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D-GAL Series Galvanized Hoppers

Instruction Manual



*Hopper design is subject to change without notice. Your unit might differ from the hopper shown.

Receiving instructions:

After delivery, remove the packaging from the product. 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.

NOTE:

The end-user is solely responsible for confirming that product design, installation, use, and maintenance comply with laws, regulations, codes, and mandatory standards applied where the product is used.

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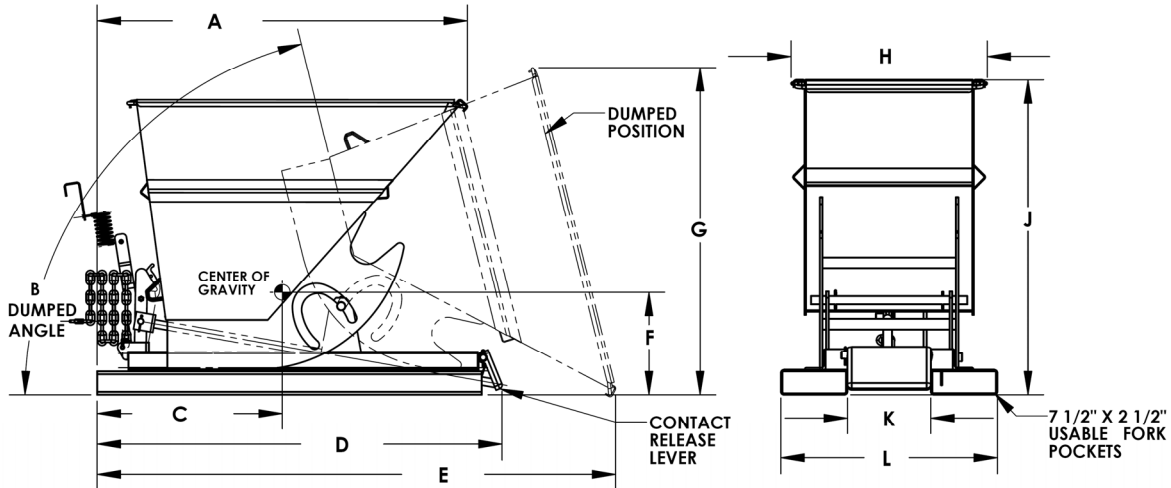
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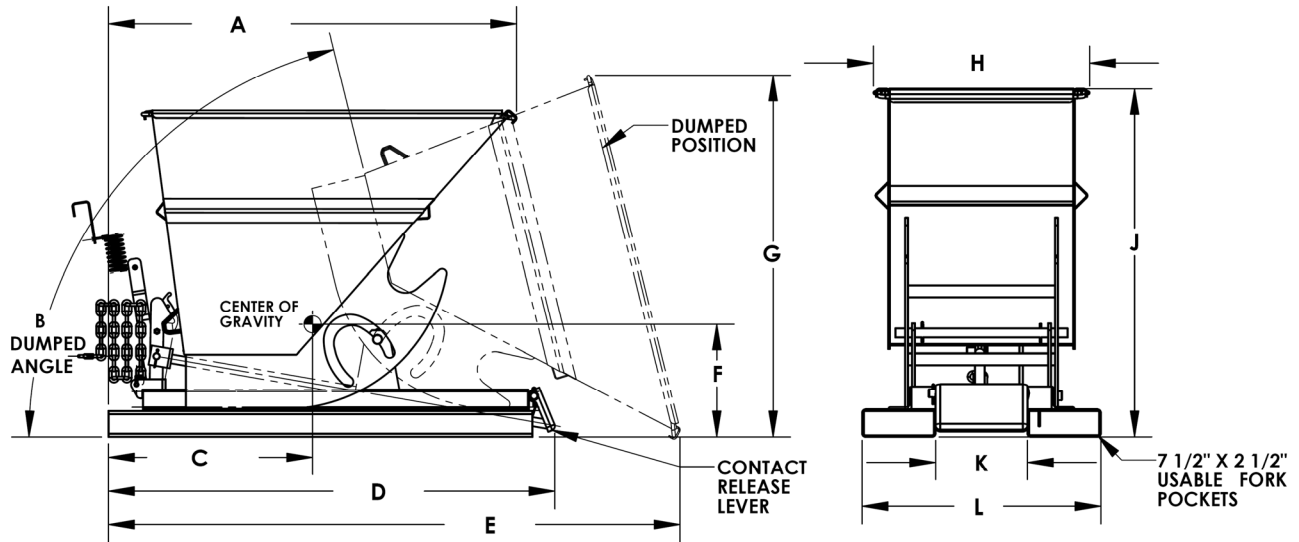
Specifications:

Dimensions, lost load, capacity and volume figures for each D-style hopper appear in the following diagrams and tables.



Model	A	B	C (Vertical Center of Gravity)	D	E	F (Horizontal Center of Gravity)	G	H	J	K	L	Volume	Net Weight (Lost Load)
Light duty (12 gauge steel); Capacity of all light duty models is 2,000 lb. (909.1 kg)													
D-25-LD-GAL	47 ⁷ / ₁₆ " 120.5cm	76°	23 ¹¹ / ₁₆ " 60.2cm	51 ⁷ / ₈ " 131.8cm	66 ³ / ₈ " 168.6cm	13 ³ / ₁₆ " 33.5cm	42 ³ / ₁₆ " 107.2cm	23 ⁹ / ₁₆ " 59.8cm	38 ¹ / ₁₆ " 96.7cm	10" 25.4cm	26" 66.0cm	¼ yd ³ (0.19 m ³)	410 lb. 186.4 kg
D-33-LD-GAL	47 ⁷ / ₁₆ " 120.5cm	76°	23 ¹¹ / ₁₆ " 60.2cm	51 ⁷ / ₈ " 131.8cm	66 ³ / ₈ " 168.6cm	13 ³ / ₁₆ " 33.5cm	42 ³ / ₁₆ " 107.2cm	23 ⁹ / ₁₆ " 59.8cm	38 ¹ / ₁₆ " 96.7cm	10" 25.4cm	26" 66.0cm	⅓ yd ³ (0.25 m ³)	410 lb. 186.4 kg
D-50-LD-GAL	47 ⁷ / ₁₆ " 120.5cm	76°	23 ¹ / ₂ " 59.7cm	51 ⁷ / ₈ " 131.8cm	66 ³ / ₈ " 168.6cm	14" 35.6cm	42 ³ / ₁₆ " 107.2cm	33 ⁹ / ₁₆ " 85.2cm	38 ¹ / ₁₆ " 96.7cm	10" 25.4cm	26" 66.0cm	½ yd ³ (0.38 m ³)	451 lb. 205 kg
D-75-LD-GAL	60 ¹ / ₁₆ " 152.6cm	76°	28 ¹¹ / ₁₆ " 72.9cm	61 ¹ / ₈ " 155.3cm	80 ¹⁵ / ₁₆ " 205.6cm	15 ⁷ / ₈ " 40.3cm	52 ³ / ₈ " 133.0cm	31 ⁹ / ₁₆ " 80.2cm	42 ³ / ₄ " 108.6cm	10" 25.4cm	26" 66.0cm	¾ yd ³ (0.57 m ³)	562 lb. 255.5 kg
D-100-LD-GAL	60 ¹ / ₁₆ " 152.6cm	76°	28 ³ / ₄ " 73.0cm	61 ¹ / ₈ " 155.3cm	80 ¹⁵ / ₁₆ " 205.6cm	15 ⁹ / ₁₆ " 39.5cm	52 ¹ / ₈ " 132.4cm	41 ¹ / ₂ " 105.4cm	42 ¹¹ / ₁₆ " 108.4cm	10" 25.4cm	26" 66.0cm	1 yd ³ (0.76 m ³)	556 lb. 252.7 kg
D-150-LD-GAL	60 ³ / ₈ " 153.4cm	67°	29 ⁷ / ₈ " 75.9cm	61 ¹ / ₈ " 155.3cm	94 ⁹ / ₁₆ " 240.2cm	21" 53.3cm	62" 157.5cm	43 ⁹ / ₁₆ " 110.6cm	51 ¹³ / ₁₆ " 131.6cm	20" 50.8cm	36" 91.4cm	1½ yd ³ (1.15 m ³)	760 lb. 345.5 kg
D-200-LD-GAL	68 ⁵ / ₁₆ " 173.5cm	67°	29 ¹³ / ₁₆ " 75.7cm	60 ¹⁵ / ₁₆ " 154.8cm	94 ⁹ / ₁₆ " 240.2cm	20 ¹¹ / ₁₆ " 52.5cm	62 ¹ / ₁₆ " 157.6cm	56 ⁵ / ₈ " 143.8cm	51 ¹³ / ₁₆ " 131.6cm	20" 50.8cm	36" 91.4cm	2 yd ³ (1.53 m ³)	754 lb. 342.7 kg
D-250-LD-GAL	68 ³ / ₈ " 173.7cm	67°	29 ¹¹ / ₁₆ " 75.4cm	61 ¹ / ₈ " 155.3cm	94 ¹ / ₄ " 239.4cm	22 ⁹ / ₁₆ " 56.7cm	62 ¹ / ₁₆ " 157.6cm	69 ⁹ / ₁₆ " 176.7cm	51 ³ / ₄ " 333.9cm	20" 50.8cm	36" 91.4cm	2½ yd ³ (1.91 m ³)	923 lb. 419.5 kg
D-300-LD-GAL	68 ⁵ / ₈ " 174.3cm	67°	29 ³ / ₄ " 75.6cm	61 ¹ / ₈ " 155.3cm	94 ⁷ / ₈ " 241.0cm	22 ⁷ / ₈ " 58.1cm	62 ⁵ / ₁₆ " 158.3cm	81 ³ / ₄ " 207.6cm	51 ¹³ / ₁₆ " 131.6cm	20" 50.8cm	36" 91.4cm	3 yd ³ (2.29 m ³)	1007 lb. 457.7 kg
Medium duty (10 gauge steel); Capacity of all light duty models is 4,000 lb. (1818.2 kg)													
D-25-MD-GAL	47 ⁷ / ₁₆ " 120.5cm	76°	23 ¹¹ / ₁₆ " 60.2cm	51 ⁷ / ₈ " 131.8cm	66 ³ / ₈ " 168.6cm	13 ³ / ₁₆ " 33.5cm	42 ³ / ₁₆ " 107.2cm	23 ⁹ / ₁₆ " 59.8cm	38 ¹ / ₁₆ " 96.7cm	10" 25.4cm	26" 66.0cm	¼ yd ³ (0.19 m ³)	410 lb. 186.4 kg
D-33-MD-GAL	47 ⁷ / ₁₆ " 120.5cm	76°	23 ¹¹ / ₁₆ " 60.2cm	51 ⁷ / ₈ " 131.8cm	66 ³ / ₈ " 168.6cm	13 ³ / ₁₆ " 33.5cm	42 ³ / ₁₆ " 107.2cm	23 ⁹ / ₁₆ " 59.8cm	38 ¹ / ₁₆ " 96.7cm	10" 25.4cm	26" 66.0cm	⅓ yd ³ (0.25 m ³)	410 lb. 186.4 kg
D-50-MD-GAL	47 ⁷ / ₁₆ " 120.5cm	76°	23 ¹ / ₂ " 59.7cm	51 ⁷ / ₈ " 131.8cm	66 ³ / ₈ " 168.6cm	14" 35.6cm	42 ³ / ₁₆ " 107.2cm	33 ⁹ / ₁₆ " 85.2cm	38 ¹ / ₁₆ " 96.7cm	10" 25.4cm	26" 66.0cm	½ yd ³ (0.38 m ³)	451 lb. 205 kg
D-75-MD-GAL	59 ¹⁵ / ₁₆ " 152.2cm	76°	28 ¹³ / ₁₆ " 73.2cm	61 ¹ / ₈ " 155.3cm	80 ¹⁵ / ₁₆ " 205.6cm	15 ⁷ / ₁₆ " 39.2cm	52 ¹ / ₈ " 132.4cm	31 ⁹ / ₁₆ " 80.2cm	42 ³ / ₄ " 108.6cm	10" 25.4cm	26" 66.0cm	¾ yd ³ (0.57 m ³)	562 lb. 255.5 kg
D-100-MD-GAL	60 ¹ / ₁₆ " 152.6cm	76°	28 ³ / ₄ " 73.0cm	61 ¹ / ₈ " 155.3cm	80 ¹⁵ / ₁₆ " 205.6cm	15 ⁹ / ₁₆ " 39.5cm	52 ¹ / ₈ " 132.4cm	41 ¹ / ₂ " 105.4cm	42 ¹¹ / ₁₆ " 108.4cm	10" 25.4cm	26" 66.0cm	1 yd ³ (0.76 m ³)	556 lb. 252.7 kg
D-150-MD-GAL	60 ³ / ₈ " 153.4cm	67°	29 ⁷ / ₈ " 75.9cm	61 ¹ / ₈ " 155.3cm	94 ⁹ / ₁₆ " 240.2cm	21" 53.3cm	62" 157.5cm	43 ⁹ / ₁₆ " 110.6cm	51 ¹³ / ₁₆ " 131.6cm	20" 50.8cm	36" 91.4cm	1½ yd ³ (1.15 m ³)	760 lb. 345.5 kg
D-200-MD-GAL	68 ⁵ / ₁₆ " 173.5cm	67°	29 ¹³ / ₁₆ " 75.7cm	60 ¹⁵ / ₁₆ " 154.8cm	94 ⁹ / ₁₆ " 240.2cm	20 ¹¹ / ₁₆ " 52.5cm	62 ¹ / ₁₆ " 157.6cm	56 ⁵ / ₈ " 143.8cm	51 ¹³ / ₁₆ " 131.6cm	20" 50.8cm	36" 91.4cm	2 yd ³ (1.53 m ³)	754 lb. 342.7 kg
D-250-MD-GAL	68 ³ / ₈ " 173.7cm	67°	29 ¹¹ / ₁₆ " 75.4cm	61 ¹ / ₈ " 155.3cm	94 ¹ / ₄ " 239.4cm	22 ⁹ / ₁₆ " 56.7cm	62 ¹ / ₁₆ " 157.6cm	69 ⁹ / ₁₆ " 176.7cm	51 ³ / ₄ " 333.9cm	20" 50.8cm	36" 91.4cm	2½ yd ³ (1.91 m ³)	923 lb. 419.5 kg
D-300-MD-GAL	68 ⁵ / ₈ " 174.3cm	67°	29 ³ / ₄ " 75.6cm	61 ¹ / ₈ " 155.3cm	94 ⁷ / ₈ " 241.0cm	22 ⁷ / ₈ " 58.1cm	62 ⁵ / ₁₆ " 158.3cm	81 ³ / ₄ " 207.6cm	51 ¹³ / ₁₆ " 131.6cm	20" 50.8cm	36" 91.4cm	3 yd ³ (2.29 m ³)	1007 lb. 457.7 kg

