

**S-TYPE**DATE 6/99  
Amended 05/00**S414-01****SERVICE****TECHNICAL BULLETIN****Battery – Quiescent Drain Current –  
Specifications**MODEL 2000 MY-ON  
S-TYPE

VIN L00001-ON

Remove and destroy Bulletin S414-01, dated 6/99.  
Replace with this Bulletin.  
The entire test procedure has been revised.

**Issue:**

This bulletin provides specifications for quiescent current drains from the vehicle battery, as well as a procedure for measuring them using a digital volt/ohmmeter (DVOM).

**Action:****CHECKING QUIESCENT DRAIN CURRENT**

**Note:** The four (4) Switched Power Relays in the Rear Distribution Box will stay active until the last SCP message is sent. This process will last up to 30-40 minutes. Opening any of the doors or the trunk during the Quiescent Drain Test will cause the timer to reset and delay the shut down of the relays. It is also recommended that the battery isolation device remain attached to the battery and NOT be removed until the vehicle is ready for delivery to the retail customer. This will prevent unnecessary drain of the battery and inconvenience to the customer.

Record the following system settings **prior** to disconnecting the battery so that they may be reset to the customers preferred setting.

- Clock time setting
- Clock 12 / 24 hour setting
- CD compress mode (if equipped. Radio must be in CD mode to check this setting.)
- Navigation volume defaults to 14 (if equipped)
- Voice feedback volume defaults to 14 (if equipped - voice training is **not** lost).
- Gear box mode
- Radio presets AM/FM
- Compass calibration and zone setting
- Navigation memory will be retained if the battery has not been disconnected longer than 24 hrs.

The trip computers (both A & B) will reset to zero, these however cannot be returned to prior readings.

Use a DVOM as follows to measure quiescent drain current:

1. Disconnect the battery negative cable and check the battery off-load voltage. If the voltage is below 12.5 volts, recharge the battery and retest the voltage. If OK, reconnect the negative cable.
2. Rotate the ignition switch to position II and leave for 30 seconds, then turn the ignition off and remove the key.
3. Ensure that the exterior light switch is turned off, the radio is switched off, the mobile phone (if equipped) is also turned off. Ensure that the interior light switches are turned off.
4. Close all the doors, and the hood. With the trunk open, move the latch to the closed position. Disconnect the trunk lights.
5. Disconnect battery negative cable. Connect a DVOM between the negative cable and battery to perform the test. The vehicle's alarm system and radio will default to active when the battery is reconnected. Press the key-fob transmitter to disarm the alarm. Turn the radio off.
6. Measure the quiescent current drain. The expected readings are as follows:

Time from ignition off and closing last door or lid (Approx.)	Total Current Drain (Approx.)
Immediate	4 amps and above
0 to 2.5 minutes	3 amps and above
2.5 to 7.5 minutes	up to 2.5 amps
7.5 to 30 minutes	up to 2.0 amps
30 to 40 minutes	up to 0.8 amps (800 mA)
40 minutes plus	0.030 amps (30 mA)

**Note:** All the above figures are **approximate** and can vary from vehicle to vehicle. However, after 45 minutes the quiescent drain of any vehicle equipped with Jaguar-approved accessories should be no greater than 30 milliamps. If the test is carried out with the security system in its armed state, the drain should be approximately the same as the readings above, but there will be a pulse to 46 milliamps for 0.25 second when the LED flashes.

Always ensure that a 'clean' connection is made when connecting the battery. If a temporary contact is made, disconnect, wait 60 seconds, then reconnect cleanly.

### Warranty Information:

This Technical Bulletin is issued as a guide for information purposes only.