



Technical Manual

E-Walk

62290 – 22” 11 Blade Reel



WARNING: If incorrectly used, this machine can cause severe injury. Those who use and maintain this machine should be trained in its proper use, warned of its dangers and should read the entire manual before attempting to set up, operate, adjust or service the machine.

To Order Parts

1. Write your **full** name and **complete** address on the order.
2. Explain where and how to make shipment.
3. Give product number, name and serial number that is stamped on the name plate or serial plate of your product.
4. Order by the quantity desired, the part number, and description of the part as given in the parts list.
5. Send or bring the order to an authorized Textron Turf Care And Specialty Products Dealer.
6. Inspect all shipments on receipt. If any parts are damaged or missing, file a claim with the carrier before accepting.
7. Do not return material without a letter of explanation, listing the parts being returned. Transportation charges must be prepaid.

Use of other than Textron Turf Care And Specialty Products authorized Parts and Accessories will void the warranty.

Table of Contents

1 Safety		7 Batteries	
1.1 Operating Safety	4	7.1 Safety	20
1.2 Important Safety Notes	5	7.2 General	20
2 Specifications		7.3 Maintenance	21
2.1 Product Identification	6	7.4 Cleaning Batteries	21
2.2 Electrical System & Batteries	6	7.5 Battery Charger	22
2.3 Traction and Differential	6	7.6 Battery Installation	23
2.4 Mower	7	7.7 Replacing Battery Pack	24
2.5 Weights	7	8 Maintenance	
2.6 Accessories & Support Literature	7	8.1 General	25
3 Decals		8.2 Tires	25
3.1 Decals	8	8.3 Wheel Bearing	25
4 Controls		8.4 Backlapping and Grinding	26
4.1 Icons	9	8.5 Storage	26
4.2 Controls	9	9 Troubleshooting	
5 Operation		9.1 General	27
5.1 Daily Inspection	10	10 Maintenance & Lubrication Charts	
5.2 Interlock System (O.P.C.)	10	10.1 General	28
5.3 Operating Procedures	11	10.2 Maintenance Chart	28
5.4 Starting/Stopping	11	10.3 Lubrication Chart	29
5.5 Transport Wheels	12	11 Notes	
5.6 Mowing	12	12 Parts Catalog	
5.7 Grass Catcher	13	12.1 Table of Contents	31
6 Adjustments			
6.1 General	14		
6.2 Reel To Bedknife	14		
6.3 Bedknife Adjuster	14		
6.4 Bedknife	15		
6.5 Brake	15		
6.6 Cutting Height	16		
6.7 Belt Adjustment	16		
6.8 Handle	17		
6.9 OPC Switch Adjustment	17		
6.10 Throttle Spring Adjustment	17		
6.11 Throttle Cable Adjustment	18		
6.12 Front Roller Weight	18		
6.13 Torque Specification	19		

Proposition 65 Warning

This product contains or emits chemicals known to State of California to cause cancer and birth defects or other reproductive harm.

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Suggested Stocking Guide

To Keep your Equipment fully operational and productive, Textron Golf, Turf & Specialty Products suggests you maintain a stock of the more commonly used maintenance items. We have included part numbers for additional support materials and training aids.

To order any of the following material:

1. Write your full name and complete address on your order form.
2. Explain where and how to make shipment:
 - UPS
 - Overnight
 - Regular Mail
 - 2nd Day

3. Order by the quantity desired, the part number, and the description of the part.
4. Send or bring the order to your authorized Textron Golf, Turf & Specialty Products Dealer.

Service Parts

Qty.	Part No.	Description	Qty.	Part No.	Description
	4102780	50 Amp Fuse		2811106	Motor to Pulley Belt
	3004555	3 Amp Fuse		2811070	Pulley to Traction Drum Belt

Service Support Material

Qty.	Part No.	Description
	4105381	Techincal Manual
	4104421	Operator Training Video

Qty.	Description
	Service Manual

How To Use This Manual

Abbreviations

N/S - Not serviced seperately, can only be obtained by ordering main component or kit.

AR -Variable quantity or measurement is required to obtain correct adjustment.

Symbols such as ●, next to the item number, indicate that a note exists which contain additional information important in ordering that part.

Indented Items

Indented items indicate component parts that are included as part of an assembly or another component. These parts can be ordered seperately or as part of the main component.

Item	Part No.	Qty	Description	Serial Numbers/Notes
● 1	123456	1	Mount, Valve	<i>Indicates a piece part</i> <i>Includes Items 2 and 3</i> <i>Serviced part included with Item 2</i> <i>Non serviced part included with Item 2</i>
2	789012	1	Valve, Lift	
3	345678	1	• Handle	
4	N/S	1	• Seal Kit	
5	901234	1	Screw, 1/4-20 x 2" Hex Head	

1 SAFETY

1.1 OPERATING SAFETY

WARNING

EQUIPMENT OPERATED IMPROPERLY OR BY UNTRAINED PERSONNEL CAN BE DANGEROUS.

Familiarize yourself with the location and proper use of all controls. Inexperienced operator's should receive instruction from someone familiar with the equipment before being allowed to operate the machine.

1. Safety is dependent upon the awareness, concern and prudence of those who operate or service the equipment. Never allow minors to operate any equipment.
2. It is your responsibility to read this manual and all publications associated with this equipment (Technical Manual, battery charger manual, accessories and attachments). If the operator can not read English it is the owner's responsibility to explain the material contained in this manual to them.
3. Learn the proper use of the machine, the location and purpose of all the controls and gauges before you operate the equipment. Working with unfamiliar equipment can lead to accidents.
4. Never allow anyone to operate or service the machine or its attachments without proper training and instructions; or while under the influence of alcohol or drugs.
5. Wear all the necessary protective clothing and personal safety devices to protect your head, eyes, ears hands and feet. Operate the machine only in daylight or in good artificial light.
6. Inspect the area where the equipment will be used. Pick up all the debris you can find before operating. Beware of overhead obstructions (low tree limbs, electrical wires, etc.) and also underground obstacles (sprinklers, pipes, tree roots, etc.) Enter a new area cautiously. Stay alert for hidden hazards.
7. Never direct discharge of material toward bystanders, nor allow anyone near the machine while in operation. The owner/operator can prevent and is responsible for injuries inflicted to themselves, to bystanders and damage to property.
8. Never operate equipment that is not in perfect working order or is without decals, guards, shields, discharge deflectors or other protective devices securely fastened in place.
9. Never disconnect or bypass any switch.
10. Place unit on a flat surface, disengage all drives and engage parking brake before energizing unit.
11. Operate the machine across the face of the slope (horizontally), not up and down the slope (vertically).
12. Always operate at speeds that allow you to have complete control of the machine. Be sure of your footing; keep a firm hold on the handle and walk; never run.
13. Before you clean, adjust or repair this equipment, place unit on kickstand, engage parking brake and disconnect power connector.
14. Do not remove battery pack without unit on kickstand.

This machine is to be operated and maintained as specified in this manual and is intended for the professional maintenance of specialized turf grasses. It is not intended for use on rough terrain or long grasses.

1.2 IMPORTANT SAFETY NOTES



This safety alert symbol is used to alert you to potential hazards.

DANGER - Indicates an imminently hazardous situation which, if not avoided, **WILL** result in death or serious injury.

WARNING - Indicates a potentially hazardous situation which, if not avoided, **COULD** result in death or serious injury.

CAUTION - Indicates a potentially hazardous situation which, if not avoided, **MAY** result in minor or moderate injury and property damage. It may also be used to alert against unsafe practices.

For pictorial clarity, some illustrations in this manual may show shields, guards or plates open or removed. Under no circumstances should this equipment be operated without these devices securely fastened in place



WARNING

The Interlock System on this machine will shut off the reel and traction drive if the operator releases the OPC bail.

To protect the operator and others from injury, never operate equipment with the Interlock System disconnected or malfunctioning.



WARNING

1. Before leaving the operator's position for any reason:
 - a. Disengage all drives.
 - b. Engage parking brake.
 - c. Disconnect power connector.
2. Keep hands, feet, and clothing away from moving parts. Wait for all movement to stop before you clean, adjust or service the machine.
3. Keep the area of operation clear of all bystanders and pets.
4. Chock or block the wheels if the machine is left on an incline.
5. Never operate mowing equipment without the discharge deflector securely fastened in place.

By following all instructions in this manual, you will prolong the life of your machine and maintain its maximum efficiency. Adjustments and maintenance should always be performed by a qualified technician.

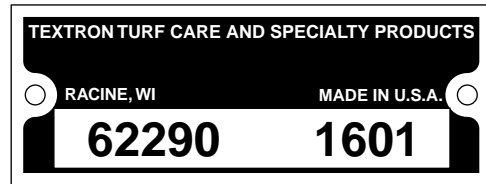
If additional information or service is needed, contact your Authorized Jacobsen Dealer who is kept informed of the latest methods to service this equipment and can provide prompt and efficient service. **Use of other than original or authorized Jacobsen parts and Accessories will void the warranty.**

2 SPECIFICATIONS

2.1 PRODUCT IDENTIFICATION

- 62290..... 22 in. (559 mm) E-Walk with 11 blade reel.
- Serial Number An identification plate, like the one shown, listing the serial number, is attached to the rear cross member of the frame.

Always provide the serial number of the unit when ordering replacement parts or requesting service information.



Product	EEC Sound Power	Vibration M/S ²
		Arms
62290	TBD	TBD

2.2 ELECTRICAL SYSTEM & BATTERIES

For optimum range and performance use batteries that equal or exceed the Amp-hour rating listed.

- System Voltage..... 48 Volt DC
- Batteries (4) 12 volt, valve regulated, non-spillable sealed lead acid batteries.
- Charger..... 5 Amp, 48 Volt DC, dual input voltage 115/230 Volt AC, 50/60 Hz.

Recommended Battery Size:

Length in. (mm)	Width in. (mm)	Height in. (mm)	Weight lbs. (kg)	Rating Amp-Hr	Volts	Qty Req'd
7-1/8 (181)	3 (76)	6-9/16 (167)	13-14 (5.9-6.4)	20	12	4

(USE ONLY 12 VOLT SLA BATTERIES)

2.3 TRACTION AND DIFFERENTIAL

- Transport Tires..... 11 x 4 pneumatic bidirectional.
- Reel Drive Independent direct drive motor.
- Traction Drive..... Independent drive motor with two synchronous polyurethane belts.
- Traction Reduction Ratio . 15.15:1
- Mowing speed..... 0 - 3.3 m.p.h. (5.31 km/h)
- Differential Full automotive type, housed in traction drum
- Rear Drive Drum..... Machined aluminum alloy 2 Section, 7-3/4 (O.D.) x 10-31/32 in. (197 x 278 mm)

2.4 MOWER

Reel.....	11 blades, hardened high manganese carbon steel.	Cutting Frequency.....	Variable
Reel Diameter	5 in. (127 mm)	3.3 m.p.h. (5.31 km/h).	0.150 in. (3.81 mm)
Cutting Width.....	22 in. (559 mm)	3.0 m.p.h. (4.83 km/h).	0.140 in. (3.56 mm)
Height of cut	3/64 to 7/16 in. (1.2 to 11 mm)	2.8 m.p.h. (4.51 km/h).	0.131 in. (3.33 mm)
Bedknives.....	Hardened carbon steel	2.6 m.p.h. (4.18 km/h).	0.122 in. (3.10 mm)
High Profile.....	Yields 5/32 in. (4 mm) cut (Optional)	2.4 m.p.h. (3.86 km/h).	0.112 in. (2.85 mm)
Low Profile	Yields 7/64 in. (2.8 mm) cut (Optional)	2.2 m.p.h. (3.54 km/h).	0.103 in. (2.62 mm)
Super Tournament.....	Yields 3/64 in. (1.2 mm) cut (Standard)	2.0 m.p.h. (3.22 km/h).	0.094 in. (2.39 mm)

2.5 WEIGHTS

Weights:	Lbs.	(kg)
Weight with batteries, catcher, Aluminum front roller and kickstand.		
62290	223	(101)

2.6 ACCESSORIES & SUPPORT LITERATURE

Contact your area Jacobsen Dealer for a complete listing of accessories and attachments.



CAUTION: Use of other than Jacobsen authorized parts and accessories may cause personal injury or damage to the equipment and will void the warranty.

Accessories

Lapping Compound (180 grit)	554598
Orange Touch-up Paint (12 oz. spray)	554598
Grass Catcher	68123
Push Brush.....	68611
Front Roller Brush	68610
Light Kit	68659
Battery Charger	68661
Removable Battery Tray (Does not include batteries).	68668
Trailer Mounting Kit (For extra battery pack)	68660
Mower Caddy mounting Kit (For Mower)	68650

Front Rollers

Grooved Assembled Disc	68527
Grooved Machined Aluminum.....	68614
Grooved Machined Steel	68613
Grooved Segmented.....	68658
Solid roller with Scraper	68530

Support Literature

Technical Manual	4105380
Operator Training Video.....	4104421
Service & Repair Manual	

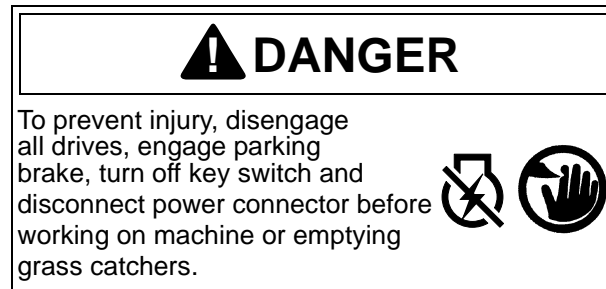
3 DECALS

3.1 DECALS

Familiarize yourself with the decals, they are critical to the safe operation of the mower. REPLACE DAMAGED DECALS IMMEDIATELY.

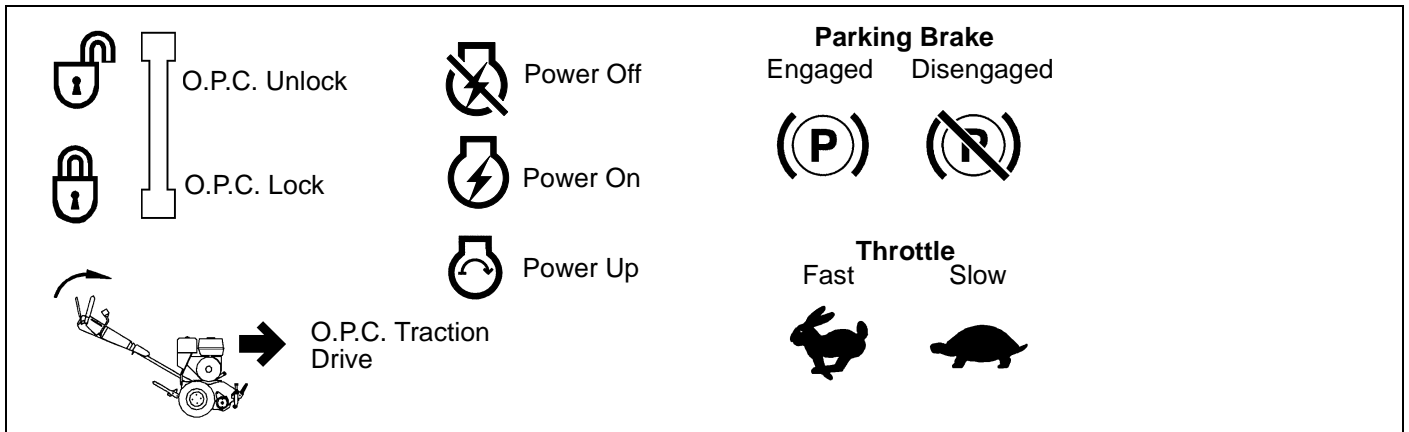
<p>⚠ WARNING</p> <ol style="list-style-type: none">1. Read operator's manual. Do not allow untrained operators to use machine.2. Keep shields in place and hardware securely fastened.3. Before you clean, adjust or repair this equipment, disengage all drives, engage parking brake and disconnect power connector.4. Keep hands, feet and clothing away from moving parts.5. Keep bystanders away.	<p>⚠ ADVERTENCIA</p> <ol style="list-style-type: none">1. Leer el manual del operador. No permitir que personas no capacitadas para ello usen la maquina.2. Mantener los escudos en su lugar y la tornilleria debidamente fijada.3. Antes de limpiar, ajustar o reparar este equipo, desengranar todas los mandos, aplicar el freno de estacionamiento y disconnectar el conector de poder.4. Manterer las manos, los pies y la ropa alejados de las piezas en movimiento.5. Manterer a las demas personas alejadas.6. Si no sabe leer ingles, solicitarle a otra persona que ie lea y explique el contenido de las etiquetas y del manual de las maquina.	<p>VEHICLE MASS 101.2 kg</p>
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4.1 ICONS



⚠ WARNING

Never attempt to operate the machine unless you have read the Safety and Operation Manual, the Parts and Maintenance Manual and know how to operate all controls correctly.

Familiarize yourself with the icons shown above and what they represent. Learn the location and purpose of all the controls before operating this mower.

4.2 CONTROLS

- A. **Parking Brake** – Used whenever the mower is left unattended or as a service brake while transporting.
- B. **Traction Speed** – Controls the ground speed of the unit. Push lever forward to increase ground speed.
- C. **O.P.C. Lock-out** – Prevents the O.P.C. bail from being accidentally engaged. Push lever (C) forward, then engage the O.P.C. bail (D).
- D. **O.P.C. Bail** - The bail handle controls power to both the reel and traction drive. The bail must be disengaged to power up the mower.
- E. **Power Switch** - The power switch turns the power on and off. It has three positions OFF, RUN and START.
- F. **Reel Switch** - The reel switch is used to start and stop the reel.
- G. **Hour Meter** - Records operating hours. Used to schedule periodic maintenance.
- H. **Power Light** - Indicates unit is energized.
- I. **Battery Monitor (Not Shown)** - Located on the removable battery pack displays battery charge level. Display will start flashing when charge level falls to 20%.

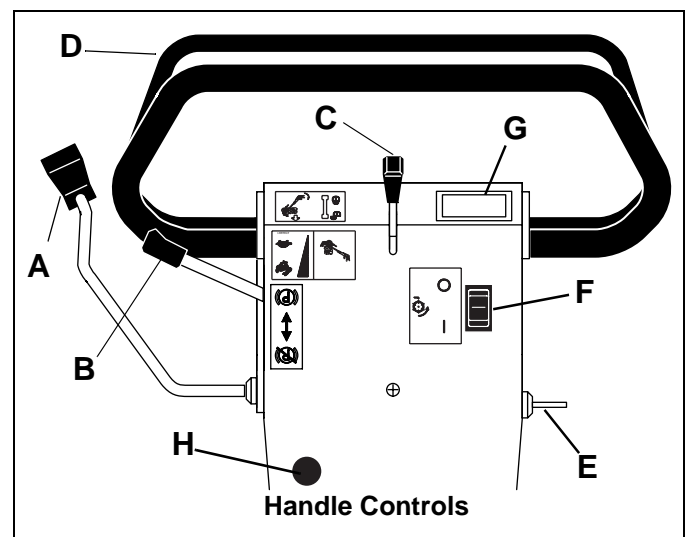


Figure 4A

⚠ DANGER

Keep hands and feet away from the cutting unit to prevent serious injury.

5 OPERATION

5.1 DAILY INSPECTION

CAUTION

The daily inspection should be performed only with the parking brake engaged, and power connector disconnected.

1. Perform a visual inspection of the entire unit, look for signs of wear, loose hardware, missing or damaged components.
2. Make sure the mower is adjusted to the required cutting height.
3. Make sure the machine is lubricated and the transport tires are properly inflated.
4. Check the O.P.C. system.

5.2 INTERLOCK SYSTEM (O.P.C.)

1. The Interlock System is intended to protect the operator and others from injury by stopping the reel and drive mechanism as soon as the operator releases the O.P.C. bail.

WARNING

Never operate equipment with the Interlock System disconnected or malfunctioning. Do not disconnect or bypass any switch.

2. To test the system, the mower must have the transport wheels attached.
 - a. Place mower on the kickstand.
 - b. Place reel switch in OFF position.
3. Start the unit and place throttle at mid-point.
 - a. Push O.P.C. lock-out **(C)** forward then push O.P.C. bail **(D)** down.
 - b. The drive mechanism will engage and the wheels will begin to turn.
 - c. Release the O.P.C. bail. The bail must come up and the wheels must stop.
4. If the wheels begin to turn before the O.P.C. bail is engaged or the wheels continue to turn after the O.P.C. bail is released; shut off the power immediately and have the system inspected and repaired.

5.3 OPERATING PROCEDURES

CAUTION

To help prevent injury, always wear safety glasses, leather work shoes or boots, a hard hat, and ear protection.

1. Do not operate mower or attachments with loose, damaged or missing components. Whenever possible mow when grass is dry.
2. First mow in a test area to become thoroughly familiar with the operation of the mower and control levers.

