

T-SERIES GANTRY CRANE

Assembly and Maintenance Instruction Manual





WARNING

SPANCO GANTRY CRANE CONDITIONS OF USE AND WARNINGS STATEMENT

1. Read, understand, and follow the manual, assembly drawings, and warnings provided with your system **before** beginning installation, use, or disassembly. Follow all instructions carefully.
2. This manual, and any other instructions, must be provided to the user(s) of this equipment. The user(s) must understand the equipment's proper use and limitations.
3. This crane is engineered to accommodate a standard hoist and a standard hoist weight. The standard hoist weight is calculated at 15 percent of the crane's rated capacity. Please inform Spanco if hoist weight exceeds 15 percent of the crane's rated capacity, or if the lifting speed exceeds 50 FPM.
4. Motorized trolley travel is available for PF-Series and T-Series Gantry Cranes.
5. "Sidewinder" hoists or low headroom hoists with motors that are parallel to the beam can potentially impart large torques (twisting moments) to the beam that can cause beam twisting and oscillations. Hoist inverter controls are heavily recommended for all "sidewinder" hoists or low headroom hoists with motors that are parallel to the beam installed on beam lengths over 12 feet.

NOTE: To eliminate any form of beam oscillation, use only an inverter controlled hoist of this type.

6. Power Drive options for motorized gantry travel are available for PF-Series Gantry Cranes only. Review Power Drive installation instructions in the separate Power Drive instruction manual.
7. Each component and system must be employed and maintained in accordance with all OSHA and ANSI standards.
8. Use a hoist with the same or lower capacity rating as the gantry crane. Do not lift more than the rated crane capacity.
9. The rated capacity is displayed on a label on the Spanco system. Exceeding the capacities displayed on this label can result in serious injury or death.
10. There should never be any type of loading past the end stops for any reason.
11. Never apply an off-plumb load to the system.
12. Always check for overhead hazards, such as power lines, trees, equipment, overhead structures, or walls, before using or moving a portable system.
13. Never use this system as fall protection or for lifting, hoisting, or carrying personnel.
14. When moving the gantry under load, keep the load in the center of the beam and as close to the ground as possible.
15. Before moving the gantry under load, remove any obstacles and ensure that the load is not attached to the floor.
16. Spanco Gantry Cranes are designed to be moved manually. Do not push or pull the gantry with a lift truck or other vehicle.
17. When moving a gantry crane under load, push the gantry; do not push or pull the suspended load.
18. Never exceed two people pushing an Aluminum gantry crane.
19. Do not disassemble the gantry or adjust the height, span, or caster frame spread (if applicable) when the gantry is under load.



WARNING

SPANCO GANTRY CRANE CONDITIONS OF USE AND WARNINGS STATEMENT

20. Do not stand under the gantry when it is being adjusted in height, span, or caster frame spread.
21. Do not stand or walk under a suspended load.
22. Caster frame spread must be a minimum of 40 percent of the overall height (T-Series only).
23. Adjustments and repairs must be made in an area that does not interfere with operation.
24. Do not load the gantry on an incline or move a loaded gantry onto an inclined surface.
25. Do not allow the load to swing or roll against the gantry support members.
26. Do not allow the hoist trolley to strike the end stops or gantry supports at any time.
27. The system must be tied down if exposed to winds exceeding 30 miles per hour. Spanco considers it an unsafe practice to operate cranes in winds over 15 miles per hour. Although the drive may work in speeds exceeding 15 miles per hour, Spanco does not recommend using any crane in winds over 15 miles per hour for safety reasons. If quoted for a pre-defined wind speed, the drive components have been designed for an approximate wind speed. It is the responsibility of others to generate a risk assessment of wind conditions and part stability, and to generate a lifting plan that accounts for the sail effect of the part being lifted and the length of the cable the part is suspended on. Notify Spanco if the system will be subjected to constant buffeting winds.
28. Although Spanco may provide components that are intended for service in a specific environment, it is the customer's responsibility to confirm that the provided Spanco system and components will work in and are acceptable for their specific application and environment.
29. **Before each use**, inspect the system for bent, broken, cracked, or missing components.
30. Thoroughly inspect the system **annually** per OSHA law.
31. Per OSHA law, load testing must be performed before the system can be placed into service.
32. Engineering of any attachment points must be done by others.
33. Component appearances and dimensions shown are approximate and subject to change without notice. All literature dimensions are developed using standard components for the spans and capacities. Substitution of optional trolleys or other components will affect certain dimensions.
34. Never deviate from the above unless you have written permission and authorization from Spanco.



WARNING

Follow the Inspection Checklists in this manual: review the Before Each Use Inspection Checklist on page 19 before each use and review the Annual Inspection Checklist on page 20 annually.

SYSTEM APPLICATIONS

The Spanco system is used for material handling applications. This material handling system is labeled with a maximum rated capacity and is designated for Class C service as defined by the CMAA; follow all limitations as noted on system labels.

STANDARDS AND COMPLIANCE

Please refer to local, state, and federal (OSHA) requirements governing occupational safety for additional information regarding material handling. The Spanco system meets or exceeds the requirements set forth in OSHA 1910.179, ANSI B30.11, and CMAA 70.

REQUIRED TRAINING

This system is intended to be used by people who are trained in its correct application and use. It is the responsibility of the users and the users' management to ensure that they are familiar with OSHA law and these instructions, and that they are trained in the correct use and care of this equipment. Authorized users must also be aware of the operating characteristics, application limits, and the consequences of improper use, which can result in serious injury or death. All users must read and understand CMAA 79 *Crane Operator's Manual*.

Every material handling application must be OSHA compliant. Safety and training measures may include, but are not limited to:

- Operator certification training
- Operator evaluation program
- Hand signal protocols if required
- Lock-out/Tag-out training

The above list is not a comprehensive list. Specific applications may need to include additional protocols. For more information on how to set up a proper lift plan within your facility, follow CMAA 79 *Crane Operator's Manual*.

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ASSEMBLY INSTRUCTIONS

1. Equipment Needed for Assembly

- a) This manual
- b) Applicable safety equipment for workers' use during assembly, such as hard hats, steel toe shoes, etc.
- c) Telescoping fork truck or crane with at least the minimum height and lifting capacity required as determined by the size and weight of the gantry crane.
- d) Man lift/cherry picker (minimum height determined by installed system height)
- e) Measuring tape
- f) Torque wrench
- g) Lifting straps
- h) Two six-inch by six-inch (or larger) wood blocks
- i) Long carpenter's level or laser level
- j) Wrench/socket sets up to 1-1/8 inch
- k) A spacious, level area for assembly (e.g., parking lot)
- l) A way to mark hanger locations, such as a permanent marker
- m) *T-SERIES-ASSEMBLY SHEET 1 OF 2*, hereafter referred to as *T-Series Gantry Crane Assembly Drawing*, included as a separate document.
- n) *T-SERIES-ASSEMBLY SHEET 2 OF 2*, hereafter referred to as *T-Series Gantry Crane Label Placement Drawing*, included as a separate document.

2. Inventory

- a) Open all bundles and confirm that all components are accounted for: see *Building Materials Description* located in the top right corner of the T-Series Gantry Crane Assembly Drawing. Note that the quantity of components in an assembly are multiplied by the number of the assemblies.
- b) Check for damage to components that may have occurred during shipping.
- c) Your T-Series Gantry Crane consists of the following components:
 - 1) One I-Beam
 - 2) Two I-Beam Hardware Assemblies
 - 3) Four Upper and Lower Main Leg Assemblies
 - 4) Four Brace Legs
 - 5) Two Caster Frame Assemblies (Caster Frame Assemblies contain a Leg Overspread Limit Cable to prevent overspreading legs. **DO NOT REMOVE OR DISCONNECT THIS CABLE**)
 - 6) Four Casters
 - 7) All Beam, Leg, and Caster Hardware and Hardware Kits
 - 8) Any optional components, such as Height Adjustment Kit and Gantry Cart Kit.

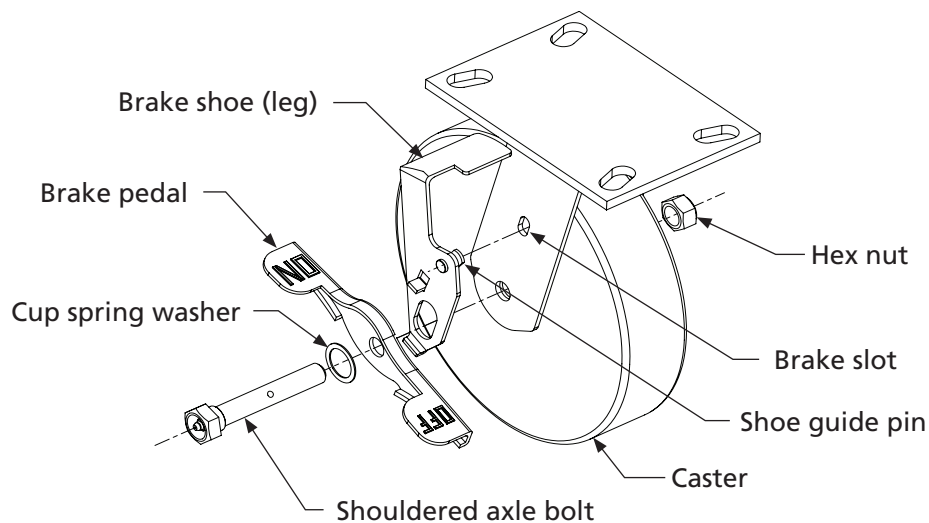
3. Attaching the Caster Brakes to the Caster Assemblies

Refer to T-Series Gantry Crane Assembly Drawing for steps A through J

WARNING: Crane parts are heavy. Use proper rigging and support to secure all parts during assembly, adjustment, and disassembly processes. Do not stand under the crane during assembly or disassembly.

- a) Select an area under an overhead hoist, or where a lift truck can be used to raise the beam. Be sure there is no machinery or clutter nearby that will obstruct free movement. All personnel should be wearing applicable safety gear, such as hard hats, steel toe shoes, and safety glasses.
- b) Depending on the system, some polyurethane casters ship with the brakes already attached. If you ordered polyurethane casters, and the brakes were shipped loose, follow steps **c** through **j** to attach the caster brakes. Refer to the caster brake assembly drawing below throughout the assembly process.

Caster Brake Assembly Drawing



- c) Using a 3/4-inch wrench and 3/4-inch socket and ratchet, unbolt the caster stud and remove the nut, bolt, washer, and caster.
NOTE: If the spacers fall out of the caster, reinsert them into the caster holes.
- d) With the top of the brake shoe facing towards the caster assembly, insert the guide pin on the brake shoe into the brake slot on the caster assembly.
- e) Using a screwdriver, slightly bend the brake shoe tab so that the brake shoe guide pin and brake shoe tab fit properly.
- f) With the brake pedal tabs pointed away from the caster assembly, line up the hole on the brake pedal with the hole on the brake shoe. "On" and "Off" on the brake pedal tabs should be visible when the caster is mounted to the system.
- g) Line up the caster holes with the brake shoe hole and brake pedal hole.
- h) With the washer on the bolt-side of the caster assembly, reinsert the longer axle bolt through the brake pedal, brake shoe, and caster. Reapply the axle nut at this time.
- i) Using a 3/4-inch wrench and 3/4-inch socket and ratchet, securely tighten the caster nut.
- j) Repeat steps **c** through **i** to install the remaining caster brakes.

4. Attaching the Swivel Locks to the Caster Assemblies

Refer to T-Series Gantry Crane Assembly Drawing for steps A through F

- The swivel lock ships zip-tied to the caster assembly for polyurethane casters. For some polyurethane casters, you should have removed the swivel lock while installing the caster brakes.
- Insert the pin on the swivel lock into the groove beneath the caster plate on the caster assembly.
- Open the pin on the swivel lock by pulling and spinning the ring to fit into the groove at the end of the swivel lock.
- Using two 3/4-inch bolts, washers, and nuts, bolt the swivel lock to the caster plate.
- Using a 3/4-inch wrench and 3/4-inch socket and ratchet, tighten the swivel lock bolts to 257 foot-pounds.
- Repeat steps **b)** through **e)** to install the remaining swivel locks.

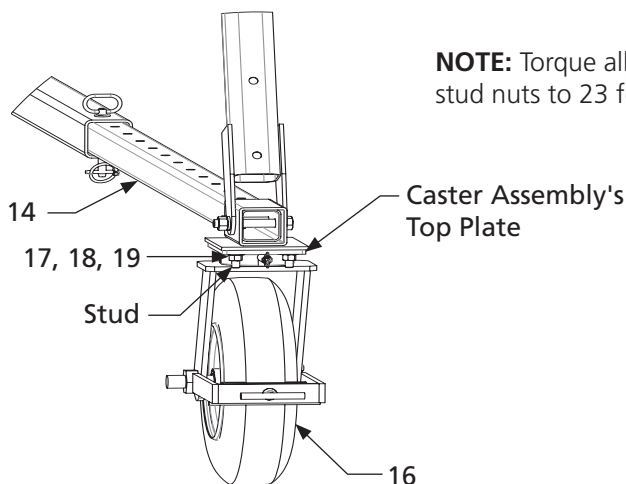
5. Attaching the Caster Assemblies to the Caster Frame Assemblies

Refer to Detail "A" for steps A through H

WARNING: Caster frames contain a pre-assembled leg overspread cable assembly inside the tubes to prevent accidental overspreading of the legs. Do not remove this cable or unbolt the bolts on each end of the caster frame assemblies to which the cable is attached.

