



TECHNICAL ALERT

December 5, 2002

TA02 1701

NAS US Only Cda Only

ATTENTION: Service Manager Service Advisor Technician

V8 Vehicles with Secondary Air Injection Discovery Series II and Range Rover 2000-2002

When performing engine-related repairs on a vehicle equipped with secondary air injection, the system pipes may need to be removed to facilitate repairs. Warranty claims indicate that these pipes are often being replaced unnecessarily.

Affected Components

- Pipe secondary air injection
- Adaptor SAI rail

Investigation shows that when the components are dismantled from the engine/vehicle without damage difficulty **may** be experienced when reassembly of the removed pipe to the engine is attempted after repair. Exhaust heat from the engine has, over time, distorted the pipes very slightly. Removal from the engine permits the pipes to move/expand to release the built-up stress.

The distortion makes it very difficult to quickly re-assemble the pipes back onto the adaptors without cross threading the union nuts fittings. Patience and a little extra time are required. Refer to the RAVE WSM sections 17.25.17-18 and perform the following refined assembly process:

1. Carefully align the pipe and the pipe union nuts.
2. Start the pipe nuts by hand.
(Figure 1)



CAUTION: Damage to the fittings can occur if care is not exercised during the assembly process.

3. Tighten both union nuts completely **finger tight** BEFORE any tools are used.
4. Install air manifold bracket nuts and tighten.
5. Torque the pipe union nuts to **25 Nm (18 lbf.ft.)**

Figure 1

Finger Tighten Nuts Completely

