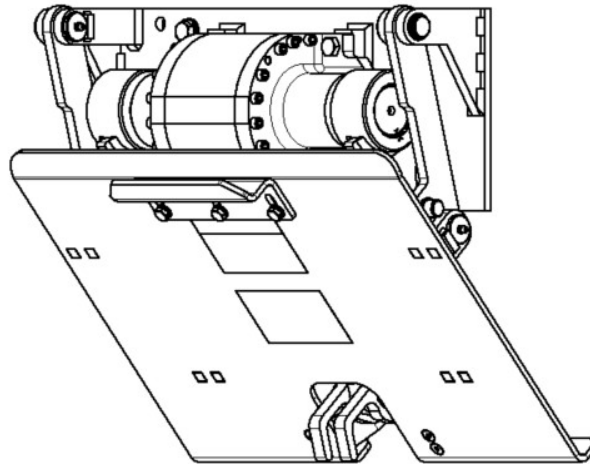




# **ROTAC<sup>®</sup>**

# **TIPPERS**

**FROM MICROMATIC LLC**



## **SCOOP WASTE CART TIPPER**

**Model: SCOOP**

**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 of the tipper or packing blade.
- **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** modify the tipper.

### **INSTALLATION PREPARATION**

- 1.) Please read this manual completely and familiarize yourself with all 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 over 200 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.
- 6.) **MUST** ensure you have a hydraulic flow control device to control speed of tipper.
- 7.) **MUST** ensure you have a hydraulic pressure relief valve in the hydraulic circuit as close as possible to the actuator to prevent over pressurization and hydraulic pressure spikes.

### **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 that:
  - 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 twenty-four (24) months after breach of warranty. If not made within said twenty-four (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

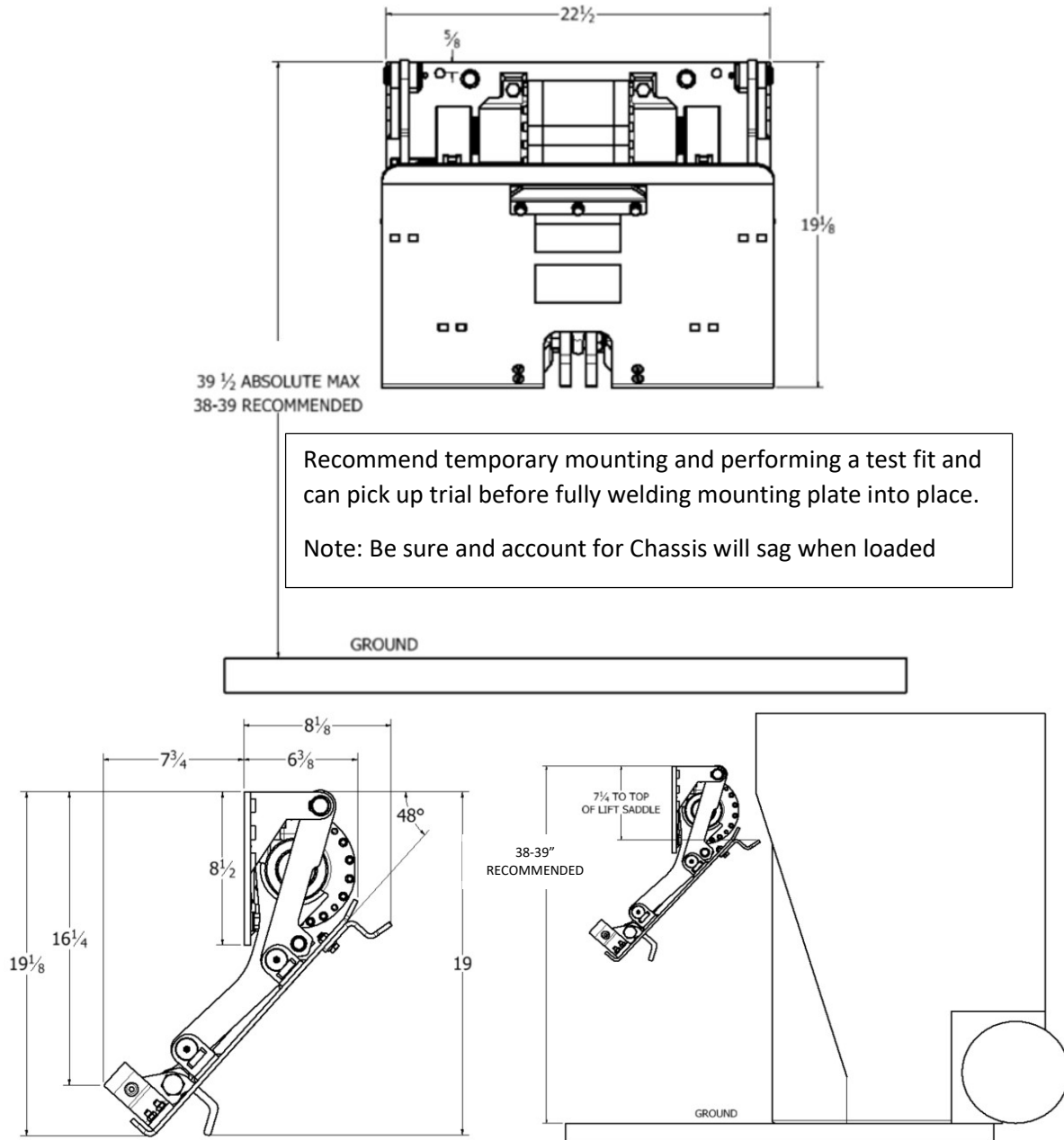
Tipper Part Number	A010050 W/O Weld Plate for mounting A010205 With Weld Plate for mounting
Model Name	SCOOP
Mounting Weld Plate Part Number with hardware (sold separately for A010050 and for service)	26-97-0275
Cart Compatibility	ANSI Z245.60 Type B-US Two-Bar Carts Lift to bar dimension 14 1/2 – 15 1/4 "
Tipper Bar Compatibility	Application Dependent
Cycle Time	6-8 second cycle (up and down total)
Finish	Powder Coat, High Visibility Color
Hydraulic Port Threads	9/16-18 UNF-2B Straight Threads
Hydraulic Actuator Type	Rotary Vane
Hydraulic Flow Rate Required	3.3 GPM
Pressure Setting	2,200psi 1,300 psi Minimum
Rated Maximum System Pressure Pressure relief <b>MUST</b> be in hydraulic circuit	3,000 psi
Hydraulic Displacement	38.40 in <sup>3</sup>
Rated Lifting Weight Capacity	400 lb Continuous use, 800 lb max. Infrequent use
Dump Angle	45°
<b>Recommended Mounting Height (Top of mounting plate to ground)</b>	<b>38" – 39"</b>
Ground Clearance	18.5" – 19.5" (dependent on mounting height)
Dry Weight	A010050 = 206 lbs. A010205 = 232 lbs.
Design and Manufacture Location	USA, Berne Indiana
Warranty	2-year limited warranty

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

## PRODUCT UPDATES

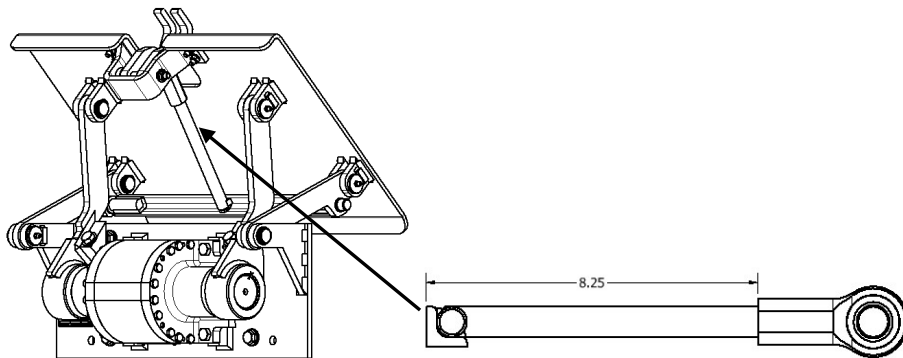
Micromatic reserves the right to make improvements and changes to the product without notice. This manual covers the first two versions.

