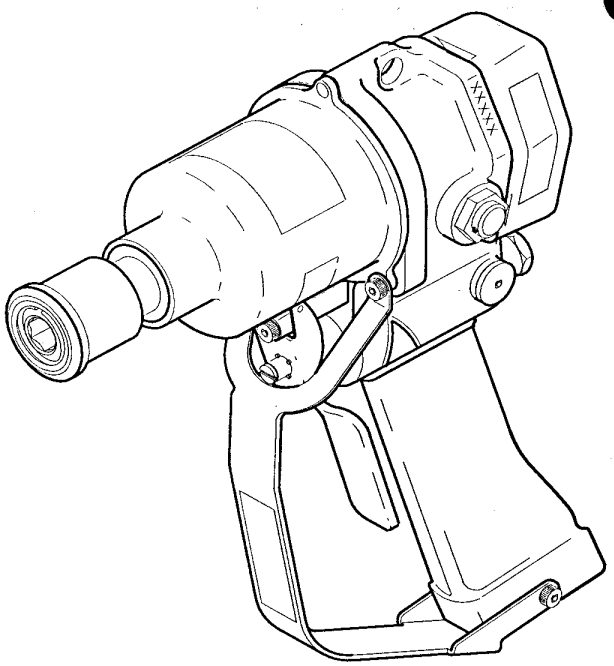
ID04

HYDRAULIC IMPACT DRILL/WRENCH

Safety, Operation and Maintenance Manual



⚠ DANGER

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.

Focused on performance™

STANLEY®
Hydraulic Tools

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CE

INDEX

SERVICING THE ID04 IMPACT DRILL/WRENCH: This manual contains safety, operation, and service 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.

⚠ DANGER

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.

A list of Stanley Hydraulic Tools Distribution Centers can be found on the last page of this manual.

SAFETY PRECAUTIONS

Tool operators and maintenance personnel must always comply with the safety precautions given in this manual and on the stickers and tags attached to the tool and hose.

These safety precautions are given for your safety. Review them carefully before operating the tool and before performing general maintenance or repairs.

Supervising personnel should develop additional precautions relating to the specific work area and local safety regulations. If so, place the added precautions in the space provided on page 3.

GENERAL SAFETY PRECAUTIONS

The ID04 Hydraulic Impact Drill/Wrench will provide safe and dependable service if operated in accordance with the instructions given in this manual. Read and understand this manual and any stickers and tags attached to the wrench and hose before operation. Failure to do so could result in personal injury or equipment damage.

- Operator 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.
- Establish a training program for all operators to ensure safe operation.
- Do not operate the tool unless thoroughly trained or under the supervision of an instructor.
- Always wear safety equipment such as goggles, ear and head protection, and safety shoes at all times when operating the tool.
- Never use tools near energized transmission lines. Know the location of buried or covered services before starting your work.
- 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.
- 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.
- 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.
- Never wear loose clothing that can get entangled in the working parts of the tool.
- To avoid personal injury or equipment damage, all tool repair, maintenance and service must only be performed by authorized and properly trained personnel.

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.

DANGER

This safety symbol may appear on the tool. It is used to alert the operator of an action that could place him/her or others in a life threatening situation.

⚠ WARNING

This safety symbol appears in these instructions to identify an action that could cause bodily injury to the operator or other personnel.

IMPORTANT

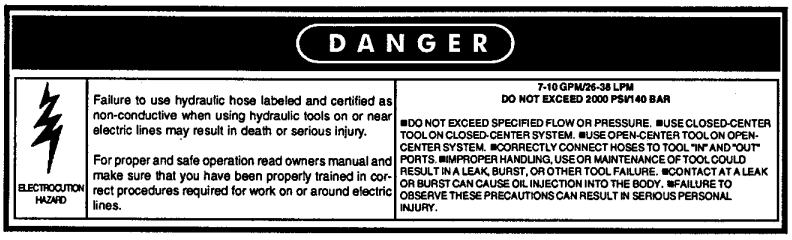
This safety symbol appears in these instructions to identify an action or condition that could result in damage to the tool or other equipment.

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

LOCAL SAFETY REGULATIONS

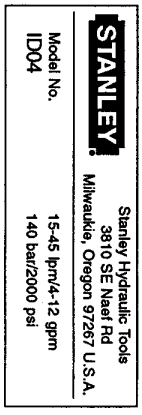
Enter any local safety regulations here. Keep these instructions in an area accessible to the operator and maintenance personnel.

TOOL STICKERS & TAGS



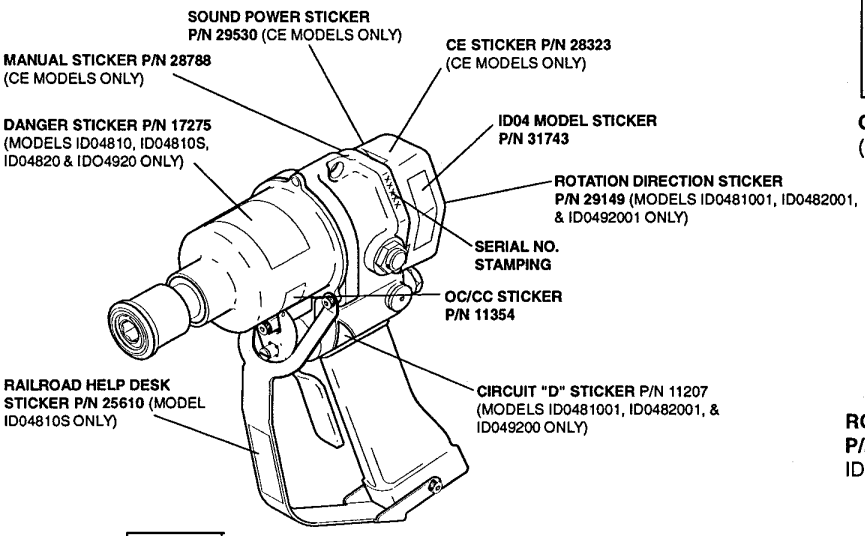
DANGER STICKER P/N 17275 (MODELS ID04810, ID04810S, ID04820 & IDO4920 ONLY)

RAILROAD HELP DESK STICKER P/N 25610 (MODEL ID04810S ONLY)

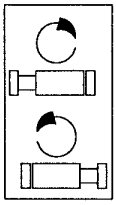


ID04 MODEL STICKER P/N 31743

TOOL STICKERS & TAGS (cont)...



