

Vestil Manufacturing Corp.

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FMDL-Series Single & Double Eagle Beak Fork-Mounted Drum Lifters Use and Maintenance Manual







FMDL-2 (Eagle Beak™)



FPDL-8-L (Base Engaging Plastic Barrel Handler)



FPDL-11-H (Top Engaging Plastic Barrel Handler)



DFDL-3 (Eagle Beak™, Top, & Base Engaging Barrel Handler)

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 http://www.vestilmfg.com/parts_info.htm.

Table of Contents	Table of Diagrams
Specifications2	FMDL-1 parts diagram and bill of materials
Signal Words2	FMDL-2 parts diagram and bill of materials4
Hazards2	FPDL-11-H parts diagram and bill of materials5
Using the Lifter11	FPDL-8-L parts diagram and bill of materials6
Record of Satisfactory Condition11 - 12	DFDL-3 parts diagram and bill of materials7
Inspections & Maintenance 12	Centers of Gravity Diagrams8, 9, 10, 16, 17
Limited Warranty18	Labeling Diagram12
	Optional Equipment13, 14, 15, 16, 17

SPECIFICATIONS

Dimensions and other product specifications appear in the table.

Model	Description	Compatible Drums	Capacity	Overall Dimensions	Net Weight
FMDL-1	Eagle Beak™ single drum carrier	30 & 55 gallonOpen & closed headSteel, plastic, & fiber	1,000 lb. (~455kg)	26½" x 46½" x 29" (67 x 118 x 74)cm	240 lb. (~109kg)
FMDL-2	Eagle Beak™ two drum carrier	30 & 55 gallonOpen & closed headSteel, plastic, & fiber	2,000 lb. (~909kg)	42" x 49½" x 29" (107 x 126 x 74)cm	340 lb. (~155kg)
DFDL-3	Deluxe 3-mode drum lifter: Eagle beak, Bottom grip & Top grip	 30 & 55 gallon Open & closed head Steel, plastic, & fiber	Eagle Beak™ = 1,000 lb. (~455kg) Bottom grip = 800 lb. (~364kg) Top grip = 1,100 lb. (~455kg)	26½" x 52" x 30" (67 x 132 x 76)cm	313 lb. (~142kg)
FPDL-8-L ("L" = low attachment)	Bottom gripping drum handler for oddly shaped plastic drums	55 gallonOpen & closed headPlastic	800 lb. (~364kg)	26½" x 56½" x 23" (67 x 144 x 58)cm	160 lb. (~73kg)
FPDL-11-H ("H" = high attachment)	FPDL-11-H Top gripping drum handler for oddly shaped • 30 & 55 gallon • Closed head		1100 lb. (~500kg)	26½" x 48½" x 23" (67 x 123 x 58)cm	185 lb. (~84kg)

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.



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.



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



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

HAZARDS

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.

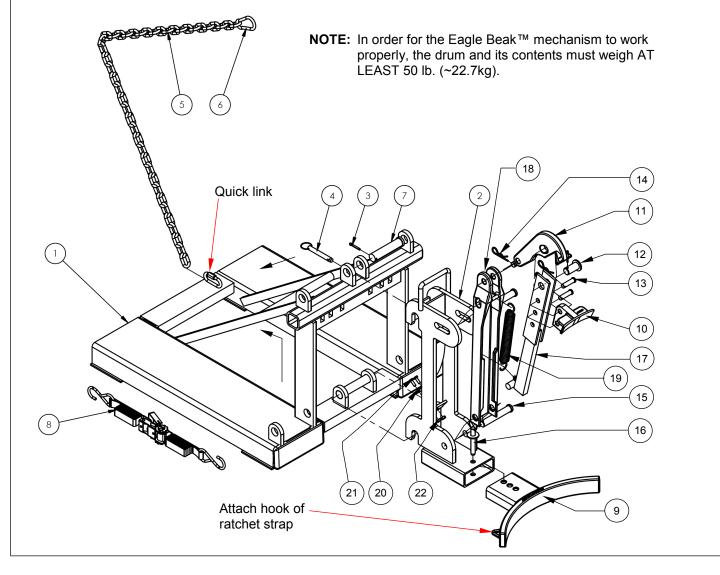
AWARNING Improper or careless use of this product might result in serious personal injury.

- DO NOT exceed the maximum rated load of your lifter (see Label on product; also see table on p. 2).
- DO NOT use an unsound drum lifter. If any of the following conditions are present, do not use the lifter: 1) missing, broken or significantly bent drum-gripping mechanism; 2) broken, missing, or deformed safety chain; 3) severely damaged/worn fork pockets. Inspect the drum lifter according to the *Inspections* on p. 12. Replace each part that fails to pass an inspection. DO NOT use the drum lifter until it is in *Original Condition*.
- No part of your body should ever be beneath any part of the lifter or drum while it is elevated.
- DO NOT use the lifter to transport anything but drums matched to your lifter. See Specifications (above).
- Transport drums slowly. Avoid rough terrain when transporting drums. Jostling might disrupt the grasp on the rim. DO NOT transport drums over rough terrain UNLESS they are secured to the lifter with a ratchet strap.
- DO NOT modify the drum lifter in any way without first obtaining written approval from Vestil. Unapproved modifications automatically void the *Limited Warranty* (p. 18) and could make the lifter unsafe to use.
- DO NOT use the lifter UNLESS all labels are easily readable and undamaged. See Labeling Diagram, p. 12.
- For the Eagle Beak™ mechanism to work properly, the drum plus contents must weigh at least 50lb. (~22.7kg).
- The chain is an essential safety-enhancing feature. Wrap the chain around the fork carriage and fasten the free end to the chain or quick link *with no slack*.

