

# INSTRUCTION MANUAL

FORK TRUCK MOUNTED TRASH CAN DUMPER MODEL FM-T-DUMP



Model No.	
SERIAL NO.	

## VESTIL MANUFACTURING CORP.

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Each fork truck mounted trash can dumper conforms to the <u>generalized</u> specifications disclosed in this manual and fulfills our demanding standards for quality, safety and durability. This manual adopts certain definitions published in the 2008 revisions of ANSI standards Z245.1, .30, and .60 ("ANSI cart and cart lifter standards"). However, our trash can dumper <u>does not lift trash carts</u>, but rather is a means for engaging a Vestil TH-64, C type 2-wheeled cart. Our product also includes mechanisms for inverting and dumping the attached cart. A fork lift must be used to raise the dumper and cart and to transport the combination to a dumping site. ANSI cart and cart lifter standards apply to devices that both lift and dump carts, and therefore, the standards apply only in part to our FM-T-Dump. Our product complies with ANSI cart and cart lifter standards to the extent that these rules apply.

The reader should note that Vestil TH-64 trash carts used with the dumper are referred to in the industry as "residential carts" and in this manual they are called "carts".

## SAFETY PRINCIPLES

Vestil Manufacturing Corp. recognizes the critical importance of workplace safety. Each person who might participate in the assembly, use, inspection or maintenance of the product must read this manual. Read the entire manual and fully understand the directions BEFORE using or maintaining the dumper. If you do not understand an instruction, contact Vestil for clarification. Failure to adhere to the directions in this manual might lead to serious personal injury or even death.

Vestil is **not liable** for any injury or property damage that occurs as a consequence of failing to apply the safe operation and maintenance procedures explained in this manual or that appear on labels affixed to the product. Failure to exercise good judgment and common sense may result in property damage, serious personal injury, or death, and are **not the responsibility of Vestil**.

This manual applies the hazard identification methods recommended for instruction manuals by the American National Standards Institute (ANSI) in standard Z535.6-2006. In accordance with ANSI guidelines, this manual identifies personal injury risks and situations that could lead to property damage with SIGNAL WORDS. These signal words announce an associated safety message. The reader must understand that the signal word chosen to identify a particular hazard conveys information about the seriousness of that hazard according to the following convention:

These symbols identify hazards that may result in personal injury

ADANGER 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. Although Z535.6-2006 approves the use of "CAUTION" without an accompanying safety alert symbol (black equilateral triangle with yellow exclamation point) as an alternative to "NOTICE", this manual differentiates between hazards that pose a risk of personal injury and those that create mere property damage situations. CAUTION appears exclusively in conjunction with the safety alert symbol to identify injury risks.

NOTICE Identifies practices not related to personal injury, such as operation that could damage the cart dumper. Note: No safety alert symbol (equilateral triangle enclosing an exclamation point) accompanies this signal word.

## **TABLE OF CONTENTS**

2
4
5
7-9
10-11

# TABLE OF FIGURES

FIG. 1: Rear View	5
FIG. 2A: Side View	6
FIG.2B: Cable Pulley	6
FIG. 2C: Latch Assembly	6

## PRODUCT INTRODUCTION



Thank you for purchasing a Fork Truck Mounted Trash Can Dumper ("cart dumper" or simply "dumper") made by Vestil Manufacturing Corporation ("Vestil"). Our dumpers are durable, high-quality products that combine safety features and rigorous engineering. Despite the dumper's relatively simple mechanisms, all personnel must familiarize themselves with the safe operation instructions provided in this manual.

The FM-T saves time and reduces injuries related to lifting and emptying heavy waste containers. Our design incorporates a safety chain to prevent accidental detachment and a release cable that allows an operator to remotely dump the contents of a trash bin (also called a "cart", as defined in ANSI Z245.1-2008) without having to dismount the fork truck. Each dumper is constructed from steel and is protected by a powder coat finish. Additional product specifications appear in the following table:

<u>Overall Size in Inches</u>		<u>Maximum Rated</u>		
	<u>Model</u>	(W x L x H)	<b>Load in Pounds</b>	Net Weight in Ibs.
	FM-T-Dump	40in. x 52in. x 41in.	1,000	400
	-	102cm x 132cm x 104cm	~455kg	~182kg

Vestil Manufacturing Corp. created this manual to acquaint owners and users of our cart dumpers with safe use and maintenance procedures. Employers are responsible for instructing employees to use the product properly. Employees and any other persons, who might foreseeably use, install, or perform maintenance on the dumper, must read and understand every instruction before using it. Furthermore, persons who use the cart dumper should have access to the manual at all times, and in particular should consult the directions before each use. Contact Vestil for answers to any question you have after reading the entire manual.

