

# REPAIR PARTS LIST AND SERVICE INSTRUCTIONS

## PUSH & PULL HYD. JACK



**CAPACITY:**

**20 TONS PUSH**

**13-1/2 TONS PULL**

**HEIN-WERNER MODEL NO. J-20-1**

**CENTURY FOX MODEL NO. C2SRP-2012**

**Hein-Werner**

### GENERAL CARE

Your Hein-Werner Push and Pull Jack is carefully designed and constructed of the best materials available. Long dependable performance is assured if the following simple rules are observed.

1. Always keep your jack clean.
2. Keep the ram fully retracted when not in use.

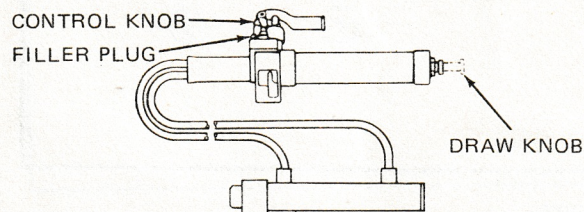
3. Center the load in any application. A bent or broken ram is a sure sign of undue sidestrain through misuse.
4. Always tighten attachments and extension tubes the full thread provided. (Attachments are rated at 50% ram capacity. Use of more than one extension tube reduces set-up capacity another 50%.)
5. Refill only with Hein-Werner Hydraulic Jack oil.

### FILLING INSTRUCTIONS

Any of the following conditions indicate your Hein-Werner Push and Pull Jack is low on oil:

1. Pump misses stroke or but partly fills.
2. Ram coasts or has jerky motion.
3. Ram does not travel full distance.

When adding oil it is essential to closely follow the below procedure.



1. Place pump in vise with filler plug up as shown in sketch. Place ram horizontally on floor with hose

- connections up. Be sure no part of hose is higher than filler hole.
2. Turn control knob to right (push position) and pump handle until pump misses stroke or but partly fills, then cease at once.
3. Unscrew and pull out draw knob and turn until it locks in end cap slot.
4. Remove filler plug, insert and fill funnel (#80171) with Hein-Werner hydraulic Jack Oil.
5. Continue to pump ram to full extent, keeping funnel full at all times.
6. Reverse control valve and pump ram in. Air will bubble out through oil in funnel.
7. Again reverse control valve and pump ram out keeping funnel full of oil. Repeat steps 6 and 7 a total of three times each ending with ram in out position.
8. Replace filler plug. Pump ram in and release draw knob which should now move freely. Screw knob into end cap.

### PISTON AND CONTROL VALVE ADJUSTMENT

Occasionally some oil leakage appears around the pump piston when "V" packings are new and stiff. This can be corrected by slightly tightening the packing nut using the wrench (#60216) supplied with each new jack.

Worn pump piston packing can be detected by leakage of oil around the packing nut. To replace, first relieve oil pressure. (See refilling instruction #3.) Remove piston pin and packing nut. Draw out piston from cylinder and pick out old packings. Insert new packings starting with neoprene and alternating leather and neoprene. Take care when inserting so packing is not damaged by machined threads.

Be sure each packing is firmly down all the way.

If the Control Valve cannot be closed by finger pressure the packing nut can be loosened slightly with the wrench supplied. Tighten the packing nut should oil leak at this point. Continued leakage after tightening means packings are worn.

To replace worn Control Valve packing first relieve oil pressure in reservoir (See Refilling Instruction No. 3). Remove set screw and control knob. Loosen the packing nut and slip nut and old neoprene packings out over end of valve stem. Install new packings and tighten packing nut, such that control valve can be operated by finger pressure. Follow refilling procedure to replace oil lost.

**HOSE . . .** To replace a worn or damaged hose, first relieve jack pressure (See Refilling Instruction No. 3). Remove hose guard and hose. Install new hose to ram first and tighten. Refill the jack with Hein-Werner hydraulic jack oil as described above.