FMDL-1 EXPLODED VIEW AND BILL OF MATERIALS

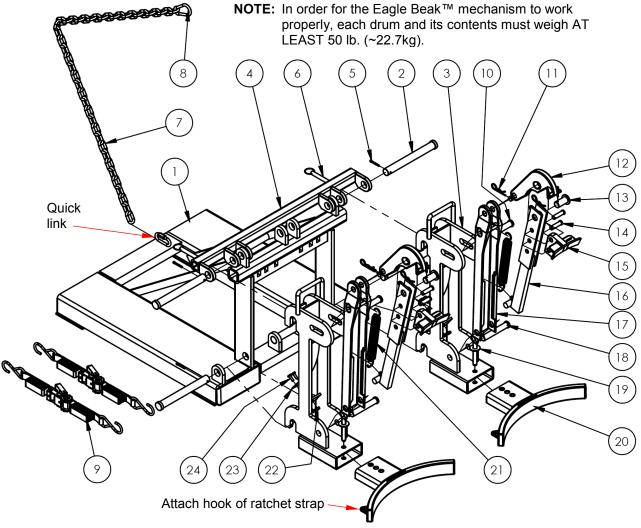
[NOTE: "Drum gripper assembly" comprised of items 9-22 (shaded).]

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	40-514-008	Weldment, frame	1	12	40-612-004	Pin, clevis, ⁷ / ₈ " x 1 ³ / ₄ " long, with washer	1
2	40-514-022	Drum gripper assembly (comprised of items 9-22)	1	13	21-112-003	Pin, clevis, ¹ / ₂ " x 1 ³ / ₄ " long	2
3	65125	Cotter pin, zinc plated, $^{3}/_{16}$ " x $1^{1}/_{2}$ "	1	14	45286	Clip, hitch pin, ¹ / ₈ " x 2 ⁵ / ₈ "	3
4	99-112-004	Pin, self-locking quick release	1	15	28-112-031	Pin, clevis, ³ / ₄ " x 4 ¹ / ₄ "	2
5	09-145-018	⁵ / ₁₆ " chain 56" long	1	16	40-612-006	Weldment, pin, cradle retainer	1
6	08-145-041	Specialty hardware, snap hook, ⁵ / ₁₆ "	1	17	40-514-011	Weldment, pin bracket	1
7	33-112-023	Pin, clevis	1	18	40-014-054	Weldment, channel	1
8	40-145-008	Strap with ratchet, 6' long, 2 hooks	1	19	40-146-001	Spring, tension, 6 ¹ / ₂ "	1
9	40-014-093	Drum cradle	1	20	40-014-029	Frame, bar, formed	1
10	40-016-053	Lower jaw, Eagle Beak™	1	21	11003	Bolt, hex head, ¹ / ₄ " - 20 x ³ / ₄ "	2
11	40-016-052	Upper jaw, Eagle Beak™	1	22	37018	Lock nut, 1/4" - 20	2



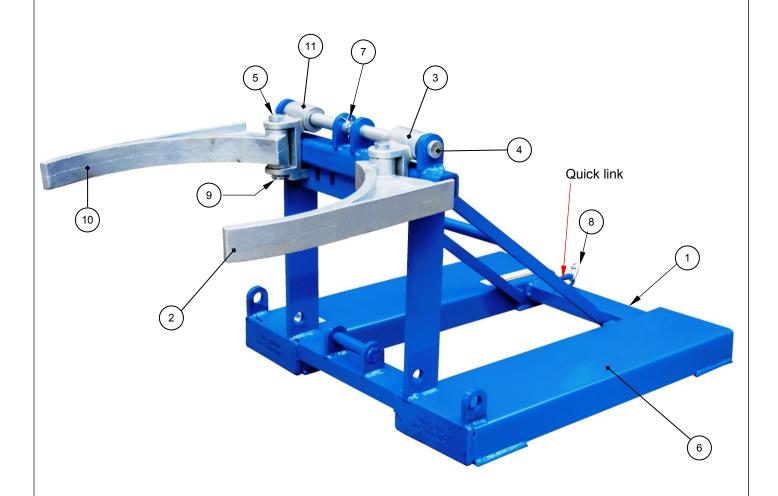
FMDL-2 EXPLODED VIEW AND BILL OF MATERIALS

[NOTE: "Drum gripper assembly" comprised of items 10-24 (shaded).]

