

## K575x Target assembly replacement instructions. Instruments built before 2006

(Item numbers refer to balloon numbers on drawing AL117157)

- 1 Ensure machine is switched off and isolated from the mains.
- 2 Open top plate to expose the target assembly.
- 3 Unscrew the target clamp (item 6) and save.
- 4 Remove the target (if fitted) and save.
- 5 Remove the target holder (item 5) and put aside.
- 6 Remove centre magnets (item 3) and annular magnet (item 2) and put aside.
- 7 Carefully unscrew the four screws (item 4) and spring washers retaining the target cover (item 1) **Do not reuse the screws**. Remove the target cover and put aside.
- 8 Remove the four screws retaining the PTFE insulator and carefully remove the grey insulator sheet, the PTFE insulator and after removing the countersunk screw, the cooling plate. Save the screws and the cooling plate but put aside the PTFE and the grey insulator.
- 9 Remove the 'O' ring (item 12) from around the exposed insulator and put aside.
- 10 Clean the area with isopropanol and fit a new 'O' ring (item 12) with the piece of aluminium tape wrapped round it so that the tape lies adjacent to the conductor (item 15)
- 11 Clean and then fit the cooling plate, replacing the countersunk screw and ensuring there are no burrs.
- 12 Carefully fit the new grey insulator sheet ensuring it does not get punctured in any way.
- 13 Fit the new target cover **using the New M3 x 8mm** screws and spring washers. **IMPORTANT!** The spring washers must be present and the screws must not be over tightened.
- 14 Assemble the new centre magnets into the recess in the target cover with the red dot on the magnets towards you.
- 15 Assemble the annular magnet into its recess with its red dot towards you. The red dots are to ensure that the magnets are assembled with opposing poles uppermost.
- 16 Fit the new target holder (item 5) and target, securing with the original target clamp (item 6)
- 17 Assemble the dark space shield (item 20) on to the grey insulator sheet, fixing with the original screws. Note there should be a gap of 1.5mm between the Target the target clamp (item 6) and the dark space shield if a target thicker than 0.3mm is being used then a spacer is required under the dark space shield.
- 18 Unscrew the hexagon stop from the shutter shaft and remove the shutter and shaft.

- 19 Fit the new shutter to the new shaft using the centre screw hole and the slot furthest away from the shutter large diameter. The screws are fitted in this manner to ensure the dark space shield does not clash with the shutter when closing the lid.
  - 20 Fit the new shutter assembly using the hexagon stop screw.
- Please return all items put aside to E.M.Technologies.