



Installation and Maintenance Manual for SPANCO® A Series Aluminum Gantry Cranes



TABLE OF CONTENTS

Warnings.....	3
Installation.....	4
Maintenance.....	5
Span Adjustment.....	5
V-Groove Installation Instructions.....	6-7
Bill of Materials.....	8
Optional Accessories.....	9
Lift Kit Instructions.....	10
Warranty.....	12
Service Policy.....	12



- Do not lift or support humans.
- When moving gantry, 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.
- Secure trolley and hoist in the center of I-beam when adjusting height.
- Ensure the rated capacity is clearly labeled on each side of the I-beam.
- Do not adjust the height when gantry is under load.
- Do not lift more than the rated capacity.
- Do not push or pull gantry with a forklift or other vehicle.
- Do not allow the load to swing or roll against support members.
- Push the gantry, not the load.
- Inspect gantry for missing or broken parts before operating.

INSTALLATION

1. For assembly, when possible, select an area under an overhead hoist, or where a lift truck can be used to raise the I-beam. Be sure 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, and safety glasses.
2. Lay both “A” frames flat on the floor, and slide upright tube into top of center tube. Upright tube should then be pinned into its lowest position, making sure that load pin is fully engaged. Top plate (and extension tube, if required) should be pinned also at this time with cotterless hitch pins.
3. The caster wheels should then be locked in position parallel to the “A” frame. This will prevent the frame assembly from rolling away when lifted to the upright position.
4. Using an overhead hoist or lift truck, lift the I-beam to the gantry's minimum height. Be sure that the capacity rating is right side up and legible.
5. Lift one end of the frame assembly into position under one end of the I-beam, and bolt I-beam to top plate of the upright with the hardware supplied. Be sure the lifting lug is on the outside of the frame assembly, not facing the I-beam. Next, raise into position the other end frame and bolt together as above.
6. Testing. We certify that the equipment referenced in this manual is in conformance with our interpretation of applicable CMAA 74, ANSI B30.17, AISC ASD 9th Edition, and AWS D1.2. This equipment is designed and manufactured to the rated capacity marked on the equipment with due allowances for safety factors. It is recommended that a person appointed by the owner, under the direction of a qualified technical person, shall perform a load test of 125% of the rated capacity before placing the unit into service. See the latest edition of ANSI B30.17 for clarification of details related to rated load tests.
7. Your SPANCO gantry is now ready to use, and you can now adjust the I-beam to desired height.
8. First secure the trolley and hoist in the center of the I-beam. To raise or lower unit height, simply hang the optional “LUG-ALL” winch kit (if ordered with the gantry), or any other type of “come-along”, from the lifting lug at the top of the A-frame. Now pull the bottom hook of the “LUG-ALL” winch down and hook it under the end of the upright tube. By raising the upright slightly, you can now pull back the spring-loaded adjustment pin. Secure the adjustment pin in the lockout position. By operating the “LUG-ALL”, you can raise or lower the height of the gantry. When desired height is reached, release the load pin. The load pin will self locate the hole in the upright. Be sure the load pin is in the full lock-in position.

NOTE: This operation requires a “LUG-ALL” winch on each end of the unit. Both ends must be raised or lowered at the same time. Never adjust gantry while it is supporting a load. Make sure that the “LUG-ALL” or “come-along” used for height adjustment has a combined capacity rating equal to the weight of the I-beam and any hoist trolley that is suspended from the I-beam.

