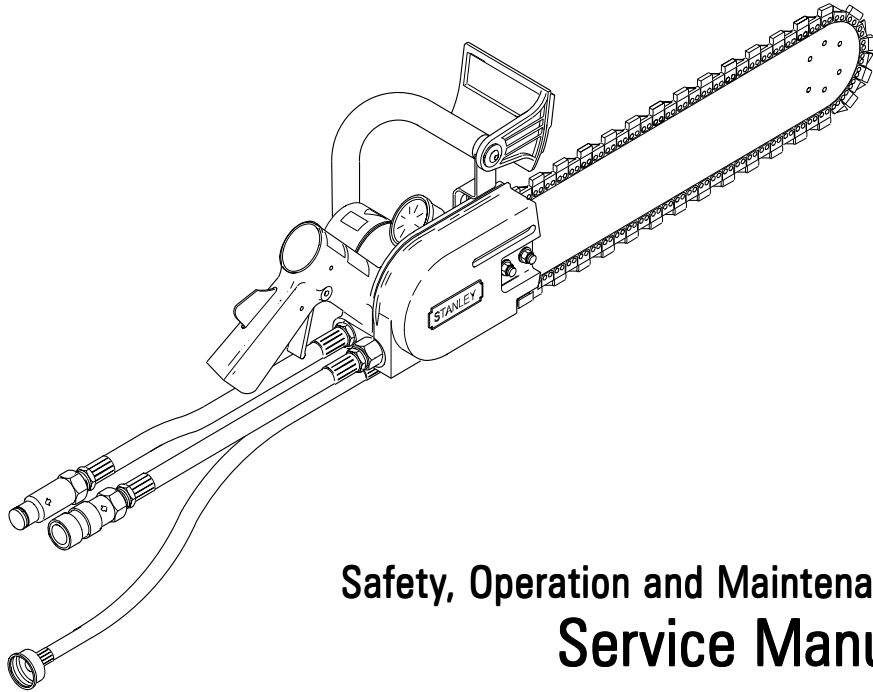


# DS06

## Hydraulic Diamond Saw

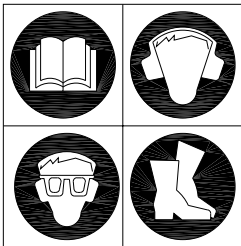


### Safety, Operation and Maintenance Service Manual

**⚠ DANGER**

SERIOUS INJURY OR DEATH  
COULD RESULT FROM THE IM-  
PROPER REPAIR OR SERVICE OF  
THIS TOOL.

REPAIRS AND/OR SERVICE TO  
THIS TOOL MUST ONLY BE DONE  
BY AN AUTHORIZED AND CERTI-  
FIED DEALER.



**STANLEY**®

Copyright © 1999 The Stanley Works  
OPS/MAINT USA & CE VERSION  
34567 10/99 Ver 2

CE

Stanley Hydraulic Tools  
3810 SE Naef Road  
Milwaukie, OR 97267-5698 USA  
Phone: (503) 659-5660  
Fax: (503) 652-1780

# **SAFETY FIRST**

**It is the responsibility of the operator and service technician to read rules and instructions for safe and proper operation and maintenance**

**A cautious worker using common sense is the greatest safety device**

COPYRIGHT© 1999 The Stanley Works

The information included in this manual is copyrighted, with all rights reserved. Under copyright law, this document may not be copied in whole or in part without the prior written consent of The Stanley Works. This exception does not permit copies to be made for others, whether or not sold. Under the law, copying includes translating into another language, format, or medium. This copyright notice must appear on any permitted copies.

Printed in U.S.A.

**Stanley Hydraulic Tools**

3810 SE Naef Road  
Milwaukie, OR 97267-5698 USA

Phone: (503) 659-5660

Fax: (503) 652-1780

Accessories .....	26
Index (this page) .....	1
Hydraulic Hose Requirements .....	7
Hydraulic Requirements .....	8
Local Safety Regulations .....	4
Maintenance & Adjustments .....	12 - 17
Operation .....	9 - 11
Parts Drawing .....	24
Parts List .....	25
Protection & Care .....	8
Service Instructions .....	18 - 21
Safety Precautions .....	2 - 3
Specifications .....	26
Stickers and Tags .....	5 - 6
Troubleshooting .....	22 - 23





 **DANGER**

**SERIOUS INJURY OR DEATH COULD RESULT FROM THE IMPROPER REPAIR OR SERVICE OF THIS EQUIPMENT.**

**REPAIRS AND / OR SERVICE TO THIS EQUIPMENT MUST ONLY BE DONE BY AN AUTHORIZED AND CERTIFIED DEALER.**

For the nearest authorized and certified dealer, call (503) 659-5660 and ask for a Customer Service Representative.

# SAFETY PRECAUTIONS

**⚠ DANGER**

**Do not operate this equipment or associated equipment until the following safety instructions have been thoroughly read and understood! Read this manual before installing, operating or maintaining this equipment.**

Tool operators and maintenance personnel must always comply with the safety precautions given in this manual and on the stickers and tags attached to the equipment.

These safety precautions are given for your safety. Review them carefully before operating the tool and before performing general maintenance or repairs.

Supervising personnel should develop additional precautions relating to the specific work area and local safety regulations. If so, place the added precautions in the space provided on page 4.

---

## GENERAL SAFETY PRECAUTIONS

---

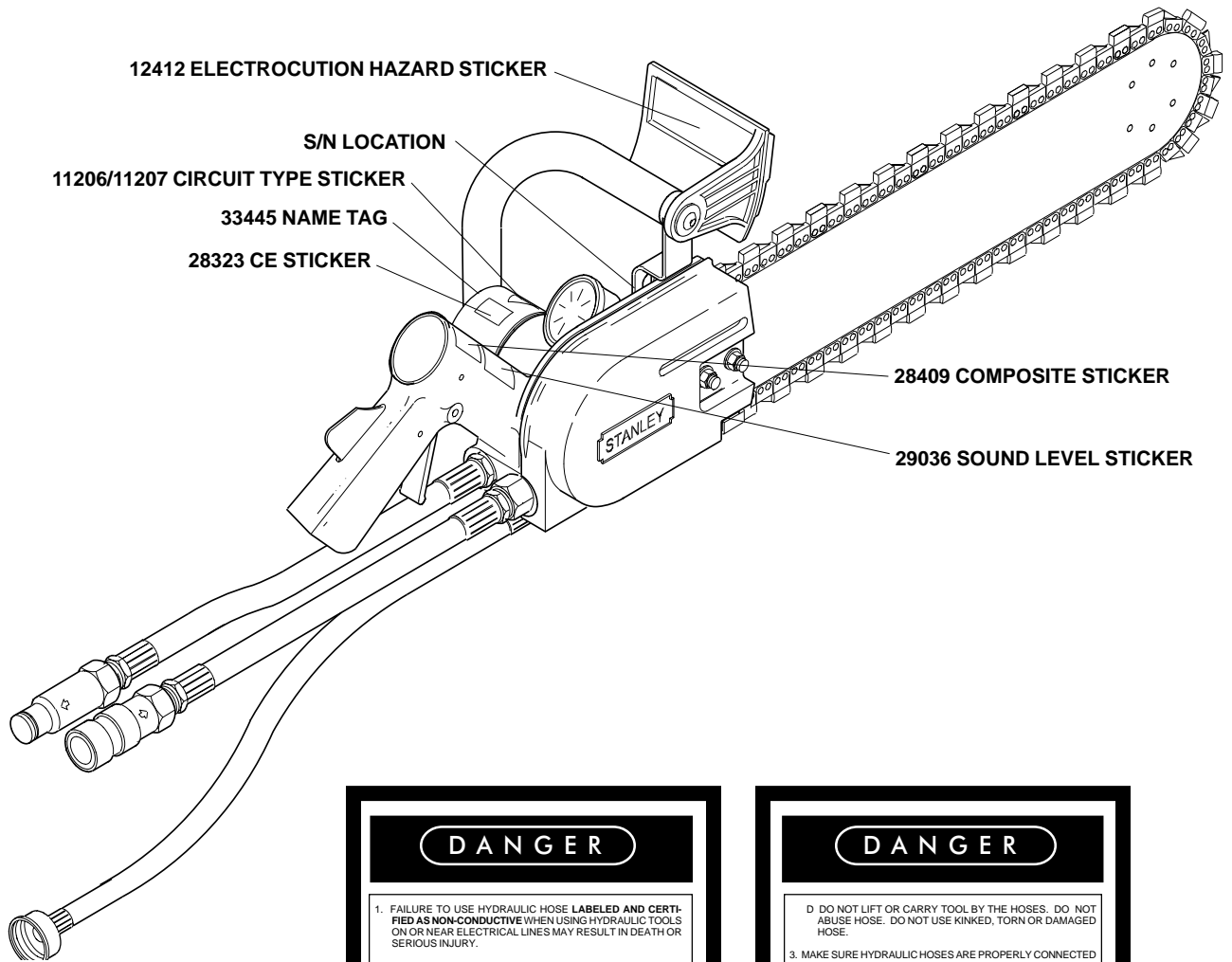
The model DS06 Diamond Chain Saw will provide safe and dependable service if operated in accordance with the instructions given in this manual. Read and understand this manual and any stickers and tags attached to the tool and hoses before operation. Failure to do so could result in personal injury or equipment damage.

- Establish a training program for all operators to ensure safe operation.
- Operator must start in a work area without bystanders. The operator must be familiar with all prohibited work areas such as excessive slopes and dangerous terrain conditions.
- Do not operate the tool unless thoroughly trained or under the supervision of an instructor.
- Always wear safety equipment such as goggles, ear and head protection, and safety shoes at all times when operating the tool.
- Do not overreach. Maintain proper footing and balance at all times.
- Do not inspect or clean the tool while the hydraulic power source is connected. Accidental engagement of the tool can cause serious injury.
- Always connect hoses to the tool hose couplers before energizing the hydraulic power source. Be sure all hose connections are tight.
- Do not operate the tool at oil temperatures above 140°F/60°C. Operation at higher temperatures can cause higher than normal temperatures at the tool which can result in operator discomfort.
- Do not operate a damaged, improperly adjusted, or incompletely assembled tool.
- Do not inspect or clean the tool while the hydraulic power source is connected. Accidental engagement of the tool can cause serious injury.
- Never wear loose clothing that can get entangled in the working parts of the tool.
- Keep all parts of your body away from the chain. Long hair or loose clothing can become drawn into rotating components.

