

10 TON PUSHMASTER SPRINT

INSTRUCTION MANUAL REPAIR PARTS LIST

Hein-Werner

Your Hein-Werner Pushmaster Sprint is a carefully designed, high quality hydraulic tool. With proper care and maintenance, this equipment will give many years of dependable service.

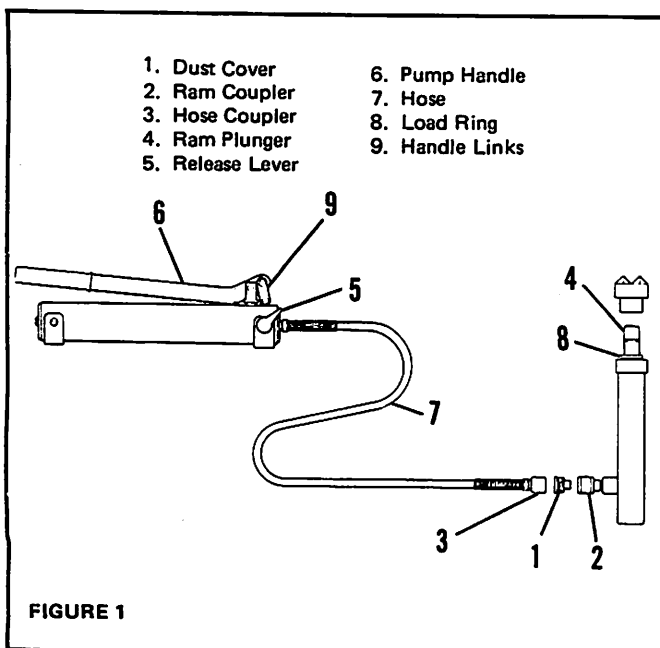
It is the owner's responsibility to study and maintain for future reference, the operating instructions which follow, and to provide this information to all employees. The owner must further provide that all users understand the operating instructions before operating this equipment. It is especially important that all cautionary information be emphasized and understood.



1. THIS EQUIPMENT IS DESIGNED FOR USE WITH HEIN-WERNER 10 TON SPRINT EQUIPMENT ONLY. USE WITH ANY OTHER EQUIPMENT MAY RESULT IN REDUCED LOAD CAPACITY, REDUCED STABILITY, AND/OR SYSTEM FAILURE.
2. THIS EQUIPMENT IS DESIGNED FOR APPLYING FORCE AND IS NOT INTENDED FOR SUSTAINING LOADS.
3. DO NOT OVERLOAD. OVERLOADING CAN CAUSE DAMAGE TO, OR FAILURE OF, THE EQUIPMENT.
4. DO NOT APPLY LOAD DIRECTLY TO RAM PLUNGER. USE AN APPROPRIATE HEIN-WERNER SPRINT ATTACHMENT.
5. CAUTION SHOULD BE USED WHEN ASSEMBLING ATTACHMENT SET-UPS. ALL ATTACHMENTS MUST BE FULLY ENGAGED.
6. USE OF MORE THAN ONE EXTENSION TUBE OR ATTACHMENT REDUCES THE CAPACITY OF THE SYSTEM.
7. OFF-CENTER LOADING FURTHER REDUCES THE CAPACITY OF THE SYSTEM.

FAILURE TO HEED THESE CAUTIONS MAY RESULT IN LOSS OF LOAD, DAMAGE TO EQUIPMENT AND/OR FAILURE RESULTING IN PERSONAL INJURY OR PROPERTY DAMAGE.

OPERATION



BASIC PRINCIPLES OF OPERATION (see fig. 1)

