

# SERVICE SPECIFICATIONS

## SERVICE DATA

Output shaft 2nd gear journal diameter		
	Limit	37.984 mm (1.4954 in.)
Output shaft 3rd gear journal diameter		
	Limit	34.984 mm (1.3773 in.)
Output shaft flange thickness		
	Limit	4.80 mm (0.1890 in.)
Output shaft runout		
	Limit	0.05 mm (0.0020 in.)
Inner race flange thickness		
	Limit	3.99 mm (0.1571 in.)
Inner race outer diameter		
	Limit	38.985 mm (1.5348 in.)
Gear thrust clearance 1st		
	STD	0.10–0.25 mm (0.0039–0.0098 in.)
	Limit	0.25 mm (0.0098 in.)
Gear thrust clearance 2nd		
	STD	0.10–0.25 mm (0.0039–0.0098 in.)
	Limit	0.25 mm (0.0098 in.)
Gear thrust clearance 3rd		
	STD	0.10–0.25 mm (0.0039–0.0098 in.)
	Limit	0.25 mm (0.0098 in.)
Gear radial clearance 1st		
	STD	0.009–0.032 mm (0.0004–0.0013 in.)
	Limit	0.032 mm (0.0013 in.)
Gear radial clearance 2nd		
	STD	0.009–0.033 mm (0.0004–0.0013 in.)
	Limit	0.033 mm (0.0013 in.)
Gear radial clearance 3rd		
	STD	0.009–0.033 mm (0.0004–0.0013 in.)
	Limit	0.033 mm (0.0013 in.)
Shift fork to hub sleeve clearance		
	Limit	1.0 mm (0.039 in.)
Synchronizer ring to gear clearance		
	Limit	0.8 mm (0.031 in.)
Input shaft snap ring thickness		
	Mark 0	2.05–2.10 mm (0.0807–0.0827 in.)
	Mark 1	2.10–2.15 mm (0.0827–0.0846 in.)
	Mark 2	2.15–2.20 mm (0.0846–0.0866 in.)
	Mark 3	2.20–2.25 mm (0.0866–0.0886 in.)
	Mark 4	2.25–2.30 mm (0.0886–0.0906 in.)
	Mark 5	2.30–2.35 mm (0.0906–0.0925 in.)
Output shaft snap ring thickness		
Front	Mark C-1	1.75–1.80 mm (0.0689–0.0709 in.)
Front	Mark D	1.80–1.85 mm (0.0709–0.0728 in.)
Front	Mark D-1	1.85–1.90 mm (0.0728–0.0748 in.)
Front	Mark E	1.90–1.95 mm (0.0748–0.0768 in.)

