



Owner's Manual

- SET-UP
- OPERATION
- MAINTENANCE

IMPORTANT

Read Safety Rules and
Instructions Carefully

IMPORTANT !

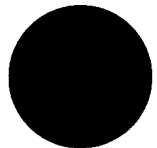
Record the Model No. and Mfg. Code which appear on your unit in the space provided. You must have these numbers, along with the date of purchase, in order to receive warranty or service.

DATE PURCHASED: -



MEETS ANSI B71.3-1995 SAFETY STANDARD	
Model Number	Serial Number
XXXXXXXXXX	XXXXXXXXXX
COLUMBIA	MTD PRODUCTS LIMITED KITCHENER, ON N2G 4J1

Models:
E9B6G
E976H
E996I



COPY DIRECTLY FROM THE UNIT.

This unit has been inspected against the manufacturers quality check list. In case of a discrepancy, please call us. We will make every effort to ship the part(s) by courier within one working day of your call.

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

SAFETY RULES FOR SNOWTHROWERS

Training

1. Read the Owner's manual 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 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 gasoline 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. If using an extension cord, use 16 gauge, maximum 100 ft. (30m.).
6. Adjust auger housing height to clear gravel or crushed rock surface.
7. Never attempt to make any adjustments while engine is running (except where specifically recommended by manufacturer).
8. Let engine and machine adjust to outdoor temperature 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 machine in any direction.

Operation

1. Do not put hands or feet near rotating parts. Keep clear of discharge chute opening while impeller is rotating.
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 snowthrower for any damage. Repair the damage before restarting and operating the snowthrower.
4. If the snowthrower should start to vibrate abnormally, stop the engine and check immediately for the cause. Vibration is generally a warning of trouble.

5. Stop engine when you leave the operating position, before unclogging the auger/impeller housing or discharge guide, and making any repairs, adjustments, or inspections. Never place your hand in the discharge or collector openings. Use a stick or wooden broom handle to unclog the discharge opening.
6. Take all possible precautions when leaving the unit unattended. Disengage the auger/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 snowthrower in or out of building. Open doors. Exhaust fumes are dangerous.
9. Do not clear snow across the face of slopes, but in an up and down pattern. Exercise extreme caution when changing direction on slopes. Do not attempt to clear steep slopes.
10. Never operate snowthrower without guards, plates, or other safety protection devices in place.
11. Make proper adjustments to the discharge chute to avoid hitting glass enclosure, automobiles, window wells, drop offs, etc. Keep children and pets away while operating.
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 up.
14. Never direct discharge at bystanders or allow anyone in front of unit.
15. Disengage power to auger/impeller when transporting or not in use.
16. Use only attachments and accessories approved by the manufacturer of snowthrower such as wheel weights, counter weights, cabs etc.
17. Never operate the snowthrower without good visibility or light. Always be sure of your footing and keep a firm hold on the handles. Walk, don't run.
18. Muffler and engine become hot and can cause a burn. Do not touch.

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 conditions.
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 snowthrower is to be stored for an extended period.
4. Run engine a few minutes after throwing snow to prevent freeze up of auger/impeller.
5. Check clutch controls periodically to verify they engage and disengage properly and readjust if necessary. Refer to operator's manual for adjustment instructions.