- For caster frames with a studded connection, lay each caster frame assembly on the ground with the studs facing up.
- Per **Detail "A,"** place a caster assembly (16) on a caster frame assembly so that the four studs extend up from the four holes in the caster assembly's top plate.
- Per **Detail "A,"** place a flat washer (17), lock washer (18), and hex nut (19) on each stud so that the lock washer (18) is between the flat washer (17) and hex nut (19). Torque all wheel stud nuts (19) to the correct value specified by the torque chart.
- Repeat steps **a)** through **c)** to attach the remaining caster assemblies (16) to the caster frame assemblies.

Detail "A" (Caster Assemblies to Caster Frame Assemblies)



ITEM	DESCRIPTION
14	Inner Caster Tube
16	Single Caster
17	Flat Washer
18	Lock Washer
19	Hex Nut
20	Hex Bolt

NOTE: On some models, item 20 replaces the stud.

- For caster frames with a bolted connection, align the holes in the caster frame assembly with the holes in the caster assembly's top plate.
- Per **Detail "A,"** insert a hex bolt (20) through each of the aligned holes in the caster frame and the caster assembly so that the bolts extend from the caster assembly's top plate.

- g) Per **Detail "A,"** place a flat washer (17), lock washer (18), and hex nut (19) on each bolt so that the lock washer (18) is between the flat washer (17) and hex nut (19). Torque all nuts (19) to the correct value specified by the torque chart.
- h) Repeat steps **e)** through **g)** to attach the remaining caster assemblies (16) to the caster frame assemblies.
- i) Test the caster brakes and swivel locks (if present) to ensure they function properly.

6. Attaching the Hanger Assemblies to the Beam

Refer to Detail "B" for steps A through H

- a) Raise the beam using saw horses, an existing overhead crane or a lift truck, and lifting straps or the lifting lug on the beam. With the beam supported and secure off the floor, remove the trolley end stop angles (34) from both ends of the beam. These stops will be reinstalled in a later step.

WARNING: The lifting lug is not intended to support the complete system. Using the lifting lug to lift and move the assembled gantry crane can cause damage to the system and may result in serious injury.

- b) Install the trolley and hoist according to the manufacturer's recommendations onto the lower flange of the beam and secure it in the middle of the span.

NOTE: Hanger assemblies ship assembled. They consist of components 21 through 27 in the *Building Materials Description*.

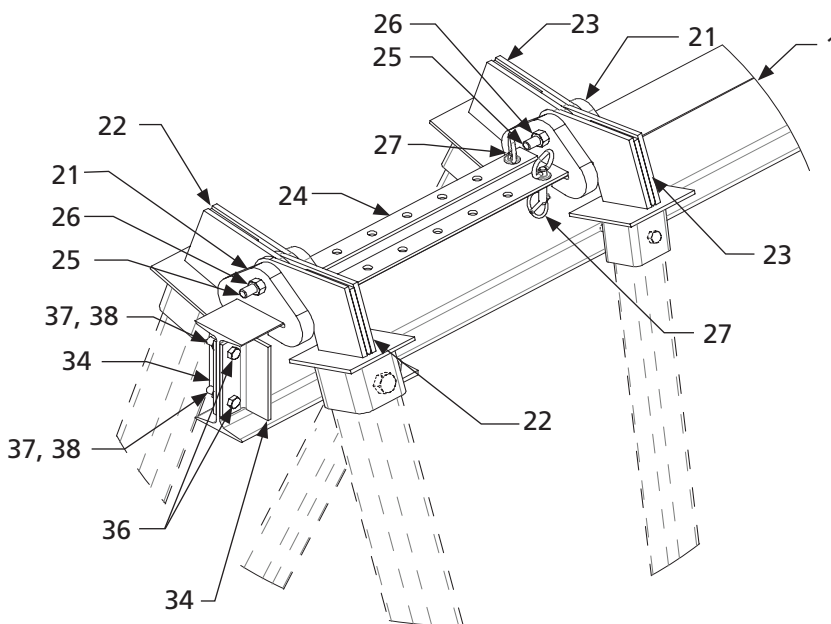
- c) Per **Detail "B,"** slide both beam hardware assemblies onto the top flange of the beam. Make sure that the angled brace tube connection is facing into the middle of the beam span.

NOTE: This arrangement is for standard inboard bracing. If outboard bracing is desired, attach the beam hardware assembly with the angled brace tube connection facing the end of the beam span.

- d) Per **Detail "B,"** set the beam hanger assembly to desired position and align the holes in the beam hanger weldment plate (24) with the holes in the top flange of the beam (1).

NOTE: For easier installation, use the holes that allow for maximum span distance as shown in **Detail "B."**

Detail "B" (I-Beam Hanger Assemblies and End Stop Angles to I-Beam)



NOTE: 5/8-inch locknuts (26) should be torqued to 108 foot-pounds.

ITEM	DESCRIPTION
1	Beam
21	Beam Hanger
22	Main Leg Hanger Assembly
23	Brace Leg Hanger Assembly
24	Beam Hanger Weldment
25	Hex Bolt
26	Locknut
27	Push/Pull Pin with Linch Pin
34	End Stop Angles
36	Hex Bolt
37	Lock Washer
38	Hex Nut

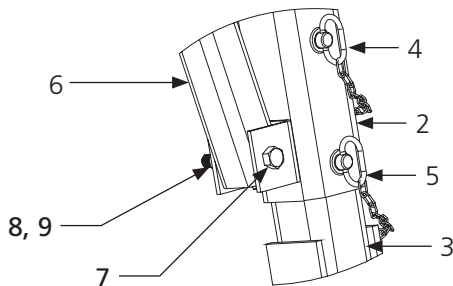
- e) Per **Detail "B,"** insert two push/pull pins (27) through the aligned holes of the beam hanger weldment (24) and beam (1). The push/pull pins (27) must be installed on the inside of the hanger assembly (21 through 27) closest to the center of the beam (1).
- f) Per **Detail "B,"** insert the attached linch pins (27) through the holes on the bottom of the push/pull pins (27).
- g) Repeat steps **d)** through **f)** to attach the remaining hanger assembly (21 through 27 in the *Building Materials Description*) to the beam (1).
- h) Reinstall the end stop angles (34) along with the counterweight lug (35) as originally attached to the beam (Counterweight lug is supplied for one end only). Align the holes in the end stop angles with the holes in the side of the beam. Insert bolts (36), and securely tighten split lock washers (37) and hex nuts (38) to the bolts.

7. Attaching the Support Legs to the I-Beam Assembly

Refer to Detail "C" and Detail "B" for steps A through G

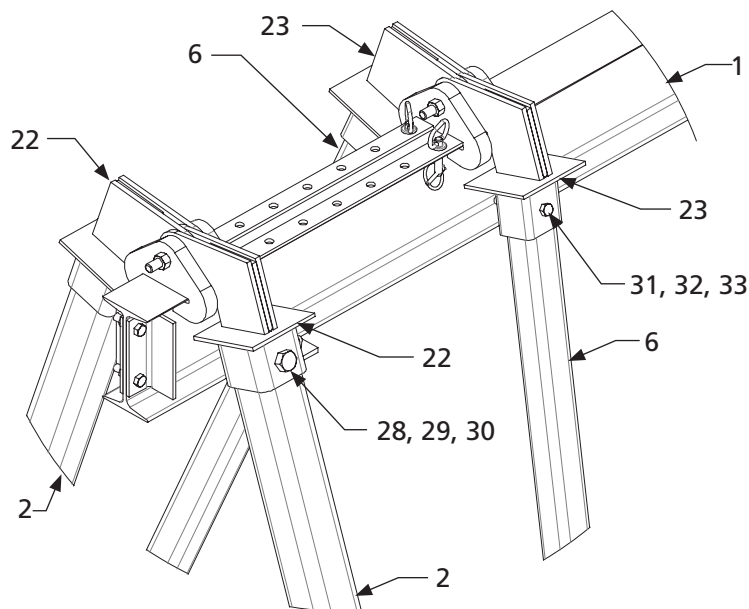
NOTE: The support legs ship assembled and include one Upper Main Leg (2), one Lower Main Leg, (3), one Brace Leg (6), one Push/Pull pin (4), one Push/Pull Safety Pin (5), and hardware components 7 through 9.

Detail "C" (Upper and Lower Main Leg)



ITEM	DESCRIPTION
2	Upper Main Leg
3	Lower Main Leg
4	Push/Pull Pin
5	Push/Pull Safety Pin
6	Brace Leg
7	Hex Bolt
8	Lock Washer
9	Hex Nut

Detail "B" (Support Legs to Beam)



ITEM	DESCRIPTION
1	Beam
2	Upper Main Leg
6	Brace Leg
22	Main Leg Hanger Assembly
23	Brace Leg Hanger Assembly
28	Hex Head Bolt
29	Lock Washer
30	Hex Nut
31	Hex Head Bolt
32	Lock Washer
33	Hex Nut

- a) Adjust each main support leg (2 and 3) to the minimum height and secure with the push/pull pins (4). Make sure to use both sets of pins.
- b) Per **Detail "C,"** ensure the brace leg (6) is installed with the angle at the top of the leg assembly and facing up toward the main leg (2).
- c) Secure the trolley, and attach the main support leg and brace leg assemblies to their respective connections by sliding the leg into the leg caps, per **Detail "B."**
- d) Per **Detail "B,"** insert a hex bolt (28) through the aligned holes in the main leg and the main leg connector hanger. Securely tighten a lock washer (29) and hex nut (30) to the bolt.
- e) Per **Detail "B,"** insert a hex bolt (31) through the aligned holes in the brace leg (6) and the brace leg connector hanger. Securely tighten a lock washer (32) and hex nut (33) to the bolt.
- f) Repeat steps a) through f) to attach the remaining support legs to the beam assembly.

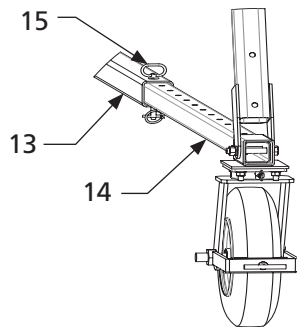
8. Attaching the Caster Frame Assemblies to the Support Legs

Refer to Detail "C" and Detail "B" for steps A through G

NOTE: The caster frame assemblies ship assembled and include the outer caster tube (13), the inner caster tube (14), one push/pull pin (15), and the overspread cable assembly (40 through 43).

WARNING: Caster frames contain a pre-assembled leg overspread cable assembly inside the tubes to prevent accidental overspreading of the legs. **DO NOT** remove this cable or any hardware attached to the cable assembly.

Detail "A" (Inner and Outer Caster Tube)



ITEM	DESCRIPTION
13	Outer Caster Tube
14	Inner Caster Tube
15	Push/Pull Pin

- a) Extend both caster frame assemblies to the maximum length by removing the attached linch pin from the bottom of the push/pull pin (15) and removing the push/pull pin (15).
- b) Pull the inner caster frame tube (14) until the last holes in the inner and outer caster frame tubes are aligned, then reinsert the push/pull pin (15) through the aligned holes in the inner and outer caster frame tubes and reinsert the linch pin.
- c) Repeat steps a) through b) to extend the remaining caster frame assembly to maximum length.
- d) Using an existing overhead crane or a lift truck and lifting straps, slowly raise the partially assembled gantry to a point where the caster frame assemblies can fit under the leg assemblies.
- e) Per **Detail "D,"** align the middle holes of the caster frame sleeve with the holes at the bottom of the main leg bottom bracket.
- f) Per **Detail "D,"** insert a hex bolt (10) through the aligned holes of the caster frame sleeve and the main leg bottom bracket.
- g) Per **Detail "D,"** securely tighten a lock washer (11) and hex nut (12) to the bolt (10) so that the lock washer (11) is between the outer support leg bottom bracket and the hex nut (12).
- h) Repeat steps e) through g) to attach the other end of the caster frame assembly to the support leg.

- i) Repeat steps **e)** through **h)** to attach the remaining caster frame assembly to the support leg.
- j) If the caster frame width (tread) of the gantry needs to be other than maximum, slightly raise the unit. This should only be done with the push/pull (4) pins inserted and secure in their correct place in the main leg. Remove the caster frame spreader pin (15) from the caster frame assembly and shorten the caster frame width to the desired length. Reinsert the caster frame spreader pin (15) and check that the same number of holes are visible on each caster frame assembly.
- k) Caster frame spread must be a minimum of 40 percent of the overall height to maintain stability.

