

OWNER'S MANUAL
20" - 3 H.P. SNOW THROWER
MODEL 5355-0400

WARRANTY

ONE YEAR LIMITED WARRANTY

For one (1) year from date of purchase by the first consumer for residential use (thirty (30) days commercial use), Western International Incorporated warrants that it will replace free of charge, including labor, any original part of any Western International Incorporated product found to be defective by any authorized Service Dealer or the factory.

This warranty does not cover engine or transmission (these items are covered by their manufacturer's own warranty). This warranty does not cover parts that have failed due to normal wear or parts that have failed subject to misuse or abuse. Transportation of the unit or part to and from an authorized Service Dealer or the factory is the responsibility of the owner.

A step by step explanation as to what procedure should be followed for this Warranty is:

1. If a part becomes defective, contact the store where the unit was purchased for the name and address of the authorized Service Dealer nearest to you.
2. If you cannot locate an authorized Service Dealer, write Service Department of Western International Incorporated for the name and address of the authorized Service Dealer in your area or call the Service Department at 1-800-247-7464.
3. Return the defective product, along with proof of purchase to such authorized Service Dealer for replacement of any defective part where covered by this warranty.

There is no other express warranty. Implied warranties, including those of merchantability and fitness for a particular purpose are limited to one (1) year from date of purchase. Liability for incidental or consequential damages are excluded.

Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. Some states do not allow the exclusion of incidental or consequential damages, so the above exclusion may not apply to you. This warranty gives you specific legal rights, and you may have other rights which vary from state to state.

Western International Incorporated P.O. Box 377 Des Moines, Iowa 50302

UNIT PARTS AND SERVICE

This manual contains instructions for safety, assembly and maintenance. Read this manual carefully and completely so that you will know proper assembly, use and care of your unit. Also fill in and mail the registration card packed with the unit. For service other than covered in this manual, contact an authorized service dealer. A nationwide parts and service organization has been established to provide locally available parts and service. A list of authorized parts distributors has been included in this manual. When ordering repair parts, always give the following information: 1. The Part Name; 2. The Part Number; 3. The Quantity desired; 4. The Full (eight digit) Model Number of the unit. The model number will be found on a plate attached to the unit.



Look for this symbol. It means - ATTENTION! BECOME ALERT! A HAZARD TO OPERATOR, BYSTANDERS, PROPERTY OR EQUIPMENT MAY EXIST.

WESTERN INTERNATIONAL INCORPORATED
P.O. BOX 377
DES MOINES, IOWA 50302

Part No. 62928

2786

Price \$2.00

Printed in U.S.A.



OPERATIONAL PRECAUTIONS

THESE INSTRUCTIONS ARE FOR YOUR PROTECTION. PLEASE READ THEM CAREFULLY.



TRAINING

1. Read the owner's manual carefully. Be thoroughly familiar with the controls and the proper use of the snow thrower. Know how to stop the snow thrower and disengage the controls quickly.
2. Never allow children or young teenagers to operate the snow thrower and keep them away while it is operating. Never allow adults to operate the snow thrower without proper instruction. Do not carry passengers.
3. Keep the area of operation clear of all persons, particularly small children, and pets.
4. Exercise caution to avoid slipping or falling, especially when operating in reverse.

PREPARATION

1. Thoroughly inspect the area where the snow thrower 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 snow thrower without wearing adequate winter outer garments. 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 remove fuel tank cap or add fuel to a running engine or hot engine.
 - (c) Fill fuel tank outdoors with extreme care. Never fill fuel tank indoors.
 - (d) Replace fuel tank cap securely and wipe up spilled fuel.
 - (e) Never store fuel or snow thrower with fuel in the tank inside of a building where fumes may reach an open flame or spark.
 - (f) Check fuel supply before each use, allowing space for expansion as the heat of the engine (motor) and/or sun can cause fuel to expand.
5. Use extension cords and receptacles as specified by the manufacturer for all snow throwers with electric drive motors or electric starting motors.
6. Adjust the snow thrower 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. Let engine (motor) and snow thrower adjust to outdoor temperatures before starting to clear snow.
9. 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 snow thrower.

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.
3. 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 snow thrower 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 auger/impeller housing or discharge guide, and when making any repairs, adjustments, or inspections.
6. When cleaning, repairing, or inspecting, make certain the auger/impeller and all moving parts have stopped. Disconnect the spark plug wire and keep the wire away from the plug to prevent accidental starting.
7. Take all possible precautions when leaving the snow thrower unattended. Disengage the auger/impeller, shift to neutral, stop engine, and remove key.
8. 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 (containing CARBON MONOXIDE, an ODORLESS and DEADLY GAS).
9. Do not clear snow across the face of slopes. Exercise caution when changing direction on slopes. Do not attempt to clear steep slopes.
10. Never operate the snow thrower without proper guards, plates or other safety protective devices in place.
11. Never operate the snow thrower near glass enclosures, automobiles, window wells, drop-offs, and the like without proper adjustment of the snow discharge angle. Keep children and pets away.
12. Do not overload the machine capacity by attempting to clear snow at too fast a rate.
13. Never operate the snow thrower at high transport speeds on slippery surfaces. Look behind and use care when backing.
14. Never direct discharge at bystanders or allow anyone in front of the snow thrower.
15. Disengage power to the auger/impeller when snow thrower is transported or not in use.
16. Use only attachments and accessories approved by the manufacturer of the snow thrower (such as tire chains, electric start kits, etc.).
17. 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.

MAINTENANCE AND STORAGE

1. Check shear bolts and other bolts at frequent intervals for proper tightness to be sure the snow thrower is in safe working condition.
2. Never store the snow thrower with fuel in the fuel tank inside a building where ignition sources are present such as hot water and space heaters, clothes dryers, and the like. Allow the engine to cool before storing in any enclosure.
3. Always refer to owner's manual instructions 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 snow thrower a few minutes after throwing snow to prevent freeze-up of the auger/impeller.

WARNING

This snow thrower is for use on sidewalks, driveways, and other ground level surfaces. CAUTION should be exercised while using on steep 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.

OWNER'S INFORMATION

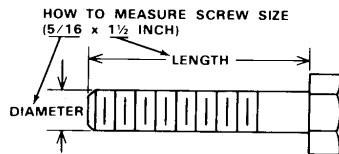
Record the following information about your unit so that you will be able to provide it in case of loss or theft.

