

Subject: Western Star 4700 Front Springs

Models Affected: Specific Western Star 4700 model vehicles,
manufactured October 11, 2011, through August 12, 2013.

General Information

Daimler Trucks North America LLC, on behalf of its wholly owned subsidiary, Western Star Trucks Sales, Inc., is initiating Field Service Campaign SF485AB to modify the vehicles mentioned above.

On certain vehicles, 18,000 lb. front axle springs were installed.

The springs will be replaced with 20,000 lb. front axle springs.

There are approximately 75 vehicles involved.

Additional Repairs

Dealers must complete all outstanding field service campaigns prior to the sale or delivery of a vehicle. A Dealer will be liable for any progressive damage that results from its failure to complete campaigns before sale or delivery of a vehicle.

Owners may be liable for any progressive damage that results from failure to complete campaigns within a reasonable time after receiving notification.

Please contact Warranty Campaigns for consideration of additional charges prior to performing the repair.

Work Instructions

Please refer to the attached work instructions. Prior to performing the campaign, check the vehicle for a completion sticker (Form WAR261).

Replacement Parts

Replacement parts are now available and can be obtained by ordering the part number(s) listed below from your facing Parts Distribution Center.

If our records show your dealership has ordered any vehicle(s) involved in campaign SF485AB, a list of the customers and vehicle identification numbers will be available on AccessFreightliner.com. Please refer to this list when ordering parts for this campaign.

Table 1 - Replacement Parts for SF485AB

Campaign Number	Kit Number	Part Description	Part Number	Qty.	Suggested Wholesale*
SF485A	N/A	SPR-20.K TPR,4"/72,TSTS,FLX	A16-17225-002	2 ea	\$938.31 US \$957.07 CAN
		U BOLT,7/8-14,210	A 681 322 07 25	4 ea	\$21.34 US \$21.77 CAN
		NUT-HEX,HI,7/8-14	23-00461-007	8 ea	\$5.25 US \$5.36 CAN
SF485B	N/A	SPR-20.K TPR,4"/72,TSTS,FLX	A16-17225-002	2 ea	\$938.31 US \$957.07 CAN
		U BOLT,7/8-14,230	A 681 322 04 25	4 ea	\$32.05 US \$32.69 CAN
		NUT-HEX,HI,7/8-14	23-00461-007	8 ea	\$5.25 US \$5.36 CAN

* Please charge all U.S. and Canadian Direct Warranty Customers the above-listed price for the kit, as they are authorized to perform their own Recalls. This pricing does not apply to Export Distributors.

Field Service Campaign

Daimler Trucks
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Removed Parts

U. S. and Canadian Dealers, please follow Warranty Failed Parts Tracking shipping instructions for the disposition of all removed parts. Export distributors, please destroy removed parts unless otherwise advised.

Labor Allowance

Table 2 - Labor Allowance

Campaign Number	Procedure	Time Allowed (hours)	SRT Code	Damage Code
SF485AB	Replace Front Springs	2.7	996-0910A	000-Modifiedx

Table 2

IMPORTANT: When the campaign has been completed, locate the base completion label in the appropriate location on the vehicle, and attach the gray completion sticker provided in the field service kit (Form WAR261). If the vehicle does not have a base completion label, clean a spot on the appropriate location of the vehicle and first attach the base completion label (Form WAR259). If a field service kit is not required or there is no completion sticker in the kit, write the campaign number on a blank sticker and attach it to the base completion label.

Claims for Credit

You will be reimbursed for your parts, labor, and handling (landed cost for Export Distributors) by submitting your claim through the Warranty system within 30 days of completing this campaign. Please reference the following information in QuickClaim or OWL:

- Claim type is **Field Service**.
- In the FTL Authorization field, enter the campaign number and appropriate condition code (e.g. **SF485A or SF485B**).
- In the Primary Failed Part Number field, enter **25-SF485-000**.
- In the Parts field, enter the appropriate part number(s) as shown in the Replacement Parts Table.
- In the Labor field, first enter the appropriate SRT from the Labor Allowance Table. For administrative time, enter SRT 939-0010A for 0.3 hours.
- For OWL, the VMRS Component Code is 016-002-001 and the Cause Code is A1 - Campaign.

