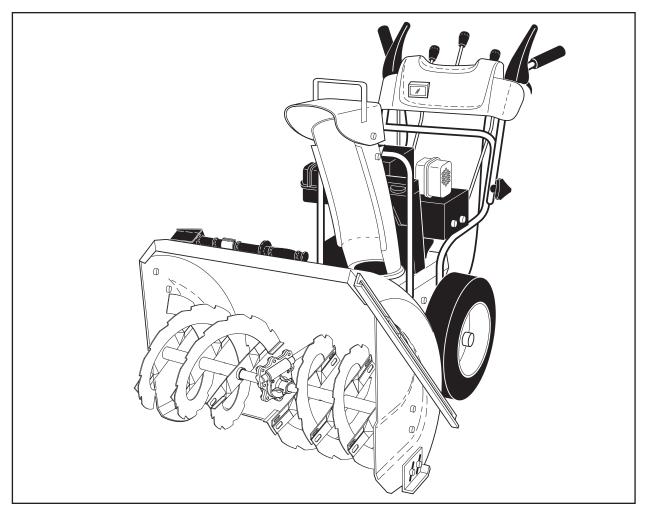
Husqvarna®



1130SB-LS

Owner's Manual

IMPORTANT Safe Operation Practices for Walk-Behind Snow Throwers

This snow thrower is capable of amputating hands and feet and throwing objects. Failure to observe the following safety instructions could result in serious injury.



Look for this symbol to point out important safety precautions. It means CAUTION!!! BECOME ALERT!!! YOUR SAFETY IS INVOLVED.



WARNING: Always disconnect spark plug wire and place it where it cannot contact plug in order to prevent accidental starting when setting up, transporting, adjusting or making repairs.



WARNING: This snow thrower is for use on sidewalks, driveways and other ground level surfaces. Caution should be exercised while using on sloping surfaces. Do not use snow thrower on surfaces above ground level such as roofs of residences, garages, porches or other such structures or buildings.

Training

- 1. Read, understand and follow all instructions on the machine and in the manual(s) before operating this unit. Be thoroughly familiar with the controls and the proper use of the equipment. Know how to stop the unit and disengage the controls quickly.
- 2. Never allow children to operate the equipment. Never allow adults to operate the equipment without proper instruction.
- 3. Keep the area of operation clear of all persons, particularly small children.
- 4. Exercise caution to avoid slipping or falling, especially when operating the snow thrower in reverse.

Preparation

- 1. Thoroughly inspect the area where the equipment is to be used and remove all doormats, sleds, boards, wires, and other foreign objects.
- 2. Disengage all clutches and shift into neutral before starting the engine (motor).
- 3. Do not operate the equipment without wearing adequate winter garments. Avoid loose fitting clothing that can get caught in moving parts. Wear footwear that will improve footing on slippery surfaces.
- 4. Handle fuel with care; it is highly flammable
 - (a) Use an approved fuel container.
 - (b) Never add fuel to a running engine or hot engine.
 - (c) Fill fuel tank outdoors with extreme care. Never fill fuel tank indoors.
 - (d) Never fill containers inside a vehicle or on a truck or trailer bed with a plastic liner. Always place containers on the ground, away from your vehicle, before filling.
 - (e) When practical, remove gas-powered equipment from the truck or trailer and refuel it on the ground. If this is not possible, then refuel such equipment on a trailer with a portable container, rather than from a gasoline dispenser nozzle.



WARNING: Snow throwers have exposed rotating parts, which can cause severe injury from contact, or from material thrown from the discharge chute. Keep the area of operation clear of all persons, small children and pets at all times including startup.



CAUTION: Muffler and other engine parts become extremely hot during operation and remain hot after engine has stopped. To avoid severe burns on contact, stay away from these areas.



WARNING: Engine exhaust, some of its constituents, and certain vehicle components contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

- (f) Keep the nozzle in contact with the rim of the fuel tank or container opening at all times, until refueling is complete. Do not use a nozzle lock-open device.
- (g) Replace gasoline cap securely and wipe up spilled fuel.
- (h) If fuel is spilled on clothing, change clothing immediately.
- 5. Use extension cords and receptacles as specified by the manufacturer for all units with electric drive motors or electric starting motors.
- 6. Adjust the collector housing height to clear gravel or crushed rock surface.
- 7. Never attempt to make any adjustments while the engine (motor) is running (except when specifically recommended by manufacturer).
- 8. Always wear safety glasses or eye shields during operation or while performing an adjustment or repair to protect eyes from foreign objects that may be thrown from the machine.

Operation

- 1. Do not put hands or feet near or under rotating parts. Keep clear of the discharge opening at all times.
- 2. Exercise extreme caution when operating on or crossing gravel drives, walks, or roads. Stay alert for hidden hazards or traffic.
- After striking a foreign object, stop the engine (motor), remove the wire from the spark plug, disconnect the cord on electric motors, thoroughly inspect the snow thrower for any damage, and repair the damage before restarting and operating the snow thrower.
- 4. If the unit should start to vibrate abnormally, stop the engine (motor) and check immediately for the cause. Vibration is generally a warning of trouble.
- 5. Stop the engine (motor) whenever you leave the operating position, before unclogging the collector/impeller housing or discharge chute, and when making any repairs, adjustments or inspections.

- 6. When cleaning, repairing or inspecting the snow thrower, stop the engine and make certain the collector/impeller and all moving parts have stopped. Disconnect the spark plug wire and keep the wire away from the plug to prevent someone from accidentally starting the engine.
- Do not run the engine indoors, except when starting the engine and for transporting the snow thrower in or out of the building. Open the outside doors; exhaust fumes are dangerous.
- 8. Exercise extreme caution when operating on slopes.
- Never operate the snow thrower without proper guards, and other safety protective devices in place and working.
- 10. Never direct the discharge toward people or areas where property damage can occur. Keep children and others away.
- 11. Do not overload the machine capacity by attempting to clear snow at too fast a rate.
- 12. Never operate the machine at high transport speeds on slippery surfaces. Look behind and use care when operating in reverse.
- 13. Disengage power to the collector/impeller when snow thrower is transported or not in use.
- 14. Use only attachments and accessories approved by the manufacturer of the snow thrower (such as wheel weights, counterweights, or cabs).
- 15. Never operate the snow thrower without good visibility or light. Always be sure of your footing, and keep a firm hold on the handles. Walk; never run.
- 16. Never touch a hot engine or muffler.

CONGRATULATIONS on your purchase of a new snow thrower. It has been designed, engineered and manufactured to give best possible dependability and performance.

Should you experience any problem you cannot easily remedy, please contact your nearest authorized service center. We have competent, well-trained technicians and the proper tools to service or repair this unit.

Please read and retain this manual. The instructions will enable you to assemble and maintain your snow thrower properly. Always observe the "SAFETY RULES".

SERIAL NUMBER:

DATE OF PURCHASE:

THE MODEL AND SERIAL NUMBERS WILL BE FOUND ON A DECAL ATTACHED TO THE REAR OF THE SNOW THROWER HOUSING.

YOU SHOULD RECORD BOTH SERIAL NUMBER AND DATE OF PURCHASE AND KEEP IN A SAFE PLACE FOR FUTURE REFERENCE.

Clearing a Clogged Discharge Chute

Hand contact with the rotating impeller inside the discharge chute is the most common cause of injury associated with snow throwers. Never use your hand to clean out the discharge chute. To clear the chute:

- 1. SHUT THE ENGINE OFF!
- 2. Wait 10 seconds to be sure the impeller blades have stopped rotating.
- 3. Always use a clean-out tool, not your hands.

Maintenance and Storage

- 1. Check shear bolts and other bolts at frequent intervals for proper tightness to be sure the equipment is in safe working condition.
- 2. Never store the machine with fuel in the fuel tank inside a building where ignition sources are present such as hot water heaters, space heaters, or clothes dryers. Allow the engine to cool before storing in any enclosure.
- 3. Always refer to operator's manual for important details if the snow thrower is to be stored for an extended period.
- 4. Maintain or replace safety and instruction labels, as necessary.
- 5. Run the machine a few minutes after throwing snow to prevent freeze-up of the collector/impeller.

PRODUCT SPECIFICATIONS

Gasoline Capao and Type:	city 4.0 Quarts Unleaded Regular only
Oil Type (API SG–SL):	SAE 30 (above 40°F) SAE 5W-30 or 10W-30 (0° to +40°F) SAE 0W-30 (below 0°F)
Oil Capacity:	21 Ounces
Spark Plug:	Champion RJ19LM (Gap: .030")

CUSTOMER RESPONSIBILITIES

- Read and observe the safety rules.
- Follow a regular schedule in maintaining, caring for and using your snow thrower.
- Follow the instructions under "Maintenance" and "Storage" sections of this owner's manual.

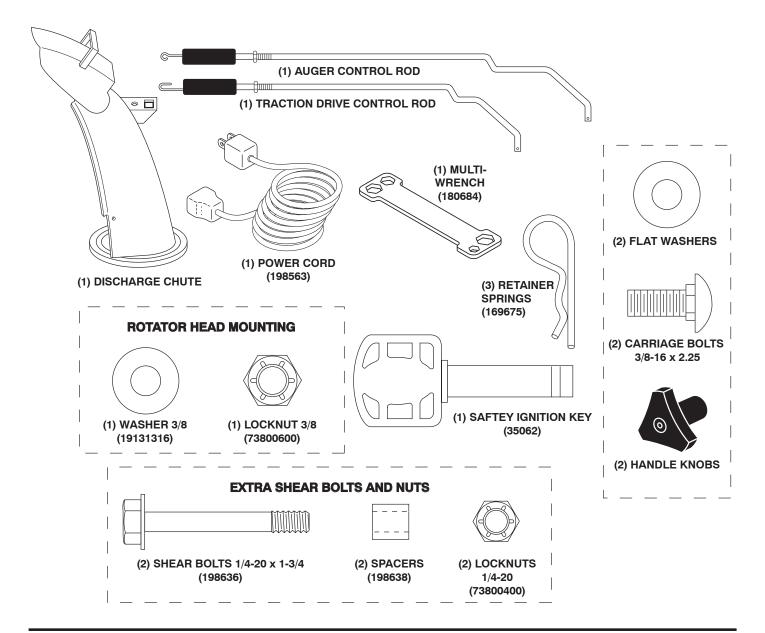
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PARTS PACKED SEPARATELY IN CARTON



ASSEMBLY / PRE-OPERATION

Read these instructions and this manual in its entirety before you attempt to assemble or operate your new snow thrower. Reading the entire manual will familiarize you with the unit, which will assist you in assembly, operation and maintenance of the product.

Your new snow thrower has been assembled at the factory with the exception of those parts left unassembled for shipping purposes. All parts such as nuts, washers, bolts, etc., necessary to complete the assembly have been placed in the parts bag. To ensure safe and proper operation of your snow thrower, all parts and hardware you assemble must be tightened securely. Use the correct tools as necessary to ensure proper tightness.

REMOVE SNOW THROWER FROM CARTON

1. Remove all accessible loose parts and parts boxes from carton.

- 2. Cut down all four corners of carton and lay panels flat.
- 3. Remove the two (2) screws securing the auger housing to the pallet.
- 4. Remove all packing materials except plastic tie holding speed control rod to lower handle.
- 5. Remove the two (2) plastic ties securing the upper handle to the pallet.
- 6. Remove snow thrower from carton and check carton thoroughly for additional loose parts.

HOW TO SET UP YOUR SNOW THROWER

TOOL BOX (See Fig. 10)

A toolbox is provided on your snow thrower. The toolbox is located on top of the belt cover. Store the extra shear bolts, nuts and multi-wrench provided in parts bag in the toolbox.

ASSEMBLY / PRE-OPERATION

NOTE: The multi-wrench may be used for assembly of the chute rotator head to snow thrower and making adjustments to the skid plates.

UNFOLD UPPER HANDLE

1. Raise upper handle to the operating position and tighten handle knobs securely. Additional carriage bolts, washers and handle knobs are in bag of parts. Use to secure upper handle to lower handle. Install in lower holes in handles.

INSTALL SPEED CONTROL ROD (See Figs. 1 and 2)

- 1. Remove plastic tie securing rod to lower handle.
- Insert rod into speed control bracket and secure with retainer spring.

