

19-003

# December 4, 2020

Version 5

# **MIL Comes On with DTC P0716**

Supersedes 19-003, dated October 15, 2020; to revise the information highlighted in yellow.

# **AFFECTED VEHICLES**

Year	Model	Trim	VIN Range
2016-17	MDX	ALL	ALL
2015	TLX	V6 2WD with 9-Speed A/T	From VIN 19UUB2FA021489 and later
		V6 AWD with 9-Speed A/T	From VIN 19UUB3FA007728 and later
2016-17	TLX	V6 with 9-Speed A/T	ALL
<mark>2018</mark>	TLX	V6 2WD with 9-Speed A/T	From VIN 19UUB2JA000001 to 19UUB2JA011767
		V6 AWD with 9-Speed A/T	From VIN 19UUB3JA000001 to 19UUB3JA005470

## **REVISION SUMMARY**

- Under SOFTWARE INFORMATION, information was updated.
- Under AFFECTED VEHICLES, models were updated.

#### BACKGROUND

During a downshift from 9th or 8th gear to 7th gear or lower, a miscalculation in the TCM software causes the MIL to come on with DTC P0716 (input shaft [mainshaft] speed sensor [range/performance]).

#### **CORRECTIVE ACTION**

Check if the on-board snapshot shows DTC P0716. If it does, send it to Tech Line referencing the repair order number and update the TCM software.

If the on-board snapshot does not show DTC P0716, this bulletin does not apply.

# WARRANTY CLAIM INFORMATION

The normal warranty applies.

Operation Number	Description	Flat Rate Time	Defect Code	Symptom Code	Template ID	Failed Part Number
1255C7	Update the TCM software.	0.2 hr	03214	03217	B19003A	28103-5J4-A500

Skill Level: Repair Technician

**CLIENT 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 Acura automobile dealer.

# SOFTWARE INFORMATION

# NOTE

Unnecessary or incorrect repairs resulting from a failure to update the i-HDS are not covered under warranty.

i-HDS Software Version: 1.006.013 or later

J2534 Rewrite Software Information:

- PC Application Version 1.2.1.1 or later
- Database update **23-SEP-2020**

Before beginning the repair, make sure that both the i-HDS and J2534 Rewrite software are updated as listed above.

Do only the update listed in this service bulletin.

You cannot apply the updates with the MVCI as a standalone tool. To update the software you must use the MVCI or the DST-i interface in conjunction with the J2534 Rewrite software on the i-HDS.

For more information about updating the i-HDS, the MVCI, and vehicle systems, refer to service bulletin 01-026, *Updating Control Units/Modules*.

Year/Model	Trim	Program ID (or later)	Program P/N (or later)
2017 TLX	9AT 2WD Base and Tech Package	28103-5J4-A100	28103-5J4-A10
2017 TLX	9AT 2WD With Advance Package	28103-5J4-A200	28103-5J4-A20
2017 TLX	9AT AWD Base and Tech Package	28103-5L9-A100	28103-5L9-A10
2017 TLX	9AT AWD Advance Package	28103-5L9-A200	28103-5L9-A20
2015-17 TLX	9AT 2WD Base and Tech Package	28103-5J4-A700	28103-5J4-A70
2015-17 TLX	9AT 2WD Advanced Package	28103-5J4-A800	28103-5J4-A80
2015-17 TLX	9AT AWD With Base and Tech Package	28103-5L9-A300	28103-5L9-A30
2015-17 TLX	9AT AWD Advance Package	28103-5L9-A800	28103-5L9-A80

Year/Model	Trim	Program ID (or later)	Program P/N (or later)
2018 TLX	2WD	<mark>28103-5J4-A300</mark>	<mark>28103-5J4-A30</mark>
2018 TLX	AWD	28103-5L9-A500	<mark>28103-5L9-A50</mark>
2018 TLX	2WD	<mark>28101-5J4-A900</mark>	<mark>28101-5J4-A90</mark>
2018 TLX	AWD	28101-5L9-A900	<mark>28101-5L9-A90</mark>
2016 MDX	2WD Base and Tech Package	28103-5NB-A500	28103-5NB-A50
2016 MDX	2WD Base and Tech Package	28103-5NB-A600	28103-5NB-A60
2016 MDX	2WD With Advance Package	28103-5NB-A700	28103-5NB-A70
2016 MDX	AWD Base and Tech Package	28103-5NC-A500	28103-5NC-A50
2016 MDX	AWD Base and Tech Package	28103-5NC-A600	28103-5NC-A60
2016 MDX	AWD With Advance Package	28103-5NC-A700	28103-5NC-A70
2017 MDX	2WD Base and Tech Package	28103-5NB-A100	28103-5NB-A10
2017 MDX	2WD Base and Tech Package	28103-5NB-A200	28103-5NB-A20
2017 MDX	2WD With Advance Package	28103-5NB-A300	28103-5NB-A30
2017 MDX	AWD Base and Tech Package	28103-5NC-A100	28103-5NC-A10
2017 MDX	AWD Base and Tech Package	28103-5NC-A200	28103-5NC-A20
2017 MDX	AWD With Advance Package	28103-5NC-A300	28103-5NC-A30

## **REPAIR PROCEDURE**

- 1. Turn the ignition to ON.
- 2. Connect the i-HDS, and go to the **A/T Data List**. Check if the software has been updated by comparing the Program ID with the table in SOFTWARE INFORMATION.