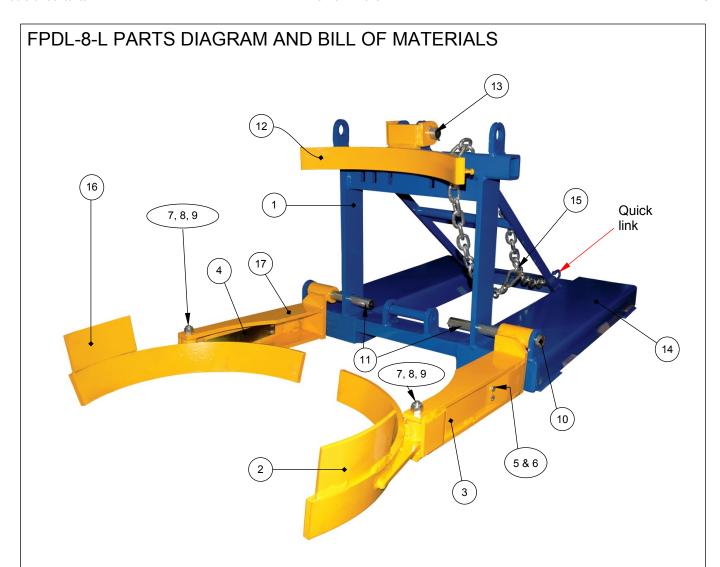


Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	40-514-008	Weldment, frame	1	13	40-612-004	Pin, clevis, ⁷ / ₈ " x 1 ³ / ₄ " long, with washer	2
2	40-112-001	Pin, main, clevis,	4	14	21-112-003	Pin, clevis, ¹ / ₂ " x 1 ³ / ₄ " long	4
3	40-514-022	Drum gripper assembly	2	15	40-016-053	Lower jaw, Eagle Beak™	2
4	40-516-008	Weldment, bracket, mounting bar	1	16	40-514-011	Weldment, pin bracket	2
5	65125	Cotter pin, zinc plated, 3/16" x 1 ¹ / ₂ "	4	17	40-014-054	Weldment, channel	2
6	99-112-004	Pin, self-locking quick release	2	18	28-112-031	Pin, clevis, ³ / ₄ " x 4 ¹ / ₄ "	4
7	09-145-018	⁵ / ₁₆ " chain 56" long	1	19	40-612-006	Weldment, pin, cradle retainer	2
8	40-145-008	Specialty hardware, snap hook, ⁵ / ₁₆ "	1	20	40-014-093	Drum cradle	2
9	40-145-008	Strap with ratchet, 6' long, 2 hooks	1	21	40-146-001	Spring, tension, 6 ¹ / ₂ "	2
10	28-112-031	Pin, clevis, ³ / ₄ " x 4 ¹ / ₄ "	2	22	37018	Lock nut, 1/4" - 20	4
11	45286	Clip, hitch pin, ¹ / ₈ " x 2 ⁵ / ₈ "	6	23	40-014-029	Frame, bar, formed	2
12	40-016-052	Upper jaw, Eagle Beak™	2	24	11003	Bolt, hex head, ¹ / ₄ " - 20 x	4

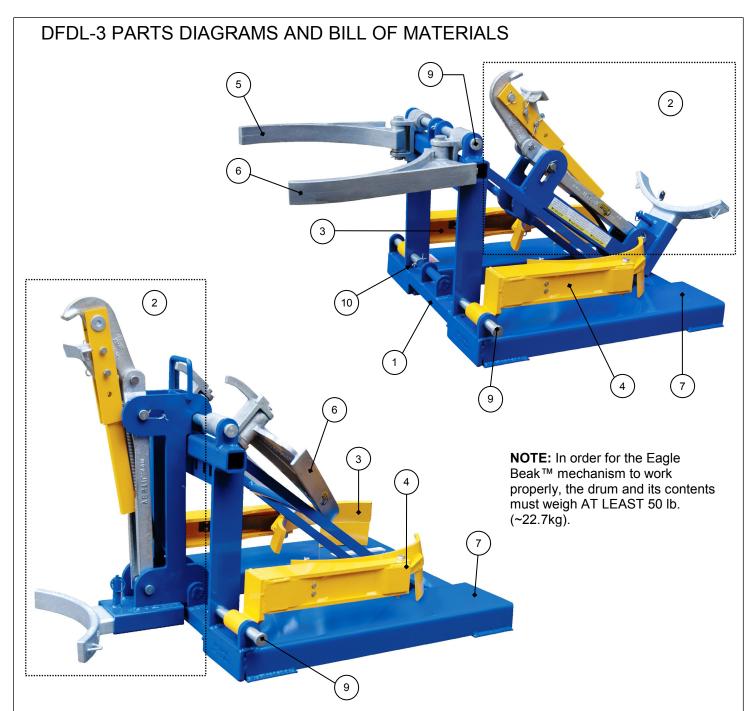
FPDL-11-H PARTS DIAGRAM AND BILL OF MATERIALS



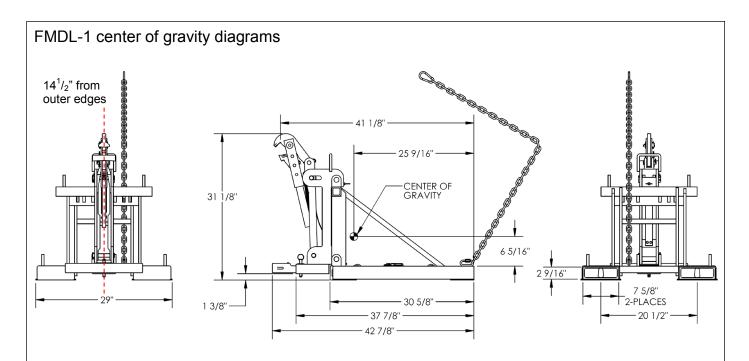
Item	Part No.	Description
1	40-514-008	Eagle Beak™ base frame casting
2	40-514-016	Left side upper drum gripper casting
3	40-512-002	Left side hinge casting
4	40-112-001	1 in. diameter 8-5/8 in. main clevis pin
5	15-112-014	1 in. diameter x 4½ in. pin
6	N/A	Fork pockets
7	65125	3/16 in. x 1½ in. cotter pin
8	37-145-004	5/16 in. x 48 in. chain
9	65125	3/16 in. x 1½ in. cotter pin
10	40-514-017	Right side upper drum gripper casting
11	40-512-001	Right side hinge casting



Item	Part No.	Description
1	40-514-008	Eagle Beak base frame weldment
2	40-514-020	Left side lower drum gripper weldment
3	40-514-019	Left side lower drum gripper arm weldment
4	40-014-029	Spring steel bar frame
5	11003	1/4 in. – 20 UNC x 3/4 in. hex head bolt
6	37018	1/4 in20 UNC nylock hex nut
7	11219	½ in. – 13 UNC x 4 in. hex head bolt
8	37030	½ in 13 UNC nylock hex nut
9	SPMSIRJ	3/4 in. (outer diameter) x 1/2 in. (inner diameter) 8-5/8 in.
	40.440.004	axle sleeve tube
10	40-112-001	1 in. diameter x 8-5/8 in. main clevis pin
11	65125	3/16 in. x 1½ in. cotter pin
12	40-514-021	Upper side wall support weldment
13	15-115-014	1 in. diameter x 4½ in. retaining pin
14	N/A	Fork pockets
15	37-145-001	5/16 in. x 48 in. chain
16	40-514-005	Right side lower drum gripper weldment
17	40-514-009	Right side lower drum gripper arm weldment

