

539TO-5400 ADA Diffuser for 3½” Drop Tube

Installation & Maintenance Instructions



Failure to follow any or all of the warnings may render the part nonfunctional and could result in a hazardous product spill, which may result in property damage, environmental contamination, fire, explosion, injury or death.

Installation



WARNINGS

- **Fire Hazard**—Death or serious injury could result from spilled liquids.
- Any modification to this product other than stated in these installation instructions will void the product warranty.
- Install in accordance with all applicable local, state, and federal laws.
- For your safety, it is important to follow local, state, federal and/or OSHA rules that apply to working inside, above, or around the storage tank and piping area. Use all personal protective equipment required for working in the specific environment.
- Tanks could be under pressure. Vapors could be expelled from tank vents, piping, valves or fittings while performing installation. Vapors could catch fire or cause an explosion. Avoid sparks, open flame, or hot tools when working on tanks.
- Fill points should be labeled to identify product being transferred, according to all applicable codes.
- In the event of malfunction, contact Morrison Bros. Co. customer service.

Steps

1. Verify drop tube outer diameter: diffuser is made for a 3½” drop tube with an outside diameter between 3 ¾” and 3 17/32” with a 16-gauge wall thickness.
2. Measure the distance to the bottom of the tank to the top of the drop tube.
3. Using the Drop Tube Length Calculator, located on page 2, calculate the length of the drop tube and cut the end of the drop tube square. (Cut end of drop tube should be 6-7 inches from bottom of tank.)
4. Place the attached hole location template onto the tube so the bottom edge of the template is flush with the bottom edge of the tube.
5. Punch the locations of the holes using the template and drill through the tube with a #2 drill (0.221”).
6. Remove the template from the drop tube.
7. Install clip-on nuts provided with 539TO-5400 ADA Diffuser Assembly over #2 drill (0.221”) tube holes.
8. Slide tube end with the clip-on nuts into the diffuser sleeve and align with sleeve countersunk holes.
Apply Loctite to the #10-32 screws and install in the countersunk sleeve screw holes, threading into the clip-on nuts until tight.

Hole Location Template note: hole centers should be 3.686”

539TO-5403 PP

Drill Hole (3x)



Hole Location Template note: hole centers should be 3.686”

539TO-5403 PP

Drill Hole (3x)



Drop Tube Length Calculator

_____ = Measured distance to
bottom of tank.
- 6 inches = Distance drop tube
will be from bottom
of tank.
= = Length drop tube is
to be cut to.

Maintenance

This product should be maintained according to local codes.



WARNINGS

- **Fire Hazard** – Death or serious injury could result from spilled liquids.
- You must be trained to maintain this product. Stop now if you have not been trained.
- For your safety, it is important to follow local, state, federal and/or OSHA rules that apply to working inside, above, or around the storage tank and piping area. Use all personal protective equipment required for working in the specific environment.
- Tanks could be under pressure. Vapors could be expelled from tank vents, piping, valves or fittings while performing maintenance. Vapors could catch fire or cause an explosion. Avoid sparks, open flame, or hot tools when working on tanks and tank accessories.

WARRANTY: If you believe this product has a defect due to material or workmanship, please contact Morrison for a return authorization. All products are thoroughly tested before shipment and meet all applicable performance standards and specifications. Only material found to be defective in manufacture will be replaced or repaired at our discretion. Claims must be made within one year from the date of installation, and Morrison Bros. Co. will not allow claims for labor or consequential damage resulting from purchase, installation or misapplication of the product. The warranty registration information must be provided to the end user.