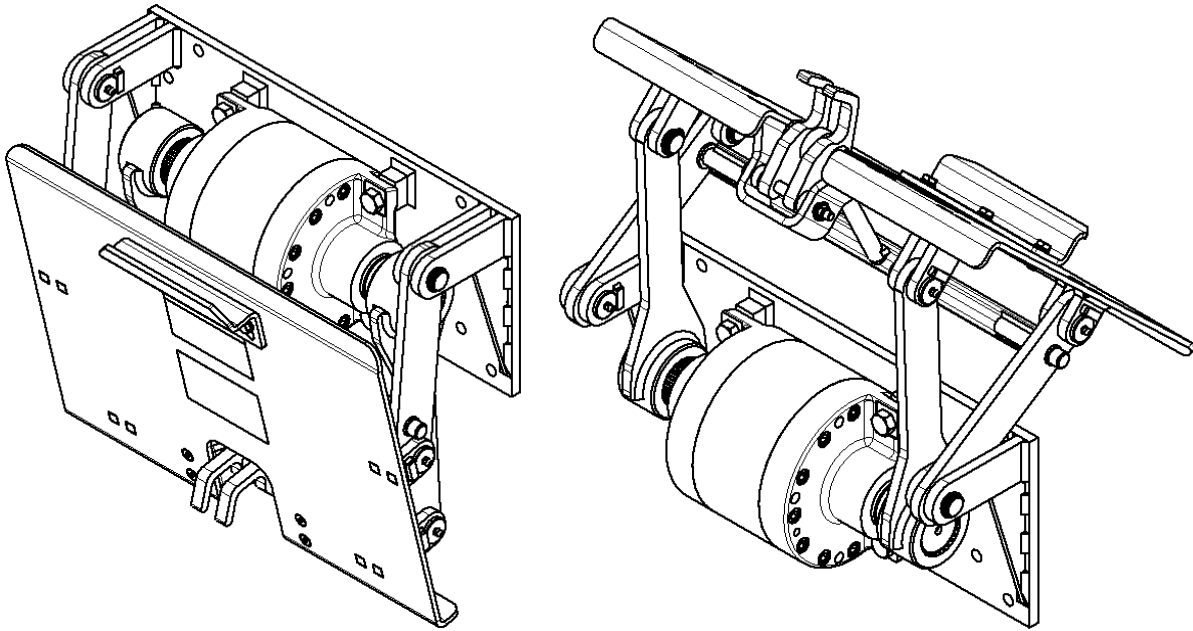




ROTAC[®]

TIPPERS

FROM MICROMATIC LLC



HEAVY DUTY CART TIPPER

Model: RT-R-V-12D-B

Installation, Service, and Use Manual

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.

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, 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 205 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.
- 5.) Reference 26-18-1001 for the waste tipper hydraulic tap-in kit user manual.

ONE 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 one (1) year 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.

