STANLEY®

DL07
HYDRAULIC DRILL

USER MANUAL
Safety, Operation and Maintenance

New Britain, CT 06053
U.S.A.
49234 9/2018 Ver. 19

DECLARATION OF CONFORMITY

DECLARATION OF CONFORMITY
ÜBEREINSTIMMUNGS-ERKLARUNG
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/Familiennname 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:

1. Category:
   Kategorie:
   Catégorie:
   Categoria:
   Categoria:
   Drill, Hydraulic
2. Make/Marke/Marque/Marca/Marca **STANLEY**
3. Type/Typ/Type/Tipo/Tipo: **DL0755001, DL0765201**
4. 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 conformitá 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 EN ISO EN ISO EN ISO EN ISO Machinery Directive	28927-10 3744 (15744) 11148-3, Cl. 5.4 11148-3, Cl. 5.5 13732-1 2006/42/EC	Self Self Self Self Self Self

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

6. 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

STANLEY

TABLE OF CONTENTS

IMPORTANT

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

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

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

⚠WARNING

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

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

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

SAFETY 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.

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

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

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

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

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

IMPORTANT — 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.

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.

- 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.
- Operators and maintenance personnel shall be able to physically handle the bulk, weight and power of the tool.
- 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.
- Never operate the tool if you are unsure about the presence of underground utilities, such as electrical cables, gas pipes, etc. These can cause a hazard if damaged with the tool.
- The tool is not insulated against coming into contact with electric power
- 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.
- When using a rotary tool to perform work related activities, the operator can experience discomfort in the hands, arms, shoulders, neck or other parts of the body.
- If you experience numbness, tingling, pain or whitening of the skin in your fingers or hands, stop using the tool. Tell your employer and consult a physician.
- Do not operate the tool in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
- 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.
- Inspect the tool before each use and ensure all decals are legible. Contact STANLEY if replacements are needed.
- Do not carry the tool by hoses.
- **WARNING:** Some dust created by power sanding,

sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead from lead-based paints,
- crystalline silica from bricks and cement and other masonry products, and
- arsenic and chromium from chemically-treated lumber.

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

Protect yourself and those around you. Research and understand the materials you are cutting. Follow correct safety procedures and comply with 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.

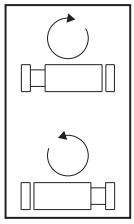
TOOL STICKERS & TAGS

Please refer to the parts illustration for location of stickers. The serial number and year of manufacture are stamped on the top of the tool body, above the trigger.

28322
CE STICKER (CE)

11207
CIRCUIT TYPE D STICKER (CE)

28788
MANUAL STICKER (CE)



29149
ROTATION DIRECTION STICKER

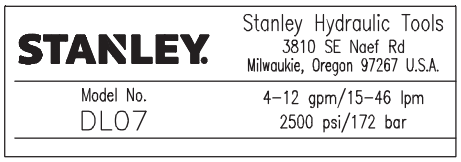
NOTE

THE INFORMATION LISTED ON THE STICKERS SHOWN, MUST BE LEGIBLE AT ALL TIMES.

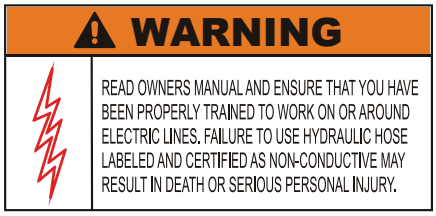
REPLACE DECALS IF THEY BECOME WORN OR DAMAGED. REPLACEMENTS ARE AVAILABLE FROM YOUR LOCAL STANLEY DISTRIBUTOR.

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.

