

For ALL Your Air Suspension Needs!!!

1995-2002

# Lincoln Continental



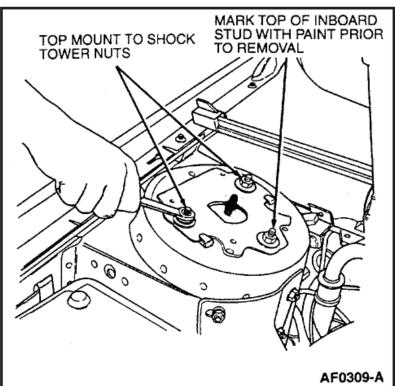
39F-30-ASSY
4-Wheel Full Assembly



# **Front Conversion:**

### **WARNING:**

BEFORE YOU BEGIN THE REMOVAL OR INSTALLATION, READ ALL INSTRUCTIONS THOROUGHLY! THE WARRANTY WILL BE VOID IF INSTRUCTIONS ARE NOT FOLLOWED EXACTLY. DO NOT WORK UNDER CAR UNDER A VEHICLE SUPPORTED BY A JACK. ALWAYS SUPPORT THE VEHICLE ON SAFETY STANDS.



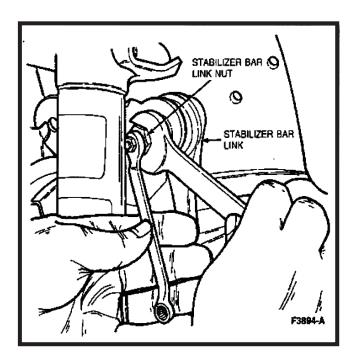
# REMOVAL

- 1. Turn off air suspension switch.
- 2. Turn ignition switch to OFF position to place steering column in unlocked position.
- 3. Loosen but do not remove three top mount-to-shock tower nuts.
- 4. Raise vehicle on hoist.
- 5. Remove tire and wheel assembly.
- 6. Remove brake hose bracket from front shock absorber (strut). CAUTION: Use extreme care not to damage boot seal. Do not use power tools to remove nut or bearing and seal damage will result. Loosen nut first, then remove nut from stud using the hex hold feature.

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### Front Conversion:



- 7. Remove vinyl cover from upper link stud. Remove stabilizer bar link nut, and remove stabilizer bar link from front shock absorber (strut).
- 8. Disconnect air suspension height sensor from lower height sensor ball stud and position out of the way. CAUTION: Do not allow the halfshaft to move outboard. Over-extension of the tripod front wheel drive joint could result in separation of internal parts, causing failure of the joint. NOTE: Do not use a hammer to separate ball joint from front suspension lower arm. Use extreme care not to damage boot seal.
- 10. Remove front spring and shock-to-front wheel knuckle pinch bolt and nut. Lightly spray the shock tube to top of shock pinch joint with Penetrating Lubricant E8AZ-19A501-B or equivalent. Using a large screwdriver, slightly spread knuckle-to-front spring and shock pinch joint, if required, for removal.
- 11. Remove three top mount-to-shock tower nuts and remove front shock absorber (strut) and spring assembly from vehicle.

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## **Front Conversion:**

# INSTALLATION

- 1. Install front shock absorber (strut) and spring assembly and three top mount-to-shock tower nuts; leave nuts loose.
- 2. Position front shock absorber (strut) into front wheel knuckle.
- 3. Install a new front shock-to-front wheel knuckle pinch bolt and nut. Tighten to 98-132 Nm (73-98 ft. lbs.). CAUTION: Use extreme care not to damage boot seal. Do not use power tools to tighten the nut or bearing and seal damage will result. Use the hex hold feature to prevent stud from rotating. NOTE: After reassembly of wheel end, make sure the front wheel drive halfshaft is fully inserted into the transaxle. Visually inspect the seal area. Some polished surface is due to axial runout and is normal. Grasp the inboard housing and gently pull outward. A slight drag from the snap ring should be felt. Failure to fully seat halfshaft into transaxle may result in premature failure of halfshaft or transaxle.
- 4. Install stabilizer bar link to front shock absorber (strut) and install a new stabilizer bar link nut. Tighten to 77-103 Nm (57-75 ft. lbs.). Install stud cover.
- 5. Connect air suspension height sensor to lower height sensor ball stud.
- 6. Install screw and front brake hose to front shock absorber (strut). Tighten screw to 15 Nm (11 ft. lbs.).
- 7. Install tire and wheel assembly. Tighten lug nuts to 115-142 Nm (85-105 ft. lbs.).
- 8. Lower vehicle.
- 9. Tighten three top mount-to-shock tower nuts to 30-40 Nm (23-29 ft. lbs.).
- 10. Turn on air suspension switch.
- 11. Dash Check Suspension:
  1995-1996 Leave the solenoid hooked up to the electrical connector.
  1997-2002 Connect the resistor to the 2 wires going to the damper strut.