CE STICKER P/N 28323
(CE MODELS ONLY)



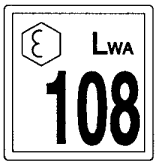
ROTATION DIRECTION STICKER
P/N 29149 (MODELS ID0481001,
ID0482001, & ID0492001 ONLY)

MANUAL STICKER P/N 28788
(CE MODELS ONLY)

OC/CC

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

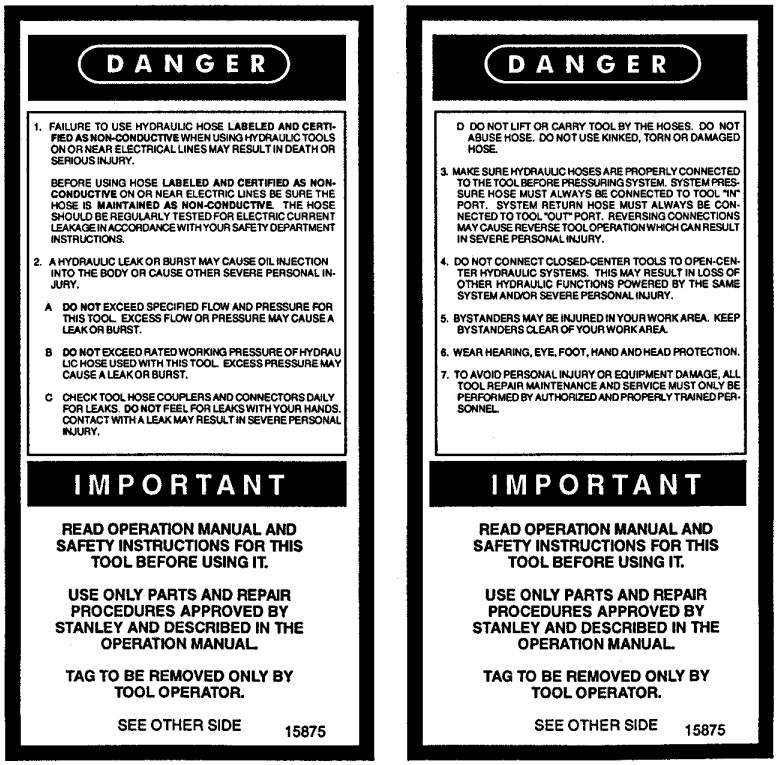
OC/CC STICKER P/N 11354



SOUND POWER STICKER
P/N 29530 (CE MODELS ONLY)

CIRCUIT "D" STICKER P/N 11207 (MODELS ID0481001, ID0482001, & ID049200 ONLY)

The safety tag (p/n 15875) at right is attached to the impact 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 impact wrench when not in use.



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

HYDRAULIC HOSE REQUIREMENTS

HOSE TYPES

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

❶ 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.

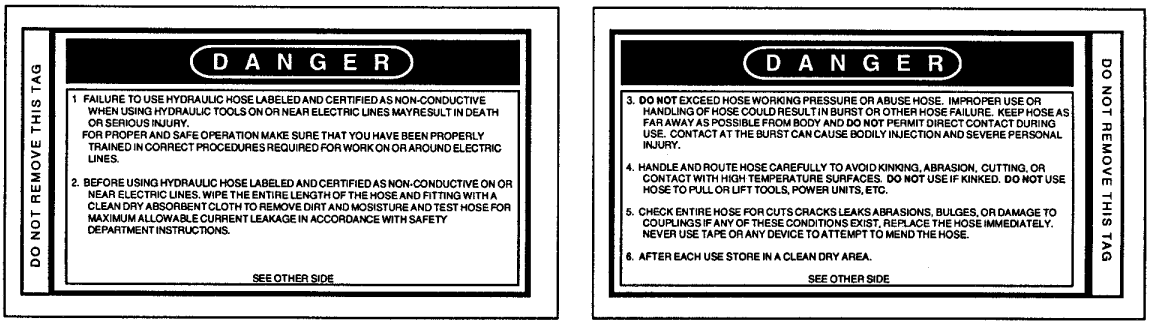
Hoses ❷ and ❸ listed above are **conductive** and **must never** be used near electrical conductors.

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

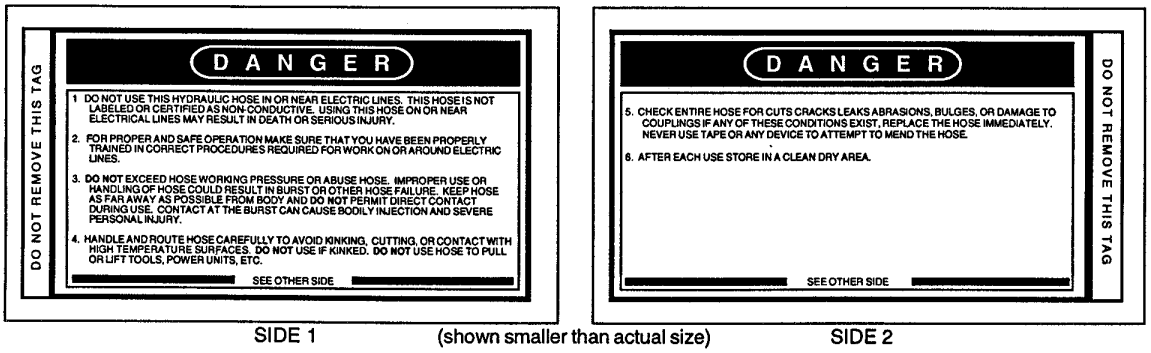
This tag is attached to all certified **non-conductive** hose.



