# **RMC Automated Safety System Installation**

# Before beginning, be sure to adhere to all safety requirements and wear appropriate safety gear for performing this type of installation.

Upon receiving the RMC Auto Lid, inspect all items to make sure nothing has been damaged in shipping and all components are present.

#### Items included:

- 1. The Auto Lid
- 2. Proper Install Kit
- 3. Control Box
- 4. Quantity of 2 swiveled air fitting elbows (in separate bag in box containing the lid)
- 5. Airline (if ordered)

**Note:** The Control Box and Install Kit may arrive in a separate box from the Auto Lid and the Airline roll.

The RMC Automated Safety System is designed to replace the original manual lid with minimal modification to the existing manhole ring. Allowing the operator to open and close the lid from ground level, eliminating the risk of climbing on top of the trailer.

To function properly and insure a tight seal, the surface of the manhole ring should be flat and free from defects and material buildup. If an **RMC Resurfacing Tool** is available, using this tool to resurface the manhole ring will insure a flat surface and a proper seal.

A minimum height of 1/8 inch from the surface of the Auto Lid bottom ring to top of the manhole ring is required to maintain a proper seal of the Auto Lid.

### WARNING:

## DO NOT WORK ON OR AROUND TRAILER WHILE UNDER PRESSURE

RMC Engineering Support @ 800-549-2083 or rmcengineering.com

#### **Installing Your Auto Lid:**

- 1. Remove the camlocks on the manhole ring along with the old manual lid.
- 2. The manual hinge lugs need to be removed along with the safety tabs on the manhole ring. **DO NOT REMOVE THE CAMLOCK EARS**.
- 3. Any material buildup between the camlock ears needs to be removed.
- 4. Place the six pin blocks depending on what type of install kit ordered in-between the camlock ears using clevis pins with the threaded hole in the pin block facing up. Secure with cotter pins. (The Betts manhole ring has only one ear per camlock and requires two pin blocks per ear. Make sure to order the proper lid and install kit for your trailer).
- 5. **Betts Install Only:** Betts camlock ears need to be ground down to match the shape of the pin block to avoid the wire form from hitting the camlock ear. Only the 3 ears corresponding to the 3 wire forms **facing down** need grinding.
- 6. Attach the Auto Lid to the pin blocks on the manhole ring. Use care when lifting the Auto Lid onto the manhole ring, so as not to damage any of the fitting on the underside of the Auto Lid.
- 7. Position the Auto Lid so that it opens away from the trailer ladder and when open the top portion of the lid is centered over the middle of the trailer.
- 8. With the Auto Lid in position secure the Auto Lid to the pin blocks with the provided mounting screws. After securing the lid, make sure the lid opens and closes freely without any interference. The lid should close all the way via the spring on the cylinder. The gap between the auto lid gasket and the surface of the manhole ring should be even from side to side.
- 9. Attach the control box in a safe and secure location on the trailer frame where access is convenient.

10. Use the labeled airline tubing to attach the 5 airlines required between the control box and the Auto Lid. On the bottom of the control box the colored lines are as follows from left to right:

**RED-** Attaches to the fitting on the air cylinder labeled red (leave off for now)

YELLOW- Attaches to the fitting labeled yellow near the bottom casting that feeds the airbag

BLUE- Attaches to the fitting on the air cylinder labeled blue

WHITE- Air supply from brake tank (supply)

GREEN- Attaches to the fitting labeled green on the rod end of the air cylinder

BLACK- Attaches to the fitting labeled black on the cylinder body end of the air cylinder

(Split loom is provided to protect the exposed portions of the airlines going to the Auto Lid to prevent UV deterioration).

- 11. Attach the bundled airline on top of the trailer securely and away from hot and moving objects
- 12. Exhaust all air out of the brake tank reservoir prior to installing the pressure protection valve and air supply line to control box. (white)
- Refer to the instruction packet "2018 Cylinder Adjustment and Wire Form Adjustment"
- 14. With the Auto lid closed and the airbag inflated, pull up on the six-spring holder to insure they are not bottoming out. This could cause the cover to not seal against the manhole ring. There should be a minimum of 1/8" travel when pulling up on the spring holders. If not, check to make sure that the wire forms are adjusted properly. After installation is complete, test the auto lid to make sure it opens and closes smoothly, and the airbag inflates for a proper seal. Prior to performing maintenance on Lid, drain trailer brake tank then push the Push/Pull valve IN, the control box gauge should remain at zero PSI (If necessary, open and close the Push/Pull valve until gauge reads zero PSI.