FINAL ASSEMBLY

- a) Ensure that the beam is secured properly to the support legs, and that the caster frame assemblies are secured properly to the support legs.
- b) Confirm that all of the system's nuts are torqued to the required specifications below prior to removing support rigging (your telescoping fork truck or crane).

BOLT DIAMETER	HEX NUT TORQUE	MINIMUM HEX LOCKNUT TORQUE
*1/2 Inch	78 Foot-Pounds	51 Foot-Pounds
†5/8 Inch	154 Foot-Pounds	93 Foot-Pounds
††3/4 Inch	257 Foot-Pounds	151 Foot-Pounds
7/8 Inch	341 Foot-Pounds	224 Foot-Pounds
1 Inch	514 Foot-Pounds	325 Foot-Pounds

NOTE: *1/2-inch hex nuts (19) on the caster frame assemblies' studs should be torqued to 23 foot-pounds.

†5/8-inch leg bracing bolts (7) should be torqued to 48 foot-pounds.

††3/4-inch leg bracing bolts (7) should be torqued to 77 foot-pounds.

NOTE: This torque value chart is based on grade 5 fasteners. Reduce torque value for lower grade fasteners as needed.

SYSTEM HEIGHT ADJUSTMENT

WARNING: Crane parts are heavy. Use proper rigging and support to secure all parts during adjustment processes. **Never** adjust the height while the gantry is under load. **Never** stand under the system when adjusting the system height, span, or tread, or while disassembling the system.

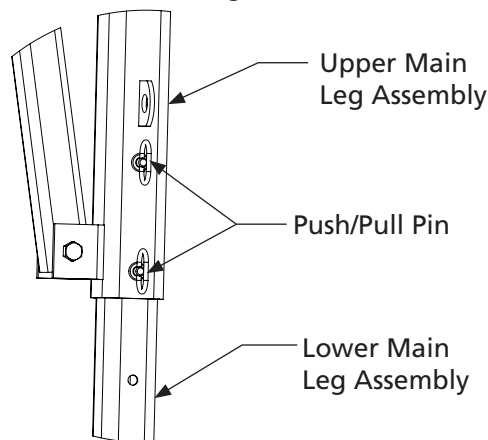
Without Height Adjustment Kit

- a) Secure the trolley and hoist in the center of the beam span.
- b) Using an existing overhead crane or lift truck and lifting straps, slightly lift the beam to relieve the weight from the push/pull pins in the support legs.
- c) Remove the attached linch pins from the push/pull pins and remove the push/pull pins from the support leg.
- d) Slowly pull or push the bottom of the support leg to lengthen or shorten the support leg.

NOTE: Support legs will not adjust at the same pace.

- e) When the support leg reaches the desired height, reinsert the push/pull pin and secure with the linch pin attached per **Figure 2**. Reinsert the second push/pull pin in the first hole showing under the upper main leg and secure with the linch pin attached per **Figure 2**. The second push/pull pin must be in place prior to making any lift.
- f) Repeat steps **c)** through **e)** to adjust the remaining support legs.

Figure 2



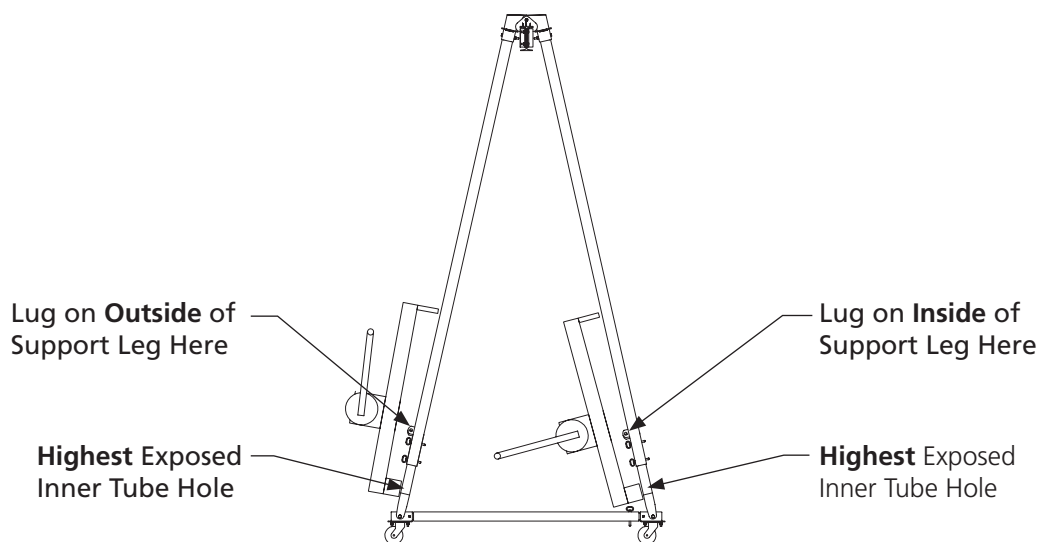
- g) Ensure that each support leg has the same number of holes visible in the lower main leg assembly and two push/pull pins in the upper main leg assembly, as per **Figure 2**.
- h) After you have reinserted two push/pull pins and attached linch pins into each support leg and have ensured that each support leg has the same number of holes visible in the lower main leg assembly, you can lower the beam and remove the crane or lift truck and lifting straps.

With Height Adjustment Kit

NOTE: The height adjustment kit is installed on the upper and lower main legs. The winch can be mounted to either the inside or the outside of the support leg assembly.

- a) Secure the trolley and hoist in the center of the beam span.
- b) Remove the bottom push/pull pin from one support leg.
- c) Attach the height adjustment kit to the lower leg using the push/pull pin supplied with the height adjustment kit and secure with the linch pin attached. Refer to **Figure 3** for height adjustment kit orientation.

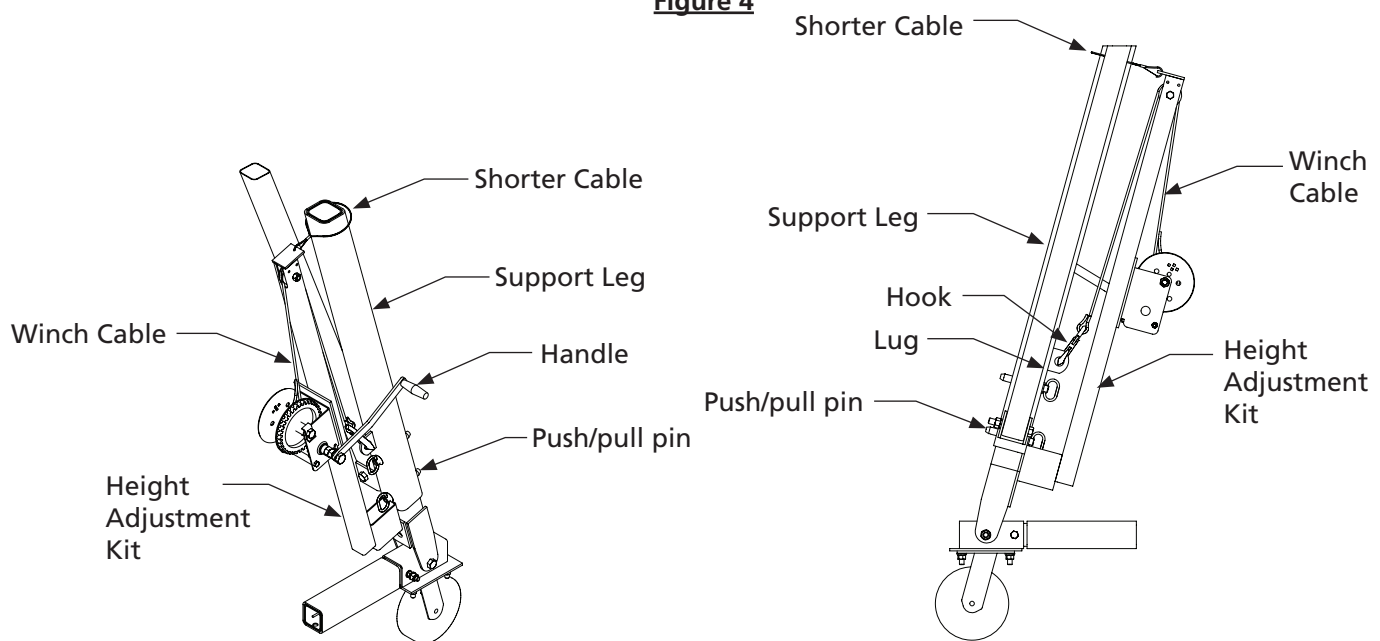
Figure 3



- d) Per **Figure 4** on page 10, wrap the shorter cable lanyard with a loop and snap hook located at the top of the height adjustment kit around the upper main leg and insert the shorter cable into the attached clip.

- e) Per **Figure 4**, attach the hook to the welded lug on the upper main leg. Refer to **Figure 3** to ensure that the correct lug is used.
- f) Crank the handle until the winch cable is tensioned to relieve the weight from the remaining push/pull pin of the leg, then remove it from the support leg.
- g) Slowly crank the handle up or down to lengthen or shorten the support leg.
NOTE: Never adjust a support leg more than two holes (one foot) at a time to prevent system binding. After a support leg has been adjusted two holes, the height adjustment kit must be repositioned before adjusting each support leg two additional holes (one foot). Repeat this process until the desired height is reached.
- h) After adjusting the support leg up to two holes (one foot) at a time, reinsert the push/pull pin through the bottom hole of the upper main leg and secure with the attached linch pin. See **Figure 2** on page 8.
- i) Repeat steps **b)** through **h)** to adjust the remaining support legs.
- j) Ensure that each support leg has the same number of holes visible in the lower main leg. See **Figure 2** on page 8.
- k) Remove each height adjustment kit.
- l) Reinsert the push/pull pins so that both are in the two holes in the upper main leg. See **Figure 2** on page 8.
- m) Reinsert the attached linch pins through the push/pull pins.
- n) Ensure that each support leg has two push/pull pins and attached linch pins through the two holes in the upper main leg. See **Figure 2** on page 8.

Figure 4



OPTIONAL ACCESSORIES

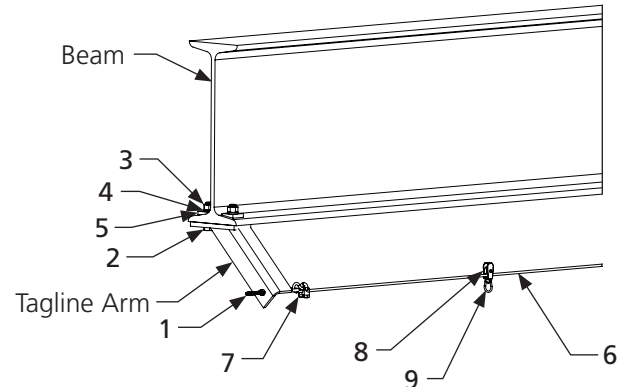
1. Gantry Cart Kit

- a) The gantry cart kit in combination with the caster frame assemblies make a portable cart for storage of the T-Series Gantry. The gantry cart kits sits on top of the caster frames and uses the same hardware to attach as the leg assembly. To adjust the carts length, remove the push/pull pin and adjust to desired length. Reinsert the push/pull pin and secure with the linch pin attached.

2. Tagline Assembly

Tagline assemblies include universal weldments, applicable hardware, tagline cable, cable clamps, eyebolts, and pulleys with cable ties. One cable tie is provided for every five feet of tagline length. Power conductor is Supplied by others.

ITEM	DESCRIPTION	QUANTITY
1	Eye Bolt with Two Hex Nuts	2
2	Hex Head Bolt	4
3	Hex Nut	4
4	Flat Washer	4
5	Bevel Washer	4
6	Galvanized Steel Cable	1
7	Cable Clamps	4
8	Pulley	X
9	Cable Tie	X

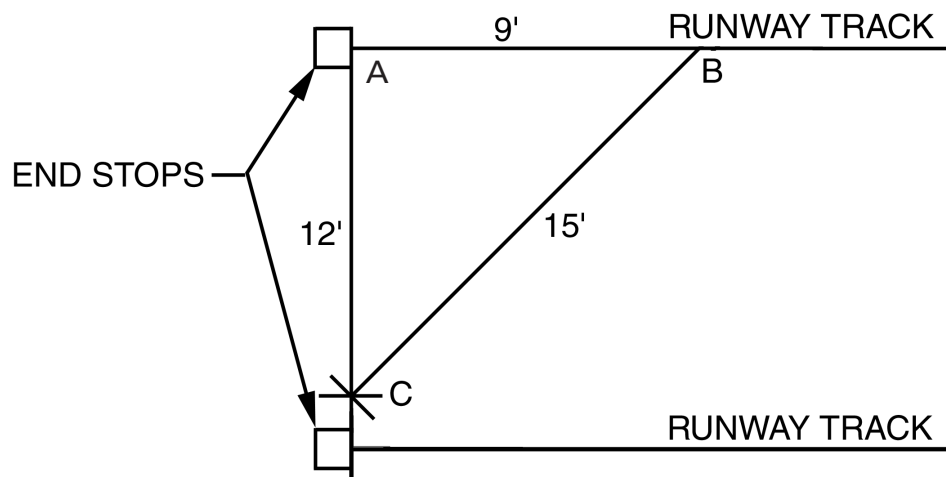


NOTE: The number of pulleys and cable ties will vary depending on the length of the tagline.