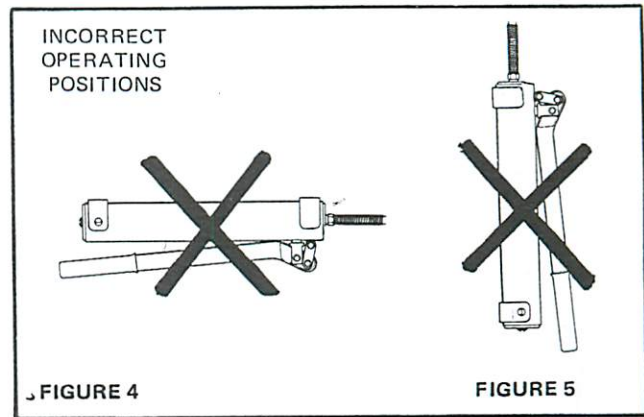
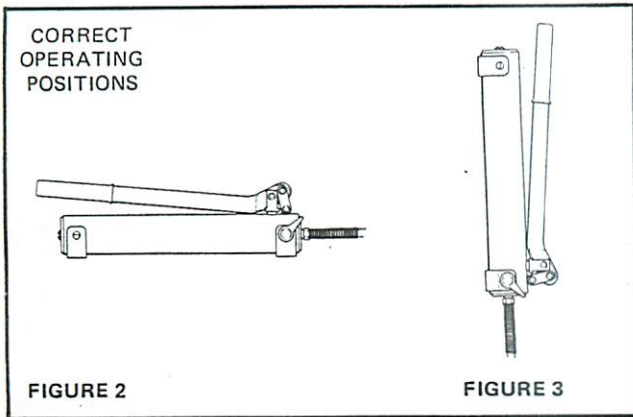
To prepare the Sprint Pump and Ram for operation, remove dust cover (1) from ram coupler (2). Connect hose coupler (3) to ram coupler. Assemble an appropriate attachment to ram plunger (4). Be certain the attachment is fully seated against load ring (8).

To operate, close the release valve by turning release lever (5) clockwise until snug. (Do not overtighten.) Operate pump handle (6) which forces oil through the hose (7) to the ram, causing the ram plunger (4) to extend. Once the load is contacted by the attachment, the internal pressure will increase until the work is accomplished, or the overload circuit by-passes.

To release the load and retract the ram plunger, slowly turn the release lever (5) counterclockwise. The release speed can be controlled by the amount the lever is turned.

PUMP OPERATING POSITIONS (see fig. 2 thru 5)

When the pump is used in a horizontal position, the handle must be on top as shown in figure 2. When the pump is used in a vertical position, the hose must be pointed downwards (fig. 3). Any other positions, such as those shown in figures 4 and 5 will prevent oil from being pumped into the hose and ram.



INSPECTION AND MAINTENANCE

Users should be aware that repair of this equipment may require specialized knowledge and facilities. It is recommended that a periodic inspection of the equipment be made by an authorized repair facility. A list of Hein-Werner authorized Service Depots is included.

It is the owner's responsibility to inspect, or appoint a knowledgeable person to inspect, this equipment at regular intervals.

Equipment must be inspected immediately if subjected to an abnormal load or shock. Any jack which appears to be damaged in any way, is deemed badly worn, or operates abnormally, **MUST BE REMOVED FROM SERVICE IMMEDIATELY**, until necessary repairs are made.

Regular inspections should be made weekly for equipment which is used daily, and monthly for equipment which is used less frequently.

Inspect for:

- a. Oil leaks
- b. Worn or damaged hose and fittings
- c. Damaged or bent extension tubes or attachments
- d. Release valve lever position (see fig. 7)
- e. Worn or damaged handle links (see fig. 1)
- f. Worn or damaged load ring (see fig. 1)

RULES TO ASSURE TOP PERFORMANCE

1. Keep equipment clean.
2. Keep ram retracted and release lever closed when not in use. (see fig. 7)
3. Avoid sharp kinks in hose.
4. Avoid storage or use at extreme temperatures.
5. Keep dust cover on ram coupler when not in use.
6. Refill only with genuine Hein-Werner Hydraulic Jack Oil.

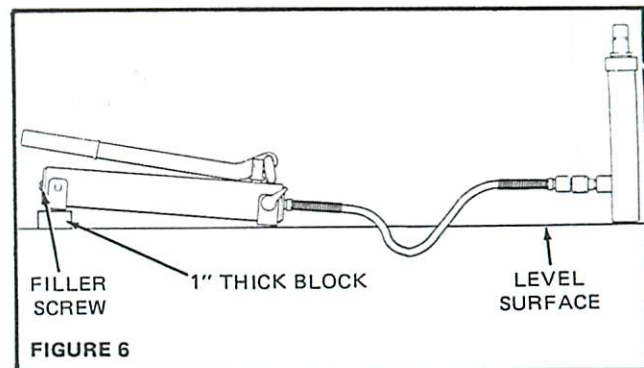
TROUBLE SHOOTING

Each Hein-Werner Sprint Pump and Ram is individually tested prior to shipment, and therefore, the probability of any malfunction is extremely remote. Occasionally during transit or storage, or through use, the pump or ram can become low on fluid, or air can be introduced into the system causing it to become "airbound."