- Always hold the tool with both hands when the unit is running. Use a firm grip.
- Make sure the chain has stopped when the trigger is released and before setting the tool down.  
Always carry the tool with the chain stopped.
- Inspect the chain guard and sprocket for damage after any chain breakage.
- Do not operate the tool in the vicinity of flammable materials.
- Eye injury, and cutting or severing of body parts is possible if proper procedures are not followed.
- Do not rely exclusively upon the safety devices built into the tool. As a user, several steps must be taken to keep your cutting jobs free from accident or injury.
  1. With a basic understanding of kickbacks, you can reduce or eliminate the element of surprise. Sudden surprise contributes to accidents.
  2. Keep a good firm grip on the tool with both hands, the right hand on the rear handle and the left hand on the front handle when operating the chain saw. Use a firm grip with thumbs and fingers encircling the handles. A firm grip helps reduce kickbacks and maintains control of the tool. Do not let go.
  3. Make sure the area in which you are cutting is free of obstructions.
  4. Cut at rated operating speeds (gpm). Never exceed the maximum operating speed of the tool.
  5. Do not overreach or cut above shoulder height.
  6. Only use replacement bars and chains specified in this manual.
- Ensure that the bar and chain and chain guard are correctly mounted and tightened before use.
- Remove or control the water slurry residue of the cutting process to prevent yourself or others from slipping while cutting.
- Provide adequate ventilation in closed areas when operating a gas or diesel hydraulic power source.
- Always be well rested and mentally alert before operating the tool.
- Keep the handle grip areas clean and free of hydraulic fluid or water.
- Know the location of electrical outlets, switches, and appliances and hidden or covered electrical services before starting work. Do not use the tool near electrical sources because the water spray creates a shock hazard which may result in serious injury or death. Do not perform any cutting if hidden or covered electrical services may exist. Cutting into an electrical service creates a shock hazard which may result in serious injury or death.
- Use a guide bar scabbard when transporting the tool.
- Inspect bar and chain on a regular basis for wear and damage. Replace components if extreme wear or damage is noted.
- To avoid personal injury or equipment damage, all chain saw repair, maintenance and service must only be performed by authorized and properly trained personnel.



# TOOL STICKERS & TAGS



The safety tag at right is attached to the tool when shipped from the factory. Read and understand the safety instructions listed on this tag before removal. We suggest you retain this tag and attach it to the tool when not in use.

**DANGER**

1. FAILURE TO USE HYDRAULIC HOSE **LABELED AND CERTIFIED AS NON-CONDUCTIVE** WHEN USING HYDRAULIC TOOLS ON OR NEAR ELECTRICAL LINES MAY RESULT IN DEATH OR SERIOUS INJURY.  
  
BEFORE USING HOSE **LABELED AND CERTIFIED AS NON-CONDUCTIVE** ON OR NEAR ELECTRIC LINES BE SURE THE HOSE IS **MAINTAINED AS NON-CONDUCTIVE**. THE HOSE SHOULD BE REGULARLY TESTED FOR ELECTRIC CURRENT LEAKAGE IN ACCORDANCE WITH YOUR SAFETY DEPARTMENT INSTRUCTIONS.
2. A HYDRAULIC LEAK OR BURST MAY CAUSE OIL INJECTION INTO THE BODY OR CAUSE OTHER SEVERE PERSONAL INJURY.
  - A. **DO NOT EXCEED SPECIFIED FLOW AND PRESSURE FOR THIS TOOL.** EXCESS FLOW OR PRESSURE MAY CAUSE A LEAK OR BURST.
  - B. **DO NOT EXCEED RATED WORKING PRESSURE OF HYDRAULIC HOSE USED WITH THIS TOOL.** EXCESS PRESSURE MAY CAUSE A LEAK OR BURST.
  - C. CHECK TOOL HOSE COUPLERS AND CONNECTORS DAILY FOR LEAKS. **DO NOT FEEL FOR LEAKS WITH YOUR HANDS.** CONTACT WITH A LEAK MAY RESULT IN SEVERE PERSONAL INJURY.

**IMPORTANT**

READ OPERATION MANUAL AND SAFETY INSTRUCTIONS FOR THIS TOOL BEFORE USING IT.

USE ONLY PARTS AND REPAIR PROCEDURES APPROVED BY STANLEY AND DESCRIBED IN THE OPERATION MANUAL.

TAG TO BE REMOVED ONLY BY TOOL OPERATOR.

SEE OTHER SIDE

**DANGER**

- D. **DO NOT LIFT OR CARRY TOOL BY THE HOSES.** DO NOT ABUSE HOSE. DO NOT USE KINKED, TORN OR DAMAGED HOSE.
3. MAKE SURE HYDRAULIC HOSES ARE PROPERLY CONNECTED TO THE TOOL BEFORE PRESSURING SYSTEM. SYSTEM PRESSURE HOSE MUST ALWAYS BE CONNECTED TO TOOL "IN" PORT. SYSTEM RETURN HOSE MUST ALWAYS BE CONNECTED TO TOOL "OUT" PORT. REVERSING CONNECTIONS MAY CAUSE REVERSE TOOL OPERATION WHICH CAN RESULT IN SEVERE PERSONAL INJURY.
4. DO NOT CONNECT OPEN-CENTER TOOLS TO CLOSED-CENTER HYDRAULIC SYSTEMS. THIS MAY RESULT IN LOSS OF OTHER HYDRAULIC FUNCTIONS POWERED BY THE SAME SYSTEM AND/OR SEVERE PERSONAL INJURY.
5. BYSTANDERS MAY BE INJURED IN YOUR WORK AREA. KEEP BYSTANDERS CLEAR OF YOUR WORK AREA.
6. WEAR HEARING, EYE, FOOT, HAND AND HEAD PROTECTION.
7. TO AVOID PERSONAL INJURY OR EQUIPMENT DAMAGE, ALL TOOL REPAIR MAINTENANCE AND SERVICE MUST ONLY BE PERFORMED BY AUTHORIZED AND PROPERLY TRAINED PERSONNEL.

**IMPORTANT**

READ OPERATION MANUAL AND SAFETY INSTRUCTIONS FOR THIS TOOL BEFORE USING IT.

USE ONLY PARTS AND REPAIR PROCEDURES APPROVED BY STANLEY AND DESCRIBED IN THE OPERATION MANUAL.

TAG TO BE REMOVED ONLY BY TOOL OPERATOR.

SEE OTHER SIDE

SAFETY TAG (shown smaller than actual size)



33445 Name Tag Sticker



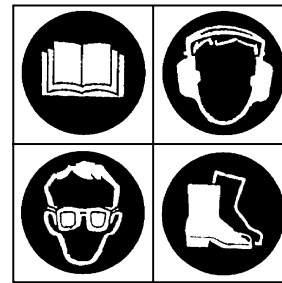
11206 Circuit "C" Sticker



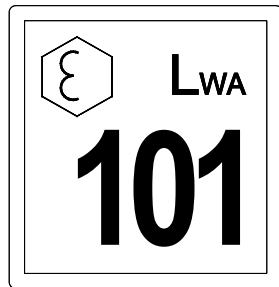
11207 Circuit "D" Sticker



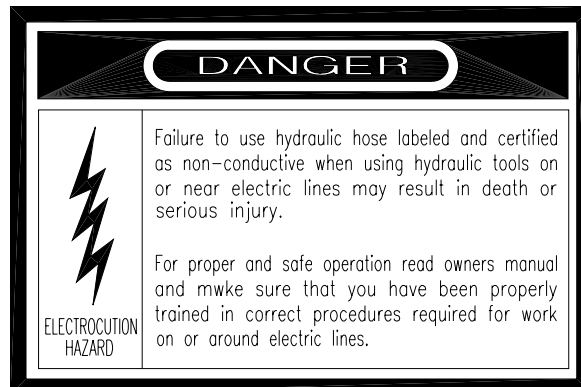
28323 CE Sticker



28409 Composite Sticker



29036 Sound Power Level Sticker



12412 Electrocution Hazard Sticker



# HYDRAULIC HOSE REQUIREMENTS

## HOSE TYPES

Hydraulic hose types authorized for use with this tool are as follows:

- 1 Certified non-conductive
- 2 Wire-braided (conductive)
- 3 Fabric-braided (not certified or labeled non-conductive)

Hose **1** listed above is the only hose authorized for use near electrical conductors.

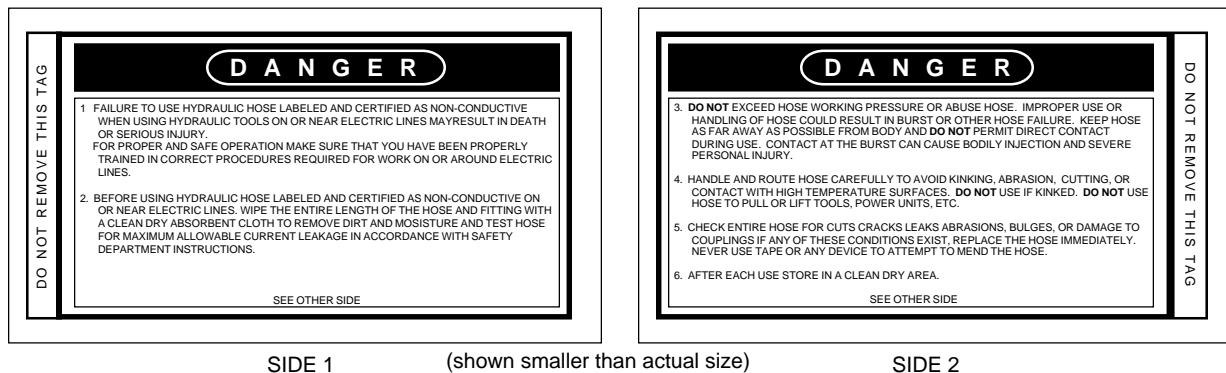
Hoses **2** and **3** listed above are **conductive** and **must never** be used near electrical conductors.

To help ensure your safety, the following DANGER tags are attached to all hose purchased from Stanley Hydraulic Tools. **DO NOT REMOVE THESE TAGS.**

If the information on a tag is illegible because of wear or damage, replace the tag immediately. A new tag may be obtained at no charge from your Stanley Distributor.

