STEERING—POWER RACK AND PINION—REVISED TORQUE REQUIREMENT FOR INSTALLING NEW DESIGN TIE RODS

Article No. 96-1-1

FORD: 1982-1995 MUSTANG, THUNDERBIRD

1986-1995 TAURUS

LINCOLN: 1984-1992 MARK VII

1988-1995 CONTINENTAL 1993-1995 MARK VIII

MERCURY: 1982-1995 COUGAR

1986-1995 SABLE

ISSUE

There is a revised torque specification and procedure for removing and installing new design inner tie rods for rack and pinion steered vehicles.

ACTION

Remove, install and torque the new design inner tie rods by referring to the following Service Procedure.

NOTE

THE NEW DESIGN INNER TIE RODS DO NOT HAVE RIVETS OR COILED PINS TO RETAIN THEM. PREVIOUS PRODUCTION TIE RODS, WITH RIVETS OR COIL PINS, MUST USE PRIOR TORQUE SPECIFICATION.

SERVICE PROCEDURE

DISASSEMBLY

- Remove power rack and pinion steering gear. Refer to the appropriate model/year Service Manual, Section 11-02, for procedure.
- Install two (2) long bolts and washers through the steering gear insulators (-3K576-) and attach to Bench Mounted Holding Fixture T57L-500-B.
- 3. Loosen the jam nuts on the outer ends of the front wheel spindle tie rods (-3280-) adjacent to the tie rod ends (-3A130-) and remove the tie rod ends and jam nuts.

- 4. Remove the four (4) inner/outer steering gear boot/bellow clamps (-3C650-) retaining the bellows to the steering gear housing (-3548-) and the front wheel spindle tie rods. Discard the inner/outer steering gear boot clamps if damaged or excessively corroded.
- 5. Remove the bellows along with the power steering gear rack tube (-3K762-).

CAUTION

USE CARE NOT TO DAMAGE THE BOOT/BELLOWS, AS INTERNAL DAMAGE TO FRONT WHEEL INNER TIE ROD MAY RESULT.

- Remove power steering short rack (-3L547-)
 from the holding fixture and lay on the bench
 before proceeding. This prevents steering gear
 teeth damage from steering gear input shaft
 twisting when removing the front wheel spindle
 tie rods.
- 7. Position steering gear input shaft so that several steering gear input shaft teeth are exposed. Hold steering gear rack with an adjustable wrench on the end teeth only, while loosening front wheel spindle tie rods with a 34mm hex nut wrench.

NOTE

SOME POWER STEERING SHORT RACK
ASSEMBLIES MAY CONTAIN ONE (1) OR TWO
(2) STEERING GEAR TRAVEL RESTRICTORS ON
EACH SIDE OF THE STEERING GEAR RACK.
THE RESTRICTORS ARE SPLIT NYLON
WASHERS AND, IF REQUIRED, CAN EASILY BE
REMOVED FROM THE STEERING GEAR RACK.
RESTRICTORS MAY BE REUSED UNLESS
HEAVILY WORN.

Article No. 96-1-1 Cont'd.

ASSEMBLY

 Turn power rack and pinion against or near left stop and hold steering gear rack with adjustable wrench. Tighten each inner tie rod assembly separately, using a 34mm hex nut wrench, to 90-110 N•m (66-81 lb-ft).

NOTE

THE NEW DESIGN SERVICE TIE ROD ENDS DO NOT HAVE RIVETS OR COILED PINS TO RETAIN THEM.

 Install tie rod bellows and power steering gear rack tube. Install clamps retaining the tie rod bellows to the steering gear housing and tighten to 2.3-3.4 N•m (20-30 lb-in). Position tie rod bellows, power steering gear rack tube and clamps as shown.

- Install new clamps retaining tie rod bellows to tie rod ends.
- 4. Install the jam nuts on the front wheel spindle tie rods.
- Apply Silicone Brake Caliper Grease and Dielectric Compound D7AZ-19A331-A, or equivalent meeting Ford specification ESA-M1C172-A, to tie rod end threads.
- Install tie rod ends on the front wheel spindle tie rod.
- 7. Install power rack and pinion steering gear. Refer to the appropriate model/year Service Manual, Section 11-02, for procedure.

| SERVICE TIE ROD USAGE | | | | |
|-----------------------|--------------------|------------------------------|-------------------------|--|
| Year | Model | Current Service Part Number | New Service Part Number | |
| 1986-95 | Taurus/Sable | F2DC-3280-AA | F6SZ-3280-BA | |
| 1982-88 | Mustang | E8SC-3280-AA | F6SZ-3280-CA | |
| 1989-93 | Mustang | E8SC-3280-AA | F6SZ-3280-CA | |
| 1994-95 | Mustang | F2DC-3280-AA | F6SZ-3280-BA | |
| 1982-86 | Capri | E8SC-3280-AA | F6SZ-3280-CA | |
| 1982-88 | Thunderbird/Cougar | E8SC-3280-AA | F6SZ-3280-CA | |
| 1989-95 | Thunderbird/Cougar | E9SC-3280-CA | F6SZ-3280-BA | |
| 1988-95 | Continental | F2DC-3280-AA | F6SZ-3280-BA | |
| 1984-92 | Mark VII | E8SC-3280-AA | F6SZ-3280-CA | |
| 1993-95 | Mark VIII | E9SC-3280-CA | F6SZ-3280-BA | |
| 1986-95 | Aerostar | F2DC-3280-AA | F6SZ-3280-BA | |
| 1995 | Windstar | F58C-3280-AA or F58C-3280-BA | F78Z-3280-AA | |

| PART NUMBER | PART NAME | |
|--------------|-----------------|--|
| F6SZ-3280-BA | Tie Rod - Inner | |
| F6SZ-3280-CA | Tie Rod - Inner | |
| F78Z-3280-AA | Tie Rod - Inner | |

OTHER APPLICABLE ARTICLES: NONE WARRANTY STATUS: INFORMATION ONLY

OASIS CODES: 303000