### 1<sup>ST</sup> VERSION SCOOP TIPPER DIMENSIONS AND INSTALLATION

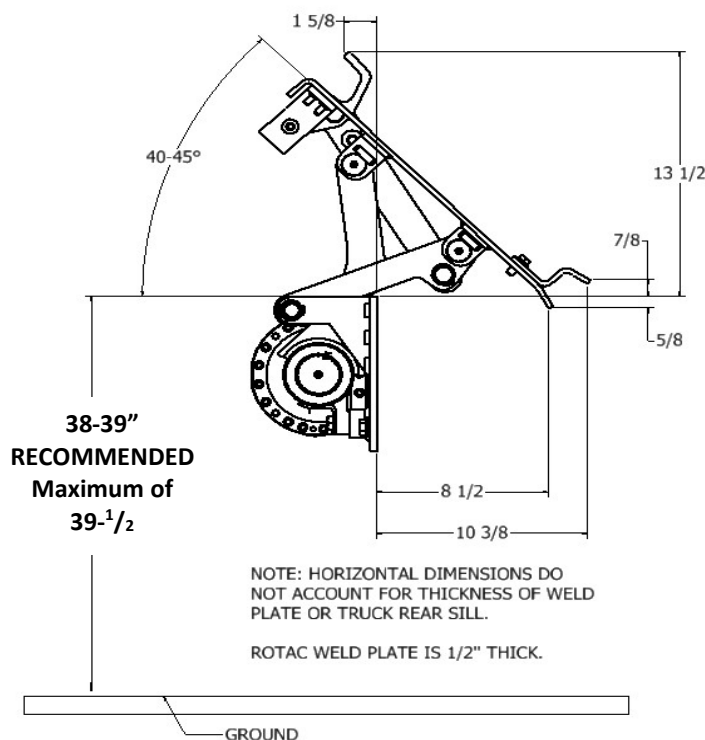


- The Scoop tipper has variability in mounting height to “Scoop” up the waste cart and dump it. Position waste cart before dumping so the waste cart’s upper cavity will be grabbed by the saddle of the tipper when it is in motion.

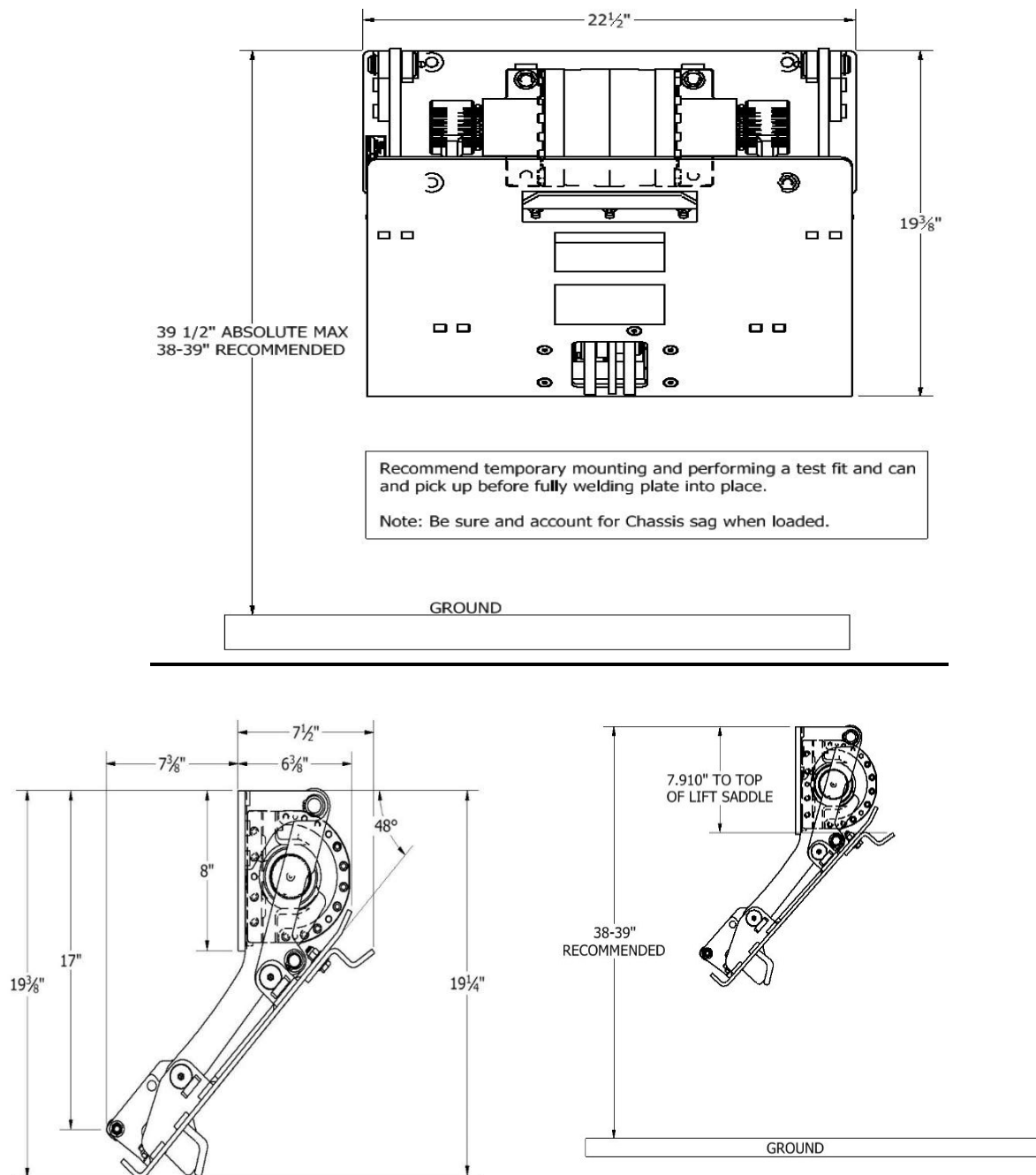
- Each waste cart manufacturer has differing dimensions for contact points. The 1<sup>st</sup> version Scoop ships with the saddle in the highest position. It must be adjusted to work with the can. When in the dump position, the can should have some play in between the saddle and hooks. If the can is tight, then the saddle needs to be moved down to allow for some play. **\*\*OVER GRIPPING CANS MAY CAUSE DAMAGE TO THE CANS AND/OR TO THE TIPPER\*\***
- The 1<sup>st</sup> version tipper assembly comes with the lower catch down rod linkage properly adjusted for an ANSI Z245.60 Type B can. The factory setting is 8.25" from top of the angle iron to the flat of the rod end.
  - To adjust: Remove rod end from latches and turn the eyelet.
    - Clockwise to shorten length, which will raise the lower catch.
    - Counterclockwise to extend length, which will lower the lower catch.



