2005 SUSPENSION Front Suspension - 4x4 - Explorer & Mountaineer

2005 SUSPENSION

Front Suspension - 4x4 - Explorer & Mountaineer

SPECIFICATIONS

GENERAL SPECIFICATIONS

GENERAL SPECIFICATIONS

Item	Specification
Silicone Gasket and Sealant F7AZ-19554-EA	WSE-M4G323-A4

TORQUE SPECIFICATIONS

TORQUE SPECIFICATIONS

Description	Nm	lb-ft
Anti-lock brake sensor bolt	18	13
Axle-to-wheel hub nut	250	184
Brake hose-to-wheel knuckle bolt	15	11
Caliper anchor plate-to-wheel knuckle bolts	112	83
Caliper-to-anchor plate bolts	210	155
Lower ball joint nut	175	129
Lower arm-to-frame flag bolt and nut (forward attachment)	400	295
Lower arm-to-frame nuts (rearward attachment)	150	111
Shock absorber-to-lower arm bolt and flag nut	350	258
Shock absorber-to-upper mounting plate nut (M12)	56	41
Shock absorber upper mounting plate-to-frame nuts (M8)	30	22
Stabilizer bar bracket-to-frame bolts	70	52
Stabilizer bar-to-link nut	25	18
Tie-rod end nut	70	52
Upper arm-to-frame nuts	150	111
Upper ball joint nut	55	41
Upper ball joint-to-wheel knuckle nut	52	38
Wheel hub-to-wheel knuckle bolts	112	83
Wheel nuts	135	100

2005 SUSPENSION Front Suspension - 4x4 - Explorer & Mountaineer

DIAGNOSIS AND TESTING

FRONT SUSPENSION

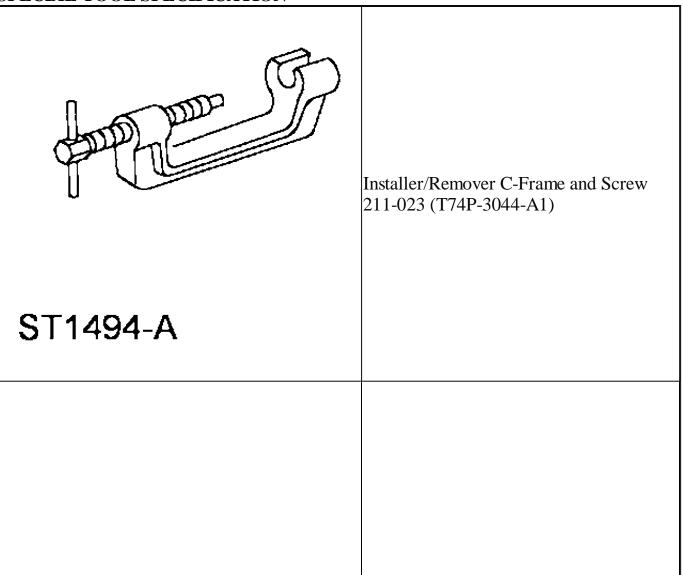
Refer to **SUSPENSION SYSTEM-GENERAL INFORMATION**.

REMOVAL AND INSTALLATION

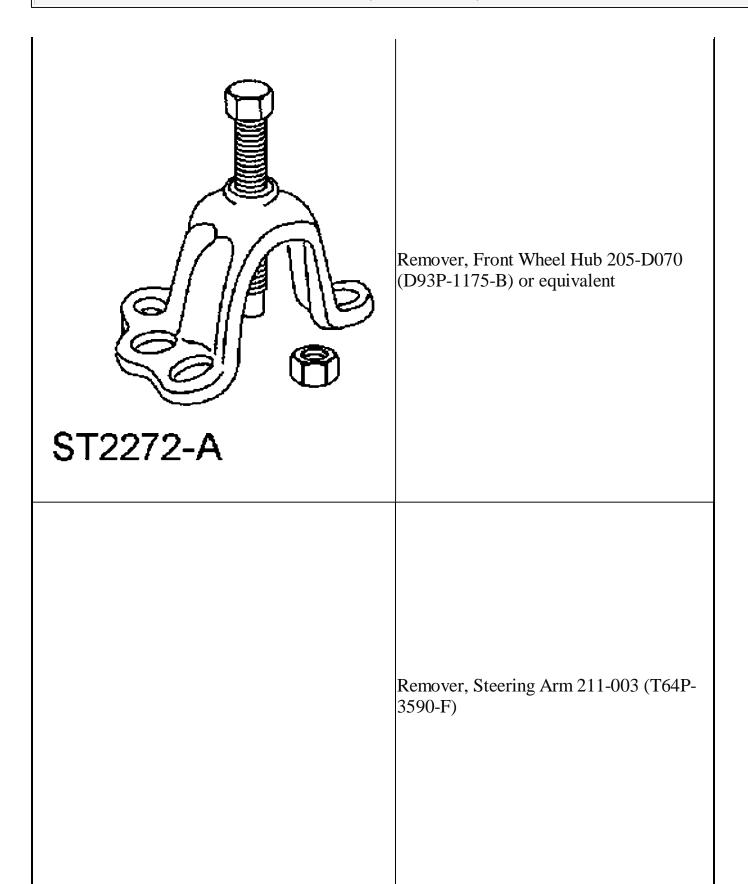
BALL JOINT

Special Tool(s)

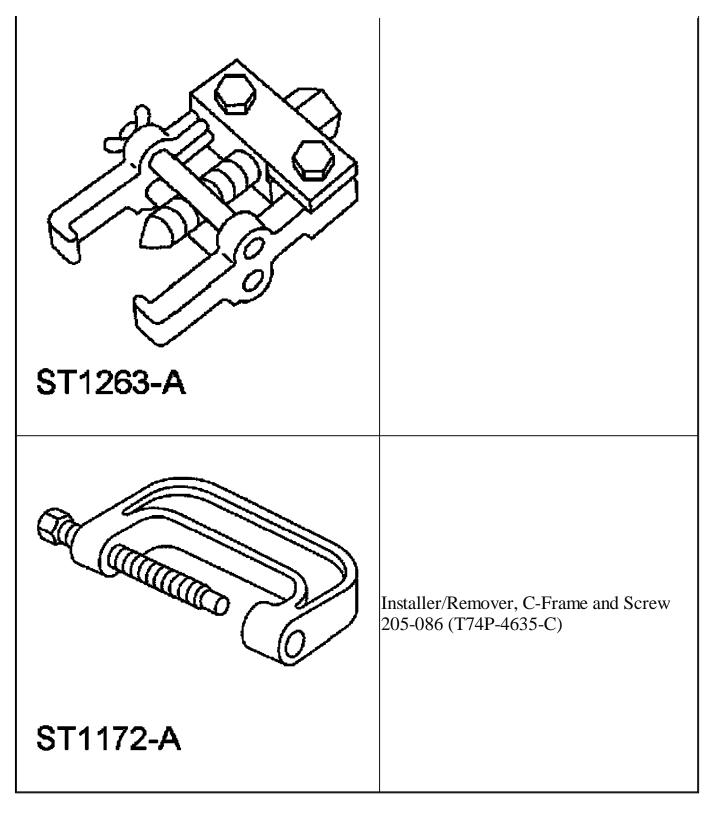
SPECIAL TOOL SPECIFICATION



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Material

MATERIAL SPECIFICATION

2005 SUSPENSION Front Suspension - 4x4 - Explorer & Mountaineer

Item	Specification
Silicone Gasket and Sealant F7AZ-19554-EA	WSE-M4G323-A4

Removal and Installation

- 1. With the vehicle in NEUTRAL, position it on a hoist. For additional information, refer to **JACKING AND LIFTING**.
- 2. Remove and discard the axle retainer nut.
 - To install, tighten the nut to 250 Nm (184 lb-ft).

