



Owner/Operator Manual

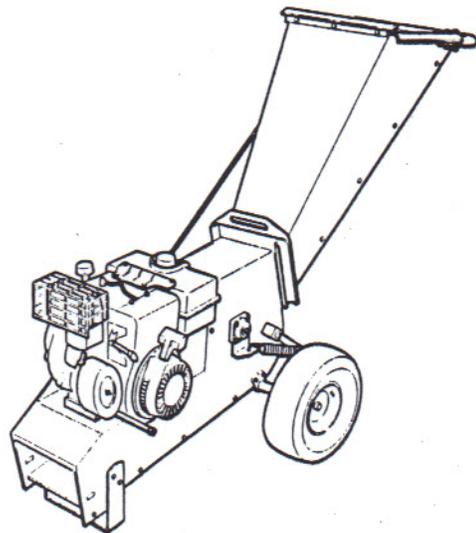
Tomahawk Pro Chipper

- Safety
- Assembly
- Features and Controls
- Operation
- Maintenance

Models

47042 — 10HP

47044 — 12HP



Thank you for purchasing the unit. It was carefully designed and manufactured to provide excellent performance if properly operated and maintained.

Read this manual. This is a safety, operation and general maintenance manual which does not attempt to cover major repairs. This manual is considered a permanent part of the unit and it must stay with the unit if it is resold. A replacement manual can be obtained from the factory. To order, call or write to the address on the following page.

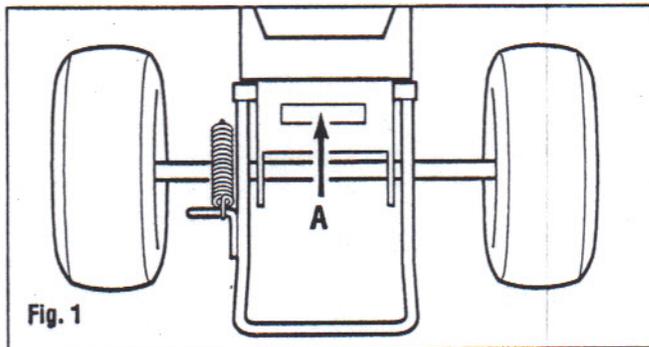
All information in this manual is based on the latest product information available at the time of printing. Review this manual frequently to familiarize yourself with the unit, its features and operation.

The unit has met the rigid safety standards of the Outdoor Power Equipment Institute and an independent testing laboratory.



The warranty statement is included on the back cover of this manual. Read it carefully. Also, please complete and return the owner registration card included with this manual.

If you have any problems or questions concerning the unit, contact your local authorized dealer or the factory (our customer service telephone numbers and mailing addresses are listed on the next page).



Owner Registration Card

Please fill out and mail the enclosed postpaid owner registration card. This card will register you as the owner of the unit.

Engine Service and Repair

For engine service or repair, contact your nearest authorized engine dealer. To locate your nearest engine dealer, look in the Yellow Pages under "Engines—Gasoline". The engine on this unit is warranted by the engine manufacturer's warranty. Any unauthorized work performed on the engine during the warranty period may void this warranty. For complete details on the engine manufacturer's warranty, refer to the engine owner manual.

Model/Serial Numbers

This model/serial number is located on the model/serial number decal (A, Fig. 1). For quick reference, record these numbers in the spaces below.

Date of Purchase:

Model/Serial Number:



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

SPARK ARRESTER WARNING TO RESIDENTS OF CALIFORNIA AND OTHER STATES

Under California law, and under the laws of several other states, you are not permitted to operate an internal combustion engine using hydrocarbon fuels on any forest, brush, hay, grain, or grass covered land; or land covered by any flammable agricultural crop, without an engine spark arrester in continuous effective working order.

The engine on the unit is an internal combustion engine which burns gasoline, a hydrocarbon fuel, and must be equipped with a spark arrester muffler in continuous effective working order. The spark arrester must be attached to the engine exhaust system in such a manner that flames or heat from the exhaust system will not ignite flammable material. Failure of the owner/operator of the unit to comply with this regulation is a misdemeanor under California law (and other states) and may also be a violation of state and/or federal regulations, laws, ordinances or codes. Contact your local fire marshal or forest service for specific information about which regulations apply in your area. Contact your local engine dealer for information about obtaining a spark arrester.

Service and Repair

For factory authorized service, contact your authorized dealer. Do not return parts directly to the factory. When ordering parts, provide your dealer with the model/serial numbers of the unit and a description of the parts required.

Replacement Parts

Factory specified replacement parts are available from your authorized dealer or directly from the factory. For parts ordering information, refer to the parts catalog.

Left and Right Sides

Left and right sides of the unit are determined from the operator's position, facing the hopper inlet.

Customer Service

If you have questions or problems with the unit, contact your local dealer – or call or write to the factory at the addresses listed below. When calling or writing the factory, provide the model/serial number of the unit.

IN THE U.S.:

Garden Way Incorporated

102nd St. and 9th Ave.
Troy, New York 12180
For Service: (800) 520-5520
For Parts: (800) 648-6776

IN CANADA:

Garden Way Incorporated

320 Van Sickle Rd., Unit 12
Saint Catharines, Ontario L2R 6P7
For Technical Service or Parts:
(800) 225-3585

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Section 1 Safety

Important! Safe Operating Practices for the Unit



This is a safety alert symbol. It is used in this manual and on decals on the unit to alert you to potential hazards. Whenever you see this symbol, read and obey the safety message that follows it. Failure to obey the safety message could result in personal injury or property damage.

SAFETY MESSAGE SIGNAL WORDS

Along with the safety alert symbol, the words **DANGER**, **WARNING** and **CAUTION** are used in this manual and on decals on the unit to indicate the degree or level of hazard seriousness:

DANGER

HAZARD

Indicates an imminently hazardous situation which, if not avoided, *will* result in death or serious injury.

WARNING

HAZARD

Indicates a potentially hazardous situation which, if not avoided, *could* result in death or serious injury.

CAUTION

HAZARD

Indicates a potentially hazardous situation which, if not avoided, *may* result in minor or moderate injury. It may also indicate unsafe actions.

INTRODUCTION

1. The unit is capable of amputating hands and feet and throwing objects. The following general safety precautions must be fully understood and followed during operation. Review these instructions frequently and never take chances. If you do not understand any part of this manual or need assistance, contact your dealer or our service department. Failure to observe the following safety instructions could result in serious injury or death.

2. Serious accidents causing injury or property damage can occur if the following safety instructions are not followed. The operator is solely responsible for accidents or hazards that occur when using the unit. Preventing accidents is the responsibility of every equipment operator. Accidents

can be prevented. Be careful before, during and immediately after using any powered equipment.



3. Read, understand and follow all instructions in this manual and on the unit before operating the unit. Replacement manuals are available from the factory. To order a replacement manual, contact the factory at the address indicated in this manual. Provide the model/serial number of the unit when ordering.

4. Know the location and function of all controls before operating the unit. Know how to stop the engine quickly in case of an emergency. Familiarize yourself with all safety and operation decals on the unit. If these decals are damaged or not legible, clean or replace them as needed.

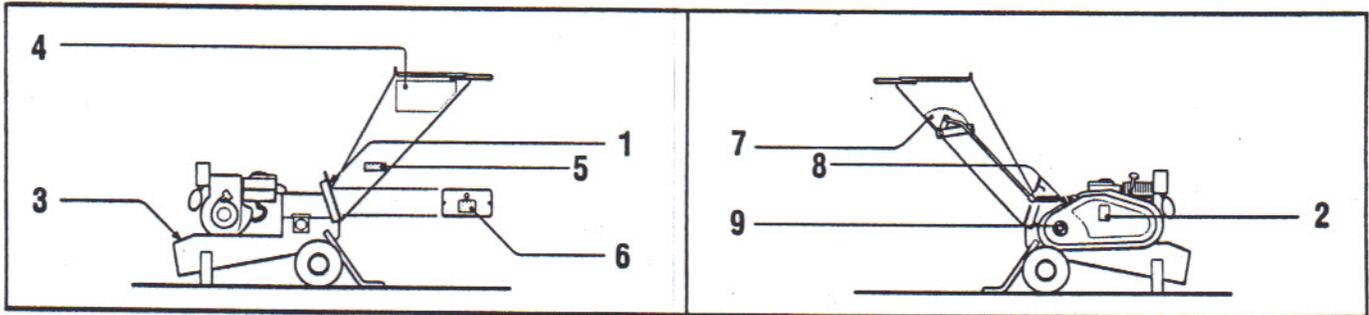
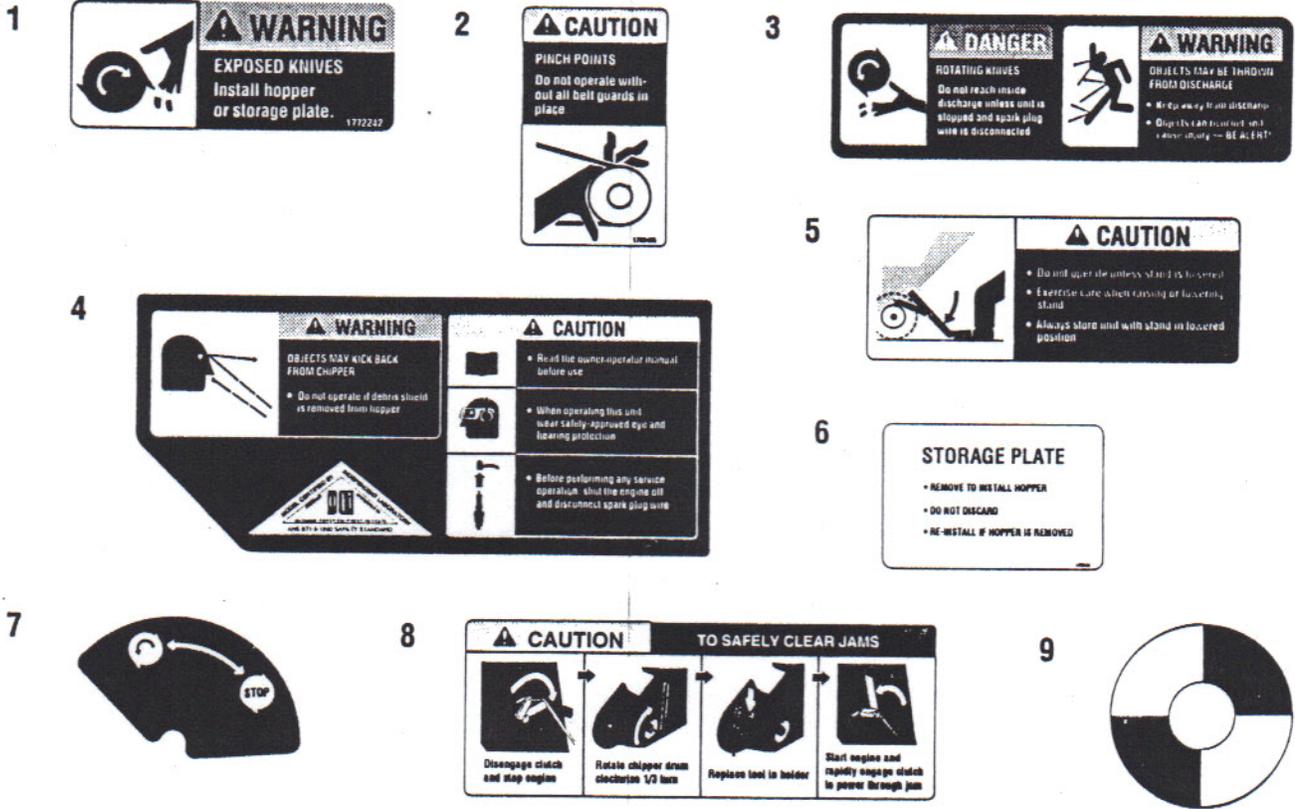
5. Read the engine owner/maintenance manual provided before operating the unit. Read and follow all safety instructions provided in that manual.

6. Only allow responsible adults, who have read and understand this manual, and the engine owner manual, to operate the unit.

Section 1: Safety (continued)

SAFETY DECALS

Refer to the information on the previous page and below for safety and instruction decal descriptions and locations. Keep safety and instruction decals on the unit clean, legible and intact. Refer to the parts list for decal part numbers and ordering information.



1. Warning, exposed knives decal.
2. Caution, belt/pulley pinch points decal (under belt guard).
3. Warning/danger, discharge hazard/rotating knives decal.
4. Warning/caution, hopper decal.
5. Caution, extend stand decal.
6. Instruction, storage plate decal.
7. Instruction, clutch operation decal.
8. Instruction, clearing jams decal.
9. Chipper rotation indicator decal.

Section

2 Optional Kits and Accessories

Kit	Description	Part Number
Collection Bag	60 lbs. maximum capacity.	47510
Tow Hitch	Allows the unit to be towed by a lawn and garden tractor	47508
Electric Start	Allows the unit to be started with the turn of a key	47509
Bumper	Protects engine parts (Air cleaner, muffler, recoil starter)	47512
Storage Cover	Protects the unit during storage	1772443
Knife Kit	Replaces worn chipper knives	1772231
10HP Service Kit	Includes: Spark plug, engine oil, V-belt, fuel stabilizer, air filter	1772234
12HP Service Kit	Includes: Spark plug, engine oil, V-belt, fuel stabilizer, air filter	1772236

To order the kits listed above, contact your dealer or call or write to the addresses listed on page 3, under *Customer Service*.

Section

3 Assembly

ASSEMBLY CHECKLIST



1. Package Inspection

Inspect crate for evidence of product damage. If suspect damage exists, contact the carrier (trucking company) immediately.