### 1<sup>ST</sup> VERSION SCOOP TIPPER DIMENSIONS WHEN IN "DUMP" POSITION



## 2<sup>ND</sup> VERSION SCOOP TIPPER DIMENSIONS AND INSTALLATION

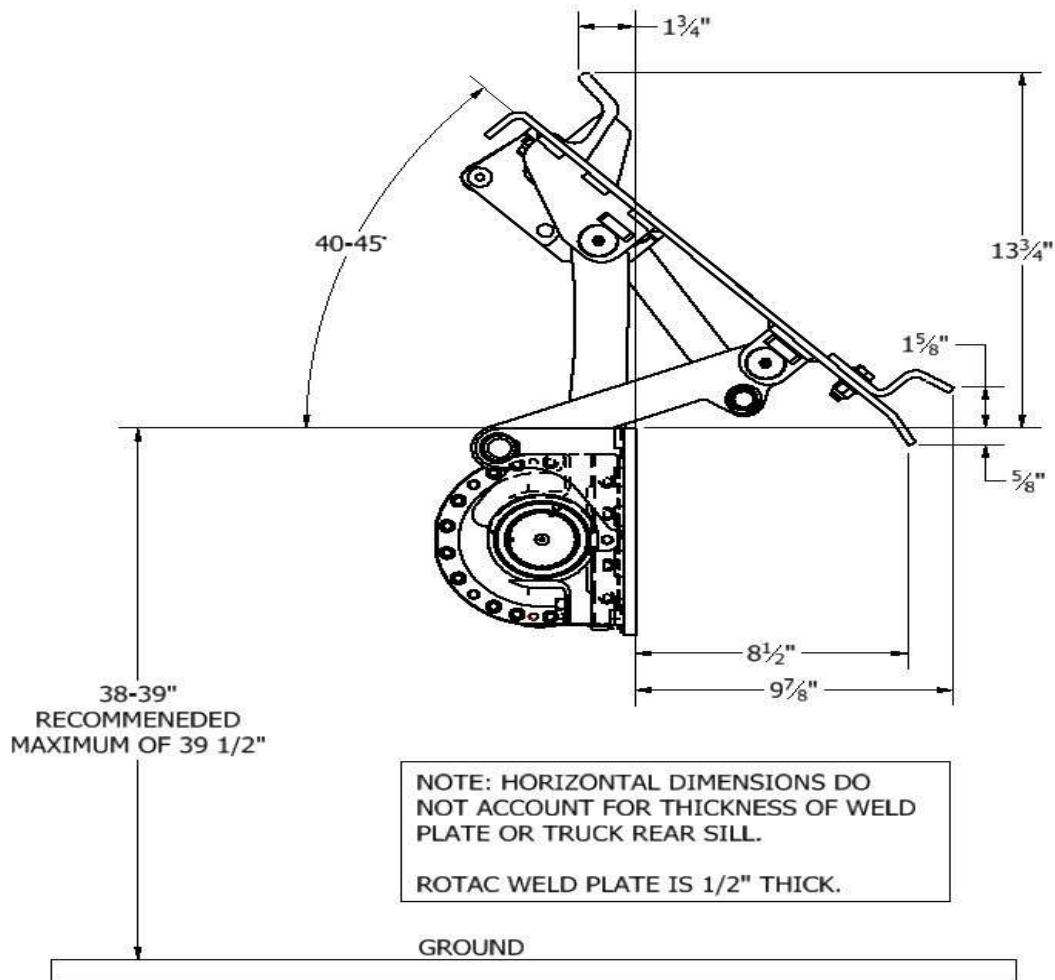


- The Scoop tipper has variability in mounting height to “Scoop” up the waste cart and dump it. Position waste cart before dumping so the waste cart’s upper cavity will be grabbed by the saddle of the tipper when it is in motion.
- Each waste cart manufacturer has differing dimensions for contact points. The 2nd version Scoop ships with the saddle in the lowest position. It must be adjusted to



work with the can. When in the dump position, the can should have some play in between the saddle and hooks. If the can is tight, then the saddle needs to be moved down to allow for some play. **\*\*OVER GRIPPING CANS MAY CAUSE DAMAGE TO THE CANS AND/OR TO THE TIPPER\*\***

## 2<sup>ND</sup> VERSION SCOOP TIPPER DIMENSIONS WHEN IN "DUMP" POSITION

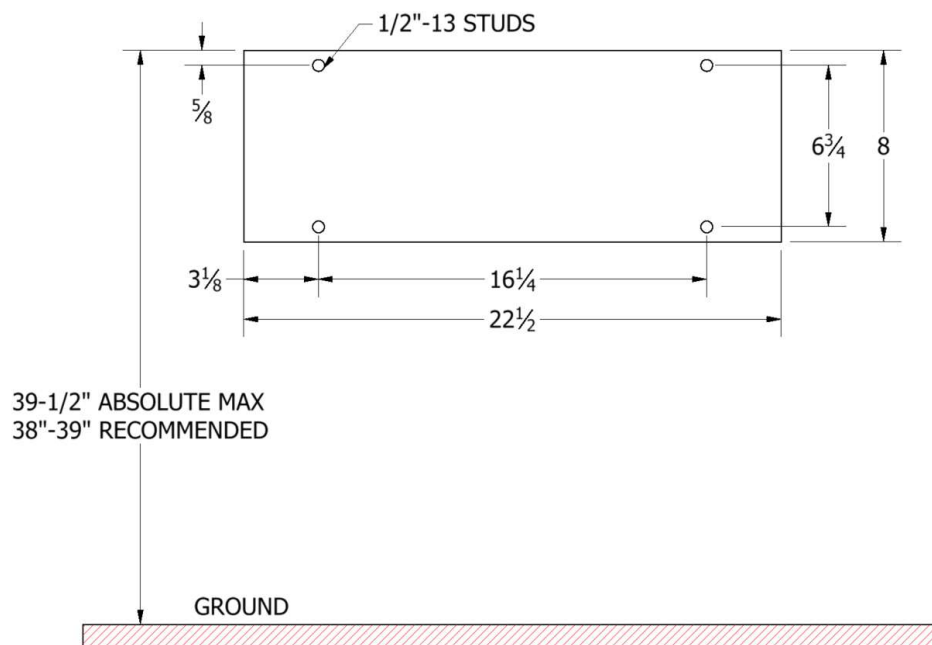


## **1<sup>st</sup> and 2<sup>ND</sup> Version SCOOP:**

- Installer to verify compatibility with kick bars and other equipment that may be on vehicle. Micromatic offers other models compatible with kick bars.
- 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.
- **CAUTION:** A flow control device **MUST** be used to control the flow of hydraulic fluid which affects the speed of the actuator. Running without a flow control device can be dangerous and lead to damage to the tipper and waste can.
  - Recommended speed is a cycle of 6-8 seconds.
  - Micromatic sells a flow control – see Service Parts section.

## **INSTALLATION DIMENSIONS**

### **OPTIONAL WELDING PLATE FOR MOUNTING**



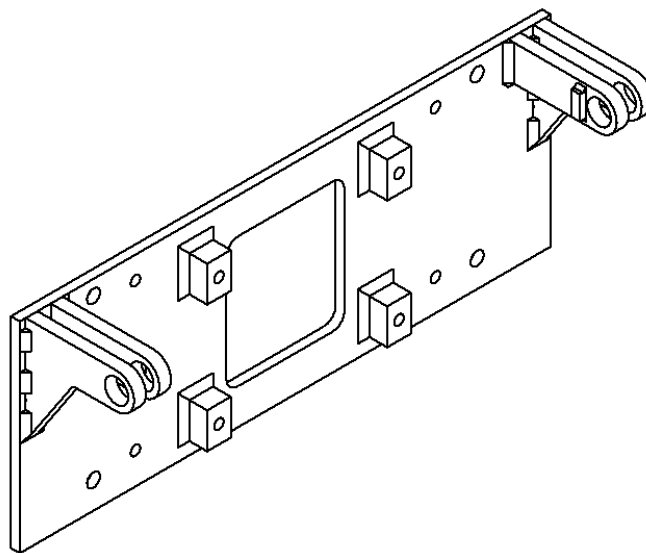
(Contact Micromatic LLC to purchase optional accessory, see service parts kit.)

- 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: 60 ft-lb with thread lock applied.
- Proper mounting distance from ground required to ensure proper function.

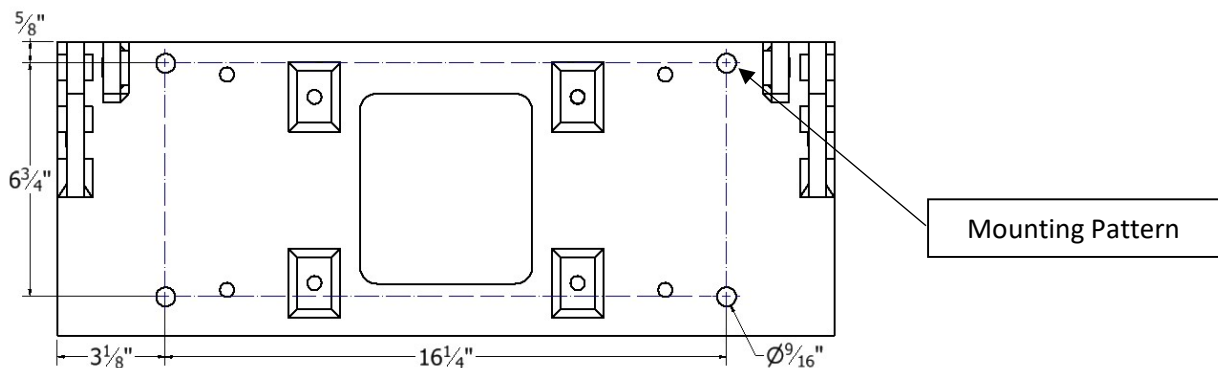
- **WARNING:** Never weld on truck unless a ground is in place, the battery is disconnected, and no flammable objects are present.
- **WARNING:** A flow control device **MUST** be used to control the flow of hydraulic fluid which affects the speed of the actuator. Running without a flow control device can be dangerous and lead to damage to the tipper and waste can.
  - Recommended speed is a cycle of 6-8 seconds.
  - Micromatic sells a flow control – see Service Parts section.
- **WARNING:** The hydraulic plumbing **MUST** have a pressure relief valve installed in the hydraulic circuit on the actuator pressure lines to protect the actuator from damage from pressure spikes.

