

Bifold

BIFOLD DOMINO SERIES VALVE MAINTENANCE INSTRUCTIONS

The BIFOLD DOMINO series valve maintenance instructions follow the same format as the catalogue.

Each valve body, actuator and static return device type is covered by an individual maintenance instruction.

A set of maintenance instructions will contain the following

I, VALVE BODY INSTRUCTION

II, PRIMARY ACTUATOR INSTRUCTION

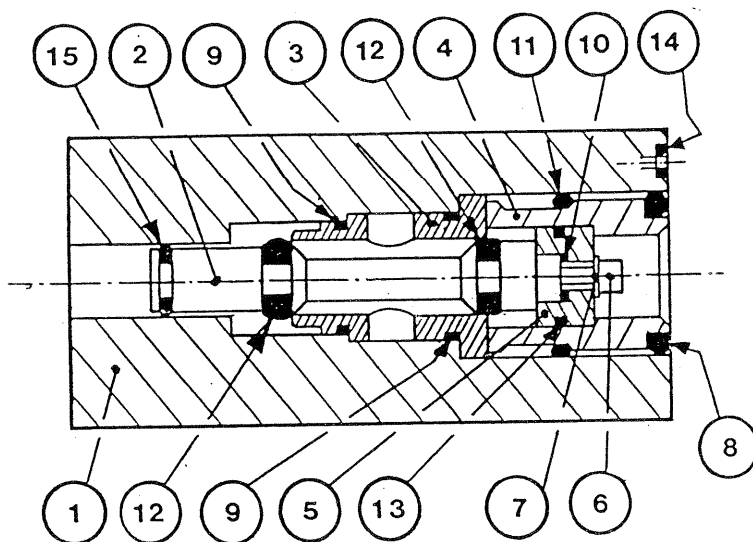
III, SECONDARY ACTUATOR OR RETURN DEVICE INSTRUCTION.

SEAL REPAIR KITS: seal repair kits are available from BIFOLD. When ordering a seal repair kit prefix the full valve model number with the letters SRK.

e.g. SRK S06 E1 32 NC 00 96 24v DC

Wherever possible give the valve serial numbers and any special requirements to assist selection of the correct seal kit for your valves.

S06-E1-32-NC-00-96.



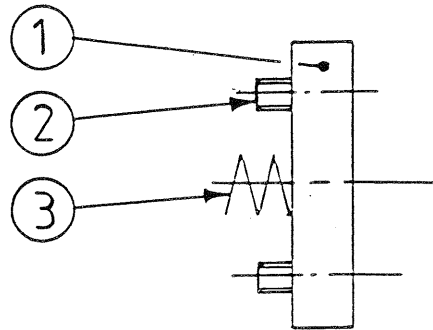
VALVE BODY INSTRUCTION MODELS
06,09,12

THIS SHEET COVERS THE VALVE BODY INSTRUCTIONS ONLY, FOR MAINTENANCE OF PRIMARY OR SECONDARY ACTUATORS SEE THE RELEVANT MAINTENANCE SHEET.

- 1, REMOVE THE VALVE FROM THE PIPEWORK AND IF RELEVANT, ELECTRICAL SUPPLY FOR SOLENOID VALVES.
- 2, REFER TO THE RELEVANT SHEETS FOR REMOVAL OF ACTUATOR ASSEMBLIES.
- 3, REMOVE THE PISTON END CAP AND 'O' SEALS (ITEMS 4,8,11) FROM THE VALVE BODY.
- 4, REMOVE THE STEM ASSEMBLY COMPLETE (ITEMS 2,5,6,7,10,12,13,15).
- 5, REMOVE THE POPPET SEAT (ITEM 3) COMPLETE WITH 'O' SEAL (ITEM 9).
- 6, REMOVE ALL 'O' SEALS FROM THE COMPONENTS TO BE RE-USED.
- 7, CLEAN AND INSPECT ALL COMPONENTS TO BE RE-USED FOR DAMAGE OR WEAR.
- 8, FIT NEW 'O' SEALS TO THE STEM ASSEMBLY (ITEMS 2,5) 'O' SEALS (ITEMS 10,12,15).
- 9, FIT NEW 'O' SEALS TO THE POPPET SEAT (ITEM 3) 'O' SEAL (ITEM 9).
- 10, FIT NEW 'O' SEALS TO THE PISTON END CAP (ITEM 4) 'O' SEAL (ITEM 9).
- 11, LUBRICATE THE 'O' SEALS WITH SILICON GREASE OR SIMILAR.
- 12, CAREFULLY FIT THE POPPET SEAT (ITEM 3) INTO THE VALVE BODY.
- 13, REFIT THE STEM ASSEMBLY INTO THE VALVE BODY.
- 14, REFIT THE PISTON END CAP INTO THE VALVE BODY.
- 15, FIT NEW 'O' SEALS (ITEMS 8,14).
- 16, ENSURE THE STEM ASSEMBLY MOVES FREELY WITHIN THE VALVE BODY.
- 17, REFER TO THE RELEVANT ACTUATOR DATA SHEET FOR REFITTING THE PRIMARY AND SECONDARY ACTUATORS.

