



Spare Parts, Instruction and Maintenance Manual for SPANCO® Model 300 Jib Cranes

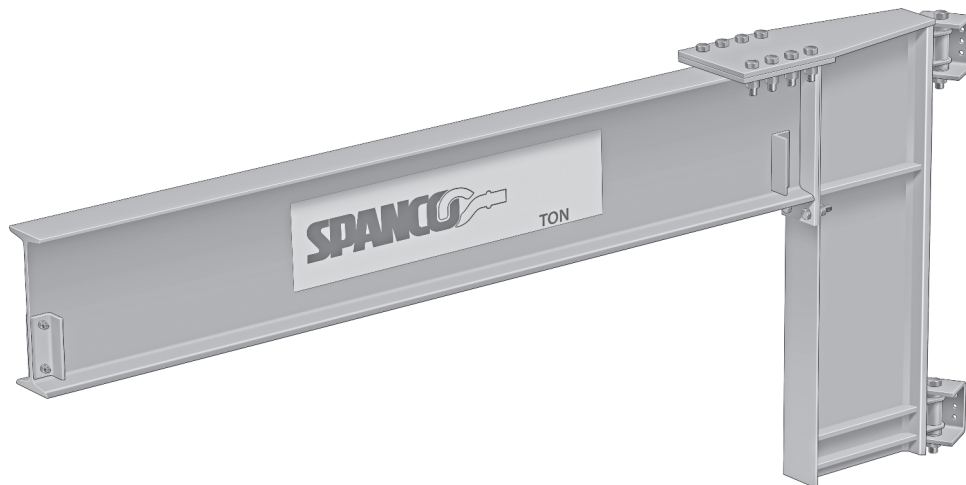


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FORWARD

This manual contains important information to help you install, operate, maintain, and service your new jib crane. We recommend that you study its contents thoroughly before putting the jib into use. We also recommend that you obtain the latest issue of ANSI B30.11 Safety Standard for Monorails and Underhung Cranes and study its contents thoroughly. By practicing the recommended maintenance, with proper installation, and application of correct operating procedures, you will be assured maximum service from your jib crane.

The jibs described in this manual are intended for indoor service. Jib cranes used for outdoor service require special consideration.

INSTALLATION

Before attempting to install your new jib crane, the following items must be understood...

1. It is the customer's responsibility to ensure that building columns or walls are adequate to support the crane including the hoist, rated load, and impact factor as outlined in the ANSI B30.11.
2. Jib cranes should not be hung from an existing building structure without first consulting a qualified architect or engineer for the purpose of determining the structure's adequacy.

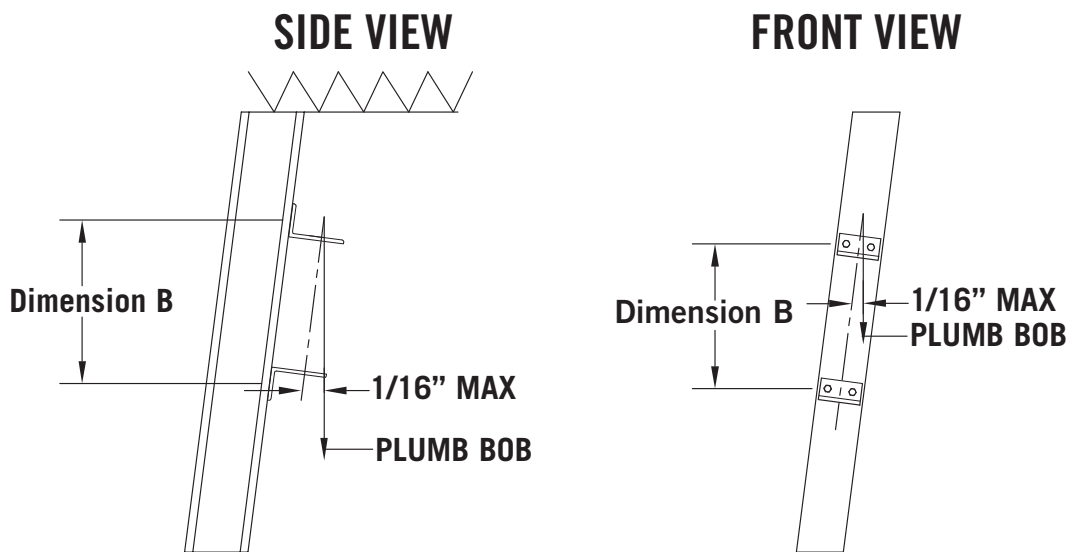


NOTE: DO NOT MOUNT THE JIB CRANE TO ANY STRUCTURE UNLESS YOU ARE SURE THE STRUCTURE CAN SAFELY SUPPORT THE LOADS IMPOSED UPON THE STRUCTURE. FAILURE TO CHECK THIS ITEM CAN RESULT IN SEVERE BODILY INJURY OR DEATH.

3. The installer is responsible for supplying the correct size, length, number, and type of bolts required to attach the jib crane brackets to the structure. SPANCO recommends that the bolts be ASTM A325 grade.
4. Plan the installation such that the proper clearance as outlined in ANSI B30.11 will be adhered to. In the design of jib crane systems, all factors that influence clearances, such as wheel float, roof truss sag, and boom deflection shall be considered. To compensate for anticipated deflection, the boom tip should be adjusted to an elevation equal to $\text{Boom Length (inches)} \div 300$ above level.

