

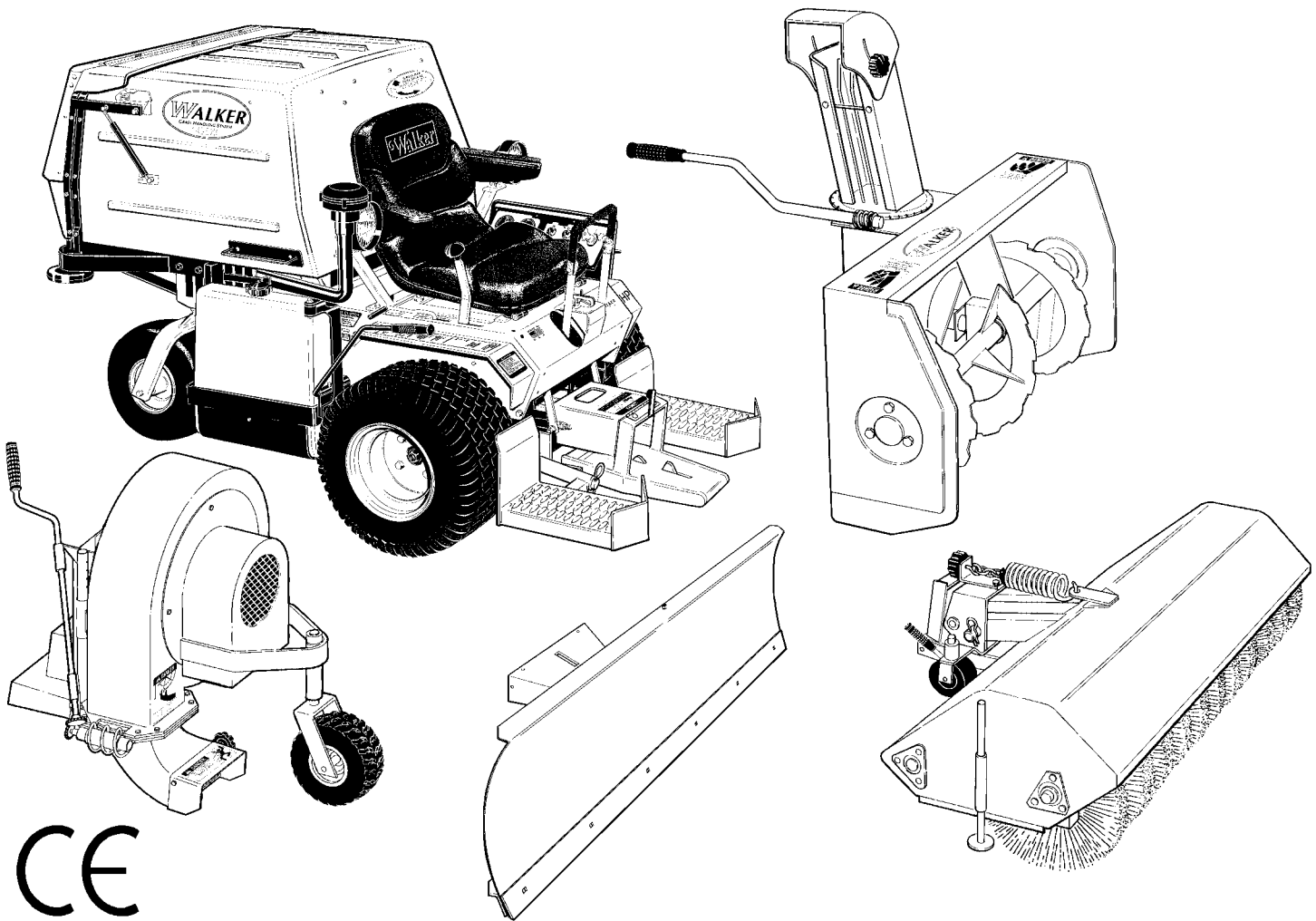
Walker Rider Lawnmowers

OWNER'S MANUAL

Safety, Assembly, Operating, and Maintenance Instructions

and ILLUSTRATED PARTS MANUAL

IH6620 Implement Hitch, RB6650 Rotary Broom, DB6660 Dozer Blade, SB6670 Two-Stage Snowblower and DB6680 Debris Blower



CE

Please Read and Save These Instructions

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

Effective Date 06-01-01

P/N I375

Price \$5.00



Foreword

Thank you. . .for purchasing a Walker implement. Every effort has been made to provide you with the most reliable product 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 mower owner's manual and the engine manufacturer's manual for the specific engine on the mower model you are using. Before you operate your new implement, please read this entire manual. Some of the information is crucial for proper operation and maintenance of this product - it will help protect your investment and ensure that the implement 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 product.

This manual covers the Model IH6620 Implement Hitch, RB6650 Rotary Broom, DB6660 Dozer Blade, SB6670 Two-Stage Snowblower, and DB6680 Debris Blower.

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

Bob Walker, President

Table of Contents

Owner's Manual

General Information _____ 1

HIGHLIGHTED INFORMATION _____	1
GLOSSARY _____	1
IDENTIFYING NUMBER LOCATIONS _____	1
SERVICING OF DRIVETRAIN GEARBOX _____	3
UNIT DESCRIPTIONS _____	3
Implement Hitch _____	3
Dozer Blade _____	3
Rotary Broom _____	3
Two-Stage Snowblower _____	3
Debris Blower _____	3

Specifications _____ 4

IMPLEMENT HITCH _____	4
DOZER BLADE _____	4
ROTARY BROOM _____	4
TWO-STAGE SNOWBLOWER _____	5
DEBRIS BLOWER _____	6

Component Identification _____ 7

IMPLEMENT HITCH _____	7
DOZER BLADE _____	8
ROTARY BROOM _____	9
TWO-STAGE SNOWBLOWER _____	10
DEBRIS BLOWER _____	12

Safety Instructions _____ 14

BEFORE OPERATING _____	14
OPERATING _____	15
MAINTENANCE _____	16
SAFETY, CONTROL, AND INSTRUCTION DECALS _____	17

Assembly Instructions _____ 19

SETUP INSTRUCTIONS _____	19
IMPLEMENT HITCH _____	19
Implement Hitch Installation _____	19
Implement Hitch Wiring _____	20
DOZER BLADE _____	23
Dozer Blade Assembly _____	23
Dozer Blade Installation _____	24
ROTARY BROOM _____	24
Rotary Broom Installation _____	24
Optional Gauge Wheel Installation _____	26

TWO-STAGE SNOWBLOWER _____	27
Snowblower Assembly _____	27
Snowblower Installation _____	28
DEBRIS BLOWER _____	31
Debris Blower Installation _____	31
PREOPERATING CHECKLIST _____	32
Implement Hitch _____	32
Dozer Blade _____	32
Rotary Broom _____	32
Two-Stage Snowblower _____	33
Debris Blower _____	33

Operating Instructions _____ 34

TRACTOR CONTROLS _____	34
STARTING THE MACHINE _____	34
IMPLEMENT HITCH CONTROLS _____	34
Implement Lift Switch _____	34
Hitch Locking Lever _____	34
DOZER BLADE CONTROLS _____	35
Angle Adjustment Pin _____	35
Trip Spring _____	35
DOZER BLADE OPERATION _____	35
Raising and Lowering the Blade _____	35
Normal Operation _____	35
Rigid Blade Operation _____	36
Speed Recommendations _____	36
ROTARY BROOM CONTROLS _____	36
Ground Contact Knob _____	36
Angle Adjustment Lever _____	37
ROTARY BROOM OPERATION _____	37
Raising and Lowering the Broom _____	37
Engaging the Rotary Broom _____	37
General Sweeping _____	37
Snow Removal _____	38
Lawn Thatching and Leaf Raking _____	38
TWO-STAGE SNOWBLOWER CONTROLS _____	38
Chute Rotation Handle _____	38
Deflector Position Control Knobs _____	38
TWO-STAGE SNOWBLOWER OPERATION _____	38
Raising and Lowering the Snowblower _____	38
Engaging the Snowblower _____	39
Recommendations For Snowblowing _____	39
Removing Snow _____	40
Clogging Checklist _____	40
DEBRIS BLOWER CONTROLS _____	41
Chute Rotation Handle _____	41
Deflector Position Control Knob _____	41
DEBRIS BLOWER OPERATION _____	41
Raising and Lowering the Debris Blower _____	41
Engaging the Debris Blower _____	42
Recommendations for Operating the Debris Blower _____	42
STOPPING THE MACHINE _____	42

Table of Contents

Maintenance Instructions	43
MAINTENANCE SCHEDULE CHART	43
LUBRICATION	44
Rotary Broom Gearbox	44
Rotary Broom Drive Chain	44
Two-Stage Snowblower Gearbox	45
Two-Stage Snowblower Reduction Chain	45
Grease Fitting and Oil Point Lubrication	45
Implement Hitch	46
Dozer Blade	48
Rotary Broom	50
Two-Stage Snowblower	52
Debris Blower	54
REPLACING/REPAIRING	56
Dozer Blade Cutting Edge	56
Rotary Broom Brush	56
Rotary Broom Gearbox	57
Rotary Broom Drive Chain	57
Rotary Broom Drive Shaft Sprocket	58
Two-Stage Snowblower Cutting Edge	59
Two-Stage Snowblower Gearbox	60
Two-Stage Snowblower Reduction Chain	60
Two-Stage Snowblower Reduction Sprocket	61
Debris Blower Drive Belt	61
Debris Blower Rotation Pinions	62
ADJUSTMENTS	62
Dozer Blade Skid Shoes	62
Rotary Broom Brush Leveling	63
Rotary Broom Gauge Wheels	63
Rotary Broom Drive Chain Tension	64
Two-Stage Snowblower Skid Shoes	64
Two-Stage Snowblower Reduction Chain Tension	64
Debris Blower Front Gauge Wheel	65
Debris Blower Drive Chain Tension	65
Debris Blower Rotation Pinions	66
Debris Blower Rotation Handle	66
TORQUE SPECIFICATIONS	67

Removal and Storage Instructions	68
REMOVAL	68
Removing Attachments	
From Implement Hitch	68
Dozer Blade	68
Rotary Broom	68
Two-Stage Snowblower	69
Debris Blower	69
Removing Implement	
Hitch From Tractor	70
END OF SEASON STORAGE	70
Implement Hitch	70
Dozer Blade	70
Rotary Broom	71
Two-Stage Snowblower	71
Debris Blower	71

Illustrated Parts Manual

IMPLEMENT HITCH ASSEMBLY	72
IMPLEMENT HITCH	
ELECTRICAL COMPONENTS	74
DOZER BLADE ASSEMBLY	76
ROTARY BROOM ASSEMBLY	78
ROTARY BROOM DRIVE COMPONENTS	80
SNOWBLOWER HOUSING COMPONENTS	82
SNOWBLOWER DRIVE COMPONENTS	84
DEBRIS BLOWER COMPONENTS	86
DEBRIS BLOWER MANUAL	
ROTATION COMPONENTS	88
KEY TO ABBREVIATIONS	
USED IN ILLUSTRATED PARTS LIST	90
Warranty	91

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 product 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.

- **FORWARD SPEED CONTROL (FSC)** controls the maximum forward speed of the tractor; functioning as a cruise control.
- **IMPLEMENT** refers to the dozer blade, rotary broom, two-stage snowblower, or debris blower used with the tractor with an implement hitch installed.
- **LEFT HAND (LH)** refers to the left-hand side of the machine when the operator is seated facing forward in the tractor seat.
- **MACHINE** consists of the implement installed on the tractor, functioning as a single unit.
- **POWER TAKE-OFF (PTO)** transmits engine power to run the rotary broom, two-stage snowblower, or debris blower.
- **RIGHT HAND (RH)** refers to the right-hand side of the machine when the operator is seated facing forward in the tractor seat.
- **TRACTOR** is the prime mover, including the engine, drivetrain, operator seat, and controls to operate the implement.

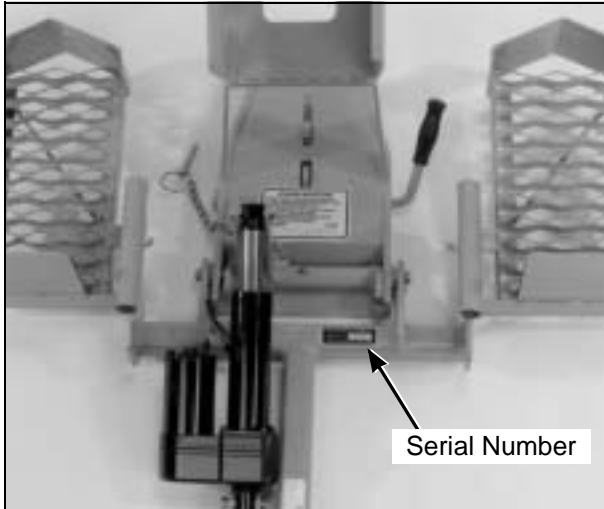
IDENTIFYING NUMBER LOCATIONS

The implement hitch serial number is affixed to the top of the male hitch assembly, underneath the PTO shield. The dozer blade serial number is affixed to the LH side of the hitch box on the back side of the blade. The rotary broom serial number is affixed on the RH side of the pivot bracket. The snowblower serial number is affixed on the RH side of the snowblower head frame. The debris blower serial number is affixed to the top RH side of the hitch. Model and serial numbers are helpful when obtaining replacement parts and maintenance assistance. For ready reference, please record these numbers in the space provided.

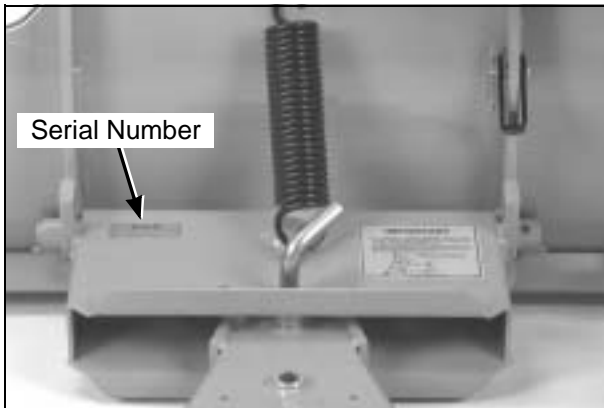
Implement Hitch Model No.	IH6620
Implement Hitch Serial No.	
Dozer Blade Model No.	DB6660
Dozer Blade Serial No.	
Rotary Broom Model No.	RB6650
Rotary Broom Serial No.	
Two-Stage Snowblower Model No.	SB6670
Two-Stage Snowblower Serial No.	
Debris Blower Model No.	DB6680
Debris Blower Serial No.	
Date of Purchase	

Fill In By Purchaser

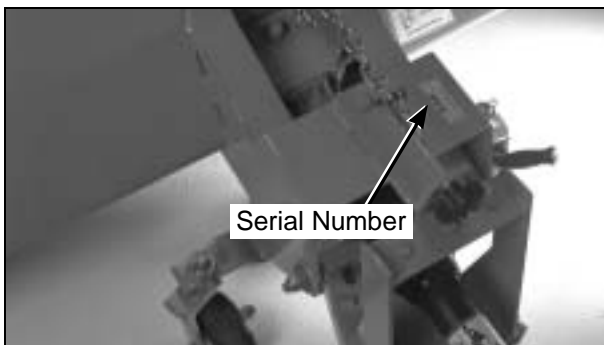
General Information



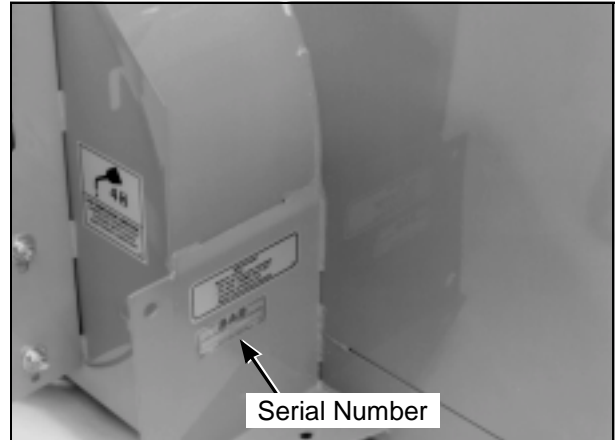
**Implement Hitch Serial Number Location
(Top View)**



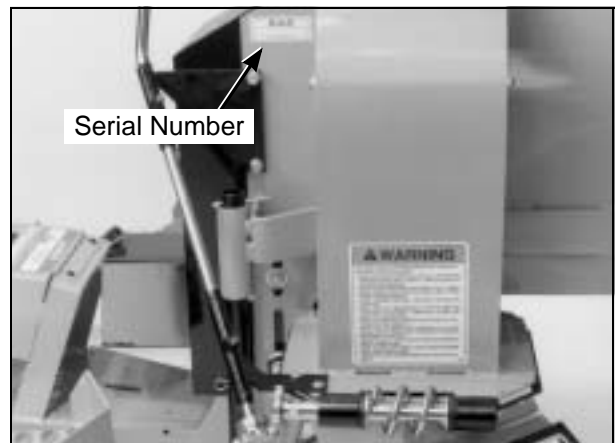
**Dozer Blade Serial Number Location
(Rear View)**



**Rotary Broom Serial Number Location
(Rear View)**



**Two-Stage Snowblower Serial Number Location
(Rear View and RH View)**



**Debris Blower Serial Number Location
(Rear View and RH View)**

General Information

SERVICING OF DRIVETRAIN GEARBOX

Detailed servicing and repair of the gearbox used on the implement attachments is not covered in this manual. Only routine maintenance and general service instructions are provided. For the service of the gearbox 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

A service manual is available for the gearbox from:

Tecumseh Products Co.

900 North Street
Grafton, WI 53024

UNIT DESCRIPTIONS

Implement Hitch

The implement hitch is required to mount each of the implements to the tractor. It clips on the tractor in place of the mower deck in less than a minute. Each implement slides on the male hitch and easily locks in place. The mount assembly also includes operator footrests and an electric power lift. The lift control switch is mounted on the FSC lever for convenient operator use, and is powered by the linear actuator on the implement hitch.

Dozer Blade

The 46-inch (117 cm) dozer blade has a five-position RH/LH angle adjustment. It is used for removal of snow, loose dirt, and gravel, and is raised and lowered automatically with the lift control switch. The dozer blade is designed to "trip" forward when striking a large object, eliminating shock to the tractor and operator. Tire chains and a soft cab are available as optional equipment.

Rotary Broom

The rotary broom has a 47-inch (119 cm) sweeping path and five-position RH/LH angle head. It is suitable for light snow removal, lawn dethatching/raking and general hard surface sweeping. It is raised and lowered automatically with the lift control switch. The rotary broom is powered by the tractor PTO through the PTO shaft, gearbox and chain final drive to brush drive shaft. Tire chains and a soft cab are available as optional equipment.

Two-Stage Snowblower

The 42-inch (107 cm) two-stage snowblower throws snow up to 40 ft (12 m). It is raised and lowered automatically with the lift control switch. The blower spout is controlled with a simple position control handle. The snowblower is powered by the tractor PTO through the PTO shaft, snowblower drive shaft, and gearbox. Tire chains and a soft cab are available as optional equipment.

Debris Blower

The debris blower is used for parking lot cleaning and leaf control. It is raised and lowered automatically with the lift control switch. The directional spout adjusts manually. The debris blower is powered by the tractor PTO through the PTO shaft. Tire chains and a soft cab are available as optional equipment.

IMPORTANT: These implements are not intended for use with Model MS tractors.

Specifications

MODEL	IMPLEMENTS
IMPLEMENT HITCH	
Height	10 in. (25 cm)
Width	33-1/2 in. (85 cm)
Length	30 in. (76 cm)
Overall Length Installed on Tractor	69-3/4 in. (177 cm)
Weight	70 lb (32 kg)
Lift	12 Volt DC Electric Ram Linear Actuator, Operated by Toggle Switch Mounted on FSC Lever
DOZER BLADE	
Height	17-1/2 in. (44 cm)
Width	46 in. (117 cm)
Length	Standard Hitch: 22-1/2 in. (57 cm) Long Hitch: 28-1/2 in. (72 cm) Longest Hitch: 35 in. (89 cm)
Overall Length Installed on Tractor	87 in. (221 cm), Typical
Weight (minimum)	102 lb (46 kg)
Lift	12 Volt DC Electric Ram Linear Actuator, Operated by Toggle Switch Mounted on FSC Lever
Hitch System	Patented Quick Hitch System
Type Blade	Multi-Purpose Blade with Reversible and Replaceable Cutting Edge, Spring Forward Trip Action with Lock Out
Angle Adjustment	Five Positions, 0° (Straight Ahead), 15° and 30° LH or RH
Body Construction	Blade Thickness: 11 Gauge Steel Frame Thickness: 3/8 in. (10 mm) Cutting Edge Thickness: 1/4 in. (6 mm)
Depth Guide	Two Adjustable, Replaceable Skid Shoes, Adjustable from 1/4 to 3/4 in. (6 to 19 mm)
ROTARY BROOM	
Height	With Broom: 18-3/8 in. (47 cm) Without Broom: 11-3/8 in. (29 cm)
Overall Width	47-3/8 in. (120 cm)
Sweeping Path Width (Brush Length)	43-1/4 in. (110 cm)
Length (With Female Hitch)	Approx. 45 in. (114 cm)
Overall Length Installed on Tractor	105-1/2 in. (268 cm)
Weight (With Female Hitch)	205 lb (93 kg)
Lift	12 Volt DC Electric Ram Linear Actuator, Operated by Toggle Switch Mounted on FSC Lever

Specifications

MODEL	IMPLEMENTS
ROTARY BROOM (continued)	
Hitch System	Patented Quick Hitch System
Type Brush	18 in. (46 cm) Diameter Polypropylene or Steel, Clockwise Rotation
Brush Drive	PTO Shaft Driving Center Mounted Gearbox
Primary Reduction	Gearbox, 2.78:1 Ratio
Secondary Reduction	#40 Chain and Sprockets, 3.27:1 Ratio
Maximum Brush Speed	260 RPM
Broom Angle Adjustment	Five Positions, 0° (Straight Ahead), 12.5° and 25° LH or RH
Working Width At Maximum Angle (25°)	39-3/16 in. (100 cm)
Ground Contact Pressure	Screw Adjustment with Viscous Damper
Body Construction	14 Gauge Steel
Capacity	Clears up to 4 in. (10 cm) snow
TWO-STAGE SNOWBLOWER	
Height (Without Chute)	20-3/4 in. (53 cm)
Width	42 in. (107 cm)
Clearing Width	42 in. (107 cm)
Length (With Female Hitch)	22-1/2 in. (57 cm)
Overall Length Installed on Tractor	95 in. (241 cm)
Weight (With Female Hitch)	210 lb (95 kg)
Lift	12 Volt DC Electric Ram Linear Actuator, Operated by Toggle Switch Mounted on FSC Lever
Hitch System	Patented Quick Hitch System
Type Blower	Two-Stage with 12-7/8 in. (33 cm) Diameter Auger and 15-3/4 in. (40 cm) Diameter, 3-Blade Impeller, Clockwise Rotation
Snowblower Drive	PTO Shaft Driving Blower Wheel
Impeller Drive	Chain, #40 Driving Sprocket: H40C11 Driven Sprocket: H40B32
Auger Drive	Worm Gearbox, 5:1 Ratio
Discharge Angle Adjustment	Chute Direction Rotation 228° by Crank, Adjustable Spout Deflector, Adjustable from Operator Seat, Up to 40 ft (12 m) Discharge Distance
Body Construction	Frame Thickness: 14 Gauge Steel Side Thickness: 11 Gauge Steel Impeller Housing Thickness: 14 Gauge Steel
Cutting Height	19 in. (48 cm)
Depth Guide	Two Adjustable, Replaceable Skid Shoes, Adjustable from 1/4 to 3/4 in. (6 to 19 mm)

Specifications

MODEL

IMPLEMENTS

DEBRIS BLOWER

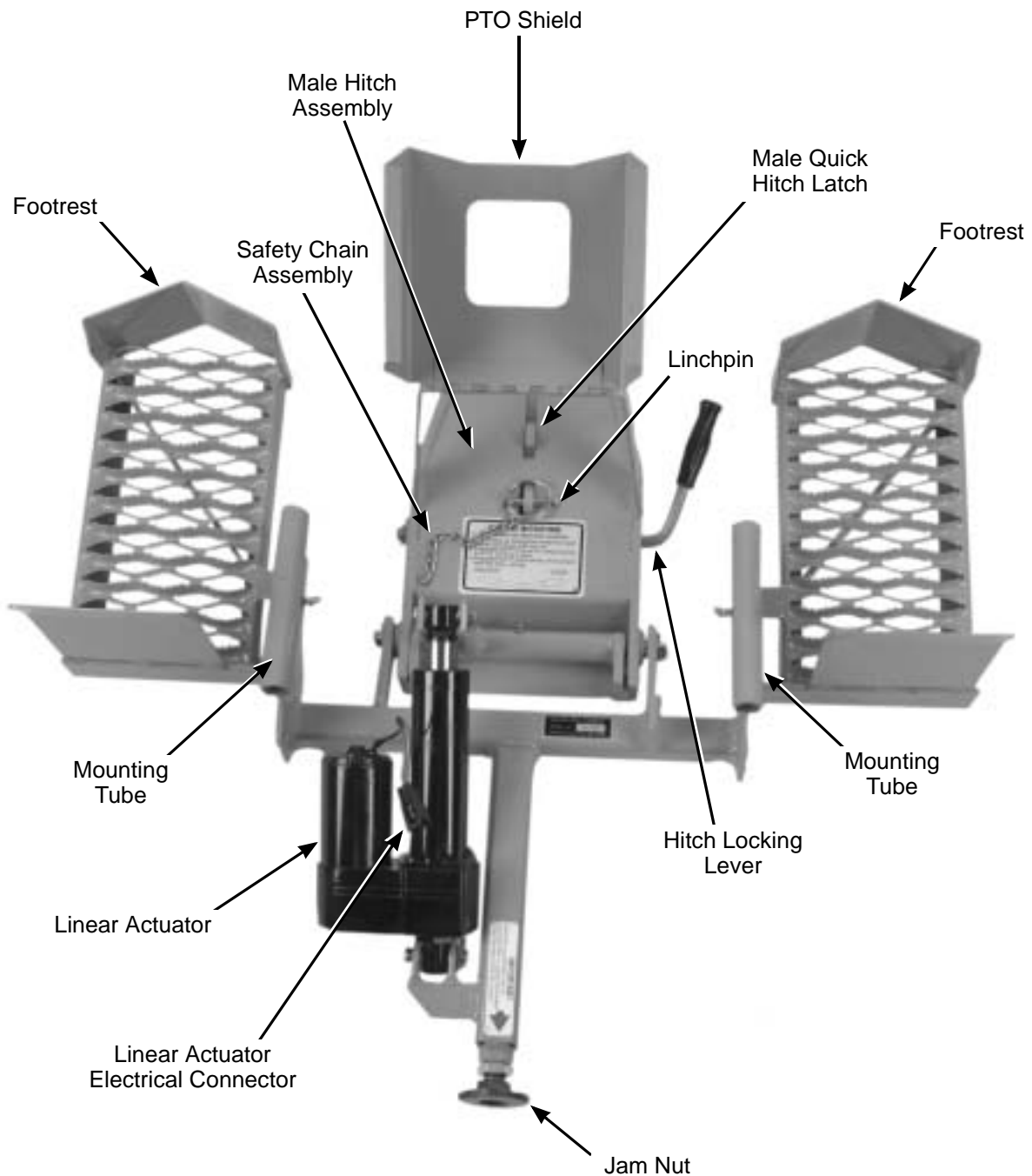
Height	28-1/2 in. (72 cm)
Width	26 in. (66 cm)
Length	34-3/4 in. (88 cm)
Overall Length Installed on Tractor	102-1/2 in. (260 cm)
Weight (With Female Hitch)	130 lb (59 kg)
Lift	12 Volt DC Electric Ram Linear Actuator, Operated by Toggle Switch Mounted on FSC Lever
Hitch System	Patented Quick Hitch System
Type Blower	13-1/2 in. (34 cm) Diameter, 8-blade Aluminum Impeller, Counterclockwise Rotation
Blower Drive	PTO Shaft Driving Blower Wheel
Recommended RPM	3600 RPM (4000 RPM Maximum)
Airflow at 4000 RPM	2000 cfm
Noise Level at 4000 RPM	Approx. 90 Dba
Approximate Required Horsepower	14 HP (10.4 kw)
Air Velocity	Mean: 125 mph (201 km/h) Maximum: 160 mph (257 km/h)
Discharge Angle Adjustment	Chute Direction Rotation 230° by Crank, Adjustable from Operator Seat
Outlet Area	25 in. ² (161 cm ²)

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

Component Identification

IMPLEMENT HITCH

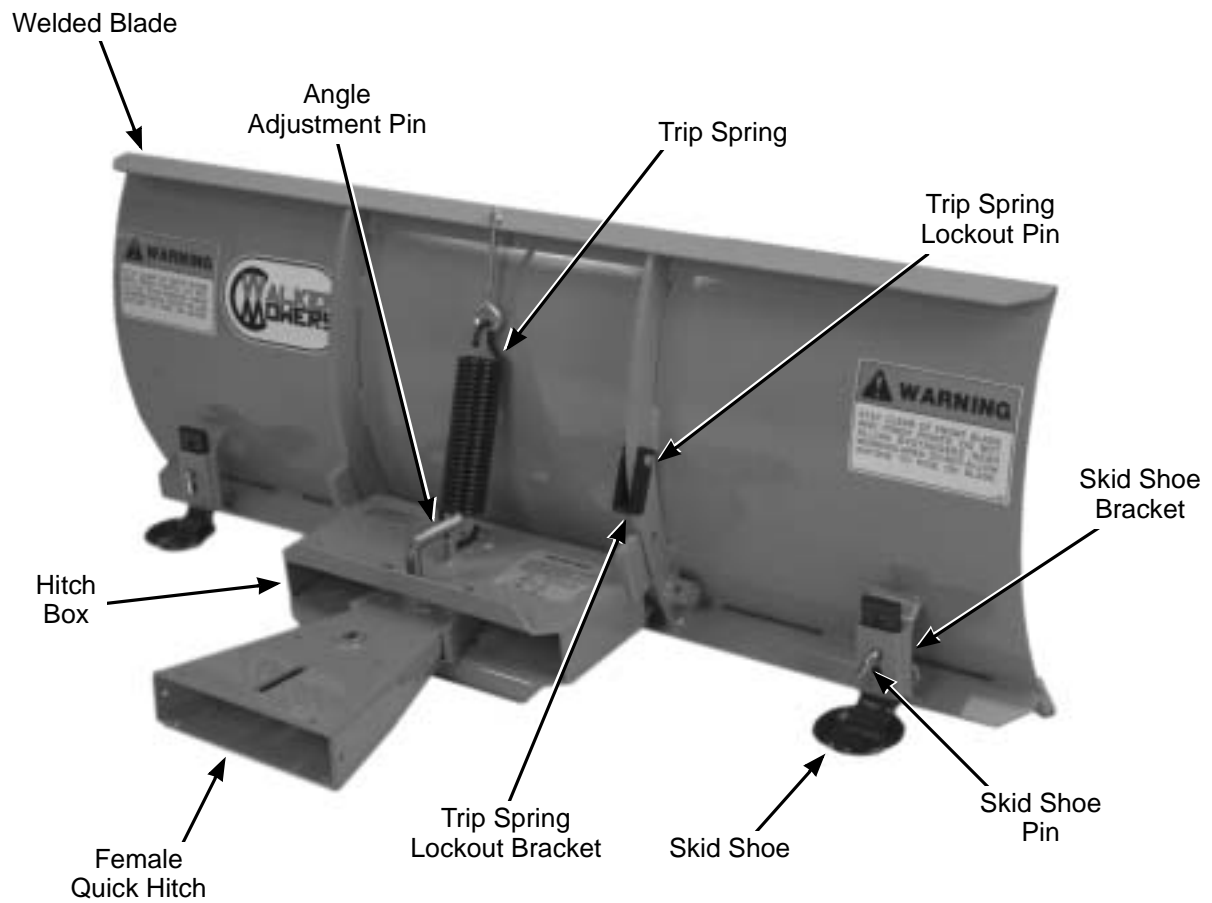
NOTE: Control Identification shown in **Operating Instructions** section and in **Illustrated Parts Manual**.



