

February 2020
SF593AB

Subject: FCCC Motorhome Chassis Fan Cages

Models Affected: Specific Freightliner Custom Chassis XCM and XCP chassis manufactured December 12, 2013, through April 16, 2019.

General Information

Daimler Trucks North America LLC (DTNA), on behalf of its wholly owned subsidiary, Freightliner Custom Chassis Corporation (FCCC), is initiating Field Service Campaign SF593 to modify the vehicles mentioned above.

On certain chassis, fan motor support brackets may be sub-optimal causing fatigue and cracking over time. Vehicles will be inspected and fan motor support bracket assemblies will be repaired as necessary.

There are approximately 411 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

NOTE: Loctite® 242 is required for this repair. You may claim up to 10.00 for Loctite® 242 on the repair claim.

If our records show your dealership has ordered any vehicle(s) involved in campaign SF593, a list of the customers and vehicle identification numbers will be available on DTNAConnect. Please refer to this list when ordering parts for this campaign.

February 2020
SF593AB

Table 1 - Replacement Parts for SF593

Campaign Number	Part Description	Part Number	Qty.
SF593A	MTG BRKT ASSY-UPR,VRT SUP RWD	A05-33269-000	1 ea
	MTG BRKT ASSY-UPR,VRT SUP FWD	A05-33275-000	1 ea
	BRKT-MTG,GRBX,UPR,X15	A05-34854-000	1 ea
	BRKT-MTG,GRBX,LWR,X15	A05-34950-000	1 ea
	SCR-CAP,HX,10.9,M12X1.50X30	DDE N910105012007	8 ea
	WASHER-HRDN,0.53X1.06X.177,ZN	23-09114-003	16 ea
	VRT SUPT-MTG,GRBX	05-32856-001	2 ea
	MTG BRKT-LWR,VRT FWD	A05-33270-000	1 ea
	MTG BRKT-LWR,VRT FWD	05-33268-000	1 ea
	HRZ SUPT-MTG,GEARBOX,SRAD	05-32855-000	2 ea
	SCREW,CAP,HEX,1/2-13,GR8	23-11751-150	4 ea
	NUT-HEX,PT,1/2-13,C,ZN/AL	23-13833-108	4 ea
	WASHER-HRDN,0.41X0.81X.080,ZN	23-09114-002	44 ea
	SCREW-CAP,HEX,GR8,3/8-16X1.00	23-11747-100	16 ea
	NUT-HEX,PT,3/8-16,ZN/AL,C,.337	23-13833-106	20 ea
	SCREW-CAP,HEX,GR8,3/8-16X1.25	23-11747-125	8 ea
SF593B	BRKT-MTG,GRBX,UPR,X15	A05-34854-000	1 ea
	BRKT-MTG,GRBX,LWR,X15	A05-34950-000	1 ea
	SCR-CAP,HX,10.9,M12X1.50X30	DDE N910105012007	4 ea
	WASHER-HRDN,0.53X1.06X.177,ZN	23-09114-003	4 ea
SF593AB	BLANK COMPLETION STICKER	WAR261	1 ea

Table 1

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	Corrective Action
SF593AB	INSPECT FAN CAGE BRACKETS	0.2	996-F201A	06-Inspect
SF593A	INSPECT AND REPLACE FAN CAGE BRACKET ASSEMBLY	13.9	996-F201C	12-Repair Recall/Campaign
SF593B	INSPECT AND REPLACE FAN GEAR BOX BRACKET ASSEMBLY	4.9	996-F201B	12-Repair Recall/Campaign

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.

February 2020
SF593AB

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 OWL:

- Claim type is **Field Service Campaign**.
- In the Campaign field, enter the campaign number and appropriate group (**SF593-A or SF593-B**).
- In the Primary Failed Part field, enter **25-SF593-000**.
- In the Parts section, enter the appropriate part number(s) as shown in the Replacement Parts Table.
NOTE: Loctite® 242 is required for this repair. You may claim up to 10.00 for Loctite® 242 on the repair claim.
- In the Labor section, enter the appropriate SRT from the Labor Allowance Table. Administrative time will be included automatically as SRT 939-6010A for 0.4 hours.
- The VMRS Component Code is **F99-999-005** and the Cause Code is **A1 - Campaign**.
- This Field Service Campaign will **terminate on February 28, 2021**. Dealers will be notified of any changes to the termination date via Important Campaign Information Letter posted on DTNACConnect.com.

