

PD45

Post Driver



Remote ON/OFF Valve Model



Valve-In-Handle Model

⚠ 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.



Read The Manual Wear Breathing Protection Wear Hearing Protection Wear Eye Protection

Safety, and Operation User's Manual

STANLEY®

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OPS USA
59010 01/03 Ver. 2

Stanley Hydraulic Tools
3810 SE Naef Road
Milwaukie, OR 97267-5698 USA
Phone: (503) 659-5660
Fax: (503) 652-1780

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PD45

Post Driver

SERVICING THE PD45 Post Driver:

This manual contains Safety, Operation, and Troubleshooting information. 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 DANGER warning on the cover and the SAFETY warning below.

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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.

Specifications

Weight (Standard) _____ 65 lbs / 29.5 kg
Weight (Extended anvil) _____ 71 lbs / 32 kg.
Pressure Range _____ 2000 psi / 140 bar
Flow Range _____ 7-9 gpm / 26-34 lpm
Optimum Flow _____ 8 gpm / 30 lpm
Couplers _____ HTMA Flush Face
Per NFPA T3.20.15/ISO 16028
Connect Size _____ 3/8 female pipe
Length _____ 30 in. / 76 cm
Width (Across Handles) _____ 10-1/8 in./25.7 cm
System Type _____ open center

Port Size _____ SAE 8 O-Ring
Hose Whips _____ Yes
Capacity _____ #2, #3 and #4 lb/ft.
_____ "U" Channel Sign Post
_____ #3 and #4 Strong Back (Heavy Duty)
_____ "U" Channel Sign Post
_____ #1 Delineator Post
_____ 2-1/2 in. / 63.5 mm Square Post
_____ 2-5/8 in. / 67 mm Round Post



HTMA Class II _____ 7-9 gpm @ 2000 psi

NOTE

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

SAFETY SYMBOLS

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



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



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



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



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



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



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



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.

WARNING

SOME HYDRAULIC FLUIDS ARE FLAMMABLE, NEVER ALLOW THESE HYDRAULIC FLUIDS TO COME IN CONTACT WITH AN OPEN FLAME.

IF A HOSE WERE TO BURST OR IF A TOOL LEAK OCCURS NEXT TO AN OPEN FLAME, THESE HYDRAULIC FLUIDS WILL IGNITE AND COULD RESULT IN SERIOUS INJURY OR DEATH.

LOCAL SAFETY REGULATIONS

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

General Safety Instructions



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.

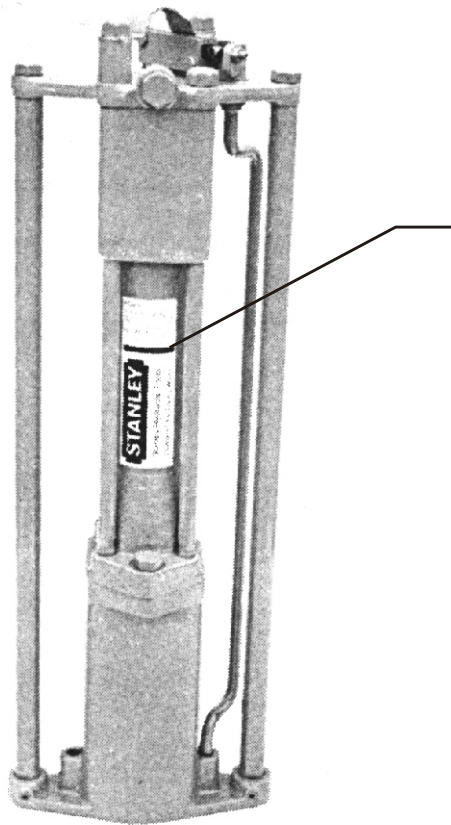
Supervising personnel should develop additional precautions relating to the specific work area and local safety regulations. If so, place the added precautions in the space provided on page 5.

