

# **ID07** HYDRAULIC IMPACT DRILL



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.





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## SAFETY, OPERATION AND MAINTENANCE USER'S MANUAL

#### Stanley Hydraulic Tools

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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.

**A WARNING** 

SERIOUS INJURY OR DEATH COULD RESULT FROM THE 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.

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



#### **Hydraulic Tools**

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

#### **Burrows**, James

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: Impact Drill Kategorie: Catégorie: Categoria: Categoria:

#### 2. Make/Ausführung/Marque/Marca/Marca

3.	Type/Typ/Type/Tipo/Tipo	•
υ.		•

larca Stanley ID0781001, ID0782001

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

All			

5. Year of manufacture/Baujahr/année de fabrication/Año de fabricacion/Anno di fabbricazione 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 type		
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
EN	792-6	1994	Self	NA
EN ISO	3744	1995	Self	NA
EN	28662-7	1997	Self	NA
Machinery Directive	98/37/EC	1998	Self	NA

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

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

Signature/Unterschrift/Signature/Firma/Firma

James O/Biener &

Position/Position/Fonction/Puesto/Posizione\_

Engineering Manager

Rev 1 4/22/05

# 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, <u>will</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>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, <u>may</u> result in <u>property damage</u>.

This signal word indicates a situation which if not avoided will result in

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 <u>damage to the equipment</u>.

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 on page 5.

The model ID07 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 impact 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.





58864



58862 PRESSURE WARNING STICKER



29530 SOUND POWER LEVEL STICKER (CE)



28788 MANUAL STICKER (CE)

OC/CC FOR USE ON OPEN CENTER AND CLOSED CENTER HYDRAULIC SYSTEMS. "SET FOR PROPER SYSTEM **BEFORE USE**"

11354 OC/CC STICKER



ELECTRICAL WARNING STICKER

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.

**NOTE** 

THE INFORMATION LISTED ON THE STICKERS SHOWN, MUST BE

LEGIBLE AT ALL TIMES.

DISTRIBUTOR.

**REPLACE DECALS IF THEY** BECOME WORN OR DAMAGED.

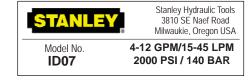
REPLACEMENTS ARE AVAILABLE

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.

FROM YOUR LOCAL STANLEY



60806 **ID07 MODEL STICKER** 

D A N G E R	DANGER
I. 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.	D DO NOT LIFT OR CARRY TOOL BY THE HOSES. DO NOT ABUSE HOSE. DO NOT USE KINKED, TORN OR DAMAGED HOSE.
DEFORE 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.	3. MAKE SURE HYDRAULC HOSES ARE PROPERLY CONNECTED TO THE TOOL BEFORE PRESSURING SYSTEM. SYSTEM PRESSURE HOSE MUST AUWAYS BE CONNECTED TO TOOL. "IN" PORT. SYSTEM RETURN HOSE MUST AUWAYS BE CONNECTED TO TOOL 'OUT' PORT. REVERSING CONNEC- TIONS MAY CAUSE FURSE TOOL OPERATION WHICH CAN RESULT IN SEVERE PERSONAL INURY.
. A HYDRAULIC LEAK OR BURST MAY CAUSE OIL INJECTION INTO THE BODY OR CAUSE OTHER SEVERE PERSONAL INJURY.	<ol> <li>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 ANDION SEVERE PERSONAL INJURY.</li> </ol>
A DO NOT EXCEED SPECIFIED FLOW AND PRESSURE FOR THIS TOOL. EXCESS FLOW OR PRESSURE MAY CAUSE A LEAK OR BURST.	5. BYSTANDERS MAY BE INJURED IN YOUR WORK AREA. KEEP BYSTANDERS CLEAR OF YOUR WORK AREA.
B DO NOT EXCEED RATED WORKING PRESSURE OF HYDRAU LIC HOSE USED WITH THIS TOOL. EXCESS PRESSURE MAY CAUSE A LEAK OR BURST.	6. WEAR HEARING, EYE, FOOT, HAND AND HEAD PROTEC- TION.
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	<ol> <li>TO AVOID PERSONAL INJURY OR EQUIPMENT DAMAGE, ALL TOOL REPAIR MAINTENANCE AND SERVICE MUST ONLY BE PERFORMED BY AUTHORIZED AND PROPERLY TRAINED PERSONNEL.</li> </ol>
IMPORTANT	IMPORTANT
READ OPERATION MANUAL AND SAFETY INSTRUCTIONS FOR THIS TOOL BEFORE USING IT.	READ OPERATION MANUAL AND SAFETY INSTRUCTIONS FOR THIS TOOL BEFORE USING IT.
USE ONLY PARTS AND REPAIR PROCEDURES APPROVED BY TANLEY AND DESCRIBED IN THE OPERA- TION MANUAL.	USE ONLY PARTS AND REPAIR PROCEDURES APPROVED BY STANLEY AND DESCRIBED IN THE OPERA- TION MANUAL.
TAG TO BE REMOVED ONLY BY TOOL OPERATOR.	TAG TO BE REMOVED ONLY BY TOOL OPERATOR.
SEE OTHER SIDE	SEE OTHER SIDE

