

REPAIR PROCEDURE

VERIFY MASS AIR FLOW SENSOR BALANCE



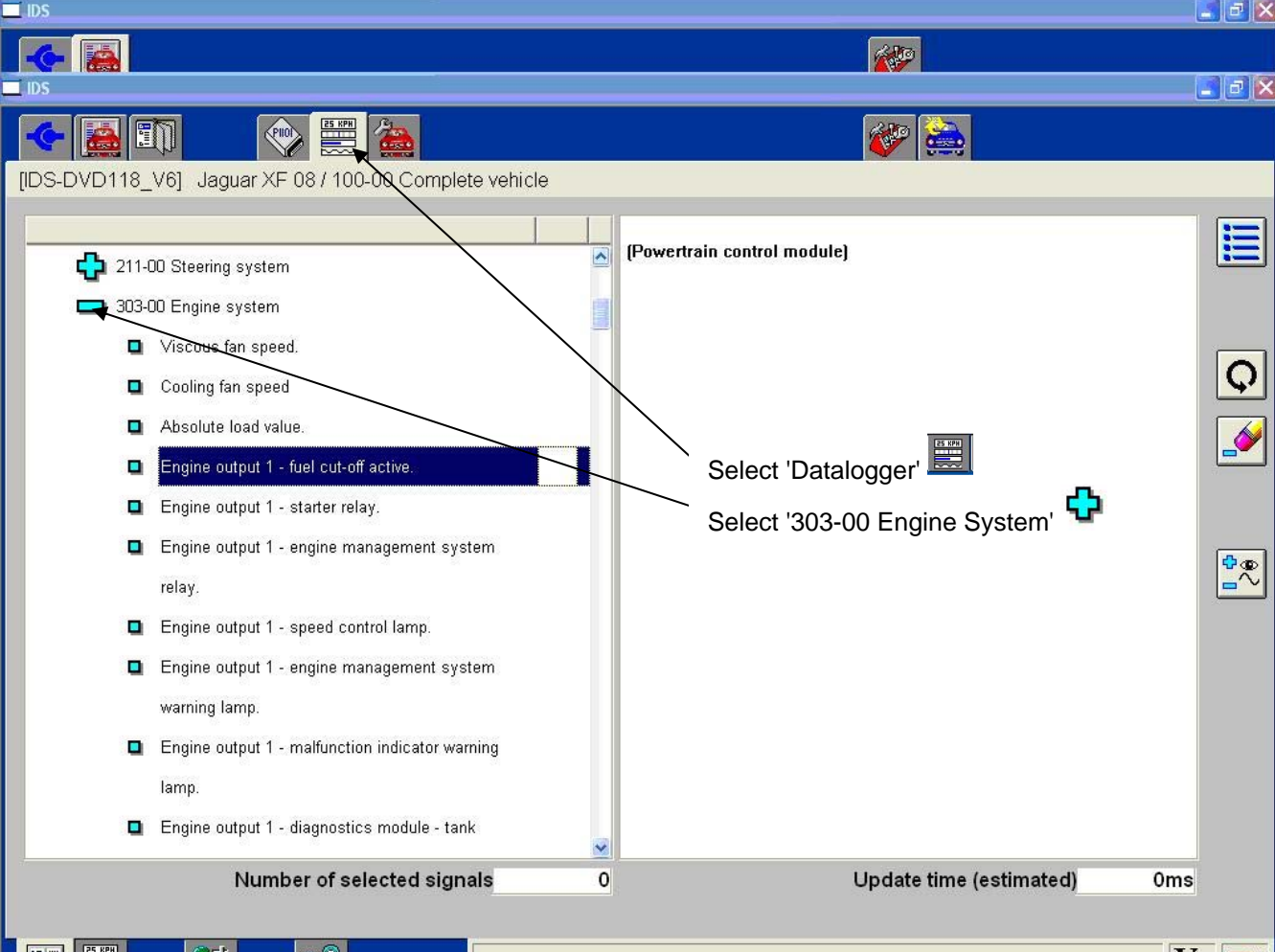
CAUTION: A Midtronics PSC-550 Vehicle Power Supply must be connected to the vehicle battery during diagnosis / module programming.

