SAFETY WARNINGS

**WARNING**

Safety decals must be replaced anytime they are damaged, missing, or cannot be read clearly. If you require safety decals, contact Micromatic LLC at (260) 589-2136 for no-charge replacement safety decals.

**WARNING**

All hydraulic pressure must be relieved from the hydraulic system prior to removing any components from the system. Failure to comply can result in serious injury or death. If you have any questions concerning relieving the hydraulic pressure from the system, contact Micromatic LLC at (260) 589-2136.

**WARNING**

Never operate the hydraulic system if a leak is present. Serious injury may result. NEVER inspect for hydraulic leaks with bare hands or other exposed body parts. At a minimum, wear leather gloves prior to inspecting for leaks and use cardboard or wood. If leaks are present, relieve pressure and allow system to cool prior to servicing.

**WARNING**

While the engine is OFF, the hydraulic actuator in the tipper could be holding the tipper at a raised position. If a hydraulic line is removed or pressure is released, gravity may allow the tipper to drop to its rest position and may cause injury. All workers and personnel must remain clear of these areas when working on or operating the tipper.

**WARNING**

Hydraulic systems are hot. DO NOT TOUCH! Serious personal injury or death may result from hot oil. When you have completed working on the hydraulic systems, thoroughly clean any spilled oil from the equipment. Do not spill any hydraulic fluid on the ground. Clean any hydraulic fluid from your skin as soon as you have completed maintenance/repairs.

**WARNING**

Follow ALL lockout procedure as defined in this manual, as well as all lockout procedures defined by OSHA or other regulatory bodies, including your employer and truck manufacturer.
SAFETY

**CAUTION:**

- Do not operate waste truck packing blade while the tipper is in the dump or raised position. The packing blade may damage the waste cart tipper.
- Do not cover the brake/safety/indicator lights on the vehicle with the mounting plate, the tipper unit itself, or any other related hardware.
- Safe working procedures must be followed at all times. Always wear correct safety gear.
- Follow OSHA Lockout/Tagout procedures during all installation, repair, or maintenance.
- Inspect operation of waste cart tipper daily before starting route.
- Ensure all persons are clear of waste cart tipper before and during operation.
- Never operate a damaged waste cart tipper.
- Never reach into a waste container or place hands or arms in harm’s way during operation.
- Never lift damaged carts with missing or broken parts.
- Never lift an overloaded cart.
- Never use waste cart tipper to lift items other than properly designated carts.
- Never loosen any hydraulic fittings or hoses unless the system is off and depressurized.
- Never weld on truck unless a ground is in place, the battery is disconnected, and no flammable objects are present.
- Do not remove the stop blocks or fasteners. They serve a functional purpose to limit the rotation of the actuator and extend service life.

INSTALLATION PREPARATION

1.) Please read this manual completely and familiarize yourself with all of the necessary procedures. Contact Micromatic LLC at (260) 589-2136 ext. 3211 or 1-800-333-5752 if there is a question.

2.) To install the waste cart tipper onto the truck to the installation dimensions stated in this service manual requires an empty truck parked on a smooth and level surface.

3.) Waste cart tippers can weigh over 300 pounds. During installation, always use a hoist to lift and secure the lifters into place and to prevent accidents.

4.) During installation, secure the waste cart tipper with a chain or suitable lifting strap to prevent accidents.


TWO YEAR LIMITED WARRANTY

- Seller warrants that Buyer will receive good title to the products and that the products received by initial purchaser will be free from defects in materials and workmanship consistent with trade practice quality control for a period of two (2) years from date of shipment, provided:
  
  - The product has been installed and used within defined specifications.
  - No repair or alteration has occurred other than by Seller’s personnel.
➢ No misapplication or negligent use has transpired in the judgement of Seller’s personnel.

➢ THERE ARE NO OTHER WARRANTIES THAT EXTEND BEYOND THE WARRANTY HEREIN CONTAINED and no statement, oral or written, inconsistent with this warranty is binding on the Seller. No agent, employee, or representative of the Seller has any authority to bind the Seller to any confirmation, representation, or warranty concerning the equipment that is the subject of this document beyond that specifically included in the written quotation. Extension of, or amendment to, this warranty can be made only in writing by a duly authorized officer of the Seller.

➢ This warranty is made IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, including any warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.

➢ Seller’s remedy for breach of any warranty shall be limited as defined below.

- Seller agrees to repair or replace, without cost, any part of the product manufactured by the Seller that, for the warranty period as specified above, may prove, upon Seller’s inspection, to be defective in material or workmanship and not commercially acceptable.

- Seller shall have the option to inspect any parts claimed to be defective either at Seller’s place of business or Buyer’s place of manufacture. No return shall be accepted unless Seller has had an opportunity to inspect the product or has expressly authorized the return.

