TECHNICAL INSTRUCTIONS

FOR

SAFETY RECALL 20TA04

CERTAIN ENGINE BLOCKS CAN CAUSE ENGINE FAILURE LEADING TO ENGINE STALL (non-hybrid) AND/OR FIRE RISK

CERTAIN 2020 AVALON HV CERTAIN 2020 CAMRY CERTAIN 2020 CAMRY HV CERTAIN 2019-2020 RAV4 CERTAIN 2019-2020 RAV4 HV

The repair quality of covered vehicles is extremely important to Toyota. All dealership technicians performing this recall are required to successfully complete the most current version of the E-Learning course "Safety Recall and Service Campaign Essentials". To ensure that all vehicles have the repair performed correctly; technicians performing this recall repair are required to currently hold <u>at least one</u> of the following certification levels:

- Certified Technician (Engine)
- Expert Technician (any specialty)
- Master Technician
- Master Diagnostic Technician

It is the dealership's responsibility to select technicians with the above certification level or greater to perform this recall repair. Carefully review your resources, the technician skill level, and ability before assigning technicians to this repair. It is important to consider technician days off and vacation schedules to ensure there are properly trained technicians available to perform this repair at all times.



II. BACKGROUND

Some of the subject vehicles may be equipped with an engine block that was manufactured incorrectly. This issue may cause coolant to leak internally and/or externally during normal engine operation. This can lead to engine noise, engine smoke, warning lights/malfunction indicator illumination, an audible chime sounding, and/or, in some cases, engine overheating and possible internal mechanical engine damage. If this occurs in a conventional gasoline vehicle, it is possible the vehicle could stall while driving at higher speeds without prior warning, increasing the risk of a crash. For both hybrid and conventional gasoline vehicles, the mechanical engine damage could cause engine oil to leak, which, in the presence of an ignition source, can lead to an increased risk of fire.

NOTE: If the engine stalls in a hybrid vehicle, the vehicle will enter a fail safe driving mode, allowing the driver to operate the vehicle at reduced power for certain distances to maneuver the vehicle to a safe location.

III. IDENTIFICATION OF AFFECTED VEHICLES

- Check the TIS Vehicle Inquiry System to confirm the VIN is involved in this Safety Recall, and that it has not already been completed prior to dealer shipment or by another dealer.
- TMS warranty will not reimburse dealers for repairs completed on vehicles that are not affected or were completed by another dealer.

IV. BLOCK ID No. INSPECTION (other than RAV4 AWD)

RAV4 AWD models are covered in Section V on p. 6.

1. REMOVE CENTER No. 4 ENGINE UNDER COVER

- a. Raise the car on a lift to gain access to the bottom of the vehicle.
- b. Remove the 4 screws to remove the Center No. 4 Engine Under Cover below the engine oil pan.





- 2. LOCATE ENGINE BLOCK ID No. (other than RAV4 AWD) a. Reference the photo below to locate the Block ID No. stamping.
- 3. CLEAN THE SURFACE
 - a. Use a clean, wet rag to wipe the area of the Block ID No. If necessary, use a wire brush to remove any additional dirt or corrosion.





TAKE A PHOTO OF THE BLOCK ID No.

a. Use a camera to take a photo of the Block ID No. Be sure to place the camera as straight and level as possible to the surface of the stamping.



5. REVIEW PHOTO

a. Zoom in on the Block ID No. in the photo to be sure all 12 characters can be clearly read. If all 12 digits are not legible, retake the photo.

Note: If Necessary, clean the area with a wire brush to remove any dirt and corrosion.

Note: If the Block ID No. is unreadable after properly cleaning the surface and retaking the photos, send an email to Quality Compliance:

Email address: Quality_Compliance@Toyota.com Subject: Block ID Unreadable

Provide the following:

- Attachment: Quality photo of the Block ID No.
- Dealer Code
- Technician Name
- VIN #
- Explanation of the problem

Once this email has been sent, please wait for an email response from Quality Compliance. They will provide directions for your next step.

Skip to Section VI. Determine Inspection Result on p. 10

V. BLOCK ID No. INSPECTION (RAV4 AWD only)

1. REMOVE CENTER No. 4 ENGINE UNDER COVER

- a. Raise the car on a lift to gain access to the bottom of the vehicle.
- b. Remove the 4 screws to remove the Center No. 4 Engine Under Cover below the engine oil pan.



2. LOCATE BLOCK ID No. (RAV4 AWD only)

The Block ID No. location on the RAV4 AWD can be seen from below by looking between the axle support carrier and the transfer case.



Note: The viewing angle is too steep to be able to read the Block ID No. It will be necessary to use an endoscope to take a photo of the Block ID No. as the transfer case prohibits access with a camera.

3. CLEAN THE BLOCK ID No. SURFACE

The surface of the Block ID No. cannot be easily reached with a rag or wire brush for cleaning. It may be necessary to use a Tube Brush or Bore Brush with a long handle to reach the area.

a. Use a Tube Brush or Bore Brush to scrub the surface of the Block ID No.





4. SET UP ENDOSCOPE

Your dealership was provided with a Depstech 85S Endoscope for Safety Recall J0M. This same endoscope will be used for this activity. If necessary, these tools can be purchased from many online retailers such as Amazon.

a. Plug the Depstech 85S Endoscope into a USB port of the Techstream.



b. Select the following link to download the Smart Camera software for the Depstech NTC 85S endoscope, if needed.