This tool 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 operations.
- ⚠ Do not operate the tool unless thoroughly trained or under the supervision of an instructor.
- ⚠ Always wear safety equipment such as goggles, 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.
- ⚠ Do not operate this tool without first reading the Operating Instructions.
- ⚠ Do not install or remove this tool while the hydraulic power source is connected. Accidental engagement of the tool can cause serious injury.
- ⚠ Never operate the tool if you cannot be sure that underground utilities are not present. Underground electrical utilities present an electrocution hazard. Underground gas utilities present an explosion hazard. Other underground utilities may present other hazards.
- ⚠ Do not wear loose fitting clothing when operating the tool. Loose fitting clothing can get entangled with the tool and 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. Failure to do so may result in damage to the quick couplers and cause overheating. Use only lint-free cloths.
- ⚠ Do not operate the tool at oil temperatures above 140° F/60° C. Operation at higher oil temperatures can cause operator discomfort and may cause damage to the tool.
- ⚠ Do not operate a damaged, improperly adjusted, or incompletely assembled tool.
- ⚠ 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 labels and warning stickers legible.
- ⚠ Always replace parts with replacement parts recommended by Stanley Hydraulic Tools.
- ⚠ Check fastener tightness often and before each use daily.

Tool Decals & Tags

A Name Tag Sticker is attached to the tool. Never exceed the flow and pressure levels specified on this sticker. The information listed on the name tag 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.



15197
Name Tag

	Stanley Hydraulic Tools Division of the Stanley Works 3810 S.E. NAEF ROAD Milwaukie, Oregon 97267 U.S.A.	PD/45 POST DRIVER FLOW: 26-34 LPM/7-9 GPM PRESS: 105-140 BAR 1500-2000 PSI ACCUMULATOR CHG: 42 BAR/600 PSI NITROGEN

The SAFETY TAG, P/N 15875, shown at right, smaller than actual size, 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 ELECTRICAL 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 & 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.

(517) 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 HOSES.

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

4. DO NOT CONNECT CLOSED-CENTER TOOLS TO OPEN-CENTER HYDRAULIC SYSTEMS. THIS MAY CAUSE EXTREME SYSTEM HEAT AND/OR SEVERE PERSONAL INJURY.

DO NOT CONNECT OPEN-CENTER TOOLS TO CLOSED-CENTER HYDRAULIC SYSTEMS. THIS MAY RESULT IN LOSS OF OTHER HYDRAULIC FUNCTIONS POWERED BY THE SAME SYSTEM AND/OR SEVERE PERSONAL INJURY.

5. BYSTANDERS MAY BE INJURED IN YOUR WORK AREA. KEEP BYSTANDERS CLEAR OF YOUR WORK AREA.

6. WEAR HEARING, EYE, FOOT, HAND AND HEAD PROTECTION.

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

(517) SEE OTHER SIDE 15875

Hydraulic Hose Requirements

HOSE TYPES

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

- 1 Certified non-conductive
- 2 Wire-braided (conductive)
- 3 Fabric-braided (not certified or labeled non-conductive)

Hose 1 listed above is the only hose authorized for use near electrical conductors.

Hoses 2 and 3 listed above are **conductive** and **must never** be near electrical conductors.

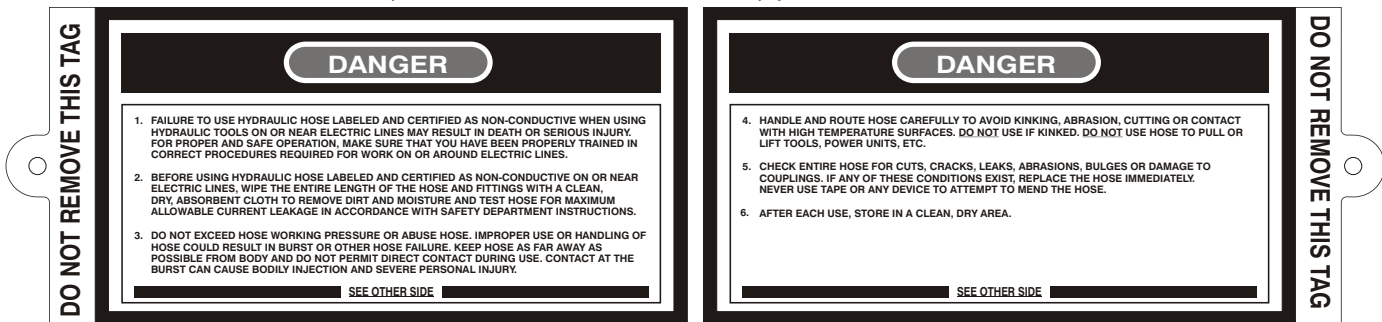
HOSE SAFETY TAGS

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

If the information in 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.

