



PP10 HYDRAULIC POST PULLER



Safety and Operation Manual

Focused on performance™

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⚠ DANGER

SERIOUS INJURY OR DEATH
COULD RESULT FROM THE
IMPROPER REPAIR OR SER-
VICE OF THIS TOOL.

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

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SERVICING THE PP10 POST PULLER: 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

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, see the Sales & Service Directory on the back page of this manual.

SAFETY PRECAUTIONS

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

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

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

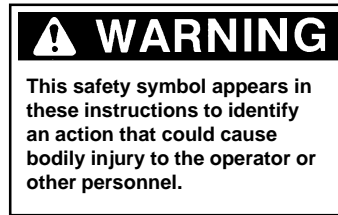
GENERAL SAFETY PRECAUTIONS

The models PP10 Hydraulic Post Puller 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 PP10 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 tool.
- Stay clear of all moving parts.
- Never wear loose clothing that can get entangled in the working parts of the tool.
- To avoid personal injury or equipment damage, all tool repair, maintenance and service must only be performed by authorized and properly trained personnel.
- System pressure hose must always be connected to the tool "IN" or "P" port and system return hose must be connected to the tool "OUT" or "T" port. Reversing connections or reversing flow to the tool can result in severe personal injury.
- Never use tools near energized transmission lines. Know the location of buried or covered services before starting your work.
- Do not overreach. Maintain proper footing and balance at all times.

SAFETY SYMBOLS

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



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

LOCAL SAFETY REGULATIONS

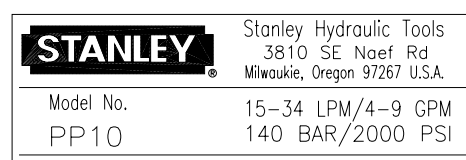
Enter any local safety regulations here. Keep these instructions in an area accessible to the operator and maintenance personnel.

TOOL STICKERS & TAGS

The safety related stickers and tags attached to the tool prior to shipment from the factory are shown below and on the next page. The pressure and flow rates specified must never be exceeded. All stickers and tags must be read and understood prior to operating the tool. The information listed on these stickers and tags must be legible at all times. Always replace those that have become worn or damaged. Replacements are available from your Stanley distributor.

PINCH POINT WARNING STICKER p/n 17572

NAME TAG PP10 p/n 17573

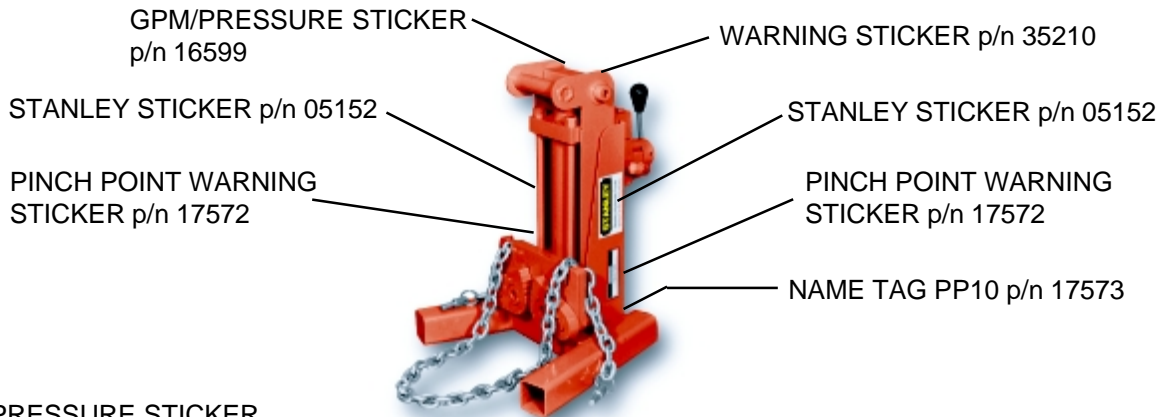


TOOL STICKERS & TAGS Continued...