IMPORTANT: 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.

For questions, U.S. and Canadian dealers, contact the Warranty Campaigns Department via Web inquiry at DTNACConnect.com / WSC, or the Customer Assistance Center at (800) 385-4357 if you have any questions or need additional information. Export distributors submit a Web inquiry or contact your International Service Manager.

February 2020
SF593AB

Copy of Notice to Owners

Subject: FCCC Motorhome Chassis Fan Cages

Daimler Trucks North America LLC (DTNA), on behalf of its wholly owned subsidiary, Freightliner Custom Chassis Corporation (FCCC), is initiating Field Service Campaign SF593AB to modify specific FCCC XCM and XCP chassis manufactured December 12, 2013, through April 16, 2019.

On certain chassis, fan motor support brackets may be sub-optimal causing fatigue and cracking over time.

Vehicles will be inspected and fan motor support bracket assemblies will be repaired as necessary.

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, select "Contact," scroll down to "Find a Dealer," and select the appropriate brand. The campaign will take approximately 1 to 14 hours, depending on the procedure, and will be performed at no charge to you.

This Field Service Campaign will **terminate on February 28, 2021**. 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 if you have any questions or need additional information.

WARRANTY CAMPAIGNS DEPARTMENT

Enclosure

February 2020
SF593AB

Work Instructions

Subject: FCCC Motorhome Chassis Fan Cages

Models Affected: Specific Freightliner Custom Chassis XCM and XCP chassis manufactured December 12, 2013, through April 16, 2019.

Fan Gear Box Mounting Bracket Inspection

1. Inspect the base label (Form WAR259) for a campaign completion sticker for SF593 (Form WAR261). If a sticker is present for campaign SF593, no work is needed. If there is no sticker, proceed with the steps below.
2. Park the vehicle on a level surface, shut down the engine, and apply the parking brake. Chock the tires.

DANGER

When working on the vehicle, shut down the engine, set the parking brake, and chock the tires. Before working under the vehicle, always place jack stands under the frame rails to ensure the vehicle cannot drop. Failure to follow these steps could result in serious personal injury or death.

3. Raise the vehicle and support it with jack stands.

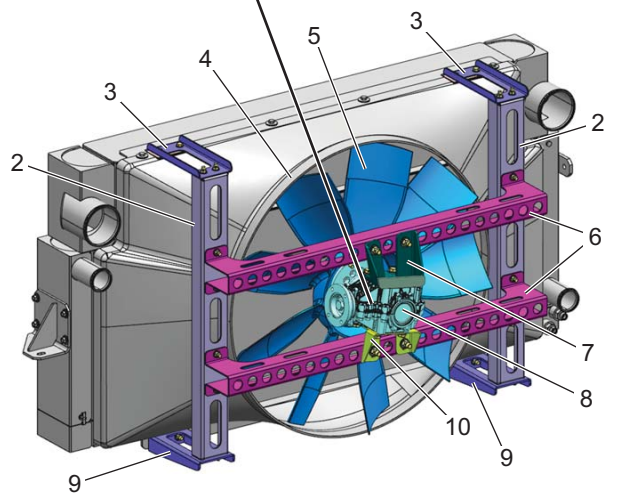
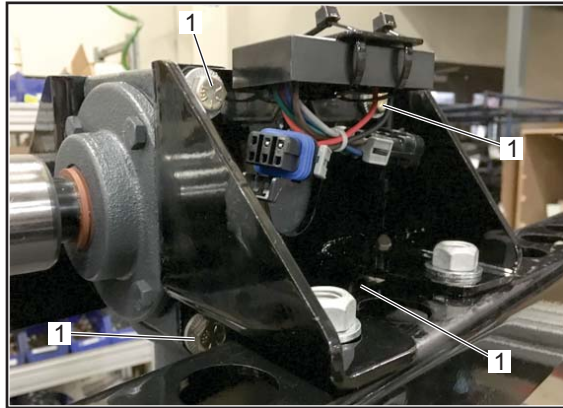
IMPORTANT: The technician must locate the bottom fan gear box mounting bracket and count the bolts.

