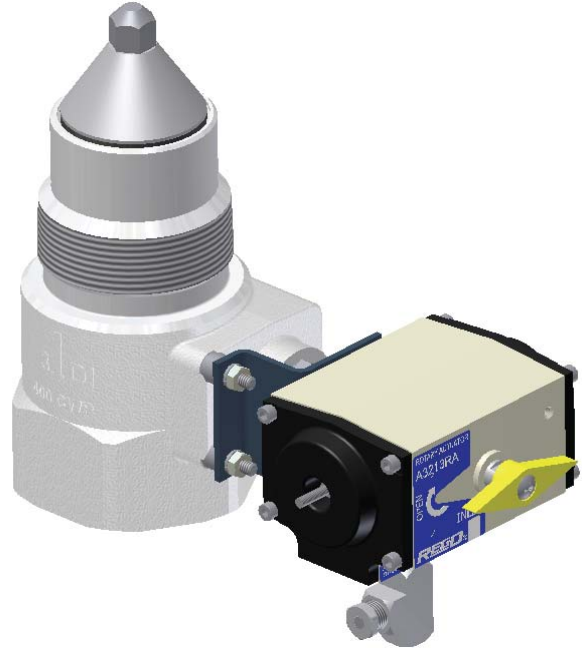


**Pneumatic Rotary Actuator Kit
for 2" A3212R, A3212RT &
3" A3213A, A3213R, A3213RT,
A3213T Internal Valves**
Installation & Operation



A3212RA Rotary Actuator
on A3212R 2" Internal Valve



A3213RA Rotary Actuator
on A3213R 3" Internal Valve



A3212R Manual 2" Internal Valve



A3213R Manual 3" Internal Valve

WARNING: Installation, usage and maintenance of this product must be in compliance with all RegO® instruction as well as requirements and provisions of NFPA #54, NFPA #58, DOT and all applicable federal, state, provincial and local standards, codes, rules, regulations and laws.

Inspection and maintenance on a periodic basis is essential. Installation and maintenance should be performed only by qualified personnel.

Be sure all instructions are read and understood before installation and operation.

CAUTION: Contact or inhalation of liquid propane, ammonia and their vapors can cause serious injury or death! NH_3 and LP-Gas must be released outdoors in air currents that will insure dispersion to prevent exposure to people and livestock. LP-Gas must be kept far enough from any open flame or other source of ignition to prevent fire or explosion! LP-Gas is heavier than air and will not disperse or evaporate rapidly if released in still air.

Foreword

The A3212RA & A3213RA Rotary Actuator kits are for use on A3212R, A3212RT Series 2" Internal Valves, A3213A, A3213R, A3213RT and A3213T 3" Series Internal Valves respectively. It is designed to provide a convenient means for operating the valve from a remote location. The diamond shaped indicator button easily shows whether the internal valve is open or closed. The installer must be responsible for proper installation and operation of these kits.

How the Pneumatic Actuator Works

The pneumatic rotary actuator must be supplied with 25 psi minimum to 125 psi maximum nitrogen, compressed air or propane vapor for proper operation. The pneumatic rotary actuator has a dual rack and pinion that when pressurized effortlessly rotates the valves shaft to the open position and returns it back to the closed position when pressure is removed using spring force. The diamond shaped indicator button that is screw mounted to the rotary actuator indicates whether the internal valve is open or closed.

NOTE: This button is not to be used to open or close the actuator.

Both the A3212RA & A3213RA Rotary Actuator are compatible with both existing air interlock systems and transport or bobtail truck compressed air systems.

Pneumatic Rotary Actuator Installation

1. Before attaching actuator to the valve confirm the cam is in contact with the nylon wear button on the bottom of stem. See Figure 2.
2. Verify the rotary actuator indicator button is also in the closed position as shown in figure 4.

