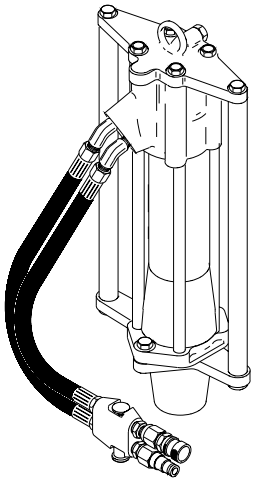
GD50

Hydraulic Rod Driver



Safety ,Operation and Maintenance
Service 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.

STANLEY®

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SAFETY FIRST

It is the responsibility of the operator
and service technician to read rules and
instructions for safe and proper
operation and maintenance.

A cautious worker
using common sense
is the greatest safety device

CONTENTS

SERVICING GD50 Rod Drivers: 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.

⚠ DANGER

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

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

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

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

GENERAL SAFETY PRECAUTIONS

The GD50 Hydraulic Rod Driver 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 and 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.
- 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 rod driver.
- Do not weld, cut with an acetylene torch, or hardface the rod driver anvil or guide housing.
- To avoid personal injury or equipment damage, all tool repair, maintenance and service must only be performed by authorized and properly trained personnel.
- Always replace parts with replacement parts recommended by Stanley Hydraulic Tools.
- Check fastener tightness often and before each use daily.

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.

⚠ CAUTION

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.

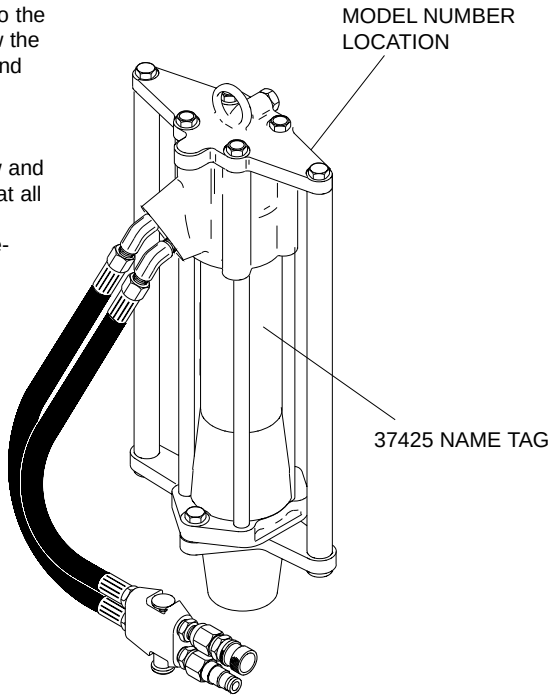
GD50 ROD DRIVER

FLOW 26-34 LPM/7-9 GPM
PRESS 105-140 BAR
1500-2000 PSI
ACCUMULATOR CHG
42 BAR/600 PSI
NITROGEN

STANLEY®
Stanley Hydraulic Tools
Division of The Stanley Works

A nameplate sticker is attached to the spike driver on the cylinder below the handle. Never exceed the flow and pressure levels specified on this sticker.

The information listed on the flow and pressure sticker must be legible at all times. Replace this sticker if it becomes worn or damaged. A replacement is available from your local Stanley distributor.



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

DANGER

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

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 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

15875

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.

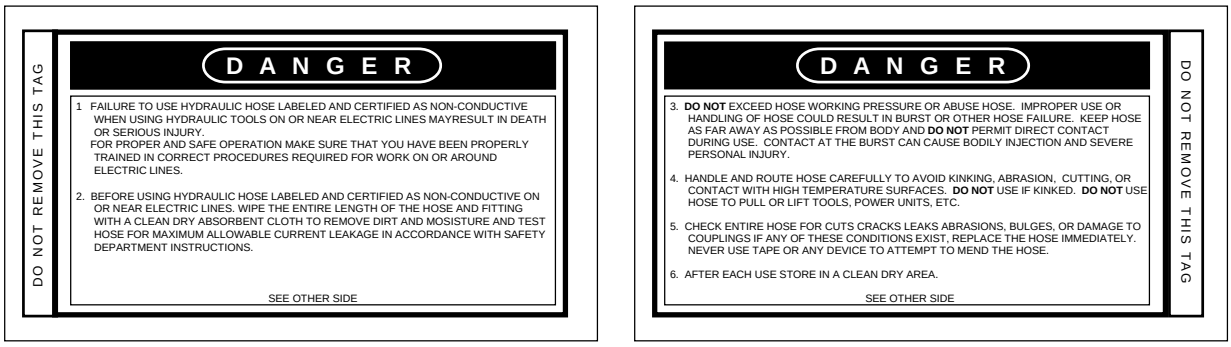
Hoses ❷ and ❸ listed above are **conductive** and **must never** be used near electrical conductors.