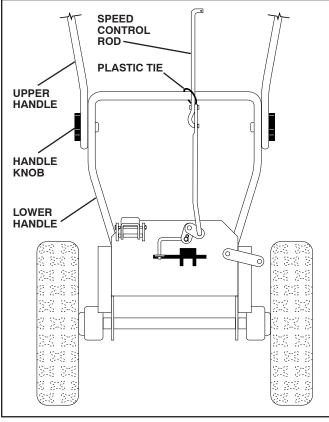
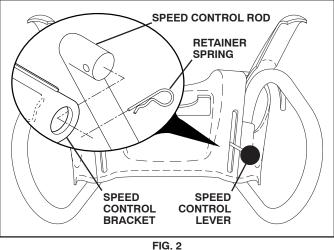


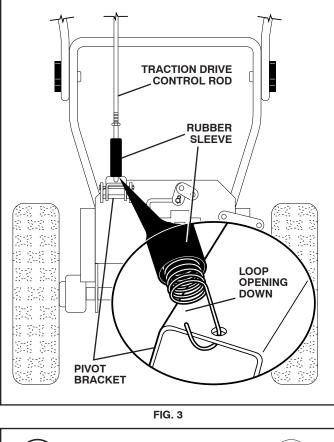
FIG. 1



INSTALL TRACTION DRIVE CONTROL ROD (See Figs. 3 and 4)

The traction drive control rod has the long loop on the end of the spring as shown.

- 1. Slide rubber sleeve up rod and hook end of spring into pivot bracket with loop opening down as shown.
- 2. With top end of rod positioned under left side of control panel, push rod down and insert top end of rod into hole in drive control bracket. Secure with retainer spring.



TRACTION DRIVE CONTROL LEVER RETAINER SPRING TRACTION DRIVE CONTROL BRACKET

FIG. 4

5

ASSEMBLY / PRE-OPERATION

INSTALL AUGER CONTROL ROD (See Figs. 5 and 6)

The auger control rod has the short loop on the end of the spring as shown.

- 1. Slide rubber sleeve up rod and hook end of spring into control arm with loop opening up as shown.
- 2. With top end of rod positioned under right side of control panel, push down on rod and insert end of rod into hole in auger control bracket. Secure with retainer spring.

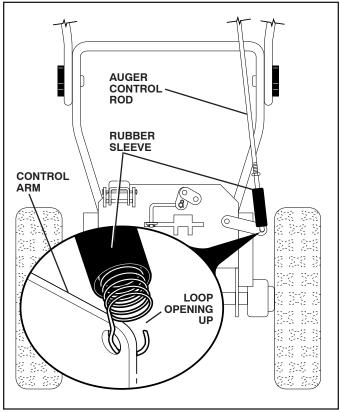


FIG. 5

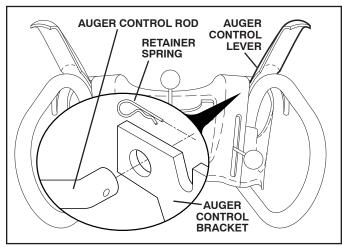


FIG. 6

INSTALL DISCHARGE CHUTE / CHUTE ROTATER HEAD (See Fig. 7)

NOTE: The multi-wrench provided in your parts bag may be used to install the chute rotater head.

- 1. Place discharge chute assembly on top of chute base with discharge opening toward front of snow thrower.
- 2. Position chute rotater head over chute bracket. If necessary, rotate chute assembly to align square and pin on underside of chute rotater head with holes in chute bracket.
- 3. With chute rotater head and chute bracket aligned, position chute rotater head on pin and threaded stud of mounting bracket.
- 4. Install 3/8 washer and locknut on threaded stud and tighten securely.

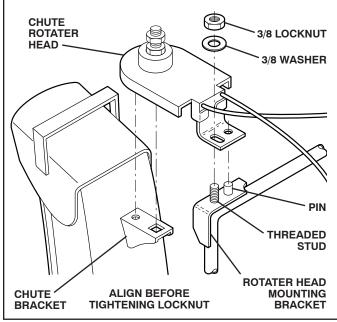
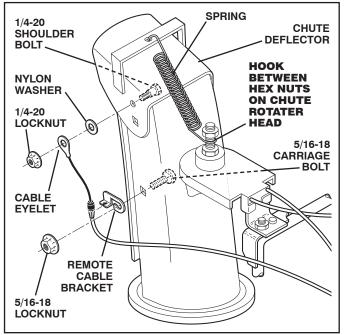


FIG. 7

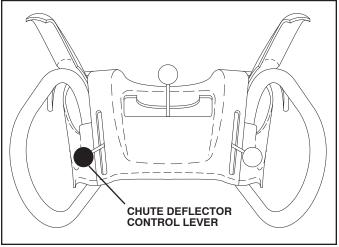
ASSEMBLY / PRE-OPERATION

INSTALL CHUTE DEFLECTOR REMOTE CONTROL (See Figs. 8 and 9)

- 1. Install remote cable bracket to discharge chute with 5/16-18 carriage bolt and 5/16-18 locknut as shown. Tighten securely.
- Install remote cable eyelet to chute deflector with 1/4-20 shoulder bolt, nylon washer and 1/4-20 locknut as shown. Tighten securely.
- 3. Install spring hooks between hex nuts on chute rotater head and into hole in chute deflector as shown.









CHECK TIRE PRESSURE

The tires on your snow thrower were overinflated at the factory for shipping purposes. Correct and equal tire pressure is important for best snow throwing performance.

• Reduce tire pressure to 14-17 PSI (19-24.5 N-m).

KNOW YOUR SNOW THROWER

READ THIS OWNER'S MANUAL AND ALL SAFETY RULES BEFORE OPERATING YOUR SNOW THROWER. Compare the illustrations with your snow thrower to familiarize yourself with the location of various controls and adjustments. Save this manual for future reference.

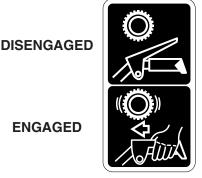
These symbols may appear on your snow thrower or in literature supplied with the product. Learn and understand their meaning.





ENGAGED

SNOW DISCHARGE



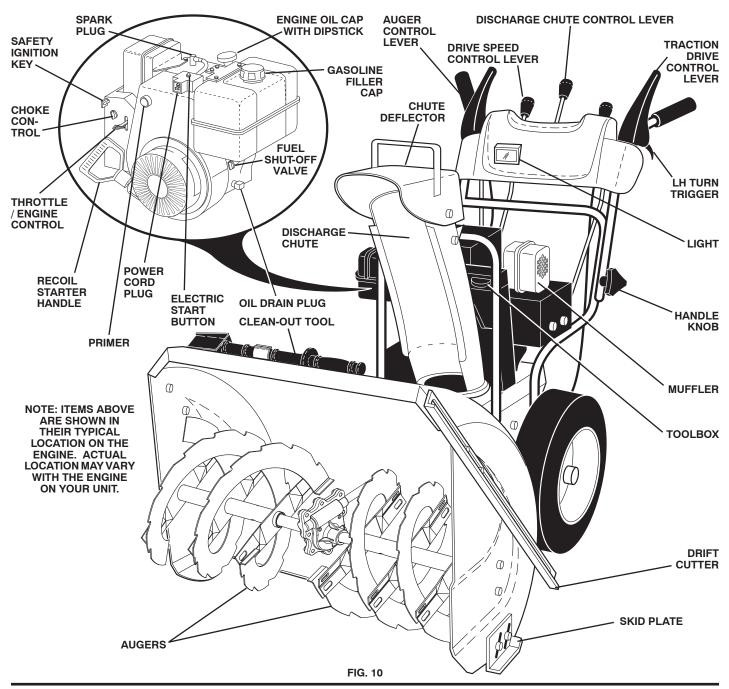
TRACTION **DRIVE CONTROL**



• SHUT OFF ENGINE AND REMAIN BEHIND HANDLES UNTIL ALL MOVING PARTS HAVE **STOPPED BEFORE UNCLOGGING OR** SERVICING UNIT.

• KEEP ALL SHIELDS AND GUARDS IN PLACE WHILE OPERATING.

 TO AVOID THROWN OBJECT INJURIES NEVER DIRECT DISCHARGE AT BYSTANDERS. **USE EXTRA CAUTION WHEN OPERATING ON GRAVEL SURFACES.**



MEETS A.N.S.I. SAFETY REQUIREMENTS

Our snow throwers conform to the standards of the American National Standards Institute.

Toolbox - used to store spare shear bolts, locknuts and wrench.

Safety ignition key - must be inserted for the engine to start and run. Remove when snow thrower is not in use.

Electric start button – used for starting the engine.

Recoil (auxiliary) starter handle – used for starting the engine.

Primer - pumps additional fuel from the carburetor to the cylinder for use when starting a cold engine.

Throttle/engine control - used to select either FAST or SLOW engine speed and to STOP the engine.

Choke control - used for starting a cold engine.

Drive speed control lever - used to select forward or reverse motion and speed of snow thrower.

Traction drive control lever - used to engage powerpropelled forward or reverse motion of snow thrower.

LH and RH turn triggers - used to steer the snow thrower.

Auger control lever - used to engage auger motion (throw snow).

Discharge chute control lever - used to change the direction the snow is thrown.

Skid plate - used to adjust height of scraper bar from the ground.

9 Drift cutter - used to cut through deep snowdrifts.



The operation of any snow thrower can result in foreign objects thrown into the eyes, which can result in severe eye damage. Always wear safety glasses or eye shields while operating your snow thrower or performing any adjust-

ments or repairs. We recommend standard safety glasses or a wide vision safety mask worn over spectacles.

HOW TO USE YOUR SNOW THROWER

Know how to operate all controls before adding fuel or attempting to start the engine.

STOPPING

TRACTION DRIVE

 Release traction drive control lever to stop the forward or reverse movement of the snow thrower.

AUGER

• Release the auger control lever to stop throwing snow.

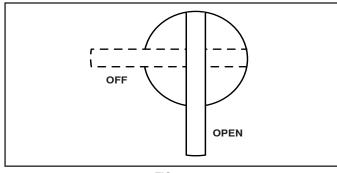
ENGINE

- 1. Move throttle control to "STOP" position.
- 2. Remove (do not turn) safety ignition key to prevent unauthorized use.

NOTE: Never use choke to stop engine.

TO USE FUEL SHUT-OFF VALVE (See Fig. 11)

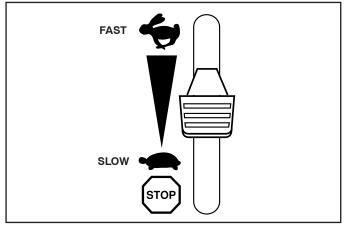
The fuel shut-off valve is located beneath the fuel tank on the engine. Always operate the snow thrower with the fuel shut-off valve in the OPEN position.





TO USE THROTTLE CONTROL (See Fig. 12)

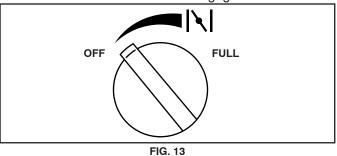
The throttle control is located on the engine. Always operate the snow thrower with the engine at full throttle. Full throttle offers the best snow thrower performance.



TO USE CHOKE CONTROL (See Fig. 13)

The choke control is located on the engine. Use the choke control whenever you are starting a cold engine. Do not use to start a warm engine.

• To engage choke, turn knob clockwise. Slowly turn knob counterclockwise to disengage.



TO CONTROL SNOW DISCHARGE (See Fig. 14)



WARNING: Snow throwers have exposed rotating parts, which can cause severe injury from contact, or from material thrown from the discharge chute. Keep the area of operation clear of all persons, small children and pets at all times including startup.



WARNING: If the discharge chute or auger become clogged, shut-off engine and wait for all moving parts to stop. Use the clean-out tool, NOT YOUR HANDS, to unclog the chute and/or auger.

The DIRECTION in which snow is to be thrown is controlled by the discharge chute control lever.

 To change the discharge chute position, press downward on discharge chute control lever and move lever left or right until chute is in desired position. Be sure lever springs back and locks into desired position.

The DISTANCE that snow is thrown is controlled by the position of the chute deflector. Set the deflector low to throw snow a short distance; set the deflector higher to throw snow farther.

• Press downward on chute deflector control lever and move lever forward to raise the deflector and increase the distance. Move lever back to lower the deflector and decrease the distance. Be sure lever springs back and locks into desired position.

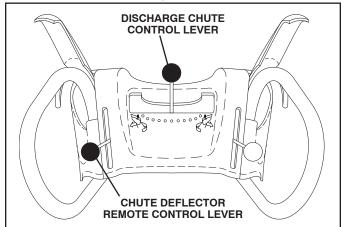


FIG. 14

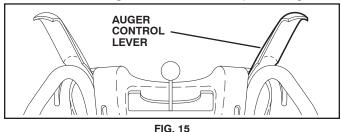


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TO THROW SNOW (See Fig. 15)

The auger rotation is controlled by the auger control lever located on the right side handle.

- Squeeze auger control lever to handle to engage the auger and throw snow.
- Release the auger control lever to stop throwing snow.



