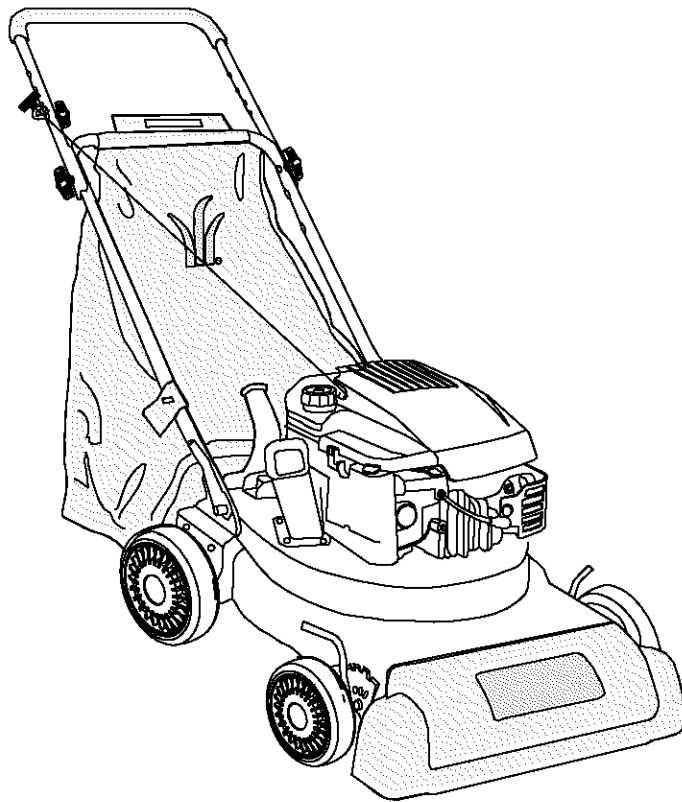


OPERATOR'S MANUAL



CHIPPER SHREDDER VACUUM Model 020



IMPORTANT: READ SAFETY RULES AND INSTRUCTIONS CAREFULLY

Warning: This unit is equipped with an internal combustion engine and should not be used on or near any unimproved forest-covered, brush-covered or grass-covered land unless the engine's exhaust system is equipped with a spark arrester meeting applicable local or state laws (if any). If a spark arrester is used, it should be maintained in effective working order by the operator. In the State of California the above is required by law (Section 4442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal lands. A spark arrester for the muffler is available through your nearest engine authorized service dealer or contact the service department, P.O. Box 368022 Cleveland, Ohio 44136-9722.

MTD PRODUCTS INC. P.O. BOX 368022 CLEVELAND, OHIO 44136-9722

SECTION 1: FINDING YOUR MODEL NUMBER

This Operator's Manual is an important part of your new chipper shredder vacuum. It will help you assemble, prepare and maintain your unit. Please read and understand what it says. Before you start to prepare your chipper-shredder vacuum for its first use, please locate the model plate and copy the information from it in this Operator's Manual. The information on the model plate is very important if you need help from your dealer or the MTD customer support department.

- Every chipper shredder vacuum has a model plate. You can locate it by standing behind the unit in the operating position and looking down behind the engine. See Figure 1.

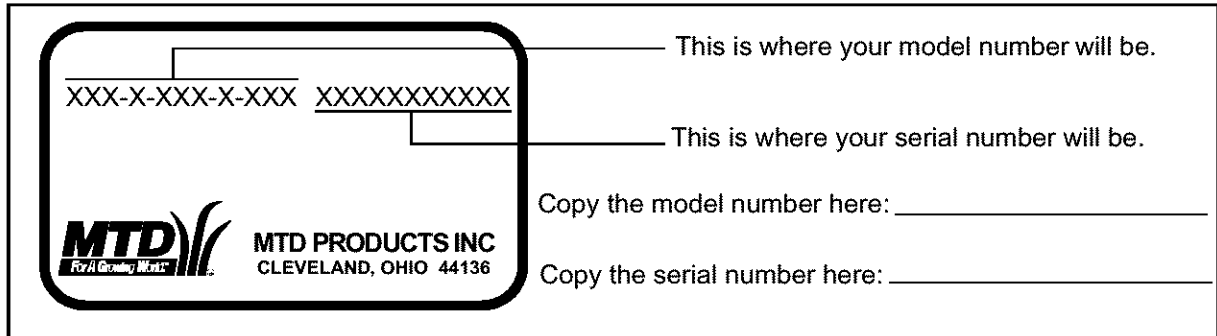


Figure 1

SECTION 2: CALLING CUSTOMER SUPPORT

- **LOCATE YOUR MODEL NUMBER AND SERIAL NUMBER** — Record this information in the space provided. To find your unit's specific model number and serial number, see SECTION 1: FINDING YOUR MODEL NUMBER.
- If you are having difficulty assembling this product or if you have any questions regarding the controls, operation or maintenance of this unit, please call the Customer Support Department.
- Customer Support can be reached by dialing: **1- (330) 220-4MTD (4683)**
or
1- (800)-800-7310
- Please have your model number and serial number ready when you call.
- Although both numbers are important, you will be asked to enter only your **serial** number before your call can be processed.

SECTION 3: IMPORTANT SAFE OPERATION PRACTICES



WARNING: THIS SYMBOL POINTS OUT IMPORTANT SAFETY INSTRUCTIONS WHICH, IF NOT FOLLOWED, COULD ENDANGER THE PERSONAL SAFETY AND/OR PROPERTY OF YOURSELF AND OTHERS. READ AND FOLLOW ALL INSTRUCTIONS IN THIS MANUAL BEFORE ATTEMPTING TO OPERATE YOUR CHIPPER SHEDDER VACUUM. **FAILURE TO COMPLY WITH THESE INSTRUCTIONS MAY RESULT IN PERSONAL INJURY. WHEN YOU SEE THIS SYMBOL, HEED ITS WARNING.**



WARNING: The Engine Exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.



DANGER: Your chipper shredder vacuum was manufactured to be operated according to the rules for safe operation in this manual. As with any type of power equipment, carelessness or error on the part of the operator can result in serious injury. This unit is capable of amputating fingers and hands and throwing objects. Failure to observe the following safety instructions could result in serious injury or death.

1. GENERAL OPERATION

- Read this operator's manual carefully in its entirety before attempting to assemble this machine. Read, understand, and follow all instructions on the machine and in the manual(s) before operation. Be completely familiar with the controls and the proper use of the machine before operating it. Keep this manual in a safe place for future and regular reference and for ordering replacement parts.
- Your chipper shredder vacuum is a powerful tool, not a plaything. Therefore, exercise extreme caution at all times. Your unit has been designed to chip/shred, vac, and blow (if equipped with attachment) vegetation found in a normal yard. Do not use it for any other purpose.
- Never allow children under 16 to operate the unit. Children 16 years and older should only operate under close parental supervision. Only responsible individuals who are familiar with these rules of safe operation should be allowed to use your unit.
- Keep the area of operation clear of all persons, particularly small children. Stop the engine when they are in the vicinity of the unit.
- When feeding material into this equipment, be extremely careful that pieces of metal, rocks, bottles, cans or other foreign objects are not included. Personal injury or damage to the machine could result.
- Always wear approved safety glasses or safety goggles, during operation and while performing an adjustment or repair, to protect eyes from foreign objects that may be thrown from the machine.
- Wear sturdy, rough-soled work shoes and close fitting slacks and shirt. Shirt and slacks that cover the arms and legs and steel-toed shoes are recommended. Do not wear loose fitting clothes or jewelry, and secure hair above shoulder length. They can be caught in moving parts. Never operate a unit in bare feet, sandals or sneakers. Wear gloves when feeding material in the chipper chute.
- Do not operate the unit while under the influence of alcohol or drugs.
- Do not over reach. Keep proper footing and balance at all times.
- Never place your hands or any part of your body or clothing near rotating parts. Keep clear of the discharge opening at all times. Never insert your hands or any part of your body or clothing into the nozzle, chipper chute or discharge opening as the rotating impeller can cause serious injury.
- If it is necessary for any reason to unclog the feed intake or discharge openings or to inspect or repair any part of the machine where a moving part can come in contact with your body or clothing, stop the machine, allow it to cool, disconnect the spark plug wire from the spark plug and move it away from the spark plug before attempting to unclog, inspect or repair.
- Never operate unit without vacuum bag or if equipped with blower chute properly affixed to unit. Large open end of bag must be securely closed to prevent objects from being blown out rear of bag.
- If operating in the blower mode (optional blower chute attachment may be included with your unit):
 - Do not stand or walk in front of blower discharge or aim it at bystanders, pets, vehicles, etc. Objects thrown out the discharge can cause personal injury or property damage.
 - Do not direct blower discharge against a wall or other vertical obstruction. Discharged material may ricochet back at operator.
 - Adjust vac nozzle height to highest position to reduce likelihood of heavier objects (e.g., small stones, pieces of glass or metal) being picked up and thrown out the discharge. Raising nozzle to highest position also maximizes air intake for improved blowing performance.

