STANLEY

ID07 HYDRAULIC IMPACT DRILL



USER MANUAL Safety, Operation and Maintenance









DECLARATION OF CONFORMITY

DECLARATION OF CONFORMITY ÜBEREINSTIMMUNGS-ERKLARUNG **DECLARATION DE CONFORMITE CEE DECLARACION DE CONFORMIDAD DICHIARAZIONE DI CONFORMITA**



| I, the undersigned: | |
|---------------------------|--|
| Ich, der Unterzeichnende: | |
| In an | |

Weisbeck, Andy

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

Je soussigné: El abajo firmante: lo sottoscritto:

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: Hydra | aulic Hand Held Impact Drill |
|--------------------|------------------------------|
|--------------------|------------------------------|

Kategorie: Catégorie: Categoria:

Categoria:

Make/Marke/Marque/Marca/Marca

Stanley

All

Type/Typ/Type/Tipo/Tipo:

ID0781001, ID0782001, ID0792001

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

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 EN ISO ISO Machinery Directive | 11148-6:2010 3744:2010 28927-2:2009 2006/42/EC:2006 | Self Self Self Self |

| 5. | Special Provisions: | None |
|----|----------------------------|------|
| | Spezielle Bestimmunger | 1: |
| | Dispositions particulières | 3: |
| | 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 Hydraulic | <u>Tools, Milwaukie, Oreg</u> | on USA | Date/Datum/le/Fecha/Data | 1-5-11 |
|------------------------------------|-------------------|-------------------------------|--------|--------------------------|--------|
| | | 1- | | | |

Signature/Unterschrift/Signature/Firma/Firma

Position/Position/Fonction/Cargo/Posizione

Director of Product Development

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IMPORTANT

To fill out a Product Warranty Validation form, and for information on your warranty, visit Stanleyhydraulics.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 Hydraulic Tools recommends that servicing of hydraulic tools, other than routine maintenance, must be performed by an authorized and certified dealer. Please read the following warning.



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

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

For the nearest authorized and certified dealer, call Stanley Hydraulic Tools at the number listed on the back of this manual and ask for a Customer Service Representative.

SAFETY SYMBOLS

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



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

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

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

This safety alert and signal word indicate a potentially hazardous situation which, if not avoided, <u>could</u> result in <u>death or serious 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, <u>will</u> result in <u>damage</u> to the equipment.

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

IMPORTANT

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

LOCAL SAFETY REGULATIONS

| nance personnel. |
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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 ID07 Hydraulic Impact 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, gloves, ear, head and breathing protection, and safety shoes at all times when operating the tool. Use gloves and aprons when necessary.
- Inspect tool daily for loose fasteners, missing parts and leakage. Have tool repaired if 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 and do not overreach.
- Do not inspect or clean the tool while the hydraulic power source is connected. Accidental engagement of the tool can cause serious injury. Be observant of hydraulic and water hose lying about the work area, they can be a tripping hazard.
- 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 wrench.
- 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.
- Serious injury or death could result from a tool or accessories dropped from an elevated height, also flying debris can cause serious injury.
- Warning: Hydraulic fluid under pressure could cause skin injection injury. If you are injured by hydraulic fluid, get medical attention immediately.
- During operation do not contact the impact mechanism, accessories or hardware as they can become very hot, use your (PPE) Personal Protection Equipment.
- 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.

STANLEY

TOOL STICKERS & TAGS

▲ WARNING

PRESSURE WARNING STICKER





11207 CIRCUIT TYPE D STICKER (CE)



28788 MANUAL STICKER (CE)



29530 SOUND POWER LEVEL STICKER (CE)





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.



ELECTRICAL WARNING STICKER



Stanley Hydraulic Tools 3810 SE Naef Road Milwaukie, Oregon USA

Model No. **ID07**

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

60806

ID07 MODEL STICKER

OC/CC

58862

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

11354 OC/CC STICKER

Please refer to the parts illustration for location of stickers.

NOTE

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

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

The safety tag (p/n 15875) at right is attached to the tool when shipped from the factory. Read and understand the safety instructions listed on this tag before removal. We suggest you retain this tag and attach it to the tool when not in use.

DANGER

FAILURE TO USE HYDRAULIC HOSE LABELED AND CER-TIFIED AS NON-CONDUCTIVE WHEN USING HYDRAULIC TOOLS ON OR NEAR ELECTRICAL LINES MAY RESULT IN DEATH OR SERIOUS INJURY.