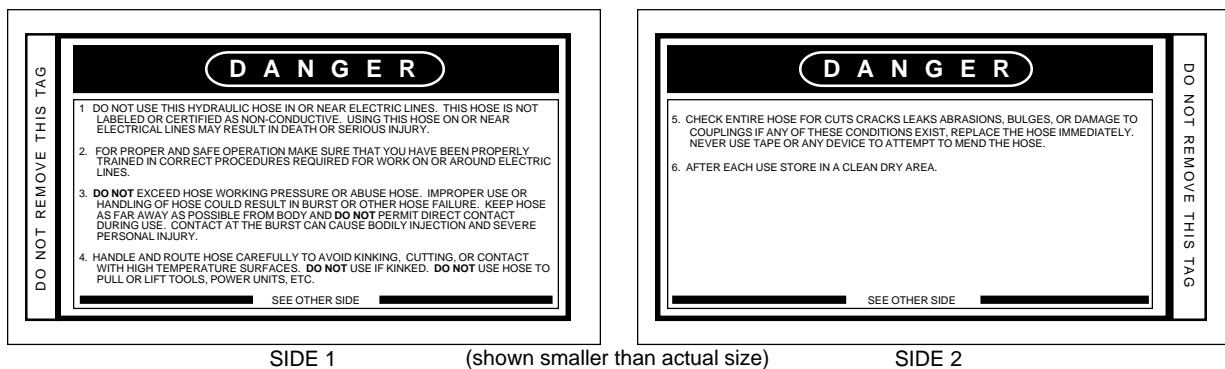
### 1 CERTIFIED NON-CONDUCTIVE HOSE

This tag is attached to all certified **non-conductive** hose.



### 2 AND 3 WIRE-BRAIDED AND FABRIC-BRAIDED (NOT CERTIFIED OR LABELED NON-CONDUCTIVE) HOSE

This tag is attached to all **conductive** hose.



## HOSE PRESSURE RATING

The rated working pressure of the hydraulic hose **must be equal or higher than** the relief valve setting on the hydraulic system.

# HYDRAULIC REQUIREMENTS

## HYDRAULIC SYSTEM REQUIREMENTS

- The hydraulic system should provide a flow of 7-9 gpm/26-34 lpm for the 8 gpm model, or 4-6 gpm/15-23 lpm for the 5 gpm model, at an operating pressure of 1000-2000 psi/70-140 bar. Recommended relief valve setting is 2100-2250 psi/145-155 bar.
- The system should have no more than 250 psi/17 bar backpressure measured at the tool end of the operating hoses. The system conditions for measurement are at maximum fluid viscosity of 400 ssu/82 centistokes (minimum operating temperatures).
- The hydraulic system should have enough heat rejection capacity to limit the maximum oil temperature to 140°F/60°C at the maximum expected ambient temperature. The recommended minimum cooling capacity is 5 hp/3.73 kW at a 40° F/22°C difference between ambient temperature and

oil temperature.

- The hydraulic system should have a minimum of 25 micron filtration. It is recommended using filter elements sized for a flow of at least 30 gpm/114 lpm for cold temperature startup and maximum dirt holding capacity.
- The hydraulic fluid used should have a viscosity between 100 and 400 ssu/20 and 82 centistokes at the maximum and minimum expected operating temperatures. Petroleum base hydraulic fluids with antiwear properties and a viscosity index over 140 will meet the recommended requirements over a wide range of operating temperatures.
- The recommended hose size is .500 inch/12 mm I.D. up to 50 ft/15 m long and .625 inch/16 mm I.D. minimum up to 100 ft/30 m long. Hoses must have a minimum operating pressure of 2500 psi/175 bar and a minimum burst pressure of 10000 psi/690 bar.
- Quick disconnect couplings must conform to EHTMA/HTMA specifications.

## EQUIPMENT PROTECTION & CARE

- Always store an idle tool in a clean dry space, safe from damage or pilferage.
- Spray a light film of lubricant such as WD40® on the bar and chain and surfaces of the tool that will be exposed to cuttings and spray during the operation of the saw. This will help prevent corrosion and will ease clean-up. Spray a light film of lubricant onto the bar and chain after clean-up and before storage. **DO NOT LUBRICATE THE BAR AND CHAIN WITH OIL DURING OPERATION.**
- Do not use the tool for applications it was not designed for. The saw chain is only designed to cut concrete, concrete block, brick, natural stone, etc. The saw chain is not designed to cut wood, plastic, glass or metal (except steel rebar encased in concrete).
- Always keep critical tool markings, such as labels and warning stickers legible.
- Always replace hoses, couplings and other parts with replacement parts recommended or identified in this manual.
- Be sure to wipe all couplers clean before connecting. Use only lint-free cloths.
- The hydraulic circuit control valve must be in the "OFF" position when coupling or uncoupling the tool. Failure to do so may result in damage to the quick couplers and cause overheating of the hydraulic system.
- Check fastener tightness often and before each use daily.
- Permit only experienced personnel to perform tool repair.

## PREOPERATION PROCEDURES

### PREPARATION FOR INITIAL USE

Each unit as shipped has no special unpacking or assembly requirements prior to usage. Inspection to assure the unit was not damaged in shipping and does not contain packing debris is all that is required. After installation of a saw bar and cutting chain, a unit may be put to use.

### CHECK HYDRAULIC POWER SOURCE

1. Using a calibrated flowmeter and pressure gauge, check that the hydraulic power source develops a flow of 7-9 gpm/26-34 lpm for the 8 gpm model, or 4-6 gpm/15-23 lpm for the 5 gpm model, at 2000 psi/140 bar.
2. Make certain the hydraulic power source is equipped with a relief valve set to open at 2100-2250 psi/145-155 bar minimum.
3. Check that the hydraulic circuit matches the tool for open-center (OC) or closed-center (CC) operation. The DS06 is designed for open-center operation only.

### CHECK TOOL

1. Make sure all tool accessories are correctly installed. Failure to install tool accessories properly can result in damage to the tool or personal injury.
2. There should be no signs of leaks.
3. The tool should be clean, with all fittings and fasteners tight.
4. Observe the arrow on the couplers to ensure that the hydraulic oil flow is in the proper direction. The female coupler is the inlet (pressure) coupler.
5. Check that the trigger operates smoothly and is free to travel between the "ON" and "OFF" positions.
6. Check that the chain is properly installed. The chain is designed to only operate in one direction.

Make sure the chain is installed so the bumper guard precedes each diamond segment. See figure 1.

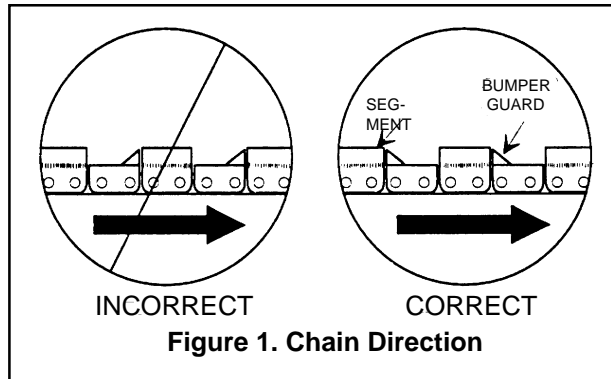


Figure 1. Chain Direction

### CHECK CHAIN AND BAR ADJUSTMENT

1. Make sure the chain does not exceed a clearance of 5/16 in./1.6 mm from the bar. See figure 2. Exceeding this clearance increases the chance of the chain being dislodged from the bar groove. To properly adjust the bar and chain, see "MAINTENANCE AND ADJUSTMENTS" later in this manual.
2. Make sure the bar attaching nuts are fully tightened and the chain guard is in place.

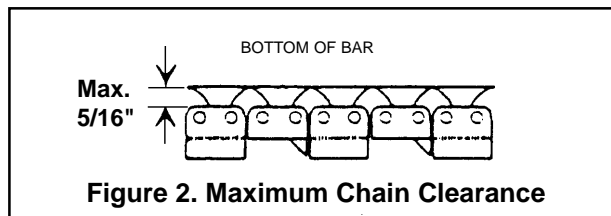


Figure 2. Maximum Chain Clearance

### CHECK CHAIN SEGMENT WEAR

1. Using adjustable calipers, measure several chain segments as illustrated in figure 3.
2. If the average measurement is less than 1/16 in./1.6 mm, then the chain must be replaced. To properly replace the chain, see "MAINTENANCE AND ADJUSTMENTS" later in this manual.

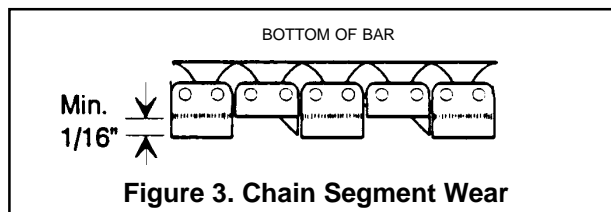


Figure 3. Chain Segment Wear

## CONNECT HYDRAULIC HOSES

1. Wipe all hose couplers with a clean lint-free cloth before making connections.
2. Connect the hoses from the hydraulic power source to the hose couplers on the DS06. It is a good practice to connect the return hose first and disconnect it last to minimize or avoid trapped pressure within the DS06 motor.
3. Observe flow indicators stamped on hose couplers to be sure that oil will flow in the proper direction. The female coupler is the inlet coupler.

**NOTE: The pressure increase in uncoupled hoses left in the sun may result in making them difficult to connect. When possible, connect the free ends of operating hoses together.**

## CONNECT WATER HOSE

1. Using a standard garden hose, connect the water hose to a city or auxiliary water supply. Make sure the water flow is at least 4 gpm/15 lpm at 50 psi/3.5 bar.

### IMPORTANT

**CHAIN AND BAR DAMAGE WILL OCCUR IF THE TOOL OPERATES WITHOUT THE PROPER WATER SUPPLY AND WATER PRESSURE.**

2. Make sure the water is running before starting the tool.
3. If a water pump is being used, refer to the manufacturers instructions for use of the pump. Make sure the pump produces a minimum water flow of 4 gpm/15 lpm at 50 psi/3.5 bar and the water pressure does not exceed 160 psi/11 bar.

---

## OPERATING PROCEDURES

---

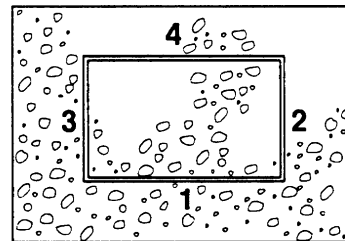
1. Observe all safety precautions.
2. Turn on the water supply. Water at the tool will be directed to the bar and chain when the trigger on the tool is squeezed "ON".

3. Operate the tool for two minutes (away from the intended cut) and then check the chain tension. New chain will normally stretch during its first usage. It is very important to keep the chain tension adjusted so that it does not exceed 5/16 in./8 mm clearance from the bottom of the bar. See "CHECK CHAIN & BAR ADJUSTMENT" on the previous page.

4. If the chain requires adjustment, see "MAINTENANCE AND ADJUSTMENTS" later in this manual.

## MAKING CUTS

1. Plan your cuts to prevent injury to yourself and to keep from pinching the bar and chain as a result of falling pieces of concrete, brick, etc.
2. Make your cuts in the order shown in figure 4, starting with cut 1 (base horizontal cut) and proceeding with the remaining three cuts.