## TIPPER MOUNTING OPTIONS

### 1<sup>ST</sup> Version SCOOP:

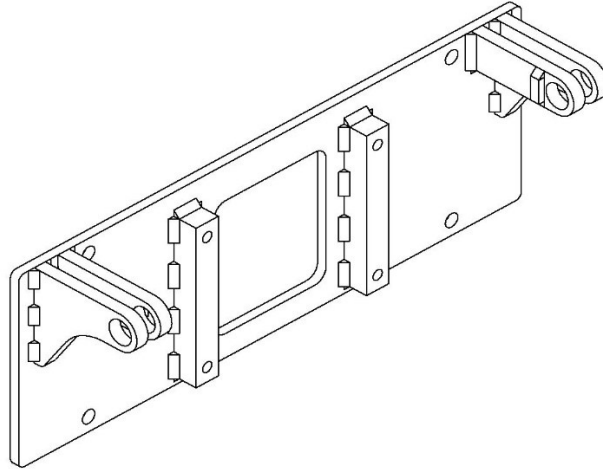


*Other tipper parts removed for clarity*

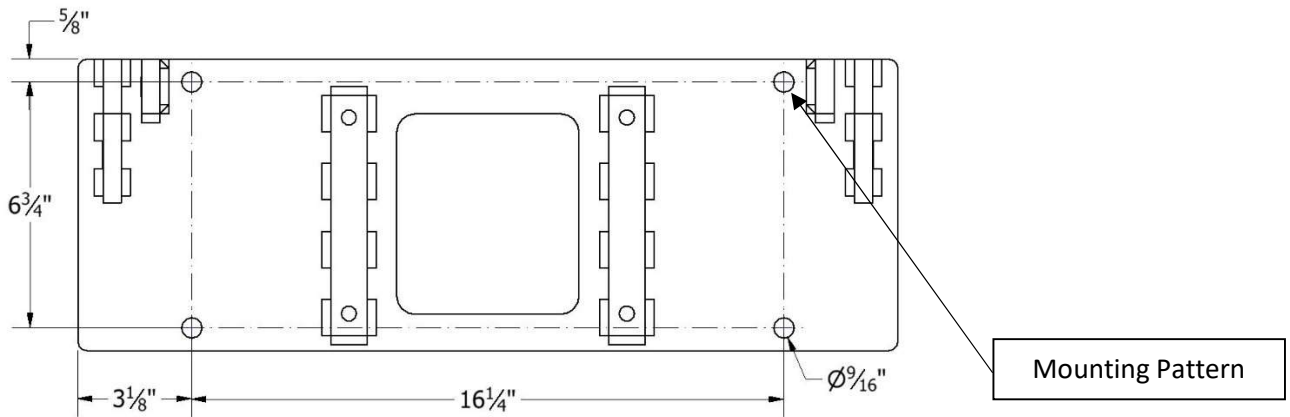


## TIPPER MOUNTING OPTIONS

### 2<sup>ND</sup> Version SCOOP:



*Other tipper parts removed for clarity*



## MAINTENANCE – all versions

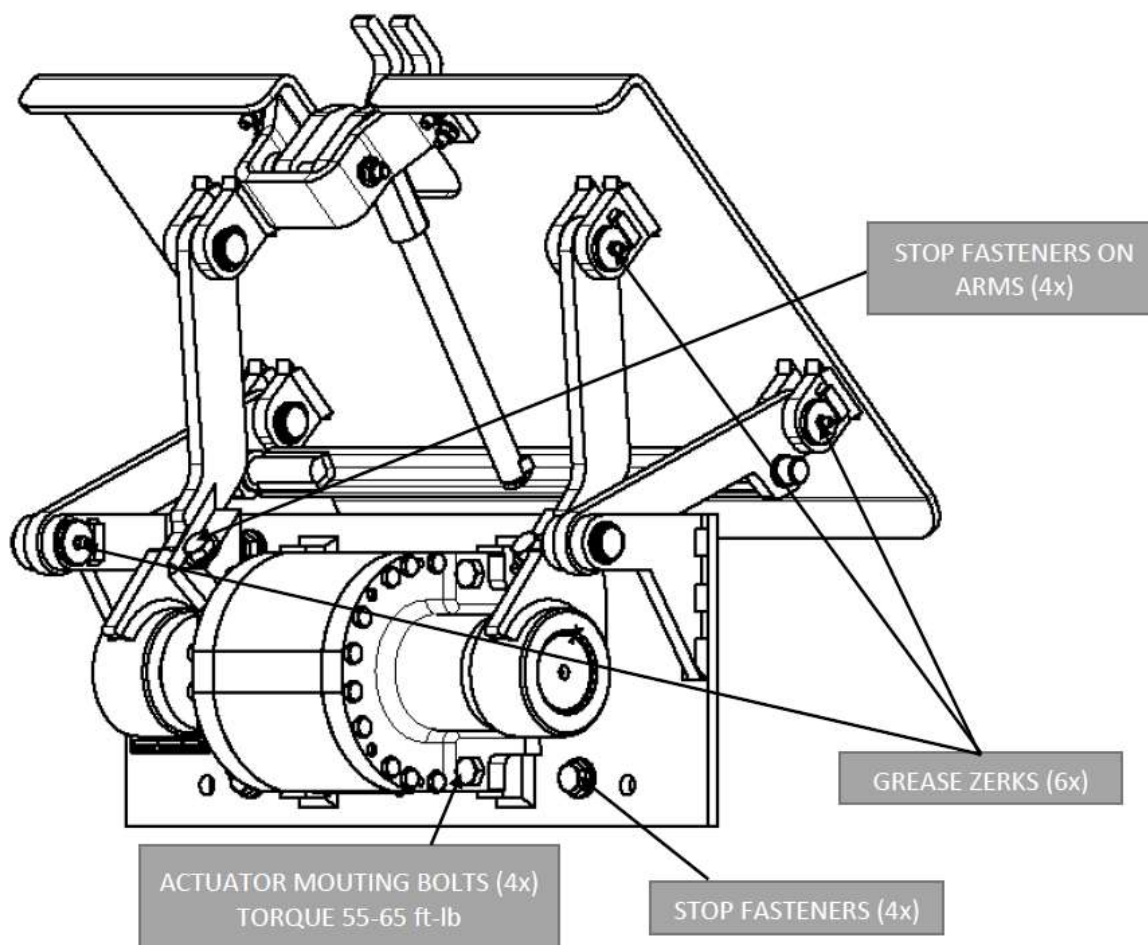
### Lubrication

- 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 to flush contamination out of pivot joint which will

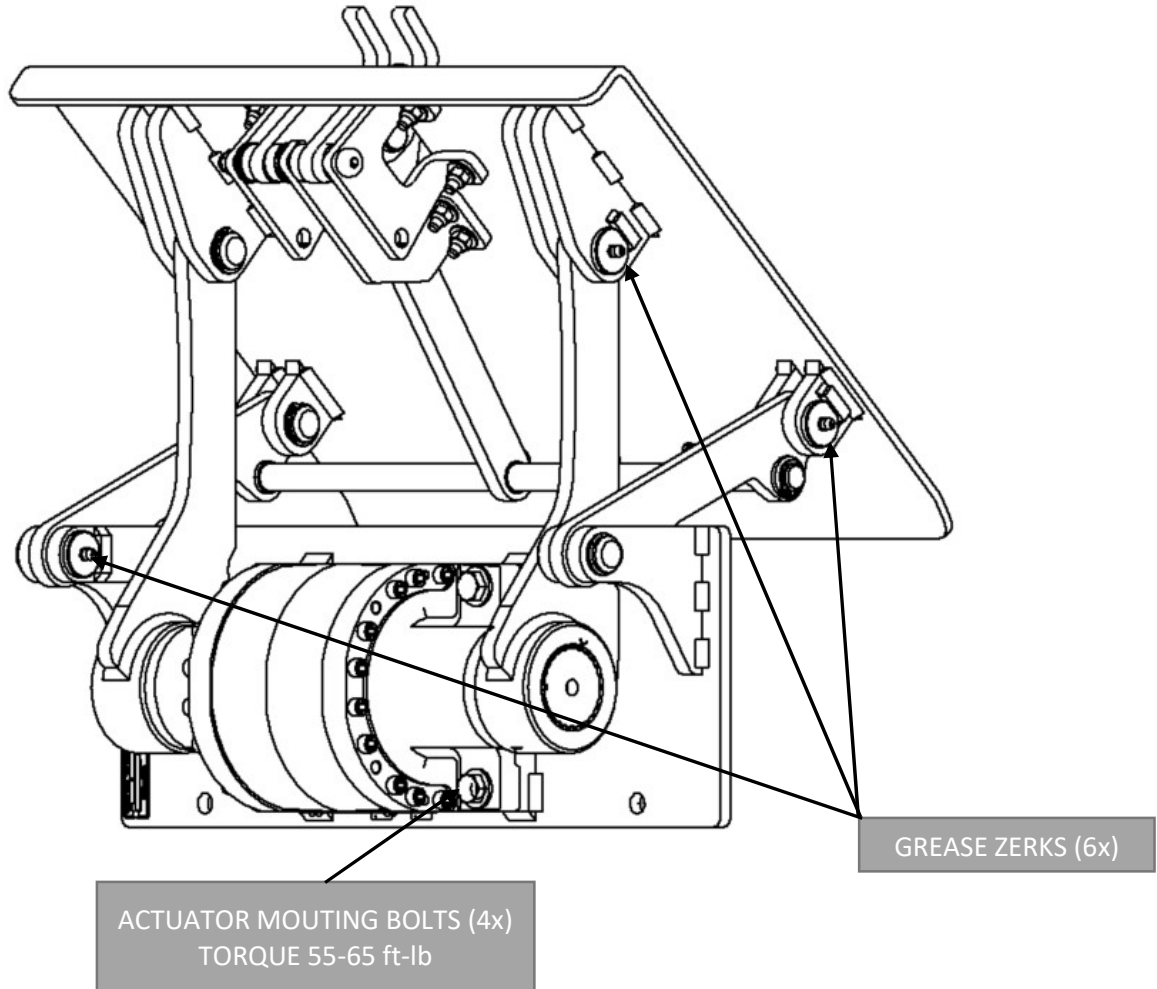
### Inspection Prior to Each Use

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

### 1<sup>ST</sup> Version SCOOP:



**2<sup>ND</sup> Version SCOOP:**



**SERVICE PARTS KITS**

**1<sup>ST</sup> Version SCOOP:**

(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)

