TOYOTA SERVICE BULLETIN

Group: 06 No.: 03 Date: July, 18

Model: RAV4

Subject: Corrections to Repair Manual RM01N3E

Please ensure these pages are distributed to all relevant staff for their information; and a copy made available for future reference, with the above repair manual.

Section	Title	Paragraph
U140F AUTOMATIC TRANSAXLE	DIFFERENTIAL OIL SEAL	REPLACEMENT (2005/11-2007/01)
		REPLACEMENT (2007/01-2007/08)
		REPLACEMENT (2007/08-)
U151F AUTOMATIC TRANSAXLE	DIFFERENTIAL OIL SEAL	REPLACEMENT
SERVICE SPECIFICATIONS	U140F AUTOMATIC TRANSAXLE	SERVICE DATA
	U151F AUTOMATIC TRANSAXLE	SERVICE DATA

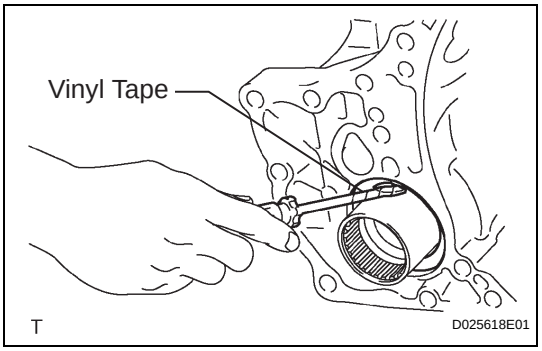
The revised pages listed above are attached.

(The corrected parts are indicated by arrows.)

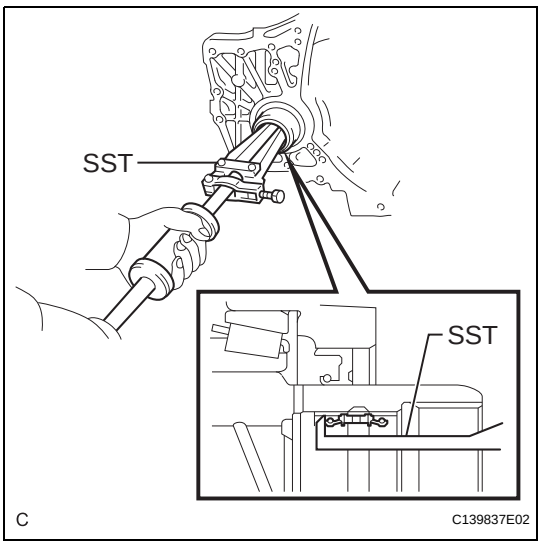
This bulletin does not cause the Flat Rate Manual to be changed

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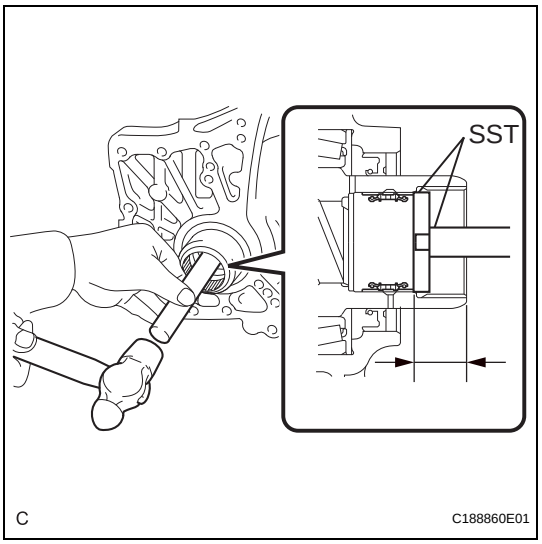
AX



(f) Remove the transaxle housing oil seal RH (Outside).
(1) Using a screwdriver with its tip wrapped with vinyl tape, pry out the oil seal.
NOTICE:
Be careful not to damage the housing.