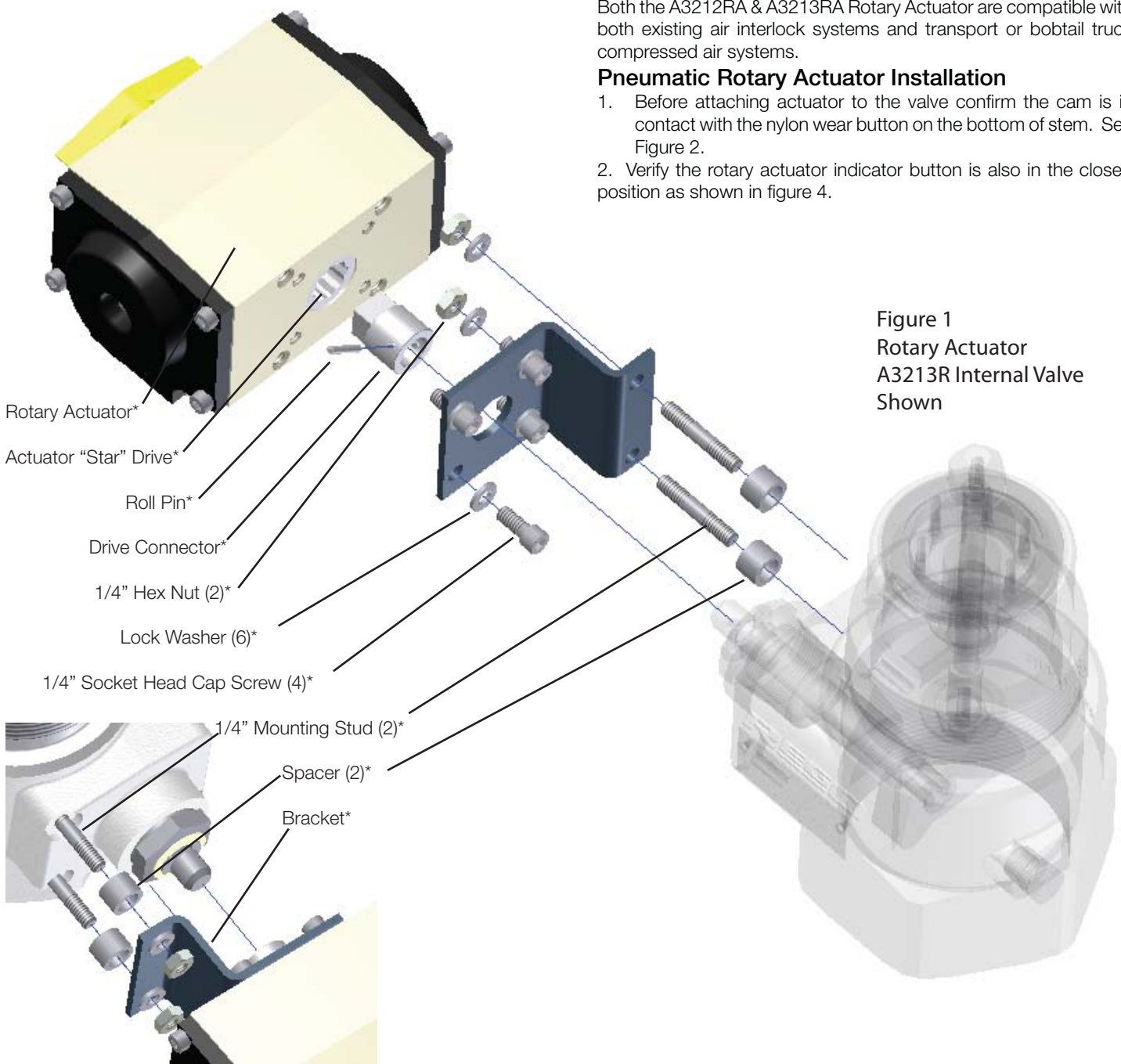


Figure 1
Rotary Actuator
A3213R Internal Valve
Shown

Lever/ Handle Removal

1. Remove and discard existing spring pin, roll pin or (cotter pin, if applicable) which retains the lever arm to the valves pivot shaft. Do not remove clip ring or plastic washer.

Mounting Studs

2. Apply thread locking compound Loctite 242® (Medium Strength) to threads on one end of the (2) 1/4"-20 double ended mounting studs. Install the (2) studs into the valve body in the (2) holes shown in Figure 1.

HINT: By threading one of the 1/4"-20 hex nuts on the end of the mounting stud followed by the second 1/4"-20 hex nut and tightening the (2) nuts together, then it is possible to tighten the stud by wrenching the second hex nut and locking the stud into the valve body. Then remove the (2) nuts from the mounting stud. Repeat same procedure for second mounting stud.

3. Install the (2) spacers provided over the studs.

NOTE: These spacers position the rotary actuator once it is attached to the valve.

Drive Connector

4. Install drive connector on the shaft of valve, align the cross drilled holes in the shaft and drive connector. Verify that one flat on the square drive of the drive connector is oriented horizontal with the cross-drilled holes aligned. Install the roll pin into the cross-drilled holes to connect the shaft and drive connector.

Bracket

5. First determine the orientation of the internal valve as it is when installed and in service. This step is necessary to prevent installation of the Rotary Actuator with the air inlet or outlet pointing upward. See figure 4.

NOTE: Always orient the air inlet such that rain cannot enter

the Rotary Actuator through the air outlet port.

6. Next assemble mounting bracket to Rotary Actuator using (4) 1/4" lock washers and (4) 1/4"-20 x 9/16" socket head cap screws. Tighten each screw using a staggered tightening sequence. Torque each 50-60 in-lbs. See figure 3.