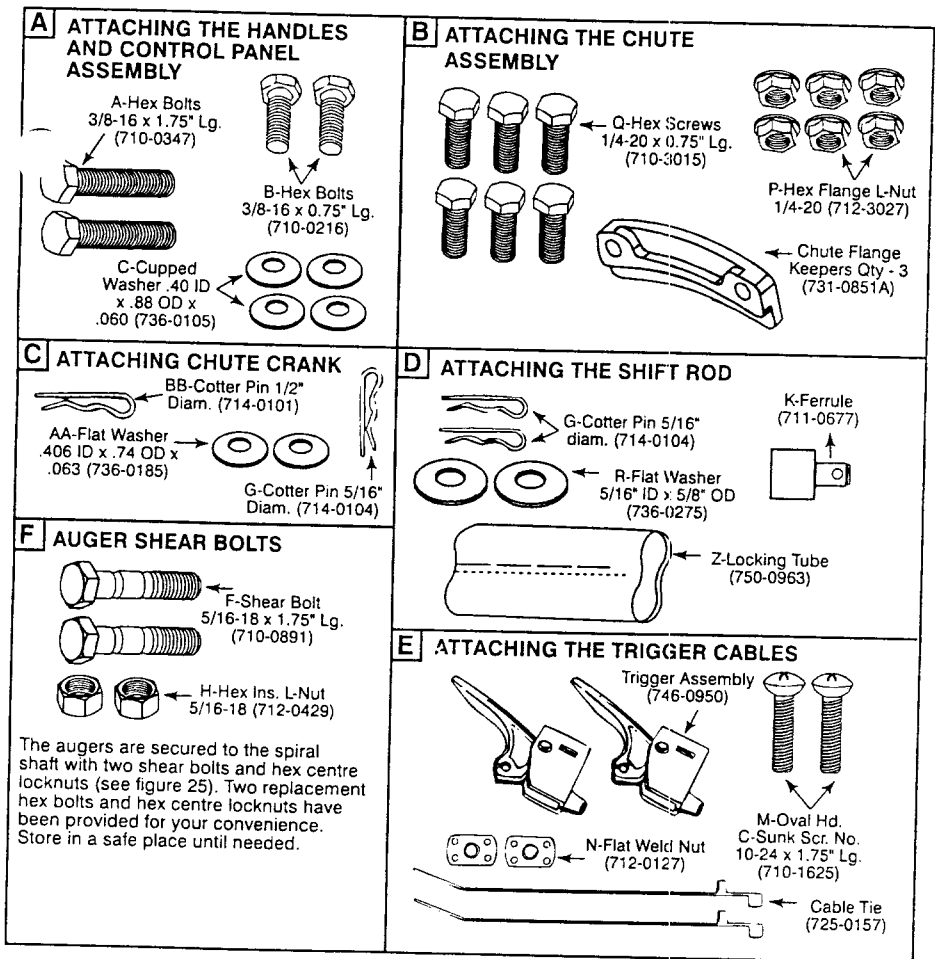


FIGURE 1 - CONTENTS OF HARDWARE PACK.

ASSEMBLY INSTRUCTIONS

NOTE: The snowthrower is shipped with oil and without gasoline. After assembly, refer to separate engine manual for proper fuel and engine oil recommendations.

NOTE: Reference to right hand or left hand side of machine are observed from the operating position.

The snowthrower comes fully assembled except for handles and control panel assembly, control cables, shift rod, chute, chute assembly and optional drift cutters.

NOTE: Your control panel may be slightly different from the one shown in figure 2.

Tools Required for Assembly:

- 9/16" Wrench or adjustable
- 7/16" Wrench or adjustable
- 1/2" Wrench or adjustable

ATTACHING THE HANDLE AND CONTROL PANEL ASSEMBLY (Hardware A)

1. Lift the handles and control panel assembly out and set right side up, crosswise on the front of the carton. **Caution: Be careful not to bend or kink the cables.** Cut the rear section of the carton away.
2. To attach the handles and control panel assembly to the unit, start hex bolts (B) and Belleville washers (C) (cupped side towards the frame) into holes in the frame sides as shown in figure 3. There

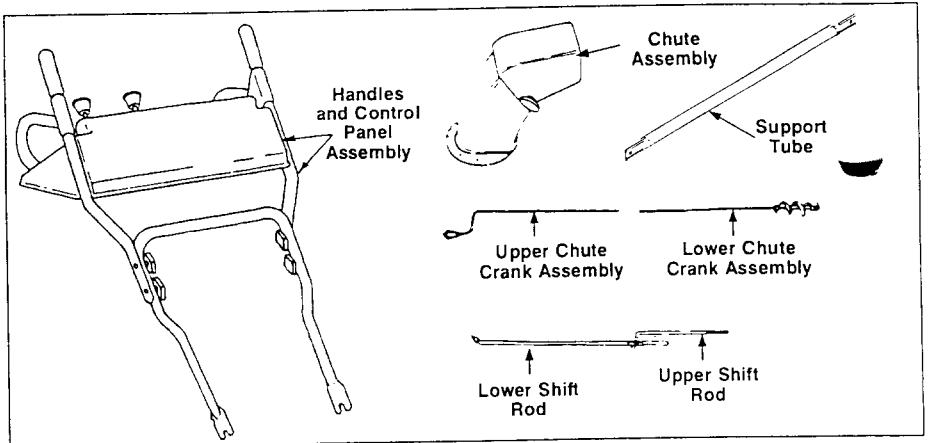


FIGURE 2

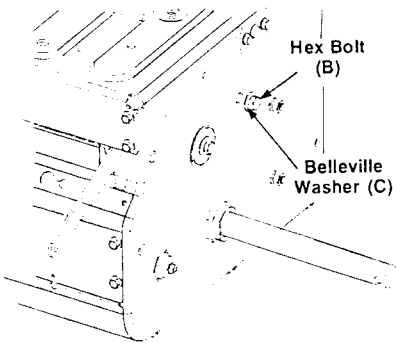


FIGURE 3 - Wheel removed for clarity.

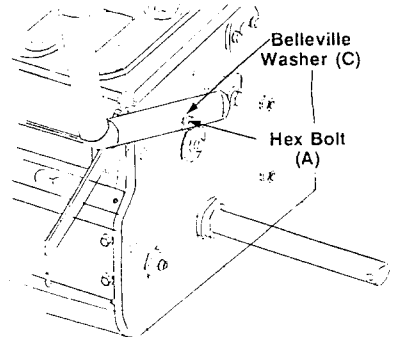


FIGURE 4 - Wheel removed for clarity.

nuts welded to the inside of the frame for these bolts.

- Slide the slotted end of the handles under the Belleville washers on the hex bolts (B).
- Secure the upper hole in the handles with Belleville washers (C) (cupped side against the handles) and hex bolts (A). See figure 4. Do not tighten at this time.
- Pull the snowthrower out of carton. Check all carton inserts to be certain that all loose parts and literature have been removed before the carton is discarded.

ATTACHING THE CHUTE ASSEMBLY (Hardware B)

- Place chute assembly over chute opening, with the opening in the chute assembly facing the front of the unit. Place chute flange keepers beneath lip of chute assembly, with the flat side of chute flange keeper facing downward.
- Insert hex screws (Q) up through chute flange keeper and chute assembly as

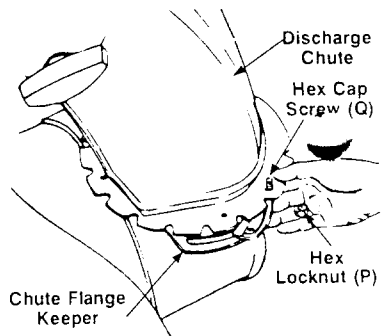


FIGURE 5

shown in figure 5. Secure with hex locknuts (P). Do not over tighten.