BILL OF MATERIAL			
ITEM	QTY.	PART NUMBER	DESCRIPTION
1	1	A010051	PLATE, MOUNTING, TIPPER
2	2	A010213	ARM, SPREADER, TIPPER, SCOOP, ASSY
3	1	26-11-5766	PLATE, WELD, TIPPER, ASM
4	1	A010091	ARM, ACTUATOR, WELDED STOP, LEFT ASM
5	1	A010090	ARM, ACTUATOR, WELDED STOP, RIGHT ASM
6	1	A010056	WELDMENT, PLATE, FACE, TIPPER SCOOP
7	1	A010214	BAR, SPREADER, TIPPER, ZYD
8	1	26-11-5753	SADDLE, TIPPER
9	1	A010058	BRACKET, PIVOT, TIPPER
10	2	26-11-5750	LATCH, ROTAC WASTE TIPPER
11	2	A010216	ARM, IDLER, ASM, TIPPER SCOOP
12	6	A010098	PIN, PIVOT, ASSEMBLY, TIPPER
13	2	A010083	HEAD-SS-010-1V-Z-SPEC
14	1	A010082	BODY-SS-010-**-**-**-2-SPEC
15	1	A010081	SHAFT SS-010-1V-**-Z-A
16	2	26-11-0336	NAME PLATE - ROTAC & HYDROAC
17	1	26-11-0337	LABEL, NAME, ROTAC WASTE TIPPER
18	1	26-11-0338	LABEL, WARNING, ROTAC WASTE TIPPER
19	1	26-12-2670	BOLT, SHOULDER, 0.5000"OD, 4"LG, 3/8"-16 THREAD
20	2	26-12-2675	SPACER, PLASTIC, 0.51"ID, 1.00"OD, 0.38"THK
21	4	26-12-2631	WASHER, FLAT, 0.41"ID, 0.81"OD, 0.06" THK, Zn, YELLOW
22	8	26-11-5772	RING, EXTERNAL RETAINING, 1.00ID"
23	5	26-12-2664	SCREW, HHCS, 1/2"-13, 1.75"LG, GRADE 8, Zn-Al
24	4	A010069	SCREW, FHCS, 5/16"-18, 1.25"LG, ZINCPLATED, CLEAR
25	4	26-12-2627	WASHER, LOCK, SPLIT, 0.32"ID, 0.58"OD, 0.08"THK
26	14	26-12-2630	WASHER, FLAT, 0.53"ID, 1.06"OD, 0.09"THK, ZINCPLATED
27	8	26-12-2684	SCREW, HHCS, 1/2"-13, 0.500"LG, 18-8 STAINLESS STEEL
28	1	A010217	PIN, CLEVIS, .75" OD, 2.50" USABLE LEN
29	1	26-11-5758	PIN, COTTER, 1/8 X 1 1/2, EXTENDED PRONG SQUARE CUT TYPE, CORROSION RESISTANT STEAL
30	1	26-12-2699	NUT, NYLOCK, 1/2"-13, GRADE 8, ZINCPLATED, HEX, JAM
31	1	A010159	WASHER, FLAT, 0.81"ID, 1.47"OD, Zn-AL
32	4	26-12-2621	NUT, HEX, 1/2"-13, GRADE 8, ZINCPLATED
33	3	26-12-2704	SCREW, HHCS, 3/8"-16 X 1.25" LG, GRADE 8, Zn-AL
34	4	26-12-2697	NUT, NYLOCK, 3/8"-16, GRADE 8, ZINCPLATED, YELLOW
35	4	26-12-2696	NUT, NYLOCK, 5/16"-18, GRADE 8, ZINCPLATED, YELLOW

TIPPER INFORMATION	
MAX. PRESSURE	3000 PSI
MAX. TORQUE	27000 IN-LB
FLOW RATE FOR 6-SECOND CYCLE	3.3 GPM
FLOW RATE FOR 8-SECOND CYCLE	2.5 GPM
APPROX. TIPPER DRY WEIGHT	148 LB
RECOMMENDED HYDRAULIC FLUID	32W MINERAL-BASED

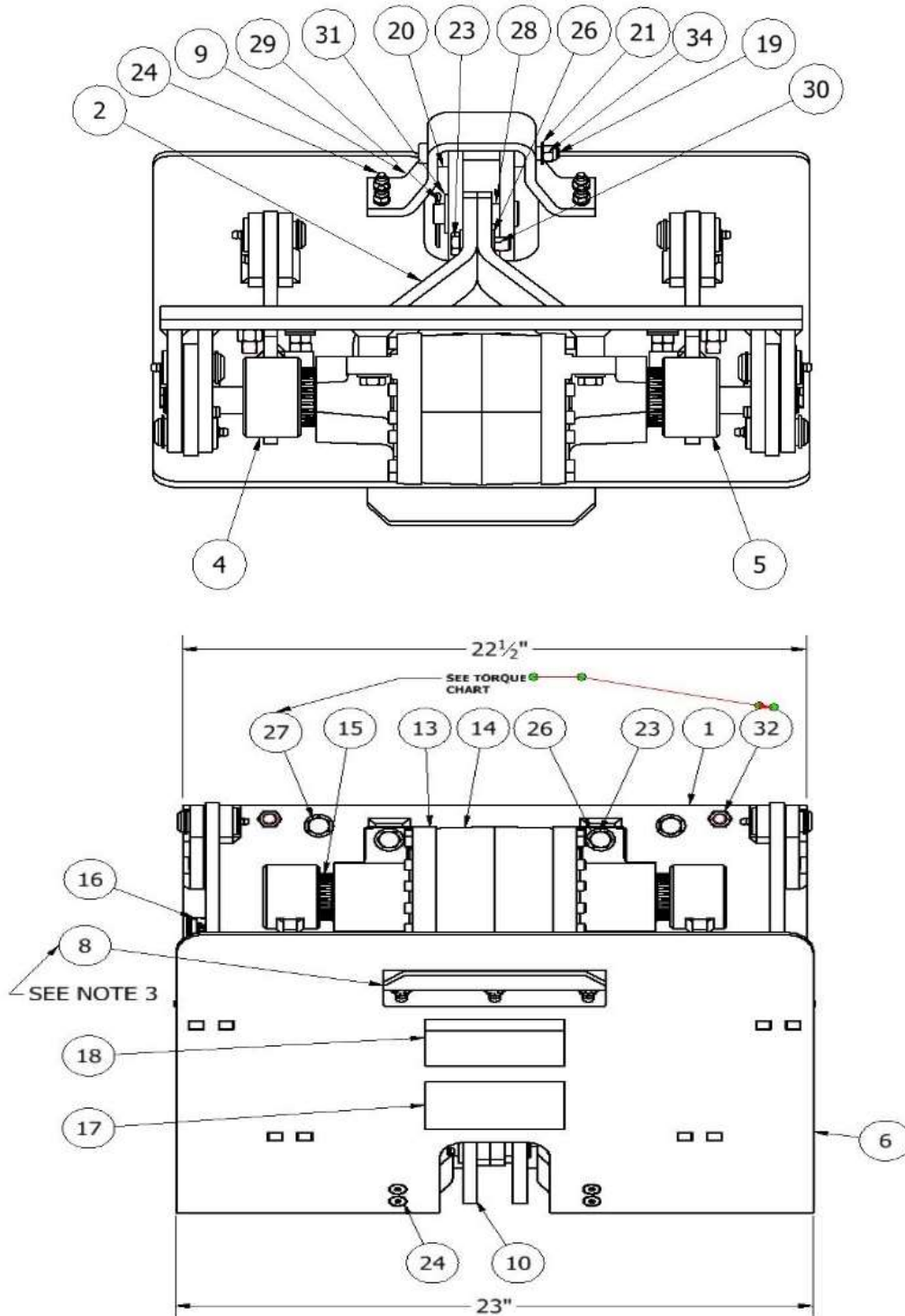
CAP SCREW & NUT TORQUE CHART	
ITEM	TORQUE (FT-LB)
14	30
15	24
23	50-60