MODEL NUMBER: - (Enter complete 8 digit model number from model plate on unit)
 PURCHASE DATE: ___ / ___ / ___ CODE NO. _____ SERIAL NO. _____
 DEALER'S NAME AND ADDRESS _____
 CITY _____ STATE _____ TELEPHONE _____

ASSEMBLY

CONTENTS OF SHIPPING CARTON

- 1 - 20 inch Snow Thrower (completely assembled except for handle and chute control lever).
- 1 - Owner's Manual
- 1 - Engine Manual
- 1 - Upper Handle Assembly
- 1 - Chute Control Rod
- 1 - Bag of Assembly Parts Containing:
 - 2 - Formed (curved) Washers
 - 1 - "U" Bolt
 - 2 - Springs
 - 1 - Hand Grip
 - 4 - 13/64 inch Flatwashers
 - 3 - No. 10 Locknuts
 - 1 - No. 10 x 1/2 inch Hex Washer Head Screw
 - 2 - 5/16 x 1 3/4 inch Hex Head Screws
 - 2 - 5/16 inch Wing Nuts



TOOLS REQUIRED FOR ASSEMBLY

- 1 - 1/2 inch Wrench (or adjustable wrench)
- 1 - 5/16 inch Wrench (or adjustable wrench)
- 1 - 3/8 inch Wrench (or adjustable wrench)

Figure 1

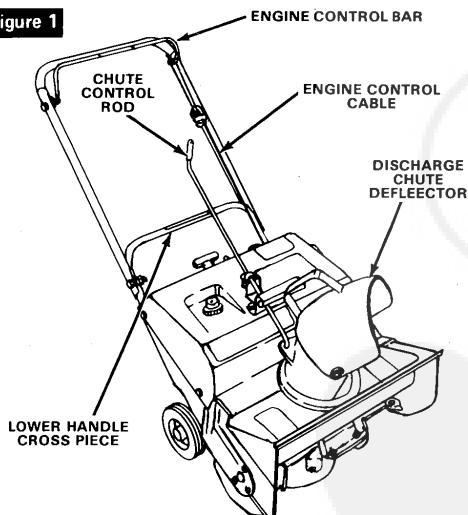


Figure 1 shows the snow thrower completely assembled. Instructions refer to right or left hand as you face the snow thrower from the operator position.

HANDLE ASSEMBLY

Attach upper handle to lower handle with two 5/16 x 1 3/4 inch hex head screws, two formed washers and two 5/16 inch wingnuts as shown in figure 2. **NOTE:** Engine control bar on upper handle must be on top side of upper handle and decal on engine control bar must face up.

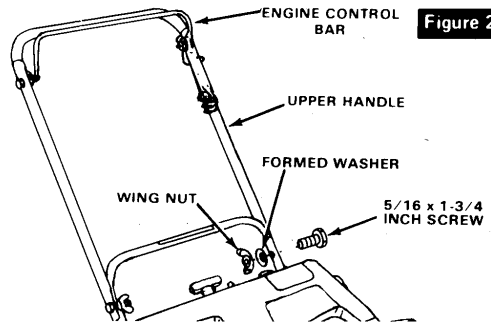


Figure 2

ENGINE CONTROL CABLE ASSEMBLY

The engine control cable (figure 3) must be attached to left side of upper handle and to the control bar. To attach cable:

1. Pull rubber thread protector cover up off threaded end of cable. Loosen top nut (figure 3) on control cable and slide nut up cable. **NOTE:** Be sure cable is over top of lower handle cross piece (figure 1).
2. Slide cable through slot in cable anchor bracket (figure 3). Push threaded end of cable up through hole in anchor bracket and secure in place with loosened nut.

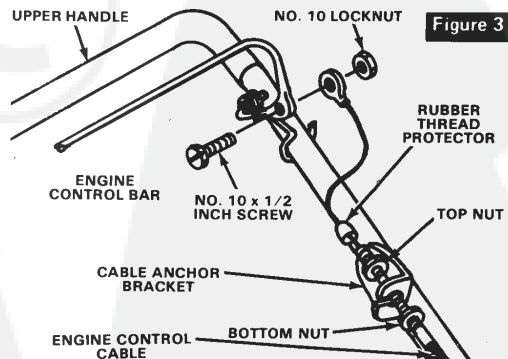


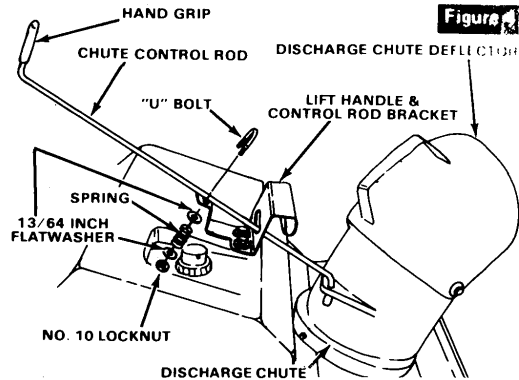
Figure 3

3. Attach eyelet end of engine control cable to left outside of engine control bar as shown in figure 3 with a No. 10 x 1/2 inch screw and a No. 10 locknut. Tighten securely. **NOTE:** Make sure eyelet on engine control cable is in line with threaded end of cable and tighten connection by holding locknut with wrench while tightening screw.

4. Adjust top and bottom nuts on cable at anchor bracket so that cable between anchor bracket and control bar is slightly loose. **NOTE:** If engine control bar will not squeeze down against upper handle, cable is too tight. Tighten nuts and push rubber thread protector back down on threads on cable.

CHUTE CONTROL ROD ASSEMBLY

1. Place chute control rod (small leg) down through front slot in lift handle and control rod bracket (figure 4)
2. Turn discharge chute until small leg end of rod will drop down through hole in back side of discharge chute (figure 4).
3. Place "U" bolt down over chute control rod and through rear slot in lift handle and control rod bracket (figure 4).
4. Place a 13/64 inch flatwasher, a spring, and then another 13/64 inch flatwasher onto one side of "U" bolt. Start a No. 10 locknut onto "U" bolt. **NOTE:** Lift handle and control rod bracket can be removed to make "U" bolt installation easier.
5. Repeat step 4 on other side of "U" bolt.



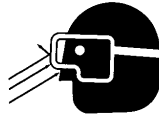
6. Tighten locknuts on "U" bolt until chute control rod is held snug, but not tight. "U" bolt should be tightened just enough to cause a small amount of drag on rod when it is pushed forward or pulled backward.

7. Apply a small amount of grease to chute control rod where it passes through "U" bolt.

8. Place hand grip on top end (large leg) of chute control rod and pull discharge chute deflector up.

OPERATION

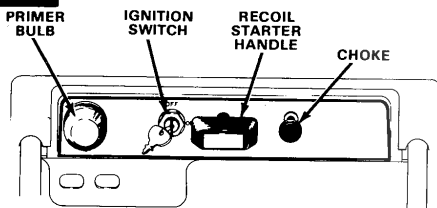
The operation of this snow thrower can result in foreign objects being thrown into the eyes, which can result in severe eye damage. Always wear safety glasses or eye shields while operating snow thrower. We recommend standard safety glasses or Wide Vision Safety Mask for over spectacles.



Get to know your snow thrower and its controls. Be sure you (or any other operator) have read and understood the **Operational Precautions** listed on page 2 of this manual.

ENGINE OPERATING CONTROLS

Figure 5

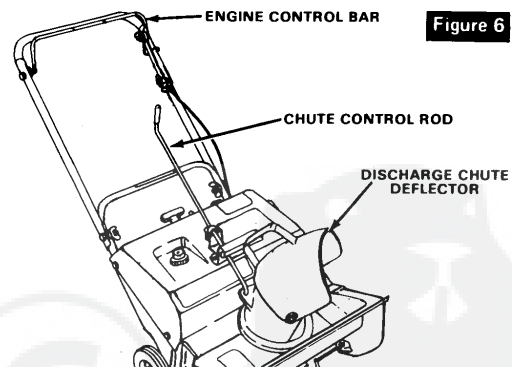


Engine operating controls (figure 5) and their functions are as follows:

- **Primer Bulb** - Used to inject fuel directly into carburetor manifold to insure fast starts.
- **Ignition Switch (key)** - Must be turned to ON position to allow engine to be started.
- **Recoil Starter Handle** - Pull handle to start engine.
- **Choke** - Used to assist in starting cold engine.

