# **TECHNICAL INSTRUCTIONS**

# FOR

# **SPECIAL SERVICE CAMPAIGN 21TC04**

# Incorrect Programming for Rear Seat Belt Reminder Indicator

# **CERTAIN 2021 Model Year C-HR**

The repair quality of covered vehicles is extremely important to Toyota. All dealership technicians performing this repair 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 have completed all of the following courses:

• T623 - Toyota Electrical Circuit Diagnosis

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. IDENTIFICATION OF AFFECTED VEHICLES**

 Check the TIS Vehicle Inquiry System to confirm that each VIN is eligible for this Special Service Campaign, and that it has not already been completed prior to dealer shipment or by another dealer.

Note: TMNA warranty will not reimburse dealers for repairs completed on vehicles that are not affected or were completed by another dealer.

#### III. PREPARATION

- 1. TOOLS, SUPPLIES & EQUIPMENT
  - Techstream ADVi / Techstream 2.0 / Techstream Lite
  - DCA-8000P Diagnostic Station
  - T-SB-0134-16

# **IV. BACKGROUND**

The subject vehicles are equipped with a rear seat belt reminder system that illuminates indicators temporarily after the ignition is turned on if rear seat belts are not buckled. Due to incorrect programming in a certain electronic control unit, certain situations can cause the rear seat belt reminder system not to illuminate the indicator as designed.

## V. DETERMINE CALIBRATION UPDATE STATUS



#### 1. PERFORM HEALTH CHECK

a. Using a Techstream, perform a Health Check to check for any Diagnostic Trouble Code.

Note: This Special Service Campaign covers only the Calibration ID update to the Combination Meter systems, as detailed in these instructions. It does not cover the diagnosis or replacement of any other parts on the vehicle.

## 2. DETERMINE CALIBRATION UPDATE STATUS

- a. Locate the <u>Update</u> column for the <u>Combination Meter</u> System's ECU in the <u>Stored Data</u> tab for this vehicle.
- b. Determine the status of an available update for the Combination Meter System's; indicated by a YES or NO.

3ZR-1	C-HR FAE	Tire Pressu	ure / Threshold	Value [psi(	gauge)]									
001553 mile 000000000000000000000000000000000000		Sensor 1: 33.42 28.43 Sensor 2: 33.17 /   Sensor 3: 0.00 1.75 Sensor 4: 0.00 /   Sensor 5: N/A N/A N/A   Health Check Results Health Check Results Health Check Results						Campaign Status: Yes PERMANENT: NO						
	File Notes	- Health Che	ck does not displa vehicle condition	will not upd	ate automatica	1			ECU Security	Key: -				
Ξ	Health Ch Data 1-	- To update I	Health Check, click	k the Refresh	button on the									
(H)	CAN Bus C		a											
Ŧ	Pre-Collisi	Enhanced	Generic											
ŧ	Engine an													
Ŧ	Cruise Cor			6			Test	0.0	Callbarder	Unders	Carlow			
(±	ABS/VSC/			System		0.81	Failed	ROB	Calibration	Update	Configure			
Ŧ	EMPS	Air Conditio	oner					-	8865F1002001	No	No			
۰	Air Condit								83800F480002	(Yes)				
Ŧ	SRS Airba	Combinatio	n Meter			1		•	83800F481000	No	No			
(H)	Combinati				/	_			83800F482000	No				
Ŧ	Starting C	Main Body						•	8922F1002001	No	No			
(±	Navigation	D-Door Mote	01					1.1			No			
Ŧ	Front Reck	Smart Key									No			
( <b>+</b> )	Lane Cont	P-Door Mote	10					•			No			
	Frank Daniel	000 0 11	dee.								No			
Ŧ	Front Rect *	RR-Door Mo	NOT						-		140			



Note: If the Combination Meter System's ECU already has the updated Calibration ID, the campaign is complete. No further action is required. Submit the warranty claim to complete this vehicle.