USING THE CLEAN-OUT TOOL (See Fig. 16)

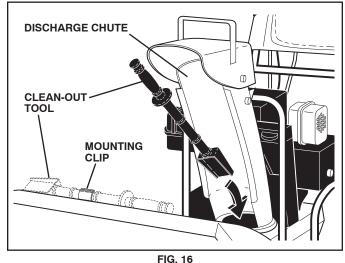
In certain snow conditions, the discharge chute may become clogged with ice and snow. Use the clean-out tool to dislodge this blockage.

When cleaning, repairing, or inspecting, make certain all controls are disengaged and the auger/impeller and all moving parts have stopped. Disconnect the spark plug wire and keep the wire away from the spark plug to prevent accidental starting.

- Release the auger control lever and shut off the engine.
- Remove the clean-out tool from it's mounting clip. Grasp the tool firmly by the handle and push and twist the tool into the discharge chute to dislodge the blockage.

After the packed snow has been dislodged, return the cleanout tool to it's mounting clip by pushing it into the clip.

- Make sure the discharge chute is pointed in a safe direction (no vehicles, buildings, people, or other objects are in the direction of discharge) before restarting engine.
- Restart the engine, then squeeze the auger control lever to the handle to clear snow from the auger housing and the discharge chute.



TO MOVE FORWARD AND BACKWARD (See Fig. 17) SELF-PROPELLING, forward and reverse movement of the snow thrower, is controlled by the traction drive control lever located on the left side handle.

- Squeeze traction drive control lever to handle to engage the drive system.
- Release traction drive control lever to stop the forward or reverse movement of the snow thrower.

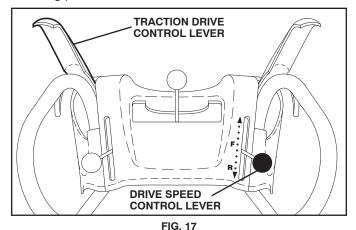
SPEED and DIRECTION are controlled by the drive speed control lever.

• Press downward on the speed control lever and move lever to desired position BEFORE engaging the traction drive control lever. Be sure lever springs back and locks into desired position.

CAUTION: Do not move speed control lever when traction drive control lever is engaged. Damage to the snow thrower can result.

• Slower speeds are for heavier snow and faster speeds are for light snow and transporting the snow thrower. It is recommended that you use a slower speed until you are familiar with the operation of the snow thrower.

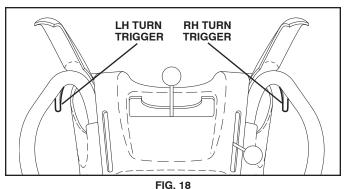
NOTE: When both traction drive and auger control levers are engaged, the traction drive control lever will lock the auger control lever in the engaged position. This will allow you to release your right hand from the handle and adjust the discharge chute direction without interrupting the snow throwing process.



POWER STEERING OPERATION (See Fig. 18)

Steering triggers are used to assist in steering your snow thrower. The triggers are located on the underside of each handle. When a trigger is squeezed, it disengages the drive wheel on that side of snow thrower and allows it to turn in that direction.

- To turn left squeeze left side trigger.
- To turn right squeeze right side trigger.



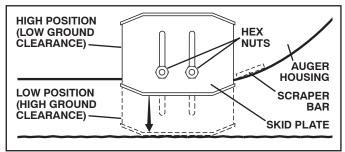
TO ADJUST SKID PLATES (See Fig. 19)

NOTE: The wrench provided in your parts bag may be used to adjust the skid plates.

Skid plates are located on each side of the auger housing and adjust the clearance between the scraper bar and the ground surface. Adjust skid plates evenly to proper height for current surface conditions. For removal of snow in normal conditions, such as a paved driveway or sidewalk, place skid plates in the highest position (lowest scraper clearance) to give a 1/8" clearance between the scraper bar and the ground. Use a middle position if the surface to be cleared is uneven.

NOTE: It is not recommended to operate the snow thrower over gravel or rocky surfaces. Objects such as gravel, rocks or other debris, can easily be picked up and thrown by the impeller, which can cause serious personal injury, property damage or damage to the snow thrower.

- If snow thrower must be operated over gravel surface, use extra caution and be sure skid plates are adjusted to lowest (highest scraper clearance) position.
- 1. Shut off engine and wait for all moving parts to stop.
- 2. Adjust skid plates by loosening the hex nuts, then moving skid plate to desired position. Be sure both plates are adjusted evenly. Tighten securely.



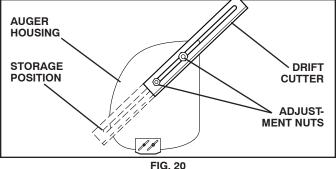


The scraper bar is not adjustable, but is reversible. After considerable use it may become worn. When it has worn almost to the edge of the housing, it can be reversed, providing additional service before requiring replacement. Replace a damaged or worn scraper bar.

TO USE DRIFT CUTTERS (See Fig. 20)

Use the drift cutters to cut through deep snowdrifts that are higher than the front of the snow thrower.

- Loosen adjustment nuts enough to allow drift cutter to be raised to highest position and tighten nuts securely. Repeat for opposite side of snow thrower.
- When not using drift cutters, loosen adjustment nuts, lower to storage position and tighten nuts securely.



BEFORE STARTING THE ENGINE

CHECK ENGINE OIL LEVEL (See Fig. 21)

The engine on your snow thrower has been shipped, from the factory, already filled with oil.

- 1. Check engine oil with snow thrower on level ground.
- Remove oil fill cap/dipstick and wipe clean, reinsert the dipstick and screw tight, wait for a few seconds, remove and read oil level. If necessary, add oil until "FULL" mark on dipstick is reached. Do not overfill.
- To change engine oil, see "TO CHANGE ENGINE OIL" in the Maintenance section of this manual.

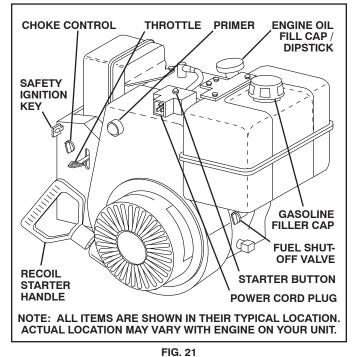
ADD GASOLINE (See Fig. 18)

• Fill fuel tank to bottom of tank filler neck. Do not overfill. Use fresh, clean, regular unleaded gasoline with a minimum of 87 octane. Do not mix oil with gasoline. Purchase fuel in quantities that can be used within 30 days to assure fuel freshness.



WARNING: Wipe off any spilled oil or fuel. Do not store, spill or use gasoline near an open flame.

CAUTION: Alcohol blended fuels (called gasohol or using ethanol or methanol) can attract moisture which leads to separation and formation of acids during storage. Acidic gas can damage the fuel system of an engine while in storage. To avoid engine problems, the fuel system should be emptied before storage of 30 days or longer. Empty the gas tank, start the engine and let it run until the fuel lines and carburetor are empty. Use fresh fuel next season. See Storage Instructions for additional information. Never use engine or carburetor cleaner products in the fuel tank or permanent damage may occur.



TO START ENGINE

• Be sure fuel shut-off valve is in the "OPEN" position.

Your snow thrower engine is equipped with both a 120 Volt A.C. electric starter and a recoil starter. The electric starter is equipped with a three-wire power cord and plug and is designed to operate on 120 Volt A.C. household current.

• Be sure your house is a 120 Volt A.C. three-wire grounded system. If you are uncertain, consult a licensed electrician.



WARNING: Do not use the electric starter if your house is not a 120 Volt A.C. three-wire grounded system. Serious personal injury or damage to your snow thrower could result.

COLD START - ELECTRIC STARTER

- 1. Insert safety ignition key (packed separately in parts bag) into ignition slot until it clicks. DO NOT turn the key. Keep the extra safety ignition key in a safe place.
- 2. Place throttle control in "FAST" position.
- 3. Rotate choke control to "FULL" position.
- 4. Connect the power cord to the engine.
- 5. Plug the other end of the power cord into a three-hole grounded 120 Volt A.C. receptacle.
- 6. Push the primer three (3) times.
- 7. Push starter button until engine starts.

IMPORTANT: Do not crank engine more than five continuous seconds between each time you try to start. Wait 5 to 10 seconds between each attempt.

- 8. When the engine starts, release the starter button and slowly move the choke control to the "OFF" position.
- 9. Disconnect the power cord from the receptacle first, then from the engine.

Allow the engine to warm up for a few minutes. Engine will not develop full power until it has reached normal operating temperature.

WARM START - ELECTRIC STARTER

Follow the steps above, keeping the choke control in the "OFF" position.

COLD START - RECOIL STARTER

- 1. Insert safety ignition key (packed separately in parts bag) into ignition slot until it clicks. DO NOT turn the key. Keep the extra safety ignition key in a safe place.
- 2. Place throttle control in "FAST" position.
- 3. Rotate choke control to "FULL" position.
- Push the primer four (4) times if the temperature is below 15°F, or two (2) times if temperature is between 15° and 50°F. If temperature is above 50°F, priming is not necessary.

NOTE: Over priming may cause flooding, preventing the engine from starting. If you do flood the engine, wait a few minutes before attempting to start and DO NOT push the primer.

- 5. Pull recoil starter handle quickly. Do not allow starter rope to snap back.
- 6. When the engine starts, release the recoil starter handle and slowly move the choke control to the "OFF" position.

Allow the engine to warm up for a few minutes. Engine will not develop full power until it has reached normal operating temperature.

WARM START - RECOIL STARTER

Follow the steps above, keeping the choke in the "OFF" position. DO NOT push the primer.

BEFORE STOPPING

Run the engine for a few minutes to help dry off any moisture on the engine.

IF RECOIL STARTER HAS FROZEN

If the recoil starter has frozen and will not turn the engine, proceed as follows:

- 1. Grasp the recoil starter handle and slowly pull as much rope out of the starter as possible.
- 2. Release the recoil starter handle and let it snap back against the starter.

If the engine still fails to start, repeat the above steps or use the electric starter.

MAINTENANCE

FII AS	IAINTENANCE SCH LL IN DATES S YOU COMPLETE EGULAR SERVICE		ILE BEFOI	AFTER EVE	SEUSE CHUSE AV 25 H AV 25 H AV 25 H F	OURS AV SEA VERY	SON 50 HOL 50 HO	RS 100 HC	URS STOP	AGE ERVI DAT	
T H	Check for Loose Fasteners	~					~				
R	Clean / Inspect Snow Thrower		~				~				
W	Check / Replace V-Belts				V						
E R	Lubrication Chart			~			~				
E	Check Engine Oil Level	v									
Ν	Change Engine Oil			~							
G	Inspect Muffler				~						
Ň	Check / Replace Spark Plug					~					
Е	Empty Fuel Tank						~				

GENERAL RECOMMENDATIONS

The warranty on this snow thrower does not cover items that have been subjected to operator abuse or negligence. To receive full value from the warranty, operator must maintain snow thrower as instructed in this manual. Some adjustments will need to be made periodically to properly maintain your snow thrower.

At least once a season, check to see if you should make any of the adjustments described in the Service and Adjustments section of this manual.

- At least once a year, you should replace the spark plug and check belts for wear. A new spark plug will help your engine run better and last longer.
- Follow the maintenance schedule in this manual.

NOTE: Use only Original Equipment Manufacturer (OEM) parts to service this unit. Failure to do so can cause the unit to malfunction and pose a risk of injury to the operator.

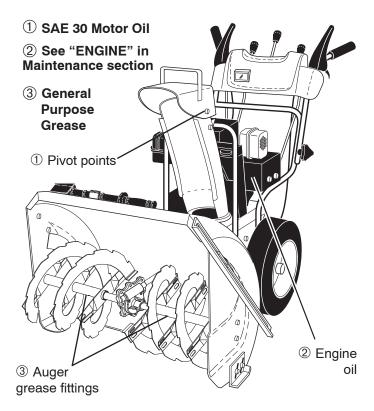
BEFORE EACH USE

- 1. Check engine oil level.
- 2. Check for loose fasteners.
- 3. Check controls to be sure they are functioning properly.

LUBRICATION

Keep your snow thrower well lubricated (See "LUBRICATION CHART").

LUBRICATION CHART



SNOW THROWER

Always observe the safety rules when performing any maintenance.

TIRES

- Maintain proper air pressure in both tires (14–17 P.S.I. / 19-24.5 N-m).
- Keep tires free of gasoline and oil, which can harm rubber.

NOTE: To seal tire punctures and prevent flat tires due to slow leaks, tire sealant may be purchased from your local parts dealer. Tire sealant also prevents tire dry rot and corrosion.

MAINTENANCE

V-BELTS

Check V-belts for deterioration and wear after every 50 hours of operation and replace if necessary. The belts are not adjustable. Replace belts if they begin to slip from wear. (See "TO REMOVE BELT COVER" in the Service and Adjustments section of this manual).

The V-belts on your snow thrower are of special construction and should be replaced by original equipment manufacturer (OEM) belts available from your nearest dealer. Using other than OEM belts can cause personal injury or damage to the snow thrower.

