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D-SERIES HOPPERS

Instruction Manual



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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Specifications:

Dimensions and other specifications appear in the following tables.

Light duty fabricated from 12 gauge steel					
Model	Volume	Capacity	Overall Dimensions (W x L x H)	Distance between Fork Pocket Centers	Net Weight
D-25-LD	$\frac{1}{4}$ yd ³ (0.19 m ³)	2,000 lb. (909 kg)	26" x 51 $\frac{7}{8}$ " x 38" (66.0 x 131.8 x 96.5)cm	18" (45.7cm)	341 lb. 155 kg
D-33-LD	$\frac{1}{3}$ yd ³ (0.25 m ³)	2,000 lb. (909 kg)	26" x 51 $\frac{7}{8}$ " x 38" (66.0 x 131.8 x 96.5)cm	18" (45.7cm)	341 lb. 155 kg
D-50-LD	$\frac{1}{2}$ yd ³ (0.38 m ³)	2,000 lb. (909 kg)	33 $\frac{11}{16}$ " x 51 $\frac{7}{8}$ " x 38" (85.6 x 131.4 x 96.5)cm	18" (45.7cm)	364 lb. 165.5 kg
D-75-LD	$\frac{3}{4}$ yd ³ (0.57 m ³)	2,000 lb. (909 kg)	33 $\frac{11}{16}$ " x 61 $\frac{1}{8}$ " x 42 $\frac{11}{16}$ " (85.6 x 155.3 x 108.4)cm	18" (45.7cm)	448 lb. 203.6 kg
D-100-LD	1 yd ³ (0.76 m ³)	2,000 lb. (909 kg)	41 $\frac{11}{16}$ " x 61 $\frac{1}{8}$ " x 42 $\frac{11}{16}$ " (105.9 x 155.3 x 108.4)cm	18" (45.7cm)	478 lb. 217.3 kg
D-150-LD	1 $\frac{1}{2}$ yd ³ (1.15 m ³)	2,000 lb. (909 kg)	43 $\frac{11}{16}$ " x 68 $\frac{5}{16}$ " x 51 $\frac{13}{16}$ " (111.0 x 173.5 x 131.6)cm	28" (71.1cm)	565 lb. 256.8 kg
D-200-LD	2 yd ³ (1.53 m ³)	2,000 lb. (909 kg)	56 $\frac{11}{16}$ " x 68 $\frac{5}{16}$ " x 51 $\frac{13}{16}$ " (144.0 x 173.5 x 130.0)cm	28" (71.1cm)	612 lb. 278.2 kg
D-250-LD	2 $\frac{1}{2}$ yd ³ (1.91 m ³)	2,000 lb. (909 kg)	69 $\frac{9}{16}$ " x 68 $\frac{3}{8}$ " x 51 $\frac{3}{4}$ " (176.7 x 173.7 x 131.4)cm	28" (71.1cm)	863 lb. 392.3 kg
D-300-LD	3 yd ³ (2.29 m ³)	2,000 lb. (909 kg)	81 $\frac{3}{4}$ " x 68 $\frac{5}{8}$ " x 51 $\frac{13}{16}$ " (207.6 x 174.3 x 130.0)cm	28" (71.1cm)	940 lb. 427.3 kg
Medium fabricated from 10 gauge steel					
D-25-MD	$\frac{1}{4}$ yd ³ (0.19 m ³)	4,000 lb. (1,818 kg)	26" x 51 $\frac{3}{8}$ " x 38 $\frac{1}{16}$ " (66.0 x 130.5 x 96.7)cm	18" (45.7cm)	396 lb. 180 kg
D-33-MD	$\frac{1}{3}$ yd ³ (0.25 m ³)	4,000 lb. (1,818 kg)	26" x 51 $\frac{3}{8}$ " x 38 $\frac{1}{16}$ " (66.0 x 130.5 x 96.7)cm	18" (45.7cm)	396 lb. 180 kg
D-50-MD	$\frac{1}{2}$ yd ³ (0.38 m ³)	4,000 lb. (1,818 kg)	33 $\frac{9}{16}$ " x 51 $\frac{7}{8}$ " x 38 $\frac{1}{16}$ " (85.2 x 131.8 x 96.7)cm	18" (45.7cm)	435 lb. 197.7 kg
D-75-MD	$\frac{3}{4}$ yd ³ (0.57 m ³)	4,000 lb. (1,818 kg)	31 $\frac{9}{16}$ " x 61 $\frac{1}{8}$ " x 42 $\frac{3}{4}$ " (80.2 x 155.3 x 108.6)cm	18" (45.7cm)	542 lb. 246.4 kg
D-100-MD	1 yd ³ (0.76 m ³)	4,000 lb. (1,818 kg)	41 $\frac{9}{16}$ " x 61 $\frac{1}{8}$ " x 42 $\frac{3}{4}$ " (105.6 x 155.3 x 108.6)cm	18" (45.7cm)	590 lb. 268.2 kg
D-150-MD	1 $\frac{1}{2}$ yd ³ (1.15 m ³)	4,000 lb. (1,818 kg)	43 $\frac{9}{16}$ " x 68 $\frac{3}{8}$ " x 51 $\frac{13}{16}$ " (110.6 x 173.7 x 131.6)cm	28" (71.1cm)	714 lb. 324.5 kg
D-200-MD	2 yd ³ (1.53 m ³)	4,000 lb. (1,818 kg)	56 $\frac{5}{8}$ " x 68 $\frac{5}{16}$ " x 51 $\frac{13}{16}$ " (143.0 x 173.5 x 131.6)cm	28" (71.1cm)	700 lb. 318.2 kg
D-250-MD	2 $\frac{1}{2}$ yd ³ (1.91 m ³)	4,000 lb. (1,818 kg)	69 $\frac{9}{16}$ " x 68 $\frac{3}{8}$ " x 51 $\frac{3}{4}$ " (176.7 x 173.7 x 131.4)cm	28" (71.1cm)	863 lb. 392.3 kg
D-300-MD	3 yd ³ (2.29 m ³)	4,000 lb. (1,818 kg)	81 $\frac{3}{4}$ " x 68 $\frac{5}{8}$ " x 51 $\frac{13}{16}$ " (207.6 x 174.3 x 131.6)cm	28" (71.1cm)	940 lb. 427.3 kg
Heavy duty fabricated from 8 gauge steel					
D-25-HD	$\frac{1}{4}$ yd ³ (0.19 m ³)	6,000 lb. (2,727.3 kg)	26" x 51 $\frac{7}{8}$ " x 38 $\frac{1}{16}$ " (66.0 x 131.8 x 96.7)cm	18" (45.7cm)	396 lb. 180 kg
D-33-HD	$\frac{1}{3}$ yd ³ (0.25 m ³)	6,000 lb. (2,727.3 kg)	26" x 51 $\frac{7}{8}$ " x 38 $\frac{1}{16}$ " (66.0 x 131.8 x 96.7)cm	18" (45.7cm)	396 lb. 180 kg
D-50-HD	$\frac{1}{2}$ yd ³ (0.38 m ³)	6,000 lb. (2,727.3 kg)	32 $\frac{9}{16}$ " x 51 $\frac{7}{8}$ " x 38 $\frac{1}{16}$ " (82.7 x 131.8 x 96.7)cm	18" (45.7cm)	435 lb. 197.7 kg
D-75-HD	$\frac{3}{4}$ yd ³ (0.57 m ³)	6,000 lb. (2,727.3 kg)	31 $\frac{9}{16}$ " x 61 $\frac{1}{8}$ " x 42 $\frac{3}{4}$ " (80.2 x 155.3 x 108.6)cm	18" (45.7cm)	542 lb. 246.4 kg
D-100-HD	1 yd ³ (0.76 m ³)	6,000 lb. (2,727.3 kg)	41 $\frac{9}{16}$ " x 61 $\frac{1}{8}$ " x 42 $\frac{3}{4}$ " (105.6 x 155.3 x 108.6)cm	18" (45.7cm)	590 lb. 268.2 kg
D-150-HD	1 $\frac{1}{2}$ yd ³ (1.15 m ³)	6,000 lb. (2,727.3 kg)	43 $\frac{9}{16}$ " x 68 $\frac{3}{8}$ " x 51 $\frac{13}{16}$ " (110.6 x 173.7 x 131.6)cm	28" (71.1cm)	714 lb. 324.5 kg
D-200-HD	2 yd ³ (1.53 m ³)	6,000 lb. (2,727.3 kg)	56 $\frac{9}{16}$ " x 68 $\frac{5}{16}$ " x 51 $\frac{13}{16}$ " (143.7 x 173.5 x 131.6)cm	28" (71.1cm)	788 lb. 358.2 kg
D-250-HD	2 $\frac{1}{2}$ yd ³ (1.91 m ³)	6,000 lb. (2,727.3 kg)	69 $\frac{9}{16}$ " x 68 $\frac{3}{8}$ " x 51 $\frac{3}{4}$ " (176.7 x 173.7 x 131.4)cm	28" (71.1cm)	863 lb. 392.3 kg
D-300-HD	3 yd ³ (2.29 m ³)	6,000 lb. (2,727.3 kg)	81 $\frac{3}{4}$ " x 68 $\frac{5}{8}$ " x 51 $\frac{13}{16}$ " (207.6 x 174.3 x 131.6)cm	28" (71.1cm)	940 lb. 427.3 kg

