Wallace Tri-Adjustable Gantry Cranes
Square Tube Assembly Instructions

CAUTIONS
1. Read and understand instructions before using this gantry.
2. Inspect gantry thoroughly before using (see Form 379) for damaged or missing parts.
3. Do not lift more than rated capacity.
4. Center hoist over the load.
5. Do not allow load to swing or to roll against any supporting members.
6. When moving gantry under load, push on the gantry, not the load. Be certain that rolling surface is hard, level, clean and smooth.
7. Do not move gantry over 50 feet per minute (1/2 m.p.h.).
8. Not to be used for lifting or supporting humans.

Before You Begin
• Place parts on a flat surface, preferably on cardboard, to keep small parts clean and organized.
• Select a clear area to assemble the Crane. The work envelope should extend five feet beyond twice the leg length (when flat) and the length of the I-beam.
• This clear area should be serviced by two overhead hoists or alternate as shown in Form 379. The cranes will raise the I-beam and leg assemblies when required.
• Select tools for fastening the nuts and bolts. You will also need C-clamps to hold the trolley in place while the crane is assembled.

Before Placing the Gantry Under Load
A. Make certain all hardware is securely attached and all locking pins are in place.
B. Give the “Operating and Safety Instructions” Form 379 to the person(s) with responsibility for the safe use of the Gantry.

Step 1. Attach the I-Beam Fittings to the I-Beam
A. Place I-Beam on suitable supports (barrels, boxes, horses, etc.) so stencilling is right side up.
B. Slide leg brace bracket assembly [assembly with narrow brackets] (2)-on the I-Beam, followed by the main leg bracket assembly [assembly with thick brackets] (3) - to position on I-Beam for desired span.
C. Remove set screws (4) with nuts (5) from leg brace bracket (2) and main leg bracket (3) nearest each other using an allen wrench.
D. Remove spacer bar (1) from caster frame carton and attach to main leg bracket (3) and leg brace bracket (2) using set screws (4) and nuts (5) previously removed.
NOTE: Do not tighten set screws to I-Beam until after installing main legs (Step No. 3) and brace legs (Step No. 4).
E. Install locking ring (6) in hole on top flange of I-Beam.
F. Repeat at other end of I-Beam.

Step 2. Attach the Trolley and Trolley Stops
A. Place trolley (if one is to be used) on the I-Beam.
NOTE: Refer to trolley instructions and adjust width, if necessary, to fit the I-Beam of your gantry.
B. Lock trolley in center of I-Beam using “C” clamps on bottom flange of I-Beam.
C. Install two trolley stop angles (1) at end of I-Beam using bolts (2) lock washers (3) and hex nuts (4).
D. Repeat at other end of I-Beam.

Step 3. Attach Main Legs to I-Beam
A. Position main leg (1) to I-Beam as shown with load pin handle (4) pointing out (or up if unit is being assembled on floor). Extend main leg to 2nd hole.
B. Remove main leg support pin (2) from brackets and position leg between brackets and re-install pin (2) through brackets and leg and install locking device (3).
NOTE: Repeat for remaining three legs.
Step 4. Attach the Brace Legs
A. Attach lower end of leg brace (1A) to the leg brace attachment casting (2) by hooking the leg brace hole (3) over the protruding curved attachment casting (2). Move leg brace in an arc to position top portion (1B) for attachment to leg brace bracket assembly.
B. Remove leg brace support pin (4) from leg brace support brackets and position leg brace between leg brace support brackets (6). Re-install leg brace support pin (4) through brackets and leg and install locking ring (5).
C. Tighten set screws in main leg brackets and leg brace brackets to I-Beam.
D. Secure the set screws by tightening the 3/8" nuts.

Step 5. Attach Caster to Caster Plate
A. Attach casters (1) to a caster plate as shown, using bolts (2), lock washers (3) and hex nuts (4) provided.
B. Repeat for remaining three caster plates.

Step 6. Attach Caster Frame to Main Legs
A. Prior to installing caster plates (5) onto caster frame tube (2), extend caster frame to full limit of safety cable. (This prevents cable from looping around pin (3) and bolt (6) when they are inserted through the caster plate (5) and tube (2). If looping does occur, full extension of caster frame cannot be realized).
B. Slide caster plate (5) onto caster frame tube (2) and align caster plate and tube temporarily by installing lower main leg pin (3).
C. Install hex bolt (6) & lock in place with lock washer (7) and nut (8).
D. Raise the I-Beam until the distance between the main legs is approximately the length of the caster frame spread.
E. Remove lower main leg pin (3) and attach lower main leg (1) to caster plate (5) by re-inserting lower main leg pin (3) through lower main leg (1), caster plate (5) and caster frame tube (2) and securing with locking ring (4).
F. Re-check to make certain locking devices (nut and locking ring) are in place and properly secured.
G. Repeat Step E at other end of caster frame.
H. Repeat Steps A, B, C and E, F, G at other end of gantry.

Step 7. Gantry Height Adjustment
A. Please follow safety instructions listed below (also refer to plastic tag attached to safety stop (1)).
B. If the gantry is to be left at minimum height, attach the safety stop pins (1) to the main legs (2) in order that they will remain available for future use.
C. Raising Gantry-Place safety stop pin (1) one hole below upper leg. Raise upper leg two holes maximum.
D. Lowering Gantry-Place safety stop pin in lower leg not over three holes below upper leg. Lower upper leg two holes maximum. Repeat as required.

NOTE: Never raise one end of the gantry more than two holes higher than the other end. After the final height has been obtained, make sure the number of exposed holes of the lower legs is the same.

Dual Caster Lockup Prevention
To prevent possible interference between any two casters, it is recommended that when changing gantry direction the procedure as shown by the diagram be used. Unless the floor surface is extremely uneven, the casters will turn and trail without interference.

Casters will turn 90° at points "A" and "B" due to swivel lead of each caster.