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.

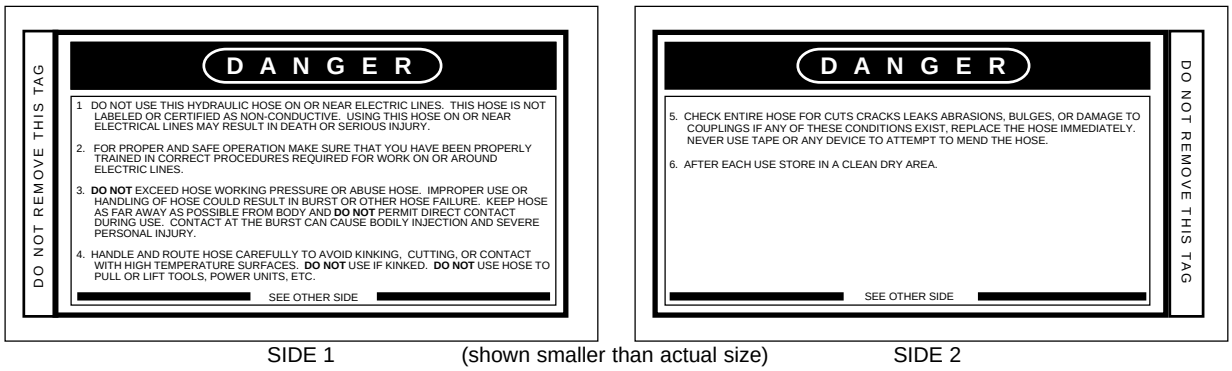
If the information on a tag is illegible because of wear or damage, replace the tag immediately. A new tag may be obtained at no charge from your Stanley Distributor.

The tag shown below is attached to "certified non-conductive" hose.



SIDE 1 (shown smaller than actual size) SIDE 2

The tag shown below is attached to "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 to or higher than** the relief valve setting on the hydraulic system.

HYDRAULIC SYSTEM REQUIREMENTS

• The hydraulic system should provide a flow of 5-9 gpm/19-34 lpm at an operating pressure of 1500-2000 psi/105-140 bar. Recommended relief valve setting is 2100-2250 psi/145-155 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. Stanley recommends 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. Petroleum base hydraulic fluids with antiwear properties and a viscosity index over 140 ssu/28 centistokes will meet the recommended requirements over a wide range of 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.

• Quick disconnect couplings must conform to NFPA T3.20,15/EHTMA specifications.

PREOPERATION

Preparation For Initial Use

Each unit as shipped has no special unpacking or assembly requirements prior to usage. Inspection to assure the unit was not damaged in shipping and does not contain packing debris is all that is required.

PROCEDURES

Check Hydraulic Power Source

1. Using a calibrated flowmeter and pressure gauge, check that the hydraulic power source develops a flow of 7-10 gpm/26-38 lpm for HTMA type II tools/EHTMA category D at 2000 psi/105-140 bar.

2. Make certain the hydraulic power source is equipped with a relief valve set to open at 2100-2250 psi/145-155 bar minimum.

3. Check that the hydraulic circuit matches the tool for open-center (OC) operation.

Check Tool

1. Make sure the tool contains the correct anvil for the rod size to be driven. Use the 5/8 inch anvil (standard in the model GD50132 & GD50132RF Rod Driver) for 5/8 inch diameter rod. Use the 1 inch anvil (standard in the model GD50133 & GD50133RF Rod Driver) for 3/4 inch to 1 inch diameter rod. Failure to use the correct anvil with the appropriate rod size can result in damage to the tool or personal injury.

2. There should be no signs of leaks.

3. The tool should be clean, with all fittings and fasteners tight.

Check Trigger Mechanism

1. Check that the trigger operates smoothly and is free to travel between the "ON" and "OFF" positions.

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

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.

OPERATING PROCEDURES

1. Observe all safety precautions.

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

3. Place the anvil of the rod driver over the rod to be driven.

4. Ensure adequate down pressure is applied to the rod driver before starting the rod driver. To start the rod driver, press the button on the control valve to the **"ON"** position. Adequate down pressure is very important. When you wish to stop the tool, press the button on the control valve to the **"OFF"** position.

COLD WEATHER OPERATION

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

Good maintenance practices will keep the rod driver on the job and increase its service life.

A very 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 procedures contained in the HYDRAULIC SYSTEM REQUIREMENTS section of this manual to ensure peak performance from the tool. Never disassemble the rod driver unless proper troubleshooting procedures have isolated the problem to an internal part. Then, only disassemble it 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 reassembly. Further wear and tool failure can result if the original cause is not corrected.