After these points have been covered, you may begin the installation procedure as follows:

1. Refer to the assembly drawings in this manual and locate the dimensions of the specific model 300 jib crane to be installed.
2. Determine the elevation of the top wall bracket by adding the dimensions listed in the charts to the desired elevation of the bottom of the boom.
3. Hold the top wall bracket against the supporting column in its proper location with a C-clamp or other supporting method.
4. Establish the correct distance from the top wall bracket to the bottom wall bracket. Hold the bottom wall bracket against the supporting column with a C-clamp or other supporting method.
5. Use a plumb bob to check the alignment of the bottom bracket with the top bracket in two planes. The alignment must be within 1/16 inches from top to bottom.



6. Using the wall brackets as a template, mark the established hole locations.
7. Drill the holes in the column for the wall brackets.
8. Mount the wall brackets and their shims (if used) to the column with bolts supplied by the installer. Care should be taken to insure all bolts are properly tightened.
9. Lift the jib assembly with its bearings attached with a lift truck, or other means, into place. Insert the hex head bolt through the bracket. Insure the thrust plate is properly located at the bottom of each bearing. Install the lock washer and hex nut onto the bolts. Tighten the nut to the torque listed:

PIVOT BOLT TORQUE ONLY	CRANE CAPACITY	BOLT SIZE	TORQUE ON NUT
	1/4 - 1 TON	1"	40 FT-lbs.
	1 1/2 - 2 TON	1 1/4"	75 FT-lbs.
	3 TON	1 1/2"	70 FT-lbs.
	4 - 5 TON	2 1/4"	57 FT-lbs.

10. Remove the end stop angles from the boom tip and install the hoist and trolley onto the boom. Refer to the hoist manufacturer's manual for proper setting of the trolley wheels to match the boom beam. Remember to reinstall the end stop angles on the boom and properly tighten the nuts.
11. Connect the hoist to its source of power (either air or electric) if required, as per the hoist manufacturer's manual.
12. Now that the jib crane installation is complete, but before the unit is placed into service, it is important to review and follow procedures outlined in Chapter 11-2 of ANSI B30.11 regarding inspection, testing, and maintenance.

STRUCTURAL BOLT ONLY (NOT PIVOT BOLTS)	FASTENER SIZE	TORQUE FT. LBS.
	1/4"	10 FT. LBS.
	5/16"	19 FT. LBS.
	3/8"	33 FT. LBS.
	7/16"	54 FT. LBS.
	1/2"	78 FT. LBS.
	9/16"	114 FT. LBS.
	5/8"	154 FT. LBS.
	3/4"	257 FT. LBS.
	7/8"	341 FT. LBS.
	1"	514 FT. LBS.
	1 1/4"	803 FT. LBS.

MAINTENANCE

By definition, the term "jib crane" includes the jib, the trolley, and the hoist, along with any attachment that may exist. The user should refer to the manual supplied with the hoist and trolley for a listing of maintenance points and their suggested frequency.

With regards to the SPANCO jib, the only maintenance item is that of the wall bracket lubrication. The sleeve bearings in those brackets are pre-lubricated at the factory. Field lubrication of those bearings is required based upon usage of the crane. SPANCO recommends that the bearings be lubricated at least once a year. The grease should be a lithium soap based grease, consistency No. NLGI 2.

Technical drawing of a beam-to-column connection. The drawing includes a front view (top) and a side view (bottom left). Dimensions are provided in inches.

Front View Dimensions:

- Overall width: $3\frac{1}{2}"$
- Distance from left edge to centerline of column: $4"$
- Distance from centerline of column to centerline of beam: $7\frac{1}{2}"$
- Overall height: $4"$
- Distance from left edge to centerline of column: $4"$
- Distance from centerline of column to centerline of beam: $5"$
- Overall length: A
- Distance from centerline of column to centerline of beam: C
- Distance from centerline of column to centerline of beam: D

Side View Dimensions:

- Overall width: $3\frac{1}{2}"$
- Distance from left edge to centerline of column: $4"$
- Distance from centerline of column to centerline of beam: $7\frac{1}{2}"$
- Overall height: $4"$
- Distance from left edge to centerline of column: $4"$
- Distance from centerline of column to centerline of beam: $5"$
- Overall length: A
- Distance from centerline of column to centerline of beam: C
- Distance from centerline of column to centerline of beam: D

