

Transmission Type... FNR5

Rebuilder's Kwik
Reference Guide



Clutch Clearances

Forward Clutch	.059-.071"	Snap Ring
3 - 4 Clutch	.043-.055"	Snap Ring
Reverse Clutch	.039-.051"	Snap Ring
Low/Reverse Clutch	.087-.098"	Snap Ring
Direct Clutch	.043-.055"	Snap Ring
Reduction Brake	.059-.070"	Snap Ring

Adjusted By: Torque Specifications

Torque Converter Housing to Case	.16 Ft. Lbs.
Pump Halves	7 Ft. Lbs.
Pump to Case	.16 Ft. Lbs.
Valve Body (Primary & Secondary)	80 In. Lbs.
Valve Body to Case (Primary & Secondary)	80 In. Lbs.
Pan (Rear & Lower)	.62 In. Lbs.
End Cover	.16 Ft. Lbs.
2-4 Band Servo Cover	.10 Ft. Lbs.
Band Anchor Bolt	.30 Ft. Lbs.

Band Adjustment

2-4 Band (See Rebuilding Tips)	Band Anchor Bolt
--------------------------------	------------------

Unit End Plays

	<u>Location</u>	<u>Selective</u>
Total Unit .025-.050	End Cover	Bearing Race
*Differential Preload 12-20 In. Lbs.	Under Torque Converter Housing Bearing Cup	Shim
Transfer Shaft .010-.011	Under Torque Converter Housing Bearing Cup	Shim
*Final Drive Input Gear Preload 4.5-7.5	Between Bearings	Collapsible Spacer

*Rotating Torque

New 09/10

Transmission Type... FNR5

Rebuilder's Kwik
Reference Guide



Clutch and Band Application Chart

Range	Mode	Gear	TCC	Engine Brakeing	Forward Clutch	3-4 Clutch	Reverse Clutch	Direct Clutch	2-4 Brake Band	Low and Reverse Brake	Reduction Brake	One-Way Clutch No. 1	One-Way Clutch No. 2	
P	-	Neutral												
R	-	Reverse		x			x			x	x			
N	-	Neutral												
D	*Power/ Normal	1GR			x						x	(x)	(x)	
		2GR		x	x				x		x		(x)	
		3GR		x	x	x					x		(x)	
		4GR		x		x				x	x		(x)	
		4GR ** TCC ON	x	x		x				x		x		(x)
		5GR		x		x			x	x				
		5GR ** TCC ON	x	x		x			x	x				

* = Automatically switches between POWER and NORMAL modes according to accelerator pedal depressing speed

** = Performs TCC operation in NORMAL mode

X = Operating

(X) = Transmits the torque only when driving

Transmission Type... FNR5

Rebuilder's Kwik
Reference Guide



Solenoid Application Chart

Range	Mode	Gear	TCC	Engine Braking	Solenoid Valve (duty-cycle type)			Solenoid Valve (ON/OFF type)		
					Shift Solenoid A	Shift Solenoid B	Shift Solenoid C	Shift Solenoid D	Shift Solenoid E	Shift Solenoid F
P	-	Neutral			OFF	OFF	OFF	ON	OFF	ON
R	-	Reverse		x	OFF	OFF	OFF	OFF	OFF	ON
N	-	Neutral			OFF	OFF	OFF	ON	OFF	ON
D	Power/ Normal	1GR			OFF	ON	ON	OFF	OFF	ON
		2GR		x	OFF	OFF	ON	OFF	OFF	ON
		3GR		x	OFF	OFF	OFF	OFF	OFF	ON
		4GR		x	ON	OFF	OFF	ON	OFF	ON
		4GR TCC ON	x	x	ON	OFF	OFF	ON	ON	ON
		5GR		x	OFF	OFF	OFF	ON	OFF	OFF
		5GR TCC ON	x	x	ON	OFF	OFF	ON	ON	OFF
M	Manual Low	1GR		x	OFF	OFF	ON	ON	ON	ON

