

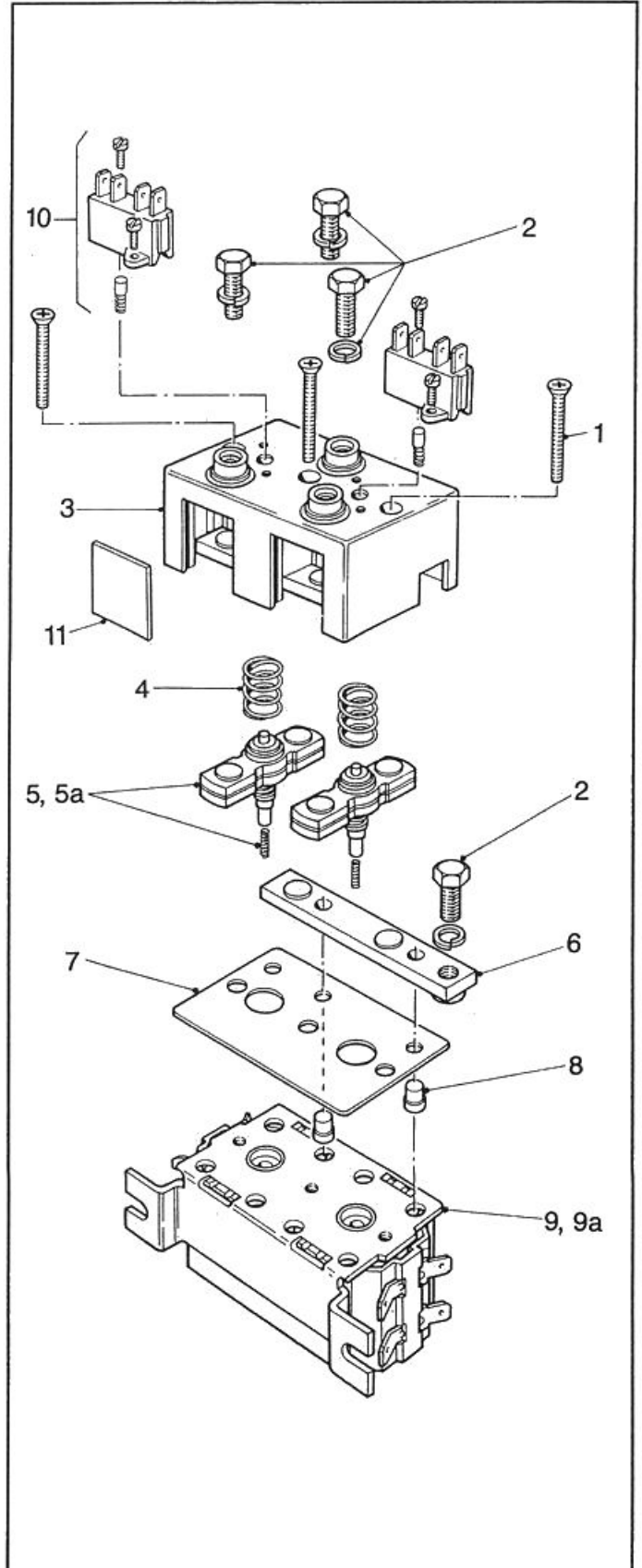


# SPARE PARTS FOR SOLENOID SWITCH TYPE DC88

Suffix 'A' indicates auxiliary contacts  
 Suffix 'B' indicates magnetic blowouts  
 Suffix 'L' indicates large contact tips