(g) Remove the transaxle housing oil seal RH (Inside).
(1) Using SST, tap out the oil seal.
SST 09308-00010
NOTICE:
Be careful not to damage the differential case.

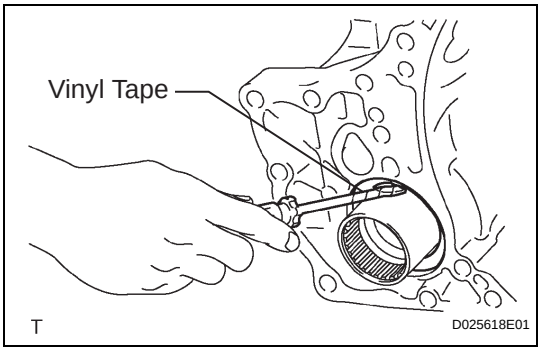


(h) Install the transaxle housing oil seal RH (Inside).
(1) Coat the lip of a new oil seal with the MP grease.
(2) Using SST and a hammer, tap in the oil seal.
SST 09950-60010 (09951-00410), 09950-70010 (09951-07200)
Standard depth:
21.5 to 22.5 mm (0.847 to 0.885 in.)
NOTICE:
Do not damage the lip of the oil seal.

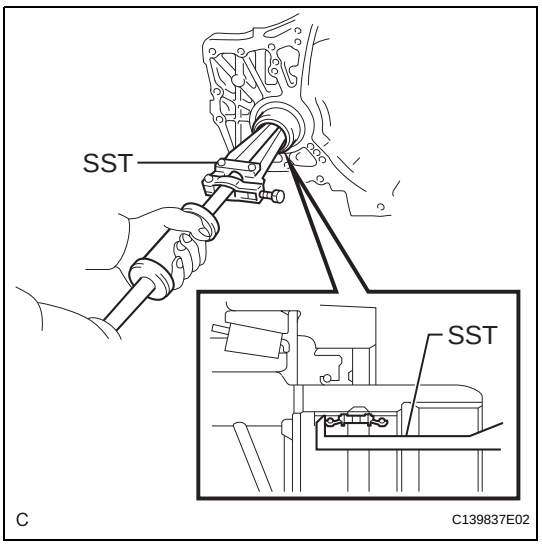
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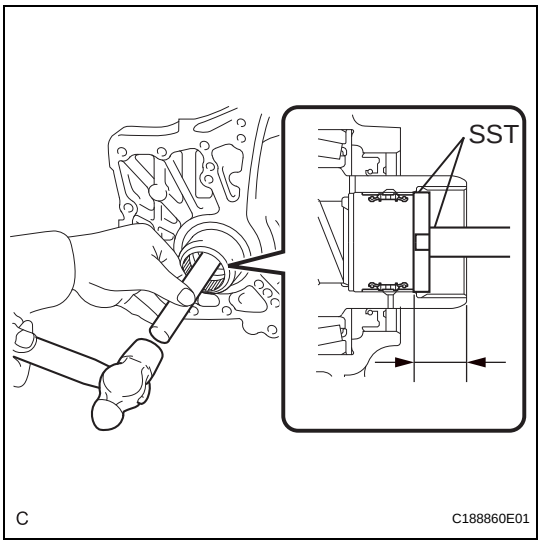
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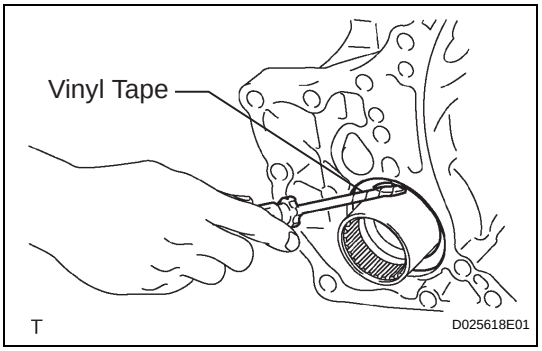