2. Package Contents

- Chipper
- Hopper
- Chipper drive clutch rod
- Tamper
- Hardware bag — Includes:
 - Chipper drive clutch spring
 - Goggles
 - Ear plugs
 - (1) 5/16-18 x 3/4 flange lock screw
 - (5) 5/16-18 flange lock nuts
 - Hex tool

3. Initial Unpacking

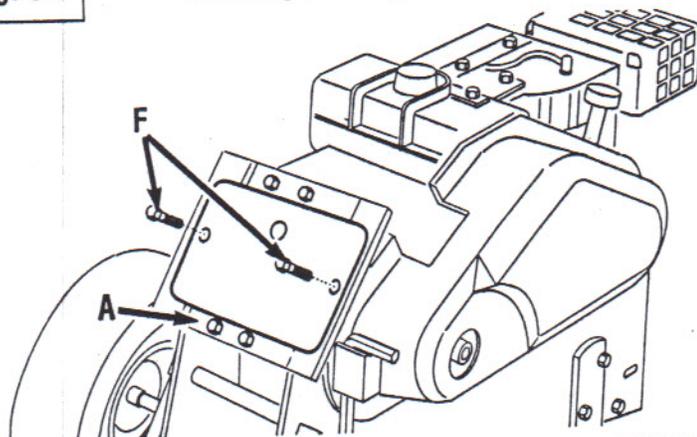
1. Remove nut (A, Fig. 3-1) securing the tie-down strap to the chipper at the hopper opening. Discard the nut and remove the strap.
2. Remove the two screws securing the hopper to the crate.
3. Cut the tie strap securing the tamper inside the hopper. Remove the tamper.

4. Hopper Preparation

1. Secure the hopper flange where the screw was removed in *Initial Unpacking*, step 2, with one 5/16-18 x 3/4 flange lock screw (B, Fig. 3-2) and nut (C).

Fig. 3-1

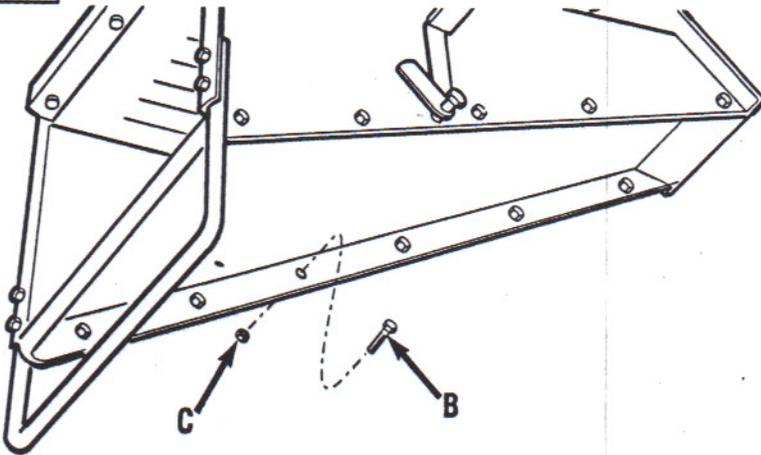
Tie-Strap / Storage Plate Removal



Section 3: Assembly (continued)

Fig. 3-2

Hopper Preparation



5. Storage Plate Removal

1. Remove the two screws (F, Fig. 3-1) securing the storage plate.
2. Remove the storage plate.
3. **Keep the storage plate.** Install it back on the unit whenever the hopper is removed.

⚠ WARNING

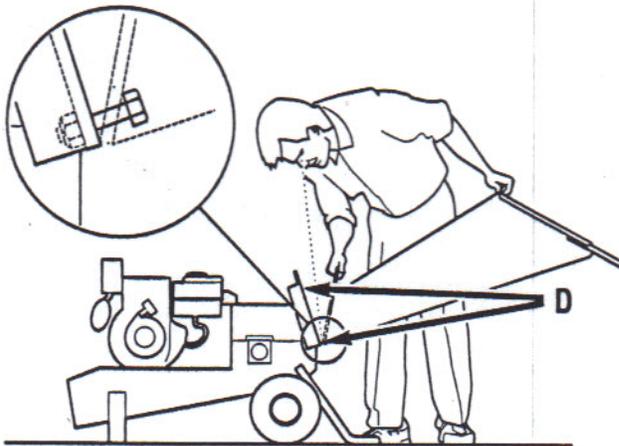


EXPOSED KNIVES

The chipper knives are extremely sharp – KEEP AWAY!

Fig. 3-3

Hopper Assembly



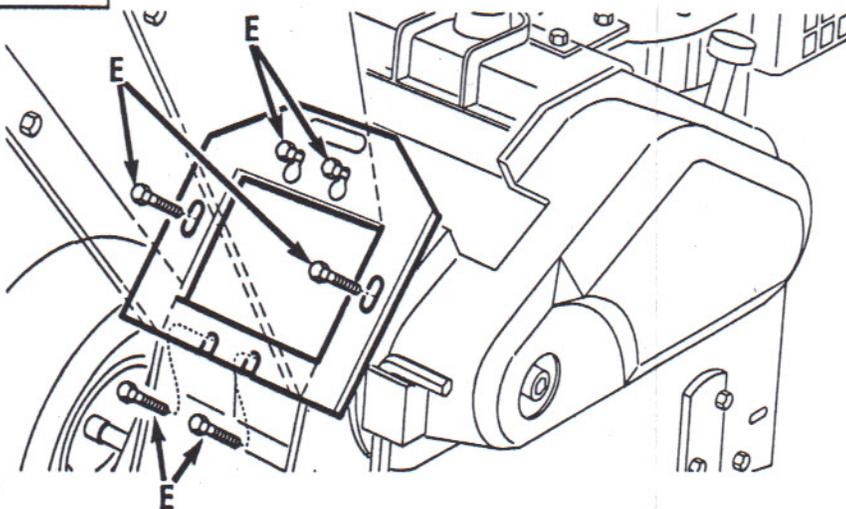
6. Hopper Assembly

Note: The hopper weighs 50 lbs (23 Kg). Use caution when lifting: Lift with your legs; keeping your back straight. Make sure you have stable footing before lifting so you are not pulled off balance by the load. Know your limits and do not lift loads too heavy for you to comfortably handle. If necessary, have someone assist you.

1. Thread the top and bottom screws four turns into the chipper frame (D, Fig. 3-3).
2. Hook the hopper on the bottom screws as shown in the detail in Fig. 3-3, then, tilt and pull the hopper up until the top screws fit through the holes in the top flange of the hopper.
3. Push down on the hopper so the screws are seated firmly against the hopper flange.
4. Tighten all six screws (E, Fig. 3-4) to secure the hopper.

Fig. 3-4

Hopper Securing



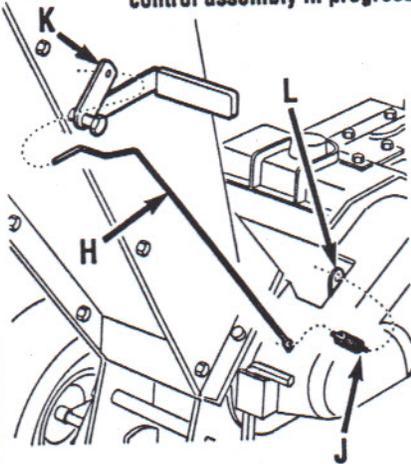
Note: If the hopper is not firmly secured to the unit with all the attaching hardware, damage to the unit could result.

Section 3: Assembly (continued)

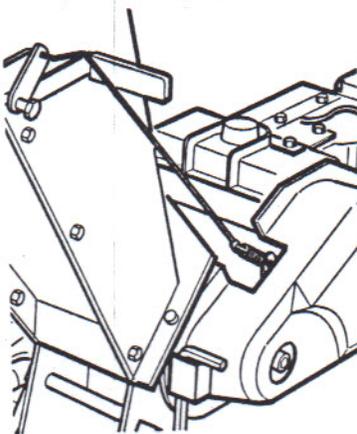
Fig. 3-5

Chipper Drive Clutch Control Assembly

control assembly in progress



control assembly completed



7. Chipper Drive Clutch Linkage Assembly

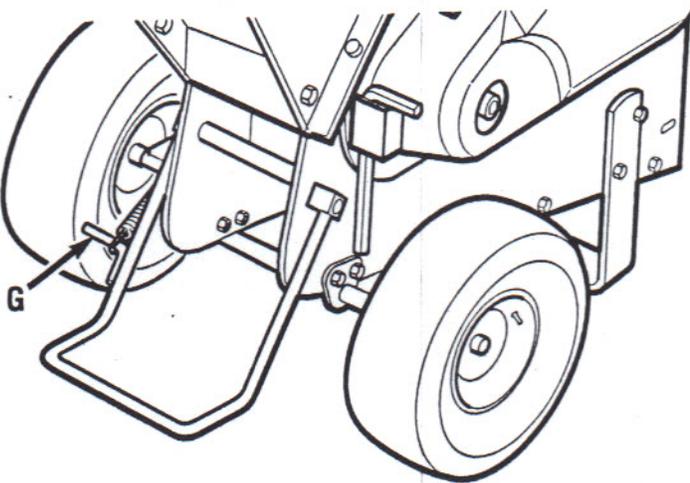
1. Remove the screw securing the clutch rod (H, Fig. 3-5) to the crate.
2. Assemble the clutch rod (H) and clutch spring (J) onto the unit in between the chipper drive clutch lever (K) and the idler pivot (L).

8. Unit Removal

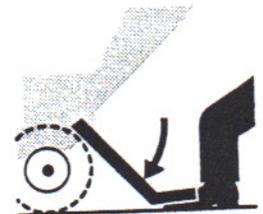
1. Remove the screw and nut securing the front stand of the unit to the crate. Discard the screw and nut.
2. Grasp the stand by the handle (G, Fig. 3-6) and lift the stand until it contacts the hopper.
3. Tilt the unit so it is balanced on the wheels. Roll the unit off the crate and onto a level surface.
4. Lower the stand.

Fig. 3-6

Raising/Lowering Stand



CAUTION

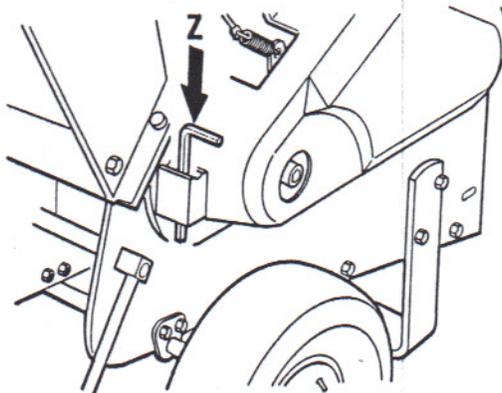


PINCH POINTS

Exercise care when raising or lowering the stand.

Fig. 3-7

Hex Wrench (for clearing jams)



9. Hex Wrench

Insert the hex wrench (Z, Fig. 3-7) into the holder at the back end of the belt cover. The hex wrench (Z) is used for clearing jams. See the *Operation* section of this manual.

Section 3: Assembly (continued)

□ 10. Engine Oil

Note: The unit is shipped without oil in the engine. Permanent engine damage, which will not be covered under warranty, will result if the engine is run without oil.

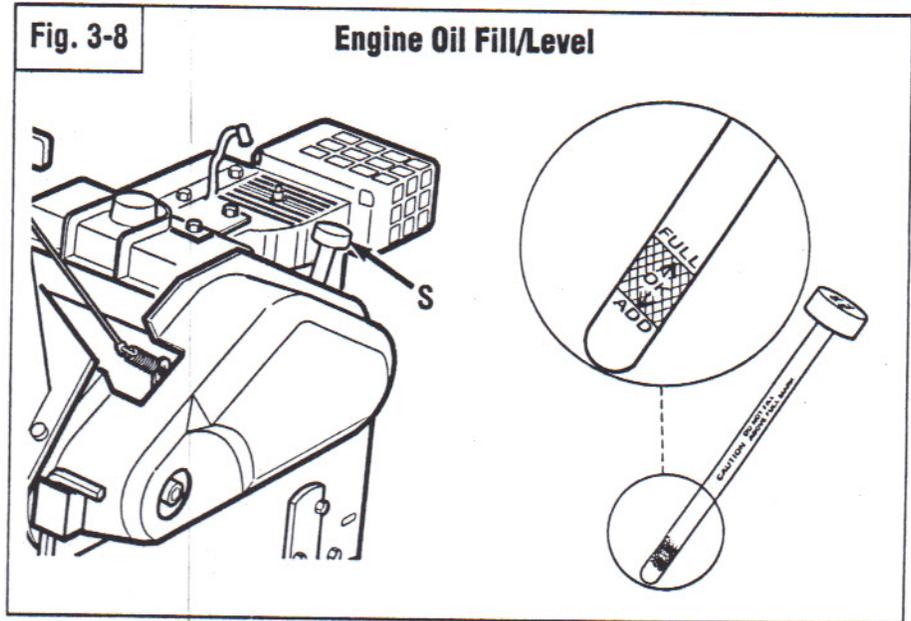
Refer to the engine owner manual for engine oil specifications and capacities.

Park the unit on a level surface.

Remove the engine oil dipstick (S, Fig. 3-8) and fill the engine with oil through the dipstick opening. Re-insert the dipstick and remove to check the oil level when filling.

Fill to between the "ADD" and "FULL" marks on the dipstick. Do not overfill. Check the oil level each time before starting the engine.

Change the engine oil after the first 5 hours of use, then every 50 hours thereafter. Refer to the *Maintenance* section of this manual for engine oil changing information.