Specifications (continued from p. 2):



Model	A	B	C (Vertical Center of Gravity)	D	E	F (Horiz- ontal Center of Gravity)	G	H	J	K	L	Volume	Net Weight (Lost Load)
Heavy duty (8 gauge steel); Capacity of all light duty models is 6,000 lb. (2727.3 kg)													
D-25-HD-GAL	47 ⁷ / ₁₆ " 120.5cm	76°	23 ¹¹ / ₁₆ " 60.2cm	51 ⁷ / ₈ " 131.8cm	66 ³ / ₈ " 168.6cm	13 ³ / ₁₆ " 33.5cm	42 ³ / ₁₆ " 107.2cm	23 ⁹ / ₁₆ " 59.8cm	38 ¹ / ₁₆ " 96.7cm	10" 25.4cm	26" 66.0cm	¼ yd ³ 0.19 m ³	410 lb. 186.4 kg
D-33-HD-GAL	47 ⁷ / ₁₆ " 120.5cm	76°	23 ¹¹ / ₁₆ " 60.2cm	51 ⁷ / ₈ " 131.8cm	66 ³ / ₈ " 168.6cm	13 ³ / ₁₆ " 33.5cm	42 ³ / ₁₆ " 107.2cm	23 ⁹ / ₁₆ " 59.8cm	38 ¹ / ₁₆ " 96.7cm	10" 25.4cm	26" 66.0cm	⅓ yd ³ 0.25 m ³	410 lb. 186.4 kg
D-50-HD-GAL	47 ⁷ / ₁₆ " 120.5cm	76°	23 ¹ / ₂ " 59.7cm	51 ⁷ / ₈ " 131.8cm	66 ³ / ₈ " 168.6cm	14" 35.6cm	42 ³ / ₁₆ " 107.2cm	33 ⁹ / ₁₆ " 85.2cm	38 ¹ / ₁₆ " 96.7cm	10" 25.4cm	26" 66.0cm	½ yd ³ 0.38 m ³	451 lb. 205 kg
D-75-HD-GAL	60 ¹ / ₁₆ " 152.6cm	76°	28 ¹¹ / ₁₆ " 72.9cm	61 ¹ / ₈ " 155.3cm	80 ¹⁵ / ₁₆ " 205.6cm	15 ⁷ / ₈ " 40.3cm	52 ³ / ₈ " 133.0cm	31 ⁹ / ₁₆ " 80.2cm	42 ³ / ₄ " 108.6cm	10" 25.4cm	26" 66.0cm	¾ yd ³ 0.57 m ³	562 lb. 255.5 kg
D-100-HD-GAL	60 ¹ / ₈ " 152.7cm	76°	28 ⁵ / ₈ " 72.7cm	61 ¹ / ₈ " 155.3cm	80 ¹⁵ / ₁₆ " 205.6cm	16 ⁹ / ₁₆ " 42.1cm	52 ¹ / ₈ " 132.4cm	41 ⁹ / ₁₆ " 105.6cm	42 ³ / ₄ " 108.6cm	10" 25.4cm	26" 66.0cm	1 yd ³ 0.76 m ³	612 lb. 278.2 kg
D-150-HD-GAL	60 ³ / ₈ " 153.4cm	67°	29 ⁷ / ₈ " 75.9cm	61 ¹ / ₈ " 155.3cm	94 ⁹ / ₁₆ " 240.2cm	21" 53.3cm	62" 157.5cm	43 ⁹ / ₁₆ " 110.6cm	51 ¹³ / ₁₆ " 131.6cm	20" 50.8cm	36" 91.4cm	1½ yd ³ 1.15 m ³	760 lb. 345.5 kg
D-200-HD-GAL	68 ⁵ / ₁₆ " 173.5cm	67°	29 ¹³ / ₁₆ " 75.7cm	61 ¹ / ₈ " 155.3cm	94 ⁵ / ₈ " 240.3cm	21 ³ / ₄ " 55.2cm	62 ¹ / ₁₆ " 157.6cm	56 ⁹ / ₁₆ " 143.7cm	51 ¹³ / ₁₆ " 131.6cm	20" 50.8cm	36" 91.4cm	2 yd ³ 1.53 m ³	842 lb. 382.7 kg
D-250-HD-GAL	68 ³ / ₈ " 173.7cm	67°	29 ¹¹ / ₁₆ " 75.4cm	61 ¹ / ₈ " 155.3cm	94 ¹ / ₄ " 239.4cm	22 ⁵ / ₁₆ " 56.7cm	62 ¹ / ₁₆ " 157.6cm	69 ⁹ / ₁₆ " 176.7cm	51 ³ / ₄ " 333.9cm	20" 50.8cm	36" 91.4cm	2½ yd ³ 1.91 m ³	923 lb. 419.5 kg
D-300-HD-GAL	68 ⁵ / ₈ " 174.3cm	67°	29 ³ / ₄ " 75.6cm	61 ¹ / ₈ " 155.3cm	94 ⁷ / ₈ " 241.0cm	22 ⁷ / ₈ " 58.1cm	62 ⁵ / ₁₆ " 158.3cm	81 ³ / ₄ " 207.6cm	51 ¹³ / ₁₆ " 131.6cm	20" 50.8cm	36" 91.4cm	3 yd ³ 2.29 m ³	1007 lb. 457.7 kg

Options		
Model	Description	Net Weight
LEKP	"Leak proof" welded hopper	5 lb. (2.3kg)
D-DPLG-1	1" threaded drain plug located in bottom, left, rear corner; includes leak proof welds	2 lb. (0.9kg)
D-DPLG-2	2" threaded drain plug located in bottom, left, rear corner; includes leak proof welds	2 lb. (0.9kg)
LUG	4 welded lifting lugs (around perimeter of hopper mouth)	23 lb. (10.5kg)
D-TILT	Sideways chute dumping configuration; D-75-LD and D-100-LD models only	130 lb. (59.1kg)