DISASSEMBLY

Prior to Disassembly

Clean the exterior of the tool.

Obtain a seal kit to replace all seals exposed during disassembly. Note the orientation of seals before removing them. Install new seals in the same position as original seals.

Discharging The Accumulator

1. Secure the rod driver 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 and the valve (49).

Note: The rod driver is full of fluid which will drip from the ports when the hoses are removed.

3. Remove the plug (3) from the side of the top plate (7). Discharge the accumulator by depressing the plunger in the charge valve (5).

Top Plate, Accumulator Diaphragm & Valve Spool

4. Unscrew and remove the 2 capscrews (2) located on the top of the top plate (7).. Loosen the 4 setscrews (8) and remove the 2 handle bars (1).

5. Remove the four lock nuts (6) and lift off the top plate (7).

6. Lift out the accumulator diaphragm (9).

7. Lift out the valve spool (11) and the spring (12). Discard the o-ring (10).

Guide Housing, Rod Anvil, & Adaptor Block

8. Unscrew and remove the 2 capscrews (2).

9. Remove the guide housing (48) , rod anvil (46), and spring (45).

10. Remove the adaptor block (43) by tapping the top of the flange with a plastic or rubber hammer to drive it from the flow sleeve tube (34). Remove the cup seal, seal washer and rod wiper (41, 40, & 39) from the adaptor block using the proper o-ring tools to avoid damage to grooved surfaces.

11. Remove the accumulator valve block (13) from the flow sleeve tube assembly by tapping on the lower edge of the accumulator valve block with a plastic or rubber hammer.

Piston, Automatic Valve Body, Automatic Valve & Flow Sleeve

12. Remove the piston (37) from the flow sleeve (35) and automatic valve body (21).

13. To disassemble the flow sleeve assembly, proceed as follows:

a. Place the flow sleeve removal tool (p/n 04919) on top of the flow sleeve removal tube (p/n 04910). Place the flow sleeve assembly (automatic valve body down) on the flow sleeve removal tool.

IMPORTANT

Use a rag in the bottom of the removal tube to protect the parts when they drop out.

b. 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. The automatic valve (30), push pins (31) and push pins (36) will come out. Set these parts aside before continuing.

c. Continue pressing on the flow sleeve until it drops out of the flow sleeve tube.

Porting Block

14. Clamp the accumulator valve block (13) in a vise with soft jaws. Use a 3/8-16 thread slide hammer or tamper sleeve tool (p/n 01120) to remove the porting block (19) from the accumulator valve block.

IMPORTANT

Do not over-tighten the vise and distort the block.

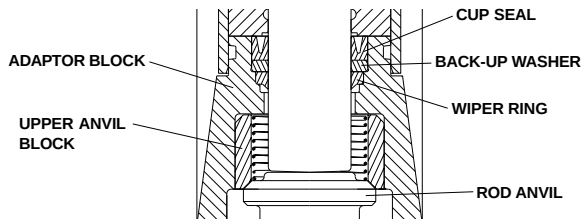
ASSEMBLY

Prior To Assembly

- Clean all parts with a degreasing solvent.
- Apply clean grease or o-ring lubricant to all parts during assembly.
- Obtain a seal kit so that all seals exposed during disassembly can be replaced. **Note:** For orientation of parts identified in the following procedures, see the parts illustration.

Installing the Flow Sleeve

1. Inspect the upper anvil stop (44). If it is broken or distorted, it and the adaptor block (43) must be replaced. The upper anvil stop is pressed into the counter bore of the adaptor block as shown in the illustration below.



2. Apply grease and install a new o-ring (38) onto the adaptor block (43). Apply grease and install a new wiper ring (39), lip facing down. Apply grease and install the back-up washer (40) and the cup seal (41), lips facing up. Refer to the illustration above for correct orientation of the seals.

3. Lubricate the entire bore of the flow sleeve tube (34) with hydraulic fluid and place it onto the adaptor block (o-ring groove up).Tap it down using a plastic or rubber hammer. Position the flow sleeve (35) with the push pin holes facing up and place it into the flow sleeve tube with the o-ring groove on the tube also facing up. Push the flow sleeve into the flow sleeve tube until it is flush with the top of the flow sleeve tube. Use an arbor press and an aluminum disc to protect the parts if necessary.

4. Lubricate and install four push pins (36) into the holes in the flow sleeve. One end of each push pin contains a machined surface. This surface must be facing up as each push pin is installed. Each push pin must slide freely in or out of the hole in the flow sleeve. If a push pin does not slide freely or seems to stick, the hole may contain contamination or the top edge of the hole contains a burr. Remove burrs with a deburring tool, clean the hole thoroughly and try the push pin again.