SIDE 1 (shown smaller than actual size) SIDE 2

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

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



SIDE 1 (shown smaller than actual size) SIDE 2

HOSE PRESSURE RATING

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

OPERATION

IMPORTANT

In addition to the Safety Precautions on pages 2 thru 3 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 the tool in a clean, dry place, 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.

• Always use hoses that have a fluid resistant inner surface and an abrasive resistant outer surface. Whenever near electrical conductors, use clean hose labeled and certified non-conductive.

• 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 can 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 can 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 spool that is part of the tool provides for reverse operation of the wrench. Operation with circuit flow reversed will cause poor or no performance and may cause rapid failure of the motor shaft seal. ALWAYS USE THE REVERSING SPOOL BUILT INTO THE WRENCH FOR REVERSE OPERATION.

HYDRAULIC SYSTEM REQUIREMENTS

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

• The system should have no 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 of 400 ssu/82 centistokes (minimum operating temperatures).

• The hydraulic system should have enough heat rejection capacity to limit the maximum oil temperature to 140°F/60°C at the maximum expected ambient temperature.

• The hydraulic system should have a minimum of 25 micron filtration. We recommend using filter elements 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.

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

PREOPERATION PROCEDURES

PREPARATION FOR INITIAL USE

See "MODEL DESCRIPTIONS" on the parts list page to determine what type of connections are furnished with your tool. Additional fittings or hoses may be required in addition to quick disconnect couplings. Make sure the direction of oil flow is as recommended by the quick disconnect manufacturer.

Inspection of the tool to assure it did not sustain any damage during shipping should be performed prior to usage.

USE AS A DRILL

The ID04 applies a high number of impact blows to turn a drill bit or socket and adapter. This process makes the ID04 an excellent tool for drilling into various hardwoods or softwoods using auger bits up to 18 inches in length and 1-1/16 inch diameter.

Because of the impact turning, the ID04 cannot be used for drilling in steel or masonry.

USE AS AN IMPACT WRENCH

The ID04 can be used with all 1/2 inch square impact sockets from 1/2 inch to 1 inch hex. The ID04 provides output torque up to 500 ft. lbs./675 Nm. See the information below on "WRENCH TORQUE".

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 do standard torque wrenches. Therefore several factors can affect resultant torque when using impact wrenches.

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

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

3. **Amount of impact.** Maximum 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.** 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 does not affect the impact force. Poorly designed hydraulic circuits can result in lower flow rates and reduced impact speeds.

BOLT GRADE AND THREAD RECOMMENDATIONS

Allowable bolt torque is limited by both thread diameter and grade of steel in the bolt. The ID04 Impact Wrench is recommended for use on the following bolt grade and thread sizes:

SAE Grade 2 7/16-7/8 inch/11-22 mm
SAE Grade 5 3/8-5/8 inch/9-16 mm
SAE Grade 8 3/8-9/16 inch/9-14 mm

CHECK HYDRAULIC 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 the hydraulic power source is equipped with a relief valve set to open at 2100 psi/145 bar maximum.

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 hose couplers on the tool. It is a good practice to connect the return hose first and disconnect it last to minimize or avoid trapped pressure within the tool.

3. Observe flow indicators stamped on hose

couplers to be sure that oil will flow in the proper direction. The female coupler is the inlet coupler.

Note: The pressure increase in uncoupled hoses left in the sun may result in making them difficult to connect. When possible, connect the free ends of operating hoses together.

WRENCH OPERATION

Use a larger capacity impact wrench model for jobs requiring continuous application of greater than 500 ft lb/675 Nm of torque on successive fasteners or requiring impact times to constantly exceed 10 seconds.

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 spool located on the side of the wrench. From the operator's view point, to tighten fasteners, push the right hand end of the valve IN. To loosen fasteners, push the left hand end of the valve IN.

NOTE: To more accurately tighten bolts, lubricate threads and check with a torque wrench. 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

1. Before using the tool in cold weather, preheat the hydraulic oil at low engine speed. When using the normally recommended oils, oil should be at or above 50 F/10 C (400 ssu/82 centistokes) before use.

2. Damage to the hydraulic system or tool can result from use with oil that is too viscous or thick.

DAILY MAINTENANCE CHECKS

To ensure safe operation, the following items must be checked each day at the start of the work shift and at the end of the work shift.

1. Check all fasteners for tightness.

2. Check the tool for oil leaks. If leaks are observed, do not use the tool. Have the tool serviced before use. .

3. Check the tool for proper operation and performance. If the tool appears to not be operating properly, do not use the tool. Have the tool serviced before use.

SERVICE INSTRUCTIONS

Note: For orientation of parts in the following procedures, refer to the parts drawing later in this manual.

PRIOR TO DISASSEMBLY

1. Clean the exterior of the tool and place on a clean work surface.

2. Obtain the seal kit listed on the PARTS LIST so all seals exposed during disassembly can be replaced.

PRIOR TO REASSEMBLY

1. Clean all parts with a degreasing solution.

2. Blow dry all parts or use lint-free cloths.

3. Ensure that all seals exposed during disassembly are replaced with new parts.

4. Apply clean grease or o-ring lubricant to all parts during assembly.

IMPACT MECHANISM DISASSEMBLY

1. Clamp the impact drill/wrench in a vice with soft jaws, impact mechanism facing up.

2. Unscrew and remove the fasteners (73) and lift the hammer case (12) off of the main housing (61). If the tool contains a trigger guard (74), unscrew and remove the fastener (67) and remove the trigger guard before lifting off the hammer case.

