STANLEY®

BR72

HYDRAULIC BREAKER

SAFETY, OPERATION AND MAINTENANCE SERVICE MANUAL

⚠ WARNING

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

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

SVCE/MAINT USA
24144 11/2003 Ver 1

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

⚠ WARNING

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

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

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

SAFETY SYMBOLS

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

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

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

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

⚠ CAUTION — **This safety alert and signal word indicate a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.**

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

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

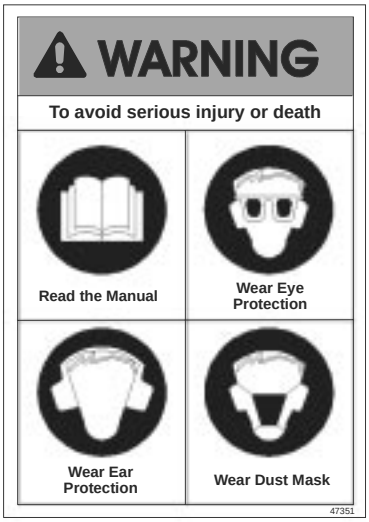
IMPORTANT — **This signal word indicates a situation which, if not avoided, may result in damage to the equipment.**

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

LOCAL SAFETY REGULATIONS

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

SAFETY PRECAUTIONS



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

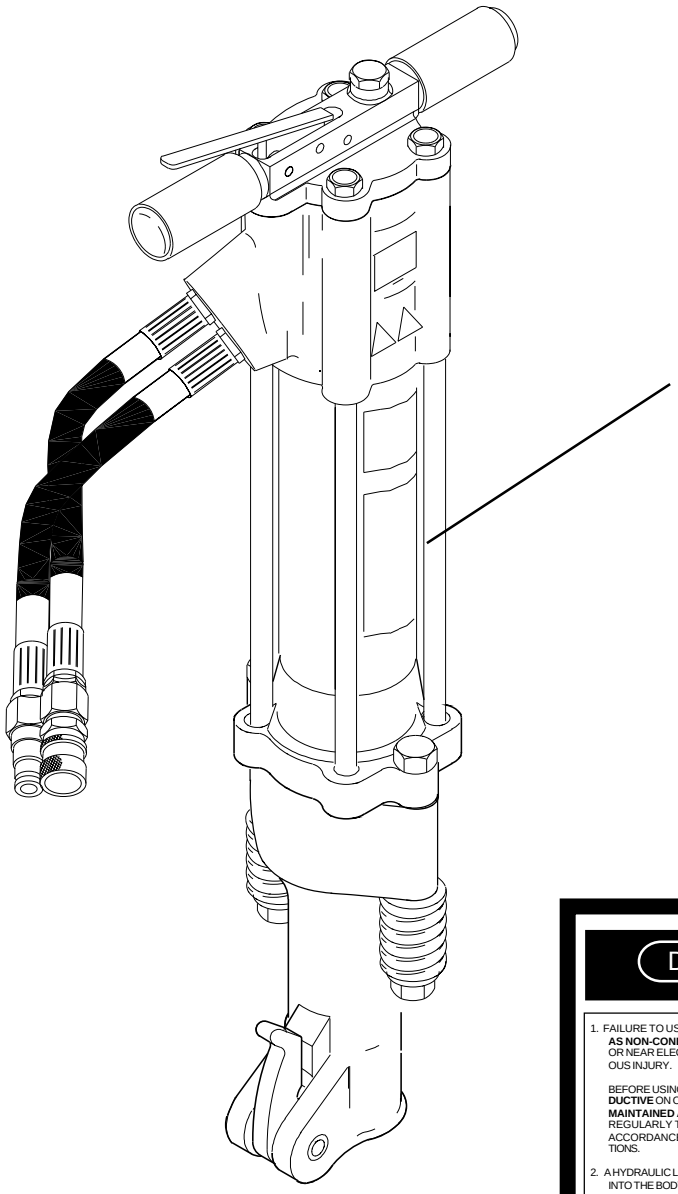
These safety precautions are given for your safety. Review them carefully before operating the tool and before performing general maintenance or repairs.

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

The BR72 Hydraulic Breaker will provide safe and dependable service if operated in accordance with the instructions given in this manual. Read and understand this manual and any stickers and tags attached to the tool and hoses 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, head protection, and safety shoes at all times when operating the tool.
- Do not inspect or clean the tool while the hydraulic power source is connected. Accidental engagement of the tool can cause serious injury.
- Supply hoses must have a minimum working pressure rating of 2500 psi/175 bar.
- Be sure all hose connections are tight.
- The hydraulic circuit control valve must be in the "OFF" position when coupling or uncoupling the tool. Wipe all couplers clean before connecting. Use only lint-free cloths. Failure to do so may result in damage to the quick couplers and cause overheating of the hydraulic system.
- Do not operate the tool at oil temperatures above 140°F/60°C. Operation at higher oil temperatures can cause operator discomfort and may damage the tool.
- Do not operate a damaged, improperly adjusted, or incompletely assembled tool.
- Do not weld, cut with an acetylene torch, or hardface the tool bit.
- To avoid personal injury or equipment damage, all tool repair, maintenance and service must only be performed by authorized and properly trained personnel.
- Do not exceed the rated limits of the tool or use the tool for applications beyond its design capacity.
- Always keep critical tool markings, such as lables and warning stickers legible.
- Always replace parts with replacement parts recommended by Stanley Hydraulic Tools.
- Check fastener tightness often and before each use daily.
- Never operate the tool if you cannot be sure that underground utilities are not present.
- Do not wear loose fitting clothing when operating the tool.

TOOL STICKERS & TAGS



STANLEY®

Stanley Hydraulic Tools
3810 SE Naef Road
Milwaukie, OR 97267

BR72	FLOW: 7-9 GPM/26-34 LPM PRESSURE: 1500-2000 PSI105-140 BAR ACCUMULATOR CHARGE: 600 PSI/41 BAR NITROGEN

12142 Name Tag Sticker

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

DANGER

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 CAUSE A LEAK OR BURST.

   C CHECK TOOL HOSE COUPLERS AND CONNECTORS DAILY FOR LEAKS. **DO NOT** FEEL FOR LEAKS WITH YOUR HANDS. CONTACT WITH A LEAK MAY RESULT IN SEVERE PERSONAL INJURY.

IMPORTANT

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

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

TAG TO BE REMOVED ONLY BY TOOL OPERATOR.