- Never attempt to remove or empty vacuum bag when engine is running. Shut the engine off and wait for the impeller to come to a complete stop before removing the bag. The impeller continues to rotate for a few seconds after the engine is shut off. Never place any part of the body in the impeller area until you are sure the impeller has stopped rotating.
- Keep all guards and safety devices in place and operating properly.
- Do not allow an accumulation of processed material to build up in the discharge area as this will prevent proper discharge.
- When feeding material into the chipper, do not stand with your face or body directly in front of the chipper chute. Stand to one side. Material being feed may bounce back out of the chute.
- If the cutting mechanism strikes a foreign object or if your machine should start making an unusual noise or vibration, immediately stop the engine, disconnect the spark plug wire and move the wire away from the spark plug. Allow the machine to stop and take the following steps.
 - Inspect for damage
 - Repair or replace any damaged parts.
 - Check for any loose parts and tighten to assure continued safe operation.
- Muffler and engine become hot and can cause a burn. Do not touch.
- Do not allow leaves or other debris to build up on engine's muffler. The debris could ignite and cause a fire.
- Do not operate engine if air cleaner or cover over carburetor air intake is removed, except for adjustment. Removal of such parts could create a fire hazard.

2. CHILDREN

Tragic accidents can occur if the operator is not alert to the presence of small children. Children are often attracted to the chipping and vacuuming activity. Never assume that children will remain where you last saw them.

- Keep children out of the work area and under the watchful eye of a responsible adult other than the operator.
- Be alert and turn the unit off if a child enters the area.
- Never allow children under the age of 16 to operate the chipper shredder vacuum.

3. SERVICE

- Use extreme care in handling gasoline and other fuels. They are extremely flammable and the vapors are explosive.
 - Store fuel and oil in approved containers, away from heat and open flame, and out of the reach of children.
 - Check and add fuel before starting the engine. Never remove gas cap or add fuel while the engine is running. Allow engine to cool at least two minutes before refueling.
 - Replace gasoline cap securely and wipe off any spilled gasoline before starting the engine as it may cause a fire or explosion.
 - Extinguish all cigarettes, cigars, pipes and other sources of ignition.
 - Never refuel unit indoors because flammable vapors will accumulate in the area.
 - Never store the machine or fuel container inside where there is an open flame or spark such as a gas hot water heater, clothes dryer or furnace.
- Never run your machine in an enclosed area as the exhaust from the engine contains carbon monoxide, which is a odorless, tasteless and deadly poisonous gas.
- To reduce fire hazard, keep engine and muffler free of leaves, grass, and other debris build-up. Clean up fuel and oil spillage. Allow unit to cool at least 5 minutes before storing.
- Before cleaning, repairing, or inspecting, make certain the impeller and all moving parts have stopped. Disconnect the spark plug wire and keep wire away from spark plug to prevent accidental starting. Do not use flammable solutions to clean air filter.
- Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.
- Never tamper with safety devices. Check their proper operation regularly.
- After striking a foreign object, immediately stop the engine, disconnect the spark plug wire from the spark plug, and thoroughly inspect the unit for any damage. Repair damage before starting and operating unit.
- Do not alter or tamper with the engine's governor setting. The governor controls the maximum safe operating speed of the engine. Overspeeding the engine is dangerous and will cause damage to the engine and to other moving parts of the machine.
- Check the vacuum bag frequently for wear. Replace if worn or damaged.
- Keep vacuum bag free of debris when not in use.



WARNING - YOUR RESPONSIBILITY: Restrict the use of this power machine to persons who read, understand and follow the warnings and instructions in this manual and on the machine.

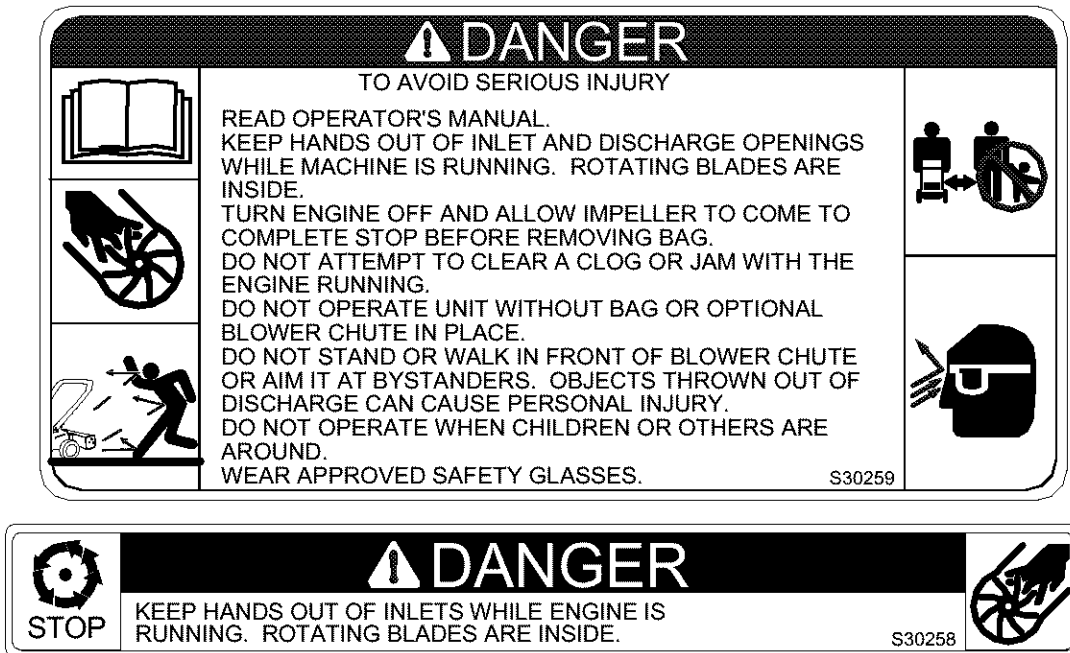


Figure 2 Safety labels found on your unit

SECTION 4: ASSEMBLY INSTRUCTIONS

IMPORTANT: This unit is shipped **WITHOUT GASOLINE** or **OIL** in the engine. After assembly, see separate engine operator's manual for proper fuel and engine oil recommendations.

NOTE: To determine right and left hand sides of your chipper shredder vacuum, stand behind the unit, in the operating position.

