

May 2024
SF684 A-I

Subject: Freightliner M2 Plus Transmission Gauge

Models Affected: Specific model year 2024 Freightliner 114SD, and business class M2 vehicles, manufactured February 2, 2023, through April 5, 2023.

General Information

Daimler Truck North America LLC (DTNA), on behalf of its Freightliner Trucks Division, is initiating Field Service Campaign SF684 to modify the vehicles mentioned above.

The affected vehicles were built without the transmission temperature gauge.

The transmission temperature gauge will be installed.

There are approximately 100 vehicles involved in this campaign.

Additional Repairs

Dealers must complete all outstanding recall and 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 kit and/or part number(s) listed below from your facing Parts Distribution Center (PDC).

If our records show your dealership has ordered any vehicle(s) involved in campaign number SF684, a list of the customers and vehicle identification numbers will be available on the DTNA Portal via OWL. Please refer to this list when ordering parts for this campaign.

Table 1 - Replacement Parts for SF684

Campaign Number	Part Number	Part Description	Qty.
SF684 A, D, H	A22-71988-202	GAUGE-TRANS OIL TEMP,ICUC,BLK,	1 ea
SF684 B, C, E, F, G, I	A22-71988-302	GAUGE-TRANS OIL TEMP,ICUC,BRT	1 ea
SF684 A-I	22-71450-000	RING-2" GAUGE MOUNTING	1 ea
SF684 A-I	A66-00487-000	HARNESS-DIM,ICU,GAUGE JMPR	1 ea
SF684 A-I	WAR261	BLANK COMPLETION STICKER	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.

May 2024
SF684 A-I

Labor Allowance

Table 2 - Labor Allowance

Campaign Number	Procedure	Time Allowed (hours)	SRT Code	Corrective Action
SF684 A-E	Install the transmission gauge	0.7	996-F180A	12-Repair Recall/Campaign
SF684 F-I	Install the transmission gauge	0.9	996-F180B	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.

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 condition code (**SF684-A, SF684-B, etc.**).
- In the Primary Failed Part field, enter **25-SF684-000**.
- In the Parts section, enter the appropriate kit or part number(s) as shown in the Replacement Parts Table.
- In the Labor section, enter the appropriate SRT from the Labor Allowance Table. Administrative time will be included automatically as SRT 939-6010A for 0.3 hours.
- The VMRS Component Code is **F99-999-005** and the Cause Code is **A1 - Campaign**.
- This Field Service Campaign will **terminate on May 31, 2025**. Dealers will be notified of any changes to the termination date via an Important Campaign Information Letter (ICI) posted on the DTNA Portal.

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 using the Warranty Support Center (WSC) app located on the DTNA Portal. Export distributors submit a WSC inquiry or contact your International Service Manager.

May 2024
SF684 A-I

Copy of Notice to Owners

Subject: Freightliner M2 Plus Transmission Gauge

Daimler Truck North America LLC (DTNA), on behalf of its Freightliner Trucks Division, is initiating Field Service Campaign SF684 to modify specific model year 2024 Freightliner 114SD, and Business Class M2 vehicles, manufactured February 2, 2023, through April 5, 2023.

The affected vehicles were built without the transmission temperature gauge.

The transmission temperature gauge will be installed.

Please contact an authorized DTNA dealer to arrange to have the campaign performed and to ensure that parts are available at the dealership. The campaign will take approximately one hour and will be performed **free of charge**. To locate an authorized dealer, search online at northamerica.daimlertruck.com/contact-us. Scroll down to "Locate a Dealer," and select the appropriate brand.

This Field Service Campaign will **terminate on May 31, 2025**. 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, DTNA will not pay for any damage caused by failure to properly maintain your vehicle. DTNA 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 a.m. to 4 p.m. Pacific Time, Monday through Friday, e-mail address DTNA-War-Campaigns@DaimlerTruck.com, or the Customer Assistance Center at (800) 385-4357, if you have any questions or need additional information.

WARRANTY CAMPAIGNS DEPARTMENT

Enclosure

May 2024
SF684 A-I

Work Instructions

Subject: Freightliner M2 Plus Transmission Gauge

Models Affected: Specific model year 2024 Freightliner 114SD, and business class M2 vehicles, manufactured February 2, 2023, through April 5, 2023.

