



Wallace Cranes 15T Assembly

Portable Crane Instructions

Read, Understand, and Comply with all instructions supplied with this crane. Also, pay attention to the equipment used with this crane such as hoists, trolleys, power drives (if applicable), etc. Read, Understand, and Comply with the requirements of OSHA (Occupational Safety, and Health Administration) 1910.179

Before You Begin

- Clear an open area at least as large as 2 X the frame length and wider than the beam.
- Get a crane or lifting device capable of lifting the entire weight of the completed crane.
- Assemble a work crew of no less than three. One will operate the lifting crane and the others perform the assembly. You may need more to lift and position the high capacity legs.
- **GENERAL NOTES:** It is advised to leave all fasteners on bolts untightened until the unit is completely assembled. This will allow the joints to seat to ensure proper component alignment. When the unit has been fully assembled, the bolts can be tightened to the recommended 25 ft. lbs.

Step 1. ATTACHING THE I-BEAM FITTINGS TO I-BEAM

- a. For assembly select a two point lifting device for stability (overhead crane, boom crane) of adequate capacity to handle the model being assembled.
- b. Place I-Beam on suitable supports so stencilling is right side up.
- c. Slide brace leg brackets (item 7) on the beam first, then main leg brackets (item 11).
- d. Remove spreader bar (item 5) from caster frame carton and attach to main leg bracket and brace leg brackets as shown using set screws and nuts provided.

NOTE: The 3/8-16 NC x 3/4" long set screws (item 4) are installed in all brackets and are used to lock the brackets to the I-Beam. After final bracket location, the 3/4" long set screws are locked in place with the long set screws used to install the spreader bar and 3/4" long set screws in the outer brackets.

- e. After attaching main leg and brace leg, position assembly on I-Beam for desired span and tighten set screws in all brackets and the nuts holding spreader bar in place.
- f. Install trolley stops (item 12) on beam as shown.
- g. Repeat at other end except omit trolley stops until after the trolley has been installed. (Step 2).

Step 2. INSTALLING TROLLEY

- a. Install trolley on end of beam without the trolley stops and then install the trolley stops.
- b. Suitable means, such as heavy duty clamps, should be used to keep trolley in center of beam while raising (or lowering) the assembly.



Step 3. ATTACHING MAIN LEGS AND BRACE LEGS TO I-BEAM

- a. Place main leg (item 16) between main leg brackets (item 11) and install pin (item 1) and pin retainer (item 8). The leg must be oriented so that brace leg "boot" is inboard as shown.
- b. Place brace leg (item 24) in "boot" on main leg (item 16) and pin in place with pin (item 17) and retainers (item 2) as shown. Brace leg must be oriented so that pin hole in upper end of leg is parallel with I-Beam.
- c. The brace leg can now be installed between the brace leg brackets (item 7). Install pin (item 6) and pin retainer (item 8).
- d. Install remaining main legs and brace legs in the same manner.
- e. Insert splice tubes (item 20) into upper main legs and install retaining bolts (item 30), nuts and washers (items 21 & 22).
- f. Assemble lower leg (item 19) over splice tube and install retaining bolts as in (e) above.

NOTE: Do NOT tighten the bolts in sub-steps (e) and (f) above. You will need some play to insert the Caster Frame Pins in Step 4. as described next.

Step 4. CASTER FRAME ASSEMBLY

- a. Assemble caster (item 26) to caster plate (item 29) with bolts (item 27), nuts and washers provided (items 21 & 22).
- b. Assemble above assemblies to caster frame (item 25) using bolt (item 30), nut and lock washer (items 21 & 22).

