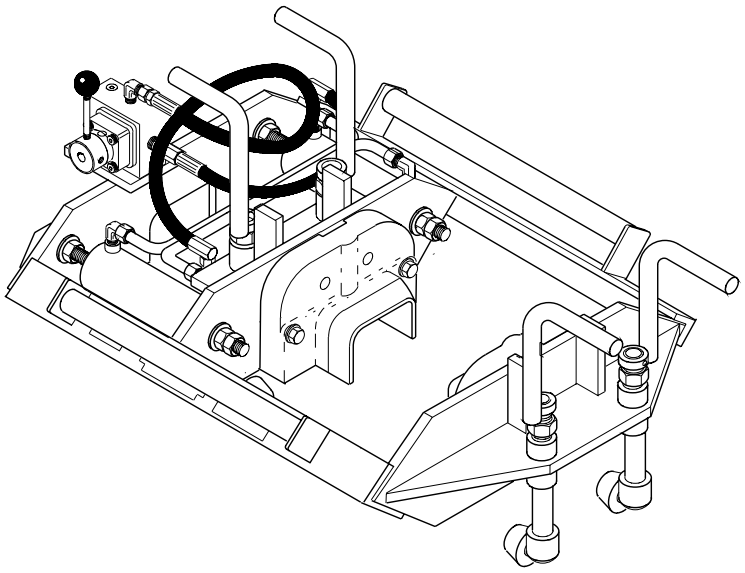
WS10
HYDRAULIC WELD SHEAR

Safety and Operation 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.

THIS MANUAL COVERS MODELS ; WS10100, WS10200, WS1020001, WS10301, WS1030101

Focused on performance™

STANLEY® Hydraulic Tools

28860 1/03
OPS USA VERSION-2
Printed in U.S.A.

CE

INDEX

SERVICING THE WS10 WELD SHEAR: This manual contains safety, operation, and routine maintenance instructions. It does not contain service disassembly and service assembly instructions. If needed, complete service disassembly and service assembly instructions are contained in Manual No. 29168 which can be ordered from your Stanley Hydraulic Tools authorized dealer. 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, call Stanley Hydraulic Tools, 1-800-549-0517 and ask for a Customer Service Representative.

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 WS10 Hydraulic Weld Shear 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 grinders 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.
- 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 weld shear.
- Do not inspect, clean or replace the shear blades while the hydraulic power source is connected. Do not inspect or clean the tool while the hydraulic power source is connected. Accidental engagement of the tool can cause serious injury.
- Never wear loose clothing that can get entangled in the working parts of the tool.
- Keep all parts of your body away from the cylinders and shear blades. Long hair or loose clothing can become drawn into moving components.
- Do not use a shear blade that is cracked, chipped or otherwise damaged. Always inspect shear blades for possible damage before installation or use.
- To avoid personal injury or equipment damage, all tool repair, maintenance and service must only be performed by authorized and properly trained personnel.
- Eye injury, and cutting or severing of body parts is possible if proper procedures are not followed.

SAFETY SYMBOLS

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

DANGER

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

⚠ WARNING

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

IMPORTANT

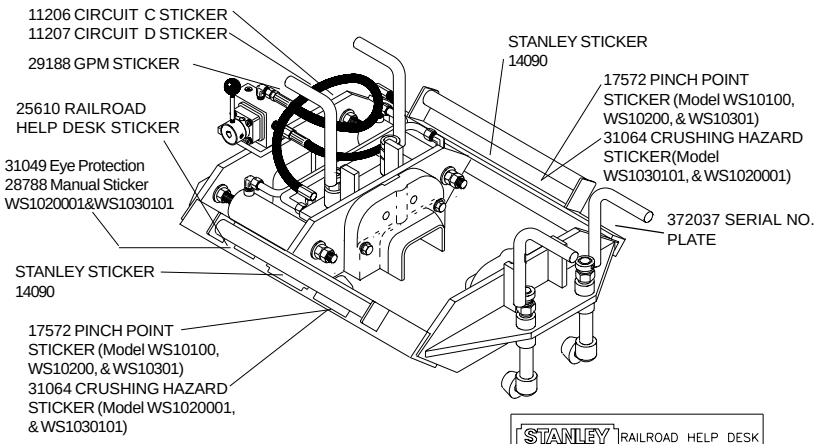
This safety symbol appears in these instructions to identify an action or condition that could result in damage to the tool or other equipment.

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

LOCAL SAFETY REGULATIONS

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

TOOL STICKERS AND TAGS



CAUTION

15–38 LPM/4–10 GPM
DO NOT EXCEED 140 BAR/2000 PSI

■ DO NOT EXCEED SPECIFIED FLOW OR PRESSURE. ■ USE CLOSED–CENTER TOOL ON CLOSED–CENTER SYSTEM. ■ USE OPEN–CENTER TOOL ON OPEN–CENTER SYSTEM. ■ CORRECTLY CONNECT HOSES TO TOOL "IN" AND "OUT" PORTS. ■ IMPROPER HANDLING, USE OR MAINTENANCE OF TOOL COULD RESULT IN A LEAK, BURST OR OTHER TOOL FAILURE. ■ CONTACT AT A LEAK OR BURST CAN CAUSE OIL INJECTION INTO THE BODY. ■ FAILURE TO OBSERVE THESE PRECAUTIONS CAN RESULT IN SERIOUS PERSONAL INJURY.

GPM/PRESSURE CAUTION STICKER P/N 29188

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

STANLEY
Stanley Hydraulic Tools
3810 S.E. Naef Rd.
Milwaukie, Oregon U.S.A.
Model No.
Serial No.

SERIAL NUMBER PLATE p/n 372037
(Shown actual size)

STANLEY RAILROAD HELP DESK
1-800-549-0517
FOR CUSTOMER SERVICE OR TECHNICAL QUESTIONS

RAILROAD HELP DESK STICKER P/N 25610

31049 Eye Protection

28788 Manual Sticker

TO MAINTAIN FREE MOVEMENT, ADJUST THE STOP NUTS FOR 1/8" CLEARANCE BETWEEN THE ROLLERS AND THE UNDERSIDE OF THE RAIL

ROLLER ADJUSTMENT STICKER 35295 (MODEL WS1020001, WS10301, & WS1030101 ONLY)

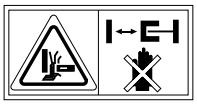
PINCH POINT WARNING STICKER P/N 17572 (Models WS10100, WS10200, & WS10301 ONLY)

NO HAMMER STICKER 35294 MODEL WS1020001, WS10301, WS1030101 ONLY

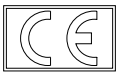
WARNING

PINCH POINT

STAY CLEAR OF ALL MOVING PARTS



CRUSHING HAZARD WARNING 31064 (MODEL WS1020001, WS1030101 ONLY)



CE STICKER 28322 (MODEL WS1020001, WS1030101 ONLY)

CIRCUIT TYPE D 11207 (MODEL WS1020001, & WS1030101 ONLY)

CIRCUIT TYPE C 11206 (MODEL WS1020001, & WS1030101 ONLY)

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 HYDRAU LIC 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 then actual size)

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.

