



# TECHNICAL SERVICE BULLETIN

## 1.5L EcoBoost - Low Coolant, White Exhaust Smoke And/OR Illuminated MIL - Built On Or Before 10-Jun-2019

**22-2134**

14 April 2022

This bulletin supersedes 21-2269.

### Model:

|                          |                                |
|--------------------------|--------------------------------|
| Ford<br>2017-2019 Escape | Built on or before 08-Apr-2019 |
| 2014-2019 Fusion         | Built on or before 10-Jun-2019 |

### Summary

This article supersedes TSB 21-2269 to update the Parts List.

**Issue:** Some 2014-2019 Fusion vehicles built on or before 10-Jun-2019 and 2017-2019 Escape vehicles built on or before 08-Apr-2019 equipped with a 1.5L EcoBoost engine may exhibit low coolant level, white exhaust smoke and/or runs rough condition with or without an illuminated malfunction indicator light (MIL) with only diagnostic trouble codes (DTCs) P0300, P0301-P0304, P0316, P0217, P1285 and/or P1299 stored in powertrain control module (PCM). This may be due to coolant intrusion into the cylinder. To resolve the condition, follow the Service Procedure to replace the short block and head gasket.

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

- One of the following vehicles:
  - 2017-2019 Escape built on or before 08-Apr-2019
  - 2014-2019 Fusion built on or before 10-Jun-2019
- 1.5L EcoBoost engine
- At least one of the following conditions:
  - Low coolant level
  - White exhaust smoke
  - Runs rough condition with or without an illuminated MIL with only DTCs P0300, P0301-P0304, P0316, P0217, P1285 and/or P1299 stored in PCM

### Parts

#### Escape - Required Parts

| Service Part Number | Quantity  | Description  |
|---------------------|-----------|--|
| 6009                | 1         | Engine Short Block - Refer To The Parts Catalog For The VIN Specific Application |
| DS7Z-6079-G         | 1         | Engine Short Block Service Kit   |
| XO-5W20-Q1SP        | As Needed | Motorcraft® SAE 5W-20 Synthetic Blend Motor Oil (All Markets Except Canada)      |
| CXO-5W20-LSP6       | As Needed | Motorcraft® SAE 5W-20 Super Premium Motor Oil (Canada Only)                      |
| TA-26               | As Needed | Motorcraft® Threadlock 262   |
| TA-357              | As Needed | Motorcraft® High Performance Engine RTV Silicone                                 |
| ZC-30-A             | As Needed | Motorcraft® Gasket Remover   |
| CU7Z-               | As        | Flange Sealant   |

|                |           |  |
|----------------|-----------|--|
| 19B508-A       | Needed    |  |
| Obtain Locally | As Needed | Loctite® Anaerobic Flange Sealant 51031  |
| ZC-31-B        | As Needed | Motorcraft® Metal Surface Prep Wipes   |
| ZC-20          | As Needed | Motorcraft® Engine Shampoo and Degreaser (All Markets Except Canada)   |
| CXC-66-A       | As Needed | Motorcraft® Engine Shampoo (Canada Only)   |
| PM-4-A         | As Needed | Motorcraft® Metal Brake Parts Cleaner (Compliant With Low Volatile Organic Compound Requirements As Required In Some USA States) |
| PM-4-B         | As Needed | Motorcraft® Metal Brake Parts Cleaner (Not Compliant With Volatile Organic Compound Requirements)                                |
| XL-2           | As Needed | Motorcraft® High Temperature Nickel Anti-Seize Lubricant   |
| XL-5-A         | As Needed | Motorcraft® Multi-Purpose Grease Spray   |
| TA-25-B        | As Needed | Motorcraft® Threadlock and Sealer  |
| XT-10-QLVC     | As Needed | Motorcraft® MERCON® LV Automatic Transmission Fluid (All Markets Except Canada)  |
| CXT-10-LV6     | As Needed | Motorcraft® MERCON® LV Automatic Transmission Fluid (Canada Only)  |
| YN-35          | As Needed | Motorcraft® R-1234yf Refrigerant PAG Oil (R-1234yf vehicles)   |
| YN-12-D        | As Needed | Motorcraft® PAG Refrigerant Compressor Oil (R-134a vehicles)   |
| VC-13-G        | As Needed | Motorcraft® Yellow Concentrated Antifreeze/Coolant (All Markets Except Canada)   |
| CVC-13-G       | As Needed | Motorcraft® Yellow Concentrated Antifreeze/Coolant (Canada Only)   |