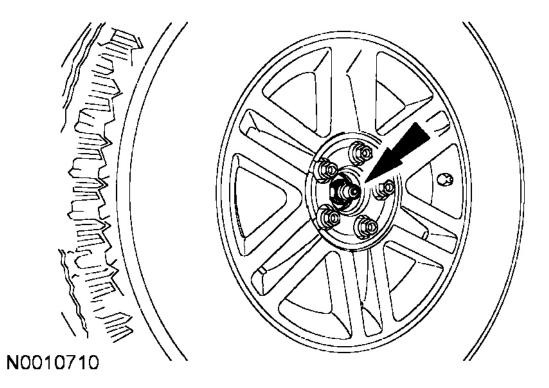


Fig. 1: Discarding Axle Retainer Nut Courtesy of FORD MOTOR CO.

NOTE: The wheel speed sensor connectors are located in the engine compartment and are secured to the fender aprons.

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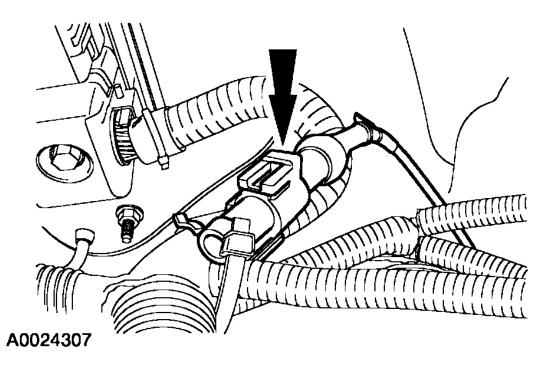


Fig. 2: Disconnecting Wheel Speed Sensor Connector Courtesy of FORD MOTOR CO.

- 3. Disconnect the wheel speed sensor connector.
- 4. Remove the wheel and tire assembly. For additional information, refer to <u>WHEELS AND</u> <u>TIRES</u>.
- 5. Detach the harness from the retainers.

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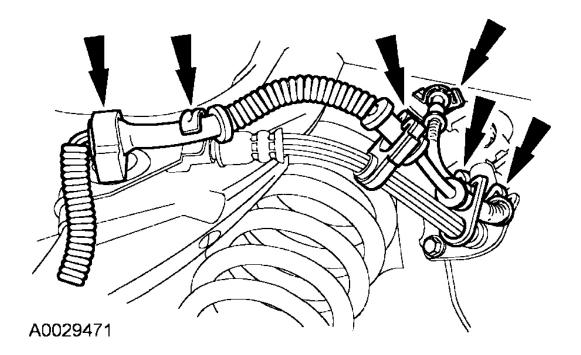
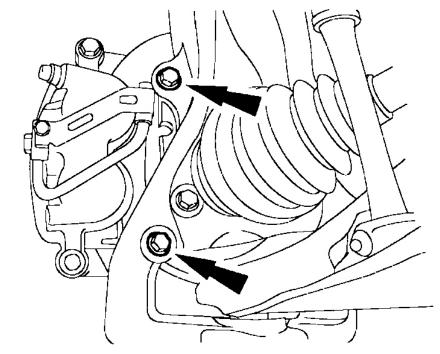


Fig. 3: Locating Wheel Speed Sensor Harness And Brake Hose Courtesy of FORD MOTOR CO.

CAUTION: Do not allow the disc brake caliper to hang suspended from the brake hose. Provide a suitable support.

- 6. Remove the bolts and position the brake caliper and support bracket aside.
 - To install, tighten the bolts to 112 Nm (83 lb-ft).

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<u>Fig. 4: Removing Bolts</u> Courtesy of FORD MOTOR CO.

7. Remove the brake disc.

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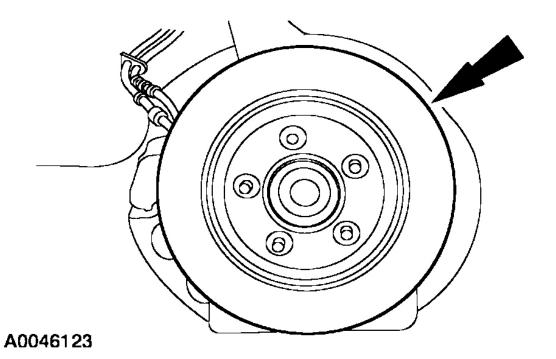


Fig. 5: Removing Brake Disc Courtesy of FORD MOTOR CO.

> CAUTION: Do not use a hammer to separate the outboard CV joint from the hub. Damage to the threads and internal CV joint components can result.

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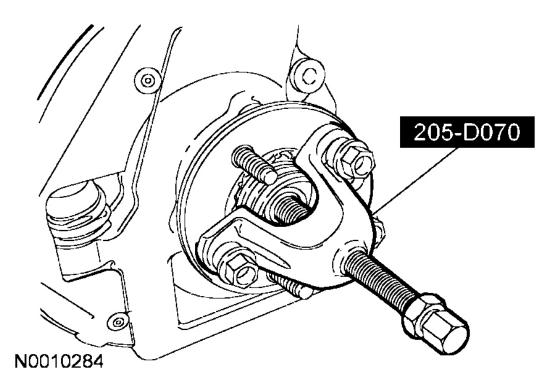


Fig. 6: Pressing Outboard CV Joint Courtesy of FORD MOTOR CO.

- 8. Using the special tool, press the outboard CV joint until it is loose in the hub.
- 9. Remove and discard the cotter pin and the castellated nut.
 - To install, tighten the nut to 70 Nm (52 lb-ft).

2005 SUSPENSION Front Suspension - 4x4 - Explorer & Mountaineer

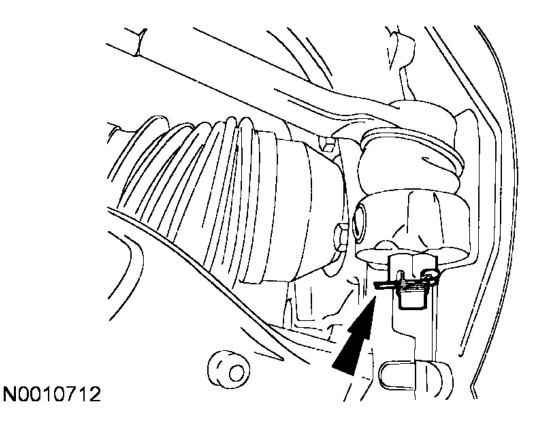
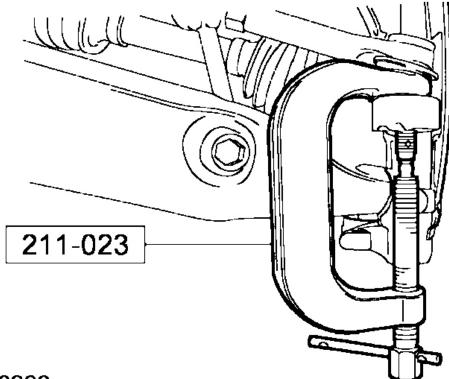


Fig. 7: Discarding Cotter Pin And Castellated Nut Courtesy of FORD MOTOR CO.

- CAUTION: Do not use a hammer to separate the tie-rod from the wheel knuckle or damage to the wheel knuckle will result.
- CAUTION: Do not damage the tie-rod boot when installing the special tool.

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N0010266

Fig. 8: Separating Tie-Rod From Wheel Knuckle Courtesy of FORD MOTOR CO.

- 10. Using the special tool, separate the tie-rod from the wheel knuckle.
- 11. Remove and discard the cotter pin and the castellated nut.
 - To install, tighten the nut to 175 Nm (129 lb-ft).

