

David J. Johnson Director Service Engineering Operations Ford Customer Service Division Ford Motor Company P. O. Box 1904 Dearborn, Michigan 48121

March 1, 2021

## TO: All U.S. Ford and Lincoln Dealers

## SUBJECT: Safety Recall 19S54

Certain 2006-2010 Model Year Fusion/Milan/MKZ/Zephyr Vehicles Equipped with Anti-Lock Brake Systems DOT 3 Brake Fluid and Anti-Lock Brake System Function

## AFFECTED VEHICLES

Vehicle	Model Year	Assembly Plant	Build Dates
Fusion/Milan/MKZ/ Zephyr	2006-2010	Hermosillo	February 22, 2006 through July 15, 2009

Affected vehicles are identified in OASIS and FSA VIN Lists.

## **REASON FOR THIS SAFETY RECALL**

In some of the affected vehicles, a chemical reaction between aged DOT 3 brake fluid and the zinc plating inside the Hydraulic Control Unit (HCU) may result in a gel formation. A normally closed valve may be stuck open, which may result in extended brake pedal travel. However, the condition does not result in a loss of braking function or loss of vehicle control, and vehicles can be safely brought to a controlled stop.

## SERVICE ACTION

Dealers are to confirm the proper function of your HCU using Ford's Integrated Diagnostic Software system. The HCU inspection and following service actions will be performed free of charge (parts and labor).

- If the HCU passes the inspection, the brake system will be pressure flushed with DOT 4 brake fluid, the DOT 3 reservoir cap will be replaced with a new DOT 4 cap, and you will receive an updated owner's guide insert.
- If the HCU does not pass the inspection, the HCU will be replaced and the brake system will be pressure flushed with DOT 4 brake fluid, the DOT 3 reservoir cap will be replaced with a new DOT 4 cap, and you will receive an updated owner's guide insert.
- This program is **not** intended to cover all brake system concerns on customer vehicles, normal workshop manual (WSM) diagnostics and related damage are not covered in this program.
- If a customer with an affected vehicle arrives at your dealership with a brake concern and mentions FSA 19S54, dealers should review pre-existing brake concerns and recommend performing the applicable WSM diagnostics, starting in Section 206.
- Any existing diagnostic trouble codes (DTCs) should be properly diagnosed and resolved <u>outside</u> of this field service action. There are no DTCs associated with this concern, no DTCs are generated by the HCU when this concern occurs and resolution of DTCs cannot be claimed as part of this program or as related damage.
- HCUs will only be replaced with documented pass/does not pass IDS service function test. VIN-specific IDS session files must be saved and uploaded upon request. We expect this failure rate to be less than 1% of the vehicle population.

• Failed HCUs and related damage parts are subject to random selection for return to the Ford Warranty Parts Analysis Center (WPAC).

### **OWNER NOTIFICATION MAILING SCHEDULE**

Owner letters are expected to be mailed the week of April 5, 2021. Dealers should repair any affected vehicles that arrive at their dealerships, whether or not the customer has received a letter.

#### PLEASE NOTE:

Federal law requires dealers to complete this recall service before a new vehicle is delivered to the buyer or lessee. Violation of this requirement by a dealer could result in a civil penalty of up to \$21,000 per vehicle. Correct all vehicles in your new vehicle inventory before delivery.

#### **ATTACHMENTS**

Attachment I:Administrative InformationAttachment II:Labor Allowances and Parts Ordering InformationAttachment III:Technical InformationOwner Notification LettersRecall Reimbursement Plan

#### **QUESTIONS & ASSISTANCE**

For questions and assistance, contact the Special Service Support Center (SSSC) via the SSSC Web Contact Site. The SSSC Web Contact Site can be accessed through the Professional Technician Society (PTS) website using the SSSC link listed at the bottom of the OASIS VIN report screen or listed under the SSSC tab.

Sincerely,

J. Johnson

David J. Johnson

#### ATTACHMENT I Page 1 of 4

#### Safety Recall 19S54

Certain 2006-2010 Model Year Fusion/Milan/MKZ/Zephyr Vehicles Equipped with Anti-Lock Brake Systems DOT 3 Brake Fluid and Anti-Lock Brake System Function

#### **OASIS ACTIVATION**

OASIS was activated on December 19, 2019.

#### FSA VIN LISTS ACTIVATION

FSA VIN Lists were available through https://web.fsavinlists.dealerconnection.com on December 19, 2019. Owner names and addresses were available on October 23, 2020.

**NOTE:** Your FSA VIN Lists may contain owner names and addresses obtained from motor vehicle registration records. The use of such motor vehicle registration data for any purpose other than in connection with this recall is a violation of law in several states, provinces, and countries. Accordingly, you must limit the use of this listing to the follow-up necessary to complete this recall.