## Parts

### Escape - Parts To Inspect And Replace Only If Necessary

| Service Part Number | Quantity  | Description                      | Unit of Issue |
|---------------------|-----------|----------------------------------|---------------|
| BE8Z-6268-C         | If Needed | Timing Belt                      | 1             |
| DS7Z-9439-A         | If Needed | Intake Manifold Gasket           | 1             |
| DS7Z-9L438-A        | If Needed | Intercooler Gasket               | 1             |
| DS7Z-9P867-A        | If Needed | Intercooler Seal                 | 1             |
| HYFS-094-YEC        | If Needed | Spark Plugs                      | 1             |
| F2GZ-63600A58-A     | If Needed | Intermediate Shaft Bushing (AWD) | 1             |
| DS7Z-9E936-A        | If Needed | Throttle Body Gasket             | 1             |
| 8W9Z-6C287-A        | If Needed | High Pressure Fuel Pump Tappet   | 1             |
| DS7Z-12029-B        | If Needed | Ignition Coil-On-Plug            | 1             |
| XS6E-6626-AA        | If Needed | Oil Pickup Tube O-ring Seal      | 1             |
| DS7Z-9346-B         | If Needed | Bracket                          | 1             |
| BM5Z-6L092-C        | If Needed | Crankcase Vent Oil Drain Tube    | 1             |
| CV6Z-6375-E         | If Needed | Flexplate                        | 1             |

|              |           |                            |   |
|--------------|-----------|----------------------------|---|
| W500215-S437 | If Needed | Oil Pump Bolts M6 X 25 mm  | 4 |
| W500301-S437 | If Needed | Oil Pump Bolts M6 x 35 mm  | 4 |
| W500305-S437 | If Needed | Oil Pump Bolts M6 x 55 mm  | 4 |
| W714789-S300 | If Needed | Coolant Outlet O-ring Seal | 1 |
| W706722-S300 | If Needed | Thermostat Ring            | 4 |
| 6M5Z-6B752-A | If Needed | Oil Separator Gasket       | 1 |
| BM5Z-8527-A  | If Needed | Oil Separator O-Ring       | 1 |

Quantity refers to the amount of the service part number required to repair the vehicle.

Unit of Issue refers to the number of individual pieces included in a service part number package.

Piece Quantity refers to the total number of individual pieces required to repair the vehicle.

As Needed indicates the amount of the part may vary and/or is not a whole number. Parts can be billed out as non-whole numbers, including less than 1.

If Needed indicates the part is not mandatory.

**NOTE: In the event that an Engine Short Block Service Kit is not available or temporarily on backorder, refer to the applicable Short Block Service Kit parts list in this article to order parts individually.**

## Parts

### Escape - Information Only - The Following Individual Parts Are Contained In Short Block Service Kit DS7Z-6079-G

| Service Part Number | Quantity | Description                                | Unit of Issue | Piece Quantity | Note                                      |
|---------------------|----------|--|---------------|----------------|---|
| DS7Z-9E583-A        | -        | High Pressure Fuel Pump O-ring Seal        | 1             | 1              |   |
| W505584-S436        | -        | High Pressure Fuel Pump Bolts              | 4             | 2              |   |
| DS7Z-9D354-B        | -        | High Pressure Fuel Tube                    | 1             | 1              |   |
| DS7Z-9229-B         | -        | Fuel Injector O-ring Kit                   |               | 1              | Part number will service 4 fuel injectors |
| DL3Z-19B596-B       | -        | A/C Compressor O-ring And Gasket           | 1             | 1              |   |
| DS7Z-19B596-A       | -        | A/C Line Gaskets                           | 1             | 1              |   |
| W500213-S437        | -        | Turbocharger Oil Supply Tube Bolt          | 4             | 1              |   |
| 4R8Z-6N652-A        | -        | Turbocharger Oil Return Tube Gasket        | 1             | 1              |   |
| DS7Z-9450-A         | -        | Turbocharger Gasket                        | 1             | 1              |   |
| W716271-S437        | -        | Turbocharger Nuts                          | 4             | 4              |   |
| DS7Z-8527-A         | -        | Turbocharger Coolant Tube O-ring Seals     | 1             | 2              |   |
| DS7Z-6K679-C        | -        | Turbocharger Oil Supply Tube Assembly      | 1             | 1              |   |
| W715309-S300        | -        | Turbocharger Mounting Studs                | 4             | 4              |   |
| DS7Z-6L092-A        | -        | Turbocharger Oil Return Tube Assembly      | 1             | 1              |   |
| W715681-S900        | -        | Catalytic Converter To Turbocharger Bolts  | 4             | 3              |   |
| AM5Z-9450-A         | -        | Catalytic Converter To Turbocharger Gasket | 1             | 1              |   |
| F1EZ-8620-A         | -        | Stretchy Belt                              | 1             | 1              |   |

