

SERVICE SPECIFICATIONS

SERVICE DATA

Output shaft 1st gear journal diameter	Min	38.860 mm (1.5299 in.)
Output shaft 2nd gear journal diameter	Min	46.860 mm (1.8449 in.)
Output shaft 3rd gear journal diameter	Min	37.860 mm (1.4905 in.)
Output shaft flange thickness	Min	4.70 mm (0.1850 in.)
Output shaft runout	Max	0.06 mm (0.0024 in.)
Gear thrust clearance 1st	STD	0.10–0.45 mm (0.0039–0.0177 in.)
	Max	0.50 mm (0.0197 in.)
Gear thrust clearance 2nd	STD	0.10–0.25 mm (0.0039–0.0098 in.)
	Max	0.30 mm (0.0118 in.)
Gear thrust clearance 3rd	STD	0.10–0.25 mm (0.0039–0.0098 in.)
	Max	0.30 mm (0.0118 in.)
Gear radial clearance 1st	STD	0.020–0.073 mm (0.0008–0.0029 in.)
	Max	0.160 mm (0.0063 in.)
Gear radial clearance 2nd	STD	0.015–0.068 mm (0.0006–0.0027 in.)
	Max	0.160 mm (0.0063 in.)
Gear radial clearance 3rd	STD	0.015–0.068 mm (0.0006–0.0027 in.)
	Max	0.160 mm (0.0063 in.)
Shift fork to hub sleeve clearance	Max	1.0 mm (0.039 in.)
Synchronizer ring to gear clearance	Min	0.8 mm (0.031 in.)
Input shaft snap ring thickness	Mark A	2.10–2.15 mm (0.0827–0.0846 in.)
	Mark B	2.15–2.20 mm (0.0846–0.0866 in.)
	Mark C	2.20–2.25 mm (0.0866–0.0886 in.)
	Mark D	2.25–2.30 mm (0.0886–0.0906 in.)
	Mark E	2.30–2.35 mm (0.0906–0.0925 in.)
	Mark F	2.35–2.40 mm (0.0925–0.0945 in.)
	Mark G	2.40–2.45 mm (0.0945–0.0965 in.)
Output shaft snap ring thickness Clutch hub No.1	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.)
Output shaft snap ring thickness Clutch hub No.2	Mark A	1.80–1.85 mm (0.0709–0.0728 in.)
	Mark B	1.85–1.90 mm (0.0728–0.0748 in.)
	Mark C	1.90–1.95 mm (0.0748–0.0768 in.)
	Mark D	1.95–2.00 mm (0.0768–0.0787 in.)
	Mark E	2.00–2.05 mm (0.0787–0.0807 in.)
	Mark F	2.05–2.10 mm (0.0807–0.0827 in.)
	Mark G	2.10–2.15 mm (0.0827–0.0846 in.)

Output shaft snap ring thickness Rear	Mark A	2.65–2.70 mm (0.1043–0.1063 in.)
	Mark B	2.70–2.75 mm (0.1063–0.1083 in.)
	Mark C	2.75–2.80 mm (0.1083–0.1102 in.)
	Mark D	2.80–2.85 mm (0.1102–0.1122 in.)
	Mark E	2.85–2.90 mm (0.1122–0.1142 in.)
	Mark F	2.90–2.95 mm (0.1142–0.1161 in.)
	Mark G	2.95–3.00 mm (0.1161–0.1181 in.)
	Mark H	3.00–3.05 mm (0.1181–0.1201 in.)
	Mark J	3.05–3.10 mm (0.1201–0.1220 in.)
	Mark K	3.10–3.15 mm (0.1220–0.1240 in.)
	Mark L	3.15–3.20 mm (0.1240–0.1260 in.)
	Mark M	3.20–3.25 mm (0.1260–0.1280 in.)
	Mark N	3.25–3.30 mm (0.1280–0.1299 in.)
	Mark P	3.30–3.35 mm (0.1299–0.1319 in.)
	Mark Q	3.35–3.40 mm (0.1319–0.1339 in.)
	Mark R	3.40–3.45 mm (0.1339–0.1358 in.)
	Mark S	3.45–2.50 mm (0.1358–0.1378 in.)
Counter gear roller bearing journal diameter	Min	27.860 mm (1.0968 in.)
Counter 5th gear thrust clearance	STD	0.10–0.35 mm (0.0039–0.0138 in.)
	Max	0.40 mm (0.0157 in.)
Counter 5th radial clearance	STD	0.015–0.068 mm (0.0006–0.0027 in.)
	Max	0.16 mm (0.0063 in.)
Reverse idler gear radial clearance	STD	0.040–0.082 mm (0.0016–0.0032 in.)
	Max	0.13 mm (0.0051 in.)
Reverse idler gear to shift arm clearance	STD	0.05–0.35 mm (0.0020–0.0138 in.)
	Max	0.50 mm (0.0197 in.)
Counter gear snap ring thickness Front	Mark A	2.00–2.05 mm (0.0787–0.0807 in.)
	Mark B	2.05–2.10 mm (0.0807–0.0827 in.)
	Mark C	2.10–2.15 mm (0.0827–0.0846 in.)
	Mark D	2.15–2.20 mm (0.0846–0.0866 in.)
	Mark E	2.20–2.25 mm (0.0866–0.0886 in.)
	Mark F	2.25–3.00 mm (0.0886–0.1181 in.)
Counter gear snap ring thickness Rear	Mark A	2.80–2.85 mm (0.1102–0.1122 in.)
	Mark B	2.85–2.90 mm (0.1122–0.1142 in.)
	Mark C	2.90–2.95 mm (0.1142–0.1161 in.)
	Mark D	2.95–3.00 mm (0.1161–0.1181 in.)
	Mark E	3.00–3.05 mm (0.1181–0.1201 in.)
	Mark F	3.05–3.10 mm (0.1201–0.1220 in.)
	Mark G	3.10–3.15 mm (0.1220–0.1240 in.)
Front bearing retainer oil seal drive in depth		11.2–12.2 mm (0.441–0.480 in.)

TORQUE SPECIFICATIONS

Part tightened	N-m	kgf-cm	ft-lbf
Reverse shift arm bracket set bolt	18	185	13
Rear bearing retainer x Intermediate plate	18	185	13
Shift fork x Shift fork shaft	20	200	14
Straight screw plug	19	190	14
Front bearing retainer x Transmission case	17	170	12
Transmission case x Transfer adaptor	37	380	27
Shift lever housing set bolt	38	390	28
Clutch housing x Transmission case	36	370	27
Oil receiver x Extension housing	11	115	8
Back-up light switch	44	450	32
Restrict pin	37	380	27
Shift lever retainer x Transfer adaptor	18	185	13
Filler and drain plug	37	380	27
Transmission x Engine	72	730	53
Engine rear mounting x Transmission	25	260	19
Crossmember x Body	95	970	70
Engine rear mounting x Crossmember	13	130	9
Stabilizer bracket set bolt	30	306	22
Stiffener plate x Engine	37	380	27
Stiffener plate x Transmission	37	380	27
Front exhaust pipe x Exhaust manifold	62	630	46
Front exhaust- pipe x Rear exhaust pipe	39	400	29
Exhaust pipe bracket x Clutch housing	39	400	29
Exhaust pipe clamp bolt	19	195	14
Starter x Transmission	39	400	29
Clutch release cylinder x Transmission	12	120	9
Engine under cover	29	300	22