SEE OTHER SIDE

DANGER

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

3. MAKE SURE HYDRAULIC HOSES ARE PROPERLY CONNECTED TO THE TOOL BEFORE PRESSURING SYSTEM. SYSTEM PRESSURE HOSE MUST ALWAYS BE CONNECTED TO TOOL "IN" PORT. SYSTEM RETURN HOSE MUST ALWAYS BE CONNECTED TO TOOL "OUT" PORT. REVERSING CONNECTIONS MAY CAUSE REVERSE TOOL OPERATION WHICH CAN RESULT IN SEVERE PERSONAL INJURY.

4. 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.

7. TO AVOID PERSONAL INJURY OR EQUIPMENT DAMAGE, ALL TOOL REPAIR MAINTENANCE AND SERVICE MUST ONLY BE PERFORMED BY AUTHORIZED AND PROPERLY TRAINED PERSONNEL.

IMPORTANT

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

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

TAG TO BE REMOVED ONLY BY TOOL OPERATOR.

SEE OTHER SIDE

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

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.

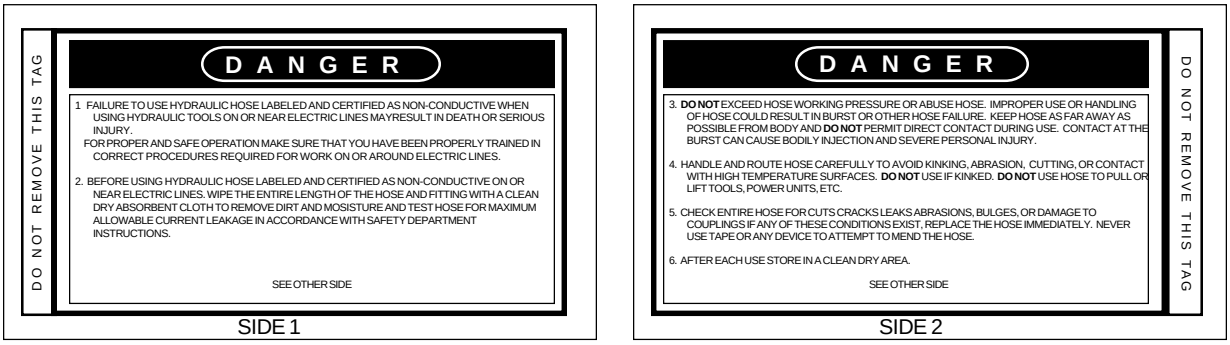
Hoses ❷ and ❸ listed above are **conductive** and **must never** be used near electrical conductors.

HOSE SAFETY TAGS

To help ensure your safety, the following DANGER tags are attached to all hose purchased from Stanley Hydraulic Tools. DO NOT REMOVE THESE TAGS.

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

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



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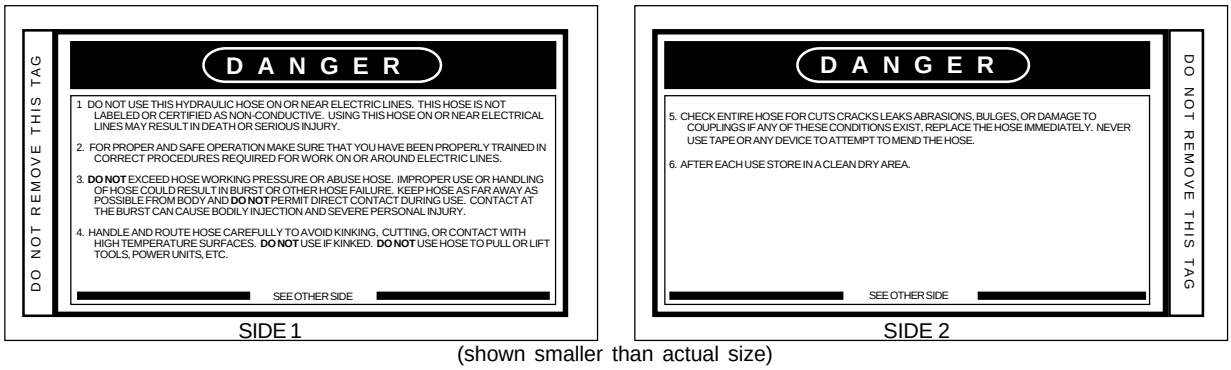
THE TAG SHOWN BELOW IS ATTACHED TO "CONDUCTIVE" HOSE.



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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.

HTMA REQUIREMENTS

Hydraulic System Requirements	Tool Category C (20L pm at 138bar BHTMA CATEGORY) Type I	D (30L pm at 138bar BHTMA CATEGORY) Type II	E (40L pm at 138bar BHTMA CATEGORY)	Type III
Flow rate Tool Operating Pressure *(at the power supply outlet)*	4-6 gpm (15-23 lpm) 2000 psi (138 bar)	7-9 gpm (26-34 lpm) 2000 psi (138 bar)	10.5-11.6 gpm (36-44 lpm) 2000 psi (138 bar)	11-13 gpm (42-49 lpm) 2000 psi (138 bar)
System relief valve setting *(at the power supply outlet)*	2100-2250 psi (145-155 bar)	2100-2250 psi (145-155 bar)	2100-2250 psi (145-155 bar)	2100-2250 psi (145-155 bar)
Maximum back pressure *(at tool end of the return hose)*	200 psi (14 bar)	200 psi (14 bar)	200 psi (14 bar)	200 psi (14 bar)
Measured at a max. fluid viscosity of: *(at min. operating temperature)*	400 ssu* (82 centistokes)	400 ssu* (82 centistokes)	400 ssu* (82 centistokes)	400 ssu* (82 centistokes)
Temperature Sufficient heat rejection capacity to limit max. fluid temperature to: *(at max. expected ambient temperature)*	140° F (60° C)	140° F (60° C)	140° F (60° C)	140° F (60° C)
Min. cooling capacity at a temperature difference of between ambient and fluid temps **NOTE:** Do not operate the tool at oil temperatures above 140° F (60° C). Operation at higher temperatures can cause operator discomfort at the tool.	3 hp (2.24 kW) 40° F (22° C)	5 hp (3.73 kW) 40° F (22° C)	6 hp (4.47 kW) 40° F (22° C)	7 hp (5.22 kW) 40° F (22° C)
Filter Min. full-flow filtration Sized for flow of at least: *(For cold temp. startup and max. dirt-holding capacity)*	25 microns 18 gpm (68 lpm)	25 microns 30 gpm (114 lpm)	25 microns 35 gpm (132 lpm)	25 microns 40 gpm (151 lpm)
Hydraulic fluid Petroleum based *(premium grade, anti-wear, non-conductive)* Viscosity *(at min. and max. operating temps)* **NOTE:** When choosing hydraulic fluid, the expected oil temperature extremes that will be experienced in service determine the most suitable temperature viscosity characteristics. Hydraulic fluids with a viscosity index over 140 will meet the requirements over a wide range of operating temperatures.	100-400 ssu* (20-82 centistokes)	100-400 ssu* (20-82 centistokes)	100-400 ssu* (20-82 centistokes)	100-400 ssu* (20-82 centistokes)

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

OPERATION

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.

