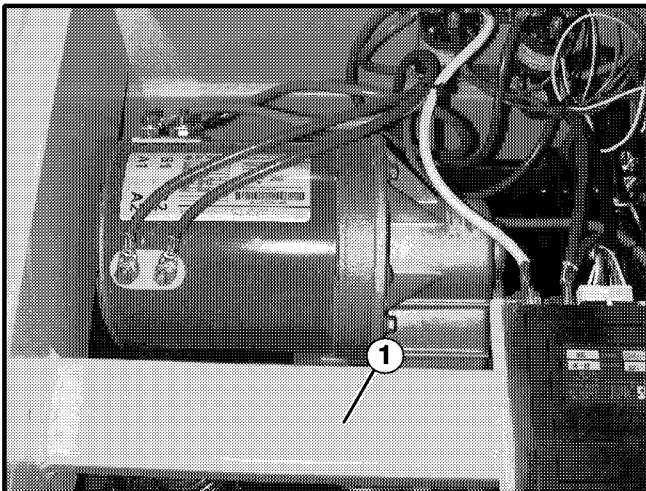


FIGURE 2

1. Serial and Model Numbers on Rear Crossmember

3 SPECIFICATIONS

Brakes

Service: Rear wheel, self-adjusting drum brakes

Parking: Toe lock on brake pedal

Power

Motor: 24-volt, DC series; direct drive

Horsepower: 1.5 hp at 2800 rpm; 4.3 hp at 1200 rpm

Differential: Bevel gear with spur and helical gear reduction

Electrical System

Batteries: four 6 volt, 225 amp hr. batteries

Charging: 115 volt AC, 24 volt DC, 25 amp built-in Lestronic II automatic charger

Speed Control

Programmable 250-amp electronic speed controller

LED Battery Condition Meter

Arcless Direction Control Switch

Optional

244 amp hr. batteries

Performance

Rated Capacity: 550 lbs. (249 kg); includes 200 lbs. (91 kg) for operator

Speed: 10.5 mph (16.9 km/h) maximum

Steering

Handlebar (wheel type steering optional)

Suspension

Front: Rubber mounted torque arm

Rear: Heavy-duty coil springs with shock absorber

Seats

1-passenger, vinyl-clad seat and backrest; backrest pivots downward to provide seating for 1 passenger; operator presence seat switch

Tires

Size: 4.80 x 8, load range B, optional solid or foam

filled

Pressure: 60 psi (345 kPa) cold

Dimensions

Height: 39" (991 mm) to top of handlebar

Length: 85" (2.2 M)

Width: 30" (762 mm)

Cargo Area: 22.75" x 28.5" x 4"
(578 mm x 724 mm x 102 mm)

Weight: 690 lbs. (313 kg) with batteries

Wheelbase: 53" (1.3 M)

Rear Wheel Tread: 25.8" (655 mm)

Handlebar Steering:

Clearance: 53" (1.3 M) minimum intersecting aisle

Inside Clearance Circle: Turnabout rear wheel

Outside Clearance Circle: 130" (3.3 M)

Wheel-type Steering (Optional):

Clearance: 56" (1.4 M) minimum intersecting aisle

Inside Clearance Circle: 46" (1.2 M)

Outside Clearance Circle: 154" (3.9 M)

Range

Up to 35 miles (56 km).

Note: Range can vary depending on a number of factors, including battery size and condition, payload, number of stops, tire pressure, speed, temperature, and operating terrain.

Special Tools

Controller Programmer Part No. 893052

Battery Hydrometer Part No. 841056

Capacitor Discharge Resistor Part No. 841148

Fluke 10 Meter Part No. 841057

4 SERVICE AND MAINTENANCE

4.1 MAINTENANCE GUIDE

Regular servicing and preventive maintenance will help ensure that your vehicle performs at its best.

The following maintenance guide lists recommended tasks, schedules and necessary lubricants/sprays.

EP = Extreme pressure lube

PG = Pressure gun grease (lithium base)

SAE = 80-90 multigrade

TP = Terminal protector spray (Part No. 841192)

As Required	Check differential lube level. Remove and clean wire terminals, battery terminals and batteries, reinstall wire terminals. (TP)
Daily	Check service/parking brake; adjust as necessary. Check operation of backup alarm when direction selector is in Reverse. Examine tires for cuts or excessive wear. Check wheels for bent rims, missing or loose lug nuts. Recharge batteries to full charge state.
Weekly	Check tire pressure. Fill batteries to proper level and check specific gravity.
Every 50 Hours	Perform previous checks. Check front fork for damage or missing hardware. Check front wheel alignment.
Every 500 Hours	Perform previous checks. Lube fork pivot bushing and brake pedal pivot. (PG) Lube and adjust service/parking brake. (PG)
Every 1000 Hours	Perform previous checks. Change differential lube. (EP) Clean and repack front wheel bearings. (PG) Check motor brushes.

4.2 LIFTING THE VEHICLE



WARNING

When raising the vehicle, use jack stands to provide adequate support and test the stability of the vehicle on the stands. DO NOT rely on hydraulic or mechanical jacks for support.

Place chocks in front of and behind the wheels not being raised.

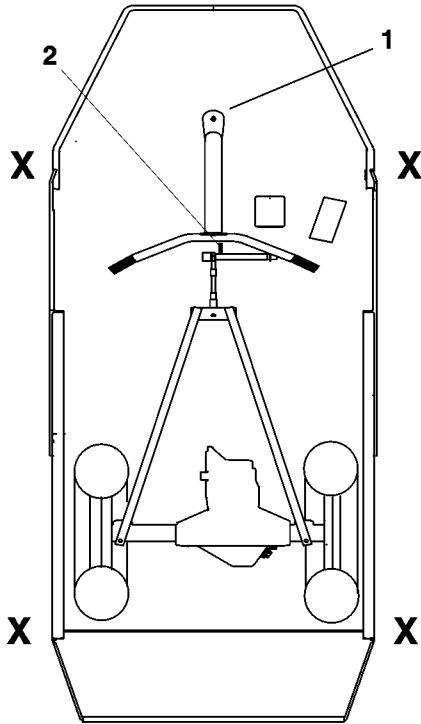
Do not attempt to raise the rear wheels without first raising the front of the vehicle and supporting on jack stands.

Due to the low ground clearance and short wheel base, the vehicle should be raised only enough to remove the front axle or the rear wheels.

Servicing that requires access to the underside of the vehicle should be accomplished by raising the front of the vehicle with a chain hoist attached to the front frame members. Always use an additional safety chain and jack stands to prevent injury in the event of a hoist malfunction.

4.3 LUBRICATION GUIDE

Use the following lubrication guide to identify lubrication points. Use a lithium-based lubricant.



X JACKING AND JACK STAND LOCATIONS

LUBRICATION AREA	NUMBER OF LUBRICATION POINTS OR FITTINGS*
1. Fork pivot bushing	1
2. Brake pedal pivot	1

* Use a lithium base pressure gun grease.

4.4 REAR ACCESS

The cargo area floor may be removed to provide access to the brakes, differential and drive motor.



WARNING

The cargo area floor is a machinery guard and its removal exposes the operator to moving parts. Keep hands, hair and clothing away from moving parts.

4.5 BRAKE ADJUSTMENT

Properly adjusted brakes should not drag when the wheels are turned. If a brake adjustment is needed, complete the following steps and refer to Figures 3 and 4.

1. Loosen the nut securing the front clevis.
2. Remove the cotter pin, washer and clevis pin.
3. Turn the clevis on the brake rod as required to achieve 1/4" (6.4 mm) pedal free travel. Free travel is movement of the pedal without activating the brake.
4. Reinstall the clevis pin and washer.
5. Install a new cotter pin and tighten the clevis nut.

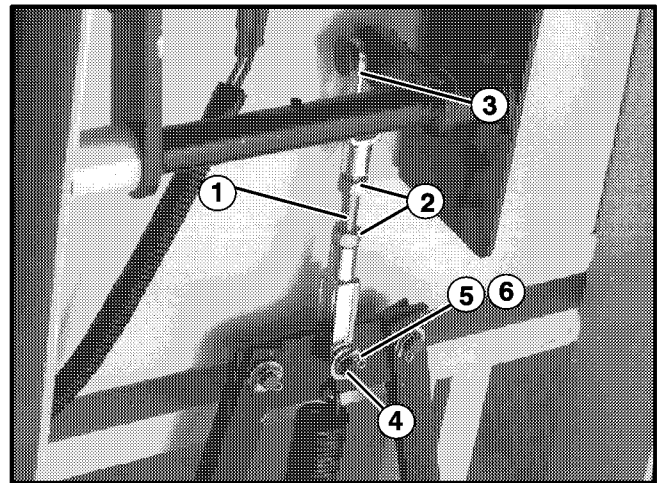


FIGURE 3

- | | |
|-----------------|---------------|
| 1. Brake Rod | 4. Clevis Pin |
| 2. Nut | 5. Washer |
| 3. Front Clevis | 6. Cotter Pin |

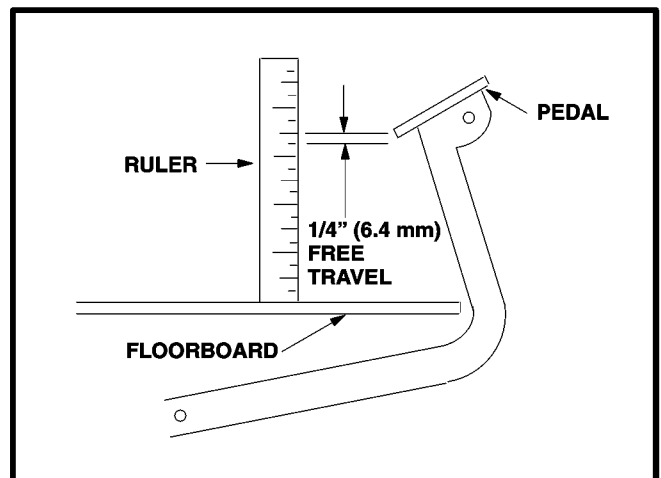


FIGURE 4

4 SERVICE AND MAINTENANCE

4.6 TIRES

Tire Condition and Pressure

Tire condition should be inspected on a daily basis and pressure should be checked weekly, when tires are cool.

For optimum performance, all three tires should have the same pressure. Tires should be inflated to a pressure between 25 psi (172 kPa) and 60 psi (413 kPa).



CAUTION

Use caution when inflating a low tire to recommended pressure. Check pressure with a low pressure tire gauge before connecting an air hose to a partly inflated tire.

Due to the low air volume requirements of a small tire, over inflation may be reached in a matter of a few seconds, which could cause the tire to explode.

Removing and Reinstalling Front Tire

To remove and reinstall the front tire, complete the following steps and refer to Figure 5.

1. Loosen the axle nuts and lower entire wheel, hub and axle assembly from front fork. Remove the four wheel retaining nuts.
2. Completely deflate the tire, then remove from wheel.
3. Reinstall tire and wheel by reversing the above sequence and tighten wheel retaining nuts. Torque to 70 to 80 ft./lbs. (95 to 108.5 N·m).
4. Position the large flat washer located on the ends of the axle above the front axle locks.
5. Torque axle nuts to 100 to 120 ft./lbs. (130 to 156 N·m).

NOTE: Install the wheel assembly with the valve stem on the same side as the wheel retaining nuts.

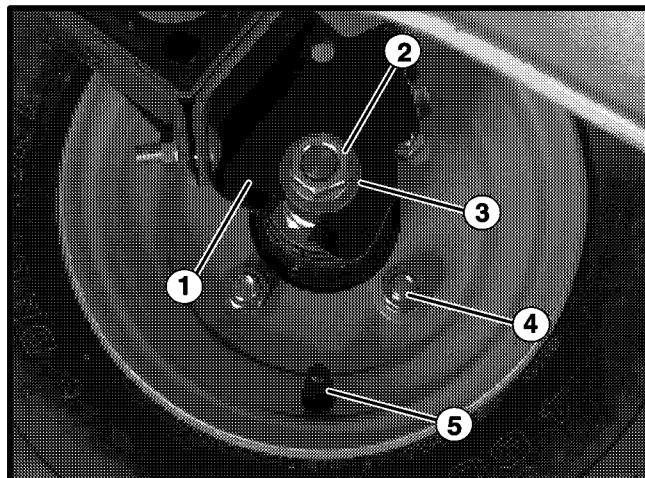


FIGURE 5

1. Front Axle Lock
2. Axle Nut
3. Retaining Washer
4. Wheel Retaining Nut
5. Valve Stem



WARNING

To prevent possible injury, always deflate the tire completely before removing from the wheel.

When reinstalling the front wheel assembly, always place the axle and retaining washer over the axle locks (as shown) and tighten the axle nuts. Torque axle nuts to 100 to 120 ft./lbs. (130 to 156 N·m). Failure to follow the procedure may allow the axle to drop, resulting in loss of vehicle control.

Removing and Reinstalling Rear Tire

1. Remove the wheel retaining nuts and remove the wheel assembly from the hub.
2. Completely deflate the tire, then remove from wheel.
3. Reinstall the tire and wheel by reversing above sequence and tighten wheel retaining nuts. Torque to 70 to 80 ft./lbs. (95 to 108.5 N·m).
4. Make sure the valve stem is located toward the outside.



WARNING

To prevent possible injury, always deflate the tire completely before removing from the wheel.

NOTE: Improper inflation will shorten tire life.

Air pressure needed is determined by payload carried.

Use replacement tires that meet or exceed original equipment specifications.

4.7 DIFFERENTIAL

The differential capacity is 10 oz. (.3 L) of E.P. SAE 80-90 multigrade lubricant. The lubricant should be maintained as indicated by the oil level check/fill plug, shown in Figure 6.



FIGURE 6

1. Check/Fill Plug

NOTE: Do not fill the differential with more lubricant than required.

4.8—FRONT & REAR WHEEL BEARINGS

The front wheel bearings are of the tapered roller type. The rear wheel bearings are sealed ball bearings. See your authorized Cushman dealer for any bearing service required.

4.9 BRUSH REPLACEMENT

At regular maintenance intervals, the motor brushes should be checked for wear or damage. See your authorized Cushman dealer for any service required.

4.10————MOTOR TERMINALS

Motor wire to motor terminal connections should be clean and tight for maximum motor efficiency and to avoid motor damage. The wire terminal retaining nuts should be torqued to 50 to 70 in./lbs. (5.5 to 8 N·m). Do not turn the motor terminals from their original position.

NOTE: On EE units, be sure to replace terminal boots.

4.11————LIGHT BULB REPLACEMENT

For vehicles with a headlight, replace the headlight bulb by pivoting the light forward and removing the two Phillips head screws from the back side. Separate the light assembly, insert the new bulb, and secure with the screws previously removed.

To replace a taillight bulb, roll the rubber bezel from around the edge of the taillight and remove the lens. Replace bulb and secure lens.

NOTE: On EE units, be sure to replace head light and rear light guards.

4.12 BATTERY SPECIFICATIONS, SERVICE AND CHARGING

Specifications

This vehicle requires four "golf cart type" 6 volt batteries, each with a minimum capacity of 180 A.H. (ampere-hours at the SAE 20-hour rate) and 5/16" (8 mm) stud posts.

The maximum case dimensions are:

Length 10 3/8" (264 mm)
Width 7 3/16" (183 mm)
Height (including posts) 11 5/8" (295 mm)

Batteries should be connected as shown in Figure 7.

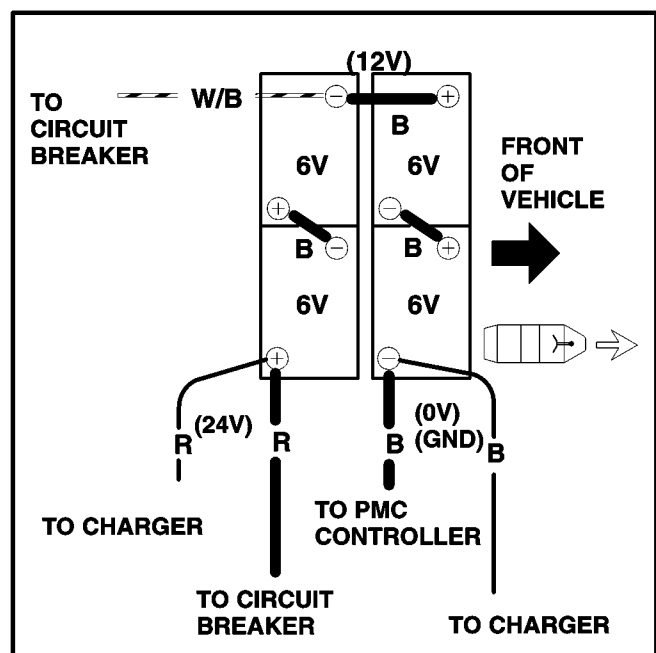


FIGURE 7

4 SERVICE AND MAINTENANCE

Service and Charging

Preventive maintenance and regular charging will help maximize battery performance and life. Preventive maintenance includes:

- keeping terminations tight
- checking electrolyte level and adding water as necessary
- cleaning the batteries and terminations
- treating terminals with terminal protection spray (Part No. 841192)

Batteries should also be properly charged after each day of vehicle use. The standard vehicle is equipped with a built-in 24 volt, 25 amp DC, 120 volt AC, 60 Hz, fully automatic charger located under the operator's seat. The charger is designed to shut off automatically when the battery set is fully charged.