#### SOLD VEHICLES

- Ford has not issued instructions to stop selling/delivering or driving used vehicles under this safety recall. Owners can continue to safely drive their vehicles, as previously stated this condition does not result in a loss of braking function or loss of vehicle control, and the vehicles can be safely brought to a controlled stop. Owners should contact their dealer for an appointment to have their vehicles remedied as soon as practicable. Owners can continue to safely drive their vehicles.
- Immediately contact any of your affected customers whose vehicles are not on your VIN list but are • identified in OASIS. Give the customer a copy of the Owner Notification Letter (when available) and schedule a service date.
- Correct other affected vehicles identified in OASIS which are brought to your dealership. •
- Dealers are to prioritize repairs of customer vehicles over repairs of new and used vehicle inventory.

#### **STOCK VEHICLES**

Use OASIS to identify any affected vehicles in your used vehicle inventory.

#### **DEALER-OPERATED RENTAL VEHICLES**

The Fixing America's Surface Transportation (FAST) Act law effective June 2016 prohibits a rental company from selling, renting or leasing vehicles subject to a safety or compliance recall. Please consult your legal counsel for legal advice.

#### **TITLE BRANDED / SALVAGED VEHICLES**

Affected title branded and salvaged vehicles are eligible for this recall.

Safety Recall 19S54 Certain 2006-2010 Model Year Fusion/Milan/MKZ/Zephyr Vehicles Equipped with Anti-Lock Brake Systems DOT 3 Brake Fluid and Anti-Lock Brake System Function

#### OWNER REFUNDS

- This safety recall must still be performed, even if the owner has paid for a previous repair. Claiming a refund will not close the recall on the vehicle.
- NOTE: DOT 3 MUST BE REPLACED WITH DOT 4 BRAKE FLUID, and a DOT 4 cap installed on brake fluid reservoir.
- Ford Motor Company is offering a refund for owner-paid repairs covered by this recall if the repair was performed prior to the date indicated in the reimbursement plan, which is posted with this bulletin. Owners are directed to seek reimbursement through authorized dealers or, at their option, directly through Ford Motor Company at P.O. Box 6251, Dearborn, MI 48121-6251.
- Dealers are also pre-approved to refund owner-paid <u>emergency</u> repairs that were performed away from an authorized servicing dealer after the end date specified in the reimbursement plan. Non-covered repairs, or those judged by Ford to be excessive, will not be reimbursed.
- Refunds will only be provided for the cost associated with HCU replacement (base part number 2C215).

## **RENTAL VEHICLES**

- Rental vehicles are not approved for this program.
- Ford has not issued instructions to stop driving vehicles under this safety recall. Owners can continue to safely drive their vehicles, as previously stated this condition does not result in a loss of braking function or loss of vehicle control, and the vehicles can be safely brought to a controlled stop. Owners should contact their dealer for an appointment to have their vehicles remedied as soon as practicable. Owners can continue to safely drive their vehicles.
- Part shortages do not qualify for rental vehicles for this program.

#### LINCOLN CLIENT SPECIAL HANDLING

Owners of 2017 MY and newer Lincoln vehicles have the option of requesting pickup and delivery service with a Lincoln loaner (up to 2 days), from their dealership. For details, reference EFC07715, 2020 Lincoln Pickup & Delivery Updates.

## ATTACHMENT I

Page 3 of 4

#### Safety Recall 19S54

#### Certain 2006-2010 Model Year Fusion/Milan/MKZ/Zephyr Vehicles Equipped with Anti-Lock Brake Systems DOT 3 Brake Fluid and Anti-Lock Brake System Function

#### ADDITIONAL REPAIR (LABOR TIME AND/OR PARTS)

Additional repairs identified as necessary to complete the FSA should be managed as follows:

- For related damage and access time requirements, refer to the Warranty and Policy Manual / Section 6 – Ford & Lincoln Program Policies / General Information & Special Circumstances for FSA's / Related Damage.
- For vehicles within new vehicle bumper-to-bumper warranty coverage, no SSSC approval is required, although related damage must be on a separate repair line with the "Related Damage" radio button checked.
  - Ford vehicles 3 years or 36,000 miles
  - Lincoln vehicles 4 years or 50,000 miles
- For vehicles outside new vehicle bumper-to-bumper warranty coverage, submit an Approval Request to the SSSC Web Contact Site <u>prior to completing the repair</u>, and attach the IDS session log file in PDF format to the contact.
  - Attach one file with complete IDS session, multiple files containing one screen print is not acceptable. Text should be in focus and readable, and in the correct orientation.
  - Dealers may also be requested to upload IDS session files to the Ford Technical Hotline server before SSSC approval is provided.
  - It is highly recommended that all IDS session files be saved, requests will be denied if they are not available upon request.
  - Any existing diagnostic trouble codes (DTCs) should be properly diagnosed and resolved outside of this field service action.
    - There are no DTCs associated with this concern
    - There are no DTCs generated by the HCU when this concern occurs
    - Resolution of DTCs cannot be claimed as part of this program or as related damage.
  - Dealers should review pre-existing brake concerns with their customers, this program will not cover all brake system concerns on customer's vehicles or as related damage, including required maintenance items.