Step 5. ASSEMBLY OF MAIN LEGS TO CASTER FRAME

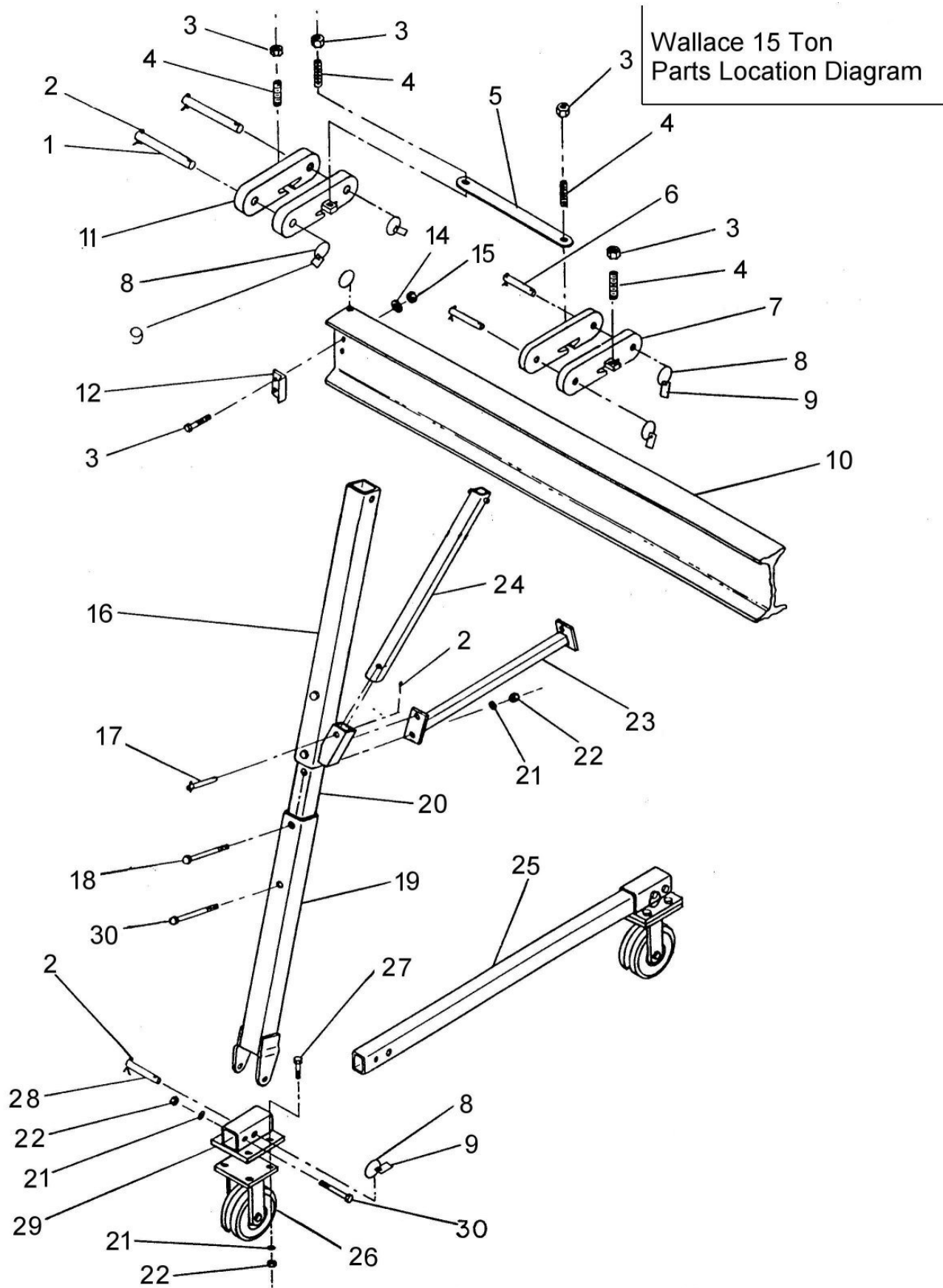
- a. Raise the I-Beam until the distance between the main legs is approximately the same as the length of the caster frame.
- b. Attach main legs (item 19) to caster frames using pin (item 28). Secure pins with locking device supplied (item 8).
- c. Recheck to make certain all locking devices (nuts, cotter pins, locking rings, etc.) are in place and secured.

Step 6. CROSS BRACE ASSEMBLY

- a. Cross-brace (item 23) is placed between the main legs as shown using bolts (item 18) nuts and washers (items 21 & 22).

NOTE: Bolts for the Main Leg splices (item 30) were loosely installed in Steps (3-e) and (3-f). In the above step, the interior bolts on the splice (item 18) are also used to attach the Cross Brace.





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Wallace Crane Safety

Safe Use and Operation Instructions & Inspection Checklist

Read, Understand, and Comply with all instructions supplied with this crane. Also, pay attention to the equipment used with this crane such as hoists, trolleys, power drives (if applicable), etc. Read, Understand, and Comply with the requirements of OSHA (Occupational Safety, and Health Administration) 1910.179

To ensure the safe operation of your Gantry, frequently inspect it for BENT, BROKEN, CORRODED, CRACKED, DAMAGED, or MISSING parts. DO NOT USE GANTRY if it does not meet inspection requirements. Please contact Wallace for replacements for any non-functional components.

DO NOT:

- Overload Gantry
- Lift loads greater than the rated capacity.
- Make any adjustments when the Gantry is under load. If necessary to adjust the Gantry, first lower and disconnect the load.
- Lift or support humans.
- Allow the load to swing or roll against any supporting members.
- Tow or Pull Gantry.

DO:

- Make certain the load is not attached to the floor.
- Remove any obstacles that may impede lifting.
- Make adjustments and/or repairs in an area where these operations will have the least impact on the normal operating environment.
- Secure the trolley and hoist to prevent movement during adjustment of the Gantry.
- Position the load at the center of the I-Beam when moving the Gantry under load.
- Use the Gantry at the lowest height possible.

Disclaimer

Please note these instructions were derived from company proprietary materials and (3) source documents including **ANSI B30.17**, **CMAA Specification #74, Revised 1987**, and **OSHA 1910.179**. As excerpts, the short form Wallace documents are intended to serve as general guidelines and are not to be considered the sole source when performing routine maintenance and inspection tasks.

Inspection Checklist on Other Side



Inspection Checklists

Excerpted from ANSI B30.17 –1980

Chapter 17-2 Inspection, Testing, and Maintenance.

Frequent Inspection

- a. Normal service, monthly.
- b. Heavy service, weekly to monthly.
- c. Severe service, daily to weekly.

Periodic Inspection

- a. Normal service, yearly – done in place.
- b. Heavy service, yearly – done in place unless disassembly is indicated (*if you completely disassemble, you must retest*) emphasis WCC.
- c. Severe Service, quarterly – done in place.
- d. Recommended interval as suggested by manufacturer.

Frequent Inspection Checklist

Any deficiencies as listed below shall be examined to determine if they constitute a hazard.

- All functional operating mechanisms for mis-adjustment interfering with proper operations.
- All limit switches should be checked without a load on the hook.
- Lines, tanks, valves, pumps and other parts of the pneumatic system for leakage.
- Hoists as specified in ANSI B30.16-1973

Periodic Inspection Checklist

The crane should be examined to determine if any of the following defects exists. DO NOT USE if any damage is found.

- Deformed, cracked, or corroded structural members
- Loose bolts or rivets.
- Cracked or worn sheaves and drums.
- Worn, cracked or distorted parts, such as pins, bearings, wheels, shafts, gears, rollers, locking and clamping devices, bumpers, switch baffles, interlock bolts, and trolley stops.
- Excessive wear on brake system parts.
- Excessive wear of chain drive sprockets and excessive chain stretch.