D-300-HD-NA	3 yd ³ (2.29 m ³)	6,000 lb. (2,727.3 kg)	55 ⁵ / ₁₆ " x 79 ³ / ₈ " x 64 ³ / ₈ " (140.5 x 201.6 x 163.5)cm	28 in. (71.1cm)	1115 lb. 506.8 kg
D-350-HD	3½ yd ³ (2.69 m ³)	6,000 lb. (2,727.3 kg)	64" x 79 ³ / ₈ " x 64 ³ / ₈ " (162.6 x 201.6 x 163.5)cm	28 in. (71.1cm)	1169 lb. 531.4 kg
D-400-HD	4 yd ³ (3.08 m ³)	6,000 lb. (2,727.3 kg)	72 ¹¹ / ₁₆ " x 79 ³ / ₈ " x 64 ³ / ₈ " (184.6 x 201.6 x 163.5)cm	28 in. (71.1cm)	1224 lb. 556.4 kg
D-500-HD	5 yd ³ (3.85 m ³)	6,000 lb. (2,727.3 kg)	90" x 79 ³ / ₈ " x 64 ³ / ₈ " (228.6 x 201.6 x 163.5)cm	28 in. (71.1cm)	1332 lb. 605.5 kg

Options

Model	Description	Net Weight
LEKP	"Leak proof" welded hopper	5 lb. (2.3kg)
D-DPLG-75	1in. drain plug option	2 lb. (0.9kg)
D-DPLG-2	2in. drain plug option	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)

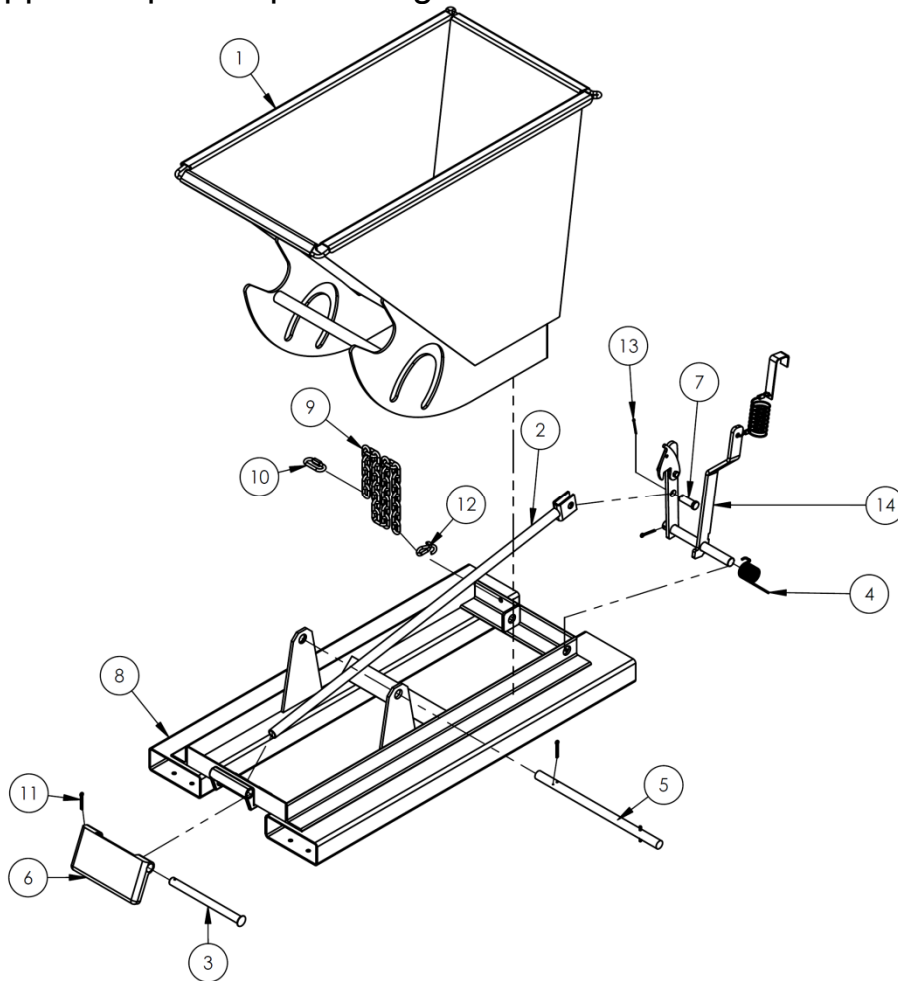
Caster kits

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)

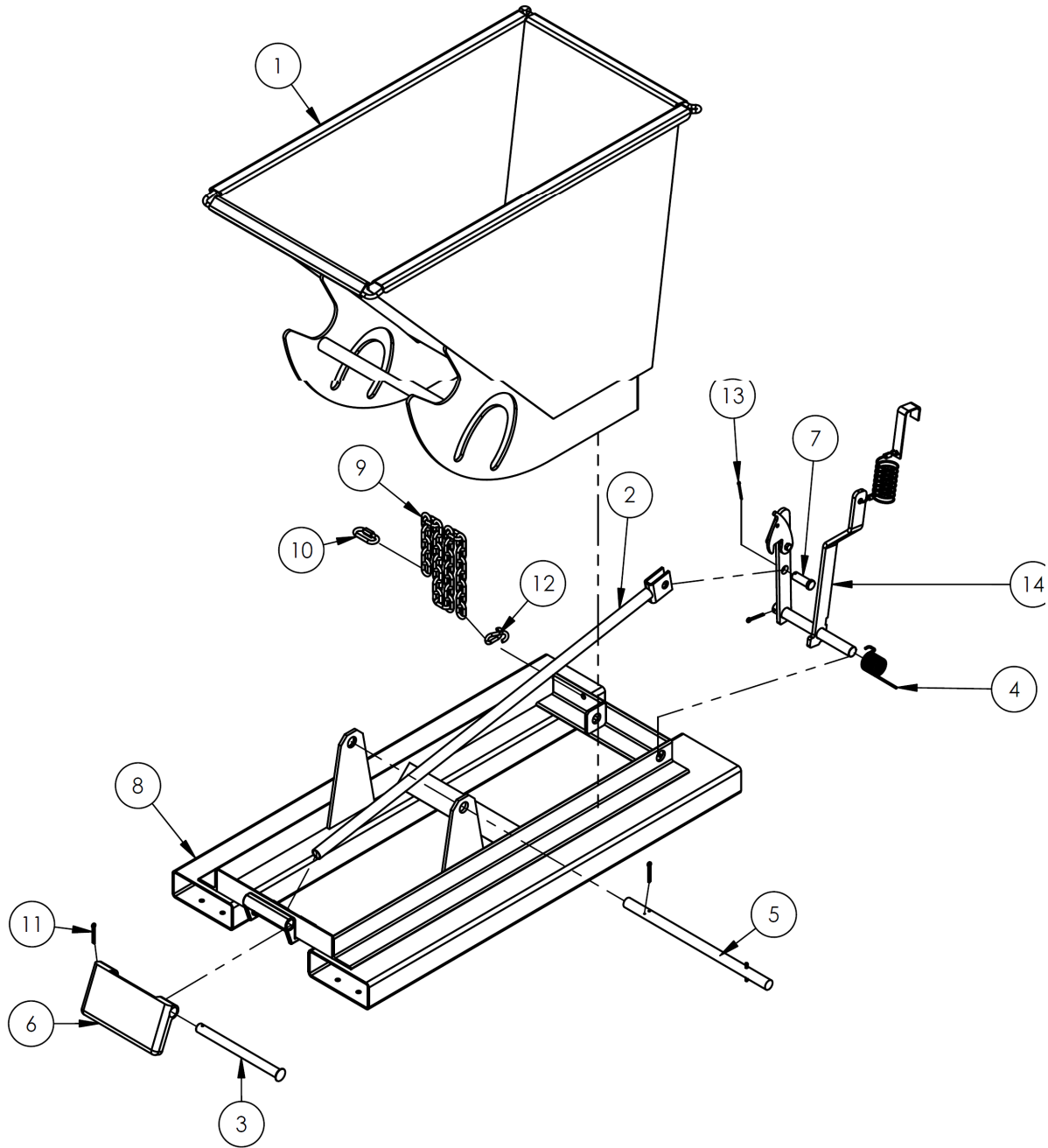
NOTE: "Uniform capacity" is the maximum weight that each caster set can support, and equals the combined weight of the hopper and its contents. **ONLY select a caster kit that equals or exceeds the maximum rated load of your hopper!**