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

#### 7

# **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.

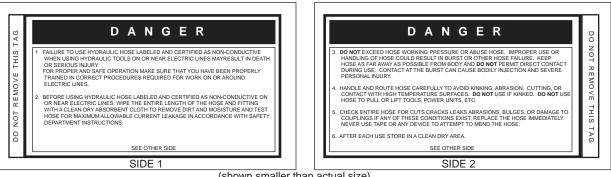
Fabric-braided (not certified or labeled non-conductive) - constucted of thermoplastic or synthetic rubber inner tube, synthetic fiber braid reinforcement, and weather resistant thermoplastic or synthetic rubber cover. This hose is not certified non-conductive and must never be used near electrical conductors.

#### **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.

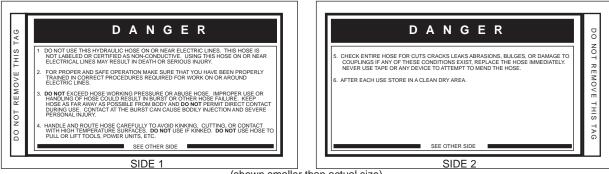
If the information on a tag is illegible because of wear or damage, replace the tag immediately. A new tag may be obtained from your Stanley Distributor.

#### 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.



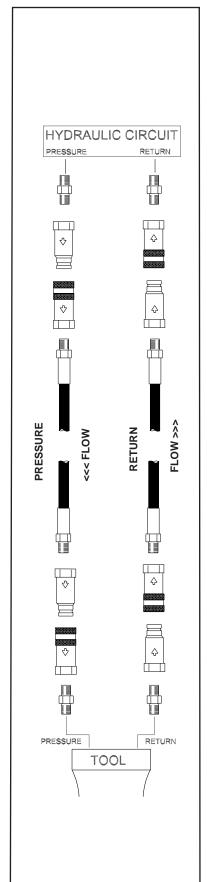
(shown smaller than actual size)

Oil F	Oil Flow	Hose L	Hose Lengths	Inside Diameter	iameter	USE	Min. Workin	Min. Working 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	<b>Frucks</b>	
4-9	15-34	up to 10	up to 3	3/8	10	Both	2250	155
	Conducti	ve Hose - Wire	<b>Braid or Fiber</b>	· Braid -DO N	NOT USE NE	Conductive Hose - Wire Braid or Fiber Braid -DO NOT USE NEAR ELECTRICAL CONDUCTORS	AL CONDUCT	ORS
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
с 10 Б	10.40	100 200	00.06	5/8	16	Pressure	2500	175
0.01-0	04-61	000-001	00-00	3/4	19	Return	2500	175
10-13	38-49	up to 50	up to 15	5/8	16	Both	2500	175
0 F U F	01 00	E4 400	15 20	5/8	16	Pressure	2500	175
c -01	00-49	001-10	00-01	3/4	19	Return	2500	175
61 01	01 00		00 00	3/4	19	Pressure	2500	175
c1-01	00-49	002-001	00-00	1	25.4	Return	2500	175
91 01	10 60	10 10 75	0 40 0	5/8	16	Pressure	2500	175
01-01	49-00	cz ni dn	o n n n	3/4	19	Return	2500	175
91 01	10 60	76 100	000	3/4	19	Pressure	2500	175
01-01	49-00	20-100	00-0	-	25.4	Return	2500	175



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.