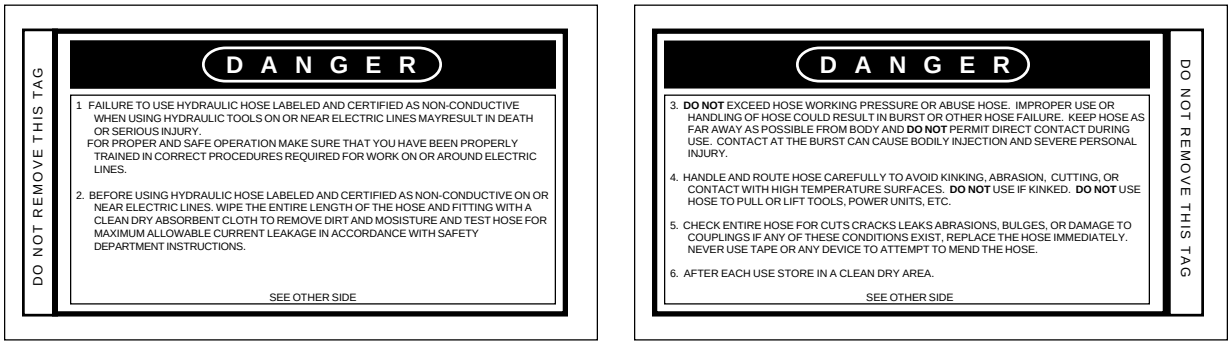
Hoses 2 and 3 listed above are **conductive** and **must never** be used near electrical conductors.

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

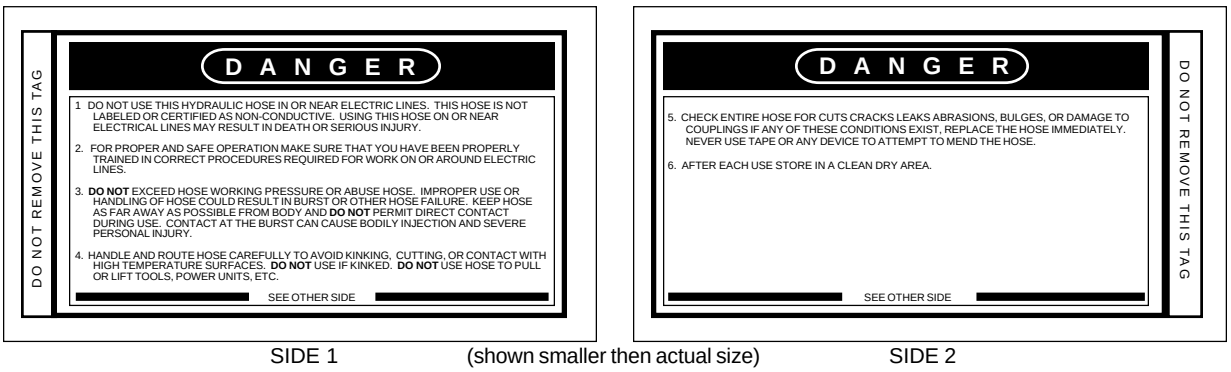
This tag is attached to all certified **non-conductive** hose.



SIDE 1 (shown smaller then 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 then 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 4 of this manual, observe the following for equipment protection and care.

• Always store an idle Weld Shear in a clean dry space, safe from damage or pilferage.

• Do not exceed the rated limits or use the Weld Shear for applications beyond its design capacity.

• Always keep critical tool markings, such as lables 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 Weld Shear. 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 4-10 gpm/15-38 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 recommended minimum cooling capacity is 5 hp/3.73 kW at a 40° F/22°C difference between ambient temperature and oil 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 luids 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 T3.2015/HTMA specifications.

PREOPERATION PROCEDURES

PREPARATION FOR INITIAL USE

On hand pump units, replace the plastic shipping plug on top of the pump assembly with the breather vent. No other special unpacking or assembly requirements are required on either unit prior to usage.

Each unit should be inspected to assure the unit was not damaged in shipping and does not contain packing debris.

CHECK HYDRAULIC POWER SOURCE (Power Unit Model Only)

1. Using a calibrated flowmeter and pressure gauge, check that the hydraulic power source develops a flow of 4-10 gpm/15-38 lpm Do Not exceed 140 bar/2000 psi.

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. Make certain that the power source return pressure does not exceed 250 psi/17 bar.

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

CHECK TOOL

1. Make sure all tool accessories are correctly installed. Failure to install tool accessories properly 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 CONTROL MECHANISM

Hand Pump Models

On hand pump models, check that the directional control valve operates freely from the neutral position to the forward position and then back to the neutral position and then to the rearward position. In each position work the lever to assure movement of the cylinders is free of binding and that the hydraulics are performing as intended.

Power Unit Models

On power unit models, check that the directional control valve operates freely from the neutral position to the forward position and then through the neutral and rearward positions.

CONNECT HOSES (Power Unit Model Only)

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

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 - Power Unit and Hand Pump Models

CHECKING OPERATION AND PERFORMANCE

1. Observe all safety precautions.

2. Remove any debris and burrs from the rail joint that will interfere with the weld shear cutters.

3. Place the weld shear on the rail over the location to be welded.

4. Adjust the height of the four roller pivots (14 & 28). The pivots must, once pivoted, be placed under the rail head with a minimum of clearance to avoid any forcing during the forward movement of the cutters. This adjustment is done with the 4 hex nuts (8).

5. On the power unit model, move the hydraulic circuit control valve to the "ON" position.

6. On the Weld Shear, move the directional control valve lever to the forward position so that the shear blade advances. (*On hand pump versions, the shear blade will not advance or retract without pumping the lever*) Check that the shear blade advances without binding. With the cylinders fully extended, there should be a gap of 1/16 inch between the two shear blades. If this gap is not correct, do not use the weld shear and have it serviced by an authorized and certified dealer. If the gap is correct, retract the shear blade to its most rearward position by moving the control lever to the rearward position. The shear blades should now be as far apart as the tool will permit.

7. Remove the weld shear from the rail.

CUTTING PROCEDURE

1. Proceed with the preparations for welding and put the molds and accessories in their place.

2. Pour the weld.

3. As soon as permitted by the mold manufacturer's instructions, remove the two side iron sheets of the mold. The bottom plate does not need to be removed.

4. Remove any excess sand from the railhead to prevent damage to the cutters.

5. Place the weld shear on the rail so that it straddles the mold.

6. Pivot the four roller pivots under the rail head by turning the handle assemblies (6 & 9).

7. Start cutting at the correct time based on the mold manufacturer's instructions by moving the directional control valve lever forward (*hand pump models require pumping of the lever*).

8. Cut to the end of the stroke and hold for approximately 1 to 2 seconds.
9. Move the valve handle to the rearward position for opening the cutters (*hand pump models require pumping of the lever*) and retract the shear blade to its most rearward position.

10. Pivot the four roller pivots away from the rail and remove the weld shear from the rail as soon as possible.

11. Quickly remove any excess weld material from the cutters to prevent overheating.

COLD WEATHER OPERATION

If a power unit model weld shear is to be used during cold weather, preheat the system hydraulic fluid at low engine speed.

Power unit models should use normally recommended fluids with fluid temperature at or above 50° F/10° C (400 ssu/82 centistokes) before use.

Hand pump models may be warmed by placing them in a heated compartment.

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 Weld Shear, always check that the hydraulic power source is supplying the correct hydraulic flow and pressure to the weld shear 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	CAUSE	REMEDY
Weld Shear does not operate.	Hydraulic power source not functioning.	On power unit models, check power source for proper flow and pressure (3-10 gpm/11-38 lpm, 2000 psi/140 bar. On hand pump models, check that the pressure relief is set to 2200 to 2400 psi.
	Couplers or hoses blocked (power unit models).	Locate and remove restriction.
	Hydraulic pump failure (hand pump models).	Have inspected and repaired at authorized Stanley service center.
	Hydraulic lines not connected (power unit models).	Connect lines.
	Cylinder seal failure.	Have inspected and repaired at authorized Stanley service center.