Automatic Valve Body & Automatic Valve

5. Tap a roll pin (32) into the hole on the automatic valve (30) side of the automatic valve body (21).

6. Lubricate with hydraulic fluid and install 2 push pins (31) into the holes in the valve body. One end of each push pin contains a machined surface. This surface must be facing up as each push pin is installed. Each push pin must slide freely in or out of the hole in the valve body. If a push pin does not slide freely or seems to stick, the hole may contain contamination or the top edge of the hole contains a burr. Remove burrs with a deburring tool, clean the hole thoroughly and try the push pin again.

7. Lubricate with hydraulic fluid the automatic valve and install it into the valve body. The automatic valve must slide freely back and forth. If it does not, the valve body or valve may contain contaminants or the bore of the valve body contains burrs. Remove the push pins and lightly polish the bore of the valve body with emery cloth and then thoroughly clean the bore, push pin holes and valve. Reinstall the push pins and valve.

8. Grasp the automatic valve body and valve so that one or more fingers are gripping the valve to

prevent it and the push pins from falling out when the valve body and valve are turned upside down (roll pin facing down). Place the assembly on top of the flow sleeve making sure the roll pin aligns with the appropriate hole in the flow sleeve.

9. Push the automatic valve body assembly into the flow sleeve tube until it stops. Use an arbor press, and an aluminum disc to protect the parts if necessary.

Piston & Porting Block

10. Using hydraulic fluid, lubricate and install the piston (37) into the top of the automatic valve body. The hole in the end of the piston must be facing up.

11. Install a roll pin into the porting block (32). Lubricate and install the o-ring (18) and backup ring (17) onto the porting block. Install the porting block onto the automatic valve body being careful to properly align the roll pin.

12. Using hydraulic fluid, lubricate the porting block bore of the accumulator valve block (13) and then install the accumulator valve block onto the automatic valve body and flow sleeve assembly and tap it into place.

13. Using hydraulic fluid, lubricate the spring (12) and install it into the spool bore of the accumulator valve block. Apply grease and install a new o-ring (10) onto the valve spool (11). Lubricate the valve spool with hydraulic fluid and install it into the spool bore of the accumulator valve block.

14. Lubricate the diapragm (9) inside and out with WD40®. Install the diapragm into the accumulator valve block.

15. Place the top plate (7) onto the accumulator valve block.

16. Install the 4 side rods (42) and nuts (6). Tighten the nuts in a cross pattern to 75 lb. ft./102 Nm in 25 lb. ft./34 Nm increments.

17. Place the complete assembly in a vise with soft jaws and clamp on the flow sleeve tube.

Rod Anvil, Spring, Anvil Guide & Guide Housing

18. Inspect the anvil guide (47) for wear and damge. If the anvil guide must be replaced, then the guide housing (48) must also be replaced.

19. Lubricate the spring (45), rod anvil (46), and adjoining parts with anti-seize compound. Install the rod anvil into the anvil guide. Install the spring into the upper anvil stop and then install the guide housing assembly, with rod anvil installed, onto the adaptor block. Apply Loctite™ 242 to the threads of the capscrews (2) and then install the capscrews. Tighten the capscrews to 90 lb. ft./122 Nm.

20. Install the 2 handle bars and secure with the capscrews (2). Tighten the capscrews to 90 lb. ft./ 122 Nm. Apply Loctite™ 242 to the threads of the setscrews (8). Install and tighten.

21. Charge the accumulator with nitrogen to 600 psi/42 bar as described in the "CHARGING THE ACCUMULATOR" section.

CHARGING THE ACCUMULATOR

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

- Accumulator tester (Part Number 02835).
- Charging assembly (Part Number 06545) (includes a regulator, hose and fitting).
- NITROGEN bottle with a 800 psi/56 bar minimum charge.

