MANUAL TRANSMISSION / TRANSAXLE

0313Z–01

SERVICE DATA

Manual transmission assy		
Counter shaft 5th gear thrust clearance	STD	0.10 – 0.30 mm (0.0039 – 0.0118 in.)
	Max	0.30 mm (0.0118 in.)
Counter gear rear shaft snap ring thickness	A	2.80 – 2.85 mm (0.110 – 0.112 in)
	B	2.85 – 2.90 mm (0.112 – 0.114 in)
	C	2.90 – 2.95 mm (0.114 – 0.116 in)
	D	2.95 – 3.00 mm (0.116 – 0.118 in)
	E	3.00 – 3.05 mm (0.118 – 0.120 in)
	F	3.05 – 3.10 mm (0.120 – 0.122 in)
	G	3.10 – 3.15 mm (0.122 – 0.124 in)
Reverse idler gear radial clearance	STD	0.04 – 0.08 mm (0.0016 – 0.0031 in.)
	Max	0.08 mm (0.0031 in.)
Reverse idler gear clearance	STD	0.05 – 0.28 mm (0.0020 – 0.0110 in.)
	Max	0.28 mm (0.0110 in.)
Transmission front bearing retainer oil seal depth		12.2 – 13.2 mm (0.480 – 0.520 in.)
Transfer adapter oil seal depth		45 – 46 mm (1.772 – 1.811 in.)

Input shaft assy		
Synchronizer ring No.1 clearance		1.0 – 2.0 mm (0.0394 – 0.0787 in.)
Input shaft shim clearance	STD	0.1 mm (0.0039 in.) or less
Front bearing shaft snap ring thickness	0	2.05 – 2.10 mm (0.0807 – 0.0827 in)
	1	2.10 – 2.15 mm (0.0827 – 0.0847 in)
	2	2.15 – 2.20 mm (0.0847 – 0.0866 in)
	3	2.20 – 2.25 mm (0.0866 – 0.0886 in)
	4	2.25 – 2.30 mm (0.0886 – 0.0906 in)
	5	2.30 – 2.35 mm (0.0906 – 0.0925 in)

Output shaft assy		
5th gear thrust clearance		0.1 – 0.3 mm (0.0039 – 0.018 in.)
1st gear thrust clearance		0.1 – 0.25 mm (0.0039 – 0.0098 in.)
2nd gear thrust clearance		0.1 – 0.25 mm (0.0039 – 0.0098 in.)
3rd gear thrust clearance		0.1 – 0.25 mm (0.0039 – 0.0098 in.)
1st gear radial clearance		0.009 – 0.056 mm (0.0004 – 0.0022 in.)
2nd gear radial clearance		0.008 – 0.034 mm (0.0003 – 0.00134 in.)
3rd gear radial clearance		0.008 – 0.034 mm (0.0003 – 0.00134 in.)
Output shaft outer diameter	STD: Part A	30.384 – 30.400 mm (1.1962 – 1.1968 in.)
	Part B	37.984 – 38.000 mm (1.4954 – 1.4960 in.)
	Part C	34.984 – 35.000 mm (1.3773 – 1.3780 in.)
	Min: Part A	30.384 mm (1.1962 in.)
	Part B	37.984 mm (1.4954 in.)
	Part C	34.984 mm (1.3773 in.)
Output shaft flange thickness	STD	4.80 – 5.20 mm (0.1890 – 0.2047 in.)
	Min	4.80 mm (0.1890 in.)
1st gear bearing inner lace thickness	STD	4.00 – 4.20 mm (0.1575 – 0.1654 in.)
	Min	4.0 mm (0.1575 in.)
1st gear bearing outer diameter	STD	38.985 – 39.000 mm (1.5348 – 1.5354 in.)
	Min	38.985 (1.5348 in.)
Synchronizer ring No.2 (For 1st synchronizer ring) clearance		1.0 – 2.0 mm (0.0394 – 0.0787 in.)
Synchronizer ring No.2 (For 2nd synchronizer ring) clearance		1.0 – 2.0 mm (0.0394 – 0.0787 in.)
Synchronizer ring No.1 clearance		1.0 – 2.0 mm (0.0394 – 0.0787 in.)
Reverse gear clearance	STD	0.15 – 0.35 mm (0.0059 – 0.0138 in.)
	Min	0.35 mm (0.0138 in.)
Transmission hub sleeve clearance		0.26 – 0.84 mm (0.0102 – 0.0331 in.)
1st gear inside diameter	STD	44.015 – 44.040 mm (1.7329 – 1.7339 in.)
	Max	44.040 mm (1.7339 in.)

