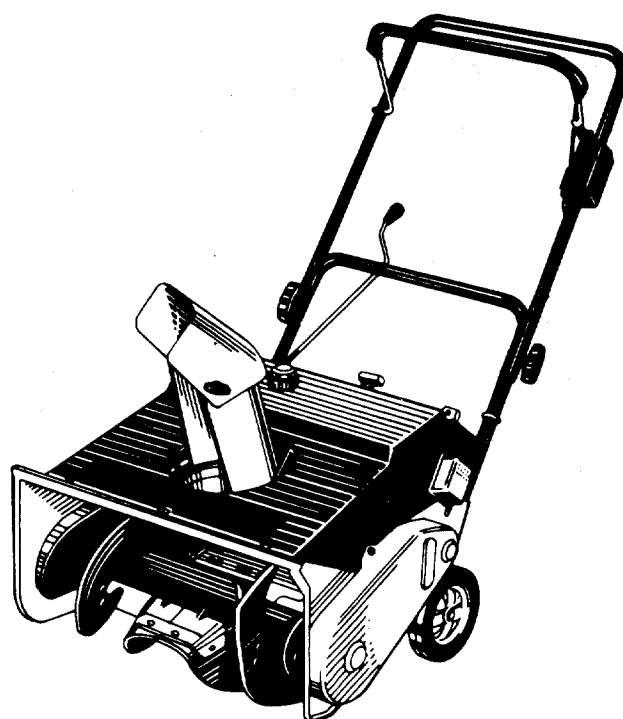


\$1.00

OWNER'S GUIDE

ASSEMBLY • OPERATION • MAINTENANCE • PARTS



**21"
SNOW
THROWERS**

**Model Numbers
310-180-000
310-181-000**

Important: Read Safety Rules and Instructions Carefully

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Dear Customer,

So often throughout the year we are all in a rush to meet our daily obligations.

However, we at MTD Products Inc are taking a quick moment out to say...

"Thank you for your business."

Sincerely,
MTD PRODUCTS INC



INSTRUCTIONS GIVEN WITH THIS SYMBOL ARE FOR PERSONAL SAFETY. BE SURE TO FOLLOW THEM.

LIMITED WARRANTY

For one year from the date of original retail purchase, MTD PRODUCTS INC will either repair or replace, at its option, free of charge, F.O.B. factory or authorized service firm, any part or parts found to be defective in material or workmanship. Transportation charges for the movement of any power equipment unit or attachment are the responsibility of the purchaser. Transportation charges for any parts submitted for replacement under this warranty must be paid by the purchaser unless such return is requested by MTD PRODUCTS INC.

This warranty will not apply to any part which has become inoperative due to misuse, excessive use, accident, neglect, improper maintenance, alterations, or if the unit has not been operated and maintained in accordance with the instructions furnished. This warranty does not apply to the engine, Peerless components, motor, battery (except as noted below) or component parts thereof. Please refer to the applicable manufacturer's warranty on these items.

A battery which proves defective within ninety (90) days will be replaced without charge. After 90 days but within one year from the date of purchase, MTD will replace the defective battery for a charge of 1/12 of the current retail price of the battery for each full 30 day period between the date of purchase and the date of return.

This warranty will not apply where the unit has been used commercially.

Warranty service is available through your local authorized service dealer or distributor. If you do not know the dealer or distributor in your area, please write to the Customer Service Department of MTD.

The return of a complete unit will not be accepted by the factory unless prior written permission has been extended by MTD.

This express limited warranty is in lieu of all other warranties, express or implied, including any implied warranty of merchantability. The remedy of replacement is the sole and exclusive remedy for MTD obligations arising from the sale of its products. In no case will MTD be liable for incidental or consequential loss or damage.

This warranty gives you specific legal rights. You may also have other rights which vary from state to state.



To reduce the potential for any injury, comply with the following safety instructions. Failure to comply with the instructions may result in personal injury.

SAFE OPERATION PRACTICES FOR SNOW THROWERS

TRAINING

1. Read this owner's guide carefully. Be thoroughly familiar with the controls and proper use of the equipment. Know how to stop the unit and disengage the controls quickly.
2. Never allow children to operate equipment. Never allow adults to operate equipment without proper instructions.
3. No one should operate this unit while intoxicated or while taking medication that impairs the senses or reactions.
4. Keep the area of operation clear of all persons, especially small children and pets.
5. Exercise caution to avoid slipping or falling, especially when operating in reverse.

PREPARATION

1. Thoroughly inspect the area where the equipment is to be used and remove all door mats, sleds, boards, wires and other foreign objects.
2. Disengage all clutches and shift into neutral before starting engine.
3. Do not operate equipment without wearing adequate winter outer garments. Wear footwear which will improve footing on slippery surfaces.
4. Check the fuel before starting the engine. Gasoline is an extremely flammable fuel. Do not fill the fuel tank indoors, while the engine is running, or while the engine is still hot. Replace gasoline cap securely and wipe off any spilled gasoline before starting the engine as it may cause a fire or explosion.
5. Use a grounded three wire plug-in for all units with electric drive motors or electric starting motors.
6. Never attempt to make any adjustments while engine is running (except where specifically recommended by manufacturer).
7. Let engine and machine adjust to outdoor temperature before starting to clear snow.
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 in any direction.

OPERATION

1. Do not put hands or feet near rotating parts. Keep clear of 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. Do not carry passengers.
3. After striking a foreign object, stop the engine, remove wire from spark plug, and thoroughly inspect the snow thrower for any damage. Repair the damage before restarting and operating the snow thrower.
4. If the snow thrower should start to vibrate abnormally, stop the engine and check immediately for the cause. Vibration is generally a warning of trouble.

5. Stop engine whenever you leave the operating position, before unclogging the collector/impeller housing or discharge guide, and making any repairs, adjustments, or inspections.
6. Take all possible precautions when leaving the unit unattended. Disengage the collector/impeller, shift into neutral, stop the engine, and remove the key.
7. When cleaning, repairing, or inspecting, make certain collector/impeller and all moving parts have stopped. Disconnect spark plug wire and keep away from plug to prevent accidental starting.
8. Do not run engine indoors, except when starting engine and transporting snow thrower in or out of building. Open doors. Exhaust fumes are dangerous.
9. Do not clear snow across the face of slopes. Exercise extreme caution when changing direction on slopes. Do not attempt to clear steep slopes.
10. Never operate snow thrower without guards, plates, or other safety protection devices in place.
11. Never operate snow thrower near glass enclosure, automobiles, window wells, drop off, etc., without proper adjustments of snow thrower discharge angle. Keep children and pets away.
12. Do not overload machine capacity by attempting to clear snow at too fast a rate.
13. Never operate the machine 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 unit.
15. Disengage power to collector/impeller when transporting or not in use.
16. Use only attachments and accessories approved by the manufacturer of snow thrower (such as wheel weights, counter weights, cabs, 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, engine mounting bolts, etc., at frequent intervals for proper tightness to be sure 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 and space heaters, clothes dryers, and the like. Allow engine to cool before storing in any enclosure.
3. Always refer to owner's guide instructions for important details if snow thrower is to be stored for an extended period.
4. Run machine a few minutes after throwing snow to prevent freeze up of collector/impeller.

