

RES.103 - Replace serial device drivers.

Purpose:

The mother board includes two driver chips which convert TTL signals to RS232 levels. These chips are more likely to be damaged than the DART itself in cases of over voltage, static discharge, and short circuiting. Because of this they are socketed on newer mother boards for simple replacement in the field.

Method:

- 1) With main power off, remove the lid of the controller.
- 2) Locate the driver chips on the mother board. They can be found in the right rear of the board in M1A controllers and in the left rear corner on M1 controllers (Chip location code: receiver is U17 and transmitter is U18). The chips are small 16-pin dip packages next to the DART which is a 40-pin DIP at U16.
- 3) If they are socketed, they can be removed with a small screwdriver or a chip puller.
- 4) Replace with chips of the same type. The transmitter is an MC1488 and the receiver is an MC1489.
- 5) Ensure they are pressed firmly in the socket with all legs in place.
- 6) If the chips are not socketed, their replacement is not field serviceable.
- 7) Replace the mother board.