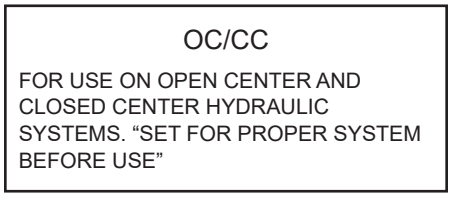
58862
PRESSURE WARNING STICKER



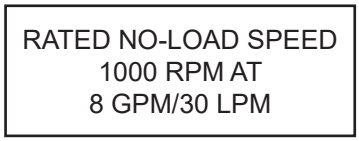
74696
DL07 MODEL STICKER



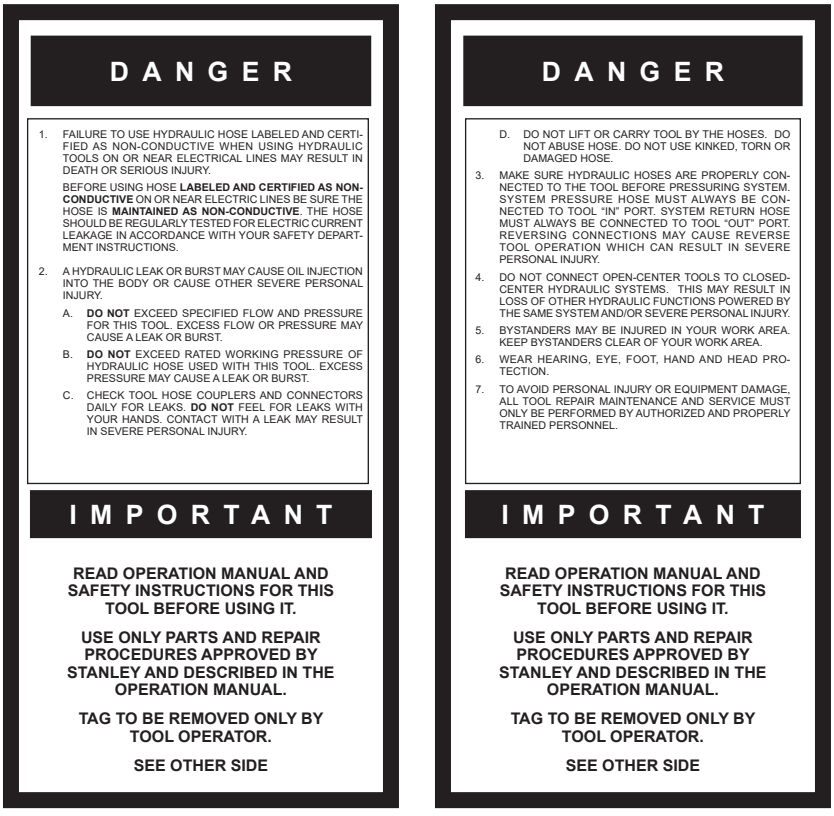
58864
ELECTRICAL WARNING STICKER



11354
OC/CC STICKER



29148
RPM STICKER



SAFETY TAG P/N 15875 (Shown smaller then 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.*

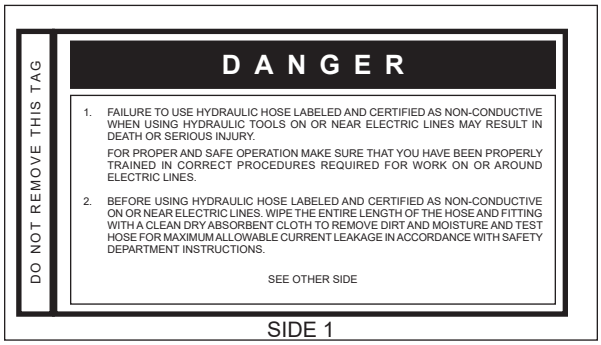
Fabric-braided (not certified or labeled non-conductive) — constructed of thermoplastic or synthetic rubber inner tube, synthetic fiber braid reinforcement, and weather resistant thermoplastic or synthetic rubber cover. *This hose is **not certified non-conductive** and must never be used near electrical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