Be certain to observe the following safety precautions when working with vehicle batteries:



WARNING

Wear safety glasses when working with batteries. Battery electrolyte is an acidic solution and should be handled with care. If electrolyte is spilled or splashed on any part of the body, immediately flush the exposed area with liberal amounts of water and obtain medical attention immediately.

Keep all smoking materials, open flame or sparks away from the batteries.



WARNING

Hydrogen gas, which can be explosive, is formed when charging batteries. Do not charge batteries without adequate ventilation.

Do not attempt to recharge the batteries with a charger not designed for this vehicle.

Undertrained/unauthorized persons should NEVER attempt to service or recharge the batteries of this vehicle.

To avoid possible injury, use an adequate lifting device to lift the batteries.

NEVER use metal chains to lift batteries, as they can cause electrical arcing which may result in battery explosion.

Before charging batteries, ensure the following:

- Electrolyte levels in all cells are at the recommended level and the plates are covered.
- The area in which the batteries will be charged is well ventilated and capable of removing the hydrogen gas that is generated by the charging process.
- The charging connector components are clean and in good condition.
- The charger is turned off before connecting or disconnecting.

4.13 STORAGE

If the vehicle is to be stored for a prolonged period, clean and reconnect the batteries, connecting wires and battery racks. Make sure the batteries are fully charged.

Check the state of charge of the batteries every 30 days and recharge as necessary to maintain the specific gravity above 1.230 (corrected for electrolyte temperature*).

*Hydrometer readings should be increased .004 for every 10 degrees F. (5.5°C) above 80 degrees F. (27°C) and decreased .004 for every 10 degrees F. (5.5°C) below 80 degrees F. (27°C).



WARNING

Wear safety glasses when working with batteries. Battery electrolyte is an acidic solution and should be handled with care. If electrolyte is spilled or splashed on any part of the body, immediately flush the exposed area with liberal amounts of water and obtain medical attention immediately.

4.14 CLEANING

To maintain vehicle appearance, adhere to the following guidelines for cleaning:

- Clean vinyl seat and plastic or rubber trim with a mild soap solution applied with a sponge or soft brush and wipe with a damp cloth.
- Remove oil, tar, asphalt, etc. with commercial rubber/vinyl cleaner.
- Wash painted surfaces with lukewarm or cold water and mild soap. Do not use harsh soap or chemical detergents.
- Occasionally flush the underbody with plain water to remove corrosive materials and dust. If sediment is packed in closed areas, loosen to ease removal.

NOTE: Make sure vehicle is dry before operating.

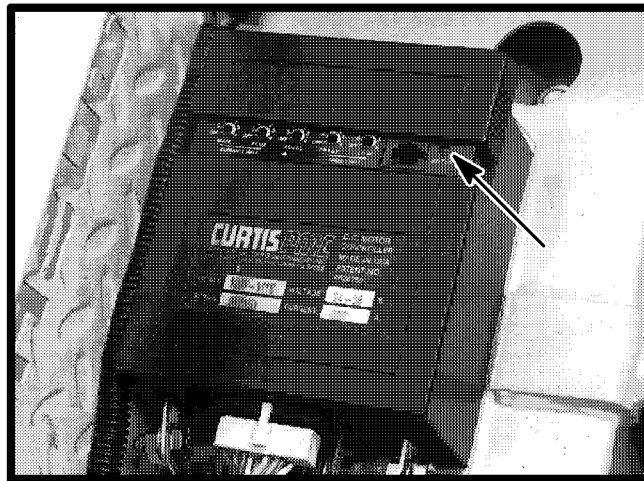
4.15 TOUCH-UP PAINT

Safety Yellow (lead free)

- 16 oz. (0.5L) spray can Part No. 833252
- 1 qt. (0.95L) can Part No. 833251

PROGRAMMABLE SPEED CONTROLLER

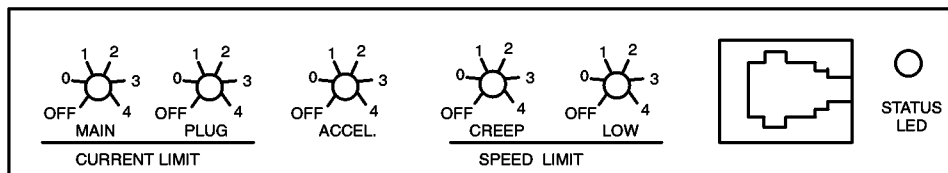
The vehicle is equipped with an electronic speed controller that does not require servicing.



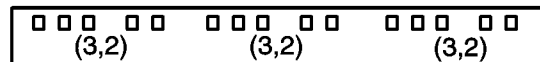
Controller LED Status Indicator

DIAGNOSTICS AND TROUBLESHOOTING

LED DIAGNOSTICS



During normal operation, with no faults present, the Status LED flashes a single flash at approximately 1 flash/second. If the controller detects a fault, a 2-digit code (see Table) is flashed continuously until the fault is corrected. For example, code “3,2” –welded direction contactor – appears as:

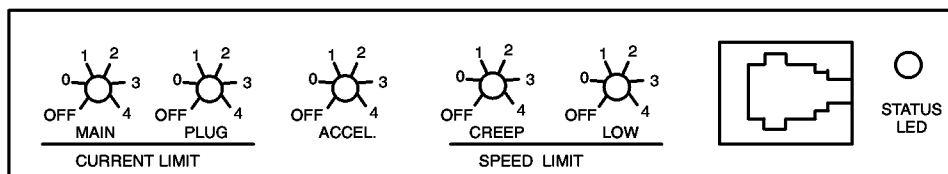


5 PROGRAMMABLE SPEED CONTROLLER

TROUBLESHOOTING CHART			
LED CODE	PROGRAMMER LCD DISPLAY	EXPLANATION	POSSIBLE CAUSE
1,2	HW FAILSAFE	hardware fail-safe error	1. Controller defective.
1,3	M-FAULT	M-output shorted	1. M-output shorted to ground. 2. Direction contactor not closing. 3. Direction contactor not closing fast enough. 4. Internal motor short to ground.
1,4	SRO	SRO fault	1. Improper sequence of KSI, brake and direction inputs. 2. Wrong SRO type selected. 3. Brake or direction switch circuit open. 4. Sequencing delay too short.
2,1	THROTTLE FAULT 1	5k Ω -0 or wiper fault	1. Throttle input wire open. 2. Throttle input wire shorted to ground or B+. 3. Throttle pot defective. 4. Wrong throttle type selected.
2,2	BB WIRING CHECK	emer. reverse wiring fault	1. BB wire open. 2. BB check wire open.
2,3	HPD	HPD sequencing fault	1. Improper seq. of KSI, brake, throttle inputs. 2. Wrong HPD type selected. 3. Misadjusted throttle pot.
2,4	THROTTLE FAULT 2	Pot Low broken or shorted	1. Pot Low wire open. 2. Pot Low wire shorted. 3. Wrong throttle type selected.
3,1	CONT DRVR OC	driver output overcurrent	1. Direction contactor coil shorted. 2. Shunt field shorted.
3,2	DIR CONT WELDED	welded direction contactor	1. Direction contactor stuck closed.
3,4	MISSING CONTACTOR	missing contactor or shunt	1. Direction contactor coil open. 2. Direction contactor missing. 3. Shunt field open. 4. Wire to shunt or direction contactor open.
4,1	LOW BATTERY VOLTAGE	low battery voltage	1. Battery voltage <16 volts. 2. Corroded battery terminal. 3. Loose battery or controller terminal.
4,2	OVERVOLTAGE	overvoltage	1. Battery voltage >45 volts. 2. Vehicle operating with charger attached.
4,3	THERMAL CUTBACK	over/under-temp. cutback	1. Temperature >85°C or <-25 °C. 2. Excessive load on vehicle. 3. Improper mounting of controller. 4. Operation in extreme environments.

MANUAL ADJUSTMENTS

Five parameters – high speed main current limit, high speed plug current limit, acceleration rate, creep speed and low speed – can be adjusted manually with a small insulated screwdriver. The five potentiometers are accessed through holes on the adjustment panel, located under the sliding protective cover on top of the controller.



The pot's relative position indicates the approximate value over the allowable range. For example: if the main current limit range is 20 to 250 amperes, position "0" corresponds to 20 amperes and position "4" to 250 amperes. Setting the pot halfway (at position "2") corresponds to approximately 135 amperes.

The main and plug current limit pots affect only the high speed mode of operation.

The low speed settings of main and plug current limit can only be changed by the programmer. If the high speed input is not connected, or if anti-tiedown is activated, the current limit pots will have no effect on operation as the controller is operating in low speed mode. NOTE: It may be possible to manually adjust the high speed current limit pots below the programmed low speed current limit settings. Should this occur, low speed would have higher current limits than high speed.

5 PROGRAMMABLE SPEED CONTROLLER

CUSHMAN FACTORY SET CONTROLLER PARAMETERS

PARAMETER	RANGE	DEFAULT	DESIRED	UNITS	DESCRIPTION
Current Limit, Main	20 – 250	250	250	Amps	Maximum current forward speed
Current Limit, Low Speed Main	20 – 250	250	250	Amps	Maximum current reverse speed
Current Limit, Plug	20 – 250	70	70	Amps	Max. plug current forward speed
Current Limit, Low Speed Plug	20 – 250	70	70	Amps	Max. plug current reverse speed
Current Limit, Emergency Reverse	20 – 250	140	250	Amps	Max. plug current in emergency reverse
Current Limit, Low Speed Emergency Reverse	20 – 250	140	250	Amps	Max. plug current in low speed emergency reverse
Current Limit, Ramp Start	20 – 250	140	250	Amps	Max. plug current during ramp start
Current Limit, Low Speed Ramp Start	20 – 250	140	250	Amps	Max. plug current during ramp start in low speed
Acceleration Rate	0 – 3	1	0.8	Sec.	Time to reach full output from zero output
Quick Start	0 – 6	1.4	0.2		Output will respond to rate of throttle change
Throttle Type	type 1, 2, 3	type 1	type 2	Ω or V	Type of throttle input type 2 = 0–5V, 3–wire pot
Ramp Shape	20 – 70	50	50	%	Adjust desired PWM output at 50% throttle to vary throttle sensitivity at low speed
Creep Speed/Min. Duty Cycle	0 – 25	10	0	%	Speed at min. throttle setting
Low Speed	40 – 100	60	55	%	Max. speed in reverse
High Speed	40 – 100	100	100	%	Max. speed in forward
Emergency Reverse Speed	25 – 100	100	100	%	Speed during emergency reverse
Sequencing Delay	0 – 3	0	0	Sec.	Delays HPD and SRO from brake after controller is enabled
Variable Plug	On/Off	On	On		On = plug current dependent upon throttle position. Off = fixed
High Pedal Disable (HPD)	0–2	0	1		Option to disable controller if throttle is applied before brake or keyswitch input (KSI)
Static Return To Off (SRO)	type 0, 1, 2	type 1 brake	type 0 No SRO		Sequencing of KSI or brake before direction is selected
Anti-tiedown	On/Off	On	Off		Prevents high speed mode if HSS in not released after brake



Factory Settings

**TORQUE SPECIFICATIONS
HEX HEAD CAP SCREWS**

The torque values shown should be used as a general guideline when specific torque values are not given.

U.S. Standard Hardware

Grade	Shank Size (Diameter in inches, fine or coarse thread)													
		1/4	5/16	3/8	7/16	1/2	9/16	5/8	3/4	7/8	1	1 1/8		
SAE grade 5 *	ft.-lb.	9	18	31	50	75	110	150	250	378	583	782		
	N-m	12	24	42	68	102	150	203	339	513	790	1060		
SAE grade 8 **	ft.-lb.	13	28	46	75	115	165	225	370	591	893	1410		
	N-m	18	38	62	108	156	224	305	502	801	1211	1912		
Flangelock Screw w/ Flangelock Nut	ft.-lb.		24	40										
	N-m		33	54										


* Grade 5 marking –  Minimum commercial quality (Lower quality not recommended).


** Grade 8 marking – 

Metric Standard Hardware

Grade	Shank Size (Diameter in millimeters, fine or coarse thread)														
		M4	M5	M6	M7	M8	M10	M12	M14	M16	M18	M20	M22	M24	M27
Grade 8.8*	N-m	2	4	7	11	18	32	58	94	144	190	260	368	470	707
	ft.-lb.	1.5	3	5.2	8.2	13.5	24	43.5	70.5	108	142	195	276	353	530
Grade 10.9**	N-m	3	6	10	16	25	47	83	133	196	269	366	520	664	996
	ft.-lb.	2.2	4.5	7.5	12	18.8	35.2	62.2	100	147	202	275	390	498	747
Grade 12.9 ***	N-m	3.6	7	11	20	29	58	100	159	235	323	440	628	794	1205
	ft.-lb.	2.7	5.2	8.2	15	21.8	43.5	75	119	176	242	330	471	596	904

