IW08
HYDRAULIC IMPACT WRENCH

Safety, Operation and Maintenance Manual

STANLEY®

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10818 U.S.A. 2/89R

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 maintenance or repairs.

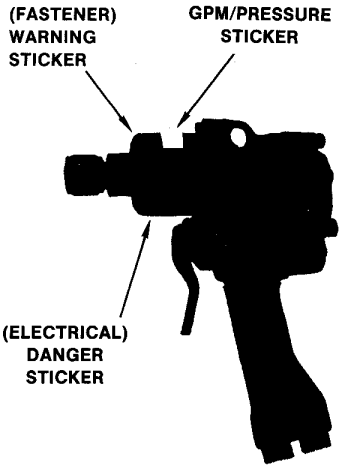
Supervising personnel should develop additional precautions relating to the specific work area and local safety regulations. If so, place the added precautions in the space provided on page 4.

GENERAL SAFETY PRECAUTIONS

The IW08 Impact Wrench will provide safe and dependable service if operated in accordance with the instructions given in this manual. Read and understand the safety precautions given in this manual and any stickers and tags attached to the tool and hose before operation. Failure to do so can result in personal injury or equipment damage.

- Operators must start in a work area without bystanders. The operator must be familiar with all prohibited work areas such as excessive slopes and dangerous terrain conditions.
- Always wear safety equipment such as goggles, ear and head protection, and safety shoes at all times when operating the tool.
- Do not operate the tool if it is damaged, improperly adjusted or not completely and correctly assembled.
- Do not overreach. 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.
- Establish a training program for all operators to ensure safe operation.
- Do not operate the tool unless thoroughly trained or under supervision of an instructor.
- 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.
- Do not operate the tool at oil temperatures above 140° F/60° C. Operation at higher temperatures can cause higher than normal temperatures at the tool which can result in operator discomfort.

TOOL STICKERS AND TAGS



WARNING

TO AVOID SEVERE PERSONAL INJURY, DO NOT OPERATE WITH NON-FACTORY APPROVED FASTENERS OR WITH LOOSE, MISSING OR DAMAGED FASTENERS. 15863

(FASTENER) WARNING STICKER

The stickers and tags attached to the wrench prior to shipment from the factory are shown below. The pressures and flow rates specified must never be exceeded. All stickers and tags must be read and understood prior to operation of the tool.

CAUTION

4-12 GPM/15-45 LPM
DO NOT EXCEED 2000 PSI/140 BAR

■**DO NOT** EXCEED SPECIFIED FLOW OR PRESSURE. ■USE CLOSED-CENTER TOOL ON CLOSED-CENTER SYSTEM. ■USE OPEN-CENTER TOOL ON OPEN-CENTER SYSTEM. ■CORRECTLY CONNECT HOSES TO TOOL "**IN**" AND "**OUT**" PORTS. ■IMPROPER HANDLING, USE OR MAINTENANCE OF TOOL COULD RESULT IN A LEAK, BURST OR OTHER TOOL FAILURE. ■CONTACT AT A LEAK OR BURST CAN CAUSE OIL INJECTION INTO THE BODY. ■ FAILURE TO OBSERVE THESE PRECAUTIONS CAN RESULT IN SERIOUS PERSONAL INJURY. 03788

GPM/PRESSURE STICKER

DANGER

ELECTROCUTION HAZARD

Failure to use hydraulic hose labeled and certified as non-conductive when using hydraulic tools on or near electric lines may result in death or serious injury.

For proper and safe operation read owners manual and make sure that you have been properly trained in correct procedures required for work on or around electric lines.

(ELECTRICAL) DANGER STICKER

The information listed on stickers and tags must be legible at all times. Always replace those that have become worn or damaged. They are available from your Stanley distributor.

The safety tag at right is attached to the wrench 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 wrench when not in use.

DANGER

1. FAILURE TO USE HYDRAULIC HOSE **LABELED AND CERTIFIED AS NON-CONDUCTIVE** WHEN USING HYDRAULIC TOOLS ON OR NEAR ELECTRICAL LINES MAY RESULT IN DEATH OR SERIOUS INJURY.
   BEFORE USING HOSE **LABELED AND CERTIFIED AS NON-CONDUCTIVE** ON OR NEAR ELECTRIC LINES BE SURE THE HOSE IS **MAINTAINED AS NON-CONDUCTIVE**. THE HOSE SHOULD BE REGULARLY TESTED FOR ELECTRIC CURRENT LEAKAGE IN ACCORDANCE WITH YOUR SAFETY DEPARTMENT INSTRUCTIONS.
2. A HYDRAULIC LEAK OR BURST MAY CAUSE OIL INJECTION INTO THE BODY OR CAUSE OTHER SEVERE PERSONAL INJURY.
   A. **DO NOT** EXCEED SPECIFIED FLOW AND PRESSURE FOR THIS TOOL. EXCESS FLOW OR PRESSURE MAY CAUSE A LEAK OR BURST.
   B. **DO NOT** EXCEED RATED WORKING PRESSURE OF HYDRAULIC HOSE USED WITH THIS TOOL. EXCESS PRESSURE MAY A CAUSE 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 15875

DANGER

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

3. MAKE SURE HYDRAULIC HOSES ARE PROPERLY CONNECTED TO THE TOOL BEFORE PRESSURIZING 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.
4. **DO NOT** CONNECT CLOSED-CENTER TOOLS TO OPEN-CENTER HYDRAULIC SYSTEMS. THIS MAY CAUSE EXTREME SYSTEM HEAT AND/OR 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.
5. BYSTANDERS MAY BE INJURED IN YOUR WORK AREA. KEEP BYSTANDERS CLEAR OF YOUR WORK AREA.
6. WEAR HEARING, EYE, FOOT, HAND AND HEAD PROTECTION.

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 15875

HYDRAULIC HOSE REQUIREMENTS

HOSE TYPES

Hydraulic hose types authorized for use with Stanley Hydraulic Tools are as follows:

❶ Labeled and certified non-conductive
❷ Wire braided (conductive)
❸ Fabric braided (not certified or labeled non-conductive)

Hose ❶ listed above is the only hose authorized for use near electrical conductors.

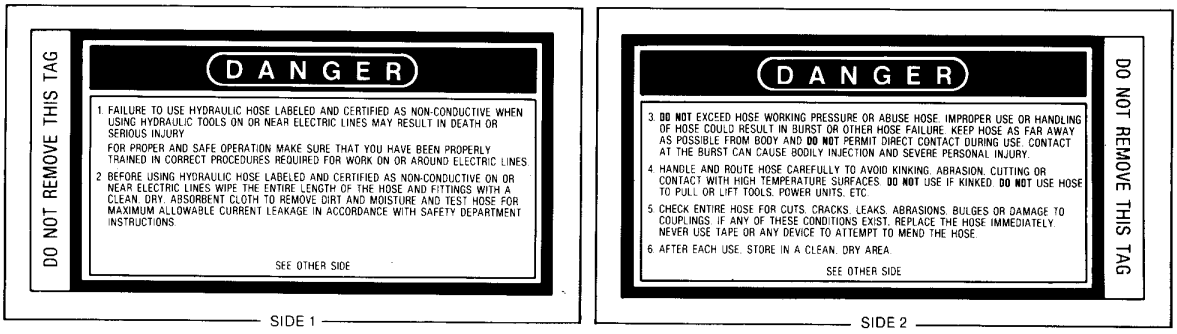
Hoses ❷ and ❸ listed above are **conductive** and **must never** be used near electrical conductors.

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 at no charge from your Stanley distributor.

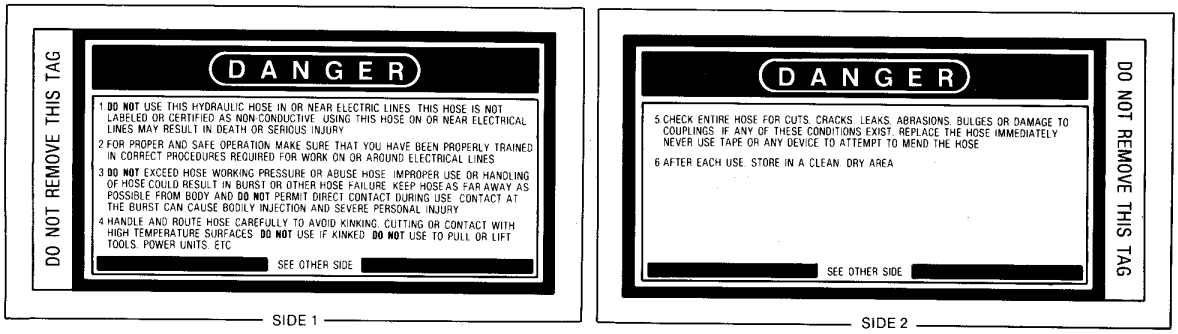
❶ CERTIFIED NON-CONDUCTIVE HOSE

This tag is attached to all certified **non-conductive** hose.



❷ AND ❸ WIRE- AND FABRIC-BRAIDED (NOT CERTIFIED OR LABELED NON-CONDUCTIVE) HOSE

This tag is attached to all **conductive** hose.

