

# Vestil Manufacturing Corp.

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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, use, and maintenance comply with laws, regulations, codes, and mandatory standards applied where the product is used.

### **Technical Service and Replacement Parts**

For answers to questions not addressed in these instructions and to order replacement parts, labels, and accessories, call our Technical Service and Parts Department at (260) 665-7586. The department can also be contacted online at <a href="http://www.vestilmfg.com/parts\_info.htm">http://www.vestilmfg.com/parts\_info.htm</a>.

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# **SPECIFICATIONS**

Dimensions, net weight, and capacity figures are provided in the following tables.

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Model	Volume	Capacity	Overall Dimensions (W x L x H)	Distance between Fork Pocket Centers	Net Weight
D-25-LD	½ yd <sup>3</sup> (0.19 m <sup>3</sup> )	2,000 lb. (909 kg)	26" x 51 <sup>7</sup> / <sub>8</sub> " x 38" (66.0 x 131.8 x 96.5)cm	18" (45.7cm)	341 lb. 155 kg
D-33-LD	<sup>1</sup> / <sub>3</sub> yd <sup>3</sup> (0.25 m <sup>3</sup> )	2,000 lb. (909 kg)	26" x 51 <sup>7</sup> / <sub>8</sub> " x 38" (66.0 x 131.8 x 96.5)cm	18" (45.7cm)	341 lb. 155 kg
D-50-LD	½ yd <sup>3</sup> (0.38 m <sup>3</sup> )	2,000 lb. (909 kg)	$33^{11}/_{16}$ " x $51^{3}/_{4}$ " x $38$ " (85.6 x 131.4 x 96.5)cm	18" (45.7cm)	364 lb. 165.5 kg
D-75-LD	<sup>3</sup> / <sub>4</sub> yd <sup>3</sup> (0.57 m <sup>3</sup> )	2,000 lb. (909 kg)	33 <sup>11</sup> / <sub>16</sub> "" x 61 <sup>1</sup> / <sub>8</sub> " x 42 <sup>11</sup> / <sub>16</sub> " (85.6 x 155.3 x 108.4)cm	18" (45.7cm)	448 lb. 203.6 kg
D-100-LD	1 yd <sup>3</sup> (0.76 m <sup>3</sup> )	2,000 lb. (909 kg)	41 <sup>11</sup> / <sub>16</sub> "" x 61 <sup>1</sup> / <sub>8</sub> " x 42 <sup>11</sup> / <sub>16</sub> " (105.9 x 155.3 x 108.4)cm	18" (45.7cm)	478 lb. 217.3 kg
D-150-LD	1½ yd <sup>3</sup> (1.15 m <sup>3</sup> )	2,000 lb. (909 kg)	$43^{11}/_{16}$ " x $68^{5}/_{16}$ " x $51^{13}/_{16}$ " (111.0 x 173.5 x 131.6)cm	28" (71.1cm)	565 lb. 256.8 kg
D-200-LD	2 yd <sup>3</sup> (1.53 m <sup>3</sup> )	2,000 lb. (909 kg)	56 <sup>11</sup> / <sub>16</sub> " x 68 <sup>5</sup> / <sub>16</sub> " x 51 <sup>3</sup> / <sub>16</sub> " (144.0 x 173.5 x 130.0)cm	28" (71.1cm)	612 lb. 278.2 kg
D-250-LD	2½ yd <sup>3</sup> (1.91 m <sup>3</sup> )	2,000 lb. (909 kg)	69 <sup>9</sup> / <sub>16</sub> " x 68 <sup>3</sup> / <sub>8</sub> " x 51 <sup>3</sup> / <sub>4</sub> " (176.7 x 173.7 x 131.4)cm	28" (71.1cm)	863 lb. 392.3 kg
D-300-LD	3 yd <sup>3</sup> (2.29 m <sup>3</sup> )	2,000 lb. (909 kg)	81 <sup>3</sup> / <sub>4</sub> " x 68 <sup>5</sup> / <sub>8</sub> " x 51 <sup>3</sup> / <sub>16</sub> " (207.6 x 174.3. x 130.0)cm	28" (71.1cm)	940 lb. 427.3 kg
Medium fa	bricated from			(11.10111)	127.0 Kg
D-25-MD	½ yd <sup>3</sup> (0.19 m <sup>3</sup> )	4,000 lb. (1,818 kg)	26" x 51 <sup>3</sup> / <sub>8</sub> " x 38 <sup>1</sup> / <sub>16</sub> " (66.0 x 130.5 x 96.7)cm	18" (45.7cm)	396 lb. 180 kg
D-33-MD	<sup>1</sup> / <sub>3</sub> yd <sup>3</sup> (0.25 m <sup>3</sup> )	4,000 lb. (1,818 kg)	26" x 51 <sup>3</sup> / <sub>8</sub> " x 38 <sup>1</sup> / <sub>16</sub> " (66.0 x 130.5 x 96.7)cm	18" (45.7cm)	396 lb. 180 kg
D-50-MD	1/2 yd <sup>3</sup> (0.38 m <sup>3</sup> )	4,000 lb.	33 <sup>9</sup> / <sub>16</sub> " x 51 <sup>7</sup> / <sub>8</sub> " x 38 <sup>1</sup> / <sub>16</sub> " (85.2 x 131.8 x 96.7)cm	18" (45.7cm)	435 lb.
D-75-MD	3/4 yd <sup>3</sup>	(1,818 kg) 4,000 lb.	$31^9/_{16}$ " x $61^1/_8$ " x $42^3/_4$ "	18"	197.7 kg 542 lb.
D-100-MD	(0.57 m <sup>3</sup> ) 1 yd <sup>3</sup>	(1,818 kg) 4,000 lb.	(80.2 x 155.3 x 108.6)cm 41 <sup>9</sup> / <sub>16</sub> " x 61 <sup>1</sup> / <sub>8</sub> " x 42 <sup>3</sup> / <sub>4</sub> "	(45.7cm) 18"	246.4 kg 590 lb.
D-150-MD	(0.76 m <sup>3</sup> ) 1½ yd <sup>3</sup>	(1,818 kg) 4,000 lb.	(105.6 x 155.3 x 108.6)cm 43 <sup>9</sup> / <sub>16</sub> " x 68 <sup>3</sup> / <sub>8</sub> " x 51 <sup>13</sup> / <sub>16</sub> "	(45.7cm) 28"	268.2 kg 714 lb.
D-200-MD	(1.15 m <sup>3</sup> ) 2 yd <sup>3</sup>	(1,818 kg) 4,000 lb.	(110.6 x 173.7 x 131.6)cm 56 <sup>5</sup> / <sub>8</sub> " x 68 <sup>5</sup> / <sub>16</sub> " x 51 <sup>13</sup> / <sub>16</sub> "	(71.1cm) 28"	324.5 kg 700 lb.
D-250-MD	$(1.53 \text{ m}^3)$ $2\frac{1}{2} \text{ yd}^3$	(1,818 kg) 4,000 lb.	(1430. x 173.5 x 131.6)cm 69 <sup>9</sup> / <sub>16</sub> " x 68 <sup>3</sup> / <sub>8</sub> " x 51 <sup>3</sup> / <sub>4</sub> "	(71.1cm) 28"	318.2 kg 863 lb.
	(1.91 m <sup>3</sup> ) 3 yd <sup>3</sup>	(1,818 kg) 4,000 lb.	(176.7 x 173.7 x 131.4)cm 81 <sup>3</sup> / <sub>4</sub> " x 68 <sup>5</sup> / <sub>8</sub> " x 51 <sup>13</sup> / <sub>16</sub> "	(71.1cm) 28"	392.3 kg 940 lb.
D-300-MD	(2.29 m <sup>3</sup> )	(1,818 kg)	(207.6 x 174.3 x 131.6)cm	(71.1cm)	427.3 kg
Heavy dut	y fabricated fro			40"	200 lb
D-25-HD	½ yd <sup>3</sup> (0.19 m <sup>3</sup> )	6,000 lb. (2,727.3 kg)	26" x 51 <sup>7</sup> / <sub>8</sub> " x 38 <sup>1</sup> / <sub>16</sub> " (66.0 x 131.8 x 96.7)cm	18" (45.7cm)	396 lb. 180 kg
D-33-HD	<sup>1</sup> / <sub>3</sub> yd <sup>3</sup> (0.25 m <sup>3</sup> )	6,000 lb. (2,727.3 kg)	$26" \times 51^{7}/_{8}" \times 38^{1}/_{16}"$ (66.0 x 131.8 x 96.7)cm	18" (45.7cm)	396 lb. 180 kg
D-50-HD	½ yd <sup>3</sup> (0.38 m <sup>3</sup> )	6,000 lb. (2,727.3 kg)	$32^9/_{16}$ " x $51^7/_8$ " x $38^1/_{16}$ " (82.7 x 131.8 x 96.7)cm	18" (45.7cm)	435 lb. 197.7 kg
D-75-HD	<sup>3</sup> / <sub>4</sub> yd <sup>3</sup> (0.57 m <sup>3</sup> )	6,000 lb. (2,727.3 kg)	$31^{9}/_{16}$ " x $61^{1}/_{8}$ " x $42^{3}/_{4}$ " (80.2 x 155.3 x 108.6)cm	18" (45.7cm)	542 lb. 246.4 kg
D-100-HD	1 yd <sup>3</sup> (0.76 m <sup>3</sup> )	6,000 lb. (2,727.3 kg)	41 <sup>9</sup> / <sub>16</sub> " x 61 <sup>1</sup> / <sub>8</sub> " x 42 <sup>3</sup> / <sub>4</sub> " (105.6 x 155.3 x 108.6)cm	18" (45.7cm)	590 lb. 268.2 kg
D-150-HD	1½ yd <sup>3</sup> (1.15 m <sup>3</sup> )	6,000 lb. (2,727.3 kg)	43 <sup>9</sup> / <sub>16</sub> " x 68 <sup>3</sup> / <sub>8</sub> " x 51 <sup>13</sup> / <sub>16</sub> " (110.6 x 173.7 x 131.6)cm	28" (71.1cm)	714 lb. 324.5 kg
D-200-HD	2 yd <sup>3</sup> (1.53 m <sup>3</sup> )	6,000 lb. (2,727.3 kg)	56 <sup>9</sup> / <sub>16</sub> " x 68 <sup>5</sup> / <sub>16</sub> " x 51 <sup>13</sup> / <sub>16</sub> " (143.7 x 173.5 x 131.6)cm	28" (71.1cm)	788 lb. 358.2 kg
D-250-HD	2½ yd <sup>3</sup> (1.91 m <sup>3</sup> )	6,000 lb. (2,727.3 kg)	69 <sup>9</sup> / <sub>16</sub> " x 68 <sup>3</sup> / <sub>8</sub> " x 51 <sup>3</sup> / <sub>4</sub> " (176.7 x 173.7 x 131.4)cm	28" (71.1cm)	863 lb. 392.3 kg
D-300-HD	3 yd <sup>3</sup> (2.29 m <sup>3</sup> )	6,000 lb. (2,727.3 kg)	81 <sup>3</sup> / <sub>4</sub> " x 68 <sup>5</sup> / <sub>8</sub> " x 51 <sup>13</sup> / <sub>16</sub> " (207.6 x 174.3 x 131.6)cm	28" (71.1cm)	940 lb. 427.3 kg
<u> </u>	\20 III )	(=,: 27.5 Ng)	\_01.0 \ 11 1.0 \ 10 1.0 \ 011	(7 1. 10111)	, ng