ASSEMBLY INSTRUCTIONS

NOTE

This unit is shipped WITHOUT GASOLINE or OIL. See operation section of this manual for proper fuel and engine oil recommendations.

Contents of Hardware Pack:

(2) Ignition Keys (One may be on snow thrower)

1. Remove the snow thrower and loose parts from carton. Make certain all parts and literature have been removed from the carton before carton is discarded.
2. Loosen the hand knob on each side of the handle. Pull handle up into operating position. See Figure 1. Retighten the hand knob.
3. Connect the control cable to the control handle by hooking the "Z" end of the control cable into the middle hole in control handle. See figure 2.

NOTE

The three holes in the control handle provide adjustment for the belt tension. Refer to adjustment section of this manual when adjustment is needed.

4. The snow thrower has been shipped with the upper chute pivoted all the way down. Assemble as follows.
 - a. Remove the hand knob, cupped washer, flat washer and carriage bolt from the upper chute. See figure 3A.
 - b. Pivot the upper chute up so there is no gap between the upper and lower chute. See figure 3B. Secure with hardware just removed.
5. Make certain all nuts and bolts are tightened securely.

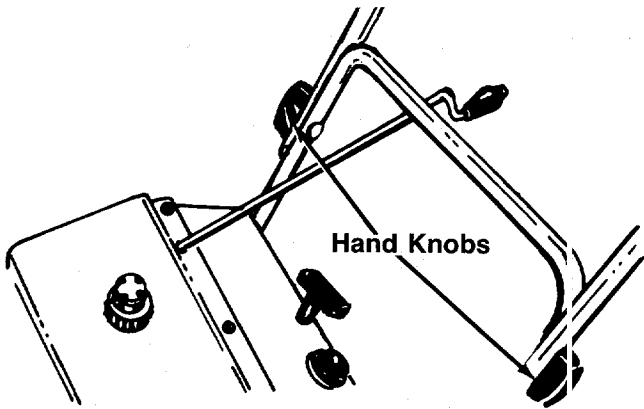


FIGURE 1.

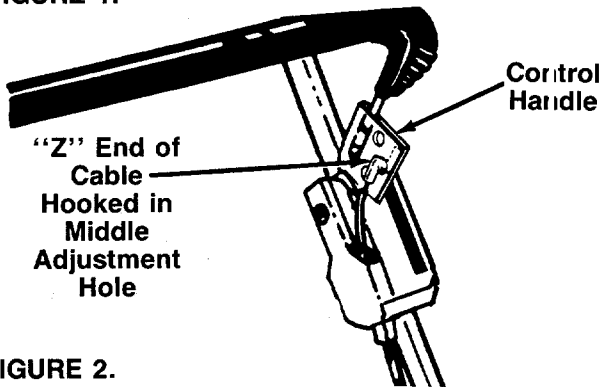


FIGURE 2.

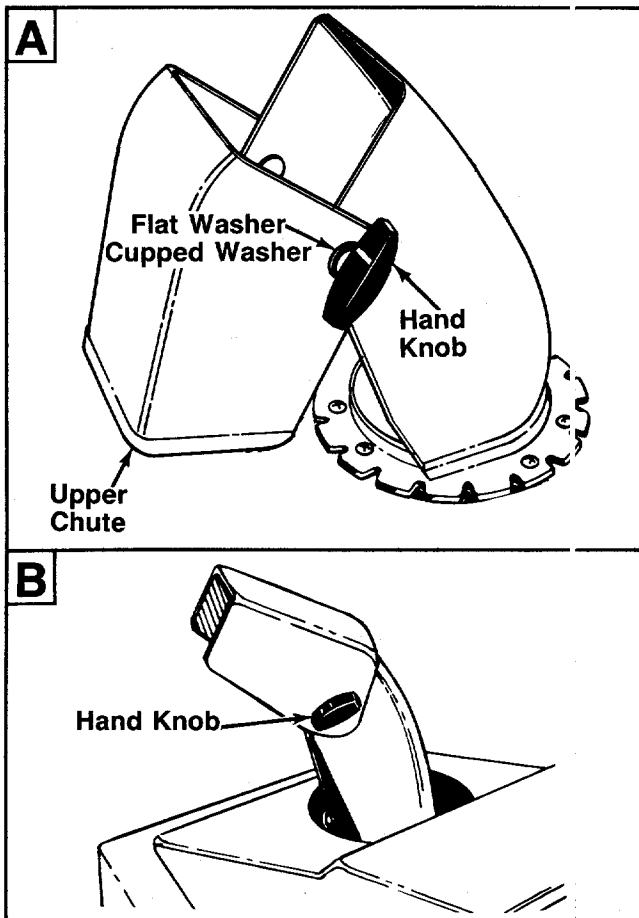


FIGURE 3.

OPERATION

⚠ DANGER

1. STOP ENGINE BEFORE REMOVING DEBRIS AND SERVICING UNIT
2. KEEP CLEAR OF IMPELLER WHILE ENGINE IS RUNNING
3. NEVER DIRECT DISCHARGE AT BYSTANDERS OR WINDOWS OR ALLOW ANYONE IN FRONT OF UNIT
4. THOROUGHLY INSPECT THE AREA WHERE THE EQUIPMENT IS TO BE USED AND REMOVE ALL DOOR MATS, SLEDS, BOARDS, WIRES AND OTHER FOREIGN OBJECTS
5. REFER TO OWNERS MANUAL FOR FULL INSTRUCTIONS

ENGINE OPERATING CONTROLS

The engine operating controls and their functions are as follows (see figure 4):

Choke Lever—Place choke lever in ON position to start a cold engine.

Primer Button—Used to inject fuel directly into the carburetor to insure fast starts in cold weather.

Ignition Key—Must be inserted into ignition key slot to start engine. Pull out to stop. Do not turn ignition key.

Starter Handle—Used to manually start the engine.

Electric Starter (Optional)—Starts engine using a 120V power source.

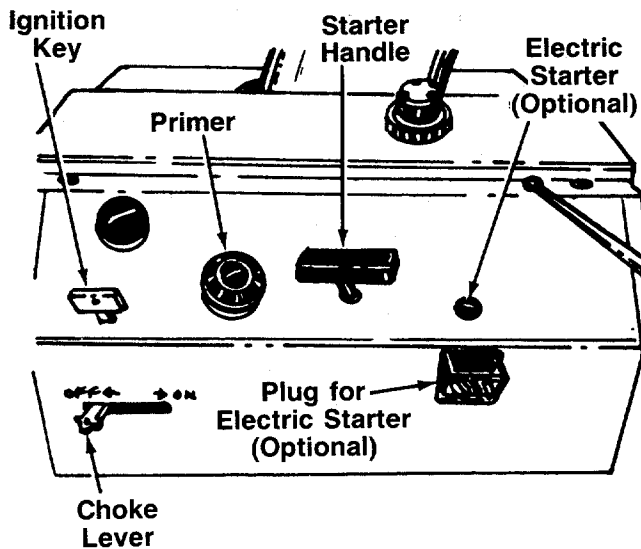


FIGURE 4.
SNOW THROWER OPERATING CONTROLS

The snow thrower operating controls and their functions are as follows.