ATTACHING THE CHUTE CRANK (Hardware C)

- Place one flat washer (AA) on the end of the lower chute crank then, insert the end of the crank into the hole in the plastic bushing in the chute bracket. See figure

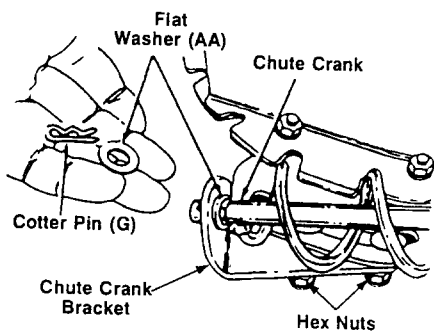


FIGURE 6

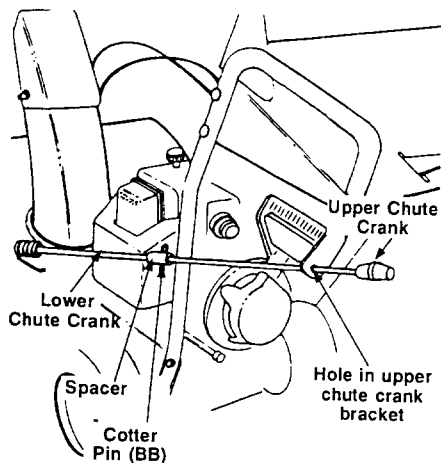


FIGURE 7

6. Secure with remaining flat washer (AA) and cotter pin (G) (5/16" diameter).

Insert upper chute crank through hole in upper chute crank bracket then into spacer. Secure with cotter pin (BB) (1/2" diameter) as shown in figure 7.

- Loosen hex nuts on the lower chute crank bracket and adjust the bracket (see figure 6) so that the spiral on the chute crank fully engages the teeth on the chute assembly. Tighten the nuts on the lower chute crank bracket securely.
- Check to make sure all nuts and bolts on the control panel and all four bolts which secure the handles to the frame are tight.

ATTACHING THE SUPPORT TUBE

- Remove the hex cap screw and hex locknut from the housing. See figure 8.
- Assemble the support tubing to the outside of the housing and secure with hardware previously removed. **Note:** Flat

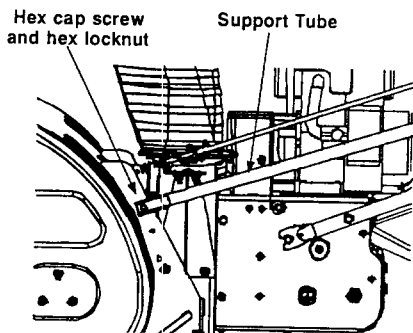


FIGURE 8

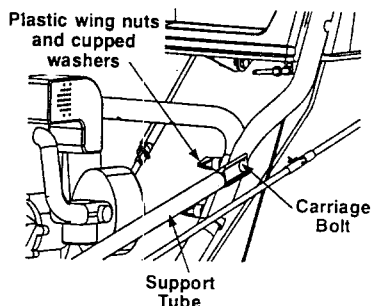


FIGURE 9

sides on the support tube should be towards the housing.

- Attach support tube on the right side of the housing in the same manner.
- Remove the upper two plastic wing nuts, cupped washers and carriage bolts from each side of the handles. See figure 9.
- Attach the support tube to the outside of the handles and secure with plastic wing nuts, cupped washers and carriage bolts previously removed.

ATTACHING THE SHIFT ROD (Hardware D)

- Insert the end of the shift rod with the small hole into the shift arm assembly, located outside the snowthrower frame. Secure with flat washer (R) and cotter pin (G) (washer and cotter pin should be on the engine side of the bracket). See figure 10.
- Slide the shift rod connector (Z) over the threaded end of the upper shift rod and guide down to secure upper and lower shift rods. See figure 11. Tap the connector until it locks on the lower shift rod.

NOTE: If the connector is not properly assembled, the shift rod will

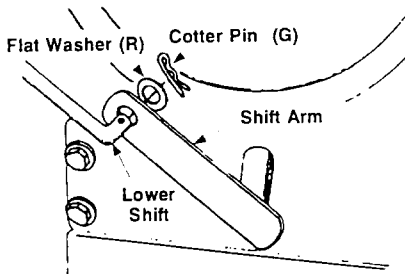


FIGURE 10

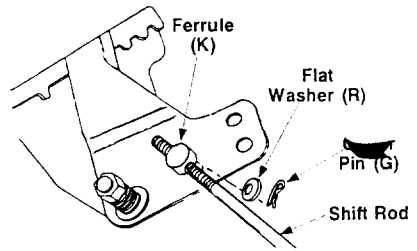


FIGURE 12

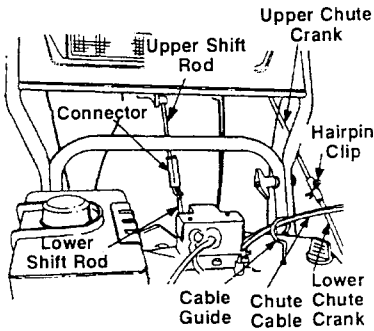


FIGURE 11

pivot and you will not be able to shift gears or change directions.