D-300-HD-NA	3 yd <sup>3</sup>	6,000 lb.	$55^{5}/_{16}$ " x $79^{3}/_{8}$ " x $64^{3}/_{8}$ "	28 in.	1115 lb.
D-300-HD-INA	(2.29 m <sup>3</sup> )	(2,727.3 kg)	(140.5 x 201.6 x 163.5)cm	(71.1cm)	506.8 kg
D-350-HD	3½ yd <sup>3</sup>	6,000 lb.	64" x 79 <sup>3</sup> / <sub>8</sub> " x 64 <sup>3</sup> / <sub>8</sub> "	28 in.	1169 lb.
ח-סמט-חח	$(2.69  \mathrm{m}^3)$	(2,727.3 kg)	(162.6 x 201.6 x 163.5)cm	(71.1cm)	531.4 kg
D-400-HD	4 yd <sup>3</sup>	6,000 lb.	$72^{11}/_{16}$ " x $79^{3}/_{8}$ " x $64^{3}/_{8}$ "	28 in.	1224 lb.
D-400-ND	$(3.08 \text{ m}^3)$	(2,727.3 kg)	(184.6 x 201.6 x 163.5)cm	(71.1cm)	556.4 kg
D 500 HD	5 yd <sup>3</sup>	6,000 lb.	90" x 79 <sup>3</sup> / <sub>8</sub> " x 64 <sup>3</sup> / <sub>8</sub> "	28 in.	1332 lb.
D-500-HD	(3.85 m <sup>3</sup> )	(2,727.3 kg)	(228.6 x 201.6 x 163.5)cm	(71.1cm)	605.5 kg

Options		
Model	Description	Net Weight
LEKP	"Leak proof" welded hopper	5 lb. (2.3kg)
D-DPLG-75	3/4in. 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