Although we strive to identify the foreseeable hazardous situations that could arise during use, this manual cannot address every conceivable danger. The end-user is ultimately responsible for exercising sound judgment at all times.

## **SAFETY GUIDELINES**

Read the entire manual before you use the cart dumper for the first time and before each subsequent use. Refer to the manual for safe use and maintenance procedures described on p. 7-12. If questions remain after you finish reading the manual, contact Vestil for answers. DO NOT attempt to resolve any problems with the dumper unless you are <u>certain</u> that it will be safe to use afterwards. NEVER modify the product in any way without the express, written approval of Vestil.

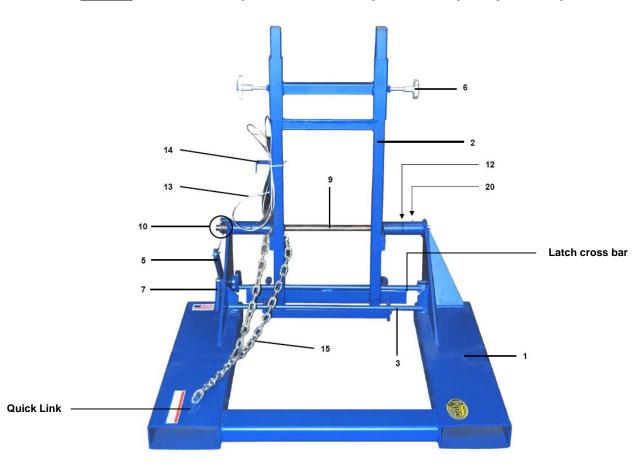
#### **A** DANGER

 Electrocution Risk: DO NOT contact live electrical wires with the cart dumper, cart (trash bin) or lift truck!

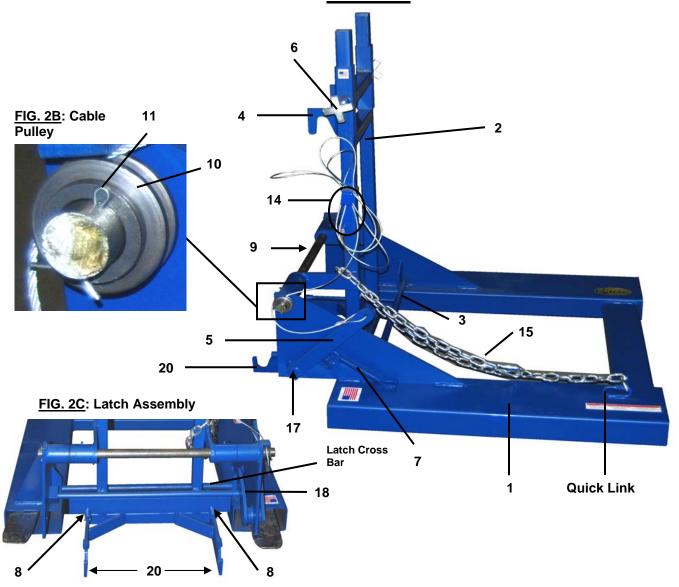
### **AWARNING**

- DO NOT exceed the dumper's maximum rated load of 1,000lbs (~455kg). DO NOT overload the TH-64 container, which is rated for loads of 55lbs. or less.
- ALWAYS inspect the dumper before each use according to the inspection instructions on p. 10. ONLY use the dumper if it passes the inspection.
- Inform all persons in the area that you are going to use the dumper, and instruct them to stay away from the fork lift and dumper during operation. Clear all debris from the path of travel.
- DO NOT transport, lift or dump trash carts that are not approved for use with the dumper. ONLY use the dumper with Vestil TH-64 C type trash carts. C type carts are described in ANSI Z245.60-2008.
- Keep clear of the dumper while it is in use. DO NOT reach into the cart while it is connected to the dumper.
- DO NOT use the FM-T-Dump to lift broken carts or carts that are overloaded. A broken or overloaded cart might break free of the dumper during use and could cause serious injuries.
- DO NOT lift carts over people; DO NOT allow people to stand on or ride the dumper, or in a cart engaged by the dumper.
- NEVER modify or alter the dumper in any way without express, written authorization from Vestil.
   Modifications and/or alterations may cause the dumper to function unpredictably, or may make the dumper unsafe to use.

