

Form No.	Issue Date	Rev. Date
I-2021	10/11/13	2/19/25

# K 588-3

## Universal Repair Kit for 3 Inch and 4 Inch Relief Valves

For Repair of 3 Inch Valves 80396, 80397, 80399, 80427, 80587, 80701, 80715, 80720, 80723, 80746, 81261, 81262, 81263

For Repair of 4 Inch Relief Valves 81825 and 82261

Part No.	Description	Quantity	Included in Parts Kit 53766
51384	Gasket	1	-
53766	Parts Kit	1	-
W 3748-4	O-ring, 3 x 3-1/4 in.	-	1
W 3704-2	O-ring, 1/4 x 3/8 in.	-	1
W 5404-10SS	Groove Pin, 1/8 x 5/8 in.	-	3
W 3706-2	O-ring, 3/8 x 1/2 in.	-	1
W 3754-4	O-ring, 3-3/8 x 5-5/8 in.	-	3
W 3752-4	O-ring, 3-1/4 x 3-1/2 in.	-	2
W 3772-4	O-ring, 4-1/2 x 4-3/4 in.	-	1

This kit includes the following parts:

## Instructions for Repair of 3 Inch Non-Indicating or Indicating Relief Valves and 4 inch Relief Valves

This repair kit is universal for either non-indicating or indicating relief valves. Some parts will not be used depending on which type of valve is being repaired.

## **3 Inch Non-Indicating Relief Valve Repair**

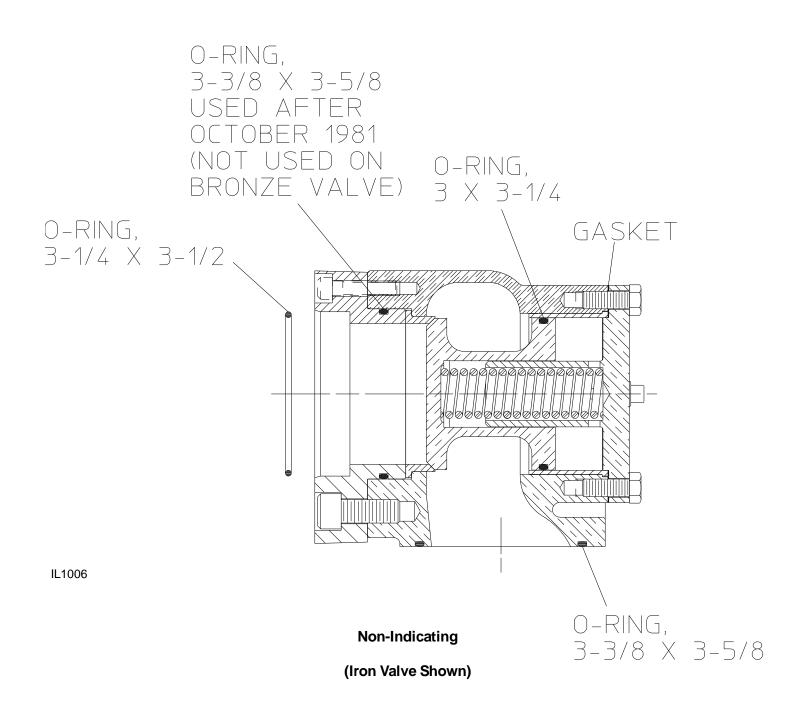
- 1. Open drain cocks in relief valve and piping to make sure all of the water is drained. Disconnect hose or tube connecting relief valve to pilot valve assembly.
- 2. Remove bolts, nuts and washers attaching the relief valve to the pump. Discard O-rings.
- 3. Remove six cap screws attaching cover to body. Remove cover, spring, main valve and gasket. Pry O-ring from main valve. Discard gasket and O-ring.
- 4. Examine spring for distortion, set or other defects. Remove any nicks or burrs outside of main valve or in bore of body. Discard any defective parts.

#### Note: Always use new gaskets and O-rings supplied with the repair kit during reassembly.

- 5. Apply a light coat of mineral oil or other light weight oil to O-ring (V10) and slide in groove of main valve. Be sure to remove any twists from O-ring.
- 6. Insert spring in cover. Position cover and gasket against flange of body with drain pointing down, and install six cap screws.
- 7. Attach relief valve to pump using O-rings, bolts, nuts and lock washers. Lubricate O-ring used on connecting pipe.
- 8. Connect tube or hose from pilot valve assembly to relief valve.

## WARNING

If a tube or hose is used to drain the cover, it should be connected to a separate drain valve and not to the manifold drain valve.



## 3 Inch and 4 inch Indicating Relief Valve Repair

- 1. Open drain cocks in relief valve and piping to make sure all of the water is drained. Disconnect hose or tube connecting relief valve to pilot valve assembly.
- 2. Remove bolts, nuts and washers attaching the relief valve to the pump. Discard O-rings.
- 3. Remove cap screws attaching switch mounting bracket and cover to body. Remove assembled valve cover and gasket. Discard gasket.