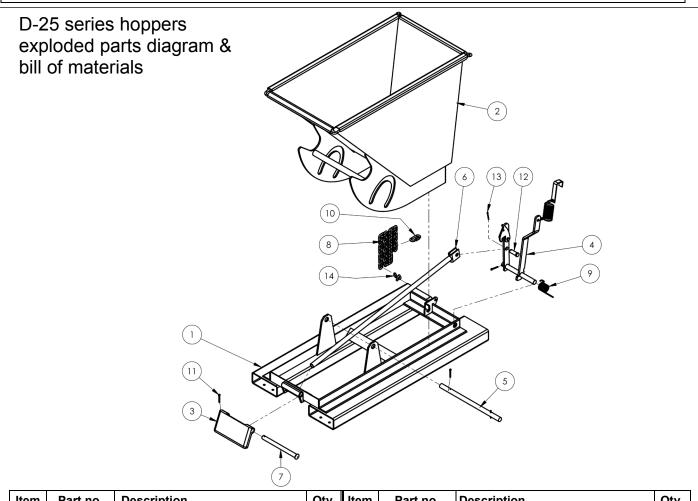
Lid Model	Parts	Description	Fits Hopper Models	Net Weight
	37-024-087-002	Plastic lid		
PLID-D-25	37-112-028	Prop rod / hinge pin	D-25-LD, D-25-MD, D-25-HD	16 lb. (7.3kg)
PLID-D-25	37-016-034	Bracket, Lid hinge, right	D-25-LD, D-25-ND, D-25-ND	10 lb. (1.3kg)
	37-016-033	Bracket, lid hinge, left		
	37-024-087-002	Plastic lid		
PLID-D-33	37-112-028	Prop rod / hinge pin	D-33-LD, D-33-MD, D-33-HD	16 lb. (7.3kg)
PLID-D-33	37-016-034	Bracket, Lid hinge, right	D-33-LD, D-33-MD, D-33-HD	10 lb. (1.3kg)
	37-016-033	Bracket, lid hinge, left		
	37-024-087-001	Plastic lid		
PLID-D-50	37-112-029	Prop rod / hinge pin	D-50-LD, D-50-MD, D-50-HD	21 lb. (9.5kg)
PLID-D-30	37-016-034	Bracket, Lid hinge, right	D-30-LD, D-30-MD, D-30-HD	21 lb. (9.5kg)
	37-016-033	Bracket, lid hinge, left		
	37-024-086-002	Plastic lid		
PLID-D-75	37-112-030	Prop rod / hinge pin	D-75-LD, D-75-MD, D-75-HD	22 lb. (10kg)
PLID-D-75	37-016-034	Bracket, Lid hinge, right	D-75-LD, D-75-MD, D-75-HD	22 lb. (10kg)
	37-016-033	Bracket, lid hinge, left		
	37-024-086-001	Plastic lid		
PLID-D-100	37-112-031	Prop rod / hinge pin	D-100-LD, D-100-MD, D-100-HD	28 lb. (12.7kg)
PLID-D-100	37-016-034	Bracket, Lid hinge, right	D-100-LD, D-100-MD, D-100-HD	20 ID. (12.7 kg)
	37-016-033	Bracket, lid hinge, left		
	37-024-085-004	Plastic lid		
PLID-D-150	37-112-032	Prop rod / hinge pin	D-150-LD, D-150-MD, D-150-HD	33 lb. (15kg)
1 210-0-100	37-016-034	Bracket, Lid hinge, right	D-130-LD, D-130-MD, D-130-HD	33 lb. (13kg)
	37-016-033	Bracket, lid hinge, left		
	37-024-089	Plastic lid		
PLID-D-200	37-112-033	Prop rod / hinge pin	D-200-LD, D-200-MD, D-200-HD	58 lb. (26.4kg)
1 LID-D-200	37-016-034	Bracket, Lid hinge, right	D-200-LD, D-200-IND, D-200-IID	30 lb. (20.4kg)
	37-016-033	Bracket, lid hinge, left		
	37-024-085-002	Plastic lid		
PLID-D-250	37-112-034	Prop rod / hinge pin	D-250-LD, D-250-MD, D-250-HD	51 lb. (23.2kg)
1 610-0-230	37-016-034	Bracket, Lid hinge, right	D-250-LD, D-250-NID, D-250-ND	01 ID. (20.2Ng)
	37-016-033	Bracket, lid hinge, left		
	37-024-085-001	Plastic lid		
PLID-D-300	37-112-035	Prop rod / hinge pin	D-300-LD, D-300-MD, D-300-HD	61 lb. (27.7kg)
1 510-0-300	37-016-034	Bracket, Lid hinge, right	D-300-LD, D-300-NID, D-300-HD	01 ID. (21.1 Kg)
	37-016-033	Bracket, lid hinge, left		

# Caster kits

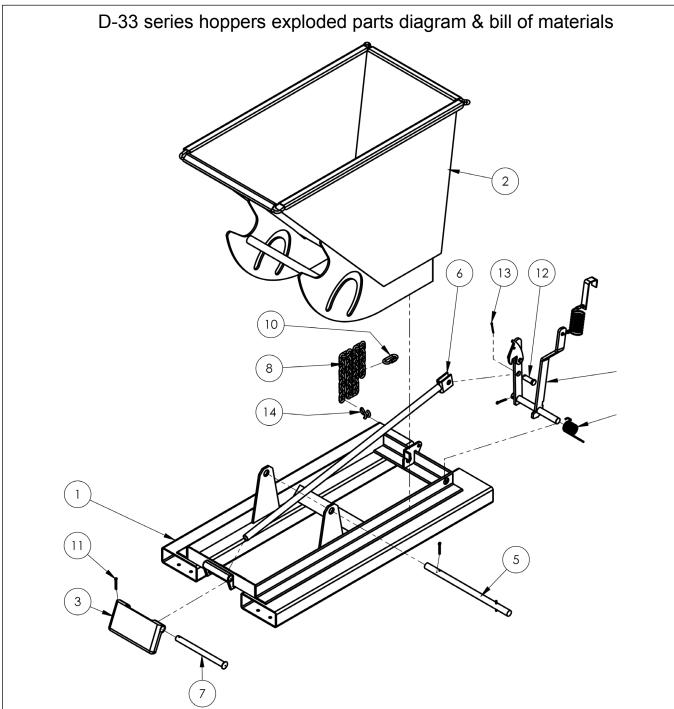
Model	Dimensions	<b>Uniform Capacity</b>	Caster Material	Quantity per Order	Net Weight
D-CK4-SC6-2	6" x 2" (15¼ x 5.1)cm	4,800 lb. (2,182 kg)	Semi-steel	4	33 lb. (15kg)
D-CK4-SC8-2	8" x 2"	4,800 lb.	Semi-steel	4	42 lb.