**PUMP VALVES . . .** To clean the pump valves, first pump ram to full extent. Pull out and lock draw rod to relieve

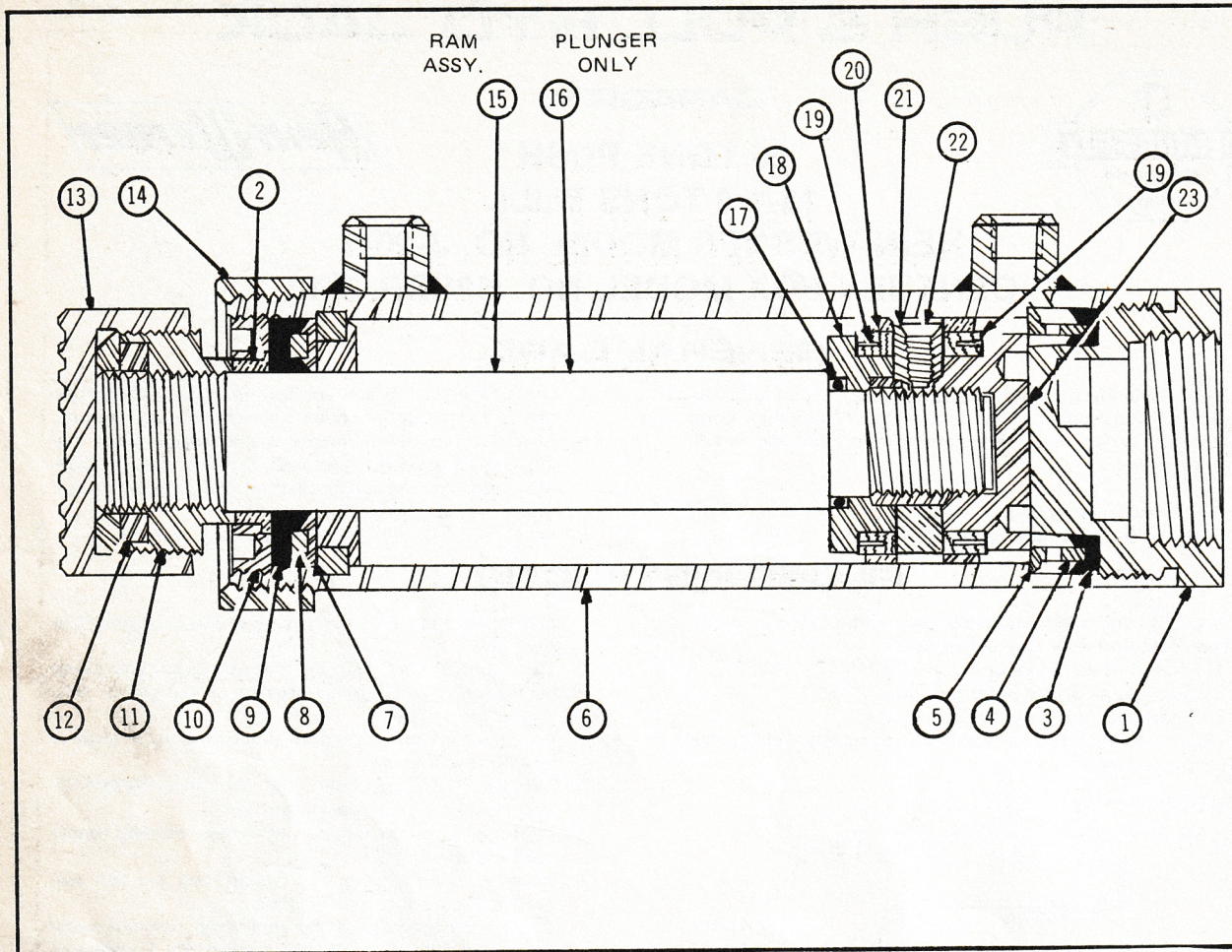
jack pressure. (See refilling instructions #3.) Remove the large hex plug near bottom of pump casting slowly. Take out the balls and springs and inspect valve chamber for particles. Install balls and springs in proper order and add enough oil to replace amount lost before putting in the plug. If considerable oil is lost, follow the regular filling procedure.



