



# HD45

## HYDRAULIC HAMMER DRILL

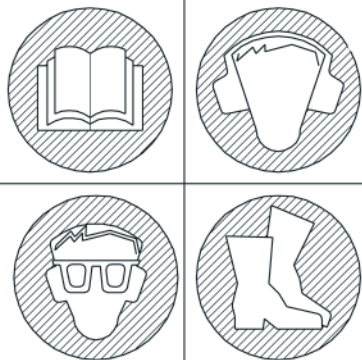
### **⚠ WARNING**

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

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

### **⚠ WARNING**

To avoid serious injury or death



## SAFETY, OPERATION AND MAINTENANCE USER'S MANUAL



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**SERVICING THE STANLEY HYDRAULIC HAMMER DRILL.** This manual contains safety, operation, and routine maintenance instructions. 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 authorized and certified dealer, call Stanley Hydraulic Tools at the number listed on the back of this manual and ask for a Customer Service Representative.

**CERTIFICATE OF CONFORMITY  
ÜBEREINSTIMMUNGS-ZERTIFIKAT  
CERTIFICAT DE CONFORMITE CEE  
CERTIFICADO DE CONFORMIDAD  
CERTIFICATO DI CONFORMITA**



**Hydraulic Tools**

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

**Burrows, James**

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

**hereby certify that the construction plant or equipment specified hereunder:  
bestätige hiermit, daß das im folgenden genannten Werk oder Gerät:  
certifies par ceci que l' usine ou l' équipement de construction indiqué cidessous:  
por el presente certifico que la fabrica o el equipo especificado a continuacion:  
certifico che l'impianto o l'attrezzatura sotto specificata:**

- Category: **Hammer Drill, Hydraulic**  
Kategorie:  
Catégorie:  
Categoria:  
Categoria:
- Make/Ausführung/Marque/Marca/Marca **Stanley**
- Type/Typ/Type/Tipo/Tipo: **HD4511001, HD4531001**
- Serial number of equipment:  
Seriennummer des Geräts:  
Numéro de série de l'équipement:  
Numero de serie del equipo:  
Matricola dell' attrezzatura: **All**

5. Year of manufacture/Baujahr/année de fabrication/Año de fabricacion/Anno di fabbricazione **2005**

**Has been manufactured in conformity with - EEC Type examination as shown.  
Wurde hergestellt in Übereinstimmung mit - EEC Typ-Prüfung nach.  
Est fabriqué conformément - au(x) type(s) examiné(s) comme indiqué dans le tableau ci-après.  
Ha sido fabricado de acuerdo con - tipo examen EEC como dice.  
E' stata costruita in conformità con - le norme CEE come illustrato.**

<b>Examen CEE de type</b>				
Directive Richtlinie Directives particulières Directriz Direttiva	No. Nr Numéro No n.	Date Datum Date Fecha Data	Approved body Prüfung durch Organisme agréé Aprobado Collaudato	Date of expiry Ablaufdatum Date d'expiration Fecha de caducidad Data di scadenza
<b>EN</b>	292		Self	NA
EN ISO	8662-3	1992	Self	NA
EN	792-5	1994	Self	NA
EN ISO	3744	1994	Self	NA
Machinery directive	98/37/EC	1998	Self	NA

- Special Provisions: **None**  
Spezielle Bestimmungen:  
Dispositions particulières:  
Provisiones especiales:  
Disposizioni speciali:

Done at/Ort/Fait à/Dado en/Fatto a Stanley Hydraulic Tools, Milwaukie, Oregon USA Date/Datum/le/Fecha/Data **6/28/05**

Signature/Unterschrift/Signature/Firma/Firma

Position/Position/Fonction/Puesto/Posizione Engineering Manager

8/1/05

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# SAFETY SYMBOLS

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Safety symbols and signal words, as shown below, are used to emphasize all operator, maintenance and repair actions which, if not strictly followed, could result in a life-threatening situation, bodily injury or damage to equipment.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.



This safety alert and signal word indicate an imminently hazardous situation which, if not avoided, will result in death or serious injury.