3. V-Groove Tack Installation

- The exact span of the crane may vary from the design span. Install the full length of the track on one side, making sure that the track is straight and level. Fasten V-groove track to the floor using 3/8-inch lag bolts and suitable anchors. (For track supplied by Spanco, use a bolt in each hole. Otherwise, space bolts approximately three feet apart on each side of the track in a staggered arrangement.) Use shims or grouting as required to keep the track level and alignment pins at joints to keep the track true. End stops are required at each end of both tracks.
- Lay one or two sections of the opposite side of the track at the design span, assemble the crane on the tracks following the assembly instructions, and operate the crane back and forth a few times, being careful not to run the crane off the tracks. The loose sections of track will float and set the track to the exact crane span.
- After the operating span is determined, attach all the other sections of track to the floor making sure the track is straight, level, parallel, and at the same elevation as the first track. The end stops should be set square with a 3-4-5 right triangle. The sides and the hypotenuse can be multiplied by any convenient number, such as three, used in the example.

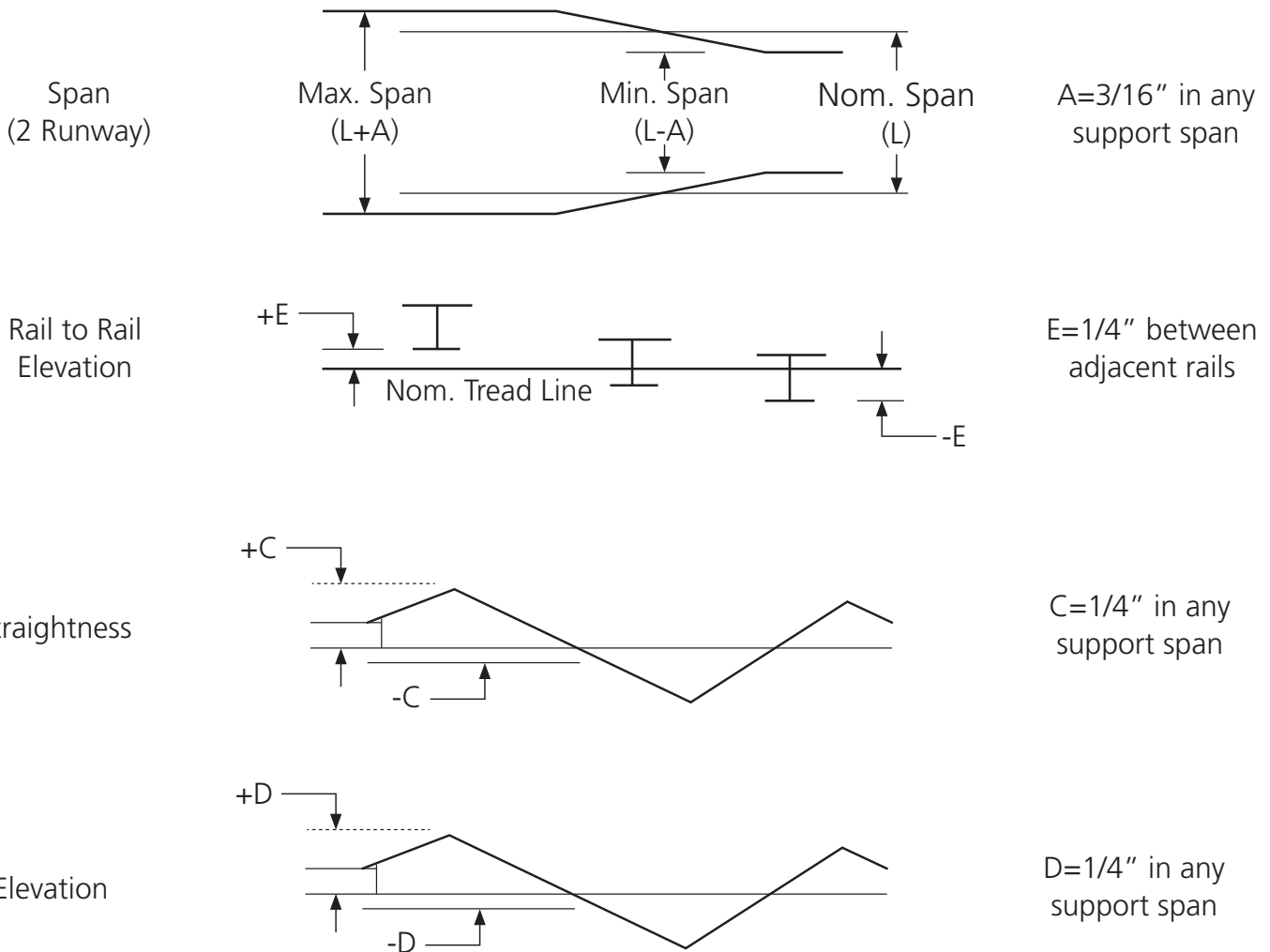
NOTE: For v-groove track, the anchors can be epoxy anchors, or "wedge" anchors, after the floor is completed.



EXAMPLE

- d) Set one end stop at point A and measure along the runway track nine feet from point A to point B. With point B as a center and 15 feet as a radius, draw a circular arc on the floor. With point A as a center and 12 feet as a radius, draw a circular arc on the floor intersecting the other arc at point C. A line running through points A and C is perpendicular, or square, with the runway track.
- e) Extend this line to the other runway track to locate the end stop on that runway. Repeat the process at the other end of the runway, or measure along each runway the same distance from these end stops for locating the stops at the other end of the runways.

RUNWAY ALIGNMENT TOLERANCE FOR V-GROOVE TRACK



MAINTENANCE

1. A system inspection should be performed 30 days after installation. All nuts, bolts, and screws should be checked for tightness. All end stops, cotter pins, and hoist trolleys should be checked for abnormal wear or breakage.
2. A complete inspection of all fasteners and connections should be performed annually or every two thousand (2,000) hours. Heavy conditions of use may require more frequent inspections.
3. Operators should visually inspect the system before each use to note any unusual or abnormal system operations.
4. **If the system fails ANY inspection point on any of the inspection checklists, immediately remove the system from service and call Spanco® at 800-869-2080 for instructions.**
5. Download and print additional blank inspection checklists from the literature tab at Spanco.com.

LOAD TEST

After the T-Series Gantry Crane has been installed, OSHA requires a load test before operating and after any modifications. This equipment is designed and manufactured to the rated capacity marked on the equipment with due allowances for safety factors. Prior to initial use of the Gantry Crane, a person appointed by the owner, under the direction of a qualified technical person, must perform a load test at 125 percent of the rated capacity using certified test weights. See CMAA 78 for periodic load testing requirements. Under no conditions shall the rated capacity be exceeded during regular use or during annual or semi-annual load tests.

DESIGN FACTOR

Nameplate capacities represent the rated load on the hoist hook. The load rating of a hoist shall not exceed the nameplate capacity. Spanco's design includes an allowance of 15 percent of nameplate capacity for trolley and hoist deadweight and 25 percent of the nameplate capacity for impact. This design provides a margin to allow for variations in material properties, operating conditions, and design assumptions. **No crane should ever be loaded beyond its rated capacity.**

SERVICE FACTOR

All Spanco gantry cranes are designed for moderate usage (Class C Moderate Service) as defined by CMAA 70:

- System or equipment is used where lifted loads average 50 percent of the rated capacity with five to ten lifts per hour, averaging 15 feet, not over 50 percent of the lifts at rated capacity.

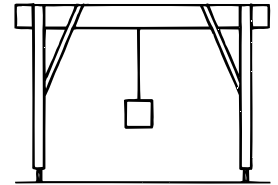
Applications involving vacuums, magnets, or other high-impact lifters are considered severe usage and require special design considerations. Contact Spanco for special design pricing.

Consult Spanco for usage other than Class C and all instances of high cycle rates or high-impact applications such as high-speed air or electric hoists, vacuum lifters, or magnets.

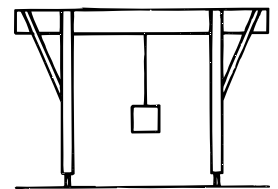
CORRECT CONFIGURATIONS FOR T-SERIES GANTRY

Spanco T-Series Gantry Cranes can be used in different crane configurations. The figures below illustrate the configurations for a T-Series Gantry Crane considered stable in lifting and transporting loads when all requirements for operation are met.

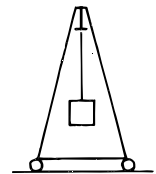
Inboard Bracing: brace legs are directed inward toward the center of beam span to allow maximum clear span. **The load must remain within the support legs.** Refer to [Step 6: Attaching the Hanger Assemblies to the Beam](#) on page 5 for assembly instructions for this configuration.



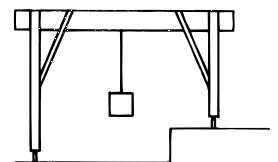
Outboard Bracing: brace legs are directed outward toward the ends of beam to allow minimum floor length. **The load must remain within the main support legs to prevent accidental cantilevering of the load.** Refer to [Step 6: Attaching the Hanger Assemblies to the Beam](#) on page 5 for assembly instructions for this configuration.



Maximum Height: the gantry is adjusted to maximum height and caster frame spread is adjusted to maximum. **Caster frame spread must be at minimum 40 percent of overall height** to maintain stability. Refer to page 8 for instructions to adjust the caster frame spread.

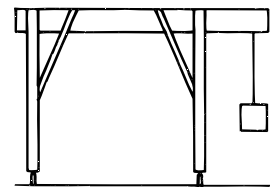


Uneven Floor: the legs are adjusted to different heights. **Legs must be adjusted so that the beam is level.** Refer to [System Height Adjustment](#) on page 8 for instructions to adjust the height of the gantry legs either with or without the optional height adjustment kit.



Cantilever: the beam overhangs one side of gantry support legs. **ALWAYS USE ADEQUATE COUNTER WEIGHT ON ANY CANTILEVER OPERATION.** Consult cantilever loading chart attached to instructions and to gantry legs. Maximum cantilever length is four feet beyond the support legs. Maximum load on the cantilever is 1/4 of the rated capacity.

WARNING: Do not cantilever a load while the gantry is in the outboard bracing configuration. Do not move the gantry in the cantilever configuration while loaded. Do not cantilever a load from both ends of the beam; only one end can be cantilevered at a time.



DISASSEMBLY

1. Removing the Legs

Refer to Detail "B" for steps A through L

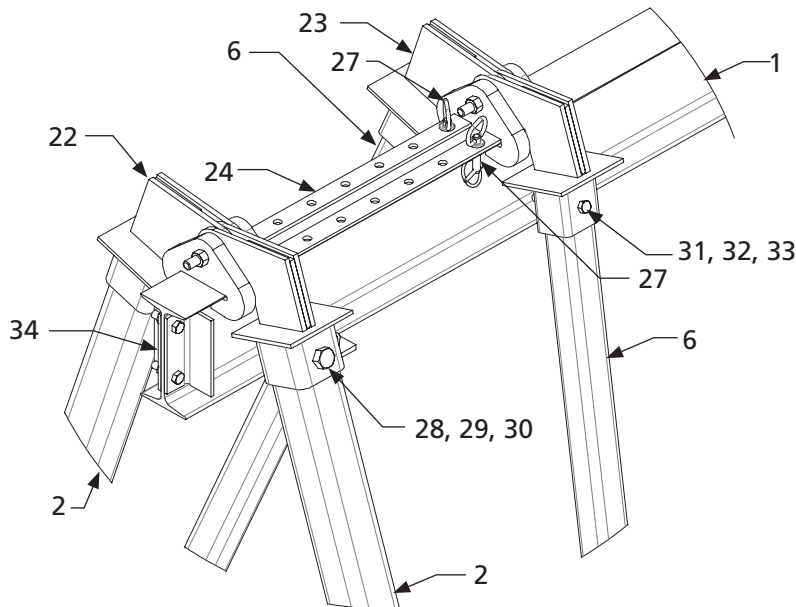
WARNING: Crane parts are heavy. Use proper rigging and support to secure all parts during assembly, adjustment, and disassembly processes.

- a) Read and understand each step before beginning the disassembly process.
- b) Move the assembled T-Series Gantry Crane to an area under an overhead hoist, or where multiple lift trucks can be used to raise the beam safely. Be sure there is no machinery or clutter nearby that will obstruct free movement. All parts must be secured to prevent sliding, slipping, or falling during the disassembly process. All personnel should be wearing applicable safety gear, such as hard hats, safety shoes, and safety glasses.
- c) Adjust the gantry to the minimum height and secure with the push/pull pins (make sure to use both sets of pins).
- d) Using an overhead hoist or multiple lift trucks, attach lifting straps to the beam to support the crane during disassembly. The beam may become unbalanced when one leg is removed. Plan rigging and support accordingly.
- e) Secure the hoist trolley in the center of the beam to prevent rolling. Raise the beam slightly to relieve weight on the system.
- f) Remove the bolt (31), lock washer (32), and hex nut (33) from one brace leg and the brace leg connector hanger.
- g) Remove the bolt (28), lock washer (29), and hex nut (30) from one main leg and the main leg connector hanger.
- h) With the brace leg and main leg secured to prevent falling, remove them from the leg caps on the hanger assembly.

