



## TECHNICAL SERVICE BULLETIN

### Various Warning Indicators - IPMA/Front Camera Detached From Windshield - Built On Or Before 15-Mar-2021

**21-2193**  
28 June 2021

#### Model:

<b>Ford</b> 2020-2021 F-59 Commercial Stripped Chassis
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**Issue:** Some 2020-2021 F-59 Commercial Stripped Chassis vehicles built on or before 15-Mar-2021 and equipped with adaptive cruise control may exhibit a Front Camera Fault message, Adaptive Cruise Control Fault message, and/or pre-collision warning indicator. This may be due to the front camera assembly becoming detached from the windshield. To correct the condition, follow the Service Procedure to reattach the front camera assembly to the windshield and align the camera.

**Action:** Follow the Service Procedure to correct the condition on vehicles that meet all of the following criteria:

- 2020-2021 F-59 Commercial Stripped Chassis
- Built on or before 15-Mar-2021
- Equipped with adaptive cruise control
- Exhibits a Front Camera Fault message, Adaptive Cruise Control Fault message, and/or pre-collision warning indicator
- Front camera assembly has become detached from the windshield

#### Parts

Part Number	Description	Quantity
MU9Z-19E523-A	Package Contains 1 Piece, 2 Pieces Required	Adhesive Patch 2
Obtain Locally	-	Gaffer Tape As Needed

**Warranty Status:** Eligible under provisions of New Vehicle Limited Warranty (NVLW)/Service Part Warranty (SPW)/Special Service Part (SSP)/Extended Service Plan (ESP) coverage. Limits/policies/prior approvals are not altered by a TSB. NVLW/SPW/SSP/ESP coverage limits are determined by the identified causal part and verified using the OASIS part coverage tool.

#### Labor Times

Description	Operation No.	Time
F-59 Commercial Stripped Chassis: Follow The Service Procedure To Reattach The Front Camera Assembly To The Windshield And Align The Camera	MT212193	Actual Time