# **Typical Hose Connections**

# HTMA REQUIREMENTS

HYDRAULIC SYSTEM REQUIREMENTS	DEPENDENT DEPENDENT TYPE 1		TYPEIII	TYPE RR
FLOW RATE TOOL OPERATING PRESSURE (at the power supply outlet)	4-6 gpm (15-23 lpm) 2000 psi (138 bar)	7-9 gpm (26-34 lpm) 2000 psi (138 bar)	11-13 gpm (42-49 lpm) 2000 psi (138 bar)	9-10.5 gpm (34-40 lpm) 2000 psi (138 bar)
SYSTEM RELIEF VALVE SETTING (at the power supply outlet)	2100-2250 psi (145-155 bar)	2100-2250 psi (145-155 bar)	2100-2250 psi (145-155 bar)	2200-2300 psi (152-159 bar)
MAXIMUM BACK PRESSURE (at tool end of the return hose)	250 psi (17 bar)	250 psi (17 bar)	250 psi (17 bar)	250 psi (17 bar)
Measured at a max. fluid viscosity of: (at min. operating temperature)	400 ssu* (82 centistokes	400 ssu* ) (82 centistokes	400 ssu* ) (82 centistokes)	400 ssu* ) (82 centistokes)
TEMPERATURE Sufficient heat rejection capacity to limit max. fluid temperature to: (at max. expected ambient temperature)	140° F (60° C)	140° F (60° C)	140° F (60° C)	140° F (60° C)
Min. cooling capacity at a temperature difference of between ambient and fluid temps	3 hp (2.24 kW) 40° F (22° C)	5 hp (3.73 kW) 40° F (22° C)	7 hp (4.47 kW) 40° F (22° C)	6 hp (5.22 kW) 40° F (22° C)
<b>NOTE:</b> Do not operate the tool at oil temperatures above 140° discomfort at the tool.	° F (60° C). Opera	ation at higher te	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 30 gpm (114 lpm)	25 microns 30 gpm (114 lpm)	25 microns 30 gpm (114 lpm)	25 microns 30 gpm (114 lpm)
HYDRAULIC FLUID Petroleum based (premium grade, anti-wear, non-conductive) VISCOSITY (at min. and max. operating temps)	100-400 ssu*	100-400 ssu* (20-82 c	100-400 ssu* entistokes)	100-400 ssu*
<b>NOTE:</b> When choosing hydraulic fluid, the expected oil tempe most suitable temperature viscosity characteristics. Hy				

ments over a wide range of operating temperatures.

\*SSU = Saybolt Seconds Universal

#### NOTE:

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

# OPERATION

## WRENCH TORQUE INFORMATION

#### FACTORS THAT AFFECT TORQUE

An impact wrench is a rotary hammer that impacts the head of a bolt or nut. It does not apply a slow steady torque as a standard torque wrench. Therefore, several factors affect the result of torque when using impact wrenches:

1. **LONG BOLTS.** Long bolts having high-friction threads with lubrication under the bolt head or associated nut can twist when impacted, then untwist before the next impact. This will especially happen if there is low friction between the bolt head or nut and the mating surface.

2. **HEAVY, LOOSE OR MULTIPLE ADAPTERS**. Heavy, loose or multiple adapters between the wrench and socket can dissipate the intensity of the impact to the bolt head or nut.

3. **AMOUNT OF IMPACT.** Maximum torque results can be obtained by allowing continuous impacting of the socket against the bolt head or nut for at least 10 seconds.

4. **HYDRAULIC FLOW RATE.** If the flow rate to the tool is too low, the hammer (or impact) speed is reduced. If the flow is correct, a change in the relief pressure does not affect the impact force. Poorly designed hydraulic circuits can result in lower flow rates and reduced impact speeds when pressure is required during impacting.

## BOLT GRADE AND THREAD RECOMMENDATIONS

Allowable bolt torque is limited by both bolt thread diameter and grade of steel in the bolt. The ID07 Impact Wrench is recommended for use on the following bolt grade and thread sizes:

SAE Grade 2	7/16 to 7/8 inch / 11 to 22 mm
SAE Grade 5	3/8 to 5/8 inch / 9 to 16 mm
SAE Grade 8	3/8 to 9/16 inch / 9 to 4 mm

### **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 2000 psi/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.

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

The ID07 can be configured to run on OC or CC circuits.

1. Determine the system type.

2. Remove the hex plug (44) 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 scew 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.

## **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.

#### **CONNECT HOSES**

1. Wipe all hose couplers with a clean, lint-free cloth before making connections.

2. Connect hoses from the hydraulic power source to the tool fittings or quick disconnects. It is good practice to connect the return hose first and disconnect it last to minimize or eliminate trapped pressure within the wrench.

3. Observe the flow indicators stamped on the main body assembly and the hose couplers to ensure that the flow is in the proper directions. The female couple on the tools "IN" port is the inlet (pressure) coupler.