PRE-OPERATION PROCEDURES

CHECK POWER SOURCE

1. Using a calibrated flowmeter and pressure gauge, check that the hydraulic power source develops a flow of 7-9 gpm/ 26-34 lpm at 2000 psi/140 bar.

2. Make certain the hydraulic power source is equipped with a relief valve set to open at 2250 psi/155 bar maximum.

INSTALL TOOL BIT

1. Rotate the latch on the breaker foot downward (pointing away from the tool).

2. Insert the tool bit into the foot and pull the latch up to lock the tool bit in place.

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 return hoses first and disconnect them last to minimize or avoid trapped pressure within the tool.

3. Observe flow indicators stamped on hose couplers to ensure that fluid flow is in the proper direction. The female coupler on the tool hose is the inlet coupler.

4. Move the hydraulic circuit control valve to the ON position to operate the tool.

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

OPERATION PROCEDURES

1. Observe all safety precautions.

2. Install the appropriate tool bit for the job.

3. Place the bit firmly on the surface to be broken.

4. Squeeze the trigger to start the breaker. Adequate down pressure is very important. When the tool bit breaks through the obstruction or becomes bound, release the trigger and reposition the tool bit.

NOTE:
Partially depressing the trigger allows the tool to run at slow speed. Slow-speed operation permits easier starting of the tool bit into the work surface.

5. To start, break an opening (hole) in the center of the surface. After making a hole, break portions of the material into the original opening. For best productivity, the breaking should be done around the original hole.

The size of the broken material will vary with the strength and thickness of the base material and the amount of any reinforcement wire or rebar.

Harder material or more reinforcing wire or rebar will require taking smaller bites. To determine the most effective bite, start with 2 in. / 50 mm or smaller bites.

Bites can then be gradually increased until the broken piece becomes too large, requiring increased time to break off the piece.

Sticking of the tool bit occurs when too large a bite is being taken and the tool bit hammers into the material without the material fracturing. This causes the tool bit to become trapped in the surrounding material.

COLD WEATHER OPERATION

If the breaker is to be used during cold weather, preheat the hydraulic fluid at low engine speed. When using the normally recommended fluid, fluid temperature should be at or above 50° F/10° C (400 ssu/82 centistokes) before use.

Damage to the hydraulic system or breaker can result from use with fluid that is too viscous or thick.

EQUIPMENT PROTECTION & CARE

NOTICE

In addition to the Safety Precautions on page 4 & 5 of this manual, observe the following for equipment protection and care.

- Make sure all couplers are wiped clean before connection.
- The hydraulic circuit control valve must be in the “OFF” position when coupling or uncoupling hydraulic tools. Failure to do so may result in damage to the quick couples and cause overheating of the hydraulic system.
- Always store the tool in a clean dry space, safe from damage or pilferage.
- Make sure the circuit PRESSURE hose (with male quick disconnect) is connected to the “IN” port. The circuit RETURN hose (with female quick disconnect) is connected to the opposite port. Do not reverse circuit flow. This can cause damage to internal seals.
- Always replace hoses, couplings and other parts with replacement parts recommended by Stanley Hydraulic Tools. Supply hoses must have a minimum working pressure rating of 2500 psi/172 bar.
- Do not exceed the rated flow (see Specifications) page 14 in the manual for correct flow rate and model number. Rapid failure of the internal seals may result.
- Always keep critical tool markings, such as warning stickers and tags legible.
- Do not force a small breaker to do the job of a large breaker.
- Keep tool bit sharp for maximum breaker performance. Make sure that tool bits are not chipped or rounded on the striking end.
- Never operate a breaker without a tool bit or without holding it against the work surface. This puts excessive strain on the breaker foot.
- Tool repair should be performed by experienced personnel only.
- Make certain that the recommended relief valves are installed in the pressure side of the system.
- Do not use the tool for applications for which it was not intended.

TROUBLESHOOTING

Tool does not run.	Power unit not functioning.	Check power unit for proper flow and pressure (7-9 gpm/26-34 lpm, 1500-2000 psi/105-140 bar).
	Couplers or hoses blocked.	Remove restriction.
	Pressure and return line hoses reversed at ports.	Be sure hoses are connected to their proper ports.
	Mechanical failure of piston or automatic valve.	Disassemble breaker and inspect for damaged parts.
Tool does not hit effectively.	Power unit not functioning.	Check power unit for proper flow and pressure (7-9 gpm/26-34 lpm, 1500-2000 psi/105-140 bar).
	Couplers or hoses blocked.	Remove restriction.
	Low accumulator charge (pressure hose will pulse more than normal).	Recharge accumulator. Replace diaphragm if charge loss continues.
	Fluid too hot (above 140°F/60°C).	Provide cooler to maintain proper fluid temperature (130°F/55°C maximum).
	The anvil is not sliding properly in the foot bore.	Remove, clean and lubricate with anti-seize,replace as required.
Tool operates slow.	Low gpm supply from power unit.	Check power unit for proper flow (7-9 gpm/26-34 lpm).
	High backpressure.	Check hydraulic system for excessive backpressure (over 200 psi/14 bar).
	Couplers or hoses blocked.	Remove restriction.
	Orifice plug blocked.	Remove restriction.
	Fluid too hot (above 140°F/60°C) or too cold (below 60°F/16°C).	Check power unit for proper fluid temperature. Bypass cooler to warm the fluid or provide cooler to maintain proper temperature.
	Relief valve set too low.	Adjust relief valve to 2100-2250 psi/145-155 bar.
Tool gets hot.	Hot fluid going through tool.	Check power unit. Be sure flow rate is not too high causing part of the fluid to go through the relief valve. Provide cooler to maintain proper fluid temperature (140°F/60°C max). Check relief valve setting. Eliminate flow control devices.
Fluid leakage on tool bit	Lower piston seal failure.	Replace seal.
Fluid leakage around trigger.	Valve spool seal failure.	Replace seals.

CHARGING THE ACCUMULATOR

ACCUMULATOR TESTING PROCEDURE

To check or charge the accumulator the following equipment is required:

31254 Charge Kit: which includes the following.
• Accumulator Tester (Part Number 02835).
• Charging Assembly (Part Number 15304) (15304 includes a liquid filled gauge w/snub valve, hose and fittings).