|              |   |   |    |    |  |
|--------------|---|---|----|----|--|
| 7N5Z-00812-A | - | Rearward Subframe Bolts                           | 1  | 2  |  |
| W715618-S437 | - | Torque Converter Nuts                             | 4  | 4  |  |
| BE8Z-6379-AB | - | Flexplate Bolts                                   | 1  | 6  |  |
| W711137-S442 | - | Steering Column Bolt                              | 4  | 1  |  |
| W715490-S442 | - | Wheel Knuckle To Strut Bolt                       | 4  | 2  |  |
| BE8Z-6731-AB | - | Oil Filter  | 1  | 1  |  |
| CV6Z-9450-E  | - | Muffler Inlet Pipe Gasket                         | 1  | 1  |  |
| W520103-S403 | - | Muffler Inlet Pipe Nuts                           | 4  | 2  |  |
| W715135-S440 | - | Stabilizer Bar Nut, M10 x 1.25 mm                 | 4  | 2  |  |
| W520214-S440 | - | Engine Mount To Engine Nuts                       | 2  | 3  |  |
| W716136-S442 | - | Engine Mount To Frame Bolts                       | 4  | 2  |  |
| W714753-S442 | - | Brake Caliper Bolts                               | 4  | 4  |  |
| W710294-S437 | - | Camshaft Mega Cap Bolts M7 x 59mm                 | 4  | 2  |  |
| W715449-S437 | - | Camshaft Bearing Cap Bolts M6 x 35 mm             | 4  | 16 |  |
| W716307-S442 | - | Camshaft Mega Cap Bolts M7 x 38 mm                | 4  | 2  |  |
| BE8Z-6K292-C | - | Camshaft Front Seals                              | 1  | 2  |  |
| 4M5Z-6M282-A | - | VCT Bolts   | 1  | 2  |  |
| BE8Z-6065-B  | - | Cylinder Head Bolts                               | 10 | 10 |  |
| DS7Z-6051-L  | - | Cylinder Head Gasket                              | 1  | 1  |  |
| W708317-S300 | - | Cylinder Head O-ring Seal, 18.3 x 2.4 mm          | 4  | 1  |  |
| W717236-S300 | - | Cylinder Head Fuel Drive O-ring Seal, 8.8 x 2.62  | 4  | 1  |  |
| W717166-S300 | - | Cylinder Head Fuel Drive O-ring Seal, 7.65 x 1.78 | 4  | 1  |  |
| BE8Z-6A340-A | - | Crankshaft Pulley Bolt                            | 1  | 1  |  |
| BE8Z-6700-B  | - | Crankshaft Front Oil Seal                         | 1  | 1  |  |
| BM5Z-6K301-B | - | Crankshaft Rear Oil Seal                          | 1  | 1  |  |
| DS7Z-6584-B  | - | Valve Cover Gasket                                | 1  | 1  |  |
| BM5Z-6659-B  | - | Oil Pump Gasket                                   | 1  | 1  |  |
| DS7Z-6B856-A | - | Oil Cooler Assembly                               | 1  | 1  |  |
| BE8Z-8507-A  | - | Coolant Pump Gasket                               | 1  | 1  |  |
| BE8Z-9278-A  | - | Oil Pressure Switch                               | 1  | 1  |  |
| W713043-S437 | - | Coolant Pump Bolts                                | 4  | 6  |  |
| W716038-S437 | - | Vacuum Pump Stud Bolts                            | 4  | 3  |  |
| BM5Z-2A572-A | - | Vacuum Pump Gasket                                | 1  | 1  |  |
| W701350-S437 | - | Cylinder Block To Transmission Dowels             | 4  | 2  |  |
| W701183-S300 | - | Cylinder Block To Cylinder Head Dowels            | 4  | 2  |  |
| W520415-S442 | - | Lower Ball Joint Nut (AWD Only)                   | 4  | 1  |  |
| W520113-S442 | - | Lower Ball Joint Nut, M10 x 1.5                   | 4  | 2  |  |