BEFORE USING HOSE LABBLED AND CERTIFIED AS NON-CONDUCTIVE ON OR NEAR ELECTRIC LINES BE SUBETHE HOSE IS MAINTAINED AS NON-CONDUCTIVE. THE HOSE SHOULD BE REGULARLY TESTED FOR ELECTRIC CUR-RENT LEAKAGE IN ACCORDANCE WITH YOUR SAFETY DEPARTMENT INSTRUCTIONS.

- A HYDRAULIC LEAK OR BURST MAY CAUSE OIL INJEC-TION INTO THE BODY OR CAUSE OTHER SEVERE PERSONAL INJURY.
 - A. DO NOT EXCEED SPECIFIED FLOW AND PRESSURE FOR THIS TOOL. EXCESS FLOW OR PRESSURE MAY CAUSE A LEAK OR BURST.
 - B. DO NOT EXCEED RATED WORKING PRESSURE OF HYDRAULIC HOSE USED WITH THIS TOOL. EXCESS PRESSURE MAY CAUSE A LEAK OR BURST.
 - C. CHECK TOOL HOSE COUPLERS AND CONNECTORS DAILY FOR LEAKS. **DO NOT** FEEL FOR LEAKS WITH YOUR HANDS. CONTACT WITH A LEAK MAY RESULT IN SEVERE PERSONAL INJURY.

IMPORTANT

READ OPERATION MANUAL AND SAFETY INSTRUCTIONS FOR THIS TOOL BEFORE USING IT.

USE ONLY PARTS AND REPAIR PROCEDURES APPROVED BY STANLEY AND DESCRIBED IN THE OPERATION MANUAL.

TAG TO BE REMOVED ONLY BY TOOL OPERATOR.

SEE OTHER SIDE

DANGER

- D. DO NOT LIFT OR CARRY TOOL BY THE HOSES. DO NOT ABUSE HOSE. DO NOT USE KINKED, TORN OR DAMAGED HOSE.
- IMMENDATED HIVSE.

 MAKE SURE HYDRAULO 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 PRO-TECTION.
- . TO AVOID PERSONAL INJURY OR EQUIPMENT DAMAGE, ALL TOOL REPAIR MAINTENANCE AND SERVICE MUST ONLY BE PERFORMED BY AUTHORIZED AND PROPERLY TRAINED PERSONNEL.

IMPORTANT

READ OPERATION MANUAL AND SAFETY INSTRUCTIONS FOR THIS TOOL BEFORE USING IT.

USE ONLY PARTS AND REPAIR PROCEDURES APPROVED BY STANLEY AND DESCRIBED IN THE OPERATION MANUAL.

TAG TO BE REMOVED ONLY BY TOOL OPERATOR.

SEE OTHER SIDE

SAFETY TAG P/N 15875 (Shown smaller 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 Hydraulic Tools. DO NOT REMOVE THESE TAGS.

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

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





(Shown smaller than actual size)

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





(Shown smaller than actual size)



HOSE 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 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 maxi-

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

mum hydraulic system relief valve setting.

| Oil | Oil Flow | Hose L | Hose Lengths | Inside Diameter | iameter | USE | Min. Workir | Min. Working Pressure |
|--------|----------|----------------|----------------|-----------------|---------------|--|-------------|-----------------------|
| GPM | LPM | FEET | METERS | INCH | MM | (Press/Return) | PSI | BAR |
| | | Certified No | on-Conductive | Hose - Fiber | r Braid - for | Certified Non-Conductive Hose - Fiber Braid - for Utility Bucket Trucks | rucks | |
| 4-9 | 15-34 | up to 10 | up to 3 | 3/8 | 10 | Both | 2250 | 155 |
| | Conducti | ve Hose - Wire | Braid or Fiber | Braid -DO | NOT USE NE | Conductive Hose - Wire Braid or Fiber Braid -DO NOT USE NEAR ELECTRICAL CONDUCTORS | AL CONDUCT | ORS |
| 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 | 2/8 | 16 | Both | 2500 | 175 |
| 7 0 | 0, | 000 | C | 2/8 | 16 | Pressure | 2500 | 175 |
| c:01-c | 04-8- | 006-001 | 08-00 | 3/4 | 19 | Return | 2500 | 175 |
| 10-13 | 38-49 | up to 50 | up to 15 | 2/8 | 16 | Both | 2500 | 175 |
| 2, | 07 00 | 777 | 75 30 | 8/9 | 16 | Pressure | 2500 | 175 |
| 2-0 | 94-00 | 001-10 | 06-61 | 3/4 | 19 | Return | 2500 | 175 |
| 7 | 00 00 | 000 001 | 0000 | 3/4 | 19 | Pressure | 2500 | 175 |
| 2-0 | 94-00 | 007-001 | 00-00 | 1 | 25.4 | Return | 2500 | 175 |
| 0,7 | 40.60 | 2C 04 000 | 0 | 8/9 | 16 | Pressure | 2500 | 175 |
| 2 | 94-99 | cz oj dn | o 01 dn | 3/4 | 19 | Return | 2500 | 175 |
| 7 7 7 | 40.60 | 26.400 | 0 | 3/4 | 19 | Pressure | 2500 | 175 |
| 0 - 0 | 49-00 | 70-100 | 06-0 | 1 | 25.4 | Return | 2500 | 175 |