UNPACKING CHIPPER SHREDDER VACUUM

Remove staples, break glue, or cut tape at carton end and peel along top flap to open carton. Remove loose parts included with unit (i.e., operator's manual, etc.). Cut along dotted lines and lay carton down flat. Remove styrofoam blocks from under unit and remove bag and handle assembly. Check for any other loose parts before discarding carton.

LOOSE PARTS IN CARTON

See Figure 3

- Handle Assembly
- Bag
- Blower Chute Assembly (If Equipped)
- Oil (Not Shown)
- Operator's Manual
- Safety Glasses (Not Shown)

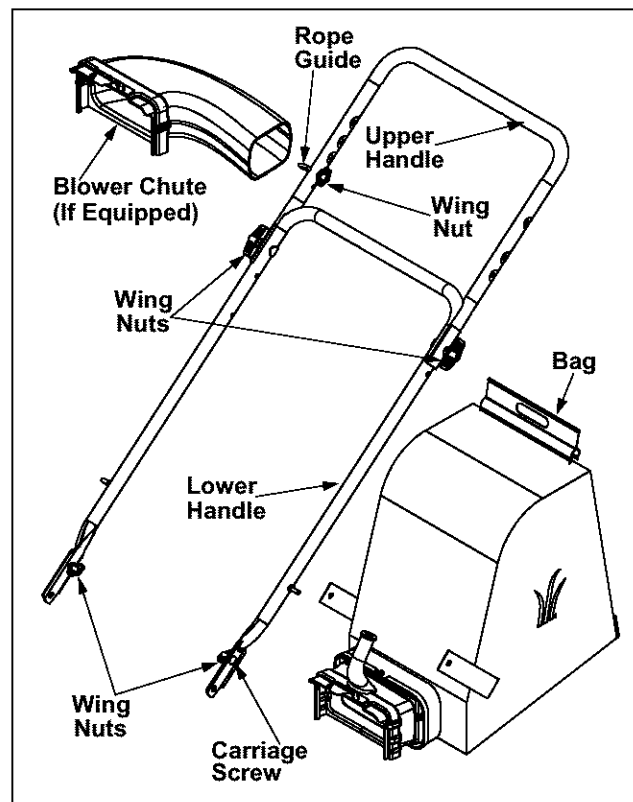


Figure 3

ATTACHING THE HANDLE

1. Disconnect the spark plug wire from the spark plug and ground it against the engine.
2. Fold out the upper handle until it aligns with lower handle. Make sure the rope guide is on the right side of upper handle. See Figure 3.
3. Secure by tightening the wing nuts which connect the two handles together.
4. Remove the hairpin clips from the handle brackets and the carriage screws and wing nuts from the lower handle. See Figure 4.
5. Place lower handle over the pins on handle brackets and secure with hairpin clips, carriage screws and wing nuts.

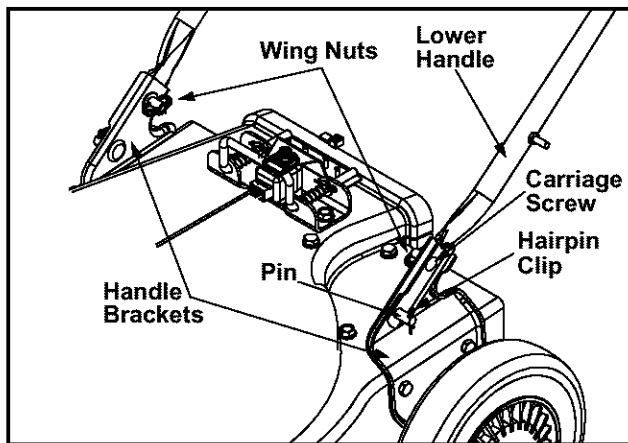


Figure 4

6. The rope guide is attached to the right side of upper handle. Loosen the wing nut which secures the rope guide, but do not remove.
7. Pull the starter rope out of the engine slowly and slip the starter rope through the rope guide. Tighten the wing nut.

ATTACHING THE BAG

1. Grasp bag handle with one hand and pull locking rod with other hand toward engine, while slipping bag **over rim** of discharge opening. See Figure 5.
2. Release locking rod so the ends are over the front tab on the bag handle to secure bag in place.
3. Snap bag clip to the top of the lower handle.
4. Place the lower straps on the bag over the top the lower handle, hooking them on the studs.

NOTE: The safety switch button attached to the mounting bracket must be fully depressed by the tip of front tab on the bag handle when securing the bag or engine will not start.

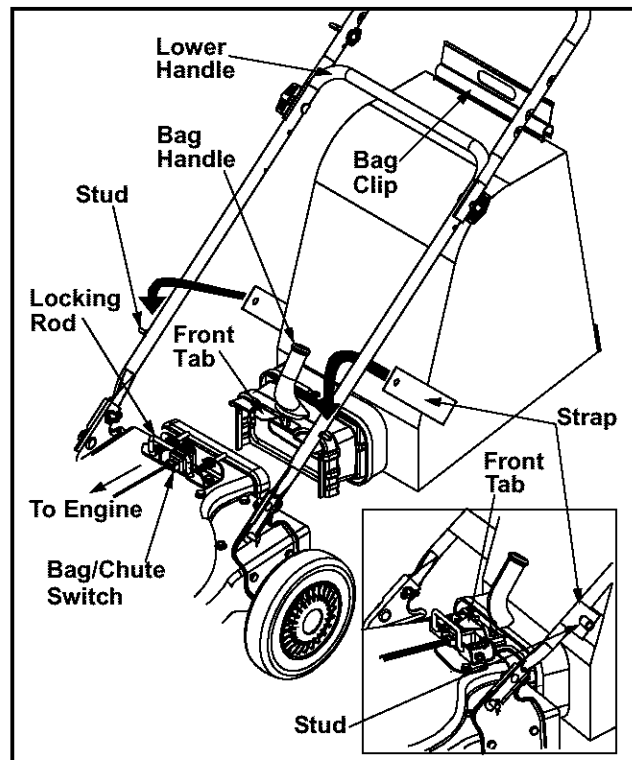


Figure 5

ATTACHING THE BLOWER CHUTE

(If Equipped)

1. Grasp blower chute with one hand and pull locking rod with other hand toward engine, while slipping blower chute **over rim** of discharge opening. See Figure 6.
2. Release locking rod so the ends are over the front tab on the blower chute to secure in place.
3. Raise the nozzle height to the highest setting when using the blower chute. Refer to nozzle height adjustment in the OPERATION section.

NOTE: The safety switch button attached to the mounting bracket must be fully depressed by the tip of front tab on the blower chute or engine will not start.

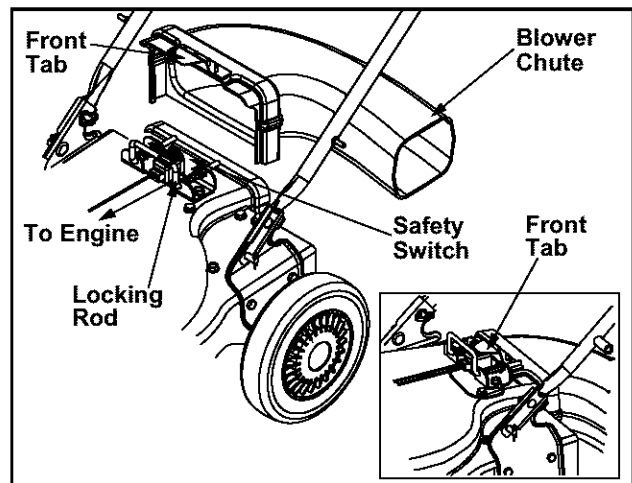


Figure 6

SECTION 5: OPERATION



The operation of any chipper shredder vacuum blower can result in foreign objects being thrown into the eyes, which can damage your eyes severely. **Always wear the safety glasses provided with this unit or eye shields before chipping or blowing and while performing any adjustments or repairs.** We recommend Wide Vision Safety Mask for over spectacles or standard glasses.