This safety alert and signal word indicate a potentially hazardous situation which, if not avoided, could result in death or serious injury.



This safety alert and signal word indicate a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.



This signal word indicates a potentially hazardous situation which, if not avoided, may result in property damage.



This signal word indicates a situation which, if not avoided, will result in damage to the equipment.



This signal word indicates a situation which, if not avoided, may result in damage to the equipment.

Always observe safety symbols. They are included for your safety and for the protection of the tool.

## LOCAL SAFETY REGULATIONS

Enter any local safety regulations here. Keep these instructions in an area accessible to the operator and maintenance personnel.

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# SAFETY PRECAUTIONS

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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 on page 5.

The model HD45 Hydraulic Hammer Drill 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 hose before operation. Failure to do so could result in personal injury or equipment damage.

- The operator must start in a work area without bystanders. Flying debris can cause serious injury.
- Do not operate the tool unless thoroughly trained or under the supervision of an instructor. Establish a training program for all operators to ensure safe operation.
- Always wear safety equipment such as goggles, ear and head protection, and safety shoes at all times when operating the tool. Use gloves and aprons when necessary.
- The operator must be familiar with all prohibited work areas such as excessive slopes and dangerous terrain conditions.
- Do not inspect, clean or replace any part(s) if the hydraulic power source is connected. 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 and are in good condition.
- 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 hammer drill.
- Never wear loose clothing that can get entangled in the working parts of the tool.
- Keep all parts of your body away from the drill and maintain proper footing and balance at all times.
- When working near electrical conductors, always assume that all conductors are energized and that insulation, clothing and hoses can conduct electricity. Stay a safe distance away from electrical conductors.
- If the hydraulic power supply has been interrupted, place the hammer drill in the OFF position before restarting the hydraulic power supply.
- To avoid personal injury or equipment damage, all tool repair, maintenance and service must only be performed by authorized and properly trained personnel.
- Never rest the tool on your foot.
- Never allow your face to come close to the tool.
- Never start the tool while it is lying on the ground.

# TOOL STICKERS & TAGS

**STANLEY**

Stanley Hydraulic tools  
Division of the Stanley Works  
3810 SE Naef Road  
Milwaukie, OR 97267

05152  
Stanley Decal  
28376  
Stanley Decal (CE Models)

**CAUTION**

7.5 GPM / 28-34 LPM  
DO NOT EXCEED 2000 PSI / 140 BAR

DO NOT EXCEED SPECIFIED FLOW OR PRESSURE. USE CLOSED-CENTER TOOL ON CLOSED-CENTER SYSTEM. USE OPEN-CENTER TOOL ON OPEN-CENTER SYSTEM. CORRECTLY CONNECT HOSES TO TOOL "IN" AND "OUT" PORTS. IMPROPER HANDLING, USE OR OTHER MAINTENANCE OF TOOL COULD RESULT IN A LEAK, BURST OR OTHER TOOL FAILURE. CONTACT AT A LEAK OR BURST CAN CAUSE OIL INJECTION INTO THE BODY. FAILURE TO OBSERVE THESE PRECAUTIONS CAN RESULT IN SERIOUS PERSONAL INJURY.

03786  
HD45 GPM Decal



28322  
CE Decal (CE Models Only)



66297  
Sound Power Decal

**HD45 HAMMER DRILL**

WEIGHT: 22 KG/48 LB  
FLOW: 34 LPM/9 GPM  
PRESSURE: 140 BAR/2000 PSI

29689  
Name Tag



28409  
Composite Decal (CE Models)



11207  
Circuit Type D Decal

**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)

# HYDRAULIC HOSE REQUIREMENTS

## HOSE TYPES

Hydraulic hose types authorized for use with Stanley Hydraulic Tools are as follows:

- ❶ Certified non-conductive
- ❷ Wire-braided (conductive)
- ❸ Fabric-braided (not certified or labeled non-conductive)