Auger Control Handle—Located on the upper handle, the auger control handle is used to engage and disengage the augers. See figure 5. The snow thrower is designed to be propelled by the rotation of the augers. Pull the control handle back against the upper handle to engage the augers; release to disengage.

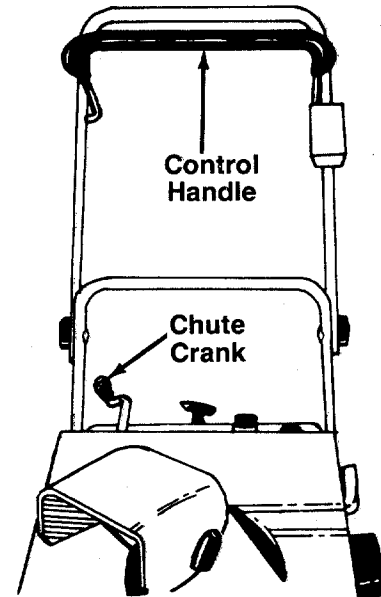


FIGURE 5.

Discharge Chute—The direction snow is thrown can be changed by turning the chute crank. See figure 5. Turn clockwise to discharge to the left. Turn counter-clockwise to discharge to the right. The distance snow is thrown can be adjusted by raising the discharge chute for greater distance, or lowering for less distance.

See figure 6. Loosen the hand knob on the side of the discharge chute to adjust. Pivot the chute to desired position, and retighten hand knob.

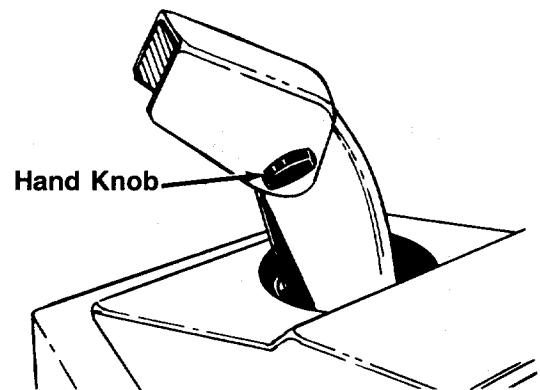


FIGURE 6.

FUEL MIXTURE



Mix oil with unleaded gasoline (regular grade gasoline is an acceptable substitute). Use a clean, high quality 2-cycle oil. Disregard instructions on oil containers. **Do not mix directly in engine fuel tank, as this will allow oil to enter carburetor which may cause engine to**

be inoperative. Do not use multi-viscosity oils. Such oils may not provide adequate lubrication and due to additives may cause excessive plug fouling. Use fresh gasoline which is blended for the season in which the engine is used. **Measure oil carefully. Excessive oil in fuel may cause hard starting or no start, also excessive smoke and plug fouling.**

Experience indicates that 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 for 30 days or longer. Drain the fuel tank, start the engine and let it run until the fuel lines and carburetor are empty. Use fresh fuel next season. See Storage section of this manual for additional information.

Never use engine or carburetor cleaner products in the fuel tank or permanent damage may occur.

To assure thorough mixing of oil and gasoline—fill container with gasoline to one quarter full, add oil per chart, shake container vigorously and then fill remainder of container with gas. **ONCE MIXED, OIL AND GASOLINE WILL NOT SEPARATE.** Use a clean container and follow the chart below.

FUEL MIX CHART
Mixture: 32:1

U.S.		S.I. (METRIC)	
Gas	Oil To Be Added	Petrol	Oil To Be Added
1 Gal.	4 oz.	4 Liters	.125 L
2 Gal.	8 oz.	8 Liters	.250 L
5 Gal.	20 oz.	20 Liters	.625 L

NOTE

Use only clean oil and fuel. Store in approved, clean, covered containers.

BEFORE STARTING ENGINE

1. Service engine with fuel mixture; use a clean funnel. Never fill fuel tank completely. Fill tank to within 1/4 to 1/2 inch of top of tank to provide space for fuel expansion. Wipe any fuel spillage from engine and equipment before starting engine.



Never fill fuel tank indoors, when engine is running or while engine is still hot. Do not smoke when filling fuel tank.

2. Make certain the auger control handle is in the **disengaged** (released) position.
3. Insert ignition key into slot. See figure 4. Be certain it snaps into place. **Do not turn key.**
4. Move choke lever to ON position (cold engine start).
If engine is warm, place choke in OFF position instead of ON.
5. Push primer button **two** or **three** times. If unit is equipped with an **electric starter**, push primer button **one** time only. See figure 4. If engine is warm, **do not prime.**

NOTE

Always cover vent hole in primer button with finger while pushing. Additional priming may be necessary for the first start if temperature is below 15°F.

TO START ENGINE

Recoil Starter:

1. Grasp starter handle (see figure 4) and pull rope out slowly, until it pulls slightly harder. Let rope rewind slowly.
2. Pull starter handle rapidly. Do not allow handle to snap back. Allow it to rewind slowly while keeping a firm hold on the starter handle.

NOTE

If recoil starter is frozen and will not crank the engine, proceed as follows:

- a. Pull as much rope out of the starter as possible.
- b. Release starter handle and let it snap back against the starter.

Only use the above procedure when necessary to free a frozen starter.

3. Repeat steps 1 and 2 until engine starts. If engine fails to start, prime engine again (step 5 from previous section), and repeat steps 1 and 2 from this section until engine starts.
4. As engine warms up and begins to operate evenly, move choke lever slowly to OFF position. If engine falters, return to ON position, then slowly move to OFF position.

Electric Starter (Optional):

The optional electric starter is equipped to operate on 120 Volt AC household current.

1. Connect power cord to switch on engine, then to a three-hole, grounded household receptacle.



When connecting power cord, first connect cord to switch on engine, then plug the other end into household receptacle. When disconnecting power cord, always unplug from the household receptacle first.

2. Push starter button to engage starter motor and crank engine.



This electric starter is not equipped with a thermal cut-out switch. Do not crank engine for more than a total of 20 seconds without allowing electric starter to cool down for 10 minutes, or severe damage to electric starter can result.

→ NOTE

If the starter motor runs but the engine does not turn over, the starter gear is apparently covered with ice and frozen. Place the unit in a warm atmosphere until the gear is free and the starter will engage.

