MANUAL TRANSMISSION / TRANSAXLE

SERVICE DATA

0314Y–02

MANUAL TRANSMISSION ASSY		
Reverse idler gear thrust clearance	STD	0.10 to 0.55 mm (0.0039 to 0.0217 in.)
	Max.	0.55 mm (0.0217 in.)
Reverse idler gear radial clearance	STD	0.015 to 0.050 mm (0.0006 to 0.0020 in.)
	Max.	0.050 mm (0.0020 in.)
Slotted spring pin		
Drive in depth	Gear shift head No.1	0 to 0.5 mm (0 to 0.020 in.)
	Gear shift fork No.1	0 to 0.5 mm (0 to 0.020 in.)
	Gear shift fork No.4	0 to 0.5 mm (0 to 0.020 in.)
Transmission case oil seal	Drive in depth	60.0 to 60.8 mm (2.362 to 2.394 in.)
Output shaft tapered roller bearing preload	at starting	0.45 to 1.35 N·m (4.59 to 13.77 kgf·cm, 3.98 to 11.95 in.·lbf)
INPUT SHAFT ASSY		
6th gear thrust clearance	STD	0.20 to 0.49 mm (0.0079 to 0.0193 in.)
6th gear radial clearance	STD	0.015 to 0.065 mm (0.0006 to 0.0026 in.)
3rd gear thrust clearance	STD	0.09 to 0.52 mm (0.0035 to 0.0205 in.)
3rd gear radial clearance	STD	0.015 to 0.067 mm (0.0006 to 0.0026 in.)
4th gear thrust clearance	STD	0.12 to 0.38 mm (0.0047 to 0.0150 in.)
4th gear radial clearance	STD	0.015 to 0.067 mm (0.0006 to 0.0026 in.)
Input shaft runout	Max.	0.03 mm (0.0012 in.)
Input shaft journal diameter	A: STD	34.002 to 34.015 mm (1.3387 to 1.3392 in.)
	Min.	34.002 mm (1.3387 in.)
	B: STD	44.985 to 45.000 mm (1.7711 to 1.7717 in.)
	Min.	44.985 mm (1.7711 in.)
	C: STD	44.985 to 45.000 mm (1.7711 to 1.7717 in.)
	Min.	44.985 mm (1.7711 in.)
	D: STD	41.985 to 42.000 mm (1.6530 to 1.6535 in.)
	Min.	41.985 mm (1.6530 in.)
	E: STD	32.967 to 32.980 mm (1.2979 to 1.2984 in.)
	Min.	32.967 mm (1.2979 in.)
6th gear inside diameter	STD	51.015 to 51.040 mm (2.0085 to 2.0095 in.)
	Max.	51.040 mm (2.0095 in.)
3rd gear inside diameter	STD	51.015 to 51.040 mm (2.0085 to 2.0095 in.)
	Max.	51.040 mm (2.0095 in.)
4th gear inside diameter	STD	51.015 to 51.040 mm (2.0085 to 2.0095 in.)
	Max.	51.040 mm (2.0095 in.)
3th gear thrust washer	STD	7.12 to 7.18 mm (0.2803 to 0.2827 in.)
	Min.	7.12 mm (0.2803 in.)
Synchronizer ring to 6th gear clearance	STD	0.70 to 1.50 mm (0.0276 to 0.0591 in.)
	Min.	0.70 mm (0.0276 in.)
Synchronizer ring to 4th gear clearance	STD	0.70 to 1.50 mm (0.0276 to 0.0591 in.)
	Min.	0.70 mm (0.0276 in.)
Synchronizer ring to 3rd gear clearance	Inner: STD	1.20 to 2.20 mm (0.0472 to 0.0866 in.)
	Min.	1.20 mm (0.0472 in.)
	Middle: STD	0.60 to 1.80 mm (0.0236 to 0.0709 in.)
	Min.	0.60 mm (0.0236 in.)
	Outer: STD	0.80 to 1.80 mm (0.0315 to 0.0709 in.)
	Min.	0.80 mm (0.0315 in.)
Width of the hub sleeve		
– Thickness of the gear shift fork	No.2	0.26 to 0.84 mm (0.0102 to 0.0331 in.)
	No.3	0.26 to 0.84 mm (0.0102 to 0.0331 in.)