Before using your Chipper Shredder Vacuum, Refer to SECTION 3: IMPORTANT SAFE OPERATION PRACTICES of this manual. Always be careful.

IMPORTANT: Care should be taken not to shut off the engine or to run out of gasoline while feeding material into the chipper shredder vacuum. Check the fuel level periodically to avoid running out of gasoline. Do not turn the engine off until all chipping is completed to avoid jamming. If the unit runs out of gas or is turned off while it is chipping or shredding it may be necessary to unclog the unit before it can be restarted. Refer to "Removing The Flail Screen" in the MAINTENANCE section.

GAS AND OIL FILL-UP

Service the engine with gasoline and oil as instructed in the separate engine manual packed with your chipper shredder vacuum.

Read instructions carefully.

NOTE: Your chipper shredder vacuum is shipped without oil in the engine; however, a small amount of oil may be present from the factory. Do not overfill.



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

TO STOP ENGINE

1. To stop engine, move throttle control lever to OFF position.
2. Disconnect spark plug wire and ground it to prevent accidental starting while equipment is unattended.

TO START ENGINE



WARNING: Be sure no one other than the operator is standing near the chipper shredder vacuum while starting or operating. Do not operate this chipper shredder vacuum unless the bag or blower chute have been properly installed.

1. Attach spark plug wire to spark plug.
2. Make sure safety switch wire is connected to engine and properly grounded.
3. **Engines with choke lever:** Move choke lever on engine to CHOKE position. (A warm engine may not require choking.)
Engines with primer: Prime engine as instructed in separate engine manual.
4. The throttle control is located on the engine. Move engine throttle control lever to FAST position.
5. Standing behind the unit, grasp starter handle and pull rope out slowly until engine reaches start of compression cycle (rope will pull slightly harder at this point). Let the rope rewind slowly.

NOTE: You may hear a noise when reaching the start of the compression cycle. This noise is caused by the flails and fingers, which are part of the shredding mechanism, falling into place, and should be expected. In addition, the flails and fingers will be noisy after the engine is started, until the impeller reaches full speed.

6. Pull rope with a rapid, continuous, full arm stroke. Keep a firm grip on starter handle. Let rope rewind slowly.
7. Repeat steps 4 and 5 until engine fires. When engine starts, move choke control (if so equipped) gradually to RUN position.

TO EMPTY BAG

1. Unhook bag straps from the lower handle and unsnap bag clip from the top of the lower handle. See Figure 7.
2. Grasp bag handle with one hand and pull lock rod on mounting bracket with other hand toward engine to release.
3. Remove bag from over the rim of the discharge opening. See Figure 5.
4. Twist the two buttons on the back of the bag to unlock and empty contents. See Figure 7.
5. Hold bag handle and bag clip while emptying the contents.

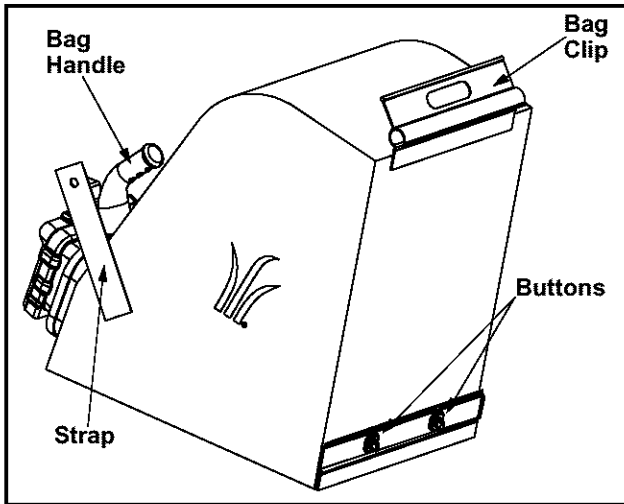


Figure 7

TO REMOVE BLOWER CHUTE (If Equipped)

1. Grasp blower chute with one hand and pull lock rod on mounting bracket with other hand toward engine to release. See Figure 6.
2. Remove blower chute from over the rim of the discharge opening.

OPERATION

Place both hands on top of upper handle to push unit over yard waste. Yard waste such as leaves and pine needles can be vacuumed up through the nozzle for shredding. After material been shredded by the flail blades on the impeller assembly, it will be discharged into catcher bag or through blower chute. Do not attempt to shred or chip any material other than vegetation found in a normal yard (i.e., branches, leaves, twigs, etc.). Avoid fibrous plants such as tomato vines until they are thoroughly dried out. Material such as stalks or heavy branches up to 1 1/2" in diameter may be fed into the chipper chute. See Figure 8.

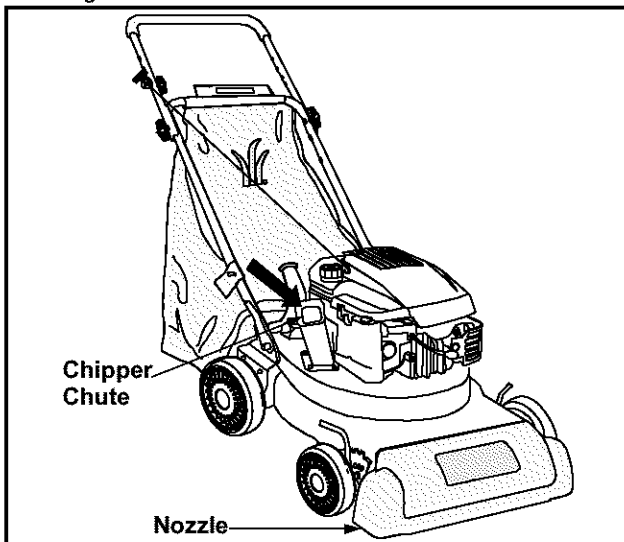


Figure 8

IMPORTANT: The flail screen located inside the housing in the discharge area. If the flail screen becomes clogged, remove and clean as instructed in SECTION 6: MAINTENANCE. For best performance, it is important to keep the chipper blade sharp. Refer to SECTION 6: MAINTENANCE.



WARNING: Do not at any time make any adjustment to the unit without first stopping engine and disconnecting spark plug wire.

NOZZLE HEIGHT ADJUSTMENT

The nozzle can be adjusted to any of five positions, ranging from 5/8" to 3 3/4" ground clearance. See Figure 9. The nozzle height has to be adjusted according to the conditions. Move the height adjustment levers forward or backward to adjust the nozzle upwards or downwards.

NOTE: In general, raise the nozzle height to vacuum a thick layer of leaves or to operate with the blower chute and lower nozzle height for smoother surfaces. Picture is shown without engine for clarity.

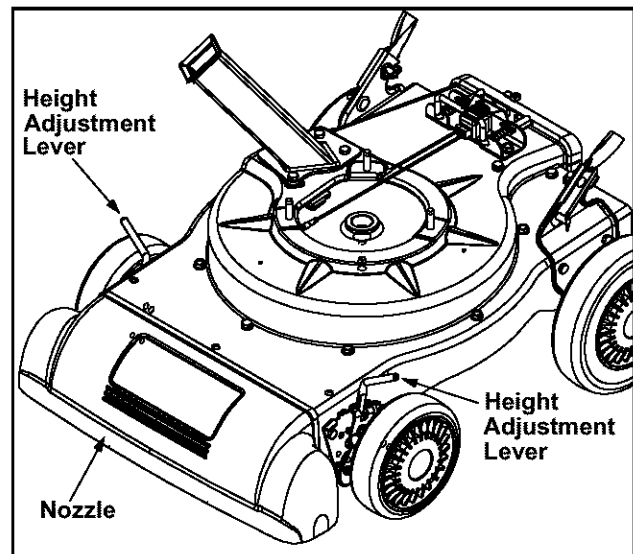


Figure 9

CARBURETOR ADJUSTMENT



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

Minor carburetor adjustment may be required to compensate for differences in fuel, temperature, altitude or load. Do not make unnecessary adjustments. Factory settings are satisfactory for most applications and conditions. If adjustment is needed, refer to the separate engine manual packed with your chipper shredder vacuum.