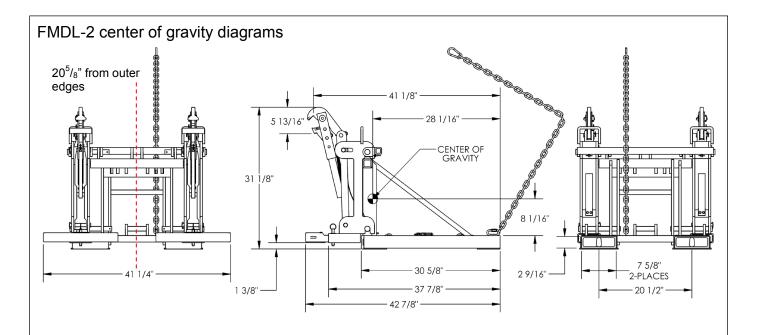


Item	Part No.	Description
1	40-514-008	Eagle Beak™ base frame weldment
2	40-514-022	Eagle Beak drum lip gripping assembly [see items 8-26 on p. 4]
3	40-514-012	Right side lower drum gripper assembly [see items 4 - 9, 16, 17 on p. 7]
4	40-514-013	Left side lower drum gripper assembly [see items 2 – 9 on p. 7]
5	40-514-014	Right side upper drum gripper assembly [see items 5, 9-11 on p. 6]
6	6 40-514-015 Left side upper drum gripper assembly [see items 2, 3, 5 & 9	
7	n/a	Fork pocket
8	37-145-004 5/16 in. x 48 in. chain (not shown)	
9	40-112-001	1 in. diameter x 8-5/8 in. main clevis pin
10	n/a	3/16 in. x 1½ in. cotter pin



Horizontal center of gravity (HCG): $25^9/_{16}$ inches (~64.9 cm) from the open ends of the fork pockets (middle graphic above) and $14^1/_2$ " inches from the outermost edges of the fork pockets (dotted line in first graphic above).

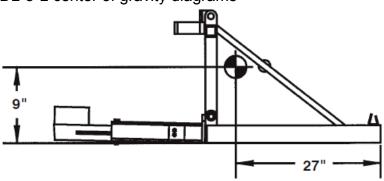
Vertical center of gravity: 6⁵/₁₆ inches (~16.0 cm) from the top of the fork pockets.

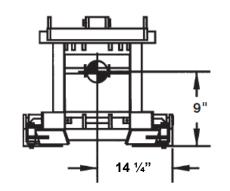


Horizontal center of gravity (HCG): $28^{1}/_{16}$ inches (~71.3 cm) from the open ends of the fork pockets (middle graphic above) and $20^{5}/_{8}$ " (~52.4 cm) from the outermost edges of the drum carrier (dotted line in first graphic above).

Vertical center of gravity: 8¹/₁₆ inches (~20.5 cm) from the top of the fork pockets.

FPDL-8-L center of gravity diagrams





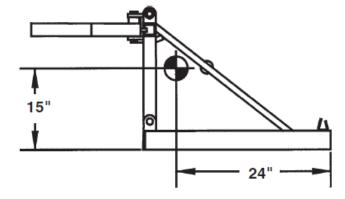
Horizontal center of gravity (HCG):

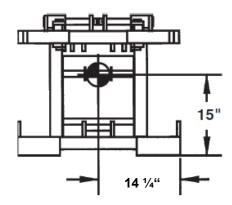
- 27 inches (~68.6cm) from the open ends of the fork pockets; and
- 141/4 inches (~36.2cm) from the outer edge of each fork pocket (halfway between the fork pockets).

Vertical center of gravity:

• 9 inches (~22.9cm) from the bottom of the fork pockets.

FPDL-11-H center of gravity diagrams





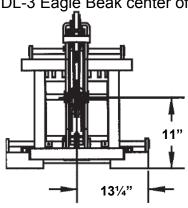
Horizontal center of gravity (HCG):

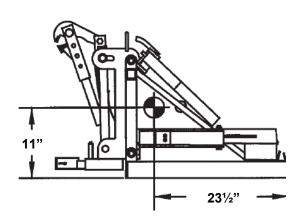
- 24 inches (~61cm) from the open ends of the fork pockets; and
- 141/4 inches (~36.2cm) from the outer edge of each fork pocket (halfway between the fork pockets).

Vertical center of gravity:

• 15 inches (~38.1cm) from the bottom of the fork pockets.

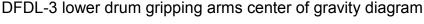
DFDL-3 Eagle Beak center of gravity diagram

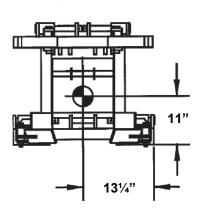


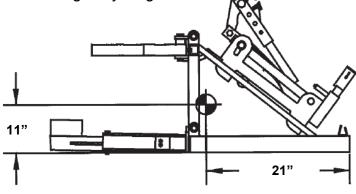


Horizontal center of gravity (HCG):

- 23½ inches (~59.7cm) from the open ends of the fork pockets; and
- 13½ inches (~33.7cm) from the outer edge of each fork pocket (halfway between the fork pockets). Vertical center of gravity:
- 11 inches (~28cm) from the bottom of the fork pockets.



