



Installation and Parts Manual for SPANCO® PF Series Gantry Cranes





INSTALLATION AND PARTS MANUAL FOR PF SERIES GANTRIES

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When moving a load, keep load as close to the floor as possible and position the load in the center of the I-beam.

Ensure the load is not attached to the floor and remove any obstacles that impede lifting.

Adjustments and/or repairs should be made in an area where it will have the least interference with operation.

Ensure the rated capacity is clearly labeled on each side of the I-beam.

Do not lift or support humans without the gantry being specifically designed for that purpose.

Do not lift more than the rated capacity.

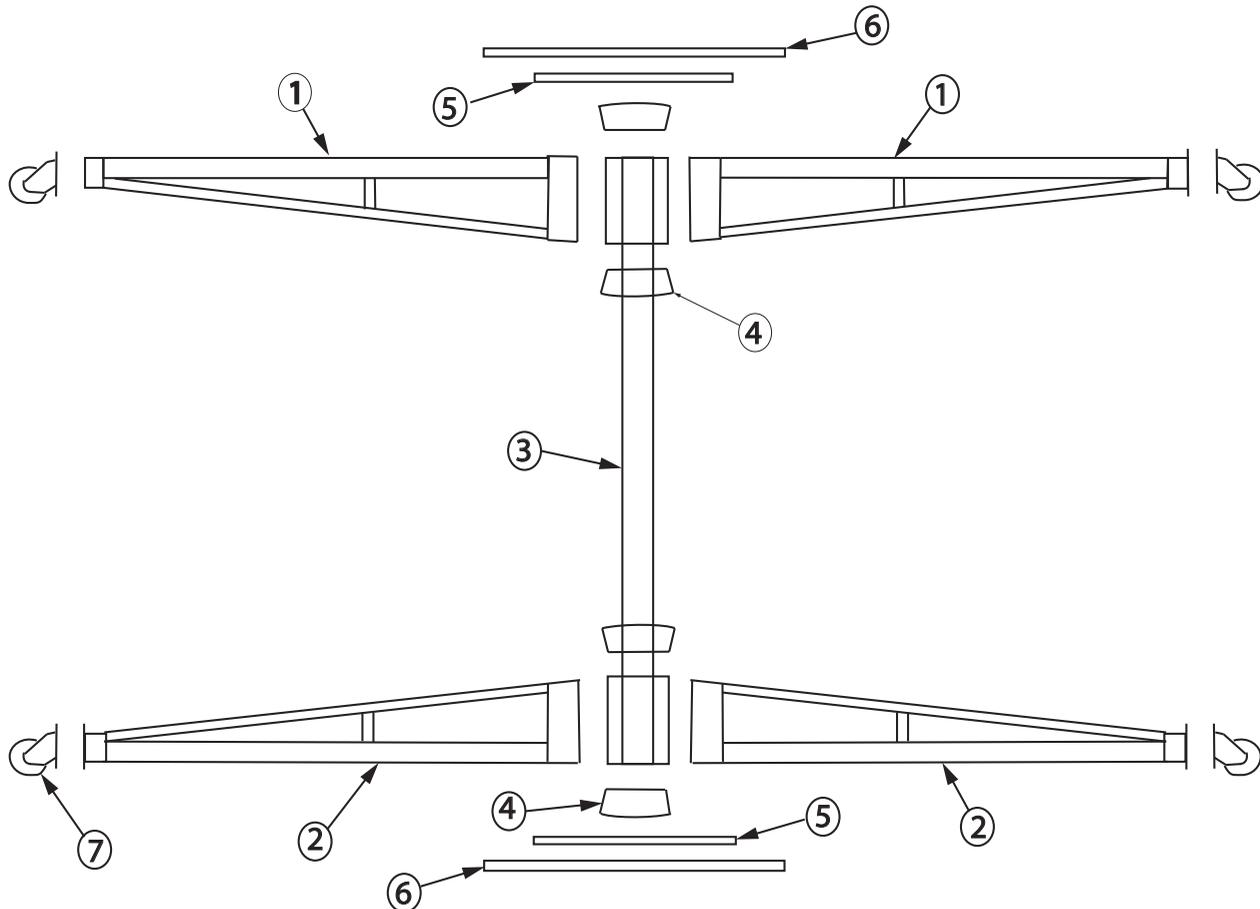
Do not push or pull unit with a forklift or other vehicle.

Do not allow the load to swing or roll against support members.

Push the gantry, not the load.

ASSEMBLY AND OPERATION

1. When possible, select an area under an overhead crane or where a forklift can be used to raise and support the bridge beam. Ensure there is no machinery or clutter nearby that will hamper free movement. All personnel should be wearing applicable safety gear such as hard hats, safety shoes, etc.