SNOW THROWER OPERATING CONTROLS

Figure 6



Snow thrower operating controls (figure 6) and their functions are as follows:

- **Engine Control Bar** - The engine control bar controls the total operation of the snow thrower. It must be engaged to allow engine to start and run. This is done by squeezing the bar down against the upper handle. **NOTE:** Engine will stop when control bar is released.
- **Chute Control Rod** - Used to change direction of snow discharge. Pull handle all the way back and discharge will be straight forward. Push handle to the left and then forward, discharge will be to the left. Pull handle all the way back then to the right and forward, discharge will be to the right.
- **Discharge Chute Deflector** - The distance snow will be discharged can be adjusted by raising discharge chute deflector for more distance, or lowering deflector for less distance.

⚠ DANGER

READ OWNER'S MANUAL BEFORE OPERATING MACHINE.

THIS MACHINE CAN BE DANGEROUS IF USED CARELESSLY.

NEVER OPERATE THE SNOW THROWER WITHOUT ALL GUARDS, COVERS, AND SHIELDS IN PLACE.

NEVER DIRECT DISCHARGE TOWARDS WINDOWS OR ALLOW BYSTANDERS NEAR MACHINE WHILE ENGINE IS RUNNING.

STOP THE ENGINE WHENEVER LEAVING THE OPERATING POSITION, BEFORE UNCLOGGING IMPELLER HOUSING OR DISCHARGE CHUTE AND BEFORE MAKING REPAIRS OR ADJUSTMENTS. WHEN LEAVING MACHINE REMOVE THE KEY.

TO REDUCE RISK OF FIRE, KEEP MACHINE CLEAN AND FREE FROM SPILLED GAS, OIL AND OTHER DEBRIS.

GASOLINE AND OIL MIXTURE

The two cycle engine used on this snow thrower requires a mixture of gasoline and oil for lubrication of bearings and other moving parts. The correct fuel mixture ratio is 32:1 (see Fuel Mixture Chart). Gasoline and oil must be premixed in a clean gasoline container. Always use fresh gasoline. **CAUTION: DO NOT use gasoline containing any amount of alcohol as it can cause serious damage or significantly reduce performance.** Mix gasoline and oil (as shown in figure 7) as follows:

1. Add 1 U.S. quart of fresh, clean, UNLEADED automotive gasoline (leaded "Regular" grade gasoline is an acceptable substitute).

⚠ DANGER ⚠

Gasoline is flammable and caution must be used when handling or storing it. Do not fill fuel tank while snow thrower is running, hot, or when snow thrower is in an enclosed area. Keep away from open flame, electrical spark, and DO NOT SMOKE while mixing fuel or filling the fuel tank. Never fill fuel tank completely; but fill the tank to within ¼ - ½ inch from the top to provide space for expansion of fuel. Always fill fuel tank outdoors and use a funnel or spout to prevent spilling. Make sure to wipe up any spilled fuel before starting the engine.

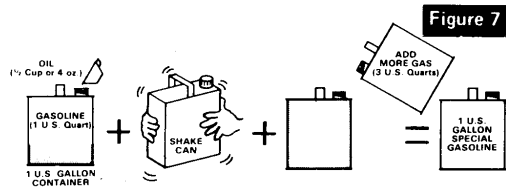
Store gasoline in a clean, approved container, and keep the cap in place on the container. Keep gasoline in a cool, well ventilated place; never in the house. Never buy more than a 30 day supply of gasoline to assure volatility. Gasoline is intended to be used as a fuel for internal combustion engines; therefore, do not use gasoline for any other purpose. Since many children like the smell of gasoline, keep it out of their reach because the fumes are dangerous to inhale, as well as being explosive.

2. Pour ½ cup (4 oz) of a clean, high quality two-cycle oil or S.A.E. 30 or S.A.E. 40 oil into the gasoline container. **CAUTION: DO NOT use BIA outboard motor oil or multi-viscosity oils, such as 10W-30 or 10W-40.**

3. Reinstall the cap on the gasoline container and shake container vigorously so the oil mixes with the gasoline.

4. Add an additional 3 U.S. quarts of gasoline to the gallon container and shake container again.

5. This completes the special gasoline mixing (32:1) procedure. It can now be poured into the snow thrower fuel tank. **IMPORTANT: DO NOT fill fuel tank with gasoline that does not have oil mixed in it. DO NOT use gasoline additives because the engine may be damaged. Shake gasoline container before each filling of fuel tank.**



FUEL MIX CHART (Mixture 32:1)

U. S.		IMPERIAL		S. I. (METRIC)	
Gas	Oil	Gas	Oil	Gas	Oil
1 Gal.	4 oz.	1 Gal.	4.5 oz.	4 Liters	.125 L
2 Gal.	8 oz.	2 Gal.	9 oz.	8 Liters	.250 L
5 Gal.	20 oz.	5 Gal.	22 oz.	20 Liters	.625 L

TO START ENGINE with Recoil Starter

Before starting the engine, be certain that you have read and understood all the instructions on the preceding pages.

1. Fill fuel tank with fresh fuel mix and reinstall fuel tank cap securely. Never use fuel that may be stale from long periods of storage.

2. Insert key and turn on (figure 5).

3. Engage engine control bar (figure 6) by squeezing it down against upper handle. **NOTE:** The control bar must be held down to allow the engine to start and run. Engine will stop when control bar is released.

4. **COLD ENGINE START** — Pull choke (figure 5) out to full choke position.

5. If engine has been idle for several hours or days and stored in an area 20°F. or colder, or weather conditions are below 20°F., push primer button four times, then pull starter four times. Repeat sequence if required. If engine has been stored in an area 20°F. or warmer or weather conditions are above 20°F., then two primes should provide good starting.

6. Pull starter handle with a smooth rapid movement. Do not allow starter rope to snap back, rewind smoothly while holding starter handle. If engine fires does not start, do not choke engine but pull starter handle until engine starts.

⚠ DANGER ⚠

Never run engine indoors or in enclosed, poorly ventilated areas. Engine exhaust contains CARBON MONOXIDE, an ODORLESS and DEADLY GAS.

ALWAYS stand behind snow thrower (operator's position) when starting engine.

DO NOT put hands, feet, hair, or loose clothing in or near the discharge chute deflector or auger housing while engine is running.

Temperature of muffler and nearby areas may exceed 150° F., avoid these areas.

7. As engine warms up and begins to operate evenly, move choke lever slowly to OFF position. If engine falters, return to ½ choke until it runs smoothly, then move to OFF position. **NOTE:** Allow engine to warm up for a few minutes, as the engine will not develop full power until it reaches operating temperature.

8. **TO STOP ENGINE,** release control bar, turn key to OFF and wait for all moving parts to stop before leaving the operator's position.