• NITROGEN bottle with an 800 psi/55 bar minimum charge.(Not included in 31254 kit)

1. Remove the plug from the handle or handle pivot.

2. Holding the chuck end of Accumulator Tester (Part Number 02835) turn the gauge fully counterclockwise to ensure that the stem inside the chuck is completely retracted.

3. Thread the tester onto the accumulator charging valve. Do not advance the gauge-end into the chuck-end. Turn as a unit. Seat the chuck on the accumulator charging valve and hand tighten only.

4. Advance the valve stem of the tester by turning the gauge-end clockwise until a pressure is read on the gauge (charge pressure should be 500-700 psi/34-48 bar).

5. If pressure is OK unscrew the gauge-end from the chuck to retract the stem, then unscrew the entire tester assembly from the accumulator charging valve. If pressure is low, charge the accumulator as described in the following paragraph.

6. Install the plug.

ACCUMULATOR CHARGING

1. Perform steps 1 through 4 of the accumulator testing procedure above.

2. Connect the chuck of the charging assembly to the charging valve on the accumulator tester or, if preferred, remove the tester from the charging valve and connect the charging assembly chuck directly to the charging valve.

3. Adjust the snub valve to a charging pressure of 600 psi/42 bar. Note: While watching the pressure gauge, open snub valve slowly until it reaches the proper charge pressure (600-700 psi).

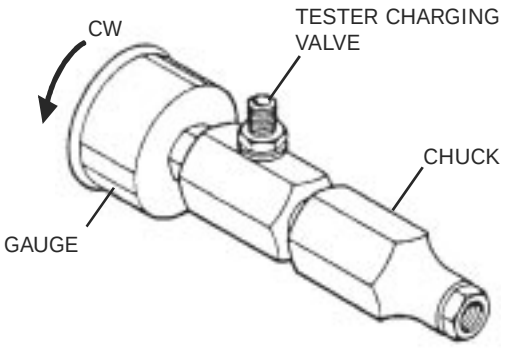
NOTE:
It may be necessary to set the gauge at 650-700 psi/45-48 bar to overcome any pressure drop through the charging system.

4. When the accumulator is fully charged close the snub valve on the charging assembly hose and remove the charging assembly chuck from the accumulator tester or tool charging valve.

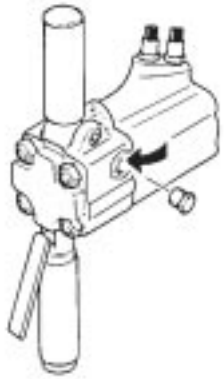
5. If the accumulator tester has been used, be sure to turn the gauge-end fully counterclockwise before removing the tester from the charging valve of the tool. Install the valve cap.

CHARGING THE ACCUMULATOR

Charging the Accumulator (BR72125S & BR72135S)

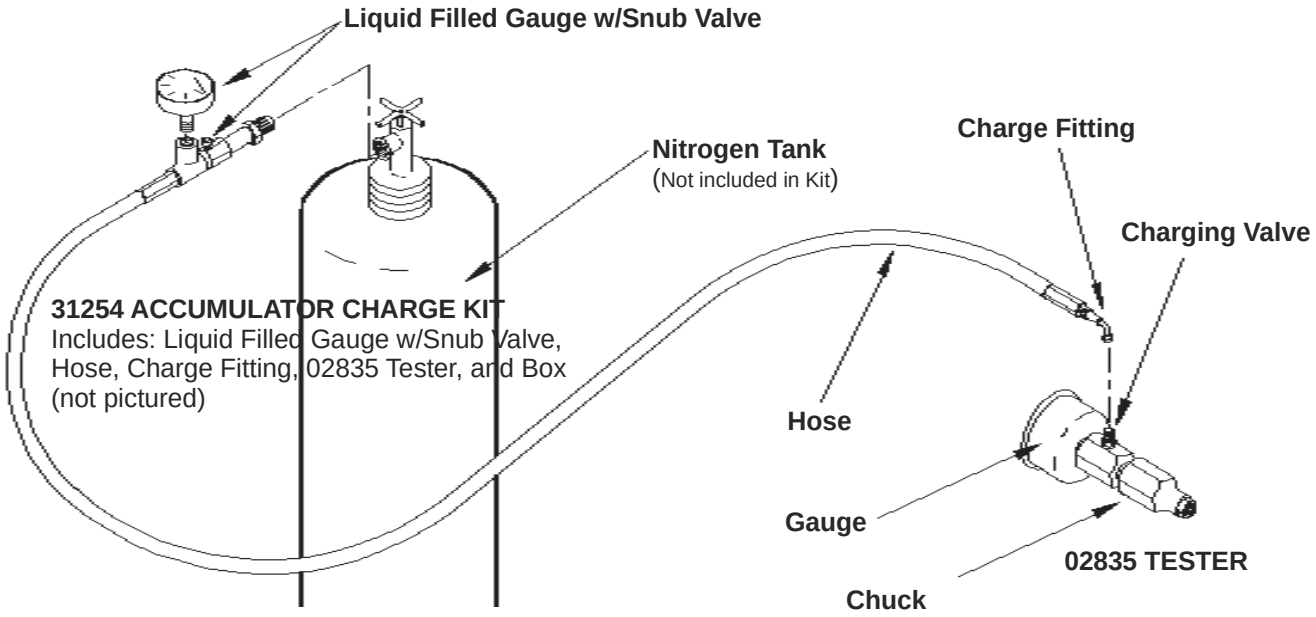


ACCUMULATOR TESTER (P/N 02835)

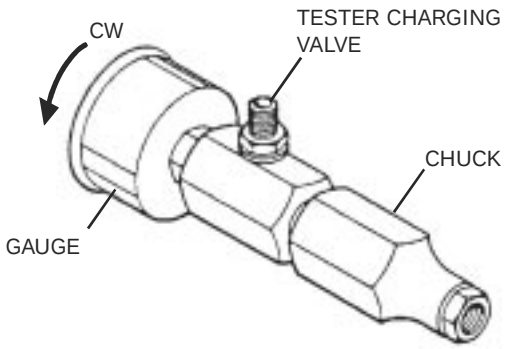


LOCATION OF CHARGING VALVE

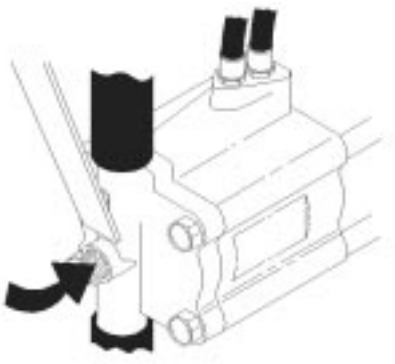
Figure 2



Charging the Accumulator (BR72120 & BR72130)