NOTE: The beam may need to be raised slightly to allow the brace leg and main leg to be removed.

- i) Lower the brace leg and main leg to ground out of the way of the remaining disassembly process.

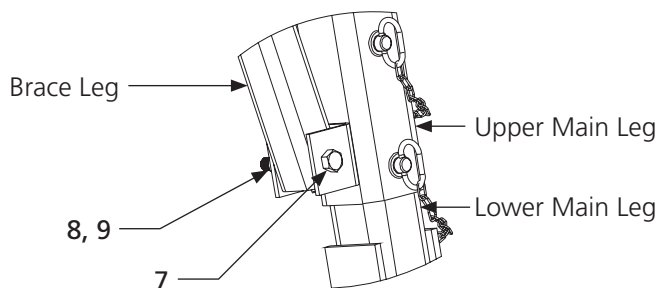
Detail "B"



ITEM	DESCRIPTION
1	Beam
2	Upper Main Leg
6	Brace Leg
22	Main Leg Hanger Assembly
23	Brace Leg Hanger Assembly
24	I-Beam Hanger Weldment
27	Push/Pull Pin with Linch Pin
28	Hex Head Bolt
29	Lock Washer
30	Hex Nut
31	Hex Head Bolt
32	Lock Washer
33	Hex Nut
34	End Stop Angles

- j) Repeat steps f) through h) on the opposite side of the hanger assembly and lay the support leg assembly on the ground.
- k) Repeat steps f) through i) for the remaining support leg assembly.
- l) Remove the bolt (7), lock washer (8), and hex nut (9) from the brace leg bracket on the upper main leg assembly, and remove the brace leg. Repeat for all four brace legs.

Detail "C"



ITEM	DESCRIPTION
2	Upper Main Leg
3	Lower Main Leg
4	Push/Pull Pin
6	Brace Leg
7	Hex Bolt
8	Lock Washer
9	Hex Nut

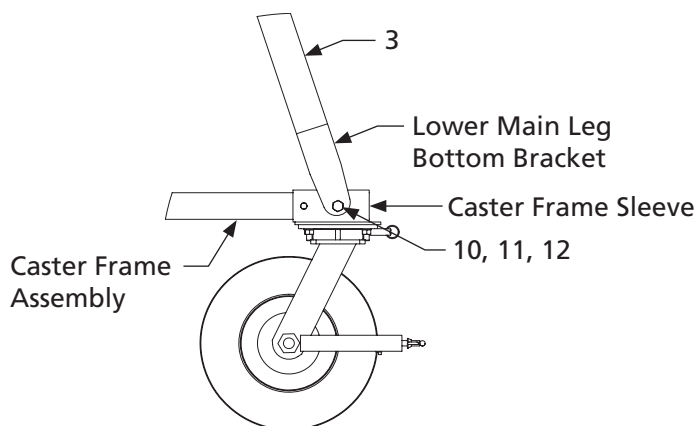
2. Removing the Caster Frames

Refer to Detail "D" and Detail "B" for steps A through D

WARNING: Caster frames contain a pre-assembled leg overspread cable assembly inside the tubes to prevent accidental overspreading of the legs. **DO NOT** remove this cable or any hardware attached to the cable assembly.

- a) Remove the hex nut (10), lock washer (12), and bolt (14) securing the caster frame to the bottom bracket of the lower main leg. Repeat this step for all four main leg connections.
- b) Remove the caster frames from underneath the support legs.

Detail "D"



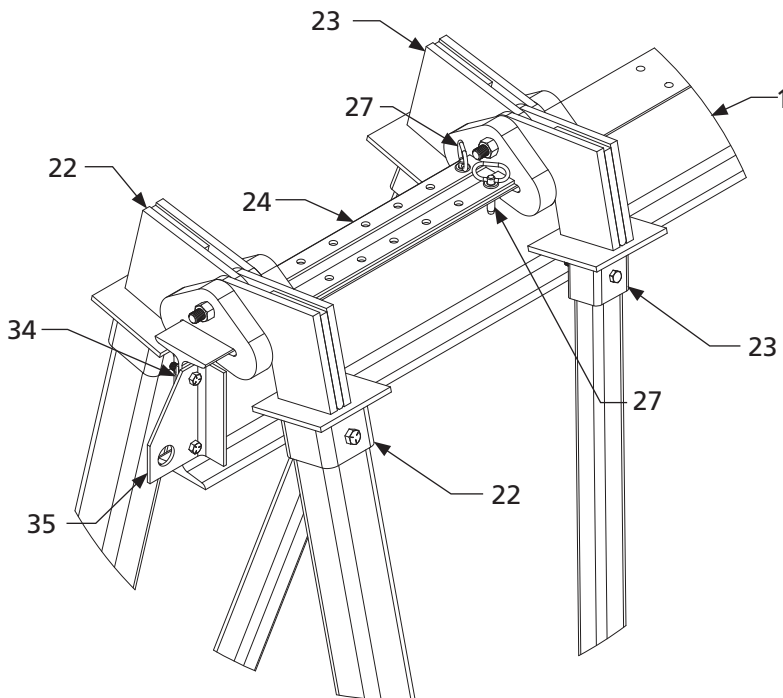
ITEM	DESCRIPTION
3	Lower Main Leg
10	Hex Bolt
11	Lock Washer
12	Hex Nut

3. Removing the Hanger Assemblies

Refer to Detail "B" for steps A through E

- a) Remove the end stop angles (34) and the counterweight lug (35) from the ends of the beam (1).
- b) Remove the linch pins (27) and push pull pins from the aligned holes in the top flange of the beam (1) and the beam hanger weldment (24).
- c) Slide both beam hanger assemblies (22 and 23) off the top flange of the beam (1).
- d) Remove the trolley and hoist from the lower flange of the beam (1).
- e) Reinstall the end stop angles (34) and the counterweight lug (35) on the ends of the beam so that they remain with the system.
- f) The caster frame assemblies do not need to be disassembled further, but may be further disassembled if desired.


Detail "B"



ITEM	DESCRIPTION
1	Beam
22	Main Leg Hanger Assembly
23	Brace Leg Hanger Assembly
24	I-Beam Hanger Weldment
27	Push/Pull Pin with Linch Pin
34	End Stop Angles
35	Counterweight Lug

If the system is shipped unpainted or without properly secured labels, proper label placement is the sole responsibility of the end user. Spanco cannot be held liable for any damage or injury resulting from omitted or improper label placement.

"A"




SAFETY INSTRUCTIONS

READ BEFORE OPERATING

1. Inspect gantry for damage or missing parts.
2. Do not exceed rated capacity.
3. Do not lift more than rated capacity.
4. Never adjust height or disassemble crane when loaded or under tension.
5. Do not use gantry on uneven ground.
6. Do not push or pull gantry with hand or other device.
7. Do not allow load to swing or not against support structure.
8. Do not use the gantry on the flat.
9. When moving loaded gantry, keep load close to the frame.
10. Do not use the gantry on uneven ground.
11. Do not use the gantry on uneven ground.
12. Do not use the gantry on uneven ground.
13. Do not use the gantry on uneven ground.
14. Do not use the gantry on uneven ground.
15. Do not use the gantry on uneven ground.
16. Do not use the gantry on uneven ground.
17. Do not use the gantry on uneven ground.
18. Do not use the gantry on uneven ground.
19. Do not use the gantry on uneven ground.
20. Do not use the gantry on uneven ground.

Labels: A 53-0003

"B"




SAFETY INSTRUCTIONS

BEFORE ADJUSTING TREAD WIDTH

1. Never adjust frame or disassemble crane when gantry is under load.
2. To adjust tread, slightly lift the unit using a lift truck or overhead crane. This should only be done with a push/pull pin in place and secured in the main legs.
3. Remove the center frame spreader pin and adjust tread to desired width.
4. Reinsert the spreader pin and secure with attached lock pin.
5. Check that the same number of holes are visible on each center frame.
6. Never stand under gantry when adjusting height or disassembling the gantry.
7. Maximum wheel spread is 40% of the overall height.

Labels: B 53-0007

"C"

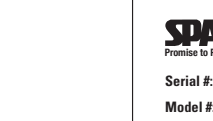


BEFORE ADJUSTING UNIT HEIGHT, FOLLOW INSTRUCTIONS BELOW

- Do not adjust or disassemble when unit is under load.
- Never stand under gantry when adjusting height or disassembling crane.
- To adjust height: secure trolley and hoist in center of I-beam. Use lift truck, existing overhead hoist, or Spanco height adjustment kit. (Consult instructions.)
- Raise unit slightly to relieve weight from push/pull pins.
- Remove pins and slowly raise unit to desired height.
- When each leg reaches desired height, reinsert push/pull pins and secure the attached lock pin.
- When desired height has been reached, check that the same number of holes are visible on each lower leg.

Labels: C 53-0009

"E"

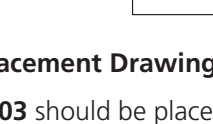


WARNING

DO NOT ADJUST HEIGHT BEYOND THIS POINT. EXCEEDING LAST HOLE ALIGNMENT COULD RESULT IN INJURY OR DEATH.

Labels: E 53-0039

"F"




WARNING

DO NOT ADJUST HEIGHT BEYOND THIS POINT. EXCEEDING LAST HOLE ALIGNMENT COULD RESULT IN INJURY OR DEATH.

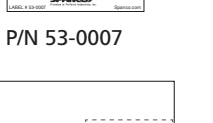
Labels: F 53-0039

"D"




P/N 53-0003

"D"




P/N 53-0007

"D"



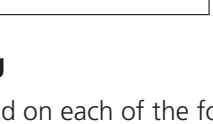
P/N 53-0006

"J"



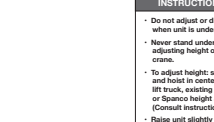
P/N 53-0025

"J"



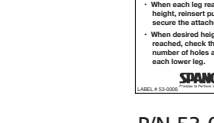
P/N 53-0589

"G"




P/N 53-0050

"G"




P/N 53-0050

"H"




P/N 53-0050

"H"



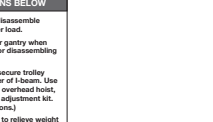
P/N 53-0050

"H"




P/N 53-0050

"I"




P/N 53-0050

"I"




P/N 53-0050

"I"




P/N 53-0050

"I"



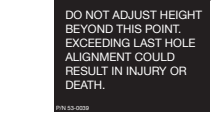
P/N 53-0050

"I"




P/N 53-0050

"I"




P/N 53-0050

"I"




P/N 53-0050

"I"



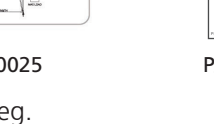
P/N 53-0050

"I"




P/N 53-0050

"I"




P/N 53-0050

"I"




P/N 53-0050

"I"



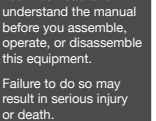
P/N 53-0050

"I"




P/N 53-0050

"I"



P/N 53-0050

"I"



P/N 53-0050

Notes on Label Placement Drawing

- Label **"A" 53-0003** should be placed on each of the four support legs on the Upper Main Leg.
- Label **"B" 53-0007** should be placed on both Caster Frames on the Outer Caster Tube.
- Label **"C" 53-0006** should be placed on each of the four support legs on the Upper Main Leg.
- Label **"D" 53-0000, 53-0001, or 53-0002** should be centered on both sides of the beam.
- Label **"E" 53-0039** should be centered on both sides of each Lower Main Leg below the top hole and should be visible when the gantry is adjusted to maximum height.
- Label **"F" 53-0050** should be placed on both sides of the beam to the inside of the end stops at both ends.
- Label **"G"** should be placed on all four Upper Main Legs and on label **"D"** inside the outlined area.
- Chart **"H"** is a printed chart attached to the gantry with a wire rope. One chart should be attached to all four support legs. Chart part numbers are: **53-0025** for one-ton capacity systems, **53-0026** for two-ton capacity systems, **53-0027** for three-ton capacity systems, **53-0028** for five-ton capacity systems, **53-0029** for eight-ton capacity systems, and **53-0030** for 10-ton capacity systems.
- Label **"I" 53-0589** should be placed on all four main legs at eye level (approximately 62 inches from the ground).
- Label **"J"** should be placed on Label **"D"** and is P/N **53-0010** for one-ton capacity systems, **53-0011** or **53-0015** for two-ton capacity systems, **53-0012** or **53-0016** for three-ton capacity systems, **53-0013** or **53-0017** for five-ton capacity systems, **53-0018** for eight-ton capacity systems, and **53-0019** for 10-ton capacity systems.

