

# VESTIL MANUFACTURING CORP.

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AHA-SERIES ALUMINUM ADJUSTABLE-HEIGHT GANTRY CRANE INSTRUCTION MANUAL



## Receiving instructions:

After delivery, IMMEDIATELY remove the packaging from the product in a manner that preserves the packaging and maintains the orientation of the product in the packaging; then inspect the product closely to determine whether it sustained damage during transport. If damage is discovered during the inspection, immediately record a complete description of the damage on the bill of lading. If the product is undamaged, discard the packaging.

## NOTES:

1) Compliance with laws, regulations, codes, and non-voluntary standards enforced in the location where the product is used is exclusively the responsibility of the owner/end-user.

2) VESTIL is not liable for any injury or property damage that occurs as a consequence of failing to apply either: a) the instructions in this manual; or b) information provided on labels affixed to the product.

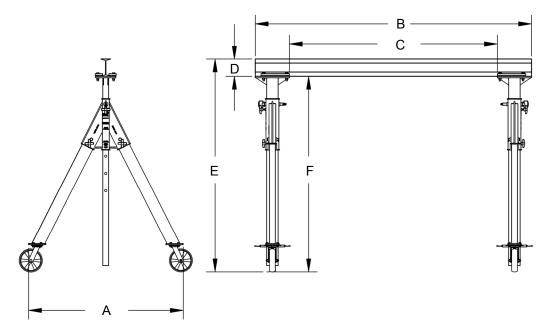
Vestil is not responsible for any consequential damages sustained as a result of failing to exercise sound judgment while assembling, installing, using or maintaining this product.

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## Product specifications:

Thank you for purchasing an adjustable height, steel, A-frame crane ("crane" or "AHS") made by Vestil manufacturing Co. Each AHS conforms to performance specifications disclosed in this manual and fulfills our demanding standards for quality, safety and durability. Although operation and assembly are relatively intuitive, all persons who might participate in assembly, use or maintenance of this crane should familiarize themselves with the instructions provided in this manual. Specifications for each AHS model appear in the table below.



Model	A: Overall width	B: Overall Beam Length	C: Usable beam length	D: Beam height	E: Overall height	F: Usable height range	Capacity	Net Weight
AHA-2-8-8	53 <sup>3</sup> / <sub>4</sub> in.	96 in.	72 <sup>1</sup> / <sub>4</sub> in.	6 in.	(74-104) in.	(68 – 98) in.	2,000 lb.	276 lb.
	136.5 cm	243.8 cm	183.5 cm	15.2 cm	(188-264.2) cm	(30.9 – 44.5) cm	909 kg	kg
AHA-2-8-10	53 <sup>3</sup> / <sub>4</sub> in.	96 in.	72 <sup>1</sup> / <sub>4</sub> in.	6 in.	(98-128) in.	(92 – 122) in.	2,000 lb.	277 lb.
	136.5 cm	243.8 cm	183.5 cm	15.2 cm	(249 - 325) cm	(233.7 – 309.9) cm	909 kg	kg
AHA-2-8-12	53 <sup>3</sup> / <sub>4</sub> in.	96 in.	72 <sup>1</sup> / <sub>4</sub> in.	6 in.	(120 – 150) in.	(114 – 144) in.	2,000 lb.	287 lb.
	136.5 cm	243.8 cm	183.5 cm	15.2 cm	(304.8 – 381) cm	(289.6 – 365.8) cm	909 kg	kg
AHA-2-10-8	53 <sup>3</sup> / <sub>4</sub> in.	120 in.	96 <sup>1</sup> / <sub>4</sub> in.	6 in.	(74 – 104) in.	(68 – 98) in.	2,000 lb.	272 lb.
	136.5 cm	304.8 cm	244.5 cm	15.2 cm	(188 – 264.2) cm	(172.7 – 248.9)cm	909 kg	kg
AHA-2-10-10	53 <sup>3</sup> / <sub>4</sub> in.	120 in.	96 <sup>1</sup> / <sub>4</sub> in.	6 in.	(98 – 128) in.	(92 – 122) in.	2,000 lb.	293 lb.
	136.5 cm	304.8 cm	244.5 cm	15.2 cm	(248.9 – 325.1) cm	(233.7 – 309.9) cm	909 kg	kg
AHA-2-10-12	53 <sup>3</sup> / <sub>4</sub> in.	120 in.	96 <sup>1</sup> / <sub>4</sub> in.	6 in.	(120 – 150) in.	(114 – 144) in.	2,000 lb.	305 lb.
	136.5 cm	304.8 cm	244.5 cm	15.2 cm	(304.8 – 381) cm	(289.6 – 365.8) cm	909 kg	kg
AHA-2-12-8	53 <sup>13</sup> / <sub>16</sub> in.	144 in.	120 <sup>1</sup> / <sub>4</sub> in.	8 in.	(76 – 106) in.	(68 – 98) in.	2,000 lb.	307 lb.
	136.7 cm	365.8 cm	305.4 cm	20.3 cm	(193 – 268.2) cm	(172.7 – 248.9) cm	909 kg	kg
AHA-2-12-10	53 <sup>13</sup> / <sub>16</sub> in.	144 in.	120 <sup>1</sup> / <sub>4</sub> in.	8 in.	(100 – 130) in.	(92 – 122) in.	2,000 lb.	315 lb.
	136.7 cm	365.8 cm	305.4 cm	20.3 cm	(254 – 330.2) cm	(233.7 – 309.9) cm	909 kg	kg
AHA-2-12-12	53 <sup>13</sup> / <sub>16</sub> in.	144 in.	120 <sup>1</sup> / <sub>4</sub> in.	8 in.	(122 – 152) in.	(114 – 144) in.	2,000 lb.	327 lb.
	136.7 cm	365.8 cm	305.4 cm	20.3 cm	(309.9 – 386.1) kg	(289.6 – 365.8) cm	909 kg	kg
AHA-2-15-8	53 <sup>13</sup> / <sub>16</sub> in.	180 in.	156 <sup>1</sup> / <sub>4</sub> in.	8 in.	(76 – 106) in.	(68 – 98) in.	2,000 lb.	360 lb.
AIIA-2-13-0	136.7 cm	457.2 cm	396.9 kg	20.3 cm	(193 – 269.2) cm	(172.7 – 248.9) cm	909 kg	kg
AHA-2-15-10	53 <sup>13</sup> / <sub>16</sub> in.	180 in.	156¹/₄ in.	8 in.	(100 – 130) in.	(92 – 122) in.	2,000 lb.	405 lb.
AIIA-2-13-10	136.7 cm	457.2 cm	396.9 kg	20.3 cm	(254 – 330.2) cm	(233.7 – 309.9) cm	909 kg	kg
AHA-2-15-12	53 <sup>13</sup> / <sub>16</sub> in.	180 in.	156 <sup>1</sup> / <sub>4</sub> in.	8 in.	(122 – 152) in.	(114 – 144) in.	2,000 lb.	412 lb.
AIIA-2-13-12	136.7 cm	457.2 cm	396.9 kg	20.3 cm	(309.9 – 386.1) kg	(289.6 – 365.8) cm	909 kg	kg
AHA-4-8-8	53 <sup>15</sup> / <sub>16</sub> in.	96 in.	72 <sup>1</sup> / <sub>4</sub> in.	8 in.	(76 <sup>1</sup> / <sub>8</sub> – 106 <sup>1</sup> / <sub>8</sub> ) in.	(68 <sup>1</sup> / <sub>8</sub> – 98 <sup>1</sup> / <sub>8</sub> ) in.	4,000 lb.	353 lb.
AIIA-4-0-0	137 cm	243.8 cm	183.5 cm	20.3 cm	(193.5 – 269.7) cm	(173.2 – 249.4) cm	1,818 kg	kg
AHA-4-8-10	53 <sup>15</sup> / <sub>16</sub> in.	96 in.	72 <sup>1</sup> / <sub>4</sub> in.	8 in.	(100 <sup>1</sup> / <sub>8</sub> – 130 <sup>1</sup> / <sub>8</sub> ) in.	(92 <sup>1</sup> / <sub>8</sub> – 122 <sup>1</sup> / <sub>8</sub> ) in.	4,000 lb.	346 lb.
ANA-4-0-10	137 cm	243.8 cm	183.5 cm	20.3 cm	(254.3 – 330.5) cm	(234 – 310.2) cm	1,818 kg	kg
AHA-4-8-12	53 <sup>15</sup> / <sub>16</sub> in.	96 in.	72 <sup>1</sup> / <sub>4</sub> in.	8 in.	(122 <sup>1</sup> / <sub>8</sub> – 152 <sup>1</sup> / <sub>8</sub> ) in.	(114 <sup>1</sup> / <sub>8</sub> – 144 <sup>1</sup> / <sub>8</sub> ) in.	4,000 lb.	372 lb.
АПА-4-0-12	137 cm	243.8 cm	183.5 cm	20.3 cm	(310.2 – 386.4) kg	(289.9–366.1) cm	1,818 kg	kg
	53 <sup>15</sup> / <sub>16</sub> in.	120 in.	96 <sup>1</sup> / <sub>4</sub> in.	8 in.	$(76^{1}/_{8} - 106^{1}/_{8})$ in.	$(68^{1}/_{8} - 98^{1}/_{8})$ in.	4,000 lb.	339 lb.
AHA-4-10-8	137 cm	304.8 cm	244.5 cm	20.3 cm	(193.5 – 269.7) cm	(173.2 – 249.4) cm	1,818 kg	135.5 kg

