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AHSN-Series Knockdown Steel Adjustable-Height Gantry Cranes Instruction Manual



Receiving instructions:

After delivery, IMMEDIATELY remove the packaging from the crane. Inspect the product closely to determine whether it sustained damage during transport. If damage is discovered, record a complete description of it 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) Instructions in this manual; or b) Information on product labeling.
- 3) VESTIL is not responsible for incidental or consequential damages resulting from assembly or maintenance of this product.

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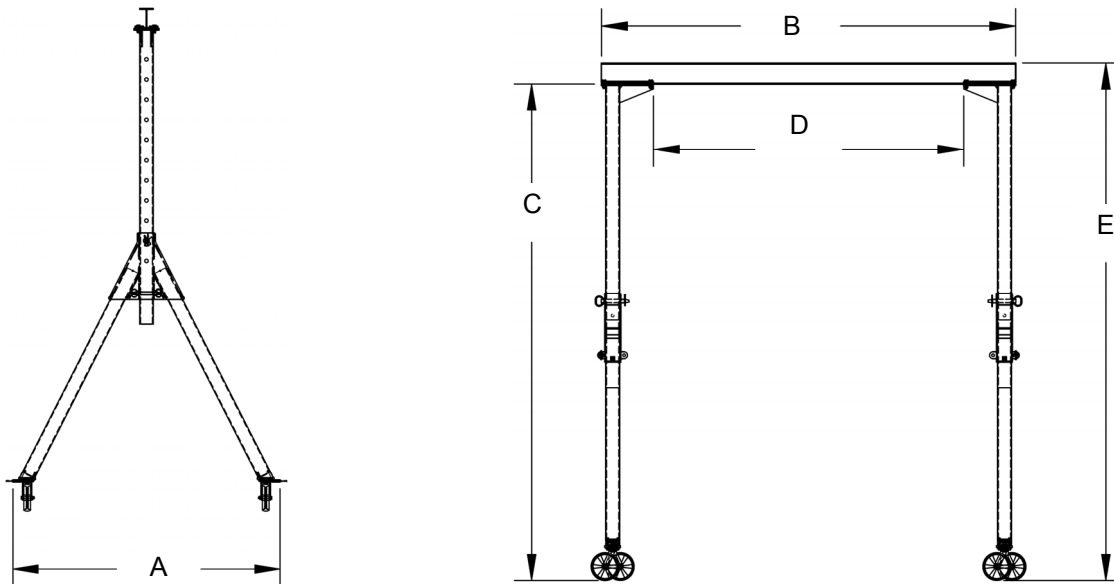
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PRODUCT INTRODUCTION

Thank you for purchasing a knock-down, adjustable height crane ("crane" or "AHSN"). Each AHSN 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 AHSN model appear in the table below.



Model	A: Overall width	B: Overall Beam Length	C: Height to bottom of beam	D: Usable beam length	E: Overall height	Capacity	Net Weight in Pounds (kg)
AHSN-2-10-12	79 ³ / ₄ in. 203 cm	119 ³ / ₄ in. 304 cm	143 ⁷ / ₈ in. 365 cm	89 ³ / ₄ in. 228 cm	149 ⁷ / ₈ in. 381 cm	2,000 lb. 909 kg	796 lb. 362kg
AHSN-2-10-14	91 ¹ / ₂ in. 232 cm	119 ³ / ₄ in. 304 cm	167 ⁷ / ₁₆ in. 425 cm	89 ³ / ₄ in. 228 cm	173 ⁷ / ₁₆ in. 441 cm	2,000 909 kg	872 lb. 396.4 kg
AHSN-2-10-16	91 ¹ / ₂ in. 232 cm	119 ³ / ₄ in. 304 cm	191 ⁷ / ₁₆ in. 486 cm	89 ³ / ₄ in. 228 cm	197 ⁷ / ₁₆ in. 501.5 cm	2,000 909 kg	921 lb. 418.6 kg
AHSN-2-15-7	50 in. 127 cm	179 ³ / ₄ in. 457 cm	84 ¹ / ₈ in. 214 cm	149 ³ / ₄ in. 380 cm	90 ¹ / ₈ in. 229 cm	2,000 909 kg	663 lb. 301.4 kg
AHSN-2-15-9	61 ⁷ / ₈ in. 157 cm	179 ³ / ₄ in. 457 cm	108 ³ / ₈ in. 275 cm	149 ³ / ₄ in. 380 cm	114 ⁷ / ₁₆ in. 291 cm	2,000 909 kg	741 lb. 336.8 kg
AHSN-2-15-10	67 ¹³ / ₁₆ in. 172 cm	179 ³ / ₄ in. 457 cm	120 ³ / ₈ in. 306 cm	149 ³ / ₄ in. 380 cm	126 ³ / ₈ in. 321 cm	2,000 909 kg	779 lb. 354 kg
AHSN-2-15-12	79 ³ / ₄ in. 203 cm	179 ³ / ₄ in. 457 cm	143 ⁷ / ₈ in. 365 cm	149 ³ / ₄ in. 380 cm	149 ⁷ / ₈ in. 381 cm	2,000 909 kg	856 lb. 389.1 kg
AHSN-2-15-14	91 ¹ / ₂ in. 232 cm	179 ³ / ₄ in. 457 cm	167 ⁷ / ₁₆ in. 425 cm	149 ³ / ₄ in. 380 cm	173 ⁷ / ₁₆ in. 441 cm	2,000 909 kg	932 lb. 424 kg
AHSN-2-15-16	91 ¹ / ₂ in. 232 cm	179 ³ / ₄ in. 457 cm	191 ⁷ / ₁₆ in. 486 cm	149 ³ / ₄ in. 380 cm	197 ⁷ / ₁₆ in. 501.5 cm	2,000 909 kg	981 lb. 446 kg
AHSN-2-20-12	79 ³ / ₄ in. 203 cm	239 ³ / ₄ in. 609 cm	143 ⁷ / ₈ in. 365 cm	209 ³ / ₄ in. 533 cm	149 ⁷ / ₈ in. 381 cm	2,000 909 kg	917 lb. 416.6 kg
AHSN-2-20-14	91 ¹ / ₂ in. 232 cm	239 ³ / ₄ in. 609 cm	167 ⁷ / ₁₆ in. 425 cm	209 ³ / ₄ in. 533 cm	173 ⁷ / ₁₆ in. 441 cm	2,000 909 kg	993 lb. 451.3 kg
AHSN-2-20-16	91 ¹ / ₂ in. 232 cm	239 ³ / ₄ in. 609 cm	191 ⁷ / ₁₆ in. 486 cm	209 ³ / ₄ in. 533 cm	197 ⁷ / ₁₆ in. 501.5 cm	2,000 909 kg	1041 lb. 473.4 kg
AHSN-4-10-12	79 ³ / ₄ in. 203 cm	119 ³ / ₄ in. 304 cm	143 ⁷ / ₈ in. 365 cm	89 ³ / ₄ in. 228 cm	149 ⁷ / ₈ in. 381 cm	4,000 1,818 kg	796 lb. 362kg
AHSN-4-10-14	91 ¹ / ₂ in. 232 cm	119 ³ / ₄ in. 304 cm	167 ⁷ / ₁₆ in. 425 cm	89 ³ / ₄ in. 228 cm	173 ⁷ / ₁₆ in. 441 cm	4,000 1,818 kg	872 lb. 396.4 kg
AHSN-4-10-16	91 ¹ / ₂ in. 232 cm	119 ³ / ₄ in. 304 cm	191 ⁷ / ₁₆ in. 486 cm	89 ³ / ₄ in. 228 cm	197 ⁷ / ₁₆ in. 501.5 cm	4,000 1,818 kg	921.6 lb. 418.5 kg
AHSN-4-15-7	50 in. 127 cm	179 ³ / ₄ in. 457 cm	84 ¹ / ₈ in. 214 cm	149 ³ / ₄ in. 380 cm	92 ³ / ₁₆ in. 234 cm	4,000 1,818 kg	708 lb. 322 kg
AHSN-4-15-9	61 ⁷ / ₈ in. 157 cm	179 ³ / ₄ in. 457 cm	108 ³ / ₈ in. 275 cm	149 ³ / ₄ in. 380 cm	116 ¹ / ₂ in. 296 cm	4,000 1,818 kg	786 lb. 357.2 kg

AHSN-4-15-10	67 ¹³ / ₁₆ in. 172 cm	179 ³ / ₄ in. 457 cm	120 ³ / ₈ in. 306 cm	149 ³ / ₄ in. 380 cm	128 ¹ / ₂ in. 326 cm	4,000 1,818 kg	824 lb. 374.7 kg
AHSN-4-15-12	79 ³ / ₄ in. 203 cm	179 ³ / ₄ in. 457 cm	143 ⁷ / ₈ in. 365 cm	149 ³ / ₄ in. 380 cm	151 ¹⁵ / ₁₆ in. 386 cm	4,000 1,818 kg	901 lb. 409.7 kg
AHSN-4-15-14	91 ¹ / ₂ in. 232 cm	179 ³ / ₄ in. 457 cm	167 ⁷ / ₁₆ in. 425 cm	149 ³ / ₄ in. 380 cm	175 ⁹ / ₁₆ in. 446 cm	4,000 1,818 kg	978 lb. 444.4 kg
AHSN-4-15-16	91 ¹ / ₂ in. 232 cm	179 ³ / ₄ in. 457 cm	191 ⁷ / ₁₆ in. 486 cm	149 ³ / ₄ in. 380 cm	199 ⁹ / ₁₆ in. 507 cm	4,000 1,818 kg	1026 lb. 466.5 kg
AHSN-4-20-12	79 ³ / ₄ in. 203 cm	239 ³ / ₄ in. 609 cm	143 ⁷ / ₈ in. 365 cm	209 ³ / ₄ in. 533 cm	151 ¹⁵ / ₁₆ in. 386 cm	4,000 1,818 kg	977 lb. 444 kg
AHSN-4-20-14	91 ¹ / ₂ in. 232 cm	239 ³ / ₄ in. 609 cm	167 ⁷ / ₁₆ in. 425 cm	209 ³ / ₄ in. 533 cm	174 ³ / ₈ in. 79.3 cm	4,000 1,818 kg	1,053 lb. 478.8kg
AHSN-4-20-16	91 ¹ / ₂ in. 232 cm	239 ³ / ₄ in. 609 cm	191 ⁷ / ₁₆ in. 486 cm	209 ³ / ₄ in. 533 cm	199 ⁹ / ₁₆ in. 507 cm	4,000 1,818 kg	1,102 lb. 500.8 kg
AHSN-6-10-12	76 ¹ / ₄ in. 194 cm	119 ³ / ₄ in. 304 cm	145 ³ / ₈ in. 369 cm	89 ³ / ₄ in. 228 cm	153 ⁷ / ₁₆ in. 389.7 cm	6,000 2,727 kg	895 lb. 406.8 kg
AHSN-6-10-14	88 in. 224 cm	119 ³ / ₄ in. 304 cm	168 ¹⁵ / ₁₆ in. 425 cm	89 ³ / ₄ in. 228 cm	177 ¹ / ₁₆ in. 450 cm	6,000 2,727 kg	973 lb. 442.6 kg
AHSN-6-10-16	88 in. 224 cm	119 ³ / ₄ in. 304 cm	192 ¹⁵ / ₁₆ in. 490 cm	89 ³ / ₄ in. 228 cm	201 ¹ / ₁₆ in. 511 cm	6,000 2,727 kg	1,022 lb. 464.6 kg
AHSN-6-15-7	46 ¹ / ₂ in. 118 cm	179 ³ / ₄ in. 457 cm	85 ⁵ / ₈ in. 217.5 cm	149 ³ / ₄ in. 380 cm	95 ¹¹ / ₁₆ in. 243 cm	6,000 2,727 kg	800 lb. 363.6 kg
AHSN-6-15-9	58 ³ / ₈ in. 148 cm	179 ³ / ₄ in. 457 cm	109 ⁵ / ₈ in. 278 cm	149 ³ / ₄ in. 380 cm	119 ³ / ₄ in. 304 cm	6,000 2,727 kg	880 lb. 400 kg
AHSN-6-15-10	64 ⁵ / ₁₆ in. 163 cm	179 ³ / ₄ in. 457 cm	121 ⁹ / ₁₆ in. 309 cm	149 ³ / ₄ in. 380 cm	131 ¹¹ / ₁₆ in. 334.5 cm	6,000 2,727 kg	920 lb. 418 kg
AHSN-6-15-12	76 ¹ / ₄ in. 194 cm	179 ³ / ₄ in. 457 cm	145 ³ / ₈ in. 369 cm	149 ³ / ₄ in. 380 cm	155 ⁷ / ₁₆ in. 395 cm	6,000 2,727 kg	999 lb. 454 kg
AHSN-6-15-14	88 in. 224 cm	179 ³ / ₄ in. 457 cm	168 ¹⁵ / ₁₆ in. 425 cm	149 ³ / ₄ in. 380 cm	179 ¹ / ₁₆ in. 455 cm	6,000 2,727 kg	1,077 lb. 489.7 kg
AHSN-6-15-16	88 in. 224 cm	179 ³ / ₄ in. 457 cm	192 ¹⁵ / ₁₆ in. 490 cm	149 ³ / ₄ in. 380 cm	203 ¹ / ₁₆ in. 516 cm	6,000 2,727 kg	1,126 lb. 511.8 kg
AHSN-6-20-12	76 ¹ / ₄ in. 194 cm	239 ³ / ₄ in. 609 cm	145 ³ / ₈ in. 369 cm	209 ³ / ₄ in. 533 cm	155 ⁷ / ₁₆ in. 395 cm	6,000 2,727 kg	1,084 lb. 492.6 kg
AHSN-6-20-14	88 in. 224 cm	239 ³ / ₄ in. 609 cm	168 ¹⁵ / ₁₆ in. 425 cm	209 ³ / ₄ in. 533 cm	179 ¹ / ₁₆ in. 455 cm	6,000 2,727 kg	1,162 lb. 528.3 kg
AHSN-6-20-16	88 in. 224 cm	239 ³ / ₄ in. 609 cm	203 ¹ / ₁₆ in. 516 cm	209 ³ / ₄ in. 533 cm	192 ¹⁵ / ₁₆ in. 490 cm	6,000 2,727 kg	1,211 lb. 550.4 kg
AHSN-8-10-12	76 ¹ / ₄ in. 194 cm	119 ³ / ₄ in. 304 cm	145 ³ / ₈ in. 369 cm	89 ³ / ₄ in. 228 cm	153 ⁷ / ₁₆ in. 389.7 cm	8,000 3,636 kg	895 lb. 406.8 kg
AHSN-8-10-14	88 in. 224 cm	119 ³ / ₄ in. 304 cm	168 ¹⁵ / ₁₆ in. 425 cm	89 ³ / ₄ in. 228 cm	177 ¹ / ₁₆ in. 450 cm	8,000 3,636 kg	974 lb. 442.6 kg
AHSN-8-10-16	88 in. 224 cm	119 ³ / ₄ in. 304 cm	192 ¹⁵ / ₁₆ in. 490 cm	89 ³ / ₄ in. 228 cm	201 ¹ / ₁₆ in. 511 cm	8,000 3,636 kg	1,022 lb. 464.6 kg
AHSN-8-15-7	46 ¹ / ₂ in. 118 cm	179 ³ / ₄ in. 457 cm	85 ⁵ / ₈ in. 217.5 cm	149 ³ / ₄ in. 380 cm	95 ¹¹ / ₁₆ in. 243 cm	8,000 3,636 kg	800 lb. 363.7 kg
AHSN-8-15-9	58 ³ / ₈ in. 148 cm	179 ³ / ₄ in. 457 cm	109 ⁵ / ₈ in. 278 cm	149 ³ / ₄ in. 380 cm	119 ³ / ₄ in. 304 cm	8,000 3,636 kg	880 lb. 400 kg
AHSN-8-15-10	64 ⁵ / ₁₆ in. 163 cm	179 ³ / ₄ in. 457 cm	121 ⁹ / ₁₆ in. 309 cm	149 ³ / ₄ in. 380 cm	131 ¹¹ / ₁₆ in. 334.5 cm	8,000 3,636 kg	920 lb. 418.2 kg
AHSN-8-15-12	76 ¹ / ₄ in. 194 cm	179 ³ / ₄ in. 457 cm	141 ³ / ₈ in. 360 cm	149 ³ / ₄ in. 380 cm	155 ⁷ / ₁₆ in. 395 cm	8,000 3,636 kg	999 lb. 454 kg
AHSN-8-15-14	88 in. 224 cm	179 ³ / ₄ in. 457 cm	164 ¹⁵ / ₁₆ in. 419 cm	149 ³ / ₄ in. 380 cm	179 ¹ / ₁₆ in. 455 cm	8,000 3,636 kg	1,077 lb. 489.7 kg
AHSN-8-15-16	88 in. 224 cm	179 ³ / ₄ in. 457 cm	188 ¹⁵ / ₁₆ in. 480 cm	149 ³ / ₄ in. 380 cm	203 ¹ / ₁₆ in. 516 cm	8,000 3,636 kg	1,126 lb. 511.8 kg
AHSN-8-20-12	76 ¹ / ₄ in. 194 cm	239 ³ / ₄ in. 609 cm	145 ³ / ₈ in. 369 cm	209 ³ / ₄ in. 533 cm	157 ¹ / ₂ in. 400 cm	8,000 3,636 kg	1,123 lb. 510.6 kg
AHSN-8-20-14	88 in. 224 cm	239 ³ / ₄ in. 609 cm	164 ¹⁵ / ₁₆ in. 419 cm	209 ³ / ₄ in. 533 cm	181 ¹ / ₁₆ in. 460 cm	8,000 3,636 kg	1,202 lb. 546.3 kg
AHSN-8-20-16	88 in. 224 cm	239 ³ / ₄ in. 609 cm	205 ¹ / ₁₆ in. 521 cm	209 ³ / ₄ in. 533 cm	205 ¹ / ₁₆ in. 521 cm	8,000 3,636 kg	1,250 lb. 568.4 kg
AHSN-10-15-10	64 ⁵ / ₁₆ in. 163 cm	179 ³ / ₄ in. 457 cm	134 in. 340 cm	149 ³ / ₄ in. 380 cm	121 ⁷ / ₈ in. 310 cm	10,000 4,545 kg	967 lb. 439.4 kg

