

DL07 HYDRAULIC DRILL

A 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.





Copyright® The Stanley Works 2006 Printed in U.S.A. 49234 12/2006 ver 4D



SAFETY, OPERATION AND MAINTENANCE USER'S MANUAL

Stanley Hydraulic Tools

3810 SE Naef Road Milwaukie OR 97267-5698 503-659-5660 FAX 503-652-1780 www.stanley-hydraulic-tools.com

TABLE OF CONTENTS

SAFETY SYMBOLS	5
SAFETY PRECAUTIONS	6
TOOL STICKERS & TAGS	7
TOOL HOSE INFORMATION	8
OPERATION	11
COLD WEATHER OPERATION	12
EQUIPMENT PROTECTION & CARE	13
TROUBLESHOOTING	
SPECIFICATIONS	15
TORQUE AND DRILL SPEEDS	15
ACCESSORIES	16
DL07 PARTS ILLUSTRATION	17
DL07 PARTS LIST	18
WARRANTY	19

SERVICING THE STANLEY HYDRAULIC IMPACT WRENCH: 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.



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.

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



Hydraulic Tools

e undersigned:	Burrows, James
e undersigned:	Burrows, James

I, th Ich, der Unterzeichnende: Je soussigné: El abajo firmante:

lo sottoscritto:

Surname and First names/Familiennname 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:

1.	Category: Kategorie:	Drill
	Catégorie:	
	Categoria:	
	Categoria:	

Stanley Make/Ausführung/Marque/Marca/Marca

3. Type/Typ/Type/Tipo/Tipo: DL0755001

Serial number of equipment: Seriennummer des Geräts: Numéro de série de l'équipement: Numero de serie del equipo: Matricola dell'attrezzatura:

> Provisiones especiales: Disposizioni speciali:

All	
-----	--

Year of manufacture/Baujahr/année de fabrication/Año de fabricacion/Anno di fabbricazione 2004

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 conformitá con - le norme CEE come illustrato.

	Examen CEE de typ	e		
Directive	No.	Date	Approved body	Date of expiry
Richtlinie	Nr	Datum	Prüfung durch	Ablaufdatum
Directives particulières	Numéro	Date	Organisme agréé	Date d'expiration
Directriz	No	Fecha	Aprobado	Fecha de caducidad
Direttiva	n.	Data	Collaudato	Data di scadenza
Machinery Directive	98/37/EC	1998	Self	NA
EN	792-3	1994	Self	NA
EN ISO	3744	1995	Self	NA
EN	28662-1	1988	Self	NA

EN EN EN	IISO	792-3 3744 28662-1	1994 1995 1988	Self Self Self	NA NA NA
6.	Special Provisions: Spezielle Bestimmunge Dispositions particulière				

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

Jans O/Biner S Signature/Unterschrift/Signature/Firma/Firma

Position/Position/Fonction/Puesto/Posizione **Engineering Manager**

Rev 1 3/05

SAFETY SYMBOLS

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, <u>could</u> result in <u>death or serious injury</u>.



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



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, <u>will</u> result in <u>damage to the equipment</u>.



This signal word indicates a situation which, if not avoided, <u>may</u> 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

Keep these instructions in an area accessible to the operator and mainte-

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 on page 5.

The model DL07 Hydraulic Impact Wrench 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.
- 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 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 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 rotating parts. Long hair or loose clothing can become drawn into rotating components.
- Always use accessories that conform to the specifications given in the OPERATION section of this manual.
- Do not reverse impact wrench rotation direction by changing fluid flow direction.
- Release the trigger if the power supply has been interrupted.
- When working near electrical conductors, always assume that all conductors are energized and that insulation, clothing and hoses can conduct electricity. Use hose labeled and certified as non-conductive.
- To avoid personal injury or equipment damage, all tool repair, maintenance and service must only be performed by authorized and properly trained personnel.
- Do not carry the tool by hoses.

TOOL STICKERS & TAGS

Please refer to the parts illustration for location of stickers.