- Thread the ferrule (K) on the threaded end of the upper shift rod.
- Place the shift lever in the fastest forward position. Push the shift rod down as far as it will go, to put the transmission into the fastest forward position. Thread the ferrule in or out on the shift rod as necessary until the ferrule lines up with the hole in the shift lever as shown in figure 12. Secure with flat washer (R) and internal cotter pin (G).

NOTE: Another counter clockwise turn on the ferrule may be necessary if the unit does not engage into first gear properly.

LAMP WIRING CONNECTION

- Wrap the wire from the lamp down the right handle until the wire can be plugged into the alternator lead wire under the fuel tank. See Figure 13.

ATTACHING THE CLUTCH CABLES

- The clutch cables are in the screw pack. Feed the "Z" fitting up through the inside cut-out in the handle panel (the outside slot is reserved for the trigger cable). See figure 14.

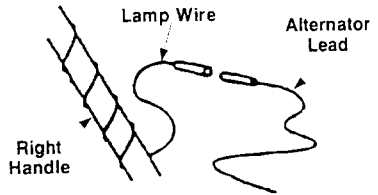


FIGURE 13

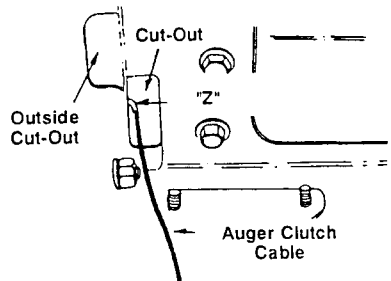


FIGURE 14

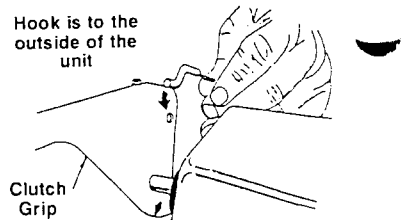


FIGURE 15

- Hook clutch cable in the hole provided in the left hand clutch grip. The hook is to the outside of the unit. See figure 15.
- Hook the remaining cable to the right hand clutch grip in the same manner. The hook is to the outside of the unit.
- For initial settings place the nuts on the cables half way up the threaded portion. See figure 16.

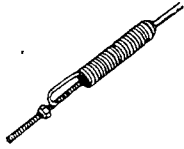


FIGURE 16

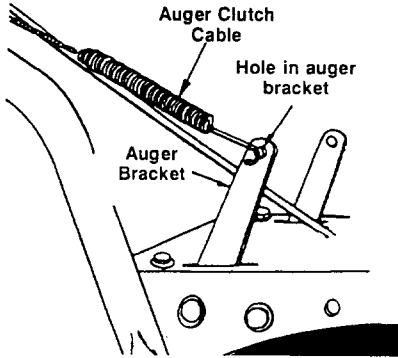


FIGURE 17

- With the clutch grip in the up (released) position, swing the left hand clutch cable down and simply hold it beside the auger bracket. Without forcing the bracket hold it up just enough to remove the play. The hook on the end of the spring must line up with the centre of the hole in the auger bracket. See figure 17.

If it does not, adjust the nut on the cable by sliding the spring up and using a 7/16" wrench to move the nut on the end of the rod up or down as necessary until the hook on the spring aligns with the centre of the hole in the bracket as shown in figure 17. Hook spring into auger bracket.

- Adjust the right hand clutch cable in the same manner as the left hand clutch cable. When adjustment is correct, hook the spring into the drive bracket.
- Correct adjustment on cables is minimal slack but not tight.

NOTE: If the right hand clutch cable is not adjusted correctly, the wheels will tend to turn. If the left hand clutch cable is not adjusted correctly, the augers will not stop rotating.



WARNING: There must not be any tension on either clutch cable spring with the drive or auger clutch grip in the disengaged (up) position. These clutches are a

safety feature, and their function can be overridden if there is tension on either spring with the clutches disengaged.

ATTACHING THE TRIGGER CABLE (Hardware G)

- Feed the trigger cable up through outer portion of cut-out in the handle panel as shown in figure 14.
- Make sure the trigger cable is routed in front of the previously assembled drive cable.
- Place the barrel fitting into the hole in the trigger. Pull on the cable and rotate it around the bottom of the trigger, with the inner cable in the slot, until the cable end can be pushed into the trigger housing and snapped tight. See figure 18.
- Both right and left trigger assemblies and cables should be assembled in the same manner.
- Place flat weld nut (N) into the slot of the right trigger assembly. Position trigger assembly on the underside of the right handle and secure with oval truss head machine screw (M). See figure 19. Attach the left trigger assembly to the left handle in the same manner.