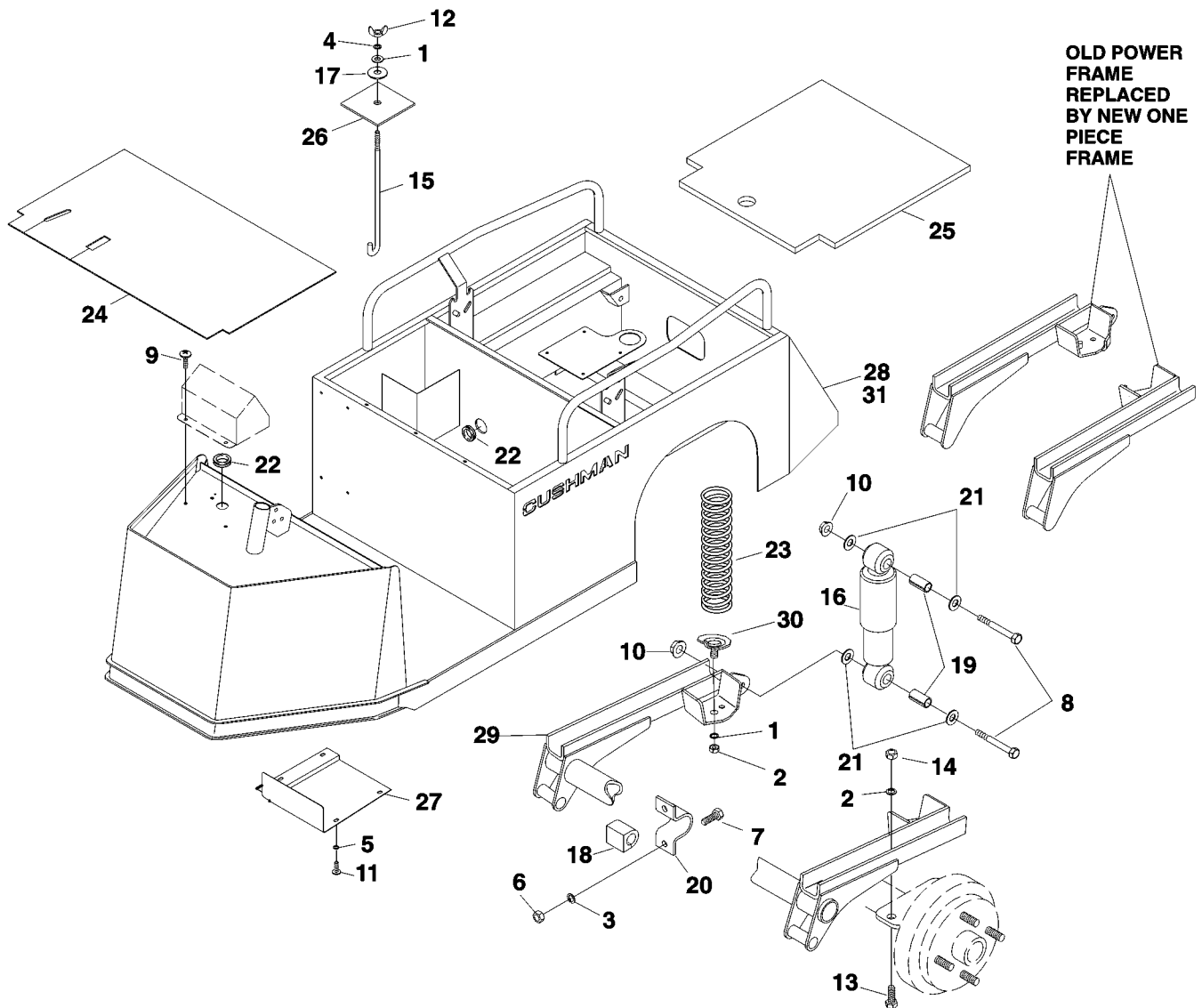
* Grade 8.8 marking – 

** Grade 10.9 marking – 

*** Grade 12.9 marking – 

6.1 BODY & REAR SUSPENSION

MODELS 898320A, 898320B, 898320EE



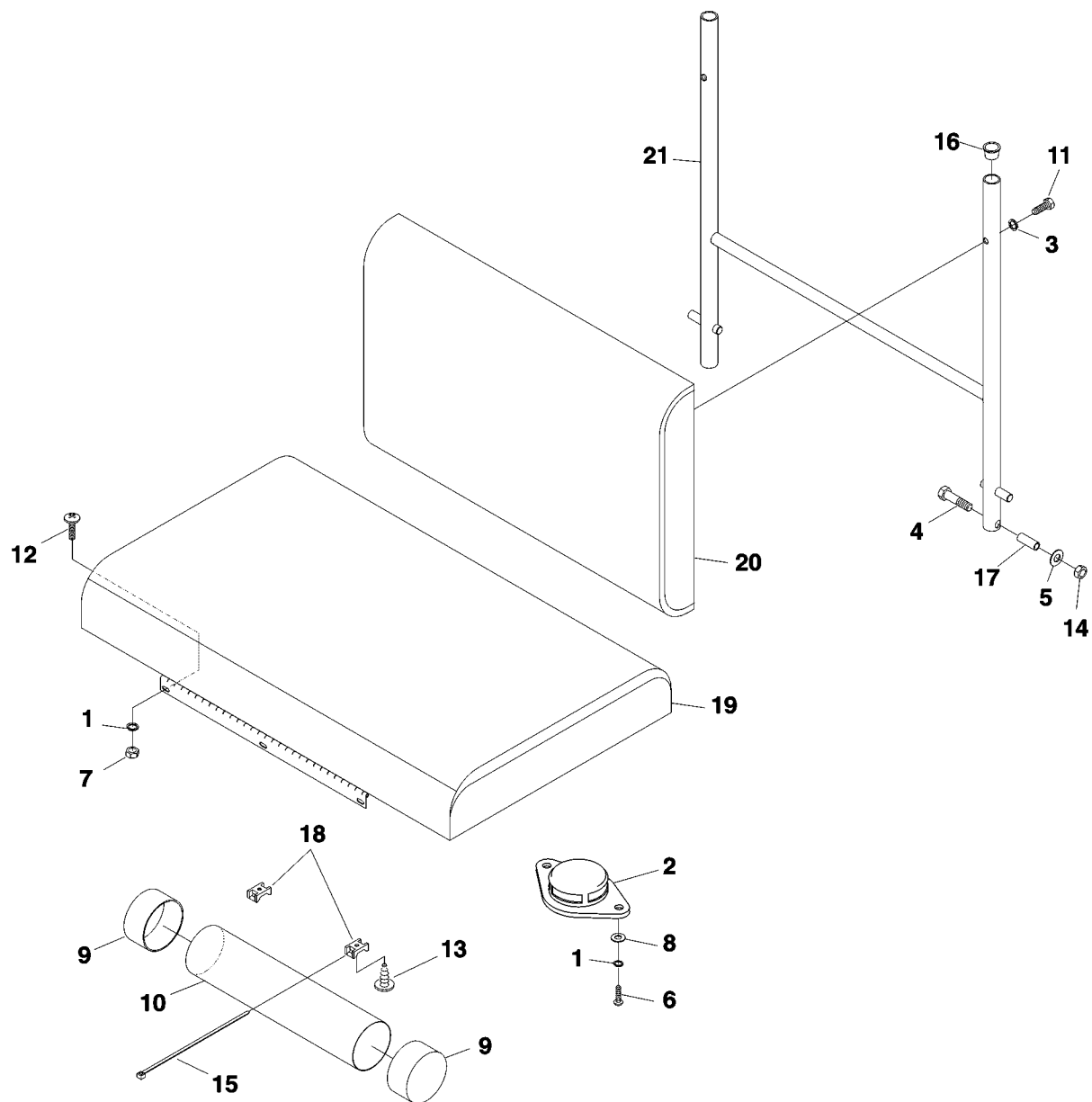
BODY & REAR SUSPENSION 6.1

MODLES 898320A, 898320B, 898320EE

Ref. No.	Part No.	Description	No. Req'd	Notes
1	103867	Washer, 5/16	3	When replacing the power frame, new springs and retainers are needed.
2	120166	Lockwasher, 1/2	6	
3	120177	Lockwasher, 3/8	4	
4	306325	Lockwasher, 5/16	1	
5	306396	Lockwasher, 1/4	4	
6	306562	Nut, 3/8-16	4	
7	306835	Screw, 3/8-16 x 1 1/4	4	
8	311392	Screw, 7/16-14 x 2	2	
9	548013	Screw, 1/4-20 x 1/2 PTH	2	
10	548912	Nut, lock 7/16-14	2	
11	800026	Screw, 1/4-20 x 3/4 PTH	4	
12	800315	Nut, wing 5/16-18	1	
13	800546	Screw, M12-1.25 x 35mm	4	
14	800875	Nut, M12-1.25	4	
15	806954	Bolt, battery hold down	1	
16	807332	Shock Absorber	1	
17	818303	Washer, rebound bumper	1	
18	816667	Block, stabilizer	2	
19	823621	Bushing	2	
20	825366	Retainer	2	
21	825500	Washer, cupped	4	
22	828247	Grommet	2	
23	805437	Spring	2	
24	840528	Mat, floor	1	
25	840684	Deck, cargo area	1	
26	840695	Plate, battery hold down	1	
27	840770	Guard, pedal	1	
28	892787	Body, w/decals	1	
29	897151	Frame, power	1	
30	876660	Retainer	2	
31	893188	Body, galvanized w/decals	1	
32	308332	Nut, 1/2-13	2	

6.2 SEAT

MODELS 898320A, 898320B, 898320EE

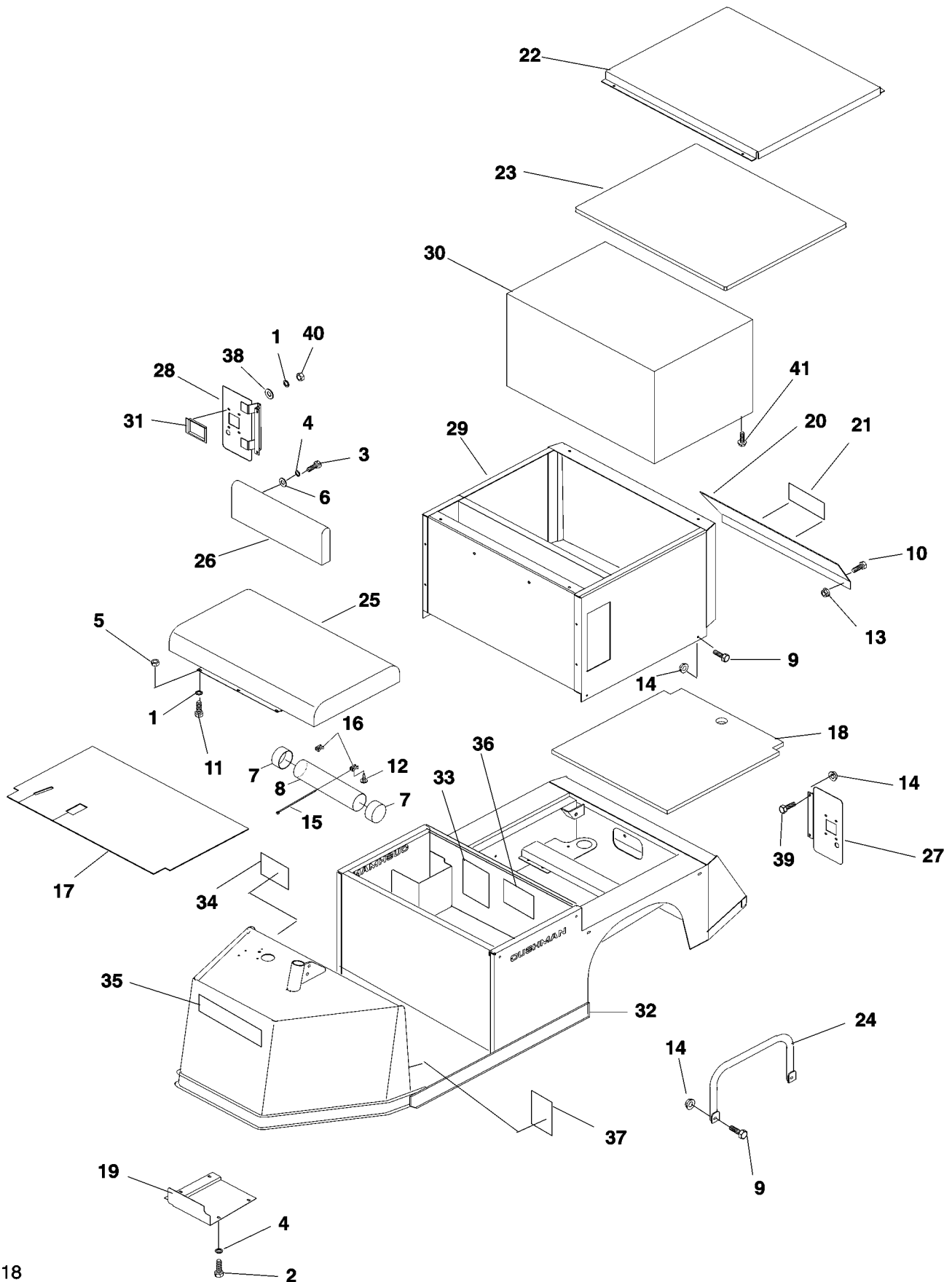


MODELS 898320A, 898320B, 898320EE

Ref. No.	Part No.	Description	No. Req'd	Notes
1	120052	Lockwasher, #10	5	
2	158135-01	Switch, seat	1	
3	306396	Lockwasher, 1/4	3	
4	306423	Screw, 5/16-18 x 1 3/4	2	
5	306453	Washer, 5/16	2	
6	306527	Screw, #10-24 x 3/4 PTH	2	
7	306531	Nut, #10-24	3	
8	308089	Washer, #10	2	
9	38061A	Cap, vinyl	2	
10	38541	Tube, document	1	
11	600014	Screw, 1/4-20 x 1 3/4	4	
12	800271	Screw, #10-24 x 1/2 PTH	3	
13	800344	Screw, #10-16 x 9/16 tapping	2	
14	800697	Nut, flangelock 5/16-18	2	
15	823549	Tie, wire 15.5" (40mm)	2	
16	826747	Plug, hole	2	
17	840499	Bushing	2	
18	840508	Mount, cable tie	2	
19	883938	Seat	1	
20	884683	Backrest	1	
21	892823	Frame, backrest	1	

6.3 TOOL BOX

MODELS 898323, 898323EE

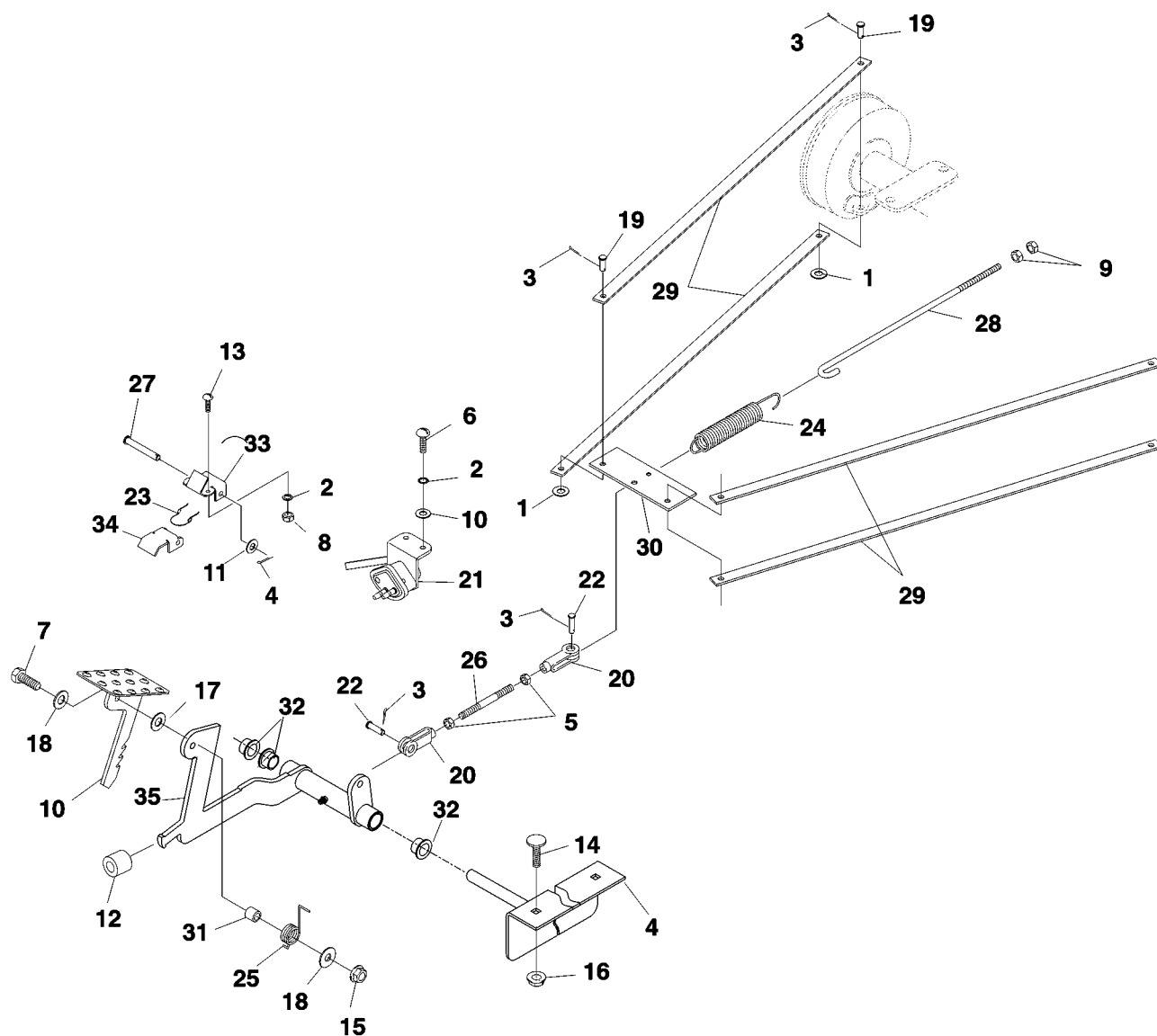


MODELS 898323, 898323EE

Ref. No.	Part No.	Description	No. Req'd	Notes
1	120052	Lockwasher, #10	15	
2	300646	Screw, 1/4-20 x 3/4	4	
3	302288	Screw, 1/4-20 x 1	2	
4	306396	Lockwasher, 1/4	6	
5	306531	Nut, #10-24	7	
6	308090	Washer, 1/4	6	
7	38061A	Cap, vinyl	2	
8	38541	Tube, document	1	
9	800026	Screw, 1/4-20 x 3/4	12	
10	800177	Screw, 5/16-18 x 3/4	2	
11	800271	Screw, #10-24 x 1/2	3	
12	800344	Screw, #10 x 9/16, tapping	2	
13	800697	Nut, 5/16, crownlock	2	
14	800706	Nut, 1/4-20, crownlock	16	
15	823549	Tie, cable	2	
16	840508	Mount, cable tie	2	
17	840528	Mat, floor	1	
18	840684	Deck, cargo	1	
19	840770	Guard, accelerator pedal	1	
20	894320	Panel w/decal	1	
21	840696	•Decal, warning	1	
22	842261	Cover, top	1	
23	842265	Board	2	
24	842271	Handle, hip restraint	2	
25	883938	Seat	1	
26	884302	Backrest	1	
27	893695	Door, LEFT	1	
28	893696	Door, RIGHT	1	
29	893697	Box ass'y, tool	1	
30	893698	Box, tool	1	
31	893701	Latch/lock, door	2	
32	894319	Body w/decals	1	
33	819936	•Decal, battery charging	1	
34	825387	•Decal, operation	1	
35	831443	•Nameplate-Cushman	1	
36	840691	•Decal, Battery wiring	1	
37	840871	•Decal, charger operation	1	
38	308089	Washer, #10	12	
39	800291	Screw, #10 x 1	4	
40	132520	Nut, #10	8	
41	819195	Screw, #8-18 x 1/2, tapping	2	

•INDENTED PART NAMES INDICATE THESE PARTS ARE INCLUDED IN PRECEDING ASSEMBLY.