If the Sprint Pump and Ram Assembly does not operate properly, perform the following:

1. Check Oil Level. (see fig. 6)

With ram fully retracted, position the pump and ram as shown in figure 6. Remove filler screw. Oil should be at the bottom edge of the filler hole. Add (or drain) oil as required to obtain this level. Use only genuine Hein-Werner Jack Oil.
(Note: Pump with hose requires 11.5 oz. for proper operation.)

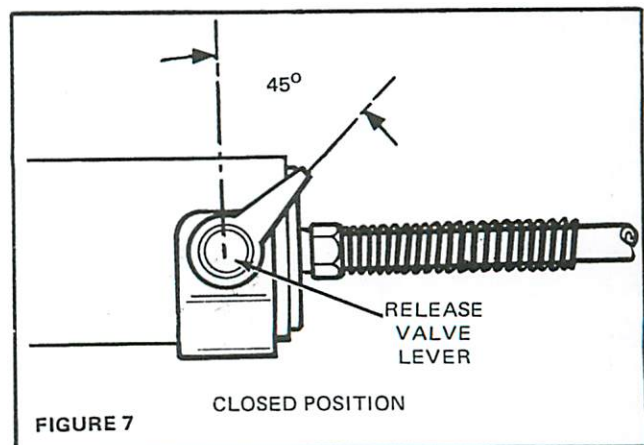


2. Bleed System

Hold pump in a vertical position as shown in figure 3, and place ram on floor with hose facing up. Open release valve fully, and pump handle full stroke several times. Close release valve, and pump handle to extend ram. Pump until resistance is felt in the handle. Open release valve and allow ram to retract fully. Repeat several times.

3. Check Release Lever (see fig. 7)

If system fails to hold a load, check to see that the release lever is not contacting the pump foot when in a closed (clockwise) position. If contact is being made, the release valve cannot fully close. To correct, loosen release lever set screw, reposition lever as shown in figure 7, and retighten.

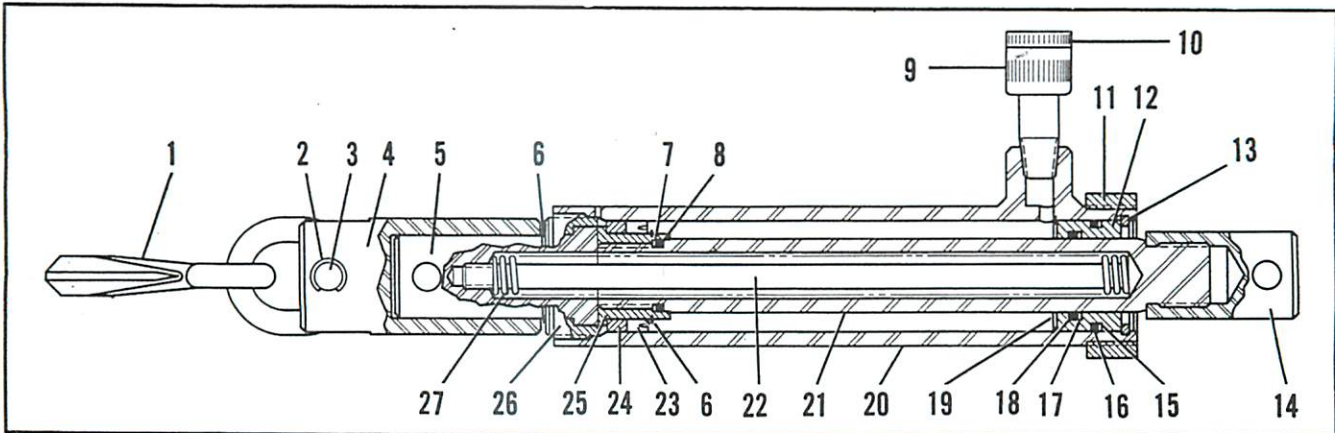


4. General Repairs

If the equipment fails to operate properly after performing the above procedures, it should be returned to the local Hein-Werner authorized service depot for repair.