**Figure 4. Planning Cuts**

3. Outline the concrete area with a permanent marker for a visual guide.
4. Know what kind of material and how much reinforcing you are going to cut.

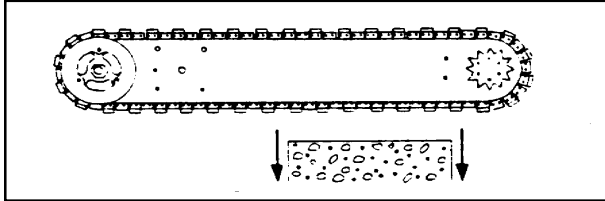
### WARNING

**Information in this manual deals with general cutting procedures and techniques. Differences in the terrain and the type of material being cut will make this information more or less valid for particular areas. For advice on specific cutting problems or techniques, consult your local representative.**

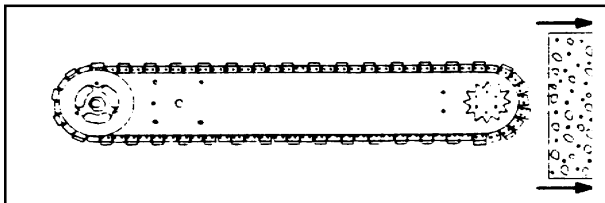
## TYPES OF CUTS

The tool can be operated using the types of cuts shown in figure 5.

### Down Cut



### Plunge Cut



### Up Cut

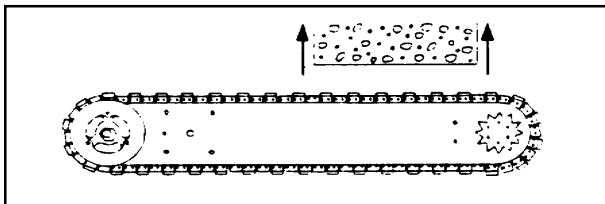


Figure 5. Types of Cuts

1. Do not use a cutting force in excess of 45 lbs/ 20 kg. Excessive force causes the chain to slow down or stall and causes premature wear of the saw bar and chain.
2. Always maintain a high chain speed. High chain speeds produce the best results.
3. Always check that plenty of water is being expelled from the bar and chain. When the tool is running, water is directed to the interior of the bar and then out of several holes located along the top and bottom channels on the bar. If these holes become plugged, cutting debris will not be adequately washed away and will result in premature wear of the bar and chain.
4. Avoid aggressive/heavy plunge forces. Aggressive plunge force creates fragmenting of the concrete when the saw bar and chain exits and causes premature bar and chain wear.

## COLD WEATHER OPERATION

If the saw is to be used during cold weather, preheat the hydraulic fluid at low power source speed. When using the normally recommended fluids, fluid should be at or above 50° F/10° C (400 ssu/82 centistokes) before use.

Damage to the hydraulic system or chain saw can result from use with fluid that is too viscous or thick.

## USING THE WALL WALKER™

The Wall Walker™ lessens operator fatigue and effort during cutting by automatic insertion of the wedge into the cut, thus allowing the operator to apply leverage to the saw.

1. Position the Wall Walker™ in the "autofeed" position by pinning the lever arm at the lowest hole as shown in the illustration.

Start cutting with the DS06 until the cut is large enough to allow the tip of the wedge to insert into the cut. With the tip of the wedge in the cut, the operator can easily apply leverage to the saw which will aid the cutting process and lessen operator fatigue and effort.

After the saw cuts approximately 1 to 2.5 in. / 25 to 65 mm, withdraw the saw only enough to allow the lever arm and wedge to reposition. After repositioning, continue cutting.

2. The Wall Walker™ can be positioned to the "parked" position by pinning the lever arm at the upper most hole. In this position, the Wall Walker™ is used as a bucking cleat.

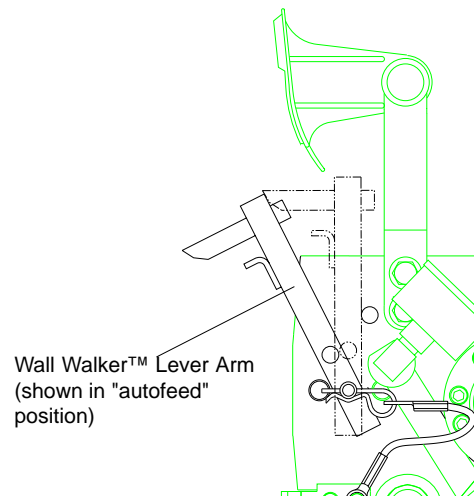


Figure 6. Wall Walker™

# MAINTENANCE AND ADJUSTMENTS

## GENERAL MAINTENANCE TIPS

Several simple maintenance tasks which, if performed, can keep a chain saw operating at a high level of efficiency. Routine maintenance also keeps replacement costs down on the parts of the chain saw, which occasionally wear out.

If any chain saw disassembly is required, refer to the SERVICE INSTRUCTIONS section of this manual.

### SAW BAR RAIL

A quick check can be made to determine if saw bar or chain segment wear exists. Figure 7 shows a worn saw bar rail.

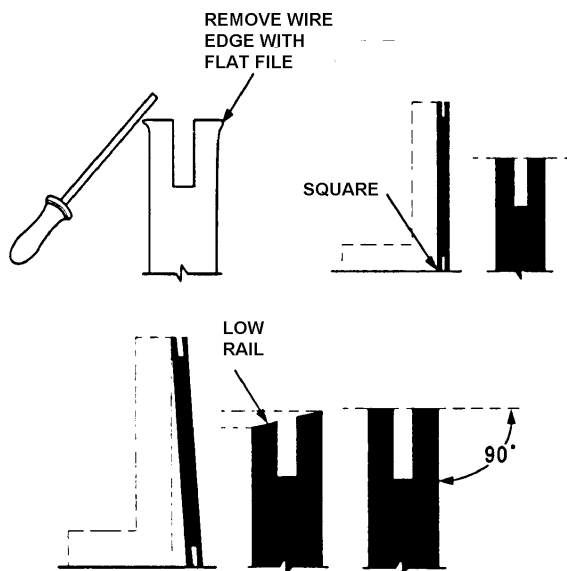


Figure 7. Rail Wear

If the saw bar rails are worn, use a flat file and dress each one until it is flat and square with the side of the saw bar (figure 7).

Also, make sure the saw bar is perfectly straight. If bows or bends are present in the saw bar, it must be replaced before dressing any rail.

## ROTATING THE SAW BAR

Maximum saw bar life can be achieved by occasionally turning the bar over so the top and bottom bar surfaces wear evenly. Refer to the saw bar disassembly procedures contained in the SERVICE INSTRUCTIONS section of this manual for further details.

## CHAIN TENSION ADJUSTMENT

Correct chain tension is very important throughout the life of the chain. Check the chain tension often during use (when the chain saw is stopped and the saw bar and chain have cooled off). The chain should move easily around the saw bar when pulled by hand. To adjust the chain tension:

1. Turn off the water and power supplies.
2. Loosen the two saw bar attachment nuts (figure 8).

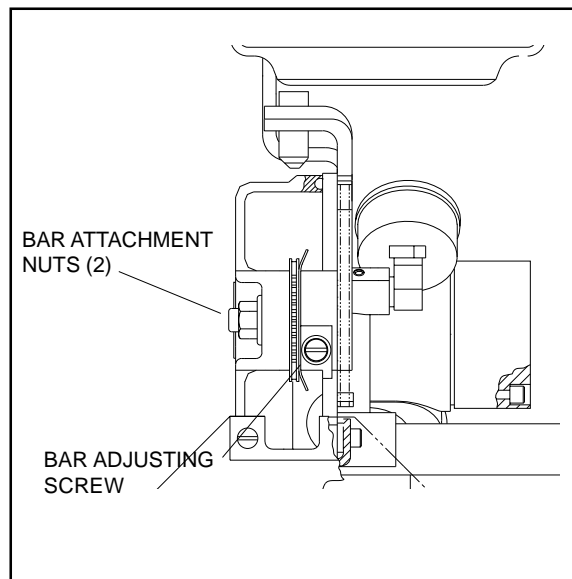
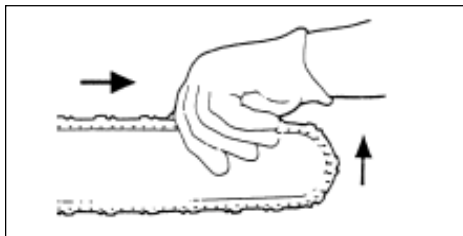


Figure 8. Attachment Screw Locations

3. Using the saw bar adjustment screw (figure 8), tighten the chain until you are still able to rotate it one full revolution by hand (figure 9).

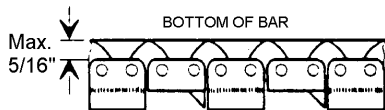


**Figure 9. Pulling the Chain**

4. Pull the chain around the saw bar to make sure it properly fits the sprocket and saw bar. Chain should be easily pulled.

5. Fully tighten the two saw bar attachment nuts (figure 8).

**Note:** Adjust the chain tension each time the drive link tang hangs fully exposed from the groove at the bottom of the saw bar (figure 10).

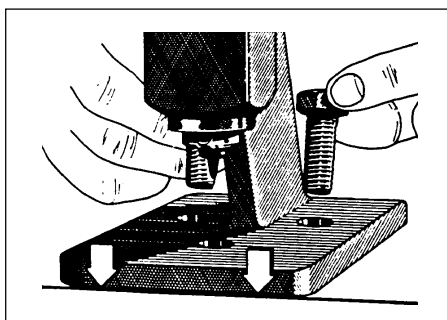


**Figure 10. Exposed Drive Link Tang**

## SERVICING THE CHAIN

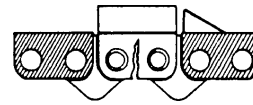
The following procedures explain how to break a chain using Stanley's bench mounted chain breaker (part number 20858) to remove a worn or damaged segment.

