Brake Roughness Diagnosis

To find the source of brake roughness, perform the following checks:

WARNING: FORD MOTOR COMPANY ADVISES TO ALWAYS DETERMINE IF BRAKE OPERATION IS ADEQUATE PRIOR TO OPERATING THE VEHICLE. PRIOR TO DRIVING A CUSTOMER'S VEHICLE ON A ROAD TEST EVALUATION, THE BRAKES SHOULD BE TESTED AT A LOW SPEED TO VERIFY THE VEHICLE IS SAFE TO DRIVE ON A PUBLIC ROAD. OBSERVE ALL TRAFFIC LAWS, SPEED LIMITS AND LOCAL ROAD CONDITIONS.

Select a road test route:

- Where highway speeds can be legally attained.
- That will be used for all brake testing.
- That is reasonably smooth and level.
  - Gravel or bumpy roads are not suitable for testing because the tires do not grip the road equally.
  - Crowned roads shift the weight of the vehicle on to the set of wheels that are on the low side of the road which changes braking performance.

This road test procedure should be followed because a concern may not be evident on a brake system that is cool, but is very apparent when the brake system is warm.

1. Accelerate the vehicle to highway speed.
2. When safe, shift to neutral to check for wheel or driveline imbalance. Let the vehicle coast without applying the brake and note any vibrations in the steering wheel or seat.
3. Warm the brakes to normal operating temperature.
   - Brake roughness is most apparent when braking to a stop from highway speeds.
4. Lightly apply the brake pedal and slow the vehicle from highway speed to 30 mph.
   - Brake roughness can be felt in one or more of the following areas:
     - Steering wheel.
     - Seat.
     - Vehicle body.
     - Brake pedal.