

- Did any abnormal occurrence coincide with or proceed its appearance?

Use the information gained from the customer to accurately begin the diagnostic process.

DIAGNOSIS AND TESTING > NOISE, VIBRATION AND HARSHNESS (NVH) > 2: PRE-DRIVE CHECK

It is important to do a pre-drive check before road testing the vehicle. A pre-drive check verifies that the vehicle is safe to drive and eliminates any obvious faults on the vehicle.

The pre-drive check consists of a brief visual inspection. During this brief inspection, take note of anything that will compromise safety during the road test and make those repairs/adjustments before taking the vehicle on the road.

DIAGNOSIS AND TESTING > NOISE, VIBRATION AND HARSHNESS (NVH) > 3: PREPARING FOR THE ROAD TEST

Observe the following when preparing for the road test:

- Review the information provided by the customer. It is important to know the specific concern the customer has with the vehicle.
- Do not be misled by the reported location of the noise/vibration. The cause can actually be some distance away.
- Remember that the vibrating source component (originator) may only generate a small vibration. This small vibration can in turn cause a larger vibration/noise to emanate from another receiving component (reactor) due to contact with other components (transfer path).
- Conduct the road test on a quiet street where it is safe to duplicate the vibration/noise. The ideal testing route is an open, low-traffic area where it is possible to operate the vehicle at the speed at which the condition occurs.
- If possible, lower the radio antenna in order to minimize turbulence. Identify anything that could potentially make noise or be a source of wind noise. Inspect the vehicle for add-on items that create vibration/noise. Turn off the radio and the heating and cooling system blower.

DIAGNOSIS AND TESTING > NOISE, VIBRATION AND HARSHNESS (NVH) > 4: VERIFY THE CUSTOMER CONCERN

Verify the customer concern by carrying out a road test.

A road test may be necessary if the symptom relates to the suspension system or is sensitive to torque. Remember, a condition will not always be identifiable by carrying out these tests; however, they will eliminate many possibilities if carried out correctly.