SPECIFICATIONS

Capacity ..... 20,000 lb / 89,000 N
Pressure Range ..... 2000 psi / 140 bar
Maximum Back Pressure ..... 250 psi / 17 bar
Flow Range ..... 3-10 gpm / 11-38 lpm
Porting (power unit model) ..... -8 SAE O-ring
Couplers (power unit model only) ..... HTMA Flush Face Type Male & Female
Connect Size and Type (power unit model only) ..... 3/8 in. Male Pipe Adapter
Hose Whips ..... No
Weight (hand pump model) ..... 110 lb / 50 kg
(power unit model) ..... 100 lb / 45 kg
Overall Length (hand pump model) ..... 32.5 inches / 82.5 cm
(power unit model) ..... 29 inches / 73.7 cm
Overall Width (hand pump & power unit models) ..... 19 inches / 18 cm
Overall Height (hand pump model without pump handle) ..... 18 inches / 45.7 cm
(power unit model) ..... 14 inches / 35.5 cm
Maximum Fluid Temperature ..... 140° F/60° C
Sound Pressure Level.....Less Than 70 dBA @ 1 meter
Vibration Level .....Less Than 2.5m/sec^2

ACCESSORIES

Description	Part No.
Conversion Kit (Power Unit Model to Hand Pump Model)	28645
Conversion Kit (Hand Pump Model to Power Unit Model)	28644
Shear Blade Set - 115 lb (1 pair)	27989
Shear Blade Set - 132 lb (1 pair)	27948
Shear Blade Set - Small Rail (1pair)	35742

WARRANTY

Hand held tools and their parts carry a limited warranty against defects in materials and workmanship for a period of 12 months from the date of purchase. Exceptions are cutting parts, steels, and other parts not manufactured by Stanley (such as impact mechanisms, alternators, regulators, and hoses), and parts subject to normal wear and tear (such as o-rings, saw blades, and other parts that become worn through normal use of the tool).

The Warranty Registration Card packed with the tool must be filled out and returned to Stanley upon receipt of the tool.

Stanley reserves the right to replace or repair only those parts which under our examination prove to have been defective at the time of purchase.

Shipping charges are prepaid by the customer unless otherwise authorized by Stanley.

The warranty is void if maximum flow and pressure ratings are exceeded.

There is no other warranty expressed or implied.

WS10100 & WS10200 PARTS LIST

Item No	Part No	Qty	Description
1	-----	1	Retaining Ring (incld in p/n 28587)●
2	25997	1	Hose Assy
3	26717	2	Elbow
4	26000	2	Tee
5	25999	2	Tube Assy
6	28113	2	Handle Assy - Right Hand
7	07492	4	Roll Pin
8	26196	4	Nut
9	28112	2	Handle Assy - Left Hand
10	25797	1	Slide Weldment
11	27948	1 pr	Shear Blade Weldment (pair)
12	02504	4	Capscrew - 1/2 - 13UNC
13	03061	4	Lockwasher
14	28107	2	Roller Pivot - Long
15	25995	8	Nut
16	21318	6	Washer
17	26001	2	Hydraulic Cylinder
18	25996	1	Hose Assy
19	14090	2	Stanley Decal
20	17572	2	Pinch Point Warning Sticker
21	372155	2	Drive Pin
22	28105	4	Shaft
23	26247	4	DU Bearing
24	28104	4	Roller
25	28228	4	Washer
26	18038	4	Retaining Ring
27	372037	1	Name Tag
28	28106	2	Roller Pivot - Short
29	25610	1	Railroad Help Desk Sticker
30	00569	2	Capscrew - 5/16-18UNC
31	03031	2	Lockwasher
32	**26002**	**1**	**Pump Block Assy (WS10200 model only) ♦**
33	29188	1	GPM Sticker □
34	25721	1	Frame Weldment
35	-----	1	Rod (part of item 17)
36	-----	1	Spacer (part of item 17)
37	-----	1	O-ring (incld in p/n 28587 Kit)●
38	-----	1	Back-up Ring (incld in p/n 28587)●
39	01532	1	Straight Thread Elbow
40	-----	1	Head (part of item 17)
41	-----	1	O-ring (incld in p/n 28587 Kit)●
42	-----	1	Dust Seal (incld in p/n 28587) ●
43	**26728**	**1**	**Valve Block Assy (WS10100 model only) □**
44	-----	1	Piston Seal (incld in p/n 28587 Kit) ●
45	-----	1	O-ring (incld in p/n 28587 Kit) ●
46	-----	1	Piston (part of item 17)
47	-----	1	Nut (part of item 17)
48	17527	1	Cap
49	24291	1	Lever Rod
50	02633	1	Knob
51	24313	1	Housing Assy
52	24876	1	Spring
53	20145	2	Ball
54	02177	1	O-ring, 2 1/16 x 2 1/4 x 3/32 ●
55	24877	1	Rotor Assy★
56	07890	1	Roll Pin
57	24233	1	Shaft
58	20761	2	Thrust Washer
59	20762	1	Needle Thrust Bearing
60	17924	1	O-ring, 3/8 x 1/2 x 1/16 ●
61	24300	1	Set Screw
62	00146	4	Capscrew, 5/16 x 18UNC x 1 3/4 HSH
63	26023	1	Handle ♦
64	25901	1	Lever ♦
65	26005	1	#80 Chain Master Link (incld items 103 & 104) ♦
66	29547	1	Pivot Block ♦
67	12100	3	3/8" Dia Steel Ball
68	26073	2	Spring ♦
69	01411	3	O-ring, .468 x .624 x .078 ♦ ●
70	08104	1	-6 SAE Plug ♦
71	26070	1	Breather Vent ♦
72	26006	1	Parkut Seal ♦●
73	26007	1	Tank ♦
74	26003	2	1/4 Stat-O-Seal ♦●
75	26004	2	Capscrew, 1/4-20UNC x 5 1/2 ♦
76	350784	1	O-ring, 5/16 x 7/16 x 1/16 ♦●
77	28233	1	Cartridge Valve ♦
78	13994	1	1/8" Steel Ball ♦
79	26077	1	Poppet ♦
80	26076	1	Spring ♦
81	350016	1	-2 Plug ♦
82	25915	1	Plunger ♦
83	28244	1	Adjustment Screw ♦
84	02901	2	O-ring, .239 x .367 x .064 ♦●
85	25916	1	Modified -5 Plug ♦
86	06533	1	O-ring, 1.171 x 1.403 x .116 ♦●
87	04858	1	-16 Plug ♦
88	03364	1	O-ring, .414 x .558 x .072 ♦●
89	26069	1	Piston Seal ♦●
90	24289	1	Plug ♦
91	26071	1	Spring ♦
92	25850	1	Pump Block ♦
93	00016	2	O-ring, 9/16 x 11/16 x 1/16 ●
94	25881	1	Valve Block
95	01362	3	O-ring, 5/16 x 7/16 x 1/16 ●
96	24305	9	Spring Washer
97	24231	3	Grommet
98	01605	2	O-ring .644 x .818 x .087 -908 (incl with item 36 or 75) ●
99	350237	2	-8 Plug (incl item 36) ♦
100	25912	1	-2 Plug
101	23002	1	O-ring, 7/8 x 1 1/8 x 1/8 -212 ♦●
102	26074	1	Backup Ring -212 ♦●
103	-----	1	Chain Link (incld with item 65) ♦
104	-----	2	Cotter Pin (incld with item 65) ♦
105	00682	3	Capscrew, 3/8 x 1 3/4 HSH ♦
106	25292	1	Roll Pin ♦
107	00936	2	Adapter (incl item 98) □
108	24059	1	Male Coupling □
109	24058	1	Female Coupling □
110	00955	2	1/8" Pipe Plug □
111	03906	4	Locknut □

