

# CONBRACO SERIES 40-200

Sizes 1/4" — 2"

## IV MAINTENANCE INSTRUCTIONS

### A. Disassembly — Check Valves

1. Close #2 shut off valve, then close #1 shut off valve.
2. Bleed pressure from the assembly by opening #2, #3, and #4 test cock.

#### CAUTION:

**Caps are spring loaded and should be removed carefully to avoid personal injury.**

3. Unscrew cap using hex head provided.
4. Remove spring and poppet assembly from the body.

### B. Disassembly — Check Valve Poppet

#### CAUTION:

**Do not use pliers or other tools which may damage or scratch the plastic stem.**

1. Holding the poppet assembly in one hand, remove screw and retaining washer.
2. Remove the seat disc.
3. All parts should be carefully inspected for any damage or excessive wear and thoroughly rinsed in clean water prior to reassembly. Replace worn parts as necessary.

### C. Assembly — Check Valve Poppet

1. Install new disc in poppet, secure disc with retaining washer and screw.

#### NOTE:

**Due to symmetry of the disc, the old disc may be turned over to obtain an effective seal.**

### D. Assembly — Check Valve

1. Install the poppet assembly into the body.
2. Install the spring (heavy spring, larger diameter wire, goes into #1 check valve) onto the poppet.
3. Apply a thin coat of silicone based lubricant on cap o-ring.
4. Guide cap over spring and poppet stem and tighten cap.

### E. Relief Valve Disassembly

1. Remove cover bolts, cover and diaphragm.
2. Grasp the diaphragm plate and pull the assembly straight out of the body.
3. Holding the relief valve assembly in one hand, remove the screw and retaining washer.
4. Remove the seat disc.
5. Turn the assembly over, keeping the spring compressed by holding down on the diaphragm plate, remove the screw.
6. Remove the diaphragm plate, spring and bushing from the mainstem.
7. Remove the o-ring from the mainstem.
8. All parts should be carefully inspected for any damage or excessive wear and thoroughly rinsed in clean water prior to reassembly. Replace worn parts as necessary.

### F. Assembly — Relief Valve

1. Apply a thin coat of silicone base lubricant on o-rings before installing.
2. Install o-ring onto mainstem.
3. Slide bushing over mainstem and position spring onto bushing.
4. Position diaphragm plate and compress spring, install screw into mainstem.
5. Turn the assembly over and install seat disc, retaining washer and screw.
6. Install o-ring onto bushing.
7. Slide complete assembly into the body.
8. Position diaphragm over flange, install cover and tighten bolts evenly.
9. Open #1 shut-off valve & bleed air out of the unit through #2, #3 and #4 test cocks; then open #2 shut-off valve.
10. Test complete assembly to ensure proper operation.

# SERIES 40-200      SERIES 40-700

## 2½'' - 10''

### IV MAINTENANCE INSTRUCTIONS

#### A. Disassembly — Check Valves

1. Close #2 shut-off valve, then close #1 shut-off valve.
2. Bleed pressure from the assembly by opening #2, #3, and #4 test cock.
3. Remove cover bolts and cover.

#### NOTE:

**The spring load on the cover will be removed when the cover bolts are backed off approximately ⅜''**

4. Remove the complete check assembly straight out of the valve body being careful not to damage the seat ring.
5. The check valve seat is threaded into the body and may be removed at this time if necessary (The seat is bolted into the body on the 10'' unit).
6. To remove the seat disc, remove the retaining plate nut (On the 8'' & 10'' units remove the retaining plate bolts) and retaining plate, remove disc.

#### WARNING

**The check valve spring is held in compression by the stem nut on top. This nut should not be removed unless the spring requires replacement.**

#### B. Assembly — Check Valves

1. Install seat disc in holder and secure with retaining plate and retaining nut or bolts as applicable.

#### NOTE

**Due to the symmetry of the disc, the old disc may be turned over to obtain an effective seal.**

2. Install the check valve assembly into the body (assemble with the larger diameter spring into the first check valve).
3. Install the check valve cover and tighten bolts evenly.

#### C. Disassembly — Relief Valve

1. Remove cover bolts, cover and diaphragm.

#### NOTE

**On the 8'' & 10'' units the diaphragm is an integral part of the relief valve assembly.**

2. Grasp the diaphragm plate and pull the assembly straight out of the body.
3. Holding the relief valve assembly in one hand, remove the screw and retaining washer.
4. Remove the seat disc.
5. Turn the assembly over, keeping the spring compressed by holding down on the diaphragm plate, remove the screw/bolt.
6. Remove the diaphragm plate(s), spring and bushing from the mainstem.
7. Remove the o-ring from the mainstem.
8. All parts should be carefully inspected for any damage or excessive wear and thoroughly rinsed in clean water prior to reassembly. Replace worn parts as necessary.

#### C. Assembly — Relief Valve

1. Apply a thin coat of silicone based lubricant on o-rings before installation.
2. Install o-ring onto mainstem.
3. Slide bushing over mainstem and position spring onto bushing.
4. Position diaphragm plate(s) and compress spring, install screw/bolt into mainstem.
5. Turn the assembly over and install seat disc, retaining washer and screw.
6. Install o-ring onto bushing.
7. Slide complete assembly into the body.
8. Position diaphragm over flange, install cover and tighten bolts evenly.
9. Open #1 shut-off valve and bleed air out of the unit through #2, #3, and #4 test cocks; then #2 shut-off valve.
10. Test complete assembly to ensure proper operation.