AUTOMATIC TRANSMISSION / TRANSAXLE

030G2–01

SERVICE DATA

U241E (1AZ–FE)		
Line pressure (Wheel locked)		
	Engine idling	
	D range	373 – 412 kPa (3.8 – 4.2 kgf·cm^2, 54 – 60 psi)
	R range	673 – 942 kPa (6.9 – 9.9 kgf·cm^2, 97 – 140 psi)
	AT stall (Throttle valve fully opened)	
	D range	931 – 1,031kPa (9.5 – 10.5 kgf·cm^2, 135 – 150 psi)
	R range	1,768 – 1,968 kPa (18.0 – 20.0 kgf·cm^2, 256 – 285 psi)
Engine stall revolution	D and R range	2,470 ± 150 rpm
Time lag	N → D range	Less than 1.2 seconds
	N → R range	Less than 1.5 seconds
Engine idle speed		
(A/C OFF)	N range	650 ± 50 rpm
Drive plate runout	Max.	0.20 mm (0.0079 in.)
Torque converter clutch runout	Max.	0.30 mm (0.0118 in.)
Differential oil seal drive in depth	LH side	0 ± 0.5 mm (0 ± 0.020 in.)
	RH side	0 ± 0.5 mm (0 ± 0.020 in.)
Shift schedule		
D range		
(Throttle valve fully opened)	1 → 2	50 – 56 km/h (31 – 35 mph)
	2 → 3	93 – 100 km/h (58 – 62 mph)
	3 → 4	149 – 160 km/h (93 – 99 mph)
	4 → 3	142 – 152 km/h (88 – 94 mph)
	3 → 2	86 – 92 km/h (53 – 57 mph)
	2 → 1	41 – 47 km/h (25 – 29 mph)
(Throttle valve fully closed)	3 → 4	35 – 40 km/h (22 – 25 mph)
	4 → 3	15 – 20 km/h (9 – 12 mph)
2 range		
(Throttle valve fully opened)	1 → 2	50 – 56 km/h (31 – 35 mph)
	3 → 2	93 – 99 km/h (58 – 62 mph)
	2 → 1	41 – 47 km/h (25 – 29 mph)
L range		
(Throttle valve fully opened)	3 → 2	93 – 99 km/h (58 – 62 mph)
	2 → 1	46 – 51 km/h (29 – 32 mph)
Lock–up point	Throttle valve opening 5 %	
O/D gear	Lock–up ON	56 – 62 km/h (35 – 39 mph)
	Lock–up OFF	54 – 60 km/h (34 – 37 mph)
U241E (2AZ–FE, w/o kick down switch)		
Line pressure (Wheel locked)		
	Engine idling	
	D range	373 – 412 kPa (3.8 – 4.2 kgf·cm^2, 54 – 60 psi)
	R range	673 – 742 kPa (6.9 – 7.8 kgf·cm^2, 97 – 111 psi)
	AT stall (Throttle valve fully opened)	
	D range	931 – 1,031kPa (9.5 – 10.5 kgf·cm^2, 135 – 150 psi)
	R range	1,768 – 1,968 kPa (18.0 – 20.0 kgf·cm^2, 256 – 285 psi)
Engine stall revolution	D and R range	2,550 ± 150 rpm
Time lag	N → D range	Less than 1.2 seconds
	N → R range	Less than 1.5 seconds
Engine idle speed		
(A/C OFF)	N range	650 ± 50 rpm
Drive plate runout	Max.	0.20 mm (0.0079 in.)
Torque converter clutch runout	Max.	0.30 mm (0.0118 in.)
Differential oil seal drive in depth	LH side	0 ± 0.5 mm (0 ± 0.020 in.)
	RH side	0 ± 0.5 mm (0 ± 0.020 in.)