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

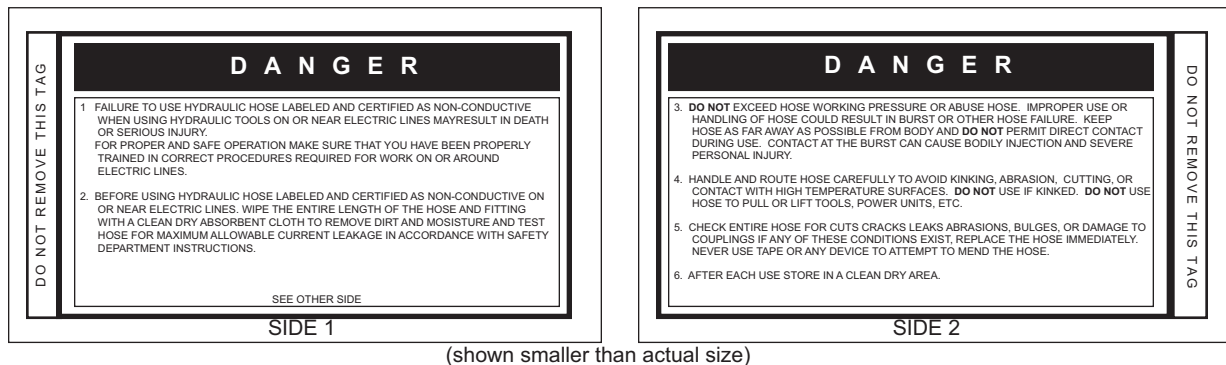
Hoses ❷ and ❸ listed above are **conductive** and **must never** be used near electrical conductors.

## HOSE SAFETY TAGS

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

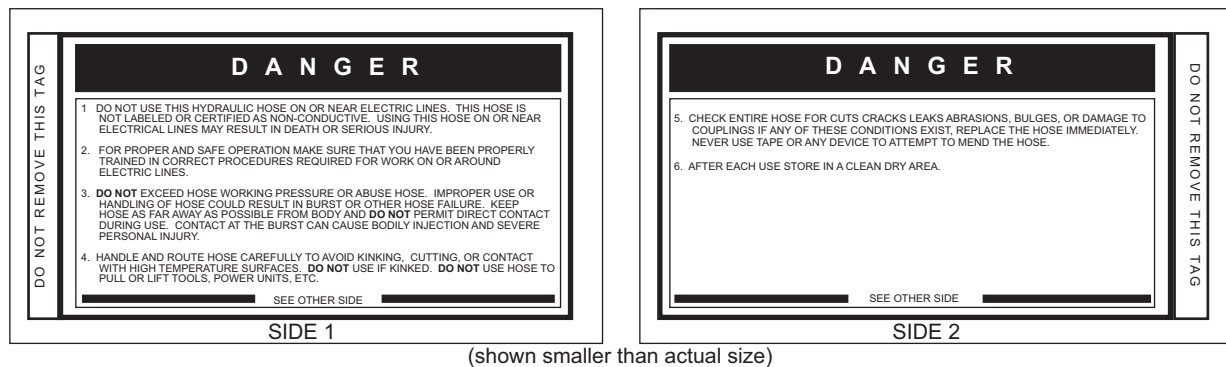
If the information on a tag is illegible because of wear or damage, replace the tag immediately. A new tag may be obtained from your Stanley Distributor.

### 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 PRESSURE RATING

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



# HTMA REQUIREMENTS

## TOOL CATEGORY



## HYDRAULIC SYSTEM REQUIREMENTS

**TYPE I**

**TYPE II**

**TYPE III**

**TYPE RR**

FLOW RATE	4-6 gpm (15-23 lpm)	7-9 gpm (26-34 lpm)	11-13 gpm (42-49 lpm)	9-10.5 gpm (34-40 lpm)
TOOL OPERATING PRESSURE (at the power supply outlet)	2000 psi (138 bar)	2000 psi (138 bar)	2000 psi (138 bar)	2000 psi (138 bar)
SYSTEM RELIEF VALVE SETTING (at the power supply outlet)	2100-2250 psi (145-155 bar)	2100-2250 psi (145-155 bar)	2100-2250 psi (145-155 bar)	2200-2300 psi (152-159 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 min. 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 max. fluid temperature to: (at max. expected ambient temperature)	140° F (60° C)	140° F (60° C)	140° F (60° C)	140° F (60° C)
Min. 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)	7 hp (4.47 kW) 40° F (22° C)	6 hp (5.22 kW) 40° F (22° C)
<b>NOTE:</b> 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 Min. full-flow filtration Sized for flow of at least: (For cold temp. startup and max. 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 min. and max. operating temps)	100-400 ssu*	100-400 ssu* (20-82 centistokes)	100-400 ssu*	100-400 ssu*
<b>NOTE:</b> 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

### NOTE:

These are general hydraulic system requirements. See tool Specification page for tool specific requirements.

