

# Installation of P810-R

**WARNING !** Failure to follow these instructions or to properly install and maintain this equipment could result in personal injury or death.

Equipment must be installed, operated and maintained in accordance with federal, state and local codes. The installation must also comply with NFPA No. 70 and ANSI K61.1, (CGA G-2.1) standards or local authority having jurisdiction.

Only personnel trained in the proper procedures, codes, standards and regulations of the Anhydrous Ammonia industry shall install and service this equipment.

The Type C810-F 12 Volt electrical release can be used for Anhydrous Ammonia applications *ONLY*. Do not use with any indoor or an enclosed NH3 application, **or any other hazardous location. DO NOT USE IN LPG/PROPANE SERVICE.**

**NOTE: REFER TO TYPE P810 INSTRUCTIONS MANUAL SUPPLIED IN BOX FOR ALL WARNINGS, CUSTOMER NOTIFICATIONS, SPECIFICATIONS, OPERATION, CAUTIONS, MAINTENANCE, & PARTS.**

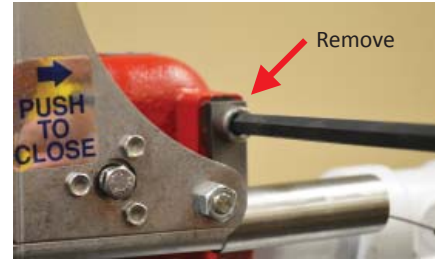
**Valve Types** The P810-R works with RegO® Emergency Shutoff Valves for NH3 Service Only; specifically part numbers beginning with AA or A prefix.

## Installation

1. Safety Equipment (i.e. gloves, goggles, & clothing) must be worn before continuing with the next step.
2. **Warning ! Before Proceeding to the next step the system must be purged of all product.**

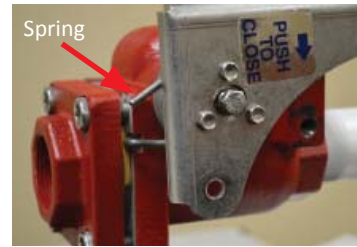
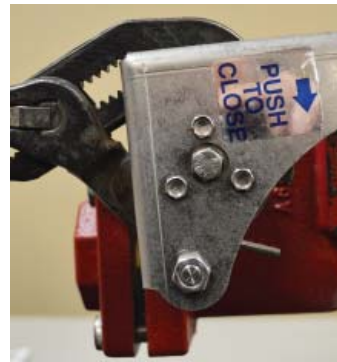
## Disassembly

1. Remove Thermal Latch Assembly and discard. Lock Handle in open position to gain access to Allen screw.



Tools Used: 5/16" Allen Wrench

2. Loosen 5/16" hex nut. Lift Handle to open Valve halfway. Grab the Spring with the vice grip or large pliers to keep from moving. Allow Handle to go back to closed to release Spring tension. Then remove the hex nut and Spring Roller Assembly from the Handle, release the Spring.



Tools Used: (2) 1/2" Wrenches & Channel Lock Pliers.

3. Remove the Lever by removing and retaining the three #10-32 hex head bolts. Remove and retain the 1/4-28 hex head bolt for reassembly.



Tools Used: 5/16" & 7/16" Wrenches



**NOTE: Keep these parts for reassembly.**

## Assembly

1. Place the Electromagnetic Support Assembly onto the valve body and align holes. Install the two 3/8"-16 socket head cap screws (supplied) and tighten firmly 35 to 55 inch-lbs / 4 to 6 N m of torque.



Tools Used: 5/16" Allen Wrench

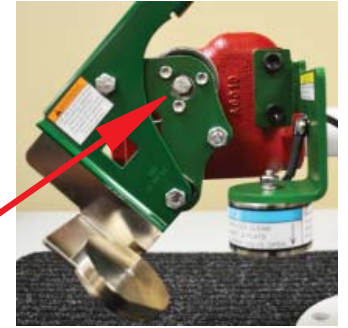
2. Using the 3 #10-32 hex head bolts retained from (step #3 on Page 1) attach the P810-R Handle Assembly to the Return Spring Arm. Reinstall the 1/4-28 hex head bolt retained from (step #3 on Page 1).



**NOTE: Position of 3 holes on the Return Spring Arm.**

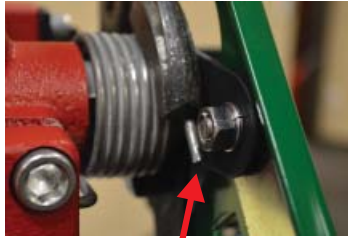
Before Assembly

After Assembly



Tools Used: 5/16" & 7/16" Wrenches

3. While holding down Handle grab the Spring with vice grip or Channel Lock pliers and twist Spring counter clockwise past the Spring Roller Assembly hole. Place Spring Roller Assembly through the hole from backside, snug up with nut. Tighten nut and line up Spring on the Roller.



End of Spring

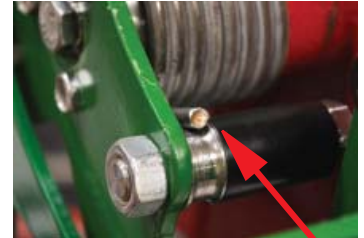


Spring Roller  
Asy. Hole

End of Spring



Spring Roller Asy. Held with Nut



Spring Lined Up

Tools Used: (2) 1/2" Wrenches & Channel Lock Pliers.

4. Raise handle to check for proper spring tension and ensure valve opens fully.



5. Connect electromagnet to the 12 V DC system and turn on voltage to the electromagnet.



6. Rotate Handle counterclockwise to open valve. Strike Plate should latch against Surface of Electromagnet and stay attached to the Surface of Strike Plate while voltage is applied. Valve must stay open. **Upon de-energizing the Electromagnet, the Handle and Valve must quickly "snap" closed.** The Handle and Valve must quickly rotate and close either when (a) the power source is turned off or (b) the handle is pushed closed from the latched open position.

### WARNING !

**NEVER WIRE OPEN OR BYPASS MAGNET TO HOLD VALVE OPEN.**



Power On & Valve Open.



Power Off & Valve Closed.