1. Mount the chain breaker flush with the side or front of a flat, clean work surface (figure 11).



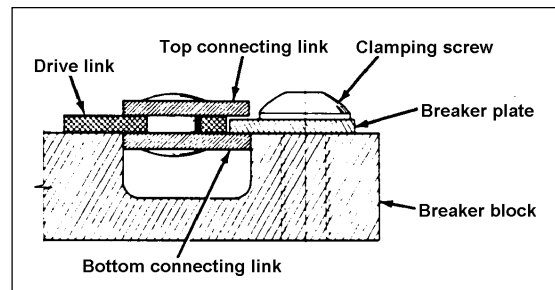
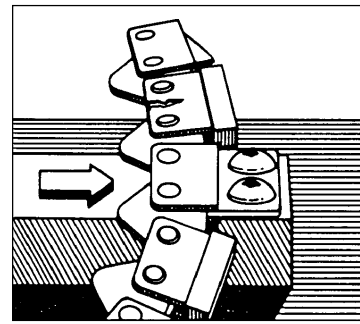
**Figure 11. Chain Breaker Mounting**

**Note:** The Stanley chain breaker is only designed to remove rivet heads from the connecting links, not from a chain segment. The rivet heads shown in the shaded areas of figure 12 are the only ones that can be removed.



**Figure 12. Removable Rivet Heads**

2. Place the chain (the portion that you want broken) into the slot of the anvil pushing it forward until the bottom connecting link is flush with the far side of the slot (figure 13).



**Figure 13. Inserting the Chain**

3. Position the rivet head you want removed directly under the chain breaker punch and then pull the handle down far enough to remove the rivet (figure 14). Do not use excessive force.

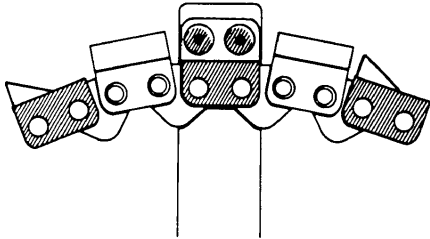
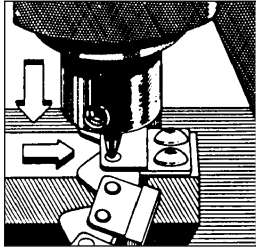


Figure 14. Removing the Rivet

## REPLACING THE CHAIN BREAKER PUNCH

If the chain breaker punch (Part Number 22801) becomes worn or damaged, use the following procedures for replacement.

1. Remove the punch by loosening the set screw (figure 15).

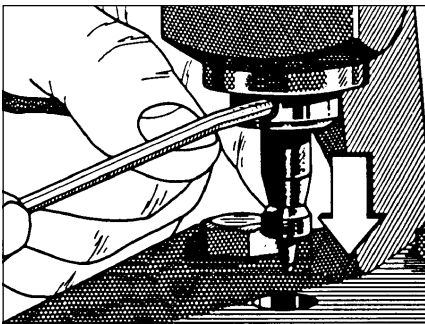


Figure 15. Removing the Punch

2. Insert a new punch into the holder and push it up until it is fully seated (figure 16). Secure the punch to the chain breaker holder by fully tightening the set screw.

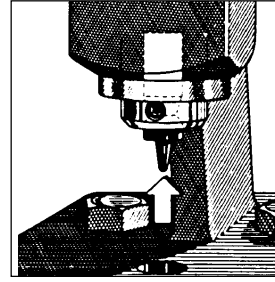


Figure 16. Replacing the Punch

## SPINNING RIVETS

The following procedures explain how to spin rivets using Stanley's bench mounted rivet spinner (Part Number 20857) to assemble the chain.

1. Mount the rivet spinner flush with the side or front of a flat, clean work surface (figure 17).

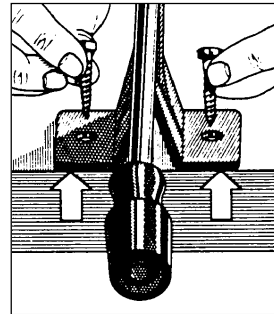


Figure 17. Rivet Spinner Mounting

2. Lay the chain across the plastic chain supports and then rotate the supports so the rivet head is centered between the take-up handle pocket and the spinner anvil (figure 18).

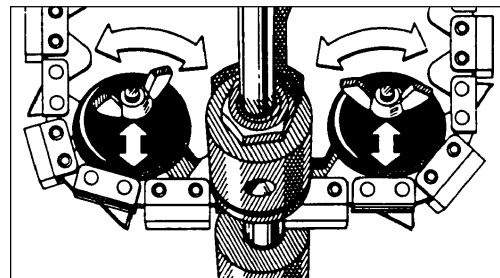


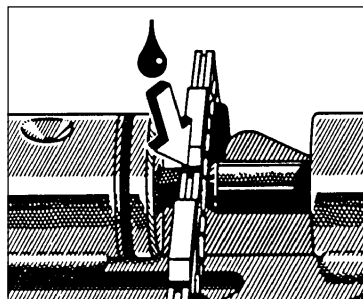
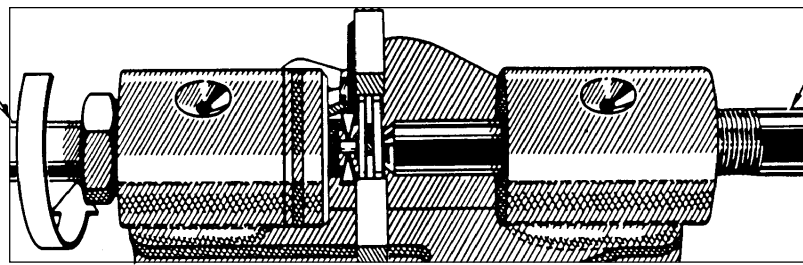
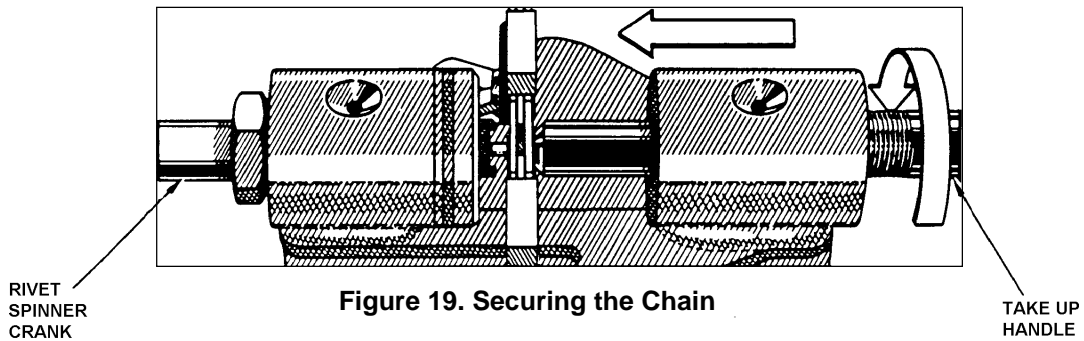
Figure 18. Positioning the Chain



3. Turn the take-up handle until the chain is tight against the spinner anvil (figure 19).

5. Apply a few drops of oil to the rivet hub (figure 21).

4. Turn the rivet spinner crank a few times to center the rivet hub in the spinner anvil (figure 20).



**Figure 21. Applying Oil**

6. Turn the spinner crank while slowly turning the take-up handle inward (approximately one full revolution) until the rivet head is formed (figure 22). Note that the take-up handle provides pressure while the spinner anvil forms the rivet head.

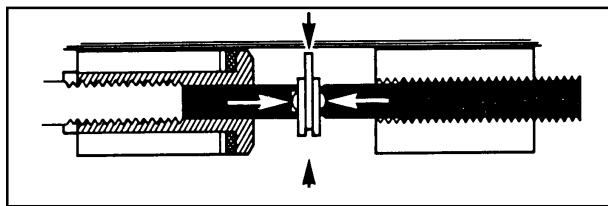


Figure 22. Forming a Rivet Head

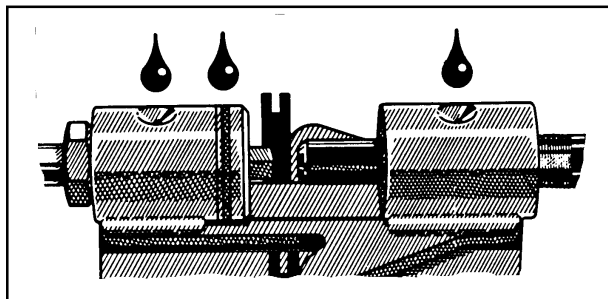


Figure 23. Spinner Oiling Chambers

**NOTE:** The rivet spinner is equipped with oiling chambers and should be maintained periodically with a light-weight oil (figure 23).

## NOSE SPROCKET DISASSEMBLY AND ASSEMBLY

1. Using the bench mounted chain breaker (see accessories), line up the 1/4 inch hole in the side of the chain breaker anvil with the chain breaker punch. Punch out the six nose sprocket rivets. See Figure 24.



Figure 24. Punching Out Nose Sprocket Rivets

2. Insert a straight blade screw driver to spread the bar nose rails just enough to remove the old nose sprocket. Use a rag or paper towel to clean the nose sprocket area. See Figure 25.

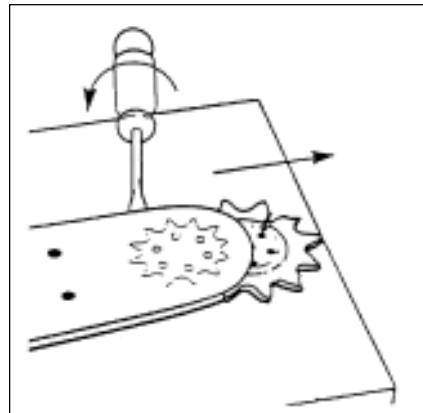


Figure 25. Removing Old Nose Sprocket

3. Remove the new nose sprocket package's clips and fold back the top portion of the insertion card being careful not to remove or disturb the components. See figure 26.

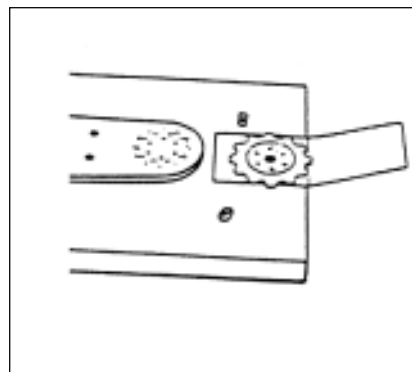
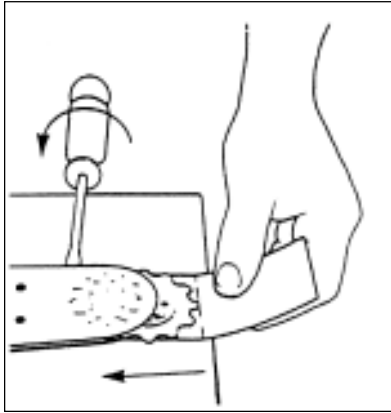


Figure 26. Preparing New Nose Sprocket

4. With a flat blade screw driver in the bar nose rails, slide the nose sprocket assembly into position aligning the 6 holes in the bar nose with the 6 holes in the nose sprocket assembly without removing the components from the card. See Figure 27.