This Tag attached to “Certified Non-Conductive” hose.

(shown smaller than actual size) p/n 27987

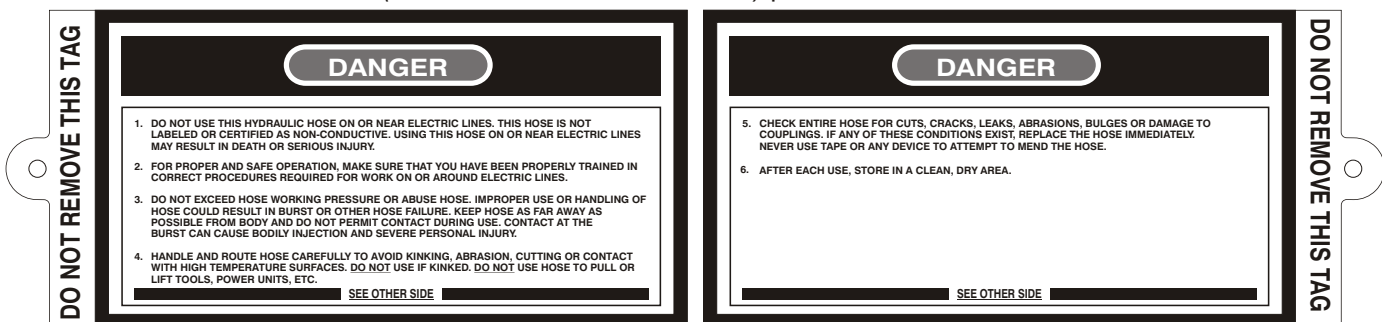


Side 1

Side 2

This Tag attached to “Conductive” hose.

(shown smaller than actual size) p/n 29144



Side 1

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.

NOTICE

These are general hydraulic system requirements. See tool specifications page for tool specific requirements.

HTMA Requirements

Hydraulic System Requirements	Tool Category:  Type I	 Type II	Type III	Type RR
Flow rate Tool Operating Pressure <i>(at the power supply outlet)</i>	4-6 GPM (15-23 lpm) 2000 psi (138 bar)	7-9 GPM (26-34 lpm) 2000 psi (138 bar)	11-13 GPM (42-49 lpm) 2000 psi (138 bar)	9-10.5 GPM (34-40 lpm) 2000 psi (138 bar)
System relief valve setting <i>(at the power supply outlet)</i>	2100-2250 (145-155 bar)	2100-2250 (145-155 bar)	2100-2250 (145-155 bar)	2200-2300 (152-159 bar)
Maximum back pressure <i>(at tool end of the return hose)</i>	250 psi (17 bar)	250 psi (17 bar)	250 psi (17 bar)	250 psi (17 bar)
Measured at a max. fluid viscosity of: <i>(at min. operating temperature)</i>	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: <i>(at max. expected ambient temperature)</i>	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	3 hp (2.24 kW) 40° F (22° C)	5 hp (3.73 kW) 40° F (22° C)	7 hp (5.22 kW) 40° F (22° C)	6 hp (4.5 kW) 40° F (22° C)
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.				
Filter Min. full-flow filtration sized for flow of at least: <i>(For cold temp. startup and max. dirt-holding capacity)</i>	25 microns 30 GPM (114 lpm)	25 microns 30 GPM (114 lpm)	25 microns 30 GPM (114 lpm)	25 microns 30 GPM (114 lpm)
Hydraulic fluid Petroleum based <i>(premium grade, anti-wear, non-conductive)</i>				
Viscosity <i>(at min. and max. operating temps)</i>	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: When choosing hydraulic fluid, the expected oil temperature extremes that will be experienced in service determine the most suitable temperature viscosity characteristics. Hydraulic fluids with a viscosity index over 140 will meet the requirements over a wide range of operating temperatures.				

*SSU = Saybolt Seconds Universal

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

Operating Instructions

Pre-Operation Procedures

Check the power source

1. Using a calibrated flowmeter and pressure guage, 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 2100-2250 psi/140 bar.

Installing Adapters

1. The post hammer is designed to drive No. 1 thought No. 4 sign post, 2-1/2 inch square and up to 2-5/8 inch diameter round post without requiring adapters. If you are driving one of these types of post, orient the post into the tightest fit in the post driver foot.
2. If you are driving smaller square or round post, insert the adapter to the post driver foot using two 1/2-hex head capscrews.