Heavy-duty polyethylene lids

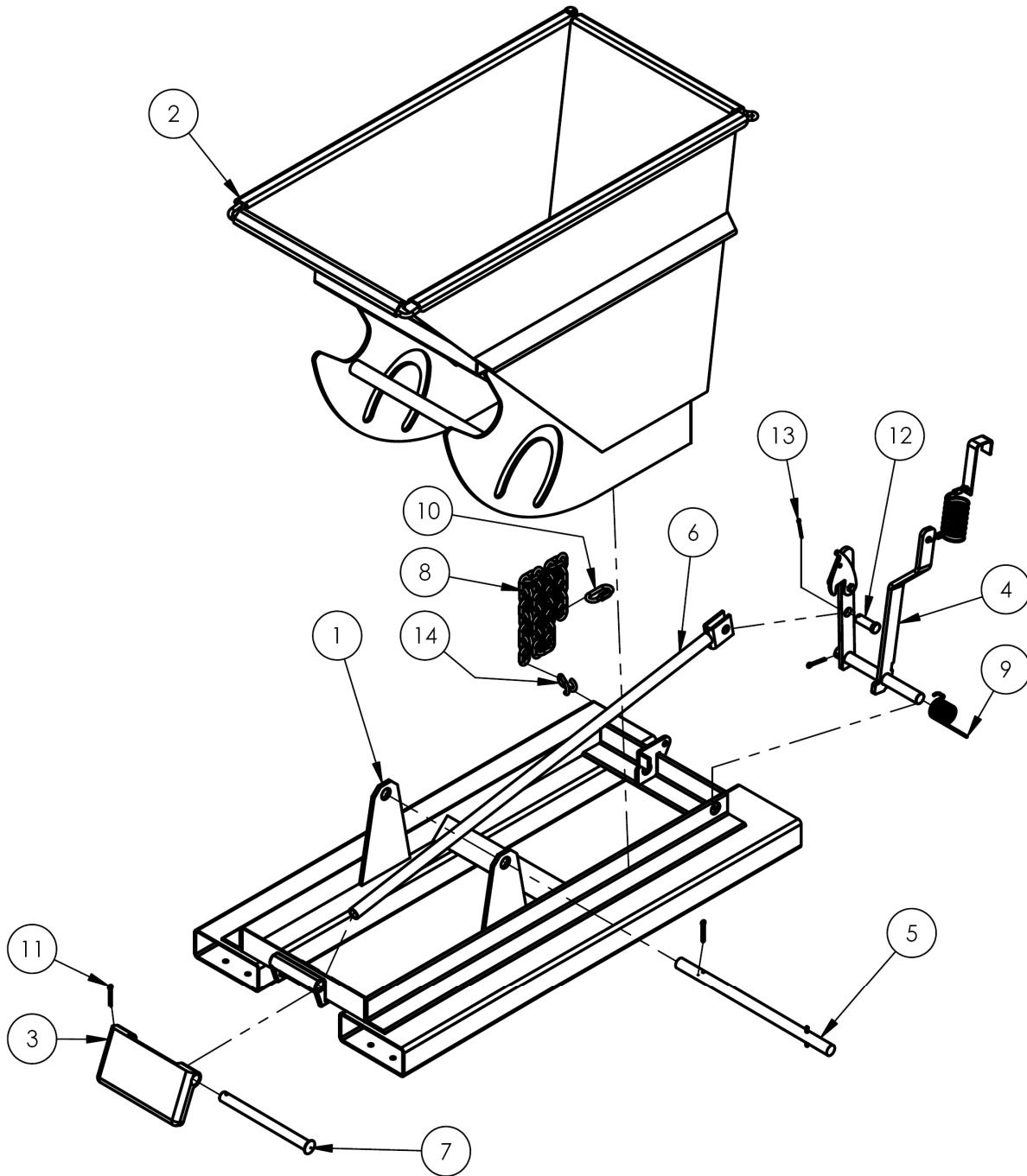
Lid Model	Parts	Description	Fits Hopper Models	Net Weight
PLID-D-25	37-024-087-002 37-112-028 37-016-034 37-016-033	Plastic lid Prop rod / hinge pin Bracket, Lid hinge, right Bracket, lid hinge, left	D-25-LD, D-25-MD, D-25-HD	16 lb. 7.3kg
PLID-D-33	37-024-087-002 37-112-028 37-016-034 37-016-033	Plastic lid Prop rod / hinge pin Bracket, Lid hinge, right Bracket, lid hinge, left	D-33-LD, D-33-MD, D-33-HD	16 lb. 7.3kg
PLID-D-50	37-024-087-001 37-112-029 37-016-034 37-016-033	Plastic lid Prop rod / hinge pin Bracket, Lid hinge, right Bracket, lid hinge, left	D-50-LD, D-50-MD, D-50-HD	21 lb. 9.5kg
PLID-D-75	37-024-086-002 37-112-030 37-016-034 37-016-033	Plastic lid Prop rod / hinge pin Bracket, Lid hinge, right Bracket, lid hinge, left	D-75-LD, D-75-MD, D-75-HD	22 lb. 10kg
PLID-D-100	37-024-086-001 37-112-031 37-016-034 37-016-033	Plastic lid Prop rod / hinge pin Bracket, Lid hinge, right Bracket, lid hinge, left	D-100-LD, D-100-MD, D-100-HD	28 lb. (12.7kg)
PLID-D-150	37-024-085-004 37-112-032 37-016-034 37-016-033	Plastic lid Prop rod / hinge pin Bracket, Lid hinge, right Bracket, lid hinge, left	D-150-LD, D-150-MD, D-150-HD	33 lb. 15kg
PLID-D-200	37-024-089 37-112-033 37-016-034 37-016-033	Plastic lid Prop rod / hinge pin Bracket, Lid hinge, right Bracket, lid hinge, left	D-200-LD, D-200-MD, D-200-HD	58 lb. 26.4kg
PLID-D-250	37-024-085-002 37-112-034 37-016-034 37-016-033	Plastic lid Prop rod / hinge pin Bracket, Lid hinge, right Bracket, lid hinge, left	D-250-LD, D-250-MD, D-250-HD	51 lb. 23.2kg
PLID-D-300	37-024-085-001 37-112-035 37-016-034 37-016-033	Plastic lid Prop rod / hinge pin Bracket, Lid hinge, right Bracket, lid hinge, left	D-300-LD, D-300-MD, D-300-HD	61 lb. 27.7kg

Caster kits

Model	Dimensions	Uniform Capacity	Caster Material	Quantity per Order	Net Weight
HOP-SC6-2	6" x 2" (15¼ x 5.1)cm	4,800 lb. (2,182kg)	Semi-steel	4	33 lb. (15kg)
HOP-SC8-2	8" x 2" (20.3 x 5.1)cm	4,800 lb. (2,182kg)	Semi-steel	4	42 lb. (19.1kg)
HOP-RC6-2	6" x 2" (15¼ x 5.1)cm	2,400 lb. (1,091kg)	Mold-on rubber	4	28 lb. (12.7kg)
HOP-RC8-2	8" x 2" (20.3 x 5.1)cm	2,400 lb. (1,091kg)	Mold-on rubber	4	37 lb. (16.8kg)
HOP-PC6-2	6" x 2" (15¼ x 5.1)cm	4,800 lb. (2,182kg)	Polyurethane on steel	4	33 lb. (15kg)
HOP-PC8-2	8" x 2" (20.3 x 5.1)cm	4,800 lb. (2,182kg)	Polyurethane on steel	4	42 lb. (19.1kg)
HOP-PHC6-2	6" x 2" (15¼ x 5.1)cm	4,800 lb. (2,182kg)	Glass-filled nylon	4	37 lb. (16.8kg)
HOP-PHC8-2	8" x 2" (20.3 x 5.1)cm	4,800 lb. (2,182kg)	Glass-filled nylon	4	54 lb. (24.5kg)
HOP-SC6-2.5	6" x 2½" (15¼ x 6.4)cm	6,000 lb. (2,727kg)	Steel	4	65 lb. (29.5kg)

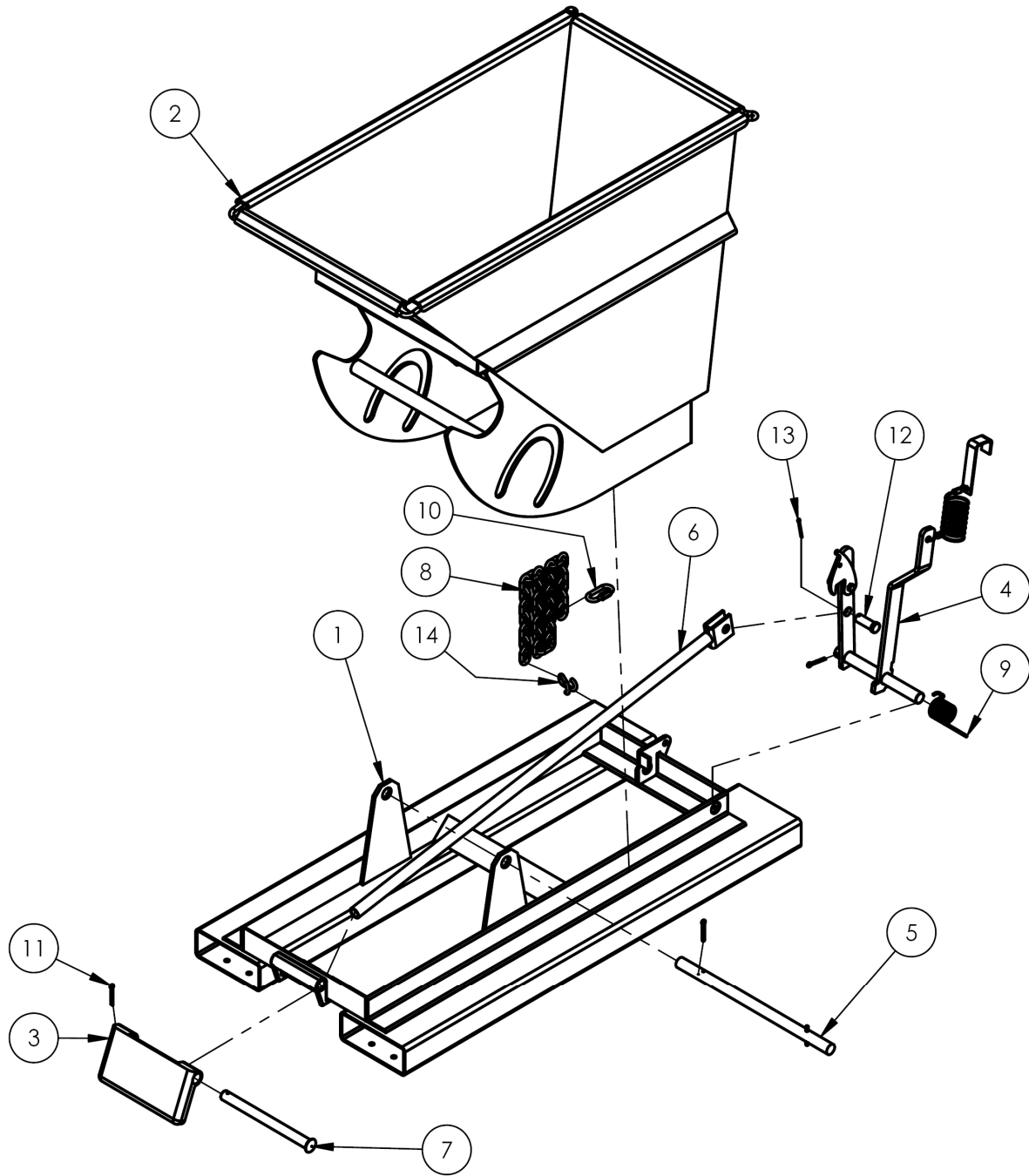
NOTE: "Uniform capacity" is the maximum weight that each caster set can support, and equals the combined weight of the hopper and its contents. **ONLY select a caster kit that equals or exceeds the maximum rated load of your hopper!**