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# OPERATION

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## PREOPERATION PROCEDURES

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### CHECK POWER SOURCE

1. Using a calibrated flowmeter and pressure gauge, check that the hydraulic power source develops a flow of 7-9 gpm/26-34lpm at 1500-2000 psi/105-140 bar.
2. Make certain that the hydraulic power source is equipped with a relief valve set to open at 2250 psi/155 bar.

### CHECK THE TOOL

1. Make certain 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 and dry with all fittings and fasteners tight.

---

## BIT INSTALLATION

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The hammer drill is designed for use with 1-inch to 2-inch diameter bits manufactured for Model 736 Skil Hex Hammer Drills.

1. Pull the latch at the foot of the tool so that the drill can be inserted into the drive hex.

**⚠ WARNING**

Do not allow your fingers to come between the latch and drill steel when closing the latch.

2. Push the latch back into the “latched” (vertical) position to lock the bit in place.

### CONNECT 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 tool fittings or quick disconnects. Connect the return hose first and disconnect it last to eliminate or reduce

trapped pressure for easier quick-connect fitting attachment.

#### Note:

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

3. Observe the flow indicators stamped on the hose couplers to ensure that the flow is in the proper direction. The female coupler on the tool’s “IN” port is the inlet coupler. See illustration in back of this manual for tool port identification.

4. Squeeze the drill trigger momentarily. If the drill does not operate, the hoses might be reversed. Verify correct connection of the hoses before continuing.

---

## DRILL OPERATION

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1. Observe all safety precautions.
2. Install the appropriate drill bit for the job.

#### Note:

**The rotation of the drillbit is reversible. Drillbit speed is variable in each direction. This is accomplished by rotating the lever on the lower section of the tool. The tool is in neutral when the lever is in the vertical “up” position. The lever can be rotated 90° to the “horizontal” position in each direction. (The direction that the bit rotates.) The distance that the lever is rotated determines the speed of the bit. The horizontal position in either direction is the maximum speed setting.**

3. Select the speed of the bit best suited for the material being drilled. Most drilling is best accomplished with the lever halfway between fully “On” (horizontal) and the vertical “up” position. Refer to the above note. The drill is not suitable for drilling steel or wood.
4. Squeeze the trigger to start the drill. Adequate down pressure is very important.

#### Note:

**If the trigger is partially depressed, the piston will cycle at a low rate and permit easier starting of the drill bit into the work surface.**

5. Periodically pull the drill out of the hole while the bit is still rotating. This will clear the hole and allow more efficient penetration.

---

# OPERATION

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6. If the bit binds in the hole, reverse direction of the bit rotation to assist in “backing out” the drill.
7. Keep the drill bit centered in the hole.

---

## COLD WEATHER OPERATION

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

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

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## UNDERWATER MODEL PREVENTATIVE MAINTENANCE

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After each use, the movable portions of the tool that were exposed to water should be flushed with a water displacing oil such as WD40. Remove any remaining water and debris as follows:

1. Turn the tool upside down (without the tool bit) and spray oil through the drive hex and side holes in the motor assembly to displace any remaining water in the lower piston cavity.
2. Spray oil into the On/Off valve trigger slot area.
3. Dip or spray the entire tool.
4. Cycle the tool hydraulically several times before storing away.

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# CHARGING THE ACCUMULATOR

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## ACCUMULATOR TESTING PROCEDURE

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To check or charge the accumulator the following equipment is required:

31254 Charge Kit: which includes the following.

- Accumulator Tester (Part Number 02835).
- Charging Assembly (Part Number 15304). (p/n 15304 includes a liquid filled gauge with snub valve, hose and fittings.)