Implement Hitch Top View (Not Installed)

Component Identification

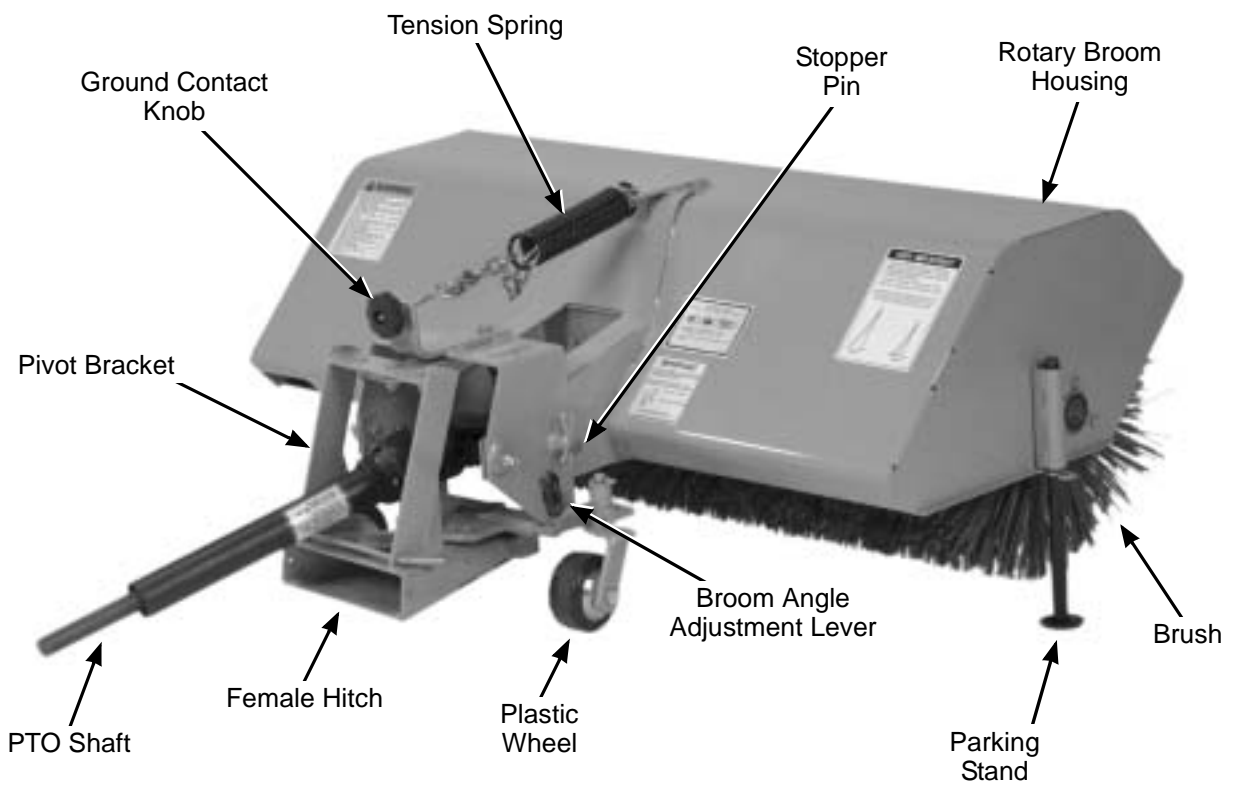
DOZER BLADE



Dozer Blade Rear View and Right Side View (Not Installed)

Component Identification

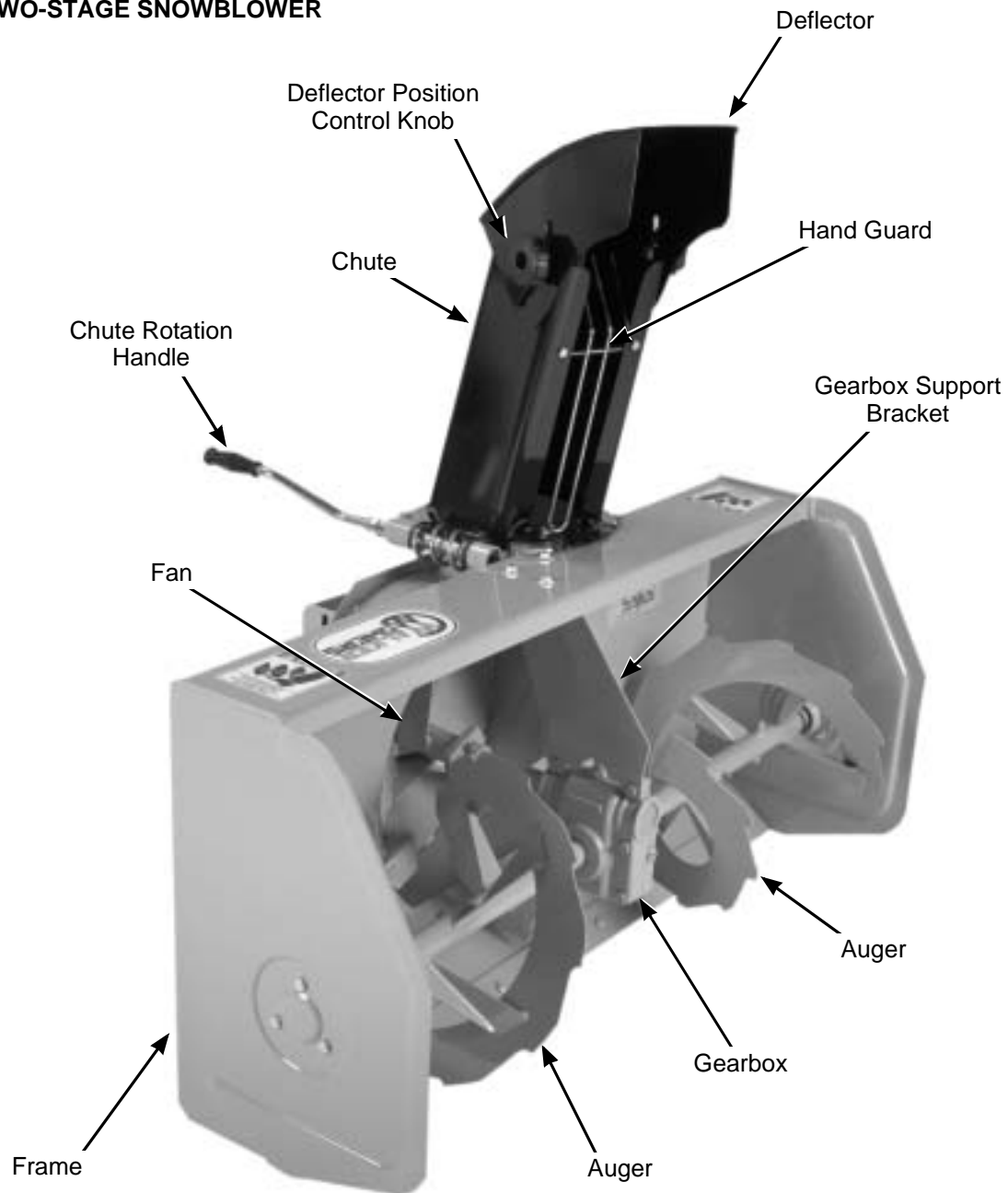
ROTARY BROOM



Rotary Broom Rear View and Right Side View (Not Installed)

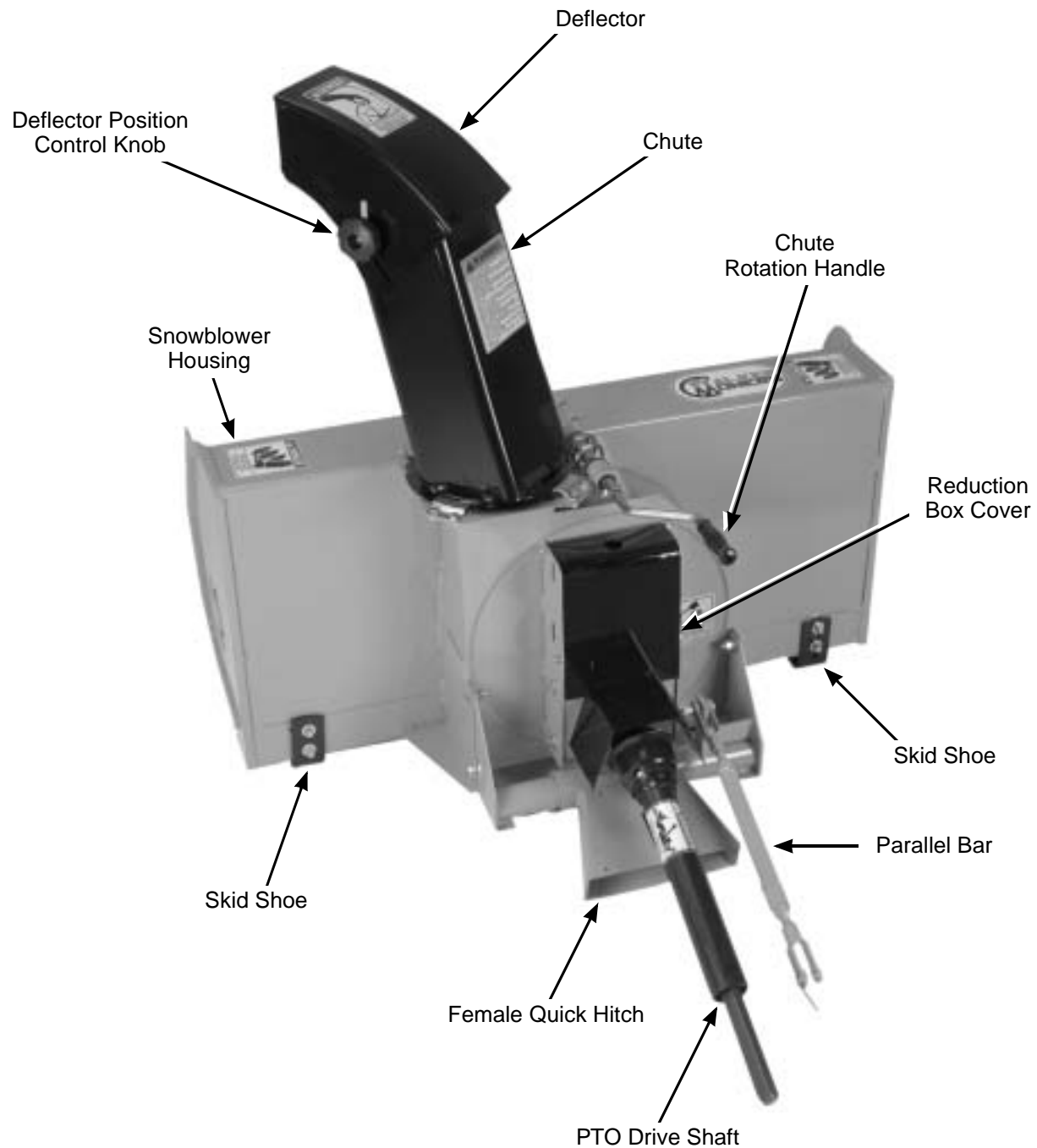
Component Identification

TWO-STAGE SNOWBLOWER



Two-Stage Snowblower Front View and Right Side View (Not Installed)

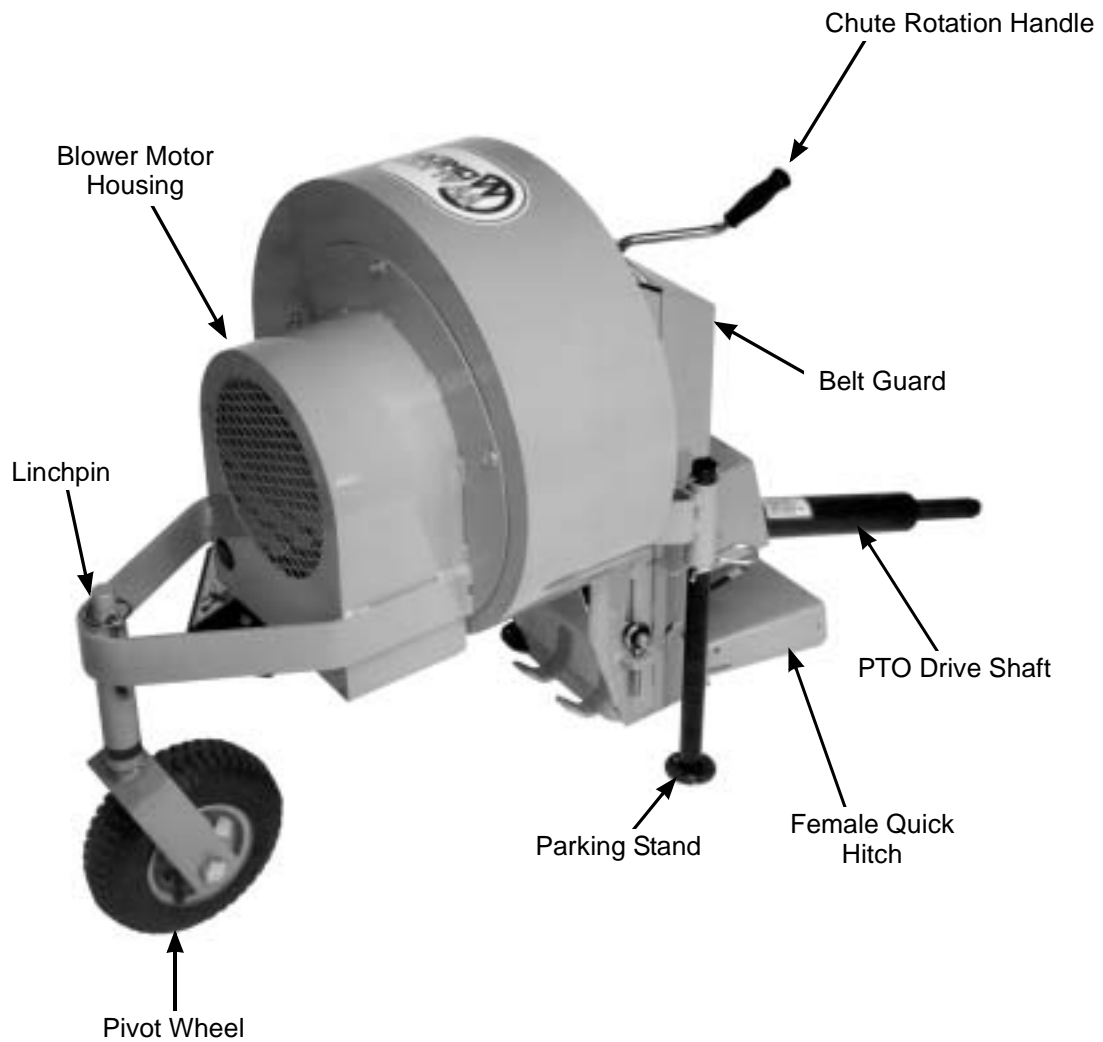
Component Identification



Two-Stage Snowblower Rear View (Not Installed)

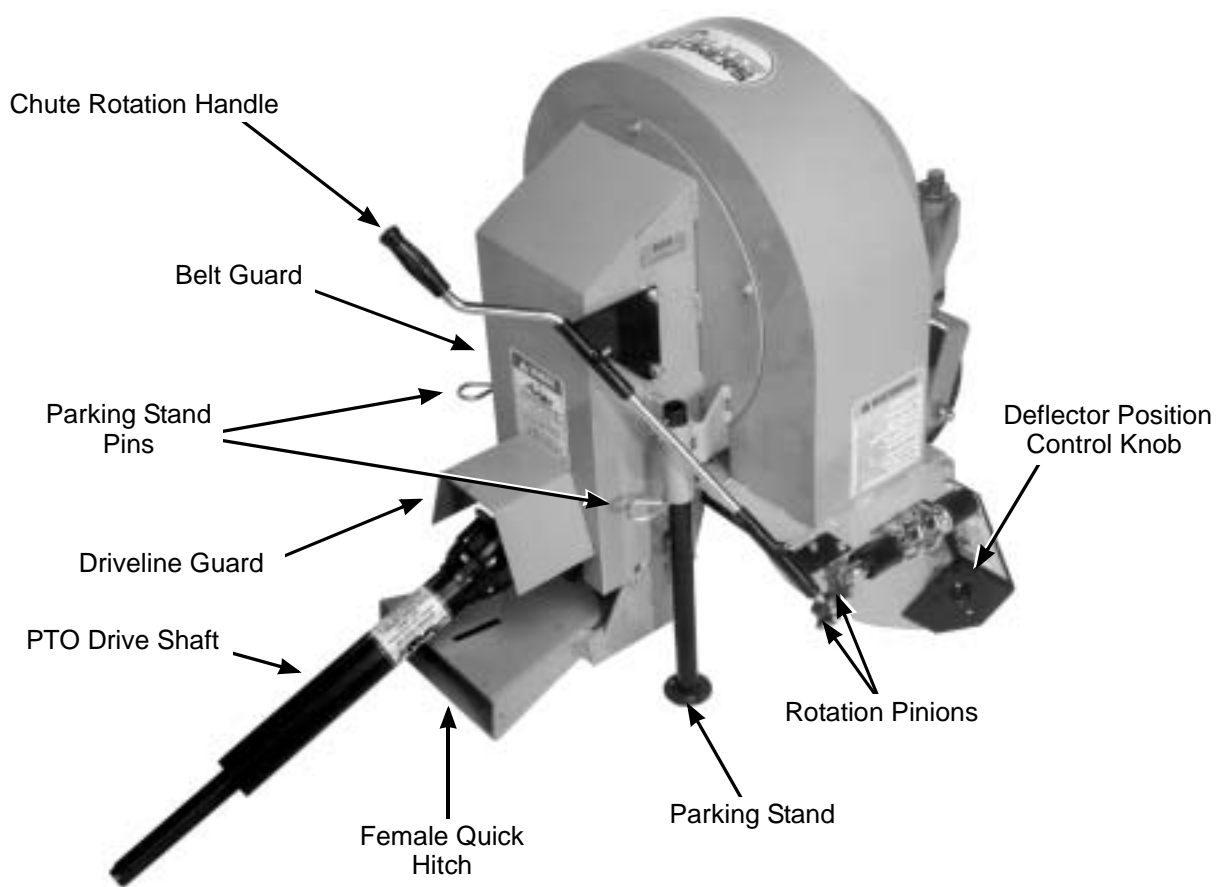
Component Identification

DEBRIS BLOWER



Debris Blower Front View and Left Side View (Not Installed)


Component Identification



Debris Blower Rear View and Right Side View (Not Installed)

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 Tractor and Implement attachments have 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 operating the machine.** Become thoroughly familiar with all 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 E. Harmony Road
Fort Collins, CO 80528

2. **Never allow children to operate or give rides on the machine.** Do not allow adults to operate without proper instruction.
3. Do not allow anyone other than the operator on the machine.
4. Keep everyone, especially children and pets, a safe distance away from the area being cleaned. **Do not operate with bystanders in the area.**
5. Do not operate the machine wearing sneakers, tennis shoes, or similar lightweight footwear. **Wear substantial protective footwear that will improve footing on slippery surfaces.**
6. The snow or leaves can sometimes hide objects that might clog the snowblower or debris blower chute, or otherwise cause damage. Clear the area of doormats, sleds, boards, wires and other debris.

Safety Instructions

7. Do not wear loose fitting clothing that could get caught in moving parts. **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.
8. 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 earmuffs or earplugs.
9. **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.
10. **Be sure any interlock switches are functioning correctly** so the engine cannot be started unless the Forward Speed Control lever is in the **NEUTRAL** position and the PTO clutch is in the **DISENGAGED** position. Also, the engine should stop if the operator lifts off the seat with the PTO clutch in the **ENGAGED** position.
11. **Never attempt to make any adjustments while the engine is running**, except where specifically instructed to do so.
12. **Handle gasoline or diesel fuel 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.

OPERATING

NOTE: Refer to the **Walker Rider Lawnmowers OWNER'S MANUAL** for safety instructions for operating the tractor.

1. Operate the machine only in daylight or in good artificial light with good visibility of areas being cleaned.
2. Sit on the seat when starting the engine and operating the machine. Keep feet on footrests at all times when the tractor is moving and/or the implement is operating.
3. An inexperienced operator should **learn to steer (maneuver) the tractor with a slow engine speed before attempting any operating.** Be aware that, with the front mounted implement configuration, the back of the machine 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. Disengage the PTO clutch and put the FSC in the **NEUTRAL-PARK** position before starting the engine (an ignition interlock switch normally prevents starting of the tractor if these controls are in the **OPERATING** position).
6. **Do not run the engine in a confined area without adequate ventilation.** Exhaust fumes are hazardous and can be deadly.
7. **Do not carry passengers** - maximum seating capacity is one (1) person.
8. Make sure the auger, brush, or debris blower is clear of snow, ice, or debris before engaging the PTO clutch.
9. Be careful never to throw snow or blow debris towards people or cars, and never allow anyone in front of the implement.
10. Watch out for hazards hidden under snow or leaves that could enter the chute or blower while operating.
11. **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.

Safety Instructions

12. Disengage the PTO clutch when transporting the machine.
13. Do not operate across the face of slopes. Use extreme caution when changing direction on slopes. Do not attempt to clear steep slopes.

14. **Never adjust gauge wheels or skid shoes with the engine running.** Before adjusting height or servicing, disengage the PTO clutch, stop the engine, and remove the ignition key. Wait for all movement to stop before getting off the seat.

NOTE: The PTO brake should normally stop drive line rotation within 5 seconds of disengaging the PTO clutch.

15. Do not operate the snowblower with the blower spout assembly removed.
16. If snowblower clogs:
 - a. Disengage the PTO clutch, stop the engine, and remove the ignition key before leaving the seat.
 - b. **LOOK** to make sure PTO shaft and auger movement has stopped before trying to unclog the snowblower.
 - c. Disconnect the fuel solenoid wire [diesel engines] or spark plug wire(s) [gasoline engines].
 - d. **Do not use hands or feet to unclog** the snowblower - use a stick or similar tool.

17. If the implement strikes a solid object or the machine begins to vibrate abnormally, **immediately disengage the PTO clutch, stop the engine, and wait for all moving parts to stop.** Disconnect the fuel solenoid wire [diesel engines] or the spark plug wire(s) [gasoline engines] to prevent accidental starting. Thoroughly inspect the implement and repair any damage before restarting the engine and operating the machine. Make sure implement components are in good condition and all bolts are tight.

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 PTO clutch, stop the engine, and remove the ignition key.

MAINTENANCE

NOTE: Refer to the **Walker Rider Lawnmowers OWNER'S MANUAL** for proper tractor maintenance procedures.

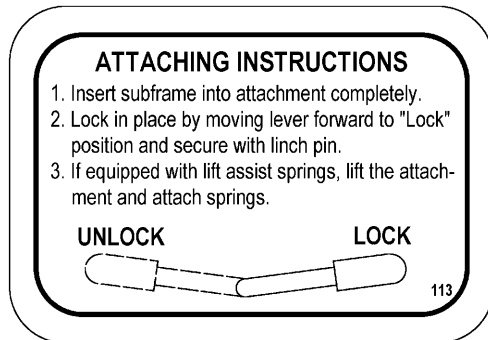
1. **To prevent accidental starting of the engine** when servicing or adjusting the machine, remove the key from the ignition switch and disconnect the fuel solenoid wire [diesel engines] or the spark plug wire(s) [gasoline engines].
2. **To reduce fire hazards**, keep the engine free of grass, leaves, excessive grease, and dirt.
3. Keep all nuts, bolts, and screws tight **to ensure the machine is in a safe, working condition.**
4. **Perform only maintenance instructions described in this manual.** Unauthorized maintenance operations or machine modifications may result in unsafe operating conditions.
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 proper engine service manuals when working on the engine.** Unauthorized maintenance operations or modifications to the engine may result in unsafe operating conditions.
7. Altering the machine 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.

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 Manual; the Decal Location is shown in the Parts Manual.



Attaching Hitch
(Walker P/N I393)
(RAD P/N 657364)



PTO Shield (Walker P/N 7822)



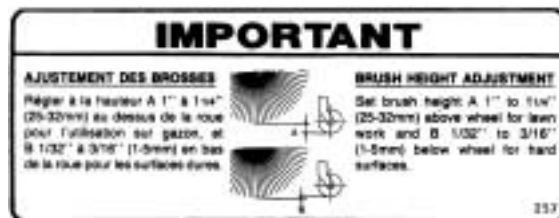
Hitch Mount Adjust
(Walker P/N 6618)



Rotating Driveline
(Walker P/N I395)
(RAD P/N 657763)



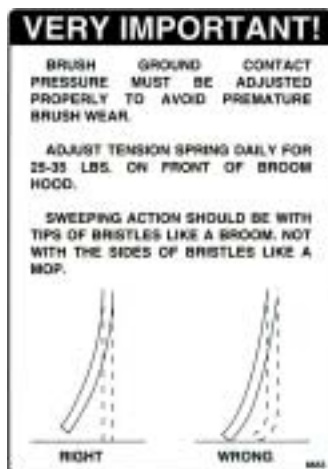
Implement Hitch
(Walker P/N 6632)



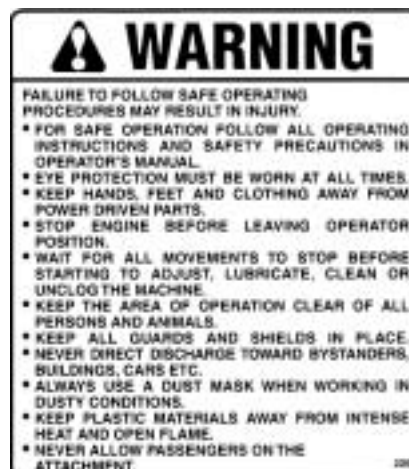
Brush Height (RAD P/N 661521)



Important - Avoid Damage
(RAD P/N 660328)



Brush Ground Contact
(RAD P/N 661052)



Safety Procedures
(RAD P/N 660988)

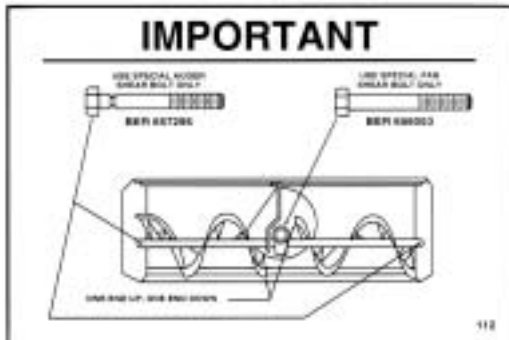


Rotating Auger
(Walker P/N I394)
(RAD P/N 657762)

Safety Instructions

SAFETY, CONTROL, AND INSTRUCTION DECALS

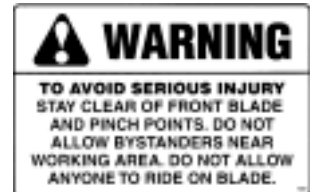
Safety, Control, and Instruction Decals are installed on the machine. If any are missing, illegible, or damaged, a replacement should be ordered and installed before putting the machine into operation. The Decal Part Number is listed below and in the Parts Manual; the Decal Location is shown in the Parts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



Use Shear Bolts (RAD P/N 657346)



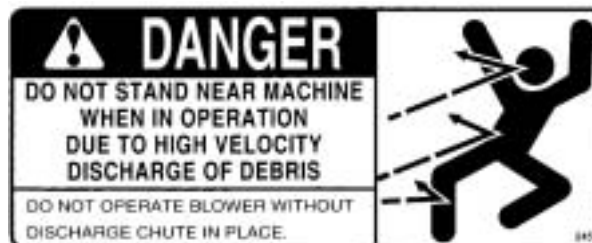
Trip Spring Lockout (RAD P/N 657503)



Stay Clear Blade (RAD P/N 657524)



Lubricate Chain (RAD P/N 657804)



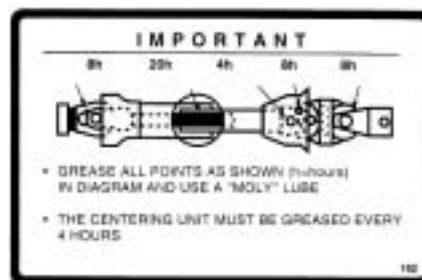
Danger, High Velocity (RAD P/N 661248)



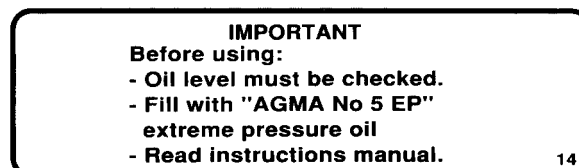
Keep Hands Out (Walker P/N I396) (RAD P/N 657764)



Avoid Serious Injury (RAD P/N 661247)



Grease All Points (RAD P/N 6586708)



Check Oil Level (RAD P/N 655683)



Drive Belt Injury (RAD P/N 660265)

Assembly Instructions

SETUP INSTRUCTIONS

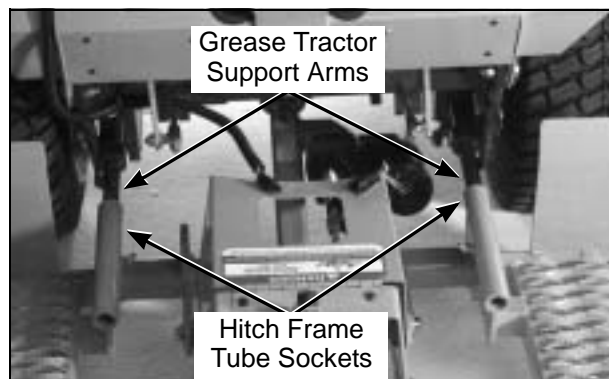
Walker Implements are shipped partially assembled. After uncrating the implement adaptor and/or implement(s), initial setup is required.

NOTE: During the process of unpacking, any damaged or missing parts should be noted and reported to the delivering carrier immediately (put in writing within 15 days). The carrier will provide directions for proceeding with a claim to receive compensation for damage.

IMPLEMENT HITCH

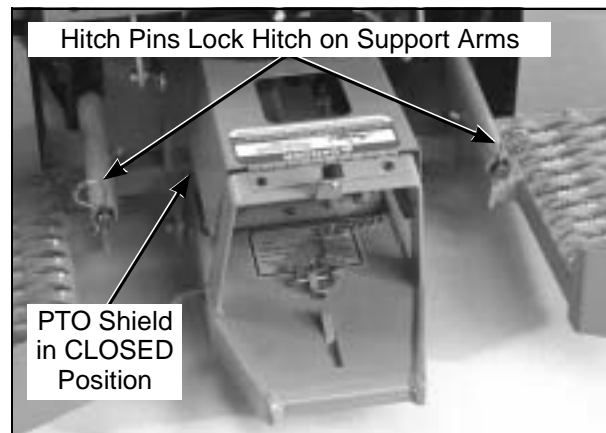
Implement Hitch Installation

1. Remove the mower deck from the tractor if necessary. Refer to the appropriate Tractor Owner's Manual.
2. Lightly grease each tractor support arm (2) on the tractor. Refer to **Implement Hitch Installation** photo for location of tractor support arms.
3. Engage the hitch frame tube sockets on the tractor support arms. Slide the implement hitch onto the support arms approximately 3 in. (76 mm).
4. Install the hitch pin through the hole on the end of each support arm to lock the hitch in place. Two (2) hitch pins are included in the owner's packet of materials.



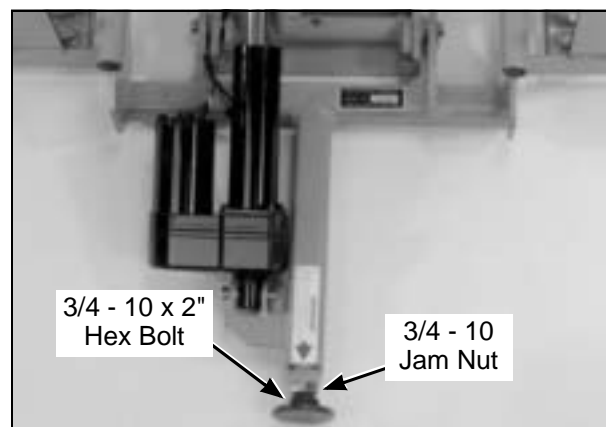
Implement Hitch Installation

IMPORTANT: If the tractor body needs to be raised, the PTO shield must be in the **closed or down position** and the implement must be in the **lowered position**. The only time the PTO shield needs to be open or raised is when connecting or disconnecting the driveline for the rotary broom, snowblower, or debris blower.



PTO Shield in CLOSED Position

5. Loosen the 3/4-10 jam nut on the end of the implement Hitch. Adjust the 3/4-10 x 2 in. hex bolt until it contacts the cross-member of the tractor frame. Securely tighten the 3/4-10 jam nut to prevent the bolt from moving.



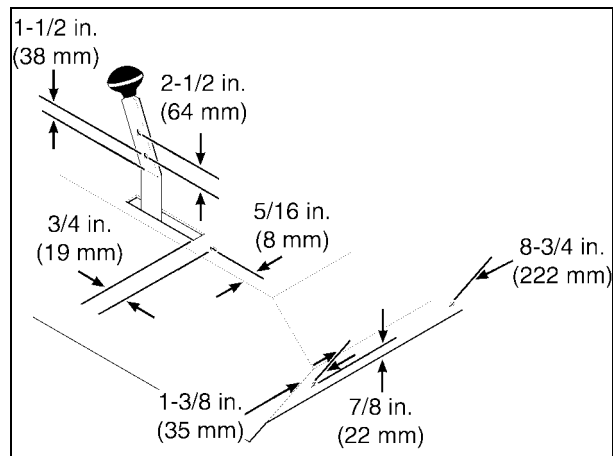
Implement Hitch Jam Nut Adjustment

IMPORTANT: This adjustment will need to be made only once if the same tractor and hitch are used together. If the hitch will be used on more than one tractor, this adjustment will be required every time the hitch is mounted on a different tractor.

Assembly Instructions

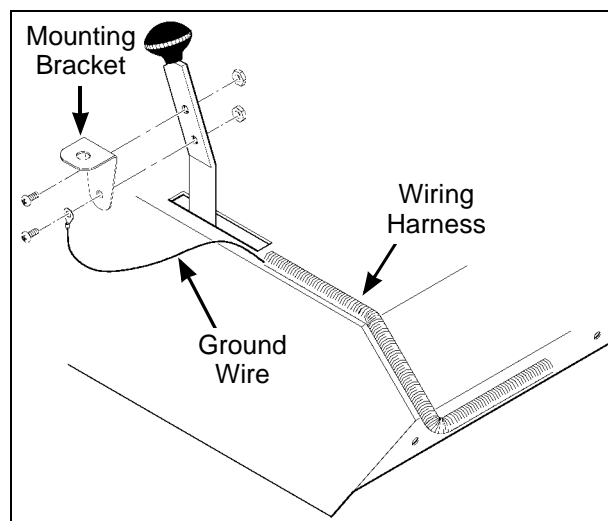
Implement Hitch Wiring

1. Drill five (5) 13/64 in. (5 mm) diameter holes in the tractor, two in the FSC lever and three in the body, as shown in the illustration.



Drill Holes for Implement Hitch Wiring

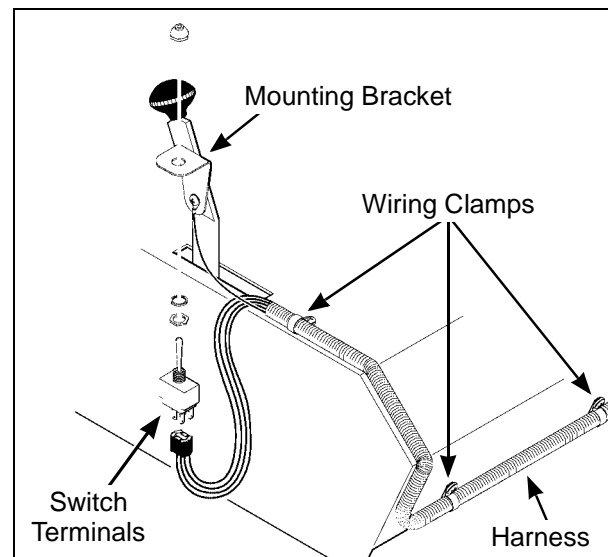
2. Attach the toggle switch mounting bracket on the FSC lever using two (2) 10-24 x 1/2 in. bolts and Keps nuts. Connect the green ground wire from the actuator wiring harness to one of the bolts of the switch mounting bracket.



Attach Toggle Switch Mounting Bracket

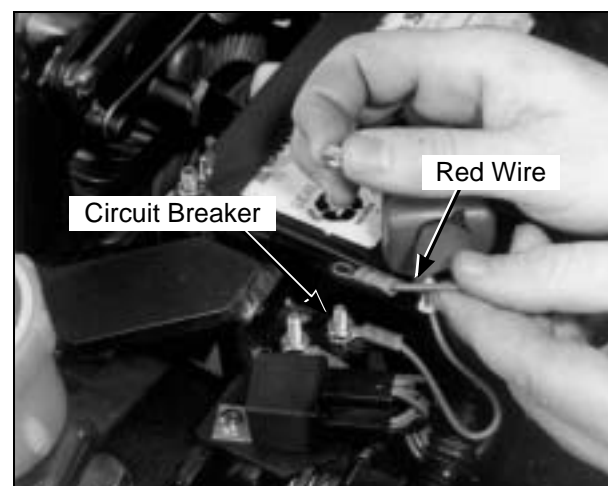
3. Install the wiring harness to the tractor body using the three wiring clamps, three 10-24 x 3/8 in. bolts and Keps nuts.

4. Attach the toggle switch to the mounting bracket, placing the switch terminals toward the **front** of the mower.



Attach Wiring Harness and Toggle Switch

5. On Models MC, MDD/MDG, and MT, connect the harness red wire to the load side of the circuit breaker mounted on the bracket behind the battery.

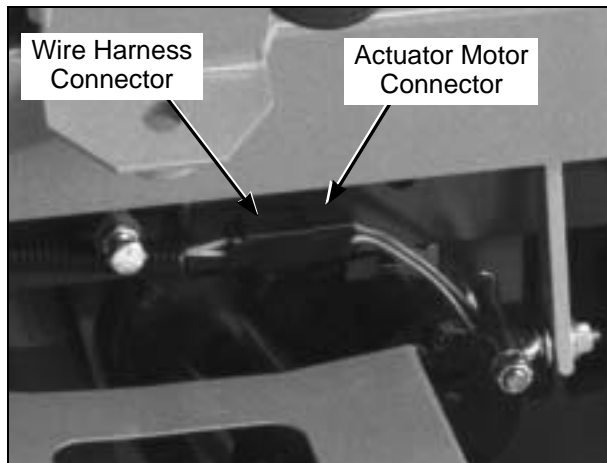


Connect Harness Wire to Circuit Breaker

IMPORTANT: For all 1987-1997 Model MC tractors (with Kohler Magnum engine), connect the harness red wire to the free connector of the PTO clutch switch red wire. Refer to **Implement Hitch Wiring Diagram** illustration.