Note: To prevent damage to the reel and bedknife **never** operate the reels when they are not cutting grass. Excessive friction and heat will develop between the bedknife and reel and damage the cutting edge.
3. Study the area to determine the best and safest operating procedure. Consider the height of the grass, type of terrain, and condition of the surface. Each condition will require certain adjustments or precautions. Only use accessories and attachments approved by Jacobsen.
4. Never direct discharge of material toward bystanders, nor allow anyone near the machine while in operation. The owner/operator is responsible for injuries inflicted to bystanders and/or damage to their property.
5. Use discretion when mowing near gravel areas (roadway, parking areas, cart paths, etc.). Stones discharged from the implement may cause serious injuries to bystanders and/or damage the equipment.
6. Disengage the reel switch when crossing paths or roadways. Look out for traffic.
7. Stop and inspect the equipment for damage immediately after striking an obstruction or if the machine begins to vibrate abnormally. Have the equipment repaired before resuming operation.

CAUTION

Before mowing, pick up all debris such as rocks, toys and wire which can be thrown by the machine. Enter a new area cautiously. Always operate at speeds that allow you to have complete control of the mower.

WARNING

Before you clean, adjust, or repair this equipment, always disengage O.P.C. bail, engage parking brake, turn power off and disconnect power connector to prevent injuries.

8. Slow down and use extra care on hillsides. Use caution when operating near drop offs.
9. Look behind and down before backing up to be sure of a clear path. Use care when approaching blind corners, shrubs, trees or other objects that may obscure vision.
10. Never use your hands to clean cutting units. Use a brush to remove grass clippings from blades. Blades are extremely sharp and can cause serious injuries

5.4 STARTING/STOPPING

1. Disconnect battery charger and connect power connector.
2. Make certain O.P.C. bail (D) is disengaged and parking brake (A) is engaged.
3. Turn power switch (E) to start position. Green power light (H) should light.
4. Check remaining battery charge on display gauge. If battery charge is low, recharge batteries before operating.
5. To mow or transport unit, push O.P.C. lockout lever (C) forward and engage O.P.C. bail (D).
6. To stop the unit, release the O.P.C. bail, engage parking brake and set power switch to "OFF" position.

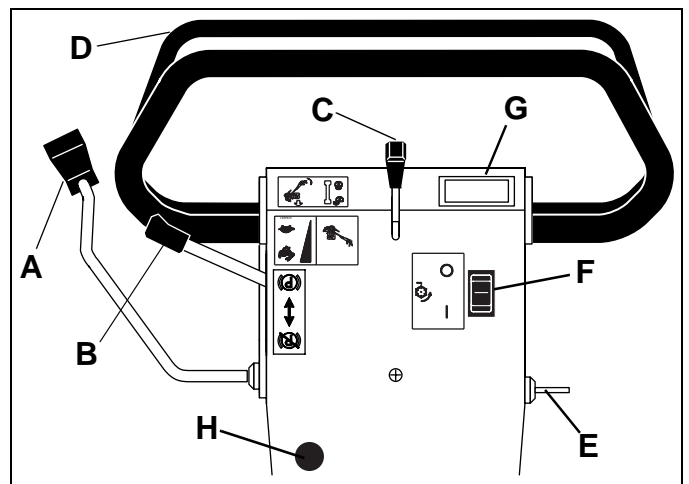


Figure 5A

5 OPERATION

5.5 TRANSPORT WHEELS

WARNING

Always engage parking brake and disconnect power connector before installing or removing the transport wheels.

1. Push and hold the kickstand against the ground then pull the mower handle back until the mower rests on the stand (**L**).
2. To remove wheels, press retaining clip (**M**) away from hub and pull wheel off hub.
3. To install wheels, press retaining clip (**M**), place wheel on hub and turn the wheel backwards until studs on back of wheel line up with holes in hub (**N**). Push wheel in and release clip.
4. Always disengage reel switch prior to transporting the mower more than a few feet.

5. Push the mower forward off the kickstand, start the unit and engage the O.P.C. bail.
6. When using a vehicle to transport the mower, apply parking brake, turn power off and disconnect power connector.

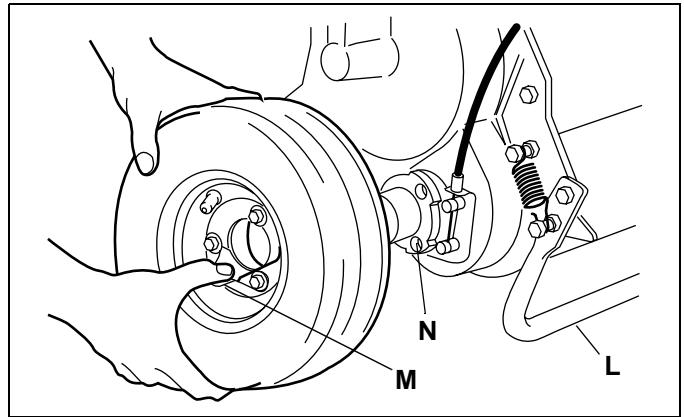


Figure 5B

5.6 MOWING

WARNING

To prevent serious injuries, keep hands, feet and clothing away from cutting unit when the blades are moving.

NEVER use your hands to clean cutting units. Use a brush to remove grass clippings from blades. Blades can be sharp and could cause injuries.

To clear obstructions from cutting unit, disengage O.P.C. bail, engage parking brake, turn off power switch and disconnect power connector then remove obstruction.

1. Turn power off. Place mower on kickstand and remove the transport wheels.
2. Engage the reel switch. Push the mower forward off kickstand. Start the unit.
3. Position mower slightly off green.
 - a. Adjust traction speed lever to provide a safe, comfortable walking speed.
 - b. Push handle down to lift mower head above the grass then engage the O.P.C. bail.

- c. As the mower crosses the edge of the green, lower the mower head to the ground and proceed across the green in a straight line.
- d. When the opposite side of the green is reached, lift the mower head without disengaging the O.P.C. bail and proceed off the green to turn around or simply release the O.P.C. bail and turn around.

Note: To prevent damage to the reel and bedknife **never** operate the reels when they are not cutting grass. Excessive friction and heat will develop between the bedknife and reel and damage the cutting edge.

4. To assure complete even cutting, overlap swaths by 1 to 2 in., (25 or 30 mm) then make one or more passes around the perimeter of the green to clean ragged edges and separate the putting green surface from the apron.

5.7 GRASS CATCHER

1. When the basket is about two thirds (2/3) full of grass clippings, move the mower off the green.
2. Stop on a flat surface, disengage O.P.C. bail, engage parking brake and disconnect power connector.
3. Remove and empty the grass clippings from the mower.



WARNING

To prevent serious injury, always disengage O.P.C. bail and disconnect power connector before emptying grass catcher.

6 ADJUSTMENTS

6.1 GENERAL

WARNING

Before you adjust, clean, or repair this equipment, always disengage all drives, engage parking brake, turn power off and disconnect power connector to prevent serious injury.

1. Adjustments and maintenance should always be performed by a qualified technician. If proper adjustment cannot be made, contact an authorized Jacobsen Dealer.

2. Replace, do not adjust, worn or damaged components.
3. Long hair, jewelry or loose fitting clothing may get tangled in moving parts.

CAUTION

Be careful to prevent entrapment of the hands and fingers between moving and fixed components of the machine.

4. Do not change speed limit settings or overspeed the drive motors.

6.2 REEL TO BEDKNIFE

(Pre-adjustment Check)

1. Check the reel bearings for end play or radial play. If there is any abnormal movement of the reel, up and down or side to side, adjust or replace components as needed.

CAUTION

Handle the reel with extreme care to prevent personal injury and damage to the cutting edges.

2. Inspect the reel blades and bedknife to insure good sharp edges without bends or nicks.
 - a. The cutting edges of the reel blades and bedknife must be sharp, free of burrs and show no signs of rounding off.
 - b. The bedknife and bedknife backing must be securely tightened. The bedknife must be straight and sharp.
 - c. A flat surface of at least 1/32 in. (0.8 mm) minimum must be maintained on the front face of the bedknife. Use a standard flat file to dress the bedknife.
3. If wear or damage is beyond the point where the reel or bedknife can be corrected by the lapping process, they must be reground.

4. Proper reel-to-bedknife adjustment is critical. A gap of 0.001 to 0.003" (0.025 to 0.076 mm) must be maintained across the entire length of the reel and bedknife.
5. The reel must be parallel to the bedknife. An improperly adjusted reel will lose its sharp edges prematurely and may result in serious damage to the reel and bedknife.
6. Grass conditions will also affect the adjustment.
 - a. Dry, sparse conditions will require a wider gap to prevent heat buildup and damage to the reel and bedknife.
 - b. High quality grass with a good moisture content requires a closer gap (near zero).

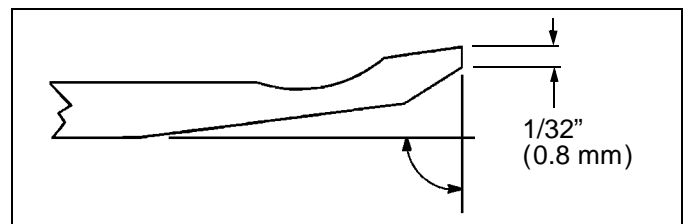


Figure 6A

6.3 BEDKNIFE ADJUSTER

1. Adjuster **(A)** is used to increase or decrease the spring load on the bedknife. Adjuster **(B)** is used to move the bedknife to the reel or away from the reel.
2. Once the spring is totally collapsed as a result of many adjustments, the bedknife cannot be moved. Back-off adjuster **(A)** before adjusting **(B)**.
3. For most applications, compress the spring to 1 in., (25 mm).

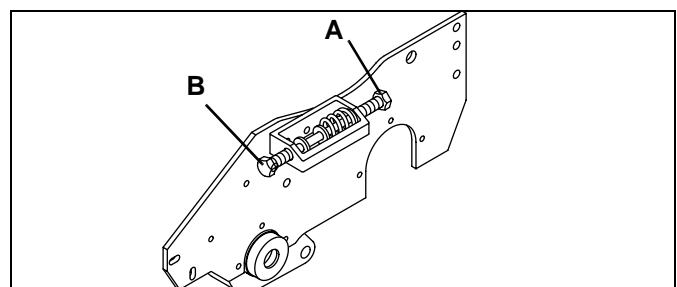


Figure 6B

6.4 BEDKNIFE

1. Read Section 5.2 before making the adjustment.
2. Start adjustment at the leading edge of the reel, followed by the trailing end. *The leading end of the reel blade is the end that passes over the bedknife first during normal rotation.*

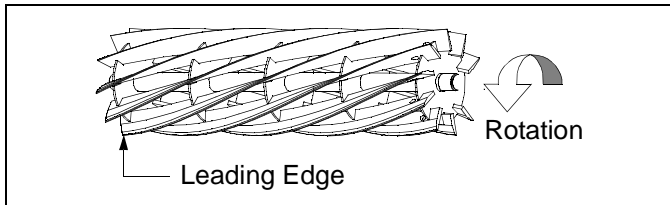


Figure 6C

CAUTION

Handle the reel with extreme care to prevent personal injury and damage to the cutting edges.

3. Turn adjuster **(B)** clockwise to bring the bedknife closer to the reel or counterclockwise to back the bedknife away from the reel.
 - a. Slide a feeler gauge or shim stock 0.001 - 0.003 in., (.025 - .075 mm) between the reel blade and the bedknife. Do not turn the reel.
 - b. Adjust the trailing end of the reel in the same manner, then recheck the adjustment at the leading end.
 - c. When the reel and bedknife are properly adjusted, the reel will spin freely and will cut a piece of newspaper along the full length of the reel when the paper is held at 90° to the bedknife.

6.5 BRAKE

A properly adjusted brake requires 10 lbs. pull at top of brake lever to engage and must have 1-1/2" (38 mm) center to center when released.

1. Minor adjustments are made at the handle. Loosen nut **(H)**, turn nut **(J)** to adjust the brake cable, then tighten nut **(H)**.
2. If adjustments cannot be made at the handle, remove the transport wheel and make the adjustment at the brake band.
3. Loosen screw **(K)** and pull cable to obtain desired brake tension. Tighten screw **(K)**. Readjust **(H)** and **(J)**.

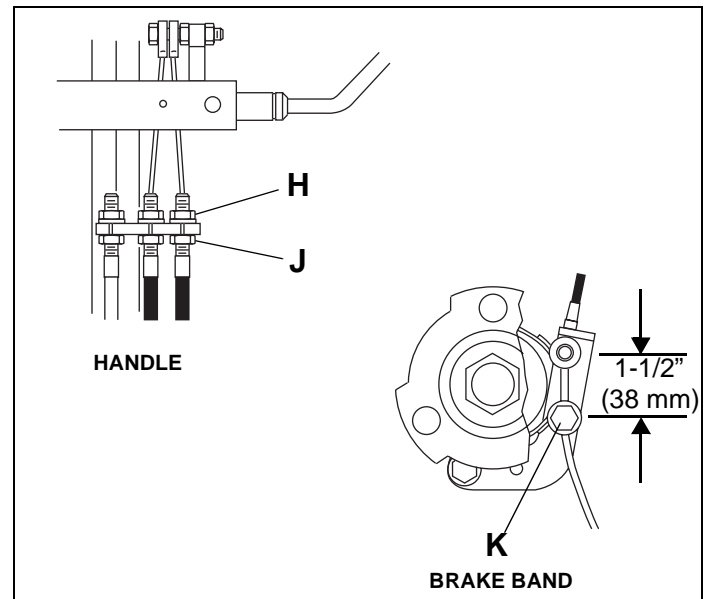


Figure 6D

6 ADJUSTMENTS

6.6 CUTTING HEIGHT

Note: Make sure the bedknife is properly adjusted before setting the cutting height. (See Section 6.4)

1. Push kickstand down and tip mower back on it's handle.
2. Loosen nuts **(M)** on both sides just enough to allow knob **(L)** to raise the front roller. Raise both sides an equal amount.
3. Set gauge screw **(P)** to the desired cutting height **(O)**. Measure from the gauge bar **(N)** to the underside of the screw head **(P)** then tighten wing nut to lock the adjustment.
4. Place gauge bar between front roller and traction roller, near the outer end of the rollers.
5. Slide screw head over bedknife **(Q)** and adjust knob **(L)** so roller just contacts the gauge bar. Tighten nut **(M)**.

6. Repeat Steps 4 and 5 on the opposite end of the reel then tighten nuts **(M)**. Recheck and readjust the cutting height if necessary.

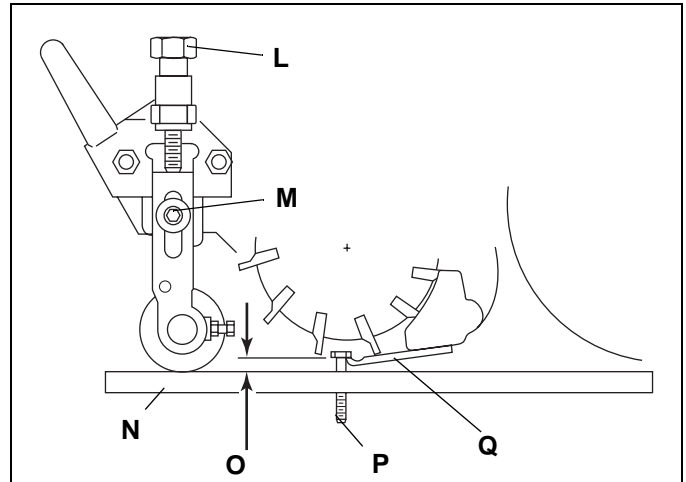


Figure 6E

6.7 BELT ADJUSTMENT

CAUTION

To prevent permanent damage to the belt, do not twist, fold, bend or overtighten the belt.

1. To adjust belt **(A)**, assemble 5/16-18 x 1" hex head screw **(D)** and 5/16-18 hex nut **(E)** to bottom of bearing bracket **(B)**. Loosen nuts **(C)**.
2. Place bedknife gauge bar **(F)** on top of roller and under screw **(D)**. Tighten screw **(D)** until belt **(A)** deflects 1/10" (2.5 mm) with 1 ~ 2 lb (0.45 ~ 0.91 kg) load applied at mid span.
3. Tighten nuts **(C)** and remove 5/16-18 x 1" screw **(D)** and lower nut **(E)**
4. Place hardware **(D and E)** in a safe place for future adjustments.
5. To adjust belt **(G)**, loosen pivot hardware **(H)** and pivot motor housing towards front of mower until belt deflects 1/10" (2.5 mm) with 1 ~ 2 lb (0.45 ~ 0.91 kg) load applied at mid span. Tighten hardware **(H)**.

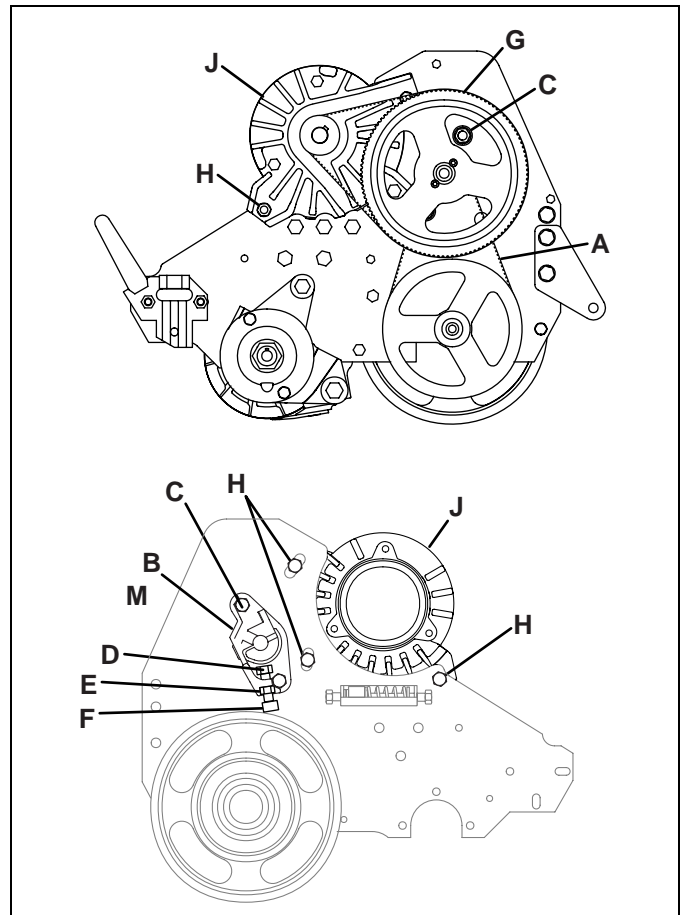


Figure 6F

6.8 HANDLE

1. To adjust the angle of the handle bar (**Y**), loosen screw (**W**) on both sides of the mower and adjust the handle bar to the desired position.
2. After adjusting handle bar, adjust bracket (**X**) so that the handle bar just rests on the bottom of the slot in bracket. Tighten screw (**W**).

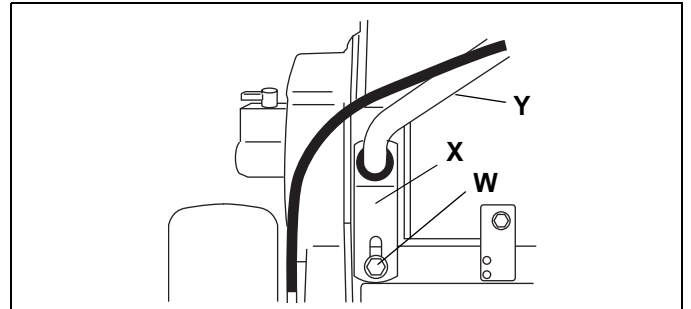


Figure 6G

6.9 OPC SWITCH ADJUSTMENT

1. Remove lower handle cover.
2. Loosen set screw and adjust collar (**Z**) on OPC bail rod to 4-7/8 in. (124 mm) from end of rod.
3. Test switch and adjust collar up or down as required until switch contacts are open with the OPC disengaged, and contacts close when OPC is engaged. When adjusting switch, any free play in bail handle with OPC disengaged must be taken into account.
4. Tighten set screw and install lower handle cover.

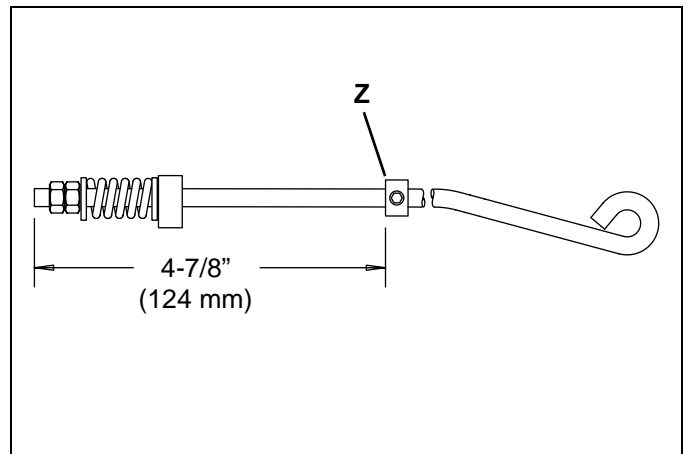


Figure 6H

6.10 THROTTLE SPRING ADJUSTMENT

1. Remove lower handle cover.
2. Loosen set screw and adjust collar (**AA**) on throttle spring rod to 1/2 in. (13 mm) from end of rod.
3. Tighten set screw and install lower handle cover.