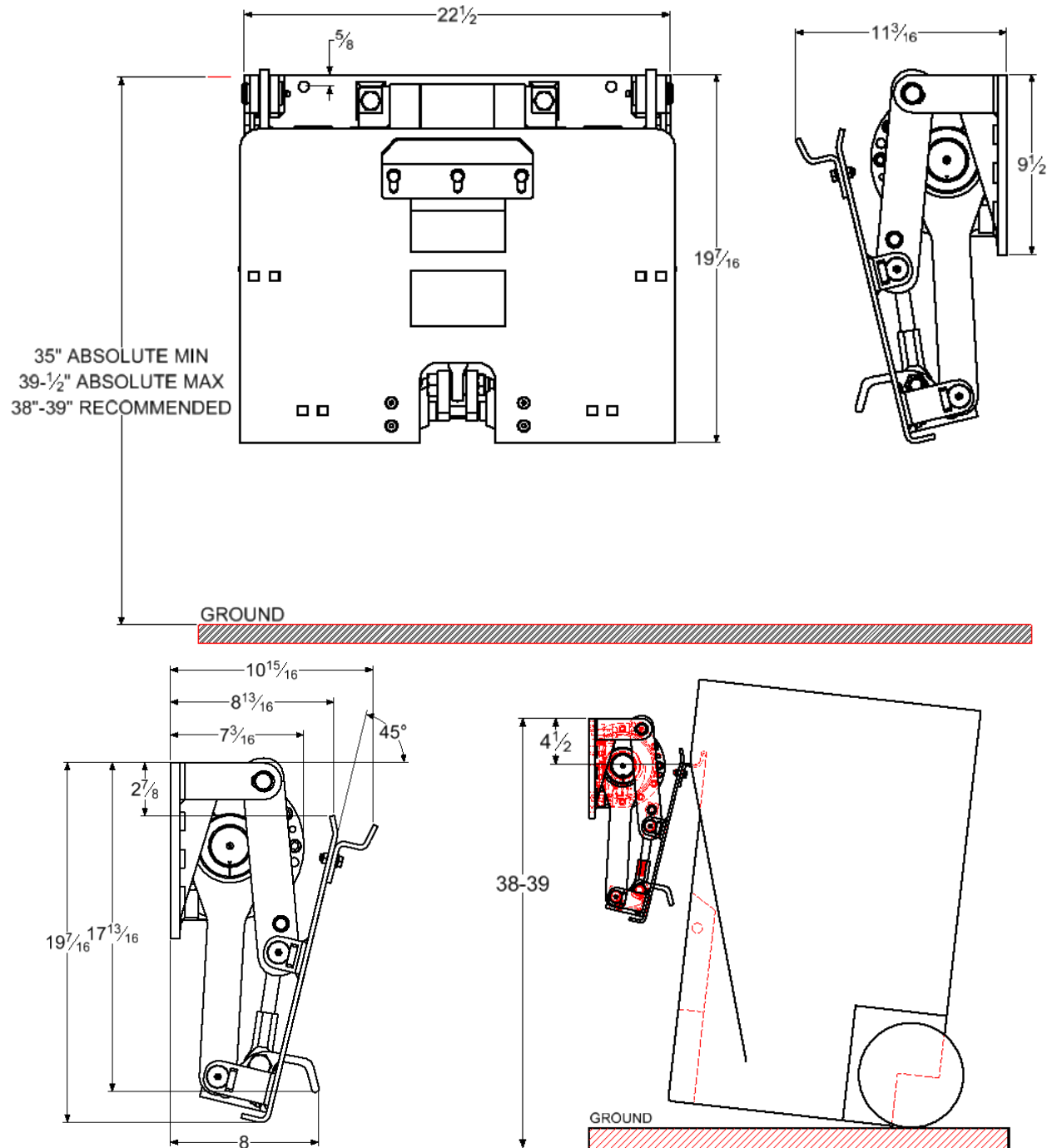
- This warranty is made IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, including any warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
- Seller's remedy for breach of any warranty shall be limited as defined below.
 - Seller agrees to repair or replace, without cost, any part of 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 (12) months after breach of warranty. If not made within said twelve (12) months period, it shall be conclusively deemed to have been waived.
 - The remedies for breach of warranty herein contained shall be exclusive.

TIPPER SPECIFICATIONS

Tipper Part Number	421792
Model Number	RT-12D
Mounting Weld Plate Part Number (sold separately)	26-11-5766
Cart Compatibility	ANSI Z245.60 Type B-US Two-Bar Carts Lift to bar dimension 14 1/2 – 15 1/4 "
Tipper Bar Compatibility	Application Dependent
Cycle Time	6-8 second cycle (up and down)
Finish	Powder Coat, High Visibility Color
Hydraulic Port Threads	3/4-16 UNF-2B Straight Threads
Hydraulic Actuator Type	Rotary Vane
Hydraulic Flow Rate Required	2.5 GPM
Recommended Pressure Setting	1,300 psi Minimum
Rated Maximum System Pressure	3,000 psi
Hydraulic Displacement	39.59 in ³
Rated Lifting Weight Capacity	400 lb Continuous use, 1000 lb max. Infrequent use
Dump Angle	45°
Recommended Mounting Height (Top of mounting plate to ground)	38" – 39"
Ground Clearance	18.5" – 19.5" (dependent on mounting height)
Dry Weight	205 lb
Design and Manufacture Location	USA
Warranty	1 year limited warranty

Note: Product specifications subject to change without notice.