TESTING: REFER TO THE VALVE LABEL FOR MINIMUM AND MAXIMUM WORKING PRESSURES. TEST THE COMPLETE VALVE ON LOW PRESSURE TO ENSURE CORRECT OPERATION PRIOR TO RAISING THE PRESSURE TO NORMAL WORKING CONDITIONS.

MAINTENANCE INSTRUCTIONS



SPRING RETURN END CAP ASSEMBLY

This sheet covers maintenance of the spring return end cap only, refer to the relevant maintenance data sheet for valve body and actuator instructions.

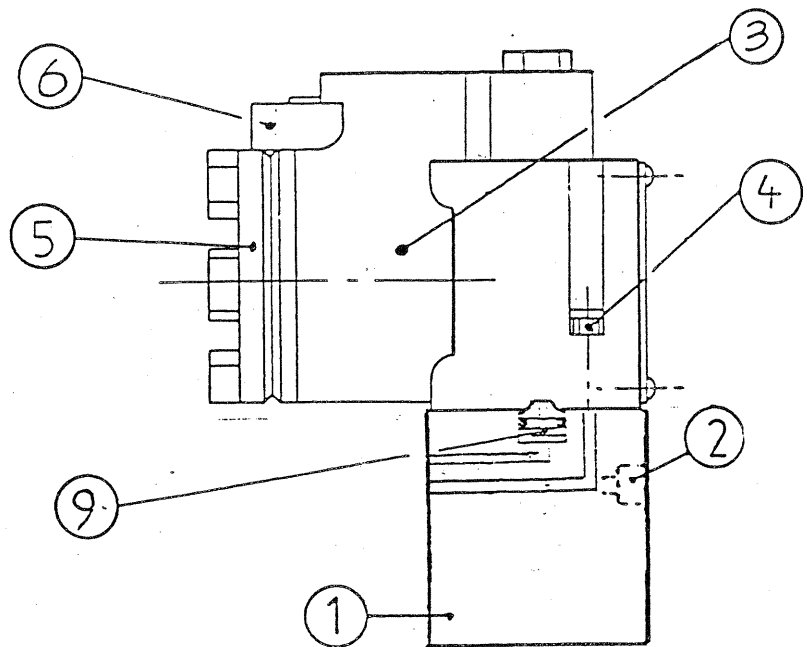
The spring end cap may be removed from the valve body without disturbing pipework. The valve must be de-energized and the air supply switched off prior to removal.

- 1, Remove the four socket head cap screws (item 2) and spring end cap (item 1) from the valve body.
- 2, Remove the spring (item 3) from the valve body.
- 3, Fit a new spring (item 3) into the valve body and replace the spring end cap and socket head cap screws (items 1,2).

NOTE: 3 port 2 position valve spring end caps have a vent drilling in the centre of the cap, this hole must be kept clear.

5 port 2 position valve spring end caps do not have a vent drilling.

REPLACEMENT SPRINGS: To obtain replacement springs quote the valve model number and serial number to obtain the correct spring. Special heavy duty springs are available, consult BIFOLD.



BASIC E1 ACTUATOR WITH CODE 96 SOLENOID

This sheet covers maintenance of the actuator only, refer to the relevant maintenance data sheet for valve body instructions.

- 1 Remove the complete valve from the actuator, to disconnect the wiring release the lid locking screw (Item 6) and unscrew the solenoid terminal cover (Item 5). Disconnect the wiring to the terminal block and internal earth point. Disconnect the external earth wire and remove the cable gland.
- 2 Remove the four socket head cap screws (Item 2) retaining the actuator to the valve body.
- 3 Remove the two socket head cap screws (Item 4) retaining the solenoid (Item 3) to the actuator block (Item 1).
- 4 Inspect the moving core for damage or wear.
NOTE:- The moving core with spring and 'O' seal are available as a seal repair kit. Quote SRK E1 96 Actuator.
- 5 Clean and inspect components to be reused.
- 6 Refit the solenoid (Item 3) on to the actuator block (Item 1) using screws (Item 4).
- 7 Refit the actuator assembly complete, to the valve body using screws (Item 2).
- 8 Re-connect the wiring to the internal connecting block and external earth point, refit the solenoid terminal cover (item 5), relock the lid locking screw (Item 6).
TESTING: Refer to the valve label for minimum and maximum working pressures, test the valve on low pressure to ensure full operation prior to raising the pressure to normal working conditions.
NOTE: The solenoid jet (Item 9) is factory preset. Do not adjust or remove.

