MANUAL TRANSMISSION / TRANSAXLE

030ZD–04

SERVICE DATA

MANUAL TRANSMISSION ASSY		
Reverse idler gear thrust clearance	STD	0.10 to 0.62 mm (0.0039 to 0.0244 in.)
	Max.	0.62 mm (0.0244 in.)
Reverse idler gear radial clearance	STD	0.015 to 0.059 mm (0.0006 to 0.0023 in.)
	Max.	0.059 mm (0.0023 in.)
Reverse idler gear inside diameter	STD	35.015 to 35.036 mm (1.3785 to 1.3793 in.)
	Max.	35.036 mm (1.3793 in.)
Reverse idler gear shaft outer diameter	STD	27.987 to 28.00 mm (1.1018 to 1.1024 in.)
	Min.	27.987 mm (1.1018 in.)
Front bearing retainer oil seal	Drive in depth	13.8 to 14.6 mm (0.5433 to 0.5750 in.)
Synchronizer ring to gear clearance (counter shaft)	4th gear STD	0.78 to 1.62 mm (0.0307 to 0.0643 in.)
	Min	0.78 mm (0.0307 in.)
Shift lever slotted pin		
Drive in depth	Shift fork shaft No.1	0 to 1.0 mm (0 to 0.039 in.)
	Shift fork shaft No.2	0 to 1.0 mm (0 to 0.039 in.)
	Shift fork shaft No.4	0 to 1.0 mm (0 to 0.039 in.)
Shift & select lever shaft bimetal formed bush	Drive in depth	149.0 to 150.0 mm (5.866 to 5.906 in.)
Select lever oil seal	Drive in depth	0 to 1.0 mm (0 to 0.039 in.)
Output shaft tapered roller bearing preload	at starting	0.3 to 0.8 N·m (3.06 to 8.16 kgf·cm, 2.66 to 7.10 in.·lbf)
Rear bearing retainer oil seal	Drive in depth	0 to 0.5 mm (0 to 0.0197 in.)
INPUT SHAFT ASSY		
5th gear thrust clearance	STD	0.10 to 0.35 mm (0.0039 to 0.0138 in.)
	Max.	0.35 mm (0.0138 in.)
5th gear radial clearance	STD	0.015 to 0.068 mm (0.0006 to 0.0027 in.)
	Max.	0.068 mm (0.0027 in.)
Input shaft runout	Max.	0.015 mm (0.0006 in.)
Input shaft journal diameter	A: STD	47.002 to 47.018 mm (1.8505 to 1.8511 in.)
	Min.	47.002 mm (1.8505 in.)
	B: STD	47.984 to 48.000 mm (1.8891 to 1.8898 in.)
	Min.	47.984 mm (1.8891 in.)
	C: STD	38.118 to 38.130 mm (1.5007 to 1.5012 in.)
	Min.	38.118 mm (1.5007 in.)
5th gear inside diameter	STD	55.015 to 55.040 mm (2.1659 to 2.1669 in.)
	Max.	55.040 mm (2.1669 in.)
5th gear thrust washer	STD	4.95 to 5.05 mm (0.1945 to 0.2004 in.)
	Min.	4.95 mm (0.1945 in.)
Synchronizer ring to gear clearance (counter shaft)	5th gear STD	0.78 to 1.62 mm (0.0307 to 0.0643 in.)
	Min.	0.78 mm (0.0307 in.)
Wide of the hub sleeve		
– Thickness of the gear shift fork	No.3	0.15 to 0.26 mm (0.0059 to 0.0102 in.)
Input shaft front bearing snap ring thickness	Mark	
	A	3.00 to 3.05 mm (0.1181 to 0.1201 in.)
	B	3.05 to 3.10 mm (0.1201 to 0.1220 in.)
	C	3.10 to 3.15 mm (0.1220 to 0.1240 in.)
	D	3.15 to 3.20 mm (0.1240 to 0.1260 in.)
	E	3.20 to 3.25 mm (0.1260 to 0.1280 in.)
	F	3.25 to 3.30 mm (0.1280 to 0.1300 in.)

