



WARNING: Installation, disassembly, repair and maintenance must be performed only by qualified personnel.

All gas **MUST** be evacuated from the system before starting repairs. Installation, usage and maintenance of this product must be in compliance with all RegO® instructions as well as requirements and provisions of NFPA #54, NFPA #58, DOT, ANSI, all applicable federal, state, provincial and local standards, codes, regulations and laws.

Inspection and maintenance on a periodic basis is essential. Be sure all instructions are read and understood before installation, operation and maintenance. These instructions must be passed along to the end user of the product.

RegO Rail Tank Car equipment is AAR approved. If repaired, the continued validity of the AAR approval is contingent upon proper inspection to determine what needs to be repaired; proper repair using RegO OEM parts and procedures, proper testing for leakage and performance following repairs and installation.

ECI EXPRESSLY DISCLAIMS ANY AND ALL LIABILITY – UNDER ANY THEORY, WHETHER CONTRACT, WARRANTY, TORT OR OTHERWISE – RELATING IN ANY MANNER TO ANY RAIL TANK CAR EQUIPMENT REPAIRED USING ANY PRODUCTS NOT MANUFACTURED BY ECI.

USE OF ANY PRODUCTS NOT MANUFACTURED BY ECI TO REPAIR ANY RAIL TANK CAR EQUIPMENT WILL INVALIDATE ANY AND ALL WARRANTIES OF THE RAIL TANK CAR EQUIPMENT, WHETHER EXPRESS OR IMPLIED.

CAUTION: Contact or inhalation of liquid propane, ammonia and their vapors can cause serious injury or death! NH₃ 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 may not disperse or evaporate rapidly if released in still air.

Disassembly and Rebuild Procedure

CAUTION: READ THROUGH ALL OF THESE INSTRUCTIONS, INCLUDING THE NOTICE AND WARNINGS ON THE BACK OF THIS SHEET BEFORE BEGINNING ANY DISASSEMBLY OR REPAIR.

TA7806-51 Kit for TA7806AP Needle Valve

NOTE: Repairs must be performed in a clean area. Hands, clothing, tools, and work area must be completely free of oil, grease, and foreign matter to prevent contamination of component parts and valves.

A. Disassembly

CAUTION: EVACUATE ALL GAS FROM THE SYSTEM BEFORE ANY DISASSEMBLY OR REPAIR.

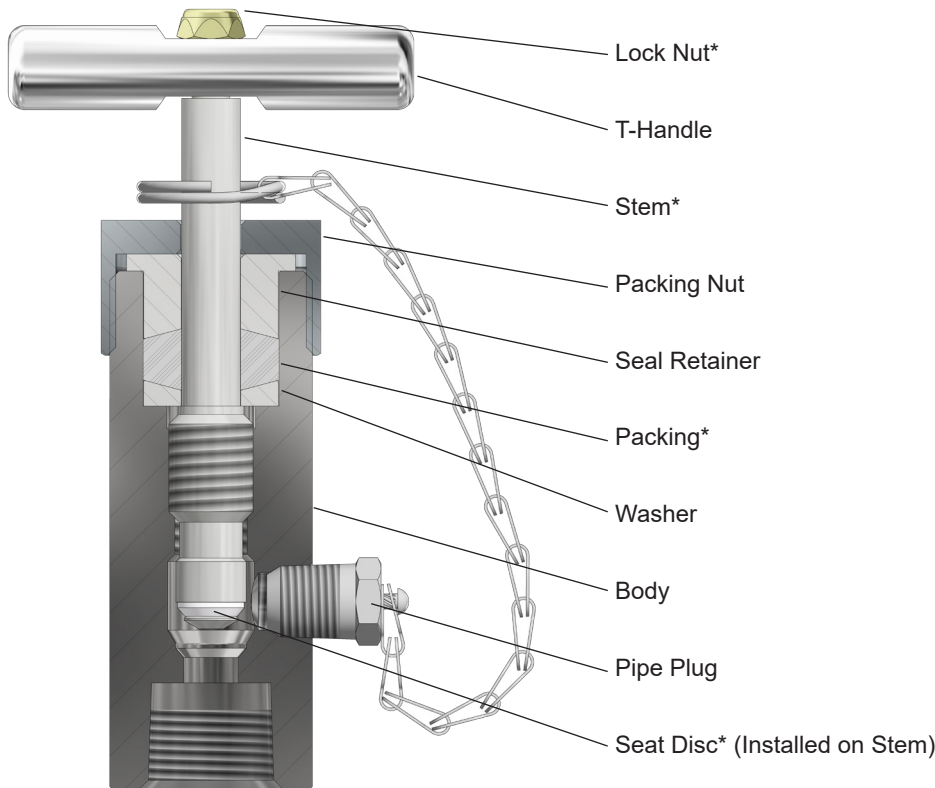
1. Remove and discard lock nut using a 7/16" suitable wrench or socket.
2. Remove "T" Handle and set aside.
3. Remove pipe plug assembly from body and stem with a 5/8" suitable wrench, set aside.
4. Remove packing nut with a 1-5/8" suitable wrench and set aside.
5. Remove seal retainer and set aside.