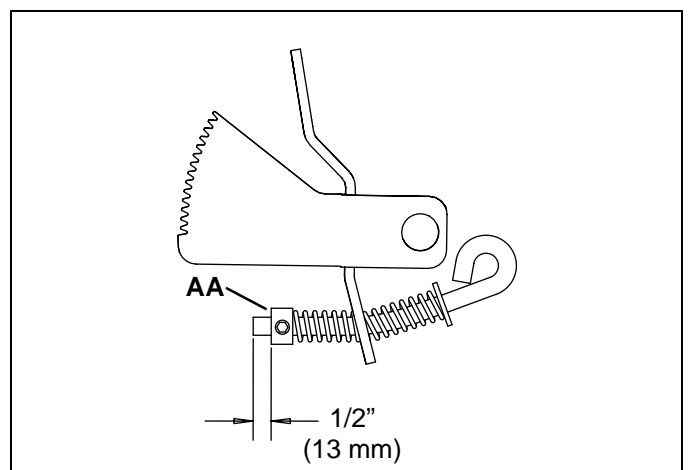


Figure 6I

6 ADJUSTMENTS

6.11 THROTTLE CABLE ADJUSTMENT

1. Remove hardware securing upper handle cover and move cover to the side. Do not disconnect any wires from electrical components.
2. Move throttle (**AH**) to fast position. Loosen retaining clip hardware (**AG**)
3. Position throttle cable so end of cable sheath extends 1-1/4 in. (32 mm) beyond cable retaining clip (**AJ**). Push cable up as required until cable end is located in hole of throttle stop plate (**AK**). Tighten retaining clip hardware.
4. Move throttle (**AH**) to slow position.
5. Make certain bail handle is disengaged. Move wire stop (**AL**) up until it is just touching throttle stop plate (**AK**). Tighten wire stop screw.
6. Slowly move throttle lever to fast position. Cable end must move through hole in throttle stop plate without binding.

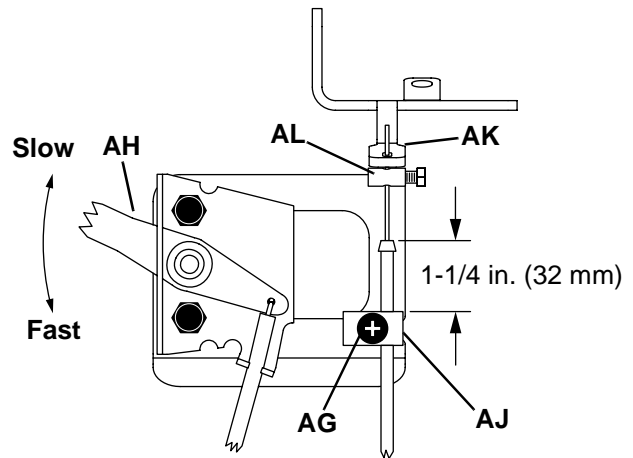


Figure 6J

6.12 FRONT ROLLER WEIGHT

The weight on the front roller is adjustable between 35 and 45 lb (15.9 - 20.4 kg). Adjust the front roller weight as required to meet your turf needs.

CAUTION

To prevent injury or property damage, place mower on kick stand before removing battery pack.

Full battery packs weigh approximately 55 lbs. Use proper lifting techniques when moving them.

1. To adjust front roller weight, disconnect power connector (**AB**) and remove battery pack (**AC**). Loosen hardware (**AD**), place battery pack back onto mower, take mower off kickstand and slide battery mounting tray (**AE**) as required.
2. To increase front roller weight, slide tray towards front of mower. To decrease front roller weight, slide tray towards rear of mower.
3. When desired weight is attained, measure distance from rear bar (**AF**) to back of tray (**AE**). Remove battery pack (**AC**). Recheck measured dimension and tighten hardware (**AD**).

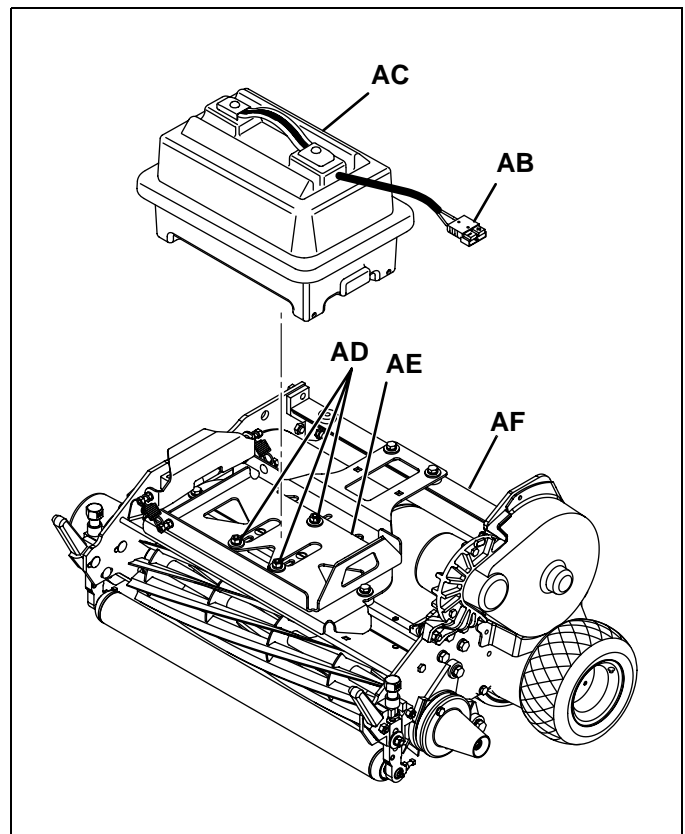


Figure 6K





6.13 TORQUE SPECIFICATION

CAUTION





All torque values included in these charts are approximate and are for reference only. Use of these torque values is at your sole risk. Jacobsen is not responsible for any loss, claim, or damage arising from the use of these charts. **Extreme caution should always be used when using any torque value.**

Jacobsen uses Grade 5 Plated bolts as standard, unless otherwise noted. For tightening plated bolts, use the value given for lubricated.

AMERICAN NATIONAL STANDARD FASTENERS

SIZE	UNITS					SIZE	UNITS				
		GRADE 5		GRADE 8				GRADE 5		GRADE 8	
		Lubricated	Dry	Lubricated	Dry			Lubri-cated	Dry	Lubri-cated	Dry
#6-32	in-lb (Nm)	–	20 (2.3)	–	–	7/16-14	ft-lb (Nm)	37 (50.1)	50 (67.8)	53 (71.8)	70 (94.9)
#8-32	in-lb (Nm)	–	24 (2.7)	–	30 (3.4)	7/16-20	ft-lb (Nm)	42 (56.9)	55 (74.6)	59 (80.0)	78 (105)
#10-24	in-lb (Nm)	–	35 (4.0)	–	45 (5.1)	1/2-13	ft-lb (Nm)	57 (77.2)	75 (101)	80 (108)	107 (145)
#10-32	in-lb (Nm)	–	40 (4.5)	–	50 (5.7)	1/2-20	ft-lb (Nm)	64 (86.7)	85 (115)	90 (122)	120 (162)
#12-24	in-lb (Nm)	–	50 (5.7)	–	65 (7.3)	9/16-12	ft-lb (Nm)	82 (111)	109 (148)	115 (156)	154 (209)
1/4-20	in-lb (Nm)	75 (8.4)	100 (11.3)	107 (12.1)	143 (16.1)	9/16-18	ft-lb (Nm)	92 (124)	122 (165)	129 (174)	172 (233)
1/4-28	in-lb (Nm)	85 (9.6)	115 (13.0)	120 (13.5)	163 (18.4)	5/8-11	ft-lb (Nm)	113 (153)	151 (204)	159 (215)	211 (286)
5/16-18	in-lb (Nm)	157 (17.7)	210 (23.7)	220 (24.8)	305 (34.4)	5/8-18	ft-lb (Nm)	128 (173)	170 (230)	180 (244)	240 (325)
5/16-24	in-lb (Nm)	173 (19.5)	230 (26.0)	245 (27.6)	325 (36.7)	3/4-10	ft-lb (Nm)	200 (271)	266 (360)	282 (382)	376 (509)
3/8-16	ft-lb (Nm)	23 (31.1)	31 (42.0)	32 (43.3)	44 (59.6)	3/4-16	ft-lb (Nm)	223 (302)	298 404	315 (427)	420 (569)
3/8-24	ft-lb (Nm)	26 (35.2)	35 (47.4)	37 (50.1)	50 (67.8)	7/8-14	ft-lb (Nm)	355 (481)	473 (641)	500 (678)	668 (905)

METRIC FASTENERS

SIZE	UNITS									Non Critical Fasteners into Aluminum
		4.6		8.8		10.9		12.9		
		Lubricated	Dry	Lubricated	Dry	Lubricated	Dry	Lubricated	Dry	
M4	Nm (in-lb)	–	–	–	–	–	–	3.83 (34)	5.11 (45)	2.0 (18)
M5	Nm (in-lb)	1.80 (16)	2.40 (21)	4.63 (41)	6.18 (54)	6.63 (59)	8.84 (78)	7.75 (68)	10.3 (910)	4.0 (35)
M6	Nm (in-lb)	3.05 (27)	4.07 (36)	7.87 (69)	10.5 (93)	11.3 (102)	15.0 (133)	13.2 (117)	17.6 (156)	6.8 (60)
M8	Nm (in-lb)	7.41 (65)	9.98 (88)	19.1 (69)	25.5 (226)	27.3 (241)	36.5 (323)	32.0 (283)	42.6 (377)	17.0 (150)
M10	Nm (ft-lb)	14.7 (11)	19.6 (14)	37.8 (29)	50.5 (37)	54.1 (40)	72.2 (53)	63.3 (46)	84.4 (62)	33.9 (25)
M12	Nm (ft-lb)	25.6 (19)	34.1 (25)	66.0 (48)	88.0 (65)	94.5 (70)	125 (92)	110 (81)	147 (108)	61.0 (45)
M14	Nm (ft-lb)	40.8 (30)	54.3 (40)	105 (77)	140 (103)	150 (110)	200 (147)	175 (129)	234 (172)	94.9 (70)


7 BATTERIES

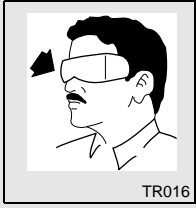
7.1 SAFETY

Batteries contain dilute sulfuric acid which can result in severe burns.

Hydrogen gas is formed within a battery during the charging cycle. Hydrogen in concentrations of 4% and higher are explosive and can be ignited by open flame or an electrical spark. A battery explosion will cause sulfuric acid and battery components to be thrown over a large area with considerable force.

Always observe the following warnings when working on or near batteries:

 **WARNING**



TR016

The electrolyte in a storage battery is a dilute acid which can cause severe burns to the skin and eyes. Treat all electrolyte spills to the body and eyes with extended flushing with clear water. Contact a physician immediately. Always wear a safety shield or approved safety goggles when charging batteries.


Hydrogen is explosive in concentrations as low as 4% and is generated in the charging cycle of electric mowers. Because it is lighter than air, it will collect in the ceiling of buildings necessitating proper ventilation. Air exchanges of 5 changes per hour is considered the minimum requirement.

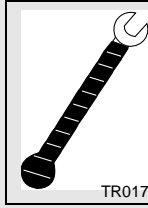
Never smoke around batteries.

Never charge batteries in an area that has open flame or electrical equipment that could cause an electrical arc.

Be sure that the key switch is off, all electrical accessories are turned off and power connector is disconnected before starting work on vehicle.

Remove all jewelry (watches, ring etc.)

 **WARNING**



TR017

Wrap wrenches with vinyl tape to prevent the possibility of a dropped wrench from 'shorting out' a battery, which could result in an explosion and severe personal injury.

Electrolyte spills should be neutralized with a solution of 1/4 cup (59.1ml) of sodium bicarbonate (baking soda) dissolved in 1-1/2 gallons (5.7 liters) of water and flushed with water.

Never disconnect a circuit under load at a battery terminal.

Wear appropriate protective clothing when working with batteries. Electrolyte can cause severe burns to the eyes, skin and clothing.

Full battery packs weigh approximately 55 lbs. Use proper lifting techniques when moving them.

Batteries, battery posts, terminals and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and reproductive harm. **Wash your hands after handling.**

7.2 GENERAL

The batteries used in this mower are sealed lead acid (SLA) maintenance free type.

Temperature is important when conducting tests on a battery and test results must be corrected to compensate for temperature differences.

As a battery ages, it still performs adequately except that its **capacity** is diminished. Capacity describes the time that a battery can continue to provide its design amperes from a full charge.

A new battery must **mature** before it will develop its maximum capacity. Maturing may take up to 15 charge/discharge cycles. A battery has a maximum life, therefore good maintenance is designed to maximize the **available** life and reduce the factors that can reduce the life of the battery.

7.3 MAINTENANCE

Tool List

Insulated wrench, 3/8"
 Insulated wrench, 11/32"
 Standard Screwdriver

Before charging batteries

Inspect the connector housings of the battery charger and battery pack for dirt or debris. It is suggested to apply white lithium grease to both terminals to prevent corrosion.

Charge the batteries daily after use.

7.4 CLEANING BATTERIES

When cleaning the batteries, do not use a water hose without first spraying with a solution of sodium bicarbonate (baking soda) and water to neutralize any acid deposits.

Use of a water hose without first neutralizing any acid, will move acid from the top of the batteries to another area of the mower or storage facility where it will attack the metal structure or the concrete/asphalt floor. After hosing down the batteries, a residue will be left on the batteries which is conductive and will contribute to the discharge of the batteries.

The correct cleaning technique is to spray the top and sides of the batteries with a solution of sodium bicarbonate (baking soda) and water. This solution is best applied with a garden type sprayer equipped with a **non metallic spray wand**. The solution should consist of 1/4 cup (59.1 ml) of sodium bicarbonate (baking soda) mixed with 1-1/2 gallons (5.7 l) of clear water. In addition to the batteries, special attention should be paid to metallic components adjacent to the batteries which should also be sprayed with the sodium bicarbonate (baking soda) solution.

Allow the solution to sit for at least three minutes; use a soft bristle brush or cloth to wipe the tops of the batteries in order to remove any residue that could cause the self discharge of the battery. Rinse the entire area with low pressure clear water. Cleaning should take place yearly or more often under extreme conditions.

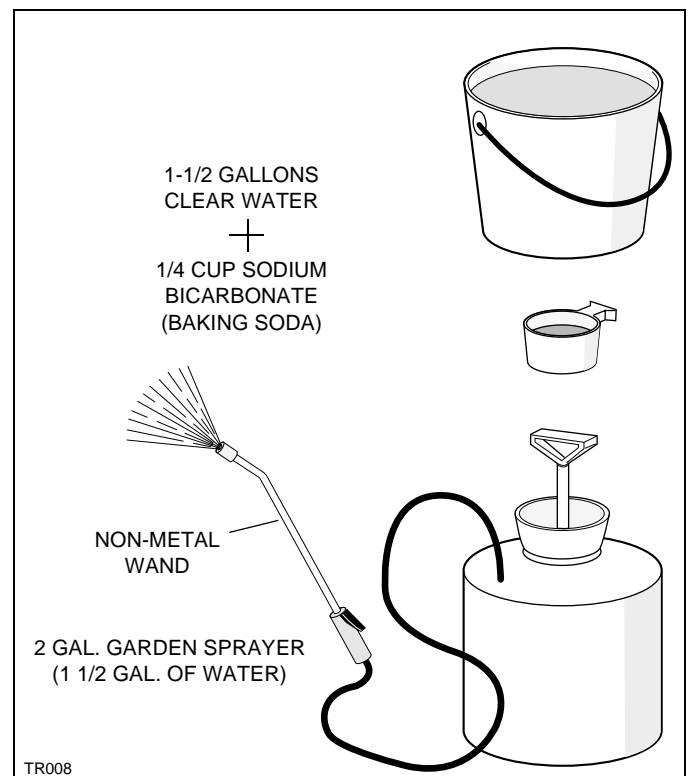


Figure 7A

7 BATTERIES

7.5 BATTERY CHARGER

The battery charger is designed to fully charge the battery pack. Read the instruction manual included with the charger for proper operating procedure.

Before charging, the following should be observed:

WARNING

Portable chargers should be mounted on a platform above the ground, or in such a manner as to permit the maximum air flow underneath and around the charger. Serious damage to the charger, overheating and potential for fire may result if the charger does not have sufficient air flow.

The charging must take place in an area that is well ventilated and capable of removing the hydrogen gas that is generated by the charging process. A **minimum** of five air exchanges per hour is recommended.

The charging connector components are in good condition and free from dirt or debris. It is suggested to apply white lithium grease to both terminals to prevent corrosion.

The charger connector is fully inserted into the battery pack receptacle.

The charger connector/cord set is protected from damage and is located in an area to prevent injury that may result from personnel running over or tripping over the cord set.

Install all chargers in accordance with the manufacturers instructions.

If the charger is operated in an outdoor location, rain and sun protection must be provided.

Remove AC power cord from outlet before connecting or disconnecting battery charger to battery pack.

The charging (DC) cord is equipped with a polarized connector which fits into a matching receptacle on the battery pack.

If the charger is not operating correctly, unplug charger from both the AC outlet and the battery pack and check the fuse.

AC Voltage

The charger is equipped with an input voltage selector switch located on the rear of the charger. Determine what input voltage is used in your area and set switch accordingly before connecting AC power cord. This charger can be used with the following AC input voltages:

- 100 - 130 V (Set voltage selector to 115 V (Position 1))
- 200 - 240 V (Set voltage selector to 230 V (Position 2))

NOTE: *Charger will operate with either a 50 or 60 Hz input voltage.*

Make certain the AC power cord is equipped with an appropriate plug for the area you live in. The charger is equipped with a grounding plug, do not attempt to defeat its functionality.

WARNING

An ungrounded electrical device may become a physical hazard that could result in an electrical shock or electrocution

Note: *The AC power cord included with the battery charger is used with 115 V - 60 Hz (North America) input voltage only. If you live in an area where 115 V - 60 Hz input voltage is not used, a new AC power cord must be purchased locally.*

The battery charger should fully charge the battery pack in approximately 7 hours with 115V AC input voltage. Battery charging times may exceed 8 hours in areas where 100V AC input voltage is used.

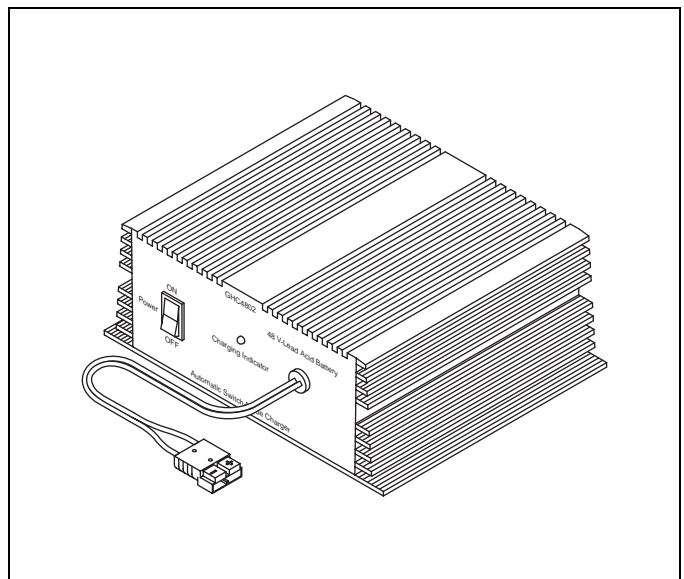


Figure 7B

7.6 BATTERY INSTALLATION

If the batteries have been cleaned and any acid in the battery tray area neutralized, no corrosion to the surrounding area should be present. Any corrosion found should be immediately removed with a putty knife and a wire brush. The area should be washed with a solution of sodium bicarbonate (baking soda) and water and thoroughly dried before priming and painting with a corrosion resistant paint.

The batteries should be placed into the battery tray as shown in **Figure 7C**. Using batteries with the correct physical size will prevent movement, but will not be tight enough to cause distortion of the battery case.

Inspect all wires and terminals. Clean any corrosion from the battery terminals or the wire terminals with a solution of sodium bicarbonate (baking soda) and brush clean if required.

Use care to connect the battery wires as shown in Figure 7D and tighten the battery post hardware securely. Protect the battery terminals and battery wire terminals with a commercially available protective coating.

Battery Pack Assembly:

1. Install batteries into battery tray.
2. Fasten fuse cable assembly (**D**) to battery pack with screws, lockwashers, and nuts.
3. Fasten two cable jumper wires (**E**) into their respective positions.
4. Thread the main cable (**F**) through the hole in the side of the battery case lid (**G**).
5. Attach the main cable (**F**) to the batteries, and battery monitor (**M**).
6. Assemble the two halves of the battery case (**G**) and (**H**), with screws (**J**), flat washers (**K**), and battery casing straps (**L**).

Refer to Section 2.2 for battery specifications.

