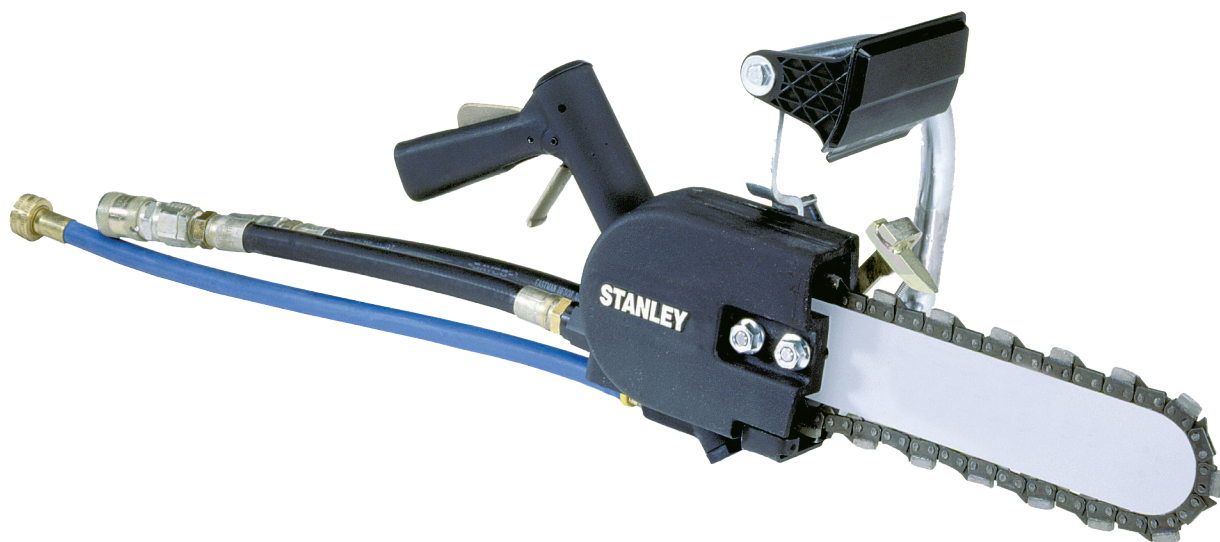


STANLEY®

DS06 HYDRAULIC DIAMOND SAW



USER MANUAL Safety, Operation and Maintenance



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New Britain, CT 06053
U.S.A.
34566 5/2019 Ver. 18

DECLARATION OF CONFORMITY

DECLARATION OF CONFORMITY
ÜBEREINSTIMMUNGS-ERKLÄRUNG
DECLARATION DE CONFORMITE CEE
DECLARACION DE CONFORMIDAD
DICHIARAZIONE DI CONFORMITA



I, the undersigned:
Ich, der Unterzeichnende:
Je soussigné:
El abajo firmante:
Io sottoscritto:

Nuerenberg, David

Surname and First names/Familiennamen und Vornamen/Nom et prénom/Nombre y apellido/Cognome e nome

hereby declare that the equipment specified hereunder:
bestätige hiermit, daß erklaren Produkt genannten Werk oder Gerät:
déclare que l'équipement visé ci-dessous:
Por la presente declaro que el equipo se especifica a continuación:
Dichiaro che le apparecchiature specificate di seguito:

- Category: **Concrete Cutting Chainsaw, Hydraulic**
Kategorie:
Catégorie:
Categoria:
Categoria:
- Make/Marke/Marque/Marca/Marca **STANLEY**
- Type/Typ/Type/Tipo/Tipo: **DS06200001, DS06300001**
- Serial number of equipment:
Seriennummer des Geräts:
Numéro de série de l'équipement:
Numero de serie del equipo:
Matricola dell'attrezzatura:
All

Has been manufactured in conformity with
Wurde hergestellt in Übereinstimmung mit
Est fabriqué conformément
Ha sido fabricado de acuerdo con
E' stata costruita in conformità con

Directive/Standards Richtlinie/Standards Directives/Normes Directriz/Los Normas Direttiva/Norme	No. Nr Numéro No n.	Approved body Prüfung durch Organisme agréé Aprobado Collaudato
EN ISO	5349	Self
EN ISO	3744 (15744)	Self
EN ISO	13732-1	Self
Machinery Directive	2006/42/EC:2006	Self

- Special Provisions: **None**
Spezielle Bestimmungen:
Dispositions particulières:
Provisiones especiales:
Disposizioni speciali:
- Representative in the Union: **Patrick Vervier, Stanley Dubuis 17-19, rue Jules Berthonneau-BP 3406 41034 Blois Cedex, France.**
Vertreter in der Union/Représentant dans l'union/Representante en la Union/Rappresentante presso l'Unione

Done at/Ort/Fait à/Dado en/Fatto a STANLEY Infrastructure, Milwaukie, Oregon USA Date/Datum/le/Fecha/Data 4-30-2018

Signature/Unterschrift/Signature/Firma/Firma

Position/Position/Fonction/Cargo/Posizione North America Quality Manager

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IMPORTANT

To fill out a product warranty validation form, and for information on your warranty, visit www.stanleyinfrastructure.com and select the Company tab > Warranty.

Note: The warranty validation record must be submitted to validate the warranty.

SERVICING: This manual contains safety, operation and routine maintenance instructions. STANLEY Infrastructure recommends that servicing of hydraulic tools, other than routine maintenance, must be performed by an authorized and certified dealer. Please read the following warning.

⚠ WARNING

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

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

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

SAFETY PRECAUTIONS

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 tool and hose.

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 in this manual.

The DS06 Diamond 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.
 - The operator must be familiar with all prohibited work areas such as excessive slopes and dangerous terrain conditions.
 - Do not operate the chain saw unless thoroughly trained or under the supervision of an instructor.
 - Always wear safety equipment such as goggles, ear protection, breathing protection, head protection, leg protection, gloves, snug fitting clothing and safety shoes at all times when operating the chain saw.
 - Do not overreach. Maintain proper footing and balance at all times.
 - Do not inspect or clean the chain saw while the hydraulic power source is connected. Accidental engagement of the chain saw can cause serious injury.
 - Always connect hoses to the chain saw hose couplers before energizing the hydraulic power source. Make sure all hose connections are tight.
 - Do not operate the chain saw at fluid temperatures above 140 °F/60 °C. Operation at higher temperatures can cause higher than normal temperatures at the chain saw which can result in operator discomfort.
- Do not rely exclusively upon the safety devices built into the chain saw. As a chain saw user, several steps must be taken to keep your cutting jobs free from accident or injury:
 - a. With a basic understanding of kickbacks, you can reduce or eliminate the element of surprise. Sudden surprise contributes to accidents.
 - b. Keep a good firm grip on the chain saw 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 chain saw handles. A firm grip helps reduce kickbacks and maintains control of the chain saw. Do not let go.
 - c. Make sure the area in which you are cutting is free of obstructions.
 - d. Cut at rated operating speeds (GPM).
 - e. Do not overreach or cut above shoulder height.
 - f. Only use replacement bars and chains specified by STANLEY or the equivalent.
 - Make sure the chain guard is in place before operating the chain saw.
 - Remove or control the water slurry to prevent yourself or others from slipping while cutting.
 - Provide adequate ventilation in closed areas when operating a gas or diesel hydraulic power source.
 - Do not operate a hydraulic power source or a hydraulic diamond saw in an explosive atmosphere.
 - **WARNING:** Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:
 - Lead from lead-based paints,
 - crystalline silica from bricks and cement and other masonry products, and
 - arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles. Protect yourself and those around you. Research and understand the materials you are cutting. Follow correct safety procedures and comply with

SAFETY PRECAUTIONS

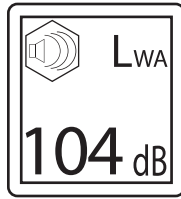
all applicable national, state or provisional health and safety regulations relating to them, including, if appropriate arranging for the safe disposal of the materials by a qualified person.