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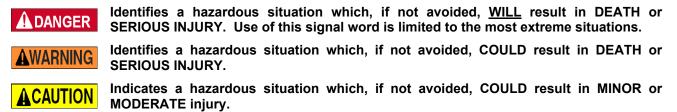
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AHA-4-10-10	53 <sup>15</sup> / <sub>16</sub> in.	120 in.	96 <sup>1</sup> / <sub>4</sub> in.	8 in.	$(100^{1}/_{8} - 130^{1}/_{8})$ in.	$(92^{1}/_{8} - 122^{1}/_{8})$ in.	4,000 lb.	348 lb.
	137 cm	304.8 cm	244.5 cm	20.3 cm	(254.3 - 330.5) cm	(234 - 310.2)  cm	1,818 kg	Kg
AHA-4-10-12	53 <sup>15</sup> / <sub>16</sub> in. 137 cm	120 in.	$96^{1}/_{4}$ in.	8 in.	$(122^{1}/_{8} - 152^{1}/_{8})$ in.	$(114^{1}/_{8} - 144^{1}/_{8})$ in.	4,000 lb.	390 lb.
	$53^{15}/_{16}$ in.	304.8 cm 144 in.	244.5 cm 120 <sup>1</sup> / <sub>4</sub> in.	20.3 cm 8 in.	(310.2 - 386.4) kg $(76^{3}/_{16} - 106^{3}/_{16})$ in.	(289.9-366.1) cm $(68^{1}/_{8}-98^{1}/_{8})$ in.	1,818 kg 4,000 lb.	Kg 353 lb.
AHA-4-12-8	137 cm	365.8 cm	305.4 cm	20.3 cm	(103.5 - 269.7) cm	(173.2 - 249.4) cm	4,000 lb. 1,818 kg	Kg
	$53^{15}/_{16}$ in.	144 in.	120 <sup>1</sup> / <sub>4</sub> in.	8 in.	$(100^{1}/_{8} - 130^{1}/_{8})$ in.	$(92^{1}/_{8} - 122^{1}/_{8})$ in.	4,000 lb.	366 lb.
AHA-4-12-10	137 cm	365.8 cm	305.4 cm	20.3 cm	(254.3 - 330.5) cm	(234 - 310.2) cm	1,818 kg	Kg
	$53^{15}/_{16}$ in.	144 in.	120 <sup>1</sup> / <sub>4</sub> in.	8 in.	$(122^{1}/_{8} - 152^{1}/_{8})$ in.	$(114^{1}/_{8} - 144^{1}/_{8})$ in.	4,000 lb.	391 lb.
AHA-4-12-12	137 cm	365.8 cm	305.4 cm	20.3 cm	(310.2 – 386.4) kg	(289.9–366.1) cm	1,818 kg	Kg
AHA-4-15-8	53 <sup>15</sup> / <sub>16</sub> in.	180 in.	156 <sup>1</sup> / <sub>4</sub> in.	10 in.	$(78^3/_{16} - 108^3/_{16})$ in.	$(68^{1}/_{8} - 98^{1}/_{8})$ in.	4,000 lb.	399 lb.
АПА-4-15-0	137 cm	457.2 cm	396.9 kg	25.4 cm	(198.6 – 274.8) cm	(173.2 – 249.4) cm	1,818 kg	Kg
AHA-4-15-10	53 <sup>15</sup> / <sub>16</sub> in.	180 in.	156 <sup>1</sup> / <sub>4</sub> in.	10 in.	$(102^{1}/_{8} - 132^{1}/_{8})$ in.	(92 <sup>1</sup> / <sub>8</sub> – 122 <sup>1</sup> / <sub>8</sub> ) in.	4,000 lb.	441 lb.
AIIA-4-10-10	137 cm	457.2 cm	396,9 kg	25.4 cm	(259.4 – 335.6) cm	(234 – 310.2) cm	1,818 kg	Kg
AHA-4-15-12	53 <sup>15</sup> / <sub>16</sub> in.	180 in.	156 <sup>1</sup> / <sub>4</sub> in.	10 in.	$(124^{1}/_{8} - 154^{1}/_{8})$ in.	$(114^{1}/_{8} - 144^{1}/_{8})$ in.	4,000 lb.	442 lb.
_	137 cm	457.2 cm	396.9 kg	25.4 cm	(315.3 – 391.5) kg	(289.9–366.1) cm	1,818 kg	Kg
AHA-6-8-8	64 <sup>11</sup> / <sub>16</sub> in.	96 in. 243.8 cm	72¹/₄ in. 183.5 cm	10 in.	(84 - 108) in. (213.4 – 274.3) cm	(74 – 98) in. (188 – 249) cm	6,000 lb. 2,727 kg	444 lb.
	164.3 cm 64 <sup>11</sup> / <sub>16</sub> in.	243.6 cm 96 in.	$72^{1}/_{4}$ in.	25.4 cm 10 in.	(108 - 132) in.	(188 – 249) čili (98 – 122) in.	2,727 kg 6,000 lb.	Kg 599 lb.
AHA-6-8-10	164.3 cm	243.8 cm	183.5 cm	25.4 cm	(100 - 132) m. (274.3 - 335.3) cm	(248.9 - 309.9) cm	2,727 kg	kg
	$64^{11}/_{16}$ in.	96 in.	$72^{1}/_{4}$ in.	10 in.	(132 - 156) in.	(122 – 146) in.	6,000 lb.	602 lb.
AHA-6-8-12	164.3 cm	243.8 cm	183.5 cm	25.4 cm	(335.3 – 396.2) cm	(309.9 – 370.8) cm	2,727 kg	kg
	$64^{11}/_{16}$ in.	120 in.	96 <sup>1</sup> / <sub>4</sub> in.	10 in.	(84 – 108) in.	(74 – 98) in.	6,000 lb.	476 lb.
AHA-6-10-8	164.3 cm	304.8 cm	244.5 cm	25.4 cm	(213.4 – 274.3) cm	(188.0 – 248.9) cm	2,727 kg	kg
AHA-6-10-10	64 <sup>11</sup> / <sub>16</sub> in.	120 in.	96¹/₄ in.	10 in.	(108 – 132) in.	(98 – 122) in.	6,000 lb.	494 lb.
ANA-0-10-10	164.3 cm	304.8 cm	244.5 cm	25.4 cm	274.3 – 335.3) cm	(248.9 – 309.9) cm	2,727 kg	kg
AHA-6-10-12	64 <sup>11</sup> / <sub>16</sub> in.	120 in.	96 <sup>1</sup> / <sub>4</sub> in.	10 in.	(132 - 156) in.	(122 – 146) in.	6,000 lb.	515 lb.
/	164.3 cm	304.8 cm	244.5 cm	25.4 cm	(335.3 – 396.2) cm	(309.9 – 370.8) cm	2,727 kg	kg
AHA-6-12-8	64 <sup>11</sup> / <sub>16</sub> in.	144 in.	120 <sup>1</sup> / <sub>4</sub> in.	12 in.	(86 – 110) in.	(74 – 98) in.	6,000 lb.	757 lb.
	164.3 cm 64 <sup>11</sup> / <sub>16</sub> in.	365.8 cm 144 in.	305.4 cm 120 <sup>1</sup> / <sub>4</sub> in.	30.5 kg 12 in.	(218.4 – 279.4) kg (110 – 134) in.	(188 – 249) cm (98 – 122) in.	2,727 kg 6,000 lb.	kg 775 lb.
AHA-6-12-10	164.3 cm	365.8 cm	305.4 cm	30.5 kg	(110 - 134) III. 279.4 – 340.4) cm	(98 - 122) III. (248.9 - 309.9) cm	2,727 kg	kg
	$64^{11}/_{16}$ in.	144 in.	$120^{1}/_{4}$ in.	12 in.	(134 – 158) in.	(122 – 146) in.	6,000 lb.	777 lb.
AHA-6-12-12	164.3 cm	365.8 cm	305.4 cm	30.5 kg	(340.4 – 401.3) kg	(309.9 – 370.8) cm	2,727 kg	kg
	64 <sup>11</sup> / <sub>16</sub> in.	180 in.	156 <sup>1</sup> / <sub>4</sub> in.	12 in.	(86 – 110) in.	(74 – 98) in.	6,000 lb.	856 lb.
AHA-6-15-8	164.3 cm	457.2 cm	396.9 kg	30.5 kg	(218.4 – 279.4) cm	(188 – 249) cm	2,727 kg	kg
AHA-6-15-10	64 <sup>11</sup> / <sub>16</sub> in.	180 in.	156 <sup>1</sup> / <sub>4</sub> in.	12 in.	(110 - 134) in.	(98 – 122) in.	6,000 lb.	874 lb.
AIIA-0-10-10	164.3 cm	457.2 cm	396.9 kg	30.5 kg	(279.4 – 340.4) cm	(248.9 – 309.9) cm	2,727 kg	kg
AHA-6-15-12	64 <sup>11</sup> / <sub>16</sub> in.	180 in.	156 <sup>1</sup> /₄ in.	12 in.	(134 – 158) in.	(122 – 146) in.	6,000 lb.	894 lb.
	164.3 cm	457.2 cm	396.9 kg	30.5 kg	(340.4 – 401.3) kg	(309.9 – 370.8) cm	2,727 kg	kg
A	diustable	Heiaht Alu	minum Ga	ntrv Cra	nes with Pneumati	c Casters (suffix -	-PNU)	
	53 <sup>3</sup> / <sub>4</sub> in.	96 in.	72 <sup>1</sup> / <sub>4</sub> in.	6 in.	(80 <sup>1</sup> / <sub>4</sub> - 110 <sup>1</sup> / <sub>4</sub> ) in.	(74 <sup>1</sup> / <sub>4</sub> - 104 <sup>1</sup> / <sub>4</sub> ) in.	1,500 lb.	268 lb.
AHA-15-8-8-PNU	136.5 cm		183.5 cm	15.2 cm	(203.8 – 280.0) cm	(188.6 – 264.8) cm	681.8 kg	kg
AHA-15-8-10-PNU	53 <sup>3</sup> /. in	96 in.	72 <sup>1</sup> / <sub>4</sub> in.	6 in.	$(104^{1}/_{4} - 134^{1}/_{4})$ in.	(98 <sup>1</sup> / <sub>4</sub> - 128 <sup>1</sup> / <sub>4</sub> ) in.	1,500 lb.	279 lb.
AHA-15-0-10-PNU	136.5 cm	243.8 cm	183.5 cm	15.2 cm	(264.8 – 341.0) cm	(249.6 – 325.8) cm	681.8 kg	kg
AHA-15-8-12-PNU	53 <sup>3</sup> / <sub>4</sub> in.	96 in.	72 <sup>1</sup> / <sub>4</sub> in.	6 in.	(126 <sup>1</sup> / <sub>4</sub> - 156 <sup>1</sup> / <sub>4</sub> ) in.	(120 <sup>1</sup> / <sub>4</sub> - 150 <sup>1</sup> / <sub>4</sub> ) in.	1,500 lb.	288 lb.
	130.5 Cm	243.8 cm	183.5 cm	15.2 cm	(320.7 – 396.8) cm	(305.4 - 381.6)  cm	681.8 kg	kg
AHA-15-10-8-PNU	$53^3/_4$ in.	120 in.	$96^{1}/_{4}$ in.	6 in.	$(80^{1}/_{4} - 110^{1}/_{4})$ in.	$(74^{1}/_{4} - 104^{1}/_{4})$ in.	1,500 lb.	275 lb.
	<u>136.5 cm</u> 53 <sup>3</sup> /₄ in.	304.8 cm 120 in.	244.5 cm 96 <sup>1</sup> / <sub>4</sub> in.	15.2 cm 6 in.	(203.8 - 280.0) cm $(104^{1}/_{4} - 134^{1}/_{4})$ in.	(188.6 - 264.8) cm $(98^{1}/_{4} - 128^{1}/_{4})$ in.	681.8 kg 1,500 lb.	kg 286 lb
AHA-15-10-10-PNL	J 53 /4 In. 136.5 cm		244.5 cm	15.2 cm	(104 / <sub>4</sub> - 134 / <sub>4</sub> ) m. (264.8 – 341.0) cm	(98 /4 - 128 /4) III. (249.6 – 325.8) cm	681.8 kg	286 lb. kg
	$53^{3}/.$ in	120 in.	96 <sup>1</sup> / <sub>4</sub> in.	6 in.	$(126^{1}/_{4} - 156^{1}/_{4})$ in.	$(120^{1}/_{4} - 150^{1}/_{4})$ in.	1,500 lb.	295 lb.
AHA-15-10-12-PNL	J 136.5 cm		244.5 cm	15.2 cm	(320.7 - 396.8) cm	(305.4 - 381.6) cm	681.8 kg	kg
	53 <sup>3</sup> /4 in	144 in.	120 <sup>1</sup> / <sub>4</sub> in.	8 in.	$(82^{1}/_{4} - 112^{1}/_{4})$ in.	(74 <sup>1</sup> / <sub>4</sub> - 104 <sup>1</sup> / <sub>4</sub> ) in.	1,500 lb.	297 lb.
AHA-15-12-8-PNU	136.5 cm		305.4 cm	20.3 cm	(208.9 – 285.1) cm	(188.6 – 264.8) cm	681.8 kg	kg
AHA-15-12-10-PNL	$53^3/_4$ in.	144 in.	120 <sup>1</sup> / <sub>4</sub> in.	8 in.	(106 <sup>1</sup> / <sub>4</sub> - 136 <sup>1</sup> / <sub>4</sub> ) in.	(98 <sup>1</sup> / <sub>4</sub> - 128 <sup>1</sup> / <sub>4</sub> ) in.	1,500 lb.	308 lb.
	136.5 CM		305.4 cm	20.3 cm	(269.9 – 346.1) cm	(249.6 – 325.8) cm	681.8 kg	kg
AHA-15-12-12-PNL	$J = \frac{53^3}{4}$ in.	144 in.	120 <sup>1</sup> / <sub>4</sub> in.	8 in.	$(128^{1}/_{4} - 158^{1}/_{4})$ in.	$(120^{1}/_{4} - 150^{1}/_{4})$ in.	1,500 lb.	317 lb.
	130.5 Cm		305.4 cm	20.3 cm	(325.8 - 402.0) cm	$(305.4 - 381.6)$ cm $(74^{1}/_{1} + 104^{1}/_{1})$ in	681.8 kg	kg
AHA-15-15-8-PNU	$53^3/_4$ in.	180 in.	156 <sup>1</sup> / <sub>4</sub> in.	8 in.	$(82^{1}/_{4} - 112^{1}/_{4})$ in.	$(74^{1}/_{4} - 104^{1}/_{4})$ in.	1,500 lb.	348 lb.
	53 <sup>3</sup> /4 in	457.2 cm 180 in.	396.9 kg 156 <sup>1</sup> / <sub>4</sub> in.	20.3 cm 8 in.	(208.9 – 285.1) cm (106 <sup>1</sup> / <sub>4</sub> - 136 <sup>1</sup> / <sub>4</sub> ) in.	(188.6 – 264.8) cm (98 <sup>1</sup> / <sub>4</sub> - 128 <sup>1</sup> / <sub>4</sub> ) in.	681.8 kg 1,500 lb.	kg 359 lb.
AHA-15-15-10-PNL	J 33 /4 In. 136.5 cm		396.9 kg	20.3 cm	(106 / <sub>4</sub> - 136 / <sub>4</sub> ) III. (269.9 – 346.1) cm	(98 /4 - 128 /4) III. (249.6 – 325.8) cm	681.8 kg	359 lb. kg
	$53^{3}/4$ in	180 in.	156 <sup>1</sup> / <sub>4</sub> in.	8 in.	$(128^{1}/_{4} - 158^{1}/_{4})$ in.	$(120^{1}/_{4} - 150^{1}/_{4})$ in.	1,500 lb.	368 lb.
AHA-15-15-12-PNU	J 136.5 cm		396.9 kg	20.3 cm	(325.8 - 402.0) cm	(305.4 - 381.6) cm	681.8 kg	kg
					(1===== 1 <b>0==</b> ; <b>0</b>	,,,,,		