D-25 series hoppers exploded parts diagram & bill of materials



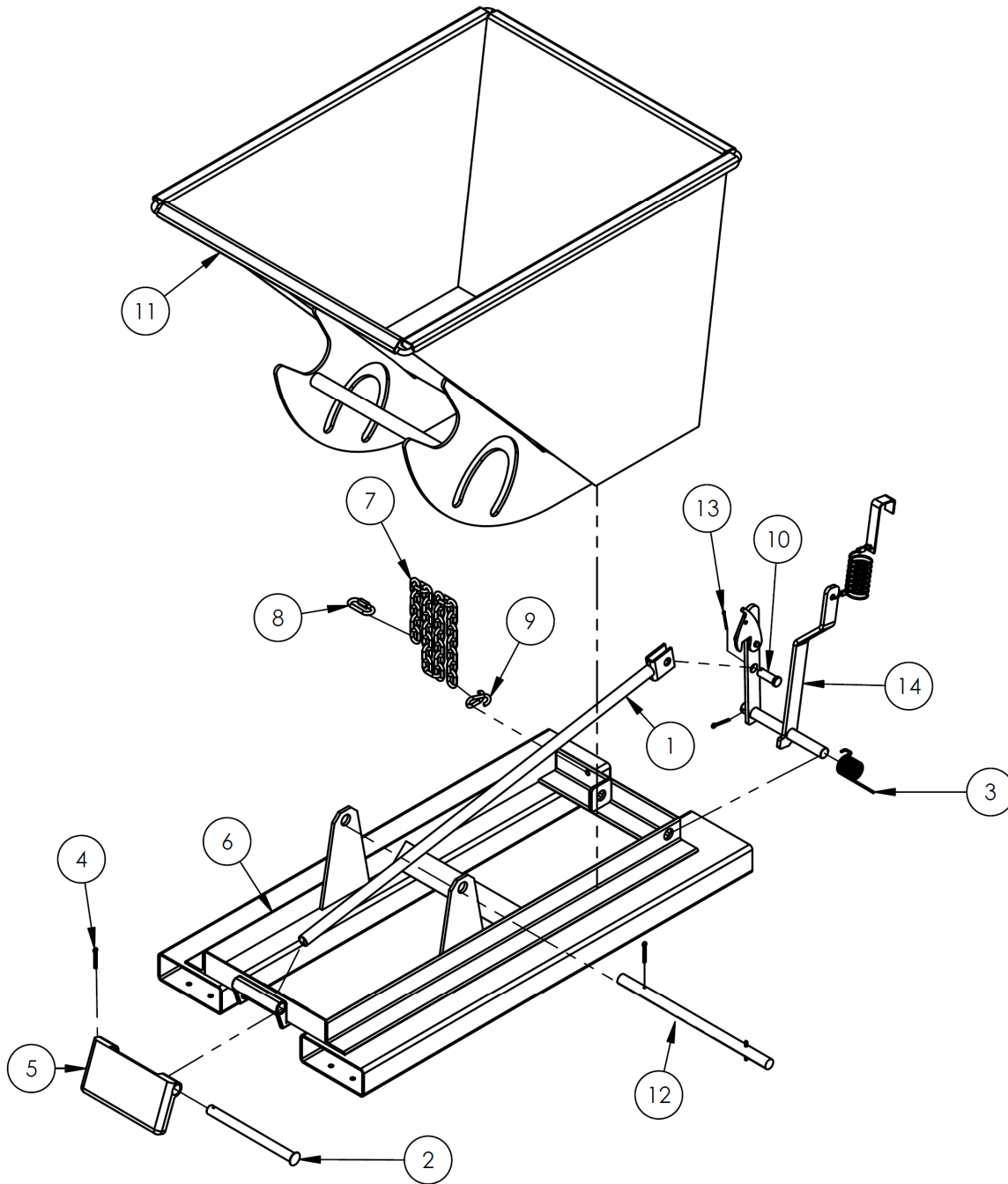
Item	Part no.	Description	Qty.	Item	Part no.	Description	Qty.
1	37-545-041 37-545-011	Weldment, chute: D-25-LD D-25-MD & D-25-HD	1 1	8	37-514-007	Frame, weldment, base	1
2	37-537-007	Release lever rod weldment	1	9	37-537-012	Weldment, lock, release, lever assembly	1
3	37-112-006	Pin, bumper plate	1	10	99-145-037	5/16" chain 36" long	1
4	37-146-005	Spring, torsion, hopper release	1	11	99-145-053	5/16" quick link	1
5	37-612-005	Subassembly, pin, main connection pin	1	12	65127	Cotter pin, zinc-plated, 3/16" x 2"	3
6	37-037-040	Bumper release for D-hoppers	1	13	99-145-084	Lap link	1
7	28-112-043	Pin, 3/4" x 2" retaining clevis	1	14	65080	Extended prong cotter pin, zinc finish, 1/8" x 2"	1