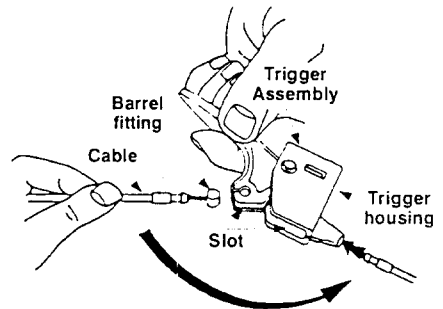


FIGURE 18

Oval Truss Head Machine Screw (M)

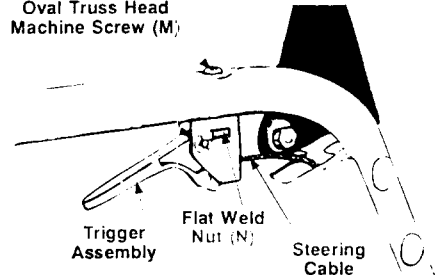
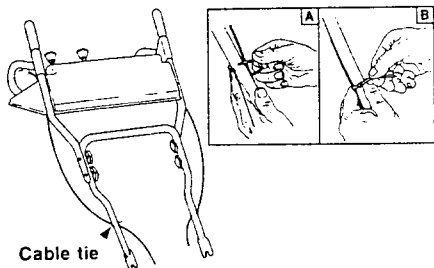


FIGURE 19



Cable tie

FIGURE 21

- Secure left trigger cable to the left handle using a cable tie. Repeat procedure for the right cable. Trim excess ends of cable ties. See figure 21.

FINAL ASSEMBLY AND ADJUSTMENTS

- Insert the optional remote chute cables into the cable guide, located on top of the engine. See figure 11.
- The space between the shave plate (see figure 22) and the ground can be adjusted. For close snow removal, place slide shoes in the low position. Use middle or high position when area to be cleared is uneven.

Adjust slide shoes by loosening the three hex nuts and carriage bolts and moving slide shoes to desired position. Make certain the entire bottom surface of slide shoe is against the ground to avoid uneven wear on the slide shoes. Tighten bolts securely. See figure 23.

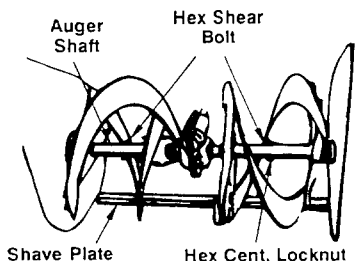


FIGURE 22

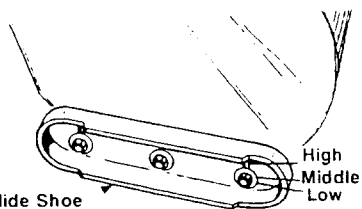


FIGURE 23

BEFORE STARTING

NOTE: The crankcase has been filled with oil and factory tested. Paint on the muffler may have bled off due to testing.

ATTENTION: YOU MUST CHECK OIL LEVEL BEFORE OPERATION. LEVEL MUST BE AT FULL MARK ON DIPSTICK BEFORE ENGINE IS STARTED.

Failure to follow this procedure may result in serious engine damage which will not be covered by warranty.

Your unit may be equipped with a plastic fuel plug at the opening of the fuel tank. Please remove and discard the plug before filling your unit with gas or before putting the unit into operation.

GAS AND OIL FILL-UP

Service the engine with gasoline and oil as instructed in the separate engine manual packed with your snowthrower. Read instructions carefully.

WARNING: Never fill fuel tank indoors. Never fill fuel tank with engine running or while engine is hot. Do not smoke when filling fuel tank.

OPERATION

TO START ENGINE

Electric Starter (Optional)

WARNING: The optional electric starter is equipped with a three-wire power cord and plug, and is designed to operate on 120 volt AC Household current. It must be properly grounded at all times to avoid the possibility of electric shock which may be injurious to the operator. Follow all instructions carefully. Determine that your house wiring is a three wire grounded system. Ask a licensed electrician if you are not certain. If your house wiring system is not a three-wire grounded system, do not use this electric starter under any conditions. If your system is grounded and a three hole receptacle is not available at the point your starter will normally be used, one should be installed by a licensed electrician.

When connecting the power cord, always connect cord to starter on engine first, then plug the other end into a three-hole grounded receptacle.

When disconnecting the power cord, always unplug the end from the three-hole grounded receptacle first.


- Make certain the metal loop on the end of the spark plug wire (inside the boot) is fastened securely over the metal tip on the spark plug. See figure 24.




FIGURE 24

ENGINE WILL NOT START UNLESS IGNITION KEY IS INSERTED INTO IGNITION SLOT IN CARBURETOR COVER. DO NOT TURN IGNITION KEY.



- Make certain the auger and drive clutch levers are in the disengaged (released) position.
- Move throttle control up to FAST  position. Insert ignition key into slot. See figure 25. Be certain it snaps into place. Do not turn key.
- Rotate choke knob to OFF position.
- Connect power cord to switch box on engine. Plug the other end of power cord into a three-hole, grounded 120 volt AC receptacle.
- Push starter button to crank engine. See figure 25. As you crank the engine, move choke knob to FULL choke position.
- When engine starts, release starter button, and move choke gradually to OFF. If engine falters, move choke immediately to FULL and then gradually to OFF.

Recoil Starter:

- Make certain the metal loop on the end of the spark plug wire (inside the boot) is fastened securely over the metal tip on the spark plug. See figure 24.
- Make certain the auger and drive clutch levers are in the disengaged (released) position.
- Move throttle control up to FAST  position. Insert ignition key into slot. See

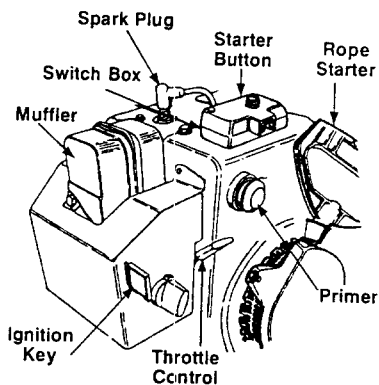


FIGURE 25

figure 25. Be certain it snaps into place. Do not turn key.