## DC88

| Item | Part No. | Description                                     | Qty |
|------|----------|---|-----|
| 1    | 2070-19  | Top Cover Fixing Screw                          | 3   |
| 2    | 2070-342 | Hardware Kit                                    | 1   |
| 3*   | 2070-360 | Assembled Top Cover                             | 1   |
| 4*   | 2070-16  | Return Spring                                   | 2   |
| 5    | 2070-14  | Moving Contact Assembly                         | 2   |
| 5a   | 2070-14C | Moving Contact Assembly (DC88L)                 | 2   |
| 6    | 2070-326 | Assembled Normally Closed Fixed Contact         | 1   |
| 7    | 2070-330 | Normally Closed Fixed Contact Insulator         | 1   |
| 8    | 2070-343 | Normally Closed Fixed Contact Peg               | 2   |
| 9*   | 2070-340 | Assembled Coil and Magnet Frame with bracket    | 1   |
| 9a*  | 2070-350 | Assembled Coil and Magnet Frame without bracket | 1   |
| 10   | 2070-413 | Auxiliary Contact Kit (DC88A)                   | 2   |
| 11   | 2070-402 | Dust Shield – optional                          | 4   |



\* When ordering these items please state full type number of contactor for which items are required.

NOTE: M8 main terminals (item 2) should be tightened to a torque of 8 to 9.5 Nm.

# Servicing Instructions for DC88 Contactor

## *using exploded diagram*

### Disassembly

1. Remove auxiliary (microswitch) contact kits, if fitted (item 10).
2. Loosen and remove the three top cover screws (item 1).
3. Holding the contactor together so that it does not fall apart, turn it upside down and place it on a bench so that it rests on its fixed contacts.
4. Separate the magnet frame assembly (item 9, 9a) from the top cover assembly (item 3).
5. Remove the normally closed fixed contact insulator (item 7) and the pegs (item 8) from the top cover assembly.
6. Remove the normally closed fixed contact (item 6) from the top cover assembly. This will allow the moving contacts (item 5, 5a) to lift up on one side and this will expose the return springs (item 4).
7. Using a thin screwdriver or similar instrument, insert it into the coils of the return spring and depress it, thus taking the pressure off the moving contact.
8. This will allow the moving contact to be removed sideways from the top cover assembly.
9. Remove the two return springs (item 4) from the top cover assembly.

*This effectively completes the disassembly of the contactor down to its basic component parts and subassemblies.*

### Reassembly

1. Place the top cover assembly (item 3) upside down on a bench so that it is resting on its fixed contacts.
2. Place the two return springs (item 4) into the recesses in the top cover.
3. Using a thin screwdriver or similar instrument depress the return spring. Now slide in from the side, a moving contact assembly (item 5, 5a) so that the top of the plunger engages into the return spring. It is important to check at this stage that the return spring and the moving contact assembly are correctly located.
4. Repeat stage 3 with the other moving contact assembly.
5. Locate the normally closed fixed contact (item 6) in its correct position in the inverted top cover.
6. Now place the normally closed fixed contact insulator into the top cover assembly and add the two pegs locating them in both the insulator and the normally closed fixed contact.
7. Still-keeping the top cover assembly upside down on the bench, carefully place the coil assembly (item 9, 9a) onto it, locating the moving contact plungers into the holes in the centre bushes and the pegs into the holes in the top of the frame. It may help in the location of the top assembly into the frame, if an elastic band is placed tightly around the top cover assembly thus holding the normally closed

contact and its insulator firmly in place. This will centralise the moving contact plungers to assist location into the centre bushes. When the top and bottom assemblies have been located, cut the elastic band and remove it.

8. When the two assemblies are correctly located, hold them together and turn the complete assembly the correct way up. Now insert the three screws (item 1) into the top cover and tighten up to a torque of 2Nm. Add auxiliary contact kits, if fitted.
9. Check that the moving contacts are sitting firmly on the normally closed fixed contact and that there is sufficient spring pressure.
10. Check the free movement of the moving contacts by pushing the solenoid armature from underneath the contactor, ensuring that there is at least 1mm overtravel at the end of the stroke.
11. Finally, electrically test for coil pull-in and drop-out voltage in accordance with the technical specification for this particular contactor. Generally, intermittently rated contactors should pull in on a rising voltage within the range of 50% to 60% of rated voltage, and continuously rated types within 55% to 66% of rated voltage. Both types should drop out on a falling voltage between 15% and 10% of rated voltage.