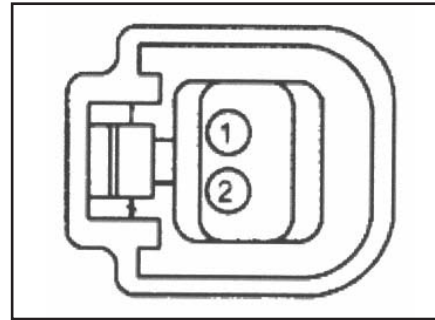
X= Operating

Transmission Type... FNR5

Rebuilder's Kwik
Reference Guide



Solenoid and Harness Information



Pin ID	Solenoid	Resistance	Wire Color
1 + GND	SSA	1.0-4.2	White
7 + GND	SSB	1.0-4.2	Blue
3 + GND	SSC	1.0-4.2	Green
4 + GND	SSD	10.9-26.2	White
8 + GND	SSE	10.9-26.2	Black
2 + 9	PCS-A	2.4-7.3	Black
5 + 6	TFT	*	Black

*See TFT Chart

Pin ID	Solenoid	Resistance	Wire Color
1 + GND	PCS B	2.4-7.3	Black
2 + GND	SSF	10.9-26.2	Black

TFT

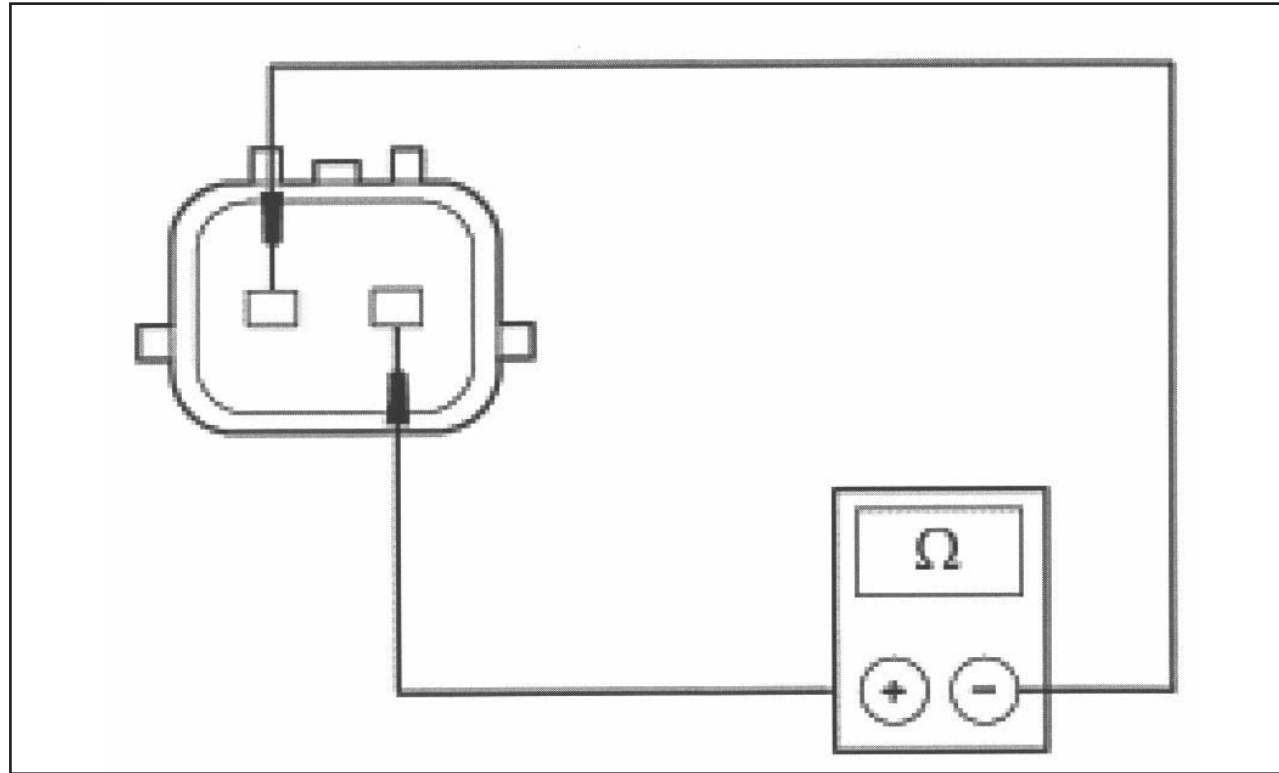
Temperature	Resistance
-4 F	236-324K
32F	84.3-110
68F	33.5-42.0
104F	14.7-17.9
140F	7.08-8.17
176F	3.61-4.15
212F	1.96-2.24
248F	1.13-1.28
266F	0.87-0.98

