MANUAL TRANSMISSION / TRANSAXLE

0314Y–01

SERVICE DATA

Manual transmission assy		
Reverse idler gear radial clearance		0.041 – 0.074 mm (0.0016 – 0.0029 in.)
Reverse idler gear clearance		0.05 – 0.35 mm (0.0020 – 0.0138 in.)
Transmission front bearing retainer oil seal depth		12.0 – 12.8 mm (0.472 – 0.504 in.)
Transfer adapter oil seal depth		45.0 – 46.0 mm (1.772 – 1.811 in.)

Input shaft assy		
Synchronizer ring No.2 clearance		0.7 – 1.7 mm (0.0276 – 0.0669 in.)
Input shaft front bearing clearance		0.1 mm (0.0039 in.) or less
Front bearing shaft snap ring thickness	1	2.05 – 2.10 mm (0.0807 – 0.0827 in.)
	2	2.10 – 2.15 mm (0.0827 – 0.0846 in.)
	3	2.15 – 2.20 mm (0.0846 – 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.)
	11	2.30 – 2.35 mm (0.0906 – 0.0925 in.)
	12	2.35 – 2.40 mm (0.0925 – 0.0945 in.)

Output shaft assy		
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		0.012 – 0.104 mm (0.0005 – 0.0041 in.)
2nd gear radial clearance		0.009 – 0.060 mm (0.0004 – 0.0024 in.)
3rd gear radial clearance		0.022 – 0.071 mm (0.0009 – 0.0028 in.)
Output shaft outer diameter	STD: Part A	42.975 – 42.991 mm (1.6919 – 1.6926 in.)
	Part B	31.969 – 31.985 mm (1.2586 – 1.2592 in.)
	Min: Part A	42.975 mm (1.6919 in.)
	Part B	31.969 mm (1.2586 in.)
Output shaft flange thickness	STD	5.7 – 6.1 mm (0.2244 – 0.2402 in.)
	Min	5.7 mm (0.2244 in.)
Output shaft runout	Max	0.03 mm (0.0012 in.)
1st gear bush thickness	STD	4.78 – 4.98 mm (0.1882 – 0.1961 in.)
	Min	4.78 mm (0.1882 in.)
1st gear bush outer diameter	STD	42.975 – 42.991 mm (1.6919 – 1.6926 in.)
	Min	42.975 mm (1.6919 in.)
Synchronizer ring No.1 clearance		0.7 – 1.7 mm (0.0276 – 0.0669 in.)
Synchronizer ring No.1 set clearance		0.57 – 1.63 mm (0.0224 – 0.0642 in.)
Synchronizer ring No.2 set clearance		1.14 – 1.74 mm (0.0449 – 0.0685 in.)
Transmission hub sleeve No.1 clearance		0.3 – 0.5 mm (0.012 – 0.020 in.)
Transmission hub sleeve No.2 clearance		0.3 – 0.5 mm (0.012 – 0.020 in.)
1st gear inside diameter	STD	49.000 – 49.025 mm (1.9291 – 1.9301 in.)
	Max	49.025 mm (1.9031 in.)
2nd gear inside diameter	STD	49.000 – 49.025 mm (1.9291 – 1.9301 in.)
	Max	49.025 mm (1.9031 in.)
3rd gear inside diameter	STD	38.007 – 38.028 mm (1.4963 – 1.4972 in.)
	Max	38.028 mm (1.4972 in.)

