

## Kochek Butterfly Valve - Air Bleeder Relocation



### Reason:

- Original air bleeder location at the bottom of the butterfly valve results in less-than-ideal ease of access and air bleeding functionality.
- Occasionally, the original orientation may cause debris from dirty water to become trapped in the air bleeder cap threads. Over time this may cause the air bleeder to bind up.

### Required Tools:

1. 3/8" Allen Key; L or T handle
2. 3/4" Hex Socket, Deep
3. Ratchet
  - a. Note: Torque-limited variable-speed power tools are acceptable.
4. Torque Wrench
  - a. Note: Torque setting should fall within middle 50% of the tool's range.

### Process Steps:

1. Remove butterfly valve from apparatus, and place it on a stable work surface, swivel side down.
2. Loosen & remove all eight nuts and bolts.
3. Lift off the inlet flange (Fig. 1) and rotate it 135 degrees counterclockwise. The air bleeder should now be located at the top right when facing the valve head on.
4. Carefully set flange in place using the rubber valve seal for center alignment and the sleeved bolts to set the clock position (Fig. 2).
5. If the original application has rinsed away over time, a light coating of anti-seize compound will help prevent galling of the stainless-steel threads during reassembly.
6. Re-install all eight bolts and tighten the nuts until they just contact the flange.
7. Actuate valve to confirm that it is properly centered. It is possible for the butterfly to rub on the flanges while opening if the flange alignment is not correct. If necessary, loosen nuts and adjust the alignment.
8. Once alignment has been verified, continue tightening nuts in multiple stages. Work in a star pattern, as you would when tightening lug nuts.
9. With the torque wrench, set final nut torque at 35-40 ft-lbs.
10. Actuate the valve once more. Confirm that nothing shifted during tightening, and that the butterfly still clears both flanges at all opening angles.

Fig. 1; Butterfly valve with inlet flange & bolts removed.



Fig. 2: Reinstalling inlet flange in new orientation.