Input shaft front bearing snap ring thickness	Mark	
	A	2.65 to 2.70 mm (0.1043 to 0.1063 in.)
	B	2.70 to 2.75 mm (0.1063 to 0.1083 in.)
	C	2.75 to 2.80 mm (0.1083 to 0.1102 in.)
	D	2.80 to 2.85 mm (0.1102 to 0.1122 in.)
	E	2.85 to 2.90 mm (0.1122 to 0.1142 in.)
	F	2.90 to 2.95 mm (0.1142 to 0.1161 in.)
Clutch hub No.2 setting shaft snap ring thickness	Mark	
	A	1.77 to 1.82 mm (0.0697 to 0.0717 in.)
	B	1.82 to 1.87 mm (0.0717 to 0.0736 in.)
	C	1.87 to 1.92 mm (0.0736 to 0.0756 in.)
	D	1.92 to 1.97 mm (0.0756 to 0.0776 in.)
	E	1.97 to 2.02 mm (0.0776 to 0.0795 in.)
	F	2.02 to 2.07 mm (0.0795 to 0.0815 in.)
	G	2.07 to 2.12 mm (0.0815 to 0.0835 in.)
Gear thrust washer shaft snap ring thickness	Mark	
	A	2.07 to 2.12 mm (0.0815 to 0.0835 in.)
	B	2.12 to 2.17 mm (0.0835 to 0.0854 in.)
	C	2.17 to 2.22 mm (0.0854 to 0.0874 in.)
	D	2.22 to 2.27 mm (0.0874 to 0.0894 in.)
	E	2.27 to 2.32 mm (0.0894 to 0.0913 in.)
	F	2.32 to 2.37 mm (0.0913 to 0.0933 in.)
Transmission clutch hub No.3 shaft snap ring	Mark	
	A	2.10 to 2.15 mm (0.0827 to 0.0847 in.)
	B	2.15 to 2.20 mm (0.0847 to 0.0866 in.)
	C	2.20 to 2.25 mm (0.0866 to 0.0886 in.)
	D	2.25 to 2.30 mm (0.0886 to 0.0906 in.)
	E	2.30 to 2.35 mm (0.0906 to 0.0925 in.)
	F	2.35 to 2.40 mm (0.0925 to 0.0945 in.)
	G	2.40 to 2.45 mm (0.0945 to 0.0965 in.)
OUTPUT SHAFT ASSY		
Output shaft Inside diameter	STD	45.009 to 45.025 mm (1.7720 to 1.7726 in.)
	Max.	45.025 mm (1.7726 in.)
Synchronizer ring to gear clearance (output shaft)	STD	0.70 to 1.50 mm (0.0276 to 0.0591 in.)
	Min.	0.70 mm (0.0276 in.)
COUNTER GEAR ASSY		
Reverse gear thrust clearance	STD	0.125 to 0.375 mm (0.0049 to 0.0148 in.)
Reverse gear radial clearance	STD	0.015 to 0.065 mm (0.0006 to 0.0026 in.)
1st gear thrust clearance	STD	0.10 to 0.43 mm (0.0039 to 0.0169 in.)
1st gear radial clearance	STD	0.015 to 0.067 mm (0.0006 to 0.0026 in.)
2nd gear thrust clearance	STD	0.10 to 0.43 mm (0.0039 to 0.0169 in.)
2nd gear radial clearance	STD	0.015 to 0.067 mm (0.0006 to 0.0026 in.)
Counter gear shaft runout	Max.	0.03 mm (0.0012 in.)
Counter gear shaft journal diameter	A: STD	34.002 to 34.015 mm (1.3387 to 1.3392 in.)
	Min.	34.002 mm (1.3387 in.)
	B: STD	36.985 to 37.000 mm (1.4561 to 1.4567 in.)
	Min.	36.985 mm (1.4561 in.)
	C: STD	47.985 to 48.000 mm (1.8892 to 1.8898 in.)
	Min.	47.985 mm (1.8892 in.)
	D: STD	53.985 to 54.000 mm (2.1254 to 2.1260 in.)
	Min.	53.985 mm (2.1254 in.)
	E: STD	34.002 to 34.015 mm (1.3387 to 1.3392 in.)
	Min.	34.002 mm (1.3387 in.)
Counter shaft reverse gear inside diameter	STD	51.015 to 51.040 mm (2.0085 to 2.0095 in.)
	Max.	51.040 mm (2.0095 in.)
Counter shaft 1st speed gear inside diameter	STD	54.015 to 54.040 mm (2.1266 to 2.1276 in.)
	Max.	54.040 mm (2.1276 in.)