MAINTENANCE

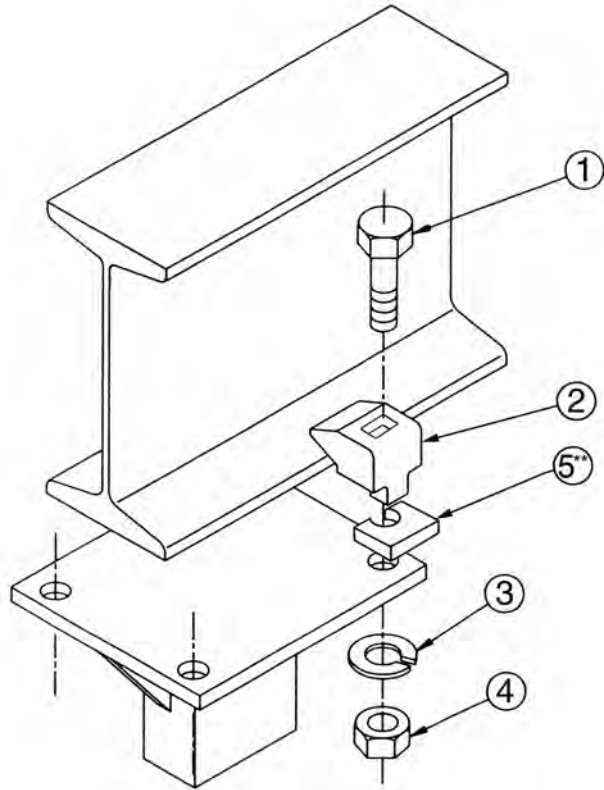
To ensure the safe operation of your gantry, periodically inspect it for bent, broken, damaged, corroded, cracked or missing parts. The only regular maintenance that is required is to check bolt tightness and to lubricate the casters through the grease fittings that are provided. Casters are prelubricated at the factory, but when lubrication is needed use NLGI No.1 or No.2 grease.

ITEM	DESCRIPTION
1	Hex Bolt
2	I-Beam Clamp
3	Lock Washer
4	Hex Nut
5**	Clipped Washer**

NOTE:

- ** Item 5 for 12" beam only (1 and 2 ton models)
- * Torque 5/8" bolt to 108 ft/lbs
- * Torque 3/4" bolt to 210 ft/lbs

ADJUSTABLE SPAN

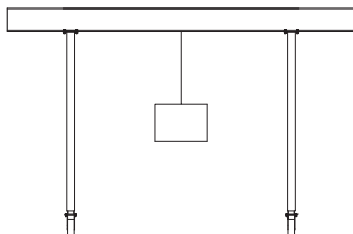


SPAN ADJUSTMENT

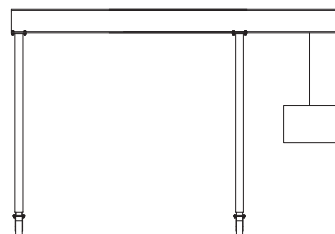
The I-Beam is clamped in place at each end with four (4) beam clamps which firmly hold the beam in place. To adjust the span, just loosen the bolts which hold the clamps and slide the beam to the desired span between the legs. Do not move the legs (A-frames) inward more than one half (1/2) of the total I-Beam length. For example, if the beam is 12 feet long, the distance between the A-Frames should never be less than six (6) feet.

After adjusting the span as desired, re-tighten all eight (8) bolts securely. Be sure you adjust both frames inward when adjusting the span so one end of the beam does not hang over more than the other end. Do not suspend a trolley or load from the cantilevered ends of the beam.