The work instructions that follow detail how to install a transmission temperature gauge in one of the gauge locations specified by population. For example, in populations A and B, the gauge is to be installed in the position AG001, on the upper-center dash panel. See [Fig. 1](#) for all the possible gauge locations.

NOTE: The switch configurations on the vehicle being repaired may differ from the panel shown in [Fig. 1](#).

NOTE: The specified gauge locations for the vehicle being repaired, based on the vehicle populations, are listed in [Table 3](#).

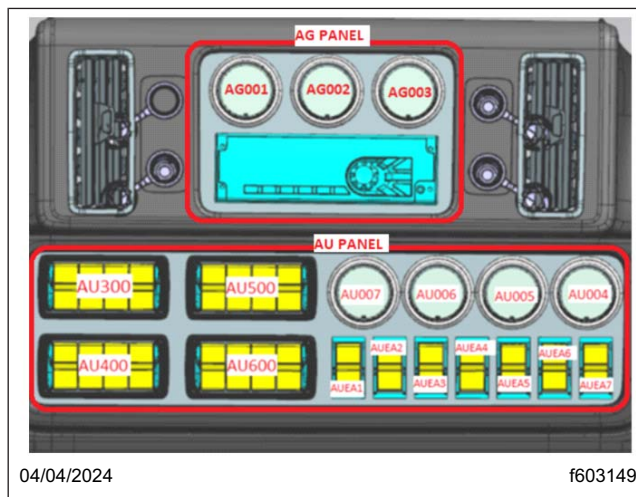


Fig. 1, Upper- and Lower-Center Dash Panels Showing all Possible Gauge Locations

Population	Gauge Location
SF684 A	AG001
SF684 B	
SF684 C	AG002
SF684 D	AG003
SF684 E	
SF684 F	AG004
SF684 G	AG005
SF684 H	AG006
SF684 I	

Table 3, Gauge Locations for Different Populations

May 2024
SF684 A-I

SF684 A-E – Installation of the Transmission Gauge

1. Check the base label (Form WAR259) for a completion sticker for SF684 (Form WAR261), 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 completion sticker is present, no work is needed. If a completion sticker is not present, proceed to the next step.
2. Park the vehicle on a level surface, shut down the engine, and set the parking brake. Chock the tires.
3. Disconnect the batteries at the negative terminal.
4. Remove the upper-center fascia panel. See [Fig. 2](#).



Fig. 2, Upper-Center Fascia Panel

5. Remove the power receptacle harness from each socket.

May 2024
SF684 A-I

6. Remove the dash top tray. See [Fig. 3](#).



Fig. 3, Dash Top Tray

May 2024
SF684 A-I

- Lay out the location for the gauge centerline and the gauge clocking notch on the upper-center dash panel (auxiliary gauge panel), as shown in **Fig. 1** and **Fig. 4**.

NOTE: The specified gauge locations for the vehicle being repaired, based on the vehicle populations, are listed in **Table 3**.

NOTE: To protect the panel and to assist in marking the gauge location, it is recommended to use masking tape on the panel areas where layout lines and centerline marks are to be made.

NOTE: Digital calipers are recommended to measure and lay out the distances from the top edge of the panel to the horizontal lines, and from the center of the upper panel notch to the vertical lines. To ensure accuracy while marking vertical lines in relation to the horizontal lines measured from the top edge of the panel, it is advisable to use a small drafting square.

- Mark the location of the gauge centerline and the center of the gauge clocking notch to be installed, per the dimensions shown in **Fig. 4**.