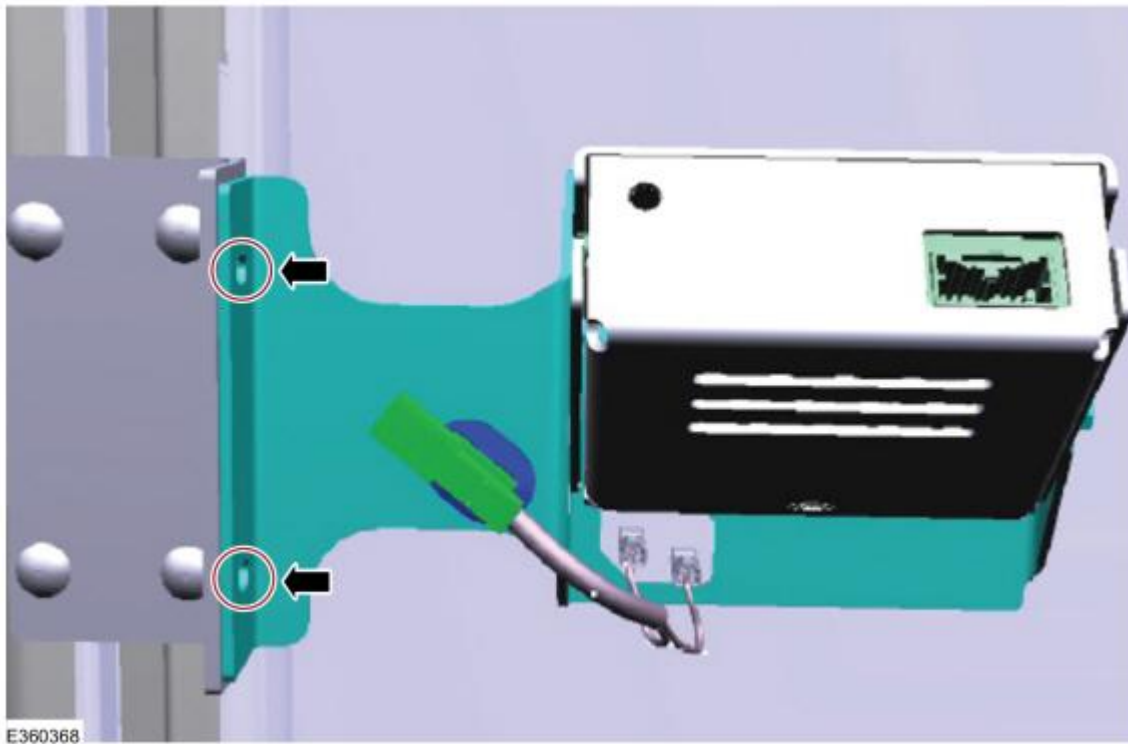
#### Repair/Claim Coding

Causal Part:	18A456
Condition Code:	33

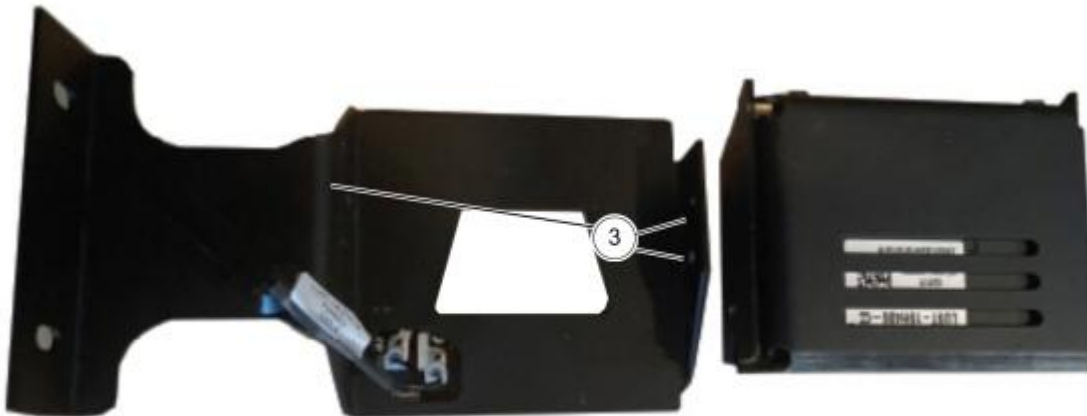
#### Service Procedure

1. Clear any obstructions from the image processing module A (IPMA) front camera.
2. Disconnect the IPMA and heater connectors.
3. Remove the fasteners securing the IPMA camera box assembly to the center post bracket and remove the assembly from the windshield. (Figure 1)

Figure 1

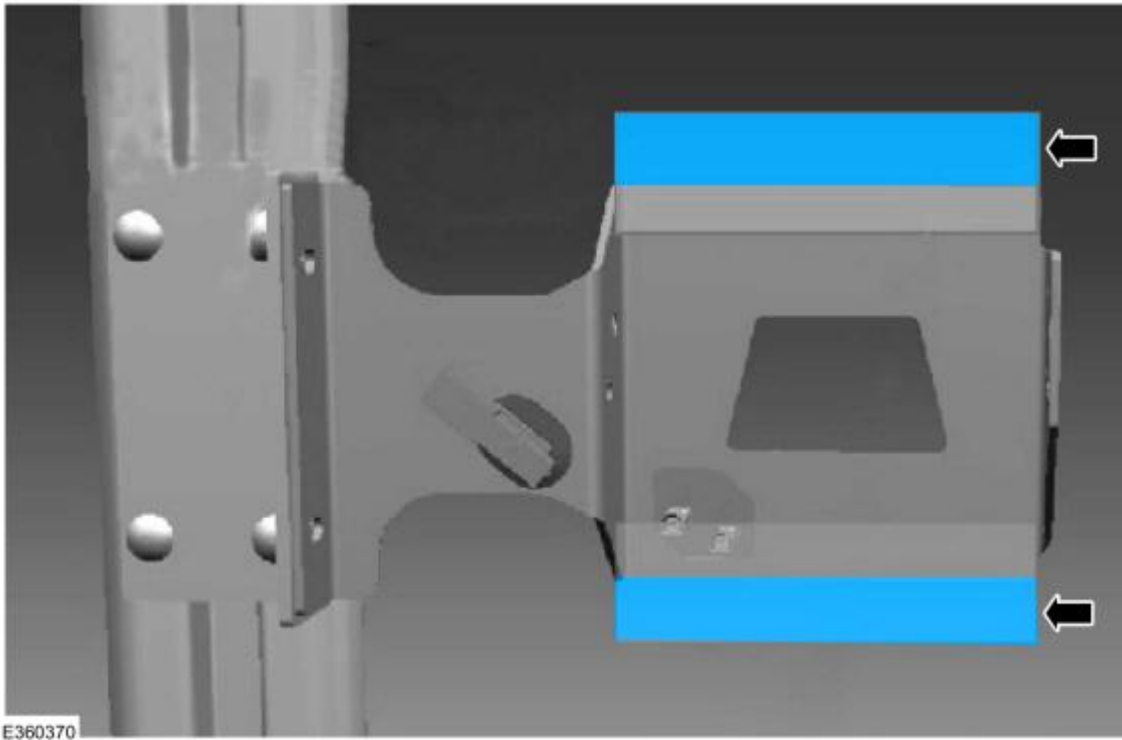


4. Remove the 3 fasteners and remove the IPMA and protective case from the camera mounting bracket. (Figure 2)  
Figure 2