D-25-LD/MD/HD-GAL hoppers exploded view & bill of materials



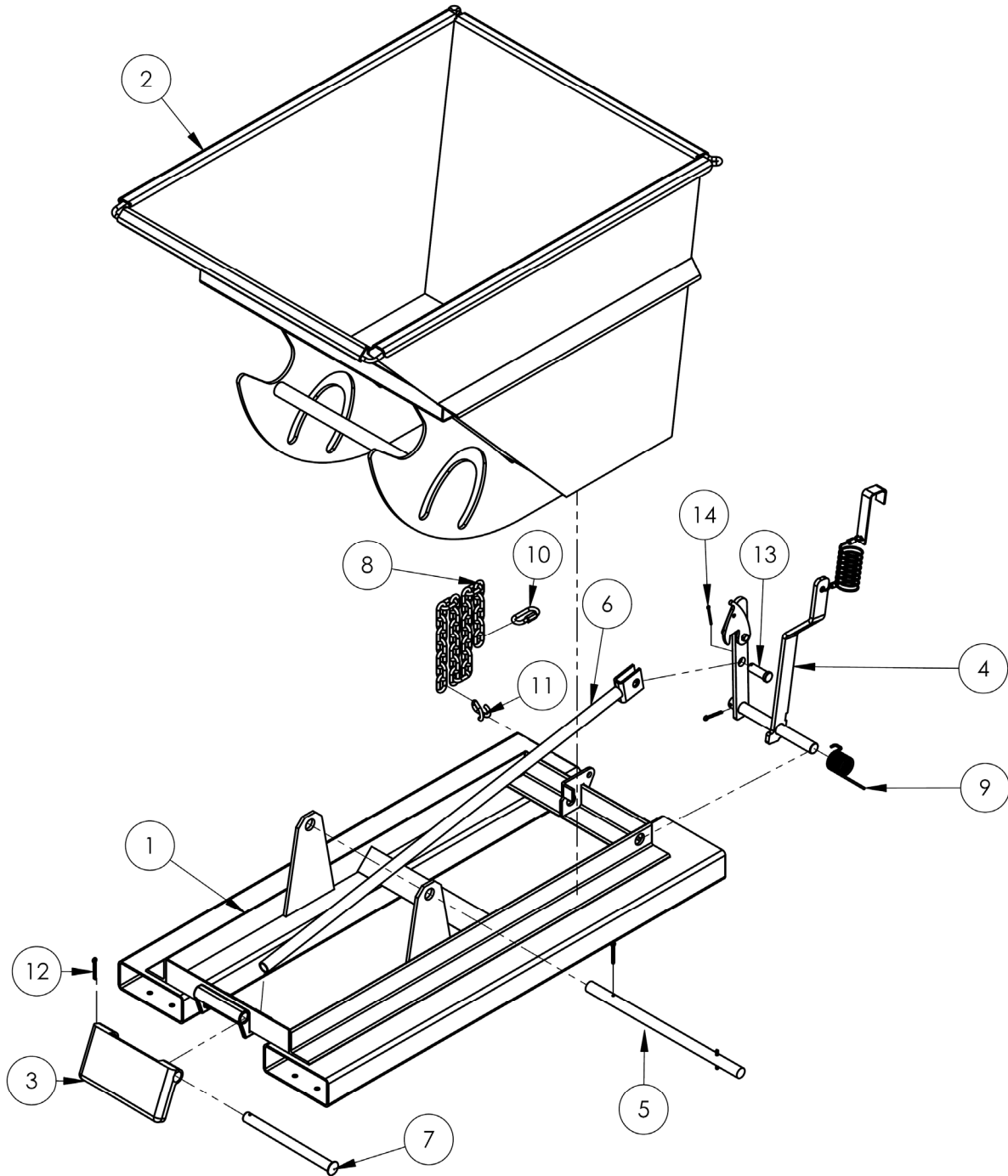
Item	Part no.	Description	Qty.	Item	Part no.	Description	Qty.
1	37-514-007	Frame, weldment, base	1	8	99-145-037	$\frac{5}{16}$ " chain 36" long	1
2	37-545-116	Weldment, chute, galvanized	1	9	37-146-005	Spring, torsion, hopper release	1
3	37-037-040	Bumper release for D-hoppers	1	10	99-145-053	$\frac{5}{16}$ " quick link	1
4	37-537-021	Weldment, lock, release, lever assembly	1	11	65127	Cotter pin, zinc-plated, $\frac{3}{16}$ " x 2"	3
5	37-612-005	Subassembly, pin, main connection pin	1	12	28-112-043	Pin, $\frac{3}{4}$ " x 2" retaining clevis	1
6	37-537-007	Release lever rod weldment	1	13	65080	Extended prong cotter pin, zinc finish, $\frac{1}{8}$ " x 2"	1
7	37-112-006	Pin, bumper plate	1	14	99-145-084	Lap link	1

D-33-LD/MD/HD-GAL hoppers exploded view & bill of materials



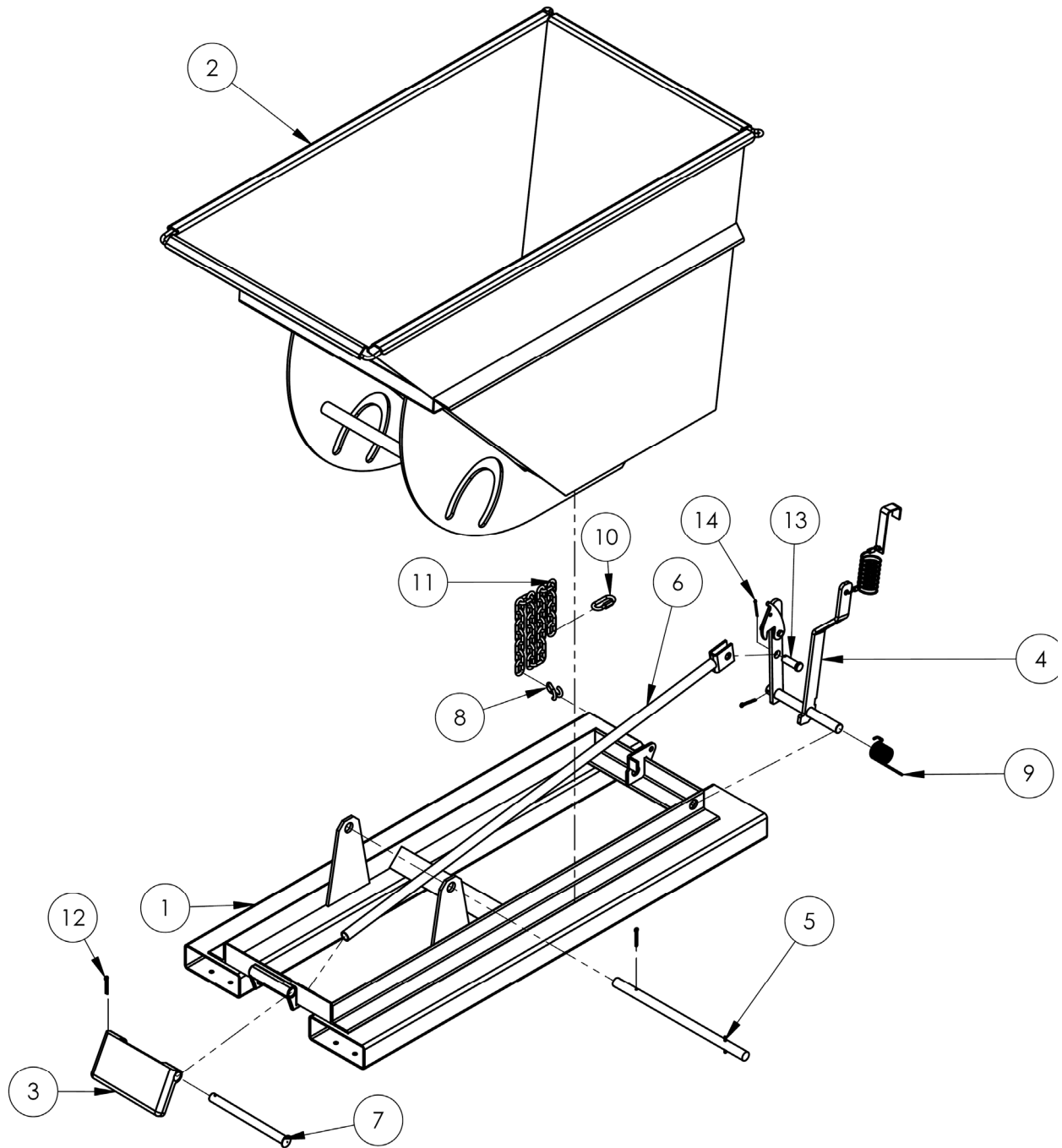
Item	Part no.	Description	Qty.	Item	Part no.	Description	Qty.
1	37-514-007	Frame, weldment, base	1	8	99-145-037	$\frac{5}{16}$ " chain 36" long	1
2	37-545-116	Weldment, chute, galvanized	1	9	37-146-005	Spring, torsion, hopper release	1
3	37-037-040	Bumper release for D-hoppers	1	10	99-145-053	$\frac{5}{16}$ " quick link	1
4	37-537-021	Weldment, lock, release, lever assembly	1	11	65127	Cotter pin, zinc-plated, $\frac{3}{16}$ " x 2"	3
5	37-612-005	Subassembly, pin, main connection pin	1	12	28-112-043	Pin, $\frac{3}{4}$ " x 2" retaining clevis	1
6	37-537-007	Release lever rod weldment	1	13	65080	Extended prong cotter pin, zinc finish, $\frac{1}{8}$ " x 2"	1
7	37-112-006	Pin, bumper plate	1	14	99-145-084	Lap link	1

