Unexplained Coolant Loss on 2012-2013 Land Rover 2.0L Engines

The AERA Technical Committee offers the following information on unexplained coolant loss on 2012-2013 Land Rover 2.0L turbo engines. Depending on the amount of loss and miles driven, coolant may also be noticed in the engine oil supply.

Apparently, core plugs located in the top of the cylinder head (Figure 1.) may be leaking. The screw-in type plugs may have had inadequate amounts of sealer applied when installed at the factory.

In most case’s a visual determination can be used to verify plug leakage as evidenced by the photos shown below. For repair, the valve cover must be removed and the plugs resealed with Loctite #R243.

1. Remove the core plug.
2. Clean and dry both threads.
3. Inspect the threads for signs of damage, replace as required.
4. Apply a continuous bead of Loctite® 243 to the core plug thread.
5. Install the core plug and tighten to 55 FT/LBS (75 Nm).
6. Allow at least an hour of time before start-up for sealant cure time.

NOTE: It is important to note that if sufficient enough coolant enters the oiling system, engine damage will result.