ADD MEADIUM STRENGTH THREAD LOCK TO ALL FASTENER THREADS

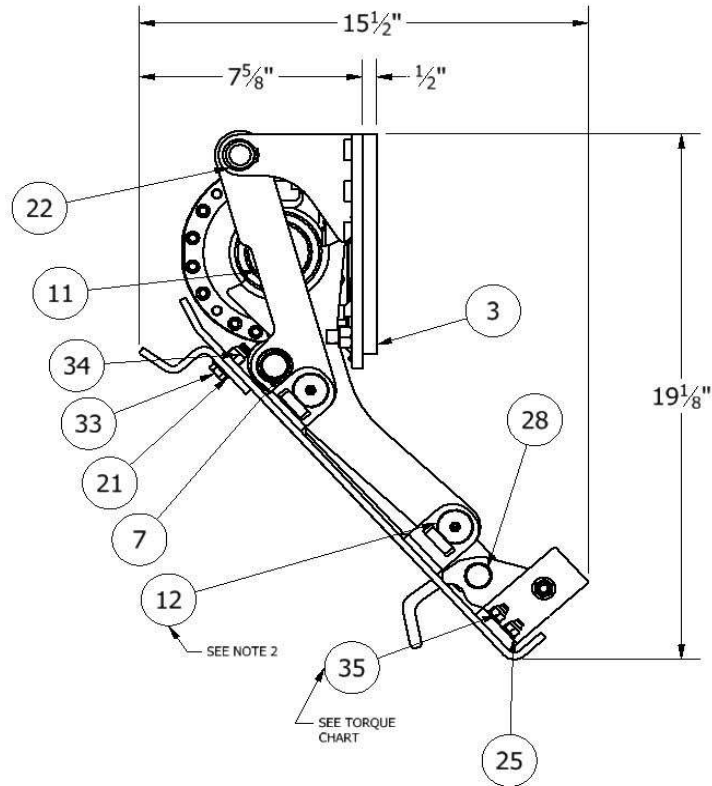
<b>SERVICE PART KIT NUMBERS FOR 1<sup>ST</sup> VERSION SCOOP</b>			
<b>KIT NUMBER</b>	<b>CONTAINS PART NUMBER</b>	<b>DESCRIPTION</b>	<b>QUANTITY</b>
26-97-0275	26-11-5766	PLATE, WELD, TIPPER, ASM	1
	26-12-2621	NUT, HEX, 1/2"-13, GRADE 8, ZINCPLATED	4
	26-12-2630	WASHER, FLAT, 0.53"ID, 1.06"OD, 0.09"THK, ZINCPLATED	4
26-97-0276	26-11-5772	RING, EXTERNAL RETAINING, 1.00ID	1
	A010098	PIN, PIVOT, ASSEMBLY, TIPPER	1
26-97-0293	26-11-0336	NAME PLATE - ROTAC & HYDROAC	1
	26-12-0138	SCREW, TYPE U DRIVE, METALLIC, 0.114"OD, 0.25"LG, PLATED	2
	26-12-2630	WASHER, FLAT, 0.53"ID, 1.06"OD, 0.09"THK, ZINCPLATED	8
	26-12-2684	SCREW, HHCS, 1/2"-13, 0.500"LG, 18-8 STAINLESS STEEL	4
	A010051	PLATE, MOUNTING, TIPPER	1
26-97-0294	A010052	ARM, IDLER, ASM	2
	A010065	BEARING, FLANGED, OIL EMBEDDED BRONZE, 0.88"OD, 0.75"ID	2
26-97-0295	26-12-2630	WASHER, FLAT, 0.53"ID, 1.06"OD, 0.09"THK, ZINCPLATED	4
	26-12-2664	SCREW, HHCS, 1/2"-13, 1.75"LG, GR8, Zn-AL	4
	A010044	SS-010-1V-Z-B-Z-A-2	1
26-97-0296	26-12-2684	SCREW, HHCS, 1/2"-13, 0.500"LG, 18-8 STAINLESS STEEL	4
	A010090	ARM, ACTUATOR, WELDED STOP, RIGHT ASM	1
	A010091	ARM, ACTUATOR, WELDED STOP, LEFT ASM	1
26-97-0297	26-11-5763	ROD END FEMALE 3/4-16 x 1.56LG	1
	26-12-2671	SCREW, HHCS, 3/4"-10, 2.75"LG, GR 8, Zn, YELLOW	1
	26-12-2672	NUT, NYLOCK, 3/4"-10	1
	A010059	BAR, SPREADER, TIPPER, SCOOP, ASM	1
26-97-0298	26-11-0336	NAME PLATE - ROTAC & HYDROAC	1
	26-11-0337	LABEL, NAME, ROTAC WASTE TIPPER	1
	26-11-5753	SADDLE	1
	26-12-2627	WASHER, LOCK, SPLIT, 0.32"ID, 0.58"OD, 0.08"THK	4
	26-12-2631	WASHER, FLAT, 0.41"ID, 0.81"OD, 0.06" THK, Zn, YELLOW	6
	26-12-2704	SCREW, HHCS, 3/8"-16, 1.25"LG, GR8, Zn	3
	26-12-2697	NUT, NYLOCK, 3/8"-16, GRADE 8, ZINCPLATED, YELLOW	3
	A010056	WELDMENT, PLATE, FACE, TIPPER SCOOP	1
	A010058	BRACKET, PIVOT, TIPPER	1
	A010069	SCREW, FHCS, 5/16"-18, 1.25"LG, ZINCPLATED, CLEAR	4
26-12-2696	NUT, NYLOCK, 5/16"-18, GR8, ZINCPLATED, YELLOW	4	
26-97-0282	26-11-5750	LATCH	2
	26-12-2631	WASHER, FLAT, 0.41"ID, 0.81"OD, 0.06" THK, Zn, YELLOW	1
	26-12-2697	NUT, NYLOCK, 3/8"-16, GRADE 8, ZINCPLATED, YELLOW	1
	26-12-2670	BOLT, SHOULDER, 0.5000"OD, 4"LG, 3/8"-16 THREAD	1
	26-12-2675	SPACER, PLASTIC, 0.51"ID, 1.00"OD, 0.38"THK	2
26-97-0285	26-11-0336	NAME PLATE - ROTAC & HYDROAC	1
	26-11-0337	LABEL, NAME, ROTAC WASTE TIPPER	1
A010044-K1		CONTAINS ACTUATOR SEAL KIT	1



**1<sup>ST</sup> Version SCOOP:**



### 1<sup>ST</sup> Version SCOOP:



#### NOTES:

- 1.) APPLY ANTI-SEIZE LUBRICANT TO SHAFT SPLINES BEFORE ASSEMBLY OF ACTUATOR ARMS.
  - 2.) GREASE ZERKS AFTER TIPPER ASSEMBLY. USE A WHITE LITHIUM GREASE: SHELL GADUS S2 V100, EQUIVALENT, OR BETTER. DO NOT USE A PETROLEUM-BASED GREASE.
  - 3.) 26-11-5753 SADDLE - FASTEN AT TOP OF SLOT (SADDLE ALL THE WAY DOWN).
  - 4.) OTHER REFERENCES:
    - a. 26-18-1003 - REPAIR MANUAL
    - b. 26-18-1001 - TAP-IN KIT MANUAL
    - c. 26-97-0275 - OPTIONAL WELD PLATE KIT
  - 5.) DECAL INSTALL: ENSURE SURFACE IS CLEAN OF ALL DIRT AND OIL.
  - 6.) TORQUE BOLTS AND APPLY THREAD LOCK TO ALL THREADED FASTENERS AS NOTED.
    - a. PERMABOND HM128, LOC-TITE 242 OR EQUIVALENT MEDIUM STRENGTH
  - 7.) LIFTER DESIGNED TO COMPLY WITH ANSI Z245.30
  - 8.) TIPPER AND ACTUATOR SERIAL NUMBER ARE TO MATCH
- Refer to repair procedure 26-17-0117 to carry out maintenance on the A010044 rotary actuator with seal kit A010044-K1. Please contact Customer Service or go to <http://www.rotactippers.com>.

