

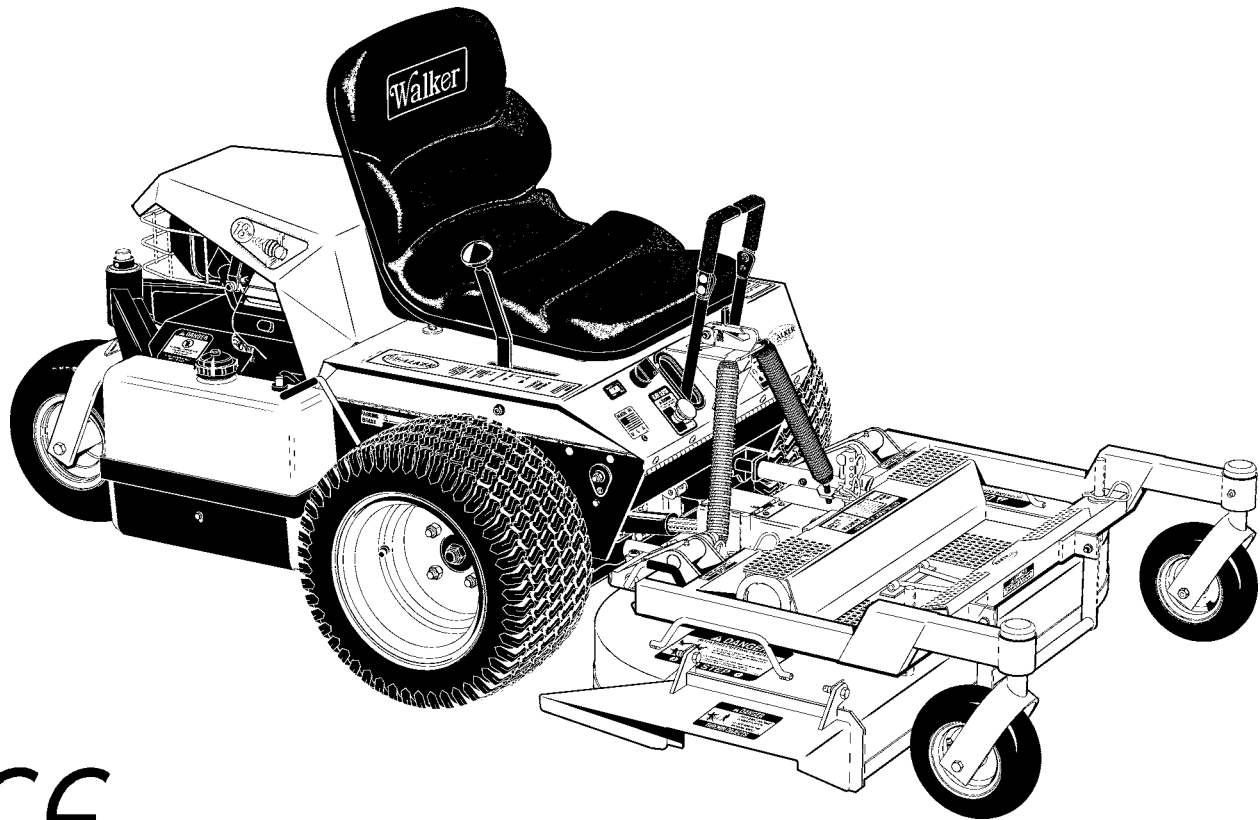
Walker Rider Lawnmowers

OWNER'S MANUAL

Safety, Assembly, Operating, and Maintenance Instructions

and ILLUSTRATED PARTS MANUAL

Model MB (18 HP)



CE

TM

Please Read and Save These Instructions

For Safety, Read All Safety and Operation
Instructions Prior to Operating Machine

Effective Date: 12-15-05

P/N 4000-2



Foreword

Thank you. . .for purchasing a Walker mower. Every effort has been made to provide you with the most reliable mower on the market, and we are sure you will be among our many satisfied customers. If for any reason this product does not perform to your expectations, please contact us at (970) 221-5614. Every customer is important to us. Your satisfaction is our goal.

Please. . .read this manual thoroughly! This manual is to be used in conjunction with the engine manufacturer's manual for the specific engine on the mower model you have purchased. Before you operate your new mower, please read this entire manual. Some of the information is crucial for proper operation and maintenance of this mower - it will help protect your investment and ensure that the mower performs to your satisfaction. Some of the information is important to your safety, and must be read and understood to help prevent possible injury to the operator or others. If anything in this manual is confusing or hard to understand, please call our service department, at (970) 221-5614, for clarification before operating or servicing this mower.

This manual covers Model MB with the Briggs & Stratton Vanguard 18 HP gasoline engine.

All shields and guards must be in place for the proper and safe operation of this machine. Where they are shown removed in this manual, it is for illustration purposes only. **Do not operate this machine unless all shields and guards are in place.**

Specifications given are based on the latest information available at the time this manual was produced.

Walker Mfg. Co. is continually striving to improve the design and performance of its products. We reserve the right to make changes in specifications and design without thereby incurring any obligation relative to previously manufactured products.

Sincerely,
WALKER MANUFACTURING COMPANY

A handwritten signature in cursive script that reads "Bob Walker".

Bob Walker, President

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General Information

HIGHLIGHTED INFORMATION

Walker Manufacturing recommends that any service requiring special training or tools be performed by an authorized Walker Mower Dealer. There are several general practices to be aware of in the area of safety. Most accidents associated with the operation or maintenance of a Walker Mower are caused by disregarding basic safety precautions or specific warnings. Such accidents, in most cases, can be prevented by being aware of the dangers present.

Information of special importance has been highlighted in bold type in this manual. Refer to **Safety Instructions** for the meanings of **DANGER, WARNING, CAUTION, IMPORTANT, and NOTE.**

GLOSSARY

There are many terms that are either unique to this equipment or that are used as acronyms. The following terms and their definitions will help while using this manual:

- **DECK** is the mowing attachment mounted on the front of the tractor which includes the carrier frame, deck housing, blade drive gearboxes, and cutter blades.
- **FORWARD SPEED CONTROL (FSC)** controls the maximum forward speed of the tractor; functioning as a cruise control.
- **GROUND DRIVE** refers to the dual transaxles which drive the main wheels.
- **TRANSAXLE** transmits and controls power from the ground drive belt to the main drive wheel.
- **LEFT HAND (LH)** refers to the left-hand side of the tractor when the operator is seated facing forward in the tractor seat.
- **POWER TAKE-OFF (PTO)** transmits engine power to run the cutter blades.
- **RIGHT HAND (RH)** refers to the right-hand side of the tractor when the operator is seated facing forward in the tractor seat.
- **SIDE DISCHARGE (SD)** mows but does not collect the mowed material.

- **STEERING LEVERS** steer the tractor by controlling the two transaxles.
- **TRACTOR** is the prime mover, including the engine, drive train, operator seat, and controls to operate the mower.
- **TRANSAXLE LOCKOUT RODS** release the transaxles to permit freewheeling the tractor.

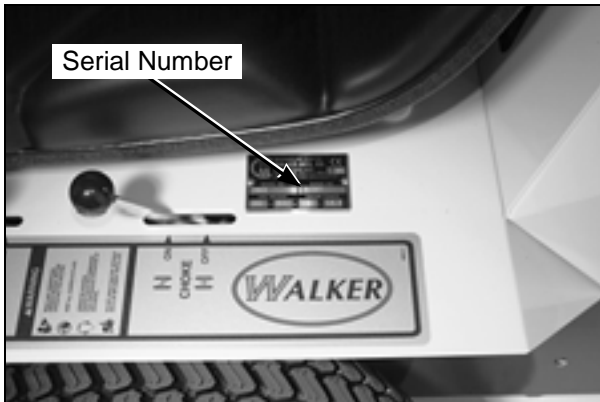
IDENTIFYING NUMBER LOCATIONS

The tractor serial number plate is affixed to the tractor body just below the left rear corner of the seat. The mower deck serial number plate is affixed alongside the angle iron framing on the LH side of the LH mower blade drive. Model and serial numbers are helpful when obtaining replacement parts and maintenance assistance. For ready reference, please record these numbers in the space provided.

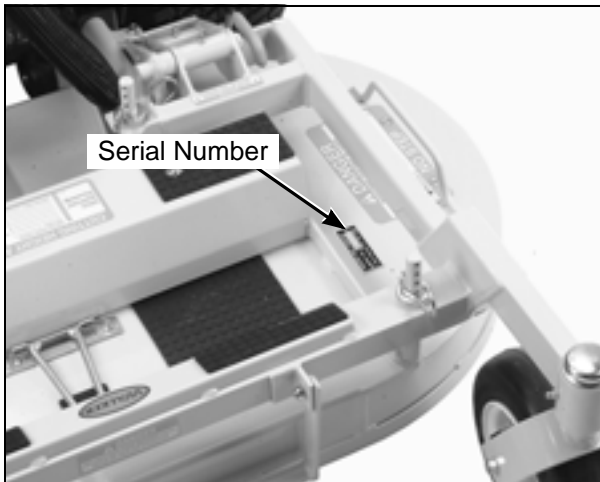
Tractor Model No.	_____
Tractor Serial No.	_____
Deck Serial No.	_____
Engine Model No.	_____
Engine Serial No.	_____
Date of Purchase	_____

Fill In By Purchaser

General Information



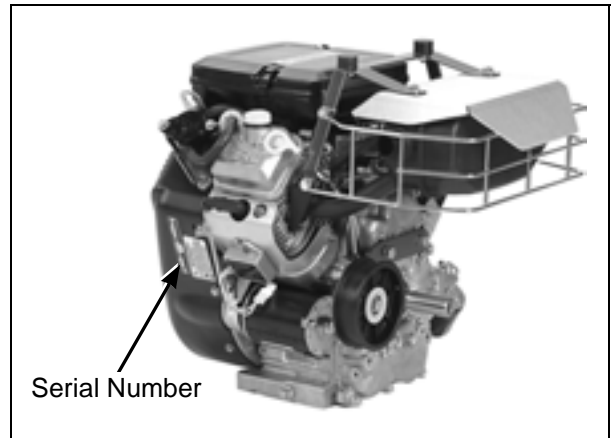
Tractor Serial Number Location



Mower Deck Serial Number Location

ENGINE SERIAL NUMBER LOCATION

The Briggs & Stratton engine model, type, and code numbers are located on the left hand of the engine shroud. For the mower model covered by this manual, contact a Briggs & Stratton servicing dealer.



Engine Serial Number Location

SERVICING OF ENGINE AND DRIVETRAIN COMPONENTS

The detailed servicing and repair of the engine, transaxle and gearboxes are not covered in this manual. Only routine maintenance and general service instructions are provided. For the service of these components during the limited warranty period, it is important to find a local, authorized servicing agent of the component manufacturer. **Any unauthorized work done** on these components during the warranty period **may void the warranty**. If you have any difficulty finding an authorized outlet or obtaining warranty service, please contact our Service Department for assistance:

Walker Manufacturing Company
5925 E. Harmony Road
Fort Collins, CO 80528
1-970-221-5614

Service manuals are available for each of these components from their respective manufacturers as follows:

Briggs & Stratton Engine	Briggs & Stratton 800-233-3723 (24-hour hotline in USA & Canada) www.briggsandstratton.com
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Transaxle	Hydro-Gear Sullivan, IL
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Gearboxes (Deck)	Tecumseh Products Co. 900 North Street Grafton, WI 53024
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Specifications

MODEL	MB
ENGINE	
Manufacturer/Model	Briggs & Stratton Vanguard, 2 Cyl. OHV (Air-Cooled)
Displacement	34.7 cu. in. (570 cc)
HP (@ 3600 RPM)	18.0
Max. RPM (No Load)	3600 ± 100
Governed RPM	3600 ± 100
Max. Torque [ft-lb (N·m) @ RPM]	29.5 (40.5) @ 2400
Idle RPM	1750
Spark Plug Type	Champion RC14YC
Spark Plug Gap	.030 in. (.75 mm)
Crankcase Capacity	1.5 qts (1.4 liters)
Crankcase Lubricant	SF/SG/SH/SJ or Higher Grade Oil Only with 30W Viscosity Above 40° F (4° C)
Fuel Tank Capacity	3 Gallons (11.35 liters)
Fuel	Automotive Grade Unleaded Gasoline (85 Octane)
Cooling System	Air Cooled
ELECTRICAL SYSTEM	
Battery	12 Volt, 220 CCA (Interstate PC12/80)
Charging System	Flywheel Alternator
Charging Output	16 Amp DC (Regulated)
System Polarity	Negative Ground
Ignition	Magnetron [®] Electronic
Starter	12 Volt Electric Key and Solenoid Operated
Interlock Switch	Ignition Lockout by Seat Switch, Transmission Neutral and Blade Clutch
TRANSMISSION	
Manufacturer/Model	Dual, Independent Hydro-Gear Integrated Transaxles
Steering	Hand Lever Control / Individual Wheel
Forward Speed Control	Precision Friction Lock Lever, Cruise Control, with Neutral-Park Position
Service Brake	Dynamic Braking through Hydrostatic Transmission
Parking Brake	Mechanical Cog Lock in Transmission Gear
Neutral	Transmission Release by Manual Dump Valve
Final Drive	Direct Drive Axle from Transaxle

Specifications

MODEL	MB
TRANSMISSION (continued)	
Transmission Fluid	
Factory Service	20W50 Multi-Viscosity Motor Oil (Minimum SL Grade Oil)
Transmission Fluid Capacity	79 fl oz (2336 ml)
Transmission Cooling	Cooling Fan Mounted on Drive Pulley
Ground Travel Speed	
Forward m.p.h. (km/h)	0-8 (0-13) Infinitely Variable
Reverse m.p.h. (km/h)	0-8 (0-13) Infinitely Variable
BLADE DRIVE	
PTO Shaft	Sliding Spline Shaft with Two (2) High-Speed U-Joints
Blade Spindle	Each Blade (2) Mounts Direct on Peerless Right Angle Gearbox with Tee Gearbox in Center Connected to PTO Shaft (Complete Geared Drive, Peerless Model 1000 Gearboxes)
Blade Drive Clutch and Brake	12V Electrical (Electromagnetic Clutch and Brake) Switch Operated [Stops Blades within Five (5) Seconds of Disengagement]
Max. Blade Speed [22 in. (56 cm) Blade] @ 3600 RPM Engine	2900 RPM [16700 FPM (5090 m/min)]
TIRE SIZE	
Deck Caster Wheel	2.80/2.50-4 Pneumatic (4-Ply)
Deck Caster Wheel (Optional)	8.25 x 2.75 (Semi-Pneumatic)
Drive	18 x 8.50-10 (4-Ply)
Rear	13 x 6.50-6 (4-Ply)
TIRE PRESSURE	
Deck Caster Wheel	20 PSI (137 kPa)
Drive	15 PSI (103 kPa)
Rear	20 PSI (137 kPa)
DIMENSIONS (Tractor and Mower)	
Length	
	82 in. (208 cm)
Width	
36 in. (91 cm) SD Model (with Deflector)	41-3/4 in. (106 cm)
42 in. (107 cm) SD Model (with Deflector)	47-3/4 in. (121 cm)
48 in. (122 cm) SD Model (with Deflector)	53-3/4 in. (137 cm)
56 in. (142 cm) SD Model (with Deflector)	61-3/4 in. (157 cm)

Specifications

MODEL

MB

DIMENSIONS (continued)

Height	39 in. (99 cm)
Wheel Base (Tractor)	38-1/2 in. (98 cm)
Tread Width (Tractor)	29-3/4 in. (76 cm)

MOWER DECK

Width of Cut	36-, 42-, 48-, or 56-in. (91, 107, 122 or 142 cm)
Cutting Height	1 to 4 in. (3 to 10 cm)
Height Adjustment	7 Positions - 1/2 in. (1 cm) Increment Hitch Pins Installed in Multi-Position Deck Support

Blade Size

36 in. (91 cm) SD Model	20 in. (51 cm) Two (2) Clockwise-Rotating Blades with a 4 in. (10 cm) Center Overlap
42 in. (107 cm) SD Model	22 in. (56 cm) Two (2) Clockwise-Rotating Blades with a 2 in. (5 cm) Center Overlap
48 in. (122 cm) SD Model	25 in. (64 cm) Two (2) Clockwise-Rotating Blades with a 2 in. (5 cm) Center Overlap
56 in. (142 cm) SD Model	20 in. (51 cm) Three (3) Clockwise-Rotating Blades with a 2 in. (5 cm) Center Overlap
Deck Suspension	Torsion-Flex Frame with Caster Wheels and Counterweight Springs

CURB WEIGHT (Approximate)

Tractor Only	551 lb (250 kg)
SD Tractor and 36 in. SD Deck	696 lb (316 kg)
SD Tractor and 42 in. SD Deck	731 lb (332 kg)
SD Tractor and 48 in. SD Deck	756 lb (343 kg)

DRIVE BELTS

Engine PTO	Walker P/N 4230
Ground Drive	Walker P/N 4248

SEAT

Contour-Molded, with Nylon Backed Vinyl Cover and Integral Foam Cushion

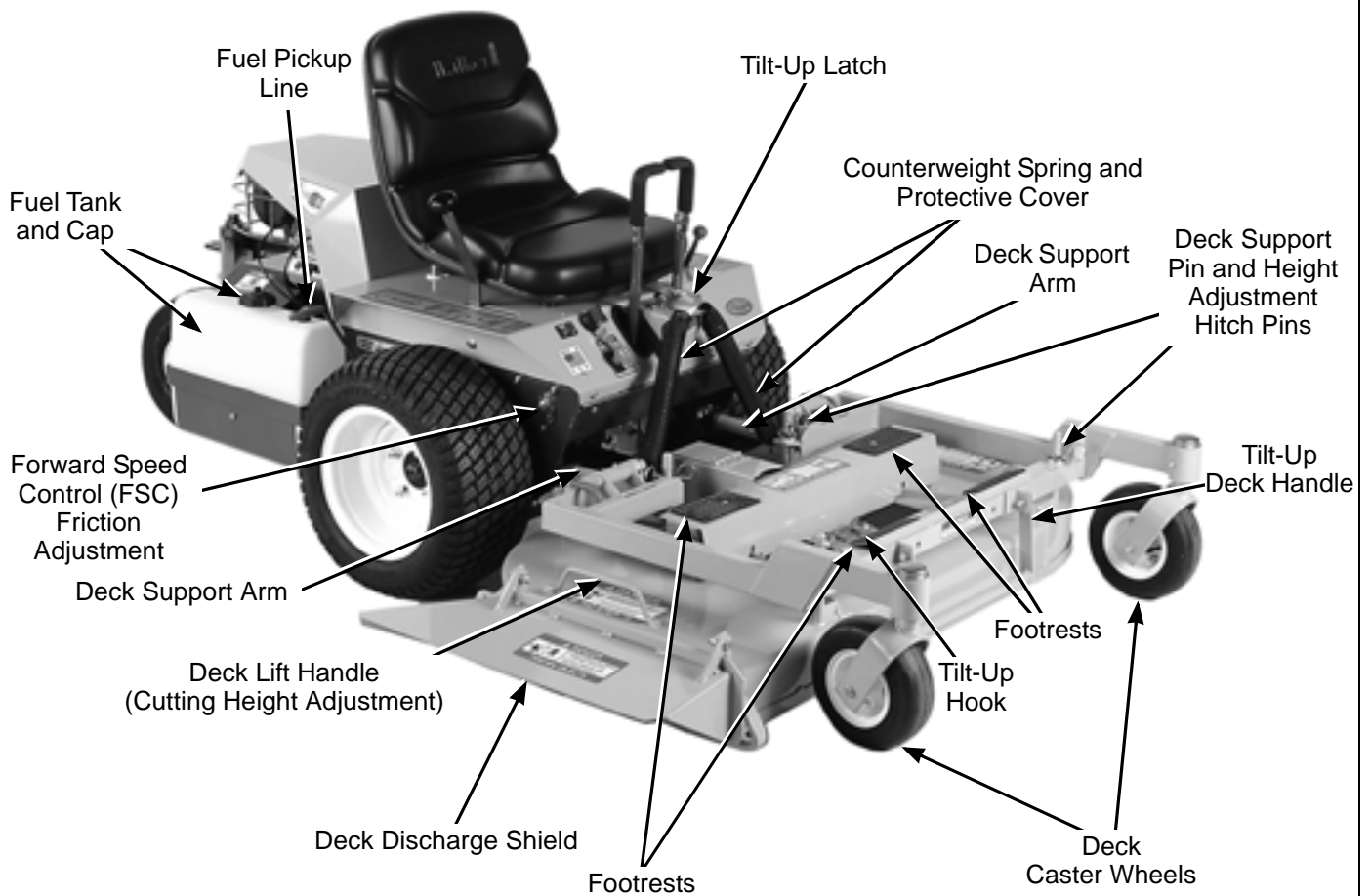
FRAME/BODY CONSTRUCTION

Frame/Body	3/16 Plate Steel
Deck	11 Gauge Steel

NOTE: The manufacturer reserves the right to make changes in specifications shown herein at any time without notice or obligation.

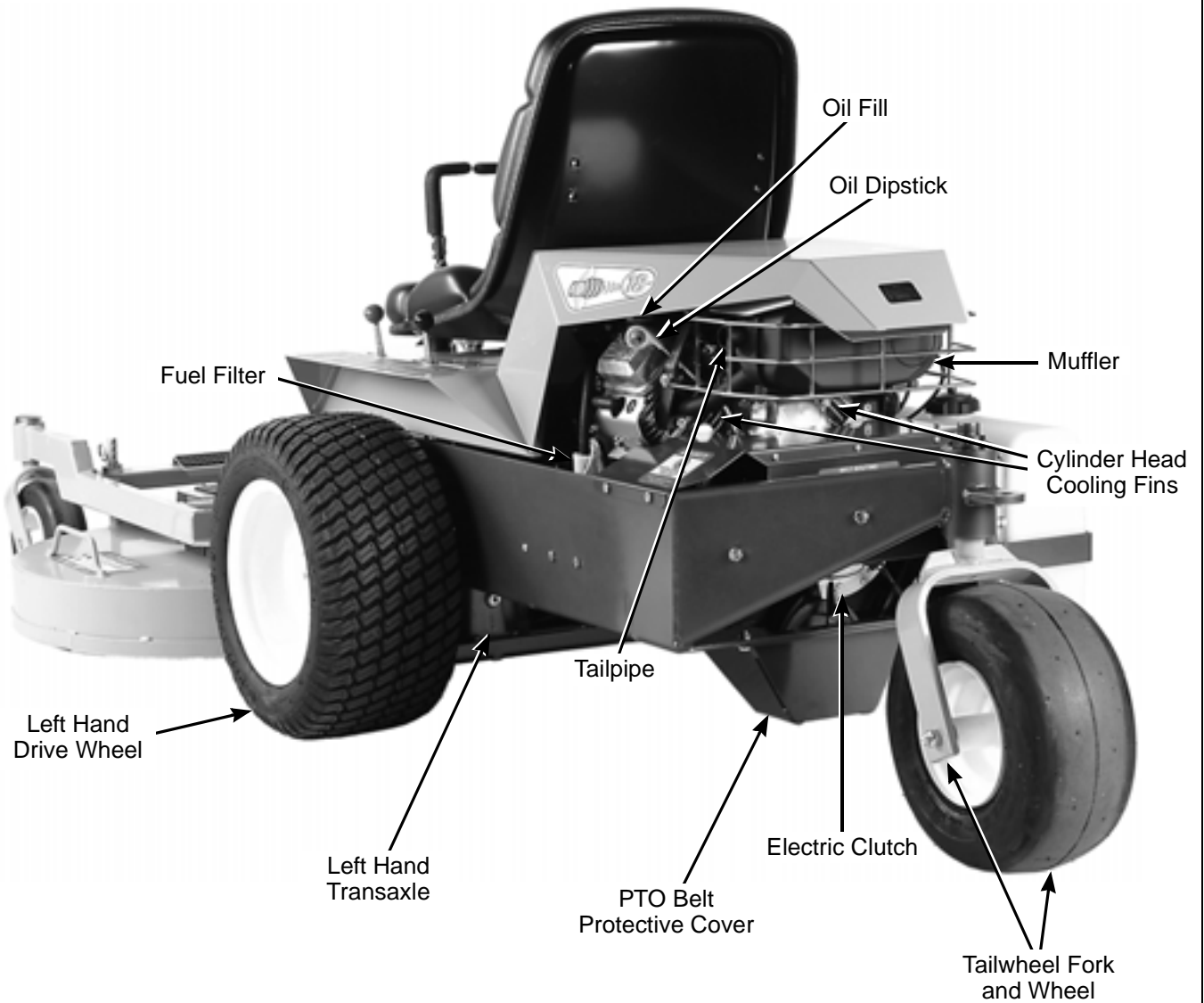
Component Identification

NOTE: Control Identification shown in **Operating Instructions** section.



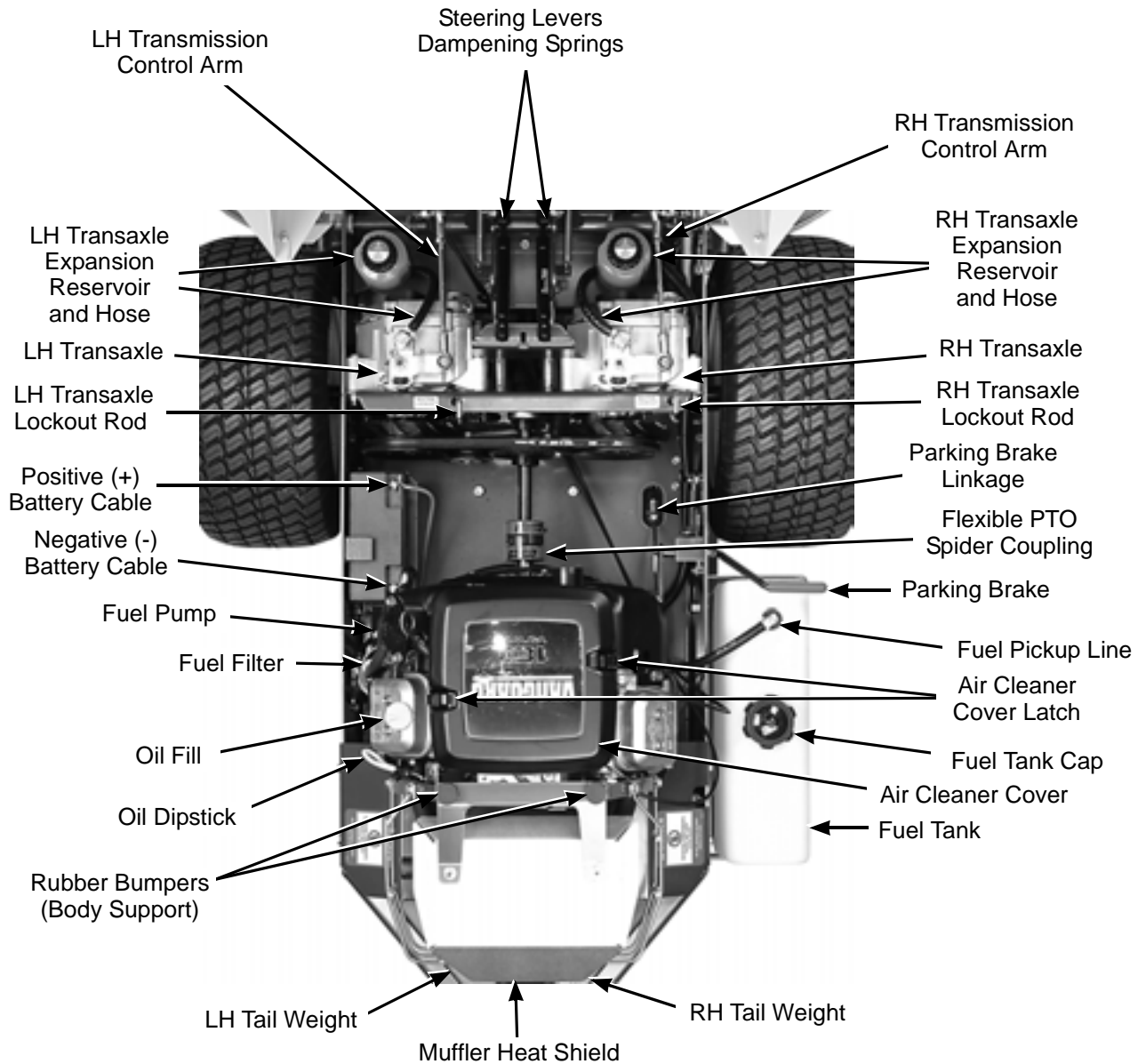
Front View and Right Side View

Component Identification



Rear View and Left Side View


Component Identification



Top View (Body Raised)

Safety Instructions

Pay particular attention to any information labeled **DANGER, WARNING, CAUTION, IMPORTANT,** and **NOTE** in this manual.