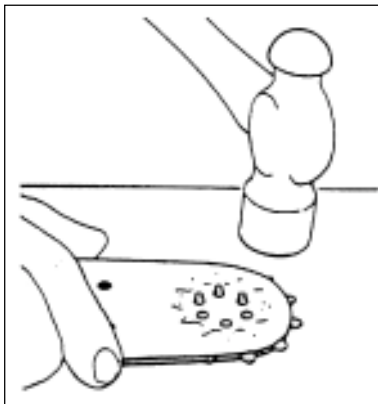


**Figure 27. Installing a New Nose Sprocket**

5. Insert 6 nose rivets into the holes and then hold them with your thumb. Remove the screwdriver and slide out the insertion card.

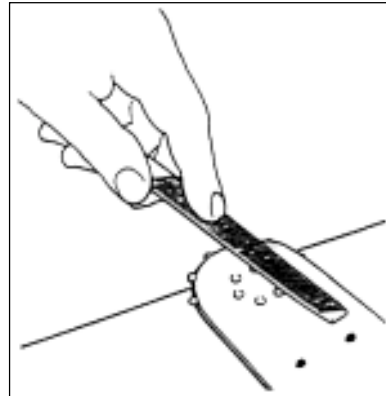
**NOTE:** On used bars the nose rails might tend to spread apart. Use a small clamp if necessary to hold the rails together.

6. With the bar and rivets solidly supported on a strong flat steel surface, carefully peen the rivet heads down with the flat end of a hammer. Be careful to only hit the rivet head. Do not hit the bar body; this will pinch the nose sprocket. Rivet heads must completely fill the countersinks in the bar body and be snug and secure while still allowing the sprocket to freely turn. See Figure 28.



**Figure 28. Replacing Rivets**

7. Using a flat file, shave the rivet heads to a uniform height that is as close to the bar body as possible. See Figure 29.



**Figure 29. Filing Rivets**

# SERVICE INSTRUCTIONS

## A. PRIOR TO DISASSEMBLY

Clean exterior of the tool.

Obtain a seal kit so that all seals exposed during disassembly can be replaced.

## B. ON-OFF VALVE SERVICING

### TRIGGER (28) AND SAFETY CATCH (30) REMOVAL & INSTALLATION

1. Drive the roll pins (20) out of the handle assembly using a 3/16 in./4 mm diameter punch. Press the safety latch and remove the trigger (28).

**NOTE:** The safety catch can be removed at this time by driving out the 3/16 inch roll pin (21), but this is not necessary for servicing the on-off valve.

2. To install the trigger and safety catch reverse the above procedures.

### VALVE SPOOL (14) REMOVAL & INSTALLATION

1. Remove the plug button (19) from the top of the handle by prying under the edge and then pulling it from the handle.

2. Drive the roll pins (20) out of the handle assembly using a 3/16 in./4 mm diameter punch. Press the safety latch and remove the trigger (28).

3. Drive the roll pin (20) (holding the valve spool (14) in place) out of the handle using a 3/16 in./4 mm diameter punch.

4. Unscrew the seal cap (44) and remove it, the spring (42), and the steel ball (41).

5. Lift out the valve spool assy (14 thru 18).

6. Using a 1/2 in./12.7 mm diameter wood dowel, place the dowel into the valve spool bore from the plug button (19) end of the handle. Push the dowel against the water sleeve (38) to push the water sleeve out.

### REASSEMBLY

1. Inspect the spool bore of the handle and the outer

surfaces of the spool for damage. **Some light surface scratches will be noticeable. Grooves, roughness or a reduced diameter indicate fluid contamination. If abnormal wear is present (more than normal polishing), replace both the spool and the handle.**

2. Apply grease and install a new o-ring (15) onto the ON/OFF valve (14).

3. Apply grease and install new o-rings (34 & 35) into the spool bore of the handle.

4. Apply grease and install new o-rings (37 & 39) onto the water valve sleeve (38).

5. If the spring retainers (16) and spring (17) were removed from the ON/OFF valve, reinstall them. Lubricate the ON/OFF valve with hydraulic fluid and install it into the valve handle. Secure it in place with the roll pin (20).

6. Install the water valve sleeve into the valve handle.

7. Install the push pin (40), steel ball (41), spring (42), and seal cap (44). Make sure a new o-ring (43) is installed onto the seal cap.

8. Install the safety catch (30) making sure the spring (29) is positioned properly. Make sure the pin (33) is in place. Secure the safety catch with the roll pin (21).

9. Install the trigger (28) and secure with the roll pin (20).

10. Replace the plug button (19) and test the action of the safety catch and trigger.

## C. FLOW CONTROL (32)

The flow control (32) is factory preset and is not field serviceable. Use the following as guides to check for proper regulated flow.

For the 5 gpm model, if the regulated flow is over 6.6 gpm or under 5.4 gpm at 8 gpm input, the flow control valve should be replaced.

For the 8 gpm model, if the regulated flow is over 10 gpm or under 8 gpm at 12 gpm input, the flow control valve should be replaced.

## D. MOTOR SERVICING

1. Remove the 2 nuts (51) and then lift off the chain guard (50).
2. Lift off the bar (61) and chain (73). If it is necessary to take tension off the bar and chain, turn the screw (68) counter clockwise.
3. Slide the sprocket wrench (84) over the sprocket (48). While gripping the sprocket wrench and using an open end wrench, turn the hex head on the Trantorque™ adapter cap (49) counter clockwise until the Trantorque™ adapter can be removed from the motor shaft (53).
4. Remove the spacer (47), support washer (100), and o-ring (97).
5. Remove the retaining ring (98).
6. Remove the capscrews (1).
7. Using a flat-blade screwdriver or similar tool, gently pry the gear housing (4) away from the valve handle (22). Lift the gear housing straight up. **Do Not** tilt the housing or pry on the flat surface inside of the surrounding groove. For prying, only use the groove provided at the split between the parts to prevent scratches on the inner mating surfaces.
8. Remove the two gears (9 & 13), needle roller (54), and the idler shaft (8).
9. Remove the large face seal o-ring (7) while being careful not to damage the o-ring groove or surrounding surface.
10. While protecting the motor surface of the valve handle from damage, tap lightly on the small diameter end (*gear side*) of the motor shaft to remove it and the seal keeper (94), seal spacer (96), seal (95), o-ring (93), and bearing (92) from the front of the valve handle. Remove the seal keeper, seal spacer, seal, and o-ring from the motor shaft.
11. To remove the bearing from the shaft, press on the outside end (sprocket end) of the motor shaft while supporting the outer race of the bearing. Discard the old bearing.
12. Remove the retaining ring (91) at the bottom of the bearing bore. Remove the seal backup washer (57). Remove the quad ring (90) and o-ring

(56) using the appropriate o-ring service tools. Discard the quad ring and o-ring

13. The bushings (6) can be removed using p/n 11930 collet from p/n 05064 bearing puller kit.

## E. MOTOR INSPECTION AND CLEANING

Inspect and clean all parts as follows:

### Cleaning

Clean all parts with a degreasing solvent. Blow dry with compressed air and wipe clean. Use only lint-free cloths.

### Gear Housing

The chamber bores and bottoms around the shaft bushings should be polished and not rough or grooved. If the bushing bores are yellow-bronze, replace them and investigate the cause of wear.

The flat surfaces around the chamber and bolt holes should be flat and free of nicks or burrs that could cause misalignment or leaks.

### Bushings

The inside of the bushings should be gray with some bronze showing through. If significant yellow-bronze shows, replace the bushings. Inspect motor shaft for corresponding wear and replace as required.

### Gears

The drive and idler gears should have straight tips without nicks, square tooth ends and a smooth even polish on the teeth and end faces. Check for cracks between the drive gear keyway and gear tooth root. Replace the gear if cracks are present.

### Valve Handle Motor Surface

The surface near the gears should show two interconnecting polished circles without a step. The bottom of the o-ring groove should be smooth as should the rest of the flat surface.

The bore for the shaft seal should be smooth or oil leakage may occur.

### Gear Housing

Shake the gear housing and the two seal check

balls (not shown) should rattle. If the seal balls do not rattle then they are probably plugged with contaminants and the gear housing will require replacement.

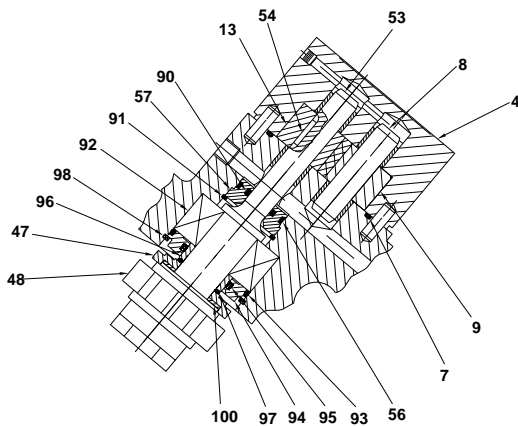
## Shafts

The shaft diameter at the bearing and seal locations must be smooth. Grooves, roughness or a reduced diameter indicate fluid contamination or damaged bushings. Grit particles may have been imbedded in the bushings grinding into the hardened shaft. If abnormal shaft wear as above occurs (more than normal polishing), replace both the shaft and associated bushings.

Also check the hydraulic system for excess contamination in the fluid and for filter condition. Operating conditions may require changing from a 25-micron filter to an oversized 10-micron filter.

## F. MOTOR REASSEMBLY

Refer to the illustration below for correct placement of parts.



1. If the bushings (6) were removed from the valve handle (22) and the gear housing (4), install new bushings using a p/n 11918 bearing pusher. (NOTE: The bushing split line must face the center of the gear housing).

2. Grease and carefully install a new quad ring (90) into the seal liner (57). Grease and install a new o-ring (56) onto the seal liner. Install the seal liner into the valve handle assy (22). Replace the retaining ring (91).

3. To replace the bearing (92) onto the motor shaft

(53), support the bearing inner race and press the motor shaft through the bearing inner race.

4. Place the valve handle assy on a smooth clean arbor press surface (protected from damage) with the large bearing bore facing up. Position the valve handle so a clearance hole exists for the insertion of the motor shaft.

5. Apply grease to the motor shaft, keyway and bushing and then insert the motor shaft through the shaft seal. Using a socket with a diameter equal to the bearing O.D., press the bearing and motor shaft into place. Press only on the outer race.

6. Install the needle roller (54) in the keyway of the motor shaft. Use grease to keep the needle roller in place. Slide the drive gear (13) over the needle roller and shaft. Install the idler shaft (8) and gear (9).