Signal words:

Vestil Manufacturing Corp. recognizes the critical importance of workplace safety. **Employers are responsible for instructing employees to use the product properly. Employees and any other person, who might foreseeably assemble, use, repair, or perform maintenance on the crane must read and understand every instruction BEFORE it. Crane operators should have access to the manual at all times and should review the directions as necessary. If you do not understand an instruction, ask your supervisor or employer for clarification. Failure to adhere to the directions in this manual might lead to serious personal injury or even death.**

Although Vestil diligently strives to identify foreseeable hazardous situations, this manual cannot address every conceivable danger. The end-user is ultimately responsible for exercising sound judgment at all times. Vestil is **not liable** for any injury or property damage that occurs as a consequence of failing to apply the recommended maintenance and operation instructions that appear either in this manual or on labels affixed to the product.

This manual classifies personal injury risks and situations that could lead to property damage with SIGNAL WORDS. These signal words announce an associated safety message. The reader must understand that the signal word chosen indicates the seriousness of the described hazard.



Identifies a hazardous situation which, if not avoided, **WILL** result in **DEATH or SERIOUS INJURY**. Use of this signal word is limited to the most extreme situations.



Identifies a hazardous situation which, if not avoided, **COULD** result in **DEATH or SERIOUS INJURY**.



Indicates a hazardous situation which, if not avoided, **COULD** result in **MINOR or MODERATE** injury.



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

Safe use recommendations:

Failure to read and understand the instructions included in this manual before using or servicing the crane constitutes misuse of the product.



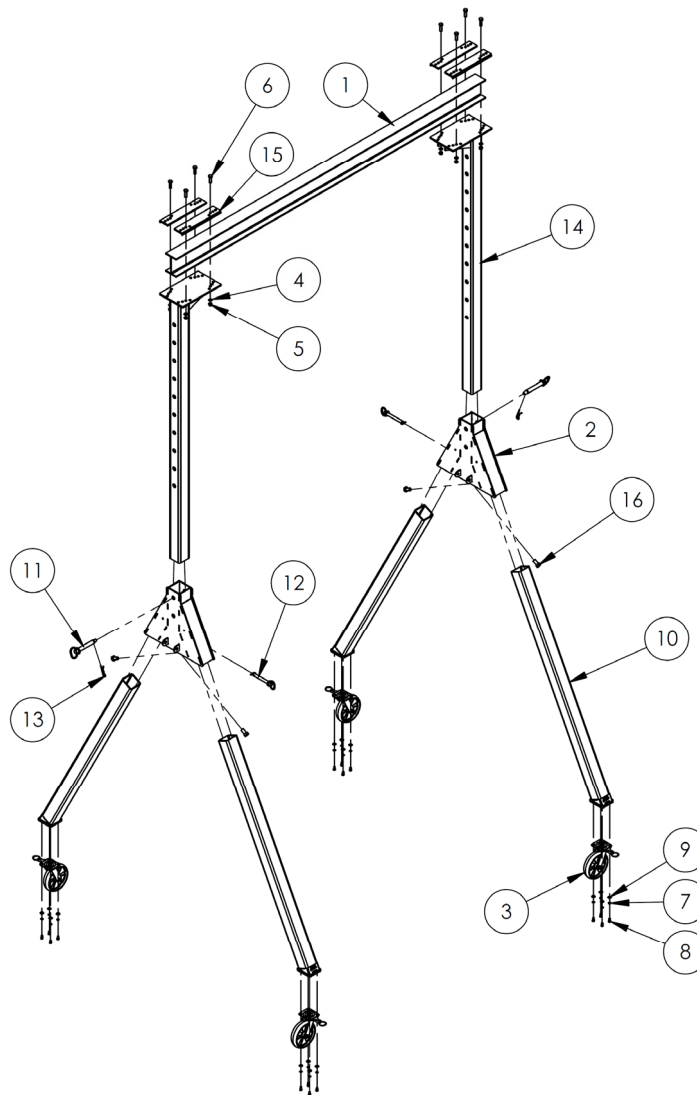
Electrocution might result if the crane contacts electrified wires. Reduce the likelihood that an operator or bystander might be electrocuted by applying **common sense**:

- DO not assemble or use the crane in an area where it might contact electrified wires;
- DO NOT *contact* electrified wires with the crane;
- Before using the crane, always inspect the usage area for conditions that might require special precautions.



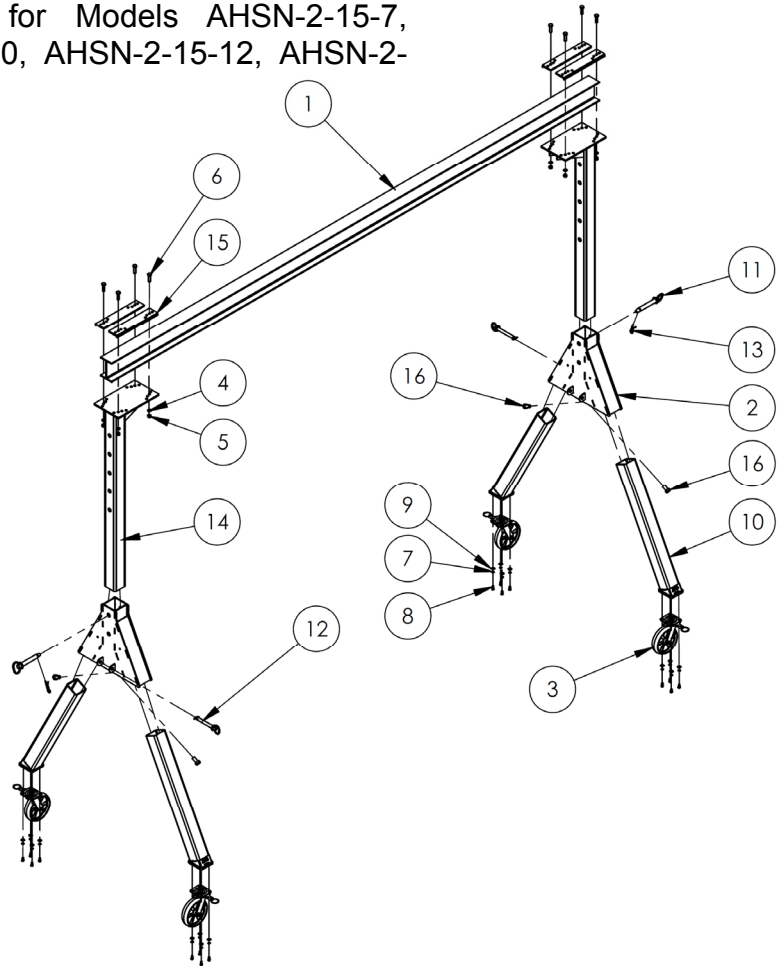
Material handling is dangerous. Improper or careless operation might result in serious personal injuries sustained by the crane user(s) and bystanders. Always apply the following:

- DO NOT use a structurally damaged/malfunctioning crane. ALWAYS inspect the crane before each use according to the inspection instructions on p. 24-25. 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 maximum rated load of your crane model (see Specifications table on p. 2-3, capacity labels on product, and label placement diagram on p. 25).
- DO NOT stand beneath or travel under the crane if a load is suspended, and DO NOT permit any person to stand beneath or travel under the load.
- Inform all persons in the area that you are going to use the crane; instruct them to stay clear of the device and the supported load during operation.
- DO NOT allow people to ride on the load.
- ALWAYS load the crane according to the "Proper loading" recommendations on p. 22-23. Failure to properly position a load might cause the load to swing as it rises off of the ground, and a swinging load might and cause serious injury to the operator(s) or others as a consequence.
- DO NOT use the crane if any label (see p. 25) is unreadable, damaged, or absent. Replace label(s) as needed.
- **DO NOT use to crane to move (transport) loads; ONLY use the crane to lift loads!**

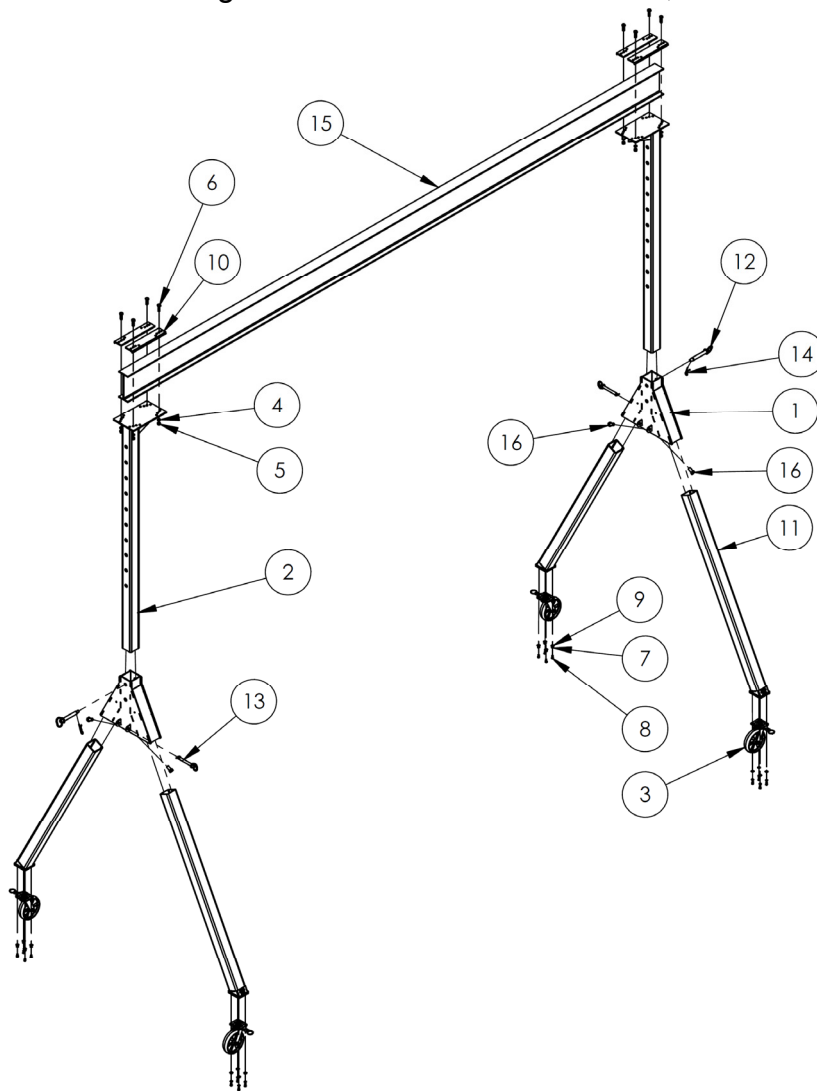
FIG. A: Exploded Parts Diagram for Models AHSN-2-10-12, AHSN-2-10-14, & AHSN-2-10-16