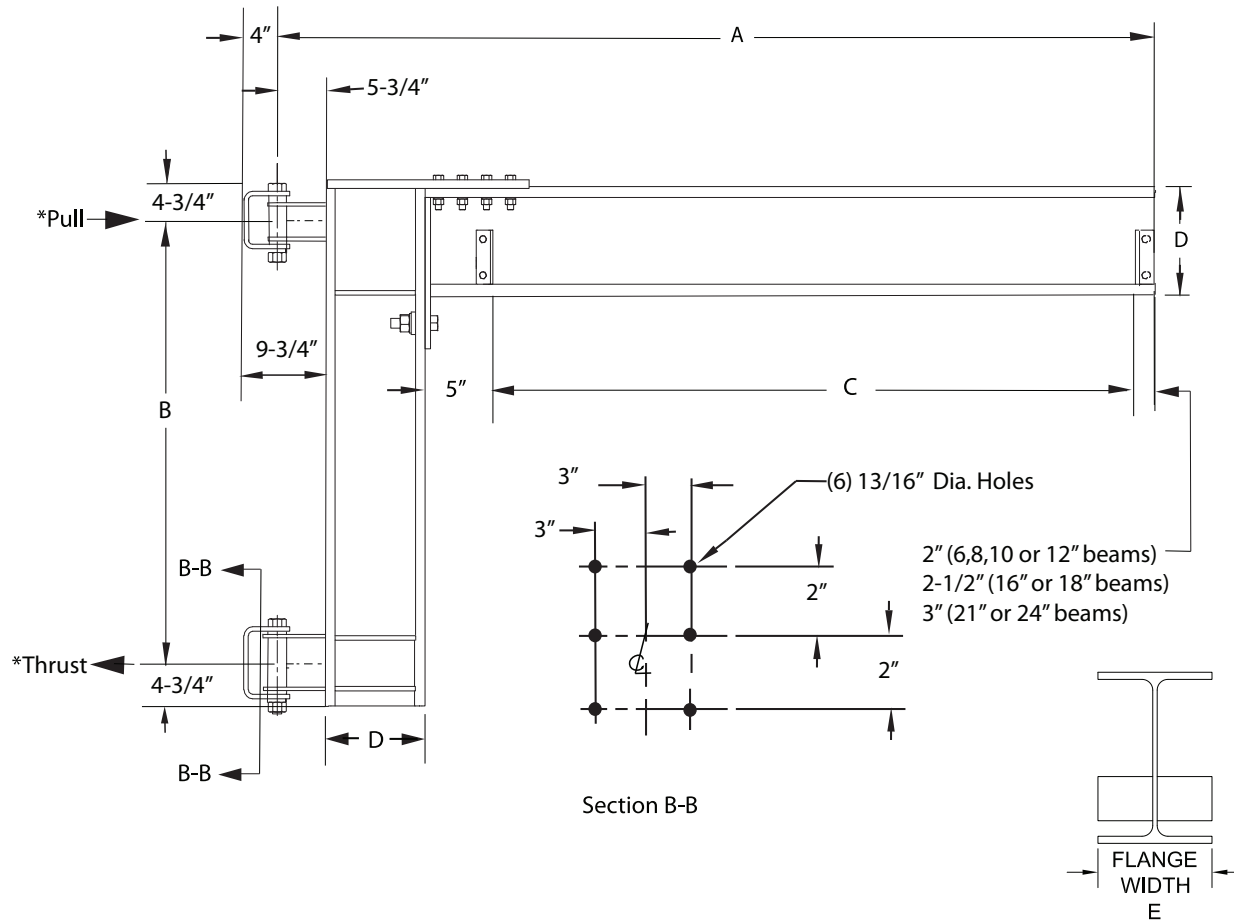
Section B-B:

- Section line B-B is indicated on the front view.
- Section B-B shows a cross-section of the beam with three rows of holes.
- Dimensions for Section B-B:
 - Distance from left edge to centerline of column: $1\frac{3}{4}"$
 - Distance from centerline of column to centerline of beam: $1\frac{1}{2}"$
 - Distance from centerline of column to centerline of beam: $1\frac{1}{2}"$
 - Distance from centerline of column to centerline of beam: $1\frac{1}{2}"$
- Notes for Section B-B:
 - (6) $11\frac{1}{16}"$ Dia. Holes
 - 2" (6, 8, 10 or 12" beams)
 - 2-1/2" (16" or 18" beams)
 - 3" (21" or 24" beams)

FLANGE WIDTH E

1 TON													
A	SPAN	8	10	12	14	16	18	20	22	24	26	28	30
B	BRACKET CENTERS	4'-0"	5'-0"	5'-0"	5'-0"	6'-0"	6'-0"	6'-0"	7'-0"	7'-6"	8'-0"	9'-0"	10'-0"
C	CLEAR SPAN	6'-5"	8'-3"	10'-3"	12'-3"	14'-1"	15'-8-1/4"	17'-8-1/4"	19'-6-1/2"	21'-6-1/2"	23'-3"	25'-3"	27'-0"
D	BEAM	S8	W10	W10	W10	W12	W16	W16	W18	W18	W21	W21	W24
E	FLANGE WIDTH	4"	5-3/4"	5-3/4"	5-3/4"	6-1/2"	7-1/8"	7-1/8"	7-1/2"	7-1/2"	8-1/4"	8-1/4"	8-1/4"
*	THRUST/PULL	5070	5320	6550	7800	7710	9140	10350	10391	10780	12217	11962	11790
	BEAM WGT/FT	18.4#	30#	30#	30#	35#	50#	50#	55#	55#	68#	68#	84#
	OVERALL WEIGHT	273#	574#	634#	694#	905#	1434#	1534#	1853#	1991#	2699#	2903#	3830#