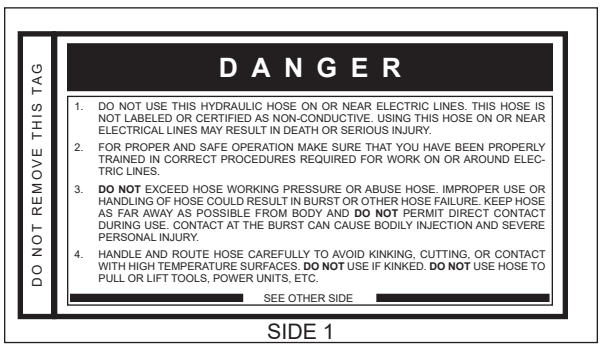


SIDE 1

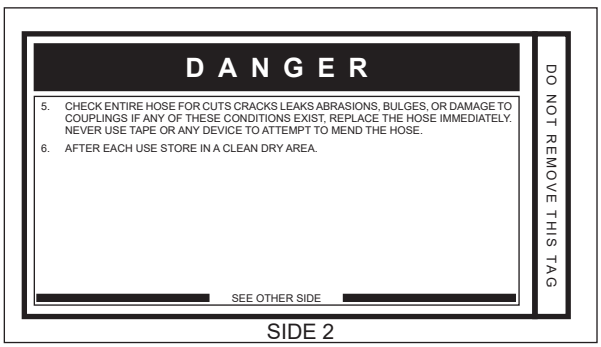
SIDE 2

(Shown smaller than actual size)

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



SIDE 1



SIDE 2

(Shown smaller than actual size)

STANLEY

Tool to Hydraulic Circuit Hose Recommendations

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

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

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

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

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

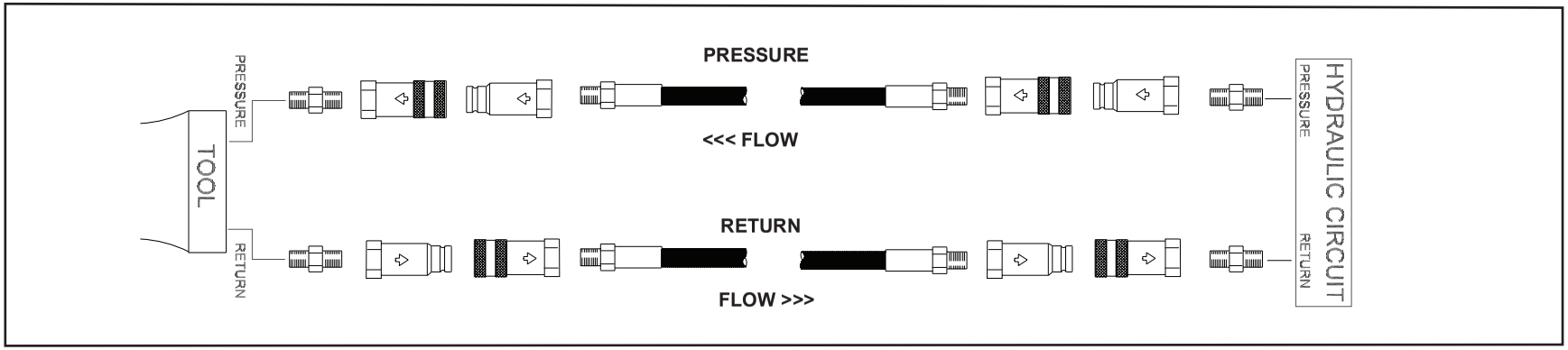


Figure 1. Typical Hose Connections

HTMA / EHTMA REQUIREMENTS

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

EHTMA HYDRAULIC SYSTEM REQUIREMENTS	CLASSIFICATION     				
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.

STANLEY

OPERATION

PREPARATION PROCEDURES

CHECK POWER SOURCE

1. Regularly use 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. Proper flow and pressure maintain proper tool speed.
2. Make certain that the hydraulic power source is equipped with a relief valve set to open at 2100 psi/145 bar minimum.

INSERT ASSIST HANDLE & TOOL BIT - FIG. 2

1. Disconnect the tool from the hydraulic power source.
2. Use the chuck key to open the chuck.
3. 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.
4. Screw the assist handle into the tool body.

Note: The assist handle will be grasped by your non-dominant hand.