|               |   |  |   |   |  |
|---------------|---|--|---|---|--|
|               |   | mm (AWD Only)                                |   |   |  |
| W716075-S442  | - | Lower Ball Joint Bolt (AWD Only)             | 4 | 1 |  |
| CCPZ-3B477-C  | - | Wheel Hub Nut (AWD Only)                     | 1 | 1 |  |
| CN1Z-7H424-B  | - | Intermediate Shaft Seal (AWD Only)           | 1 | 1 |  |
| YS4Z-3N324-AA | - | Halfshaft Bearing Retaining Strap (AWD Only) | 1 | 1 |  |
| W520102-S442  | - | Halfshaft Bearing Retaining Nuts (AWD Only)  | 4 | 2 |  |
| 5F9Z-4682-AA  | - | Driveshaft-To-Pinion Flange Bolts (AWD Only) | 1 | 3 |  |
| W718250-S439  | - | Upper/Lower PTU Bolts (AWD Only)             | 5 | 5 |  |
| CV6Z-7086-B   | - | PTU Compression Seal (AWD Only)              | 1 | 1 |  |

Unit of Issue in the above section refers to the number of individual pieces included if ordering a service part number package (not applicable to the contents of the long block service kit).

Piece Quantity refers to the total number of individual pieces required to repair the vehicle (what is included in the long block service kit)

## Parts

### Fusion - Required Parts

| Service Part Number | Quantity  | Description  |
|---------------------|-----------|--|
| 6009                | 1         | Engine Short Block - Refer To The Parts Catalog For The VIN Specific Application   |
| DS7Z-6079-H         | 1         | Engine Short Block Service Kit   |
| XO-5W20-Q1SP        | As Needed | Motorcraft® SAE 5W-20 Synthetic Blend Motor Oil (All Markets Except Canada)  |
| CXO-5W20-LSP6       | As Needed | Motorcraft® SAE 5W-20 Super Premium Motor Oil (Canada Only)  |
| TA-26               | As Needed | Motorcraft® Threadlock 262   |
| TA-357              | As Needed | Motorcraft® High Performance Engine RTV Silicone   |
| ZC-30-A             | As Needed | Motorcraft® Gasket Remover   |
| CU7Z-19B508-A       | As Needed | Flange Sealant   |
| Obtain Locally      | As Needed | Loctite® Anaerobic Flange Sealant 51031  |
| ZC-31-B             | As Needed | Motorcraft® Metal Surface Prep Wipes   |
| ZC-20               | As Needed | Motorcraft® Engine Shampoo and Degreaser (All Markets Except Canada)   |
| CXC-66-A            | As Needed | Motorcraft® Engine Shampoo (Canada Only)   |
| PM-4-A              | As Needed | Motorcraft® Metal Brake Parts Cleaner (Compliant With Low Volatile Organic Compound Requirements As Required In Some USA States) |
| PM-4-B              | As Needed | Motorcraft® Metal Brake Parts Cleaner (Not Compliant With Volatile Organic Compound Requirements)                                |

|            |           |   |
|------------|-----------|---|
| XL-2       | As Needed | Motorcraft® High Temperature Nickel Anti-Seize Lubricant                        |
| XL-5-A     | As Needed | Motorcraft® Multi-Purpose Grease Spray  |
| TA-25-B    | As Needed | Motorcraft® Threadlock and Sealer   |
| XT-10-QLVC | As Needed | Motorcraft® MERCON® LV Automatic Transmission Fluid (All Markets Except Canada) |
| CXT-10-LV6 | As Needed | Motorcraft® MERCON® LV Automatic Transmission Fluid (Canada Only)               |
| YN-35      | As Needed | Motorcraft® R-1234yf Refrigerant PAG Oil (R-1234yf vehicles)                    |
| YN-12-D    | As Needed | Motorcraft® PAG Refrigerant Compressor Oil (R-134a vehicles)                    |
| VC-13-G    | As Needed | Motorcraft® Yellow Concentrated Antifreeze/Coolant (All Markets Except Canada)  |
| CVC-13-G   | As Needed | Motorcraft® Yellow Concentrated Antifreeze/Coolant (Canada Only)                |