Transmission Type... FNR5

Rebuilder's Kwik
Reference Guide



TSS Connector



TSS - 330-390 Ω @ 70°F

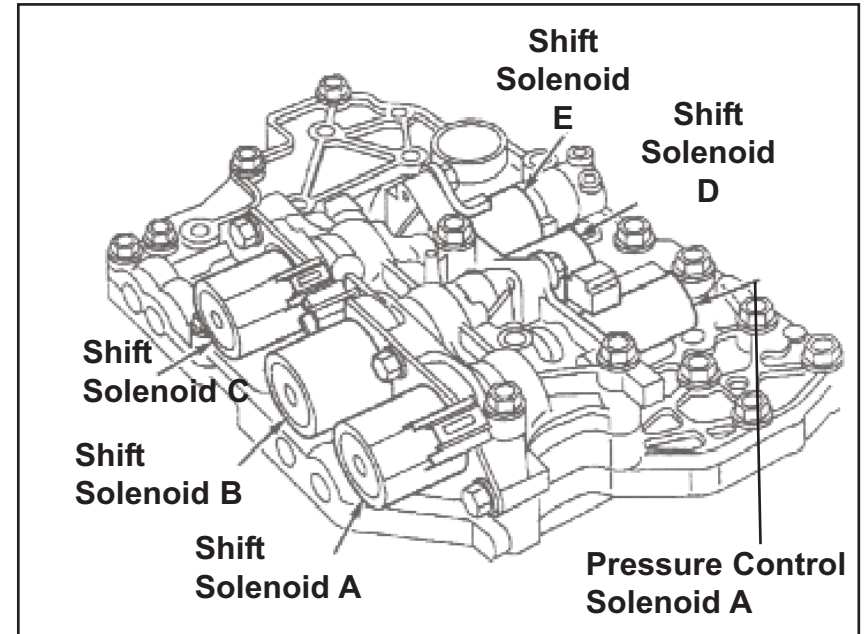
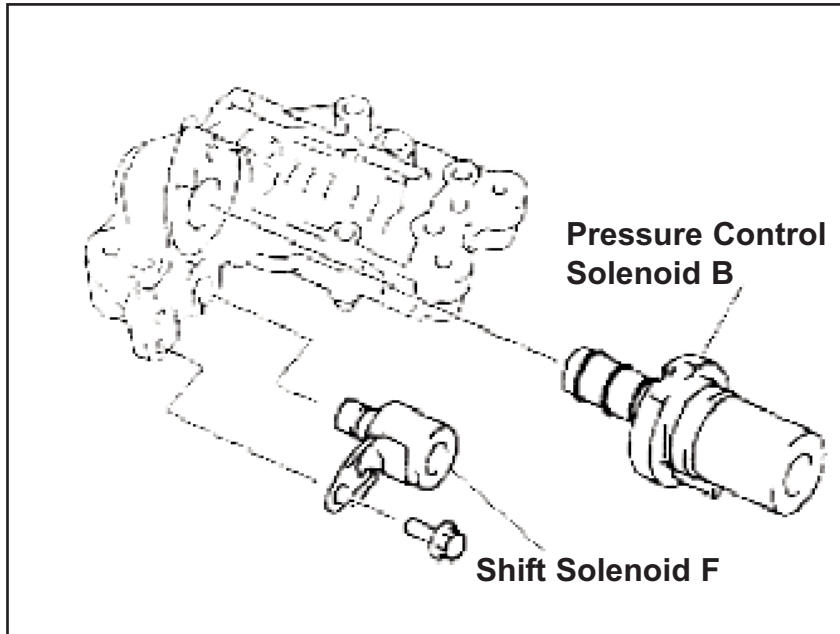
NOTE *ISS } Hall Affects
OSS } No Bench Test

*Intermediate Shaft Speed Sensor (ISS)