D-50-LD/MD/HD-GAL hoppers exploded view & bill of materials



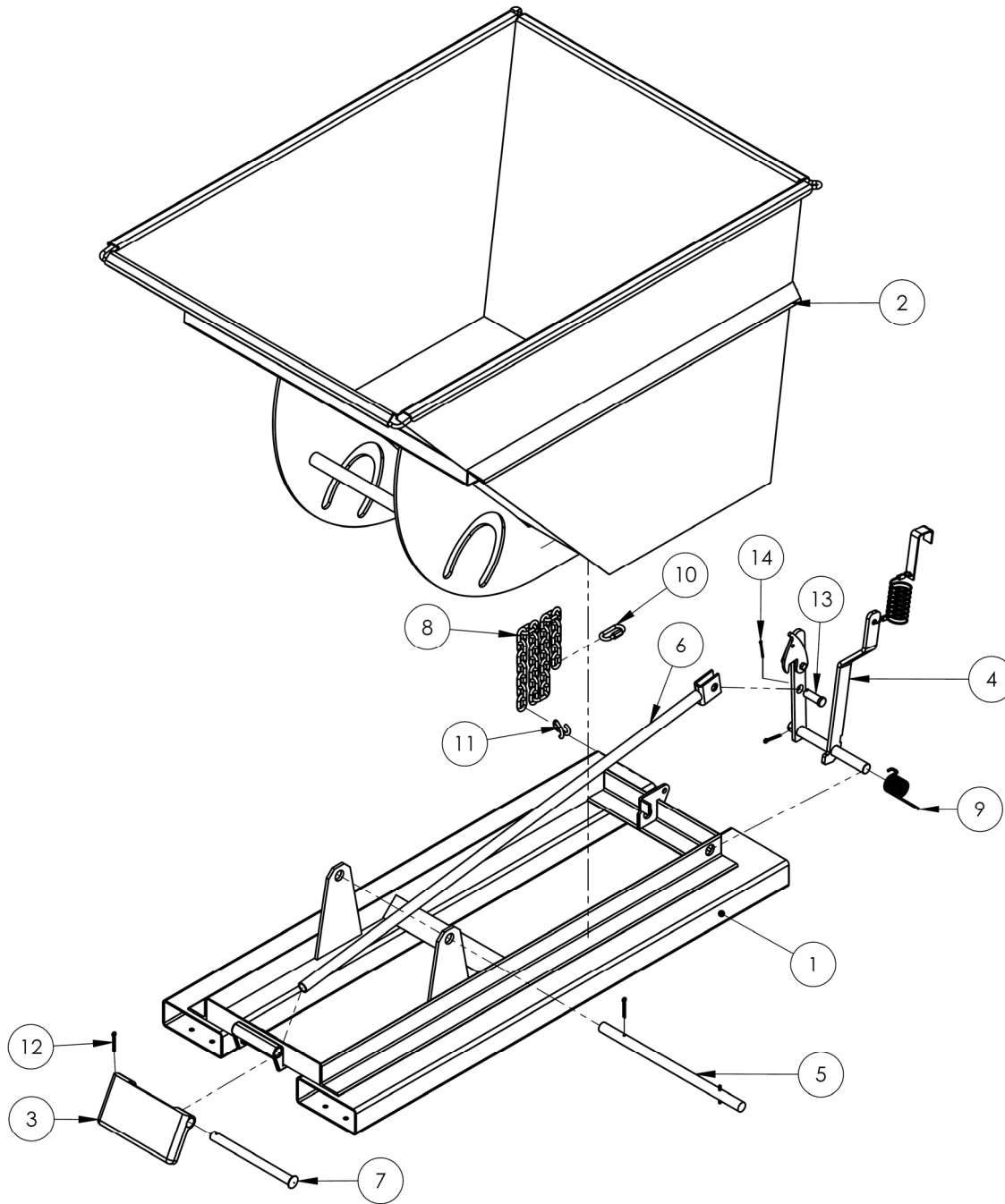
Item	Part no.	Description	Qty.	Item	Part no.	Description	Qty.
1	37-514-007	Weldment, frame, base	1	8	99-145-037	$\frac{5}{16}$ " chain 36" long	1
2	37-545-117	Weldment, chute, galvanized	1	9	37-146-005	Spring, torsion, hopper release	1
3	37-037-040	Bumper release for D-hoppers	1	10	99-145-053	$\frac{5}{16}$ " quick link	1
4	37-537-021	Weldment, lock, release, lever assembly	1	11	99-145-084	Lap link	1
5	37-612-005	Subassembly, pin, main connection pin	1	12	65127	Cotter pin, zinc-plated, $\frac{3}{16}$ " x 2"	3
6	37-537-007	Release lever rod weldment	1	13	28-112-043	Pin, $\frac{3}{4}$ " x 2" retaining clevis	1
7	37-112-006	Pin, bumper plate	1	14	65080	Extended prong cotter pin, zinc finish, $\frac{1}{8}$ " x 2"	1

D-75-LD/MD/HD-GAL hoppers exploded view & bill of materials



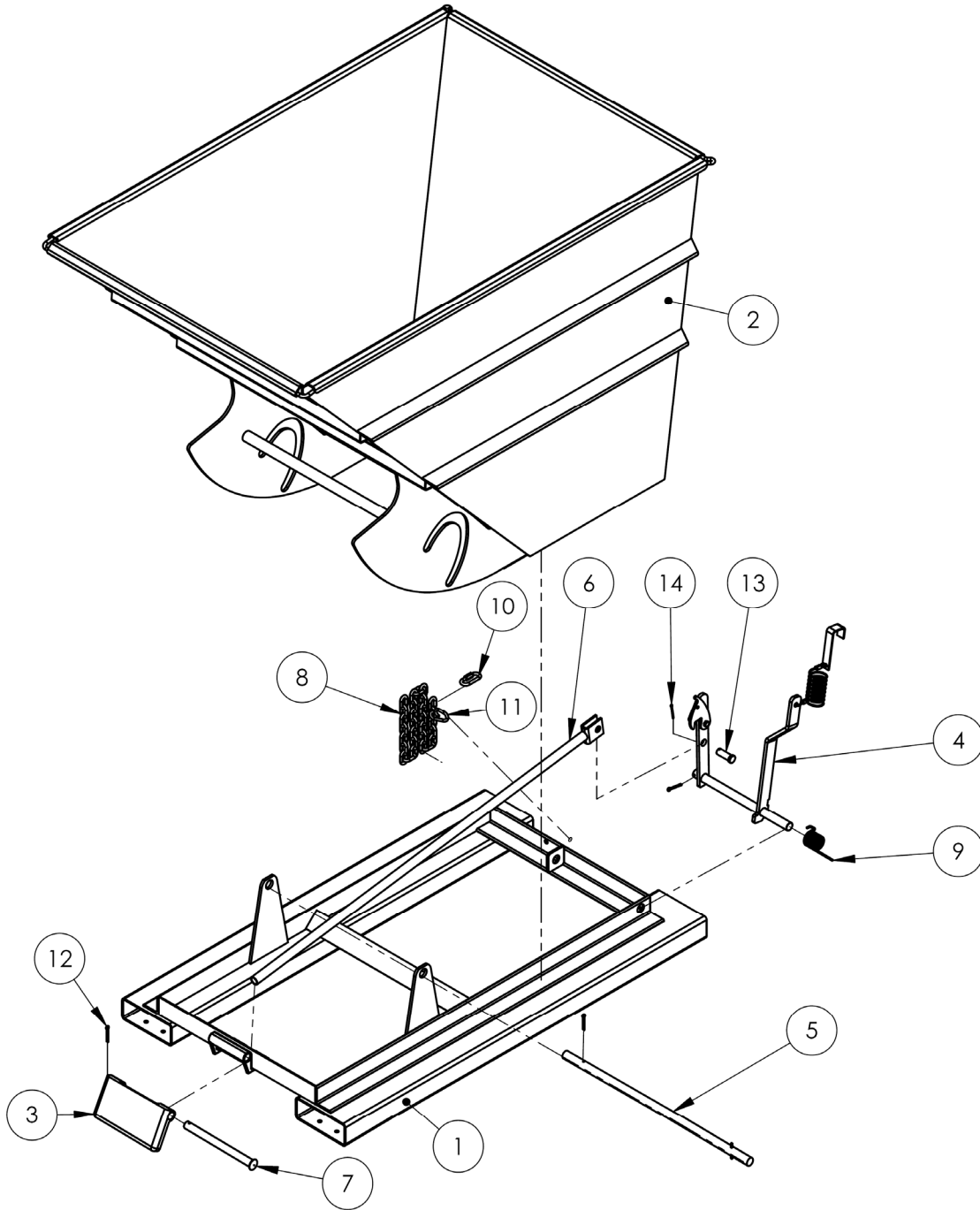
Item	Part no.	Description	Qty.	Item	Part no.	Description	Qty.
1	37-514-008	Weldment, frame, base	1	8	99-145-084	Lap link	1
2	37-545-118	Weldment, chute, galvanized	1	9	37-146-005	Spring, torsion, hopper release	1
3	37-037-040	Bumper release for D-hoppers	1	10	99-145-053	$\frac{5}{16}$ " quick link	1
4	37-537-021	Weldment, lock, release, lever assembly	1	11	99-145-037	$\frac{5}{16}$ " chain 36" long	1
5	37-612-005	Subassembly, pin, main connection pin	1	12	65127	Cotter pin, zinc plated, $\frac{3}{16}$ " x 2"	3
6	37-537-006	Release lever rod weldment	1	13	28-112-043	Pin, $\frac{3}{4}$ " x 2" long retaining clevis	1
7	37-112-006	Pin, bumper plate	1	14	65080	Extended prong cotter pin, zinc finish, $\frac{1}{8}$ " x 2"	1