Output shaft assy		
Transmission clutch hub No.2 clearance		0.1 mm (0.0039 in.) or less
Clutch hub set shaft snap ring thickness	C–D	1.75 – 1.80 mm (0.0689 – 0.0709 in.)
	D	1.80 – 1.85 mm (0.0709 – 0.0728 in.)
	11	1.86 – 1.91 mm (0.0732 – 0.0752 in.)
	12	1.92 – 1.97 mm (0.0756 – 0.0776 in.)
	13	1.98 – 2.03 mm (0.0780 – 0.0799 in.)
	14	2.04 – 2.09 mm (0.0803 – 0.0823 in.)
	15	2.10 – 2.15 mm (0.0827 – 0.0846 in.)
Reverse gear clearance		0.1 mm (0.0039 in.) or less
Output shaft center bearing shaft snap ring thickness	5	2.25 – 2.30 mm (0.0886 – 0.0906 in.)
	11	2.30 – 2.35 mm (0.0906 – 0.0925 in.)
	12	2.35 – 2.40 mm (0.0925 – 0.0945 in.)
	13	2.40 – 2.45 mm (0.0945 – 0.0965 in.)
	14	2.45 – 2.50 mm (0.0965 – 0.0984 in.)
	15	2.50 – 2.55 mm (0.0984 – 0.1004 in.)
	16	2.55 – 2.60 mm (0.1004 – 0.1024 in.)
	17	2.61 – 2.66 mm (0.1028 – 0.1047 in.)
	18	2.67 – 2.72 mm (0.1051 – 0.1071 in.)
	19	2.73 – 2.78 mm (0.1075 – 0.1094 in.)
	20	2.79 – 2.84 mm (0.1098 – 0.1118 in.)
	21	2.85 – 2.90 mm (0.1122 – 0.1142 in.)
	22	2.91 – 2.96 mm (0.1146 – 0.1165 in.)
	23	2.97 – 3.02 mm (0.1169 – 0.1189 in.)
5th gear clearance		0.1 mm (0.0039 in.) or less
Output shaft bearing shaft snap ring thickness	8	2.31 – 2.36 mm (0.0909 – 0.0929 in.)
	9	2.37 – 2.42 mm (0.0933 – 0.0953 in.)
	10	2.43 – 2.48 mm (0.0957 – 0.0976 in.)
	11	2.49 – 2.54 mm (0.0980 – 0.1000 in.)
	12	2.55 – 2.60 mm (0.1004 – 0.1024 in.)
	13	2.61 – 2.66 mm (0.1028 – 0.1047 in.)
	14	2.68 – 2.73 mm (0.1055 – 0.1075 in.)
	15	2.74 – 2.79 mm (0.1079 – 0.1098 in.)

Counter gear assy		
Countershaft 5th gear radial clearance	STD	0.012 – 0.059 mm (0.0005 – 0.0023 in.)
	Max	0.059 mm (0.0023 in.)
Synchronizer ring outer No.3 clearance		0.35 – 1.05 mm (0.0138 – 0.0413 in.)
Transmission hub sleeve No.3 clearance		0.26 – 0.84 mm (0.0102 – 0.0331 in.)
Countershaft 5th gear inside diameter	STD	33.000 – 33.025 mm (1.2992 – 1.3001 in.)
	Max	33.025 mm (1.3001 in.)
Counter gear outer diameter	STD: Part A	26.975 – 26.991 mm (1.0620 – 1.0626 in.)
	Part B	29.950 – 29.970 mm (1.1791 – 1.1799 in.)
	Min: Part A	26.975 mm (1.0620 in.)
	Part B	29.950 mm (1.1791 in.)
Counter gear front bearing or roller clearance		0.1 mm (0.0039 in.) or less
Counter gear front bearing snap ring No.2 thickness	A	2.05 – 2.10 mm (0.0807 – 0.0827 in.)
	B	2.10 – 2.15 mm (0.0827 – 0.0846 in.)
	C	2.15 – 2.20 mm (0.0846 – 0.0866 in.)
	D	2.20 – 2.25 mm (0.0866 – 0.0886 in.)
	E	2.25 – 2.30 mm (0.0886 – 0.0906 in.)
	F	2.30 – 2.35 mm (0.0906 – 0.0925 in.)
Countershaft 5th gear thrust clearance	STD	0.10 – 0.35 mm (0.0039 – 0.0138 in.)
	Max	0.35 mm (0.0138 in.)
Transmission clutch hub No.3 clearance		0.1 mm (0.0039 in.) or less
Transmission clutch hub No.3 shaft snap ring thickness	2	2.06 – 2.11 mm (0.0811 – 0.0831 in.)
	3	2.12 – 2.17 mm (0.0835 – 0.0854 in.)
	4	2.18 – 2.23 mm (0.0858 – 0.0878 in.)
	5	2.24 – 2.29 mm (0.0882 – 0.0902 in.)

Counter gear assy		
Countershaft 5th gear clearance		0.1 mm (0.0039 in.) or less
Snap ring counter gear rear bearing thickness	1	1.90 – 1.95 mm (0.0748 – 0.0768 in.)
	2	1.96 – 2.01 mm (0.0772 – 0.0791 in.)
	3	2.02 – 2.07 mm (0.0795 – 0.0815 in.)
	4	2.08 – 2.13 mm (0.0819 – 0.0839 in.)
	5	2.14 – 2.19 mm (0.0843 – 0.0862 in.)
	6	2.20 – 2.25 mm (0.0866 – 0.0886 in.)
	7	2.26 – 2.31 mm (0.0890 – 0.0909 in.)