Connecting 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. If hose couplers are used, observe the arrow on the coupler to ensure that the flow is in the proper direction. The female coupler on the tool hose is the inlet (pressure) coupler.
4. Move the hydraulic power source on/off control valve to the **ON** position to operate the tool.

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

Tool Operation

1. Observe all safety precautions.
2. Install the appropriate adapter as required.
3. Place the post driver foot firmly on the surface to be driven.
4. Press the lever assembly on handle to start the post driver.
Note: On Remote ON/OFF Valve Models
Place the post driver on/off control valve in The “ON” position to start the post driver.

Note: Adequate down pressure is very important.

5. When the post is fully set in the ground, release the lever assembly on handle.

Cold Weather Operation

If the post hammer 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 (400ssu/82 centistrokes) before use.

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

Troubleshooting

This section describes how to find and resolve problems users may experience. If a situation occurs that is not covered, call your Stanley Customer Service representative for assistance.

⚠ WARNING

**Inspecting the tool or installing parts with the hydraulic hoses connected can result in severe personal injury or equipment damage.
To prevent accidental startup, disconnect the hydraulic power before beginning any inspection or installation task.**

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.

Symptom	Possible Cause	Solution
Tool does not run.	Power unit not functioning.	*Check power source for proper flow and pressure (7-9 gpm / 26-34 lpm, 2000 psi / 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.
Tool does not hit effectively.	Mechanical failure of piston or automatic valve.	Disassemble post driver and inspect for damaged parts.
	Power unit not functioning.	*Check power unit for proper flow and pressure (7-9 gpm / 26-34 lpm, 2000 psi / 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 oil temperature (130°F / 55°C maximum).
	The anvil is not sliding freely in the post driver foot.	Remove, clean, lubricate and replace anvil as required.

continued

* Refer to Page 7, Hydraulic Power Source Check

Troubleshooting

Symptom	Possible Cause	Solution
Tool operates slow.	Low gpm supply from power unit	*Check power source for proper flow (7-9 gpm / 26-64 lpm).
	High backpressure.	Check hydraulic system for excessive backpressure (over 250 psi / 17 bar).
	Couplers or hoses blocked.	Remove restriction.
	Orifice blocked.	Remove restriction.
	Fluid too hot (above 140°F / 60°C) or too cold (below 60°F / 16°C).	Check power source for proper fluid temperature. Bypass cooler to warm fluid up or provide cooler to maintain proper temperature.
	Relief valve set too low.	Adjust relief valve to 2100-2250 psi / 145-155 bar.
	The anvil is not sliding freely in the post driver foot.	Remove, clean, lubricate and replace as required.
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.
Oil Leakage on post.	Lower piston seal failure.	Replace seal.

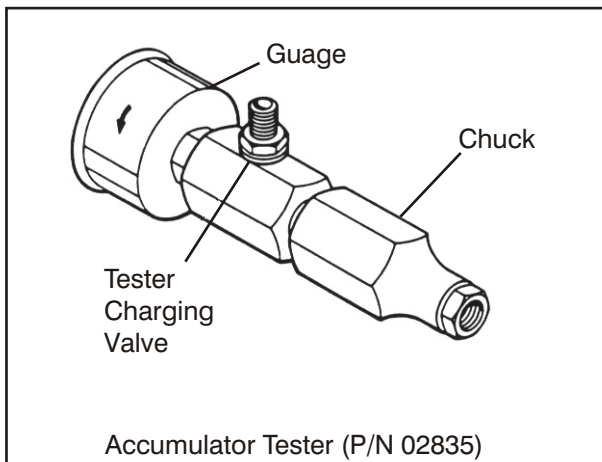
* Refer to Page 7, Hydraulic Power Source Check.

Charging the Accumulator

Accumulator Testing Procedure

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

- Accumulator tester (Part Number 02835).
 - Charging kit assembly (Part Number 31254) (includes a regulator, hose and fittings).
 - NITROGEN bottle with an 800 psi/56 bar minimum charge.
- A. Remove the charging valve plug from the post driver.
 - B. Holding the chuck end of Stanley tester (Part Number 02835), turn the gauge fully counterclockwise to ensure the stem inside the chuck is completely retracted.
 - C. 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 and hand tighten only.
 - D. Advance the valve stem by turning the gauge-end clockwise until pressure is read on the gauge (charging pressure should be 500-700 psi/ 34-38 bar).
 - E. If pressure is OK unscrew the gauge-end from the chuck to retract the stem, then unscrew the entire tester assembly from the tool accumulator charging valve.