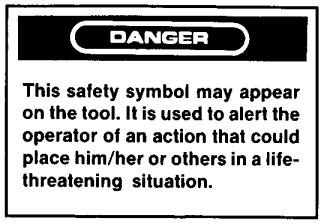


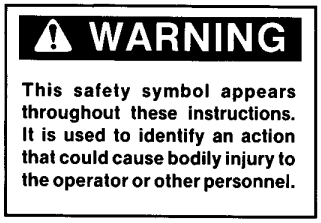
HOSE PRESSURE RATING

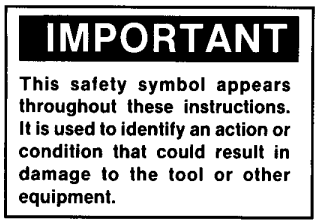
The rated working pressure of the hydraulic hose **must be equal to or higher than** the relief valve setting on the hydraulic system used to power the impact wrench.

SAFETY SYMBOLS

Safety symbols 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.







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.

IMPORTANT

In addition to the Safety Precautions on pages 1 thru 4 of this manual, observe the following for equipment protection and care.

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

- Always store an idle wrench in a clean dry space safe from damage or pilferage.

- Always keep critical Tool markings such as labels and stickers legible.

- 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/175 bar.

- All hoses must have an oil resistant inner surface and an abrasive resistant outer surface. Hoses that conform to SAE100R1A or SAE100R2 are recommended for most tool applications. Whenever near electrical conductors use **clean** SAE100R7 (nonmetallic braid) nonconductive hose.

- Tool repair should be performed by experienced personnel only.

- 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.

- Do not exceed 12 gpm/45 lpm flow rate. Rapid failure of the impact mechanism may result.

- Make sure the circuit PRESSURE hose (with male quick disconnect) is connected to the port furthest from the trigger. The circuit RETURN hose (with female quick disconnect) is connected to the port closest to the trigger.

- Do **not** reverse circuit flow. The reversing valve that is part of the tool provides for reverse impact of the wrench. Operation with circuit flow reversed will cause rapid failure of the motor shaft seal and may break the impact mechanism. ALWAYS USE THE REVERSING VALVE BUILT INTO THE WRENCH FOR REVERSE IMPACT.

- Always use a closed center (c.c.) impact wrench on closed center circuits and an open center (o.c.) model on open center circuits. If the wrench is the Dual-Spool version with an o.c./c.c. selector, make certain that the selector is positioned correctly for the circuit application before using.

HYDRAULIC SYSTEM REQUIREMENTS

- The hydraulic system should provide a flow of 4-12 gpm/15-45 lpm at an operating pressure of 750-2000 psi/53-140 bar, Recommended relief valve setting is 2100 psi/145 bar.

- The system should not have more than 250 psi/17 bar backpressure measured at the tool end of the operating hoses. The system conditions for measurement are at maximum fluid viscosity or 400 ssu/82 centistokes (minimum operating temperatures).

- The hydraulic system should have sufficient heat rejection capacity to limit the maximum oil temperature to 140°F/60°C at the maximum expected ambient temperature. The recommended minimum cooling capacity is 5 hp/3.73 kW at a 40°F/22°C difference between ambient temperature and oil temperature.

- The hydraulic system should have a minimum of 25 micron filtration. It is recommended that filter elements be sized for a flow of at least 30 gpm/114 lpm for cold temperature startup and maximum dirt holding capacity.

- The hydraulic fluid used should have a viscosity between 100 and 400 ssu/20 and 82 centistokes at the maximum and minimum expected operating temperatures. Hydraulic fluids of petroleum base with antiwear and nonconductive properties and viscosity in-

dexes over 140 will meet the recommended requirements over a wide range of operating temperatures.

- The recommended hose size is .500-inch/12 mm I.D. to 50 ft/15 m long and .625-inch/16 mm I.D. minimum up to 100 ft/30 m long.

- The wrench return hose must connect directly to the circuit return line and go straight through the oil filter, thermal valve, and oil cooler to the reservoir. To prevent trapped or reversed pressure, fluid should not be returned through a blocking or reversing valve.

- Do not use emulsifying hydraulic fluids and keep the recommended fluids drained of settled moisture. Water in the fluid can cause pump cavitation and will reduce or negate the personnel safety factor gained through the use of nonconductive hoses.

WRENCH TORQUE INFORMATION

FACTORS THAT AFFECT TORQUE

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

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

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

3. ***Too few impacts on the bolt head or nut.*** Maximum resultant torque 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 to the tool must be within the required range.*** If the flow rate to the tool is too low, hammer (or impact) speed is reduced. If the flow is correct, a change in the relief pressure will 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 IW08 Impact Wrench is recommended for use on the following bolt grade and thread sizes:

SAE Grade 2	7/16-7/8 inch/22 mm
SAE Grade 5	3/8-5/8 inch/16 mm
SAE Grade 8	3/8-9/16 inch/14 mm

PREOPERATION PROCEDURES

CHECK POWER SOURCE

1. Using a calibrated flowmeter and pressure gauge, check that the hydraulic power source develops a flow of 4-12 gpm/15-45 lpm at 950-2000 psi/67-140 bar.

2. Make certain that the hydraulic power source is equipped with a relief valve set to open at 2100 psi/145 bar, minimum.

3. UNDERWATER MODELS ONLY. Make certain that the wrench impact mechanism is cleaned and greased (with waterproof grease) after each day's use.

CONNECT HOSES

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

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

3. Observe the arrow on hose couplers to ensure that the flow is in the proper direction. The female coupler on the tool is the inlet (pressure) coupler.

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

WRENCH OPERATION

- The IW08 Impact Wrench is configured with 1/2-inch square or 7/16-inch hex quick-change drives. The 1/2-inch square drive configuration is used with drive sockets for high-impact (160-220 ft lb/218-307 Nm) installation and removal or fasteners. The 7/16-inch hex quick-change drive configuration is used with auger bits for boring wood (poles, etc.).

- Adapters are used to extend the capability of each drive configuration. The 1/2-inch square anvil is adapted to 7/16-inch or 5/8-inch hex quick-change drive by use of Adapter, part number 05079 or 07192, respectively. Adapter, part number 05117, is supplied with the 7/16-inch hex quick-change anvil to adapt it to 1/2-inch square drive wrench sockets.

- During normal operation it is not uncommon to see some grease leakage from around the anvil during hard use. See the SERVICE INSTRUCTIONS section of this manual for the correct lubrication procedures.

- Substitute an IW12 Impact Wrench for the IW08 in jobs requiring continuous application of greater than 200 ft lb/271 Nm of torque on successive fasteners or requiring impact times constantly exceeding 10-seconds per fastener. Such jobs will be performed faster using the IW12; the impact mechanism will run cooler, and the wrench is subjected to less wear and tear.

1. Observe all safety precautions.

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

⚠ 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 of impact desired using the reversing valve located on the side of the wrench. To select clockwise direction, press the valve towards the right side of the wrench. To select counterclockwise direction, press the valve to the left.

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 oil at low engine speed. When using the normally recommended oils, oil 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 oil that is too viscous or thick.

SERVICE INSTRUCTIONS

WRENCH IDENTIFICATION

One or more of the variations described below may be incorporated into the wrench. A desired variation can be added to the wrench using the kit identified.

Refer to the PARTS LIST illustrations at the back of this manual to aid in identifying which variations are present in the wrench being repaired.

Gear Set Configuration

Wrenches serial number 3200 and below have ten-tooth drive and idler gears. Wrenches above serial number 3200 have seventeen-tooth drive and idler gears and a different motor cap. This feature improves tool performance in circuits having less than a 5 gpm/19 lpm flow rate.

Cap and Gear Service Kit, part number 07166, will upgrade wrenches serial number 3200 and below with this feature.

Trigger and Bracket Configuration

Standard oc or cc models that do not have the current style trigger and bracket will require Trigger Service Kit, part number 07165, to replace these pieces.

Reversing Spool Configuration

Reversing Spool Replacement Kit, part number 07230, replaces spools that are not tapped for capscrews and stopwashers.

Trigger Spool Configuration

Wrenches currently supplied have new trigger spool assemblies to increase impact at lower flow rates without affecting high flow rate performance. Part replacement orders and wrenches requiring trigger spool repair automatically receive the improved assemblies. The revised trigger spool assembly is identifiable by the presence of notches around the spool ring at the spring end.

Circuit Configuration

The IW08 Impact Wrench is available in three models: open center (o.c.), closed center (c.c.), and Dual-Spool. The o.c. and c.c. models are designed to operate specifically on open- or closed-center circuits only. The Dual-Spool model design incorporates both o.c. and c.c. operation in the same wrench.

1. Models built for either open- or closed-center operation can be identified by the stamped "o.c." or "c.c." on the main body at the motor cap assembly end. If no stamp can be found, the wrench is o.c.

2. Dual-Spool models can be identified by the slotted selector located just above the handle at either the rear of the motor cap assembly or the front of the Trigger.

After identifying the wrench configuration proceed to the applicable procedure in this section.

PRIOR TO DISASSEMBLY

- Clean tool exterior.
- Obtain Seal Kit, part number 10829 for Dual-Spool models or part number 06755 for o.c./c.c. models, so that all seals exposed during disassembly can be replaced. Note orientation of seals before removing them. Install new seals in the same way.

