

# STANLEY®

## DL07 HYDRAULIC DRILL



### USER MANUAL Safety, Operation and Maintenance



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New Britain, CT 06053  
U.S.A.  
49234 6/2018 Ver. 17

# DECLARATION OF CONFORMITY

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

**STANLEY**  
Infrastructure  
**CE**

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: **Drill, Hydraulic**  
Kategorie:  
Catégorie:  
Categoria:  
Categoria:
- Make/Marke/Marque/Marca/Marca **STANLEY**
- Type/Typ/Type/Tipo/Tipo: **DL0755001, DL0765201**
- Serial number of equipment:  
Seriennummer des Geräts:  
Numéro de série de l'équipement:  
Numero de serie del equipo:  
Matricola dell'attrezzatura:  
**All**

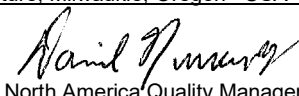
Has been manufactured in conformity with  
Wurde hergestellt in Übereinstimmung mit  
Est fabriqué conformément  
Ha sido fabricado de acuerdo con  
E' stata costruita in conformità con

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	28927-10	Self
EN ISO	3744 (15744)	Self
EN ISO	11148-3, Cl. 5.4	Self
EN ISO	11148-3, Cl. 5.5	Self
EN ISO	13732-1	Self
Machinery Directive	2006/42/EC	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 4-24-2018

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](http://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 model DL07 Hydraulic 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.



- 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.
  - **Warning:** Use of this tool on certain materials during demolition could generate dust potentially containing a variety of hazardous substances such as asbestos, silica or lead. Inhalation of dust containing these or other hazardous substances could result in serious injury, cancer or death. Protect yourself and those around you. Research and understand the materials you are cutting. Follow correct safety procedures and comply with 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.
- 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.

# TOOL STICKERS & TAGS

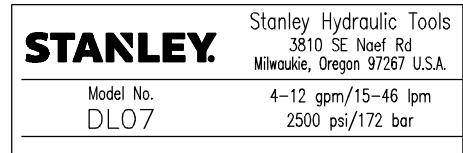
Please refer to the parts illustration for location of stickers.



28322  
CE STICKER (CE)



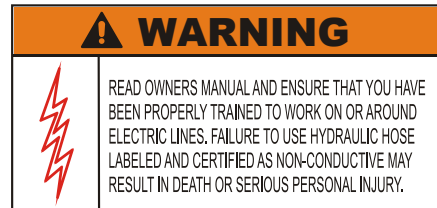
58862  
PRESSURE WARNING STICKER



74696  
DL07 MODEL STICKER



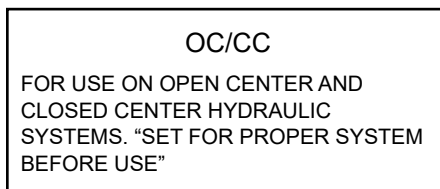
11207  
CIRCUIT TYPE D STICKER (CE)



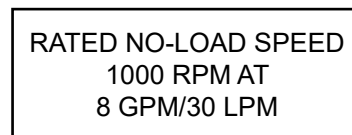
58864  
ELECTRICAL WARNING STICKER



28788  
MANUAL STICKER (CE)



11354  
OC/CC STICKER



29148  
RPM 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.

**D A N G E R**

- 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 ELECTRICAL 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.
- A HYDRAULIC LEAK OR BURST MAY CAUSE OIL INJECTION INTO THE BODY OR CAUSE OTHER SEVERE PERSONAL INJURY.
  - DO NOT EXCEED SPECIFIED FLOW AND PRESSURE FOR THIS TOOL. EXCESS FLOW OR PRESSURE MAY CAUSE A LEAK OR BURST.
  - DO NOT EXCEED RATED WORKING PRESSURE OF HYDRAULIC HOSE USED WITH THIS TOOL. EXCESS PRESSURE MAY CAUSE A LEAK OR BURST.
  - 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.