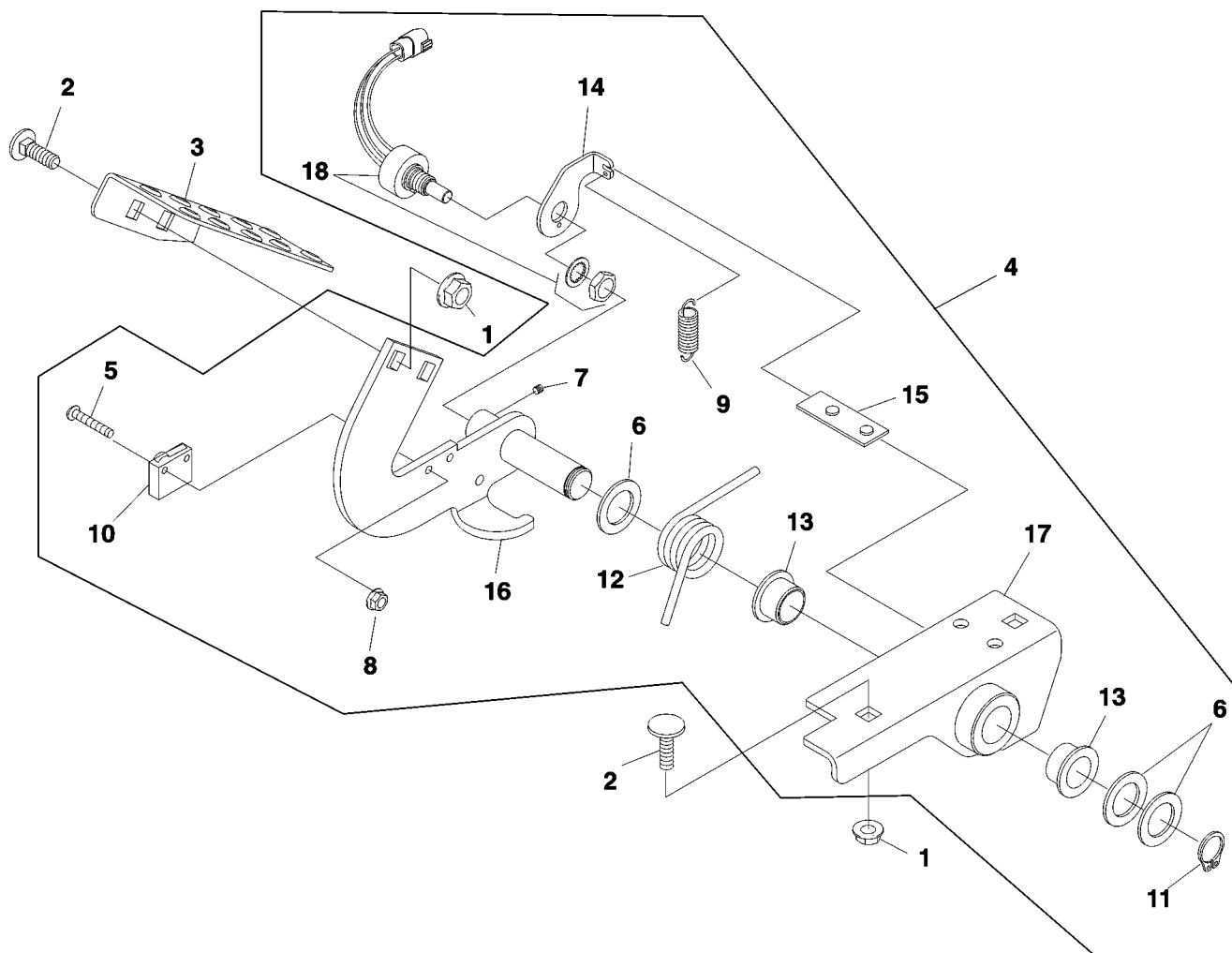
6.4 BRAKE PEDAL & LINKAGE



BRAKE PEDAL & LINKAGE 6.4

Ref. No.	Part No.	Description	No. Req'd	Notes
1	103867	Washer, 11/32	4	
2	120052	Lockwasher, #10	4	
3	306328	Pin, cotter 3/32 x 3/4	7	
4	2703903.7	Pivot, brake	1	
5	306320	Nut, 5/16-24	2	
6	306391	Screw, #10-32 x 5/16	2	
7	306435	Screw, 5/16-18 x 1 1/4	1	
8	306531	Nut, #10-24	2	
9	306932	Nut, 5/16-18	2	
10	892802	Latch, brake	1	
11	308090	Washer, 1/4	1	
12	517163	Spacer	1	
13	800271	Screw, #10-24 x 1/2	2	
14	800557	Bolt, carriage 5/16-18 x 3/4	2	
15	800290	Nut, lock 5/16-18	1	
16	800697	Nut, flangelock 5/16-18	2	
17	800873	Washer, nylon 3/8	1	
18	800874	Washer, 11/32	2	
19	806714	Pin, clevis 5/16 x 15/16	4	
20	810722	Yoke	2	
21	814005	Switch	1	
22	806703	Pin, clevis	2	
23	817507	Spring	1	
24	822313	Spring, extension	1	
25	829860	Spring	1	
26	830661	Rod, threaded	1	
27	830784	Pin, pivot	1	
28	831861	Bolt, adjusting	1	
29	840326	Strape, brake	4	
30	840335	Crossmember, brake	1	
31	840491	Bushing	1	
32	840494	Bearing, flanged	3	
33	840666	Latch, brake lock	1	
34	840667	Latch, park brake	1	
35	2703900.7	Arm, brake	1	

6.5 SPEED CONTROL PEDAL (A & EARLIER B MODELS)

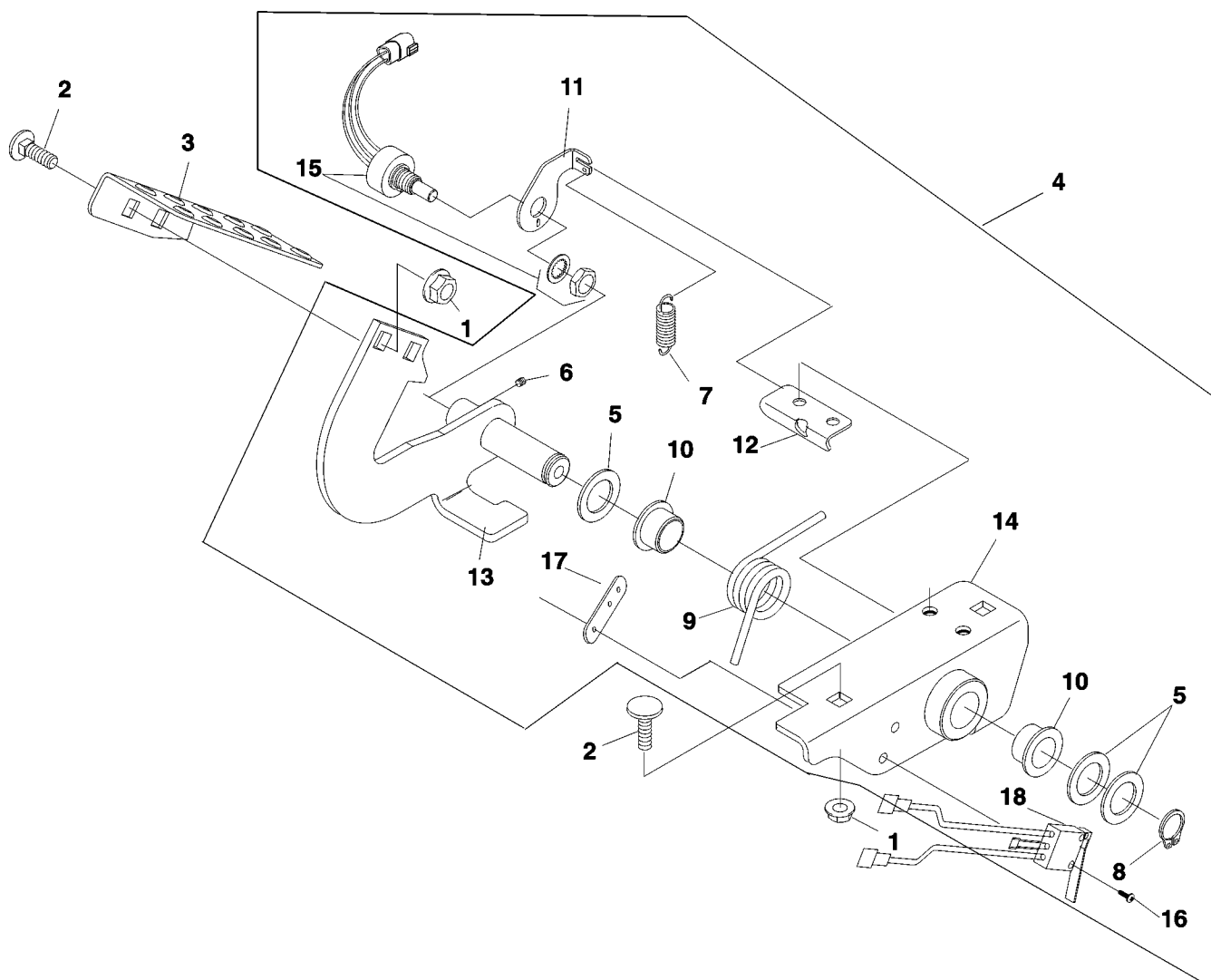


SPEED CONTROL PEDAL (A & EARLIER B MODELS) 6.5

Ref. No.	Part No.	Description	No. Req'd	Notes
1	548911	Nut, flangelock, 5/16–18	4	
2	800557	Bolt, carriage, 5/16–18 x 3/4	4	
3	840419	Pedal, speed control	1	
4	893391	Speed control assembly	1	
5	888503	•Screw, #6–32 x 3/4	2	
6	548478	•Spacer	3	
7	800225	•Screw, set, #10–24 x 1/4	1	
8	800587	•Nut, #4–40 w/ext. lockwasher	2	
9	805421	•Spring, index	1	
10	829754	•Switch snap action	1	
11	833104	•Ring, retaining	1	
12	840435	•Spring, torsion	1	
13	840494	•Bearing, flanged	2	
14	840687	•Bracket, pot mount	1	
15	840688	•Tab	1	
16	892799	•Arm, speed control	1	
17	892801	•Bracket, speed control mount	1	
18	892894	•Potentiometer, 30°	1	

• INDENTED PART NAMES INDICATE THESE PARTS ARE INCLUDED IN PRECEDING ASSEMBLY

6.6 SPEED CONTROL PEDAL (LATER B & 898323 MODELS)

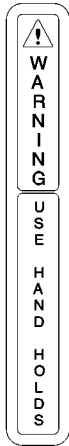


SPEED CONTROL PEDAL (LATER B & 898323 MODELS) 6.6

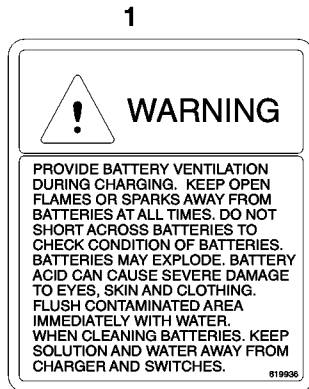
Ref. No.	Part No.	Description	No. Req'd	Notes
1	548911	Nut, flangelock, 5/16–18	4	Not used on these units.
2	800557	Bolt, carriage, 5/16–18 x 3/4	4	
3	840419	Pedal, speed control	1	
4	894440	Speed control assembly	1	
5	548478	•Spacer	3	
6	800225	•Screw, set, #10–24 x 1/4	1	
7	805421	•Spring, index	1	
8	833104	•Ring, retaining	1	
9	840435	•Spring, torsion	1	
10	840494	•Bearing, flanged	2	
11	869184	•Bracket, pot mount	1	
12	840688	•Tab	1	
13	897182	•Arm, speed control	1	
14	897183	•Bracket, speed control mount	1	
15	894461	•Potentiometer, 30°	1	
16	800897	•Screw, #4–40	2	
17	841151	•Nut, #4 tapping twin	1	
18	894439	•Switch, NC	1	

• INDENTED PART NAMES INDICATE THESE PARTS ARE INCLUDED IN PRECEDING ASSEMBLY

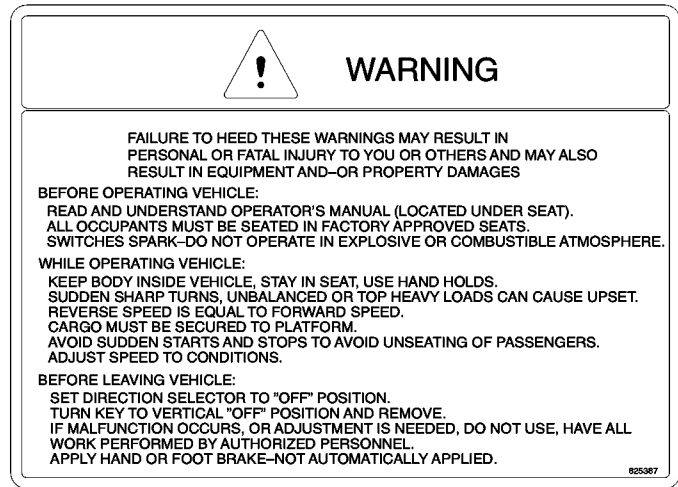
6.7 DECALS



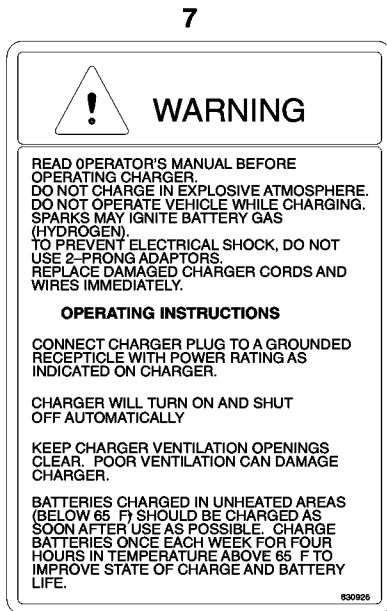
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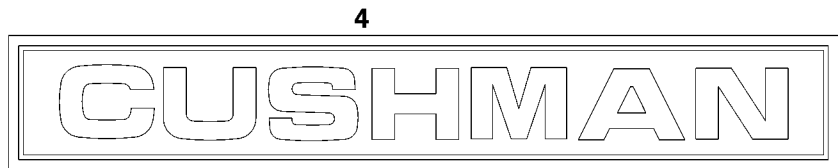
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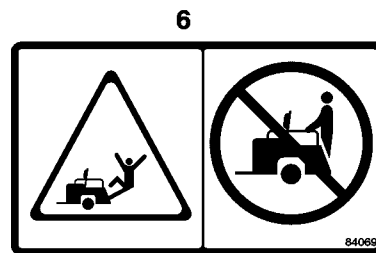
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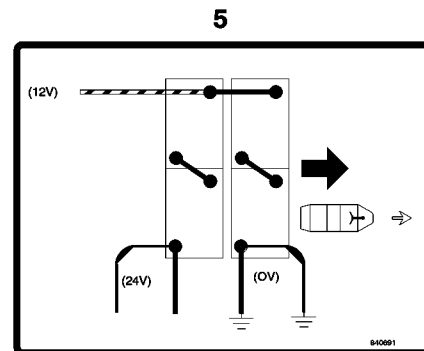
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6