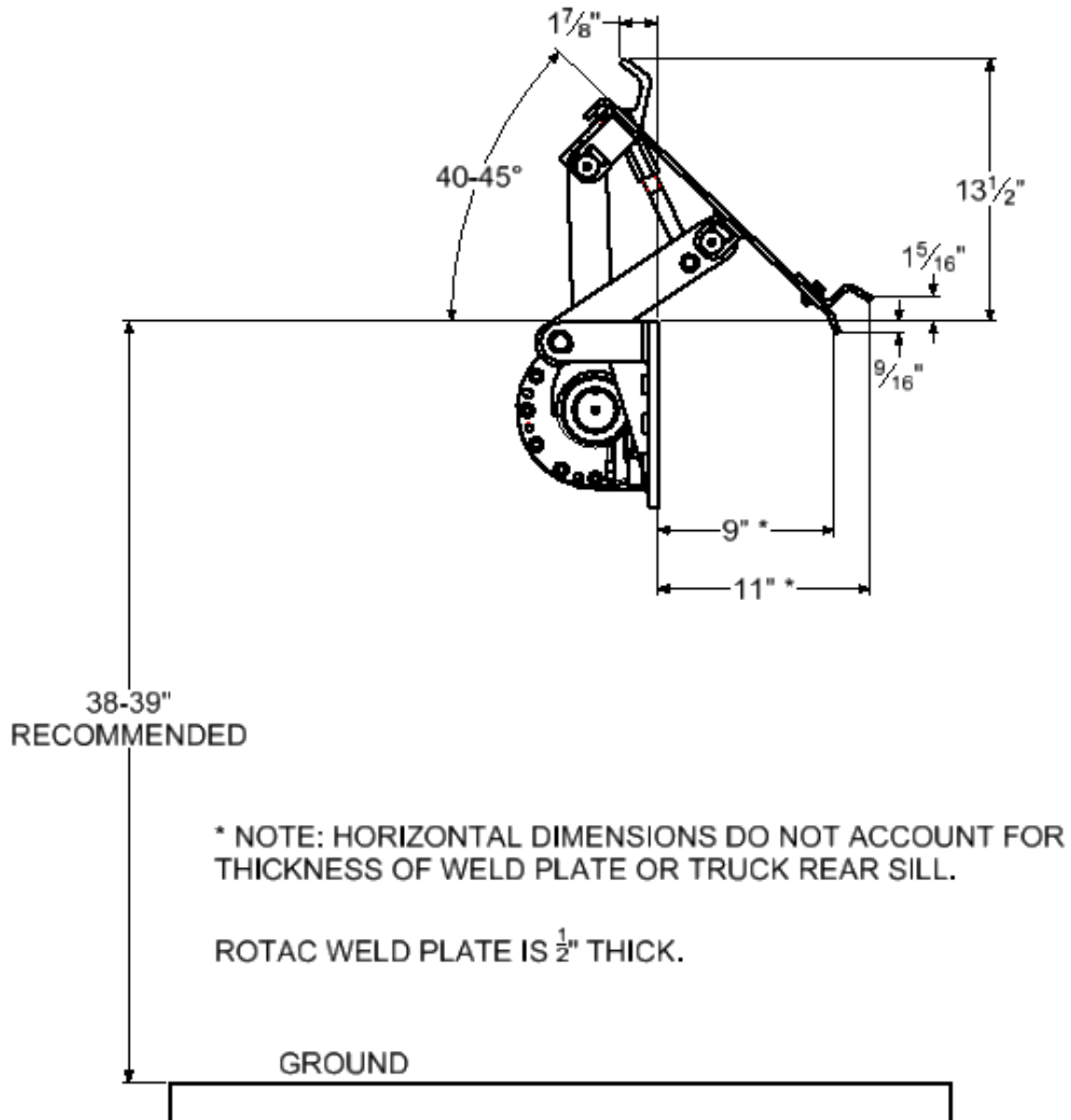
TIPPER DIMENSIONS



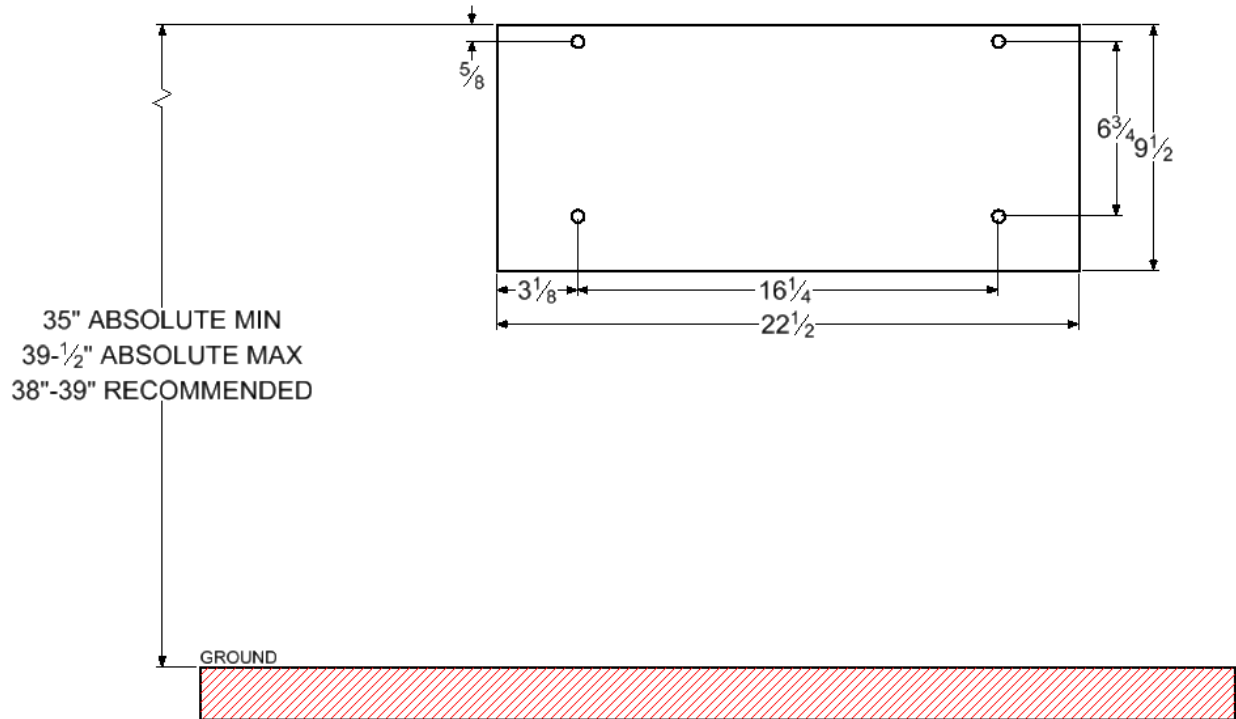
- Mounting height distance from ground is a critical dimension.
 - Lower catch down rod linkage of the tipper may require adjustment to properly grab lower bar of waste cart. See Adjustments Section.
- Each waste cart manufacturer has slightly different dimensions for contact points.

- 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.