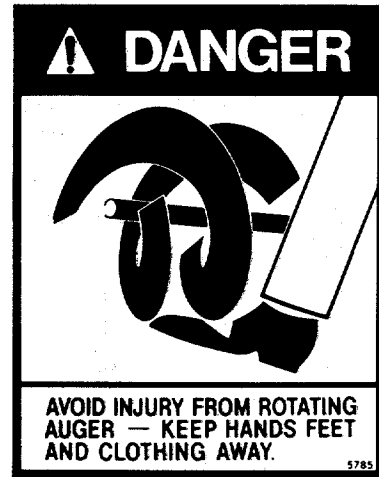
3. After engine starts, release starter button. Move choke gradually to OFF position. If engine falters, return to ON position, then slowly move to OFF position.

→ NOTE

Allow the engine to warm up for a few minutes as the engine will not develop full power until it reaches operating temperature.



Temperature of muffler and surrounding areas may exceed 150°F. Avoid these areas.



TO STOP ENGINE

1. Run engine for a few minutes before stopping to help dry off any moisture on the engine.
2. **Recoil Starter:** To help prevent possible freeze-up of starter, proceed as follows. With engine running, pull starter rope with a rapid, continuous full arm stroke three or four times. Pulling the starter rope will produce a loud clattering sound, which is not harmful to the engine or starter.
3. **To stop engine, remove the ignition key.** (Do not turn key.)

→ NOTE

Do not lose ignition key. Keep it in a safe place. Engine will not start without the ignition key.

4. Wipe all snow and moisture from the unit. Move the choke lever back and forth several times and leave in the ON position.



OPERATING THE SNOW THROWER

1. Start the engine as instructed previously.
2. Adjust the discharge chute up or down as desired. Then use the chute crank to position the discharge to discharge snow with the wind. Do not throw snow toward a building as hidden objects could be discharged with enough force to cause damage.
3. Making certain no bystanders or obstacles are in front of the unit, engage the auger control handle. As the snow thrower starts to move, maintain a firm

hold on the handle, and guide the snow thrower along the path to be cleared.

Release the auger control handle to stop the snow throwing action and forward motion.

Operating Tips

1. For most efficient snow removal, remove snow immediately after it falls.
2. Discharge snow downwind whenever possible. Slightly overlap each previous swath.
3. Pushing downward on the handle will raise the augers off the ground and stop the forward motion.

NOTE

Excessive upward pressure on the handle will result in premature wear on the rubber auger blades.

4. Be certain to follow the precautions listed under "To Stop Engine" to prevent possible freeze-up.
5. Clean the snow thrower thoroughly after each use.

MAINTENANCE



NEVER attempt to clean chute or make any adjustments or repairs while engine is running.

DISCHARGE CHUTE ADJUSTMENT

To adjust the discharge chute, refer to "Discharge Chute" instructions in Operation section, page 5.

BELT TENSION ADJUSTMENT

Periodic adjustment of the belt tension may be required due to normal stretch and wear on the belt. Adjustment is needed if the augers seem to hesitate while turning, but the engine maintains the same speed.

There are three holes in the control handle which provide this adjustment. Move the clutch cable to the highest hole to increase the belt tension. Refer to figure 2.

If additional adjustment is needed, there are three adjustment holes provided in the idler brake bracket assembly. To adjust, remove the belt cover. Move the extension spring on the end of the clutch cable to the next higher adjustment position on the idler brake bracket assembly. Reassemble belt cover. See figure 7.

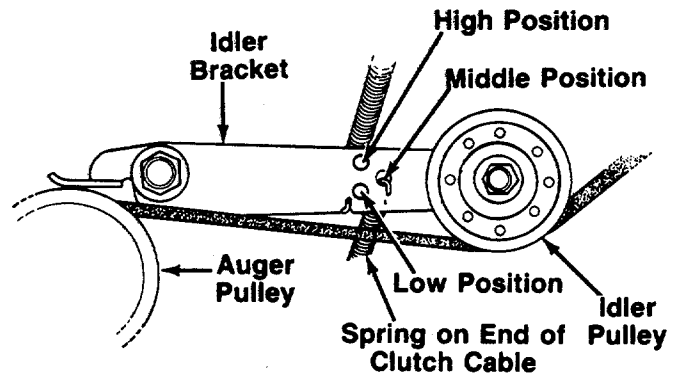


FIGURE 7.

CARBURETOR ADJUSTMENT



If any adjustments are made to the engine while the engine is running (e.g. carburetor), disengage all clutches and augers. Keep clear of all moving parts. Be careful of heated surfaces and muffler.

Do not make unnecessary adjustments. Factory settings are satisfactory for most conditions. If adjustments are necessary, refer to the separate engine manual packed with your snow thrower.



Never tamper with engine governor which is factory set for proper engine speed. Overspeeding engine may increase the danger of personal injury and will void engine warranty. If you think the engine governed speed needs adjusting, contact your nearby authorized Tecumseh service dealer, who has the proper equipment and experience to make any necessary adjustments.

SHAVE PLATE *CAN ADJUST.*

The shave plate on the bottom of the snow thrower housing is subject to wear. It should be checked periodically and replaced when necessary. (Refer to Ref. No. 72 on page 10.)

To remove shave plate, remove the four carriage bolts, flat washers and hex nuts which attach it to the snow thrower housing. Reassemble new shave plate, making sure the heads of the carriage bolts are on the inside of the housing. Tighten securely.

ENGINE

Refer to the separate engine manual packed with your snow thrower for all engine maintenance procedures.

→ NOTE

Check engine and snow thrower frequently for loose nuts, bolts, etc., and keep these items tightened.

BELT REPLACEMENT

1. Remove the belt cover by removing three screws with a 3/8" wrench and one screw with a Phillips screwdriver. See figure 8.

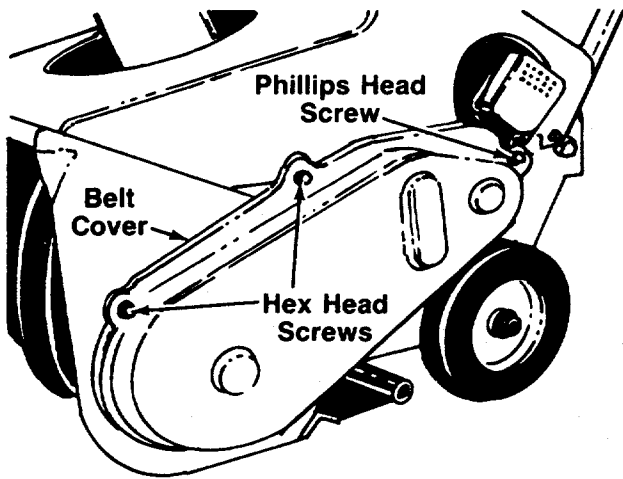


FIGURE 8.

2. Pull upward on the idler pulley and slip the belt off engine pulley. See figure 9.
3. Push down on idler pulley and slip the belt off auger pulley. See figure 9.
4. Reassemble new belt in reverse order.