AUGER GEAR CASE

- The gear case was filled with lubricant to the proper level at the factory. The only time the lubricant needs attention is if service has been performed on the gear case.
- If lubricant is required, use only Ronex ED #1 grease.

TRACTION DRIVE SYSTEM

DO NOT lubricate the drive components inside the snow thrower. The sprockets, hex shafts, drive disc and friction wheel require no lubrication. The bearings and bushings are lifetime lubricated and require no maintenance.

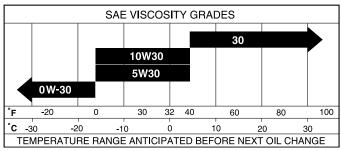
CAUTION: Any lubricating of the above components can cause contamination of the friction wheel and damage to the drive system of your snow thrower.

ENGINE

See engine manual.

LUBRICATION

Use only high quality detergent oil rated with API service classification SG–SL. Select the oil's SAE viscosity grade according to your expected operating temperature.



NOTE: Although multi-viscosity oils (5W30, 10W30 etc.) improve starting in cold weather, these multi-viscosity oils will result in increased oil consumption when used above 32°F. Check your engine oil level more frequently to avoid possible engine damage from running low on oil.

Change the oil after every 25 hours of operation or at least once a year if the snow thrower is not used for 25 hours in one year.

Check the crankcase oil level before starting the engine and after each five (5) hours of continuous use. Tighten oil fill cap / dipstick securely each time you check the oil level.

TO CHANGE ENGINE OIL

Determine temperature range anticipated before next oil change. All oil must meet API service classification SG–SL.

- Be sure snow thrower is on level surface.
- Oil will drain more freely when warm.
- Catch oil in a suitable container.

NOTE: The left side wheel may be removed from snow thrower for easier access to the oil drain plug and placement of a suitable container. The unit tilted, resting on the frame with the left wheel removed, will help drain any oil trapped inside the engine. (See "TO REMOVE WHEELS" in the Service and Adjustments section of this manual).

- 1. Remove safety ignition key and disconnect spark plug wire from spark plug and place wire where it cannot come in contact with plug.
- 2. Clean area around drain plug.
- 3. Remove drain plug and drain oil in a suitable container.
- 4. Install drain plug and tighten securely.
- 5. Wipe off any spilled oil from snow thrower and engine.
- Install left wheel (if removed for draining oil). Be sure to install klick pin into proper hole in wheel axle (See "TO REMOVE WHEELS" in the Service and Adjustments section of this manual).
- 7. Remove oil fill cap/dipstick. Be careful not to allow dirt to enter the engine.
- 8. Refill engine with oil through oil dipstick tube. Pour slowly. Do not overfill. For approximate capacity see "PRODUCT SPECIFICATIONS" section of this manual.
- 9. Use gauge on oil fill cap/dipstick for checking level. Be sure dipstick cap is tightened securely for accurate reading. Keep oil at "FULL" line on dipstick.
- 10. Wipe off any spilled oil.

MUFFLER

Inspect and replace corroded muffler as it could create a fire hazard and/or damage.

SPARK PLUG

Replace spark plug at the beginning of each season or after every 100 hours of operation, whichever occurs first. Spark plug type and gap setting are shown in the "PRODUCT SPECIFICATIONS" section of this manual.

CLEANING

IMPORTANT: For best performance, keep snow thrower housing free of any dirt or trash. Clean the outside of your snow thrower after each use.



WARNING: Disconnect spark plug wire from spark plug and place wire where it cannot come in contact with plug.

- Keep finished surfaces/wheels free of gasoline, oil, etc.
- We do not recommend using a garden hose to clean your snow thrower unless the electrical system, muffler and carburetor are covered to keep water out. Water in engine can result in shortened engine life.

SERVICE AND ADJUSTMENTS

WARNING: To avoid serious injury, before performing any service or adjustments:

- 1. Be sure throttle is in STOP position.
- A
- 2. Remove safety ignition key.
- 3. Make sure the augers and all moving parts have completely stopped.
- 4. Disconnect spark plug wire from spark plug and place wire where it cannot come in contact with plug.

SNOW THROWER

TO ADJUST SNOW THROWER HEIGHT

See "TO ADJUST SKID PLATES" and "SCRAPER BAR" in the Operation section of this manual.

CHUTE DEFLECTOR

The chute deflector, attached to the top of the discharge chute, is provided to direct discharging snow away from the operator. If the deflector becomes damaged, it should be replaced.



WARNING: To avoid serious injury, never operate your snow thrower with the deflector removed or damaged.

 To change direction and/or distance snow is discharged, see "TO CONTROL SNOW DISCHARGE" in the Operation section of this manual.

SHEAR BOLTS (See Fig. 22)

AUGER SHEAR BOLTS

Both right and left-hand augers are secured to the auger shaft with a shoulder/shear bolt and hex nut. Should a foreign object or ice become lodged in the augers, the shear bolts are designed to break, preventing damage to any other components. If one or both augers do not turn when auger control lever is engaged, check to see if one or both of the bolts have sheared. To replace the shear bolts:

- 1. Disengage all controls and move throttle control to STOP position. Wait for all moving parts to stop.
- 2. Remove safety ignition key and disconnect spark plug wire from spark plug. Place wire where it cannot come in contact with plug.
- 3. Align hole in auger hub with hole in auger shaft and install a new 1/4-20 x 2" shoulder/shear bolt and spacer. Install 1/4-20 lock nut and tighten securely.

CAUTION: Do not substitute. Use only original equipment shear bolts as supplied with your snow thrower.

4. Connect spark plug wire to spark plug. Replace safety ignition key

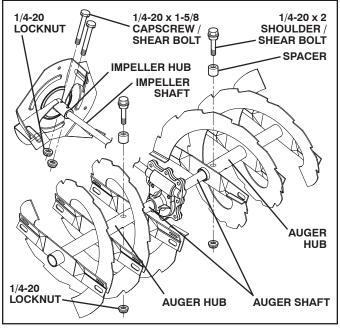
IMPELLER SHEAR BOLTS

The impeller is secured to the impeller shaft with two (2) capscrew/shear bolts and hex nuts. Should a foreign object or ice become lodged in the impeller, the capscrews are designed to break, preventing damage to any other components. If impeller does not turn when auger control lever is engaged, check to see if the capscrews have sheared. To replace the capscrew/shear bolts:

- 1. Disengage all controls and move throttle control to STOP position. Wait for all moving parts to stop.
- 2. Remove safety ignition key and disconnect spark plug wire from spark plug. Place wire where it cannot come in contact with plug.
- 3. Align holes in impeller hub with holes in impeller shaft and install two (2) new 1/4-20 x 1-5/8" capscrew/shear bolts. Install 1/4-20 locknuts and tighten securely.

CAUTION: Do not substitute. Use only original equipment capscrew/shear bolts as supplied with your snow thrower.

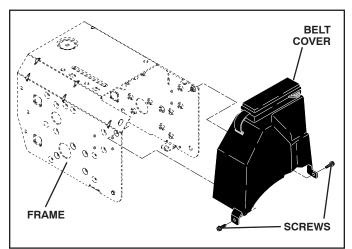
4. Connect spark plug wire to spark plug.





TO REMOVE BELT COVER (See Fig. 23)

- 1. Remove the two (2) screws securing belt cover to frame.
- 2. Remove belt cover.
- 3. Replace belt cover by installing cover and screws and tighten securely.



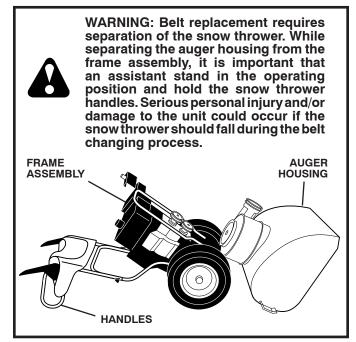
SERVICE AND ADJUSTMENTS

TO REPLACE BELTS (See Fig. 24)

The auger and traction drive belts are not adjustable. If the belts are damaged or begin to slip from wear, they should be replaced. It is recommended that the belt(s) be replaced by a qualified service center.

NOTE: It is recommended that both the auger and traction drive belt be replaced at the same time.

The V-belts on your snow thrower are of special construction and should be replaced by original equipment manufacturer (OEM) belts available from your nearest dealer. Using other than OEM belts can cause personal injury or damage to the snow thrower.



- 1. REMOVE GASOLINE FROM FUEL TANK Drain gasoline from fuel tank into a suitable container, outdoors, away from fire or flame. Wipe up any spilled gasoline.
- REMOVE DISCHARGE CHUTE Loosen locknut securing chute rotator head to mounting bracket only enough to allow chute rotator head to be raised and discharge chute to be removed from snow thrower.
- REMOVE BELT COVER See "TO REMOVE BELT COVER" in this section of this manual.
- REMOVE ENGINE PULLEY Remove bolt, lockwasher and flat washer securing pulley to engine crankshaft. Remove outside (auger) pulley only from crankshaft.
- 5. SEPARATE SNOW THROWER With your assistant standing in the operating position holding the handles, remove the two (2) bolts holding auger housing and frame together.



WARNING: As the last bolt is removed, have your assistant carefully lower the handles down to the ground.

- 6. REMOVE AUGER BELT from around pulley.
- RELIEVE TENSION ON TRACTION DRIVE BELT IDLER and remove traction drive belt from around pulleys.

HINT: Insert a 3/8" drive ratchet (in the "ON" position) into the square hole in idler arm and rotate ratchet clockwise to relieve tension.

- 8. With tension relieved on idler, install new traction drive belt around pulleys and inside belt keepers.
- 9. Place auger belt around and inside the groove of auger pulley only.
- 10. While your assistant slowly raises handles to rejoin the auger housing and frame assembly, pull up on the auger belt and squeeze sides together above pulley so belt is fully seated in groove of pulley.
- 11. Move idler arm so it does not hit impeller pulley as you bring snow thrower completely together and check carefully for proper routing of belts. If auger belt has become dislodged from the pulley (by catching the idler arm bracket while bringing snow thrower together), separate the snow thrower and repeat step 12. Belt must be fully seated in pulley groove when bringing the snow thrower together.
- 12. Install the two (2) hex bolts and tighten securely.
- 13. INSTALL ENGINE PULLEY Place belt in pulley groove and slide pulley on crankshaft. Install flat washer, lockwasher and bolt and tighten securely (30-35 ft. lbs. torque). Make sure belt is inside belt keeper.
- 14. INSTALL BELT COVER and two (2) screws. Tighten securely.
- 15. INSTALL DISCHARGE CHUTE See "INSTALL DIS-CHARGE CHUTE / CHUTE ROTATER HEAD" in the Assembly / Pre-Operation section of this manual.

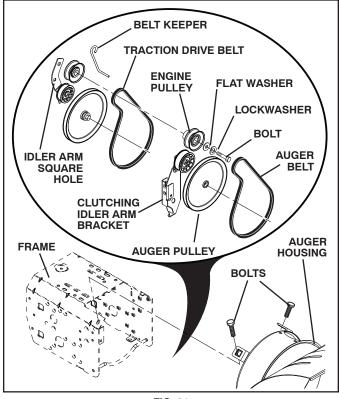
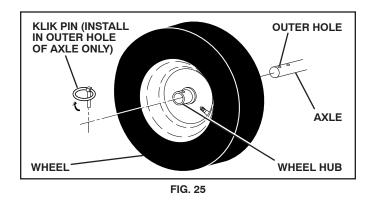


FIG. 24

TO REMOVE WHEELS (See Fig. 25)

• Remove the klik pin and remove wheel from axle.

IMPORTANT: When installing wheel, be sure to use the axle hole closest to the end of the shaft – *do not* use the hole in the wheel hub (if equipped). Inner hole in axle and hole in wheel hub are not used for your model snow thrower.



NOTE: To seal punctures or prevent flat tires due to slow leaks, tire sealant may be purchased from your local parts dealer. Tire sealant also prevents tire dry rot and corrosion.

ENGINE

See engine manual.

CARBURETOR

Your carburetor is not adjustable. Engine performance should not be affected at altitudes up to 7,000 feet (2,134 meters). If your engine does not operate properly due to suspected carburetor problems, take your snow thrower to a qualified service center.

ENGINE SPEED

Never tamper with the engine governor, which is factory set for proper engine speed. Overspeeding the engine above the factory high speed setting can be dangerous and will void the warranty. If you think the engine-governed high speed needs adjusting, contact a qualified service center, which has proper equipment and experience to make any necessary adjustments.

STORAGE

Immediately prepare your snow thrower for storage at the end of the season or if the unit will not be used for 30 days or more.



WARNING: Never store the snow thrower with gasoline in the tank inside a building where fumes may reach an open flame, spark or pilot light as on a furnace, water heater, clothes dryer or gas appliance. Allow the engine to cool before storing in any enclosure.

