

**SUSPENSION—VEHICLE LEAN LEFT—ALL MODELS  
EXCEPT POLICE**

**Article No.  
93-1-1**

**FORD:** 1992 CROWN VICTORIA

**MERCURY:** 1992 GRAND MARQUIS

This TSB article is being republished in its entirety to reflect corrections in the Ford/Mercury Front Spring Chart. The D9AZ-5310-S front spring load/rate was changed to 2340/410 and the spring tag code for the F2AZ-5310-C front spring was changed to O A CGI.

**ISSUE**

A lean left condition may be present on some 1992 Crown Victoria/Grand Marquis 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**

If service is required, use the following procedure to check and, if necessary, to install body mount shims 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 0.5" (12.7mm) side-to-side.

1. Check the vehicle interior and trunk for any significant baggage/tool boxes, etc., and remove them before proceeding with the lean analysis.
2. Confirm that the vehicle is assembled with the proper front spring codes. Refer to the 1992 Ford/Mercury Front Spring Chart after Step 7 in this TSB article.
3. Place the vehicle on a level surface and check tire pressures to ensure that the left front/right front and left rear/right rear are identical.
4. On vehicles equipped with air suspension (Opt. Air/Trailer Tow III/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 1992 Crown Victoria/Grand Marquis Service Manual, Section 14-40.
5. On vehicles equipped with standard steel coil springs, ensure 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 1992 CROWN VICTORIA/GRAND MARQUIS 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.
7. Determine the difference in the front and rear wheel lip measurements by subtracting the left side measurement from the right hand 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 and/or shim combination.

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SPRING SELECTION CHART - MERCURY BASE AND TRAILER TOW SUSPENSION			
SPRINGS ON VEHICLE (L.F./R.F.)	SPRINGS REQ. FOR 0.5" TO 1.5" DIF. - LEFT FRONT	SPRINGS REQ. FOR 0.5" TO 1.0" DIF. - RIGHT FRONT	SPRINGS REQ. FOR 1.1" TO 1.5" DIF. - RIGHT FRONT
NAT/NAT RIM/RIM SAP/RIM	NAT+2 Shims or RIM RIM+2 Shims or SAP SAP+2 Shims	NAT RIM RIM	VIX NAT NAT

SPRING SELECTION CHART - FORD BASE AND TRAILER TOW SUSPENSION			
SPRINGS ON VEHICLE (L.F./R.F.)	SPRINGS REQ. FOR 0.5" TO 1.5" DIF. - LEFT FRONT	SPRINGS REQ. FOR 0.5" TO 1.0" DIF. - RIGHT FRONT	SPRINGS REQ. FOR 1.1" TO 1.5" DIF. - RIGHT FRONT
CGI/CGI DVY/DVY JET/DVY	CGI+2 Shims or DVY DVY+2 Shims or JET JET+2 Shims	CGI DVY DVY	BOT CGI CGI

SPRING SELECTION CHART - FORD/MERCURY HANDLING SUSPENSION (REAR AIR SUSPENSION STANDARD)			
SPRINGS ON VEHICLE (L.F./R.F.)	SPRINGS REQ. FOR 0.5" TO 1.5" DIF. - LEFT FRONT	SPRINGS REQ. FOR 0.5" TO 1.0" DIF. - RIGHT FRONT	SPRINGS REQ. FOR 1.1" TO 1.5" DIF. - RIGHT FRONT
GAP/GAP HND/HND KGB/HND	GAP+2 Shims or HND HND+2 Shims or KGB KGB+2 Shims	GAP HND HND	FIC GAP GAP

The following Front Spring Load Chart provides information about the 410/440/560 lbs/in rate springs which are specifically released for the 1992 Crown Victoria/Grand Marquis.