## Parts

### Fusion - Parts To Inspect And Replace Only If Necessary

| Service Part Number | Quantity  | Description                    | Unit of Issue |
|---------------------|-----------|--------------------------------|---------------|
| BE8Z-6268-C         | If Needed | Timing Belt                    | 1             |
| DS7Z-9439-A         | If Needed | Intake Manifold Gasket         | 1             |
| DS7Z-9L438-A        | If Needed | Intercooler Gasket             | 1             |
| DS7Z-9P867-A        | If Needed | Intercooler Seal               | 1             |
| HYFS-094-YEC        | If Needed | Spark Plugs                    | 1             |
| DS7Z-9E936-A        | If Needed | Throttle Body Gasket           | 1             |
| CV6Z-6375-E         | If Needed | Flexplate                      | 1             |
| 8W9Z-6C287-A        | If Needed | High Pressure Fuel Pump Tappet | 1             |
| DS7Z-12029-B        | If Needed | Ignition Coil-On-Plug          | 1             |
| XS6E-6626-AA        | If Needed | Oil Pickup Tube O-ring Seal    | 1             |
| DS7Z-9346-B         | If Needed | Bracket                        | 1             |
| BM5Z-6L092-C        | If Needed | Crankcase Vent Oil Drain Tube  | 1             |
| W500215-S437        | If Needed | Oil Pump Bolts M6 X 25 mm      | 4             |
| W500301-S437        | If Needed | Oil Pump Bolts M6 x 35 mm      | 4             |
| W500305-S437        | If Needed | Oil Pump Bolts M6 x 55 mm      | 4             |
| W714789-S300        | If Needed | Coolant Outlet O-ring Seal     | 1             |
| W706722-S300        | If Needed | Thermostat Ring                | 4             |
| 6M5Z-6B752-A        | If Needed | Oil Separator Gasket           | 1             |
| BM5Z-8527-A         | If Needed | Oil Separator O-Ring           | 1             |

Quantity refers to the amount of the service part number required to repair the vehicle.

Unit of Issue refers to the number of individual pieces included in a service part number package.

Piece Quantity refers to the total number of individual pieces required to repair the vehicle.

As Needed indicates the amount of the part may vary and/or is not a whole number. Parts can be billed out as non-whole numbers, including less than 1.

If Needed indicates the part is not mandatory.

**NOTE: In the event that an Engine Short Block Service Kit is not available or temporarily on backorder, refer to the applicable Short Block Service Kit parts list in this article to order parts individually.**

## Parts

### Fusion - Information Only - The Following Individual Parts Are Contained In Short Block Service Kit DS7Z-6079-H

| Service Part Number | Quantity | Description   | Unit of Issue | Piece Quantity | Note                                      |
|---------------------|----------|---|---------------|----------------|---|
| DS7Z-9D354-B        | -        | High Pressure Fuel Tube                                 | 1             | 1              |   |
| W505584-S436        | -        | High Pressure Fuel Pump Bolts                           | 4             | 2              |   |
| DS7Z-9E583-A        | -        | High Pressure Fuel Pump O-ring Seal                     | 1             | 1              |   |
| DS7Z-9229-B         | -        | Fuel Injector O-ring Kit                                | 1             | 1              | Part number will service 4 fuel injectors |
| DL3Z-19B596-B       | -        | A/C Compressor O-ring And Gasket                        | 1             | 1              |   |
| DS7Z-19B596-A       | -        | A/C Line Gaskets  | 1             | 1              |   |
| DS7Z-6K679-C        | -        | Turbocharger Oil Supply Tube Assembly                   | 1             | 1              |   |
| W500213-S442        | -        | Turbocharger Oil Supply Tube Bolt                       | 10            | 1              |   |
| DS7Z-6L092-A        | -        | Turbocharger Oil Return Tube Assembly                   | 1             | 1              |   |
| 4R8Z-6N652-A        | -        | Turbocharger Oil Return Tube Gasket                     | 1             | 1              |   |
| W716271-S437        | -        | Turbocharger Nuts                                       | 4             | 4              |   |
| DS7Z-8527-A         | -        | Turbocharger Coolant Tube O-ring Seals                  | 1             | 2              |   |
| DS7Z-9450-A         | -        | Turbocharger Gasket                                     | 1             | 1              |   |
| W715309-S300        | -        | Turbocharger Mounting Studs                             | 4             | 4              |   |
| AM5Z-9450-A         | -        | Catalytic Converter Gasket                              | 1             | 1              |   |
| GS7Z-8620-A         | -        | Stretchy Belt (2017-2019 Fusion Without Belt Tensioner) | 1             | 1              |   |
| W715618-S437        | -        | Torque Converter Nuts                                   | 4             | 4              |   |
| BE8Z-6379-AB        | -        | Flexplate Bolts   | 1             | 6              |   |
| W520214-S442        | -        | Engine Mount To Engine Nuts                             | 1             | 3              |   |
| W708728-S442        | -        | Engine Mount To Frame Bolts                             | 4             | 2              |   |
| W712961-S450B       | -        | Steering Column Bolt (2017-2019 Fusion)                 | 1             | 1              |   |
| W714878-S439        | -        | Steering Column Bolt (2013-2016 Fusion)                 | 4             | 1              |   |
| W715681-S900        | -        | Catalytic Converter Bolts                               | 4             | 3              |   |