SNOW THROWER

When snow thrower is to be stored for a period of time, clean it thoroughly, remove all dirt, grease, leaves, etc. Store in a clean, dry area.

- 1. Clean entire snow thrower (See "CLEANING" in the Maintenance section of this manual).
- 2. Inspect and replace belts, if necessary (See "TO RE-PLACE BELTS" in the Service and Adjustments section of this manual).
- 3. Lubricate as shown in the Maintenance section of this manual.
- 4. Be sure that all nuts, bolts, screws, and pins are securely fastened. Inspect moving parts for damage, breakage and wear. Replace if necessary.
- 5. Touch up all rusted or chipped paint surfaces; sand lightly before painting.

ENGINE

See engine manual.

FUEL SYSTEM

IMPORTANT: It is important to prevent gum deposits from forming in essential fuel system parts such as carburetor, fuel hose, or tank during storage. Also, alcohol blended fuels (called gasohol or using ethanol or methanol) can attract moisture which leads to separation and formation of acids during storage. Acidic gas can damage the fuel system of an engine while in storage.

- Empty the fuel tank by starting the engine and letting it run until the fuel lines and carburetor are empty.
- Never use engine or carburetor cleaner products in the fuel tank or permanent damage may occur.
- Use fresh fuel next season.

NOTE: Fuel stabilizer is an acceptable alternative in minimizing the formation of fuel gum deposits during storage. Add stabilizer to gasoline in fuel tank or storage container. Always follow the mix ratio found on stabilizer container. Run engine at least 10 minutes after adding stabilizer to allow the stabilizer to reach the carburetor. Do not empty the gas tank and carburetor if using fuel stabilizer.

ENGINE OIL

Drain oil (with engine warm) and replace with clean engine oil. (See "ENGINE" in the Maintenance section of this manual).

CYLINDER

- 1. Remove spark plug.
- 2. Pour one ounce (29 ml) of oil through spark plug hole into cylinder.
- 3. Pull recoil starter handle slowly a few times to distribute oil.
- 4. Replace with new spark plug.

OTHER

- Remove safety ignition key; store it in a safe place.
- · Do not store gasoline from one season to another.
- Replace your gasoline can if your can starts to rust. Rust and/or dirt in your gasoline will cause problems.
- If possible, store your snow thrower indoors and cover it to protect it from dust and dirt.
- Cover your snow thrower with a suitable protective cover that does not retain moisture. Do not use plastic. Plastic cannot breathe, which allows condensation to form and will cause your snow thrower to rust.

IMPORTANT: Never cover snow thrower while engine/exhaust area is still warm.

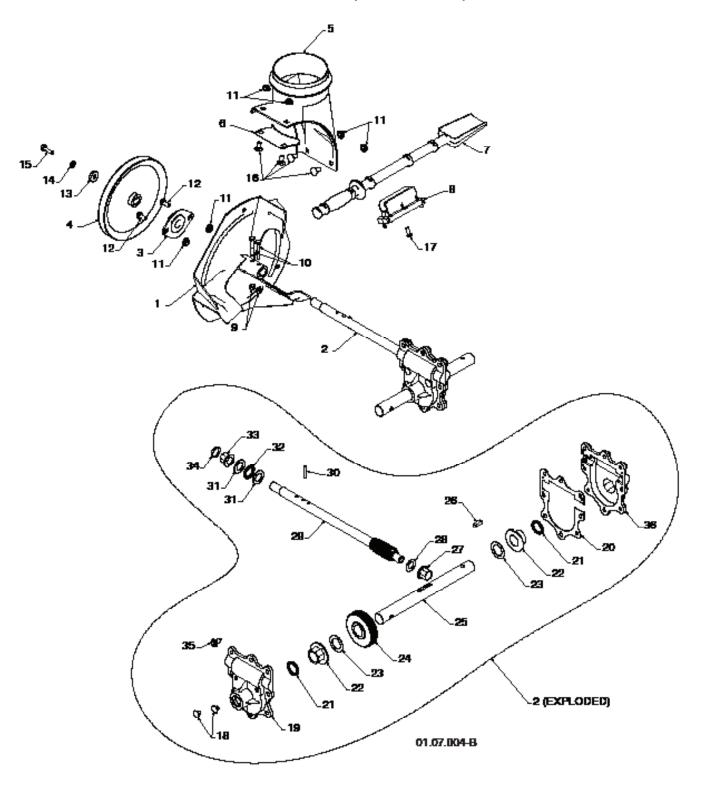
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TROUBLESHOOTING

See appropriate section in manual unless directed to a qualified service centre.				
PROBLEM	CAUSE	CORRECTION		
Does not start	 Fuel shut-off valve (if so equipped) in OFF position. 	1. Turn fuel shut-off valve to OPEN position.		
	 Safety ignition key is not inserted. 	2. Insert safety ignition key.		
	3. Out of fuel.	3. Refill fuel tank with fresh, clean gasoline.		
	4. Throttle in STOP position.	4. Move throttle to FAST position.		
	5. Choke in OFF position.	5. Move to FULL position.		
	6. Primer not depressed.	6. Prime as instructed in the Operation section of this manual.		
	7. Engine is flooded.	7. Wait a few minutes before restarting, DO NOT prime.		
	 Spark plug wire is disconnected. 	8. Connect wire to spark plug.		
	9. Bad spark plug.	9. Replace spark plug.		
	10. Stale fuel.	10. Empty fuel tank & carburetor, refill with fresh, clean gasoline.		
	11. Water in fuel.	11. Empty fuel tank & carburetor, refill with fresh, clean gasoline.		
Loss of power	1. Spark plug wire loose.	1. Reconnect spark plug wire.		
	2. Throwing too much snow.	2. Reduce speed and width of swath.		
	3. Fuel tank cap is covered	3. Remove ice and snow on and around fuel tank cap.		
	with ice or snow.			
	4. Dirty or clogged muffler.	4. Clean or replace muffler.		
Engine idles or	1. Choke is in FULL position.	1. Move choke to OFF position.		
runs roughly	2. Blockage in fuel line.	2. Clean fuel line.		
	3. Stale fuel.	3. Empty fuel tank & carburetor, refill with fresh, clean gasoline.		
	4. Water in fuel.	4. Empty fuel tank & carburetor, refill with fresh, clean gasoline.		
	5. Carburetor is in need of	5. Contact a qualified service centre.		
	adjustment or overhaul.			
Excessive	1. Loose parts or damaged	1. Tighten all fasteners. Replace damaged parts.		
vibration	augers or impeller.	If vibration remains, contact a qualified service centre.		
Recoil starter	1. Frozen recoil starter.	1. See "IF RECOIL STARTER HAS FROZEN"		
is hard to pull		in the Operation section of this manual.		
Loss of traction	1. Drive belt is worn.	1. Check / replace drive belt.		
drive / slowing	2. Drive belt is off of pulley.	2. Check / reinstall drive belt.		
of drive speed	3. Friction drive wheel is worn.	3. Contact a qualified service centre.		
Loss of snow	1. Auger belt is off of pulley.	1. Check / reinstall auger belt.		
discharge or	2. Auger belt is worn.	2. Check / replace auger belt.		
slowing of	3. Clogged discharge chute.	3. Clean snow chute.		
snow discharge	4. Augers / impeller jammed.	4. Remove debris or foreign object from augers / impeller.		

AUGER HOUSING / IMPELLER ASSEMBLY

SNOW THROWER - MODEL NO. 1130SB-LS (96193002900), PRODUCT NO. 961 93 00-29

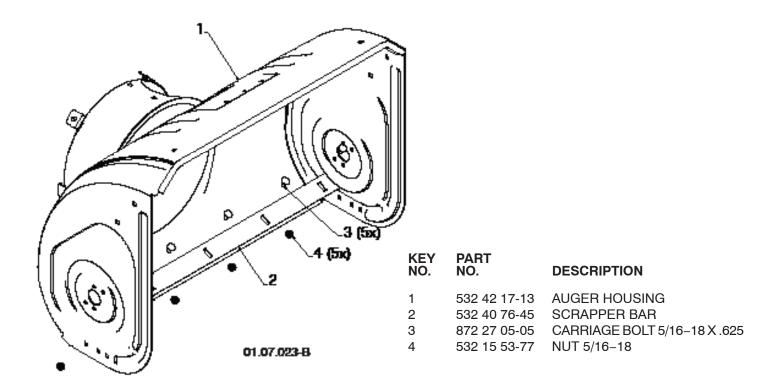


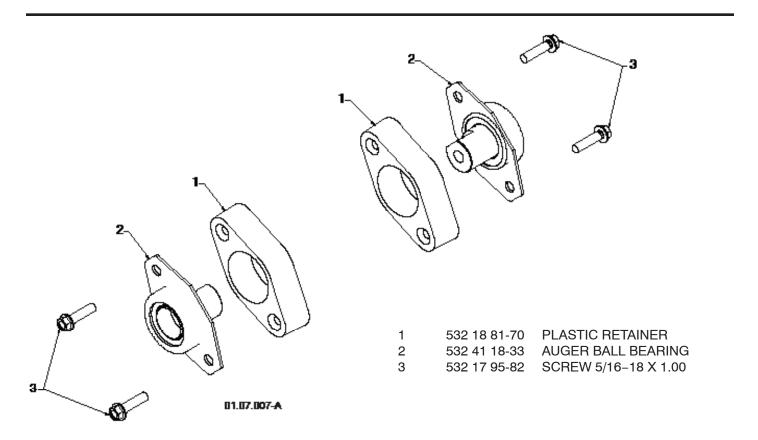
SNOW THROWER - MODEL NO. 1130SB-LS (96193002900), PRODUCT NO. 961 93 00-29

KEY NO.	PART NO.	DESCRIPTION
1	532 18 41-05	IMPELLER
2	532 19 67-10	GEARBOX ASSEMBLY
3	532 18 89-09	BEARING
4	532 19 10-79	IMPELLER PULLEY
5	532 17 53-22	DISCHARGE BASE
6	532 18 40-95	CORNER BRACKET
7	532 19 21-99	CLEAN OUT TOOL
8	532 40 54-00	TOOL CLIP
9	873 80 04-00	NUT 1/4–20
10	874 78 04-26	SCREW 1/4-20 X .625
11	532 15 53-77	NUT 5/16–18
12	532 16 31-83	SCREW 5/16-18 X .625
13	819 11 15-07	WASHER
14	810 04 05-00	LOCKWASHER 5/16
15	874 94 05-16	SCREW 5/16-18 X 1.00
16	532 18 03-55	CARRIAGE BOLT
17	532 19 41-89	SCREW 13-16 X .625
18	532 40 77-60	PLUG
19	532 40 77-61	GEARBOX COVER RH
20	532 40 77-66	GASKET
21	532 40 77-70	SEAL
22	532 40 77-62	BEARING
23	532 17 46-97	THRUST WASHER 1.00
24	532 40 77-63	WORM GEAR
25	532 40 77-64	AUGER SHAFT
26	532 18 92-82	SQUARE KEY
27	532 40 77-58	BEARING
28	532 17 46-83	THRUST WASHER
29	532 40 77-57	IMPELLER SHAFT
30	532 18 42-05	
31	532 17 46-81	THRUST WASHER
32	532 17 46-84	THRUST BEARING
33	532 40 77-69	BEARING
34	532 40 77-68	O-RING
35	532 40 77-67	SCREW 5/16–18 X .750 GEARBOX COVER LH
36	532 40 77-65	GEARBUX COVER LH

AUGER HOUSING / IMPELLER ASSEMBLY

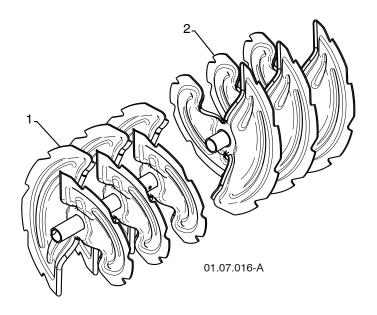
SNOW THROWER - MODEL NO. 1130SB-LS (96193002900), PRODUCT NO. 961 93 00-29