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# Rear Conversion: WARNING:

BEFORE YOU BEGIN THE REMOVAL OR INSTALLATION, READ ALL INSTRUCTIONS THOROUGHLY! THE WARRANTY WILL BE VOID IF INSTRUCTIONS ARE NOT FOLLOWED EXACTLY. DO NOT WORK UNDER CAR UNDER A VEHICLE SUPPORTED BY A JACK. ALWAYS SUPPORT THE VEHICLE ON SAFETY STANDS.

#### Removal

- 1. Turn "OFF" air suspension switch. Raise the vehicle on hoist. Remove tire and wheel assembly.
- 2. Remove the air spring by disconnecting air line by pushing in on red seal pulling out on the line. Disconnect electric plug, now twist air bag clockwise and pull it out.
- 3. Remove 3 bolts on spring seat. install bottom plate by puting bolt and beveled washer trough bottom of spring seat, and slide the bottom plate and hardware on the top of spring seat (Tighten).
- 4. Using a jack, set spring seat on jack, place spring on plate and seat. Place top plate on spring with triangles ears pointing up.
- 5. Jack up and guide ears into top holes. Keep jacking up until holes are lined up on spring seat. NOTE: When reinstalling bolts, reverse bolt procedure with nuts on the inside. You will need to use a 18mm wrench to tighten.

### Installation

- 1. Install the supplied bottom spring support by putting the bolt and beveled washer through the bottom of the sping seat, and install the plate and hardware on top of the spring seat. (Tighten to 40-45 ft.lb)
- 2. Place the spring, hardware and lower spring seat on a floor jack, and lift into place in the original air spring location. Guide the top plate ears into the upper mounting holes on a floor slide the bottom plate and hardware on the top of spring seat (Tighten).
- 3. Continue jacking until you have compressed the spring enough to reinstall the 3 lower spring seating mouning bolts. (When reinstalling bolts, reverse the bolts so that the nuts are on the inside of the spring seat.)
- 4. Reinstall wheel and tire assembly. (torque lug nuts to 85-105 ft.lb)

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### **Rear Conversion:**

### **Installation Notes:**

The new springs may soften and setle some during the first few weeks of use.

(2-wheel kit ONLY) - Securely plug the two rear air lines with a tight fiting screw and epoxy.

(2-wheel kit ONLY) - Plug the air spring solenoids back into their electrical connector and tie up securely underneath car.

Turn the air ride switch in the trunk back "ON", and leave on to control your electronic struts.

Set the ride control button on the dash to 'PLUSH".

(4-wheel kit ONLY) - Disconnect Compressor

NOTE: When completed, switch in trunk must remain "ON" for proper ride.

### **AIR RIDE SUSPENSION DISARM**

Option1: Leave the solenoids connected

Option 2:

In order to disarm the air ride suspension warning lights, you must bypass the VDM (VEHICLE DYNAMIC MODULE) that controls air ride functions. To accomplish this, you will need to tap into the wiring harness under the rear seat and make several modifications.

The first step is to remove the rear seat.

The wiring harness is located on the DRIVERS SIDE under the foam insulating pad.

Separate the wires from the plastic shielding.

Locate the following wires within the bundle:

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-----Pink with a Light Blue stripe (PK/LB)
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-----Tan with an Orange Stripe (T/O)

On some models these wires are twisted around each other, making them easier to identify. Cut both wires, use electrical tape on both ends.

*Next, locate the following wires:* 

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-----Light Blue with a Yellow stripe (LB/Y)
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-----Light Green with a Black Stripe (LG/BK)

On some models these wires are twisted around each other, making them easier to identify. Cut both wires, tape ends leading to trunk area.

Make the following modifications to the wire ends leading to the front of the car.

Take the Light Green wire with a Black Stripe (LG/BK) and ground it to the body of the car.

(Make sure you get a good ground, if not, your power steering effort will be hard.

Now take the Light Blue wire with a Yellow stripe (LB/Y) and splice it with the 10-amp VDM ignition power wire. (ignition power source)

This will be one of the following:

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-----Purple with a Orange Stripe (P/O) on the 95-97
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-----Light Green wire with a Purple Stripe (LG/P) on the '98-newer

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