ACCUMULATOR TESTER (P/N 02835)



LOCATION OF CHARGING VALVE

Figure 2

SPECIFICATIONS

Pressure Range	1500-2000 psi/105-140 bar
Flow Range	7-9 gpm / 26-34 lpm
Optimum Flow	8 gpm / 30 lpm
Maximum Back Pressure	250 Psi/17 bar
Couplers	HTMA Flush Face (Per NFPA T3.20.15/ISO 16028)
Connect Size & Type	3/8 in. Male Pipe Hose Ends
Weight	59 lbs. / 27 kg
Overall Length	28 in. / 71 cm
Overall Width	14-1/4 in. / 36 cm
Max. Fluid Temperature	140°F / 60°C
System Type	Open Center
Port Size	SAE 8 O-ring
HTMA Class II	7-9 gpm @ 2000 psi
 EHTMA Category	30 lpm @ 138 bar

ACCESSORIES

1-1/8 in. Hex x 6 in. Shank (BR72120 & BR72125S Models)

Clay Spade, 5-1/2 in. Blade	02321
Asphalt Cutter, 5 in. Blade - 11 in. Long UC	02332
Moil Point - 14 in. Long UC	02333
3 in. Chisel - 14 in. Long UC	02334
Chisel Point - 14 in. Long UC	03990
Ground Rod Driver, 1 in. Rod	04176
Asphalt Wedge	08106

1-1/4 in. Hex x 6 in. Shank (BR72130 & BR72135S Models)

Asphalt Cutter, 5 in. / 13 cm Blade - 11 in. / 28 cm Long UC	02335
Moil Point - 14 in. / 36 cm Long UC	02336
3 in. Chisel - 14 in. / 36 cm Long UC	02337
1 in. Chisel, Heavy Duty - 14 in. / 36 cm Long UC	02338
Ground Rod Driver, 1 in. / 25 mm Rod	04367
Moil Point, Heavy Duty - 18 in. / 146 cm Long UC	04404
Clay Spade, 8 in. / 20 cm Blade	04405
Brick Wedge	08118
Asphalt Wedge	08119
Clay Spade, 5-1/2 in. / 14 cm Blade	09262
Detachable Shank	17782
Tamping Pad, 6 in. Square	17783

Test Equipment

Accumulator Charge Assembly (incl. Liquid Filled Gauge w/ Valve, Hose, & Charge Fitting)	15304
Accumulator Tester	02835
20 gpm/75 lpm Flowmeter	03189
Flow and Pressure Tester	04182
Accumulator Charge Kit	31254

SERVICE

Good maintenance practice keeps the breaker on the job and increases its service life.

The most important maintenance practice is to keep the hydraulic fluid clean at all times. Contaminated hydraulic fluid causes rapid wear and/or failure of internal parts.

Follow the procedure contained in the HYDRAULIC SYSTEM REQUIREMENTS section of the manual to ensure peak performance from the tool.

Never disassemble the tool unless proper trouble -shooting procedures have isolated the problem to an internal part. Disassemble it only to the extent necessary to replace the defective part. KEEP CONTAMINANTS SUCH AS DIRT AND GRIT AWAY FROM INTERNAL PARTS AT ALL TIMES.

Always determine and correct the cause of the problem prior to assembly. Further wear and tool failure can result if the original cause is not corrected.

BREAKER DISASSEMBLY

PRIOR TO DISASSEMBLY

• Clean exterior of tool.
• Obtain Seal Kit (Part Number 13552). Replace all seals exposed during disassembly. Note orientation of seals before removing them. Install new seals in the same way.

DISASSEMBLY

1. Secure the breaker in a bench vise with the “IN” and “OUT” ports up, clamping on the flow sleeve tube between the side rods. Soft vise jaws are recommended.

2. Remove the pigtail hose assemblies.

3. Remove the plug from the side of the handle pivot block (BR72125S & BR72135S) or remove the plug from the top of the handle (BR72120 & BR72130) and discharge the accumulator.

4. Remove the four side rods.

⚠ WARNING
Discharge the accumulator.

5. Remove the top plate, then remove the handle pivot block with the two handles attached (BR72125S & BR72135S). On the BR72120 & BR72130 remove the handle.

6. If necessary, remove the two handles from the pivot block by removing the pivot screw securing each handle (BR72120S & BR72135S only).

7. If necessary, the trigger and the lever can be removed from the trigger handle by driving out the spirol pin securing each part.

8. To service the foot assembly, proceed as follows:

A. The latch, detent, spring and cone washers are accessible when the latch bolt is removed (15/16-inch hex).

Note:
Before removing the hex bushing, note the alignment of hex flats with latch bolt centerline (see figure 1) so that the new hex bushing is installed with the same alignment.

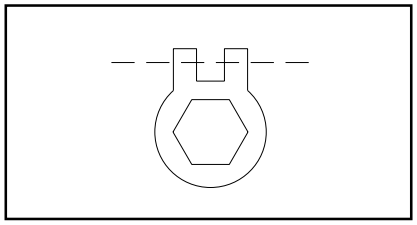


Figure 1. Hex Alignment with Latch Bolt

B. Use a 1-3/8 inch/35 mm diameter steel rod 10 inches/25 cm long and use the rod to push the hex bushing from the flanged end of the foot (toward the latch end). A 25 ton press is required.

C. Place the new hex bushing, O. D. tapered end first into the foot bore and press into place.

D. The cup seal and rod wiper should be removed with proper o-ring tools to avoid damage to the seal surfaces. (Note orientation above and below aluminum washer).

9. Remove the accumulator diaphragm and on-off valve spool from the accumulator valve block, taking care not to damage the valve stem. The spool, bushing and associated seals will

come out as an assembly.
10. Remove the accumulator valve block from the flow sleeve by tapping on the underside of the valve block with a plastic or rubber hammer. Tap on alternate sides to ensure that the valve block comes out straight without binding. Turn the valve block upside down to remove the valve spring.

11. Remove the piston from the flow sleeve assembly.

12. Clamp the accumulator valve block in a bench vise with "IN" and "OUT" ports up.

IMPORTANT

Over tightening the vise can distort the block.

13. Remove the porting block from the accumulator valve block with a 3/8-16 thread slide hammer or Tamper Sleeve Tool (Part Number 01120).