SEAL KIT DATA

Seal Kit Part No. 28586

Item No	Part No	Qty	Description
99	01605	2	O-ring
54	02177	1	O-ring
60	17924	1	O-ring
74	26003	2	Stat-O-Seal
72	26006	1	Purkut Seal
69	01411	3	O-ring
101	23002	1	O-ring
102	26074	1	Backup Ring
84	02901	2	O-ring
95	01362	3	O-ring
93	00016	2	O-ring
89	26069	1	Piston Seal
88	03364	1	O-ring
86	06533	1	O-ring
76	350784	1	O-ring
--	28587	2	Cylinder Repair Kit

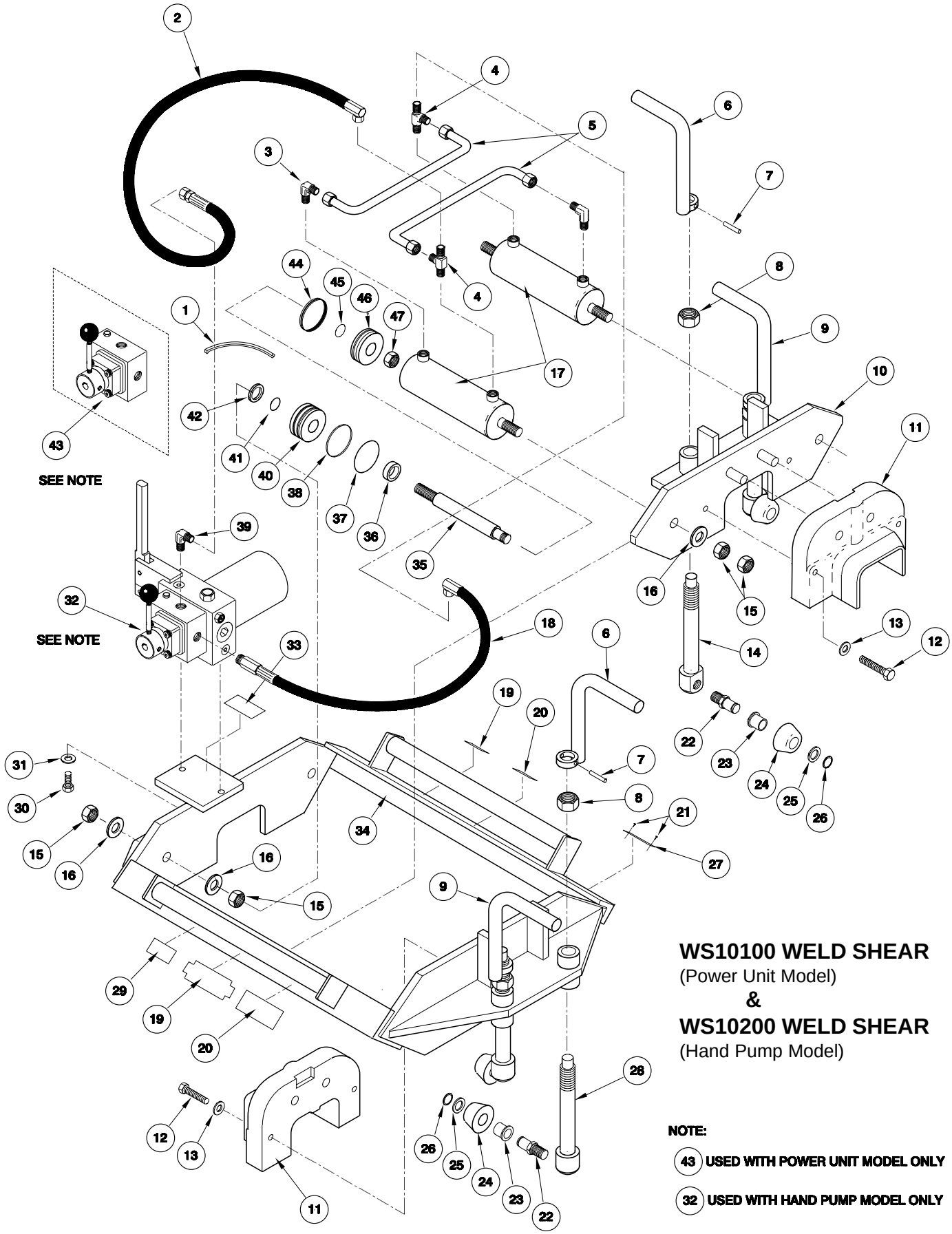
□ Denotes parts used only in WS10100 (Power Unit) models.

♦ Denotes parts used only in WS10200 (Hand Pump) models.

● Denotes part in seal kit

★33614 - Rotor Service Assy.

NOTE: Use Part Number and Part Name when ordering.



WS10100 WELD SHEAR
(Power Unit Model)
&
WS10200 WELD SHEAR
(Hand Pump Model)

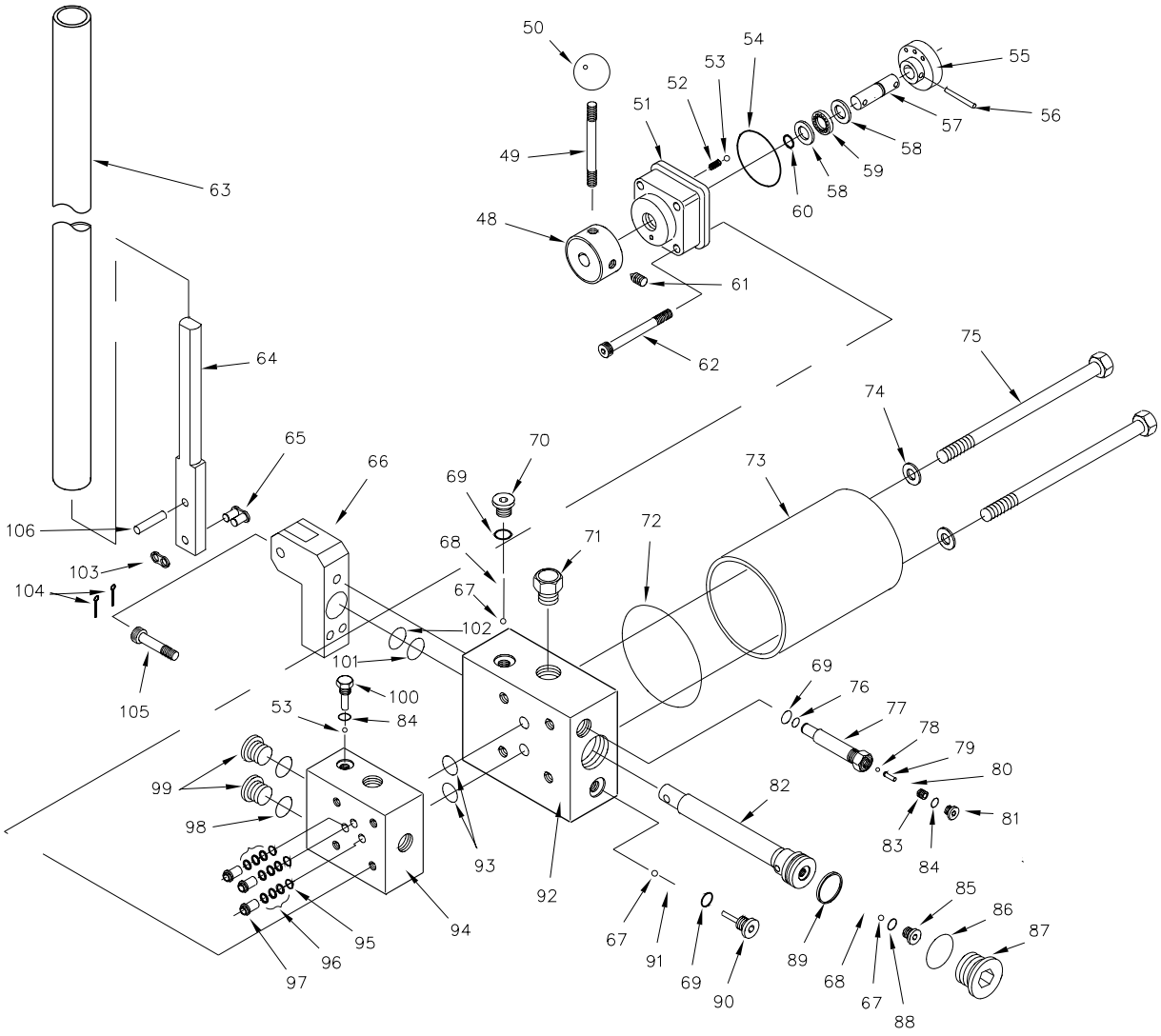
NOTE:

43 **USED WITH POWER UNIT MODEL ONLY**

32 **USED WITH HAND PUMP MODEL ONLY**

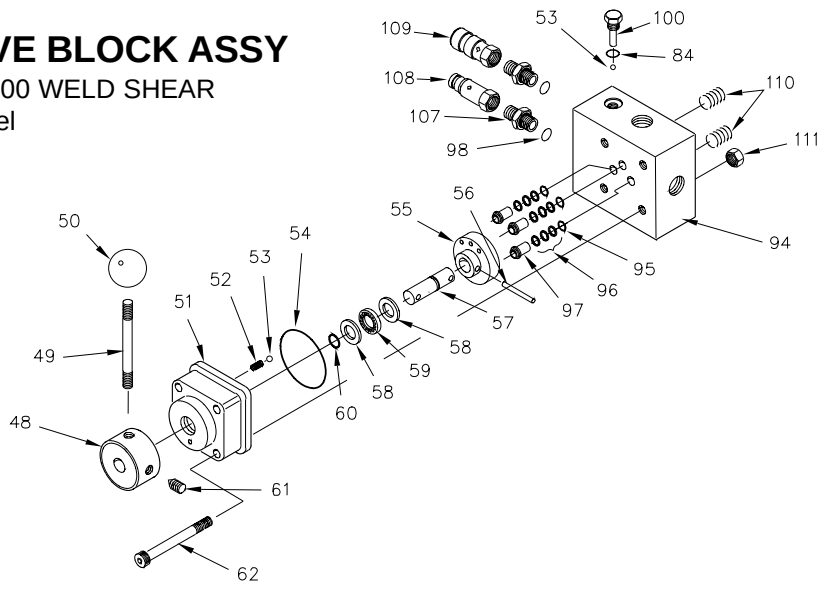
26002 PUMP BLOCK ASSY

Used on WS10200 WELD SHEAR
Hand Pump Model



26728 VALVE BLOCK ASSY

Used on WS10100 WELD SHEAR
Power Unit Model



WS1020001 PARTS LIST

Item No	Part No	Qty	Description
1	-----	1	Retaining Ring (incld in p/n 28587)●
2	25997	1	Hose Assy
3	26717	2	Elbow
4	26000	2	Tee
5	25999	2	Tube Assy
6	28113	2	Handle Assy - Right Hand
7	07492	4	Roll Pin
8	26196	4	Nut
9	28112	2	Handle Assy - Left Hand
10	25797	1	Slide Weldment
11	27948	1 pr	Shear Blade Weldment (pair)
12	02504	4	Capscrew - 1/2 - 13UNC
13	03061	4	Lockwasher
14	28107	2	Roller Pivot - Long
15	25995	8	Nut
16	21318	6	Washer
17	26001	2	Hydraulic Cylinder
18	25996	1	Hose Assy
19	14090	2	Stanley Decal
20	17572	2	Pinch Point Warning Sticker
21	372155	2	Drive Pin
22	28105	4	Shaft
23	26247	4	DU Bearing
24	28104	4	Roller
25	28228	4	Washer
26	18038	4	Retaining Ring
27	372037	1	Name Tag
28	28106	2	Roller Pivot - Short
29	25610	1	Railroad Help Desk Sticker
30	00569	2	Capscrew - 5/16-18UNC
31	03031	2	Lockwasher
32	**26002**	**1**	**Pump Block Assy (WS10200 model only) ♦**
33	29188	1	GPM Sticker □
34	25721	1	Frame Weldment
35	-----	1	Rod (part of item 17)
36	-----	1	Spacer (part of item 17)
37	-----	1	O-ring (incld in p/n 28587 Kit)●
38	-----	1	Back-up Ring (incld in p/n 28587)●
39	01532	1	Straight Thread Elbow
40	-----	1	Head (part of item 17)
41	-----	1	O-ring (incld in p/n 28587 Kit)●
42	-----	1	Dust Seal (incld in p/n 28587) ●
43	**26728**	**1**	**Valve Block Assy (WS10100 model only) □**
44	-----	1	Piston Seal (incld in p/n 28587 Kit) ●
45	-----	1	O-ring (incld in p/n 28587 Kit) ●
46	-----	1	Piston (part of item 17)
47	-----	1	Nut (part of item 17)
48	17527	1	Cap
49	24291	1	Lever Rod
50	02633	1	Knob
51	24313	1	Housing Assy
52	24876	1	Spring
53	20145	2	Ball
54	02177	1	O-ring, 2 1/16 x 2 1/4 x 3/32 ●
55	24877	1	Rotor Assy★
56	07890	1	Roll Pin
57	24233	1	Shaft
58	20761	2	Thrust Washer
59	20762	1	Needle Thrust Bearing
60	17924	1	O-ring, 3/8 x 1/2 x 1/16 ●
61	24300	1	Set Screw
62	00146	4	Capscrew, 5/16 x 18UNC x 1 3/4 HSH
63	26023	1	Handle ♦
64	25901	1	Lever ♦
65	26005	1	#80 Chain Master Link (incld items 103 & 104) ♦
66	29547	1	Pivot Block ♦
67	12100	3	3/8" Dia Steel Ball
68	26073	2	Spring ♦
69	01411	3	O-ring, .468 x .624 x .078 ♦ ●
70	08104	1	-6 SAE Plug ♦
71	26070	1	Breather Vent ♦
72	26006	1	Parkut Seal ♦●
73	26007	1	Tank ♦
74	26003	2	1/4 Stat-O-Seal ♦●
75	26004	2	Capscrew, 1/4-20UNC x 5 1/2 ♦
76	350784	1	O-ring, 5/16 x 7/16 x 1/16 ♦●
77	28233	1	Cartridge Valve ♦
78	13994	1	1/8" Steel Ball ♦
79	26077	1	Poppet ♦
80	26076	1	Spring ♦
81	350016	1	-2 Plug ♦
82	25915	1	Plunger ♦
83	28244	1	Adjustment Screw ♦
84	02901	2	O-ring, .239 x .367 x .064 ♦●
85	25916	1	Modified -5 Plug ♦
86	06533	1	O-ring, 1.171 x 1.403 x .116 ♦●
87	04858	1	-16 Plug ♦
88	03364	1	O-ring, .414 x .558 x .072 ♦●
89	26069	1	Piston Seal ♦●
90	24289	1	Plug ♦
91	26071	1	Spring ♦
92	25850	1	Pump Block ♦
93	00016	2	O-ring, 9/16 x 11/16 x 1/16 ●
94	25881	1	Valve Block
95	01362	3	O-ring, 5/16 x 7/16 x 1/16 ●
96	24305	9	Spring Washer
97	24231	3	Grommet
98	01605	2	O-ring .644 x .818 x .087 -908 (incl with item 36 or 75) ●
99	350237	2	-8 Plug (incl item 36) ♦
100	25912	1	-2 Plug
101	23002	1	O-ring, 7/8 x 1 1/8 x 1/8 -212 ♦●
102	26074	1	Backup Ring -212 ♦●
103	-----	1	Chain Link (incld with item 65) ♦
104	-----	2	Cotter Pin (incld with item 65) ♦
105	00682	3	Capscrew, 3/8 x 1 3/4 HSH ♦
106	25292	1	Roll Pin ♦
107	00936	2	Adapter (incl item 98) □
108	24059	1	Male Coupling □
109	24058	1	Female Coupling □
110	00955	2	1/8" Pipe Plug □
111	03906	4	Locknut □