1. Connect the Midtronics PSC-550 Vehicle Power Supply to the vehicle battery.



NOTE: IDS must be loaded with software release DVD118 Patch File 6 or later.

2. Connect the IDS to the vehicle and begin a new diagnostic session by entering the correct VIN for the current vehicle.
3. Follow the IDS prompts to read the vehicle configuration.
4. Select 'No' when prompted 'Do you wish to read diagnostic trouble codes?'
5. Select 'tick' to continue.
6. Select 'Datalogger' button and then select '303-00 Engine system'.



The screenshot shows the IDS software interface. The title bar indicates the software version is [IDS-DVD118_V6] and the vehicle is a Jaguar XF 08 / 100-00 Complete vehicle. The left pane shows a diagnostic tree with the following items:

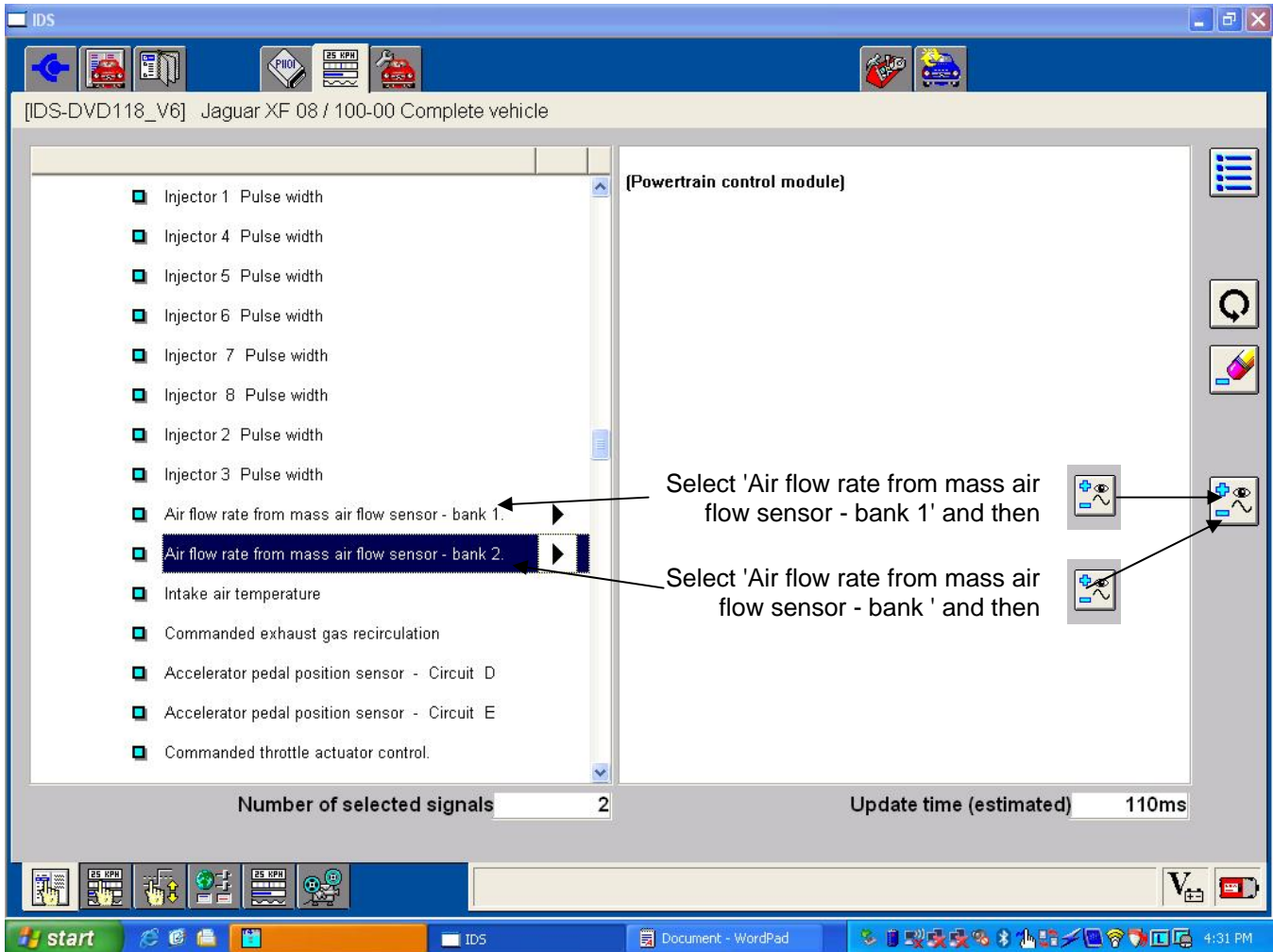
- 211-00 Steering system
- 303-00 Engine system (selected)
- Viscous fan speed.
- Cooling fan speed
- Absolute load value.
- Engine output 1 - fuel cut-off active. (highlighted)
- Engine output 1 - starter relay.
- Engine output 1 - engine management system relay.
- Engine output 1 - speed control lamp.
- Engine output 1 - engine management system warning lamp.
- Engine output 1 - malfunction indicator warning lamp.
- Engine output 1 - diagnostics module - tank