When you see the Safety Alert Symbol (), read, understand, and follow the instructions. Failure to comply with safety instructions may result in personal injury.

The seriousness or degree of importance of each type of information is defined as follows:



DANGER

An **IMMEDIATE** hazard that **WILL** result in severe personal injury or **DEATH**, if warning is ignored and proper safety precautions are not taken.



WARNING

A **POTENTIAL** hazard that **COULD** result in severe personal injury or **DEATH**, if warning is ignored and proper safety precautions are not taken.



CAUTION

Possible hazards or unsafe practices that **MAY** result in **MODERATE** personal injury or property damage, or machine damage, if warning is ignored and proper safety precautions are not taken.

IMPORTANT: Identifies mechanical information demanding special attention, since it deals with the possibility of damaging a part or parts of the machine.

NOTE: Identifies information worthy of special attention.

Walker Manufacturing cannot predict every potentially dangerous situation. Therefore, items labeled as such in this manual do not cover all conceivable situations. Any person using procedures, tools, or control techniques not recommended by Walker Manufacturing must take full responsibility for safety.

The Walker Rider Lawnmower has been designed with many safety features to protect the operator from personal harm or injury. However, it is necessary for the operator to use safe operating procedures at all times. **Failure to follow safety instructions contained in this manual may result in personal injury or damage to equipment or property.**

If you have any questions concerning setup, operation, maintenance, or safety, please contact your authorized Walker Mower Dealer or call Walker Manufacturing Company at (970) 221-5614.

BEFORE OPERATING

1. **Read and understand the contents of this Owner's Manual before starting and operating the machine.** Become thoroughly familiar with all machine controls and how to stop the machine and disengage the controls quickly. Replacement Owner's Manuals are available by sending the Model and Serial Number to:

Walker Manufacturing Company
5925 East Harmony Road
Fort Collins, CO 80528
2. **Never allow children to operate rider mower.** Do not allow adults to operate without proper instruction.
3. **Clear the area to be mowed of any foreign objects** which may be picked up and thrown by cutter blades. Pick up all sticks, stones, wire, and any other debris.
4. Keep everyone, especially children and pets, a safe distance away from the area being mowed. **Do not mow with bystanders in the area.**
5. Do not operate the machine barefoot or wearing sandals, sneakers, tennis shoes, or similar light-weight footwear. **Wear substantial protective footwear.**

Safety Instructions

6. Do not wear loose fitting clothing that could get caught in moving parts. Do not operate this machine while wearing shorts; **always wear adequate protective clothing**, including long pants. Wearing safety glasses, safety shoes, and a helmet is advisable and required by some local ordinances and insurance regulations.
7. Prolonged exposure to loud noise can cause impairment or loss of hearing. **Operator hearing protection is recommended.** Wear a suitable hearing protective device, such as ear-muffs or earplugs.
8. **Keep all protective shields and safety devices in place.** If a protective shield, safety device, or decal is damaged, unusable, or missing, repair or replace it **before** operating the machine.
9. **Be sure interlock switches are functioning correctly**, so the engine cannot be started unless the Forward Speed Control lever is in the **NEUTRAL-PARK** position, and the PTO switch is in the **DISENGAGED** position. Also, the engine should stop if the operator lifts off the seat with the PTO switch in the **ENGAGED** position.
10. **Handle gasoline with care.** Gasoline is highly flammable and its vapors are explosive:
 - a. Use an approved fuel container.
 - b. Never add fuel to a running engine or hot engine (allow hot engine to cool several minutes).
 - c. Keep matches, cigarettes, cigars, pipes, open flames, or sparks away from the fuel tank and fuel container.
 - d. Always fill the fuel tank outdoors using care. Fill to about one inch from the top of the tank. Use a funnel or spout to prevent spilling.
 - e. Replace the machine fuel cap and container cap securely and clean up any spilled fuel before starting the engine.
11. **Never attempt to make any adjustments while the engine is running**, except where specifically instructed to do so.

12. The electrical system battery contains sulfuric acid. Avoid any contact with skin, eyes, and clothing. Keep the battery and acid out of reach of children.

OPERATING

1. **Operate the mower only in daylight** or in good artificial light with good visibility of the area being mowed.
 2. Sit on the seat when starting the engine and operating the machine. Keep feet on the deck footrests at all times when the tractor is moving and/or mower blades are operating.
 3. For a beginning operator, **learn to steer (maneuver) the tractor with a slow engine speed before attempting any mowing operation.** Be aware that, with the front mounted mower configuration, the back of the tractor swings to the outside during turns.
 4. Remember, for an emergency stop, the forward motion of the tractor can always be stopped by pulling the Forward Speed Control (FSC) into the **NEUTRAL-PARK** position.
 5. In case the transmission drive belt breaks during operation, and if the machine is on a slope, the machine will freewheel down the slope. **To maintain control**, immediately (1) Release the steering levers and simultaneously (2) Move the FSC to the **NEUTRAL-PARK** position. When the machine is stopped or moving slowly, engage the parking brake.
- NOTE:** This is exactly the same procedure used to normally stop and park the machine.
6. Disengage the blade clutch and put the FSC in the **NEUTRAL-PARK** position before starting the engine (an ignition interlock switch normally prevents starting of the machine if these controls are in the **OPERATING** position).
 7. **Do not run the engine in a confined area without adequate ventilation.** Exhaust fumes are hazardous and can be deadly.
 8. **Do not carry passengers** - maximum seating capacity is one (1) person.

Safety Instructions

9. Watch for holes, rocks, and roots in the terrain and for other hidden hazards. When mowing tall grass, mow higher than desired to expose any hidden obstacles. Then, clean the area and mow to the desired height.
10. **Avoid sudden starts or stops.** Before backing the machine up, look to the rear to be sure no one is behind the machine. Watch carefully for traffic when crossing or working near roadways.
11. Disengage the blade drive when transporting the machine across drives, sidewalks, etc. **Never raise the mower deck while blades are rotating.**
12. **The maximum recommended side slope operating angle is 20 degrees or 33% grade.** When operating the machine on a slope, reduce speed and use caution to start, stop, and maneuver. To prevent tipping or loss of control of the machine, avoid sharp turns or sudden changes in direction.
13. **Never adjust cutting height with the engine running.** Before adjusting cutting height or servicing, disengage the blade clutch (PTO), stop the engine, and remove the ignition key. Wait for all movement to stop before getting off the seat.

NOTE: The electric clutch brake should normally stop drive line rotation within five (5) seconds of disengaging the PTO clutch.
14. For side discharge mower decks, **do not operate with the grass deflector chute removed.** Keep the deflector in the lowest possible position.
15. When using the tilt-up deck, **observe the following recommendations:**
 - a. Do not move tractor with deck in tilt-up position.
 - b. Never tilt body forward with deck in tilt-up position.

16. **In case of a clogged or plugged mower deck:**
 - a. Disengage the blade clutch (PTO) and turn the engine off before leaving the seat.
 - b. **LOOK** to make sure blade drive shaft movement has stopped before trying to unclog the system.
 - c. Disconnect the spark plug wires.
 - d. Never place hands under the deck use a stick or similar tool to remove clogged material.
17. If the cutting blades strike a solid object or the machine begins to vibrate abnormally, **immediately disengage the blade clutch (PTO), stop the engine, and wait for all moving parts to stop.** To prevent accidental starting, disconnect the spark plug wires. Thoroughly inspect the mower and repair any damage before restarting the engine and operating the mower. Make sure cutter blades are in good condition and blade nuts are torqued to 60 ft-lb (81.3 N·m).
18. **Do not touch the engine or muffler while the engine is running** or immediately after stopping the engine. These areas may be hot enough to cause serious burns.
19. When leaving the machine unattended, **disengage the blade clutch (PTO), stop the engine, and remove the key.**

MAINTENANCE

1. To prevent accidental starting of the engine when servicing or adjusting the machine, remove the key from the ignition switch and disconnect the spark plug wires.
2. **To reduce fire hazards,** keep the engine free of grass, leaves, excessive grease, and dirt.
3. Keep all nuts, bolts, and screws tight to ensure the machine is in a safe, working condition. Check the blade mounting nuts frequently, making sure they are tight.
4. **Perform only maintenance instructions described in this manual.** Unauthorized maintenance operations or machine modifications may result in unsafe operating conditions.

Safety Instructions

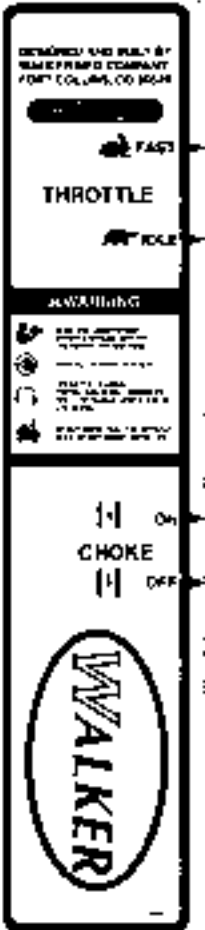
5. If the engine must be running to perform a maintenance adjustment, keep hands, feet, and clothing away from moving parts. **Do not wear jewelry or loose clothing.**
6. **Always use the proper engine service manual when working on the engine.** Unauthorized maintenance operations or modifications to the engine may result in unsafe operating conditions.
7. Altering the equipment or engine in any manner which adversely affects its operation, performance, durability, or use will **VOID the warranty** and may cause hazardous conditions.
8. Never attempt to disconnect any safety devices or defeat the purpose of these safety devices.
9. Do not change the engine governor settings or overspeed the engine. The governor has been factory-set for maximum-safe engine operating speed.
10. **Use genuine factory replacement parts.** Substitute parts may result in product malfunction and possible injury to the operator and/or others.
11. **Use care when charging the battery** or performing maintenance on the battery and electrical system:
 - a. Make sure the battery charger is unplugged before connecting or disconnecting cables to the battery.
 - b. Charge the battery in a well-ventilated space, so gases produced while charging can dissipate. Make sure the battery vents in the caps are open.
 - c. Keep sparks, flames, and smoking materials away from the battery at all times. To avoid sparks, use care when removing battery cables from posts.
 - d. Disconnect both battery cables before unplugging any wiring connectors or making repairs on the electrical system.

IMPORTANT: Keep all applicable manuals immediately accessible to anyone who may operate or service this machine.

Safety Instructions

SAFETY, CONTROL, AND INSTRUCTION DECALS

Safety, Control, and Instruction Decals are installed on the machine; if any are missing, illegible, or damaged, a replacement should be ordered and installed before putting the machine into operation. The Decal Part Number is listed below and in the Parts Section.



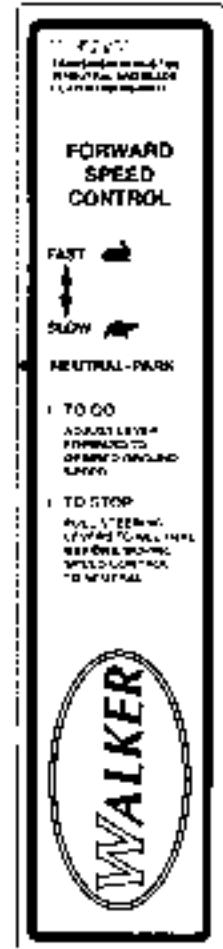
LH Fender (5802-2)



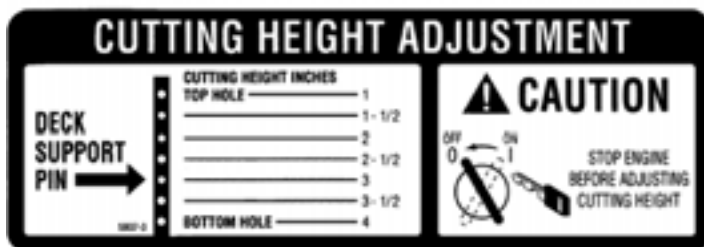
Each End of Mower Deck (5808)



SD Deck Discharge Shield (5848)



RH Fender (5802-1)



Deck Gearbox Cover (5807-3)

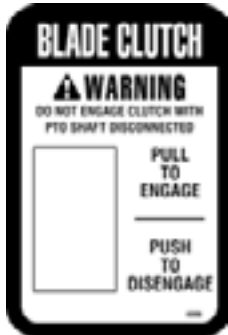


Rear Body, Above Muffler (5805)

Safety Instructions

SAFETY, CONTROL, AND INSTRUCTION DECALS

Safety, Control, and Instruction Decals are installed on the machine; if any are missing, illegible, or damaged, a replacement should be ordered and installed before putting the machine into operation. The Decal Part Number is listed below and in the Parts Section.



Blade Clutch on Front Body Adjacent to RH Steering Lever (4806)



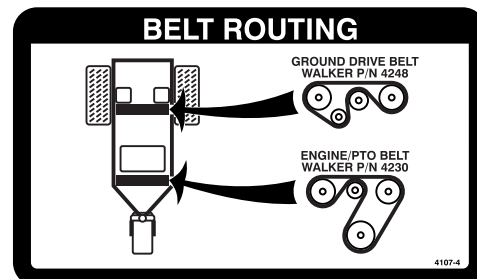
Front Body Adjacent to LH Steering Lever (7818)



Upper Guard (4107-1)



Hydrostat Oil Reservoir (4024-2)



Belt Routing (4107-4)



Parking Brake (7809)



Deck Carrier Frame (8647)



Center Body Behind Transaxles (9804)



Deck Carrier Frame (5865)



Deck Carrier Frame (8653)

Assembly Instructions

SETUP INSTRUCTIONS

Walker Mowers are shipped partially assembled to our distribution network, and are typically assembled by the selling dealer. For any additional assembly besides the following, contact your Walker dealer.

Battery Service

The battery is a completely sealed, non serviceable battery.

IMPORTANT: Make sure battery is securely mounted in the frame. A loose battery may cause damage to the case resulting in acid leakage and severe damage to the machine. A hazard may be created by damage to critical working parts and safety systems.

Mower Deck Assembly

Deck Caster Wheels Installation

1. Remove the bolt, nut, axle spacer tube, and spacer washers from each deck caster wheel fork.

NOTE: Spacer washers are used only when the optional semi-pneumatic deck wheels (8.25 x 2.75) are installed.

2. Fit the axle spacer tube through the wheel hub, position the spacer washer on each side of the hub (if used), and fit the assembly into the wheel fork.
3. Insert the 3/8-16 x 4-1/2 in. bolt through the wheel fork with the bolt head to the outside and install the 3/8-16 in. Keps nut.
4. Tighten the bolt and nut until the axle spacer tube bottoms against the inside of the wheel fork (will not turn) while the wheel and spacer washers (if used) spin freely without binding.



Deck Caster Wheel Installation

Deck Discharge Shield Installation (Side Discharge Models Only)

Attach the deck side discharge shield by positioning the shield hinge lug in front of the deck mount and fastening with two 3/8-16 x 1-1/4 in. bolts, 3/8-16 ESNA nuts, and 3/8 in. wave spring washers. The wave washers fit between the two hinging surfaces. Tighten the nuts until the shield moves freely but is not loose.



WARNING

DO NOT operate the machine without the grass deflector chute attached and in the lowest possible position.

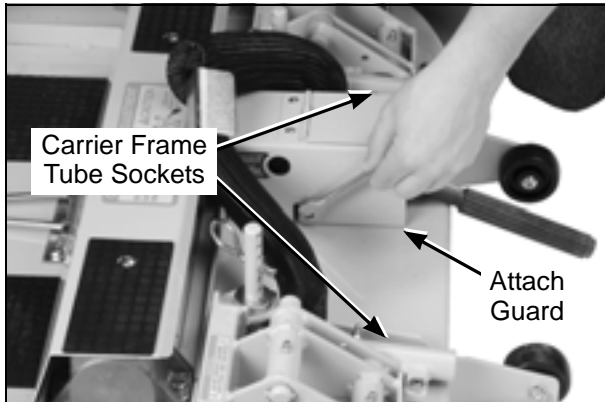


Deck Discharge Shield Installation

Assembly Instructions

PTO Shaft Guard Installation

Position the shaft guard as shown and mount with two 1/4-20 x 1/2 in. bolts.

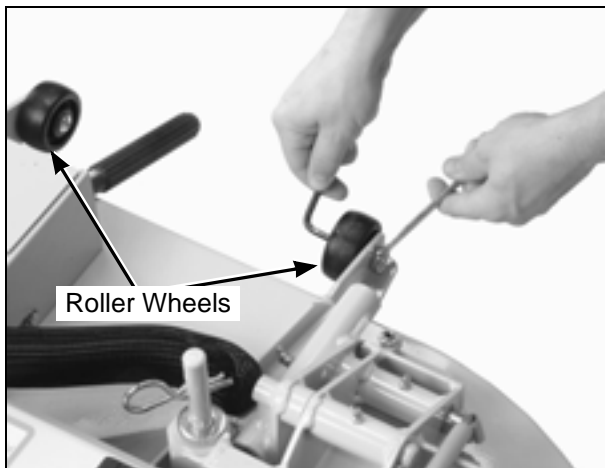


PTO Shaft Guard Installation

Tilt-Up Roller Wheel Installation

NOTE: A 2-1/2" diameter tilt-up roller wheel (P/N 9772) is required for decks installed on the Model MB tractor.

Mount the two (2) tilt-up roller wheels on the brackets on the rear skirt of the deck housing using the P/N 8490 axle bolt, 3/8 in. wave spring washer and 3/8-16 in. Whiz locknut. Tighten the axle bolt until the wheel rolls freely, but is not loose.

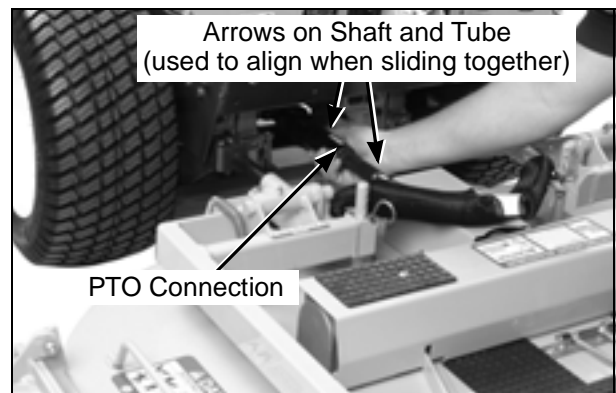


Roller Wheel Installation

Mower Deck Installation on Tractor

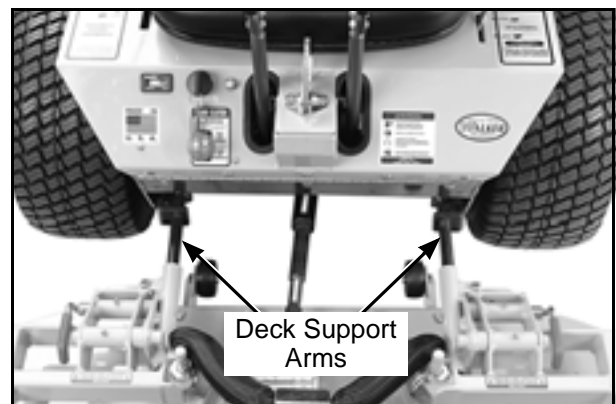
Deck Installation

1. Lightly grease each deck support arm (2) on the tractor. Refer to **Mower Deck Installation** photo for location of deck support arm.
2. Engage the deck carrier frame tube sockets on the tractor support arms (refer to **PTO Shaft Guard Installation** photo for socket location). Slide the deck onto the support arms approximately 3 in. (76 mm).
3. Align and connect the splined PTO shaft and socket halves, as shown in **PTO Shaft Connection** photo. The PTO shaft has a pilot end to ease alignment of shaft; fit shaft end into socket and rotate shaft until the splines line up as indicated by arrows, then slide together.



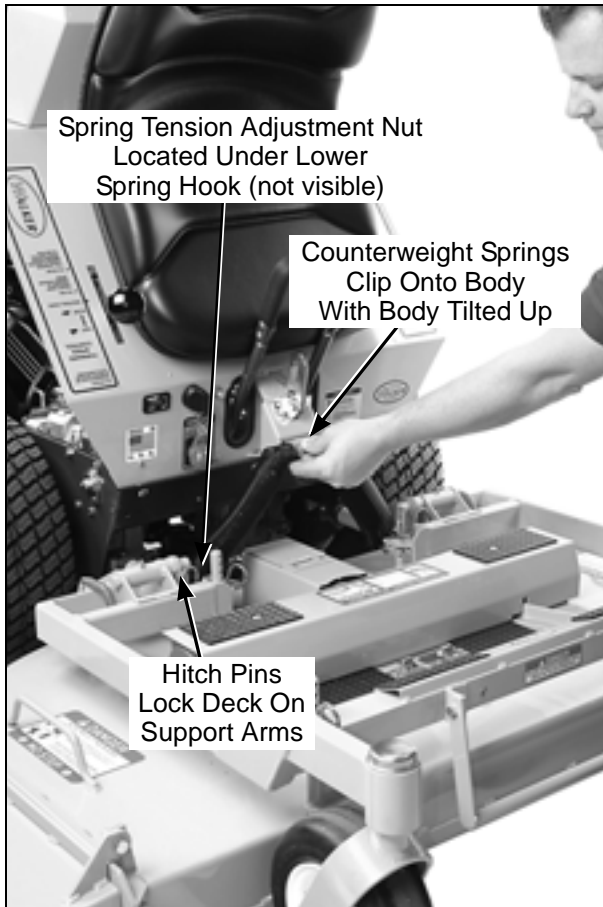
PTO Shaft Connection

4. Install the hitch pin through the hole on the end of each support arm to lock the deck in place (refer to **Deck Counterweight Spring Installation** photo). Two (2) hitch pins are included in the owner's packet of materials.



Mower Deck Installation

Assembly Instructions



Deck Counterweight Spring Installation

5. Raise mower body (instead of lifting the front of deck) and clip the counterweight springs to the receptacle on front of body. Lower the body to tension the springs. (Refer to **Deck Counterweight Spring Installation** photo.)
6. With the counterweight springs connected, the weight on the deck caster wheels should be 15 to 25 lb (6.8 to 11.3 kg). Check this weight by lifting on the front of the deck carrier frame. If required, the spring tension can be adjusted by tightening or loosening the elastic stop nuts located underneath the lower spring hook. Refer to **Deck Counterweight Spring Installation** photo.

Assembly Instructions

Deck Leveling

1. Position mower on a smooth, level surface. Set the cutting height to the highest position - 4 in. (102 mm) - for easy access under the deck to measure blade height. Refer to **ADJUSTING CUTTING HEIGHT** in **Operating Instructions**.

NOTE: A block of wood cut **4 in. (102 mm)** high is a convenient gauge to measure blade height above ground during the leveling process.

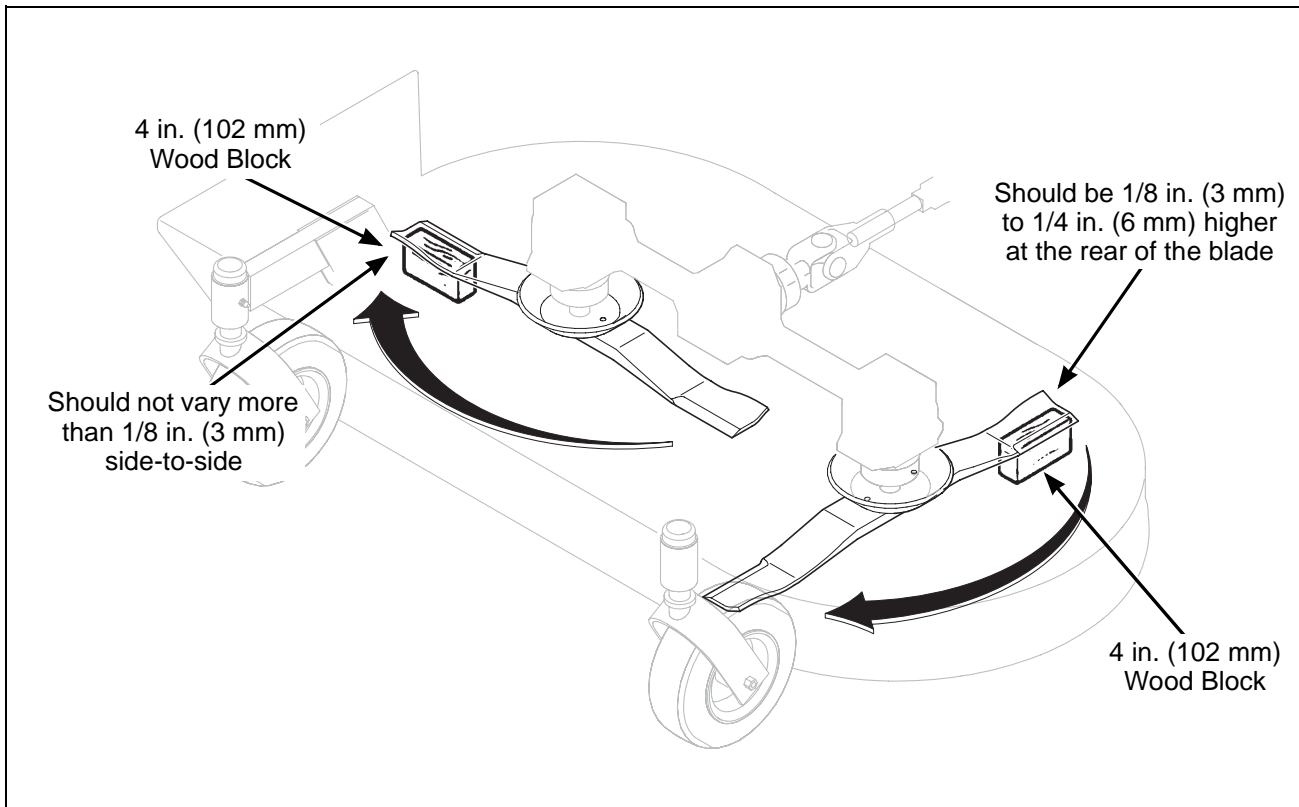


WARNING

The machine must be shut off during this procedure.

2. Check the side-to-side level. **Rotate each blade sideways** and measure the distance from blade tip to ground on each side. If measurements vary more than 1/8 in. (3 mm), add a washer shim under the deck support pins on the low side to level the deck.
3. Check the front-to-rear level. **Rotate the blades to point forward**. Measure the distance from blade tip to ground on the front and rear. The rear of the blade should be 1/8 to 1/4 in. (3 to 6 mm) higher than the front of the blade; shim the rear (or front) deck support pins equally to achieve **at least** 1/8 in. (3 mm) difference.

NOTE: The mower deck and support frame are jig welded; within normal tolerances, very little, if any, shimming should be required to level the deck. Tire pressure will influence the levelness of the deck. Check the tire pressure as a possible cause of the deck not being level.

