

Combimeter Reflash Tool Instruction Manual

AFFECTED VEHICLES

Year	Model	Trim Level
2018-20	Odyssey	ALL except LX
2019-20	Passport	ALL except Sport
2019-20	Pilot	ALL except LX

INTRODUCTION

This job aid supports the combimeter reflash tool (T/N 07AAL-THRA100) used in service bulletin 20-047 *Noncompliance Recall: Gauge Control Module Software Update*. Be sure to review this job aid before using the tool.



SAFETY PRECAUTIONS

NOTICE

The following safety precautions have been supplied by Denso. This information alerts you to potential hazards that could hurt you or others, and cause damage to the tool, the environment, or other property.

- Always observe the following rules. Failure to do so can result in heat generation, fire, or electrical shock.
- Do not disassemble or alter this tool.
- Do not connect this tool to any voltage exceeding its ratings.

Work environment

- Do not work anywhere that water or any other liquid, could come in contact with the tool.
- Ensure the tool is safely secured on a flat surface before carrying out any work.
 - Failure to do so could result in an accident.
- Only operate in a clean, well-lit environment.
 - Failure to do so could result in an accident.

Check before use

- Inspect each connector for foreign material or damaged, broken, or bent pins.
- Before connecting the power cable between this tool and the source, inspect for damage.
- Before use, make sure all hinges and control knobs properly function.
- Before use, check the reflash connector for signs of abnormal wear. Also check that the connector guide is present within the unit.
- Before using the tool for the first time, make sure it is calibrated. See CALIBRATION PROCEDURE on page 6.

Handling of the product and equipment

- Avoid dropping this tool or subjecting it to a strong impact.
- When connecting any connectors, ensure correct orientation of the connector and gently insert it straight in.
 - If the connector is connected in the wrong orientation, or put in or pulled out at the wrong angle, there is a risk of damaging the connector terminal and this may cause malfunctioning of this product.
- When removing any connector, hold the connector body, not the cord.
 - Pulling on the cord section can break the lines in the cable over time.
- Do not lift or drag the tool by pulling on the connected power cable. When moving the tool, hold the body of the unit or the integrated handles.
- Do not apply stress to the connector of the product.
 - Applying too much force could result in breaking the connector terminal, and this may cause malfunctions.

Usage restrictions

- Use this product only with approved gauge control modules.
- Always check for the proper connector prior to use to ensure you use the correct function.
- When removing the connector cover, be careful not to drop it into the product.
- Do not adjust the connector position while hinged top plate is lowered and the pogo head is down. Doing so will cause damage to the gauge control module.