Item no.	Part no.	Description	Quantity
1	28-014-384	Frame, domestic steel I-beam	1
2	28-514-237	Weldment, steel leg yoke	2
3	GFN-8/2-S-4PSL	Glass filled nylon 4-position swivel locking caster	4
4	33626	Lock washer, zinc-plated, $\frac{1}{2}$ in.	8
5 & 6	19211	A325 structural bolt & nut combo. $\frac{1}{2}$ in. – 13 A325 structural nut $\frac{1}{2}$ in. – 13 x 2in. A325 structural bolt	8 8
7	33620	$\frac{5}{16}$ in. lock washer, zinc-plated	16
8	11053	$\frac{5}{16}$ in. 18 x $\frac{3}{4}$ in. HHCS #2 zinc-plated bolt	16
9	33006	$\frac{5}{16}$ in. USS flat washer, zinc-plated	16
10	28-514-241 28-514-242	<u>Leg weldment:</u> 12ft. H (AHSN-20-10-12) 14ft - 16ft. H (AHSN-2-10-14 & AHSN-2-10-16)	4 4
11	28-112-027	Pin, axel, pivot, roller	2
12	28-112-007	$\frac{3}{4}$ in. retaining pin	2
13	45282	#6 hitch pin clip	2
14	28-514-009 28-514-010 28-514-124	<u>Weldment, upright assembly:</u> AHSN-2-10-12 AHSN-2-10-14 AHSN-2-10-16	2
15	28-516-053	Weldment, I-beam clamp	4
16	11359	$\frac{3}{4}$ in. – 10 x 1 $\frac{1}{2}$ in. HHCS #2 zinc-plated bolt (leg clamp)	4

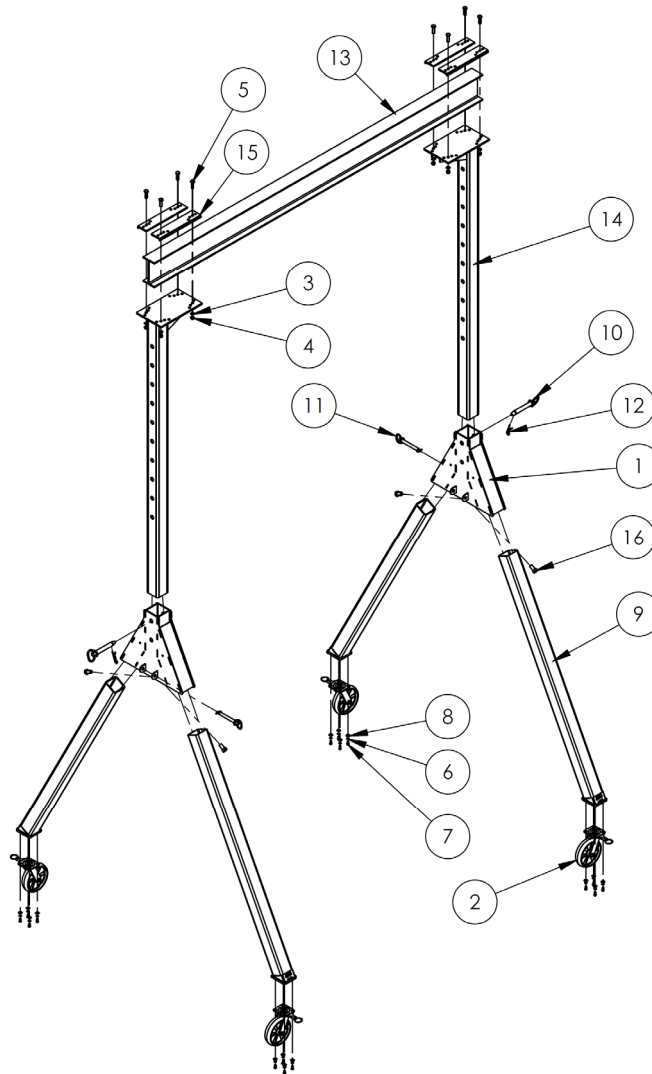
FIG. B: Exploded Parts Diagram for Models AHSN-2-15-7, AHSN-2-15-9, AHSN-2-15-10, AHSN-2-15-12, AHSN-2-15-14, AHSN-2-15-16



Item no.	Part no.	Description	Quantity
1	28-014-385	Frame, domestic steel I-beam	1
2	28-514-237	Steel leg yoke weldment	2
3	GFN-8/2-S-4PSL	Glass filled nylon 4-position swivel locking caster	4
4	33626	½ in. zinc-plated lock washer	8
5 & 6	19211	A325 structural bolt & nut combo. ½ in. – 13 A325 structural nut ½ in. – 13 x 2 in. A325 structural bolt	8 8
7	33620	5/16 in. zinc-plated lock washer	16
8	11053	5/16 in. – 18 x 3/4 in. HHCS #2 zinc-plated bolt	16
9	33006	5/16 in. zinc-plated USS flat washer	16
10	28-514-238 28-514-239 28-514-240 28-514-241 28-514-242 28-514-242	<u>Leg weldment:</u> AHSN-2-15-7 AHSN-2-15-9 AHSN-2-15-10 AHSN-2-15-12 AHSN-2-15-14 AHSN-2-15-16	4 4 4 4 4 4
11	28-112-027	Pin, axle, pivot, roller	2
12	28-112-007	¾ in. retaining pin	2
13	45282	#6 hitch pin clip	2
14	28-514-151 28-514-150 28-514-149 28-514-009 28-514-010 28-514-124	<u>Weldment, upright assembly:</u> AHSN-2-15-7 AHSN-2-15-9 AHSN-2-15-10 AHSN-2-15-12 AHSN-2-15-14 AHSN-2-15-16	2 2 2 2 2 2
15	28-516-053	Weldment, I-beam clamp	4
16	11359	¾ in. – 10 x 1½ in. HHCS #2 zinc-plated bolt (leg clamp)	4

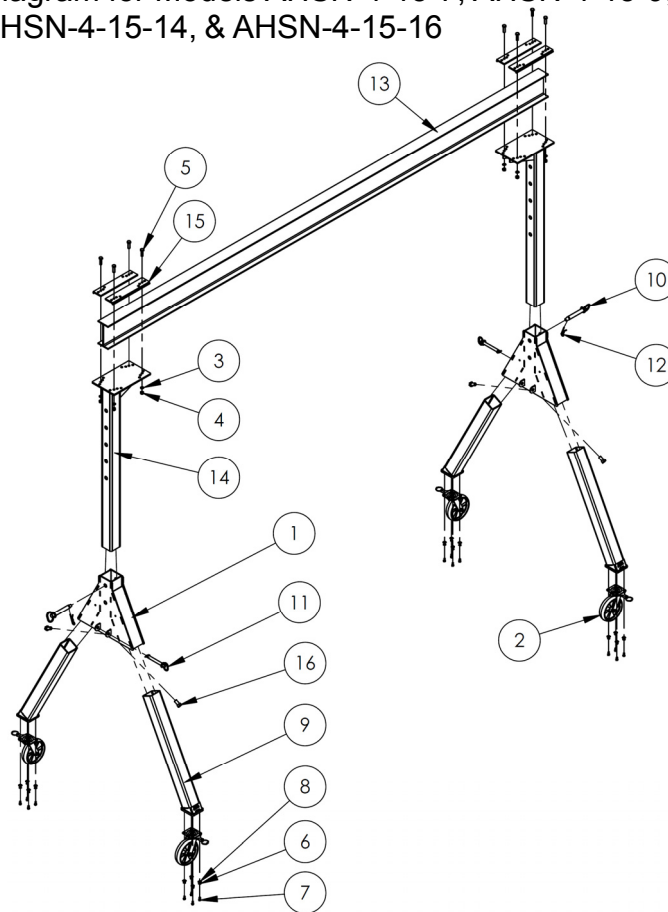
FIG. C: Exploded Parts Diagram for Models AHSN-2-20-12, AHSN-2-20-14, & AHSN-2-20-16

Item no.	Part no.	Description	Quantity
1	28-514-237	Steel leg yoke weldment	2
2	28-514-009 28-514-010 28-514-124	<u>Weldment, upright assembly:</u> AHSN-2-20-12 AHSN-2-20-14 AHSN-2-20-16	2 2 2
3	GFN-8/2-S-4PSL	Glass filled nylon 4-position swivel locking caster	4
4	33626	1/2 in. zinc-plated lock washer	8
5 & 6	19211	A325 structural bolt & nut combo. 1/2 in. – 13 A325 structural nut 1/2 in. – 13 x 2 in. A325 structural bolt	8 8
7	33620	5/16 in. zinc-plated lock washer	16
8	11053	5/16 in. – 18 x 3/4 in. HHCS #2 zinc-plated bolt	16
9	33006	5/16 in. zinc-plated USS flat washer	16
10	28-516-053	Weldment, I-beam clamp	4
11	28-514-241 28-514-242 28-514-242	<u>Leg weldment:</u> AHSN-2-20-12 AHSN-2-20-14 AHSN-2-20-16	4 4 4
12	28-112-027	Pin, axle, pivot, roller	2
13	28-112-007	3/4 in. retaining pin	2
14	45282	#6 hitch pin clip	2
15	28-014-392	Frame, domestic steel I-beam	1
16	11359	3/4 in. – 10 x 1 1/2 in. HHCS #2 zinc-plated bolt (leg clamp)	4

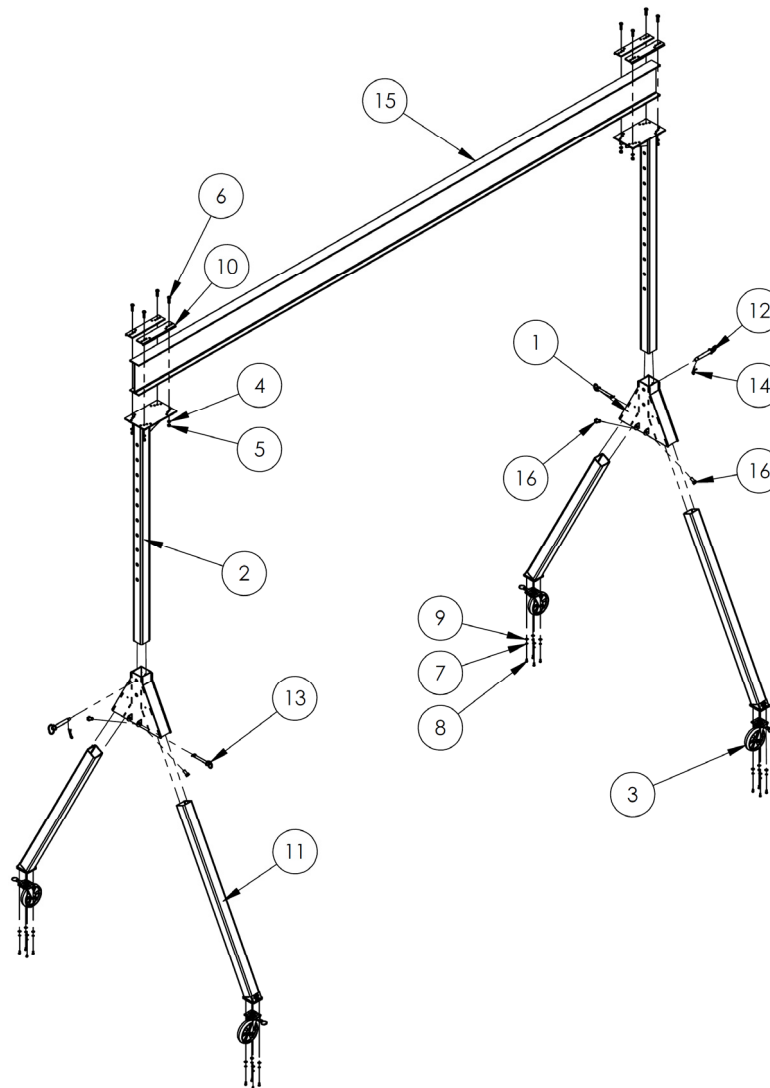
FIG. D: Exploded Parts Diagram for Models AHSN-4-10-12, AHSN-4-10-14, & AHSN-4-10-16

Item no.	Part no.	Description	Quantity
1	28-514-237	Steel leg yoke weldment	2
2	GFN-8/2-S-4PSL	Glass filled nylon 4-position swivel locking caster	4
3	33626	½ in. zinc-plated lock washer	8
4 & 5	19211	A325 structural bolt & nut combo. 1½ in. – 13 A325 structural nut 1½ in. – 13 x 2 in. A325 structural bolt	8 8
6	33620	5/16 in. zinc-plated lock washer	16
7	11053	5/16 in. – 18 x ¾ in. HHCS #2 zinc-plated bolt	16
8	33006	5/16 in. zinc-plated USS flat washer	16
9	28-514-241 28-514-242 28-514-242	<u>Leg weldment:</u> AHSN-4-10-12 AHSN-4-10-14 AHSN-4-10-16	4 4 4
10	28-112-027	Pin, axle, pivot, roller	2
11	28-112-007	¾ in. retaining pin	2
12	45282	#6 hitch pin clip	2
13	28-014-384	Steel I-beam	1
14	28-514-009 28-514-010 28-514-124	<u>Weldment, upright assembly:</u> AHSN-4-10-12 AHSN-4-10-14 AHSN-4-10-16	2 2 2
15	28-516-03	Weldment, I-beam clamp	4
16	11359	¾ in. – 10 x 1½ in. HHCS #2 zinc-plated bolt (leg clamp)	4

FIG. E: Exploded Parts Diagram for Models AHSN-4-15-7, AHSN-4-15-9, AHSN-4-15-10, AHSN-4-15-12, AHSN-4-15-14, & AHSN-4-15-16