58862 PRESSURE WARNING STICKER



Stanley Hydraulic Tools 3810 SE Naef Road Milwaukie, Oregon USA

Model No. **DL07**

4-12 GPM/15-45 LPM 2000 PSI / 140 BAR

60807 DL07 MODEL STICKER



11207 CIRCUIT TYPE D STICKER (CE)

OC/CC

FOR USE ON OPEN CENTER AND CLOSED CENTER HYDRAULIC SYSTEMS. "SET FOR PROPER SYSTEM BEFORE USE"

11354 OC/CC STICKER RATED NO-LOAD SPEED 1000 RPM AT 8 GPM/30 LPM

29148 RPM STICKER



28788 MANUAL STICKER (CE)

⚠ WARNING



READ OWNERS MANUAL AND ENSURE THAT YOU HAVE BEEN PROPERLY TRAINED TO WORK ON OR AROUND ELECTRIC LINES, FAILURE TO USE HYDRAULIC HOSE LABELED AND CERTIFIED AS NON-CONDUCTIVE MAY RESULT IN DEATH OR SERIOUS PERSONAL INJURY.

58864 ELECTRICAL WARNING STICKER

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

. 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 DEPART-MENT 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 HYDRAU LIC 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

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 OPERA-TION 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 CONNECTED TO TOOL OUT PORT. REVERSING CONNECTED TO TOOL OUT PORT. TREVENING CONNECTED TO TOOL OUT PORT. TREVENING CONNECTED TO TOOL OUT PORT. TREVENING CONNECTED TO THE SEVERE PERSONAL INJURY.
- DO NOT CONNECT OPEN-CENTER TOOLS TO CLOSED-CEN-TER HYDRAULIC SYSTEMS. THIS MAY RESULT IN LOSS OF OTHER HYDRAULIC FUNCTIONS POWERED BY THE SAME SYSTEM AND/OR SEVERE PERSONAL INJURY.
- BYSTANDERS MAY BE INJURED IN YOUR WORK AREA. KEEF BYSTANDERS CLEAR OF YOUR WORK AREA.
- WEAR HEARING, EYE, FOOT, HAND AND HEAD PROTEC-TION.
- 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 OPERA-TION MANUAL.

TAG TO BE REMOVED ONLY BY TOOL OPERATOR.

SEE OTHER SIDE

SAFETY TAG P/N 15875 (shown smaller then actual size)

TOOL HOSE INFORMATION

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) - constucted 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 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.

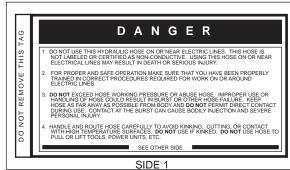
THE TAG SHOWN BELOW IS ATTACHED TO "CERTIFIED NON-CONDUCTIVE" HOSE





(shown smaller than actual size)

THE TAG SHOWN BELOW IS ATTACHED TO "CONDUCTIVE" HOSE.





(shown smaller than actual size)

Tool to Hydraulic Circuit Hose Recommendations

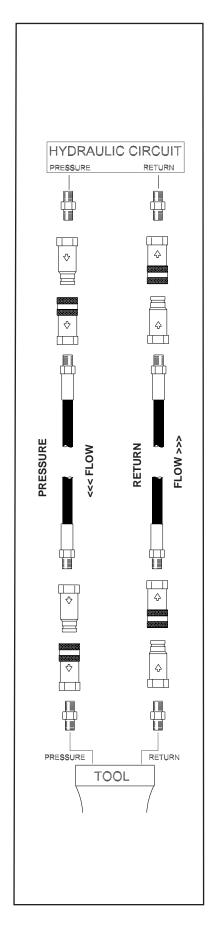
The chart to the right shows recommended minimum hose diameters for various hose lengths based on gallons per minute (gpm)/liters per minute (lpm). These recommendations are intended to keep return line pressure (back pressure) to a minimum acceptable level to ensure maximum tool performance.

This chart is intended to be used for hydraulic tool applications only based on Stanley Hydraulic Tools 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.