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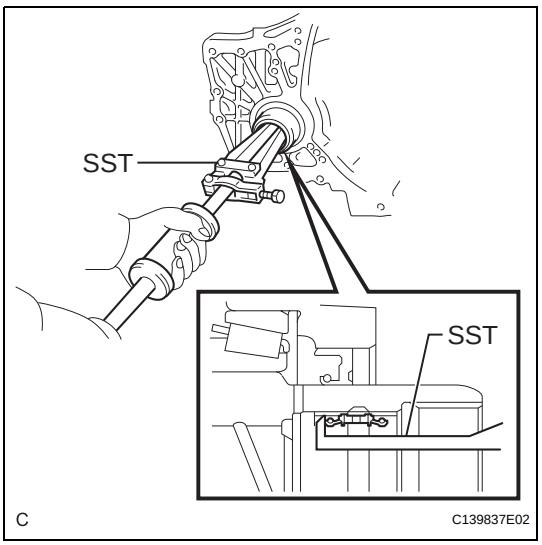
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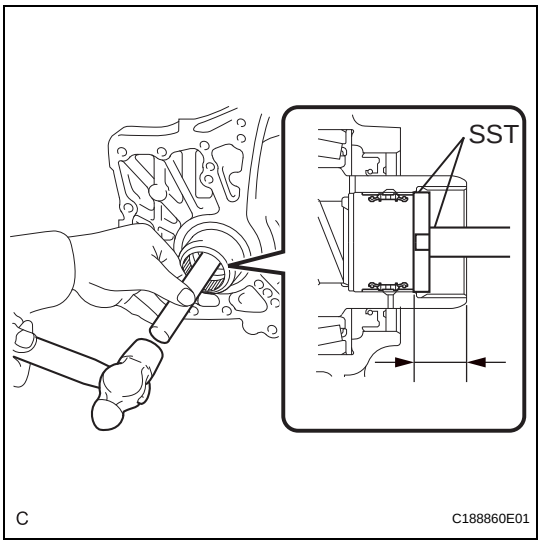
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SST 09308-00010
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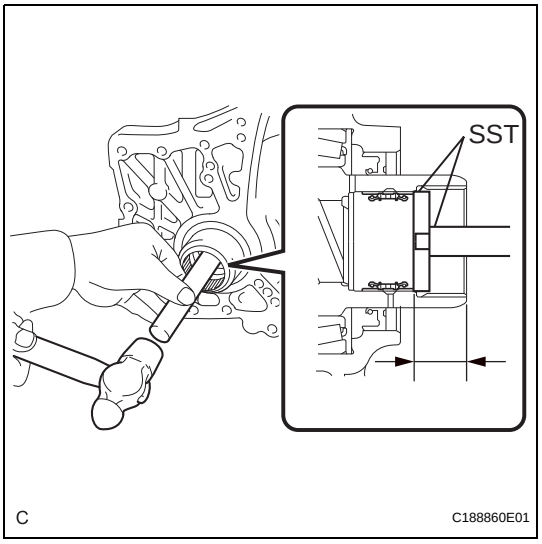


(h) Install the transaxle housing oil seal RH (Inside).
(1) Coat the lip of a new oil seal with the MP grease.
(2) Using SST and a hammer, tap in the oil seal.
SST 09950-60010 (09951-00410), 09950-70010 (09951-07200)
Standard depth:
21.5 to 22.5 mm (0.847 to 0.885 in.)
NOTICE:
Do not damage the lip of the oil seal.

[Corrected]

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AX



5. INSTALL TRANSAXLE HOUSING OIL SEAL RH

(a) Install the transaxle housing oil seal RH (Inside).

(1) Coat the lip of a new oil seal with MP grease.

