



## SPARE PARTS FOR SOLENOID SWITCH TYPE DC182

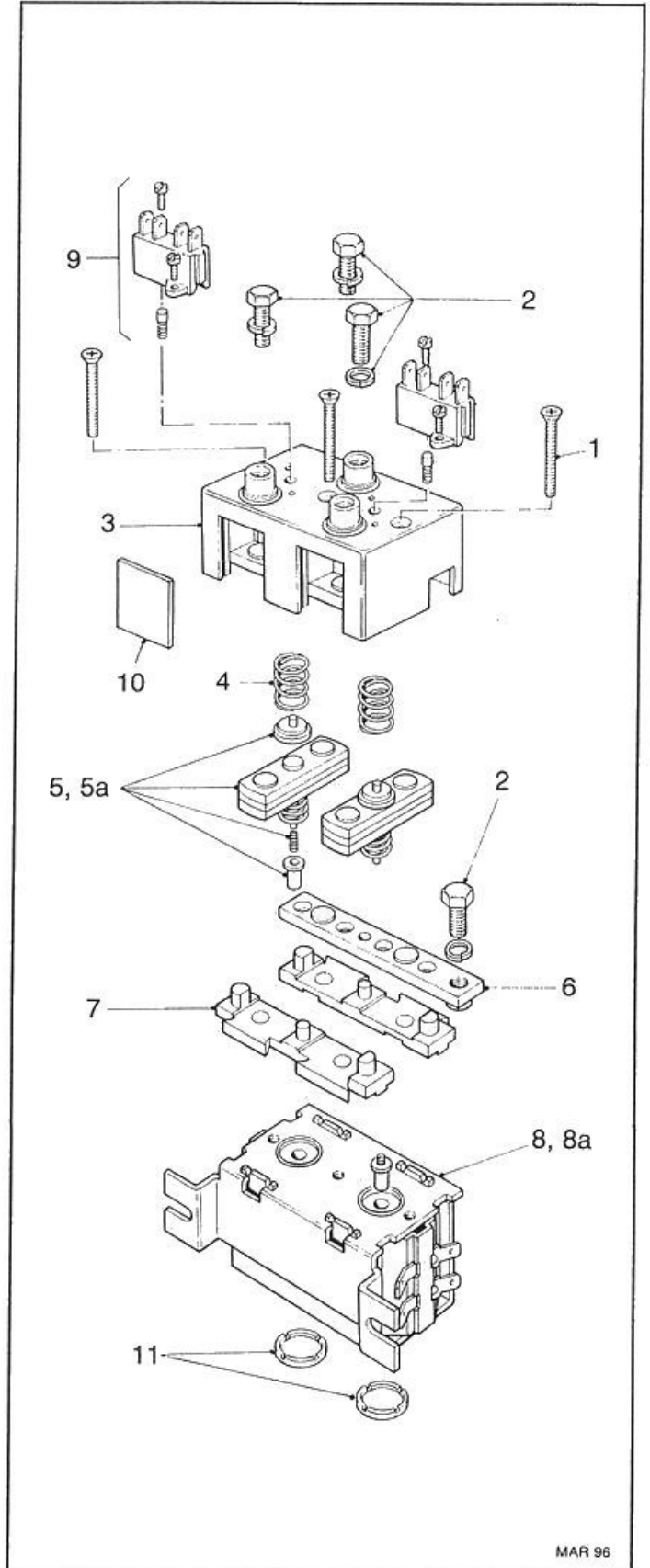
Suffix 'A' indicates auxiliary contacts  
 Suffix 'B' indicates magnetic blowouts  
 Suffix 'L' indicates large contact tips

### DC182

Item	Part No.	Description	Qty
1	2180-38	Top Cover Fixing Screw	3
2	2180-254	Hardware Kit	1
3*	2180-270	Assembled Top Cover	1
4*	2028-30	Return Spring	2
5	2180-29	Moving Contact Assembly	2
5a	2180-30	Moving Contact Assembly (DC182L)	2
6	2180-325	Assembled Normally Closed Fixed Contact	1
7	2180-227	Normally Closed Fixed Contact Insulator	2
8*	2180-280	Assembled Coil and Magnet Frame with bracket	1
8a*	2180-260	Assembled Coil and Magnet Frame without bracket	1
9	2180-796	Auxiliary Contact Kit (DC182A)	1
10	2180-403	Dust Shield – optional	4
11	2180-246	End Cap	2

\* 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 DC182 Contactor

*using exploded diagram*

## Disassembly

1. Remove auxiliary (microswitch) contact kits, if fitted (item 9).
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 8, 8a) from the top cover assembly (item 3).
5. Remove the two fixed contact insulators (item 7) 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. Note that the moving contact assembly comprises four separate parts: plunger, damper spring, contact assembly and return spring insulator.
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. Locate the return spring insulators into the springs.
4. Using a thin screwdriver or similar instrument depress the return spring insulator, and thus the return spring itself. 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 insulator. It is important to check at this stage that the return spring and its insulator are correctly located.
5. Repeat stage 4 with the other moving contact assembly.
6. Locate the normally closed fixed contact (item 6) on to one of the insulators (item 7).
7. Now place the normally closed fixed contact and its insulator into the top cover assembly.
8. Place the other contact insulator into the top cover assembly.
9. Add the plunger to the moving contact assembly, ensuring that the small damper spring is in place within the plunger.
10. Still keeping the top cover assembly upside down on the bench, carefully place the coil assembly (item 8, 8a) on to it, locating the moving contact plungers into the holes in the centre bushes and the pegs on the contact insulator into the holes in the top of the frame.

11. 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 2.4Nm. Add auxiliary contact kits, if fitted.

12. Check that the moving contacts are sitting firmly on the normally closed fixed contact and that there is sufficient spring pressure.

13. Check the free movement of the moving contacts by pushing the solenoid armature from underneath the contactor, ensuring that there is at least 1.25mm overtravel at the end of the stroke.

14. 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.