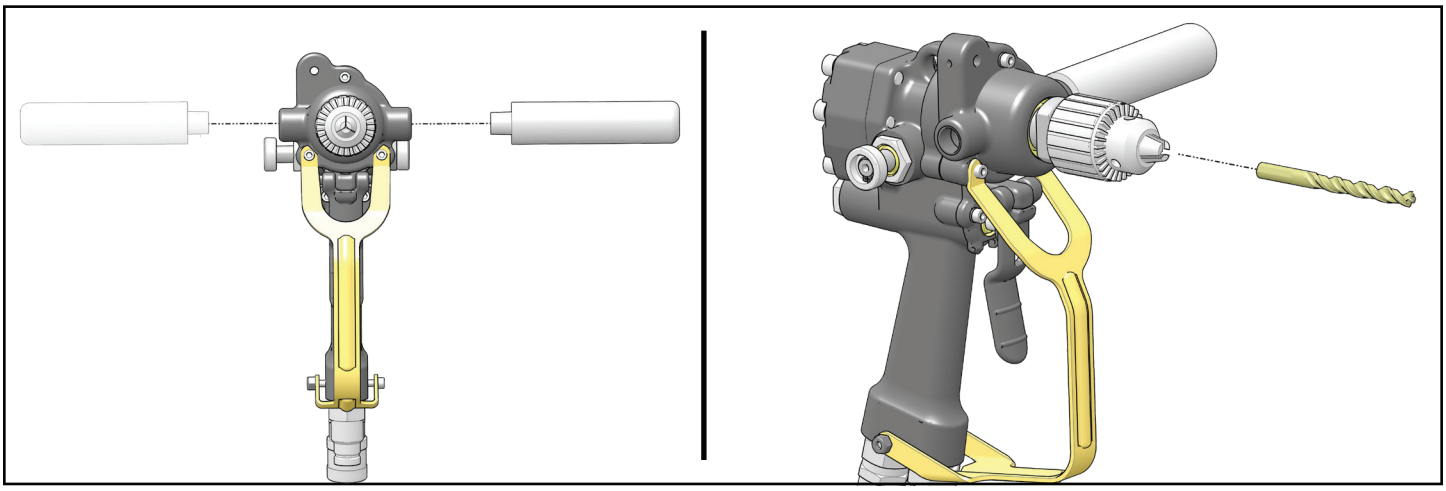


Figure 2 - Install Tool Bit

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) OR CLOSED-CENTER (CC) OPERATION - FIG. 3

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.

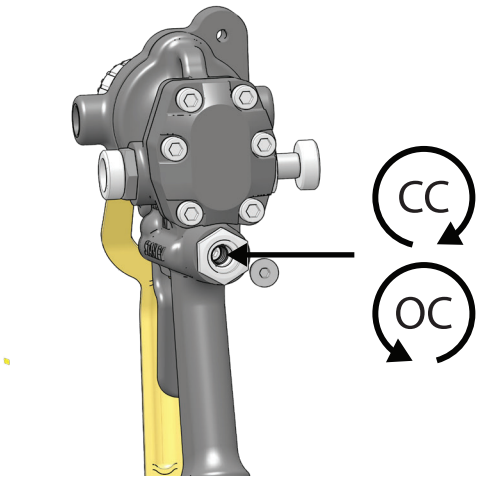


Figure 3 - Hydraulic Circuit Selection

⚠ 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.

Note: Hold the tool correctly and be ready to counteract normal or sudden movements. Have both hands available. High reaction torque can develop if the tool stalls, which can be caused by excessive loads being applied to the drill bit, by the drill bit snagging on the material being drilled into or y the drill bit breaking through the material being drilled.

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.