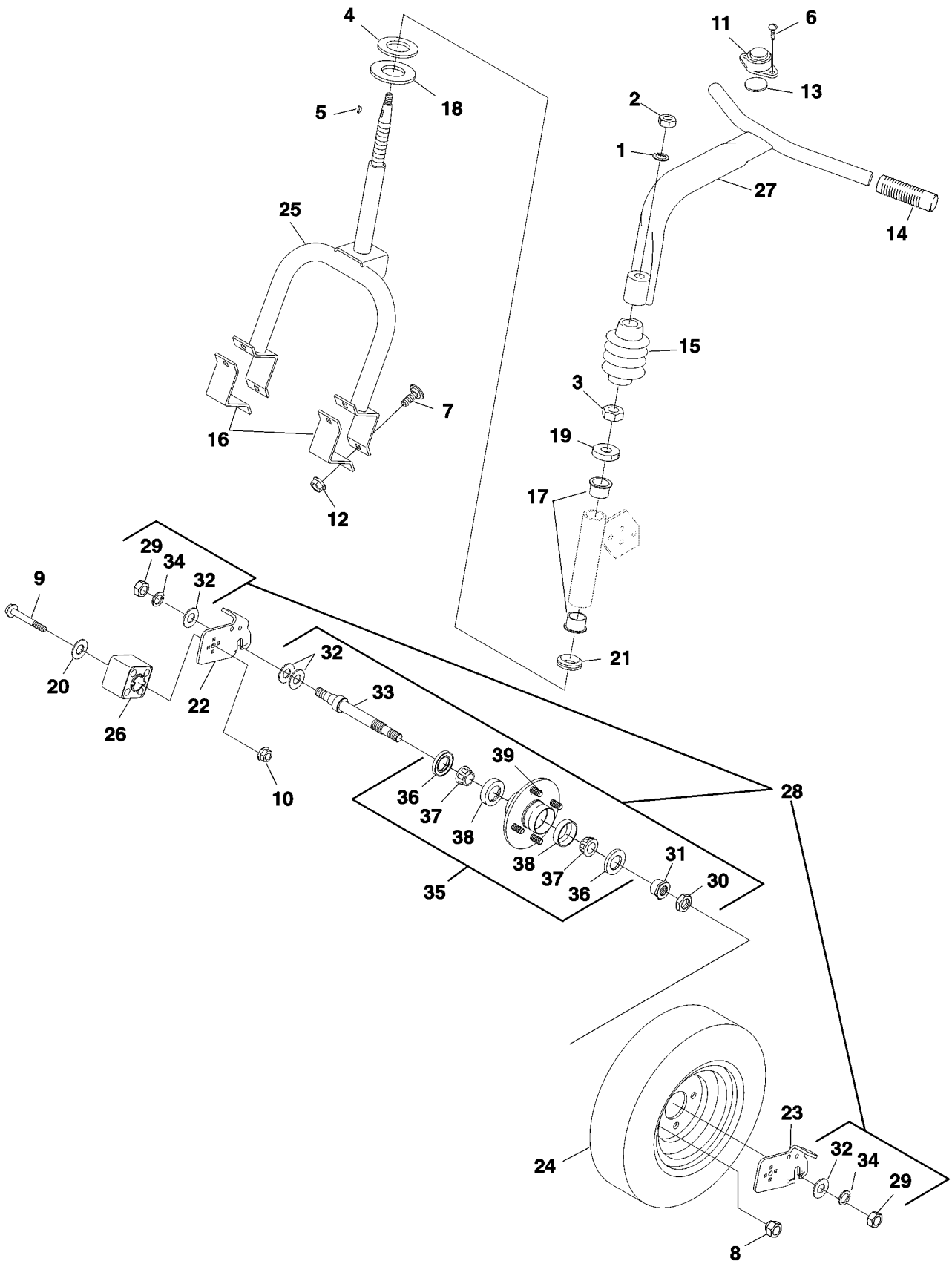
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5

Ref. No.	Part No.	Description	No. Req'd	Notes
1	819936	WARNING – battery vent	1	
2	825328	WARNING – use hand holds	2	
3	825387	WARNING – vehicle op.	1	
4	831443	Plate, CUSHMAN	1	
5	840691	Battery wiring	1	
6	840696	WARNING – no standing	1	
7	840871	WARNING – charger op.	1	
8	841860	Plate, TEXTRON 4"	1	
9	844847	Decal, TEXTRON	1	

6.8 FORK, HUB & HANDLEBARS

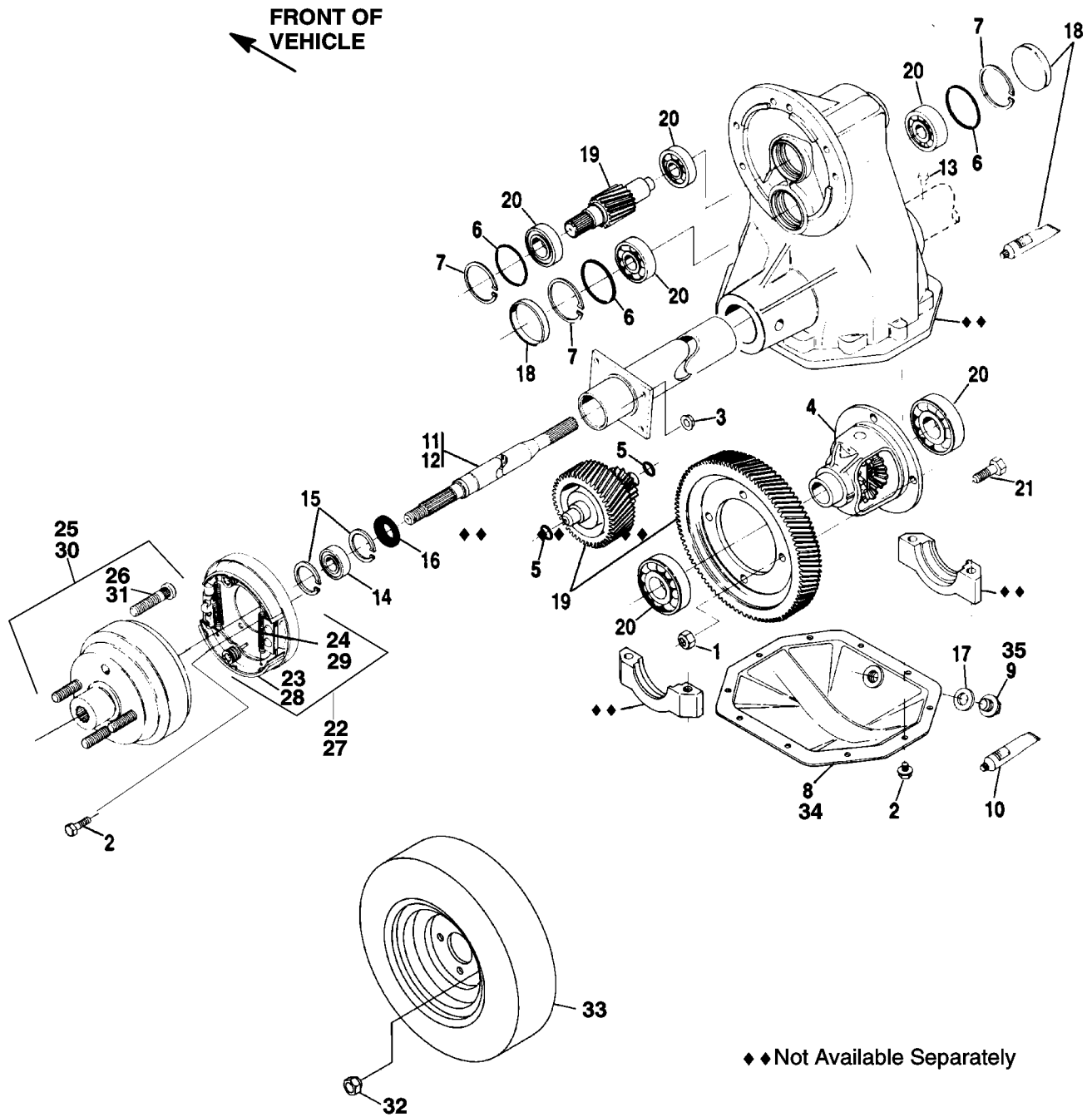


FORK, HUB & HANDLEBARS 6.8

Ref. No.	Part No.	Description	No. Req'd	Notes
1	120166	Lockwasher, 1/2	1	
2	301988	Nut, 1/2-20	1	
3	305134	Nut, jam 7/8-14	2	
4	520231	Washer, thrust 1 1/4	1	
5	551041	Key, woodruff #6	1	
6	800144	Screw, #10-16 x 5/8 PTH	2	
7	800500	Bolt, carriage 3/8-16 x 1	4	
8	800573	Nut, lug 1/2-20	4	
9	800610	Screw, flange 7/16-20 x 1 1/8	2	
10	800612	Nut, lock 7/16-20	2	
11	806791	Horn Button	1	
12	800698	Nut, flangelock 3/8-16	4	
13	807290	Insulator, horn	1	
14	807472	Grip, handle	2	
15	831909	Boot	1	
16	840318	Clamp, half	2	
17	840324	Bearing, flanged	2	
18	840372	Washer, rubber	1	
19	840411	Nut, spindle	1	
20	840412	Washer, 7/16	2	
21	840458	Ring, V	1	
22	840479	Bracket, fork RH	1	
23	840689	Bracket, fork LH	1	
24	892668	Wheel Assembly	1	
		•Tire, 4.80 x 8 load range B	1	Obtain locally. Not illustrated. Not illustrated. Not illustrated.
	840843	•Rim, wheel	1	
	886735	•Valve Stem	1	
	892701	Fork	1	
25	892701	Fork	1	
26	892744	Mount, suspension	2	
27	892764	Handle Bar	1	
28	892781	Axle & Hub Assembly	1	
29	130084	•Nut, 5/8-18	2	
30	310854	•Nut, jam 1-14	1	
31	815814	•Nut, bearing adjusting	1	
32	809156	•Washer, thrust 9/16	4	
33	840325	•Axle	1	
34	306494	•Lockwasher, 5/8	2	
35	892751	•Hub Assembly	1	
36	700290	••Seal, grease	2	
37	814473	••Bearing	2	
38	814474	••Race, bearing	2	
39	843616	••Bolt, wheel	4	

• INDENTED PART NAMES INDICATE THESE PARTS ARE INCLUDED IN PRECEDING ASSEMBLY

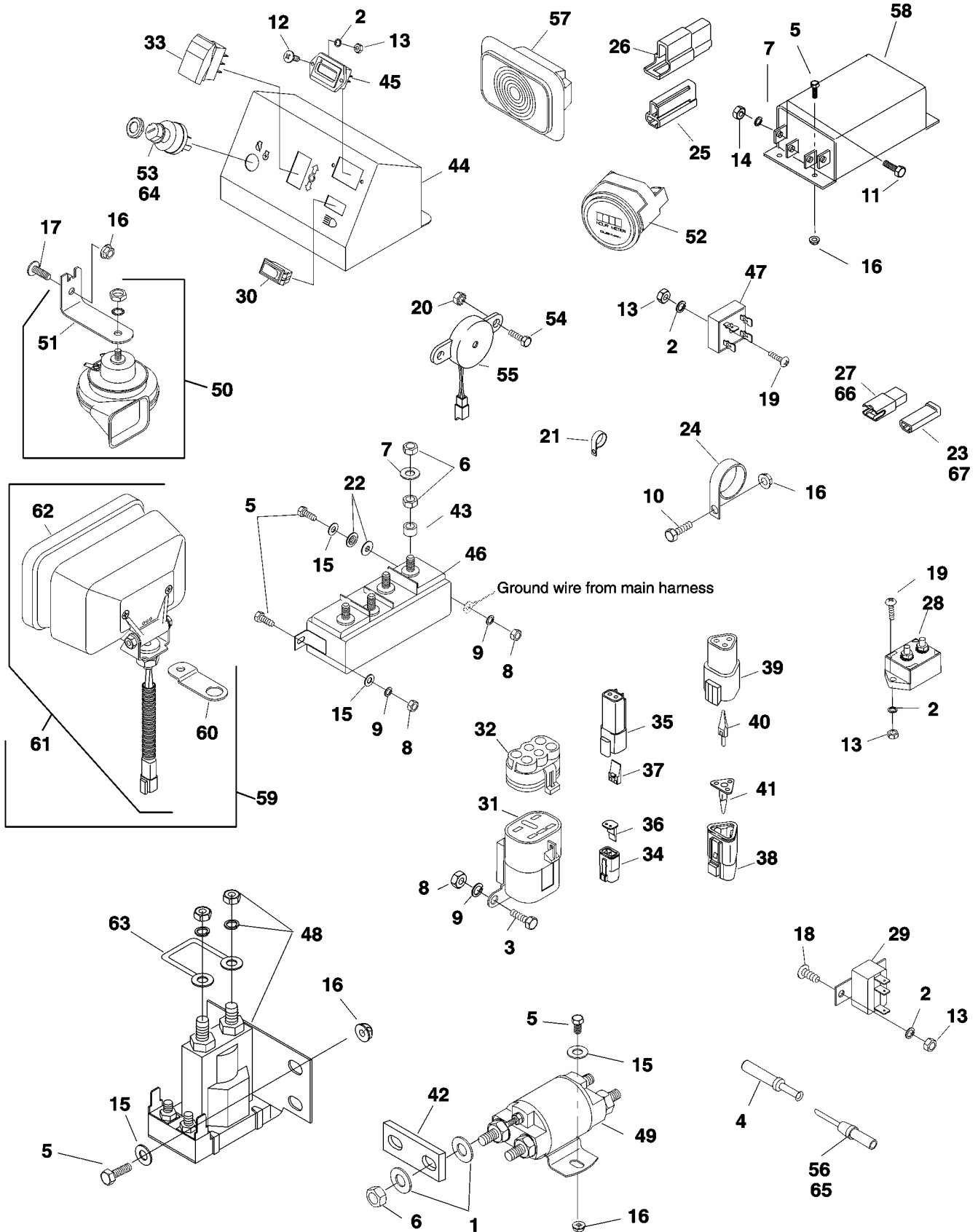
6.9 DIFFERENTIAL



Ref. No.	Part No.	Description	No. Req'd	Notes
	892672	Differential, complete		
1	306319	•Nut, 3/8–24	4	
2	306450	•Screw, 5/16–18 x 3/4	18	
3	548911	•Nut, flangelock 5/16–18	8	
4	840807	•Case Assembly	1	
5	840808	•Seal, O–ring	2	
6	840809	•Seal, O–ring	3	
7	840810	•Ring, retaining	3	
8	845315	•Cover, carrier	1	(use w/hex head plug)
9	845316	•Plug, fill (hex head)	1	
10		•Seal, cover plate	1	Obtain locally.
11	840814	•Shaft, axle LH	1	
12	840815	•Shaft, axle RH	1	
13	840816	•Vent	1	
14	840817	•Bearing	2	
15	840818	•Ring, retaining	4	
16	840819	•Seal, oil	2	
17	840820	•Washer, flat plastic	1	
18	840821	•Kit, intermediate seal	1	
19	840822	•Gear Set	1	
20	840823	•Kit, carrier bearing	1	
21	840824	•Screw, 3/8–24 x 1 1/8	4	
22	845183	•Brake, (LEFT), complete	1	
23	892866	••Kit, brake shoes (1 wheel)	2	
24	892968	••Kit, Brake hardware	2	(springs and pin for 1 wheel)
25	892969	•Hub, w/ studs	2	
26	840844	••Stud, wheel mounting	4	
27	845184	•Brake, (RIGHT), complete	1	
28	892866	••Kit, brake shoes (1 wheel)	2	
29	892968	••Kit, Brake hardware	2	(springs and pin for 1 wheel)
30	892969	•Hub, w/ studs	2	
31	840844	••Stud, wheel mounting	4	
32	800573	Nut, lug 1/2–20	8	
33	892668	Wheel Assembly	2	
		•Tire, 4.80 x 8 load range B	1	Obtain locally. Not illustrated.
	840843	•Rim, wheel	1	Not illustrated.
	886735	•Valve Stem	1	Not illustrated.
34	845315	•Cover, carrier (use w/socket head plug)	1	
35	845316	•Plug, fill (socket head)	1	
	2700812	Boot, brake lever	1	Not illustrated.