REPAIR PARTS LIST

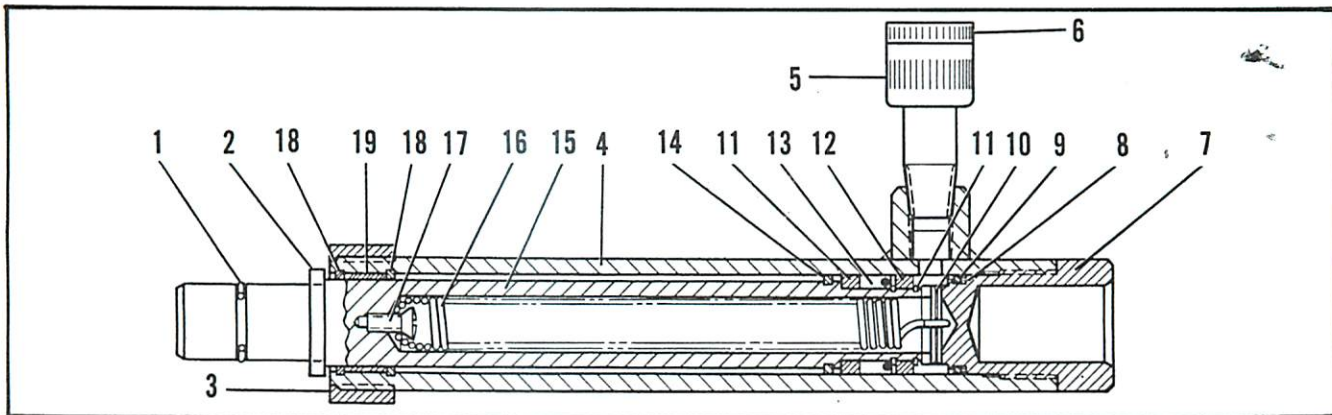
HEIN-WERNER MODEL 64856



ITEM NO.	PART NO.	DESCRIPTION
1	65067	Chain Hook
2	65068	Retaining Ring
3	61995	Pin
4	65069	Hook Adapter
5	65052	Stud
6	64440	Retaining Ring
7	65056	Back-up Washer
8	63815	O-Ring
9	64384	Lower Body
10	64387	Dust Cover
11	65088	Thread Protector
12	65064	Guide Gland
13	64434	Retaining Ring
14	65065	Ram Head
15	65128	Back-up Washer

ITEM NO.	PART NO.	DESCRIPTION
16	65062	O-Ring
17	65061	Back-up Washer
18	65060	O-Ring
19	62549	Retaining Ring
20	65059	Cylinder
21	65058	Ram Plunger
22	65055	Spring Guide
23	64439	U-Cup
24	64441	Bearing
25	65054	Pull Gland
26	65053	Retainer
27	65057	Spring
-	82047	Repair Kit
-	65086	Decal