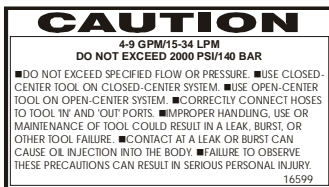
WARNING STICKER p/n 35210



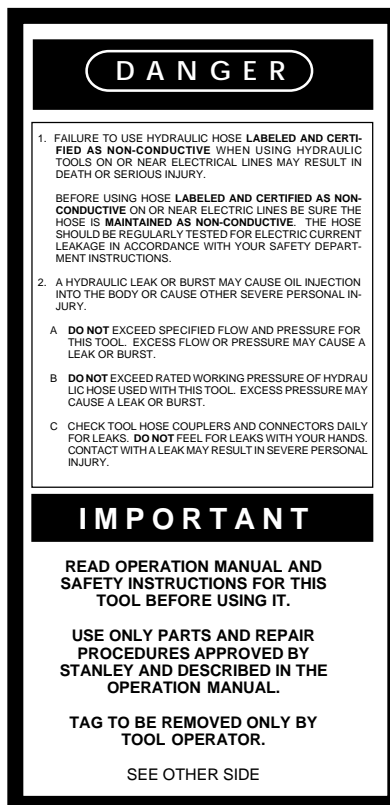
STANLEY STICKER p/n 05152



GPM/PRESSURE STICKER
p/n 16599



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.



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

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.

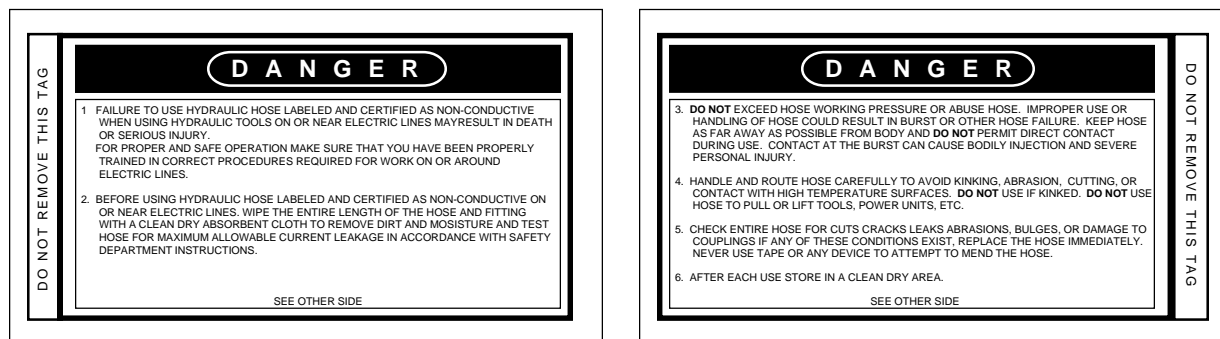
Hoses ② and ③ listed above are **conductive** and **must never** be used near electrical conductors.

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

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

① CERTIFIED NON-CONDUCTIVE HOSE

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



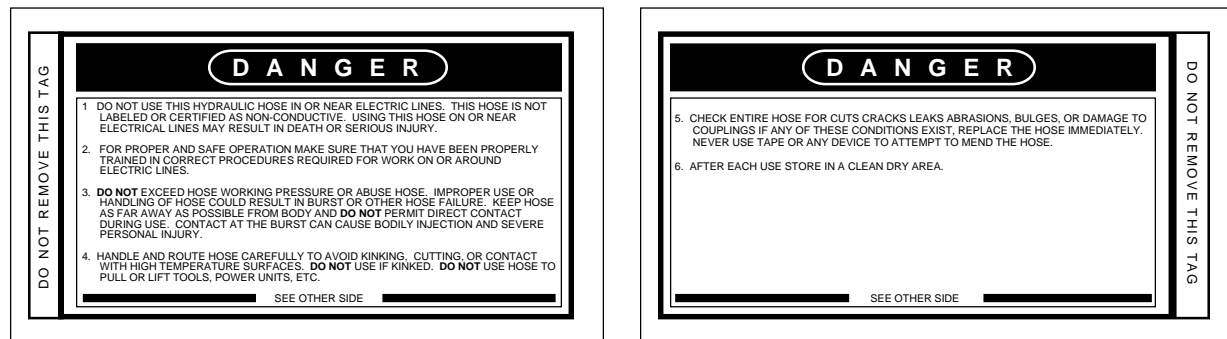
SIDE 1

(shown smaller than actual size)

SIDE 2

② AND ③ WIRE-BRAIDED AND FABRIC-BRAIDED (NOT CERTIFIED OR LABELED NON-CONDUCTIVE) HOSE

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



SIDE 1

(shown smaller than actual size)

SIDE 2

HOSE PRESSURE RATING

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

HYDRAULIC REQUIREMENTS

IMPORTANT

In addition to the Safety Precautions on pages 2 thru 5 of this manual, observe the following for equipment protection and care.