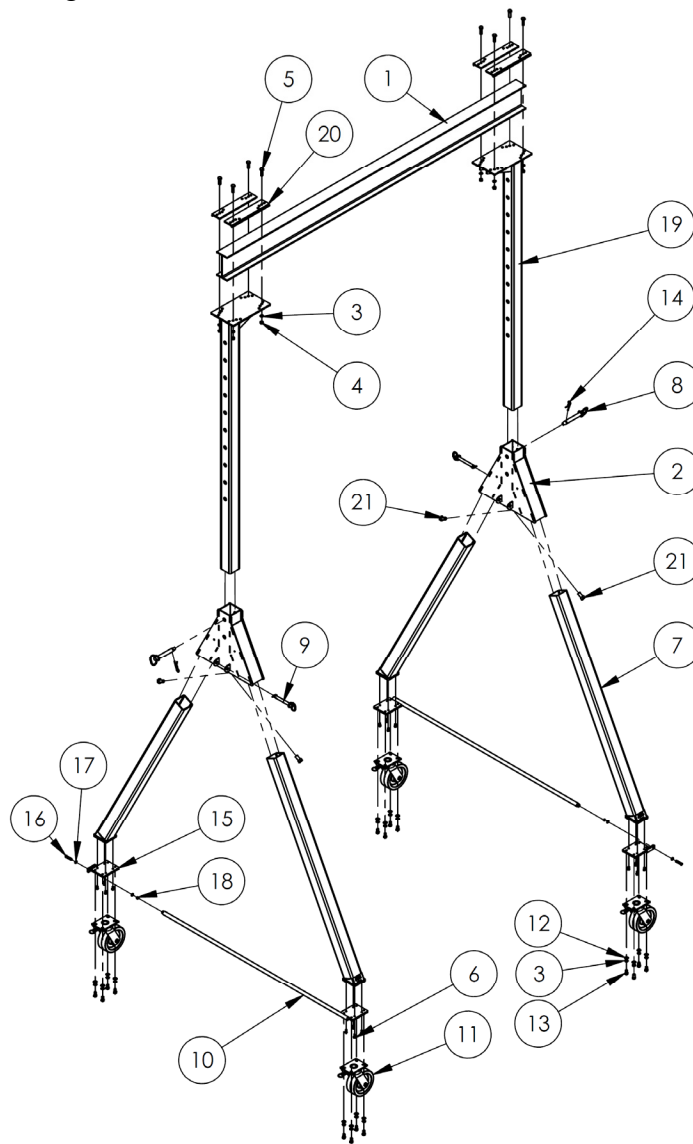


Item no.	Part no.	Description	Quantity
1	28-514-237	Weldment, steel leg yoke	2
2	GFN-8/2-S-4PSL	Glass filled nylon 4-position swivel locking caster	4
3	33626	½ in. zinc-plated lock washer	8
4 & 5	19211	A325 structural bolt & nut combo. ½ in. – 13 A325 structural nut ½ in. – 13 x 2in. A325 structural bolt	8 8
6	33620	5/16 in. zinc-plated lock washer	16
7	11053	5/16 in. – 18 x ¼ in. HHCS #2 zinc-plated bolt	16
8	33006	5/16 in. zinc-plated USS flat washer	16
9	28-514-238 28-514-239 28-514-240 28-514-241 28-514-242 28-514-242	<u>Leg weldment::</u> AHSN-4-15-7 AHSN-4-15-9 AHSN-4-15-10 AHSN-4-15-12 AHSN-4-15-14 AHSN-4-15-16	4 4 4 4 4 4
10	28-112-027	Pin, axle, pivot, roller	2
11	28-112-007	¾ in. retaining pin	2
12	45282	#6 hitch pin clip	2
13	28-014-388	Frame, domestic steel I-beam	1
14	28-514-151 28-514-150 28-514-149 28-514-009 28-514-010 28-514-124	<u>Weldment, upright assembly:</u> AHSN-4-15-7 AHSN-4-15-9 AHSN-4-15-10 AHSN-4-15-12 AHSN-4-15-14 AHSN-4-15-16	2 2 2 2 2 2
15	28-516-053	Weldment, I-beam clamp	4
16	11359	¾ in. – 10 x 1½ in. HHCS #2 zinc-plated bolt (leg clamp)	4

FIG. F: Exploded Parts Diagram for Models AHSN-4-20-12, AHSN-4-20-14, & AHSN-4-20-16

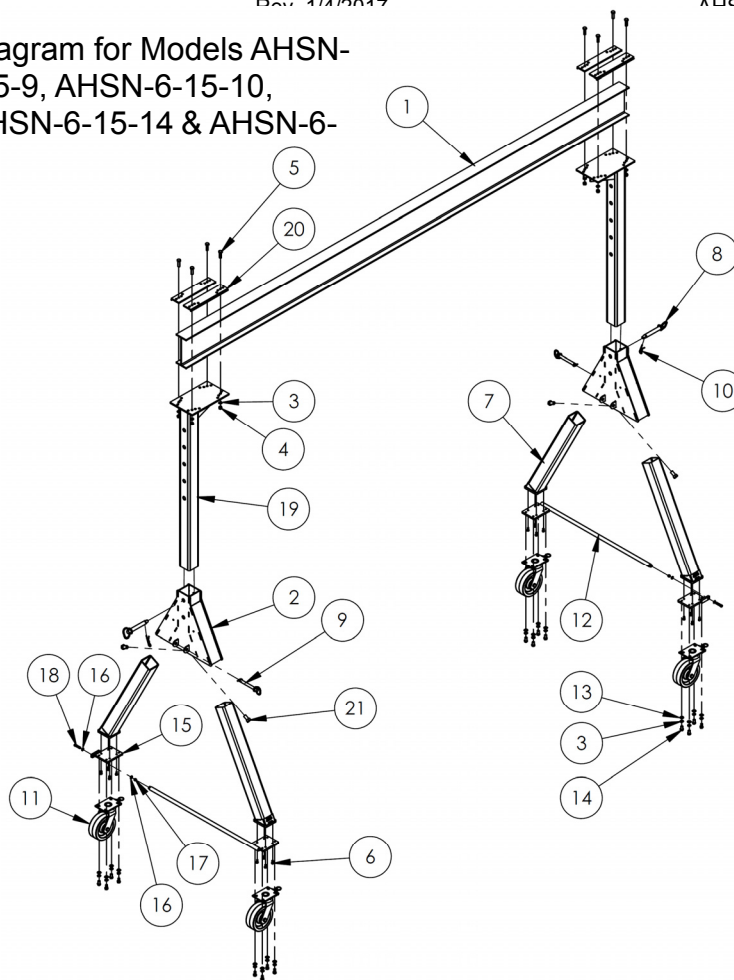
Item no.	Part no.	Description	Quantity
1	28-514-237	Weldment, steel leg yoke	2
2	28-514-009	<u>Weldment, upright assembly:</u> AHSN-4-20-12	2
	28-514-010	AHSN-4-20-14	2
	28-514-124	AHSN-4-20-16	2
3	GFN-8/2-S-4PSL	Glass filled nylon 4-position swivel locking caster	4
4	33626	1/2 in. zinc-plated lock washer	8
5 & 6	19211	A325 structural bolt & nut combo. 1/2 in. – 13 A325 structural nut	8
		1/2 in. – 13 x 2 in. A325 structural bolt	8
7	33620	5/16 in. zinc-plated lock washer	16
8	11053	5/16 in. – 18 x 3/4 in. HHCS #2 zinc-plated bolt	16
9	33006	5/16 in. zinc-plated USS flat washer	16
10	28-516-053	Weldment, I-beam clamp	4
11	28-514-241	<u>Leg weldment:</u> AHSN-4-20-12	4
	28-514-242	AHSN-4-20-14	4
	28-514-242	AHSN-4-20-16	4
12	28-112-027	Pin, axle, pivot, roller	2
13	28-112-007	3/4 in. retaining pin	2
14	45282	#6 hitch pin clip	2
15	28-014-394	Frame, domestic steel I-beam	1
16	11359	3/4 in. – 10 x 1 1/2 in. HHCS #2 zinc-plated bolt (leg clamp)	4

FIG. G: Exploded Parts Diagram for Models AHSN-6-10-12, AHSN-6-10-14, & AHSN-6-10-16



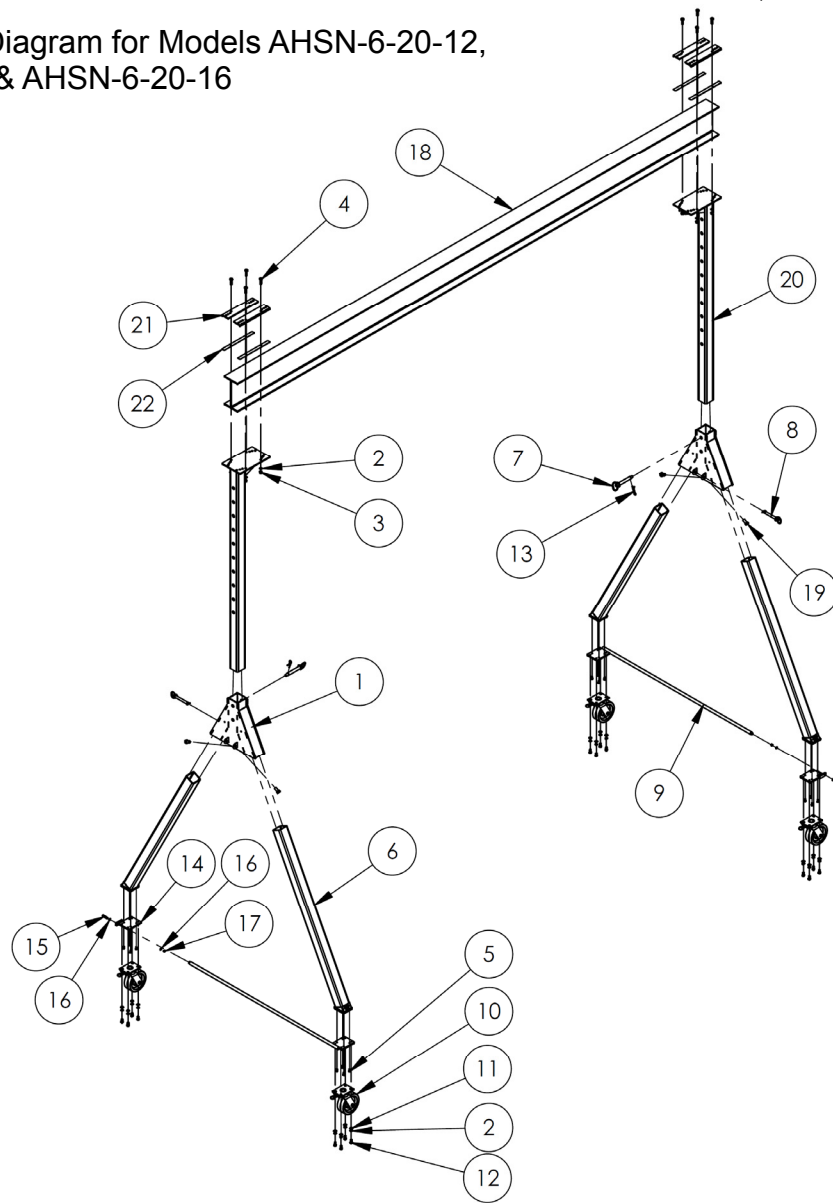
Item no.	Part no.	Description	Quantity	Item no.	Part no.	Description	Quantity
1	28-014-387	Frame, domestic steel I-beam	1	12	33011	½ in. USS flat washer, plain	16
2	28-514-237	Weldment, steel leg yoke	2	13	13205	½ in. – 13 x 1in. HHCS zinc-plated, grade 5 bolt	16
3	33626	½ in. zinc-plated lock washer	24	14	45282	#6 hitch pin clip	2
4 & 5	19211	A325 structural bolt & nut combo. ½ in. – 13 A325 structural nut ½ in. – 13 x 2in. A325 structural bolt	8 8	15	28-514-258	Weldment, cross brace bolt end, 6k & 8k	2
6	11053	⅝ in. – 18 x ¾ in. HHCS #2 zinc-plated bolt	16	16	13111	⅜ in. – 16 x 2in. HHCS #5 zinc-plated bolt	2
7	28-514-241 28-514-242	Leg weldment: AHSN-6-10-12 AHSN-6-10-14 & AHSN-6-10-16	4 4	17	33008	⅜ in. USS flat washer, zinc-plated	4
8	28-112-027	Pin, axle, pivot, roller	2	18	36106	⅜ in. – 16 hex nut, zinc-plated	2
9	28-112-007	¾ in. retaining pin	2	19	28-514-009 28-514-010 28-514-124	Telescoping upright assembly weldment: AHSN-6-10-12 AHSN-6-10-14 AHSN-6-10-16	2 2 2
10	28-514-246 28-514-247	Weldment, leg set cross brace: AHSN-6-10-12 AHSN-6-10-14 & AHSN-6-10-16	2 2	20	28-516-053	Weldment, I-beam clamp	4
11	PH-F-8/3-S-4PSL	8in. x 3in. phenolic 4-way swivel lock caster	4	21	11359	¾ in. – 10 x 1½ in. HHCS #2 zinc-plated bolt (leg clamp)	4

FIG. H: Exploded Parts Diagram for Models AHSN-6-15-7, AHSN-6-15-9, AHSN-6-15-10, AHSN-6-15-12, AHSN-6-15-14 & AHSN-6-15-16