SEAL KIT DATA

Seal Kit Part No. 28586

Item No	Part No	Qty	Description
99	01605	2	O-ring
54	02177	1	O-ring
60	17924	1	O-ring
74	26003	2	Stat-O-Seal
72	26006	1	Purkut Seal
69	01411	3	O-ring
101	23002	1	O-ring
102	26074	1	Backup Ring
84	02901	2	O-ring
95	01362	3	O-ring
93	00016	2	O-ring
89	26069	1	Piston Seal
88	03364	1	O-ring
86	06533	1	O-ring
76	350784	1	O-ring
--	28587	2	Cylinder Repair Kit

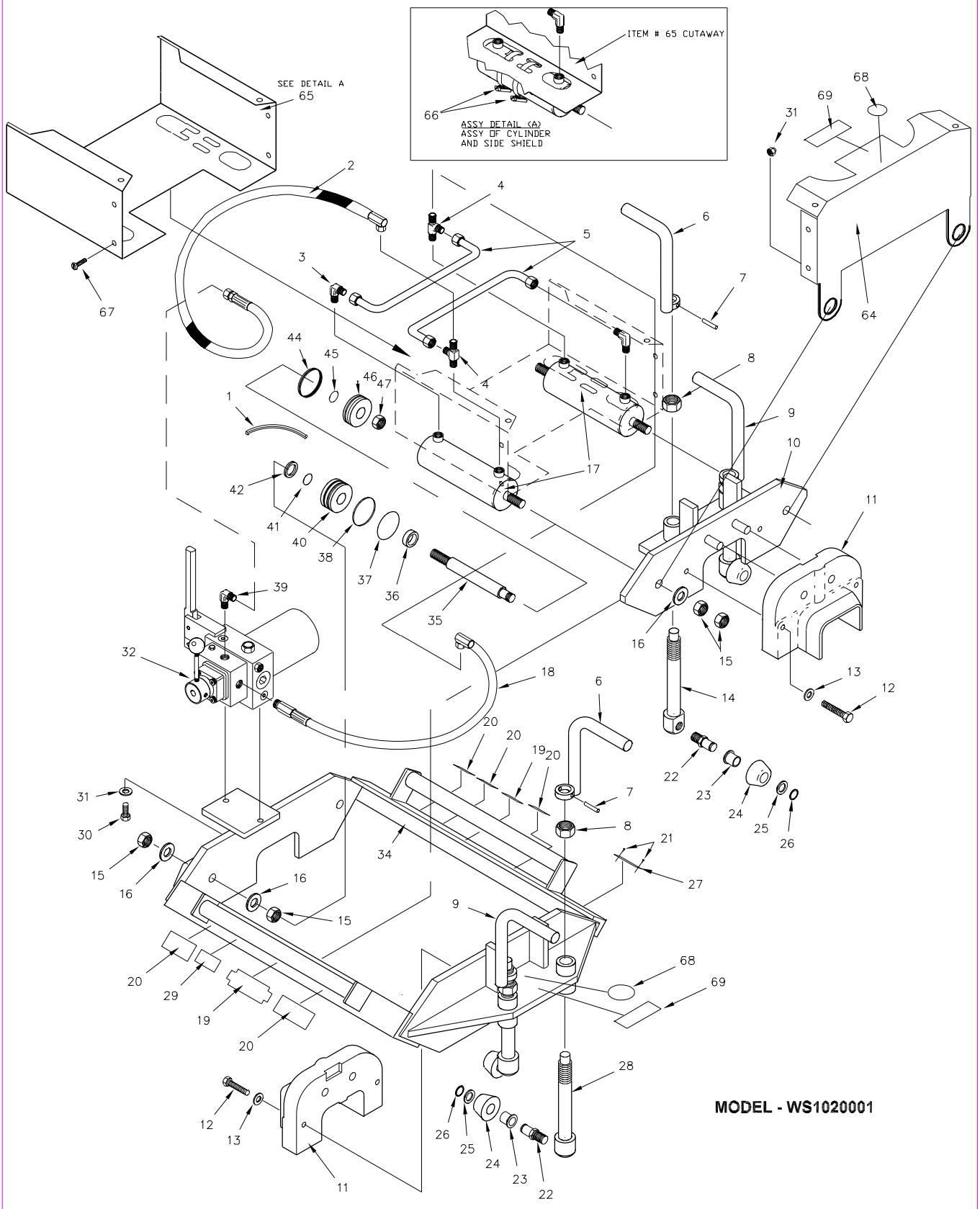
□ Denotes parts used only in WS10100 (Power Unit) models.

♦ Denotes parts used only in WS10200 (Hand Pump) models.

● Denotes part in seal kit

★33614 - Rotor Service Assy.

NOTE: Use Part Number and Part Name when ordering.