PRIOR TO REASSEMBLY

- Clean all parts with a degreasing solvent.
- Ensure that all seals exposed during disassembly are replaced with new parts.
- Apply clean grease or o-ring lubricant to all parts during assembly.

Note: For orientation of the parts identified in the following procedures, refer to the parts location illustrations contained at the back of this manual.

IMPACT MECHANISM REMOVAL

1. Clean the exterior of the wrench.

Note: On dual-spool front selector models, the trigger guard must be removed before removal of the trigger.

2. Remove the two socket head capscrews securing the trigger bracket to the main body. Remove the trigger bracket and trigger as a single assembly.

3. Remove the three 10-24 x 1/2-inch/12.7 mm long socket head capscrews and lockwashers securing the hammer case assembly to the main body assembly.

4. Hold the wrench with the impact mechanism pointing down and pull the hammer case assembly, gasket retainer and impact mechanism away from the main body assembly.

5. Remove the inertia insert, thrust bearing and two bearing races, if they were not removed with the impact mechanism.

MAIN SHAFT SEAL REPLACEMENT

1. Remove the impact mechanism following the above procedure.

2. Remove the retaining ring which holds the back-up washer and shaft seal at the impact mechanism end of the main body.

3. With the splined end of the shaft pointing down, the back-up washer can be shaken out or caused to fall out by tapping on the face of the main body with a soft-faced mallet.

4. Pick the o-ring out with an o-ring removal tool, taking care to not mar the shaft or housing bore.

5. Lubricate the new o-ring and put it into the housing bore.

6. Replace the back-up washer, flat face out.

7. Install the retaining ring.

8. Clean, grease and reassemble the impact mechanism. See IMPACT MECHANISM REASSEMBLY procedure.

ANVIL DISASSEMBLY

FOR 1/2-INCH SQUARE DRIVE

Turn the hammer case assembly with the anvil pointing up. The impact mechanism components will drop out.

FOR 7/16-INCH QUICK-CHANGE

1. The anvil will remain with the hammer case assembly, but the rest of the impact mechanism will drop out into your hand by twisting the anvil back and forth.

2. Place the hammer case and anvil assembly as a unit over a bar or block to support the anvil from inside.

3. Push down on the thrust ring located inside the retainer sleeve and remove the front thrust ring lock (wire ring).

4. Remove the thrust ring, retainer sleeve and spring, and retainer ball.

5. Remove the rear thrust ring lock. The anvil can now be removed from inside the hammer case assembly.

IMPACT MECHANISM DISASSEMBLY

1. Remove the hammer pins, hammers, and anvil assembly from the hammer frame assembly.

2. Pull the two hammer pins from the hammer frame and all the impact mechanism parts will be free.

3. If the hammer case bushing is damaged, use an arbor press to remove it. Also remove and replace the gasket retainer if it is damaged.

IMPACT MECHANISM REASSEMBLY

Note: It is best to reassemble the impact mechanism on the main shaft of the wrench. Complete any other service before reassembly or installation of the impact mechanism.

IMPORTANT

Use the proper impact grease for equipment protection and care.

1. Thoroughly clean and inspect all parts of the impact mechanism.

2. Secure the wrench by lightly clamping the handle grip portion in a vise with the main shaft aimed up. Grease the thrust bearing and the two bearing races. Install the bearing race, thrust bearing and the remaining bearing race onto the main shaft in that order and against the seal back-up washer.

3. Place the inertia insert (holes up) onto the main shaft above the top bearing race.

4. Grease the inside of the hammer frame spline; then place the hammer frame above the inertia insert on the main shaft.

5. See figure 1. Place the hammers side-by-side in the hammer frame. The two hammers are identical, but must be installed with the grooves opposite each other. Place the hammer frame assembly on the main shaft.

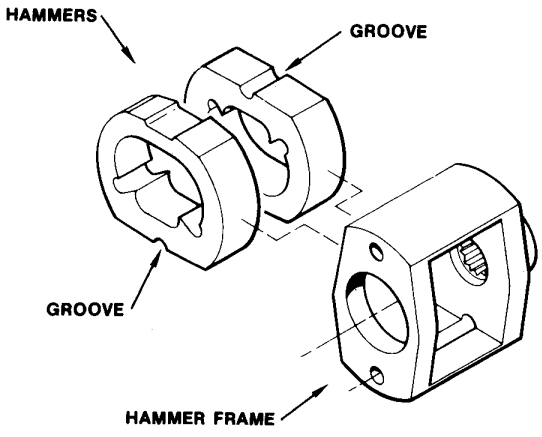


Figure 1.

6. Install the hammer pins through the hammer frame, hammers and into the inertia insert. Twist the hammer frame against the inertia insert to make certain that the hammer pins are set into the insert holes; then pack the hammer center space with the correct grease.

7. Insert the anvil into the hammers with a twisting motion.

8. If the hammer case bushing must be replaced, press it into place using an arbor press after greasing the case bore.

9. Install the hammer case gasket and gasket retainer into the hammer case assembly. Remove any existing grease from the inside of the hammer case to avoid over lubrication.

10. Grease the hammer case bushing and slide onto the anvil.

11. **For 7/16-inch Quick-Change.** Install the anvil through the hammer case bushing. Place the hammer case and anvil over a bar or block to support them from the anvil end. Install a thrust ring lock in the groove below the hole in the anvil. Grease the retainer ball and place in the hole.

12. Slide the retainer sleeve (open end up), spring and thrust ring (hollow end up) onto the anvil. Press down on the thrust ring and install the thrust ring lock.

13. Install the hammer case assembly and secure with three 10-24 x 1/2-inch/12.7 mm long socket head capscrews and lockwashers. Tighten capscrews to 48 in. lb/5.4 Nm torque.

14. Install the trigger bracket if removed, and secure with two 10-24 x 1 1/2-inch/38 mm long socket head capscrews.

WRENCH DISASSEMBLY

Note: Do not remove or tighten the reverse spool stop screws unless the idler gear shaft has been removed.

1. Remove the impact mechanism as described in the IMPACT MECHANISM REMOVAL section of this manual.

2. Remove the four 5/16-18 x 1 1/2-inch/38 mm long and the two 3/8-16 x 1 1/2-inch/38 mm long socket head capscrews and lockwashers securing the motor cap assembly to the main body assembly.

3. Tap on the splined end of the main shaft and push the motor cap assembly and gears from the main body. DO NOT pry or in any way excessively force the motor cap assembly off of the main body assembly.

4. Remove the o-ring from the motor cap assembly.

5. Remove the idler gear, idler shaft and main shaft.

6. Remove the trigger spool assembly, spring and (if Dual-Spool) the selector seat.

7. Remove the two 1/4-20 x 1/4-inch/6.35 mm long hex socket capscrews and stopwashers from the ends of the reversing spool.

8. Carefully slide the reversing spool out of the main body just far enough to remove one of the o-rings. Carefully push the reversing spool out of the opposite side of the main body.

9. Remove the o-ring (and back-up ring on front oc/cc selector models) from the small hole in the end of the main housing for the trigger spool.

10. Remove the retaining ring holding the back-up washer and shaft seal at the impact mechanism end of the main body. Remove the o-ring and back-up washer. (The o-ring is subject to severe service and should be replaced whenever the main shaft is serviced).

MOTOR CLEANING AND INSPECTION (all models)

Cleaning

Clean all parts with a degreasig solvent. Blow dry with compressed air and wipe clean. Use only lint-free cloths.

Bushings (Main Body and Motor Cap)

The inside of the bushings should be gray in color. If a significant amount of yellow bronze is evident, bushing replacement is required. Inspect shafts for corresponding wear and replace as required. The hydraulic system should be thoroughly flushed and the filter replaced before further operation of the wrench.

Gear Chamber (Motor Cap)

The gear chamber bores and end faces around the bores should be polished, not rough or grooved. The flat surfaces around the chamber and bolt holes should be flat and free of nicks and burrs that could cause misalignment or leaks.

Idler Gear and Drive Gear

The idler gear should have flat, straight tips without nicks. It should have a smooth even polish on the teeth and end faces. Discard the gear if cracks are present.

Main Body Assembly

The gear running surfaces should show two interconnecting polished circles without a step or roughness.

Shafts

Main and idler shaft diameter at the associated bushings must be smooth. Grooves, roughness or a reduced diameter indicates fluid contamination and damaged bushings. If abnormally worn (in excess of normal polishing), both shafts and associated bushings must be replaced. The hydraulic system should be thoroughly flushed and the filter replaced before further operation of the wrench.

WRENCH REASSEMBLY

1. See figure 2. The reversing spool must have the horizontal groove toward the idler shaft hole when assembled (with the narrower part of the relief above and the wider part below). Holding the spool in this position, install a greased o-ring in the **right groove**.

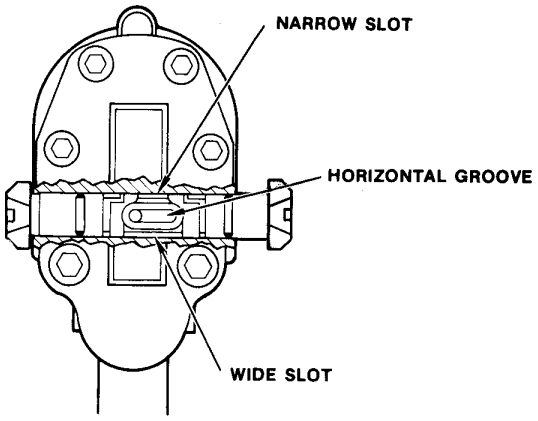


Figure 2.

