# SUSPENSION—VEHICLE LEAN RIGHT—ALL MODELS EXCEPT POLICE

Article No. 97-18-2

FORD: 1995-1997 CROWN VICTORIA

**LINCOLN:** 1995-1997 TOWN CAR

MERCURY: 1995-1997 GRAND MARQUIS

## **ISSUE**

A lean right condition may be present on some vehicles. This does not include Police units. The lean may be caused by vehicle weight side-to-side differences from component packaging, body shell and frame tolerances.

## **ACTION**

Use the following procedure to check and, if necessary, replace front coil springs to level the vehicle.

#### **CHECKING PROCEDURE**

To restore the vehicle to a level condition at the fender wheel lip openings, use the following procedure to check and correct service leans with differences in excess of 12.7mm (0.5") side-to-side.

- Check the vehicle interior and trunk for any significant baggage/tool boxes, etc., and remove them before proceeding with the lean analysis.
- Confirm that the vehicle is assembled with the proper front spring codes. Refer to the 1995-97 Ford/Mercury Front Spring Chart after Step 8 in this TSB article.
- Place the vehicle on a level surface and check tire pressures to be sure the left front/right front and left rear/right rear are identical.
- 4. On vehicles equipped with air suspension (optional Air/Trailer Tow/Handling Package) turn the engine OFF but leave the ignition in the ON position and the driver's door open. Proceed as follows:
  - a. Load the rear bumper until the air suspension compressor cycles for at least 30 seconds.

- b. Close the driver's door and let the vehicle vent to the "Top of Trim" position (approximately 10 seconds).
- c. If the air suspension does not function properly, perform service diagnostics as outlined in the appropriate Crown Victoria/Grand Marquis/Town Car Service Manual, Section 04-05.
- On vehicles equipped with standard steel coil springs, be sure rear springs are the same part number and properly nested on frame rose bud and axle collar.

#### **NOTE**

IF FRONT OR REAR SUSPENSION SPRINGS ARE IMPROPERLY INSTALLED OR ARE THE INCORRECT PART NUMBER, PERFORM SERVICE REPAIRS AS OUTLINED IN THE APPROPRIATE CROWN VICTORIA/GRAND MARQUIS/TOWN CAR SERVICE MANUAL, SECTIONS 04-01 AND 04-02.

- 6. Equalize the suspension by shaking the vehicle side-to-side from the B-pillar joint before taking wheel lip measurements (Figure 1).
- Determine the difference in the front and rear wheel lip measurements by subtracting the left side measurement from the right side at both the front and rear locations.

#### **NOTE**

THE FENDER WHEEL LIP MEASUREMENT IS THE VERTICAL DISTANCE FROM THE FENDER WHEEL LIP TO THE GROUND WHILE PASSING THROUGH THE CENTER OF THE WHEEL (FIGURE 1).

8. Use the following Spring Selection Chart to select the correct spring three letter code.

# Article No. 97-18-2 Cont'd.

SPRING SELECTION				
CROWN VICTORIA/GRAND MARQUIS - BASE				
Front Spring Code	Load	Load Rate	Service Part Number	
AFD	9481 N (2131 lb)	77.1 N•m (440 lb-in)	F4AZ-5310-A	
BOS	9943 (2235)	77.1 (440)	F4AZ-5310-B	
CKV	10404 (2339)	77.1 (440)	F4AZ-5310-C	

SPRING SELECTION				
CROWN VICTORIA/GRAND MARQUIS HANDLING PACKAGE				
Front Spring Code	Load	Load Rate	Service Part Number	
DHL	9670 (2174)	98.1 (560)	F4AZ-5310-G	
ETR	10266 (2308)	98.1 (560)	F4AZ-5310-E	
FPK	10862 (2442)	98.1 (560)	F4AZ-5310-F	

SPRING SELECTION					
TOWN CAR					
Front Spring Code	Load	Load Rate	Service Part Number		
RIM	9960 (2239)	71.8 (410)	D9AZ-5310-R		
SAP	10410 (2340)	71.8 (410)	D9AZ-5310-S		

 Using the three letter code on the driver's side front spring, replace the steel spring with a part with load rating one level lower. Replace the right front spring with part with load rating one level higher (swap springs side-to-side).

