

SERVICE POLICY LETTER

Reference number:	SPL-14-1038	Issued: 07 December, 2018
Subject:	Absorbent Glass Mat (AGM) Battery Care	
Model(s):	DB11, Vantage 19MY, DBS Superleggera	
Applicable to:	All Dealers	
Distribute to:	After Sales Manager Executive Manager Service Manager Sales Manager	Warranty Staff Technician(s) Parts Staff

Dear Colleagues,

From the introduction of DB11, all vehicles with stop/start systems use an Absorbent Glass Mat (AGM) battery. AGM batteries are maintenance free and it is only necessary to examine the battery at regular vehicle services.

When a vehicle with an AGM battery is stored for an extended period, it is important to test the voltage level. This must be done at least once every week to make sure that the battery is fully charged to 12.8V. This will make sure that the customer receives maximum service life from the battery.

CAUTION: IF THE VOLTAGE LEVEL OF AN AGM BATTERY GOES BELOW 8V, THE BATTERY MUST BE DISCONNECTED AND REMOVED FROM THE VEHICLE (REFER TO WORKSHOP MANUAL PROCEDURE 14.01.AB). THIS WILL HELP PREVENT FAILURE OF ELECTRICAL MODULES IN THE VEHICLE.

AGM Battery Technical Details

Type	Banner H8 Absorbent Glass Mat (AGM)
Rated Voltage	12V
Capacity	92 Ah (K20)
Reserve Capacity	150 minutes
Cold Cranking Amps.....	520 (DIN), 850 (EN)

Health and Safety Precautions

WARNING: BATTERIES CONTAIN CORROSIVE FLUIDS AND EXPLOSIVE GASES. MAKE SURE THAT YOU OBEY THE SAFETY PRECAUTIONS THAT FOLLOW:

Batteries can release highly explosive hydrogen gas when charged. To prevent the risk of ignition when you do work near a battery:

- Do not smoke when you do work near batteries.
- Avoid sparks, short circuits or other sources of ignition near the battery.
- Isolate the electrical circuit before you connect or disconnect electrical connections.
- There must be a good airflow in the work area.
- Make sure that the charger is set to "off" before you connect or disconnect the battery.

AGM Battery Care and Maintenance

To extend the life of an AGM battery, refer to the steps that follow:

1. AGM batteries are a serviceable consumable item. If an AGM battery is maintained at optimum voltage it will have a service life of more than 5 years. If the vehicle is not used regularly and the battery has low voltage, the life expectancy of the battery will be reduced.
2. A fully charged AGM battery voltage is 12.8V at no more than 50mA discharge and 30°C.
3. If a vehicle is used on a regular basis, it is normal for an AGM battery to not exceed 80% charge (12.65V).
4. DB11, Vantage 19MY and DBS Superleggera have an onboard battery meter system. This will identify when the battery needs to be replaced and will cause a Diagnostic Trouble Code (DTC). At less than 50% battery charge, a warning will appear in the instrument cluster. The battery meter system can also be monitored on AMDS.
5. If a vehicle is not used for more than two weeks, the battery must be connected to an AGM battery conditioner. Select the applicable conditioner to make sure it is correct for your region (refer to Part Data).
6. If an AGM battery is used below 12V, battery sulphate crystal growth will occur. This will insulate the plate in the battery and cause the battery to not operate correctly. This effect is increased in lower temperature environments.
7. If a vehicle is not expected to be used for more than six months, the battery must be disconnected and maintained off the vehicle with an applicable AGM maintenance charger.

WARNING: WHEN THE BATTERY IS DISCONNECTED, THE VEHICLE MUST BE STORED IN A DRY ENVIRONMENT. THE DOOR GLASS WILL NOT FULLY ENGAGE IN THE SEAL WHEN THE DOOR IS CLOSED.

8. When the engine is in operation, the battery will charge from 20% to 55% in approximately 20 minutes. The stop/start function will not be available during this time.

When the stop/start function operates as normal, the battery is charged sufficiently.

Note: Charge times can increase if ambient temperature is increased above 30°C or decreased below 0°C.

9. For the battery to recover from 20% to 100% charge will take approximately 1 hour.
10. The alternator is controlled by the engine management system, which will adjust how the battery is charged. The alternator will reduce charge to the battery when the vehicle is driven at a constant cruising speed. The alternator will only do this if the battery is in a good, charged condition.
If the alternator does not supply charge to the battery when the battery is less than 60% charged, the system can have a fault.
If the battery is charged to more than 70% and in a good condition, it will be normal for the alternator to not be in constant operation.

Jump Start Procedure

Note: *Charge time will depend on the initial 'state of health' of the discharged battery.*

If the cause and time the battery has been discharged is not known, the battery must be replaced.

1. Position the charger pack so that the connecting cables will reach into the recipient engine bay.
2. Remove the cover for the main power fuse bank.
3. Connect the positive (+) cable of the charger pack to the positive (+) terminal on the fuse bank.
4. Connect the negative (-) cable of the charger pack to the ground nut on the suspension turret point.
5. Set the charger pack to "ON".
6. With the charger pack connected, start the vehicle engine and increase the engine speed. Run the engine at 1500 – 2000 rpm for approximately two minutes.
7. Leave the charger pack attached to the engine and let the engine idle for approximately 2 to 3 minutes to charge the battery.
8. Set the charger pack to "OFF".
9. Allow the engine to run until the discharged battery is sufficiently charged (15 to 20 minutes) to start the engine without assistance. Set the engine to "OFF" and start the engine again.
10. Charge the battery until sufficiently charged or drive the vehicle for 1 hour and 30 minutes to charge the battery to the correct voltage.

