

## Product Update: 2016-20 HR-V Software Update and CVT Inspection

### AFFECTED VEHICLES

Year	Model	Trim Level	VIN Range
2016-20	HR-V (CVT models only)	ALL	Check the iN VIN status for eligibility.

### BACKGROUND

An incorrect value in the PCM may cause a pressure problem in the CVT under certain driving conditions, causing increased surface pressure on the belt leading to a partial or complete breakage as well as possible ring breakage. New PCM software will increase the overall durability of the CVT primary belt within the transmission. This is accomplished by revising operational loads placed on the belt under certain driving conditions. DTC P271E is added so at the early stages of a CVT primary belt failure, the D light will flash, the MIL will come on, and engine power output will be reduced. This will lessen the chances of an unexpected, sudden loss of acceleration and allow the customer an opportunity to get the vehicle to a Honda dealer

### CUSTOMER NOTIFICATION

Owners of affected vehicles will be sent a notification of this campaign.

Do an iN VIN status inquiry to make sure the vehicle is shown as eligible.

Some vehicles affected by this campaign may be in your new or used vehicle inventory. Repair these vehicles before they are sold.

### CORRECTIVE ACTION

Update the PCM software and inspect the transmission to verify if the internal components are prematurely deteriorating within the transmission.

#### NOTE:

- Failure to follow the inspection procedure correctly may result in the customer's vehicle experiencing a transmission failure after the repair. Improper repairs could be subject to debit.
- Failure to perform the software update will result in the vehicle not having the ability to detect CVT belt slippage, trigger the MIL, and set a DTC which could cause the CVT belt to break and the vehicle not move when accelerating.

**CUSTOMER INFORMATION:** The information in this bulletin is intended for use only by skilled technicians who have the proper tools, equipment, and training to correctly and safely maintain your vehicle. These procedures should not be attempted by "do-it-yourselfers," and you should not assume this bulletin applies to your vehicle, or that your vehicle has the condition described. To determine whether this information applies, contact an authorized Honda automobile dealer.

## REQUIRED MATERIALS

Part Name	Part Number	Quantity
Disposable Paint Strainer (pack of 250) or Commercially equivalent (fixes 250 vehicles)	PMICSM6	1
Fine Point Permanent Marker (Black or Red) or Equivalent	Commercially Available	1

NOTE: Available through the Honda Tool and Equipment Program. Call (888) 424-6857 or use the fax order form provided in the Honda Tool and Equipment Program Catalog. Phone lines are open Monday through Friday from 7:30 AM to 7:00 PM Central Time.

## TOOL INFORMATION

Tool Name	Part Number	Quantity
Belt Fragment Detection Kit (includes belt fragment detection template and a magnet, 5 kits were shipped to each dealership)	07AAJ-52NA100	1

## WARRANTY CLAIM INFORMATION

Operation Number	Description	Flat Rate Time	Defect Code	Symptom Code	Template ID	Failed Part Number
1255G3	Update the PCM Software.	0.2 hr.	6MT00	EAU00	A21046A	37820-51M-A63
A	Do the PCM idle learn procedure.	0.1 hr.				
B	Inspection. (Includes time to remove and install lower engine cover on 2WD).	0.3 hr.				

Skill Level: Repair Technician

## SOFTWARE INFORMATION

This new software will increase the overall durability of the CVT belt within the transmission. This is accomplished by revising operational loads placed on the belt under certain driving conditions. DTC P271E was added so at the early stages of a CVT belt failure, the D light will flash, the MIL will come on, and engine power output will be reduced. This will lessen the chances of an unexpected, sudden loss of acceleration and allow the customer an opportunity to get the vehicle to a Honda dealer.

NOTE: Unnecessary or incorrect repairs resulting from a failure to update the diagnostic and reprogramming software are not covered under warranty.

**Before beginning the repair, make sure all diagnostic and reprogramming software are updated as listed.**

<b>i-HDS Software Version</b>	1.006.026 or later
<b>HDS Software Version</b>	3.104.014 or later
<b>J2534 Rewrite Software Information</b>	
<b>PC Application Version</b>	1.2.1.1
<b>Database Update</b>	05-APR-2021 or later
<b>NoticeDB Version</b>	05-APR-2021 or later

**Update only the systems and software listed in this service bulletin.**

American Honda has validated and approved the Denso DST-I as the vehicle communication interface (VCI) to support this service bulletin.