- Always be well rested and mentally alert before operating the chain saw.
- Do not allow bystanders near the chain saw when starting or cutting.
- Do not start cutting until you have a clear work area and secure footing.
- Keep all parts of the body away from the chain saw during operation, including loose clothing and long hair.
- Carry the chain saw with the tool de-energized and the bar and chain to the rear of your body.
- Do not operate a chain saw that is damaged, improperly adjusted, or not completely and securely assembled. Make sure the chain stops moving when the control trigger is released.
- Keep the handle dry, clean and free of hydraulic fluid.
- Do not use the chain saw near energized transmission lines.
- Turn off the power source or move the hydraulic control valve to neutral before setting the chain saw down.
- Use a guide bar scabbard when transporting the chain saw.
- Know the location of buried or covered utilities before starting work.
- To avoid personal injury or equipment damage, all chain saw repair, maintenance and service must only be performed by authorized and properly trained personnel.
- Make sure the chain breaker and rivet spinner are securely mounted on flat, clean work surfaces. Check the mounting screws/bolts often.
- Check all chain breaker and rivet spinner components regularly for wear and general condition.
- Avoid contact with the saw bar rails as they can become very sharp during use.
- Provide adequate lighting when operating the saw in a darkened area or at night.
- Always keep critical tool markings, such as labels and warning stickers, legible. Always replace stickers and decals that have become worn or damaged.
- Be observant of hydraulic and water hoses that lay about the work area, especially in trenches where they can be hidden from view due to liquids that have accumulated within the space.
- Keep all parts of the body away from the cleats that are attached to the saw, as these are sharp and can be a puncture hazard.
- Improper handling, use or maintenance can result in an oil leak or burst. Do not contact an oil leak as high pressure oil can cause injection into the body.
- Never stand in the path of the discharge, as ejection of material from the work piece can cause personal injury.
- Never use the saw in a potentially explosive atmosphere.
- **WARNING: Hydraulic fluid under pressure could cause skin injection injury. If you are injured by hydraulic fluid, get medical attention immediately.**

TOOL STICKERS & TAGS



11206
Circuit C Decal (5-GPM Models)
11207
Circuit D Decal (8-GPM models)



81438
Sound Level Decal



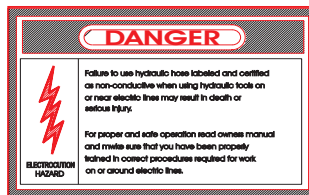
28323
CE Decal



73659
Name Tag Decal
(5-GPM Models)



28409
Composite Decal



12412
Warning Sticker-Electrical



74806
Name Tag Decal
(8-GPM Models)

NOTE:
THE INFORMATION LISTED ON THE STICKERS SHOWN, MUST BE LEGIBLE AT ALL TIMES.
REPLACE DECALS IF THEY BECOME WORN OR DAMAGED. REPLACEMENTS ARE AVAILABLE FROM YOUR LOCAL STANLEY DISTRIBUTOR.

The safety tag (P/N 15875) 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 P/N 15875 (Shown smaller than actual size)

HOSE TYPES

The rated working pressure of the hydraulic hose must be equal to or higher than the relief valve setting on the hydraulic system. There are three types of hydraulic hose that meet this requirement and are authorized for use with STANLEY hydraulic tools. They are:

Certified non-conductive — constructed of thermoplastic or synthetic rubber inner tube, synthetic fiber braid reinforcement, and weather resistant thermoplastic or synthetic rubber cover. *Hose labeled **certified non-conductive** is the only hose authorized for use near electrical conductors.*

Wire-braided (conductive) — constructed of synthetic rubber inner tube, single or double wire braid reinforcement, and weather resistant synthetic rubber cover. *This hose is **conductive** and must never be used near electrical conductors.*

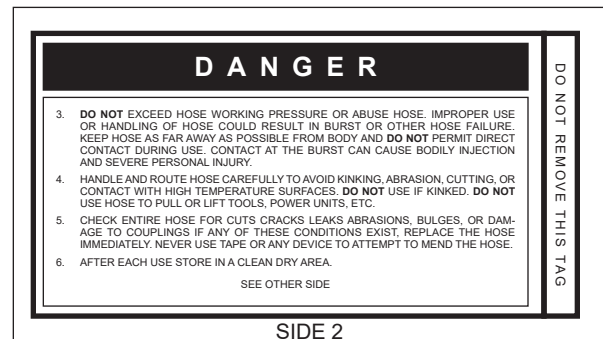
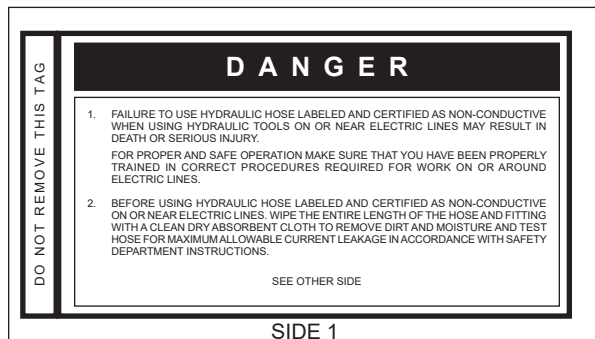
Fabric-braided (not certified or labeled non-conductive) — constructed of thermoplastic or synthetic rubber inner tube, synthetic fiber braid reinforcement, and weather resistant thermoplastic or synthetic rubber cover. *This hose is **not certified non-conductive** and must never be used near electrical conductors.*

HOSE SAFETY TAGS

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

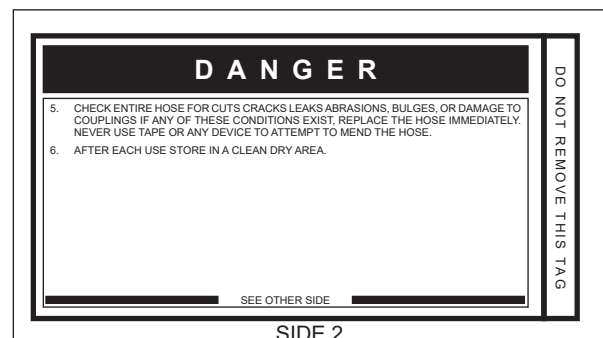
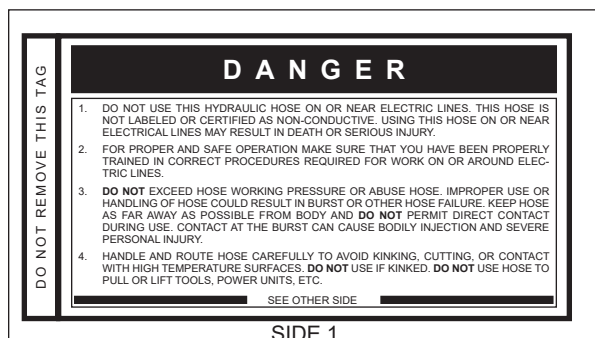
If the information on a tag is illegible because of wear or damage, replace the tag immediately. A new tag may be obtained from your STANLEY Distributor.

THE TAG SHOWN BELOW IS ATTACHED TO “CERTIFIED NON-CONDUCTIVE” HOSE



(Shown smaller than actual size)

THE TAG SHOWN BELOW IS ATTACHED TO “CONDUCTIVE” HOSE.



(Shown smaller than actual size)

HOSE RECOMMENDATIONS

Tool to Hydraulic Circuit Hose Recommendations

The chart to the right shows recommended minimum hose diameters for various hose lengths based on gallons per minute (GPM)/liters per minute (LPM). These recommendations are intended to keep return line pressure (back pressure) to a minimum acceptable level to ensure maximum tool performance.

This chart is intended to be used for hydraulic tool applications only based on STANLEY tool operating requirements and should not be used for any other applications.

All hydraulic hose must have at least a rated minimum working pressure equal to the maximum hydraulic system relief valve setting.

All hydraulic hose must meet or exceed specifications as set forth by SAE J517.