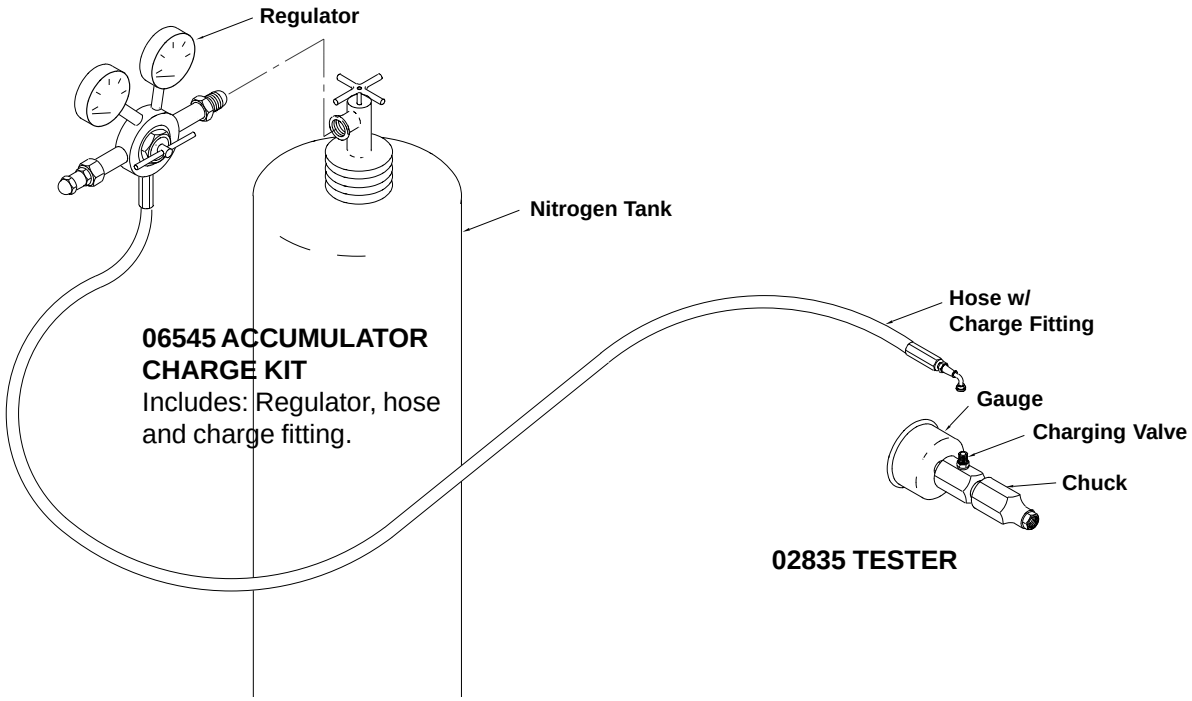
1. Holding the chuck end of the Stanley tester (p/n 02835), turn the gauge fully counterclockwise to ensure the stem inside the chuck is completely retracted.
2. Thread the tester onto the charging valve of the tool accumulator (do not advance the gauge-end into the chuck end. Turn as a unit). Seat the chuck on the accumulator charging valve by hand tightening only.
3. Advance the valve stem by turning the gauge- end clockwise.
4. Connect the charging assembly to the valve on the tester.
5. Adjust the regulator on the nitrogen bottle to 600 psi/42 bar.

NOTE: It may be necessary to set the regulator at 650-700 psi/41-48 bar to overcome any pressure drop through the charging system.

6. Open the valve on the charging assembly hose. When the tester gauge reads 600-700 psi41-48 bar, close the valve on the charging assembly hose and remove the charging assembly.
7. Turn the gauge end of the tester fully counterclockwise to retract the plunger in the chuck. Remove the tester from the charge valve.
8. Replace the valve cap.

TESTING THE ACCUMULATOR PRESSURE

1. Follow instructions 1 through 3 under "CHARGING THE ACCUMULATOR".
2. Read the pressure on the gauge. It should be between 500-700 psi/35-48 bar.
3. If the pressure is low, recharge the tool.



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 spike driver, always check that the hydraulic power source is supplying the correct hydraulic flow and pressure to the spike driver 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.

Rod driver does not run.	Power unit not functioning.	Check power unit for proper flow and pressure (7-10 gpm / 26-38 lpm, 2000 psi / 140 bar).
	Couplers or hoses blocked.	Remove restriction.
	Presssure and return line hoses reversed at ports.	Be sure hoses are connected to their proper ports.
	Mechanical failure of piston or automatic valve.	Have inspected and repaired by authorized dealer.
Rod driver does not hit effectively.	Power unit not functioning.	Check power unit for proper flow and pressure (7-10 gpm / 26-38 lpm, 2000 psi / 140 bar).
	Couplers or hose blocked.	Remove restriction,
	Low accumulator charge (pressure hose will pulse more than normal).	Have recharged by authorized dealer.
	Fluid too hot (above 140° F / 60° C).	Provide cooler to maintain proper fluid temperature.
	Rod Anvil is not sliding freely in the anvil guide.	Remove, clean and replace as required.
Rod driver operates slow.	Low oil flow from power unit.	Check power source for proper flow.
	High backpressure.	Check hydraulic system for excessive backpressure and correct as required.