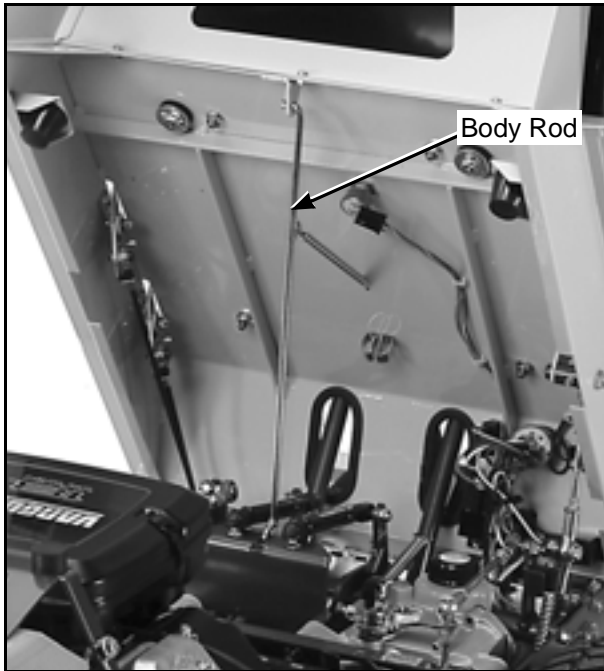


Deck Leveling

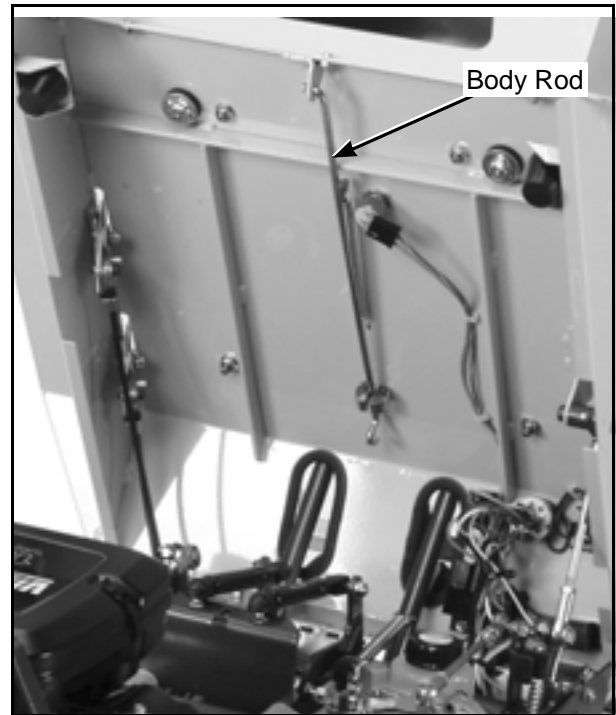
Assembly Instructions

PREOPERATING CHECKLIST

Before operating the mower for the first time, and as a routine before daily operations, it is important to make sure the mower is properly prepared and ready for operation. The following is a list of items to be checked. (For a mower with frequent operation, some of these items will not need to be checked every day, but the operator should be aware of the condition of each.)



Body Rod in Engaged Position



Body Rod in Stowed Position

CHECK BODY ROD IN STOWED POSITION

Check that body rod is secured in the stowed position before lowering body. Refer to **Body Rod in Stowed Position** photo.

For proper fuel and lubricants refer to **Specifications**.

FILL FUEL TANK

Fill the fuel tank using clean, fresh, automotive grade **unleaded** gasoline (85 octane rating minimum).

Assembly Instructions



DANGER

Handle gasoline with care. Gasoline is highly flammable and its vapors are explosive. Use safe refueling procedures:

- DO NOT fill fuel tank with the engine running.
- If the engine is hot, allow to cool before refueling.
- Use an approved fuel container.
- Fuel the mower outdoors.
- DO NOT smoke while refueling.
- Avoid spilling fuel; use a funnel or spout.
- DO NOT overfill the fuel tank; fill up to about 1 in. (25 mm) below the top of tank.

IMPORTANT: DO NOT permit dirt or other foreign matter to enter the fuel tank. Wipe dirt from around the filler cap before removing. Use a clean fuel storage container and funnel.

IMPORTANT: DO NOT mix oil with gasoline. Always use fresh, automotive grade unleaded gasoline. DO NOT use premium, white, or high-test gasoline. DO NOT use additives, such as carburetor cleaners, deicers, or moisture removing agents. DO NOT use gasoline blended with methyl alcohol.

CHECK ENGINE CRANKCASE OIL LEVEL

Check the engine crankcase oil level before use and after each 8 hours of continuous operation. Refer to **LUBRICATION** for *Checking Engine Crankcase Oil Level* in **Maintenance Instructions**.

CHECK AND SERVICE ENGINE AIR CLEANER SYSTEM

- Check condition, cleanliness, and security of the complete air filter element (clean air filter **every 100 hours**). For detailed procedures, refer to **CLEANING** the **Air Cleaner System** in **Maintenance Instructions**.

CHECK ENGINE COOLING SYSTEM

Check that the engine cooling air intake screen is free of obstruction by grass clippings or debris and clean if required. Also, cylinder head cooling fins should be inspected and cleaned if any build-up of debris is noted. Contact your Walker Dealer to perform this procedure.

CHECK SECURITY OF DRIVE TIRE MOUNTING NUTS

The eight (8) Drive Tire mounting nuts should each be torqued to 75-85 ft-lbs. (101.7-115.2 N-m).

INSPECT TWO (2) DRIVE BELTS

Engine/PTO and Ground Drive.

CHECK HYDROSTATIC TRANSAXLE OIL LEVEL

Refer to **LUBRICATION** for **Transaxle Lubrication** in **Maintenance Instructions**.

CHECK TIRE PRESSURE

Deck Caster Wheel = 20 PSI (137 kPa)
Drive = 15 PSI (103 kPa)
Rear = 20 PSI (137 kPa)

CHECK AND CLEAN GRASS BUILDUP UNDERNEATH MOWER DECK

Refer to **CLEANING** in **Maintenance Instructions** for deck cleaning information.

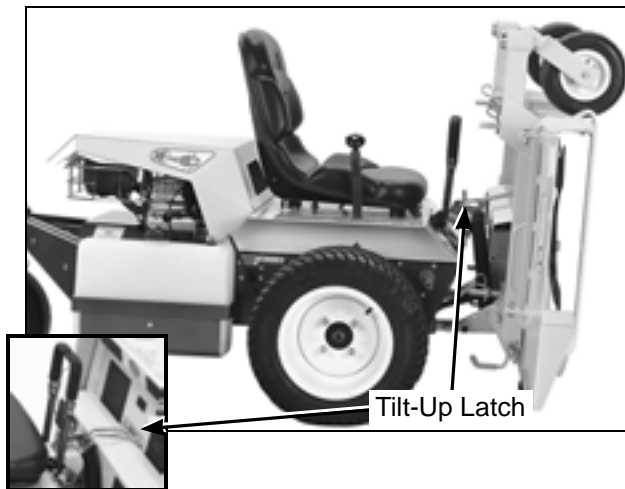


DANGER

Never operate cutter blades with deck in raised position because it is hazardous.

The tilt-up deck can be secured in the raised position by unlocking the deck lock levers on each side of the carrier frame and inserting the deck hook into the tilt-up latch on the tractor body. Before operating the tractor, make sure to re-engage the deck lock levers after lowering the deck to the normal operating position.

Assembly Instructions



Deck Secured in Tilt-Up Position



CAUTION

Do not operate machine with deck tilt-up pivot joint unlocked.



DANGER

Do not operate the mower with deck in tilt-up position. Do not move the tractor with the deck in the tilt-up position.

- CHECK MOWER BLADE CONDITION, SHARPNESS, AND SECURITY OF MOUNTING

The blade mounting nut should be tightened to 60 ft-lb (81.3 N·m). If blade sharpening is required, refer to **CHECKING/SERVICING** for **Sharpen Mower Blades** in **Maintenance Instructions**.

- ADJUST MOWER CUTTING HEIGHT, IF REQUIRED

Position the hitch pins in the four deck support pins. Refer to the "Cutting Height Adjustment" decal on the deck gearbox cover.

- PERFORM ANY ADDITIONAL PROCEDURES called for on the **MAINTENANCE SCHEDULE CHART** in **Maintenance Instructions**.

Operating Instructions

CONTROL IDENTIFICATION, LOCATION, AND FUNCTION

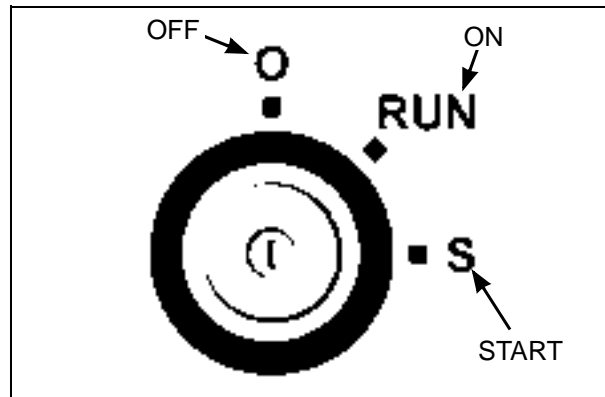
CAUTION

Before operating the mower, become familiar with the location and function of all operator controls. Knowing the location, function, and operation of these controls is important for safe and efficient operation of the mower.

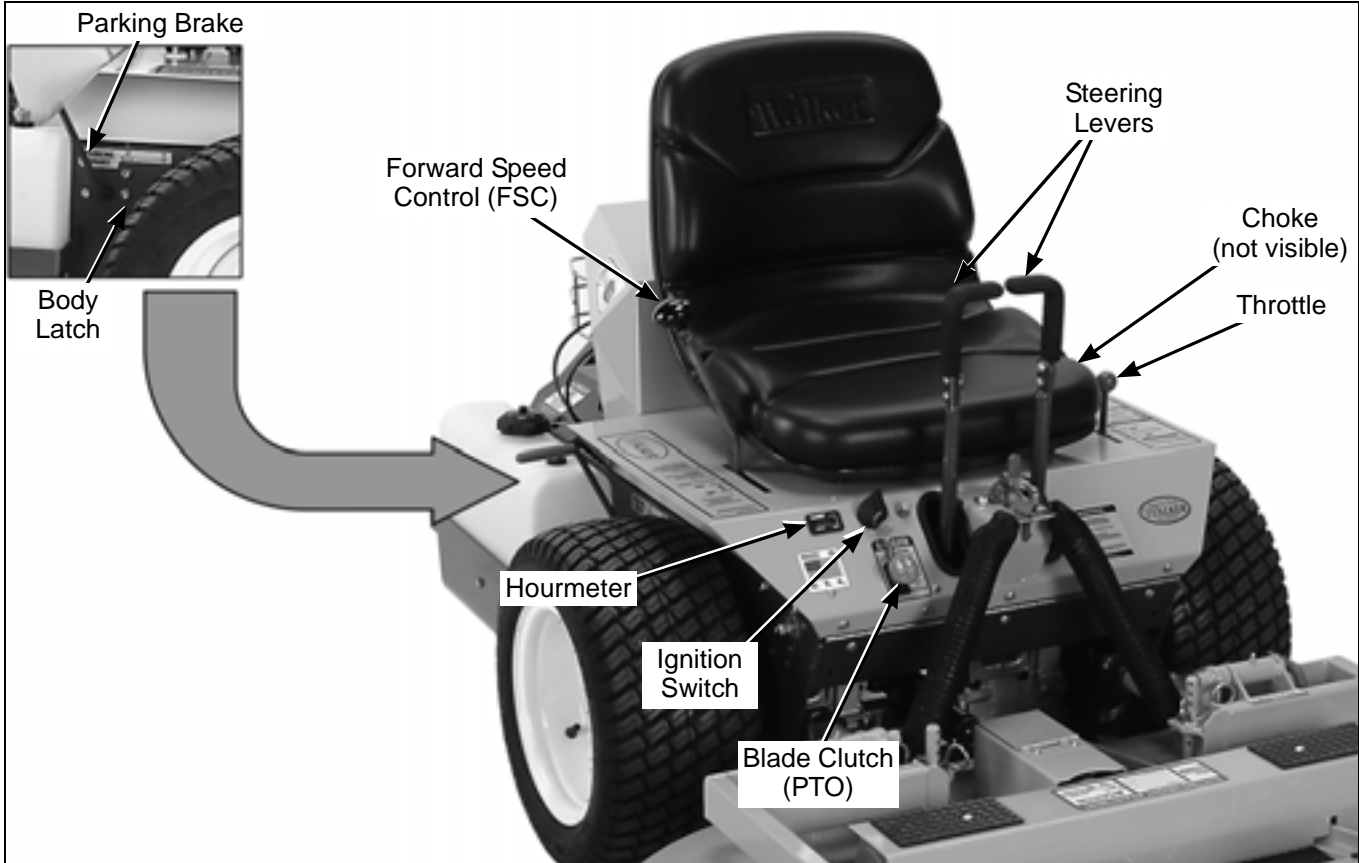
Ignition Switch

The ignition switch is located on the right front of the body and is used to start and stop the engine. The switch has three positions: "O" is the **OFF** position, **RUN** is the position the key returns to after starting, and "S" is the **START** position. When starting the engine, turn the key clockwise to the "S" position. Do not hold the key in the "S" position longer than 10

seconds. If the engine does not start, return the key to the "O" position for at least 60 seconds before making a restart attempt. Prolonged cranking can damage the starter motor and shorten battery life. Release the key when the engine starts, and it will return to the **RUN** position. To stop the engine, rotate the key counterclockwise to the "O" position.



Ignition Switch



Operating Controls

Operating Instructions

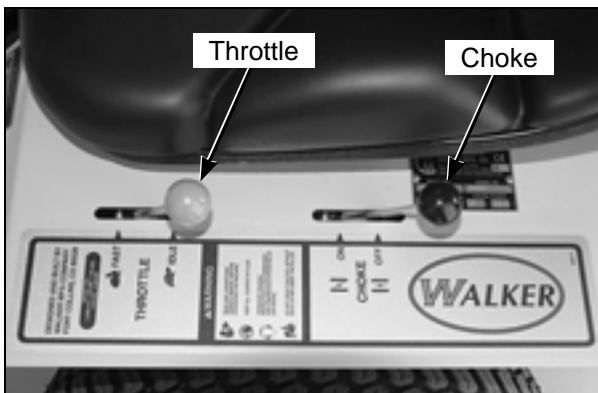
Engine Choke

The choke control lever (black knob) is located on the left side of the seat. To start a cold engine, move the choke control forward to the **ON** position. After engine starts, move choke control toward the **OFF** position, keeping enough choke to allow the engine to run smoothly as it warms up. As soon as possible, move the choke to the **OFF** position. A warm engine requires little or no choke for starting.

IMPORTANT: Make sure the choke is in the **OFF** position during normal engine operation; running with the choke in the **ON** position **CAN** damage the engine.

Engine Throttle

The throttle control lever (red knob) is located on the left side of the seat and is used to control engine speed. Moving the lever **forward** toward the **FAST** position **increases** engine speed; moving it **backward** toward the **IDLE** position **decreases** engine speed.



Choke and Throttle Location

Forward Speed Control (FSC)

Forward Speed Control (FSC) has two functions: One is to set forward travel speed, and the other is to establish the **NEUTRAL-PARK** position. When the FSC lever is moved into the **FORWARD** position, a friction lock holds any forward speed setting from 0 to 7 mph (0 to 11.3 km/h). The ground speed is proportional to the lever position; the further the lever is advanced forward, the faster the tractor moves. It is not necessary to hold the FSC in position since the friction lock maintains the selected lever position. Pulling back on the steering levers overrides the FSC setting and slows or stops forward travel. Releasing the steering levers allows the tractor to resume forward travel at the speed set by the FSC lever. To stop and park the machine, the FSC lever is moved backward to the **NEUTRAL-PARK** position.

Steering Levers

Each drive wheel is controlled by its own independent steering lever, for both steering function and **FORWARD/REVERSE** motion. The FSC lever sets the maximum forward speed, and also sets the forward position of the steering levers. The steering levers operate **only with a backward pulling** movement of the lever, which causes the drive wheel for that lever to first slow down, stop, and then reverse with a full backward lever stroke. The levers are released to the **FORWARD** position for "straight-ahead" ground travel.

NOTE: Pushing forward on the steering levers will not cause **any** change in tractor motion - there will be no steering lever reaction and there will be no machine damage.

PTO Switch

The PTO toggle switch is located on the RH front of the body and has two positions: **ON (ENGAGE)** and **OFF (DISENGAGE)** - positioning switch "**ON**" activates the electromagnetic blade drive clutch while the blade brake is applied when the switch is moved to "**OFF**".

Operating Instructions

Parking Brake

The parking brake functions by locking a detent arm into the transaxle outer control gear teeth. Moving the lever **FORWARD engages** the parking brake; moving the lever **BACKWARD releases** the brake.

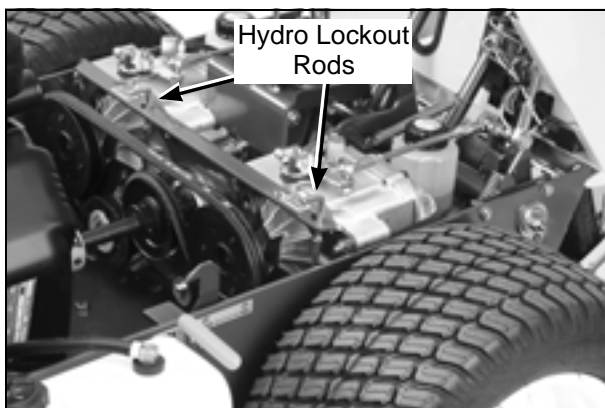
IMPORTANT: Stop the tractor completely before engaging the parking brake. The parking brake uses a positive mechanical lock similar to the **PARK** position on an automotive automatic transmission. If the tractor is moving when the brake is engaged, it will result in sudden stoppage and possible internal damage to the transaxle.

NOTE: If pressure on the parking brake pin (e.g. parked on a hill) makes it impossible to release the parking brake with the parking brake lever, move the mower gently forward or backward to allow the brake detent to set into the teeth.

Transaxle Lockout Rods

The transaxle lockout rods disengage the transaxles. By lifting the rods up and locking them into place with the shoulder on the rod in the chassis notch, the transaxles are released to permit freewheeling. By releasing the rods and recessing them back toward the chassis, the transaxles are engaged for normal operation. The transaxle rods in the **LOCKOUT** position are used to enable moving the machine without the engine running (e.g., for service). Refer to **TRANSAXLE LOCKOUTS** in this section for operating instructions.

NOTE: The transaxle lockout rods ends should be completely retracted against the body, otherwise operation of the transaxle may be erratic.



Hydro Lockout Rod Location

Hourmeter

The hourmeter, which is located on the right front of the body, displays **operating time** accumulated while the ignition switch is in the **ON** position.

The hourmeter provides maintenance reminders after certain hours of operation. The hourmeter screen will start flashing the reminder one hour prior to the recommended interval and will continue until one hour after the recommended interval (two hours). The hourmeter **does not have a manual reset function**.

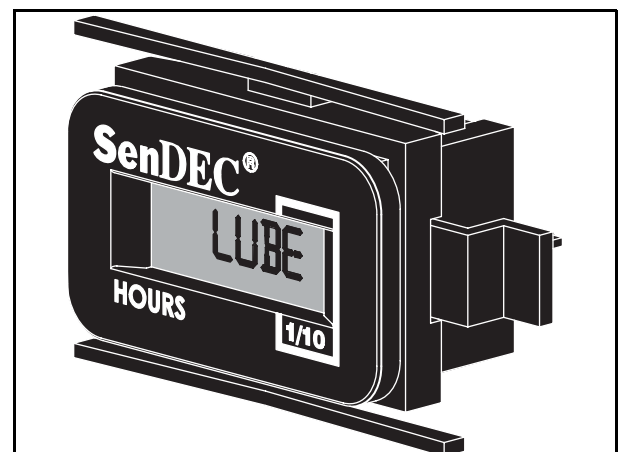
Procedure	Interval*	Reminder
Oil Change (Break-In)**	4-6 Hours	C H G OIL
Lubricate and Check Levels	24-26 Hours	LUBE
Oil Change	49-51 Hours***	C H G OIL

* These intervals reflect the actual time that the reminder will flash (one hour prior to and one hour after the recommended interval).

** This reminder is only used one time.

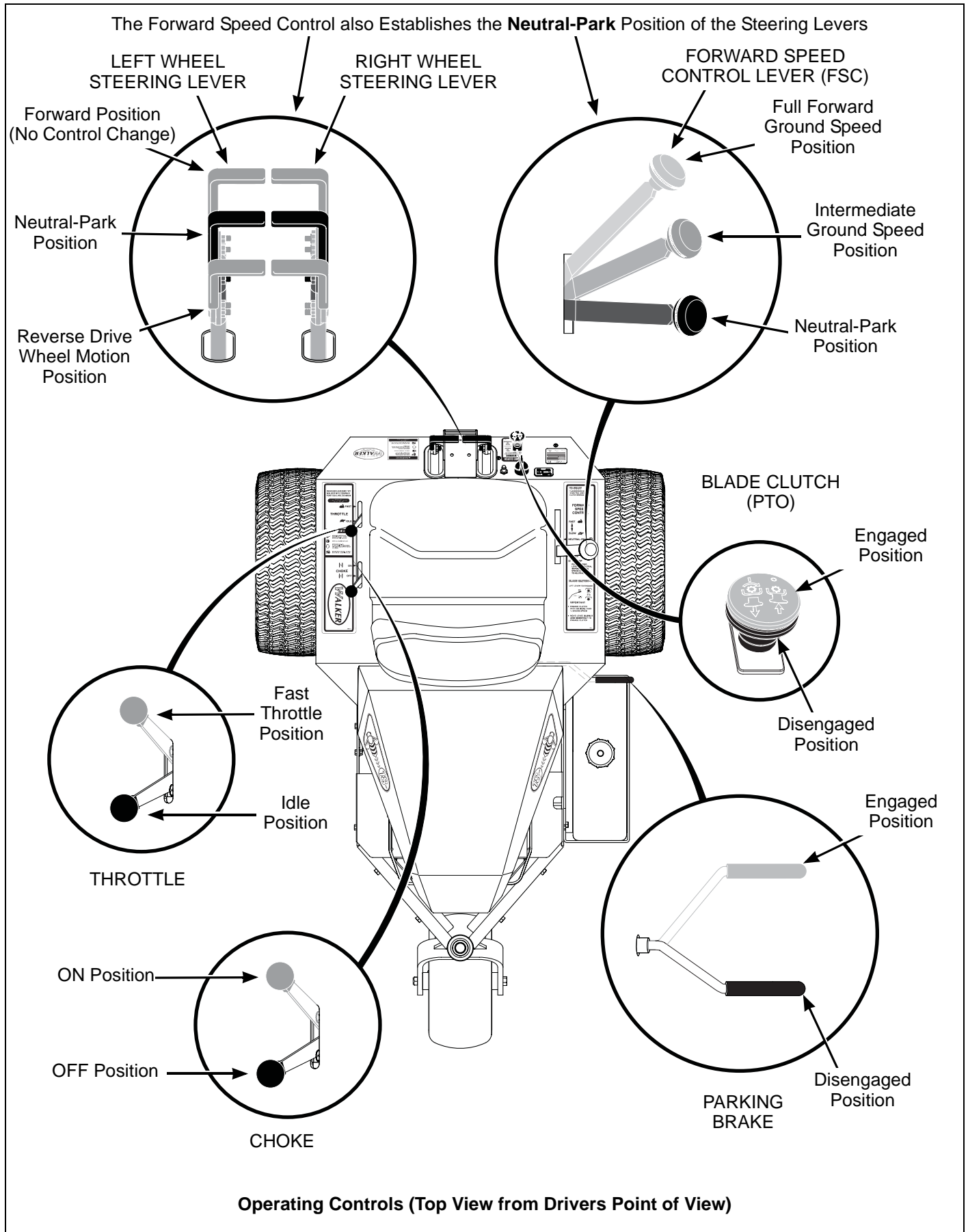
*** In normal operating conditions, oil changes in 100-hour intervals are acceptable. Walker and the engine manufacturers recommend engine oil changes every 50 hours in extremely dirty or dusty conditions or for units with less than 100 hours annual use.

NOTE: The blinking hour glass on the display means that the meter is operating properly.



Hourmeter

Operating Instructions



Operating Instructions

STARTING THE ENGINE



CAUTION

Before operating the mower, read and understand all Safety Instructions and Operating Instructions.



WARNING

NEVER run the engine in an enclosed or poorly ventilated area. Engine exhaust contains carbon monoxide, an odorless and deadly gas.

1. Before attempting to start the engine, make sure the operator is in the seat, the Forward Speed Control is in **NEUTRAL-PARK** position, and the blade clutch and parking brake are **DISENGAGED**.

NOTE: Release parking brake to prevent extra load on the starter if the transmission neutral is slightly out of adjustment.



CAUTION

A safety interlock switch system **PREVENTS CRANKING** the engine with either the Forward Speed Control or the blade clutch (PTO) out of neutral. If the engine cranks otherwise, the safety system is not working and should be repaired or adjusted before operating the mower. **DO NOT** disconnect safety switches; they are for the operator's protection.

2. Move the choke lever to the **ON** position and move the throttle 1/4 to 1/2 open (toward **FAST**). Turn the ignition switch to the **START** position to start the engine. Release the key to **RUN** position as soon as the engine starts.

NOTE: The choke may not be required if the engine is warm.

IMPORTANT: **DO NOT** crank the engine continuously for more than 10 seconds at a time. If the engine does not start, turn the key to the **OFF** position and allow a 60 second cool-down period between starting attempts. Failure to follow these guidelines can damage the starter motor and shorten battery life.

3. After the engine starts, gradually move the choke to the **OFF** position, keeping enough choke on to allow the engine to run smoothly as it warms up. As soon as possible, move the choke to the **OFF** position.

IMPORTANT: Make sure the choke is in the **OFF** position during normal engine operation; running with the choke in the **ON** position **CAN** damage the engine.

ADJUSTING GROUND SPEED AND STEERING



CAUTION

Learn to **START, STOP, and MANEUVER** the mower in a large, open area.

If the operator has not operated a machine with **LEVER STEERING OR DUAL TRAN-SAXLES**, steering and ground operation should be learned and practiced until the operator is completely comfortable handling the machine **BEFORE ATTEMPTING TO MOW**.



DANGER

Keep feet on footrest at all times when the machine is moving.

Operating Instructions

Beginning Recommendations are:

- ◆ Learn operation of the mower in an open area away from buildings, fences, and obstructions. Learn operation on flat ground **BEFORE** operating on slopes.

- ◆ Start maneuvering the mower with **SLOW** engine speed and **SLOW** Forward Speed Control setting until familiar with all operating characteristics.

- ◆ Remember it is not necessary to hold the steering levers forward (a unique Walker feature); always **PULL** on the levers for steering or for reverse motion of the mower.

- ◆ Learn to operate the mower with your left hand on the steering levers and right hand on Forward Speed Control. The use of two hands on the steering levers tends to cause overcontrol.

- ◆ Learn to operate the steering levers with smooth action. Jerky movements are hard on the transmission and lawn. For sharp turns, do not allow the inside wheel to stop and twist on the grass. Pull the steering lever controlling the inside wheel into reverse for a smooth “rolling” turn (one wheel rolling forward while the other rolls backward).

- ◆ Practice maneuvering the mower until you can make it go exactly where you are aiming.

- ◆ Remember, for an emergency stop, or in case of loss of control, machine movement can always be stopped quickly by pulling the Forward Speed Control into the **NEUTRAL-PARK** position.

1. Move the FSC out of **NEUTRAL-PARK** position to the desired forward speed. **DO NOT** hold forward on steering levers. It is not necessary to hold the FSC lever in position since a friction lock maintains the selected lever position (and forward travel speed).



WARNING

In case either of the transmission drive belts break during operation, and if the machine is on a slope, the machine will freewheel down the slope. To maintain control, immediately (1) Release the steering levers and simultaneously (2) Move the FSC to the **NEUTRAL-PARK** position. When the machine is stopped or moving slowly, engage the parking brake.

NOTE: This is exactly the same procedure used to normally stop and park the machine.

NOTE: If the FSC lever will not stay in the selected position, the friction lock needs to be adjusted. Contact your Walker Dealer.

2. Steer by pulling the lever on the side of desired direction of turn, e.g., pull the **LH** lever to **turn left**. To minimize the possibility of overcontrol, use only one hand on both steering levers.



Correct Operator Hand Position on the Controls

Operating Instructions

- Reverse direction of the mower by pulling both levers backward.

NOTE: Smooth action on the steering levers will produce smooth mower operation. Remember to keep the engine and ground speed slow until learning the control response.