3. If the hammer frame (22) and hammers (26) remain on the main housing, lift them off. If the hammer frame and hammers remain in the hammer case, remove them by turning the anvil until they drop out. On models containing the 1/2 inch drive anvil, the hammer frame, hammers, and anvil can be removed from the hammer case by simply pushing on the anvil.

4. Push the pins (1) out of the hammer frame and then remove the two hammers.

5. To remove a 7/16 inch anvil from the hammer case, complete the following steps.

   a. Using two small screw drivers, push the thrust ring (5) down and pry out the thrust ring lock (6). Lift off the thrust ring, spring (4), and retaining sleeve (3) being careful to not allow the steel balls (21) to fall out.

   b. Remove the steel balls.

   c. Push the anvil out of the hammer case.

IMPACT MECHANISM REASSEMBLY

1. Thoroughly clean and inspect all parts of the impact mechanism. If the hammer case, hammers, pins, or anvil appears damaged in any way, the part(s) should be replaced.

2. Apply grease and install a new o-ring (14) onto the pilot ring (17). For underwater models, apply grease and install a new o-ring (19) into the groove in the bushing (20).

3. Apply impact tool lubricant (Stanley p/n 02718 for land model ID04's - p/n 03201 for underwater model ID04's) to the anvil and install it into the hammer case. If the anvil is a 7/16 inch quick change, complete the following steps.

   a. Apply grease to the holes in the anvil for the steel balls (21) and then install each ball.

   b. Place the retaining sleeve (3) over the anvil followed by the spring (4) and thrust ring (5).

   c. Push down on the thrust ring and then install the thrust ring lock (6).

4. Apply impact tool grease to the hammers, hammer frame, and pins. **NOTE: Do not fill the hammer case with grease or heavily coat the mechanism parts with grease. A coating is all that is required.**

5. Install the hammers into the hammer frame and then install each pin. **NOTE: Make sure the hammers are oriented as shown in the parts illustration (one hammer appears to be upside down against the other). The order (front to back) does not matter as long as one is upside down against the other.**

6. Install the hammer frame and hammers assembly into the hammer case. Turning of the anvil will help seat the frame and hammers.

7. Making sure the spacer (71) and bearing (8 & 9) are in place, install the completed mechanism assembly to the main housing and secure with the capscrews (73) and lock washers (70). Tighten to 48 in. lb./5.4 Nm. If a trigger guard is used, install it at this time.

TOOL DISASSEMBLY

1. Complete steps 1, 2 and 3 under IMPACT MECHANISM REMOVAL.

2. Remove the thrust washer (71) and thrust bearing (8 & 9) from the main housing assembly.

MOTOR CAP

3. Remove the 6 socket head capscrews (32) and lockwashers (33) securing the motor cap assembly (27) to the main housing assembly and lift off the motor cap assembly. Screw driver slots are provided on each side of the motor cap for prying the cap up if necessary. Do not in any way excessively force the motor cap assembly off of the main housing assembly.

4. Remove the o-ring (36) from the motor cap.

MAIN SHAFT & IDLER SHAFT

5. Tap on the splined end of the main shaft (25) and push the shaft from the main body.

6. Remove the idler gear, idler shaft, spring (23), and plunger (40).

7. Remove the retaining ring (11) and then pick out the seal washer (13), o-ring (16) and back-up ring (15) from the main housing.

TRIGGER

8. Remove the trigger (68) by first removing the retaining ring (69) and then driving out the roll pin (62). Or, - by unscrewing the capscrews (67) and removing the trigger and trigger bracket (64) as an assembly. Be careful to not let the spool end socket (66) and the spool to socket adaptor (65) fall off the valve spool.

VALVE SPOOL

9. Unscrew the spring cap (41), pick out the spring (45) and then push the valve spool (47) out of the main housing.

REVERSING SPOOL

10. Loosen the set screws (52) and remove the end caps (51).

11. Unscrew and remove the seal caps (49) and slide the reversing spool assembly (55) out of the main housing. **NOTE: Make sure the idler shaft has been removed prior to completing this step.**

CHECK BALLS (58)

12. It should not be necessary to remove the plugs (56) and steel balls (58) unless the oil passages in the main housing require cleaning.

CLEANING AND INSPECTION

Cleaning

Clean all parts with a degreasing solution. Blow dry with compressed air or use lint-free cloths.

Gear Chamber (Motor Cap)

The chamber bores and bottoms around the shaft bushings should be polished and not rough or grooved. If the bushing bores are yellow-bronze, replace them and investigate the cause of wear.

The flat surfaces around the chamber and bolt holes should be flat and free of nicks or burrs that could cause misalignment or leaks.

Bushings

The inside of the bushings should be gray with some bronze showing through. If significant yellow-bronze shows, replace the bushings. Inspect the motor shaft and idler shaft for corresponding wear and replace as required.

Gears

The drive and idler gears should have straight tips without nicks; square tooth ends and a smooth even polish on the teeth and end faces. Replace the gear if cracks are present.

Main Housing Assembly

The surface near the gears should show two interconnecting polished circles without a step.

Shafts

The shaft diameter at the bearing and seal locations must be smooth. Grooves, roughness or a

reduced diameter indicate fluid contamination or damaged bushings. Grit particles may have been imbedded in the bushings, grinding into the hardened shaft. If abnormal shaft wear as above occurs (more than normal polishing), replace both the shaft and associated bushings.

Also check the hydraulic system for excess contamination in the fluid and for filter condition. Operating conditions may require changing from a 25-micron filter to an oversized 10-micron filter.

TOOL REASSEMBLY

1. Lubricate and install a new o-ring (16) and back-up ring (15) into the main housing. Install the seal back-up washer (13) and retaining ring (11).