□ 10. Tire Pressure (Model 47044 only)

Inflate the tires 20 - 25 PSI (103 - 137 kPa)

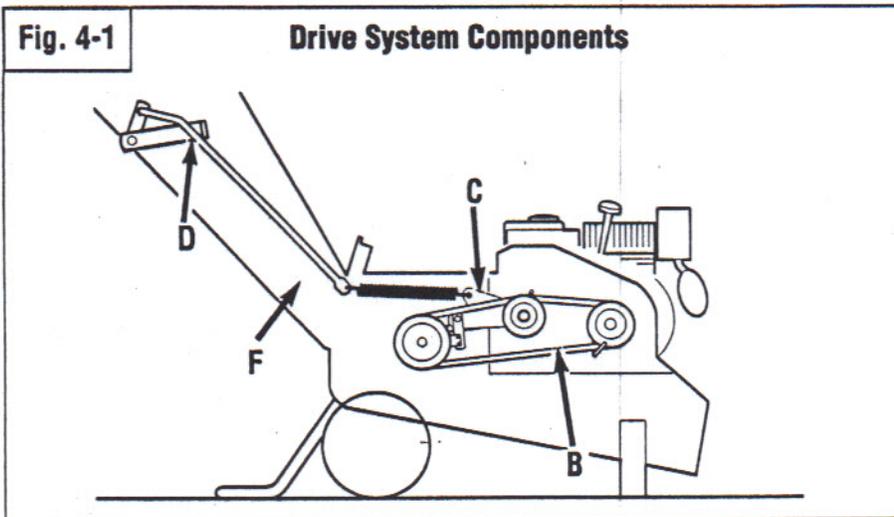
Note: Do not over inflate the tires.
Inflate both tires evenly.

□ 11. Package Content Inspection

Carefully inspect all packaging material for any loose parts before disposal.

Section

4 Features and Controls



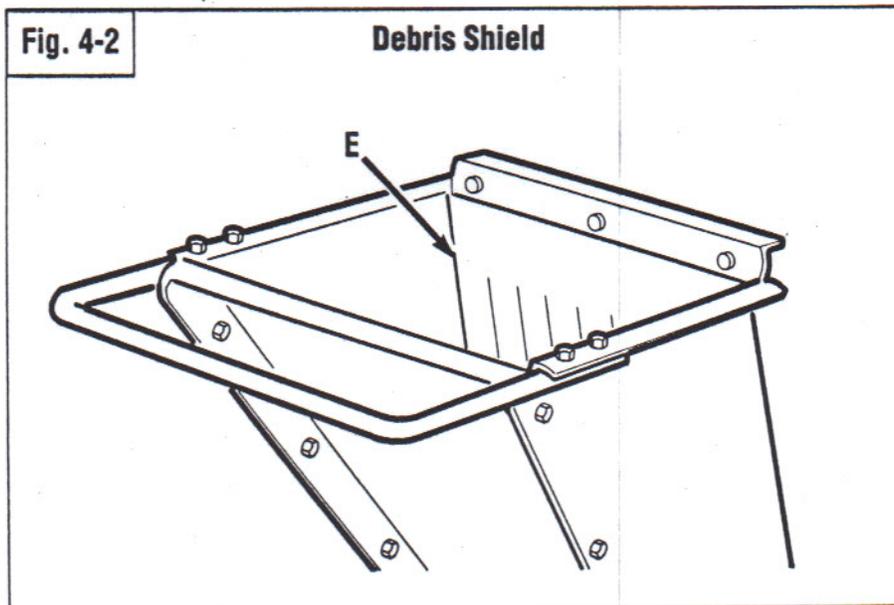
Inlet

- **Debris Shield (E, Fig. 4-2)**

Materials entering the unit for processing must first pass through the debris shield. Dust and debris produced by the chipping action of the unit are contained within the hopper and shielded from the operator by the debris shield.

- **Hopper (F, Fig. 4-1)**

Materials to be processed are fed into the top of the hopper. Materials enter into the cutting chamber at the bottom end of the hopper.



Cutting Chamber/Chipper Drum

- **Cutting Chamber (X, Fig. 4-3)**

Materials leaving the hopper enter into the cutting chamber, and are cut against the anvil (G, Fig. 4-3) by the rotating knives (H) attached to the chipper drum.

- **Chipper Drum (J, Fig. 4-3)**

The chipper drum serves three purposes:

1. When the chipper drum is spinning, it acts as a flywheel which aids the cutting action of the chipper knives, especially when processing hard materials.
2. The chipper drum provides the rotating motion required for the two chipper knives to process material.
3. The rotating action of the chipper drum throws material out of the discharge end of the unit after processing.

HOW THE UNIT OPERATES

Drive System

- **Belt Drive (B, Fig. 4-1)**

Power from the engine is transferred by a belt drive to the chipper (J, Fig. 4-3), which is a rotating drum/knife mechanism.

- **Belt Clutch (Chipper Drive Clutch) (C, Fig. 4-1)**

The belt drive uses a disengaging (declutching) mechanism, which is operated by a lever (D, Fig. 4-1).

Section 4: Features & Control (continued)

• Chipper Knives (H, Fig. 4-3)

The two chipper knives (H) secured to the chipper drum (J) do the actual cutting or chipping of material when it enters the cutting chamber.

• Anvil (G, Fig. 4-3)

The anvil (G) is secured to the chassis, at the bottom of the cutting chamber inlet.

Fig. 4-3

Chipper Drum Components

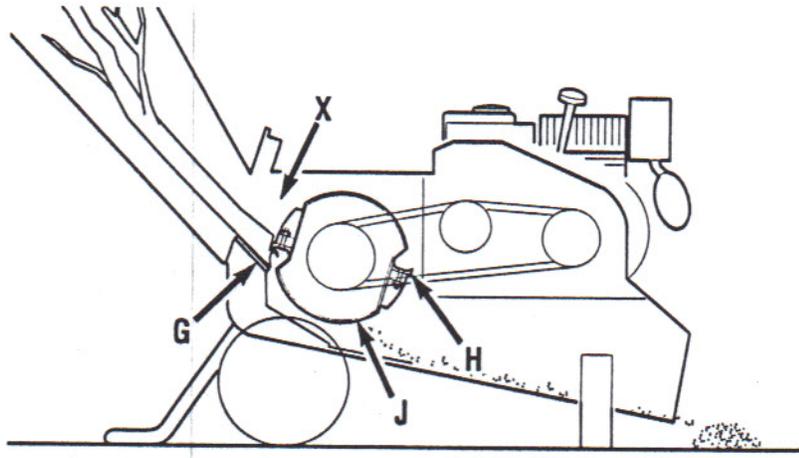
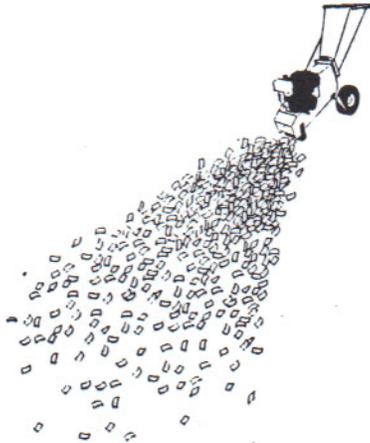


Fig. 4-4 Discharge Dispersion Pattern



Frame/Discharge

• Frame Assembly

The frame is the main structure of the unit. It provides a sturdy foundation for securing the component parts. The frame assembly includes the axle/wheel assembly, the stabilizing stand, and the discharge opening.

• Discharge

Processed material exits from the unit through the discharge opening in a cone-shaped pattern (Fig. 4-4)

CONTROLS

Throttle/Engine Kill

The throttle (M, Fig. 4-5) controls the engine speed. Always operate the unit at full throttle. Rotating the throttle lever all the way down stops the engine.

Choke

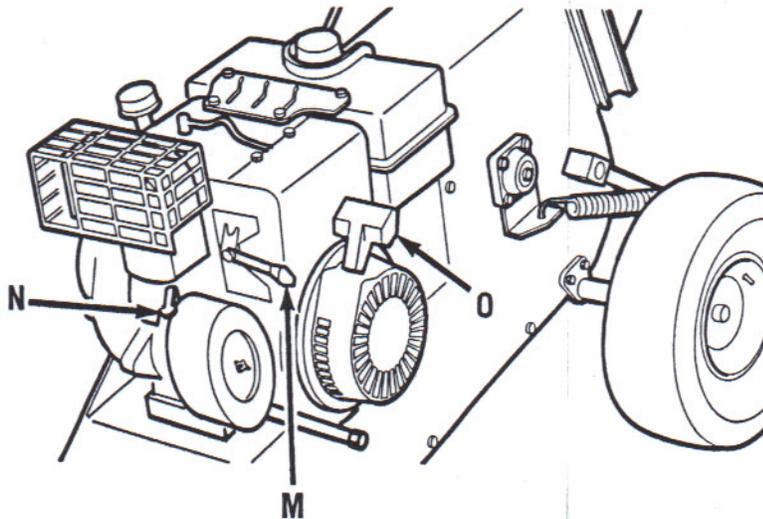
The choke (N) controls the air/fuel mixture into the engine. It is used when starting a cold engine.

Recoil Starter

The recoil starter (O) is used to pull-start the engine.

Fig. 4-5

Engine Controls



Section 4: Features & Control (continued)

Chipper Drive Clutch Lever

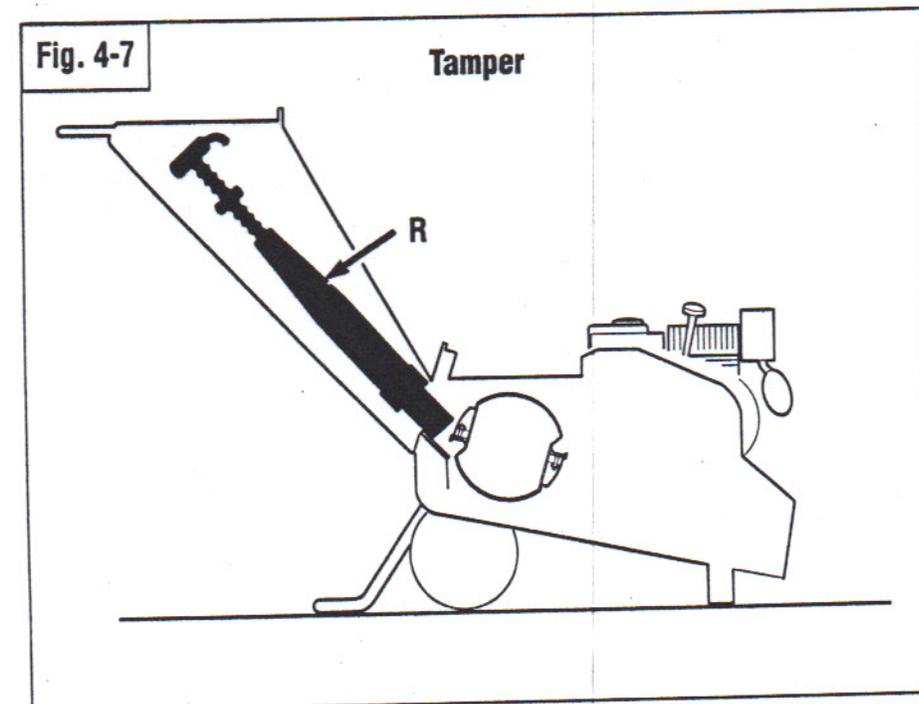
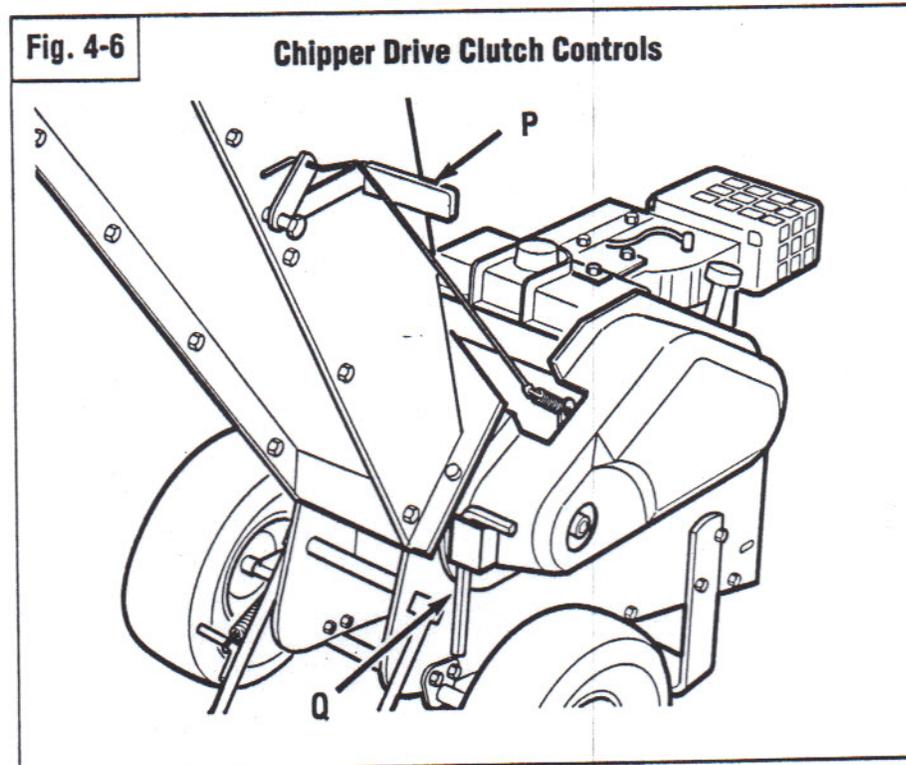
The chipper drive clutch lever (P, Fig. 4-6) controls engagement of drive from the engine to the chipper drum.