OPERATION

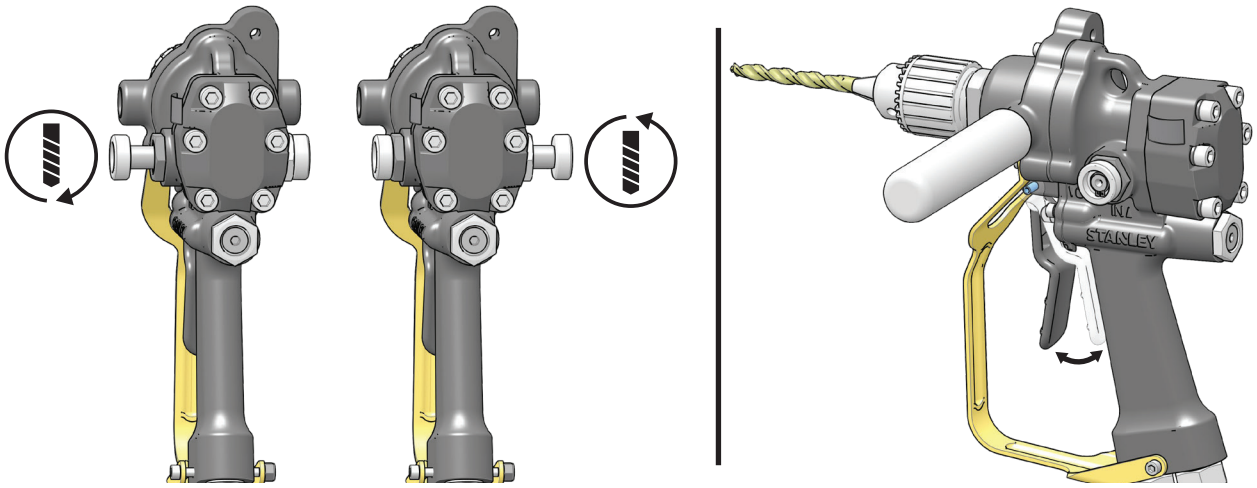


Figure 4 - Tool Use

ASSIST HANDLE

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 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.

In cases where the means to absorb the reaction torque are requested, it is recommend to use a suspension arm whenever possible. If that is not possible, side handles are recommended for straightcase tools and pistol grip tools. In any case, it is recommended to use a means to absorb the reaction torque above 4 Nm for straight tools and above 10 Nm for pistol grip tools.

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.

SPECIFICATIONS

Drive Size ..... 1/2 inch / 1.3 cm 3-Jaw Adjustable
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 350–1500
Weight ..... 8 lbs / 3.6 kg
Overall Length ..... 9 inch / 22.9 cm
Width ..... 4 inch / 10 cm
Motor ..... Integral
Pressure Range ..... 1000–2000 psi / 70–140 bar
Flow Range ..... 4–12 GPM / 15-45 LPM
Optimum Flow ..... 8 GPM / 30 LPM
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