**I M P O R T A N T**

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

**D A N G E R**

- DO NOT LIFT OR CARRY TOOL BY THE HOSES. DO NOT ABUSE HOSE. DO NOT USE KINKED, TORN OR DAMAGED HOSE.
- 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.
- 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.
- BYSTANDERS MAY BE INJURED IN YOUR WORK AREA. KEEP BYSTANDERS CLEAR OF YOUR WORK AREA.
- WEAR HEARING, EYE, FOOT, HAND AND HEAD PROTECTION.
- TO AVOID PERSONAL INJURY OR EQUIPMENT DAMAGE, ALL TOOL REPAIR MAINTENANCE AND SERVICE MUST ONLY BE PERFORMED BY AUTHORIZED AND PROPERLY TRAINED PERSONNEL.

**I M P O R T A N T**

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.*

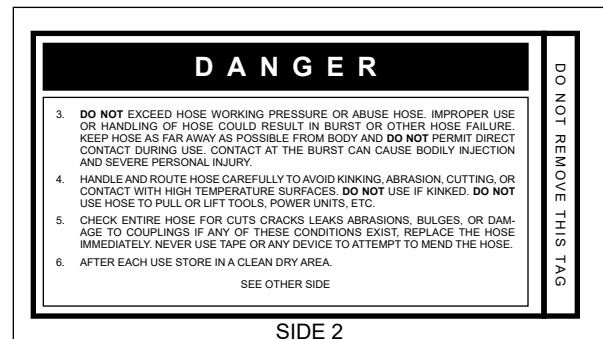
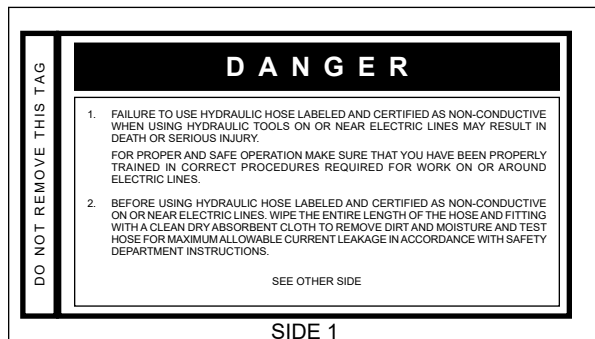
**Fabric-braided** (not certified or labeled non-conductive) — constructed of thermoplastic or synthetic rubber inner tube, synthetic fiber braid reinforcement, and weather resistant thermoplastic or synthetic rubber cover. *This hose is **not certified non-conductive** and must never be used near electrical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

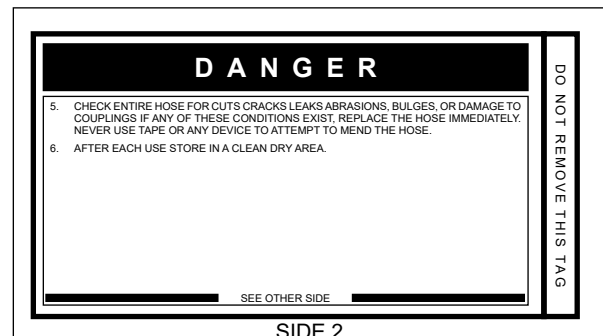
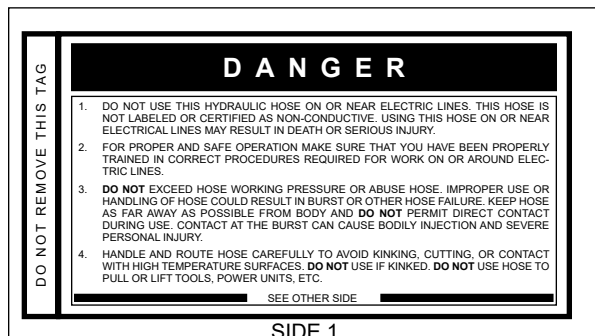
If the information on a tag is illegible because of wear or damage, replace the tag immediately. A new tag may be obtained from your STANLEY Distributor.