### CAUTION

**DO NOT USE ANY OTHER SPRINGS THAN THOSE SPECIFIED.**

1992 FORD/MERCURY FRONT SPRING CHART			
SPRING TAG CODE	ENGINEERING PART NUMBER	SERVICE PART NUMBER	LOAD/RATE (LBS.-LBS./IN.)
M B VIX	D9AC-5310-VA	D9AZ-5310-V	2038/410
E A NAT	D9AC-5310-NA	D9AZ-5310-N	2138/410
R S RIM	D9AC-5310-RA	D9AZ-5310-R	2239/410
C E SAP	D9AC-5310-SA	D9AZ-5310-S	2340/410
F B BOT	F2AC-5310-BA	F2AZ-5310-B	2027/440
O A CGI	F2AC-5310-CA	F2AZ-5310-C	2131/440
R S DVY	F2AC-5310-DA	F2AZ-5310-D	2235/440
D E JET	F2AC-5310-JA	F2AZ-5310-J	2339/440
H P FIC	F2AC-5310-FA	F2AZ-5310-F	2040/560
A K GAP	F2AC-5310-GA	F2AZ-5310-G	2174/560
N G HND	F2AC-5310-HA	F2AZ-5310-H	2308/560
D KGB	F2AC-5310-KA	F2AZ-5310-K	2442/560
SHIM		MB-5355-B	0.125" each

### NOTE

**THE 410, 440 AND 560 LBS/IN RATE SPRING ARE SPECIFICALLY RELEASED FOR THE MERCURY GRAND MARQUIS, FORD CROWN VICTORIA AND FORD/MERCURY HANDLING PACKAGES, RESPECTIVELY. DO NOT USE ANY OTHER SPRINGS THAN THOSE SPECIFIED ABOVE OR MIX SPRING RATES.**

9. Install the appropriate shim pack (MB-5355-B) and/or spring combination per the Service Manual procedures. Eliminate the potential of suspension noise by taping the shims and spring insulator to the flat end of the front spring. On reinstallation of the spring(s), ensure that...
  - a. There is proper orientation of the spring tail in the lower control arm assembly.
  - b. All disrupted fasteners are returned to the recommended torque settings.
10. Test drive the vehicle for about two 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

**WHEEL LIP AND BUMPER SHOULD NOT EXCEED 29.5" (749.3MM) AND 16.0" (406.4MM) RESPECTIVELY AFTER CORRECTIVE ACTIONS HAVE BEEN COMPLETED.**

- If this procedure does not reduce the lean to acceptable levels of 0.5" (12.7mm), the following body/frame shimming procedure should be performed to further reduce the vehicle lean condition.

**BODY/FRAME SHIMMING PROCEDURE**

- Remove fan shroud screws to loosen shroud for accessibility.
- Remove low side "F" mount nut and washer.
- Raise vehicle on hoist.
- Position adjustable jack stands or equivalent under body flange on low side of vehicle.
- Remove and discard body mount bolts from seven body mounts on low side only. Do not remove bolts from high side.
- Raise adjustable jack stands to lift body off mounts approximately 1/2" (12.7mm).
- Install new bolts (N807292/3-S2) with shims (385127-S2) on all seven body locations, Figure 3. Use torque wrench to tighten to proper torque specification 40-54 N•m (29.5-39.8 Lb.-Ft.), Figure 2.
- Position the adjustable jack stands out of the way and lower the vehicle.
- Adjust the low side "F" mount shim by turning clockwise with deep socket 3/4" (19.05mm) until there is no gap between the radiator support and the adjustable shim, Figure 3.
- Install both "F" mount washer and nut. Tighten nut to 47-63 N•m (34.6-46 Lb.-Ft.).
- Install fan shroud screws and tighten to 2.7-5.4 N•m (2-4 Lb.-Ft.).

**SPECIAL WARRANTY CODE**

The unique warranty code account number established to handle lean related claims is: Special Warranty Code R1P.

PART NUMBER	PART NAME
MB-5355-B	Shim
385127-S2	Shim
N807292-S2	Bolt
N807293-S2	Bolt
D9AZ-5310-N	Spring
D9AZ-5310-R	Spring
D9AZ-5310-S	Spring
D9AZ-5310-V	Spring
F2AZ-5310-B	Spring
F2AZ-5310-C	Spring
F2AZ-5310-D	Spring
F2AZ-5310-E	Spring
F2AZ-5310-F	Spring
F2AZ-5310-G	Spring
F2AZ-5310-H	Spring
F2AZ-5310-J	Spring
F2AZ-5310-K	Spring

