

2005 Ford Focus ZX4 S

2005 STEERING Steering Linkage - Focus

2005 STEERING

Steering Linkage - Focus

SPECIFICATIONS

GENERAL SPECIFICATIONS

GENERAL SPECIFICATIONS

Item	Specification
Lubricants	
Premium Long Life Grease XG-I-C	ESA-M1C75-B
Adhesives	
Stud and Bearing Mount TA-27	WSK-M2G349-A1

TORQUE SPECIFICATIONS

TORQUE SPECIFICATIONS

Description	Nm	lb-ft
Tie-rod	110	81
Tie-rod end jam nut	41	30
Tie-rod end retaining nut	47	35

DESCRIPTION AND OPERATION

STEERING LINKAGE

The steering linkage consists of the following components:

- Steering gear
- Tie-rod end
- Tie-rod boot
- Tie-rod end jam nut
- Tie-rod end retaining nut

The steering linkage connects the steering gear to the front of the wheel knuckle. The steering linkage is adjustable at the two tie-rod ends.

DIAGNOSIS AND TESTING

STEERING LINKAGE

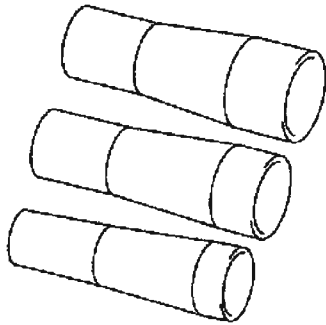
Refer to **STEERING SYSTEM-GENERAL INFORMATION** .

REMOVAL AND INSTALLATION

TIE ROD END

Special Tool(s)

SPECIAL TOOLS DESCRIPTION



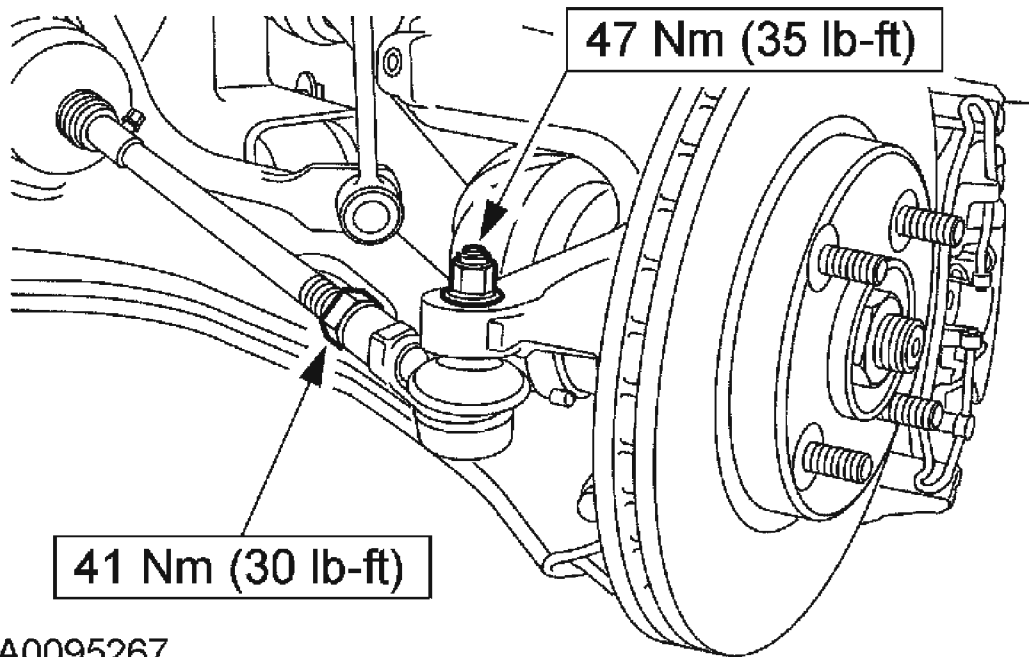
ST2787-A

Remover, Tie-Rod End 211-001 (TOOL-3290-D)

Removal and Installation

1. Remove the wheel and tire assembly. For additional information, refer to **WHEELS AND TIRES**.

WARNING: Install a new tie-rod end retaining nut. Failure to follow these instructions may result in personal injury.



