Air Mass Adaptation

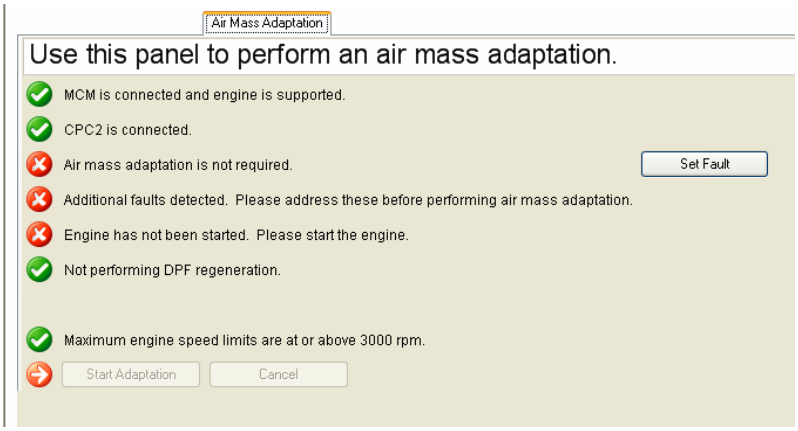
The MBE4000 and MBE900 engines use a delta-pressure sensor in the intake air stream to allow the measurement of mass air flow into the engine.

Variations in OEM vehicle intake-air plumbing (air filter, piping etc) mean that the air mass flow rate must be "corrected". To do this, you must carry out the Air Mass Adaptation (AMA) procedure to enable the engine control software to learn the appropriate correction factors under fixed engine operating conditions. You should do this after *any* of the following components has been replaced:

- MCM (replaced or reprogrammed)
- Single stage turbo
- Dual stage turbo (MBE 900 only)
- Inlet Air Delta Pressure sensor
- Systec Sensor (attached to turbo, which Inlet Air Delta P hoses attach to)
- Intake Manifold Pressure/Temp Sensor
- Turbo Inlet Pressure/Temp Sensor
- Turbo Outlet Temp Sensor (MBE 900 only)
- Turbo Inlet elbow
- Air Inlet piping (FLC Parts if part # has been revised)

To carry out the AMA procedure:

1. Connect DDDL/DDRS to the vehicle.
2. Click on the **Air Mass Adaptation** tab in the Service Routines window.



Note:

Several engine conditions must be met for this routine to be carried out: AMA will not execute unless they are all present.  shows that the condition is met,  shows that it is not met.

3. Press 

Note

At this point the SPN 132 FMI 14 **Air Mass Adaptation Required** fault code will go active.

4. Once all the conditions are met, the 

button will be ungrayed – press the button to start the routine.

5. To stop the routine at any time, press **Cancel**.

When the routine has successfully completed, the fault code will be cleared.