**NOTE**

**ONE SHIM MAXIMUM (4.8MM THICK) ALLOWED AT EACH BODY MOUNT LOCATION.**

**OTHER APPLICABLE ARTICLES: NONE**

**SUPERSEDES: 92-5-4**

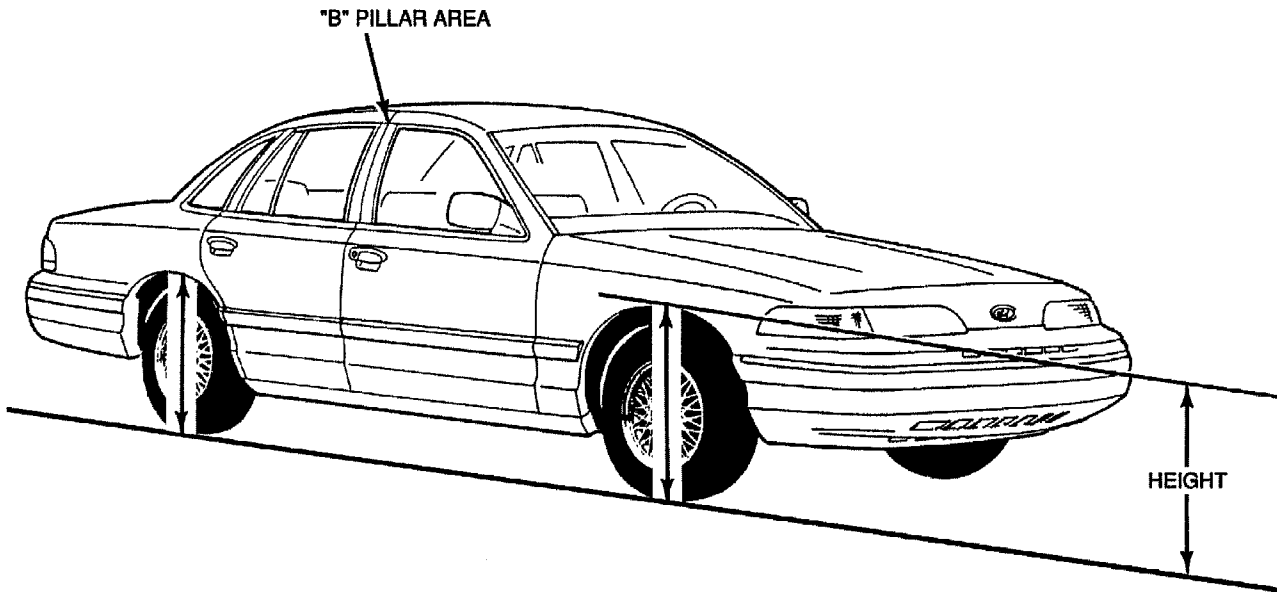
**WARRANTY STATUS:** Eligible Under Bumper To Bumper Warranty Coverage

OPERATION	DESCRIPTION	TIME
930101A	Install Shim Pack And/Or Springs As Required	1.0 Hr.