U241E (2AZ–FE, w/o kick down switch)		
Shift schedule		
D range		
(Throttle valve fully opened)	1 → 2	57 – 64 km/h (35 – 40 mph)
	2 → 3	106 – 114 km/h (66 – 71 mph)
	3 → 4	171 – 183 km/h (106 – 114 mph)
	4 → 3	162 – 174 km/h (101 – 108 mph)
	3 → 2	98 – 105 km/h (61 – 65 mph)
	2 → 1	43 – 49 km/h (27 – 30 mph)
(Throttle valve fully closed)	3 → 4	40 – 46 km/h (25– 29 mph)
	4 → 3	17 – 23 km/h (11 – 14 mph)
2 range		
(Throttle valve fully opened)	1 → 2	57 – 64 km/h (35 – 40 mph)
	3 → 2	106 – 113 km/h (66 – 70 mph)
	2 → 1	43 – 49 km/h (27 – 30 mph)
L range		
(Throttle valve fully opened)	3 → 2	106 – 113 km/h (66 – 70 mph)
	2 → 1	52 – 58 km/h (32 – 36 mph)
Lock–up point	Throttle valve opening 5 %	
O/D gear	Lock–up ON	64 – 70 km/h (40 – 43 mph)
	Lock–up OFF	62 – 68 km/h (39 – 42 mph)
U241E (2AZ–FE, w/ kick down switch)		
Line pressure (Wheel locked)		
	Engine idling	
	D range	373 – 412 kPa (3.8 – 4.2 kgf·cm^2, 54 – 60 psi)
	R range	673 – 742 kPa (6.9 – 7.8 kgf·cm^2, 97 – 111 psi)
	AT stall (Throttle valve fully opened)	
	D range	931 – 1,031kPa (9.5 – 10.5 kgf·cm^2, 135 – 150 psi)
	R range	1,768 – 1,968 kPa (18.0 – 20.0 kgf·cm^2, 256 – 285 psi)
Engine stall revolution	D and R range	2,550 ± 150 rpm
Time lag	N → D range	Less than 1.2 seconds
	N → R range	Less than 1.5 seconds
Engine idle speed		
(A/C OFF)	N range	650 ± 50 rpm
Drive plate runout	Max.	0.20 mm (0.0079 in.)
Torque converter clutch runout	Max.	0.30 mm (0.0118 in.)
Differential oil seal drive in depth	LH side	0 ± 0.5 mm (0 ± 0.020 in.)
	RH side	0 ± 0.5 mm (0 ± 0.020 in.)
Shift schedule		
D range		
(Throttle valve fully opened)	1 → 2	57 – 64 km/h (35 – 40 mph)
	2 → 3	106 – 114 km/h (66 – 71 mph)
	3 → 4	171 – 183 km/h (106 – 114 mph)
	4 → 3	126 – 138 km/h (78 – 86 mph)
	3 → 2	74 – 80 km/h (46 – 50 mph)
	2 → 1	0 – 13 km/h (0 – 8 mph)
(Throttle valve fully closed)	3 → 4	40 – 46 km/h (25 – 29 mph)
	4 → 3	17 – 23 km/h (11 – 14 mph)
2 range		
(Throttle valve fully opened)	1 → 2	57 – 64 km/h (35 – 40 mph)
	3 → 2	106 – 113 km/h (66 – 70 mph)
	2 → 1	0 – 13 km/h (0 – 8 mph)
L range		
(Throttle valve fully opened)	3 → 2	106 – 113 km/h (66 – 70 mph)
	2 → 1	52 – 58 km/h (32 – 36 mph)

U241E (2AZ–FE, w/ kick down switch)		
Shift schedule(When kick down switch turns ON)		
D range		
(Throttle valve fully opened)	1 → 2	57 – 64 km/h (35 – 40 mph)
	2 → 3	106 – 114 km/h (66 – 71 mph)
	3 → 4	171 – 183 km/h (106 – 114 mph)
	4 → 3	162 – 174 km/h (101 – 108 mph)
	3 → 2	98 – 105 km/h (61 – 65 mph)
	2 → 1	43 – 49 km/h (27 – 30 mph)
2 range		
(Throttle valve fully opened)	1 → 2	57 – 64 km/h (35 – 40 mph)
	3 → 2	106 – 113 km/h (66 – 70 mph)
	2 → 1	43 – 49 km/h (27 – 30 mph)
Lock–up point	Throttle valve opening 5 %	
O/D gear	Lock–up ON	64 – 70 km/h (40 – 43 mph)
	Lock–up OFF	62 – 68 km/h (39 – 42 mph)
U140E (1MZ–FE, w/o kick down switch)		
Line pressure (Wheel locked)		
	Engine idling	
	D range	373 – 412 kPa (3.8 – 4.2 kgf·cm^2, 54 – 60 psi)
	R range	673 – 742 kPa (6.9 – 7.8 kgf·cm^2, 97 – 111 psi)
	AT stall (Throttle valve fully opened)	
	D range	931 – 1,031kPa (9.5 – 10.5 kgf·cm^2, 135 – 150 psi)
	R range	1,768 – 1,968 kPa (18.0 – 20.0 kgf·cm^2, 256 – 285 psi)
Engine stall revolution	D and R range	2,680 ± 150 rpm
Time lag	N → D range	Less than 1.2 seconds
	N → R range	Less than 1.5 seconds
Engine idle speed		
(A/C OFF)	N range	650 ± 50 rpm
Drive plate runout	Max.	0.20 mm (0.0079 in.)
Torque converter clutch runout	Max.	0.30 mm (0.0118 in.)
Differential oil seal drive in depth	LH side	0 ± 0.5 mm (0 ± 0.020 in.)
	RH side	0 ± 0.5 mm (0 ± 0.020 in.)
Shift schedule		
D range		
(Throttle valve fully opened)	1 → 2	57 – 62 km/h (35 – 39 mph)
	2 → 3	108 – 111 km/h (67 – 69 mph)
	3 → 4	165 – 170 km/h (103 – 106 mph)
	4 → 3	158 – 164 km/h (98 – 102 mph)
	3 → 2	101 – 104 km/h (63 – 65 mph)
	2 → 1	43 – 47 km/h (27 – 29 mph)
(Throttle valve fully closed)	3 → 4	38 – 42 km/h (24 – 26 mph)
	4 → 3	18 – 23 km/h (11 – 14 mph)
2 range		
(Throttle valve fully opened)	1 → 2	57 – 62 km/h (35 – 39 mph)
	3 → 2	111 – 114 km/h (69 – 71 mph)
	2 → 1	43 – 47 km/h (27 – 29 mph)
L range		
(Throttle valve fully opened)	3 → 2	111 – 114 km/h (69 – 71 mph)
	2 → 1	50 – 54 km/h (31 – 34 mph)
Lock–up point	Throttle valve opening 5 %	
O/D gear	Lock–up ON	55 – 59 km/h (34 – 37 mph)
	Lock–up OFF	49 – 53 km/h (30 – 33 mph)
U140E (1MZ–FE, w/ kick down switch)		
Line pressure (Wheel locked)		
	Engine idling	
	D range	373 – 412 kPa (3.8 – 4.2 kgf·cm^2, 54 – 60 psi)
	R range	673 – 742 kPa (6.9 – 7.8 kgf·cm^2, 97 – 111 psi)
	AT stall (Throttle valve fully opened)	
	D range	931 – 1,031kPa (9.5 – 10.5 kgf·cm^2, 135 – 150 psi)
	R range	1,768 – 1,968 kPa (18.0 – 20.0 kgf·cm^2, 256 – 285 psi)