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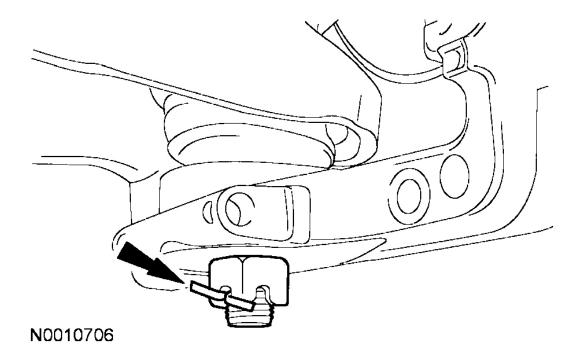


Fig. 9: Discarding Cotter Pin And Castellated Nut Courtesy of FORD MOTOR CO.

CAUTION: Do not use a hammer to separate the ball joint from the wheel knuckle or damage to the wheel knuckle will result.

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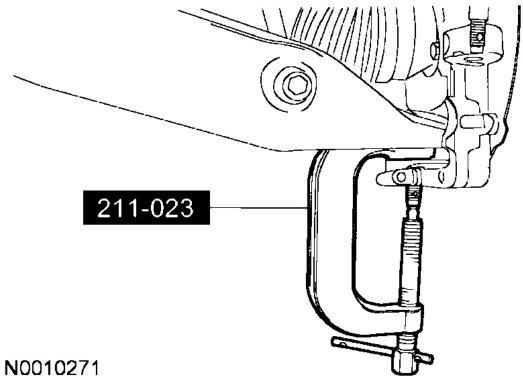


Fig. 10: Separating Lower Ball Joint From Wheel Knuckle Courtesy of FORD MOTOR CO.

- 12. Using the special tool, separate the lower ball joint from the wheel knuckle. Reinstall and hand-tighten the lower ball joint castellated nut.
- 13. Remove and discard the upper ball joint nut.
 - To install, tighten the nut to 55 Nm (41 lb-ft).

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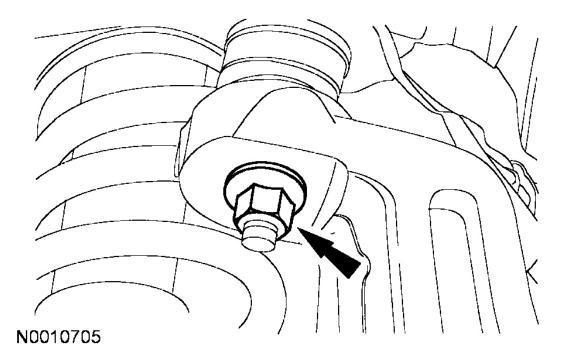


Fig. 11: Discarding Upper Ball Joint Nut Courtesy of FORD MOTOR CO.

- CAUTION: Secure the front axle shaft to prevent the CV joint and boots from overextending. Failure to do so can cause damage to the CV joint and boots.
- CAUTION: Do not use a hammer to separate the ball joint from the wheel knuckle or damage to the wheel knuckle will result.
- CAUTION: Do not damage the ball joint when installing the special tool.

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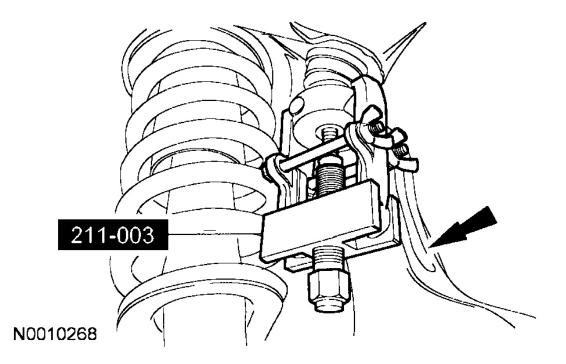
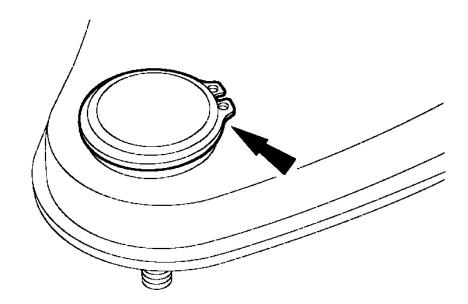


Fig. 12: Separating Upper Ball Joint From Wheel Knuckle Courtesy of FORD MOTOR CO.

- 14. Using the special tool, separate the upper ball joint from the wheel knuckle.
- 15. Remove the hand-tightened lower ball joint castellated nut and remove the wheel knuckle.
- 16. Remove and discard the snap ring from the ball joint.

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A0094888

Fig. 13: Discarding Snap Ring From Ball Joint Courtesy of FORD MOTOR CO.

17. Using a suitable ball joint remover tool, remove the ball joint.

2005 SUSPENSION Front Suspension - 4x4 - Explorer & Mountaineer

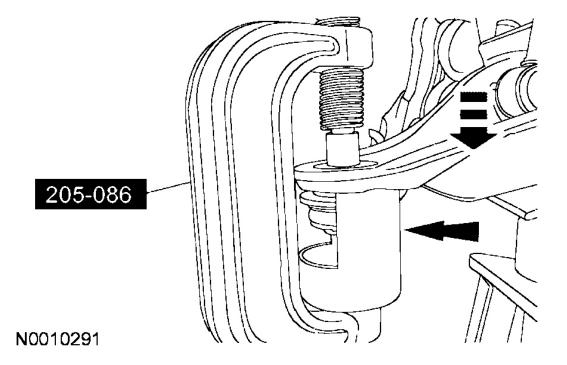


Fig. 14: Removing Ball Joint Courtesy of FORD MOTOR CO.

- CAUTION: Do not damage the ball joint boot when installing the special tool.
- NOTE: Apply a thin coat of silicone sealant to the wheel hub mounting surfaces before installation.
- NOTE: Clean and inspect the control arm ball joint bore for damage before installing a new ball joint.

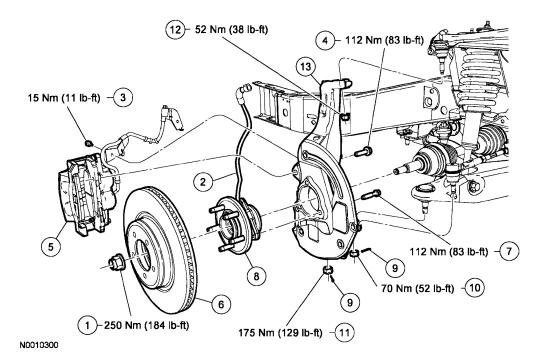
NOTE: Make sure the new ball joint snap ring is fully seated.

- 18. To install, reverse the removal procedure.
 - Always install new:
 - castellated nuts.
 - cotter pins.

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- snap rings.
- upper ball joint nuts.
- axle retainer nut.

FRONT SUSPENSION - EXPLODED VIEW

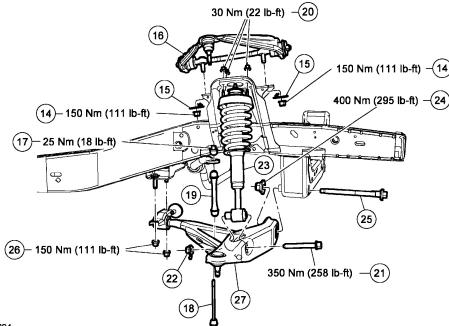


Item	Part Number	Description
1	W706540-S900	Axle-to-wheel hub nut
2	—	Speed sensor harness (part of 2C204)
3	W505223-S436	Brake hose-to-wheel knuckle bolt
4	2027	Anchor plate bolt (2 required)
5	_	Brake caliper, pads and anchor plate
6	1125	Brake disc
7	1107	Wheel hub-to-wheel knuckle bolt (3 required)

ltem	Part Number	Description
8	1104	Wheel bearing and hub assembly
9	N642567-S36	Cotter pins (2 required)
10	N642567-S36	Tie-rod end-to-wheel knuckle nut
11	N808039-S427	Lower ball joint-to-wheel knuckle nut
12	W520214-S436	Upper ball joint-to-wheel knuckle nut
13	3K185	Wheel knuckle

Fig. 15: Exploded View Of Front Suspension With Torque Specifications (1 Of 2) Courtesy of FORD MOTOR CO.

