MANUAL TRANSMISSION / TRANSAXLE

SERVICE DATA

031BZ–01

Oil pump driven rotor to pump cover clearance	STD	0.02 – 0.17 mm (0.0008 – 0.0067 in.)
	Max.	0.17 mm (0.0067 in.)
Oil pump drive to driven rotor tip clearance	STD	0.05 – 0.15 mm (0.0020 – 0.0059 in.)
	Max.	0.15 mm (0.0059 in.)
Reverse idler gear thrust clearance	STD	0.10 – 0.55 mm (0.0039 – 0.0217 in.)
	Max.	0.55 mm (0.0217 in.)
6th gear thrust clearance	STD	0.10 – 0.57 mm (0.0039 – 0.0224 in.)
	Max.	0.57 mm (0.0224 in.)
Reverse gear thrust clearance	STD	0.10 – 0.45 mm (0.0039 – 0.0177 in.)
	Max.	0.45 mm (0.0177 in.)
6th gear radial clearance	STD	0.020 – 0.073 mm (0.0008 – 0.0029 in.)
	Max.	0.073 mm (0.0029 in.)
Reverse gear gear radial clearance	STD	0.015 – 0.067 mm (0.0006 – 0.0026 in.)
	Max.	0.067 mm (0.0026 in.)
6th gear inside diameter	STD	46.015 – 46.040 mm (1.8116 – 1.8126 in.)
	Max.	46.040 mm (1.8126 in.)
Reverse gear inside diameter	STD	45.015 – 45.040 mm (1.7722 – 1.7732 in.)
	Max.	45.040 mm (1.7732 in.)
Shift fork to hub sleeve clearance	1st – 2nd, 3rd – 4th Max.	0.35 mm (0.0138 in.)
	5th Max.	0.84 mm (0.0331 in.)
Synchronizer ring to gear clearance (Input Shaft)	Min.	0.8 mm (0.0315 in.)
Synchronizer ring to gear clearance (Output Shaft)		
	1st gear Min.	1.25 mm (0.0492 in.)
	2nd gear Min.	1.23 mm (0.0484 in.)
	3rd gear Min.	1.15 mm (0.0453 in.)
	5th gear Min.	0.8 mm (0.0315 in.)
	6th gear Min.	1.1 mm (0.0433 in.)
	Reverse gear Min.	0.9 mm (0.0354 in.)
Output shaft center bearing shaft snap ring thickness		
	Mark A	2.40 – 2.45 mm (0.0945 – 0.0965 in.)
	Mark B	2.45 – 2.50 mm (0.0965 – 0.0984 in.)
	Mark C	2.50 – 2.55 mm (0.0984 – 0.1004 in.)
	Mark D	2.55 – 2.60 mm (0.1004 – 0.1024 in.)
	Mark E	2.60 – 2.65 mm (0.1024 – 0.1044 in.)
	Mark F	2.65 – 2.70 mm (0.1044 – 0.1063 in.)
	Mark G	2.70 – 2.75 mm (0.1063 – 0.1083 in.)
	Mark H	2.75 – 2.80 mm (0.1083 – 0.1102 in.)
6th counter gear front bearing snap ring No. 2 thickness	Mark A	2.30 – 2.35 mm (0.0906 – 0.0925 in.)
	Mark B	2.35 – 2.40 mm (0.0925 – 0.0945 in.)
	Mark C	2.40 – 2.45 mm (0.0945 – 0.0965 in.)
	Mark D	2.45 – 2.50 mm (0.0965 – 0.0984 in.)
	Mark E	2.50 – 2.55 mm (0.0984 – 0.1004 in.)
	Mark F	2.55 – 2.60 mm (0.1004 – 0.1024 in.)
	Mark G	2.60 – 2.65 mm (0.1024 – 0.1043 in.)
Counter gear snap ring thickness		
	Mark A	2.40 – 2.45 mm (0.0945 – 0.0965 in.)
	Mark B	2.45 – 2.50 mm (0.0965 – 0.0984 in.)
	Mark C	2.50 – 2.55 mm (0.0984 – 0.1004 in.)
	Mark D	2.55 – 2.60 mm (0.1004 – 0.1024 in.)
	Mark E	2.60 – 2.65 mm (0.1024 – 0.1043 in.)
	Mark F	2.65 – 2.70 mm (0.1043 – 0.1063 in.)
	Mark G	2.70 – 2.75 mm (0.1063 – 0.1083 in.)