D-33 series hoppers exploded parts diagram & bill of materials



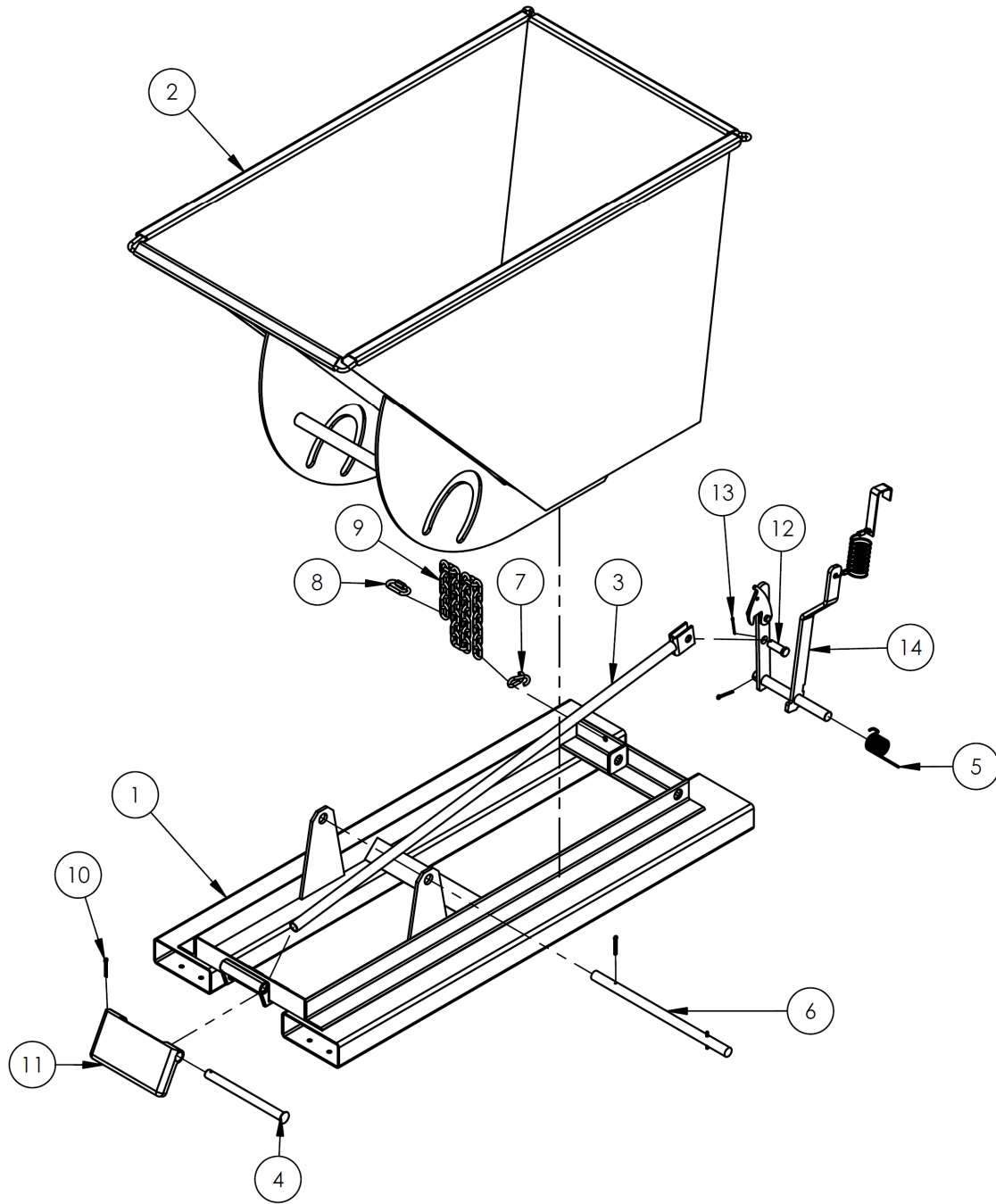
Item	Part no.	Description	Qty.	Item	Part no.	Description	Qty.
1	37-545-041 37-545-011	Weldment, chute: D-25-LD D-25-MD & D-25-HD	1 1	8	37-514-007	Frame, weldment, base	1
2	37-537-007	Release lever rod weldment	1	9	37-537-022	Weldment, lock, release, lever assembly	1
3	37-112-006	Pin, bumper plate	1	10	99-145-037	$\frac{5}{16}$ " chain 36" long	1
4	37-146-005	Spring, torsion, hopper release	1	11	99-145-053	$\frac{5}{16}$ " quick 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	37-037-040	Bumper release for D-hoppers	1	13	99-145-084	Lap link	1
7	28-112-043	Pin, $\frac{3}{4}$ " x 2" retaining clevis	1	14	65080	Extended prong cotter pin, zinc finish, $\frac{1}{8}$ " x 2"	1

D-50 series hoppers exploded parts diagram & bill of materials



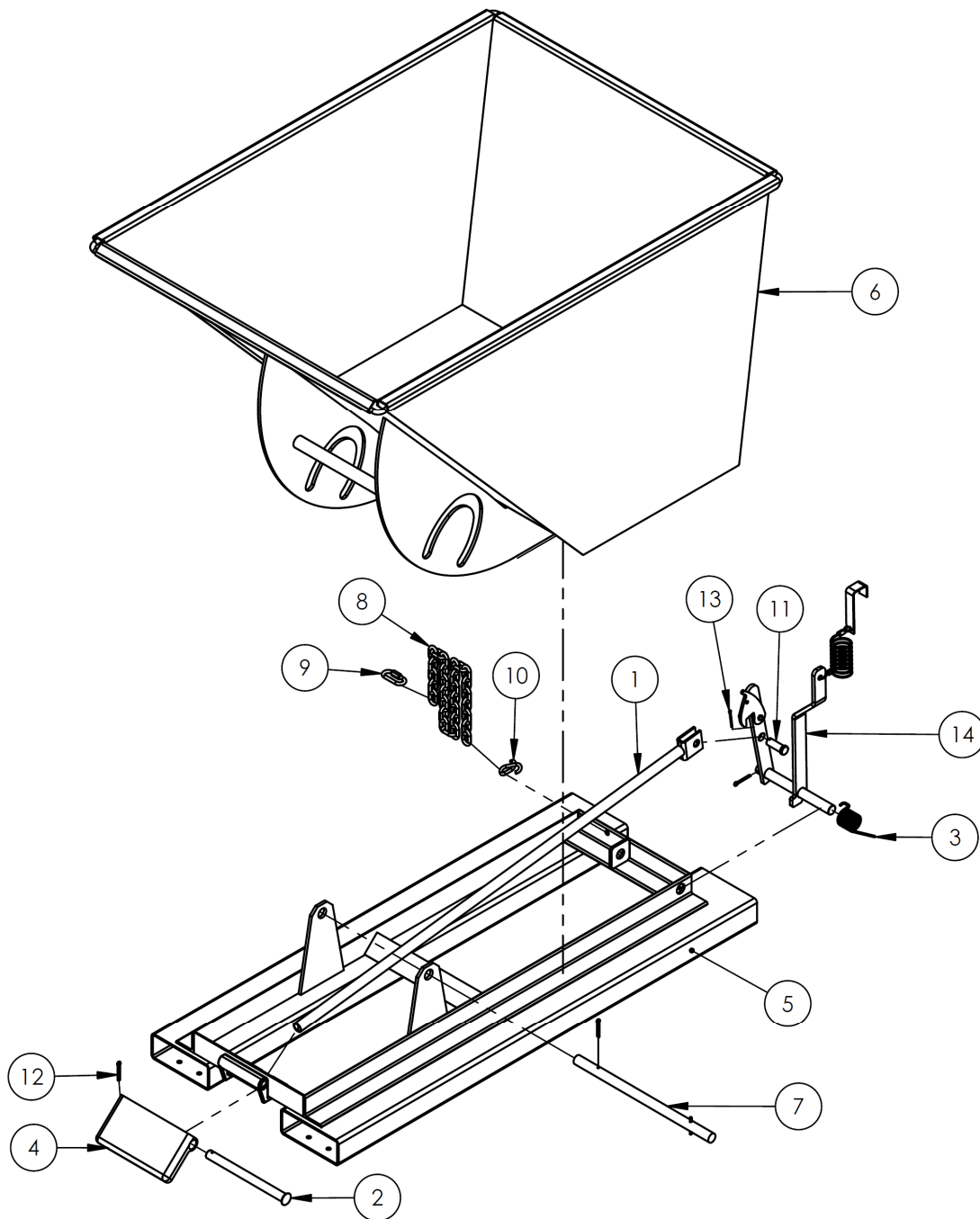
Item	Part no.	Description	Qty.	Item	Part no.	Description	Qty.
1	37-537-007	Release lever rod weldment	1	8	99-145-053	$\frac{5}{16}$ " quick link	1
2	37-112-006	Pin, bumper plate	1	9	99-145-084	Lap link	1
3	37-146-005	Spring, torsion, hopper release	1	10	28-112-043	Pin, $\frac{3}{4}$ " x 2" retaining clevis	1
4	65127	Cotter pin, zinc-plated, $\frac{3}{16}$ " x 2"	3	11	37-545-043	Weldment, chute: D-50-LD	1
5	37-037-040	Bumper release for D-hoppers	1	11	37-545-012	D-50-MD & D-50-HD	1
6	37-514-007	Frame, weldment, base	1	12	37-612-005	Subassembly, pin, main connection pin	1
7	99-145-037	$\frac{5}{16}$ " chain 36" long	1	13	65080	Extended prong cotter pin, zinc finish, $\frac{1}{8}$ " x 2"	1
				14	37-537-021	Weldment, lock, release, lever assembly	1