14. To disassemble the flow sleeve and automatic valve body assembly, proceed as follows:

A. Remove the piston if not previously removed.

B. Place the flow sleeve assembly, automatic valve body down, on the Flow Sleeve Removal Tool (Part Number 04919) which in turn is placed on th Flow Sleeve Removal Tube Part Number 04910).

C. Using an arbor press and an aluminum disc to protect the flow sleeve, push on the flow sleeve to remove the automatic valve body from the flow sleeve tube.

IMPORTANT

Use a rag in the bottom of the Removal tube to protect the Automatic valve body when it Drops out.

D. The automatic valve, four 1/4 x 1-1/2 inch /38mm long push pins (from the flow sleeve) and Two 3/16 x 1-1/4 inch/32mm long push pins from the automatic valve body will come out.

E. To remove the flow sleeve from the flow sleeve tube, remove the automatic valve body and associated parts from within the flow sleeve removal tube, and continue pushing on the flow sleeve until it drops out.

IMPORTANT

Use a rag in the bottom of the removal tube to protect the flow sleeve.

BREAKER ASSEMBLY

PRIOR TO ASSEMBLY

• Clean all parts with a degreasing solvent.

• Obtain seal kit (Part Number 13552) so all seals exposed during disassembly can be replaced during assembly.

• Ensure that all seals that were exposed have been replaced with new parts.

• Apply clean grease or o-ring lubricant to all parts during reassembly.

Note:
For orientation of parts identified in the following procedures, see the parts exploded view at the back of this manual.

1. Check all parts for evidence of excessive wear, scoring, or obvious damage. Pay particular attention to seal and other running surfaces, looking for scratches or other signs of fluid contamination caused defects. Dirty or water contaminated fluid can cause scratches on running component surfaces.

2. Examine all exposed seals and o-rings for worn spots or damage caused by overheating or ingestion of contaminants. Although all exposed o-rings and seals must be replaced during assembly of the unit, this inspection should be performed to help identify related faulty components and the cause of an experienced or potential malfunction.

3. All components exhibiting excessive wear or deep scratches can usually be touched up using emery cloth. Thoroughly clean all parts before assembly.

4. Apply clean grease or o-ring lubricant to all close fitting parts and seals during assembly.

SERVICE

ASSEMBLY

1. Using an arbor press and an aluminum disc or Accumulator Cylinder Puller (Part Number 05640) to protect the flow sleeve, push the flow sleeve (with seven holes on its end facing up) into flow sleeve tube (o-ring groove up) until it is flush with the tube. Be sure to lubricate the entire bore of the flow sleeve tube prior to assembly.

2. Install the four 1/4 x 1-1/2 inch/38mm push pins, with ground face end up, in the flow sleeve.

3. Install the two 3/16 x 1-1/4 inch/32 mm push pins with the ground face end up, in the automatic valve body. Install the automatic valve, small diameter first into the automatic valve body.

IMPORTANT

The push pins must be installed such that the flat ground surfaces bear on the flange of the automatic valve.

4. Place the automatic valve body, with proper roll pin alignment and with the side holes up, on top of the flow sleeve. Allow the automatic valve to drop and pilot into the bore of the flow sleeve.

5. Use an aluminum disc or Accumulator Cylinder Puller (Part Number 05640) to protect parts, then push the automatic valve body into the flow sleeve tube until the valve body shoulder stops on the top of the flow sleeve tube.

6. Install the piston, small end first, into flow sleeve assembly from the automatic valve body end.

7. Install the porting block into the flow sleeve assembly with proper roll pin alignment.

8. Place the accumulator valve block in a bench vise being careful not to over-tighten or distort the block.

9. Push the flow sleeve assembly into the accumulator valve block. It may be necessary to tap on the end of the flow sleeve tube with a rubber or plastic hammer. Be sure to tap on opposite sides to make sure that the assembly seats properly.

10. Remove assembly from the vise and clamp on the flow sleeve tube with “IN” and “OUT” ports facing up.

11. Slide the foot assembly over the piston and drive the foot into the flow sleeve tube by tapping the end of the foot with a plastic or rubber hammer. Align the foot latch with the trigger.

12. Replace (in this order) the spring, valve spool and bushing (with rod wiper facing out of the accumulator valve block) in valve spool bore. The bushing should project from the accumulator valve block approximately 0.200 inch/5mm.

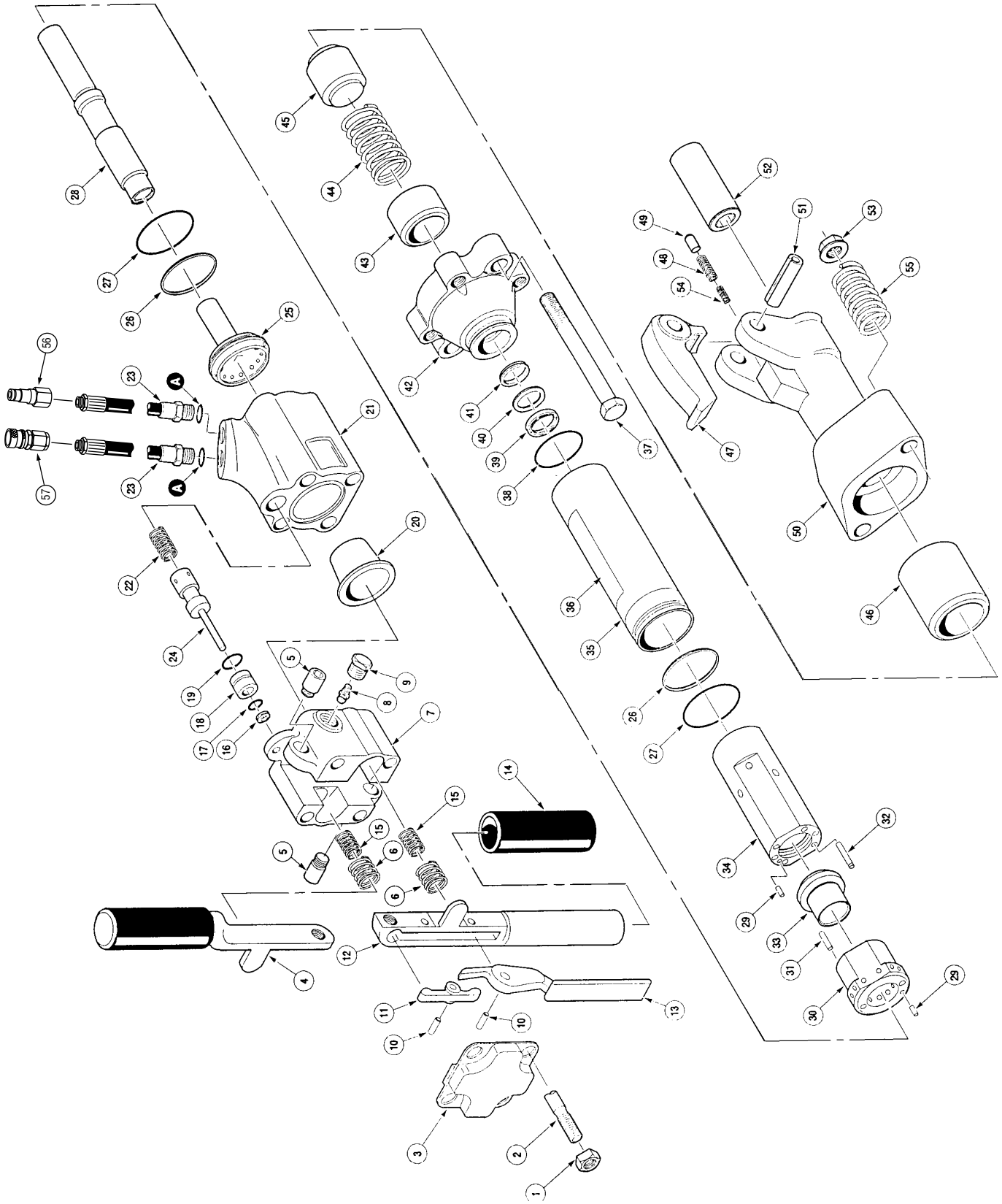
13. Apply a light coating of WD40® lubricant to the accumulator diaphragm and install in the accumulator bore.