### FIG. 1: Rear View (from fork lift operator's perspective)



# FIG. 2A: Side View



An asterisk (\*) next to a number indicates that the corresponding part is a component of the "Cartengaging assembly".

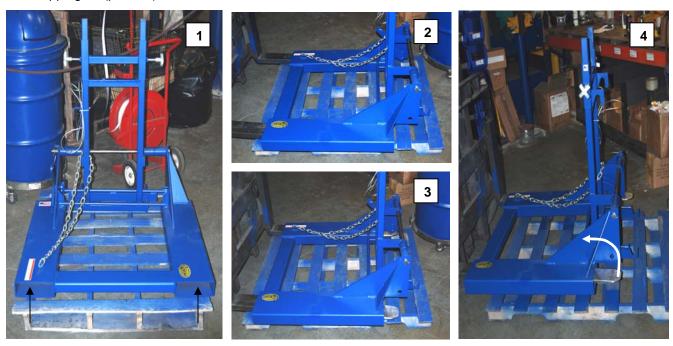
Identification No.	Part No.	Description	Quantity
1	37-514-023	Base Frame Weldment	1
*2	37-514-022	Upright frame weldment	1
3	37-612-001	Locking Pin Weldment	1
*4	37-516-001	Can Adjustment Bracket Weldment	1
5	37-025-005	Latch Handle	1
*6	KNOB-12	Knob	2
7	28-146-003	Tension Spring	1
*8	03-146-001	Uni-tilt Lever Compression Spring	2
*9	37-112-025 Axle Pin		1
10	37-027-001 2 x 5/8 Cable Pulley		1
11	65127	3/16 x 2 Cotter Pin	5
12 33444 or (Thin) 18 Ga. Mac		(Thin) 18 Ga. Machinery Bushing, or	as
	33446	(Thick) 12 Ga. Machinery Bushing	required
13	13 37-145-005 1/8 x 48 Cable Specialty Hardware		1
14 37-025-002 Formed Chute Release Handle		1	
15 37-145-004 5/16 x 48 Chain (Specialty Hardware)		1	
16 37-145-003 Wire Crimp (Specialty Hardware)		2	
17			1
18	18 37-037-021 FL-4000 Chute Latch		1
19			2
*20	N/A	Axle Bracket	2

### **Use Instructions:**

The cart dumper is intended to be used with a forklift truck, and therefore, only personnel who have successfully completed an approved operator training program like the one described in B56.1-2005, section 4.19.1-.5 should operate the cart dumper.. The operating instructions in this manual are intended to *supplement* the recommendations for safe forklift operation learned during a forklift training program or contained in ANSI/ITSDF standard B56.1, and ANSI standards Z245.1, .30, and .60. According to these standards, safe operation of lift trucks and cart dumpers is the responsibility of the operator. B56.1 defines an "Operator" as a "trained and authorized [by your employer or by the owner of the dumper] person who controls any function(s) of a powered industrial truck." Operators must develop safe working habits and an awareness of hazardous conditions occurring or present during operation of the fork truck and dumper.

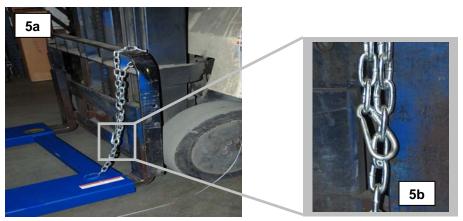
<u>Step 1</u>: Inspect the cart dumper as recommended in the "Maintenance and Inspection" section of this manual. Proceed to the next step <u>ONLY IF the clamp passes the inspection and is deemed safe to use by designated inspection personnel.</u>

Step 2: Drive the forklift truck forward to insert the forks into both of the fork pockets, which are identified with arrows in photo 1. Continue driving forward until the dumper base frame (1) rests against the vertical portion of each fork and the ends of the fork tines extend beyond the end of the pockets (shown in photo 3). Tilt the forks to prevent the FM-T from slipping off (photo 4).