Assembly Instructions

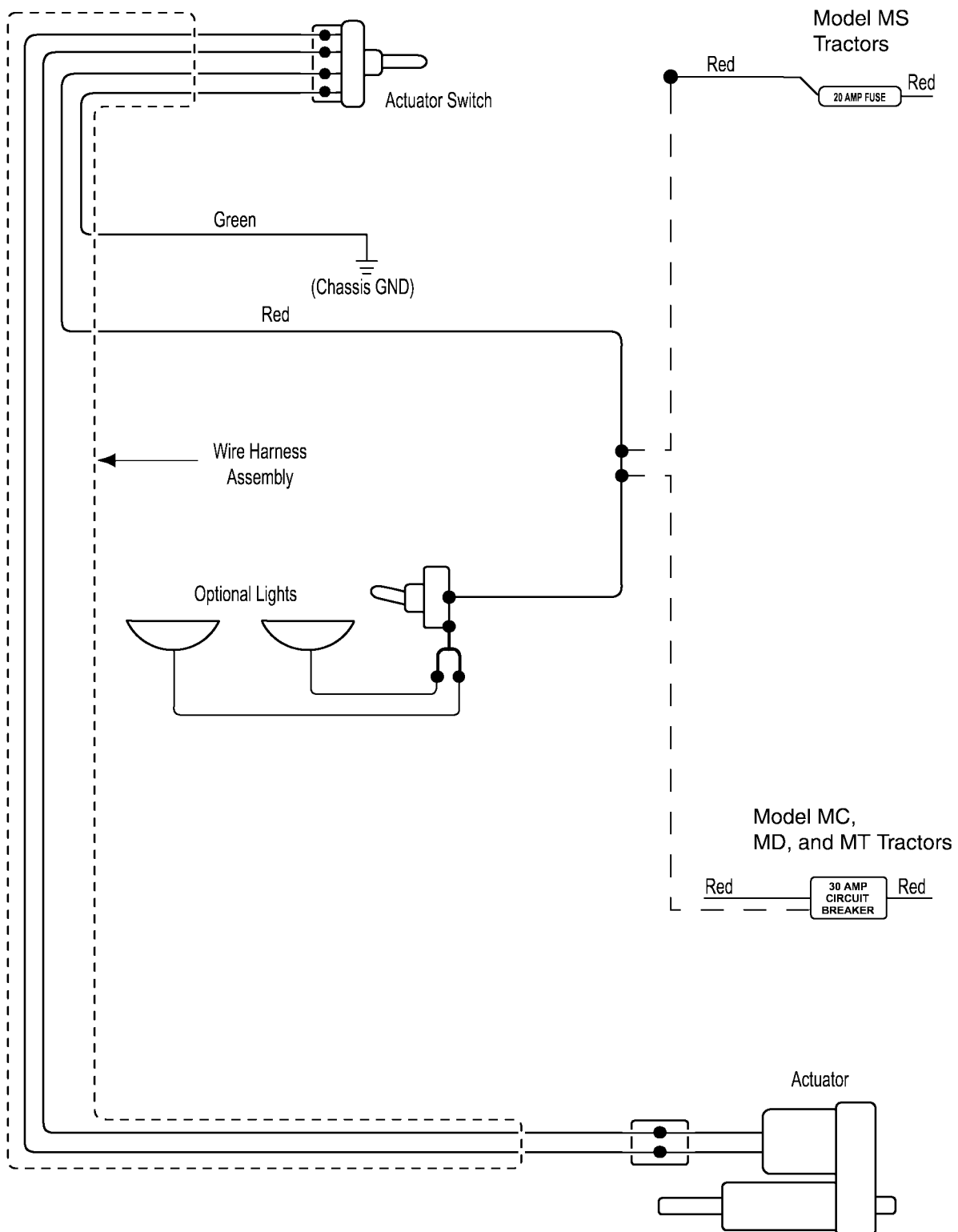
6. Complete the wiring by connecting the wiring harness ends to the toggle switch and to the actuator motor of the implement hitch.



Complete Implement Hitch Wiring

7. Move the implement lift switch backward to raise the implement hitch to the **UP** position.
8. Move the implement lift switch forward to lower the implement hitch to the **DOWN** position.
9. Raise and lower the hitch a few times to check the operation and make sure it moves smoothly. If not, make sure the wiring harness ends are connected properly and securely. Refer to **Implement Hitch Wiring Diagram** illustration.

Assembly Instructions



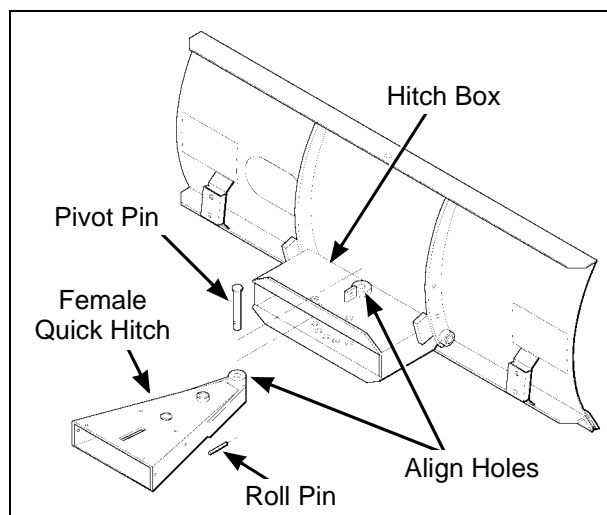
Implement Hitch Wiring Diagram

Assembly Instructions

DOZER BLADE

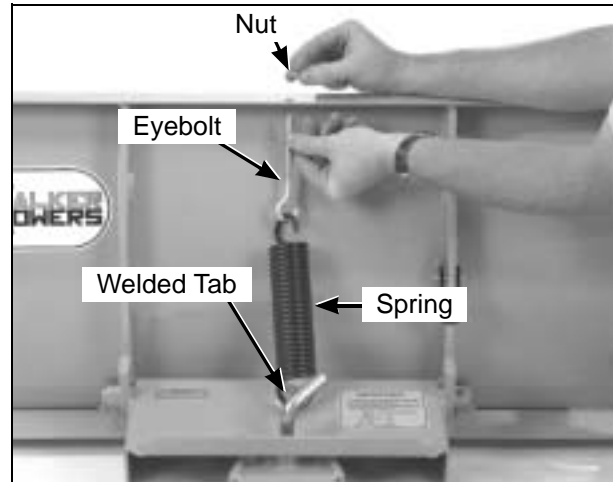
Dozer Blade Assembly

1. Insert the female quick hitch into the hitch box on the blade attachment.
2. Align the single hole at the end of the female quick hitch with the single hole in the hitch box and insert the pivot pin through both holes. Secure the pivot pin on the underside with a 1/4 x 1 in. roll pin.



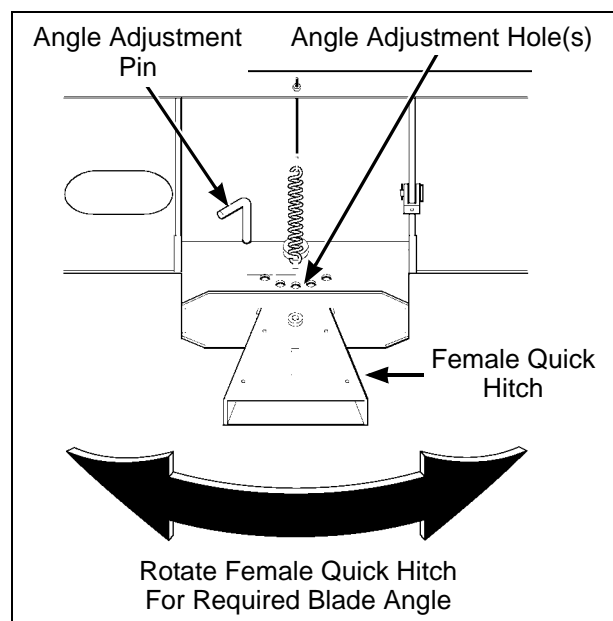
Insert Female Hitch into Blade Attachment

3. Hook one end of the spring onto the welded tab on the hitch box. Hook the eyebolt onto the free end of the spring.
4. Insert the eyebolt up through the hole in the upper bend of the blade and secure it with a flat washer and nut. Adjust the length of the eyebolt according to the amount of spring tension required for safe operation. Refer to **Trip Spring** in **Operating Instructions**.



Attach Spring to Blade Assembly

5. Insert a 3/16 x 1 in. split spring pin into the angle adjustment pin.
6. Rotate the female quick hitch to obtain the required blade angle. Align the hole in the center of the female quick hitch with one of the five (5) holes in the hitch box, and insert the angle adjustment pin through the top and bottom holes. Refer to **Angle Adjustment Pin** in **Operating Instructions**.

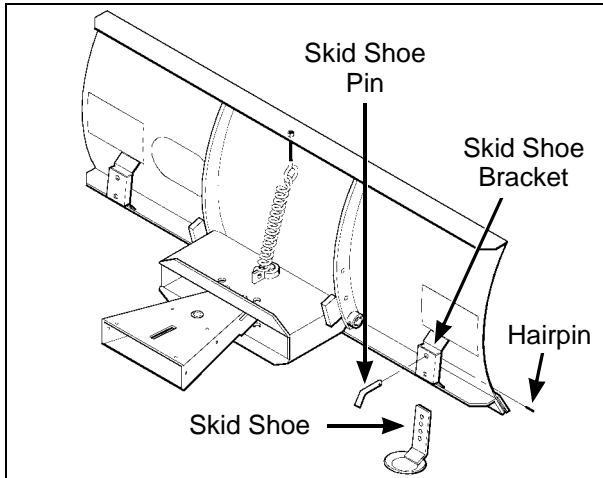


Insert Adjustment Pin and Set Blade Angle

7. Install the two (2) skid shoes in the two brackets on the rear outer edges of the blade.

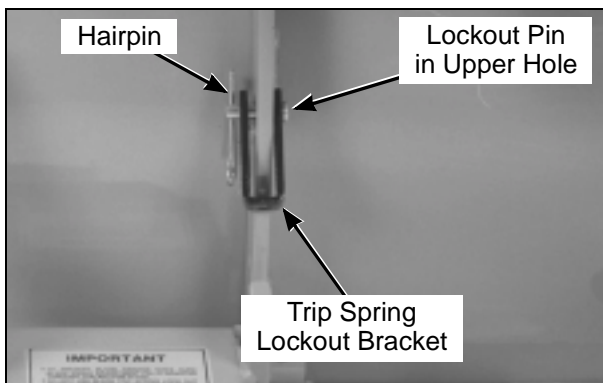
Assembly Instructions

8. Adjust the skid shoes to allow the required clearance under the blade. Install a skid shoe pin in each shoe and lock in place with a 4 mm x 80 mm hairpin. Refer to **ADJUSTMENTS of Dozer Blade Skid Shoes** in **Maintenance Instructions**.



Install Skid Shoes

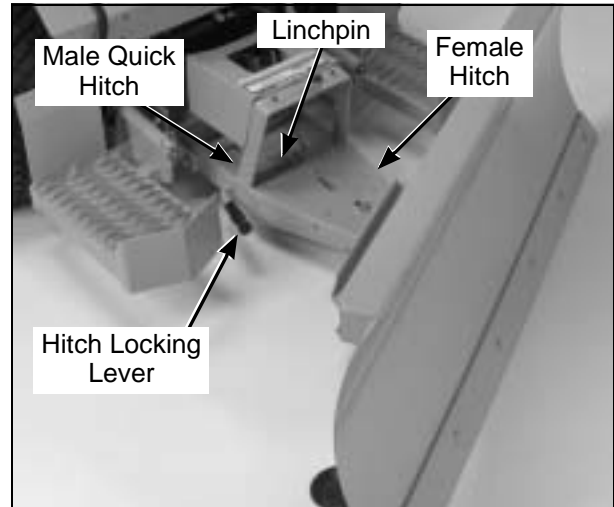
9. Install the trip spring lockout bracket in the upper hole behind the blade using the lockout pin and hairpin.



Install Trip Spring Lockout Bracket

Dozer Blade Installation

1. Insert the male quick hitch section of the implement hitch into the female hitch of the blade. Lock in place by moving the hitch locking lever **fully forward** to the **LOCKED** position. Secure the male quick hitch latch with the linchpin. Refer to **Hitch Locking Lever** in **Operating Instructions**.



Attach Blade to Tractor

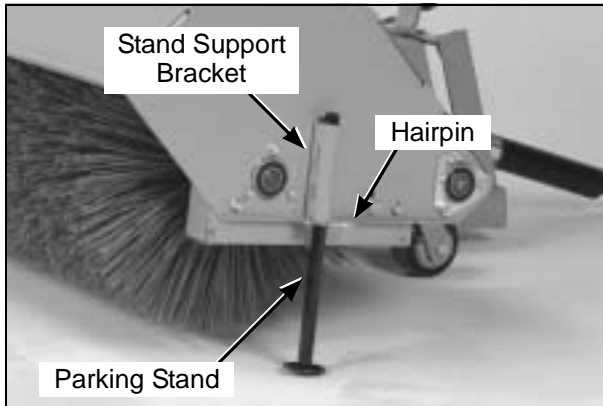
2. To install the optional tire chains:
 - a. Remove the tractor wheels.
 - b. Attach the tire chains to the wheels.
 - c. Place the wheel spacer plates on the lug bolts. The wheel spacer plates provide clearance for the chains between the tires and the tractor body.
 - d. Place the wheels back on the tractor.
 - e. Reinstall and tighten the lug bolts.

ROTARY BROOM

Rotary Boom Installation

1. Insert a parking stand into each stand support bracket from the underside. Install a 5/32 x 1-1/4 in. cotter pin in the upper hole of each parking stand. Set the parking stands in their **most extended position** and **secure each stand** with a 4 mm x 80 mm hairpin.
2. Check the pivot lock pin and make sure it is in the **innermost position** to prevent bulking of the female hitch member, and to facilitate quick hitch attachment.

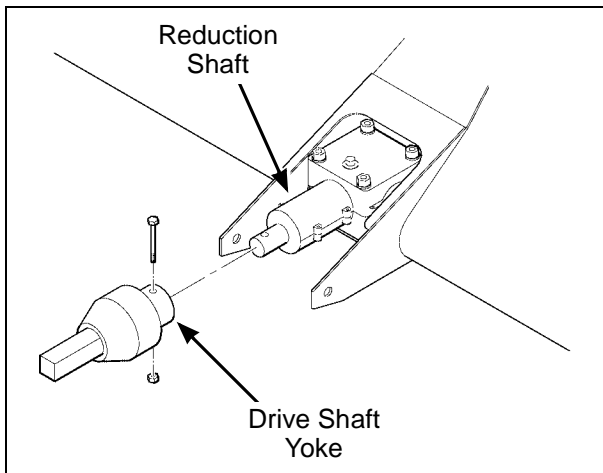
Assembly Instructions



Prepare Rotary Broom for Installation

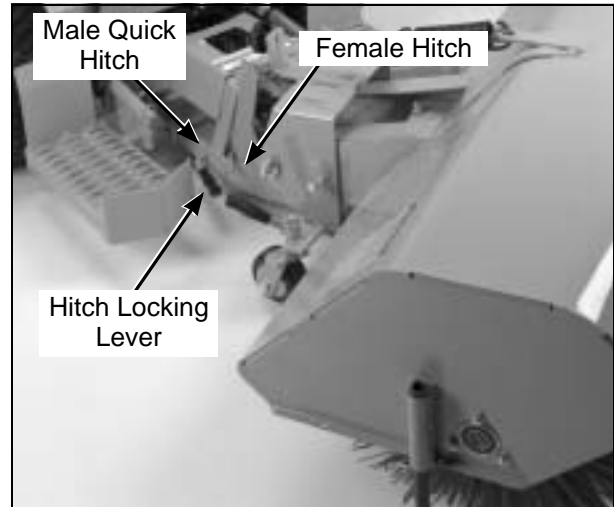
3. Attach the female broom driveline half (with quick connect yoke) over the male broom driveline half. Set the driveline on its support.

NOTE: Driveline sliding surfaces must be greased.



Assemble Rotary Broom Driveline

4. Insert the male quick hitch section of the implement hitch into the female quick hitch of the rotary broom and place the male quick hitch lever **fully forward** to the **LOCKED** position. Secure the male quick hitch latch with the linchpin. Refer to **Hitch Locking Lever** in **Operating Instructions**.

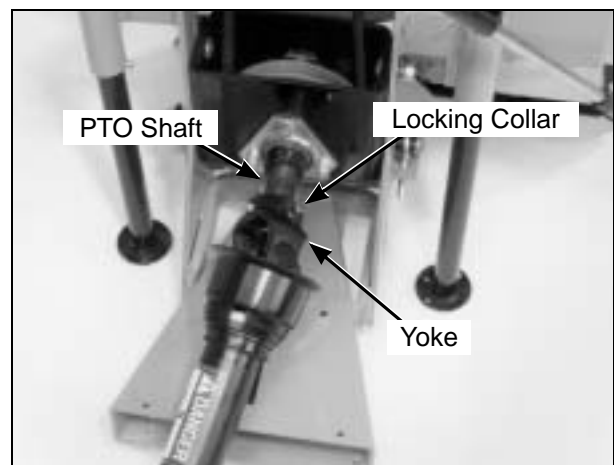


Attach Broom to Implement Hitch

5. Connect the broom driveline to the tractor PTO shaft by sliding back the locking collar on the yoke, then push the yoke over the PTO shaft until the locking collar **snaps back fully**. Make sure the driveline is well secured at both ends.

DANGER

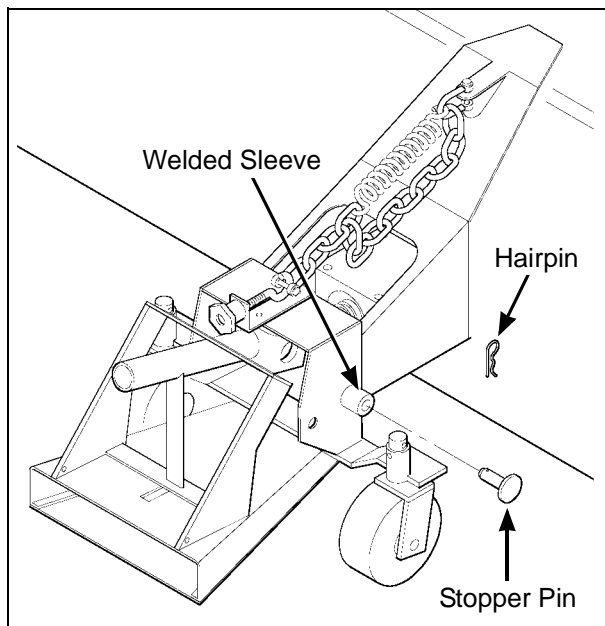
This shaft turns at very high RPM. If the collar is not locked to the PTO shaft at the tractor end, or if the yoke at the broom end is not secured properly, the driveline can fly loose with great force capable of causing serious injury or death.



Connect Broom Driveline to Tractor PTO Shaft

Assembly Instructions

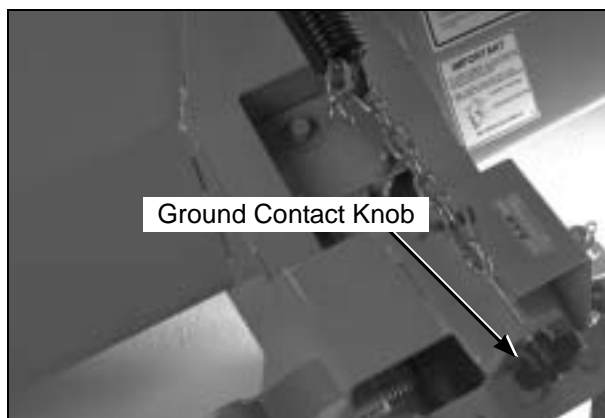
6. Remove the hairpin from the welded sleeve on the right hand side of the broom mounting bracket. Carefully pull out the stopper pin to its **most extended position** and lock in place with the hairpin.



Lock Stopper Pin in Place

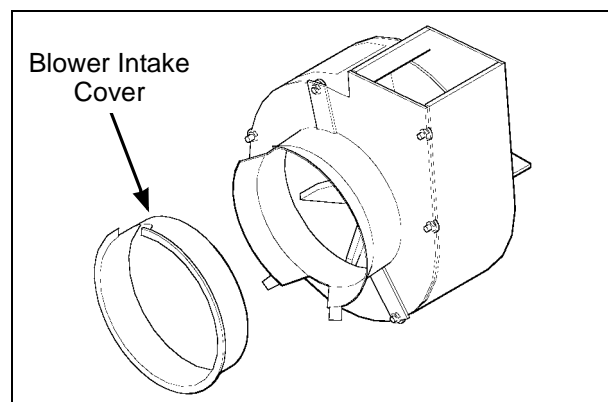
NOTE: The pin in the innermost position is used to prevent the female hitch on the broom from being pulled up by the brush ground contact adjustment spring, thus facilitating mounting and dismounting of the broom.

7. Adjust brush ground contact by threading knob. Refer to **Ground Contact Knob** in **Operating Instructions**.



Adjust Brush to Ground Contact

8. Retract the parking stands and secure with the hairpins prior to operation.
9. To install the optional tire chains:
 - a. Remove the tractor wheels.
 - b. Attach the tire chains to the wheels.
 - c. Place the wheel spacer plates on the lug bolts. The wheel spacer plates provide clearance for the chains between the tires and the tractor body.
 - d. Place the wheels back on the tractor.
 - e. Reinstall and tighten the lug bolts.
10. For GHS (Grass Handling System) equipped Walker tractors, install a blower intake cover in the blower intake tube. The cover "unloads" the blower and seals the intake to effectively eliminate power loss and noise when the blower is not being used.



GHS Blower Intake Cover

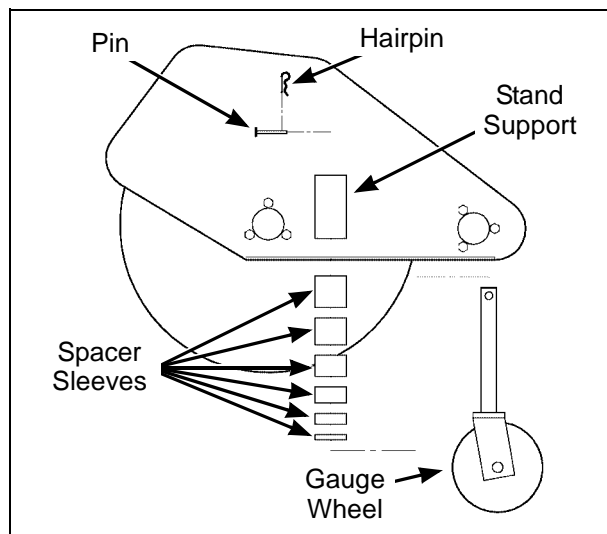
11. For stability of the tractor when transporting with the rotary broom in raised position, approximately 80 lb (36 kg) of counterweight should be installed on the tail of the tractor. Optional tail weights for the various tractor models are available from your Walker dealer or a sandbag or similar weight may be used.

Optional Gauge Wheel Installation

NOTE: Gauge wheels are required for lawn work or heavy loads.

Assembly Instructions

1. Remove the pin and hairpin from each gauge wheel. Select the required number of spacer sleeves to remain on the bottom portion of the gauge wheels. Refer to **ADJUSTMENTS of Rotary Broom Gauge Wheels in Maintenance Instructions**.
2. Remove the parking stands and replace them with the gauge wheels. Place the remaining spacer sleeve(s) over the gauge wheels on the upper part of the stand supports, and secure the gauge wheels with the pins and hairpins.

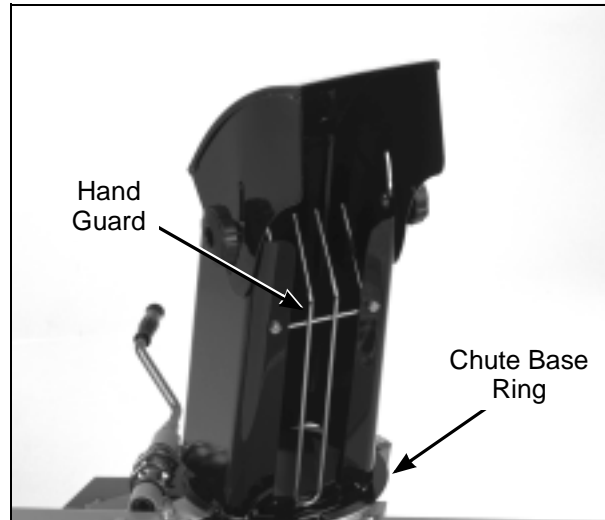


Optional Gauge Wheel Installation

TWO-STAGE SNOWBLOWER

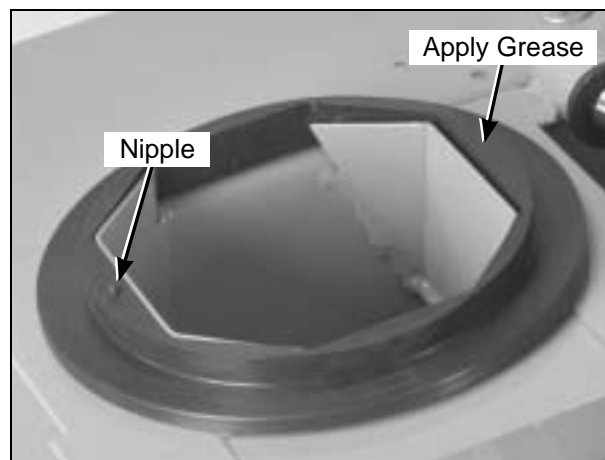
Snowblower Assembly

1. Install the hand guard on the chute, with the top section inside the chute and the bottom section outside the chute base ring. Place two (2) 1/4 x 3/4 in. bolts through the chute and the hand guard. Secure with a flat washer, lock washer, and nut. Position the bolt with the head on the outside of the chute and the nut on the inside. Torque both bolts to 10 ft-lb. (13.6 N·m).



Install Hand Guard on Chute

2. Remove the bushing support from the chute base lip and discard the existing bolt (refer to **Install Rotation Worm Assembly** photo).
3. Place the plastic anti-friction insert over the chute base (placing the nipple on the upper side towards the center of the fan housing). Only one position provides a perfect fit. Apply grease on top of the insert where it will contact the chute base.

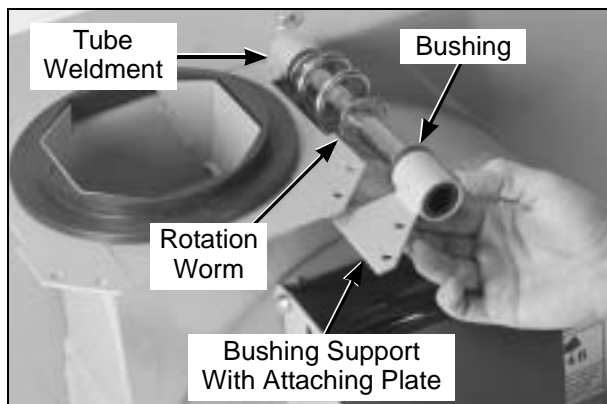


Install Plastic Insert over Chute Base Lip

4. Insert the 1-5/16 in. (33 mm) plastic bushing into the tube weldment.

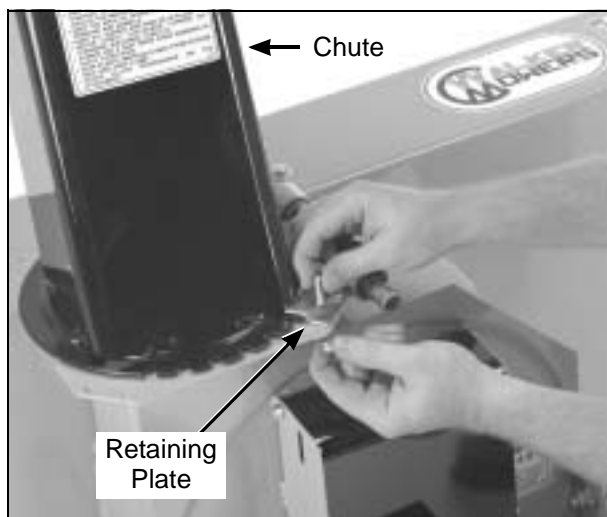
Assembly Instructions

5. Insert the 1-11/16 in. (43 mm) plastic bushing into the bushing support and place this over the shaft on the rotation worm.
6. Install the rotation worm assembly through the tube weldment with the attaching plate of the support on the underside of the chute base lip.



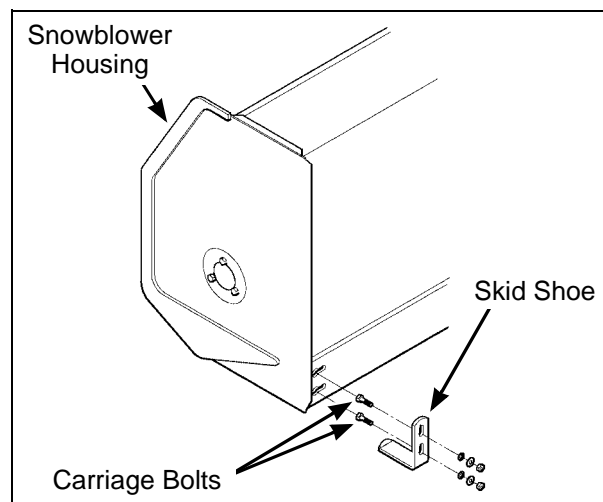
Install Rotation Worm Assembly

7. Install the chute over the plastic insert and secure with four retaining plates, using two (2) 1/4 x 1/2 in. bolts, lock washers, and nuts in each of the three (3) standard retaining plates, and two (2) 1/4 x 3/4 in. bolts, lock washers and nuts in the rear right retaining plate which also secures the support. Torque all bolts to 10 ft-lb. (13.6 N·m).



Install Chute over Plastic Insert

8. Insert two (2) 5/16 x 1 in. carriage bolts through each of the skid shoes from inside the bend. Place a flat washer, lock washer, and nut loosely on each bolt and place the bolt heads through the round holes in the outer ends of the bottom angle of the snowblower body. Adjust the skid shoes to allow the required clearance under the cutting edge. Slide the square shank portion of the bolt head into the slot and torque to 19 ft-lb (25.8 N·m). Refer to **ADJUSTMENTS of Two-Stage Snowblower Skid Shoes** in **Maintenance Instructions**.

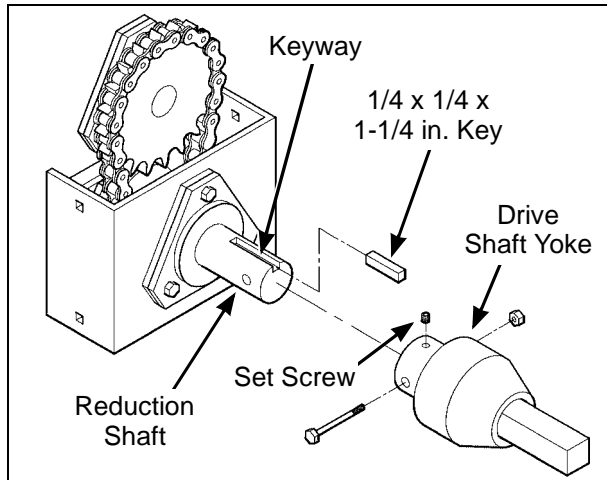


Install Skid Shoes

Snowblower Installation

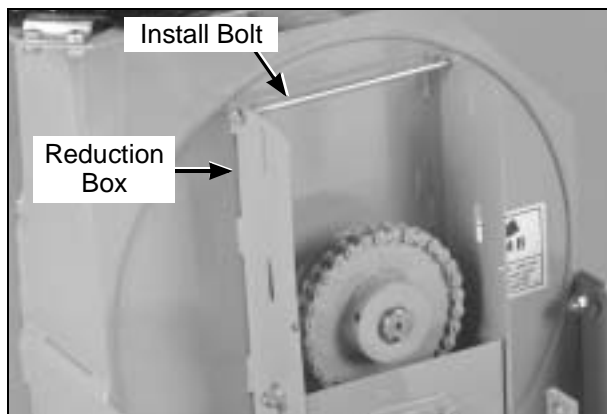
1. Thoroughly clean the drive shaft yoke and install a 1/4 x 1/4 x 1-1/4 in. key in the reduction shaft keyway.
2. Slide the drive shaft yoke over the reduction shaft.
3. Secure the yoke to the reduction shaft with a 1/4 x 2-1/2 in. bolt and nylon locknut. Tighten the nut and the 3/8 x 3/8 in. allen set screw securely over the key in the yoke.

Assembly Instructions



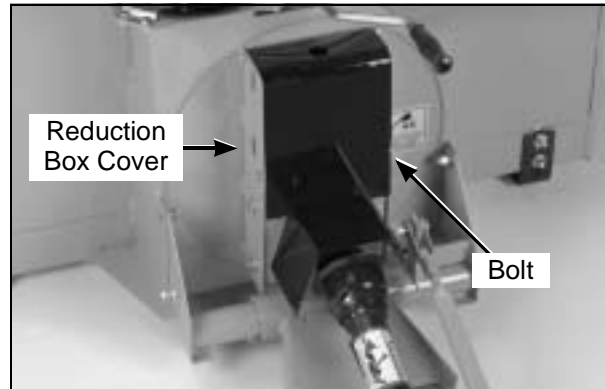
Attach Drive Shaft Yoke to Reduction Shaft

4. Install one 1/4 x 7-1/2 in. bolt through the upper set of holes in the reduction box and secure loosely with a lock washer and nut.



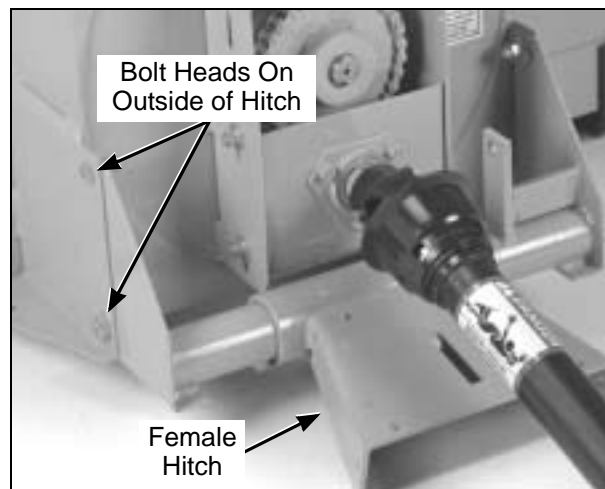
Install Bolt in Reduction Box

5. Hook the reduction box cover over the bolt and secure the cover with a second 1/4 x 7-1/2 in. bolt, lock washer, and nut through the lower set of holes in the reduction box. Torque both bolts to 10 ft-lb (13.6 N-m).



Install Reduction Box Cover

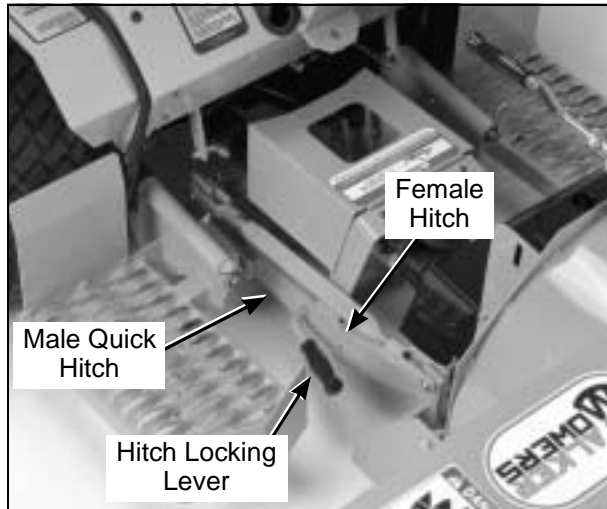
6. Attach the female portion of the hitch to the snowblower using one 3/8 x 1 in. bolt in the upper hole of each side, placing the bolt head on the outside, with a flat washer, lock washer, and nut on the inside. Use one 1/2 x 1 in. bolt, lock washer and nut in the bottom hole of each side. Tighten all four (4) bolts securely.