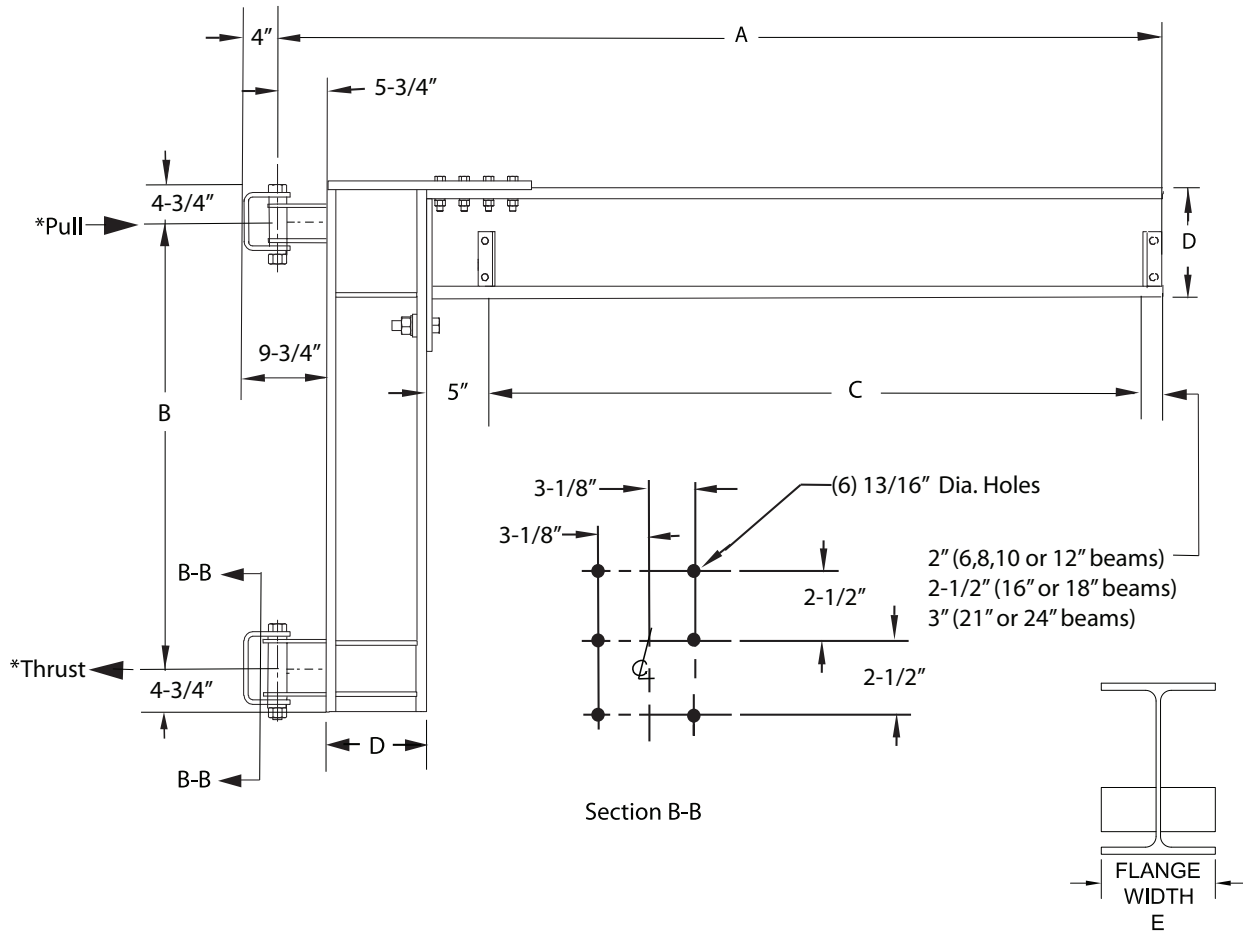
WALL CANTILEVER JIB CRANE 200° ROTATION MODEL 300 - -



WALL CANTILEVER (300 SERIES) JIB CRANE - 200 DEGREE ROTATION													
1-1/2 TON													
A	SPAN	8	10	12	14	16	18	20	22	24	26	28	30
B	BRACKET CENTERS	4'-0"	4'-0"	4'-0"	4'-0"	5'-0"	6'-0"	6'-0"	7'-0"	7'-6"	8'-0"	9'-0"	10'-0"
C	CLEAR SPAN	6'-1-1/4"	8'-1-1/4"	9'-11-1/4"	11'-11-1/4"	13'-6-1/2"	15'-4-3/4"	17'-4-3/4"	19'-1-1/4"	21'-1-1/4"	22'-10-1/4"	24'-10-1/4"	26'-9-3/4"
D	BEAM	W10	W10	W12	W12	W16	W18	W18	W21	W21	W24	W24	W24
E	FLANGE WIDTH	5-3/4"	5-3/4"	6-1/2"	6-1/2"	7-1/8"	7-1/2"	7-1/2"	8-1/4"	8-1/4"	9"	9"	9"
*	THRUST/PULL	7180	9800	12160	14470	13760	13460	15200	15516	16092	16636	16201	17055
	BEAM WGT/FT	30#	30#	35#	35#	50#	55#	55#	68#	68#	84#	84#	103#
	OVERALL WEIGHT	511#	571#	722#	792#	1313#	1606#	1717#	2385#	2555#	3353#	3605#	4618#

