MANUAL TRANSMISSION (H151F)

Service Data

Output shaft			
1st gear journal diameter	Limit	49.979 mm	1.9677 in.
2nd gear journal diameter	Limit	57.984 mm	2.2828 in.
3rd gear journal diameter	Limit	37.979 mm	1.4952 in.
5th gear journal diameter	Limit	45.984 mm	1.8104 in.
Frange thickness	Limit	4.725 mm	0.1860 in.
Runout	Limit	0.05 mm	0.0020 in.
Counter gear			
Roller bearing journal diameter	STD	35.957 — 35.970 mm	1.4156 — 1.4161 in.
	Limit	35.957 mm	1.4156 in.
Gear thrust clearance			
1st & 3rd gear	STD	0.1 — 0.45 mm	0.0039 — 0.0177 in.
	Limit	0.45 mm	0.0177 in.
2nd & 5th gear	STD	0.1 — 0.35 mm	0.0039 — 0.0138 in.
	Limit	0.35 mm	0.0138 in.
Reverse gear	STD	0.1 — 0.67 mm	0.0039 — 0.0264 in.
	Limit	0.67 mm	0.0264 in.
Gear oil clearance			
1st & 3rd gear	STD	0.020 — 0.073 mm	0.0008 — 0.0029 in.
	Limit	0.073 mm	0.0029 in.
2nd & 5th gear	STD	0.015 — 0.068 mm	0.0006 — 0.0027 in.
	Limit	0.068 mm	0.0027 in.
Shift fork to hub sleeve clearance	Limit	0.35 mm	0.0138 in.
Synchronizer ring to gear clearance			
1st & 2nd gear	STD	0.85 — 1.4 mm	0.0335 — 0.0551 in.
	Limit	0.85 mm	0.0335 in.
3rd & reverse gear	STD	0.75 — 1.3 mm	0.0295 — 0.0512 in.
	Limit	0.75 mm	0.0295 in.
Oil seal drive in depth			
Front bearing retainer		15.4 — 16.2 mm	0.6063 — 0.6378 in.
Input shaft to synchronizer ring	Limit	0.6 mm	0.0236 in.
Input shaft snap ring thickness	Mark		
	A	2.50 — 2.55 mm	0.0984 — 0.1004 in.
	B	2.55 — 2.60 mm	0.1004 — 0.1024 in.
	C	2.60 — 2.65 mm	0.1024 — 0.1043 in.
	D	2.65 — 2.70 mm	0.1043 — 0.1063 in.
	E	2.70 — 2.75 mm	0.1063 — 0.1083 in.
	F	2.75 — 2.80 mm	0.1083 — 0.1102 in.
Counter gear snap ring (Front bearing)	Mark		
	A	2.45 — 2.50 mm	0.0970 — 0.0984 in.
	B	2.50 — 2.55 mm	0.0984 — 0.1004 in.
	C	2.55 — 2.60 mm	0.1004 — 0.1024 in.
	D	2.60 — 2.65 mm	0.1024 — 0.1043 in.
	E	2.65 — 2.70 mm	0.1043 — 0.1063 in.
	F	2.70 — 2.75 mm	0.1063 — 0.1083 in.
Output shaft snap ring thickness			
Hub sleeve No.3	Mark		
	A	2.40 — 2.45 mm	0.0945 — 0.0965 in.
	B	2.45 — 2.50 mm	0.0965 — 0.0984 in.
	C	2.50 — 2.55 mm	0.0984 — 0.1004 in.
	D	2.55 — 2.60 mm	0.1004 — 0.1024 in.
	E	2.60 — 2.65 mm	0.1024 — 0.1044 in.
	F	2.65 — 2.70 mm	0.1044 — 0.1063 in.

Specifications (Cont'd)

Output shaft snap ring thickness (cont'd)			
Hub sleeve No.2	Mark		
	4	1.90 — 1.95 mm	0.0748 — 0.0768 in.
	5	1.95 — 2.00 mm	0.0768 — 0.0787 in.
	6	2.00 — 2.05 mm	0.0787 — 0.0807 in.
	7	2.05 — 2.10 mm	0.0807 — 0.0827 in.
	8	2.10 — 2.15 mm	0.0827 — 0.0847 in.
	9	2.15 — 2.20 mm	0.0847 — 0.0866 in.
Hub sleeve No.1	Mark		
	A	2.90 — 2.95 mm	0.1142 — 0.1162 in.
	B	2.95 — 3.00 mm	0.1162 — 0.1181 in.
	C	3.00 — 3.05 mm	0.1181 — 0.1201 in.
	D	3.05 — 3.10 mm	0.1201 — 0.1220 in.
	E	3.10 — 3.15 mm	0.1220 — 0.1240 in.
	F	3.15 — 3.20 mm	0.1240 — 0.1260 in.
Rear bearing	Mark		
	A	2.40 — 2.45 mm	0.0945 — 0.0965 in.
	B	2.45 — 2.50 mm	0.0965 — 0.0984 in.
	C	2.50 — 2.55 mm	0.0984 — 0.1004 in.
	D	2.55 — 2.60 mm	0.1004 — 0.1024 in.
	E	2.60 — 2.65 mm	0.1024 — 0.1044 in.
	F	2.65 — 2.70 mm	0.1044 — 0.1063 in.
	G	2.70 — 2.75 mm	0.1063 — 0.1083 in.
	H	2.75 — 2.80 mm	0.1083 — 0.1102 in.
Oil pump			
Body clearance of driven rotor	STD	0.075 — 0.170 mm	0.0030 — 0.0067 in.
	Limit	0.17 mm	0.0067 in.
Tip clearance of both rotors	STD	0.10 — 0.22 mm	0.0039 — 0.0087 in.
	Limit	0.22 mm	0.0087 in.
Reverse idler gear oil clearance	STD	0.015 — 0.059 mm	0.0006 — 0.0023 in.
	Limit	0.059 mm	0.0023 in.

Torque Specifications

Part tightened	N·m	kgf·cm	ft·lbt
Shift lever control retainer × Transmission case	17	170	12
Restrict pin	37	380	27
Oil receiver × Transmission case	12	120	7
Back-up light switch	44	450	33
Top switch	44	450	33
Drain plug	37	380	27
Front bearing retainer × Transmission case	16	170	12
Clutch housing × Transmission case	37	380	27
Oil strainer × Transfer adaptor	12	120	7
Oil receiver × Intermediate plate	18	185	13
Transmission case × Transfer adaptor	37	380	27
Rear bearing retainer × Intermediate plate	18	185	13
Shift fork No.1 set bolt	36	370	27
Shift fork No.2 set bolt	36	370	27
Shift fork No.3 set bolt	36	370	27
Reverse shift fork set bolt	34	350	25
Screw plug	19	190	14
Oil pump cover × Transfer adaptor	17	170	12
Oil pump screw plug	18	185	13
Oil pump taper plug	12	120	9