# OPERATION

Note:

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

## WRENCH OPERATION

The ID07 is designed for 1/2-inch square or 7/16-inch hex drive.

During normal operation it is common to see some grease leakage from around the anvil during hard use. Refer to the Service Manual for the correct lubrication procedures.

1. Observe all Safety Precautions.

2. Move the hydraulic circuit control valve to the "ON" position to operate the wrench.

## **A WARNING**

Always use sockets and accessories designed for impact type applications. DO NOT USE STANDARD SOCKETS OR ACCESSORIES. THESE CAN CRACK OR FRACTURE DURING OPERATION.

3. Select the direction (clockwise or counterclockwise) of impact desired by pushing the reversing spool either left or right. See item 75 in the parts illustration.

#### Note:

To more accurately tighten bolts, lubricate threads, check with a torque wrench and duplicate time of impacting for other bolts of the same length and thread size.

- 4. Squeeze the trigger to activate the wrench.
- 5. Release the trigger to stop the wrench.

## **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  $50^{\circ}$  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
Low performance or impact.	Incorrect hydraulic flow.	Check that the hydraulic power source is producing 4-12 gpm/15-45 lpm at 2000 psi/140 bar.
	Defective quick disconnects.	Check each quick disconnect.
	Hydraulic motor failure.	Inspect and repair.
	Hammer pins broken.	Replace hammer pins.
	Incorrect grease or periodic mainte- nance of the impact mechanism is not being performed.	See Service Instructions.
	Sockets or adapters too heavy or loose.	Use the correct impact type sockets or adapters.
	Long bolt with lubricated head.	Lubricate threads only.
	Not enough grease in mechanism.	Regrease mechanism.
	Supply and return hoses reversed.	Install hoses corrrectly.
Wrench runs too fast. Impact mecha- nism or screws broken.	Incorrect hydraulic flow (too high).	Check that hydraulic power source is producing 4-12 gpm/15-45 lpm at 2000 psi/140 bar.
Oil leak at motor cap face.	Fasteners loose.	Tighten to recommended torque.
	Face O-ring worn or missing.	Replace as required.
	Motor cap/main housing damaged.	Replace as required.
Performance low and seems to get	Bearing failure.	Replace as required.
worse rapidly.	Trigger spool worn.	Replace as required.
	Impact mechanism worn.	Repair or replace.
Fluid gets hot, power unit working hard.	Circuit relief set too low.	Adjust relief valve to 2200 psi/155 bar minimum.
	Too much fluid going through tool.	Adjust flow for 4-12 gpm/15-45 lpm maximum.
	Circuit has contaminants that have caused wear and high heat genera-tion.	Replace worn pump and valves. Install a large clean filter and keep circuit fluid clean.

# SPECIFICATIONS

Drive Size Weight	1/2 inch Square Drive or 7/16 inch Hex 7.7 lbs / 3.5 kg
Weight Overall Length	
Width	4 5 inch / 11 4 cm
Height	10.5 inch / 26.7 cm
Motor	Integral
Pressure Range	2000 psi / 140 bar
Flow Range	
Optimum Flow	4-9 gpm / 15-34 lpm
Optimum Flow System Type	Open and Closed Center, HTMA Type II
Porting Output Torque	8 SAE O-Ring
Output Torque	500 ft lbs / 675 Nm
Connect Size and Type	3/8 inch NPT Pipe Fitting
Sound Power Level	
Vibration Level	

# ACCESSORIES

#### DESCRIPTION

#### PART NUMBER

7/16 inch Quick Change Chuck to 1/2 inch Square Female	. 05079
Adapter, 7/16 inch Hex Shank to 1/2 inch Square Male	
5/8 inch Quick Change Adapter to 1/2 inch Square Female	
Adapter, 5/8 inch Male Hex x 1/2 inch Male Square Drive	

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

9/16 inch dia x 21 inch Carbide Tipped Auger Bit (24 inch OAL)	27845
13/16 inch dia x 21 inch Carbide Tipped Auger Bit (24 inch OAL)	27847