This Field Service Campaign will **terminate on December 30, 2014**. Dealers will be notified of any changes to the termination date via Important Campaign Information Letter posted on AccessFreightliner.com.

IMPORTANT: ServicePro or OWL must be viewed prior to beginning work to ensure the vehicle is involved and the campaign has not previously been completed. Also, check for a completion sticker before beginning work.

All claims must be submitted within 30 days of the repair and within 30 days of the termination date of the campaign. U.S. and Canadian Dealers: All excess inventory to be returned to the PDC following the conclusion of the campaign must be returned in resaleable condition to the Memphis PDC within 90 days from the termination date. Please submit a PAR to request return to the Memphis PDC. (Canadian dealers should return the kits to their facing PDC.) Export Distributors: Excess inventory is not returnable.

U.S. and Canadian dealers, contact the Warranty Campaigns Department from 7:00 a.m. to 4:00 p.m. Pacific Time, Monday through Friday, via Web inquiry at AccessFreightliner.com / Support / My Tickets and Submit an Inquiry, or the Customer Assistance Center at (800) 385-4357, after normal business hours, if you have any questions or need additional information. Export distributors submit a Web inquiry or contact your International Service Manager.

Field Service Campaign

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Copy of Notice to Owners Subject: Western Star 4700 Front Springs

Daimler Trucks North America LLC, on behalf of its wholly owned subsidiary, Western Star Trucks Sales, Inc., is initiating Field Service Campaign SF485AB to modify specific Western Star 4700 model vehicles manufactured October 11, 2011, through August 12, 2013.

On certain vehicles, 18,000 lb. front axle springs were installed.

The springs will be replaced with 20,000 lb. front axle springs.

Please contact an authorized Daimler Trucks North America dealer to arrange to have the campaign performed and to ensure that parts are available at the dealership. To locate an authorized dealer, search online at www.Daimler-TrucksNorthAmerica.com. The campaign will take approximately three hours and will be performed at no charge to you.

This Field Service Campaign will **terminate on December 30, 2014**. Please make sure the campaign is completed prior to this date. Work completed after this date will be done at the customer's expense.

As stated in the terms of your express limited warranty, Daimler Trucks North America LLC will not pay for any damage caused by failure to properly maintain your vehicle. Daimler Trucks North America LLC considers the work necessary under this campaign to be proper maintenance and will, therefore, not pay for any damage to your vehicle caused by your failure to have the repairs that are the subject of this campaign performed in a reasonable time.

Contact the Warranty Campaigns Department at (800) 547-0712, from 7:00 a.m. to 4:00 p.m. Pacific Time, Monday through Friday, e-mail address DTNA.Warranty.Campaigns@Daimler.com, or the Customer Assistance Center at (800) 385-4357, after normal business hours, if you have any questions or need additional information.

WARRANTY CAMPAIGNS DEPARTMENT

Enclosure

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Work Instructions

Subject: Western Star 4700 Front Springs

Models Affected: Specific Western Star 4700 model vehicles,
manufactured October 11, 2011, through August 12, 2013.

Replacement

1. Check the base label (Form WAR259) for a completion sticker for SF485 indicating this work has been done. The base label is usually located on the passenger-side door about 12 inches (30 cm) below the door latch. If a sticker is present, no work is needed. If there is no sticker, proceed with the work instructions.
2. Park the vehicle on a level surface, shut down the engine and set the parking brake. Chock the tires.

WARNING

Never work under a vehicle that is supported only by jacks. Jacks can slip, which can result in serious personal injury, death, or component damage. Always support the vehicle with safety stands capable of supporting the weight of the vehicle.

IMPORTANT: Make sure the frame rails are level side-to-side and an equal distance off the ground.

