

**\*\* TECHNICAL INFORMATION NOTICE \*\***

**DATE:** November 10, 2021  
**TO:** Mitsubishi Motors US & Puerto Rico Dealer Service and Parts Managers  
**RE:** Additional Details for Front Camera Unit Calibration  
**TIN NO.** TIN-21-54-006

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**AFFECTED VEHICLES:** 2022 Outlander equipped with MI-Pilot system

**PURPOSE:**

MUT-III SE screen locks/freezes (black screen) when calibrating the Front Camera Unit. The following information provides clarification to the Front Camera Unit calibration procedure found in the Service Manual: Service Manual > Volume 5 > Driver Assistance System. When referring to the instructions in the Service Manual, please also reference the following:

**DETAILS:**

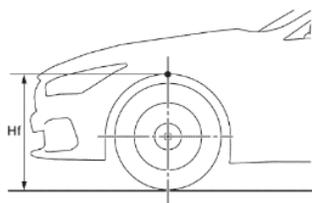
When diagnostics determine that calibration of the Front Camera unit is required, follow all Service Manual instructions (beginning on page 393). Upon reaching Step 1 (page 399) and prior to continuing to Step 2: CAMERA AIMING ADJUSTMENT, ensure the following conditions are met:

1. The hood can be opened but is not raised (ensure hood does not enter camera view or create reflections when placing a battery charger on vehicle).
2. The vehicle headlights and running lights are in the off position.

Take special notice of the CAMERA AIMING ADJUSTMENT Step 2 (page 400).

**1. CHECK VEHICLE HEIGHT**

Measure the wheelarch height.



CF100CIIAA00USA

Hl: Front left wheelarch height [mm]

Hr: Front right wheelarch height [mm]

$$Dh(\text{mm}) = (Hl + Hr) \div 2 - 829$$

**DH**, is a calculated value and **MUST** be entered as an even number. Place this value in MUT-III SE first and then enter the remaining values as stated in the Service Manual (page 400).

**EXAMPLE:**

Calculate the vehicle ride height (DH): Service Manual > Volume 5, Driver Assistance System > Page 399 (measures vehicle ride height). Measure the wheel arch to the ground at the left and right front of the Outlander and add both values (807mm + 810mm) = 1,617mm. Divide this by 2 = 808.5mm. Subtract 808.5mm from 829 (see image on bottom left of previous page) = -20.5. This number must be rounded to the nearest even number (up or down). In this example, we will round the value down. The number to enter for (DH) is (-20).

**CAUTION:** Measure the customer's vehicle. DO NOT USE the values listed in this document. The remaining values listed in the work instruction are distance measurements of the vehicle to target.

DH	-20
VP	0
Dt	3,000
Dbt	720
Htu	1,420
Htl	1,180
TS	120

Once all values are entered, select the "OK" within the MUT-III SE screen.

**NOTE:** If the calibration is not successful, work instructions will guide technicians to correct the cause. If a code displayed is not listed in this section of the Service Manual (page 400), navigate to the CONTENTS section and locate REFERENCE VALUES (see image below).

FRONT CAMERA UNIT .....	353
Reference Value .....	353

The reference values section will have the complete list of codes.

**VALUES ON THE DIAGNOSIS TOOL**

NOTE: The following table provides information (DTCs) recognizable to DTC, vehicle. For information (DTCs) applicable to this vehicle, refer to MUT-III SE display menu.

Monitor Name	Condition	Resolution
AWARD DONE	Ignition switch ON	0
	When the camera settings are completed	1
	When the camera settings are completed	6
AWARD RESULT	Ignition switch ON	1
	When the camera settings are normal completed	0
	When the camera settings are normal completed	0
	When the front camera unit fails an internal communication error	1
	When the front camera unit fails an internal communication error	2
	When the front camera unit fails a sensor information error	3
	When the front camera unit fails a setting mode error	4
	When a thermal sensor	6
	When the front camera unit cannot detect the setting mode	8
	When the front camera unit fails a camera setting error	9
	When the condition of the front camera unit is not correct	6
	When an correction value are outside the threshold	9
AWARD REASON	Ignition switch ON	18
	When the front camera unit cannot detect the target	18
	When the front camera unit cannot detect the target	19
	When the front camera unit cannot calculate the driving condition value	20
	When the front camera unit cannot detect the target	21
	When the camera unit cannot detect the target	22
	When the camera unit cannot detect the target	23
	When the camera unit cannot detect the target	24
	When the camera unit cannot detect the target	25
	When the camera unit cannot detect the target	26
	When the camera unit cannot detect the target	27
	When the camera unit cannot detect the target	28
AWARD	Ignition switch ON	01: 0.0 m/s
AWARD RES	Ignition switch ON	01: 0.0 m/s
AWARD SET	Ignition switch ON	01: 0.0 m/s
AWARD SET TIME	Ignition switch ON	01: 0.0 m/s
AWARD SET ACC	Ignition switch ON	01: 0.0 m/s
AWARD SET ACC	Ignition switch ON	01: 0.0 m/s
COMPARISON RESULT	Ignition switch ON	When the configuration is completed When the configuration is not completed When the configuration is completed When the configuration is not completed
		OK
		NG1
		NG2
		NG3
		NG4
		NG5
		NG6
		NG7

Providing outstanding customer service will increase long-term customer retention – leading to increased sales and profitability. Mitsubishi is dedicated to train Dealer personnel with the ability to diagnose vehicles on the first attempt.

If a technician has not yet completed the New ADAS 2021 Instructor-led training, we encourage dealers to sign by visiting: [MitsubishiAcademy.com](https://www.mitsubishiacademy.com). The course will be taught in Mitsubishi Technical Training Centers beginning on November 8th, 2021.