Transmission Type... FNR5



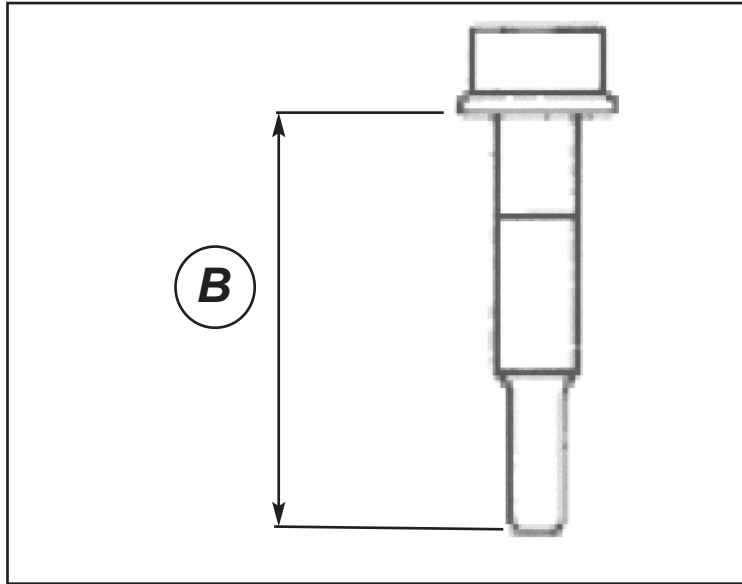
Solenoid Identification



Transmission Type... FNR5



Tips for Rebuilding - Band Adjustment

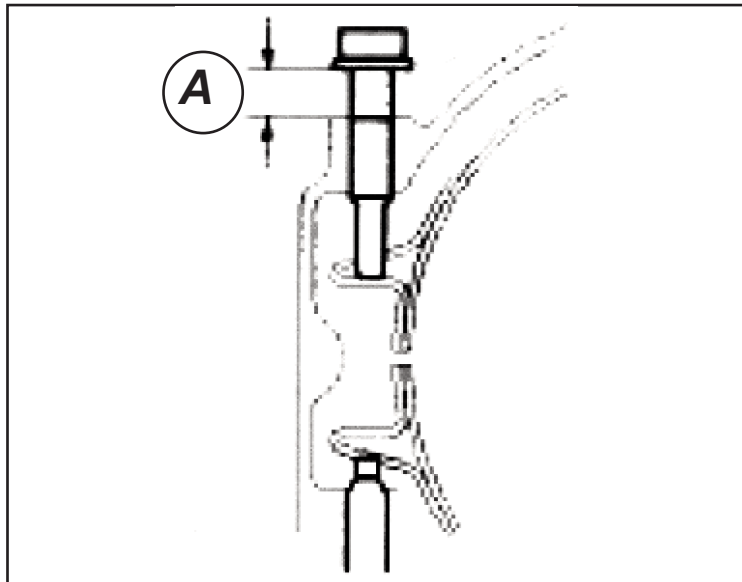


Find appropriate bolt between 2.36 - 2.75 inches long. Install bolt and tighten to 43 In Lbs.

Measure Dimension "A"
Measure Dimension "B"

Calculate required band anchor bolt length

$B - A = C$ *Select Anchor Bolt*
 $C - 4 = D$ *that falls between*
 $C - 4.7 = E$ *dimensions D+E*



Band Anchor Bolt Length Specifications

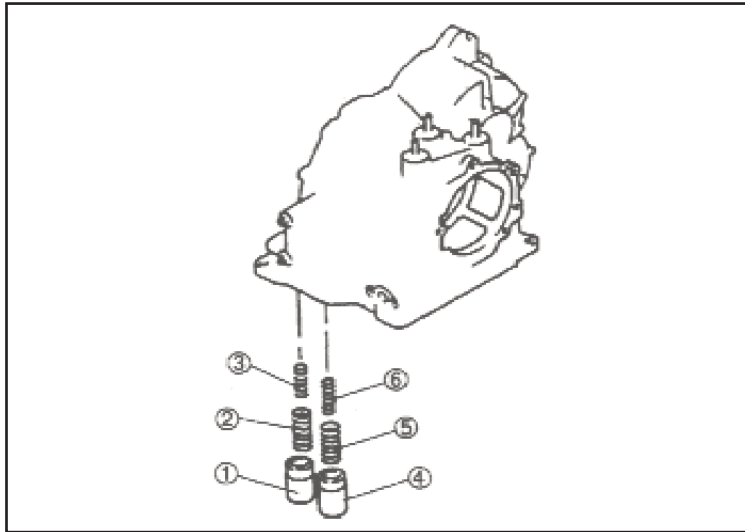
- | | |
|-------|-------|
| 1.417 | 1.437 |
| 1.467 | 1.476 |
| 1.496 | 1.506 |
| 1.535 | 1.486 |
| 1.516 | |