3. If necessary, drain the air tanks, and remove the primary air tank to make room for the safety stand.
Raise the vehicle until both front tires are off the ground and support the vehicle on safety stands positioned under the frame rails.
The axle and springs can now be manipulated with the floor jack.
4. Disconnect both shock absorbers. See **Fig. 1**.
5. Remove the grease zerk fittings from the spring pins.
6. Using the floor jack, support the axle underneath the center of the spring, then remove the U-bolts and the axle stop/shock absorber mount.
7. Lower the axle and remove the spring spacer and caster shim. Note the taper direction of the caster shim so that it will not be reversed during the installation.
8. Raise the axle back up to support the spring and remove some of the load from the spring.
9. Disconnect the front of the spring from the spring drive bracket.
 - 9.1 Remove the 4 retaining bolts from the retainers at the front spring drive bracket.
 - 9.2 Using the proper removal tool (Removal Tool J-49860) unthread the front spring pin from the spring eye. See **Fig. 1**.
10. Disconnect the rear of the spring from the shackle bracket.
 - 10.1 Remove the lower retaining bolts from the inboard and outboard shackle links.
 - 10.2 Using the proper removal tool (Removal Tool J-49860) unthread the lower rear spring pin from the spring eye and shackle links.

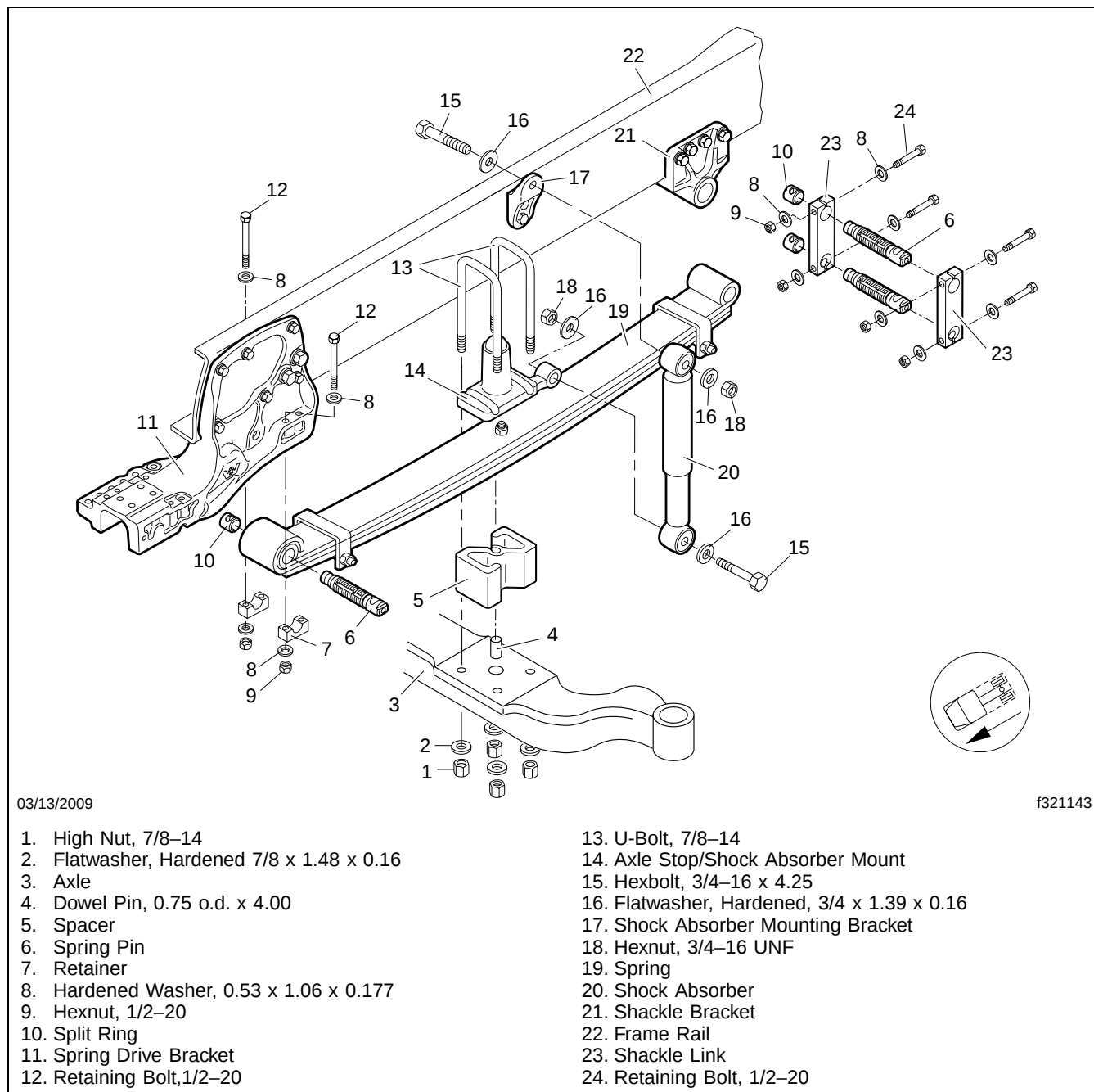


Fig. 1, Drop Hanger Front Suspension with Threaded Spring Pins

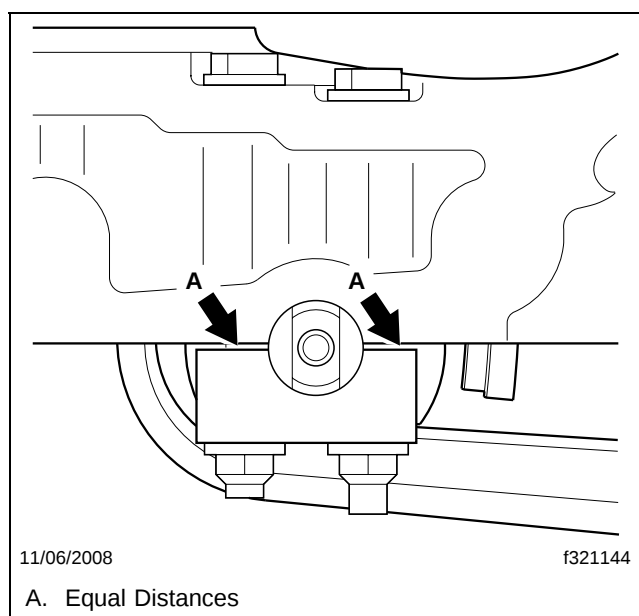
11. Lower the spring and the axle, then remove and discard the spring.
12. Using multipurpose chassis grease, lubricate both spring pins, the shackle pin, and the inside surfaces of the bushings.