TORQUE AND DRILL SPEEDS

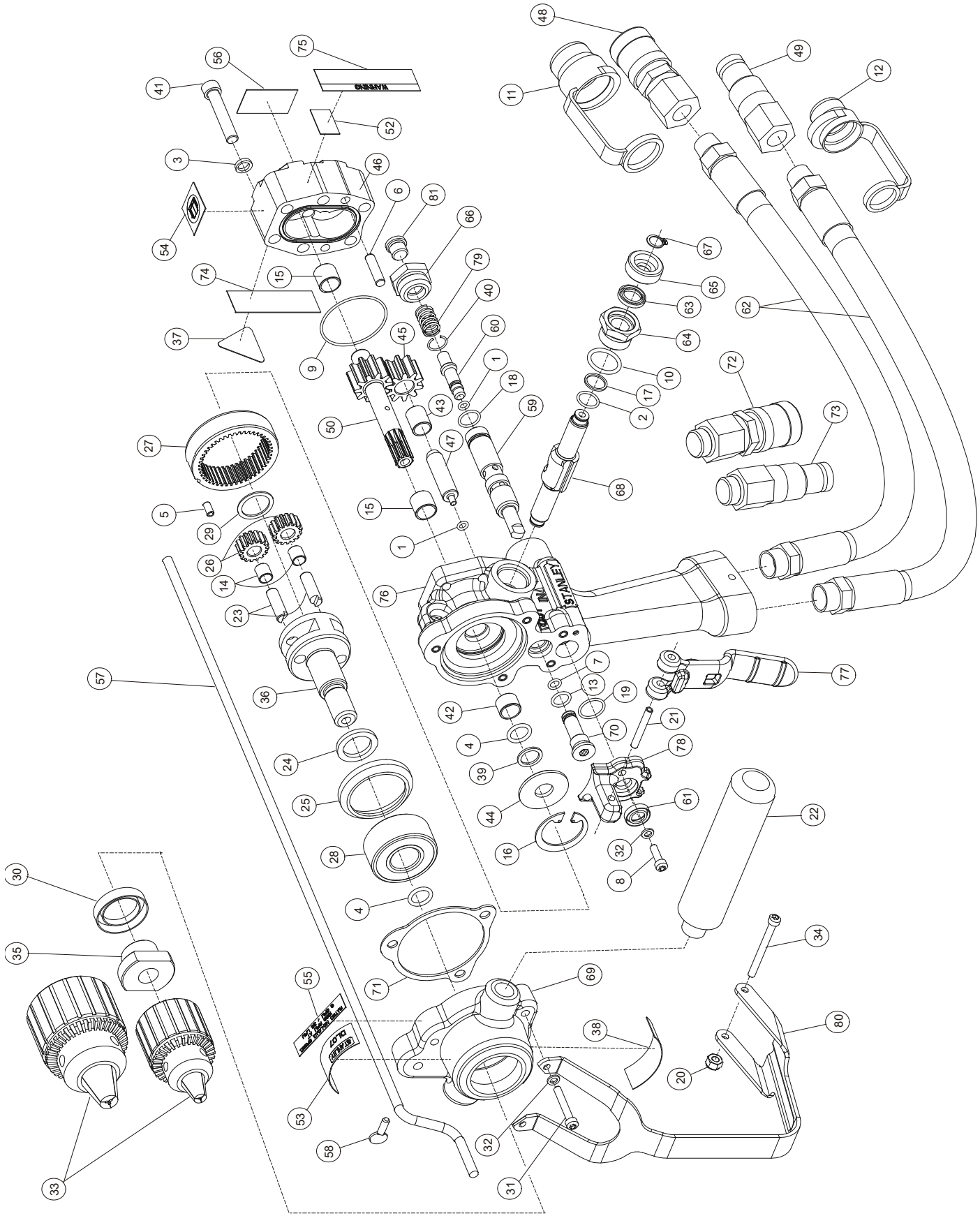
TORQUE	HYDRAULIC FLOW	DRILL SPEED
4 ft lbs @ 500 psi / 5.4 Nm @ 35 bar	3 GPM / 11.3 LPM	350 rpm
9 ft lbs @ 1000 psi / 12.2 Nm @ 70 bar	4 GPM / 15 LPM	475 rpm
14 ft lbs @ 1500 psi / 19 Nm @ 105 bar	6 GPM / 23 LPM	750 rpm
19 ft lbs @ 2000 psi / 25.7 Nm @ 140 bar	8 GPM / 30 LPM 10 GPM / 38 LPM	1000 rpm 1250 rpm

SOUND AND VIBRATION DECLARATION	
Test conducted on DL0755001.	
Measured A-weighted sound power level, Lwa (ref. 1pW) in decibels	85.92 dBA
Uncertainty, Kwa, in decibels	3.39 dBA
Measured A-weighted sound pressure level, Lpa (ref. 20 µPa) at operator's position, in decibels	77.93 dBA
Uncertainty, Kpa, in decibels	3.39 dBA
Values determined according to noise test code given in ISO 15744, 11203 and 3744. **NOTE:** The sum of a measured noise emission value and its associated uncertainty represents an upper boundary of the range of values which is likely to occur in measurements.	
Declared vibration emission value in accordance with EN 12096	
Measured vibration emission value: a (Trigger Handle)	1.8 m/sec²
Measured vibration emission value: a (Aux Handle)	2.5 m/sec²
Uncertainty: K	0.73 m/sec²
Values determined according to EN ISO 28927-5	

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



STANLEY

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
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

STANLEY®

STANLEY Infrastructure
6430 SE Lake Road
Portland, Oregon 97222 USA
(503) 659-5660 / Fax (503) 652-1780
www.stanleyinfrastructure.com