D-75 series hoppers exploded parts diagram & bill of materials



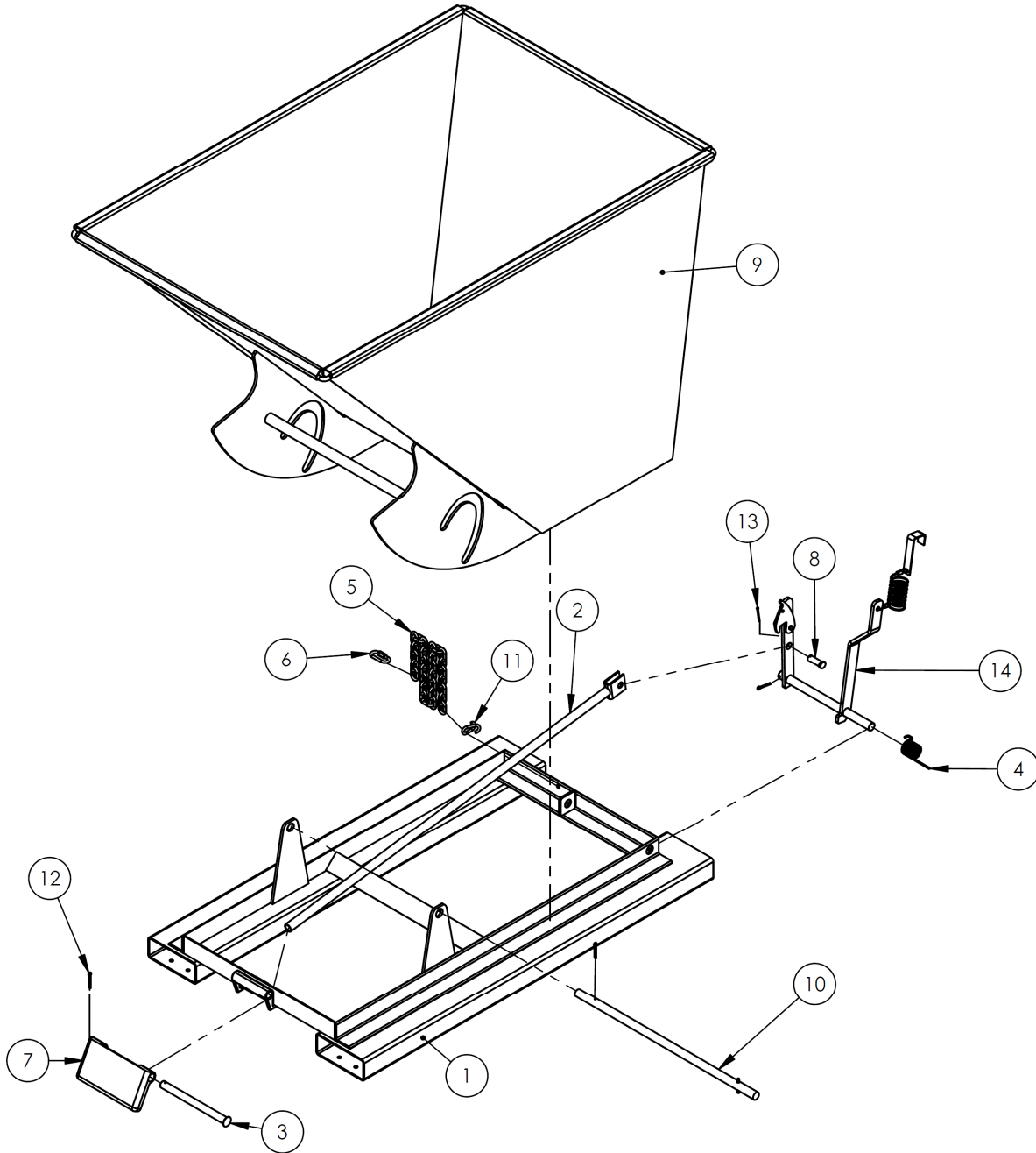
Item	Part no.	Description	Qty.	Item	Part no.	Description	Qty.
1	37-514-008	Frame, weldment, base	1	8	99-145-053	⁵ / ₁₆ " quick link	1
2	37-545-050 37-545-013	Chute weldment: D-75-LD D-75-MD & D-75-HD	1 1	9	99-145-037	⁵ / ₁₆ " chain 36" long	1
3	37-537-006	Release lever rod weldment	1	10	65127	Cotter pin, zinc plated, ³ / ₁₆ " x 2"	3
4	37-112-006	Pin, bumper plate	1	11	37-037-040	Bumper release for D-hoppers	1
5	37-146-005	Spring, torsion, hopper release	1	12	28-112-043	Pin, ³ / ₄ " x 2" long retaining clevis	1
6	37-612-005	Subassembly, pin, main connection pin	1	13	65080	Extended prong cotter pin, zinc finish, ¹ / ₈ " x 2"	1
7	99-145-084	Lap link	1	14	37-537-021	Weldment, lock, release, lever assembly	1

D-100 series hoppers exploded parts diagram & bill of materials



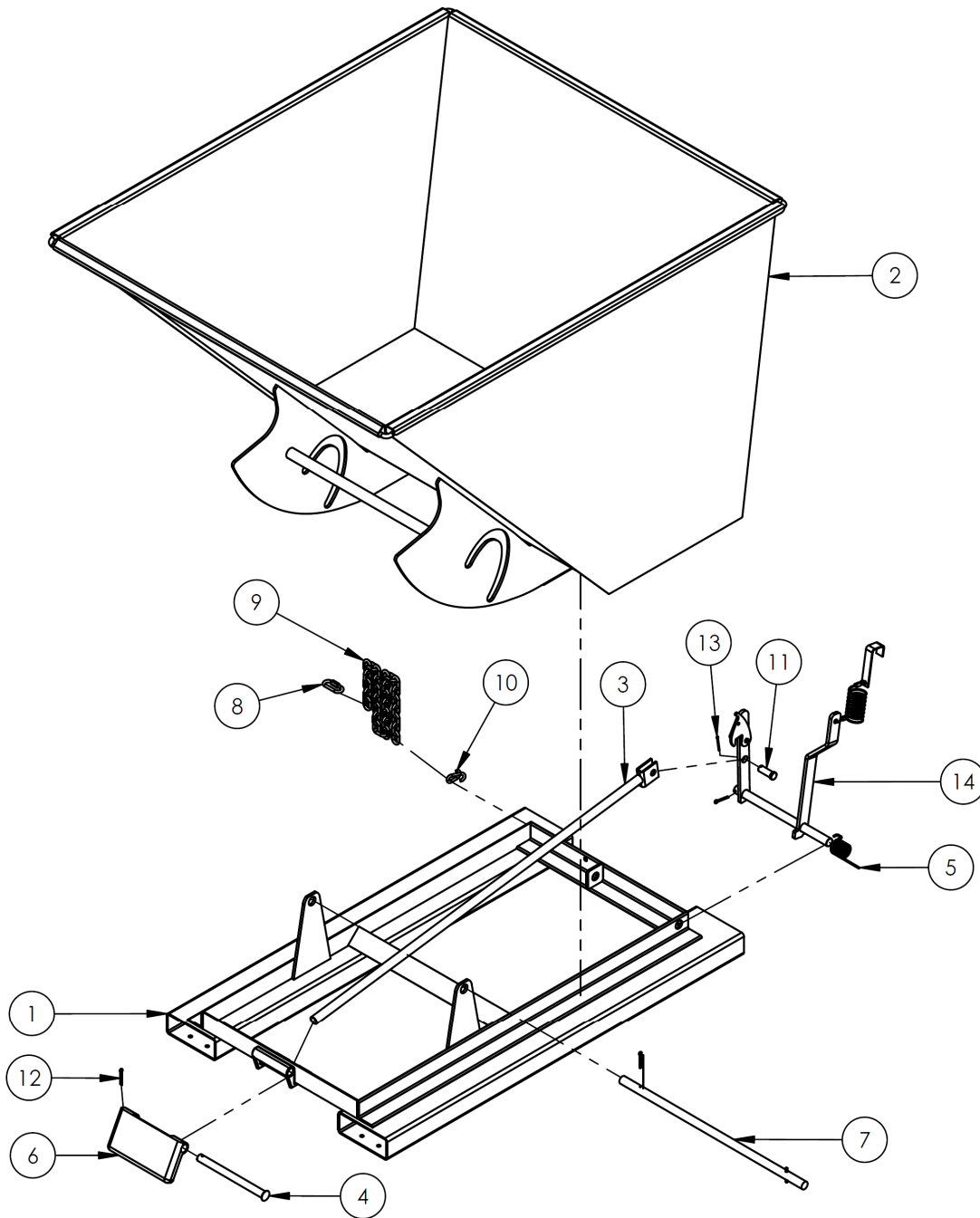
Item	Part no.	Description	Qty.	Item	Part no.	Description	Qty.
1	37-537-006	Release lever rod weldment	1	8	99-145-037	$\frac{5}{16}$ " chain 36" long	1
2	37-112-006	Pin, bumper plate	1	9	99-145-053	$\frac{5}{16}$ " quick link	1
3	37-146-005	Spring, torsion, hopper release	1	10	99-145-084	Lap link	1
4	37-037-040	Bumper release for D-hoppers	1	11	28-112-043	Pin, $\frac{3}{4}$ " x 2" long retaining clevis	1
5	37-514-008	Frame, weldment, base	1	12	65127	Cotter pin, zinc plated, $\frac{3}{16}$ " x 2"	3
6	37-545-022 37-545-014	Chute, weldment: D-100-LD D-100-MD & D-100-HD	1	13	65080	Extended prong cotter pin, zinc finish, $\frac{1}{8}$ " x 2"	1
7	37-612-005	Subassembly, pin, main connection pin	1	14	37-537-021	Weldment, lock, release, lever assembly	1