• INDENTED PART NAMES INDICATE THESE PARTS ARE INCLUDED IN PRECEDING ASSEMBLY

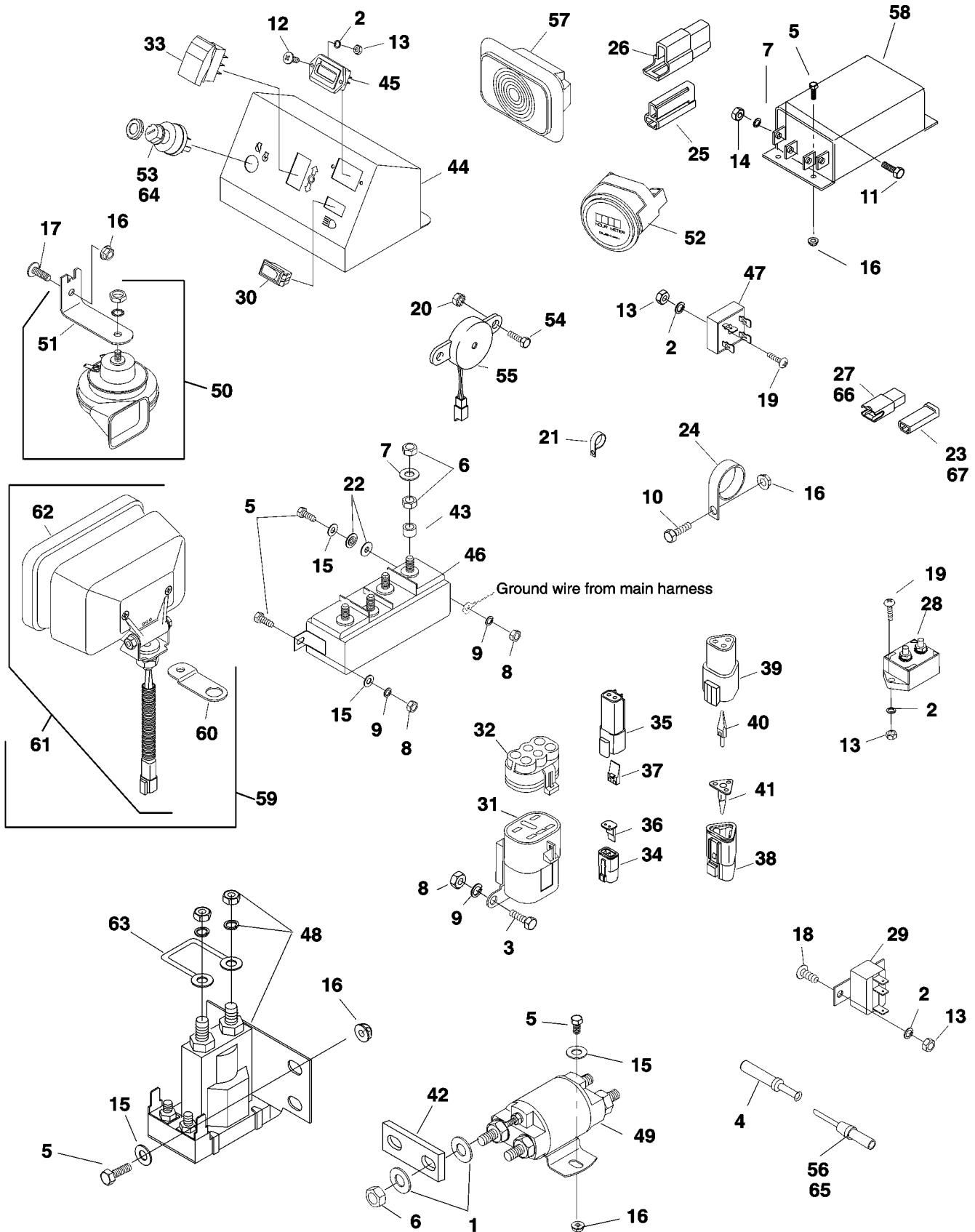
6.10 ELECTRICAL COMPONENTS



Ref. No.	Part No.	Description	No. Req'd	Notes
1	103867	Washer, 5/16	8	
2	120052	Washer, #10	7	
3	300646	Screw, 1/4-20 x 3/4	2	
4	838769	Terminal, socket	As Req'd.	
5	302288	Screw, 1/4-20 x 1	14	
6	306320	Nut, 5/16-24	12	
7	306325	Lockwasher, 5/16	4	
8	306375	Nut, 1/4-20	8	
9	306396	Lockwasher, 1/4	7	
10	306419	Screw, 1/4-20 x 1/2	1	
11	306450	Screw, 5/16-18 x 3/4	4	
12	306514	Screw, #10-24 x 1/2 slotted	2	
13	306531	Nut, #10-24	6	
14	306932	Nut, 5/16-18	4	
15	308090	Washer, 1/4	6	
16	548910	Nut, 1/4-20 flangelock	6	
17	800017	Screw, 1/4-20 x 1 PTH	1	
18	800271	Screw, #10-24 x 1/2 PTH	2	
19	800299	Screw, #10-24 x 1 PTH	3	
20	800587	Nut, #4-40 w/lockwasher	2	
21	814924	Clamp	3	
22	817719	Bushing, fiber	2	
23	825880	Connector, 1 contact plug	As Req'd.	
24	825884	Clamp	1	
25	826005	Connector, 2 contact plug	As Req'd.	
26	826006	Connector, 2 contact receptacle	As Req'd.	
27	826726	Connector, 1 contact receptacle	As Req'd.	
28	829164	Circuit Breaker, 90 amp	1	
29	829780	Circuit Breaker, 20 amp	1	
30	830640	Switch, rocker	1	
31	2703735	Relay, 30 amp	1	A models ONLY.
32	835481	Plug, 30 amp	1	A models ONLY.
33	836354	Switch	1	
34	839917	Plug, 2-wire	As Req'd.	

• INDENTED PART NAMES INDICATE THESE PARTS ARE INCLUDED IN PRECEDING ASSEMBLY

6.10 ELECTRICAL COMPONENTS



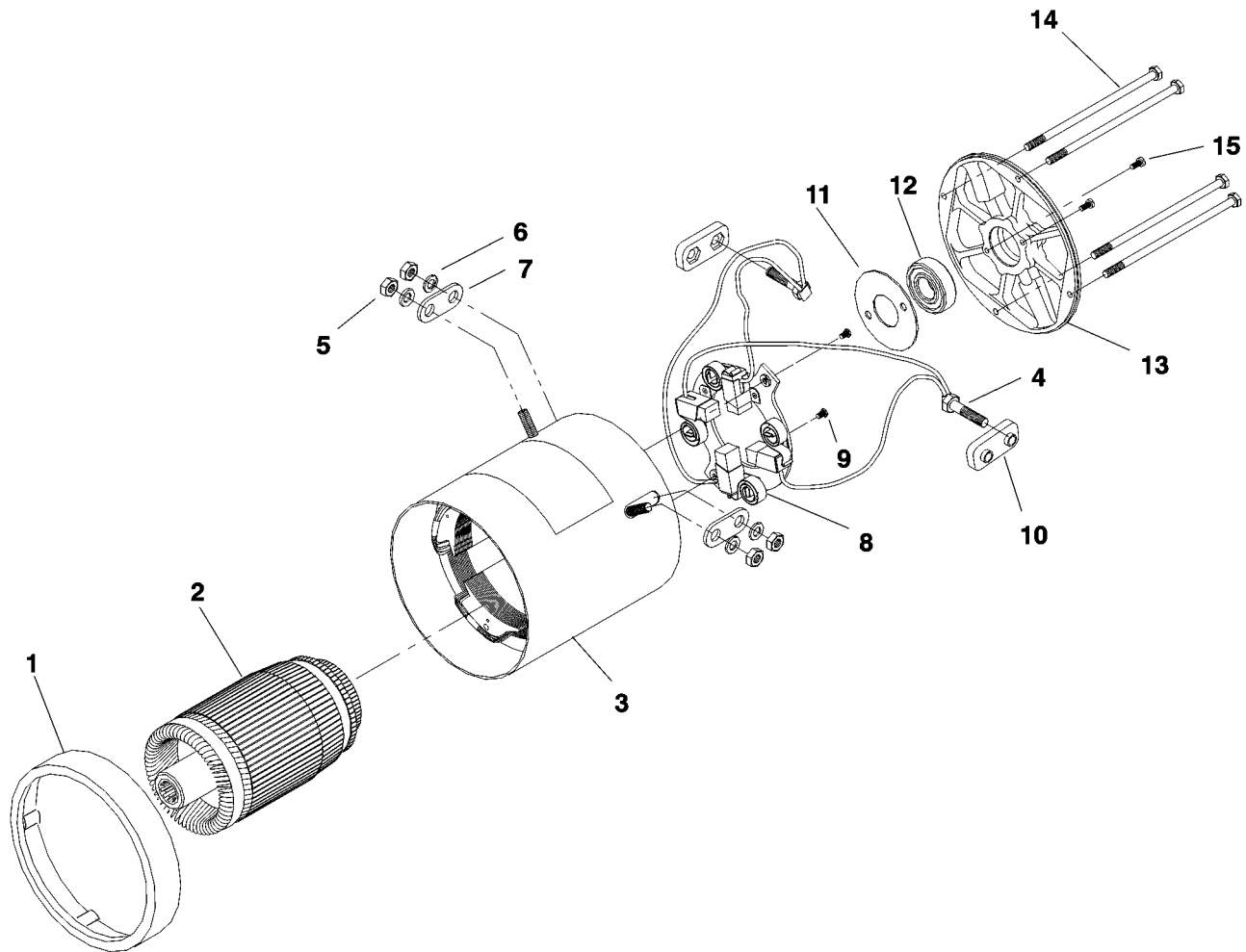
ELECTRICAL COMPONENTS 6.10

Ref. No.	Part No.	Description	No. Req'd	Notes
35	839918	Receptacle, 2-wire	As Req'd.	A models ONLY.
36	839921	Lock, 2-wire plug	As Req'd.	
37	839935	Lock, 2-wire receptacle	As Req'd.	
38	839849	Plug, 3-wire	As Req'd.	
39	839850	Receptacle, 3-wire	As Req'd.	
40	840117	Lock, 3-wire receptacle	As Req'd.	
41	840118	Lock, 3-wire plug	As Req'd.	
42	840273	Bar, solenoid bus	2	
43	840491	Bushing	4	
44	840496	Panel, control	1	
45	840526	Gauge, battery condition	1	Key not offered separately.
46	2701550	Switch, reversing	1	
47	840679	Rectifier bridge	1	
48	841208	Solenoid, 24 volt	1	
49	841248	Solenoid, 24 volt	2	
50	886090	Horn	1	
51	829694	•Bracket, horn	1	
52	880631	Hour Meter Set (accessory)	1	
53	886311	Switch, ignition	1	
54	888503	Service Set contains two #4-40 x 3/4 screws	1	
55	890000	Buzzer	1	Key not offered separately.
56	524358	Terminal, male pin (16-18 gauge)	As Req'd.	
57	892676	Light, red (tail light)	1	
58	892789	Controller, speed	1	
59	892942	Headlight Set (accessory)	1	
60	840854	•Bracket, headlight	1	
61	892523	•Headlight	1	
62	840860	••Bulb, headlight	1	
63	893142	Resistor, 250 ohm	1	
64	894222	Switch, ignition, keyed alike	1	
65	840676	Terminal, male pin (14-16 gauge)	As Req'd.	Not illustrated.
66	825886	Terminal, 1/4 female, 14-16awg	As Req'd.	
67	825748	Terminal, 1/4 female, 14-16awg	As Req'd.	
	845050	Grease, electrical connector	1	Not illustrated.

• INDENTED PART NAMES INDICATE THESE PARTS ARE INCLUDED IN PRECEDING ASSEMBLY

6.11 MOTOR (G.E.)

MOTOR 892671
G.E. NO. 5BC58JBS6217



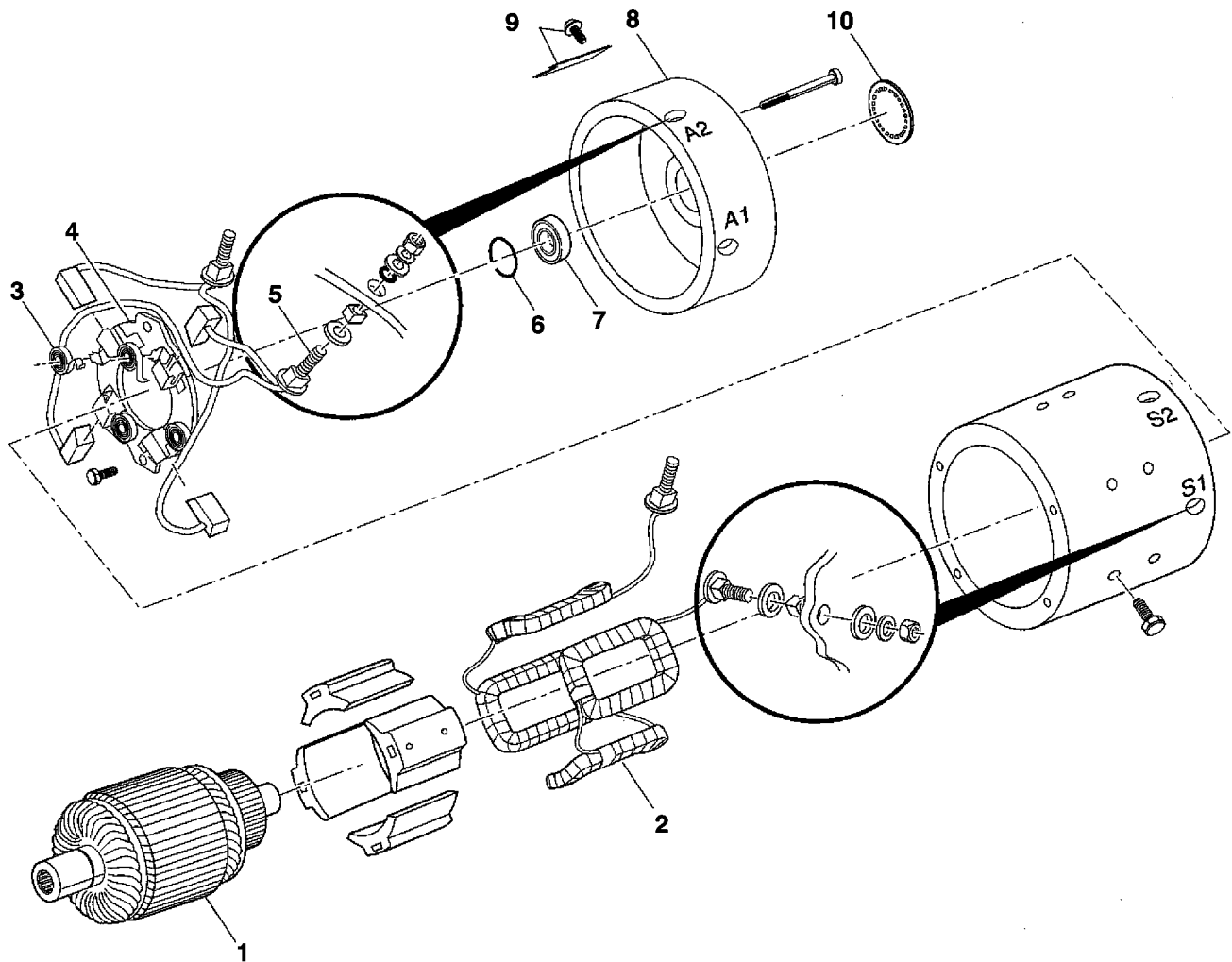
**MOTOR 892671
G.E. NO. 5BC58JBS6217**

Ref. No.	Part No.	Description	No. Req'd	Notes
1	◇	Shield, end (GE-115C562AB1)	1	
2	◇	Armature (GE-346C558ABB1)	1	
3	◇	Stator (GE-342C460AJB3)	1	
4	840992	Brush	2	
5	◇	Nut (GE-N210P23B)	4	
6	◇	Washer (GE-N402P12B11)	4	
7	840995	Insulator, outer	2	
8	840993	Plate, spring & holder	1	
9	◇	Screw (GE-111A523P1)	2	
10	840994	Insulator, inner	2	
11	◇	Retainer, bearing (GE-115A907AB1)	1	
12	◇	Bearing, ball (GE-626A259AA1)	1	
13	◇	Shield, end (GE-325D306AA1)	1	
14	◇	Clamp, screw (GE-111A515GC1)	4	
15	◇	Screw (GE-N37P15014B11)	2	

◇ Parts may be obtained from a G.E. Service Center.