CAUTION: Do not mar or scratch internal cavity of body.

6. Turn stem counterclockwise until it can be pulled out from the top of the body with packing and washer still on stem.
7. Remove and discard packing from stem.
8. Remove washer from stem and set aside.
9. Discard stem.

B. Reassembly

1. Apply Shell Gadus S2 V220 1 Grease to stem threads and seat disc.
2. Insert new stem into body, carefully protecting the seat from



* These items form the rebuild kit for TA7806AP.

body threads. Screw stem in clockwise until seat disc is seated against body seat.

3. Install new washer and slide over stem into body.
4. Install new packing, sliding over stem and pressing fully into body against washer.
5. Install seal retainer over stem into body.
6. Install packing nut over stem and thread into body. Tighten to 110-130 in-lbs (9-10 ft-lbs) using 1-5/8" wrench.
7. Retrieve pipe plug and chain assembly and apply Teflon tape to the pipe plug threads. Slide split ring over stem and install plug into body handtight.
8. Install T-handle onto stem.
9. Install lock nut using a 7/16" suitable wrench or socket until tight.

Bench Test

1. Assemble valve to test fixture with the outlet unplugged.
2. Close valve stem.
3. Apply 500 psi air pressure to the inlet of the valve.
4. Submerge valve into water.
5. Test for seat leakage.

6. Remove valve from water.
7. Install pipe plug into outlet and handtighten, then apply 2 to 3 turns using a 5/8" wrench.
8. Submerge valve into water.
9. Open the valve using the "T" handle (Do Not Backseat) with 500 psi maintained and check for leakage at the outlet pipe plug joint, packing nut joint or stem seal housing joint.
 - a. If leakage is noted at the packing nut joint or stem seal joint the packing nut may be re-torqued. (Reference Step 6 of Reassembly Instructions). Repeat bench test step 8
 - b. If leakage is noted at the pipe plug joint repeat bench test steps 6 & 7. Repeat bench test step 8.
10. Operate valve from closed to open range without back seating valve and check for leaks.
11. If no leaks are found release test pressure and remove from test fixture.

CAUTION: Wrenches must never be used to operate valves equipped with handwheels or "T" handles designed for hand operation.

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[®] parts and procedures, and proper testing for leakage and performance following repairs and installation.

RegO[®] 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

RegO[®] 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 (at buyer's expense) 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, AND EXPRESSLY DISCLAIMS, ANY EXPRESS OR IMPLIED WARRANTIES, 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.

This Limited Warranty is given by Engineered Controls International LLC, of 100 RegO Drive Elon, NC 27244 USA, (336) 449-7707.

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 based 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.

The benefits given by the Limited Warranty above are in addition to any other rights and remedies to which you may be entitled by law.

NOTE TO AUSTRALIAN PURCHASERS: The following applies if you purchased this product as a "consumer" as defined in the Australian Consumer Law. Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure. Information regarding how to return a product and make a claim under this Limited Warranty is set forth below.

Nothing in this document purports to modify or exclude your rights if any under the Australian Consumer Law, or other laws which cannot be lawfully be modified or excluded.

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 and 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, to make a claim under this Limited Warranty 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 (at the user's expense) 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 and return the product 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.



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