3.6 Service Operations

In the event of a suspected ESS failure the following check sheet must be follow.

HSV – EMBEDDED SECURITY SYSTEM (ESS) CHECK SHEET (VT.II / WH / VY / WK / VZ).

In the event of a suspected ESS failure, fill in the following check sheet.

STEP	ACTION	MEASURED VALUE	YES	NO
	• What type of vehicle has the suspected ESS failure?	VT.II : ☐ VY : ☐ WH : ☐ WK: ☐ VZ : ☐		
1	• Turn ignition to ON position and listen for the number of beeps.	Zero beeps: ☐ One beep: ☐ Five beeps: ☐ Other:_____		
2	• With the ignition in the ON position, is the Theft Deterrent Led flashing?			
3	• Turn Ignition switch to the Start position. • Does the vehicle start?			
4	• Has there been a BCM replacement?			
5	• Remove the EFI relay and back probe terminal 85 (as per figure 1 for VT.II / WH Vehicles or as per figure 3 for VY / WK/ VZ Vehicles), with reference to Ground. • With the Ignition switch to ON, measure DC voltage.	_____ volts DC.		
6	• Remove Fuel Pump relay and back probe terminal 1 (as per figure 1 for VT.II / WH Vehicles) or terminal.2 (as per figure 3 for VY / WK Vehicles), to measure continuity with ref. to Ground. • Turn the ignition to ON, measure resistance.	_____ Ohms.		
7	• For VY / WK Vehicles Disconnect Engine Connector (X206 located above passenger kick panel) and back probe pin 9 (as per figure 4) with reference to ground. • For VT.II / WH Vehicles Disconnect Engine Connector (YE112) and back probe pin (as per figure 2), with reference to Ground. • For VZ vehicles Disconnect ECM connector A43 X1 and back probe pin 19 (as per figure 5) with reference to ground. • Turn the ignition to ON, measure DC voltage.	_____ volts DC		
8	• Is communications with Tech 2 active?			
9	• With TDL flashing, operate "Unlock" button on the Remote Control. • Does the TDL stop flashing?			

Dealer Code: _____ ISOVIN: _____ Vehicle Build Date: _____

Km's: _____ ESS Pin No:_____BCM Part No: _____ BCM Barcode No: __ __ __ __ __ __ __ . __

This check sheet must signed by the Service Manager. _____ Date: _____

Fax the completed copy to Australian Arrow Customer Service. Facsimile: (03) 9775 0954.

HSV – EMBEDDED SECURITY SYSTEM (ESS) DIAGNOSTIC PROCEDURE (VT.II / WH / VY / WK / VZ).

STEP	ACTION	VALUE	YES	NO
1	• Turn ignition to ON position. • Is one (1) beep audible?		• Go to Step 2	• Go to Step 3.
2	• Turn Ignition switch to the Start position. • Does the vehicle start?		• **System O.K, return vehicle to customer.**	• Go to Step 11.
3	• Are five (5) beeps audible?		• Go to Step 13.	• Go to Step 8.
4	• Turn Ignition switch to the Start position. • Does the vehicle start?		• Go to Step 5.	• Go to Step 6.
5	• **Fill in the ESS check sheet and Contact Australian Arrow Customer Service.**			
6	• Has there been a BCM replacement?		• Go to Step 5.	• Go to Step 14.
7	• **Perform Serial Data Communications diagnostic as per Holden Service Manual, then go to Step 5.**			
8	• Zero beeps were audible?		• Go to Step 9.	• **Record number of beeps, then go to Step 5.**
9	• Turn Ignition switch to the Start position. • Does the vehicle start?		• Go to Step 5.	• Go to Step 10.
10	• Remove the EFI relay and back probe terminal 85 (as per figure.1 for VT.II / WH vehicle), or (as per figure.3 for VY/WK/VZ vehicle), with reference to Ground. • With the Ignition switch to ON, Is the value as specified?	• 12 volts DC.	• Go to Step 5.	• **Refer to Service Manual and check Ignition system.**
11	• Remove Fuel Pump relay and back probe terminal.1 (as per figure.1 for VT.II / WH vehicle), or (as per figure.3 terminal.2 for VY/WK/VZ vehicle), to check continuity with reference to Ground. • Turn the ignition to ON. Is the value as specified?	• Less than one (1) Ohm.	• Go to Step 12.	• Go to Step 5.
12	• For VT.II / WH vehicle, Disconnect Engine Connector (YE112) and back probe pin (as per figure 2), with reference to Ground. • For VY/WK vehicle, Disconnect Engine Connector (X206 located above passenger kick panel), and back probe pin.9 (as per figure.4), with reference to ground. • For VZ vehicles Disconnect ECM connector A43 X1 and back	• 12 volts DC	• Go to Step 5.	• Go to Step 5.

	probe terminal 19 (as per figure 5) with reference to ground. • Turn the ignition to ON. Is the value as specified?			
STEP	**ACTION**	**VALUE**	**YES**	**NO**
13	• Is the Theft Deterrent Led flashing?		• Go to Step 4.	• Go to Step 5.
14	• Is communications with Tech 2 active?		• Go to Step 15.	• Go to Step 7.
15	• With TDL flashing, operate "Unlock" button on the Remote Key. • Does the TDL stop flashing?		• Go to Step 5.	• **Refer to Theft Deterrent System diagnostics in Holden Service Manual.**

RELAY BOX

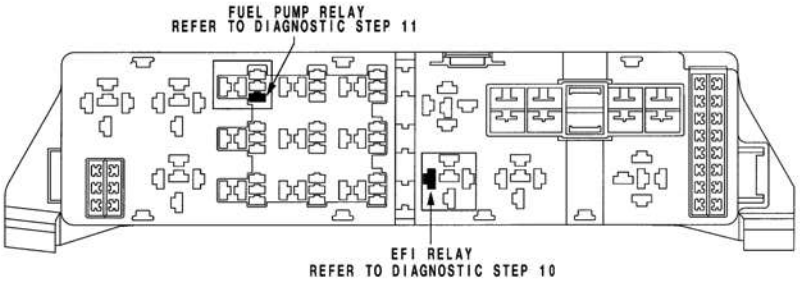


FIGURE 1

ENGINE HARNESS 3 YE112

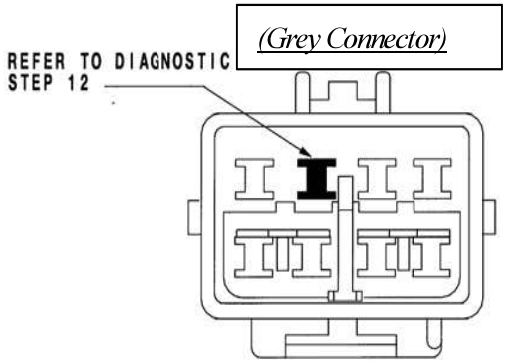


FIGURE: 2
LOOKING TOWARDS FIREWALL

Australian Arrow Pty. Ltd.
Customer Service.
Telephone: (03) 9785 0792
Facsimile: (03) 9775 0954