6.12 MOTOR (ADVANCED DC)

ADVANCED DC
PART NO. 73124-G02
or
PART NO. 2703784

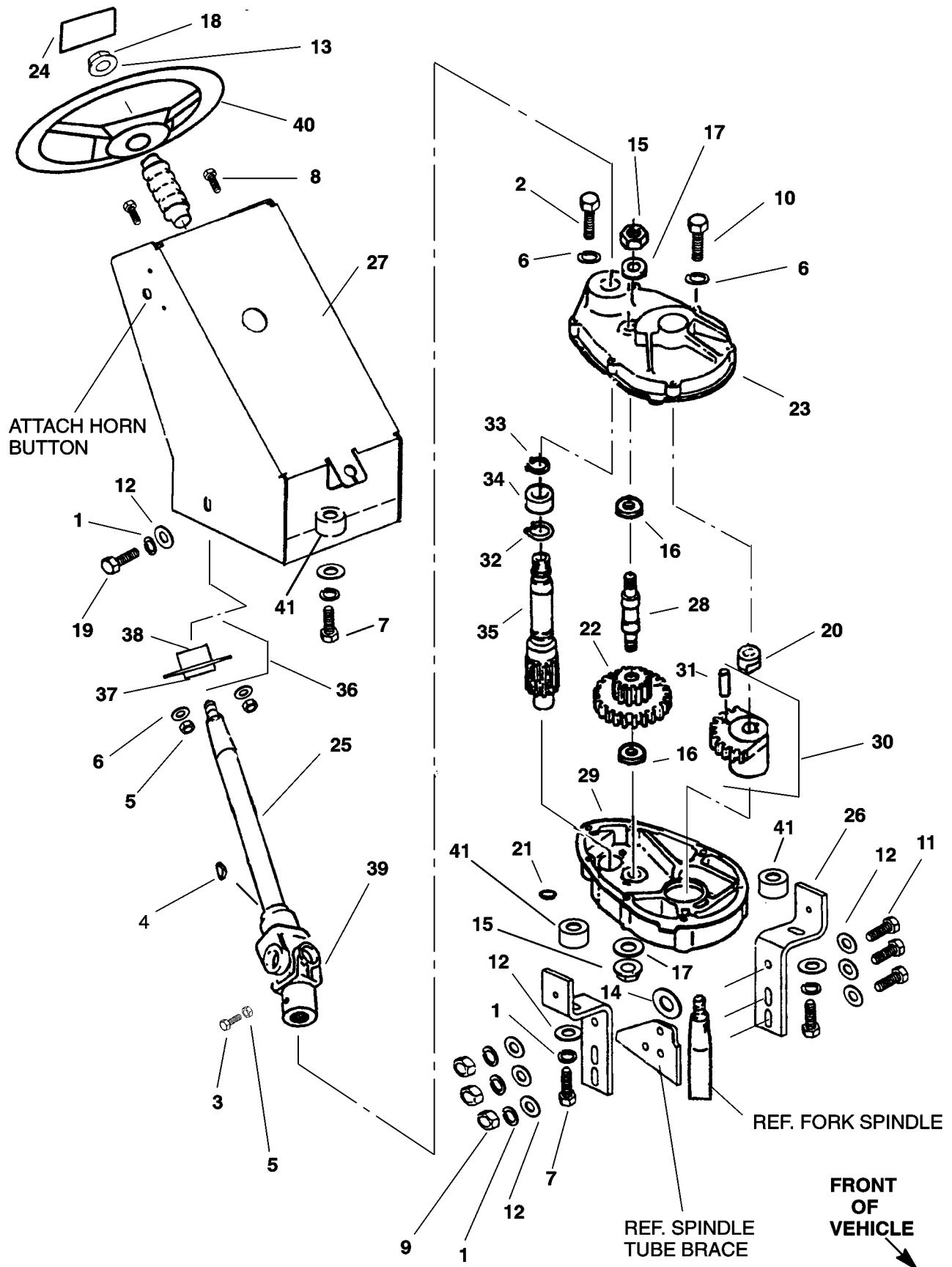


**ADVANCED DC
PART NO. 73124-G02
or
PART NO. 2703784**

Ref. No.	Part No.	Description	No. Req'd	Notes
1	73124-G02	Motor, non-vented	1	Not available individually. Includes hardware.
2	73120-G11	•Armature	1	
3	73120-G03	•Field coil kit	1	Includes hardware.
4	73120-G15	•Brush spring	4	
5	73120-G05	•Brush plate and box	1	
6	73120-G06	•Brush replacement kit	1	
7	73120-G07	•Snap ring	1	
8	73120-G08	•Bearing	1	
9	73120-G09	•Cover communtator end	1	
10	73120-G10	•Cover plate and screw	1	
		•Cap	1	

• INDENTED PART NAMES INDICATE THESE PARTS ARE INCLUDED IN PRECEDING ASSEMBLY

6.13 STEERING WHEEL ACCESSORY



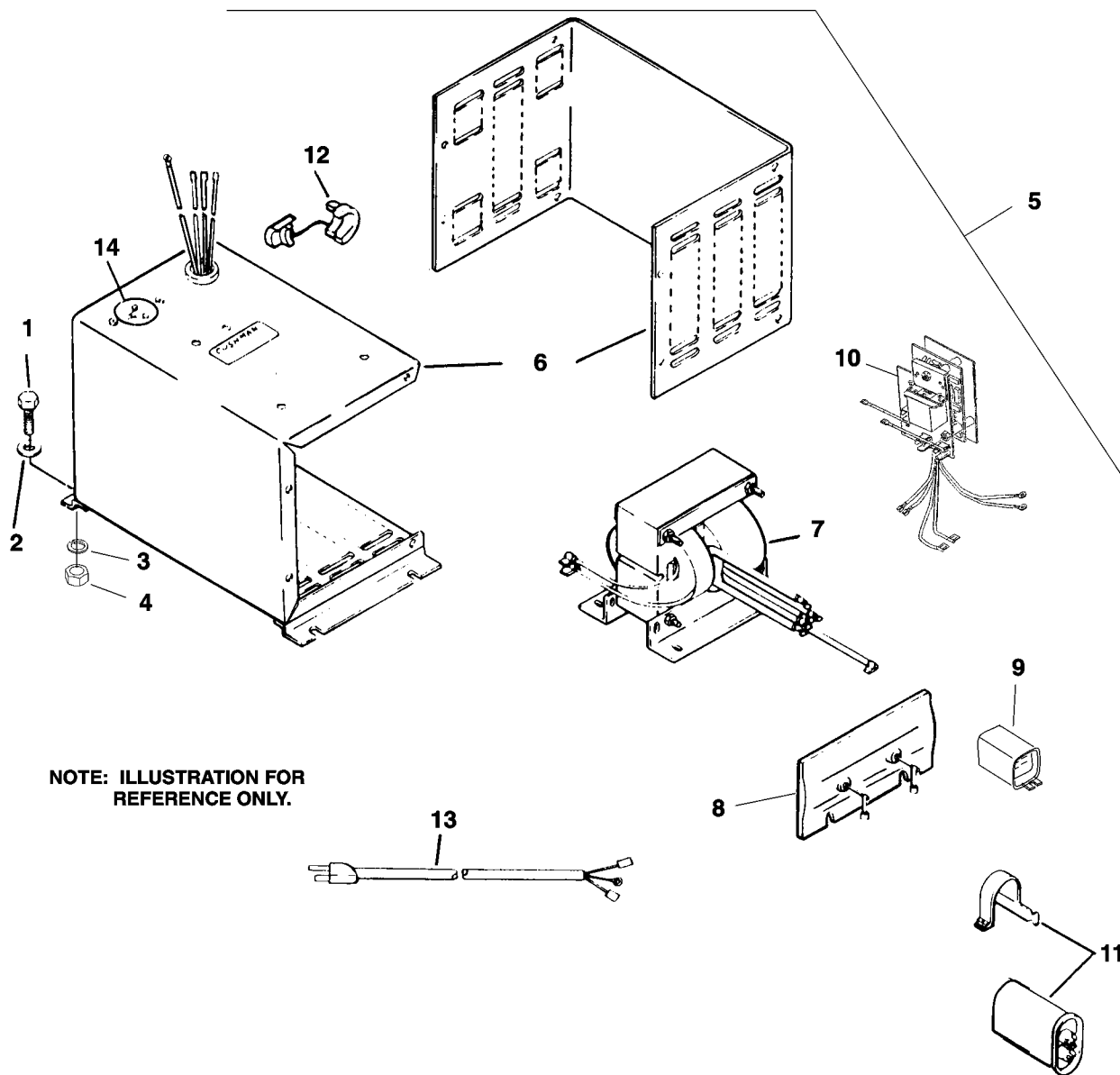
STEERING WHEEL ACCESSORY 6.13

Ref. No.	Part No.	Description	No. Req'd	Notes
	893079	Accessory, steering wheel	1	
1	120177	•Lockwasher, 3/8	8	
2	302030	•Screw, 1/4-20 x 1 1/4	3	
3	302288	•Screw, 1/4-20 x 1	4	
4	306367	•Key, woodruff .188 x .750	2	
5	306375	•Nut, 1/4-20	8	
6	306396	•Lockwasher, 1/4	11	
7	306414	•Screw, 3/8-16 x 1	3	
8	306487	•Screw, 1/4-20 x .62	4	
9	306562	•Nut, 3/8-16	3	
10	306832	•Screw, 1/4-20 x 2	4	
11	302600	•Screw, 3/8-16 x 1 1/2	3	
12	306981	•Washer, 3/8	11	
13	311496	•Washer, 5/8	1	
14	517663	•Washer	1	
15	800612	•Nut, 7/16 crown lock	2	
16	816446	•Washer	2	
17	816449	•Washer, locating	2	
18	816652	•Nut, steering wheel	1	
19	306834	•Screw, 3/8-16 x 3/4	2	
20	825672	•Nut	1	
21	825919	•Plug, hole	1	
22	830168	•Gear, cluster	1	
23	832555	•Housing, upper	1	
24	840017	•Cover, steering wheel center	1	
25	840981	•Shaft, steering wheel	1	
26	840982	•Support, steering	2	
27	840983	•Cover, steering	1	
28	883317	•Bolt, idler adjusting	1	
29	886883	•Housing, lower	1	
30	886913	•Gear, driven	1	
31	310546	••Pin, roll 1/2 x 1 1/2	1	
32	816447	•Ring, internal retaining	1	
33	816455	•Ring, retaining	1	
34	816456	•Bearing, ball	1	
35	837855	•Shaft, pinion gear	1	
36	891597	•Bushing, steering	1	
37	548225	••Fitting, lube	1	
38	827188	••Bearing	1	
39	891680	•Joint, universal	1	
40	892228	•Wheel, steering 14"	1	
41	808935	•Spacer	3	

• INDENTED PART NAMES INDICATE THESE PARTS ARE INCLUDED IN PRECEDING ASSEMBLY.

6.14 BATTERY CHARGER

25 AMP, 115 VAC, 60 HZ
PART NO. 892860
LESTER MODEL 16940

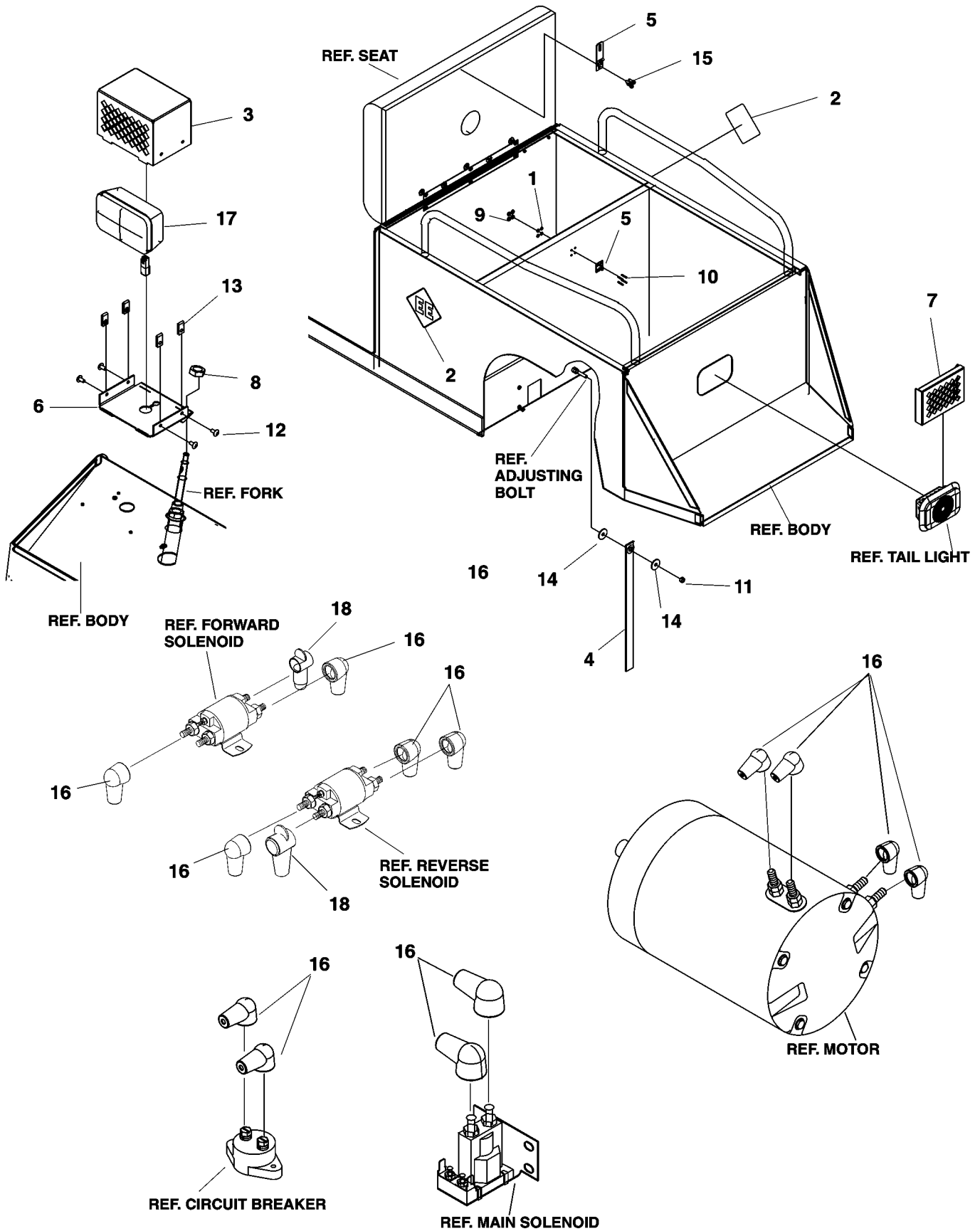


**25 AMP, 115 VAC, 60 HZ
PART NO. 892860
LESTER MODEL 16940**

Ref. No.	Part No.	Description	No. Req'd	Notes
1	800017	Screw, 1/4-20 x 1	4	Not illustrated.
2	308090	Washer, 1/4	4	
3	306396	Lockwasher, 1/4	4	
4	306375	Nut, 1/4-20	4	
5	892860	Charger, complete, Model 16940	1	
6	892889	•Case, Lester No. 21559S	1	
7	892890	•Transformer, Lester No. 16945S	1	
8	886435	•Heatsink, w/diodes	1	
9	892893	••Relay	1	
10	892891	•Timer	1	
11	823749	•Capacitor, 6.0 Mfd.	1	
12	822048	•Bushing, A.C. cord	1	
13	883216	•Cordset, A.C.	1	
	892892	•Wiring harness	1	
14	883844	•Fuse	1	

•INDENTED PART NAMES INDICATE THESE PARTS ARE INCLUDED IN PRECEDING ASSEMBLY.

