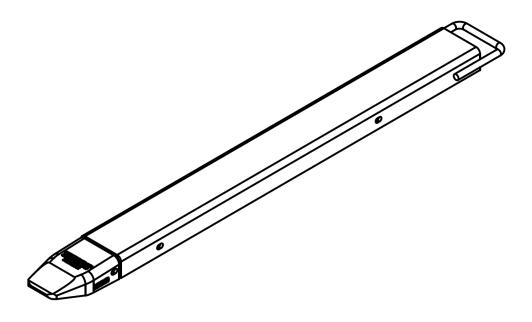


# VESTIL MANUFACTURING CORP.

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# FE-SERIES FORK EXTENSIONS INSTRUCTION MANUAL



## Receiving instructions:

After delivery, immediately remove the packaging from the product in a manner that preserves the packaging and maintains the orientation of the product in the packaging; then inspect the product closely to determine whether it sustained damage during transport. If damage is discovered during the inspection, record a complete description of the damage on the bill of lading. If the product is undamaged, discard the packaging.

#### NOTES:

- 1) Compliance with laws, regulations, codes, and non-voluntary standards enforced in the location where the product is *used* is exclusively the responsibility of the owner/end-user.
- 2) Vestil is not liable for injury or property damage that occurs as a consequence of failing to apply either:
- a) Instructions in this manual; or b) information provided on labels affixed to the product. Vestil is also not responsible for *any* consequential damages sustained as a result of failing to exercise sound judgment while assembling, installing, using or maintaining this product.

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# NOTES:

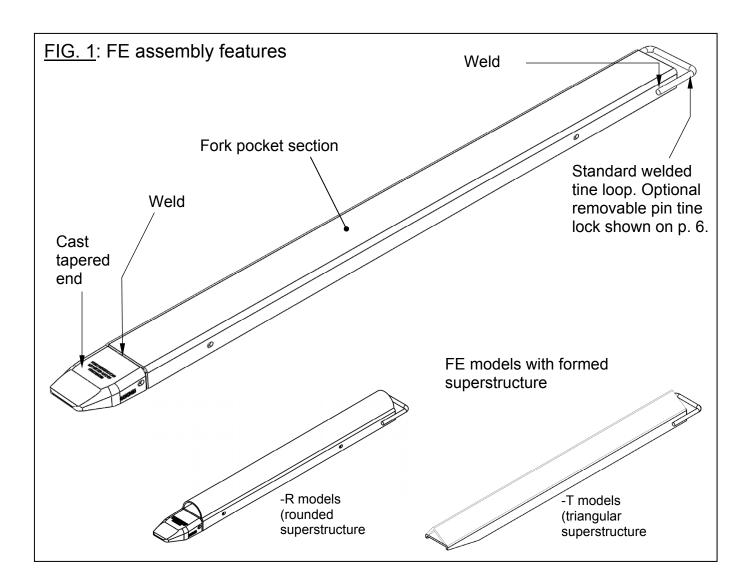
# **Product specifications:**

Dimensions and other product specifications appear in the following table.