2nd gear inside diameter	STD	44.015 – 44.040 mm (1.7329 – 1.7339 in.)
	Max	44.040 mm (1.7339 in.)
3rd gear inside diameter	STD	44.015 – 44.040 mm (1.7329 – 1.7339 in.)
	Max	44.040 mm (1.7339 in.)
Transmission clutch hub No.2 clearance		0.1 mm (0.0039 in.) or less
Clutch hub shaft snap ring thickness	C–1	1.75 – 1.80 mm (0.0689 – 0.0709 in)
	D	1.80 – 1.85 mm (0.0709 – 0.0728 in)
	D–1	1.85 – 1.90 mm (0.0728 – 0.0748 in)
	E	1.90 – 1.95 mm (0.0748 – 0.0768 in)
	E–1	1.95 – 2.00 mm (0.0768 – 0.0787 in)
	F	2.00 – 2.05 mm (0.0787 – 0.0807 in)
	F–1	2.05 – 2.10 mm (0.0807 – 0.0827 in)
5th gear clearance		0.1 mm (0.039 in.) or less
Output shaft bearing shaft snap ring	A	2.67 – 2.72 mm (0.1051 – 0.1071 in)
	B	2.73 – 2.78 mm (0.1075 – 0.1094 in)
	C	2.79 – 2.84 mm (0.1098 – 0.1118 in)
	D	2.85 – 2.90 mm (0.1122 – 0.1141 in)
	E	2.91 – 2.96 mm (0.1146 – 0.1165 in)
	F	2.97 – 3.02 mm (0.1169 – 0.1189 in)
	G	3.03 – 3.08 mm (0.1193 – 0.1213 in)
	H	3.09 – 3.14 mm (0.1217 – 0.1236 in)
	J	3.15 – 3.20 mm (0.1240 – 0.1260 in)
	K	3.21 – 3.26 mm (0.1264 – 0.1283 in)
	L	3.27 – 3.32 mm (0.1287 – 0.1307 in)

Counter gear assy		
5th gear radial clearance		0.008 – 0.034 mm (0.0003 – 0.00134 in.)
Synchronizer ring No.3 clearance		0.85 – 1.55 mm (0.0335 – 0.0610 in.)
Transmission hub sleeve No.3 clearance		0.25 – 0.45 mm (0.0098 – 0.0177 in.)
Counter shaft 5th gear inside diameter	STD	33.015 – 33.040 mm (1.2998 – 1.3008 in.)
	Max	33.040 mm (1.3008 in.)
Counter gear journal outer diameter	STD	25.984 – 26.000 mm (1.0230 – 1.0236 in.)
	Max	26.000 mm (1.0236 in.)
Counter gear clearance		0.1 mm (0.0039 in.) or less
Counter gear front bearing snap ring No. 2 thickness	1	2.05 – 2.10 mm (0.0807 – 0.0827 in)
	2	2.10 – 2.15 mm (0.0827 – 0.0847 in)
	3	2.15 – 2.20 mm (0.0847 – 0.0866 in)
	4	2.20 – 2.25 mm (0.0866 – 0.0886 in)
	5	2.25 – 2.30 mm (0.0886 – 0.0906 in)
	6	2.30 – 2.35 mm (0.0906 – 0.0925 in)
	7	2.35 – 2.40 mm (0.0925 – 0.0945 in)
	8	2.40 – 2.45 mm (0.0945 – 0.0965 in)