D-150 series hoppers exploded parts diagram & bill of materials



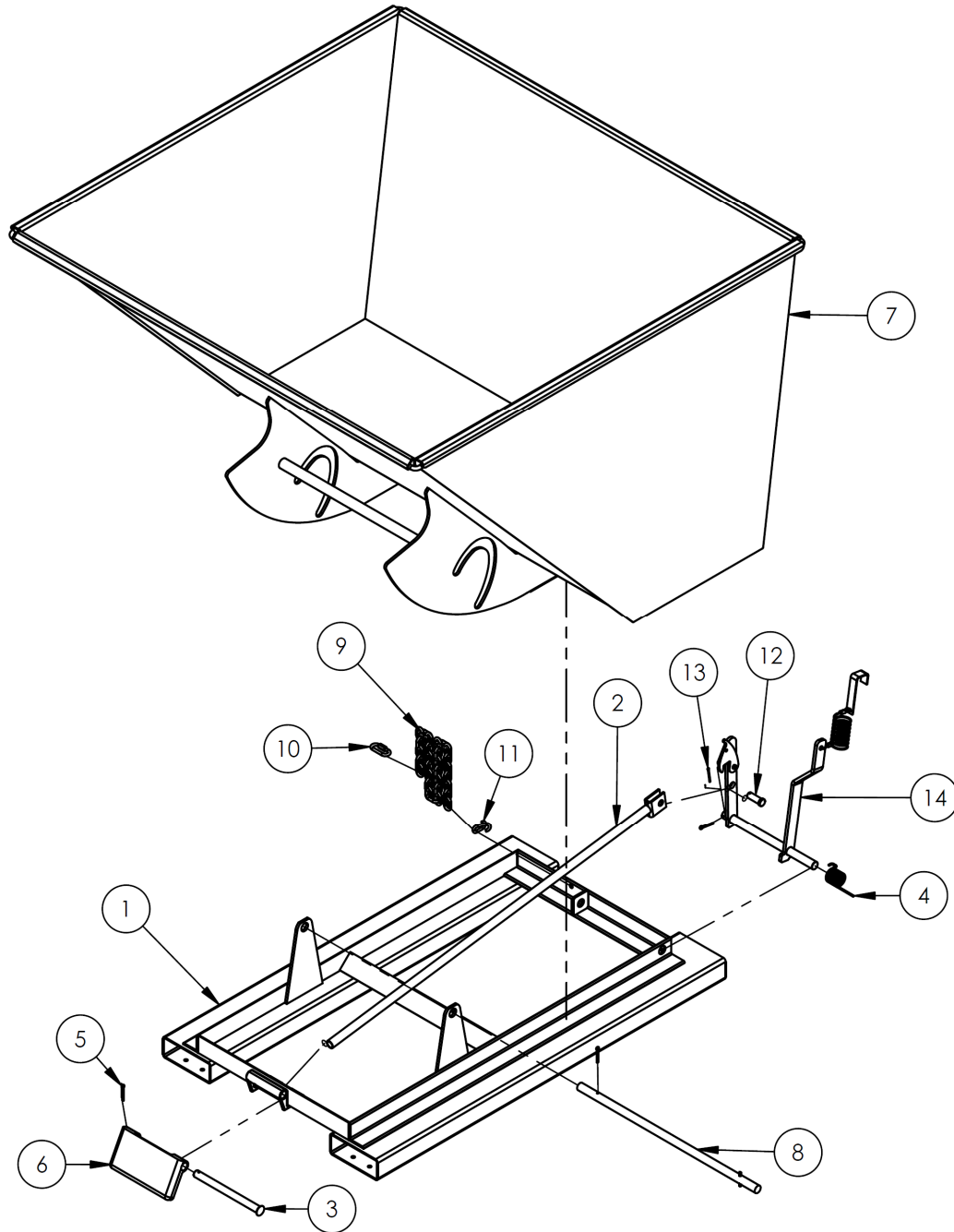
Item	Part no.	Description	Qty.	Item	Part no.	Description	Qty.
1	37-514-004	Frame, weldment, base	1	8	28-112-043	Pin, $\frac{3}{4}$ " x 2" retaining clevis	1
2	37-537-006	Release lever rod weldment	1	9	37-545-046 37-545-015	Weldment, chute: D-150-LD D-150-MD & D-150-HD	1 1
3	37-112-006	Pin, bumper plate	1	10	37-612-006	Subassembly, pin, main connection pin	1
4	37-146-005	Spring, torsion, hopper, release	1	11	99-145-084	Lap link	1
5	99-145-037	$\frac{5}{16}$ " chain 36" long	1	12	65127	Cotter pin, zinc plated, $\frac{3}{16}$ " x 2"	3
6	99-145-053	$\frac{5}{16}$ " quick link	1	13	65080	Extended prong cotter pin, zinc finish, $\frac{1}{8}$ " x 2"	1
7	37-037-040	Bumper release for D-hoppers	1	14	37-537-020	Weldment, lock, release, lever assembly, hopper	1