RIGHT WAY



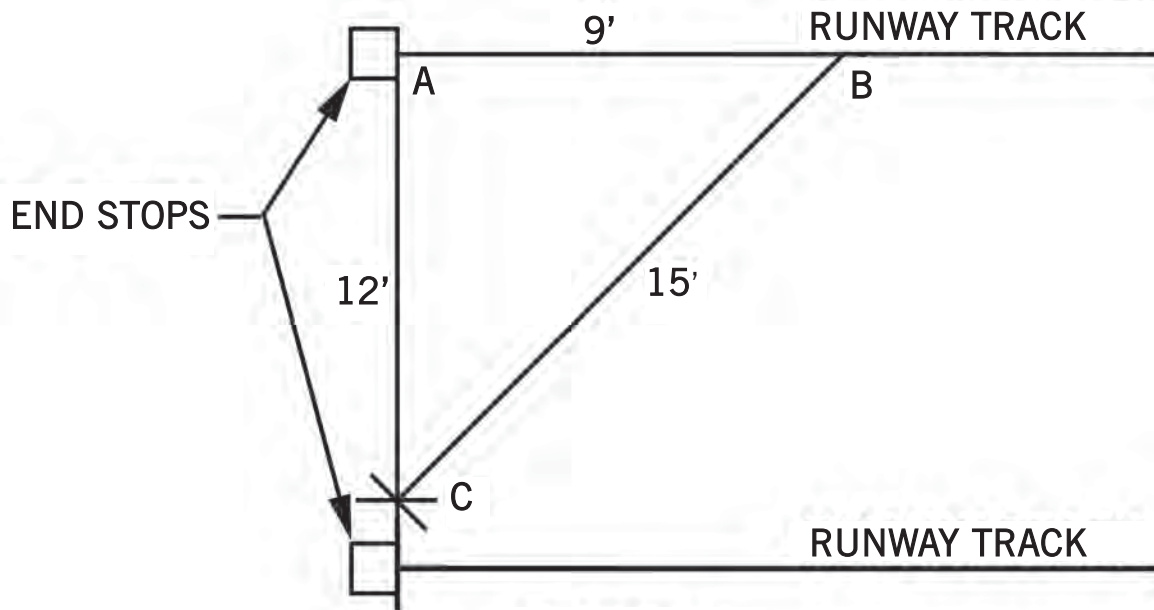
WRONG WAY



V-GROOVE INSTALLATION INSTRUCTIONS

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 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 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 ft. 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.



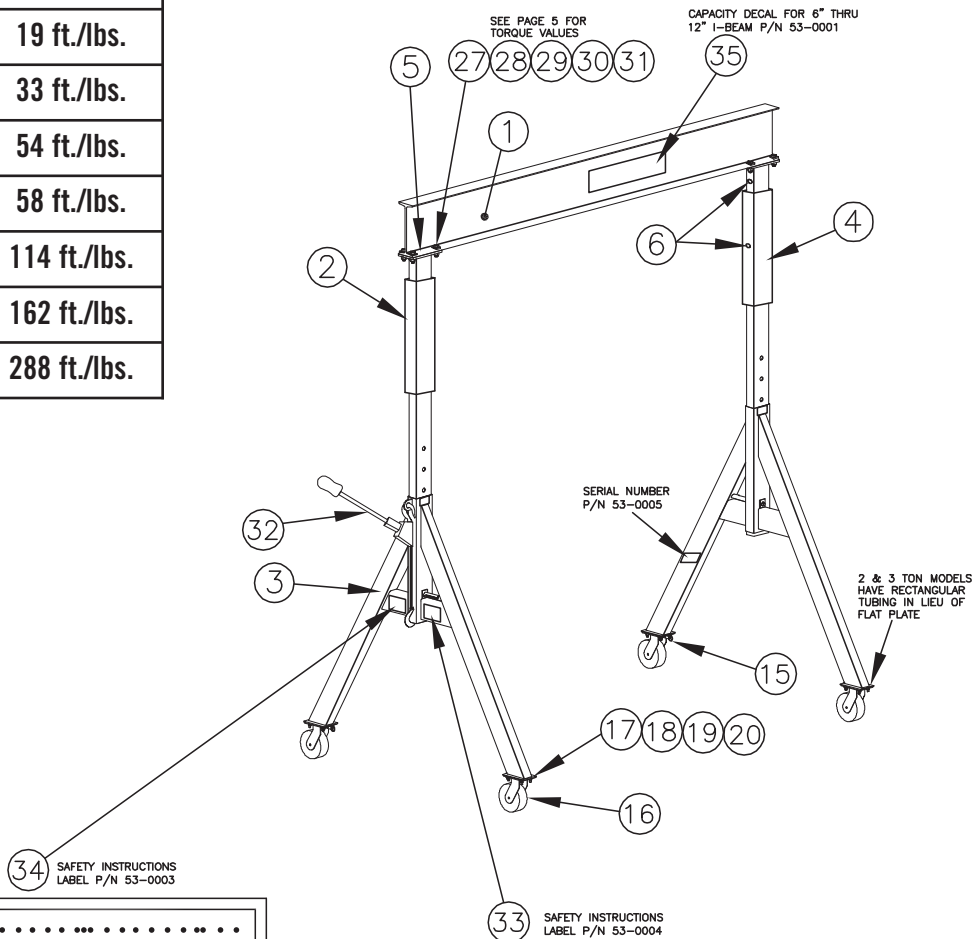
NOTE: SPANCO recommends lagging with 3/8" lag bolts every 3'-0" staggered.