# RAM UNIT PARTS

HEIN-WERNER MODEL UR-20-1

CENTURY-FOX MODEL C2SR-2012



UR-20-1 (RAM UNIT PARTS)

ITEM NO.	PART NO.	8 DIGIT NO.	DESCRIPTION
1	22730	1854-1000	Bottom Plug
2	22685	7094-0432	Pkg. Nut Insert
3	22785	7134-0460	U-Cup - Bottom
4	22740	7333-2450	Expander
5	22745	1854-9500	Bottom Spreader
6	63405	00-1854-01	Ram Cylinder W/Stop Ring
7	22775	1854-9503	Spreader Ring
8	22765	7334-0460	Expander
9	22710	7133-2450	U-Cup - Top
10	22680	1854-2200	Packing Nut
11	22735	1854-3300	Threaded Head
12	22770	1854-2100	Cross Pin
13	19845	1654-2300	Saddle
14	22725	1854-8200	Adapter

ITEM NO.	PART NO.	8 DIGIT NO.	DESCRIPTION
15	05555	0-1854-006	Ram Assembly
16	22675	1854-1500	Ram Only
17	16307	7521-6170	"O"-Ring
18	22695	1854-1800	Retainer
19	22750	7333-8450	Cup Expander (Each) 2 Req'd
20	22705	7133-8450	Ram U-Cup (Each) 2 Req'd
21	22690	1854-2000	Ram Spacer
22	25475	8331-9101	Allen Set Scw.
23	22720	1854-1801	Ram Nut
24	16680	1640-9602	6' Hose (Each) 2 Req'd
25	—	—	H-W Decal
26	60450	1854-9011	C-F Decal
27	80801	00-1854-00	Repair Kit (Ram Only)

USE PART NUMBER ONLY WHEN ORDERING PARTS

Order parts from the nearest Hein-Werner or Century-Fox Service Station. Always state both model and serial number.