2005 SUSPENSION Front Suspension - 4x4 - Explorer & Mountaineer



N0010304

Item	Part Number	Description
14	W520215-S436	Upper arm-to-frame nuts
15	3C203	Set shims (2 required)
16	3084/3085	Upper arm (RH/LH)
17	5C491	Nut and grommet
18	5495	Stud
19	5K484	Stabilizer bar link
20	W704790-S426	Shock absorber upper mount-to-frame nuts (3 required)
21	W707900-S426	Shock absorber-to-lower arm bolt
22	W707633-8436	Shock absorber-to-lower arm flag nut

ltem	Part Number	Description
23	—	Shock absorber and spring assembly
24	W707084-S436	Lower arm-to-frame nut (forward mounting)
25	W707923-S436	Lower arm-to-frame flag bolt (forward mounting)
26	W520215-S427	Lower arm-to-frame nuts (rearward mounting) (2 required)
27	3078	Lower arm

Fig. 16: Exploded View Of Front Suspension With Torque Specifications (2 Of 2) Courtesy of FORD MOTOR CO.

1. For additional information, refer to the procedures in this article.

WHEEL BEARING AND WHEEL HUB

Removal and Installation

1. Loosen the axle retainer nut.

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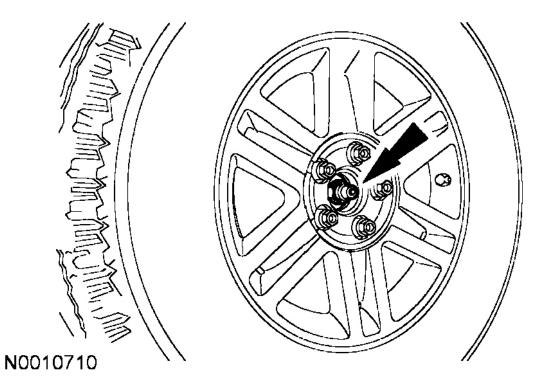


Fig. 17: Loosening Axle Retainer Nut Courtesy of FORD MOTOR CO.

NOTE: The wheel speed sensor electrical connectors are located in the engine compartment secured to the fender aprons.

2005 SUSPENSION Front Suspension - 4x4 - Explorer & Mountaineer

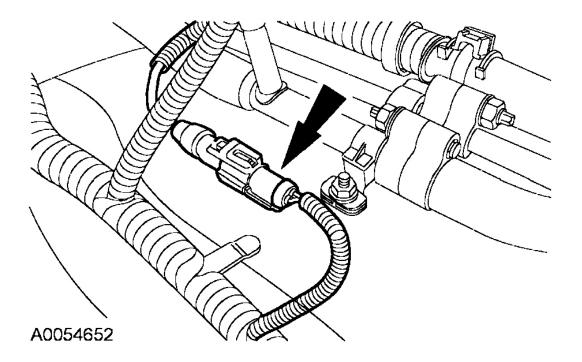


Fig. 18: Disconnecting Wheel Speed Sensor Courtesy of FORD MOTOR CO.

- 2. Disconnect the wheel speed sensor.
- 3. Remove the wheel and tire assembly. For additional information, refer to <u>WHEELS AND</u> <u>TIRES</u>.
- 4. Remove and discard the axle retainer nut.
 - To install, tighten the nut to 250 Nm (184 lb-ft).
- 5. Using the special tool, separate the outboard CV joint from the wheel hub.

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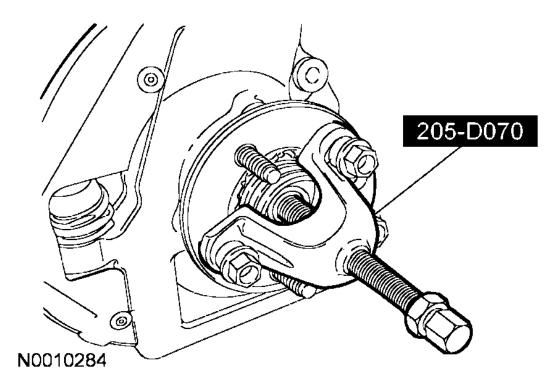


Fig. 19: Separating Outboard CV Joint From Wheel Hub Courtesy of FORD MOTOR CO.

6. Detach the wheel speed sensor harness from the brake hose.

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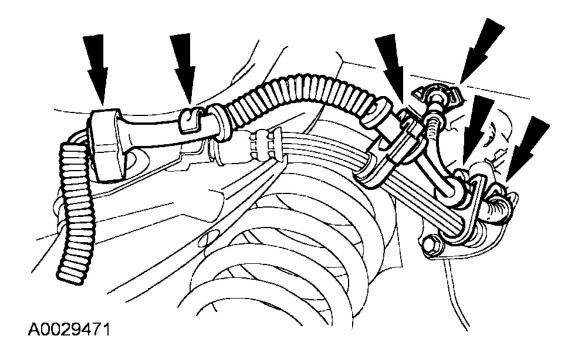
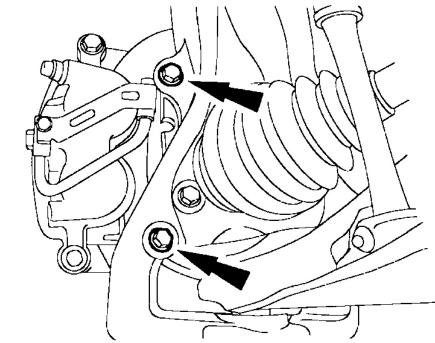


Fig. 20: Locating Wheel Speed Sensor Harness And Brake Hose Courtesy of FORD MOTOR CO.

- 7. Remove the brake hose-to-wheel knuckle bolt.
 - To install, tighten the bolt to 15 Nm (11 lb-ft).
- 8. Remove the 2 anchor plate bolts.
 - To install, tighten the bolts to 112 Nm (83 lb-ft).

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N0010711

Fig. 21: Removing Anchor Plate Bolts Courtesy of FORD MOTOR CO.

CAUTION: Do not allow the brake caliper to hang from the hose or damage to the hose can occur.

- 9. Position the caliper, pads and anchor plate aside.
- 10. Remove the brake disc.
- 11. Remove and discard the 3 wheel hub-to-wheel knuckle bolts.
 - To install, tighten the bolts to 112 Nm (83 lb-ft).
- 12. Remove the wheel bearing and hub assembly.
- 13. To install, reverse the removal procedure.
 - Always install new wheel hub-to-wheel knuckle bolts and a new axle retainer nut.

WHEEL KNUCKLE

Removal and Installation

1. Loosen the axle retainer nut.

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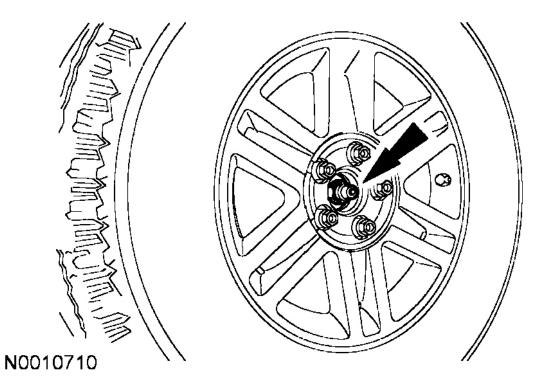


Fig. 22: Loosening Axle Retainer Nut Courtesy of FORD MOTOR CO.