Tee Connector/Screen Assembly - See Figure 4

7. Apply thread sealant to the 1/8" NPT threads of the Tee Connector Assembly and install into the air inlet of the Rotary Actuator body and tighten.
8. Install the vent screen into the rotary actuator outlet by pressing it into the 1/8" NPT outlet port.

Rotary Actuator Bracket Assembly

9. Install the Rotary Actuator on the valve by aligning the (2) holes in the bracket with the (2) mounting studs and centering the largest hole on the main boss of valve body. The square drive on the drive connector and the "star drive" inside the Rotary Actuator should also align.
10. Next install the lock washer and nut on each mounting stud and verify the spacers are nested properly before applying a torque 50-60 in-lbs to each nut. No adjustment is necessary; the rotary actuator is preset at the factory.

Bench Test

Verify proper operation of both the rotary actuator and internal valve by connecting to air source that will provide inlet pressure of 25 psi minimum and 125 psi maximum. Within this supply line a valve may be attached to release the air pressure between the Shut-Off Valve and the air supply. Cycle the valve open by applying pressure, then releasing the pressure to close the valve. Verify all connections are leak tight with high quality noncorrosive leak detection solution.

Figure 2
Cam Position

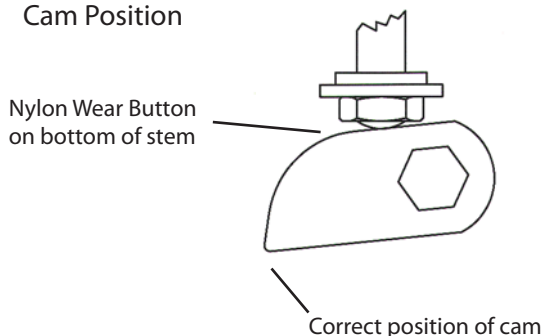


Figure 3
Bolt Sequence

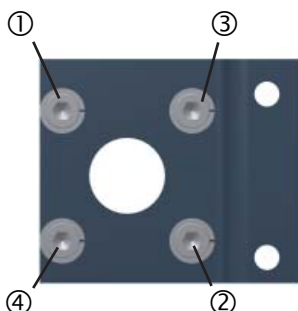
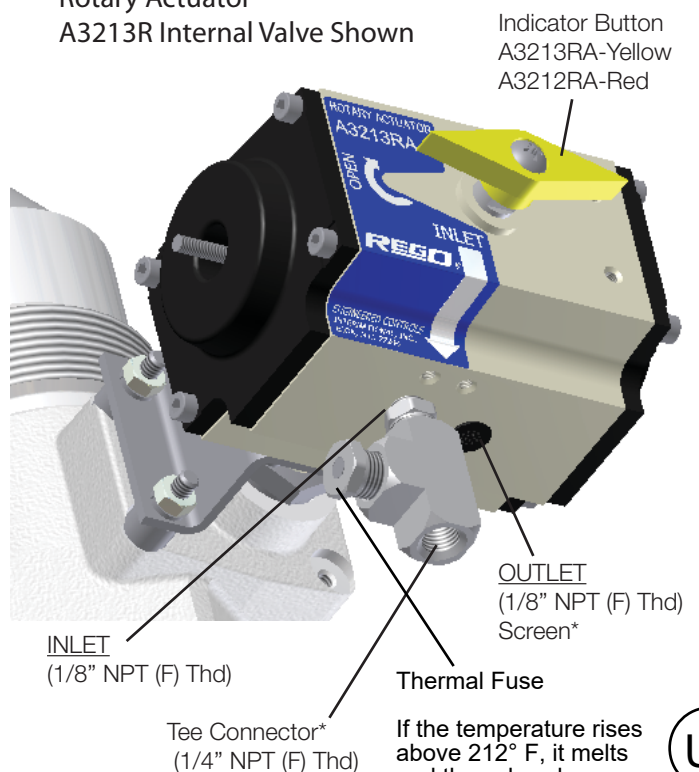


Figure 4
Rotary Actuator
A3213R Internal Valve Shown



Position the actuator so that rain and other foreign matter can not enter the outlet.



NOTICE

LP-Gas is extremely flammable and explosive. Failure to install parts exactly as described in the instructions could result in a product that will not perform satisfactorily. Even if parts are correctly installed, the product might fail to perform satisfactorily, if other parts are worn, corroded or dirty. Improper repair can cause leaks and malfunction, which could result in bodily injury and property damage. **Any such use or installation of parts must ONLY be done by experienced and trained personnel using accepted governmental and industrial safety procedures.**

Most RegO® products are listed with Underwriters Laboratories as manufactured. If repaired, the continued validity of the UL listing is contingent upon proper inspection to determine what needs repairing, proper repair using RegO® Products parts and procedures, and proper testing for leakage and performance following repairs and installation.