2. Slide the reversing spool into the main housing assembly. Insert the spool with the slot toward the idler shaft hole and the narrow side of the depression in the spool facing up toward the top of the main housing.

3. Insert the idler shaft with spring and plunger to prevent the reversing spool from turning.

4. Lubricate and install new wiper seals (50), o-rings (48), back-up rings (53), and o-rings (54) into each seal cap (49). Install each seal cap onto the main housing assembly.

5. Install each end cap (51) and tighten the set screws (52).

6. Install the valve spool (47), spring (45), and spring cap with a new o-ring (41).

7. Lubricate the seal area of the main shaft (25) and install it into the main housing. Install the idler gear (37) onto the idler shaft.

8. Lubricate and install a new o-ring (36) onto the motor cap (27). Lubricate the bolt (32) threads with an antiseize compound and install the motor cap. Tighten the bolts to 15-17 ft. lb./20-23 Nm in a cross pattern.

IMPORTANT

Do not force parts together.

9. Install the spool to socket adapter (65), spool end socket (66), trigger (68), and retaining ring (69).

10. Lubricate with grease and install the bearing races (8) and thrust bearing (9). Install the spacer (71) with the smaller stepped diameter facing the main housing.

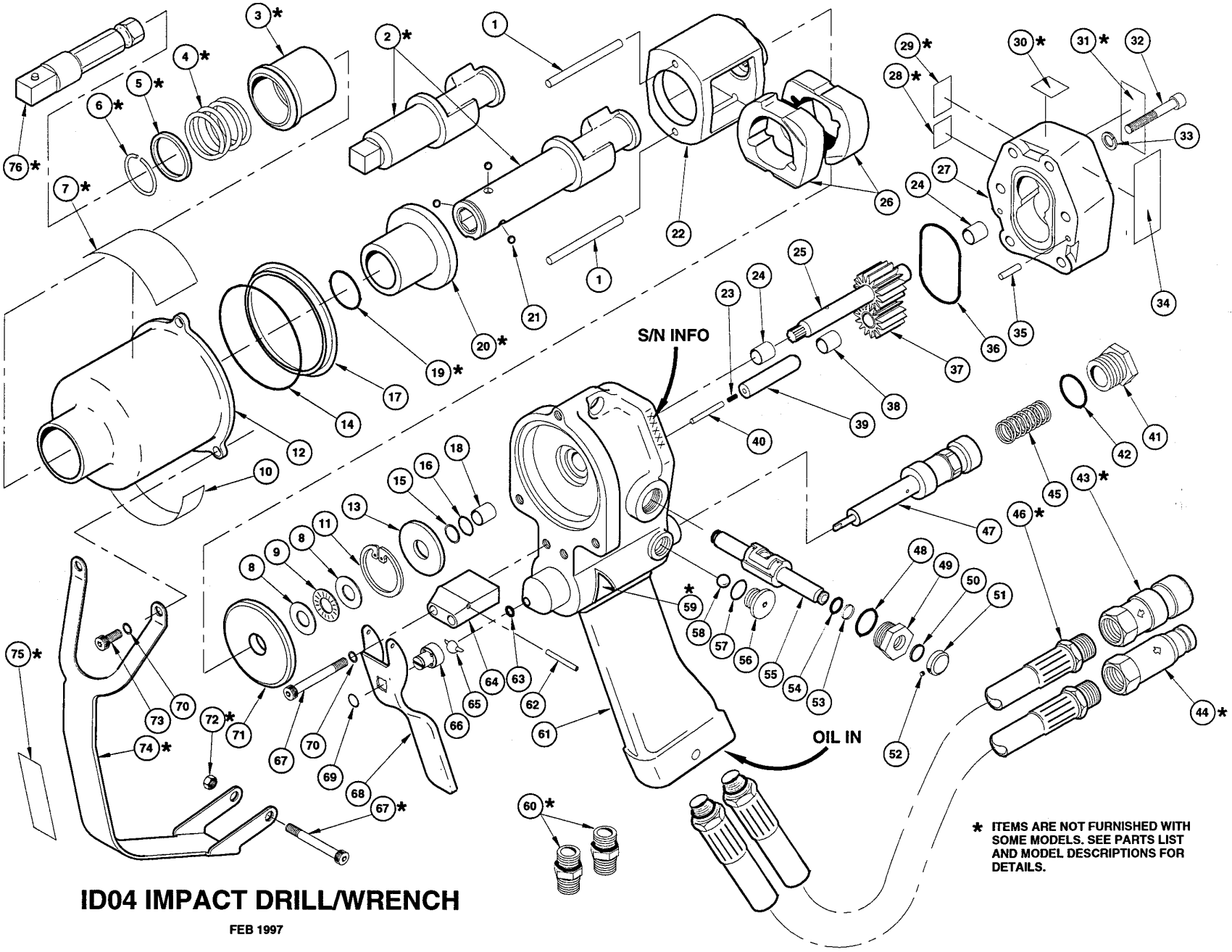
11. Install the impact mechanism. Tighten to 48 in. lb./5.4 Nm. If a trigger guard is used, install it at this time.

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 tool, 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.	Hydraulic power source not functioning.	Check power source for proper flow and pressure (4-12 gpm/15-45 lpm, 2000 psi/140 bar.)
	Couplers or hoses blocked.	Locate and remove obstruction.
	Hydraulic motor failure.	Inspect and repair.
	Hydraulic lines not connected.	Connect lines.
	Hammer pins broken.	Replace hammer pins.
	Reversing spool incorrectly installed.	See SERVICE INSTRUCTIONS.
	Long bolt.	Lubricate threads.
	Sockets or adapters too heavy or loose.	Use the correct impact type sockets or adapters.
Wrench runs too fast.	Incorrect hydraulic flow.	Check that hydraulic power source is producing 4-12 gpm/15-45 lpm at 2000 psi/140 bar.
	Supply and return hoses reversed.	Install hoses correctly. Observe the arrow on hose couplers.
Fluid leak at motor cap face.	Fasteners loose.	Tighten to recommended torque.
	Face o-ring worn or damaged.	Replace as required.
Performance low and seems to get worse rapidly.	Bearing failure.	Replace as required.
	Trigger spool worn.	Replace as required.
	Impact mechanism worn.	Repair or replace. See SERVICE INSTRUCTIONS.
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.