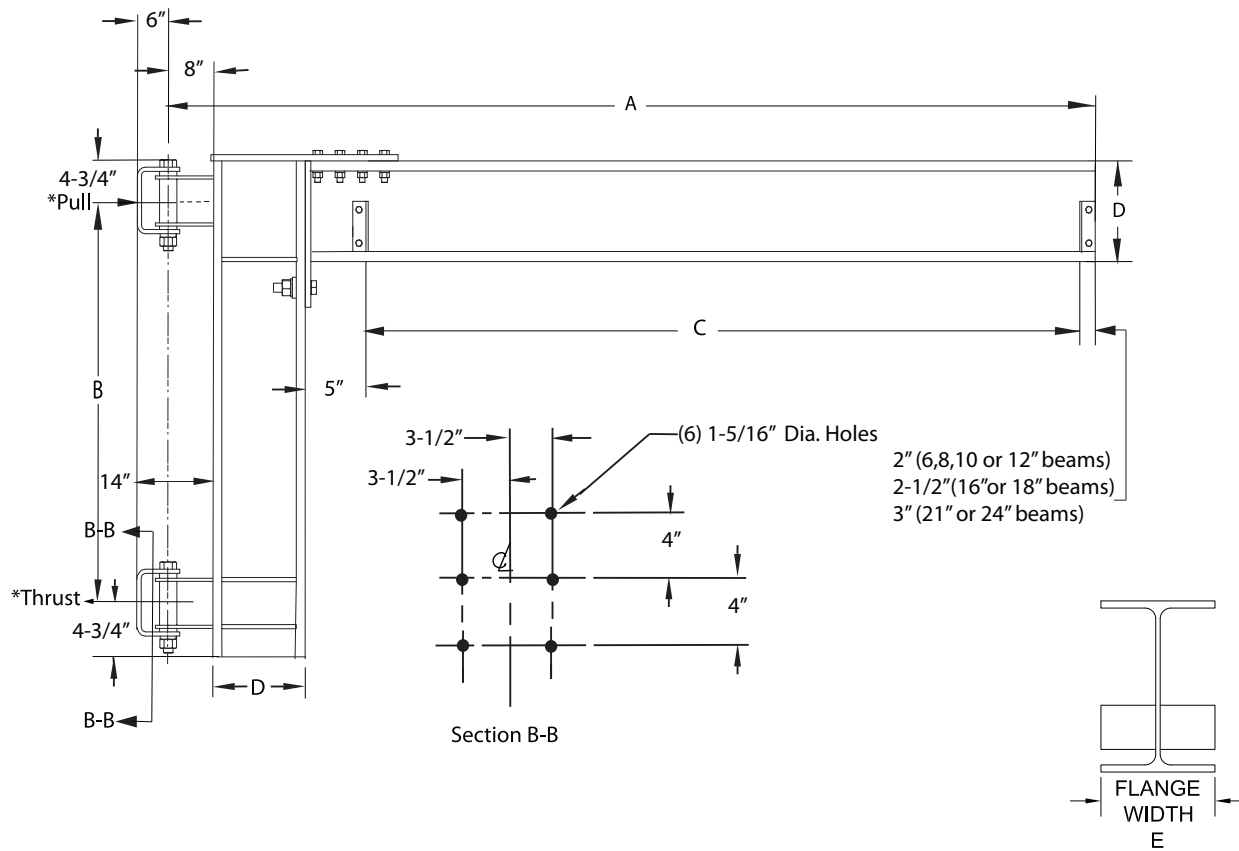
2 TON													
A	SPAN	8	10	12	14	16	18	20	22	24	26	28	30
B	BRACKET CENTERS	4'-0"	4'-0"	4'-0"	5'-0"	6'-0"	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	9'-0"	10'-0"
C	CLEAR SPAN	5'-11-1/4"	7'-11-1/4"	9'-11-1/4"	11'-6-1/2"	13'-4-3/4"	15'-4-3/4"	17'-1-1/4"	19'-1-1/4"	20'-10 1/4"	22'-10 1/4"	24'-9-3/4"	26'-9-3/4"
D	BEAM	W12	W12	W12	W16	W18	W18	W21	W21	W24	W24	W24	W24
E	FLANGE WIDTH	6-1/2"	6-1/2"	6-1/2"	7-1/8"	7-1/2"	7-1/2"	8-1/4"	8-1/4"	9"	9"	9"	9"
*	THRUST/PULL	10090	13040	16010	15440	15250	17420	18500	19766	20432	21055	21572	21150
	BEAM WGT/FT	35#	35#	35#	50#	55#	55#	68#	68#	84#	84#	103#	103#
	OVERALL WEIGHT	582#	652#	722#	1213#	1497#	1607#	2215#	2385#	3143#	3353#	4309#	4618#

WALL CANTILEVER JIB CRANE 200° ROTATION MODEL 300 - -



WALL CANTILEVER (300 SERIES) JIB CRANE - 200 DEGREE ROTATION													
3 TON													
A	SPAN	8	10	12	14	16	18	20	22	24	26	28	30
B	BRACKET CENTERS	4'-0"	4'-0"	6'-0"	6'-0"	6'-6"	7'-6"	9'-6"	9'-6"	8'-6"	9'-3"	10'-0"	NS
C	CLEAR SPAN	5'-6-1/2"	7'-6-1/2"	9'-6-1/2"	11'-6-1/2"	13'-4-3/4"	15'-1-1/4"	17'-1-1/4"	18'-10 1/4"	20'-9-3/4"	22'-9-3/4"	24'-9-3/4"	NS
D	BEAM	W16	W16	W16	W16	W18	W21	W21	W24	W24	W24	W24	NS
E	FLANGE WIDTH	7-1/8"	7-1/8"	7-1/8"	7-1/8"	7-1/2"	8-1/4"	9"	9"	9"	9"	9"	NS
*	THRUST/PULL	15110	19500	15980	18960	20550	20580	18630	20827	26568	26803	27045	NS
	BEAM WGT/FT	50#	50#	50#	50#	55#	68#	68#	84#	103#	103#	103#	NS
	OVERALL WEIGHT	892#	992#	1192#	1292#	1556#	2192#	2464#	3176#	3879#	4162#	4445#	NS