RegO® Products assumes no responsibility or liability for performance of products repaired in the field. It must be clearly understood that the person or organization repairing the product assumes total responsibility for performance of the product.

LIMITED 10 YEAR WARRANTY AND LIMITATION OF LIABILITY

LIMITED 10 YEAR WARRANTY

RegO® Products warrants to the original purchasers the products and repair kits manufactured by it to be free from defects in materials and workmanship under normal use and service for a period of 10 years from the date of manufacture. If within thirty days after buyer's discovery of what buyer believes is a defect, buyer notifies in writing and ships the product to RegO® at 100 RegO Drive, Elon, N.C. 27244, RegO®, at its option, and within forty-five days of receipt, will repair, replace F.O.B. point of manufacture, or refund the purchase price of that part or product found by RegO® to be defective. Failure of buyer to give such written notice and ship the product within thirty days shall be deemed an absolute and unconditional waiver of any and all claims of buyer arising out of such defect.

This warranty does not extend to any product or part that is not installed and used continuously after installation in accordance with RegO®'s printed instructions, all applicable state and local regulations, and all applicable national standards, such as those promulgated by NFPA, DOT and ANSI. This warranty does not extend to any product or part that has been damaged by accident, misuse, abuse, failure to maintain, or neglect, nor does it extend to any product or part which has been modified, altered, disassembled, or repaired in the field. This warranty does not cover any cosmetic issues, such as scratches, dents, marring, fading of colors or discoloration.

Except as expressly set forth above, and subject to the limitation of liability below, RegO® MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, with respect to its products and parts, whether used alone or in combination with others. RegO® disclaims all warranties not stated herein.

LIMITATION OF LIABILITY

RegO® total liability for any and all losses and damages arising out of any cause whatsoever shall

in no event exceed the purchase price of the products or parts in respect of which such cause arises, whether such causes be based on theories of contract, negligence, strict liability, tort or otherwise.

RegO® shall not be liable for incidental, consequential or punitive damages or other losses. RegO® shall not be liable for, and buyer assumes any liability for all personal injury and property damage connected with the handling, transportation, possession, further manufacture, other use or resale of products, whether used alone or in combination with any other products or materials.

From time to time buyers might call to ask RegO® for technical advice base upon limited facts disclosed to RegO®. If RegO® furnishes technical advice to buyer, whether or not a buyer's request, with respect to application, further manufacture or other use of the products and parts, RegO® shall not be liable for such technical advice or any such advice provided to buyer by any third party and buyer assumes all risks of such advice and the results thereof.

NOTE: Some states do not allow the exclusion or limitation of incidental, consequential or punitive damages, so the above limitation or exclusion may not apply to you. The warranty gives you specific legal rights, and you may have other rights that vary from state to state. The portions of the limited warranty and limitation of liability shall be considered severable and all portions which are not disallowed by applicable law shall remain in full force and effect.

WARNING

All RegO® products are mechanical devices that will eventually become inoperative due to wear, corrosion and aging of components made of materials such as rubber, etc. The environment and conditions of use will determine the safe service life of these products. Periodic inspection and maintenance are essential to avoid serious injury and property damage.

Many RegO® products are manufactured components which are incorporated by others on or in other products or systems used for storage, transport, transfer and otherwise for use of toxic, flammable and dangerous liquids and gases. Such substances must be handled by experienced and trained personnel only, using accepted governmental in industrial safety procedures.

NOTICE TO USERS OF PRODUCTS

The Limited Warranty stated above is a factory warranty to the first purchasers of RegO® products. Since most users have purchased these products from RegO® distributors, the user must within thirty (30) days after the user's discovery of what user believes is a defect, notify in writing and return the product to the distributor from whom he purchased the product/part. The distributor may or may not at the distributor's option choose to submit the product/parts to RegO®, pursuant to this Limited Warranty. Failure by buyer to give such written notice within thirty (30) days shall be deemed an absolute and unconditional waiver of buyer's claim for such defects. Acceptance of any alleged defective product/parts by RegO®'s distributor for replacement or repairs under the terms of RegO®'s Limited Warranty in no way determines RegO®'s obligations under this Limited Warranty.

Because of a policy of continuous product improvement, RegO® reserves the right to change designs, materials or specifications without notice.

REGO® PRODUCTS

Printed in U.S.A. 04-0311-0908
Instruction Sheet A3213RA-300

Elon, N.C. 27244 U.S.A. Phone (336) 449-7707 Fax (336) 449-6594 www.regoproducts.com