- NITROGEN bottle with an 1000 psi/70 bar minimum charge. (Not included in 31254 Charge Kit.)

1. Remove the valve cap assembly from the hammer drill.
2. Holding the chuck end of Accumulator Tester (Part Number 02835) turn the gauge fully counterclockwise to ensure that the stem inside the chuck is completely retracted.
3. Thread the tester onto the accumulator charging valve. Do not advance the gauge-end into the chuck-end. Turn as a unit. Seat the chuck on the accumulator charging valve and hand tighten only.
4. Advance the valve stem of the tester by turning the gauge-end clockwise until a pressure is read on the gauge (charge pressure should be 500-700 psi/34-48 bar).
5. If pressure is OK unscrew the gauge-end from the chuck to retract the stem, then unscrew the entire tester assembly from the accumulator charging valve. If pressure is low, charge the accumulator as described in the following procedure.
6. Install the protective valve cap assembly.

---

## ACCUMULATOR CHARGING

---

1. Perform steps 1 through 4 of the accumulator testing procedure above.
2. Connect the chuck of the charging assembly to the charging valve on the accumulator tester or, if preferred, remove the tester from the charging valve and connect the charging assembly chuck directly to the charging valve.
3. Adjust the regulator to the charging pressure of 600 psi/42 bar.

### NOTE:

It may be necessary to set the gauge at 650-700 psi/45-48 bar to overcome any pressure drop through the charging system.

4. Open the valve on the charging assembly hose.

## IMPORTANT

If the underwater model is to be used at depths greater than 300 ft/91 m, increase the accumulator charge 40 psi/3 bar for each 100 ft/30 m of depth to offset water pressure.

5. When the accumulator is fully charged close the valve on the charging assembly hose and remove the charging assembly chuck from the accumulator tester or tool charging valve.
6. If the accumulator tester has been used, be sure to turn the gauge-end fully counterclockwise before removing the tester from the charging valve of the tool.
7. Replace the valve cap assembly.

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## GENERAL SERVICE NOTES

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1. If the hammer drill is repainted after servicing, be sure to mask off the vent in the valve cap assembly. Do not allow paint to enter the IN and OUT ports or the bore of the motor assembly.
2. If the handle grips need to be replaced.
  - a. Remove the old grips and clean the handle.
  - b. Wash the new grips and the handle clean and dry, simply push or drive the grips on. DO NOT lubricate the parts. The grips will not be secure on the handle if any grease or oil is used.