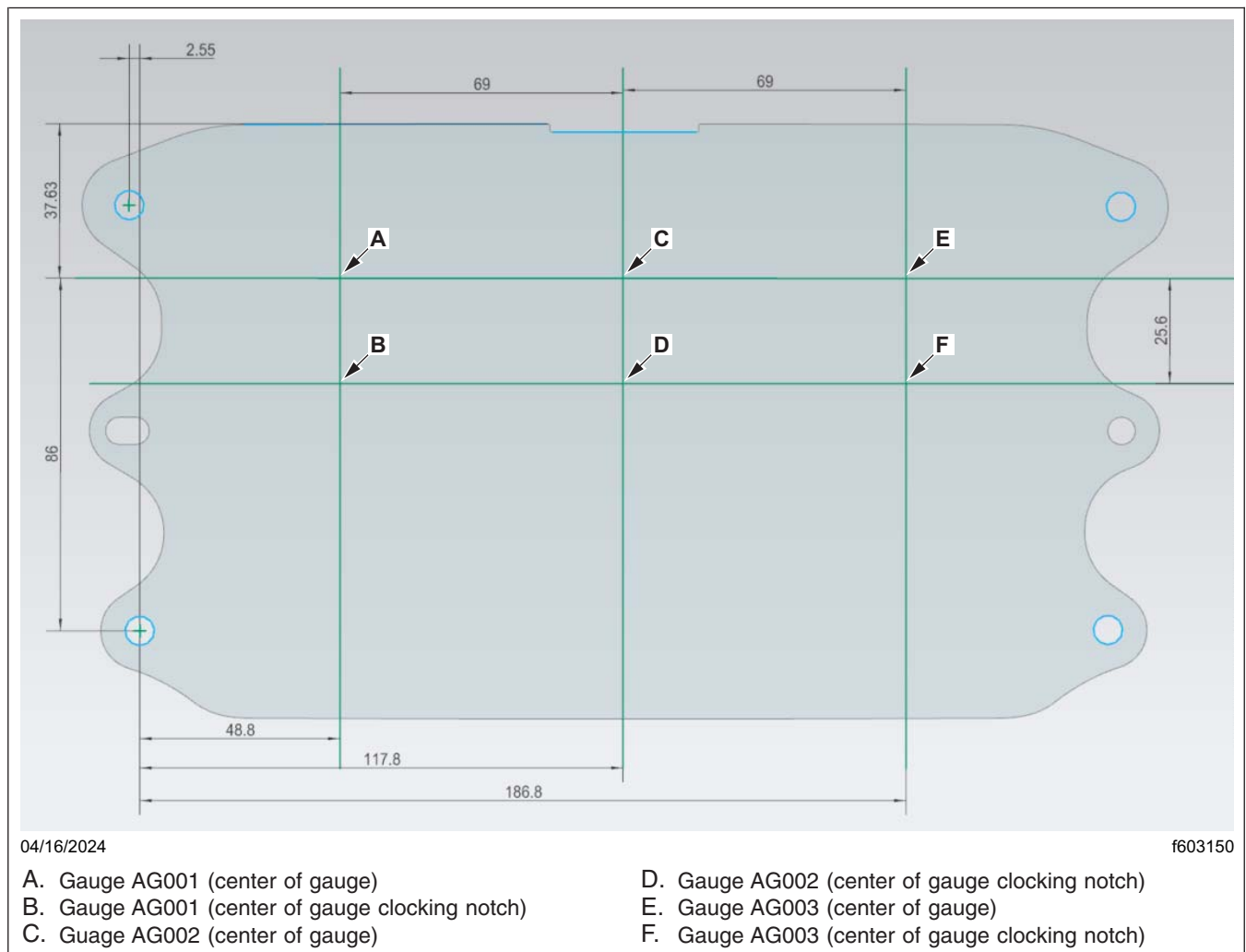


Fig. 4, Locations for Gauges AG001, AG002, and AG003; Upper-Center Dash Panel (AG)

May 2024
SF684 A-I

9. Drill out the holes for the gauge installation. See [Fig. 5](#).
 - 9.1 Centerpunch the marks made for the gauge centerline and the gauge clocking notch centerline.
 - 9.2 At the gauge clocking notch centerline, drill a 5-mm hole. Use a 13/64-inch drill bit if a metric bit is not available.

NOTICE

Ensure that the bit does not plunge too deep and damage the wiring behind the panel.

- 9.3 At the gauge centerline, drill a 53.1-mm hole. Use a 2-1/16-inch hole saw suitable for aluminum if a metric bit is not available.