V-GROOVE INSTALLATION INSTRUCTIONS continued...

CASTER BOLT TORQUE

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 lower grades of bolts may not take these high torques. Reduce values accordingly.



.....

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.

SPANCO
WWW.SPANCO.COM
P/N 53-0003

.....

BEFORE ADJUSTING GANTRY HEIGHT FOLLOW INSTRUCTIONS BELOW

1. Never adjust height or disassemble crane when gantry is under load.
2. Secure trolley & hoist in center of I-beam.
3. To adjust height, use forklift, overhead hoist or attached winch hoist (if included).
4. Raise center post slightly, pull out load pin and secure in lock position.
5. Do not raise or lower one end more than one foot at a time.
6. Adjust height to required position and release load pin to full lock position.
7. Never stand under gantry when adjusting height or disassembling crane.

SPANCO
WWW.SPANCO.COM
P/N 53-0004



◀ 2 and 3 ton models are manufactured with "rounded edge" tubing.

BILL OF MATERIALS

BILL OF MATERIALS		
ITEM#	DESCRIPTION	QUANTITY
1	I-Beam	1
2	Upright Tube	2
3	End Frame/A Frame	2
4	2' Extension (if required**)	2
5	Top Plate**	2
6	Cotterless Hitch Pin	2
15	Swivel Lock	4
16	Caster	4
17	Flat Washer	16
18	Lock Washer	16
19	Hex Nut	16
20	Hex Bolt	16
27	Clipped Washer	8*
28	Hex Bolt	8
29	Lock Washer	8
30	Hex Nut	8
31	I-Beam Clamp	8
32	Optional LUG-ALL Winch Kit	2
33	Safety Instruction	2
34	Safety Instruction	2
45	Capacity Decal	2

NOTE:

* 12" beam only (1 & 2 ton models)

** Items 4 and 5 are combined into one piece on the 3 ton model only.

NOTE: ITEM #6 IS INCREASED TO QUANTITY OF 4 IF ITEM #4 (EXTENSION TUBE) IS REQUIRED

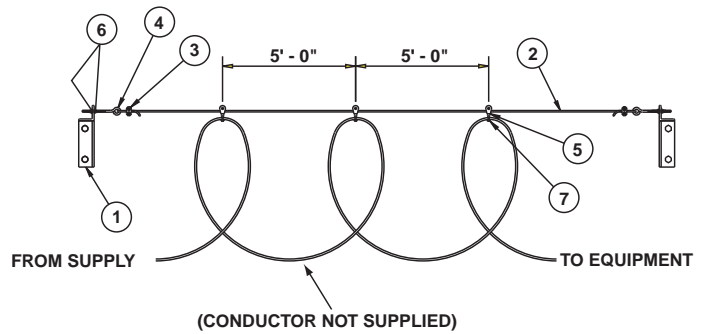
If replacement parts are required, please supply the complete gantry model, and serial number from the label affixed to the A-frame, and the item number of the part(s) on the drawing and bill of materials.

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.

OPTIONAL ACCESSORIES

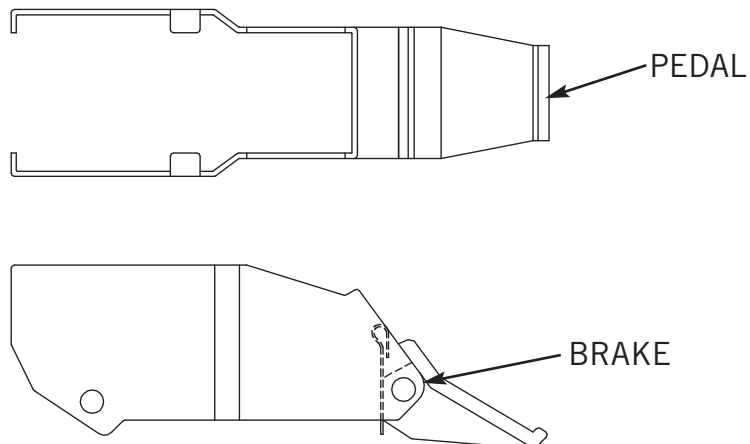
Tagline Assembly

BILL OF MATERIALS		
ITEM	DESCRIPTION	QTY
7	Cable Ties	5
6	Hex Nuts	4
5	Pulleys	5
4	Eye Bolts	2
3	Cable Clamps	2
2	Tagline Cable	1
1	Trolley Stops	2