		1 250	Lose Lengths	Inside L	Inside Diameter	USE	Min. Working Pressure	ig Pressure
GPM	LPM	FEET	METERS	INCH	MM	(Press/Return)	PSI	BAR
		Certified No	on-Conductive	Hose - Fibe	r Braid - for	Certified Non-Conductive Hose - Fiber Braid - for Utility Bucket Trucks	Trucks	
	15-34	up to 10	up to 3	3/8	10	Both	2250	155
0	Sonductiv	ve Hose - Wire	Braid or Fiber	Braid -DO	NOT USE NE	Conductive Hose - Wire Braid or Fiber Braid -DO NOT USE NEAR ELECTRICAL CONDUCTORS	AL CONDUCT	ORS
	15-23	up to 25	up to 7.5	3/8	10	Both	2500	175
	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	8/9	16	Both	2500	175
_	7	000	C	2/8	16	Pressure	2500	175
c:01-c	04-60	005-001	06-00	3/4	19	Return	2500	175
10-13	38-49	up to 50	up to 15	8/9	16	Both	2500	175
	07 00	77	200	2/8	16	Pressure	2500	175
2	94-00	00-	06-61	3/4	19	Return	2500	175
	00 70	100 200	0000	3/4	19	Pressure	2500	175
2	94-00	007-001	00-00	_	25.4	Return	2500	175
—	00	70 64 61.	0 4 4	8/9	16	Pressure	2500	175
01-51	94-80 00-84	cz 01 dn	8 01 dn	3/4	19	Return	2500	175
10 16	40 60	26 400	000	3/4	19	Pressure	2500	175
	00-84	001-07	05-0	_	25.4	Return	2500	175



Typical Hose Connections

HTMA REQUIREMENTS

TOOL CATEGORY

HYDRAULIC SYSTEM REQUIREMENTS	TYPE 1	TYPEII	TYPEIII	TYPE RR
FLOW RATE	4-6 gpm	7-9 gpm	11-13 gpm	9-10.5 gpm
	(15-23 lpm)	(26-34 lpm)	(42-49 lpm)	(34-40 lpm)
TOOL OPERATING PRESSURE (at the power supply outlet)	2000 psi	2000 psi	2000 psi	2000 psi
	(138 bar)	(138 bar)	(138 bar)	(138 bar)
SYSTEM RELIEF VALVE SETTING (at the power supply outlet)	2100-2250 psi	2100-2250 psi	2100-2250 psi	2200-2300 psi
	(145-155 bar)	(145-155 bar)	(145-155 bar)	(152-159 bar)
MAXIMUM BACK PRESSURE (at tool end of the return hose)	250 psi	250 psi	250 psi	250 psi
	(17 bar)	(17 bar)	(17 bar)	(17 bar)
Measured at a max. fluid viscosity of: (at min. operating temperature)	400 ssu*	400 ssu*	400 ssu*	400 ssu*
	(82 centistokes	s) (82 centistokes	s) (82 centistokes) (82 centistokes)
TEMPERATURE Sufficient heat rejection capacity to limit max. fluid temperature to: (at max. expected ambient temperature)	140° F	140° F	140° F	140° F
	(60° C)	(60° C)	(60° C)	(60° C)
Min. cooling capacity at a temperature difference of between ambient and fluid temps	3 hp	5 hp	7 hp	6 hp
	(2.24 kW)	(3.73 kW)	(4.47 kW)	(5.22 kW)
	40° F	40° F	40° F	40° F
	(22° C)	(22° C)	(22° C)	(22° C)
NOTE: Do not operate the tool at oil temperatures above 140° discomfort at the tool.	F (60° C). Oper	ration at higher to	emperatures can	cause operator
FILTER Min. full-flow filtration Sized for flow of at least: (For cold temp. startup and max. dirt-holding capacity)	25 microns	25 microns	25 microns	25 microns
	30 gpm	30 gpm	30 gpm	30 gpm
	(114 lpm)	(114 lpm)	(114 lpm)	(114 lpm)
HYDRAULIC FLUID Petroleum based (premium grade, anti-wear, non-conductive) VISCOSITY	100-400 ssu*	100-400 ssu* (20-82 c	100-400 ssu* centistokes)	100-400 ssu*

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.

(at min. and max. operating temps)

NOTE:

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

^{*}SSU = Saybolt Seconds Universal

OPERATION

PREOPERATION PROCEDURES

CHECK POWER SOURCE

- 1. Using a calibrated flow meter and pressure gauge, check that the hydraulic power source develops a flow of 4-12 gpm/15-45 lpm at 1000-2000 psi/70-140 bar.
- 2. Make certain that the hydraulic power source is equipped with a relief valve set to open at 2100 psi/145 bar minimum.