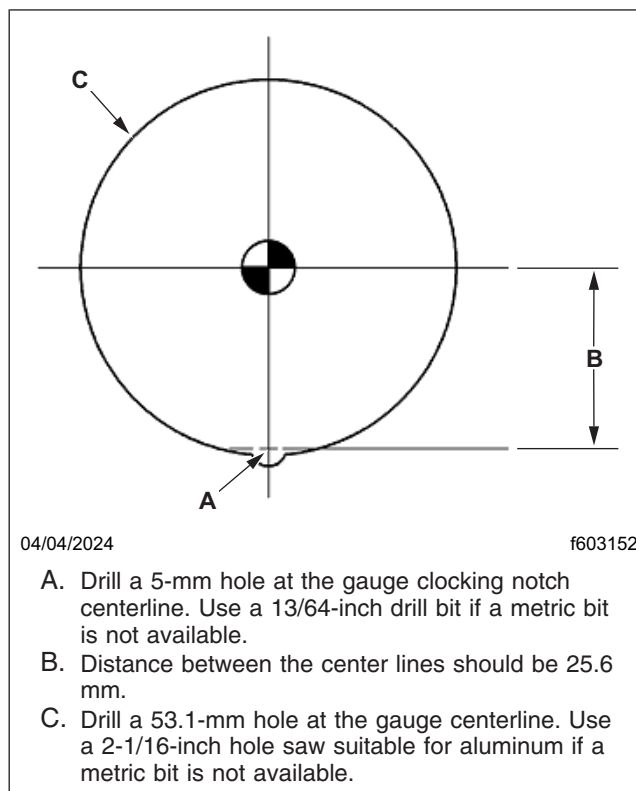


Fig. 5, Gauge Cutout Details

- 9.4 Deburr the holes as needed.
10. Install the gauge.
 - 10.1 Remove the screws from the upper-center dash panel, and pull it out enough to access the rear side.
 - 10.2 Clean any metal shavings behind the panel from drilling the holes.

May 2024
SF684 A-I

- 10.3 Insert the gauge from the front of the panel into the hole. Thread the mounting ring on the rear side of the gauge to secure it tightly to the panel. See [Fig. 6](#).

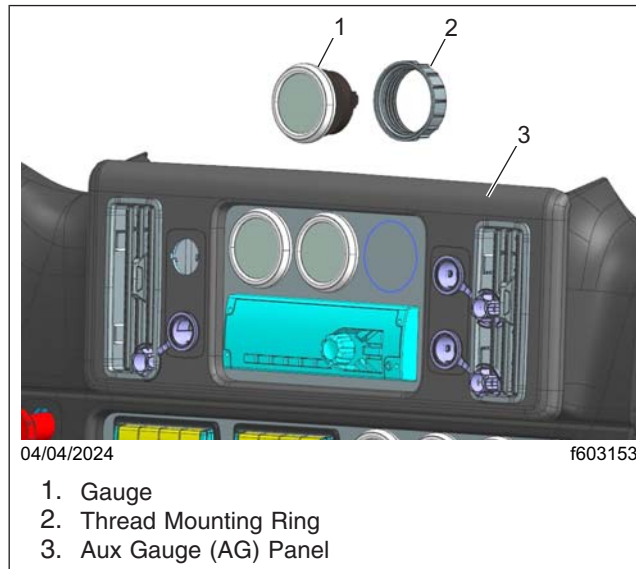


Fig. 6, Aux Gauge (AG) Panel

11. Install the jumper wire.

- *For population A only* → To install the gauge AG001, locate the jumper coming from the main harness behind the panel, and connect it to the back of the gauge. See [Fig. 7](#).
- *For populations B-E* → To install the gauges AG002 or AG003, check if a spare jumper is attached to the adjacent gauge, and connect it to the gauge that is just installed. If the jumper is missing, install the jumper supplied between the adjacent gauge and the newly installed gauge. See [Fig. 1](#) and [Fig. 7](#).