- For the latest information and updates on this user manual and Rotacippers, please go to <http://www.rotactippers.com>.

**2<sup>ND</sup> Version SCOOP:**

BILL OF MATERIAL			
ITEM	QTY.	PART NUMBER	DESCRIPTION
1	2	A010253	WELDMENT, ARM, LIFT, TIPPER, SCOOP
2	2	A010256	ARM, IDLER, ASM, TIPPER, SCOOP
3	1	A010244	BEARING, FLANGED, 0.5" OD, 0.377" ID, 1/16" FLG, MDS
4	2	A010065	BEARING, FLANGED, OIL EMBEDDED BRONZE, 0.88"OD, 0.75"ID
5	1	26-12-2670	BOLT, SHOULDER, 0.5000"OD, 4"LG, 3/8"-16 THREAD
6	2	A010199	BRACKET, LATCH, TIPPER BEAST
7	1	A010255	CONNECTOR, ASSEMBLY, LATCH, TIPPER, SCOOP
8	2	26-11-5755	EXTERNAL RETAINING RING 0.75ID
9	1	26-11-0337	LABEL, NAME, ROTAC WASTE TIPPER
10	1	26-11-0338	LABEL, WARNING, ROTAC WASTE TIPPER
11	1	A010231	LATCH, ROD, TIPPER, RECOIL
12	2	A010238	LATCH, TIPPER, LONG ARM
13	1	26-11-0336	NAME PLATE - ROTAC & HYDROAC
14	4	26-12-2697	NUT, NYLOCK, 3/8"-16, GRADE 8, ZINCPLATED, YELLOW
15	6	26-12-2696	NUT, NYLOCK, 5/16"-18, GRADE 8, ZINCPLATED, YELLOW
16	1	A010217	PIN, CLEVIS, .75" OD, 2.50" USABLE LEN
17	1	A010257	PIN, COTTER, LOCKING, 3/32" (FOR 3/4" PIN)
18	6	A010098	PIN, PIVOT, ASSEMBLY, TIPPER
19	1	A010252	PLATE, MOUNTING, TIPPER, SCOOP
20	6	26-11-5772	RING, EXTERNAL RETAINING, 1.00ID
21	1	26-11-5753	SADDLE
22	6	A010069	SCREW, FHCS, 5/16"-18, 1.25"LG, ZINCPLATED, CLEAR
23	4	26-12-2664	SCREW, HHCS, 1/2"-13, 1.75"LG, GR8, Zn-AL
24	3	26-12-2704	SCREW, HHCS, 3/8"-16 X 1.25" LG, GRADE 8, Zn-AL
25	2	26-12-0138	SCREW, TYPE U DRIVE, METALLIC, 0.114"OD, 0.25"LG, PLATED
26	2	934000-020	SEAL VRING, 2.38ID, .51THK
27	4	26-12-2675	SPACER, PLASTIC, 0.51"ID, 1.00"OD, 0.38"THK
28	1	A010044	SS-010-1V-Z-B-Z-A-2
29	1	A010201	STOP, CAN, TIPPER, BEAST
30	13	26-12-2631	WASHER, FLAT, 0.41"ID, 0.81"OD, 0.06" THK, Zn, YELLOW
31	8	26-12-2630	WASHER, FLAT, 0.53"ID, 1.06"OD, 0.09"THK, ZINCPLATED
32	1	A010159	WASHER, FLAT, 0.81"ID, 1.47"OD, Zn-AL
34	1	A010254	WELDMENT, PLATE, FACE, TIPPER, SCOOP
33	2	26-09-0533	O-RING, DASH 330, BUNA

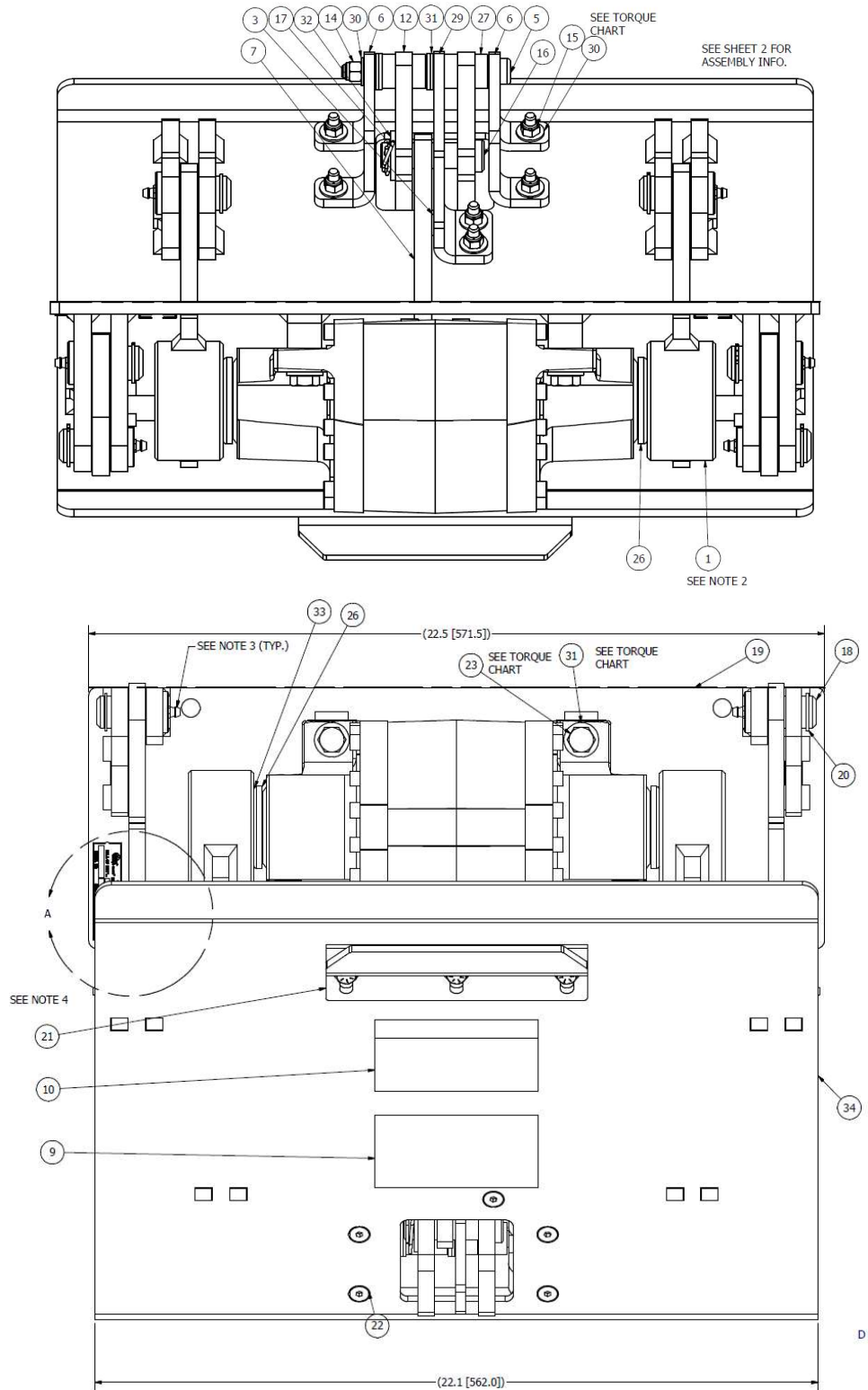
TIPPER INFORMATION	
MAX. PRESSURE	3000 PSI
MAX. TORQUE	27000 IN-LB
FLOW RATE FOR 6-SECOND CYCLE	3.3 GPM
FLOW RATE FOR 8-SECOND CYCLE	2.5 GPM
APPROX. TIPPER DRY WEIGHT	148 LB
RECOMMENDED HYDRAULIC FLUID	32W MINERAL-BASED