- Under no circumstances shall Seller be liable for consequential or incidental damages resulting from any breach of warranty even though Seller may have been advised of the possibility of such damages, nor will Seller’s liability for breach of any warranty exceed the purchase price of the product less the value of the equipment at time of acceptance.

- Any claim for breach of Seller’s warranty herein contained must be made in writing, addressed to the Seller, and set forth in sufficient detail to permit identification of the defect. Any claim for breach of warranty must be made within twelve (24) months after breach of warranty. If not made within said twelve (24) months period, it shall be conclusively deemed to have been waived.

- The remedies for breach of warranty herein contained shall be exclusive.
## TIPPER SPECIFICATIONS

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tipper Part Number</td>
<td>A010200 With Weld Plate</td>
</tr>
<tr>
<td>Model Number</td>
<td>A010200</td>
</tr>
<tr>
<td>Mounting Weld Plate Part Number (included)</td>
<td>A010208</td>
</tr>
<tr>
<td>Cart Compatibility</td>
<td>ANSI Z245.60 Type B-US Two-Bar Carts</td>
</tr>
<tr>
<td>Tipper Bar Compatibility</td>
<td>Application Dependent</td>
</tr>
<tr>
<td>Cycle Time</td>
<td>6-8 second cycle (up and down)</td>
</tr>
<tr>
<td>Finish</td>
<td>Durable Paint, High Visibility Color</td>
</tr>
<tr>
<td>Hydraulic Port Threads</td>
<td>9/16-18 SAE Threads</td>
</tr>
<tr>
<td>Hydraulic Actuator Type</td>
<td>Rotary Vane</td>
</tr>
<tr>
<td>Hydraulic Flow Rate Required</td>
<td>4.9 GPM</td>
</tr>
<tr>
<td>Minimum Pressure Setting</td>
<td>1,300 psi</td>
</tr>
<tr>
<td>Rated Maximum System Pressure</td>
<td>3,000 psi</td>
</tr>
<tr>
<td>Hydraulic Displacement</td>
<td>38.40 in$^3$</td>
</tr>
<tr>
<td>Rated Lifting Weight Capacity</td>
<td>800 lb Continuous Use</td>
</tr>
<tr>
<td>Dump Angle</td>
<td>45°</td>
</tr>
<tr>
<td>Recommended Mounting Height (Top of mounting plate to ground)</td>
<td>39” – 40” (See Page 6)</td>
</tr>
<tr>
<td>Ground Clearance</td>
<td>24” – 25” (dependent on mounting height)</td>
</tr>
<tr>
<td>Dry Weight</td>
<td>A010200 = 254 lb (with plate attached)</td>
</tr>
<tr>
<td>Design and Manufacture Location</td>
<td>USA</td>
</tr>
<tr>
<td>Warranty</td>
<td>Two (2) year limited warranty</td>
</tr>
</tbody>
</table>

*Note: Product specifications subject to change without notice.*
TIPPER DIMENSIONS

37 ABSOLUTE MIN
42 ABSOLUTE MAX
39-40
RECOMMENDED
MOUNTING HEIGHT

GROUND

9
9 1/8

8 7/8
7

14 3/4

8 7/8
17

11°
➢ The Beast tipper has larger variability in mounting height to scoop up the waste cart and dump it. Position waste cart before dumping so the waste cart’s upper cavity will be grabbed by the saddle of the tipper when it is in motion.
➢ Each waste cart manufacturer has slightly different dimensions for contact points.
➢ Installer to verify compatibility with kick bars and other equipment that may be on vehicle.
➢ When carrying out tipper installation onto truck, account for height changing when the truck is in loaded and unloaded conditions.

➢ Always test after installation using an empty waste cart. Evaluate clearances for the tipper when it is in the down and up (“dump”) positions.

TIPPER DIMENSIONS WHEN IN “DUMP” POSITION
INSTALLATION DIMENSIONS

OPTIONAL WELDING PLATE FOR MOUNTING

(Contact Micromatic LLC to purchase optional accessory, see service parts kit.)

➢ Welding plate must be securely welded around its perimeter onto the truck body rear sill except where noted above. The areas where a weld bead is not permissible is where the upper stop blocks contact.

➢ Welding plate should be backed by structurally sound material to support the plate long-term.
  o If necessary, weld supplemental strips for additional plate support.

➢ Stud threads require ½-13 UNC grade 8 nuts to mount tipper to weld plate.
  o Recommended installation torque: 60 ft-lb with thread lock applied.
  o Tipper is shipped with the weld plate properly attached, so the entire tipper can remain attached to the weld plate during the weld plate installation or the weld plate can be first removed from the tipper, welded to the truck body, and then the tipper reinstalled as mentioned above.

