MAINTENANCE PROCEDURES

The QMI MULTIPLEX comprehensive fault finding program greatly simplifies the fault analysis procedure. Fault indicators, whether operational or component breakdown, are built into the program. In the event of their occurrence a fault code (listed in the Fault Directory on the right hand side of the display fascia) is displayed digitally against the faulty channel number. In the event of a component failure in the Monitor or fan the CPU light will be displayed (see Fault Directory).

In all fault indications the fault warning relay will de-energise. The relay may be returned to normal through the 'RESET' function. The warning indication on the digital display will persist until the fault is dealt with correctly.

DETECTOR HEAD CLEANLINESS

Very often, due to difficult working conditions and lack of experience, the lenses in the Detector Head are not properly cleaned. This problem is made more difficult because the operator has to return to the Monitor in order to check the cleanliness of the lenses. A simple way to help the cleaning process is to use the suggestion on Part 5-4.

A large percentage of returns under Warranty are in fact due to dirty lenses.

FILTER CLEANING

It is important to inspect and clean the filters every 30 days

Carry out the following procedure when readings on the Monitor go down. In the inlet boss of the Detector base plate is situated a stainless steel mesh filter that should be cleaned from time to time. There are three ways of doing this:

- 1. Extract filter from boss and place in a good solvent solution
- 2. Clean filter in an ultrasonic bath
- 3. Blow compressed air into the filter (always blow towards the crankspace)

If none of these methods unblock the filter, replace the filter with a new one.



LENS CLEANING PROCEDURE

The need for lens cleaning will be indicated by Code "F2" against the relevant channel on the CMU. See diagram in Part 5-5 in connection with the cleaning procedure.

To clean the lens in the event of oil or condensation build up:

- 1. Disconnect the 6-way connector on the rear of the Detector Head.
- 2. Remove the 5 x M4 socket head screws on the front of the Detector Head. This will enable the Detector Head to be removed leaving the Back Plate retained and connected to the pipework.
- 3. Reverse the Detector Head to achieve access to clean the 3 lenses situated in the main channel of the labyrinth.
- 4. Use the brush supplied in the spares kit with "Clean-All" fluid. Keep the Detector Head upright at all times to prevent residual oil flowing onto the lenses. After cleaning the lenses with the fluid ensure that they are thoroughly polished.
- 5. To clean the stainless steel filter fitted in the Back Plate, remove from Back Plate and soak in detergent and rinse.
- 6. Care must be taken when replacing the Detector Head to the Back Plate that the gasket is not damaged, allowing air to be drawn in; and that the stainless steel filter is fitted in the Back Plate.
- 7. Re-assemble and run the "TEST' program to monitor the lens cleanliness.

IMPORTANT NOTES

The Detector Head electronics are factory calibrated and cannot be serviced on site. In the event of a fault the top section of Detector must be sent back leaving the Back Plate attached to the engine.

DO NOT USE diesel oil, acetone or kerosene to clean Heads.

DO NOT IMMERSE Detector in any cleaning solution.

DO NOT IMMERSE the casting in cleansing fluid.

DO NOT REMOVE the cover after the Detector Head is removed from the Back Plate as this will expose PCB components which are light sensitive.

UNDER NO CIRCUMSTANCES remove the cover and try to adjust Head settings. Removal of the cover invalidates the guarantee.