

# Installation Guide

## Mounting

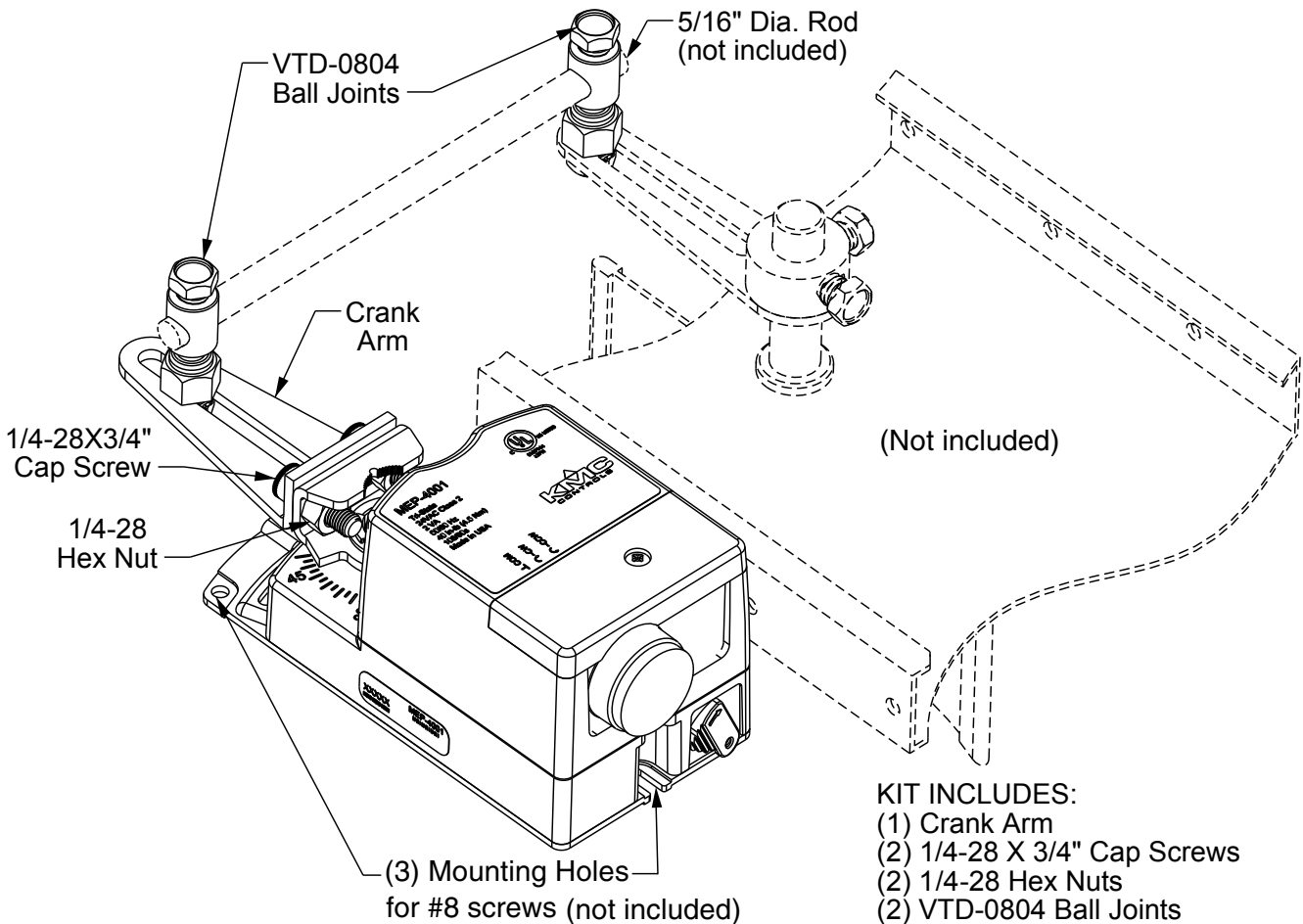
1. From the MEP-4xxx actuator, remove and discard the V-bolt.
2. Assemble and install the kit and actuator as shown in the diagram below.

**NOTE:** In general, **position both the ball joints as close to the end of the crank arms as is feasible** for the application. Positioning a ball joint in the slot closer to the shaft will change the torque, rotation speed, and/or angle of rotation—which may be useful for some applications.

**NOTE:** Check for potential issues such as binding of the linkage or damage caused by the actuator still rotating when the damper (or other application) is already closed.

**NOTE:** See the Accessories section for an **auxiliary crank arm** if the damper or other equipment does not have one already installed.

**NOTE:** For much more information about installing MEP-4xxx actuators, see the **MEP-4xxx Applications Guide** on the KMC web site ([www.kmcccontrols.com](http://www.kmcccontrols.com)) as well as the relevant installation guide.



## Maintenance

Under normal conditions, no routine maintenance is required. In harsh environments, however, periodic lubrication of the ball joints may be necessary.

Each component is designed for dependable, long-term reliability and performance. Careful installation will also help ensure long-term reliability and performance.

## Accessories

### Auxiliary Crank Arms



- VTD-1403\* Short slotted, for 3/8" shafts
- VTD-1404\* Short slotted, for 1/2" shafts
- VTD-1405\* Long slotted, for 1/2" shafts
- VTD-1406\* Long slotted, for 3/8" shafts

**\*NOTE:** In the VTD-1403/1404 short crank arms, a ball joint can be adjusted from 3/4 inches (minimum) from the center of the shaft to 2-7/8 inches (maximum) from the center. In VTD-1405/1406 long crank arms, the maximum is 4-5/8 inches.



- VTD-1414 Three-hole, for 3/8" shafts
- VTD-1415 Three-hole, for 1/2" shafts

### Replacement Ball Joints



- VTD-0804 Ball joint for side-mounted 5/16" diameter rods (1/4-20 male mounting stud with locknut)

## More Information

For additional information about installing MEP-4xxx actuators, see the **MEP-4xxx Applications Guide** on the KMC web site ([www.kmccontrols.com](http://www.kmccontrols.com)) as well as the relevant installation guide.

## Important Notices

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