ACURA TLX-2016 AT Mode DataList		
	19UARDESIGA	TAC TAC
Signal	Value	Units
Vehicle Speed	0	MPH
Vehicle Speed from Transmission Output Shaft Speed	0	MPH
Vehicle Speed from Transmission Input Shaft Speed	0	MPH
Transmission Input Speed	0	RPM
Transmission Output Speed	0	RPM
ATF Temperature	123.8	۰F
Voltage to control solenoids	12.10	V
Input voltage of "ESL_POWER"	11.40	V
Oil pressure sensor value for dog clutch	1.11	bar
Parking Sensor Signal P	Parking	0
Parking Sensor Signal not P	Other	
Shift up Switch on Steering	OFF	
Shift down Switch on Steering	OFF	•
Power supply voltage for "VBSOL"	12.10	V
Power supply voltage for sensors 1.	8.60	V
Power supply voltage for sensors 2.	5.00	V
Reverse signal output.	OTHER	
Parking signal output.	OTHER	
Engine Speed	0	RPM
Calculated Accelerator Pedal Position	0.0	%
Calculated Driver request engine torque.	0.8	N-m
Calculated Engine torque.	3.0	N-m
Barometric Pressure	100	kPa
Lateral G	0.00	m/s <sup>3</sup>

- If the Program ID shown matches the table, the vehicle has been updated and this service bulletin does not apply. Continue with normal system troubleshooting.
- If the Program ID shown does not match the table, the vehicle has not been updated. Go to step 3.

3. Select Mode Menu, then On-Board Snapshot.

1 2 12 12 12 12 12 12 12 12 12 12 12 12	
Mode Menu Mode Menu      Mode Menu      Mode Menu	

4. Select and view all available on-board snapshots for Automatic Transmission (EAT).

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ACURA TLX-2016 AT Mode On-Board Snapshot	
16,4,621	NACAMPINETI SAT
Please select an OBS file to view.	OBDSnapshot_08_VIY_WFD
	On some 2006 and later models, temporary OBS file (s) will be available for 30 drive cycles after the associated initial detection of a malfunction or temporary DTC(s) has been set.
1. P0716 – VNM Performance	This temporary OBS file is an indicator of a potential intermittent problem that may or may not be currently present.
	The temporary OBS file should be treated exactly as a temporary DTC. The information is provided as an aid in troubleshooting difficult to resolve intermittent problems. The information can be used to target the condition experienced by the customer when the symptom occurred in the event recreation is needed.
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• If no on-board snapshots show P0716, this service bulletin does not apply. Continue with normal system troubleshooting.

• If an on-board snapshot shows P0716, select **Send On Demand** to e-mail it to Tech Line, then go to step 5.

ACURA TLX-2016 AT Mode On-Board Snapshot	Value 39 1200 1200 OTHER H OTHER	Units MPH A RPM RPM	14 09 30 03 28101-5J4-A590
III List-DTC: P0/16 VM Performance Signal Chicle Speed from Transmission Output (Counter Shaft) Speed nput Shaft (Mainshaft) Speed input Shaft (Mainshaft) Speed istW Selector Position 1 ISW Selector Position 2 addle Shift Switch Take Switch	Value 39 1200 1200 OTHER H OTHER	Units MPH RPM	UECKPLOTIOS EU UC
Signal	39 1200 1200 OTHER U OTHER	MPH ^ RPM	
ehicle Speed from Transmission Output (Counter Shaft) Speed nput Shaft (Mainshaft) Speed ngine Speed BW Selector Position 1 BW Selector Position 2 addle Shift Switch Take Switch	39 1200 1200 OTHER U OTHER	MPH ^ RPM	
nput Shafi (Mainshafi) Speed ngine Speed BW Selector Position 1 SW Selector Position 2 addle Shift Switch Take Switch	1200 1200 OTHER H OTHER	RPM	
ngine Speed BW Selector Position 1 BW Selector Position 2 addle Shift Switch rake Switch	1200 OTHER H OTHER		
BW Selector Position 1 BW Selector Position 2 addle Shift Switch rake Switch	OTHER H OTHER	RPM	
BW Selector Position 2 addle Shift Switch rake Switch	H		
addle Shift Switch trake Switch	OTHER		
Irake Switch			
TR	ON		
	102	%	SEND ON DEMAND
alculated Engine torque	0.0	N-m	
ntegrated Dynamic Mode(IDS)	Normal		
arget gear Shifting	7th	for a second	
river Side Door Switch	CLOSE	•	X
river Side Seatbelt Switch	ON		
lutch target torque.	360.0	N-m	
arking Sensor Signal P	Other		
arking Sensor Signal not P	Not Parking		
Dil pressure sensor voltage.	0.50	V	
/T SHIFT SOL VLV. A: Automatic Transmission Shift Solenoid Valve A	ON	0	
/T SHIFT SOL VLV. B: Automatic Transmission Shift Solenoid Valve B	OFF		
/T SHIFT SOL VLV. C: Automatic Transmission Shift Solenoid Valve C	ON	0	
/T SHIFT SOL VLV. D: Automatic Transmission Shift Solenoid Valve D	ON		
P SENSOR: Throttle Position Sensor	3	%	
PP SENSOR: Accelerator Pedal Position Sensor	0	5	
hift Map Number	5	~	

5. Update the TCM software using the i-HDS J2534 Rewrite software with the MVCI or DST-i. Refer to service bulletin 01-026, *Updating Control Units/Modules*.

END