Mount Female Hitch to Snowblower

7. Insert the male quick hitch section of the implement hitch into the female hitch of the snowblower and lock in place by moving the hitch locking lever **fully forward** to the **LOCKED** position. Secure the latch with the linchpin. Refer to **Hitch Locking Lever** in **Operating Instructions**.
8. Grease the drive shaft sliding surfaces and slide the male shaft inside the female tube.

Assembly Instructions



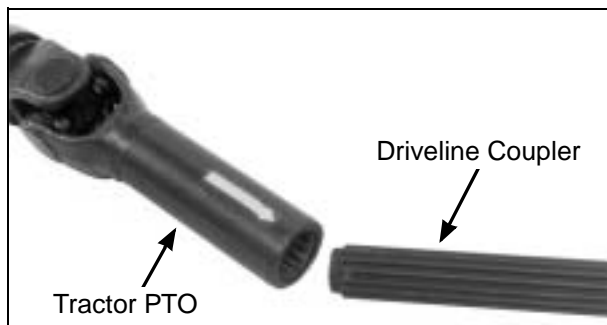
Attach Snowblower to Implement Hitch

9. Attach the driveline quick lock coupler to the tractor PTO.



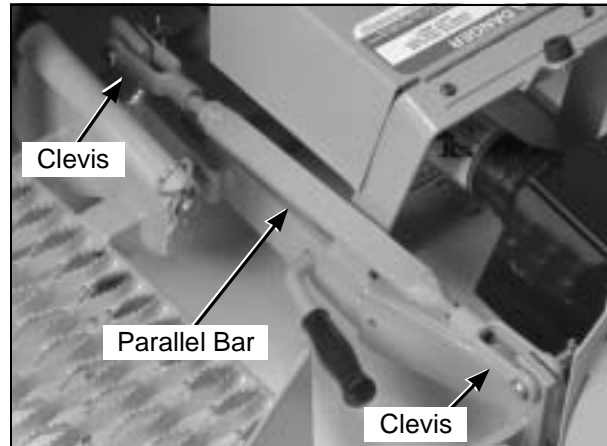
WARNING

This shaft turns at high RPM. If the collar is not locked to the shaft at the tractor end, or if the yoke at the blower end is not secured properly, the drive shaft can fly loose with great force, capable of causing serious injury or death.



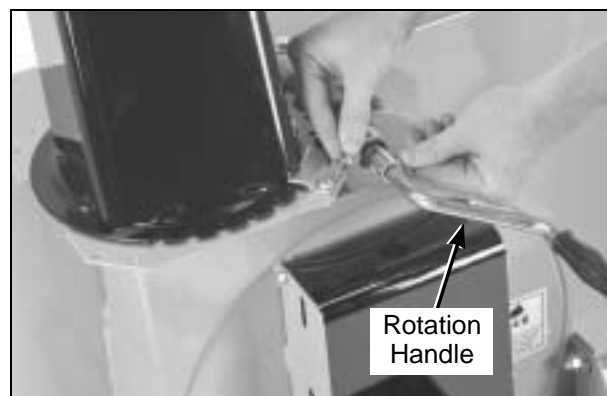
Connect Driveline Coupler to Tractor PTO

10. Attach the parallel bar to the female hitch and the implement adaptor using the two clevises and spring clips.



Attach Parallel Bar to Female Hitch

11. Insert the rotation handle into the rotation worm. Align the holes and lock in place with a 1/4 x 1 in. socket head cap screw and nylon locknut.
12. Install the plastic handle grip on the chute rotation handle.



Insert Rotation Handle into Rotation Worm

13. To install the optional tire chains:
 - a. Remove the tractor wheels.
 - b. Attach the tire chains to the wheels.
 - c. Place the wheel spacer plates on the lug bolts. The wheel spacer plates provide clearance for the chains between the tires and the tractor body.
 - d. Place the wheels back on the tractor.
 - e. Reinstall and tighten the lug bolts.

Assembly Instructions

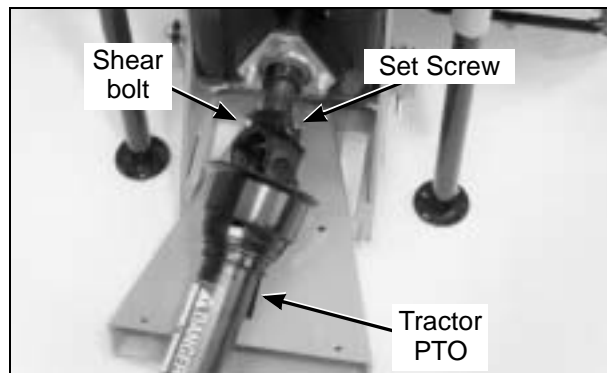
14. For GHS (Grass Handling System) equipped Walker tractors, install a blower intake cover in the blower intake tube. The cover “unloads” the blower and seals the intake to effectively eliminate power loss and noise when the blower is not being used. Refer to **GHS Blower Intake Cover** illustration for **ROTARY BROOM** in this section.
15. For stability of the tractor when transporting with the snowblower in raised position, approximately 80 lb (36 kg) of counterweight should be installed on the tail of the tractor. Optional tail weights for the various tractor models are available from your Walker dealer or a sandbag or similar weight may be used.

DEBRIS BLOWER

Debris Blower Installation

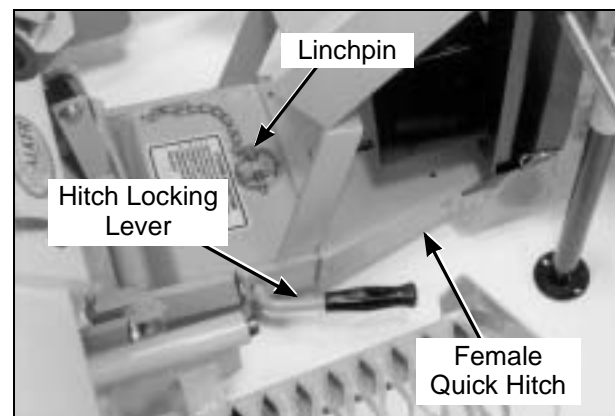
The debris blower is shipped completely assembled except for the driveline, which must be connected to the input shaft.

1. Remove the belt guard from the debris blower housing by removing the two (2) cover pins and hairpins securing it to the housing.
2. Thoroughly clean the debris blower input shaft and install a 1/4 x 1/4 x 1-1/4 in. key in the input shaft keyway.
3. Thoroughly clean the inside of the tractor PTO shaft and align the PTO shaft keyway with the key in the input shaft keyway.
4. Secure the PTO shaft to the input shaft with a 1/4 x 2-1/2 in. bolt and nylon locknut. Tighten the locknut and the set screw over the key.



Attach Tractor PTO to Debris Blower Input Shaft

5. Reinstall the belt guard by reversing the removal procedure.
6. Insert the male quick hitch section of the implement hitch into the female hitch of the debris blower and lock in place by moving the hitch locking lever **fully forward** to the **LOCKED** position. Secure the latch with the linchpin. Refer to **Hitch Locking Lever** in **Operating Instructions**.



Attach Debris Blower to Implement Hitch

7. To install the optional tire chains:
 - a. Remove the tractor wheels.
 - b. Attach the tire chains to the wheels.
 - c. Place the wheel spacer plates on the lug bolts. The wheel spacer plates provide clearance for the chains between the tires and the tractor body.
 - d. Place the wheels back on the tractor.
 - e. Reinstall and tighten the lug bolts.
8. For GHS (Grass Handling System) equipped Walker tractors, install a blower intake cover in the blower intake tube. The cover “unloads” the blower and seals the intake to effectively eliminate power loss and noise when the blower is not being used. Refer to **GHS Blower Intake Cover** illustration for **ROTARY BROOM** in this section.

Assembly Instructions

9. For stability of the tractor when transporting with the debris blower in raised position, approximately 80 lb (36 kg) of counterweight should be installed on the tail of the tractor. Optional tail weights for the various tractor models are available from your Walker dealer or a sandbag or similar weight may be used.

PREOPERATING CHECKLIST

Before operating any of the implements for the first time, and as a routine before daily operations, it is important to make sure the machine is properly prepared and ready for operation. The following is a list of items to be checked. (For machines 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.)

- ☐ CHECK TRACTOR PREOPERATING CHECKLIST

Refer to the appropriate Tractor Owner's Manual.

- ☐ CHECK GAUGE WHEEL OR SKID SHOE ADJUSTMENT

Refer to **ADJUSTMENTS of Dozer Blade Skid Shoes** in **Maintenance Instructions**.

Refer to **ADJUSTMENTS of Rotary Broom Gauge Wheels** in **Maintenance Instructions**.

Refer to **ADJUSTMENTS of Two-Stage Snowblower Skid Shoes** in **Maintenance Instructions**.

Refer to **ADJUSTMENTS of Debris Blower Front Gauge Wheel** in **Maintenance Instructions**.

- ☐ CHECK OPTIONAL TIRE CHAINS

Tire chains should always be used when operating the machine in icy conditions. If the tractor is equipped with the optional tire chains, make sure the chains are in good condition and are installed properly.

- ☐ CHECK TRACTOR TAILWEIGHT

Make sure 80 lb (36 kg) weight has been installed on rear of tractor.

Implement Hitch

- ☐ CHECK LIFT SWITCH OPERATION

Raise and lower the implement hitch to make sure the lift switch and linear actuator operate properly.

- ☐ CHECK HITCH LOCKING LEVER

Lock and unlock the male hitch to make sure the locking mechanism functions properly.

Refer to **Hitch Locking Lever** in **Operating Instructions**.

Dozer Blade

- ☐ CHECK CUTTING EDGE

- Make sure the cutting edge is not nicked, bent or worn.

Refer to **REPLACING/REPAIRING of Dozer Blade Cutting Edge** in **Maintenance Instructions**.

- ☐ CHECK TRIP SPRING

- Check trip spring tension.

Refer to **Trip Spring** in **Operating Instructions**.

- Check trip spring lockout bracket.

Refer to **Normal Operation** or **Rigid Blade Operation** in **Operating Instructions**.

- ☐ CHECK SWIVEL ADJUSTMENT

Refer to **Angle Adjustment Pin** in **Operating Instructions**.

Rotary Broom

- ☐ CHECK BRUSH

- Make sure the brush is clear of snow and/or ice.
- Make sure the brush is free to rotate.
- Check that the bristles are in good condition and are not worn or bent.

Assembly Instructions

☐ CHECK BROOM ANGLE ADJUSTMENT

Refer to **Angle Adjustment Lever** in **Operating Instructions**.

☐ CHECK DRIVE CHAIN

Refer to **LUBRICATION** for **Rotary Broom Drive Chain** in **Maintenance Instructions**.

Refer to **ADJUSTMENTS** of **Rotary Broom Drive Chain Tension** in **Maintenance Instructions**.

☐ CHECK GEARBOX

Refer to **LUBRICATION** for **Rotary Broom Gearbox** in **Maintenance Instructions**.

☐ CHECK SIDE TO SIDE LEVEL ADJUSTMENT

Refer to **ADJUSTMENTS** of **Rotary Broom Brush Leveling** in **Maintenance Instructions**.

☐ CHECK BRUSH TO GROUND CONTACT PRESSURE ADJUSTMENT

Refer to **Ground Contact Knob** in **Operating Instructions**.

Two-Stage Snowblower

☐ CHECK CUTTING EDGE

- Make sure the cutting edge is not nicked, bent or worn.

Refer to **REPLACING/REPAIRING** of **Two-Stage Snowblower Cutting Edge** in **Maintenance Instructions**.

☐ CHECK AUGER

- Make sure the auger is clear of snow and/or ice.
- Make sure the auger is free to rotate.
- Check that the auger flighting and paddle blades are in good condition and not bent.

☐ CHECK CHUTE AND DEFLECTOR

- Make sure the chute and deflector are not clogged with snow and/or ice.
- Turn the chute rotation handle and rotate the chute. The chute should rotate freely.
- Use the deflector position control knobs and raise and lower the deflector. The deflector should move freely.

☐ CHECK GEARBOX

Refer to **LUBRICATION** for **Two-Stage Snowblower Gearbox** in **Maintenance Instructions**.

☐ CHECK REDUCTION CHAIN

Refer to **LUBRICATION** for **Two-Stage Snowblower Reduction Chain** in **Maintenance Instructions**.

Refer to **ADJUSTMENTS** for **Two-Stage Snowblower Reduction Chain Tension** in **Maintenance Instructions**.

Debris Blower

☐ CHECK CHUTE AND DEFLECTOR

- Make sure the chute and deflector are not clogged with leaves and/or debris.
- Turn the chute rotation handle and rotate the chute. The chute should rotate freely.
- Use the deflector position control knob and raise and lower the deflector. The deflector should move freely.

☐ CHECK GAUGE WHEEL TIRE PRESSURE

- Make sure the tire pressure is 20 PSI (137 kPa).

☐ INSPECT DRIVE BELT

Refer to **ADJUSTMENTS** of **Debris Blower Drive Belt Tension** in **Maintenance Instructions**.

☐ CHECK BLOWER FAN

- Make sure the fan is clear of debris.
- Make sure the fan is free to rotate.
- Check that the fan blades are in good condition and not bent.

Operating Instructions

Snow Removal

WARNING

Foreign objects in snow may be thrown farther than the snow. Use the slowest brush speed that will perform the job. Stay aware of the broom discharge direction at all times.

1. The rotary broom works best on snow depths of **4 in. (10 cm) or less**. Larger amounts of snow can be moved **if the ground speed is reduced**.
2. To avoid snow being blown back onto the tractor and operator, sweep **with the wind blowing in the direction of broom discharge**.

Lawn Thatching and Leaf Raking

CAUTION

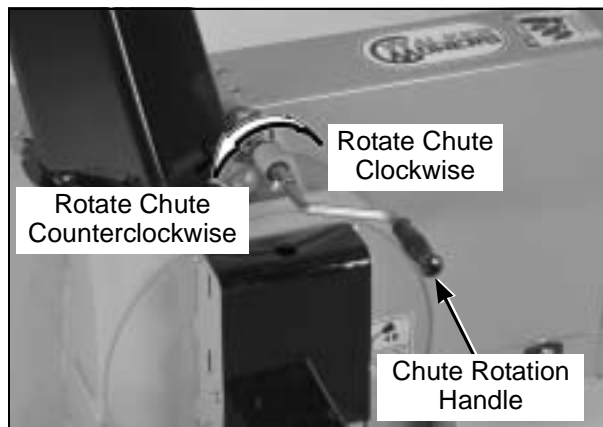
Optional gauge wheels must be installed to perform these types of operation in order to avoid excessive brush ground contact.

1. Bristles should barely touch the ground for lawn thatching, and barely touch the grass in leaf raking operations.
2. Slower brush speed and ground speed are more adequate for lawn thatching. This will prevent "bouncing" which could **damage the lawn** due to excessive ground contact.
3. Minimize dust by sweeping when moisture is high (but not wet) whenever possible.

TWO-STAGE SNOWBLOWER CONTROLS

Chute Rotation Handle

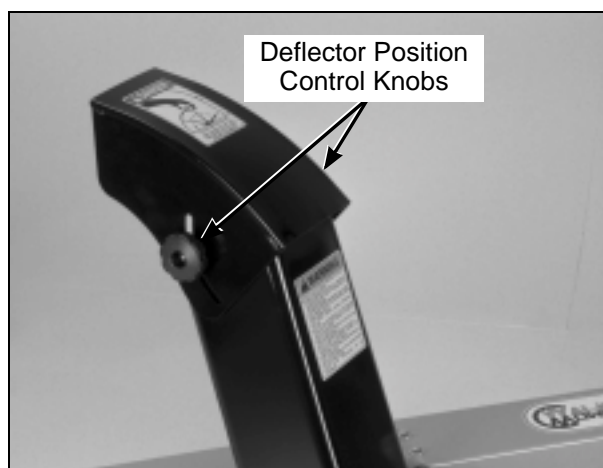
The chute rotation handle is located on the rear of the snowblower head, on the lower RH side of the discharge chute. The chute rotates in a 228 degree arc, by cranking the rotation handle. Turning the handle **clockwise rotates the chute clockwise**. Turning the handle **counterclockwise rotates the chute counterclockwise**.



Chute Rotation Handle

Deflector Position Control Knobs

Set the angle of the deflector according to the distance the snow must be thrown. To adjust the deflector angle, loosen the two knobs on the sides of the deflector, slide the deflector to the required angle, and securely retighten the two knobs.



Deflector Position Control Knobs

TWO-STAGE SNOWBLOWER OPERATION

CAUTION

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

Raising and Lowering the Snowblower

Refer to **Implement Lift Switch** in this section.

Operating Instructions

Engaging the Snowblower

1. Make sure that the snowblower is clear of snow and/or ice before engaging the snowblower.
2. Make sure that the auger and fan operate freely.
3. Check the oil level in the worm gearbox and if necessary, add SAE 90 E.P. (Extreme Pressure) oil. Make sure the oil level is up to the side plug. (Refer to **LUBRICATION of Two-Stage Snowblower Gearbox** in **Maintenance Instructions**.)
4. Check the three (3) shear bolts, one on each auger section, and one between the fan and gearbox for proper tightness, approximately 8 ft-lb (11 N·m).
5. Adjust the snowblower so that it runs level.
6. Set the engine throttle at about 1/3 speed. **DO NOT attempt to engage the PTO clutch at high engine speeds.** This will drastically shorten drive belt life. Use only **moderate engine speed** when engaging the PTO clutch.
7. Pull the PTO clutch lever **SLOWLY** to engage the snowblower.

NOTE: For cold weather operation, allow sufficient time for the snowblower components (i.e., gearbox oil) to warm up before beginning to blow snow.

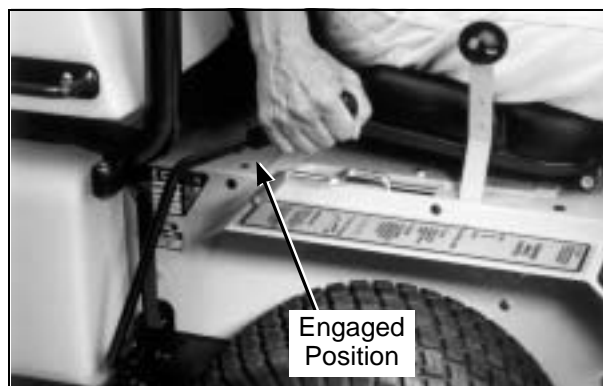
DANGER

A safety interlock switch (seat switch) will cause the engine to stop if the PTO 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 PTO clutch; the engine should stop. If the switch is not working, it should be repaired or replaced before operating the snowblower. **DO NOT disconnect the safety switches; they are for the operator's protection.**

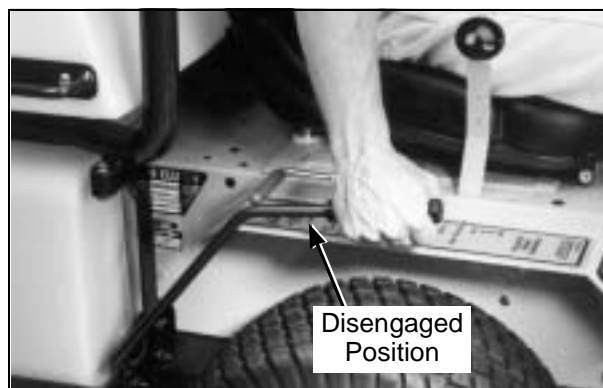
IMPORTANT: **DO NOT** engage the PTO clutch when transporting the machine. **DO NOT engage the PTO clutch with the PTO shaft disconnected** (the snowblower removed from the tractor).

DANGER

If the auger strikes a solid object or the machine begins to vibrate abnormally, immediately disengage the PTO clutch, stop the engine, and wait for all moving parts to stop. Disconnect the fuel solenoid wire [diesel engines] or the spark plug wire(s) [gasoline engines] to prevent accidental starting. Thoroughly inspect the snowblower and repair any damage before restarting the engine and operating the machine. Make sure auger blades are in good condition and all bolts are tight.



PTO Clutch Engaged



PTO Clutch Disengaged

Recommendations For Snowblowing

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

Operating Instructions

- When operating on a slope, **reduce speed and use caution** to start, stop, and maneuver. Avoid sharp turns or sudden changes in direction.
- When blowing through deep snow drifts, let the snowblower work its way through the drifts. For best results, raise the snowblower and remove a top layer of snow, then pass through the area a second time to remove the remaining snow.
- When snowblowing, operate the engine at or near **full throttle** for the best snowblowing action. The engine is **designed to be operated at full speed**.
- Use optional tire chains or optional all-terrain tires to improve traction.
- Disengage the PTO clutch to stop the snowblower when driving the machine but not blowing snow.
- Avoid damage to property and extra snowblowing work by **carefully choosing the direction** to move the snow. Orient the blower away from people and property due to the possibility of thrown objects.
- To momentarily increase traction in case the drive wheels are slipping, use the lift switch to raise the snowblower slightly and transfer extra weight on the drive wheels.

Removing Snow



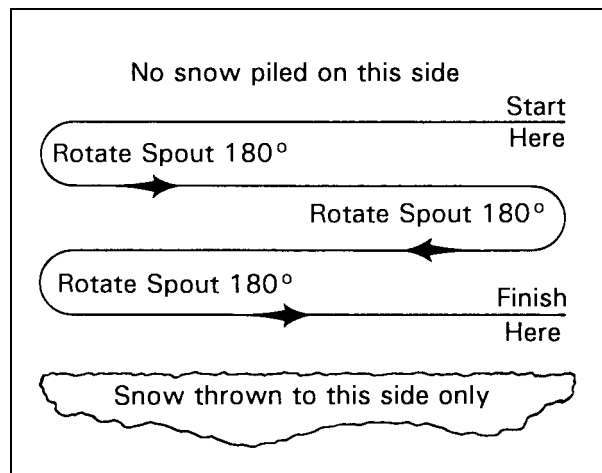
DANGER

DO NOT blow snow with bystanders in the area (especially children or pets).

A definite operating pattern is required to thoroughly clear snow from an area. Each pattern described below clears all the snow in one pass (of the pattern) and prevents throwing snow in unwanted places.

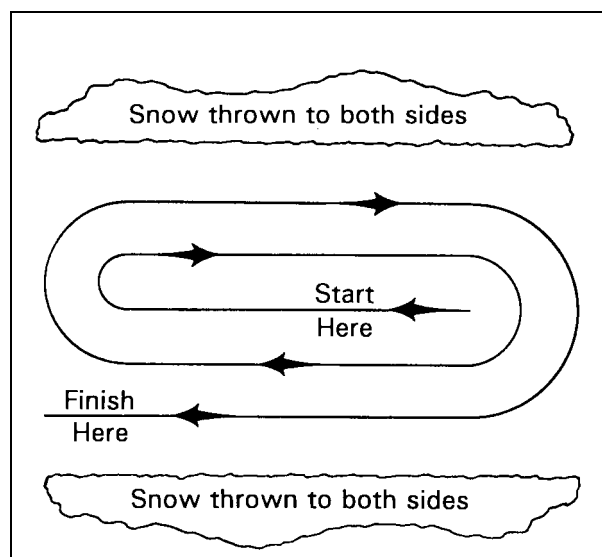
IMPORTANT: DO NOT use the snowblower as a dozer blade to push snow. Let the snowblower work its way through deep snow. If the tractor is driven forward into snow **too fast**, the snowblower may become overloaded and clog.

Use the following pattern where snow can be thrown only to one side. Start **on the side farthest from where the snow will be thrown**. At the end of the first pass, **rotate the blower spout 180 degrees for the return pass**. At the end of each following pass, rotate the spout 180 degrees to keep throwing snow in the same direction.



Throw Snow to One Side

Use the following pattern where snow can be thrown to both sides. Start **in the middle with the blower spout directed to either the right or left**. Drive from one end to the other **in an outward spiral, without changing the position of the blower spout** to throw snow to both sides.



Throw Snow to Both Sides

Clogging Checklist

In case of clogging, the snow throwing action will decrease and finally stop. When this occurs, disengage the PTO clutch, stop the engine, disconnect the fuel solenoid wire [diesel engines] or spark plug wire(s) [gasoline engines], and remove the ignition key. **Make sure all movement has stopped before attempting to unclog.**

Operating Instructions



DANGER

DO NOT attempt to unclog the snowblower or make any adjustments with the tractor engine running. Disengage the PTO clutch, stop the engine, and remove the ignition key.



DANGER

NEVER place hands in the blower spout. **DO NOT** use hands or feet to unclog the snowblower. Use a short stick or similar tool to remove any clogged material.

The following list of items should be checked if a pattern of clogging begins to develop. All of these items are capable of causing clogging.

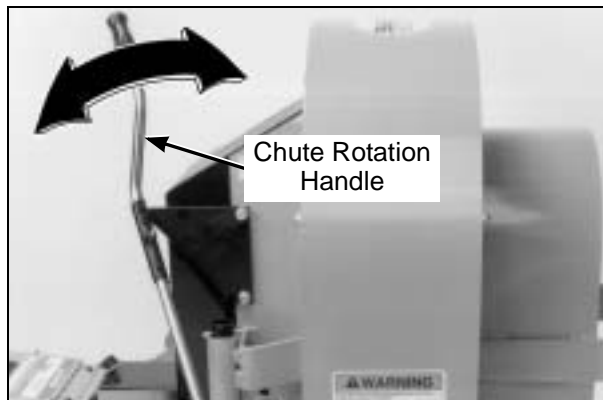
- Check that the inside of the snowblower housing is **clean and free of snow and/or ice buildup**.
- Check that the auger is in good condition and not bent, both the auger flighting and the center paddles.
- Check the inside of the blower spout for **smoothness and freedom of obstruction**.

Remember, anything that restricts airflow or material flow along the entire path from the auger to the blower spout can cause clogging.

DEBRIS BLOWER CONTROLS

Chute Rotation Handle

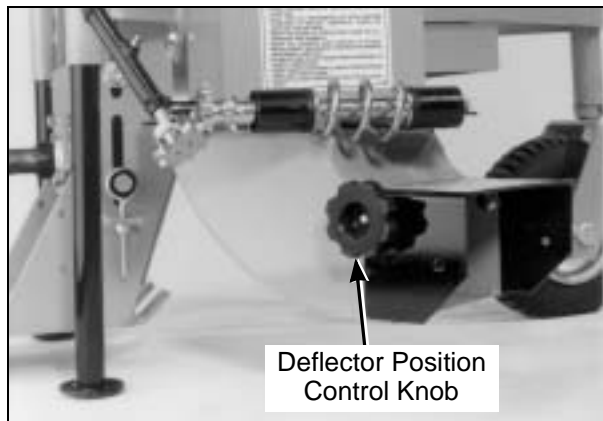
The chute rotation handle is located on the rear of the debris blower, on the upper RH side of the impeller housing. The chute rotates in a 230 degree arc, by cranking the rotation handle. Turning the handle **clockwise rotates the chute clockwise**. Turning the handle **counterclockwise rotates the chute counterclockwise**.



Chute Rotation Handle

Deflector Position Control Knob

Set the angle of the deflector according to the distance the debris must be thrown. To adjust the deflector angle, loosen the knob on the RH side of the deflector, slide the deflector to the required angle, and securely retighten the knob.



Deflector Position Control Knob

DEBRIS BLOWER OPERATION



CAUTION

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

Raising and Lowering the Debris Blower

Refer to **Implement Lift Switch** in this section.

Operating Instructions

Engaging the Debris Blower

1. Set the engine throttle at about 1/3 speed. **DO NOT attempt to engage the PTO clutch at high engine speeds.** This will drastically shorten drive belt life. Use only **moderate engine speed** when engaging the PTO clutch.
2. Pull the PTO clutch lever **SLOWLY** to engage the debris blower.

NOTE: For cold weather operation, allow sufficient time for the debris blower components to warm up before beginning to blow debris.



WARNING

A safety interlock switch (seat switch) will cause the engine to stop if the PTO 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 PTO clutch; the engine should stop. If the switch is not working, it should be repaired or replaced before operating the debris blower. **DO NOT** disconnect the safety switches; they are for the operator's protection.

IMPORTANT: **DO NOT** engage the PTO clutch when transporting the machine. **DO NOT** engage the PTO clutch with the PTO shaft disconnected (the debris blower removed from the tractor).

Recommendations For Operating the Debris Blower

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

- When operating on a slope, **reduce speed and use caution** to start, stop, and maneuver. Avoid sharp turns or sudden changes in direction.
- Use optional tire chains or optional all-terrain tires to improve traction.
- Disengage the PTO clutch to stop the debris blower when driving the machine but not operating the debris blower.
- Avoid damage to property and extra cleaning work by **carefully choosing the direction** to move

the debris. Orient the blower away from people and property due to the possibility of thrown objects.

- To momentarily increase traction in case the drive wheels are slipping, use the lift switch to raise the debris blower slightly and transfer extra weight on the drive wheels.

STOPPING THE MACHINE

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

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



WARNING

A brake stops the machine from free-wheeling within five (5) seconds after disengaging the PTO clutch. If the brake system malfunctions and the machine does not stop within five (5) seconds, the brake should be adjusted or repaired before operating the machine. Refer to the appropriate Tractor Owner's Manual for adjustment procedures.

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



WARNING

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

5. Engage the parking brake.

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

Maintenance Instructions



CAUTION

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

MAINTENANCE SCHEDULE CHART - RECOMMENDED SERVICE INTERVALS - IMPLEMENTS

Model	Service Item	Daily	25 Hours	Yearly	Reference Page
All Models:	Check Tire Chains (Optional)	X			32
	Check Gauge Wheels or Skid Shoes	X			32
	Check Tractor Tailweight	X			32
	Lubricate Grease Fittings and Oil Points		X		45
	Repaint Components/Parts			X	70
Implement Hitch:	Check Implement Lift Switch Operation	X			32
	Check Hitch Locking Lever Function	X			32
Dozer Blade:	Check Dozer Blade Cutting Edge Condition	X			32
	Check Dozer Blade Trip Spring Tension	X			32
	Check Dozer Blade Swivel Adjustment	X			32
Rotary Broom:	Check Rotary Broom Brush Condition	X			32
	Check Broom Angle Adjustment Lever	X			33
	Check Broom Side to Side Level Adjustment	X			33
	Check Rotary Broom Ground Contact Knob	X			33
	Check Rotary Broom Gearbox Oil Seals		X		44
	Lubricate Rotary Broom Drive Chain		X		44
Two-Stage Snowblower:	Check Snowblower Auger Condition	X			33
	Check Snowblower Chute Rotation Handle	X			33
	Check Snowblower Deflector Position Control Knobs	X			33
	Check Snowblower Scraper Blade Condition	X			33
	Check Snowblower Gearbox Oil Seals		X		45
	Lubricate Snowblower Reduction Chain		X		45
Debris Blower:	Check Debris Blower Chute Rotation Handle	X			33
	Check Debris Blower Deflector Position Control Knob	X			33
	Check Debris Blower Gauge Wheel Tire Pressure	X			33
	Check Debris Blower Impeller Condition	X			33
	Check Debris Blower Drive Belt Tension and Condition		X		33

Refer to the appropriate Tractor Owner's Manual for complete information about Tractor Maintenance Items.

LUBRICATION



WARNING

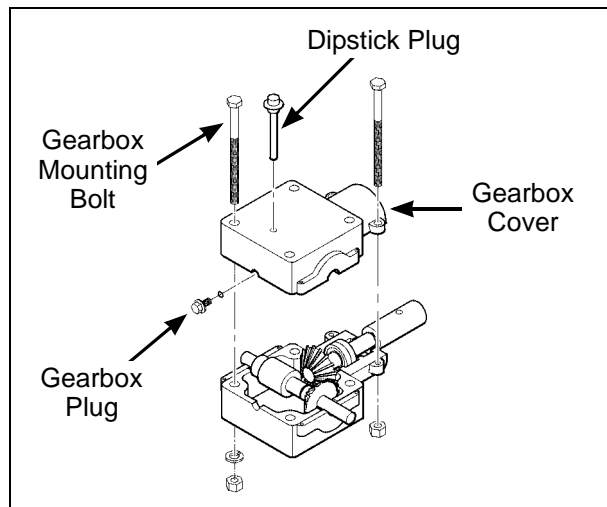
DO NOT attempt to lubricate the machine with the tractor engine running. Disengage the PTO clutch, shut off the machine, and remove the ignition key.

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

Rotary Broom Gearbox

The gearbox is permanently lubricated (oil filled) and sealed requiring no scheduled lubrication. However, the gearbox oil seal(s) should be checked **every 25 hours** for indication of an oil leak. If an oil leak is noted, replace the oil seal and relubricate the gearbox as follows:

1. Remove the gearbox following the procedure described in **REPLACING/REPAIRING the Rotary Broom Gearbox** in this section.



Rotary Broom Gearbox with Cover Removed

2. Clean the area around the plug located on the front of the gearbox.
3. Remove the gearbox plug on the gearbox.

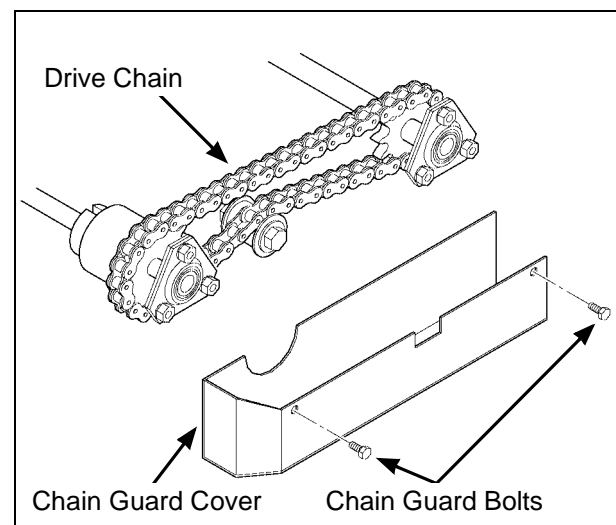
4. If the lubricant is flowing out of the plug hole, the gearbox is full. Reinsert the plug. If no lubricant flows out, add SAE E.P. (Extreme Pressure) 90W oil into the gearbox through the plug hole until it starts to flow out.
5. Wipe the threads of the gearbox plug before re-installing.
6. Torque screws to 24 in-lb (2.7 N-m).

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

Rotary Broom Drive Chain

Lubricate the drive chain **every 25 hours**. A light penetrating oil or special purpose chain oil is recommended. Lubricate the drive chain as follows:

1. Remove the two (2) bolts fastening the chain guard cover to the broom housing and remove the cover.



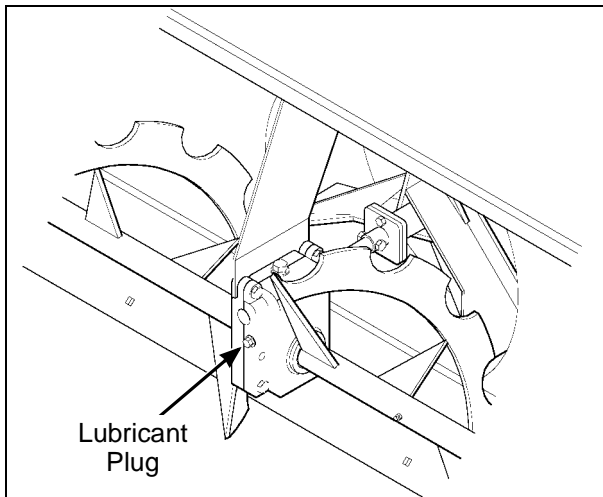
Remove Chain Guard Cover

2. Apply oil to the drive chain.
3. Reinstall the chain guard cover by reversing the removal procedures.

Two-Stage Snowblower Gearbox

The gearbox is permanently lubricated (oil filled) and sealed requiring no scheduled lubrication. However, the gearbox oil seal(s) should be checked **every 25 hours** for indication of an oil leak. If an oil leak is noted, replace the oil seal(s) and relubricate the gear-box as follows:

1. Remove the gearbox following the procedure described in **REPLACING/REPAIRING** the **Two-Stage Snowblower Gearbox** in this section.