13. Loosely position the new spring on top of the axle, with the alignment pin in the hole in the top of the axle.

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NOTICE

Failure to apply Alumilastic or similar compound will result in electrolytic corrosion of dissimilar metal components, and will damage the suspension system.

14. Connect the rear of the spring as follows.
 - 14.1 Place the floor jack under the axle, then raise it until the rear spring eye aligns with the holes in the shackles.
 - 14.2 Using the removal tool, thread the rear spring pin through the outboard shackle link, the spring eye, then the inboard shackle link. Take care not to push the split ring out of the inboard shackle link.
 - 14.3 Apply Alumilastic® or similar compound to all areas of the aluminum shackle link that contacts other metal. This includes all capscrews, washers, and locknuts that contact the aluminum shackle link.
 - 14.4 Insert the lower retaining bolt, with a hardened washer, through the inboard shackle link. Do not install the retaining bolt through the outboard shackle link at this time.
15. Connect the front of the spring as follows.
 - 15.1 Align the forward spring eye in the spring drive bracket.
 - 15.2 Thread the spring pin through the spring eye, then set the split-ring on the inboard end of the spring pin.
 - 15.3 Install the retaining bolts down through the spring drive bracket and attach the retainers. Tighten the nuts evenly to maintain equal clearance between the retainers and the spring drive bracket, but do not fully tighten them at this time. They need to be loose enough to adjust. See **Fig. 2**.
16. Using the floor jack, lower the axle until the spring hangs freely.