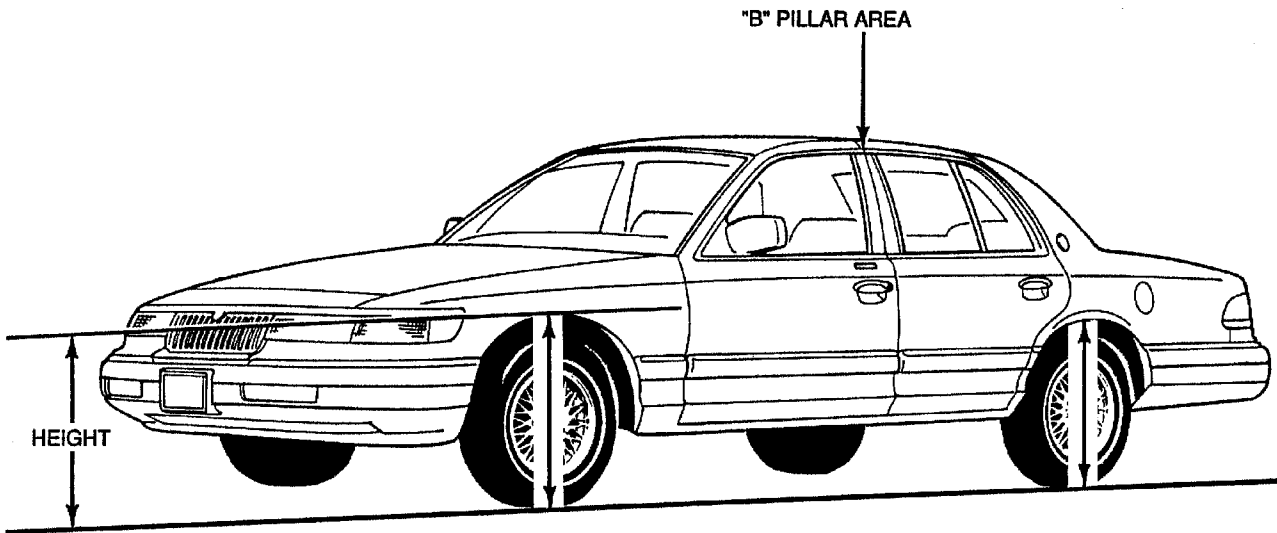
**DEALER CODING**

BASIC PART NO.	CONDITION CODE
5310	71
<b>OASIS CODES: 304000</b>	

1992 FORD CROWN VICTORIA/MERCURY GRAND MARQUIS



CROWN VICTORIA