2. Slide the reversing spool (the end with no o-ring) into the main body from the right side as the wrench is shown in figure 2. Slide the spool only far enough in so the o-ring on the opposite end of the reversing spool can be installed.

3. Grease and install the second o-ring and center the reversing spool.

4. Locate or turn the reversing spool so the **small** horizontal groove will be facing straight back (towards the motor cap end). Install the

stopwashers and secure with two 1/4-20 x 1/4-inch/6.35 mm long hex socket capscrews. Torque the capscrews securely using wrenches on **both** screws at the same time to ensure that they will not come loose.

5. Lubricate and install the small o-ring (and back-up ring on front oc/cc selector models) in the cartridge bore of the main body for the trigger spool assembly.

6. Install the trigger spool assembly in the main body.

7. Locate or turn the reversing spool so the horizontal groove will be facing straight back (toward the motor cap end) and install idler shaft. This will key the reversing spool to keep it from rotating.

8. On the rear oc/cc selector model, lubricate and install small o-ring in the selector seat bore of the motor cap.

9. Install the main shaft and idler gear and if Dual-Spool model, the selector seat in the motor cap.

10. Lubricate and install o-ring in the groove of the motor cap. (The o-ring will stay in the groove better if it is limbered-up by slight stretching and the groove is filled with stiff grease.)

Note: Do not force, wobble, or impact to assemble parts.

11. For rear selector Dual-Spool models, align the notches of the trigger spool and the selector seat. Carefully slide the main body over the main shaft until the main body seats securely against the motor cap.

12. Lubricate and install the four 5/16 x 1 1/2-inch/38 mm long and the two 3/8-16 x 1 1/2-inch/38 mm long socket head capscrews and lockwashers securing the motor cap assembly to the main body. Tighten the four 5/16 screws to 18 ft lb/24 Nm, lubricated. Tighten the two 3/8 screws to 28 ft lb/38 Nm, lubricated.

13. Lubricate and install the o-ring on the main shaft. Install the back-up washer and the retaining ring.

14. Check that the spools move freely. Turn the main shaft by using the impact mechanism frame to make certain that it turns freely. If damaged or assembled incorrectly, movement of these parts will result in a rough feeling. If this occurs, disassemble and inspect.

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 table. Use a flowmeter known to be accurate. Check the flow with the hydraulic oil temperature at least 80° F/27° C.

PROBLEM	CAUSE	REMEDY
Low performance or impact.	Incorrect hydraulic flow.	Check that hydraulic power source is producing 4-12 gpm/ 15-45 lpm at 750-2000 psi/ 53-140 bar.
	Defective quick disconnects.	Check each quick disconnect separately.
	Worn impact mechanism.	Repair or replace the impact mechanism. See SERVICE INSTRUCTIONS.
	Hammer pins broken.	Replace hammer pins.
	Incorrect grease.	See SERVICE INSTRUCTIONS.
	Spools incorrectly installed.	Reverse spool upside down. Reassemble. See SERVICE INSTRUCTIONS, figure 2.
	Sockets or adapters too heavy or loose.	Use the correct impact type sockets or adapters.
	Long bolt with lubricated head.	Lubricate threads only.
	Hammers incorrectly assembled.	Correct assembly. Grooves must be opposite (figure 1).
	Impact mechanism out of grease.	Grease mechanism.
	Trigger spool relief valve action weak	Replace spool with current version (notches near spring).
Wrench runs too fast; impact mechanism or screws broken.	Incorrect hydraulic flow.	Check that hydraulic power source is not producing over 12 gpm/45 lpm at 750-2000 psi/53-140 bar.
	Supply and return hoses reversed.	Install hoses correctly. Observe the arrow on hose couplers. The female coupler on the tool is the inlet (pressure) coupler.
	Relief sleeve or spring damaged.	Remove and replace spool assembly.

PROBLEM	CAUSE	REMEDY
Wrench runs too fast; impact mechanism or screws broken (cont.)	Trigger spool not operating properly.	Replace spool assembly with current version.
Grease leaks at anvil bushing, wrench warm.	Hard duty cycle and heat forces grease out.	Normal unless greasing instructions in SERVICE INSTRUCTIONS are not being followed.
	Hydraluic pressure and return reversed or failed main shaft seal.	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.
Grease leaks at anvil bushing, wrench cold.	Main shaft o-ring leaking.	Replace as required.
	Hydraulic pressure and return reversed.	Correct hose connections.
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.
Oil leaks at reversing spool.	Damaged o-rings.	Replace as required.
	Wrong hydraulic fluid. Circuit too hot.	See OPERATING INSTRUCTIONS for correct fluid/circuit specifications.
	Hydraulic pressure and return reversed.	Correct hose connections.
Performance low and seems to get worse rapidly.	Thrust bearing missing or failed.	Replace bearing. Check motor cap, seal back-up washer, and main shaft for damage.
Oil gets hot, power unit working hard.	Open center tool on a closed center circuit and vice versa.	Use tools to match circuit.
	Circuit relief set too low.	Adjust relief valve to 2100 psi/ 145 bar, minimum.
	Too much oil going through tool.	Adjust flow for 12 gpm/45 lpm maximum.
	Circuit is generating high heat with flow controls, popover relief, etc.	Use pump size and rpm for producing needed flow only. Eliminate circuit heating causes.
	Circuit has contaminants which have caused wear and high heat generation.	Replace worn pump and valves; install a large clean filter and keep circuit fluid clean.

Note: Internal wear in pump motors and valves are sure signs of water or abrasive fluid contaminants. If the circuit is efficient and cool (without internal leaks from wear), the system and tools perform better, last longer and leaks are less likely to occur.

SPECIFICATIONS

Drive Size	1/2-inch Square Drive 7/16-inch Quick-Change
Weight	7.5 lb/3.4 kg
Overall Length	8 inch/20 cm
Width	2.8 inch/71 mm
Pressure Range	750-2000 psi/53-140 bar
Flow Range	4-12 gpm/15-45 lpm
Optimum Flow	4-9 gpm/15-34 lpm
System Type	open or closed center, HTMA TYPE I & II
Porting	8 SAE O-Ring
Connect Size and Type	3/8-inch NPT male adapter
Motor	Integral
Torque	160-220 ft lb/218-307 Nm

NOTE

Weights, dimensions and operating specifications listed are subject to change without notice. Where specifications are critical to your application, please consult the factory.

ACCESSORIES

PART NUMBER	DESCRIPTION
02718	Impact Tool (Land Model) Lubricant 1 Pound Can
03201	Lubricant for Underwater Tools 1 Pound Can
05127	1/2 in. Sq. Female x 3/4 in. Sq. Male Adapter
05119	Jacobs Chuck 1/2 in. Sq. Dr. Female Plain Chuck for Drills 1/8 to 1/2 in. Plain Shank
05117	7/16 in. Hex Shank x 1/2 in. Sq. Male Adapter
05079	1/2 in. Sq. Drive to 7/16 in. QC Chuck
07192	1/2 in. Sq. Drive to 5/8 Hex QC Adapter
08207	0-1/2 in. Adjustable Jacobs #34 Chuck
	Auger Drill Bits — Lineman's Style 7/16 in. Hex Shank Auger Drill Bits
05097	Auger 8/16 in. x 12 in./30.5 cm
05098	Auger 9/16 in. x 12 in./30.5 cm
05099	Auger 9/16 in. x 18 in./45.7 cm
05100	Auger 11/16 in. x 12 in./30.5 cm
05101	Auger 11/16 in. x 18 in./45.7 cm
05103	Auger 13/16 in. x 18 in./45.7 cm
05104	Auger 15/16 in. x 18 in./45.7 cm
05105	Auger 17/16 in. x 12 in./30.5 cm
05106	Auger 17/16 in. x 18 in./45.7 cm
	1/2 in. Square Female Shank Auger Drill Bits
04657	Auger 11/16 in. x 12 in./30.5 cm
04658	Auger 13/16 in. x 12 in./30.5 cm
	Sockets — 1/2 in. Square Drive Depth Length Double Square 8-Point
05108	1/2 in. Socket
05109	9/16 in. Socket
05110	5/8 in. Socket
05111	11/16 in. Socket
05112	3/4 in. Socket
05113	13/16 in. Socket
05114	7/8 in. Socket
05115	15/16 in. Socket
05116	1 in. Socket

WARRANTY

Hand held tools and their parts are warranted against defects in materials and workmanship for a period of 12 months from the date of purchase. Exceptions are cutting parts, steels, and other parts not manufactured by Stanley (such as impact mechanisms, alternators, regulators, and hoses), and parts subject to normal wear and tear (such as o-rings, saw blades, and other parts that become worn through normal use of the tool).

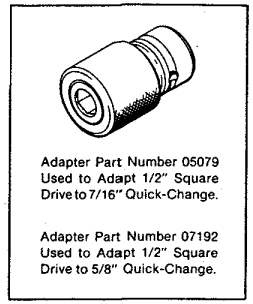
The Warranty Registration Card packed with the tool must be filled out and returned to Stanley upon receipt of the tool.

