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2003 FORD Freestar OEM Service and Repair Workshop Manual

[Go to manual page](#)



Steering Column Lower Shaft

<i>211-04 Steering Column</i>	<i>2022 F-150</i>
<i>Removal and Installation</i>	<i>Procedure revision date: 05/21/2020</i>

Steering Column Lower Shaft

Removal

NOTE

Removal steps in this procedure may contain installation details.

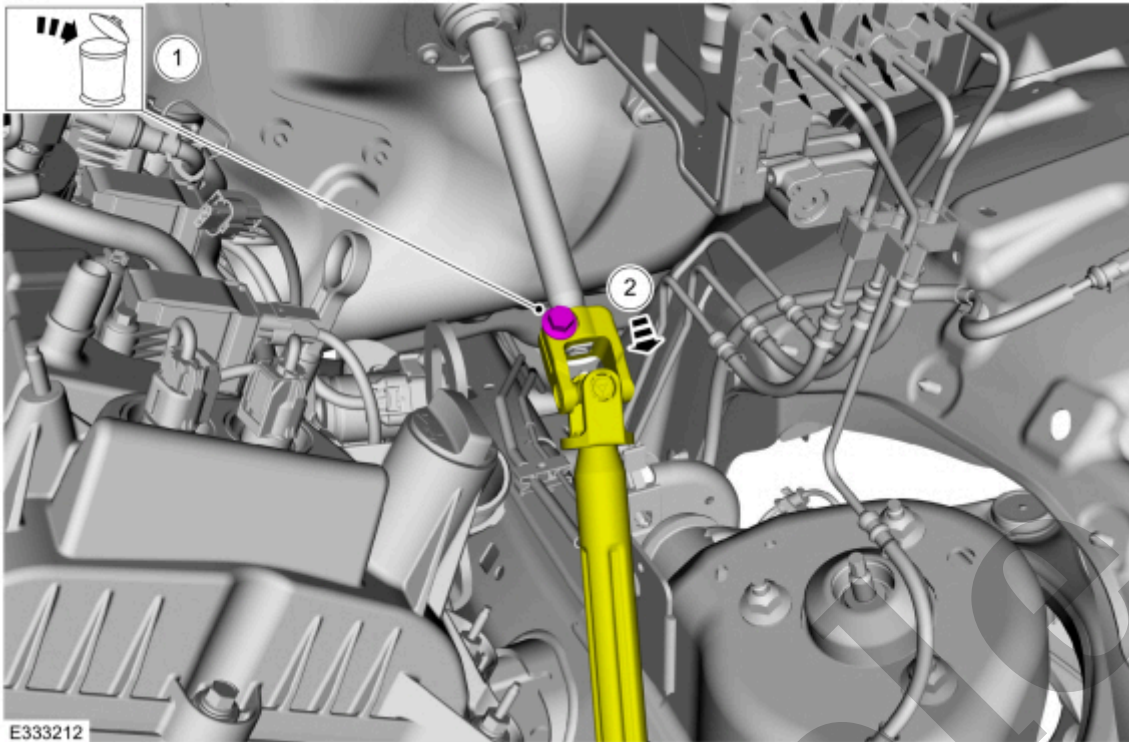
1. NOTE

Do not allow the steering column to rotate while the steering column shaft is disconnected or damage to the steering column internal sensor may result.

NOTE

Use a steering wheel holding device (such as Hunter® 28-75-1 or equivalent).

Keep the steering wheel in the straight ahead position.



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3. **WARNING**

Do not reuse steering column shaft bolts. This may result in fastener failure and steering column shaft detachment or loss of steering control. Failure to follow this instruction may result in serious injury to vehicle occupant(s).

Remove and discard the bolt and remove the lower steering column shaft.

Torque : 22 lb.ft (30 Nm)



Steering Column Opening Seal

211-04 Steering Column	2022 F-150
Removal and Installation	Procedure revision date: 05/21/2020

Steering Column Opening Seal

Removal

NOTE

Removal steps in this procedure may contain installation details.