Wheel Brake Assembly Installation

For 6" and 8" diameter casters on SPANCO "A" & "E" Series Gantries

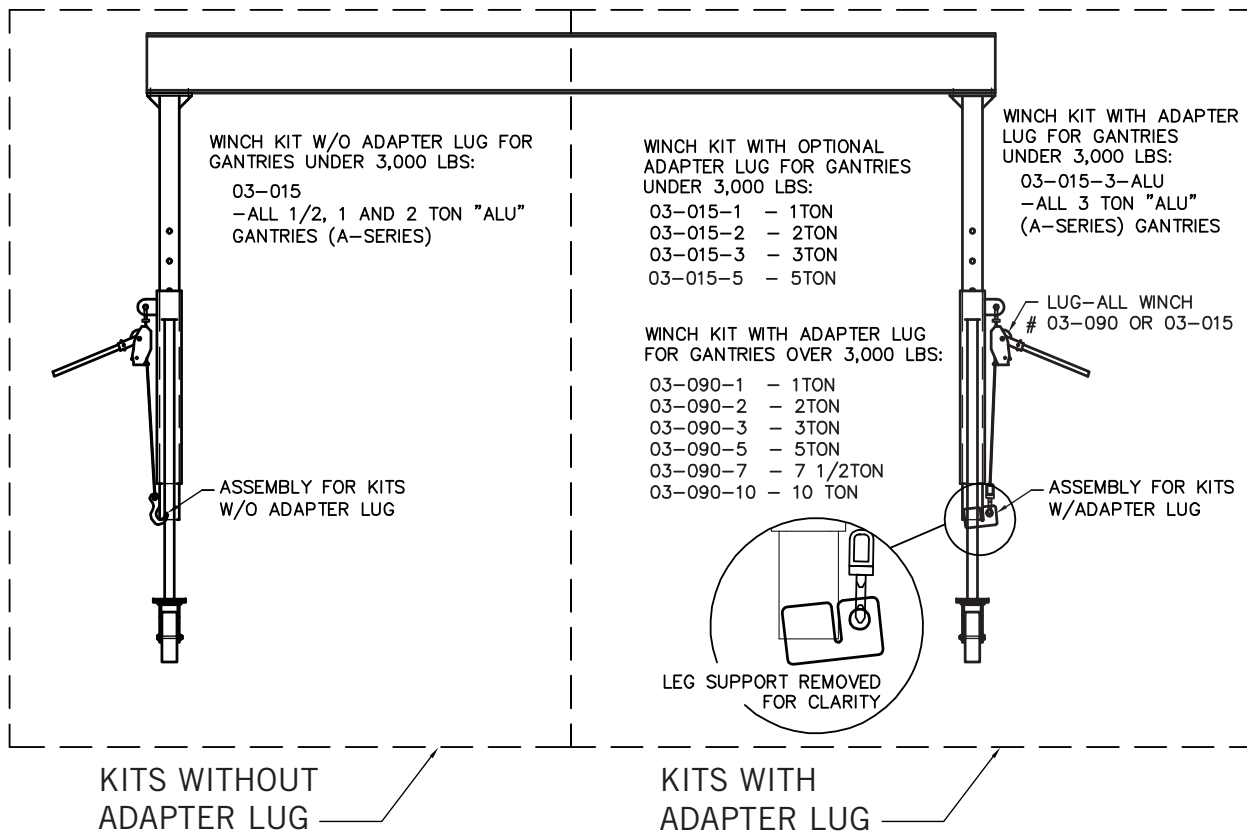


To set brake while assembling the caster:

1. Inspect the brake mechanism to ensure it is in working order.
2. Make sure the brake pedal is in the "off" position (pedal is in the up position).
3. Position the brake brackets over the outside of the fork legs. Line the bolt holes over each fork's bolt holes.
4. Insert the wheel between the fork legs and place the axle through the brake/fork holes and the wheel hub.
5. Thread the nut on the axle and tighten.