- Rotate choke knob to FULL choke position (cold engine start).
- If engine is warm, place choke in OFF position instead of FULL.
- Push primer button two or three times. See figure 8.
- If engine is warm, push primer button once only.

NOTE: Always cover vent hole in primer button when pushing. Additional priming may be necessary for first start if temperature is below 15°F.

- Grasp starter handle (see figure 25) and pull rope out slowly, until it pulls slightly harder. Let rope rewind slowly.
- 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. Repeat until engine starts.
- As engine warms up and begins to operate evenly, rotate choke knob slowly to OFF position. If engine falters, return to FULL choke, then slowly move to OFF position.

TO STOP ENGINE

- Run engine for a few minutes before stopping to help dry off any moisture on the engine.
- To help prevent possible freeze-up of starter, proceed as follows.

Optional Electric Starter: Connect power cord to switch box on engine, then to 120 volt AC receptacle. With the engine running, push starter button and spin the starter for several seconds. The unusual sound made by spinning the starter will not harm engine or starter.

Disconnect the power cord from receptacle first, and then from switch box.

Recoil Starter: 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.

- To stop engine, remove the ignition key. Do not turn key. Disconnect the spark plug wire from the spark plug to prevent accidental starting while equipment is unattended.

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

- Wipe all snow and moisture from the carburetor cover in the area of the control levers. Also, move control levers back and forth several times.

TO ENGAGE DRIVE

- With the engine running near top speed, move shift lever into one of the possible FORWARD or REVERSE positions. Select a speed appropriate for the snow conditions that exist. Use the slower speeds until you are familiar with the operation of the snowthrower.
- Squeeze the left hand auger clutch grip and engage it.
- While the left hand auger clutch grip is engaged, engage the right hand drive clutch grip.
- Release the left hand auger clutch grip only. The interlock mechanism should keep the left hand clutch engaged until the right hand clutch is released.

NOTE: Never move shift lever without first releasing the drive clutch.

TRIGGER LEVERS (optional)

The trigger levers are located on the underside of the handles and used to steer your snowthrower. See figure 19. To turn right, squeeze the right trigger lever and guide the snowthrower to the right. Squeeze and guide the left lever to turn left. These controls should be used while operating your snowthrower in open areas until you become familiar with their operation.

Squeeze both triggers to free wheel or to transport unit.

TIRE PRESSURE

Pneumatic tires only. Tires are over-inflated for shipping purposes. Correct tire pressure is 10-15 psi.

OPERATING TIPS

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



WARNING: Temperature of chute and surrounding areas may exceed 150°F. Avoid these areas.

- For most efficient snow removal, remove snow immediately after it falls.
- Discharge snow downwind whenever possible. The distance snow is thrown can be adjusted by adjusting the angle of the chute assembly. The sharper the angle, the shorter the distance snow is thrown. Slightly overlap each previous swath.
- Set the slide shoes 1/4" below the scraper bar for normal usage. The slide shoes may be adjusted upward for hard-packed snow. Adjust downward when using on gravel or crushed rock.
- Be certain to follow the precautions listed under previous section, "To Stop Engine" to prevent possible freeze up.
- Clean the snowthrower thoroughly after each use.

ADJUSTMENTS



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

REMOTE CHUTE ASSEMBLY ADJUSTMENT

The remote chute control cables have been pre-adjusted at the factory. Move the remote chute lever on the control panel back and forward to adjust angle of the chute assembly.

CHECK ADJUSTMENT OF CLUTCH CABLES

Proper adjustment is achieved by sliding the spring up the cable and threading the nut in or out. Correct adjustment on cables is minimal slack but not tight.

AUGER BELT TENSION ADJUSTMENT

Periodic adjustment of the belt tension may be required due to normal stretch and wear on the belt. Increase belt tension if the augers hesitate while the augers are engaged or decrease tension if the the augers continue to turn when the augers are disengaged. See "Proper Adjustment", page 13.

SHIFT ROD ADJUSTMENT

To adjust the shift rod, remove the cotter pin which secures the shift rod to the shift lever. For proper adjustment refer to "Attaching the Shift Rod", page 5.

SHAVE SHOE ADJUSTMENT

The space between the shave plate and the ground can be adjusted. Refer to "Final Assembly and Adjustment", page 8.

CARBURETOR ADJUSTMENT

Minor carburetor adjustment may be required to compensate for differences in fuel, temperature, altitude and load.

Refer to the separate engine manual packed with your unit for carburetor adjustment information.

NOTE: Failure to comply with suggested maintenance and lubrication specifications will void warranty..

LUBRICATION

WHEELS

Oil or spray lubricant into bearings at wheels at least once a season. Remove wheels, clean and coat axles with a multi-purpose automotive grease.

CHAINS AND SHIFTING MECHANISM

Remove rear cover. Oil all chains, sprockets, bearings, the hexagonal shaft, round shaft and shifting mechanism at least once a season. Use engine oil or a spray lubricant. Avoid getting oil on rubber friction wheel and aluminum drive plate.

CHUTE CRANK WORM

The worm gear on the chute direction crank should be greased with multi-purpose automotive grease.

IMPELLER PULLEY

The impeller pulley should be lubricated once a season. Refer to exploded view of parts, found in the centre of the book, for correct location.