For more information about updating vehicle systems, refer to service bulletin 01-023, *Updating Control Units/Modules*.

Year/Model	Drivetrain	Trim Level	Vehicle System	Program ID (or later)
2016 HR-V	2WD	LX	PCM	37805-51M-A54
2016 HR-V	2WD	EX, EXL	PCM	37805-51M-A64
2016 HR-V	AWD	LX	PCM	37805-51M-A74
2016 HR-V	AWD	EX, EXL	PCM	37805-51M-A84
2017 HR-V	2WD	LX	PCM	37805-51M-C53
2017 HR-V	2WD	EX, EXL	PCM	37805-51M-C63
2017 HR-V	AWD	LX	PCM	37805-51M-C73
2017 HR-V	AWD	EX, EXL	PCM	37805-51M-C83
2018 HR-V	2WD	LX	PCM	37805-51M-C22
2018 HR-V	2WD	EX, EXL	PCM	37805-51M-C32
2018 HR-V	AWD	LX	PCM	37805-51M-C42
2018 HR-V	AWD	EX, EXL	PCM	37805-51M-C92
2019 HR-V	2WD	LX	PCM	37805-51M-L52
2019 HR-V	2WD	EX, EXL	PCM	37805-51M-L72
2019 HR-V	2WD	Sport	PCM	37820-51M-L62
2019 HR-V	AWD	LX	PCM	37805-51M-L82
2019 HR-V	AWD	EX, EXL	PCM	37805-51M-L42
2019 HR-V	AWD	Sport	PCM	37820-51M-L92
2020 HR-V	2WD	LX	PCM	37805-6N8-A52
2020 HR-V	2WD	EX, EXL	PCM	37805-6N8-A72
2020 HR-V	2WD	Sport	PCM	37820-6N8-A62
2020 HR-V	AWD	LX	PCM	37805-6N8-A12
2020 HR-V	AWD	EX, EXL	PCM	37805-6N8-A32
2020 HR-V	AWD	Sport	PCM	37805-6N8-A22

## REPAIR PROCEDURE

### NOTE:

- Make sure the 12-volt battery is fully charged before starting an update.
- Connect a fully charged jumper battery to the vehicle, and leave it connected during the entire procedure to maintain steady voltage.
- Do not use the GR8 because the vehicle requires a steady electrical current.
- Control module failure caused by the improper completion of a software update (early key cycle, low battery voltage, disconnected DLC cable, etc.) is not covered by warranty.
- If an error occurs during the update or the i-HDS freezes, **do not disconnect the battery or turn the ignition to OFF**. Reboot the i-HDS, and start over.
- To prevent control unit damage, do not operate anything electrical (headlights, audio system, brakes, A/C, power windows, door locks, etc.) during the update.
- Warranty reimbursement for technician labor is not allowed for **routine** checking/installation of any available software update.

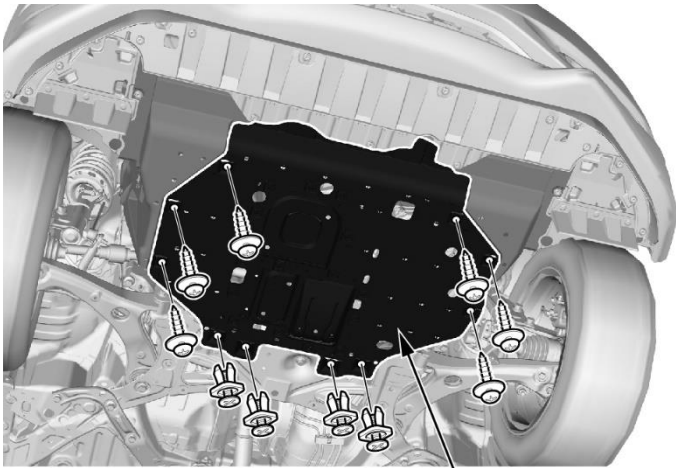
1. Update the PGM-FI software using the J2534 Rewrite software with the DST-i. Refer to service bulletin 01-023, *Updating Control Units/Modules*.
2. ECM/PCM Idle Learn.  
NOTE: Make sure all electrical items (the A/C, the audio, the lights, etc.) are off.
3. Turn the vehicle to the ON mode, and wait 2 seconds.
4. Start the engine. Hold the engine speed at 3,000 rpm without load (CVT in P or N) until the radiator fan comes on, or until the engine coolant temperature reaches 194 °F (90 °C).
5. Let the engine idle for about 5 minutes with the throttle fully closed.  
NOTE: If the radiator fan comes on, do not include its running time in the 5 minutes.
6. Turn the vehicle to the OFF (LOCK) mode.
7. Jump the SCS line with the HDS.
8. Wait 60 seconds, and exit the SCS mode with the HDS.

