TRANSFER (VF3AM) SERVICE DATA

SS086-03

Transfer unit		
Hose insertion depth		13 mm (0.51 in.) or more
Oil pump body		
Body clearance	STD	0.09 - 0.16 mm (0.0035 - 0.0063 in.)
	Max.	0.16 mm (0.0063 in.)
Tip clearance	STD	0.05 - 0.15 mm (0.0020 - 0.0059 in.)
	Max.	0.15 mm (0.0059 in.)
Side clearance	STD	0.03 - 0.10 mm (0.0012 - 0.0039 in.)
	Max.	0.10 mm (0.0039 in.)
Rear output shaft		
Drive sprocket thrust clearance	STD	0.10 - 0.25 mm (0.0039 - 0.0098 in.)
	Max.	0.25 mm (0.0098 in.)
Drive sprocket radial clearance	STD	0.01 - 0.06 mm (0.0004 - 0.0024 in.)
	Max.	0.06 mm (0.0024 in.)
No. 2 shift fork claw thickness		11.85 mm (0.4665 in.)
High and low clutch sleeve groove distance		12.00 mm (0.4724 in.)
No. 2 shift fork to high and low clutch sleeve clearance	STD	0.15 - 0.35 mm (0.0059 - 0.138 in.)
	Max.	0.35 mm (0.138 in.)
Center differential lock fork claw thickness		10.2 mm (0.4016 in.)
Center differential lock sleeve groove distance		10.5 mm (0.4134 in.)
Center differential lock fork to center differential lock sleeve clearance	•	
	STD	0.26 - 0.84 mm (0.0102 - 0.0331 in.)
	Max.	0.84 mm (0.0331 in.)
No. 1 gear shift fork claw thickness		11.85 mm (0.4665 in.)
Front drive clutch sleeve groove distance		12.00 mm (0.4724 in.)
No. 1 gear shift fork to front drive clutch sleeve clearance	STD	0.15 - 0.35 mm (0.0059 - 0.0138 in.)
	Max.	0.35 mm (0.0138 in.)
Rear output shaft journal outer diameter		
Part A	STD	36.98 - 37.00 mm (1.4559 - 1.4567 in.)
	Min.	36.98 mm (1.4559 in.)
Part B	STD	27.98 - 27.99 mm (1.1016 - 1.1020 in.)
	Min.	27.98 mm (1.1016 in.)
Center differential planetary gear radial clearance	STD	0.01 - 0.04 mm (0.0004 - 0.0016 in.)
	Max.	0.04 mm (0.0016 in.)
Center differential planetary gear backlash	STD	0.01 - 0.04 mm (0.0004 - 0.0016 in.)
Center differential planetary gear thrust clearance	STD	0.15 - 0.70 mm (0.0059 - 0.0276 in.)
	Max.	0.70 mm (0.0276 in.)
Clutch hub snap ring thickness	Mark	
	K	2.00 - 2.05 mm (0.0787 - 0.0807 in.)
	L	2.05 - 2.10 mm (0.0807 - 0.0827 in.)
	Α	2.10 - 2.15 mm (0.0827 - 0.0846 in.)
	В	2.15 - 2.20 mm (0.0846 - 0.0866 in.)
	С	2.20 - 2.25 mm (0.0866 - 0.0886 in.)
	D	2.25 - 2.30 mm (0.0886 - 0.0906 in.)
	Ε	2.30 - 2.35 mm (0.0906 - 0.0925 in.)
	F	2.35 - 2.40 mm (0.0925 - 0.0945 in.)
	G	2.40 - 2.45 mm (0.0945 - 0.0965 in.)
	Н	2.45 - 2.50 mm (0.0965 - 0.0984 in.)
	J	2.50 - 2.55 mm (0.0984 - 0.1004 in.)

2002 4RUNNER (RM887U)

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Input shaft		
Input shaft journal outer diameter	Min.	47.59 mm (1.8736 in.)
Input shaft bushing diameter	Max.	39.14 mm (1.5409 in.)
Input gear stopper snap ring thickness	Mark	
	Α	2.10 - 2.15 mm (0.0827 - 0.0846 in.)
	В	2.15 - 2.20 mm (0.0846 - 0.0866 in.)
	С	2.20 - 2.25 mm (0.0866 - 0.0886 in.)
	D	2.25 - 2.30 mm (0.0886 - 0.0906 in.)
	Е	2.30 - 2.35 mm (0.0906 - 0.0925 in.)
	F	2.35 - 2.40 mm (0.0925 - 0.0945 in.)
	G	2.40 - 2.45 mm (0.0945 - 0.0965 in.)
	Н	2.45 - 2.50 mm (0.0965 - 0.0984 in.)
	J	2.50 - 2.55 mm (0.0984 - 0.1004 in.)
	K	2.55 - 2.60 mm (0.1004 - 0.1024 in.)
	L	2.60 - 2.65 mm (0.1024 - 0.1043 in.)
	М	2.65 - 2.70 mm (0.1043 - 0.1063 in.)
	N	2.70 - 2.75 mm (0.1063 - 0.1083 in.)
	Р	2.75 - 2.80 mm (0.1083 - 0.1102 in.)
	Q	2.80 - 2.85 mm (0.1102 - 0.1122 in.)
	R	2.85 - 2.90 mm (0.1122 - 0.1142 in.)
	S	2.90 - 2.95 mm (0.1142 - 0.1161 in.)
	Т	2.95 - 3.00 mm (0.1161 - 0.1181 in.)
	U	3.00 - 3.05 mm (0.1181 - 0.1201 in.)
Planetary gear		
Pinion gear thrust clearance	STD	0.11 - 0.84 mm (0.0043 - 0.0331 in.)
-	Max.	0.84 mm (0.0331 in.)
Pinion gear radial clearance	STD	0.009 - 0.038 mm (0.0004 - 0.0015 in.)
	Max.	0.038 mm (0.0015 in.)
Outer bearing snap ring thickness	Mark	
	1	1.45 - 1.50 mm (0.0571 - 0.0591 in.)
	2	1.50 - 1.55 mm (0.0591 - 0.0610 in.)
	3	1.55 - 1.60 mm (0.0610 - 0.0630 in.)
	4	1.60 - 1.65 mm (0.0630 - 0.0650 in.)
	5	1.65 - 1.70 mm (0.0650 - 0.0669 in.)
Inner bearing press in depth		7.7 - 8.3 mm (0.0303 - 0.327 in.)
Oil seal		
Shift fork shaft drive in depth		-0.5 - 0.5 mm (-0.020 - 0.020 in.)
One touch 2-4 selector system		
Motor actuator		
2-3	STD resistance	0.3 - 100 Ω
2 or 3-body ground	STD resistance	More than $0.5~\text{M}\Omega$