4. Inspect the fan gear box mounting brackets. If the bottom bracket (with flanges on the left and right side) has four mounting bolts that attach the fan gear box, shown in [Fig. 1](#), no further work is needed. Clean a spot on the base label (Form WAR259) and attach a campaign completion sticker for SF593 (Form WAR261) indicating this work has been completed.

If the fan cage is a welded assembly, shown in [Fig. 2](#), it must be replaced. Go to *Replacing a Welded Fan Cage Assembly* for instructions.

If the bottom fan gear box mounting bracket (with a flange in the center) only has two bolts that attach the fan gear box, shown in [Fig. 3](#), go to *Replacing Two-Bolt Mounted Fan Gear Box Brackets* to replace the top and bottom fan gear box mounting brackets.

February 2020
SF593AB



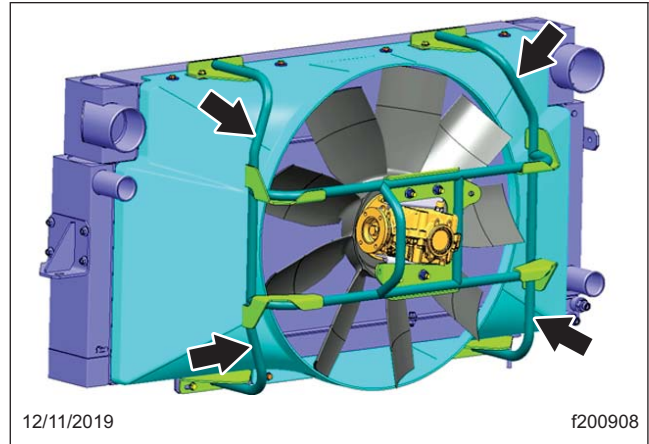
01/27/2020

f200910

The technician must locate the bottom mounting bracket and count the bolts.

1. Bolts (Qty. 4), Fan Gear Box Bottom Mounting Bracket
2. Vertical Fan Cage Brackets
3. Fan Cage Mounting Brackets, Top
4. Fan Shroud
5. Fan
6. Horizontal Fan Cage Brackets
7. Fan Gear Box Mounting Bracket, Top
8. Fan Gear Box
9. Fan Cage Mounting Brackets, Bottom
10. Fan Gear Box Mounting Bracket, Bottom

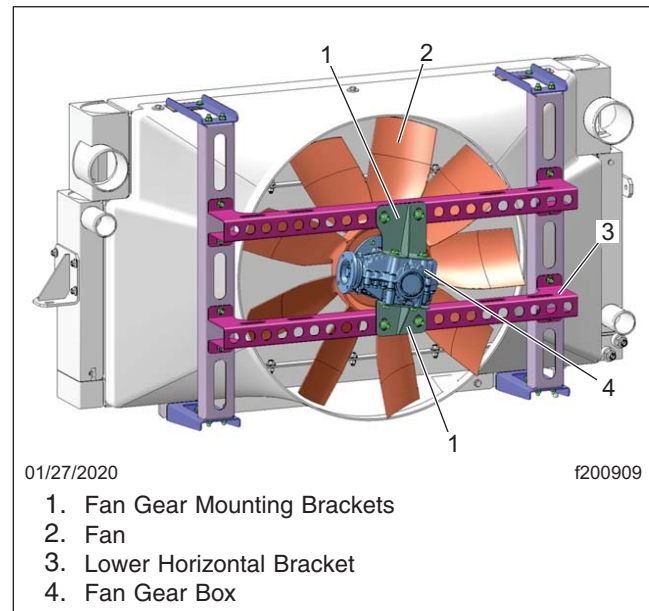
Fig. 1, Bolt-Together Fan Cage with Four Fan Gear Box Mounting Bolts (per bracket)