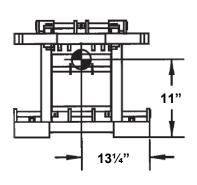


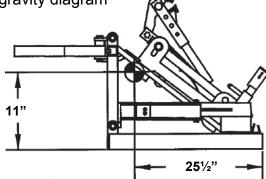


Horizontal center of gravity (HCG):

- 21 inches (~53.3cm) from the open ends of the fork pockets; and
- 13½ inches (~33.7cm) from the outer edge of each fork pocket (halfway between the fork pockets). Vertical center of gravity:
- 11 inches (~23cm) from the bottom of the fork pockets

DFDL-3 upper drum gripping arms center of gravity diagram





Horizontal center of gravity (HCG):

- 25½ inches (~64.8cm) from the open ends of the fork pockets; and
- 13½ inches (~33.7cm) from the outer edge of each fork pocket (halfway between the fork pockets). Vertical center of gravity:
 - 11 inches (~23cm) from the bottom of the fork pockets

USING THE LIFTER

Step 1: Adjust the positions of the forks on the carriage (of your lift truck) to align with the fork pockets (of the lifter).

Step 2: Mount the drum lifter on the forks of your lift truck by slowly driving forward until the forks contact the ends of the pockets.

Step 3: Attach the safety chain to the fork carriage. Wrap the chain around the carriage. Fasten the snap hook to the chain or quick link (see exploded parts diagrams) without slack. The chain must not be able to disconnect from the carriage during use, i.e. slide off of the carriage.

AWARNING Improper use of this fork attachment might result in death or serious injury.

- The chain is an essential safety-enhancing feature. Wrap the chain around the carriage and fasten the free end to the chain with no slack. The chain will not prevent the drum lifter from sliding off of the forks if it is improperly connected to the fork carriage.
- Using this device affects lift truck center of gravity. Before using the lifter, US Federal regulation 29 CFR 1910.178 requires you to contact the manufacturer of your lift truck and request: 1) Written approval; 2) Markings for the lift truck that identify the attachment and provide the approximate weight of truck and attachment at maximum elevation with load laterally-centered. DO NOT use this lifter UNTIL your lift truck is marked with corrected capacity tags.

FMDL-1 and FMDL-2 Eagle Beak™ and DFDL-3 models:

NOTE: In order for the Eagle Beak™ mechanism to work properly, the drum and its contents must weigh AT LEAST 50 lbs. (~22.7kg).

Step 4 Engage the selected drum with the lifter: Raise the forks just a few inches off of the ground/floor, and tilt the mast of you fork truck forward. Drive slowly towards the selected drum until the lower jaw of the Eagle Beak™ (item no. 10, p. 3) contacts the side of the drum directly beneath the lip of the drum.

Step 5 Grasp the lip of the drum: Slowly raise the forks until the upper jaw engages the top of the drum lip. Continue to raise the forks until the drum is elevated a few inches above the floor/ground. Attach one end of the ratchet strap to a loop on the drum saddle (Item 9, p. 3). Attach the other end of the ratchet strap to the loop on the other side of the saddle; then work the ratchet mechanism until the strap is tight.

Step 6 Transport the drum: Straighten the mast and transport the drum to the desired unloading location. Raise the forks when/as required by conditions along the travel path.

Step 7 Release the drum: Lower the forks until the drum is just a few inches above the floor, and then remove the ratchet strap. Tilt the fork truck mast forward. Slowly lower the forks until the Eagle Beak™ disengages the lip of the drum and the drum is fully supported by the floor/ground.

FPDL-11-H and DFDL-3 models:

Step 4 Position the fork lift and drum lifter: Raise the forks and adjust the location of the fork lift to position the drum grippers above the top of the drum. Tilt the mast forward, i.e. point the forks toward the floor.

Step 5 Position drum grippers: Lower the forks; the drum grippers will slide over the lip of the drum. Position the grippers below the lip or the middle rim as desired.

Step 6 Transport the drum: Straighten the mast and raise the forks until the gripper engages the lip or rim, and then slowly raise the forks until the drum is elevated a few inches above the floor. Tilt the mast back; then transport the drum to the desired location.

Step 7 Release the drum: First tilt the mast forward and then slowly lower the forks until the drum is fully supported by the floor. To finish disengaging the drum, back the fork truck away from it.

FPDL-8-L and DFDL-3 models:

Step 4 Position fork lift and drum lifter: Adjust the mast position so that the drum grippers are parallel to the ground. Slightly elevate the forks above the floor.

Step 5 Prepare the engage the drum: Adjust the position of the fork truck to center the drum lifter on the drum: then drive forward until the side of the drum contacts the upper side wall support weldment. See Item no. 12, p. 7.

Step 6 Transport drum: Raise the forks until the lower drum gripper weldments (item nos. 2 & 16, p. 7) engage the base of the drum. Raise the drum a few inches above the ground; secure it to the lifter by attaching the ratchet strap to the loops on the side wall support (item no. 12, p. 7); then transport it to the desired unloading point.

Step 7 Release the drum: First tilt the mast forward; then slowly lower the forks until the drum is fully supported by the ground/floor. Slowly back the fork lift away from the drum until the drum and lifter disengage.

RECORD OF SATISFACTORY CONDITION (THE RECORD")

Before putting the drum lifter into service, record its condition. Thoroughly photograph the unit from multiple angles. Take close-range photographs of the drum gripping mechanism, the labels, all pivot points, the drum saddle(s), the safety chain and snap hook, and fork/tine locks (if applicable). Use the lifter to lift a drum. Describe how the drum grasping mechanism engages the drum. Describe all sounds produced by the lifter under load. Collate the photographs and writings into a file. Mark the file appropriately to identify it. Compare the results of all inspections to this record to determine whether the lifter is in satisfactory condition. Do not use the lifter unless it is in satisfactory condition. Purely cosmetic changes, like damaged paint or powdercoat are not changes from satisfactory condition. However, touchup paint should be applied to all affected areas as soon as the finish is damaged.

INSPECTIONS & MAINTENANCE

Compare the results of all inspections to the *Record* to determine whether a component is in satisfactory condition or requires repair or replacement.