NOTE: A dirty air cleaner will cause engine to run rough. Be certain air cleaner is clean and attached to the carburetor before adjusting carburetor.

SECTION 6: MAINTENANCE



WARNING: Always stop engine and disconnect spark plug wire before cleaning, lubricating or performing any repairs or maintenance.

CLEANING

Clean the chipper shredder vacuum thoroughly after each use. Wash the bag periodically with water. Allow to dry thoroughly in the shade. Do not use heat.

ENGINE

Refer to the separate engine manual for engine maintenance instructions.

Maintain **engine oil level** as instructed in the separate engine manual packed with your unit. Read and follow instructions carefully.

Service **air cleaner** every 25 hours under normal conditions. Clean every few hours under extremely dusty conditions. Poor engine performance and flooding usually indicates that the air cleaner should be serviced. To service the air cleaner, refer to the separate engine manual packed with your unit.

The **spark plug** should be cleaned and the gap reset once a season. Spark plug replacement is recommended at the start of each season; check engine manual for correct plug type and gap specifications. Clean the engine regularly with a cloth or brush. Keep the cooling system (engine blower housing area) clean to permit proper air circulation which is essential to engine performance. Be certain to remove all leaves and combustible debris from muffler area.

LUBRICATION

Wheels- Place a few drops of SAE 30 oil on each shoulder screw once a season. See Figure 12.

Nozzle height adjustment levers- Lubricate nozzle height adjustment levers at pivot point with light oil. Refer to Figure 9.

Lock Rod- Lubricate the lock rod and compression springs which attach to the mounting bracket. Refer to Figure 5.

REMOVING THE FLAIL SCREEN

If the discharge area becomes clogged, remove the flail screen and clean area as follows.

1. Stop the engine. Make certain the chipper shredder vacuum has come to a complete stop. **Disconnect the spark plug wire** before unclogging the discharge chute.
2. Remove the vacuum bag or blower chute from the unit as instructed in the OPERATION section to obtain access to flail screen. See Figure 10.

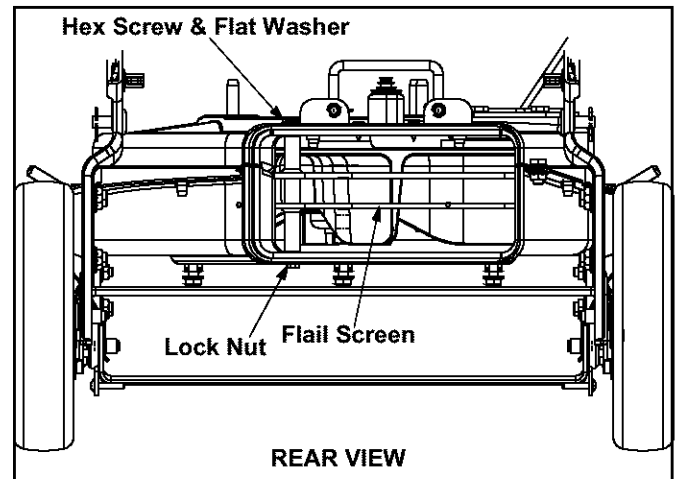


Figure 10

3. Remove hex screw on right side of unit that attaches to the flail screen. See Figure 11.
4. Remove hex screw and flat washer on top of rear housing near mounting bracket and the lock nut that secures flail screen. See Figure 10 and Figure 12.
5. Remove and clean the screen by scraping or washing with water. Reinstall the flail screen.

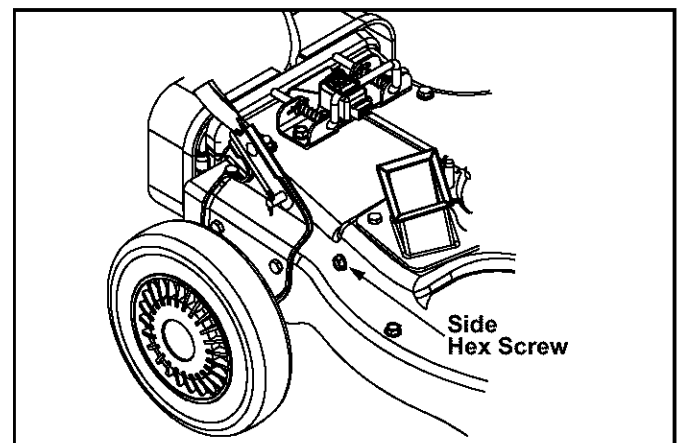


Figure 11

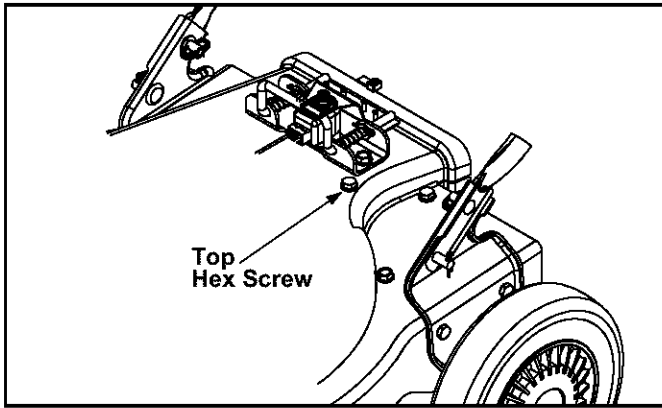


Figure 12

SHARPENING OR REPLACING CHIPPER BLADE

Because the engine on this unit has a tapered crankshaft, a special impeller removal tool (part number 753-0638) is required to remove the impeller assembly. For further assistance, contact your local service dealer.

NOTE: When tipping the unit, empty the fuel tank and keep engine spark plug side up.

1. **Disconnect the spark plug wire** and ground it away from the spark plug.
2. Remove the front hubcaps, shoulder screws, wave washers, and bell washers that attach to the front wheels. See Figure 13.
3. Remove the shoulder screws that go through the pivot arms and height bracket adjusters to the front support brace. See Figure 13.

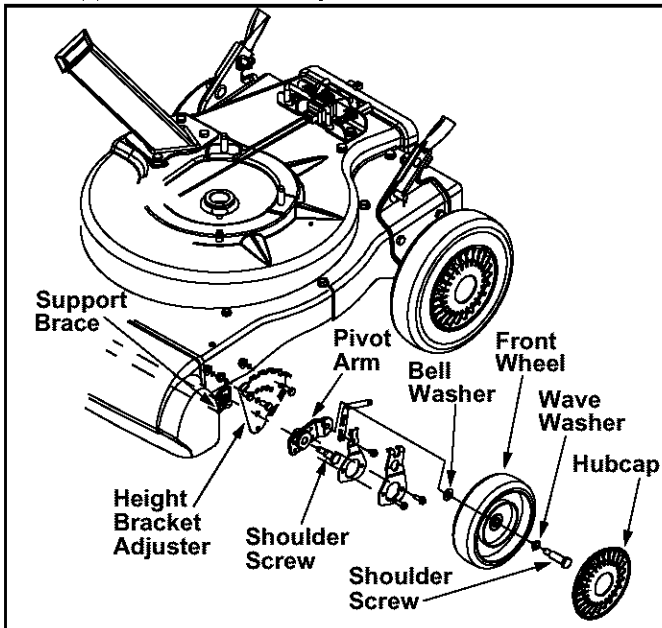


Figure 13

4. Remove the three screws on the upper housing that secure the nozzle cover and the nine screws that secure the lower housing to the upper housing. See Figure 14.