**Fig. 2, Spring Drive Bracket and Retainer
Installation**

17. Attach the rear of the spring as follows.

17.1 Using the threaded spring pin, center the lower rear spring pin in the shackle bracket. The gap on each side should be within 0.080 inch (20 mm) of the other side. The minimum gap on each side is 0.020 inch (0.5 mm). See **Fig. 3**.

17.2 After the spring is correctly positioned, install the retaining bolt through the outboard shackle link, then tighten the bolts in both the inboard and outboard shackle links 45 lbf-ft (61 N·m).

18. Adjust the front of the spring.

18.1 Using the threaded spring pin to adjust the position, center the front spring pin in the drive bracket. The nominal gap on each side is 0.063 inch (1.60 mm). Maintain a minimum gap of 0.020 inch (0.5 mm) on each side. See **Fig. 4**.

18.2 Tighten the nuts on the retainer bolts 60 to 76 lbf-ft (81 to 103 N·m).

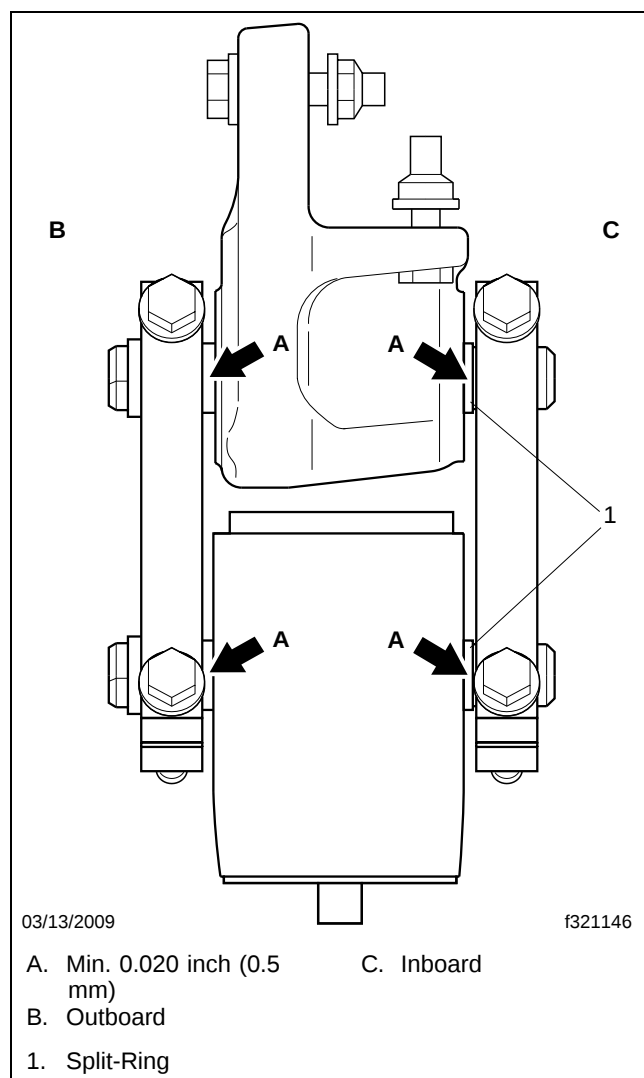


Fig. 3, View from Rear of Spring Looking Forward

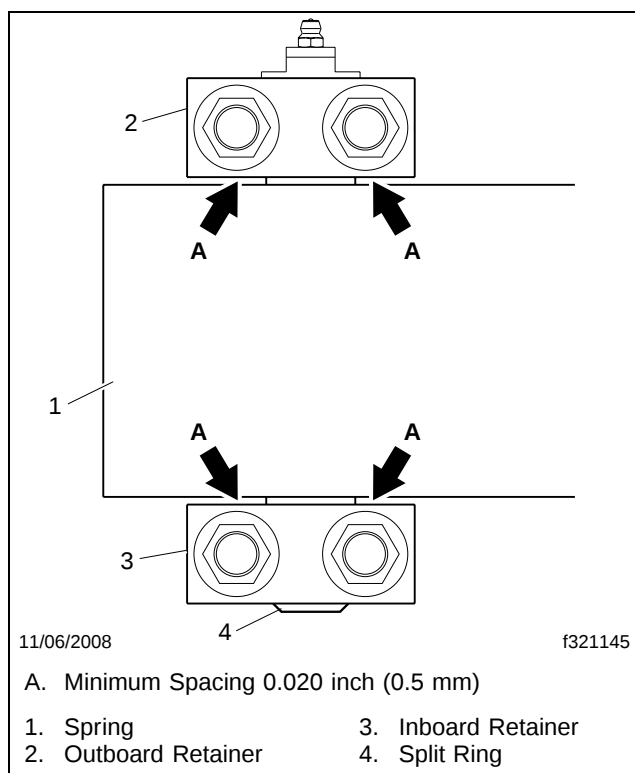


Fig. 4, View From Underneath the Forward Spring Eye

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19. Install the grease zerks into the spring pins.
20. Lower the axle and place the spacer and/or caster shim (if removed) on the front axle in the position referenced during removal.
21. Using the jack, raise the axle until the spring spacer touches the spring, then place the axle stop/shock-absorber mount on top of the spring.