Before each use, inspect the following components:

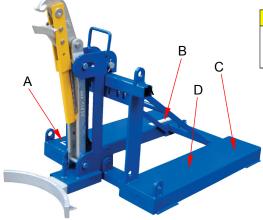
- 1. <u>Safety chain and snap hook (attached to the free end of the safety chain)</u>: confirm that the spring latch automatically closes securely against the hook. DO NOT use the lifter if the hook, chain, cold shut (the loop welded to the lifter frame, which connects to one end of the chain), or ratchet strap loop castings are damaged.
- 2. <u>Labels</u>: all labels should be readable and located as shown in the *Labeling Diagram*. If a label is unreadable or missing, contact the *Parts Department* to order a replacement.

At least once per month, inspect:

- 1. Fasteners (hardware):
 - Bolts, nuts, washers, pins, cotter pins;
 - Chain and snap hook.
- 2. Fork pockets: confirm that each pocket is structurally sound, i.e. no significant corrosion. Do not use the lifter if the fork pockets are structurally unsound
- 3. Welds: confirm that all welds are intact.
- 4. Drum grippers, Eagle Beak® upper and/or lower jaw, fork pockets, and supporting frame: must be undamaged. For example, no deformations, warps, or cracks.
- 5. Overall condition of drum lifter: the structure should be clean, square and rigid, and free of rust and corrosion. Remove dirt and debris. Do not use the lifter if the supporting frame and/or one or both grippers are excessively rusted or corroded.

LABELING DIAGRAM

The unit should be labeled as shown in the diagram. However, 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 http://www.vestilmfg.com/parts_info.htm. 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.



C: Label 287 (on fork pocket)

MODEL/MODÉLO/MODÈLE	
STATIC CAPACITY (evenly distributed)	lbs.
LA CAPACIDAD CONSTANTE (distribuida uniformemente)	kgs.
CAPACITÉ STATIQUE (distribuée régulièrement)	kgs.
SERIAL/SERIE/SÉRIE	
	287 BEV 0812

A: Label 485

	A. Label 400		
A CAUTION		▲ PRECAUTIÓN	A ATTENTION
	When transporting hazardous waste or traveling in rough surfaces, use the supplied safety retaining strap	Precaución cuando transporte deshecho peligroso o cuando viaje por superficies irregulares, use el cinturón seguridad suministrado	Pour le transport de déchets dangereux ou pour circuler sur les voies non uniformes, utilisez la sangle de sécurité fournie 485

B: Label 218 (on fork pocket)

▲ WARNING	▲ ADVERTENCIAS
Improper use might result in death or serious personal injury. Attach device to fork carriage with safety chain/strap.	El uso imapropiado puede resultar en muerte o herirás personales. Atar aparato al mástil del montagcargas con cadenas/correrás.
Drive lift truck forward until forks contact ends of fork pockets	 Maneje el montacargas para adelante hasta que las cuñas hagan contacto con la orilla del bolsillo de las cuñas.
Chain/straps must not be able to disconnect (slide free) from carriage.	 La cadenas y correas no deben de deslizarse (soltarse) del mástil del montacargas.
Safety chain/strap must be taut. Connect chain/ strap to carriage via shortest line.	La cadena/correa de seguridad debe de estar apretado. Asegure la cadena/correa al mástil via la ruta mas corta. La cadena/correa al mástil via la ruta mas corta.

D: Label 1049 (on fork pocket)

AWARNING

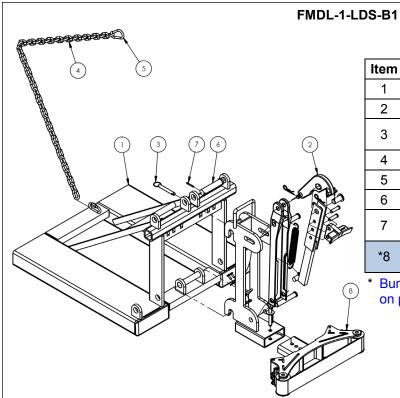
Improper use of this fork attachment might result in death or serious injury.

- Using this front end attachment affects lift truck center of gravity.
- Before using this fork attachment, US Federal regulation 29 CFR 1910.178 requires you to contact the manufacturer of your lift truck and request:
- Written approval [29 CFR 1910.178(a)(4)]
 Markings for (fork) lift truck that:
- Identify the attachment;
- Give approximate weight of truck and attachment at maximum
- elevation with laterally-centered load. [29 CFR 1910.178(a)(5)].
- DO NOT use UNTIL lift truck is marked with corrected capacity tags.

rev 111

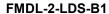
OPTIONAL EQUIPMENT

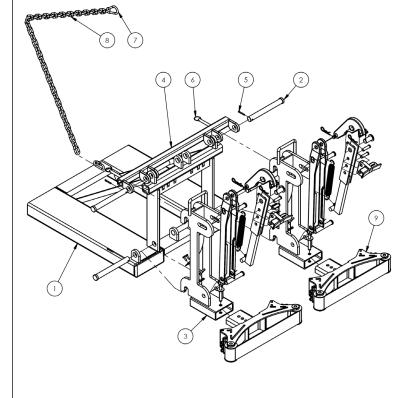
Cushioned drum cradles are available for FMDL-style drum lifters. Models FMDL-1-LDS-B1 and FMDL-2-LDS-B1 include saddles equipped with rubber belts. FMDL-1-LDS-R3 and FMDL-2-LDS-R3 provide rollers along the face of the drum saddle. Exploded views of cushioned models are provided on pages 13, 14, and 15.