5. Using isopropyl alcohol, clean the mounting surface of the windshield where the IPMA camera box assembly attaches and allow to dry completely.
6. Loosely fasten the camera mounting bracket to the center post bracket.
7. Remove the paper backing from the adhesive patches and apply to the windshield supporting the camera mounting bracket. The support rail of the adhesive patch must overlap the camera mounting bracket. Apply 15 lbs. (33 kg) of force by hand for 30 seconds to the adhesive patches for proper adhesion. (Figure 3)

Figure 3



8. Continue to apply side-to-side pressure on the adhesive patches to knead out any air bubbles or moisture.
9. Place a 10 in. (254 mm) long and 1.88 in. (50 mm) wide piece of gaffer's tape centered over the right side mounting ear of the camera mounting bracket. (Figure 4)

Figure 4



E360371

**10.** Crimp tape around the mounting ear and apply to the windshield. Allow vehicle to sit for at least 10 hours before carefully removing tape strip. (Figure 5)

Figure 5



E360372

**11.** Tighten 2 fasteners securing the camera mounting bracket to the center post bracket, making sure camera mounting bracket is parallel to the windshield.

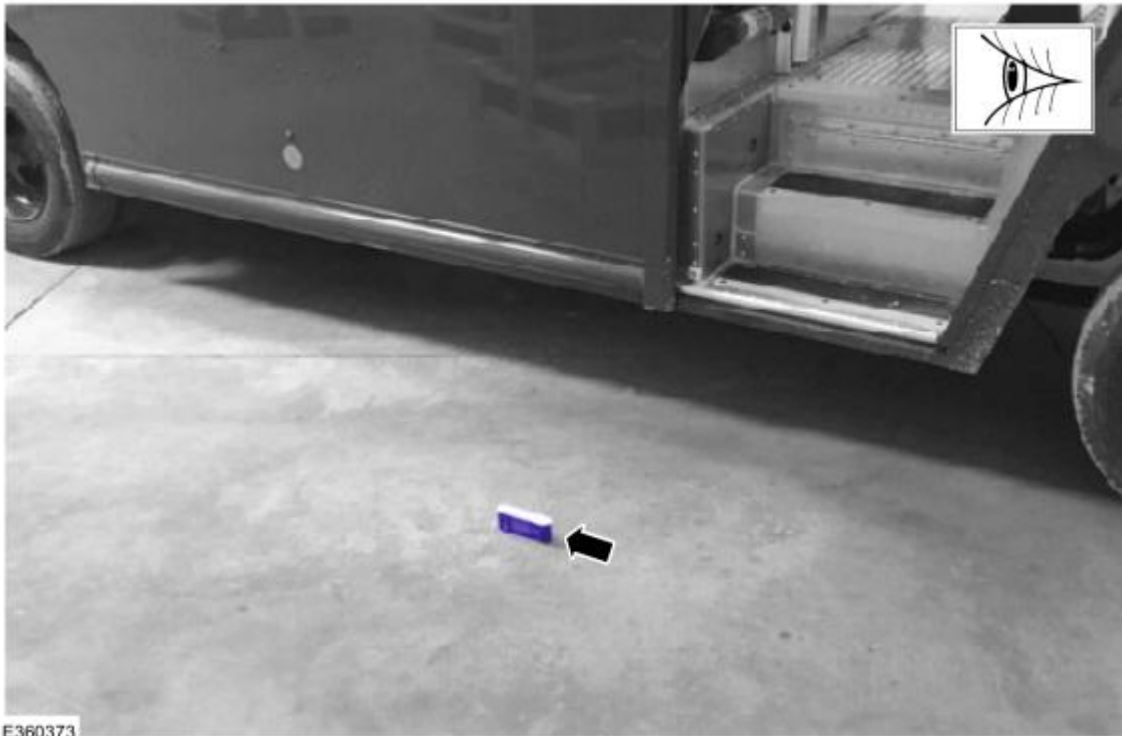
(1). Tighten to 57 lb-in (6.5 Nm)