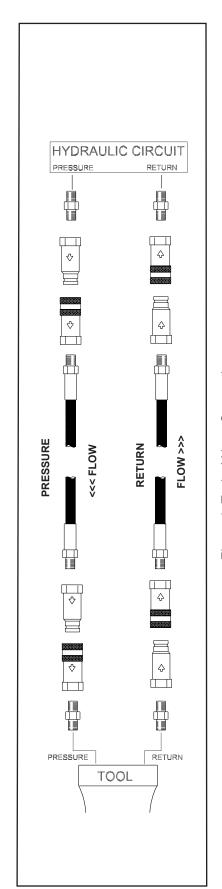


Figure 1. Typical Hose Connections

HTMA / EHTMA REQUIREMENTS

HTMA / EHTMA REQUIREMENTS

| HTMA | | TOOL TY | /PE | |
|---|-----------------------|-----------------------------------|-------------------|-----------------|
| HYDRAULIC SYSTEM REQUIREMENTS | TYPE I | TYPE II | TYPE RR | TYPE III |
| Flow Range | 4-6 gpm | 7-9 gpm | 9-10.5 gpm | 11-13 gpm |
| | (15-23 lpm) | (26-34 lpm) | (34-40 lpm) | (42-49 lpm) |
| Nominal Operating Pressure | 1500 psi | 1500 psi | 1500 psi | 1500 psi |
| (at the power supply outlet) | (103 bar) | (103 bar) | (103 bar) | (103 bar) |
| System relief valve setting (at the power supply outlet) | 2100-2250 psi | 2100-2250 psi | 2200-2300 psi | 2100-2250 psi |
| | (145-155 bar) | (145-155 bar) | (152-159 bar) | (145-155 bar) |
| Maximum back pressure | 250 psi | 250 psi | 250 psi | 250 psi |
| (at tool end of the return hose) | (17 bar) | (17 bar) | (17 bar) | (17 bar) |
| Measured at a max. fluid viscosity of: (at min. operating temperature) | 400 ssu* | 400 ssu* | 400 ssu* | 400 ssu* |
| | (82 centistokes) | (82 centistokes) | (82 centistokes) | (82 centistokes |
| Temperature: Sufficient heat rejection capacity to limit max. fluid temperature to: (at max. expected ambient temperature) | 140° F | 140° F | 140° F | 140° F |
| | (60° C) | (60° C) | (60° C) | (60° C) |
| Min. cooling capacity at a temperature difference of between ambient and fluid temps NOTE: Do not operate the tool at oil temperatures above 140° F (discomfort at the tool. | 3 hp | 5 hp | 6 hp | 7 hp |
| | (2.24 kW) | (3.73 kW) | (5.22 kW) | (4.47 kW) |
| | 40° F | 40° F | 40° F | 40° F |
| | (22° C) | (22° C) | (22° C) | (22° C) |
| | (60° C). Operation at | higher temperatur | res can cause ope | rrator |
| Filter Min. full-flow filtration Sized for flow of at least: (For cold temp. startup and max. dirt-holding capacity) | 25 microns | 25 microns | 25 microns | 25 microns |
| | 30 gpm | 30 gpm | 30 gpm | 30 gpm |
| | (114 lpm) | (114 lpm) | (114 lpm) | (114 lpm) |
| Hydraulic fluid Petroleum based (premium grade, anti-wear, non-conductive) Viscosity (at min. and max. operating temps) | 100-400 ssu* (2 | 100-400 ssu* 0-82 centistokes) | 100-400 ssu* | 100-400 ssu* |