## ATTACHMENT I

Page 4 of 4

#### Safety Recall 19S54

Certain 2006-2010 Model Year Fusion/Milan/MKZ/Zephyr Vehicles Equipped with Anti-Lock Brake Systems DOT 3 Brake Fluid and Anti-Lock Brake System Function

#### CLAIMS PREPARATION AND SUBMISSION

- **Claim Entry**: Enter claims using Dealer Management System (DMS) or One Warranty Solution (OWS) online.
  - When entering claims, select claim type 31: Field Service Action. The FSA number (19S54) is the sub code.
  - For additional claims preparation and submission information, refer to the Recall and Customer Satisfaction Program (CSP) Repairs in the OWS User Guide.
- **Related Damage/Additional labor and/or parts**: Must be claimed as Related Damage on a separate repair line from the FSA with same claim type and sub code as described in Claim Entry above.

**IMPORTANT:** Click the Related Damage Indicator radio button.

- **Refunds:** Submit refunds on a separate repair line.
  - Program Code: 19S54 Misc. Expense: ADMIN
  - Misc. Expense: REFUND Misc. Expense: 0.2 Hrs.
  - Multiple refunds should be submitted on one repair line and the invoice details for each repair should be detailed in the comments section of the claim.
- Lincoln Pickup & Delivery: Claims for Lincoln Pickup & Delivery with a Lincoln loaner (up to 2 days) should be submitted on a separate line from the FSA. Refer to EFC07715, 2020 Lincoln Pickup & Delivery Updates for details.

## ATTACHMENT II

Page 1 of 3

#### Safety Recall 19S54

#### Certain 2006-2010 Model Year Fusion/Milan/MKZ/Zephyr Vehicles Equipped with Anti-Lock Brake Systems DOT 3 Brake Fluid and Anti-Lock Brake System Function

#### LABOR ALLOWANCES

- The BrakeMate Jr. Standard and Hybrid Brake System Pressure Bleed Machine with Master Cylinder Adapter Kit and Fluid Extractor was used to complete the brake system flush for this program.
- Before starting the brake system flush, ensure that you have the correct adapter that fits securely, or you will introduce air into the brake system.

Understanding required IDS functions for this service action:

<u>Valve Actuation</u>: To access this function on IDS select Toolbox, Chassis, Braking, Valve Actuation. This function will cycle the HCU valves a total of four times to determine if the valves are stuck in an open position.

<u>ABS Service Bleed</u>: To access this function on IDS select Toolbox, Chassis, Braking, ABS Service Bleed. This function is performed when the brake system is flushed.

PASS	BRAKE SYSTEM FLUSH, REPLACE CAP	Labor Operation	Labor Time
1. 2. - 3. 4. 5.	Perform Valve Actuation Service Function using the latest available IDS release. Flush brake system with power brake bleed machine Exchange DOT 3 brake fluid with DOT 4 brake fluid Perform ABS Service Bleed a total of <u>10 times.</u> Bleed brakes per Technical Instructions Step 1 on Page 9 Replace Brake Fluid Reservoir cap	19S54B	0.9 Hours

FAIL:	HCU REPLACEMENT	Labor Operation	Labor Time
1. 2.	Perform Valve Actuation Service Function using the latest available IDS release ( <u>Save IDS Session</u> <u>File</u> ). Replace HCU - SSSC approval required (along with IDS Session Log File to be Uploaded)		
3.	Flush brake system with power brake bleed machine a. Exchange DOT 3 brake fluid with DOT 4 brake fluid	19S54C	1.9 Hours
4.	Perform ABS Service Bleed a total of <u>5 times,</u>		
5.	Bleed brakes per Technical Instructions Step 1 on Page 17		
6.	Replace brake fluid reservoir cap		

# 

Page 2 of 3

#### Safety Recall 19S54

Certain 2006-2010 Model Year Fusion/Milan/MKZ/Zephyr Vehicles Equipped with Anti-Lock Brake Systems DOT 3 Brake Fluid and Anti-Lock Brake System Function

#### PARTS REQUIREMENTS / ORDERING INFORMATION

## Order the Brake System Pressure Bleed Machine & Adapter Kit through Rotunda:

- BrakeMate Jr. Standard and Hybrid Brake System Pressure Bleed Machine with Master Cylinder Adapter Kit and Fluid Extractor
- Master Cylinder Brake Bleeder Cap BA04 SP

#### SSSC Web Contact Site:

# Most vehicles will <u>not</u> require HCU replacement; brake system will be flushed, and a new DOT 4 brake fluid reservoir cap will be installed.

To place an order for an HCU, submit a VIN-specific Part Order contact via the SSSC Web Contact Site and attach the entire IDS session log file to the part order:

- One file attached to the part order (multiple photos or screen shot are <u>not</u> acceptable)
- PDF file format with the following information highlighted in red or similar bright color
  - o VIN number
  - Date IDS service function completed
  - o Result of IDS service function test (pass or fail).

Note: IDS session files showing both pass and fail results will not be approved.