SPECIFICATIONS

Capacity (Rod Anvil)
1/2 to 5/8 inch/12 to 16 mm diameter rod (model GD50132 & GD50132RF)
3/4 to 1 inch/19 to 25 mm diameter rod (model GD50133 & GD50133RF)
Pressure Range ..... 1500-2000 psi/105-140 bar
Maximum Back Pressure ..... 250 psi/17 bar
Flow Range ..... 5-9 gpm/19-34 lpm
Couplers ..... HTMA/EHTMA Flush Face Type Male & Female
Hose Whips ..... Yes

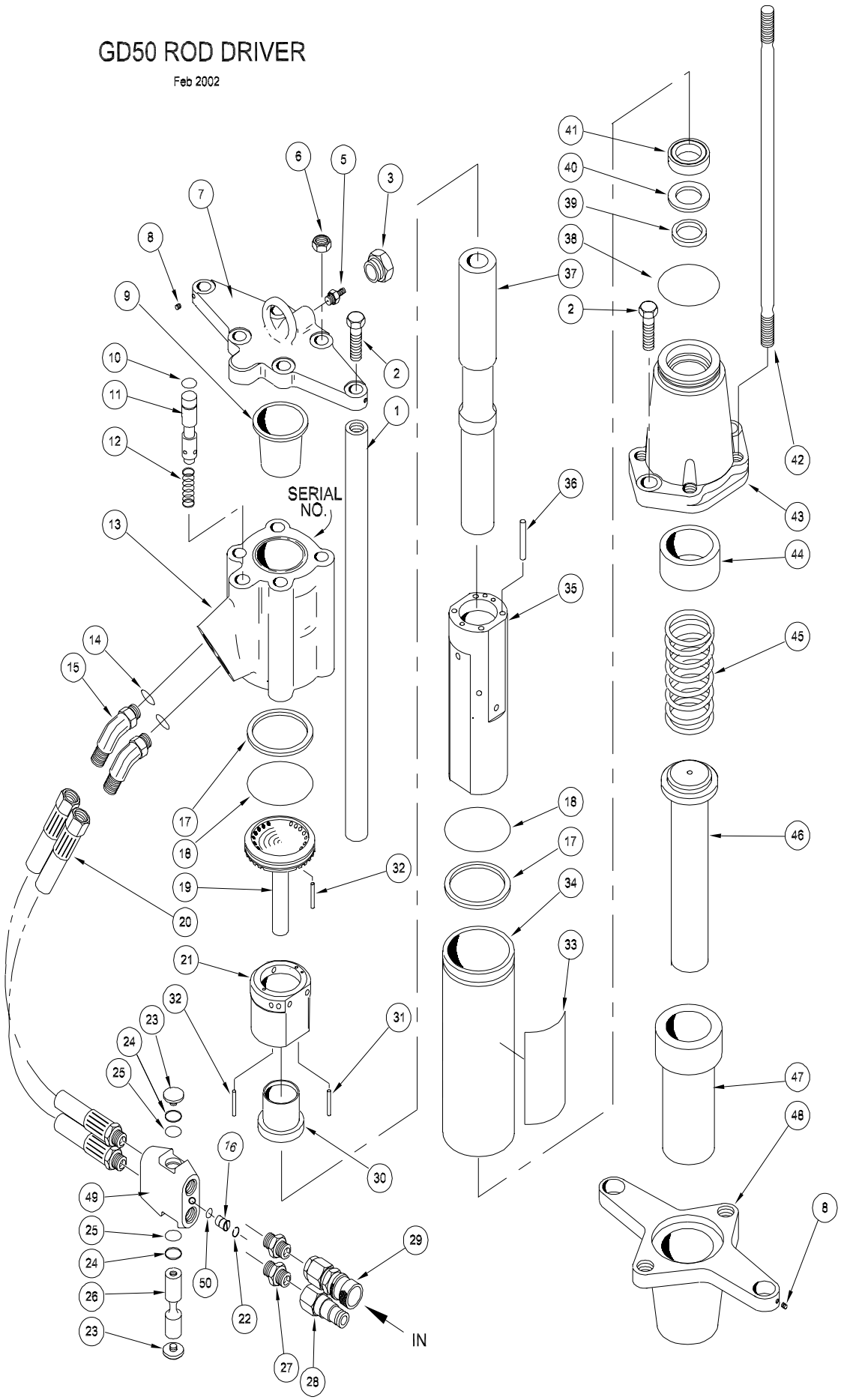
Weight ..... 57.3 lbs./26 kg
Overall Length ..... 25.5 inches/64.8 cm
Overall Width ..... 10 inches/25.4 cm
Maximum Fluid Temperature ..... 140° F/60° C