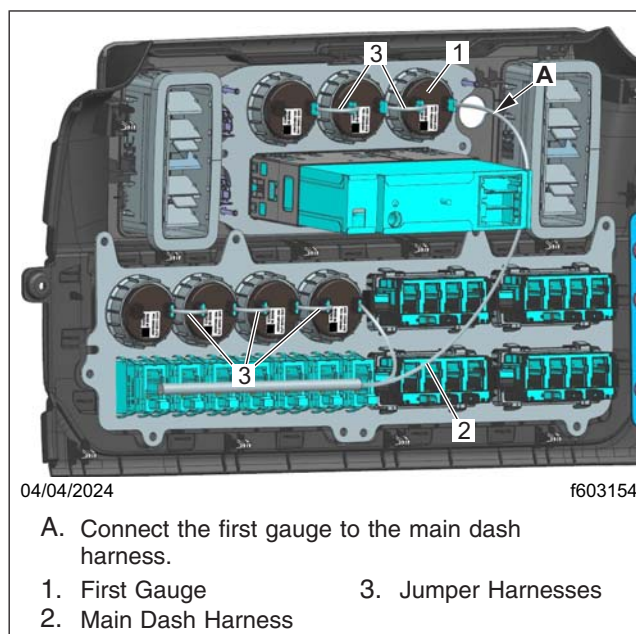


Fig. 7, Installation of the Gauge Jumper

May 2024
SF684 A-I

12. Install the gauge panel.
13. Install the dash top tray.
14. Install the upper-center fascia panel.
15. Install the power receptacle harness to each socket.
16. Clean a spot on the base label (Form WAR259), and attach a campaign completion sticker for SF684 (Form WAR261), indicating this work has been completed.

SF684 F-I – Installation of the Transmission Gauge

1. Check the base label (Form WAR259) for a completion sticker for SF684 (Form WAR261), 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 completion sticker is present, no work is needed. If a completion sticker is not present, proceed to the next step.
2. Park the vehicle on a level surface, shut down the engine, and set the parking brake. Chock the tires.
3. Disconnect the batteries at the negative terminal.
4. Remove the upper-center fascia panel. See [Fig. 8](#).