NOTE: The wheel speed sensor electrical connectors are located in the engine compartment secured to the fender aprons.

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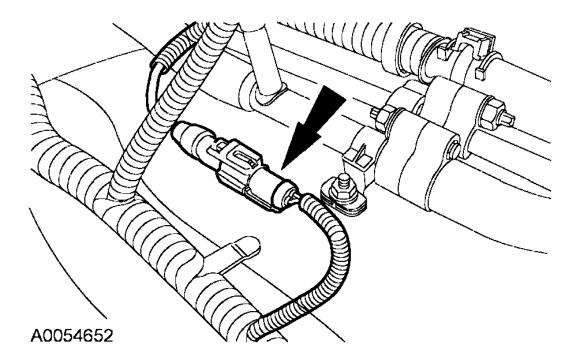


Fig. 23: Disconnecting Wheel Speed Sensor Courtesy of FORD MOTOR CO.

- 2. Disconnect the wheel speed sensor.
- 3. Remove the wheel and tire assembly. For additional information, refer to <u>WHEELS AND</u> <u>TIRES</u>.
- 4. Remove and discard the axle retainer nut.
 - To install, tighten the nut to 250 Nm (184 lb-ft).
- 5. Using the special tool, separate the outboard CV joint from the wheel hub.

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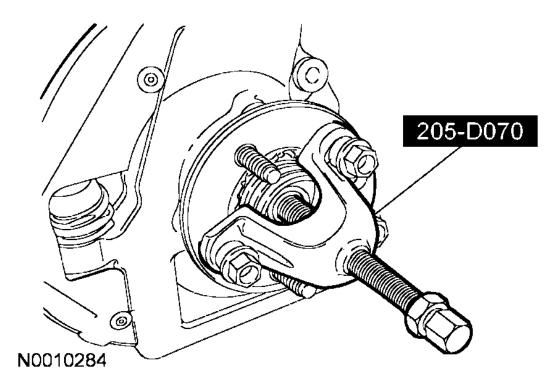


Fig. 24: Separating Outboard CV Joint From Wheel Hub Courtesy of FORD MOTOR CO.

6. Detach the wheel speed sensor harness from the brake hose.

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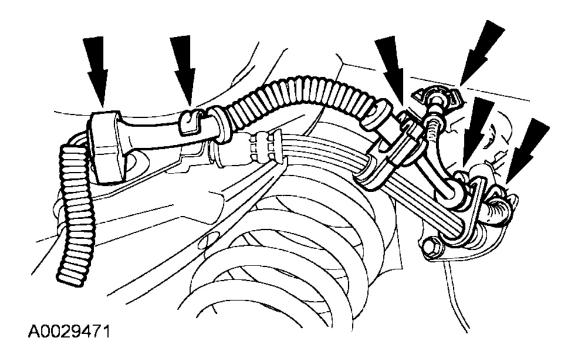


Fig. 25: Locating Wheel Speed Sensor Harness And Brake Hose Courtesy of FORD MOTOR CO.

- 7. Remove the brake hose-to-wheel knuckle bolt.
 - To install, tighten the bolt to 15 Nm (11 lb-ft).
- 8. Remove the 2 anchor plate bolts.
 - To install, tighten the bolts to 112 Nm (83 lb-ft).

CAUTION: Do not allow the brake caliper to hang from the hose or damage to the hose can occur.

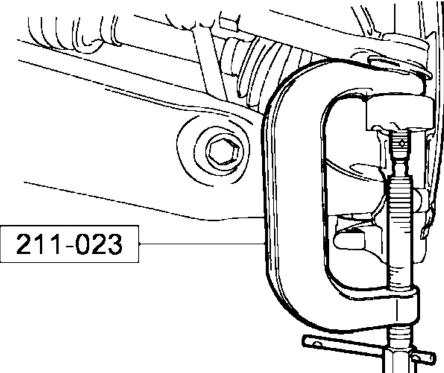
- 9. Position the caliper, pads and anchor plate aside.
- 10. Remove the brake disc.
- 11. Remove and discard the 3 wheel hub-to-wheel knuckle bolts.
 - To install, tighten the bolts to 112 Nm (83 lb-ft).
- 12. Remove the wheel bearing and hub assembly.
- 13. Remove the discard the 2 cotter pins.
- 14. Remove and discard the tie-rod end-to-wheel knuckle castellated nut.

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• To install, tighten the nut to 70 Nm (52 lb-ft).

CAUTION: Do not use a hammer to separate the tie-rod from the wheel knuckle or damage to the wheel knuckle can result.

CAUTION: Do not damage the tie-rod boot while installing the special tool.



N0010266

Fig. 26: Separating Tie-Rod From Wheel Knuckle Courtesy of FORD MOTOR CO.

- 15. Using the special tool, separate the tie-rod from the wheel knuckle.
- 16. Remove and discard the lower ball joint-to-wheel knuckle castellated nut.
 - To install, tighten the nut to 175 Nm (129 lb-ft).

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CAUTION: Do not use a hammer to separate the ball joint from the wheel knuckle or damage to the wheel knuckle can result.

CAUTION: Do not damage the ball joint boot while installing the special tool.

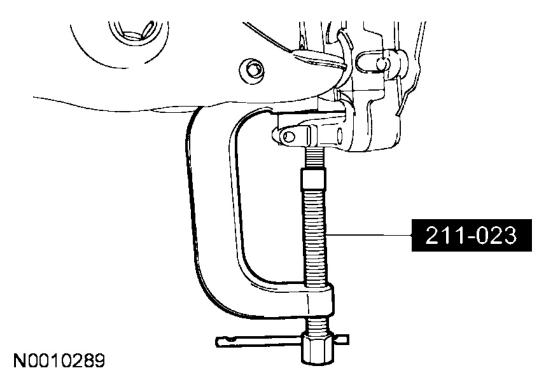


Fig. 27: Separating Lower Ball Joint From Wheel Knuckle

Courtesy of FORD MOTOR CO.

- 17. Using the special tool, separate the lower ball joint from the wheel knuckle.
- 18. Remove and discard the upper ball joint-to-wheel knuckle nut.
 - To install, tighten the nut to 52 Nm (38 lb-ft).

CAUTION: Do not use a hammer to separate the ball joint from the wheel knuckle or damage to the wheel knuckle can result.

CAUTION: Do not damage the ball joint boot while installing the special tool.

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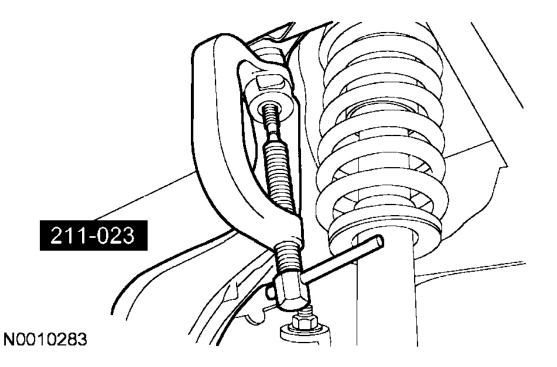


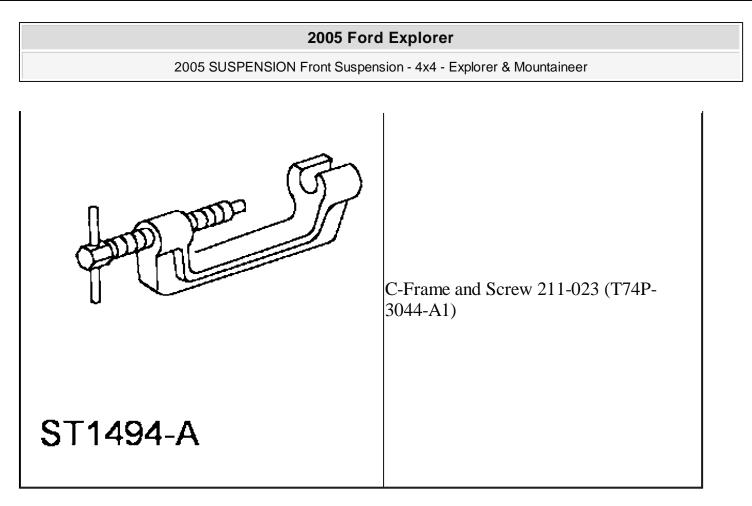
Fig. 28: Separating Upper Ball Joint From Wheel Knuckle Courtesy of FORD MOTOR CO.