SPECIAL TOOLS

DESCRIPTION	PART NUMBER	USAGE
O-ring Tool Kit	04337	General Service of Seals
Split Rings	04908	Used with 04910
Flow Sleeve Removal Tool	04919	Flow Sleeve Removal
Flow Sleeve Removal Tube	04910	Used with 04908 & 05508
Bearing Puller Kit	05064	General Bearing Pulling
Accumulator Disassembly Tool	05508	Used with 04910
Tamper Sleeve Tool	01120	Used to Pull Porting Block from Valve Block
Accumulator Cylinder Puller	05640	An Aluminum Disk (handy for protecting parts when using an arbor press

GD50 ROD DRIVER

Feb 2002



GD50 PARTS LIST

Item	Part No. GD50132	GD50133	GD50132RF	GD50133RF	Qty	Description
1	35770	35770	35770	35770	2	Handle Bar
2	370351	370351	370351	370351	4	Capscrew
3	07493	07493	07493	07493	1	O-Ring Plug-Male
4	-----	-----	05243	05243	1	Orifice Plug (Included with Item 13)
5	20499	20499	20499	20499	1	Charge Valve
6	04374	04374	04374	04374	4	Lock Nut
7	15190	15190	15190	15190	1	Top Plate
8	00720	00720	00720	00720	4	Set Screw
9	07479	07479	07479	07479	1	Diapragm
10	00293	00293	00293	00293	1	O-ring
11	15188	15188	15188	15188	1	Valve Spool
12	04058	04058	04058	04058	1	Spring
13	11588	11588	11588	11588	1	Accumulator Valve Block
14	01605	01605	01605	01605	2	O-ring (Included with Item 15)
15	350000	350000	350000	350000	2	Elbow, 45° (Included with item 14)
16	10536	10536	10536	10536	1	Selector Screw
17	04381	04381	04381	04381	2	Back-up Ring
18	04379	04379	04379	04379	2	O-ring
19	09640	09640	04378	04378	1	Porting Block
20	35784	35784	35784	35784	2	Hose Assy
21	07480	07480	07480	07480	1	Automatic Vavle Body
22	16070	16070	16070	16070	1	Retaining Ring
23	01003	01003	01003	01003	2	Valve Button
24	13568	13568	13568	13568	2	Back-up Ring
25	13567	13567	13567	13567	2	O-ring
26	38631	38631	38631	38631	1	Valve Spool
27	00936	00936	00936	00936	2	Adaptor
28	24059	24059	24059	24059	1	Male Coupler Body
29	24058	24058	24058	24058	1	Female Coupler Body
30	04382	04382	04382	04382	1	Automatic Valve
31	04571	04571	04571	04571	2	Push Pin
32	02900	02900	02900	02900	2	Roll Pin
33	37425	37425	37425	37425	1	Name Tag
34	04383	04383	04383	04383	1	Flow Sleeve Tube
35	09611	09611	04384	04384	1	Flow Sleeve
36	04605	04605	04605	04605	4	Push Pin
37	19443	19443	04954	04954	1	Piston
38	02022	02022	02022	02022	1	O-ring
39	03127	03127	04387	04387	1	Wiper Ring
40	09642	09642	04780	04780	1	Back-up Washer
41	34092	34092	04386	04386	1	Cup Seal
42	12139	12139	12139	12139	4	Side Rod
43	35119	35119	43527	43527	1	Adaptor Block
44	12143	12143	12143	12143	1	Upper Anvil Stop
45	12146	12146	12146	12146	1	Spring
46	36106	35751	36106	35751	1	Rod Anvil, 5/8 inch rods (mdl GD50132) Rod Anvil, 3/4 to 1 inch rods (mdl GD50133)
47	35752	35752	35752	35752	1	Anvil Guide
48	35753	35753	35753	35753	1	Guide Housing
49	38629	38629	38629	38629	1	Valve Body Assy.
50	00026	00026	00026	00026	1	O-ring

MODEL DESCRIPTIONS

GD50132 - Rod Driver for 1/2 and 5/8 inch rods

GD50133 - Rod Driver for 3/4 and 1 inch rods

GD50132RF - Rod Driver for 1/2 and 5/8 inch rods

GD50133RF - Rod Driver for 3/4 and 1 inch rods

CHECK TO MAKE SURE YOU HAVE THE CORRECT MODEL NUMBER BEFORE ORDERING

38632 O.C./C.C. Inline Control Valve
Operating Instructions & Parts List

The 38632 Inline Control Valve is designed to provide the ON/OFF functions for a hydraulic tool connected to either an OPEN CENTER (O.C.) hydraulic system or an CLOSED CENTER (C.C.) hydraulic system. The valve is to be used with tools which do not have an ON/OFF trigger control. The 38632 Control Valve can be used on hydraulic systems producing up to 10 gpm/38 lpm with a maximum relief valve setting of 2500 psi/172 bar. The valve ports are -8 SAE (3/4-16 thread) o-ring ports.