AHA Option	Description
AHA-2/4-TLC	TOTAL LOCKING CASTERS (SET OF 4; ONLY FOR 2,000 & 4,000LB. CAPACITY MODELS)
AHA-PNU-RF	RETROFIT FOUR-WAY LOCKING PNEUMATIC CASTERS (1,500 POUND CAPACITY)
AHA-2/4-V	8IN. X 2IN. V-GROOVE WHEELS (SET OF 4; 2,000 & 4,000LB. CAPACITY MODELS ONLY)
AHA-2/4-V4	8IN. X 2IN. V-GROOVE WHEELS (SET OF 4 WITH 4-POSITION LOCK; ONLY FOR 2,000 & 4,000LB. CAPACITY MODELS)
AHA-KIT	(2) COME-ALONG FOR HEIGHT ADJUSTMENT ONLY

## Signal words:

This manual uses SIGNAL WORDS to indicate the likelihood of personal injuries, as well as the probable seriousness of those injuries, if the product is misused in the ways described. Other signal words call attention to uses of the product likely cause property damage. The signal words used appear below along with the meaning of each word:



**NOTICE** Identifies practices likely to result in product/property damage, such as operation that might damage the product.

## Safe use recommendations:

VESTIL strives to identify foreseeable hazards associated with the use of its products. However, material handling is inherently dangerous and no manual can address every conceivable risk. The end-user ultimately is responsible for exercising sound judgment at all times.

**ADANGER** Electrocution might result if the crane contacts electrified wires. Reduce the likelihood that an operator or bystander might be electrocuted by applying the following:

>DO NOT assemble or use the crane in an area where it might contact electrified wires.

> DO NOT *contact* electrified wires with the crane.

**AWARNING** Material handling is dangerous. Improper or careless operation might result in serious personal injuries. To reduce the risk of injury:

• Before using the crane, always inspect the usage area for conditions that might require special precautions.

• DO NOT use a structurally damaged/malfunctioning crane. ALWAYS inspect the crane before each use according to the inspection instructions on p. 21-22. DO NOT use the crane unless it passes every part of the prescribed inspection, i.e. do not use the crane if it is damaged.

• DO NOT attempt to lift a load that weighs more than the rated load of your crane model (see Table on p. 2-4; capacity labels on product; "Markings and labels" on p. 23).

• DO NOT stand beneath or travel under the crane if a load is suspended, and DO NOT permit any person to stand beneath, or walk/stand under, the load.

• Inform all persons in the area that you are going to use the crane; instruct them to stay clear of the crane and the supported load during operation.

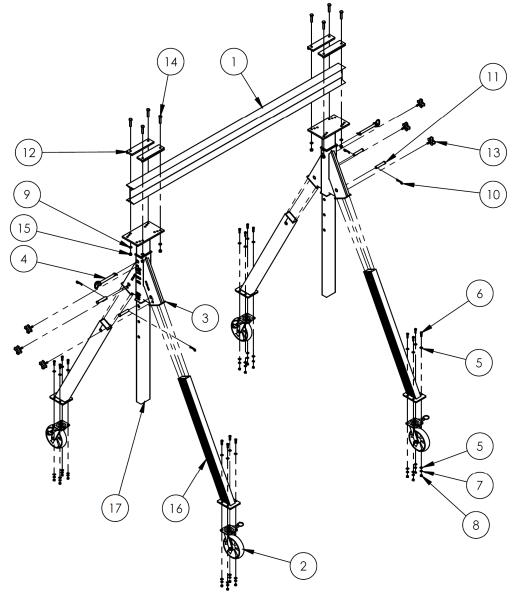
• DO NOT allow people to ride on the load or climb on the crane.

• ALWAYS load the crane according to "Proper loading" recommendations on p. 21. Failure to properly load the crane might cause the load to swing as it rises. A swinging load might cause serious injury.

• DO NOT use the crane if any label (see p. 23) is unreadable, damaged, or missing. Contact Vestil for replacement label(s) as needed.

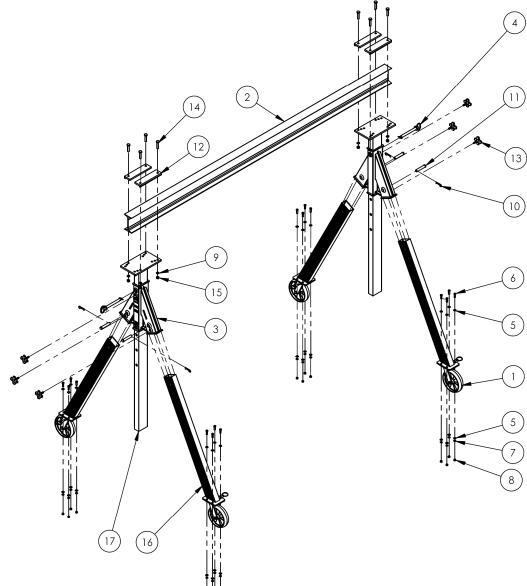
• DO NOT use the crane to transport loads. ONLY use the crane to lift loads!

## FIG. 1: Adjustable Height Aluminum Gantry Crane models AHA-2-8-8, AHA-2-8-10, & AHA-2-8-12



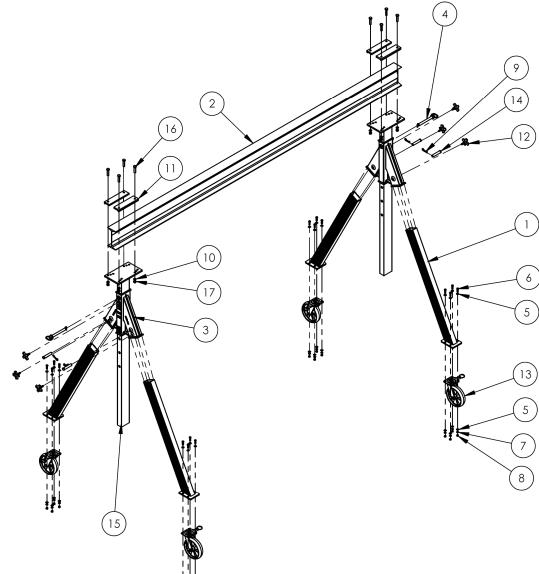
Item no.	Part no.	Description	Quantity
1	28-014-986-001	6in. (H) x 3.314 in. (W) x 96 in. (L) inch aluminum I-beam	1
2	GFN-8/2-S-4PSL (16-132-249)	Glass filled nylon 4-position swivel locking caster	4
3	28-014-190	Casting, aluminum 2k yoke	2
4	28-112-007	Pin, retaining, ¾ in. x 6 in. usable length	2
5	33082	<sup>3</sup> / <sub>8</sub> in. zinc plated SAE flat washer	32
6	11107	<sup>3</sup> / <sub>8</sub> in. – 16 x 1¼ HHCS #2 zinc-plated bolt	16
7	33622	<sup>3</sup> / <sub>8</sub> in. zinc plated lock washer	16
8	36106	<sup>3</sup> / <sub>8</sub> in. – 16 zinc plated hex nut	16
9	33626	1/2 in. zinc-plated lock washer	8
10	45286	$^{1}/_{8}$ in. x $2^{5}/_{8}$ in. #11 hitch pin clip	4
11	33-112-034	Pin, clevis, $\frac{3}{4}$ in. x $\frac{3}{2}$ in. usable length	4
12	28-516-054	I-beam clamp weldment	4
13	08-025-007	Knob, ${}^{3}/_{8}$ in. – 16 UNC THD x 1 ${}^{1}/_{4}$ long	6
14 & 15	11134585	Structural nut and bolt combo: ½ in. – 13 x 2½ in. A325 galvanized ½ in. – 13 A325 galvanized	8
16	28-514-220	2k leg tube weldment	4
		Adjustable upright weldment: (when ordering replacements, only sold as a pair)	
17	28-514-227	AHÁ-2-8-8	2
	28-514-228	AHA-2-8-10	2
	28-514-229	AHA-2-8-12	2