WALL CANTILEVER JIB CRANE 200° ROTATION MODEL 300 - -



WALL CANTILEVER (300 SERIES) JIB CRANE - 200 DEGREE ROTATION

4 TON

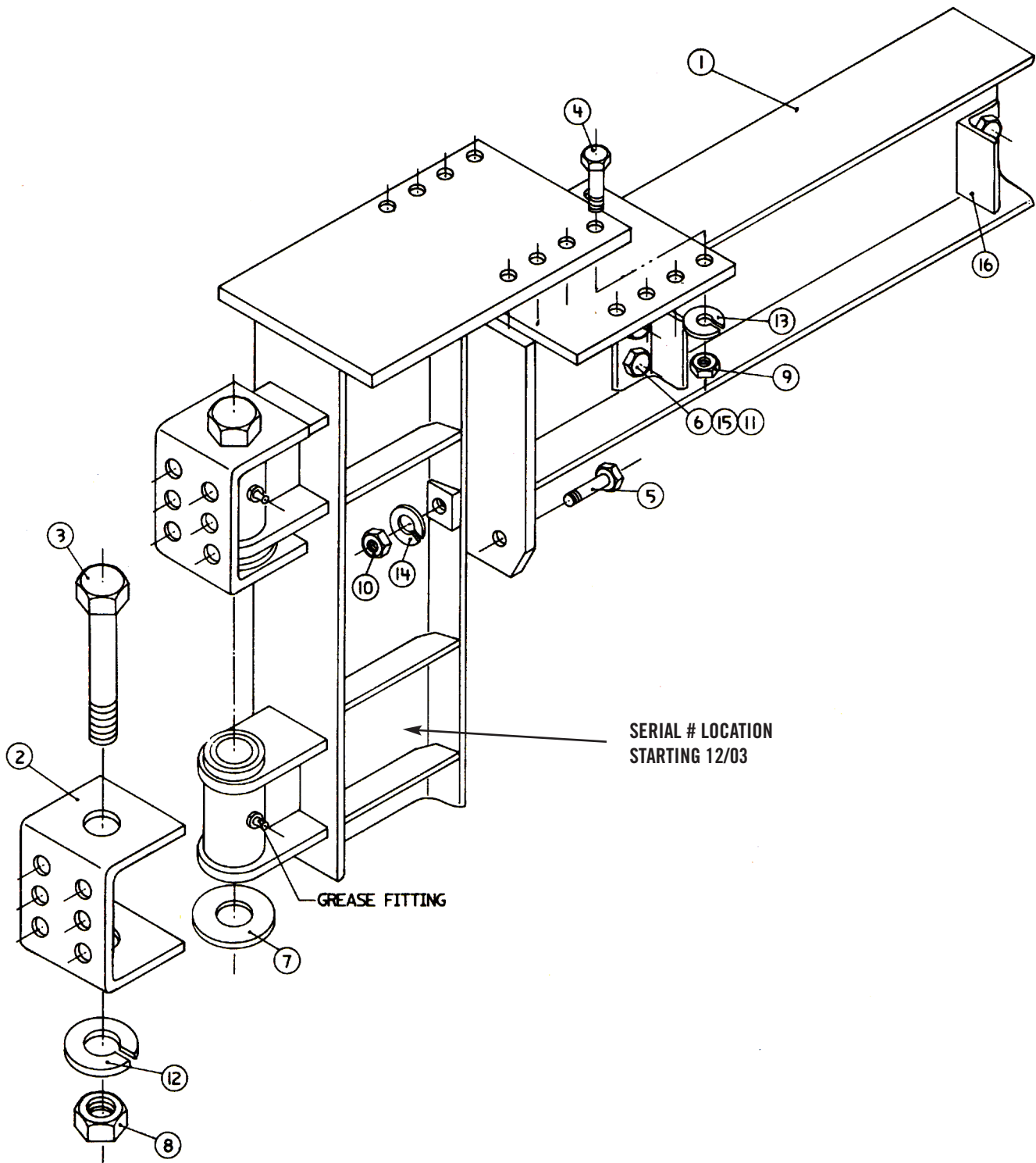
A	SPAN	8	10	12	14	16	18	20	22	24	26	28	30
B	BRACKET CENTERS	4'-0"	6'-6"	6'-6"	6'-6"	7'-6"	9'-6"	9'-6"	7'-9"	8'-6"	9'-3"	NS	NS
C	CLEAR SPAN	5'-4-1/4"	7'-2-1/2"	9'-2-1/2"	11'-2-1/2"	12'-11"	14'-8"	16'-8"	18'-7-1/2"	20'-7-1/2"	22'-7-1/2"	NS	NS
D	BEAM	W16	W18	W18	W18	W21	W24	W24	W24	W24	W24	NS	NS
E	FLANGE WIDTH	7-1/8"	7-1/2"	7-1/2"	7-1/2"	9"	9"	9"	9"	9"	9"	NS	NS
*	THRUST/PULL	20010	16020	19650	23310	23640	21550	24230	34019	34227	34446	NS	NS
	BEAM WGT/FT	50#	55#	55#	55#	68#	84#	84#	103#	103#	103#	NS	NS
	OVERALL WEIGHT	1166#	1475#	1585#	1695#	2302#	3015#	3272#	3860#	4143#	4426#	NS	NS

5 TON

A	SPAN	8	10	12	14	16	18	20	22	24	26	28	30
B	BRACKET CENTERS	6'-6"	6'-6"	6'-6"	7'-6"	9'-6"	9'-6"	9'-6"	7'-9"	NS	NS	NS	NS
C	CLEAR SPAN	5'-5-1/2"	7'-2-1/2"	9'-2-1/2"	10'-6-3/4"	12'-8"	14'-8"	16'-8"	18'-7-1/2"	NS	NS	NS	NS
D	BEAM	W18	W18	W18	W21	W24	W24	W24	W24	NS	NS	NS	NS
E	FLANGE WIDTH	7-1/2"	7-1/2"	7-1/2"	9"	9"	9"	9"	9"	NS	NS	NS	NS
*	THRUST/PULL	15430	19890	24390	25240	23330	26560	29830	41697	NS	NS	NS	NS
	BEAM WGT/FT	55#	55#	55#	68#	84#	84#	103#	103#	NS	NS	NS	NS
	OVERALL WEIGHT	1366#	1475#	1585#	2166#	2961#	3105#	3272#	38630#	NS	NS	NS	NS

*USE FOR REFERENCE ONLY

**BILL OF MATERIALS DIAGRAM:
WALL CANTILEVER JIB CRANES**



BILL OF MATERIALS: WALL CANTILEVER JIB CRANES

IMPORTANT:

All hardware for crane must be grade 5 or A325.