Model	Required width of supporting truck tine in inches (~cm)	fork extension in inches (~cm)	Usable length of extension in inches (~cm)	Height of fork extension in inches (~cm)	Net weight of pair in pounds (~kg)
FE-4-48	4 (10.2cm)	4½ (11.4cm)	48 (122cm)	2 (5.1cm)	76.1 (34.6kg)
FE-4-54	4 (10.2cm)	4½ (11.4cm)	54 (137cm)	2 (5.1cm)	85.4 (38.8kg)
FE-4-60	4 (10.2cm)	4½ (11.4cm)	60 (152cm)	2 (5.1cm)	94.8 (43.1kg)
FE-4-63	4 (10.2cm)	4½ (11.4cm)	63 (160cm)	2 (5.1cm)	99.4 (45.2kg)
FE-4-66	4 (10.2cm)	4½ (11.4cm)	66 (168cm)	2 (5.1cm)	104.1 (47.3kg)
FE-4-72	4 (10.2cm)	4½ (11.4cm)	72 (183cm)	2 (5.1cm)	113.4 (51.5kg)
FE-4-84	4 (10.2cm)	4½ (11.4cm)	84 (213cm)	2 (5.1cm)	132.1 (60.0kg)
FE-4-90	4 (10.2cm)	4½ (11.4cm)	90 (229cm)	2 (5.1cm)	141.1 (64.1kg)
FE-4-96	4 (10.2cm)	4½ (11.4cm)	96 (244cm)	2 (5.1cm)	150.7 (68.5kg)
FE-4-108-P	4 (10.2cm)	4½ (11.4cm)	108 (274cm)	2 (5.1cm)	171.5 (78.0kg)
FE-4-120-P	4 (10.2cm)	4½ (11.4cm)	120 (305cm)	2 (5.1cm)	190.1 (86.4kg)
FE-5-48	5 (12.7cm)	5½ (14cm)	48 (122cm)	2 (5.1cm)	85.1 (38.7kg)
FE-5-54	5 (12.7cm)	5½ (14cm)	54 (137cm)	2 (5.1cm)	98.5 (43.4kg)
FE-5-60	5 (12.7cm)	5½ (14cm)	60 (152cm)	2 (5.1cm)	105.9 (48.1kg)
FE-5-63	5 (12.7cm)	5½ (14cm)	63 (160cm)	2 (5.1cm)	111.1 (50.5kg)
FE-5-66	5 (12.7cm)	5½ (14cm)	66 (168cm)	2 (5.1cm)	116.3 (52.8kg)
FE-5-72	5 (12.7cm)	5½ (14cm)	72 (183cm)	2 (5.1cm)	126.6 (57.6kg)
FE-5-84	5 (12.7cm)	5½ (14cm)	84 (213cm)	2 (5.1cm)	147.4 (67.0kg)
FE-5-90	5 (12.7cm)	5½ (14cm)	90 (229cm)	2 (5.1cm)	157.8 (71.7kg
FE-5-96	5 (12.7cm)	5½ (14cm)	96 (244cm)	2 (5.1cm)	168.2 (76.5kg)
FE-5-108-P	5 (12.7cm)	5½ (14cm)	108 (274cm)	2 (5.1cm)	190.3 (86.5kg)
FE-5-120-P	5 (12.7cm)	5½ (14cm)	120 (305cm)	2 (5.1cm)	211.1 (96.0kg)
FE-6-48	6 (15.2cm)	6½ (16.5cm)	48 (122cm)	2 (5.1cm)	94.1 (42.8kg)
FE-6-54	6 (15.2cm)	6½ (16.5cm)	54 (137cm)	2 (5.1cm)	105.5 (48.0kg)
FE-6-60	6 (15.2cm)	6½ (16.5cm)	60 (152cm)	2 (5.1cm)	117.0 (53.2kg)
FE-6-63	6 (15.2cm)	6½ (16.5cm)	63 (160cm)	2 (5.1cm)	122.7 (55.8kg)
FE-6-66	6 (15.2cm)	6½ (16.5cm)	66 (167.6cm)	2 (5.1cm)	128.4 (58.4kg)
FE-6-72	6 (15.2cm)	6½ (16.5cm)	72 (183cm)	2 (5.1cm)	139.9 (63.6kg)
FE-6-84	6 (15.2cm)	6½ (16.5cm)	84 (213cm)	2 (5.1cm)	162.8 (74.0kg)
FE-6-90	6 (15.2cm)	6½ (16.5cm)	90 (229cm)	2 (5.1cm)	174.2 (79.2kg)
FE-6-96	6 (15.2cm)	6½ (16.5cm)	96 (244cm)	2 (5.1cm)	185.7 (84.4kg)
FE-6-108-P	6 (15.2cm)	6½ (16.5cm)	108 (274cm)	2 (5.1cm)	209.1 (95.0kg)
FE-6-120-P	6 (15.2cm)	6½ (16.5cm)	120 (305cm)	2 (5.1cm)	232.0 (105.4kg)
FE-4-54-T	4 (10.2cm)	4½ (11.4cm)	54 (137cm)	2 (5.1cm)	84 (38.2kg)
FE-4-63-T	4 (10.2cm)	4½ (11.4cm)	63 (160cm)	2 (5.1cm)	98 (44.5kg)
FE-5-54-T	5 (12.7cm)	5½ (14cm)	54 (137cm)	2 (5.1cm)	148 (67.3kg)
FE-5-63-T	5 (12.7cm)	5½ (14cm)	63 (160cm)	2 (5.1cm)	172 (78.2kg)
FE-4-54-R	4 (10.2cm)	4½ (11.4cm)	54 (137cm)	2 (5.1cm)	132 (60kg)
FE-4-63-R	4 (10.2cm)	4½ (11.4cm)	63 (160cm)	2 (5.1cm)	148 (57.4kg)
FE-5-54-R	5 (12.7cm)	5½ (14cm)	54 (137cm)	2 (5.1cm)	180 (81.8kg)
FE-5-63-R	5 (12.7cm)	5½ (14cm)	63 (160cm)	2 (5.1cm)	200 (90.9kg)