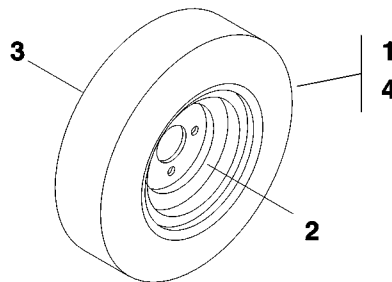
6.15 EE COMPONENTS



Ref. No.	Part No.	Description	No. Req'd	Notes
1	120052	Lockwasher, #10	4	
2	2701213	Decal, EE	2	
3	2702875.7	Cover, headlight guard	1	
4	2702915	Strap, static	1	
5	2702994	Hasp, safety w/staple	1	
6	2703038.7	Base, headlight guard	1	
7	2703039.7	Cover, rear light	1	
8	305134	Nut, 7/8–14, jam	1	
9	306531	Nut, #10–24	4	
10	306532	Screw, #10–24 x 5/8	4	
11	306932	Nut, 5/16–18	1	
12	800019	Screw, 1/4–29 x 1/2	4	
13	800238	Nut, 1/4–20, speed	4	
14	800874	Washer, 11/32	2	
15	800965	Screw, 12–14 x 3/4, tapping	3	
16	844328	Boot, terminal	13	
17	892523	Headlight	1	
18	840177	Boot, terminal	2	

6.16 ACCESSORIES

TIRES



Ref. No.	Part No.	Description	No. Req'd	Notes
1	893092	Tire and wheel, solid tire, set of 3	1	
2	893091	•Tire and wheel, solid	1	
3	841028	•Rim, solid	1	
4	841029	•Tire, solid	1	
	893472	Tire & wheel, foam filled	1	

- INDENTED PART NAMES INDICATE THESE PARTS ARE INCLUDED IN PRECEDING ASSEMBLY

CALIBRATOR

CURTIS CALIBRATOR – PART NO. 893052

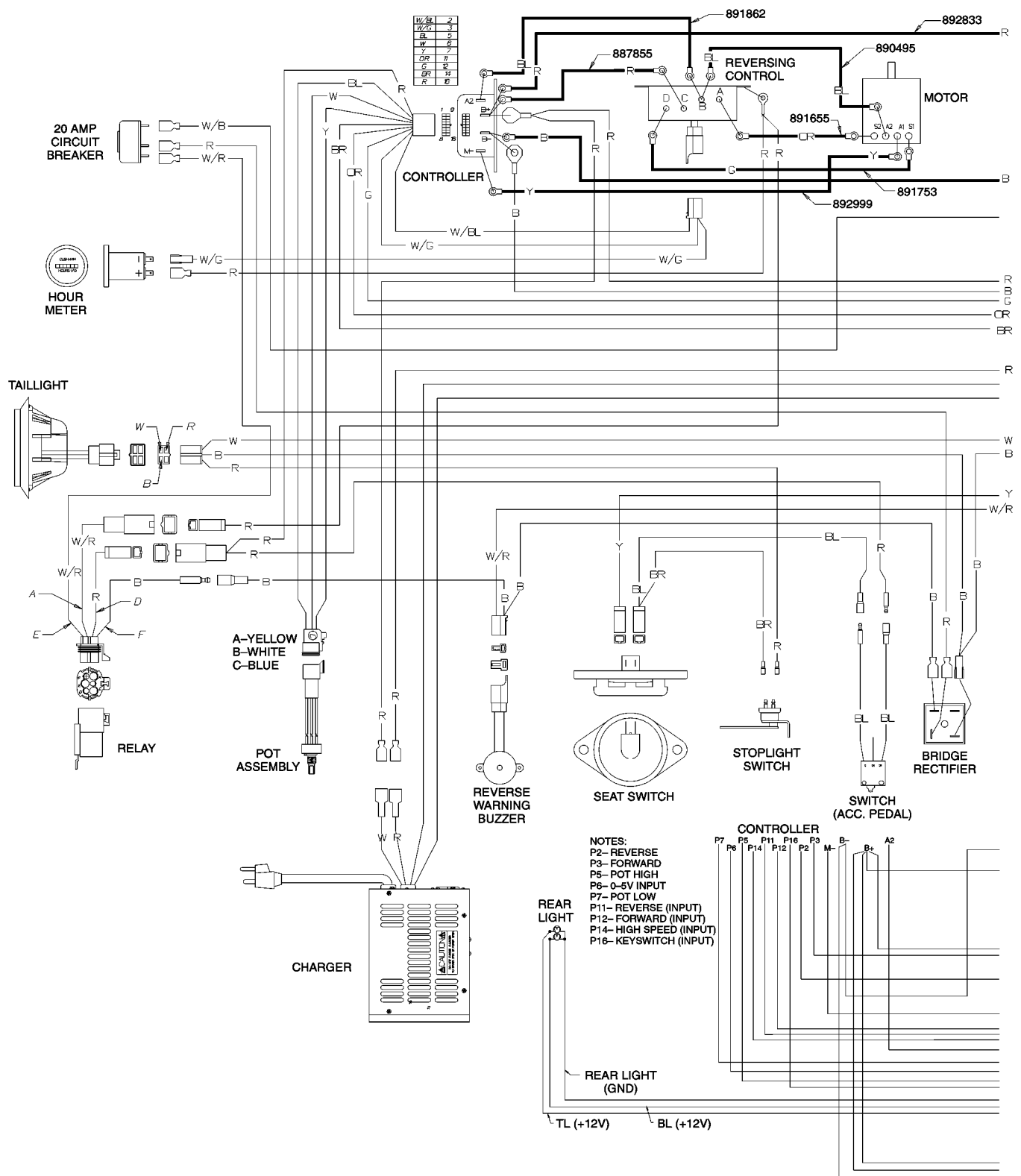
CHARGER

CHARGER MODIFICATION 117 – EUROPEAN, SHELF MOUNTED PART NO. 887096

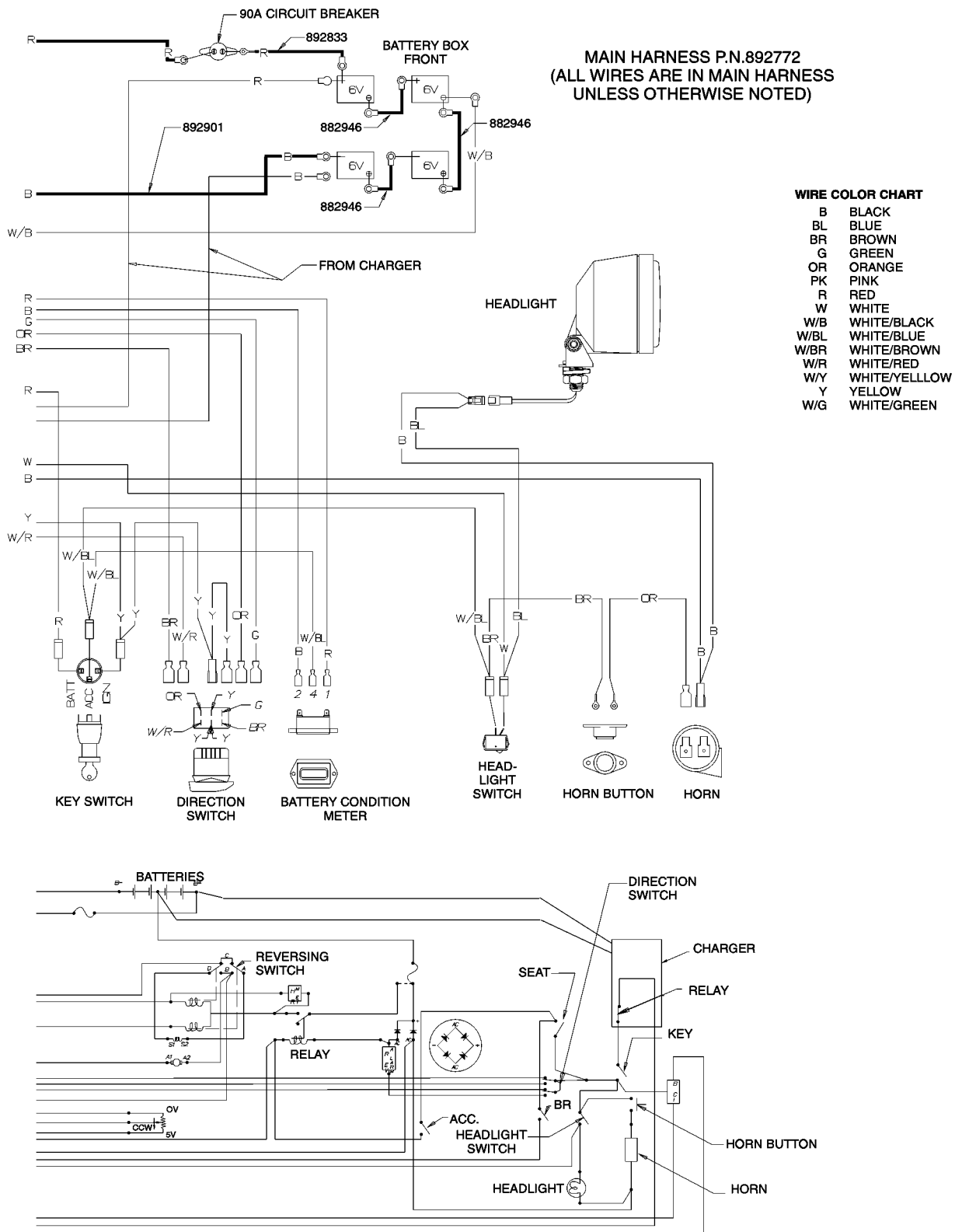
WIRING DIAGRAMS

7 WIRING DIAGRAM

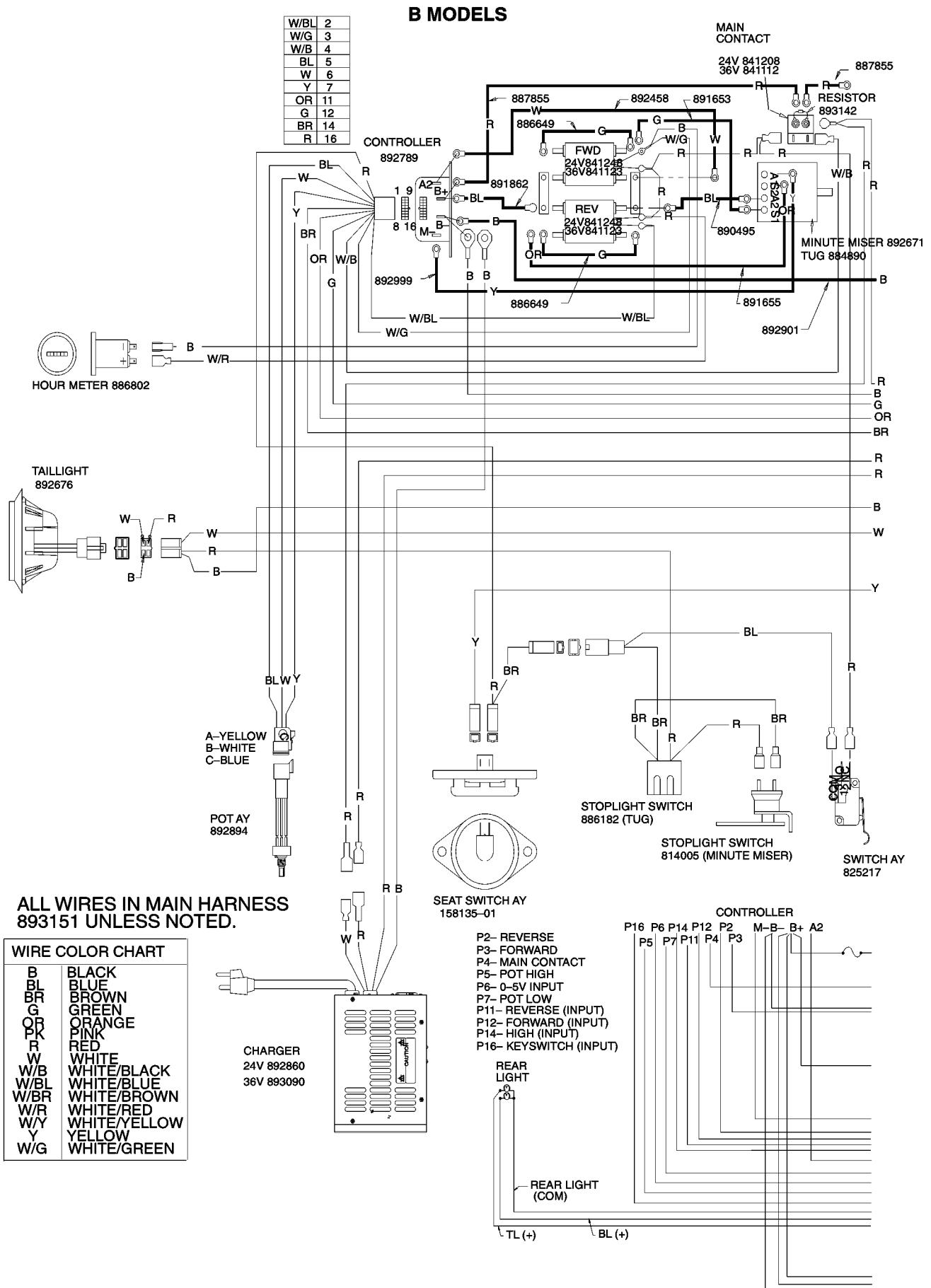
A MODELS



A MODELS

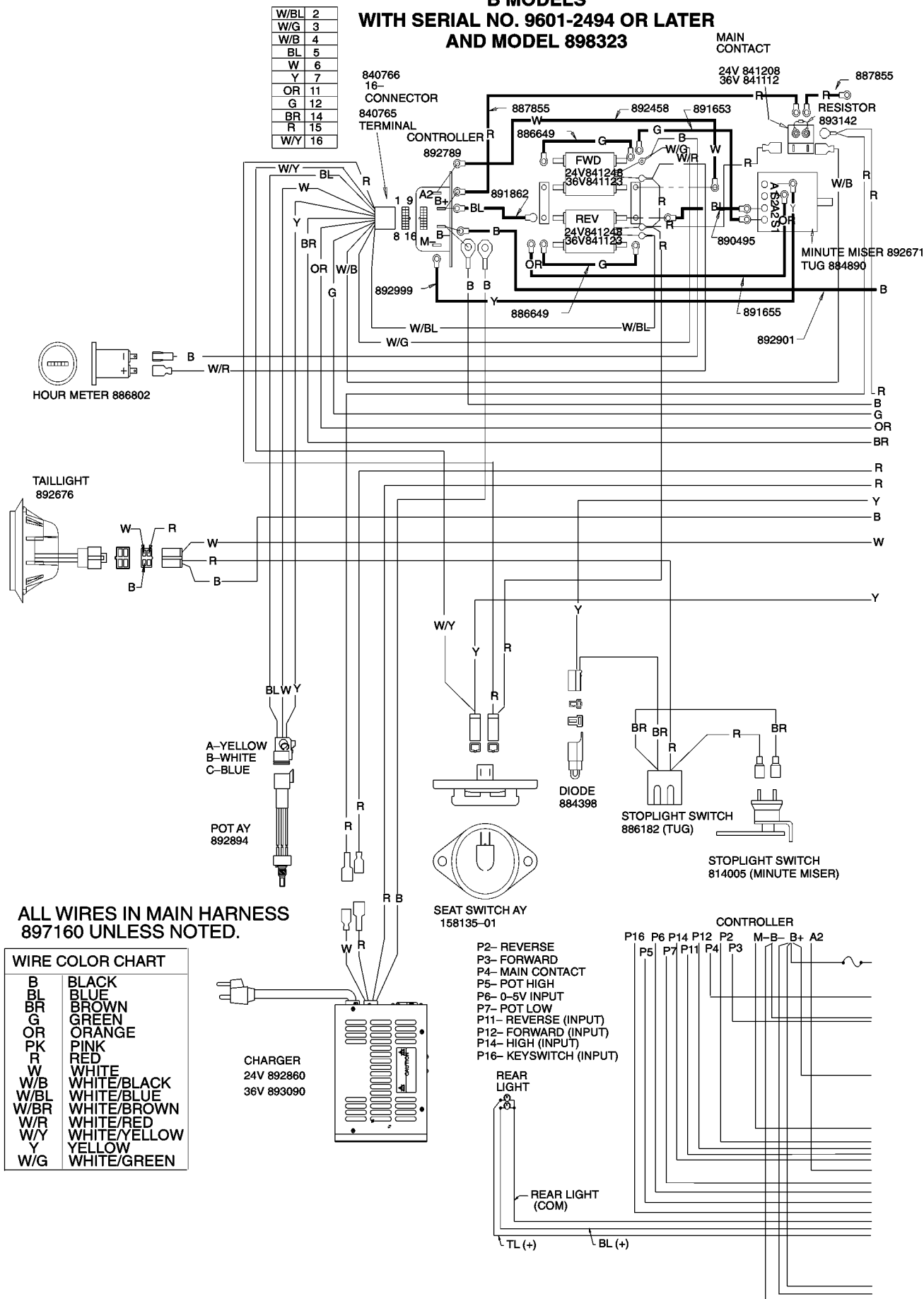


7 WIRING DIAGRAM



7 WIRING DIAGRAM

B MODELS WITH SERIAL NO. 9601-2494 OR LATER AND MODEL 898323



**B MODELS
WITH SERIAL NO. 9601-2494 OR LATER
AND MODEL 898323**



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