TIPPER DIMENSIONS WHEN IN “DUMP” POSITION



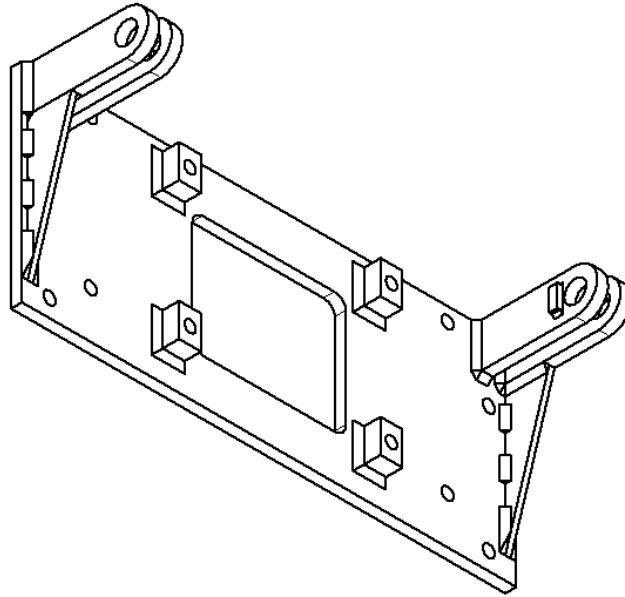
INSTALLATION DIMENSIONS OPTIONAL WELDING PLATE FOR MOUNTING



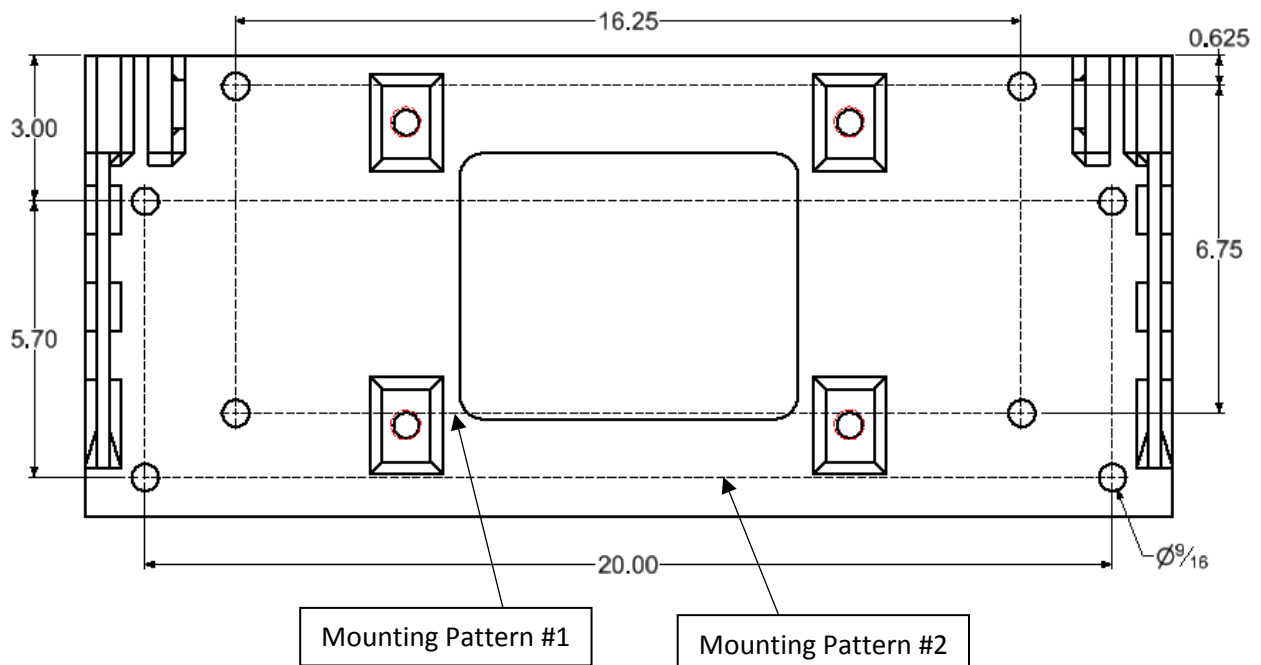
- Welding plate must be securely welded completely around its perimeter onto the truck body rear sill.
- Welding plate **MUST** be fully backed by material to support the plate long-term.
 - If necessary, weld supplemental strips for additional plate support.
- Stud threads require 1/2-13 UNC grade 8 nuts to mount tipper to weld plate.
 - Recommended installation torque: 40 ft-lb.
- Proper mounting distance from ground required to ensure proper function.
 - Lower catch down rod linkage for lower bar catch on waste cart may require adjustment. See Adjustments Section.
- **CAUTION:** Never weld on truck unless a ground is in place, the battery is disconnected, and no flammable objects are present.