CONNECT HOSES

- 1. Wipe all hose couplers with a clean lint-free cloth before making connections.
- 2. Connet hoses from the hydraulic power suupply to the tool quick disconnects. It is good practice to connect the return hose first and disconnect it last to minimize or avoid trapped pressure within the drill.
- 3. Observe the arrow on hose couplers to ensure that the flow is in the proper direction. The male coupler on the circuit hose end is the supply (pressure) coupler.
- 4. Make sure the circuit PRESSURE (male quick disconect) hose is conneced to the port at the back of the drill handle. The circuit RETURN hose (female quick disconnect) is connected to the port closest to the trigger.
- 5. Move the hyraulic circuit control valve to the ON position to direct hydraulic flow to the drill.

Note:

If uncoupled hoses are left in the sun, pressure increase inside the hose may result in making them difficult to connect. Whenever possible, connect the free ends of the hoses together.

OPEN-CENTER (OC) OR CLOSED-CENTER (CC) OPERATION

The DL07 can be configured to run on OC or CC circuits.

- 1. Determine the system type.
- 2. Remove the hex plug (81) from the spring cap.

FOR OPEN-CENTER OPERATION:

Using a 3/16 in. hex, reach through the hole in the spring cap and turn the selector screw counter-clockwise until meeting resistance (from the retaining ring). Turn the selec-

tor clockwise and then counter-clockwise to be sure the selector is being stopped by the retaining ring. Do not force the selector screw. Open-center operation is now selected.

FOR CLOSED-CENTER OPERATION:

Using a 3/16 in. hex, reach through the hole in the spring cap and turn the selector screw fully clockwise. When the selector screw bottoms. Closed-center operation is now selected.

A CAUTION

To prevent damage to the retaining ring, do not attempt to force the selector screw counter-clockwise beyond the point of initial resistance.

Reinstall the hex plug. Failure to install the plug may introduce contaminants to the spool bore resulting in replacement of the valve spool and main housing.

DRILL OPERATION

- 1. Observe all safety precautions.
- 2. Place the selected drill bit fully into the chuck. Center the bit and tighten the chuck using the key provided. Remove the key and store away from the drill.
- 3. Momentarily press the trigger to ensure that the drill bit rotates clockwise and runs true.
- 4. Select a work position that gives secure footing and balance while operating the drill.
- 5. Press the drill against the work and squeeze the trigger.

The drilling method used is determined by the material being drilled and the size and depth requirements of the hole.

Brittle material such as rock, brick or concrete can be drilled efficiently when the bit is caused to strike (hammer) the hole bottom to break up the material. Without hammering, the rotating bit will only grind down and become dull. The Stanley HD08 should be used for this application.

OPERATION

Ductile material such as metal or wood is drilled efficiently when a steady down force is applied to the drill center to cause the bit to slice chips of material from the hole bottom. When drilling in metal, use a cutting lubricant to prolong bit life and reduce the amount of force required to drill effectively.

Large drill holes are more productively created from small drill holes. Drill bits are incrementally selected to enlarge the hole until the desired hole size is obtained. Each bit selected must always be too large to thread and jam into an existing hole; otherwise the bit may break and endanger the operator.

COLD WEATHER OPERATION

If the wrench 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 wrench can result from use with fluid that is too viscous or too thick.

EQUIPMENT PROTECTION & CARE

NOTICE

In addition to the Safety Precautions 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) 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.

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 wrench, always check that the hydraulic power source is supplying the correct hydraulic flow and pressure to the tool as listed in the following table. Use a flow meter known to be accurate. Check the flow with the hydraulic fluid temperature at least 80° F/27° C.