12/11/2019

f200908

Fig. 2, Welded Fan Cage Assembly



01/27/2020

f200909

1. Fan Gear Mounting Brackets
2. Fan
3. Lower Horizontal Bracket
4. Fan Gear Box

Fig. 3, Bolt-Together Fan Cage with Two Fan Gear Box Mounting Bolts (per bracket)

February 2020
SF593AB

SF593A - Replacing a Welded Fan Cage Assembly

If the fan cage is a welded assembly, as shown in [Fig. 2](#), it must be replaced with vertical and horizontal fan cage brackets, and fan gear box mounting brackets as shown in [Fig. 1](#).

DANGER

When working on the vehicle, shut down the engine, set the parking brake, and chock the tires. Before working under the vehicle, always place jack stands under the frame rails to ensure the vehicle cannot drop. Failure to follow these steps could result in serious personal injury or death.

1. Remove the air cleaner.
2. Remove the two-piece dust shield, if so equipped. See [Fig. 4](#) for an example of the dust shield.

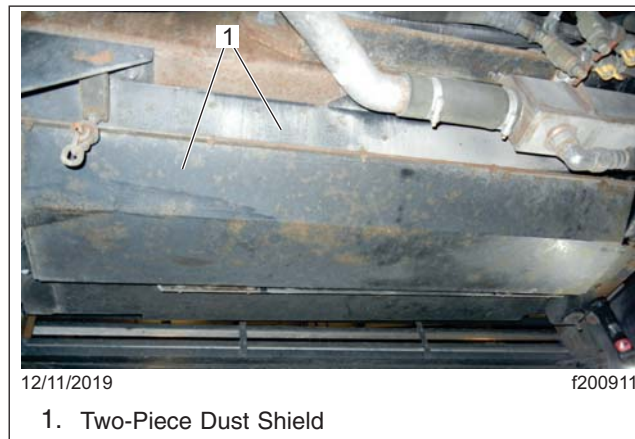


Fig. 4, Two-Piece Dust Shield

3. Remove the fan bolt and set the fan aside.
4. Remove the driveshaft.
5. Remove the gear box.
6. Remove the stabilizer bars (the new fan cage does not use these).