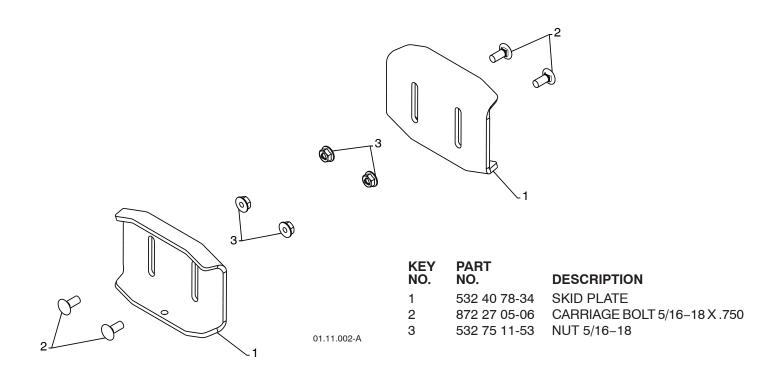


AUGER HOUSING / IMPELLER ASSEMBLY

SNOW THROWER - MODEL NO. 1130SB-LS (96193002900), PRODUCT NO. 961 93 00-29

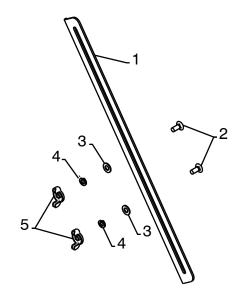


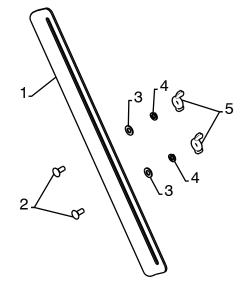
KEY NO.	PART NO.	DESCRIPTION
1 2		AUGER ASSEMBLY 30 LH AUGER ASSEMBLY 30 RH



AUGER HOUSING / IMPELLER ASSEMBLY

SNOW THROWER - MODEL NO. 1130SB-LS (96193002900), PRODUCT NO. 961 93 00-29





01.16.001-A

KEY NO.	PART NO.	DESCRIPTION
1	532 18 47-47	DRIFT CUTTER BAR
2	872 27 05-06	CARRIAGE BOLT 5/16-18 X .750
3	532 17 92-46	PLASTIC WASHER
4	810 04 05-00	LOCKWASHER 5/16
5	532 12 86-38	NUT 5/16–18

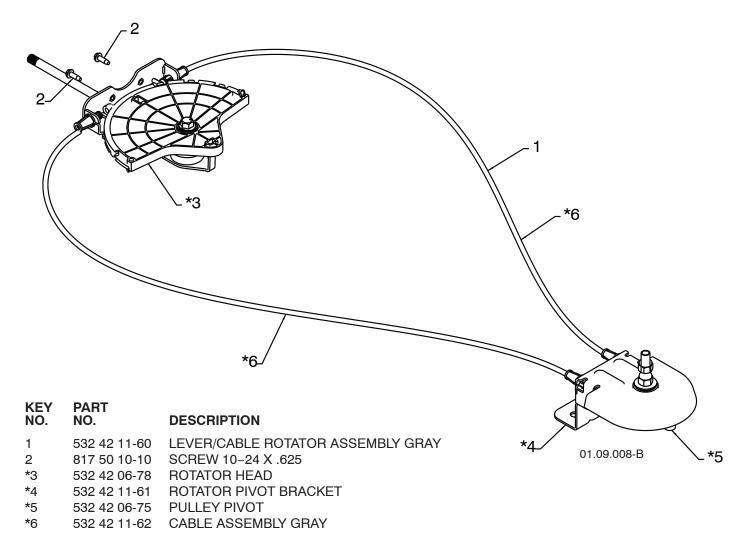
CONTROL PANEL / DISCHARGE CHUTE

SNOW THROWER - MODEL NO. 1130SB-LS (96193002900), PRODUCT NO. 961 93 00-29

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KEY NO.	PART NO.	
1 2 3 4 5 6 7 8 9 *10 *11 *12 *13 *14 *15 16 17 18 19	532 42 17-14 532 18 41-13 532 42 11-63 532 42 03-25 532 41 42-80 532 12 84-15 817 50 10-10 532 41 98-21 532 42 17-28 532 17 98-29 532 17 92-46 532 19 17-30 872 25 05-05 532 75 11-53 532 18 45-05 532 42 06-79 532 42 11-64 532 42 11-38 532 42 32-47	CHUTE WELDMENT DEFLECTOR WELDMENT DEFLECTOR CONTROL ASSEMBLY DEFLECTOR SEAL KNOB BLACK POP RIVET SCREW 10–24 X .625 CHUTE SNOW SHIELD SHIELD RETAINER STRAP SHOULDER BOLT 1/4–20 X .375 PLASTIC WASHER NUT 1/4–20 CARRIAGE BOLT 3/8–16 X .625 NUT 5/16–18 DEFLECTOR SPRING (SERVICE PART) DEFLECTOR CONTROL (SERVICE PART) DEFLECTOR CABLE GRAY DEFLECTOR SHIELD DEFLECTOR SHIELD STRAP

CONTROL PANEL / DISCHARGE CHUTE

SNOW THROWER - MODEL NO. 1130SB-LS (96193002900), PRODUCT NO. 961 93 00-29



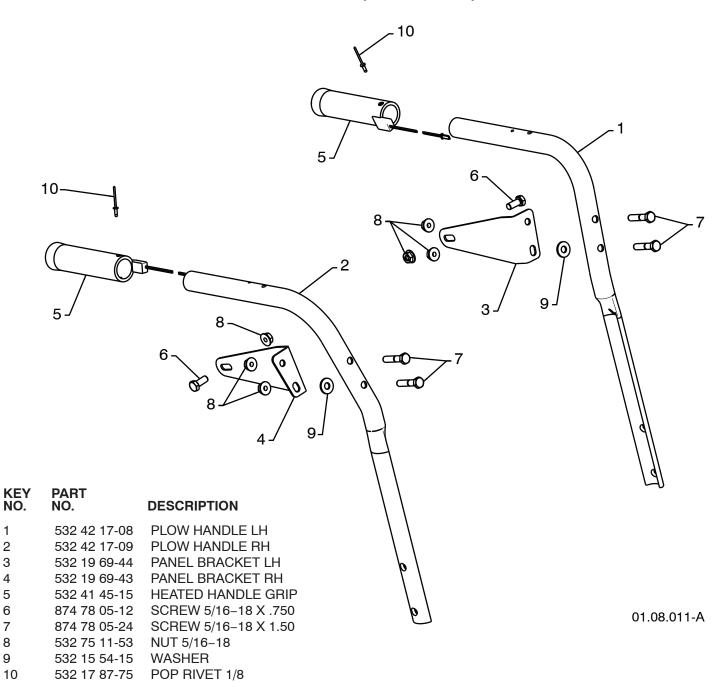
NOTES:

1. ITEMS INDICATED WITH AN * ARE LISTED AS REFERENCE FOR SERVICE PARTS ONLY.

SNOW THROWER - MODEL NO. 1130SB-LS (96193002900), PRODUCT NO. 961 93 00-29

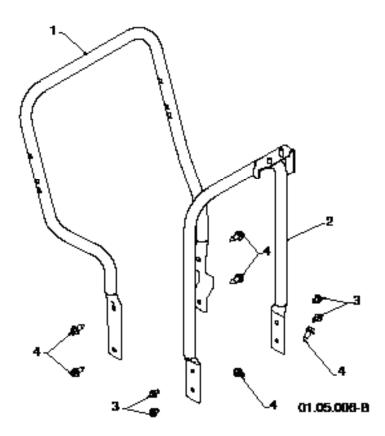
	3		
KEY NO. 1 2 3 4 5 6 7 8 9 10 11 12 13 14	PART NO. 532 41 55-39 532 42 17-06 532 42 17-07 532 41 55-46 532 42 14-92 532 41 26-77 532 41 26-80 532 16 96-75 817 06 04-08 532 41 42-80 532 41 42-81 532 41 42-81 532 17 88-99 819 13 13-16 872 12 06-18	DESCRIPTION CONTROL PANEL CONTROL LEVER LH CONTROL LEVER RH TRACTION ROD ARM IMPELLER ROD ARM IMPELLER ROD ARM INTERLOCK ROD SPACER RETAINER SCREW 1/4–20 X .50 KNOB BLACK KNOB RED HANDLE KNOB WASHER 3/8 CARRIAGE BOLT 3/8–16)	13 12 14 01.08.012-A

SNOW THROWER - MODEL NO. 1130SB-LS (96193002900), PRODUCT NO. 961 93 00-29



HANDLES

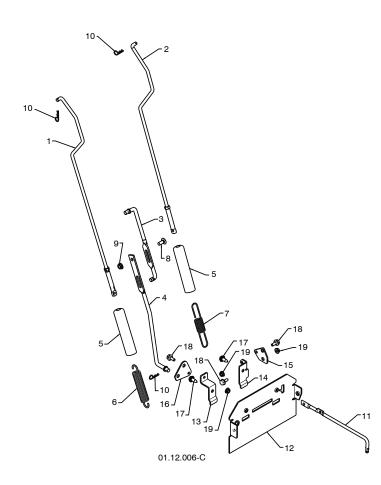
SNOW THROWER - MODEL NO. 1130SB-LS (96193002900), PRODUCT NO. 961 93 00-29



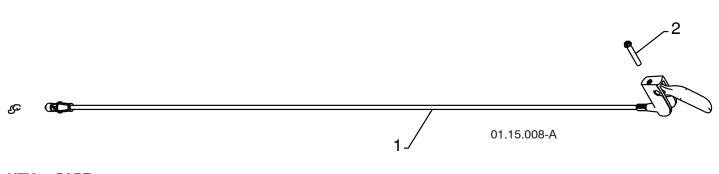
KEY NO.	PART NO.	DESCRIPTION
1	532 42 17-05	LOWER TUBE PNT
2	532 40 76-43	PIVOT SUPPORT
3	532 15 00-78	HEXHEAD SCREW .3125–18 X .75
4	817 00 06-16	HEXHD FLG CAPSCREW 3/8 X 1.0 TT

HANDLES

SNOW THROWER - MODEL NO. 1130SB-LS (96193002900), PRODUCT NO. 961 93 00-29



KEY	PART	
NO.	NO.	DESCRIPTION
1	532 18 04-80	IMPELLER ROD ASSEMBLY
2	532 40 57-40	TRACTION ROD ASSEMBLY
3	532 18 04-45	SHIFTER ROD TOP
4	532 18 77-16	SHIFTER ROD BOTTOM
5	532 18 04-47	SPRING SLEEVE
6	532 17 86-69	IMPELLER SPRING
7	532 18 09-26	TRACTION SPRING
8	872 27 05-06	CARRIAGE BOLT 5/16-18 X .750
9	532 15 53-77	NUT 5/16–18
10	532 16 96-75	RETAINER
11	532 40 33-00	CLUTCH ROD
12	532 40 32-15	REAR PLATE
13	532 40 30-96	SHIFTER PLATE BRACKET
14	532 41 67-17	CLUTCH PLATE BRACKET
15	532 40 28-56	CLUTCH PLATE
16	532 40 30-97	SHIFTER PLATE
17	532 15 00-78	BOLT 5/16–18 X .750
18	532 40 28-81	SHOULDER BOLT 1/4-20 X .500
19	532 19 17-30	NUT 1/4–20