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 7.1-8.7 gpm Flow Range 3.5-4.3 gpm 4.7-5.8 gpm 9.5-11.6 gpm 11.8-14.5 gpm (13.5-16.5 lpm) (18-22 lpm) (27-33 lpm) (36-44 lpm) (45-55 lpm) Nominal Operating Pressure 1870 psi 1500 psi 1500 psi 1500 psi 1500 psi (103 bar) (at the power supply outlet) (129 bar) (103 bar) (103 bar) (103 bar) System relief valve setting 2000 psi 2000 psi 2000 psi 2495 psi 2000 psi (at the power supply outlet) (172 bar) (138 bar) (138 bar) (138 bar) (138 bar)

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:

- 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.
- 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.
- 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 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.



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.
- 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.
- 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.



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.

- 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 °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.

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 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 maintenance of the impact mechanism is not being performed. | See Service Manual. |
| | 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 correctly. |
| Wrench runs too fast. Impact mechanism 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 generation. | Replace worn pump and valves. Install a large clean filter and keep circuit fluid clean. |

SPECIFICATIONS

| Drive Size | |
|-----------------------|----------------------|
| Overall Length | 9 inch / 22.9 cm |
| Width | 4.5 inch / 11.4 cm |
| Height | 10.5 inch / 26.7 cm |
| Motor | Integral |
| Pressure Range | 2000 psi / 140 bar |
| Flow Range | 4–10 gpm / 15–38 lpm |
| Optimum Flow | 4–9 gpm / 15–34 lpm |
| System Type | |
| Porting | 8 SAE O-ring |
| Output Torque | 500 ft lbs / 675 Nm |
| Connect Size and Type | |

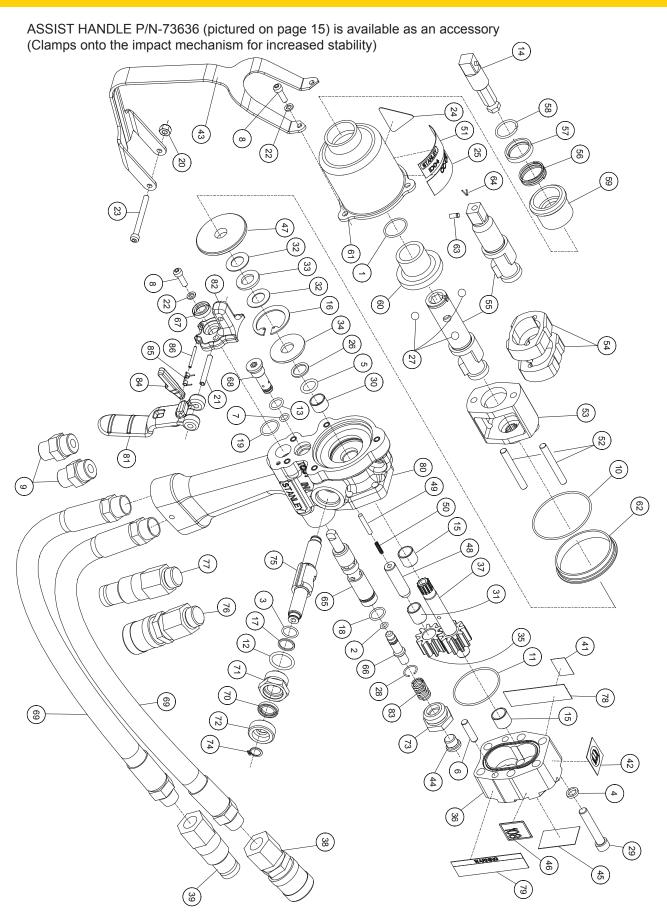
| SOUND AND VIBRATION DECLARATION | |
|--|------------------------|
| Test conducted on ID07 operated at standard 5 gpm input | |
| Measured A-weighted sound power level, Lwa (ref. 1pW) in decibels | 104.6 dBA |
| Uncertainty, Kwa, in decibels | 3 dBA |
| Measured A-weighted sound pressure level, Lpa (ref. 20 μPa) at operator's position, in decibels | 96.5 dBA |
| Uncertainly, Kpa, in decibels | 3 dBA |
| Values determined according to noise test code given in ISO 15744, using the basic standard ISO 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: A | 8.5 m/sec ² |
| Uncertainty: K | 1.3 m/sec ² |
| Values determined according to ISO 8662-7, ISO 5349-1, 2 | |