D-100-LD/MD/HD-GAL hoppers exploded view & bill of materials



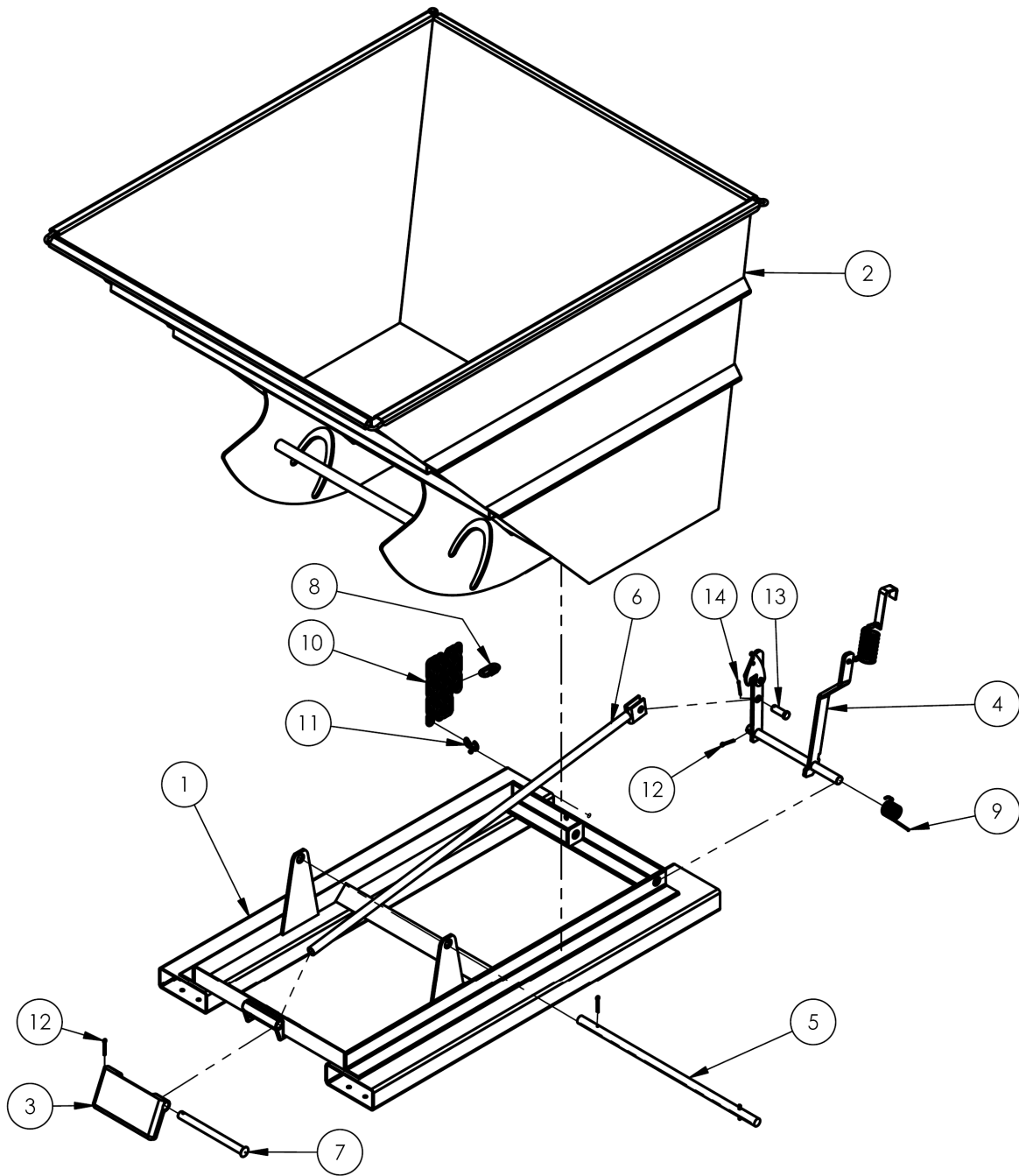
Item	Part no.	Description	Qty.	Item	Part no.	Description	Qty.
1	37-514-008	Weldment, frame, base	1	8	99-145-037	$\frac{5}{16}$ " chain 36" long	1
2	37-545-119	Weldment, chute, galvanized	1	9	37-146-005	Spring, torsion, hopper release	1
3	37-037-040	Bumper release for D-hoppers	1	10	99-145-053	$\frac{5}{16}$ " quick link	1
4	37-537-021	Weldment, lock, release, lever assembly	1	11	99-145-084	Lap link	1
5	37-612-005	Subassembly, pin, main connection pin	1	12	65127	Cotter pin, zinc plated, $\frac{3}{16}$ " x 2"	3
6	37-537-006	Release lever rod weldment	1	13	28-112-043	Pin, $\frac{3}{4}$ " x 2" long retaining clevis	1
7	37-112-006	Pin, bumper plate	1	14	65080	Extended prong cotter pin, zinc finish, $\frac{1}{8}$ " x 2"	1

D-150-LD/MD/HD-GAL hoppers exploded view & bill of materials



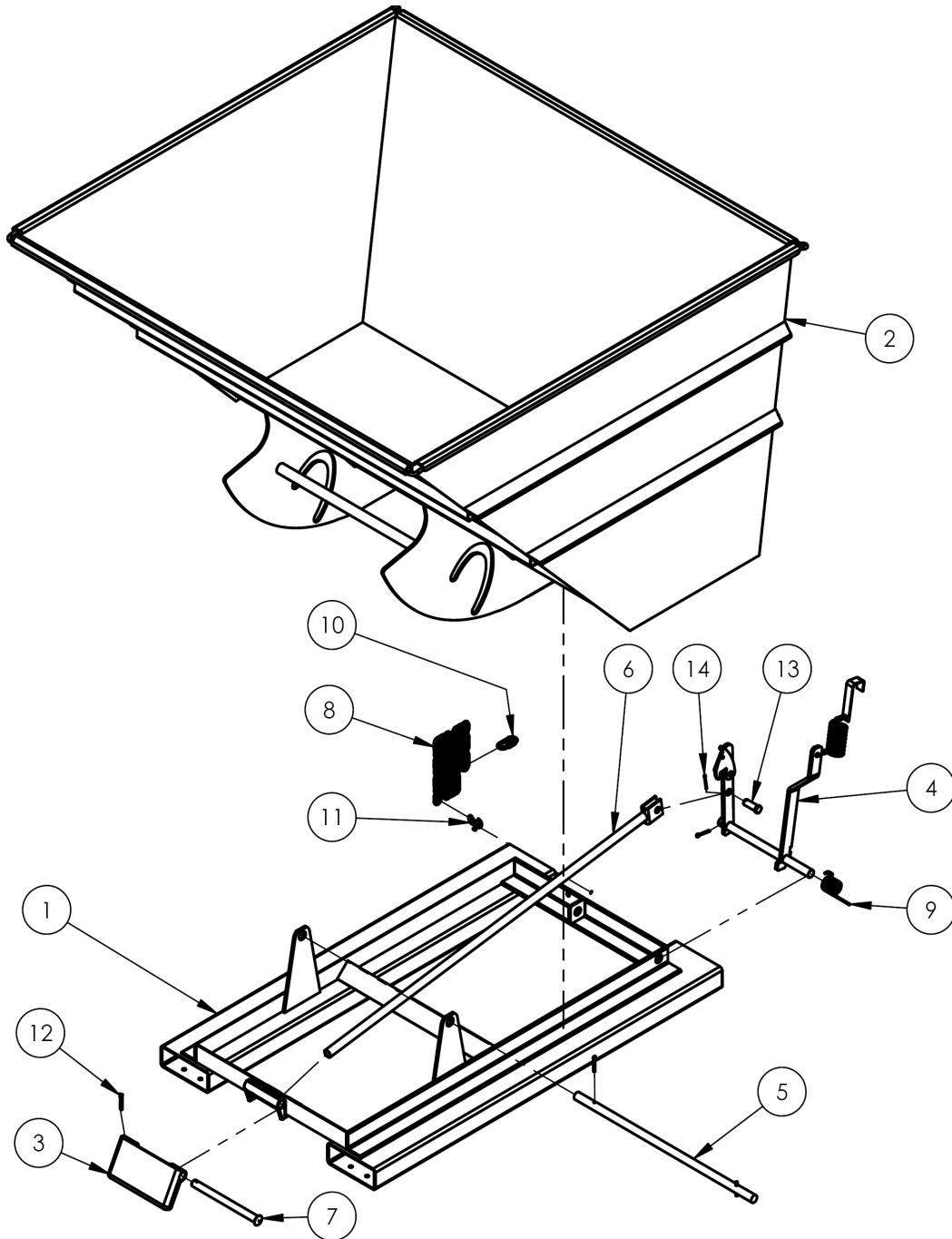
Item	Part no.	Description	Qty.	Item	Part no.	Description	Qty.
1	37-514-004	Weldment, frame, base	1	8	99-145-037	$\frac{5}{16}$ " chain 36" long	1
2	37-545-046	Weldment, chute, galvanized	1	9	37-146-005	Spring, torsion, hopper, release	1
3	37-037-040	Bumper release for D-hoppers	1	10	99-145-053	$\frac{5}{16}$ " quick link	1
4	37-537-020	Weldment, lock, release, lever assembly, hopper	1	11	99-145-084	Lap link	1
5	37-612-006	Subassembly, pin, main connection pin	1	12	65127	Cotter pin, zinc plated, $\frac{3}{16}$ " x 2"	3
6	37-537-006	Release lever rod weldment	1	13	28-112-043	Pin, $\frac{3}{4}$ " x 2" retaining clevis	1
7	37-112-006	Pin, bumper plate	1	14	65080	Extended prong cotter pin, zinc finish, $\frac{1}{8}$ " x 2"	1

D-200-LD/MD/HD-GAL hoppers exploded view & bill of materials



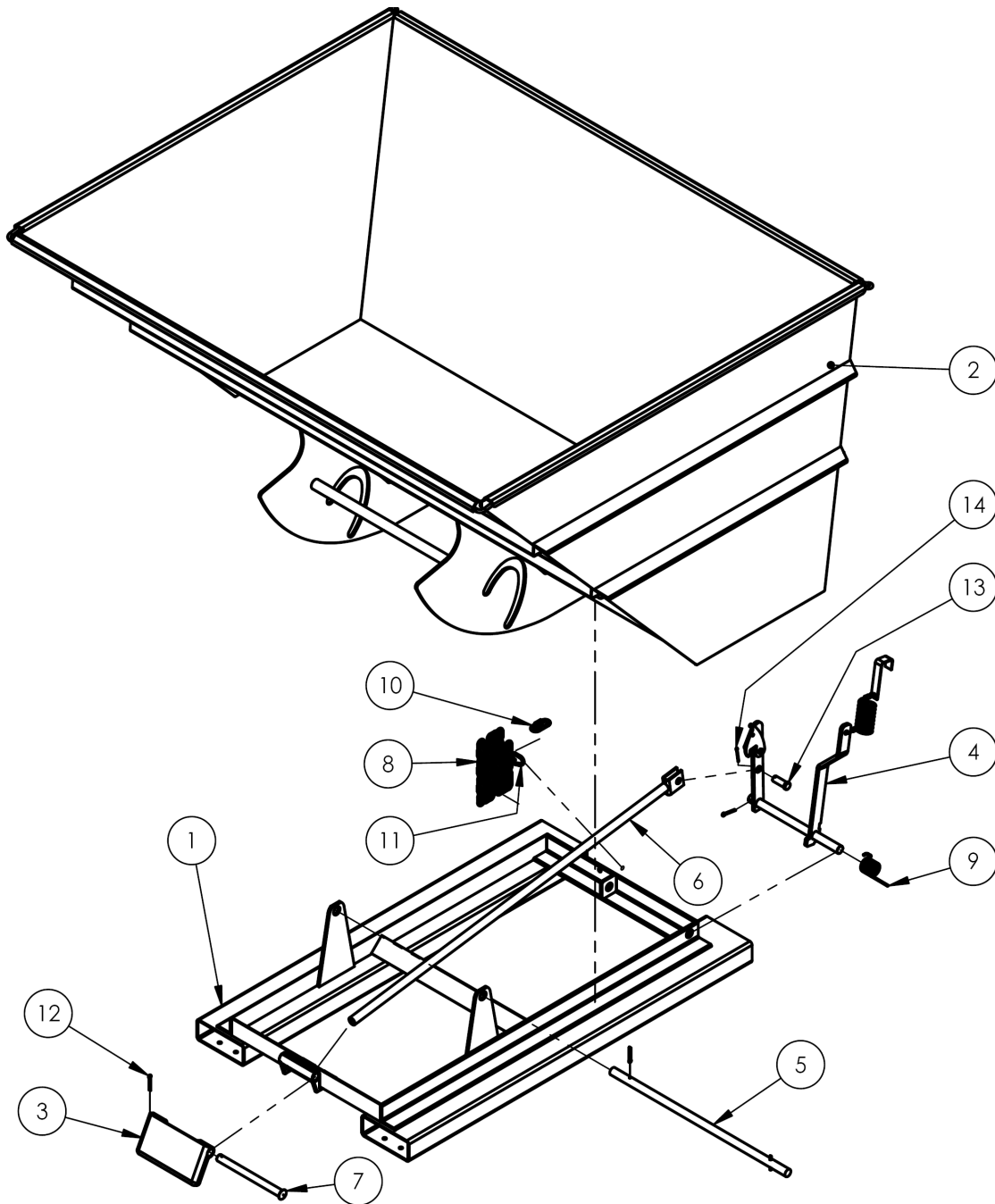
Item	Part no.	Description	Qty.	Item	Part no.	Description	Qty.
1	37-514-004	Frame, weldment, base	1	8	99-145-053	⁵ / ₁₆ " quick link	1
2	37-545-121	Weldment, chute, galvanized	1	9	37-146-005	Spring, torsion, hopper release	1
3	37-037-040	Bumper release for D-hoppers	1	10	99-145-037	⁵ / ₁₆ " chain 36" long	1
4	37-537-020	Weldment, lock, release, lever assembly, hopper	1	11	99-145-084	Lap link	1
5	37-612-006	Subassembly, pin, main connection pin	1	12	65127	Cotter pin, zinc plated	3
6	37-537-006	Release lever rod assembly	1	13	28-112-043	Pin, ³ / ₄ " x 2" long retaining clevis	1
7	37-112-006	Pin, bumper plate	1	14	65080	Extended prong cotter pin, zinc finish, ¹ / ₈ " x 2"	1