7. Apply grease to the face seal o-ring groove; then install the o-ring (7).

8. Note the screw hole pattern on the rear gear housing and the valve handle. They will only assemble one way. With all parts aligned, carefully slide the gear housing assembly over the gears until it contacts the valve handle. **Do not force parts together.**

9. Turn the motor shaft manually to check for free rotation. Install the eight capscrews (1) and then recheck rotation.

10. Apply grease and install a new seal (95) into the seal keeper (94). Apply grease and install a new o-ring onto the seal keeper. Insert the seal spacer (96) into the seal keeper and then install the seal spacer and seal keeper onto the motor shaft as an assembly. Press the assembly against the bearing and then install the retaining ring (98).

11. Apply grease and install a new o-ring (97) onto the motor shaft. Slide the o-ring against the seal spacer. Install the spacer (47) and support washer (100).

12. Install the sprocket (48) over the Trantorque™ adapter cap (49) and then install this assembly onto the motor shaft. While gripping the sprocket, hand tighten the hex head of the Trantorque™ adapter cap by turning it clockwise.

13. Slide the sprocket wrench (84) over the sprocket (48). While gripping the sprocket wrench and using an open end wrench, tighten the hex head on the Trantorque™ adapter (49) clockwise to 17 lb. ft./23 Nm.

## **G. BAR & CHAIN AND CHAIN GUARD ASSEMBLY**

1. Back the bar adjustment nut (70) off by turning the adjustment screw (68) counter clockwise.
2. Install the chain (73) onto the bar (61). Make sure the chain is installed so that the bumper guards precede the segments. See the section titled 'OPERATION'.
3. Install the chain guide plate (65) over the studs (66) as shown in the parts illustration.
4. Place the bar (with chain) over the studs making sure the chain is looped around the sprocket and the bar adjustment nut is seated in the hole on the bar. While holding the bar and chain in place, turn the adjustment screw (68) clockwise to take the slack out of the chain. Install the chain guard (50) and the 2 nuts (51). Hand tighten the 2 nuts and then back them off 1/4 turn.
5. Adjust the chain tension by turning the adjustment screw (68) in accordance with the instructions contained in the section titled "MAINTENANCE & ADJUSTMENTS".
6. When adjustments are completed, be sure to tighten the nuts (51).

# TROUBLESHOOTING

If symptoms of poor performance develop, the following chart can be used as a guide to correct the problem.

supplying the correct hydraulic flow and pressure to the tool as listed in the table. Use a flowmeter known to be accurate. Check the flow with the hydraulic oil temperature at least 80°F/27°C.

When diagnosing faults in operation of the tool, always check that the hydraulic power source is

Does not run.	Hydraulic power source not functioning correctly	Check power source for proper flow and pressure (7-9 gpm/26-34 lpm, 2000 psi/140 bar.
	Coupler or hoses blocked	Remove obstruction.
	Mechanical failure.	Have tool serviced by authorized dealer.
Runs backwards.	Pressure and return lines incorrectly connected.	Correct hose connections. Motor shaft rotates counter-clockwise as viewed from the end of the motor shaft.
Cuts slow.	Insufficient fluid flow or too high back pressure or relief valve set too low.	Check hydraulic supply. If hydraulic supply is correct, have unit serviced by authorized dealer.
	Back pressure too high.	Should not exceed 250 psi/17 bar at 9 gpm/34 lpm measured at the end of the tool's operating hoses.
	Loss of diamond segment side clearance.	Replace the chain.
	Chain segment dulled because of continuous use in hard material or rebar.	Redress segment by cutting in abrasive material (i.e. concrete, building block, etc.). NOTE: This indicates that the wrong chain is being used.
	Wrong chain for application.	Scale down to a lower numbered chain.
	Wired edged bar rails.	Dress rails square.
	Hydraulic fluid mixed in water supply.	Have tool serviced.
Excessive vibration and cuts rough.	Segment(s) broken or missing.	Repair broken segment or replace chain.
	Chain installed backwards.	Correct chain direction.

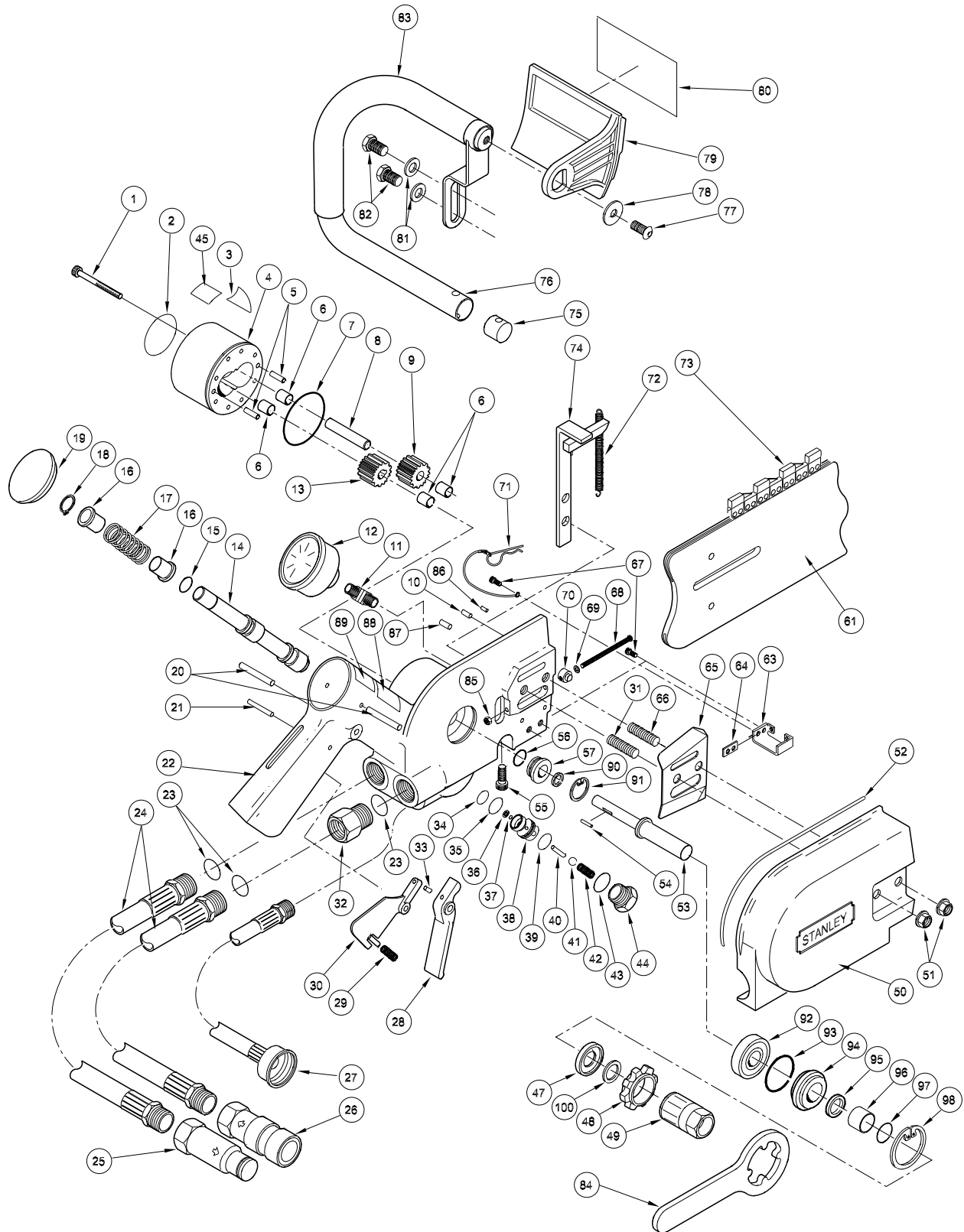


# TROUBLESHOOTING Continued

Excessive vibration and cuts rough.	Loose chain tension.	Retension the chain.
	Excessive feed force.	Reduce feed force.
Will not cut straight.	Accumulated saw bar wear and uneven chain segment profile wear.	Turn the saw bar over and dress rails square. Replace the saw bar and chain.
Loss of power.	Drive sprocket slipping on Trantorque® adaptor.	Adjust and tighten Trantorque® adaptor to 17 lb. ft./23 Nm.
Trigger hard to press.	Pressure & return hoses reversed.	Connect for proper flow direction. Motor shaft must rotate clockwise.
	Back pressure too high.	Should not exceed 250 psi/17 bar at 9 gpm/34 lpm measured at the end of the tool's operating hoses.
Leakage around drive sprocket.	Motor shaft seal failure.	Have unit serviced.
No water discharge at bar..	Blocked port(s) in bar.	Turn off hydraulic supply. Remove bar and chain and clean bar thoroughly. Blow ports with compressed air.
	Block inlet or outlet.	Turn off hydraulic supply. Remove bar and chain. Make sure water supply is on. Press trigger to see if water exits near bar adjustment nut area (a small port). If no water exits, have unit serviced.

# DS06 DIAMOND CHAIN SAW

OCT 1999



# DS06 PARTS LIST

Item No	Qty	Part No.	Description
1	8	00753	HSCHS 10-24UNCx1-1/4
2	1	33445	NAME TAG
3	1	11207	CIRCUIT "D" STICKER
	1	11206	CIRCUIT "C" STICKER
4	1	07652	REAR GEAR HOUSING ASSY (INCLD ITEM 5 & 6), 8 gpm model only
	1	07834	REAR GEAR HOUSING ASSY (INCLD ITEM 5 & 6), 5 gpm model only
5	2	00289	DOWEL PIN
6	4	04041	BUSHING
7	1	00020	O-RING 5-329 R17 ●
8	1	07612	IDLER SHAFT
9	1	04105	IDLER GEAR, 8 gpm model only
	1	07831	IDLER GEAR, 5 gpm model only
10	1	32190	PIVOT PIN
11	1	22716	ST ELBOW 1/8NPT
12	1	21550	WATER GAUGE
13	1	04106	DRIVE GEAR, 8 gpm model only
	1	07832	DRIVE GEAR, 5 gpm model only
14	1	32207	ON/OFF VALVE
15	1	07626	O-RING 2-014 R18 ●
16	2	07609	SPRING WASHER
17	1	34119	SPRING
18	1	04512	RETAINING RING 1/2 EX
19	1	07625	PLUG BUTTON
20	2	03009	ROLL PIN
21	1	07624	ROLL PIN-3/16 X 1
22	1	32201	VALVE HANDLE ASSY (INCLD ITEMS 31 & 66)
23	3	01605	O-RING
24	2	01652	PIGTAIL HOSE ASSEMBLY
25	1	24059	MALE COUPLER
26	1	24058	FEMALE COUPLER
27	1	33443	WATER HOSE ASSY
28	1	34093	TRIGGER
29	1	07602	SPRING
30	1	34105	SAFETY CATCH
31	1	32197	STUD
32	1	33444	FLOW CONTROL VALVE, 8 gpm model only
	1	34006	FLOW CONTROL VALVE, 5 gpm model only
33	1	00072	ROLL PIN
34	1	07627	O-RING 2-016 R24 ●
35	1	00074	O-RING 2-021 R16 ●
36	1	33488	SELF LOCKING RETAINING RING
37	1	05632	O-RING 2-005 R16 ●
38	1	33377	WATER VALVE SLEEVE
39	1	01403	O-RING 2-020 R16 ●
40	1	33380	PIN
41	1	36259	STEEL BALL 3/8 DIA.
42	1	32188	SPRING
43	1	04052	O-RING 3-914 R17 ●
44	1	32189	SEAL CAP
45	1	28323	CE STICKER
46	1	06635	RET RING 1 3/8 INT
47	1	32211	SPACER
48	1	32210	SPROCKET
49	1	32209	TRANTORQUE™ ADAPTOR
50	1	32202	CHAIN GUARD
51	2	32203	FLG NUT M10
52	1	20721	CORD STOCK 3/16DIA R1
53	1	35897	MOTOR SHAFT
54	1	04044	NEEDLE ROLLER
55	1	02688	HSCHS 5/16-18UNCx3/4
56	1	00171	O-RING