A0095267

Fig. 1: Removing Retaining Nut
Courtesy of FORD MOTOR CO.

2. Loosen the tie-rod end jam nut and remove the retaining nut.
 - Discard the retaining nut.
3. Using the special tool, disconnect the tie-rod end from the wheel knuckle.

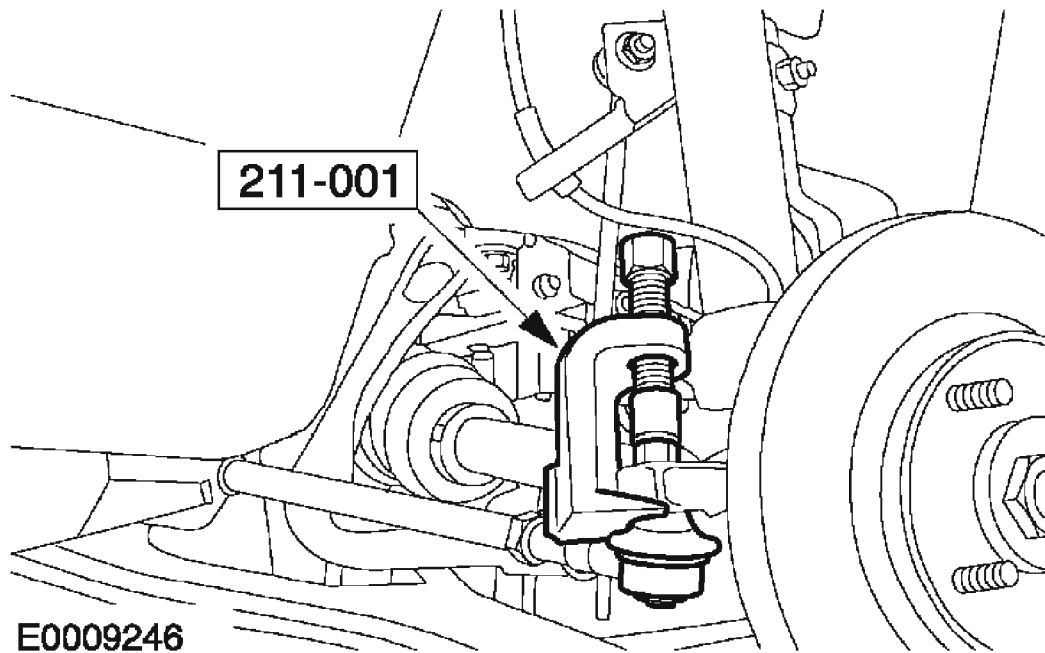
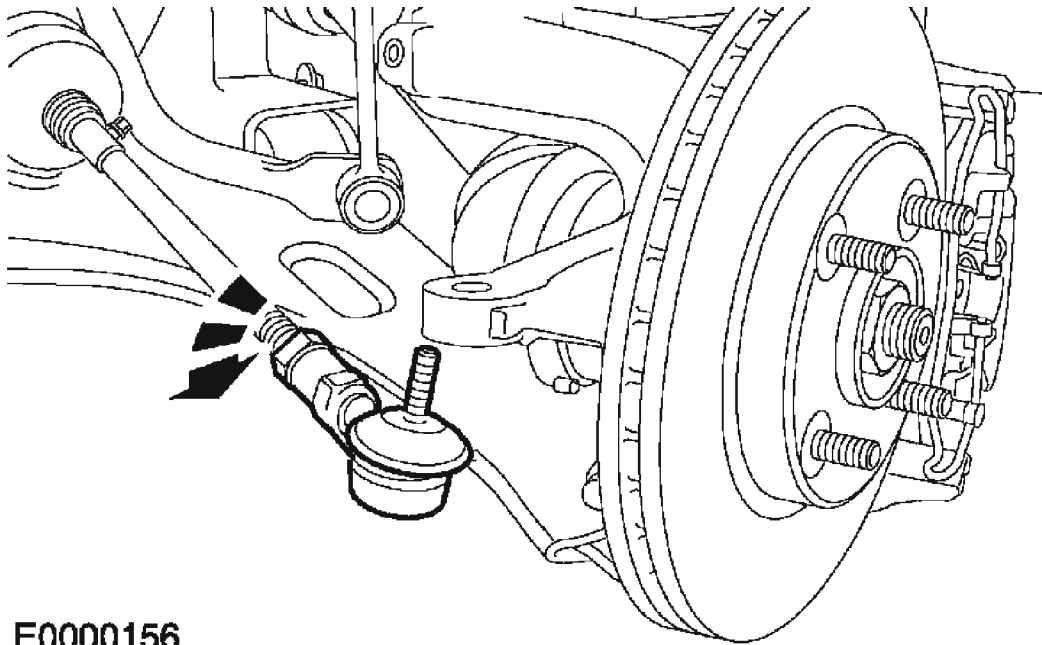