Hex Wrench

The hex wrench (Q) is used when the unit has jammed. See the *Operation* section in this manual for jam clearing instructions.

Tamper

The tamper (R, Fig. 4-7) is used to help push materials through the hopper into the cutting chamber for processing.



Section 5 Operation

General Operation Safety

⚠ CAUTION



Read, understand and follow all the instructions included in this section before operating the unit.

Note: Repair or replace any safety devices or shields as necessary. Do not use the unit if all safety devices and shields are not in place and operating properly.

Note: Keep all safety and operation decals in place. If these decals are damaged or not legible, clean or replace them as necessary. Refer to the Safety section, in this manual, or the parts catalog, for decal description and location.

Note: Keep the unit in a safe operating condition. Check all hardware for tightness each time before starting the unit. Correct any malfunction before using the unit.

Note: Only use attachments which are approved for use with the unit. Contact our service department if there is a question whether an attachment is approved for the unit.

Note: Operate the unit only in daylight or good artificial light.

⚠ CAUTION



Wear the proper clothing whenever operating the unit:

- Wear safety-approved hearing and eye protection.
- Wear heavy leather gloves.
- Do not wear loose-fitting clothing, jewelry, scarves, ties, etc., which may get caught in moving parts. Tie up or restrain long hair.
- Do not operate the unit while barefoot. Wear sturdy footwear, preferably steel-toed shoes. Do not wear sandals.
- Wear long trousers.

⚠ WARNING

PERSONAL INJURY/PROPERTY DAMAGE HAZARD

Do not operate the unit when tired, ill or under the influence of alcohol and/or other drugs.

⚠ WARNING

PERSONAL INJURY HAZARD

- Keep children out of the work area and under the supervision of a responsible adult.
- Tragic accidents can occur if the operator is not alert to the presence of children.
- Never allow children to operate the unit, even under adult supervision. Local regulations may restrict operator age.

⚠ WARNING

PERSONAL INJURY/PROPERTY DAMAGE HAZARD

Check the chipper drum brake operation frequently. Adjust and service the brake as necessary as indicated in the *Maintenance* section in this manual.

⚠ WARNING

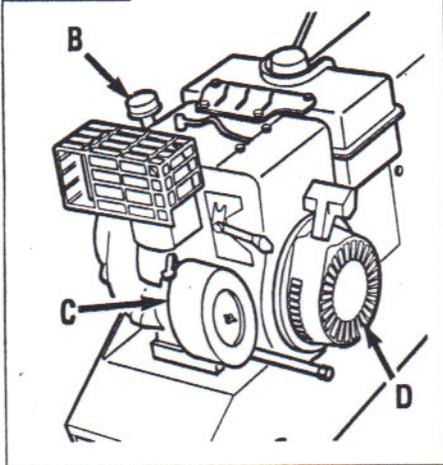


POISON HAZARD

Never run an internal combustion engine inside an enclosed area. Engine exhaust contains carbon monoxide gas, a deadly poison. Carbon monoxide is odorless, colorless and tasteless. Do not run the engine near buildings, windows or air conditioners. If the engine is run in a garage, open all doors and allow for adequate ventilation.

Section 5: Operation (continued)

Fig. 5-1 Engine Preparation



Engine Preparation

Engine Oil

Check for proper engine oil level as follows:

1. Park the unit on a level surface.
2. With the engine off, remove the dipstick (B, Fig. 5-1). Wipe oil from the dipstick with a clean cloth.
3. Screw the dipstick firmly back into the engine.
4. Remove the dipstick and check the oil level. The oil level is indicated by marks on dipstick. Level must be between "FULL" and "ADD" marks.
5. If necessary, add oil to the crankcase through the dipstick opening.

Note: Refer to the engine manual provided with your unit for specific engine oil information.

CAUTION

Do not add oil to the engine beyond the full mark – engine damage may occur.

Engine Air Cleaner

Check for and remove any dirt or debris present inside the air cleaner (C).

Engine Recoil Housing

Check for and remove any dirt or debris on the engine recoil housing (D).

Fueling

DANGER



FIRE HAZARD

- Use extra care when handling gasoline. Gasoline and gasoline vapors are volatile and dangerous. Keep gasoline and gasoline containers away from hot engine exhaust. Never allow flame, sparks, smoking materials or other hot objects near gasoline or gasoline fumes.
- Wipe up spilled gasoline immediately.
- Store gasoline only in approved gasoline storage containers.
- Leave approximately 1/2 inch (1.5 cm) of air space at the top of the gasoline tank to allow room for expansion.
- Store gasoline in a cool, well-ventilated area. Never store the unit or gasoline storage containers inside where there is a danger of an open flame or spark, such as near a hot water heater, furnace, etc.
- Never remove the gasoline tank fill cap, or add gasoline to the gasoline tank, if the engine is running or hot. Always replace the gasoline tank fill cap before starting the engine.
- Refuel the unit outdoors only.
- Do not mix oil with gasoline.

Fill the gasoline tank with clean, fresh, automotive gasoline with an octane rating of 85 or higher. Fill the gasoline tank slowly.

Visual Inspection

Check for:

1. Damaged or illegible safety or instruction decals.
2. Loose or damaged hardware.
3. Fuel or oil spills or leaks.

Repair or replace as necessary.

Tire Pressure (Model 47044 only)

(check at first use, then every 25 hours thereafter)

Inflate the tires 20 - 25 PSI (103 - 137 kPa)

Note: Do not over inflate the tires. Inflate both tires evenly.

Transporting the Unit

CAUTION

Do not transport the unit with the engine running.

CAUTION

The unit weighs over 250 lbs. (113 Kg). Have at least one person assist you and be extremely careful when loading the unit into a truck or trailer. Use loading ramps when loading/unloading the unit. The loading ramps must be rated strong enough to carry the weight of the unit.

Section 5: Operation (continued)

Transporting the Unit in a Vehicle

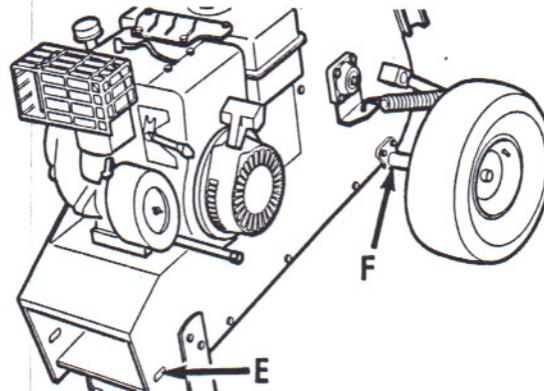
Securely tie the unit when transporting it in a vehicle to prevent it from shifting while in transit. Tie-down slots (E, Fig. 5-2) are provided at the discharge end of the unit. Tie the hopper end of the unit down at the wheel axle (F).

Moving the Unit Manually

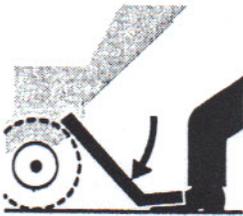
To move the unit by hand: Lift the stand until it contacts the hopper. Tip the unit by the handlebars until it is balanced over the wheels.

Fig. 5-2

Tie-down Points for Transporting Unit in a Truck/Trailer



⚠ CAUTION



PINCH POINTS

Exercise care when raising or lowering the stand.

⚠ CAUTION

Operate the unit only on a surface sloped 10° or less. Excessive fuel consumption, vibration and reduced performance will result if this instruction is not followed.

Select the work site carefully – it should be a level surface and the discharge of the unit should be directed into a safe area and direction.

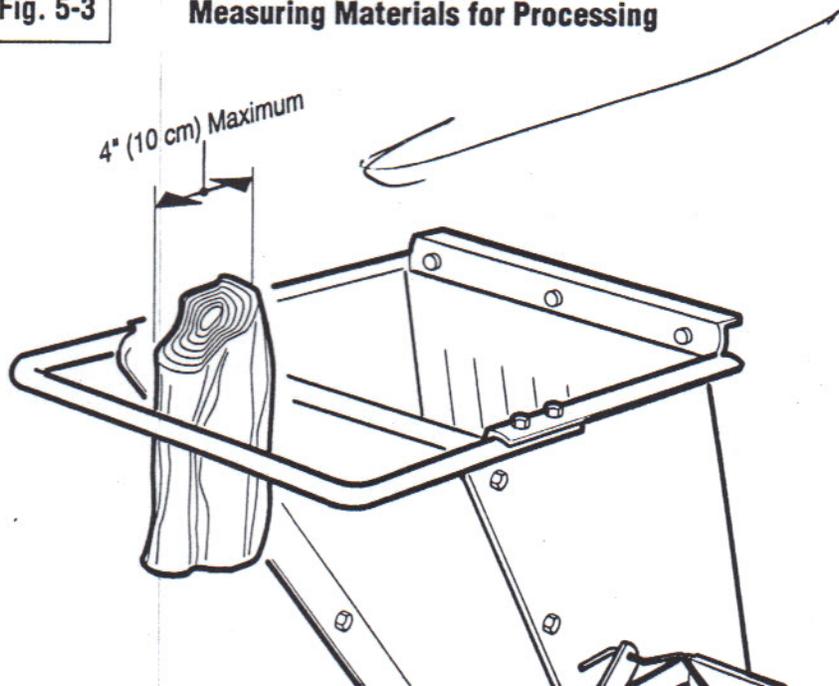
Always lower the stand after moving the unit to the work site.

Material Preparation

Materials up to 4" (10 cm) in diameter can be processed by the unit.

Fig. 5-3

Measuring Materials for Processing



Note: Materials that are too big to fit into the area between the hopper and the handlebar (Fig. 5-3) are too big to fit into the unit.

If one person is using the unit, we recommend cutting branches and other large materials into pieces small enough to fit into the hopper before starting the unit.

If more than one person is using the unit, the work can be split between preparing materials and feeding material into the unit.

⚠ CAUTION



Read, understand and follow all instructions in the manuals that came with any powered equipment used when preparing materials for processing.

Section 5: Operation (continued)

Note: Use caution when lifting materials for processing: Lift with your legs while keeping your back straight. Make sure you have stable footing before lifting so you are not pulled off balance by the load. To avoid tripping, do not carry loads that block the view to your feet. Know your limits and do not lift loads too heavy for you to comfortably handle.

Note: The unit is not designed to process leaves. The Troy-Bilt® Chipper Vac is specially designed to process leaves. Contact your local dealer or the factory for ordering information.

Starting

Note: Remove any unprocessed material from inside the hopper before starting the engine.

Spark Plug

Connect the spark plug wire (H, Fig. 5-4) to the spark plug, if necessary.

Choke Setting

Move the choke lever (J) all the way clockwise (full choke). A warm engine may require little or no choking.

Throttle

Move the throttle lever (K) counter-clockwise all the way up into the *FAST* position.

Pull-Starting

Always lower the stand before pull-starting the unit.

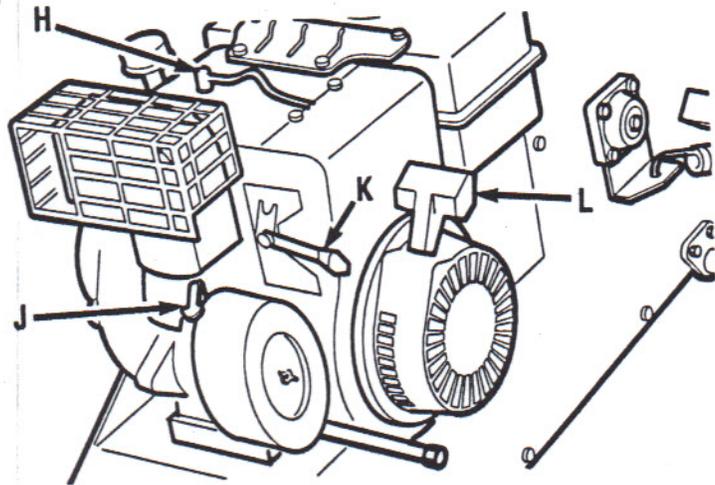
Make sure the area behind you is clear before pulling the recoil starter. Rapidly pull the recoil starter handle (L) all the way out to start the engine.

Do not allow the recoil starter rope to snap back into the engine. This can damage the starter. Let the starter rope rewind gradually.

Pull the recoil starter handle (L) again, if necessary, until the engine starts.

Fig. 5-4

Engine Starting



Choke Setting

When the engine starts, rotate the choke lever (J) counter-clockwise halfway down (half choke). Gradually rotate the choke lever all the way counter-clockwise as the engine warms up.

Note: Do not run the engine with the choke on for extended periods. The engine will run poorly (rich fuel mixture) if over-choked.

Throttle Setting

Always operate the unit with the throttle lever (K) in the *FAST* position. The engine is designed to run at full throttle and provides the best performance in this throttle setting.

Let the engine warm up for a few minutes before processing material.

Processing Material

WARNING



THROWN OBJECTS

Processed material exits the unit at high speed – keep away from the discharge. Objects can ricochet and cause injury – **BE ALERT!** Do not let anyone stand or walk in front of the discharge.

Do not operate the unit if anyone not directly involved in the chipping activity is closer than 25 feet (8 meters) from the unit.

Section 5: Operation (continued)

⚠ WARNING



FIRE HAZARD

The engine muffler and exhaust are extremely hot. Keep wood chips, oil, fuel and other combustible materials far away from the engine muffler and exhaust.

Chipper Drive Engagement

To engage the chipper drive, rotate the chipper drive clutch lever (M, Fig. 5-5) counter-clockwise. The chipper drum will begin rotating.

An indicator on the chipper drum (N, Fig. 5-6) is visible through an opening in the belt cover. When the indicator is rotating, the chipper drum is also rotating.