ITEM # 65 CUTAWAY
ASSY DETAIL (A)
ASSY OF CYLINDER
AND SIDE SHIELD
SEE DETAIL A
MODEL - WS1020001

WS10301, WS1030101 PARTS LIST

Item No	Part No	Qty	Description
1	-----	1	Retaining Ring (incld in p/n 28587)●
2	35691	1	Tube Assy
3	26717	4	Elbow
4	26000	2	Tee
5	25999	2	Tube Assy
6	28113	2	Handle Assy - Right Hand
7	07492	4	Roll Pin
8	26196	4	Nut
9	28112	2	Handle Assy - Left Hand
10	25797	1	Slide Weldment
11	27948	1 pr	Shear Blade Weldment (pair) WS10301 Only. (No shear Blades are Shipped with Model WS1030101)
12	02504	4	Capscrew - 1/2 - 13UNC
13	03061	4	Lockwasher
14	28107	2	Roller Pivot - Long
15	25995	8	Nut
16	21318	6	Washer
17	26001	2	Hydraulic Cylinder
18	35690	1	Tube Assy
19	14090	2	Stanley Decal
20	31064	4	Crushing Hazard Warning Sticker (model WS1030101)
20	17572	2	Pinch Point Sticker Model WS10301
21	372155	2	Drive Pin
22	28105	4	Shaft
23	26247	4	DU Bearing
24	28104	4	Roller
25	28228	4	Washer
26	18038	4	Retaining Ring
27	372037	1	Name Tag
28	28106	2	Roller Pivot - Short
29	25610	1	Railroad Help Desk Sticker (Model WS10301) Not used on WS1030101
30	35869	1	Flow Control
31	06971	6	Locknut 10-24 Plated
32	34570	2	Adaptor, -6 SAE/-8 JIC
33	29188	1	GPM Sticker
34	25721	1	Frame Weldment
35	-----	1	Rod (part of item 17)
36	-----	1	Spacer (part of item 17)
37	-----	1	O-ring (incld in p/n 28587 Kit)●
38	-----	1	Back-up Ring (incld in p/n 28587)●
39	N/A	---	N/A
40	-----	1	Head (part of item 17)
41	-----	1	O-ring (incld in p/n 28587 Kit)●
42	-----	1	Dust Seal (incld in p/n 28587) ●
43	N/A	---	N/A
44	-----	1	Piston Seal (incld in p/n 28587 Kit) ●
45	-----	1	O-ring (incld in p/n 28587 Kit) ●
46	-----	1	Piston (part of item 17)
47	-----	1	Nut (part of item 17)
48	31061	1	Cap
49	24291	1	Lever Rod
50	02633	1	Knob
51	24313	1	Housing Assy
52	00757	1	Roll Pin 1/8 x 3/4
53	20145	1	Steel Ball
54	02177	1	O-ring, 2 1/16 x 2 1/4 x 3/32 ●
55	24877	1	Rotor Assy★
56	07890	1	Roll Pin
57	24233	1	Shaft
58	20761	2	Thrust Washer
59	20762	1	Needle Thrust Bearing
60	17924	1	O-ring, 3/8 x 1/2 x 1/16 ●
61	24300	1	Set Screw
62	01758	4	Capscrew, 5/16 x 18UNC x 3-1/2 HSH
63	29876	1	Valve Block
64	35359	1	Front Shield
65	35360	1	Side Shield
66	35871	4	Heavy Duty Hose Clamps
67	02473	6	Screw, 10-24 x 1/2 PHMS,Slotted
68	35294	2	No Hammer Sticker
69	35295	2	Roller Adjustment Sticker
70	24297	1	Torsion Spring
71	28670	1	Koenig Plug
72	35687	1	Valve Bracket
73	11206	1	Type C Sticker
74	11207	1	Type D Sticker
75	28322	1	CE Sticker
76	02901	1	O-ring .239 x .367 x .064●
77	00285	1	Roll Pin 1/8 x 5/8
78	01362	3	O-ring, 5/16 x 7/16 x 1/16 ●
79	24305	9	Spring Washer
80	24231	3	Grommet
81	25912	1	-2 Plug
82	00936	2	Adapter (incl o-ring)
83	24059	1	Male Coupling
83	24058	1	Female Coupling
85	03906	4	Locknut
86	28788	1	Manual Sticker (WS1030101 Only)
87	31049	1	Eye Protection Sticker (WS1030101 Only)

SEAL KIT DATA

Seal Kit Part No. 28586

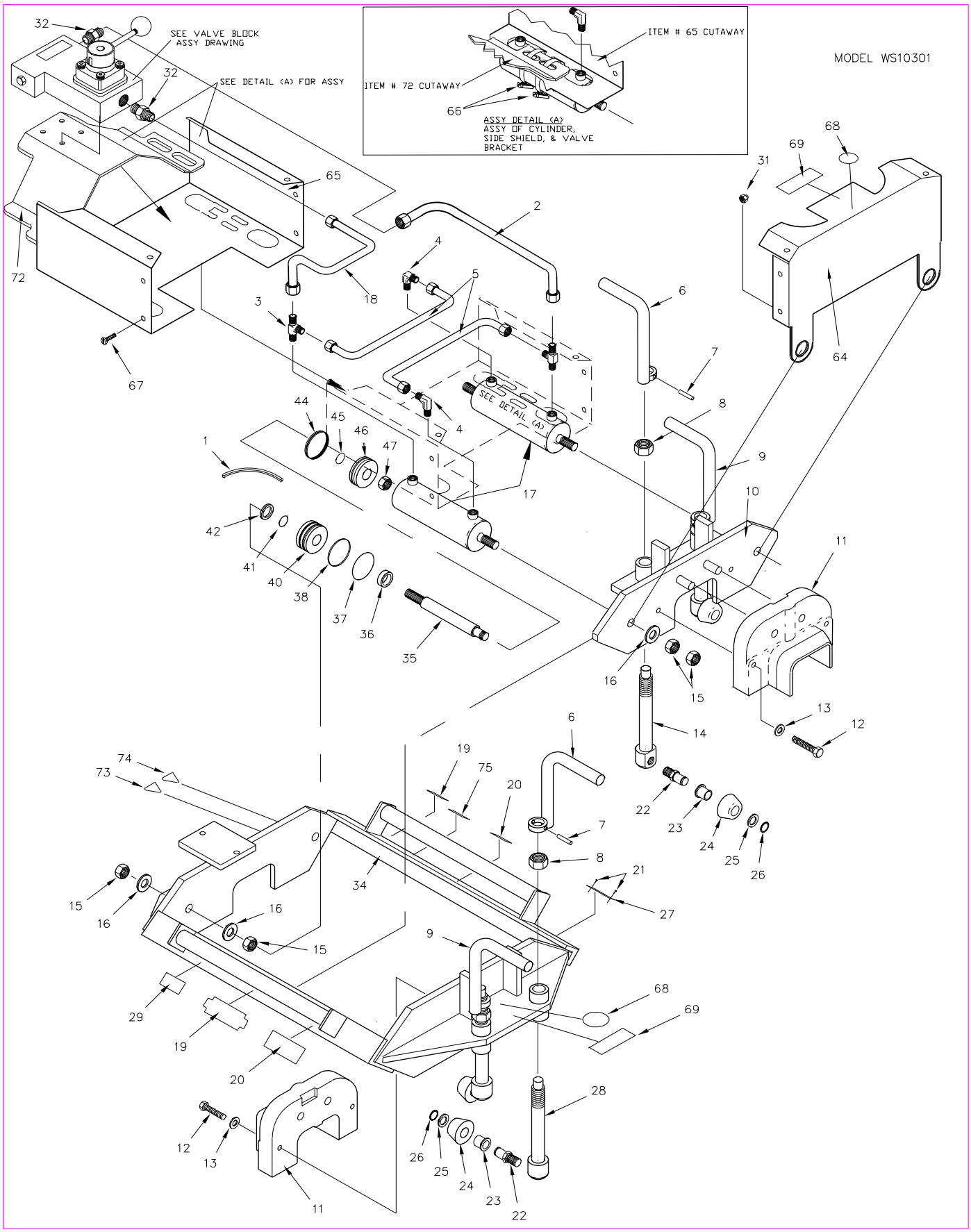
Item No	Part No	Qty	Description
99	01605	2	O-ring (See WS10100/200 Parts List)
54	02177	1	O-ring
60	17924	1	O-ring
74	26003	2	Stat-O-Seal (See WS10100/200 Parts List)
72	26006	1	Purkut Seal (See WS10100/200 Parts List)
69	01411	3	O-ring (See WS10100/200 Parts List)
101	23002	1	O-ring (See WS10100/200 Parts List)
102	26074	1	Backup Ring (See WS10100/200 Parts List)
76	02901	2	O-ring
87	01362	3	O-ring
93	00016	2	O-ring (See WS10100/200 Parts List)
89	26069	1	Piston Seal (See WS10100/200 Parts List)
88	03364	1	O-ring (See WS10100/200 Parts List)
86	06533	1	O-ring (See WS10100/200 Parts List)
76	350784	1	O-ring (See WS10100/200 Parts List)
--	28587	2	Cylinder Repair Kit