Storage and maintenance of the product

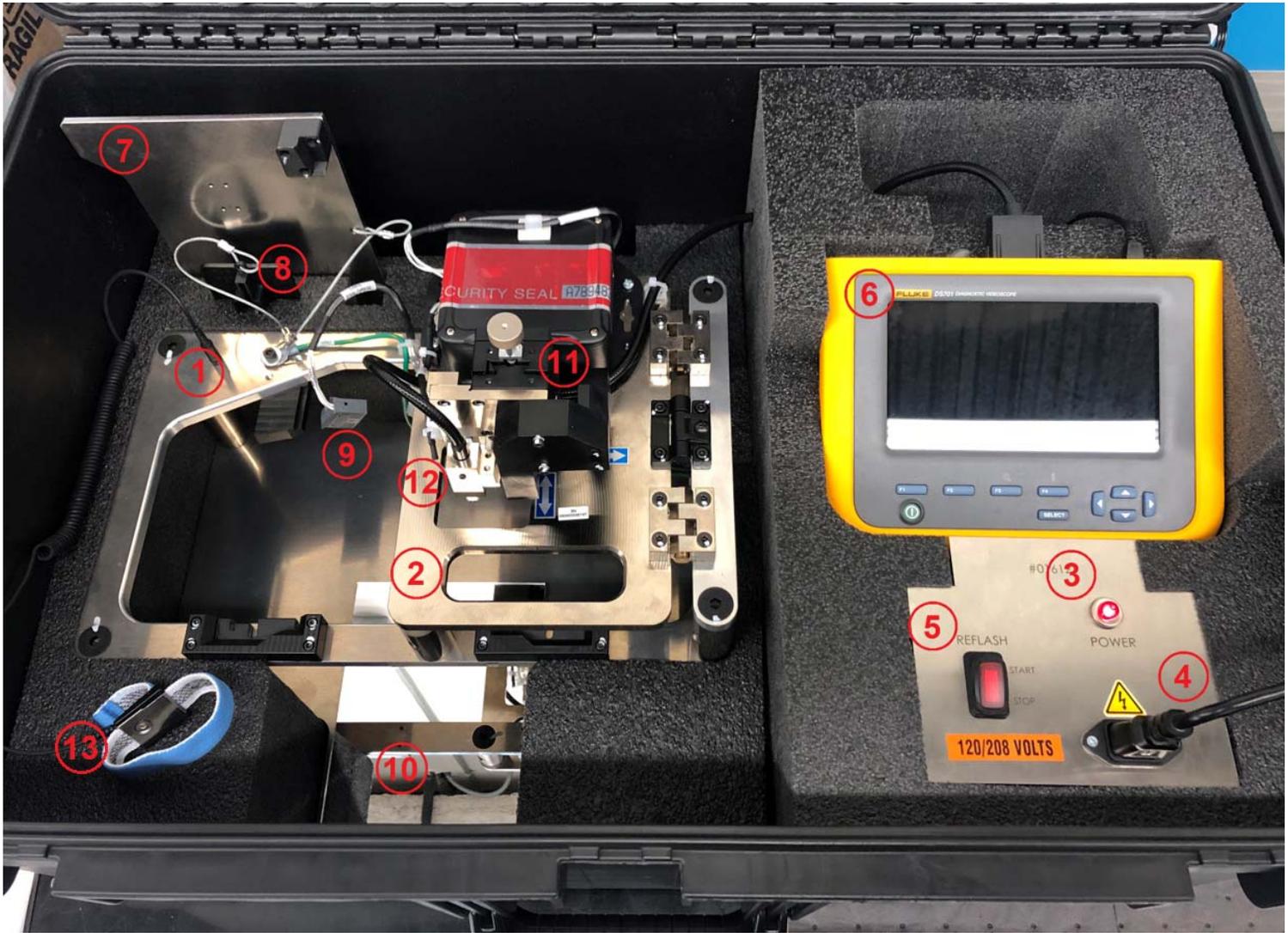
- Do not expose this product to direct sunlight for long periods of time.
- Do not expose this product to extreme heat.
 - Use and store this product in a dry environment.
- Do not use solvents or thinners such as benzine when cleaning.
 - Doing so could cause deformation, discoloration, cracking, etc., and malfunctions may result. To clean, wipe gently with diluted neutral detergent on a soft, damp cloth.

Disposal of the product

- Discard this tool or its accessories after its useful life according to local disposal laws.

PARTS LOCATION

General View



1	Reflash Jig
2	Hinged Top Plate
3	Power Indicator
4	Power Cable
5	Reflash Switch
6	Fluke Borescope
7	Calibration Plate
8	Connector Adaptor Plate
9	Cluster Power Supply
10	Inspection Mirror
11	Pogo Head Adjustment Assembly
12	Pogo Head Connector
13	Grounding Wriststrap

Fluke Borescope



1	F1 Button
2	F2 Button
3	F3 Button
4	F4 Button
5	Navigation Control Buttons
6	Power Button
7	SELECT Button
8	Menu Indicator
9	Screen
10	Battery Charge Level

Pogo Head Adjustment Assembly



1	X-Axis (Left/Right) Control Knob
2	Y-Axis (Forward/Backward) Control Knob
3	Z-Axis (Up/Down) Control Knob
4	Safety Shield
5	Pogo Head
6	Fluke Borescope Camera Head

CALIBRATION PROCEDURE

The combimeter reflash tool **must** be calibrated when it first arrives at your dealership, and again if the reflash procedure continues to fail.

1. Begin by powering on the combimeter reflash tool as normal, and raising the pogo head all the way up by turning the Z-axis control knob clockwise.
2. Remove the master calibration plate from the case, and fully seat it into the jig. Fully lower the hinged top plate.
3. Slowly lower the pogo head by turning the Z-axis control knob counterclockwise until you feel resistance or it contacts the calibration plate.

NOTICE

If the pogo head does not fit into the opening in the calibration plate, do not force the pogo head into the opening, as it may damage the tool. Call the Honda Special Tools hotline at **(800) 346-6327** for assistance.

4. Raise the pogo head, and adjust the X-axis and Y-axis control knobs to move the head closer to the center of the tooling. You should be moving the head away from the area where it contacted the calibration plate.
5. Repeat steps 3 and 4 until the head travels into the tooling on the calibration plate without resistance, dragging, or contact. Leave the pogo head down.
6. On the Fluke borescope, use the navigation control buttons to highlight the menu indicator at the top left corner of the screen.