➢ Proper mounting distance from ground is required to ensure proper function.

➢ CAUTION: Never weld on truck unless a ground is in place, the battery is disconnected, and no flammable objects are present.
MAINTENANCE

Lubrication
➢ Pivot joints are equipped with two (2) easy access grease zerk fittings.
➢ Main pivot joints should be greased after approximately every 50 hours of use.

Inspection Prior to Each Use
➢ Fasteners should be inspected to ensure all are in place and tight.
➢ Stop blocks as shown below serve a functional purpose to limit the rotation of the actuator. Make sure they are in place and do not remove them.
➢ Inspect all welds for cracks and repair or replace.
➢ Hydraulic oil and oil filter on the waste truck should be checked periodically and changed according to the manufacturer-recommended intervals.
SERVICE PARTS KITS

(If your parts differ from those shown, please contact Micromatic LLC. Customer support at (260)589-2136 Ext. 3211 for proper revision of repair manual)

<table>
<thead>
<tr>
<th>ITEM</th>
<th>QTY.</th>
<th>P/N</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>26-97-0303</td>
<td>ASSYKIT, TIPPER, SERVICE, BEAST WELDPLATE</td>
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<tr>
<td>2</td>
<td>1</td>
<td>26-97-0304</td>
<td>ASSYKIT, TIPPER, SERVICE, BEAST MOUNTING BRACKET (LEFT AND RIGHT SIDE)</td>
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<tr>
<td>3</td>
<td>2</td>
<td>26-97-0305</td>
<td>ASSYKIT, TIPPER, SERVICE, BEAST LIFTING ARM</td>
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<tr>
<td>4</td>
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<td>26-97-0306</td>
<td>ASSYKIT, TIPPER, SERVICE, BEAST ACTUATOR ACTUATOR ONLY 450687-S-B</td>
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<tr>
<td>5</td>
<td>2</td>
<td>26-97-0307</td>
<td>ASSYKIT, TIPPER, SERVICE, BEAST ACTUATOR ARM</td>
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<tr>
<td>6</td>
<td>1</td>
<td>26-97-0308</td>
<td>ASSYKIT, TIPPER, SERVICE, BEAST LATCH BAR</td>
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<tr>
<td>7</td>
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<td>26-97-0309</td>
<td>ASSYKIT, TIPPER, SERVICE, BEAST LATCHES</td>
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<tr>
<td>8</td>
<td>1</td>
<td>26-97-0310</td>
<td>ASSYKIT, TIPPER, SERVICE, BEAST FACEPLATE ASSY</td>
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<tr>
<td>9</td>
<td>1</td>
<td>26-97-0311</td>
<td>ASSYKIT, TIPPER, SERVICE, BEAST NAME AND WARNING LABELS</td>
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<tr>
<td>10</td>
<td>2</td>
<td>26-97-0312</td>
<td>ASSYKIT, TIPPER, SERVICE, BEAST STOP BLOCK BTM</td>
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<tr>
<td>11</td>
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<td>26-97-0313</td>
<td>ASSYKIT, TIPPER, SERVICE, BEAST STOP BLOCK TOP</td>
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<tr>
<td>12</td>
<td>2</td>
<td>26-97-0314</td>
<td>ASSYKIT, TIPPER, SERVICE, BEAST PIVOT ARMS</td>
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<tr>
<td>13</td>
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<td>26-97-0315</td>
<td>ASSYKIT, TIPPER, SERVICE, BEAST PIVOT BLOCK</td>
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<tr>
<td>14</td>
<td>2</td>
<td>26-97-0276</td>
<td>KIT - PIVOT PIN, BEAST ZERK AND RETAINING RING</td>
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<tr>
<td>15</td>
<td>1</td>
<td>450687-K1</td>
<td>SEAL KIT ONLY FOR ROTARY VANE ACTUATOR</td>
</tr>
</tbody>
</table>

**SERVICE PART KITS**

**MOUNTING DOWEL PINS AND FASTENERS INCLUDED**

**FACEPLATE SERVICE KIT ASSEMBLY INCLUDES:**
- (A010195)
  - ITEM 9 (26-97-0311)
  - ITEM 13 (26-97-0315)
  - HARDWARE FROM ITEM 7 (26-97-0309)
  - HARDWARE FROM ITEM 5 (26-97-0307)
➢ Refer to repair procedure “Repair Manual, HS-1.5 thru HS-015” to carry out maintenance on the 450687-S-B rotary actuator with seal kit 450687-K1. Please contact Customer Service for a copy of this manual or go to https://www.micromaticllc.com.
➢ For the latest information and updates on this user manual and Rotac Tippers, please go to https://www.micromaticllc.com.