Input shaft snap ring thickness Clutch hub shaft No.3	Mark A B C D E F	 2.60 to 2.65 mm (0.1024 to 0.1043 in.) 2.65 to 2.70 mm (0.1043 to 0.1063 in.) 2.70 to 2.75 mm (0.1063 to 0.1083 in.) 2.75 to 2.80 mm (0.1083 to 0.1102 in.) 2.80 to 2.85 mm (0.1102 to 0.1122 in.) 2.85 to 2.90 mm (0.1122 to 0.1142 in.)
OUTPUT SHAFT ASSY		
Inside diameter of the output shaft bearing race	STD Max.	54.170 to 54.187 mm (2.1327 to 2.1333 in.) 54.187 mm (2.1333 in.)
Synchronizer ring to gear clearance (output shaft)	STD Min.	0.78 to 1.62 mm (0.0307 to 0.0638 in.) 0.78 mm (0.0307 in.)
COUNTER GEAR ASSY		
Reverse gear thrust clearance	STD Max.	0.10 to 0.45 mm (0.0039 to 0.0177 in.) 0.45 mm (0.0177 in.)
Reverse gear radial clearance	STD Max.	0.15 to 0.068 mm (0.0006 to 0.0027 in.) 0.068 mm (0.0027 in.)
1st gear thrust clearance	STD Max.	0.10 to 0.45 mm (0.0039 to 0.0177 in.) 0.45 mm (0.0177 in.)
1st gear radial clearance	STD Max.	0.15 to 0.068 mm (0.0006 to 0.0027 in.) 0.068 mm (0.0027 in.)
3rd gear thrust clearance	STD Max.	0.10 to 0.45 mm (0.0039 to 0.0177 in.) 0.45 mm (0.0177 in.)
3rd gear radial clearance	STD Max.	0.15 to 0.068 mm (0.0006 to 0.0027 in.) 0.068 mm (0.0027 in.)
2nd gear thrust clearance	STD Max.	0.10 to 0.35 mm (0.0039 to 0.0138 in.) 0.35 mm (0.0138 in.)
2nd gear radial clearance	STD Max.	0.15 to 0.068 mm (0.0006 to 0.0027 in.) 0.068 mm (0.0027 in.)
Counter gear shaft runout	Max.	0.015 mm (0.0006 in.)
Counter gear shaft journal diameter	A: STD Max. B: STD Max. C: STD Max. D: STD Max. E: STD Max.	43.484 to 43.500 mm (1.7120 to 1.7126 in.) 43.500 mm (1.7126 in.) 48.984 to 49.000 mm (1.9285 to 1.9291 in.) 49.000 mm (1.9291 in.) 53.984 to 54.000 mm (2.1253 to 2.1260 in.) 54.000 mm (2.1260 in.) 53.984 to 54.000 mm (2.1253 to 2.1260 in.) 54.000 mm (2.1260 in.) 40.002 to 40.018 mm (1.5749 to 1.5755 in.) 40.018 mm (1.5755 in.)
Reverse gear inside diameter	STD Max.	50.515 to 50.540 mm (1.9888 to 1.9898 in.) 50.540 mm (1.9898 in.)
1st gear inside diameter	STD Max.	55.015 to 55.040 mm (2.2053 to 2.2063 in.) 55.040 mm (2.2063 in.)
2nd gear inside diameter	STD Max.	61.015 to 61.040 mm (2.4022 to 2.4031 in.) 61.040 mm (2.4031 in.)
3rd gear inside diameter	STD Max.	61.015 to 61.040 mm (2.4022 to 2.4031 in.) 61.040 mm (2.4031 in.)
2nd gear thrust washer thickness	STD Min.	5.45 to 5.55 mm (0.2146 to 0.2185 in.) 5.45 mm (0.2146 in.)
3rd gear thrust washer thickness	STD Min.	11.45 to 11.55 mm (0.4508 to 0.4547 in.) 11.45 mm (0.4508 in.)

Synchronizer ring to gear clearance (counter shaft)	1st gear	STD	1.10 to 2.10 mm (0.0433 to 0.0822 in.)
		Min.	1.10 mm (0.0433 in.)
	2nd gear	STD	1.10 to 2.10 mm (0.0433 to 0.0822 in.)
		Min.	1.10 mm (0.0433 in.)
	3rd gear	STD	0.78 to 1.62 mm (0.0307 to 0.0643 in.)
		Min.	0.78 mm (0.0307 in.)
	Reverse gear	STD	0.78 to 1.62 mm (0.0307 to 0.0643 in.)
		Min.	0.78 mm (0.0307 in.)
Wide of the hub sleeve			
– Thickness of the gear shift fork		No.1	0.25 to 0.85 mm (0.0098 to 0.0335 in.)
		No.2	0.25 to 0.85 mm (0.0098 to 0.0335 in.)
Transmission clutch hub shaft snap ring No.2		Mark	
		1	2.40 to 2.45 mm (0.0945 to 0.0965 in.)
		2	2.45 to 2.50 mm (0.0965 to 0.0984 in.)
		3	2.50 to 2.55 mm (0.0984 to 0.1004 in.)
		4	2.55 to 2.60 mm (0.1004 to 0.1024 in.)
		5	2.60 to 2.65 mm (0.1024 to 0.1043 in.)
		6	2.65 to 2.70 mm (0.1043 to 0.1063 in.)
3rd gear thrust washer hole snap ring		Mark	
		1	2.40 to 2.45 mm (0.0945 to 0.0965 in.)
		2	2.45 to 2.50 mm (0.0965 to 0.0984 in.)
		3	2.50 to 2.55 mm (0.0984 to 0.1004 in.)
		4	2.55 to 2.60 mm (0.1004 to 0.1024 in.)
		5	2.60 to 2.65 mm (0.1024 to 0.1043 in.)
		6	2.65 to 2.70 mm (0.1043 to 0.1063 in.)
Transmission clutch hub shaft snap ring No.1		Mark	
		A	2.40 to 2.45 mm (0.0945 to 0.0965 in.)
		B	2.45 to 2.50 mm (0.0965 to 0.0984 in.)
		C	2.50 to 2.55 mm (0.0984 to 0.1004 in.)
		D	2.55 to 2.60 mm (0.1004 to 0.1024 in.)
		E	2.60 to 2.65 mm (0.1024 to 0.1043 in.)
		F	2.65 to 2.70 mm (0.1043 to 0.1063 in.)
Counter gear front bearing hole snap ring		Mark	
		A	2.40 to 2.45 mm (0.0945 to 0.0965 in.)
		B	2.45 to 2.50 mm (0.0965 to 0.0984 in.)
		C	2.50 to 2.55 mm (0.0984 to 0.1004 in.)
		D	2.55 to 2.60 mm (0.1004 to 0.1024 in.)
		E	2.60 to 2.65 mm (0.1024 to 0.1043 in.)
		F	2.65 to 2.70 mm (0.1043 to 0.1063 in.)
SHIFT LEVER SHAFT HOUSING ASSY			
Control shaft cover bimetal formed bush	Drive in depth		9.0 to 10.0 mm (0.3543 to 0.3937 in.)
Control shaft cover oil seal	Drive in depth		0 to 1.0 mm (0 to 0.0394 in.)
Select lever shaft slotted pin			
Drive in depth	Select inner head		0 to 1.0 mm (0 to 0.039 in.)
	Shift lever inner No.1		0 to 1.0 mm (0 to 0.039 in.)