### CVT INSPECTION

The CVT inspection uses a special magnet to detect any metal fragments that may have been shed from the CVT belt. These fragments will collect in the oil pan. The inspection will be performed by placing a clear template on the CVT oil pan; tracing the slots on the template onto the pan with a marker, removing the template and then slowly sliding the magnet over lines 1 through 7 on the pan to the inspection area. If the magnet sticks to the inspection area, then the transmission will need to be replaced.

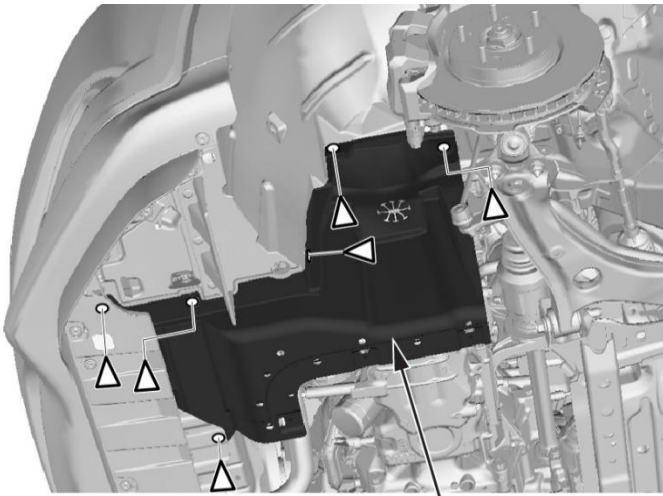
NOTE: Click [HERE](#) to see video of the transmission inspection.

1. Remove the engine undercover (2WD models).



ENGINE UNDERCOVER

2. Remove the front splash shield.



**FRONT SPLASH SHIELD**

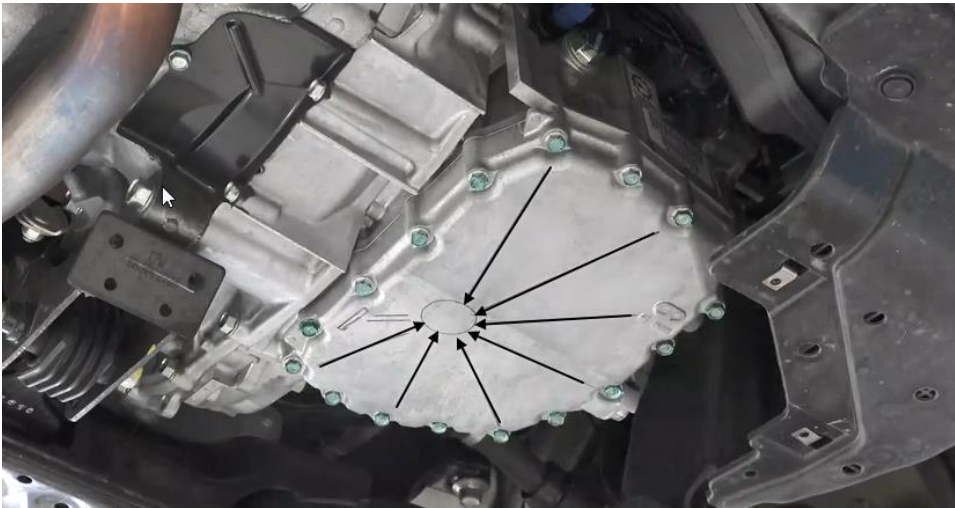
3. Wipe the oil pan with a shop towel, removing any dirt or contamination.
4. Remove the clear protective wrapper from the template.
5. Place the clear template (07AAJ-52NA100) on the oil pan as shown below. Line up the template with the oil pan bolts and the center of the transmission oil pan with the dashed lines.