ID04 IMPACT DRILL/WRENCH

FEB 1997

* ITEMS ARE NOT FURNISHED WITH SOME MODELS. SEE PARTS LIST AND MODEL DESCRIPTIONS FOR DETAILS.

ID04 PARTS LIST

Item No	Part No	Qty	Description
1	31895	2	Hammer Pin
2	32150	1	Anvil, 1/2 in. Square Drive (models ID04820, ID0482001, ID04920, & ID0492001 only)
	31898	1	Anvil, 7/16 in. Quick Change (models ID04810, ID04810S, & ID0481001 only)
3	31902	1	Retaining Sleeve (7/16 Q.C. models)
4	31899	1	Retainer Spring (7/16 Q.C. models)
5	31900	1	Thrust Ring (7/16 Q.C. models)
6	31901	1	Thrust Ring Lock (7/16 Q.C. models)
7	17275	1	Warning Sticker (models ID04810, ID04810S, ID04820, & ID04920 only)
8	20761	2	Bearing Race
9	20762	1	Thrust Bearing
10	11354	1	OC/CC Sticker
11	06635	1	Retaining Ring
12	31904	1	Hammer Case
13	20767	1	Seal Back-up Washer1
14	01205	1	O-ring, 2-1/4 x 2-3/8 x 1/16 -035 90D ●
15	13995	1	Back-up Ring ●
16	00354	1	O-ring, 1/2 x 11/16 x 3/32 -112 70D ●
17	32029	1	Pilot Ring
18	20758	1	DU Bushing (incld with item 61)
19	00012	1	O-ring, 13/16 x 15/16 x 1/16 -019 70D ● (used only with p/n 32153, item 20)
20	31903	1	Hammer Case Bushing (models ID04810, ID04810S, IID0481001, D04820, & ID0482001 only)
	32153	1	Hammer Case Bushing U/W (models ID04920 & ID0492001 only) (requires item 19)
21	15966	3	Retainer Ball
22	31896	1	Hammer Frame
23	31665	1	Spring
24	05207	2	DU Bushing
25	20788	1	Main Shaft
26	31897	2	Hammer
27	20770	1	Motor Cap Assy (incl items 24 & 35)
28	28788	1	Manual Sticker (models ID0481001, ID0482001, & ID0492001 only)
29	29530	1	Sound Power Sticker (models ID0481001, ID0482001, & ID0492001 only)
30	28323	1	CE Sticker (models ID0481001, ID0482001, & ID0492001 only)
31	29149	1	Rotation Direction Sticker (models ID0481001, ID0482001, & ID0492001 only)
32	26297	6	Capscrew (land models only)
	18206	6	Capscrew (underwater models)
33	00231	6	Lockwasher (land models only)
	00231	6	Lockwasher (underwater models)
34	31743	1	ID04 Model Sticker
35	00713	2	Dowel Pin
36	01262	1	O-ring, 1-3/4 x 1-7/8 x 1/16 -031 70D ●
37	20768	1	Idler Gear
38	20760	1	DU Bushing
39	31246	1	Idler Shaft
40	31299	1	Plunger
41	20781	1	Spring Cap
42	01605	1	O-ring, .644 x .818 x .087 -908 90D ●
43	24058	1	Female Coupler Body (models ID04810S, ID0481001, ID0482001, ID04920, & ID0492001 only)
44	24059	1	Male Coupler Body (models ID04810S, ID0481001, ID0482001, ID04920, & ID0492001 only)
45	06617	1	Spring
46	28234	2	Hose Whip (model ID04810S only)
47	29313	1	Valve Spool Assembly
48	01604	2	O-ring, .755 x .949 x .097 -910 90D ●
49	31273	2	Seal Cap
50	02178	2	Wiper Seal ●
51	31247	2	End Cap
52	24874	4	Setscrew
53	07223	2	Back-up Ring ●
54	00106	2	O-ring, 3/8 x 1/2 x 1/16 -012 70D ●
55	31298	1	Reversing Spool Assy
56	03709	2	SAE Plug
57	03364	2	O-ring (part of item 56) ●
58	12100	2	Steel Ball
59	11207	1	Circuit "D" Sticker (models ID0481001, ID0482001, & ID049200 only)
60	00936	2	Adapter (models ID04810, ID0481001, ID0482001, ID04920, & ID0492001 only)
61	31741	1	Main Housing Assy (incld items 18, 24, & 63)
62	07970	1	Spirol Pin
63	00026	1	O-ring, 2-008 R16 ●
64	14021	1	Trigger Bracket
65	18919	1	Spool to Socket Adaptor
66	14019	1	Spool End Socket
67	09687	3	Capscrew (1 capscrew used for trigger guard mounting on models ID04810S, D0481001, ID042001, & ID0492001 only)
68	14024	1	Trigger
69	14028	1	Retaining Ring
70	09623	5	Lockwasher
71	30704	1	Spacer
72	06971	1	Locknut (used only with item 67)
73	00803	3	Capscrew
74	14022	1	Trigger Guard (models ID04810S, ID0481001, ID042001, & ID0492001 only)
75	25610	1	Railroad Help Desk Sticker (model ID04810S only)
76	05117	1	Adaptor, 7/16 in. QC x 1/2 in. Sq.

