



PRELIMINARY INFORMATION

The information in this document is designed to assist non-franchised technicians in fault diagnosis and rectification on 1995MY Jaguar saloon vehicles compliant with OBDII legislation. The document comprises two main sections; Engine Management and Transmission numbered 5.1 and 8. Transmission, Section 8 is divided into two further sub-sections (8.1 and 8.2) to accommodate the different transmission systems fitted to normally aspirated and supercharged vehicles.

During fault diagnosis procedures reference is made to the Service Drive Cycle, instruction for performing this action are detailed below.

Introduction

Most of the frequent diagnostic tests involving sensors and actuators will run within approximately 20 seconds of starting the engine. The other less frequent diagnostics are timed such that they occur and complete within the Federal Test Pipe (FTP) drive cycle when conditions are appropriate to providing a correct outcome.

For the purposes of the service technician a more expedient method of generating a trip is described below. This should ensure that all diagnostic routines are exercised. Any fault information regarding any of the tests will be held in the GEMS system fault messages received parameters. It must be remembered that the GEMS system operates a two trip logic convention as allowed by CARB; ie two defined trips are required to switch on the MIL unless the faults compromise functionality of the whole system, causing the MIL to switch on immediately.

Service Drive Cycle

1. Allow the car to 'soak' at room temperature until the coolant temperature reaches 60°C.
2. Start engine.
3. Idle for approximately 8 minutes; diagnostics such as a misfire, sensors and actuators will run and produce an outcome. An additional test requiring the engine to run for 15 minutes is present, thus a long idle period is the most appropriate method consuming time without excessive miles being clocked.
4. Accelerate in drive (maximum gear 3rd engine speed 2000 rpm, wide open throttle), up an incline to maintain a high load for approximately 10 seconds, this will test the Neutral Drive switch and Road Speed diagnostics.
5. Drive as normal, whilst driving, change through the gears briskly such that 40 gear changes are requested. This further tests the Neutral Drive Switch.

Note: Required gear changes must be between gears, not between Neutral and Drive.

6. Accelerate in drive to a target road speed in the range of 35–45mph, then cruise at target speed preferably in a flat surface to achieve a steady load. Attempt to maintain the speed for a duration of approximately 3 minutes. This allows adaptations and the Catalyst monitoring routine within the system to take place.
7. Come to idle and park.
8. Rev the engine to 1500/2000rpm for a duration of approximately one minute.
9. Wait at idle for a period of 2 minutes.
10. Interrogate Generic Scan Tool and establish faults, if any.
11. Switch off engine.

When performing diagnostics on a vehicle technicians should be aware that erroneous codes may be introduced by their actions. In order to ensure correct diagnosis, all codes should be noted, before commencing diagnosis, so that induced codes can be identified on completion and safely cleared without further work.

5.1