NOTICE

Failure to tighten the U-bolt fasteners as instructed could result in spring breakage or abnormal tire wear.

22. Install the U-bolts, flat washers and high nuts. Using the diagonal pattern shown in **Fig. 5**, tighten the high nuts sequentially in four stages as shown in **Table 3**.
23. Remove the jack stands and lower the vehicle to the ground.
24. Wipe all dirt from the grease fittings on the spring pins and the shackle pin. Apply multipurpose chassis grease with a pressure gun until grease appears at the opposite end of the pin.
25. Remove the jack stands from the chassis, and lower the vehicle.
26. Install both front shock absorbers, and tighten the bolts 200 lbf.ft (271 N·m).

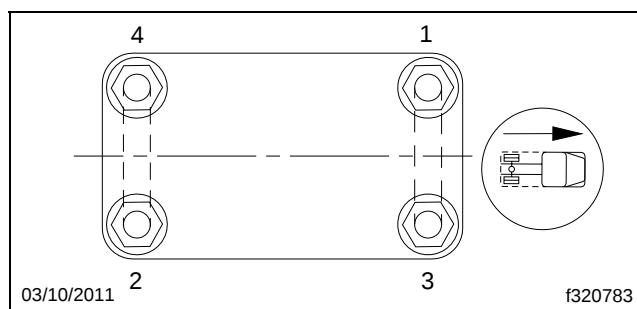


Fig. 5, Tightening Pattern for U-bolt High Nuts

Front Suspension Fastener Torque Values		
Description	Size	Torque: lbf·ft (N·m)
Shackle Bracket-to-Frame Locknut	3/4–10	240 (325)
Forward Spring-Eye Bolt	3/4–10	240 (325)
Upper and Lower Shackle Bolt	3/4–10	240 (325)
Axle U-bolt High Nuts	7/8–14	Stage 1: Hand-tighten Stage 2: 60 (81) Stage 3: 200 (271) Stage 4: 420–500 (571–680)
Spring Assembly Center-Bolt Nut	1/2–20	65 (88)
Shock Absorber Upper and Lower Mounting Locknut	3/4–10	140 (190)

Table 3, Front Suspension Fastener Torque Values

27. Close the hood.
28. Clean a spot on the base label (Form WAR259), and attach a completion sticker (Form WAR 261) for campaign SF485 to the base label.