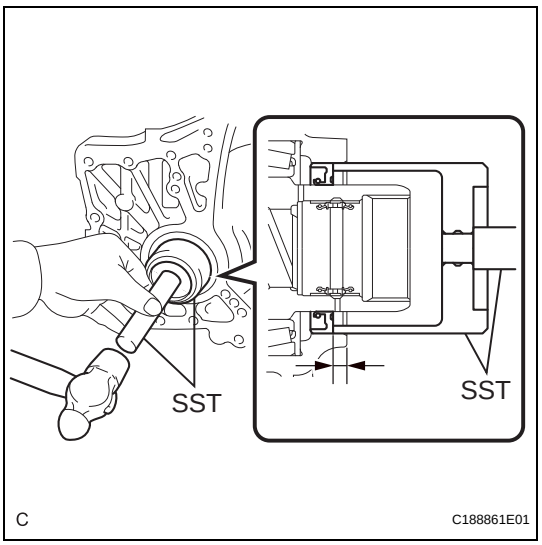
(2) Using SST and a hammer, tap in the oil seal.

SST 09950-60010 (09951-00410), 09950-70010 (09951-07200)

Standard depth:
21.5 to 22.5 mm (0.847 to 0.885 in.)

NOTICE:
Do not damage the lip of the oil seal.

[Corrected]



(b) Install the transaxle housing oil seal RH (Outside).

(1) Coat the lip of the oil seal with MP grease.

(2) Using SST and a hammer, tap in the oil seal.

SST 09649-17010, 09950-70010 (09951-07200)

Standard depth:
5.5 to 6.5 mm (0.217 to 0.256 in.)

NOTICE:
Do not damage the lip of the oil seal.

6. INSTALL TRANSFER ASSEMBLY

HINT:
(See page)

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U140F AUTOMATIC TRANSAXLE

SERVICE DATA

AUTOMATIC TRANSMISSION ASSEMBLY

Line pressure (Wheel locked) AT stall (Throttle valve fully opened)	D position	931 to 1,031 kPa (9.1 to 10.5 kgf*cm^2, 129 to 149 psi)
	R position	1,768 to 1,968 kPa (18.0 to 20.0 kgf/cm^2, 284 to 256 psi)
Engine stall revolution	D positions	2,400 to 2,700 rpm
Time lag	N → D position	Less than 1.2 seconds
	N → R position	Less than 1.2 seconds
Engine idle speed (A/C OFF)	N position	610 to 710 rpm
Drive plate runout	Maximum.	0.20 mm (0.0079 in.)
Differential oil seal drive in depth	LH	-0.5 to 0.2 mm (-0.0196 to 0.00787 in.)
	RH (Inside)	21.5 to 22.5 mm (0.847 to 0.885 in.)
	RH (Outside)	5.5 to 6.5 mm (0.217 to 0.256 in.)
Shift point	[Corrected]	
D position (Throttle valve fully opened)	1 → 2	55 to 63 km/h (34 to 39 mph)
	2 → 3	102 to 112 km/h (63 to 70 mph)
	3 → 4	156 to 171 km/h (97 to 106 mph)
	4 → 3	148 to 163 km/h (92 to 101 mph)
	3 → 2	94 to 104 km/h (58 to 65 mph)
	2 → 1	44 to 51 km/h (27 to 32 mph)
D position (Throttle valve fully closed)	3 → 4	40 to 47 km/h (25 to 29 mph)
	4 → 3	16 to 22 km/h (10 to 14 mph)
2 position (Throttle valve fully opened)	1 → 2	55 to 63 km/h (34 to 39 mph)
	3 → 2	102 to 112 km/h (63 to 70 mph)
	2 → 1	32 to 39 km/h (20 to 24 mph)
L position (Throttle valve fully opened)	3 → 2	102 to 112 km/h (63 to 70 mph)
	2 → 1	48 to 55 km/h (30 to 34 mph)
Lock-up point		
D position (Throttle valve opening 5 %)	Lock-up ON 4 → 4L	53 to 60 km/h (33 to 37 mph)
	Lock-up OFF 4L → 4	51 to 58 km/h (32 to 36 mph)
Input shaft		
End play	0.262 to 1.249 mm (0.0103 to 0.0492 in.)	
Multiple disc clutch clutch hub		
Inside diameter	STD	23.025 to 23.045 mm (0.9065 to 0.9073 in.)
	Max.	23.09 mm (0.9091 in.)
Underdrive brake		
Return spring free length	14.04 mm (0.5528 in.)	
Pack clearance	1.81 to 2.20 mm (0.0713 to 0.0866 in.)	
Flange thickness	Mark 1	3.0 mm (0.118 in.)
	Mark 2	3.2 mm (0.126 in.)
	Mark 3	3.4 mm (0.134 in.)
2nd brake		
Pack clearance	0.62 to 0.91 mm (0.0244 to 0.0358 in.)	
Return spring free length	16.61 mm (0.6539 in.)	