Fig. 5-5

Clutch Lever Engaged

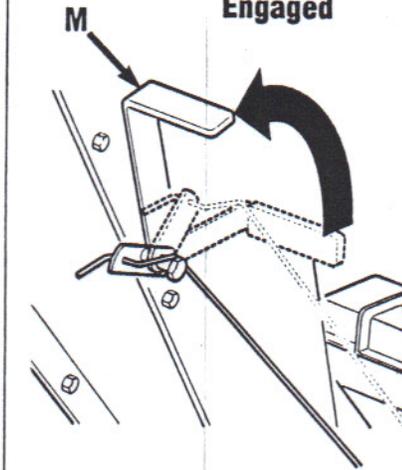
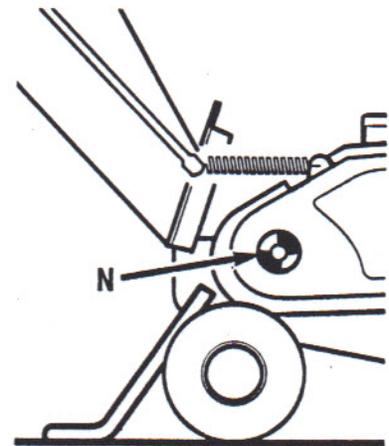


Fig. 5-6

Chipper Drum Rotation Indicator



When the chipper drum is rotating, the unit is ready to process material.

Feeding Material

Material is fed into the hopper for processing (Fig. 5-7). The cutting action of the unit pulls material down through the hopper and into the cutting chamber.

Note: Keep processed material from accumulating at the discharge opening. If the discharge becomes blocked, the unit will clog.

A steady flow of material into the hopper usually provides the most efficient results.

Feeding material at too fast a rate will overload and jam the unit. Experience will tell how fast the unit can handle different material.

Material can be fed into the hopper from either side of the unit. Fig. 5-7 shows a comfortable position for feeding material into the unit.

It is not uncommon for some hard materials to bounce around inside the hopper while being processed.

Tamper

If material sticks or wedges inside the hopper, the tamper (Z, Fig. 5-8) can be used to push the material through the hopper and into the cutting chamber.

The tamper is shaped to fit snugly inside the hopper, to help dislodge stubborn material.

The tamper is most useful on bushy material that tends to bind near the bottom of the hopper. Most material will not require the tamper.

Stopping

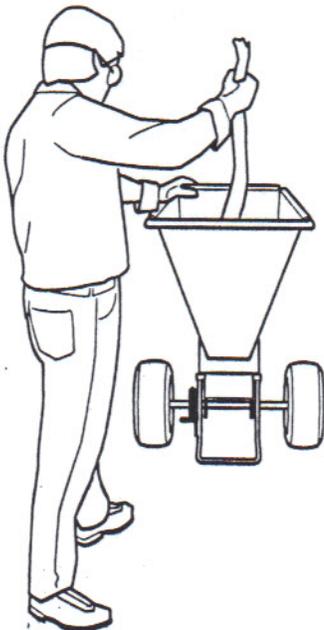
⚠ WARNING

PERSONAL INJURY/PROPERTY DAMAGE HAZARD

Never leave the unit unattended while it is running. Always:

- Disengage the chipper drive.
- Stop the engine (and remove the ignition key on units equipped with an electric start kit).
- Wait for all moving parts to come to a complete stop.
- Disconnect the spark plug wire from the spark plug.

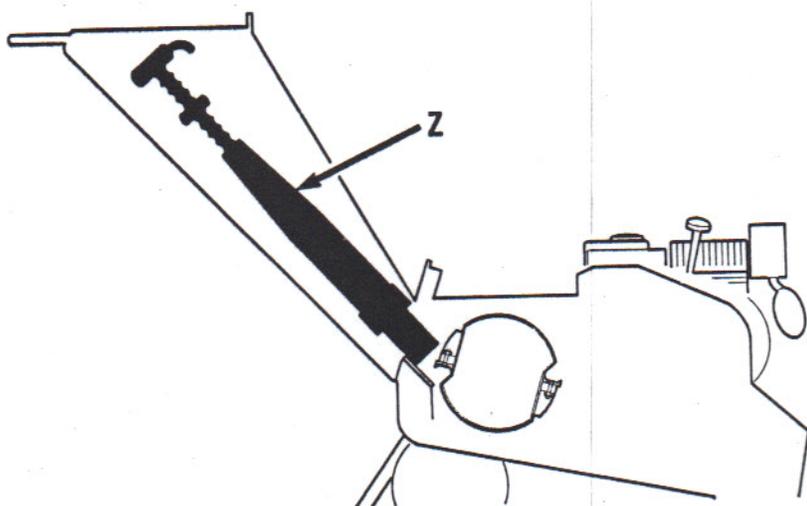
Fig. 5-7 Feeding Material



Section 5: Operation (continued)

Fig. 5-8

Tamper



It is important to know how to stop the unit quickly in case of emergency.

Emergency Stopping

The quickest way to stop the unit is to rotate the throttle lever (K, Fig. 5-4) clockwise all the way down. Wait for all moving parts to come to a complete stop. The chipper rotation indicator (N, Fig. 5-6) on the chipper drum is visible through an opening in the belt cover. When the indicator stops rotating, the chipper drum has stopped rotating.

Also listen for the engine and all moving parts to stop. When no sound comes from the unit, all the parts have stopped.

Normal Stopping

Under normal circumstances, stop the unit as follows:

1. Rotate the chipper drive clutch lever (M, Fig. 5-5) clockwise all the way forward to disengage the chipper drive.
2. Gradually rotate the throttle lever (K, Fig. 5-4) clockwise. Allow the engine to idle for a few minutes before rotating the throttle lever all the way down to stop the engine.

3. Wait for all moving parts to come to a complete stop. The chipper rotation indicator (N, Fig. 5-6) on the chipper drum is visible through an opening in the belt cover. When the indicator stops rotating, the chipper drum has stopped rotating.

Jams and Clogs

The chipper drum will jam if material wedges in between a chipper knife and the anvil inside the cutting chamber. The unit will clog if processed material accumulates at the discharge area and backs up into the unit. Jams and clogs can be avoided.

Note: Jams will almost always cause the engine to stall.

Jams

Four factors contribute to jamming the unit:

1. The hardness of the material being processed.
2. The size of the material being processed.

3. The sharpness of the chipper knives.

4. The rate the material is fed into the unit.

Avoid feeding material into the unit at too fast a rate. Avoid leaving unprocessed material in the hopper when the unit is stopped.

Note: Allow the unit to process all the material in the hopper before stopping.

In the event of a jam, follow the instructions below.

⚠ CAUTION

To safely clear jams (refer to Fig. 5-9):

1. Be sure the engine and all moving parts have come to a stop.
2. Remove any material from inside the hopper.
3. Rotate the drive clutch lever (M) clockwise all the way forward to disengage the chipper drive.
4. Remove the hex wrench (P) from the holder on the belt cover.
5. Rotate the chipper drum with the hex wrench clockwise 1/3 rotation.
6. Replace the hex wrench into the holder on the belt cover.
7. Re-start the engine and rapidly engage the drive clutch lever (M) to power through the jam.

Note: It is important to RAPIDLY engage the drive clutch lever (M) to build up enough inertia to power through the jam or the engine could stall and the unit could jam again.

Section 5: Operation (continued)

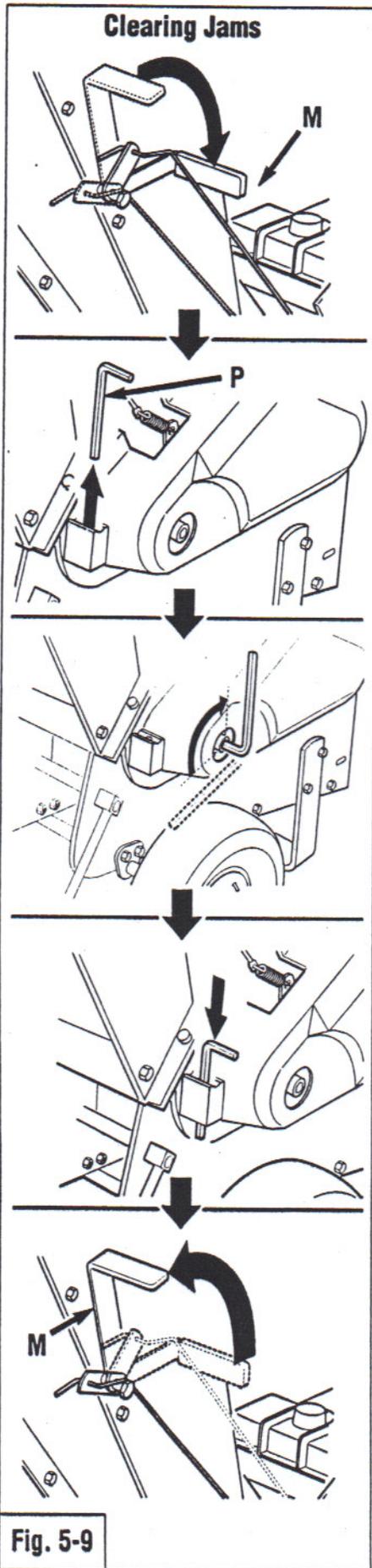
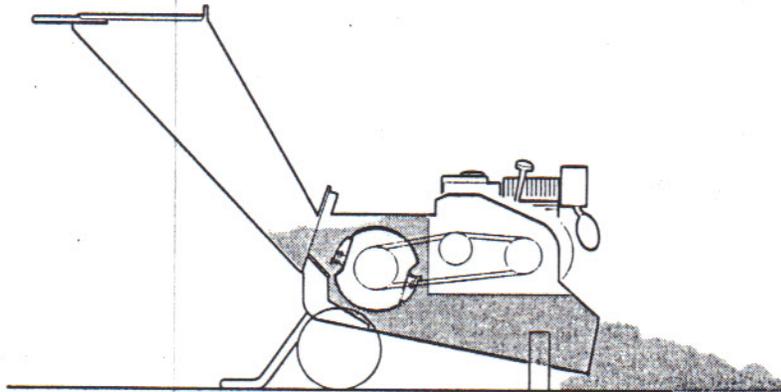


Fig. 5-9

Fig. 5-10

Discharge Clogs



Clogs

Note: Keep processed material from accumulating at the discharge opening. If the discharge becomes blocked, the unit will clog.

When the unit is in use, processed material will accumulate and begin to block the discharge opening. If this accumulation is not cleared away, processed material will collect inside and clog the unit (Fig. 5-10). To prevent clogging, clear the processed material away from the discharge opening.

If material is fed into the hopper and the unit is running, but there is no discharge, the unit is probably clogged.

Follow the instructions below for clearing clogs below.

⚠ CAUTION

If the unit clogs:

1. Disengage the chipper drive.
2. Stop the engine and wait for all moving parts to come to a stop. Observe the indicator through the belt cover to determine when the chipper drum has stopped rotating.
3. Remove the spark plug wire from the spark plug (and remove the ignition key on units equipped with the electric start kit).
4. Inspect for and clear any clogs before re-starting the engine.

Section 6 Maintenance

General Maintenance Safety

WARNING



PERSONAL INJURY/PROPERTY DAMAGE HAZARD

- Before performing any maintenance or adjustments to the unit:
- Disengage the chipper drive.
- Stop the engine (and remove the ignition key on units equipped with an electric start kit).
- Wait for all moving parts to come to a complete stop.
- Disconnect the spark plug wire from the spark plug.
- Allow the unit to cool.

CAUTION

Always wear sturdy footwear (preferably steel-toed shoes), long trousers, and safety-approved eye protection while performing any maintenance on the unit. Do not wear loose-fitting clothing or jewelry, which could get caught in moving parts. Tie up or restrain long hair.

Note: Provide safe, adequate light in your work area. Never use an open flame for illumination. Hot filaments from a broken light bulb can ignite spilled fuel or oil.

Note: Keep children away when performing maintenance or adjustments on the unit.

Note: Repair or replace any safety devices or shields as necessary. Do not use the unit if all safety devices and shields are not in place and operating properly.

Note: Keep all safety and operation decals in place. If these decals are damaged or not legible, clean or replace them as necessary. Refer to the Safety section in this manual, or the parts catalog, for decal description and location.

Preventive Maintenance

Preventive maintenance results in longer operating life and better performance from the unit. The warranty on the unit does not cover items subjected to operator abuse or neglect. To receive full value from the unit and the warranty, the unit must be maintained as instructed in this manual.

Note: Keep the unit in good operating condition and frequently check for loose or missing nuts and screws. Tighten or replace as required.

Note: Use only genuine replacement parts for maintenance or repair. Parts manufactured by others may present safety hazards even though they may fit on the unit.

Note: Keep the unit clean and free of wood chips, leaves or other debris build-up, especially around the hot engine or exhaust.

Engine Maintenance

CAUTION

Do not change the engine governor setting. Over-revving could damage the engine or other components and will void the warranty.

Section 6: Maintenance (continued)

Engine Service

For complete engine service, contact an authorized engine dealer. To locate an authorized engine dealer, refer to the "Yellow Pages" under "Engines - Gasoline" or "Gasoline - Engines". Provide the dealer with the engine model and serial numbers. Routine engine service is described below. For more detailed engine service information, refer to the engine owner manual. Refer to the serial number tag on the engine to determine the specific engine model, type and specification numbers.

Engine Oil

Check the oil level each time before starting the engine.

Checking the Engine Oil Level

Clean the area around the dipstick so dirt does not fall into the engine crankcase when the dipstick is removed.