BEFORE EACH USE T-SERIES GANTRY CRANE SYSTEM INSPECTION CHECKLIST

Inspector Name: _____

Date: _____

System Number: _____

Model: _____

INSPECTION POINTS	Inspection Result (✓)	
	PASS	FAIL
1. Inspect hoist per manufacturer's instructions.		
2. Verify that the trolley can easily and smoothly roll the full length of the beam.		
3. Verify that the caster wheels can easily and smoothly roll along the full length of the surface the gantry operates on.		
4. Check all system welds for cracks.		
5. Check system components for corrosion.		
6. Check the entire system for bent or damaged components.		
7. Visually check all bolted assemblies for proper connections and properly secured bolts and nuts.		
Caster Inspection		
1. Inspect casters for visible signs of damage or excessive wear.		
2. Check each caster unit for potentially concealed damage.		
3. Visually check that all caster studs are present and tight.		
4. Ensure that the caster's axles are properly secured.		
5. Ensure that the casters' brakes and swivel locks perform properly.		
6. Ensure that the caster brakes make contact with the caster material for maximum effectiveness.		

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ANNUAL GANTRY CRANE SYSTEM INSPECTION CHECKLIST

Inspector Name: _____

Date: _____

System Number: _____

Model: _____

INSPECTION POINTS	Inspection Result (✓)	
	PASS	FAIL
1. Check that end stops are present and have lock washers installed.		
2. Using a torque wrench, check that all bolts are present and torqued to values shown in the system manual.		
3. Verify that capacity labels are present, attached, and legible.		
4. Check the beam flanges. Beam flanges cannot be bent downward more than five degrees.		
5. Check the beam flange thickness. Beam flange thickness cannot be worn more than 10 percent.		
6. Check all system welds for cracks.		
7. Check system components for corrosion and bent or damaged areas.		
8. Verify that the trolley can traverse the entire length of the beam without snags.		
9. Inspect the hoist per the manufacturer's instructions.		
10. Check the entire system for loose components.		
11. Check that all wheel studs, if supplied, are torqued to value shown in the system manual. Note that 1/2-inch wheel studs have a different torque value than other 1/2-inch bolts.		
12. Check motorization components, if supplied, for improper performance or noncompliance with applicable safety requirements.		
13. Check drive chain sprockets, if supplied, for excessive wear and excessive chain stretch.		
14. Check the electrical apparatus, if supplied, for any deterioration of the controller contactors, limit switches, and push button stations.		
15. Check system for unauthorized modifications. Only Spanco can authorize modifications. Remove system from service if it is modified in anyway.		

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Notes

[illegible]

This image shows a full page of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page, typical of notebook paper. There are no margins, text, or other markings on the page.

PRODUCT WARRANTY COVERAGE

Spanco warrants its products to be free from defects in material and workmanship as follows:

- **Manual Systems & Equipment:** Ten Years
- **Motorized Systems & Equipment and Paint and Finishes for Non-Aluminum Components:** Two Years

Ten-Year Warranty Coverage:

- Defects in equipment material and workmanship of manual systems and equipment
- Only applies to the wearable wheels on workstation bridge crane end trucks and hoist trolley

Spanco warrants its manual workstation bridge crane, jib crane, and gantry crane products to be free from defects in material and workmanship for a period of ten (10) years or 20,000 hours, commencing on the date of shipment to the first retail purchaser. This warranty extends to non-wearable parts only, with the exception of the wheels supplied on manually operated workstation end trucks and hoist trolleys.

Two-Year Warranty Coverage:

- Defects in equipment material and workmanship of motorized systems and equipment
- Paint coatings and finishes for non-aluminum components

Spanco warrants motorized equipment to be free from defects in material and workmanship for a period of two (2) years or 4,000 hours, commencing on the date of shipment to the first retail purchaser. Spanco warrants its paint and finishes for a period of two (2) years. Warranty claims related to coatings must be accompanied by documentation of the product's application and environmental conditions from time of delivery to time of claim.

WARRANTY TERMS & CONDITIONS

All warranty claims must be approved by Spanco before any work is performed. Spanco's obligation under this warranty is limited to the replacement or repair of Spanco products at the factory or separate location approved by Spanco. Other than the above mentioned warranty, Spanco will not honor any other warranties—whether expressed, implied, or statutory—and disclaims any warranties of merchantability or fitness for a particular purpose. Spanco has the right to reject any warranty claim due to harsh and/or inappropriate environmental conditions.

Spanco Is Not Liable for:

- Indirect, incidental, or consequential damages including lost profits, operating costs, loss of production, or travel expenses
- Components or accessories not manufactured by Spanco
- Defective equipment or system failure caused by misuse, negligence, and improper installation or maintenance
- Equipment that has been used in excess of its rated capacity or beyond its service factors
- Rework and modification of any equipment that has been altered without Spanco's written authorization
- Freight charges and damage incurred by freight carriers
- Any loss, injury, or damage to persons or property resulting from failure or defective operation of material or equipment
- Any damage to paint coatings and finishes caused by negligence and improper storage, such as temporarily storing an indoor system outdoors

Reimbursement Disclaimer:

- Written notice of any claimed system defect must be given to Spanco within ninety (90) days of shipment.
- All requests for reimbursement must be accompanied by proper documentation.
- Reimbursement is provided in the form of a credit unless otherwise approved by Spanco management.
- Reimbursement for labor will be provided at a maximum rate of \$75 per hour.
- All reimbursement is subject to approval by Spanco management.

ABOUT SPANCO®

Our Commitment

Spanco professionals are dedicated to designing and manufacturing a variety of material handling solutions that meet all applicable CMAA, ANSI, OSHA, and MMA guidelines and standards. Our team of engineers and industry experts combine many years of experience in the material handling industry to manufacture material handling solutions that are backed by the best warranty in the industry.

Spanco production facilities are certified under the ISO 9001:2015 Quality Management System to provide superior quality products. Every welder at Spanco is AWS D1.1 certified to handle steel products in accordance with the rigorous requirements and lab testing established by the American Welding Society. Our aluminum welders are also AWS D1.2 certified to handle aluminum products.

Spanco professionals welcome challenging projects that require custom crane engineering. Spanco also offers hundreds of pre-engineered lifting solutions, including Workstation Bridge Cranes, Jib Cranes, Gantry Cranes, Monorails, and Tractor Drives.

Our Production:

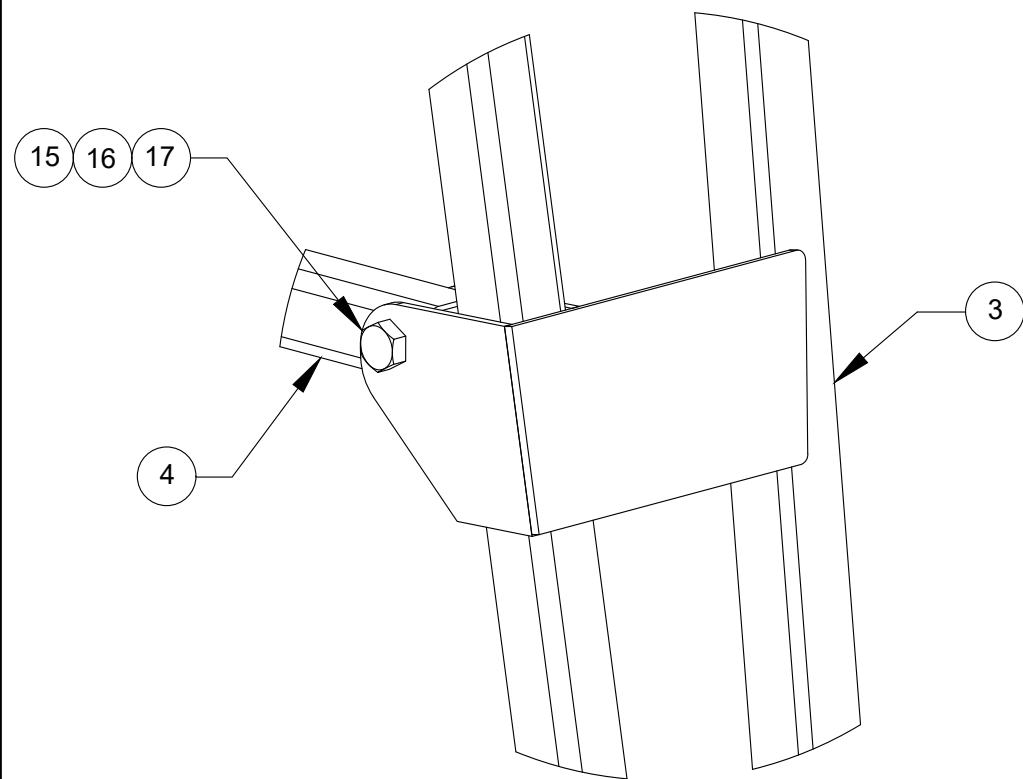
All of our systems are designed and manufactured in the United States of America. We have production facilities in Las Vegas, Nevada, and at our headquarters in Morgantown, Pennsylvania.



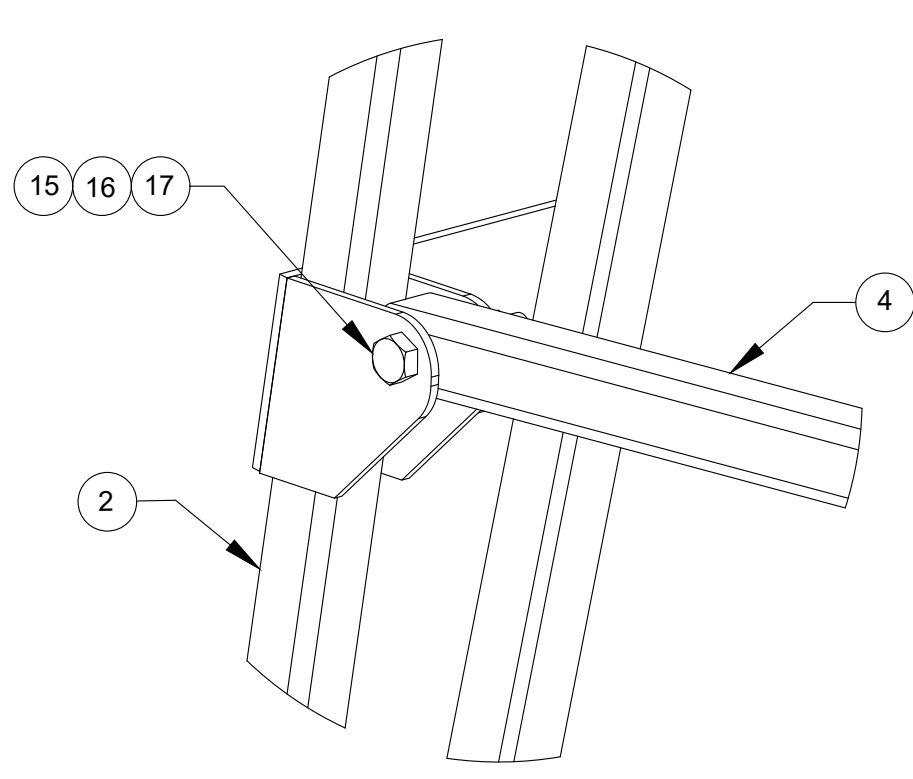
Morgantown, PA | Las Vegas, NV
Toll Free: (800) 869-2080 | Local: (610) 286-7200 | Outside US: 1-610-286-7200 | Fax: (610) 286-0085
Spanco.com | info@Spanco.com



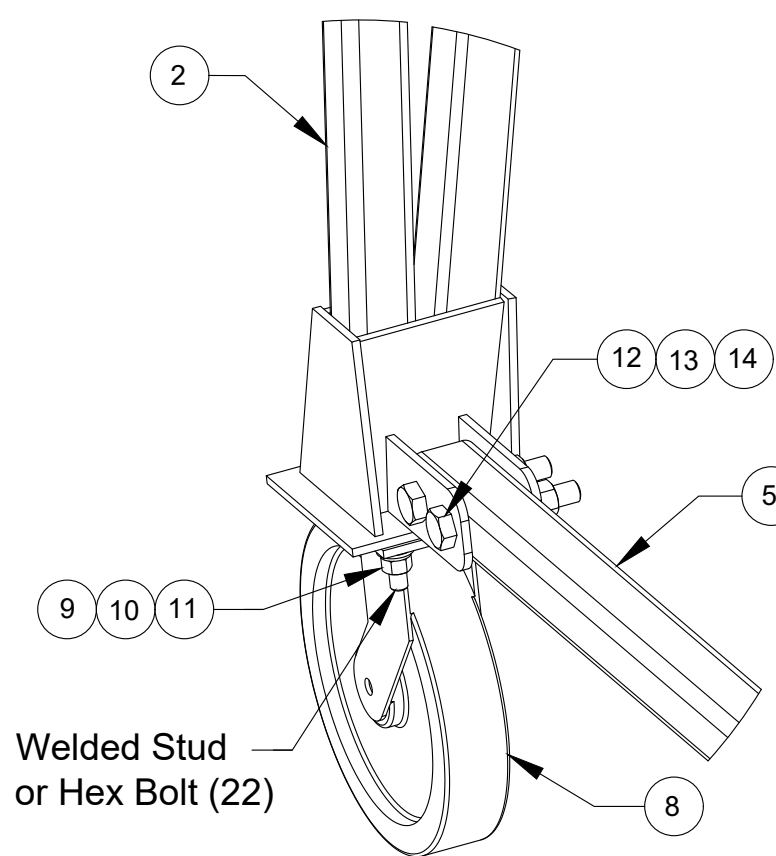
DETAIL "C" (Upper Brace Tubes to Legs)