2. Ensure you have all the parts. Arrange parts on the floor as shown above.
 1. Left and right leg assembly (one end).
 2. Left and right leg assembly (other end).
 3. Bridge beam with register plates attached.
 4. Connecting plates.
 5. Upper leg brace.
 6. Lower leg brace.
 7. Casters or optional power drive.
3. Assemble casters or optional power drive assemblies to legs with provided hardware. Leg sets are match marked. Bolt one set of legs together using connection plates. Install upper leg brace and lower leg brace. Follow the same procedure for the other set of legs.

4. Using an overhead crane or forklift, raise the bridge beam so the legs can be bolted to the register plates on the under side of the bridge beam. The bolts should be tightened and torqued to values shown in chart below.
5. Install hoist trolley unit on bridge beam. Trolley must be separated to install around bridge beam. Register plates are welded to bottom flange of beam so the trolley cannot be slid onto the beam from one end.
6. Shims are furnished for leg connections to register plates. Variations in rolled structural shapes, manufacturing, and site conditions may require shimming to plumb legs and align wheels.

Fastener Size	Torque
1/4"	10 ft. lbs.
5/16"	19 ft. lbs.
3/8"	33 ft. lbs.
7/16"	54 ft. lbs.
1/2"	58 ft. lbs.
9/16"	114 ft. lbs.
5/8"	162 ft. lbs.
3/4"	288 ft. lbs.

This is a general chart of fastener torque values. This table is based upon Grade 5 fasteners. Note that some lower grades of bolts may not take these high torques. Reduce values accordingly.

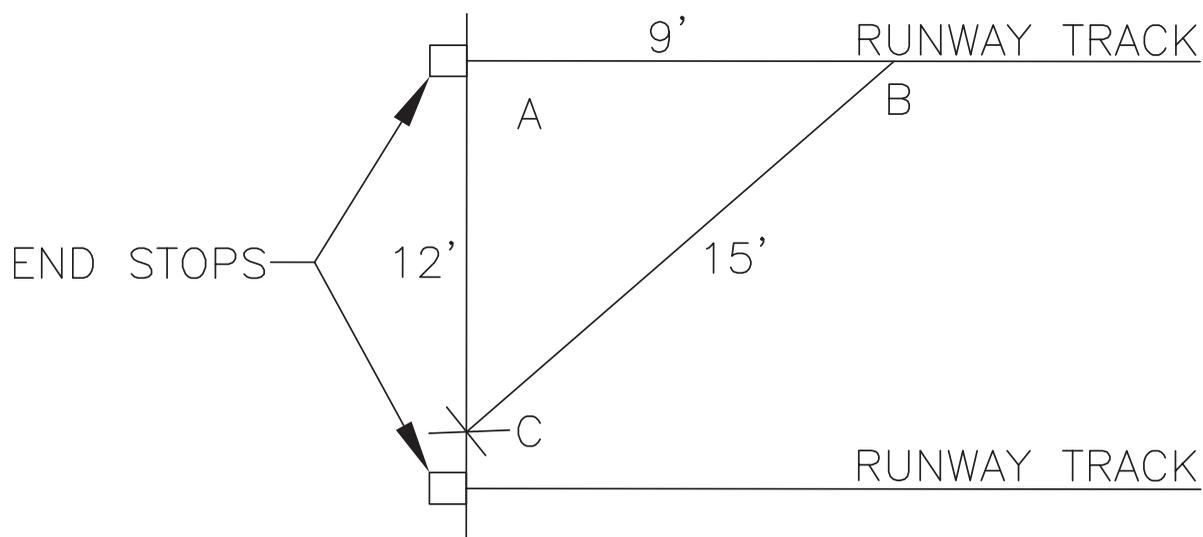
PF GANTRIES WITH POWER DRIVE OPTION

7. Install bridge electrification and connect all electrical components if the gantry crane is so equipped. Ensure equipment travels in direction indicated on control station. If not, correct phasing by interchanging any two incoming power wires. Do not work on electrical components unless you are a certified industrial electrician.
8. Check oil level in all gear boxes. Make sure all wheels and roller chains are lubricated if the gantry is furnished with power drives.
9. Operate the crane the full length of the runway several times to make sure it is tracking properly and it clears all obstructions. If any problems occur while tracking, the legs should be checked for being plumb. Rearrange shims to plumb legs.
10. A complete electrical/mechanical manual is supplied separately for power drives.

V-GROOVE INSTALLATION INSTRUCTIONS FOR GANTRY CRANES

The exact span of the crane may vary from the design span. We recommend installing the track on one side making sure that the track is straight and level. Lay one or two sections of the track down at the design span, assemble crane on the tracks following 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 crane span. Once the operation 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 the 3-4-5 right triangle. The sides and the hypotenuse can be multiplied by any convenient number such as three used in the example.