- 19. Using the special tool, separate the upper ball joint from the wheel knuckle.
- 20. Remove the wheel knuckle.
- 21. To install, reverse the removal procedure.
 - 1. Check and, if necessary, align the front end.
 - 2. Always install new:
 - wheel hub-to-wheel knuckle bolts.
 - cotter pins.
 - castellated nuts.
 - upper ball joint-to-wheel knuckle nut.
 - axle retainer nut.

LOWER ARM

Special Tool(s)

SPECIAL TOOL SPECIFICATION



Removal and Installation

- 1. Remove the wheel and tire assembly. For additional information, refer to <u>WHEELS AND</u> <u>TIRES</u>.
- 2. Remove and discard the lower ball joint-to-wheel knuckle cotter pin and castellated nut.
 - To install, tighten the nut to 175 Nm (129 lb-ft).

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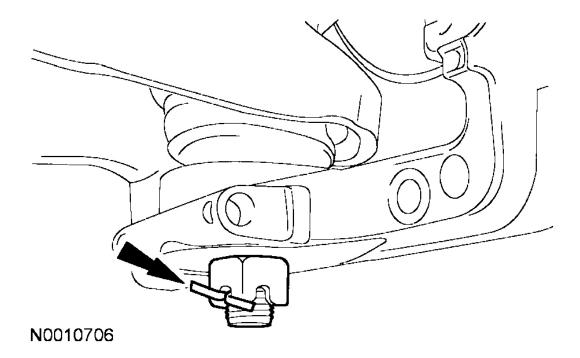


Fig. 29: Discarding Lower Ball Joint-To-Wheel Knuckle Cotter Pin And Castellated Nut Courtesy of FORD MOTOR CO.

CAUTION: Do not use a hammer to separate the ball joint from the wheel knuckle or damage to the wheel knuckle can result.

CAUTION: Do not damage the ball joint boot while installing the special tool.

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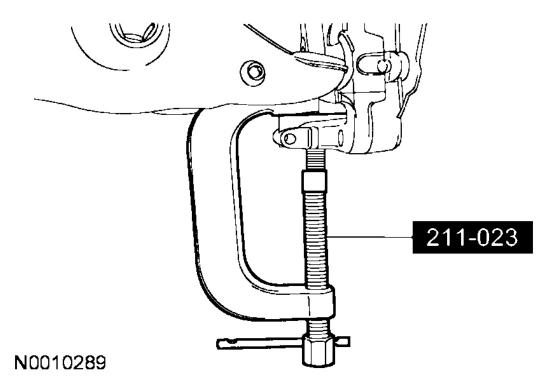


Fig. 30: Separating Lower Ball Joint From Wheel Knuckle Courtesy of FORD MOTOR CO.

- 3. Using the special tool, separate the lower ball joint from the wheel knuckle.
- 4. Remove and discard the front stabilizer bar nut and grommet.
 - To install, tighten the nut to 25 Nm (18 lb-ft).
- 5. Remove the front stabilizer bar stud.
- 6. Remove the front stabilizer bar link.
- 7. Remove and discard the 3 shock absorber upper mount-to-frame nuts.
 - To install, tighten the nut to 30 Nm (22 lb-ft).

NOTE: Do not tighten until the installation procedure is complete and the weight of the vehicle is resting on the wheel and tire assemblies.

- 8. Remove the shock absorber-to-lower arm bolt.
 - To install, tighten the nut to 350 Nm (258 lb-ft).

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- 9. Remove and discard the shock absorber-to-lower arm flag nut.
- 10. Remove the shock absorber and spring assembly.

NOTE: Do not tighten until the installation procedure is complete and the weight of the vehicle is resting on the wheel and tire assemblies.

- 11. Remove and discard the lower arm-to-frame nut (forward mounting).
 - To install, tighten the nut to 400 Nm (295 lb-ft).
- 12. Remove the lower arm-to-frame flag bolt (forward mounting).
- 13. Remove and discard the 2 lower arm-to-frame nuts (rearward mounting).
 - To install, tighten the nut to 150 Nm (111 lb-ft).
- 14. To install, reverse the removal procedure.
 - 1. Check and, if necessary, align the front end.
 - 2. Always install new:
 - cotter pins.
 - castellated nuts.
 - front stabilizer bar nut and grommet.
 - shock absorber upper mount-to-frame nuts.
 - shock absorber-to-lower arm flag nut.
 - lower arm-to-frame nut (forward mounting).
 - lower arm-to-frame nuts (rearward mounting).

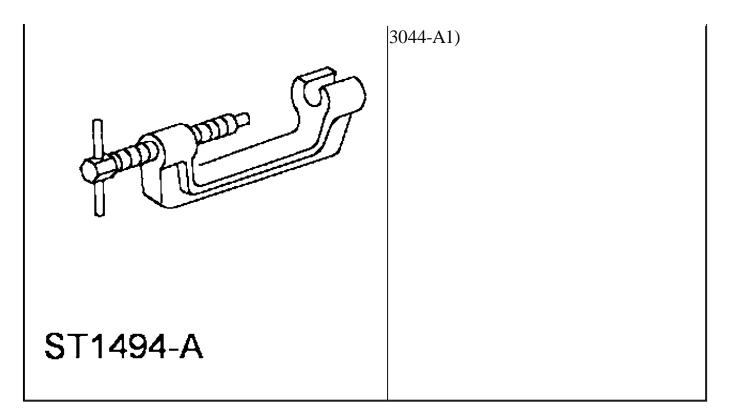
UPPER ARM

Special Tool(s)

SPECIAL TOOL SPECIFICATION

C-Frame and Screw 211-023 (T74P-

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Removal and Installation

- 1. Remove the wheel and tire assembly. For additional information, refer to <u>WHEELS AND</u> <u>TIRES</u>.
- 2. Remove and discard the upper ball joint-to-wheel knuckle nut.
 - To install, tighten the nut to 52 Nm (38 lb-ft).

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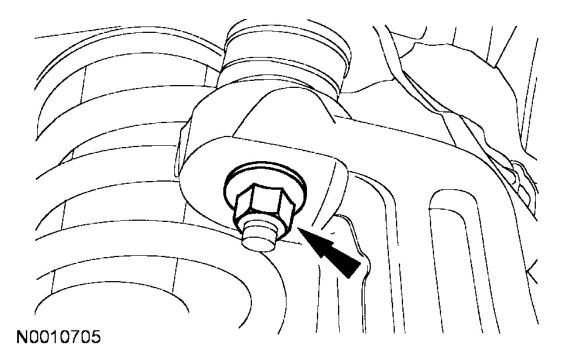


Fig. 31: Discarding Upper Ball Joint-To-Wheel Knuckle Nut Courtesy of FORD MOTOR CO.

- CAUTION: Do not use a hammer to separate the ball joint from the wheel knuckle or damage to the wheel knuckle can result.
- CAUTION: Do not damage the ball joint boot while installing the special tool.