9. **WARM ENGINE START** - Push choke to OFF position and pull starter handle until engine starts. **NOTE:** Do not prime a warm engine. If engine fails to start after several attempts, see **Cold Engine Start** instructions above.

SNOW THROWING HINTS

1. For most efficient snow throwing, turn discharge chute deflector to throw snow downwind, and slightly overlap each swath.
2. It is a good practice to keep the area to be plowed free of stones, toys and other foreign objects. Such items might be covered by the first snow fall and picked up by the auger while plowing.
3. When plowing gravel or crushed rock driveways, move handle down to raise auger slightly.
4. The allowable forward speed of the snow thrower is dependent on the depth and weight of the snow. Experience

will establish the most effective method of using the snow thrower under different conditions. **NOTE:** The snow thrower will pull itself forward when tilted forward so that the auger will contact the ground.

⚠ DANGER ⚠

Objects such as gravel, rocks or other debris, if struck by the auger may be thrown with sufficient force to cause personal injury or property damage. **WARNING:** Rocks or other solid objects thrown by the auger could cause severe damage to this snow thrower.

SNOW THROWER CARE

Check for any loose or damaged parts after each use. Tighten any loose fasteners. Check controls often to make sure they are functioning properly. If any parts are worn or damaged, replace immediately. See **Repair Parts** section for proper **original equipment parts**. Make repairs as instructed in **Repair** section of this manual.

Always remove all snow and slush from snow thrower after each use to prevent freezing of auger or controls. When storing snow thrower, follow instructions in **Storage** section of this manual.

MAINTENANCE

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. The following

Maintenance Check List is supplied to assist operator to properly maintain snow thrower. This is a **check list only**. Adjustments referred to will be found in **Adjustment/Repairs** section of this manual.

MAINTENANCE CHECK LIST	SERVICE RECORD FILL IN DATES AS YOU COMPLETE REGULAR SERVICE					
	AFTER FIRST USE	AFTER FIRST 2 HOURS	FREQUENTLY	EVERY 5 HOURS	BEGINNING EACH SEASON	BEFORE STORAGE
Tighten All Screws and Nuts	●	●				
Check Spark Plug		●	●	●		
Check Drive Belt and	●			●		
Lubricate Chute Control Rod		●			●	
Lubricate Discharge Chute Flange			●		●	

SPARK PLUG MAINTENANCE

Clean spark plug and reset gap periodically. See **Spark Plug Replacement** paragraph in **Adjustments/Repairs** section of this manual for method of removal and proper gap setting.

DRIVE BELT MAINTENANCE

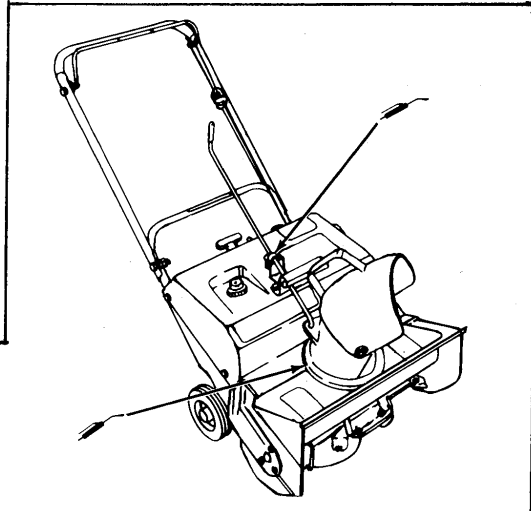
The drive belt will seat into pulleys in the first half hour of use. Pulley alignment must be checked no later than after the first use of snow thrower. See **Drive Belt Adjustment** paragraph in **Adjustments/Repairs** section of this manual.

CARBURETOR MAINTENANCE

The carburetor on this snow thrower is not adjustable. **IMPORTANT:** If you think carburetor is not operating properly, contact nearest Service Dealer (see **Engine Operating and Maintenance** manual).

⚠ DANGER ⚠

Never tamper with engine governor which is factory set for proper engine speed. Over-speeding engine may increase the danger of personal injury and will void engine warranty. If you think the engine governor high speed needs adjusting, contact nearest Service Dealer (see Engine Manual) who has the proper equipment and experience to make any necessary adjustments.



LUBRICATION

For lubrication frequency see Maintenance Check List. For lubrication points and type of lubricant see Lubrication Chart.

LUBRICATION CHART

- Apply a clinging type grease such as lubriplate to discharge chute control rod where it passes through "U" bolt.
- Remove discharge chute and coat flange with a clinging type grease such as lubriplate.

TROUBLE SHOOTING

DANGER: ALWAYS DISCONNECT SPARK PLUG WIRE BEFORE ATTEMPTING ANY REMEDY.

TROUBLE	LOOK FOR	REMEDY
Difficult starting; engine runs erratic	Engine running on choke.	Push choke lever fully in.
	Defective spark plug.	Replace spark plug.
	Obstruction in auger	Remove obstruction; clean rotor housing; clean ice and snow from discharge deflector chute.
	Improper Gas/Oil Mixture.	Drain gas tank and fill with fresh gas/oil mixture (32:1 ratio). <i>Review To Start Engine paragraph in Operation section.</i>
Engine stalls; lack of power	Blocked fuel line or empty gas tank.	Clean fuel line; check fuel supply; fill with gas/oil mixture (32:1 ratio).
Excessive vibration	Loose parts.	Stop engine immediately; tighten screws and make necessary repairs. If vibration continues, have unit serviced by a competent technician.

ADJUSTMENTS/REPAIRS

DRIVE BELT ADJUSTMENT

If engine drive pulley and auger drive pulley are not aligned properly, excessive belt wear will occur. To check pulley alignment, proceed as follows:

1. Remove belt cover (figure 8) by removing 5 screws from around the auger housing.
2. Remove 2 screws from top cover.
3. Remove 2 screws from bottom cover.
4. Pull belt cover away from snow thrower.
5. Place a straight edge across the outside edges of the auger pulley and the engine pulley. With straight edge pressed flat against the auger pulley, the engine pulley outside must be flush with the straight edge. To adjust engine pulley proceed with steps 6 through 8. If pulleys are aligned skip to step 9.
6. Loosen 2 set screws on engine pulley.
7. Slide engine pulley in or out on shaft until pulley is flush with straight edge.

8. Tighten 2 set screws on engine pulley.
9. If drive belt is damaged or worn excessively replace with new belt, see Drive Belt Replacement paragraph.
10. Reinstall belt cover (reverse steps 1 through 4).

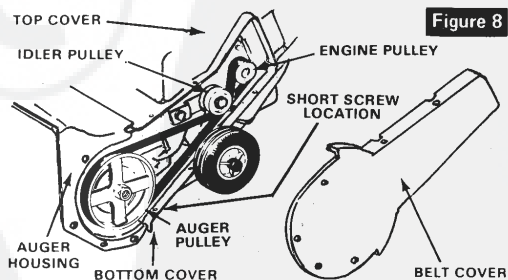


Figure 8

DRIVE BELT REPLACEMENT

The drive belt (figure 8) on this unit is of special construction and should be replaced with an **original equipment belt** (see **Repair Parts** section).