## VI. VEHICLE PREPERATION

**The ECU reprograming procedure is detailed in <u>T-SB-0134-16.</u> Reference this Bulletin for additional detailed procedures and information.** 

## 1. VEHICLE PREPARATION

- a. Confirm the following conditions:
  - Vehicle in the IG position (engine off).
  - Transaxle in Park.
  - Parking brake engaged.
  - Turn off all electrical accessories (i.e. climate control, audio system, etc.)
  - Headlight switch in the DRL OFF position.
  - Windshield wiper switch in the OFF position.

## 2. CONNECT THE 12v BATTERY TO A POWER SUPPLY (DCA-8000)

- a. Connect the DCA-8000 or other type of a power supply (not a battery charger) to the 12v battery.
- b. Select the Reflash icon from the Main Menu screen of the DCA-8000.



A power supply *MUST* be used during reprogramming. ECU damage will occur if the battery voltage is not properly maintained during this re-flash procedure.

Note: A power supply must be connected directly to the 12v battery terminals and <u>NOT</u> the remote jump posts under the hood (if equipped).

## 3. VERIFY TECHSTREAM SETUP

- a. Verify that the Techstream meets the following conditions:
  - The latest version of software is loaded.
  - The Techstream battery is fully charged. If not, connect the Techstream to a 120v source.
  - The DLCIII cable is in good condition.



The Techstream battery must be maintained during the update procedure. If necessary, plug the Techstream into a 120v outlet to ensure that a failure does not occur.

Note: If the Techstream communication with the vehicle fails during the re-flash procedure, the Combination Meter System's ECU will be damaged and must be replaced.

#### 4. DISCONNECT COOLING FAN

a. Disconnect the electrical connector from the cooling fan ECU on the radiator fan shroud.



STOP If the cooling fans run during the Calibration update procedure, the battery voltage will be inconsistent and could cause damage to the control module(s).

# **VII. UPDATE CALIBRATION ID**

- 1. UPDATE THE CALIBRATION ID FOR THE COMBINATION METER SYSTEMS ECU.
  - a. Identify the current <u>Calibration</u> ID for the <u>Combination Meter System's</u> ECU on the <u>Stored</u> <u>Data</u> tab.

2021 3ZR-	FAE	Tire Press	ure / Threshol	d Value [psi(	gauge)]							
0015	i53 mile	Sensor 1: Sensor 3:	33.42 / 28.4 0.00 / 1.1	43 Sensor 2: 75 Sensor 4:	33.17 / 0.00 /							
		Sensor 5.	N/A / N						Ca	mpaign S	status: Yes	٤.
00000		Health Che	eck Results			1				PERMAN	NENT: NO	
1	2021_C-HR_3i ^	- Health Chr	ECU Security Key: -									
	File Notes	- Changes in	n vehicle condition	on will not upd	ate automaticy	_						
Ξ	Health Ch	- To update	Health Check, cl	ick the Refresh	button on the	~	\	- (				
_	Data 1-				1	C	rigin	aic				
Œ	CAN Bus C	Enhanced	Generic			_	-	_				
•	Fre-Collisi											
8	Cruise Cor					-	Test					1.
œ F	ABS/VSC/			System		list	Failed	RoB	Calibration	Update	Configure	ľ
Ŧ	EMPS	Air Conditi	oner			1-	- arrea	· ·	8465F1002001	No	No	1
æ	Air Condit					1-			83800F480002	Yes		-
Ŧ	SRS Airba	Combinatio	on Meter			1-			83800F481000	No	No	
(±	Combinati				/				83800F482000	No	1	
Ŧ	Starting C	Main Body							8922F1002001	No	No	1
(±	Navigation	D-Door Mo	tor					1.1	-		No	
Ŧ	Front Reck	Smart Key						1.1			No	
(H)	Lane Cont	P-Door Mo	tor					1.1			No	
Ŧ	Front Reck Y	RR-Door M	otor						-		No	1
	Sort	RL-Door M	otor			<u> </u>			-		No	1
	301	Master Cod	la			-					P21042	20

- b. Locate the vehicles <u>Current CID</u> in the chart below.
- c. Select the corresponding <u>NEW CID link</u> to load the update.
- d. Follow the on-screen instructions to complete the calibration update procedure.