Counter shaft 2nd speed gear inside diameter	STD	60.015 to 60.040 mm (2.3628 to 2.3638 in.)
	Max.	60.040 mm (2.3638 in.)
Synchronizer ring to reverse gear clearance	STD	0.70 to 1.30 mm (0.0276 to 0.0512 in.)
	Min.	0.70 mm (0.0276 in.)
Synchronizer ring to 1st gear clearance	Inner: STD	1.48 to 2.12 mm (0.0583 to 0.0835 in.)
	Min.	1.48 mm (0.0583 in.)
	Middle: STD	0.68 to 1.92 mm (0.0268 to 0.0756 in.)
	Min.	0.68 mm (0.0268 in.)
	Outer: STD	0.88 to 1.72 mm (0.0346 to 0.0677 in.)
	Min.	0.88 mm (0.0346 in.)
Synchronizer ring to 2nd gear clearance	Inner: STD	1.48 to 2.12 mm (0.0583 to 0.0835 in.)
	Min.	1.48 mm (0.0583 in.)
	Middle: STD	0.68 to 1.92 mm (0.0268 to 0.0756 in.)
	Min.	0.68 mm (0.0268 in.)
	Outer: STD	0.88 to 1.72 mm (0.0346 to 0.0677 in.)
	Min.	0.88 mm (0.0346 in.)
Width of the hub sleeve		
– Thickness of the gear shift fork	No.1	0.15 to 0.35 mm (0.0059 to 0.0138 in.)
	No.4	0.26 to 0.84 mm (0.0102 to 0.0331 in.)
Snap ring counter gear rear bearing thickness	Mark	
	A	2.35 to 2.40 mm (0.0925 to 0.0945 in.)
	B	2.40 to 2.45 mm (0.0945 to 0.0965 in.)
	C	2.45 to 2.50 mm (0.0965 to 0.0984 in.)
	D	2.50 to 2.55 mm (0.0984 to 0.1004 in.)
	E	2.55 to 2.60 mm (0.1004 to 0.1024 in.)
	F	2.60 to 2.65 mm (0.1024 to 0.1043 in.)
	G	2.65 to 2.70 mm (0.1043 to 0.1063 in.)
	H	2.70 to 2.75 mm (0.1063 to 0.1083 in.)
	J	2.75 to 2.80 mm (0.1083 to 0.1102 in.)
	K	2.80 to 2.85 mm (0.1102 to 0.1122 in.)
	L	2.85 to 2.90 mm (0.1122 to 0.1142 in.)
	M	2.90 to 2.95 mm (0.1142 to 0.1161 in.)
Clutch hub No.1 shaft snap ring thickness	Mark	
	A	2.28 to 2.33 mm (0.0898 to 0.0917 in.)
	B	2.33 to 2.38 mm (0.0917 to 0.0937 in.)
	C	2.38 to 2.43 mm (0.0937 to 0.0957 in.)
	D	2.43 to 2.48 mm (0.0957 to 0.0976 in.)
	E	2.48 to 2.53 mm (0.0976 to 0.0996 in.)
	F	2.53 to 2.58 mm (0.0996 to 0.1016 in.)
	G	2.58 to 2.63 mm (0.1016 to 0.1035 in.)
Counter gear front bearing snap ring No.1 thickness	Mark	
	A	2.35 to 2.40 mm (0.0925 to 0.0945 in.)
	B	2.40 to 2.45 mm (0.0945 to 0.0965 in.)
	C	2.45 to 2.50 mm (0.0965 to 0.0984 in.)
	D	2.50 to 2.55 mm (0.0984 to 0.1004 in.)
	E	2.55 to 2.60 mm (0.1004 to 0.1024 in.)
	F	2.60 to 2.65 mm (0.1024 to 0.1043 in.)
	G	2.65 to 2.70 mm (0.1043 to 0.1063 in.)
	H	2.70 to 2.75 mm (0.1063 to 0.1083 in.)
	J	2.75 to 2.80 mm (0.1083 to 0.1102 in.)
	K	2.80 to 2.85 mm (0.1102 to 0.1122 in.)
	L	2.85 to 2.90 mm (0.1122 to 0.1142 in.)
	M	2.90 to 2.95 mm (0.1142 to 0.1161 in.)