Fig. 2: Disconnecting Tie-Rod End From Wheel Knuckle
Courtesy of FORD MOTOR CO.

NOTE: Record the number of turns used to remove the tie-rod end.



E0000156

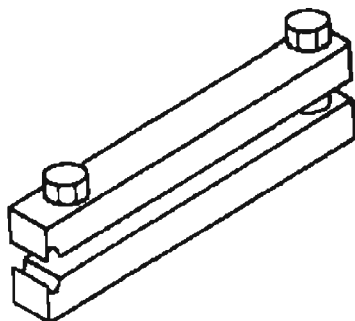
Fig. 3: Removing Tie-Rod End
Courtesy of FORD MOTOR CO.

4. Remove the tie-rod end.
5. To install, reverse the removal procedure.
6. Check the front toe adjustment. For additional information, refer to **SUSPENSION SYSTEM-GENERAL INFORMATION** .

TIE ROD

Special Tool(s)

SPECIAL TOOLS DESCRIPTION



ST1301-A

Installer, Constant Velocity Joint Boot
Clamp 205-343 (T95P-3514-A)

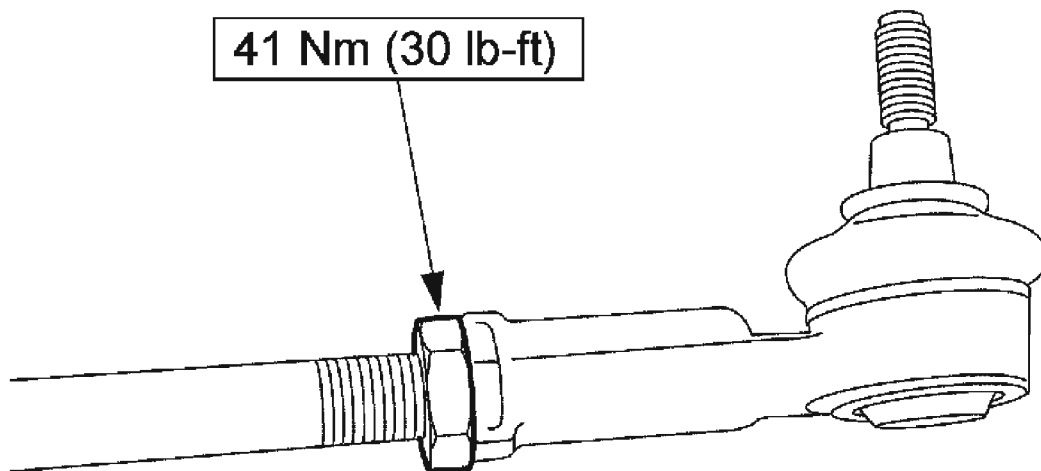
Material**MATERIAL SPECIFICATIONS**

Item	Specification
Stud and Bearing Mount TA-27	WSK-M2G349-A1
Premium Long Life Grease XG-1-C	ESA-M1C75-B

Removal and Installation

1. Remove the steering gear. For additional information, refer to **POWER STEERING** .

NOTE: Record the number of turns required to remove the tie-rod end.