Oil Flow		Hose Lengths		Inside Diameter		USE (Press/Return)	Min. Working Pressure	
GPM	LPM	FEET	METERS	INCH	MM		PSI	BAR
Certified Non-Conductive Hose - Fiber Braid - for Utility Bucket Trucks								
4-9	15-34	up to 10	up to 3	3/8	10	Both	2250	155
Conductive Hose - Wire Braid or Fiber Braid - DO NOT USE NEAR ELECTRICAL CONDUCTORS								
4-6	15-23	up to 25	up to 7.5	3/8	10	Both	2500	175
4-6	15-23	26-100	7.5-30	1/2	13	Both	2500	175
5-10.5	19-40	up to 50	up to 15	1/2	13	Both	2500	175
5-10.5	19-40	51-100	15-30	5/8	16	Both	2500	175
5-10.5	19-40	100-300	30-90	5/8	16	Pressure	2500	175
10-13	38-49	up to 50	up to 15	3/4	19	Return	2500	175
10-13	38-49	51-100	15-30	5/8	16	Both	2500	175
10-13	38-49	100-200	30-60	3/4	19	Pressure	2500	175
13-16	49-60	up to 25	up to 8	1	25.4	Return	2500	175
13-16	49-60	26-100	8-30	5/8	16	Pressure	2500	175
13-16	49-60	26-100	8-30	3/4	19	Return	2500	175
13-16	49-60	26-100	8-30	3/4	19	Pressure	2500	175
13-16	49-60	26-100	8-30	1	25.4	Return	2500	175

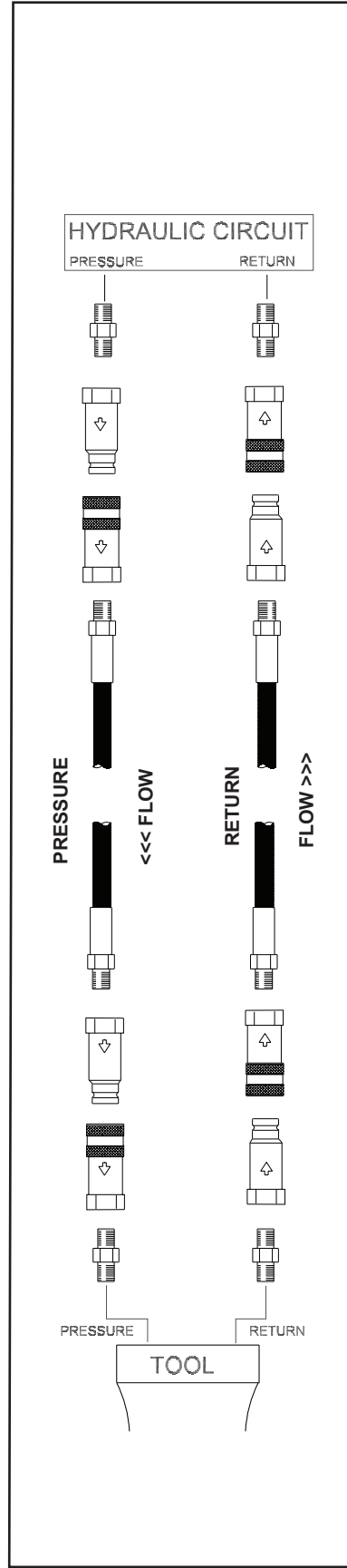


Figure 1. Typical Hose Connections






HTMA / EHTMA REQUIREMENTS

HTMA / EHTMA REQUIREMENTS

TOOL TYPE

HTMA HYDRAULIC SYSTEM REQUIREMENTS	TYPE I	TYPE II	TYPE RR	TYPE III
Flow range	4-6 GPM (15-23 LPM)	7-9 GPM (26-34 LPM)	9-10.5 GPM (34-40 LPM)	11-13 GPM (42-49 LPM)
Nominal operating pressure (At the power supply outlet)	1500 psi (103 bar)	1500 psi (103 bar)	1500 psi (103 bar)	1500 psi (103 bar)
System relief valve setting (At the power supply outlet)	2100-2250 psi (145-155 bar)	2100-2250 psi (145-155 bar)	2200-2300 psi (152-159 bar)	2100-2250 psi (145-155 bar)
Maximum back pressure (At tool end of the return hose)	250 psi (17 bar)	250 psi (17 bar)	250 psi (17 bar)	250 psi (17 bar)
Measured at a max fluid viscosity of: (At minimum operating temperature)	400 ssu* (82 centistokes)	400 ssu* (82 centistokes)	400 ssu* (82 centistokes)	400 ssu* (82 centistokes)
Temperature: Sufficient heat rejection capacity to limit maximum fluid temperature to: (At maximum expected ambient temperature)	140° F (60° C)	140° F (60° C)	140° F (60° C)	140° F (60° C)
Minimum cooling capacity at a temperature difference of between ambient and fluid temps	3 hp (2.24 kW) 40° F (22° C)	5 hp (3.73 kW) 40° F (22° C)	6 hp (5.22 kW) 40° F (22° C)	7 hp (4.47 kW) 40° F (22° C)
Note: Do not operate the tool at oil temperatures above 140° F (60° C). Operation at higher temperatures can cause operator discomfort at the tool.				
Filter minimum full-flow filtration Sized for flow of at least: (For cold temp startup and maximum dirt-holding capacity)	25 microns 30 GPM (114 LPM)	25 microns 30 GPM (114 LPM)	25 microns 30 GPM (114 LPM)	25 microns 30 GPM (114 LPM)
Hydraulic fluid, petroleum based (premium grade, anti- wear, non-conductive) Viscosity (at minimum and maximum operating temps)	100-400 ssu (20-82 centistokes)	100-400 ssu (20-82 centistokes)	100-400 ssu (20-82 centistokes)	100-400 ssu (20-82 centistokes)
Note: When choosing hydraulic fluid, the expected oil temperature extremes that will be experienced in service determine the most suitable temperature viscosity characteristics. Hydraulic fluids with a viscosity index over 140 will meet the requirements over a wide range of operating temperatures.				
*SSU = Saybolt Seconds Universal				

CLASSIFICATION

EHTMA HYDRAULIC SYSTEM REQUIREMENTS					
Flow range	3.5-4.3 GPM (13.5-16.5 LPM)	4.7-5.8 GPM (18-22 LPM)	7.1-8.7 GPM (27-33 LPM)	9.5-11.6 GPM (36-44 LPM)	11.8-14.5 GPM (45-55 LPM)
Nominal operating pressure (At the power supply outlet)	1870 psi (129 bar)	1500 psi (103 bar)	1500 psi (103 bar)	1500 psi (103 bar)	1500 psi (103 bar)
System relief valve setting (At the power supply outlet)	2495 psi (172 bar)	2000 psi (138 bar)	2000 psi (138 bar)	2000 psi (138 bar)	2000 psi (138 bar)

Note: These are general hydraulic system requirements. See tool specification page for tool specific requirements.

OPERATION

PRE-OPERATION PROCEDURES

CHECK THE POWER SOURCE

1. Using a calibrated flow meter and pressure gauge, make sure the hydraulic power source develops a flow of 7–9 GPM/26–34 LPM for the 8 GPM model and 4–6 GPM/15–23 LPM for the 5 GPM model at 2000 psi/140 bar.
2. Make certain that the power source is equipped with a relief valve set to open at 2100–2250 psi/145–155 bar.
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 2.

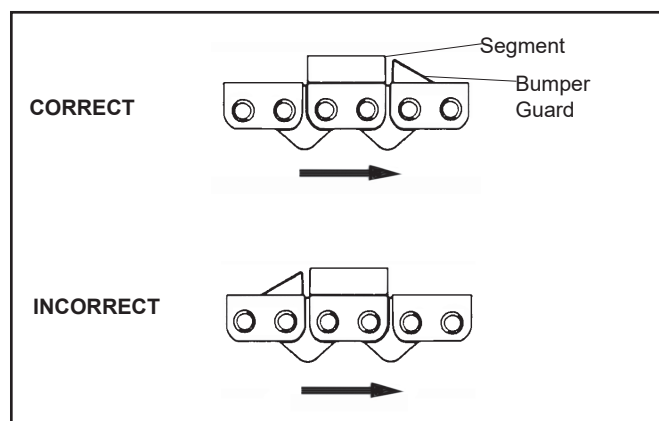


Figure 2. Chain Direction

CONNECT HYDRAULIC HOSES

1. Wipe all hose couplers with a clean lint-free cloth before making connections. If necessary, use a light-weight penetrating oil in a spray can to clean the hose couplers before each connection.
2. Connect the hoses from the hydraulic power source to the chain saw fittings or quick disconnects. It is a good practice to connect return hose first and disconnect them last to minimize or avoid trapped pressure within the chain saw.
3. Observe the arrow on the couplers to ensure that the flow is in the proper direction. The female coupler on the chain saw is the inlet (pressure) coupler.

NOTE:

If uncoupled hoses are left in the sun, pressure increase inside the hoses might make them difficult to connect. Whenever possible, connect the free ends of the hoses together.

CONNECTING TO A WATER SUPPLY

1. Using a standard garden hose, connect the DS06 to a city or auxiliary water supply. Make sure the 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.

CHECK CHAIN AND BAR ADJUSTMENT

NOTE:

Check the chain tension often during operation, especially during the first 1/2 hour when using a new chain. Adjust the chain accordingly when it becomes loose. Follow the procedures contained in the Maintenance and Adjustments section of this manual.