	(20.3 x 5.1)cm	(2,182 kg)			(19.1kg)
D-CK4-MR6-2	6" x 2" (15¼ x 5.1)cm	2,400 lb. (1,091 kg)	Mold-on rubber	4	29 lb. (13.2kg)
D-CK4-MR8-2	8" x 2" (20.3 x 5.1)cm	2,400 lb. (1,091 kg)	Mold-on rubber	4	37 lb. (16.8kg)
D-CK4-PU6-2	6" x 2 (15¼ x 5.1)cm	4,800 lb. (2,182 kg)	Polyurethane on steel	4	31 lb. (14.1 kg)
D-CK4-PU8-2	8" x 2" (20.3 x 5.1)cm	5,000 lb. (2,273 kg)	Polyurethane on steel	4	42 lb. (19.1 kg)
D-CK4-GFN6-2	6" x 2" (15¼ x 5.1)cm	4,800 lb. (2,182kg)	Glass-filled nylon	4	19 lb. (8.6 kg)
D-CK4-GFN8-2	8" x 2" (20.3 x 5.1)cm	5,000 lb. (2,273 kg)	Glass-filled nylon	4	22 lb. (10 kg)
D-CK4-SC6-2HD	6" x 2" (15¼ x 5.1)cm	8,000 lb. (2,727 kg)	Ductile steel	4	43 lb. (19.5 kg)

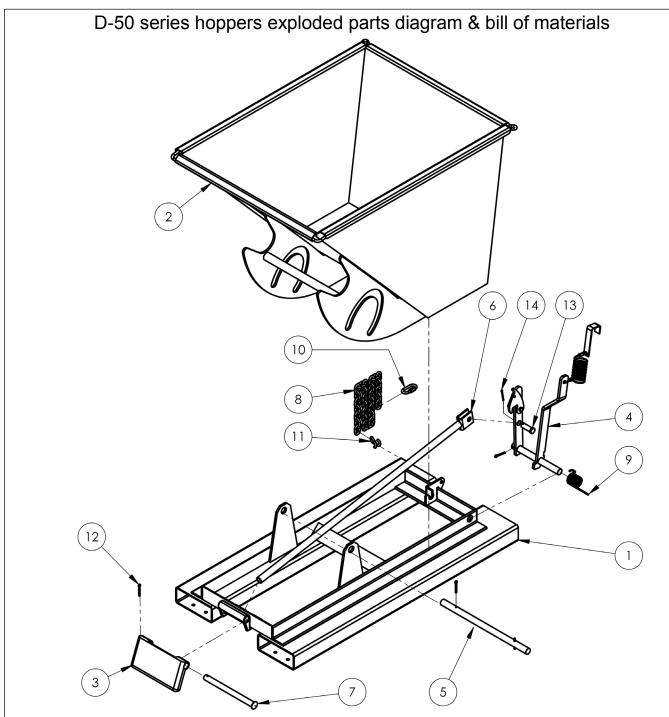
NOTE: Select a caster kit whose capacity equals or exceeds the maximum rated load of your hopper!



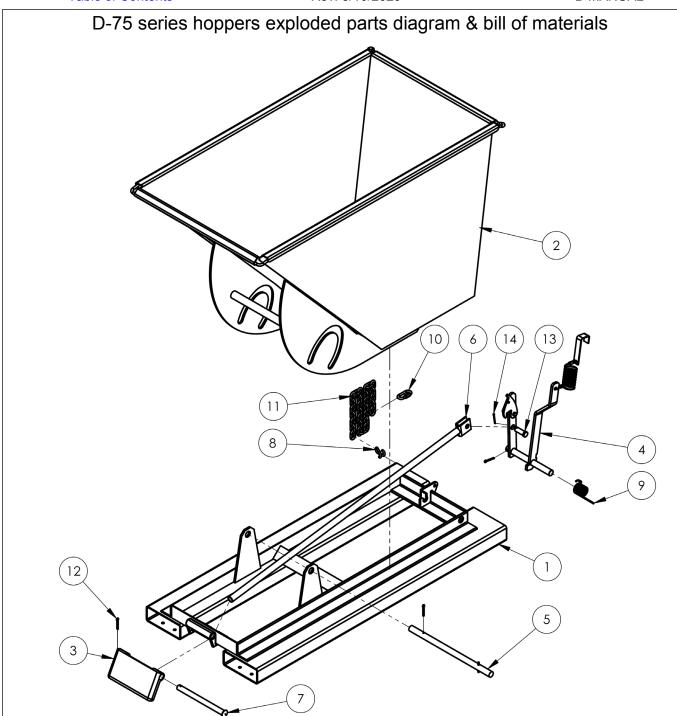
Item	Part no.	Description	Qty.	Item	Part no.	Description	Qty.
1	37-514-007	Frame, weldment, base	1	8	99-145-037	<sup>5</sup> / <sub>16</sub> " chain 36" long	1
2	37-545-041 37-545-011	Weldment, chute: D-25-LD D-25-MD & D-25-HD	1	9	37-146-005	Spring, torsion, hopper release	1
3	37-037-040	Bumper release for D-hoppers	1	10	99-145-053	<sup>5</sup> / <sub>16</sub> " quick link	1
4	37-537-021	Weldment, lock, release, lever assembly	1	11	65127	Cotter pin, zinc-plated, <sup>3</sup> / <sub>16</sub> " x 2"	3
5	37-612-005	Subassembly, pin, main connection pin	1	12	28-112-043	Pin, <sup>3</sup> / <sub>4</sub> " x 2" retaining clevis	1
6	37-537-007	Release lever rod weldment	1	13	65080	Extended prong cotter pin, zinc finish, <sup>1</sup> / <sub>8</sub> " x 2"	1
7	37-112-006	Pin, bumper plate	1	14	99-145-084	Lap link	1