Park the unit on a level surface. Remove the dipstick. The oil level must be between the "ADD" and "FULL" marks on the dipstick. **DO NOT OVERFILL!** - the oil level must not exceed the "FULL" mark on the dipstick.

Adding Engine Oil

Stop the engine. Remove the oil dipstick (S, Fig. 6-1) and add oil as necessary. Replace the dipstick and tighten securely.

New Engines

Change the oil after the first 5 hours of use, then change the oil regularly as specified in the lubrication chart at the end of this section.

Changing the Engine Oil

Drain the oil when it is warm. Warm oil flows more freely and carries away more impurities.

1. Stop the engine.
2. Park the unit on a level surface.
3. Remove the engine oil dipstick (B, Fig. 6-2).

Fig. 6-1

Engine Oil Fill/Level

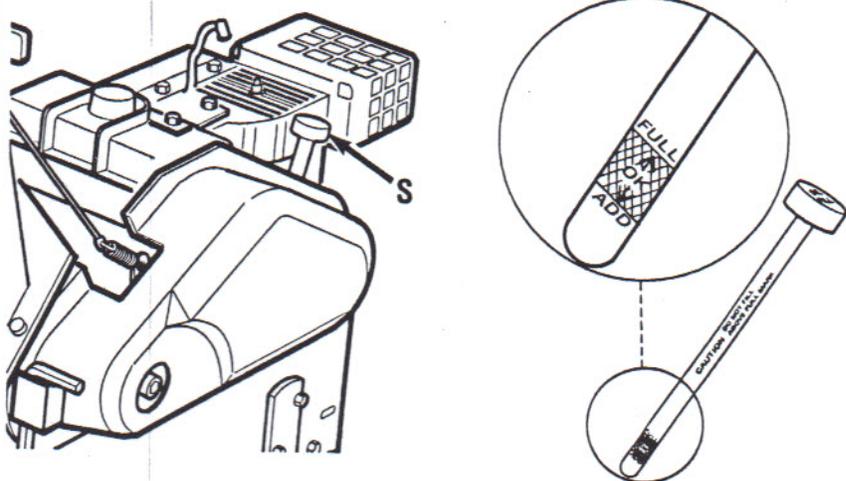
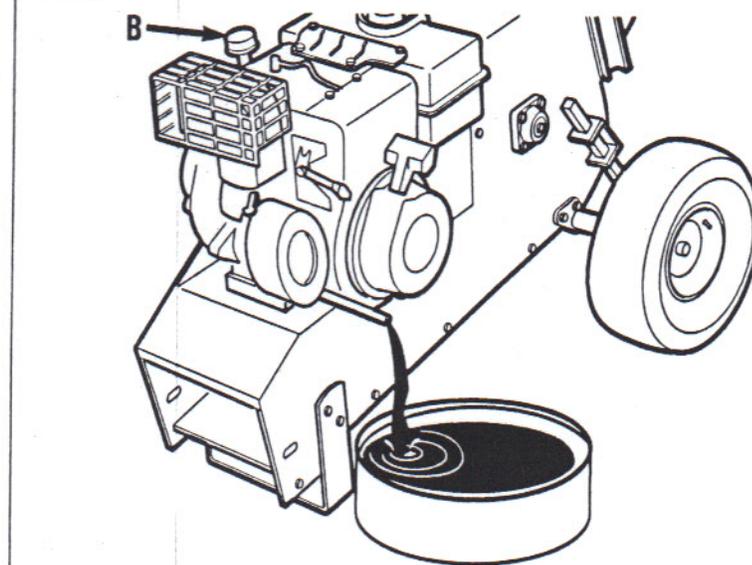


Fig. 6-2

Engine Oil Drain



4. Place an appropriate waste oil collection container (Fig. 6-2) below the end of the oil drain tube.
5. Remove the oil drain cap (Z, Fig. 6-3). Allow the oil to flow into the collection container until the engine is completely drained.
6. Replace the oil drain cap (Z) onto the oil drain tube. Tighten securely. Dispose of the waste oil properly.
7. Re-fill the engine with clean, fresh oil through the engine oil dipstick. See the engine owner manual for correct oil specifications. Fill the engine with oil to between the "ADD" and "FULL" marks on the dipstick.

NOTE: Please dispose of all waste materials in an ecologically responsible manner. DO NOT dispose of waste oil onto the ground, down a drain, or into a stream, pond or lake. Contact your local environmental

Section 6: Maintenance (continued)

authorities for proper waste oil disposal information. Use proper waste oil storage containers.

⚠ WARNING

Do not use food or beverage containers to store waste oil. Using such containers could result in accidental poisoning.

For complete engine lubrication information, including engine oil specifications and capacities, refer to the engine owner manual.

Engine Recoil Housing

Check the engine recoil housing (U, Fig. 6-3) for debris and clean regularly. A dirty flywheel screen can cause the engine to overheat.

Engine Air Cleaner

The engine air cleaner (A, Fig. 6-3) requires regular maintenance. Improper air cleaner maintenance can cause engine damage.

Engine Air Cleaner Service Schedule

Outer foam pre-cleaner (Model 47042 only): Wash and dry the outer foam pre-cleaner (V, Fig. 6-4) every 25 operating hours or every season, whichever occurs first.

Inner paper cartridge: Replace the paper cartridge (W) every 50 operating hours or every season, whichever occurs first.

Service the air cleaner more often under extreme conditions.

Engine Air Cleaner Servicing

1. Stop the engine.
2. Remove the wing nut (X) and air cleaner cover (Y).
3. Lift out the paper cartridge (W) and foam pre-cleaner (V).

Fig. 6-3

Engine Flywheel Screen

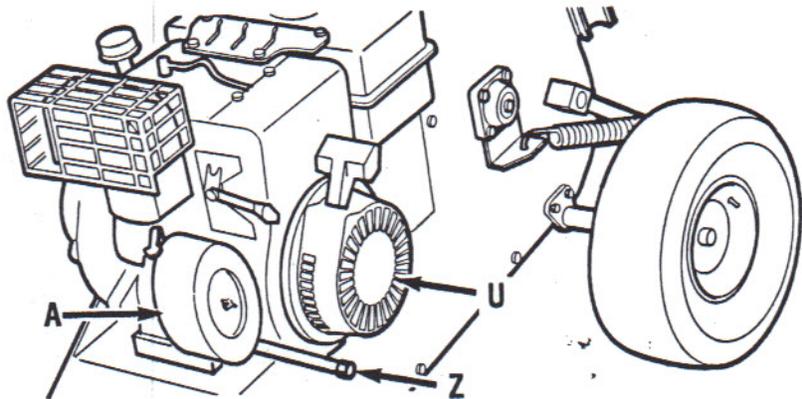
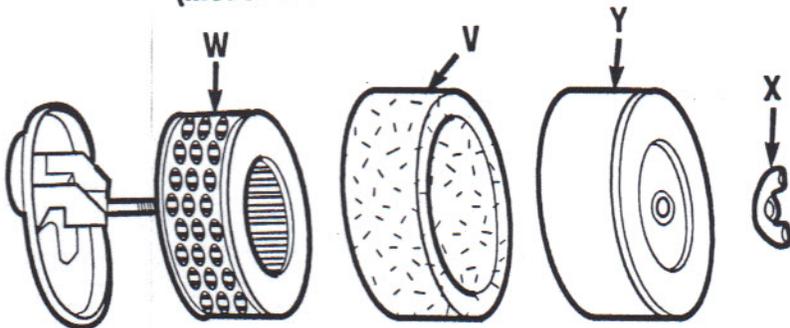


Fig. 6-4

Engine Air Cleaner (Model 47042 shown—47044 similar)



4. (Model 47042 only) Separate the foam pre-cleaner (V) from the paper cartridge (W).
5. (Model 47042 only) Wash the foam pre-cleaner (V) in liquid detergent and warm water. Squeeze dry in a clean cloth. **DO NOT OIL THE FOAM PRE-CLEANER.**
6. Replace the paper cartridge (W) if it is dirty. **DO NOT CLEAN OR OIL THE PAPER CARTRIDGE.**
7. Thoroughly clean the inside of the air cleaner cover (Y) and the air cleaner cover base.
8. (Model 47042 only) Slide the foam pre-cleaner (V) over the paper cartridge (W).
9. Re-assemble the air cleaner components. Replace the air cleaner cover (Y). Replace the wing nut (X) and tighten securely.

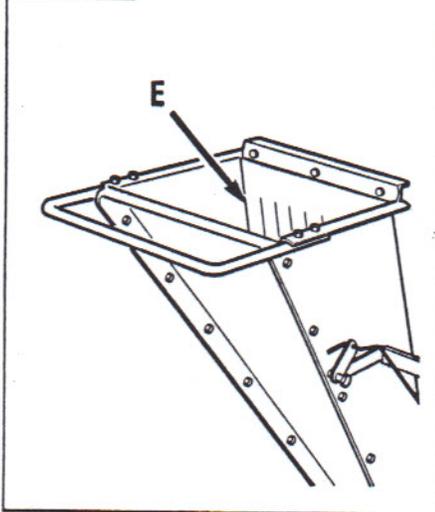
Carburetor

The carburetor has been adjusted at the factory. It should not need to be reset. If a black exhaust is noted, check the air cleaner first. An over-rich mixture is usually caused by a poorly serviced or clogged air cleaner element, not an improperly adjusted carburetor. If re-adjustment is necessary, refer to the engine owner manual or contact your local dealer for servicing.

Section 6: Maintenance (continued)

Fig. 6-5

Debris Shield

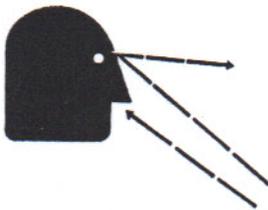


Spark Plug

Every 50 operating hours or every season, remove and check the condition of the spark plug. Do not service a plug in a poor condition. Best results are obtained with a new plug. See the engine owner manual to determine the proper replacement spark plug specifications.

Debris Shield

⚠ WARNING



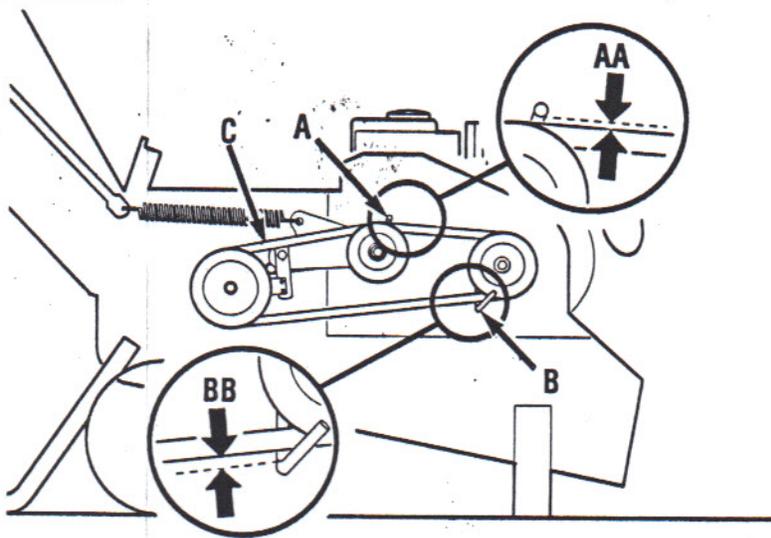
THROWN OBJECTS

Do not operate the unit if the debris shield is damaged or removed from the hopper.

Frequently check the condition of the debris shield (E, Fig. 6-5). Replace it if it is worn or damaged.

Fig. 6-6

Belt Removal/Replacement



Drive Belt

Replace the chipper drive belt when it is worn or damaged, or if it begins to slip.

Belt Removal

1. Stop the engine.
2. Rotate the chipper drive clutch lever clockwise all the way forward to disengage the chipper drive and relieve tension on the belt.
3. Using a 1/2" wrench, remove the screws securing the belt cover to the unit. Remove the belt cover.
4. Loosen belt guide (B, Fig. 6-6). Remove pulley and belt guide (A).
5. Remove the belt (C) from around the drive pulleys.

Belt Replacement

1. Route the new belt (C) around the drive pulleys, and reinstall pulley and belt guide (A).
2. Rotate the chipper drive clutch lever counter-clockwise all the way backward to engage the chipper drive and tension the belt.
3. Adjust the top belt guide (A) as shown in detail AA, Fig. 6-6, so it is 1/16" - 3/32" (1.5 - 2.75mm) away from the belt.

4. Adjust the bottom belt guide (B) as shown in detail BB, Fig. 6-6, so it is 1/16" - 3/32" (1.5 - 2.75mm) away from the belt.

5. Position the belt cover back onto the unit and secure with the three screws removed earlier.

⚠ CAUTION



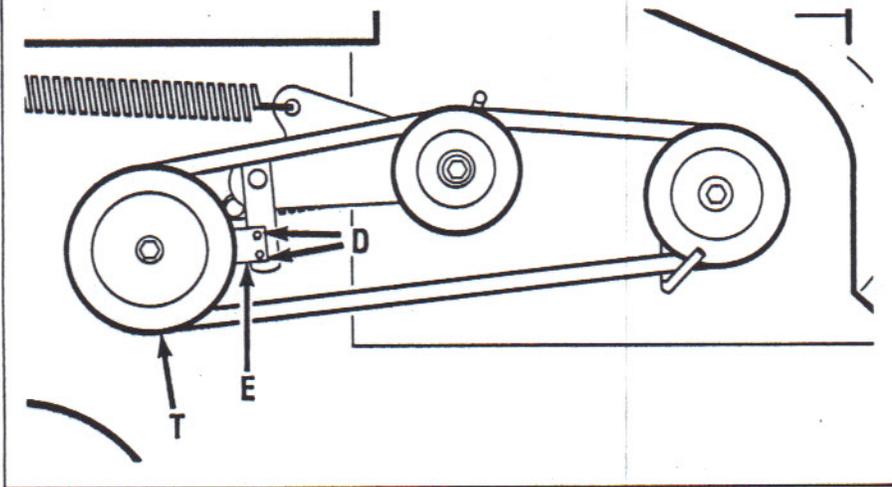
PINCH POINTS

Do not operate the unit without the belt guard in place.