ACCESSORIES



| 7/16 inch Quick Change Chuck to 1/2 inch Square Female 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 × 1/2 inch Male Square Drive | 05117 07192 |
|--|----------------|
| WOOD AUGER BITS, 5/8 INCH HEX | |
| 9/16 inch dia \times 21 inch Carbide Tipped Auger Bit (24 inch OAL) | |
| WOOD AUGER BITS, 7/16 INCH HEX | |
| 9/16 inch dia × 8 inch Carbide Tipped Auger Bit (12 inch OAL) | |
| SOCKETS, 1/2 INCH SQUARE DRIVE | |
| 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 7/8 inch Double Square 8 Point Deep Length 15/16 inch Double Square 8 Point Deep Length 1 inch Double Square 8 Point Deep Length | |
| 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

| ITEM NO. | PART NO. | QTY | DESCRIPTION | |
|-------------|----------------|-----|---|--|
| 1 | 00012 | 1 | O-RING (ID07920, ID0792001 ONLY) | |
| 2 | _ | _ | NO ITEM | |
| 3 | 00175 | 2 | O-RING | |
| 4 | 00231 | 6 | LOCKWASHER | |
| 5 | 00354 | 1 | O-RING | |
| 6 | 00713 | 2 | DOWEL PIN | |
| 7 | 00717 | 1 | O-RING | |
| 8 | 62229 | 5 | CAPSCREW | |
| 9 | 00936 | 2 | ADAPTER (ID07810, ID07820 ONLY) | |
| 10 | 01205 | 1 | O-RING | |
| 11 | 01262 | 1 | O-RING | |
| 12 | 01604 | 2 | O-RING | |
| 13 | 03364 | 1 | O-RING | |
| 14 | 05117 | 1 | ADAPTER (ID07810, ID0781001, ID07810S ONLY) | |
| 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 (ID0781001, ID0710S, ID072001 ONLY) | |
| 21 | 07970 | 1 | ROLL PIN | |
| 22 | 09623 | 5 | LOCKWASHER | |
| 23 | 09687 | 1 | CAPSCREW (ID0781001, ID07810S, ID0782001, ID0792001 ONLY) | |
| 24 | 11207 | 1 | CIRCUIT TYPE D STICKER (ID0781001, ID0782001 ONLY) | |
| 25 | 11354 | 1 | OC/CC STICKER | |
| 26 | 13995 | 1 | BACKUP RING | |
| 27 | 15966 | 3 | RETAINER BALL (ID07810, ID0781001, ID07810S ONLY) | |
| 28 | _ | _ | NO ITEM | |
| 29 | 18206 | 6 | CAPSCREW | |
| 30 | 20758 | 1 | BUSHING | |
| 31 | 20760 | 1 | BUSHING | |
| 32 | 20761 | 2 | BEARING RACE | |
| 33 | 20762 | 1 | BEARING | |
| 34 | 20767 | 1 | SEAL BACKUP WASHER | |
| 35 | 20769 | 1 | IDLER GEAR ASSY (INCL ITEM 31) | |
| 36 | 20770 | 1 | MOTOR CAP ASSY (INCL ITEMS 6, 15) | |
| 37 | 20788 | 1 | MAIN SHAFT | |
| 38 | 03972 47436 | 1 | FEMALE COUPLER (PARKER) FEMALE COUPLER (AEROQUIP) | |
| 39 | 03973 47437 | 1 | MALE COUPLER (PARKER) MALE COUPLER (AEROQUIP) | |
| 40 | 25610 | 1 | RAILROAD HELP DESK STICKER (ID07810S ONLY) | |