- The FSC may be adjusted forward for faster ground speed and backward for slower ground speed. When mowing, ground speed should be adjusted to match the load on the cutter blades, i.e., as the engine pulls down in heavy cutting, pull back on the FSC lever to reduce ground speed. Adjusting ground speed helps maintain a balance between engine power and blade speed for high-quality cutting action.

- Stop ground travel by pulling both steering levers backward to the **NEUTRAL-PARK** position (tractor not moving) and then moving the FSC lever to the **NEUTRAL-PARK** position.

NOTE: If the tractor creeps forward or backward with the FSC lever in the **NEUTRAL-PARK** position, the transmission control needs to be adjusted. Contact your Walker Dealer.

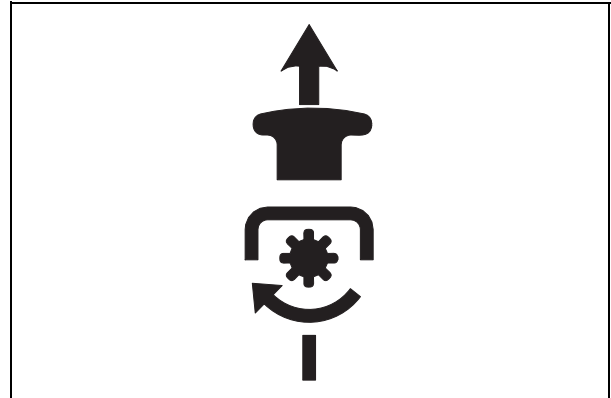
ENGAGING THE MOWER

- Set the engine throttle at about 1/2 speed. **DO NOT attempt to engage the blade clutch at high engine speeds.** This will drastically shorten drive belt and clutch life. Use only moderate engine speed when engaging the blade clutch.
- Pull up the blade clutch toggle switch to engage the mower blades.

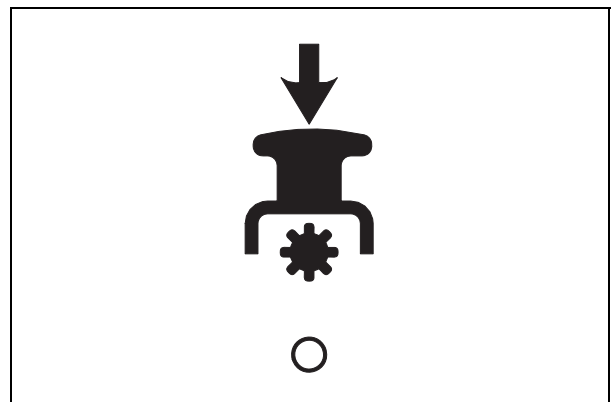
CAUTION

A safety interlock switch (seat switch) will cause the engine to stop if the blade clutch is engaged and the operator is not in the seat. The function of this switch should be checked by the operator raising off the seat and engaging the blade clutch; the engine should stop. If the switch is not working, it should be repaired or replaced before operating the mower. **DO NOT** disconnect the safety switches; they are for the operator's protection.

IMPORTANT: DO NOT engage the blade clutch when transporting the mower across drives, sidewalks, loose materials, etc. **DO NOT engage the blade clutch with the PTO shaft disconnected** (the mower deck removed from tractor).



Blade Clutch Engaged



Blade Clutch Disengaged

CAUTION

If the cutting blades strike a stationary object while mowing, stop the mower immediately, disconnect the spark plug wires, lift the deck, and inspect the deck and blades thoroughly for damage. Make sure that the blade timing has not been disturbed (the blades should be at 90 degrees to each other). Refer to **REPLACING/REPAIRING the Blade Overload Shear Bolts** in Maintenance Instructions if blades are out of time. Also, make sure the blade retaining nuts are torqued to 60 ft-lb (81.3 N-m).

Operating Instructions

STOPPING THE MACHINE

1. Slow the engine to idle; put the throttle in the **IDLE** position.
2. Pull the steering levers to the **NEUTRAL-PARK** position and then move the FSC lever backward to the **NEUTRAL-PARK** position.
3. Disengage the blade clutch.

IMPORTANT: DO NOT disengage the blade clutch with high engine speed (above 1/2 throttle) since the brake action on the blade drive will cause premature wear of the Engine/PTO Belt and electric clutch/brake.

WARNING

A brake stops the cutter blades from free-wheeling within five (5) seconds after disengaging the clutch. If the brake system malfunctions and the blades do not stop within five (5) seconds, the brake should be repaired or replaced before operating the mower. Contact your Walker Dealer.

4. Turn the ignition switch **OFF**.

WARNING

Remove the key from the ignition switch when leaving the mower unattended. This will prevent children and inexperienced operators from starting the engine.

5. Engage the parking brake.

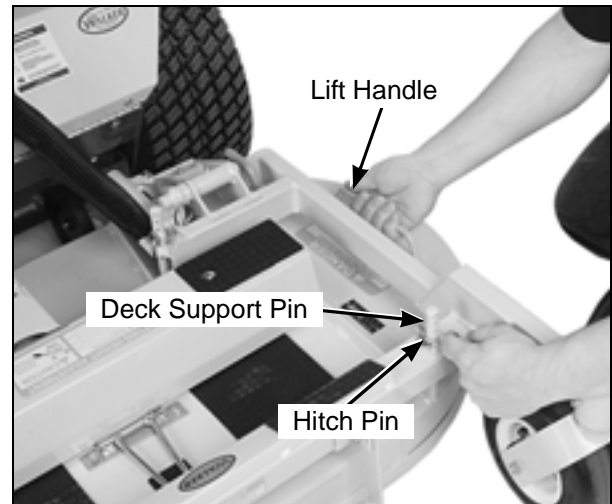
IMPORTANT: The transaxles lock to prevent the mower from rolling freely with the engine stopped. However, if the mower is parked on a slope, it is necessary to **ENGAGE** the parking **BRAKE** to prevent the mower from creeping. This is due to a small amount of slippage in the transaxles, especially when transmission fluid is warm.

ADJUSTING CUTTING HEIGHT

WARNING

The engine must be stopped before adjusting cutting height. Disengage the blade clutch (PTO), stop the engine, and remove the ignition key. Wait for all movement to stop before getting off the seat.

Cutting height is adjusted by positioning the four retainer hitch pins in a series of seven vertical holes on the deck support pins. Lift handles have been provided on each end of the deck to assist in raising the deck while positioning the hitch pins. Cutting heights range from 1 in. (25 mm) [top holes] to 4 in. (102 mm) [bottom holes] in 1/2 in. (13 mm) increments.



Cutting Height Adjustment

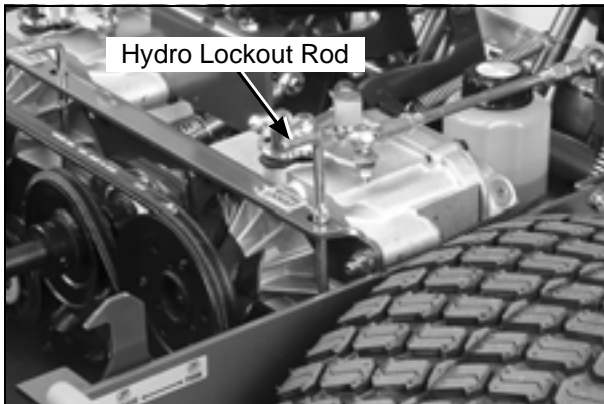
Operating Instructions

TRANSAXLE LOCKOUTS

IMPORTANT: DO NOT TOW this mower with the transmission lockout engaged. Towing can produce excessive internal pressure and damage the transaxle.

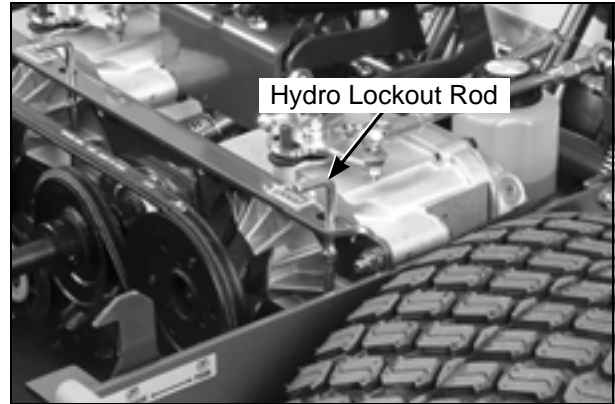
To move the mower with the engine **NOT** running (dead battery, maintenance, etc.), the transaxles are unlocked (released).

1. Raise the body.
2. Pull up the transaxle lockout rods on both the RH and LH transaxles and secure into place by shouldering both rods in the chassis notch area.
3. The mower will “freewheel” with the rods in the **LOCKOUT** position. The levers must be in the highest position to completely unlock the transmissions.



Hydro Lockout Rod - Freewheel Position

4. After moving the mower, release the rods, placing them in the normal **OPERATING** position. The transmission rod ends should be completely retracted against the chassis, otherwise operation of the transmission may be erratic.



Hydro Lockout Rod - Normal Operating Position

RECOMMENDATIONS FOR MOWING

IMPORTANT: Operate the engine at **full speed** when mowing, to allow the engine to produce full horsepower and to increase efficiency of the engine cooling system.

- Keep the mower deck and discharge chute clean.
- Mow with **sharp blades**. A dull blade tears the grass (resulting in poor lawn appearance) and uses extra power (slowing the mowing speed).
- It is preferable to cut grass when it is **dry** and **not too tall**. Mow frequently and do not cut grass too short. (For best appearance, cut off 1/3 or less of existing grass height.)
- When mowing, operate the engine at or near **full throttle** for the best cutting action. Mowing with a lower engine RPM causes the mowing blade to not cut clean and tear the grass. The engine is **designed to be operated at full speed**.
- When mowing in adverse conditions (tall and/or wet grass), mow the grass twice. Raise the mower to the highest setting - 4 in. (102 mm) - for the first pass and then make a second pass cutting to the desired height.
- Use a **slow** setting on the FSC for **trimming** operations.

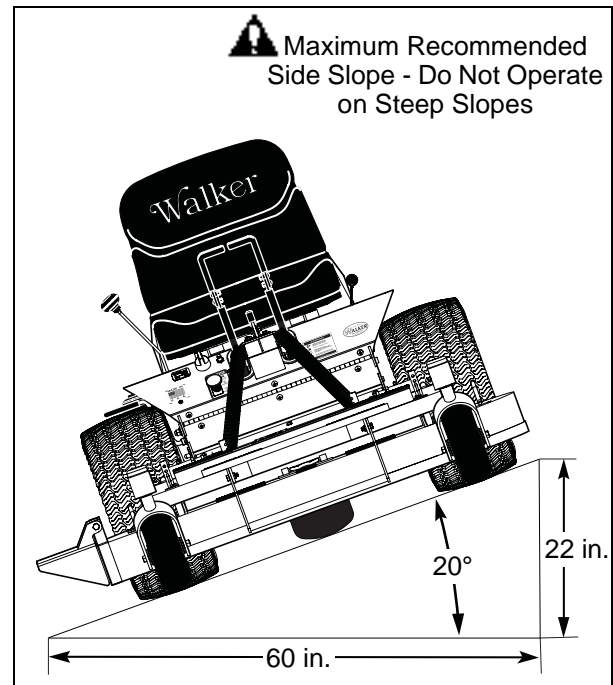
Operating Instructions

- Make sure the mower is **leveled properly** for a smooth cut. Refer to *Deck Leveling* in **Assembly Instructions**.
- Use an alternating **stripe mowing pattern** for **best appearance** and vary the direction of the stripe each time the grass is mowed to avoid wear patterns in the grass.
- Avoid damage to the grass by slipping and skidding of the drive tires. Use **smooth control movements** of the steering levers since the transaxles are “power boosted controls” and jerking the levers can easily slip the tires. For sharp turns, do not allow the inside wheel to stop and twist on grass; pull inside steering lever into reverse for a smooth “rolling” turn (one wheel rolling forward while the other rolls backward).
- When using a side discharge mower deck, the side discharge shield **must not be removed** and must be kept in the lowest possible position to deflect grass clippings and thrown objects downward. Orient the side discharge away from sidewalks or streets to minimize cleanup of clippings. When mowing close to obstacles, orient the side discharge away from obstacles to reduce the chance of damage to property by thrown objects.



Side Discharge Shield in Lowest Position

- When operating on a slope, **reduce speed and use caution** to start, stop, and maneuver. Avoid sharp turns or sudden changes in direction. The **maximum recommended side slope operating angle is 20 degrees or 33% grade**.



Maximum Recommended Side Slope

RECOMMENDATIONS FOR TILT-UP DECK OPERATION/TRANSPORT

To avoid potential deck and/or tractor damage while using the tilt-up deck, the following recommendations are offered:

- **Do not move the tractor** with the deck in the tilt-up position since both the roller wheels (on the back of the deck) may be damaged by moving the tractor. The tilt-up configuration should only be used when the tractor is parked.
- The tractor **body should never be tilted forward** with the deck in the tilt-up position. This can cause the deck to unhook from the tractor and fall with considerable force, potentially causing deck or tractor damage and/or bodily injury.
- When transporting a tractor with the deck in the tilt-up position (on a truck or trailer), the **deck should be secured** to the vehicle with a strap or rope (stop vertical movement). This will prevent the deck from bouncing on the rear roller wheels (causing breakage). This will also prevent the deck from unhooking from the tractor and falling, potentially causing deck or tractor damage. Damage to other items parked in front of the deck may also occur.

Maintenance Instructions



CAUTION

Maintenance procedures requiring special training or tools should be performed by a trained technician.

MAINTENANCE SCHEDULE CHART - RECOMMENDED SERVICE INTERVALS - MODEL MB

Service Item	Daily	25 Hours	50 Hours	100 Hours	250 Hours	Yearly	Ref. Page
Check Engine Crankcase Oil Level	X						36
Check/Clean Engine Air Cooling System*	X						41
Clean Grass Buildup Under Deck	X						42
Service Mower Blades	X						44
Check Security of Air Cleaner System	X						44
Lubricate Grease Fittings and Oil Points*		X					37
Check Transaxle Fluid		X					40
Check Tire Pressure		X					44
Check Drive Belts (Engine, PTO, Ground Drive)		X					45
Check PTO and Deck Gearbox Oil Seals		X					45
Inspect Air Filter Paper Element*		X					42
Clean and Re-Oil Air Filter Foam Element		X					42
Change Engine Crankcase Oil**			X				36
Change Engine Oil Filter				X			36
Check Security of Drive Tire Mounting Nuts (75-85 ft-lbs.)				X			22
Clean Transaxle Cooling Fins				X			43
Change Transaxle Oil and Filter					X		40
Replace Fuel Filter						X	49

- * More often in extremely dusty or dirty conditions (see notes about air cleaner element under IMPORTANT TIPS FOR CARE OF BRIGGS & STRATTON ENGINE)
- ** Change engine oil and filter after first 8 hours of operation of a new engine (break-in period)



CAUTION

When performing maintenance with the mower body raised, a safety prop should be installed from back of body to chassis frame (fail-safe protection in case of failure of body lift support).

IMPORTANT TIPS FOR CARE OF THE BRIGGS & STRATTON ENGINE

Fuel System

- Fuel must be clean - free from water, dirt, and organic material.
- Clean the fuel filter on a regular basis and when contamination is suspected or found in the fuel.

Starting

- Start engine with the throttle advanced off idle (1/4 to 1/2 throttle). This will aid starting, especially in cold weather.
- Keep the battery fully charged.
- Match crankcase oil viscosity to the ambient temperature, allowing the engine to crank faster and start easier.
- Allow engine to run at idle for a few seconds before stopping engine to avoid run-on or backfiring.

Cooling System

- Keep engine air intake screen and cylinder head fins free of grass clippings, chaff, and dirt. Inspect intake screen and cooling fins for cleanliness and damage.
- Operate the engine at full speed when mowing. This will allow the engine to produce full horsepower and move more cooling air through the engine cooling fins.

Air Cleaner

- Use **only** Briggs & Stratton air cleaner elements. Aftermarket elements may not seal in the air cleaner housing, allowing dirt to enter the engine. Also, aftermarket filters often skimp on the filtration media and require more frequent cleaning and replacement.
- **DO NOT overservice** or frequently “disturb” the **air filter**. A dirty air filter actually cleans better than a new one. Changing and cleaning the filter too often can actually reduce filter efficiency and increase the opportunity for traces of dust to enter the engine. Wait until the element really needs servicing as indicated by the loss of engine power.
- When the air filter element is removed or replaced, make sure all **dust is cleaned out** of the **air cleaner body**. Use a damp cloth and wipe the interior of the air cleaner body clean (a little dirt left here will be sucked into the engine and reduce engine life). When the filter is reinstalled, make sure the **element is held tight and straight** in the air cleaner body for proper seating and sealing.

Oil

- Single viscosity or multi-viscosity oils may be used with the viscosity matching ambient temperatures for the engine operating conditions. This will **aid starting** in cold weather and assure proper lubrication in hot weather.
- Use only Briggs & Stratton oil filters. **Aftermarket filters may not seal properly** and/or have the incorrect pressure relief valve for proper lubrication.

LUBRICATION



WARNING

DO NOT attempt to lubricate the machine with the engine running. Disengage the PTO clutch, shut off the machine, and remove the ignition key.

Proper lubrication is an important maintenance procedure. It reduces wear and makes the machine quieter and easier to operate.

Engine Oil

Engine Break-In Oil

No special break-in oil is required. The engine is serviced with 10W-30, Service Class SG oil from the factory. The oil should be changed after the initial engine **break-in period of 5-8 hours**. Thereafter, change oil **after every 50 hours** of operation.

Checking Engine Crankcase Oil Level

Check the engine crankcase oil level before use and **after each 8 hours** of continuous operation.

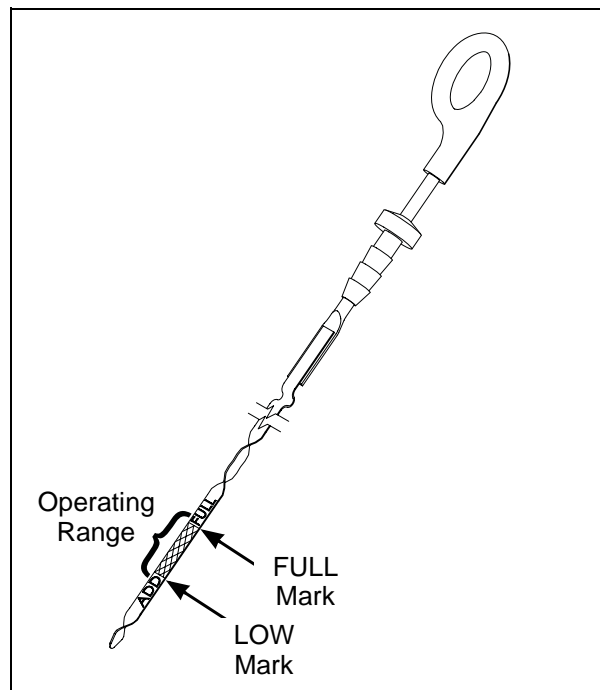
IMPORTANT: The importance of checking and maintaining the proper crankcase oil level cannot be overemphasized. Check the oil level **BEFORE EACH USE**.

1. Park the mower on a **level surface with the engine stopped**. Also, make sure the engine is cool and oil has had time to drain into the sump [allow **at least five (5) minutes** after stopping the engine].

IMPORTANT: NEVER check or add oil with the engine running.

2. Before removing the dipstick, clean the area around the dipstick to keep any dirt or debris out of the engine.
3. Remove the dipstick, wipe off with a clean rag, then reinsert the dipstick into the tube and press all the way down.
4. Remove the dipstick again and check the oil level on the dipstick. The oil level should be within the "Operating Range" on the dipstick (between the **LOW** mark and the **FULL** mark).

IMPORTANT: DO NOT operate engine without sufficient oil supply in the crankcase. **DO NOT** operate with oil level below the **LOW** mark or above the **FULL** mark on the dipstick.



Dipstick Operating Range

5. If additional oil is needed, refer to **Specifications** for proper crankcase lubricant. **Fill to the FULL mark**.

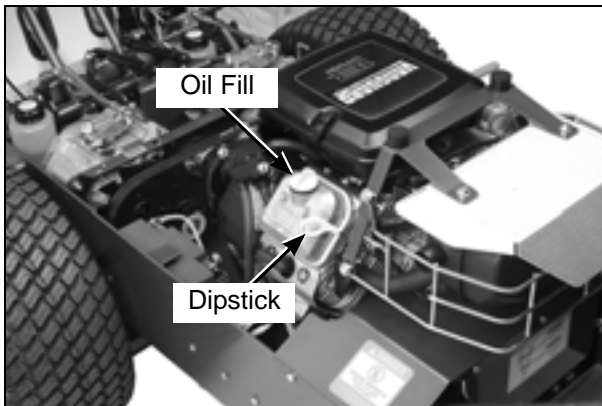
IMPORTANT: DO NOT overfill crankcase [oil above **FULL** level] as this **CAN** result in engine overheating, loss of power, and possible engine damage.

Changing Engine Crankcase Oil/Oil Filter

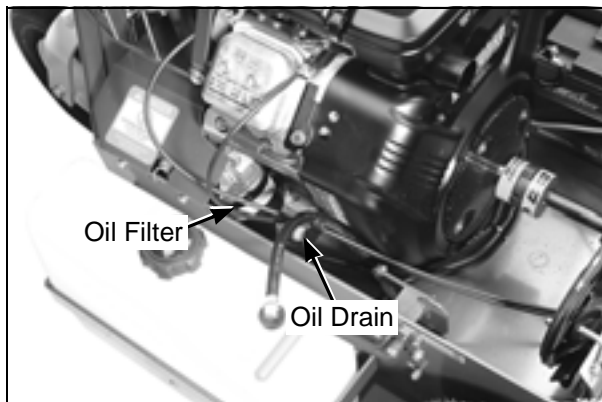
Change the engine crankcase oil **after every 50 hours** of operation and the oil filter **after every 100 hours** of operation as follows:

1. Park the mower on a **level surface with the engine stopped**. The engine oil should be warm before draining. If not warm from operation, start the engine and run a few minutes to warm the oil.
2. Before removing the dipstick, clean the area around it to keep any dirt or debris out of the engine.

3. Remove the dipstick and oil drain plug, and drain oil into a suitable container. Be sure to allow ample time for complete drainage.
4. Before removing the oil filter, clean the area around the filter to keep dirt and debris out of the engine.
5. Remove the old oil filter and wipe off the filter mounting surface on the engine.



Dipstick and Oil Fill
(view from above left side of tractor)



Oil Drain and Oil Filter Locations
(view from above right side of tractor)

6. Apply a thin coating of new oil to the rubber gasket on the replacement oil filter.

IMPORTANT: Use **ONLY** oil filters from the engine manufacturer. Aftermarket oil filters may not seal properly and/or may not have the correct pressure relief valve for proper lubrication.

7. Install the new oil filter on the engine. Turn the oil filter clockwise until the rubber gasket contacts the sealing surface, then tighten the filter an additional **1/2 to 3/4 turn**.
8. Reinstall the drain plug.
9. Fill the crankcase with new, clean oil. Use only crankcase lubricants recommended by the engine manufacturer. Refer to **Specifications** in this manual or the engine owner's manual. Use the recommended oil viscosity for the expected ambient temperature. Oil with the correct viscosity will aid starting in cold weather and assure proper lubrication in hot weather. **Fill to FULL mark** on the dipstick; crankcase capacity is 1.5 quarts (1.4 liters) when changing oil and filter.

IMPORTANT: Check the dipstick reading before pouring in the last 1/2 pint of oil and **fill only to the FULL mark**. The oil level should never be over the **FULL** mark on the dipstick; overfilling can result in engine overheating and loss of power.

10. Start the engine and check for oil leaks around the oil filter. Stop the engine, recheck the oil level, and add oil if necessary. (When the engine is first operated with a new oil filter, the oil level will drop slightly as the filter is filled with oil.)

Grease Fitting and Oil Point Lubrication

Lubricate the grease fittings and oil points after **every 25 hours** of operation. Lubricate **more often** when operating in **dusty or dirty conditions**. Use SAE general purpose lithium or molybdenum base grease for grease fittings and light machine oil (SAE 10) to lubricate oil points. **Lubricate the locations shown in the Chassis and Deck Lubrication Points illustration.**

NOTE: PTO universal joints (on the deck and tractor) require routine lubrication **after every 8 hours** of running time.

NOTE: The pillowblock bearings on the PTO drive shaft are a sealed, relubricatable-type bearing. Grease lightly **once per year** using care to not over-lubricate and damage the seals.

Maintenance Instructions

LUBRICATION

Ident No.	Location	Lubrication Type	No. Places
1	Deck Caster Wheel Fork Pivot	Grease	2
2	Deck Caster Wheel Bearing	Grease	2
3	Tee Gearbox, Deck	Oil*	1
4	Blade Drive Gearbox	Oil*	2
5	Universal Joint Shaft Assembly	Grease**	1
6	Deck Support Arm Socket	Grease	2
7	Pivot Assembly, Tilt-Up Deck	Grease	4
8	Steering Lever Pivot	Grease	2
9	Transaxle Oil Reservoir	Oil	2
10	Deck-to-PTO Coupling (Grease Slide Area)	Grease	1
11	Universal Joint Tube Assembly	Grease**	1
12	Deck Support Arm Pivot	Grease	2
13	Hydro Idler Arm Pivot	Grease	1
14	Parking Brake Clevis	Oil	1
15	FSC Lever Pivot	Grease	1
16	Body Latch	Oil	1
17	Parking Brake Lever	Oil	2
18	Choke Control Cable Ends	Oil	2
19	PTO Belt Tightener Pivot	Grease	1

Ident No.	Location	Lubrication Type	No. Places
20	Pillowblock Bearing, Drive Shaft	Grease ^Δ	2
21	Throttle Control Cable Ends	Oil	2
22	Engine / Oil Filler	Oil***	1
23	Choke Control Pivot	Oil	1
24	Throttle Control Pivot	Oil	1

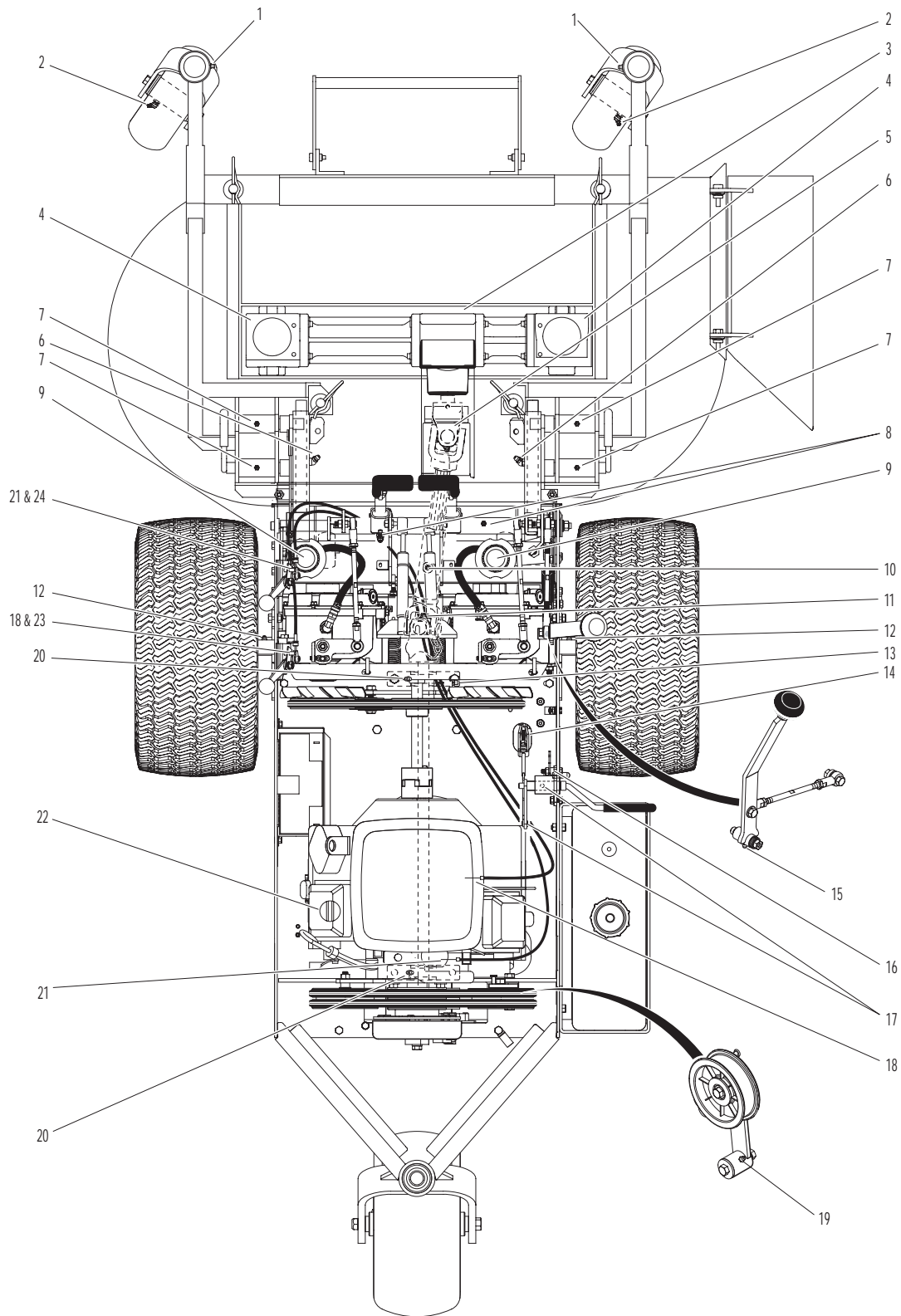
* Gearboxes are permanently lubricated and sealed requiring no scheduled lubrication. Oil level should be checked only when an oil leak is noted.