Vestil Manufacturing Corp. created this manual to acquaint owners and end-users of our fork extensions with safe use and installation procedures. Employers are responsible for instructing employees to use the product properly. Employees and any other person, who might use or install these attachments, must read and understand every instruction BEFOREHAND. Users should have access to the manual at all times and should review the directions before each use.

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.



## SIGNAL WORDS:

This manual uses SIGNAL WORDS to indicate the likelihood of personal injuries, as well as the probable seriousness of those injuries, if the product is misused in the ways described. Other signal words call attention to uses of the product likely cause property damage.

The signal words used appear below along with the meaning of each word:

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.

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 product.

Each person who installs, uses, or maintains this product should read the entire manual in advance and fully understand the directions. If after reading the manual you do not understand an instruction, ask your supervisor or employer for clarification, because failure to adhere to the directions in this manual might result in serious personal injury.

# Safe use recommendations:

Vestil diligently strives to identify foreseeable hazards associated with the use of its products. However, material handling is inherently dangerous and no manual can address every conceivable risk. The end-user ultimately is responsible for exercising sound judgment at all times.

Material handling is inherently dangerous. Improper or careless operation might result in serious personal injuries sustained by the operator and/or bystanders. Fork extension users should apply the following recommendations:

- ONLY use fork extensions as a means for supporting palletized loads or skids.
- DO NOT use a structurally compromised fork extension. Examples of structural damage include: a) broken tine lock, retaining loop, or welds connecting the loop/lock to the main body of the extension (fork pocket); b) cracked, warped, bent or excessively corroded fork pockets; and c) cracks, warps, bends or excessive corrosion of the cast tapered end welded to the end of each fork pocket. Inspect the platform before each use according to the inspection instructions on p. 5. DO NOT use the platform unless it passes every part of the inspection.
- DO NOT use a damaged fork extension. Inspect both extensions before each use according to the inspection instructions below. DO NOT use an FE unless it passes *every* element of the inspection, or until authorized maintenance personnel approve the extension for service.
- DO NOT stand beneath or travel under the elevated tines of a fork truck while equipped with the fork extensions or permit others to do so.
- DO NOT use a fork extension UNLESS each label shown in Fig. 4 on p. 6 is affixed to the extension and is undamaged and readable.
- DO NOT attempt to lift loads that exceed the 4,000lb. (~1,818kg) maximum rated load.
- DO NOT exceed the load rating of the fork truck. (See "4. Contact the manufacturer..." on p. 5).
- DO NOT attempt to lift a load using only the tapered (front) end of a fork extension. Permanent damage to the fork extension, damage to property, or serious personal injury could result.
- DO NOT modify either fork extension in any way UNLESS you first obtain express, written approval from Vestil. Unauthorized modifications might make the extension unsafe to use, and could result in operator and/or bystander injury. Additionally, any modification not expressly approved by Vestil in writing automatically voids the warranty.

# Inspections:

Before each use:

- Look for damage to either the fork extension or the tine lock/loop. Verify that the locking mechanism functions normally.
- Examine the cast tapered end of the extension. Make sure that it is not cracked or deformed, and that the weld between the tapered end and the fork pocket portion is intact.

At least once per month:

- Inspect each extension for regions where the metal has warped, bent, or cracked.
- Closely inspect the tine lock/loop for damage.
- Verify that all welds are intact.
- Confirm that each label is located as shown in FIG. 4 on p. 6 and is undamaged and readable.

