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# MG TF POST CAT RESISTOR LOOM (BGL6122)

### **MIL Eliminator Installation Instructions**

- 1. Remove the second O<sup>2</sup> sensor from the exhaust (this is the second one between the Catalytic converter and the silencer).
- 2. At the plug end of the O<sup>2</sup> sensor, pull back the sleeve to reveal the 4 wires, cut enough back to be able to splice in the MIL eliminator.
- 3. Cut the black and grey wires, DO NOT cut the two white wires.
- 4. Splice the MIL Eliminator between the cut's you have made as follows:

From the plug end, connect the black wire of the plug to the green wire on the Mil Eliminator From the plug end, connect the grey wire of the plug to the blue wire on the Mil Eliminator From the  $O^2$  end, connect the black wire of the  $O^2$  sensor to the black wire on the Mil Eliminator

From the  ${\rm O^2}$  end, connect the grey wire of the  ${\rm O^2}$  sensor to the blue wire on the Mil Eliminator

Plug		Mil Eliminator		O <sup>2</sup> sensor
	Black - Green		Black - Black	_
	Grey - Blue		Blue - Grey	

- 5. Use some protective tape to tightly wrap the spliced assembly together, make sure you DO NOT bend the Mil Eliminator.
- 6. NB\* keep the eliminator protected under heatshield.
- 7. Re-install the O<sup>2</sup> sensor.

#### How it works

The MIL eliminator has internal capacitors and resistors and is installed in the wiring of the second sensor.

If you remove the cat and change nothing else then the second sensor starts to show exactly the same signal as the first one (BTW only the first one is used to adjust the mixture). This is detected by the ECU (under some specific circumstances) and it can trigger the MIL.

The processes inside cat will store and release oxygen, just like a capacitor stores and releases electric charge. If you look at the signal from the second sensor with the cat installed you'll see a gentle rise and fall of the voltage as you press and release the throttle.

What the MIL-eliminator does, without the cat, is take the signal from the second sensor (which is now a 1/2 to 1 Hz signal alternating between 0 and 1V just like the first sensor) and 'smoothing' it out. The charging and discharging effect of the capacitor on the signal sent to the ECU looks roughly the same as the signal the sensor produces when a cat is present and is hopefully enough to fool the ECU in thinking a cat is present.

PLEASE NOTE: IT MAY TAKE SEVERAL START/STOPS AND 20 MILES TO TRIGGER THE ELIMINATOR