NOTE: NEVER CHANGE CASTERS WITH A LOAD ON GANTRY!

LIFT KIT INSTRUCTIONS



- NOTE:**
1. To be used under no load conditions only.
 2. For use on "A" or "ALU" series gantry cranes only.
 3. For kits supplied with an adapter lug, **DO NOT** use without winch adapter lug or damage to the crane could result.
 4. Before removing LUG-ALL® winch, ensure that load pin is fully engaged.



SPANCO, Inc.
604 Hemlock Road
Morgantown, PA, 19543

Toll Free: (800) 869-2080
Local: (610) 286-7200
Fax: (610) 286-0085

spanco.com

FIVE-YEAR EQUIPMENT WARRANTY

SPANCO offers this Equipment Warranty (the "Warranty") on the following equipment:

- Manually propelled Free Standing and Ceiling Mounted Workstation Bridge Cranes.
- Manually propelled Monorails.
- Manually propelled ALU-TRACK Bridge Cranes and Monorails.
- Manually rotated Enclosed Track and I-Beam Jib Cranes.
- Manually propelled Gantries.
- Manually propelled Articulating Jib Cranes.
- ALL motorized SPANCO products come with a one year warranty on drive components.

SPANCO warrants the Equipment and wearable end truck and trolley wheels only, to be free from defects in material and workmanship for a period of five (5) years or 10,000 hours (whichever occurs first), commencing on the date of shipment to the first retail purchaser ("Purchaser"). This Warranty does not extend to Equipment which has been subject to misuse, use in excess of rated capacity, negligent operation, use beyond SPANCO's published service factors, improper installation or maintenance, and does not apply to any Equipment which has been repaired or altered without SPANCO's written authorization. Written notice of any claimed defect must be given to SPANCO within thirty (30) days after such defect is discovered. SPANCO's obligation, and Purchaser's sole remedy under this Warranty is limited to, at SPANCO's discretion, the replacement or repair of the Equipment at SPANCO's factory or at a location approved by SPANCO. Purchaser is responsible for all freight and transportation costs relating to the repair or replacement of the Equipment. THE FOREGOING WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES WHATSOEVER WHETHER EXPRESS, IMPLIED, OR STATUTORY. SELLER MAKES NO WARRANTY AS TO THE MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF THE EQUIPMENT AND MAKES NO OTHER WARRANTY, EITHER EXPRESS OR IMPLIED. SPANCO shall not be liable, under any circumstances, for any indirect, special or consequential damages including, but not limited to, lost profits, increased operating costs or loss of production. This Warranty shall not extend to any components or accessories not manufactured by SPANCO (such as casters), and Purchaser's remedy for such components and accessories shall be determined by the terms and conditions of any warranty provided by the manufacturer of such components and accessories.

SERVICE POLICY

1. Obtain as much information as possible concerning the problem through personal observation by yourself or other authorized personnel familiar with the job and equipment: include model, serial and/or part numbers, voltages, speeds and any other special identifying features. Be prepared to discuss the situation in detail.
2. All authorized labor charges will be based on straight time. Hourly rates, estimated man hours, and not to exceed total dollar amount required for corrections are to be agreed upon before authorization is given. There will be no allowances for overtime except in dire emergencies and then only with prior approval.
3. A verbal agreement may be reached immediately on both the method of correction and the approximate cost. A warranty authorization number will be assigned for the specific incident. A confirming written authorization will be forwarded to the distributor.
4. The distributor must send an itemized invoice, showing our release number or invoice number and warranty authorization number after authorized corrections have been made. A credit memo will be issued by accounting after the invoice has been received and approved. Warranty charges ARE NOT to be deducted from outstanding open account invoices under any circumstances.
5. Any field corrections made prior to an authorization by SPANCO will not be accepted as a warranty charge or the responsibility of SPANCO. Any modification to the equipment made without the prior approval of the seller will void all warranties. A verbal authorization for modification may be obtained, in which event a warranty authorization number will be assigned for the specific modification. A confirming written authorization will be forwarded to the distributor.

This warranty and service policy will be incorporated as a permanent section of the current price book as issued by SPANCO.