AUGER SHAFT

Remove auger bolts on auger shaft, see figure 22. Oil or spray lubricant inside shaft.

ENGINE

Refer to engine manual for engine lubrication instructions.

HEX SHAFT

Lubricate the gear (hex) shaft with a light weight cold weather lubricant at least once a season or after every 25 hours of operation.

MAINTENANCE and LUBRICATION CHECK LIST

	After First 2 Hours	After 5 Hours	Frequently	Beginning Each Season	Before Storage
Check engine oil level		•			
Change engine oil	•			•	
Tighten all screws and nuts			•		
Check spark plug				•	
Lubricate chute opening				•	
Lubricate wheel axle				•	
Lubricate wheel bearings				•	
Lubricate chains, bearings, and hex shaft				•	•
Check Gear Case Oil Level				•	

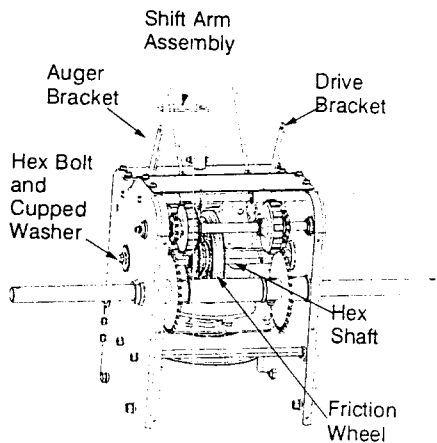


FIGURE 26

IMPORTANT: Keep all grease and oil off of the rubber friction wheel and aluminum drive plate.

If for any reason your transmission was disassembled and the auger cable disconnected, reassemble routing the cable so it does not interfere with any moving parts when pulled tight.

MAINTENANCE



WARNING: Disconnect the spark plug wire and ground against the engine before performing any repairs or maintenance

AUGERS

The augers are secured to the spiral shaft with two shear bolts and hex locknuts. See figure 22. If you hit a foreign object or ice jam, the snowthrower is designed so that the shear bolts will shear.

If the augers will not turn, check to see if the hex bolts have sheared. Two replacement hex bolts and hex lock nuts have been provided with the snowthrower. When replacing bolts, spray an oil lubricant into shaft before inserting new bolts.

SHAVE PLATE AND SLIDE SHOES

The shave plate and slide shoes on the bottom of the snowthrower are subject to wear. They should be checked periodically and replaced when necessary.

NOTE: Some models are equipped with reversible slide shoes.

To remove slide shoes, remove the carriage bolts, Belleville washers and hex nuts which attach them to the snowthrower. Reassemble new slide shoes with the carriage bolts, Belleville washers (cupped side goes against slide shoes) and hex nuts.

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

BELT REMOVAL AND REPLACEMENT

WARNING: Remove the spark plug wire from the spark plug and ground. Drain gasoline from the fuel tank, or place a piece of plastic film underneath the gas cap to prevent gasoline from leaking.

Auger Drive Belt

To remove and replace either the auger drive belt or the drive belt, proceed with the following instructions.

- Disconnect chute crank assembly at the discharge chute by removing the cotter pin and flat washer.
- Remove the plastic belt cover on the front of the engine by removing three self-tapping screws and flat washers. See figure 27.
- Remove the large shoulder bolt and washer on the left hand side of the engine pulley with an adjustable wrench. See figure 28.

NOTE: Reference to right hand or left hand side of machine are observed from the operating position.

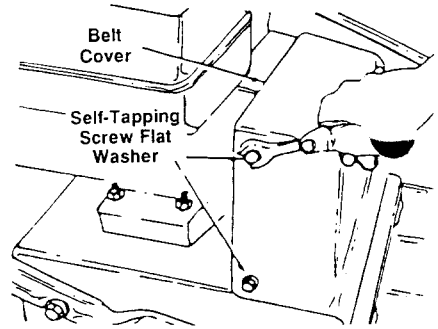


FIGURE 27

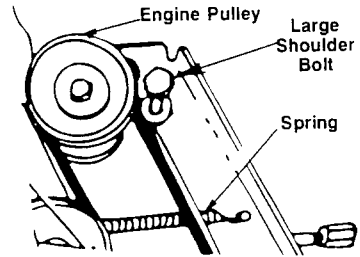


FIGURE 28

- Remove the cotter pin and washer from the ferrule in order to disconnect the auger idler rod from the brake bracket assembly as shown in figure 29.
- Slip the auger drive belt (the front belt) off the engine pulley. See figure 29.
- Pull the brake bracket assembly towards the cable guide roller and unhook the auger cable "Z" fitting.