Ordering Repair Parts:

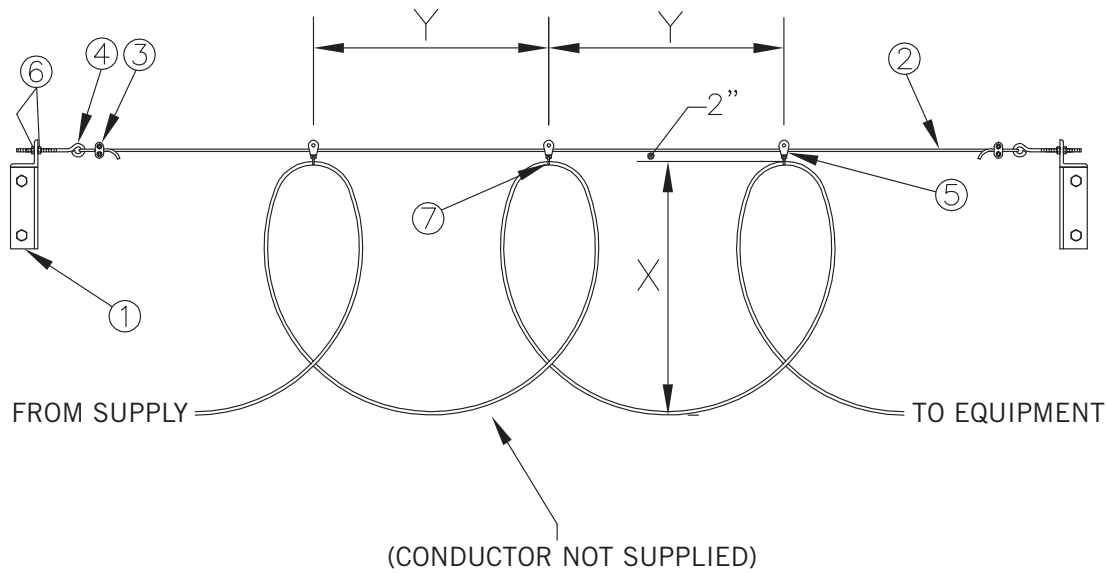
When ordering repair parts from this manual, be sure to state the model and serial numbers of the unit. This information can be found on the small metal plate attached to the jib crane.

The hardware kits are determined by the capacity and beam size of the crane.

ITEM	DESCRIPTION	PART #	QTY.
1/4, 1/2, and 1 TON CRANES			
3	Hex bolt, 1", 8NC, 9" long	10-0604	2
7	Thrust washer, 1"	36-0008	2
8	Hex Nut, 1", 8NC	11-0080	2
12	Lockwasher, 1"	14-0007	2
1 1/2 and 2 TON CRANES			
3	Hex bolt, 1 1/4", 7NC, 10" long	10-0606	2
7	Thrust washer, 1 1/4"	36-0009	2
8	Hex Nut, 1 1/4", 8NC	11-0090	2
12	Lockwasher, 1 1/4"	14-0009	2
3 TON CRANES			
3	Bolt, 1 1/2", 6NC, 12" long	10-1001M	2
7	Thrust washer, 1 1/2"	36-0010	2
8	Hex Nut, 1 1/2", 6NC	11-0102	2
12	Lockwasher, 1 1/2"	14-0010	2
4 and 5 TON CRANES			
3	Bolt, 2 1/4", 4.5NC, 18" long	10-4001M	2
7	Thrust washer, 2 1/4"	06-0508	2
8	Hex Nut, 2 1/4", 4.5NC	11-0101	2
12	Lockwasher, 2 1/4"	14-0011	2

ITEM	DESCRIPTION	PART #	QTY.
S6 and S8 BEAM CRANES			
4	Hex bolt, 1/2", 13NC, 2" long	10-0203	6
5	Hex bolt, 5/8", 11NC, 2 1/2" long	10-0302	2
6	Hex bolt, 1/2", 13NC, 1 1/2" long	10-0202	4
9	Hex nut, 1/2", 13NC	11-0030	6
10	Hex nut, 5/8", 11NC	11-0040	2
11	Hex nut, 1/2", 13NC	11-0030	4
13	Lockwasher, 1/2"	14-0003	6
14	Lockwasher, 5/8"	14-0004	2
15	Lockwasher, 1/2"	14-0003	4
W10 and W12 Beam Cranes			
4	Hex bolt, 5/8", 11NC, 2 1/2" long	10-0302	8
5	Hex bolt, 5/8", 11NC, 2 1/2" long	10-0302	2
6	Hex bolt, 1/2", 13NC, 1 1/2" long	10-0202	4
9	Hex nut, 5/8", 11NC	11-0040	8
10	Hex nut, 5/8", 11NC	11-0040	2
11	Hex nut, 1/2", 13NC	11-0030	4
13	Lockwasher, 5/8"	14-0004	8
14	Lockwasher, 5/8"	14-0004	2
15	Lockwasher, 1/2"	14-0003	4
W16 and W18 Beam Cranes			
4	Hex bolt, 1", 8NC, 3 1/2" long	10-0608	8
5	Hex bolt, 3/4", 10NC, 3 1/2" long	10-0404	2
6	Hex bolt, 1/2", 13NC, 2" long	10-0203	4
9	Hex nut, 1", 8NC	11-0080	8
10	Hex nut, 3/4", 11NC	11-0060	2
11	Hex nut, 1/2", 13NC	11-0030	4
13	Lockwasher, 1"	14-0007	8
14	Lockwasher, 3 1/4"	14-0005	2
15	Lockwasher, 1/2"	14-0003	4
W21 and W24 Beam Cranes			
4	Hex bolt, 1 1/4", 9NC, 4" long	10-0808	8
5	Hex bolt, 3/4", 10NC, 3 1/2" long	10-0404	2
6	Lockwasher, 1/2"	14-0003	4
9	Hex nut, 1 1/4", 7NC	11-0090	8
10	Hex nut, 3/4", 10NC	11-0060	2
11	Hex nut, 1/2", 13NC	11-0030	4
13	Lockwasher, 3/4"	14-0009	8
14	Lockwasher, 3/4"	14-0005	2
15	Hex bolt, 1/2", 13NC, 2 1/2" long	14-0003	4