Section 6: Maintenance (continued)

Fig. 6-7

Chipper Drum Brake



Chipper Drum Brake

Replace the chipper drum brake pad when it is worn or damaged, or if the chipper drum does not stop within 15 seconds after the drive clutch lever is disengaged.

Brake Pad Replacement

1. Stop the engine.
2. Rotate the chipper drive clutch lever counter-clockwise all the way backward to engage the chipper drive and relieve tension on the brake pad

3. Using a 1/2" wrench, remove the screws securing the belt cover to the unit. Remove the belt cover.
4. Loosen the 10-24 x 1-1/4 screws and nuts (D, Fig. 6-7) securing the brake pad to the idler pivot arm.
5. Remove the old brake pad (E) and discard.
6. Position the new brake pad (E) in place on the idler pivot arm.
7. Secure the brake pad (E) to the idler pivot arm with the 10-24 x 1-1/4 screws and nuts (D) removed earlier. Tighten securely.
8. Rotate the chipper drive clutch lever all the way forward to verify the brake alignment.
9. Position the belt cover back onto the unit and secure with the three screws removed earlier.

Chipper Knives

Chipping performance is greatly affected by knife condition. Dull knives process material more slowly and are more likely to jam. Hard materials are especially difficult to process with dull knives.

The knives should be reversed or replaced when jams occur frequently or if performance becomes poor.

Chipper Knife Reversal

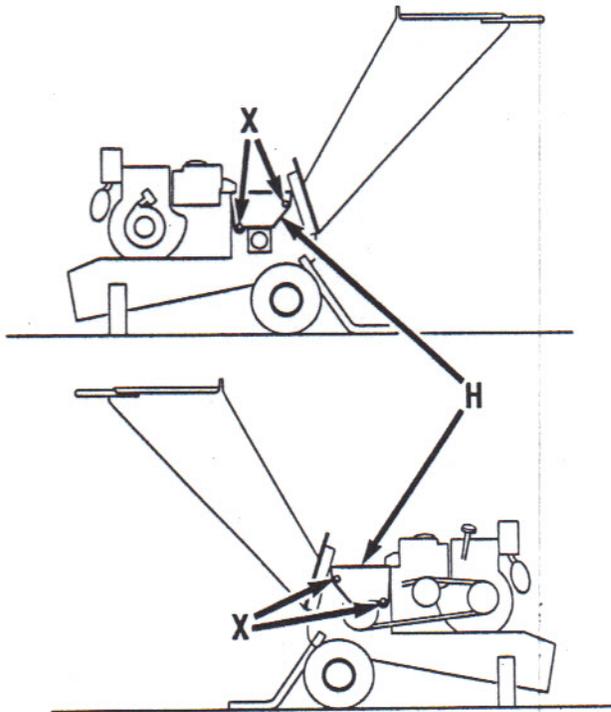
The chipper knives have two cutting surfaces. When one of the cutting surfaces becomes dull, the knives can be reversed (turned over) to expose the unused, sharp surfaces.

Replace the chipper knives when both cutting surfaces become dull. Do not sharpen dull chipper knives. Best results are obtained by replacing dull chipper knives with new ones.

Reverse or replace both chipper knives at the same time. Using two chipper knives that are worn to different degrees will result in excessive vibration and uneven processing.

Fig. 6-8

Cover Plate Removal



Section 6: Maintenance (continued)

⚠ WARNING



EXPOSED KNIVES

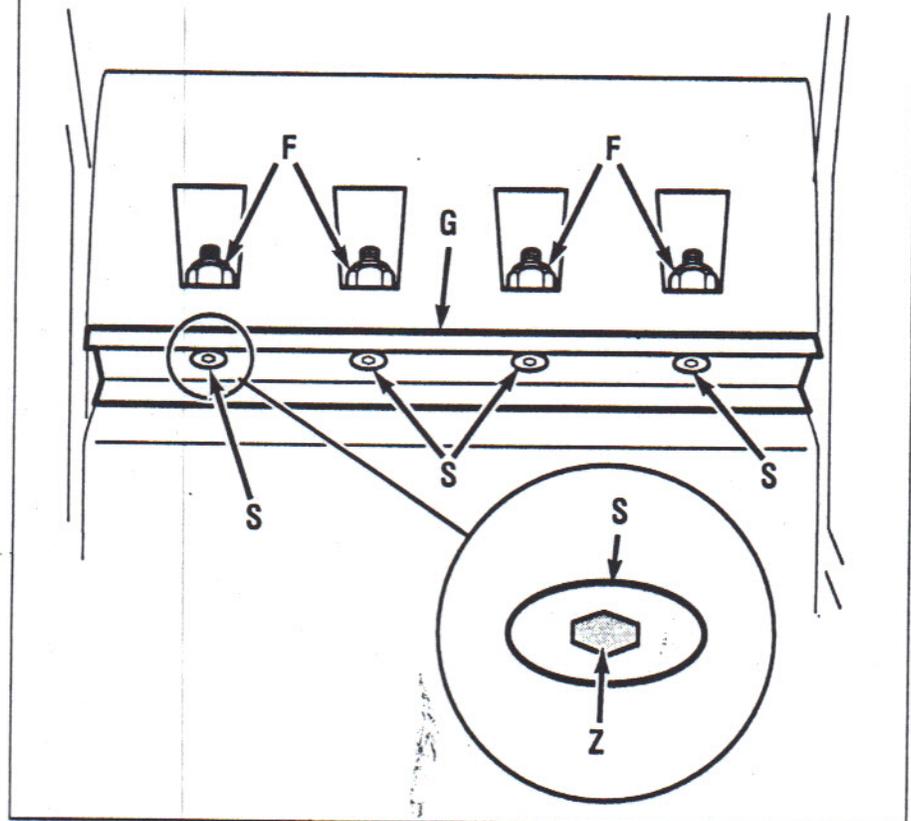
The chipper knives are extremely sharp – use caution when handling them.

Chipper Knife Removal

1. Stop the engine.
2. Rotate the chipper drive clutch lever clockwise all the way forward to disengage the chipper drive and relieve tension on the belt.
3. Remove the clutch rod and clutch spring from between the chipper drive clutch lever and the idler pivot.
4. Using a 1/2" wrench, remove the screws securing the belt cover to the unit. Remove the belt cover.
5. Remove the belt from around the chipper drum pulley (T, Fig. 6-7).
6. Using a 1/2" wrench, remove the four screws (X, Fig. 6-8) securing the cover plate (H) to the top of the unit.
7. Lift the cover plate, and turn it over and out of the way. It is not necessary to remove the belt.
8. Clean out the socket head screw holes (Z, Fig. 6-9).
9. With a 5/32" hex wrench and a 1/2" socket, remove the socket head screws (S) and nuts (F) securing the chipper knives (G) to the chipper drum.
10. Carefully remove the chipper knives (G) from the unit.

Fig. 6-9

Chipper Knife Removal



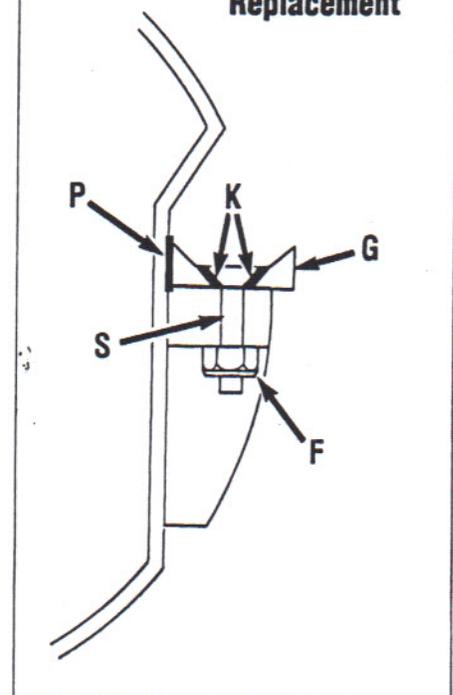
Chipper Knife Replacement

1. Carefully clean the chipper knife seats (P, Fig. 6-10) on the chipper drum, and the socket head screw holes (K) in the chipper knives (G) before securing the knives to the chipper drum. If these surfaces are not clean, the knives and the socket head screws will not lay flat, and damage to the unit and poor chipping performance could occur.
1. If only one of the cutting surfaces on the chipper knives (G) has been used, turn over the chipper knives to expose the unused, sharp surfaces.
2. If both cutting surfaces on the chipper knives are dull, replace the chipper knives with a new knife kit.

NOTE: Do not re-use the chipper knife hardware. Use the new hardware included in the chipper knife kit.

Fig. 6-10

Chipper Drum Cleaning/Chipper Knife Replacement

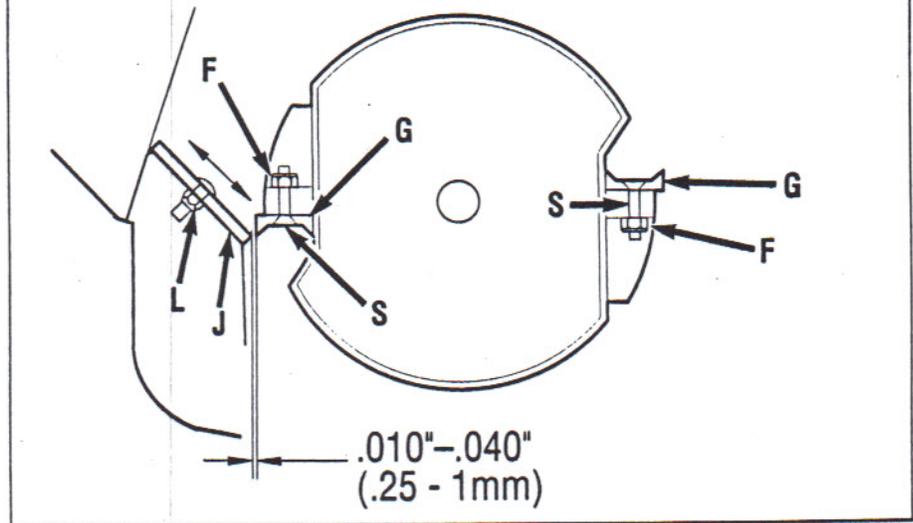


Section 6: Maintenance (continued)

3. Position the reversed/new chipper knives (G, Fig. 6-11) in place into the chipper drum.
 4. Secure the chipper knives (G) with the hex screws (S) and nuts (F) removed earlier. Torque the screws and nuts to 10-12 ft. lbs (14-16 Nm).
 5. Check the anvil clearance as instructed in *Anvil*, later in this section.
 6. Spin the chipper drum to check for interference between the chipper knives (G) and the anvil (J).
 7. Position the cover plate (H, Fig. 6-8) back into place onto the unit (it may be necessary to pull back on the idler pulley to fit the cover plate back in place).
 8. Secure the cover plate onto the unit with the four screws (X) removed earlier. Tighten the screws in the sequence shown in Fig. 6-12.
- Note:** Failure to follow the tightening sequence indicated in step 8 & Fig. 6-12 may result in premature belt wear.
9. Position the belt back in place around the pulleys.
 10. Replace the clutch rod and clutch spring back onto the unit in between the chipper drive clutch lever and the idler pivot.
 11. Position the belt cover back onto the unit and secure with the three screws removed earlier.

Fig. 6-11

Chipper Anvil Adjustment



Anvil

Check the anvil clearance whenever reversing or replacing the chipper knives.

Adjust the anvil (J, Fig. 6-11) .010" – .040" (.25 – 1mm) away from the chipper knife cutting surfaces. Use a feeler gauge when measuring.

Adjust the anvil at nuts (L). Tighten the nuts securely after adjusting.

When adjusting the anvil, measure at both ends, to ensure the distance is equal all the way along the surfaces of the anvil and the knives.

After adjustment, spin the chipper drum to check for interference between the

chipper knives (G, Fig. 6-11) and the anvil.

The anvil can also be reversed, like the chipper knives, if one side becomes dull or rounded.

Tires (Model 47044 only)

Check the tire pressure after every 25 of use.

Inflate the tires 15 - 20 PSI (103 - 137 kPa). Inflate the tires evenly. The unit will not be level if the tire pressure is uneven.

Lubrication

Lubricate the unit as according to the *Lubrication Chart* on the following page.

CAUTION

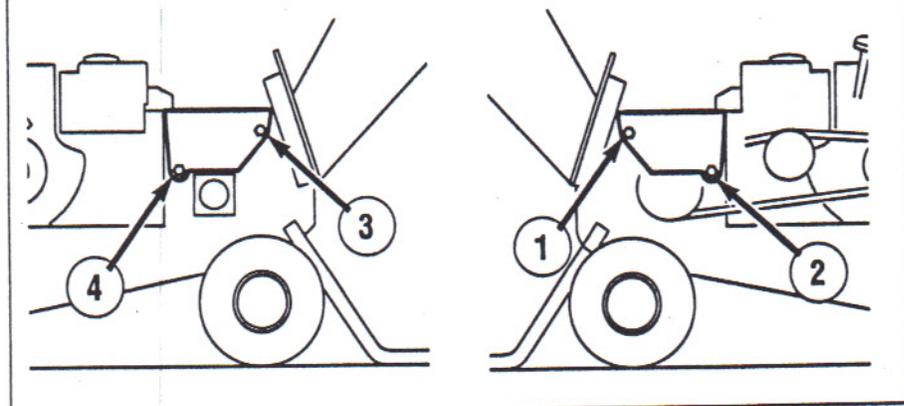


PINCH POINTS

Do not operate the unit without the belt guard in place.

