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Form No. 107080

Parts List & Operating Instructions  
 for: 2004

# Heavy Duty Mobile Floor Crane

Maximum Capacity: 2 Tons (1800 kg)

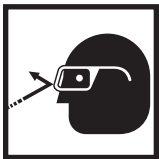
## Safety Precautions



**WARNING :** To prevent personal injury and/or equipment damage,



- Read and carefully follow the safety precautions and operating instructions for this floor crane, and the pump and ram used with this floor crane. Most problems with new equipment are caused by incorrect operation or assembly.
  - If the operator cannot read English, operating instructions and safety precautions must be read and discussed in the operator's native language.



- Wear eye protection that meets the requirements of ANSI Z87.1 and OSHA.
- Use only on a hard, level surface.
- Do not raise the boom with the legs in the upright position; the legs must be pinned through the cross member.
- Never attempt to lift a load heavier than the rated capacity of the crane boom; overloaded equipment can fail.

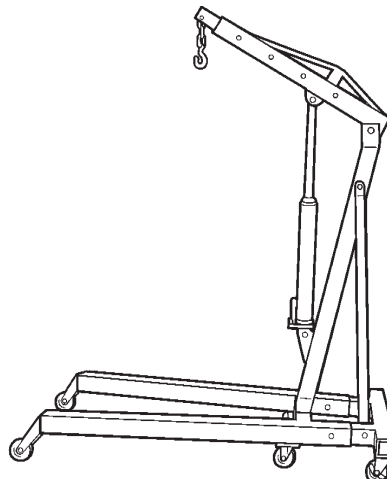


- Stay out from underneath a load being lifted or suspended.
- To prevent tipping: do not lift or move a load that has a center of gravity extending beyond the legs or wheels; do not move a loaded crane unless the load has been lowered as close to the floor as possible; use extreme caution when moving a loaded crane on an incline or around a corner; the load can swing out beyond the wheels and cause the crane to tip over.

- Do not modify this floor crane. Any unauthorized modification of this product and/or the use of unapproved attachments are prohibited due to potential hazards associated with incorrect use. If a modification is needed, contact OTC Technical Services.
- The owner of the crane is responsible for ensuring that procedures are followed according to federal, state, and local safety regulations.