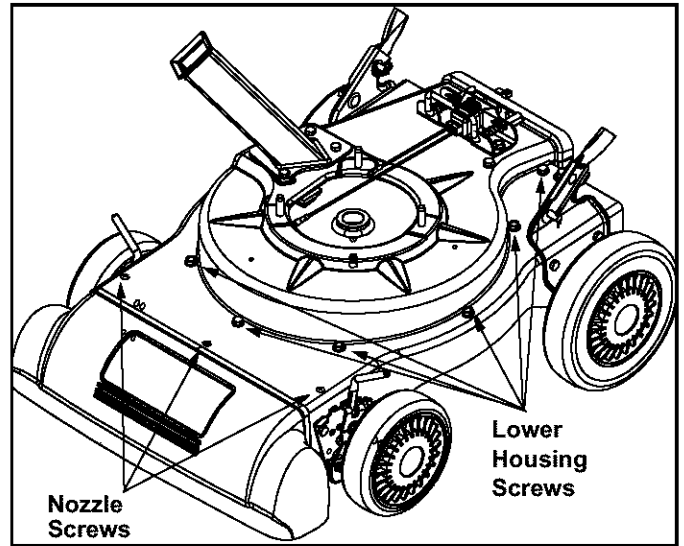


Figure 14

5. Remove lock nut that secures flail screen to the lower housing. The flail screen does not have to be removed. See Figure 10 and Figure 12.
6. Remove the hex bolt, lock washer and flat washer that secure the impeller assembly to the crankshaft. See Figure 15.

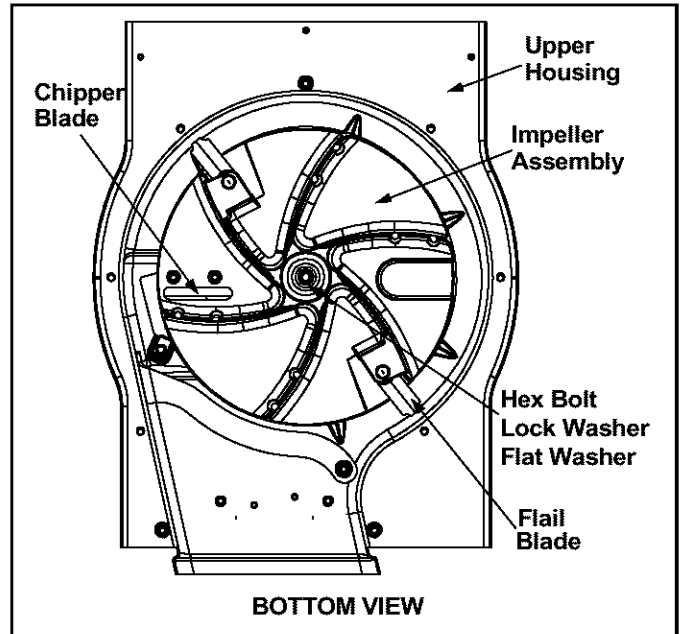


Figure 15

7. Apply lubricant to the threads of impeller removal tool and then thread the tool into the crankshaft. Stop when the impeller assembly can move on the crankshaft.
8. Remove the impeller assembly from the crankshaft. Unthread the impeller removal tool from the impeller assembly.
9. Remove the blade using a 3/16" allen wrench on the outside of the blade and 1/2" wrench on the impeller assembly.

10. Replace or sharpen chipper blade.
11. When sharpening blade, protect hands by using gloves and follow the original angle of grind.
12. Reassemble by performing steps 1 through 9 in reverse order.
 - Tighten blade screws to 210 - 250 in-lbs.
 - Tighten impeller bolt to 375 - 425 in-lbs.

NOTE: Make certain blade is reassembled with the sharp edge facing upward. See Figure 16.

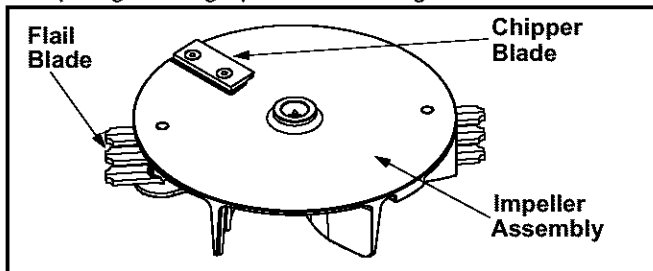


Figure 16

SECTION 7: OFF-SEASON STORAGE

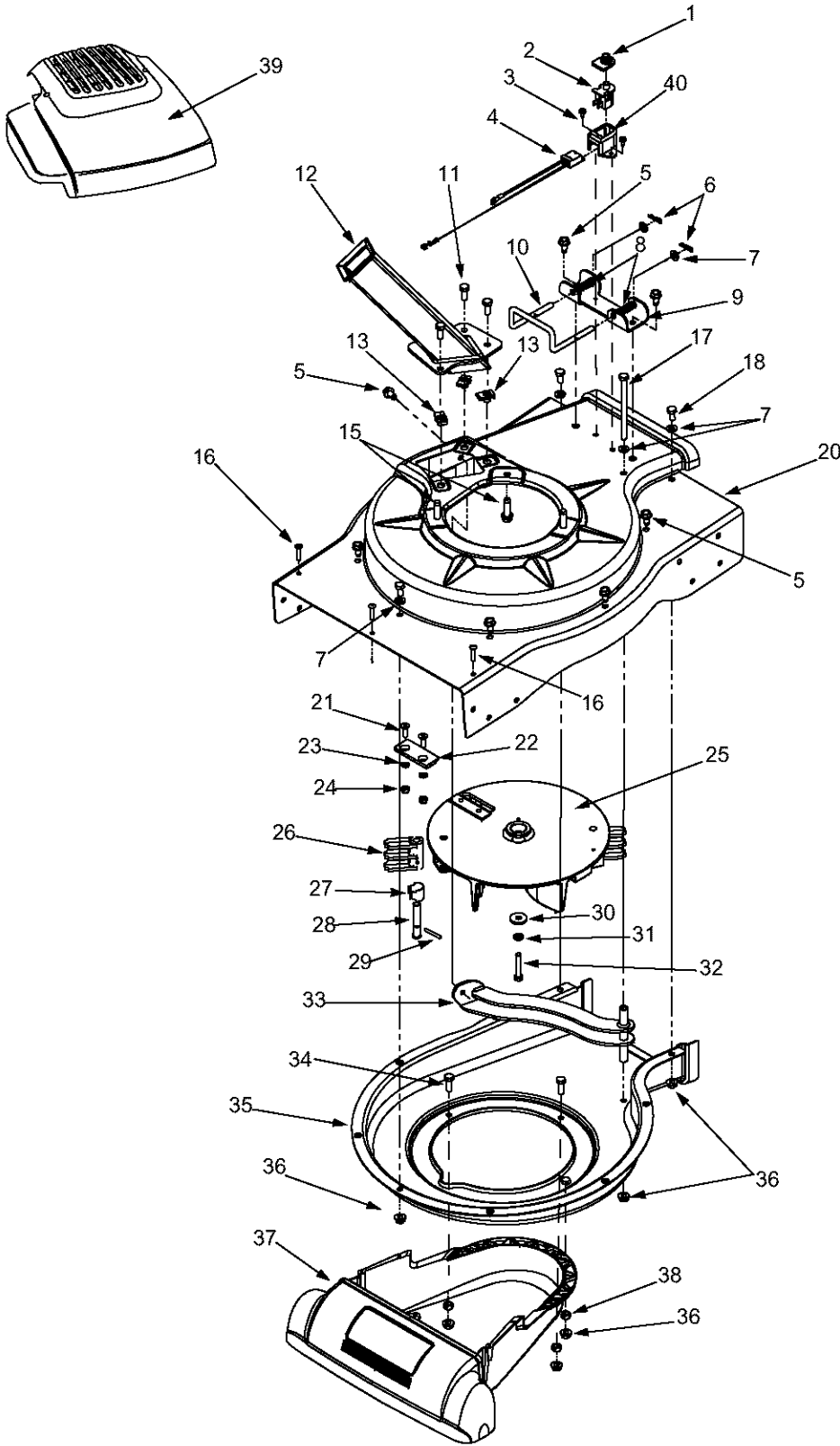
The following steps should be taken to prepare your chipper shredder vacuum for storage.