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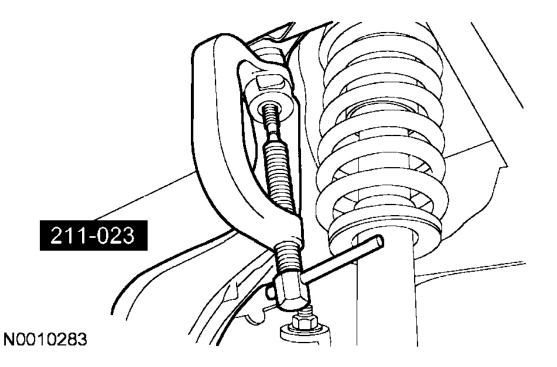
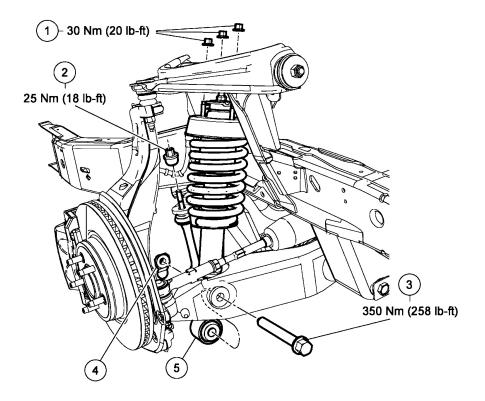


Fig. 32: Separating Upper Ball Joint From Wheel Knuckle Courtesy of FORD MOTOR CO.

- 3. Using the special tool, separate the upper ball joint from the wheel knuckle.
- 4. Remove the 2 upper arm-to-frame nuts.
 - To install, tighten the nut to 150 Nm (111 lb-ft).
- 5. Remove the 2 set shims.
- 6. Remove the upper arm.
- 7. To install, reverse the removal procedure.
 - 1. Check and, if necessary, align the front end.
 - 2. Always install a new upper ball joint-to-wheel knuckle nut.

SHOCK ABSORBER AND SPRING ASSEMBLY

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N0010295

Item	Part Number	Description
1	W704790-S426	Shock absorber upper mount-to frame nuts (3 required)
2	5C491	Nut and grommet
3	W707900-S426	Shock absorber-to-lower arm bolt
4	W707633-S436	Shock absorber-to-lower arm flag nut
5		Shock absorber and spring assembly

Fig. 33: Exploded View Of Shock Absorber And Spring Assembly Component With <u>Torque Specifications</u> Courtesy of FORD MOTOR CO.

Removal and Installation

- 1. Remove the wheel and tire assembly. For additional information, refer to <u>WHEELS AND</u> <u>TIRES</u>.
- 2. Remove and discard the 3 shock absorber upper mount-to frame nuts.
 - To install, tighten the nuts to 30 Nm (22 lb-ft).

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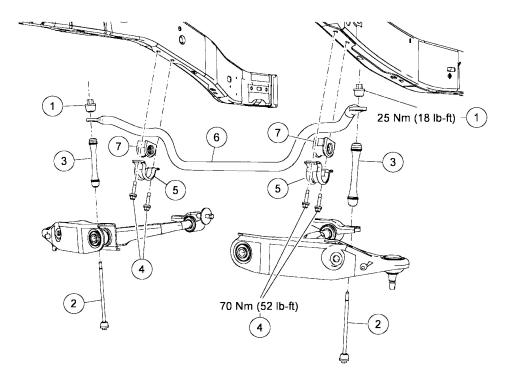
- 3. Remove and discard the stabilizer bar nut and grommet.
 - To install, tighten the nut to 25 Nm (18 lb-ft).

NOTE: Do not tighten until the installation procedure is complete and the weight of the vehicle is resting on the wheel and tire assemblies.

- 4. Remove the shock absorber-to-lower arm bolt.
 - To install, tighten the bolt to 350 Nm (258 lb-ft).
- 5. Remove and discard the shock absorber-to-lower arm flag nut.
- 6. Remove the shock absorber. For additional information on the disassembly and assembly of the shock absorber and spring assembly, refer to **SHOCK ABSORBER AND SPRING ASSEMBLY**.
- 7. To install, reverse the removal procedure.
 - Always install a new:
 - shock absorber upper mount-to frame nut.
 - stabilizer bar nut and grommet.
 - shock absorber-to-lower arm flag nut.

STABILIZER BAR AND LINK

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N0010294

ltem	Part Number	Description
1	5C491	Nut and grommet (2 required)
2	5495	Stud (2 required)
3	5K484	Stabilizer bar link (2 required)
4	W707472-S426	Stabilizer bar-to-frame bolts (4 required)
5	5486	Bracket (2 required)
6	5482	Stabilizer bar
7	5493	Bushing (2 required)

Fig. 34: Exploded View Of Stabilizer Bar And Link Assembly Component With Torque Specifications Courtesy of FORD MOTOR CO.

Removal and Installation

- 1. Remove and discard the 2 stabilizer bar nut and grommets.
 - To install, tighten the nuts to 25 Nm (18 lb-ft).
- 2. Remove the 2 stabilizer bar studs.
- 3. Remove the 2 stabilizer bar links.

NOTE: Inspect and clean the mating surfaces and the internal threads.

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Make sure all mating surfaces are free of foreign material and remove any thread locking compound from the internal threads.

- 4. Remove and discard the 4 stabilizer bar-to-frame bolts.
 - To install, tighten the nuts to 70 Nm (52 lb-ft).
- 5. Remove the 2 stabilizer bar brackets.
- 6. Remove the stabilizer bar.

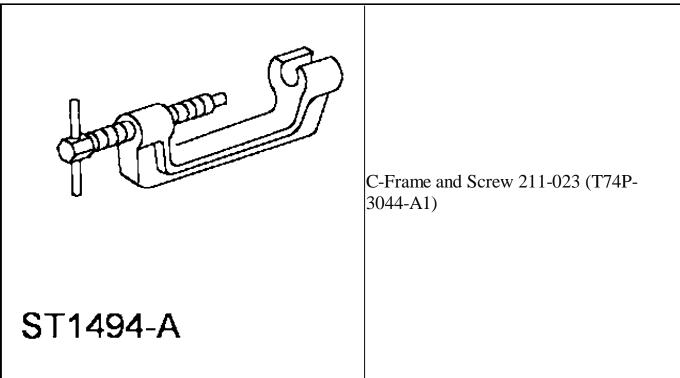
NOTE: Inspect the bushings for wear or damage. Install new bushings as necessary.

- 7. Remove the 2 stabilizer bar bushings.
- 8. To install, reverse the removal procedure.
 - Always install new stabilizer bar-to-frame bolts and stabilizer bar nut and grommets.

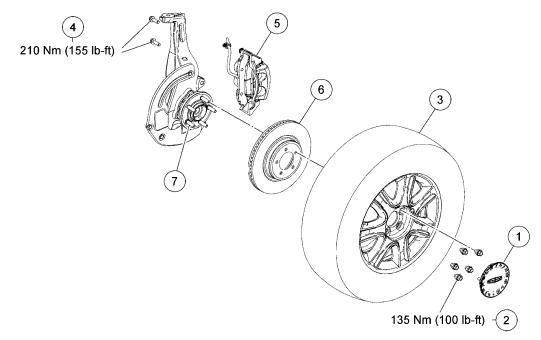
WHEEL STUDS

Special Tool(s)

SPECIAL TOOL SPECIFICATION



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N0010299

Item	Part Number	Description
1	1130	Wheel cap
2	1012	Wheel nuts
3	1007	Wheel and tire assembly
4	2027	Brake caliper anchor plate bolts
5	_	Brake caliper, pads and anchor plate
6	1125	Brake disc
7	1107	Wheel stud

Fig. 35: Identifying Wheel Studs And Wheel Cap With Torque Specifications Courtesy of FORD MOTOR CO.