| NO. | PART NO. | QTY | DESCRIPTION | |
|-----|----------------|-----|--|--|
| 41 | 28323 | 1 | CE STICKER (ID0781001, ID0782001, ID0792001 ONLY) | |
| 42 | 28788 | 1 | MANUAL STICKER | |
| 43 | 60710 | 1 | TRIGGER GUARD (ID0781001, ID07810S, ID0782001, ID0792001 ONLY) | |
| 44 | 350041 | 1 | HOLLOW HEX PLUG | |
| 45 | 29149 | 1 | ROTATING DIRECTION STICKER | |
| 46 | 29530 | 1 | SOUND POWER LEVEL STICKER | |
| 47 | 30704 | 1 | SPACER | |
| 48 | 31246 | 1 | IDLER SHAFT | |
| 49 | 31299 | 1 | PLUNGER | |
| 50 | 31665 | 1 | COIL SPRING | |
| | 31894 | 1 | IMPACT MECHANISM ASSY (7/16 QC) (ID07810, ID0781001, ID07815, ID08810S ONLY) | |
| | 32149 | 1 | IMPACT MECHANISM ASSY (1/2 SQUARE) (ID07820, ID0782001) | |
| | 32284 | 1 | IMPACT MECHANISM ASSY U/W (1/2 SQUARE) (ID07920, ID0792001 ONLY) | |
| 52 | 06757 | 2 | HAMMER PIN | |
| | 31895 | 2 | HAMMER PIN (ID07920, ID0792001 ONLY) | |
| 53 | 31896 | 1 | HAMMER FRAME | |
| 54 | 31897 | 2 | HAMMER | |
| 55 | 31898 32150 | 1 | ANVIL, 7/16 QC (ID07810, ID0781001, ID07810S ONLY) ANVIL, 1/2 SQUARE (INCL ITEM 63-64 ID07820, ID0782001, ID07920, ID0792001 ONLY) | |
| 56 | 31899 | 1 | RETAINER SPRING (ID07810, ID0781001, ID07810S ONLY) | |
| 57 | 31900 | 1 | THRUST RING (ID07810, ID0781001, ID07810S ONLY) | |
| 58 | 31901 | 1 | THRUST RING LOCK (ID07810, ID0781001, ID07810S ONLY) | |
| 59 | 31902 | 1 | RETAINING SLEEVE (ID07810, ID0781001, ID07810S ONLY) | |
| 60 | 31903 | 1 | HAMMER CASE BUSHING (ID07810, ID0781001, ID07810S, ID07820, ID0782001 ONLY) | |
| | 32153 | 1 | HAMMER CASE BUSHING U/W (ID07920, ID0792001 ONLY) | |
| 61 | 31904 | 1 | HAMMER CASE | |
| 62 | 32029 | 1 | PILOT RING | |
| 63 | 32151 | 1 | RETAINER (ID07820, ID0782001, ID07920 ONLY) | |
| 64 | 08416 | 1 | SPRING (ID07820, ID0782001, ID07920 ONLY) | |
| 65 | 48986 | 1 | VALVE SPOOL ASSY | |
| 66 | _ | _ | NO ITEM | |
| 67 | 49139 | 1 | SEAL WIPER | |

ID07 PARTS LIST

| ITEM | PART | | | |
|------|----------------|-----|--|--|
| NO. | NO. | QTY | DESCRIPTION | |
| 68 | 56721 | 1 | RELIEF CARTRIDGE ASSY (INCL ITEMS 7, 13) | |
| 69 | 56725 66727 | 2 | HOSE ASSY (PARKER) (ID07810S ONLY) HOSE ASSY (AEROQUIP) (ID07810S ONLY) | |
| 70 | 56747 | 2 | SEAL WIPER | |
| 71 | 56749 | 2 | SEAL CAP | |
| 72 | 56757 | 2 | END CAP | |
| 73 | 56758 | 1 | SPRING CAP | |
| 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 | |
| 84 | 60681 | 1 | TRIGGER LOCK | |
| 85 | 28808 | 1 | SPRING | |
| 86 | 29051 | 1 | ROLL PIN | |
| | 03693 | 1 | STICKER, CLOSED-CENTER (SHIPPED LOOSE WITH ID07810, ID07820 ONLY) | |
| | | | | |
| | 60791 | 1 | SEAL KIT | |

UNDERWATER TOOLS DEPTH GUIDELINE

UNDERWATER MODELS ONLY

A CAUTION

DO NOT USE HYDRAULIC TOOLS UNDER-WATER 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 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 on-board 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 Hydraulic Tools 3810 SE Naef Road Milwaukie, Oregon 97267-5698 USA (503) 659-5660 / Fax (503) 652-1780 www.stanleyhydraulics.com