D-250-LD/MD/HD-GAL hoppers exploded view & bill of materials



Item	Part no.	Description	Qty.	Item	Part no.	Description	Qty.
1	37-514-004	Frame, weldment, base	1	8	99-145-037	$\frac{5}{16}$ " chain 36" long	1
2	37-545-114	Weldment, chute, galvanized	1	9	37-146-005	Spring torsion, hopper release	1
3	37-037-040	Bumper release for D-hoppers	1	10	99-145-053	$\frac{5}{16}$ " quick link	1
4	37-537-020	Weldment, lock, release, lever assembly, hopper	1	11	99-145-084	Lap link	1
5	37-612-006	Subassembly, pin, main connection pin	1	12	65127	Cotter pin, zinc plated, $\frac{3}{16}$ " x 2"	3
6	37-537-006	Release lever rod weldment	1	13	28-112-043	Pin, $\frac{3}{4}$ " x 2" long retaining clevis	1
7	37-112-006	Pin, bumper plate	1	14	65080	Extended prong cotter pin, zinc finish, $\frac{1}{8}$ " x 2"	1

D-300-LD/MD/HD-GAL hoppers exploded view & bill of materials



Item	Part no.	Description	Qty.	Item	Part no.	Description	Qty.
1	37-514-004	Weldment, frame, base	1	8	99-145-037	$\frac{5}{16}$ " chain 36" long	1
2	37-545-115	Weldment, chute, galvanized	1	9	37-146-005	Spring, torsion, hopper release	1
3	37-037-040	Bumper release for D-hoppers	1	10	99-145-053	$\frac{5}{16}$ " quick link	1
4	37-537-020	Weldment, lock, release, lever assembly, hopper	1	11	99-145-084	Lap link	1
5	37-612-006	Subassembly, pin, main connection pin	1	12	65127	Cotter pin, zinc plated, $\frac{3}{16}$ " x 2"	3
6	37-537-006	Release lever rod weldment	1	13	28-112-043	Pin, $\frac{3}{4}$ " x 2" long retaining clevis	1
7	37-112-006	Pin, bumper plate	1	14	65080	Extended prong cotter pin, zinc finish, $\frac{1}{8}$ " x 2"	1

Signal Words

Vestil Manufacturing Corp. created this manual to acquaint owners and users of our fork-mounted hoppers with safe use and maintenance procedures. 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.

The mechanisms of each hopper are relatively intuitive to operate. Nonetheless, all persons who might use or operate this product should familiarize themselves with the instructions provided in this manual. Each person who **might** use or maintain the product must read this entire manual and fully understand the directions BEFORE using or performing maintenance on the hopper.

Failure to apply the directions in this manual might lead to serious personal injury or even death. Vestil is **not liable** for any injury or property damage that occurs as a consequence of failing to apply either: 1) the instructions that appear in this manual; or 2) the information disclosed on labels affixed to the product. Furthermore, failure to exercise good judgment and common sense could result in property damage, serious personal injury or death, and also are **not the responsibility of Vestil**.

This manual uses SIGNAL WORDS to direct the reader's attention to important safety-related messages. These messages describe uses of the product that could result in personal injury or property damage. Each signal word connotes a specific hazard level. The following are definitions of signal words used in this manual.



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 hopper.

Hazards of Improper Use

Study the entire manual before using the product for the first time. Read the manual when necessary to refresh your understanding of the safe operation, inspection and maintenance procedures explained on pages 15 & 16. If questions remain after you finish reading this manual, ask your supervisor or employer for assistance. **DO NOT** attempt to resolve any problems with the hopper unless you are authorized to do so and are *certain* that it will be safe to use afterwards.



Material handling is dangerous. Improper or careless operation might result in serious personal injuries.

- *Read & understand the instructions included in this manual before installing, using or servicing the hopper.*
- **DO NOT** use a malfunctioning or structurally damaged hopper. Examples of structural damage include: 1) damage to the hopper release mechanism (that allows the hopper to dump); 2) broken fork pocket(s); 3) bent main connection pin; or 4) broken welds. Inspect the hopper before each use according to the inspection instructions on p. 16. **DO NOT** use the hopper unless it passes *every* part of the inspection.
- **DO NOT** use the hopper if the safety chain is damaged or absent; **DO NOT** lift the hopper until it is securely connected to the carriage of the fork truck with the safety chain.
- **ONLY** use this hopper on a powered forklift truck. **DO NOT** mount the hopper on stackers or manually propelled lift trucks.
- **DO NOT** fill the hopper with a load weighing more than its capacity (see Tables on p. 2-4).
- **DO NOT** stand beneath or travel under the hopper at any time. **DO NOT** permit any person to stand beneath or travel under the hopper.
- **Hoppers with lifting lugs** can be lifted with overhead hoists and cranes. **DO NOT** lift a hopper unless the chute is securely latched to the frame. The hopper must not be able to dump while it is suspended.
- **DO NOT** allow people to ride on or in the hopper.
- **DO NOT** use the hopper if any label (see p. 17) is unreadable, damaged, or missing. Contact Vestil to order replacement labels.
- **ALWAYS** apply proper (fork) lift truck operation practices learned during your training program. Before raising the hopper from the floor **AND** tilt the (forklift) mast toward the cab of the truck to ensure that the hopper will not slide towards the tips of the forks.
- **DO NOT** modify the hopper in any way! Modification(s) might make the hopper unsafe to use.
- **DO NOT** dump the hopper **UNLESS** every person in the vicinity is safely behind the forklift truck.
- **DO NOT** dump the hopper if the forklift is facing down a slope. Only dump the hopper while parked on a level surface.
- **DO NOT** exceed the load rating of the hopper or overfill the hopper (do not fill above the top of the hopper's sides). Injury to personnel or permanent damage to the equipment could result from overloading.

Using the Hopper

Confirm that the hopper chute is latched to the base frame (i.e. NOT released and cannot rotate) before filling the chute with refuse. Standard self-dumping hoppers are suitable for use indoors and outdoors and in most industrial and commercial settings. They are intended to be used with rider forklift trucks as a means for dumping non-hazardous refuse into larger trash receptacles. The chute rotates through a 70° dump angle. D-series hoppers can be dumped in 2 ways: 1) manually by pulling the release cable; or 2) remotely by pressing the bumper plate against an object.

Step 1: Drive the lift truck forward and insert the forks into the fork tubes. Drive forward until either: 1) the tips of the forks begin to stick out of the ends of the tubes; or 2) if the forks are not long enough to extend all the way through the tubes, drive forward as far as possible.

Step 2: Securely attach the hopper to the fork carriage with the safety chain. Wrap the chain around part of the fork carriage; then connect the quick link at the end of the chain to a link in the chain with as little slack as possible.

WARNING DO NOT wrap the release cable around any part of your body, especially your hands, or attach the handle at the end of the cable to your clothing. If you do and the chute is released, you might be seriously injured.

Step 3: If you will release the chute manually by pulling the release handle, store the handle within reach of the forklift operator, for example by hooking it to the frame of the cab. Make sure that there is plenty of slack in the cable to avoid accidentally releasing/dumping the chute.

NOTE: If you will use the bumper plate mechanism to dump the chute, attach the handle to the frame of the hopper. Do not hook the handle to the chute because it could be torn from the cable when the chute is dumped.

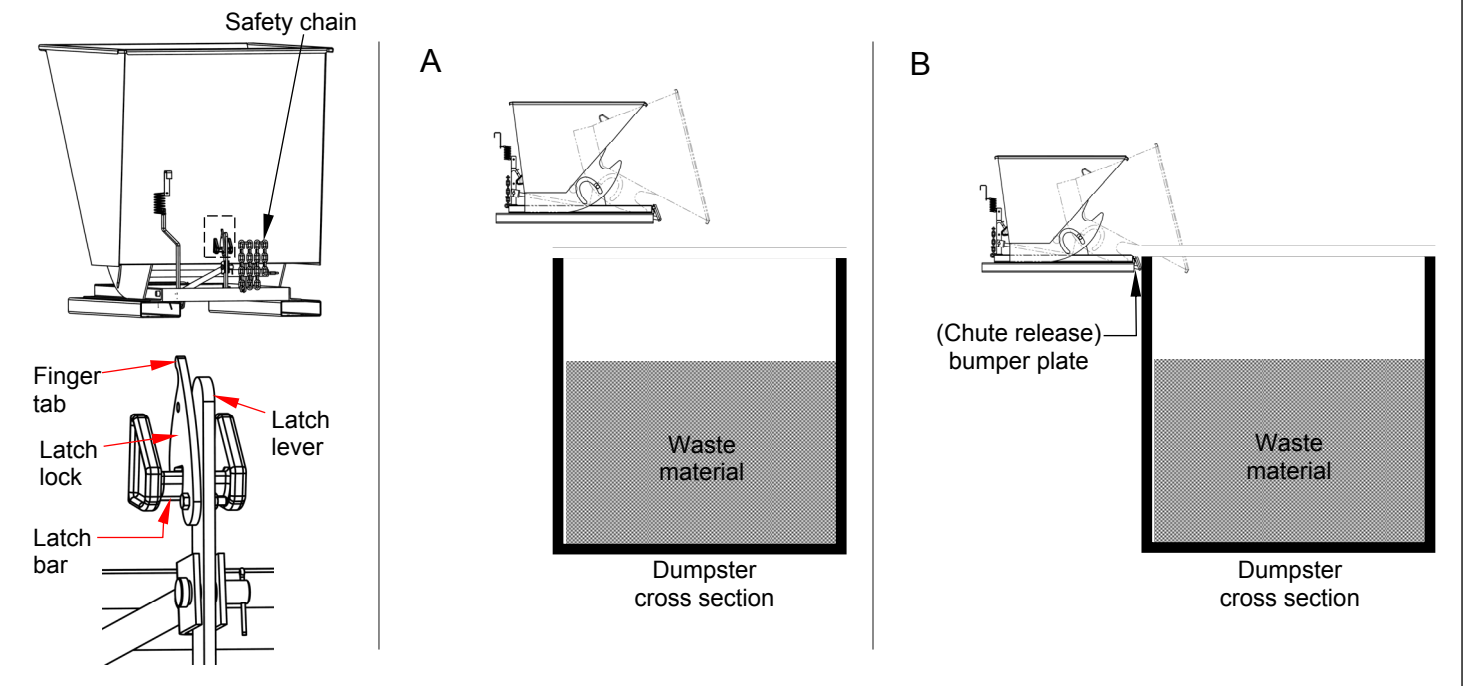
Step 4: Drive the forklift to the trash receptacle. Before raising the hopper, unlock the latch lever by pulling the finger tab until the lock disengages the latch bar (see diagrams with Step 5 below).