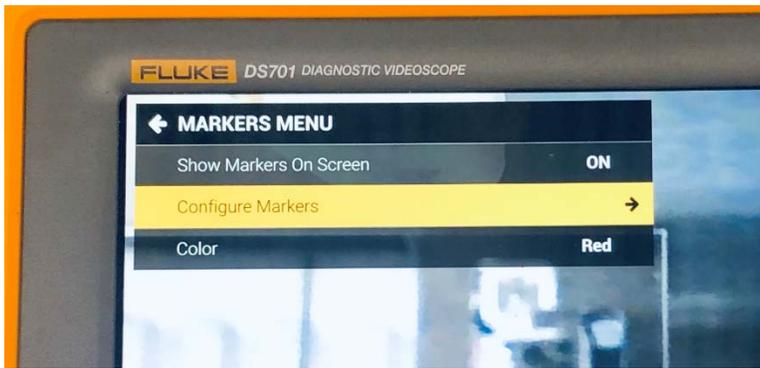


7. Press the SELECT button to open the menu at the bottom left of the screen.



8. Press the F3 button to select **Markers**.

9. In the **MARKERS MENU**, use the navigation control buttons to highlight **Configure Markers**.

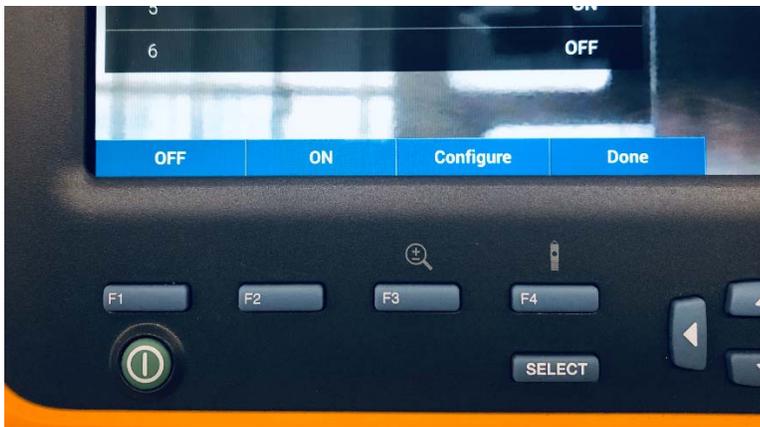


10. Press the SELECT button or the right navigation control button to select **Configure Markers**.

11. In the **CONFIGURE MARKER** menu, use the navigation control buttons to highlight marker 1.



12. Press the F3 button to configure marker 1



13. Use the navigation control buttons to position the red marker over the hole in the calibration plate.



14. Press the F4 button to go back to the **CONFIGURE MARKER** menu, then select the next marker to configure.

15. Repeat steps 11 thru 14 until all of the markers are configured.

16. When all of the markers have been configured, press the F4 button to select **Done** until you are back at the main screen to complete the calibration.

BASIC OPERATION

Setup / Powering On

1. Open the case, and remove the power cord from its storage area. Plug the power cord into the receptacle on the control panel. If the unit does not power on, check the appropriate breaker in your facilities breaker box.
2. Press the green Power button on the Fluke display, and wait for it to fully power up.

NOTE

If the Fluke display does not power up, or is showing a low battery sign on the screen, wait 1 hour with the unit plugged in to allow the internal battery to charge.

Identifying the Connector Type

Use a small snipping tool to remove the access cover on the back of the gauge control module.

NOTICE

Do not let the access cover fall into the gauge control module. The loose access cover could result in a rattle or buzzing noise, and the difficult recovery of the cover could lead to damage to the module.

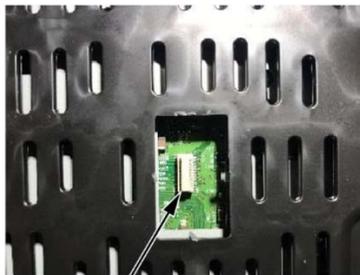


NOTE

Some gauge control modules have a connector on the circuit board and some do not.



WITHOUT CONNECTOR



WITH CONNECTOR

Reflashing the Gauge Control Module

To reflash the gauge control module, refer to service bulletin 20-047 *Noncompliance Recall: Gauge Control Module Software Update*.