FIG. 2: Adjustable Height Aluminum Gantry Crane models AHA-2-10-8, AHA-2-10-10, & AHA-2-10-12



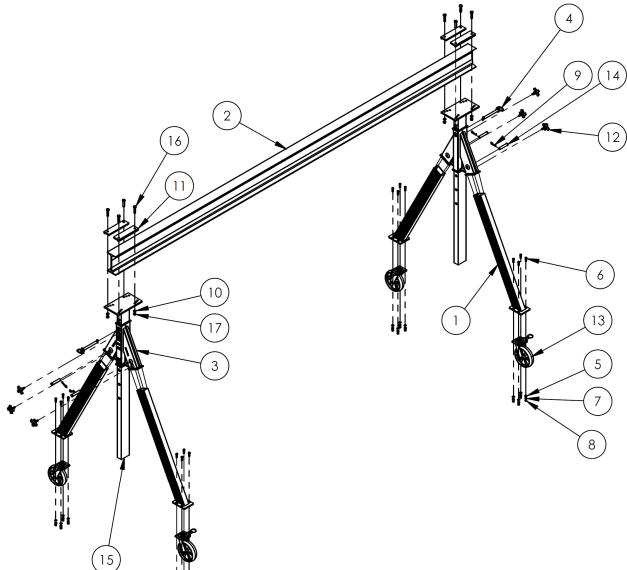
Item no.	Part no.	Description	Quantity
1	GFN-8/2-S-4PSL (16-132-249)	Glass filled nylon 4-position swivel locking caster	4
2	28-014-986-002	6in. (H) x 3.314 in. (W) x 120 in. (L) inch aluminum I-beam	1
3	28-014-190	Casting, aluminum 2k yoke	2
4	28-112-007	Pin, retaining, ¾ in. x 6 in. usable length	2
5	33082	<sup>3</sup> / <sub>8</sub> in. zinc plated SAE flat washer	32
6	11107	<sup>3</sup> / <sub>8</sub> in. – 16 x 1¼ HHCS #2 zinc-plated bolt	16
7	33622	<sup>3</sup> / <sub>8</sub> in. zinc plated lock washer	16
8	36106	<sup>3</sup> / <sub>8</sub> in. – 16 zinc plated hex nut	16
9	33626	1/2 in. zinc-plated lock washer	8
10	45286	$^{1}$ / <sub>8</sub> in. x 2 <sup>5</sup> / <sub>8</sub> in. #11 hitch pin clip	4
11	33-112-034	Pin, clevis, $\frac{3}{4}$ in. x $\frac{3}{2}$ in. usable length	4
12	28-516-054	I-beam clamp weldment	4
13	08-025-007	<sup>3</sup> / <sub>8</sub> in. – 16 UNC threaded knob, TT-18-PED	6
14 & 15	11134585	$\frac{1}{2}$ in. – 13 x 2 $\frac{1}{2}$ in.A325 galvanized structural nut & bolt combo $\frac{1}{2}$ in. – 13 A325 galvanized structural nut & bolt combo	8
16	28-514-220	2k leg tube weldment	4
17	28-514-227 28-514-228 28-514-229	Adjustable upright weldment: (when ordering replacements, only sold as a pair) AHA-2-10-8 AHA-2-10-10 AHA-2-10-12	2 2 2

FIG. 3: Adjustable Height Aluminum Gantry Crane models AHA-2-12-8, AHA-2-12-10, & AHA-2-12-12



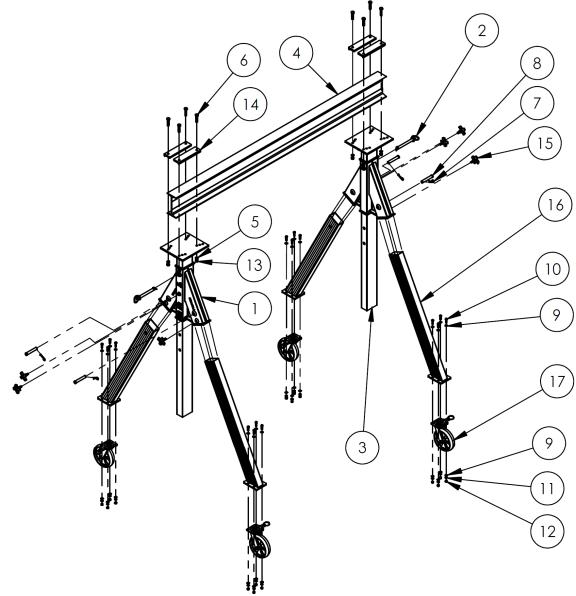
ltem no.	Part no.	Description	Quantity
1	28-514-220	2k leg tube weldment	4
2	28-014-987-002	8 in. (H) x 4 in. (W) x 144 in. (L) aluminum I-beam	1
3	28-014-190	Casting, aluminum 2k yoke	2
4	28-112-007	Pin, retaining ¾ in. x 6 in. usable length	2
5	33082	<sup>3</sup> / <sub>8</sub> in. zinc plated SAE flat washer	32
6	11107	<sup>3</sup> / <sub>8</sub> in. – 16 x 1¼ HHCS #2 zinc-plated bolt	16
7	33622	<sup>3</sup> / <sub>8</sub> in. zinc plated lock washer	16
8	36106	<sup>3</sup> / <sub>8</sub> in. – 16 zinc plated hex nut	16
9	45286	$^{1}$ / <sub>8</sub> in. x 2 <sup>5</sup> / <sub>8</sub> in. #11 hitch pin clip	4
10	33626	1/2 in. zinc-plated lock washer	8
11	28-516-054	I-beam clamp weldment	4
12	08-025-007	<sup>3</sup> / <sub>8</sub> in. – 16 UNC threaded knob, TT-18-PED	6
13	GFN-8/2-S-4PSL (16-132-249)	Glass filled nylon 4-position swivel locking caster	4
14	33-112-034	Pin, clevis, $\frac{3}{4}$ in. x $\frac{3}{2}$ in. usable length	4
		Adjustable upright weldment: (when ordering replacements, only sold as a pair)	
15	28-514-227	AHA-2-12-8	2
	28-514-228	AHA-2-12-10	2
	28-514-229	AHA-2-12-12	2
16 & 17	11134585	$\frac{1}{2}$ in. – 13 x 2 $\frac{1}{2}$ in.A325 galvanized structural nut & bolt combo $\frac{1}{2}$ in. – 13 A325 galvanized structural nut & bolt combo	8

FIG. 4: Adjustable Height Aluminum Gantry Crane models AHA-2-15-8, AHA-2-15-10, & AHA-2-15-12



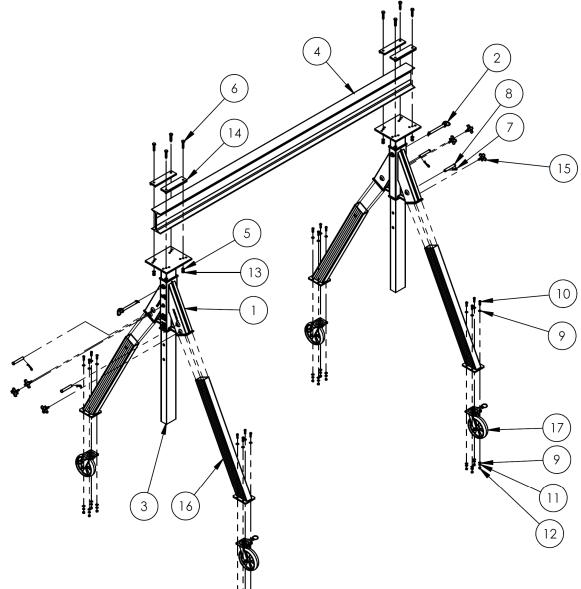
ltem no.	Part no.	Description	Quantity
1	28-514-220	2k leg tube weldment	4
2	28-014-988-004	8 in. (H) x 4.17 in. (W) x 180 in. (L) aluminum I-beam	1
3	28-014-190	Casting, aluminum 2k yoke	2
4	28-112-007	Retaining, pin, ¾ in. x 6 in. usable length	2
5	33082	<sup>3</sup> / <sub>8</sub> in. zinc plated SAE flat washer	32
6	11107	<sup>3</sup> / <sub>8</sub> in. – 16 x 1¼ HHCS #2 zinc-plated bolt	16
7	33622	<sup>3</sup> / <sub>8</sub> in. zinc plated lock washer	16
8	36106	<sup>3</sup> / <sub>8</sub> in. – 16 zinc plated hex nut	16
9	45286	$^{1}$ / <sub>8</sub> in. x 2 <sup>5</sup> / <sub>8</sub> in. #11 hitch pin clip	4
10	33626	1/2 in. zinc-plated lock washer	8
11	28-516-054	I-beam clamp weldment	4
12	08-025-007	<sup>3</sup> / <sub>8</sub> in. – 16 UNC threaded knob, TT-18-PED	6
13	GFN-8/2-S-4PSL (16-132-249)	Glass filled nylon 4-position swivel locking caster	4
14	33-112-034	Pin, clevis, $\frac{3}{4}$ in. x $\frac{3}{2}$ in. usable length	4
		Adjustable upright weldment: (when ordering replacements, only sold as a pair)	
15	28-514-227	AHA-2-15-8	2
	28-514-228	AHA-2-15-10	2
	28-514-229	AHA-2-15-12	2
16 & 17	11134585	$\frac{1}{2}$ in. – 13 x 2 $\frac{1}{2}$ in.A325 galvanized structural nut & bolt combo $\frac{1}{2}$ in. – 13 A325 galvanized structural nut & bolt combo	8

FIG. 5: Adjustable Height Aluminum Gantry Crane models AHA-4-8-8, AHA-4-8-10, & AHA-4-8-12