The right pane shows the selected module: [Powertrain control module]. At the bottom of the interface, there are two status fields: "Number of selected signals" (0) and "Update time (estimated)" (0ms). On the right side of the interface, there are several icons, including a "Datalogger" icon (a document with a pencil) and a "303-00 Engine System" icon (a plus sign). Annotations with arrows point to these icons with the text: "Select 'Datalogger'" and "Select '303-00 Engine System'".

7. Select 'Air flow rate from mass air flow sensor - bank 1' and then




8. Select 'Air flow rate from mass air flow sensor - bank 2' and then

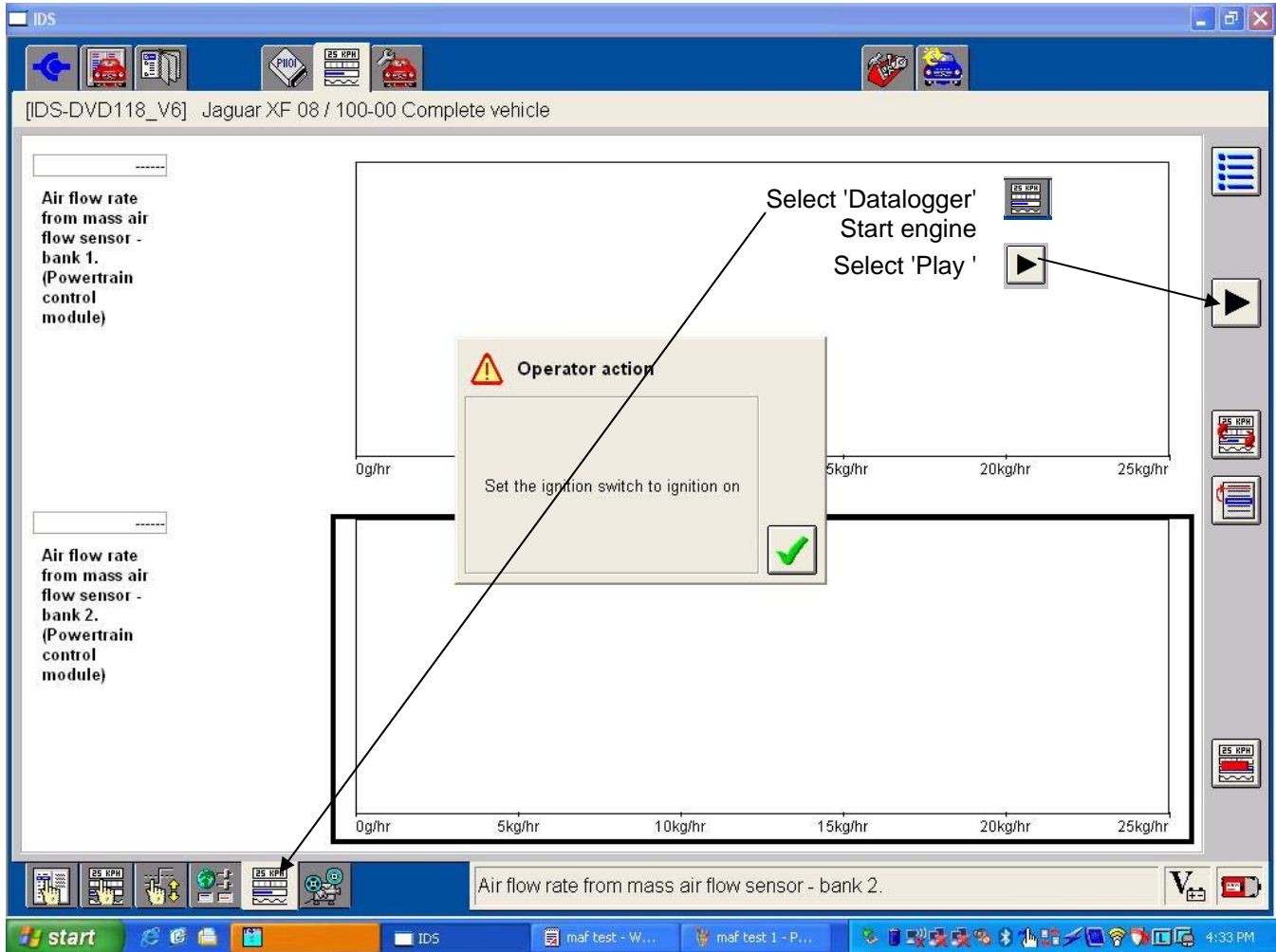



The screenshot shows the IDS software interface for a Jaguar XF 08. The window title is "[IDS-DVD118_V6] Jaguar XF 08 / 100-00 Complete vehicle". The main area displays a list of signals under the heading "(Powertrain control module)". The signal "Air flow rate from mass air flow sensor - bank 2" is highlighted in blue. Below the list, it shows "Number of selected signals" as 2 and "Update time (estimated)" as 110ms. On the right side of the interface, there are several icons, including a refresh icon and a signal waveform icon. Annotations with arrows point to the selected signal and to the signal waveform icon on the right.