Fig. 8, Upper-Center Fascia Panel

5. Remove the power receptacle harness from each socket.

May 2024
SF684 A-I

6. Remove the dash top tray. See [Fig. 9](#).



Fig. 9, Dash Top Tray

7. Remove the passenger-side lower access cover. See [Fig. 10](#).



Fig. 10, Passenger-Side Lower Access Cover

May 2024
SF684 A-I

8. Remove the passenger-side upper dash fascia. See [Fig. 11](#).



Fig. 11, Passenger-Side Upper Dash Fascia

9. Remove the driver-side lower dash cover. See [Fig. 12](#).



Fig. 12, Lower Dash Cover

10. Remove the park brake knobs.

May 2024
SF684 A-I

11. Remove the steering column cover.
12. Remove the driver-side upper dash fascia. See [Fig. 13](#).

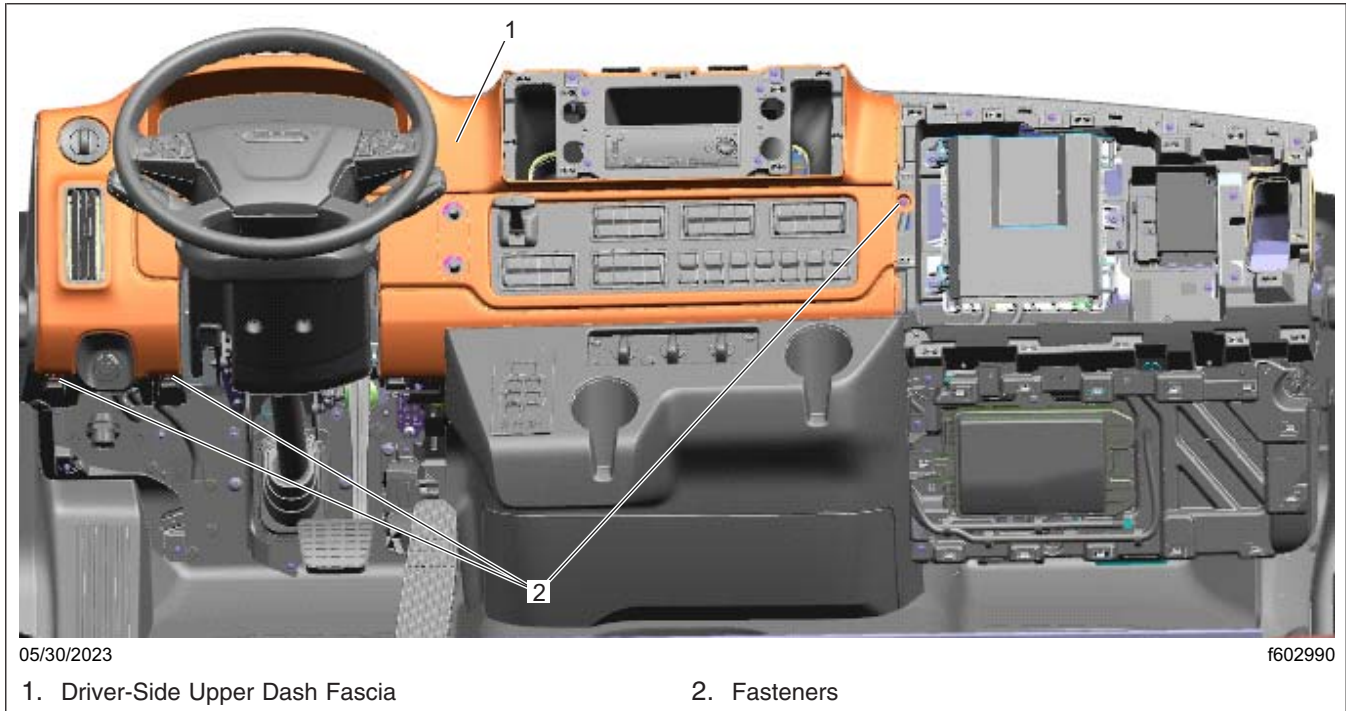


Fig. 13, Driver-Side Upper Dash Fascia

13. Lay out the location for the gauge centerline and the gauge clocking notch on the lower-center dash panel (AU panel), as shown in [Fig. 1](#).

May 2024
SF684 A-I

NOTE: The specified gauge locations for the vehicle being repaired, based on the vehicle populations, are listed in [Table 3](#), page 4.

NOTE: To protect the panel and to assist in marking the gauge location, it is recommended to use masking tape on the panel areas where layout lines and centerline marks are to be made.

NOTE: Digital calipers are recommended to measure and lay out the distances from the top edge of the panel to the horizontal lines, and from the center of the upper panel notch to the vertical lines. To ensure accuracy while marking vertical lines in relation to the horizontal lines measured from the top edge of the panel, it is advisable to use a small drafting square.

14. Mark the location of the gauge centerline and the center of the gauge clocking notch to be installed, per the dimensions shown in [Fig. 14](#).