CAP SCREW & NUT TORQUE CHART	
ITEM	TORQUE (FT-LB)
14	30
15	24
23	50-60

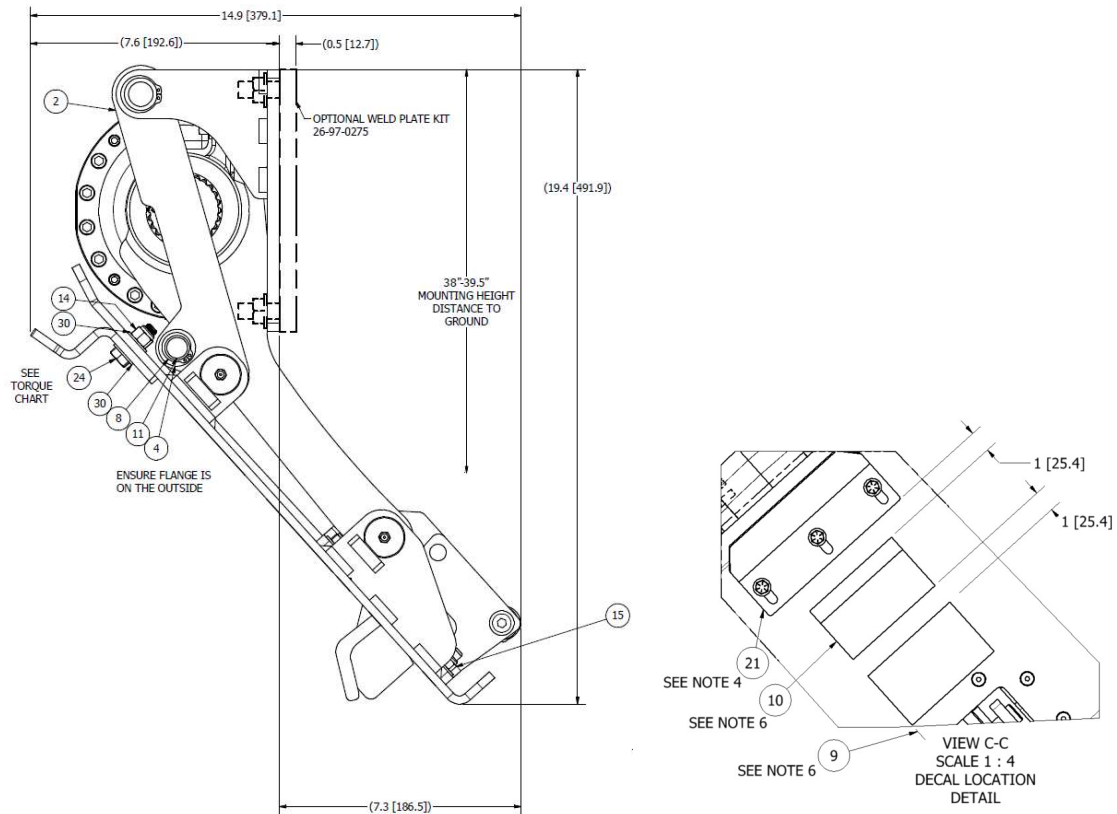
ADD MEADIUM STRENGTH  
 THREAD LOCK TO ALL  
 FASTENER THREADS

<b>SERVICE PART KIT NUMBERS FOR 2<sup>ND</sup> VERSION SCOOP</b>			
<b>KIT NUMBER</b>	<b>CONTAINS PART NUMBER</b>	<b>DESCRIPTION</b>	<b>QUANTITY</b>
26-97-0275	26-11-5766	PLATE, WELD, TIPPER, ASM	1
	26-12-2621	NUT, HEX, 1/2"-13, GRADE 8, ZINCPLATED	4
	26-12-2630	WASHER, FLAT, 0.53"ID, 1.06"OD, 0.09"THK, ZINCPLATED	4
26-97-0276	26-11-5772	RING, EXTERNAL RETAINING, 1.00ID	1
	A010098	PIN, PIVOT, ASSEMBLY, TIPPER	1
26-97-0323	26-11-0336	NAME PLATE - ROTAC & HYDROAC	1
	26-12-0138	SCREW, TYPE U DRIVE, METALLIC, 0.114"OD, 0.25"LG, PLATED	2
	A010252	PLATE, MOUNTING, TIPPER, SCOOP	1
26-97-0324	A010256	ARM, IDLER, ASM, TIPPER, SCOOP	2
	A010065	BEARING, FLANGED, OIL EMBEDDED BRONZE, 0.88"OD, 0.75"ID	2
26-97-0295	26-12-2630	WASHER, FLAT, 0.53"ID, 1.06"OD, 0.09"THK, ZINCPLATED	4
	26-12-2664	SCREW, HHCS, 1/2"-13, 1.75"LG, GR8, Zn-AL	4
	A010044	SS-010-1V-Z-B-Z-A-2	1
26-97-0325	A010253	WELDMENT, ARM, LIFT, TIPPER, SCOOP	2
26-97-0326	A010244	BEARING, FLANGED, 0.5" OD, 0.377" ID, 1/16" FLG, MDS	1
	A010065	BEARING, FLANGED, OIL EMBEDDED BRONZE, 0.88"OD, 0.75"ID	2
	A010255	CONNECTOR, ASSEMBLY, LATCH, TIPPER, SCOOP	1
	A010231	LATCH, ROD, TIPPER, RECOIL	1
	A010217	PIN, CLEVIS, .75" OD, 2.50" USABLE LEN	1
	26-11-5755	EXTERNAL RETAINING RING 0.75ID	2
	A010257	PIN, COTTER, LOCKING, 3/32" (FOR 3/4" CLEVIS PIN)	1
26-97-0327	A010159	WASHER, FLAT, 0.81"ID, 1.47"OD, Zn-AL	1
	26-12-2670	BOLT, SHOULDER, 0.5000"OD, 4"LG, 3/8"-16 THREAD	1
	A010238	LATCH, TIPPER, LONG ARM	2
	26-12-2697	NUT, NYLOCK, 3/8"-16, GRADE 8, ZINCPLATED, YELLOW	1
	26-12-2675	SPACER, PLASTIC, 0.51"ID, 1.00"OD, 0.38"THK	4
	26-12-2631	WASHER, FLAT, 0.41"ID, 0.81"OD, 0.06" THK, Zn, YELLOW	1
26-97-0328	26-12-2630	WASHER, FLAT, 0.53"ID, 1.06"OD, 0.09"THK, ZINCPLATED	4
	A010199	BRACKET, LATCH, TIPPER BEAST	2
	26-11-0337	LABEL, NAME, ROTAC WASTE TIPPER	1
	26-11-0338	LABEL, WARNING, ROTAC WASTE TIPPER	1
	26-12-2697	NUT, NYLOCK, 3/8"-16, GRADE 8, ZINCPLATED, YELLOW	3
	26-12-2696	NUT, NYLOCK, 5/16"-18, GRADE 8, ZINCPLATED, YELLOW	6
	26-11-5753	SADDLE	1
	A010069	SCREW, FHCS, 5/16"-18, 1.25"LG, ZINCPLATED, CLEAR	6
	26-12-2704	SCREW, HHCS, 3/8"-16 X 1.25" LG, GRADE 8, ZN-AL	3
	A010201	STOP, CAN, TIPPER, BEAST	1
26-97-0285	26-12-2631	WASHER, FLAT, 0.41"ID, 0.81"OD, 0.06" THK, Zn, YELLOW	12
	A010254	WELDMENT, PLATE, FACE, TIPPER, SCOOP	1
26-97-0285	26-11-0336	NAME PLATE - ROTAC & HYDROAC	1
	26-11-0337	LABEL, NAME, ROTAC WASTE TIPPER	1
A010044-K1		CONTAINS ACTUATOR SEAL KIT	1

**2<sup>ND</sup> Version SCOOP:**



## 2<sup>ND</sup> Version SCOOP:



### NOTES:

- 1.) APPLY ANTI-SEIZE LUBRICANT TO SHAFT SPLINES BEFORE ASSEMBLY OF ACTUATOR ARMS.
  - 2.) GREASE ZERKS AFTER TIPPER ASSEMBLY. USE A WHITE LITHIUM GREASE: SHELL GADUS S2 V100, EQUIVALENT, OR BETTER. DO NOT USE A PETROLEUM-BASED GREASE.
  - 3.) 26-11-5753 SADDLE - FASTEN AT TOP OF SLOT (SADDLE ALL THE WAY DOWN).
  - 4.) OTHER REFERENCES:
    - a. 26-18-1003 - REPAIR MANUAL
    - b. 26-18-1001 - TAP-IN KIT MANUAL
    - c. 26-97-0275 - OPTIONAL WELD PLATE KIT
  - 5.) DECAL INSTALL: ENSURE SURFACE IS CLEAN OF ALL DIRT AND OIL.
    - a. (REF. VIEW C-C)
  - 6.) TORQUE BOLTS AND APPLY THREAD LOCK TO ALLTHREADED FASTENERS AS NOTED.
    - a. PERMABOND HM128, LOC-TITE 242 OR EQUIVALENT MEDIUM STRENGTH
  - 7.) LIFTER DESIGNED TO COMPLY WITH ANSI Z245.30
  - 8.) TIPPER AND ACTUATOR SERIAL NUMBER ARE TO MATCH
- Refer to repair procedure 26-17-0117 to carry out maintenance on the A010044 rotary actuator with seal kit A010044-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>.