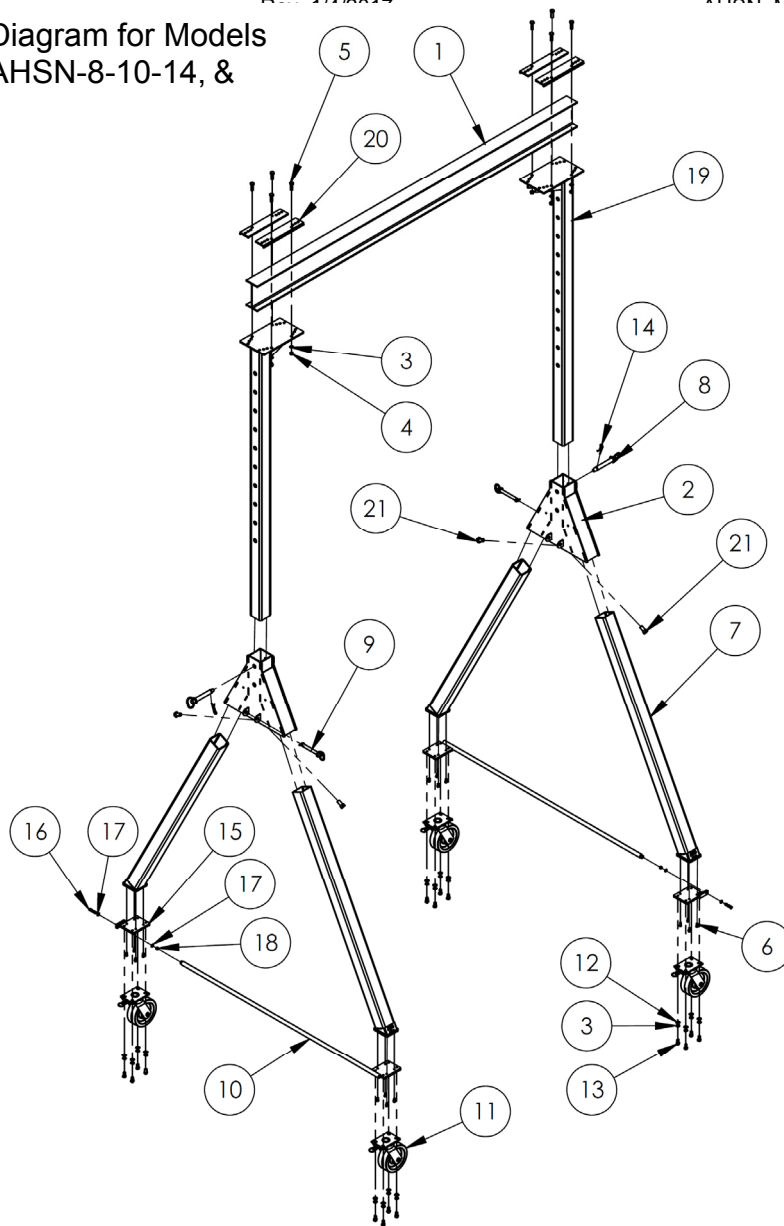
Item no.	Part no.	Description	Quantity	Item no.	Part no.	Description	Quantity								
1	28-014-391	Frame, domestic steel I-beam	1	12	<u>Weldment, leg set cross brace:</u>										
					28-514-243	AHSN-6-15-7	2								
					28-514-244	AHSN-6-15-9	2								
					28-514-245	AHSN-6-15-10	2								
					28-514-246	AHSN-6-15-12	2								
					28-514-247	AHSN-6-15-14 & AHSN-6-15-16	2								
2	28-514-237	Weldment, steel leg yoke	2	13	33011	½ in. USS flat washer, plain	16								
3	33626	½ in. zinc-plated lock washer	24	14	13205	½ in. – 13 x 1 in. HHCS grade 5 zinc-plated bolt	16								
4 & 5	19211	A325 structural bolt & nut combo. ½ in. – 13 A325 structural nut ½ in. – 13 x 2 in. A325 structural bolt	8 8	15	28-514-258	Weldment, cross brace bolt end, 6k & 8k	2								
6	11053	¾ in. – 18 x ¾ in. HHCS #2 zinc-plated bolt	16	16	33008	¾ in. USS flat washer, zinc-plated	4								
7	28-514-238 28-514-239 28-514-240 28-514-241 28-514-242	<u>Leg weldment:</u> AHSN-6-15-7 AHSN-6-15-9 AHSN-6-15-10 AHSN-6-15-12 AHSN-6-15-14 & AHSN-6-15-16	4 4 4 4 4	17	36106	¾ in. – 16 hex nut, zinc-plated	2								
								8	28-112-027	Pin, axle, pivot, roller	2	18	13111	¾ in. – 16 x 2 in. HHCS #5 zinc-plated bolt	2
								9	28-112-007	¾ in. retaining pin	2	19	<u>Weldment, upright assembly:</u>		
													28-514-151	AHSN-6-15-7	2
													28-514-150	AHSN-6-15-9	2
28-514-149	AHSN-6-15-10	2													
28-514-009	AHSN-6-15-12	2													
28-514-010	AHSN-6-15-14	2													
28-514-124	AHSN-6-15-16	2													
10	45282	#6 hitch pin clip	2	20	28-516-053	Weldment, I-beam clamp	4								
11	PH-F-8/3-S-4PSL	8 in. x 3 in. phenolic 4-way swivel lock caster	4	21	11359	¾ in. – 10 x 1½ in. HHCS #2 zinc-plated bolt (leg clamp)	4								

FIG. I: Exploded Parts Diagram for Models AHSN-6-20-12, AHSN-6-20-14, & AHSN-6-20-16



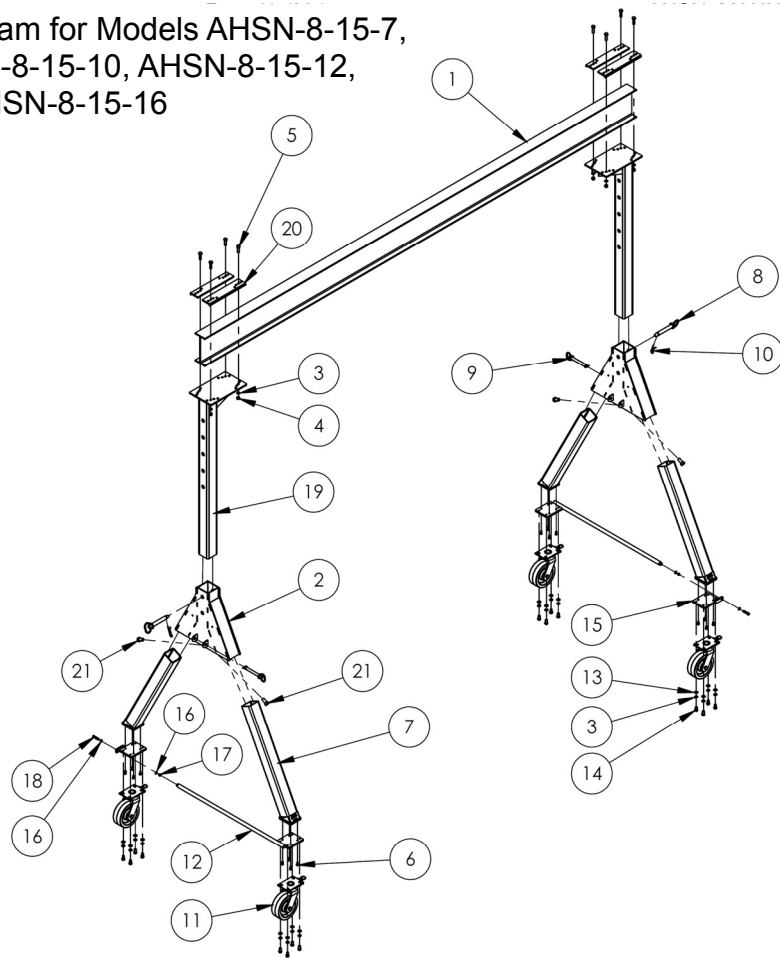
Item no.	Part no.	Description	Quantity	Item no.	Part no.	Description	Quantity
1	28-514-237	Weldment, steel leg yoke	2	12	13205	½ in. – 13 x 1in. HHCS grade 5 zinc-plated bolt	16
2	33626	½ in. zinc-plated lock washer	24	13	45282	#6 hitch pin clip	2
3 & 4	19211	A325 structural bolt & nut combo. ½ in. – 13 A325 structural nut ½ in. – 13 x 2in. A325 structural bolt	8 8	14	28-514-258	Weldment, cross brace bolt end, 6k & 8k	2
5	11053	¾ in. – 18 x ¼ in. HHCS #2 zinc-plated bolt	16	15	13111	¾ in. – 16 x 2in. HHCS #5 zinc-plated bolt	2
6	28-514-241 28-514-242	Weldment, leg: AHSN-6-20-12 AHSN-6-20-14 & AHSN-6-20-16	4 4	16	33008	¾ in. USS flat washer, zinc-plated	4
7	28-112-027	Pin, axle, pivot, roller	2	17	36106	¾ in. – 16 hex nut, zinc-plated	2
8	28-112-007	¾ in. retaining pin	2	18	28-014-417	Frame, domestic steel I-beam	1
9	28-514-246 28-514-247	Weldment, leg set cross brace: AHSN-6-20-12 AHSN-6-20-14 & AHSN-6-20-16	2 2	19	11359	¾ in. – 10 x 1½ in. HHCS #2 zinc-plated bolt	4
10	PH-F-8/3-S-4PSL	8in. x 3in. phenolic 4-way swivel lock caster	4	20	28-514-009 28-514-124 28-514-010	Assembly frame, upright: AHSN-6-20-12 AHSN-6-20-14 AHSN-6-20-16	2 2 2
11	33011	½ in. USS flat washer, plain	16	21	28-516-053	Weldment, I-beam clamp	4
				22	28-113-022	Shim, top plate clamp shim	4

FIG. J: Exploded Parts Diagram for Models
AHSN-8-10-12, AHSN-8-10-14, &
AHSN-8-10-16



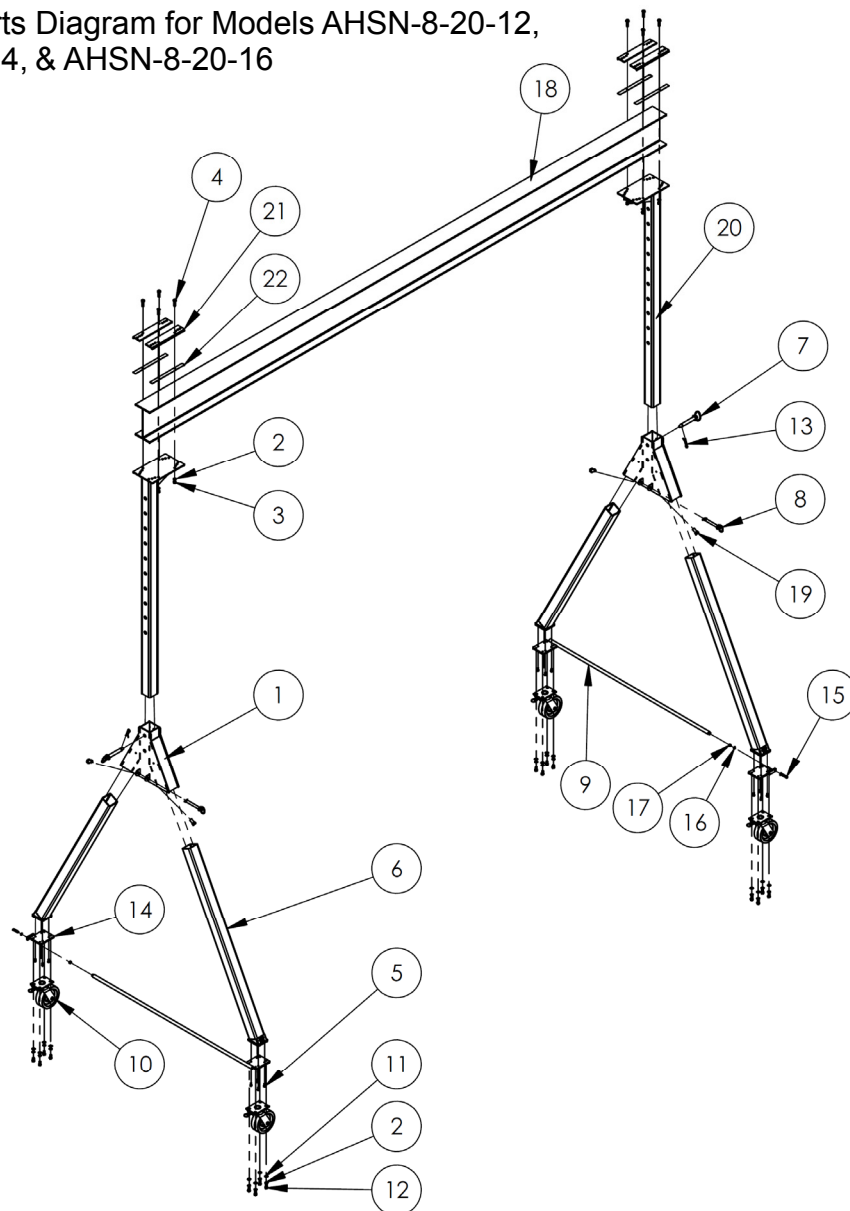
Item no.	Part no.	Description	Quantity	Item no.	Part no.	Description	Quantity
1	28-014-387	Frame, domestic steel I-beam	1	12	33011	½ in. USS flat washer, plain	16
2	28-514-237	Weldment, steel leg yoke	2	13	13205	½ in. – 13 x 1in. HHCS grade 5 zinc-plated bolt	2
3	33626	½ in. zinc-plated lock washer	8	14	45282	#6 hitch pin clip	1
4 & 5	19211	A325 structural bolt & nut combo. ½ in. – 13 A325 structural nut ½ in. – 13 x 2in. A325 structural bolt	8 8	15	28-514-258	Weldment, cross brace bolt end, 6k & 8k	2
6	11053	¾ in. – 18 x ¼ in. HHCS #2 zinc-plated bolt	4	16	13111	¾ in. – 16 x 2in. HHCS #5 zinc-plated bolt	2
7	28-514-241 28-514-242	Leg weldment: AHSN-8-10-12 AHSN-8-10-14 & AHSN-8-10-16	2	17	33008	¾ in. USS flat washer, zinc-plated	4
8	28-112-027	Pin, axle, pivot, roller	2	18	36106	¾ in. – 16 hex nut, zinc-plated	2
9	28-112-007	¾ in. retaining pin	2	19	28-514-009 28-514-010 28-514-124	Weldment, upright assembly: AHSN-8-10-12 AHSN-8-10-14 AHSN-8-10-16	24
10	28-514-246 28-514-247	Weldment, leg set cross brace: AHSN-8-10-12 AHSN-8-10-14 & AHSN-8-10-16	4	20	28-516-053	Weldment, I-beam clamp	4
11	PH-F-8/3-S-4PSL	8in. x 3in. phenolic 4-way swivel lock caster	16	21	11359	¾ in. – 10 x 1½ in. HHCS #2 zinc-plated bolt (leg clamp)	4

FIG. K: Exploded Parts Diagram for Models AHSN-8-15-7, AHSN-8-15-9, AHSN-8-15-10, AHSN-8-15-12, AHSN-8-15-14, & AHSN-8-15-16