Stanley reserves the right to replace or repair only those parts which under our examination prove to have been defective at the time of purchase.

Shipping charges are prepaid by the customer unless otherwise authorized by Stanley.

The warranty is void if maximum flow and pressure ratings are exceeded.

There is no other warranty expressed or implied.



Adapter Part Number 05079
Used to Adapt 1/2" Square
Drive to 7/16" Quick-Change.

Adapter Part Number 07192
Used to Adapt 1/2" Square
Drive to 5/8" Quick-Change.

DUAL SPOOL FRONT SELECTOR MODEL

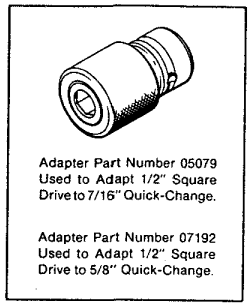
PARTS LIST

Item No.	Part No.	Qty.	Description
1	06620	1	Main Body Assy (w/o Trigger Guard)
	14023	1	Main Body Assy (w/ Trigger Guard)
2	14024	1	Trigger
3	14028	1	Retaining Ring
4	00025	3	Capscrew 10-24 x 1-3/4 HSH
5	07970	1	Spirol Pin 3/16 x 1-3/8
6	14021	1	Trigger Bracket
7	14019	1	Spool End Socket
8	0688	1	Needle Roller
9	07223	1	Back-Up Ring ⊙
10	00106	1	O-Ring 3/8 x 1/2 x 1/16 ⊙
11	06971	1	Elastic Stop Nut
12	14022	1	Trigger Guard
13	00153	3	Capscrew 10-24 x 1/2 HSH
14	04420	3	Lockwasher #10
15	09601	1	Idler Shaft Assy
16	07019	1	Main Shaft
17	07021	1	Idler Gear Assy
18	06799	1	O-Ring 2-3/4 x 2-7/8 x 1/16 ⊙
19	07023	1	Motor Cap Assy
20	03031	4	Lockwasher 5/16
21	06638	4	Capscrew 5/16-16 UNC x 1-1/2 HSH
22	07727	1	Sticker-Name Tag
23	01459	2	Lockwasher 3/8
24	01458	2	Capscrew 3/8-16 UNC x1-1/2 HSH
25	14017	1	Spool Assy, OC/CC
26	06617	1	Spring
27	04911	2	O-Ring 1/2 x 5/8 x 1/16 ⊙
28	07230	1	Reversing Spool
29	07227	2	Stop washer
30	03475	2	Capscrew 5/16-18 x 1/2 HSCH
31	00936	2	Fitting 1/2 SAE to 3/8 NPT Male
32	06632	1	Impact Mechanism 1/2-in. Sq. Drive (Incl. Items 34 thru 39)
	06783	1	Impact Mechanism 7/16-in. Quick-Change (Incl. Items 34 thru 39, 44, 49 thru 51
33	12412	1	Warning Sticker — Electrical
34	06759	1	Hammer Case Assy (Incl Items 36 thru 39 and 57)
35	03788	1	GPM Sticker 4-12 GPM
36	06760	1	Hammer Case Gasket ⊙
37	06763	1	Gasket Retainer
38	06761	1	Hammer Case Bushing
39	06762	1	Anvil 1/2-in. Sq. Drive
40	06786	1	Anvil Assy 7/16-in. Quick-Change (Incl Items 43 thru 47)
41	05117	1	Adapter
42	06010	2	Thrust Ring Lock
43	06009	1	Thrust Ring
44	06008	1	Retainer Spring
45	06007	1	Retainer Sleeve
46	06001	1	Retainer Ball
47	06787	1	Anvil
48	06756	1	Hammer Frame
49	06757	2	Hammer Pin
50	06758	2	Hammer
51	06626	1	Intertia Insert
52	06636	2	Bearing Race
53	06637	1	Thrust Bearing
54	06635	1	Retainer Ring 1-3/8 Internal
55	06614	1	Seal Back-Up Washer
56	02003	1	O-Ring 9/16 x 3/4 x 3/32 ⊙
57	15883	1	Warning Sticker — Fasteners
	15817	1	Operator Warning Tag (Not Shown)
58	08928	1	Split Back-up Ring

NOTE: Use Part Number and Part Name when ordering.
⊙ Denotes Part in Seal Kit.
Ⓐ **Part of (32)**

SEAL KIT DATA

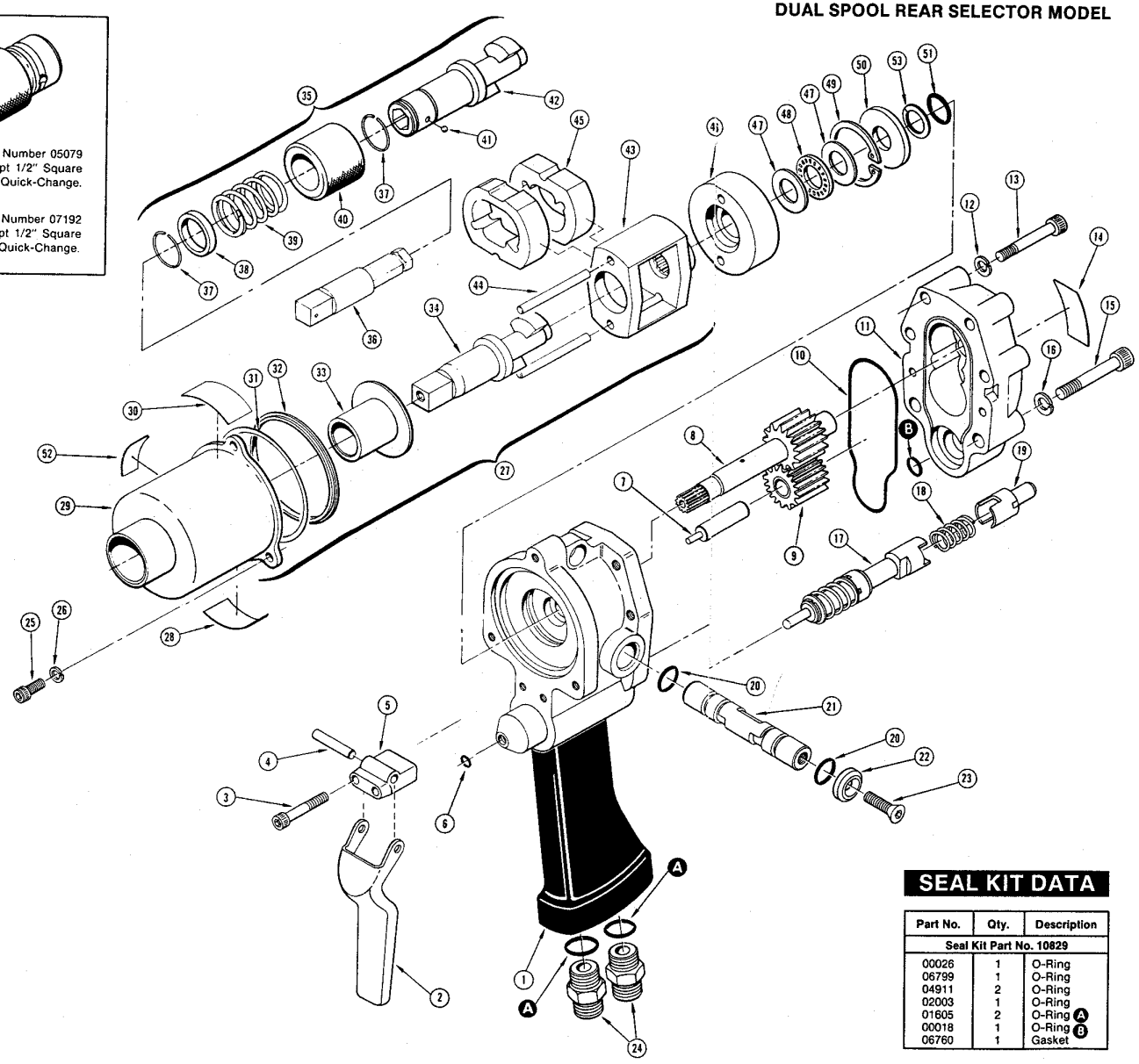
Part No.	Qty.	Description
Seal Kit Part No.		
00018	1	O-Ring
00026	1	O-Ring
00106	1	O-Ring
01605	2	O-Ring Ⓐ
02003	1	O-Ring
04911	2	O-Ring
06799	1	O-Ring
07223	1	Back-Up Ring



Adapter Part Number 05079
Used to Adapt 1/2" Square
Drive to 7/16" Quick-Change.

Adapter Part Number 07192
Used to Adapt 1/2" Square
Drive to 5/8" Quick-Change.