1. Make sure the chain does not exceed a clearance of 5/16 in./8 mm from the bar (see Figure 3). Exceeding

OPERATION

the maximum clearance increases the chance of the chain being dislodged from the bar groove.

2. Make sure the bar attaching nuts are fully tightened and the chain guard is in place.

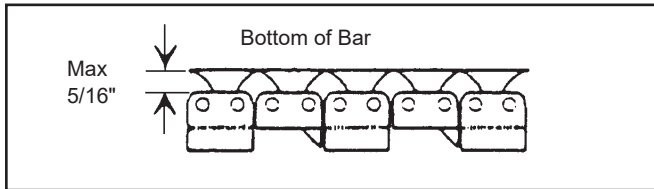


Figure 3. Maximum Chain Clearance

CHECK CHAIN SEGMENT WEAR

1. Using adjustable calipers, measure several chain segments as illustrated in Figure 4.

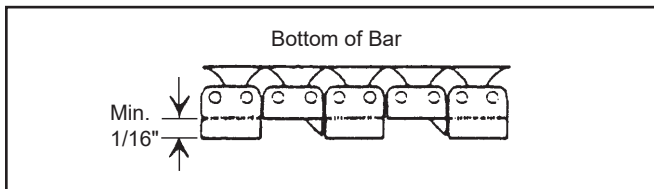


Figure 4. Chain Segment Wear

2. If the average measurement is less than 1/16-inch/1.6 mm, then the chain must be replaced. Refer to your Service Manual for chain replacement procedures.

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 in this manual.
4. If the chain requires adjustment, see "Maintenance & adjustments" on page 14.

PLAN THE CUT

1. Plan your cuts to prevent injury to yourself and to

keep from pinching the saw bar and chain as a result of falling pieces of concrete, brick, etc.

2. Make your cuts in the order shown in Figure 5, starting with cut 1 (base horizontal cut) and proceeding with the remaining three cuts.

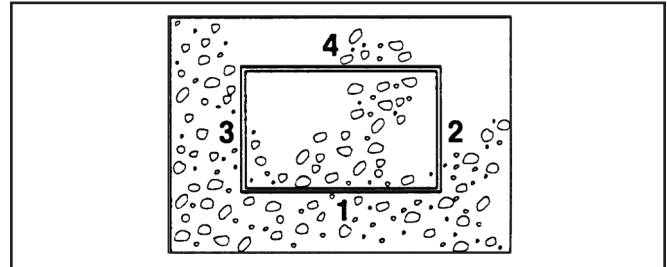


Figure 5. Planning Cuts

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.

TYPES OF CUTS

The DS06 can be operated using the types of cuts shown in Figure 6. When making cuts:

NOTICE

The following are 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 STANLEY Representative. He/she can often provide information that will make your work safer and more productive.

OPERATION

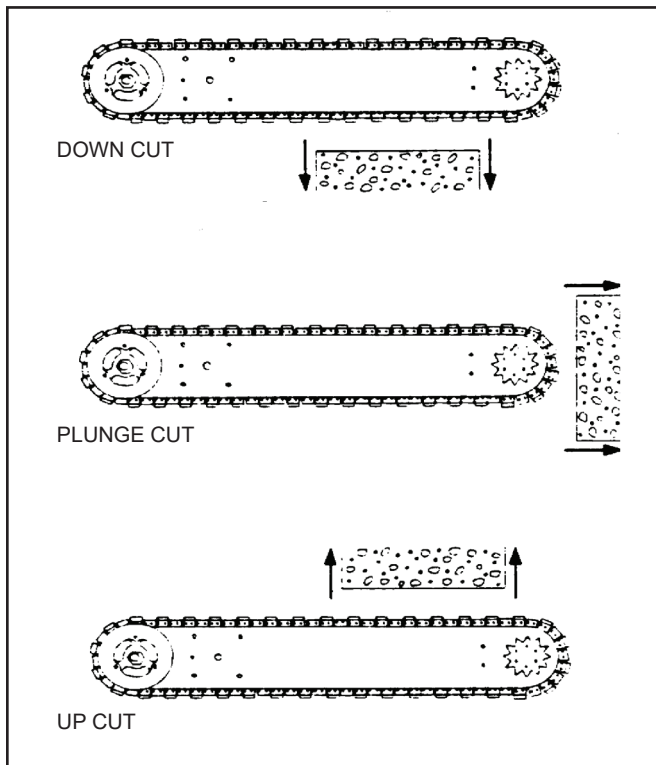


Figure 6. Types of Cuts (chain guard removed for clarity)

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.

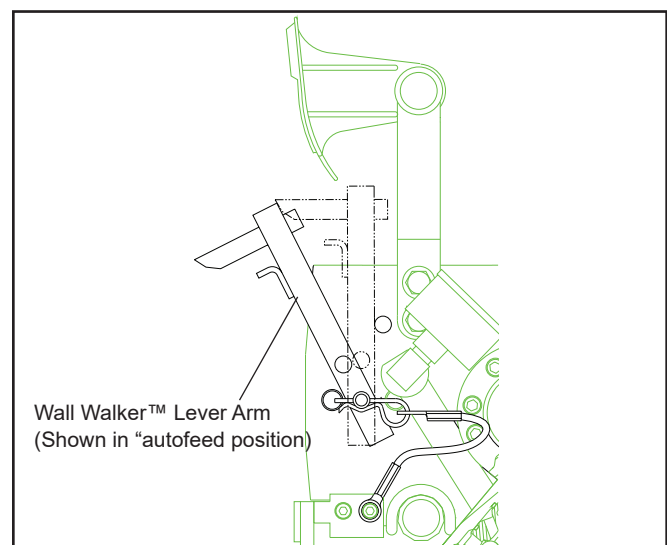


Figure 7. Wall Walker™

MAINTENANCE & 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 Manual.

SAW BAR RAIL

A quick check can be made to determine if saw bar rail or chain segment wear exists. Figure 8 shows a worn saw bar rail.

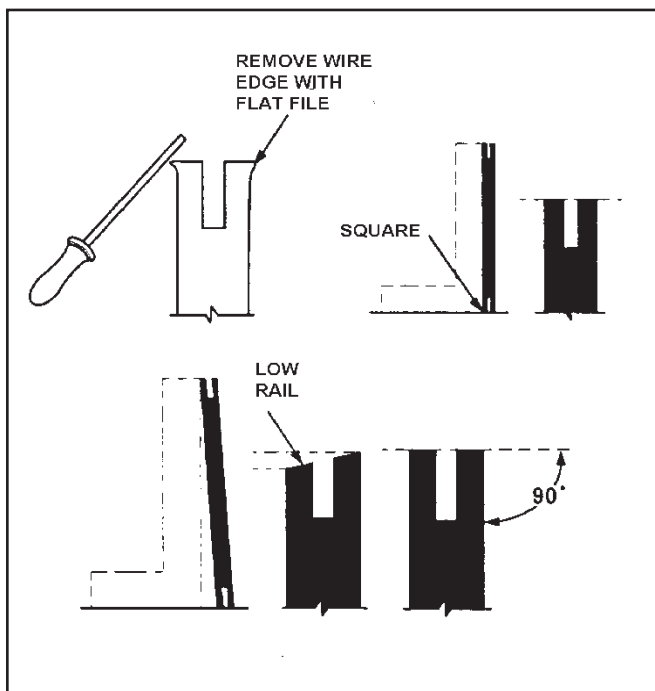


Figure 8. Rail Wear

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 8).

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 in the Service 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 9).

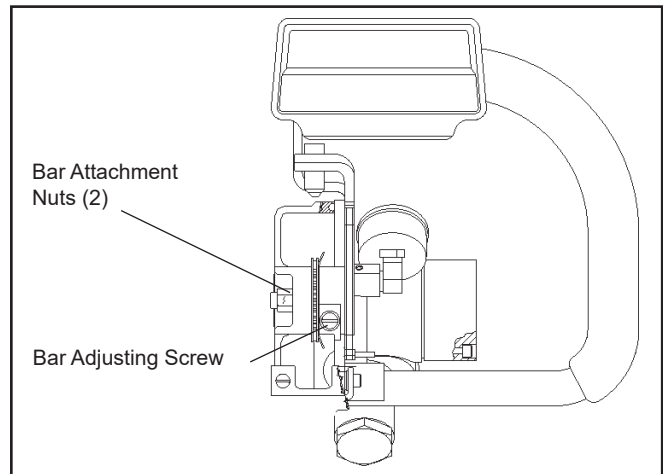


Figure 9. Attachment Screw Locations

3. Using the saw bar adjustment screw (Item 68, Parts Illustration), tighten the chain until you are still able to rotate it one full revolution by hand (Figure 10).

