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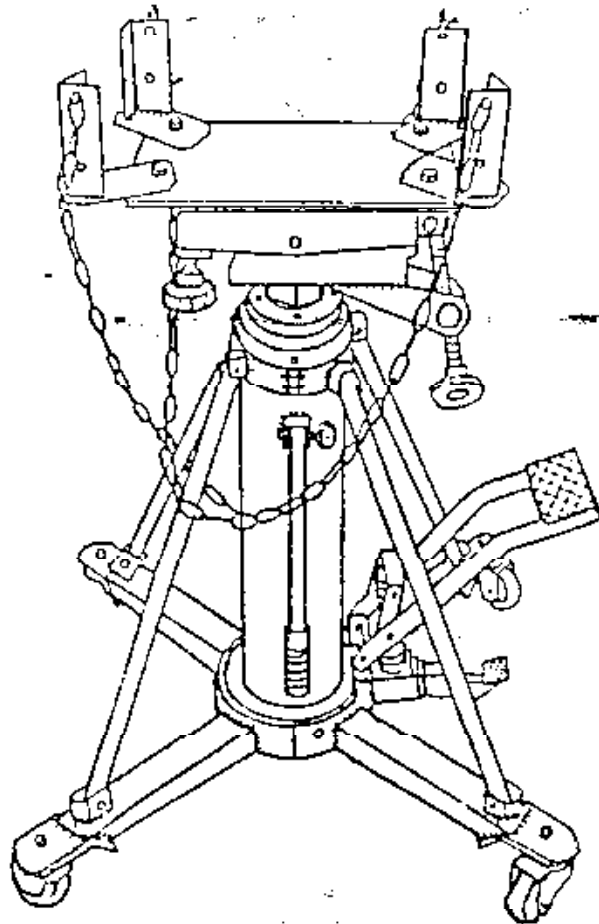


33884

# 2200 LB. CAPACITY TWO-STAGE HYDRAULIC TRANSMISSION JACK

ITEM 33884

## INSTRUCTION MANUAL



HARBOR FREIGHT TOOLS  
3491 MISSION OAKS BLVD.  
CAMARILLO, CA. 93011  
1-800-444-3353

## SPECIFICATIONS

2200 lbs. capacity	37" x 32" base
34-7/16" minimum height	75" maximum height

## SAVE THIS MANUAL

You will need this manual for the safety instructions, assembly instructions, operating procedures, and parts list. Put them in a safe, dry place for future reference.

## IMPORTANT SAFETY PRECAUTIONS

**WARNING:** When using hydraulic tools, machines or equipment, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and personal injury.

**READ ALL INSTRUCTIONS BEFORE USING THIS TOOL.**

1. **KEEP WORK AREA CLEAN.** Cluttered areas invite injuries.
2. **CONSIDER WORK AREA CONDITIONS.** Don't use in damp, wet, or poorly lit locations. Don't expose to rain. Keep work area well lit.
3. **KEEP CHILDREN AWAY.** All children should be kept away from the work area. Don't let them handle machines, tools or extension cords.
4. **STORE IDLE EQUIPMENT.** When not in use, tools should be stored in a dry location to inhibit rust and locked. If possible, also store in an area out of reach of children.
5. **USE THE RIGHT TOOL.** Don't force a small tool or attachment to do the work of a larger industrial tool. Don't use a tool for a purpose for which it was not intended.
7. **DRESS PROPERLY.** Don't wear loose clothing or jewelry. Wear protective hair covering to contain long hair, preventing it from getting caught in machinery.
8. **DON'T OVERREACH.** Keep proper footing and balance at all times.
9. **STAY ALERT.** Watch what you are doing, use common sense. Don't operate any tool when you are tired.
10. **CHECK DAMAGED PARTS.** Before using any tool, any part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for breakage of parts, mounting, and other conditions that may affect its operation. Any part that is damaged should be properly repaired or replaced by an authorized service center unless otherwise indicated elsewhere in the instruction manual.

11. **REPLACEMENT PARTS AND ACCESSORIES.** When servicing, use only identical replacement parts. Only use accessories intended for use with this tool. Approved accessories are available from Harbor Freight Tools.

12. **DO NOT OPERATE TOOL IF UNDER THE INFLUENCE OF ALCOHOL OR DRUGS.** Read warning labels on prescriptions to determine if your judgment or reflexes are impaired while taking drugs. If there is any doubt, do not operate machine.

13. **NEVER STAND ON TOOL.** If tool is tipped over serious injury could result.

14. **SECURE WORK.** Use chain to hold the work if possible. It's safer than using your hands and it frees both hands to operate the tool.

## **NEVER EXCEED WEIGHT CAPACITY**

### **TRANSMISSION JACK SAFETY**

1. The use of this jack is limited to the removal, installation, and transportation (in the lowest position) of transmissions and differentials. It may be used with appropriate adapters manufactured especially for the jack to handle other components, such as rear axle units and transfer cases, within the weight limits specified.

2. Be sure that the jack is properly supported before starting repairs.

3. This jack is designed for use only on hard level surfaces capable of sustaining the load. Use on other than hard level surfaces can result in jack instability and possible loss of load.

4. Failure to follow these warnings may result in loss of load, damage to jack, and/or failure resulting in personal or property damage.

## **ASSEMBLY**

Step 1.

Unpack, compare items against parts list.

Step 2.

You will need to supply an adjustable wrench.

Step 3.