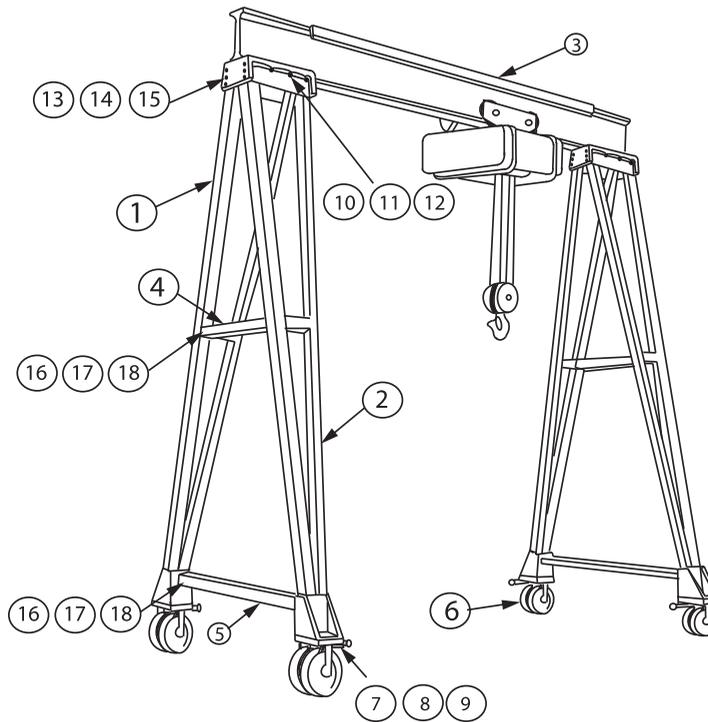
Set one end stop at point A, measure along runway track nine feet from point A to point B. With B as a center and fifteen feet as a radius, draw a circular arc on the floor. With point A as a center and 12 feet as a radius, draw a circular arc on the floor intersecting the other arc at C. A line running through points A and C is perpendicular, or square, with the runway track. 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.



EXAMPLE

NOTE: SPANCO recommends lagging with 3/8" lag bolts every 3'-0" staggered.

PARTS BREAKDOWN SCHEMATIC



BILL OF MATERIALS		
ITEM NO.	DESCRIPTION	QUANTITY
1	LEFT LEG ASSEMBLY	2
2	RIGHT LEG ASSEMBLY	2
3	BRIDGE BEAM ASSEMBLY	1
4	MIDDLE BRACE TUBE	2
5	LOWER BRACE TUBE	2
6	CASTER	4
7	HEX BOLT	16
8	HEX NUT	16
9	LOCK WASHER	16
10	HEX BOLT	12
11	HEX NUT	12
12	LOCK WASHER	12
13	HEX BOLT	24
14	HEX NUT	24
15	LOCK WASHER	24
16	HEX BOLT	8
17	HEX NUT	8
18	LOCK WASHER	8
19	CAPACITY DECAL	2
20	SAFETY INSTRUCTION MANUAL	4
21	CAPACITY DECAL	2

NOTE: Item No. 3 is capped when required.
 Item No. 7 is replaced with welded studs when required.
 Item No. 19 is for 8 inch through 12 inch I-beams.
 Item No. 21 is for 15 inch through 24 inch I-beams.

If replacement parts are required, please supply the complete gantry model number and serial number from the label affixed to the A-frame as well as the item number of the part(s) on the drawing and bill of materials.

Safety instruction labels should be in readable condition at all times. If any become lost or damaged, please notify SPANCO with the gantry serial number immediately and they will be replaced at no charge.



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TEN-YEAR SPANCO WARRANTY

Products covered under the Ten-Year Warranty:

- Manual Steel Freestanding, Ceiling Mounted Workstation Bridge Cranes, and Monorails
- Manual Aluminum (Alu-Track®) Workstation Bridge Cranes and Monorails
- Manual Jib Cranes (I-Beam, Articulating, and Workstation Jib Cranes)
- Manual Gantry Cranes and Tripods

What the Ten-Year Warranty covers:

- Defects in Equipment material and workmanship
- Wearable parts (end truck and hoist trolley wheels only)

Spanco, Inc. warrants its manual workstation bridge crane products, jib crane products, 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. This warranty does not cover defective equipment or system failure caused by misuse, negligence, improper installation or maintenance, or equipment that has been used in excess of its rated capacity or beyond its service factors. It does not apply to equipment that has been altered without Spanco's written authorization.

Written notice of any claimed system defect must be given to Spanco within thirty days of discovery. Spanco's obligation under this warranty is limited to the replacement or repair of Spanco's products at the factory or separate location approved by Spanco. The purchaser is responsible for all freight and transportation costs relating to equipment repair or replacement. **Other than the abovementioned warranty, Spanco will not honor any other warranties—whether express, implied, or statutory—and disclaims any warranties of merchantability or fitness for a particular purpose. Spanco is not liable—under any circumstances—for any indirect, incidental, or consequential damages including but not limited to lost profits, increased operating costs, or loss of production.**

This warranty does not extend to components or accessories not manufactured by Spanco. The purchaser's remedy for such components and accessories will be determined by the terms and conditions of any the warranty provided by the manufacturer of such components and accessories.

NOTE: *All motorized Spanco products come with a One-Year Warranty on drive components.*