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U151F AUTOMATIC TRANSAXLE

SERVICE DATA

Automatic Transaxle Assembly

Line pressure (Wheel locked) AT stall (Throttle valve fully open)	D position	931 to 1031 kPa (9.5 to 10.5 kgf*cm^2, 135 to 150 psi)
	R position	1768 to 1968 kPa (18.0 to 20.1 kgf/cm^2, 256 to 285 psi)
Engine stall revolution	D position	2450 to 2750 rpm
Time lag	N → D position	Less than 1.2 seconds
	N → R position	Less than 1.5 seconds
Engine idle speed (A/C OFF)	N position	600 to 700 rpm
Drive plate runout	Maximum	0.20 mm (0.0079 in.)
Differential side oil seal depth	LH	-0.5 to 0.5 mm (-0.0197 to 0.0197 in.)
	RH (Inside)	21.5 to 22.5 mm (0.847 to 0.885 in.)
	RH (Outside)	5.5 to 6.5 mm (0.217 to 0.256 in.)
Shift point [Corrected]		
D position (Throttle valve fully open)	1 → 2	50 to 58 km/h (31 to 36 mph)
	2 → 3	99 to 108 km/h (62 to 67 mph)
	3 → 4	161 to 176 km/h (100 to 109 mph)
	4 → 5	239 to 257 km/h (149 to 160 mph)
	5 → 4	230 to 247 km/h (143 to 153 mph)
	4 → 3	154 to 169 km/h (96 to 105 mph)
	3 → 2	94 to 102 km/h (58 to 63 mph)
	2 → 1	35 to 42 km/h (22 to 26 mph)
D position (Throttle valve fully closed)	4 → 5	68 to 75 km/h (42 to 47 mph)
	5 → 4	40 to 47 km/h (25 to 29 mph)
3 position (Throttle valve fully open)	1 → 2	50 to 58 km/h (31 to 36 mph)
	2 → 3	99 to 108 km/h (62 to 67 mph)
	4 → 3	154 to 169 km/h (96 to 105 mph)
	3 → 2	94 to 102 km/h (58 to 63 mph)
	2 → 1	35 to 42 km/h (22 to 26 mph)
2 position (Throttle valve fully open)	1 → 2	50 to 58 km/h (31 to 36 mph)
	3 → 2	94 to 102 km/h (58 to 63 mph)
	2 → 1	35 to 42 km/h (22 to 26 mph)
L position (Throttle valve fully open)	2 → 1	35 to 42 km/h (22 to 26 mph)
Lock-up point		
D position (Throttle valve opening 5%)	Lock-up ON 5 → 5L	66 to 74 km/h (41 to 46 mph)
	Lock-up OFF 5L → 5	64 to 72 km/h (40 to 45 mph)
	Lock-up ON 4 → 4L	106 to 116 km/h (66 to 72 mph)
	Lock-up OFF 4L → 4	103 to 112 km/h (64 to 70 mph)
	Lock-up ON 3 → 3L	64 to 73 km/h (40 to 45 mph)
	Lock-up OFF 3L → 3	62 to 70 km/h (39 to 43 mph)
Input shaft		
End play	0.262 to 1.244 mm (0.0103 to 0.0490 in.)	

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