# CHARGING THE ACCUMULATOR

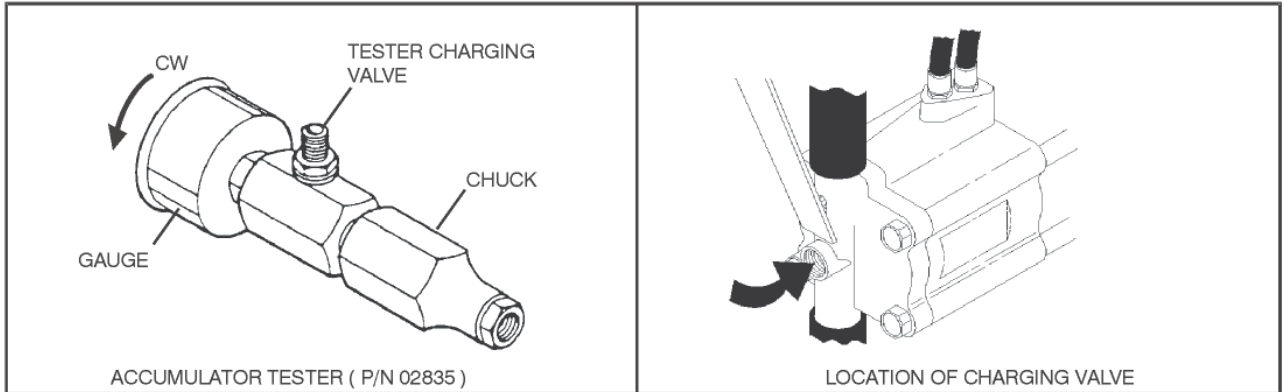
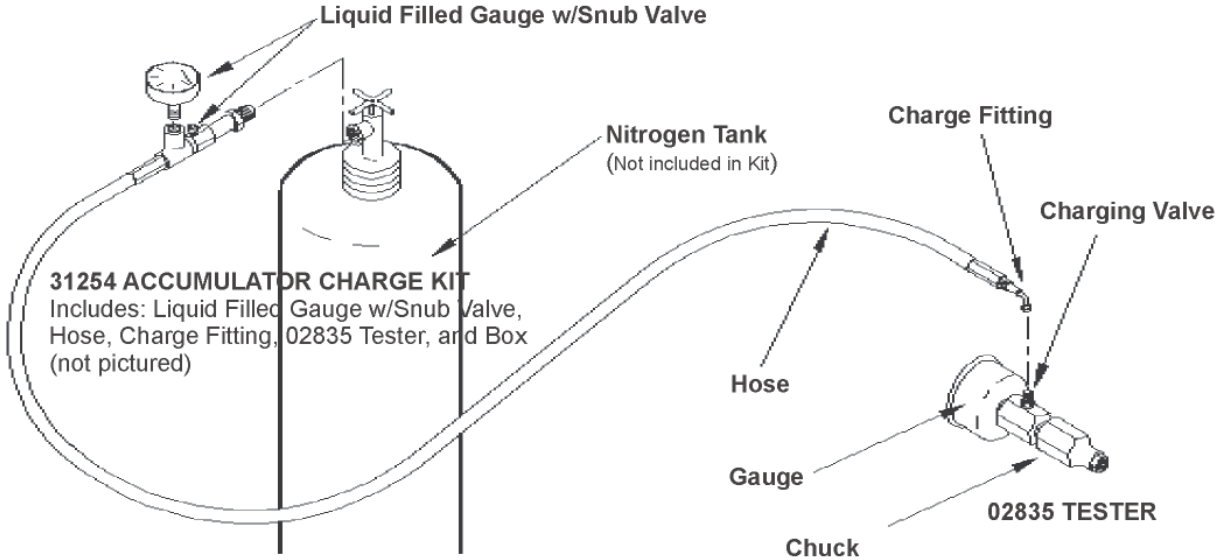


Figure 2

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# TOOL EQUIPMENT & CARE

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## NOTICE

In addition to the Safety Precautions on page 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 Hydraulic Tools. Supply hoses must have a minimum working pressure rating of 2500 psi/172 bar.
- Do not exceed the rated flow (see Specifications) page in this manual 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.
- Never operate a hammer drill without a drill bit or without holding it against the work surface. To do so, places excessive strain on the hammer drill.
- Keep drill bits sharp for maximum tool performance. Make sure the drill bits are not chipped or rounded on the striking end.

# 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 hammer drill, always check that the hydraulic power source is supplying the correct hydraulic flow and a pressure to the tool as

listed in the table. Use a flowmeter known to be accurate. Check the flow with the hydraulic fluid temperature at least 80° F / 27° C.

