



Diamond Butterfly Valve Maintenance Instructions

Butterfly Valve Spares Kits:

SIZE	Diamond Kit	This Kit	Pre-1992 Kit	This Kit
1.0"	KBFD10__		KBV10__	
1.5"	KBFD15__		KBV15__	
2.0"	KBFD20__		KBV20__	
2.5"	KBFD25__		KBV25__	
3.0"	KBFD30__		KBV30__	
4.0"	KBV40__		KBV40__	

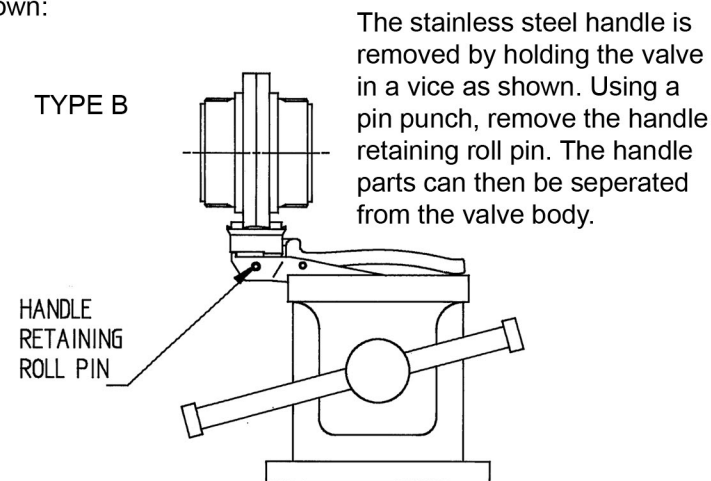
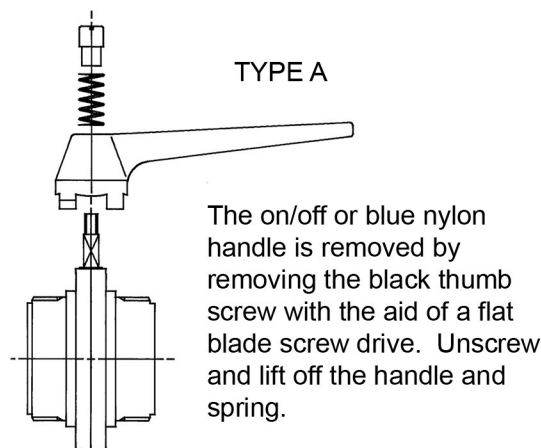
IMPORTANT Please read carefully before commencing any work on this valve:

1. Ensure that the line pressure is zero and fully drained and that all pneumatic and power supplies are turned off and isolated.
2. When operating the valve ensure that fingers are clear of moving parts to avoid injury.
3. Gaskets and seals should be stored away from UV light to increase shelf life.
4. Ensure that pipes and connections are properly aligned to avoid undue stress and leakage.
5. The additional ATEX / Equivalent UK Regulations Installation & Maintenance Instructions must be used in conjunction with this document to ensure safe use of ATEX / equivalent UK regulations rated valves. **CONNECTING PIPEWORK MUST BE EARTHED.**
6. Valves should be stored in the open position to prevent seal set around the valve disc.
7. Always operate the valve open and closed before use to ensure correct function.
8. The user should adopt a maintenance programme for valves depending on application particulars. DPL recommends seal replacement at least every 2 years.

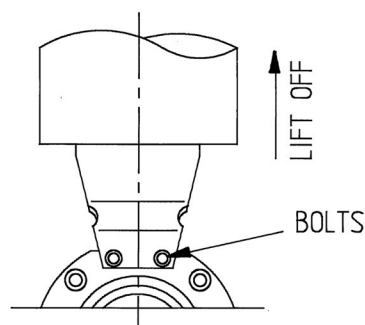
Dis-assemble as shown below and on Page 2 depending on your valve configuration:

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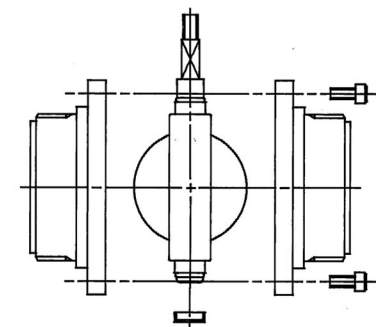
1. First remove the handle (if fitted), type A or type B as shown:



2. Remove the actuator (if fitted). Place the valve body in a vice. Undo and remove the two M5 bracket bolts and lift off the actuator as shown. Note the red position indicator fitted to the actuator coupling is in-line with the valve disc.



