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December 13, 2017

TO: All U.S. Ford and Lincoln Dealers

SUBJECT: Safety Recall 17S09 – Supplement #1 Certain 2013-2014 Fusion, 2013-2015 Transit Connect, 2014 Escape, and 2014-2015 Fiesta ST Vehicles Equipped with a 1.6L EcoBoost Engine Coolant Level Sensor System Installation

REF: Safety Recall 17S09 Dated March 28, 2017

New! <u>REASON FOR THIS SUPPLEMENT</u>

• Service Action Update: Parts are available to complete this safety recall on Escape vehicles. A Dealer Bulletin Supplement will be provided to dealers in January 2018 when it is anticipated that parts ordering information and repair instructions will be available to complete this safety recall on Transit Connect and Fusion vehicles and again in February 2018 for Fiesta ST vehicles.

AFFECTED VEHICLES

Vehicle	Model Year	Assembly Plant	Build Dates
Escape	2014	Louisville	February 12, 2013 through September 2, 2014
Fiesta ST	2014-2015	Cuautitlan	January 22, 2013 through May 27, 2014
Fusion	2013-2014	Hermosillo	February 15, 2012 through June 6, 2014
Transit Connect	2013-2015	Valencia	June 13, 2013 through December 14, 2014

Affected vehicles are identified in OASIS and FSA VIN Lists.

REASON FOR THIS SAFETY RECALL

In the affected vehicles, localized overheating of the engine cylinder head may cause the cylinder head to crack, causing a pressurized oil leak that may result in a fire in the engine compartment.

New! <u>SERVICE ACTION</u>

Escape Vehicles:

Parts ordering information and repair instructions are now available to complete this safety recall. Dealers are to perform repairs following the technical information (Attachment IV) that include enhancements to the engine cooling and control systems. This service must be performed on all affected vehicles at no charge to the vehicle owner.

A small number of Escape vehicles will require unique PCM programming instructions. Please refer to Attachment VI prior to carrying out any repairs, as certain VINs will require a contact to the Special Service Support Center (SSSC) for additional repair instructions.

Prepare your dealership to efficiently perform the repair:

- Review the repair instructions, which include 11 modular sub-procedures as identified in the Escape technical information (Attachment IV).
- Watch the instructional videos and become familiar with the repair instructions and parts.

Transit Connect, Fusion and Fiesta ST Vehicles:

Service parts and repair procedures are not currently available to address this safety recall. A Dealer Bulletin Supplement will be provided to dealers in January 2018 when it is anticipated that parts ordering information and repair instructions will be available to complete this recall for Transit Connect and Fusion vehicles and again in February 2018 for Fiesta ST vehicles.

In the interim period, some customers may arrive at your dealership if their vehicle exhibits a coolant leak, overheating, or frequently needs coolant added. If the vehicle arrives with any of these symptoms, dealers are to use the *Transit Connect, Fusion and Fiesta ST* technical information in Attachment III to perform a cooling system pressure test and repairs, as necessary.

OWNER NOTIFICATION MAILING SCHEDULE

Owners of record were notified of this safety recall via first-class mail the week of April 24, 2017.

Owners of Escape vehicles will be notified of the final repair the week of January 1, 2018.

For all others, in the interim period, dealers are to address customer symptoms described in the Service Action, 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.

New! ATTACHMENTS

Attachment I:	Administrative Information
Attachment II:	Labor Allowances and Parts Ordering Information
Attachment III:	Technical Information (Transit Connect, Fusion and Fiesta ST Interim Repairs)
Attachment IV:	Technical Information (Escape)
Attachment V:	Inspection / Check Sheet
Attachment VI:	Unique Vehicle Repairs
Attachment VII:	Instructional Video Links
Owner Notification	Letters
Recall Reimbursen	nent 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,

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Michael A. Berardi

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Safety Recall 17S09 – Supplement #1

Certain 2013-2014 Fusion, 2013-2015 Transit Connect, 2014 Escape, and 2014-2015 Fiesta ST Vehicles Equipped with a 1.6L EcoBoost Engine Coolant Level Sensor System Installation

OASIS ACTIVATION

OASIS was activated on March 28, 2017.

New! FSA VIN LISTS ACTIVATION

FSA VIN Lists were made available through <u>https://web.fsavinlists.dealerconnection.com</u> on March 28, 2017. Owner names and addresses will be available by January 12, 2018 for Escape vehicle owners and in the first quarter of 2018 for Transit Connect, Fusion and Fiesta ST vehicle owners.

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.

New! SOLD VEHICLES

Escape Vehicles:

- Owners of affected vehicles will be directed to dealers for repairs.
- 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.

Transit Connect, Fusion and Fiesta ST Vehicles:

Until repair instructions and parts ordering information are available to complete this recall, owners of affected vehicles will be directed to dealers <u>ONLY</u> if their vehicle exhibits a coolant leak, overheating, or frequently needs coolant added.

New! <u>STOCK VEHICLES</u>

Escape Vehicles:

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

DEALER-OPERATED RENTAL VEHICLES

A new law prohibits a Rental Company from selling, renting or leasing vehicles subject to a safety or compliance recall. This could impact dealer-operated rental fleets of 35 vehicles or more, including FRAC, LRAC, and DDR vehicles. Please see EFC04833 for details and consult your legal counsel for legal advice.

TITLE BRANDED / SALVAGED VEHICLES

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

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Safety Recall 17S09 – Supplement #1

Certain 2013-2014 Fusion, 2013-2015 Transit Connect, 2014 Escape, and 2014-2015 Fiesta ST Vehicles Equipped with a 1.6L EcoBoost Engine Coolant Level Sensor System Installation

ADDITIONAL REPAIR (LABOR TIME AND/OR PARTS)

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

- For vehicles within new vehicle bumper-to-bumper warranty coverage, follow existing warranty and policy guidelines for related damage claims. No SSSC approval is required for these vehicles:
 - Ford vehicles 3 years or 36,000 miles
- For vehicles outside new vehicle bumper-to-bumper warranty coverage, dealers are preapproved to claim up to \$500 in related damage for labor and/or parts.
 - For claims exceeding the pre-approved amount, submit an Approval Request to the SSSC Web Contact Site prior to completing the repair.

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.
- 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 an engine coolant leak or overheat.

RENTAL VEHICLES

Dealers are pre-approved for up to 1 day for a rental vehicle. Follow Extended Service Plan (ESP) guidelines for dollar amounts. Rentals will only be reimbursed for the day(s) the vehicle is at the dealership for part replacement. Prior approval for more than 1 rental day is required from the SSSC via the SSSC Web Contact Site.