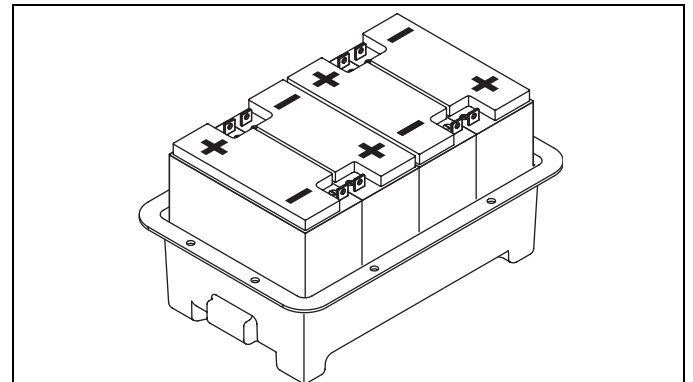


Figure 7C

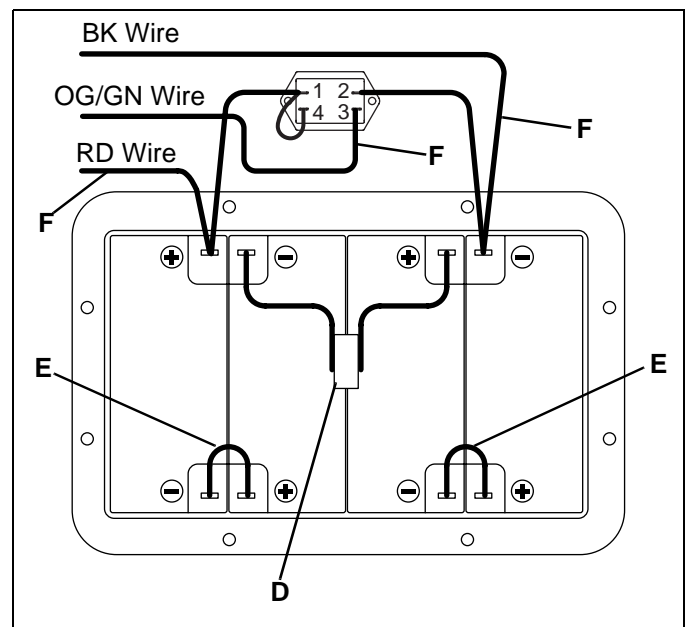


Figure 7D

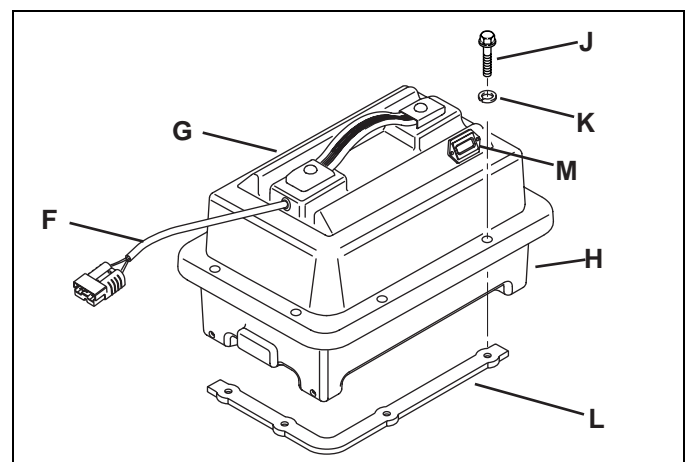


Figure 7E

WARNING

Aerosol containers of battery terminal protectant must be used with extreme care. Insulate the metal container to prevent the metal can from contacting battery terminals which could result in an explosion.

7 BATTERIES

7.7 REPLACING BATTERY PACK

The battery pack **(A)** is designed to be easily lifted out and replaced. This allows the mower to quickly return to service should the batteries become discharged or fail. Additional battery packs are available as an accessory. See Section 2.6

CAUTION

To prevent injury or property damage, place mower on kick stand before removing battery pack.

Full battery packs weigh approximately 55 lbs. Use proper lifting techniques when moving them.

To remove battery tray:

1. Park tractor on a solid, level area.
2. Set parking brake and remove key from switch.
3. Disconnect both battery connectors **(B)**, place mower on kickstand.
4. Push and hold battery release latch **(C)** down and lift battery pack **(A)** away from mower.
5. Reverse procedure to install pack. Be sure pack is completely seated on frame and secure.

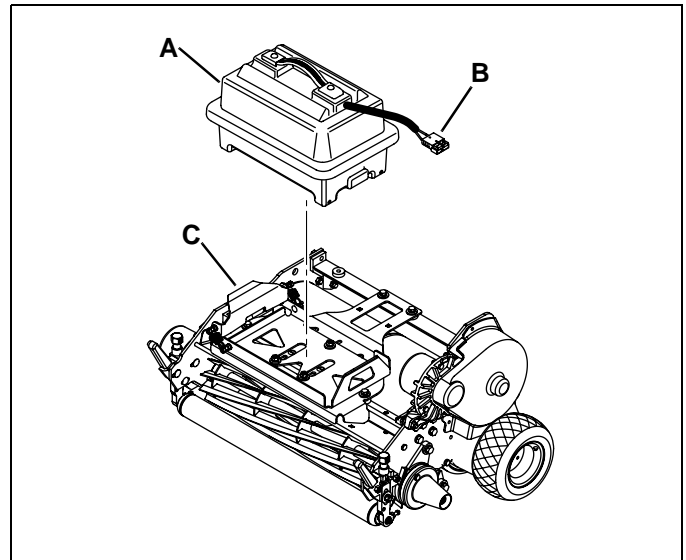


Figure 7F

8.1 GENERAL

! WARNING

Before you adjust, clean, or repair this equipment, always disengage all drives, engage parking brake, turn power off and disconnect power connector to prevent serious injury.

1. Adjustment and maintenance should always be performed by a qualified technician. If proper adjustments cannot be made, contact an Authorized Jacobsen Dealer.
2. Inspect the equipment on a regular basis, establish a maintenance schedule and keep detailed records.
 - a. Keep the equipment clean.
 - b. Keep all moving parts properly adjusted and lubricated.
 - c. Replace worn or damaged parts before operating the machine.
 - d. Keep shields in place and all hardware securely fastened.
 - e. Keep tires properly inflated.

3. Long hair, jewelry or loose fitting clothing may get tangled in moving parts.

! CAUTION

Be careful to prevent entrapment of the hands and fingers between moving and fixed components of the machine.

4. Use the illustrations in the Parts Catalog as reference for the disassembly and reassembly of components.
5. Recycle or dispose of all hazardous materials (batteries, lubricants, etc.) according to local, state or federal regulations.
6. Do not change speed limit settings or overspeed the drive motors.

8.2 TIRES

1. Keep tires properly inflated to prolong tire life. Check pressure only when the tires are cool.
2. Use an accurate, low pressure tire gauge. 6 - 8 psi (41.3-55.1 kPa)

! CAUTION

Unless you have the proper training, tools and experience, DO NOT attempt to mount a tire on a rim. Improper mounting can produce an explosion that may result in serious injury.

8.3 WHEEL BEARING

The bearing has the word **LOCK** and an arrow stamped on the face. When replacing the bearing, make absolutely certain that the bearing is being installed in the proper direction or rotation.

For the **Right** wheel, install the bearing with the "**LOCK➡**" arrow to the **Outside** of the bearing housing.

For the **Left** wheel, install the bearing with the "**LOCK➡**" arrow to the **Inside** of the housing.

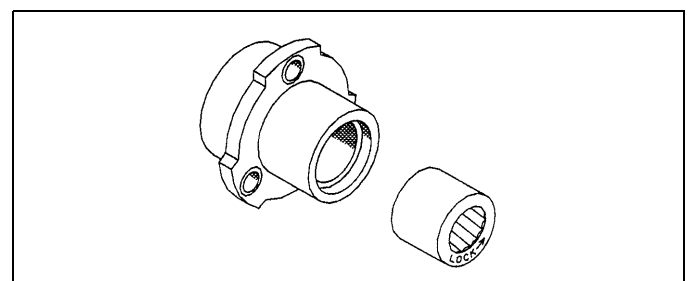


Figure 8A

8 MAINTENANCE

8.4 BACKLAPPING AND GRINDING

Check for damage to the bedknife and reel blades. Refer to (Section 6.2).

1. Determine if backlapping or grinding will restore the proper cutting edge.
2. For optimum performance use a bedknife grinder to touch-up the blade then reassemble and adjust the bedknife to the reel as described in (Section 6.2).

NOTE: *Using a bench backlapping unit will not cause any damage to the reel drive motor.*

3. Remove shaft cover from left side of reel and assemble a 3/8-24 bolt and locknut to the end of the shaft.

- a. Apply lapping compound with a long handle brush along the entire length of the reel, (180 grit is recommended, Section 2.6).
 - b. Continue lapping and at the same time make a fine adjustment on the reel and bedknife until there is a uniform clearance along the full length of the cutting edges.
4. Carefully and thoroughly remove all lapping compound from reel and bedknife *before running the reel in forward direction.*

8.5 STORAGE

General

1. Wash the mower thoroughly and lubricate. Repair and paint damaged or exposed metal.
2. Inspect the mower, tighten all hardware, replace worn or damaged components.
3. Clean the tires thoroughly and store the tractor on the kickstand so the load is off the tires. The front roller should be resting on a wood board.
4. Keep the machine and all its accessories clean, dry and protected from the elements during storage. Never store equipment near an open flame.

Reel and Bedknife

1. Wash the reel and bedknife thoroughly, then repair and paint any damaged or exposed metal.
2. Lubricate all fittings and friction points.
3. Backlap the reels then back the reel away from the bedknife. Apply a light coat of rust preventative oil to the sharpened edges of the reel and bedknife.



CAUTION: *To prevent personal injury and damage to the cutting edges, handle the reel with extreme care.*

Batteries

During periods of storage, the batteries will need attention to keep them maintained and prevent discharge.

In high temperatures the chemical reaction is faster, while low temperatures cause the chemical reaction to slow down. If a fully charged battery is allowed to sit unused, it will slowly self discharge. When the battery

charge level falls to 80% of its full charge, it should be recharged.

If a battery is allowed to fully discharge and is left in a discharged state, sulfation takes place on and within the plates. This condition is not reversible and will cause permanent damage to the battery. In order to prevent damage, the battery should be recharged.

In winter conditions, the battery must be fully charged to prevent the possibility of freezing. A fully charged battery will not freeze in the most severe of winter climates. Although the chemical reaction is slowed in cold temperatures, the battery must be stored fully charged, and disconnected from any circuit that could discharge the battery. Disconnect the charging plug from the mower power connector. The batteries must be cleaned and all deposits neutralized and removed from the battery case to slow self discharge. The batteries should be tested or recharged at thirty day intervals.

After Storage

1. Fully charge the batteries.
2. Make certain that the tires are properly inflated.
3. Remove all oil from the reels and bedknife. Adjust bedknife and cutting height.

9.1 GENERAL

The troubleshooting chart below lists basic problems that may occur during start-up and operation. For more detailed information, contact your area Jacobsen Dealer.

Symptoms	Possible Causes	Action
Unit does not have power	<ol style="list-style-type: none"> 1. Power Connector Disconnected 2. Batteries Discharged 3. 50 Amp fuse blown 4. 3 Amp fuse blown 5. Defective Battery 6. OPC bail engaged 7. OPC Switch out of adjustment 	<ol style="list-style-type: none"> 1. Connect Power Connector 2. Fully charge battery pack 3. Open battery tray and check fuse. Replace 4. Check fuse, Replace 5. Perform load test, replace batteries as needed 6. Disengage bail and restart 7. Adjust OPC Switch
Mower does not react to O.P.C. Lever	<ol style="list-style-type: none"> 1. Power switch not on 2. Parking brake engaged 3. Reel switch in off position 4. Broken Belt 5. OPC Switch out of adjustment 	<ol style="list-style-type: none"> 1. Follow proper start-up procedure 2. Disengage parking brake 3. Turn reel switch on 4. Check and replace belts as needed 5. Adjust OPC Switch
Reel does not cut, or cuts unevenly	<ol style="list-style-type: none"> 1. Reel to bedknife not adjusted 2. Reel switch in off position 	<ol style="list-style-type: none"> 1. Adjust Reel to Bedknife 2. Turn reel switch on

10 MAINTENANCE & LUBRICATION CHARTS

10.1 GENERAL

The mower was designed for minimum lubrication. Over greasing will produce high loads on the bearings; thereby reducing the performance of the machine.

All maintenance intervals must be performed more frequently when operating in extremely dusty conditions.



WARNING

Before you clean, adjust, or repair this equipment, disengage all drives, engage parking brake, turn power off and disconnect power connector to prevent injuries.

1. Always clean grease fittings before and after lubrication.
2. Lubricate with grease that meets or exceeds NLGI Grade 2 LB specifications. Apply grease with a manual grease gun and fill slowly until grease begins to seep out. Do not use compressed air.

3. For smooth operation of pivot points and other friction points, apply several drops of SAE 30 oil every 50 hours or as required.
4. To lubricate point **(L4)**, remove L.H. transport wheel and mounting bracket **(E)** to gain access to fitting. Turn the traction drum if pulley **(F)** is blocking the fitting then insert grease gun through hole and carefully apply grease.
5. To lubricate points **(L7)**, remove transport wheel, nut **(A)** from end of shaft and pull wheel hub **(D)** off. Remove collar **(B)** and bushing **(C)** then pack bearing with lithium grease.

10.2 MAINTENANCE CHART

Recommended Service and Lubrication Intervals

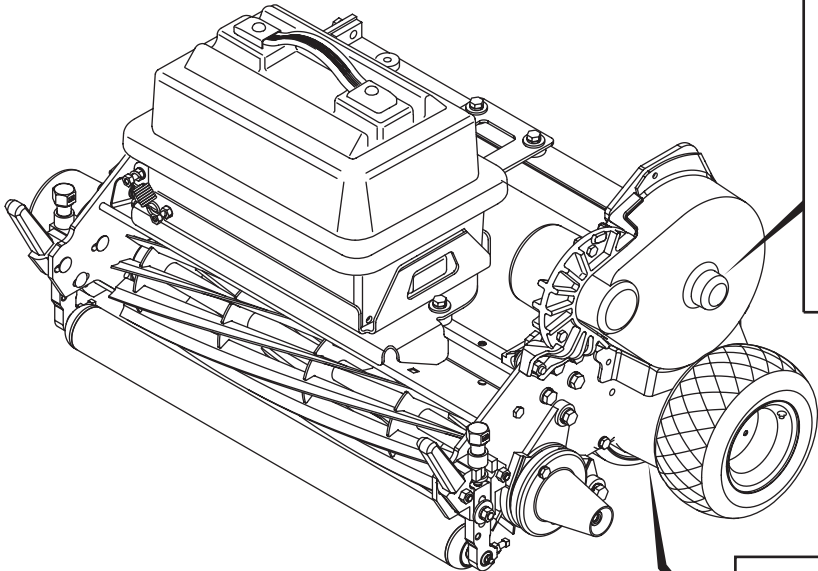
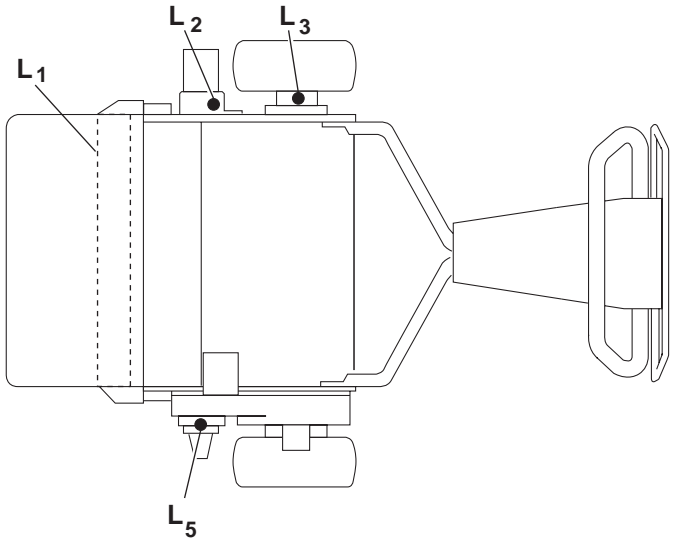
	Every 3-4 Hours	Every 20 Hours	Every 50 Hours	Every 100 Hours	Every 250 Hours	Yearly	Lubricant Type
Charge Batteries	AR		I			C	
Belt Tension						I-A	
Grease Locations							
L1 - L5			L			L	I
L6-L7						L	I

A - Adjust C - Clean I - Inspect L - Lubricate R - Replace AR - As Required

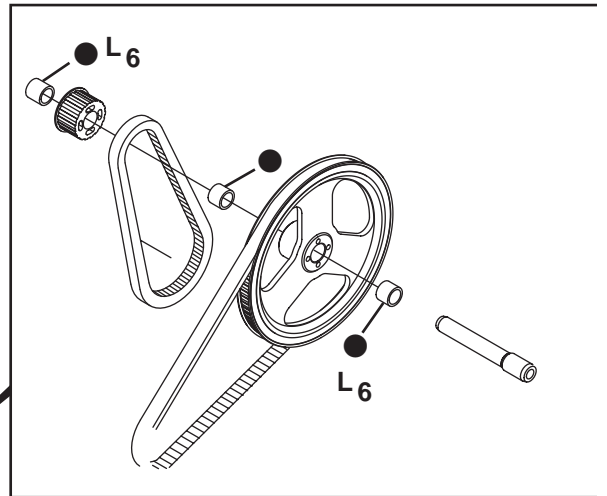
* Indicates initial service for new machines.

I Manual grease gun with NLGI Grade 2 (Service Class LB).

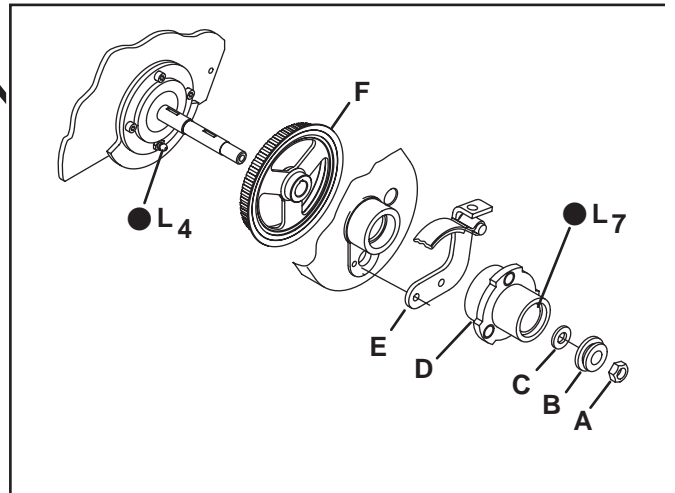
10.3 LUBRICATION CHART



Pulley Shaft Assembly



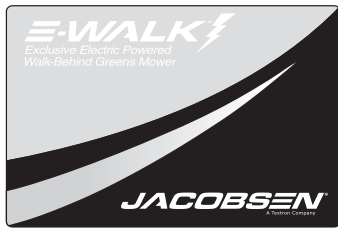
Wheel Hub Assembly



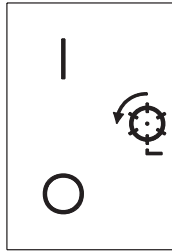
12.1 TABLE OF CONTENTS

1.1	Decals	32
2.1	Handle Covers	34
3.1	Handle Electronics	35
4.1	Handle Controls	36
5.1	Internal Controls	38
6.1	Battery Case Mounting Tray	40
7.1	Battery Case	42
8.1	Lower Unit	44
9.1	Reel	46
10.1	Belts and Drive Motors	48
11.1	Parking Brake and Transport Wheels	50
12.1	Differential and Rollers	52
13.1	Clamps and Wire Harness	54
14.1	Electrical Schematic	56

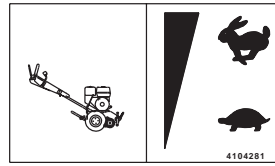
1.1 Decals



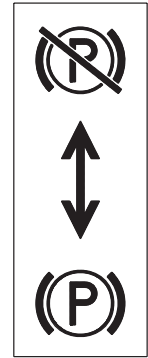
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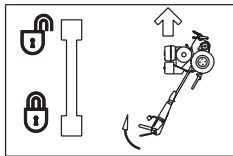
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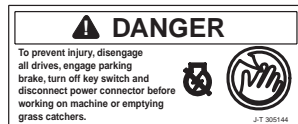
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7



5



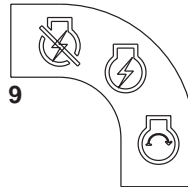
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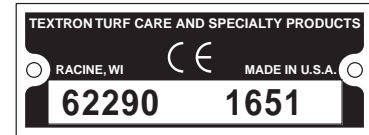
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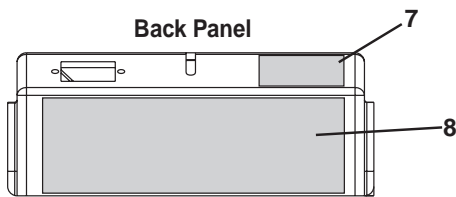
VEHICLE
MASS
101.2 Kg.