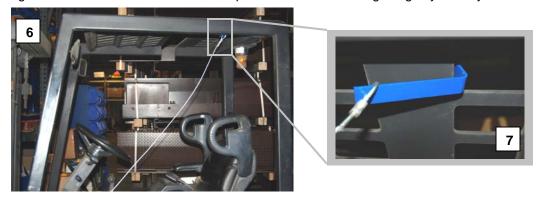


<u>Step 3</u>: Set the dumper on the ground and complete the steps learned during your forklift operator training program before dismounting the forklift.

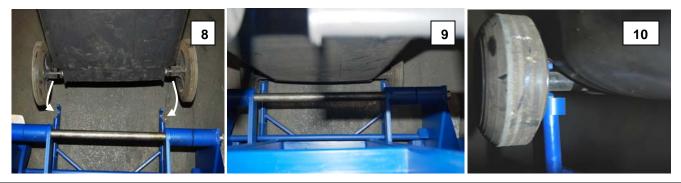
<u>Step 4</u>: Attach the safety chain to the carriage. Attach the carabiner to the safety chain near the end that connects to the base frame of the dumper as shown in photo 5b. Adjust the connection so that there is very little slack in the chain.



<u>Step 5</u>: Stow the Chute Release Handle. Feed the release cable through the fork carriage; attach the handle to the cage of the forklift in a location that will prevent the cable from getting in your way while driving the fork truck.



<u>Step 6</u>: Engage a trash cart with the dumper. Roll the cart to the front of the dumper, pivot the cart away from the dumper, and set the axle of the cart in the axle brackets (20) as shown in photos 9 & 10.



NOTICE The size of the wheels may prevent the axle from settling into the bottom of the brackets. Step 8 addresses this situation.

<u>Step 7</u>: Secure the top of trash cart. Loosen the knobs (6) that hold the adjustment bracket weldment (4) in position relative to the upright frame (2) by turning them counterclockwise. Lower the bracket weldment until it makes solid contact with the handle. Turn the knobs clockwise to secure the bracket weldment to the frame.



<u>Step 8</u>: Adjust the connection between the bracket weldment and the cart handle. Raise the forks just a few inches off of the ground so that the wheels of the cart no longer contact the ground. Instead, ask a coworker to check the connection between the brackets and the cart axle, as well as the connection between the cart handle and the adjustment bracket weldment. If the handle and bracket weldment have separated, your coworker must repeat step 7 to secure the cart to the dumper.

Step 9: Drive the lift truck to the dump site. Make sure that the path of travel to the dump site is clear of people and debris.

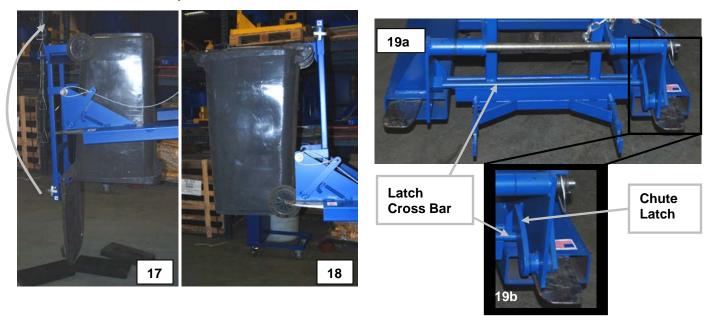
Step 10: Empty the trash cart. Photographs 11-15 demonstrate use of the dumper to empty a trash cart into a moveable hopper. The fork lift operator approached the front of the hopper, and raised the forks to an appropriate height to avoid contact with the lip of the hopper (circled in photos 11 & 12). The operator drove the lift forward so that the dumper overhung the hopper by at least the width (W) of the trash cart as shown in photos 11 & 13. With the cart in position, the operator pulled the release cable, and the contents of the cart dumped into the hopper.

Note: A pin slides over the top of the cart axle on both sides when the cable is pulled. These pins prevent the cart

from jostling out of the axle brackets during dumping.