Safety Recall 17S09 – Supplement #1

Certain 2013-2014 Fusion, 2013-2015 Transit Connect, 2014 Escape, and 2014-2015 Fiesta ST Vehicles Equipped with a 1.6L EcoBoost Engine Coolant Level Sensor System Installation

New! CLAIMS PREPARATION AND SUBMISSION

- Enter claims using One Warranty Solution (OWS).
- When entering claims in DMS software, select claim type 31: Field Service Action. The FSA number 17S09 is the sub code.
- Additional labor and/or parts must be claimed as related damage on a separate repair line from the FSA.
- Dealers are authorized to claim up to \$500 of additional labor and/or parts <u>without</u> contacting the SSSC for approval. Follow the Actual Time Usage Guidelines and Service Management Responsibilities as identified in the Warranty and Policy Manual.
- For rental vehicle claiming, follow Extended Service Plan (ESP) guidelines for dollar amounts. Enter the total amount of the rental expense under Miscellaneous Expense code RENTAL.
- Submit refunds on a separate repair line.
 - Program Code: 17S09
- 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.
- Claims for Escape interim repairs under labor operation code 17S09XX must have a repair date on or before December 13, 2017 to be eligible for payment.

ATTACHMENT II

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Safety Recall 17S09 – Supplement #1

Certain 2013-2014 Fusion, 2013-2015 Transit Connect, 2014 Escape, and 2014-2015 Fiesta ST Vehicles Equipped with a 1.6L EcoBoost Engine Coolant Level Sensor System Installation

New! LABOR ALLOWANCES

Escape Vehicles:

Description	Labor Operation	Labor Time
Install Coolant Level Sensor System - Escape	17S09B	3.8 Hours
Powertrain assembly mount neutralizing - Claim as needed Use in combination with 17S09B	17\$09D	0.2 Hours

Transit Connect, Fusion and Fiesta ST Vehicles:

NOTE: This is an interim labor operation and will <u>NOT</u> close the safety recall.

Description	Labor Operation	Labor Time
Perform cooling system pressure test and add coolant as needed - Escape (must have a repair date on/before December 13, 2017 to be eligible for payment)	17S09XX	0.6 Hours
Perform cooling system pressure test and add coolant as needed - Fiesta ST and Fusion	17S09YY	0.3 Hours
Perform cooling system pressure test and add coolant as needed - Transit Connect	17S09ZZ	0.4 Hours

New! PARTS REQUIREMENTS / ORDERING INFORMATION

Escape Vehicles Built on or before August 23, 2014: Note: These vehicles use a 6-Pin Wiring Harness

Part Number	Description	Order Quantity	Claim Quantity
GV6Z-9P449-E	Coolant Level Sensor Kit	1	1
GV6Z-9P449-A	Degas Bottle and Cap Kit	1	1
EV4Z-14A411-F	6-Pin EPAS Connector Coolant Stand-pipe Wire Harness	1	1
VC-3DIL-B (US) CVC-3DIL-B (Canada)	Motorcraft Orange Antifreeze / Coolant Prediluted	1 Gallon	1 Gallon

Escape Vehicles Built on or after August 24, 2014: Note: These vehicles use a 3-Pin Wiring Harness.

Part Number	Description	Order Quantity	Claim Quantity
GV6Z-9P449-E	Coolant Level Sensor Kit	1	1
GV6Z-9P449-A	Degas Bottle and Cap Kit	1	1
EV4Z-14A411-H	3-Pin EPAS Connector Coolant Stand-pipe Wire Harness	1	1
VC-3DIL-B (US) CVC-3DIL-B (Canada)	Motorcraft Orange Antifreeze / Coolant Prediluted	1 Gallon	1 Gallon

ATTACHMENT II

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Safety Recall 17S09 – Supplement #1

Certain 2013-2014 Fusion, 2013-2015 Transit Connect, 2014 Escape, and 2014-2015 Fiesta ST Vehicles Equipped with a 1.6L EcoBoost Engine Coolant Level Sensor System Installation

New! PARTS REQUIREMENTS / ORDERING INFORMATION (Continued)

Transit Connect, Fusion and Fiesta ST Vehicles:

Part Number	Description	Order Quantity	Claim Quantity
VC-3DIL-B (US) CVC-3DIL-B (Canada)	Motorcraft Orange Antifreeze /	Up to 1 Gallon	Up to 1 Gallon

Less than 5% of the affected vehicle population is expected to require an interim repair for an engine coolant leak or overheat.

All Vehicles:

The DOR/COR number for this recall is 51077.

Order your parts through normal order processing channels. 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 2013-2014 FUSION, 2013-2015 TRANSIT CONNECT, 2014 ESCAPE, AND 2014-2015 FIESTA ST VEHICLES EQUIPPED WITH A 1.6L ECOBOOST ENGINE — COOLANT LEVEL SENSOR SYSTEM INSTALLATION

WEWL FUSION, TRANSIT CONNECT AND FIESTA ST — INTERIM REPAIR

NEW! OVERVIEW

In the affected vehicles, localized overheating of the engine cylinder head may cause the cylinder head to crack, causing a pressurized oil leak that may result in a fire in the engine compartment. Service parts and repair procedures are not currently available to address this safety recall. A Dealer Bulletin Supplement will be provided to dealers in January 2018 when it is anticipated that parts ordering information and repair instructions will be available to complete this recall for Transit Connect and Fusion vehicles and again in February 2018 for Fiesta ST vehicles.

In the interim period, some customers may arrive at your dealership if their vehicle exhibits a coolant leak, overheating, or frequently needs coolant added. If the vehicle arrives with any of these symptoms, dealers are to use this Interim Service Action to perform a cooling system pressure test and repairs, as necessary.

SERVICE PROCEDURE

Interim Service Action

NOTE: These are interim repairs and will NOT close the safety recall.

1. Perform a cooling system pressure test per Workshop Manual Section 303-03_Diagnosis and Testing.

- If the cooling system pressure does not drop, add coolant, as necessary, and release the vehicle.
- If the cooling system pressure drops, perform required repairs and add coolant, as necessary.



CERTAIN 2013-2014 FUSION, 2013-2015 TRANSIT CONNECT, 2014 ESCAPE, AND 2014-2015 FIESTA ST VEHICLES EQUIPPED WITH A 1.6L ECOBOOST ENGINE — COOLANT LEVEL SENSOR SYSTEM INSTALLATION

2014 ESCAPE TECHNICAL INFORMATION

OVERVIEW

In the affected vehicles, localized overheating of the engine cylinder head may cause the cylinder head to crack, causing a pressurized oil leak that may result in a fire in the engine compartment.