SEAL KIT P/N 32328

● Denotes part in seal kit

NOTE: Use Part Number, Part Name and Serial Number when ordering.

MODEL DESCRIPTIONS

ID04810 - 7/16 in. quick change chuck, USA version. No trigger guard. Furnished with 00936 adaptors only.

ID04810S - 7/16 in. quick change chuck, USA version. Furnished with trigger guard, couplers and whip hoses installed.

ID0481001 - 7/16 in. quick change chuck, CE (European Countries) version. Furnished with trigger guard, 00936 adaptors and couplers installed.

ID04820 - 1/2 in. square drive, USA version. No trigger guard. Furnished with 00936 adaptors only.

ID0482001 - 1/2 in. square drive, CE (European Countries) version. Furnished with trigger guard, 00936 adaptors and couplers installed.

ID04920 - 1/2 in. square drive, underwater usage , USA version. No trigger guard. Furnished with 00936 adaptors only. Hammer case bushing contains an o-ring.

ID0492001 - 1/2 in. square drive, underwater usage, CE (European Countries) version. Furnished with trigger guard, 00936 adaptors and couplers installed. Hammer case bushing contains an o-ring.

SPECIFICATIONS

Drive Size	1/2 inch square or 7/16 in. hex
Pressure Range	2000 psi/140 bar
Flow Range	4-12 gpm/15-45 lpm
Optimum Flow	4-9 gpm/15-34 lpm
Porting	-8 SAE O-ring
Weight (less couplers)	7.7 lbs/3.5 kg
Overall Length	9 inches/22.9 cm
Width	4.5 inches/11.4 cm
Height	10-1/2 inches/26.7 cm
Motor	Integral
Output Torque	500 ft lbs/675 Nm
Connect Size and Type*	3/8 NPT Pipe Fitting
Hose Whips & Quick Disconnect Couplers**	Yes
EHTMA Category	30 lpm @ 138 bar
Noise Level	Lwa 108

ACCESSORIES

02718	Impact Lubricant (for land models), 1 lb. can
03201	Impact Lubricant (for underwater models, 1 lb. can
05127	Adapter, 1/2 in. square female to 3/4 in. male
05079	7/16 in. Quick Change Chuck to 1/2 in. square female
05117	Adapter, 7/16 in. hex shank to 1/2 in. square male
07192	5/8 in. Quick Change Adapter to 1/2 in. square female
31951	ID04 Trigger Guard Kit

WOOD AUGER BITS, 7/16 in. Hex

27850	9/16 in. dia. x 8 in. carbide tipped auger bit (12 in. oal)
27851	11/16 in. dia. x 8 in. carbide tipped auger bit (12 in. oal)
27852	13/16 in. dia. x 8 in. carbide tipped auger bit (12 in. oal)
27853	15/16 in. dia. x 8 in. carbide tipped auger bit (12 in. oal)
27854	1-1/16 in. dia. x 8 in. carbide tipped auger bit (12 in. oal)
27855	9/16 in. dia. x 12 in. carbide tipped auger bit (16 in. oal)
27856	11/16 in. dia. x 12 in. carbide tipped auger bit (16 in. oal)
27857	13/16 in. dia. x 12 in. carbide tipped auger bit (16 in. oal)
27858	15/16 in. dia. x 12 in. carbide tipped auger bit (16 in. oal)
27859	1-1/16 in. dia. x 12 in. carbide tipped auger bit (16 in. oal)
27860	9/16 in. dia. x 18 in. carbide tipped auger bit (22 in. oal)
27861	11/16 in. dia. x 18 in. carbide tipped auger bit (22 in. oal)
27862	13/16 in. dia. x 18 in. carbide tipped auger bit (22 in. oal)
27863	15/16 in. dia. x 18 in. carbide tipped auger bit (22 in. oal)
27864	1-1/16 in. dia. x 18 in. carbide tipped auger bit (22 in. oal)

SOCKETS, 1/2 Square Drive

05108	1/2 in., double square 8-point, deep length
05109	9/16 in., double square 8-point, deep length
05110	5/8 in., double square 8-point, deep length
05111	11/16 in., double square 8-point, deep length
05112	3/4 in., double square 8-point, deep length
05113	13/16 in., double square 8-point, deep length
05114	7/8 in., double square 8-point, deep length
05115	15/16 in., double square 8-point, deep length
05116	1 in., double square 8-point, deep length
21755	Socket Set, double square 8-point, deep length, 1/2 square drive, 1/2 to 1-1/16 in. sizes

WARRANTY

Stanley Hydraulic Tools (hereinafter called "Stanley"), subject to the exceptions contained below, warrants new hydraulic tools for a period of one year from the date of sale to the first retail purchaser, or for a period of 2 years from the shipping date from Stanley, whichever period expires first, to be free of defects in material and/or workmanship at the time of delivery, and will, at its option, repair or replace any tool or part of a tool, or new part, which is found upon examination by a Stanley authorized service outlet or by Stanley's factory in Milwaukie, Oregon to be DEFECTIVE IN MATERIAL AND/OR WORKMANSHIP.

EXCEPTIONS FROM WARRANTY

NEW PARTS: New parts which are obtained individually are warranted, subject to the exceptions herein, to be free of defects in material and/or workmanship at the time of delivery and for a period of 6 months after the date of first usage. Seals and diaphragms are warranted to be free of defects in material and/or workmanship at the time of delivery and for a period of 6 months after the date of first usage or 2 years after the date of delivery, whichever period expires first. Warranty for new parts is limited to replacement of defective parts only. Labor is not covered.

FREIGHT COSTS: Freight costs to return parts to Stanley, if requested by Stanley for the purpose of evaluating a warranty claim for warranty credit, are covered under this policy if the claimed part or parts are approved for warranty credit. Freight costs for any part or parts which are not approved for warranty credit will be the responsibility of the individual.