Snowblower Lubricant Plug Location

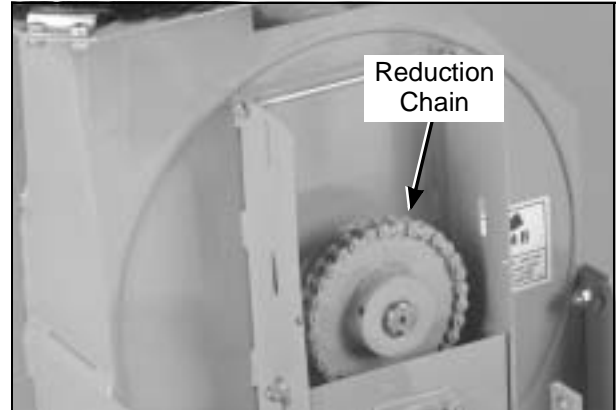
2. Clean the area around the lubricant plug located on the front of the gearbox.
3. Remove the lubricant plug on the gearbox.
4. If the lubricant is flowing out of the plug hole, the gearbox is full. Reinsert the plug. If no lubricant flows out, add SAE E.P. (Extreme Pressure) 90W lubricant into the gearbox through the plug hole until it starts to flow out.
5. Wipe the threads of the gearbox plug before re-installing.
6. Torque to 24 in-lb (2.7 N-m).

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

Two-Stage Snowblower Reduction Chain

Lubricate the reduction chain **every 25 hours**. A light penetrating oil or special purpose chain oil is recommended. Lubricate the reduction chain as follows:

1. Remove the bolt fastening the reduction box cover to the reduction box and remove the cover.



Remove Reduction Box Cover

2. Apply oil to the reduction chain.
3. Adjust the chain if necessary. Refer to **ADJUSTMENTS** of **Two-Stage Snowblower Reduction Chain Tension** in this section.
4. Reinstall the reduction box cover by reversing the removal procedures.

Grease Fitting and Oil Point Lubrication

Lubricate the grease fittings and oil points **after every 25 hours** of operation. 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 Lubrication Points illustrations on the following pages.**

Ident No.	Location	Lubrication Type	No. Places
--------------	----------	---------------------	---------------

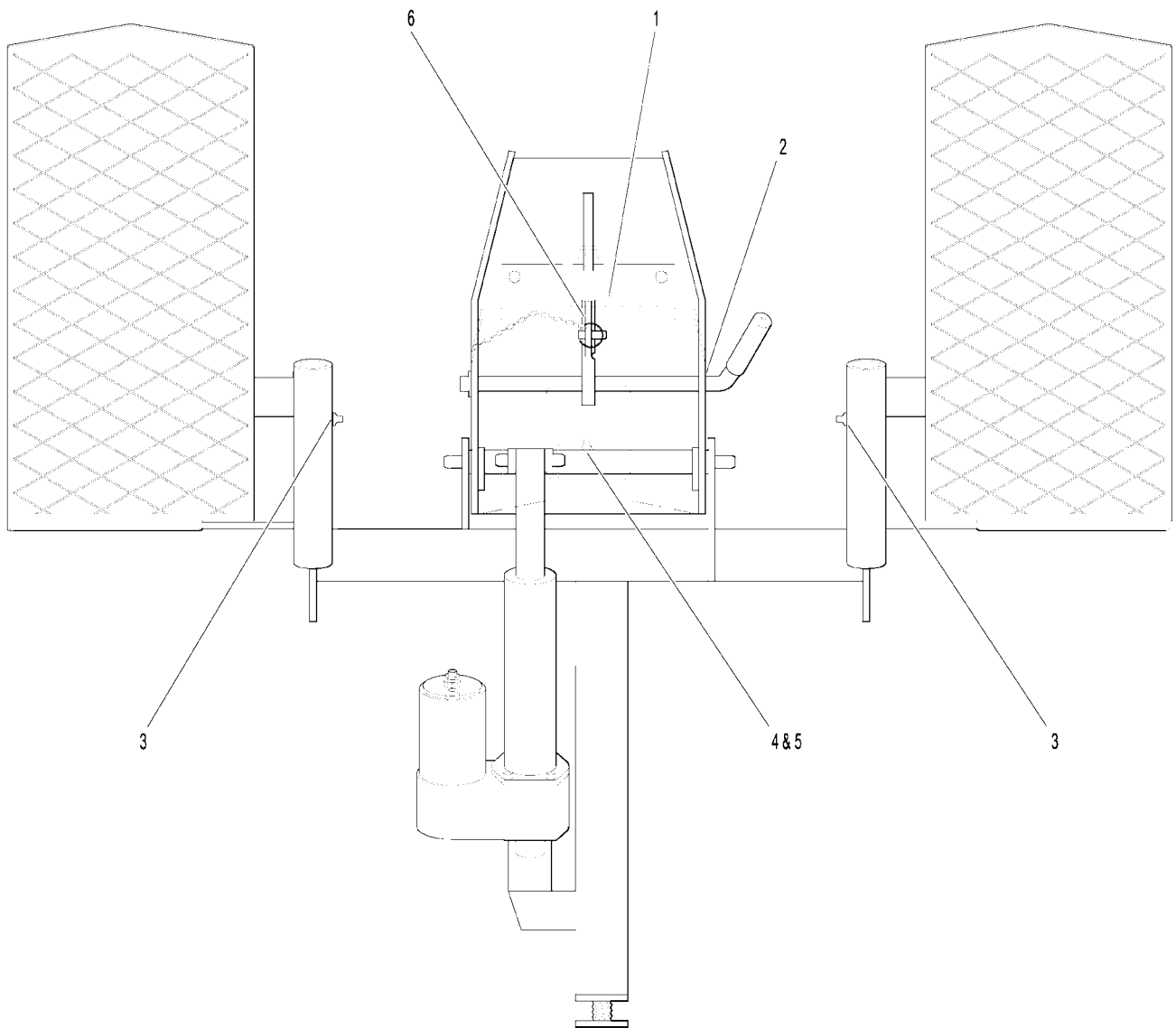
Implement Hitch

1	PTO Shield Hinge	Oil	1
2	Hitch Locking Lever Pivot	Oil	1
3	Mounting Tube Sockets	Grease	2
4	Hitch Lift Crank	Grease	1

Ident No.	Location	Lubrication Type	No. Places
--------------	----------	---------------------	---------------

5	Hitch Pivot Shaft	Oil	1
6	Quick Hitch Latch	Oil	1

NOTE: Tractor Lubrication Points are not shown here. For Tractor Lubrication Points, refer to the appropriate Tractor **OWNER'S MANUAL** or **ILLUSTRATED PARTS MANUAL**.



Implement Hitch Lubrication Points

Ident No.	Location	Lubrication Type	No. Places
--------------	----------	---------------------	---------------

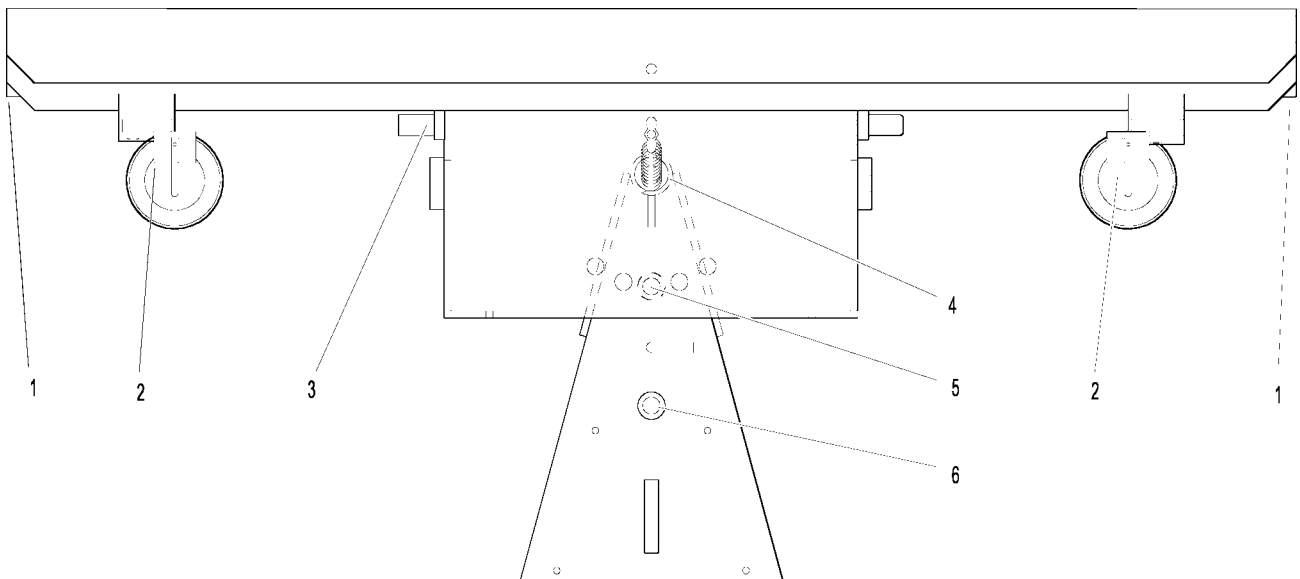
Dozer Blade

1	Cutting Edge	Oil	1
2	Skid Shoe Brackets (Grease Slide Area)	Grease	2
3	Hitch Box Pin	Oil	1
4	Trip Spring Lockout Bracket Pivot Pin	Oil	1

Ident No.	Location	Lubrication Type	No. Places
--------------	----------	---------------------	---------------

5	Angle Adjustment Pin	Oil	1
6	Female Quick Hitch Pivot Pin	Oil	1

NOTE: Tractor Lubrication Points are not shown here. For Tractor Lubrication Points, refer to the appropriate Tractor **OWNER'S MANUAL** or **ILLUSTRATED PARTS MANUAL**.



Dozer Blade Lubrication Points

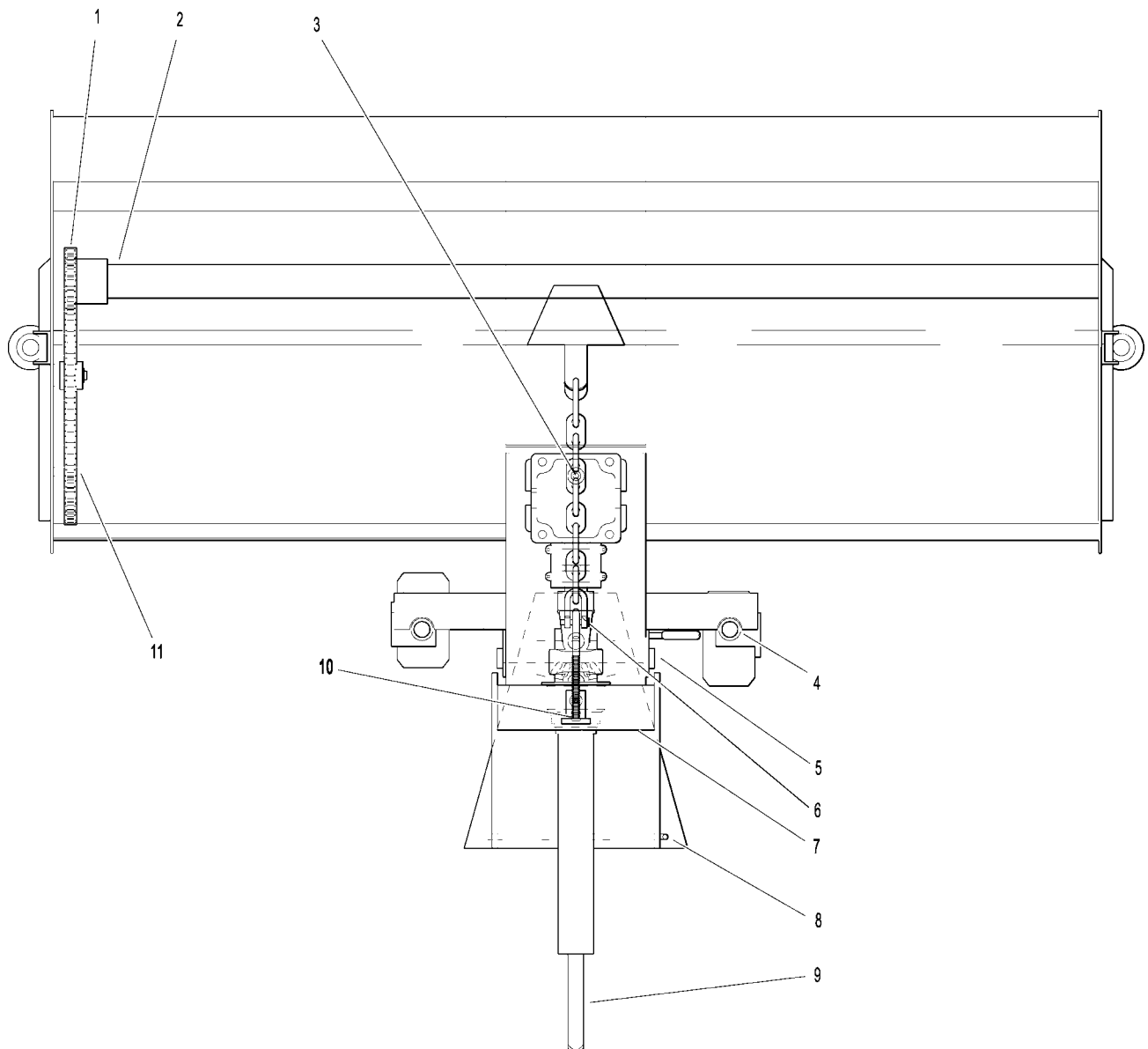
Ident No.	Location	Lubrication Type	No. Places
<i>Rotary Broom</i>			
1	Chain Drive Sprocket	Oil	1
2	Chain Drive Shaft	Grease	1
3	Gearbox	Oil*	1
4	Wheel Brackets	Grease	2
5	Angle Adjustment Lever Pivot	Oil	1
6	Driveline	Grease	1
7	Driveline Support Pivot	Oil	1
8	Angle Adjustment Plate	Oil	1
9	Universal Joint Shaft Assembly (Grease Slide Area)	Grease**	1
10	Ground Contact Knob Eyebolt	Grease	1
11	Drive Chain	Oil	1

Ident No.	Location	Lubrication Type	No. Places
-----------	----------	------------------	------------

- * Gearboxes are permanently lubricated and sealed requiring no scheduled lubrication. Oil level should be checked only when an oil leak is noted. Refer to **Rotary Broom Gearbox** in this section.

- ** Grease every eight (8) hours.

NOTE: Tractor Lubrication Points are not shown here. For Tractor Lubrication Points, refer to the appropriate Tractor **OWNER'S MANUAL** or **ILLUSTRATED PARTS MANUAL**.



Rotary Broom Lubrication Points

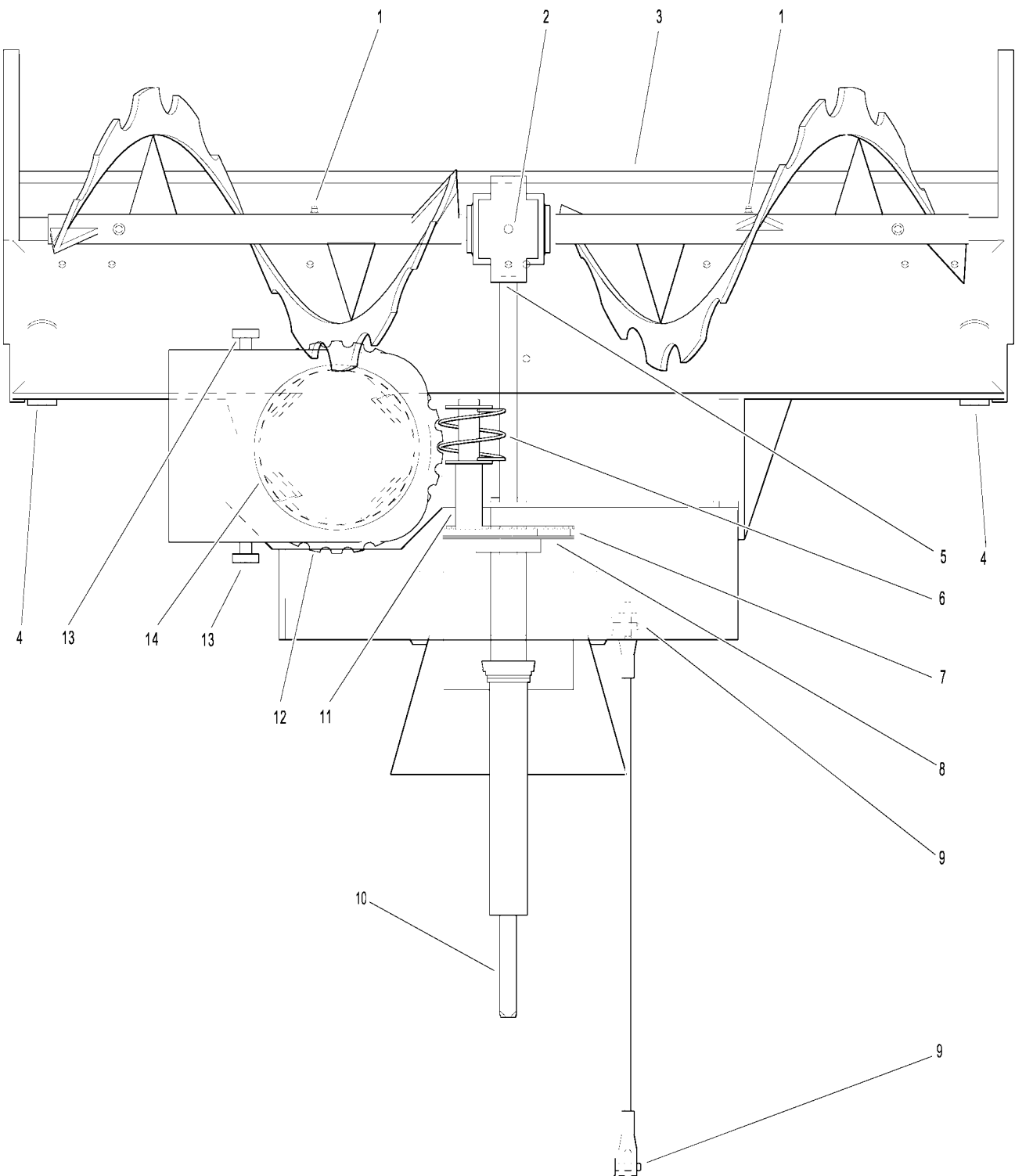
Ident No.	Location	Lubrication Type	No. Places
<i>Two-Stage Snowblower</i>			
1	Auger Sections	Grease	2
2	Gearbox	Oil*	1
3	Cutting Edge	Oil	1
4	Skid Shoes	Grease	2
5	Gearbox Shaft	Oil	1
6	Rotation Worm	Grease	1
7	Reduction Chain	Oil	1
8	Sprockets	Oil	2
9	Parallel Bar Pivot Pins	Oil	2
10	Universal Joint Shaft Assembly (Grease Slide Area)	Grease**	1
11	Rotation Handle Pivot	Oil	1

Ident No.	Location	Lubrication Type	No. Places
12	Plastic Anti-Friction Insert	Grease	1
13	Chute Knobs	Grease	2
14	Deflector Slide Area	Grease	1

* Gearboxes are permanently lubricated and sealed requiring no scheduled lubrication. Oil level should be checked only when an oil leak is noted. Refer to **Two-Stage Snowblower Gearbox** in this section.

** Grease every eight (8) hours.

NOTE: Tractor Lubrication Points are not shown here. For Tractor Lubrication Points, refer to the appropriate Tractor **OWNER'S MANUAL** or **ILLUSTRATED PARTS MANUAL**.



Two-Stage Snowblower Lubrication Points

Ident No.	Location	Lubrication Type	No. Places
-----------	----------	------------------	------------

Debris Blower

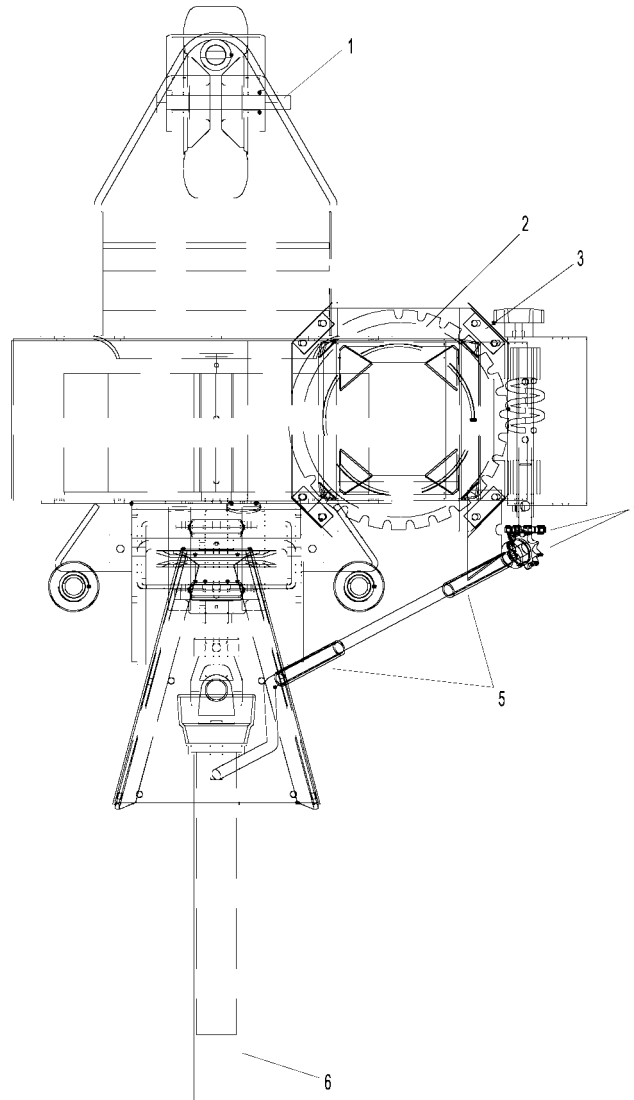
1	Front Gauge Wheel	Grease	1
2	Plastic Anti-Friction Insert	Grease	1
3	Air Blast Nozzle	Oil	1
4	Sprockets	Oil	2

Ident No.	Location	Lubrication Type	No. Places
-----------	----------	------------------	------------

5	Rotation Handle	Grease*	2
6	Universal Joint Shaft Assembly (Grease Slide Area)	Grease*	1

* Grease every eight (8) hours.

NOTE: Tractor Lubrication Points are not shown here. For Tractor Lubrication Points, refer to the appropriate Tractor **OWNER'S MANUAL** or **ILLUSTRATED PARTS MANUAL**.



Debris Blower Lubrication Points

REPLACING/REPAIRING



WARNING

To prevent accidental engine starting when replacing parts or repairing the machine, remove the key from the ignition switch and disconnect the fuel solenoid wire [diesel engines] or the spark plug wire(s) [gasoline engines].



CAUTION

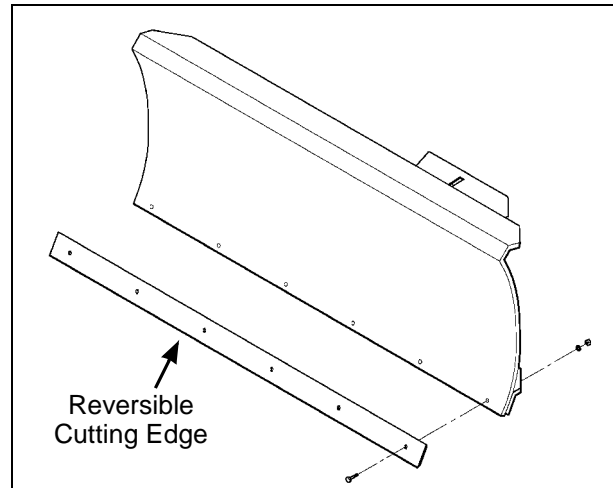
ALWAYS use genuine factory replacement parts. Substitute parts **CAN** result in product malfunction and possible injury to the operator and/or others.

Dozer Blade Cutting Edge

NOTE: The cutting edge of the dozer blade is **reversible** and needs to be replaced only when **both the top and bottom edges have worn**.

Replace the dozer blade cutting edge as follows:

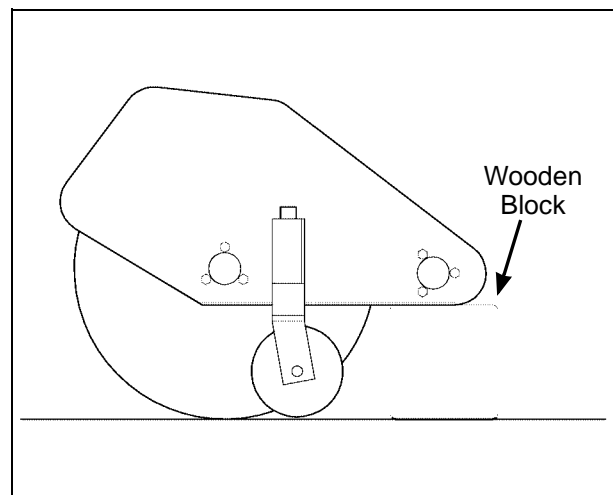
1. Remove the six (6) 5/16-NC hex nuts and 5/16 in. lock washers from the rear of the blade, behind the cutting edge. Remove the six (6) 5/16-NC x 1 in. carriage bolts from the front cutting edge.
2. If only **one edge** of the blade is **dull or nicked**, rotate the blade 180 degrees. (The sharp edge should now be at the bottom.) Reinstall the cutting edge onto the dozer blade by reversing the removal procedure.
3. If **both edges** are **dull or nicked**, remove the cutting edge and install a new one by reversing the removal procedure.



Dozer Blade Cutting Edge Replacement

Rotary Broom Brush

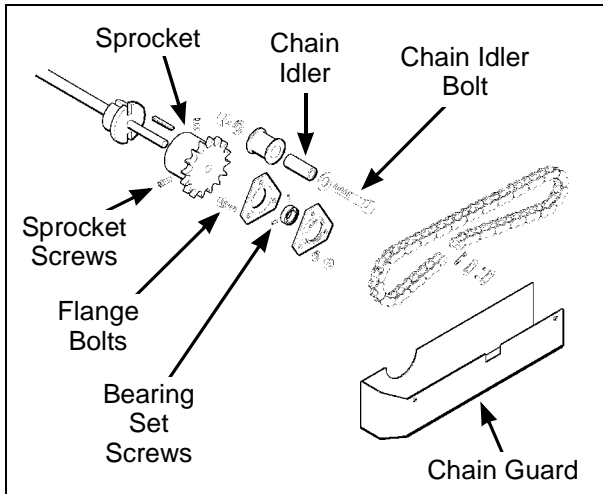
1. Stop the tractor engine, set the parking brake and remove the ignition key.
2. Lift the broom head from the front approximately 7 to 8 inches (18 to 20 cm) from the ground.
3. Place two (2) wooden blocks, one on each side, under the rear of the broom housing and gently lower the broom head.



Support Rear of Broom Housing

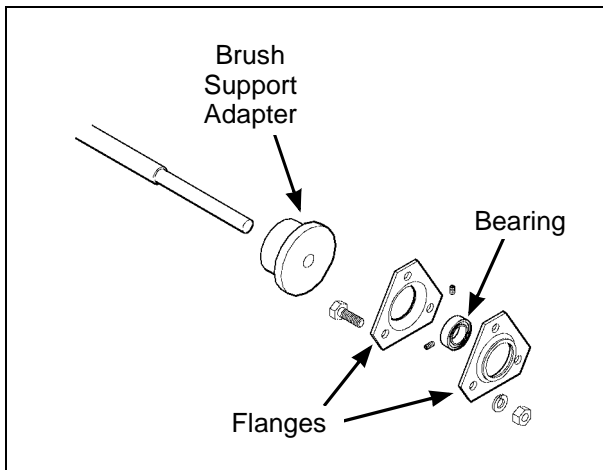
4. Remove the two (2) bolts and the chain guard.
5. Loosen the bolt securing the chain idler so that the chain can be removed from the sprocket.

- Loosen the two sprocket set screws and push sprocket towards the brush.



Loosen Chain Idler and Set Screws

- Remove the three bolts on the bearing flanges on each side of the broom and loosen the bearing set screws. Push the bearings and flanges towards the brush.
- Remove the bearing, brush support adapter and flanges on the opposite side of the sprocket. Remove the brush by carefully sliding it downward from its position.



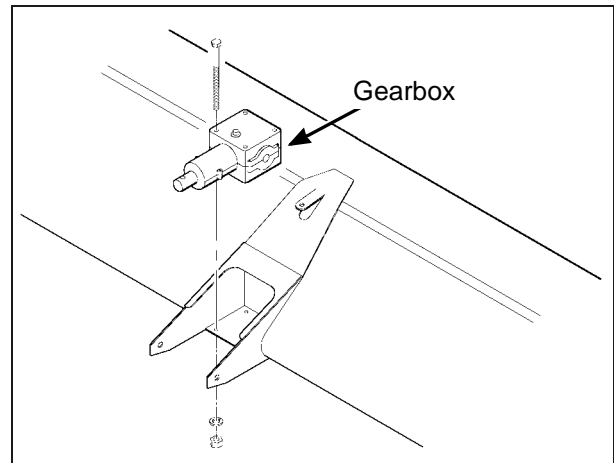
Remove Brush from Broom Housing

- Install the new brush by reversing the removal procedure.

Rotary Broom Gearbox

Remove and replace the gearbox as follows:

- Stop the tractor engine, set the parking brake, and remove the ignition key.
- Loosen the set screw fastening the driveline female half and slide the driveline off the gearbox shaft.
- Remove the four (4) bolts, lock washers, and hex nuts that fasten the gearbox to the broom housing.
- Loosen two (2) set screws on the chain drive shaft and slide it from the gearbox drive shaft.
- Replace the gearbox by reversing the removal procedures.



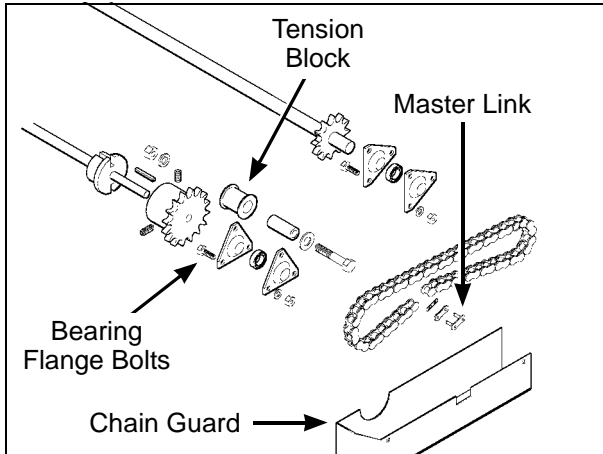
Replace Rotary Broom Gearbox

Rotary Broom Drive Chain

The drive chain should be replaced if, when adjusted properly, it can be pulled away from the front of the drive sprocket **more than 1/2 the height of a tooth on the sprocket**. Running the rotary broom with a worn chain **increases wear on the sprockets**.

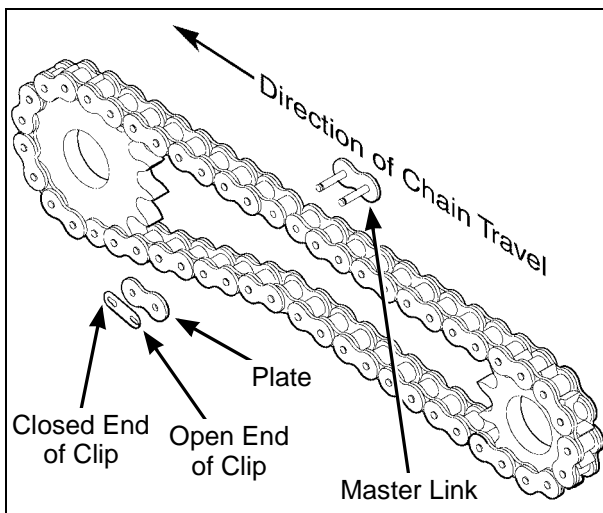
- Remove the chain guard. Refer to **LUBRICATION of Rotary Broom Drive Chain** in this section.

- Loosen the bearing flange mounting nuts and bolts. Position the chain tension block so that the chain has as much slack as possible. Tighten the bearing flange mounting nuts and bolts slightly to hold the bearing flange in this position.



Remove Chain Guard and Loosen Chain Tension

- Turn the brush drive shaft until the master link for the chain is accessible.
- Remove the master link from the chain and remove the chain from the sprocket.
- Place the new chain on the sprockets and install the master link. Be sure to install the clip on the master link properly. The **closed end of the clip** should point in the direction of chain travel.

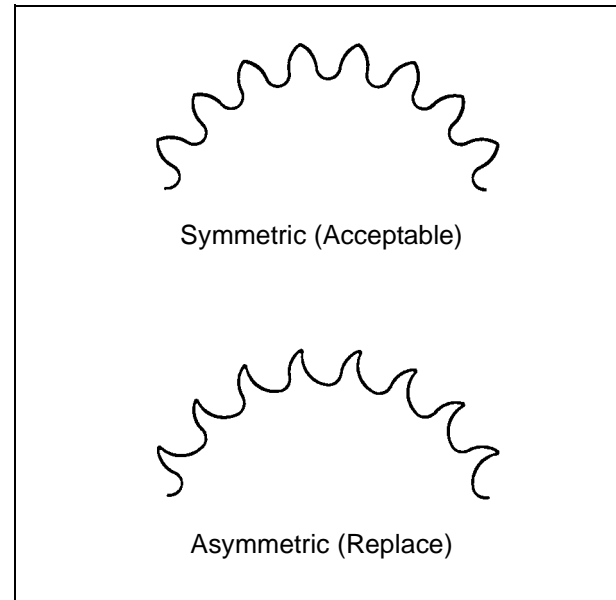


Replace Drive Chain

- Adjust the chain. Refer to **ADJUSTMENTS of Rotary Broom Drive Chain Tension** in this section.
- Reinstall the chain guard by reversing the removal procedures.

Rotary Broom Drive Sprocket

A sprocket should be replaced **when the teeth become asymmetric** (when the front side of a tooth is a different shape than the back side of the tooth).

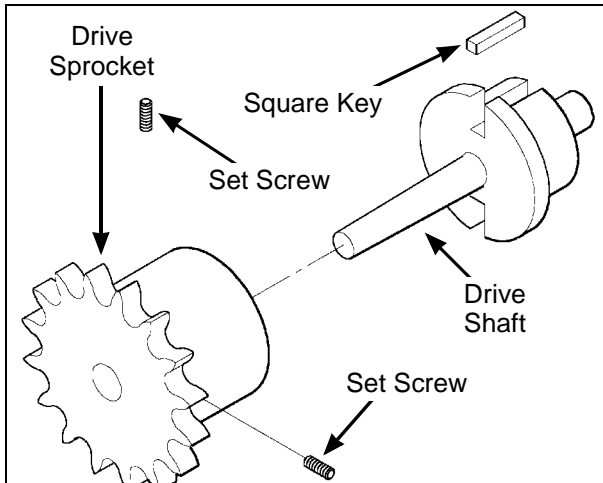


Sprocket Wear

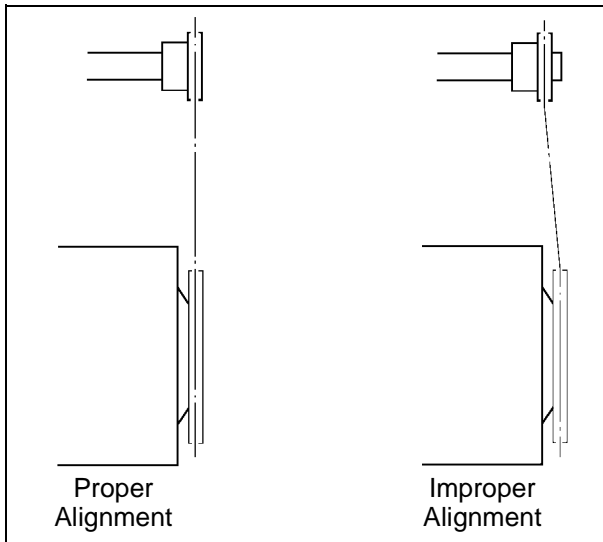
NOTE: Generally; a small sprocket wears faster than a large sprocket.