1. Remove all dirt from exterior of engine and equipment.
2. Refer to engine manual for correct engine storage instructions.
3. Wipe unit with an oiled rag to prevent rust (use a light oil or silicone), especially if storing in an unventilated or metal storage shed.
4. Store in a dry, clean area. Do not store next to corrosive materials, such as fertilizer.

SECTION 8: TROUBLE SHOOTING GUIDE

Trouble	Possible Cause(s)	Corrective Action
Engine fails to start	Fuel tank empty or stale fuel. Spark plug wire disconnected. Cannot pull recoil cord. Choke not in ON position. Faulty spark plug. Safety switch not depressed. Safety switch wire is disconnected to engine or not properly grounded.	Fill tank with clean, fresh gasoline. Fuel will not last over thirty days unless a fuel stabilizer is added. Connect wire to spark plug. Obstruction lodged in impeller. Disconnect spark plug wire and remove lodged object. Move CHOKE (if equipped) to ON position. Clean, adjust gap or replace. Safety switch must be depressed by the front tab on the bag handle when securing the bag. Connect safety switch wire to engine connector and ground to mounting bracket.
Loss of power; operation erratic	Spark plug wire loose. Unit running on CHOKE. Blocked fuel line or stale fuel. Water or dirt in fuel system. Low engine RPM.	Connect and tighten spark plug wire. Move choke lever (if equipped) to OFF position. Clean fuel line; fill tank with clean fresh gasoline. Fuel will not last over thirty days unless a fuel stabilizer is used. Disconnect fuel line at carburetor to drain fuel tank. Refill with fresh fuel. Always run engine at full throttle.
Too much vibration	Loose parts or damaged impeller.	Stop engine immediately and disconnect spark plug wire. Have unit serviced by a an authorized service dealer.
Unit does not discharge	Discharge chute clogged. Foreign object lodged in impeller. Low engine RPM. Vacuum bag is full.	Stop engine immediately and disconnect spark plug wire. Clean flail screen and inside of discharge opening. See Maintenance section of this manual. Stop engine immediately and disconnect spark plug wire. Remove lodged object. Always run engine at full throttle. Empty bag.
Rate of discharge slows considerably or composition of discharged material changes	Low engine RPM. Chipper blade dull.	Always run engine at full throttle. Replace chipper blade or see your authorized service dealer.