D-200 series hoppers exploded parts diagram & bill of materials



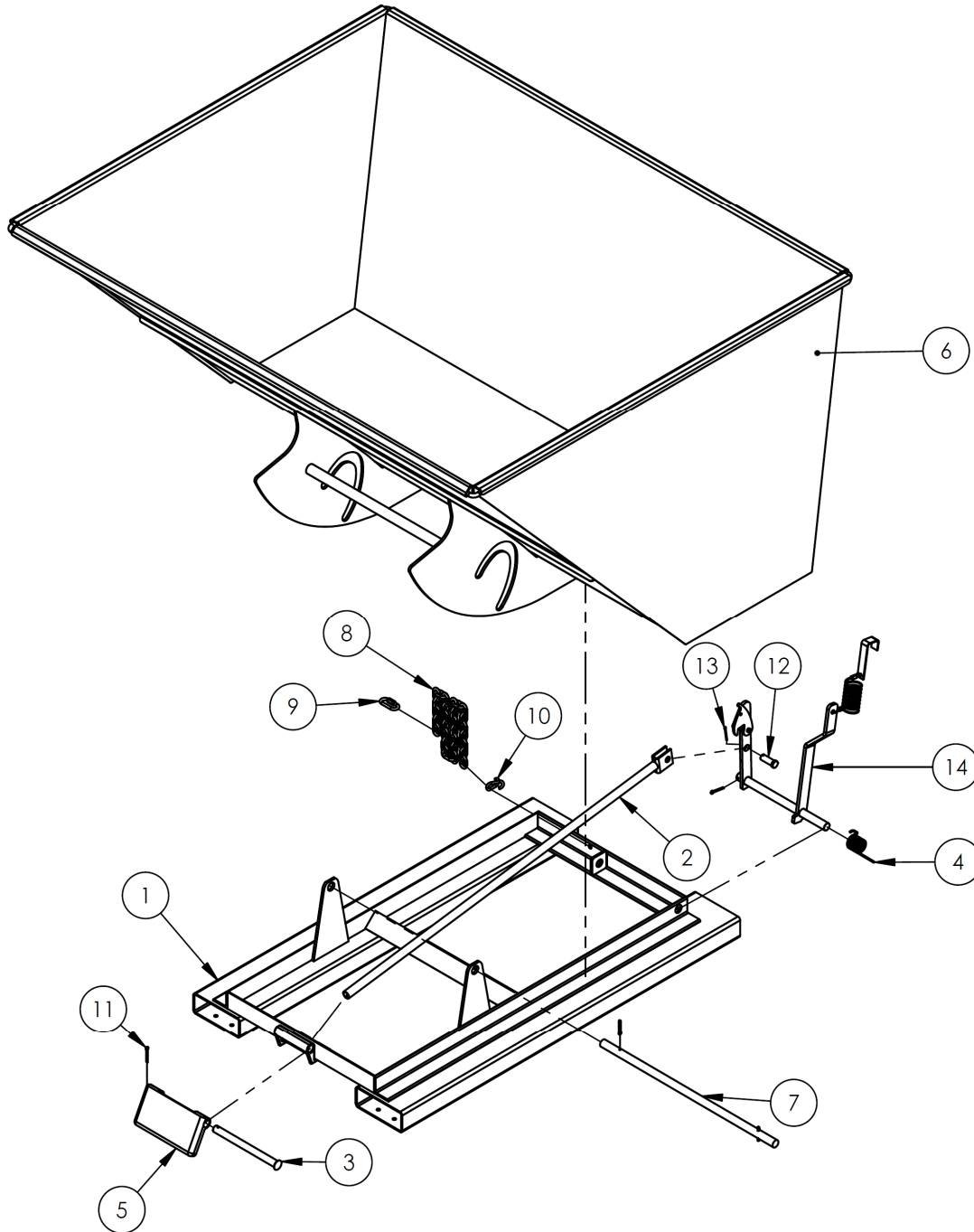
Item	Part no.	Description	Qty.	Item	Part no.	Description	Qty.
1	37-514-004	Frame, weldment, base	1	8	99-145-053	$\frac{5}{16}$ " quick link	1
2	37-545-025	Weldment, chute: D-200-LD	1	9	99-145-037	$\frac{5}{16}$ " chain 36" long	1
	37-545-026	D-200-MD	1				
	37-545-007	D-200-HD	1				
3	37-537-006	Release lever rod assembly	1	10	99-145-084	Lap link	1
4	37-112-006	Pin, bumper plate	1	11	28-112-043	Pin, $\frac{3}{4}$ " x 2" long retaining clevis	1
5	37-146-005	Spring, torsion, hopper release	1	12	65127	Cotter pin, zinc plated	3
6	37-037-040	Bumper release for D-hoppers	1	13	65080	Extended prong cotter pin, zinc finish, $\frac{1}{8}$ " x 2"	1
7	37-612-006	Subassembly, pin, main connection pin	1	14	37-537-010	Weldment, lock, release, lever assembly, hopper	1

D-250 series hoppers exploded parts diagram & bill of materials



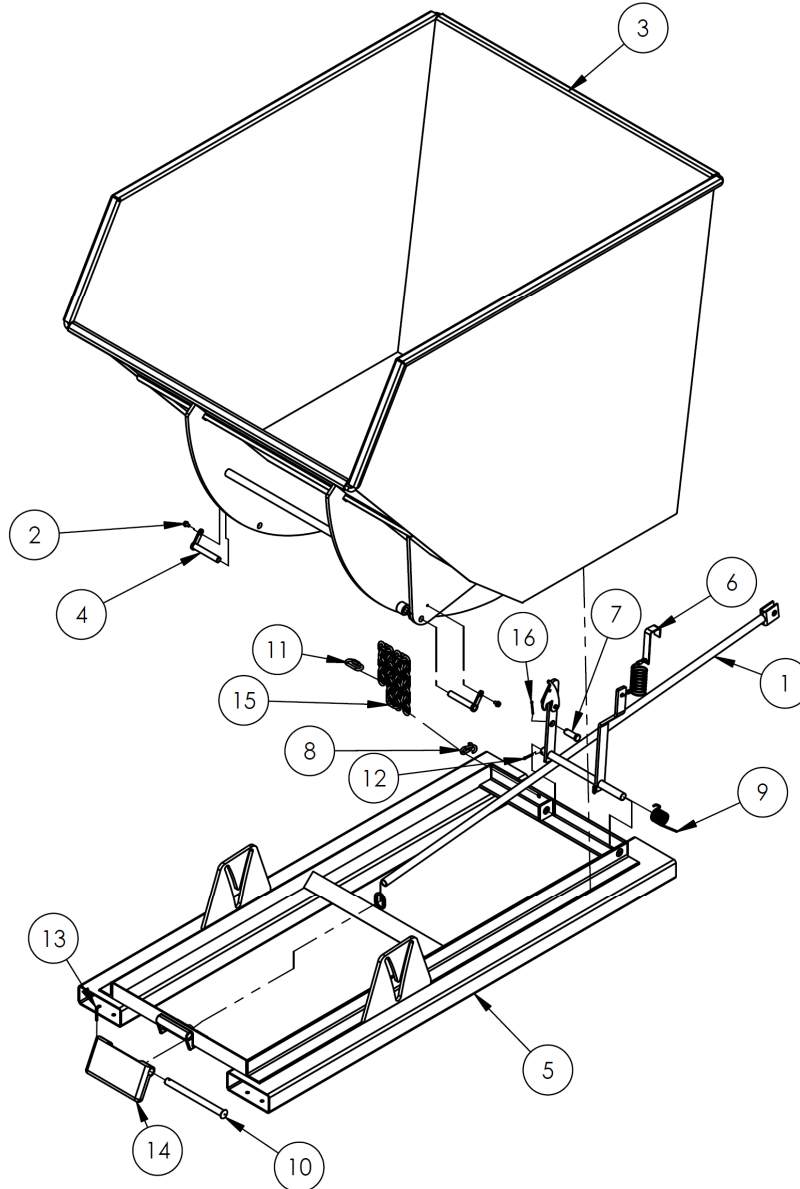
Item	Part no.	Description	Qty.	Item	Part no.	Description	Qty.
1	37-514-004	Frame, weldment, base	1	8	37-612-006	Subassembly, pin, main connection pin	1
2	37-537-006	Release lever rod weldment	1	9	99-145-037	⁵ / ₁₆ " chain 36" long	1
3	37-112-006	Pin, bumper plate	1	10	99-145-053	⁵ / ₁₆ " quick link	1
4	37-146-005	Spring torsion, hopper release	1	11	99-145-084	Lap link	1
5	65127	Cotter pin, zinc plated, ³ / ₁₆ " x 2"	3	12	28-112-043	Pin, ³ / ₄ " x 2" long retaining clevis	1
6	37-037-040	Bumper release for D-hoppers	1	13	65080	Extended prong cotter pin, zinc finish, ¹ / ₈ " x 2"	1
7	37-545-016	Weldment, chute	1	14	37-537-020	Weldment, lock, release, lever assembly, hopper	1

D-300 series hoppers exploded parts diagram & bill of materials



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

D-300-HD-NA, D-350-HD, D-400-HD and D-500-HD series hoppers exploded parts diagram & bill of materials



Item	Part no.	Description	Qty.	Item	Part no.	Description	Qty.
1	37-537-019	Weldment, release lever rod	1	9	37-112-006	Pin, bumper plate	1
2	32415	$\frac{5}{16}$ " - 18 x $\frac{1}{2}$ " HWH thread cutting screw, type F, zinc	2	10	99-145-053	$\frac{5}{16}$ " quick link	1
3	37-545-106 37-545-104 37-545-090 37-545-088	Weldment, chute: D-300-HD-NA D-350-HD D-400-HD D-500-HD	1	11	65125	Cotter pin, zinc plated, $\frac{3}{16}$ " x $1\frac{1}{2}$ "	1
4	37-612-004	Weldment, pin, main, connection pin	2	12	65127	Cotter pin, zinc plated, $\frac{3}{16}$ " x 2"	1
5	37-514-081	Weldment, frame, base	1	13	37-037-040	Bumper release for D-hoppers	1
6	28-112-043	Pin, $\frac{3}{4}$ " x 2" long retaining clevis	1	14	99-145-037	$\frac{5}{16}$ " chain 36" long	1
7	99-145-084	Lap link	1	15	65080	Extended prong cotter pin, zinc finish, $\frac{1}{8}$ " x 2"	1
8	37-146-005	Spring, torsion, hopper release	1	16	37-537-020	Weldment, lock, release, lever assembly, hopper	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**.

To draw attention to hazards that users might encounter, 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 hopper.

Safety Recommendations:

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 p. 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 the maximum rated load (see Table, 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 product 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.