Select 'Air flow rate from mass air flow sensor - bank 1' and then

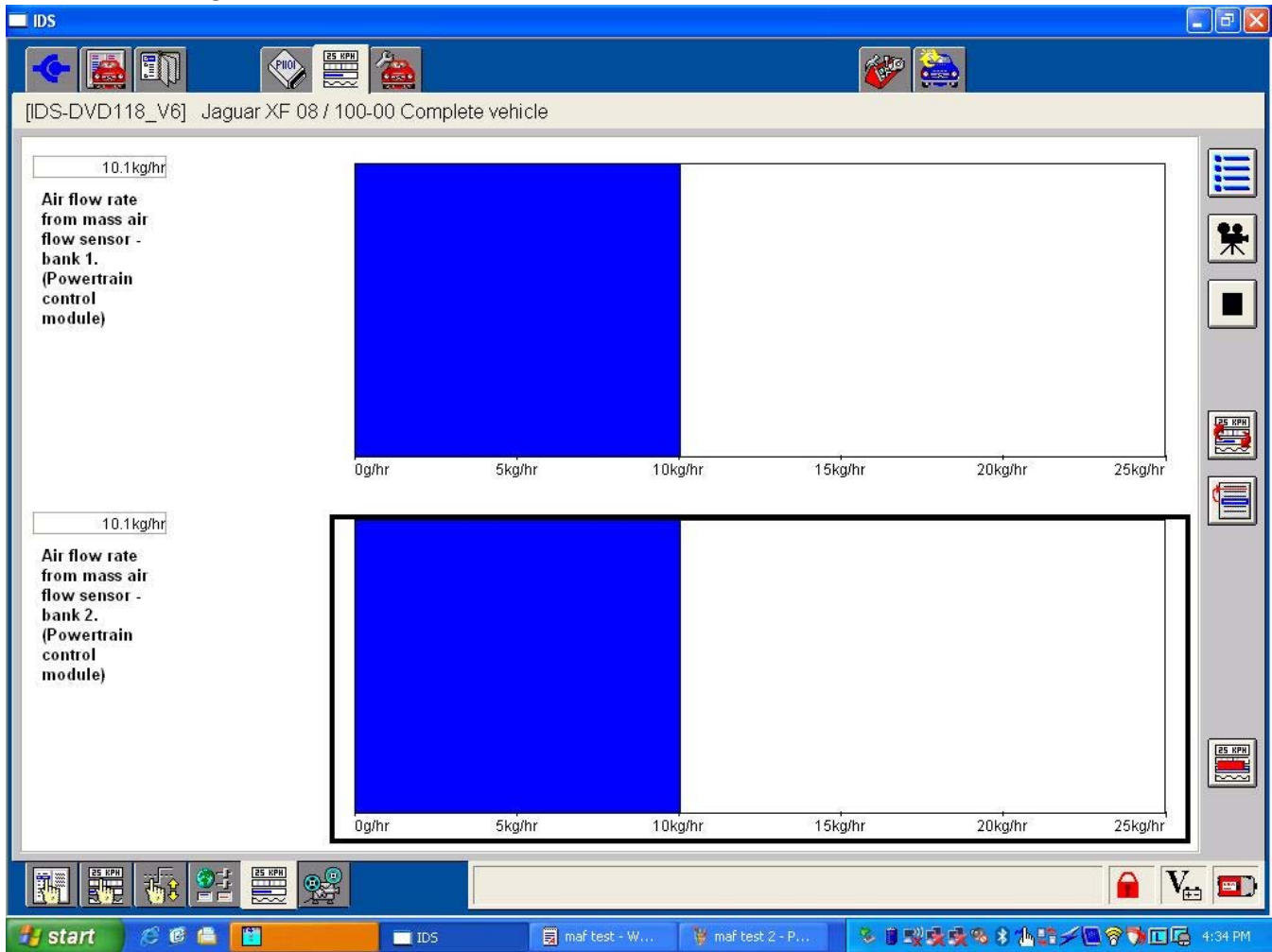
Select 'Air flow rate from mass air flow sensor - bank ' and then

9. Select 'Datalogger' , start engine and select 'Play' .



10. With engine warm, monitor Mass Air Flow (MAF) sensor signals:

- Ensure air flow is even for both bank 1 and bank 2 (slight variation is normal).
- If an air flow imbalance of greater than 2.5 kg / hour is evident, refer to 'REPLACE AIR CLEANER ELEMENTS'.



11. Exit the current session.

12. Disconnect IDS and the Midtronics PSC-550 Vehicle Power Supply from the vehicle.

REPLACE AIR CLEANER ELEMENTS



NOTE: Global Technical Reference (GTR) lookup sequence is as follows:

GTR Home > NAS > X250-XF > Service Information > 2009 > Workshop Manual > 3: Powertrain > 303: Engine > 303-12E: Intake Air Distribution and Filtering - 4.2L, Vehicles With: Supercharger

1. Refer to Workshop Manual (GTR) section 303-12E: Intake Air Distribution and Filtering - 4.2L, Vehicles With: Supercharger and replace the air cleaner elements.