Escape Vehicles:

Service parts and repair procedures are now available to address this safety recall. Dealers are to perform repairs following the technical information in this document that include enhancements to the engine cooling and control systems. This service must be performed on all affected vehicles at no charge to the vehicle owner.

IMPORTANT! A small number of Escape vehicles will require unique PCM programming instructions. Please refer to Attachment VI prior to performing any repairs, as certain VINs will require a contact to the Special Service Support Center (SSSC) for additional repair instructions.

Transit Connect, Fusion and Fiesta ST Vehicles:

Service parts and repair procedures are not currently available to address this safety recall. A Dealer Bulletin Supplement will be provided to dealers in the January 2018 when it is anticipated that parts ordering information and repair instructions will be available to complete this recall for Transit Connect and Fusion vehicles and again in February 2018 for Fiesta ST vehicles. In the interim, please refer to Attachment III for an interim Service Action on these vehicles.

Due to the complexity of this repair, the following considerations have been made to help the repair procedure go as smoothly as possible:

- Repair procedures have been divided alphabetically into multiple separate procedures.
- Parts have been packaged into kits.
- Each procedure includes:
 - Overview
 - List and photo of the parts required
 - List of unique tools needed
 - Service tips to help complete the repair
- **NOTE:** Please read this procedure in its entirety, prior to performing repairs. Additionally, instructional videos have been developed to assist with the repair. Please refer to Attachment VII: Instructional Video Links to view the videos.



Recommended Tools:

General Tools	General Equipment
1/4" Drive Ratchet (Power And Hand Tool)	Floor Jack
1/4" Drive 7, 8, and 10 mm Shallow Sockets	Wood Block
1/4" Drive 10 mm, 12 mm Deep Sockets	Coolant Pressure Tester
1/4" Drive T-25 And T-30 Torx Bit Sockets	Drain Pan
1/4" Drive 6 in (152 mm) Extension	Battery Charger
3/8" Drive Ratchet (Power And Hand Tool)	Extension Cord
3/8" Drive 10 mm, 15 mm Swivel Impact Sockets	
3/8" Drive 6 in (152 mm) Extension	Special Tools
3/8" Drive 10 mm, 13 mm Deep Impact Sockets	Hydrometer/Refractometer
1/2" Drive Ratchet Power Tool And Hand Tool	Vacuum Tester/Re-filler
1/2" Drive 15 mm Shallow Impact Socket	IDS and VCM II
1/2" Drive Impact Swivel	
1/2" Drive Impact 6 in (152 mm) Extension	
1/2" Drive 9 in (228 mm) Impact Extension	
1/2" Drive Torque Wrench	
1/4" And 3/8" Drive Torque Wrench	
Needle Nose Vise Grip Pliers	
Needle Nose Pliers	
13 mm Wrench	
Plastic Trim Tools	
Side Cutters	
Coolant Hose Hook Tool	
Pocket Screwdriver	
Inspection Mirror	
Drill	
5.5 mm and 6.2 mm Drill Bits	
Tape Measure/Ruler	
Paint Stick/Pen	
De-burr Tool	
Pick Tool 12 in (304 mm) with 90 Degree Bend	
2 Jaw Puller	
Cable Operated Hose Clamp Pliers	
Scissors	



SERVICE PROCEDURE

Procedure A - Initial Disassembly and Preparation for Inspection

OVERVIEW: This procedure details the components to be removed to enable initial vehicle inspection.

PARTS / SUPPLIES REQUIRED: None

UNIQUE TOOL REQUIREMENTS: None

SERVICE TIPS: Please note the following:

- The Inspection / Check Sheet (Attachment V) must be printed and started during "Procedure A".
- The air cleaner, mass air flow sensor and air intake tube are removed as an assembly.
- Cover the turbocharger inlet opening to prevent dropping any parts or debris into the turbocharger while the turbocharger inlet pipe is off.
- 1. Print a copy of the Inspection / Check Sheet (Attachment V), to record vehicle information and inspection/repair information for the vehicle. The Inspection / Check Sheet is to be attached/filed with the recall repair order following completion, it does not need to be provided to Ford at this time.
- 2. Fill out top of Inspection / Check Sheet including:
 - VIN
 - Technician ID
 - Repair Order Number
 - Repair Date
 - Vehicle Mileage
 - Vehicle Build Date
 - Open Field Service Actions

- Example of a second secon
- 3. Using OASIS, document vehicle build date on the Inspection / Check Sheet.
- 4. With the vehicle in NEUTRAL, position it on a hoist. Please follow the Workshop Manual (WSM) procedures in Section 100-02.
- 5. Using IDS/scan tool, retrieve and record DTCs on the Inspection / Check Sheet.
 - Any DTCs recorded will be used later in this procedure.
- 6. Remove the engine appearance cover.
- 7. Remove the cowl panel. Please follow the WSM procedures in Section 501-02.



- NOTICE: When working with liquid or vapor tube connectors, make sure to use compressed air to remove any foreign material from the connector retaining clip area before separating from the tube or damage to the tube or connector retaining clip can occur. Apply clean engine oil to the end of the tube before inserting the tube into the connector.
- NOTICE: Whenever turbocharger air intake system components are removed, always cover open ports to protect from debris. It is important that no foreign material enter the system. The turbocharger compressor vanes are susceptible to damage from even small particles. All components should be inspected and cleaned, if necessary, prior to installation or reassembly.
- 8. Disconnect the EVAP line quick connect coupling from the air intake tube center section. Set the clip aside for re-installation to prevent it from falling into the engine compartment. See Figure A1.
- 9. Loosen the clamp and disconnect the air intake tube from the turbocharger inlet pipe. See Figure A1.



FIGURE A1



- NOTICE: Whenever turbocharger air intake system components are removed, always cover open ports to protect from debris. It is important that no foreign material enter the system. The turbocharger compressor vanes are susceptible to damage from even small particles. All components should be inspected and cleaned, if necessary, prior to installation or reassembly.
- **NOTE:** The air cleaner assembly is removed from the vehicle with the mass air flow sensor and air intake tube attached.
- 10. Remove the air cleaner assembly. See Figure A2.
 - a. Disconnect the mass air flow sensor electrical connector.
 - b. Release the fresh air intake tube flap.
 - c. Detach the mass air flow sensor wire harness retainer from the air cleaner assembly.
 - d. Lift upward to disengage the two retaining grommets and remove the air cleaner assembly.



FIGURE A2

11. Remove the battery tray. Please follow the WSM procedures in Section 414-01.



- NOTICE: Whenever turbocharger air intake system components are removed, always cover open ports to protect from debris. It is important that no foreign material enter the system. The turbocharger compressor vanes are susceptible to damage from even small particles. All components should be inspected and cleaned, if necessary, prior to installation or reassembly.
- 12. Disconnect the PCV tube from the turbocharger inlet pipe. Remove the retainers and loosen the clamp at the turbocharger. Remove the turbocharger inlet pipe. See Figure A3.