- Dealers may also be requested to upload IDS session files to the Ford Technical Hotline server before SSSC approval is provided.
- It is highly recommended that all IDS session files be saved, requests will be denied if they are not available upon request.
- Any existing diagnostic trouble codes (DTCs) should be properly diagnosed and resolved outside of this field service action.
  - There are no DTCs associated with this concern
  - $\circ$   $\,$  There are no DTCs generated by the HCU when this concern occurs
  - Resolution of DTCs cannot be claimed as part of this program or as related damage.

Part Number	Description	Order Quantity
*-2C215-*	HCU (part number varies by vehicle – use Ford ECat to identify the specific part number by VIN)	Only if IDS Service Function is failed and documented in IDS Log File

Dealers will be notified via a DOES II communication if circumstances warrant a change in part supply strategy and when open ordering resumes.

#### ATTACHMENT II Page 3 of 3

#### Safety Recall 19S54

#### Certain 2006-2010 Model Year Fusion/Milan/MKZ/Zephyr Vehicles Equipped with Anti-Lock Brake Systems DOT 3 Brake Fluid and Anti-Lock Brake System Function

### Order the parts below through normal order processing channels:

Note: Do not order DOT 4 Brake Fluid Reservoir Cap for stock, if excessive caps are ordered sales restrictions will be implemented.

Part Number	Description	Order Quantity	Claim Quantity
PM-20	Brake Fluid 16 oz, pint bottle (4 required, 4 per case)	1	4
6E5Z-2162-A	DOT 4 Brake Fluid Reservoir Cap	1	1

To guarantee the shortest delivery time, an emergency order for parts must be placed.

#### DEALER PRICE

For latest prices, refer to DOES II.

#### PARTS RETENTION AND RETURN

Follow the provisions of the Warranty and Policy Manual, Section 1 - WARRANTY PARTS RETENTION AND RETURN POLICIES.

#### EXCESS STOCK RETURN

Excess stock returned for credit must have been purchased from Ford Customer Service Division in accordance with Policy Procedure Bulletin 4000.

## CERTAIN 2006-2010 MODEL YEAR FUSION/MILAN/MKZ/ZEPHYR VEHICLES EQUIPPED WITH ANTI-LOCK BRAKE SYSTEMS — DOT 3 BRAKE FLUID AND ANTI-LOCK BRAKE SYSTEM FUNCTION

## **REGULAR MAINTENANCE & RELATED DAMAGE**

A lack of regular maintenance on a vehicle's brake system may result in poor braking or even a complete inability to stop. Some of the more common problems are listed below and should be discussed with the customer before the repair begins, as they are outside the scope of this program.

- 1. Leaking brake fluid due to cracks in brake lines or hoses
- 2. Leaking fluid or other problems with master cylinder
- 3. Unreliable braking due to air in the system
- 4. Poor braking caused by worn pads or warped rotors
- 5. Temporary loss of stopping ability due to oil or grease on the pads or rotors
- 6. Poor braking due to uneven application of hydraulic pressure on all four wheels
- 7. A chattering or shaking sensation when the brakes are applied due to bent pads or rotors
- 8. A screeching or grinding noise caused by worn brake pads gouging the rotors

## SERVICE PROCEDURE

A. IDS Service Function - Hydraulic Control Unit (HCU)	) Valve
Inspection	Page 2
B. Inspection Results	Page 8
C. Valve Activation PASSES IDS Routine	Page 9
D. Valve Activation DOES NOT PASS IDS Routine	Page 14



## **IDS Service Function - HCU Valve Inspection**

NOTE: Ensure that your Integrated Diagnostic Software (IDS) is updated with the most current version.

- 1. Park the vehicle on a flat, level surface.
- 2. Apply the parking brake.

NOTE: For manual vehicles ensure the vehicle is in neutral.

- 3. Perform a walk around visual inspection of the vehicles condition, ensuring there is no current brake fluid leaks or damage to the braking system before performing this procedure.
- 4. Connect the IDS and start a new session.
- 5. Any existing diagnostic trouble codes (DTCs) should be properly diagnosed and resolved outside of this field service action. There are no DTCs associated with this concern, no DTCs are generated by the HCU when this concern occurs and resolution of DTCs cannot be claimed as part of this program or as related damage.

- Review any existing DTCs with customer prior to starting repair.

- 6. Select the "Tool Box" tab then "Chassis", "Braking" then "Valve Activation". See Figure 1.
- 7. Follow the on screen prompts to complete the procedure. See Figures 2 through 11, for screenshots of the process, and applicable notes.
  - The procedure will complete the activation of the valves a total of four times.