USE ONLY GENUINE HEIN-WERNER JACK OIL IN THIS UNIT

HEIN-WERNER CORPORATION

CENTURY-FOX COMPANY

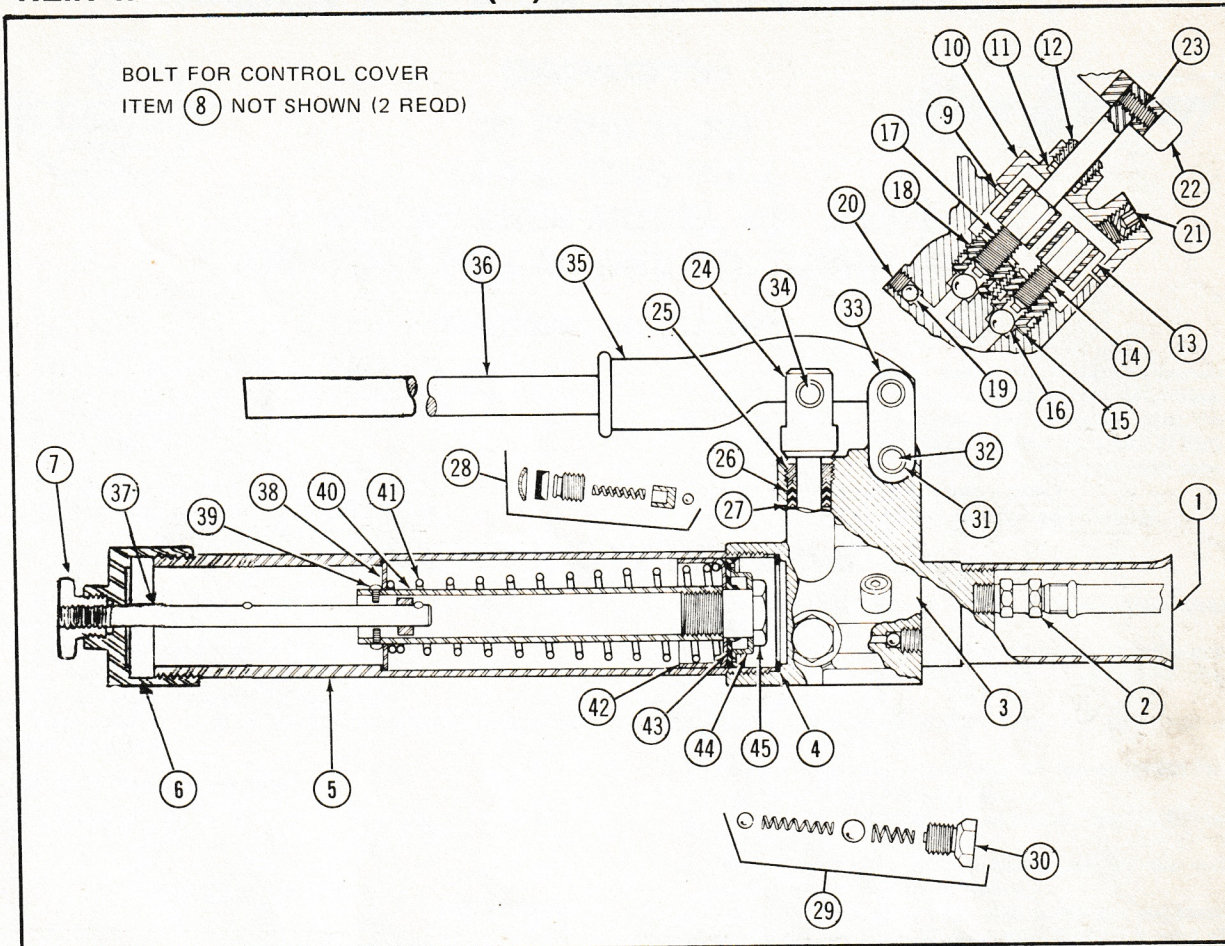
WAUKESHA, WISCONSIN  
AJAX, ONTARIO



# PUMP UNIT PARTS

HEIN-WERNER MODEL UP-10(20)

CENTURY-FOX MODEL C2P20



UP-10(20)(PUMP UNIT PARTS)

ITEM NO.	PART NO.	8 DIGIT NO.	DESCRIPTION
1	23420	3041-9500	Hose Guard
2	22410	7824-1010	1/8" Hose Connection (2 Req'd)
3	22320	3041-1000	Base Only
4	22360	7696-6668	Gasket
5	22435	3041-1400	Reservoir Tube
6	22395	3041-95011	Reservoir Cap
7	23390	9960-3623	Draw Knob
8	25455	8261-9162	Bolt (2 Req'd)
9	22895	3040-9501	Gasket
10	22865	3040-7900	Cover
11	23155	7161-2170	Valve Packing Each (2 Req'd)
12	23035	3040-1100	Packing Nut
13	22880	3040-4100	Gear (2 Req'd)
14	23305	3040-1901	Driven Valve Stem
15	22915	7696-3034	Gasket (2 Req'd)
16	03010	9904-0380	Ball
17	23050	3040-1900	Driver Valve Stem
18	23325	3040-1101	Valve Cage (Only) (2 Req'd)
19	02675	9904-0250	Ball .250 Dia.
20	26510	8332-1041	Set Screw
21	25440	7816-1001	Soc. Hd. Plug
22	14290	9960-0374	Control Knob
23	25810	8332-0101	Set Screw
24	62669	3041-1601	Piston
25	22525	7321-6241	Female Adapter
26	80181	0030-4101	Piston "V" Pkg. (Set of 5)

ITEM NO.	PART NO.	8 DIGIT NO.	DESCRIPTION
27	22385	7321-6240	Adapter - Male
28	80360	0010-0032	Safety Valve - Complete
29	80127	00-1000-01	Pump Valves - Complete
30	23375	3040-3201	Pump Valve Plug
31	12415	1000-4400	Pin Ring (3 Req'd)
32	10780	9011-0250	Pin (2 Req'd)
33	22570	3041-6200	Link - Handle (2 Req'd)
34	10760	9011-0300	Piston Pin
35	22965	3541-1200	Handle Socket
36	23080	3041-2800	Handle
37	61262	3041-3600	Draw Rod Assy
38	22350	7655-3802	Washer
39	14945	8411-1040	Drive Screw Each (2 Req'd)
40	22930	3040-5500	Draw Tube
41	22630	9925-0048	Spring
42	22340	3041-9502	Guide
43	22330	7132-0417	Cup
44	22375	7332-0417	Retainer
45	22945	3040-3202	Plug
46	60216	1750-9601	Packing Nut Wrench
47	55165	1810-9001	H-W Decal
48	60449	3041-9011	C-F Decal
49	62693	1814-9003	Nameplate
50	26910	8410-3020	Drive Screw Each (2 Req'd)
51	80171	—	Oil Filler Funnel
52	60180	—	Hyd. Oil Qt.
53	80774	0030-4100	Repair Kit