FIGURE A3

- 13. Remove the rear engine mount bolt and take note of the bolt hole location. The bolt hole must be centered with the engine mount hole to allow for proper installation of the coolant stand-pipe bracket within Procedure J.
 - If the bolt hole is centered with the engine mount, then powertrain assembly mount neutralizing <u>will not be required</u> within Procedure C.
 - If the hole is not centered, please carry out the powertrain assembly mount neutralizing when instructed in Procedure C. See Figure A4.



14. Remove the retainers and the front underbody air deflector. See Figure A5.



FIGURE A5

15. Detach the wire harness retainer from the front cover, disconnect the crankshaft position sensor, turbocharger wastegate regulating valve solenoid, and turbocharger bypass valve electrical connectors. See Figure A6.





Procedure B - Inspection / Check Sheet Completion

OVERVIEW: The Inspection must be completed and documented on the Inspection / Check Sheet. The inspection will check for obvious concerns that require correction with additional focus on cooling system concerns such as:

- Internal coolant leaks
- External coolant leaks
- Any DTC(s) that could indicate a recent engine overheat event or internal engine damage that may have resulted from a previous cooling system concern.

PARTS / SUPPLIES REQUIRED: None

UNIQUE TOOL REQUIREMENTS: Rotunda Cooling System Pressure Tester (STN12270) and adapter (Snap-On TA52, AST ASSFZ-47, Redline RDL95-0750 or equivalent).

SERVICE TIPS: Use standard Workshop Manual and PC/ED Diagnostics, if necessary, to diagnose any cooling system or misfire DTC(s) retrieved and for any coolant loss concerns.

- **NOTE:** Perform an underhood visual inspection for any obvious coolant, oil, transmission, or fuel leaks.
- **NOTE:** If any concerns are identified repair as related damage before proceeding. If the coolant pressure test identifies concerns with the degas bottle, turbocharger return tube, upper section of the degas bottle return hose, or quick connect T-fitting at the coolant shutoff solenoid valve; note the condition. These items will be replaced as part of this recall. Refer to Dealer Bulletin Attachment I, Related Damage, for related damage claiming.

Vehicle Inspection

1. Visually inspect the coolant level in the degas bottle.

- If the coolant level is visible in the degas bottle, proceed to Step 2.
- If the coolant level **is not** visible in the degas bottle, add coolant as necessary, and proceed to Step 2.

NOTE: Any gross loss of coolant must be identified and repaired prior to proceeding.

- 2. Remove the degas bottle cap.
- 3. Install a coolant pressure tester with adapter onto the degas bottle. Pressurize to 138 kPa (20 psi). Once stabilized, pressure should hold at 138 kPa (20 psi) for a minimum of 2 minutes.
 - If cooling system pressure does not hold for a minimum of 2 minutes, the source of pressure loss must be identified and repaired as necessary before proceeding.
- 4. Visually check for coolant leaks with the system under pressure.



- 5. Check the engine oil level to ensure it is within normal range, note if it is overfilled. Visually check for engine oil leaks at the rear surface of the cylinder head, above exhaust manifold, that may be the result of a crack in the cylinder head. See Figure B1.
 - If an oil leak is detected at the rear surface of the cylinder head, replace the complete cylinder head assembly before proceeding.
- NOTE: The turbocharger coolant tubes and exhaust manifold heat shield are removed for clarity.



FIGURE B1



- 6. DTCs If any of the DTCs listed below are present, note and identify the cause before proceeding.
 - If additional DTCs are present, diagnose and repair as required.
- **NOTE:** Diagnosis for any of the following DTCs may require reinstallation of the air intake components and battery. Perform diagnosis and repairs as necessary. Refer to Dealer Bulletin Attachment I, Related Damage, for related damage claiming.

Cooling System DTCs		
P0217	Engine Coolant Over Temperature Condition	
P0218	Transmission Fluid Over Temperature Condition	
P0219	Engine Over Speed Condition	
P1299	Cylinder Head Over Temperature Protection Active	
Engine Misfire DTCs		
P0300	Random Misfire Detected	
P030x	Cylinder X Misfire Detected	
P0313	Misfire Detected With Low Fuel	
P0316	Misfire Detected On Startup (First 1000 Revolutions)	

7. Note any concerns identified and repairs made on the Inspection / Check Sheet.



Procedure C - Battery Tray Modification

OVERVIEW: With the battery tray removed, four holes need to be drilled in the right side to allow mounting of wiring harness components that will be added to support coolant level monitoring. The battery is reinstalled to allow module communication for reprogramming while additional repairs are performed.

PARTS / SUPPLIES REQUIRED:

C. 6.2 MM FIR CLIP 5.	5 MM LOCATING TAB	B	8	1709AI

А	Connector Junction Box
В	Push Pin Retainers (2 ea.)
С	Wiring Harness Clip

UNIQUE TOOL REQUIREMENTS: 5.5 mm (7/32"), 6.2 mm (1/4") drill bits.

SERVICE TIPS: Remove the two (2) push pin retainers from the connector junction box, prior to installation. While installing the connector junction box ensure that the push pin retainers are installed in the proper orientation. See Figure C4.



1. NOTE: If a 6.2 mm drill bit is not readily available, use a 6 mm drill bit and ream the holes slightly to allow the push-pin retainers and wiring harness clip to fit snug.

Using the dimensions shown below, mark and drill the locations of the two (2) holes that are required for the *new* connector junction box, in the right side of the battery tray. See Figure C1.

- a. Position the *new* connector junction box on the forward right side of the battery tray, 10mm (3/8") down from the top edge of the battery tray. Using the *new* connector junction box as a template, mark the two (2) hole locations on the battery tray. See Figure C1.
- b. Remove the new connector junction box from the battery tray.
- c. Using a 6.2 mm (1/4") drill bit, drill the two marked locations on the battery tray.



FIGURE C1

2. Measure and mark the two hole locations on the battery tray for the *new* wire harness clip. See Figure C2.



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Using the appropriate size drill bit for the two (2) remaining marked locations on the battery tray, 5.5 mm (7/32") and 6.2 mm (1/4") as indicated in Figure C3, drill the two (2) holes. See Figure C3.