### 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
<b>Certified Non-Conductive Hose - Fiber Braid - for Utility Bucket Trucks</b>								
4-9	15-34	up to 10	up to 3	3/8	10	Both	2250	155
<b>Conductive Hose - Wire Braid or Fiber Braid - DO NOT USE NEAR ELECTRICAL CONDUCTORS</b>								
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

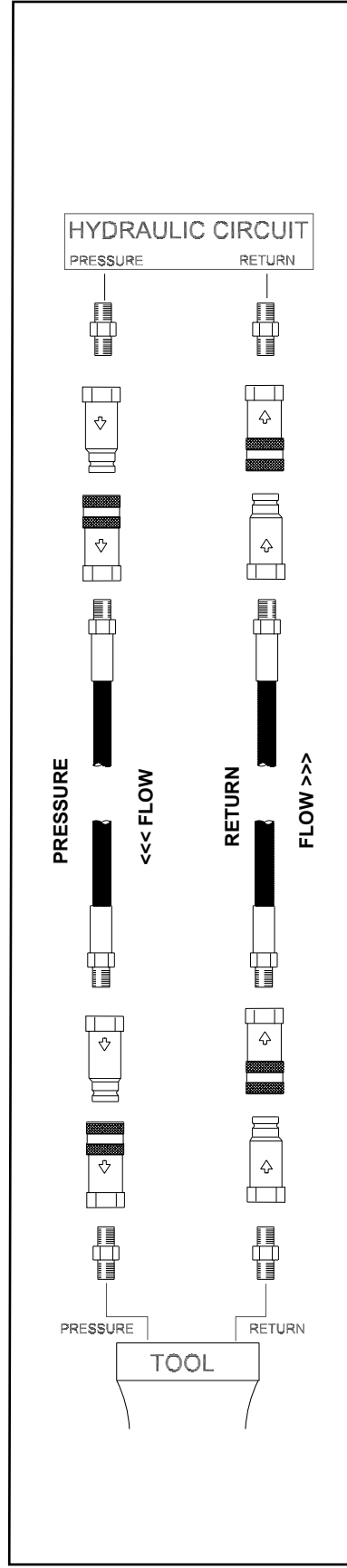


Figure 1. Typical Hose Connections



# 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)
<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 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)
<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				

### 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

## PREPARATION 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. Connect hoses from the hydraulic power supply 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 disconnect) hose is connected 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 hydraulic 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)ORCLOSED-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 selector 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.

### 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.

## ASSIST HANDLE

1. The assist handle (Item-22) can be installed on either side of the DL07 to accommodate the user preference. Install the handle into the 3/8-18NPT hole located on the left or right side of (Item 69) gear housing.

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

# OPERATION

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.

## UNDERWATER MODEL MAINTENANCE

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 water and debris as follows:

1. Spray oil through the tool and displace any remaining water.
2. Spray oil into the On/Off trigger slot area
3. Dip or spray the entire tool.
4. Cycle the tool hydraulically several times before storing away.

# 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) 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
Tool will not start.	Power not being supplied.	Check to make certain that both hoses are connected. Turn hydraulic circuit control valve ON.
	Defective quick disconnects.	Check each quick disconnect.
Low drilling torque.	Relief valve set too low.	Set relief valve at 2100 psi/145 bar.
	Fluid restriction in hose or valve.	Locate and remove restriction.
	Excess flow and pressure loss.	Use correct fluid.
		Fluid not warmed up. Preheat system.
		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.
Oil gets hot, power unit working hard.	Open-center tool on a closed-center circuit or vice-versa.	Use tools to match circuit.
	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.
Oil leaks at reversing spool.	Damaged O-rings.	Replace as required.
	Wrong hydraulic fluid. Circuit too hot.	Refer to Operation section for correct fluid/circuit specifications.
Oil leak at motor cap face.	Fasteners loose.	Refer to Service Manual.
	Face O-ring worn or missing.	Replace as required.
	Motor cap/main housing damaged.	Replace as required.