DETAIL "B" (Upper Brace Tubes to Legs)

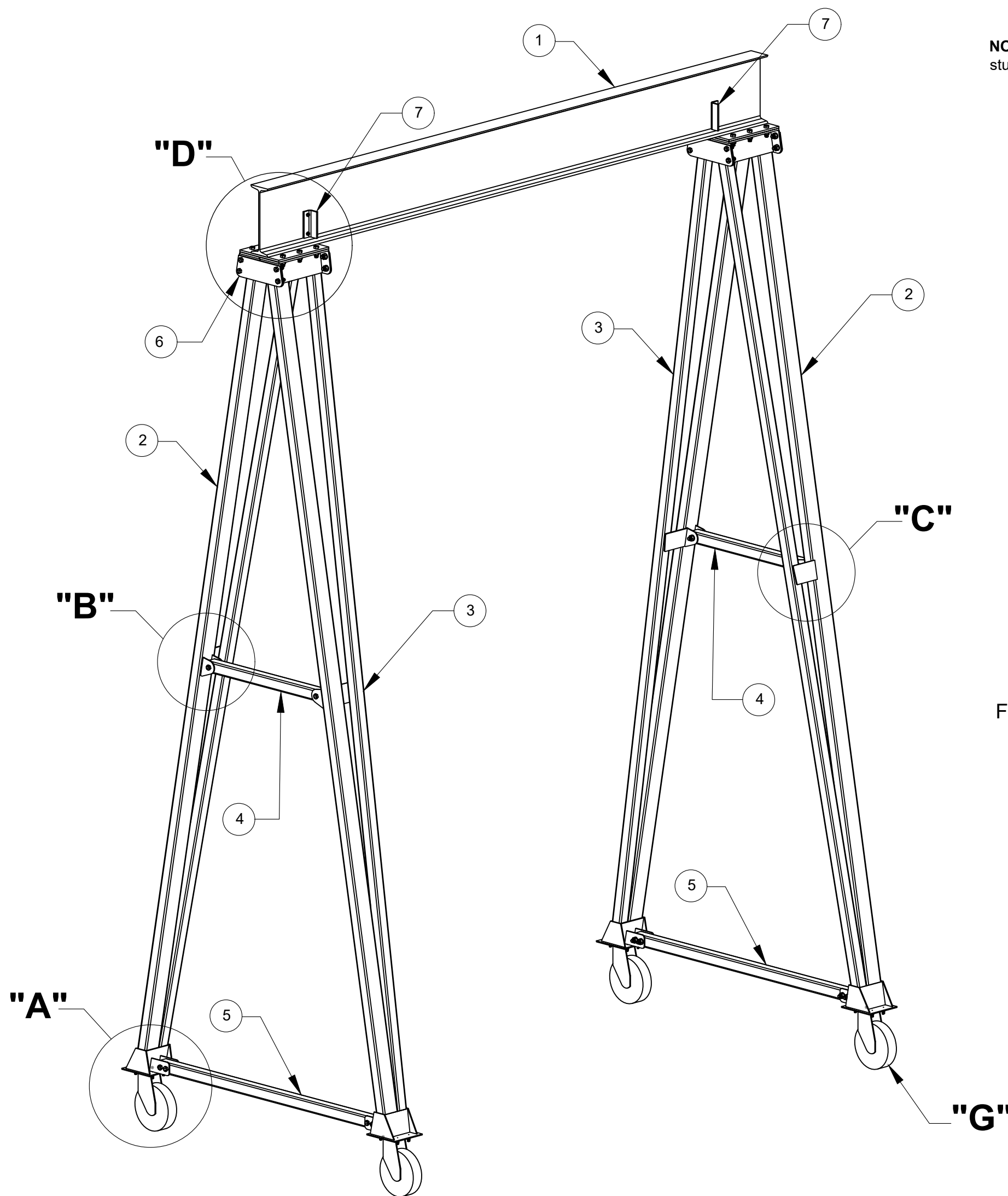
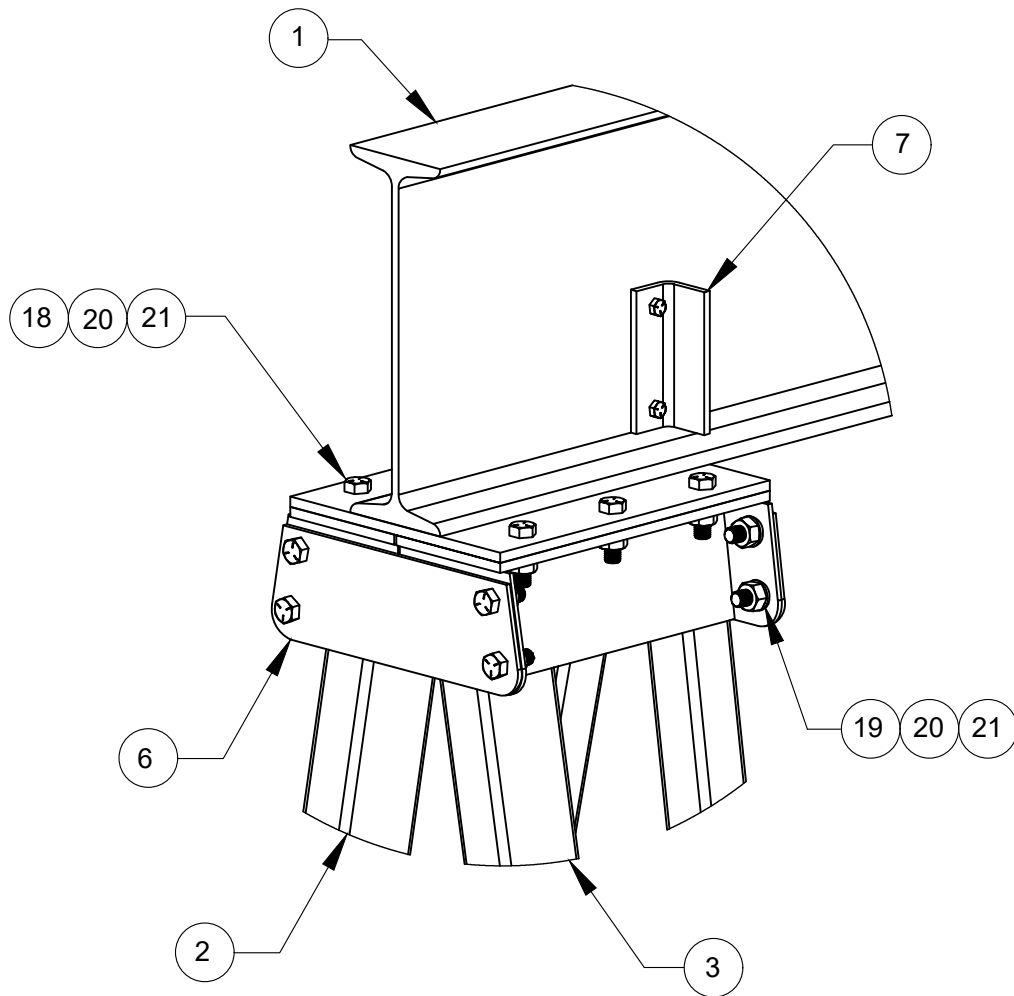


DETAIL "A" (Casters and Lower Brace Tubes to Legs)

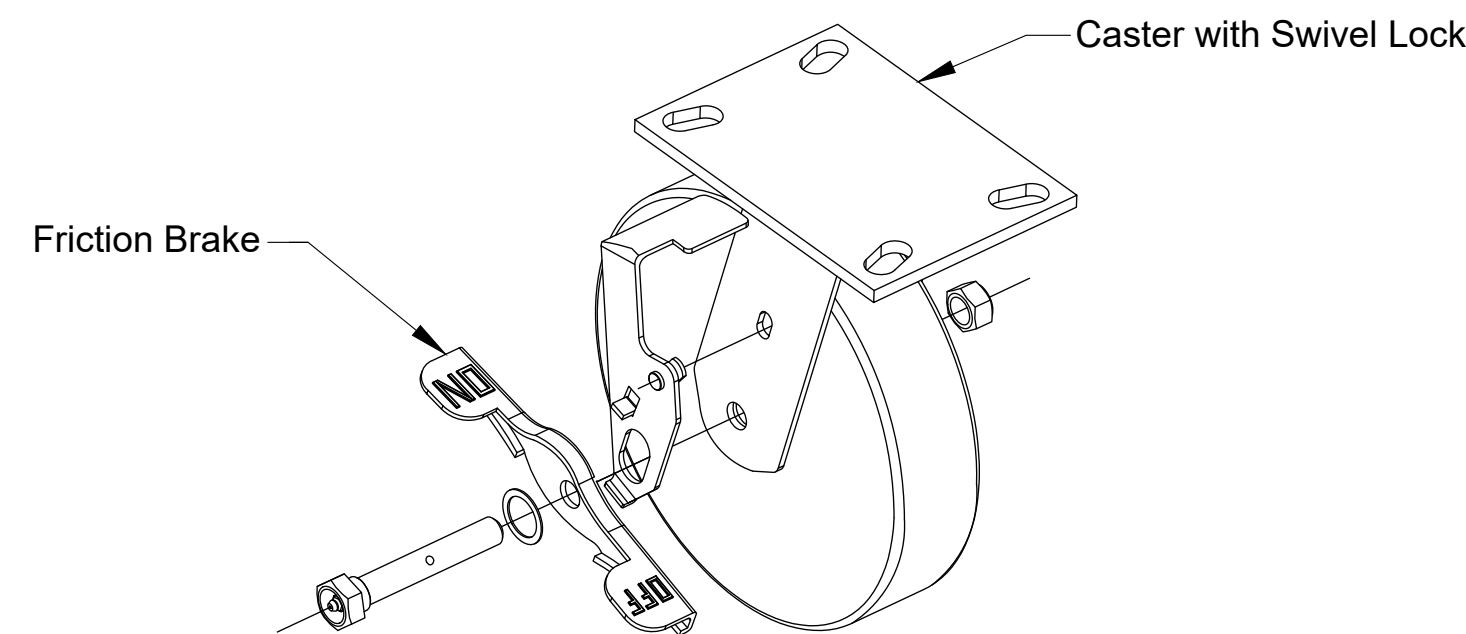


NOTE: On some models, the welded studs are replaced with hex bolts (22).

DETAIL "D" (Beam Weldment and Leg Connection Plates to Legs)



DETAIL "E" (Wheel Brake Assembly)



NOTE: Some polyurethane casters ship with the wheel brakes already attached. If you ordered polyurethane casters, and the brakes were shipped loose, see page 7 of the user manual to attach the caster brakes.

Item	Quantity	Building Materials Description
1	1	Beam
2	2	Right Leg Assembly
3	2	Left Leg Assembly
4	2	Upper Brace Tube
5	2	Lower Brace Tube
6	4	Leg Connection Plate
7	4	End Stop Angle
8	4	Caster
9	16	Flat Washer
10	16	Lock Washer
11	16	Hex Nut
12	8	Hex Bolt (Long)
13	8	Lock Washer
14	8	Hex Nut
15	8	Hex Bolt (Long)
16	8	Lock Washer
17	8	Hex Nut
18	12	Hex Bolt (Medium)
19	16	Hex Bolt (Short)
20	28	Lock Washer
21	28	Hex Nut
22	16	Hex Bolt

HEX LOCKNUT TORQUE SPECS.	HEX NUT TORQUE SPECS.
1/2 Inch - 51 Foot-Pounds	1/2 Inch - 78 Foot-Pounds
5/8 Inch - 93 Foot-Pounds	5/8 Inch - 154 Foot-Pounds
3/4 Inch - 151 Foot-Pounds	3/4 Inch - 257 Foot-Pounds
7/8 Inch - 224 Foot-Pounds	7/8 Inch - 341 Foot-Pounds
1 Inch - 325 Foot-Pounds	1 Inch - 514 Foot-Pounds

TORQUE 1/2-INCH WHEEL STUD NUTS (11) TO 23 FOOT-POUNDS ONLY

TORQUE 5/8-INCH LEG BRACING BOLTS (12 AND 15) TO 48 FOOT-POUNDS. TORQUE 3/4-INCH LEG BRACING BOLTS (12 AND 15) TO 77 FOOT-POUNDS.