- Do not exceed the rated limits or use the tool for applications beyond its design capacity.
- Always keep critical tool markings, such as labels and warning stickers legible.
- Always replace hoses, couplings and other parts with replacement parts recommended by Stanley Hydraulic Tools. Supply hoses must have a minimum working pressure rating of 2500 psi/175 bar.
- Permit only experienced personnel to perform tool repair.
- Be sure to wipe all couplers clean before connecting. Use only lint-free cloths.
- The hydraulic circuit control valve must be in the "OFF" position when coupling or uncoupling the tool. Failure to do so may result in damage to the quick couplers and cause overheating of the hydraulic system.
- Check fastener tightness often and before each use daily.

HYDRAULIC SYSTEM REQUIREMENTS

- The hydraulic system should provide a flow of 3-9 gpm/11-34 lpm at an operating pressure of 1000-2000 psi/70-140 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 hydraulic system should have enough heat rejection capacity to limit the maximum oil tempera-

ture to 140°F/60°C at the maximum expected ambient temperature.

- The hydraulic system should have a minimum of 25 micron filtration. Recommend using filter elements sized for a flow of at least 30 gpm/114 lpm for cold temperature startup and maximum dirt holding capacity.
- The hydraulic fluid used should have a viscosity between 100 and 400 ssu/20 and 82 centistokes at the maximum and minimum expected operating temperatures. 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.

DANGER

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

Make sure that you have been properly trained in correct procedures required for work on or around electric lines.

- Quick disconnect couplings must conform to NFPA T3.20,15/HTMA specifications.

OPERATION

PREOPERATION PROCEDURES

• 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.

• CHECK HYDRAULIC POWER SOURCE

1. Using a calibrated flowmeter and pressure gauge, check that the hydraulic power source develops a flow of 3-9 gpm/11-34 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/145-155 bar minimum.

• CHECK TOOL

1. There should be no signs of leaks.
2. The tool should be clean, with all fittings and fasteners tight.

• CONNECT HOSES

1. Wipe all hose couplers with a clean lint-free cloth before making connections.
2. Connect the hoses from the hydraulic power source to the tool fittings or quick disconnects. It is a good practice to connect the return hose first and disconnect it last to minimize or avoid trapped pressure within the tool.
3. Observe flow indicators stamped on hose couplers to be sure that oil will flow in the proper direction. The female coupler is the inlet coupler.

NOTE: The pressure increase in uncoupled

hoses left in the sun may result in making them difficult to connect. When possible, connect the free ends of operating hoses together.

4. Observe all safety precautions.
5. Move the hydraulic circuit control valve to the "ON" position to operate the tool.

TOOL OPERATION

1. Observe all safety precautions.
2. For flanged posts, position the base weldment on a flat surface with the post engaged in the jaws of the tool.
3. For solid or square posts, position the base weldment on a flat surface and wrap a chain around the post. Place the chain in the slots on the post puller frame.
4. Actuate the control lever from the "NEUTRAL" position to the "UP" position until the post raises approximately eight inches.
5. Move the control lever from the "UP" position past the "NEUTRAL" position to the "DOWN" position. This releases the jaws (or chain) from the post and lowers the lift frame weldment down to the base weldment (bottom of post).
6. Repeat steps one through five until the post is fully removed.

COLD WEATHER OPERATION

If the post puller 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.