# ACCESSORIES

## DESCRIPTION

## PART NUMBER

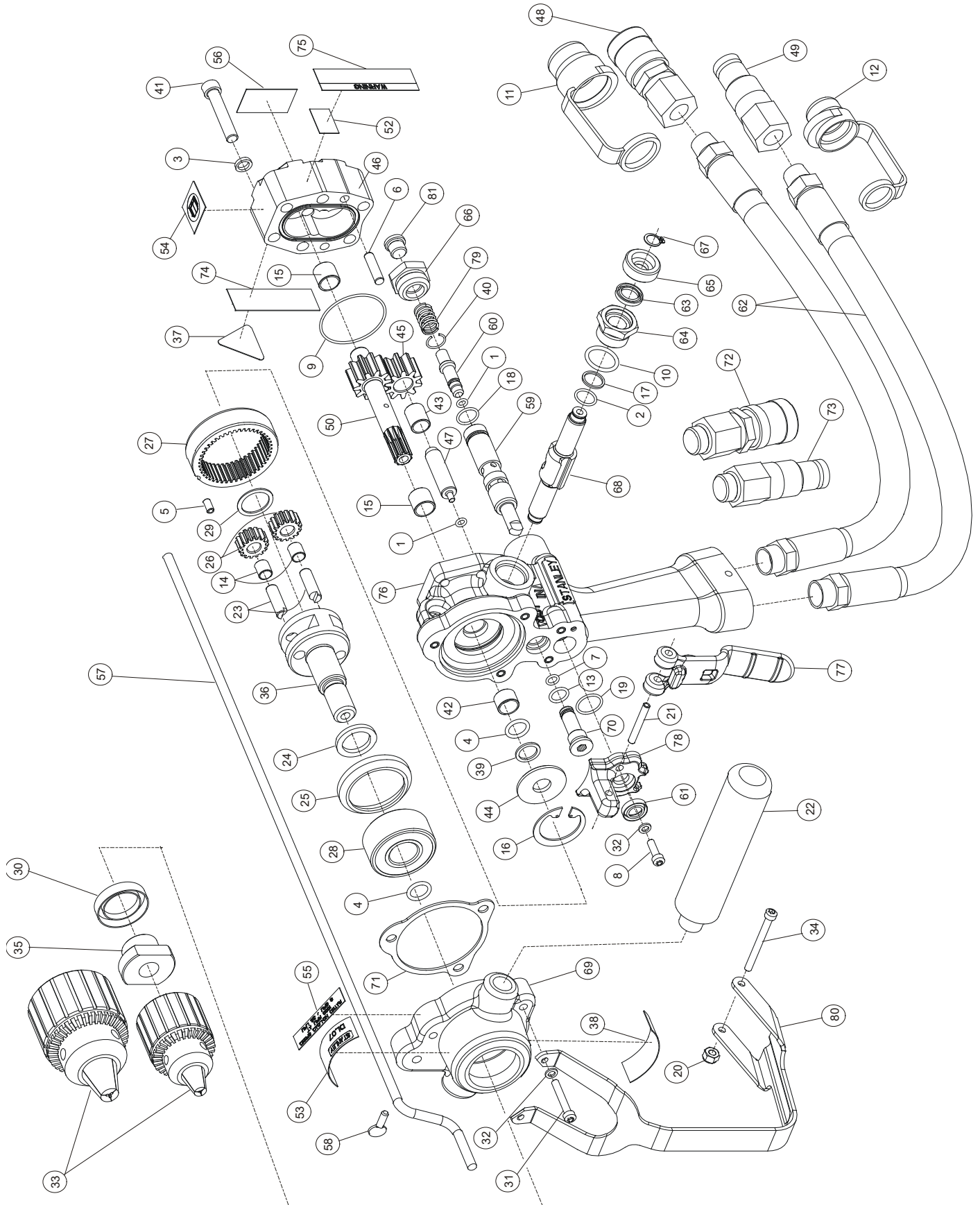
### WOOD AUGER BITS, 5/8 INCH HEX

9/16 inch dia × 18 inch Carbide Tipped Auger Bit (22 inch OAL) .....	27845
13/16 inch dia × 18 inch Carbide Tipped Auger Bit (22 inch OAL) .....	27847