** Grease every eight (8) hours.

*** Refer to **Engine Oil** located on page 36.

Δ Sealed, relubricatable-type bearings, grease lightly once per year, **do not over grease** or seals will be damaged.

NOTE: DSD42 Tilt-Up Deck is shown for reference. For other Deck Lubrication Points, refer to **Deck and Carrier Frame Illustrated Parts Manual**.

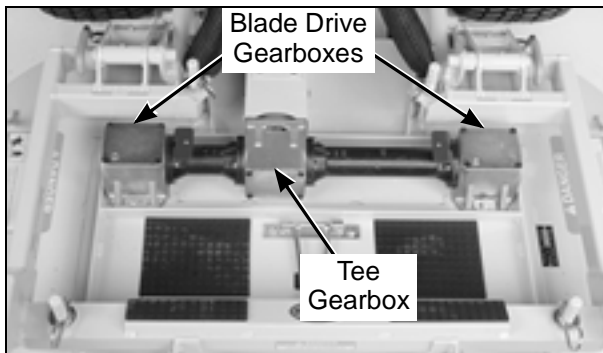


Chassis and Deck Lubrication Points

Mower Deck Gearbox Lubrication

The mower deck gearboxes (tee gearbox and blade drive gearboxes) are connected as a unitized assembly, and oil flows freely between them. The gearboxes are permanently lubricated (oil filled) and sealed requiring no scheduled lubrication. However, the gearbox oil seals should be checked **every 25 hours** for indication of an oil leak; **particularly the lower seals** on the blade drive gearboxes should be inspected, since they operate in a dirty environment. If an oil leak is noted, replace the oil seal and relubricate the gearbox assembly as follows:

1. Remove gearbox cover (footrest). Deck orientation should be the normal operating position.



Mower Deck Gearboxes (shown with gearbox cover removed for clarity)

2. Clean the area around the individual gearbox cover plates to prevent contaminants from entering the gearcase.
3. Remove the screws securing the cover plates on the blade drive gearboxes.
4. Check the level of lubricant in the gearboxes. If the lubricant is low, add SAE E.P. (Extreme Pressure) 90W oil until the oil level is up to (submerges) the horizontal shaft in the gearbox (shaft parallel to cover plate).

NOTE: In case the gearboxes are completely drained of oil, approximately 5 fl. oz. (15 cl) of oil per gearbox is required to refill the gear drive assembly.

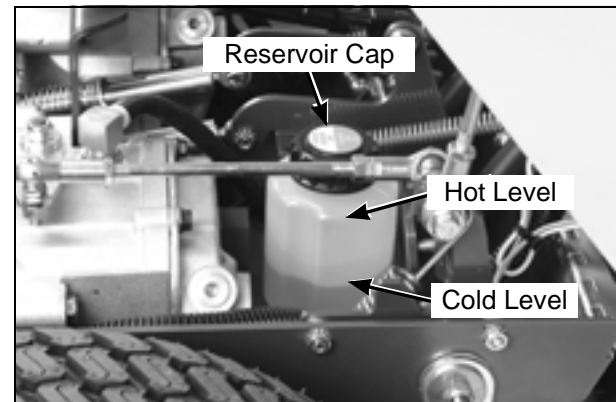
NOTE: Since the gearboxes are connected as a unit by connector tubes, it is necessary to add oil slowly. Allow a few minutes after adding oil for the oil to flow throughout the assembly and the oil level to stabilize before reassembly.

IMPORTANT: DO NOT overfill the deck gearboxes. The gearbox assembly is not vented, and overfilling with oil will cause excessive pressure and result in oil leaks.

5. Check condition of the cover gasket and replace if worn or damaged. Reinstall gearbox cover plates; torque screws to 24 in-lb (2.7 N·m).

Transaxle Lubrication

- The transaxle oil lubrication is SAE 20W-50 (API Service Class SL or higher) engine oil.
- Inspect both transaxle cases and hoses **after every 100 hours** of operation for visible leaks.
- The fluid levels for each transaxle can be checked visually by looking at the fluid levels in each expansion reservoir. When the transaxles are cold, the fluid level in the expansion reservoirs should be between 1/4" and 1/2" (.64 cm and 1.27 cm).

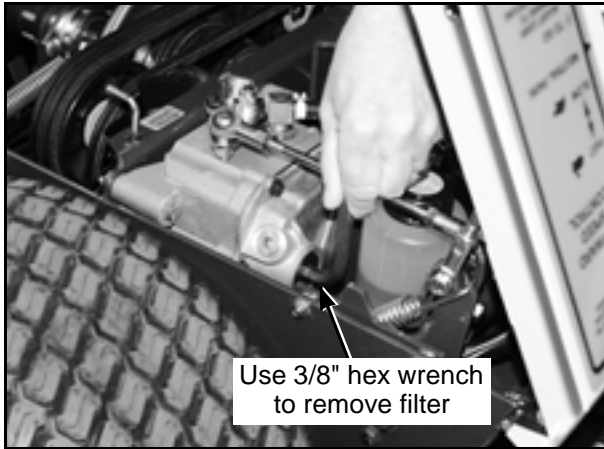


Expansion Reservoir Location

Transaxle Oil and Filter Change

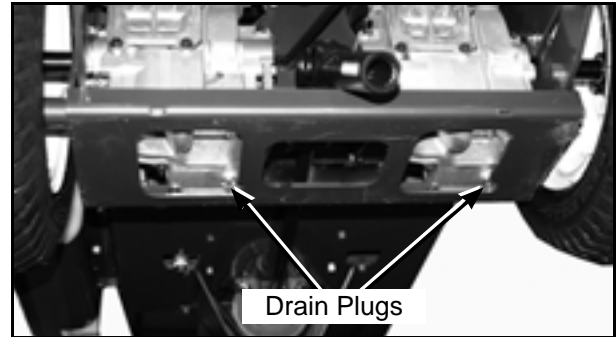
Change the transaxle oil after the initial **break-in period of 50 hours**. Thereafter, change oil **every 250 hours** of operation as follows:

1. Thoroughly clean the exterior of the transmission housing before servicing. Using a 1/4" hex wrench, remove the plug on the underside of each transaxle allowing the oil to drain.
2. Remove and replace the oil filters using a 3/8" hex wrench. (Refer to **Transaxle Oil Filter Location** photo.)



Transaxle Oil Filter Location

3. Reinstall drain plugs.
4. Place 6" (15 cm) block under the left hand drive wheel.
5. Remove the oil reservoir hose attached to the elbow on top of the transaxles and remove the elbows to access the oil fill openings.
6. Fill the transaxles with 20W-50 (API Service Class SL or higher) oil through the opening where the elbows were. Fill up to the opening.
7. Before reinstalling the elbows, screw the locking nut on the elbows down until they are snug (the o-ring on the elbow will be to the bottom of the o-ring groove).
8. Reinstall the elbows. When the elbow begins to be snug, position the elbow as it was when removed and tighten the lock nut.
9. Remove the block from the left wheel and reattach the reservoir hoses to the transaxles.
10. Fill both reservoirs to 1" (25 mm) with 20W-50 (API Service Class SL or higher) oil.
11. Start and drive the unit for 1- 2 minutes.
12. If the transaxles sound noisy or have poor steering response, recheck oil level in both transaxles by removing the elbows (check oil level at fill opening).
13. If oil needs to be added refer back to steps 5-12.



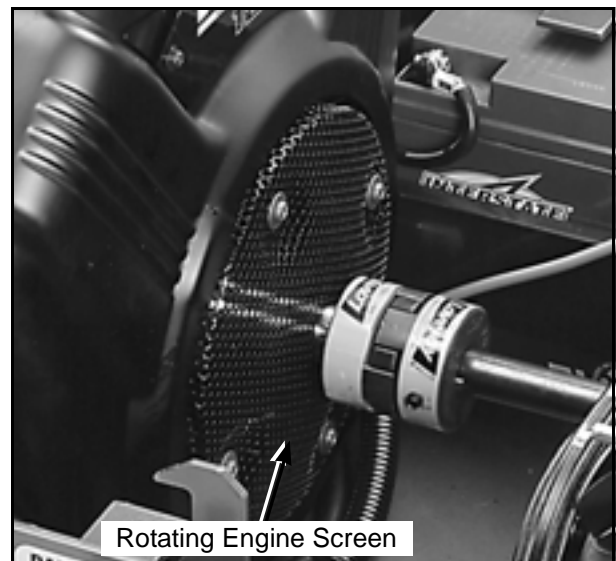
**Transaxle Drain Plugs
(view from underside of tractor)**

CLEANING

Engine Air Cooling System

To prevent engine overheating and possible engine damage, clean grass clippings, chaff and dirt from the rotating engine air intake screen every 8 hours of operation. In certain mowing conditions (dry grass, leaves, tree "cotton", etc.) it may be necessary to check and clean this area several times each day to prevent engine overheating. Also, visually check inside cylinder head shroud and between cylinder head fins for material packed in this area which would prevent cooling airflow; remove shroud and clean as required.

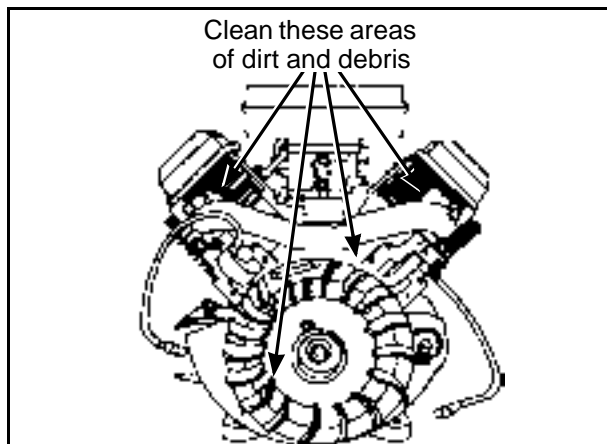
IMPORTANT: Yearly or every 100 hours, remove engine cooling shroud and clean cylinder head cooling fins to prevent overheating. Make sure cooling shroud is reinstalled properly.



Keep Engine Screen Clean

CAUTION

Operating the engine with a blocked air intake screen, dirty or plugged cooling fins, and/or cooling shrouds removed will cause engine damage from overheating.



Clean Cooling Fins and Fan

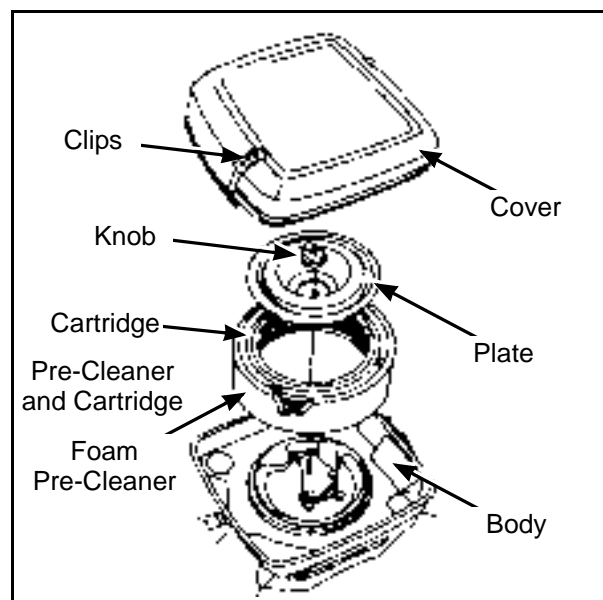
Air Cleaner System

The engine is equipped with a paper air cleaner element with an oiled foam pre-cleaner which surrounds the paper element. Clean and re-oil the foam pre-cleaner every 25 hours; more often in dusty/dirty conditions. Clean the paper element every 100 hours and replace yearly (or when dirty or damaged). Service the air filter as follows:

- Remove air cleaner cover and remove foam pre-cleaner by sliding it off the paper element.
- Wash foam pre-cleaner in liquid detergent and warm water.
- Wrap foam pre-cleaner in cloth and squeeze dry (do not wring).
- **Saturate foam in clean engine oil.** Squeeze foam to distribute and remove excess oil.
- Remove the paper filter element by pulling it out of the air cleaner body.
- Clean the filter element using **low pressure** compressed air [less than 100 PSI (689 kPa)]. Blow out the filter from the interior of the element while turning the element.

NOTE: Washing the element in water or cleaning solution is **not recommended**. Replace the element if it does not clean up with compressed air.

- Use a bright light inside the element to inspect for damage. Check the element very carefully for **pin holes or other damage** that will allow dirt to leak through the paper media. Replace element if necessary.
- Use a clean, damp cloth and wipe the interior of the air cleaner body clean. Use special care to clean **both the inside and outside** surfaces of the outlet tube.
- Install foam pre-cleaner over dry element and re-assemble onto engine. Tighten knob mounting air cleaner element securely, 1/2 to 1 turn after contacting cover, but do not over-tighten. Make sure element is sealed tightly against the element cover and base plate. Reinstall air cleaner cover.



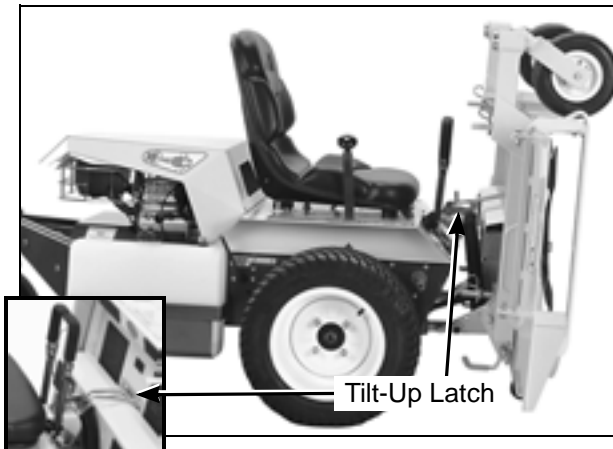
Air Cleaner Components

Grass Buildup in Mower Housing

DANGER

Before raising or removing the mower deck for cleaning, stop the engine, remove the ignition key, and disconnect the spark plug wires.

1. **Raise** the deck lock lever handle on each side of the carrier frame **and pull out** to release carrier frame for tilting action.
2. Using the carrier frame lift handle, raise deck to the **TILT-UP** position and insert the deck hook into the tilt-up latch on the tractor body.



Deck Secured in Tilt-Up Position

3. Clean grass buildup underneath the deck using a pressure washer (and scraper if required).

NOTE: If the buildup is severe, it may be easier to clean the deck by removing the deck assembly from the tractor and standing the deck assembly on its “nose”.

NOTE: While some degree of material buildup in the mower deck housing can be tolerated, a point is finally reached **where cutting quality deteriorates and clogging begins to occur** because of too much buildup on the baffling and housing.

4. Lower the deck to the normal operating position and re-engage the deck lock levers.



CAUTION

Do not operate machine with deck tilt-up pivot joint unlocked.

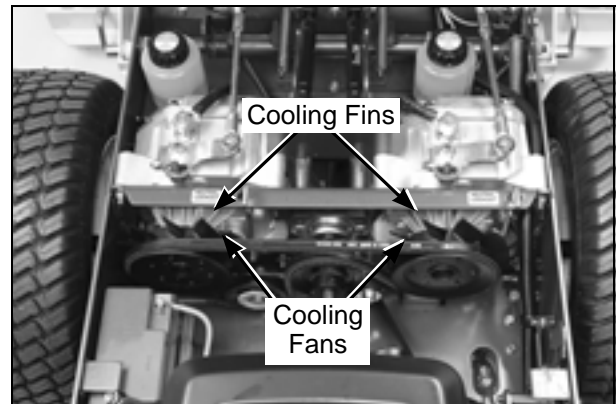
Transaxle Cooling Fins

Keeping the cooling fins on the transaxles clean and free of obstruction is **essential to avoid overheating** the transmission fluid and shortening transmission life. The cooling fins should be checked **every 100 hours**; and cleaned if necessary.

To clean the fins, use compressed air and/or a pressure washer. The cooling fins extend all the way around the housing -- the fins underneath need to be clean as well as the more visible fins above. Also, pay close attention to the area under the drive pulley.

IMPORTANT: In case an oil leak develops on the input shaft, the cooling fan blowing dusty air and oil on the transmission will **quickly** pack the cooling fins with **oily dirt**. If this condition occurs, contact your dealer immediately to avoid overheating and damaging the transaxle.

An additional procedure in maintaining transaxle cooling is to inspect the cooling fans. Replace the fan(s) if blades are missing or damaged.



Transaxle Cooling Fins

CHECKING/SERVICING



DANGER

To prevent accidental starting of the engine when servicing or adjusting the machine, remove the key from the ignition switch and disconnect the spark plug wires.

Security of Air Cleaner System

NOTE: The following inspection is **only an external inspection** and should be done without “**disturbing**” the filtration components.

On a daily basis, visually inspect the external condition of the air cleaner cover.

Check for damage. Make sure the cover is in place and the cover latches are secure - do not run the engine without the air cleaner cover in place and secure.

Battery

NOTE: For initial battery service during setup, refer to **Battery Service** in **Assembly Instructions**.

IMPORTANT: Make sure battery is securely mounted in the frame. A loose battery may cause damage to the case resulting in acid leakage and severe damage to the machine. A hazard may be created by damage to critical working parts and safety systems.

Cleaning the Terminals

If battery terminals are corroded, **remove battery** from the mower. Using a wire brush, remove corrosion with a solution of **one part baking soda and four parts water**. Rinse with clean water. Coat the terminals with petroleum jelly or terminal protector spray to retard further corrosion.

Charging the Battery



DANGER

BATTERIES PRODUCE EXPLOSIVE GASES

- Charge the battery in a well-ventilated area, so that gases produced while charging can dissipate.
- Keep sparks, flames, and smoking materials away from the battery at all times.
- Make sure the battery cap vents are open (check manifold vent on each cap).
- Make sure the battery charger is unplugged before connecting or disconnecting cables to the battery.

Check the battery charge by measuring the specific gravity of electrolyte; if specific gravity is less than 1.225, the battery will need to be charged as follows:

- Charge the battery at 15 amps for 10 minutes. **DO NOT** exceed 20 amps maximum recommended charging rate. Charge until specific gravity is at least 1.250. Total charging time should not exceed one (1) hour.

Tire Pressure

Inflate tires to pressures shown below:

Deck Caster Wheel = 20 PSI (137 kPa)
Drive = 15 PSI (103 kPa)
Rear = 20 PSI (137 kPa)

Sharpen Mower Blades

Check mower blade(s) for **straightness, sharpness, condition of the cutting edge, and balance every 10 hours** of operation (or more often when mowing abrasive type grass or operating on sandy soils). **Replace blades if worn, bent, cracked, or otherwise damaged** (refer to **REPLACING/REPAIRING the Mower Blades** in this section). Use the following procedure to check and sharpen blades:

NOTE: Keep blades sharp - cutting with dull blades not only yields a poor mowing job but slows the cutting speed of the mower and causes extra wear on the engine and blade drive by pulling hard.

1. Stop the engine, remove ignition key, and disconnect the spark plug wires **before** raising the mower deck to service blades.
2. Raise the deck and **secure it** in the **tilt-up** position (refer to **Deck Secured in Tilt-Up Position** photo in **CLEANING of Grass Buildup in Mower Housing** in this section).



DANGER

NEVER operate cutter blades with the deck in the raised position.

3. Check the blades for **straightness** by marking the blade tip position inside the deck housing, and then rotating the opposite end of the blade to the same position and comparing. If the difference in blade tip track is **more than 1/8 in. (3 mm)**, the blade is bent and **should be replaced**.

WARNING

DO NOT try to straighten a blade that is bent. **NEVER** weld a broken or cracked blade. **ALWAYS** replace with a new blade to assure safety.

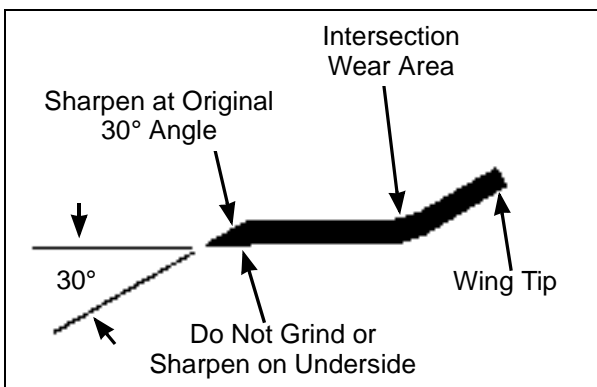
- If the blade cutting edge is **dull or nicked**, it should be sharpened. Remove blades for sharpening by grasping the end of the blade using a rag or a thick, padded glove, while loosening and removing the nut, lock washer, and flat washer that mounts the blade.
- Grind cutting edge at the same bevel as the original. Sharpen only the top of the cutting edge to maintain sharpness.

NOTE: Blades can be sharpened with an electric blade sharpener, conventional electric grinder, or a hand file.

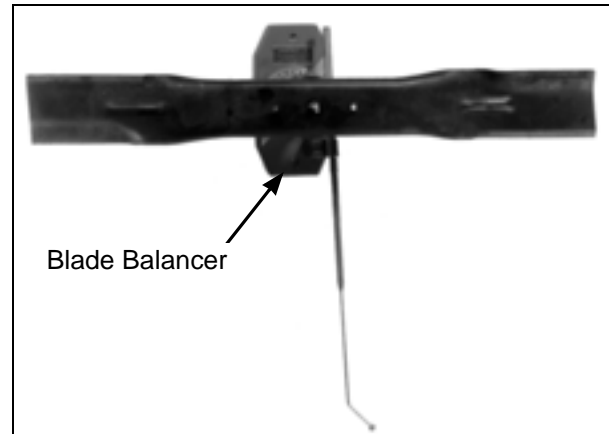
CAUTION

ALWAYS wear eye protection and gloves when sharpening a blade.

- Check blade balance by positioning the blade **horizontally** on a blade balancer or use a nail or shaft through the center hole. If either end of the blade rotates downward, grind (remove) metal on that end until the blade will balance. The blade is properly balanced when neither end drops. Balance of a blade is generally maintained by removing an equal amount of material from each end of the blade when sharpening.



Mower Blade Profile For Sharpening



Blade Balanced on Magnetic Wall-Mounted Balancer

- Mount the blade with wing tips pointing up into the housing. Reinstall the blade, washer, lock washer, and nut. **Tighten the nut to 60 ft-lb (81.3 N·m).**

Drive Belts

Raise the body and inspect the condition of the two (2) drive belts **after every 25 hours** of operation -- engine/PTO drive and ground drive. If the belts show **signs of cracking or deteriorating**, the belts should be **replaced**. Refer to **REPLACING/REPAIRING the Drive Belts** in this section.

Mower Deck Gearbox Oil Seals

The mower deck gearbox seals should be inspected **every 25 hours** for evidence of oil leaking; **particularly the lower oil seal on the blade drive gearbox**. This seal is protected by the trash guard on the blade hub and seal protector plate on the housing, but is still vulnerable to seal damage due to operating in an adverse environment. The mower blade must be removed for inspection of the seal, so it is recommended to **inspect the gearbox seals when blades are removed for sharpening**. If an oil leak is noted, the seal should be replaced and the gearbox assembly relubricated. Refer to **Mower Deck Gearbox Lubrication** in this section.

Spark Plugs

Every 100 hours, remove the spark plugs, inspect, clean, and reset the gap (or replace with a **new plug**). Clean spark plug with a wire brush. If the electrodes are burned short or pitted, replace the plug (refer to **Specifications** for the proper type of replacement plug). Check the spark plug gap with a wire-type feeler gauge and set the gap between 0.028 and 0.032 in. (0.7 and 0.8 mm). Reinstall and tighten to 17 ft-lb (23 N·m). Both spark plugs should be replaced yearly.

Breaker Points

The Briggs & Stratton engine is equipped with electronic ignition. No breaker points, maintenance, or adjustments are necessary with this system. Contact an authorized Briggs & Stratton engine dealer in case of ignition failure.

Fuel Lines and Clamps

Every year, inspect the fuel line from the tank to engine for deterioration or damage. Also, inspect the fuel line **clamps for tightness**. Good preventive maintenance calls for complete **replacement** of fuel lines and clamps **every two (2) years**.

Blade Brake Action

WARNING

It is important to check and maintain blade brake action for safe operation of the machine.

Check the function of the cutter blade brake by engaging the blade clutch (PTO), operating the engine at full throttle, then disengaging the clutch and measuring how quickly the blades stop. Watch the rotation of the blade drive shaft as a visual indication that movement has stopped. If the brake is **working properly, all rotation will stop five (5) seconds after disengagement** of the clutch. If the brake system malfunctions -- blades do not stop in five (5) seconds -- repair the brake before operating the mower.

REPLACING/REPAIRING

DANGER

To prevent accidental starting of the engine when replacing parts or repairing the machine, remove the key from the ignition switch and disconnect the spark plug wires.

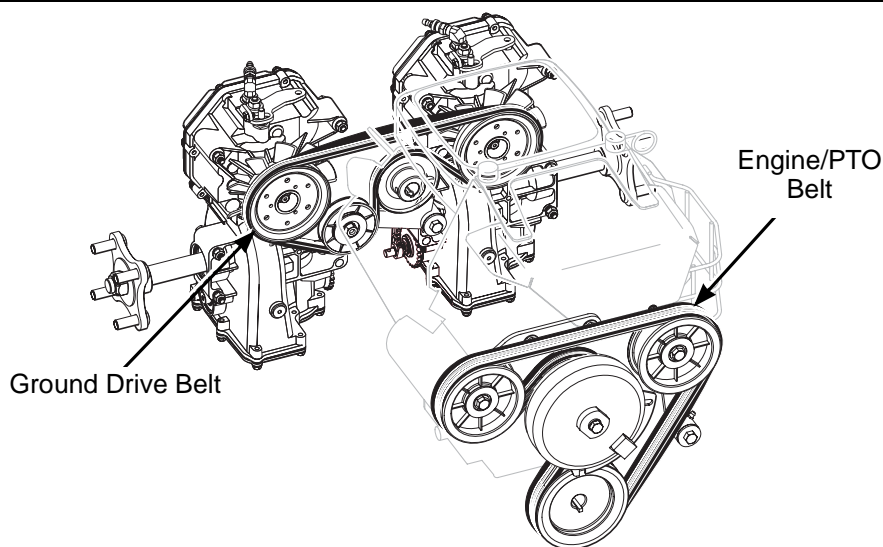
IMPORTANT: ALWAYS use genuine factory replacement parts. Substitute parts **CAN** result in product malfunction and possible injury to the operator and/or others.