Fig. 6-12

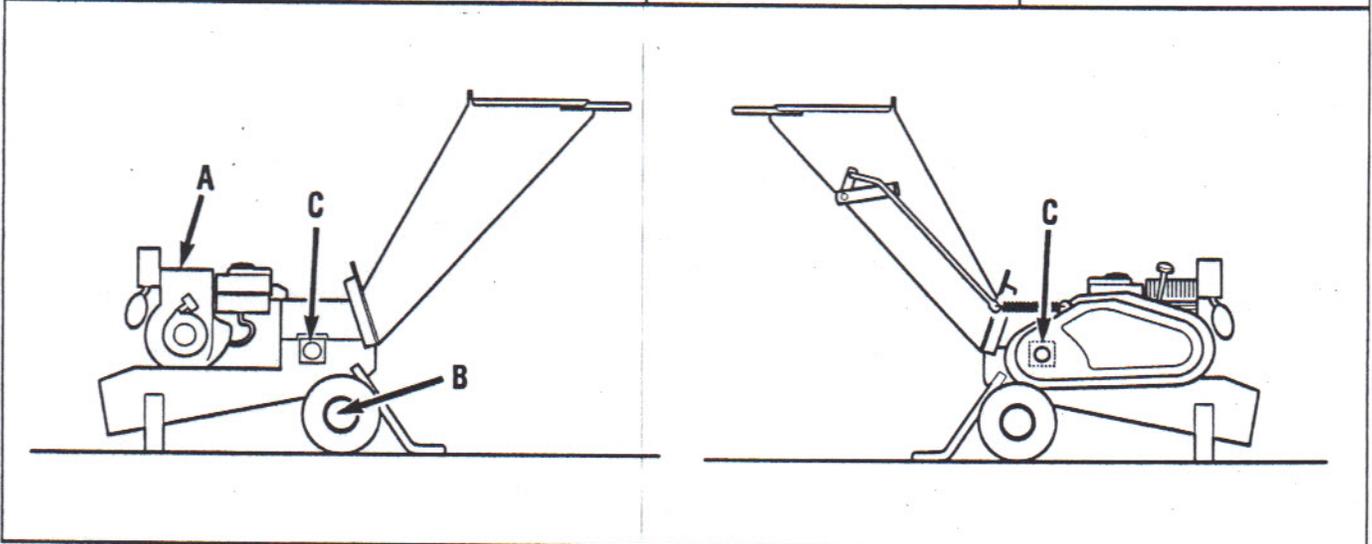
Cover Plate Tightening Sequence



Section 6: Maintenance (continued)

Lubrication Chart

ITEM	INTERVAL	LUBRICATION TYPE	AMOUNT REQUIRED
A--Engine Crankcase	First 5 hours	Change Engine Oil	Refer to the Engine Owner Manual
	25-50 hours Each Season	Change Engine Oil (lubrication intervals vary with operating conditions and type of oil used)	
B--Wheel Bushings	15 hours/annually	Engine Oil	A Few Drops
C--Chipper Drum Bearings	15 hours/annually	Multi-purpose grease	1-3 Strokes*



*A hand-type grease gun is recommended when greasing the unit. High-pressure type grease guns could cause damage to fittings/seals.

Section 6: Maintenance (continued)

Maintenance Chart

INTERVAL*	ITEM	SERVICE
Each use	Engine Flywheel Screen Loose or Missing Hardware Debris in Hopper Inlet Engine Oil Level	Check. Clean if Necessary Tighten or Replace Remove Check. Add if Necessary
First 5 hours	Engine Oil**	Change
15 hours	Engine Oil Level** Engine Air Filter** Chipper Drum Bearings Wheel Axle Bushings Chipper Knives Tire Pressure (Model 47044)	Check. Add if Necessary Clean or Replace Grease*** A Few Drops of Oil Check. Reverse or Replace if Necessary Check. Adjust if Necessary
50 hours	Engine Oil** Spark Plug** Air Filter Element**	Change Replace Replace Inner Paper Cartridge
Each Season	Linkages Belt Chipper Drum Brake Chipper Knives Anvil Engine Oil** Spark Plug** Engine Air Filter** Wheel Axle Bushings	Lube & adjust Check. Replace if Necessary Check. Replace if Necessary Check. Reverse or Replace if Necessary Check. Adjust if Necessary Change Check. Replace if Necessary Check. Replace if Necessary A Few Drops of Oil

*Interval describes running time. Service more often under extreme conditions.

**Consult the engine owner manual for more detailed engine service information.

***A hand-type grease gun is recommended when greasing the unit. High-pressure type grease guns could cause damage to fittings/seals.

This table describes service guidelines only. It does not provide complete service information. Complete service is available from your authorized dealer.

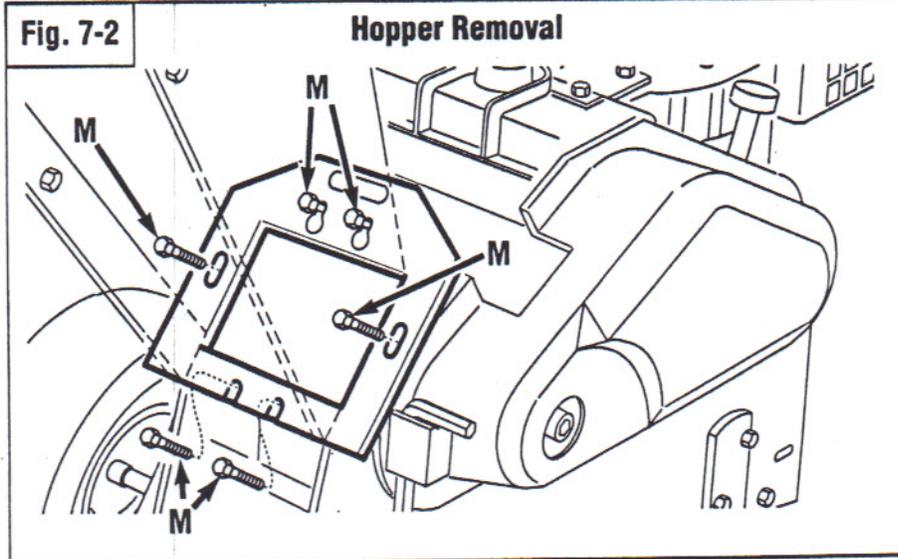
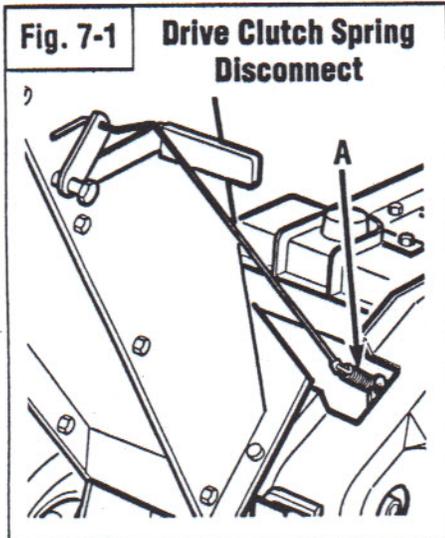
Section 6: Maintenance (continued)

Troubleshooting Chart

Symptom	Possible Cause																				
	Engine malfunction (refer to the engine owner manual).	Dirty engine cooling fins or flywheel screen.	Faulty spark plug.	Spark plug disconnected.	Empty gasoline tank.	Stale or contaminated gasoline.	Maladjusted or dirty carburetor.	Improper oil level.	Dirty air cleaner element.	Maladjusted choke.	Maladjusted throttle.	Plugged fuel line.	Clutch linkage malfunction.	Broken, loose or worn belt.	Loose engine.	Dull or damaged chipper knife (knives).	Anvil/chipper knife clearance out of adjustment.	Processed material not cleared away from discharge opening.	Feeding material at too fast a rate.	Damaged Chipper Drum Bearings.	
Excessive vibration.	●		●											●	●	●					●
Engine will not start.	●		●	●	●	●		●	●	●	●	●									
Engine starts only after repeated tries.	●		●			●	●	●	●	●	●										
Engine runs roughly.	●		●							●	●										
Engine stalls in a few seconds.	●					●	●	●		●	●							●			
Engine stalls when hot.	●	●																			
Engine overheats.	●	●	●				●	●	●	●											
Unit chips poorly.	●										●		●	●	●	●	●				
Unit does not chip.	●												●	●	●	●	●				
Unit jams frequently.	●													●		●	●			●	
Unit clogs.																		●			

This table describes service guidelines only. It does not provide repair information. Complete service is available from your authorized dealer.

Section 7 Storage



Engine Storage Preparation

Refer to the engine owner manual for proper engine storage information.

Off-Season Storage

CAUTION



Before storing the unit:

- Stop the engine (and remove the ignition key on units equipped with an electric start kit).
- Disconnect the spark plug wire from the spark plug.
- Allow the unit to cool.

WARNING



FIRE HAZARD

Do not store the unit inside a building where fumes from gasoline in the fuel tank may reach an open flame or spark.

WARNING

PERSONAL INJURY/PROPERTY DAMAGE HAZARD

Keep the unit and fuel supplies securely locked away out of the reach of children.

CAUTION

PERSONAL INJURY/PROPERTY DAMAGE HAZARD

Do not climb on the unit or use it as a step ladder or a sawhorse.

Hopper Removal/Storage Plate

The hopper can be removed to allow for storing the unit in a confined space.

Note: The hopper weighs 50 lbs (23 Kg). Use caution when lifting: Lift with your legs; keeping your back straight. Make sure you have stable footing before lifting so you are not pulled off balance by the load. Know your limits and do not lift loads too heavy for you to comfortably handle. If necessary, have someone assist you.

Hopper Removal

1. Disconnect the drive clutch lever spring (A, Fig. 7-1).
2. Remove the screws (M, Fig. 7-2) securing the hopper.
3. Carefully lift the hopper off the unit.

Section 7: Storage (continued)

Position the storage plate on the unit as shown in Fig. 7-3 and secure with the screws (M) removed when removing the hopper.

⚠ WARNING

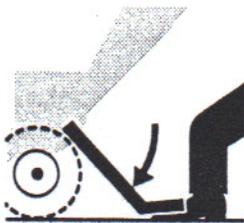


EXPOSED KNIVES

The chipper knives are extremely sharp. Always install the storage plate on the unit whenever the hopper is removed.

NOTE: Thread screws (M) back onto the studs on the unit when the hopper is removed, to prevent loss.

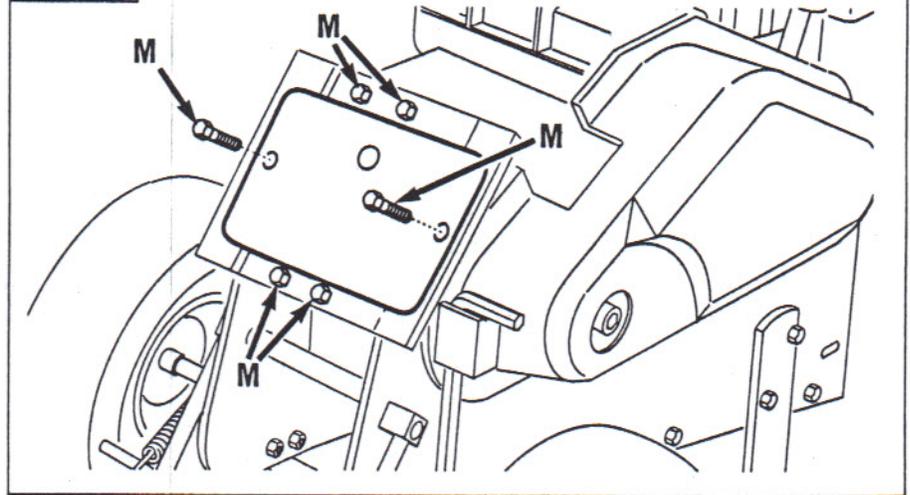
⚠ CAUTION



- Exercise care when raising or lowering the stand.
- Always store the unit with the stand in the lowered position.

Fig. 7-3

Storage Plate



Hopper Re-assembly

Refer to the *Assembly* section in this manual for hopper re-assembly instructions.

Inspection/Replacement Parts

Thoroughly clean the exterior of the unit. Apply touch-up paint to any chips or scratches to keep rust from forming.

Inspect all parts for breakage or wear. Tighten any loose fasteners. Replace any damaged parts with factory-approved replacements.

⚠ CAUTION

Use only genuine replacement parts of maintenance or repair. Parts manufactured by others may present safety hazards even though they may fit on the unit.

Section 8 Specifications

Dimensions:

Length

Models 47042, 47044.....71"/180 cm

Height

Models 47042, 47044.....49"/124.5 cm

Width

Model 47042.....30.5"/77.5 cm

Model 47044.....32.5"/82.5 cm

Shipping weight

Model 47042.....261 lbs/ 118 Kg.

Model 47044.....267 lbs/ 121 Kg.

Engine-Tecumseh:

Model 47042.....HM 100-159314M
10HP-3600 rpm

Model 47044.....OHM120-220008C
12HP-3600 rpm
Overhead valve engine

Chipper

Capacity.....4"/10 cm

Type.....Drum

Opening Size.....16" x 18"/40.5 cm x 45.5 cm

Features:

Drum style chipper for brush reduction, belt clutch, drum brake, reversible blades, extra-large self-feeding hopper, engine equipped to receive electric start.