If pressure is low, charge the accumulator as described in the following section.

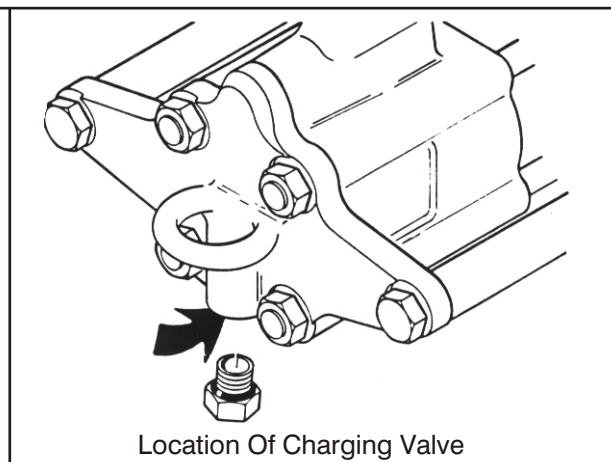
- F. Install the charging valve cap (or plug).

Accumulator Charging Procedure

- A. Perform steps A through D of the accumulator testing procedure above.
- B. Connect the chuck of the charging assembly to the charging valve on the accumulator tester or, if preferred, remove the tester from the tool charging valve and connect the charging assembly chuck directly to the tool charging valve.
- C. Adjust the regulator to the charging pressure of 600 psi/42 bar.

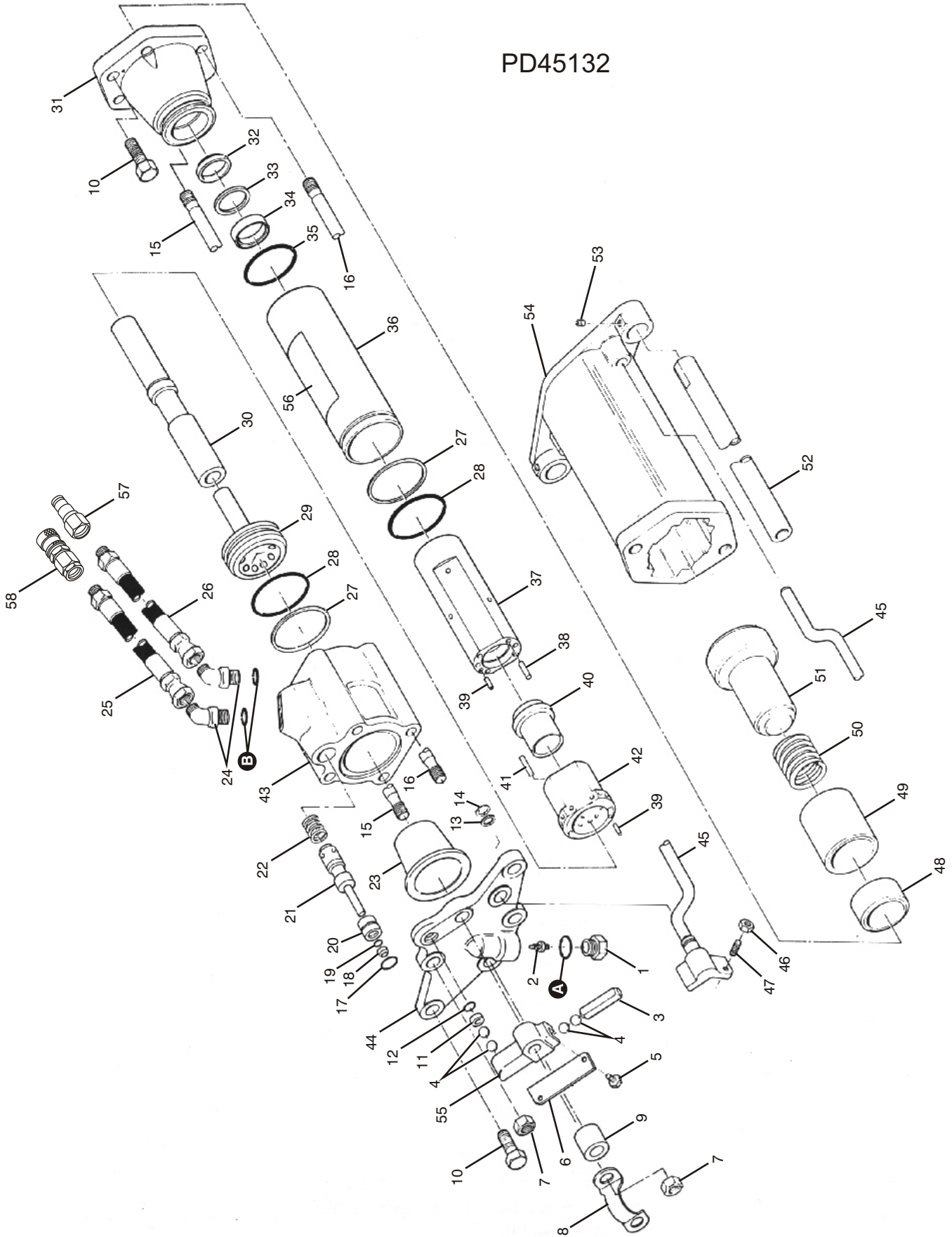
Note: It may be necessary to set the regulator at 650 to 700 psi/45-48 bar to overcome any pressure drop through the charging system.