PROBLEM	CAUSE	SOLUTION
Table 11 and a fact	Power not being supplied.	Check to make certain that both hoses are connected.
Tool will not start.		Turn hydraulic circuit control valve ON.
	Defective quick disconnects.	Check each quick disconnect.
	Relief valve set too low.	Set relief valve at 2100 psi/145 bar.
		Locate and remove restriction.
		Use correct fluid.
Low drilling torque.	Fluid restriction in hose or valve.	Fluid not warmed up. Prehead system.
2011 0111111111111111111111111111111111	Excess flow and pressure loss.	Hoses too long for hose ID. Use shorter hose.
		Hose ID too small for hose length. Use larger ID hose.
Low tool speed.	Fluid flow rate is too low.	Check circuit flow rate.
High tool speed.	Fluid flow rate is excessive.	Check circuit flow rate. Add proper flow control valve or reduce the pump RPM.
Oil leaks around gear housing.	Hydraulic pressure and return hoses reversed.	Correct hose connections. Pressure should be to the handle port away from the trigger, return is near the trigger, then replace the main shaft oil seal.
	Open-center tool on a closed-center circuit or vice-versa.	Use tools to match circuit.
Oil gets hot, power unit working hard.	Circuit relief set too low.	Adjust relief valve to 2100 psi/145 bar.
	Too much oil going through tool.	Adjust flow for 12 gpm/45 lpm maximum or less.
	Damaged O-Rings.	Replace as required.
Oil leaks at reversing spool.	Wrong hydraulic fluid. Circuit too hot.	Refer to Operation Instructions for correct fluid/circuit specifications.
	Fasteners loose.	Refer to Service Instructions
Oil leak at motor cap face.	Face O-Ring worn or missing.	Replace as required.
	Motor cap/main housing damaged.	Replace as required.

SPECIFICATIONS

Drive Size	5/8 -16 THD Chuck
Drill Torque	20 ft lbs / 27 Nm at 2000 psi / 140 bar
Drill Speed	1000 rpm at 8 gpm / 30 lpm
RPM Range	
RPM Range Weight Overall Length Width	8 lbs / 3.6 kg
Overall Length	
Width	3.5 inch / 9 cm
Motor	Integral
Pressure Range	
Flow Range	4-12 gpm / 30 lpm
Optimum Flow	
System Type	Open and Closed Center, HTMA Type I, II and III
Porting	8 SAE O-Ring
Output Torque	500 ft lbs / 675 Nm
Connect Size and Type	3/8 inch NPT Male Adapter
System Type Porting Output Torque Connect Size and Type Sound Power Level	87.69 dBA
Vibration Level	9 m/s²