6. While holding the template with one hand, apply pressure to keep the left side of the template flat against the pan, and trace the grooves on that side with a permanent marker as shown above. Keeping it in position, press against the right side of the template so the right-side grooves are now flush against the oil pan and trace the remaining lines including the inspection area circle on that side. Next, trace grooves on Letter "A" with a permanent marker.



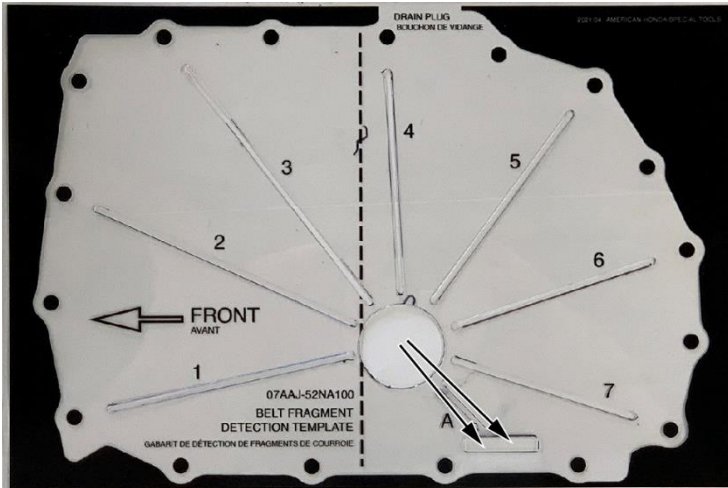
7. Remove the template from the oil pan.
8. Starting on line #1, place a magnet on each of the lines starting from the outside, slowly trace each line to the center inspection circle on the template, then lift the magnet off the inspection area (shown in black below).



- Repeat until you have traced all 7 lines with the magnet.

NOTE: It is important to slide the magnet smoothly from outside (bolt side) of the oil pan slowly, following the 7 lines you traced to the inspection area circle. While sliding the magnet on the oil pan, you may feel the magnet sticking in some areas shown on illustration above. This is normal as there are some bolts under the oil pan that attach the valve body to the transmission.

- After tracing all 7 lines from the outside to the inspection area, let go of the magnet to see if it sticks in place. If the magnet sticks to the oil pan in the inspection area there is a problem with the transmission, go to service bulletin 21-047, *Warranty Extension 2016 - 20 HR-V CVT Premature Belt Deterioration*. If the magnet does not stick to the oil pan, go to the next step.
- Place the magnet in the inspection area and slowly trace the "A" lines with the magnet to the lower right-side magnet shown on the oil pan (see image below). This is done to move any metal contaminates too small to hold the test magnet to the internal transmission magnet. Inspection is complete.



- Install the engine undercover (2WD models) and front lower splash shield.
- California residents only: Fill out a Vehicle Emissions Recall – Proof of Correction certificate, and use EAU as the recall number. Have the service advisor give the certificate to your customer, and advise him or her to keep it as proof that the recall was completed. Your customer will need to submit this certificate to the DMV only if the DMV requests it. If you need more certificates, use reorder number Y0657.

Vehicle Emission Recall - Proof of Correction				
License Number	Make	Year Model	Body Type	Vehicle Identification Number
Manufacturer			Recall Number <b>EAU</b>	
The above described vehicle has been repaired, modified and/or equipped with new emission control devices to meet applicable California Emission Control Laws.				
Dealer's Name		Address, City, State and Zip		
Date	Dealership's Authorized Signature			
	X			
Return this certificate to DMV <u>only</u> when required - otherwise retain for your records.				
Y0657		ACL 24832 (02/12)		

END