Item No	Qty	Part No.	Description
57	1	19215	SEAL BACK-UP WASHER
58	-	-----	NO ITEM
59	-	-----	NO ITEM
60	-	-----	NO ITEM
61	-	-----	SAW BAR (SEE ACCESSORIES)
62	-	-----	NO ITEM
63	1	32196	FLAP MOUNT
64	1	33219	SPACER
65	1	32192	CHAIN GUIDE PLATE
66	1	32245	STUD
67	2	02446	HSCHS 1/4-20UNCx5/8
68	1	02687	MACHINE SCREW
69	1	32191	STAT-O-SEAL ●
70	1	32198	BAR ADJUSTMENT NUT
71	1	33481	WALLWALKER CLEVIS PIN
72			SPRING (INCLD WITH ITEM 74)
73		-----	CHAIN (SEE ACCESSORIES)
74	1	32206	WALL WALKER
75	1	02649	HANDLE BAR RETAINER
76	1	33229	HANDLE WELDMENT
77	1	33260	BHCS 1/4-20x.625 ZINC
78	1	33261	FENDER WASHER 17/64
79	1	33258	HAND GUARD
80	1	12412	WARNING STICKER-ELECT
81	2	12175	WASHER
82	2	33454	HHCS 5/16-18x5/8 ZINC
83	1	33263	HANDLE GRIP
84	1	33429	SPROCKET WRENCH
85	1	17134	NUT 1/4-20 HHD LT SST
86	2	31614	SPIROL PIN
87	1	30635	SPIROL PIN 5/16 x 7/8
88	1	28409	COMPOSITE STICKER
89	1	29036	SOUND POWER LEVEL STICKER
90	1	00173	QUAD RING
91	1	04856	RETAINING RING
92	1	35965	BEARING
93	1	00521	O-RING
94	1	35899	SEAL KEEPER
95	1	35964	SEAL
96	1	35898	SEAL SPACER
97	1	350810	O-RING
98	1	07324	RETAINING RING
99	-	-----	NO ITEM
100	1	34118	SUPPORT WASHER

● Denotes Part in Seal Kit

**SEAL KIT PART NO. 33360**

# SPECIFICATIONS

Capacity .....	8 inches/20 cm cutting depth
Chain Type .....	3/8 inch pitch with 21 diamond segments
Pressure Range .....	2000 psi / 140 bar
Maximum Back Pressure .....	250 psi / 17 bar
Flow Range	
5 gpm model .....	4-6 gpm/15-23 lpm
8 gpm model .....	7-9 gpm/26-34 lpm
Porting* .....	-8 SAE O-ring
Hose Whips* .....	Yes
Couplers .....	EHTMA/HTMA Flush Face
Overall Length (without bar) .....	14.3 inches/36 cm
Overall Width .....	9.2 inches/23 cm
Height .....	11.3 inches/28.5 cm
Chain Speed	
5 gpm model .....	4600 fpm/23.4 m/s
8 gpm model .....	5000 fpm/25.4 m/s

\* Couplers and whip hoses are furnished as standard equipment.

# ACCESSORIES

SAW BAR	32194
CHAIN, DC05-21	33477
CHAIN, DC20-21	33478
CHAIN, DC40-21	33479
BAR NOSE REPAIR KIT	33482
SEAL KIT	33360
CHAIN REPAIR KIT (Diamond Segment & Linkage)	20859
CHAIN REPAIR RIVET SPINNER	20857
CHAIN BREAKER	20858

## DIAMOND CHAIN APPLICATIONS

MODEL	CORRECT APPLICATIONS
DC05	Very hard aggregate concretes (flint, chert, granite, etc.) Heavy steel reinforcing (5/8 in. [16 mm] dia. and larger) Hard natural stone.
DC20	Medium/Hard aggregate concretes (granite, quartz, river rock, etc.) Moderate steel reinforcing (wire mesh 3/8 in. [10 mm], 1/2 in. [12 mm] diameter). Soft aggregate concrete, concrete block, masonry, "green" concrete, highly abrasive conditions.
DC40	Soft aggregate concretes, concrete block, masonry, "green concrete", highly abrasive conditions.

# WARRANTY

Stanley Hydraulic Tools (hereinafter called "Stanley"), subject to the exceptions contained below, warrants new hydraulic tools for a period of one year from the date of sale to the first retail purchaser, or for a period of 2 years from the shipping date from Stanley, whichever period expires first, to be free of defects in material and/or workmanship at the time of delivery, and will, at its option, repair or replace any tool or part of a tool, or new part, which is found upon examination by a Stanley authorized service outlet or by Stanley's factory in Milwaukie, Oregon to be DEFECTIVE IN MATERIAL AND/OR WORKMANSHIP.

## EXCEPTIONS FROM WARRANTY

**NEW PARTS:** New parts which are obtained individually are warranted, subject to the exceptions herein, to be free of defects in material and/or workmanship at the time of delivery and for a period of 6 months after the date of first usage. Seals and diaphragms are warranted to be free of defects in material and/or workmanship at the time of delivery and for a period of 6 months after the date of first usage or 2 years after the date of delivery, whichever period expires first. Warranty for new parts is limited to replacement of defective parts only. Labor is not covered.

**FREIGHT COSTS:** Freight costs to return parts to Stanley, if requested by Stanley for the purpose of evaluating a warranty claim for warranty credit, are covered under this policy if the claimed part or parts are approved for warranty credit. Freight costs for any part or parts which are not approved for warranty credit will be the responsibility of the individual.

**SEALS & DIAPHRAGMS:** Seals and diaphragms installed in new tools are warranted to be free of defects in material and/or workmanship for a period of 6 months after the date of first usage, or for a period of 2 years from the shipping date from Stanley, whichever period expires first.

**CUTTING ACCESSORIES:** Cutting accessories such as breaker tool bits are warranted to be free of defects in material and or workmanship at the time of delivery only.

**ITEMS PRODUCED BY OTHER MANUFACTURERS:** Components which are not manufactured by Stanley and are warranted by their respective manufacturers.

- a. Costs incurred to remove a Stanley manufactured component in order to service an item manufactured by other manufacturers.

**ALTERATIONS & MODIFICATIONS:** Alterations or modifications to any tool or part. All obligations under this warranty shall be terminated if the new tool or part is altered or modified in any way.

**NORMAL WEAR:** any failure or performance deficiency attributable to normal wear and tear such as tool bushings, retaining pins, wear plates, bumpers, retaining rings and plugs, rubber bushings, recoil springs, etc.

**INCIDENTAL/CONSEQUENTIAL DAMAGES:** To the fullest extent permitted by applicable law, in no event will STANLEY be liable for any incidental, consequential or special damages and/or expenses.

**FREIGHT DAMAGE:** Damage caused by improper storage or freight handling.

**LOSS TIME:** Loss of operating time to the user while the tool(s) is out of service.

**IMPROPER OPERATION:** Any failure or performance deficiency attributable to a failure to follow the guidelines and/or procedures as outlined in the tool's operation and maintenance manual.

**MAINTENANCE:** Any failure or performance deficiency attributable to not maintaining the tool(s) in good operating condition as outlined in the Operation and Maintenance Manual.

**HYDRAULIC PRESSURE & FLOW, HEAT, TYPE OF FLUID:** Any failure or performance deficiency attributable to excess hydraulic pressure, excess hydraulic back-pressure, excess hydraulic flow, excessive heat, or incorrect hydraulic fluid.

**REPAIRS OR ALTERATIONS:** Any failure or performance deficiency attributable to repairs by anyone which in Stanley's sole judgement caused or contributed to the failure or deficiency.

**MIS-APPLICATION:** Any failure or performance deficiency attributable to mis-application. "Mis-application" is defined as usage of products for which they were not originally intended or usage of products in such a manner which exposes them to abuse or accident, without first obtaining the written consent of Stanley. PERMISSION TO APPLY ANY PRODUCT FOR WHICH IT WAS NOT ORIGINALLY INTENDED CAN ONLY BE OBTAINED FROM STANLEY ENGINEERING.

**WARRANTY REGISTRATION:** STANLEY ASSUMES NO LIABILITY FOR WARRANTY CLAIMS SUBMITTED FOR WHICH NO TOOL REGISTRATION IS ON RECORD. In the event a warranty claim is submitted and no tool registration is on record, no warranty credit will be issued without first receiving documentation which proves the sale of the tool or the tools' first date of usage. The term "DOCUMENTATION" as used in this paragraph is defined as a bill of sale, or letter of intent from the first retail customer. A WARRANTY REGISTRATION FORM THAT IS NOT ALSO ON RECORD WITH STANLEY WILL NOT BE ACCEPTED AS "DOCUMENTATION".

## NO ADDITIONAL WARRANTIES OR REPRESENTATIONS

This limited warranty and the obligation of Stanley thereunder is in lieu of all other warranties, expressed or implied including merchantability or fitness for a particular purpose except for that provided herein. There is no other warranty. This warranty gives the purchaser specific legal rights and other rights may be available which might vary depending upon applicable law.



**Stanley Hydraulic Tools** • 3810 S.E. Naef Road • Milwaukie, Oregon 97267-5698  
Phone: 503/659-5660 • Fax: 503/652-1780