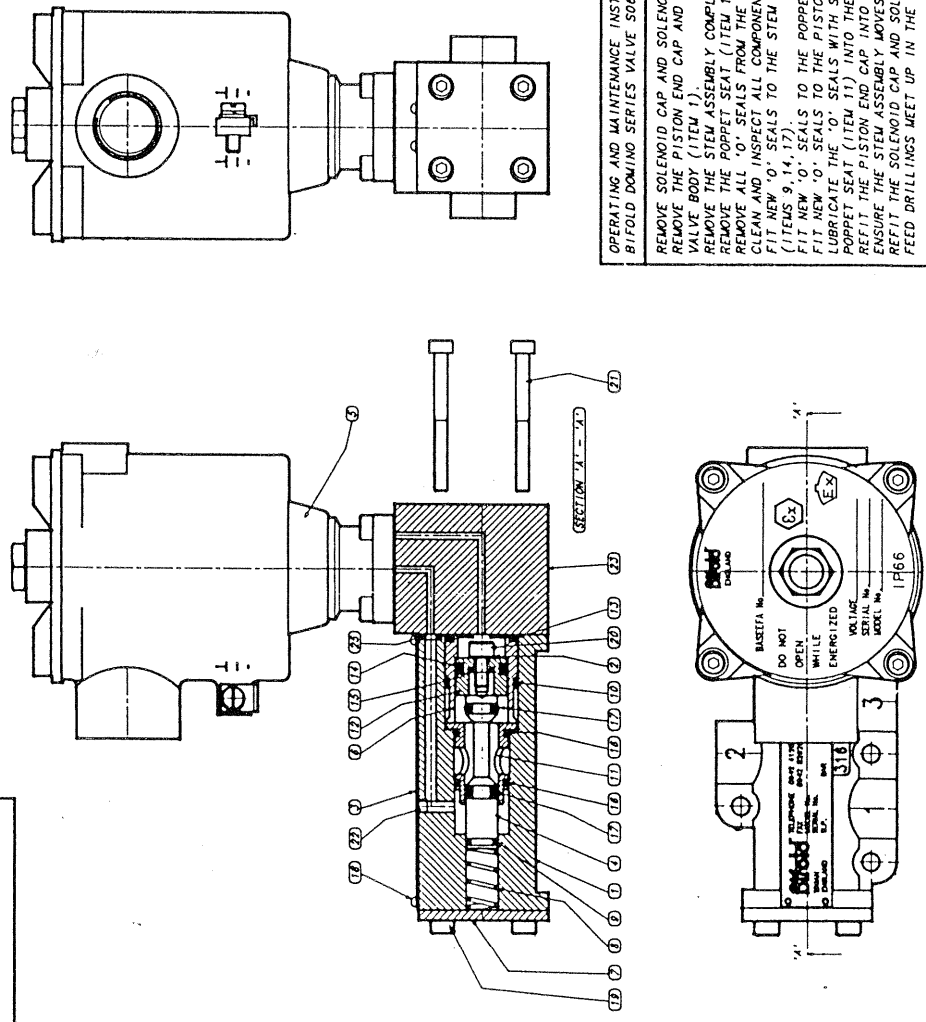
DWG NO. **400-1047**

REVISIONS: TOLERANCES: UNLESS OTHERWISE STATED
 DECIMAL PLACES: 0.4
 ANGULAR: 1/16"
 DIMENSIONAL: 0.125"
 DECIMALS: 0.005"
 ALL DIMENSIONS IN mm. UNLESS OTHERWISE STATED
 ALL SURFACE FINISH IN µm.
 ALL DIMENSIONS TO BE TAKEN FROM THE POSITION OF NOTES DIMENSIONS, ETC SEE BS308.
 DO NOT SCALE.