9



10



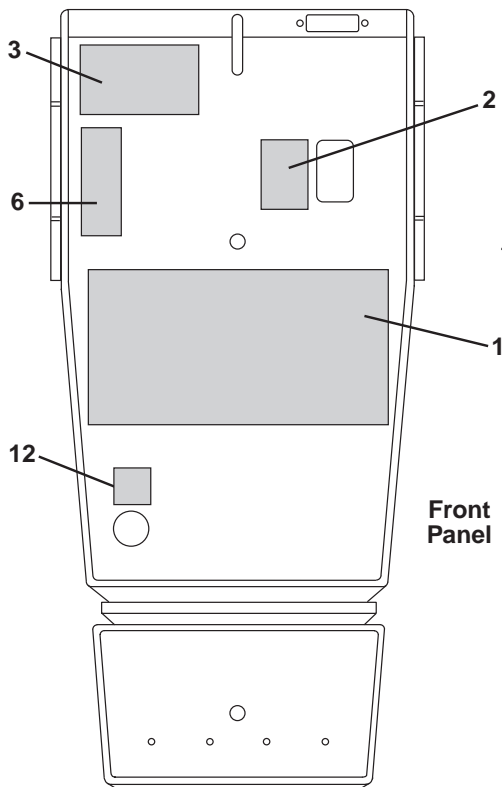
Back Panel



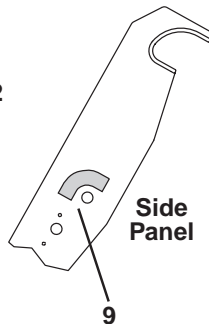
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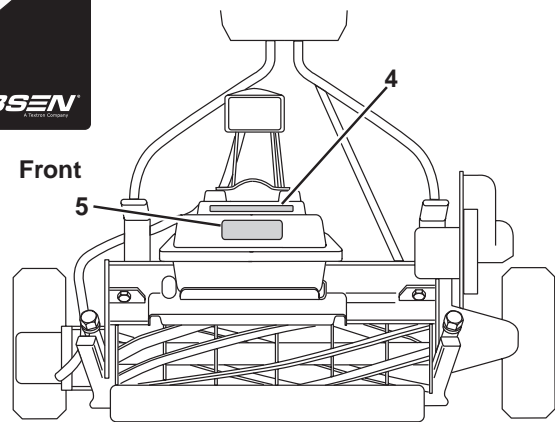
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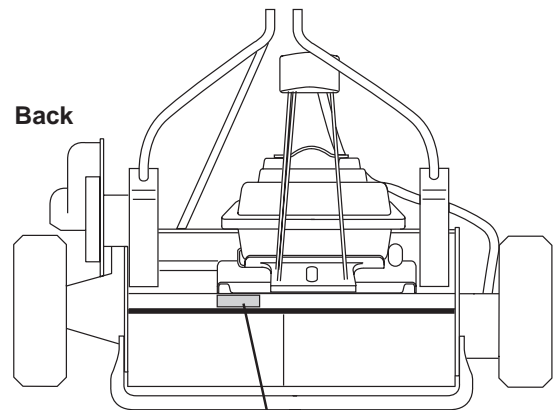
Front Panel



Side Panel



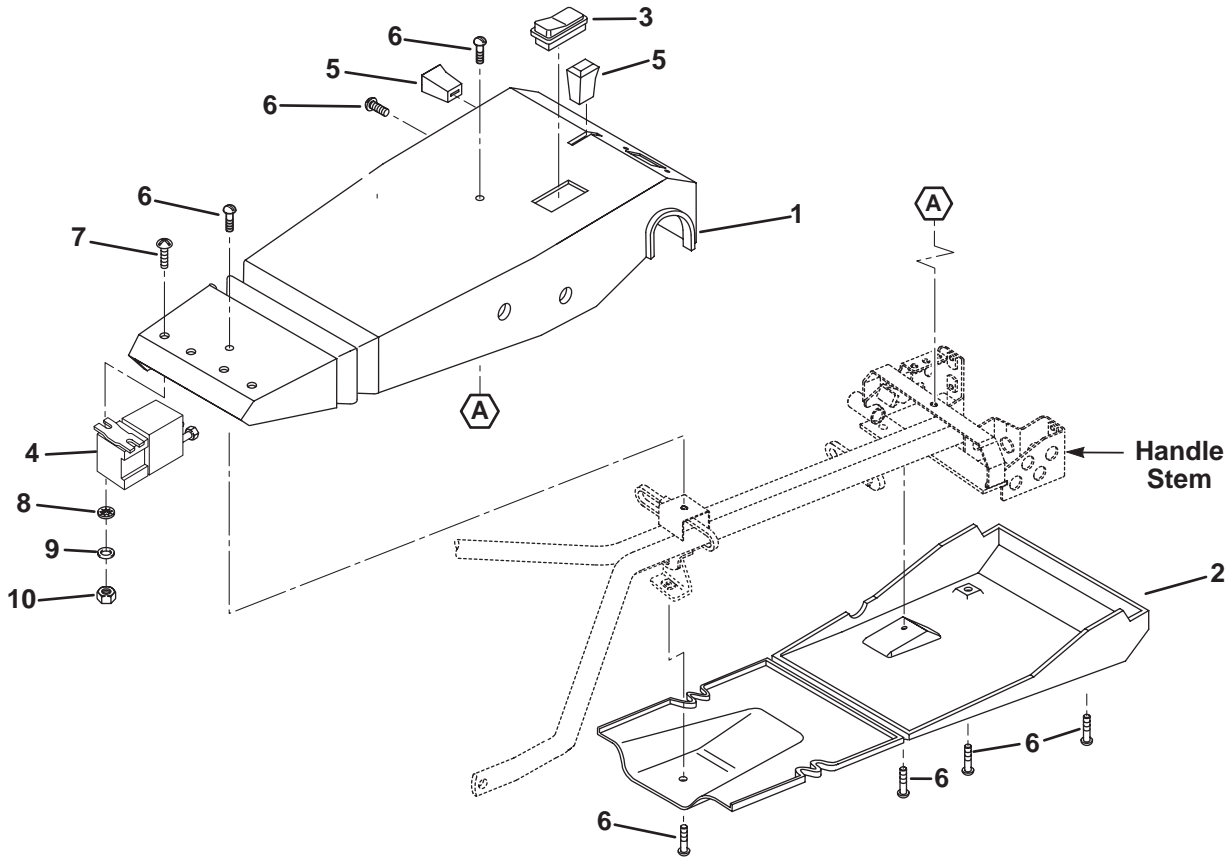
Front



Back

Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	4122713	1	Decal, E-Walk Cover	
2	4104280	1	Decal, Reel On/Off	
3	4104281	1	Decal, Ground Speed	
4	4122712	1	Decal, E-Pac	
5	3005144	1	Decal, Danger	
6	3002753	1	Decal, Parking Brake	
7	3002756	1	Decal, Bale Handle Control	
8	4104283	1	Decal, Warning	
9	4104282	1	Decal, Key Switch	
10	N/S	1	Serial Plate	
11	4122711	4	Decal, E-Walk Battery	Located on battery
12	4121514	1	Decal, Power	

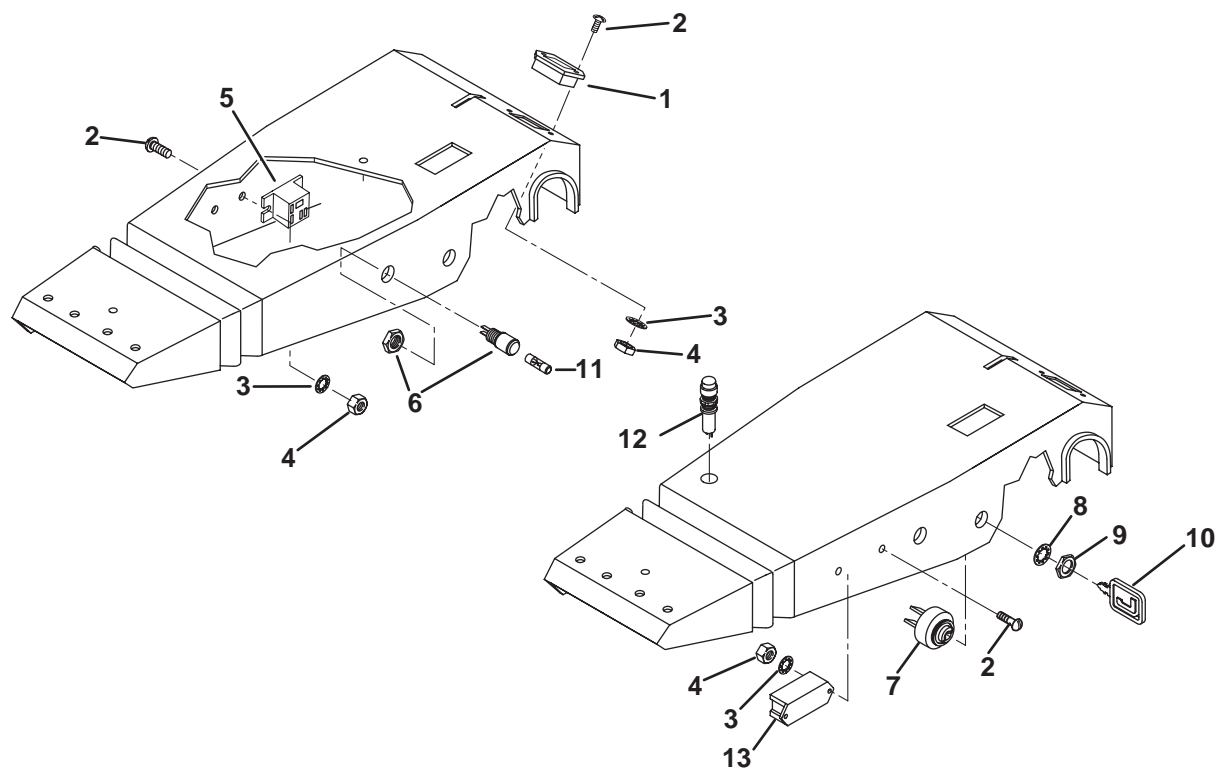
2.1 Handle Covers



Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	4104320	1	Cover, Top, & Decal Assembly	Includes Decals Reference SW3, See 14.1 Reference K1 and K2, See 14.1
2	4103280	1	Cover, Bottom	
3	3006436	1	Switch, Reel	
4	2811676	2	Contactor, 48V	
5	366768	2	Throttle, Knob	
6	404014	7	Screw, 1/4-20 x 12" Round Head	
7	403858	4	Screw, #8-32 x 1/2" Truss Head	
8	453004	4	Flat Washer, #8	
9	447206	4	Lockwasher #8 Internal	
10	444306	4	Nut, #8-32 Hex	
11	452004	1	Flat Washer, 1/4	
12	447010	1	Lockwasher, 1/4 Internal Tooth	
13	443102	1	Nut, 1/4-20 Hex	

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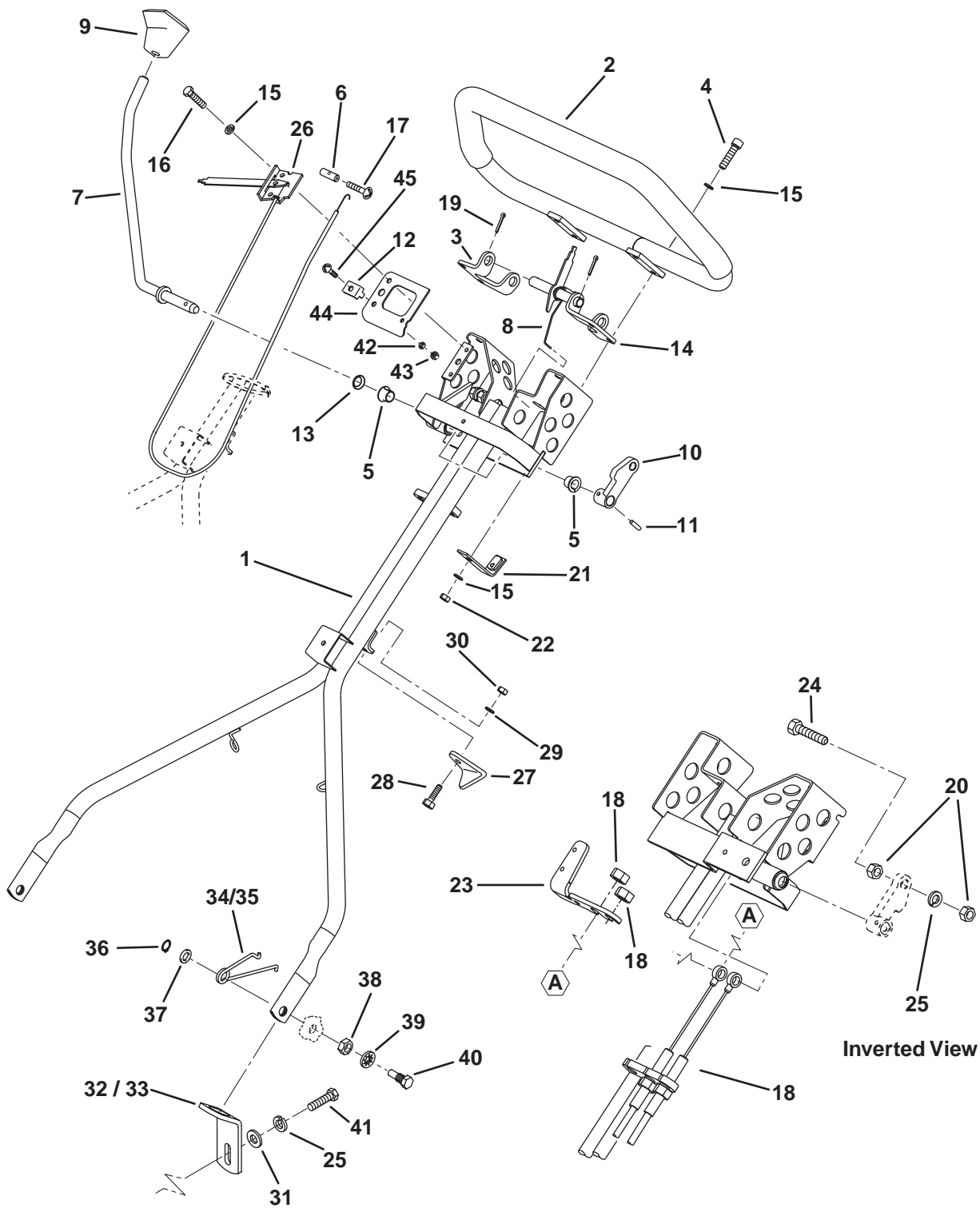
3.1 Handle Electronics



Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	4121513	1	Hour Meter	Reference U1, See 14.1
2	402006	6	Screw, #6-32 x 1/2" Round Head	
3	447204	6	Lockwasher, #6-32 Internal Tooth	
4	444304	6	Nut, #6-32, Hex	
5	REF	1	Relay, Run	See 13.1
6	3004520	1	Fuse Holder	
7	1000348	1	Power Switch	Reference SW1, See 14.1
8	447222	1	• Lockwasher, 9/16 Internal Tooth	
9	358968	1	• Nut, 6/16-24 Hex	
10	5000039	1	• Key	
11	3004555	1	Fuse, 3A	Reference F2, See 14.1
12	4121768	1	Light, Green Indicator	Reference L2, See 14.1
13	4121764	1	Soft Start Time Delay	Reference U3, See 14.1
14				

> Change from previous revision

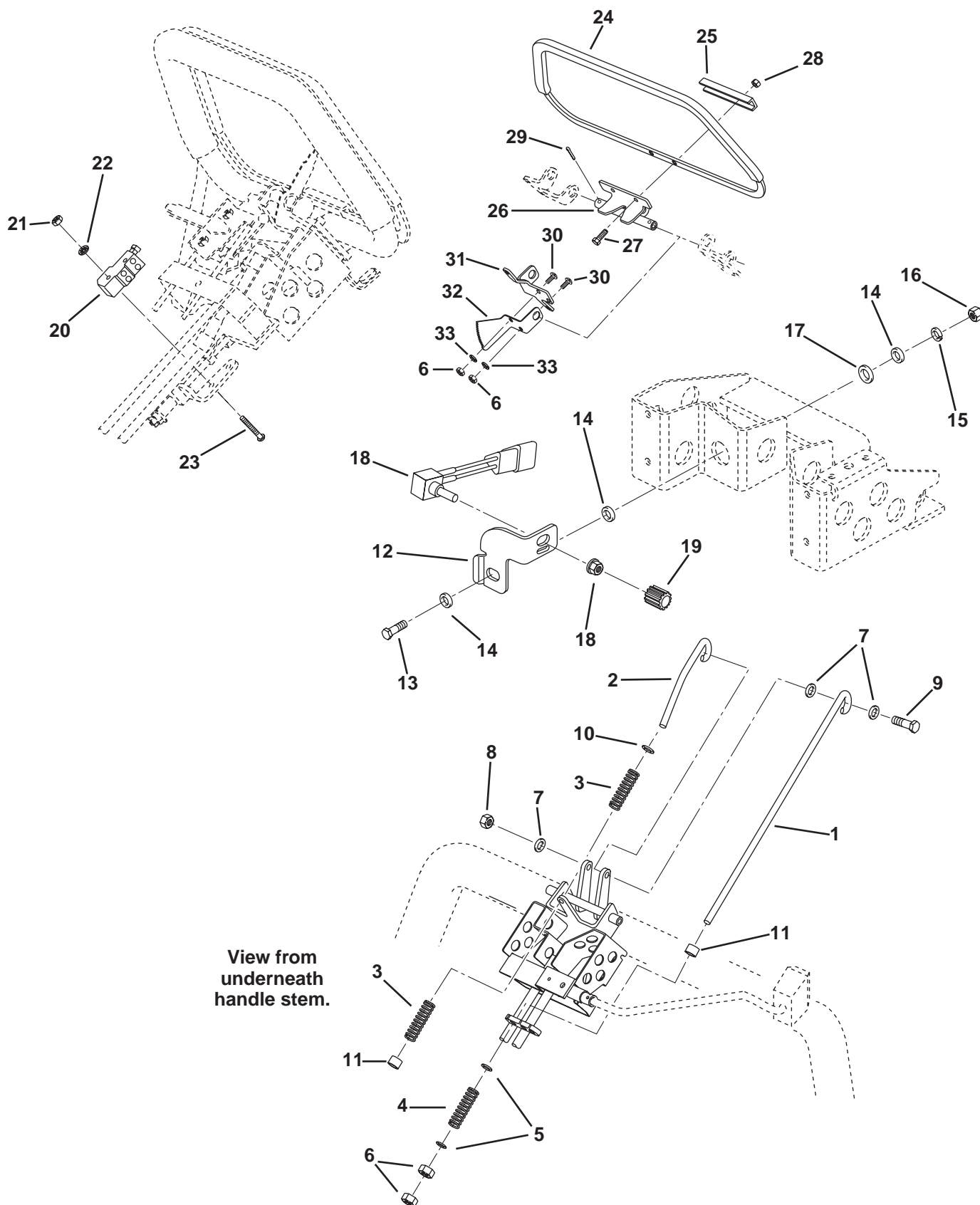
4.1 Handle Controls



Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	1001266	1	Handle Assembly	
2	1001250	1	Coated Handle	
3	3002047	2	Bracket	
4	434029	4	Screw, 1/4-20 x 1" Socket Head	
5	366708	2	Flanged Bearing	
6	303962	1	Wire Stop	
7	1000634	1	Brake Handle Assembly	
8	3002480	1	Spring, Torsion	
9	3002001	1	Knob, Red	
10	2000067	1	Lever, Brake	
11	461181	1	Pin, Grooved, 3/16 x 3/4"	
12	4108641	1	Clamp, Throttle Cable	
13	454008	1	Washer, Spring	
14	1001007	1	Latch Assembly	
15	446130	8	Lockwasher, 1/4 Heavy	
16	400108	2	Screw, 1/4-20 x 3/4" Hex Head	
17	403858	1	Screw, #8-32 x 1/2" Truss Head	
18	366741	2	Brake, Cable	
19	460026	2	Cotter Pin, 1/8 x 3/4"	
20	443110	2	Nut, 3/8-16, Hex	
21	1001292	2	Bracket Assembly	
22	443102	2	Nut, 1/4-20 Hex	
23	4108460	1	Plate, Spring	
24	400268	1	Screw, 3/8-16 x 1-3/4" Hex Head	
25	446142	3	Lockwasher, 3/8 Heavy	
26	366743	1	Throttle Control	
27	4105181	1	Bracket Assembly Cover	
28	400186	1	Screw, 5/16-18 x 7/8" Hex Head	
29	446136	1	Lockwasher, 5/16 Heavy	
30	443106	1	Nut, 5/16-18 Hex	
31	453011	2	Flat Washer, 3/8	
32	4115960	1	Stop, Left Side Handle	
33	4115961	1	Stop, Right Side Handle	
34	2809900	1	Spring, Left Side, Torsion	
35	2809901	1	Spring, Right Side, Torsion	
36	458006	2	Retaining Ring, 1/2	
37	455012	2	Flat Washer, 1/2	
38	443828	2	Nut, 5/8-18 Hex Jam	
39	447224	2	Lockwasher, 5/8 Internal Tooth	
40	2811559	2	Bolt, Special	
41	400262	2	Screw, 3/8-16 x 1" Hex Head	
42	446118	1	Lockwasher, #10 Heavy	
43	444310	1	Nut, 10-24 Hex	
44	4108540	1	Plate, Throttle	
45	403912	1	Screw, 10-24 x 5/8" Truss Head	

