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CP102, CP105, CP27, CP42 & CP44-3

ALTERNATIVE TO W27 WIREFEED ASSEMBLY AND W27-0/1 MOTOR

The W27 wirefeed assembly used in the Weldmatic 205S, 210S, 305, 325 and 335 internal has become difficult to obtain. However, the wirefeed assembly, Part No WF010 used in the current model Weldmatic 2RD (W55) is similar and can be fitted as a replacement. Some modification will be necessary depending on which model it is fitted to.

The W27-0/1 motor/gearbox which is part of the W27 wirefeed assembly has also become difficult to obtain. The motor/gearbox used in the Weldmatic 2RD (W55) is very similar, and can be fitted as a replacement available as Part No WF001-1. Once again some modification may be necessary.

There were a number of different models which utilized the W27 wirefeed assembly and W27-0/1 motor/gearbox, so these instructions are general in nature.

W27 - Complete Wirefeed Assembly Replacement Procedure

Parts Required

1 x **WF010** 2 Roll Drive Wirefeed Assembly (comes complete with Euro adaptor.)

1. Isolate the power to the welder.
2. Remove the panels which cover the wirefeeder assembly.
3. Disconnect the wirefeed motor wires.
4. Undo the mounting screws and remove the complete wirefeed assembly
5. Place the new wirefeed assembly into the wirefeed area and check the following:
 - Height: check that the hole in the front case for the Euro connector lines up with the position on the new wirefeed assembly. It may be necessary to reduce the height of the mounting blocks, or to elongate the hole in the panel to allow clearance.
 - Euro adaptor: Either the new Euro fitting or the old fitting may be used depending on clearance inside the case. The hole in the casting is suitable for either.
 - Motor position: depending on the model, it may be necessary to rotate the motor to achieve the required clearance around the motor/gearbox assembly. This can be achieved by undoing the 3 screws and rotating the motor on the feedplate.
 - Mounting holes: drill new mounting holes into the base if necessary to fit the new casting. It is critical that the new casting is electrically insulated from the case.
6. Bolt the wirefeed assembly into position and fit the Euro adaptor.
7. **Check that there is clearance between all parts of the the wirefeed assembly and the metal case or other metal parts of the wirefeeder.** If there is insufficient clearance, use a piece of durable insulation to insulate the case from the motor and feed assembly.
8. Check the wirefeed alignment as per the procedure outlined on pg 2.
9. Connect the motor wires to the original connections. On some models it may be necessary to splice the wires onto the existing wires to keep the original connectors. Make sure that the join is electrically reliable and well insulated.
10. Ensure all cabling is secure and clear of moving parts. Use cable ties if required.
11. Fit panels and check operation. If the motor turns in reverse direction, swap over the motor wire connections.

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W27-0/1 Motor/Gearbox Replacement

Parts required

1 x WF001-1 Motor/gearbox assembly
3 x M6 countersunk head screws

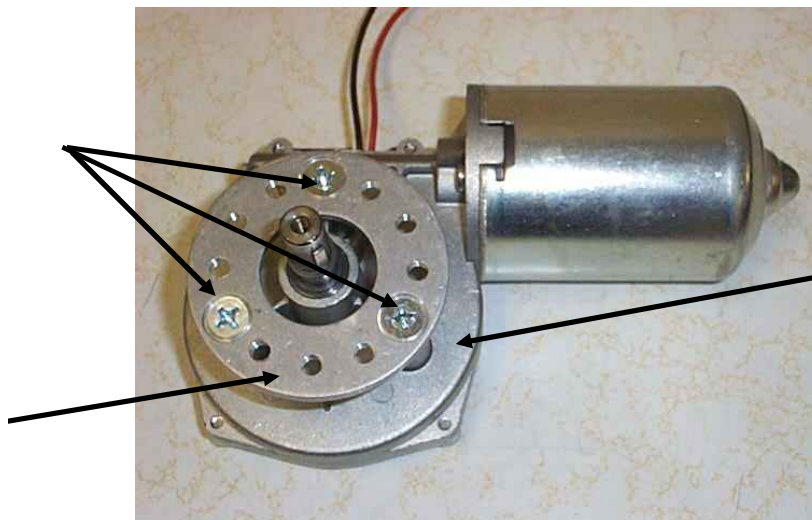
1 x WF009 Multiposition Adaptor Ring

Procedure

1. Isolate the power to the welder.
2. Remove the panels which cover the wirefeeder assembly
3. Disconnect the wirefeed motor wires.
4. Undo the mounting screws and remove the motor/gearbox assembly.
5. Fit the adaptor ring to the gearbox mounting holes on the new WF001-1 motor/gearbox assembly using 3 countersunk head screws as per Fig 1.
6. Pass the original mounting screws through the feed plate of the wirefeed assembly and screw them into the threaded holes of the adaptor ring to secure the motor assembly to the wirefeed assembly. The multiple holes of the adaptor ring allow the motor assembly to be positioned in several different orientations. A different orientation to the original one may be necessary to achieve sufficient clearance around the motor/gearbox assembly.
7. **Check that there is clearance between the motor and the metal case of the wirefeeder.** If there is insufficient clearance, use a piece of durable insulation between the motor and the case to insulate the case from the motor.
8. Check the alignment as per the procedure outlined below.
9. Connect the motor wires to the original connections. On some models it may be necessary to splice the wires onto the existing wires to keep the original connectors. Make sure that the join is electrically reliable and well insulated.
10. Ensure all cabling is secure and clear of moving parts. Use cable ties if required.
11. Fit panels and check operation. If the motor turns in reverse direction, swap over the motor wire connections.

3 x Countersunk
head screws

Multi position
adaptor ring



Motor/gearbox
assembly

Fig 1 Attachment of Multi Position Adaptor Ring

Wire Feed Alignment

1. Feed a straight piece of wire through the inlet and outlet guides and check the vertical alignment of the feed roller to the inlet and outlet guides. If it is not correct, adjust the height of the motor (undo the mounting screws - there is a small amount of movement up/down).
2. Check the horizontal alignment of the feed roller to the inlet and outlet guides. If it is not correct fit a thin shim/washer behind the drive roller for correction of misalignment in the horizontal direction.

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