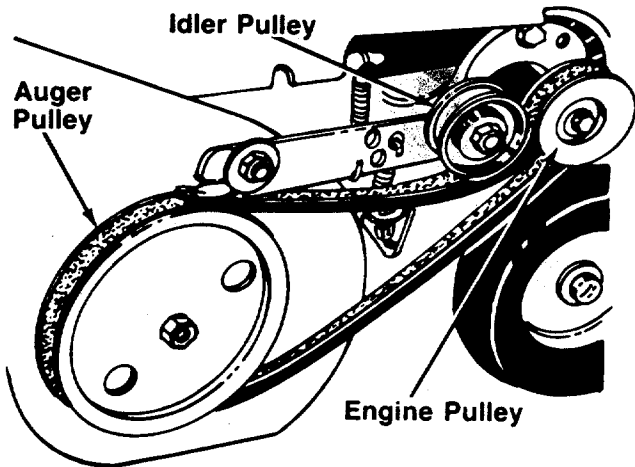


FIGURE 9.

OFF-SEASON STORAGE



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

If unit is to be stored over 30 days, prepare for storage as follows:

1. Remove all dirt from exterior of engine and equipment.
2. Remove all fuel from carburetor and fuel tank to prevent gum deposits from forming on these parts and causing possible malfunction of engine.



Drain fuel into approved container outdoors, away from open flame. Be certain engine is cool. Do not smoke. Fuel left in engine during warm weather deteriorates and will cause serious starting problems.

- A. Run engine until fuel tank is empty and engine stops due to lack of fuel.
- B. Drain carburetor by pressing upward on bowl drain, located below the carburetor.

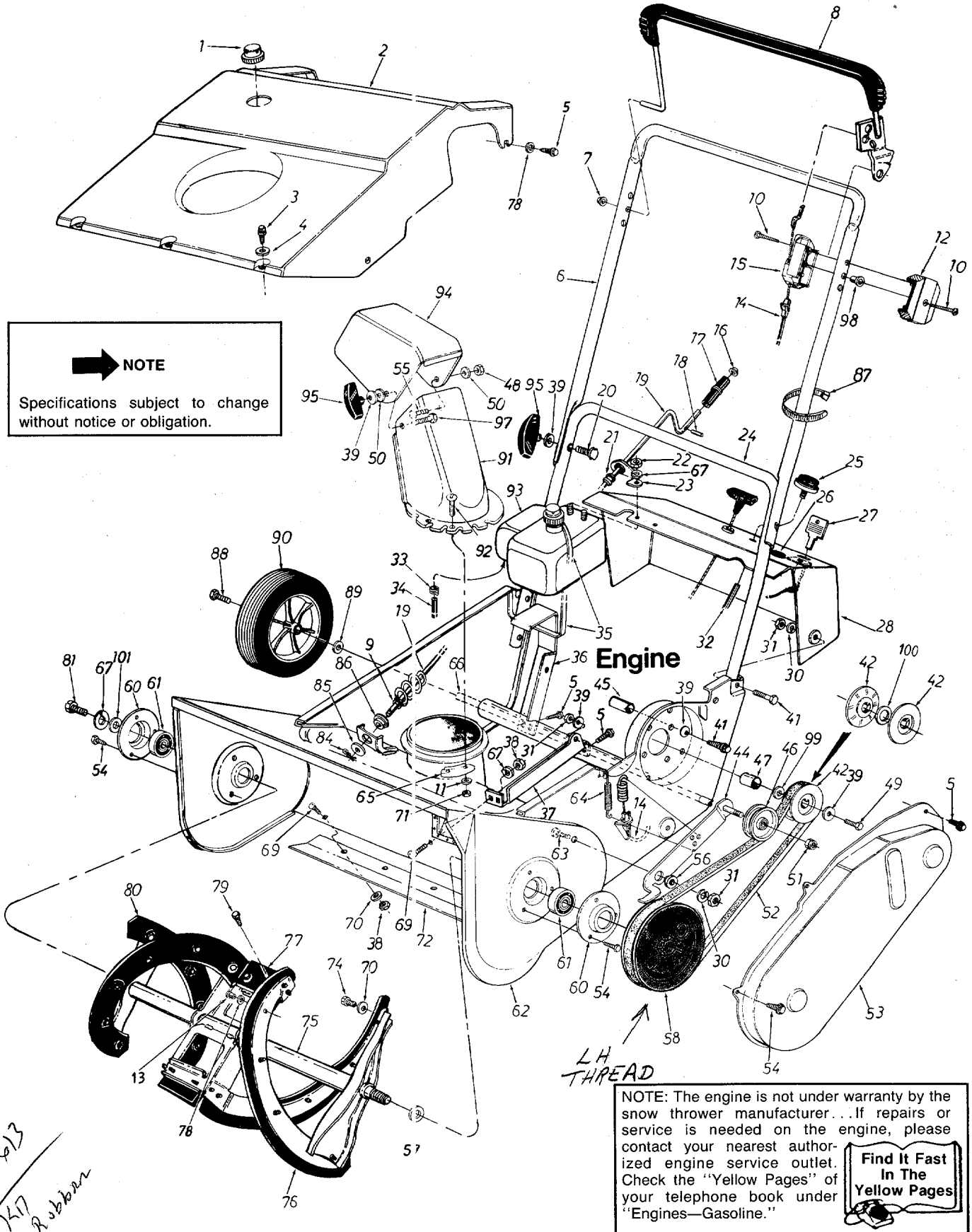
If gasohol has been used, complete preceding instructions A and B and then add a small amount, one pint or less, of regular automotive gasoline or unleaded gasoline properly mixed with the specified lubricating oil. Repeat preceding instructions A and B.

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. Block the unit up so that it is not resting on the rubber auger blades.

→ NOTE

When storing any type of power equipment in an unventilated or metal storage shed, care should be taken to rustproof the equipment. Using a light oil or silicone, coat the equipment, especially springs, cables and all moving parts.

Models 180 and 181



NOTE
 Specifications subject to change without notice or obligation.

Engine

LH
 THREAD

NOTE: The engine is not under warranty by the snow thrower manufacturer... If repairs or service is needed on the engine, please contact your nearest authorized engine service outlet. Check the "Yellow Pages" of your telephone book under "Engines—Gasoline."