14. (BR72125S & BR72135S) Place the handle pivot block (with handles attached) on the accumulator valve block). Then position the top plate on the pivot block. Lubricate the pivot screw O.D. And the rubbing surfaces of the handles with anti-seize compound.
(BR72120 & BR72130) Place the handle on the accumulator valve block with the trigger side facing the latch on the breaker foot

15. Install the four side rods. Tighten the side rods in 15 ft lb/20 Nm increments to 60 ft lb/80 Nm.

16. Charge the accumulator (See the maintenance section of this manual for the charging procedure).

BR72125S & BR72135S PARTS ILLUSTRATION



BR72125S & BR72135S PARTS LIST

ITEM	P/N	QTY	DESCRIPTION
1	04374	4	LOCK NUT 5/8 -18
2	08087	4	SIDE RIDE
3	28494	1	TOP PLATE
4	28369	1	HANDLE
5	20508	2	PIVOT SCREW
6	20540	2	SPRING
7	20505	1	HANDLE, PIVOT BLOCK
8	20499	1	CHARGE VALVE
9	20510	1	MODIFIED PLUG
10	20500	2	SPIROL PIN 1/4 x 1
11	20511	1	LEVER
12	29045	1	TRIGGER HANDLE
13	20502	1	TRIGGER
14	02494	2	HANDLE GRIP
15	20541	2	SPRING
	07699		BUSHING ASSEMBLY (Incl items 16-19)
16	04056	1	ROD WIPER 5/16 x 9/16
17	01362	1	O-RING 2-011 R16
18	04057	1	BUSHING
19	00293	1	O-RING 2-115 R17
20	07479	1	ACCUMLATOR DIAPHRAGM
21	11588	1	ACCUMULATOR VALVE BLOCK
22	04058	1	SPRING
23	01652	2	PIGTAIL HOSE ASSEMBLY
24	20515	1	VALVE SPOOL
25	09640	1	PORTING BLOCK
26	04379	2	O-RING 2-145 R17
27	04381	2	BACK-UP RING
28	19443	1	PISTON
29	02900	2	ROLL PIN
30	07480	1	AUTOMATIC VALVE BODY
31	04571	2	PUSH PIN
32	04605	4	PUSH PIN
33	04382	1	AUTOMATIC VALVE
34	12140	1	FLOW SLEEVE
35	04383	1	FLOW SLEEVE TUBE
36	12142	1	DECAL, NAME TAG
37	12147	2	HHCS 5/8 -18 UNF x 6-1/2
38	02022	1	O-RING 2-228 R16
39	34092	1	CUP SEAL
40	09642	1	BACK-UP WASHER
41	03127	1	WIPER RING
42	12144	1	ADAPTER BLOCK
43	12143	1	UPPER ANVIL STOP
44	12146	1	SPRING
45	12141	1	ANVIL
	12149		BREAKER FOOT ASSEMBLY 1-1/8
	12150		BREAKER FOOT ASSEMBLY 1-1/4†
46	12145	1	ANVIL BLOCK*
47	01837	1	LATCH CASTING*
48	01744	1	SPRING*
49	08411	1	DETENT*
50	12151	1	BREAKER FOOT*
51	12155	1	SPIROL PIN*
52	12153	1	HEX BUSHING 1-1/8*
	12154	1	HEX BUSING 1-1/4* †
53	12307	2	LOCKING FLANGE NUT
54	18903	1	COIL SPRING*
55	12148	2	SPRING
56	25059	1	MALE COUPLER
57	24058	1	FEMALE COUPLER
	49000	1	MANUAL, OPERATION