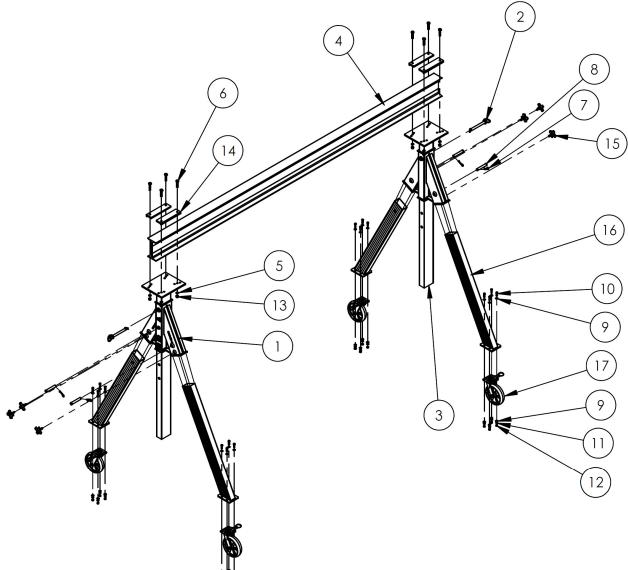
Item no.	Part no.	Description	Quantity
1	28-014-272	Aluminum 4k gantry casting	2
2	28-112-007	Retaining, pin, ¾ in. x 6 in. usable length	2
		Adjustable upright weldment: (when ordering replacements, only sold as a pair)	
3	28-514-230	AHA-4-8-8	2
	28-514-231	AHA-4-8-10	2
	28-514-232	AHA-4-8-12	2
4	28-014-987-001	8 in. (H) x 4 in. (W) x 96 in. (L) aluminum I-beam	1
5	33626	1/2 in. zinc-plated lock washer	8
6 & 13	11134585	$\frac{1}{2}$ in 13 x 2 $\frac{1}{2}$ in.A325 galvanized structural nut & bolt combo $\frac{1}{2}$ in 13 A325 galvanized structural nut & bolt combo	8
7	45286	$^{1}/_{8}$ in. x 2 <sup>5</sup> / <sub>8</sub> in. #11 hitch pin clip	4
8	28-112-031	Pin, clevis, $\frac{3}{4}$ in. x $4^{1}/_{4}$ in. usable length	4
9	33082	<sup>3</sup> / <sub>8</sub> in. zinc plated SAE flat washer	32
10	11107	<sup>3</sup> / <sub>8</sub> in. – 16 x 1¼ HHCS #2 zinc-plated bolt	16
11	33622	<sup>3</sup> / <sub>8</sub> in. zinc plated lock washer	16
12	36106	$^{3}$ / <sub>8</sub> in. – 16 zinc plated hex nut	16
14	28-516-054	I-beam clamp weldment	4
15	08-025-007	<sup>3</sup> / <sub>8</sub> in. – 16 UNC threaded knob, TT-18-PED	6
16	28-514-221	4k leg tube weldment	4
17	GFN-8/2-S-4PSL (16-132-249)	Glass filled nylon 4-position swivel locking caster	4

FIG. 6: Adjustable Height Aluminum Gantry Crane models AHA-4-10-8, AHA-4-10-10, & AHA-4-10-12



Item no.	Part no.	Description	Quantity
1	28-014-272	Aluminum 4k gantry casting	2
2	28-112-007	Pin, retaining, <sup>3</sup> / <sub>4</sub> in. x 6 in. usable length	2
3	28-514-230	Adjustable upright weldment: (when ordering replacements, only sold as a pair) AHA-4-8-8	2
5	28-514-230 28-514-231 28-514-232	AHA-4-8-10 AHA-4-8-12	2 2
4	28-014-988-001	8 in. (H) 4.17 in. (W) x 120 in. (L) aluminum I-beam	1
5	33626	1/2 in. zinc-plated lock washer	8
6 & 13	11134585	$\frac{1}{2}$ in. – 13 x 2 $\frac{1}{2}$ in.A325 galvanized structural nut & bolt combo $\frac{1}{2}$ in. – 13 A325 galvanized structural nut & bolt combo	8
7	45286	$^{1}/_{8}$ in. x 2 <sup>5</sup> / <sub>8</sub> in. #11 hitch pin clip	4
8	28-112-031	Pin, clevis, $\frac{3}{4}$ in. x $4^{1}/_{4}$ in. usable length	4
9	33082	<sup>3</sup> / <sub>8</sub> in. zinc plated SAE flat washer	32
10	11107	<sup>3</sup> / <sub>8</sub> in. – 16 x 1¼ HHCS #2 zinc-plated bolt	16
11	33622	<sup>3</sup> / <sub>8</sub> in. zinc plated lock washer	16
12	36106	<sup>3</sup> / <sub>8</sub> in. – 16 zinc plated hex nut	16
14	28-516-054	I-beam clamp weldment	4
15	08-025-007	<sup>3</sup> / <sub>8</sub> in. – 16 UNC threaded knob, TT-18-PED	6
16	28-514-221	4k leg tube weldment	4
17	GFN-8/2-S-4PSL (16-132-249)	Glass filled nylon 4-position swivel locking caster	4

FIG. 7: Adjustable Height Aluminum Gantry Crane models AHA-4-12-8, AHA-4-12-10, & AHA-4-12-12

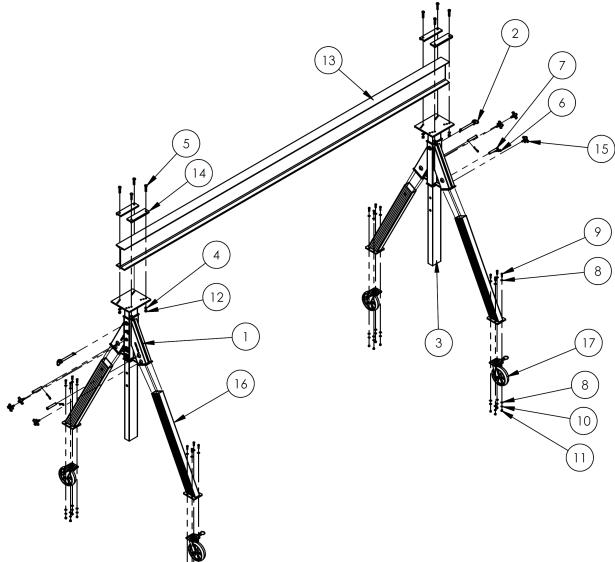


Item no.	Part no.	Description	Quantity
1	28-014-272	Aluminum 4k gantry casting	2
2	28-112-007	Pin, retaining, <sup>3</sup> / <sub>4</sub> in. x 6 in. usable length	2
		Adjustable upright weldment: (when ordering replacements, only sold as a pair)	
3	28-514-230	AHA-4-12-8	2
	28-514-231	AHA-4-12-10	2
	28-514-232	AHA-4-12-12	2
4	28-014-988-002	8in. (H) x 4.17in. (W) x 144in. (L) aluminum I-beam	1
5	33626	1/2 in. zinc-plated lock washer	8
6 & 13	11134585	$\frac{1}{2}$ in. – 13 x 2 $\frac{1}{2}$ in.A325 galvanized structural nut & bolt combo $\frac{1}{2}$ in. – 13 A325 galvanized structural nut & bolt combo	8
7	45286	$^{1}/_{8}$ in. x 2 <sup>5</sup> / <sub>8</sub> in. #11 hitch pin clip	4
8	28-112-031	Pin, clevis, $\frac{3}{4}$ in. x $\frac{4^{1}}{4}$ in. usable length	4
9	33082	<sup>3</sup> / <sub>8</sub> in. zinc plated SAE flat washer	32
10	11107	<sup>3</sup> / <sub>8</sub> in. – 16 x 1¼ HHCS #2 zinc-plated bolt	16
11	33622	<sup>3</sup> / <sub>8</sub> in. zinc plated lock washer	16
12	36106	<sup>3</sup> / <sub>8</sub> in. – 16 zinc plated hex nut	16
13	11134585	1/2 in. – 13 A325 galvanized structural nut & bolt combo	8
14	28-516-054	I-beam clamp weldment	4
15	08-025-007	<sup>3</sup> / <sub>8</sub> in. – 16 UNC threaded knob, TT-18-PED	6
16	28-514-221	4k leg tube weldment	4
17	GFN-8/2-S-4PSL (16-132-249)	Glass filled nylon 4-position swivel locking caster	4

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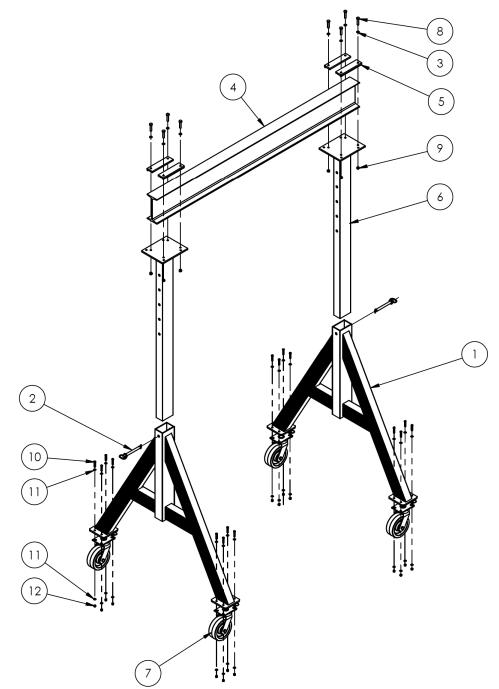
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FIG. 8: Adjustable Height Aluminum Gantry Crane models AHA-4-15-8, AHA-4-15-10, & AHA-4-15-12