Drive Belts

There are **two (2) individual belts** on the machine:

- Engine/PTO Belt
- Ground Drive Belt

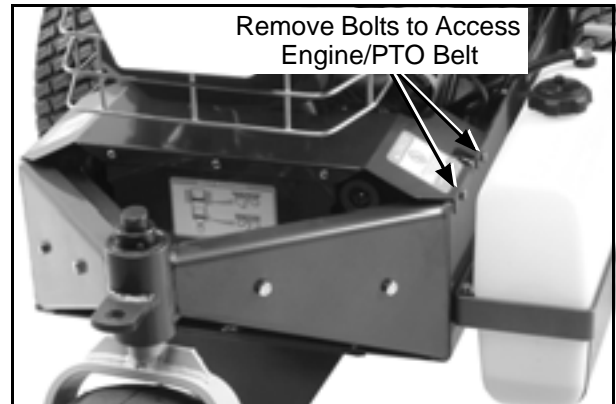
The belts may be removed and replaced using the **procedures described on the following pages**.



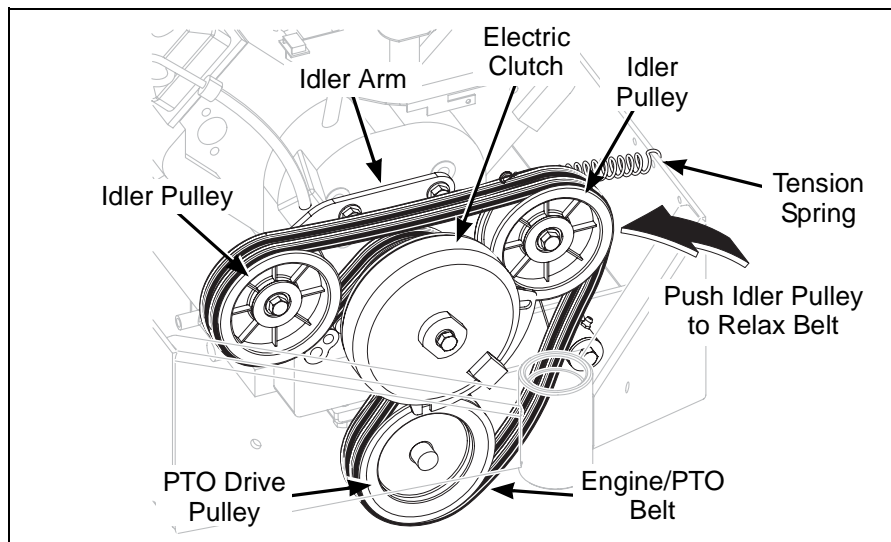
Belt Locations

Engine/PTO Belt

1. To remove the engine/PTO belt:
 - a. Remove belt guard from underneath muffler. Refer to **Remove Belt Guard** photo.
 - b. Relax the belt by depressing the spring-loaded idler arm.
 - c. Roll the belt off the pulley and remove the belt.

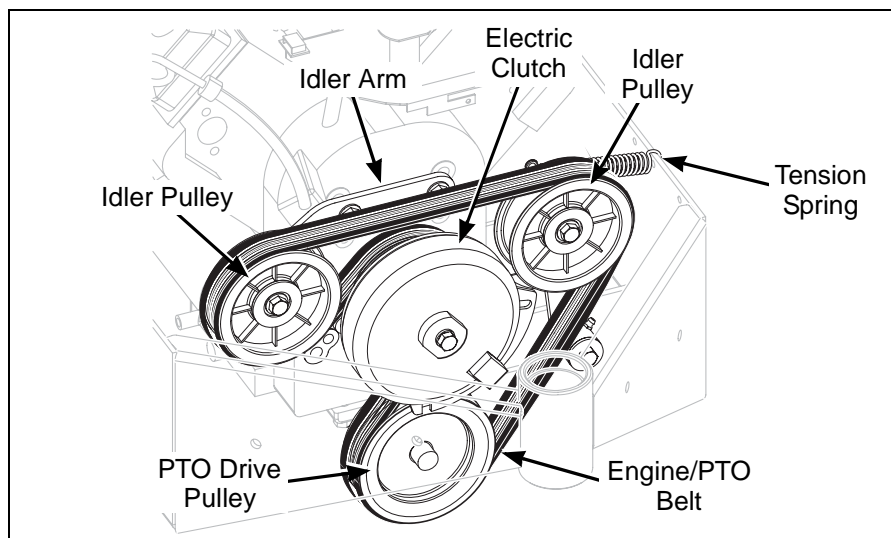


Remove Belt Guard



Engine/PTO Belt (Disengaged)

2. Reverse the removal procedure to replace the engine belt.



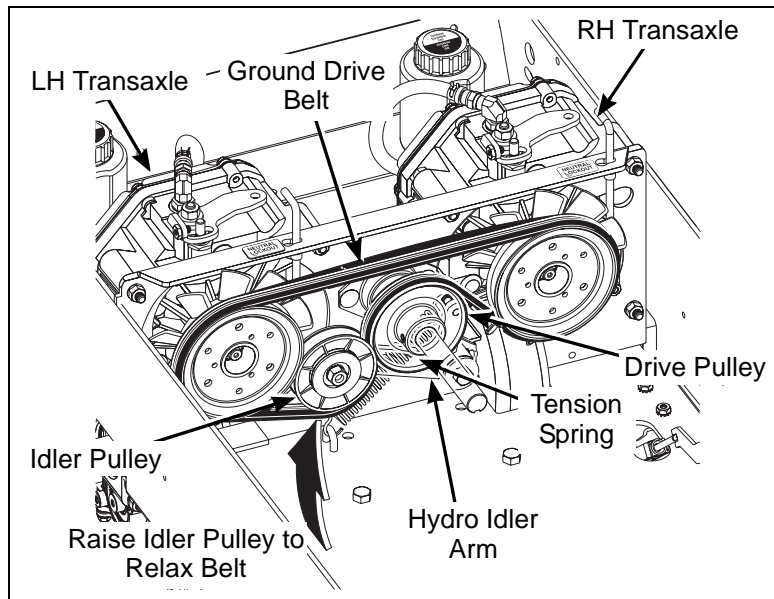
Engine/PTO Belt (Engaged)

Ground Drive Belt

1. To remove the ground drive belt:

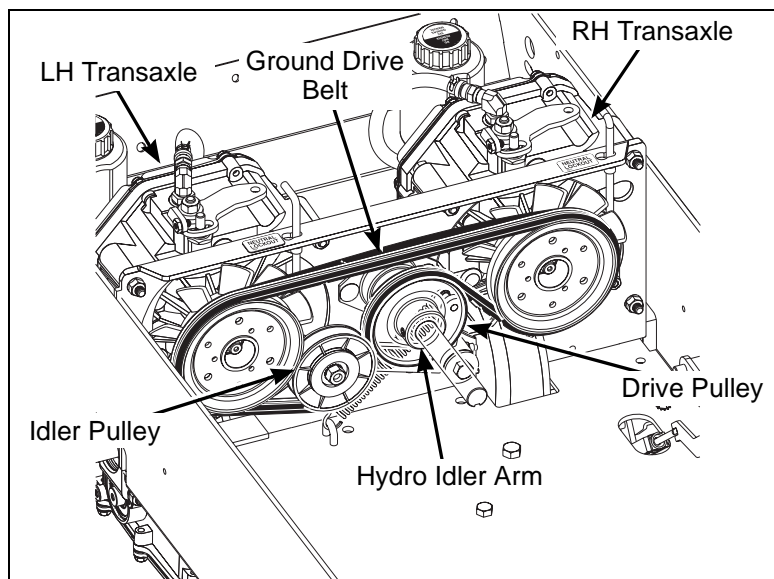
a. Raise the spring-loaded idler to relax belt.

b. Slide belt off pulleys, then release the idler.



Ground Drive Belt Assembly (Disengaged)

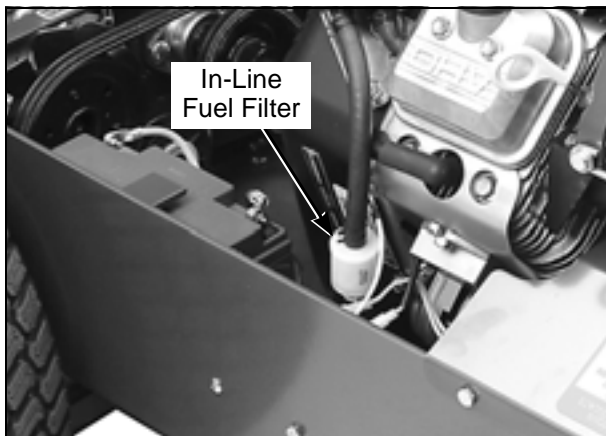
2. Reverse the procedure to install the ground drive belt.



Ground Drive Belt Assembly (Engaged)

Fuel Filter

Model MB is equipped with an in-line fuel filter. Visually inspect the filter periodically, and replace the filter **yearly**.



Fuel Filter Location

IMPORTANT: Replace the fuel filter only in a clean area where the fuel line and connections will not be contaminated by any dust and dirt.



DANGER

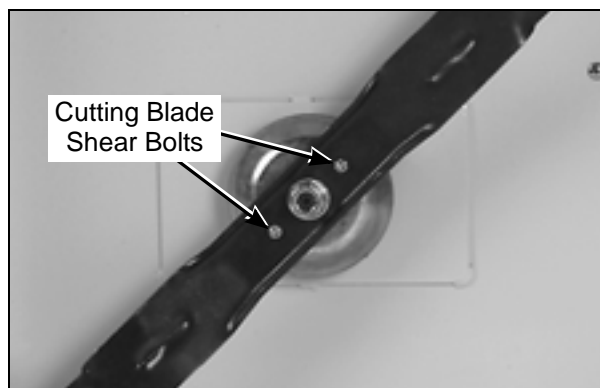
Gasoline is extremely flammable and can be highly explosive. To minimize danger:

- Use only an approved fuel container for gasoline.
- **DO NOT** allow open flames or sparks near the machine while performing maintenance or refueling; **DO NOT** smoke while working with fuel.
- Wipe up spilled gasoline immediately and completely.

1. Expand and slide clamps on either side of the filter away from filter and pull fuel lines off filter.
2. Replace filter.

Blade Overload Shear Bolts

The cutting blade is keyed to the blade hub by **two (2) shear bolts** (10-24 x 5/8 in. stainless steel machine screws). These bolts are designed to shear and protect the blade drive gearbox from damage if the blade encounters a shock load.



Cutting Blade Shear Bolts

NOTE: Tightening the **5/8-18 blade mounting nut to 60 ft-lb (81.3 N·m)** is also important for proper shock load protection. It is important to **not over-tighten** the mounting nut since this defeats (overrides) the function of the shear bolts.

If these bolts shear, remove the blade and install new bolts. Refer to **CHECKING/SERVICING** in this section for **Sharpen Mower Blades** which describes the blade removal and installation procedure.

After reinstalling the blade, check blade timing by moving blades through **one (1) complete revolution**. Make sure blade tips pass clear of each other. If timing is incorrect, contact your Walker Dealer.

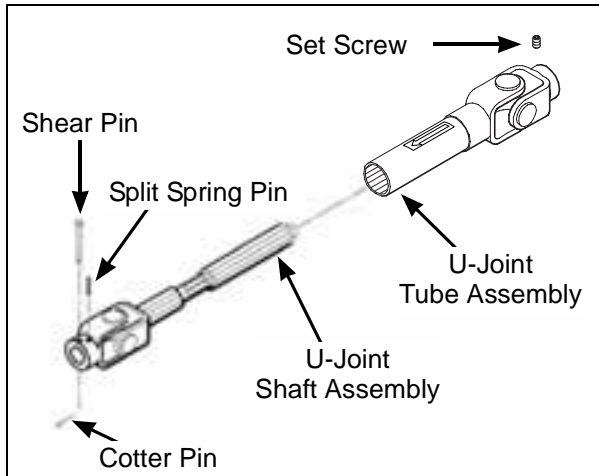
PTO Shear Pin

The PTO drive shaft connection to the deck gearbox has a shear pin to provide shock load protection to the mower deck drive. This system provides **primary shock protection** in case of blade impact and will normally shear before the individual shear bolts on the blade hub.

When the PTO pin has sheared, use the following procedure to replace it:

1. Loosen the two bolts securing the PTO shaft guard on the deck; lift the guard off. (Holes in guard are slotted for easy removal.)

2. Rotate U-joint on shaft to align the shear pin hole with the hole (and shear pin fragment) in the shaft. Use a punch to drive the remaining portion of the old shear pin out.
3. Install new shear pin and secure with cotter pin.



PTO Shear Pin

IMPORTANT: Use only Walker P/N 8067-13 shear pins for replacement to provide proper shock protection -- these pins are hardened to shear under a specific amount of load.

4. Reinstall the PTO shaft guard.

Before operating the deck, inspect the blade over-load shear bolts and also check blade timing (on gear driven decks) by moving blades through **one (1) complete revolution**. Make sure blade tips pass clear of each other. If timing is incorrect, contact your Walker Dealer.

Mower Blades

Mower blades are removed and remounted as described in the **Sharpen Mower Blades** instructions. During the course of sharpening and inspecting mower blades, if there are **any of the following conditions of wear or damage, blades should be replaced** for reasons of safety and performance of the machine:

- An excessive amount of the **flat section** of the blade has been **ground away** (removed) when the blade is sharpened. Replace the blade **when less than a 3/4 in. (19 mm) flat section remains** at the blade tip.

- Examine ends of the blade carefully, especially the intersection where the flat section of the blade turns up to form the “wing tip” (refer to **Mower Blade Profile For Sharpening** illustration in **Sharpen Mower Blades** instructions). Since sand and abrasive material can wear metal away in this area, the blade should be **replaced when metal thickness has worn to 1/16 in. (1.6 mm) or less**.



DANGER

When blades are operated over sandy soil, and if blades are allowed to wear, a “slot” may be worn into the wing tip of blade. Eventually a piece of the blade may break off creating a serious potential for injury or damage.

- Check the blades for **straightness** by marking blade tip position inside the deck housing and then rotating the opposite end of the blade to the same position and comparing. If the difference in blade tip track is **more than 1/8 in. (3 mm)**, the blade is bent and **should be replaced**.
- Inspect the blade surface, especially in formed areas, for **cracks**. Replace the blade if any cracks are found.



WARNING

DO NOT try to straighten a blade that is bent. NEVER weld a broken or cracked blade. ALWAYS replace with a new blade to assure safety.

Reinstall the blades following procedure from **Sharpen Mower Blades** instructions. If blades are replaced, always use **Walker original equipment blades** to ensure safety and optimum performance. The quality and performance of **replacement blades offered by other manufacturers** cannot be guaranteed, they **could be dangerous**.



CAUTION

ALWAYS use genuine factory replacement parts. Substitute parts CAN result in product malfunction and possible injury to the operator.

ADJUSTMENTS

Transmission Control

IMPORTANT: The proper adjustment of the transaxle control stops is essential for efficient operation and life of the transaxle. These stops are properly adjusted at the factory and should only require readjustment if the transaxle or related control linkage is removed or changed.

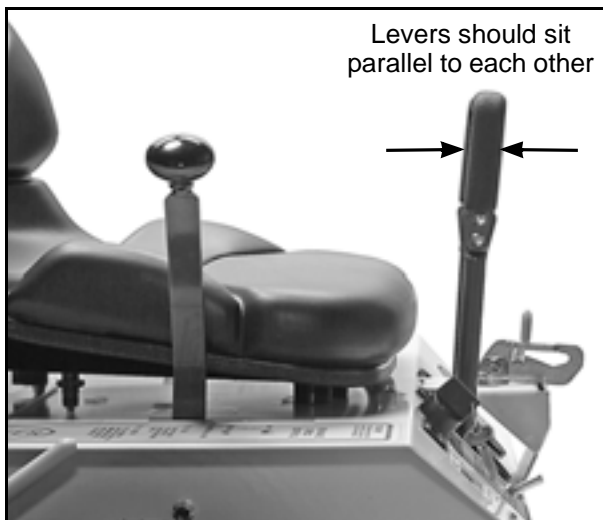
NOTE: It would not be unusual for a new machine, after initial 5 or 10 hours of operation, to begin to not travel straight (this is due to the break-in of the transaxles).

Steering Lever Position Adjustment - Step 1

NOTE: For proper operation, the steering levers should be adjusted to sit evenly using the following procedure.

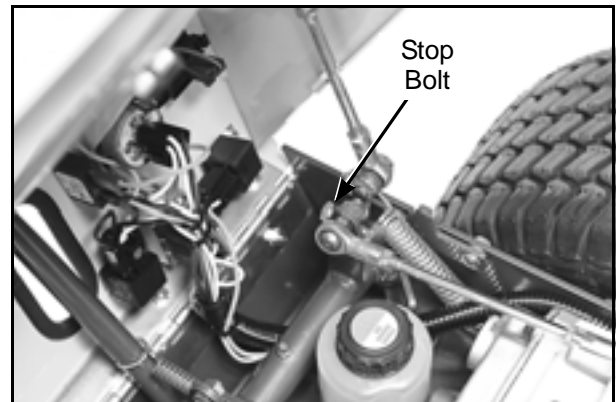
1. Examine the steering levers to make sure they are parallel front to back in relation to one another. If they are not equal, adjust accordingly. (The handles may or may not be even at this point.)

NOTE: The LH steering lever is non-adjustable. This procedure will require adjustment of the RH lever to make it even with the LH lever.



Lever Alignment

2. Adjust the position of the RH lever by turning the stop bolt in the Speed Control Actuator in or out. Turning the stop bolt in will make the RH lever move back, and turning it out will make it move forward. Tighten the lock nut.



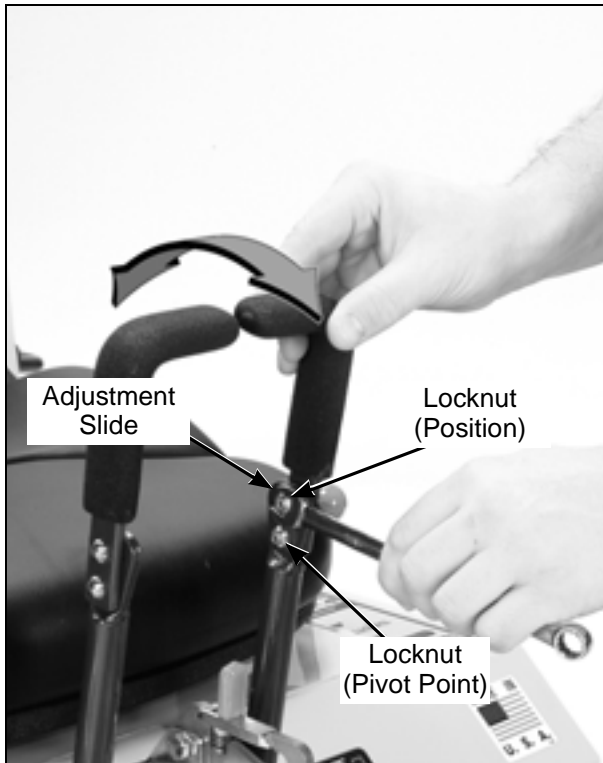
Stop Bolt Location



Stop Bolt Adjustment

Steering Handles Adjustment - Step 2

1. An adjustment range of approximately 3 inches is available on the steering handles - the handles can be adjusted forward or aft depending on the arm length of the operator. The handles can be adjusted by loosening the lock nut at the pivot point and the lock nut holding the handle in position in the adjustment slide. Adjust the handles into the most comfortable position and tighten both lock nuts.



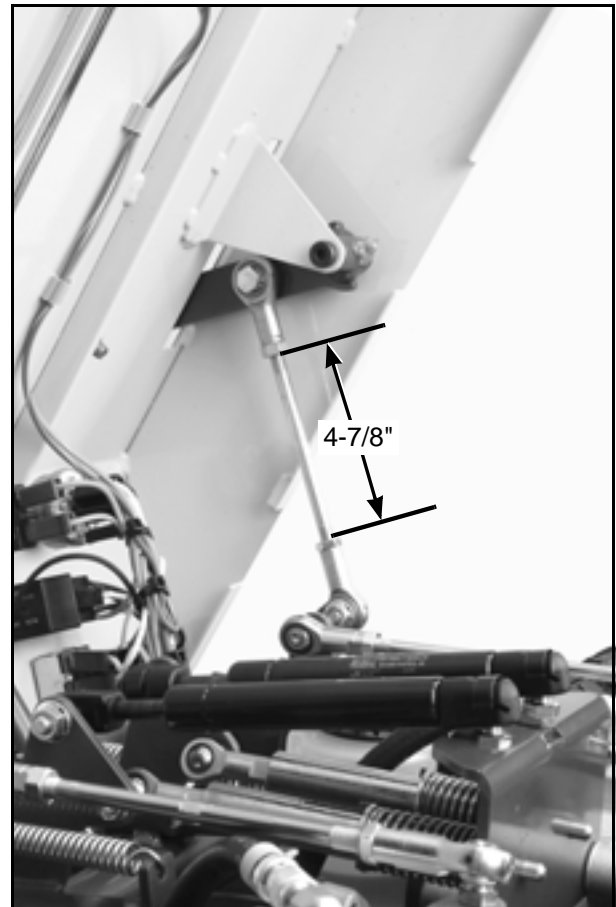
Steering Lever Adjustment

Neutral Position Adjustment - Step 3

1. With the Forward Speed Control (FSC) in neutral, the lever should be straight up. Adjust by loosening the jam nuts on the FSC Rod and turn the rod to attain the straight up position. Tighten the jam nuts.

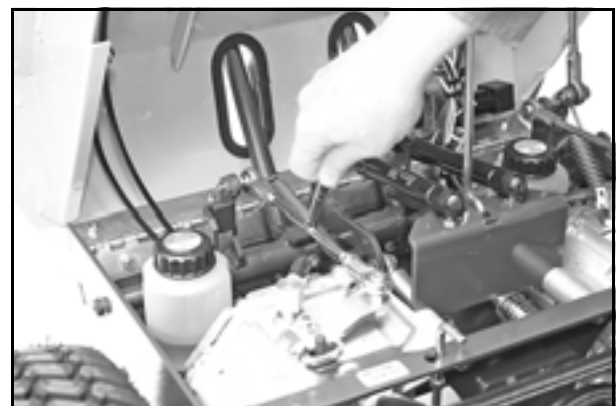


FSC Position



Steering Adjustment

2. The initial adjustment for neutral is to loosen the jam nuts on each end of the Hydro-Gear Control Rods and turn the rods to achieve a measurement of 4-7/8" between the jam nuts. Be sure to tighten jam nuts before making the measurement.

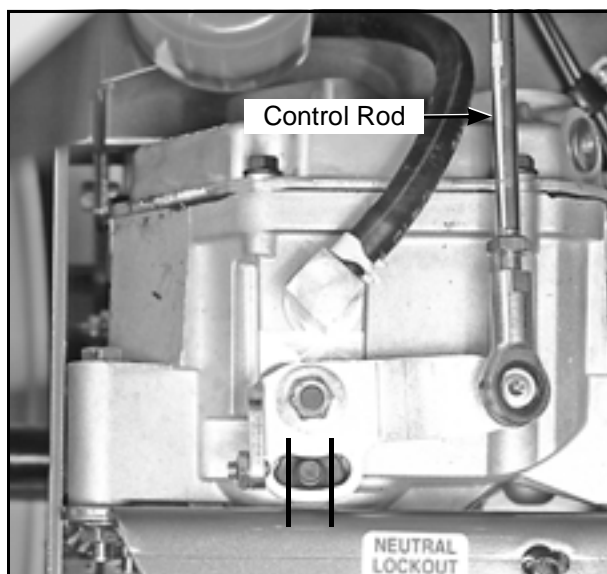


Actuator Rod Length Adjustment

3. Block the tractor up so the drive tires are off the ground.
4. With the FSC in neutral, start the engine. (Operate first at idle and then normal operating speed) and check for movement of drive wheels.

NOTE: If the engine will not start, check and adjust the neutral safety switch (see adjustment below).

5. With the FSC in the neutral position and the engine running, the wheels should not move. If a drive tire is moving, the Control Rod on that side is out of adjustment. Adjust that side to achieve neutral. Now both transaxles are in the neutral window.

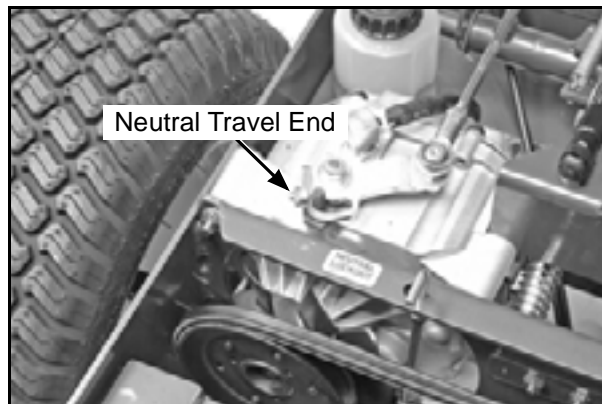


Neutral Window

6. One at a time adjust the left and right Control Rods to find the center of the neutral window. Shorten the rods until the drive tire turns forward then lengthen it until the drive tire turns in reverse (approximately 1 turn). Position the rods 1/2 way between forward and reverse. Tighten the jam nuts.
7. Lower drive tires onto ground.

Full Forward Speed Adjustment - Step 4

1. Move the FSC to the full forward speed position.
2. Raise the body. The set screws in the left and right Transmission Control Arms should not be contacting the locating stud in the transaxle. If they are, back the set screws out until they do not touch.



Neutral Travel End

Straight Tracking Adjustment - Step 5

1. Sit in the seat, start the engine, set throttle at full speed, and with the FSC in the neutral-park position check for movement of either drive wheel (if either wheel moves backward or forward, refer back to the Neutral Position Adjustment - Step 2 and readjust).
2. Check for straight ground tracking on a level surface (with hands off the steering levers). Set the FSC at several different speeds and observe if the mower moves in a straight line (use cement joint or other line on ground for reference).
3. If travel is not straight, shorten the control rod of the slow side (adjust in 1/8 turn increments) to match the faster side while maintaining the neutral position. If straight tracking and neutral can not be achieved, turn the control rod back to where neutral can be achieved.
4. Lengthen the control rod of the faster side (adjust in 1/8 turn increments) to match the slower side while maintaining the neutral position.

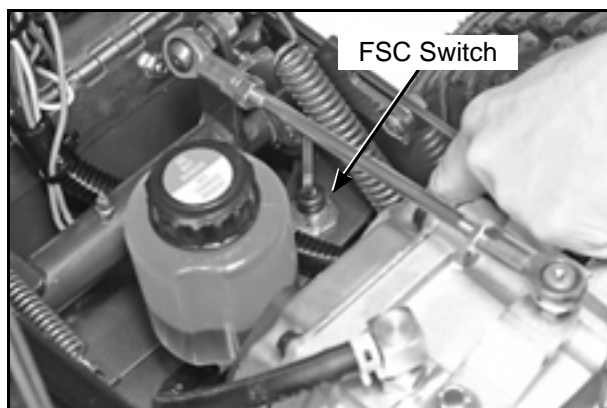
5. If the forward travel is straight throughout the speed range, except at maximum speed - place the FSC in full forward, turn the set screw in the Transmission Control Arm, of the faster side, in until it contacts the hydro stud. (Turning the set screw in slows the wheel.) Turn the set screw in an additional 1/8 turn. Recheck for equal full forward speed. Adjust this set screw until equal full forward speed is achieved. Tighten the jam nut.



Neutral Travel End Adjust

Neutral Switch Adjustment - Step 6

1. Place the FSC in neutral position. Loosen the bottom lock nut and adjust switch body up with top nut until the switch contacts open. Turn the nut an additional 1 turn. Tighten lower nut.