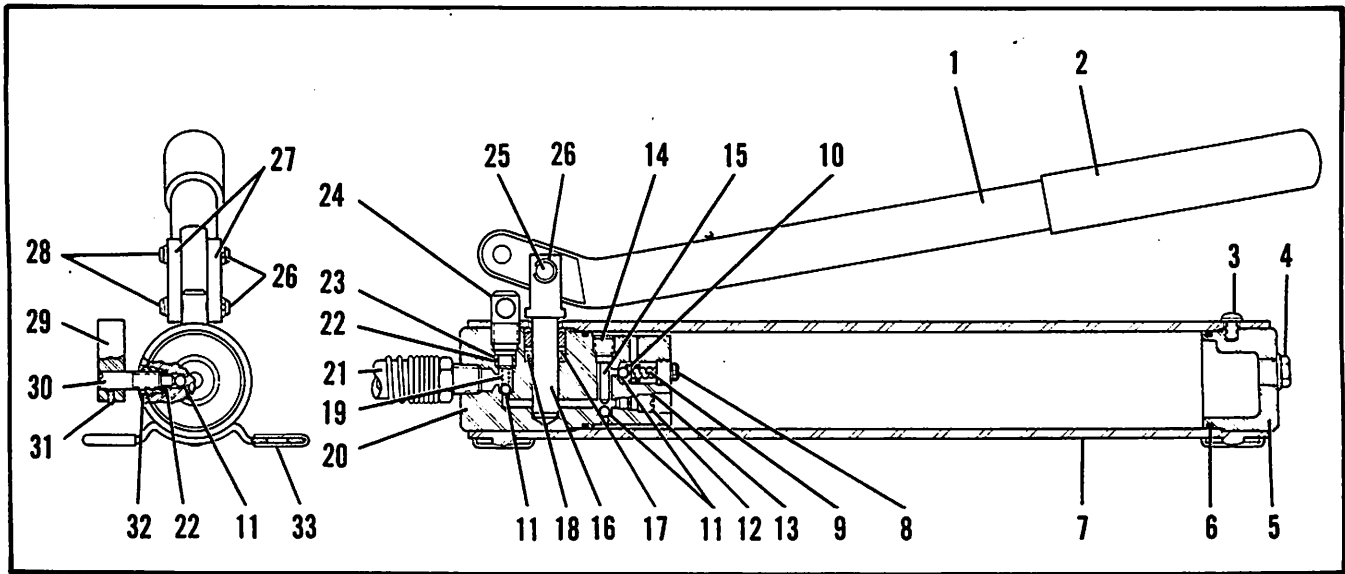
HEIN-WERNER MODEL 64853



ITEM NO.	PART NO.	DESCRIPTION
1	64897	Compression Ring
2	64959	Ring
3	63933	Thread Protector
4	64956	Cylinder
5	64384	Lower Body
6	64387	Dust Cover
7	64958	Base
8	61487	Back-up Washer
9	16350	O-Ring
10	64129	Roll Pin
11	64957	Retaining Ring

ITEM NO.	PART NO.	DESCRIPTION
12	64954	Bearing
13	64955	U-Cup
14	64953	Retaining Ring
15	64952	Ram Plunger
16	20850	Spring
17	19925	Screw
18	64950	Retaining Ring
19	64951	Plunger Guide
-	82053	Repair Kit (Ram Only)
-	64960	Decal

HEIN-WERNER MODEL 64857



ITEM NO.	PART NO.	DESCRIPTION
1	65028	Handle
2	63732	Handle Grip
3	63854	Button Head Cap Screw
4	65037	Filler Plug
5	65036	End Cap
6	65033	O-Ring
7	65035	Reservoir Tube
8	17520	Adjusting Screw
9	62244	Spring
10	17055	Spring Cap
11	17220	Ball
12	07345	Seal
13	03580	Plug
14	25935	Pipe Plug
15	65115	Ball Spacer
16	65032	Piston
17	65163	U-Cup
18	65031	Piston Guide

ITEM NO.	PART NO.	DESCRIPTION
19	62811	Spring
20	65030	Unit Body
21	65029	Hose and Coupler
22	14605	O-Ring
23	61538	Back-up Washer
24	65089	Post
25	63859	Pin
26	63838	Pin Ring
27	63825	Link
28	63858	Pin
29	64203	Release Lever
30	63822	Release Screw
31	63851	Set Screw
32	65038	Packing Nut
33	65039	Foot Grip
-	82054	Repair Kit (Pump Only)
-	65046	Hein-Werner Decal

WARRANTY TO COMMERCIAL CUSTOMERS

Hein-Werner warrants its products to be free from defects in materials and workmanship for a period of 90 days from the date of original sale to user. Any product proved to Hein-Werner's satisfaction to be defective during that 90-day period will be repaired or replaced, at Hein-Werner's option, if returned to the nearest official service station, transportation charges prepaid. A full and complete explanation of the complaint, and proof of purchase date, must accompany the product. Hein-Werner's sole obligation and buyer's exclusive remedy under this warranty is limited to such repair or replacement.

HEIN-WERNER SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL OR SPECIAL DAMAGES INCLUDING BUT NOT LIMITED TO LOSS OR DAMAGE RESULTING FROM USE OR LOSS OF USE OF HEIN-WERNER PRODUCTS WHATSOEVER, WHETHER BASED ON BREACH OF CONTRACT, BREACH OF WARRANTY, NEGLIGENCE OR OTHER TORT, OR ANY STRICT LIABILITY THEORY.

This warranty does not apply to products subjected to accident, damage by circumstances beyond Hein-Werner's control, improper operation, maintenance or storage, or to other than normal application, use or service.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

USE PART NUMBER ONLY WHEN ORDERING PARTS

Order parts from the nearest Hein-Werner Service Depot. Always state both model and serial number.

USE ONLY GENUINE HEIN-WERNER JACK OIL IN THIS UNIT

HEIN-WERNER CORPORATION

WAUKESHA, WISCONSIN — AJAX, ONTARIO