FIGURE C3

- 4. Deburr the four (4) previously drilled holes on the battery tray as necessary.
- Attach the *new* connector junction box to the battery tray using the two (2) *new* push pin retainers. Install the *new* push pin retainers so the heads of the retainers are on the <u>INSIDE</u> of the battery tray. See Figure C4.
- 6. Install the *new* wire harness clip onto the battery tray. The christmas tree portion of the *new* wire harness clip is to be installed into the larger of the two mounting holes. See Figure C4.





7. **NOTE**: This step is only required if the bolt hole is not centered with the engine mount hole. The bolt hole must be centered to allow for proper installation of the coolant stand-pipe bracket in Procedure J.

If required, perform the powertrain assembly mount neutralizing procedure, (reference Step 13 in Procedure A). Please follow the WSM procedures in Section 303-00.



FIGURE C5

- 8. Position the battery tray back into the vehicle and install the three (3) bolts. See Figure C6.
 - 11 Nm (97 lb-in).



Procedure D - Coolant Stand-pipe Wire Harness Installation

OVERVIEW: The coolant stand-pipe wire harness is partially installed in this procedure to complete the CAN Network connections which will allow module communication for reprogramming.

PARTS / SUPPLIES REQUIRED:



Α	6-Pin EPAS Connector Coolant Stand-pipe Wire Harness
В	3-Pin EPAS Connector Coolant Stand-pipe Wire Harness
С	Wire Harness Ground Bolt
D	Protective Foam Pad

UNIQUE TOOL REQUIREMENTS: None

SERVICE TIPS: None



- 1. Detach the retaining clip from the battery tray mounting bracket and disconnect the EPAS electrical connector. See Figure D1.
- 2. Remove and discard the retaining clip from the EPAS electrical connector. See Figure D1.



FIGURE D1

- 3. Install and connect the battery. For additional information, refer to WSM Section 414-01.
 - Do not reinstall the engine air cleaner assembly at this time. It will be installed in one of the following procedures.



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- 4. Install the coolant stand-pipe wiring harness. See Figure D2.
 - 1. Connect the electrical connector to the connector junction box on the battery tray.
 - 2. Connect and attach the electrical connectors to the white retaining clip that was previously installed on the battery tray.
 - 3. Connect and attach the coolant stand-pipe wiring harness electrical connector to the EPAS electrical connector.
 - 4. Pre-route the wiring harness. Using the clips to attach to the engine compartment wiring harness.



FIGURE D2

5. NOTICE: Ensure the junction box surface is clean and free of any dirt and debris prior to foam pad installation.

Apply foam pad over the connector junction box and electrical connector. See Figure D3.



FIGURE D3



6. NOTICE: Ensure the surface is clean and free of any dirt and debris prior to installing the *new* ground bolt.

Install the *new* coolant stand-pipe wire harness ground eyelet to the vehicle using the *new* wire harness ground bolt. See Figure D4.

• 12 Nm (106 lb-in).

NOTE: The new coolant stand-pipe wire harness is highlighted to show routing and connection points.



FIGURE D4

- 7. Position the stand-pipe wire harness aside. It will be routed/secured and connected later.
- 8. Install the transmission fluid heater coolant control valve to the battery tray and install the two (2) retainers. See Figure D5.



Procedure E - Instrument Panel Cluster (IPC) Reprogramming

OVERVIEW: The IPC software is being updated to coordinate cooling system improvements and instrument cluster messaging. IPC reprogramming can be performed while performing other repairs on the vehicle. The PCM must be reprogrammed during Procedure L after cooling system repairs and bleeding are completed.

PARTS / SUPPLIES REQUIRED: None

UNIQUE TOOL REQUIREMENTS:

- IDS with release 108.01 or higher
- Portable battery charger (10 to 20 amps)

SERVICE TIPS: Begin IPC reprogramming and continue to perform repairs during IPC reprogramming. Reprogramming times for the IPC can be significantly reduced by using a VCM II instead of a VCM.

Important Information for Module Programming

- **NOTE:** When programming or reprogramming a module, use the following basic checks to ensure programming completes without errors.
- Make sure the 12V battery is fully charged before carrying out the programming steps and connect IDS/scan tool to a power source.
- Inspect Vehicle Communication Module (VCM) and cables for any damage. Make sure scan tool connections are not interrupted during programming.
- A hardwired connection is strongly recommended.
- Turn off all unnecessary accessories (radio, heated/cooled seats, headlamps, interior lamps, HVAC system, etc.) and close doors.
- Disconnect/depower any aftermarket accessories (remote start, alarm, power inverter, CB radio, etc.).
- Follow all scan tool on-screen instructions carefully.
- Disable IDS/scan tool sleep mode, screensaver, hibernation modes.
- Create all sessions key on engine off (KOEO). Starting the vehicle before creating a session will cause errors within the programming inhale process.
- · Ensure the headlamps and accessories are turned off.



Module Reprogramming

- **NOTE:** The IDS must be updated to software level 108.01 or later to perform the FSA. If the IDS is not updated when the FSA is performed, it may result in various DTCs and drivability concerns. It is important that all steps of this FSA are performed in the order listed. This will ensure proper operation of the vehicle once completed.
- **NOTE:** Reprogram appropriate vehicle modules before performing diagnostics and clear all Diagnostic Trouble Codes (DTCs) after programming. For DTCs generated after reprogramming, follow normal diagnostic service procedures.
- 1. The IPC reprogramming can take up to 1 hour or more. Connect a portable battery charger of 10 to 20 amps to an extension cord and to the 12V battery. This will allow the vehicle to be raised and lowered as needed while completing the remaining repair procedures, and ensure uninterrupted reprogramming is achieved. Programming times can be significantly reduced by using a VCMII.

NOTE: Periodically check the status of the reprogramming progress to continue the process, as required.

- 2. Reprogram the IPC using IDS release 108.01 or higher.
- **NOTE**: If DTC U2101 is set after reprogramming of the IPC, please configure the Car Configuration Parameters. Using the IDS, select Tool Box/Module Programming/Programmable Parameters/Car Configuration Parameters(s)/Retrieve PTS derived ASBUILT data.
- NOTE: Follow the IDS on-screen instructions to complete the reprogramming procedure.

Recovering a module when programming has resulted in a blank module: <u>NEVER DELETE THE ORIGINAL SESSION!</u>

- a. Obtain the original IDS tool which will have the original IDS session, that was used when the programming error occurred during module reprogramming (MR) or programmable module installation (PMI).
- b. Disconnect the VCM from the data link connector (DLC) and the IDS.
- c. Reconnect the VCM to IDS and then connect to the DLC. Once reconnected, the VCM icon should appear in the corner of the IDS screen. If it does not, troubleshoot the IDS to VCM connection.
- d. Locate the original vehicle session when programming failed. This should be the last session used in most cases. If not, use the session created on the date that the programming failed.
- **NOTE:** If the original session is not listed in the previous session list, click the Recycle Bin icon at the lower right of the previous session screen. This loads any deleted sessions and allows you to look through them. Double-click the session to restore it.
- e. Once the session is loaded, the failed process should resume automatically.
- f. If programming does not resume automatically, proceed to the Module Programming menu and select the previously attempted process, PMI or MR.
- g. Follow all on-screen prompts/instructions.
- h. The last screen on the IDS may list additional steps required to complete the programming process. Make sure all applicable steps listed on the screen are followed in order.