#### ATTACHMENT III PAGE 3 OF 20 SAFETY RECALL 19S54

The <u>ABS</u> hydraulic unit will be tested for sufficient valve movement. If insufficient valve movement is experienced, the <u>ABS</u> hydraulic unit must be replaced.	
Do you wish to continue?	
NO	

2	Valve Activation	
		ali da
Initial Conditions		
-		
Vehicle is in PAPK	n 11 voits.	
Finance is in FARR.     Finance the brake nedal is not pre-	eead	
Ensure park brake is not applied.	ооси.	
Engine Running		





#### ATTACHMENT III PAGE 4 OF 20 **SAFETY RECALL 19S54**



## **FIGURE 4**

IDS-118.06		o x	
	Valve Activation		
		_	
Deprese th	brake nodel and HOLD Smith		
Depress th	brake pedal and HOLD minity.		
1			1000
		4	17291

## **FIGURE 5**



CPR © 2021 FORD MOTOR COMPANY DEARBORN, MICHIGAN 48121 02/2021

**NOTE:** Brake pedal must be depresed when prompted to complete the IDS routine, **if brake pedal is not depressed** you will recieve a message prompting you to do so. See Figure 6.

NOTE: If brake pedal is depressed properly, Figure 6 will not apply.





**FIGURE 7** 



#### ATTACHMENT III PAGE 6 OF 20 SAFETY RECALL 19S54

IDS-118.06			- • ×
• Did you feel a drop/move in the bra	ke pedal?		
			_
NO		YES	

## **FIGURE 8**

IDS-118.06	- a ×
Valve Activation	
Deprese the broke model and HOLD French	
Depress the brake pedal and HOLD firmly.	





## **INSPECTION RESULTS**

1. Did the HCU pass inspection after the IDS routine was performed?

HCU Passes inspection - Proceed to Valve Activation PASSES IDS Routine, on Page 9. HCU Replacement Not Required. HCU DOES NOT PASS inspection - Proceed to Valve Activation FAILS IDS Routine, on Page 14. This procedure will include the HCU Replacement procedure, and Brake Fluid Change Procedure.



## Valve Activation PASSES IDS Routine

**NOTE:** If the IDS routine ends with a Function Complete and Pass screen, See Figure 10 the brake system will need to have the DOT 3 brake fluid removed and replaced with DOT 4.

## **Brake Fluid Change Procedure**

1. With the vehicle in NEUTRAL, position it on a hoist. Please follow the Workshop Manual (WSM) procedures in section 100-02.

NOTE: Make sure the area around the master cylinder reservoir cap is clean and free of foreign material.

2. Remove the master cylinder reservoir cap. See Figure 12.



**FIGURE 12** 



- 3. Using a suitable Brake/Clutch System Pressure Bleeder/Filler, such as the Flo-Dynamics® BrakeMate JR<sup>™</sup> brake flush machine, install the bleeder adapter to the brake master cylinder reservoir and attach the bleeder tank hose to the fitting on the adapter.
- **NOTE:** When using a suitable Brake/Clutch System Pressure Bleeder/Filler ensure that you are using the correct adapter cap. The cap should fit tight/snug on the brake master cylinder reservoir. To ensure a proper fit to the brake master cylinder while using the power bleeder, it is recommend to use adapter BA04 SP available through NORCO INDUSTRIES©. See Figure 13.





- 4. Adjust the pressure on the pressure bleeder machine to 30-50 psi (207-345 kPa).
- **NOTE:** The front and rear wheel tire assemblies will remain on the vehicle while bleeding the brake calipers.
- **NOTE:** For manual transmission vehicles it is not necessary to bleed the clutch slave cylinder for this procedure.
- 5. Remove the brake caliper bleeder screw covers and attach fluid capture reservoirs to all four brake caliper bleeder screws. See Figure 14.



**FIGURE 14** 

- 6. Loosen all four caliper bleeder screws in the order indicated. See Figure 15. Allow approximately 10 fl oz (295.7 mL) to drain from each bleeder screw.
  - Once 10 fl oz (295.7 mL) of brake fluid has drained from each of the four caliper bleeder screws, tighten to 8 Nm (71 lb in).



- Turn off the pressure bleeding machine and remove the adapter cap from the master cylinder reservoir – The pressure bleeder will be used one last time for a final bleed after the next step (IDS Routine).
- 8. Verify the brake system connections are secure and functioning properly (master cylinder cap, bleeder screws, etc.) prior to performing the IDS Routine.

**NOTICE:** The Integrated Diagnostic Software (IDS) ABS service bleed procedure must be performed.

9. Select the "Tool Box" tab then "Chassis", "Braking" then "ABS Service Bleed". See Figure 16.

- 10. Follow the on screen prompts to complete the procedure.
- -----VMM Applications VCMM Applications Self Test DataLogger Module Programming Network Test VDR VCI-CFR Body Braking ABS Service Bleed Chassis Electrical Valve Activation Powertrain 1729V
- Using IDS perform the ABS service bleed a total of TEN times.

	- D ×	4.5
		₽.
	Operator Action	
<ul> <li>Before continuing refer to workshop m</li> <li>Prepare vehicle for test.</li> <li>Turn Ignition on.</li> <li>Depress the brake pedal and HOLD.</li> </ul>	anual and complete all necessary steps before starting test	
1		1729W
	EIGUDE 17	

#### ATTACHMENT III PAGE 13 OF 20 SAFETY RECALL 19S54



## **FIGURE 18**

- 11. Repeat the "Brake Fluid Change Procedure" (Steps 1 through 6, above), while bleeding an additional 2 to 3 oz. from each bleeder screw.
  - It is not necessary to perform the ABS service bleed during the secondary bleed.
- 12. Adjust the brake fluid level in the master cylinder reservoir to the "Max" line.
- 13. Replace master cylinder reservoir cap with new DOT 4 cap.
- 14. Reassemble the vehicle and ensure the vehicle is secure by reversing the removal procedure.