A0095268

Fig. 4: Removing Tie-Rod End And Jam Nut
Courtesy of FORD MOTOR CO.

2. Remove the tie-rod end and jam nut.
3. Remove the boot.
 1. Remove and discard the clamps.
 2. Disconnect the breather pipe (if equipped).
 3. Remove the boot.

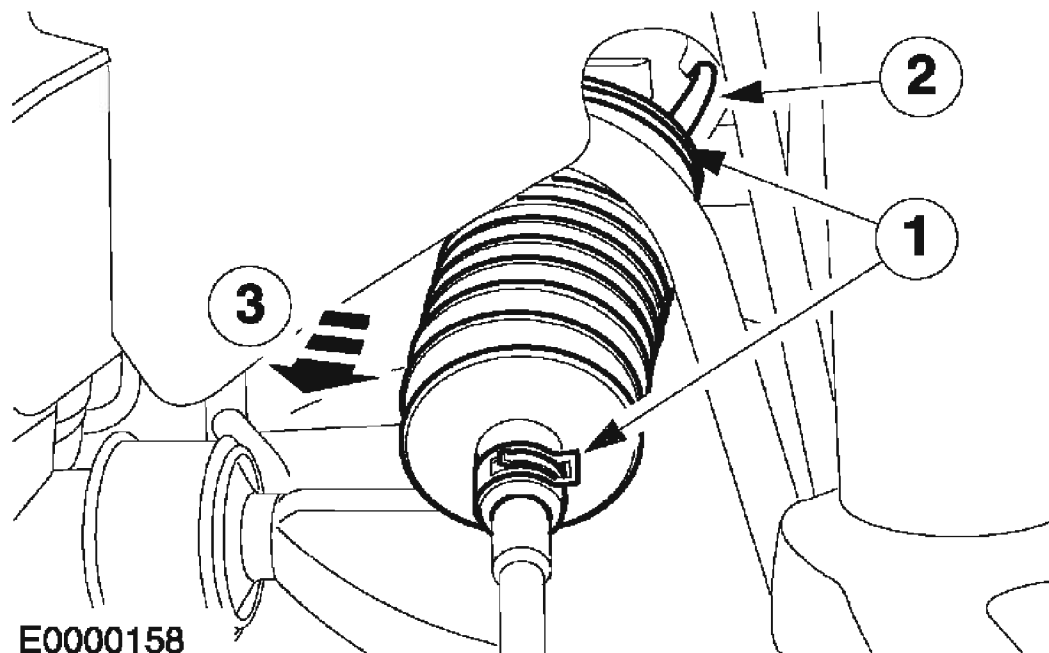


Fig. 5: Removing Boot

Courtesy of FORD MOTOR CO.