AGM Battery Testing

Use a digital multimeter (set to the 0–20V range) to determine the battery condition. If you do not have a digital multimeter available, a battery tester can be used (in voltage mode only) to measure the battery voltage. No other indication on the battery tester should be used to calculate the battery condition. Refer to the vehicle owner's guide before you disconnect the battery terminals.

Pages 5 and 6 of this document are Battery Report Forms. Use the correct report form for the type of test that you do. Mandatory fields on the Report Form are shaded and you must complete them. Also, we ask that you complete all other fields with as much information as possible.

To accurately find the battery condition, you **MUST** do the battery tests in the order shown on the Report Form. This will give the correct steps to accurately find battery faults. If you do not follow this procedure, you cannot correctly find the condition of the battery.

WARNING: DO NOT ALLOW FLAMES, SPARKS OR LIGHTED SUBSTANCES TO COME NEAR THE BATTERY. BATTERIES NORMALLY PRODUCE EXPLOSIVE GASES WHICH CAN CAUSE PERSONAL INJURY. WHEN WORKING NEAR THE BATTERY, ALWAYS SHIELD YOUR FACE AND PROTECT YOUR EYES. ALWAYS HAVE SUFFICIENT VENTILATION.

AGM Battery Charge

The battery charger must be compatible with Absorbent Glass Mat (AGM) type batteries and have a maximum charging voltage of 14.8V.

WARNING: THE USE OF A STANDARD, NON-VOLTAGE CONTROLLED CHARGER WILL OVERLOAD AND CAUSE DAMAGE TO THE BATTERY. THIS CAN CAUSE SERIOUS INJURY OR DEATH.

AGM Battery Storage

AGM batteries must be stored in a dry, light-protected and cool environment in a charged condition. When batteries are stored, it is important to rotate stock on a first in first out (FIFO) process.

CAUTION: AN AGM BATTERY MUST BE CHARGED AFTER A MAXIMUM OF 3 MONTHS STORAGE. THIS WILL EXTEND THE LIFE OF THE BATTERY.

Battery Report Form – New Batteries**For port of entry, Dealer (new vehicles only) and new stored batteries.**

GENERAL INFORMATION (Note: Mandatory fields are shown grey shaded and must be completed)											
Customer's Name:				Dealer Code (Export)							
Job Number:				Corporate I.D. (UK)							
Date:				Battery Date Code:							
Technician's Name:				No. of Battery Changes							
Vehicle Model:				Customer's Signature:							
VIN (last 6 digits):										Technician's Signature:	
Give a description of the symptoms that are experienced by the Customer (attach a separate sheet if necessary)											
DIAGNOSTICS (Battery Testing)											
1. Loose battery clamps (If YES , torque as necessary).		YES				NO				9. Voltage reading under load @ 2000 rpm	
2. Loose battery terminal connectors.		YES				NO				Heated Rear Window – Headlamps – Heater- ON	
3. Corroded terminal/posts		YES				NO					
4. Physical damage/leaks		YES				NO				10. High rate discharge test	
5. Alternator – belt tension		OK				NOT OK				Reading after 15 seconds	
6. Surface charge removed		YES				NO				Comments:	
7. Wait 15 minutes check voltage level						-					
8. Quiescent drain						mA					

Note: Refer to the “Vehicle Storage and Battery Care Manual” for further information.

Battery Report Form – In Service**Only for batteries that have been in service for a period of time.**

GENERAL INFORMATION (Note: Mandatory fields are shown grey shaded and must be completed)									
Customer's Name:				Dealer Code (Export)					
Job Number:				Corporate ID (UK)					
Date:				Battery Date Code:					
Technician's Name:				No. of Battery Changes					
Vehicle Make/Model:				Customer's Signature:					
VIN (last 6 digits):								Technician's Signature:	
Give a description of the symptoms that are experienced by the Customer (attach a separate sheet if necessary)									
DIAGNOSTICS (Battery Testing)									
1. Loose battery clamps (If YES, torque as necessary).		YES		NO		8. Quiescent drain			
2. Loose battery terminal connectors.		YES		NO		9. Voltage reading under load @ 2000 rpm Heated Rear Window – Headlamps – Heater- ON			
3. Corroded terminal/posts		YES		NO					
4. Physical damage/leaks		YES		NO					
5. Alternator – belt tension		OK		NOT OK					
6. Surface charge removed		YES		NO					
7. Wait 15 minutes check voltage level				-		Comments:			
Midtronics Test									
Code before charge									
If initial voltage is less than 12.5 V, charge the battery for 24 hours. Then remove surface charge.									
Code after charge									
Result after charge									
- If "charge and re-test" is the result before and after charge, then replace the battery - If the test after charging gives a result "good & recharge", charge for 24 hours more, then test again. - Replace the battery only if "replace battery", "bad cell" or "charge & re-test" has been shown two times.									

Note: Refer to "Vehicle Storage and Battery Care Manual" for further information.

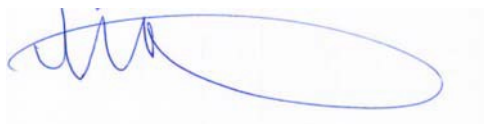
Part Data

Description	Part Number
Battery Conditioner + Link Lead (Australia/New Zealand)	HY53-37-10014
Battery Conditioner + Link Lead (UK/Hong Kong)	HY53-37-10015
Battery Conditioner + Link Lead (USA/Canada/Japan)	HY53-37-10016
Battery Conditioner + Link Lead (Rest of World)	HY53-37-10017

If you have any questions about this Policy Letter, please speak to Client Services - Technical on Tel: +44 (0) 1926 644720.

Thank you for your continued support.

Yours faithfully



Steve Tiltman

Client Technical Services Manager