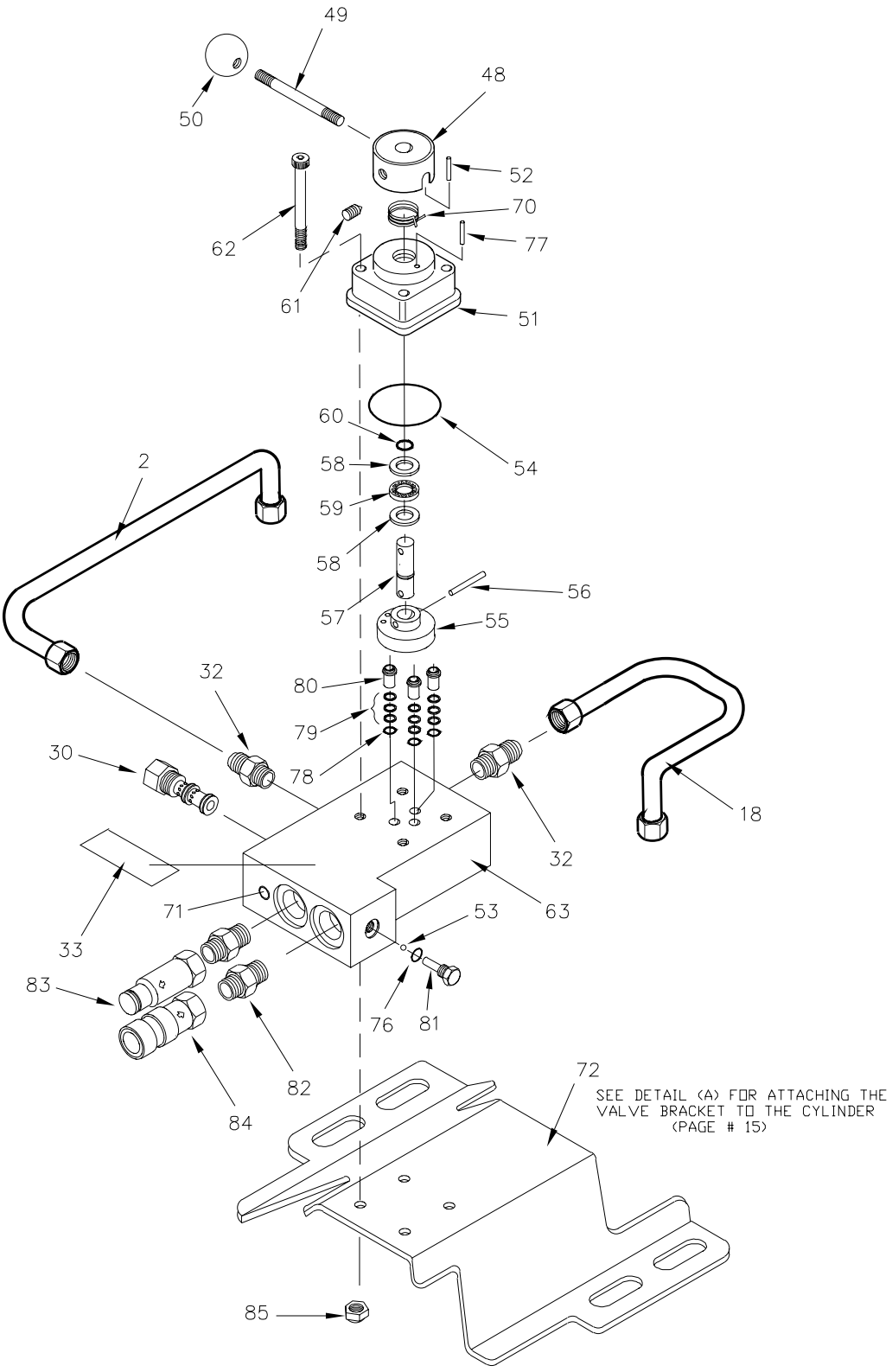
NOTE: Not all Parts found in the seal kit are used in all models. Check your parts list of the specific model you have for the correct part or parts you are installing.

★33614 - Rotor Service Assy.

● Denotes part in seal kit

NOTE: Use Part Number and Part Name when ordering.


MODEL WS10301
SEE VALVE BLOCK ASSY DRAWING
SEE DETAIL (A) FOR ASSY
ITEM # 65 CUTAWAY
ITEM # 72 CUTAWAY
ASSY DETAIL (A)
ASSY OF CYLINDER, SIDE SHIELD, & VALVE BRACKET
SEE DETAIL (A)



VALVE BLOCK ASSY WS10301

CERTIFICATE OF CONFORMITY
ÜBEREINSTIMMUNGS-ZERTIFIKAT
CERTIFICAT DE CONFORMITE CEE
D'UN MARTEAU-PIQUEUR OU D'UN BRISE-BETON EXAMINE
CERTIFICADO DE CONFORMIDAD
CERTIFICATO DI CONFORMITA

STANLEY®
Hydraulic Tools

I, the undersigned:
Ich, der Unterzeichnende:
Je soussigné:
El abajo firmante:
Io sottoscritto:

Burrows, James O.

Surname and First names/Familienname und Vernamen/Nom et prénoms/Nombre y apellido/Cognome e nome

hereby certify that the construction plant or equipment specified hereunder:
bestätigt hiermit, daß die Konstruktion und Ausrüstung wie folgt spezifiziert ist:
atteste que le brise-béton:
por el presente certifico que la fabrica o el equipo especificado a continuacion:
certifico che l'impianto o l'attrezzatura sotto specificata:

1. Category: Weld Shear
   Kategorie:
   Catégorie:
   Categoria:
   Categoria:

2. Make/Ausführung/Marque/Marca/Fabbricazione Stanley

3. Type/Typ/Type/Tipo/Tipo: WS1020001, WS1030101

4. Type serial number of equipment:
   Typ und Serien - Nr. der Ausrüstung:
   Numéro dans la série du type de matériel:
   Numero de serie tipo del equipo:
   Matricola dell´attrezzatura:
   All

5. Year of manufacture/Baujahr/année de fabrication/Año de fabricacion/Anno di fabbricazione 2000

Has been manufactured in conformity with - EEC Type examination as shown.
wurde hergestellt in Übereinstimmung mit - EEC Typ-Prüfung nach.
est fabriqué conformément - au(x) type(s) examiné(s) comme indiqué dans le tableau di-après.
ha sido fabricado de acuerdo con - tipo examen EEC como dice.
è stata costruita in conformitá con - le norme CEE come illustrato.

	Examen CEE de type			
Directive Richtlinie Directives particulières Directriz Direttiva	No. Nr Numéro No n.	Date Datum Date Fecha Data	Approved body Prüfung durch Organisme agréé Aprobado Collaudato	Date of expiry Ablauf datum Date d´expiration Fecha de caducidad Data di scadenza
EN	292-1, 292-2	1991	Self	N/A

6. Special Provisions: None
   Spezielle Bestimmungen:
   Dispositions particulières:
   Provisiones especiales:
   Misure special:

Done at/Ort/Fait à/Dado en/Fatto a Stanley Hydraulic Tools, Milwaukie, Oregon USA Date/Datum/le/Fecha/Data 9/19/2002

Signature/Unterschrift/Signature/Firma/Firma

Position/Position/Fonction/Puesto/Posizione Engineering Manager

Stanley Hydraulic Tools
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