DUAL SPOOL REAR SELECTOR MODEL



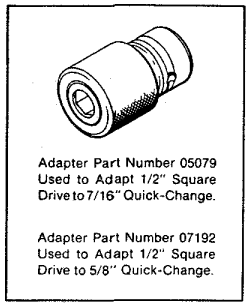
SEAL KIT DATA

Part No.	Qty.	Description
Seal Kit Part No. 10829		
00026	1	O-Ring
06799	1	O-Ring
04911	2	O-Ring
02003	1	O-Ring
01605	2	O-Ring (A)
00018	1	O-Ring (B)
06760	1	Gasket

PARTS LIST

Item No.	Part No.	Qty.	Description
1	06620	1	Main Body Assy
2	06981	1	Trigger
3	00111	2	Capscrew 10-24 x 1-1/2 HSH
4	07970	1	Spirol Pin 3/16 x 1-3/8
5	06982	1	Trigger Bracket
6	00026	1	O-Ring 3/16 x 5/16 x 1/16 ⊙
7	09601	1	Idler Shaft Assy
8	07019	1	Main Shaft
9	07021	1	Idler Gear Assy
10	06799	1	O-Ring 2-3/4 x 2-7/8 x 1/16 ⊙
11	09604	1	Motor Cap Assy (B)
12	03031	4	Lockwasher 5/16
13	06638	4	Capscrew 5/16-16 UNC x 1-1/2 HSH
14	07727	1	Sticker-Name Tag
15	01458	2	Capscrew 3/8-16 UNC x 1-1/2 HSH
16	01459	2	Lockwasker O-Ring 3/8
17	12162	1	Spool Assy
18	06617	1	Spring
19	09484	1	Selector Seat
20	04911	2	O-Ring 1/2 x 5/8 x 1/16 ⊙
21	07230	1	Reversing Spool
22	07227	2	Stopwasher
23	03475	2	Capscrew 5/16-18 x 1/2 HSCH
24	00936	2	Fitting 1/2 SAE to 3/8 NPT Male (A)
25	00154	3	Capscrew 10-24 x 1/2 HSH
26	04420	3	Lockwasher #10
27	06632	1	Impact Mechanism 1/2-in. Sq. Drive (Incl. Items 28 thru 34, 43 thru 45)
	06783	1	Impact Mechanism 7/16-in. Quick-Change (Incl. Items 28 thru 33, 35, 43 thru 45)
28	12412	1	Warning Sticker — Electrical
29	06759	1	Hammer Case Assy (Incl. Items 31 thru 33, and 52)
30	03788	1	GPM Sticker 4-12 GPM
31	06760	1	Hammer Case Gasket ⊙
32	06763	1	Gasket Retainer
33	06761	1	Hammer Case Bushing
34	06762	1	Anvil 1/2-in. Sq. Drive
35	06786	1	Anvil Assy 7/16-in. Quick-Change (Incl. Items 37 thru 42)
36	05117	1	Adapter
37	06010	2	Thrust Ring Lock
38	06009	1	Thrust Ring
39	06008	1	Retainer Spring
40	06007	1	Retainer Sleeve
41	06001	1	Refainer Ball
42	06787	1	Anvil
43	06756	1	Hammer Frame
44	06757	2	Hammer Pin
45	06758	2	Hammer
46	06626	1	Intertia Insert
47	06636	2	Bearing Race
48	06637	1	Thrust Bearing
49	06635	1	Retaining Ring 1-3/8 Internal
50	16248	1	Seal Back-Up Washer
51	02003	1	O-Ring 9/16 x 3/4 x 3/32 ⊙
52	15863	1	Warning Sticker — Fasteners
	15817	1	Operator Warning Tag (Not Shown)
53	08928	1	Split Back-up Ring

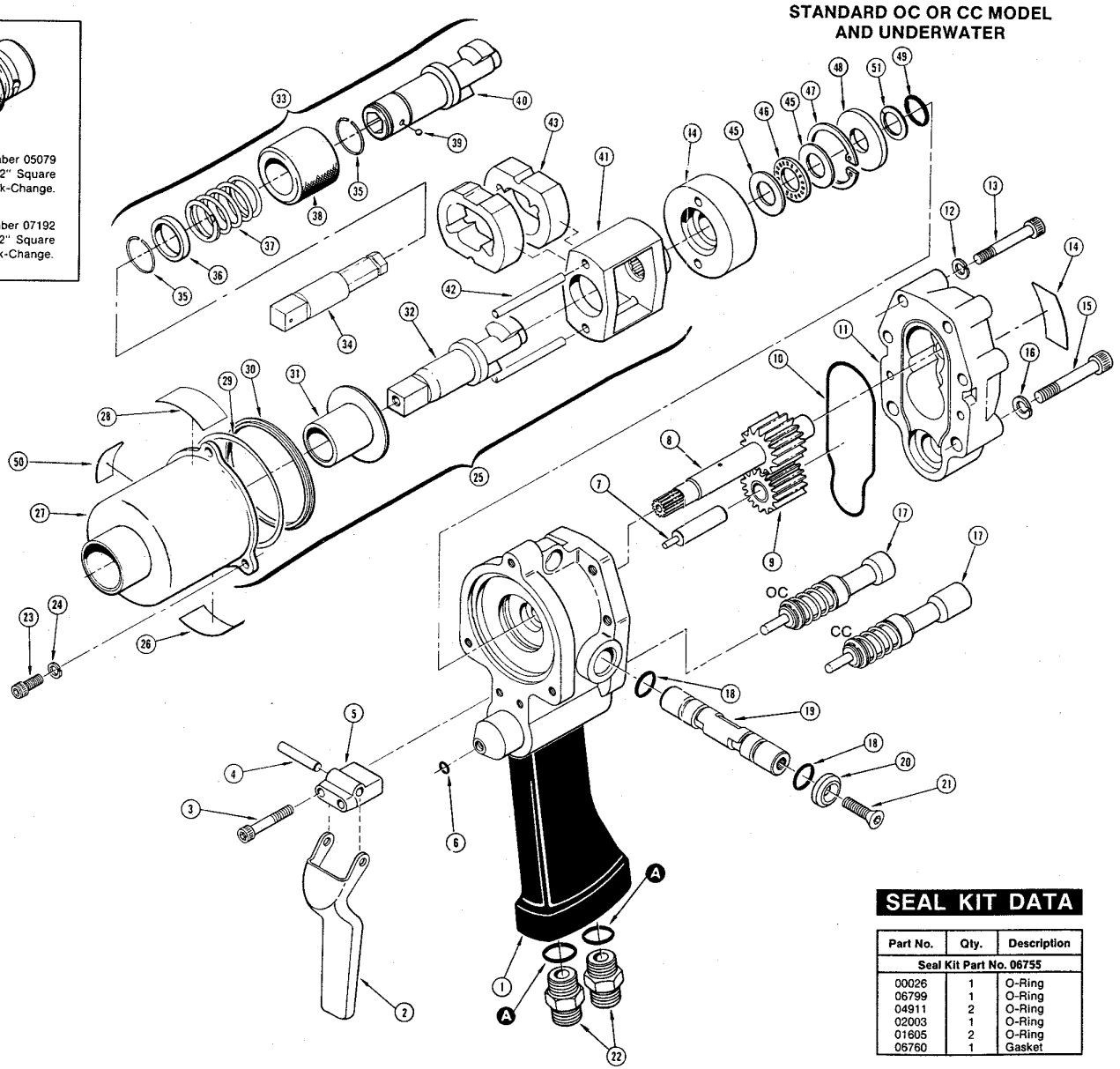
NOTE: Use Part Number and Part Name when ordering.
⊙ Denotes Part in Seal Kit.
(A) **Part of** (24)
(B) **Part of** (11)



Adapter Part Number 05079
Used to Adapt 1/2" Square
Drive to 7/16" Quick-Change.

Adapter Part Number 07192
Used to Adapt 1/2" Square
Drive to 5/8" Quick-Change.

STANDARD OC OR CC MODEL AND UNDERWATER



SEAL KIT DATA

Part No.	Qty.	Description
Seal Kit Part No. 06755		
00026	1	O-Ring
06799	1	O-Ring
04911	2	O-Ring
02003	1	O-Ring
01605	2	O-Ring
06760	1	Gasket