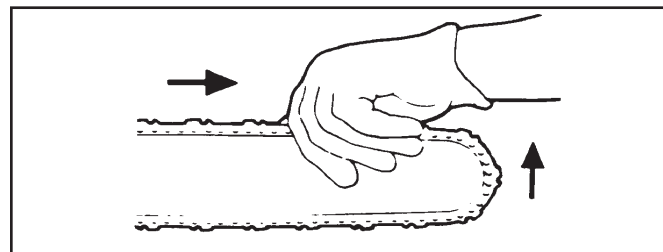


Figure 10. Pulling the Chain

4. Pull the chain around the saw bar to make sure it properly fits the sprocket and saw bar. The chain should be easily pulled.
5. Fully tighten the two saw bar attachment nuts (Figure 9).

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 11).

MAINTENANCE & ADJUSTMENTS

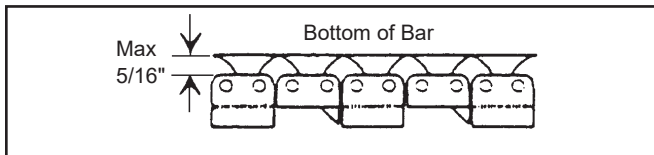


Figure 11. Exposed Drive Link Tang

SERVICING THE CHAIN

The following procedures explain how to break a chain using the STANLEY bench mounted chain breaker (P/N 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 12).

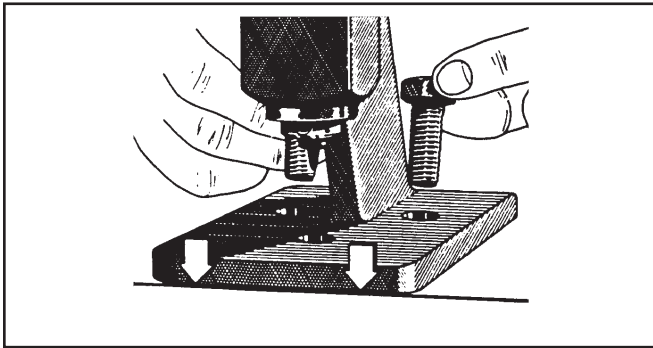


Figure 12. Chain Breaker Mounting

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 13 are the only ones that can be removed.

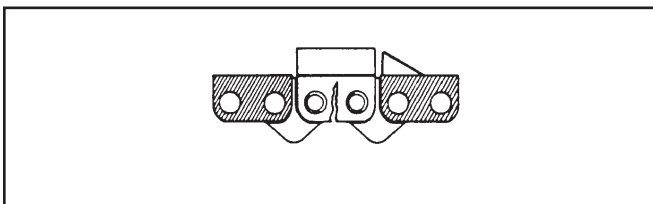


Figure 13. Removable Rivet Heads

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 14).

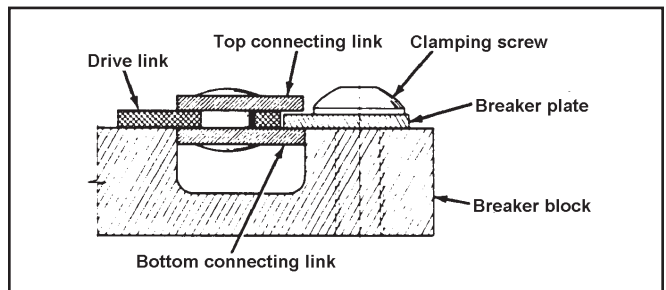
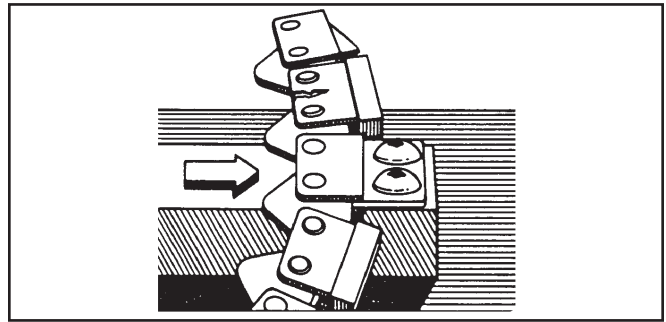


Figure 14. Inserting the Chain

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 15). Do not use excessive force.

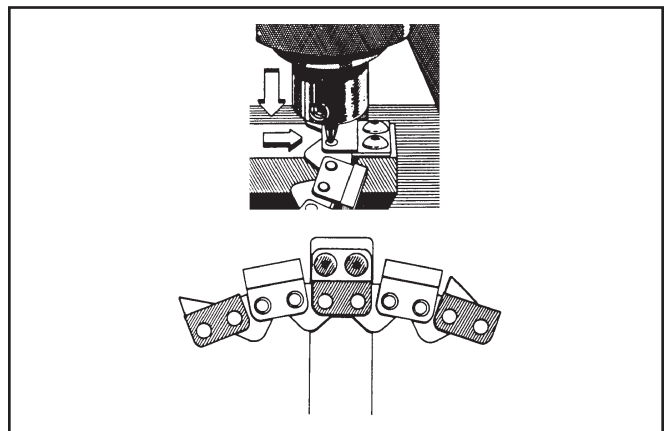


Figure 15. Removing a Rivet

MAINTENANCE & ADJUSTMENTS

REPLACING THE CHAIN BREAKER PUNCH

If the chain breaker punch (P/N 22801) becomes worn or damaged, use the following procedures for replacement.

1. Remove the punch by loosening the set screw (Figure 16).

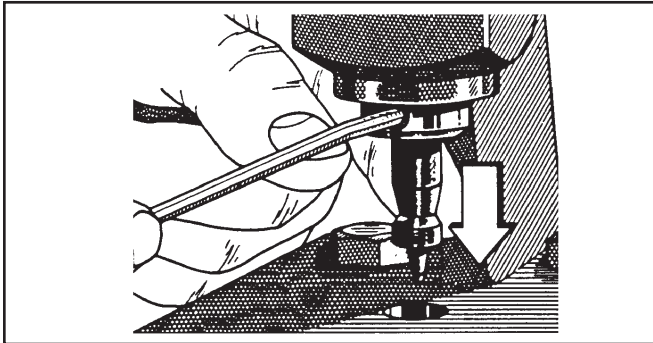


Figure 16. Removing the Punch

2. Insert a new punch into the holder and push it up until it is fully seated (Figure 17). Secure the punch to the chain breaker holder by fully tightening the set screw.

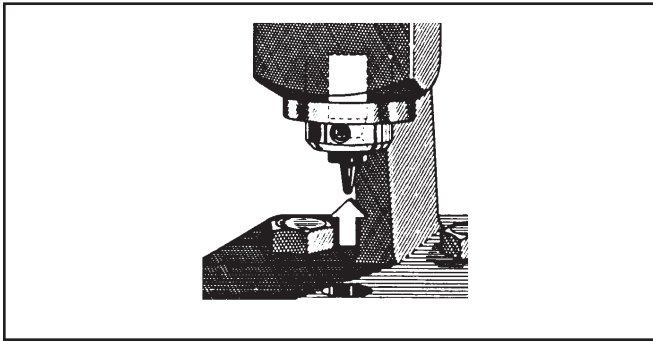


Figure 17. Replacing the Punch

SPINNING RIVETS

The following procedures explain how to spin rivets using the STANLEY bench-mounted rivet spinner (P/N 20857) to assembly the chain.

1. Mount the rivet spinner flush with the side or front of a flat, clean work surface (Figure 18).

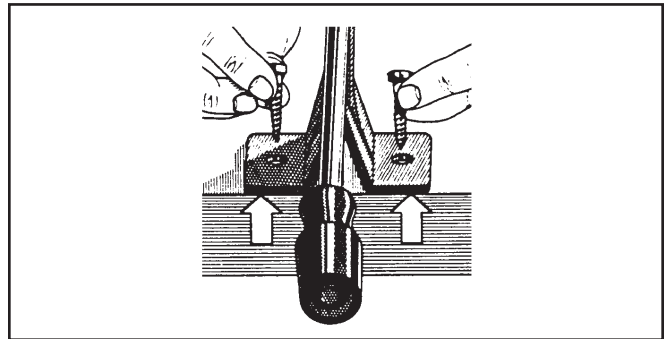


Figure 18. Rivet Spinner Mounting

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 19).