Front	Mark E-1	1.95-2.00 mm (0.0768-0.0787 in.)
Front	Mark F	2.00-2.05 mm (0.0787-0.0807 in.)
Front	Mark F-1	2.05-2.10 mm (0.0807-0.0827 in.)
Rear	Mark A	2.67-2.72 mm (0.1051-0.1071 in.)
Rear	Mark B	2.73-2.78 mm (0.1075-0.1094 in.)
Rear	Mark C	2.79-2.84 mm (0.1098-0.1118 in.)
Rear	Mark D	2.85-2.90 mm (0.1122-0.1142 in.)
Rear	Mark E	2.91-2.96 mm (0.1146-0.1165 in.)
Rear	Mark F	2.97-3.02 mm (0.1169-0.1189 in.)
Rear	Mark G	3.03-3.08 mm (0.1193-0.1213 in.)
Rear	Mark H	3.09-3.14 mm (0.1217-0.1236 in.)
Rear	Mark J	3.15-3.20 mm (0.1240-0.1260 in.)
Rear	Mark K	3.21-3.26 mm (0.1264-0.1283 in.)
Rear	Mark L	3.27-3.32 mm (0.1287-0.1307 in.)
Counter gear needle roller bearing race diameter		
	STD	25.98-26.00 mm (1.0228-1.0236 in.)
	Limit	25.86 mm (1.0181 in.)
Counter 5th gear thrust clearance		
	STD	0.10-0.30 mm (0.0039-0.0118 in.)
	Limit	0.30 mm (0.0118 in.)
Counter 5th gear radial clearance		
	STD	0.009-0.032 mm (0.0004-0.0013 in.)
	Limit	0.032 mm (0.0013 in.)
Reverse idler gear radial clearance		
	STD	0.04-0.08 mm (0.0016-0.0031 in.)
	Limit	0.13 mm (0.0051 in.)
Reverse idler gear to shift arm shoe clearance		
	STD	0.05-0.27 mm (0.0020-0.0106 in.)
	Limit	0.5 mm (0.0197 in.)
Counter gear snap ring thickness		
Front bearing	Mark 1	2.05-2.10 mm (0.0807-0.0827 in.)
Front bearing	Mark 2	2.10-2.15 mm (0.0827-0.0846 in.)
Front bearing	Mark 3	2.15-2.20 mm (0.0846-0.0866 in.)
Front bearing	Mark 4	2.20-2.25 mm (0.0866-0.0886 in.)
Front bearing	Mark 5	2.25-2.30 mm (0.0886-0.0906 in.)
Front bearing	Mark 6	2.30-2.35 mm (0.0906-0.0925 in.)
Gear spline piece No.5	Mark A	2.80-2.85 mm (0.110-0.112 in.)
Gear spline piece No.5	Mark B	2.85-2.90 mm (0.112-0.114 in.)
Gear spline piece No.5	Mark C	2.90-2.95 mm (0.114-0.116 in.)
Gear spline piece No.5	Mark D	2.95-3.00 mm (0.116-0.118 in.)
Gear spline piece No.5	Mark E	3.00-3.05 mm (0.118-0.120 in.)
Gear spline piece No.5	Mark F	3.05-3.10 mm (0.120-0.122 in.)
Gear spline piece No.5	Mark G	3.10-3.15 mm (0.122-0.124 in.)
Front bearing retainer oil seal drive in depth		12.2-13.2 mm (0.480-0.520 in.)

## TORQUE SPECIFICATIONS

Part tightened	N·m	kgf·cm	ft·lbf
Straight screw plug	19	190	14
Front bearing retainer X Transmission case	17	170	12
Rear bearing retainer X Intermediate plate	18	185	13
Reverse shift arm bracket	18	185	13
Shift fork X Shift fork shaft	20	200	14
Back-up light switch	37	380	27
Reverse idler gear shaft stopper bolt	17	175	13
Clutch housing X Transmission case	37	380	27
Transfer adaptor X Intermediate plate	37	380	27
Shift lever housing bolt	38	390	28
Transfer adaptor plug	37	380	27
Restrict pin	27	280	20
Transmission shift lever control retainer X Transfer adaptor	18	185	13
Transfer shift lever control retainer X Transfer adaptor	18	185	13
Propeller shaft upper dust cover set bolt	37	380	27
Propeller shaft upper dust cover X Bracket	23	230	17
Engine rear mounting X Transmission	25	260	19
Dynamic damper set bolt	37	380	27
Transmission X Engine	72	730	53
Stiffener plate X Transmission	37	380	27
Starter X Transmission	39	400	29
Frame crossmember X Body	95	970	70
Engine rear mounting X Crossmember	13	130	9
Stabilizer bracket set bolt	29	300	22
Front exhaust pipe X Exhaust manifold	62	630	46
Exhaust pipe bracket X Clutch housing	Upper Bolt	19	195
	Rear Bolt	69	700
Exhaust pipe clamp bolt	19	195	14
Clutch tube bracket X Starter lower mounting bolt	39	400	29
Clutch release cylinder X Transmission	12	120	9
Propeller shaft dust cover	Bolt A	36	370
	Bolt B	23	230