IMPORTANT NOTE: Federal law prohibits selling motor vehicle parts or components that are under safety, compliance, or emissions recall. Unless a part is requested to be returned to Ford, all parts replaced under this FSA must be scrapped in accordance with all applicable local, state and federal environmental protection and hazardous material regulations. Refer to the Parts Retention, Return, & Scrapping section of the FSA dealer bulletin for further information.



## Valve Activation DOES NOT PASS IDS Routine

**NOTE:** If the IDS routine ends with a Replace ABS HCU screen, See Figure 11. Documents will be required to be submitted to the SSSC prior to HCU Replacement.

## **Required Submission for HCU Replacement Approval**

1. Send the following pictures to Special Service Support Center (SSSC) via the SSSC Web Contact Site:

- One picture of the odometer
- One picture of the Vehicle Certification (VC) Label showing the Vehicle Identification Number (VIN).
- IDS Log file. See Figure 19 and 20.
- **NOTE:** All IDS session files should be saved, requests will be denied if they are not available upon request. Dealers may also be requested to upload IDS session files to the Ford Technical Hotline server before SSSC approval is provided.

#### **IDS Log File**

🔮 🛥 🌮		
	Select Option	
Hold (saves recordings)		
Complete (deletes recordi	ngs).	
• Delete (deletes session).		
	Complete	172





		SAFETY	ATTACHM PAGE 15 RECALL	IEN 5 O . 19
		<b>D</b>		1
Lo	ng Viewer - Technician View (Full Diagnostic)			
S S S S S S S S S S S S S S S S S S S	ystem : oftware version : IDS-118.06 elect Option lodd (saves recordings). omplete (deletes recordings). elete (deletes session). /ehicle: Milan Engine Type: DURATEC-HE / I4 Capacity: 2.3L Transmission: Manual Fuel Type: Gasoline Emission level: 50 State Emission Model Year: 2008 (MY) Ddometer: 302387. VIN): #########8R665658 trategy : ICDX3 ilename: ICDX3M3 lodule Part Number : 8E5AVB	× 💷		
0	iptional equipment Modules - Fail - (4X4) ABS) Part Number = 7E5C_2C219_AA			
	Complete		1729T	
2. Proceed	FIGURE 20 to HCU Replacement, after approval is given by the SSSC.			J
WARNING:	Do not use any fluid other than clean brake fluid meeting manufacturer's sp Additionally, do not use brake fluid that has been previously drained. Follow instructions will help prevent system contamination, brake component dam and the risk of serious personal injury.	ecificatio ving these age	n. Ə	

- WARNING: Carefully read cautionary information on product label. For EMERGENCY MEDICAL INFORMATION seek medical advice. In the USA or Canada on Ford/Motorcraft products call: 1-800-959-3673. For additional information, consult the product Material Safety Data Sheet (MSDS) if available. Failure to follow these instructions may result in serious personal injury.
  - **NOTICE:** Brake fluid is harmful to painted and plastic surfaces. If brake fluid is spilled onto a painted or plastic surface, immediately wash it with water.
  - 1. Perform a Road Test to determine the brake pedal condition. Note the firm or spongy condition upon inspection.
  - 2. Remove the condenser-to-evaporator line and compressor manifold and tube bracket bolts.
    - To install, tighten to 6 Nm (53 lb-in).
  - 3. Position the engine coolant degas bottle aside.
    - 1. If equipped, detach the wiring harness retainer from the degas bottle.
    - 2. Remove the bolt.
      - To install, tighten to 9 Nm (80 lb-in).
    - 3. Remove the nut.
      - To install, tighten to 9 Nm (80 lb-in).
  - **NOTE:** It is not necessary to evacuate, recover and remove the Air Conditioning (A/C) lines for this procedure.



CPR © 2021 FORD MOTOR COMPANY DEARBORN, MICHIGAN 48121 02/2021

#### ATTACHMENT III PAGE 16 OF 20 SAFETY RECALL 19S54

- 4. Disconnect the ABS module electrical connector.
- 5. Disconnect the brake tube fittings.
  - To install:
    - tighten the front and rear brake tube fittings to 20 Nm (177 lb-in).
    - tighten the master cylinder brake tube fittings to 27 Nm (20 lb-ft).
- 6. Remove the HCU bracket-to-HCU bolt.
  - To install, tighten to 9 Nm (80 lb-in).
- NOTE: Due to rust and corrosion the HCU bracket-to-HCU bolt and the HCU may be difficult to remove.
- 7. Remove the HCU.
- **NOTE:** It is not necessary to remove the HCU bracket from vehicle to complete this procedure.
- **NOTE:** Make sure the HCU and ABS module are clean and free of any brake fluid or foreign material before separating the components.
- 8. Transfer the ABS module and the two HCU to bracket grommet securement studs to the *new* HCU Valve Body.
- 9. To install the HCU, reverse the removal procedure.
- 10. Follow bleed procedure to remove DOT 3 from braking system and replace with DOT 4.
- **NOTE:** For manual transmission vehicles it is not necessary to bleed the clutch slave cylinder for this procedure.



