

MAZDA 3 FRONT SWAY BAR - Installation Instructions

| Tools Required | |
|--|---------------------------------|
| Torque Wrench | 3/8" ratchet |
| 30" ratchet extension | 21mm socket |
| 17mm universal joint socket (or) | 14mm socket |
| 17mm shallow socket w/ universal joint | 5mm Hex |
| 12mm socket | 14mm Crowfoot socket (Optional) |

ESTIMATED TIME: 1-2 hours

PEOPLE REQUIRED: 2

Read these installation instructions before starting:

1. Loosen the front wheel lug nuts slightly, then raise the car and place on safety stands. NEVER work under a car supported only by a floor jack! Remove the front wheels.

2. Unscrew the one (1) 17mm head securing bolt from both the left and right forward side of the steering rack by using a 30" extension and universal joint. To access these bolts, guide the socket extension through the openings as shown in Photo A and have an assistant position the socket head onto the bolts. This process allows access to the steering rack bolts and prevents undue stress on the steering column during the following steps.

3. Remove the 17mm head bolt from the bottom of the rear engine mount. See Photo B.

4. Remove the 14mm head nuts which attach the sway bar ends to the end links. See Photo C.

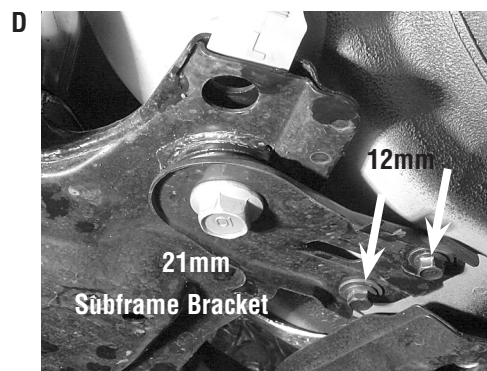
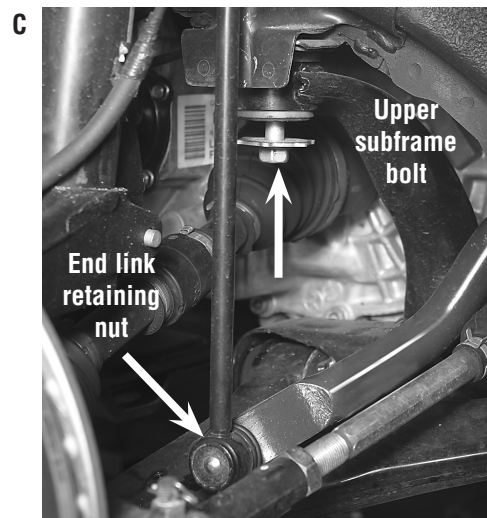
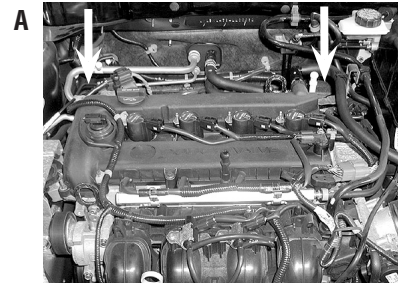
5. Remove the left forward upper subframe bolt (17mm head). Now, re-install the bolt by screwing it in for the first four (4) turns. This allows the maximum safe amount of subframe drop. Repeat this procedure with the right side bolt. See Photo C.

NOTE: You do NOT need to support the engine in the following steps.

6. Remove the one (1) 10mm head bolt and four (4) 14mm head bolts indicated from the reinforcement shown in Photo D. Then remove the four(4) 12mm head bolts nearby. Finally, remove the two (2) 21mm head bolts shown.

7. Remove the four (4) 17mm head bolts that attach the sway bar mounts (and the rear mount for the A-frame). Collect the "green-colored" winged nuts they engaged. Pry off the bar retaining clamps and rubber bushings.

8. To ease the removal of the sway bar from the chassis, it is necessary to separate the exhaust system. Remove the rubber exhaust hangers from the hangers positioned just aft of the metal bellows. (Lubricate the hangers with silicone spray to ease the removal.) Remove the two (2) 14mm head nuts that secure the connecting pipe section to the catalytic converter. Separate the two components and



reposition the forward flange upwards, allowing the flange to rest on the studs from the rear section.

9. Remove the sway bar out from the right side of the car.

If you are installing the optional Racing Beat Sway Bar End Links, proceed with Step 3 in the instructions supplied with the links. Once finished with these instructions, return to Step 10.

10. Lubricate the urethane bushings with the supplied grease. Install the Racing Beat sway bar in the reverse order of removal. (Install the bushings and STOCK clamps once the bar has been positioned in the car.)

11. Retighten the attachment bolts using the following torque specifications:

Swaybar ends to links:

- 14mm head nuts: 37-41 ft/lbs

Important Note: It is very important to tighten the end link retaining nuts to the specific torque settings. We recommend the following procedure:

Stock end links - If needed, insert a 5mm hex wrench into the end of the end link stud to prevent the stud from rotating. Place a 14mm Crowfoot Socket onto your torque wrench and place the socket onto the retaining nut. While firmly holding the hex wrench, use the torque wrench to tighten the retaining nuts to 40-45 ft/lbs. Alternatively, you may be able to use a box or open end wrench to partially tighten the nut and then finish torquing with a 14mm socket.

Sway bar retaining brackets:

- 14mm head nuts: 30-36 ft/lbs

Others:

- Subframe bracket - 12mm head: 13-19 ft/lbs
- Subframe bracket - 21mm head: 69-86 ft/lbs
- Steering rack bolt - 17mm head: 55-79 ft/lbs
- Upper subframe bolt - 17mm head: 72-97 ft/lbs
- Rear engine mount - 17mm head: 69-85 ft/lbs
- Misc 14mm head bolts: 28 ft/lbs