Locate two leg assemblies (37 and 39), two bolts (38 and 42), and spring washer (35). Using bolts and spring washer, fasten one leg assembly to each side of the pump. Holes are provided.

Step 4.

Locate four castors (36), four nuts (34), and four spring washers (35). One at a time, fasten the wheels to the undercarriage through the holes provided. Make the nuts finger tight, and once all the wheels are attached, tighten.

Step 5.

Locate four pipe stands (41), and eight each of bolts (43), nuts (30) and washers (31). Place one end of the pipe stands in one leg assembly, thread a bolt through the holes provided and tighten a washer and nut with your fingers. Repeat for all four pipe stands.

Step 6.

Locate the two half rings (32), two bolts (7), nuts (30) and washers (31). Using the bolts nuts and washers, fasten the two half rings around the cylinder. Then place the free end of the pipe stands against the provided spaces on the half ring and fasten. Afterwards, tighten all bolts.

Step 7.

Locate saddle assembly (95). Place the support on the ram (5) at the top of the jack.

Step 8.

Locate angle plate set. Attach and adjust to your individual needs.

## **MAINTENANCE**

The hydraulic system is a closed system, and will normally demand no maintenance.

The mechanical parts of the pedal must be frequently lubricated with a high-quality oil.

The oil level must not come up over the filling plug when the transmission jack is in its lowest position.

When the lifting saddle can be pumped up to the top position the hydraulic system is filled with enough oil.

Any good hydraulic oil of viscosity 15°CSI/40°C can be used  
NEVER USE BRAKE FLUID.

## **OIL DISPOSAL**

Whenever hydraulic oil is drained or changed, old oil must be legally disposed of.

# PARTS LIST

NO.	DESCRIPTION	QTY.
	CYLINDER	
1	DUST SEAL 42X7	1
2	"O"-RING 41X3.5	1
3	TOP NUT	1
4	"O"-RING 45X3.1	1
5	RAM	1
6	RETAINER RAM	1
7	BOLT M10X30	8
8	DUST SEAL	1
9	SPRING WASHER 10	4
10	"O"-RING 65X5.7	1
11	FLANGE	1
12	"O"-RING 85X3.1	1
13	PACKING	1
14	"O"-RING 85X3.1	1
15	TOP NUT	1
16	"O"-RING 135X3.7	2
17	RAM	1
18	RETAINER RAM	1
19	CYLINDER	1
20	"O"-RING 80X5.7	1
21	RESERVOIR	1
23	BASE	1
24	ADR. VENT VALVE ASS'Y	1
25	"O"-RING 16X2.4	1
26	SNAP PIN	1
27	PIN	1
28	HANDLE	1
29	GRIP	1
105	DUST PIPE	1
	LEG SET	
30	NUT M10	8
31	WASHER 10	20
32	HALE RING	2
34	NUT M12	4
35	SPRING WASHER 12	10
36	CASER ASS'Y	4
37	LEG ASS'Y	1
38	BOLT M12X35	3
39	LEG ASS'Y	1
40	NUT M12	3
41	PIPE STAND	4
42	BOLT M12X35	3
43	BOLT M10X45	8

NO.	DESCRIPTION	QTY.
	PUMP SET	
44	CONNECTING ROD	1
45	SPRING RETAINER	1
46	SPRING	1
47	DUST PIPE	1
48	SPRING RETAINER	1
49	SET SCREW M8X10	1
50	PUMP PISTON	1
51	DUST SEAL	1
52	"O"-RING 30X3.1	1
53	PUMP PISTON	1
54	"O"-RING 34X3.5	1
55	"O"-RING 14X2.4	2
56	PUMP BASE	1
57	BALL 8	2
58	SPRING	1
59	WASHER	1
60	SCREW	1
61	BOLT M10X55	4
	RELEASE VALVE SET	
62	"O"-RING	1
63	RELEASE VALVE	1
64	PIN	1
65	SPRING	1
66	BASE RELEASE VALVE	1
67	PIN	1
68	PEDAL RELEASE VALVE	1
69	SNAP RING	1
	PUMP PEDAL SET	
70	SCREW M8X12	4
71	WASHER 8	10
72	CONNECTING ROD	1
73	SNAP PIN	2
74	WASHER 14	2
75	PEDAL PUMP PISTON	1
76	COTTER LINK	2
77	LINK	2
	SADDLE SET	
78	ADJUSTABLE SCREW	1
79	SPRING PIN	8
80	GRIP	1
81	NUT M10	1
82	BEARING	2

NO.	DESCRIPTION	QTY.
83	SET SCREW M6X10	2
84	SET SCREW M8X10	1
85	CONNECTING ROD	1
86	RETAINING RING	4
87	CONNECTING ROD	1
88	BOTTOM PLATE ASS'Y	1
89	RETAINING RING	4
90	CONNECTING ROD	1
91	NUT M12	1
92	ADJUSTABLE SCREW	4
93	GRIP	4
94	CONNECTING ROD	1
95	TILTING SADDLEASSLY	1
96	SADDLE KIT	1
97	SCREW M12X35	4
	ANGLE PLATE SET	
98	WING NUT	2
99	HOOK SCREW	2
100	BOLT CHAIN	2
101	CHAIN	1
102	NUT M12	4
103	STATIONARY PLATE	4
104	SCREW M8X25	2
105	NUT M8	2
106	WASHER 12	4

# EXPLODED DRAWING