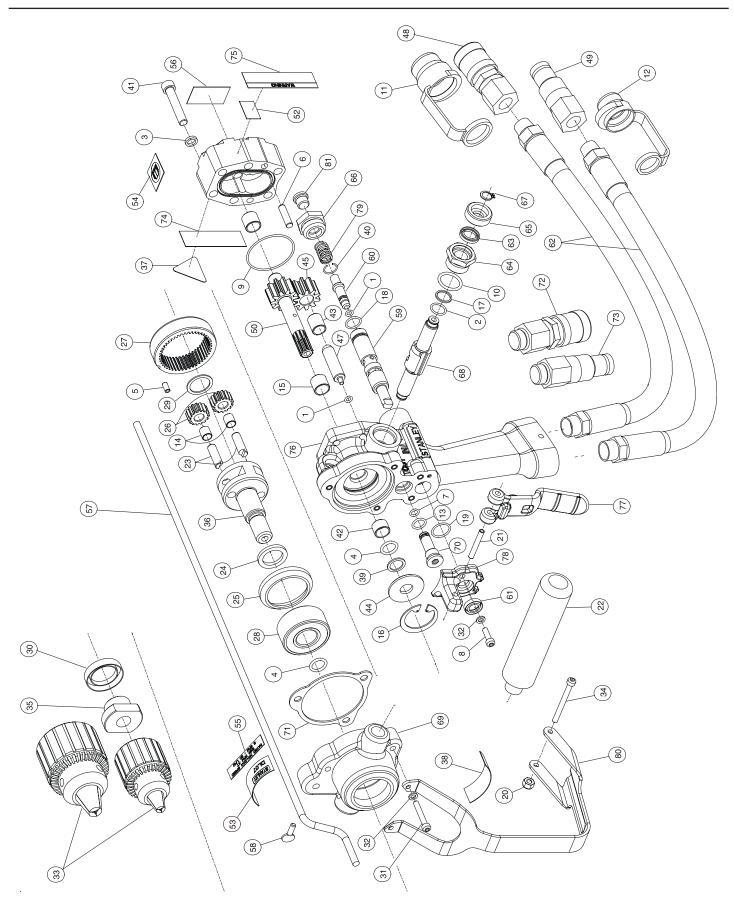
TORQUE AND DRILL SPEEDS

TORQUE	HYDRAULIC FLOW	DRILL SPEED	
4 ft lbs @ 500 psi / .5 Nm @ 35 bar	3 gpm / 11.3 lpm	350 rpm	
9 ft lbs @ 1000 psi / 1.2 Nm @ 70 bar	4 gpm / 15 lpm	475 rpm	
14 ft lbs @ 1500 psi / 1.9 Nm @ 105 bar	6 gpm / 23 lpm	750 rpm	
19 ft lbs @ 2000 psi / 2.6 Nm @ 140 bar	8 gpm / 30 lpm 10 gpm / 38 lpm	1000 rpm 1250 rpm	

ACCESSORIES

DESCRIPTION	PART NUMBER
WOOD AUGER BITS, 5/8 INCH HEX	
9/16 inch dia x 18 inch Carbide Tipped Auger Bit (22 inch OAL)	2784
13/16 inch dia x 18 inch Carbide Tipped Auger Bit (22 inch OAL)	27847
WOOD AUGER BITS, 7/16 INCH HEX	
9/16 inch dia x 8 inch Carbide Tipped Auger Bit (12 inch OAL)	27850
11/16 inch dia x 8 inch Carbide Tipped Auger Bit (12 inch OAL)	
13/16 inch dia x 8 inch Carbide Tipped Auger Bit (12 inch OAL)	
15/16 inch dia x 8 inch Carbide Tipped Auger Bit (12 inch OAL)	
1-1/16 inch dia x 8 inch Carbide Tipped Auger Bit (12 inch OAL)	
9/16 inch dia x 12 inch Carbide Tipped Auger Bit (16 inch OAL)	
11/16 inch dia x 12 inch Carbide Tipped Auger Bit (16 inch OAL)	
13/16 inch dia x 12 inch Carbide Tipped Auger Bit (16 inch OAL)	
15/16 inch dia x 12 inch Carbide Tipped Auger Bit (16 inch OAL)	
1-1/16 inch dia x 12 inch Carbide Tipped Auger Bit (16 inch OAL)	
9/16 inch dia x 18 inch Carbide Tipped Auger Bit (22 inch OAL)	
11/16 inch dia x 18 inch Carbide Tipped Auger Bit (22 inch OAL)	
13/16 inch dia x 18 inch Carbide Tipped Auger Bit (22 inch OAL)	
15/16 inch dia x 18 inch Carbide Tipped Auger Bit (22 inch OAL)	
1-1/16 inch dia x 18 inch Carbide Tipped Auger Bit (22 inch OAL)	
13/16 inch dia x 36 inch Carbide Tipped Auger Bit (48 inch OAL)	
11/16 inch dia x 15 inch Carbide Tipped Auger Bit (18 inch OAL)	
13/16 inch dia x 15 inch Carbide Tipped Auger Bit (18 inch OAL)	32400
Chuck Key 5/8" Chuck	
Chuck Key 1/2" Chuck	29456