FSC Switch Location

Forward Speed Control Friction Adjustment - Step 7

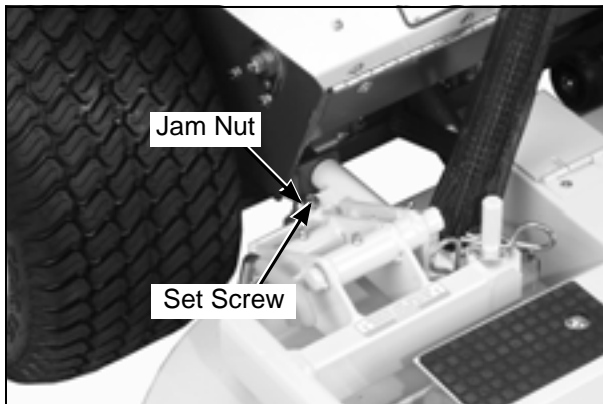


FSC Position With Levers

1. Place the FSC in the full forward position and pull both steering levers back; the FSC lever should not move. If the FSC lever moves back the friction needs to be increased.
2. With the steering levers held back, move the FSC lever back from the forward position. With a proper amount of friction adjusted, the FSC lever should move back with a slight amount of resistance (friction). If the FSC lever movement is "stiff", the friction needs to be decreased.
3. The FSC friction is increased or decreased by tightening or loosening the friction adjustment nut. Loosen or tighten the nut and check the control function until the conditions of both steps 1 and 2 are met.

Tilt-Up Deck Adjustable Stop

When the carrier frame hinge joint is properly adjusted, the deck lock levers should move in and out of the engaged and disengaged positions freely. All four hitch pins used for height adjustment should sit flush on the washers above the deck pin bushing. On a level surface, if any pin is sticking up (likely the front pins), tighten the opposite side or loosen the same side to lower the pin. Adjustments are made by loosening the jam nut and tightening or loosening the set screws on the Deck Mount Pivot Brackets. Retighten the jam nut when the adjustment is complete.



Tilt-Up Deck Adjustable Stop

ELECTRICAL SYSTEM

For troubleshooting, refer to the **Wiring Schematic**.

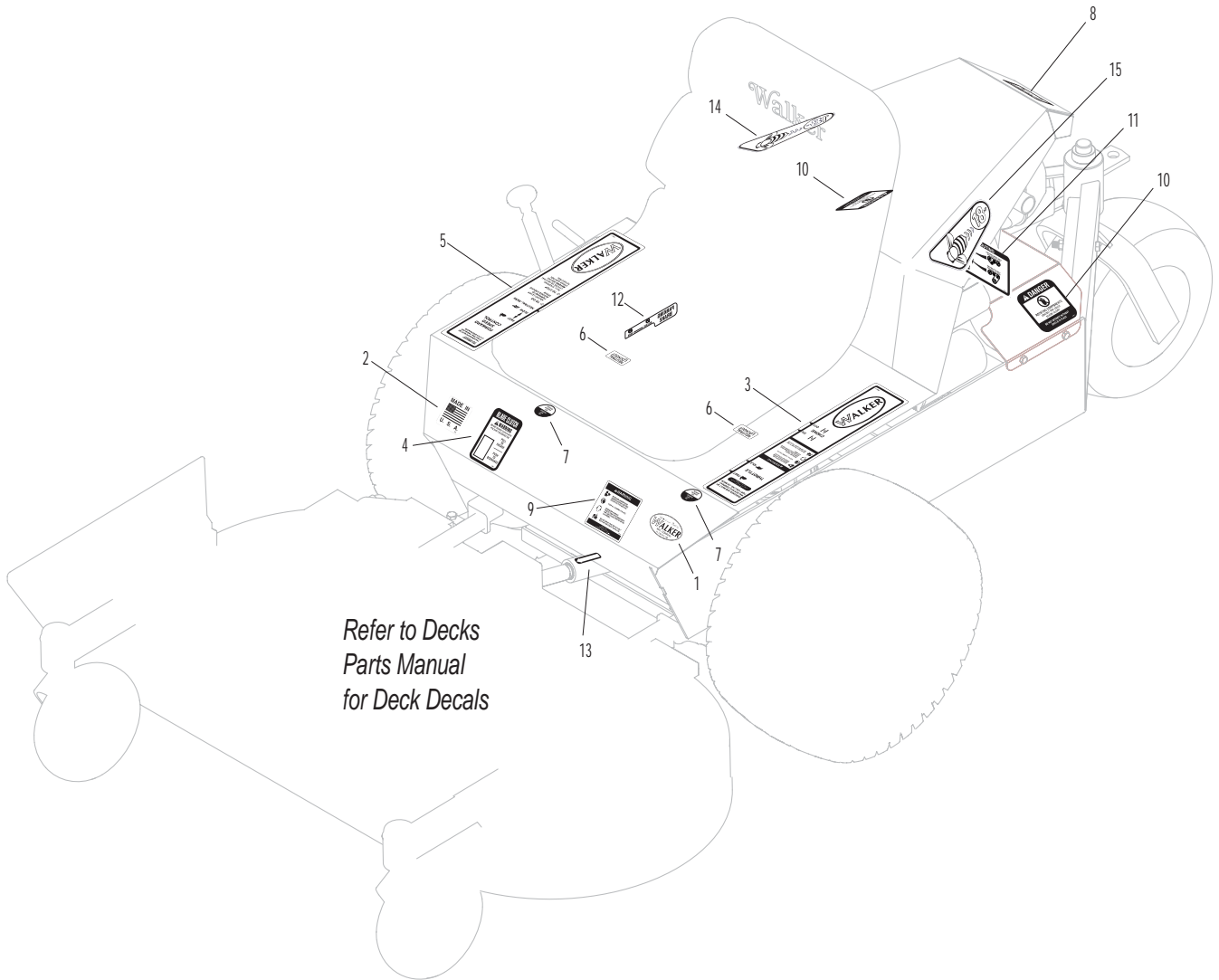
IMPORTANT: Disconnect both battery cables before unplugging any wiring connectors or making repairs on the electrical system.

TRACTOR DECALS

ITEM NO.	PART NO.	DESCRIPTION	LOCATION	NO. REQ'D SD
Walker Product and Operation Decals				
1	5803	Walker Manufacturing Logo	Body	1
2	5856	Made In USA	Body	1
3	5802-2	LH Fender	Body, LH Side Near Seat	1
4	4806	Blade Clutch	Body	1
5	5802-1	RH Fender	Body, RH Side Near Seat	1
6	9804	Axle Lockout	Chassis	2
7	4024-2	Oil Reservoir	Chassis	2
Danger Decals Warning Decals Caution Decals				
8	5805	Caution, Engine Exhaust	Rear Body	1
9	7818	Warning, Read Manual	Body	1
10	4107-1	Decal, Danger	On Guard	2
11	4107-4	Decal, Belt Routing	On Guard	1
Maintenance Decals				
12	7809	Decal, Parking Brake	Body, RH Side below Seat	1
13	6875	PTO Alignment Arrow	Universal Joint Tube Assembly	1
14	4105-8	Decal/RH, 18HP	Body	1
15	4105-9	Decal/LH, 18HP	Body	1

NOTE: All parts requiring decals are shipped with decals applied.

TRACTOR DECALS



BODY / CHASSIS ASSEMBLY

ITEM NO.	PART NO.	DESCRIPTION	NO. REQ'D	ITEM NO.	PART NO.	DESCRIPTION	NO. REQ'D
Seat Assembly				39	4431	Deck Support Arm/LH	1
1	5103	Seat	1	40	5775-2	Hitch Pin (#6)	2
2	7203	Seat Spring Plate	1	41	4430	Deck Support Arm/RH	1
3	7223	Compression Spring (1/2 x 1)	2	Tilt-Up Latch Assembly**			
4	7845	Rubber Bumper (1.375 x .63)	2	42	5847	Plastic Tip	1
5	5841	Retainer Washer (3/8 x 1-1/4)	6	43	5744-20	Spring Arm, Tilt-Up Latch	1
6	7846	Washer (3/8 x 1-1/4 x 1/8)	4	44	5744-10	Spring Pivot Bushing	1
7	7204	Shoulder Bolt, Seat Mount	2	45	5744-15	Compression Spring (3/8 x 5/8)	1
8	7440-5	Shock Mount (1-1/4 x 3/4)	2	46	5744-13	Mount Angle, LH	1
Body Assembly				47	5744-12	Hook, Tilt-Up Latch	1
9	4105	Rear Body (Includes Item # 11)	1	48	5744-14	Mount Angle, RH	1
10	4100	Front Body	1	Fasteners			
11	4190	Insulation Foam Pad	1	F002	10-24 Keps Nut		8
12	4107-3	Clutch Guard	1	F004	1/4-20 Keps Nut		18
13	4107-2	Upper Guard	1	F005	1/4-20 ESNA Nut		1
14	5845	Rubber Bumper (1.50 x 1.25)	2	F009	5/16-18 Whiz Locknut		12
15	5180	Edge Molding/Lever Opening	2	F013	3/8-16 Whiz Locknut		4
16	4504-3	Hinge (19")	1	F016	1/2-13 Self-Locking Nut		1
Chassis Assembly				F020	5/16-18 ESNA Nut		1
17	4910-2	Battery Hold Down Plate	1	F023	10-24 ESNA Nut		2
18	5747-10	Rubber Mat, No-Hole (3 x 6)	1	F025	10-24 x 3/8 PPHMS		9
19	4647-1	Tail Weight, LH	1	F028	10-24 x 3/4 PPHMS		1
20	4647-2	Tail Weight, RH	1	F029	1/4-20 X 1/2 Hex Bolt		4
21	4300-8	Chassis Guard, Lower Front	1	F034	5/16-18 x 3/4 Hex Bolt		6
22	4300	Chassis Frame	1	F037	10-24 x 5/8 PTH Screw		2
23	4102	Body Guide	1	F048	1/2 SAE Washer		2
24	7222	Extension Spring (1/4 x 3)	1	F093	5/16-18 x 1 Hex Bolt		1
25	7854	Plastic Tip, Red	1	F116	1/4-20 x 1-1/4 Hex Bolt		1
26	7383-1	Body Latch Hook	1	F120	AN960416 Washer		1
27	9046	Gas Tank Mount	1	F127	1/16 x 1/2 Cotter Pin		1
28	4145	Body Support Rod	1	F172	1/4-20 x 3/4 Carriage Bolt		2
29	4145-1	Spring Clip	1	F182	1/4 x 5/8 x 1/8 Washer		2
30	5223	Extension Spring (1/4 x 5-1/2)	1	F227	3/8 x 1-1/4 x 1/8 Washer (Plastic)		2
Tail Wheel Assembly				F246	1/4-20 x 1/2 PTHMS		10
31	5267-1	Retainer Collar (1") (Includes Item # F413)	1	F292	1/2-13 x 8-1/2 Hex Bolt, GR 2		1
32	5270-1	Pivot Bearing	2	F295	3/16 x 1-1/2 Split Spring Pin		2
33	5420-2	Tail Wheel Fork	1	F341	Coil Roll Pin (7/64 x 9/16)		1
34	5037-1	Bearing, Tail Wheel	2	F342	5/16 Conical Washer		2
35	5035	Tail Wheel & Tire Assembly (13 x 6.50-6)	1	F393	3/8-16 x 3-1/4 Hex Bolt		4
	5035-1	Tail Wheel Tire (13 x 6.50-6)	*	F413	5/16-24 x 5/16 Set Screw		2
	5036	Tail Wheel & Hub (6 x 4.5)	*	* Service Part Only			
36	5038-1	Axle Spacer Tube (6-5/8)	1	** Complete Tilt-Up Latch Assembly Kit available by ordering kit # 5747.			
Deck Support Arm & Hitch Assemblies							
37	5830	Grease Fitting	1				
38	4300-9	Deck Support Arm Mount (Includes Item # 37)	1				

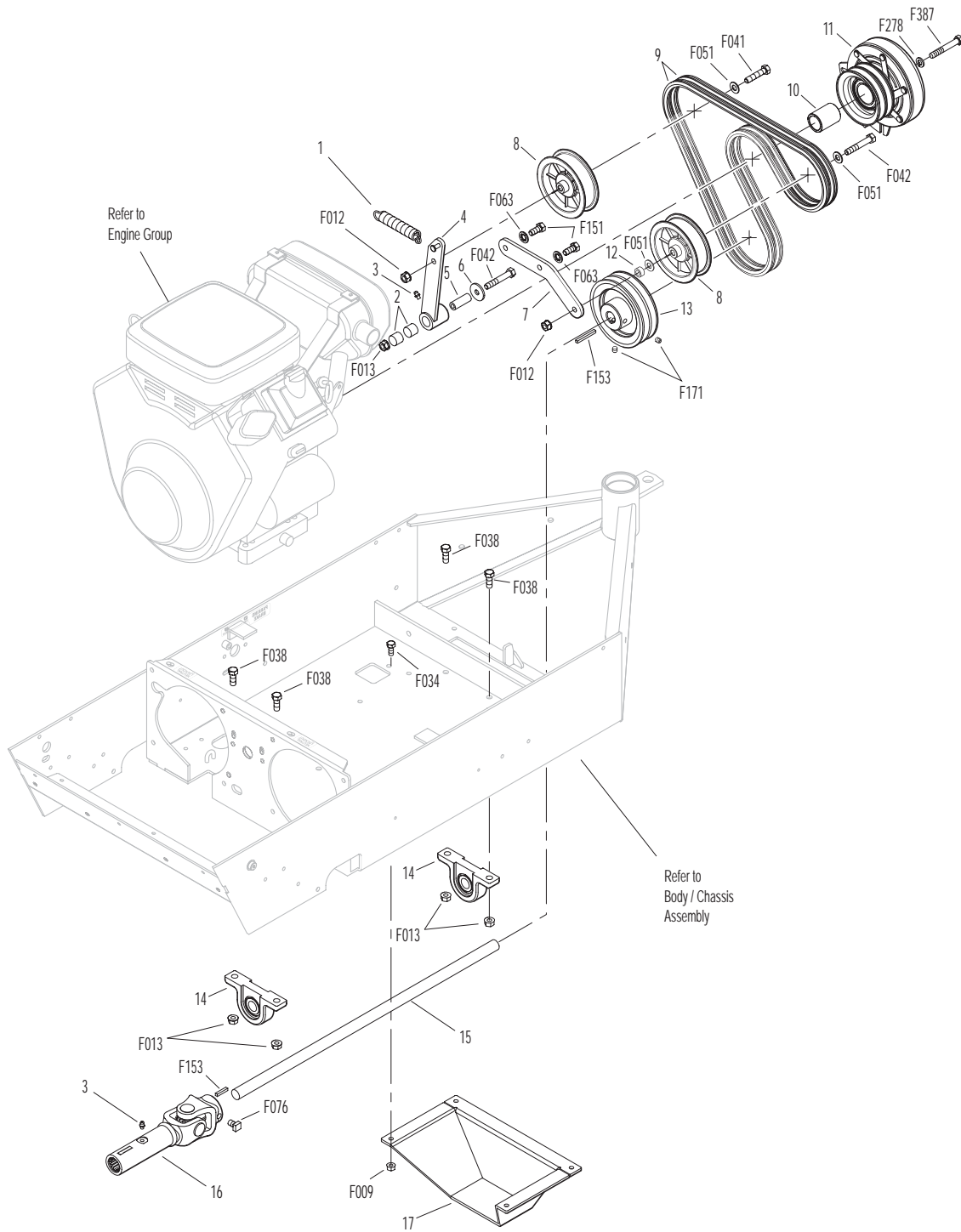
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Effective Date 12-15-05

MAIN COMPONENT POWER TRANSMISSION

ITEM NO.	PART NO.	DESCRIPTION	NO. REQ'D	ITEM NO.	PART NO.	DESCRIPTION	NO. REQ'D
PTO Drive Assembly				Fasteners			
1	4706-1	Extension Spring (3/4 x 4)	1	F009		5/16-18 Whiz Locknut	4
2	7201-3	DU Bearing	1	F012		3/8-16 Keps Nut	2
3	5830	Grease Fitting	2	F013		3/8-16 Whiz Locknut	5
4	4325	PTO Belt Tightener (Includes Item # 3)	1	F034		5/16-18 x 3/4 Hex Bolt	4
5	7201-4	Inner Race (1-1/2)	1	F038		3/8-16 x 1 Hex Bolt	4
6	5841	Retainer Washer (3/8 x 1-1/4)	1	F041		3/8-16 x 1-3/4 Hex Bolt	1
7	4245-2	Stationary Idler Arm	1	F042		3/8-16 x 2-1/4 Hex Bolt	2
8	4245-1	Idler Pulley (4/Flat)	2	F051		3/8 SAE Washer	3
9	4230	Engine/PTO Belt/Matched Set	*	F063		3/8 Internal Star Lock Washer	2
10	4410-3	Clutch Spacer	1	F076		3/8-16 x 5/8 SQH Set Screw	1
11	4410	Electric Clutch	1	F151		3/8-16 x 7/8 Hex Bolt	2
12	6325-2	Spacer Bushing (5/16)	1	F153		3/16 x 3/16 x 1-1/4 Key	2
13	4236	PTO Drive Pulley (5/AA) (Includes Items # F153 & F171)	1	F171		5/16-18 x 3/8 Set Screw	2
14	5263	Pillowblock Bearing	2	F278		3/8 Split Lock Washer	1
15	4274	PTO Drive Shaft	1	F387		3/8-24x2-1/2 Hex Bolt	1
16	5275-15	U-Joint Tube/9.5" OAL Spline (Includes Item # F076)	1	* Service Part Only			
17	4300-7	Belt Guard	1				

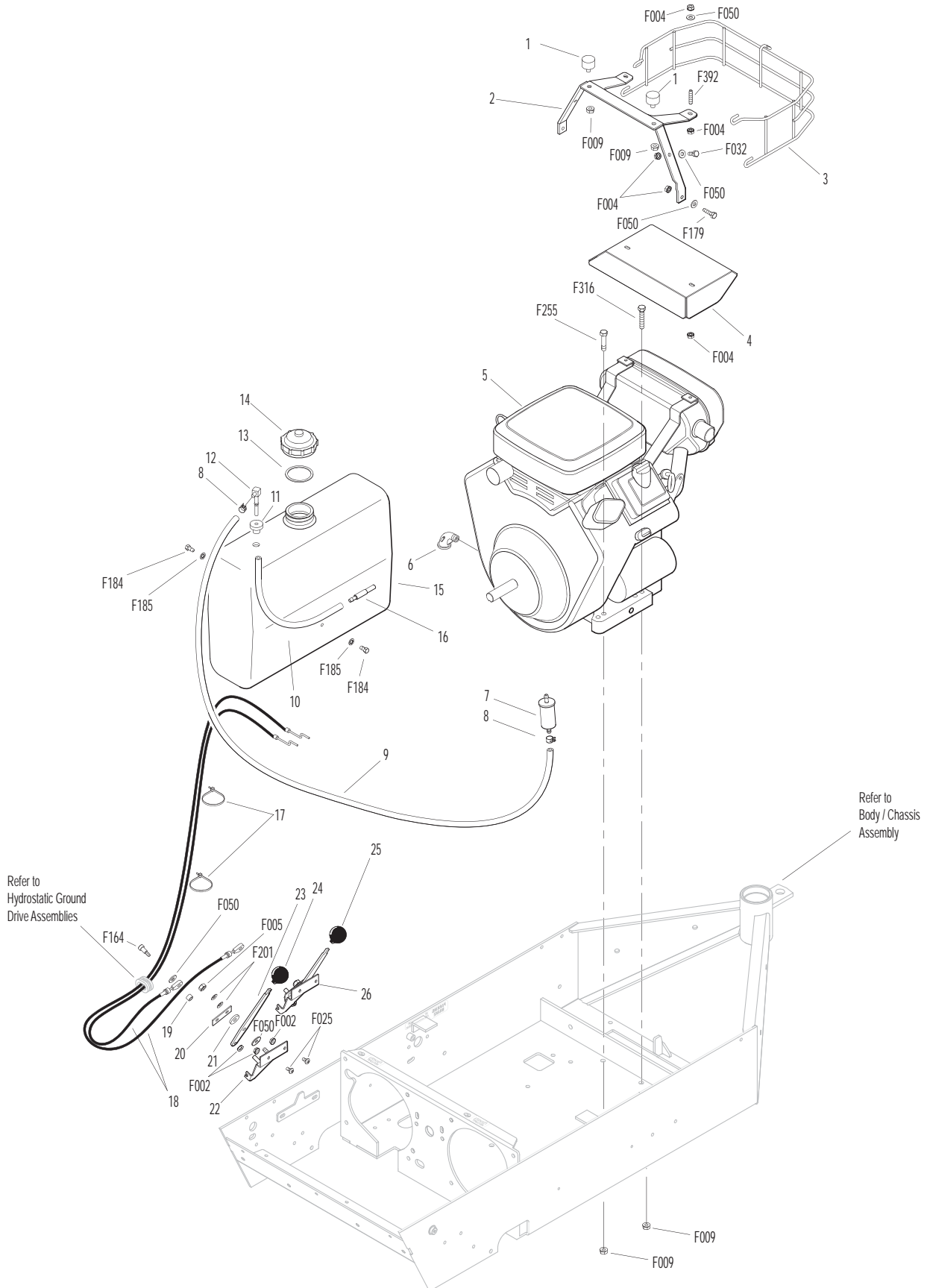
MAIN COMPONENT POWER TRANSMISSION



ENGINE GROUP

ITEM NO.	PART NO.	DESCRIPTION	NO. REQ'D	ITEM NO.	PART NO.	DESCRIPTION	NO. REQ'D
Engine Assembly				Fasteners			
1	4845	Rubber Bumper (1.0 x .625)	2	F002		10-24 Keps Nut	5
2	4104-1	Body Support	1	F004		1/4-20 Keps Nut	6
3	4013-1	Muffler Guard	1	F005		1/4-20 ESNA Nut	1
4	4104-9	Heat Shield/Aluminum	1	F009		5/16-18 Whiz Locknut	6
5	NS	18 HP Engine (Briggs & Stratton 350447)	1	F025		10-24 x 3/8 PPHMS	4
Fuel Tank Assembly				F032		1/4-20 x 3/4 Hex Bolt	2
6	4010-5	3/8 NPT Street L	1	F050		1/4 SAE Washer	8
7	5020	Fuel Filter	1	F164		10-24 x 1/4 x 3/8 SHL Bolt	1
8	5879-3	Hose Clamp (1/2)	2	F179		1/4-20 x 1 Hex Bolt	2
9	5086-5	Hose (1/4 x 32)	1	F184		1/4-20 x 1/2 Hex Bolt, SS	2
10	5086	Fuel Line (In Tank P/U)	1	F185		1/4 Internal Star Lock Washer	2
11	5083-1	Bushing, Rubber (Fits 5083)	1	F201		1/4 Belleville Spring Washer	2
12	5083-2	Tank Tube Elbow	1	F255		5/16-18 x 1-1/2 Hex Bolt	2
13	5082-2	Fuel Cap Seal	1	F316		5/16-18 x 1-3/4 Hex Bolt	2
14	5082	Fuel Tank Cap (Includes Item # 13)	1	F392		1/4-20 x 1 Set Screw, SS Cup Point	2
15	4046	Fuel Tank, 3.0 Gal. Gas (Fuel Cap Centered) (Includes Items # 13 & 14)	1	* Service Part Only			
16	5020-2	Fuel Filter, In Tank	1				
Choke and Throttle Assemblies							
17	5975-3	Cable Tie (50# x 7")	2				
18	4108-1	Throttle/Choke Cable (56-1/2)	2				
19	5172	Bearing, Nylon (.255 ID x .379 OD x .250)	1				
20	5108-7	Control Lock Tab	2				
21	5108-10	Friction Washer (.125)	2				
22	5108-8	Control Bracket	2				
23	5108-1	Control Lever, Throttle/Choke	2				
24	5108-5	Throttle Control Knob/Red	1				
25	5108-6	Choke Control Knob/Black	1				
26	7108	Control Assembly	2				
	4108	Throttle Control and Cable Assembly (Includes Item # 24)	*				
	4109	Choke Control and Cable Assembly (Includes Item # 25)	*				

ENGINE GROUP



Effective Date 12-15-05

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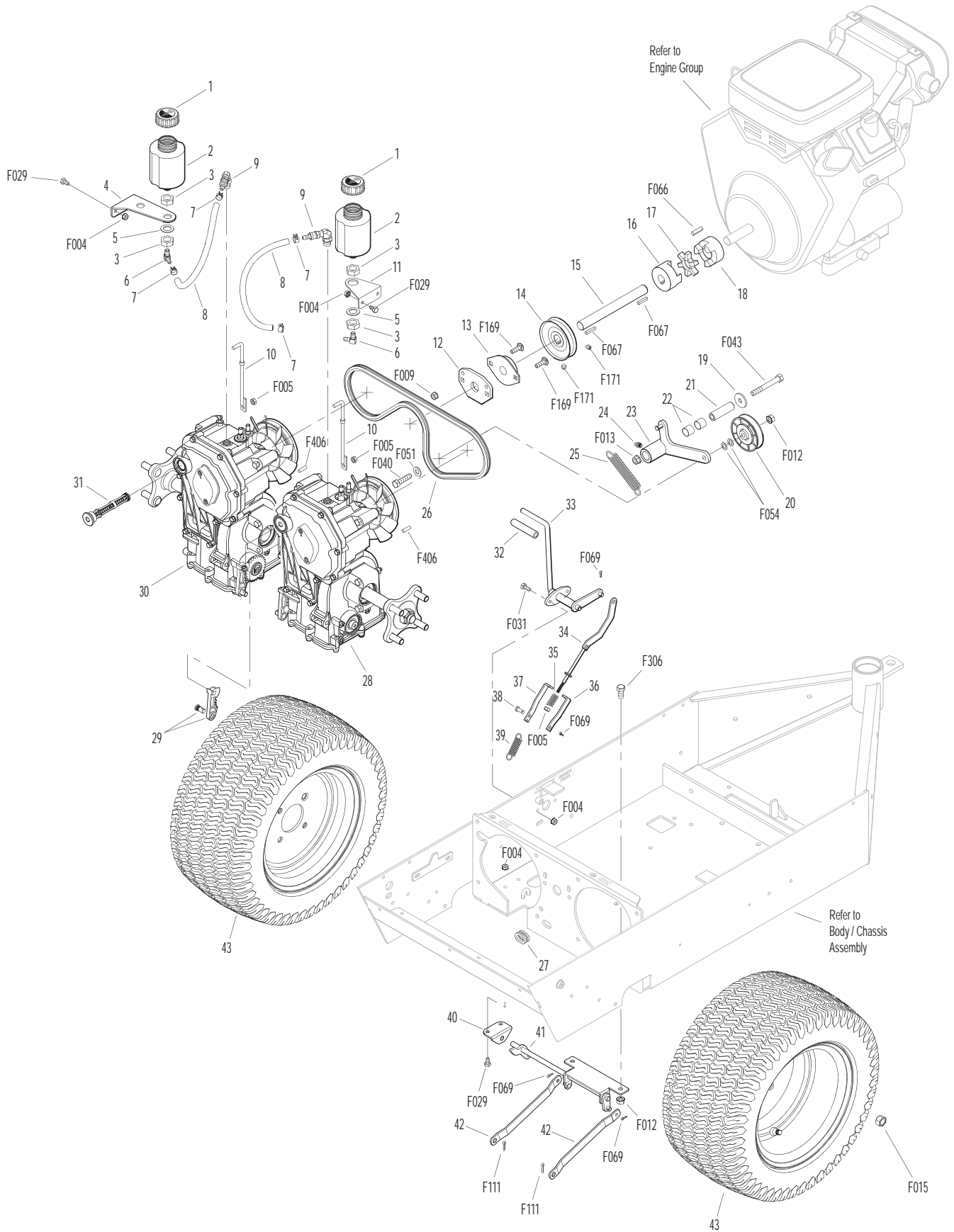
HYDROSTATIC GROUND DRIVE ASSEMBLIES

ITEM NO.	PART NO.	DESCRIPTION	NO. REQ'D	ITEM NO.	PART NO.	DESCRIPTION	NO. REQ'D
Ground Drive Assemblies				Wheel Assembly			
1	4024-9	Reservoir Cap	*	43	5075	LP Wheel & Tire Assembly (18 x 8.50-10)	2
2	4024	Oil Expansion Reservoir (Includes Items # 3 & 5)	2		5075-2	LP Tire (18 x 8.50-10)	*
3	NS	Nut	4		5075-4	LP Wheel (10 x 7)	*
4	4024-4	Oil Reservoir Mount/RH	1		5033-2	Wheel & Tire Assembly (18 x 6.50-8)	**
5	NS	Washer	2		5030-2	Standard Tire (18 x 6.50-8)	*
6	4024-1	Oil Expansion Reservoir Elbow	2		5031-2	Standard Wheel (8 x 5.5)	*
7	5879-3	Hose Clamp (1/2)	4		5030-4	Tire Tube (18 x 8.50-8)	*
8	5086-2	Hose (1/4 x 10-1/2)	2	Fasteners			
9	NS	90° Elbow	2		F004	1/4-20 Keps Nut	8
10	4028-3	Hydro Lockout Rod	2		F005	1/4-20 ESNA Nut	3
11	4024-3	Oil Reservoir Mount/LH	1		F009	5/16-18 Whiz Locknut	2
12	4300-4	Spring Mount Plate	1		F012	3/8-16 Keps Nut	3
13	4349-4	Flanged Bearing	1		F013	3/8-16 Whiz Locknut	1
14	4240	Drive Pulley (4-1/2A) (Includes Items # F067 & F171)	1		F015	1/2-20 Wheel Lug Nut	8
15	4349-3	Hydro Drive Shaft	1		F029	1/4-20 x 1/2 Hex Bolt	6
16	4350-1	Flex Coupling Half (3/4 Bore)	1		F031	1/4-20 x 5/8 Hex Bolt	2
17	4350	Spider, Flexible Coupling	1		F040	3/8-16 x 1-1/2 Hex Bolt	1
18	4350-2	Flex Coupling Half (1" Bore)	1		F043	3/8-16 x 3 Hex Bolt	1
19	5841	Retainer Washer (3/8 x 1-1/4)	1		F051	3/8 SAE Washer	1
20	4245	Idler Pulley (3/A)	1		F054	AN960616 Washer	2
21	7201-5	Inner Race (2-1/4)	1		F066	1/4 x 1/4 x 3/4 Key	1
22	7201-3	DU Bearing	1		F067	3/16 x 3/16 x 1 Key	2
23	4349-5	Hydro Idler Arm	1		F069	3/32 x 1/2 Cotter Pin	3
24	5830	Grease Fitting	1		F111	1/8 x 3/4 Cotter Pin	2
25	5221	Extension Spring (3/4 x 4)	1		F169	5/16-18 x 1 Carriage Bolt	2
26	4248	Ground Drive Belt	1		F171	5/16-18 x 3/8 Set Screw	2
27	4977	Grommet (1/2 x 13/16 x 3/16)	1		F306	3/8-16 x 3/4 Hex Bolt	2
28	4025	Hydro-Gear W/Charge Pump/LH	1		F406	6mm x 20mm Dowel Pin	2
29	4025-9	Parking Brake Arm Kit	*	* Service Part Only			
30	4026	Hydro-Gear W/Charge Pump/RH	1	** May be ordered as a factory-installed option or for dealer installation. Narrow Drive Tires are used when installing a 36" Deck. Contact your Walker Dealer.			
31	4025-5	Hydro Oil Filter	*				
Parking Brake Assembly							
32	7406-1	Handle Grip/Red	1				
33	4406-4	Parking Brake Arm Assembly	1				
34	4406-2	Brake Actuator Pull	1				
35	5665	Compression Spring (1/2 x 1)	1				
36	9406-4	Clevis Half	1				
37	9406-3	Clevis Half, Spring Side	1				
38	7523-2	Clevis Pin (1/4 x 5/8)	1				
39	5225-3	Return Spring (1/2 x 1.63)	1				
40	4406-7	Parking Brake End Mount	1				
41	4406-3	Parking Brake Mount Assembly	1				
42	4407-1	Park Brake Actuator Link	2				

Use only genuine **Walker**[®] replacement parts.

