



# Repair Instructions for Seal Replacement Kit No. 1667-0022 for 1667-1600 Control Valve Assembly

June 2000

Form FVC 025

**KEEP THIS DOCUMENT WITH THE PRODUCT UNTIL IT REACHES THE END USER.**

## WARNING

Use proper safety equipment at all times. Purge the system completely of all product.

This equipment must be installed, operated, and maintained in accordance with federal, state, and local codes and manufacturer's instructions. In addition, in most states the installation must also comply with ANSI K61.1 standards. Only personnel trained in the proper procedures, codes, standards, and regulations should install and inspect this equipment. Failure to follow these instructions or to properly install and maintain this equipment could result in property damage and personal injury or death.

To insure long term safe operation, the manufacturer recommends that under normal service conditions this product should be inspected at least once every five (5) years and be repaired or replaced as required.

**CAUTION:** Contact with or inhalation of Liquid Anhydrous Ammonia or L-P Gas or their vapors can cause serious injury or death. Dispersement must be in accordance with local regulations.  
For the proper handling and storage of Anhydrous Ammonia refer to ANSI Standard K61.1.  
For the proper handling and storage of Liquefied Petroleum Gas refer to NFPA Pamphlet 58.

## Disassembly

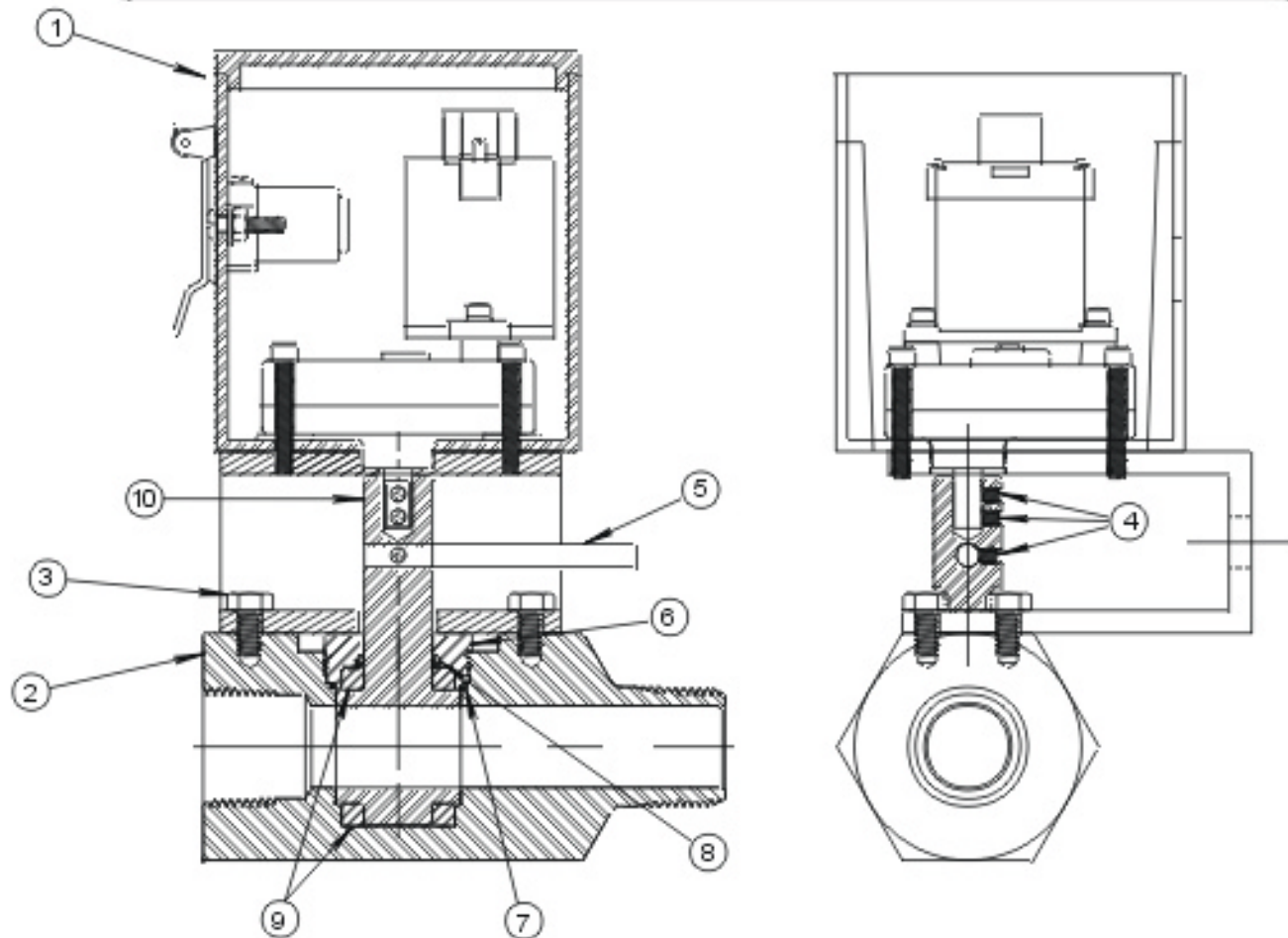
REFER TO FIGURE 1 FOR THE FOLLOWING STEPS:

- Step 1: Purge all piping of anhydrous ammonia before removing Control Valve Assembly from Tool Bar. Remove Set Screws (4) from Control Valve Stem (10). Remove Position Indicator (5). Remove four Cap Screws (3) that hold Motor Box Support to Valve Body. Carefully remove Valve Bonnet (6) from Valve Body. Lift Valve Stem out of Body, noting position of O-Rings (7) and (8), and Bushings (9). Remove and discard the O-rings and Bushings.
- Step 2: Clean Valve Body, Valve Stem and Valve Bonnet thoroughly.  
**IMPORTANT:** Before reassembly, threads of Bonnet **MUST BE** coated with an anti-seize thread compound.
- Step 3: Install new O-rings and Bushings to Valve Stem. Place Valve Stem into Valve Body in the same manner and position as when previously removed. Place Valve Bonnet over Stem, align to Body, engage threads and tighten. Install Position Indicator in Stem (10) and rotate. If the Control Valve Stem (10) is hard to rotate, loosen Bonnet (6) slightly. The Control Valve Stem should have a slight drag, but NOT difficult to turn. Remove Position Indicator (5) from Stem and place Motor Support (with Motor Box still intact) over Valve Stem. Align the flat on the Motor Shaft with the top two Set Screws (4) and tighten Set Screws against this flat surface. Install Position Indicator (5) and tighten bottom Set Screw (4). Align four holes and secure to Body with Cap Screws.
- Step 4: Return the Control Box and Motor Valve Assembly to service and check for leaks at Bonnet and Stem. There should be no leaks. Attach cable to 12 Vdc power and check rotation. The entire assembly is ready for operation.

## Contents of Kit

<u>ITEM</u>	<u>QUANTITY</u>
1667-2026 Bushing	2
P5-075-R1 O-Ring	1
P5-066-R2 O-Ring	1
FVC 025 Instructions	1

# CONTROL BOX & MOTOR VALVE ASSEMBLY 1667-1600



## FIG.1

1	1	1667-1500	MOTOR BOX ASSEMBLY W/SUPPORT
2	1	1667-1400	CONTROL VALVE ASSEMBLY
3	4	P6-091 C O	1/4-20 X 1/2" HX HD BOLT
4	3	310-2008	BALL SET SCREW (310-8)
5	1	1667-5005	1/4" X 3' POSITION INDICATOR
6	1	1667-5003	CONTROL VALVE STEM BONNET
7	1	P5-066-R2	2-028 O-RING NITRILE
8	1	P5-075-R1	2-116 O-RING NITRILE
9	2	1667-2026	CONTROL VALVE STEM BUSHING
10	1	1667-5002	CONTROL VALVE STEM
ITEM	QTY	PART NO.	DESCRIPTION