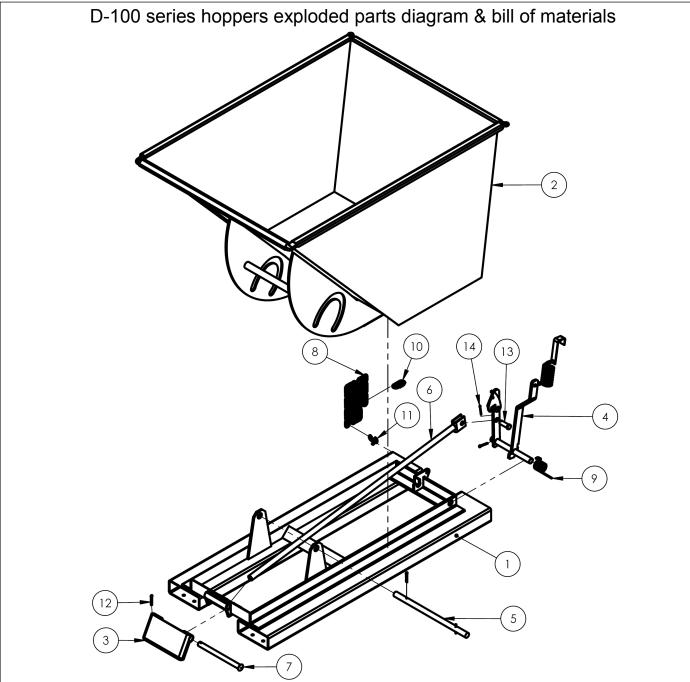
Item	Part no.	Description	Qty.	Item	Part no.	Description	Qty.
1	37-514-007	Frame, weldment, base	1	8	99-145-037	<sup>5</sup> / <sub>16</sub> " chain 36" long	1
2	37-545-041 37-545-011	Weldment, chute: D-25-LD D-25-MD & D-25-HD	1 1	9	37-146-005	Spring, torsion, hopper release	1
3	37-037-040	Bumper release for D-hoppers	1	10	99-145-053	<sup>5</sup> / <sub>16</sub> " quick link	1
4	37-537-021	Weldment, lock, release, lever assembly	1	11	65127	Cotter pin, zinc-plated, <sup>3</sup> / <sub>16</sub> " x 2"	3
5	37-612-005	Subassembly, pin, main connection pin	1	12	28-112-043	Pin, <sup>3</sup> / <sub>4</sub> " x 2" retaining clevis	1
6	37-537-007	Release lever rod weldment	1	13	65080	Extended prong cotter pin, zinc finish, <sup>1</sup> / <sub>8</sub> " x 2"	1
7	37-112-006	Pin, bumper plate	1	14	99-145-084	Lap link	1



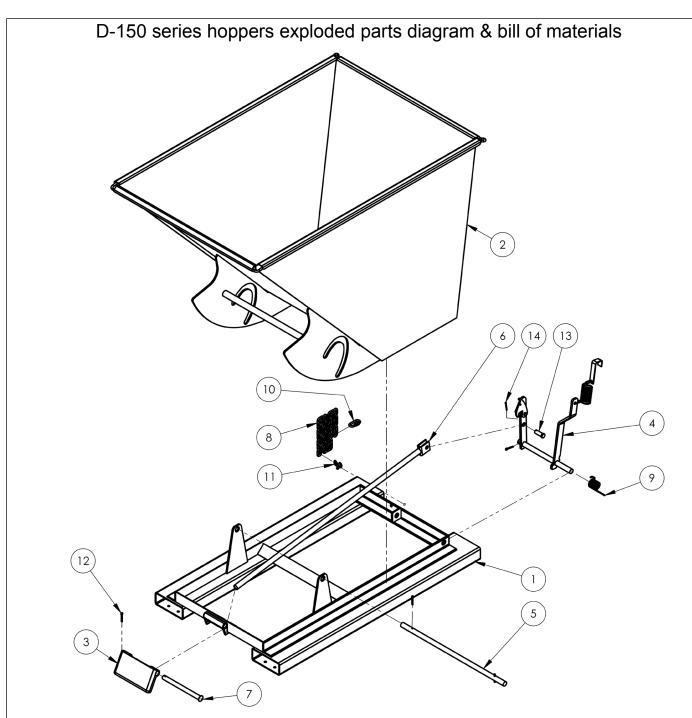
Item	Part no.	Description	Qty.	Item	Part no.	Description	Qty.
1	37-514-007	Frame, weldment, base	1	8	99-145-037	<sup>5</sup> / <sub>16</sub> " chain 36" long	1
2	37-545-043 37-545-012	Weldment, chute: D-50-LD D-50-MD & D-50-HD	1	9	37-146-005	Spring, torsion, hopper release	1
3	37-037-040	Bumper release for D-hoppers	1	10	99-145-053	<sup>5</sup> / <sub>16</sub> " 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, <sup>3</sup> / <sub>16</sub> " x 2"	3
6	37-537-007	Release lever rod weldment	1	13	28-112-043	Pin, <sup>3</sup> / <sub>4</sub> " x 2" retaining clevis	1
7	37-112-006	Pin, bumper plate	1	14	65080	Extended prong cotter pin, zinc finish, <sup>1</sup> / <sub>8</sub> " x 2"	1



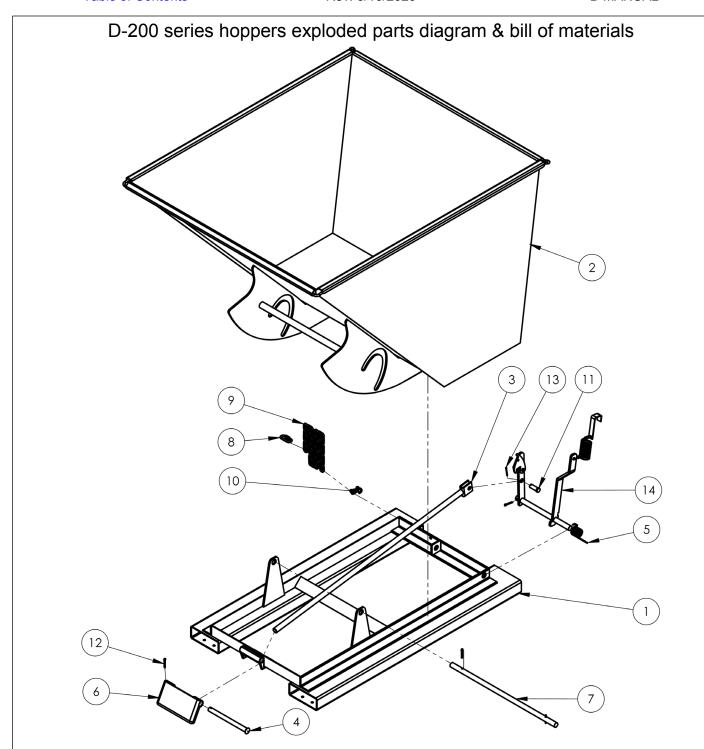
Item	Part no.	Description	Qty.	Item	Part no.	Description	Qty.
1	37-514-008	Frame, weldment, base	1	8	99-145-084	Lap link	1
		Chute weldment:					
2	37-545-050	D-75-LD	1	9	37-146-005	Spring, torsion, hopper release	1
	37-545-013	D-75-MD & D-75-HD	1				
3	37-037-040	Bumper release for D-hoppers	1	10	99-145-053	<sup>5</sup> / <sub>16</sub> " quick link	1
4	37-537-021	Weldment, lock, release, lever	1	11	99-145-037	<sup>5</sup> / <sub>16</sub> " chain 36" long	1
	07 007 021	assembly			00 140 007	716 Gridin Go Tong	'
5	37-612-005	Subassembly, pin, main	1	12	65127	Cotter pin, zinc plated, <sup>3</sup> / <sub>16</sub> " x 2"	3
	07 012 000	connection pin	•			• • • • • • • • • • • • • • • • • • • •	
6	37-537-006	Release lever rod weldment	1	13	28-112-043	Pin, <sup>3</sup> / <sub>4</sub> " x 2" long retaining	1
	0. 00. 000	resease sever real westerness.	·		20 112 010	clevis	·
7	37-112-006	Pin, bumper plate	1	14	65080	Extended prong cotter pin, zinc	1 1
<u>'</u>	0. 112 000	in, sampor plate	'	'	35366	finish, <sup>1</sup> / <sub>8</sub> " x 2"	_ '