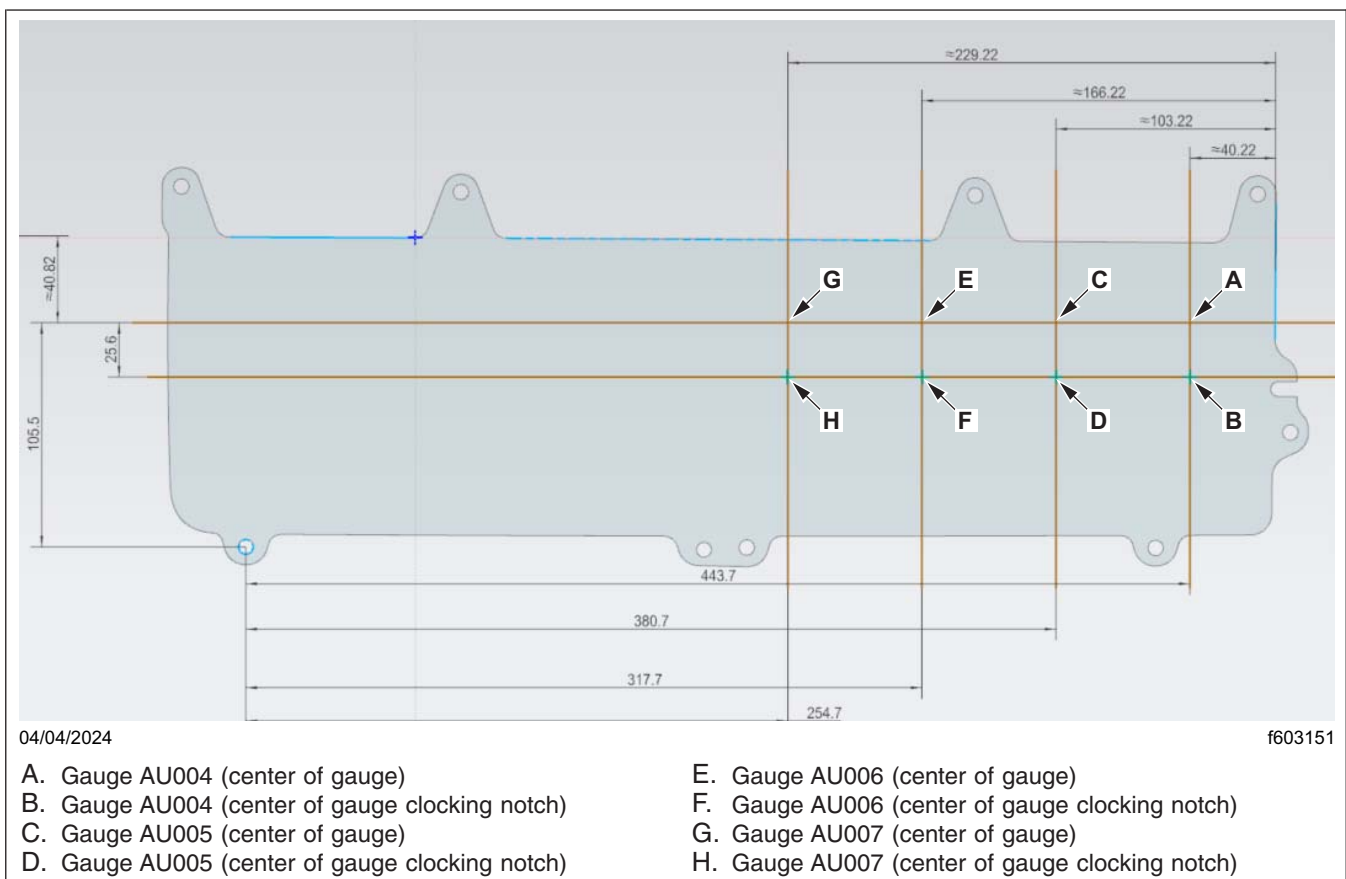


Fig. 14, Locations for the Gauges AU004, AU005, AU006, and AU007; Lower-Center Dash Panel (AU)

May 2024
SF684 A-I

NOTE: In this campaign, no vehicles require a transmission temperature gauge to be installed in the position AU007. Some vehicles may have a different gauge installed in the position of AU0007. Position AU007, shown in [Fig. 1](#) and [Fig. 14](#), is for reference only.

15. Drill out the holes for the gauge installation. See [Fig. 15](#).
 - 15.1 Centerpunch the marks made for the gauge centerline and the gauge clocking notch centerline.
 - 15.2 At the gauge clocking notch centerline, drill a 5-mm hole. Use a 13/64-inch drill bit if a metric bit is not available.

NOTICE

Ensure that the bit does not plunge too deep and damage the wiring behind the panel.

- 15.3 At the gauge centerline, drill a 53.1-mm hole. Use a 2-1/16-inch hole saw suitable for aluminum if a metric bit is not available.

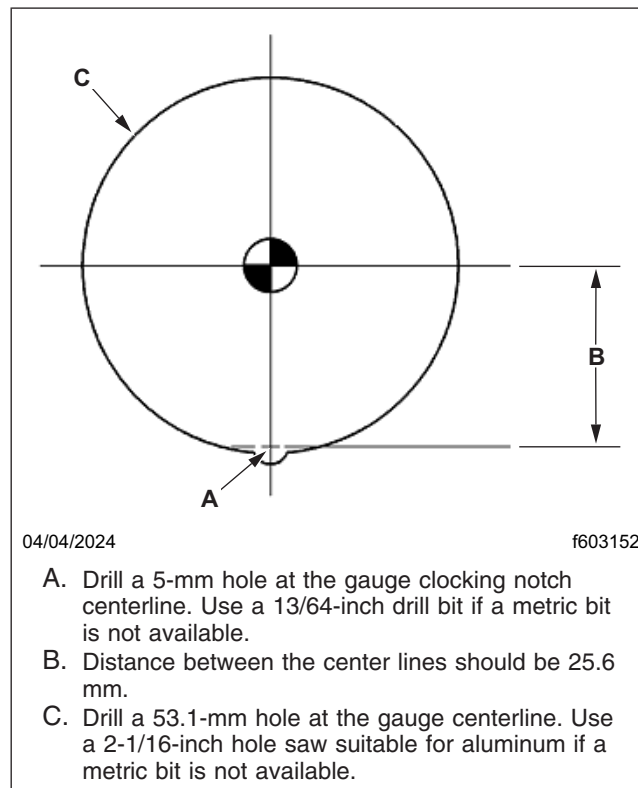


Fig. 15, Gauge Cutout Details

- 15.4 Deburr the hole as needed.
16. Install the gauge.
 - 16.1 Remove the screws from the lower-center dash panel, and pull out enough to access the rear side.
 - 16.2 Clean any metal shavings behind the panel from drilling the holes.