753-0613
 147
 Robbin

Models 180 and 181

PARTS LIST FOR MODELS 180 AND 181 SNOW THROWERS

REF. NO.	PART NO.	CODE	DESCRIPTION	REF. NO.	PART NO.	CODE	DESCRIPTION
1	751-0353		Gas Tank Cap	50	736-0231		FI-Wash. .344" I.D. x 1.25"
2	731-0702		21" Shroud	51	712-0296		Hex Patch L-Nut 3/8-24 Thd.
3	710-0429		Hex B-Tap Scr. #10 x .38"	52	754-0367	N	"V"-Belt 3/8 x 34.4
4	736-0370		Spr.-Wash. .206" I.D. x .448"	53	784-5176		Belt Cover
5	710-0892		Hex L-Wash. Hd. AB-Tap 1/4 x .62" Lg.	54	710-0352		Hex B-Tap Scr. 1/4" x .38" Lg.
6	749-0705		Upper Handle	55	710-0451		Carriage Bolt 5/16-18 x .75"
7	726-0135		Cap Speed Nut	56	748-0234		Shld. Spacer .50" Dia. x .27"
8	731-0791		Control Handle Ass'y.—L.H.	57	736-0326		FI-Wash. .510" I.D. x 1.0" O.D.
9	736-0140		FI-Wash. .385" I.D. x .62"	58	756-0550	N	3/8" "V"-Pulley 1/2-20 L.H. x 6"
10	710-0796		Truss Mach. Hi-B Tap Scr. #12 x 1.5" Lg.	60	784-5174		Bearing Cup
11	736-0142		FI-Wash. .281" I.D. x .5" O.D.	61	741-0124		Ball Brg. .669" I.D. x 1.574"
12	731-0815		Control Panel Half	62	784-5325C	638/N	21" Blower Hsg. Ass'y.
13	728-0173		Pop Rivet .188" Dia.	63	710-0323		Truss Mach. Scr. 5/16-18 x .75" Lg.*
14	746-0506		Clutch Cable 35" Lg.	64	732-0357		Extension Spring 1.12" Lg.
15	731-0816		Control Panel Half	65	731-0851		Chute Flange Keeper
16	726-0100		Push Cap 3/8" Rod	66	749-0810	N	Wheel Axle 1/2" O.D. x 20.6" Lg.
17	720-0201A	N	Knob—3/8" Dia. Hole	67	736-0329		L-Wash. 1/4" I.D.*
18	715-0138		Roll Pin 1/8" Dia. x .63" Lg.	69	710-0167		Carriage Bolt 1/4-20 x .50"*
19	784-5344		Chute Crank Ass'y.	70	736-0173		FI-Wash. .281" I.D. x .73"
20	710-0405		Curved Carriage Bolt 5/16-18 x 1.75" Lg.	71	712-0291		Hex L-Nut 1/4-20 Thd.
21	735-0218A	N	Chute Crank Grommet	72	731-1033		Shave Plate
22	712-0287		Hex Nut 1/4-20 Thd.	74	710-0896		Hex Wash. B-Tap Scr. 1/4 x .62" (Spec.)
23	784-5178		Upper Chute Crank Brkt.	75	784-5485	N	Auger Ass'y. 21"
24	749-0713		Lower Handle	76	731-0781A	N	Rubber Spiral—L.H.
25	751-0354		Primer	77	731-0782		Rubber Paddle
26	731-0732		Plastic Plug	78	736-0400		FI-Wash. .218" I.D. x .62"
27	725-0954		Plastic Key (Tech. Eng.)	79	710-1003		Hex Wash. B-Tap Scr. #10 x .62" Lg.
28	784-5168B	638/N	Dash Panel Ass'y.	80	731-0780A	N	Rubber Spiral—R.H.
30	736-0119		L-Wash. 5/16" I.D.*	81	710-0875		Hex Wash. TT-Tap Cl-Scr. 1/4-20 x .75" Lg.
31	712-0267		Hex Nut 5/16-18 Thd.*	84	714-0507		Cotter Pin 3/32" Dia. x .75"
32	723-0354		Primer Hose—11" Lg.	85	736-0133		FI-Wash. .406" I.D. x 1.25"
33	726-0205		Hose Clamp—1/2" Dia.	86	741-0403		Hex Bushing .385" I.D.
34	751-0535		Gas Line—12" Lg.	87	726-0240		Cable Tie
35	726-0225		Cable Tie—17.75" Lg.	88	726-0649		Hex Tap Scr. 3/8-24 x .88" Lg.
36	784-5341		Engine Support Brkt.	89	736-0108		FI-Wash. .510" I.D. x .75"
37	784-5495	N	Engine Support	90	734-1176		Wheel & Tire Ass'y. 7" x 1.5"
38	712-0298		Hex Jam Nut 1/4-20 Thd.	91	731-0915		Lower Chute
39	736-0242		Bell-Wash. .345" I.D. x .88"	92	710-0255		Truss Mach. Scr. 1/4-20 x .75"
41	710-0442		Hex Bolt 5/16-18 x 1.5" Lg.*	93	751-0435		Fuel Tank—Two Qt.
42	756-0416A	N	3/8" "V"-Pulley Half .625" I.D. x 6.0" O.D.	94	731-0921		Upper Chute
44	784-5180A	N	Idler Brake Brkt. Ass'y.	95	09966		Knob Handle Ass'y.
45	750-0589		Spacer .325" I.D. x .625" O.D. x .875"	97	710-0276		Carriage Bolt 5/16-18 x 1"*
46	756-0313		FI-Idler w/Flanges 2.12" O.D.	98	731-0524		Control Disc Pin
47	748-0201		Spacer .635" I.D. x .89" O.D. x .57"	99	736-0162		FI-Wash. .635" I.D. x 1.04" O.D.
48	712-0158		Hex L-Nut 5/16-18 Thd.	100	736-0256		FI-Wash. .635" I.D. x 1.0" O.D.
49	710-0157		Hex Bolt 5/16-24 x .75" Lg.*	101	736-0176		FI-Wash. .25" I.D. x .93"
				—	390-697		3 HP 110V Electric Start

*For faster service obtain standard nuts, bolts and washers locally.
If these items cannot be obtained locally, order by part number and size as shown on parts list.

CODE: N notates a new part (not previously existing). A three digit number is the color code (use if color or finish is important when ordering parts). See chart at right. [i.e., (part no.)-638 for Red Finish].

