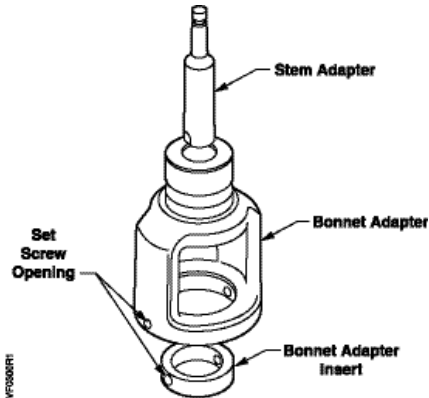


## Universal Valve Retrofit Kit

### Product Description

Kit contains the parts needed to adapt a valve to the following Siemens 599 Series Flowrite™ actuators: SKB, SKC, SKD, SQX.



### Contents

- 1- Bonnet Adapter
- 1- Bonnet Adapter Insert
- 1- Stem Adapter
- 1- Jam nut (size varies according to kit)
- 3- Square head set screws (5/16-in. -18 x 1-1/4-in.)

### NOTE:

- ARK 11 (Siemens 591 and 598) contains
  - 3-Bonnet Adapter Inserts
  - 4-Stem Adapters
  - 2-Jam nuts.
- ARK 12 (Johnson VG2XXX) contains
  - 2-Bonnet Adapter Inserts
  - 2-Stem Adapters
  - 2-Jam Nuts
- ARK 14 (Siebe VB7XXX and VB9XXX)
  - 2- Stem Adapters

### Materials

Stem Adapter- Brass alloy 360

Bonnet Adapter- ASTM A-126 cast iron

Bonnet Adapter Insert- Brass alloy 360

### Product Numbers

Brand Name	Valve Product Number	Kit Number
Siemens	658-XXXX and 339-XXXX	ARK10
	591-XXXX and 598-XXXX	ARK11
Honeywell	V3XXXX (2-in through 3-in)	ARK16
	V3XXXX (4-in through 6-in)	ARK18
	V501X (A, B, C, F, G, N) 1/2-inch through 3-inch	ARK17
	V501X (A, B, C) 4-in through 6-in	ARK21
Johnson Controls	VG2XXX	ARK12
	VG7XXX (1-in. through 2-in)	ARK13
	VG7XXX (1/2-in. and 3/4-in)	ARK19
Siebe	VB7XXX and VB9XXX (threaded and flanged)	ARK14

### Warning/Caution Notations

<b>WARNING:</b>		Personal injury/loss of life may occur if you do not follow the procedures as specified.
<b>CAUTION:</b>		Equipment damage, or loss of data may occur if you do not follow the procedures as specified.

### Required Tools

Two adjustable wrenches for tightening set screws and jam nut.

### Expected Installation Time

15 minutes

### Prerequisites



#### CAUTION:

Shut off line flow through valve before proceeding.

- Remove existing actuator and all linkages from valve.
- Clean dust and residue from valve stem and bonnet.
- Increase the height of the service envelope by six-inches (152 mm) to accommodate the retrofit kit.

## Installation

### Assemble Kit to Valve

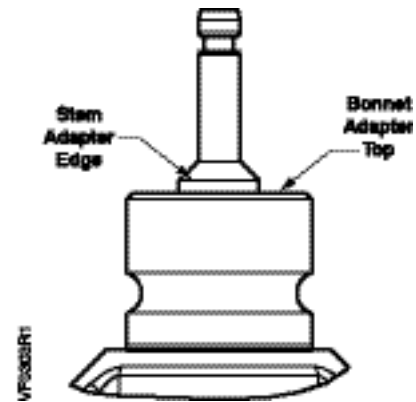
1. Loosely screw the jam nut and stem adapter on valve stem.
2. Screw/slip the bonnet adapter insert as far as possible on to the valve. The packing gland may need to be removed.

**NOTE:** For ARK11, (Siemens 591 and 598 series) and ARK12 (Johnson VG2XXX) measure the bonnet to determine which insert to use. Discard any remaining inserts.

3. Reinstall packing gland if previously removed. Slip bonnet adapter over bonnet adapter. Insert and align set screw openings.
4. With valve stem in down position:
  - a. For ARK 11 (Siemens 591-XXXX and 598-XXXX), ARK 12 (Johnson) and ARK14 (Siebe) measure stem adapter and use the stem adapter that properly aligns with top edge of bonnet adapter. Discard any remaining stem adapters.
  - b. For "Up to Open" valves: Adjust stem adapter so that the edge is approximately 1/8-inch (5 mm) above bonnet adapter, while still maintaining at least two full threads of engagement. See Figure 1.

**NOTE:** For ARK 16 (Honeywell V3XXXX 2-inch through 3-inch): Adjust stem adapter so a minimum of two full threads of engagement is achieved.

- c. For "Up to Close" valves: Adjust stem adapter so that edge is at least 1/8-inch (5 mm) below the top of the Bonnet Adapter.



**Figure 1.**

5. Tighten jam nut to base of Stem Adapter. (Temporarily remove Bonnet Adapter if needed.)
6. Replace Bonnet Adapter if previously removed.
7. Tighten set screws through the Bonnet Adapter and Bonnet Adapter Insert to the valve.



**CAUTION:**

If the set screws are not properly aligned, damage may occur to the valve, the actuator or both when actuator is engaged.

### Assemble Actuator to Kit

1. Pull valve stem, with adapter, to its full up position.
2. Assemble Actuator to the retrofitted valve.

**NOTE:** Actuator may need to be manually adjusted to reach stem adapter. See the actuator installation instructions.

Installation is complete.

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