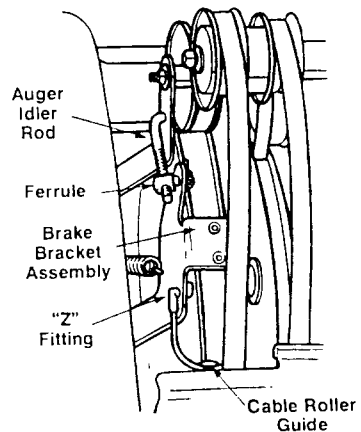


Figure 29

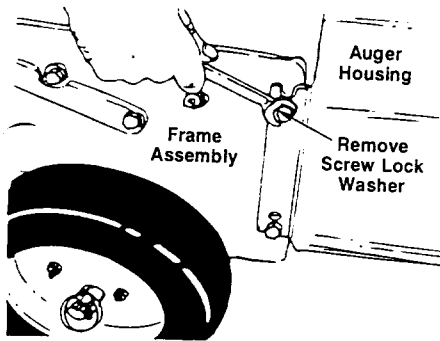


Figure 30

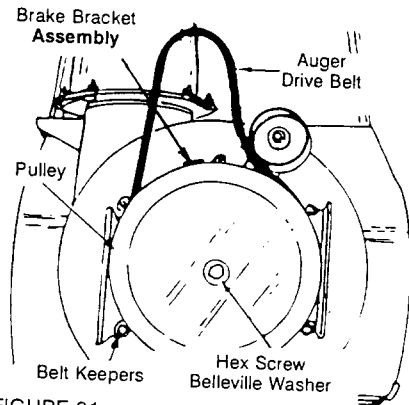


FIGURE 31

- Remove the top screws and lockwashers which attach the auger housing assembly to the frame assembly. A 9/16" wrench is required. See figure 30.
- Separate the auger housing from the frame assembly by tilting the housing forward and pulling up the handles.

To Remove the Auger Drive Belt:

- a. Using a 1/2" wrench remove the hex screw and belleville washer from the centre of the pulley on the auger housing. Lift the brake bracket assembly out of the pulley groove and remove the pulley. See figure 31. Be careful not to lose the key.
- b. Remove and replace auger drive belt inside belt keepers.
- c. Reassemble pulley to auger housing with hex screw and belleville washer (cupped is toward the pulley). Be certain key is in place on shaft and brake puck is seated in the pulley groove.

Proper adjustment: After assembling your snowthrower, with the auger clutch lever in the disengaged position the top surface of the new belt should be even with the outside diameter of the pulley. To adjust, disconnect ferrule from the brake bracket assembly and thread ferrule in (towards idler) to increase tension on belt, out to decrease tension.

NOTE: The brake puck must always be firmly seated in the pulley groove when the auger clutch lever is in the disengaged position.

To Remove the Drive Belt:

- a. Unhook extension spring from the belt cover plate. See figure 28.
- b. Remove drive belt from the engine pulley and bottom drive pulley.
- c. Replace belt and reassemble in reverse order.
- Reassemble the two halves of the unit hooking the lower portion of the auger housing over the stationary shoulder bolts in the frame assembly.
- Secure the two halves with the two screws and lockwashers
- Attach the "Z" fitting of the cable into the brake bracket assembly. See figure 29.
- Slip the auger drive belt over engine pulley.
- Insert ferrule on auger idler rod into bracket assembly and secure with flat washer and cotter pin.
- Reassemble the large shoulder bolt and lockwasher as shown in figure 28.
- Reassemble belt cover and chute crank.
- Remove plastic film from gas cap.

Changing the Friction Wheel

The rubber on the friction wheel is subject to wear and should be checked after 25 hours of operation, and periodically thereafter. Replace the friction wheel rubber if any signs of wear or cracking are found.

- Drain the gasoline from the snowthrower, or place a piece of plastic under the gas cap.
- Tip the snowthrower up and forward, so that it rests on the housing.
- Remove six self-tapping screws from the frame cover underneath the snowthrower and remove cover.
- Remove the wheels from the axle.
- Using a 7/8" wrench hold the hex shaft and remove the hex bolt and cupped

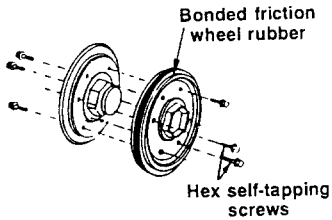


FIGURE 32

washer and bearing from left side of the frame. See figure 26. Hold the friction wheel assembly, and slide the hex shaft out of the unit toward the right hand side.

- Remove the six screws from the friction wheel assembly (three from each side) and remove the bonded friction wheel.
- Reassemble new bonded friction wheel rubber to the friction wheel assembly, tighten the six screws in rotation and with equal force. See figure 32.
- Position the friction wheel assembly up onto the pin of the shift rod assembly and slide the shaft through the friction wheel. See figure 33.

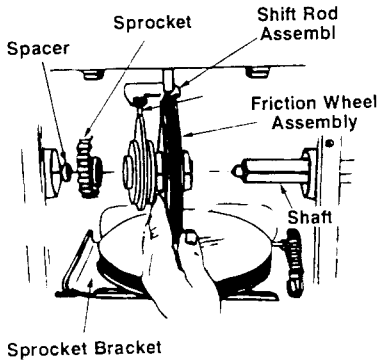


FIGURE 33

- Slide the hex shaft into the hex I.D. of the sprocket, the spacer and the left ball bearing and secure with the bell washer and hex bolt.

NOTE: Make sure the pin from the shift arm assembly is assembled to the new friction wheel assembly.

CAUTION: Check engine and snowthrower frequently for loose nuts, bolts, etc. and keep these items tightened.

STORAGE INSTRUCTIONS



NEVER STORE ENGINE WITH FUEL IN TANK INDOORS OR IN ENCLOSED, POORLY VENTILATED ENCLOSURES, WHERE FUMES MAY REACH AN OPEN FLAME OR SPARK.

If unit is to be stored over 30 days, prepare for storage as instructed in the separate engine manual packed with your unit.

NOTE: Failure to comply with suggested maintenance and lubrication specifications.