# Use fork extensions on appropriate lift trucks:

- 1. Compare the length of the truck tine to the length of the fork extension; the extension must be 150% of the tine length OR LESS.
- 2. ONLY use FE-series fork extensions with truck tines that are at least 2in. (~5cm) thick.
- 3. To prevent side-to-side movement (by the fork extension) during use, select a model that matches the tine width (see "Required width of supporting truck tine in inches (~cm)" from table on p. 2; also see ANSI/ITSDF B56.1-2005, paragraph 7.39.5, p. 51, "Fork extensions shall be designed to avoid unintentional disengagement from the forks. Lateral clearance shall not exceed 12mm between fork and extension.")
- 4. Operate the lift truck in a manner consistent with the training provided by your employer. For instance, per ANSI/ITSDF B56.1-2009, Safety Standard for Low Lift and High Lift Trucks, Part II, paragraph 5.4.3: "... Fork length should be at least two-thirds of load length." NOTE: B56.1-2009 is not law, so the recommendations are not compulsory. However, a prior version, B56.1-1969, was incorporated by reference into OSHA regulation, and therefore, is treated as if it were law.
- 5. Contact the manufacturer of your fork lift to verify that your fork extensions can safely be used with the fork lift. The manufacturer must also provide updated labels/tags for the fork lift because, of course, regulations impose these obligations:
  - a. "Modifications and additions which affect [fork lift] capacity and safe operation shall not be performed by the customer or user without manufacturer's prior written approval. Capacity,

operation, and maintenance instruction plates, tags, or decals shall be changed accordingly." See 29 CFR 1910.178(a)(4).

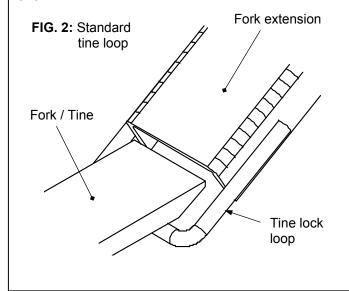
b. "If [your fork lift] truck is equipped with front-end attachments [like fork extensions] other than factory installed attachments, the user shall request that the truck be marked to identify the attachments and show the approximate weight of the truck and attachment combination at maximum elevation with load laterally centered." See 29 CFR 1910.178(a)(5).

NOTE: Although the regulations cited above impose a duty on the fork truck manufacturer to evaluate the safety of equipping your forklift with fork extensions, the manufacturer may refuse to do so. In that case, you should hire a "Qualified Registered Professional Engineer" to "perform a safety analysis and address any safety and/or structural issues contained in the [manufacturer's] negative response prior to granting approval. Machine data plates must be changed accordingly." See April 11, 1997 OSHA letter of interpretation to Mr. Kenneth J. Yotz titled, "Powered industrial truck modifications and approval" accessible at <a href="http://www.osha.gov/pls/oshaweb/owadisp.show\_document?p\_table=INTERPRETATIONS&p\_id=22384">http://www.osha.gov/pls/oshaweb/owadisp.show\_document?p\_table=INTERPRETATIONS&p\_id=22384</a>.

# Installation:

#### Standard Welded Loop Tine Lock (Models FE-x-xx)

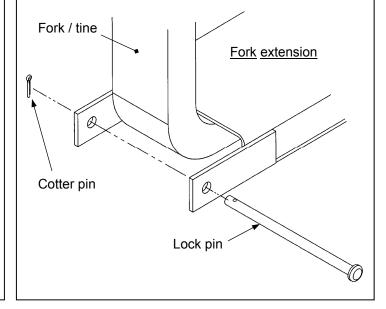
Raise the forks/tines approximately 4-6in. from the ground. Lift the nose of the fork extension so that the extension is angled at 45° to the ground/floor. Guide the tine lock loop underneath the tapered end of the tine; slide the fork extension onto the tine until it reaches the heel of the tine; then lower the extension onto the fork once the tine lock is behind the heel of the tine



#### Removable Pin Tine Lock (Models FE-x-xx-P)

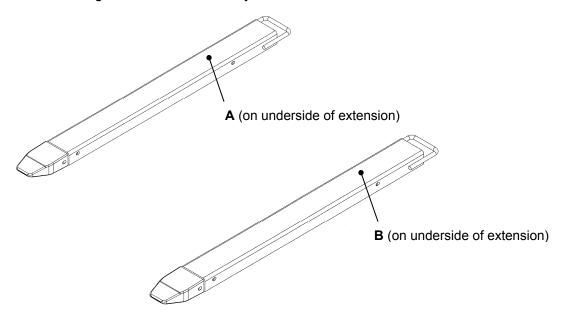
Remove the lock pin and place the fork extension over the fork truck's fork so it is all the way back against the fork's heel. Reinstall the locking pin behind the heel of the tine.