PARTS LIST

Item No.	Part No.	Qty.	Description
1	06620	1	Main Body Assy
2	06981	1	Trigger
3	00111	2	Capscrew 10-24 x 1-1/2 HSH
	04045	2	Capscrew 10-24 x 1-1/2 HSH STNLS
4	07970	1	Spirol Pin 3/16 x 1-3/8
5	06982	1	Trigger Bracket
6	00026	1	O-Ring 3/16 x 5/15 x 1/16 ⊙
7	09601	1	Idler Shaft Assy
8	07019	1	Main Shaft
9	07021	1	Idler Gear Assy
10	06799	1	O-Ring 2-3/4 x 2-7/8 x 1/16 ⊙
11	07023	1	Motor Cap Assy
12	03031	4	Lockwasher 5/16
	00283	4	Lockwasher 5/16 STNLS (UWTR Model)
13	06638	4	Capscrew 5/16-16 UNC x 1-1/2 HSH
	09625	4	Capscrew 5/16-16 UNC x 1-1/2 HSH STNLS (UWTR Model)
14	07727	1	Sticker-Name Tag
15	01458	2	Capscrew 3/8-16 UNC x 1-1/2 HSH
	03600	2	Capscrew 3/8-16 UNC x 1-1/2 HSH STNLS (UWTR Model)
16	01459	2	Lockwasher 3/8
	01214	2	Lockwasher 3/8 STNLS (UWTR Model)
17	12163	1	Spool Assy (OC and UWTR Models)
	12164	1	Spool Assy (CC Model)
18	04911	2	O-Ring 1/2 x 5/8 x 1/16 ⊙
19	07230	1	Reversing Spool
20	07227	2	Stopwasher
21	03475	2	Capscrew 5/16-18 x 1/2 HSCH
22	00936	2	Fitting 1/2 SAE to 3/8 NPT Male Ⓐ
23	00154	3	Capscrew 10-24 x 1/2 HSH
	00789	3	Capscrew 10-24 x 1/2 HSH STNLS
24	04420	3	Lockwasher #10
	09623	3	Lockwasher #10
25	06632	1	Impact Mechanism 1/2-in. Sq. Drive (Incl. Items 27 thru 32, 41, thru 43)
	06783	1	Impact Mechanism 7/16-in. Quick-Change (Incl. Items 27 thru 31, 33, 41 thru 43)
26	12412	1	Warning Sticker — Electrical
27	06759	1	Hammer Case Assy (Incl. Items 29 thru 31)
28	03788	1	GPM Sticker 4-12 GPM
29	06760	1	Hammer Case Gasket ⊙
30	06763	1	Gasket Retainer
31	06761	1	Hammer Case Bushing
32	06762	1	Anvil 1/2-in. Sq. Drive
33	06786	1	Anvil Assy 7/16-in. Quick-Change (Incl. Items 35 thru 40)
34	05117	1	Adapter
35	06010	2	Thrust Ring Lock
36	06009	1	Thrust Ring
37	06008	1	Retainer Spring
38	06007	1	Retainer Sleeve
39	06001	1	Retainer Ball
40	06787	1	Anvil
41	06756	1	Hammer Frame Assy
42	06757	2	Hammer Pin
43	06758	2	Hammer
44	06626	1	Intertia Insert
45	06636	2	Bearing Race
46	06637	1	Thrust Bearing
47	06635	1	Retaining Ring 1-3/8 Internal
48	16248	1	Seal Back-Up Washer
49	02003	1	O-Ring 9/16 x 3/4 x 3/32 ⊙
50	15863	1	Warning Sticker — Fasteners
	15817	1	Operator Warning Tag (Not Shown)
51	08928	1	Split Back-up Ring

NOTE: Use Part Number and Part Name when ordering.
⊙ Denotes Part in Seal Kit.
Ⓐ **Part of** (21)

SERVICE AND REPAIR NOTES

SERVICE AND REPAIR NOTES

STANLEY®

helps you do things right

Stanley Hydraulic Tools
Division of The Stanley Works
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Milwaukie, Oregon 97267-5698
Phone: 503/659-5660
Telex: 360771
Fax: 503/652-1780

CHANGE PUBLICATION NOTICE

ISSUE DATE 4-1-89 TOOL MODEL NO. IW08 DOCUMENT PART NO. 10818 2/89R

This change notice contains text and illustration changes for the IW08 Safety, Operation and Maintenance Manual.
The areas shaded in gray are the items changed since the original printing of the manual.

IMPORTANT

Keep this notice with your manual at all times to ensure that you have the correct and most current information for your tool model.

The following is a summary of changes applicable to this change notice:

IN PARTS LIST

Delete 06620 Main Body Assy (w/o Trigger Guard) (Item 1).

Change parts supplied with Impact Mechanism (Item 32).

Delete Fastener Warning Sticker (Item 57).

Change part number of item 55.

Change item 58 Back-Up to item 57 — Delete "Split."

Add Gasket, Back-Up Ring and Back-Up washer to Seal Kit.

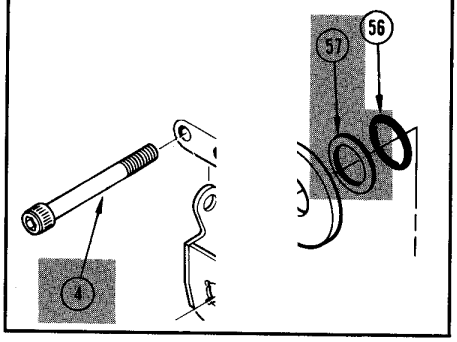
Change Note A to "Part of 31."

IN ILLUSTRATION

Change item 59 capscrew to item 4

Change item 58 Split Ring to 57 — Delete "Split."

ILLUSTRATION CHANGES



SEAL KIT DATA

Part No.	Qty.	Description
Seal Kit Part No. 10829		
00018	1	O-Ring
00026	1	O-Ring
00106	1	O-Ring
01605	2	O-Ring (A)
02003	1	O-Ring
04911	2	O-Ring
06799	1	O-Ring
07223	1	Back-Up Ring
06760	1	Gasket
08928	1	Back-up Ring
16248	1	Seal Back-up Washer

IW08 DUAL SPOOL FRONT SELECTOR MODEL

PARTS LIST

Item No.	Part No.	Qty.	Description
1	14023	1	Main Body Assy
2	14024	1	Trigger
3	14028	1	Retaining Ring
4	14757	3	Capscrew 10-24 x 1-3/4 HSH
5	07970	1	Spirol Pin 3/16 x 1-3/8
6	14021	1	Trigger Bracket
7	14019	1	Spool End Socket
8	00688	1	Needle Roller
9	07223	1	Back-Up Ring ⊙
10	00106	1	O-Ring 3/8 x 1/2 x 1/16 ⊙
11	06971	1	Elastic Stop Nut
12	14022	1	Trigger Guard
13	00296	3	Capscrew 10-24 x 1/2 HSH
14	04420	3	Lockwasher #10
15	09601	1	Idler Shaft Assy
16	07019	1	Main Shaft
17	07021	1	Idler Gear Assy
18	06799	1	O-Ring 2-3/4 x 2-7/8 x 1/16 ⊙
19	07023	1	Motor Cap Assy
20	03031	4	Lockwasher 5/16
21	06638	4	Capscrew 5/16-16 UNC x 1-1/2 HSH
22	07727	1	Sticker-Name Tag
23	01459	2	Lockwasher 3/8
24	01458	2	Capscrew 3/8-16 UNC x1-1/2 HSH
25	14017	1	Spool Assy, OC/CC
26	06617	1	Spring
27	04911	2	O-Ring 1/2 x 5/8 x 1/16 ⊙
28	07230	1	Reversing Spool
29	07227	2	Stop washer
30	03475	2	Capscrew 5/16-18 x 1/2 HSCH
31	00936	1	Fitting 1/2 SAE to 3/8 NPT Male
32	06632	1	Impact Mechanism 1/2-in. Sq. Drive (Incl. Items 33 thru 39 48 thru 50)
	06783	1	Impact Mechanism 7/16-in. Quick-Change (Incl. Items 33 thru 38, 40, and 48 thru 50
33	12412	1	Warning Sticker — Electrical
34	06759	1	Hammer Case Assy (Incl Items 36 thru 39 and 57)
35	03788	1	GPM Sticker 4-12 GPM
36	06760	1	Hammer Case Gasket ⊙
37	06763	1	Gasket Retainer
38	06761	1	Hammer Case Bushing
39	06762	1	Anvil 1/2-in. Sq. Drive
40	06786	1	Anvil Assy 7/16-in. Quick-Change (Incl Items 43 thru 47)
41	05117	1	Adapter
42	06010	2	Thrust Ring Lock
43	06009	1	Thrust Ring
44	06008	1	Retainer Spring
45	06007	1	Retainer Sleeve
46	06001	1	Retainer Ball
47	06787	1	Anvi
48	06756	1	Hammer Frame
49	06757	2	Hammer Pin
50	06758	2	Hammer
51	06626	1	Inertia Insert
52	06636	2	Bearing Race
53	06637	1	Thrust Bearing
54	06635	1	Retainer Ring 1-3/8 Internal
55	16248	1	Seal Back-Up Washer
56	02003	1	O-Ring 9/16 x 3/4 x 3/32 ⊙
	15875	1	Operator Warning Tag (Not Shown)
57	08928	1	Back-up Ring ⊙

NOTE: Use Part Number and Part Name when ordering.
⊙ Denotes Part in Seal Kit.
(A) Part of (31)

CHANGE PUBLICATION NOTICE

ISSUE DATE 4-1-89 TOOL MODEL NO. IW08 DOCUMENT PART NO. 10818 2/89R

This change notice contains text and illustration changes for the IW08 Safety, Operation and Maintenance Manual.

The areas shaded in gray are the items changed since the original printing of the manual.

IMPORTANT

Keep this notice with your manual at all times to ensure that you have the correct and most current information for your tool model.

The following is a summary of changes applicable to this change notice:

IN PART LIST

Change parts supplied with Hammer Case Assy (Item 29).

Delete Fastener Warning Sticker (Item 52).

Change part number of Operator Warning Tag.

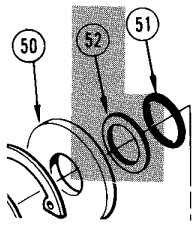
Change item 53 Back-Up Ring to item 52 — Delete "Split."

Add Back-Up Ring and Back-Up Washer to Seal Kit.

IN ILLUSTRATION

Change item 53 Split Ring to 52 — Delete "Split."