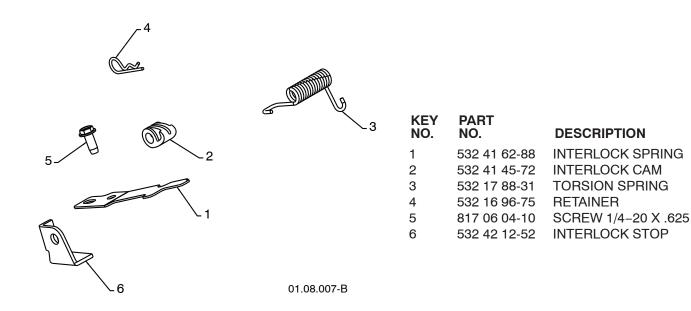
KEY NO. PART

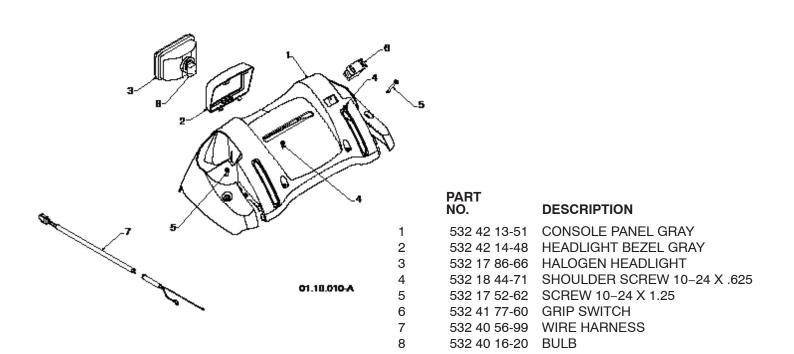
NO. DESCRIPTION

1 532 42 12-31 STEER CABLE

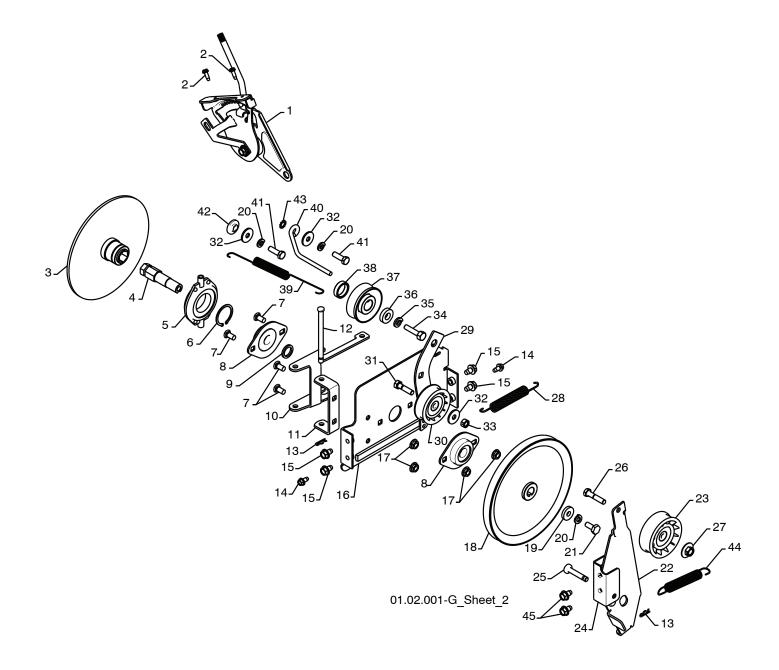
2 874 04 10-24 SCREW 10-24 X 1.50

SNOW THROWER - MODEL NO. 1130SB-LS (96193002900), PRODUCT NO. 961 93 00-29





SNOW THROWER - MODEL NO. 1130SB-LS (96193002900), PRODUCT NO. 961 93 00-29



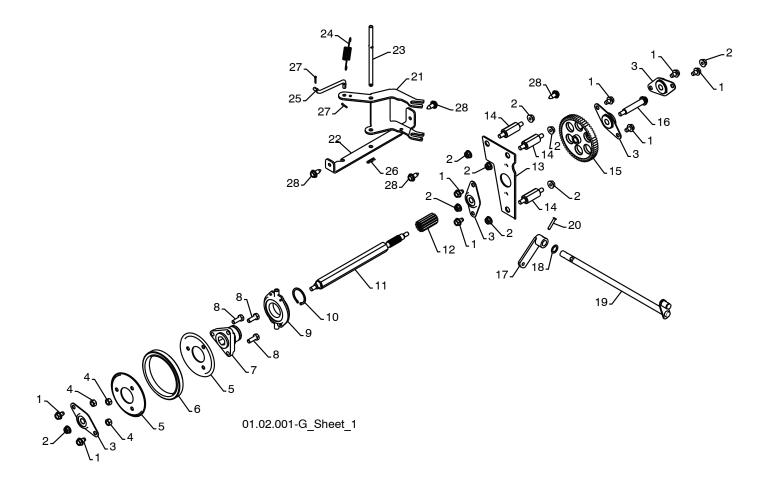
DRIVE

SNOW THROWER - MODEL NO. 1130SB-LS (96193002900), PRODUCT NO. 961 93 00-29

KEY NO.	PART NO.	DESCRIPTION
1	532 19 84-74	SPEED SELECTOR HEAD ASSEMBLY
2	817 50 10-10	
3		DRIVE PLATE WELDMENT
4	532 19 77-64	
5		TRUNNION BEARING ASSEMBLY
6	812 00 00-12	
7		CARRIAGE BOLT 5/16–18 X .625
8		FLANGE BEARING
9	532 18 25-04	
10		LEVER SHIFTER PLATE
11		SHIFTER SUPPORT BRACKET
12		
13		
14		SCREW 1/4-20 X .500
		BOLT 5/16–18 X .500
	532 18 40-75	-
	532 15 53-77	
18		
19	819 11 15-07	WASHER
20	810 04 05-00	LOCKWASHER 5/16
		SCREW 5/16-18 X .750
22	532 41 99-25	IDLER BRAKE ARM
23	532 18 05-23	IDLER PULLEY
24	532 18 40-74	IDLER PIVOT BRACKET
25	532 17 53-30	PIN
26	874 78 05-24	SCREW 5/16-18 X 1.50
27	532 16 67-85	NUT 5/16–18
28	532 18 10-44	TRACTION SPRING
29	532 17 93-54	IDLER TRACTION ARM
30	532 18 05-22	IDLER PULLEY
31		SCREW 5/16-18 X 1.25
32		
33	873 93 05-00	
	532 85 10-84	
35		LOCKWASHER 3/8
36		
37		ENGINE TRACTION PULLEY
38		
39		RETURN SPRING
40		
		SCREW 5/16-18 X 1.00
	532 17 53-31	
		LOCKWASHER 5/16
44	532 17 88-28	BRAKE SPRING

SNOW THROWER - MODEL NO. 1130SB-LS (96193002900), PRODUCT NO. 961 93 00-29

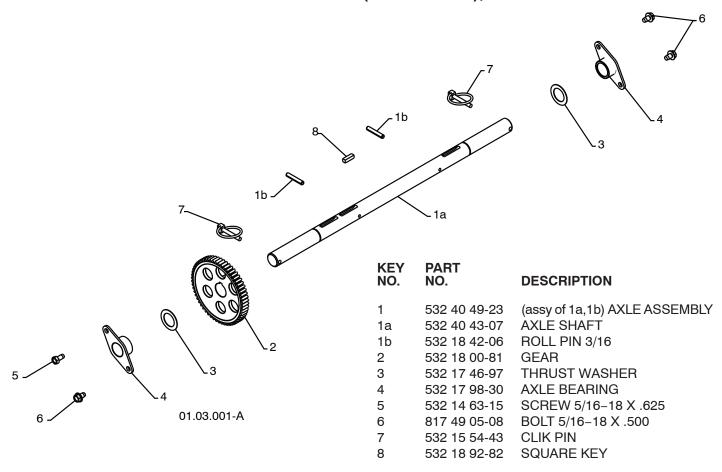
REPAIR PARTS

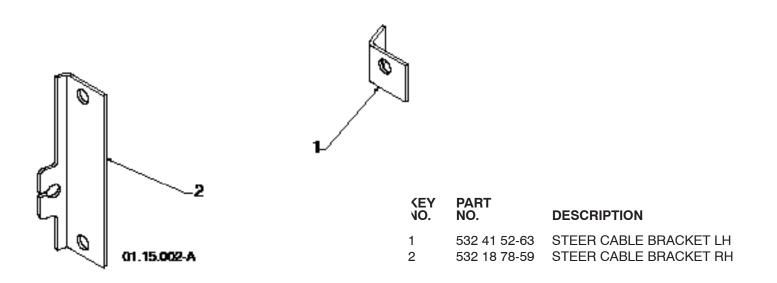


KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	817 49 05-08	BOLT 5/16–18 X .500	15	532 18 00-82	INTERMEDIATE GEAR
2	532 75 11-53	NUT 5/16–18	16	532 18 01-34	AUXILIARY SHAFT
3	532 18 00-17	FLANGE BEARING	17	532 40 54-85	CONTROL ARM
4	873 93 05-00	NUT 5/16–18	18	532 05 70-79	WASHER
5	532 19 81-76	RUBBER WHEEL PLATE	19	532 40 61-09	CONTROL SHAFT ASSEMBLY
6	532 17 98-31	RUBBER WHEEL RING	20	532 19 85-80	CLEVIS PIN
7	532 17 86-13	RUBBER WHEEL HUB	21	532 17 86-19	SHIFTER LEVER
8	874 76 05-14	BOLT 5/16-18 X .875	22	532 18 69-51	PIVOT BRACKET
9	532 17 53-44	TRUNNION BEARING	23	532 17 88-07	PIVOT PIN
		ASSEMBLY	24	532 18 01-35	SPRING
10	812 00 00-12	RETAINER	25	532 18 71-01	SHIFTER LINK
11	532 18 00-66	HEX SHAFT	26	532 08 51-79	RETAINER
12	532 18 00-65	PINION GEAR	27	532 70 02-79	CLIP
13	532 19 26-16	AUXILIARY PLATE	28	532 15 00-78	BOLT 5/16–18 x .750
14	532 17 92-70	SPACER PLATE			

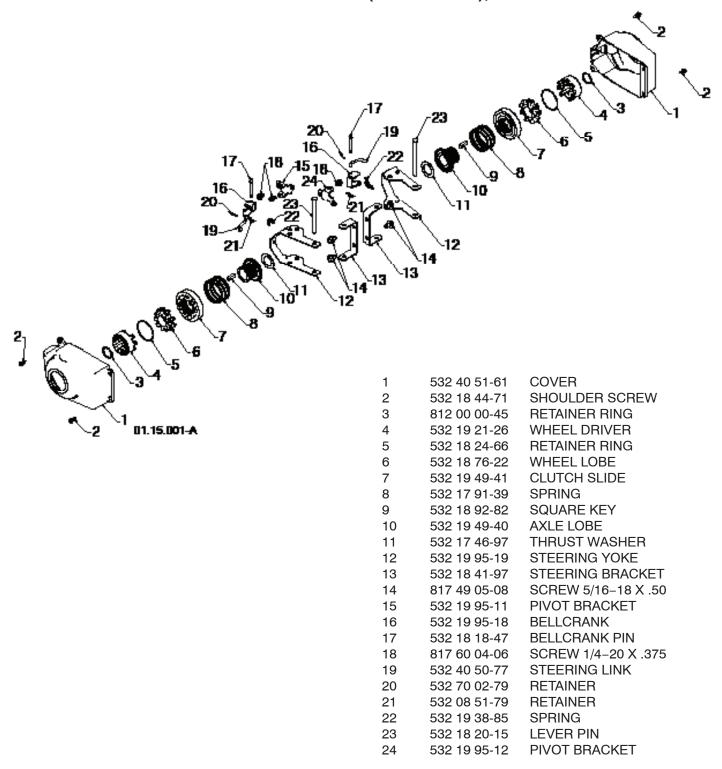
DRIVE

SNOW THROWER - MODEL NO. 1130SB-LS (96193002900), PRODUCT NO. 961 93 00-29



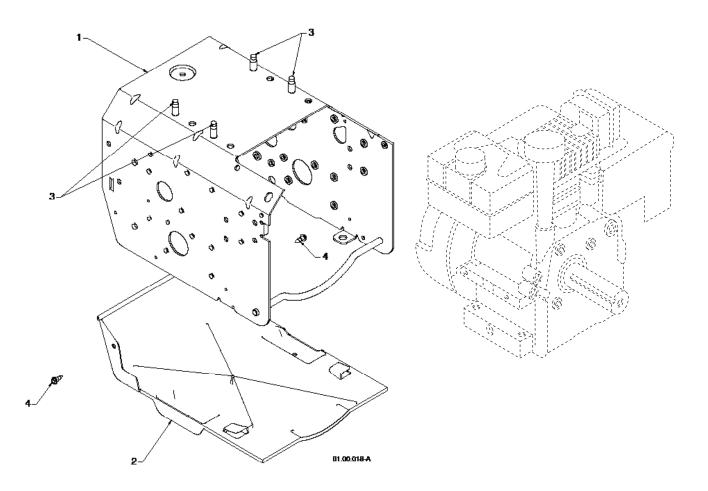


SNOW THROWER - MODEL NO. 1130SB-LS (96193002900), PRODUCT NO. 961 93 00-29



CHASSIS / ENGINE / PULLEYS

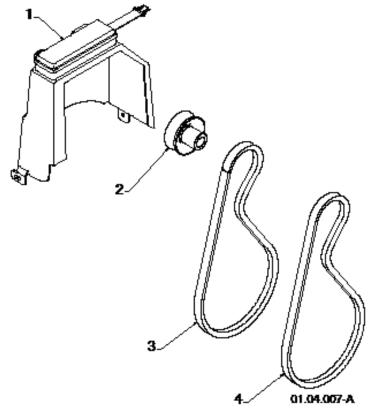
SNOW THROWER - MODEL NO. 1130SB-LS (96193002900), PRODUCT NO. 961 93 00-29



KEY NO.	PART NO.	DESCRIPTION
-		ENGINE TEC MODEL LH358SA-159648A
1	532 41 61-55	FRAME
2	532 41 08-77	BOTTOM PAN
3	532 15 04-06	BOLT 3/8–16
4	532 18 44-71	SCREW 10-24 X .625