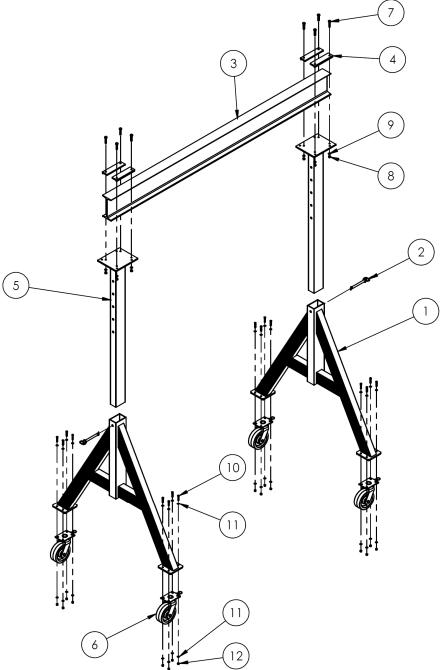
Item no.	Part no.	Description	Quantity
1	28-014-272	Aluminum 4k gantry casting	2
2	28-112-007	Pin, retaining, ¾ in. x 6 in. usable length	2
		Adjustable upright weldment: (when ordering replacements, only sold as a pair)	
3	28-514-230	AHA-4-15-8	2
	28-514-231	AHA-4-15-10	2
	28-514-232	AHA-4-15-12	2
4	33626	1/2 in. zinc-plated lock washer	8
5 & 12	11134585	$\frac{1}{2}$ in. – 13 x 2 $\frac{1}{2}$ in.A325 galvanized structural nut & bolt $\frac{1}{2}$ in. – 13 A325 galvanized structural nut & bolt	8
6	45286	$^{1}$ / <sub>8</sub> in. x 2 <sup>5</sup> / <sub>8</sub> in. #11 hitch pin clip	4
7	28-112-031	Pin, clevis, <sup>3</sup> / <sub>4</sub> in. x 4 <sup>1</sup> / <sub>4</sub> in. usable length	4
8	33082	<sup>3</sup> / <sub>8</sub> in. zinc plated SAE flat washer	32
9	11107	<sup>3</sup> / <sub>8</sub> in. – 16 x 1¼ HHCS #2 zinc-plated bolt	16
10	33622	<sup>3</sup> / <sub>8</sub> in. zinc plated lock washer	16
11	36106	$^{3}$ / <sub>8</sub> in. – 16 zinc plated hex nut	16
13	28-014-236	10 in. (H) x 4.66 in. (W) x 180 in. (L) aluminum I-beam	1
14	28-516-054	I-beam clamp weldment	4
15	08-025-007	<sup>3</sup> / <sub>8</sub> in. – 16 UNC threaded knob, TT-18-PED	6
16	28-514-221	4k leg tube weldment	4
17	GFN-8/2-S-4PSL (16-132-249)	Glass filled nylon 4-position swivel locking caster	4

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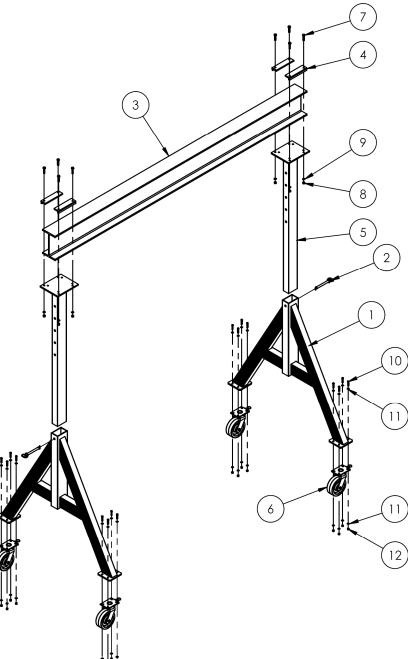
ltem no.	Part no.	Description	Quantity
1	28-514-189	Leg set weldment	2
2	28-112-007	Pin, retaining, ¾ in. x 6 in. usable length	2
3	33626	1/2 in. zinc-plated lock washer	8
4	28-014-355	10 in.(H) x 4.66 in. (W) x 96 in. (L) aluminum I-beam	1
5	28-516-054	I-beam clamp weldment	4
		Adjustable upright weldment: (when ordering replacements, only sold as a pair)	
6	28-514-233	AHA-6-8-8	2
	28-514-234	AHA-6-8-10	2
28-514-235		AHA-6-8-12	2
7	PH-F-8/3-S-4PSL (16-132-064)	8in. x 3in. phenolic 4-way swivel lock caster	4
8&9	11134585-B	$\frac{1}{2}$ in. – 13 x 2 $\frac{1}{2}$ in. A325 galvanized structural nut & bolt $\frac{1}{2}$ in13 A325 galvanized structural nut & bolt	8
10	11109	$^{3}$ / <sub>8</sub> in. – 16 x 1 <sup>1</sup> / <sub>2</sub> in. HHCS #2 zinc-plated bolt	16
11	33008	<sup>3</sup> / <sub>8</sub> in. USS zinc-plated flat washer	32
12	37024	<sup>3</sup> / <sub>8</sub> in. nylock insert nut	

FIG. 10: Adjustable Height Aluminum Gantry Crane models AHA-6-10-8, AHA-6-10-10, & AHA-6-10-12



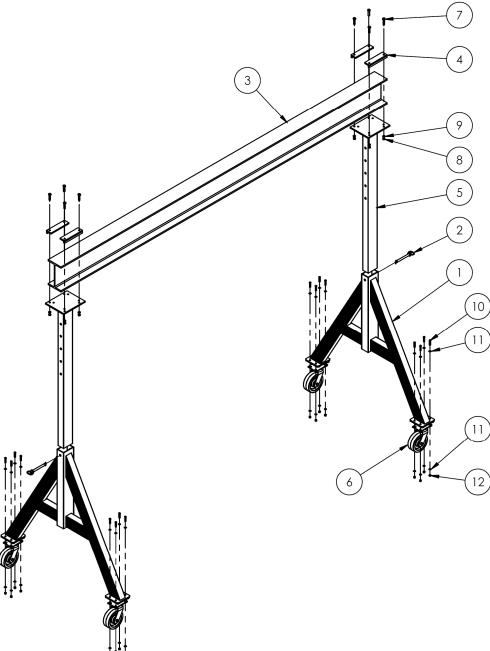
ltem no.	Part no.	Description	Quantity
1	28-514-189	Frame, leg set weldment	2
2	28-112-007	Pin, retaining, <sup>3</sup> / <sub>4</sub> in. x 6 in.	2
3	28-014-356	10 in. (H) x 4.66 in. (W) x 120 in. (L) aluminum I-beam	1
4	28-516-054	I-beam clamp weldment	4
5	28-514-233 28-514-234 28-514-235	Adjustable upright weldment: (when ordering replacements, only sold as a pair) AHA-6-10-8 AHA-6-10-10 AHA-6-10-12	2 2 2
6	PH-F-8/3-S-4PSL (16-132-064)	8in. x 3in. phenolic 4-way swivel lock caster	4
7&8	11134585	$\frac{1}{2}$ in. – 13 x 2 $\frac{1}{2}$ in. A325 galvanized structural nut & bolt $\frac{1}{2}$ in13 A325 galvanized structural nut & bolt	8
9	33626	1/2 in. zinc-plated lock washer	8
10	11109	$^{3}$ / <sub>8</sub> in. – 16 x 1 <sup>1</sup> / <sub>2</sub> in. HHCS #2 zinc-plated bolt	16
11	33008	<sup>3</sup> / <sub>8</sub> in. USS zinc-plated flat washer	32
12	37024	<sup>3</sup> / <sub>8</sub> in. nylock insert nut	16

FIG. 11: Adjustable Height Aluminum Gantry Crane models AHA-6-12-8, AHA-6-12-10, & AHA-6-12-12



ltem no.	Part no.	Description	Quantity
1	28-514-189	Leg set weldment	2
2	28-112-007	Pin, retaining, ¾ in. x 6 in. usable length	2
3	28-014-357	12 in. (H) x 7 in. (W) x 144 in. (L) heavy duty aluminum I-beam	1
4	28-516-061	I-beam clamp weldment	4
5	28-514-233	Adjustable upright weldment: (when ordering replacements, only sold as a pair) AHA-6-12-8	2
	28-514-234 28-514-235	AHA-6-12-10 AHA-6-12-12	2 2
6	PH-F-8/3-S-4PSL (16-132-064)	8in. x 3in. phenolic, 4-way, swivel-lock caster	4
7&8	11134585	<sup>1</sup> / <sub>2</sub> in. – 13 x 2 <sup>1</sup> / <sub>2</sub> in. A325 galvanized structural nut & bolt <sup>1</sup> / <sub>2</sub> in13 A325 galvanized structural nut & bolt	8
9	33626	1/2 in. zinc-plated lock washer	8
10	11109	$^{3}$ / <sub>8</sub> in. – 16 x 1 <sup>1</sup> / <sub>2</sub> in. HHCS #2 zinc-plated bolt	16
11	33008	<sup>3</sup> / <sub>8</sub> in. USS zinc-plated flat washer	32
12	37024	<sup>3</sup> / <sub>8</sub> in. nylock insert nut	16

FIG. 12: Adjustable Height Aluminum Gantry Crane models AHA-6-15-8, AHA-6-15-10, & AHA-6-15-12



ltem no.	Part no.	Description	Quantity
1	28-514-189	Leg set weldment	2
2	28-112-007	Pin, retaining, ¾ in. x 6 in. usable length	2
3	28-014-358	12 in. (H) x 7 in. (W) x 180 in. (L) heavy duty aluminum I-beam	1
4	28-516-061	I-beam clamp weldment	4
5	28-514-233 28-514-234 28-514-235	Adjustable upright weldment: (when ordering replacements, only sold as a pair) AHA-6-15-8 AHA-6-15-10 AHA-6-15-12	2 2 2
6	PH-F-8/3-S-4PSL (16-132-064)	8in. x 3in. phenolic, 4-way, swivel-lock caster	4
7&8	11134585	1/2 in. – 13 x 21/2 in. A325 galvanized structural nut & bolt 1/2 in13 A325 galvanized structural nut & bolt	8
9	33626	1/2 in. zinc-plated lock washer	8
10	11111	<sup>3</sup> / <sub>8</sub> in. USS zinc-plated flat washer	16
11	33008	<sup>3</sup> / <sub>8</sub> in13 zinc-plated hex nut	32
12	37024	$^{3}$ / <sub>8</sub> in. – 16 x 1 <sup>1</sup> / <sub>2</sub> in. HHCS #2 zinc-plated bolt	16

## Assembly instructions:

**AWARNING** If the crane is improperly assembled, it might malfunction and result in serious personal injuries. Read this instruction manual in its entirety before assembling the crane; only assemble the crane if you fully understand both the associated risks and the manufacturer-approved assembly procedure discussed below.

- Failure to apply the assembly procedure described in Steps 1-8 below constitutes misuse of the product.
- ONLY qualified personnel should assemble the crane.

• **DO NOT** modify the crane in any way. Unauthorized modifications automatically void the limited warranty (see p. 25) and might make the crane unsafe to use.

• **DO NOT** use the crane if you notice damage to, or deformation of, the beam, uprights, or any part of the leg assemblies. Using the crane despite weakness of a structural component could result in crane collapse.

• **DO NOT** use the crane if any of the hardware (bolts, nuts, clamps, etc.) is damaged or missing. Contact Vestil to order replacement parts.