May 2024
SF684 A-I

- 16.3 Insert the gauge from the front of the panel in the hole. Thread the mounting ring on the rear side of the gauge to secure it tightly to the panel. See [Fig. 16](#).

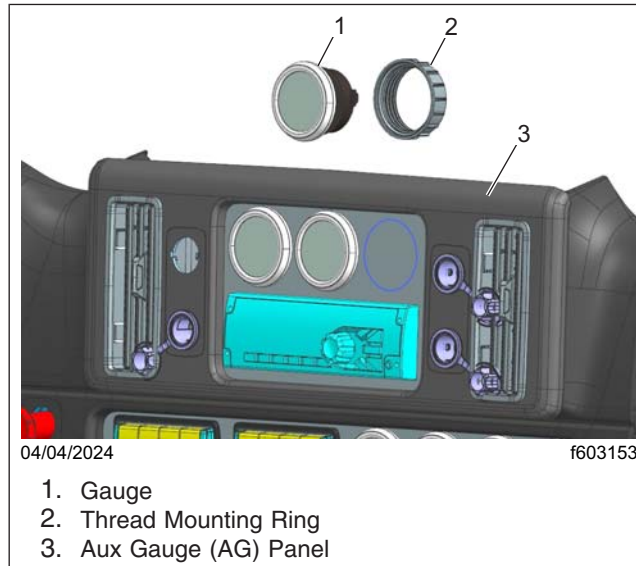


Fig. 16, Typical Gauge Installation (Upper Panel Shown, Lower Panel is Similar)

17. To install the gauges AU004, AU005, AU006, or AU007, check if a spare jumper is attached to the adjacent gauge, and connect it to the gauge that is just installed. If the jumper is missing, install the jumper supplied between the adjacent gauge and the newly installed gauge. See [Fig. 1](#) and [Fig. 17](#).

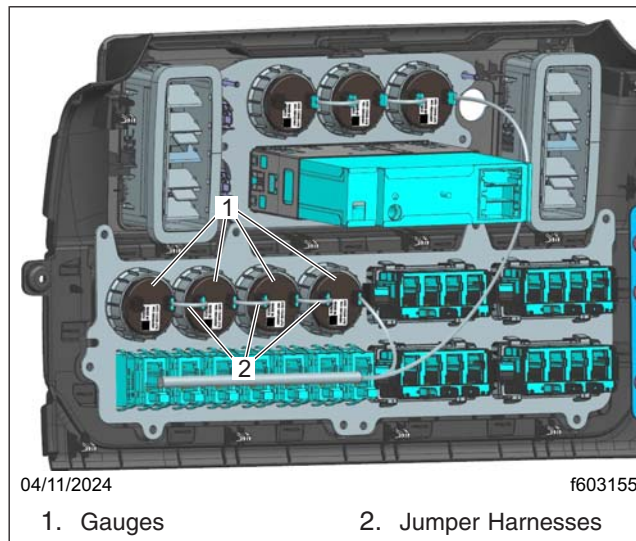


Fig. 17, Installation of the Gauge Jumper

18. Install the gauge panel.
19. Install the driver-side upper dash fascia.
20. Install the steering column cover.
21. Install the park brake knobs.

**May 2024
SF684 A-I**

22. Install the driver-side lower dash cover.
23. Install the dash top tray.
24. Install the upper-center fascia panel.
25. Install the power receptacle harness from each socket
26. Install the passenger-side upper dash fascia.
27. Install the passenger-side lower access cover.
28. Clean a spot on the base label (Form WAR259), and attach a campaign completion sticker for SF684 (Form WAR261), indicating this work has been completed.