|              |   |   |    |    |  |
|--------------|---|---|----|----|--|
| BE8Z-6731-AB | - | Oil Filter  | 1  | 1  |  |
| CV6Z-9450-E  | - | Muffler Inlet Pipe Gasket                         | 1  | 1  |  |
| W520103-S442 | - | Muffler Inlet Pipe Nuts                           | 4  | 2  |  |
| W715623-S439 | - | Brake Caliper Bolts                               | 4  | 4  |  |
| W716457-S439 | - | Subframe Mounting Bolts                           | 4  | 4  |  |
| W710294-S437 | - | Camshaft Mega Cap Bolts M7 x 59 mm                | 4  | 2  |  |
| W716307-S442 | - | Camshaft Mega Cap Bolts M7 x 38 mm                | 4  | 2  |  |
| W715449-S437 | - | Camshaft Bearing Cap Bolts M6 x 35 mm             | 4  | 16 |  |
| BE8Z-6K292-C | - | Camshaft Front Seals                              | 1  | 2  |  |
| 4M5Z-6M282-A | - | VCT Bolts   | 1  | 2  |  |
| BE8Z-6065-B  | - | Cylinder Head Bolts                               | 10 | 10 |  |
| DS7Z-6051-L  | - | Cylinder Head Gasket                              | 1  | 1  |  |
| W708317-S300 | - | Cylinder Head O-ring Seal, 18.3 x 2.4 mm          | 4  | 1  |  |
| W717236-S300 | - | Cylinder Head Fuel Drive O-ring Seal, 8.8 x 2.62  | 4  | 1  |  |
| W717166-S300 | - | Cylinder Head Fuel Drive O-ring Seal, 7.65 x 1.78 | 4  | 1  |  |
| BE8Z-6A340-A | - | Crankshaft Pulley Bolt                            | 1  | 1  |  |
| BE8Z-6700-B  | - | Crankshaft Front Oil Seal                         | 1  | 1  |  |
| BM5Z-6K301-B | - | Crankshaft Rear Oil Seal                          | 1  | 1  |  |
| DS7Z-6584-A  | - | Valve Cover Gasket                                | 1  | 1  |  |
| BM5Z-6659-B  | - | Oil Pump Gasket                                   | 1  | 1  |  |
| BE8Z-8507-A  | - | Coolant Pump Gasket                               | 1  | 1  |  |
| DS7Z-6B856-A | - | Oil Cooler Assembly                               | 1  | 1  |  |
| W520202-S437 | - | Coolant Outlet Nut                                | 4  | 1  |  |
| BE8Z-9278-A  | - | Oil Pressure Switch                               | 1  | 1  |  |
| W713043-S437 | - | Coolant Pump Bolts                                | 4  | 6  |  |
| BM5Z-2A572-A | - | Vacuum Pump Gasket                                | 1  | 1  |  |
| W716038-S437 | - | Vacuum Pump Stud Bolts                            | 4  | 3  |  |
| W701183-S300 | - | Cylinder Block To Cylinder Head Dowels            | 4  | 2  |  |
| W701350-S437 | - | Cylinder Block-To-Transmission Dowels             | 4  | 2  |  |
| W520101-     | - | Vacuum Control Regulator Nuts                     | 4  | 2  |  |