TIPPER MOUNTING OPTIONS

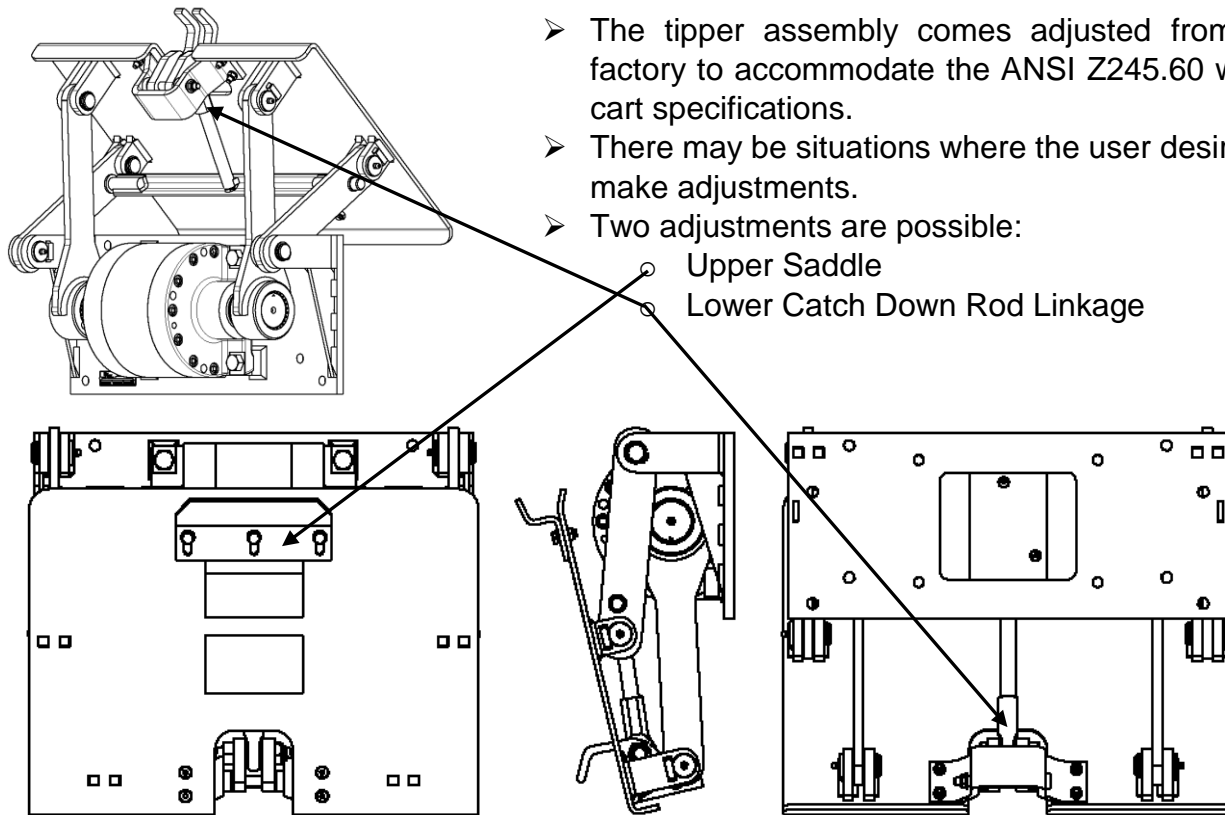
The standard tipper base mounting plate is equipped with two mounting patterns:



Other tipper parts removed for clarity



ADJUSTMENTS



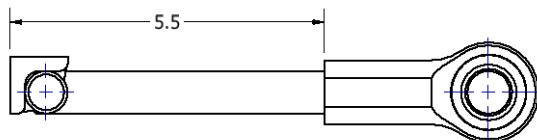
- The tipper assembly comes adjusted from the factory to accommodate the ANSI Z245.60 waste cart specifications.
- There may be situations where the user desires to make adjustments.
- Two adjustments are possible:
 - Upper Saddle
 - Lower Catch Down Rod Linkage

Upper Saddle Adjustment *

- Saddle height can be adjusted up and down a length of $\frac{3}{4}$ " with a $\frac{7}{32}$ " Allen key.
- This adjustment will affect the height and timing the waste can is 'picked up'.
- Adjusting the saddle may require the lower catch down rod linkage to also be adjusted. The down rod linkage profile may contact the bar and not capture it upon going over-center, resulting in the waste cart being ejected into the packer body.

Lower Catch Down Rod Linkage *

- The factory setting is 5.50" from top of the angle iron to the flat of the rod end.



- To adjust: Remove rod end from latches, and turn the eyelet(s).
 - Clockwise to shorten length, which will raise the lower catch.
 - Counterclockwise to extend length, which will lower the lower catch.