MODEL	SYSTEM	ORIGINAL CID	NEW CID (Combination Meter)
	Combination Mater	83800F480002	92900E490102
C-RK	Combination Meter	83800F480101	<u>03000F400102</u>

Note: If the Combination Meter ECU has the New CID's, no update is necessary.

The CID Update Procedure is detailed in <u>T-SB-0134-16</u>. Please reference this Bulletin for more detailed procedures and information.

#### VIII. COMPLETE REPAIR



#### 1. CONNECT COOLING FAN

a. Connect the electrical connector to the cooling fan ECU on the radiator fan shroud.

## 2. PERFORM VERIFICATION HEALTH CHECK

- a. Using a Techstream, perform a Health Check.
- b. Clear DTC's that may have set during the re-flash procedure.
- c. Re-run the Health Check to confirm that no DTC's reappear.

STOP THIS VERIFICATION HEALTH CHECK IS NECESSARY to update the results and CID's to the National database.

#### 3. CONFIRM CID UPDATE

a. On the Stored Data tab, confirm the following for the **Combination Meter** Systems:

- The Calibration number has the "New CID" number.
- The "Update" column says "No"



#### 4. PRINT CUSTOMER HEALTH CHECK REPORT

a. From the Stored Data tab, select the Customer Health Check Report button (TIS will launch when button is pressed).

								i —				<u> </u>		
2018 C-HR 32R-FAE	Tire Pressure / Threshold V	alue [kPajab	(a)										19	
WG409-2003071	Sensor 1: 368.19 / N/A Sensor 3: 366.47 / N/A Sensor 5: N/A / N/A	Sensor 2: 3 Sensor 4: 3	NR.19 / NJ NR.19 / NJ							$\ $	Custm	er Healt	th 斗 📑	1
2018_C.HR_32R -	Health Check Results	Health Check Results										Button	itton	
File Notes Health Ch	System	Monitor	DTC	Carr	Pend	Hist	Int	Calibration	Update *	II`	moon	Dutton		11
Engine	Families	Status		Conf			Failed							- L - L
a Transmiss	Radiar Cruise2									. –				
H Radar Cru	Transmission							**********	2	N				
H Radar Cru	Radar Cruise1	+			-			**********			~ ~			
H ABSVSC	ABS/VSC/TRAC/EPB							F1526F4033	Yes		/			
* FMPS	Steering Angle Sensor							**********	2		/			
a Air Condit	Four Wheel Drive	+0						**********	2		/			
H SRS Aliba	EMPS							**********	2 /					
# Pre-Collie	LKALDA							**********	1/	/				
H Combinat E Starting C	Front Recognition Camera							**********	11	ſ				
Front Rep	Air Conditioner	- +						**********						
E LANCON	Combination Meter							*********						
Sot	Main Body							********						
Familia	D Door Motor	+						//						
re-representation of	Entry& Start	+ -						/						
				-	_		_	-						

- b. Log in to TIS.
- c. Input Vehicle Mileage and Repair Order number.
- d. Check the "Performed" campaign button for the applicable campaigns.
- e. Select the Report button.
- f. Confirm Customer Health Check Report information is correct.

- g. Print Customer Health Check Report from TIS.
- h. Sign and provide to the customer.

# IX. REASSEMBLY

1. REMOVE THE POWER SUPPLY FROM THE BATTERY

# ◄ VERIFY REPAIR QUALITY ►

- Confirm the cooling fans are re-connected.
- Confirm the system Calibration has been updated successfully.
- Confirm there are no DTC's after the Calibration update.

#### X. 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.* 