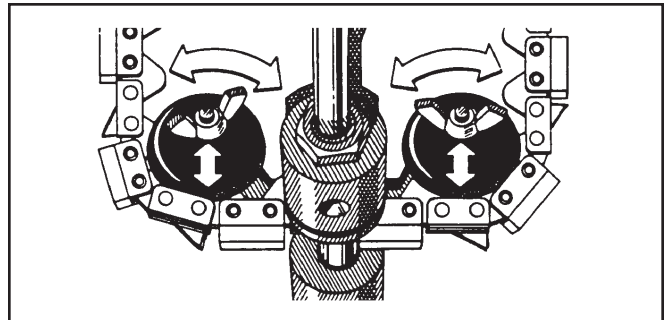


Figure 19. Positioning the Chain

3. Turn the take-up handle until the chain is tight against the spinner anvil (Figure 20).

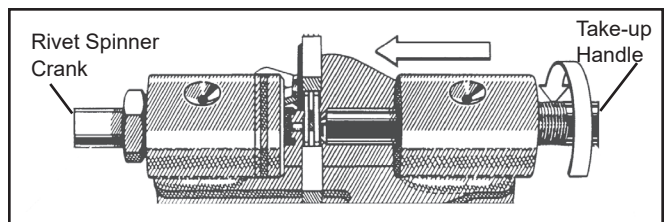


Figure 20. Securing the Chain

4. Turn the rivet spinner crank a few times to center the rivet hub in the spinner anvil (Figure 21).

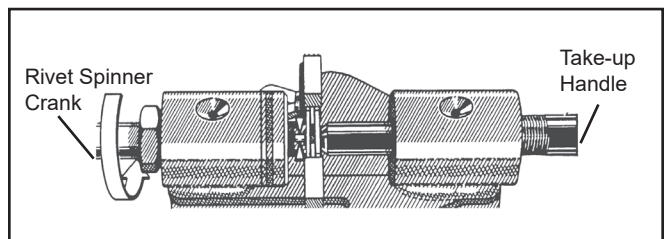


Figure 21. Centering the Rivet Hub

MAINTENANCE & ADJUSTMENTS

5. Apply a few drops of oil to the rivet hub (Figure 22).

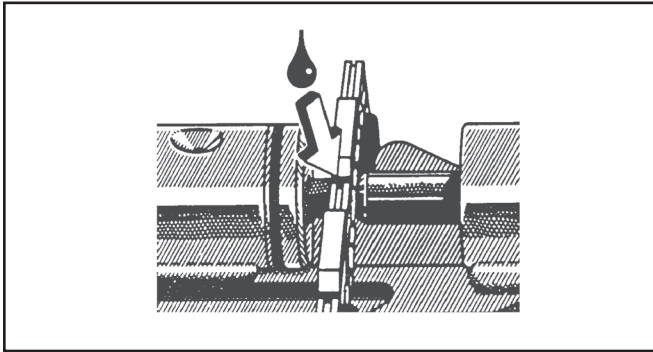


Figure 22. Applying the Oil

6. Turn the spinner crank while slowly running the take-up handle inward (approximately one full revolution) until the rivet head is formed (Figure 23).

NOTE:

The take-up handle provides pressure while the spinner anvil forms the rivet head.

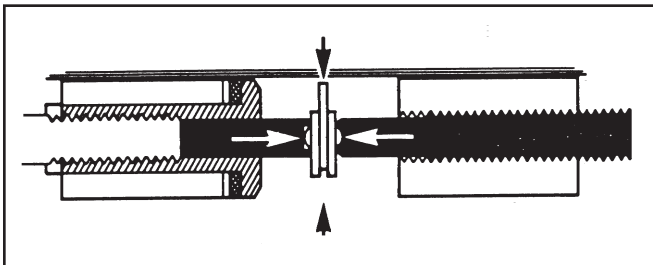


Figure 23. Forming a Rivet Head

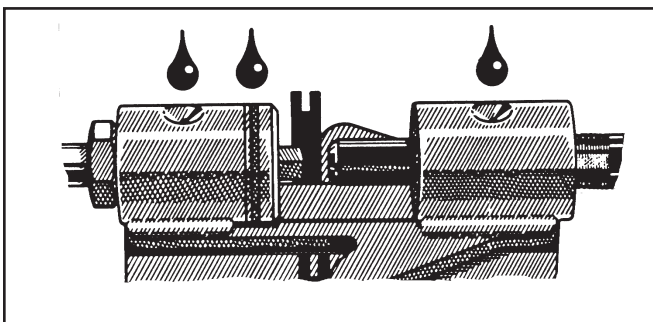


Figure 24. Spinner Oiling Chambers

NOTE:

The rivet spinner is equipped with oiling chambers and should be maintained periodically with a light-weight oil (Figure 24).

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 25.

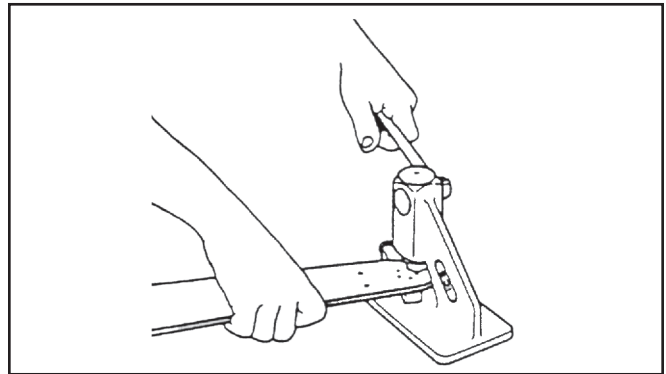


Figure 25. Punching Out Nose Sprocket Rivets

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 26.

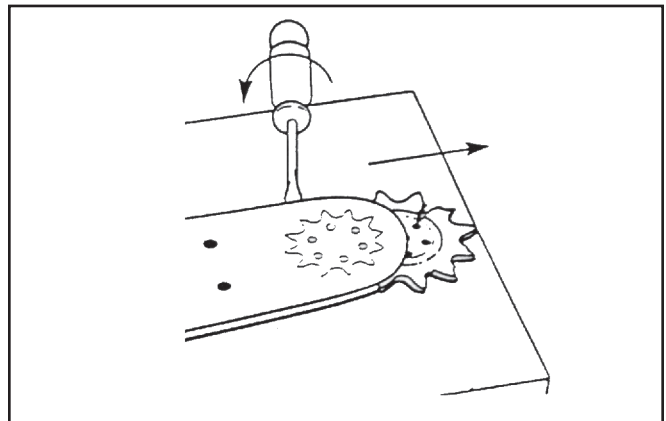


Figure 26. Removing Old Nose Sprocket

MAINTENANCE & ADJUSTMENTS

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 27.

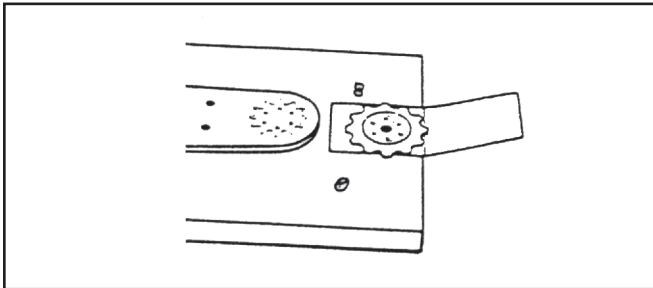


Figure 27. Preparing New Nose Sprocket

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 28.

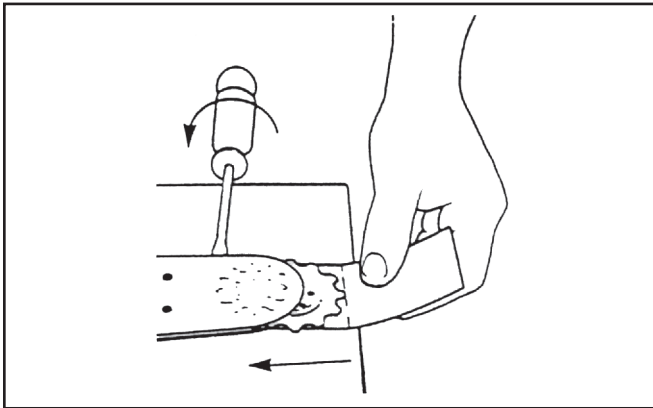


Figure 28. Installing a New Nose Sprocket

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 29.