- Remove the chain guard and drive chain. Refer to **REPLACING/REPAIRING of Rotary Broom Drive Chain** in this section.
- Loosen the set screws that fasten the sprocket to the drive shaft.
- Slide the sprocket off the drive shaft. Use a puller if necessary.
- If necessary, clean off the end of the drive shaft with an emery cloth or a wire brush.
- Place the key in the keyway on the drive shaft.

- Align the slot in the new sprocket with the square key and slide the sprocket onto the drive shaft. Make sure the key is in place between the drive shaft and sprocket.



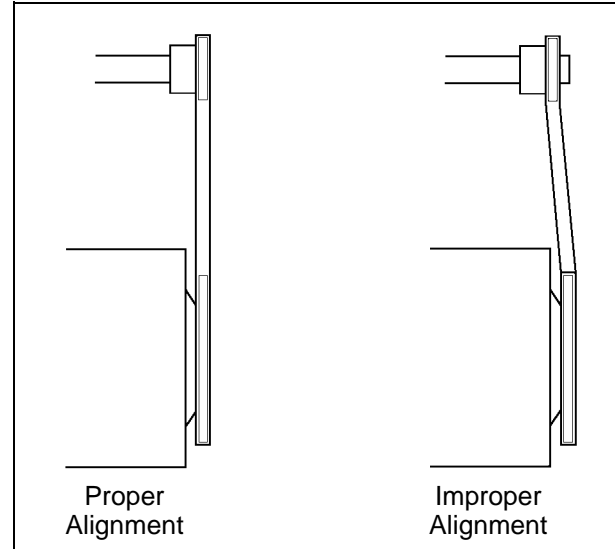
Remove and Replace Sprocket



Align Sprockets

- Position the sprocket on the drive shaft so it is aligned with the chain drive shaft sprocket.
- When the sprockets are aligned properly, tighten the set screw in the drive shaft sprocket.
- Install chain and adjust the chain tension. Refer to **ADJUSTMENTS of Rotary Broom Drive Chain Tension** in this section.

- With the chain installed, recheck the sprocket alignment.
- Lubricate the drive chain. Refer to **LUBRICATION of Rotary Broom Drive Chain** in this section.



Check Sprocket Alignment with Chain Installed

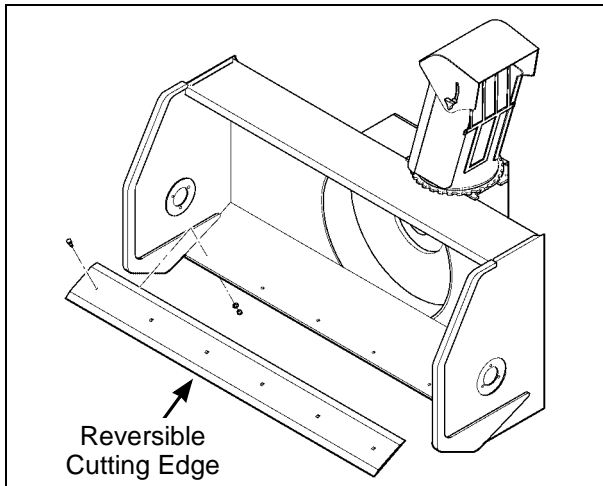
- Reinstall the chain guard by reversing the removal procedures.

Two-Stage Snowblower Cutting Edge

NOTE: The cutting edge of the snowblower is **reversible** and needs to be replaced only when **both the top and bottom edges have worn**.

Replace the snowblower cutting edge as follows:

- Remove the six (6) 5/16-NC hex nuts and 5/16 in. lock washers from the rear of the snowblower housing, behind the cutting edge. Remove the six (6) 5/16-NC x 1 in. carriage bolts from the front of the cutting edge.
- If only **one edge** of the blade is **dulled or nicked**, rotate the blade 180 degrees. (The sharp edge should now be at the bottom.) Reinstall the cutting edge onto the snowblower housing by reversing the removal procedure.
- If **both edges** are **dull or nicked**, remove the cutting edge and install a new one by reversing the removal procedure.

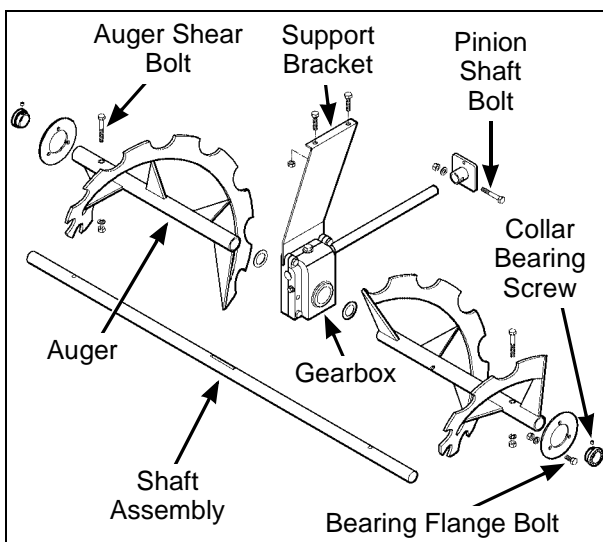


Snowblower Cutting Edge Replacement

Two-Stage Snowblower Gearbox

Remove and replace the gearbox as follows:

1. Stop the tractor engine, set the parking brake, and remove the ignition key.



Replace Snowblower Gearbox

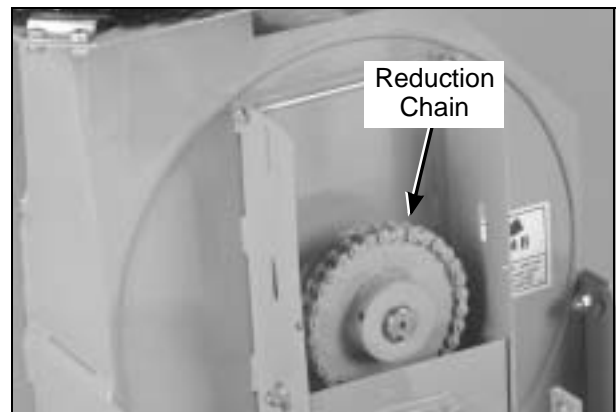
2. Remove the three (3) 5/16 nuts and the three (3) 5/16 x 3/4 bolts holding the bearing flanges on each end of the snowblower. Loosen the (2) two set screws on each collar bearing.
3. Remove the 5/16 nut and the 5/16 x 2 hex pinion shaft bolt.

4. Remove the two (2) 5/16-NC nylon locknuts and the two (2) 5/16-NC x 1-1/4 in. hex bolts fastening the support bracket and gearbox to the snowblower frame.
5. Hold and move the gearbox/auger assembly to the left and the right side will slide out. Slide the left side out.
6. Remove the two (2) 5/16-18 auger shear bolts and two (2) 5/16 nuts. Remove augers from gearbox/shaft assembly.
7. Replace the gearbox by reversing the removal procedures.

Two-Stage Snowblower Reduction Chain

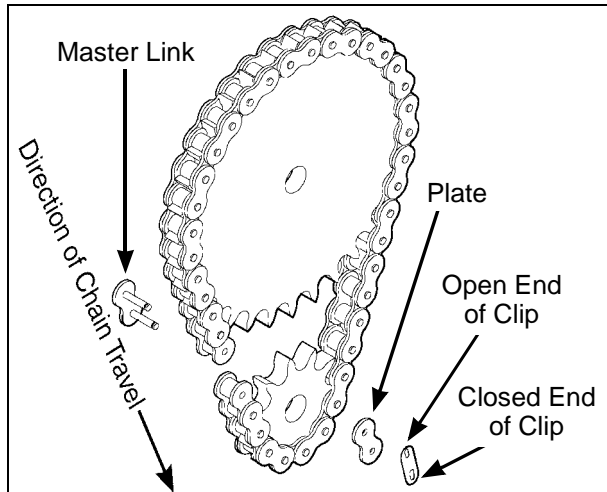
The reduction chain should be replaced if, when adjusted properly, it can be pulled away from the front of the reduction sprocket **more than 1/2 the height of a tooth on the sprocket**. Running the snowblower with a worn chain **increases wear on the sprockets**.

1. Remove the 1/4 x 7-1/2 in. bolt, lock washer, and nut from the reduction box cover.
2. Remove the box cover from the reduction box.



Remove Reduction Box Cover

3. Turn the reduction box drive shaft until the master link for the chain is accessible.
4. Remove the master link from the chain and remove the chain from the sprocket.
5. Place the new chain on the sprockets and install the master link. Install the clip on the master link properly. The **closed end of the clip** should point **in the direction of chain travel**.

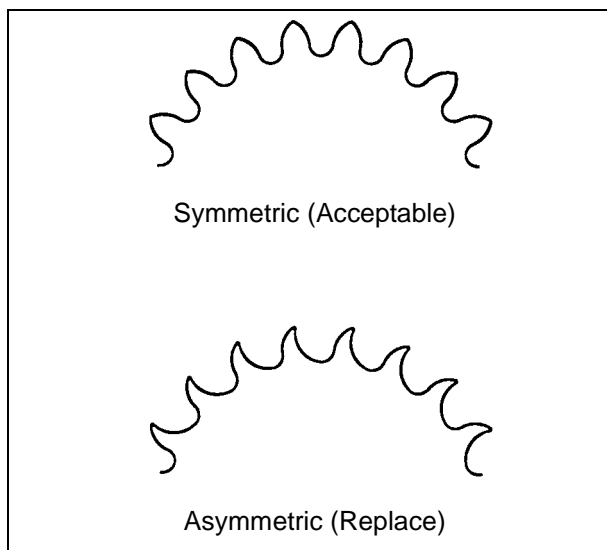


Replace Reduction Chain

- Adjust the chain tension. Refer to **ADJUSTMENTS of Two-Stage Snowblower Reduction Chain Tension** in this section.
- Reinstall the reduction box cover by reversing the removal procedures.

Two-Stage Snowblower Reduction Sprocket

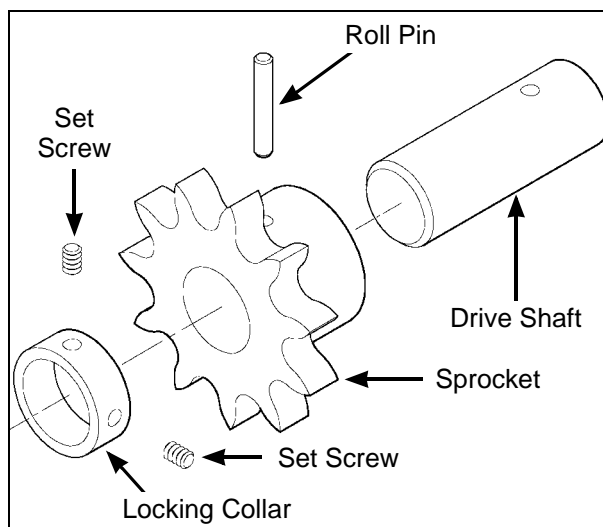
A sprocket should be replaced **when the teeth become asymmetric** (when the front of a tooth is a different shape than the back side of the tooth).



Reduction Sprocket Wear

NOTE: Generally, a small sprocket wears faster than a large sprocket.

- Remove the reduction box cover and reduction chain. Refer to **REPLACING/REPAIRING of Two-Stage Snowblower Reduction Chain** in this section.
- Loosen the set screws that fasten the sprocket to the fan assembly by applying heat to the thread sealant used on these screws during assembly.
- Slide the sprocket off the fan assembly. Use a puller if necessary.
- Position the new sprocket on the fan assembly. Apply Loctite® Threadlocker to set screws before tightening.



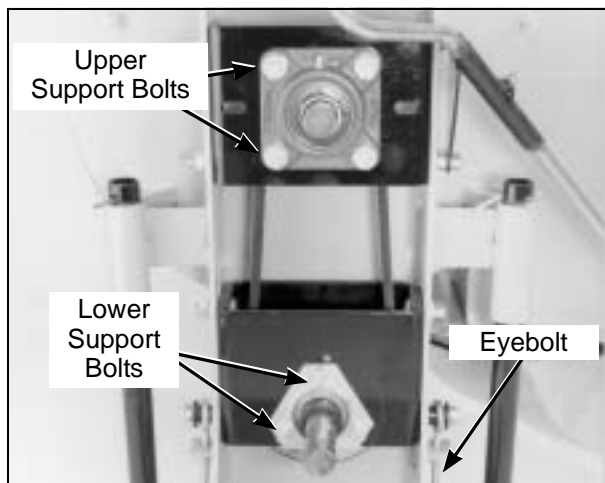
Remove and Replace Sprocket

- Install chain and adjust the chain tension. Refer to **ADJUSTMENTS of Two-Stage Snowblower Reduction Chain Tension** in this section.
- Lubricate the reduction chain. Refer to **LUBRICATION of Two-Stage Snowblower Reduction Chain** in this section.
- Reinstall the reduction box cover by reversing the removal procedures.

Debris Blower Drive Belt

- Remove the belt guard from the debris blower housing by removing the two (2) cover pins and hairpins securing it to the housing.

2. Loosen the three (3) nuts and three (3) bolts on lower pulley bearing support and the adjustment nut on the lower end of each (2) eyebolts to release belt tension.
3. Loosen the two (2) set screws securing the upper pulley bearing to the shaft. Unbolt and remove the upper pulley bearing support.
4. Install the new drive belt and reinstall the upper pulley bearing support. Secure the bearing on the shaft by tightening the two set screws.
5. Adjust the belt tension. Refer to **ADJUSTMENTS of Debris Blower Drive Belt Tension** in this section. Tighten fasteners securely and reinstall belt guard by reversing the removal procedures.

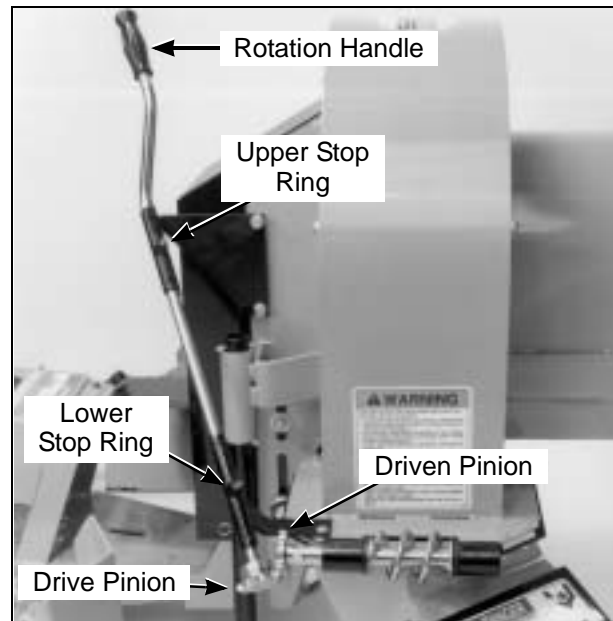


Debris Blower Drive Belt

Debris Blower Rotation Pinions

1. Remove the drive pinion from the rotation handle by loosening the set screw and pulling off the pinion.
2. Remove the rotation handle lower stop ring and pull up on the rotation handle. Loosen set screw in upper stop ring. Pull rotation handle up out of work way. Unbolt and remove the driven pinion.
3. Install the new driven pinion and tighten the nut and bolt securely.
4. Lower the rotation handle back into its original position and reinstall the lower stop ring. Position the new drive pinion flush with the shaft and securely tighten the pinion set screw.

5. Adjust the rotation pinions as instructed in **ADJUSTMENTS of Debris Blower Rotation Pinions** in this section. Securely tighten the set screw of each stop ring.



Debris Blower Rotation Pinions

ADJUSTMENTS

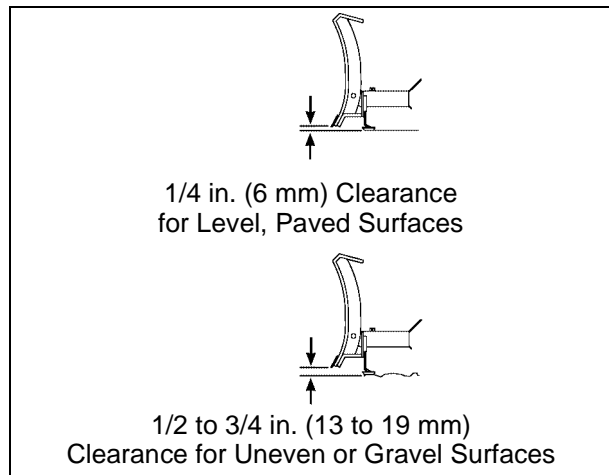


WARNING

DO NOT attempt to make any adjustments with the tractor engine running. Disengage the PTO clutch, stop the engine, and remove the ignition key. Wait for all movement to stop before getting off the seat.

Dozer Blade Skid Shoes

Adjust the skid shoes to allow the required clearance under the blade. **On level, paved surfaces**, adjust the skid shoes to allow approximately 1/4 in. (6 mm) clearance between the cutting edge and the surface. **On uneven or gravel surfaces**, allow 1/2 to 3/4 in. (13 to 19 mm) clearance, depending on the size of the gravel. Refer to **Skid Shoe Height Adjustment** illustration.

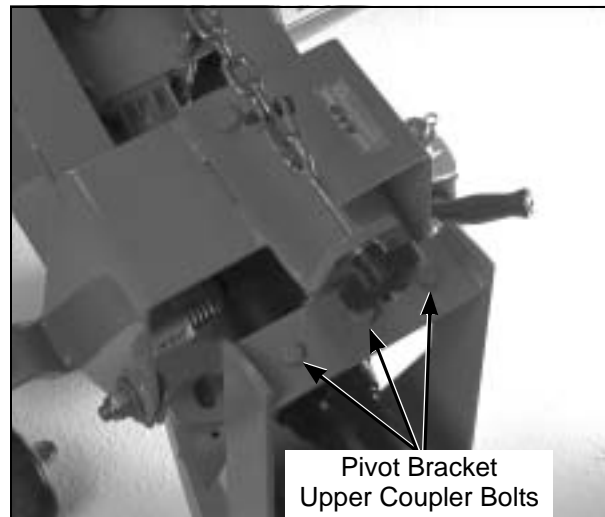


Skid Shoe Height Adjustment

Rotary Broom Brush Leveling

IMPORTANT: The proper level adjustment of the broom is **essential** for efficient operation and life of the bristles. The broom should regularly be adjusted to prevent **uneven brush wear**.

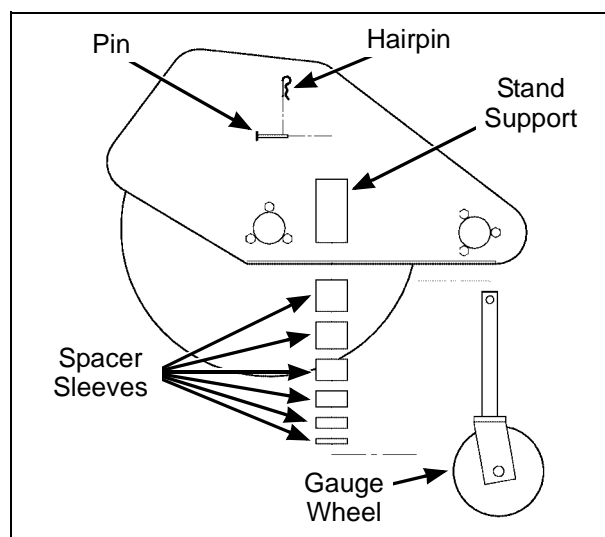
1. Extend the parking stands and raise the broom to the transport position (so that the bristles do not contact the ground).
2. Loosen the three bolts on the upper coupler of the pivot bracket.
3. Gently lower the broom head until the brush is parallel to ground level on both sides. Place a block of wood under each side of the brush to keep the brush in place.
4. Tighten the three bolts on the upper coupler, remove the wood blocks, and lower the broom to the ground to make sure the brush is level.



Side to Side Level Adjustment

Rotary Broom Gauge Wheels

This adjustment is required for lawn thatching or leaf raking operations. Height is adjusted to the nearest 1/4 in. (6 mm) by placing spacer sleeves on the upper or lower sides of the stand support. Adjust height according to type of application. Refer to **Lawn Thatching and Leaf Raking in Operating Instructions**.

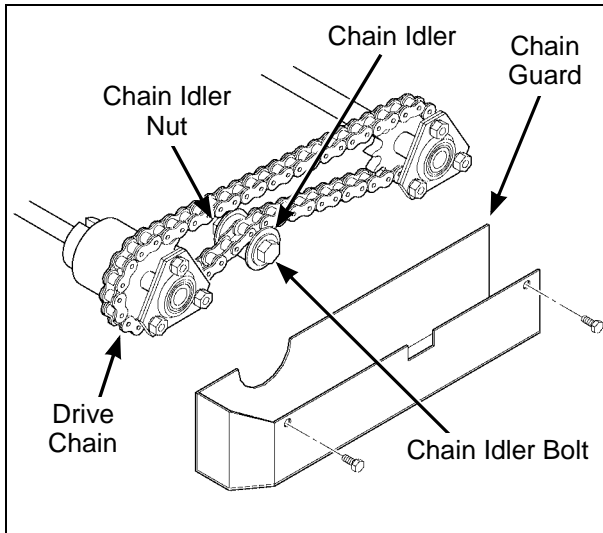


Gauge Wheel Height Adjustment

Rotary Broom Drive Chain Tension

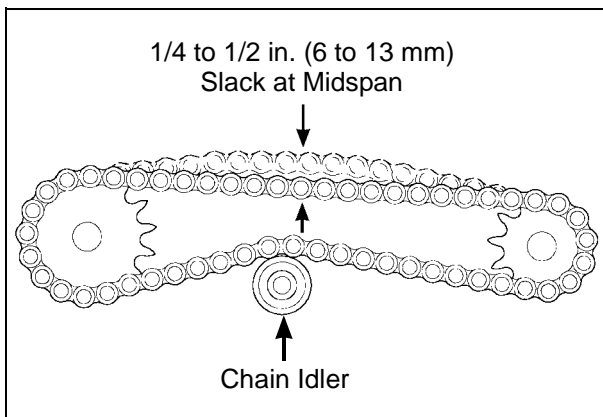
The drive chain should have 1/4 to 1/2 in. (6 to 13 mm) of slack at midspan. Remove the chain guard cover to check slack. Adjust the drive chain as follows:

1. Loosen the chain idler nut.



Loosen Chain Idler Nut

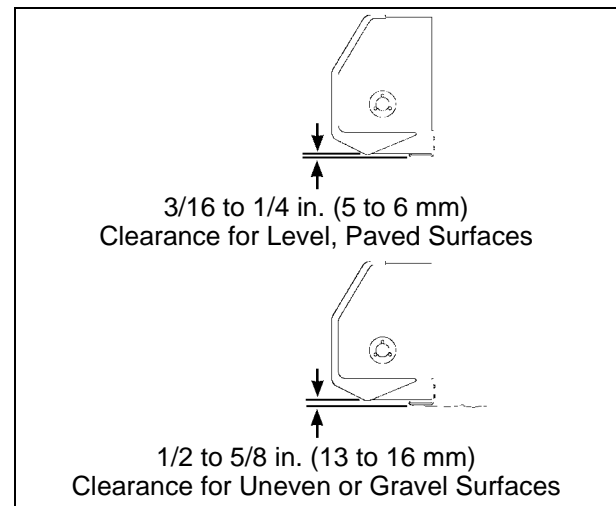
2. Position the chain idler so the chain has 1/4 to 1/2 in. (6 to 13 mm) of slack.
3. Retighten the chain idler nut.
4. Recheck the drive chain tension.



Proper Drive Chain Tension

Two-Stage Snowblower Skid Shoes

Adjust the skid shoes to allow the required clearance under the blade. **On level, paved surfaces**, adjust the skid shoes to allow 3/16 to 1/4 in. (5 to 6 mm) clearance between the cutting edge and the surface. **On uneven or gravel surfaces**, allow 1/2 to 5/8 in. (13 to 16 mm) clearance, depending on the size of the gravel. Refer to **Skid Shoe Height Adjustment** illustration.

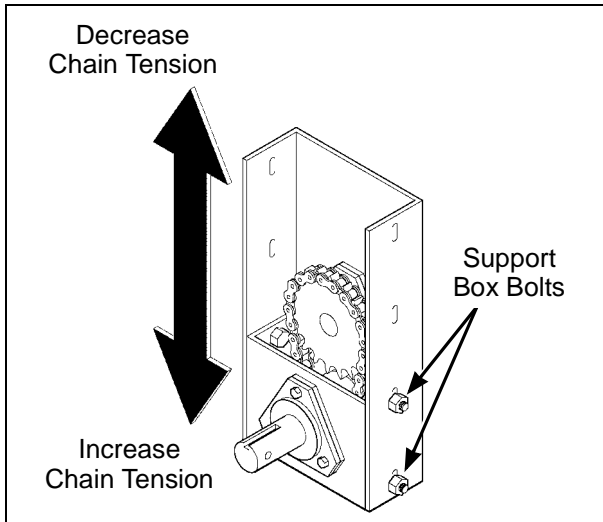


Skid Shoe Height Adjustment

Two-Stage Snowblower Reduction Chain Tension

Adjust the tension on the reduction chain as follows:

1. Loosen the four (4) bolts securing the lower sprocket support box to the reduction box housing.
2. Position the lower sprocket support box according to the amount of chain tension required. The chain should have about 1/4 to 1/2 in. (6 to 13 mm) of slack.
3. To **increase the chain tension**, position the support box **lower**. To **decrease the chain tension**, position the support box **higher**.
4. Retighten the four (4) bolts securing the support box.



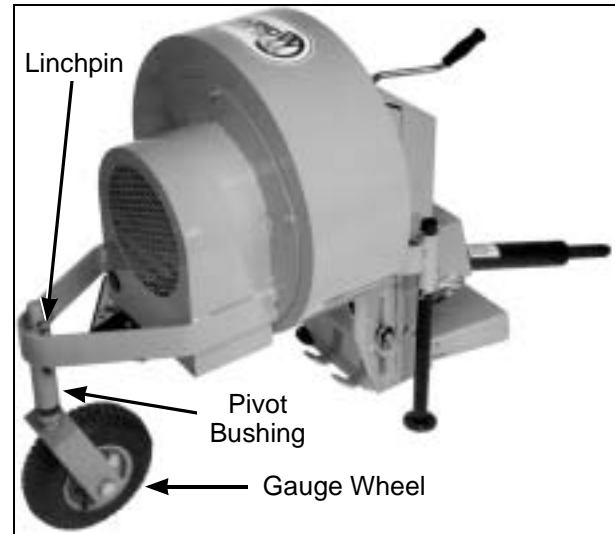
Reduction Chain Tension Adjustment

Debris Blower Front Gauge Wheel

Adjust the gauge wheel height according to surface condition.

IMPORTANT: The air blast nozzle **must clear the ground at all times.**

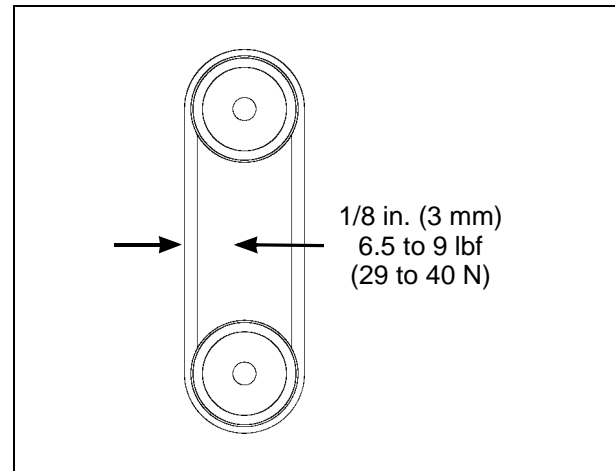
1. Remove the linchpin from the wheel pivot shaft.
2. Adjust wheel height by placing sleeve spacers either on the upper or lower side of the wheel pivot bushing. Placing the spacers on the **lower side increases** gauge wheel height. Placing the spacers on the **upper side lowers** gauge wheel height.
3. Reinstall the linchpin when proper gauge wheel height has been reached.



Gauge Wheel Height Adjustment

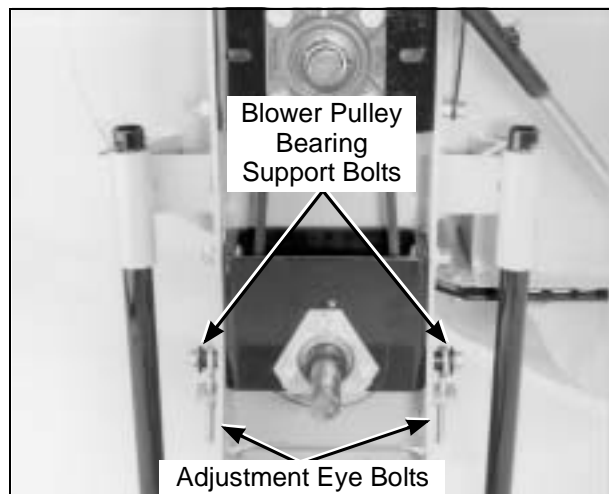
Debris Blower Drive Belt Tension

The drive belt deflection must be 1/8 in. (3 mm) when 6-1/2 to 9 lbf (29 to 40 N) is applied midway between the two pulleys.



Proper Drive Belt Deflection

1. Remove the belt guard from the debris blower housing by removing the two (2) cover pins and hairpins securing it to the housing.
2. Loosen the two (2) nuts and bolts on the blower pulley bearing support and turn the adjustment nuts on each side until the required tension is reached. Tighten the fasteners securely and re-install the belt guard by reversing the removal procedures.



Drive Belt Tension Adjustment

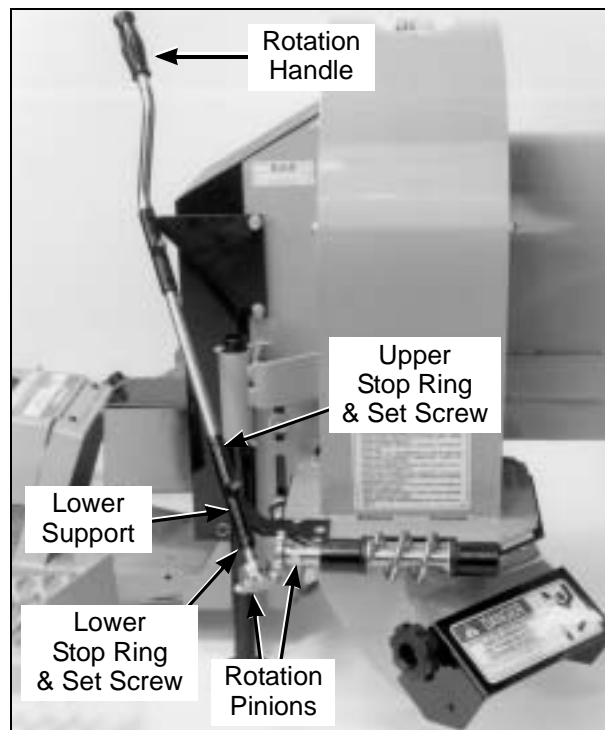
Debris Blower Rotation Pinions

The two (2) rotation pinions should slightly contact each other without any resistance.

1. Loosen the set screw of each stop ring on the rotation handle.
2. Keeping the two (2) pinions slightly in contact with each other, position the upper stop ring against the lower support and tighten the screw.
3. Position the lower stop ring close to the lower support and tighten the set screw. The rotation handle should rotate freely without excessive end play.








Debris Blower Rotation Handle

With the rotation pinions properly adjusted, the two (2) stop rings should be positioned close enough to the lower support to allow the rotation handle to rotate freely without excessive end play.






Debris Blower Rotation Pinions & Handle Adjustment

TORQUE SPECIFICATIONS

GENERAL SPECIFICATION TABLE													
Use the following torques when special torques are not given													
NOTE: These values apply to fasteners as received from supplier, dry, or when lubricated with normal engine oil. They do not apply if special graphited or moly disulphide greases or other extreme pressure lubricants are used. This applies to both UNF and UNC threads.													
SEE Grade No.	2				5				8				
BOLT HEAD IDENTIFICATION MARKS AS PER GRADE NOTE: MANUFACTURING MARKS WILL VARY.					  				  				
	Torque				Torque				Torque				
	Pounds-Foot		Newtons-Meter		Pounds-Foot		Newtons-Meter		Pounds-Foot		Newtons-Meter		
BOLT SIZES	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	
Inches	Millimeters												
1/4	6.35	5	6	6.8	8.13	9	11.0	12.2	14.9	12	15	16.3	30.3
5/16	7.94	10	12	13.6	16.3	17	20.5	23.1	27.8	24	29	32.5	39.3
3/8	9.53	20	23	27.1	31.2	35	42.0	47.5	57.0	45	54	61.0	73.2
7/16	11.11	25	30	40.7	47.4	54	64.0	73.2	86.8	70	84	94.9	113.9
1/2	12.70	45	52	61.0	70.5	80	96.0	108.5	130.2	110	132	149.2	179.0
9/16	14.29	65	75	88.1	101.6	110	132.0	149.2	179.0	160	192	217.0	260.4
5/8	15.88	95	105	128.7	142.3	150	180	203.4	244.1	220	264	298.3	358.0
3/4	19.05	150	185	203.3	250.7	270	324	366.1	439.3	380	456	515.3	618.3
7/8	22.23	160	200	216.8	271.0	400	480	542.4	650.9	600	720	813.6	976.3
1	25.40	250	300	338.8	406.5	580	696	786.5	943.8	900	1080	1220.4	1464.5
1 1/8	25.58	-	-	-	-	800	880	1084.8	1193.3	1280	1440	1735.7	1952.6
1 1/4	31.75	-	-	-	-	1120	1240	1518.7	1681.4	1820	2000	2467.9	2712.0
1 3/8	34.93	-	-	-	-	1460	1680	1979.8	2278.1	2380	2720	3227.3	3688.3
1 1/2	38.10	-	-	-	-	1940	2200	2630.6	2983.2	3160	3560	4285.0	4827.4

METRIC BOLT TORQUE SPECIFICATIONS

		Coarse thread					Fine Thread				
Size of screw	Grade No.	Pitch mm	Pounds-Foot		Newtons-Meter		Pitch mm	Pounds-Foot		Newtons-Meter	
			MIN.	MAX.	MIN.	MAX.		MIN.	MAX.	MIN.	MAX.
M6	4T 	1.0	3.6	5.8	4.9	7.9	-	-	-	-	-
	7T 		5.8	9.4	7.9	12.7		-	-	-	-
	8T 		7.2	10	9.8	13.6		-	-	-	-
M8	4T	1.25	7.2	14	9.8	19.0	1.0	12	17	16.3	23.0
	7T		17	22	23	29.8		19	27	25.7	36.6
	8T		20	26	27.1	35.2		22	31	29.8	42
M10	4T	1.5	20	25	27.1	33.9	1.25	20	29	27.1	39.3
	7T		34	40	46.1	54.2		35	47	47.4	63.7
	8T		38	46	51.5	62.3		40	52	54.2	70.5
M12	4T	1.75	28	34	37.9	46.1	1.25	31	41	42	55.6
	7T		51	59	69.1	79.9		56	68	75.9	92.1
	8T		57	66	77.2	89.4		62	75	84	101.6
M14	4T	2.0	49	56	66.4	75.9	1.5	52	64	70.5	86.7
	7T		81	93	109.8	126		90	106	122	143.6
	8T		96	109	130.1	147.7		107	124	145	168
M16	4T	2.0	67	77	90.8	104.3	1.5	69	83	93.5	112.5
	7T		116	130	157.2	176.2		120	138	162.6	187
	8T		129	145	174.8	196.5		140	158	189.7	214.1
M18	4T	2.0	88	100	119.2	136	1.5	100	117	136	158.5
	7T		150	168	203.3	227.6		177	199	239.8	269.6
	8T		175	194	237.1	262.9		202	231	273.7	313
M20	4T	2.5	108	130	146.3	176.2	1.5	132	150	178.9	203.3
	7T		186	205	252	277.8		206	242	279.1	327.9
	8T		213	249	288.6	337.4		246	289	333.3	391.6

Removal and Storage Instructions

REMOVAL

Removing Attachments from Implement Hitch

Dozer Blade

1. Park the tractor on a level surface and lower the dozer blade.

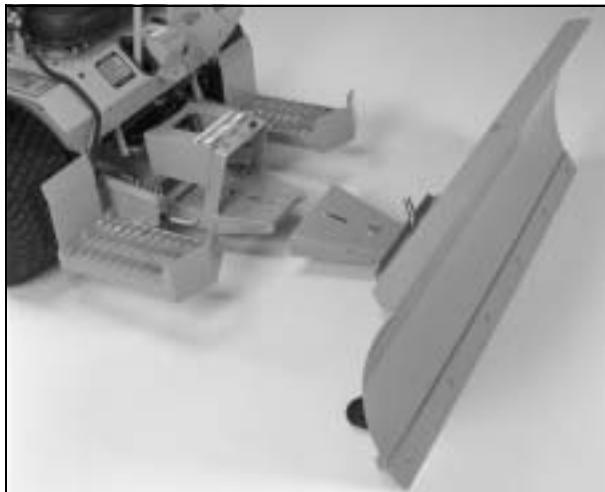


WARNING

DO NOT attempt to remove the dozer blade with the tractor engine running. Disengage the PTO clutch, stop the engine and remove the ignition key. Wait for all movement to stop before getting off the seat.