> Change from previous revision

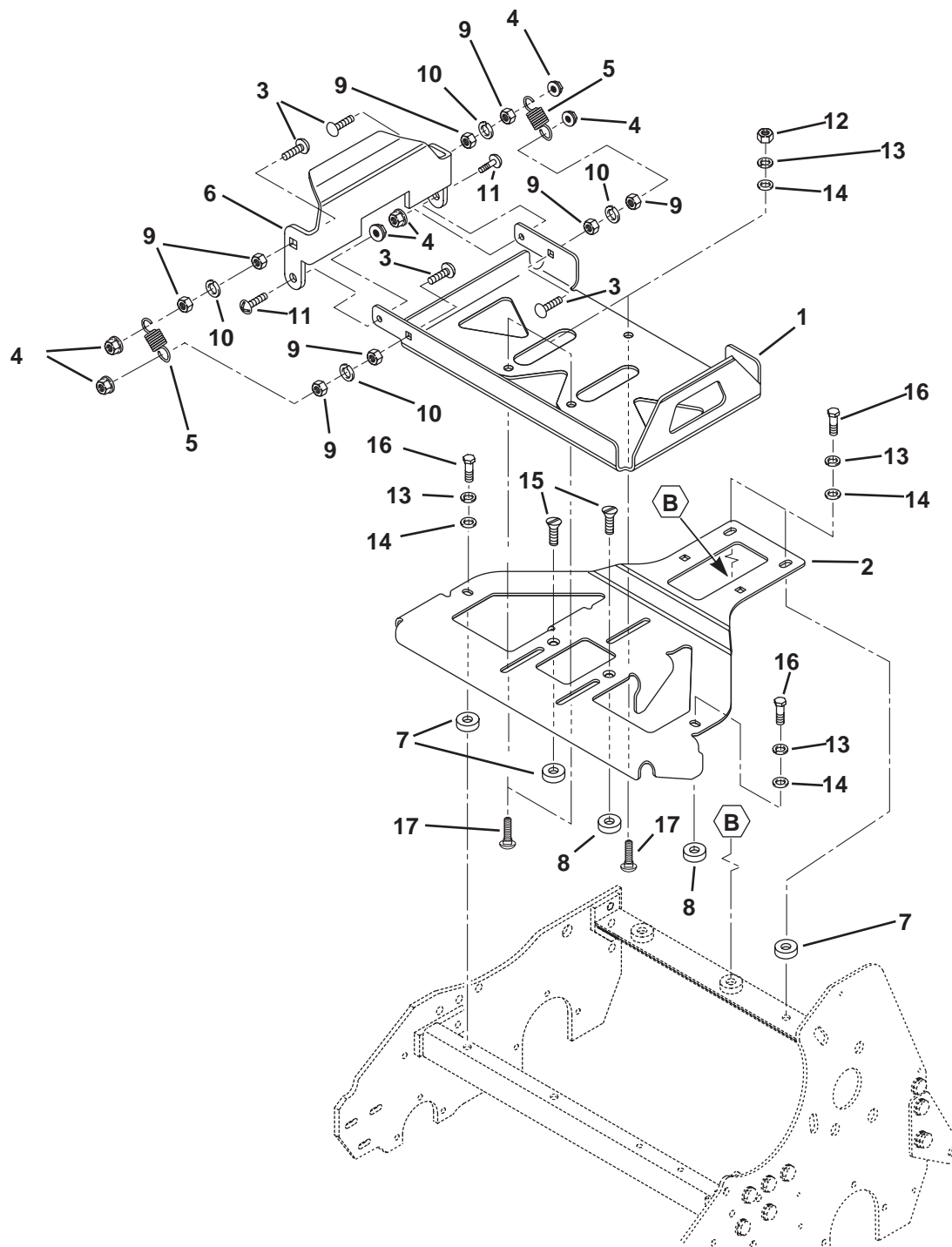
5.1 Internal Controls



Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	4108283	1	Rod, Bail Spring	
2	4108282	1	Rod, Throttle Spring	
3	4108643	2	Spring, Throttle Plate	
4	4108642	1	Spring, Bail Return	
5	452004	2	Flat Washer, 1/4	
6	443102	4	Nut, 1/4-20 Hex	
7	452006	3	Flat Washer, 5/16	
8	444718	1	Locknut, 5/16-18 Center	
9	400192	1	Screw, 5/16-18 x 1-1/2" Hex Head	
10	453023	1	Flat Washer, 1/4	
11	4108640	2	Collar, 1/4" Inner Diameter	
12	4107800	1	Plate, Potentiometer	
13	400188	1	Screw, 5/16-18 x 1" Hex Head	
14	453009	3	Flat Washer, 5/16	
15	446136	1	Lockwasher, 5/16 Heavy	
16	443106	1	Nut, 5/16-18 Hex	
17	452008	1	Flat Washer, 3/8	
18	2811680	1	Potentiometer	Reference R1, See 14.1
19	4108740	1	Gear, Speed Control	
20	3000265	1	Switch, Neutral	Reference SW2, See 14.1
21	444304	2	Nut, #6-32 Hex	
22	447204	2	Lockwasher, #6, Internal Tooth	
23	402014	2	Screw, #6-32 x 1-1/4" Round Head	
24	3002179	1	Coated Handle Loop	
25	3004259	1	Channel, Loop	
26	4108300	1	Pivot Assembly	
27	400108	2	Screw, 1/4-20 x 3/4" Hex Head	
28	444708	2	Locknut, 1/4-20 Center	
29	460026	2	Pin, Cotter, 1/8 x 3/4"	
30	404016	2	Screw, 1/4-20 x 5/8" Truss Head	
31	4108280	1	Plate, Throttle Stop	
32	4108281	1	Bracket, Speed Control	
33	446130	2	Lockwasher, 1/4 Heavy	

> Change from previous revision

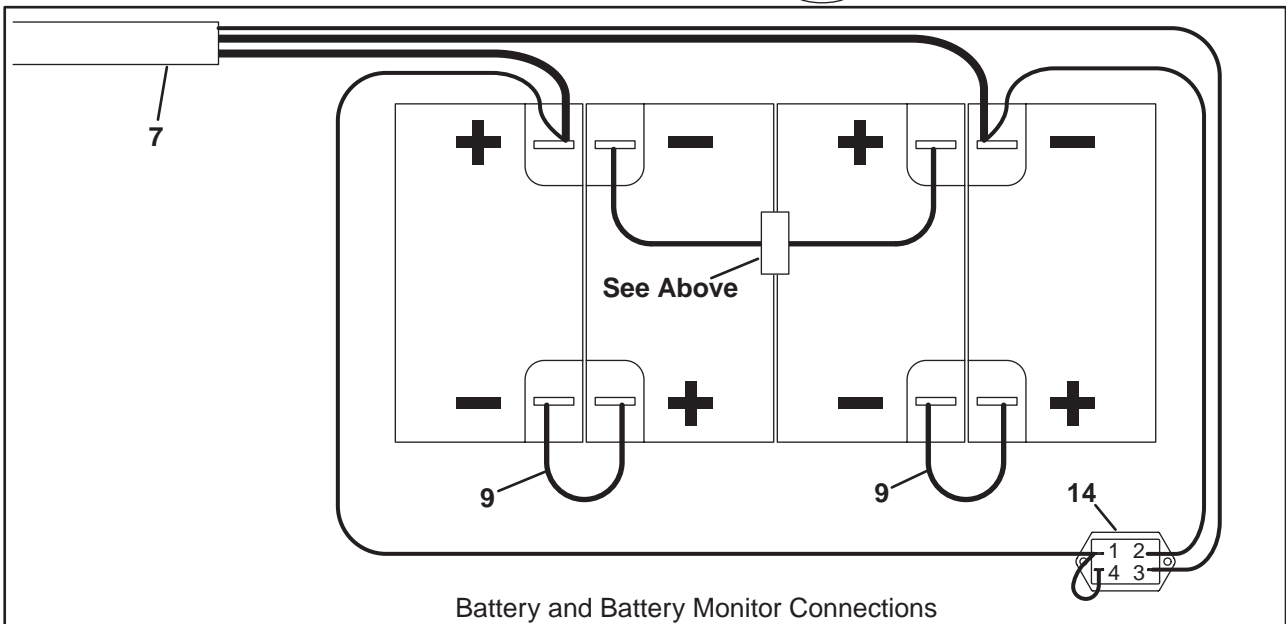
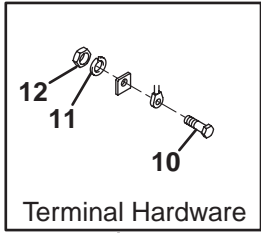
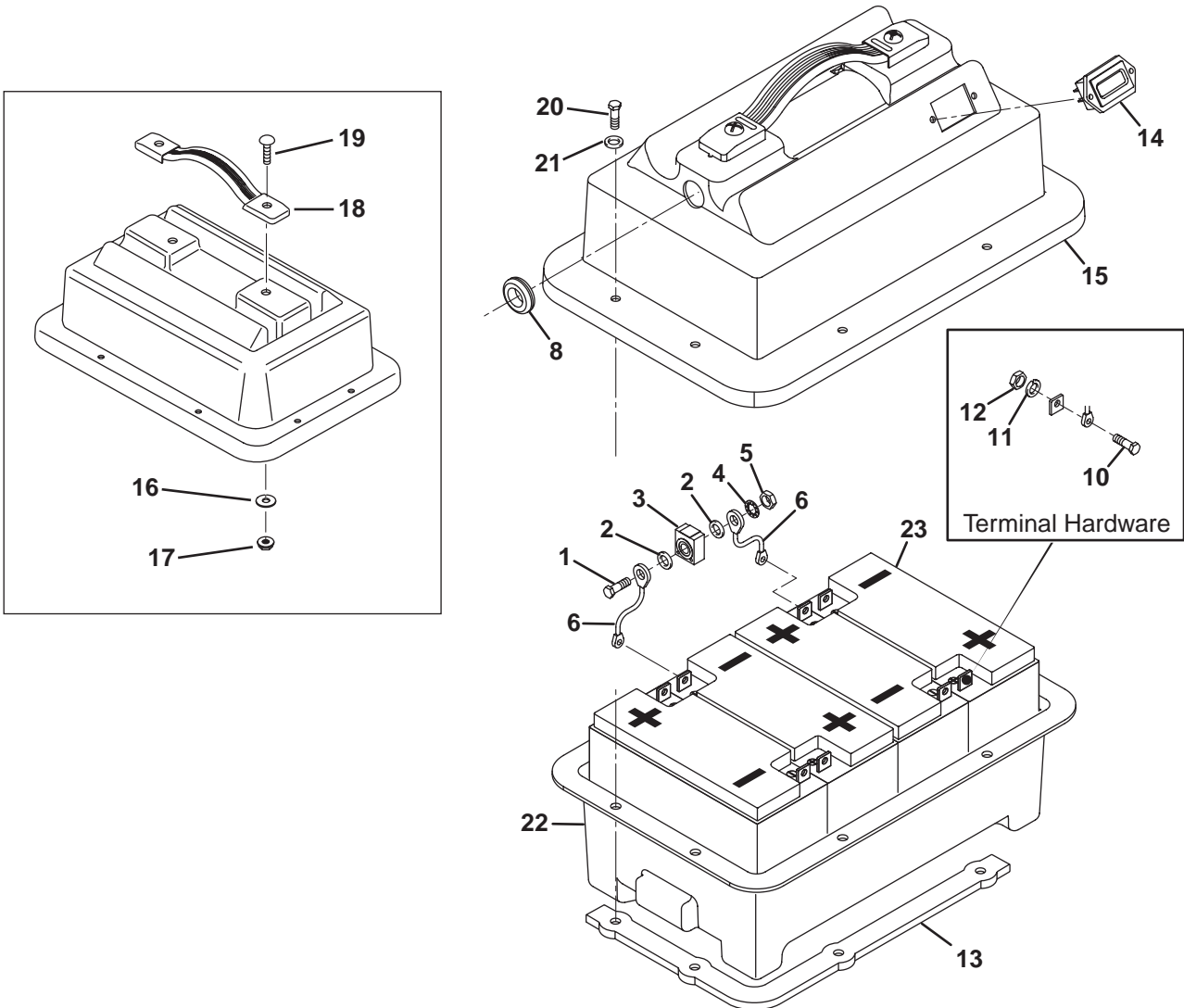
6.1 Battery Case Mounting Tray



Item	Part No.	Qty.	Description	Serial Numbers/Notes	
	1	4104080	1	Battery Tray	
	2	4104081	1	Mount, Battery Tray	
●	3	441604	4	Bolt, Carriage, 1/4-20 x 1"	
●	4	444708	4	Locknut, 1/4-20, Center Lock	
●	5	2809837	2	Spring, Extension	
●	6	2811206	1	Clip	
	7	4104360	3	Spacer	
	8	4104361	2	Spacer	
●	9	443102	8	Nut, 1/4-20 Hex	
●	10	446130	4	Lockwasher, 1/4 Heavy	
●	11	400108	2	Screw, 1/4-20 x 3/4" Hex Head	
●	12	443106	3	Nut, 5/16-18 Hex	
●	13	446136	7	Lockwasher, 5/16 Heavy	
	14	452006	7	Flat Washer, 5/16	
	15	402636	2	Screw, 5/16-28 x 1" Flat Head	
	16	400190	4	Screw, 5/16-18 x 1-1/4" Hex Head	
	17	440078	3	Bolt, Carriage, 5/16-18 x 3/4"	
●	Included in Battery Tray Mounting Kit 68660				

> Change from previous revision

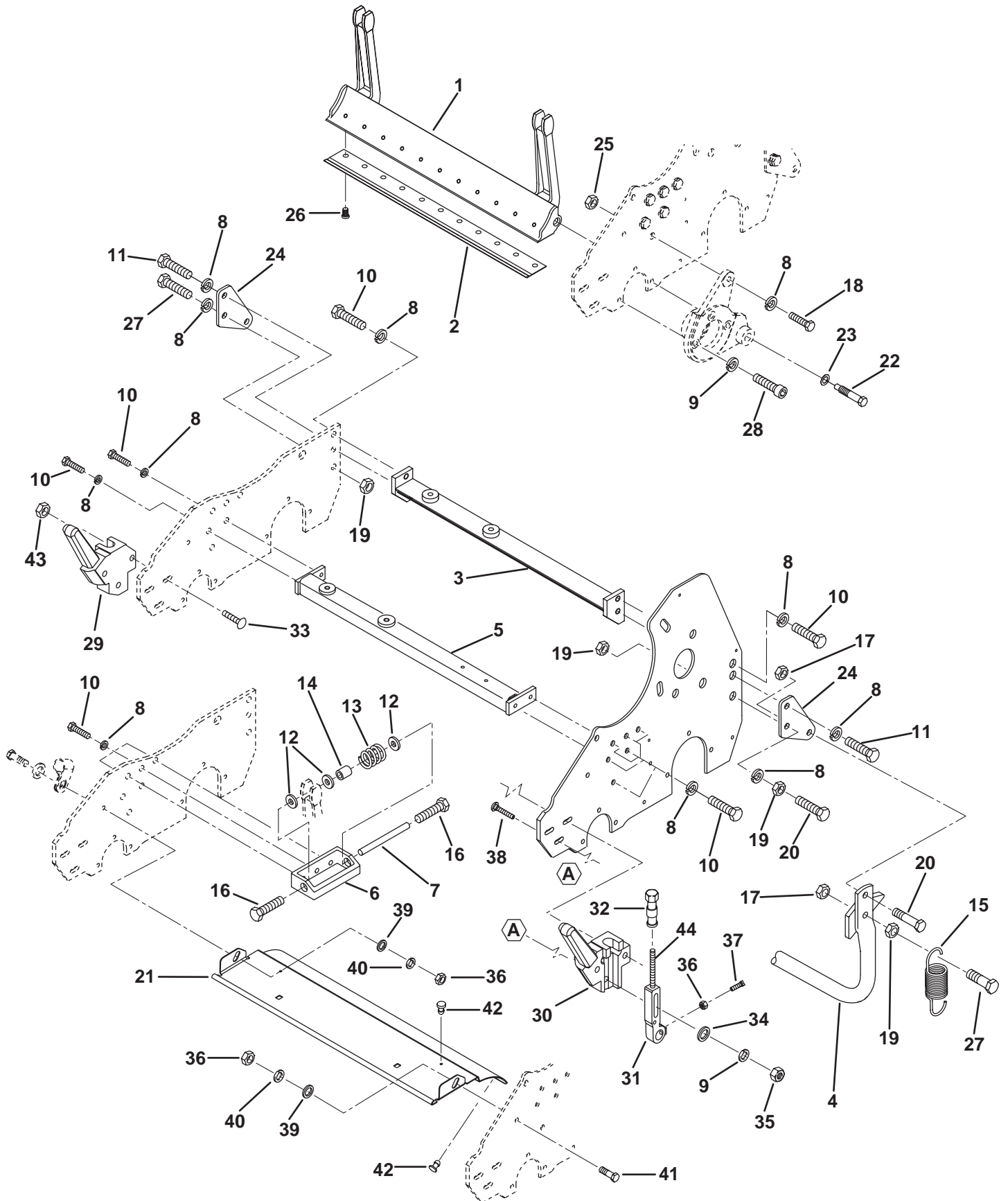
7.1 Battery Case



Item	Part No.	Qty.	Description	Serial Numbers/Notes
	68668	1	Battery Case	Does Not Include Batteries
1	4105660	1	• Screw, Nylon	Reference F1, See 14.1
2	452004	2	• Flat, Washer 1/4	
3	4105800	1	• Fuse, 50A	
4	447214	1	• Lockwasher, 5/16 Internal	
5	443106	1	• Nut, 5/16 Hex	
6	2811664	2	• Cable	
7	2811662	1	• Main Cable	
8	366984	1	• Grommet	
9	2811663	2	• Cable, Jumper	
10	403741	8	• Screw, #8-32 x 5/8" Hex Head	
11	444306	8	• Nut, 5/16-18 Hex	
12	446112	8	• Lockwasher, #8 Heavy	
13	4101600	2	• Strap, Battery Case	
14	2811669	1	• Battery Monitor (Includes Hardware)	Reference U2, See 14.1
15	2811221	1	• Lid, Battery Case	Includes Decals
16	455058	2	• • Flat Washer, 1/4	Reference B1, B2, B3, B4, See 14.1
17	444708	2	• • Locknut, 1/4-20, Center Lock	
18	2811220	1	• • Handle, Battery Case	
19	404022	2	• • Screw, 1/4-20 x 1" Truss Head	
20	408851	8	• Screw, 1/4-20 x 3/4" Hex Self Tap	
21	453023	8	• Flat Washer, 1/4	
22	2809762	1	• Battery Case, Lower Half	
23	4121377	4	Battery, 12V	

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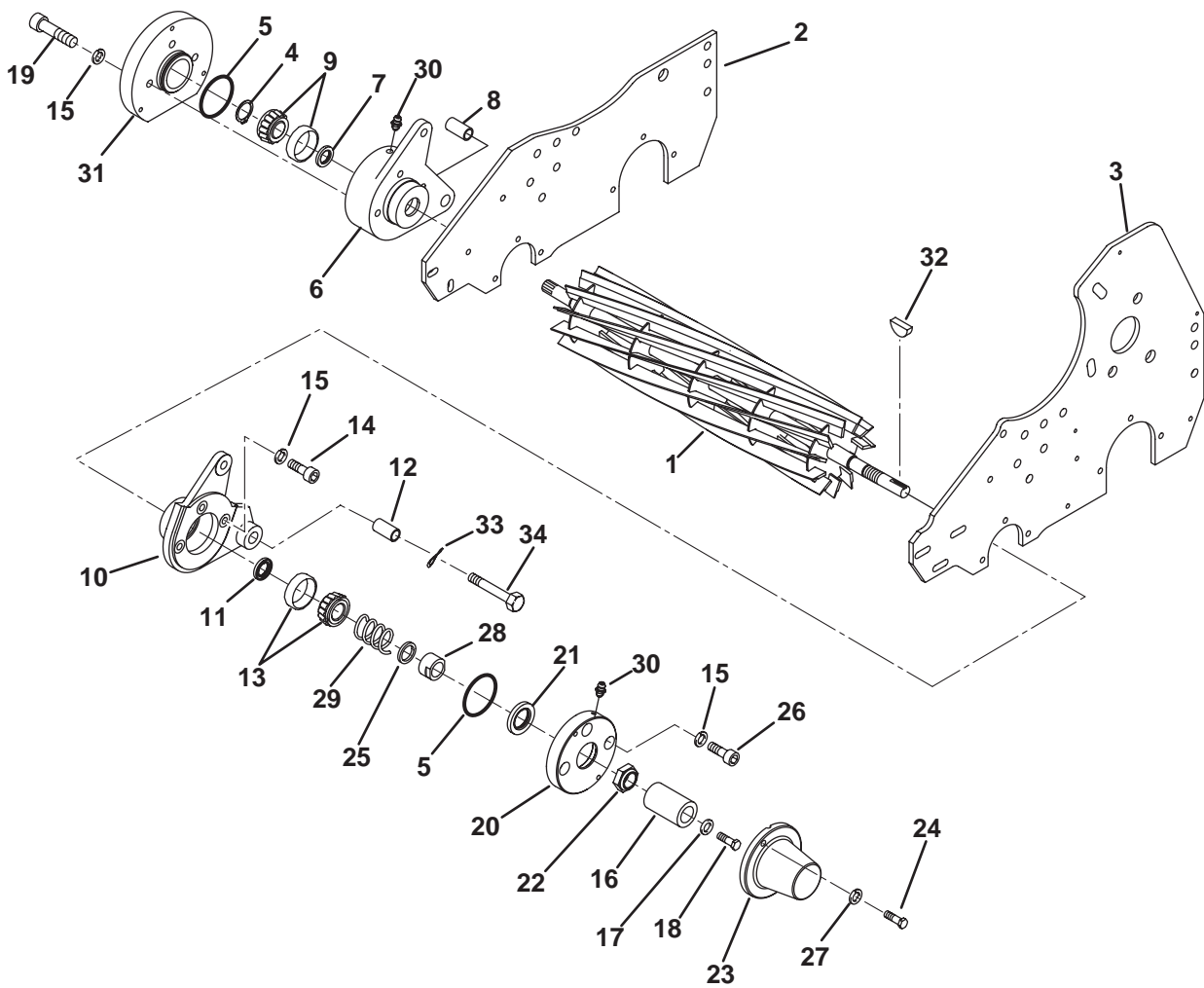
8.1 Lower Unit



Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	5000457	1	Bedknife Backing	
2	503478	1	Bedknife, Low Profile	Optional
2	503477	1	Bedknife, High Profile	Optional
2	5002887	1	Bedknife, Special Tournament	Standard
3	1000838	1	Rear Crossbar	
4	132674	1	Kickstand	
5	1000839	1	Front Crossbar	
6	3001600	2	Bedknife Block	
7	366727	2	Rod	
8	446142	18	Lockwasher, 3/8 Heavy	
9	446136	8	Lockwasher, 5/16 Heavy	
10	400258	14	Screw, 3/8-16 x 3/4" Hex Head	
11	400262	2	Screw, 3/8-16 x 1" Hex Head	
12	366653	6	Spacer	
13	366709	2	Spring	
14	367512	2	Spacer	
15	364164	1	Spring	
16	366726	4	Bolt, Special	
17	444850	3	Nut, 3/8-16 Center Lock Jam	
18	400264	2	Screw, 3/8-16 x 1-1/4 Hex Head	
19	443810	4	Nut, 3/8-16 Hex Jam	
20	400268	2	Screw, 3/8-16 x 1-3/4" Hex Head	
21	3008674	1	Grass Shield	
22	365501	2	Bolt, Bedknife Mounting Shoe	
23	454017	2	Spring Washer	
24	366796	2	Kickstand, Mounting Bracket	
25	443110	2	Nut, 3/8-16 Hex	
26	3009138	AR	Screw, 1/4-20 x 3/4 Soc. Hd.	
27	400260	2	Screw, 3/8-16 x 7/8" Hex Head	
28	434051	6	Screw, 5/16-18 x 1/2" Socket Head	
29	241828	1	Bracket, Catcher Mounting	
30	241827	1	Bracket, Catcher Mounting	
31	2000072	2	Bracket, Roller	
32	3005692	2	Adjusting Knob	
33	441677	4	Bolt, 5/16-18 x 1-1/2, Carriage	
34	364441	2	Spacer	
35	443106	2	Nut, 5/16-18, Hex	
36	443102	4	Nut, 1/4-20 Hex	
37	352737	2	Set Screw	
38	441674	2	Bolt, 5/16-18 x 1-3/4" Carriage	
39	453023	2	Flat Washer, 1/4	
40	446130	2	Lockwasher, 1/4 Heavy	
41	400112	1	Screw, 1/4-20 x 1" Hex Head	
42	3008974	4	Grommet	
43	444718	4	Locknut, 5/16-18 Center	
44	343616	2	Stud, Front Roller Adjusting	

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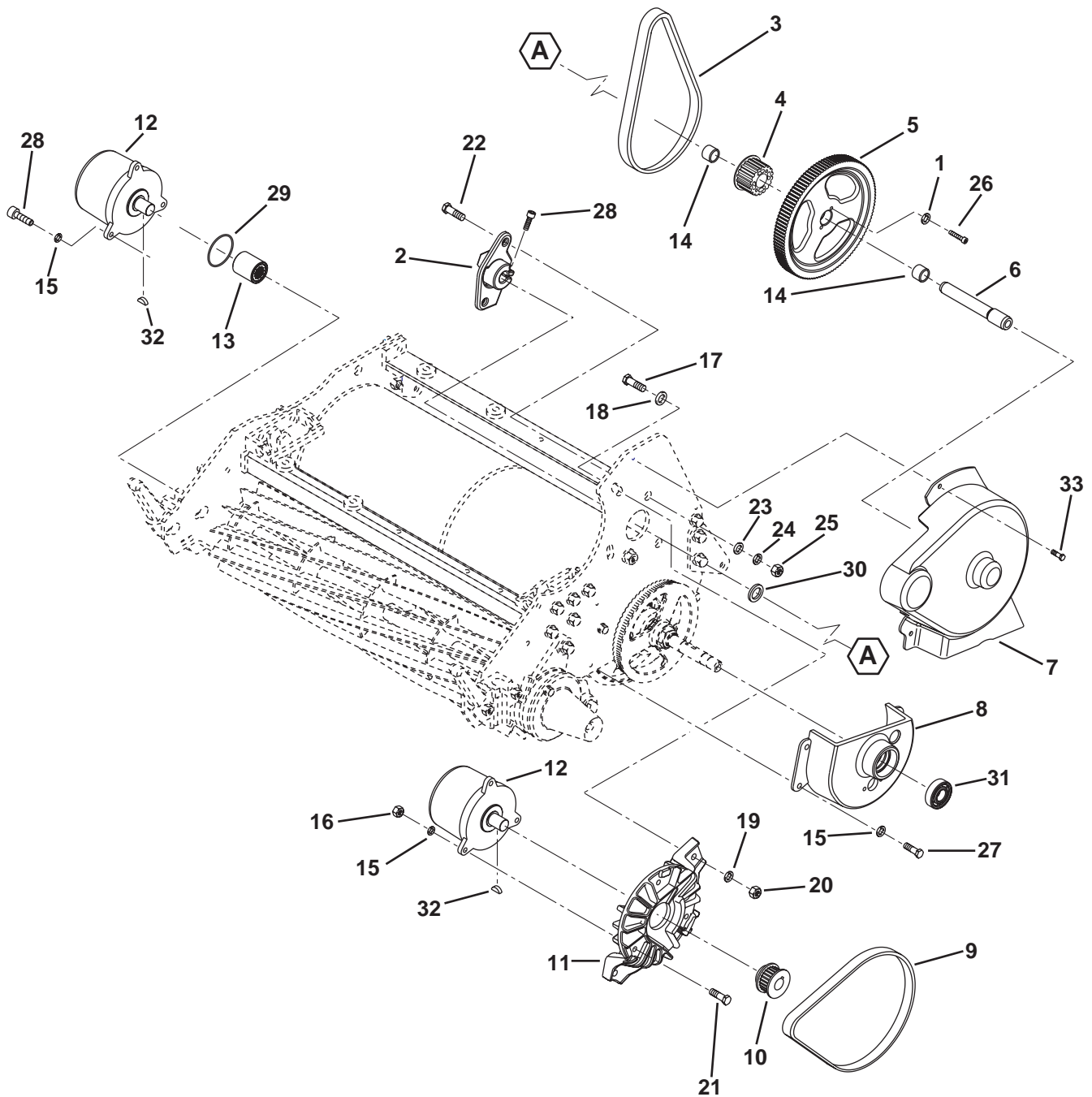
9.1 Reel



Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	4104640	1	Reel	
2	2811122	1	Frame, R.H. Side	
3	2811104	1	Frame, L.H. Side	
4	458013	1	Snap Ring	
5	4104720	2	O-Ring	
6	1000447	1	Bearing Housing	
7	366650	1	• Seal	
8	545940	1	• Bushing	
9	500534	1	Bearing Cup and Cone	
10	4105281	1	Bearing Housing	
11	366650	1	• Grease Seal	
12	545940	1	• Bushing	
13	500534	1	• Bearing Cup and Cone	
14	434051	1	Screw, 5/16-18 x 1/2" Socket Head	
15	446136	6	Lockwasher, 5/16 Heavy	
16	367164	1	Spacer, Reel Shaft	
17	453011	1	Flat Washer, 3/8	
18	400294	1	Screw, 3/8-24 x 3/4" Hex Head	
19	4105360	3	Screw, 5/16-18 x 2-1/4" Socket Hd.	
20	2812325	1	Seal Carrier	
21	366648	1	Grease Seal	
22	367029	1	Nut, 3/4-16 Hex Nylock Jam	
23	338675	1	Cover	
24	400108	2	Screw, 1/4-20 x 3/4" Hex Head	
25	304745	1	Washer	
26	434003	2	Screw, 5/16-18 x 1" Socket Head	
27	446130	2	Lockwasher, 1/4 Heavy	
28	364900	1	Nut	
29	363047	1	Spring	
30	471214	2	Grease Fitting	
31	2811222	1	Adaptor, Motor	
32	463007	1	Woodruff Key	
33	454017	1	Wave Washer	
34	365501	2	Bolt, Bedknife Mounting Shoe	

> Change from previous revision

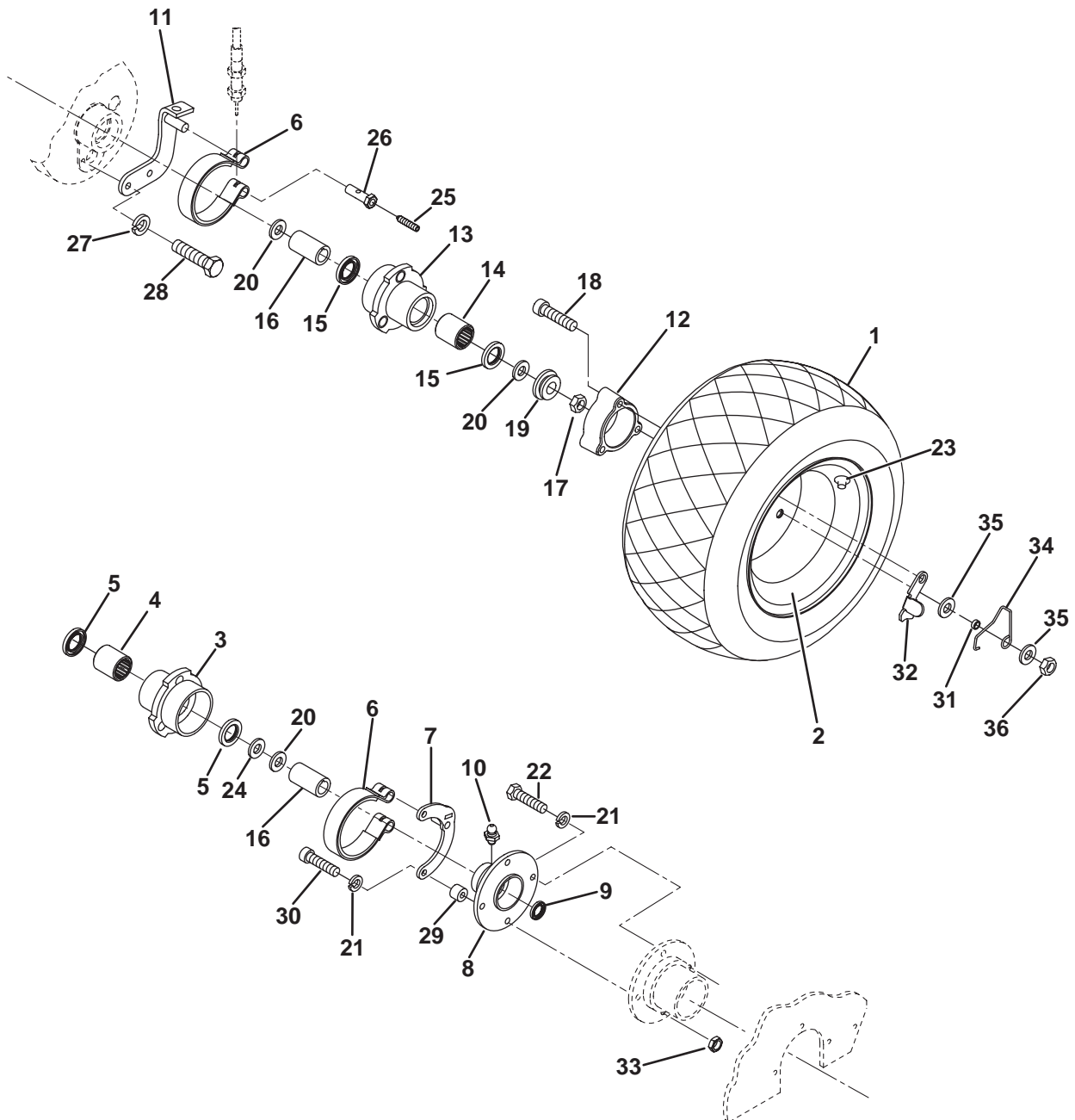
10.1 Belts and Drive Motors



Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	446116	2	Lockwasher, #10	Reference M1 and M2, See 14.1
2	2000148	1	Bracket, Bearing	
3	2811071	1	Belt, Polychain, 80 Tooth	
4	2811223	1	Pully, 18 Tooth	
5	2811107	1	Pully, 112 Tooth	
6	3001273	1	Shaft	
7	2811110	1	Cover, Pulleys	
8	4102241	1	Cover, Belt	
9	4104641	1	Belt, 130 Tooth	
10	2811108	1	Pulley, 23 Tooth	
11	2811105	1	Mount, Motor	
12	2811219	2	Motor, Brushless	
13	2812384	1	Coupler Assembly	
14	367554	2	Bearing, Needle	
15	446130	9	Lockwasher, 1/4 Heavy	
16	443102	3	Nut, 1/4-20 Hex	
17	400190	1	Screw, 5/16-18 x 1-1/4" Hex Head	
18	452006	3	Flat Washer, 5/16	
19	446134	1	Lockwasher, 5/16	
20	443106	1	Nut, 5/16-18 Hex	
21	400110	3	Screw, 14-20 x 7/8" Hex Head	
22	400262	2	Screw, 3/8-16 x 1" Hex Head	
23	453011	2	Flat Washer, 3/8	
24	446142	2	Lockwasher, 3/8 Heavy	
25	443110	2	Nut, 3/8-16 Hex	
26	434034	2	Screw, 10-24 x 1" Socket Head	
27	400106	3	Screw, 1/4-20 x 5/8" Hex Head	
28	434031	4	Screw, 1/4-20 x 3/4" Socket Head	
29	4104720	1	O-Ring	
30	359864	1	Thrust Washer	
31	366707	1	Ball Bearing	
32	463029	2	Key, Woodruff	
33	403744	3	Screw, #10-24 x 1/2" Hex Head	

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11.1 Parking Brake and Transport Wheels

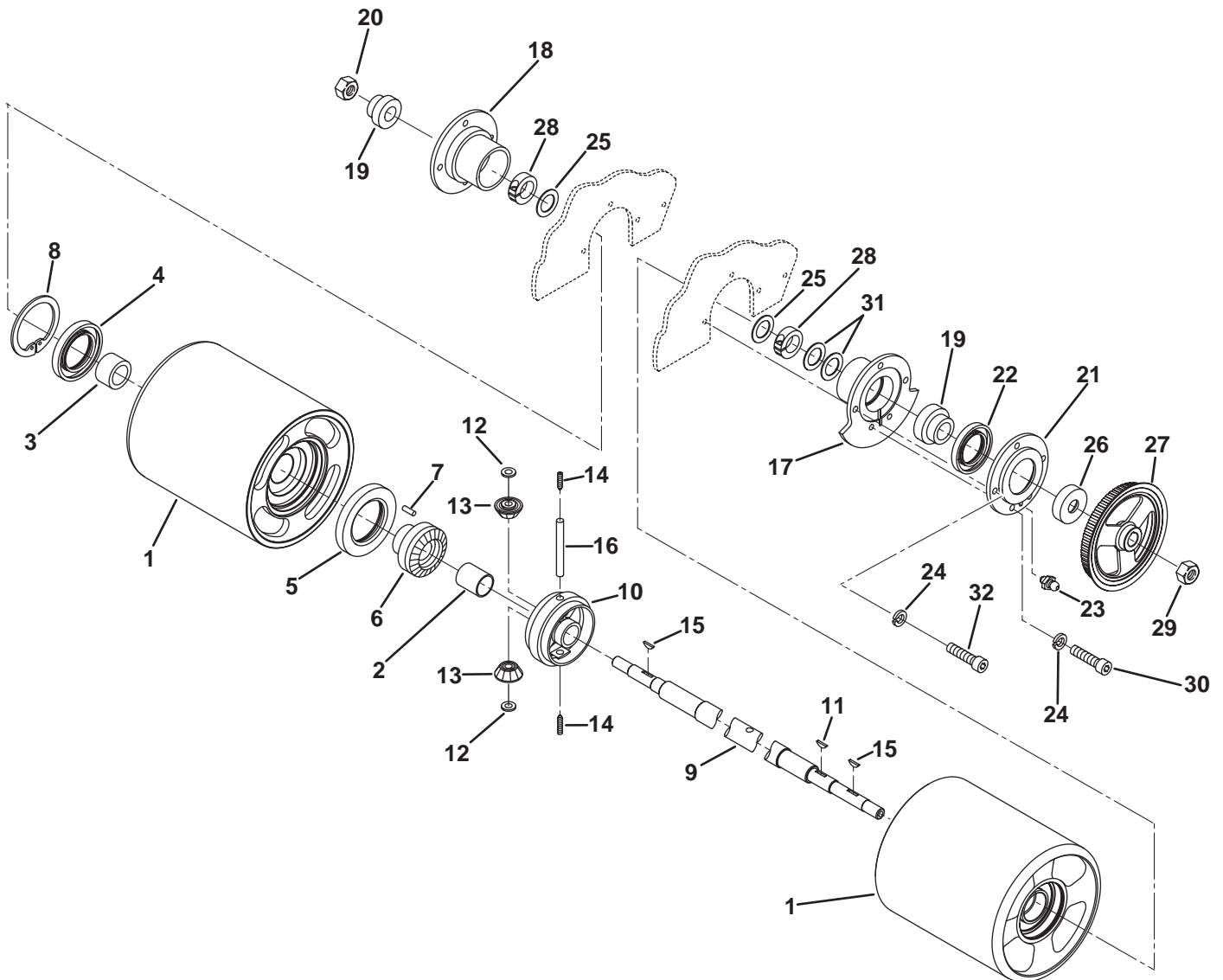


Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	554847	2	Tire	
2	5002905	2	Wheel, Gray	
3	1000476	1	R.H. Hub	
4	338766	1	• Bearing	
5	366705	2	• Grease Seal	
6	164056	2	Brake Band	
7	132663	1	Brake Mounting Bracket	
8	132658	1	Seal Housing	
9	365753	1	• Grease Seal	
10	471214	1	• Grease Fitting	
11	164063	1	Brake Mounting Bracket	
12	271920	2	Wheel Spacer	
13	1000477	1	L.H. Hub	
14	338766	1	• Bearing	
15	366705	2	• Grease Seal	
16	366717	2	Clutch Sleeve	
17	445801	2	Nut, 5/8-18 Hex Jam Lock	
18	434049	6	Screw, 5/16-18 x 2" Socket Head	
19	366718	2	Latching Collar	
20	366697	4	Bushing	
21	446136	2	Lockwasher, 5/16 Heavy	
22	400188	2	Screw, 5/16-18 x 1" Hex Head	
23	360111	2	Valve	
24	361451	1	Washer	Left Side Only
25	415513	2	Set Screw, 1/4-20 x 1/2"	
26	366742	2	Brake Band Pin	
27	446130	2	Lockwasher, 1/4 Heavy	
28	400108	2	Screw, 1/4-20 x 3/4" Hex Head	
29	366737	2	Spacer	
30	434032	2	Screw, 5/16-18 x 1-3/4" Socket Hd.	
31	366716	6	Spacer	
32	366719	2	Latch, Wheel	
33	443106	1	Nut, 5/16-18 Hex	
34	366704	2	Spring	
35	452004	12	Flat Washer, 5/16	
36	444718	6	Locknut, 5/16-18 Center	