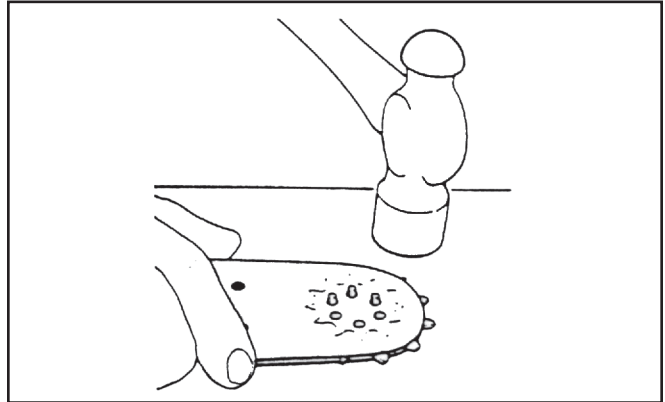


Figure 29. Replacing Rivets

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 30

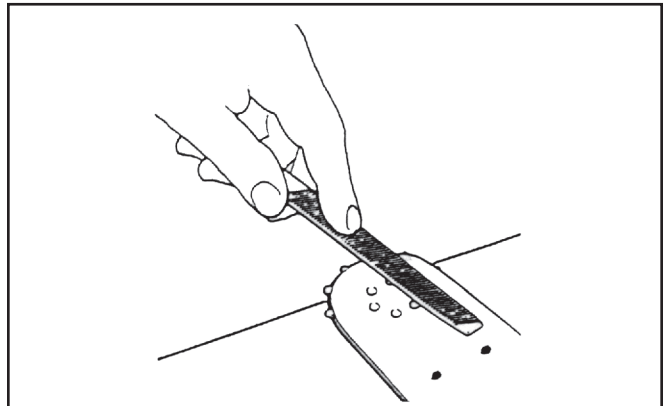


Figure 30. Filing Rivets

TOOL PROTECTION & CARE

NOTICE

In addition to the Safety Precautions found in this manual, observe the following for equipment protection and care.

- Make sure all couplers are wiped clean before connection.
- The hydraulic circuit control valve must be in the **OFF** position when coupling or uncoupling hydraulic tools. Failure to do so may result in damage to the quick couplers and cause overheating of the hydraulic system.
- Always store the tool in a clean dry space, safe from damage or pilferage.
- Make sure the circuit **PRESSURE** hose (with male quick disconnect) is connected to the **IN** port. The circuit **RETURN** hose (with female quick disconnect) is connected to the opposite port. Do not reverse circuit flow. This can cause damage to internal seals.
- Always replace hoses, couplings and other parts with replacement parts recommended by STANLEY. Supply hoses must have a minimum working pressure rating of 2500 psi/172 bar.
- Do not exceed the rated flow . See “SPECIFICATIONS” on page 22 for correct flow rate and model number. Rapid failure of the internal seals may result.
- Always keep critical tool markings, such as warning stickers and tags legible.
- Tool repair should be performed by experienced personnel only.
- Make certain that the recommended relief valves are installed in the pressure side of the system.
- Do not use the tool for applications for which it was not intended.

TROUBLESHOOTING

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

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

SYMPTOM	CAUSE	SOLUTION
Tool does not run.	Hydraulic power source not functioning correctly.	Check power source for proper flow and pressure (7–9 GPM 26–34 LPM at 2000 psi/140 bar.
	Coupler or hoses blocked.	Remove obstruction.
	Mechanical failure.	Have tool serviced by authorized dealer.
Tool runs backwards.	Pressure and return lines incorrectly connected.	Correct hose connections. Motor shaft rotates counterclockwise as viewed from the end of the motor shaft.
Diamond saw 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 tools operating hoses.
	Loss of diamond segment side clearance.	Replace chain.
	Chain segment dulled because of continuous use in hard material or rebar.	Redress segmented 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.
	Loose chain tension.	Re-tension 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® adapter.	Adjust and tighten Trantorque® adapter to 17 ft lb/23 Nm.
Trigger hard to press.	Pressure and return hose reversed.	Connect for proper flow direction. Motor shaft must rotate clockwise.
	Back-pressure too high.	Should not exceed 250 psi/17 bar @ 9 GPM/34 LPM measured at the end of the tool's operating hoses.
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.
	Blocked 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.

TROUBLESHOOTING

DIAMOND CHAIN APPLICATIONS

MODEL	BAR LENGTH	P/N	CORRECT APPLICATIONS
Pinnacle-	13 inch		Very hard aggregate concretes (flint, chert, granite, etc). Heavy steel reinforcing, 5/8 inch/16 mm diameter and larger. Medium/hard aggregate concretes (granite, quartz, river rock, etc). Moderate steel reinforcing (wire mesh 3/8-1/2 inch/10-12 mm diameter). Soft aggregate concrete, concrete block, masonry, "green" concrete, highly abrasive conditions.
Ultra-	13 inch		Medium/hard aggregate concretes (granite, quartz, river rock, etc). Moderate steel reinforcing (wire mesh 3/8-1/2 inch/10-12 mm diameter). Soft aggregate concrete, concrete block, masonry, "green" concrete, highly abrasive conditions.

SPECIFICATIONS

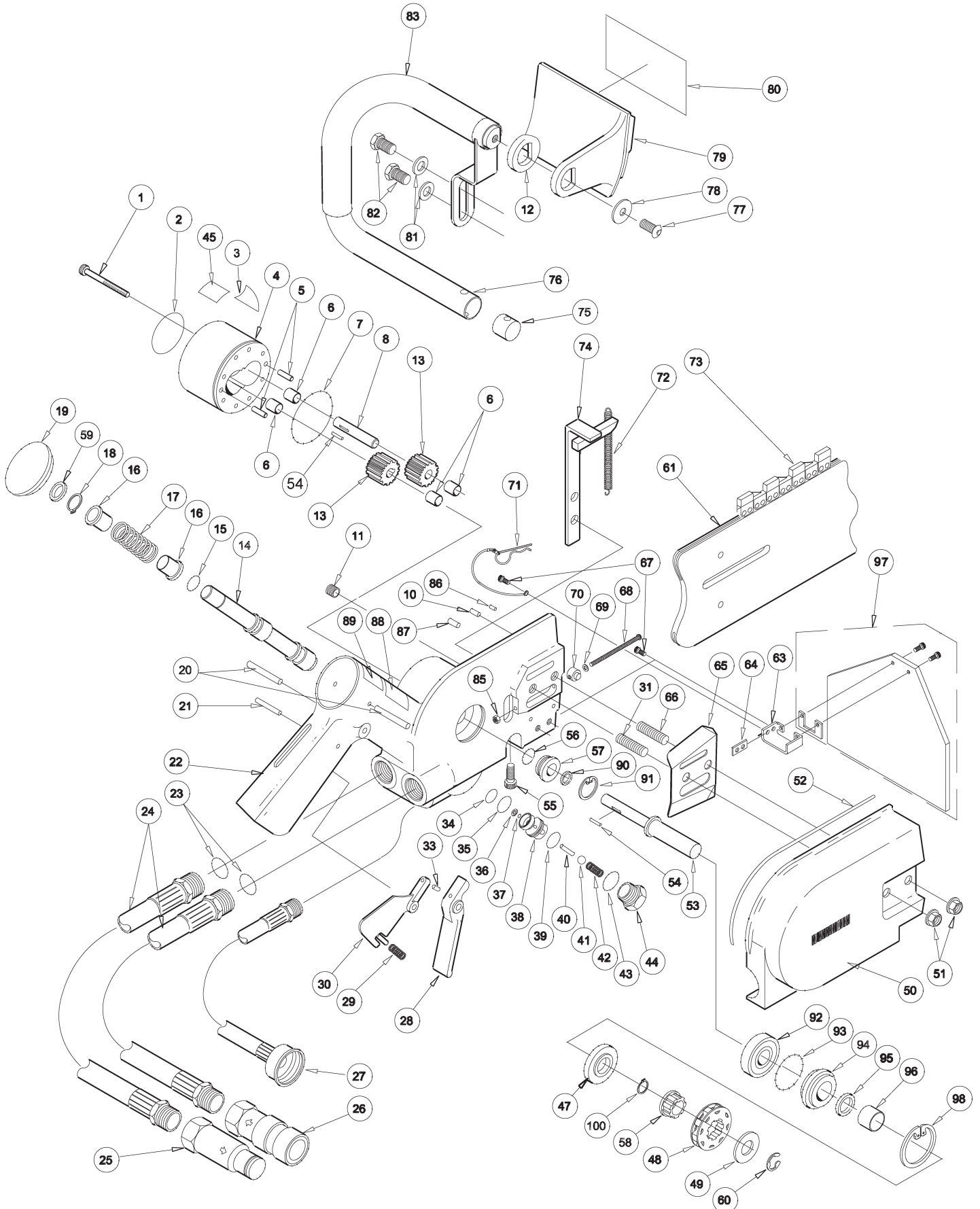
Cutting Depths.....	13 inches/33 cm
Bar Lengths.....	13 inch/33 cm
Chain Type.....	3/8 inch pitch with 21 diamond segments
Maximum Back Pressure.....	250 psi/17 bar
Input Flow Range	
5 GPM model.....	4–6 GPM/15–23 LPM
8 GPM model.....	7–9 GPM/26–34 LPM
Input Pressure.....	2000 psi/140 bar
Weight (without bar).....	14 lbs/6 kg
Length (without bar).....	14.3 inches/36 cm
Width.....	9 inches/23 cm
Lubrication/Cooling.....	Internal Water Channels in Bar
Porting.....	-8 SAE O-ring
Connection.....	EHTMA/HTMA Flush Face
Hose Whips.....	Yes
Chain Speed	
5 GPM model.....	4600 fpm/23.4 m/s
8 GPM model.....	5000 fpm/25.4 m/s