U140E (1MZ–FE, w/o kick down switch)		
Engine stall revolution	D and R range	2,680 ± 150 rpm
Time lag	N → D range	Less than 1.2 seconds
	N → R range	Less than 1.5 seconds
Engine idle speed (A/C OFF)	N range	650 ± 50 rpm
Drive plate runout	Max.	0.20 mm (0.0079 in.)
Torque converter clutch runout	Max.	0.30 mm (0.0118 in.)
Differential oil seal drive in depth	LH side	0 ± 0.5 mm (0 ± 0.020 in.)
	RH side	0 ± 0.5 mm (0 ± 0.020 in.)
Shift schedule		
D range		
(Throttle valve fully opened)	1 → 2	57 – 64 km/h (35 – 40 mph)
	2 → 3	108 – 115 km/h (67 – 71 mph)
	3 → 4	165 – 176 km/h (103 – 109 mph)
	4 → 3	127 – 138 km/h (79 – 86 mph)
	3 → 2	72 – 78 km/h (45 – 48 mph)
	2 → 1	28 – 34 km/h (17 – 21 mph)
(Throttle valve fully closed)	3 → 4	38 – 43 km/h (24 – 27 mph)
	4 → 3	18 – 23 km/h (11 – 14 mph)
2 range		
(Throttle valve fully opened)	1 → 2	57 – 64 km/h (35 – 40 mph)
	3 → 2	111 – 118 km/h (69 – 73 mph)
	2 → 1	28 – 34 km/h (17 – 21 mph)
L range		
(Throttle valve fully opened)	3 → 2	111 – 118 km/h (69 – 73 mph)
	2 → 1	50 – 56 km/h (31 – 35 mph)
Shift schedule(When kick down switch turns ON)		
D range		
(Throttle valve fully opened)	1 → 2	57 – 64 km/h (35 – 40 mph)
	2 → 3	108 – 115 km/h (67 – 71 mph)
	3 → 4	165 – 176 km/h (103 – 109 mph)
	4 → 3	158 – 170 km/h (98 – 106 mph)
	3 → 2	101 – 107 km/h (63 – 66 mph)
	2 → 1	43 – 49 km/h (27 – 30 mph)
2 range		
(Throttle valve fully opened)	1 → 2	57 – 64 km/h (35 – 40 mph)
	3 → 2	111 – 118 km/h (69 – 73 mph)
	2 → 1	43 – 49 km/h (27 – 30 mph)
Lock–up point	Throttle valve opening 5 %	
O/D gear	Lock–up ON	55 – 61 km/h (34 – 38 mph)
	Lock–up OFF	49 – 55 km/h (30 – 34 mph)