Transmission Type... FNR5

Rebuilder's Kwik Reference Guide



Tips for Rebuilding - Accumulator Spring ID



1	<i>Servo apply accumulator</i>
2	<i>Servo apply accumulator large spring</i>
3	<i>Servo apply accumulator small spring</i>
4	<i>Forward accumulator</i>
5	<i>Forward accumulator large spring*</i>
6	<i>Forward accumulator small spring*</i>

**Thin Longer Springs*

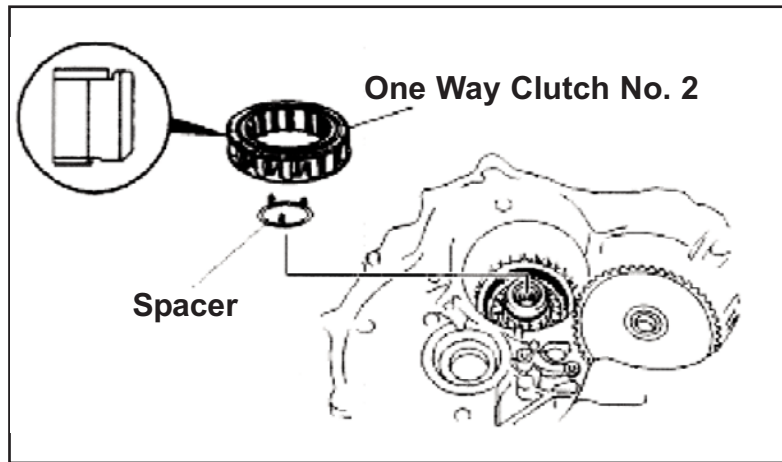
Transmission Type... FNR5

Rebuilder's Kwik
Reference Guide

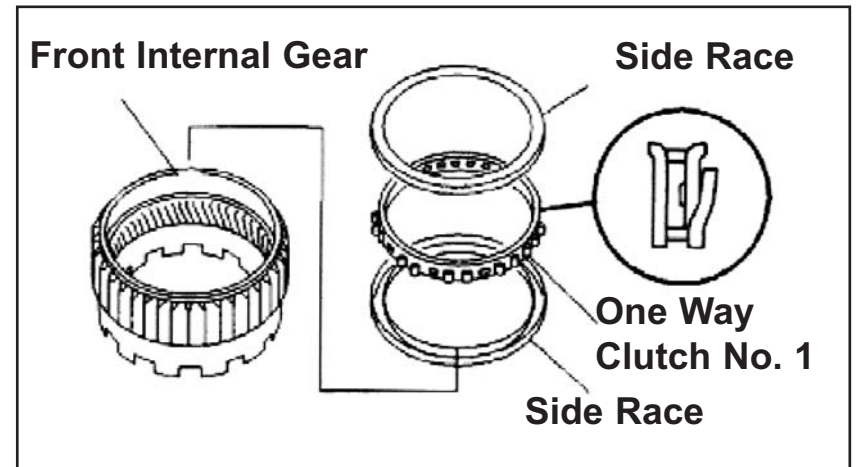


Tips for Rebuilding

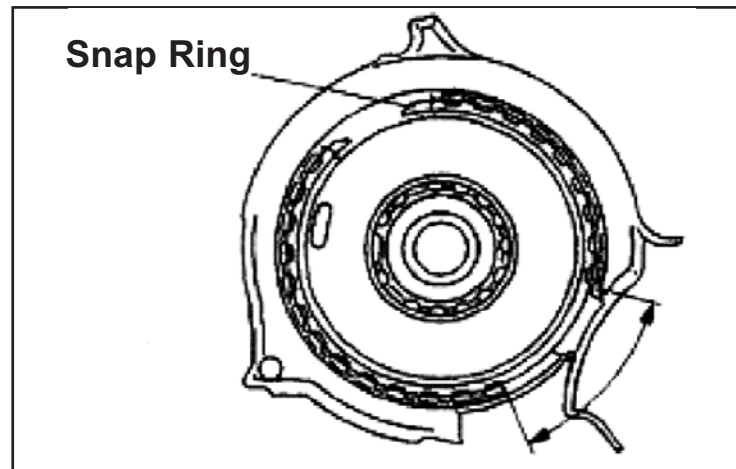
Sprag Assembly



One Way Clutch No. 2



One Way Clutch No. 1



Reduction Brake Snap Ring Location