February 2020
SF593AB

7. Using a Sawzall®, cut the fan cage to make removal easier. For cutting points, refer to [Fig. 5](#).

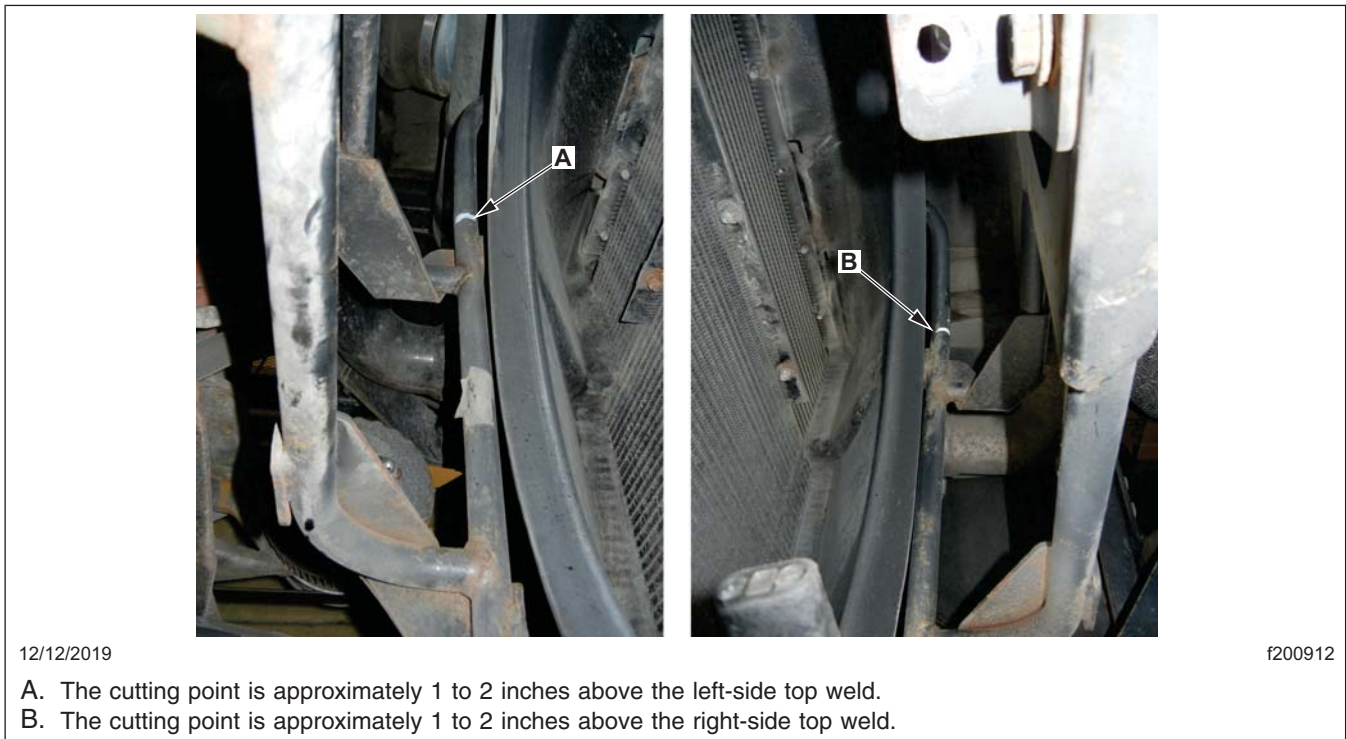


Fig. 5, Approximate Cutting Points for a Welded Fan Cage

8. Remove the bolts from the bottom and top of the fan cage and dispose of the cage.

IMPORTANT: The vertical brackets of the new fan cage must be measured before installation to ensure that the longer side (end of the bracket to the first hole) is on the bottom, otherwise the fan cage will not mount correctly.

9. Measure both ends of the two vertical brackets, from the end of the bracket to the first hole. The longer side (end of the bracket to the first hole) goes on the bottom of the fan cage assembly. See [Fig. 6](#).