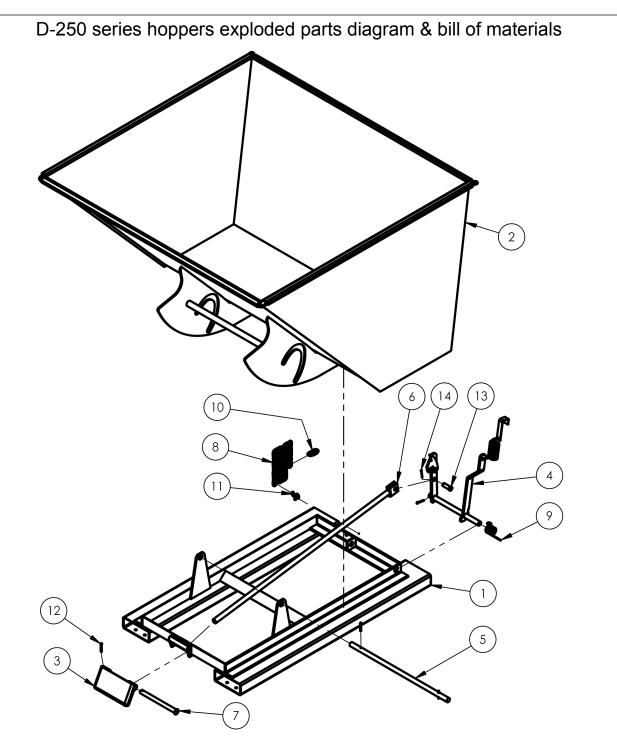
Item	Part no.	Description	Qty.	Item	Part no.	Description	Qty.
1	37-514-008	Frame, weldment, base	1	8	99-145-037	<sup>5</sup> / <sub>16</sub> " chain 36" long	1
2	37-545-022 37-545-045 37-545-014		1	9	37-146-005	Spring, torsion, hopper release	1
3	37-037-040	Bumper release for D-hoppers	1	10	99-145-053	<sup>5</sup> / <sub>16</sub> " 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, <sup>3</sup> / <sub>16</sub> " x 2"	3
6	37-537-006	Release lever rod weldment	1	13	28-112-043	Pin, <sup>3</sup> / <sub>4</sub> " x 2" long retaining clevis	1
7	37-112-006	Pin, bumper plate	1	14	65080	Extended prong cotter pin, zinc finish, <sup>1</sup> / <sub>8</sub> " x 2"	1



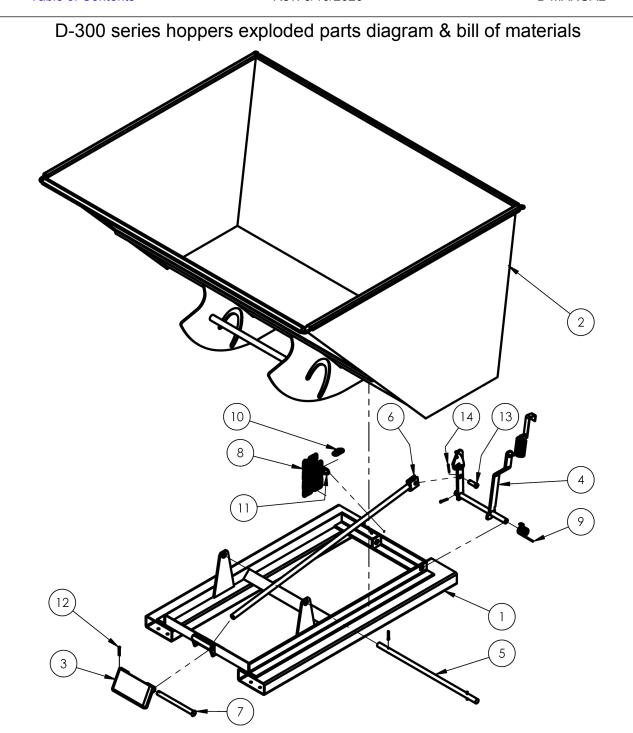
Item	Part no.	Description	Qty.	Item	Part no.	Description	Qty.
1	37-514-004	Frame, weldment, base	1	8	99-145-037	<sup>5</sup> / <sub>16</sub> " chain 36" long	1
2	37-545-046 37-545-015	Weldment, chute: D-150-LD D-150-MD & D-150-HD	1	9	37-146-005	Spring, torsion, hopper, release	1
3	37-037-040	Bumper release for D-hoppers	1	10	99-145-053	<sup>5</sup> / <sub>16</sub> " 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, <sup>3</sup> / <sub>16</sub> " x 2"	3
6	37-537-006	Release lever rod weldment	1	13	28-112-043	Pin, <sup>3</sup> / <sub>4</sub> " x 2" retaining clevis	1
7	37-112-006	Pin, bumper plate	1	14	65080	Extended prong cotter pin, zinc finish, $^{1}/_{8}$ " x 2"	1



Item	Part no.	Description	Qty.	Item	Part no.	Description	Qty.
1	37-514-004	Frame, weldment, base	1	8	99-145-053	<sup>5</sup> / <sub>16</sub> " quick link	1
2	37-545-025 37-545-026 37-545-007	Weldment, chute: D-200-LD D-200-MD D-200-HD	1 1 1	9	99-145-037	<sup>5</sup> / <sub>16</sub> " chain 36" long	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, <sup>3</sup> / <sub>4</sub> " 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, <sup>1</sup> / <sub>8</sub> " x 2"	1
7	37-612-006	Subassembly, pin, main connection pin	1	14	37-537-020	Weldment, lock, release, lever assembly, hopper	1