1. Remove belt cover by removing 5 screws from around the auger housing.
2. Remove 2 screws from top cover.
3. Remove 2 screws from bottom cover.
4. Pull belt cover away from snow thrower.
5. Lift idler pulley and remove old belt.
6. Replace with new belt by lifting idler pulley and attaching new belt to drive wheel and auger wheel.
7. Slowly release idler pulley and ensure belt is seated properly.
8. Check drive belt adjustment, see **Drive Belt Adjustment** paragraph.
9. Reinstall belt cover (reverse steps 1 through 4).

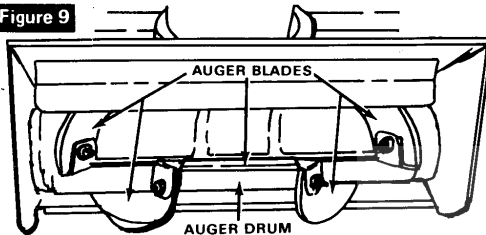
AUGER BLADE REPLACEMENT

The auger on this snow thrower has six blades (three shown in figure 9) attached to the auger drum. These blades are made of a special compound and **must** be replaced with **original equipment parts** (see **Repair Parts** section). Each blade is secured into slots on auger drum with two screws.

Each of six blades can be replaced by removing two screws, pull old blade out, push new blade into slots and reinstall screws.

Any damaged blade can be replaced separately, however, if blades show signs of wear, all six blades should be replaced. **CAUTION:** Be sure to reinstall screws, nuts and washers in same direction as they were factory installed.

Figure 9

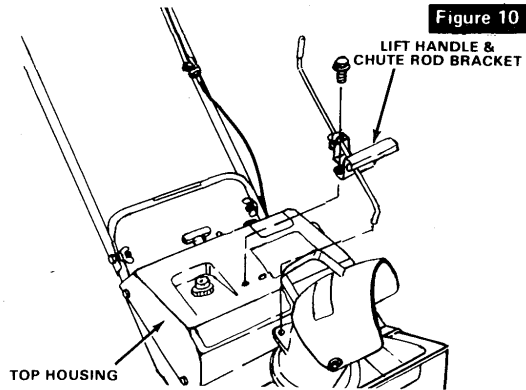


SPARK PLUG REPLACEMENT

The spark plug is housed under the top cover (figure 10) and cannot be seen under normal conditions.

1. Remove screws from lift handle and chute rod bracket.
2. Remove 5 screws from top housing and remove housing.
3. Remove spark plug wire.
4. Clean area around plug base to prevent dirt from entering engine when plug is removed.
5. Remove spark plug. If cracked, fouled or dirty, it must be replaced.
6. Set gap between electrodes of new spark plug at 0.035 of an inch. Next, install spark plug in cylinder head. Tighten plug to 15 ft. lb. If torque wrench is not used, tighten plug firmly.
7. Push spark plug wire onto spark plug.
8. Reinstall top housing cover.

Figure 10



GENERAL REPAIR

Unless the operator is fully qualified to replace other parts on this snow thrower, it is recommended that such work be done by technicians trained to work on snow thrower type equipment.

ENGINE SERVICE

Unless the operator is fully qualified to make engine repairs or adjustments, it is recommended that such work be done by technicians trained to work on snow thrower type engines.

STORAGE

⚠ DANGER ⚠

Never store engine with fuel in tank indoors or in enclosed, poorly ventilated enclosures, where fuel fumes may reach an open flame, spark or pilot light as on a furnace, water heater, clothes dryer, etc.

Handle gasoline carefully. It is highly flammable and careless use could result in serious fire damage to your person and/or property. Drain fuel into approved container outdoors, away from open flame.

The snow thrower should be immediately prepared for storage at the end of the season or if the unit is to be un-used for 30 days or more.

1. Tip snow thrower upside down to remove all gasoline from tank. Drain into approved container out of doors.

2. Start engine to use gasoline in carburetor and fuel line. When engine starts to sputter, operate choke which will drain carburetor.

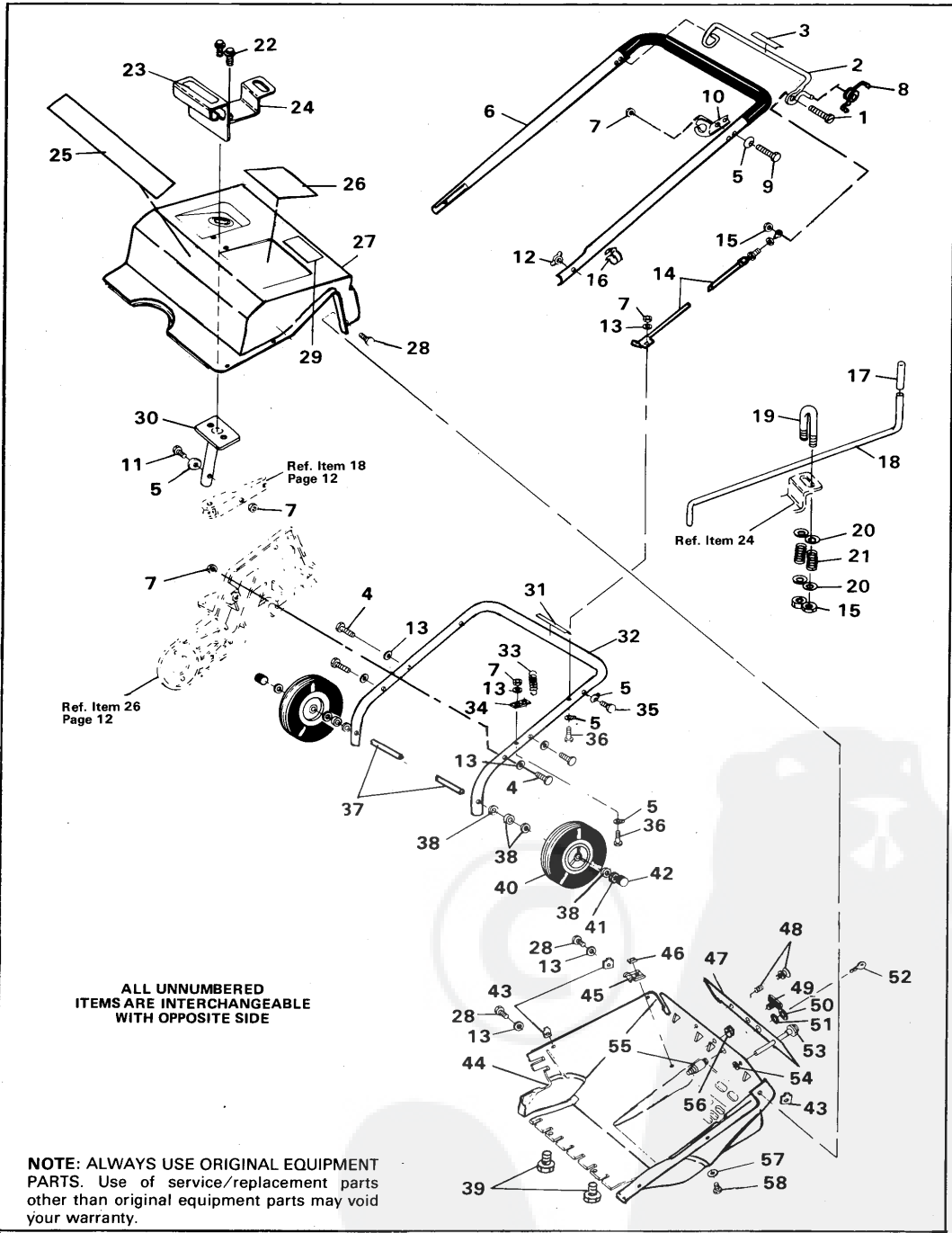
3. Pull starter handle slowly until resistance is felt due to compression pressure, then stop. Release starter tension slowly to prevent engine from reversing due to compression pressure. This position will close both the intake and exhaust ports to prevent corrosion of the piston and cylinder bore.