### WOOD AUGER BITS, 7/16 INCH HEX

9/16 inch dia × 8 inch Carbide Tipped Auger Bit (12 inch OAL) .....	27850
11/16 inch dia × 8 inch Carbide Tipped Auger Bit (12 inch OAL) .....	27851
13/16 inch dia × 8 inch Carbide Tipped Auger Bit (12 inch OAL) .....	27852
15/16 inch dia × 8 inch Carbide Tipped Auger Bit (12 inch OAL) .....	27853
1-1/16 inch dia × 8 inch Carbide Tipped Auger Bit (12 inch OAL) .....	27854
9/16 inch dia × 12 inch Carbide Tipped Auger Bit (16 inch OAL) .....	27855
11/16 inch dia × 12 inch Carbide Tipped Auger Bit (16 inch OAL) .....	27856
13/16 inch dia × 12 inch Carbide Tipped Auger Bit (16 inch OAL) .....	27857
15/16 inch dia × 12 inch Carbide Tipped Auger Bit (16 inch OAL) .....	27858
1-1/16 inch dia × 12 inch Carbide Tipped Auger Bit (16 inch OAL) .....	27859
9/16 inch dia × 18 inch Carbide Tipped Auger Bit (22 inch OAL) .....	27860
11/16 inch dia × 18 inch Carbide Tipped Auger Bit (22 inch OAL) .....	27861
13/16 inch dia × 18 inch Carbide Tipped Auger Bit (22 inch OAL) .....	27862
15/16 inch dia × 18 inch Carbide Tipped Auger Bit (22 inch OAL) .....	27863
1-1/16 inch dia × 18 inch Carbide Tipped Auger Bit (22 inch OAL) .....	27864
13/16 inch dia × 36 inch Carbide Tipped Auger Bit (48 inch OAL) .....	27869

# DL07 PARTS ILLUSTRATION





# DL07 PARTS LIST

ITEM	P/N	QTY	DESCRIPTION
1	00026	1	O-RING
2	00175	2	O-RING
3	00231	6	LOCK WASHER
4	00354	1	O-RING
5	00563	1	ROLL PIN
6	00713	2	DOWEL PIN
7	00717	1	O-RING
8	62229	2	CAPSCREW
9	01262	1	O-RING
10	01604	1	O-RING
11	02324	1	CAP AND PLUG, 1/2 INCH
12	03288	1	CAP AND PLUG, 3/8 INCH
13	03364	1	O-RING
14	05206	2	BUSHING
15	05207	2	BUSHING
16	06635	1	RETAINING RING
17	07224	2	BACKUP RING
18	07626	1	O-RING
19	07627	1	O-RING
20	07724	1	NYLOCK NUT
21	07970	1	ROLL PIN
22	08130	1	HANDLE
23	08161	2	PLANET SHAFT
24	08162	1	SHAFT KEEPER
25	08163	1	BEARING KEEPER
26	08165	2	PLANET GEAR ASSY
27	08166	1	RING GEAR
28	08175	1	BALL BEARING
29	08440	1	RETAINING RING
30	09621	1	SHAFT SEAL
31	62228	3	CAPSCREW
32	09623	5	LOCK WASHER
33	09624 27628	1	DRILL CHUCK, 1/2 INCH DRILL CHUCK, 5/8 INCH
34	09687	1	CAPSCREW
35	09778	1	SEAL NUT
36	09779	1	OUTPUT SHAFT
37	11207	1	CIRCUIT TYPE D STICKER
38	11354	1	OC/CC STICKER
39	13995	1	BACKUP RING
40	—	—	NO ITEM
41	18206	6	CAPSCREW
42	20758	1	BUSHING
43	20760	1	BUSHING
44	20767	1	SEAL BACKUP WASHER
45	20769	1	IDLER GEAR ASSY
46	20770	1	MOTOR CAP ASSY (INCLUDES 1 BUSHING ITEM 15 & 2 DOWEL PINS ITEM 6)
47	20782	1	IDLER SHAFT
48	03972	1	3/8 NPT FLUSHFACE COUPLER BODY PART OF SET 03971 (PARKER) OR 81158 (STUCCHI) FOR DL07552S, 552SUP, 572S