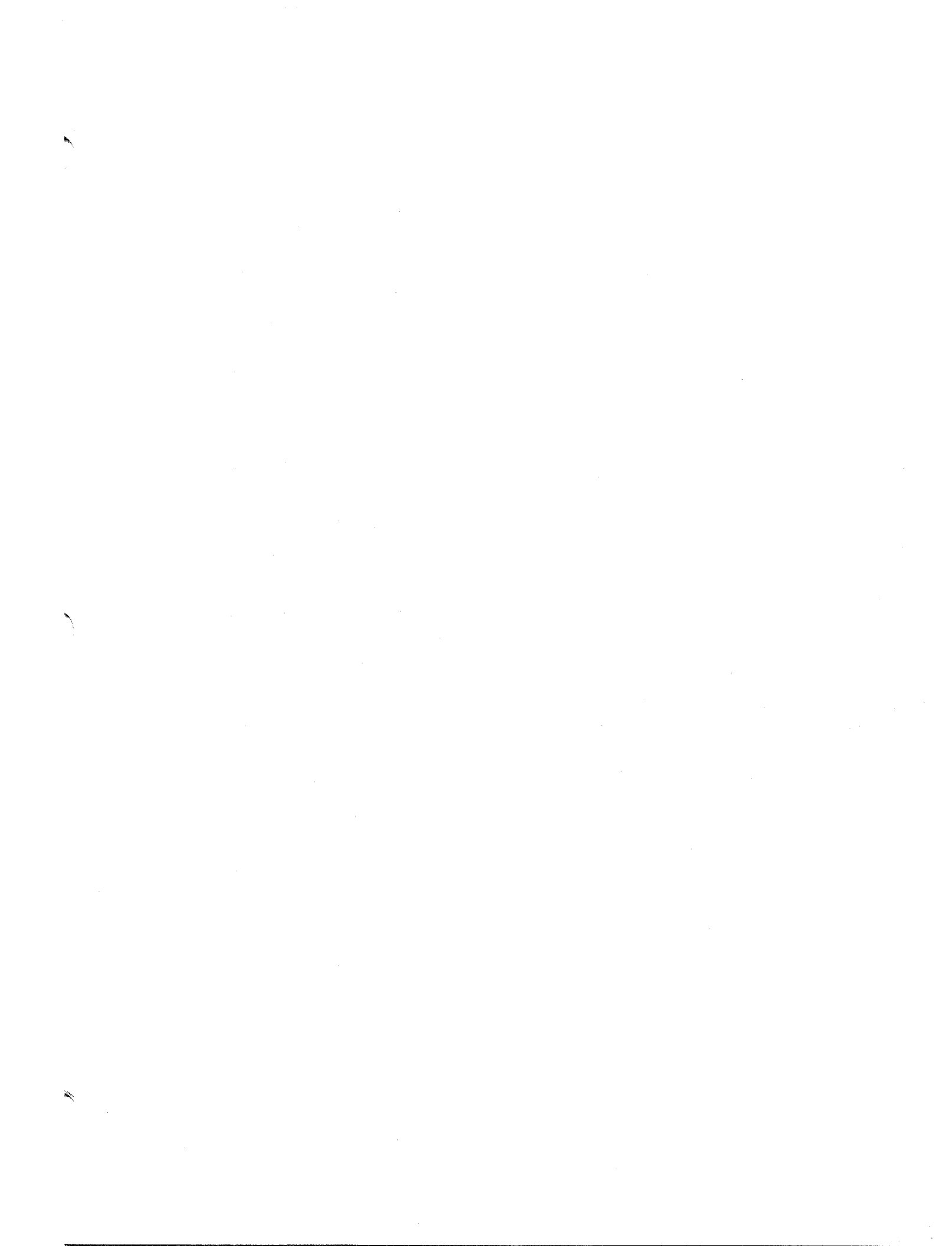
Color Codes

638—MTD Red
483—Charcoal Grey
488—Radiant Yellow

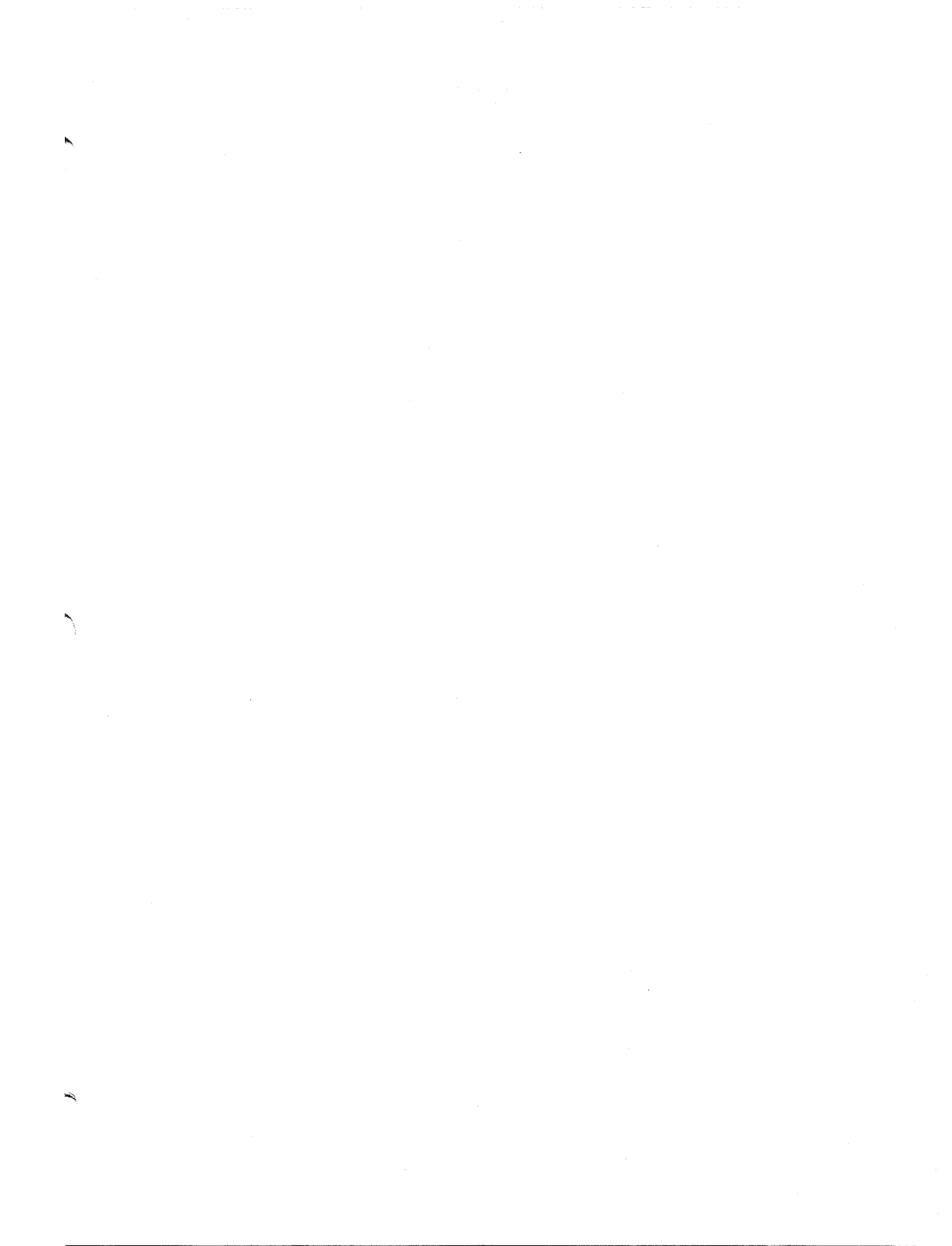
TROUBLE SHOOTING GUIDE

TROUBLE	POSSIBLE CAUSE(S)	CORRECTIVE ACTION
Engine fails to start	<ol style="list-style-type: none"> 1. Fuel tank empty, or stale fuel. 2. Blocked fuel line. 3. Key not in switch on engine. 4. Spark plug wire disconnected. 5. Faulty spark plug. 	<ol style="list-style-type: none"> 1. Fill tank with clean, fresh fuel mixture. 2. Clean fuel line. 3. Insert key. 4. Connect wire to spark plug. 5. Clean, adjust gap or replace.
Engine runs erratic	<ol style="list-style-type: none"> 1. Unit running on CHOKE. 2. Blocked fuel line or stale fuel. 3. Water or dirt in fuel system. 4. Carburetor out of adjustment. 	<ol style="list-style-type: none"> 1. Move choke lever to OFF position. 2. Clean fuel line; fill tank with clean fresh gasoline. 3. Drain fuel tank using carburetor bowl drain. Refill with fresh fuel. 4. Have carburetor adjusted by an authorized service dealer.
Loss of power	<ol style="list-style-type: none"> 1. Spark plug wire loose. 2. Gas cap vent hole plugged. 	<ol style="list-style-type: none"> 1. Connect and tighten spark plug wire. 2. Remove ice and snow from cap. Be certain vent hole is clear.
Engine overheats	<ol style="list-style-type: none"> 1. Carburetor not adjusted properly. 2. Incorrect fuel mixture. 	<ol style="list-style-type: none"> 1. Have carburetor adjusted by an authorized service dealer. 2. Drain fuel tank. Refill with proper fuel mixture.
Excessive vibration	Loose parts or damaged auger.	Stop engine immediately and disconnect spark plug wire. Tighten all bolts and nuts. Make all necessary repairs. If vibration continues, have unit serviced by an authorized service dealer.
Unit fails to propel itself	<ol style="list-style-type: none"> 1. Incorrect adjustment of drive cable. 2. Drive belt loose or damaged. 	<ol style="list-style-type: none"> 1. Adjust drive cable. Refer to Belt Tension Adjustment in Maintenance section of this manual. 2. Replace drive belt. Refer to Belt Replacement in Maintenance section of this manual.
Unit fails to discharge snow	<ol style="list-style-type: none"> 1. Discharge chute clogged. 2. Foreign object lodged in auger. 3. Incorrect adjustment of drive cable. 4. Drive belt loose or damaged. 	<ol style="list-style-type: none"> 1. Stop engine immediately and disconnect spark plug wire. Clean discharge chute and inside of auger housing. 2. Stop engine immediately and disconnect spark plug wire. Remove object from auger. 3. Adjust drive cable. Refer to Belt Tension Adjustment in Maintenance section of this manual. 4. Replace drive belt. Refer to Belt Replacement in Maintenance section of this manual.

NOTE: For repairs beyond the minor adjustments listed above, please contact your nearest authorized service dealer.







PARTS INFORMATION

POWER EQUIPMENT PARTS AND SERVICE

Parts and service are available through the authorized service firms listed below. All orders should specify the model number of your unit, part numbers, description of parts and the quantity of each part required.

NOTE: If any parts are found to be missing or defective upon assembly of this unit, write to advise the factory so that immediate replacement can be made.