Item	Part no.	Description	Qty.
1	40-514-008	Weldment, frame	1
2	40-514-105	Frame, subassembly	1
3	99-112-004	Pin, self-locking, quick release	1
4	09-145-018	Chain, ⁵ / ₁₆ " x 56"	1
5	08-145-041	Snap hook, ⁵ / ₁₆ "	1
6	33-112-023	Pin, clevis	1
7	65125	Cotter pin, z-plated, $^{3}/_{16}$ " x 1 $^{1}/_{2}$ "	1
*8	40-001-098	Saddle/bumper belt assembly	1

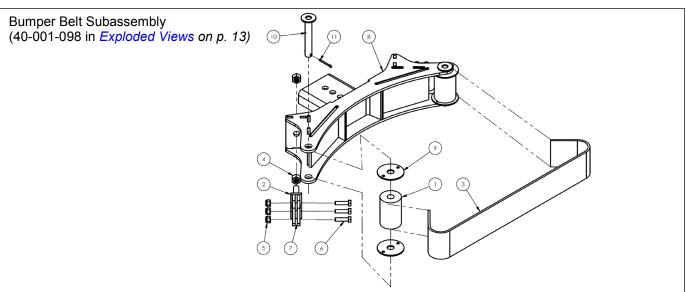
* Bumper belt subassembly exploded view provided on p. 14.



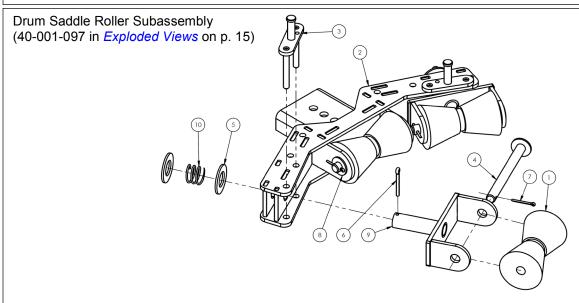


Item	Part no.	Description	Qty.
1	40-514-008	Weldment, frame	1
2	44-112-001	Pin, main, clevis	4
3	40-514-105	Frame, subassembly	2
4	40-516-008	Weldment, bracket, mounting bar	1
5	65125	Cotter pin, z-plated, ³ / ₁₆ " x 1 ¹ / ₂ "	1
6	99-112-004	Pin, self-locking, quick release	1
7	08-145-041	Snap hook, ⁵ / ₁₆ "	1
8	09-145-018	Chain, ⁵ / ₁₆ " x 56"	1
*9	40-001-098	Bumper belt subassembly	1

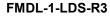
^{*} Bumper belt subassembly exploded view provided on p. 14.

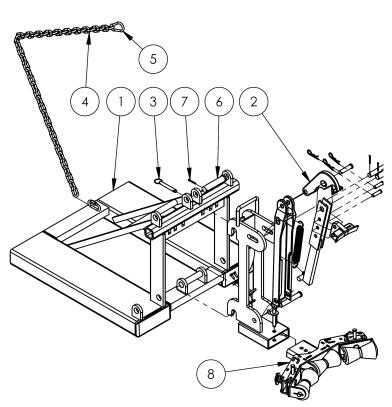


Item	Part no.	Description	Qty.	Item	Part no.	Description	Qty.
1	40-145-015	Roller, delrin	2	6	11057	Hex bolt, gr. A, zinc plated, ⁵ / ₁₆ "-18x 1 ¹ / ₄ "	6
2	40-516-023	Weldment, bracket, belt tensioner	2	7	40-016-136	Bracket, mount, belt clamp	2
3	40-145-013	Conveyor belt	1	8	40-514-103	Weldment, frame, belt	1
4	36110	Hex nut, z-plated, ¹ / ₂ "-13	4	9	40-145-014	Roller washer	4
5	37021	Nylock nut, gr. 2, zinc finish, ⁵ / ₁₆ "-18	6	10	40-612-011	Weldment, pin, belt	2
				11	65078	Extended prong cotter pin, z-finish, 1/8"x11/2"	2



Item	Part no.	Description	Qty.	Item	Part no.	Description	Qty.
1	40-145-012	Roller, keel	3	6	65127	Cotter pin, zinc plated, ³ / ₁₆ " x 2"	2
2	40-514-102	Weldment, frame roller	1	7	65078	Extended prong cotter pin, z-finish, ¹ / ₈ "x1 ¹ / ₂ "	3
3	40-145-013	Weldment, spacer, pin	2	8	33090	SAE flat washer, 5/8"	1
4	40-612-010	Weldment, pin, roller axle	3	9	40-514-104	Weldment, frame, bracket, roller mount	2
5	33095	SAE flat washer, 1 ¹ / ₁₆ " ID x 2" OD	4	10	40-146-006	Spring, compression	2

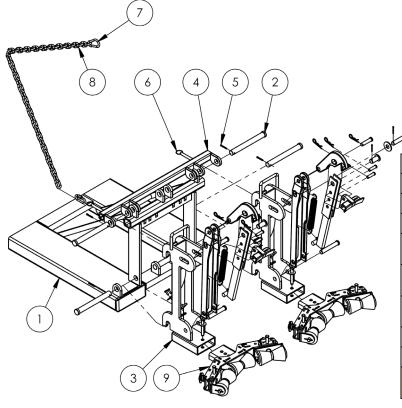




Item	Part no.	Description	Qty.
1	40-514-008	Weldment, frame	1
2	40-514-105	Frame, subassembly	1
3	99-112-004	Pin, self-locking, quick release	1
4	09-145-018	Chain, ⁵ / ₁₆ " x 56"	1
5	08-145-041	Snap hook, 5/16"	1
6	33-112-023	Pin, clevis	1
7	65125	Cotter pin, z plated, ³ / ₁₆ " x 1 ¹ / ₂ "	1
*8	40-001-097	Drum saddle roller subassembly	1

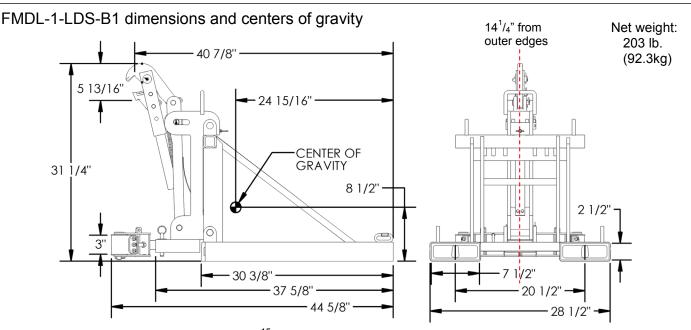
^{*} Roller subassembly *Exploded View* provided on p. 14.