### Note: Disassembling switch housing is not necessary unless switch is known to be defective.

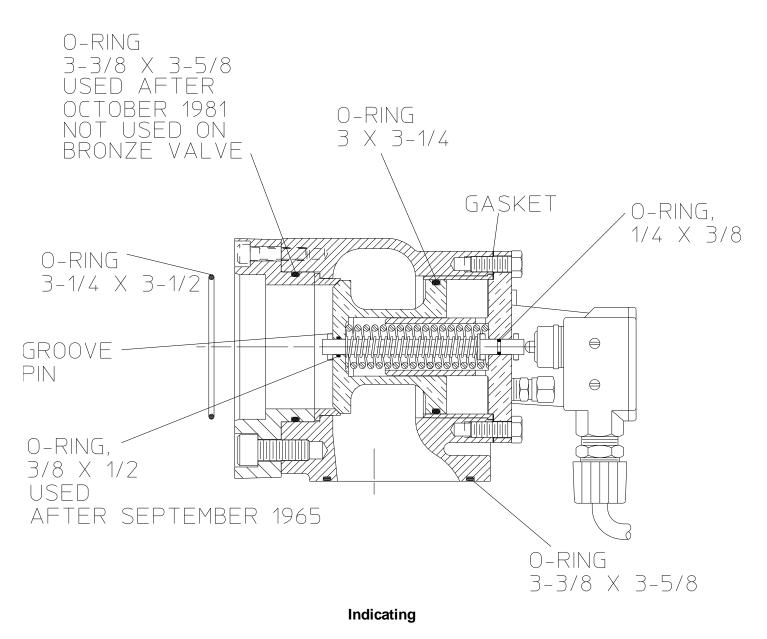
- 4. To disassemble valve cover, remove pins from both ends of switch actuating rod. Pull rod, main valve springs and washer from cover. Remove O-rings from valve and rod. Discard O-rings.
- 5. Examine springs for distortion, set or other defects. Remove any nicks or burrs on outside of main valve, in bore of body and on actuating rod. Discard any defective parts.

#### Note: Always use the new gaskets and O-rings supplied with the repair kit during reassembly.

- 6. Apply a light coating of mineral oil or other light weight oil to O-rings, and install in main valve. Lubricate O-ring, and install in groove in actuating rod. Be sure to remove any twists from O-rings.
- 7. Make sure a pin is installed in inner hole in actuating rod. Insert rod in valve cover and install one pin in rod on outside of cover. Slide washer, springs and main valve on rod, and install remaining pin behind valve.
- 8. Position assembled cover and gasket against flange of body with drain pointing down. Place switch mounting bracket on cover so sealing grip is either horizontal or points down slightly. Adjust the position of the switch so that insertion of a .015 inch feeler gauge will light amber indicator, but insertion of a .010 feeler gauge will not.
- 9. Attach relief valve to pump using O-rings, bolts, nuts and lock washers. Lubricate O-ring used on connecting pipe.
- 10. Connect tube or hose from pilot valve assembly to relief valve.

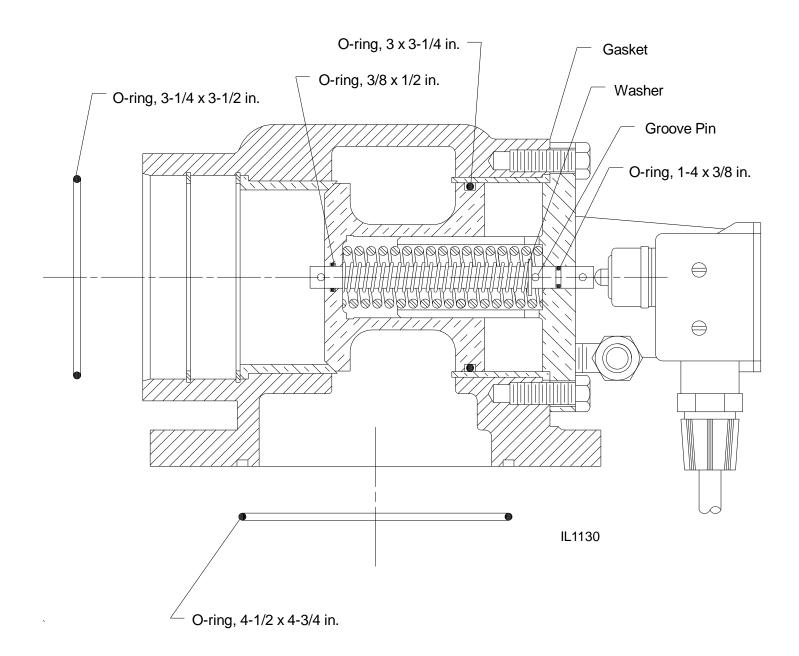
## WARNING

If a tube or hose is used to drain the cover it should be connected to a separate drain valve and not to the manifold drain valve.



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## 4 Inch Indicating