#### **CAUTION**

# DO NOT USE ANY OTHER SPRINGS THAN THOSE SPECIFIED OR MIX SPRING RATES.

10. Test drive the vehicle for about 3 km (2 miles) over a moderate road surface to settle the suspension before re-evaluating it for body lean. Revent the air suspension prior to making lean measurements.

#### NOTE

BUMPER HEIGHT SHOULD BE BETWEEN 365-416mm (14.4-16.4") AT THE FRONT AND 370-422mm (14.6-16.6") AT THE REAR RESPECTIVELY AFTER CORRECTIVE ACTIONS HAVE BEEN COMPLETED.

- 11. If this procedure does not reduce the lean to acceptable levels of 12.7mm (0.5"), refer to TSB 93-1-1 for the body/frame shimming procedure. This procedure may be performed to further reduce the vehicle lean condition.
- 12. Verify vehicle alignment is within specification after completing repairs.

PART NUMBER	PART NAME
D9AZ-5310-R	Spring
D9AZ-5310-S	Spring
F4AZ-5310-A	Spring
F4AZ-5310-B	Spring
F4AZ-5310-C	Spring
F4AZ-5310-E	Spring
F4AZ-5310-F	Spring
F4AZ-5310-G	Spring

OTHER APPLICABLE ARTICLES: 93-1-1 WARRANTY STATUS: Eligible Under The

Provisions Of Bumper To Bumper Warranty Coverage

OPERATION<br/>971802ATDESCRIPTION<br/>Replace (Or Swap) BothTIME<br/>3.8 Hrs.

Front Springs - Includes Road Test And Check And Correct Alignment

971802A Replace One Front Spring 2.7 Hrs.

- Includes Road Test And Check And Correct

Alianment

**DEALER CODING** 

CONDITION

BASIC PART NO. CODE 5310 63

OASIS CODES: 304000

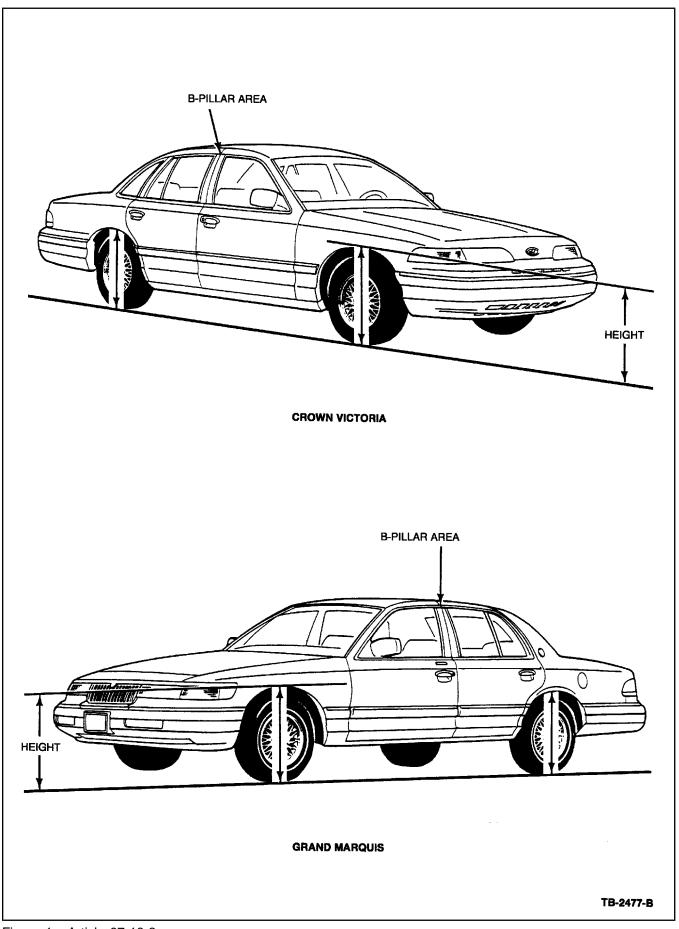


Figure 1 - Article 97-18-2