3. Using an allen key undo and remove the M6 cap screws. Loosen the screws a little at a time, diagonally at first as the valve halves separate. Once separated, remove the gasket / paddle / bottom cap assembly as shown.

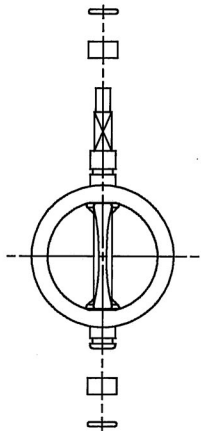




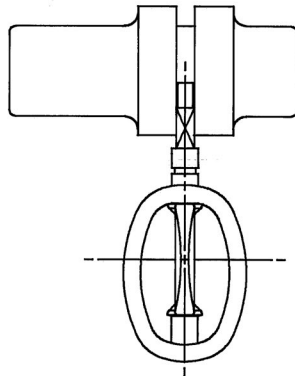
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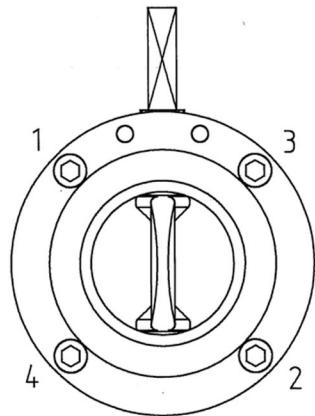
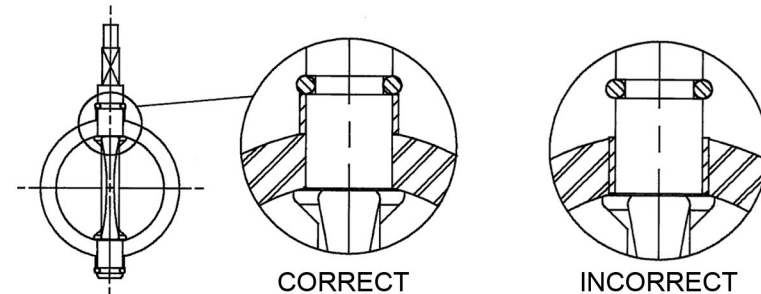
4. Remove the O rings and bearings as shown:



5. Hold the spindle in a vice and turn the seal at 90° to the disc as shown. Pull the seal off of the spindle, short end first.



6. **Re-Assembly:** DPL recommend the application of a seal and process compatible, food grade grease to the cross holes of the new seal to give optimal operating performance. The user may choose not to apply grease due to process particulars / application restrictions. Fit the new seal by first pushing the long end of the spindle through one of the seal cross-holes. Hold the spindle in the vice once more as pictured in previous step 5 and pull the seal over the short end of the spindle (as pictured in step 5). Fit the bearings and O rings in the correct orientation as shown below:



7. Replace the re-fitted spindle / seal assembly between the valve halves. Don't forget to replace the black plastic dust cap (if fitted). This fits between the valve halves at the base of the valve. Tighten the M6 bolts in a diagonal sequence as numbered in the illustration to the left, a little at a time. Ensure that all bolts are fully tight and that the valve halves are fully tightened together. Place the valve in a vice and open and close the valve several times to ensure correct operation.

8. Place the valve in a vice with the spindle pointing up-wards as shown. If a handle is fitted this can now be replaced by referring to step 1 on the previous page.

If an actuator is fitted this can now be replaced as shown in the illustration to the right. Lower the actuator into position ensuring that the red valve position indicator is in-line with the valve disc as was noted in previous step 2. Replace the two M5 bracket bolts and tighten accordingly. Check and make sure that the other four bracket bolts on the underside of the actuator are also tight. Ensure that fingers are clear of moving parts to avoid injury before reconnecting the pneumatic supply. Actuate the valve open and closed several times to ensure correct open / closed operation.