4. Rotate the pinion to expose the rack gear teeth.

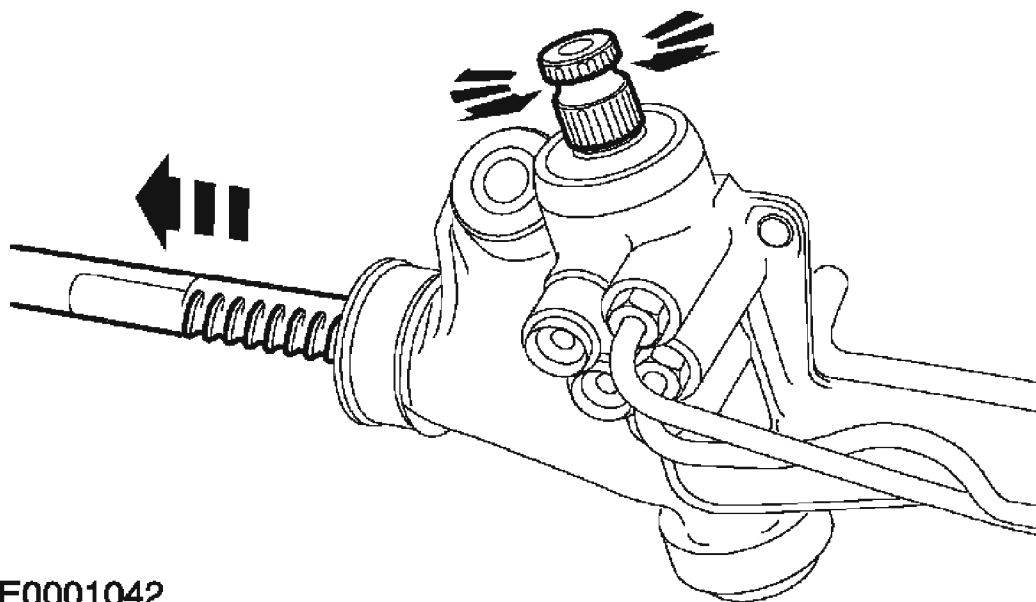


Fig. 6: Rotating Pinion To Expose Rack Gear Teeth

Courtesy of FORD MOTOR CO.

CAUTION: To counter the extensive torque forces required to remove the tie-rod, clamp the rack gear teeth in a suitable vise. Do not clamp the steering gear body.

CAUTION: Make sure vise jaw protectors are used.

NOTE: Remove all traces of thread locking compound from the steering rack threads.

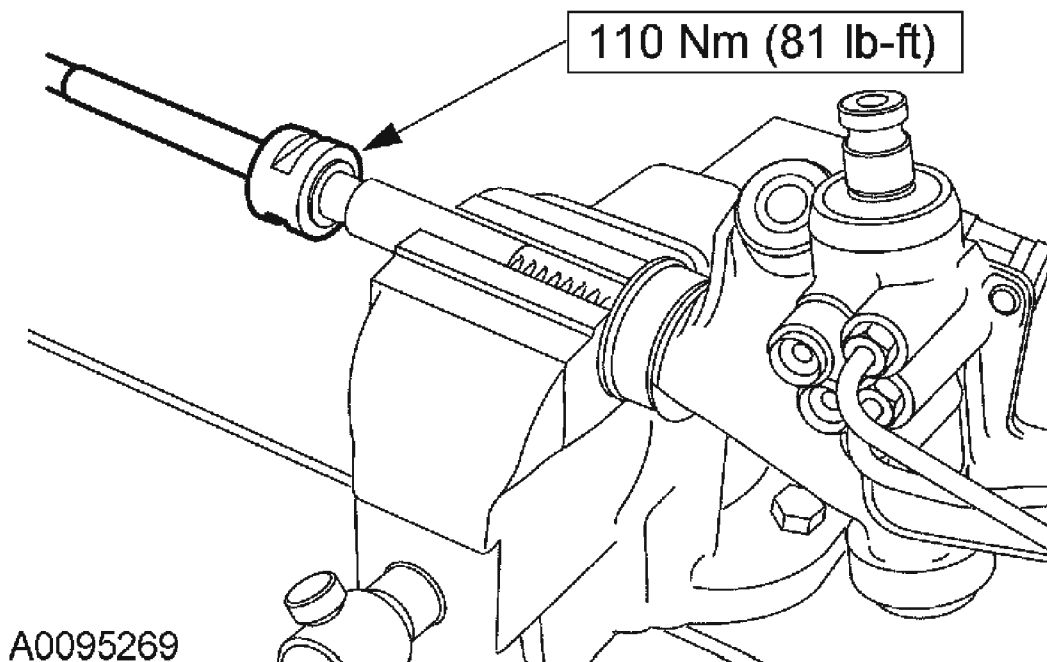


Fig. 7: Securing Steering Gear In A Vise And Using Suitable Removal Tool To Remove Tie-Rod

Courtesy of FORD MOTOR CO.

5. Secure the steering gear in a vise. Using a suitable removal tool, remove the tie- rod.
 - Apply thread locking compound to the inner threads of the tie-rod.

CAUTION: Make sure the tie-rod is clean before installing the boot.

NOTE: To prevent the steering gear boot from twisting during toe

adjustment, apply long-life grease to the groove in the tie-rod and uniformly to the inner diameter of the steering gear boot.

NOTE: Install new boot clamps.