ARKANSAS	NORTH LITTLE ROCK
Sutton's Lawn Mower Shop.....	5301 Roundtop Drive Box 368, Rt. 4 72117
CALIFORNIA	PORTERVILLE
Billious	75 North D Street 93257
COLORADO	DENVER
Spitzer Industrial Products Co. ...	6601 N. Washington St. 30229
FLORIDA	JACKSONVILLE
Radco Distributors	4909 Victor St. Box 5459 32207
	HIALEAH
Small Eng. Dist.	7995 W. 26th Court 33016
ILLINOIS	LYONS
Keen Edge Co.	8615 Ogden Ave. 60534
INDIANA	ELKHART
Parts & Sales Inc.	2101 Industrial Pkwy. Box 277 46516
IOWA	DUBUQUE
Power Lawn & Garden Equip.	2551 J.F. Kennedy. 52001
MARYLAND	BELTSVILLE
Center Supply Co.	6802 Industrial Dr. #208 20705
MASSACHUSETTS	SPRINGFIELD
Morton B. Collins Co.	300 Birnie Ave. 01107
MICHIGAN	MOUNT CLEMENS
Power Equipment Dist.	340 Hubbard 48043
MINNESOTA	PLYMOUTH
Hance Distributing Inc.	12795 16th Ave. North 55441
MISSOURI	EARTH CITY
Oscar Wilson Engine & Parts ...	4159 Shoreline Dr. 63045
	KANSAS CITY
Automotive Equip. Service	3117 Holmes St. 64109
NEW YORK	CARTHAGE
Gamble Dist., Inc.	West End Ave. Box 389 3619

BRIGGS AND STRATTON, TECUMSEH AND PEERLESS PARTS AND SERVICE

Briggs & Stratton, Tecumseh and Peerless parts and service should be handled by your nearest authorized engine service firm. Check the yellow pages of your telephone directory under the listing **Engines—Gasoline**, Briggs & Stratton or Tecumseh Lauson.

NORTH CAROLINA	BROWNS SUMMIT
Dixie Sales Company	5920 Summit Ave. 27214
OHIO	CARROLL
Stebe's Mid-State Mower Supply	Box 366, 71 High St. 43112
	CLEVELAND
Bleckrie, Inc.	7900 Lorain Ave. 44102
	WADSWORTH
National Central	687 Seville Rd. 44281
	YOUNGSTOWN
Burton Supply Co.	1301 Logan Ave. Box 929 44501
PENNSYLVANIA	HARRISBURG
EECO Inc.	4021 N. 6th St. 17110
	PITTSBURGH
Bluemont Co.	11101 Frankstown Rd. 15235
	PUNXSUTAWNEY
Frank Roberts & Sons	R.D. 2 15767
	SCRANTON
Scranton Auto Ignition Co.	1133-35 Wyoming Ave. 18509
TENNESSEE	KNOXVILLE
Ace Distributors	2103 Magnolia 37917
	NASHVILLE
Chilton Air Cooled Engine	319 4th Ave. S. 37210
TEXAS	DALLAS
Marr Brothers, Inc.	423 E. Jefferson 75203
UTAH	SALT LAKE CITY
Powered Products	1661 N. Beck St. 84116
VIRGINIA	ASHLAND
RBI Corp.	101 Cedar Ridge Dr. 23005
WASHINGTON	SEATTLE
Equip. Northwest	1410 14th Ave. 98122
WISCONSIN	MILWAUKEE
Wisconsin Magneto Inc.	4727 N. Teutonia St. 53209
PUERTO RICO	AGUADILLA
CIE & Associates, Inc.	102 North St. 00604

WARRANTY PARTS AND SERVICE POLICY

(0689)

The purpose of warranty is to protect the customer from defects in workmanship and materials, defects which are NOT detected at the time of manufacture. It does not provide for the unlimited and unrestricted replacement of parts. Use and maintenance are the responsibility of the customer. The manufacturer cannot assume responsibility for conditions over which it has no control. Simply put, if it's the manufacturer's fault, it's the manufacturer's responsibility; if it's the customer's fault, it's the customer's responsibility.

CLAIMS AGAINST THE MANUFACTURER'S WARRANTY INCLUDES:

1. Replacement of Missing Parts on new equipment.
2. Replacement of Defective Parts within the warranty period.
3. Repair of Defects within the warranty period.

All claims MUST be substantiated with the following information:

1. Model Number, Serial Number and/or Data Code of unit involved.
2. Date unit was purchased.
3. Date of Failure.
4. Nature of Failure.