SEALS & DIAPHRAGMS: Seals and diaphragms installed in new tools are warranted to be free of defects in material and/or workmanship for a period of 6 months after the date of first usage, or for a period of 2 years from the shipping date from Stanley, whichever period expires first.

CUTTING ACCESSORIES: Cutting accessories such as breaker tool bits are warranted to be free of defects in material and or workmanship at the time of delivery only.

ITEMS PRODUCED BY OTHER MANUFACTURERS: Components which are not manufactured by Stanley and are warranted by their respective manufacturers.

a. Costs incurred to remove a Stanley manufactured component in order to service an item manufactured by other manufacturers.

ALTERATIONS & MODIFICATIONS: Alterations or modifications to any tool or part. All obligations under this warranty shall be terminated if the new tool or part is altered or modified in any way.

NORMAL WEAR: any failure or performance deficiency attributable to normal wear and tear such as tool bushings, retaining pins, wear plates, bumpers, retaining rings and plugs, rubber bushings, recoil springs, etc.

INCIDENTAL/CONSEQUENTIAL DAMAGES: To the fullest extent permitted by applicable law, in no event will STANLEY be liable for any incidental, consequential or special damages and/or expenses.

FREIGHT DAMAGE: Damage caused by improper storage or freight handling.

LOSS TIME: Loss of operating time to the user while the tool(s) is out of service.

IMPROPER OPERATION: Any failure or performance deficiency attributable to a failure to follow the guidelines and/or procedures as outlined in the tool's operation and maintenance manual.

MAINTENANCE: Any failure or performance deficiency attributable to not maintaining the tool(s) in good operating condition as outlined in the Operation and Maintenance Manual.

HYDRAULIC PRESSURE & FLOW, HEAT, TYPE OF FLUID: Any failure or performance deficiency attributable to excess hydraulic pressure, excess hydraulic back-pressure, excess hydraulic flow, excessive heat, or incorrect hydraulic fluid.

REPAIRS OR ALTERATIONS: Any failure or performance deficiency attributable to repairs by anyone which in Stanley's sole judgement caused or contributed to the failure or deficiency.

MIS-APPLICATION: Any failure or performance deficiency attributable to mis-application. "Mis-application" is defined as usage of products for which they were not originally intended or usage of products in such a matter which exposes them to abuse or accident, without first obtaining the written consent of Stanley. PERMISSION TO APPLY ANY PRODUCT FOR WHICH IT WAS NOT ORIGINALLY INTENDED CAN ONLY BE OBTAINED FROM STANLEY ENGINEERING.

WARRANTY REGISTRATION: STANLEY ASSUMES NO LIABILITY FOR WARRANTY CLAIMS SUBMITTED FOR WHICH NO TOOL REGISTRATION IS ON RECORD. In the event a warranty claim is submitted and no tool registration is on record, no warranty credit will be issued without first receiving documentation which proves the sale of the tool or the tools' first date of usage. The term "DOCUMENTATION" as used in this paragraph is defined as a bill of sale, or letter of intent from the first retail customer. A WARRANTY REGISTRATION FORM THAT IS NOT ALSO ON RECORD WITH STANLEY WILL NOT BE ACCEPTED AS "DOCUMENTATION".

NO ADDITIONAL WARRANTIES OR REPRESENTATIONS

This limited warranty and the obligation of Stanley thereunder is in lieu of all other warranties, expressed or implied including merchantability or fitness for a particular purpose except for that provided herein. There is no other warranty. This warranty gives the purchaser specific legal rights and other rights may be available which might vary depending upon applicable law.

SALES & SERVICE DIRECTORY

NORTH AMERICA & CORPORATE HEADQUARTERS

Stanley Hydraulic Tools
3810 S.E. Naef Road
Milwaukie, Oregon U.S.A. 97267-5698
Tel: 503 659 5660
Fax: 503 652 1780

EUROPEAN HEADQUARTERS

Stanley Hydraulic Tools
West Quay Road
Sunderland Enterprise Park
Sunderland, England SR5 2TE
Tel: 44 (0) 191 501 1000
Fax: 44 (0) 191 501 1005

CENTRAL EUROPE

Stanley Hydraulic Tools
West Quay Road
Sunderland Enterprise Park
Sunderland, England SR5 2TE
Tel: 44 191 501 1000
Fax: 44 191 501 1005

NORTHERN EUROPE

Stanley Svenska Ab
Box 1054
Datavagen 51
S436 22 Askim, Sweden
Tel: 46 31 289775
Fax: 46 31 288099

SOUTHERN EUROPE

Stanley Tools S.p.A.
Via Trieste 1
22060 Figino Serenza (Co.)
Italy
Tel: 39 31 785111
Fax: 39 31 781766 / 781094

ASIA PACIFIC HEADQUARTERS

Stanley Hydraulic Tools Asia
No. 25 Senoke South
Woodland East Industrial Estate
Jurong Town
Singapore 2775
Tel: 65 7522001
Fax: 65 7522018
Telex: RS 23945 STANLEY

AUSTRALIA-NEW ZEALAND HEADQUARTERS

Stanley Hydraulic Tools
3810 S.E. Naef Road
Milwaukie, Oregon U.S.A. 97267-5698
Tel: 503 659 5660
Fax: 503 652 1780

CENTRAL & SOUTH AMERICA HEADQUARTERS

Stanley Hydraulic Tools
3810 S.E. Naef Road
Milwaukie, Oregon U.S.A. 97267-5698
Tel: 503 659 5660
Fax: 503 652 1780

STANLEY Hydraulic Tools

Stanley Hydraulic Tools
Division of the Stanley Works
3810 S.E. Naef Road
Milwaukie, Oregon 97267-5698
Phone: 503/659-5660
Fax: 503/652-1780