PROBLEM	CAUSE	SOLUTION
Drill does not run.	Power unit not functioning	Check power unit for proper flow and pressure (7-9 gpm/26-34 lpm, 1500-2000 psi/104-140 bar).
	Couplers or hoses blocked.	Remove restriction.
	Flow direction reversed. Pressure and return lined hoses reversed at ports.	Be sure hoses are connected to their proper ports..
	Mechanical failure of piston or automatic valve.	Disassemble drill and inspect for damaged parts.
Drill does not drill effectively.	Power unit not functioning.	Check power unit for proper flow and pressure (7-9 gpm/26-34 lpm, 1500-2000 psi/104-140 bar).
	Couplers or hoses blocked.	Remove restriction.
	Low accumulator charge (pressure hose will pulse more than normal).	Recharge accumulator. Replace diaphragm if charge loss continues.
	Oil too hot (above 140° F/60° C).	Provide cooler to maintain proper oil temperature.
Drill operates slow.	Low flow supply from power unit.	Check power unit for proper flow (7-9 gpm/26-34 lpm).
	High backpressure.	Check hydraulic system for excessive backpressure (over 250 psi/17 bar).
	Couplers or hoses blocked.	Remove restriction.
	Orifice plug or internal passage blocked.	Remove restriction.
	Oil too hot (above 140° F/60° C) or too cold (below 60° F/16° C).	Check power unit for proper oil temperatures. Bypass cooler to warm oil up or provide cooler to maintain proper temperature.
	Relief valve set too low.	Adjust relief valve to 2100-2250 psi/145-155 bar.
Drill gets hot.	Hot oil going through tool.	Check power unit. Be sure flow rate is not too high causing part of the oil to go through the relief valve. Provide cooler to maintain proper oil temperature (140° F/60°C maximum).
		Check relief valve setting.
Oil leakage on drill bit.	Lower piston or drive hex seal failure.	Replace seals.
Oil leakage around trigger.	Valve spool seal failure.	Replace seals.
Low rotation torque.	Motor not completely broken in.	Continued operation or break in with motor break-in block will correct.
	Damage to motor clearances.	Repair as required.
	Mechanical binding during drilling.	Take care to guide drill straight.

# SPECIFICATIONS

Operating Pressure .....	1500-2000 psi / 105-140 bar
Flow Range .....	7-9 gpm / 26-34 lpm
Optimum Flow .....	8 gpm / 30 lpm
Capacity .....	1- to 2-in. / 25-50 mm Dia. No. 736 Skil Carbide Tipped Drill Bit
Porting .....	.8 SAE O-Ring
Connect Size and Type .....	3/8 in. Male Pipe Hose End
System .....	Open Center, HTMA Type II/ETMA Category D
Rotating Speed .....	0-300 RPM (Forward or Reverse)
Hose Whips .....	Yes
Weight .....	45 lb / 20.4 kg
Length .....	14 in. / 35.6 cm
Motor .....	Integral

## SOUND POWER AND VIBRATION DECLARATION

Measured A-weighted sound power level, L <sub>wa</sub> (ref. 1pW) in decibels	111 dBA
Uncertainty, K <sub>wa</sub> , in decibels	3 dBA
Measured A-weighted sound pressure level, L <sub>pa</sub> (ref. 20 µPa) at operator's position, in decibels	98 dBA
Uncertainty, K <sub>pa</sub> , in decibels	3 dBA
Values determined according to noise test code given in ISO 15744, using the basic standard ISO3744 NOTE- The sum of a measured noise emission value and its associated uncertainty represents an upper boundry of the range of values which is likely to occur in measurements.	
Declared vibration emission value in accordance with EN 12096	
Measured vibration emission value: a	25.6 m/sec <sup>2</sup>
Uncertainty: K	8.4 m/sec <sup>2</sup>
Values determined according to ISO 8662-3	

# ACCESSORIES

Carbide Bit 1 in. x 24 in. Long (Drills 14-7/8 in. Deep).....	02281
Carbide Bit 1-1/4 in. x 24 in. Long (Drills 14-7/8 in. Deep).....	02282
Carbide Bit 2 in. x 24 in. Long (Drills 14-3/4 in. Deep) .....	02283
Carbide Bit 1 in. x 18 in. Long (Drills 8-7/8 in. Deep).....	04668
Carbide Bit 1-1/4 in. x 36 in. Long (Drills 29 in. Deep).....	04896

# SERVICE TOOLS

Tamper Sleeve Tool .....	01120
Accumulator Tester .....	02835
Flow and Pressure Tester .....	04182
O-Ring Tool Kit.....	04337
Flow Sleeve Removal Tube.....	04910
Flow Sleeve Removal Tool.....	04919
Bearing Installation Tool.....	05044
Latch Removal Tool.....	05045
Bearing Installation Tool.....	05061
Latch Installation Tool .....	05062
Accumulator Cylinder Puller.....	05640
Seal Kit.....	05839
Latch Installation Tool.....	05879
Accumulator Charge Kit .....	06545