Oil seal drive in depth		
Output shaft rear bearing retainer		0 – 0.5 mm (0 – 0.0197 in.)
Select outer lever		0 – 1.0 mm (0 – 0.039 in.)
Shift outer lever		–0.2 – 0.6 mm (–0.008 – 0.024 in.)
Input shaft snap ring thickness		
	Mark A	2.50 – 2.55 mm (0.0984 – 0.1004 in.)
	Mark B	2.55 – 2.60 mm (0.1004 – 0.1024 in.)
	Mark C	2.60 – 2.65 mm (0.1024 – 0.1044 in.)
	Mark D	2.65 – 2.70 mm (0.1044 – 0.1063 in.)
	Mark E	2.70 – 2.75 mm (0.1063 – 0.1083 in.)
	Mark F	2.75 – 2.80 mm (0.1083 – 0.1102 in.)
Gear thrust clearance 1st and 3rd	STD	0.10 – 0.45 mm (0.0039 – 0.0177 in.)
	Max.	0.45 mm (0.0177 in.)
Gear thrust clearance 2nd and 5th	STD	0.10 – 0.35 mm (0.0039 – 0.0138 in.)
	Max.	0.35 mm (0.0138 in.)
Gear radial clearance 1st and 3rd	STD	0.020 – 0.073 mm (0.0008 – 0.0029 in.)
	Max.	0.073 mm (0.0029 in.)
Gear radial clearance 2nd and 5th	STD	0.015 – 0.068 mm (0.0006 – 0.0027 in.)
	Max.	0.068 mm (0.0027 in.)
Output shaft flange thickness	Min.	4.725 mm (0.1860 in.)
Output shaft 1st gear journal diameter	Min.	49.979 mm (1.9677 in.)
Output shaft 2nd gear journal diameter	Min.	57.984 mm (2.2828 in.)
Output shaft 3rd gear journal diameter	Min.	37.979 mm (1.4952 in.)
Output shaft 5th gear journal diameter	Min.	45.984 mm (1.8104 in.)
Output shaft runout	Max.	0.03 mm (0.0012 in.)
Output shaft snap ring thickness		
Clutch hub No. 3 and No. 4	Mark A	2.40 – 2.45 mm (0.0945 – 0.0965 in.)
	Mark B	2.45 – 2.50 mm (0.0965 – 0.0984 in.)
	Mark C	2.50 – 2.55 mm (0.0984 – 0.1004 in.)
	Mark D	2.55 – 2.60 mm (0.1004 – 0.1024 in.)
	Mark E	2.60 – 2.65 mm (0.1024 – 0.1044 in.)
	Mark F	2.65 – 2.70 mm (0.1044 – 0.1063 in.)
Output shaft snap ring thickness		
Clutch hub No. 2	Mark 4	1.90 – 1.95 mm (0.0748 – 0.0768 in.)
	Mark 5	1.95 – 2.00 mm (0.0768 – 0.0787 in.)
	Mark 6	2.00 – 2.05 mm (0.0787 – 0.0807 in.)
	Mark 7	2.05 – 2.10 mm (0.0807 – 0.0827 in.)
	Mark 8	2.10 – 2.15 mm (0.0827 – 0.0847 in.)
	Mark 9	2.15 – 2.20 mm (0.0847 – 0.0866 in.)
Output shaft snap ring thickness		
Clutch hub No. 1	Mark A	2.90 – 2.95 mm (0.1142 – 0.1161 in.)
	Mark B	2.95 – 3.00 mm (0.1161 – 0.1181 in.)
	Mark C	3.00 – 3.05 mm (0.1181 – 0.1201 in.)
	Mark D	3.05 – 3.10 mm (0.1201 – 0.1220 in.)
	Mark E	3.10 – 3.15 mm (0.1220 – 0.1240 in.)
	Mark F	3.15 – 3.20 mm (0.1240 – 0.1260 in.)
Output shaft snap ring thickness		
	Mark A	2.40 – 2.45 mm (0.0945 – 0.0965 in.)
	Mark B	2.45 – 2.50 mm (0.0965 – 0.0984 in.)
	Mark C	2.50 – 2.55 mm (0.0984 – 0.1004 in.)
	Mark D	2.55 – 2.60 mm (0.1004 – 0.1024 in.)
	Mark E	2.60 – 2.65 mm (0.1024 – 0.1044 in.)
	Mark F	2.65 – 2.70 mm (0.1044 – 0.1063 in.)
	Mark G	2.70 – 2.75 mm (0.1063 – 0.1083 in.)
	Mark H	2.75 – 2.80 mm (0.1083 – 0.1102 in.)

Counter gear roller bearing journal diameter	A: STD	35.957 – 35.970 mm (1.4156 – 1.4161 in.)
	Max.	35.970 mm (1.4161 in.)
	B: STD	32.002 – 32.015 mm (1.2599 – 1.2604 in.)
	Max.	32.015 mm (1.2604 in.)
Counter gear front bearing snap ring thickness	Mark A	2.45 – 2.50 mm (0.0970 – 0.0984 in.)
	Mark B	2.50 – 2.55 mm (0.0984 – 0.1004 in.)
	Mark C	2.55 – 2.60 mm (0.1004 – 0.1024 in.)
	Mark D	2.60 – 2.65 mm (0.1024 – 0.1044 in.)
	Mark E	2.65 – 2.70 mm (0.1044 – 0.1063 in.)
	Mark F	2.70 – 2.75 mm (0.1063 – 0.1083 in.)