GRAND MARQUIS

TB-2477-A

Figure 1 - Article 93-1-1

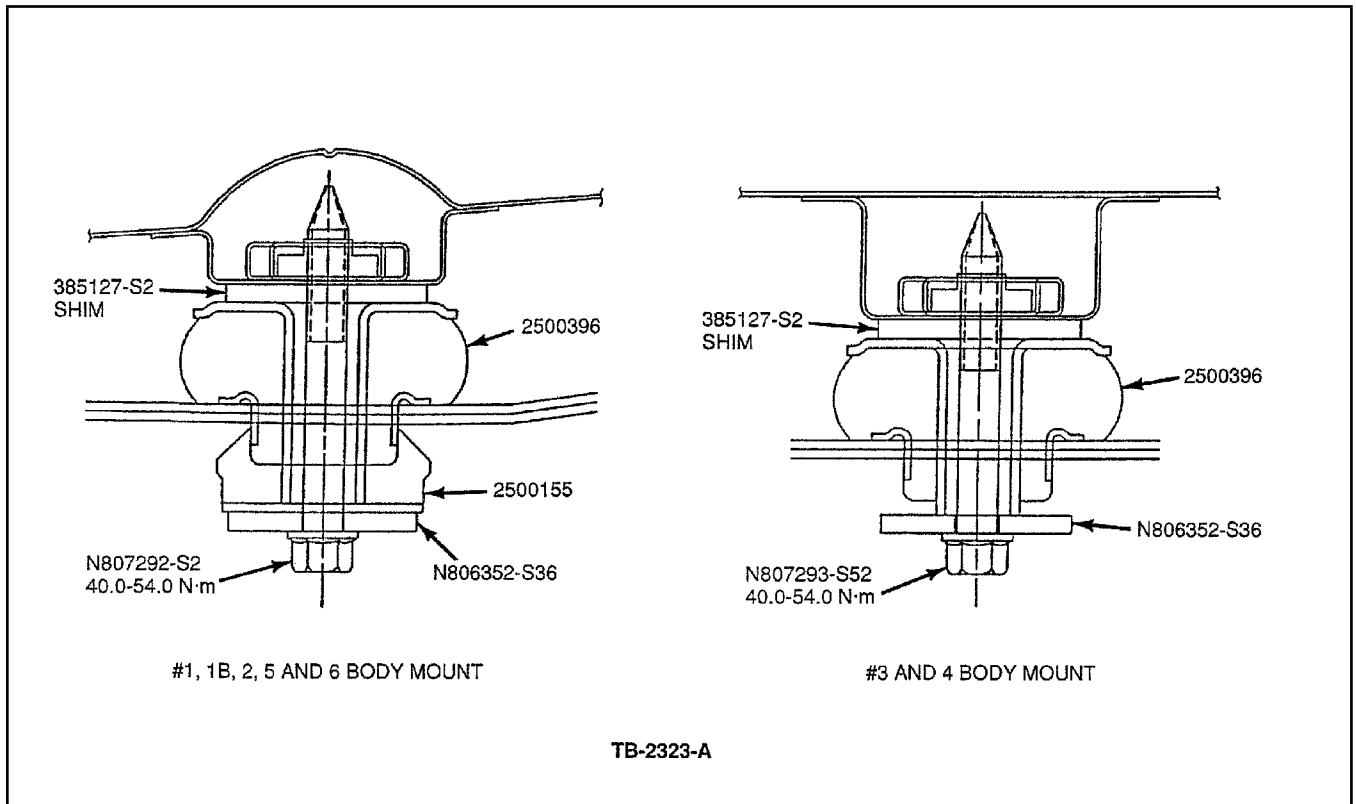


Figure 2 - Article 93-1-1

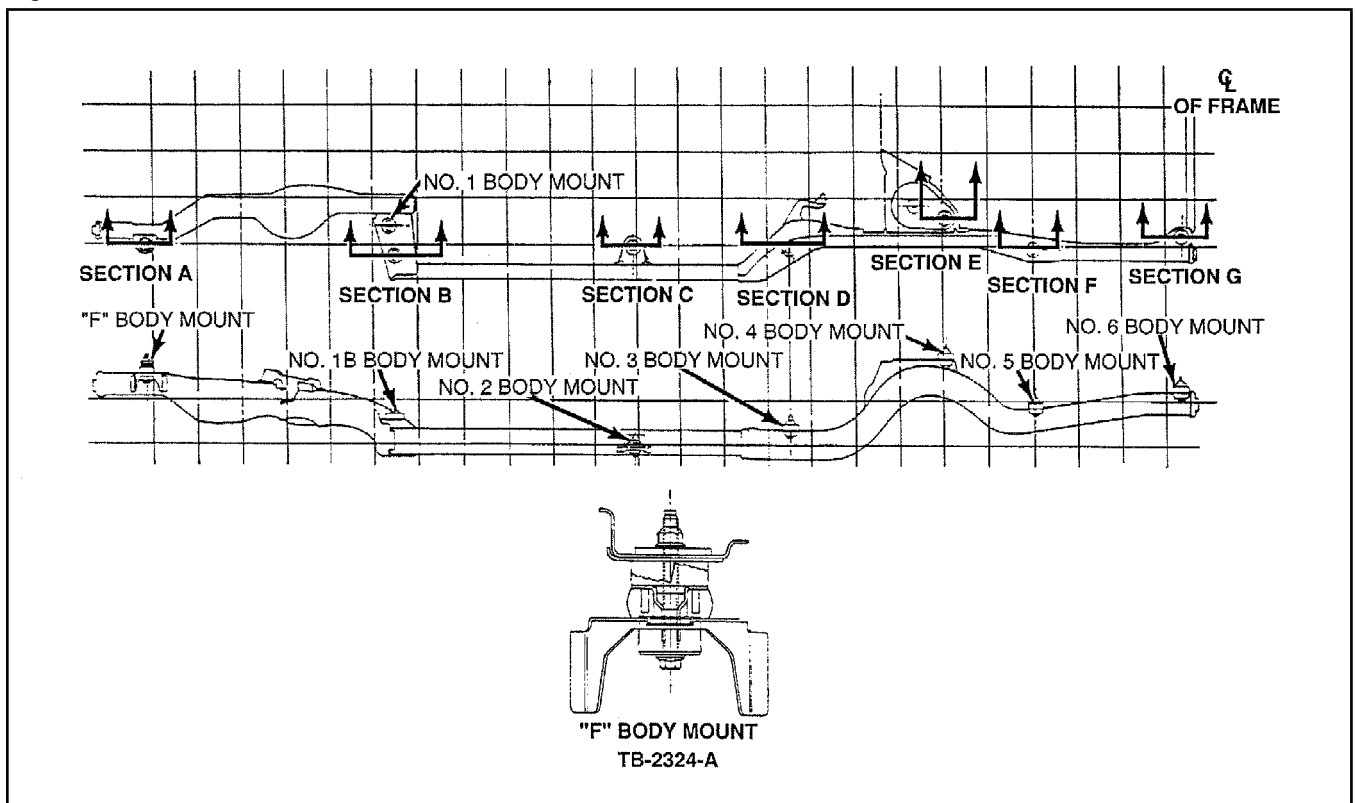


Figure 3 - Article 93-1-1