SHEET 1 OF 2

REV.	DATE	NAME	REVISION DESCRIPTION
CAD GENERATED DRAWING. DO NOT MANUALLY UPDATE. DO NOT SCALE DRAWING			
DRAWN:	JRM	11/29/21	
CHECKED:			
APPVD:	JRG	04/01/22	
PLOT DATE:	WT.		
PROJECT NO.:	SCALE:		
INSTRUCTIONS	NTS		
			REVISION DESCRIPTION
			SPANCO Promise to Perform Industries, Inc.
			MATERIAL HANDLING PF-SERIES GANTRY CRANE ASSEMBLY DRAWING
			SIZE: DWG. NO. C PF-SERIES-ASSEMBLY REV. -
			CAD FILE: 7PF1520B SHEET 1 OF 2

"A"

SAFETY INSTRUCTIONS

READ BEFORE OPERATING

1. Inspect gantry for damaged or missing parts.
2. Not to be used for lifting or supporting humans.
3. Do not lift more than rated capacity.
4. Never adjust height or disassemble crane when gantry is under load.
5. Do not load gantry on an incline.
6. Do not push or pull gantry with forklift or other vehicle.
7. Do not allow load to swing or roll against support members.
8. Push the gantry, not the load.
9. When moving loaded gantry, keep load close to the floor.
10. Be certain that load is directly beneath beam before load is lifted. Do not pull sideways on crane.
11. Do not anchor legs to the floor.
12. Never stand under gantry when adjusting height or disassembling crane.
13. Do not lift gantry fully assembled.

LABEL # 53-0003
Spanco.com

P/N 53-0003
SEE NOTE 1 FOR
MORE INFO.

"B"

SAFETY INSTRUCTIONS

BEFORE ADJUSTING TREAD WIDTH

1. Never adjust frame or disassemble crane when gantry is under load.
2. To adjust tread, slightly lift the unit using a lift truck or overhead crane. This should only be done with a push/pull pin in place and secured in the main legs.
3. Remove the caster frame spreader pin and adjust tread to desired width.
4. Reinsert the spreader pin and secure with attached linch pin.
5. Check that the same number of holes are visible on each caster frame.
6. Never stand under gantry when adjusting height or disassembling the gantry.
7. Minimum wheel spread is 40% of the overall height.

LABEL # 53-0007
Spanco.com

P/N 53-0007
SEE NOTE 1 FOR
MORE INFO.

"C"

**BEFORE ADJUSTING UNIT
HEIGHT, FOLLOW
INSTRUCTIONS BELOW**

- Do not adjust or disassemble when unit is under load.
- Never stand under gantry when adjusting height or disassembling crane.
- To adjust height: secure trolley and hoist in center of I-beam. Use lift truck, existing overhead hoist, or Spanco height adjustment kit. (Consult instructions.)
- Raise unit slightly to relieve weight from push/pull pins.
- Remove pins and slowly raise unit to desired height.
- When each leg reaches desired height, reinsert push/pull pins and secure the attached linch pin.
- When desired height has been reached, check that the same number of holes are visible on each lower leg.

LABEL # 53-0006
Spanco.com

P/N 53-0006
SEE NOTE 1 FOR
MORE INFO.

"D"

SPANCO
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SPANCO.COM | (800) 869-2080
PROUDLY MADE IN THE USA

TON

SEE NOTE 1 FOR MORE INFO.

"E"

WARNING

DO NOT ADJUST HEIGHT
BEYOND THIS POINT.
EXCEEDING LAST HOLE
ALIGNMENT COULD
RESULT IN INJURY OR
DEATH.

P/N 53-0039

P/N 53-0039
SEE NOTE 1 FOR
MORE INFO.

"F"

WARNING



FALLING TROLLEYS CAN CAUSE
SEVERE INJURY OR DEATH.
DO NOT OPERATE CRANE WITHOUT
END STOPS BOLTED IN PLACE.

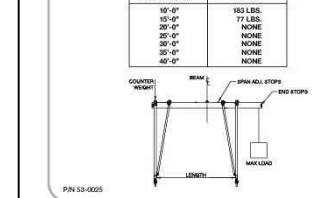
P/N 53-0050
SEE NOTE 1 FOR
MORE INFO.

"H"

**CAUTION:
READ BEFORE OPERATING IN
CANTILEVER POSITION**

1-TON CAPACITY T-SERIES GANTRY CRANE:
ALL STEEL CONSTRUCTION

- DO NOT CANTILEVER BEAM MORE THAN 2 FT. ON A 10-FOOT BEAM AND 4 FT. ON A BEAM OF 16 FT. OR MORE.
- ALWAYS USE ADEQUATE COUNTERWEIGHT AS SHOWN ON THE CHART BELOW.
- DO NOT CANTILEVER LOAD WHILE GANTRY IS IN THE OUTSTACHED REACHING CONFIGURATION.
- DO NOT MOVE GANTRY WHILE LOADED IN CANTILEVER CONFIGURATION.
- CENTER LOAD ON BRIDGE BEAM BEFORE MOVING GANTRY.
- MAXIMUM CAPACITY IS 500 POUNDS WHEN SYSTEM IS IN CANTILEVER POSITION.
- DO NOT LOAD CRANE BEYOND ITS RATED CAPACITY.



SEE NOTE 2 FOR
MORE INFO.

"G"

SPANCO
Promise to Perform Industries, Inc.

Serial #: 123456-789
Model #: X12XXXX34.5678.90
MFG Date: 00/0000

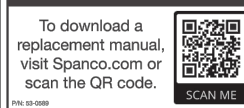
SEE NOTE 1 FOR MORE INFO.

"I"

WARNING

You must read and
understand the manual
before you assemble,
operate, or disassemble
this equipment.

Failure to do so may
result in serious injury
or death.

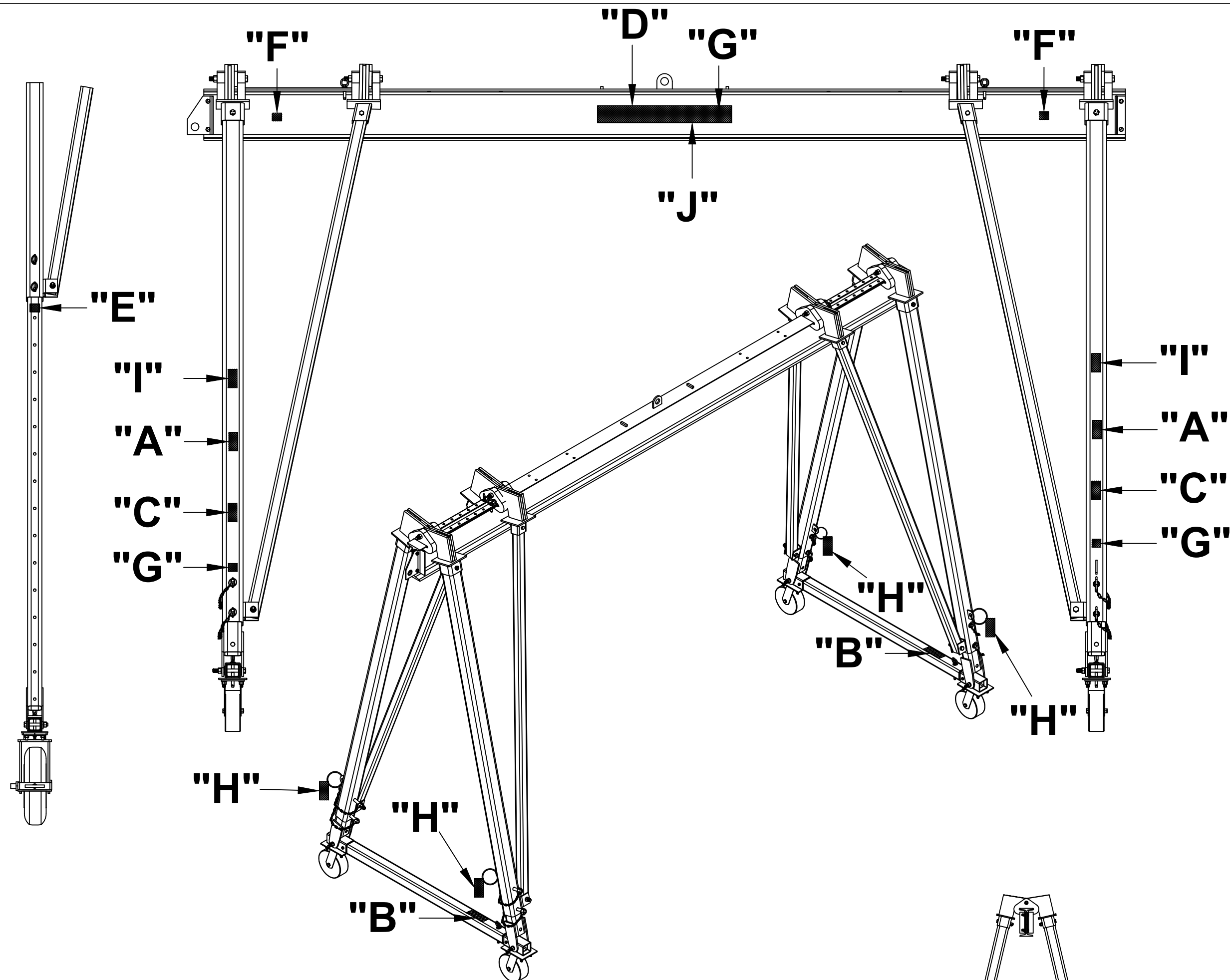


P/N 53-0589
SEE NOTE 1 FOR
MORE INFO.

"J"

1

SEE NOTE 3 FOR
MORE INFO.



NOTE 1:

LABEL "A" 53-0003 SHOULD BE PLACED ON EACH OF THE FOUR MAIN LEGS ON THE UPPER LEG.
LABEL "B" 53-0007 SHOULD BE PLACED ON BOTH CASTER FRAMES ON THE OUTER CASTER TUBE.
LABEL "C" 53-0006 SHOULD BE PLACED ON EACH OF THE FOUR MAIN LEGS ON THE UPPER LEG.
LABEL "D" 53-0000, 53-0001, OR 53-0002 SHOULD BE CENTERED ON THE I-BEAM ON BOTH SIDES.
LABEL "E" 53-0039 SHOULD BE CENTERED ON BOTH SIDES OF EACH LOWER MAIN LEG BELOW THE TOP HOLE AND SHOULD BE VISIBLE WHEN THE GANTRY IS ADJUSTED TO MAXIMUM HEIGHT.
LABEL "F" 53-0050 SHOULD BE PLACED ON BOTH SIDES OF THE I-BEAM TO THE INSIDE OF THE END STOPS.
LABEL "G" 53-0552 SHOULD BE PLACED ON ALL FOUR UPPER MAIN LEGS AND ON LABEL "D" INSIDE THE OUTLINED AREA.
LABEL "I" 53-0589 SHOULD BE PLACED ON ALL FOUR MAIN LEGS AT EYE LEVEL (APPROXIMATELY 62 INCHES FROM THE GROUND).

NOTE 2:

CHART "H" IS A PRINTED CHART ATTACHED TO THE GANTRY CRANE WITH A WIRE ROPE.
ONE CHART SHOULD BE ATTACHED TO ALL FOUR MAIN LEGS. CHART PART NUMBERS ARE:
53-0025 FOR ONE-TON CAPACITY SYSTEMS, 53-0026 FOR TWO-TON CAPACITY SYSTEMS,
53-0027 FOR THREE-TON CAPACITY SYSTEMS, 53-0028 FOR FIVE-TON CAPACITY SYSTEMS,
53-0029 FOR EIGHT-TON CAPACITY SYSTEMS, AND 53-0030 FOR 10-TON CAPACITY SYSTEMS.

NOTE 3:

LABEL "J" SHOULD BE PLACED ON LABEL "D" AND IS P/N 53-0010 FOR ONE-TON CAPACITY SYSTEMS, 53-0011 OR 53-0015 FOR TWO-TON CAPACITY SYSTEMS, 53-0012 OR 53-0016 FOR THREE-TON CAPACITY SYSTEMS, 53-0013 OR 53-0017 FOR FIVE-TON CAPACITY SYSTEMS, 53-0018 FOR EIGHT-TON CAPACITY SYSTEMS, AND 53-0019 FOR 10-TON CAPACITY SYSTEMS.

SHEET 2 OF 2

REV.	DATE	NAME	REVISION DESCRIPTION
CAD GENERATED DRAWING. DO NOT MANUALLY UPDATE. DO NOT SCALE DRAWING			
APPROVALS	DATE		
DRAWN: JRM	08/25/21		
CHECKED:			
APP'D: JRG	04/01/22		
PLOT DATE:	WT.		
PROJECT NO.:	SCALE:		

SPANCO Promise to Perform Industries, Inc.	
MATERIAL HANDLING T-SERIES GANTRY CRANE LABEL PLACEMENT DRAWING	
SIZE: DWG. NO. C	REV. -
CAD FILE:	SHEET 2 OF 2