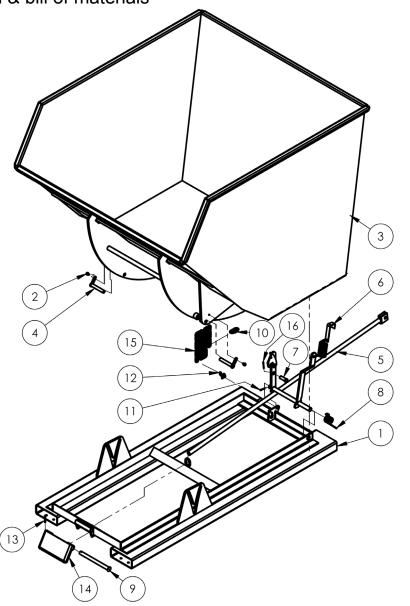


Item	Part no.	Description	Qty.	Item	Part no.	Description	Qty.
1	37-514-004	Frame, weldment, base	1	8	99-145-037	<sup>5</sup> / <sub>16</sub> " chain 36" long	1
2	37-545-016	Weldment, chute	1	9	37-146-005	Spring torsion, hopper release	1
3	37-037-040	Bumper release for D-hoppers	1	10	99-145-053	<sup>5</sup> / <sub>16</sub> " 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, <sup>3</sup> / <sub>16</sub> " x 2"	3
6	37-537-006	Release lever rod weldment	1	13	28-112-043	Pin, <sup>3</sup> / <sub>4</sub> " x 2" long retaining clevis	1
7	37-112-006	Pin, bumper plate	1	14	65080	Extended prong cotter pin, zinc finish, <sup>1</sup> / <sub>8</sub> " x 2"	1



Item	Part no.	Description	Qty.	Item	Part no.	Description	Qty.
1	37-514-004	Frame, weldment, base	1	8	99-145-037	<sup>5</sup> / <sub>16</sub> " chain 36" long	1
2	37-545-006	Weldment, chute	1	9	37-146-005	Spring, torsion, hopper release	1
3	37-037-040	Bumper release for D-hoppers	1	10	99-145-053	<sup>5</sup> / <sub>16</sub> " 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, <sup>3</sup> / <sub>16</sub> " x 2"	3
6	37-537-006	Release lever rod weldment	1	13	28-112-043	Pin, <sup>3</sup> / <sub>4</sub> " x 2" long retaining clevis	1
7	37-112-006	Pin, bumper plate	1	14	65080	Extended prong cotter pin, zinc finish, <sup>1</sup> / <sub>8</sub> " x 2"	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	37-514-081	Weldment, frame, base	1	9	37-112-006	Pin, bumper plate	1
2	32415	<sup>5</sup> / <sub>16</sub> " – 18 x <sup>1</sup> / <sub>2</sub> " HWH thread cutting screw, type F, zinc	2	10	99-145-053	<sup>5</sup> / <sub>16</sub> " quick link	1
3		Weldment, chute: D-300-HD-NA D-350-HD D-400-HD D-500-HD	1	11	65125	Cotter pin, zinc plated, $^3/_{16}$ " x $1^1/_2$ "	1
4	37-612-004	Weldment, pin, main, connection pin	2	12	99-145-084	Lap link	1
5	37-537-019	Weldment, release lever rod	1	13	65127	Cotter pin, zinc plated, <sup>3</sup> / <sub>16</sub> " x 2"	1
6	37-537-020	Weldment, lock, release, lever assembly, hopper	1	14	37-037-040	Bumper release for D-hoppers	1
7	28-112-043	Pin, <sup>3</sup> / <sub>4</sub> " x 2" long retaining clevis	1	15	99-145-037	<sup>5</sup> / <sub>16</sub> " chain 36" long	1
8	37-146-005	Spring, torsion, hopper release	1	16	65080	Extended prong cotter pin, zinc finish, $^{1}/_{8}$ " x 2"	1

# SIGNAL WORDS

This manual classifies personal injury risks and situations that might cause property damage with signal words. Signal words indicate the seriousness of injuries that might result if a particular act does, or does not, occur.

**A** DANGER

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

**AWARNING** 

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

**ACAUTION** 

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

NOTICE

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

# SAFETY INSTRUCTIONS

We strive to identify all hazards associated with the use of our products. However, material handling is dangerous and no manual can address every risk. The most effective way to avoid injury is for the end-user to exercise sound judgment whenever using this product.

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

- Read & understand the instructions in this manual before installing, using or servicing the hopper.
- DO NOT use the hopper unless it is in *satisfactory condition*. See *Record of Satisfactory Condition* on p. 16.
- Inspect the hopper before each use as directed in *Inspections & Maintenance* on p. 16.
- DO NOT lift the hopper until the safety chain is connected to the fork carriage without slack.
- ONLY use this hopper on a powered forklift truck. DO NOT mount the hopper on stackers or manually propelled lift trucks.
- DO NOT overfill the hopper! The total weight of the fill material must not weigh more than its capacity. Capacity information is provided in the *Specifications* tables on p. 2-4. Capacity is also included on label 287 which is shown in the *Labeling Diagram* on p. 17.
- Keep clear of the hopper whenever it is mounted on a forklift. Keep feet and all other parts of your body out from underneath the hopper when it is elevated. Instruct others to stay away from the forklift and hopper while transport and dumping operations are underway.
- 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. Confirm that the chute is latched and locked before attaching rigging to the lifting lugs. The chute must not be able to release while the hopper is suspended.
- DO NOT allow people to ride on or in the hopper.
- DO NOT use the hopper if any label is unreadable, damaged, or missing. Contact the *Parts Department* to order replacement labels.
- Before raising the hopper, tilt the forklift mast toward the cab. Tilting the mast should prevent the hopper from sliding on the forks. Drive slowly and carefully. Bumps encountered while driving cause the hopper to bounce and slide on the forks. Turn slowly. Turning rapidly will cause the hopper to slide toward the ends of the forks.
- DO NOT modify the hopper. Modifying the hopper automatically voids the *Limited Warranty* and could make the hopper unsafe to use.
- DO NOT dump the chute UNLESS every person in the vicinity is a safe distance from the dumping site and forklift truck.
- DO NOT dump the chute if the forklift is facing downslope. Dump the hopper from a level surface.
- DO NOT exceed the capacity of the hopper.
- DO NOT overfill the chute. Fill material should not be higher than any of the walls of the chute.

# 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; and 2) Remotely—by pressing the bumper plate against an object.

<u>Step 1</u>: 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.

<u>Step 2</u>: 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.

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

<u>Step 3</u>: 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 <u>frame</u> of the hopper. Do not hook the handle to the chute because it could be torn from the cable when the chute is dumped.

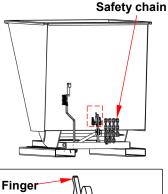
<u>Step 4</u>: Drive the forklift to the trash receptacle. Before raising the hopper, unlock the latch lever by pulling the finger tab until the lock disengages the latch bar. See diagrams with Step 5.

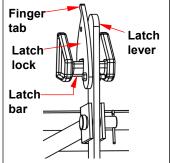
<u>Step 5</u>: Raise the forks and tilt the forklift mast backwards (towards the cab). Tilting the mast backwards makes it easier to release the latch. The hopper can now be dumped manually or remotely:

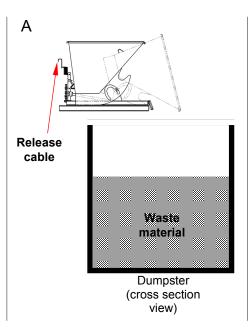
A) <u>Manually</u>: elevate the entire hopper above the side wall of the dumpster. See diagram A. Tile the mast forward slightly and pull the release cable.