### Replacement Parts

509880	Hydraulic Ram
509881	Wheel
510359	Caster
510360	Handle
513917	Hardware Pack

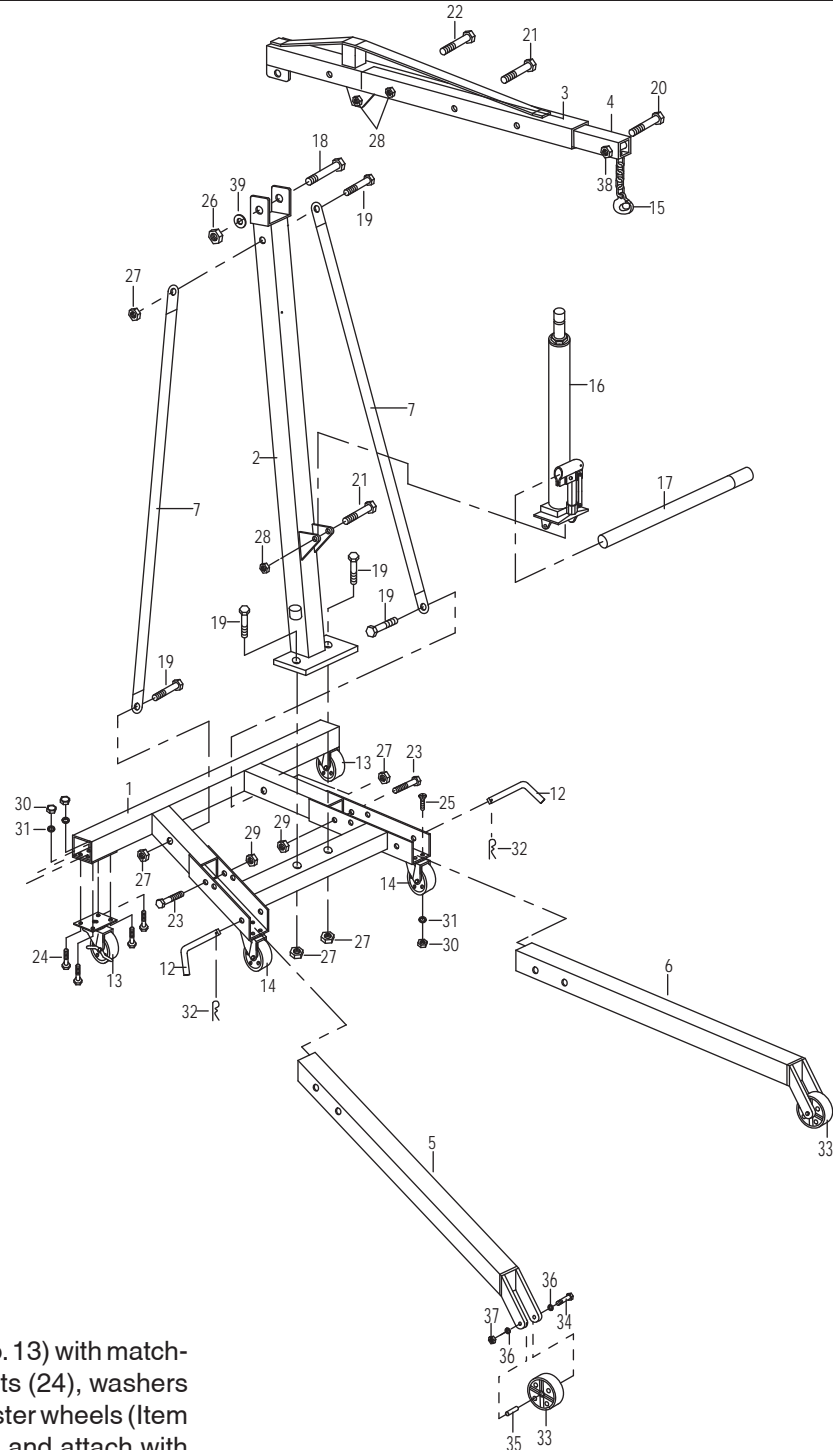


Sheet No. 1 of 2

Issue Date: Rev. F 08-25-11

**Assembly**

Item No.	Description	Qty.
1	Base	1
2	Upright Mast	1
3	Boom	1
4	Boom Extension	1
5	Leg Extension (left)	1
6	Leg Extension (right)	1
7	Mast Braces	2
12	Lock Pin	2
13	Swivel Caster (3.5")	2
14	Swivel Caster (2.5")	2
15	Hook & Chain	1
16	Hydraulic Ram	1
17	Handle	1
18	Bolt (M20 x 120)	1
19	Bolt (M14 x 100)	5
20	Bolt (M14 x 80)	1
21	Bolt (M16 x 90)	2
22	Bolt (M16 x 70)	1
23	Bolt (M18 x 110)	2
24	Bolt (M8 x 25)	8
25	Bolt (M8 x 20)	8
26	Nut (M20)	1
27	Nut (M14)	5
28	Nut (M16)	3
29	Nut (M18)	2
30	Nut (M8)	16
31	Spring Washer 8	16
32	Cotter Pin (2.5")	2
33	Wheel	2
34	Bolt (M10 x 80)	2
35	Bushing	2
36	Washer 10	4
37	Nut (M10)	2
38	Nut (M14)	1
39	Washer 20	1



1. Align holes on rear caster wheels (Item No. 13) with matching holes on base (1), and attach with bolts (24), washers (31), and nuts (30). Align holes on front caster wheels (Item No. 14) with matching holes on base (1), and attach with bolts (25), washers (31), and nuts (30). Slide bushings (35) through wheels (33), and install wheels into welded forks in front of each leg extension (5, 6) with bolts (34), washers (36), and nuts (37).
2. Slide leg extensions into open ends of base. Install bolts (23), nuts (29), lock pins (12), and cotter pins (32) to securely hold leg extensions to base.
3. Install upright mast (2) onto base using bolts (19) and nuts (27). Install mast braces (7) onto base using bolts (19) and nuts (27). Align holes at upper end of mast braces with second hole from the top in upright mast using bolt (19) and nut (27). Once aligned, securely tighten bolts.

4. Install hydraulic ram (16) to support bracket on upright mast using bolt (21) and nut (28). Once secure, temporarily rest the ram against the upright mast.
5. Install boom (3) on top of upright mast, and secure with bolt (18), washer (39), and nut (26).
6. Align and install top of hydraulic ram into welded fork on boom, and secure with bolt (22) and nut (28).
7. Slide boom extension (4) into boom, and secure with bolt (21) and nut (28).
8. Install hook and chain (15) at end of boom extension using bolt (20) and nut (38). Slide handle (17) on socket on hydraulic ram.