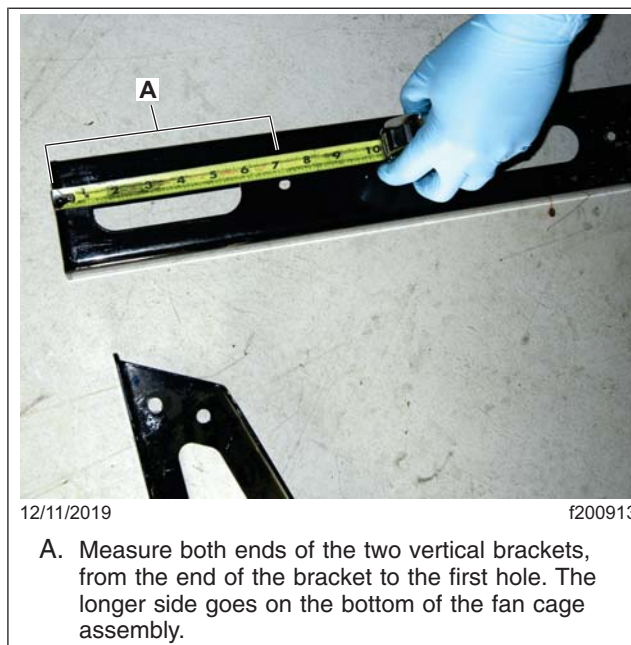


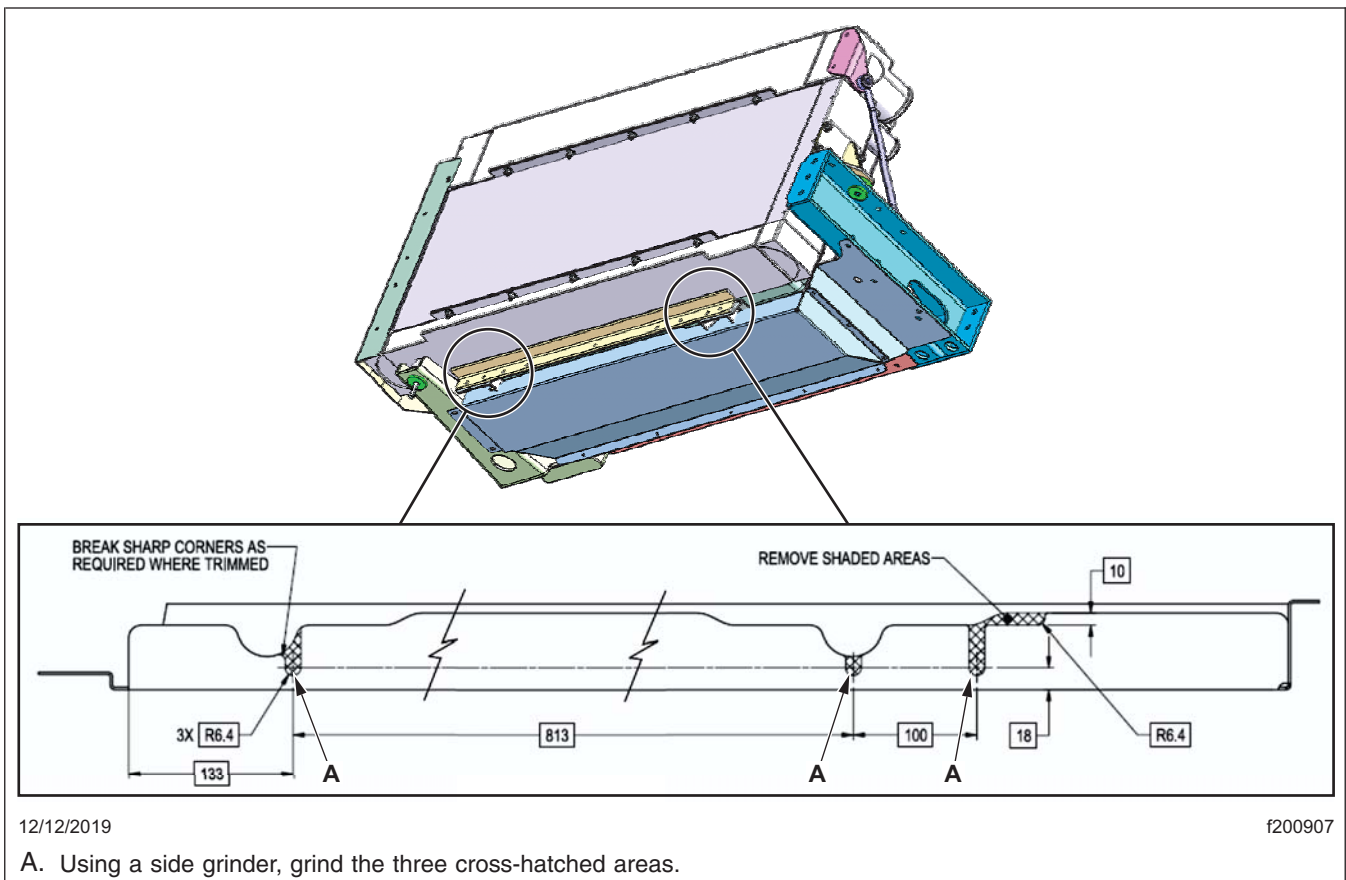
Fig. 6, Measuring the Vertical Brackets

February 2020
SF593AB

- Using the 3/8 nuts and washers, install the top-left (A05-33269-000) and top-right (A05-33275-000) mounting brackets. See [Fig. 1](#). Tighten the nuts 26 lbf-ft (35 N·m).
- Using the 3/8 nuts and washers, install the two vertical fan cage brackets (05-32856-001). Tighten the nuts 26 lbf-ft (35 N·m).
- Using the 3/8 nuts and washers, install the bottom-left (A05-33270-000) and bottom-right (05-33268-000) mounting brackets. Tighten the nuts 26 lbf-ft (35 N·m).
- Using the 3/8 nuts and washers, install the top horizontal fan cage bracket (05-32855-000). Tighten the nuts 26 lbf-ft (35 N·m).

NOTE: Apply Loctite 242 on the threads of all eight gear box bracket bolts.

- Using eight new bolts (DDE N910105012007), install the top (A05-34854-000) and bottom (A05-34950-000) brackets on the gear box. Tighten the bolts 59 lbf-ft (80 N·m).
- Install the gear box on the top horizontal fan cage bracket. Tighten the mounting hardware 64 lbf-ft (87 N·m).
- Using the 3/8 nuts and washers, install the bottom horizontal fan cage bracket (05-32855-000). Tighten the nuts 26 lbf-ft (35 N·m).
- With the bottom horizontal fan cage bracket installed, tighten the bottom mounting hardware of the gear box 64 lbf-ft (87 N·m).
- Mount the fan to the gear box and then center the fan. Using the six bolts removed earlier, install the fan. Tighten the bolts 35 lbf-ft (47 N·m).
- Using the eight bolts removed earlier, install the driveshaft. Tighten the bolts 70 lbf-ft (95 N·m).
- Install the two-piece dust shield, if so equipped. The bottom half of the shield may require modification. Refer to the cross-hatched sections shown in [Fig. 7](#). Tighten the dust shield bolts 26 lbf-ft (35 N·m).



February 2020
SF593AB

21. Clean a spot on the base label (Form WAR259) and attach a campaign completion sticker for SF593 (Form WAR261) indicating this work has been completed.