**Warranty Status:** Eligible under provisions of New Vehicle Limited Warranty (NVLW)/Emissions Warranty/Service Part Warranty (SPW)/Special Service Part (SSP)/Extended Service Plan (ESP) coverage. Limits/policies/prior approvals are not altered by a TSB. NVLW/Emissions Warranty/SPW/SSP/ESP coverage limits are determined by the identified causal part and verified using the OASIS part coverage tool. For repairs covered by the NVLW, completion of the procedure outlined in this TSB does not require obtaining Prior Approval or completion of a Cost Cap.

### Labor Times

| Description  | Operation No. | Time      |
|--|---------------|-----------|
| 2017-2019 Escape Front Wheel Drive (FWD) 1.5L: Retrieve DTCs, Diagnose And Replace The Short Block (Can Be Claimed With Labor Operation D)           | 222134A       | 19.7 Hrs. |
| 2017-2019 Escape All Wheel Drive (AWD) 1.5L: Retrieve DTCs, Diagnose And Replace The Short Block (Can Be Claimed With Labor Operation D)             | 222134B       | 21.2 Hrs. |
| 2014-2019 Fusion 1.5L: Retrieve DTCs, Diagnose And Replace The Short Block (Can Be Claimed With Labor Operation D Or E)                              | 222134C       | 19.2 Hrs. |
| 2014-2019 Fusion, 2017-2019 Escape Without Lane Departure: Additional Time To Check And Correct Front Toe (Can be Claimed With Labor Operations A-C) | 222134D       | 0.6 Hrs.  |
| 2014-2019 Fusion With Lane Departure: Additional Time To Check And Correct Front Toe (Can be Claimed With Labor Operation C Only)                    | 222134E       | 0.8 Hrs.  |

### Repair/Claim Coding

|                 |      |
|-----------------|------|
| Causal Part:    | 6009 |
| Condition Code: | D8   |

### Service Procedure

For repairs covered by the New Vehicle Limited Warranty, completion of the procedure outlined in this TSB does not require completion of a Cost Cap.

**NOTE: In the event that an Engine Short Block Service Kit is not available or temporarily on backorder, refer to the applicable Short Block Service Kit parts list in this article to order parts individually.**

- With the engine at normal operating temperature, pressurize the cooling system to 138 kPa (20 psi) and hold for 5 hours. Refer to the Cooling System Pressure Test in Workshop Manual (WSM), Section 303-03, Diagnosis and Testing.
- Did the coolant system pressure drop more than 27.57 kPa (4 psi) after 5 hours?
  - Yes - proceed to Step 3.
  - No - this article does not apply. Refer to the Powertrain Control/Emission Diagnosis (PC/ED) Manual for normal diagnostics.
- Remove the spark plugs. Refer to WSM, Section 303-07.
- Inspect for coolant in the cylinders due to an erosion, corrosion, pitting and flatness of the engine block surface. Is coolant present in any cylinders?
  - Yes - proceed to Step 5.
  - No - this article does not apply. Refer to WSM, Section 303-01A for normal diagnostics.
- Remove the engine and replace the engine short block. Refer to WSM, Section 303-01A.
  - Inspect the flexplate at the flexplate bolt holes. If cracks are detected, replace the flexplate.
  - For Escape AWD vehicles, the driveshaft is only disconnected at the PTU pinion flange for this procedure.

**NOTE: Advise the customer that some odor may be present after the repair has been completed until the residual coolant dissipates from the exhaust.**

**NOTE: The head gasket required for this repair may differ from the parts catalog. This is due to the fact that the parts catalog contains the information of the vehicle as it was originally built with a saw-cut short block.**

**The replacement short block used in this article is a cross-drilled design.**

**NOTE: If the crankshaft front seal is rolled during positioning, remove and reposition the seal or an oil leak will occur. Use the crankshaft front oil seal installer to seat the new crankshaft front seal.**

**NOTE: Make sure to install the oil pump bolts in their correct location and follow the appropriate tighten procedure. Refer WSM, Section 303-01A.**

**NOTE: Fusion vehicles equipped with the accessory drive belt tensioner do not use a stretchy belt.**

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