### Operating and Storage Instructions

1. Lock the boom in place for the correct weight marking BEFORE APPLYING THE LOAD TO THE LIFT. Do NOT exceed the rated capacity and travel limits of the equipment.
2. Use correct levellers, slings, or chains (capable of sustaining the load) around the load before using the hook to lift it. Verify the latching mechanism is working correctly before lifting or moving the load.
3. Once the load is securely hooked in place, lift by turning the release valve on the hydraulic jack clockwise until closed and pumping the jack until the load is clear of any obstruction. Move very carefully, avoiding slopes, in direction of travel. Avoid sudden or swinging movements of the load. To lower the load, SLOWLY turn release valve counterclockwise.

**Storage**

1. Lower the boom to its lowest position.
2. Remove bolts, nuts, and lock pins holding leg extensions to base. Remove leg extensions from base, and position them vertically in storage pockets located slightly behind the front caster wheels.
3. Reinstall bolts, nuts, and lock pins removed in Step 2 to secure leg extensions in vertical position.

### Troubleshooting Guide

Repair procedures must be performed in a dirt-free environment by qualified personnel who are familiar with this equipment. **CAUTION: All inspection, maintenance, and repair procedures must be performed when the floor crane is free of load (not in use).**

Trouble	Cause	Solution
<b>Failure to lift a load</b>	<ol style="list-style-type: none"> <li>1. Low oil level.</li> <li>2. Release valve open.</li> </ol>	<ol style="list-style-type: none"> <li>1. Turn release valve counterclockwise to allow ram to fully retract. Remove fill plug. With jack in vertical position, oil level should be even with bottom of hole. If not, fill with NEW, clean, hydraulic jack oil. Recheck oil level. Do NOT overfill. Replace filler plug.</li> <li>2. Close release valve.</li> </ol>
<b>Failure to hold a load</b>	<ol style="list-style-type: none"> <li>1. Release valve open.</li> <li>2. Jack is air locked.</li> <li>3. Dirt in oil.</li> <li>4. Release valve not sealing.</li> </ol>	<ol style="list-style-type: none"> <li>1. Close release valve (turn clockwise - CW).</li> <li>2. Turn release valve counterclockwise (CCW) to open. Pump handle 8 strokes. Close release valve (CW). Pump handle until lift arm reaches maximum height; continue to pump several times to remove trapped air in ram. Open release valve; allow lift arm to retract. Close release valve; check pump action. Repeat procedure if necessary.</li> <li>3. Replace existing oil with NEW, clean, hydraulic jack oil.</li> <li>4. Clean release valve.</li> </ol>
<b>Lift arm will not lower</b>	<ol style="list-style-type: none"> <li>1. Ram is binding.</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace hydraulic ram.</li> </ol>
<b>Jack feels spongy when lifting</b>	<ol style="list-style-type: none"> <li>1. Jack is air locked.</li> </ol>	<ol style="list-style-type: none"> <li>1. Turn release valve counterclockwise (CCW) to open. Pump handle 8 strokes. Close release valve (CW). Pump handle until lift arm reaches maximum height; continue to pump several times to remove trapped air in ram. Open release valve; allow lift arm to retract. Close release valve; check pump action. Repeat procedure if necessary.</li> </ol>

### Maintenance

- Inspect the floor crane before each use. Look at the jack support, boom, or boom extension for cracked welds, bent, loose, or missing parts, or hydraulic oil leaks. If the crane is damaged in any way, worn, or operating abnormally, IT MUST BE REMOVED FROM SERVICE UNTIL REPAIRED.
- A hydraulic jack found to be damaged in any way, worn, or operating abnormally MUST BE REMOVED FROM SERVICE UNTIL REPAIRED. If the jack is subjected to abnormal load or shock, remove it from service and have it examined by an authorized repair service. Only factory-authorized parts, labels, and decals shall be used on this equipment.
- Look for unauthorized modification of this product. Modifications to this product and/or the use of unapproved attachments are prohibited due to potential hazards associated with incorrect use.
- Clean all surfaces and maintain all labels and warnings.
- Grease pivot points: boom to upright mast; ram mount to boom.