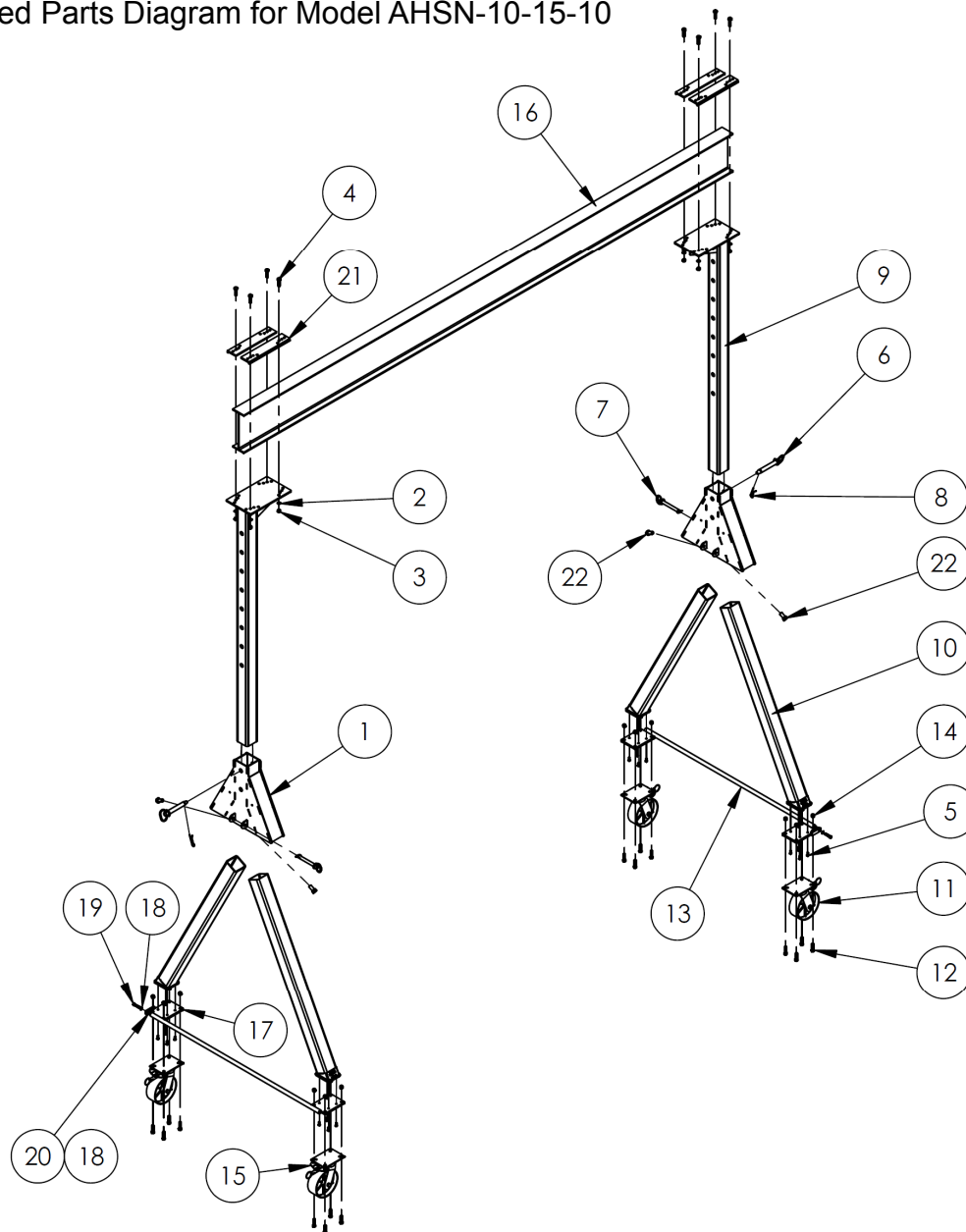
Item no.	Part no.	Description	Quantity	Item no.	Part no.	Description	Quantity
1	28-014-391	Frame, domestic steel I-beam	1	12	28-514-243 28-514-244 28-514-245 28-514-246 28-514-247	<u>Weldment, leg set cross brace:</u> AHSN-8-15-7 AHSN-8-15-9 AHSN-8-15-10 AHSN-8-15-12 AHSN-8-15-14 & AHSN-8-15-16	16
2	28-514-237	Weldment, steel leg yoke	2	13	33011	½ in. USS flat washer, plain	2
3	33626	½ in. zinc-plated lock washer	8	14	13205	½ in. – 13 x 1in. HHCS grade 5 zinc-plated bolt	1
4 & 5	19211	A325 structural bolt & nut combo. ½ in. – 13 A325 structural nut ½ in. – 13 x 2in. A325 structural bolt	8 8	15	28-514-258	Weldment, cross brace bolt end, 6k & 8k	2
6	11053	5/16 in. – 18 x 3/4 in. HHCS #2 zinc-plated bolt	4	16	33008	3/8 in. USS flat washer, zinc-plated	2
7	28-514-238 28-514-239 28-514-240 28-514-241 28-514-242	<u>Leg weldment:</u> AHSN-8-15-7 AHSN-8-15-9 AHSN-8-15-10 AHSN-8-15-12 AHSN-8-15-14 & AHSN-8-15-16	2	17	36106	3/8 in. – 16 hex nut, zinc-plated	4
8	28-112-027	Pin, axle, pivot, roller	2	18	13111	3/8 in. – 16 x 2in. HHCS #5 zinc-plated bolt	2
9	28-112-007	¾ in. retaining pin	2	19	28-514-151 28-514-150 28-514-149 28-514-009 28-514-010 28-514-124	<u>Telescoping upright assembly weldment:</u> AHSN-8-15-7 AHSN-8-15-9 AHSN-8-15-10 AHSN-8-15-12 AHSN-8-15-14 AHSN-8-15-16	24
10	45282	#6 hitch pin clip	4	20	28-516-053	Weldment, I-beam clamp	4
11	PH-F-8/3-S-4PSL	8in. x 3in. phenolic 4-way swivel lock caster	16	21	11359	¾ in. – 10 x 1½ in. HHCS #2 zinc-plated bolt (leg clamp)	4

FIG. L: Exploded Parts Diagram for Models AHSN-8-20-12, AHSN-8-20-14, & AHSN-8-20-16



Item no.	Part no.	Description	Quantity	Item no.	Part no.	Description	Quantity
1	28-514-237	Weldment, steel leg yoke	2	12	13205	½ in. – 13 x 1in. HHCS grade 5 zinc-plated bolt	16
2	33626	½ in. zinc-plated lock washer	24	13	45282	#6 hitch pin clip	2
3 & 4	19211	A325 structural bolt & nut combo. ½ in. – 13 A325 structural nut ½ in. – 13 x 2in. A325 structural bolt	8 8	14	28-514-258	Weldment, cross brace bolt end, 6k & 8k	2
5	11053	5/16 in. – 18 x ¾ in. HHCS #2 zinc-plated bolt	16	15	13111	3/8 in. – 16 x 2in. HHCS #5 zinc-plated bolt	2
6	28-514-241 28-514-242	Leg weldment: AHSN-8-20-12 AHSN-8-20-14 & AHSN-8-20-16	4 4	16	33008	3/8 in. USS flat washer, zinc-plated	4
7	28-112-027	Pin, axle, pivot, roller	2	17	36106	3/8 in. – 16 hex nut, zinc-plated	2
8	28-112-007	¾ in. retaining pin	2	18	28-014-417	Steel I-beam	1
9	28-514-246 28-514-247	Weldment, leg set cross brace: AHSN-8-20-12 AHSN-8-20-14 & AHSN-8-20-16	2 2	19	11359	¾ in. – 10 x 1½ in. HHCS #2 zinc-plated bolt	4
10	16-132-064	¾ in. retaining pin	4	20	28-514-009 28-514-010 28-514-124	Assembly frame, upright: AHSN-8-20-12 AHSN-8-20-14 AHSN-8-20-16	2 2 2
11	33011	½ in. USS flat washer, plain	16	21	28-516-053	Weldment, I-beam clamp	4
				22	28-113-022	Shim, top plate clamp shim	4

FIG. M: Exploded Parts Diagram for Model AHSN-10-15-10



Item no.	Part no.	Description	Quantity	Item no.	Part no.	Description	Quantity
1	28-514-237	Weldment, steel leg yoke	2	12	13211	1/2 in. - 13 x 2in. HHCS #5 zinc-plated bolt	16
2	33626	1/2 in. zinc-plated lock washer	8	13	28-514-256	Weldment, leg set cross brace	2
3 & 4	19211	A325 structural bolt & nut combo. 1/2in. - 13 A325 structural nut 1/2in. - 13 x 2in. A325 structural bolt	8 8	14	37030	1/2 in. - 13 nylon insert lock nut	16
5	11053	5/16 in. - 18 x 3/4 in. HHCS #2 zinc-plated bolt	14	15	16-132-305	Batwing caster position lock	4
6	28-112-027	Pin, axle, pivot, roller	2	16	28-014-393	Steel I-beam	1
7	28-112-007	3/4 in. retaining pin	2	17	28-514-259	Weldment, cross brace (bolt end)	2
8	45282	#6 hitch pin clip	2	18	33008	3/8 in. USS flat washer, zinc-plated	5
9	28-514-149	Telescoping upright assembly weldment:	2	19	13111	3/8 in. - 16 x 2in. HHCS #5 zinc-plated bolt	2
10	28-514-240	Leg weldment	4	20	36106	3/8 in. - 16 hex nut, zinc-plated	2
11	16-132-243	8in. x 3in. ductile steel caster	4	21	28-516-053	Weldment, I-beam clamp	4
				22	11359	3/4 in. - 10 x 1 1/2 in. HHCS #2 zinc-plated bolt (leg clamp)	4

Assembly Instructions:

WARNING

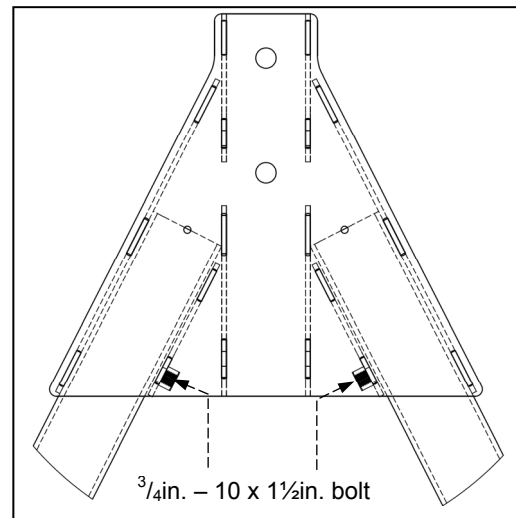
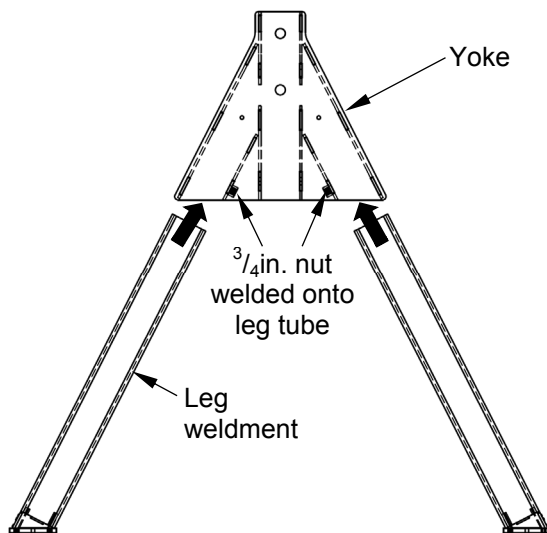
If the crane is improperly assembled, it might malfunction and result in serious personal injuries. Read this instruction manual in its entirety before assembling the crane; only assemble the crane if you fully understand both the associated risks and the manufacturer-approved assembly procedure discussed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

- Failure to apply the assembly procedure described in Steps 1-7 that follow constitutes misuse of the product.
- ONLY qualified personnel should assemble the crane.
- **DO NOT** modify the crane in any way unless and until you receive written approval from Vestil.
- **DO NOT** use the crane if you notice damage to or deformation of the beam, uprights, or any component of either 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; you could sustain serious injuries if the crane collapses. Contact Vestil to order replacement parts.
- **DO NOT** use the crane if any of the casters is damaged. A damaged caster may cause the crane to tip over while hoisting or supporting a load.

NOTICE

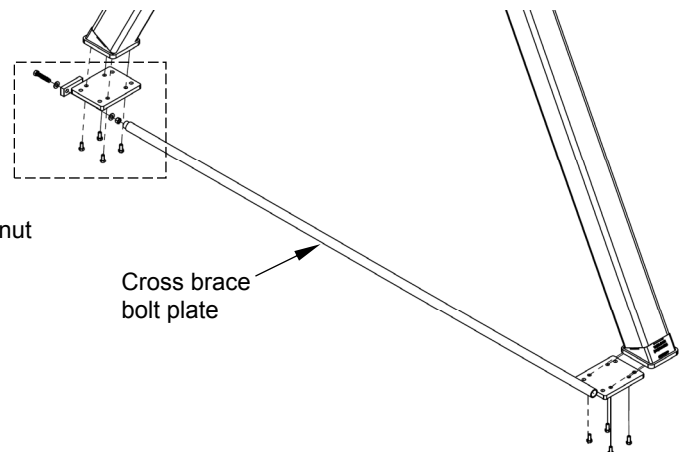
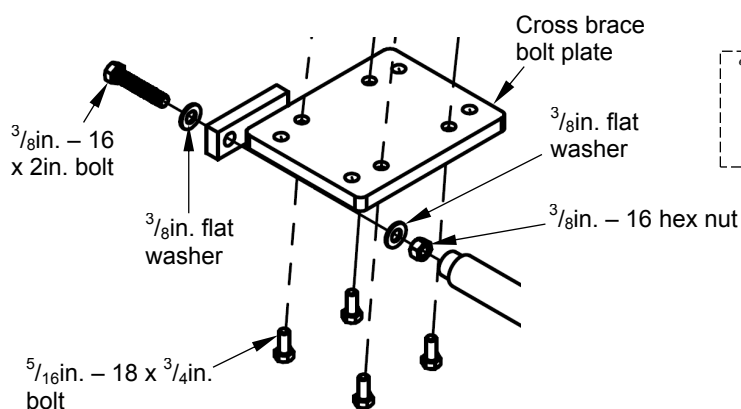
- Modifying the crane in any way without first receiving written approval of the modification from Vestil automatically voids the limited warranty.
- The crane is designed for both indoor and outdoor use. However, it should be sheltered from the weather when not in use.
- Inspect the crane for damage before each use.

Step 1a: Insert the leg weldments into the leg yoke; then secure the legs in place by installing $\frac{3}{4}$ in. – 10 x $1\frac{1}{2}$ in. bolts through the $\frac{3}{4}$ in. square nuts welded to the outer surface of the leg tubes.