## Brake Fluid Change Procedure

1. With the vehicle in NEUTRAL, position it on a hoist. Please follow the Workshop Manual (WSM) procedures in section 100-02.

NOTE: Make sure the area around the master cylinder reservoir cap is clean and free of foreign material.

2. Remove the master cylinder reservoir cap. See Figure 21.



**FIGURE 21** 

- 3. Using a suitable Brake/Clutch System Pressure Bleeder/Filler, such as the Flo-Dynamics® BrakeMate JR<sup>™</sup> brake flush machine, install the bleeder adapter to the brake master cylinder reservoir and attach the bleeder tank hose to the fitting on the adapter.
- **NOTE:** When using a suitable Brake/Clutch System Pressure Bleeder/Filler ensure that you are using the correct adapter cap. The cap should fit tight/snug on the brake master cylinder reservoir. To ensure a proper fit to the brake master cylinder while using the power bleeder, it is recommend to use adapter BA04 SP available through NORCO INDUSTRIES©. See Figure 22.



- 4. Adjust the pressure on the pressure bleeder machine to 30-50 psi (207-345 kPa).
- **NOTE:** The front and rear wheel tire assemblies will remain on the vehicle while bleeding the brake calipers.
- 5. Remove the brake caliper bleeder screw covers and attach fluid capture reservoirs to all four brake caliper bleeder screws. See Figure 23.



**FIGURE 23** 

- 6. Loosen all four caliper bleeder screws in the order indicated. See Figure 24. Allow approximately 10 fl oz (295.7 mL) to drain from each bleeder screw.
  - Once 10 fl oz (295.7 mL) of brake fluid has drained from each of the four caliper bleeder screws, tighten to 8 Nm (71 lb in).



1729V

- Turn off the pressure bleeding machine and remove the adapter cap from the master cylinder reservoir – The pressure bleeder will be used one last time for a final bleed after the next step (IDS Routine).
- 8. Verify the brake system connections are secure and functioning properly (master cylinder cap, bleeder screws, etc.) prior to performing the IDS Routine.

NOTICE: The Integrated Diagnostic Software (IDS) ABS service bleed procedure must be performed.

9. Select the "Tool Box" tab then "Chassis", "Braking" then "ABS Service Bleed". See Figure 25.

- 10. Follow the on screen prompts to complete the procedure.
- VIMM Applications VCMM Applications Self Test DataLogger Module Programming Network Test VDR VCLCFR Body Chassis Braking ABS Service Bleed Valve Activation Powertrain
- Using IDS perform the ABS service bleed a total of FIVE times.

■3 ID5-118.06 - □	×	
	3	
Operator Action		
<ul> <li>Before continuing refer to workshop manual and complete all necessary steps before starting test</li> <li>Prepare vehicle for test.</li> <li>Turn Ignition on.</li> <li>Depress the brake pedal and HOLD.</li> </ul>		
		1729W
FIGURE 26		

#### ATTACHMENT III PAGE 20 OF 20 SAFETY RECALL 19S54



- 11. Repeat the "Brake Fluid Change Procedure" (Steps 1 through 6, above), while bleeding an additional 2 to 3 oz. from each bleeder screw.
  - It is not necessary to perform the ABS service bleed during the secondary bleed.
- 12. Adjust the brake fluid level in the master cylinder reservoir to the "Max" line.
- 13. Reassemble the vehicle and ensure the vehicle is secure by reversing the removal procedure.
- 14. Replace master cylinder reservoir cap with new DOT 4 cap.
- 15. Perform a Road Test to see if the brake pedal improves or returns to initial condition.
- 16. If the condition of the pedal is not improved or worsened, contact the SSSC for further direction and approval.
  - Low or spongy brake pedal.
  - Slow or incomplete brake pedal return.
- IMPORTANT NOTE: Federal law prohibits selling motor vehicle parts or components that are under safety, compliance, or emissions recall. Unless a part is requested to be returned to Ford, all parts replaced under this FSA must be scrapped in accordance with all applicable local, state and federal environmental protection and hazardous material regulations. Refer to the Parts Retention, Return, & Scrapping section of the FSA dealer bulletin for further information.



#### Ford Motor Company Recall Reimbursement Plan for 19S54

Ford and Lincoln dealers are in the best position to quickly and efficiently process reimbursement requests. However, federal legislation requires all motor vehicle manufacturers to establish processes through which customers may seek recall reimbursement directly from the manufacturer or from the dealers.