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

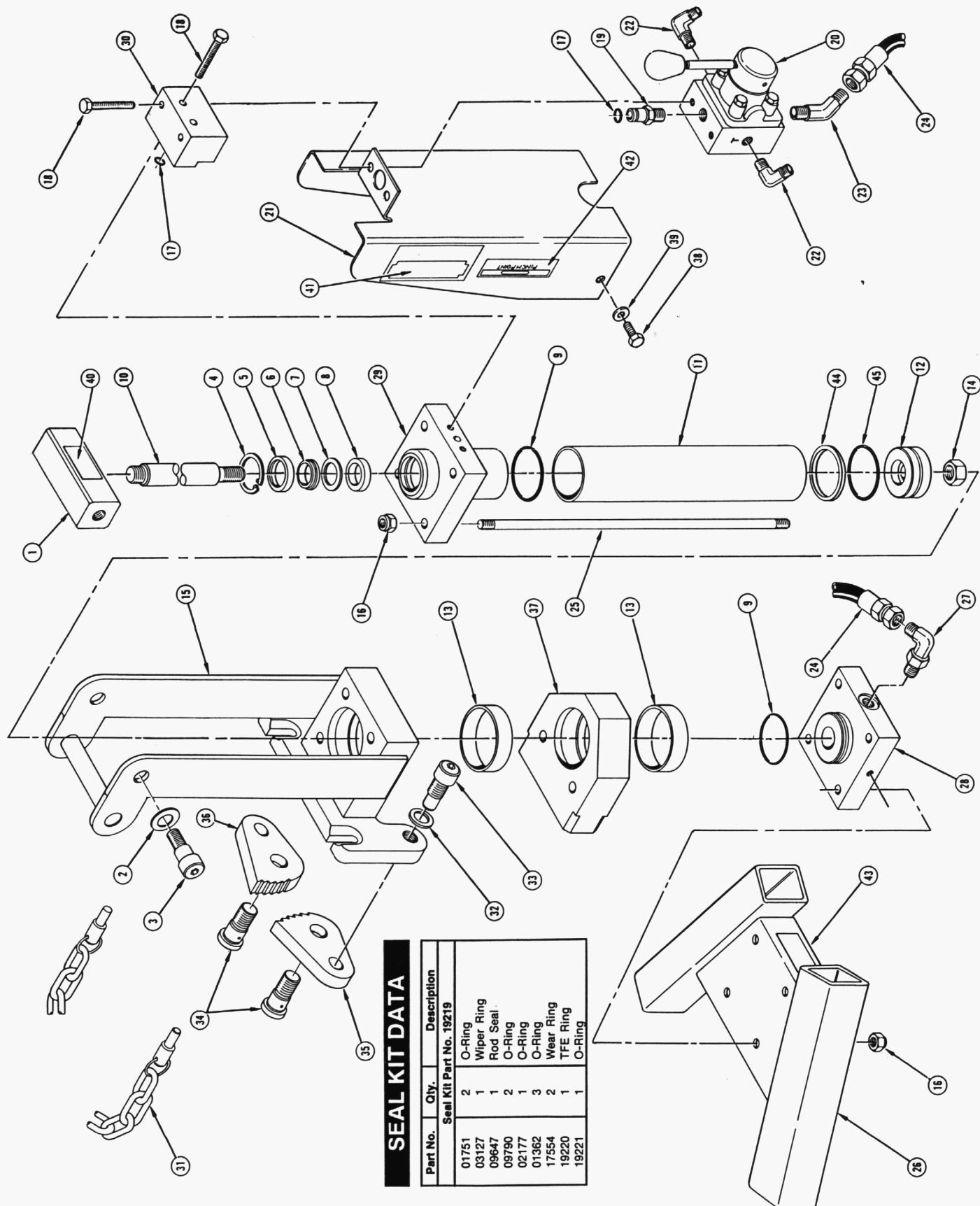
TROUBLESHOOTING

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 Post Puller, always check that the hydraulic power

source is supplying the correct hydraulic flow and pressure to the post puller as listed in the table. Use a flowmeter known to be accurate. Check the flow with the hydraulic oil temperature at least 80°F/27°C.

PROBLEM	POSSIBLE CAUSE	SOLUTION
Post Puller does not run.	Power unit not functioning.	Check power unit for proper flow and pressure (3-9 gpm/11-34 lpm, 2000 psi/140 bar).
	Coupler or hoses blocked.	Remove restriction.
	Mechanical failure of lift cylinder assembly.	Disassemble post puller and inspect for damaged parts.
Post Puller does not pull effectively.	Power unit not functioning.	Check power unit for proper pressure (2000 psi/140 bar).
	Couplers or hoses blocked.	Remove restriction.
Post Puller operates slow.	Low gpm supply from power unit	Check power source for proper flow (3-9 gpm/11-34 lpm).
	Couplers or hoses blocked.	Remove restriction.
	Relief valve set too low.	Adjust relief valve to 2100-2250 psi /145-155 bar.
Post Puller gets hot.	Hot fluid going through tool.	Check power unit. Make sure the 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.