**12.** Loosely install the IPMA and protective case to the camera mounting bracket using 3 fasteners.

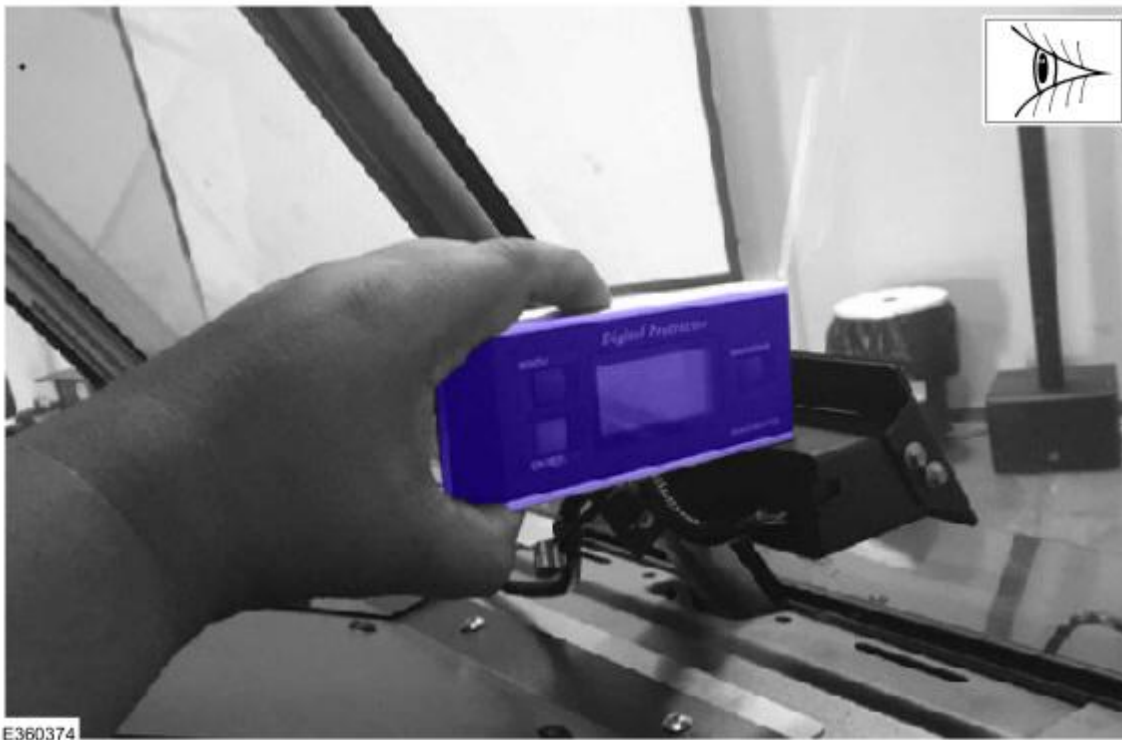
**13.** If the vehicle is in Transport Mode, disable Transport Mode. Refer to Workshop Manual (WSM), Section 419-10.

**14.** Zero the inclinometer (Anglemaster II Driveline Inclinometer/Protractor) to the ground. (Figure 6)

Figure 6



15. Using the inclinometer, align the IPMA to point down 9 degrees (+/- 2.9 degrees). (Figure 7)  
Figure 7



16. Tighten the 3 fasteners securing the IPMA and protective case to the camera mounting bracket. Tighten to 57 lb-in (6.5 Nm).
17. Perform the cruise control module (C-CM) (with sensor) adjustment. Refer to WSM, Section 419-03B.
18. Align the IPMA using the latest software level of the appropriate Ford diagnostic scan tool. Go to Body > LDWS Camera Alignment and follow the on-screen prompts.

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NOTE: The information in Technical Service Bulletins is intended for use by trained, professional technicians with the knowledge, tools, and equipment to do the job properly and safely. It informs these technicians of conditions that may occur on some vehicles, or provides information that could assist in proper vehicle service. The procedures should not be performed by "do-it-yourselfers". Do not assume that a condition described affects your car or truck. Contact a Ford or Lincoln dealership to determine whether the Bulletin applies to your vehicle. Warranty Policy and Extended Service Plan documentation determine Warranty and/or Extended Service Plan coverage unless stated otherwise in the TSB article. The information in this Technical Service Bulletin (TSB) was current at the time of printing. Ford Motor Company reserves the right to supersede this information with updates. The most recent information is available through Ford Motor Company's on-line technical resources.