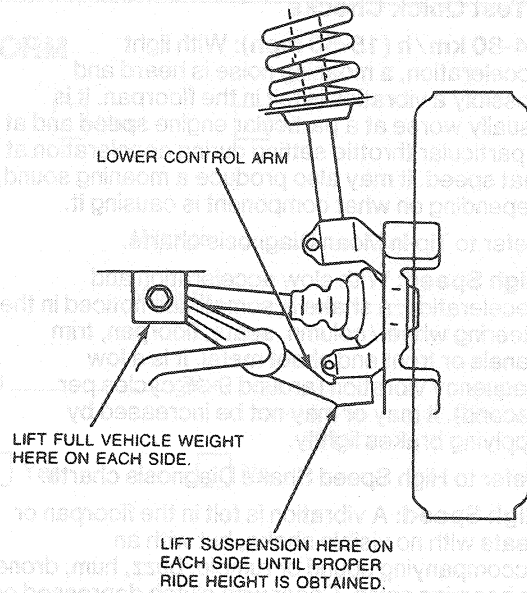## DIAGNOSIS AND TESTING (Continued)

When performing the High-Speed Shake Diagnosis or Engine Accessory Vibration Diagnosis, observe the following precautions:

CAUTION: The suspension should not be allowed to hang free. When the constant velocity joint is run at a very high angle, extra vibrations as well as damage to seals and joints can occur.

The lower control arm should be supported as far outboard as possible. To bring the vehicle to its proper ride height, the full weight of the vehicle should be supported in front by floor jacks, as shown. Refer to Section 00-02 for jacking instructions.

WARNING: IF ONLY ONE DRIVE WHEEL IS ALLOWED TO ROTATE, SPEED MUST BE LIMITED TO 55 KM/H (35 MPH) INDICATED ON THE SPEEDOMETER SINCE ACTUAL WHEEL SPEED WILL BE TWICE THAT INDICATED ON THE SPEEDOMETER. SPEED EXCEEDING 55 KM/H (35 MPH) OR ALLOWING THE DRIVE WHEEL TO HANG UNSUPPORTED COULD RESULT IN TIRE DISINTEGRATION, DIFFERENTIAL FAILURE AND/OR CONSTANT VELOCITY JOINT AND HALFSHAFT FAILURE, WHICH COULD CAUSE SERIOUS PERSONAL INJURY AND EXTENSIVE VEHICLE DAMAGE.

LOWER CONTROL ARM

LIFT FULL VEHICLE WEIGHT HERE ON EACH SIDE.

LIFT SUSPENSION HERE ON EACH SIDE UNTIL PROPER RIDE HEIGHT IS OBTAINED.

F3804-B

PINPOINT TEST A:
HIGH SPEED SHAKE DIAGNOSIS

TEST STEP		RESULT ▶	ACTION TO TAKE
A1	**ROAD TEST** ● Accelerate vehicle to the speed which the customer indicated the shake occurred. ● **Is shake present?**	No ▶ Yes ▶	Vehicle OK. GO to A2.
A2	**INSPECT TIRES** ● Raise vehicle on hoist. Inspect tires for extreme wear or damage, cupping or flat spots. ● **Are tires OK?** CUPPED OR DISHED TREADS F7035-A	No ▶ Yes ▶	GO to A3. CHECK suspension components for misalignment, abnormal wear, or damage that may have contributed to the tire wear. CORRECT suspension concerns and REPLACE damaged tires. PERFORM Road Test.
A3	**INSPECT WHEEL BEARINGS** ● Spin front tires by hand to check for wheel bearing roughness. Check bearing end play. ● **Are bearings OK?**	Yes ▶ No ▶	GO to A4. REPLACE bearings as necessary. ROAD TEST vehicle.