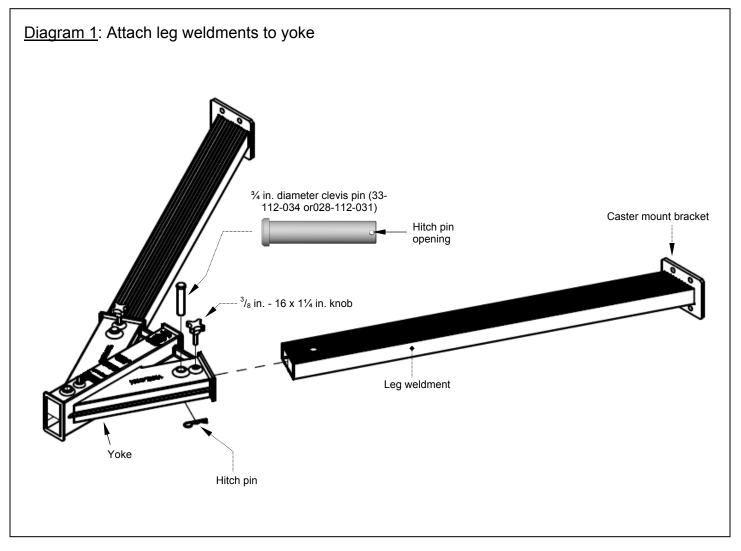
• **DO NOT** use the crane if any of the casters are damaged. A damaged caster may cause the crane to tip over, and the possibility that the crane will tip increases while it is used to hoist or support a load.

## NOTICE

- Modifying the crane in any way automatically voids the limited warranty.
- This crane can be used outdoors. However, it should be sheltered from the weather when not in use.
- Inspect the crane for damage before each use.

Step 1: [2,000 lb. (AHA-2-#-#) and 4,000 lb. (AHA-4-#-#) models only] Attach the leg weldments and yokes

Insert the end of each leg into one of the leg openings in the yoke as shown below. Fasten the legs to the yoke with clevis pins (33-112-034 or 28-112-031) and secure the clevis pins with hitch pins. Wind a knob into the yoke until the end of the knob presses firmly against the leg.

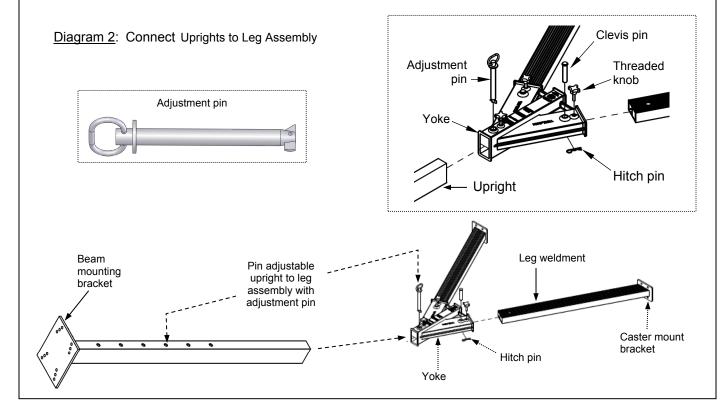


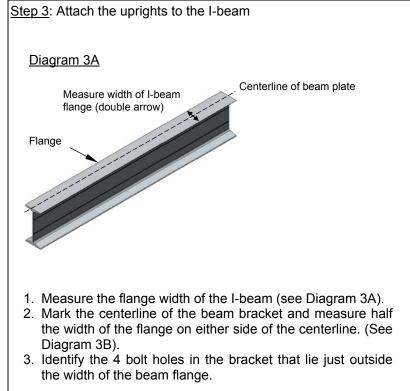
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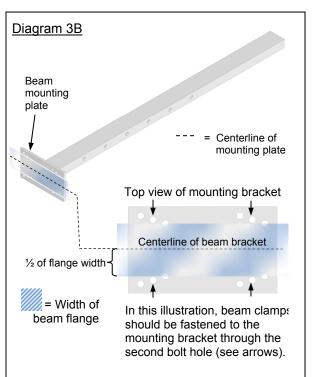
<u>Step 2</u>: [NOTE: If you ordered a "Come-along" kit, perform Step 8 on p. 21 first.] Fasten uprights to leg assemblies (AHA-6-#-# series; 6,000 lb. capacity models) or yokes (2,000 lb. and 4,000 lb. models).

Insert the uprights into the receivers of the leg assemblies or yokes. Align the 3<sup>rd</sup> pinhole in each upright with the pinhole in the leg receivers as is depicted in Diagram 2 below.

Pin each adjustable upright to a leg assembly through the same (3<sup>rd</sup>) pinhole with adjustment pins (see Diagram 2A below as well as the exploded parts diagrams on p. 5-16).

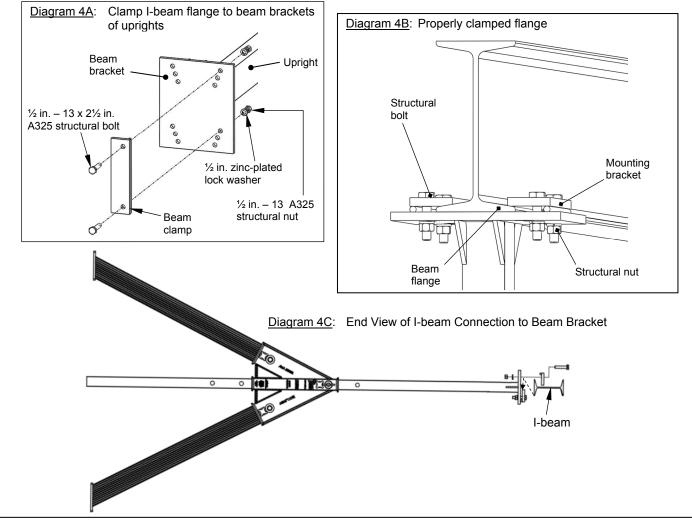






<u>Step 4</u>: Fasten the I-beam to the uprights.

- a. As shown in Diagram 4A, insert  $\frac{1}{2}$ in. structural bolts through the bolt holes of a beam clamp and through the selected bolt holes in the beam bracket. Then, slide a lock washer onto each bolt and secure the bolts with  $\frac{1}{2}$ in. structural nuts. Do not fully tighten the nuts at this point.
- b. As shown in Diagram 4C, insert the flange of the I-beam into the gap between the beam clamp and the beam bracket; then install another beam clamp on the other side of the beam to secure the flange on both sides. Diagram 4B shows



<u>Step 5</u>: Make sure that the I-beam is centered on both beam plates and that the beam clamps significantly overlap the flange on both sides. Tighten the nuts to 50 - 52 ft·lb of torque.

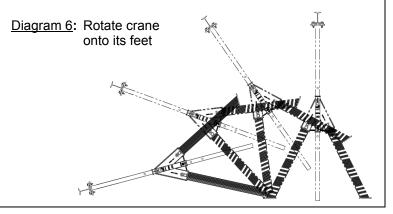
Step 6: Stand the crane on its feet.

Rotate the crane onto its feet in a *controlled* manner. [For instance, attach a hoist chain to the I-beam and then *slowly* raise the beam until the crane rotates to stand on its feet. Alternatively, raise the crane with a fork truck. Position the forks under the beam and slowly raise it until the crane rotates onto its feet.]

Approach the crane with a fork truck from this side, and slide the forks under the I-beam.

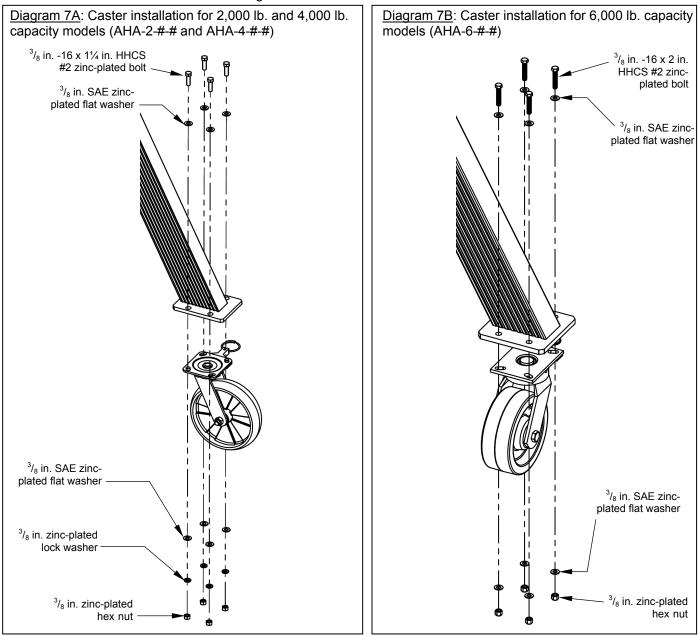
Slowly raise the beam while slowly driving forward until the crane stands on its feet.

**WARNING** DO NOT raise the beam unless all other persons have moved to a location away from and behind the fork truck.

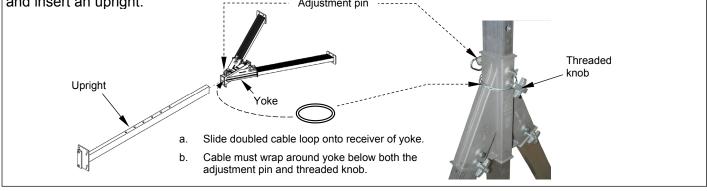


## <u>Step 7</u>: Connect the casters to the legs.

Attach a caster to each caster bracket of each leg using the hardware shown in Diagrams 7A & 7B (diagrams show standard casters). Raise the crane 8 to 10 inches off of the ground with a fork lift or hoist. Position a caster underneath each foot as shown in the diagram below and fasten it to the caster mount bracket.



<u>Step 8</u>: If you have a "Come-Along" kit used to adjust the height of the crane, install the cable loops before inserting the uprights into the receivers (of the yokes). Twist the cable loops into an "8" and fold the top of the 8 over onto the bottom part of the 8 (this will double loop the cable). Slide the doubled loop around the receiver and insert an upright.



## Use instructions:

<u>NOTE</u>: Before using the crane for the first time, perform the "Initial Inspection" described on p. 21 below.

**AWARNING** Crane operators are responsible for operating the crane in a safe manner. To reduce the likelihood of serious personal injuries or death resulting as a consequence of negligent operation:

• Only use this crane if you are qualified and trained to use it. The operating instructions in this manual *supplement* safe crane and hoist operation practices learned during your training program.

• ALWAYS apply the safe material handling practices learned from your training program.

• All personnel not participating in the use of the crane must stay out of the area during use. Be certain no part of any person or object is under any part of the boom (I-beam) or the suspended load at any time and particularly before lowering it. Instruct all persons to remain at a safe distance during operation.

• Always carefully watch the boom and any load hanging from it while using the crane.

- Always follow the hoist and trolley manufacturers' instructions regarding proper use of their products.
- BEFORE the load is connected to the hoist, lock or immobilize the casters (for instance with chocks).