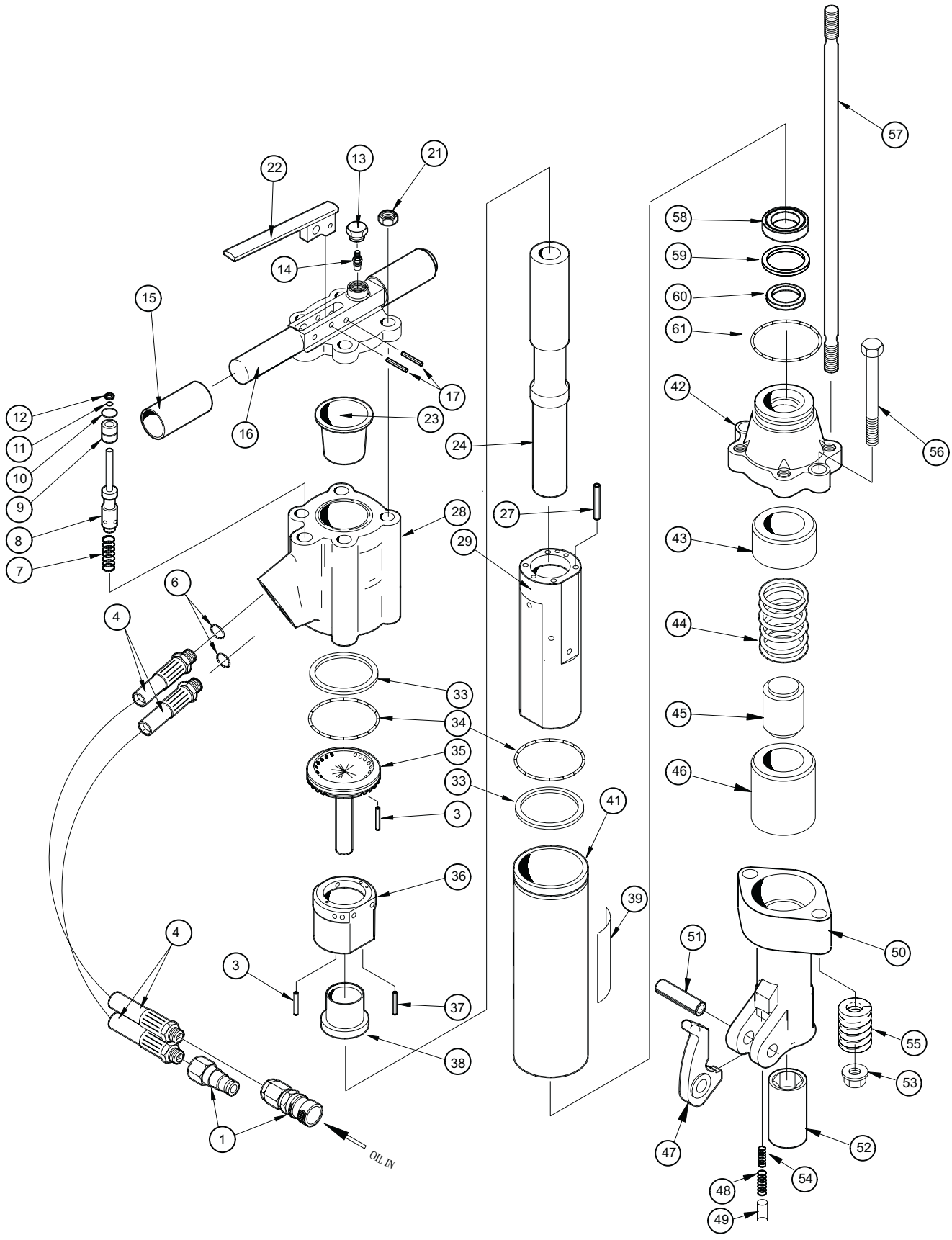
MODEL DESIGNATIONS	
BR72125S	1-1/8 Spring Handle Model
BR72135S	1-1/4 Spring Handle Model

SEAL KIT PART NUMBER 13552		
00293	O-RING	1
01362	O-RING	1
01604	O-RING	1
01605	O-RING	2
02022	O-RING	1
03127	ROD WIPER	1
04056	ROD WIPER	1
04379	O-RING	2
04381	BACK-UP RING	2
09467	CUP SEAL	1

* PART OF BREAKER FOOT ASSEMBLY

† MODEL BR72135S ONLY

BR72120 & BR72130 PARTS ILLUSTRATION



BR72120 & BR72130 PARTS LIST

ITEM	P/N	QTY	DESCRIPTION
1	24069	1	COUPLER SET
2			NO ITEM
3	02900	2	ROLL PIN 1/8 x 1/2
4	09546	2	HOSE ASSEMBLY (Incl. Item 6)
5			NO ITEM
6	01605	2	O-RING (Incl. Item 4)
7	04058	1	SPRING
8	04077	1	VALVE SPOOOL
9	04057	1	BUSHING
10	00293	1	O-RING 11/16 x 7/8 x 3/32
11	01362	1	O-RING 5/16 x 7/16 x 1/16
12	04056	1	ROD WIPER
13	07493	1	PLUG
14	20499	1	CHARGE VALVE
	09349	1	VALVE CAP (Not Pictured)
15	02494	2	HANDLE GRIP
16	07483	1	HANDLE
17	07492	2	SPIROL PIN 1/4 x 1
18			NO ITEM
19			NO ITEM
20			NO ITEM
21	04374	4	LOCKNUT 5/8 -18
22	04371	1	TRIGGER
23	07479	1	ACCUMULATOR DIAPHRAGM
24	19443	1	PISTON
25			NO ITEM
26			NO ITEM
27	04605	4	PUSH PIN
28	11588	1	ACCUMULATOR VALVE BLOCK
29	12140	1	FLOW SLEEVE
30			NO ITEM
31			NO ITEM
32			NO ITEM
33	04381	2	BACK-UP RING
34	04379	2	O-RING 2-9/16 x 2-3/4 x 3/32
35	09640	1	PORTING BLOCK
36	07480	1	AUTOMATIC VALVE BODY
37	04571	2	PUSH PIN
38	04382	1	AUTOMATIC VALVE
39	12142	1	DECAL, NAME TAG
40			NO ITEM
41	04383	1	FLOW SLEEVE TUBE
42	12144	1	ADAPTER BLOCK
43	12143	1	UPPER ANVIL STOP
44	12146	1	SPRING
45	12141	1	ANVIL
46	12145	1	ANVIL BLOCK
47	01837	1	LATCH*
48	01744	1	SPRING*
49	08411	1	DETENT*
50	12151	1	BREAKER FOOT*
51	12155	1	SPIROL PIN
52	12153	1	HEX BUSHING (BR72120)*
	12154	1	HEX BUSHING (BR72130)*
53	12307	2	LOCKING FLANGE NUT 5/8 -18
54	18903	1	SPRING*
55	12148	2	SPRING*
56	12147	2	CAPSCREW, 5/8-18 x 6-1/2 HEX
57	31709	4	SIDE ROD
58	34092	1	CUP SEAL
59	09642	1	BACK-UP WASHER
60	03127	1	ROD WIPER
61	02022	1	O-RING

MODEL DESIGNATIONS	
BR72120	1-1/8 T-Handle Model
BR72130	1-1/4 T-Handle Model

SEAL KIT PART NUMBER 13552		
00293	O-RING	1
01362	O-RING	1
01605	O-RING	2
02022	O-RING	1
03127	ROD WIPER	1
04056	ROD WIPER	1
04379	O-RING	2
09642	BACK-UP RING	2
34092	CUP SEAL	1

* PART OF BREAKER FOOT ASSEMBLY

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

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: Any failure or performance deficiency attributable to excess hydraulic pressure, excess hydraulic back-pressure, or excess hydraulic flow.

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.

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

NO ADDITIONAL WARRANTIES OR REPRESENTATIONS

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

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