SOUND POWER AND VIBRATION DECLARATION	
Measured A-weighted sound power level, Lwa (ref. 1pW) in decibels	103.98 dBA
Measured A-weighted sound pressure level, Lpa (ref. 20 µPa) at operator's position, in decibels	95.99 dBA
Uncertainty, Kpa, in decibels	3.39 dBA
Values determined according to noise test code given in ISO 15744, 11203 and 3744.	
NOTE: The sum of a measured noise emission value and its associated uncertainty represents an upper boundary of the range of values which is likely to occur in measurements.	
Measured vibration emission value: a (Trigger Handle)	9.9 m/sec ²
Measured vibration emission value: a (Non-Trigger Handle)	5.7 m/sec ²
Uncertainty: K	1.9 m/sec ²
Values determined according to ISO 5349-1, 5349-2	

ACCESSORIES

Chain Repair Spinner.....	20857
Diamond Chain Repair Breaker.....	20858
Diamond Chain Service Kit.....	(sub P/N 20857 or 20858)
Diamond Chain Butterfly Repair Kit.....	20859
13 inch Bar, Sprocket Nose.....	35037
Ultra-25, Diamond Chain for 13 inch Bar.....	56799
Pinnacle-25, Diamond Chain for 13 inch Bar.....	56800
Water Flow Meter, 0-7 GPM.....	60859
Water Pump, 12 VDC, DC Plug.....	DCP30100
Water Pump, 12 VDC, Battery Clips.....	DCP30101

DS06 PARTS ILLUSTRATION



DS06 PARTS LIST

ITEM	PART NO.	QTY	DESCRIPTION
1	00753	8	SHCS 10-24 UNC × 1-1/4
2	73659	1	NAME TAG (5-GPM MODELS)
	74806		NAME TAG (8-GPM MODELS)
3	11207	1	CIRCUIT D DECAL (8-GPM MODEL)
	11206		CIRCUIT C DECAL (5-GPM MODEL)
4	07652	1	REAR GEAR HOUSING ASSY (INCL ITEMS 5-6, 8-GPM MODEL ONLY)
	07834	1	REAR GEAR HOUSING ASSY (INCL ITEMS 5-6, 5-GPM MODEL ONLY)
5	00289	2	DOWEL PIN
6	04041	4	BUSHING
7	00020	1	O-RING
8	07612	1	IDLER SHAFT
9	—	—	NO ITEM
10	32190	1	PIVOT PIN
11	00961	1	PIPE PLUG
12	73583	1	HAND GUARD SPACER
13	04106	2	DRIVE GEAR (8-GPM MODEL ONLY)
	07832	2	DRIVE GEAR (5-GPM MODEL ONLY)
14	32207	1	ON/OFF VALVE
15	07626	1	O-RING
16	07609	2	SPRING WASHER
17	34119	1	SPRING
18	04512	1	RETAINING RING, 1/2 EX
19	07625	1	PLUG BUTTON
20	17668	2	ROLL PIN
21	07624	1	ROLL PIN, 3/16 × 1
22	73656	1	VALVE HANDLE ASSY (INCL ITEMS 6, 31, 66)
23	01605	—	O-RING (SUPPLIED W/ ITEM 24)
24	01652	2	PIGTAIL HOSE ASSY
25	03973	1	MALE COUPLER
26	03972	1	FEMALE COUPLER
27	33443	1	WATER HOSE ASSY
28	58879	1	TRIGGER
29	07602	1	SPRING
30	34105	1	SAFETY CATCH
31	32197	1	STUD (SUPPLIED W/ ITEM 22)
32	—	—	NO ITEM
33	00072	1	ROLL PIN
34	07627	1	O-RING
35	00074	1	O-RING
36	33488	1	SELF-LOCKING RETAINING RING
37	05632	1	O-RING
38	58970	1	WATER VALVE SLEEVE
39	01403	1	O-RING

ITEM	PART NO.	QTY	DESCRIPTION
40	33380	1	PIN
41	36259	1	STEEL BALL, 3/8" DIA.
42	32188	1	SPRING
43	04052	1	O-RING
44	32189	1	SEAL CAP
45	28323	1	CE DECAL
46	—	—	NO ITEM
47	38898	1	SEAL SPACER
48	09098	1	SPROCKET
49	41765	1	WASHER
50	73658	1	CHAIN GUARD
51	32203	2	NUT
52	35181	1	CORD STOCK, 3/16" DIA.
53	43690	1	MOTOR SHAFT (SEE ITEM #60 FOR SERIAL NO. BREAK)
54	04044	2	NEEDLE ROLLER
55	02688	1	SHCS 5/16 -18 UNC × 3/4
56	60804	1	O-RING
57	19215	1	SEAL BACK-UP WASHER
58	43689	1	SPROCKET ADAPTER
59	58969	1	WIPER SEAL
60	66299	1	SPIRAL RETAINER RING
61	—	—	SAW BAR (SEE ACCESSORIES)
62	—	—	NO ITEM
63	32196	1	FLAP MOUNT
64	33219	1	SPACER
65	32192	1	CHAIN GUIDE PLATE
66	32245	1	STUD (SUPPLIED W/ ITEM 22)
67	58968	2	SHCS 1/4 -20 UNC × 5/8
68	02687	1	MACHINE SCREW
69	32191	1	STAT-O-SEAL
70	32198	1	BAR ADJUSTMENT NUT
71	33481	1	WALL WALKER CLEVIS PIN
72	—	—	SPRING (INCL W/ ITEM 74)
73	—	—	CHAIN (SEE ACCESSORIES)
74	32206	1	WALL WALKER
75	02649	1	HANDLE BAR RETAINER
76	33229	1	HANDLE WELDMENT
77	33260	1	BHCS 1/4 -20 × .625 ZINC
78	33261	1	FENDER WASHER
79	73582	1	HAND GUARD
80	12412	1	ELECTRICAL WARNING DECAL
81	12175	2	WASHER
82	33454	2	HHCS 5/16 -18 × 5/8 ZINC
83	33263	1	HANDLE GRIP

DS06 PARTS LIST

ITEM	PART NO.	QTY	DESCRIPTION
84	—	—	NO ITEM
85	17134	1	NUT, 1/4 -20 HHD LT SST
86	31614	1	SPIROL PIN
87	30635	1	SPIROL PIN, 5/16 × 7/8
88	28409	1	COMPOSITE DECAL (CE)
89	81438	1	SOUND POWER LEVEL DECAL (CE)
90	00173	1	QUAD RING
91	04856	1	RETAINING RING
92	35965	1	BEARING
93	00621	1	O-RING
94	38897	1	SEAL WASHER
95	39070	1	V-RING
96	38700	1	SEAL RING
97	65797	1	FLAP KIT DS06
98	07324	1	RETAINING RING
99	37793	1	EXTENSION SPRING ANCHOR
100	41764	1	RETAINING RING
	33360	1	SEAL KIT

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