- D. Open the valve on the charging assembly hose.
- E. When the accumulator is fully charged close the valve on the charging assembly hose and remove the charging assembly chuck from the accumulator tester or tool charging valve.
- F. 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.
- G. Replace the o-ring plug.



PD45 Parts Illustration

PD45132



PD45 Parts List

PD45132

NOTE:

Use **Part Number** and **Description** when ordering.

A- Supplied With Item # 1
B- Supplied With Item # 24

● Denotes Part in Seal Kit

04595	Seal Kit	
00293	O-Ring	1
01362	O-Ring	1
01604	O-Ring (For item 1)	1
01605	O-Ring (For item 24)	2
02022	O-Ring	1
04056	Rod Wiper	1
04379	O-Ring	2
04381	Backup Ring	2
04386	Cup Seal	1
04387	Rod Wiper	1

Item	Part	Description	QTY
1	07493	O-Ring Plug-Male	1
2	20499	Charge Valve	1
3	20387	Plunger	1
4	12100	Steel Ball 3/8 Dia. G	4
5	00899	HHCS 1/4-20 UNC x 1/2 G	2
6	20386	Cover Plate	1
7	04374	Lock Nut 5/8-18	4
8	20390	Lift Strap	1
9	20384	Spacer	1
10	370351	HHCS 5/8-11 UNC x 1-3/4	4
11	20385	Pilot Ring	1
12	02003	O-Ring 2-013 R16	1
13	20398	Support Washer 3/4 Tr	1
14	08016	Retaining Ring-3/4 Ex	1
15	12139	Side Rod	2
16	08087	Side Rod	2
17	00293	O-Ring 2-115 R17●	1
18	04056	Rod Wiper 5/16 x 9/16●	1
19	01362	O-Ring 2-011 R16●	1
20	04057	Bushing	1
21	04077	Valve Spool OC	1
22	04058	Spring	1
23	07479	Accumulator Diaphragm	1
24	350000	Straight Thread 45 EL	2
25	15195	Hose Assy-15 in.	1
26	15196	Hose Assy-14 in.	1
27	04381	Back-Up Ring●	2
28	04379	O-Ring 2-145 R17●	2
29	04378	Porting Block	1
30	07481	Piston	1
31	15191	Adaptor Block	1
32	04387	Rod Wiper●	1
33	04780	Back up Washer	1
34	04386	Cup Seal	1
35	02022	O-Ring 2-228 R16●	1
36	04383	Flow Sleeve Tube	1
37	07485	Flow Sleeve	1
38	04605	Push Pin	4
39	02900	Roll Pin	2
40	04382	Automatic Valve	1
41	04571	Push Pin	2
42	07480	Automatic Valve Body	1
43	11588	Accumulator Valve Block	1
44	20396	Valve Top Plate	1
45	20392	Trigger Assy	1
46	00038	Nut 1/4-20 Plain	1
47	20399	Oval Pt. Set Screw 1/4	1
48	12143	Upper Anvil Stop	1
49	15183	Anvil Bushing	1
50	12146	Spring	1
51	15189	Anvil	1
52	15182	Handle Bar	2
53	15194	Set Screw	2
54	15170	Post Driver Foot	1
55	20388	Valve Actuator Housing	1
56	48962	Decal, Name Tag LPH30	1
57	24059	Male Coupler	1
58	24058	Female Coupler	1