ITEM	P/N	QTY	DESCRIPTION
49	03973	1	3/8 NPT FLUSHFACE COUPLER NOSE PART OF SET 03971 (PARKER) OR 81159 (STUCCHI) FOR DL07552S, 552SUP, 572S
50	24271	1	MAIN SHAFT
51	73680	1	RAILROAD HELP DESK STICKER (DL07552S, 552SUP, 572S ONLY)
52	28323	2	CE STICKER (DL0755001 ONLY)
53	74696	1	DL07 MODEL NUMBER STICKER
54	28788	2	MANUAL STICKER
55	29148	1	RPM STICKER (DL0755001 ONLY)
56	29149	1	ROTATION DIRECTION STICKER (DL0755001 ONLY)
57	38676	1	DEPTH GAUGE ROD (DL07552S, 572S ONLY)
58	38685	1	THUMB SCREW (DL07552S, 572S ONLY)
59	48986	1	VALVE SPOOL ASSY
60	—	—	NO ITEM
61	49139	1	SEAL WIPER
62	56725 66727	2	HOSE ASSY (PARKER) HOSE ASSY (AEROQUIP)
63	56747	2	SEAL WIPER
64	56749	2	SEAL CAP
65	56757	2	END CAP
66	56758	1	SPRING CAP
67	56764	2	RETAINING RING
68	56765	1	REVERSING SPOOL
69	58403	1	GEAR HOUSING MACHINING
70	58462	1	RELIEF CARTRIDGE PLUG ASSY (INCL ITEMS 7 AND 13)
71	58635	1	SEAL GASKET
72	58856	1	3/8 FLUSHFACE COUPLER BODY 1/2 INCH MALE SAE (PART OF SET 58718 FOR DL07550, 55001, 652 ONLY)
73	58857	1	3/8 FLUSHFACE COUPLER NOSE 1/2 INCH MALE SAE (PART OF SET 58718 FOR DL07550, 5501, 652 ONLY)
74	58862	1	PRESSURE WARNING STICKER (DL07550, 652, 552S, 552SUP, 572S ONLY)
75	58864	1	ELECTRICAL WARNING STICKER (DL07550, 652, 552S, 552SUP, 572S ONLY)
76	59049	1	MAIN HOUSING ASSY (INCL ITEMS 15, 42)
77	60677	1	TRIGGER CASTING
78	60678	1	TRIGGER MOUNT CASTING
79	65480	1	SPRING
80	60710	1	TRIGGER GUARD
81	350041	1	HOLLOW HEX PLUG
	60792	1	SEAL KIT

# UNDERWATER TOOLS DEPTH GUIDELINE

## UNDERWATER MODELS ONLY

### **⚠ CAUTION**

Do not use hydraulic tools underwater that are not designated as an “underwater” model, or this will result in damage to the tool.

For underwater hydraulic tools the applications are broken down into four quadrants depending on type of tool and method of operation.

The types of tools are percussive and rotational, each with different characteristics allowing for different depth operation. With percussive tools, the nitrogen accumulator PSI must counter the increase in ambient pressure found at lower depths. Since there is a maximum PSI for percussive tools they are limited to certain depths. Rotational tools do not have accumulators and thus are capable of deeper depths.

The methods are broken into diver operated or remote operated vehicle (ROV). ROV's can reach lower depths and with an onboard hydraulic power source that is depth compensated, can operate hydraulic tools at depths of thousands of feet. ROV operation is still limited to the tool, for example a percussive tool has the same depth limitation whether ROV or diver operated.



## OPERATION OVERVIEW

	PERCUSSIVE	ROTATIONAL
DIVER	Tools: Breakers, Hammer Drills and Chipping Hammers  Max Depth: 500' - limitations due to accumulator PSI max (increase 40 PSI for every 100')	Tools: Grinders, Saws, Chain Saws  Max Depth: 1000' - Reference hose sizing guide below
ROV	Tools: Breakers, Hammer Drills and Chipping Hammers  Max Depth: 500' - limitations due to accumulator PSI max (increase 40 PSI for every 100')	Tools: Grinders, Saws, Chain Saws  Max Depth: 1000' - Reference hose sizing guide below

### RECOMMENDED HOSE DIAMETERS

DEPTH (FT)	8 GPM	12 GPM
100	5/8"	5/8"
300	3/4"	1"
600	1"	1"
1000	1"	1-1/4"





# **STANLEY®**

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