PP10 PARTS LIST

Item No	Part No	Qty	Description
1	17533	1	T-bar
2	04985	2	Spring Washer
3	17553	2	Shoulder Screw, 3/4 x 3/4 Hex Socket Head
4	00166	1	Retaining Ring, 1.850 Heavy Duty (Internal)
5	17526	1	Seal Retainer
6	03127	1	Rod Wiper ●
7	09642	1	Washer
8	09647	1	Rod Seal ●
9	09790	2	O-ring, 2-1/4 x 2-1/2 x 1/8 ●
10	17546	1	Piston Rod
11	17536	1	Cylinder
12	17552	1	Piston
13	17554	2	Wear Ring ●
14	04984	1	Elastic Stop Nut, 3/4-16 Hex
15	17550	1	Lift Frame Weldment
16	371500	8	Elastic Stop Nut, 1/2-13 Hex
17	01751	2	O-ring 3/8 x 9/16 x 3/32 ●
18	06736	4	Capscrew, 5/16-18 x 2-1/4 Hex Head
19	01752	1	Adapter Fitting
20	35518	1	Valve Assembly
21	18514	1	Guard Weldment
22	17556	2	Elbow, 90°-3/8 NPT M3/8 NPT M
23	17557	1	Elbow, 45°-3/8 NPT M-6 Tube
24	17558	1	Hose Assembly
25	17537	4	Tie Rod
26	17538	1	Base Weldment
27	01532	1	Elbow, 90°-6 SAE/-6 Tube
28	17545	1	Cylinder Base
29	17549	1	Cylinder Bearing
30	17544	1	Adapter Block
31	17529	1	Chain Assy (Accessory Item)
32	17559	2	Washer, 7/8 Narrow Type B
33	17534	2	Modified Capscrew
34	17540	2	Shoulder Screw
35	17543	1	Jaw, R.H. (Model PP10100)
	33452	1	Jaw, R.H. (Model PP10100A)
36	17542	1	Jaw, L.H. (Model PP10100)
	33453	1	Jaw, L.H. (Model PP10100A)
37	17541	1	Pivot Block
38	00569	2	Capscrew, 5/16-18 x 1 Hex Hd
39	03031	2	Lockwasher, 5/16
40	16599	1	GPM Sticker
41	05152	2	Stanley Sticker
42	17572	2	Pinch Point Warning Sticker
43	17573	1	Name Tag
44	19220	1	TFE Ring ●
45	19221	1	O-ring ●

The Following Items Are Not Pictured

	35213	2	Swivel, Hydraulic Inc.#956P6-P6 (Used on Model PP10100A only)
	35149	1	Post (Model PP10100A only)
	35212	1	Hitch Pin Assy (Model PP10100A only)
	24069	1	Coupler set (Model PP10100A only)
	35210	1	Warning Decal (Both Models)

SEAL KIT 19219

- Denotes part in seal kit

NOTE: Use Part Number and Part Name when ordering.

SPECIFICATIONS

Capacity (Lift per Stroke).....	8 in./20 cm
Pulling Force.....	9800 lbs/4450 kg
Weight.....	62 lbs/28 kg
Flow Range	3-9 gpm/ 11-34 lpm
Pressure Range.....	2000 psi/140 bar
Porting.....	3/8 NPT Female Pipe Thread
Connect Size	90° Elbow 3/8 NPTM
Height (Retracted).....	18-3/4 in/48 cm
Length.....	14-1/4 in/36 cm
Width.....	14-1/4 in/36 cm
System Type.....	Open Center
Port Size.....	3/8 NPTF

Note

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

ACCESSORIES

17529 Chain Assy

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 Milwaukee, 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 fitness for a particular purpose except for that provided herein. There is no other warranty. This warranty gives the purchaser specific legal rights and other rights may be available which might vary depending upon applicable law.

SALES & SERVICE DIRECTORY

NORTH AMERICA & CORPORATE HEADQUARTERS

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

EUROPEAN HEADQUARTERS

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

NORTHERN EUROPE

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

SOUTHERN EUROPE

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

ASIA PACIFIC HEADQUARTERS

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

AUSTRALIA-NEW ZEALAND HEADQUARTERS

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

CENTRAL & SOUTH AMERICA HEADQUARTERS

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

Hydraulic Tools

STANLEY®

3810 S.E. Naef Road
Milwaukie, Oregon 97267-5698
Phone: 503/659-5660
Fax: 503/652-1780