Use instructions:

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.

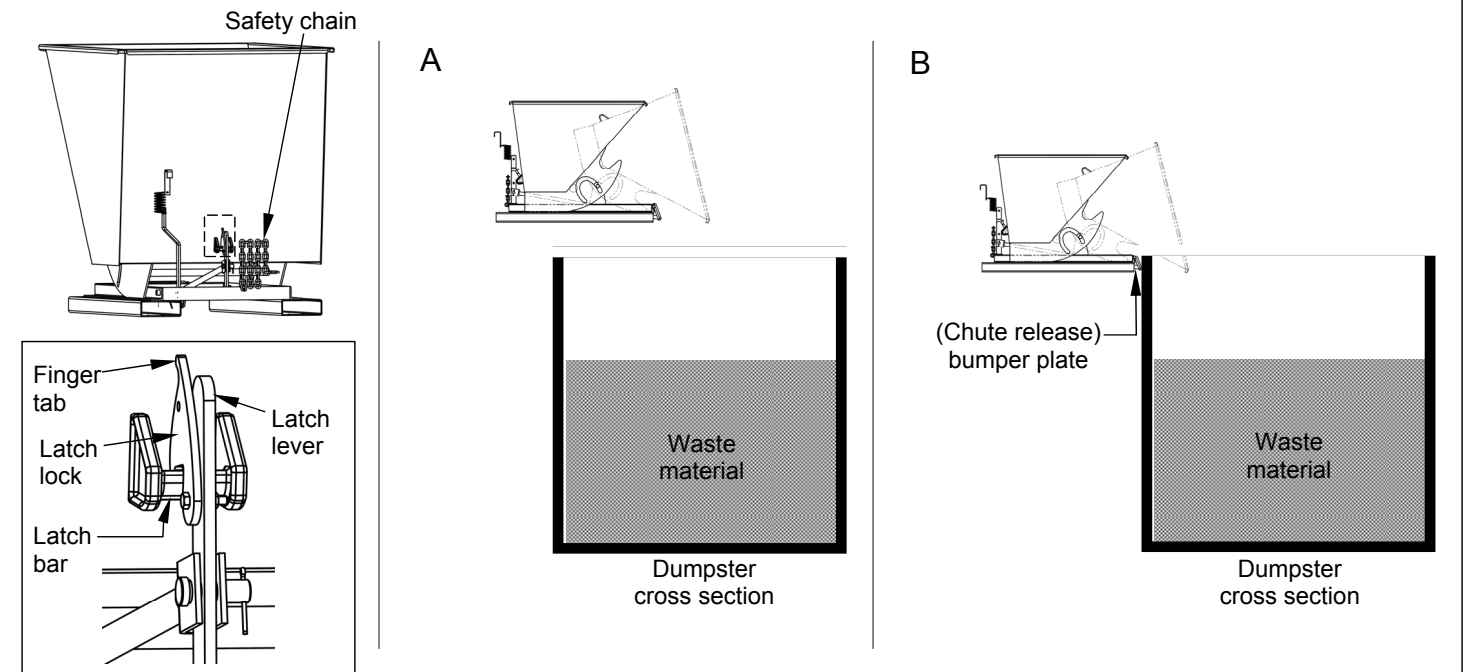
Step 4: Drive the forklift to the trash receptacle. Before raising the hopper, unlock the latch lever by pulling the finger tab until the lock disengages the latch bar (see diagrams with Step 5 below).

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:

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. This written record establishes “normal condition”. When conducting future inspections compare those observations with the written 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.

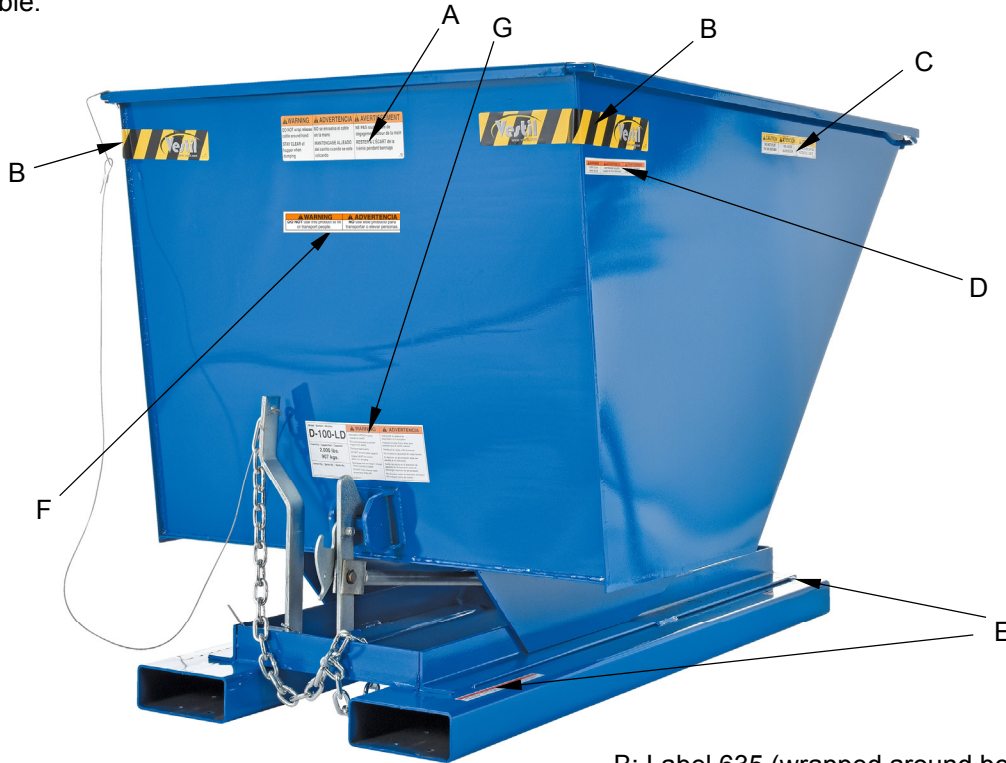
Step 3: Perform all necessary adjustments, replacements, and repairs.

⚠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 always be labeled as shown below. Replace all labels that are missing, damaged, or not easily readable.



A: Label 620

⚠ WARNING	
	DO NOT wrap release cable around hand.
	Severe injury or amputation might occur if cable wrapped around body part when chute dumped.
<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 0716</small>	

B: Label 635 (wrapped around both rear corners)



C: Label 375 (both sides)

⚠ WARNING ⚠ ADVERTENCIA ⚠ AVERTISSEMENT		
DO NOT PLAY ON OR AROUND	NO JUEGE ALREDEDOR	NE PAS JOUER SUR OU AUTOUR DE L'UNITÉ
<small>Rev. 12</small>		

D: Label 220 (both sides)

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

E: Label 208 (both fork tubes)

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

F: Label 995

⚠ WARNING		⚠ ADVERTENCIA	
DO NOT use this product to lift or transport people.		NO use este producto para transportar o elevar personas.	
<small>995</small>			

G: 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. 	
Capacity / Capacidad / Capacité	<ul style="list-style-type: none"> • ASEGURE la cadena de seguridad a la transeleste. • Vuelque la carga hacia atrás para prevenir que el carrito resbale. • Distribuya la carga uniformemente. • NO exceda la capacidad de carga teada. • 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. 	
lb. kg		
Serial No. / Serie No. / Serie No.		
<small>529 REV 1011</small>		

Model	Label
D-25-LD	549
D-25-MD	549
D-25-HD	549
D-33-LD	549
D-33-MD	549
D-33-HD	591
D-50-LD	549
D-50-MD	549
D-50-HD	542

Model	Label
D-75-LD	549
D-75-MD	549
D-75-HD	592
D-100-LD	630
D-100-MD	1050
D-100-HD	644
D-150-LD	549
D-150-MD	549
D-150-HD	544

Model	Label
D-200-LD	540
D-200-MD	541
D-200-HD	545
D-250-LD	549
D-250-MD	549
D-250-HD	593
D-300-LD	549
D-300-MD	631
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 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”): bearings, hoses, wheels, seals, brushes, batteries, and the battery charger.

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 when Vestil ships the product to the warrantee. If the product was purchased from an authorized distributor, the periods began when the distributor shipped the product. Vestil may extend the 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?

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.