6. To install, reverse the removal procedure.
7. Using the special tool, tighten the steering gear inner boot clamp.

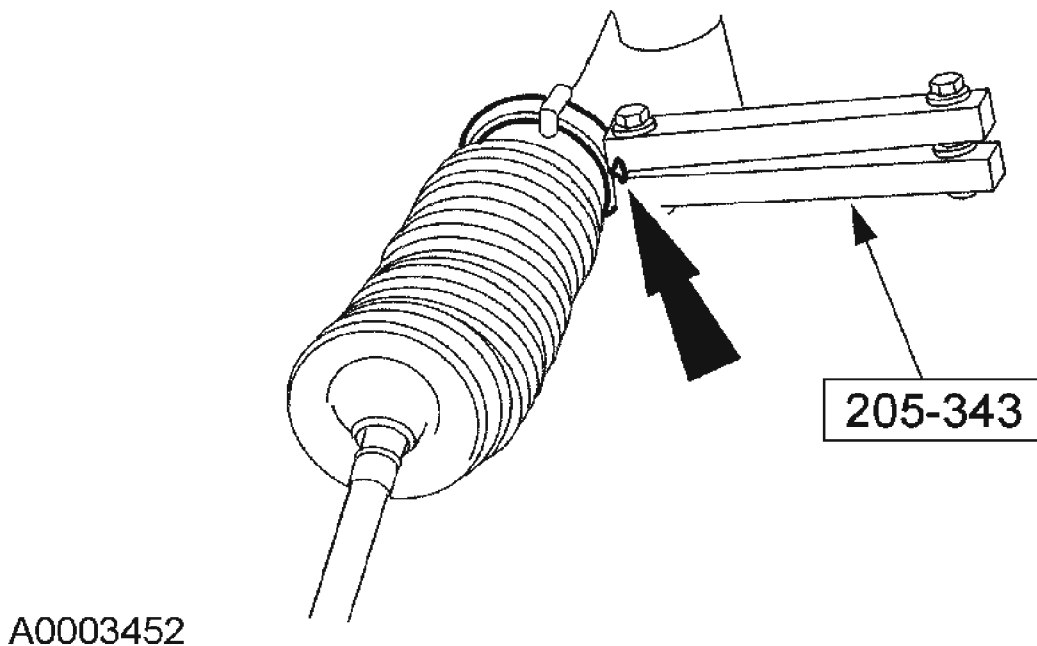


Fig. 8: Using Special Tool To Tighten Steering Gear Inner Boot Clamp
Courtesy of FORD MOTOR CO.

8. Check the front toe adjustment. For additional information, refer to **SUSPENSION SYSTEM-GENERAL INFORMATION** .

STEERING GEAR BOOT

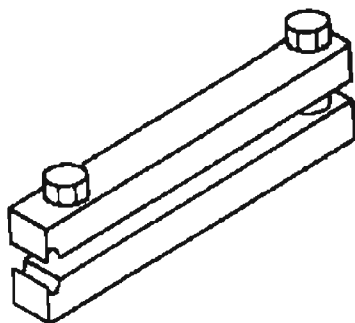
Special Tool(s)

SPECIAL TOOLS DESCRIPTION

	Installer, Constant Velocity Joint Boot Clamp 205-343 (T95P-3514-A)
--	---

2005 Ford Focus ZX4 S

2005 STEERING Steering Linkage - Focus



ST1301-A

Material

MATERIAL SPECIFICATIONS

Item	Specification
Premium Long Life Grease XG-1-C	ESA-M1C75-B

Removal and Installation

1. Remove the tie-rod end and jam nut. For additional information, refer to **TIE ROD END**.
2. Remove the boot.
 1. Remove and discard the clamps.
 2. Disconnect the breather pipe (if equipped).
 3. Remove the boot.