4. Store in a clean, dry place and cover to keep clean.

IMPORTANT: A yearly checkup or tuneup by a qualified repairman is a good way for insuring that your snow thrower will provide maximum performance for the next season.

REPAIR PARTS

20" SNOW THROWER MODEL NUMBER 5355-0400



ALL UNNUMBERED
ITEMS ARE INTERCHANGEABLE
WITH OPPOSITE SIDE

NOTE: ALWAYS USE ORIGINAL EQUIPMENT PARTS. Use of service/replacement parts other than original equipment parts may void your warranty.

20" SNOW THROWER MODEL NUMBER 5355-0400

ALWAYS GIVE THE FOLLOWING INFORMATION WHEN ORDERING REPAIR PARTS:

1. The PART NUMBER; 2. The PART NAME; 3. QUANTITY DESIRED; 4. The MODEL NUMBER (As shown on Model Plate)

SEND PART ORDERS AS PER INSTRUCTIONS ON THE FRONT PAGE

YOUR UNIT IS RIGHT HAND (RH) OR LEFT HAND (LH) AS YOU STAND BEHIND IT.

DO NOT USE KEY NUMBERS WHEN ORDERING REPAIR PARTS, ALWAYS USE PART NUMBERS.

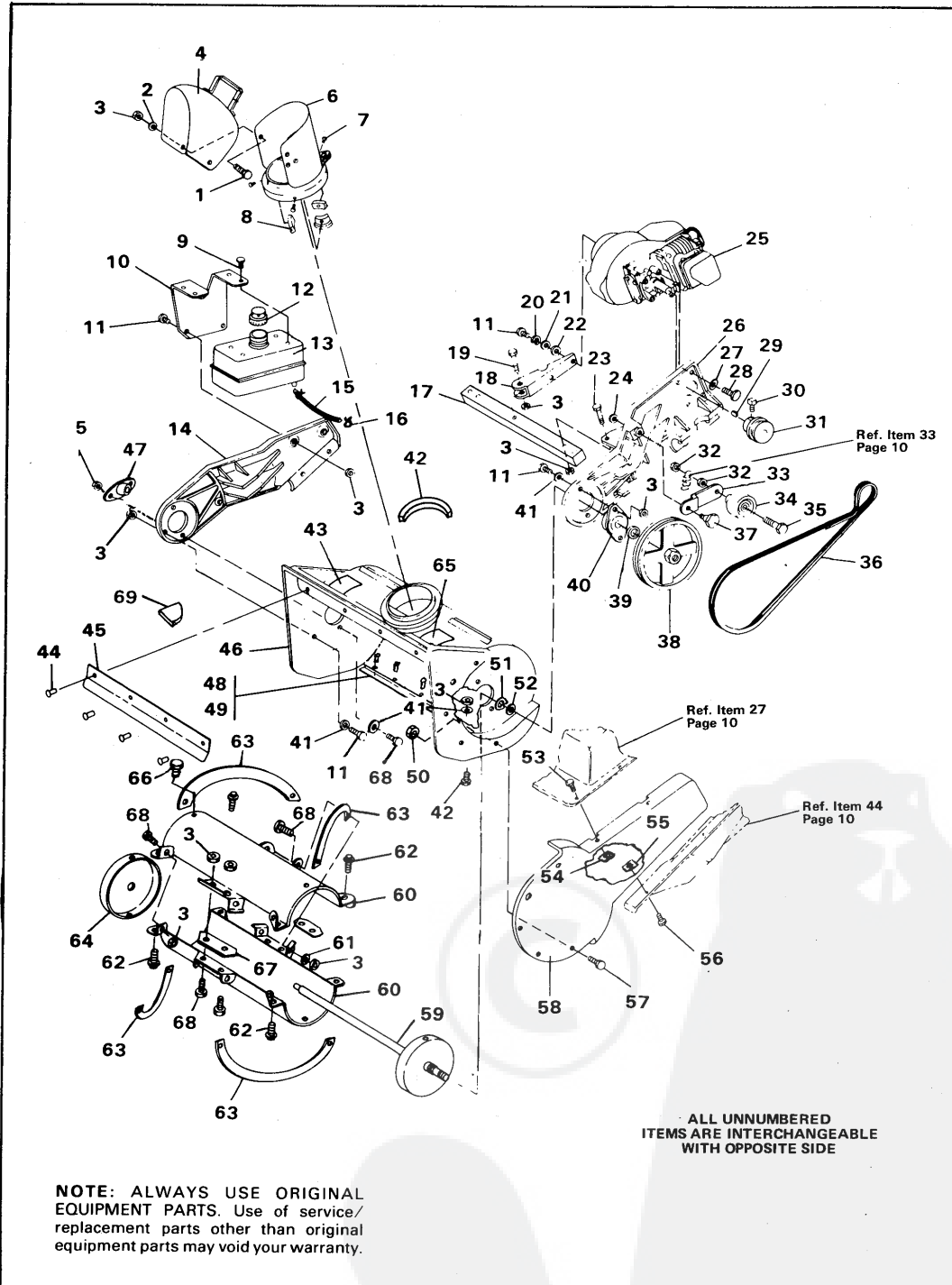
All replacement parts will be supplied in current production colors or in a neutral color.

A handling fee is applicable to small parts orders.