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Procedure F - Turbocharger Wire Harness Taping

OVERVIEW: This procedure wraps the turbocharger wire harness with Coroplast® tape to prevent the entry/buildup of fluids and debris in the convolute which could ignite from an ignition source.

PARTS / SUPPLIES REQUIRED:



А	Coroplast® Tape
В	Wire Harness Retainer w/Tie-Strap

UNIQUE TOOL REQUIREMENTS: None

SERVICE TIPS: Tips for wrapping the harness are included in the procedure.





FIGURE F1

1. Route the turbocharger wire harness to the top of the engine compartment. See Figure F2.



FIGURE F2



- 2. Disconnect the rear Variable Camshaft Timing (VCT) oil control solenoid. See Figure F1.
 - Detach the VCT harness retaining clip from the turbocharger outlet tube.
- 3. Replace the wire harness retainer with a new one supplied in the vehicle parts kit. See Figure F3.
 - Mark the wire harness retainer location before removal.
- 4. Wrap the turbocharger wire harness convolute with the Coroplast® tape provided in the service kit. See Figure F3.
 - Start and finish each length of tape applied with three (3) initial and three (3) finishing wraps.
 - Apply each wrap of tape with a 50% overwrap.
 - First, wrap the takeout for the crankshaft position sensor. Begin the wrap at the connector and end this portion of wrapping by going around the main harness at the takeout. See Figure F3, (A).
 - Wrap the turbocharger harness starting at the takeout to the rear VCT solenoid. Proceed down the remaining length of harness to the turbocharger wastegate regulating valve solenoid connector. See Figure F3, (B).



FIGURE F3

- 5. Connect the rear VCT oil control solenoid. See Figure F1.
 - Attach the VCT harness retaining clip to the turbocharger outlet tube.
- 6. Route the wire harness back down to the crankshaft position sensor, turbocharger wastegate regulating valve solenoid, and turbocharger bypass valve. See Figure F1.
- 7. Attach the wire harness retainer to the front cover. Connect the crankshaft position sensor, turbocharger wastegate regulating valve solenoid, and turbocharger bypass valve electrical connectors. See Figure F1.



Procedure G - Thermostat Replacement - (Not required for 2014 MY Escape Vehicles)

OVERVIEW: Thermostat replacement is not required for 2014 MY Escape Vehicles. Proceed to Procedure H.

Procedure H - Engine Coolant Bypass Valve Replacement

OVERVIEW: The engine coolant bypass valve is being replaced in this procedure.

PARTS / SUPPLIES REQUIRED:



B Hose Clamp

UNIQUE TOOL REQUIREMENTS: None

SERVICE TIPS: None



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- 1. Drain the cooling system. Please follow the WSM procedures in Section 303-03.
- 1709R
- 2. Disconnect the engine coolant bypass valve electrical connector. See Figure H1.

FIGURE H1

3. Release the clamp and disconnect the coolant hose. Discard the clamp. See Figure H2.



FIGURE H2



- 4. Remove the bolts from the engine coolant bypass valve. Remove and discard the valve and O-ring seal. See Figure H3.
 - 89 lb.in (10 Nm).



FIGURE H3

5. Install a *new* engine coolant bypass valve and O-ring seal by reversing the removal procedure.



Procedure I - Coolant Degas Bottle, Degas Bottle Cap, and Coolant Hose Replacement

OVERVIEW: In this procedure, the coolant hose that runs between the degas bottle and thermostat quick connect T-fitting is replaced with an updated hose that allows for connection to the turbocharger coolant return line and the *new* coolant stand-pipe.

PARTS / SUPPLIES REQUIRED:



А	Coolant Degas Bottle to Thermostat Housing Hose
В	Large Hose Clamps
С	Small Hose Clamp

UNIQUE TOOL REQUIREMENTS: None



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FIGURE I1

- 1. Remove and discard the turbocharger coolant return hose. See Figure I2.
- 2. Remove discard the degas bottle and cap. See Figure I2.

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3. Release the clip and disconnect the quick connect T-fitting from the coolant shutoff solenoid valve. See Figure I3.



FIGURE I3

- 4. Position the degas bottle hose downward out the bottom of the engine compartment. See Figure I4.
- 5. Use a pair of needle nose VISE-GRIP® pliers to compress the degas bottle hose clamp and slide the clamp downward off of the quick connect T-fitting. See Figure I4.
 - Space the needle nose VISE-GRIP® plier teeth 6.35 mm (1/4") apart when closed so that they
 will fully compress the hose clamp when locked, to allow the clamp to be slid down the hose for
 hose removal.





FIGURE I5

- 8. Ensure the inside of the quick connect T-fitting is free from dirt and debris.
- 9. Lubricate the new o-ring with coolant and install it into the quick connect T-fitting. See Figure I5.
- 10. Route the degas bottle hose upward, back to the degas bottle and to the turbocharger outlet tube.
- 11. Connect the quick connect T-fitting to the coolant shutoff solenoid valve. See Figure I6.



FIGURE I6



NOTE: Lubricating the new coolant hoses with coolant will aid in easier installation.

12. Position a *new* clamp onto the longer section of the *new* degas bottle hose and install the hose onto the quick connect T-fitting. Ensure the "I" mark on the *new* degas bottle hose is aligned with the alignment mark on the quick connect T-fitting. Also align the clamp center with the "I" mark. See Figure I7.



FIGURE I7

 Connect the *new* turbocharger coolant return hose to the turbocharger coolant outlet tube and release the clamp. Attach the wire harness retainer to the *new* turbocharger coolant return hose. See Figure 18.



FIGURE I8



Procedure J - Coolant Stand-pipe, Degas Bottle and Cap Installation

OVERVIEW: The coolant stand-pipe provides coolant level information to the PCM and IPC via the CAN network, this prevents overheat issues due to low coolant level by informing the driver when the coolant level is low. The coolant stand-pipe and bracket is installed using the engine mount rear fixing bolt. On installation, the wiring harness is routed across the engine bay wiring loom and the related coolant hoses are attached.