*** Trial all adjustments on empty waste cart prior to releasing unit into service ***

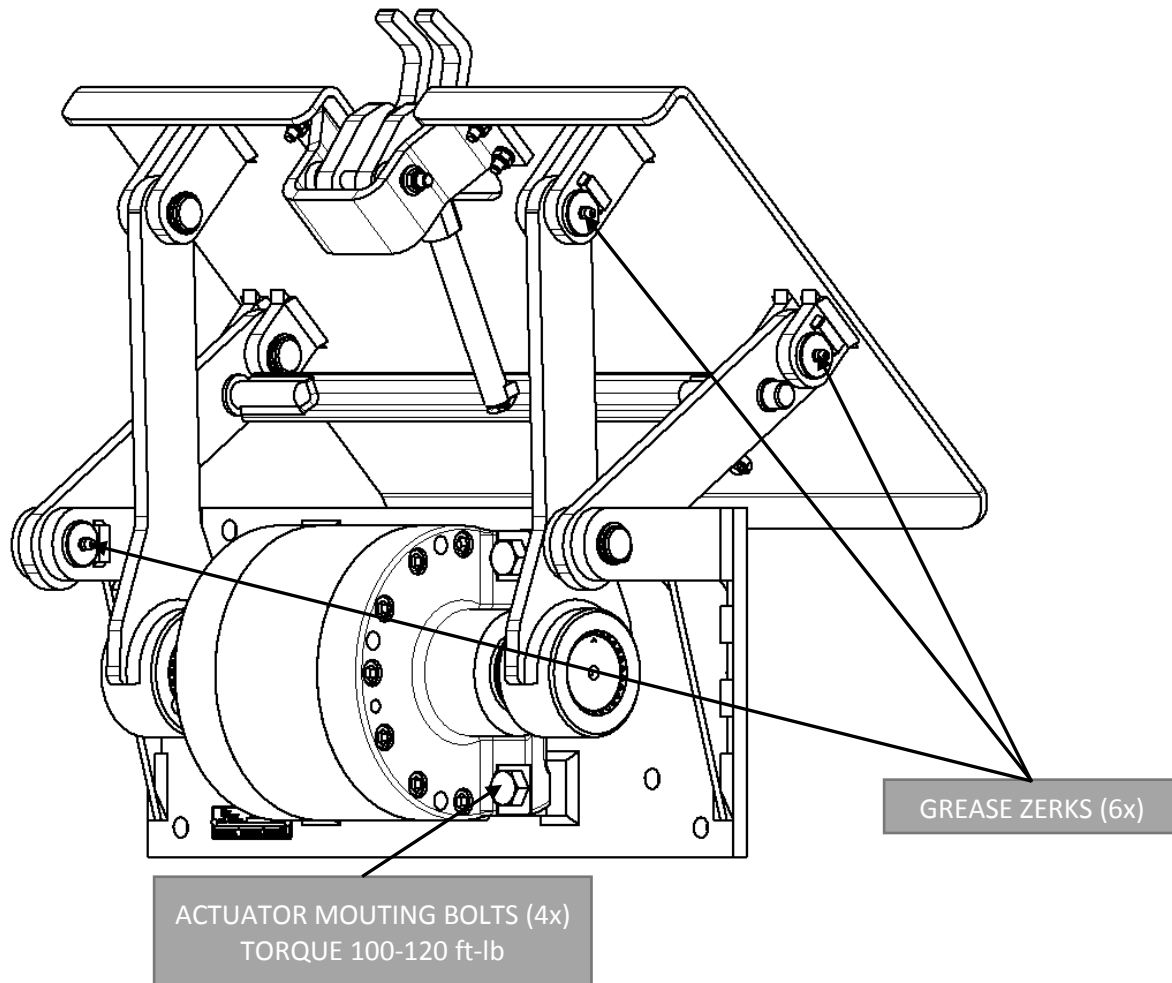
MAINTENANCE

Lubrication

- Pivot joints are equipped with six (6) easy access grease zerk fittings.
- Main pivot joints should be greased after approximately every 50 hours of use.