To prevent accidental engine starting, disconnect the fuel solenoid wire [diesel engines] or the spark plug wire(s) [gasoline engines].

2. Remove the linchpin from the quick hitch latch and place the hitch locking lever in the **UNLOCKED** position.
3. Start the tractor engine and carefully back the tractor away from the blade.



Detach Blade from Implement Hitch

Rotary Broom

1. Park the tractor on a level surface and lower the rotary broom.



WARNING

DO NOT attempt to remove the rotary broom with the tractor engine running. Disengage the PTO clutch, stop the engine and remove the ignition key. Wait for all movement to stop before getting off the seat.

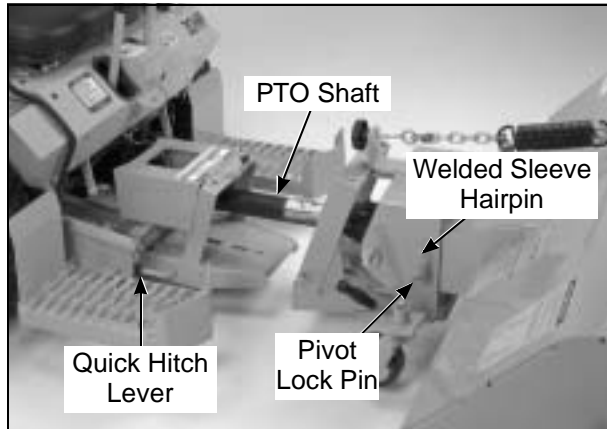
To prevent accidental engine starting, disconnect the fuel solenoid wire [diesel engines] or the spark plug wire(s) [gasoline engines].

2. Extend the parking stands to raise the broom to the transport position (so that the bristles do not contact the ground).
3. Remove the hairpin from the welded sleeve on the RH side of the broom mounting bracket. Set the pivot lock pin in the **innermost position** (it may be necessary to lift the broom head slightly), and lock in place with the hairpin.

IMPORTANT: Once the broom is fully remounted, the pivot lock pin should be set in its **most extended position** in order to allow the broom to follow varying ground contours.

4. Carefully lower the broom so that it rests on the parking stands.
5. Disconnect the broom driveline from the tractor PTO shaft and place the driveline on its support (located on the female hitch).
6. Remove the linchpin from the quick hitch latch. Place the hitch locking lever in the **UNLOCKED** position.
7. Start the tractor engine and carefully back the tractor away from the broom.

Removal and Storage Instructions



Detach Rotary Broom from Implement Hitch

Two-Stage Snowblower

1. Park the tractor on a level surface and lower the snowblower.

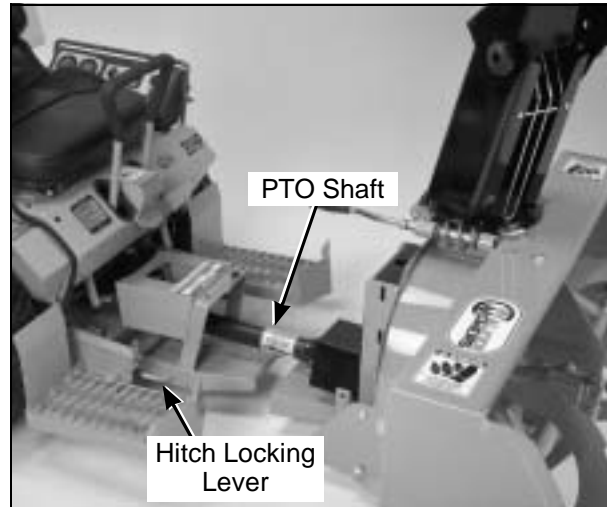


WARNING

DO NOT attempt to remove the snowblower with the tractor engine running. Disengage the PTO clutch, stop the engine and remove the ignition key. Wait for all movement to stop before getting off the seat.

To prevent accidental engine starting, disconnect the fuel solenoid wire [diesel engines] or the spark plug wire(s) [gasoline engines].

2. Remove the hairpin from the parallel bar at the adaptor end, and remove the parallel bar from the implement adaptor.
3. Disconnect the driveline from the tractor PTO shaft.
4. Remove the linchpin from the quick hitch latch and place the hitch locking lever in the **UN-LOCKED** position.
5. Start the tractor engine and carefully back the tractor away from the snowblower.



Detach Snowblower from Implement Hitch

Debris Blower

1. Park the tractor on a level surface and lower the debris blower.



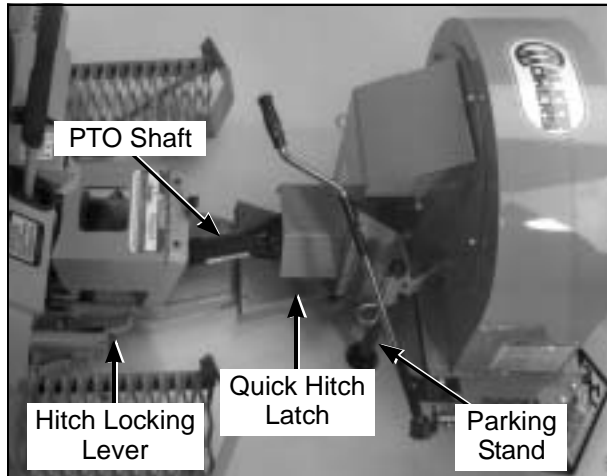
WARNING

DO NOT attempt to remove the debris blower with the tractor engine running. Disengage the PTO clutch, stop the engine and remove the ignition key. Wait for all movement to stop before getting off the seat.

To prevent accidental engine starting, disconnect the fuel solenoid wire [diesel engines] or the spark plug wire(s) [gasoline engines].

2. Set the parking stands in the most extended position and lock in place.
3. Disconnect the tractor PTO shaft from the debris blower input shaft.
4. Remove the linchpin from the quick hitch latch and place the hitch locking lever in the **UN-LOCKED** position.
5. Start the tractor engine and carefully back the tractor away from the debris blower.

Removal and Storage Instructions



Detach Debris Blower from Implement Hitch

Removing Implement Hitch from Tractor

IMPORTANT: Detach any attached implement from the hitch **before detaching the hitch from the tractor**. Refer to the instructions for **REMOVAL** of *Dozer Blade*, *Rotary Broom*, *Two-Stage Snowblower*, or *Debris Blower* in this section.

1. Park the tractor on a level surface and lower the implement hitch.

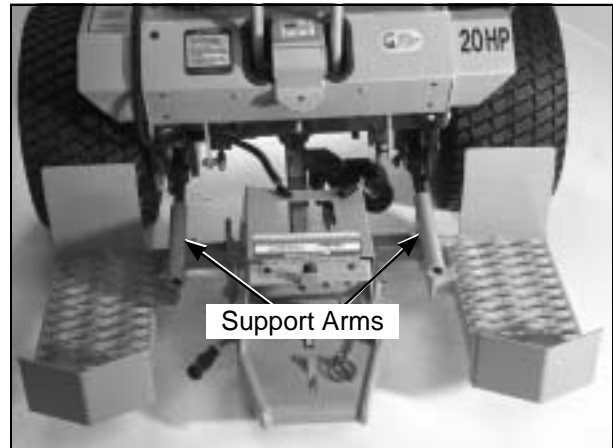


WARNING

DO NOT attempt to remove the implement hitch with the tractor engine running. Disengage the PTO clutch, stop the engine and remove the ignition key. Wait for all movement to stop before getting off the seat.

To prevent accidental engine starting, disconnect the fuel solenoid wire [diesel engines] or the spark plug wire(s) [gasoline engines].

2. Unplug the male connector on the implement lift wiring harness from the female connector on the linear actuator.
3. Remove the hitch pins from each support arm and slide the implement hitch off the support arms.



Detach Implement Hitch from Tractor

END OF SEASON STORAGE



WARNING

NEVER store the tractor with fuel in the fuel tank inside a building where open flames or sparks are present. Allow the engine to cool before storing in any enclosure.

Implement Hitch

1. Clean the implement hitch thoroughly.
2. Repaint all parts from which paint has worn.

NOTE: Rustproofing or painting **every year** will prolong the life of the hitch components and moving parts.

3. When the implement hitch is dry, lubricate all moving parts. Apply lubricant liberally to all exposed surfaces to protect against rust.
4. List the replacement parts that will be needed before the next season.
5. Store the hitch in a dry place.

Dozer Blade

1. Clean the dozer blade thoroughly.
2. Repaint all parts from which paint has worn.

Removal and Storage Instructions

NOTE: Rustproofing or painting **every year** will prolong the life of the blade components and moving parts.

3. When the dozer blade is dry, lubricate all moving parts with SAE 30 engine oil. Apply oil liberally to all exposed surfaces to protect against rust.
4. Store the dozer blade in a dry place.

Rotary Broom

1. Clean the rotary broom thoroughly.
2. Repaint all parts from which paint has worn.

NOTE: Rustproofing or painting **every year** will prolong the life of the broom components and moving parts.

3. When the rotary broom is dry, lubricate all moving parts. Apply lubricant liberally to all exposed surfaces to protect against rust.
4. Store the broom on parking stands so that the bristles **do not touch the ground**.
5. If the broom bristles are exposed to direct sunlight, protect the bristles with a tarp.
6. List the replacement parts that will be needed before the next season.
7. Store the broom in a dry place.

Two-Stage Snowblower

1. Clean the snowblower thoroughly.
2. Repaint all parts from which paint has worn.

NOTE: Rustproofing or painting **every year** will prolong the life of the snowblower components and moving parts.

3. When the snowblower is dry, lubricate all moving parts. Apply lubricant liberally to all exposed surfaces to protect against rust.
4. List the replacement parts that will be needed before the next season.
5. Store the snowblower in a dry place.

Debris Blower

1. Clean the debris blower thoroughly.
2. Repaint all parts from which paint has worn.

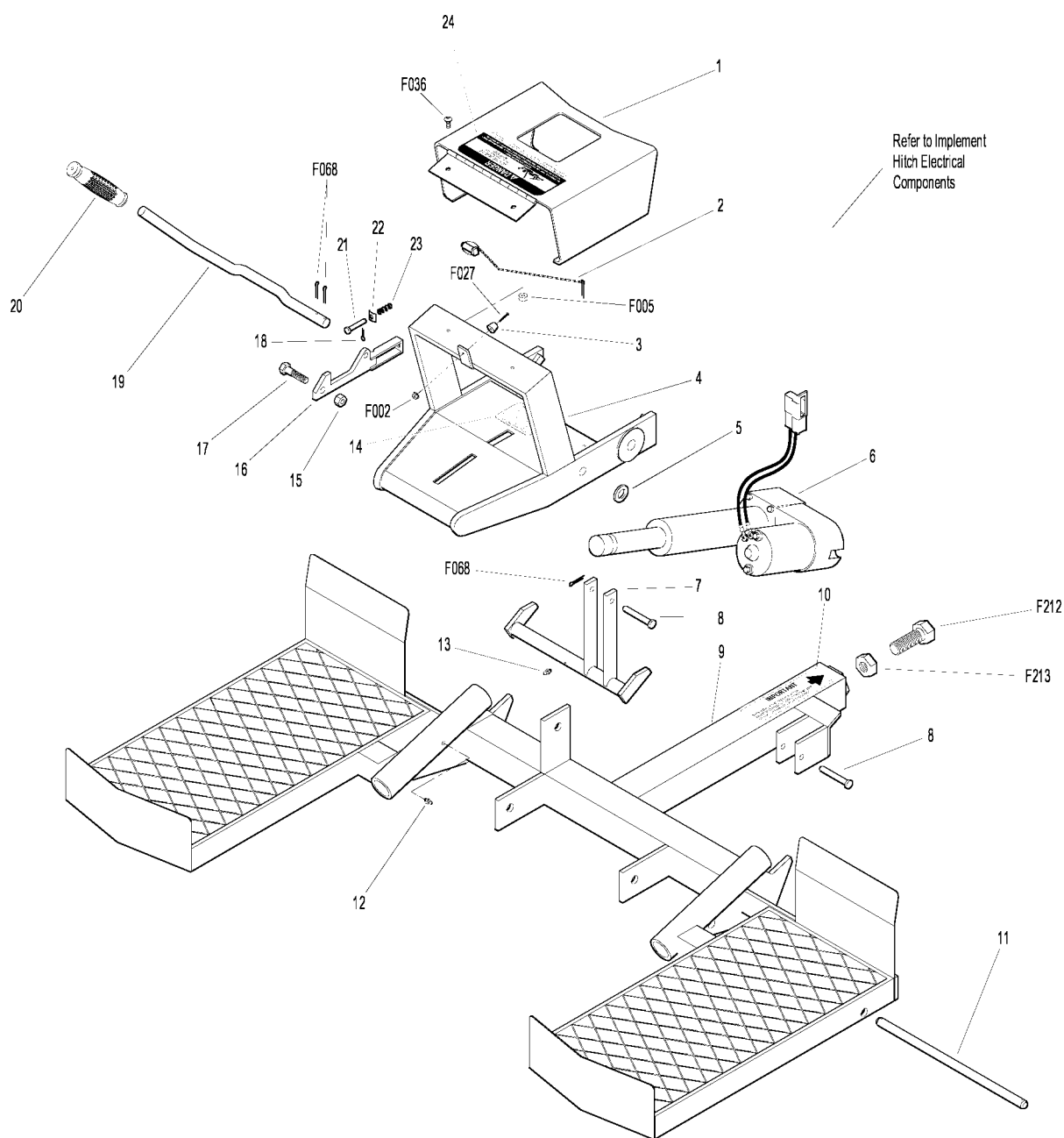
NOTE: Rustproofing or painting **every year** will prolong the life of the debris blower components and moving parts.

3. When the debris blower is dry, lubricate all moving parts. Apply lubricant liberally to all exposed surfaces to protect against rust.
4. List the replacement parts that will be needed before the next season.
5. Store the debris blower in a dry place.

IMPLEMENT HITCH ASSEMBLY

ITEM NO.	PART NO.	DESCRIPTION	NO. REQ'D	ITEM NO.	PART NO.	DESCRIPTION	NO. REQ'D
Implement Hitch				23	I008	Spring (1/4 x 1)	1
1	6627	PTO Shield	1	24	7822	Decal, PTO Shield	1
2	I392	Safety Chain Assembly	1	Fasteners			
	I015	Chain	1		F002	10-24 Keps Nut	1
	O/L	5/16 Linchpin	1		F005	1/4-20 ESNA Nut	2
	O/L	5/32 x 1 Cotter Pin	1		F027	10-24 x 5/8 PPHMS	1
3	5588	Rubber Bumper	1		F036	1/4-20 x 1/2 SBH Screw	2
4	I001	Quick Hitch	1		F068	1/8 x 1 Cotter Pin	6
	6625-1	Hitch Assembly, Male	1		F212	3/4-10 x 2 Hex Bolt	1
5	O/L	9/16 ID Flat Washer	1		F213	3/14-10 Nut	1
6	6621	Linear Actuator (11-3/4)	1	NOTE: Decals are illustrated in greater detail in the Owner's section of this manual. Refer to SAFETY, CONTROL, AND INSTRUCTION DECALS in Safety Instructions , Page 17.			
7	6630	Hitch Lift Crank	1	NOTE: All NS items are listed with a RAD Part Number (e.g., RAD 657383), and are not sold by Walker Manufacturing. To order these items, contact:			
8	6621-1	Clevis Pin (1/2 x 2)	2	RAD Technologies Inc. 2835, Chemin de l'Aéroport Thetford Mines (Québec) G6G 5R7 CANADA 1-418-338-4499			
9	6624	Mounting Frame Assembly, Hitch	1				
10	6618	Decal, Hitch Mount Adjust	1				
11	6626	Pivot Shaft	1				
12	5830-3	Grease Fitting (45 Degree)	2				
13	5830	Grease Fitting	1				
14	I393	Decal, Attaching Hitch	1				
15	O/L	3/8-NC Nylon Locknut	1				
16	I002	Quick Hitch Latch	1				
17	O/L	3/8-NC x 1-1/2 Hex Bolt	1				
18	O/L	3/32 x 3/4 Cotter Pin	1				
19	I009	Attaching Lever	1				
20	7860	Handle Grip	1				
21	I005	1/4 x 1-11/16 Pin	1				
22	NS	Spring Plate (RAD 657383)	1				

IMPLEMENT HITCH ASSEMBLY



IMPLEMENT HITCH ELECTRICAL COMPONENTS

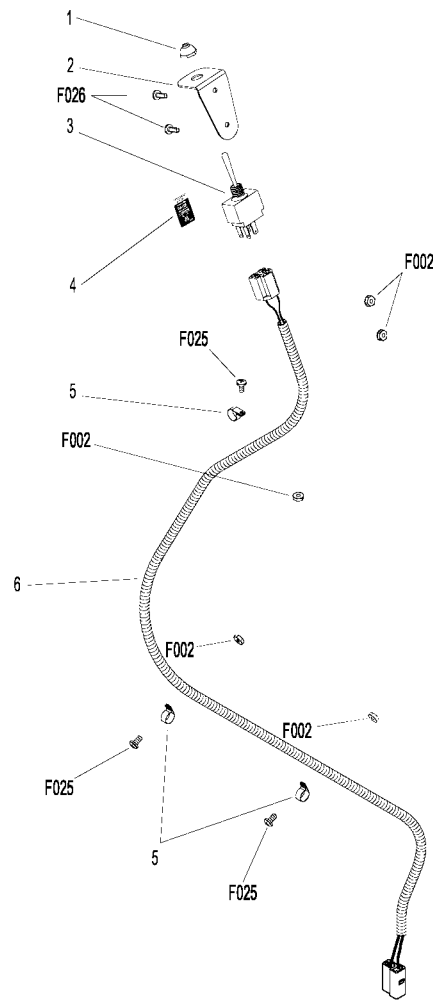
ITEM NO.	PART NO.	DESCRIPTION	NO. REQ'D	ITEM NO.	PART NO.	DESCRIPTION	NO. REQ'D
Implement Hitch Electrical Components				Fasteners			
1	6623-1	Switch Boot (Fits P/N 6623)	1		F002	10-24 Keps Nut	5
2	6628	Switch Mount Bracket	1		F025	10-24 x 3/8 PPHMS	3
3	6623	Lift Control Switch	1		F026	10-24 x 1/2 PPHMS	2
4	6632	Decal, Implement Hitch	1				
5	5832	Cable Clamp (1/2)	3	* Service Part Only			
6	6622	Wiring Harness, Actuator	1				
	6631	Implement Hitch Electrical Package	*				

NOTE: Decals are illustrated in greater detail in the Owner's section of this manual. Refer to **SAFETY, CONTROL, AND INSTRUCTION DECALS** in **Safety Instructions**, Page 17.

NOTE: All NS items are listed with a RAD Part Number (e.g., RAD 657383), and are not sold by Walker Manufacturing. To order these items, contact:

RAD Technologies Inc.
2835, Chemin de l'Aéroport
Thetford Mines (Québec)
G6G 5R7 CANADA
1-418-338-4499

IMPLEMENT HITCH ELECTRICAL COMPONENTS

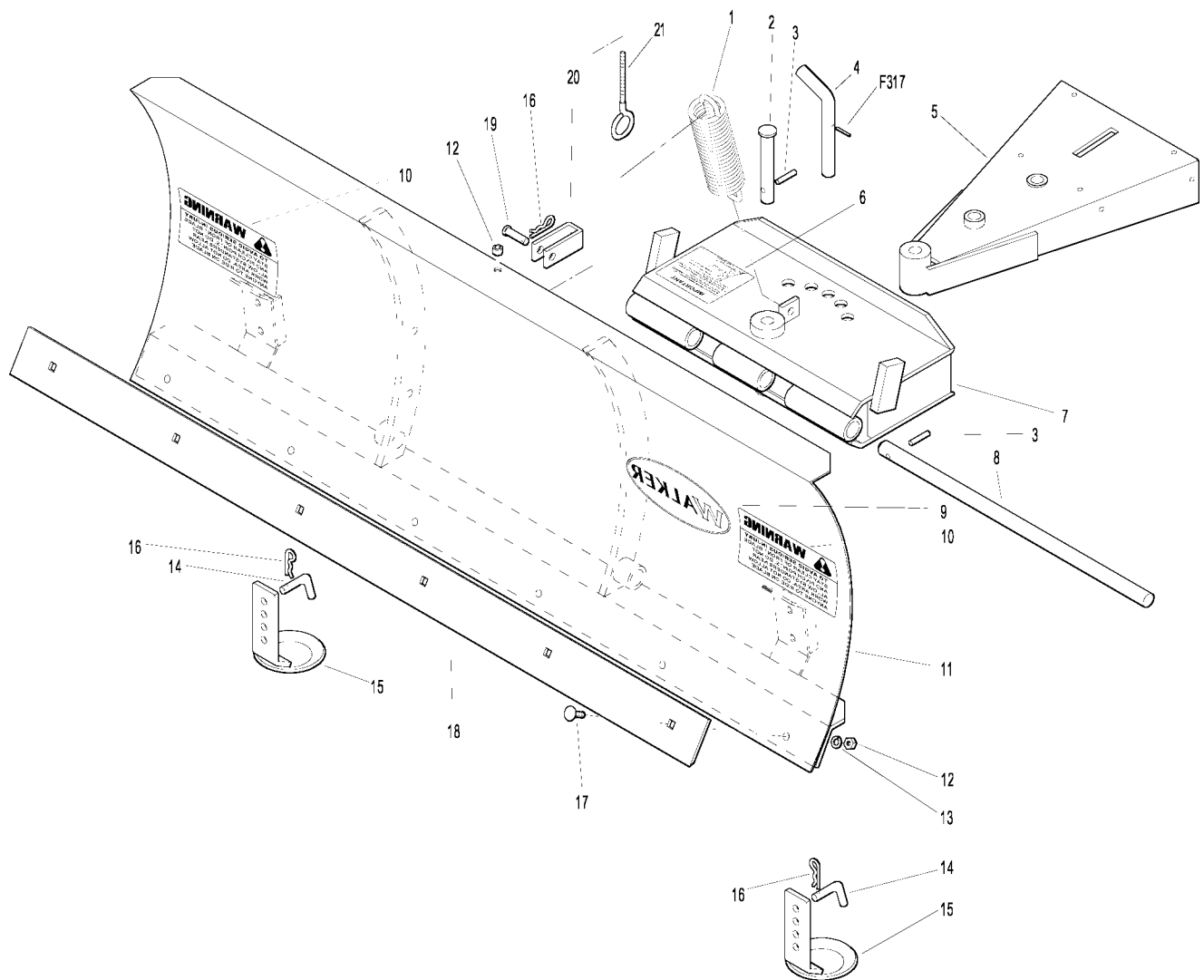


Refer to
Implement Hitch Assembly

DOZER BLADE ASSEMBLY

ITEM NO.	PART NO.	DESCRIPTION	NO. REQ'D	ITEM NO.	PART NO.	DESCRIPTION	NO. REQ'D
Dozer Blade Assembly				21	I341	5/16-18 x 5 Eyebolt (Includes Item # 11)	1
1	I061	Spring (1-7/8 x 9)	1	Fasteners			
2	I064	Pivot Pin	1				
3	I060	1/4 x 1 Roll Pin	2				
4	I065	Adjustment Pin	1	F317		3/16 x 1 Split Spring Pin	1
5	I063	Female Quick Hitch	1	NOTE: Decals are illustrated in greater detail in the Owner's section of this manual. Refer to SAFETY, CONTROL, AND INSTRUCTION DECALS in Safety Instructions , Page 17.			
6	NS	Decal, Trip Spring Lockout (RAD 657503)	1	NOTE: All NS items are listed with a RAD Part Number (e.g., RAD 657383), and are not sold by Walker Manufacturing. To order these items, contact:			
7	I058	Hitch Box	1	RAD Technologies Inc. 2835, Chemin de l'Aéroport Thetford Mines (Québec) G6G 5R7 CANADA 1-418-338-4499			
8	I059	3/4 x 17-3/4 Pin	1				
9	5800	Decal, Walker Mower (4 x 7-1/2)	1				
10	NS	Decal, Stay Clear Blade (RAD 657524)	2				
11	I050	Welded Blade	1				
12	O/L	5/16-NC Hex Nut	7				
13	O/L	5/16 Lock Washer	1				
14	I056	Skid Shoe Pin	2				
15	I055	Skid Shoe	2				
16	I057	3mm x 65mm Hairpin	3				
17	O/L	5/16-NC x 1 Carriage Bolt	6				
18	I051	Cutting Edge	1				
19	I068	Trip Spring Lockout Pin	1				
20	I067	Trip Spring Lockout	1				

DOZER BLADE ASSEMBLY



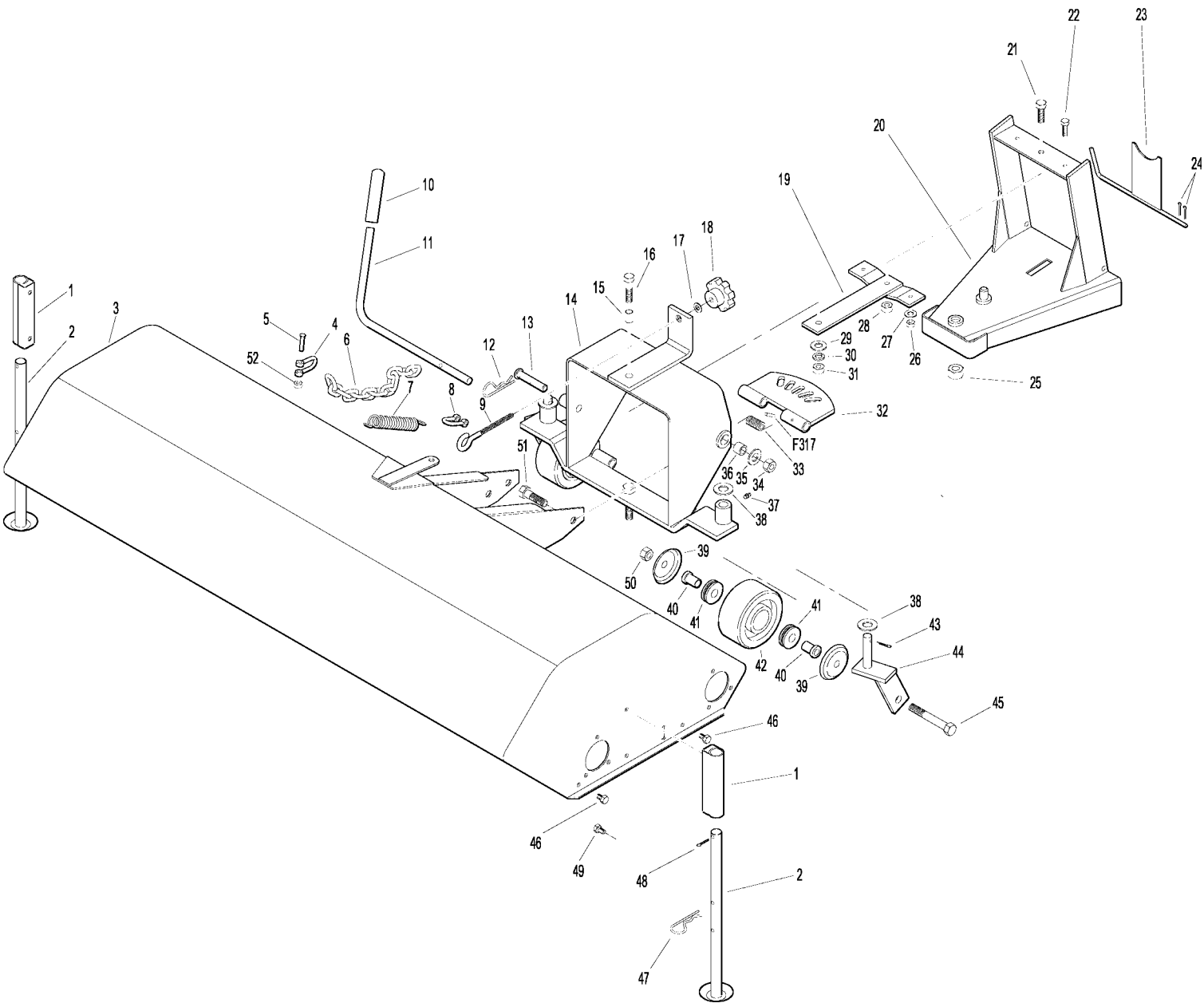
ROTARY BROOM ASSEMBLY

ITEM NO.	PART NO.	DESCRIPTION	NO. REQ'D	ITEM NO.	PART NO.	DESCRIPTION	NO. REQ'D
Rotary Broom Assembly				45	O/L	1/2-NC x 3-1/2 Hex Bolt	2
1	I385	Stand Support Bracket	2	46	O/L	5/16-NC x 1/4 Set Screw	2
2	I366	Parking Stand	2	47	O/L	4mm x 80mm Hairpin	2
3	NS	Housing (RAD 661579)	1	48	O/L	5/32 x 1-1/4 Cotter Pin	2
4	663827	Clevis	1	49	O/L	5/16-NC x 1/2 Hex Bolt (Flange)	4
5	O/L	5/16-NC Hex Bolt, Plated	1	50	O/L	1/2-NC Nylon Hex Nut	2
6	I377	Chain, 3/16 x 15	1	51	O/L	1/2-NC x 1-3/4 Hex Bolt	2
7	I347	Tension Spring	1	52	O/L	5/16-NC Hex Nut	1
8	I344	Clevis	1	Kit I391 Side Caster Wheels Kit			
9	I341	5/16-18 x 5 Eyebolt	1	Includes Items listed below and instructions. Side Caster Wheel Kit is not shown here. May be ordered as a factory-installed option or as a kit for dealer installation. Contact your Walker dealer.			
10	7860	Handle Grip	1	NS		Locking Screw (RAD 663527)	2
11	NS	Adjustment Handle (RAD 663640)	1	O/L		5/16-NC Flange Nut	8
12	I057	3mm x 65mm Hairpin	1	NS		Right Bracket (RAD 663532)	1
13	I306	Stopper Pin, 1/2 x 2-9/16	1			Left Bracket (RAD 663533)	1
14	I329	Pivot Bracket	1	O/L		5/16-NC x 3/4 Flange Bolt	8
15	I339	Upper Bushing	1	NS		Support (RAD 663534)	2
16	O/L	7/16-NC x 1-3/4 Hex Bolt	1	NS		Wheel Bracket, RH (RAD 663535)	1
17	I171	11/32 Nylon Washer	1			Wheel Bracket, LH (RAD 663536)	1
18	I170	5/16-18 Knob	1	O/L		11/16 ID Flat Washer	8
19	NS	Upper Coupler (RAD 661009)	1	I319		Wheel, 6 x 2	2
20	I328	Female Hitch	1	O/L		1/4 x 1-1/2 Cotter Pin	2
21	O/L	7/16-NC x 1-1/4 Hex Bolt	1	I364		0.063 ID Nylon Ring	2
22	O/L	5/16-NC x 1 Hex Bolt	2	O/L		3/16 x 1-1/2 Cotter Pin	2
23	I343	Driveline Support	1	NS		Decal, Brush Height (RAD 661521)	2
24	O/L	3/32 x 3/4 Cotter Pin	2	Fasteners			
25	O/L	5/8 Uni-Torque Nut	1	F317		3/16 x 1 Split Spring Pin	1
26	O/L	5/16-NC Nylon Locknut	2	NOTE: Decals are illustrated in greater detail in the Owner's section of this manual. Refer to SAFETY, CONTROL, AND INSTRUCTION DECALS in Safety Instructions , Page 17.			
27	O/L	3/8 ID Flat Washer	2	NOTE: All NS items are listed with a RAD Part Number (e.g., RAD 657383), and are not sold by Walker Manufacturing. To order these items, contact:			
28	O/L	7/16 Nylon Locknut	1	RAD Technologies Inc. 2835, Chemin de l'Aéroport Thetford Mines (Québec) G6G 5R7 CANADA 1-418-338-4499			
29	O/L	1/2 ID Flat Washer	1				
30	O/L	7/16 Lock Washer	1				
31	O/L	7/16-NC Hex Nut	1				
32	I338	Adjustment Plate	1				
33	I348	Torsion Spring	1				
34	O/L	1/2 Nylon Locknut	2				
35	O/L	9/16 ID Flat Washer	2				
36	I367	Pivot Bushing	2				
37	5830	Grease Fitting	4				
38	I364	11/16 Nylon Washer	4				
39	I317	Wheel Cap	4				
40	I312	Wheel Bushing	4				
41	I310	Bearing	4				
42	I311	Plastic Wheel (4")	2				
43	O/L	1/4 x 1-1/4 Cotter Pin	2				
44	I335	Wheel Bracket, RH	1				
	I336	Wheel Bracket, LH	1				