FIG. 3: Optional removable pin tine lock



# Labeling diagram (per pair):

Each pair of fork extensions should be labeled at all times as shown below. Replace a label that is absent, damaged, faded, or not easily readable.



## A: Label #697 (FE-4), 698 (FE-5), or 699 (FE-6)

## WARNING

Material handling is inherently dangerous. Improper or inappropriate use of fork extensions might result in operator or bystander death or serious injury.

697 rev. 1209

- DO NOT use this extension if more that 150% of the fork tine length.
- DO NOT use if locking loop damaged or absent.
- Law requires you to contact (fork) lift truck manufacturer and request;
  - 1. Written approval BEFORE using fork extensions [29 CFR 1910.178(a)(4)],
  - 2. Markings for (fork) lift truck that:
  - Identify fork extensions;
  - Give approximate weight of truck and extensions at maximum evaluation with laterally-centered load. [29 CFR 1910.178(a)(5)].
- DO NOT use UNTIL lift truck manufacturer provides corrected capacity tags.

		Extension		Minimum Fork Size		Extension		Minimum Fork Size			
ORK SIZE ORK SIZE EXTENSION	Model	Capacity each Extension Kg.	Load Center mm.	Thick mm.	Width mm.	Length mm.	Capacity each Extension Lb.	Load Center in.	Thick in.	Width in.	Length in.
O G G	FE-4-48	907.2	508.0	50.8	101.6	812.8	2,000	20	2	4	32
2 ≅ ⊈	FE-4-54	907.2	584.2	50.8	101.6	914.4	2,000	23	2	4	36
7,≣2	FE-4-63	907.2	698.5	50.8	101.6	1066.8	2,000	28	2	4	42
CH	FE-4-66	907.2	736.6	50.8	101.6	1117.6	2,000	29	2	4	44
D M D IV E A	FE-4-72	907.2	812.8	50.8	101.6	1219.2	2,000	32	2	4	48
A NI	FE-4-84	907.2	965.2	50.8	101.6	1422.4	2,000	38	2	4	56
P 0	FE-4-96	907.2	1117.6	50.8	101.6	1625.6	2,000	44	2	4	64
	FE-4-120-P	907.2	1422.4	50.8	101.6	2032.0	2,000	56	2	4	80

#### B: Label #460



#### 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 <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 any of the following methods:

MailFaxEmailVestil Manufacturing Corporation(260) 665-1339sales@vestil.com2999 North Wayne Street, PO Box 507PhoneAngola, IN 46703(260) 665-7586

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

### How long is the warranty period?

The warranty period for original dynamic components is <u>30 days</u>. For wearing parts, the warranty period is <u>30 days</u>. The warranty periods begin on the date when Vestil ships the product to the warrantee. If the product was purchased from an authorized distributor, the periods begin when the distributor ships the product. Vestil may, at its sole discretion, extend the warranty periods for products shipped from authorized distributors by *up to* 30 days to account for shipping time.

#### If a defective part is covered by the warranty, what will Vestil do to correct the problem?

Vestil will provide an appropriate replacement for any *covered* part. An authorized representative of Vestil will contact you to discuss your claim.

## What is <u>not</u> covered by the warranty?

- 1. Labor;
- 2. Freight:
- 3. Occurrence of any of the following, which <u>automatically voids the warranty:</u>
  - Product misuse;
  - Negligent operation or repair;
  - Corrosion or use in corrosive conditions:
  - Inadequate or improper maintenance;
  - Damage sustained during shipping;
  - Accidents involving the product;
  - <u>Unauthorized modifications</u>: 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.