Key No.	Part No.	Description	Key No.	Part No.	Description
1	431942	Screw, Hex Hd, No. 10-32 x 1/2 In.	31	68963	Decal, Control Bar Instruction
2	55275	Bar, Engine Control	32	54660	Handle, Lower
3	68552	Decal, Engine Control	33	54503	Spring
4	180024	*Screw, Hex Hd, 1/4-20 x 1 1/4 In.	34	49958	Bracket, Spring
5	8728	Formed Washer	35	180085	*Screw, Hex Hd, 5/16-18 x 1 1/4 In.
6	54658	Handle, Upper	36	180034	*Screw, Hex Hd, 1/4-20 x 1 1/2 In.
7	9424215	Nut, Hex, 1/4-20 Thd.	37	57041	Axle
8	55274	Spring, Torsion	38	996416	*Flatwasher, 25/64 In.
9	180033	*Screw, Hex Hd, 1/4-20 x 1 3/8 In.	39	9411563	Screw, Hex Hd Tap, 1/4-10 x 3/8 In.
10	49127	Bracket, Cable	40	49439	Wheel
11	180042	*Screw, Hex Hd, 1/4-20 x 1 3/4 In.	41	26178	Retaining Ring
12	997206	*Wing Nut, 5/16-18 Thd.	42	56371	Hub Cap
13	120392	*Washer, 1/4 In.	43	49441	J-Nut
14	50082	Cable & Switch Assembly	44	57035	Cover, Bottom
15	997319	Nut, Hex, No. 10-32 Thd.	45	41652	Clip, Wire
16	32951	Clip, Wire	46	120619	*Nut, Square, No. 10-24 Thd.
17	48441	Grip, Chute Control Rod	47	70459	Decal, Control Panel
18	51258	Chute Control Rod	48	48937	Cable, Choke
19	23940	"U" Bolt	49		Starter Handle, Engine Part)
20	9417373	*Washer, 13/64 In.	50	48140	Nut (Igniton Switch Part)
21	23939	Spring	51	138557	Lockwasher (Ignition Switch Part)
22	51332	Screw, Flange Hd, 1/4-20 x 3/8 In.	52	49643	Key, Ignition
23	69616	Decal, Upper Handle Assembly	53		Primer Bulb (Engine Part)
24	52149	Lift Handle & Chute Rod Bracket	54	271172	Keps Nut, 1/4-20 Thd.
25	69894	Decal, Name	55	56992	Switch, Ignition
26	70140	Decal, Caution	56	50079	Grommet & Washer
27	57145	Cover, Top	57	120385	*Flatwasher, 1/4 In.
28	56021	Screw, Hex Wa Hd, 1/4-14 x 3/4 In.	58	274707	*Screw, Hex Wa. Hd, No. 10-24 x 1/2 In.
29	69880	Decal, Caution	59	62928	Owner's Manual (Not Illustrated)
30	51226	Lift Handle, Lower			

*Standard Hardware Items - May Be Purchased Locally.

20" SNOW THROWER MODEL NUMBER 5355-0400



20" SNOW THROWER MODEL NUMBER 5355-0400

Key No.	Part No.	Description	Key No.	Part No.	Description
1	57038	*Carriage Bolt, 1/4-20 x 3/8 In.	36	48922	V-Belt
2	25840	Spring Washer	37	46511	Shoulder Bolt
3	9424215	Nut, Hex, 1/4-20 Thd.	38	48919	Pulley, Auger
4	55291	Chute Deflector, Top	39	54570	Spacer, 1/8 In. Thick
5	46931	Locknut, Wide Flange, 1/4-20 Thd.	40	54573	Bearing Assembly
6	55292	Chute Deflector, Lower	41	120392	*Flatwasher, 1/4 In.
7	50668	Screw, Hex Hd, No.10-14 x 1/2 In.	42	55380	Seal, Strip
8	51276	Guide, Chute Deflector	43	70142	Decal, Warning
9	49697	Screw, Hex Hd, 1/4-14 x 7/8 In.	44	54577	Rivet, 3/16 x 11/32 In.
10	50649	Bracket, Gas Tank	45	51262	Deflector
11	180018	Screw, Hex Hd, 1/4-20 x 3/8 In.	46	54695	Auger Housing Assembly
12		Gas Tank Cap (Engine Part)	47	54837	Bearing Assembly
13	55381	Gas Tank	48	55323	Blade, Scraper
14	49826	Frame, Right Hand	49	54578	Rivet, 1/4 x 39/64 In.
15	48930	Gas Line	50	997316	Nut, Hex, No.10-24 Thd.
16	48672	Clamp, Gas Line	51	54504	Retaining Ring
17	52147	Support Tube	52	54571	Spacer, 1/16 In. Thick
18	51414	Bracket, Engine Support	53	56021	Screw, Hex Wa Hd, No.14-10 x 3/4 In.
19	180042	*Screw, Hex Hd, 1/4-20 x 1 1/2 In.	54	49441	J-Nut
20	120380	*Lockwasher, Split, 1/4 In.	55	50669	Nut, "U" Type
21	9419265	Flatwasher, 9/32 In.	56	180016	*Screw, Hex Hd, 1/4-20 x 1/2 In.
22	42128	Grommet	57	274707	*Screw, Hex Wa Hd, No.10-24 x 1/2 In.
23	180044	*Screw, Hex Hd, 1/4-20 x 2 In.	58	57036	Belt Cover
24	9413447	Nut, Hex, 5/16-18 Thd.	59	54502	Auger End & Shaft Assembly
25	Engine	§See Footnote Below	60	52198	Auger Rib Assembly
26	49825	Frame, Left Hand	61	54569	Washer
27	120638	*Lockwasher, Split, 5/16 In.	62	995346	Screw, Hex Wa Tap, 1/4-20 x 1/2 In.
28	180077	*Screw, Hex Hd, 5/16-18 x 3/4 In.	63	55322	Blade, Auger
29	2125	Key, Woodruff No: 505	64	53790	Cap, Auger End
30	191956	*Set Screw, Sq Hd, 1/4-20 x 3/8 In.	65	70141	Decal, Danger
31	48921	Pulley, Engine	66	35055	Screw, Hex Hd Tap, No.10-24 x 1/2 In.
32	41529	Nut, 3/8-16 Thd.	67	55321	Blade, Center
33	50689	Idler Arm	68	180021	*Screw, Hex Hd, 1/4-20 x 7/8 In.
34	48924	Pulley, Idler	69	55379	Seal, Auger
35	45204	Screw, Hex Hd, 3/8-16 x 1 3/4 In.			

*Standard Hardware Items - May Be Purchased Locally.

§Contact Engine Manufacturer's authorized service dealer (See Engine Manual) for parts and warranty.

SEE, CALL OR WRITE ONE OF THE FOLLOWING DISTRIBUTORS FOR PARTS FOR: HOMKO -LAWN SCOUT - AMF - TURFMASTER - DYNAMARK - OR ANY OTHER WESTERN INTERNATIONAL INCORPORATED PRODUCT.

ALABAMA

Automotive Elect. Service, 415 Meridian St., Huntsville, AL 35801, (205) 539-2131, AL WATS 800-536-3394 *b,c,f,g,h
Warlick-Miller A/C Eng., 630 N. 20th St., Bessemer, AL 35020, (205) 424-8288, AL WATS 800-292-8123
MS WATS 800-292-4494 *b,c,f,g,h

CALIFORNIA

Billiou's, 75 No. D, Porterville, CA 93257, (209) 784-4102 *b,c,f,g,h
The Lawn Mower Shop, 1340 El Camino Real, San Carlos, CA 94070, (415) 593-4716 *a,d,f,g

COLORADO

Spitzer Ind. Prod. Co., 6601 N. Washington, Thornton, CO 80229, (303) 267-3414 *b,d,h

FLORIDA

G.L.O. Products Inc., 13201 Belcher Rd. S., Largo, FL 33543, (813) 530-9723 *a,c,h

Radco Distributors Inc. 4909 Victor St., Box 5459, Jacksonville, FL 322070459, (904) 733-7957 *a,c,f,g,h