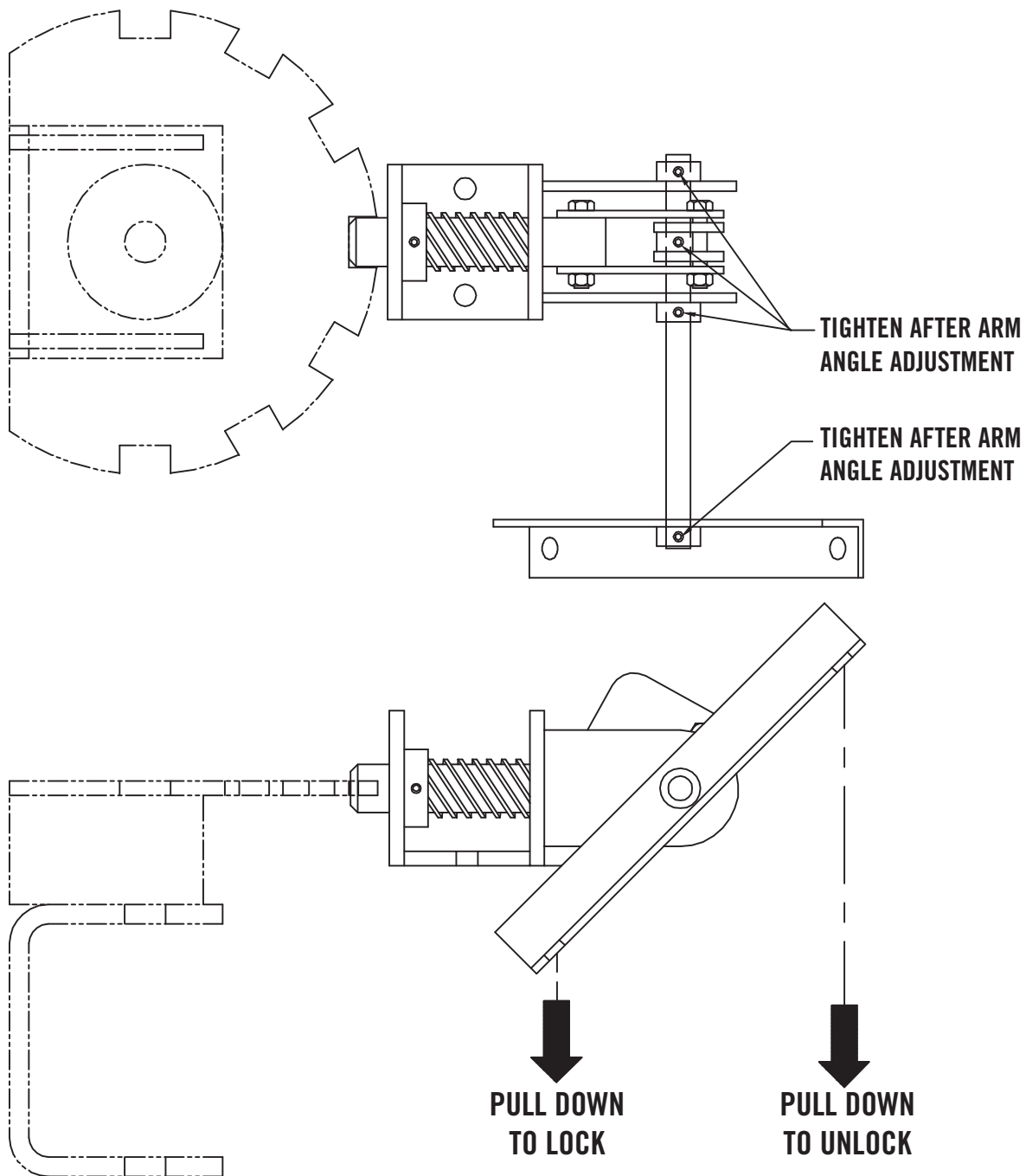
BILL OF MATERIALS: TAG LINE SUPPORT SYSTEM



ITEM	DESCRIPTION	QTY.
7	Cable ties	5
6	Hex nuts	4
5	S-hooks	5
4	Eyebolts	2
3	Cable clamps	2
2	Tagline cable	1
1	Trolley stops	2

X	Y
	MAX
2 FT.	5 FT.

SINGLE POSITION BOOM LOCK



NOTE:

1. Rope length must be specified to fit each crane. To determine rope length use: $2 \times \text{floor to height under boom}$ minus 7'-0". This will place rope approximately 3'-6" from floor.
2. Thread rope ends through holes and tie knots at rope ends.
3. To adjust swing-arm, all set screws and collars should be loose to return components to the proper position. Push main locking pin against bottom of slot and make sure lever arm is horizontal. Tighten all set screws to anchor set screws in shaft.



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Spanco.com

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.*