Step 5: Raise the forks and tilt the forklift mast forward (towards the dumpster). To dump the hopper:

A) **Manually:** elevate the entire hopper above the side wall of the dumpster (see diagram A) and pull the release cable

NOTE: NEVER wrap the release cable around your fingers, hand, etc.

B) **Remotely:** elevate the hopper so that the bumper plate will contact the side of the dumpster at or near the top (see diagram B). Drive the forklift toward the dumpster and press the bumper plate against the top of the side wall.



Step 6: Return the chute to the latched position. Tilt the forklift mast toward the cab and back away from the dumpster. The hopper should automatically return to the latched position. Confirm that the chute is latched to the base by raising the forks. The hopper should not dump. If necessary, lower the forks completely and manually latch the chute to the frame by pressing down on the rear wall of the chute until the latch lever engages the latch bar. Then, apply the latch lock.

Inspections & Maintenance

Written Record:

Regular inspections and maintenance are necessary for the hopper to remain in normal condition. After receiving the unit and before using it for the first time, create a written record that describes the appearance of each major component, including the main frame, release mechanism, fork pockets, safety chain, pivot points and pivot point hardware. Mount the hopper of the forks of your forklift and apply the safety chain. Elevate the hopper and release the chute. Record your observations about how the unit looks and sounds as the chute rotates. Lower the unit and secure the chute to the frame. Record your observations. Take photographs of the unit an all labels applied to it. Add the photographs to the record. The record establishes “normal condition”. When conducting future inspections compare those observations with the record to determine whether a component is in normal condition or requires repair or replacement. If issues are discovered during an inspection, DO NOT use the hopper or return it to regular service until it is restored to normal operating condition.

Inspections:

Inspect the following components at least once per month. Replace any component that is significantly worn or no longer operates normally:

- 1.) Pivot points: check for excessive wear, warping, or other significant damage to pivot pins, cotter pins, and pin receivers.
- 2.) Hopper chute and base frame: examine the structures for damage, deformation, and corroded or excessively rusted regions. Remove rust with a steel bristle brush and apply touch-up paint to exposed metal.
- 3.) Hardware (bolts, nuts, pins, cotter pins, retaining rings): inspect hardware for looseness and severe wear. Tighten loose connections and replace all damaged hardware.
- 4.) Casters (if hopper is equipped with caster kit): check for looseness, excessive wear, etc. to the casters, caster bearings, mounting brackets, and mounting hardware.
- 5.) Release mechanism: the torsion spring should cause the latch lever to automatically recoil and the lever should firmly contact the release lock bar. Check the release cable for frayed, thinned, and bird-caged regions.
- 6.) Moving parts: listen for unusual noises and watch for irregular movement. Remove dirt and debris from areas that could affect the hopper’s dumping motion.
- 7.) Safety chain: examine the safety chain, its point of attachment to the base frame, and the quick links for damage.
- 8.) Labels: all labels must be firmly affixed in the locations shown in the “Labeling Diagram” on p. 17.

Maintenance:

Implement a maintenance program to ensure that the product functions properly and is adequately maintained. The following steps should be applied to complement established maintenance programs.

Step 1: Tag the hopper, “Out of Service.”

Step 2: Inspect the unit as described above. If deformity, corrosion, rusting, or excessive wear of structural members is found, DO NOT continue to use the product.

Step 3: Perform all necessary adjustments, replacements, and repairs.

⚠WARNING DO NOT modify the hopper in any way without first obtaining written approval from Vestil. Modifications automatically void the Limited Warranty and might make the hopper unsafe to use. A “modification” is a change that alters the hopper from original condition, like bending a structural member or removing a component.

Step 4: Make a dated record of all repairs made to the hopper.

Labeling Diagram

The unit should be labeled as shown below. However, labeling is subject to change without notice. Make sure that your written record (see p. 16) includes photographs of each label and descriptions of their locations in the hopper. Replace all labels that are missing, damaged, or not easily readable, e.g. faded or torn.



A: Label 620 (on rear wall)

⚠ WARNING	
	<p>DO NOT wrap release cable around hand.</p> <p>Severe injury or amputation might occur if cable wrapped around body part when chute dumped.</p>
<p>STAY CLEAR of hopper when dumping.</p> <p>DO NOT hook manual release handle on hopper when using bumper release.</p> <p>Each person who uses this hopper should have access to the user manual. Copies of the manual can be downloaded from www.vestil.com.</p>	
⚠ ADVERTENCIA	
<p>NO AGARRAR el cable con la mano.</p> <p>Puede causar un daño severo o amputación si el cable se envuelve alrededor del cuerpo al estar descargando la tolva.</p> <p>MANTENTE ALEJADO de la tolva al descargar.</p> <p>Nunca agarrar el gancho de la tolva.</p> <p>Cada persona que use la tolva debe de usar el manual, las copias se pueden descargar de la dirección www.vestil.com.</p>	
<small>620 rev 07/16</small>	

B: Label 1023 (wrapped around both rear corners)

⚠ CAUTION	⚠ ATENCIÓN	⚠ ATTENTION
<small>DO NOT PLAY ON OR AROUND</small>	<small>NO JUEGE ALREDEDOR</small>	<small>NE PAS JOUER SUR OU AUTOUR DE L'UNITÉ</small>

C: Label 220 (both sides)

⚠ WARNING	⚠ ADVERTENCIA	⚠ AVERTISSEMENT
<small>KEEP CLEAR WHEN IN USE</small>	<small>MANTENGASE ALEJADO CUANDO SE ESTA OPERANDO</small>	<small>SE TENIR À DISTANCE LORS DU FONCTIONNEMENT</small>
<small>220 rev 01/11</small>		

D: Label 1049

⚠ WARNING
<p>Improper use of this fork attachment might result in death or serious injury.</p> <ul style="list-style-type: none"> Before using this fork attachment, US Federal regulation 29 CFR 1910.178 requires you to contact the manufacturer of your lift truck and request: <ol style="list-style-type: none"> Written approval [29 CFR 1910.178(a)(4)] Markings for (fork) lift truck that: <ul style="list-style-type: none"> Identify the attachment; Give approximate weight of truck and attachment at maximum evaluation with laterally-centered load. [29 CFR 1910.178(a)(5)]. DO NOT use UNTIL lift truck is marked with corrected capacity tags. 1049

E: Label 208 (both fork tubes)

⚠ WARNING	⚠ ADVERTENCIA	⚠ AVERTISSEMENT
<small>KEEP CLEAR OF PINCH POINT</small>	<small>MANTENGASE ALEJADO DEL PUNTO DE CORTE</small>	<small>SE TENIR À DISTANCE DU POINT DE PINCEMENT</small>
<small>208A</small>		

F: Model specific label (see tables)

Model / Modelo / Modèle	⚠ WARNING	⚠ ADVERTENCIA
D- -	<ul style="list-style-type: none"> SECURELY ATTACH safety restraint to forklift. Tilt load backwards to prevent hopper from sliding. Distribute load evenly. DO NOT exceed rated capacity. Hopper MUST be locked when not dumping. Disengage lock on hopper release before dumping hopper. DO NOT wrap release cable around any body part. 	<ul style="list-style-type: none"> ASEGURE la cadena de seguridad a la transportadora. Vuelte la carga hacia atrás para prevenir que el carrito resbale. Distribuya la carga uniformemente. NO exceda la capacidad de carga tasada. El depósito de alimentación debe ser cerrado al no descargar. Suelte cerradura en la liberación de depósito de alimentación antes de descargar depósito de alimentación. No envuelva cable de liberación alrededor de cualquier parte del cuerpo.
Capacity / Capacidad / Capacité	lb. kg	
Serial No. / Serie No. / Serie No.		
<small>039 REV 10/11</small>		

G: Label 1058 (warning for California residents)

⚠ WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov
<small>1058</small>

Model	Label	Model	Label	Model	Label
D-25-LD	549	D-75-LD	549	D-200-LD	540
D-25-MD	549	D-75-MD	549	D-200-MD	541
D-25-HD	549	D-75-HD	592	D-200-HD	545
D-33-LD	549	D-100-LD	630	D-250-LD	549
D-33-MD	549	D-100-MD	1050	D-250-MD	549
D-33-HD	591	D-100-HD	644	D-250-HD	593
D-50-LD	549	D-150-LD	549	D-300-LD	549
D-50-MD	549	D-150-MD	549	D-300-MD	631
D-50-HD	542	D-150-HD	544	D-300-HD	546
				D-300-HD-NA	549
				D-350-HD	549
				D-400-HD	549
				D-500-HD	549

LIMITED WARRANTY

Vestil Manufacturing Corporation (“Vestil”) warrants this product 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 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.

Definition of “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 one of the following methods:

<u>US 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	info@vestil.com Enter “Warranty service request” in subject field.

In the written request, list the parts believed to be defective and include the address where replacements should be delivered. 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 will require you to send the entire product, or just the defective part (or parts), to its facility in Angola, IN.

What is covered under the warranty?

The warranty covers defects in the following original, dynamic parts: 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 1 year. For wearing parts, the warranty period is 90 days. Both warranty periods begin on the date 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 a warranty period 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?

The Warrantee (you) are responsible for paying labor costs and freight costs to return the product to Vestil for warranty service.

Events that automatically void the Limited Warranty.

- Misuse;
- Negligent assembly, installation, operation or repair;
- Installation/use in corrosive environments;
- Inadequate or improper maintenance;
- Damage sustained during shipping;
- Collisions or other accidents that damage the product;
- Unauthorized modifications: Do not modify the product IN ANY WAY without first receiving written authorization from Vestil.

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. Vestil makes no warranty or representation that this product complies with any state or local design, performance, or safety code or standard. Noncompliance with any such code or standard is not a defect in material or workmanship.