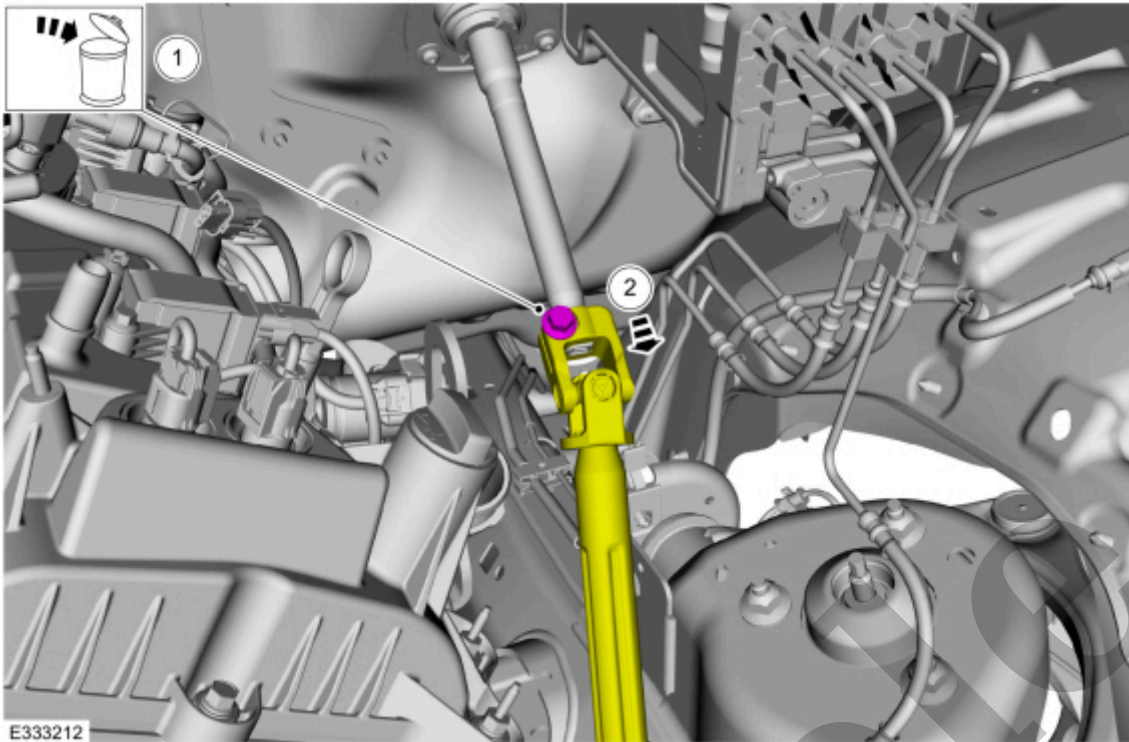
1. NOTE

Do not allow the steering column to rotate while the steering column shaft is disconnected or damage to the steering column internal sensor may result.

NOTE

Use a steering wheel holding device (such as Hunter® 28-75-1 or equivalent).

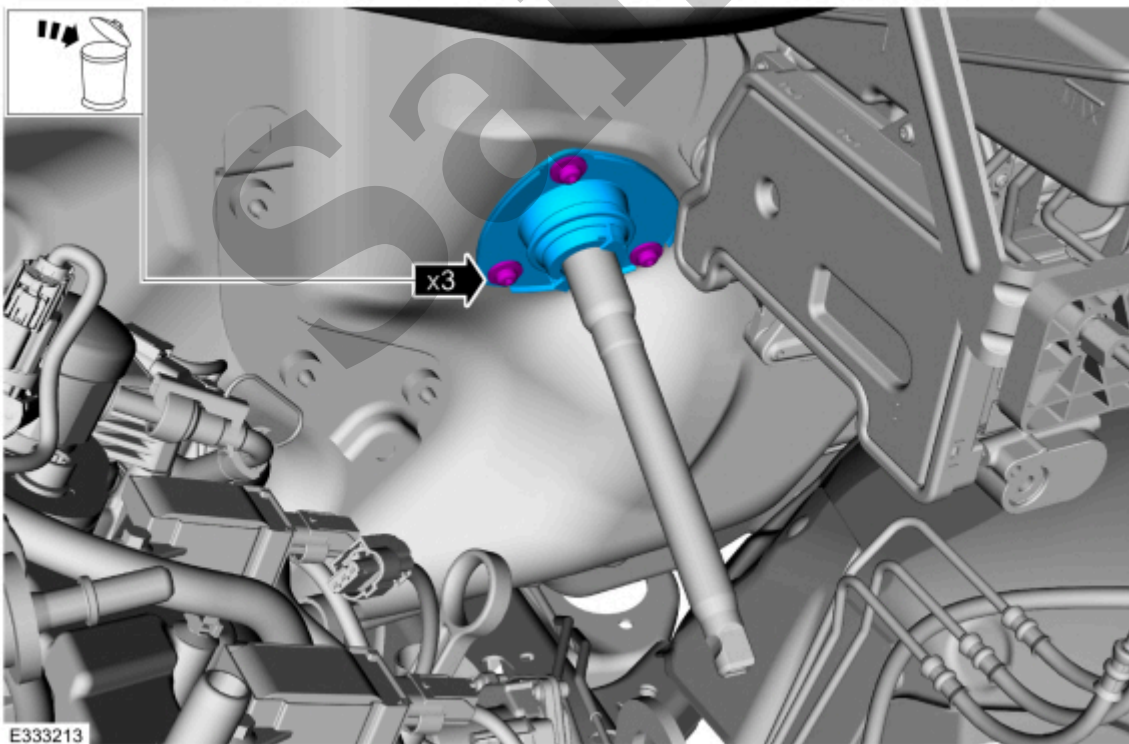
Keep the steering wheel in the straight ahead position.