TROUBLESHOOTING

General Tool Troubleshooting

Problem	Cause	Solution
Power indicator is not on	Power cord is disconnected or damaged	Check cord for damage and proper engagement with the power source (wall outlet) and product.
Power indicator is on, but Fluke borescope is not powering on	Battery within Fluke borescope is exhausted	Leave the unit plugged in, and wait about 1 hour to charge.
Fluke borescope displays battery icon	Battery within Fluke borescope is exhausted	Leave the unit plugged in, and wait about 1 hour to charge.
Fluke screen is dim or turned off	Fluke backlight setting is too low or off	Press the backlight button (F4) to open the backlight setting, and use the arrows to increase brightness.
Fluke screen is too bright	Fluke backlight setting is too high	Press the backlight button (F4) to open the backlight setting, and use the arrows to decrease brightness.

Reflashing Gauge Control Modules with a Connector

Problem	Cause	Solution
Gauge control module is booting normally instead of reflash sequencing	Connection between gauge control module and combimeter reflash tool is broken	Make sure the power and reflash cables are properly connected to the gauge control module. Also, make sure the reflash adaptor is properly in place.
Gauge control module is not turning on during reflash process		

Reflashing Gauge Control Modules without a Connector

Problem	Cause	Solution
Gauge control module is booting normally instead of reflash sequencing	Probe head is misaligned or damaged	<ol style="list-style-type: none"> 1. Raise the pogo head, and try to align the probe head. Try the flash process again. 2. If the problem continues, inspect the probe head for damage, such as a bent or missing pin. 3. If the problem still continues, recalibrate the pogo head position. See Calibration Procedure on page 9.
Gauge control module is not turning on during reflash process	Gauge control module power cable is ajar or damaged	Verify the power connector is fully seated into the gauge control module.

NOTE

If you need further assistance, call the Honda Special Tools hotline at **(800) 346-6327**.

REPLACEMENT COMPONENTS

Part Name	Part Number	Description
Pogo head, Reflash	07AAL-THRA110	Pogo head for reflashing non-populated GDC meters
Cable, C13 to Type B	07AAL-THRA130	Power Cable (110 V)
Display, Borescope	07AAL-THRA160	Fluke main display and case with buttons
Cable, Borescope Power	07AAL-THRA170	Power cable for Fluke borescope
Calibration, Pogo head	07AAL-THRA180	Calibration plate for aligning pogo head for mastering of borescope
Wriststrap, ESD Ground	07AAL-THRA190	ESD wriststrap and cable
Sheet, Hole Seal	07AAL-THRA120	Felt to apply to cover reflash hole (service part with size)
Hinge, Adjustable Torqu	07AAL-THRA1B0	Tension hinge
Card, SMART Reflash	07AAL-THRA1D0	Cable from SMART reflash unit to adapter board
Card, SMART Reflash	07AAL-THRA1E0	Adapter board and connection to meter/cable
Alignment, GDC	07AAL-THRA1F0	Plastic alignment tool for adapter board
Sub-cable, Combimeter	07AAL-THRA150	32 pin meter connector
Unit, SMART Reflash	07AAL-THRA140	SMART Reflash Unit (with SD card software installed and cyber security measures in place)

NOTE

To order replacement parts, call the Honda Special Tools hotline at **(800) 346-6327**.

TOOL SPECIFICATIONS

Item	Specification	
Size	31.3 in. (L) x 20.4 in. (W) x 13.8 in. (H) 79.5 cm (L) x 51.8 cm (W) x 35.1 cm (H)	
Weight	Approx. 59 lbs.(22.7 kg)	
Operating Environment	Operating Temperature	32 °F to 122 °F (0 °C to 50 °C)
	Storage Temperature	-4 °F to 158 °F (-20 °C to 70 °C)
	Operating Humidity	10 to 90% (No condensation)
Main Power Supply Voltage	95 to 264 VAC at 47 to 63 Hz	
Power Consumption	Normal Operation 50W (120 VAC) Max. 1.2kW (120 VAC)	
Gauge Control Module Output Voltage	11-13 VDC	
Fluke Borescope Input Voltage	5.0VDC	

STORAGE

This tool should be stored in accordance with the following:

1. Power the unit down fully using the power button on the Fluke borescope and unplugging the power supply cable.
2. The Z-axis control knob should be lowered down approximately 3 full rotations from its highest position.
 - If it is too high, you risk the case lid damaging it when being closed.
 - If it is too low and is not raised prior to the insertion of a gauge control module when next used, the head will collide with the gauge control module, causing damage to the head.
3. Make sure there is no gauge control module in the reflash jig when the hinged plate is lowered.
4. The calibration plate connector alignment tool, gauge control module power supply cable, and power cable should be stored in their respective storage locations.
5. Close the case lid and latch all points around the lid.
6. Store the closed case in a cool, dry area, away from direct sunlight.

END