[AHSN-6, AHSN-8, and AHSN-10 models only]

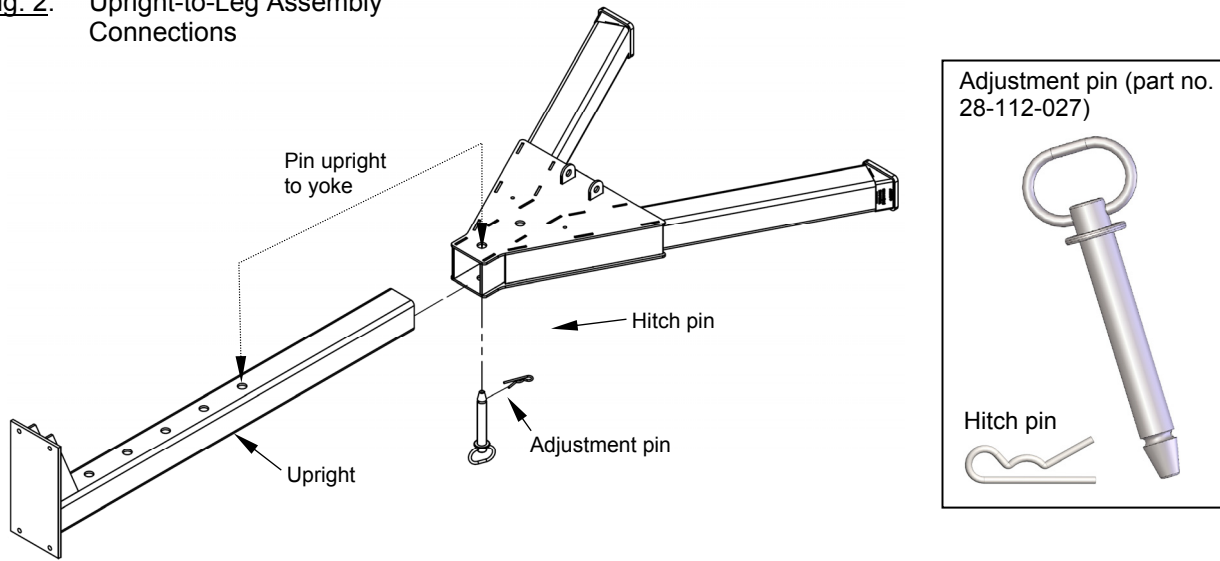
Step 1b: Attach cross brace (28-514-246) and cross brace bolt plate (28-514-259) to bottoms of legs; then fasten the cross brace to the bolt tab with $\frac{3}{8}$ in. hardware.



Step 2: Attach the uprights to the yokes.

- a. Lay the yokes, uprights, and legs on the ground.
- b. Slide the uprights into the center channels of the yokes.
- c. Align the selected pinhole in each upright with the pinhole in the yoke as shown in Figs. 2A below. Both uprights must be pinned to a leg assembly through the same pinhole.

Fig. 2: Upright-to-Leg Assembly Connections



Step 3: Attach one beam clamp to each upright using the hardware indicated in FIG. 3A or 3B below.

NOTE: Fig. 3A applies only to models AHSN-6-20-12, 6-20-14, 6-20-16, 8-20-12, 8-20-14, & 8-20-16.

Fig. 3A: Beam Clamp-to-Bracket Connection
[Models AHSN-6-20-12, 6-20-14, 6-20-16, 8-20-12, 8-20-14, & 8-20-16]

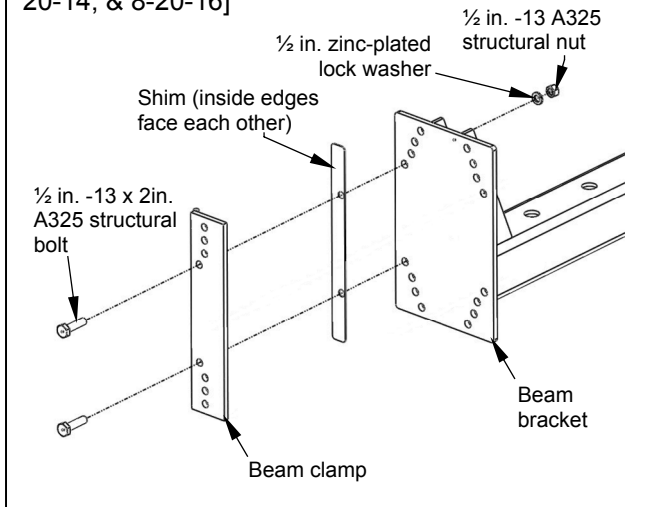
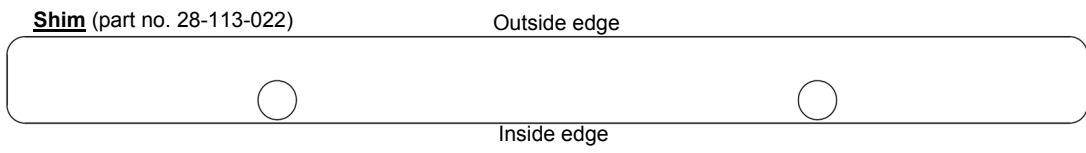
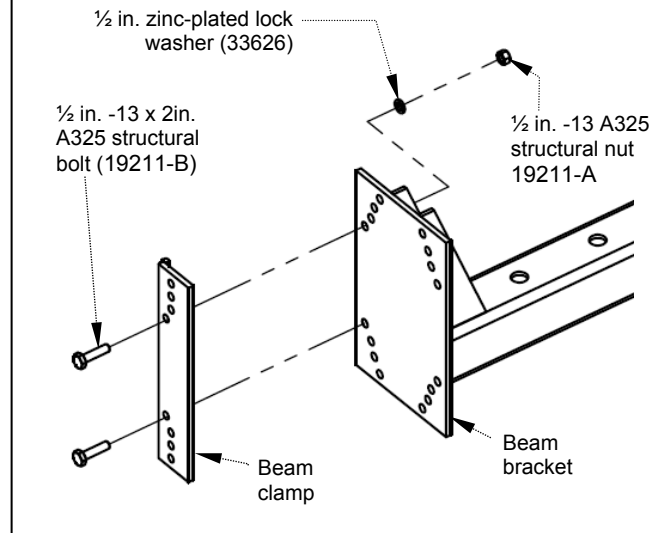


Fig. 3B: Beam Clamp-to-Bracket Connection



Step 4: Fasten I-beam to uprights.

[NOTE: Shim only used with models AHSN-6-20-12, 6-20-14, 6-20-16, 8-20-12, 8-20-14 & 8-2016.]

- a. Insert the flange of the I-beam into the gap between the beam clamp and the top of the uprights (see FIG. 4B below);
- b. Then clamp the flange on the opposite side of the beam to the beam bracket with the remaining beam clamps as shown in the diagram below.

FIG. 4B: Clamp the I-beam to the tops of the uprights

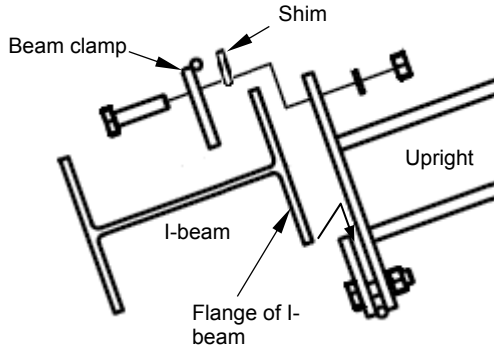


FIG. 4A: End View of I-beam Connection to Beam Bracket

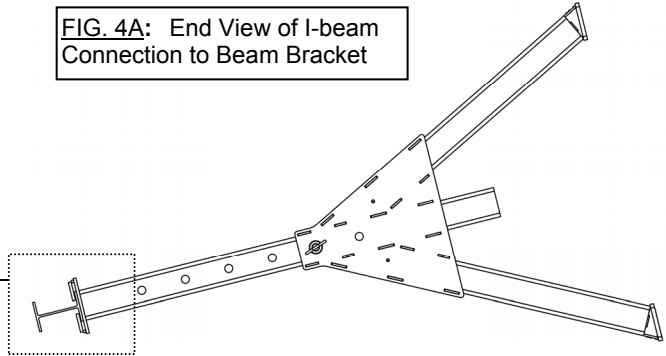


FIG. 4C: Beam-to-upright connection

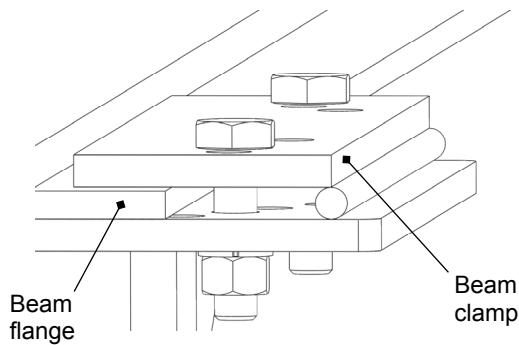
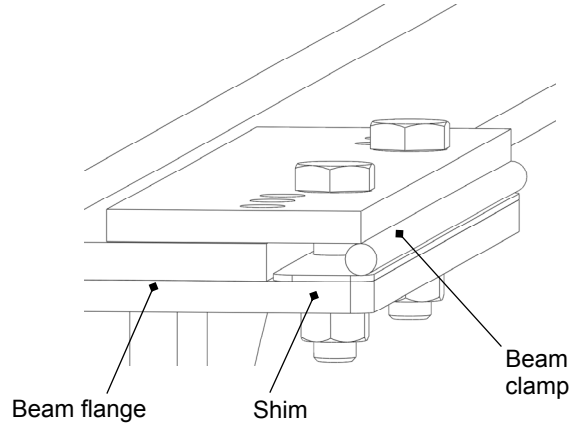


FIG. 4D: Beam-to-upright connection including shim

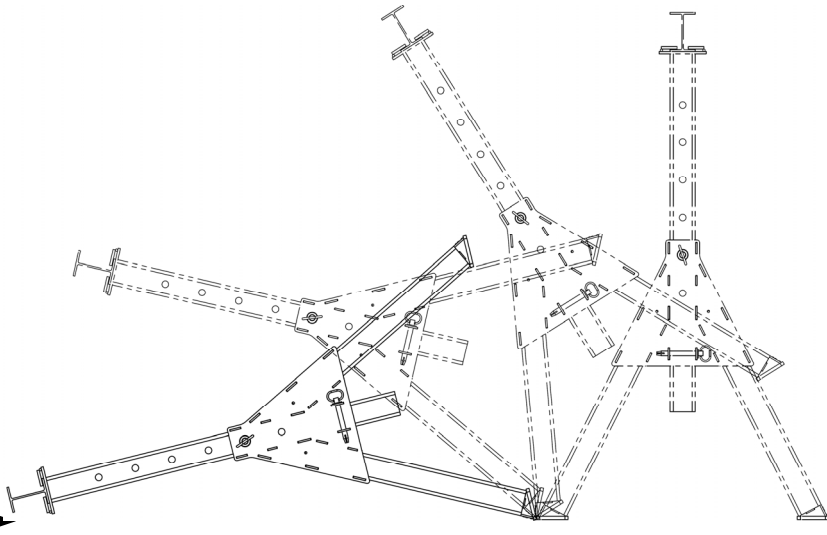


Step 5: Tighten the beam clamp nuts and bolts to 50 - 52 ft·lb of torque.

Step 6: Put 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 *slowly* raise the beam until the crane stands on its feet. Alternatively, raise the crane with a fork truck. Position the forks under the I-beam and slowly raise the beam until the crane rotates onto its feet in a controlled manner.

Approach the crane with a fork truck from this side and slide the forks under the I-beam. Slowly raise the beam and drive forward until the crane stands on its feet.



Step 7: Connect the casters to the legs (diagrams below show standard casters).

- a. Raise the crane 8-10 inches off of the ground with a fork lift or hoist.
- b. Position a caster underneath each foot.
- c. Attach a caster to the foot of each leg using the hardware as shown in the diagrams below.

Fig. 7A: Caster attachment

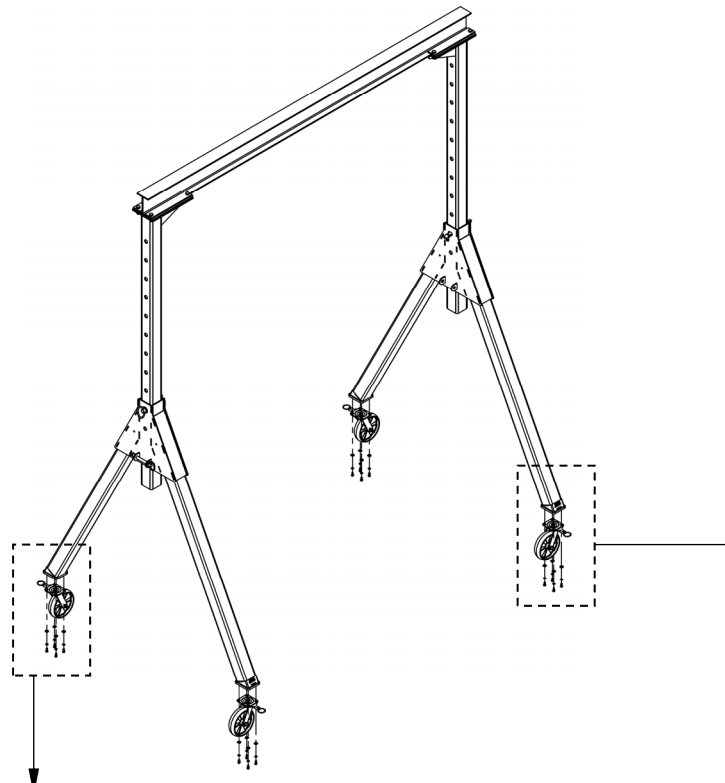
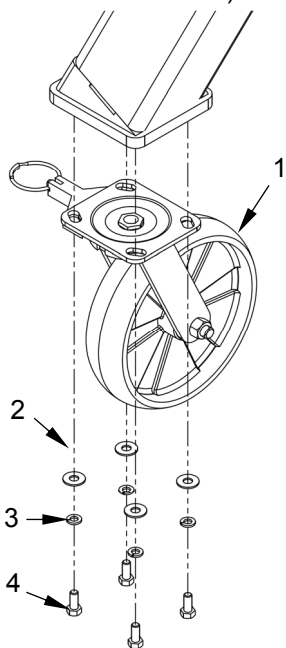


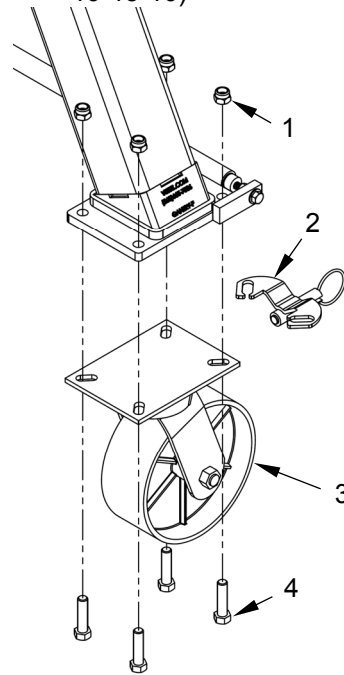
Fig. 7B: Caster attachment (AHSN-2; AHSN-4; AHSN-6; and AHSN-8 models)



- 1 GFN-8/2-S-4PSL caster
- 2 $\frac{5}{16}$ in. zinc-plated USS flat washer
- 3 $\frac{5}{16}$ in. zinc-plated lock washer
- 4 $\frac{5}{16}$ in. - 18 x $\frac{3}{4}$ in. HHCS #2 zinc-plated bolt

-OR-

Fig. 7C: Caster attachment (AHSN-10-15-10)



- 1 $\frac{1}{2}$ in. - 13 lock nut
- 2 Batwing caster position lock
- 3 Ø8in. x 3in. ductile steel caster
- 4 $\frac{1}{2}$ in. - 13 x 2in. HHCS #5 zinc-plated bolt

Use Instructions

Before using the crane for the first time, perform the "Initial Inspection" described on p. 24.