Setting for Open Center (O.C.) or Closed Center (C.C.)

Set the valve to O.C. or C.C. before connecting it to the hydraulic system. To set the valve for open center operation, use a straight blade screw driver to turn the selector screw counter clockwise until it stops. To set the valve for closed center operation, turn the selector screw clockwise until it stops.

⚠ CAUTION

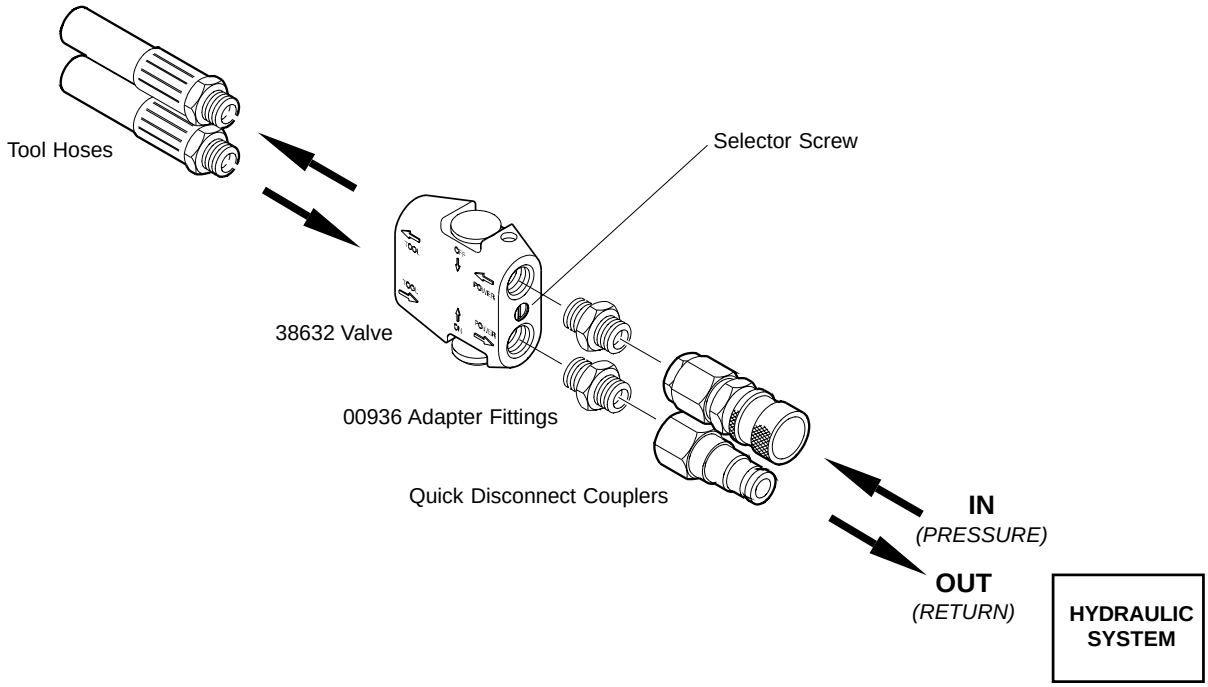
Be sure you know if you have an OPEN CENTER (O.C.) OR CLOSED CENTER (C.C.) hydraulic system, DO NOT attempt to install or operate the 38632 Valve until you do. Incorrect installation or operation of the valve can result in seal failures in the tool, cause excessive heat in the hydraulic system, and may damage the tool and hydraulic system. Understand which type of hydraulic system you are using before installing or operating this valve.

Installing The Valve

Connect the valve to the hydraulic system as shown in the illustration.

Operating The Valve

Connect the valve to the tool using the illustration below as a guide. Make sure the valve spool on the valve is pushed **OFF** before connecting the valve to the hydraulic system. Make sure the hydraulic system is **OFF** before connecting the valve to the hydraulic system. Connect the valve to the hydraulic system. Turn **ON** the hydraulic system. Place the tool to be operated in its operating position. Push the valve spool **ON** to begin operating the tool. Push the valve spool **OFF** to stop operating the tool. Turn the hydraulic system **OFF** before disconnecting the valve.



Instruction Sheet P/N 39716

WARRANTY

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

EXCEPTIONS FROM WARRANTY

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

NO ADDITIONAL WARRANTIES OR REPRESENTATIONS

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

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