DL07 PARTS ILLUSTRATION



DL07 PARTS LIST

ITEM NO.	PART NO.	QTY	DESCRIPTION	ITEM NO.	PART NO.	QTY	DESCRIPTION
1	00026	1	O-RING	46	20770	1	MOTOR CAP ASSY
2	00175	2	O-RING	47	20782	1	IDLER SHAFT
3 4	00231 00354	6 1	LOCKWASHER O-RING	48	03972	1	3/8 NPT FLUSHFACE COUPLER BODY PART OF SET 03971 (PARKER) OR 47436 (AEROQUIP) FOR DL07552S, 552SUP, 572S
5	00563 00713	1 2	ROLL PIN DOWEL PIN	49	03973	1	3/8 NPT FLUSHFACE COUPLER NOSE PART OF SET 03971 (PARKER) OR 47437
7	00713	1	O-RING				(AEROQUIP) FOR DL07552S, 552SUP, 572S
8	62229	2	CAPSCREW	50	24271	1	MAIN SHAFT
9	01262	1	O-RING	51	25610	1	RAILROAD HELP DESK STICKER (DL07552S, 552SUP, 572S ONLY)
10	01604	1	O-RING	52	28323	2	CE STICKER (DL0755001 ONLY)
11	02324	1	CAP AND PLUG, 1/2 INCH	53	60807	1	DL07 MODEL NUMBER STICKER
12	03288	1	CAP AND PLUG, 3/8 INCH	54	28788	2	MANUAL STICKER
13	03364	1	O-RING	55	29148	1	RPM STICKER (DL0755001 ONLY)
14	05206	2	BUSHING	56	29149	1	ROTATION DIRECTION STICKER (DL0755001 ONLY)
15	05207 06635	2	BUSHING RETAINING RING	57	38676	1	DEPTH GAUGE ROD (DL07552S, 572S ONLY)
16 17	07224	2	BACKUP RING	58	38685	1	THUMB SCREW (DL07552S, 572S ONLY)
18			NO ITEM				,
19	07627	1	O-RING	59	48986	1	VALVE SPOOL ASSY
20	07724	1	NYLOCK NUT	60			NO ITEM
				61	49139	1	SEAL WIPER
21 22	07970 08130	1	ROLL PIN HANDLE	62	56725 66727	2	HOSE ASSY (PARKER) HOSE ASSY (AEROQUIP)
23	08161	2	PLANET SHAFT	63	56747	2	SEAL WIPER
24	00460	4	CHAFT VEEDED	64	56749	2	SEAL CAP
24	08162	1	SHAFT KEEPER	65	56757	2	END CAP
25	08163	1	BEARING KEEPER	66	56758	1	SPRING CAP
26	08165	2	PLANET GEAR ASSY	67	56764	2	RETAINING RING
27	08166	1	RING GEAR	68	56765	1	REVERSING SPOOL
28	08175	1	BALL BEARING	69	58403	1	GEAR HOUSING MACHINING
29	08440	1	RETAINING RING	70	58462	1	RELIEF CARTRIDGE PLUG ASSY
30	09621	1	SHAFT SEAL				(INCL ITEMS 7 AND 13)
31	62228	3	CAPSCREW	71	58635	1	SEAL GASKET
32	09623 09624	5	LOCKWASHER DRILL CHUCK, 1/2 INCH	72	58856	1	3/8 FLUSHFACE COUPLER BODY 1/2 INCH MALE SAE (PART OF SET 58718 FOR DL07550, 55001, 652
33	27628	1	DRILL CHUCK, 5/8 INCH				ONLY)
34	09687	1	CAPSCREW				3/8 FLUSHFACE COUPLER NOSE 1/2 INCH MALE SAE
35	09778	1	SEAL NUT	73	58857	1	(PART OF SET 58718 FOR DL07550, 5501, 652
36	09779	1	OUTPUT SHAFT				ONLY)
37	11207	1	CIRCUIT TYPE D STICKER	74	58862	1	PRESSURE WARNING STICKER (DL07550, 652, 552S, 552SUP, 572S ONLY)
38	11354	1	OC/CC STICKER	75	58864	1	ELECTRICAL WARNING STICKER (DL07550, 652, 552S, 552SUP, 572S ONLY)
39	13995	1	BACKUP RING	76	59049	1	MAIN HOUSING ASSY (INCL ITEMS 15, 42)
40			NO ITEM	77	60677	1	TRIGGER CASTING
41	18206	6	CAPSCREW	78	60678	1	TRIGGER MOUNT CASTING
42	20758	1	BUSHING	79	65480	1	SPRING
43	20760	1	BUSHING	80	60710	1	TRIGGER GUARD
44	27067	1	SEAL BACKUP WASHER	81	350041	1	HOLLOW HEX PLUG
45	20769	1 1	IDLER GEAR ASSY		60700	_	SEAL MIT
		<u> </u>			60792	1	SEAL KIT

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 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 matter 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.