ILLUSTRATION CHANGE



SEAL KIT DATA

Part No.	Qty.	Description
Seal Kit Part No. 10829		
00026	1	O-Ring
06799	1	O-Ring
04911	2	O-Ring
02003	1	O-Ring
01605	2	O-Ring Ⓐ
00018	1	O-Ring Ⓑ
06760	1	Gasket
08928	1	Back-up Ring
16248	1	Seal Back-up Washer

IW08 DUAL SPOOL REAR SELECTOR MODEL

PARTS LIST

Item No.	Part No.	Qty.	Description
1	06620	1	Main Body Assy
2	06981	1	Trigger
3	00111	2	Capscrew 10-24 x 1-1/2 HSH
4	07970	1	Spirol Pin 3/16 x 1-3/8
5	06982	1	Trigger Bracket
6	00026	1	O-Ring 3/16 x 5/16 x 1/16 ⊙
7	09601	1	Idler Shaft Assy
8	07019	1	Main Shaft
9	07021	1	Idler Gear Assy
10	06799	1	O-Ring 2-3/4 x 2-7/8 x 1/16 ⊙
11	09604	1	Motor Cap Assy Ⓑ
12	03031	4	Lockwasher 5/16
13	06638	4	Capscrew 5/16-16 UNC x 1-1/2 HSH
14	07727	1	Sticker-Name Tag
15	01458	2	Capscrew 3/8-16 UNC x 1-1/2 HSH
16	01459	2	Lockwasker O-Ring 3/8
17	12162	1	Spool Assy
18	06617	1	Spring
19	09484	1	Selector Seat
20	04911	2	O-Ring 1/2 x 5/8 x 1/16 ⊙
21	07230	1	Reversing Spool
22	07227	2	Stopwasher
23	03475	2	Capscrew 5/16-18 x 1/2 HSCH
24	00936	2	Fitting 1/2 SAE to 3/8 NPT Male Ⓐ
25	00154	3	Capscrew 10-24 x 1/2 HSH
26	04420	3	Lockwasher #10
27	06632	1	Impact Mechanism 1/2-in. Sq. Drive (Incl. Items 28 thru 34, 43 thru 45)
	06783	1	Impact Mechanism 7/16-in. Quick-Change (Incl. Items 28 thru 33, 35, 43 thru 45)
28	12412	1	Warning Sticker — Electrical
29	06759	1	Hammer Case Assy (Incl. Items 28 thru 33)
30	03788	1	GPM Sticker 4-12 GPM
31	06760	1	Hammer Case Gasket ⊙
32	06763	1	Gasket Retainer
33	06761	1	Hammer Case Bushing
34	06762	1	Anvil 1/2-in. Sq. Drive
35	06786	1	Anvil Assy 7/16-in. Quick-Change (Incl. Items 37 thru 42)
36	05117	1	Adapter
37	06010	2	Thrust Ring Lock
38	06009	1	Thrust Ring
39	06008	1	Retainer Spring
40	06007	1	Retainer Sleeve
41	06001	1	Retainer Ball
42	06787	1	Anvil
43	06756	1	Hammer Frame
44	06757	2	Hammer Pin
45	06758	2	Hammer
46	06626	1	Intertia Insert
47	06636	2	Bearing Race
48	06637	1	Thrust Bearing
49	06635	1	Retaining Ring 1-3/8 Internal
50	16248	1	Seal Back-Up Washer ⊙
51	02003	1	O-Ring 9/16 x 3/4 x 3/32 ⊙
	15875	1	Operator Warning Tag (Not Shown)
52	08928	1	Back-up Ring ⊙

NOTE: Use Part Number and Part Name when ordering.

⊙ Denotes Part in Seal Kit.

Ⓐ **Part of** (24)

Ⓑ **Part of** (11)

CHANGE PUBLICATION NOTICE

ISSUE DATE 4-1-89 TOOL MODEL NO. IW08 DOCUMENT PART NO. 10818 2/89R

This change notice contains text and illustration changes for the IW08 Safety, Operation and Maintenance Manual.

The areas shaded in gray are the items changed since the original printing of the manual.

IMPORTANT

Keep this notice with your manual at all times to ensure that you have the correct and most current information for your tool model.

The following is a summary of changes applicable to this change notice:

IN PARTS LIST

Add (Underwater) to 04045 Capscrew (Item 3).

Add (Underwater) to 00789 Capscrew (Item 23).

Add (Underwater) to 09623 Lockwasher (Item 24).

Change parts supplied with Impact Mechanism (Item 25).

Change parts supplied with Hammer Case Assy (Item 27).

Delete Fastener Warning Sticker (Item 50).

Change part number of Operator Warning Tag.

Change Item 51 Back-Up Ring to 50 — Delete "Split."

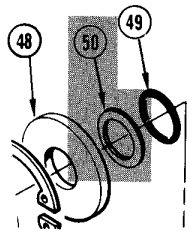
Add Back-Up Ring and Back-Up Washer to Seal Kit.

Change Note A to "Part of 22."

IN ILLUSTRATION

Change item 51 Split Ring to 50 — Delete "Split."

ILLUSTRATION CHANGE



SEAL KIT DATA

Part No.	Qty.	Description
Seal Kit Part No. 06755		
00026	1	O-Ring
06799	1	O-Ring
04911	2	O-Ring
02003	1	O-Ring
01605	2	O-Ring
06760	1	Gasket
08928	1	Back-up Ring
16248	1	Seal Back-up Washer

IW08 STANDARD OC OR CC MODEL AND UNDERWATER

PARTS LIST

Item No.	Part No.	Qty.	Description
1	06620	1	Main Body Assy
2	06981	1	Trigger
3	00111	2	Capscrew 10-24 x 1-1/2 HSH
	04045	2	Capscrew 10-24 x 1-1/2 HSH STNLS (Underwater)
4	07970	1	Spirol Pin 3/16 x 1-3/8
5	06982	1	Trigger Bracket
6	00026	1	O-Ring 3/16 x 5/15 x 1/16 ⊙
7	09601	1	Idler Shaft Assy
8	07019	1	Main Shaft
9	07021	1	Idler Gear Assy
10	06799	1	O-Ring 2-3/4 x 2-7/8 x 1/16 ⊙
11	07023	1	Motor Cap Assy
12	03031	4	Lockwasher 5/16
	00283	4	Lockwasher 5/16 STNLS (UWTR Model)
13	06638	4	Capscrew 5/16-16 UNC x 1-1/2 HSH
	09625	4	Capscrew 5/16-16 UNC x 1-1/2 HSH STNLS (UWTR Model)
14	07727	1	Sticker-Name Tag
15	01458	2	Capscrew 3/8-16 UNC x 1-1/2 HSH
	03600	2	Capscrew 3/8-16 UNC x 1-1/2 HSH STNLS (UWTR Model)
16	01459	2	Lockwasher 3/8
	01214	2	Lockwasher 3/8 STNLS (UWTR Model)
17	12163	1	Spool Assy (OC and UWTR Models)
	12164	1	Spool Assy (CC Model)
18	04911	2	O-Ring 1/2 x 5/8 x 1/16 ⊙
19	07230	1	Reversing Spool
20	07227	2	Stopwasher
21	03475	2	Capscrew 5/16-18 x 1/2 HSCH
22	00936	2	Fitting 1/2 SAE to 3/8 NPT Male Ⓐ
23	00154	3	Capscrew 10-24 x 1/2 HSH
	00789	3	Capscrew 10-24 x 1/2 HSH STNLS (Underwater)
24	04420	3	Lockwasher #10
	09623	3	Lockwasher #10 STNLS (Underwater)
25	06632	1	Impact Mechanism 1/2-in. Sq. Drive (Incl. Items 26 thru 32, 41 thru 43)
	06783	1	Impact Mechanism 7/16-in. Quick-Change (Incl. Items 26 thru 31, 33, 41 thru 43)
26	12412	1	Warning Sticker — Electrical
27	06759	1	Hammer Case Assy (Incl. Items 26 thru 31)
28	03788	1	GPM Sticker 4-12 GPM
29	06760	1	Hammer Case Gasket ⊙
30	06763	1	Gasket Retainer
31	06761	1	Hammer Case Bushing
32	06762	1	Anvil 1/2-in. Sq. Drive
33	06786	1	Anvil Assy 7/16-in. Quick-Change (Incl. Items 35 thru 40)
34	05117	1	Adapter
35	06010	2	Thrust Ring Lock
36	06009	1	Thrust Ring
37	06008	1	Retainer Spring
38	06007	1	Retainer Sleeve
39	06001	1	Retainer Ball
40	06787	1	Anvil
41	06756	1	Hammer Frame Assy
42	06757	2	Hammer Pin
43	06758	2	Hammer
44	06626	1	Intertia Insert
45	06636	2	Bearing Race
46	06637	1	Thrust Bearing
47	06635	1	Retaining Ring 1-3/8 Internal
48	16248	1	Seal Back-Up Washer ⊙
49	02003	1	O-Ring 9/16 x 3/4 x 3/32 ⊙
	15875	1	Operator Warning Tag (Not Shown)
50	08928	1	Back-up Ring ⊙

NOTE: Use Part Number and Part Name when ordering.

⊙ Denotes Part in Seal Kit.

Ⓐ Part of (22)