Model 020

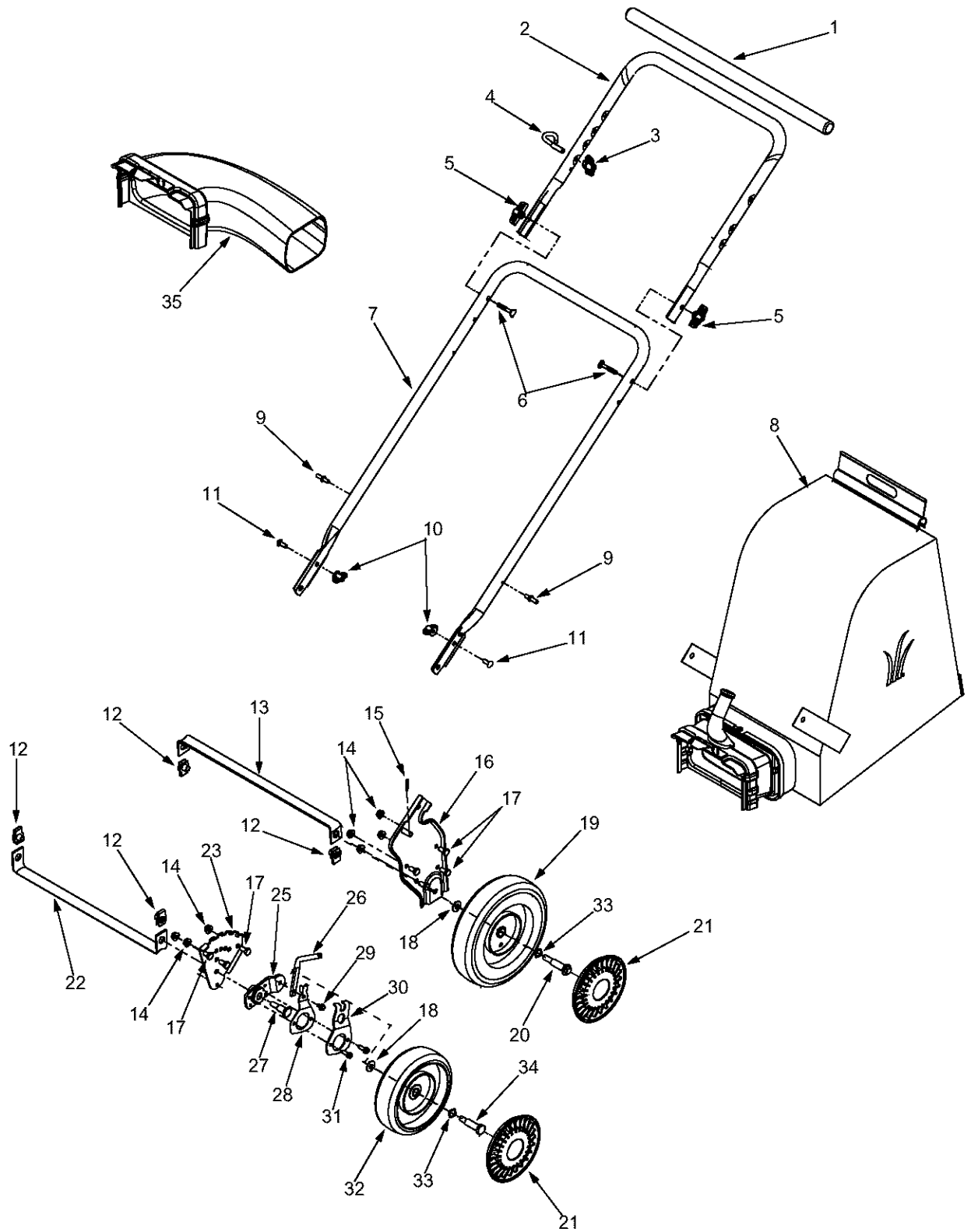


REF NO.	PART NO.	DESCRIPTION	REF NO.	PART NO.	DESCRIPTION
1	725-1700	Switch Cover	22	781-0490	Chipper Blade
2	725-3166	Safety Switch	23	736-0119	Lock Washer 5/16
3	710-0224	Hex Washer Screw #10-16 x .50	24	712-0411	Hex Lock Nut 5/16-24
4	629-0920	Wire Harness	25	681-0152	Impeller Ass'y
5	710-0604	Hex Washer Screw 5/16-18 x .625	26	719-0329	Flail Blade
6	714-0104	Cotter Pin	27	781-0735	Pin Clip
7	736-0264	Flat Washer .330 ID x .630 OD	28	711-1401	Clevis Pin
8	732-0962	Compression Spring	29	715-0166	Spiral Pin
9	781-0778	Mounting Bracket	30	736-0247	Flat Washer 3/8 ID x 1.25 OD
10	747-1153	Lock Rod	31	736-0217	Lock Washer 3/8
11	710-3008	Hex Cap Screw 5/16-18 x .75	32	710-0818	Hex Cap Screw 3/8-24 x 2.0
12	681-0122	Chipper Chute Ass'y	33	681-0154	Screen Ass'y
13	726-0454	U-Clip Lock Nut 5/16-18	34	710-3038	Hex Cap Screw 5/16-18 x .875
15	710-0502A	Hex Washer Screw 3/8-16 x 1.25	35	781-0721	Lower Housing
16	710-0969	Screw #12-16 x 1.0	36	712-3004A	Lock Nut 5/16-18
17	710-3195	Hex Cap Screw 5/16-18 x 4.5	37	731-2265	Nozzle Cover
18	710-3025	Hex Cap Screw 5/16-18 x .625	38	712-0158	Lock Nut 5/16-18
20	781-0720	Upper Housing	39	731-1402B	Shroud
21	710-1054	Hex Screw 5/16-24 x 1.0	40	731-1613	Safety Switch Cover

NOTE: For **painted parts**, please refer to the list of color codes below. Please add the applicable color code, wherever needed, to the part number to order a replacement part. For instance, if a part numbered 700-xxxx is painted Yard-Man Green, the part number to order would be 700-xxxx-0665.

Yard-Man Green: 0665
Yard-Man Yellow: 0674
Powder Black: 0637

Model 020



REF NO.	PART NO.	DESCRIPTION	REF NO.	PART NO.	DESCRIPTION
1	720-0295	Foam Grip	18	736-0105	Bell Washer .401 ID x .870 OD
2	749-0438C	Upper Handle	19	734-1992	Wheel 9 x 2
3	720-0279	Knob	20	738-1015	Shoulder Screw 3/8-16
4	710-1205	Eye Bolt	21	731-1426	Hubcap
5	720-0276	Handle Knob 5/16-18	22	781-0725	Front Wheel Support Brace
6	710-1174	Carriage Bolt	23	781-0765	Hgt Bracket Adjuster LH
7	749-0907A	Lower Handle		781-0766	Hgt Bracket Adjuster RH (Not Shown)
8	664-0090	Bag Ass'y	25	748-0417	Pivot Arm
9	711-1293	Studs	26	747-1100	Handle Height Adjuster
10	712-0397	Wing Nut 1/4-20	27	738-1017	Shoulder Screw 3/8-16
11	710-0703	Carriage Screw 1/4-20 x .75	28	732-0864	Height Adjuster Plate Spring
12	726-0453	Lock U-Clip Nut 3/8-16	29	710-0653	Hex Washer Screw 1/4-20 x .375
13	781-0777	Rear Wheel Support Brace	30	782-0578	Spring Lever Support Bracket
14	712-3004A	Flange Lock Nut 5/16-18	31	710-0642	Hex Washer Screw 1/4-20 x .75
15	714-0104	Cotter Pin	32	734-1978	Wheel 8 x 2
16	681-0155	Handle Bracket Ass'y LH	33	736-0232	Wave Washer .531 ID x .781 OD
	681-0156	Handle Bracket Ass'y RH (Not Shown)	34	738-0213	Shoulder Screw
17	710-3025	Hex Cap Screw 5/16-18 x .625	35	631-0090	Blower Chute Ass'y (If Equipped)

NOTE: If your unit is not equipped with an blower chute assembly, you may purchase one by ordering OEM-290-012.

MANUFACTURER'S LIMITED WARRANTY FOR:



The limited warranty set forth below is given by MTD PRODUCTS INC ("MTD") with respect to new merchandise purchased and used in the United States, its possessions and territories.

MTD warrants this product against defects in material and workmanship for a period of two (2) years commencing on the date of original purchase and will, at its option, repair or replace, free of charge, any part found to be defective in material or workmanship. This limited warranty shall only apply if this product has been operated and maintained in accordance with the Operator's Manual furnished with the product, and has not been subject to misuse, abuse, commercial use, neglect, accident, improper maintenance, alteration, vandalism, theft, fire, water or damage because of other peril or natural disaster. Damage resulting from the installation or use of any accessory or attachment not approved by MTD Products Inc. for use with the product(s) covered by this manual will void your warranty as to any resulting damages.

Normal wear parts or components thereof are subject to separate terms as follows: All normal wear part or component failures will be covered on the product for a period of 90 days regardless of cause. After 90 days, but within the two year period, normal wear part failures will be covered ONLY IF caused by defects in material or workmanship of OTHER component parts. Normal wear parts and components include, but are not limited to, belts, blades, blade adapters, grass bags, rider deck wheels, seats, snow thrower skid shoes, shave plates and tires. Batteries are covered by a 90-day limited replacement warranty.

HOW TO OBTAIN SERVICE: Warranty service is available, WITH PROOF OF PURCHASE THROUGH YOUR LOCAL AUTHORIZED SERVICE DEALER. To locate the dealer in your area, please check for a listing in the Yellow Pages or contact the Customer Service Department of MTD PRODUCTS INC by calling 1-800-800-7310 or writing to P.O. Box 368022, Cleveland, Ohio 44136-9722. No product returned directly to the factory will be accepted unless prior written permission has been extended by the Customer Service Department of MTD PRODUCTS INC.

This limited warranty does not provide coverage in the following cases:

- a. The engine or component parts thereof. These items carry a separate manufacturer's warranty. Please refer to the applicable manufacturer's warranty on these items.

- b. Routine maintenance items such as lubricants, filters, blade sharpening and tune-ups, or adjustments such as brake adjustments, clutch adjustments or deck adjustments; and normal deterioration of the exterior finish due to use or exposure.
- c. Log splitter pumps, valves and cylinders have a separate one year warranty.
- d. MTD does not extend any warranty for products sold or exported outside of the United States of America, its possessions and territories, except those sold through MTD's authorized channels of export distribution.

No implied warranty, including any implied warranty of merchantability or fitness for a particular purpose, applies after the applicable period of express written warranty above as to the parts as identified. No other express warranty or guaranty, whether written or oral, except as mentioned above, given by any person or entity, including a dealer or retailer, with respect to any product shall bind MTD. During the period of the Warranty, the exclusive remedy is repair or replacement of the product as set forth above. (Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.)

The provisions as set forth in this Warranty provide the sole and exclusive remedy arising from the sales. MTD shall not be liable for incidental or consequential loss or damages including, without limitation, expenses incurred for substitute or replacement lawn care services, for transportation or for related expenses, or for rental expenses to temporarily replace a warranted product. (Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion or limitation may not apply to you.)

In no event shall recovery of any kind be greater than the amount of the purchase price of the product sold. Alteration of the safety features of the product shall void this Warranty. You assume the risk and liability for loss, damage, or injury to you and your property and/or to others and their property arising out of the use or misuse or inability to use the product.

This limited warranty shall not extend to anyone other than the original purchaser, original lessee or the person for whom it was purchased as a gift.

How State Law Relates to this Warranty: This limited warranty gives you specific legal rights, and you may also have other rights which vary from state to state.