> Change from previous revision

12.1 Differential and Rollers

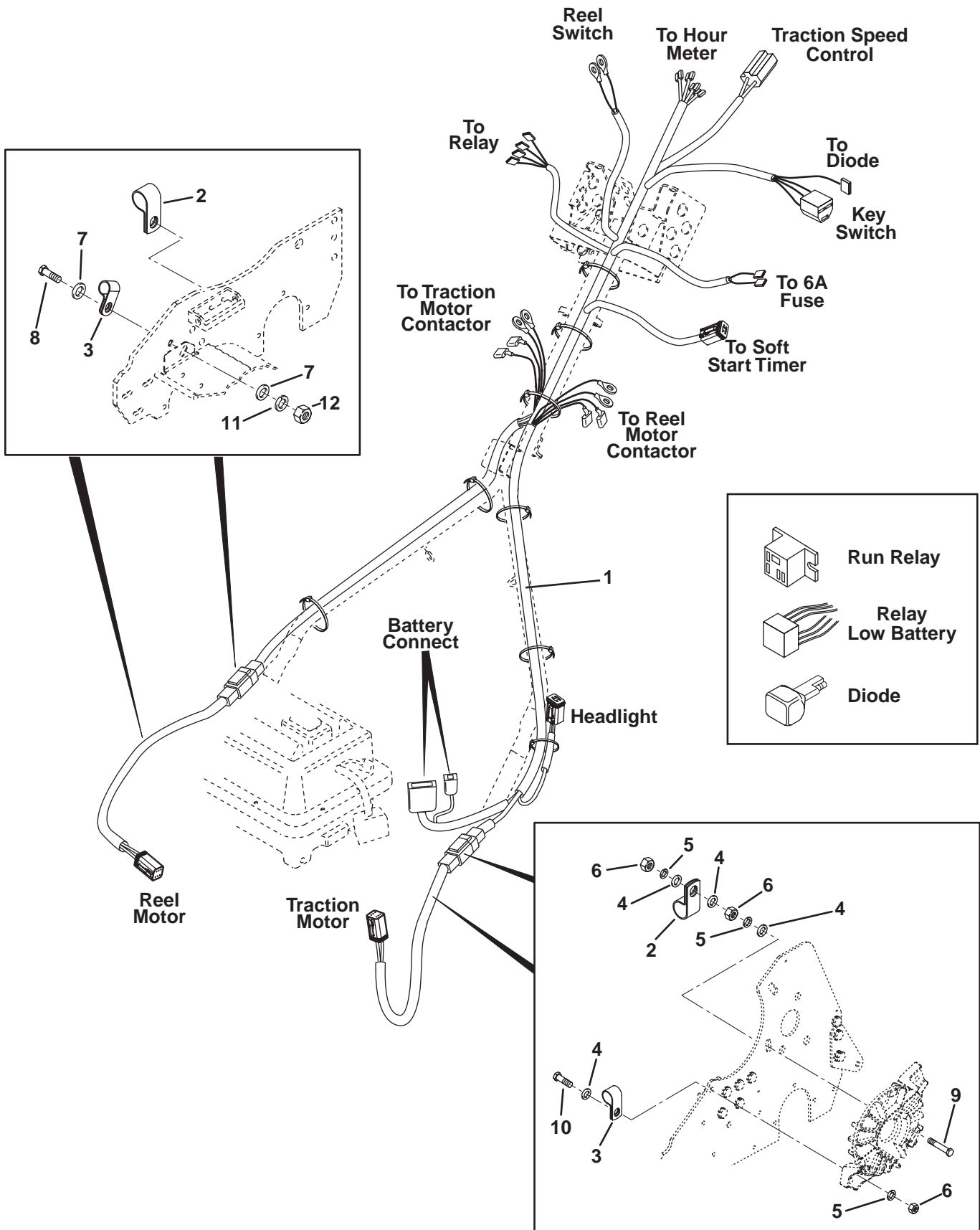
Illustration Description 2



Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	132655	2	Smooth Roller (522)	
2	366699	1	• Differential Gear Bushing	
3	366698	1	• Drum Bushing	
4	366701	1	• Grease Seal	
5	366700	1	• Grease Seal	
6	241836	1	• Differential Gear	
7	319085	1	• Pin	
8	458127	1	• Snap Ring	
9	395367	1	Roller Shaft (522)	
10	241835	1	Differential	
11	463017	1	Key, #9 Woodruff	
12	308030	2	Thrust Washer	
13	202947	2	Pinion Gear	
14	415563	2	Set Screw, 7/16-20 x 3/8"	
15	463007	2	Key, #7 Woodruff	
16	308028	1	Pinion Shaft	
17	220318	1	Bearing Housing	
18	220319	1	Bearing Housing	
19	366693	2	Bearing	
20	2810096	1	Nut, 1-14 Nylock Hex	
21	164057	1	Seal Cover	
22	366702	1	• Grease Seal	
23	471214	1	• Grease Fitting	
24	446136	5	Lockwasher, 5/16 Heavy	
25	366697	2	Spacer	
26	366696	1	Spacer	
27	3004484	1	Pulley, 56 Tooth	
28	366695	2	Locking Collar	
29	367029	1	Nut, 3/4-16 Hex Nylock Jam	
30	434024	2	Screw, 5/16-18 x 3/4" Socket Head	
31	361451	2	Washer	
32	434003	3	Screw, 5/16-18 x 1" Socket Head	

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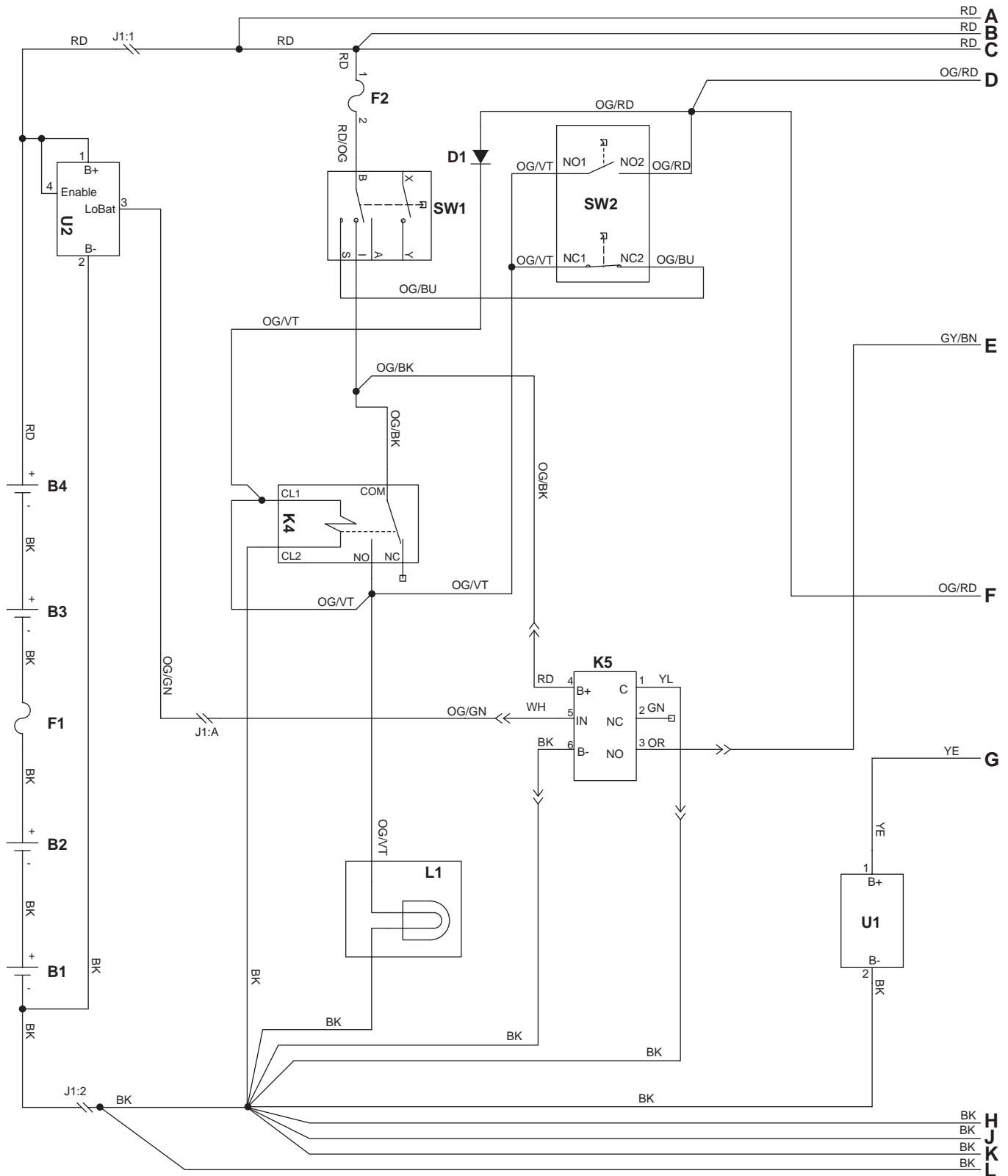
13.1 Clamps and Wire Harness



Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	2812037	1	Harness, Electrical	Reference D1, See 14.1 Reference K4, See 14.1 Reference K5, See 14.1
	555846	1	• Diode	
	4103540	1	• Relay, Run	
	2811690	1	• Relay, Low Battery	
2	3008474	1	Clamp	
3	345666	2	Clamp	
4	452006	1	Flat Washer, 5/16	
5	446134	3	Lockwasher, 5/16	
6	443106	3	Nut, 5/16-18 Hex	
7	453023	3	Flat Washer,	
8	400112	1	Screw, 1/4-20 x 1" Hex Head	
9	400194	1	Screw, 5/16-18 x 1-3/4" Hex Head	
10	400190	1	Screw, 5/16-18 x 1-1/4" Hex Head	
11	446130	2	Lockwasher, 1/4 Heavy	
12	443102	2	Nut, 1/4-20 Hex	

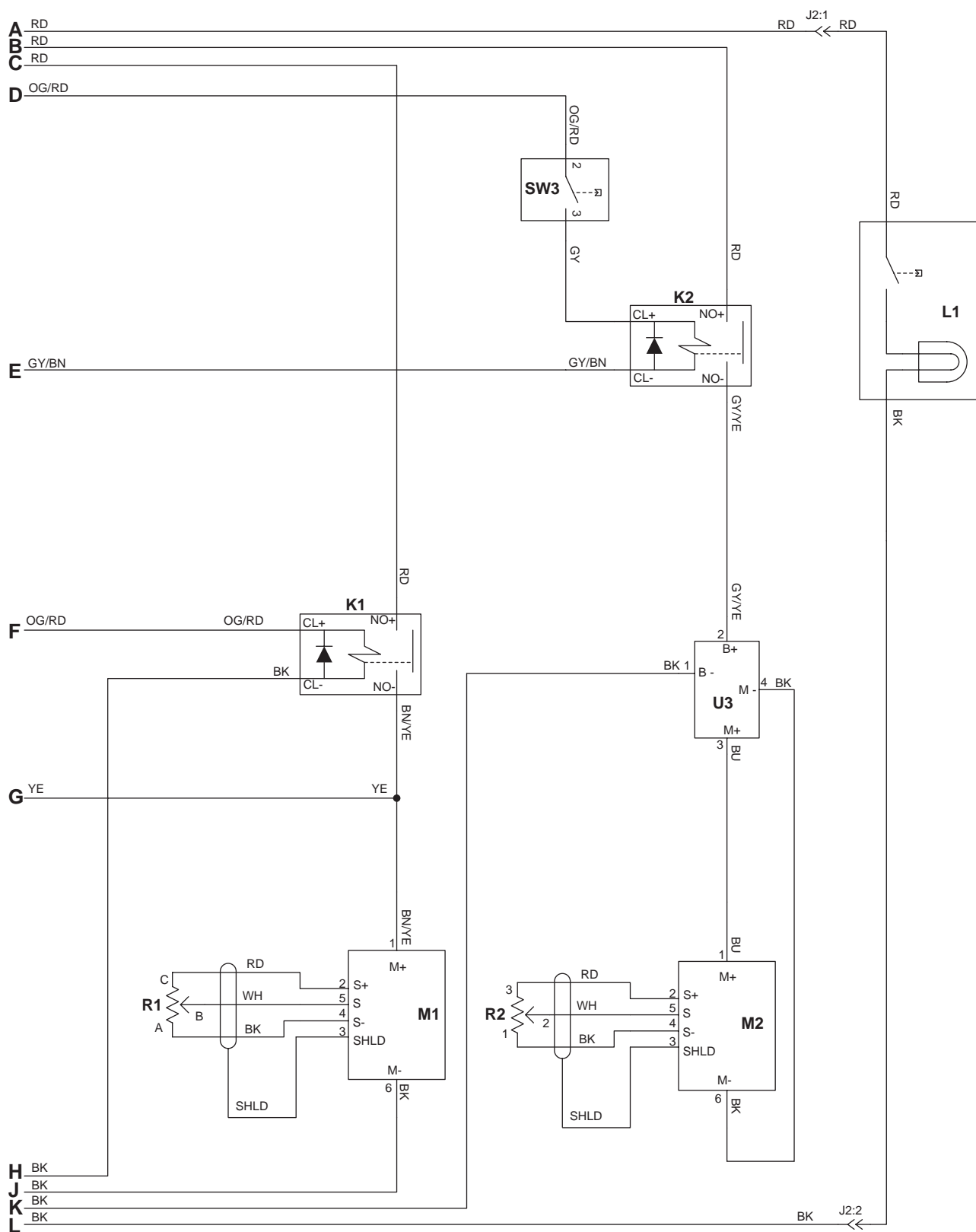
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14.1 Electrical Schematic



BATTERY

CONTROLS



TRACTION



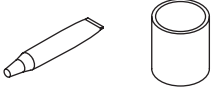
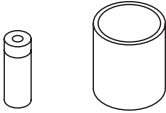



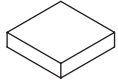
REEL

LIGHT OPT

E-WALK

Item	Reference Illustration	Part Number	Description	Serial Numbers/Notes
B1	See 7.1	4121377	12 Volt SLA Battery	
B2	See 7.1	4121377	12 Volt SLA Battery	
B3	See 7.1	4121377	12 Volt SLA Battery	
B4	See 7.1	4121377	12 Volt SLA Battery	
D1	See 13.1	555846	Diode	Included with Harness
F1	See 7.1	4105800	50 Amp Fuse (Main)	
F2	See 3.1	3004555	3 Amp Fuse (Controls)	
K1	See 2.1	2811676	Traction Contactor	
K2	See 2.1	2811676	Reel Contactor	
K4	See 13.1	4103540	Run Relay	Included with Harness
K5	See 13.1	2811690	Low Battery Relay	Included with Harness
L1	Not Shown	4108221	Headlight with Switch	Included in Light Kit
L2	See 3.1	4121768	48 Volt Green Indicator	
M1	See 10.1	2811219	Traction Motor	
M2	See 10.1	2811219	Reel Motor	
R1	See 5.1	2811680	Traction Potentiometer	
R2	Not Shown	N/S	Reel Potentiometer	Included with Harness
SW1	See 3.1	1000348	Power Switch	
SW2	See 5.1	3000265	O.P.C. Switch	
SW3	See 2.1	3006436	Reel Switch	
U1	See 3.1	4121513	Hour Meter	
U2	See 7.1	2811669	Battery Charge Meter	
U3	See 3.1	4121764	Soft Start Time Delay	

Fluids and Compounds

Hydraulic Fluid*		
5001405	Two 2-1/2 Gallon Container of ISO VG68 Oil	
5001404	One 5 Gallon Pail of ISO VG68 Oil	
2500548	Two 2-1/2 Gallon Container of 10W30 Oil	
2500546	One 5 Gallon Pail of 10W30 Oil	
503409	Two 2-1/2 Gallon Container of ATF Fluid	
503407	One 5 Gallon Pail of ATF Fluid	
2-Cycle Oil		
554600	Twenty Four 16 Ounce Plastic Container	
554599	Twenty Four 8 Ounce Plastic Container	
Grease		
5000067	One 5 Gallon Pail OO-Grease	
5000068	Twenty Four 8 Ounce Tube OO-Grease	
Paint		
5003469	16 Ounce Gray Aerosol	
554598	Six 12 Ounce Orange Aerosol	
2500789	Twelve 1 Quart Can Orange	
546409	Two 1 Gallon Can Orange	
Lapping Compound		
5002488	One 10 Pound Pail of 80 Grit	
5002490	One 25 Pound Pail of 80 Grit	
5002489	One 10 Pound Pail of 120 Grit	
5002491	One 25 Pound Pail of 120 Grit	
Specialty Compound		
365422	5.3 Ounce Tube of Electrical Insulating Gel	
5001581	14 Ounce Can of Lubriplate Multi Lube A	
Biodegradable Hydraulic Fluid*		
5003102	One 55 Gallon Drum TGTSP GreensCare 68	
5003103	One 5 Gallon Pail TGTSP GreensCare 68	
5003105	One 55 Gallon Drum TGTSP GreensCare 46	
5003104	One 5 Gallon Pail TGTSP GreensCare 46	
4115976	One 55 Gallon Drum TGTSP GreensCare 32	
4115977	One 5 Gallon Pail TGTSP Greens Care 32	
5003106	Twenty Four 14 Ounce Tube Greens Care Grease	
O-Ring Kit		
5002452	SAE O-Ring Boss (3/32 ~ 2" Tube O.D.)	
5002453	Common O-Ring Kit	
5002454	O-Ring Face Seal ORFS (-4 ~ -24 ORS Tube Size)	
Right Start Kit for New Machines		
See your local TGTSP Dealer		
On-Time Maintenance Kit		
See your local TGTSP Dealer		

* Refer to the Operator's manual or the Parts & Maintenance Manual for the correct hydraulic oil requirements for your machine. Textron Golf, Turf & Specialty Products offers a High Usage Parts Catalog illustrating commonly used Parts through easy to read line Drawings. See your local TGTSP Dealer for a copy.

INDEX

1000348.....	35	3001273.....	49	366718.....	51	4121768.....	35
1000447.....	47	3001600.....	45	366719.....	51	4122711.....	33
1000476.....	51	3002001.....	37	366726.....	45	4122712.....	33
1000477.....	51	3002047.....	37	366727.....	45	4122713.....	33
1000634.....	37	3002179.....	39	366737.....	51	5000457.....	45
1000838.....	45	3002480.....	37	366741.....	37	5002887.....	45
1000839.....	45	3002753.....	33	366742.....	51	5002905.....	51
1001007.....	37	3002756.....	33	366743.....	37	500534.....	47
1001250.....	37	3004259.....	39	366768.....	34	503477.....	45
1001266.....	37	3004484.....	53	366796.....	45	503478.....	45
1001292.....	37	3004520.....	35	366984.....	43	545940.....	47
132655.....	53	3004555.....	35	367029.....	47, 53	554847.....	51
132658.....	51	3005144.....	33	367164.....	47	555846.....	55
132663.....	51	3005692.....	45	367512.....	45	68668.....	43
132674.....	45	3006436.....	34	367554.....	49		
164056.....	51	3008474.....	55	395367.....	53		
164057.....	53	3008674.....	45	4101600.....	43		
164063.....	51	3008974.....	45	4102241.....	49		
2000067.....	37	3009138.....	45	4103280.....	34		
2000072.....	45	303962.....	37	4103540.....	55		
2000148.....	49	304745.....	47	4104080.....	41		
202947.....	53	308028.....	53	4104081.....	41		
220318.....	53	308030.....	53	4104280.....	33		
220319.....	53	319085.....	53	4104281.....	33		
241827.....	45	338675.....	47	4104282.....	33		
241828.....	45	338766.....	51	4104283.....	33		
241835.....	53	345666.....	55	4104320.....	34		
241836.....	53	352737.....	45	4104360.....	41		
271920.....	51	359864.....	49	4104361.....	41		
2809762.....	43	360111.....	51	4104640.....	47		
2809837.....	41	361451.....	51, 53	4104641.....	49		
2809900.....	37	363047.....	47	4104720.....	47, 49		
2809901.....	37	364164.....	45	4105181.....	37		
2810096.....	53	364441.....	45	4105281.....	47		
2811071.....	49	364900.....	47	4105360.....	47		
2811104.....	47	365501.....	45, 47	4105660.....	43		
2811105.....	49	365753.....	51	4105800.....	43		
2811107.....	49	366648.....	47	4107800.....	39		
2811108.....	49	366650.....	47	4108280.....	39		
2811110.....	49	366653.....	45	4108281.....	39		
2811122.....	47	366693.....	53	4108282.....	39		
2811206.....	41	366695.....	53	4108283.....	39		
2811219.....	49	366696.....	53	4108300.....	39		
2811220.....	43	366697.....	51, 53	4108460.....	37		
2811221.....	43	366698.....	53	4108540.....	37		
2811222.....	47	366699.....	53	4108640.....	39		
2811223.....	49	366700.....	53	4108641.....	37		
2811559.....	37	366701.....	53	4108642.....	39		
2811669.....	43	366702.....	53	4108643.....	39		
2811676.....	34	366704.....	51	4108740.....	39		
2811680.....	39	366705.....	51	4115960.....	37		
2811690.....	55	366707.....	49	4115961.....	37		
2812037.....	55	366708.....	37	4121377.....	43		
2812325.....	47	366709.....	45	4121513.....	35		
2812384.....	49	366716.....	51	4121514.....	33		
3000265.....	39	366717.....	51	4121764.....	35		

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