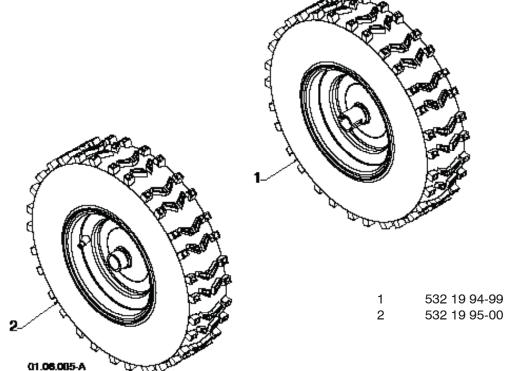
CHASSIS / ENGINE / PULLEYS

SNOW THROWER - MODEL NO. 1130SB-LS (96193002900), PRODUCT NO. 961 93 00-29



KEY NO.	PART NO.	DESCRIPTION
1	532 19 22-13	COVER ASSEMBLY
2	532 17 91-57	PULLEY
3	532 41 97-44	TRACTION BELT
4	532 40 80-10	IMPELLER BELT
	002 11 01 11	

SNOW THROWER - MODEL NO. 1130SB-LS (96193002900), PRODUCT NO. 961 93 00-29

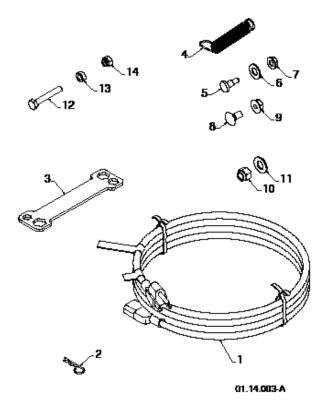


DESCRIPTION

1	532 19 94-99	WHEEL 16 X 4.80 X LH
2	532 19 95-00	WHEEL 16 X 4.80 X RH

BAG OF PARTS

SNOW THROWER - MODEL NO. 1130SB-LS (96193002900), PRODUCT NO. 961 93 00-29

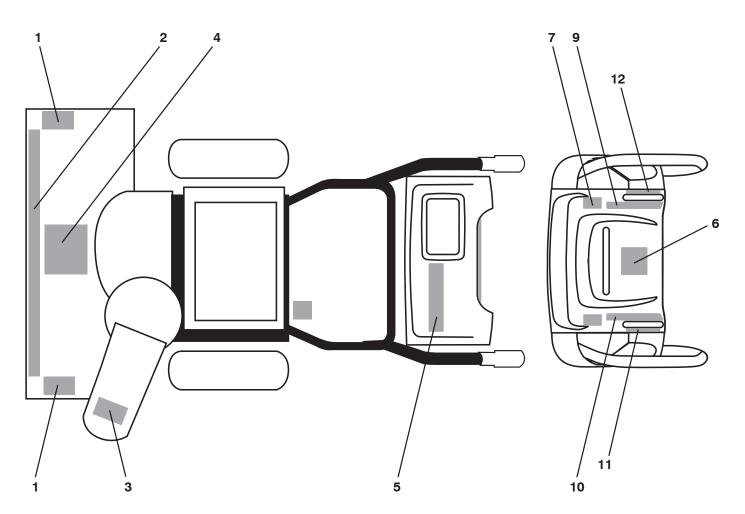


KEY NO.	PART NO.	DESCRIPTION
1	532 19 85-63	POWER CORD
2	532 16 96-75	RETAINER PIN
3	532 18 06-84	WRENCH
4	532 18 45-05	REMOTE SPRING
5	532 17 98-29	SHOULDER BOLT 1/4–20
6	532 17 92-46	NYLON WASHER 1/4-20
7	532 19 17-30	LOCKNUT 1/4–20
8	872 25 05-05	CARRIAGE BOLT 5/16-18 X 5/8
9	532 75 11-53	LOCKNUT 5/16–18
10	873 80 06-00	LOCKNUT 3/8–16
11	819 13 13-16	WASHER 3/8
12	532 19 86-36	SHEAR BOLT 1/4-20 X 1-3/4
13	532 19 86-38	SPACER
14	873 80 04-00	LOCKNUT 1/4–20





SNOW THROWER - MODEL NO. 1130SB-LS (96193002900), PRODUCT NO. 961 93 00-29



KEY	PART	
NO.	NO.	DESCRIPTION
1	532 18 10-37	DECAL, DANGER
2	532 42 10-44	DECAL, HUSQ
3	532 18 10-35	DECAL, DANGER, DEFLECTOR
4	532 18 10-42	DECAL, DANGER
5	532 42 10-43	DECAL, HUSQ
6	532 18 10-33	DECAL, INSTRUCTION
7	532 42 21-13	DECAL, HAND WARMER
9	532 41 54-75	DECAL, SPEED CONTROL
10	532 18 37-30	DECAL, REMOTE DEFLECTOR
11	532 41 53-99	DECAL, LH TRIGGER
12	532 41 53-98	DECAL, RH TRIGGER
	532 42 09-31	OWNER'S MANUAL, ENGLISH
	532 42 09-32	OWNER'S MANUAL, FRENCH

SERVICE NOTES

SERVICE NOTES

 starter ropes and tiller tines; (2) Natural discoloration of material due to ultraviolet light; (2) Natural discoloration of material due to ultraviolet light; (3) Engine and drive systems not manufactured by Husqvama; these items are covered by the respective manufacturer's warranty as provided in writing with the product information supplied at the time of purchase; all claims must be sent to the appropriate manufacturer; (4) Lawn and garden attachments are covered by a third party which gives a warranty, all claims for warranty should be sent to the manufacturer; (5) Commercial or consumer mowing decks with sand abrasion damage. (6) Emission Control System components necessary to comply with CARB-TIER II and EPA regulations which are manufacturer. 	 SECTION 4: EXCEPTIONS AND LIMITATIONS This warranty shall be inapplicable to defects resulting from the following: Accident, abuse, misuse, negligence and neglect, including stale fuel, dirt, abrasives, moisture, rust, corrosion, or any adverse reaction due to incorrect storage or use habits; Failure to operate or maintain the unit in accordance with the Owner's/Operator's manual or instruction sheet furnished by Husqvama; Alterations or modifications that change the intended use of the product or affects the product's performance, operation, safety, or durability, or causes the product to fail to comply with any applicable laws; or: 	REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE EXCLUSIVE REMEDY OF THE PURCHASER. HUSQVARNA SHAL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY EXPRESS OR IMPLIED WARRANTY ON THESE PRODUCTS EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, ANY IMPLIED WARRANTY OF MERCHANTABLITY OR FITNESS FOR A PACHBITED BY APPLICABLE LAW, ANY IMPLIED WARRANTY OF MERCHANTABLITY OF RITNESS FOR A PACHBITED BY APPLICABLE LAW, ANY IMPLIED WARRANTY OF MERCHANTABLITY OF RITNESS FOR A DEFINED IN THE LIMITED WARRANTY PERIOD AS DEFINED IN THE LIMITED WARRANTY PROFIDE AS THE RIGHT TO CHANGE OR IMPROVE THE DESIGN OF THE PRODUCT WITHOUT NOTICE, AND DOES NO T ASSUME OBLIGATION TO UPDATE PREVIOUSLY MANUFACTURED PRODUCTS.	Some states do not allow the exclusion of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. SECTION 5: CUSTOMER RESPONSIBILITIES The product must exhibit reasonable care, maintenance, operation, storage and general upkeep as written in the maintenance section of the Owner's/Operator's manual. Should an operational problem or failure occur, the product should not be used, but delivered as is to an authorized Husqvarma retailer for evaluation. Proof of purchase, as explained in section 6, rests solely with the customer.	SECTION 6: PROCEDURE TO OBTAIN WARRANTY CONSIDERATION It is the Owner's and Retailer's responsibility to make certain that the Warranty Registration Card is properly filled out and mailed to Husqvarme Forest & Garden Company. This card should be mailed within ten (10) days from the date of purchase in order to confirm the warranty and to facilitate post-sale service. Proof of purchase must be presented to the authorized Husqvarma retailer in order to obtain warranty service. This proof much date nuchased model number and compate name and address of the cellion retailer.		X
Observation VARRANTY STATEMENT ECTION 1: LIMITED WARRANTY VARRANTY STATEMENT SECTION 1: LIMITED WARRANTY WARRANTY STATEMENT Husquame Forest & Garden Company ("Husquama") warrants Husquama product to the original purchaser to be free from the squerane for the "Warranty Period" of the product as est forth below: Lifetime Warranty (Parts on Labor): All tiller tines and timmer shafts against breakage. Proof of purchase required. Lifetime Warranty ("Parts onLy"" after initial warranty expiration): Ignition coils and modules on handheld product. Proof of purchase required.	 WARRANTY SCHEDULE FOR TURF CARE Equipment - Zero Turn Riders WARRANTY SCHEDULE FOR TURF CARE Equipment - Zero Turn Riders (New warranty applies to units sold after August 1, 2005. Also applies to units factory-equipped with R.O.P.S. EZ Zero Turn Riders: 3 year consumer warranty or 600 hours of use (when used solely at the owner's residence.) EZ & MZ Zero Turn Riders: 1 year commercial warranty or 1,500 hours of use. IZ, LZ & BZ Zero Turn Riders: 5 year commercial warranty or 1,500 hours of use. IZ, LZ & BZ Zero Turn Riders: 5 year commercial warranty or 1,500 hours of use. IZ, LZ & BZ Zero Turn Riders: 5 year commercial warranty or 1,500 hours of use. IZ, LZ & BZ Zero Turn Riders: 5 year commercial warranty or 1,500 hours of use. IZ, LZ & BZ Zero Turn Riders: 5 year commercial warranty or 1,500 hours of use. IZ, LZ & BZ Zero Turn Riders: 5 year commercial warranty or 1,500 hours of use. IZ, LZ & BZ Zero Turn Riders: 5 year commercial warranty or 1,500 hours of use. IZ, LZ & BZ Zero Turn Riders: 5 year commercial warranty or 1,500 hours of use. IZ, LZ & BZ Zero Turn Riders: 5 year commercial warranty or 1,500 hours of use. IZ, LZ & BZ Zero Turn Riders: 5 year commercial warranty. Warranty Schedule for Turf Care Walk Beinind Units - W, WG & WH Zero Turn Riders - 3 year consumer and commercial warranty. New warranty new warranty is units sold after August 1, 2005. Also applies to units sactory-equipped with R.O.P.S. Zear COMMERCIAL and CONSUMER Warranty: all Husqvama ground-engaging commercial equipment. 	 WARRANTY SCHEDULE FOR CONSUMER TURF CARE EQUIPMENT: 2 Year Consumer Warranty: Automatic mower, all Residential Zero Tum Riders, all lawn, yard and garden tractors, all noncommercial work walk behind mowers, electrical products and power-assist collection systems for noncommercial, nonpodessional, noninstitutional or nonincommercial products and power-assist collection systems for product use must have been limited to the owner's residence. WARRANTY SCHEDULE FOR CONSUMER FOREST & GARDEN EQUIPMENT: 2 Year Consumer Warranty: all consumer chain saws, hindhed blowers, blowers, hordprofessional, noninformation and or nonincome producting use, except as herein stated. All consumer browner use thave been limited to the owner's residence. 	 producing use, except as herein stated. All consumer product use must have been limited to the owner's residence. 2 Year or 2,000 Hour Powertrain & 1 Year or 1,000 Hour Body Warranty: Husquarma Utility Vehicles. 1 Year Warranty: Power culters, stump ginder, pole pruners and pole saws for non-commercial, non-professional, non-income producing use. All 300 series trimmers, purshcutters, clearing saws, howering trimmers, professional or income producing use. All 300 series trimmers, power-assist collection systems for commercial, institutional, professional or income producing upropeses or use. 1 Year Conditional Component Warranty: Chain saws, 100 series trimmers, power-assist collection systems for commercial, institutional, professional or income producing upropeses or use. 1 Year Conditional Component Warranty: Chain saws, 100 series trimmers, power-assist collection Systems for commercial, institutional moures for a (XM) walk-helinid for works and laboh). Saw must be operated with Husquarma XP 2 cycle oil. Day Commercial Warranty: Annotatic mower, chain saws, 100 series trimmers, power cutters, stump grinders, pole saws non-income for dial of mowers on raw. 	es or use es or use warranty t stomer's o arranty. P wed as st	care label. The fit of the protective apparel/boot is not covered under warranty. 30 Day Warranty: Replacement parts, accessories including bars and chains, tools and display items. Emission control system components necessary to comply with CARB-TIER II and EPA regulations, except for those components which are part of engine systems manufactured by third part engine manufacturers for which the purchaser has received a separate warranty with product at time of purchase. SECTION 2: HUSQVARNA'S OBLIGATIONS UNDER THE WARRANTY Husqvarna will repair or replace defective components without charge for parts or labor if a component fails because of a defect in material or workmanship during the warranty period.	SECTION 3: ITEMS NOT COVERED BY THIS WARRANTY The following items are not covered by this warranty: (1) Normal customer maintenance items which become worn through normal regular use, including, but not limited to, belts, blades, blade adapters, bulbs, clutches, clutch drums, fitters, guide bars, lubricants, rewind springs, saw chain, spark plugs,