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3. Remove and discard the retainers and remove the steering column opening seal.

Torque : 106 lb.in (12 Nm)



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Steering Column Telescopic Motor

211-04 Steering Column	2022 F-150
Removal and Installation	Procedure revision date: 05/21/2020

Steering Column Telescopic Motor

Removal

NOTE

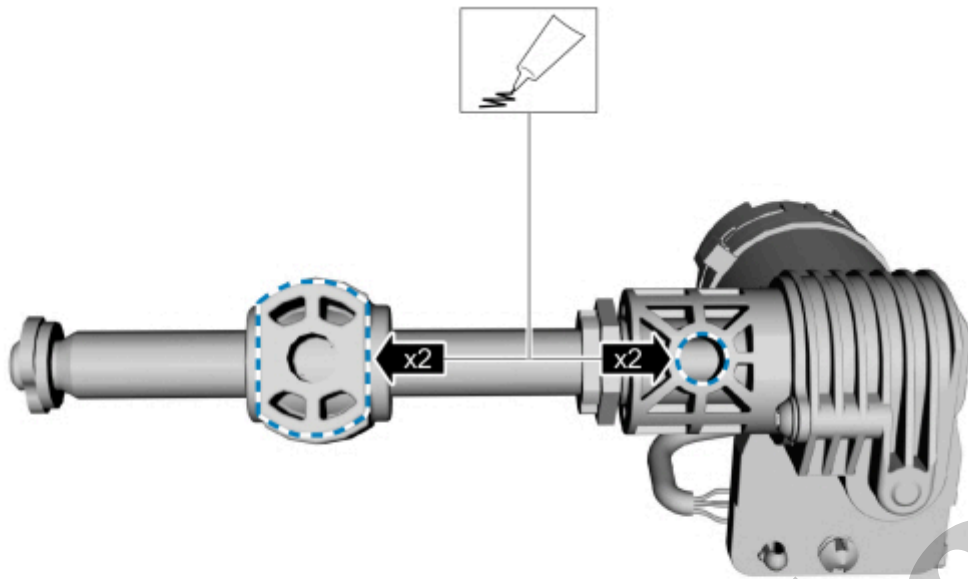
Removal steps in this procedure may contain installation details.

1. Remove the steering column.

Refer to: [Steering Column](#)(211-04 Steering Column, Removal and Installation).

2. Remove the telescopic motor retainers and the telescopic motor.

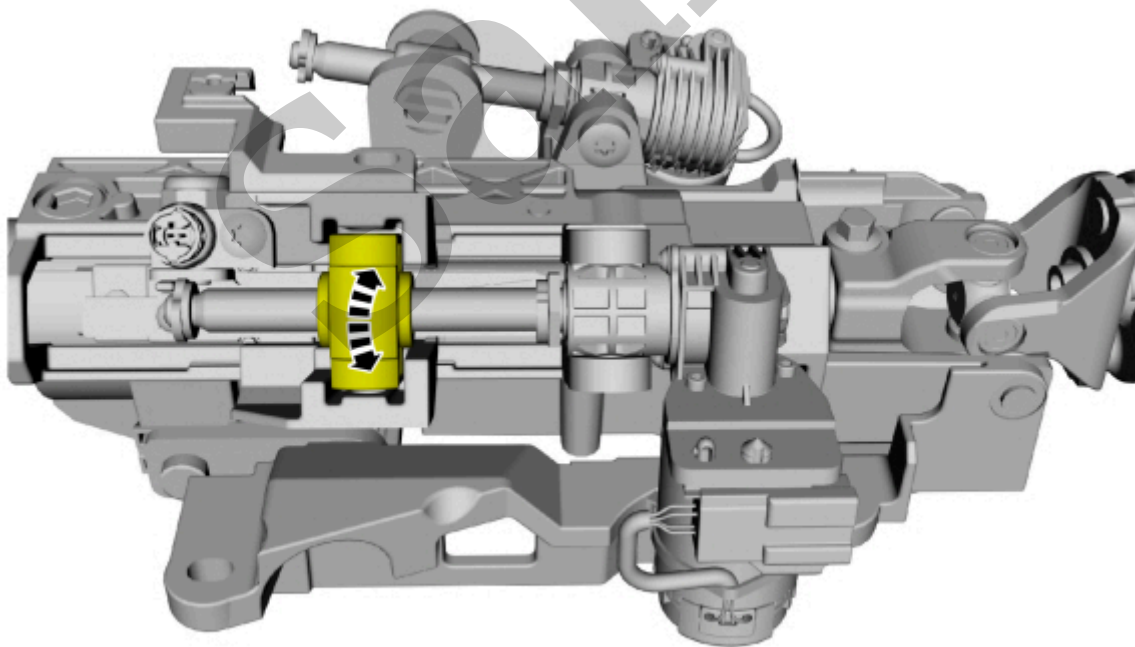
Torque : 62 lb.in (7 Nm)