Effective Date 12-15-05

HYDROSTATIC GROUND DRIVE ASSEMBLIES



Effective Date 12-15-05

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STEERING CONTROL ASSEMBLIES

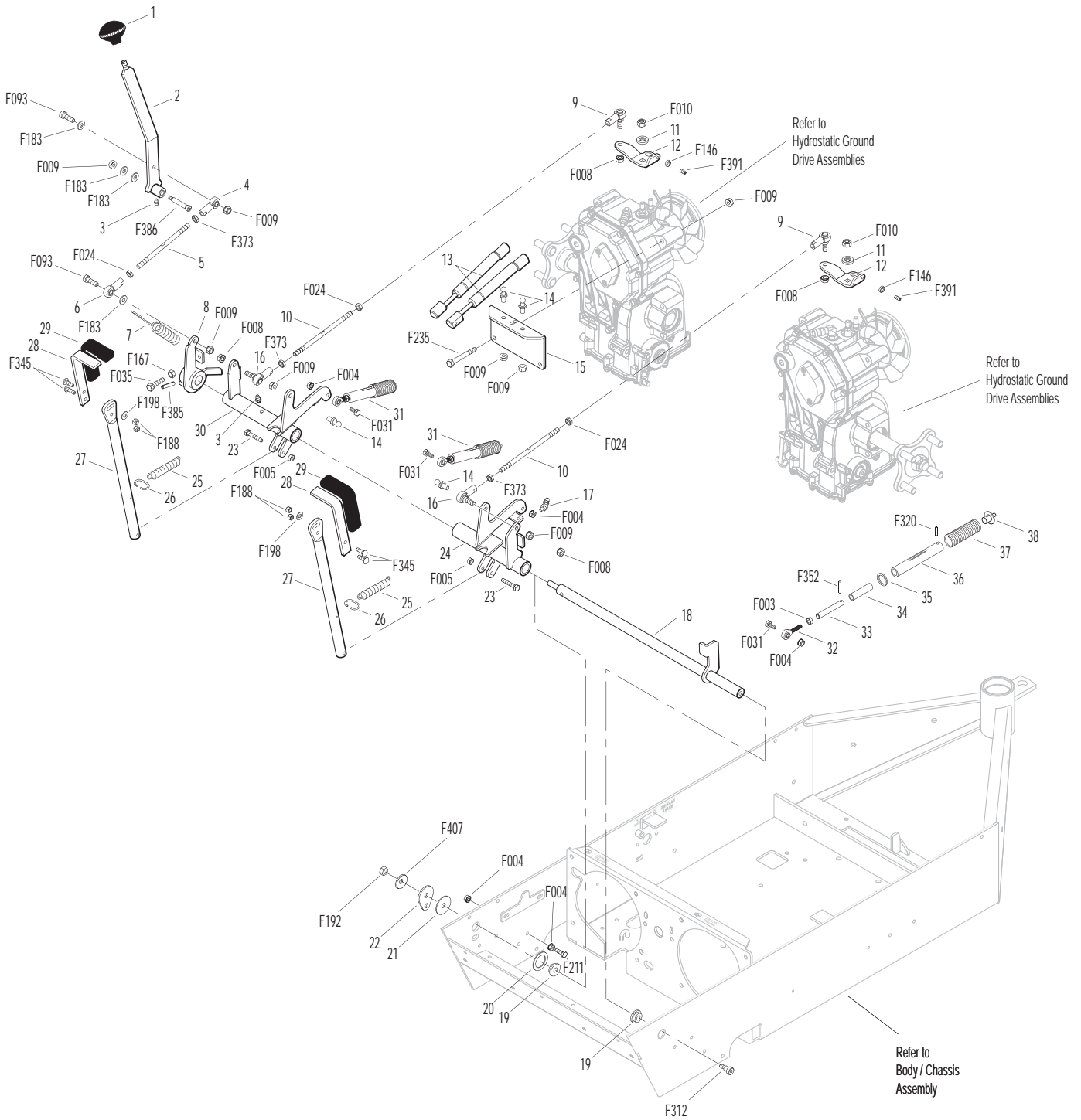
ITEM NO.	PART NO.	DESCRIPTION	NO. REQ'D	ITEM NO.	PART NO.	DESCRIPTION	NO. REQ'D
Steering Lever & FSC Assemblies				Fasteners			
1	5862	FSC Knob	1	F003	1/4-28 Hex Nut		2
2	4170	FSC Lever Assembly (Includes Item # 3)	*	F004	1/4-20 Keps Nut		4
3	5830	Grease Fitting	2	F005	1/4-20 ESNA Nut		2
4	5214-5	Ball Joint (5/16-24/LH) W/O Stud	1	F008	5/16-24 Keps Nut		5
5	4173	FSC Rod	1	F009	5/16-18 Whiz Locknut		19
6	5214-4	Ball Joint (5/16-24) W/O Stud	1	F010	5/16-24 ESNA Nut		2
7	4219	Extension Spring (3/4 x 6-1/2)	1	F024	5/16-24 Jam Nut		3
8	4451-4	FSC Friction Actuator	1	F031	1/4-20 x 5/8 Hex Bolt		2
9	5214-2	Ball Joint (5/16-24) (Nylon Lined)	2	F035	5/16-18 x 1-1/4 Hex Bolt		1
10	4213	Hydro-Gear Control Rod	2	F093	5/16-18 x 1 Hex Bolt		2
11	9024	Washer (1/8 x 7/8)	2	F146	1/4-20 Jam Nut		2
12	4212	Transmission Control Arm	2	F167	5/16-18 Hex Nut		1
13	4215-2	Steering Lever Dampener	2	F183	.312 x .700 x .074 Washer		4
14	5146	10mm Ball Stud	4	F188	1/4-20 Self-Locking Nut		4
15	4215	Steering Dampener Mount	1	F192	3/8-24 Self-Locking Nut		1
16	5214-3	Ball Joint (5/16-24 LH) (Nylon Lined)	2	F198	.250 x .625 x .040 Washer, SS		2
17	5830-3	Grease Fitting (45 Deg.)	1	F211	1/4-20 x 7/8 Hex Bolt		1
18	4451-1	Steering Pivot Shaft W/Stop	1	F235	5/16-18 x 2-1/2 Hex Bolt		12
19	9704-3	Pivot Rod Bushing/Plastic	2	F312	3/8 x 3/8 Shoulder Bolt		1
20	4142-2	FSC Friction Washer (1-1/2 x 1-1/32 x 1/16)	1	F320	1/8 x 3/4 Split Spring Pin		2
21	5141	FSC Friction Washer (1-1/2 x 3/8 x 1/16)	1	F345	1/4-20 x .770 Knurled Bolt		4
22	4142-1	FSC Cam	1	F352	5/32 x 1 Heavy Duty Roll Pin		2
23	4452-6	Steering Pivot (1/4-20 x 1-1/2)	2	F373	5/16-24LH Hex Nut		3
24	4451-3	Speed Control Actuator/LH (Includes Item # 17)	1	F385	1/4 x 1-1/4 Roll Pin		1
25	5222	Extension Spring (1/2 x 3-1/4)	2	F386	5/16-18 x 1-1/2 x 3/8 Shoulder Bolt		1
26	5450	D-Clip	2	F391	1/4-20 x 1/2 Set Screw, SS		2
27	4452-4	Steering Lever Tube W/Tab	2	F407	Belleville Washer 3/8 x 1.187 SS		1
28	5453-10	Steering Lever Handle/Adj. (Includes Items # 29 & F345)	2				
29	5850-2	Handle Grip, Foam (5-1/2)	2				
30	4451-2	Speed Control Actuator/RH (Includes Item # 3)	1				
Transmission Spring Assemblies							
31	4199	Transmission Spring Assembly (Includes Items # 32-38, F004, F031, F320 & F352)	*				
32	4552	Ball Joint (1/4-28)	2				
33	5192-2	Spring Plunger (Female)	2				
34	5194	Plunger Sleeve	2				
35	5193	Washer (3/4 x 1 x .085)	2				
36	6191	Spring Slide (4-3/4)	2				
37	5195	Compress Spring (1 x 5-1/8)	2				
38	6196	Spring Slide Cap	2				

* Service Part Only

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Effective Date 12-15-05

STEERING CONTROL ASSEMBLIES



Effective Date 12-15-05

Use only genuine Walker® replacement parts.

ELECTRICAL ASSEMBLY

ITEM NO.	PART NO.	DESCRIPTION	NO. REQ'D	ITEM NO.	PART NO.	DESCRIPTION	NO. REQ'D
Electrical Assembly				Fasteners			
1	8960-15	Ignition Switch W/Keys (Includes Items # 17, 18 & F349)	1	F002		10-24 Keps Nut	4
2	4950	PTO Switch	1	F004		1/4-20 Keps Nut	2
3	6941	Relay Switch 30/40AMP (NC)	1	F009		5/16-18 Whiz Locknut	1
4	7941-3	Boot, Circuit Breaker	1	F025		10-24 x 3/8 PPHMS	2
5	7941-6	Circuit Breaker (15AMP)	1	F026		10-24 x 1/2 PPHMS	2
6	5942-1	Switch Boot (Fits P/N 5942)	2	F028		10-24 x 3/4 PPHMS	1
7	5942	Safety Switch (NO)	2	F029		1/4-20 x 1/2 Hex Bolt	1
8	5975-5	Wire Clip, Self-Mount	2	F031		1/4-20 x 5/8 Hex Bolt	1
9	8990-1	Hourmeter (Sendec)	1	F034		5/16-18 x 3/4 Hex Bolt	1
10	5835	Cable Clamp (3/4)	1	F061		1/4 Star Lock Washer	1
11	6923	Battery Cable (-)	1	F086		#10 SAE Washer	4
12	4940-4	Battery Cable 12" (+)	1	F349		Washer .835 ID 1.122 OD, SS	1
13	7832	Wire Clamp (13/16 x #10)	1	F374		10-24 Hex Nut	2
14	4940-3	Starter Solenoid Cable (4-1/2")	1				
15	4929	Starter Solenoid	1				
16	4910	Battery (CCA/220)	1				
17	7854	Plastic Tip, Red	1				
18	8960-3	Key Set W/Umbrella	1				
19	4940	Wire Harness	1				

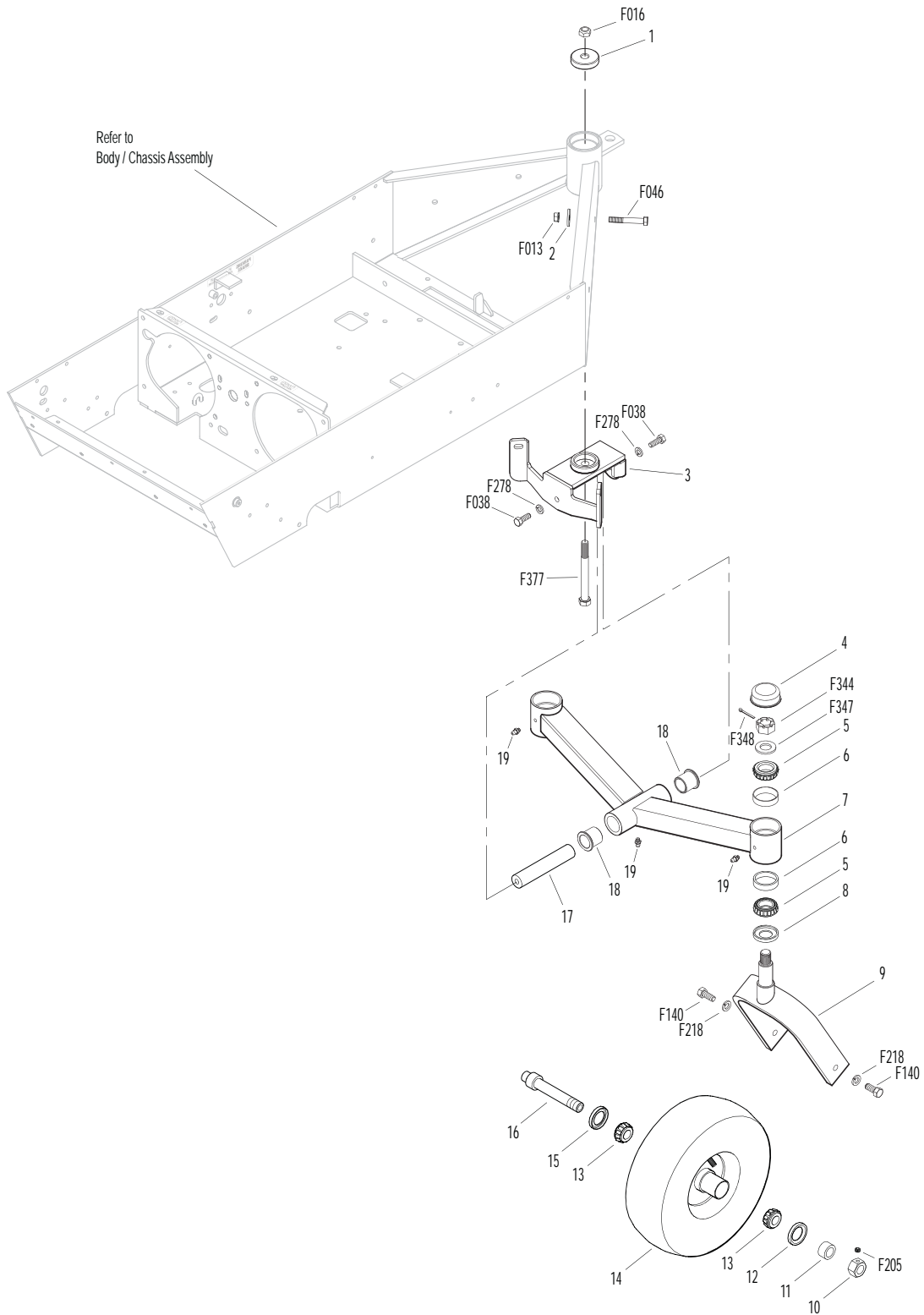
SPREAD TAIL WHEEL AXLE KIT

ITEM NO.	PART NO.	DESCRIPTION	NO. REQ'D	ITEM NO.	PART NO.	DESCRIPTION	NO. REQ'D
Kit 4420-3 Spread Axle Kit Includes Items # 1-19, fasteners listed & instructions. May be ordered as a dealer-installed option. Contact your Walker Dealer.				Fasteners			
1	7420-6	Washer (2-1/2)	1	F013		3/8-16 Whiz Locknut	2
2	5841	Retainer Washer (3/8 x 1-1/4)	2	F016		1/2-13 Self-Locking Nut	1
3	4420-5	Mount, Spread Axle	1	F038		3/8-16 x 1 Hex Bolt	2
4	8769-8	Dust Cap, Deck Caster	2	F046		3/8-16 x 3-1/2 Hex Bolt	2
5	8769-6	Bearing Cone (1" ID)	4	F140		7/16-14 x 1 Hex Bolt	4
6	8769-5	Bearing Cup	4	F205		5/16-18 x 1/4 Set Screw	2
7	7420-4	Fork Mount Tube (Includes Item # 6)	1	F218		7/16 Split Lock Washer	4
8	8769-7	Seal	2	F278		3/8 Split Lock Washer	2
9	7420-2	Tail Fork, Spread Axle	2	F344		3/4-16 Slotted Hex Nut	2
10	8039	Nut, Tail Wheel Axle	2	F347		3/4 SAE Washer	2
11	8038-1	Spacer, Tail Wheel Axle	2	F348		1/8 x 1-1/2 Cotter Pin	2
12	8768-2	Seal, Reverse Lip	2	F377		1/2-13 x 5 Hex Bolt	1
13	8037	Bearing Cone (3/4 ID)	4	* Service Part Only			
14	8035	Tail Wheel & Tire Assembly (13 x 5.00-6) (With Bearing Race)	2				
	7035-1	Tail Wheel Tire (13 x 5.00-6)	*				
	8036	Wheel & Hub (6 x 3.25)	*				
	8037-2	Bearing Race	*				
15	8037-1	Seal, Outer (1-3/4 x 1-1/8)	2				
16	7038	Tail Wheel Axle (3/4 x 5-9/16)	2				
17	7420-7	Pivot Shaft (1 x 5-1/4)	1				
18	5683	Pivot Bearing	2				
19	5830	Grease Fitting	3				

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Effective Date 12-15-05

SPREAD TAIL WHEEL AXLE KIT



Effective Date 12-15-05

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WIRING SCHEMATIC

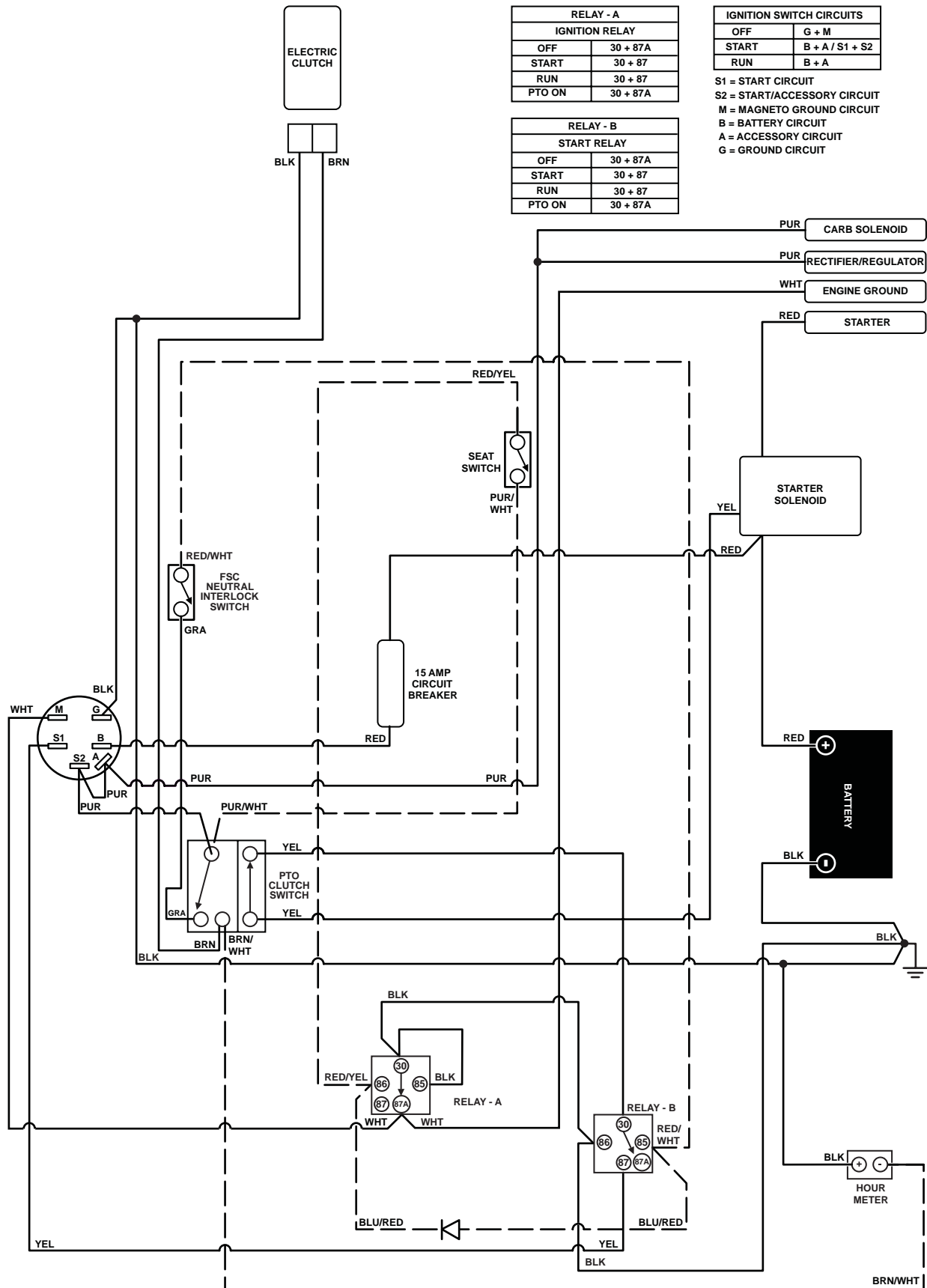
WALKER MODEL MB
Beginning S/N 2005-76681

RELAY - A	
IGNITION RELAY	
OFF	30 + 87A
START	30 + 87
RUN	30 + 87
PTO ON	30 + 87A

RELAY - B	
START RELAY	
OFF	30 + 87A
START	30 + 87
RUN	30 + 87
PTO ON	30 + 87A

IGNITION SWITCH CIRCUITS	
OFF	G + M
START	B + A / S1 + S2
RUN	B + A

S1 = START CIRCUIT
S2 = START/ACCESSORY CIRCUIT
M = MAGNETO GROUND CIRCUIT
B = BATTERY CIRCUIT
A = ACCESSORY CIRCUIT
G = GROUND CIRCUIT



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Effective Date 12-15-05

LIMITED WARRANTY FOR WALKER MODEL MB RIDER MOWER

1. WHAT THIS WARRANTY COVERS, AND FOR HOW LONG:

Walker Manufacturing company will, at its option, repair or replace, without charge, any part covered by this warranty which is found to be defective in material and/or workmanship within one (1) year after date of sale to the original retail purchaser unless the product is used for commercial or rental purposes, in which case this warranty is limited to ninety (90) days. At Walker's request, customer will make the defective part available for inspection by Walker and/or return the defective part to Walker, transportation charges prepaid. All parts and components of the Walker Mower are covered by this warranty **except** the following components which are warranted separately by their respective manufacturers:

Briggs & Stratton Engine
Hydro-Gear Transaxles
Battery
Tires

The available warranties covering these items are furnished with each mower. Walker does not assume any warranty obligation, liability or modification for these items, which are covered exclusively by the stated warranty of the respective manufacturers noted above.

2. WHAT THIS WARRANTY DOES NOT COVER:

- A. This warranty does not cover defects caused by depreciation or damage caused by normal wear, accidents, improper maintenance, improper use or abuse of the product, alterations, or failure to follow the instructions contained in the Owner's Manual for operation and maintenance.
- B. The customer shall pay any charges for making service calls and/or for transporting the mower to and from the place where the inspection and/or warranty work is performed.

3. HOW TO OBTAIN SERVICE UNDER THIS WARRANTY:

Warranty service can be arranged by contacting the dealer where you purchased the mower or by contacting Walker Manufacturing Company, 5925 East Harmony Road, Ft. Collins, CO 80528. Proof of the date of purchase may be required to verify warranty coverage.

4. WARRANTY LIMITATION:

- A. **THERE IS NO OTHER EXPRESS WARRANTY. ANY WARRANTY THAT MAY BE IMPLIED FROM THIS PURCHASE INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE IS HEREBY LIMITED TO THE DURATION OF THIS WARRANTY AND TO THE EXTENT PERMITTED BY LAW ANY AND ALL IMPLIED WARRANTIES ARE EXCLUDED.** Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.
- B. **WALKER WILL NOT BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL, OR SPECIAL DAMAGES AND/OR EXPENSES IN CONNECTION WITH THE PURCHASE OR USE OF THE MOWER.** Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation(s) or exclusion(s) may not apply to you.
- C. Only the warranty expressed in this limited warranty shall apply and no dealer, distributor, or individual is authorized to amend, modify, or extend this warranty in any way. Accordingly, additional statements such as dealer advertising or presentations, whether oral or written, do not constitute warranties by Walker, and should not be relied upon.
- D. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Sound - Model MB

Sound Test

Lwa
97

Sound test conducted was in accordance with 2000/14/EC and was performed on 31 May 05 under the conditions listed:

LpA
83

OPERATOR

General Condition: Clear
Temperature: 65 (F)°18 (C)°
Wind Speed: < 5 mph (< 8 kmh)
Humidity: 25%
Barometric Pressure: 83.8 kPA

Vibration - Model MB

Vibration Level

0.6g

Vibration levels at the operators handles were measured in the vertical, lateral, and longitudinal directions using calibrated vibration test equipment.

Tests were performed on 14 July 04 under the conditions listed:

General Condition: Clear
Temperature: 50 (F)°10 (C)°
Wind Speed: < 5 mph (< 8 kmh)
Humidity: 52%
Barometric Pressure: 24.9" HG (759 mm Hg)

WALKER MOWERS™

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