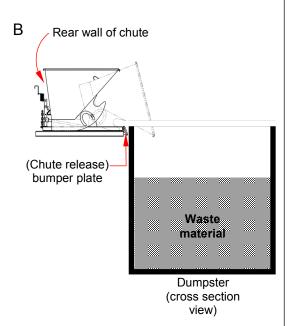
NOTE: NEVER wrap the release cable around any part of your body, particularly fingers, hands, and arms.

B) Remotely: elevate the hopper so that the bumper plate can 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. Tilt the mast forward slightly, if necessary, to dump the chute.









<u>Step 6</u>: 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 tilting the mast forward (away from the cab). The chute should not dump. If the chute will not latch by tilting the mast backwards, set the hopper on the ground and manually latch the chute to the frame. Press down on the rear wall of the chute until the latch lever engages the latch bar. Apply the lock.

## RECORD OF SATISFACTORY CONDITION

After receiving the unit and <u>before using it for the first time</u>, create a record that describes the appearance and operation of the hopper. Thoroughly photograph the unit from multiple angles. Take close range photographs of the labels, release mechanisms, safety chain—particularly at each end, 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 satisfactory condition. Compare the results of all inspections to this record to determine whether a component is in satisfactory condition or requires repair or replacement. If issues are discovered during an inspection, DO NOT use the hopper until it is restored to satisfactory condition. Purely cosmetic changes, like damaged surface coating (paint or powdercoat) are not changes from satisfactory condition. However, touchup paint should be applied wherever the finish is damaged as soon as damage occurs.

### INSPECTIONS & MAINTENANCE

Regular inspections and maintenance are necessary for the hopper to remain in satisfactory condition for as long as possible. If you have any questions about the condition of your hopper, including whether it should continue to be used or whether a part should be replaced, contact *Technical Service*.

Step 1: At least once per month, tag the hopper "Out of Service."

Step 2: Inspect the hopper. Replace any component that is not in satisfactory condition.

- 1.) <u>Pivot points</u>: Check for excessive wear, warping, or other significant damage to pivot pins, cotter pins, and pin receivers.
- 2.) <u>Hopper chute and base frame</u>: 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.) <u>Hardware (bolts, nuts, pins, cotter pins, retaining rings)</u>: Inspect hardware for looseness and severe wear. Tighten loose connections and replace all damaged hardware.
- 4.) <u>Casters (if hopper is equipped with caster kit)</u>: Check for looseness, excessive wear, and damage to the caster wheels, 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 frays, thinning, corrosion, and bird-caging.
- 6.) <u>Pivot points</u>: Listen for unusual sounds. Watch for irregular movements. Remove dirt and debris from areas that could affect the dumping motion.
- 7.) Carriage chain: Examine the chain, the attachment to the base frame, and the quick links for damage.
- 8.) Labels: All labels should be present in the locations shown in the Labeling Diagram on p. 17.

Step 3: Perform all adjustments, replacements, and repairs necessary to restore satisfactory condition.

**AWARNING** 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, like or removing or bending a component.

Step 4: Make a dated record of all repairs and replacements.

# LABELING DIAGRAM

The unit should be labeled as shown in the diagram. Label content and location are subject to change so your product might not be labeled exactly as shown. Compare this diagram to your *Record of Satisfactory Condition*. Replace all labels that are damaged, missing, or not easily readable (e.g. faded). Order replacement labels by contacting the *Replacement Parts Department* online at <a href="http://www.vestilmfg.com/parts\_info.htm">http://www.vestilmfg.com/parts\_info.htm</a>. Alternatively, you may request replacement parts and/or service by calling (260) 665-7586 and asking the operator to connect you to the Parts Department.



A: Label 620 (left side in-line with manual release handle)





#### D: Label 220 (both sides)

<b>A</b> WARNING	▲ ADVERTENCIA	<b>A</b> AVERTISSEMENT
KEEP CLEAR	MANTENGASE ALEJADO	SE TENIR À DISTANCE
WHEN IN USE	CUANDO SE ESTA OPERANDO	LORS DU FONCTIONNEMENT

## E: Label 208 (both fork tubes)

<b>AWARNING</b>	▲ ADVERTENCIA	<b>▲ AVERTISSEMENT</b>
KEEP CLEAR OF	MANTENGASE ALEJADO DEL	SE TENIR À DISTANCE DU
PINCH POINT	PUNTO DE CORTE	POINT DE PINCEMENT 209A

#### F: Label 995

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

### G: Model specific label (see tables)

Model / Modelo / Modele	<b>▲</b> WARNING	ADVERTENCIA
D	SECURELY ATTACH safety restraint to forklift     Tilt load backwards to prevent	ASEGURE la cadena de seguridad a la transpaleta     Vuelque la carga hacia atras para
Capacity / Capacidad / Capacite	hopper from sliding  Distribute load evenly	prevenir que el carrito resbale  Distribuya la carga uniformemente  NO exceda la capacidad de carga tasada
lb. ka	DO NOT exceed rated capacity     Hopper MUST be locked     when not dumping	El depósito de alimentación debe ser cerrado al no descargar
Serial No. / Serie No. / Serie No.	Disengage lock on hopper release before dumping hopper     DO NOT wrap release cable	<ul> <li>Suelte cerradura en la liberación de depósito de alimentación antes de descargar depósito de alimentación</li> </ul>
	around any body part	No envuelva cable de liberación alrededor de cualquier parte del cuerpo

Model	Label	Model	Label
D-25-LD	549	D-75-LD	549
D-25-MD	549	D-75-MD	549
D-25-HD	549	D-75-HD	592
D-33-LD	549	D-100-LD	630
D-33-MD	549	D-100-MD	1050
D-33-HD	591	D-100-HD	644
D-50-LD	549	D-150-LD	549
D-50-MD	549	D-150-MD	549
D-50-HD	542	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 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 <u>Customer Invoice</u> that displays the shipping date; AND 2) a <u>written request</u> for warranty service including your name and phone number. Send requests by one of the following methods:

US MailFaxEmailVestil Manufacturing Corporation(260) 665-1339info@vestil.com2999 North Wayne Street, PO Box 507PhoneEnter "Warranty service request"Angola, IN 46703(260) 665-7586in the 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, motor controllers, 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 <u>1 year</u>. For wearing parts, the warranty period is <u>90 days</u>. 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) is responsible for paying labor costs and freight costs to return the product to Vestil for warranty service.

#### **Events that automatically void this 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;
- <u>Unauthorized modifications</u>: 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.