- WARNING** 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 trained, qualified crane operators should use this device. The operating instructions in this manual *supplement* safe crane and hoist operation practices learned during your training program.
 - ALWAYS apply safe material handling practices learned during your training program.
 - All personnel not participating in crane use must stay out of the crane operation area during use. Be certain no 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 maintenance personnel if: 1) you observe any damage or hear unusual noise during operation; 2) if you observe any warping or deformation of the beam, the uprights, the load hook or chain (or cable).

Height adjustment:

Support the I-beam so that the height adjustment pins can be removed, for instance with the tines of a fork truck or by attachment to an overhead hoist. Raise the beam to the desired height; then reinstall the adjustment pins. Each pin must extend completely through a yoke (see Fig. 8).

Proper loading:

Position the trolley and hoist directly above the load. Proper centering requires the operator to center the trolley and hoist above the center of the load as well as to position the long axis of the I-beam above the center of the load. Proper positioning is diagrammed below in Fig 9.

FIG. 9: Loading the crane

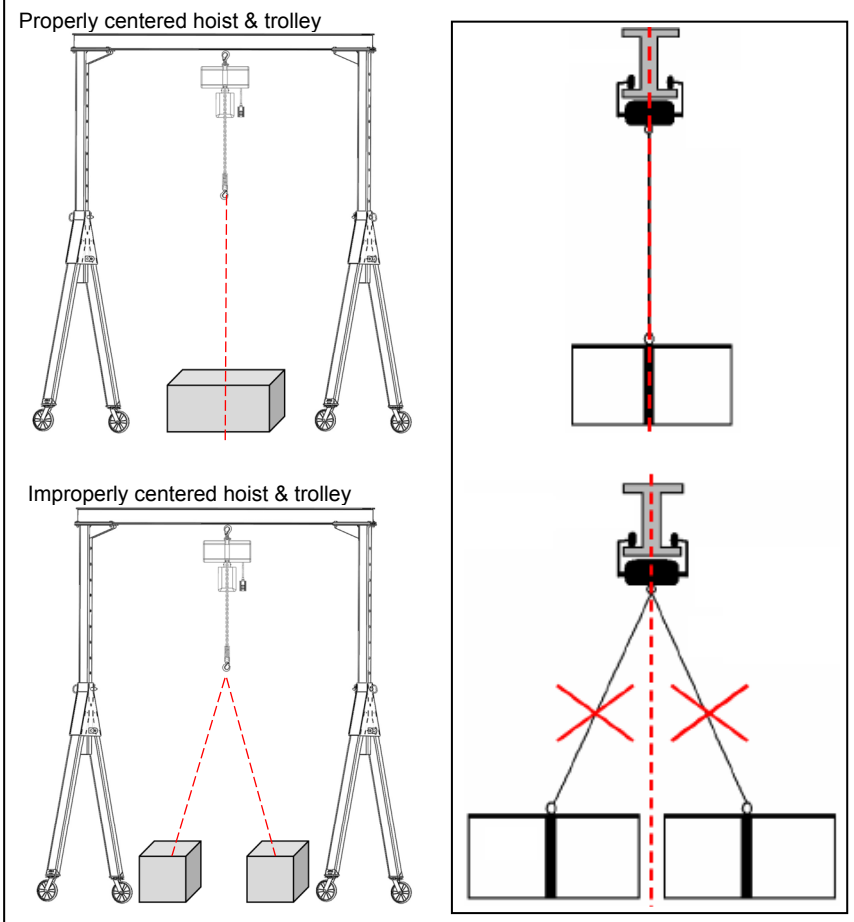
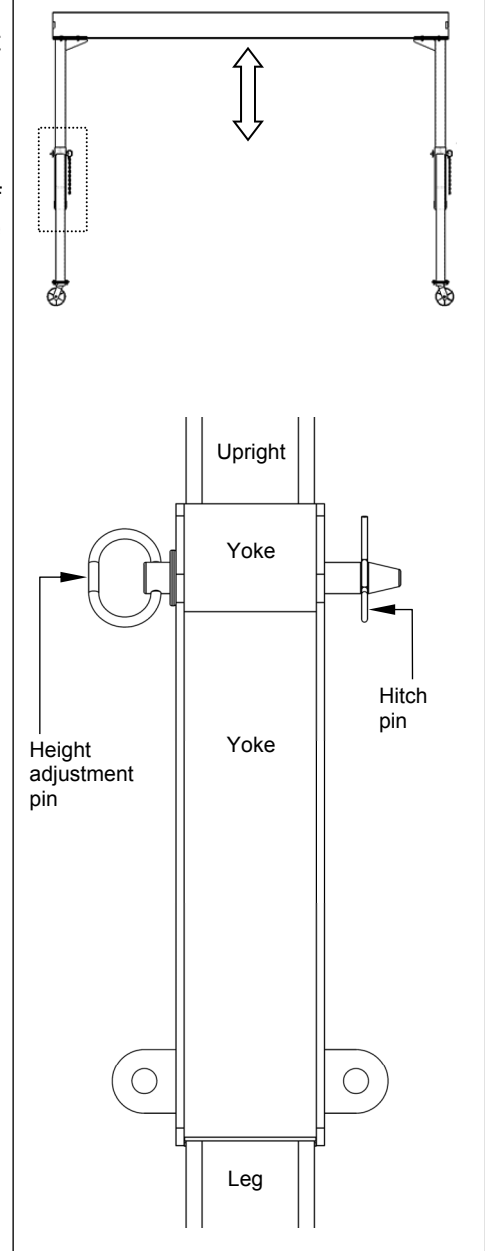


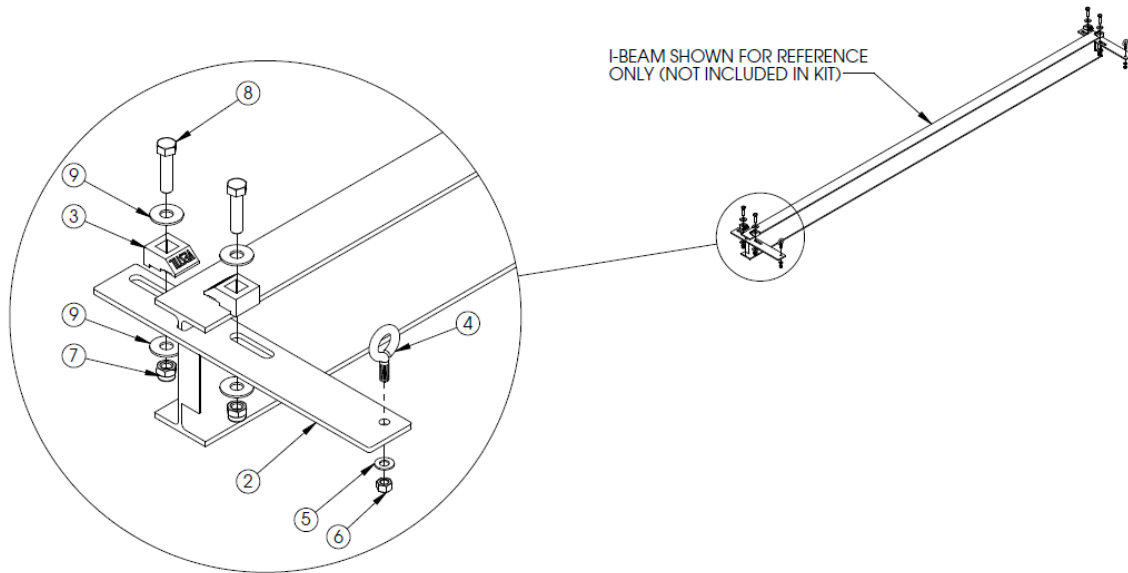
Fig. 8: Pin uprights at selected height



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 only 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 and hoist to their storage locations.

If you must move the load to a different location, return the load to the ground and disconnect it from the hoist. **Move the crane and load separately to the desired work location. Only use the crane to lift loads.**

Festoon Kit (option)



Item no.	Part no.	Description	Quantity
2	28-016-169	Hold down plate	2
3	28-145-002	I-beam clamp	4
4	42234	$\frac{3}{8}$ in. -16 x 1in. turned eye bolt	2
5	33008	$\frac{3}{8}$ in. zinc-plated flat washer	2
6	36106	$\frac{3}{8}$ in. -16 zinc-plated hex nut	2
7	37030	$\frac{1}{2}$ in. - 13 nylon insert lock nut	4
8	11211	$\frac{1}{2}$ in. - 13 x 2 in. HHCS zinc-plated bolt	4
9	33012	$\frac{1}{2}$ in. zinc-plated USS flat washer	8
10	45503	$\frac{1}{8}$ in. wire rope (1 in. longer than 1-beam)	1
11	34785T4	Quick-grip wire rope clamp	2
12	CV200	Plastic cable tie	7
13	O-RING15	Metal ring	6
14	FCOIL 143-001	Coiled power cord	1

Inspections and Maintenance:

Apply crane inspection procedures established in 29 CFR 1910.179 (accessible by visiting <http://www.osha.gov/> and navigate to “Regulations”; then to “General Industry” standards, section 1910.179; specifically 29 CFR 1910.179(j) describes the various inspections the end user is responsible for performing on this crane):

1. **Initial inspection** — 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, 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, 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 all rope 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).

Markings and Labels:

NOTE: Periodically inspect the labels affixed to the product. Clean the labels as necessary to maintain legibility from a reasonable viewing distance. Contact the manufacturer for replacement labels.

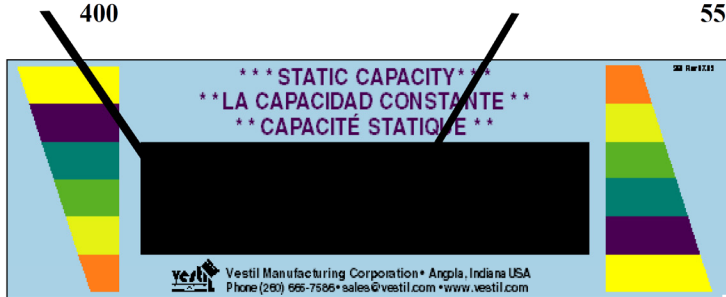
2,000 / 907
POUNDS KILOGRAMS 397

4,000 / 1,814
POUNDS KILOGRAMS 398

6,000 / 2,721
POUNDS KILOGRAMS 400

8,000 / 3,628
POUNDS KILOGRAMS 559

OR



WARNING
DO NOT MOVE Gantry Crane with load suspended
ADVERTENCIA
NO MUEVA La grúa de caballete con la carga suspendida
ATTENTION
NE PAS DÉPLACER portique avec chargement suspendu

649

STATIC CAPACITY
LA CAPACIDAD CONSTANTE
CAPACITÉ STATIQUE

532

2,000 / 907
LBS. KG.

395

4,000 / 1,814
LBS. KG.

392

OR

6,000 / 2,721
LBS. KG.

420

8,000 / 3,628
LBS. KG.

558

WARNING

- Lock all wheels in perpendicular position to one another before loading.
- Check for damage and be sure all hardware is tight before each use. Remove from service and repair immediately if necessary.
- Never exceed capacity printed on I-Beam.
- Never move or load unless both height adjustment pins are fully inserted.
- Never cantilever loads off of one end.
- Always include weight of hoist and trolley when calculating load.
- Use on level concrete or equal surface.
- Stand clear of hanging tools.
- Keep clear of all overhead obstructions especially electrical equipment when moving gantry.
- See owner's manual for inspection and testing requirements.
- DO NOT MOVE Gantry Crane with load suspended

ADVERTENCIA

- Asegure todas las ruedas en la posición perpendicular antes de cargar la unidad.
- Compruebe por daños y asegúrese que toda la ferretería está sujeta antes de cada uso. Retire del servicio y repare inmediatamente si es necesario.
- Nunca exceda la capacidad impresa en la viga.
- Nunca mueva o cargue la unidad a no ser que ambos pasadores de ajuste de altura estén completamente insertados.
- Nunca deje que la carga sobresalga en un solo extremo.
- Siempre incluya el peso de la grúa y la carretilla cuando se calcule la carga.
- Use en cemento a nivel o en una superficie equivalente.
- Manténgase alejado de herramientas que cuelguen.
- Manténgase alejado de todas las obstrucciones en lo alto especialmente equipos eléctricos cuando se mueva la grúa.
- Vea el manual del propietario para los requisitos de inspección y pruebas.
- NO MUEVA La grúa de caballete con la carga suspendida

AVERTISSEMENT

- Bloquer chaque roue en position perpendiculaire à une autre avant de charger.
- Contrôler tout dommage et s'assurer que tout le matériel soit bien serré avant chaque utilisation. Retirer du service et réparer immédiatement si nécessaire.
- Ne jamais excéder la capacité imprimée sur la poutre.
- Ne jamais déplacer ou charger sans que les deux goupilles d'ajustement de hauteur ne soient complètement insérées.
- Ne jamais cantilever les charges d'une des extrémités.
- Toujours inclure le poids de levage et de charriage pour calculer la charge.
- Utiliser sur un ciment à niveau ou sur une surface équivalente.
- Vous écarter de tout outil pendant.
- Éviter toutes les obstructions élevées, surtout l'équipement électrique, pendant le mouvement du portique.
- Voir le guide d'utilisation pour les impératifs d'inspection et de vérification.
- NE PAS DÉPLACER portique avec chargement suspendu

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 used to make the product as shipped to the warrantee.

What is a "proper request"?

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

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

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 original dynamic components: motors, hydraulic pumps, electronic controllers, switches and cylinders. It also covers defects in original parts that wear under normal usage conditions ("wearing parts"), such as bearings, hoses, wheels, seals, brushes, and batteries.

How long is the warranty period?

The warranty period for original dynamic components is 90 days. For wearing parts, the warranty period is 90 days. 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;
 - Unauthorized modifications: 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 terms of this Limited Warranty.

