Earth Stud.pdf	
Reference	SSM67737
Models	Range Rover Sport / L494 Range Rover (All New) / L405
Title	Earth fixings to Body Studs Potentially Loose (L405 & L494)
	Electrical
Last modified	26-Aug-2013 00:00:00
Symptom	203000 Basic Electrical
Content	 ISSUE: Variety of symptoms relating to the electrical system, including (but not exclusively) non start, multiple warning lights illuminated, Instrument pack not operating or HLDF (High Level Display Front) not lighting up. CAUSE: The root cause is under investigation and may be that the fixing for an Earth stud is not clamping the earth eyelets with the required force. ACTION: If during diagnosis an earth fixing is found to be loose: Do not physically disturb the joint until you have: Take photos to show the condition of the exposed thread Check if the Anti- Rotation device is clamped against the BIW or another object (ie harness) and take a photo There should be a paint mark on the anti-rotation device, or a china graph pencil mark on the heat shrink sleeve primary of the battery earth (G4D178). Take photo to confirm if marks are present or missing. Check if the anti-rotation device is sitting square on the stud, and take a photo Can the nut be undone by hand? Remove the nut (by hand or otherwise) and take a photo of the stud thread Take a photo of the nut internal thread Take a photo of the weld securing the stud to the body to confirm if the weld contacts the anti-rotation device (ie does the anti-rotation device si on weld spatter?) If the Primary Battery earth (G4D178) is loose, take a photo of the white fir tree clip attached to the earth cable to show if it is fitted correctly into the hole in the body or not. If not correctly fitted, are there any signs on the fir tree clip that it has been fitted previously (ie is there any deformation to the fir tree)? Check the battery earth lead for damage and take photos of any observed damage. Please raise an EPQR detailing the observations, relevant connector number and attach the photos.