Step 11: Reset the dumper. Adjust the height of the forks as necessary to avoid contact between the cart and the receptacle. Back away from the receptacle (or dump site), and lower the forks until the lid of the cart or top of the upright frame (2) is a few inches from the ground. Your coworker should rotate the container engaging assembly (see "Parts List," p. 6) back to the cart-carrying position (photos 17 & 18). You should hear the chute latch fasten to the latch crossbar as shown in photos 19a and 19b.



## **Maintenance and Inspections:**

A <u>designated person</u> must verify that the dumper complies with all regulations, codes, and standards that apply in the location where the clamp is *used*.

#### Inspections:

**AWARNING** DO NOT use the dumper if an inspection reveals any structural damage. Structural damage might include, but is not limited to, cracked welds, warping or other deformation of the frame members or cart-engaging assembly (see FIG. 1 on p. 6, FIG. 2A-C on p. 7). Restore the dumper to normal operating condition BEFORE using it again.

Regular/Frequent: The person(s) designated to conduct inspections by your employer must do so before the dumper is used for the first time, and before each subsequent use. If the dumper is infrequently used, conduct regular inspections at least once every 2 weeks. Person(s) designated to conduct inspections should inspect the dumper for:

- 1. Fraying or damage to the cable;
- 2. Structural damage or deformation;
- 3. Proper functioning of the latch mechanism;
- 4. Damage or deformation of the chain, the carabiner, or the quick link that connects the chain to the base frame.
- 5. Unusual noise, binding or rough rotation of the cart-engaging assembly.

<u>Periodic</u>: inspect the following at least once per month for corrosion, rusting, damage, excessive wear, or noisy or rough operation:

- 1. Pivot points and pivot point pins;
- 2. Cart-engaging assembly release mechanism
  - a. Chute release handle;
  - b. Chain, carabiner, and quick link;
  - c. Latch Handle;
  - d. Latch:
  - e. Handle pins;
- 3. Labels (as shown in Fig. 3, p. 11).

#### Maintenance:

AWARNING The end-user (your employer) must implement a maintenance program to ensure the proper function and safety of the dumper, and is responsible for training employees to work on the dumper. "Work on" refers to operating, loading, cleaning, servicing, maintaining, or repairing the product. ONLY trained, competent maintenance personnel or contractors should perform inspection, maintenance, or repair work.

Step 1: Tag the dumper, "Out of Service."

Step 2: Conduct "Before each use" and "Frequent" inspections.

<u>Step 3</u>: If deformity, corrosion, rusting, or excessive wear of structural members is present, DO NOT use the dumper. Contact Vestil for instructions. If the cart-engaging assembly does not rotate smoothly or makes noise when released, apply grease through the 3/16 inch grease fittings. If the mechanisms still function noisily even after applying lubricant, contact Vestil for directions.

Step 4: Perform all other necessary adjustments and/or repairs.

**AWARNING** The reader should understand the significant difference between necessary adjustments and repairs, and modifications.

- An <u>adjustment</u> refers to a simple correction that restores the dumper to normal operating condition, such as tightening loose fasteners, or removing dirt or other debris from the surface of the dumper; a <u>repair</u> refers to replacing worn parts with new replacement parts.
- ➤ DO NOT use the dumper if adjustments and/or repairs are incomplete! Return the dumper to service ONLY after finishing all necessary repairs and adjustments.
  (Continued on p. 11)

#### (Continued from p. 10)

- A <u>modification</u> is a change that <u>alters the dumper from normal operating condition</u>, like bending the structural members or removing a part or 2 or more parts. <u>NEVER</u> <u>modify the dumper without the express</u>, <u>written approval of Vestil. Modifications may render the dumper unsafe to use</u>. If Vestil approves a modification, in writing, you are responsible for labeling the equipment with the following information:
  - 1. Name of the person(s) who performed the modifications;
  - 2. Date modification occurred; AND
  - 3. Statement that all modifications comply with ANSI Z245.30-2008.

<u>Step 5</u>: Contact Vestil for directions if a condition(s) are discovered during an inspection that is/are not addressed in this manual.

Step 6: Make a dated record of the repairs, adjustments and/or replacements made.

### **Markings**:

Only use the dumper if ALL labels are readable and undamaged. Contact Vestil for replacement labels.