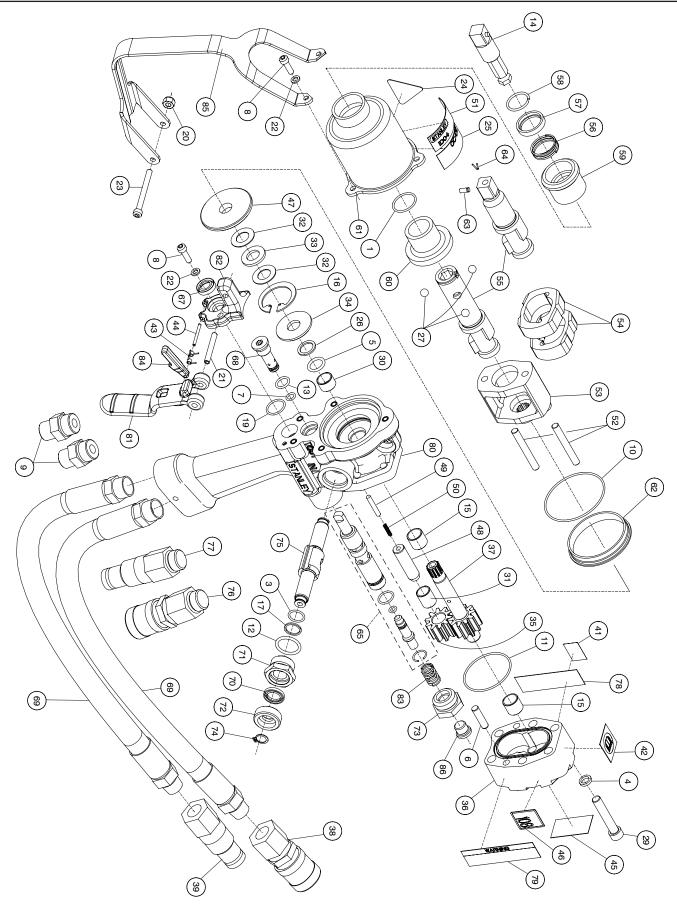
#### WOOD AUGER BITS, 7/16 INCH HEX

9/16 inch dia x 8 inch Carbide Tipped Auger Bit (12 inch OAL)	
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 15 inch Carbide Tipped Auger Bit (18 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)	
15/16 inch dia x 15 inch Carbide Tipped Auger Bit (18 inch OAL)	
1-1/16 inch dia x 15 inch Carbide Tipped Auger Bit (18 inch OAL)	
9/16 inch dia x 21 inch Carbide Tipped Auger Bit (24 inch OAL)	
11/16 inch dia x 21 inch Carbide Tipped Auger Bit (24 inch OAL)	
13/16 inch dia x 21 inch Carbide Tipped Auger Bit (24 inch OAL)	
15/16 inch dia x 21 inch Carbide Tipped Auger Bit (24 inch OAL)	
1-1/16 inch dia x 21 inch Carbide Tipped Auger Bit (24 inch OAL)	

#### SOCKETS, 1/2 INCH SQUARE DRIVE

1/2 inch Double Square 8 Point, Deep Length 9/16 inch Double Square 8 Point Deep Length	
5/8 inch Double Square 8 Point Deep Length	
11/16 inch Double Square 8 Point Deep Length	
3/4 inch Double Square 8 Point Deep Length	
13/16 inch Double Square 8 Point Deep Length	05113
7/8 inch Double Square 8 Point Deep Length	05114
15/16 inch Double Square 8 Point Deep Length	05115
1 inch Double Square 8 Point Deep Length	05116
Lineman's Socket, 13/16 inch and 15/16 inch	
Lineman's Socket, 1 inch and 1-1/8 inch	