Removal

1. Remove the wheel cap.

CAUTION: Do not use heat to loosen a seized wheel nut or damage to the wheel and wheel bearing can occur.

- 2. With the weight of the vehicle on the wheels, loosen the wheel nuts.
- 3. With the vehicle in NEUTRAL, position it on a hoist. For additional information, refer to

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JACKING AND LIFTING .

- 4. Remove the wheel and tire assembly.
- 5. Remove the brake caliper anchor plate bolts.
 - To install, tighten the bolts to 210 Nm (155 lb-ft).

CAUTION: Do not allow the brake caliper to hang from the hose or damage to the hose may result.

- 6. Position the caliper, pads and anchor plate aside.
- 7. Remove the brake disc.
- 8. Using the special tool, remove the wheel stud.

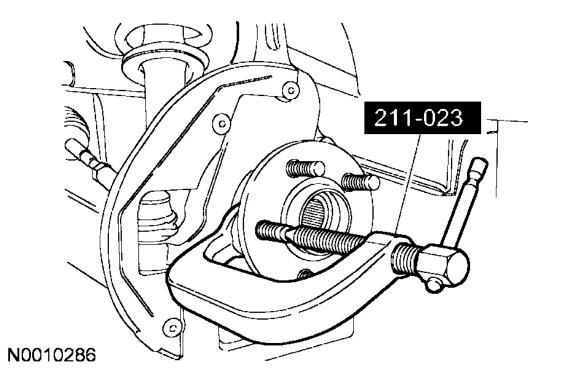


Fig. 36: Removing Wheel Stud Courtesy of FORD MOTOR CO.

Installation

1. To install, reverse the removal procedure.

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CAUTION: Do not use power tools to install the wheel stud. The serrations on the stud can be stripped.

NOTE: Do not use the wheel nut that came with the vehicle.

- 2. Install washers and a new wheel nut on the wheel stud and tighten the nut until the stud seats against the flange.
 - Discard the wheel nut and washers.

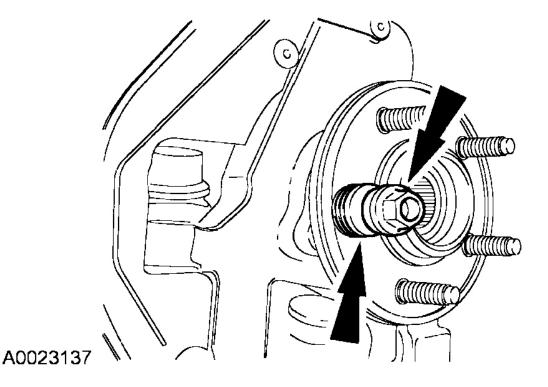
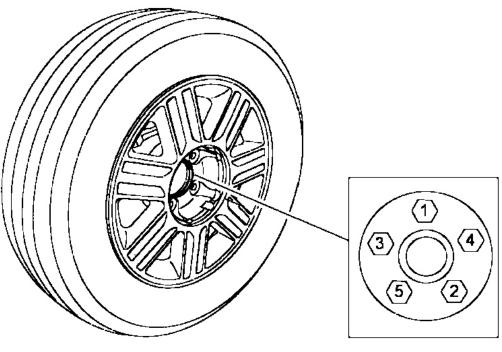


Fig. 37: Discarding Wheel Nut And Washers Courtesy of FORD MOTOR CO.

WARNING: When installing a wheel and tire, make sure to remove any corrosion, dirt or foreign material present on the mounting surfaces of the wheel and brake disc. Installing a wheel without correct metal-to-metal contact at the mounting surfaces can cause the wheel nuts to loosen and the wheel to come off while the vehicle is in motion, 2005 SUSPENSION Front Suspension - 4x4 - Explorer & Mountaineer

causing loss of control.

- 3. Clean the wheel mounting surfaces.
 - WARNING: Retighten at 800 km (500 miles) after any wheel change or any time the wheel nuts are loosened. Failure to retighten the wheel nuts at the mileage specified could allow the wheels to come off while the vehicle is in motion, possibly causing loss of control.
 - CAUTION: Failure to tighten the wheel nuts in a star pattern can result in high brake disc runout, which will speed up the development of brake roughness, shudder and vibration.



N0010784

Fig. 38: Tightening Wheel Nuts Courtesy of FORD MOTOR CO.

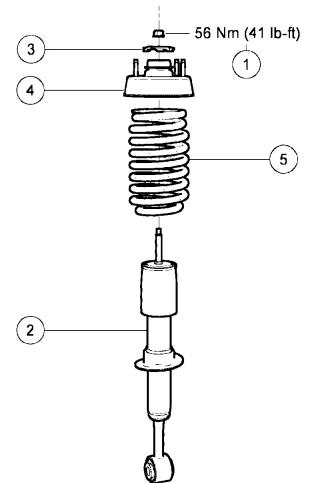
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4. Tighten the wheel nuts to 135 Nm (100 lb-ft).

DISASSEMBLY AND ASSEMBLY

SHOCK ABSORBER AND SPRING ASSEMBLY

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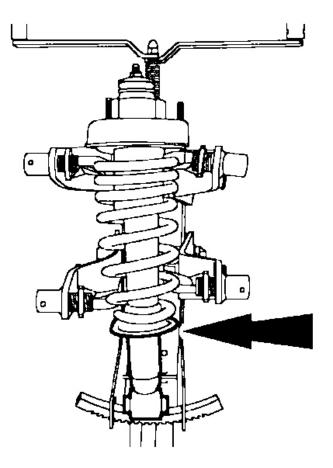
ltem	Part Number	Description
1		Shock absorber-to-upper mount nut (part of 18198)
2	18124/18125	Shock absorber (front/rear)
3		Washer (part of 18198)
4	18183/18178	Upper shock mount (front/rear)
5	5310/5560	Coil spring (front/rear)

Fig. 39: Exploded View Of Shock Absorber And Spring Assembly With Torque Specification Courtesy of FORD MOTOR CO.

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Disassembly and Assembly

- 1. Remove the shock absorber and spring assembly. For additional information, refer to **SHOCK ABSORBER AND SPRING ASSEMBLY**.
- 2. Using a suitable spring compressor, compress the spring until the tension is released from the shock absorber.

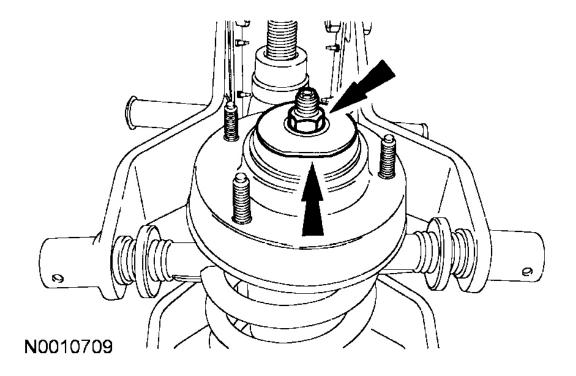


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Fig. 40: Compressing Spring Courtesy of FORD MOTOR CO.

- 3. While holding the flats of the washer, remove and discard the nut.
 - To install, tighten the nut to 56 Nm (41 lb-ft).

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<u>Fig. 41: Tightening Nut</u> Courtesy of FORD MOTOR CO.

- 4. Remove the shock absorber.
- 5. Remove the washer.
- 6. Remove the upper shock absorber mount.
- 7. Remove the coil spring.
- 8. To assemble, reverse the disassembly procedure.
 - Always install a new shock absorber-to-upper mount nut.