FMDL-2-LDS-R3



Item	Part no.	Description	Qty.
1	40-514-008	Weldment, frame	1
2	40-112-001	Pin, clevis	4
3	40-514-105	Frame, subassembly	2
4	40-516-008	Weldment, bracket, mounting bar	1
5	65125	Cotter pin, z plated, ³ / ₁₆ " x 1 ¹ / ₂ "	4
6	99-112-004	Pin, self-locking, quick release	2
7	08-145-041	Snap hook, 5/16"	1
8	09-145-018	Chain, ⁵ / ₁₆ " x 56"	1
*9	40-001-097	Drum saddle roller subassembly	2

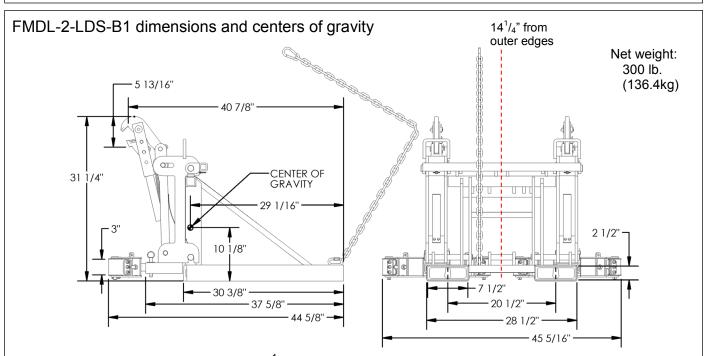
^{*} Roller subassembly *Exploded View* provided on p. 14.



Horizontal center of gravity (HCG): $24^{15}/_{16}$ inches (~63.3cm) from the open ends of the fork pockets (middle graphic above) and $14^{1}/_{4}$ " inches from the outermost edges of the fork pockets (dotted line in first graphic above).

Vertical center of gravity: $8^{1}/_{2}$ inches (~21.6 cm) from the top of the fork pockets.

NOTE: In order for the Eagle Beak™ mechanism to work properly, the drum and its contents must weigh AT LEAST 50 lbs. (~22.7kg).

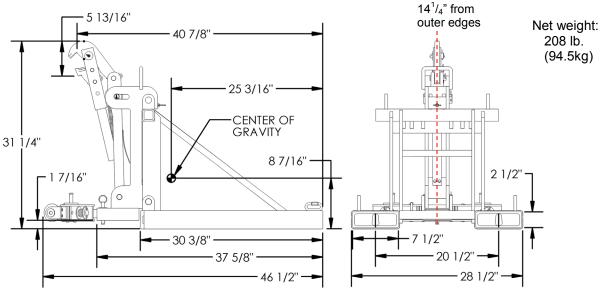


Horizontal center of gravity (HCG): $29^{1}/_{16}$ inches (~73.8 cm) from the open ends of the fork pockets (middle graphic above) and $14^{1}/_{4}$ " inches from the outermost edges of the fork pockets (dotted line in first graphic above).

Vertical center of gravity: $10^{1}/_{8}$ inches (~25.7 cm) from the top of the fork pockets.

NOTE: In order for the Eagle Beak™ mechanism to work properly, the drum and its contents must weigh AT LEAST 50 lbs. (~22.7kg).

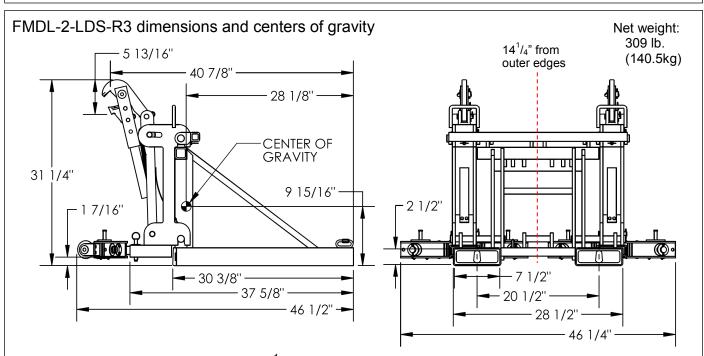
FMDL-1-LDS-R3 dimensions and centers of gravity



Horizontal center of gravity (HCG): $25^3/_{16}$ inches (~64.0 cm) from the open ends of the fork pockets (middle graphic above) and $14^1/_4$ " inches from the outermost edges of the fork pockets (dotted line in first graphic above).

Vertical center of gravity: $8^{1}/_{2}$ inches (~21.4 cm) from the top of the fork pockets.

NOTE: In order for the Eagle Beak™ mechanism to work properly, the drum and its contents must weigh AT LEAST 50 lbs. (~22.7kg).



Horizontal center of gravity (HCG): $28^{1}/_{8}$ inches (~71.4 cm) from the open ends of the fork pockets (middle graphic above) and $14^{1}/_{4}$ " inches from the outermost edges of the fork pockets (dotted line in first graphic above).

Vertical center of gravity: 9¹⁵/₁₆ inches (~25.2 cm) from the top of the fork pockets.

NOTE: In order for the Eagle Beak™ mechanism to work properly, the drum and its contents must weigh AT LEAST 50 lbs. (~22.7kg).

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 Mail
 Fax
 Email

 Vestil Manufacturing Corporation
 (260) 665-1339
 info@vestil.com

2999 North Wayne Street, PO Box 507 Phone Enter "Warranty service request"

Angola, IN 46703 (260) 665-7586 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, 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>90 days</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 code or standard is not a defect in material or workmanship.