## **ID07 PARTS ILLUSTRATION**



## **ID07 PARTS LIST**

NO.	PART NO.	QTY	DESCRIPTION		ITEM NO.	PART NO.	QTY	DESCRIPTION
	00012	1	O-RING (ID07920 ONLY)		43	60710	1	TRIGGER GUARD (ID0781001, ID07810S, ID0782001 ONLY)
2			NOITEM		44	350041	1	HOLLOW HEX PLUG
-	00175	2	O-RING		45	29149	1	ROTATING DIRECTION STICKER
4	00231	6	LOCKWASHER		46	29530	1	SOUND POWER LEVEL STICKER
5	00354	1	O-RING		47	30704	1	SPACER
	00713	2	DOWEL PIN		48	31246	1	IDLER SHAFT
7	00717	1	O-RING		49	31299	1	PLUNGER
8	62229	5	CAPSCREW		50	31665	1	COIL SPRING
9	00936	2	ADAPTER (ID07810, ID07820 ONLY)		51	60806	1	MODEL NUMBER STICKER
10	01205	1	O-RING		51			IMPACT MECHANISM ASSY (7/16 QC)
11	01262	1	O-RING			31894	1	(ID07810, ID0781001, ID07815, ID08810S ONLY)
12	01604	2	O-RING			32149	1	IMPACT MECHANISM ASSY (1/2 SQUARE)
13	03364	1	O-RING					(ID07820, ID0782001) IMPACT MECHANISM ASSY (1/2 SQUARE)
14	05117	1	ADAPTER (ID07810, ID0781001, ID07810S ONLY)			32284	1	(ID07920 ONLY)
15	05207	2	BUSHING		52	06757	2	HAMMER PIN
16	06635	1	RETAINING RING		53	31896	1	HAMMER FRAME
17	07224	2	BACKUP RING		54	31897	2	HAMMER
18			NO ITEM			31898		ANVIL, 7/16 QC (ID07810, ID0781001, ID07810S ONLY)
19	07627	1	O-RING		55	32150	1	ANVIL, 1/2 SQUARE (INCLUDES ITEM 63-64
20	07724	1	NYLOCK NUT (ID0781001, ID0710S, ID072001 ONLY)		56	31899	1	ID07820, ID0782001, ID07920 ONLY) RETAINER SPRING (ID07810, ID0781001,
21	07970	1	ROLL PIN			0.000		
22	09623	5	LOCKWASHER		57	31900	1	THRUST RING (ID07810, ID0781001, ID07810S ONLY)
23	09687	1	CAPSCREW (ID0781001, ID07810S, ID0782001 ONLY)		58	31901	1	THRUST RING LOCK (ID07810, ID0781001, ID0781001)
24	11207	1	CIRCUIT TYPE D STICKER (ID0781001, ID0782001 ONLY)		59	31902	1	RETAINING SLEEVE (ID07810, ID0781001, ID07810S ONLY)
25	11354	1	OC/CC STICKER		60	24002	4	HAMMER CASE BUSHING
26	13995	1	BACKUP RING		60	31903	1	(ID07810, ID0781001, ID07810S, ID07820, ID0782001 ONLY)
27	15966	3	RETAINER BALL (ID07810, ID0781001, ID07810S ONLY)			32153	1	HAMMER CASE BUSHING U/W
28			NOITEM		61	31904	1	HAMMER CASE
29	18206	6	CAPSCREW		-		1	
30	20758	1	BUSHING		62	32029		
31	20760	1	BUSHING		63	32151	1	RETAINER (ID07820, ID0782001, ID07920 ONLY)
	20761	2	BEARING RACE		64	32152	1	SPRING (ID07820, ID0782001, ID07920 ONLY)
	20762	1	BEARING		65	48986	1	VALVE SPOOL ASSY
34	20767	1	EAL BACKUP WASHER		66			NO ITEM
35	20769	1	IDLER GEAR ASSY (INCLUDES ITEM 31)		67	49139	1	SEAL WIPER
36	20770	1	MOTOR CAP ASSY (INCLUDES ITEMS 6, 15)		68	56721	1	RELIEF CARTRIDGE ASSY (INCL ITEMS 7, 13)
37	20788	1	MAIN SHAFT		69	56725	2	HOSE ASSY (PARKER) ID07810S Only
	03972 47436	1	FEMALE COUPLER (PARKER) FEMALE COUPLER (AEROQUIP)		70	66727 56747	2	HOSE ASSY (AEROQÚIP) ID07810S Ónly SEAL WIPER
	03973 47437	1	MALE COUPLER (PARKER) MALE COUPLER (AEROQUIP)		71	56749	2	SEAL CAP
40	25610	1	RAILROAD HELP DESK STICKER (ID07810S ONLY)		72 73	56757 56758	2	END CAP SPRING CAP
41	28323	1	CE STICKER (ID0781001, ID0782001 ONLY)				I .	
42	28788	1	MANUAL STICKER					

## **ID07 PARTS LIST CONTINUED**

ITEM NO.	PART NO.						
74	56764	2	RETAINING RING EXTERNAL				
75	56765	1	REVERSING SPOOL				
76	58856	1	3/8 FLUSHFACE COUPLER BODY				
77	58857	1	3/8 FLUSHFACE COUPLER NOSE				
78	58862	1	PRESSURE WARNING STICKER				
79	58864	1	ELECTRICAL WARNING STICKER				
80	59049	1	MAIN HOUSING ASSY (INCL ITEMS 15, 30)				
81	60677	1	TRIGGER				
82	60678	1	TRIGGER MOUNT CASTING				
83	65480	1	SPRING				
	03693	1	STICKER, CLOSED-CENTER (Shipped loose with ID07810, ID07820 Only)				
	60791	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 back-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.



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