ILLINOIS

Cox Tire & Battery, 603 N. Market, Marion, IL 62959, (618) 993-2607 IL WATS 800-642-4351 *a,c,f,g,h

Garmoe Distr. Inc., 2620 N. Mannheim Road, Franklin Park, IL 60131, (312) 455-3588 *a,c,f,g,h

Small Engine Parts, 3515 Auburn St., Rockford, IL 61103, (815) 964-1754 *b,c,f,g,h

INDIANA

Thompson Sales & Service, 2400 W. Ridge Road, Gary, IN 46408, (219) 980-3282 *a,b,c,f,g,h

IOWA

Bruce Engine, 1829 N.W. 86th, Des Moines, IA 50322, (515) 278-5151 *a,c,f,g,h

KANSAS

Colladay Hdwe. Co., 201 N. Plum, Box 766, Hutchinson, KS 67501, (316) 663-4477 *a,c

KENTUCKY

Auto-Electric Inc., 715 W. Hwy 80, Box 671, Somerset, KY 42501, (606) 679-1171 *c,f,g,h

Cayce Mill Supply Co., 1st & Douglas St., Hopkinsville, KY 42240, (502) 886-3335 *f,g,i

Ellingsworth Auto Electric, 1003-08 E. Broadway, Louisville, KY 40204 (Serving Southern Indiana), (502) 585-5055, KY WATS (800) 722-5061 *b,c,f,g,h

LOUISIANA

United Engine Service, Inc., 11923 Cloverland Ave., Baton Rouge, LA 70809, (504) 291-2622 *a,d,f,g,h

MARYLAND

Center Supply Co., 6867 New Hampshire Ave., Takoma Park, MD 20912, (301) 270-1690 *b,c,f,g,h

Kunkel Service Co., 6252 Frankford Ave., Baltimore, MD 21206, (301) 377-4008, MD WATS 800-492-8886 *b,c,f,g,h

MASSACHUSETTS

Morton B. Collins Co., 300 Birnie Ave., Box 70058, Springfield, MA 01107, (413) 732-7449 *a,c,g,h

Crandall-Hicks Co., 250 Eliot St., Ashland, MA 01721, (617) 881-6122 *a,d

MICHIGAN

Air Cooled Engine Div., 615 First St., Menominee, MI 49858, (906) 863-8011, MI WATS (906 area only) 800-562-4825 *a,c,f,g,h

The Factory Branch, 440 E. Prospect, Jackson, MI 49203, (517) 783-3201 *b,c,f,g,h

MINNESOTA

Northern Automotive Co., 1401 W. Broadway, Minneapolis, MN 55411, (612) 522-6656 *a,c,f,g,h

MISSISSIPPI see Bessemer, Alabama

MISSOURI

Gunther's Service & Supply, 7320 Wornall Road, Kansas City, MO 64114, (816) 523-1952 *a,f,g,h

Wilson Engine & Parts Inc., 4159 Shoreline Drive., Jct. I-70 & 270, Earth City, MO 63045, (314) 739-1313, MO WATS 800-392-4063, WATS (outside MO only) 800-367-2787 *a,b,d,f,g,h

NEW JERSEY

Power Distributors, Inc., 102 Mayfield Ave., Edison, NJ 08837, (201) 225-4922 *i

NEW YORK

Loegler & Ladd Inc., 3950 Broadway, Box 214, Buffalo, NY 14225, (716) 684-0600 *a,c

Stiefvater Distr. Inc., Clinton Road, Route 12B, New Hartford, NY 13413, (315) 853-5581 *a,c,f,g,h

NORTH CAROLINA

Carswell Distr. Co., 3750 N. Liberty St., Box 4193, Winston-Salem, NC 27105, (919) 767-7700 *g,i

Dixie Sales Co., Inc., 335 N. Green, Box 1408, Greensboro, NC 27402, (919) 274-0490, NC WATS 800-632-1276 *b,c,f,g,h

OHIO

American Power Distr., 2430 Tremainsville Rd., Box 5815, Toledo, OH 43613, (419) 475-7261 *f,g,h

Small Engine Distr., 5250 N. Dixie, Box 1481, Dayton, OH 45414, (513) 278-8241 *b,f,g,h

OKLAHOMA

Albro's, 2921 W. Hefner Rd., Oklahoma City, OK 73120, (405) 751-1711 *a,c,f,g,h

PENNSYLVANIA

Bluement Co., 11101 Frankstown Road, Pittsburg, PA 15235, (412) 242-2522 *a,b,c,f,g,h

Scranton Auto Ignition, 1133 Wyoming Ave., Scranton, PA 18509, (717) 342-8133 *b,c,f,g,h

SOUTH CAROLINA

Magneto & Elect. Service, 103 Assembly St., Columbia, SC 29201, (803) 771-4044, SC WATS 800-922-1118 *a,c,f,g,h

TENNESSEE

American Sales & Serv., 3035 Bellbrook Dr., Memphis, TN 38116, (901) 332-2210 *a,d,f,g,h

Chilton A/C Engines, 319 4th Ave. S., Box 15806, Nashville, TN 37201, (615) 254-1634 *b,c,f,g,h

Ace Distr., Inc., 2103 E. Magnolia Ave., Box 3587, Knoxville, TN 37917, (615) 524-5359, TN WATS 800-332-9904 *a,c,f,g,h

TEXAS

Marr Bros. Inc., 423 E. Jefferson, Dallas, TX 75203, (214) 948-7387 *a,c,f,g,h

Midland Small Engine Sales, 108 Carlton, Box 4215, Midland, TX 79704, (915) 682-1409 *b,f,g,h

VIRGINIA

Norva Small Engines, 8120 E. Wellington Rd., Manassas, VA 22110, (703) 369-3387 *a,c,f,g,h

RBI Corporation, 101 Cedar Ridge Rd., Lakeridge Park, Ashland, VA 23005, (804) 798-1535 *a,c,f,g,h

WASHINGTON

Pacific A/C Engine Inc., 4030 1st Ave. S., Box 84783, Terminal Annex, Seattle, WA 98124, (206) 682-4677 *a,c,f,g,h

WISCONSIN

Reliable Hdwe., 8010 N. 76th St., Milwaukee, WI 53223, (414) 355-2900 *b,c,f,g,h

Wiggert Brothers, 3rd & Jay, Box 1267, La Crosse, WI 54601, (608) 784-4790 *a,b,c,f,g,h

CANADA

Sunter Equipment Ltd., 5466 Timberlea Blvd., Mississauga, Ontario, Canada L4W 2T7, (416) 624-6200 *g,i

Yetman's Ltd., 949 Jarvis Ave., Winnipeg, Manitoba, Canada R2X 0A1, (204) 586-8046, WATS (Manitoba & Sask.) 800-665-8623 *b,c,f,g

Revised 4/2/86

(*) General Information Codes:

- (a) Advance Payment Preferred
- (b) Accepts Credit Cards
- (c) C.O.D. okay
- (d) No. C.O.D.
- (e) C.O.D. only
- (f) Briggs & Stratton dealer or distributor
- (g) Tecumseh/Peerless dealer or distr.
- (h) Foote dealer or distributor
- (i) Dealer sales only, contact for closest dealer.