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3. Rotate the trunnion nut until the correct length is achieved to align the leadscrew housing with the threaded holes in the support arm.



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Steering Column Tilt Motor

211-04 Steering Column	2022 F-150
Removal and Installation	Procedure revision date: 05/21/2020

Steering Column Tilt Motor

Removal

NOTE

Removal steps in this procedure may contain installation details.

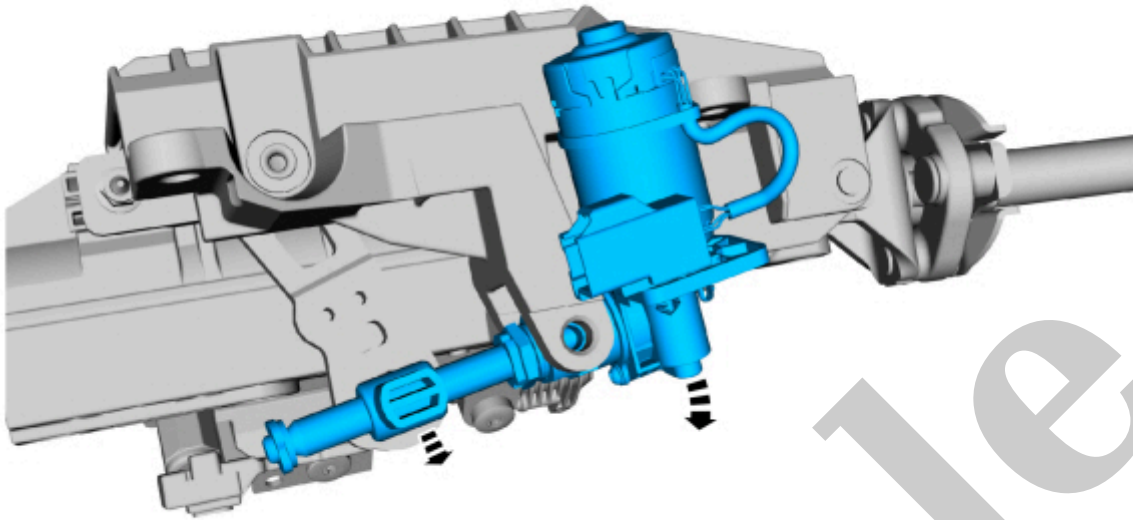
1. Remove the steering column.

Refer to: [Steering Column](#)(211-04 Steering Column, Removal and Installation).

2. Remove the tilt motor retainers.

Torque : 62 lb.in (7 Nm)

4. Remove the tilt motor.



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[Click here to learn about symbols, color coding, and icons used in this manual.](#)

Installation

1. To install, reverse the removal procedure.
2. On both sides.

Apply grease (supplied with the new motor) to the trunnion nut axles and the tilt motor leadscrew housing holes.

4. If equipped with memory steering column, use the steering column control switch and set the soft stops as follows.

1. Move the column up until it reaches the end of travel and hold the switch for 2 seconds after the column has reached the end of travel.
2. Move the column in the same direction until it reaches the end of travel again and hold the switch for 2 seconds after the motor has reached the end of travel. This clears any unintended soft stops.
3. Move the column down until it reaches the end of travel and hold the switch for 2 seconds after the motor has reached the end of travel.
4. Move the column in the same direction until it reaches the end of travel and hold the switch for 2 seconds after the motor has reached the end of travel. This clears any unintended soft stops.

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