Regarding the specific reimbursement plan for Recall # 19S54, owners who have paid for service to remedy the defect or noncompliance must have had that service performed prior to April 15, 2021. After this date, if repairs related to this recall are performed by a non-Ford repair facility in an emergency situation, customers must submit any refund requests through their dealership. As required by this federal regulation, Ford Motor Company submitted the details of its latest General Recall Reimbursement Plan in a letter to the National Highway Traffic Safety Administration (NHTSA) in February 2019. The following is the text of that letter and the Plan:

# General Recall Reimbursement Plan

(As submitted to the NHTSA)

Pursuant to the requirements set forth in 49 CFR Part 573 and Part 577 of the Code of Federal Regulations, Ford Motor Company (Ford) is submitting required information pertaining to our general reimbursement plan for the cost of remedies paid for by vehicle owners before they are notified of a related safety recall.

Set forth below is Ford's general plan to reimburse owners and purchasers for costs incurred for remedies in advance of notification of potential safely-related defects or noncompliances pursuant to Part 573.6 (c)(8)(i). This plan has not changed since our February 20, 2019 submission.

#### **Reimbursement Notification**

Ford's notice to a vehicle owner in accordance with 49 CFR Part 577 will indicate that Ford is offering a refund if the owner paid to have service to remedy the defect or noncompliance prior to a specified ending date. In accordance with Part 573.13 (c)(2), this ending date will be defined as a minimum of ten calendar days after the date on which Ford mailed the last of its Part 577 notifications to owners, and will be indicated in the specific reimbursement plan available to owners for an individual recall. This notice will direct owners to seek eligible reimbursement through authorized dealers or, at their option, directly through Ford at the following address:

Ford Motor Company P.O. Box 6251 Dearborn, MI 48121-6251

Ford notes that this rule allows for the identification of a beginning date for reimbursement eligibility. Under the rule, an owner who paid to remedy the defect or noncompliance prior to the identified beginning date would not be eligible for reimbursement. Ford generally has not established such a beginning date for reimbursement eligibility and does not presently anticipate changing this general policy. However, in any case where Ford determines a beginning date is appropriate, Ford will indicate that date in the owner notice. As permitted by 577.11(e), Ford may not include a reimbursement notification when all vehicles are well within the warranty period, subject to approval by the agency.

## Costs to be Reimbursed

For vehicles, reimbursement will not be less than the lesser of:

- The amount paid by the owner for the remedy that specifically addressed and was reasonably necessary to correct the defect or noncompliance that is the subject of the recall, or
- The cost of parts for the remedy (to be no more than the manufacturer's list retail price for authorized part(s), plus associated labor at local labor rates, miscellaneous fees (such as disposal of waste) and taxes.

For replacement equipment, reimbursement will be the amount paid by the owner for the replacement item (limited by the amount of the retail list price of the defective or noncompliant item that was replaced, plus taxes, where the brand or model purchased by the owner was different than the brand or model that was the subject of the recall). If the item of motor vehicle equipment was repaired, the reimbursement provisions identified above for vehicles will apply.

Ford notes that costs incurred by the owner within the period during which Ford's original or extended warranty would have provided for a free repair of the problem will not be eligible for reimbursement, as provided by Part 573.13 (d)(1).

#### Entities Authorized to Provide Reimbursement

Ford will continue to use authorized dealers to reimburse owners under the specific reimbursement plans for a particular recall, and will encourage owners to pursue requests for reimbursement directly through dealers to expedite reimbursement. Ford will also provide a mailing address to which customers can, at their option, send requests for reimbursement directly to Ford, as previously noted. Requests for reimbursement sent directly to Ford may take up to 60 days to process. Whether the owner chooses to pursue reimbursement requests through a dealer or directly through Ford, the owner will be directed to submit the required documentation, upon which reimbursement eligibility will be determined.

#### **Required Documentation**

The reimbursement determination will depend upon the information provided by the customer. Consistent with Part 573.13 (d)(4) the following information must be submitted:

- Claimant name and address
- Vehicle make, model, and model year
- Vehicle identification number (VIN) and, for replacement equipment, a description of such equipment or, for tires, the model, size and TIN (DOT code)
- Identification of the recall number (either the Ford recall number or the NHTSA recall number)
- Identification of the owner of the recalled vehicle at the time that the pre-notification remedy was obtained
- An original receipt for the pre-notification remedy that includes a breakdown of the amount for parts, labor, other costs and taxes, including costs for the replacement item. Where the receipt covers work other than to address the recall or noncompliance, Ford may require the claimant to separately identify costs that are eligible for reimbursement.
- If the remedy was obtained during the warranty period, documentation indicating that the warranty was not honored or the warranty repair did not correct the problem related to the recall.

Failure to submit all of the above information may result in denial of the reimbursement request.

## Additional Information

The Part 577 required owner notice will provide a toll-free telephone number through which specific information about the reimbursement plan can be requested from Ford. This general reimbursement plan will be incorporated into notifications pursuant to Part 573.6 by reference. Information specific to an individual recall also may be incorporated into the Part 573.6 notification.