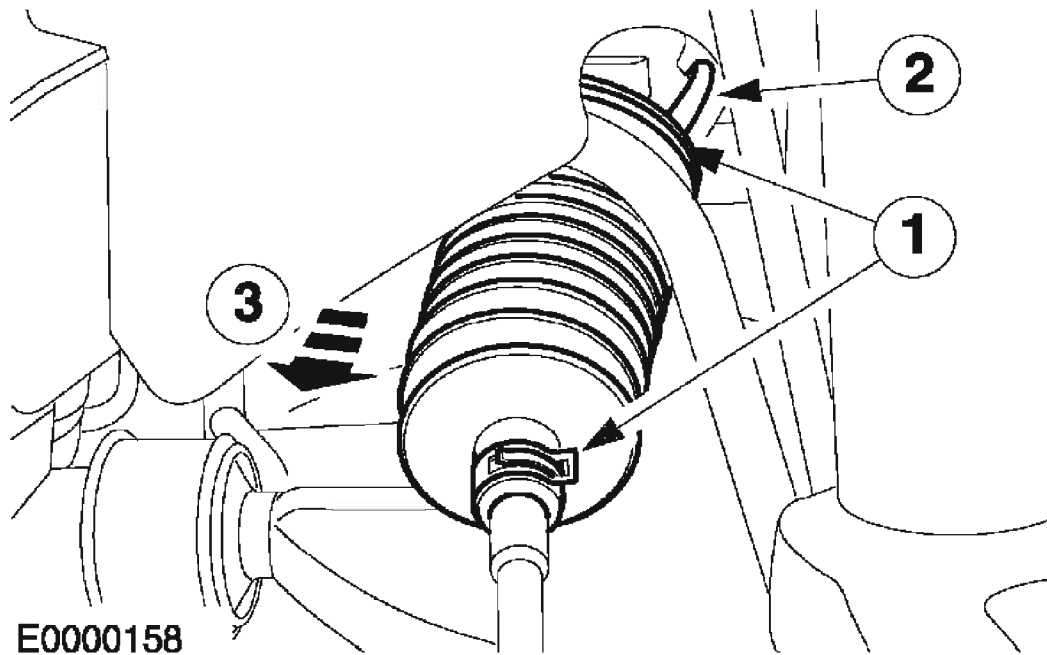


Fig. 9: Removing Boot

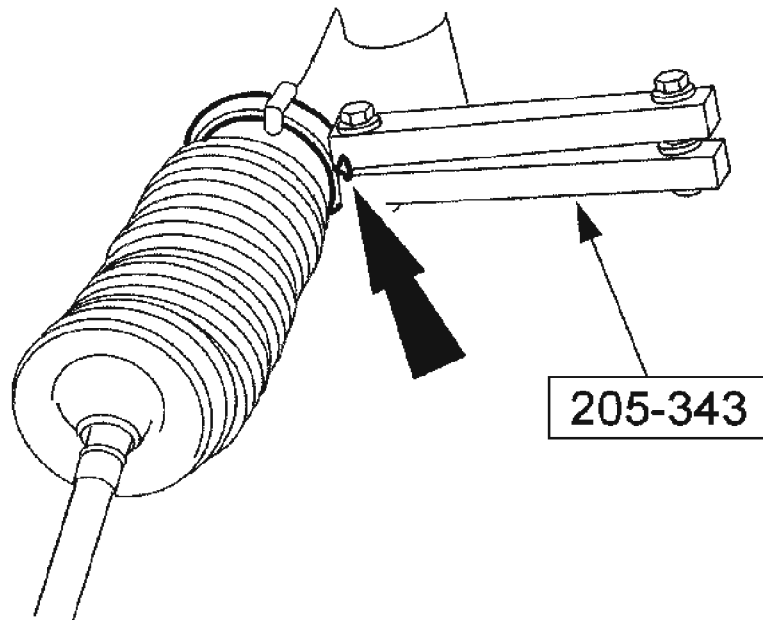
Courtesy of FORD MOTOR CO.

CAUTION: Make sure the tie-rod is clean before installing the boot.

NOTE: Install new boot clamps.

NOTE: To prevent the steering gear boot from twisting during toe adjustment, apply long-life grease to the groove in the tie-rod and uniformly to the inner diameter of the steering gear boot.

3. To install, reverse the removal procedure.
4. Using the special tool, tighten the steering gear boot clamp.



A0003452

Fig. 10: Using Special Tool To Tighten Steering Gear Boot Clamp
Courtesy of FORD MOTOR CO.