

# AUTOMATIC TRANSMISSION / TRANSAXLE

## SERVICE DATA

0305K-09

A246E			
Line pressure (Wheel locked)	Engine idling		
	D position	382 – 422 kPa (3.9 – 4.3 kgf/cm <sup>2</sup> , 55 – 61 psi)	
	R position	647 – 760 kPa (6.6 – 7.8 kgf/cm <sup>2</sup> , 94 – 111 psi)	
	At stall (Throttle valve fully opened)		
	D position	713 – 844 kPa (7.27 – 8.61 kgf/cm <sup>2</sup> , 103 – 122 psi)	
	R position	1,520 – 1,755 kPa (15.5 – 17.9 kgf/cm <sup>2</sup> , 220 – 254 psi)	
Engine stall revolution	D and R positions	2,550 ± 150 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	650 ± 50 rpm	
Drive plate runout	Max.	0.20 mm (0.0079 in.)	
Differential oil seal drive in depth	LH side	5.3 ± 0.5 mm (0.209 ± 0.020 in.)	
	RH side	2.0 ± 0.5 mm (0.079 ± 0.020 in.)	
Shift schedule	D position (Throttle valve fully opened)	1 → 2	55 – 64 km/h (34 – 40 mph)
		2 → 3	103 – 114 km/h (64 – 71 mph)
		3 → O/D	161 – 178 km/h (100 – 110 mph)
		O/D → 3	154 – 170 km/h (96 – 106 mph)
		3 → 2	96 – 105 km/h (60 – 65 mph)
		2 → 1	42 – 48 km/h (26 – 30 mph)
	(Throttle valve fully closed)	3 → O/D	32 – 39 km/h (20 – 24 mph)
		O/D → 3	15 – 21 km/h (9 – 13 mph)
	2 position (Throttle valve fully opened)	1 → 2	55 – 64 km/h (34 – 40 mph)
		3 → 2	97 – 107 km/h (60 – 66 mph)
		2 → 1	42 – 48 km/h (26 – 30 mph)
	L position (Throttle valve fully opened)	2 → 1	46 – 53 km/h (29 – 33 mph)
Lock-up point 3rd gear (O/D main switch OFF)	Throttle valve opening 5 %		
	Lock-up ON	70 – 79 km/h (43 – 49 mph)	
	Lock-up OFF	63 – 71 km/h (39 – 44 mph)	
	O/D gear	Lock-up ON	57 – 65 km/h (35 – 40 mph)
Lock-up OFF		51 – 58 km/h (32 – 36 mph)	
U240E			
Line pressure (Wheel locked)	Engine idling		
	D position	373 – 412 kPa (3.8 – 4.2 kgf/cm <sup>2</sup> , 54 – 60 psi)	
	R position	673 – 742 kPa (6.9 – 7.6 kgf/cm <sup>2</sup> , 98 – 108 psi)	
	At stall (Throttle valve fully opened)		
	D position	931 – 1,031 kPa (9.5 – 10.5 kgf/cm <sup>2</sup> , 135 – 150 psi)	
	R position	1,768 – 1,968 kPa (18.0 – 20.0 kgf/cm <sup>2</sup> , 256 – 285 psi)	
Engine stall revolution	D and R positions	2,325 ± 150 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	700 ± 50 rpm	
Drive plate runout	Max.	0.20 mm (0.0079 in.)	
Differential oil seal drive in depth	LH side	2.7 ± 0.5 mm (0.106 ± 0.020 in.)	
	RH side	0 ± 0.5 mm (0 ± 0.020 in.)	

2003 COROLLA MATRIX (RM940U)

## SERVICE SPECIFICATIONS – AUTOMATIC TRANSMISSION / TRANSAXLE

Shift schedule			
D position (Throttle valve fully opened)	1 → 2	58 – 66 km/h (36 – 41 mph)	
	2 → 3	108 – 122 km/h (67 – 76 mph)	
	3 → O/D	172 – 189 km/h (107 – 117 mph)	
	O/D → 3	166 – 182 km/h (103 – 113 mph)	
	3 → 2	101 – 114 km/h (63 – 71 mph)	
	2 → 1	43 – 49 km/h (27 – 30 mph)	
	(Throttle valve fully closed)	3 → O/D	38 – 45 km/h (24 – 28 mph)
		O/D → 3	14 – 19 km/h (9 – 12 mph)
	2 position (Throttle valve fully opened)	1 → 2	58 – 66 km/h (36 – 41 mph)
	3 → 2	108 – 121 km/h (67 – 75 mph)	
	2 → 1	43 – 49 km/h (27– 30 mph)	
L position (Throttle valve fully opened)	3 → 2	108 – 121 km/h (67 – 75 mph)	
	2 → 1	50 – 57 km/h (31 – 35 mph)	
Lock-up point	Throttle valve opening 5 %		
O/D gear	Lock-up ON	72 – 81 km/h (45 – 50 mph)	
	Lock-up OFF	62 – 70 km/h (39 – 43 mph)	
U341F			
Line pressure (Wheel locked)	Engine idling		
	D position	372 – 412 kPa (3.8 – 4.2 kgf/cm <sup>2</sup> , 54 – 60 psi)	
	R position	553 – 623 kPa (5.6 – 6.4 kgf/cm <sup>2</sup> , 80 – 100 psi)	
	At stall (Throttle valve fully opened)		
	D position	1,126 – 1,226 kPa (11.5 – 12.5 kgf/cm <sup>2</sup> , 164 – 178 psi)	
	R position	1,764 – 1,964 kPa (18.0 – 20.0 kgf/cm <sup>2</sup> , 256 – 284 psi)	
Engine stall revolution	D and R positions	2,550 ± 150 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	650 ± 50 rpm	
Drive plate runout	Max.	0.20 mm (0.0079 in.)	
Differential oil seal drive in depth	LH side	2.7 ± 0.5 mm (0.106 ± 0.020 in.)	
	RH side (Front transaxle case oil seal)	4.0 ± 0.5 mm (0.157 ± 0.020 in.)	
	RH side (Front differential case oil seal)	0 ± 0.5 mm (0 ± 0.020 in.)	
Shift schedule			
D position (Throttle valve fully opened)	1 → 2	52 – 59 km/h (32 – 37 mph)	
	2 → 3	100 – 110 km/h (62 – 68 mph)	
	3 → O/D	161 – 173 km/h (100 – 108 mph)	
	O/D → 3	154 – 165 km/h (96 – 103 mph)	
	3 → 2	94 – 104 km/h (58 – 65 mph)	
	2 → 1	43 – 48 km/h (27 – 30 mph)	
	(Throttle valve fully closed)	3 → O/D	42 – 47 km/h (26 – 29 mph)
		O/D → 3	31 – 36 km/h (19 – 22 mph)
	2 position (Throttle valve fully opened)	1 → 2	52 – 59 km/h (32 – 37 mph)
	3 → 2	96 – 105 km/h (60 – 65 mph)	
	2 → 1	43 – 48 km/h (27– 30 mph)	
L position (Throttle valve fully opened)	3 → 2	96 – 105 km/h (60 – 65 mph)	
	2 → 1	48 – 53 km/h (30 – 33 mph)	