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

Effective Date 06-01-01

ROTARY BROOM ASSEMBLY



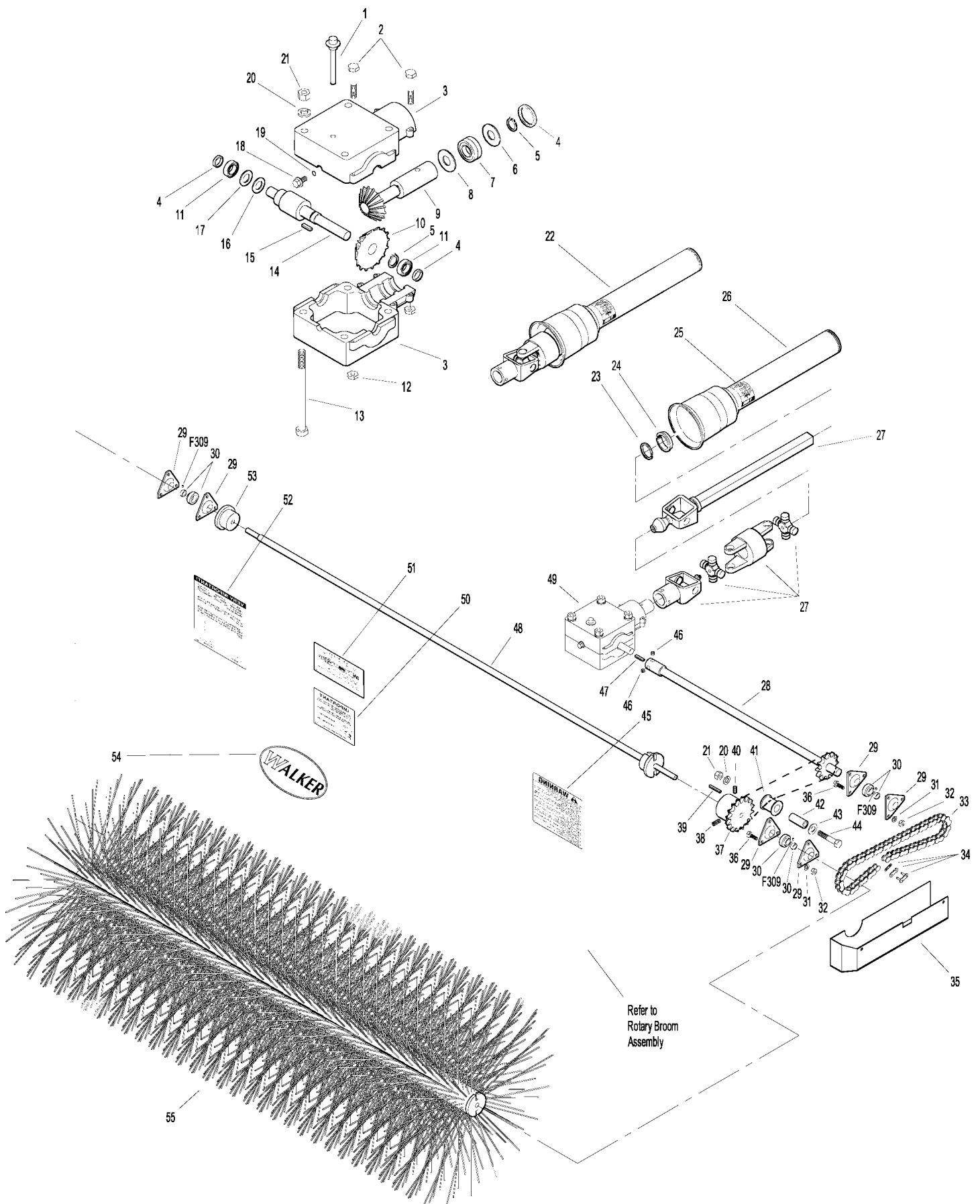
ROTARY BROOM DRIVE COMPONENTS

ITEM NO.	PART NO.	DESCRIPTION	NO. REQ'D	ITEM NO.	PART NO.	DESCRIPTION	NO. REQ'D
Gearbox Assembly				38	O/L	5/16-NC x 3/4 Set Screw	1
1	NS	Dipstick Plug (RAD 661741)	1	39	I162	1/4 x 1/4 x 1 Key	1
2	O/L	M8 x 45 Bolt	8	40	O/L	5/16-NC x 5/8 Set Screw	1
3	NS	Casing (RAD 661740)	1	41	I387	Chain Idler	1
4	NS	Oil Seal (RAD 661730)	3	42	I388	Spacer	1
5	NS	Snap Ring (RAD 661734)	3	43	O/L	7/16 ID Flat Washer	1
6	NS	25.6 x 0.6 Shim (RAD 661733)	1	44	O/L	3/8-NC x 2 Hex Bolt	1
7	NS	Bearing (RAD 661732)	2	45	I397	Decal, Safety Procedures	1
8	NS	25.6 x 0.7 Shim (RAD 661731)	1	46	O/L	5/16-NC x 1/4 Set Screw	2
9	NS	Pinion, 29M3.5 (RAD 661735)	1	47	I305	1/4 x 1/4 x 1-1/4 Key	1
10	NS	Gear Z25M35 (RAD 661738)	1	48	I390	Brush Drive Shaft	1
11	NS	Bearing 6205 (RAD 661728)	2	49	I376	Gearbox, Updated Broom (Includes Items # 1-21)	1
12	O/L	M8 Hex Nut	8	50	NS	Decal, Important - Avoid Damage (RAD 660328)	1
13	O/L	3/8-NC x 5 Hex Bolt	4	51	NS	Decal, Grease All Points (RAD 658708)	1
14	NS	Shaft (RAD 661729)	1	52	NS	Decal, Brush Ground Contact (RAD 661052)	1
15	NS	Parallel Key, A8 x 7 x 25 (RAD 660063)	1	53	I389	Brush Support Adaptor	1
16	NS	25.6 x 0.8 Shim (RAD 661737)	1	54	5800	Decal, Walker Mower (4 x 7-1/2)	1
17	NS	25.6 x 1.0 Shim (RAD 661736)	1	55	I386	Polypropylene Brush, 1 piece	1
18	NS	3/8 Plug (RAD 661739)	1		NS	Brush, 50% Steel / 50% Nylon (RAD 661727)	*
19	NS	O-Ring (RAD 661144)	1				
20	O/L	3/8 Lock Washer	1				
21	O/L	3/8 Hex Nut	1				
Driveline and Sprockets Assembly				Fasteners			
22	6651	Driveline Male Portion Assembly (Includes Items # 23-27)	1	F309		1/4-28 x 1/4 Set Screw	3
23	6651-3	Bearing Retainer	1	* Service Part Only			
24	6651-2	Nylon Bearing	1	NOTE: Decals are illustrated in greater detail in the Owner's section of this manual. Refer to SAFETY, CONTROL, AND INSTRUCTION DECALS in Safety Instructions , Page 17.			
25	I395	Decal, Rotating Driveline	1	NOTE: All NS items are listed with a RAD Part Number (e.g., RAD 657383), and are not sold by Walker Manufacturing. To order these items, contact:			
26	6651-1	PTO Outer Shield	1	RAD Technologies Inc. 2835, Chemin de l'Aéroport Thetford Mines (Québec) G6G 5R7 CANADA 1-418-338-4499			
27	6651-4	Male Shaft and Yoke Assembly	1				
28	I378	Chain Drive Shaft	1				
29	I120	Bearing Flange	6				
30	5609	Bearing (with Set Screw) (Includes Item # F309)	3				
31	O/L	5/16 Lock Washer	9				
32	O/L	5/16-NC Hex Nut	9				
33	I381	Chain, #40 x 71 Links	1				
34	NS	Connecting Link #40 (RAD 656153)	1				
35	I382	Chain Guard	1				
36	O/L	5/16-NC x 3/4 Carriage Bolt	9				
37	I380	Drive Sprocket 40B36	1				

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

Effective Date 06-01-01

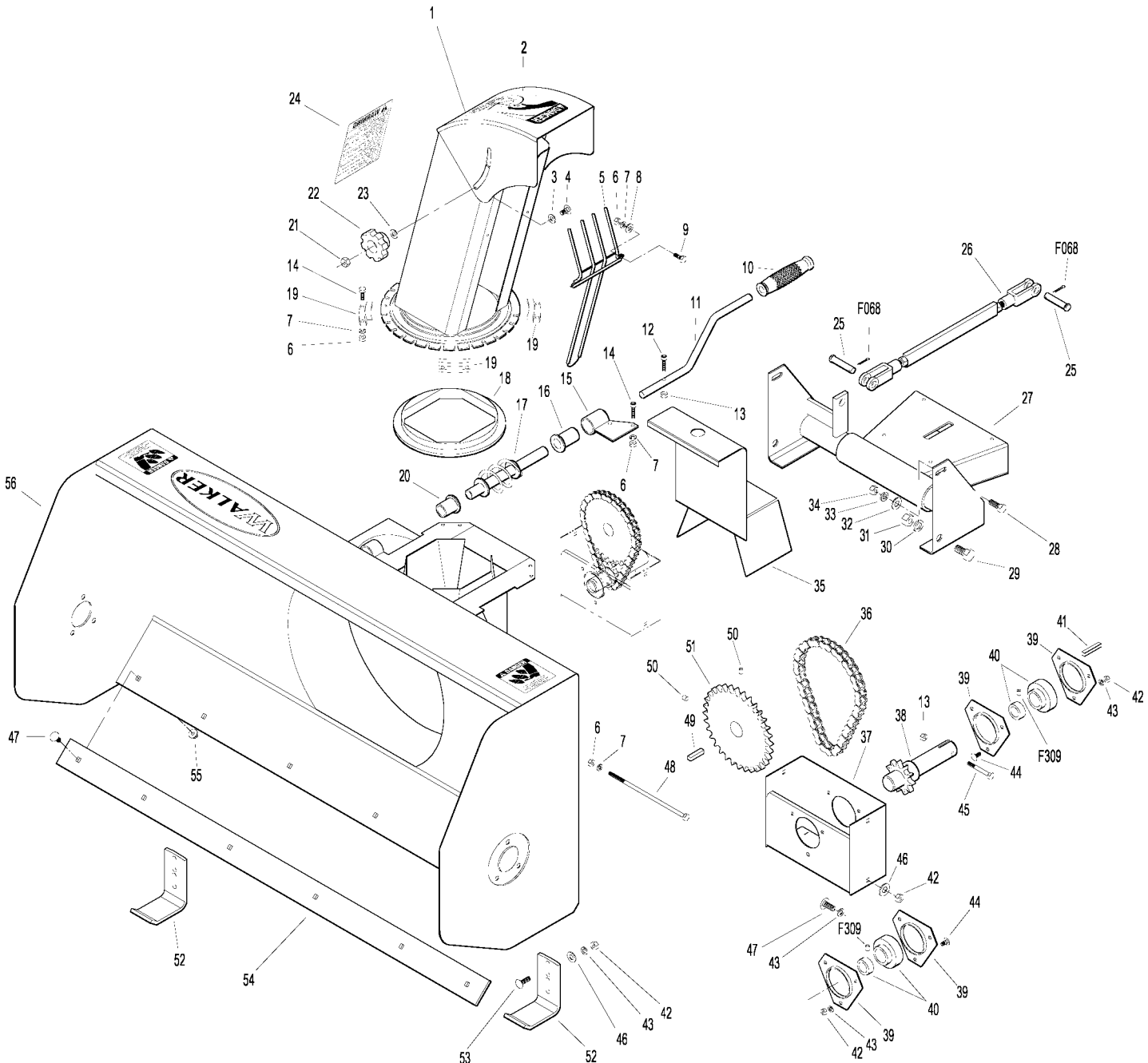
ROTARY BROOM DRIVE COMPONENTS



SNOWBLOWER HOUSING COMPONENTS

ITEM NO.	PART NO.	DESCRIPTION	NO. REQ'D	ITEM NO.	PART NO.	DESCRIPTION	NO. REQ'D
Chute Rotation Assembly				Reduction Box Assembly			
1	NS	Chute, Base and Knobs (with Decals) (RAD 661168)	1	35	I196	PTO Guard	1
2	I396	Decal, Keep Hands Out	1	36	I163	40 x 38 Chain	1
3	I172	7/16 Nylon Washer	2	37	NS	Reduction Box (RAD 657355)	1
4	O/L	5/16-NC x 1 Carriage Bolt	2	38	I153	Drive Shaft (with Sprocket), H40C11	1
5	I175	Hand Guard	1	39	I120	Bearing Flange	4
6	O/L	1/4-NC Hex Nut	12	40	5609	Spindle Bearing & Collar (Includes Item # F309)	2
7	O/L	1/4 Lock Washer	12	41	I305	1/4 x 1/4 x 1-1/4 Key	1
8	O/L	5/16 ID Flat Washer	2	42	O/L	5/16-NC Hex Nut	14
9	O/L	1/4-NC x 3/4 Hex Bolt	2	43	O/L	5/16 Lock Washer	14
10	7860	Handle Grip	1	44	O/L	5/16-NC x 5/8 Carriage Bolt	6
11	I188	Handle (with Grip)	1	45	O/L	1/4-NC x 2-1/2 Hex Bolt	1
12	O/L	1/4-NC x 1 Allen Socket Head Cap Screw	1	46	O/L	3/8 ID Flat Washer	8
13	O/L	1/4-NC Nylon Locknut	2	47	O/L	5/16-NC x 3/4 Carriage Bolt	10
14	O/L	1/4-NC x 1/2 Hex Bolt	6	48	O/L	1/4-NC x 7-1/2 Hex Bolt	2
	O/L	1/4-NC x 3/4 Hex Bolt	2	49	I162	1/4 x 1/4 x 1 Key	1
15	I187	Support Rotation	1	50	O/L	Set Screw (5/16-NC x 1/2, Allen)	2
16	I186	1-11/16 Plastic Bushing	1	51	I161	Sprocket (H40B32)	1
17	I185	Rotation Worm	1	Snowblower Frame Assembly			
18	I183	Nylon Ring	1	52	I125	Skid Shoe	2
19	I180	Retaining Plate	4	53	O/L	5/16-NC x 1 Carriage Bolt	4
20	I184	1-5/16 Plastic Bushing	1	54	I122	Cutting Edge	1
21	O/L	5/16-NC Nylon Locknut	2	55	O/L	5/16-NC Stover Nut	6
22	I170	5/16-18 Knob	2	56	NS	Frame (RAD 661031)	1
23	I171	11/32 Nylon Washer	2	Fasteners			
24	I397	Decal, Safety Procedures	1		F068	1/8 x 1 Cotter Pin	2
Snowblower Mount Assembly					F309	1/4-28 x 1/4 Set Screw	2
25	6621-2	Clevis Pin (1/2 x 2)	2	NOTE: Decals are illustrated in greater detail in the Owner's section of this manual. Refer to SAFETY, CONTROL, AND INSTRUCTION DECALS in Safety Instructions , Page 17.			
26	6670-2	Parallel Bar Assembly	1	NOTE: All NS items are listed with a RAD Part Number (e.g., RAD 657383), and are not sold by Walker Manufacturing. To order these items, contact:			
27	6670-1	Snowblower Mount Assembly (Female)	1				
28	O/L	3/8-NC x 1 Hex Bolt	2				
29	O/L	1/2-NC x 1 Hex Bolt	2				
30	O/L	1/2 Lock Washer	2				
31	O/L	1/2-NC Hex Nut	2				
32	O/L	7/16 ID Flat Washer	2				
33	O/L	3/8 Lock Washer	2				
34	O/L	3/8-NC Hex Nut	2				

RAD Technologies Inc.
2835, Chemin de l'Aéroport
Thetford Mines (Québec)
G6G 5R7 CANADA
1-418-338-4499



Effective Date 06-01-01

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

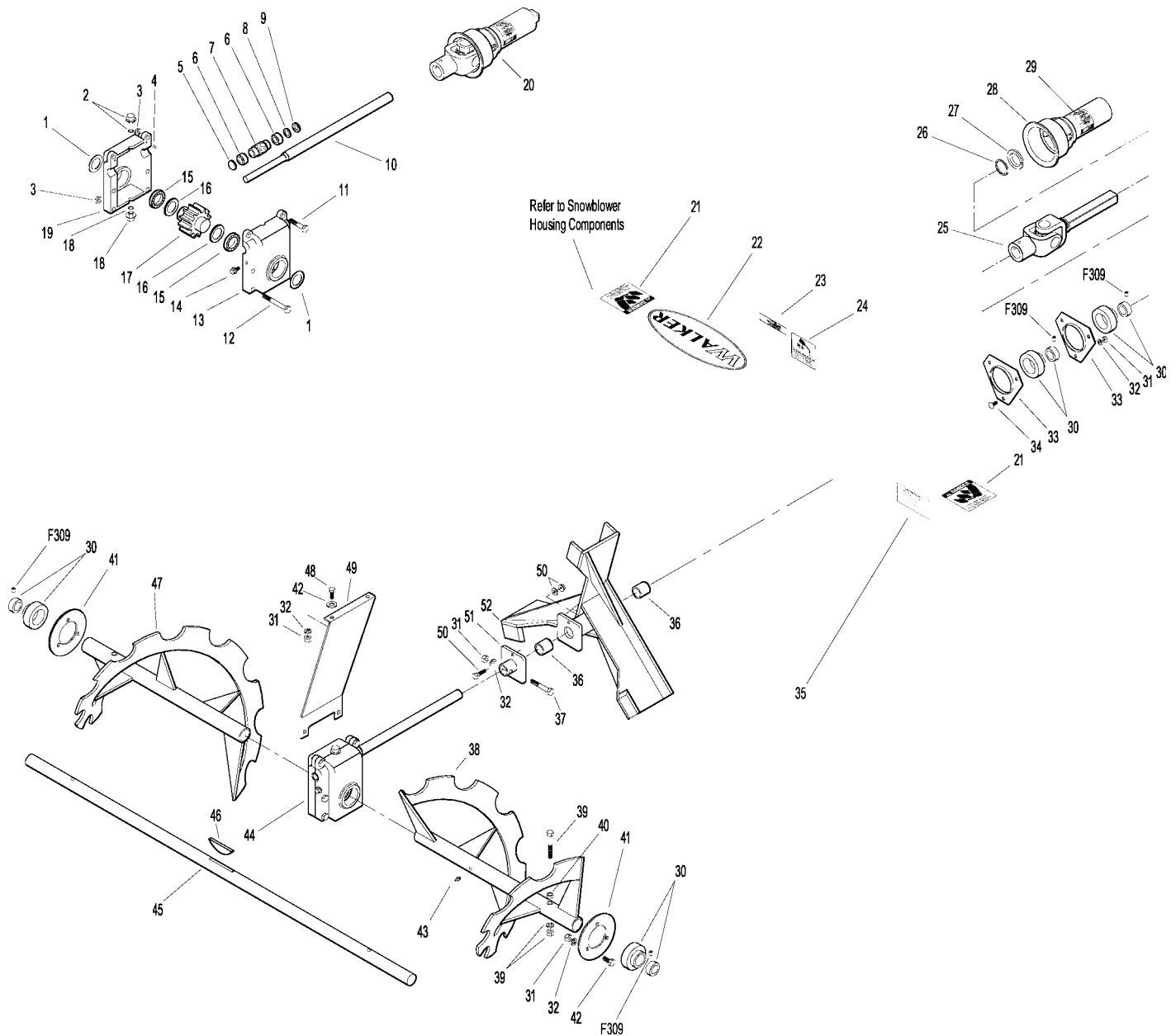
SNOWBLOWER DRIVE COMPONENTS

ITEM NO.	PART NO.	DESCRIPTION	NO. REQ'D	ITEM NO.	PART NO.	DESCRIPTION	NO. REQ'D
Gearbox Assembly				32	O/L	5/16 Lock Washer	12
1	I193	Double Lip Seal	2	33	I120	Bearing Flange	2
2	NS	Breather, 3/8 NPT & O-Ring (Comer) (RAD 661185)	1	34	O/L	5/16-NC x 3/4 Carriage Bolt	3
	NS	Pressure Plug, 1/8 NPT (Usimax) (RAD 654927)	1	35	NS	Decal, Use Shear Bolts (RAD 657346)	1
3	O/L	M8 Hex Nut	6	36	I103	Bushing	2
4	I178	Spring Pin, Casing	2	37	O/L	5/16-NC x 2 GR 8 Hex Bolt	1
5	NS	Cap (RAD 661150)	1	38	I109	Auger, LH	1
6	I182	Bearing, Gearbox	2	39	I111	5/16-18 x 2-1/4 Shear Bolt Lock & Nut	2
7	NS	Pinion Gear (RAD 661160)	1	40	I128	Shear Bolt Bushing	4
8	I198	Shim, Pinion Shaft	1	41	I113	Bearing Flange	2
9	I194	Oil Seal	1	42	O/L	3/8 ID Flat Washer	2
10	I199	Shaft, Gearbox	1	43	5830	Grease Fitting	2
11	O/L	M8 x 40 Hex Bolt	2	44	I101	Gearbox (Comer)	1
12	O/L	M8 x 65 Hex Bolt	4			(Includes Items # 1-19)	
13	NS	Casing Ello (RAD 661145)	1		NS	Gearbox (Usimax) (RAD 663030)	1
14	NS	Oil Plug, 1/4 (Comer) (RAD 661972)	1		NS	Seal Kit (RAD 665775)	1
	NS	Plug, 1/8 NPT (Usimax) (RAD 656090)	1	45	NS	Output Shaft (RAD 657286)	1
15	I195	Bearing	2	46	I130	Woodruff Key	1
16	I181	Shim, Gearbox	2	47	I110	Auger, RH	1
17	NS	Gear (RAD 661159)	1	48	O/L	5/16-NC x 3/4 Hex Bolt	8
18	NS	Plug, 3/8 NPT & O-Ring (Comer) (RAD 659847)	1	49	NS	Gearbox Support Bracket (RAD 657332)	1
	NS	Plug, 1/8 NPT (Usimax) (RAD 656090)	1	50	I105	1/4-20 x 1 Shear (w/Locknut)	1
19	NS	Casing (RAD 661142)	1	51	I104	Fan Adaptor Shear Plate	1
Driveline and Auger Components				52	I102	Fan Assembly	1
20	6671	Driveline Male Portion Assembly (Includes Items # 25-29)	1	Fasteners			
21	I394	Decal, Rotating Auger	2	F309		1/4-28 x 1/4 Set Screw	3
22	5800	Decal, Walker Mower (4 x 7-1/2)	1	NOTE: Decals are illustrated in greater detail in the Owner's section of this manual. Refer to SAFETY, CONTROL, AND INSTRUCTION DECALS in Safety Instructions , Page 17.			
23	NS	Decal, Check Oil Level (RAD 655683)	1	NOTE: All NS items are listed with a RAD Part Number (e.g., RAD 657383), and are not sold by Walker Manufacturing. To order these items, contact:			
24	NS	Decal, Lubricate Chain (RAD 657804)	1	RAD Technologies Inc. 2835, Chemin de l'Aéroport Thetford Mines (Québec) G6G 5R7 CANADA 1-418-338-4499			
25	6671-4	Male Shaft and Yoke Assembly	1				
26	6671-3	Bearing Retainer	1				
27	6671-2	Nylon Bearing	1				
28	6671-1	Outer Shield	1				
29	I395	Decal, Rotating Driveline	1				
30	5609	Spindle Bearing & Collar (Includes Item # F309)	2				
31	O/L	5/16-NC Hex Nut	12				

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

Effective Date 06-01-01

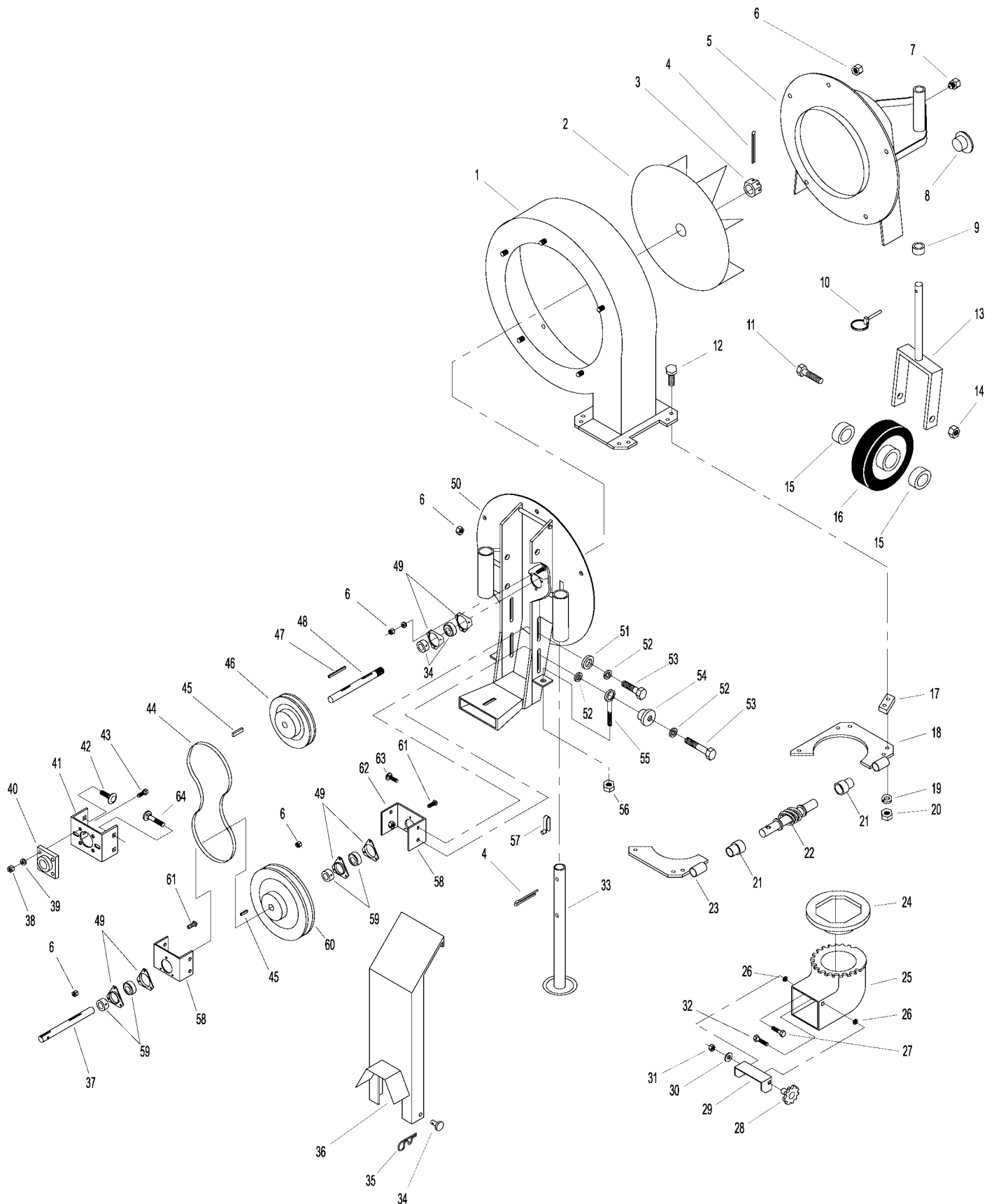
SNOWBLOWER DRIVE COMPONENTS



DEBRIS BLOWER COMPONENTS

ITEM NO.	PART NO.	DESCRIPTION	NO. REQ'D	ITEM NO.	PART NO.	DESCRIPTION	NO. REQ'D
Debris Blower Components				40	I452	Bearing	1
1	I402	Impeller Housing	1	41	NS	Upper Bearing Support (RAD 662713)	1
2	NS	Impeller (RAD 662644)	1	42	O/L	5/16-NC x 1 Carriage Bolt	2
3	NS	1-14 Castel Nut (RAD 654988)	1	43	O/L	7/16-NC x 1-1/4 Hex Bolt	4
4	O/L	3/16 x 2 Cotter Pin	3	44	NS	V-Belt AM33 (RAD 663458)	1
5	NS	Intake Cover (RAD 662646)	1	45	I162	Key, 1/4 x 1/4 x 1	2
6	O/L	5/16-NC Flange Nut	23	46	I461	Pulley MA38	1
7	5830	Grease Fitting	1	47	NS	Key, 1/4 x 1/4 x 2-1/2 (RAD 660924)	1
8	NS	Cap (RAD 662825)	2	48	I459	Shaft, 1 x 12-11/16	1
9	NS	Wheel Support Spacer (RAD 662737)	1	49	I120	Flange Bearing	6
10	O/L	5/16 Linchpin	1	50	NS	Housing (RAD 662643)	1
11	O/L	5/8-NC x 5-1/2 Hex Bolt	1	51	O/L	7/16 ID Flat Washer	4
12	O/L	1/4-NC x 1 Hex Bolt	8	52	O/L	3/8 Lock Washer	4
13	NS	Wheel Support (RAD 662642)	1	53	O/L	3/8-NC x 2 Hex Bolt	2
14	O/L	5/8-NC Locknut	1	54	NS	Eyebolt Spacer (RAD 663043)	2
15	NS	Wheel Spacer (RAD 662822)	2	55	NS	5/16-NC x 4 Eyebolt (RAD 663273)	2
16	I426	Wheel and Tire Assembly	1	56	O/L	5/16-NC Nylon Locknut	2
17	NS	Rotation Spacer (RAD 661498)	4	57	NS	Snap Button (RAD 663601)	2
18	NS	Rotation Bracket (RAD 663096)	1	58	NS	Lower Brg Support, Ext (RAD 663296)	1
19	O/L	1/4 Lock Washer	8	59	5609	1" Brg w/Locking Collar	3
20	O/L	1/4-NC Hex Nut	8	60	NS	Pulley MA53 (RAD 663457)	1
21	I186	Plastic Bushing, 1-11/16	2	61	O/L	5/16-NC x 3/4 Carriage Bolt	9
22	NS	Worm (RAD 663503)	1	62	NS	Lower Brg Support, Int (RAD 663382)	1
23	NS	Retaining Plate (RAD 661508)	1	63	O/L	3/8-NC x 1-1/4 Carriage Bolt	2
24	I183	Nylon Ring	1	64	O/L	5/16-NC x 1-1/4 Carriage Bolt	2
25	NS	Air Blast Nozzle (RAD 662672)	1	NOTE: Decals are illustrated in greater detail in the Owner's section of this manual. Refer to SAFETY, CONTROL, AND INSTRUCTION DECALS in Safety Instructions , Page 17.			
26	I172	7/16 ID Nylon Flat Washer	2	NOTE: All NS items are listed with a RAD Part Number (e.g., RAD 657383), and are not sold by Walker Manufacturing. To order these items, contact:			
27	O/L	5/16-NC x 3/4 Carriage Bolt	1	RAD Technologies Inc. 2835, Chemin de l'Aéroport Thetford Mines (Québec) G6G 5R7 CANADA 1-418-338-4499			
28	I170	Knob, 5/16-18	1				
29	NS	Deflector (RAD 662734)	1				
30	O/L	11/32 Nylon Flat Washer (RAD 658467)	1				
31	O/L	5/16-NC Nylon Locknut	1				
32	O/L	5/16-NC x 1 Carriage Bolt	1				
33	NS	Parking Stand (RAD 662648)	2				
34	NS	Cover Pin, 1/4 x 1/2 (RAD 662926)	2				
35	O/L	Hairpin, 5/64 x 1-5/8 (2mm x 41mm)	2				
36	NS	Belt Cover (RAD 662735)	1				
37	I439	Shaft, 1 x 7-3/8	1				
38	O/L	7/16-NC Hex Nut	4				
39	O/L	7/16 Lock Washer	4				

DEBRIS BLOWER COMPONENTS



Effective Date 06-01-01

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

DEBRIS BLOWER MANUAL ROTATION COMPONENTS

ITEM NO.	PART NO.	DESCRIPTION	NO. REQ'D
----------	----------	-------------	-----------

Debris Blower Manual Rotation Components

1	7860	Handle Grip	1
2	NS	Rotation Handle (RAD 663509)	1
3	5830	Grease Fitting	2
4	O/L	#8-32 x 1/8 Allen Set Screw	2
5	O/L	1/4-20 x 3/16 Allen Set Screw	2
6	I415	Drive Sprocket	1
7	I403	Driven Sprocket	1
8	I186	1-11/16 Plastic Bushing	2
9	O/L	1/4-NC Nylon Locknut	1
10	NS	Rotation Worm (RAD 663503)	1
11	O/L	1/4-NC x 1-1/4 Hex Bolt	1
12	NS	Adjustment Bushing (RAD 663332)	2
13	I412	Handle Rotation Guide	1
14	O/L	5/16-NC Flange Nut	2

ITEM NO.	PART NO.	DESCRIPTION	NO. REQ'D
----------	----------	-------------	-----------

15	I406	Handle Fixation Bracket	1
----	------	-------------------------	---

NOTE: Decals are illustrated in greater detail in the Owner's section of this manual. Refer to **SAFETY, CONTROL, AND INSTRUCTION DECALS** in **Safety Instructions**, Page 17.

NOTE: All NS items are listed with a RAD Part Number (e.g., RAD 657383), and are not sold by Walker Manufacturing. To order these items, contact:

RAD Technologies Inc.
2835, Chemin de l'Aéroport
Thetford Mines (Québec)
G6G 5R7 CANADA
1-418-338-4499

KEY TO ABBREVIATIONS USED IN ILLUSTRATED PARTS MANUAL

<i>Abbreviation</i>	<i>What it Represents</i>
° (Dimension)	Degrees (Angle)
" (Dimension)	inches
cfm	cubic feet per minute
cl	centiliters
cm	centimeters
Db	Decibels
DC	Direct Current
ESNA (Fastener)	Nylon Insert Locknut
fl. oz.	fluid ounces
FSC	Forward Speed Control
ft	feet
ft-lb	foot-pounds
GHS	Grass Handling System
GR (Fastener)	Grade
HP	Horse Power
ID	Identification or Inside Diameter
kg	kilograms
km/h or kph	kilometers per hour
kPa	kilopascals
lb	pounds
lbf	poundals or pounds force
LH	Left Hand (orientated with operator on seat)
m	meters
mm (Dimension)	millimeters
mph	miles per hour
N	Newtons
NC (Fastener)	National Coarse
NF (Fastener)	National Fine
NPT	National Pipe Thread
NS (as part number)	Item is not sold by Walker Manufacturing
N·m	Newton-meters
O/L	Obtain Locally (Item is not sold by Walker Manufacturing)
P/N	Part Number
PPHMS (Fastener)	Phillips Pan Head Machine Screw
PSI	Pounds Square Inch
PTO	Power Take-Off
RH	Right Hand (orientated with operator on seat)
RPM	revolutions per minute
SAE (Fastener)	Society of Automotive Engineers
SBH (Fastener)	Socket Button Head (Bolt)
S/N	Serial Number
U	Unified

NOTE: In some instances, combinations of abbreviations may be used (e.g. UNC - Unified National Coarse).

LIMITED WARRANTY FOR WALKER COMMERCIAL 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 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:

Kohler Engine
Kubota Engine
Kawasaki Engine
Eaton Hydraulic Transmission
Peerless Gearboxes
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.

* An extended three (3) year warranty is offered on the Walker P/N 6200-7 Gear Axle Assembly.

2. WHAT THIS WARRANTY DOES NOT COVER:

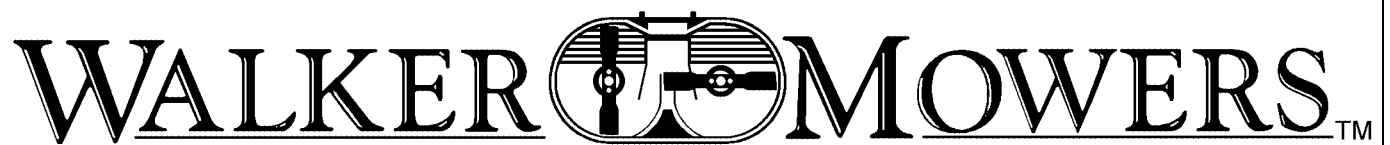
- A. This warranty does not cover defects caused by depreciation or damage caused by normal wear, accidents, improper maintenance, improper use or abuse of the product, alterations, or failure to follow the instructions contained in the Owner's Manual for operation and maintenance.
- B. The customer 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.



WALKER MFG. CO. • 5925 E. HARMONY ROAD, FORT COLLINS, CO 80528 • (970) 221-5614
FORM NO. 060101 PRINTED IN USA ©2001 WALKER MFG. CO
www.walkermowers.com