SF593B - Replacing Two-Bolt Mounted Fan Gear Box Brackets

If the bottom fan gear box mounting bracket only has two mounting bolts, the mounting brackets must be replaced with the fan gear mounting brackets shown in [Fig. 1](#).



When working on the vehicle, shut down the engine, set the parking brake, and chock the tires. Before working under the vehicle, always place jack stands under the frame rails to ensure the vehicle cannot drop. Failure to follow these steps could result in serious personal injury or death.

1. Remove the lower horizontal bracket.
 - 1.1 Remove the bottom mounting bolts of the fan gear box.
 - 1.2 Remove the bolts that attach the lower horizontal bracket to the right and left vertical brackets; set the horizontal bracket aside.
2. Remove the fan bolts then set the fan inside the fan shroud.
3. Remove the drive shaft.
4. Remove the two bolts at the top of the gear box, then remove the gear box from the top horizontal bracket; set the gear box aside.

NOTE: Apply Loctite® 242 on the threads of all eight (new) gear box bracket bolts .

5. Remove the top and bottom two-bolt gear box mounting brackets, then install the new four-bolt mounting brackets. Tighten the mounting bolts 59 lbf-ft (80 N·m).
6. Install the gear box on the top horizontal bracket. Tighten the mounting hardware 64 lbf-ft (87 N·m).
7. Using 3/8 bolts, install the lower horizontal bracket on the vertical brackets. Tighten the bolts 26 lbf-ft (35 N·m).
8. With the bottom horizontal fan cage bracket installed, tighten the bottom mounting hardware of the gear box 64 lbf-ft (87 N·m).
9. Mount the fan to the gear box and then center the fan. Using the six bolts removed earlier, install the fan. Tighten the bolts 35 lbf-ft (47 N·m).
10. Install the driveshaft. Tighten the bolts 70 lbf-ft (95 N·m).
11. Clean a spot on the base label (Form WAR259) and attach a campaign completion sticker for SF593 (Form WAR261) indicating this work has been completed.