PD45 Parts List

PD45131

NOTE:

Use **Part Number** and **Description** when ordering.

Item	Part	Description	QTY
1	15190	Top Plate	1
2	11588	Accumulator Valve Block	1
3	04374	Locknut 5/8-18	4
4	00293	O-ring 11/16x7/8x3/32-115-R17●	1
5	15188	Valve Spool	1
6	07493	Male O-ring Plug	1
7	20499	Charge Valve	1
8	07479	Accumulator Diaphragm	1
9	04381	Back Up Ring●	2
10	04379	O-ring 2-9/16x2-3/4x3/32-R17●	2
11	04378	Porting Block	1
12	04571	Push Pin	2
13	04382	Automatic Valve	1
14	04605	Push Pin	4
15	04383	Flow Sleeve Tube	1
16	12139	Side Rod	4
17	02022	O-Ring 2-1/4x2-1/2x1/8-228,R16●	1
18	04386	Cup Seal●	1
19	04780	Washer	1
20	04387	Rod Wiper●	1
21	370351	Capscrew,5/8-11x1-3/4 Hex HD	4
22	15191	Adapter Block	1
23	15189	Anvil	1
24	15170	Post Driver Foot	1
25	15182	Handle Bar	2
26	15194	Set Screw, 3/8-16 x 1/2	2
27	04058	Spring	1
28	07480	Automatic Valve Body	1
29	07481	Piston	1
30	07485	Flow Sleeve	1
31	12146	Spring	1
32	12143	Upper Anvil Stop	1
33	15183	Anvil Bushing	1
34	350000	45° Elbow, 8-V50X-S	2
35	15195	Hose Assy, Aeroquip #FG1055HHG0150	1
36	15196	Hose Assy, Aeroquip # FG1055HHG0140	1
37	00026	O-ring	1
38	02900	Roll Pin	2
39	15197	Name Tag	1
40	03044	Hex Nipple 3/8 NPT	2
41	19693	Danger Stricker	1
42	13568	Back Up Ring A5 568-015	2
43	13567	O-ring,9/16x11/16x1/16-015 R24	2
44	01003	On-Off Valve Button	2
45	10536	Selector Screw	1
46	24058	Female Coupler 3/8 NPT	1
47	24059	Male Coupler 3/8 NPT	1
48	16070	Retaining Ring	1
49	38631	Valve Spool	1
50	38629	Valve Body Assy	1
51	11499	Adaptor 1/2 SAE to 3/8 NPTF	2

A-Supplied With Item # 34

● Denotes Part in Seal Kit

04595	Seal Kit	
00293	O-Ring	1
01362	O-Ring	1
01604	O-Ring (For item 1)	1
01605	O-Ring (For item 24)	2
02022	O-Ring	1
04056	Rod Wiper	1
04379	O-Ring	2
04381	Backup Ring	2
04386	Cup Seal	1
04387	Rod Wiper	1

Accessories

NOTE:

Use **Part Number** and **Description** when ordering.

Part	Description
15184	Adapter - 1-3/4 in. Square Post
15185	Adapter - 2 in. Round Pipe
15186	Adapter - 2-1/4 in. Square Post
15187	Adapter - 2 in. Square Post

Service Tools

NOTE:

Use **Part Number** and **Description** when ordering.

Part	Description
01120	Tamper Sleeve Tool
04337	O-ring Tool Kit
04910	Flow Sleeve Removal Tube
15187	Flow Sleeve Removal Tool
05640	Accumulator Cylinder Puller

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 manner 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

For additional Sales & Service information, contact:



Stanley Hydraulic Tools
Division of the Stanley Works
3810 SE Naef Road
Milwaukie, OR 97267 USA

Tel: (503) 659-5660
Fax: (503) 652-1780