Smart Camera 3.1.2 download

Note: The software for this Depstech NTC 85S can also be downloaded at the Depstech website: https://www.depstech.com/index.php?route=product/support



c. Select the Settings tab at the bottom of the Smart Camera screen.

| Recording Method: AVI (High Quality) Video Renderer: Video mixing renderer 9 Video Compressor: MJPEG Compressor Audio Device: Headset Microphone (Jabra E Audio Compressor: PCM | Video Format: | MJPG 640x480 30 fps | ~ |
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| IP Cameras Video Advanced Settings. | IP Cameras | Video Advanced Settings | |

- d. Verify the following settings:
 - Device: SMI
 - Video Format: MJPG 640x480

The default values on the remainder of the settings will be acceptable.

e. Maximize the photo display area by selecting the Full Screen icon.

5. POSITION ENDOSCOPE

It will be necessary to use the endoscope to take a photo of the Block ID No. You can view the Block ID No. by positioning the Endoscope over the top of the transfer case, as shown below.



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6. TAKE PHOTO

- a. Turn on the endoscope light by adjusting the thumbwheel on the cord, close to the USB plug.
- b. Guide the endoscope over the top of the transfer case and locate the Block ID No.
- c. Select the TAKE PHOTO icon to save the image.

Note: Take a few different photos to be sure that one has the clarity to read all 12 digits of the Block ID No.

7. LOCATE PHOTOS

- a. Select the FULL SCREEN icon at the bottom of the screen
- b. Select the PHOTOS tab at the <u>bottom</u> of the Smart Camera screen.
- 8. Save each of the photos so they can be accessed later.

Note: Photos of the Block ID No. will be required to upload into the Inspection Website in the next steps, so be sure to save the photos.



9. REVIEW PHOTO

a. Review the photos of the Block ID. No.'s to determine which photo clearly displays the 12 digits.

Note: If the Block ID No. is unreadable after properly cleaning the surface and retaking the photos, send an email to Quality Compliance:

Email address: Quality_Compliance@Toyota.com Subject: Block ID Unreadable

Provide the following:

- Attachment: Quality photo of the Block ID No.
- Dealer Code
- Technician Name
- VIN #
- Explanation of the problem

Once this email has been sent, please wait for an email response from Quality Compliance. They will provide directions for your next step.

VI. DETERMINE INSPECTION RESULT

1. OPEN INSPECTION WEBSITE

a. Open the 20TA04 Inspection Website by selecting the following link:

https://20TA04-20LA02-safety-recall.imagespm.info/

- b. Enter your dealer code in the User ID field.
- c. Enter xxxxx for the Password. It will then prompt you to change the password. You can enter the same (5 x's) again, or create your own password. If you do change the password, be sure to advise other technicians of the updated password.

Note: Selecting the "Forgot Password" link will reset the password to the default password: xxxxx

d. Enter the vehicles VIN. It is critical that the VIN be entered accurately.

2. ENTER BLOCK ID No.

a. Enter the top row of the Block ID No. (6 digits) when prompted.

NOTE: All 6 digits are NUMBERS.



b. Enter the bottom row of the Block ID No. (6 digits) when prompted.

NOTE: The first digit is a LETTER, the remaining digits are NUMBERS.



| Take a photo of the Block ID Number and save to computer. Browse to select the file location and upload VIN: | Take a photo of the Block ID Number and save to computer. Browse to select the file location and upload. VIN: Block ID Number: Choose File No file chosen | Image Uplo | ad |
|---|---|---------------------|---|
| VIN: | VIN: Block ID Number: Choose File No file chosen | Take a photo of the | Block ID Number and save to computer. Browse to select the file location and upload |
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3. UPLOAD PHOTO

a. The website will require a photo of the Block ID No. to be uploaded. Be sure that all 12 digits of the Block ID No. are legible in the photo.

4. REVIEW INSPECTION RESULTS

a. Review the results provided by the website after inputting the Block ID No.



VII. REASSEMBLE VEHICLE (Engine Replacement NOT Necessary)



INSTALL CENTER No. 4 ENGINE UNDER COVER

 a. Install the center No. 4 engine under cover with the 4
 screws.

The Campaign is now complete. Return the vehicle to the customer.

VIII. ENGINE REPLACEMENT



- 1. INSTALL CENTER No. 4 ENGINE UNDER COVER
 - a. Install the center No. 4 engine under cover with the 4 screws.

2. ADVISE SERVICE MANAGER

Advise your Service Manager about this vehicle's need for engine replacement. The Engine Replacement repair is currently not available. When available, instructions will be provided to complete this repair. At this time, it's critical to discuss this vehicle with your Service Manager to insure the customer is correctly informed of their options.

Safety Recall 20TA04 Dealer Letter will provide details to discuss with the customer:

Safety Recall 20TA04 Dealer Letter

◄ VERIFY REPAIR QUALITY ►

- Confirm the Center No. 4 Engine Under Cover has been properly installed.
- If Engine replacement is required, be sure the Service Manager has been properly informed and the customer has been informed of their options.

If you have any questions regarding this update, please contact your regional representative.

IX. APPENDIX

A. PARTS DISPOSAL

In accordance with Federal law, please make sure all recalled parts (original parts) removed from the vehicle are disposed of in a manner in which they will not be reused, **unless requested for parts recovery return**.

B. CAMPAIGN DESIGNATION DECORDER