APPROVED FOR PRODUCTION: BY: U.C

MATERIAL AS LISTED

TITLE: **MAINTENANCE INSTRUCTION**
S06-E1-32-NC-00-900



ITEM	PART No	DESCRIPTION	QTY	MATERIAL	S/FK
1	1-90-1-9S	VALVE BODY	1	BS970/1/3 316S11	
2	100-84	WASHER FLAT M4	1	GRADE A4 ST/STEEL	
3	140-15	LABEL	1	BS970 316S11 24 SWG	
4	2-1985	STEM	1	BS970/1/3 316S11	
5	38-900	SOLENOID	1		
6	6-146-1S	PISTON END CAP	1	BS970/1/3 316S11	
7	7-54-1S	SPRING END CAP	1	BS970/1/3 316S11	
8	88-23	SPRING	1	BS2056 316 S42	
9	90-11V	'O' SEAL	1	VITON	
10	90-504V	'O' SEAL	1	VITON	
11	72-6-1S	POPPET SEAT	1	BS970/1/3 316S11	
12	71-1885	PISTON HEAD	1	BS970/1/3 316S11	
13	90-606V	'O' SEAL	1	VITON	
14	90-607V	'O' SEAL	1	VITON	
15	90-608V	'O' SEAL	1	VITON	
16	90-501V	'O' SEAL	2	VITON	
17	90-605V	'O' SEAL	2	VITON	
18	841-1	RIVETS	4	GRADE A4 ST/STEEL	
19	86-4-6	M4 SOCKET HEAD CAP SCREW	4	GRADE A4 ST/STEEL	
20	86-4-10	M4 SOCKET HEAD CAP SCREW	4	GRADE A4 ST/STEEL	
21	85-5-6	M4 SOCKET HEAD CAP SCREW	4	GRADE A4 ST/STEEL	
22	85-5-6	M4 SOCKET HEAD CAP SCREW	4	GRADE A4 ST/STEEL	
23	68-33-6S	SOLENOID BLOCK	1	BS970/1/3 316S11	
24	68-33-2	SPRING	1	BS2056 316 S42	
25	90-50V	'O' SEAL	1	VITON	
26	90-11V	'O' SEAL	2	VITON	
27	90-615V	'O' SEAL	1	VITON	
28	90-668V	'O' SEAL	1	VITON	
29	90-99V	'O' SEAL	1	VITON	
30	90-93V	'O' SEAL	1	VITON	
31	90-82V	'O' SEAL	1	VITON	

ITEMS MARKED THUS '*' INCLUDED IN SEAL REPAIR KIT 'SRKS06-E1-32-NC-00-900'

ITEMS 25 TO 31 ARE INTERNAL ITEMS OF THE SOLENOID AND ARE NOT SHOWN.

OPERATING AND MAINTENANCE INSTRUCTIONS FOR BIFOLD DOMINO SERIES VALVE S06-E1-32-NC-00-(900 SERIES)

REMOVE SOLENOID CAP AND SOLENOID. BY UNSCREWING THE FOUR SOCKET HEAD CAP SCREWS (ITEM 21). REMOVE THE PISTON END CAP AND 'O' SEALS (ITEMS 6, 13 AND 10). FROM THE VALVE BODY (ITEM 1).

REMOVE THE STEM ASSEMBLY COMPLETE (ITEMS 2, 4, 9, 12, 14, 17, 19 AND 20). REMOVE THE POPPET SEAT (ITEM 11) COMPLETE WITH 'O' SEALS (ITEM 16).

REMOVE ALL 'O' SEALS FROM THE COMPONENTS TO BE RE-USED.

CLEAN AND INSPECT ALL COMPONENTS TO BE RE-USED FOR DAMAGE OR WEAR.

FIT NEW 'O' SEALS TO THE STEM ASSEMBLY (ITEMS 4 AND 12), 'O' SEALS (ITEMS 9, 14, 17).

FIT NEW 'O' SEALS TO THE POPPET SEAT (ITEM 11) 'O' SEALS (ITEMS 16).

FIT NEW 'O' SEALS TO THE PISTON END CAP (ITEM 6) 'O' SEALS (10 AND 13).

LUBRICATE THE 'O' SEALS WITH SILICON GREASE OR SIMILAR. CAREFULLY FIT THE POPPET SEAT (ITEM 11) INTO THE VALVE BODY.

RE-ASSEMBLY THE STEM ASSEMBLY INTO THE VALVE BODY. COMPLETE WITH 'O' SEALS. ENSURE THE STEM END KEYWAY IS PERFECTLY WITHIN THE VALVE BODY.

REFIT THE SOLENOID CAP AND SOLENOID TO THE VALVE BODY ENSURING ALL SOLENOID FEED DRILLINGS MEET UP IN THE CORRECT POSITION.

TESTING:-- REFER TO THE VALVE LABEL FOR MAXIMUM AND MINIMUM OPERATING PRESSURES. TEST THE COMPLETE VALVE ON LOW PRESSURE TO ENSURE CORRECT OPERATION PRIOR TO RAISING THE PRESSURE TO NORMAL WORKING CONDITIONS.

This drawing is a copyright work and is a design document within the meaning of the Copyright Act 1988. It is an infringement of the copyright to copy the document and it is an infringement of the design right to make the article or articles depicted in the document or to reproduce the document for the purpose of making such articles. The document is the property of Bifold Company (Manufacturing) Ltd. and all rights in the document are reserved.

Bifold
 COMPANY (MANUFACTURING) LIMITED

DWG NO. **400-1047**