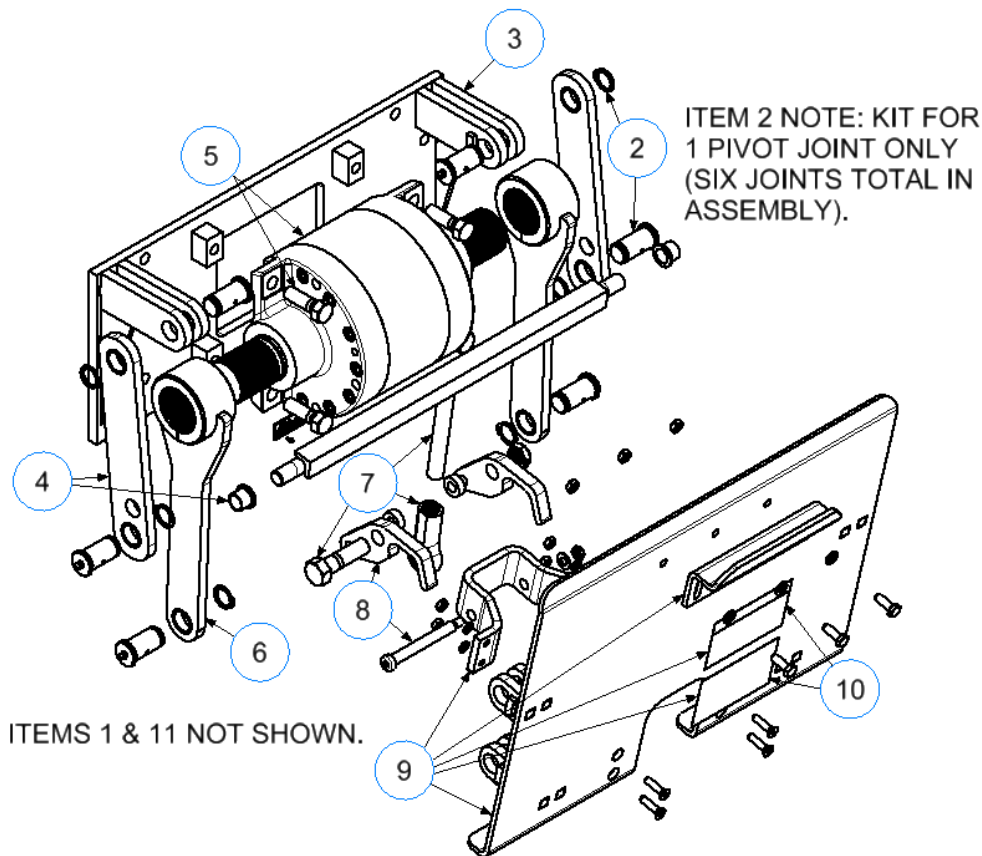
Inspection Prior to Each Use

- Fasteners should be inspected to ensure all are in place and tight.
- 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

SERVICE PART KITS			
ITEM	QTY.	P/N	DESCRIPTION
1	1	26-97-0275	WELDING PLATE WITH HARDWARE
2	1	26-97-0276	KIT- PIVOT PIN, GREASE ZERK, AND RETAINING RING (SET OF 1 EA.)
3	1	26-11-5749	MOUNTING PLATE WELDMENT
4	1	26-97-0278	KIT – LIFTING ARM ASSEMBLY (SET OF 2 ARMS)
5	1	26-97-0279	ROTARY VANE ACTUATOR WITH MOUNTING BOLTS
6	1	26-97-0280	KIT – ACTUATOR ARM ASSEMBLY (SET OF 2 ARMS)
7	1	26-97-0281	KIT – SPREADER BAR WITH HARDWARE
8	1	26-97-0282	KIT – LATCHES WITH HARDWARE
9	1	26-97-0284	FACEPLATE ASSEMBLY WITH PIVOT BLOCK, SADDLE, AND LABELS
10	1	26-97-0285	KIT – NAME AND WARNING LABELS
11	1	420659-K1	SEAL KIT ONLY FOR ROTARY VANE ACTUATOR



- Refer to repair procedure 26-17-0116 to carry out maintenance on the 420659-S-B rotary actuator with seal kit 420659-K1. Please contact Customer Service or go to <http://www.rotactippers.com>.
- For the latest information and updates on this user manual and Rotac Tippers, please go to <http://www.rotactippers.com>.