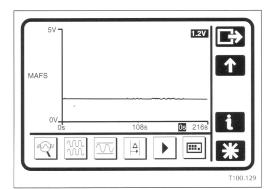
### Dealer Training – AJ16 – Engine Management System

#### AJ16 ECM Traces (continued)

Section 12

**Notes** 



# Mass Airflow "MAFS"

The parameter provides the mass air flow sensor voltage input to the Engine Management System.

The output of the "MAFS" sensor is the primary input for the fueling calculation.

The traces illustrated above are the traces which will be seen in the practical session of this course.

In practical diagnosis the PDU might be used to compare a number of traces under specific driving conditions as illustrated below.

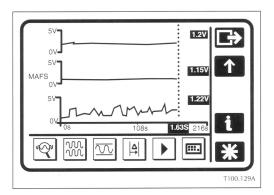


Fig. 1

## "HO2S1HM" Oxygen Sensor Heater - Upstream

The parameter indicates the voltage supply for the upstream oxygen sensor heater circuit. It is monitored by the ECM to measure and control the oxygen sensor tip temperature. Values will only change when the heaters are on

#### "HO2S2HM" Oxygen Sensor Heater -Downstream

The parameter indicates the voltage supply for the downstream oxygen sensor heater circuit. It is monitored by the ECM to measure and control the oxygen sensor tip temperature. Values will only change when the heaters are on.



The parameter provides the mass air flow sensor voltage input to the Engine Management System.

The three traces "HO2S1HM", "HO2S2HM" and "MAFS" (Fig. 1) were recorded during a 25 mph(40 kph) drive.

The effects of re-scaling on the shape of the traces is shown in Fig. 2.

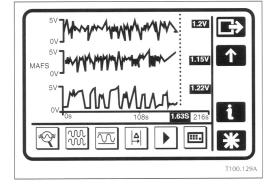


Fig. 2