PARTS / SUPPLIES REQUIRED:





- 1. Route and secure the *new* coolant stand-pipe wiring harness along the engine wiring harness. See Figure J1.
- **NOTE**: The coolant stand-pipe electrical connector will be connected after the coolant stand-pipe is installed.
- NOTE: The new coolant stand-pipe wire harness is highlighted to show routing and connection points.
- NOTE: The coolant by-pass hose is removed for clarity.



FIGURE J1

2. NOTICE: The bolt hole must be centered with the engine mount hole to allow for proper installation of the coolant stand-pipe bracket. <u>DO NOT</u> use power tools to re-install the bolt.

Position the *new* coolant stand-pipe bracket on the engine mount. The bolt will center the bracket and the locating tab on the bottom of the bracket should be pressed against the engine mount. Hand start the bolt and then tighten both engine mount retaining bolts at this time. See Figure J2.

• 90 Nm (66 lb.ft).



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- 3. Install the coolant stand-pipe to the bracket. See Figure J3.
 - 1. Push the coolant stand-pipe fully down in to position.
 - 2. Tighten the bolt to 5 Nm (44 lb.in).
 - 3. Connect the electrical connector.
 - 4. Install the harness push pin to the A/C Line bracket.



FIGURE J3

- NOTE: Lubricating the new coolant hoses with coolant will aid in easier installation.
- **NOTE:** When connecting the coolant hoses to the stand-pipe ensure the hoses are fully installed and meet the hose stops, before securing in place with hose clamps.
- 4. Install the new coolant hoses to the coolant stand-pipe. See Figure J4.



FIGURE J4

NOTE: Check the status of the IPC reprogramming progress.



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Install the degas bottle and connect the coolant hoses. See Figure J5.



FIGURE J5

- 6. **NOTE**: There must be a minimum clearance of 10 mm (3/8") between the coolant stand-pipe and degas bottle. To achieve this, it may be necessary to adjust the coolant stand-pipe mounting bracket and the coolant hose positions as necessary.
 - NOTE: Make sure that no strain is placed on the coolant hose and pipe.

Make sure the coolant stand-pipe is not contacting the coolant degas bottle. Adjust the coolant stand-pipe mounting bracket if required. See Figure J6.





Procedure K - Battery B+ Terminal Cable Routing Inspection and Tie-Strap Retention

NOTE: The Battery B+ Terminal Cable Routing Inspection is only required on Escape vehicles equipped with an Automatic Transmission.

OVERVIEW: Ensure the battery positive cable to the generator is routed correctly. If routed incorrectly, the cable may contact and chafe at the transmission lifting eye on top of the transmission. Upon inspection, if the cable is routed incorrectly, it must be re-routed properly and secured to the engine main wiring harness using a tie-strap.

PARTS / SUPPLIES REQUIRED:

	1367ZZ
A Tie-Strap	

UNIQUE TOOL REQUIREMENTS: None

SERVICE TIPS: None



- 1. Inspect the battery B+ terminal cable for improper routing and/or any signs of wire and insulation damage. See Figures K1 and K2.
 - If the battery cable is damaged, replace it prior to proceeding.
 - A <u>properly routed</u> cable can be identified by having the cable routed from the generator across the front of the engine and with the cable secured to the main engine wiring harness with a tiestrap near the forward left side of the intake manifold. See Figure K1.
 - An <u>improperly routed</u> cable can be identified by the cable being routed forward of the engine near the radiator, and is not attached to the main engine wiring harness with a tie-strap. See Figure K2.



FIGURE K1



FIGURE K2



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NOTICE: Ensure the IPC reprogramming has completed prior to disconnecting battery cables, if required.

- If the battery positive terminal cable is routed improperly and isn't damaged, pull it back through to the center of the engine compartment. Then re-route it up and near the front left side of the engine. Secure it to the main engine wiring harness using the tie-strap and existing clips as shown. See Figure K1.
 - If required to disconnect the battery B+ terminal cable for rerouting, the battery negative cable must be disconnected. Please use the procedures in WSM section 414-01. Reconnect the battery after the rerouting and reinstallation of the battery B+ terminal cable is completed.
 - If removed, tighten the battery B+ terminal cable to 12 Nm (106 lb-in).
- Install the tie-strap provided in the kit to secure the starter/generator battery positive cable to the engine wire harness and prevent the cable from contacting the transmission lifting eye. See Figure K1.



Procedure L - Vehicle Reassembly, PCV Tube Retention, and Powertrain Control Module (PCM) Reprogramming

OVERVIEW: The vehicle is reassembled, the cooling system is vacuum filled, pressure tested and bled; and a PCV tube retainer is installed. The PCM is reprogrammed and coolant level sensor operation is validated.

PARTS / SUPPLIES REQUIRED:



А	PCV Tube Retainer / Tie-Strap
В	Motorcraft® Orange Antifreeze / Coolant Prediluted (VC-3DIL-B (U.S.) CVC-3DIL-B (Canada) / WSS-M97B44-D2) (Obtain Locally) (Not Shown)

UNIQUE TOOL REQUIREMENTS: Vacuum Filling Tool, Hydrometer and/or Refractometer, Cooling System Pressure Tester

SERVICE TIPS: Follow procedure steps to verify proper coolant fill.



NOTE: This procedure contains unique steps for reassembly, including installation of new components.

- 1. If disconnected previously, connect the battery cables.
 - a. Install and tighten the battery B+ terminal cable to 12 Nm (106 lb-in).
 - b. Connect the battery negative cable to ground. Please follow the WSM procedures in Section 414-01.
- **NOTE:** Remove protective covers that were placed over the turbocharger air intake system before re-installing components.
- 2. Install the turbocharger inlet pipe and connect the PCV hose to the turbocharger inlet pipe. See Figure A3.
 - Tighten the turbocharger inlet pipe fasteners to 5 Nm (44 lb-in).
 - Tighten the turbocharger inlet pipe-to-turbocharger clamp to 5 Nm (44 lb-in).
- 3. Vacuum fill the cooling system. Refer to WSM Section 303-03 for coolant specifications.
 - Do not bleed the cooling system at this time.
 - Coolant level should be filled to the "MAX" mark on the degas bottle.
- 4. Install a coolant pressure tester with adapter onto the degas bottle. Pressurize to 138 kPa (20 psi). Once pressure stabilizes, pressure should hold at 138 kPa (20 psi) for a minimum of 2 minutes.
 - If pressure test fails, the source of pressure loss must be identified and repaired as appropriate before proceeding. Retest the cooling system, if required.
- 5. Install the air cleaner assembly. See Figure A2.
 - a. Install the air cleaner assembly.
 - b. Attach the fresh air intake tube flap.
 - c. Connect the mass air flow sensor electrical connector.
 - d. Tighten the clamp to 5 Nm (44 lb-in).
- 6. Connect the EVAP line quick connect coupling to the air intake tube center section and install the retention clip. See Figure A1.