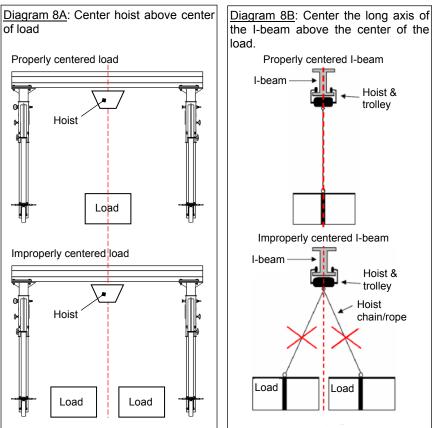
• DO NOT use the crane and notify your supervisor and authorized maintenance personnel if: 1) you observe any damage or hear unusual noise during operation; or 2) you observe any warping or deformation of the beam, the adjustable uprights, the load hook or chain/cable.

## Proper loading:

Position the trolley and hoist directly above the load. Center the trolley and hoist above the center of the load and position the long axis of the I-beam above the center of the load. Proper positioning is illustrated in Diagrams 8A & 8B.

Connect the load to the hoist chain/cable, according to the instructions supplied with your hoist and the method applied at your work site; then raise the load <u>only</u> as high as is necessary to position it. Once the load is properly centered above the work location, lower the load until it is fully supported by the ground or work surface and disconnect the load from the hoist. Return the crane to its storage locations.

If you must move the load to a different location, return the load to the ground or other supporting surface, e.g. pallet, and disconnect it from the hoist. **Move the crane and load separately to the work location. Only use the crane to** <u>lift</u> loads.



## Inspections and maintenance:

Owner(s)/end-user(s) of the crane should apply Occupational Safety and Health Administration (OSHA) crane inspection procedures (see 29 CFR 1910.179 by visiting http://www.osha.gov/ and navigate to "Regulations"; then to "General Industry" standards, section 1910.179. However, the end-user should realize that occupational safety and health laws and regulations of the state where the crane is used, rather than federal OSHA regulations, are controlling authority). Inspections are classified according to the intervals at which inspection should be performed. The identity of the components to be inspected and the degree to which those components wear, deteriorate, or malfunction determine how frequently you must inspect the crane. 29 CFR 1910.179(j) describes the various inspections the end user is responsible for performing on this crane:

1. <u>Initial inspection</u> — before a new or modified crane may be used for the first time, it must be inspected to insure normal condition. Conduct a "Frequent inspection" as described next.

## After the first use, the crane end-user/owner must conduct the following 2 types of inspection:

2. Frequent inspection [29 CFR 1910.179(j)(1)(ii)(a)] — Daily to monthly intervals.

The following items shall be inspected for defects at the intervals specifically indicated, including observation *during operation* for any defects which might appear between inspections. All deficiencies such as those listed shall be carefully examined to determine whether they constitute a safety hazard:

- **[Inspect daily]** All functional operating mechanisms (wheels/casters, adjustable uprights, leg tubes, pins, and yokes) for maladjustment interfering with proper operation. Verify that the wheels/casters roll smoothly by pushing/pulling the crane 4-6 feet in one direction.
- **[Inspect daily]** Look for deterioration or leakage in lines, tanks, valves, drain pumps, and other parts of air or hydraulic systems. [not applicable]
- [Inspect daily (visually); inspect monthly and make a certification record, which includes the date of inspection, the signature of the person who performed the inspection and the serial number (or other identifier) of the hook inspected] Hooks with deformation or cracks. Immediately discard hooks with cracks or that have a throat opening that is more than 15 percent in excess of normal throat opening, or that are twisted more than 10° from the plane of the unbent hook.
- [Inspect daily (visually); monthly inspection with a certification record which includes the date of inspection, the signature of the person who performed the inspection and an identifier of the chain which was inspected] Hoist chains, including end connections, for excessive wear, twist, distorted links interfering with proper function, or stretch beyond hoist manufacturer's recommendations.
- **[Inspect weekly]** All functional operating mechanisms (wheels/casters, adjustable uprights, leg tubes, pins, and yokes, bolts and nuts, including anchor bolts and nuts) for excessive wear.
- [Inspect weekly] Rope reeving for noncompliance with hoist manufacturer's recommendations.

## 3. **Periodic inspection** [29 CFR 1910.179(j)(1)(ii)(b)] — 1 to 12-month intervals.

Complete inspections of the crane shall be performed at intervals depending upon its activity, severity of service, and environment, or as specifically indicated below. Perform all of the requirements described for frequent inspections and the following bulleted items. Carefully examine the crane for any problems such as those listed below to determine whether they constitute a safety hazard:

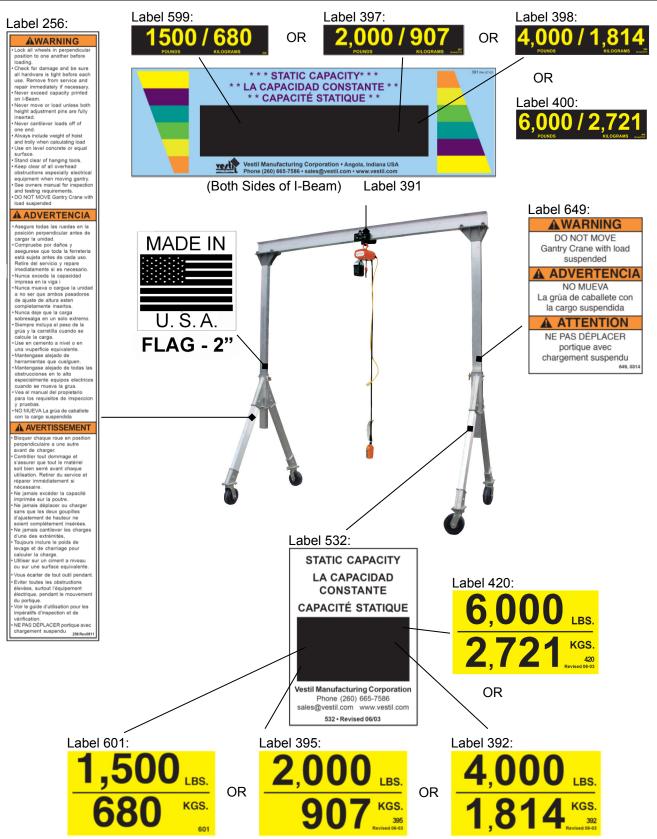
- Deformed, cracked, or corroded members.
- Loose bolts or rivets.
- Cracked or worn sheaves and drums.
- Worn, cracked or distorted parts such as pins, bearings, shafts, gears, rollers, locking and clamping devices.
- Excessive wear on brake system parts, linings, pawls, and ratchets.
- Load, wind, and other indicators over their full range, for any significant inaccuracies.
- Gasoline, diesel, electric, or other power plants for improper performance or noncompliance with applicable safety requirements.
- Excessive wear of chain drive sprockets and excessive chain stretch.
- Electrical apparatus, for signs of pitting or any deterioration of controller contactors, limit switches and pushbutton stations.

**Cranes not in regular use:** for each of the 3 bullet points below, in addition to the *crane* inspection <u>all rope</u> which has been idle for a period of a month or more due to shutdown or storage of a crane on which it is installed must be given a thorough inspection before it is used. An appointed person, whose approval is required before the rope may be used, must inspect the rope for all types of deterioration. A certification record must be available for inspection. The record must include at least the date of inspection, the signature of the person who performed the inspection and an identifier for the rope inspected.

- A crane which has been idle for a period of 1 month or more, but less than 6 months, shall undergo a "Frequent inspection" before being returned to service.
  - A crane which has been idle for a period of over 6 months shall be given a "Complete inspection" before placing in service.
  - Standby cranes shall be given a "Frequent inspection" at least semi-annually (twice per year; 1 inspection each 6 months).

## Labeling diagram:

The crane should always be labeled as soon in the diagram below. Periodically inspect each label applied to the product. Clean the labels as necessary to maintain legibility from a reasonable, safe viewing distance. Replace any label that is missing, damaged, or not easily readable.



## LIMITED WARRANTY

Vestil Manufacturing Corporation ("Vestil") warrants this Semi-Automatic Strapping Machine, model S-2001 to be free of defects in material and workmanship during the warranty period. *Our warranty obligation is to provide a replacement for a defective original part if the part is covered by the warranty, after we receive a proper request from the warrantee (you) for warranty service*.

#### Who may request service?

Only a warrantee may request service. You are a warrantee if you purchased the product from Vestil or from an authorized distributor AND Vestil has been fully paid.

#### What is an "original part"?

An original part is a part <u>used to make the product as shipped</u> to the warrantee.

#### What is a "proper request"?

A request for warranty service is proper if Vestil receives: 1) a photocopy of the <u>Customer Invoice</u> that displays the shipping date; AND 2) a <u>written request</u> for warranty service including your name and phone number. Send requests by any of the following methods:

Mail	Fax	<u>Email</u>
Vestil Manufacturing Corporation	(260) 665-1339	sales@vestil.com
2999 North Wayne Street, PO Box 507	Phone	
Angola, IN 46703	(260) 665-7586	

In the written request, list the parts believed to be defective and include the address where replacements should be delivered.

#### What is covered under the warranty?

After Vestil receives your request for warranty service, an authorized representative will contact you to determine whether your claim is covered by the warranty. Before providing warranty service, Vestil may require you to send the entire product, or just the defective part or parts, to its facility in Angola, IN. The warranty covers defects in the following <u>original dynamic components</u>: motors, hydraulic pumps, electronic controllers, switches and cylinders. It also covers defects in <u>original</u> parts that wear under normal usage conditions ("<u>wearing parts</u>"), such as bearings, hoses, wheels, seals, brushes, and batteries.

#### How long is the warranty period?

The warranty period for original dynamic components is <u>90 days</u>. For wearing parts, the warranty period is <u>90 days</u>. The warranty periods begin on the date when Vestil ships the product to the warrantee. If the product was purchased from an authorized distributor, the periods begin when the distributor ships the product. Vestil may, at its sole discretion, extend the warranty periods for products shipped from authorized distributors by *up to* 30 days to account for shipping time.

## If a defective part is covered by the warranty, what will Vestil do to correct the problem?

Vestil will provide an appropriate replacement for any *covered* part. An authorized representative of Vestil will contact you to discuss your claim.

#### What is not covered by the warranty?

- 1. Labor;
- 2. Freight;
- 3. Occurrence of any of the following, which automatically voids the warranty:
  - Product misuse;
  - Negligent operation or repair;
  - Corrosion or use in corrosive conditions;
  - Inadequate or improper maintenance;
  - Damage sustained during shipping;
  - Accidents involving the product;
  - <u>Unauthorized modifications</u>: DO NOT modify the product IN ANY WAY without first receiving written authorization from Vestil. Modification(s) might make the product unsafe to use or might cause excessive and/or abnormal wear.

#### Do any other warranties apply to the product?

Vestil Manufacturing Corp. makes no other express warranties. All implied warranties are disclaimed to the extent allowed by law. Any implied warranty not disclaimed is limited in scope to the