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- 7. Install the PCV tube retainer / tie-strap provided in the vehicle parts kit. See Figure L1.
 - a. Attach the clamp onto the PCV tube and secure.
 - b. Wrap the tie strap around the air intake tube center section and tighten.
 - c. Trim the excess length from the tie strap.



FIGURE L1

- 8. Install the front under-body air deflector and retainers. See Figure A5.
- 9. Bleed the cooling system. Please follow the WSM procedures in Section 303-03.



- 10. Reprogram the PCM using IDS release 108.01 or higher. For additional information, Refer to "Procedure E" (Important Information for Module Reprogramming).
- Using IDS select "Coolant Level Sensor Check". See Figure L2. 11.
 - Follow the on screen instructions to complete the "Coolant Level Sensor Check" procedure.



FIGURE L2



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- **NOTE:** If the coolant level is too high, additional cooling system bleeding is needed. If it is proving difficult to bleed, it may be necessary to drive the vehicle up to 12.5 Miles (20 km) to remove the air from the system.
- 12. Check coolant concentration using the hydrometer/refractometer to make sure it is correct for the local climate.
- 13. Remove the portable battery charger and install the battery cover.
- 14. Install the cowl panel. Please follow the WSM procedures in Section 501-02.
- 15. Install the engine appearance cover.
- 16. Perform any other open recalls.
- 17. Coolant level should be filled to the "MAX" mark on the degas bottle once the engine is cold, prior to returning the vehicle to the customer.



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17S09 VEHICLE INSPECTION / CHECK SHEET AT Technician ID: Repair Order#: INSPECTION / Check Sheet Vehicle Mileage: Repair Order#: No Vehicle Build Date: Open FSA(s): Inspection / Check Sheet and attach / file it with the recall repair or following completion. 1. Record any DTCs present. Pass - No DTCs present. Fail - DTCs present. If fail, document any DTCs retrieved below, and reference during "Procedure B". Image: Coolant level is correct in the degas bottle. Pass - Coolant concentration is not concentratis is not conconcentratin is not concentration is not co	TACHME HECK SH ALL 17S0
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 Fail - Coolant level is not correct in the degas bottle, needed to add coolant. If fail, document any repairs performed below. 3. Pressure test cooling system. Check appropriate box. Pass - Cooling system holds pressure for 2 minutes. Fail - Cooling system does not hold pressure for 2 minutes. If fail, document any repairs performed below. 	ect.
If fail, document any repairs performed below. 3. Pressure test cooling system. Check appropriate box. Pass - Cooling system holds pressure for 2 minutes. I Fail - Cooling system does not hold pressure for 2 minutes. If fail, document any repairs performed below. 4. Visually check for coolant leaks with the system under pressure. Check appropriate box. Pass - No coolant leak(s) found.	orrect, entration
If fail, document any repairs performed below. 3. Pressure test cooling system. Check appropriate box. Pass - Cooling system holds pressure for 2 minutes. Fail - Cooling system does not hold pressure for 2 minutes. If fail, document any repairs performed below. 4. Visually check for coolant leaks with the system under pressure. Check appropriate box. Pass - No coolant leak(s) found. Fail - Coolant leak(s) found.	Sintation
 3. Pressure test cooling system. Check appropriate box. Pass - Cooling system holds pressure for 2 minutes. Fail - Cooling system does not hold pressure for 2 minutes. If fail, document any repairs performed below. 4. Visually check for coolant leaks with the system under pressure. Check appropriate box. Pass - No coolant leak(s) found. Fail - Coolant leak(s) found. 	
 4. Visually check for coolant leaks with the system under pressure. Check appropriate box. Pass - No coolant leak(s) found. Fail - Coolant leak(s) found. 	
Fail - Coolant leak(s) found	
If fail, document any repairs performed below.	
 Visually inspect the engine oil level and check for engine oil leaks at the rear surface of cylinder h above exhaust manifold. Check appropriate box. 	1ead,
 Pass - No engine oil leak(s) found. Pass - Correct oil level. Fail - Engine oil leak(s) found. Fail - Engine oil not at correct level. 	
If fail, document any repairs performed below.	

ATTACHMENT VI

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Safety Recall 17S09 – Supplement #1

Certain 2013-2014 Fusion, 2013-2015 Transit Connect, 2014 Escape, and 2014-2015 Fiesta ST Vehicles Equipped with a 1.6L EcoBoost Engine Coolant Level Sensor System Installation

UNIQUE VEHICLE REPAIRS

Use the following charts, arranged by VIN, to identify the vehicles that require additional assistance from the Special Service Support Center (SSSC) to carry out the FSA repair.

- 1. Determine if the vehicle VIN is in the chart below.
 - In Adobe Reader menu, click "EDIT", then click "FIND", then insert the VIN, then press ENTER, *Or*
 - Press Ctrl and F simultaneously, then insert the VIN, then press ENTER.
- 2. If the vehicle VIN is in the chart below, create a VIN specific contact to the SSSC for additional repair instructions.
- 3. If the vehicle VIN is not in the chart below, proceed with coolant level sensor installation as outlined in the technical instructions.

Escape Unique PCM Programming Required

VIN	VIN	VIN

ATTACHMENT VII

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Safety Recall 17S09 – Supplement #1

Certain 2013-2014 Fusion, 2013-2015 Transit Connect, 2014 Escape, and 2014-2015 Fiesta ST Vehicles Equipped with a 1.6L EcoBoost Engine Coolant Level Sensor System Installation

INSTRUCTIONAL VIDEO LINKS

Escape Video Links:

Procedure A – Initial Disassembly and Preparation for Inspection

Procedure B – Inspection and Check Sheet Completion

Procedure C – Battery Tray Modification

Procedure D – Coolant Stand-pipe Wire Harness Installation

Procedure E – Instrument Panel Cluster (IPC) Reprogramming

Procedure F – Turbocharger Wire Harness Taping

Procedure H – Engine Coolant Bypass Valve Replacement

Procedure I - Coolant Hose Replacement

Procedure J – Coolant Stand-pipe, Degas Bottle and Cap Installation

Procedure K – Battery B+ Terminal Cable Routing Inspection and Retention

Procedure L – Vehicle Reassembly, PCV Tube Retention, and PCM Reprogramming

Ford Motor Company Recall Reimbursement Plan for 17S09

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 # 17S09, owners who have paid for service to remedy the defect or noncompliance must have had that service performed prior to May 8, 2017. 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 2015. 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, 2015 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.