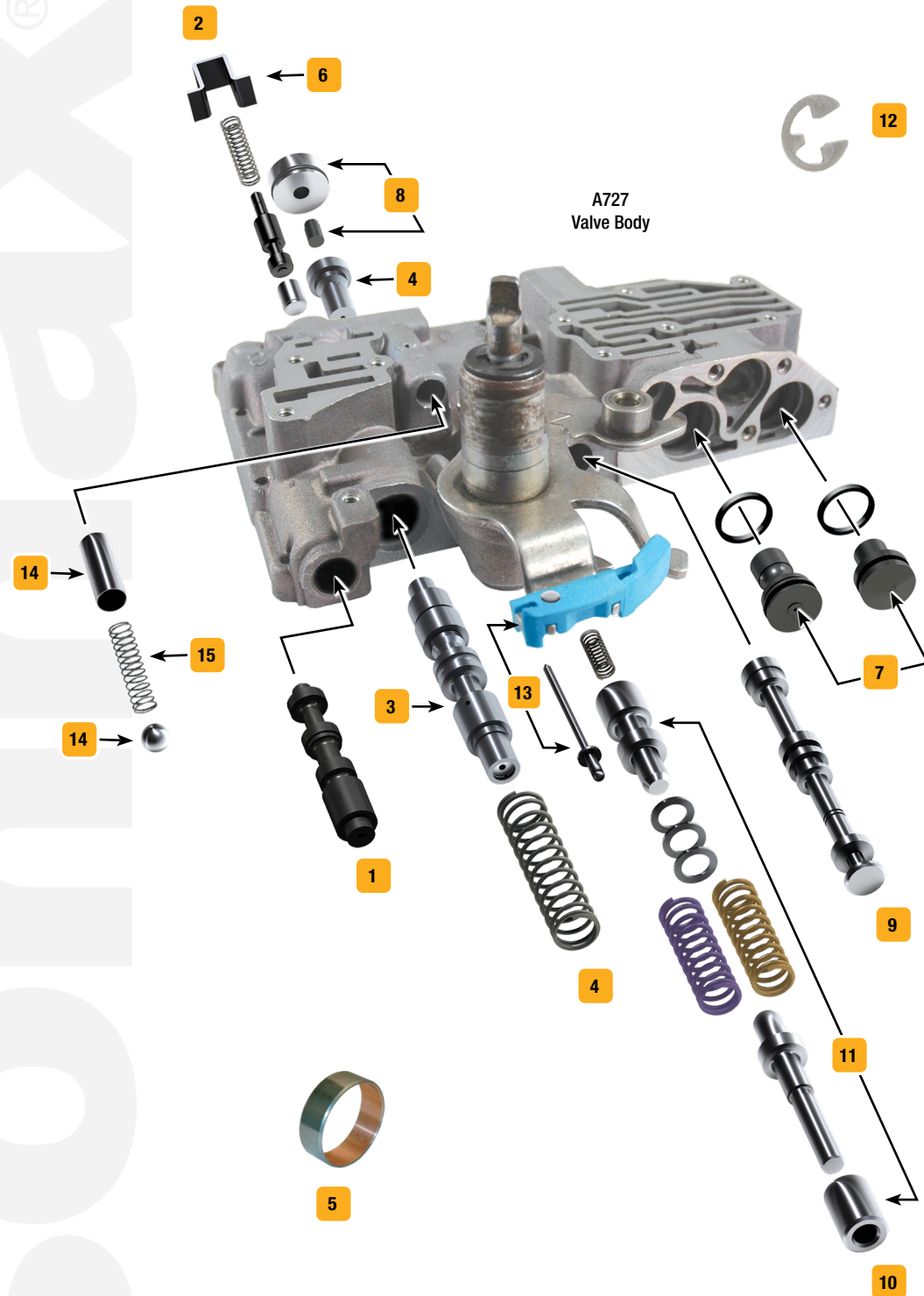


Click on part numbers for product details or visit [www.sonnax.com](http://www.sonnax.com) to see all products for the unit(s) shown here.



Symptoms/Part Type	Product Name	Part No.	Details	Tooling
<b>TCC/Lockup Symptoms</b>				
Lockup shudder, Overheated converter, Low cooler flow, Soft TCC apply	4-Spool Switch Valve	1 22771A-01	ZIP '93-Later, improved Sonnax design	
Lockup shudder, Overheated converter, Lost or damaged component	4-Spool Switch Valve	1 22771A-43	ZIP '93-Later, OE design	
Lockup shudder, Overheated converter, Low cooler flow, Soft TCC apply	Oversized 4-Spool Switch Valve	1 22771A-13	'93-Later, improved Sonnax design	22771A-TL13
TCC slip under load, Overheated converter, No line rise during TCC apply in 4th, No lockup	Oversized Lockup Boost Valve Kit	2 22771-19K	'94-Later with boost oil delivery tube	F-22771-TL19*
<b>Pressure Problems</b>				
Delayed engagement, Converter bushing failure, Pressure regulator buzz, Lube failures	Lube Regulated Pressure Regulator Valve	3 22771A-10K	ZIP '62-'77	
Delayed engagement, Pressure regulator buzz, Converter drain back, Lube failures	Lube Regulated Pressure Regulator Valve	3 22771A-02K	ZIP '78-Later	
	Oversized Lube Regulated Pressure Regulator Valve Kit	4 22771A-07K	OE valve must match '78-later design	F-22771A-TL7*
Delayed engagement, Pressure regulator buzz, Lost or damaged component	Pressure Regulator Valve	3 22771A-42	ZIP '78-Later, OE 4130169	
Pump seal leakage, Pump noise, Loss of prime, Low pump volume, Low cooler flow, TCC codes	Pump Bushing	5 12502-01	Precision, 5/bag	
<b>Shift/Engagement Concerns</b>				
Leakage of 4th & TCC oil pressure, Slipping gears	Boost Valve Spring Retainer	6 22990-01	5/Bag	
1-2 Shuttle, 2-3, 3-2 Oversensitive, Early upshifts	Governor Bore Plug Kit	7 22771-14K	ZIP	
Reverse slip, Poor line pressure control, Poor Forward & Reverse engagement, Soft Reverse	Line Pressure Plug & Sleeve Kit	8 22229-01K	ZIP A727 with boost tube only, .200" plug dia.	
	Line Pressure Plug & Sleeve Kit	8 22229-04K	ZIP A727 with boost tube only, .264" plug dia.	
Delayed engagement, No cooler flow in Park, Converter bushing failure	Manual Valve	9 22771-09	ZIP For use in conjunction with '78-later pressure regulator valve only	
Shift timing concerns, Throttle buzz, Poor kickdown, 2-3 Late, 3-2 Oversensitive	Throttle Valve Kit	10 22771-03K	ZIP	
	Oversized Throttle Valve Kit	11 22771-04K		F-22771-TL*
<b>Component Damage/Failure</b>				
Lost or damaged component	E-Ring	12 10000-03K	For .250" dia. manual shaft, 10/bag	
	Neutral Safety Back-Up Insulator Service Kit	13 22229-03	Fits '70-'02 units with 3-terminal switch	
Manual lever binds in Park position, Damaged valve body casting, Linkage loose, No start	Valve Body Detent Ball & Sleeve Kit	14 22771-12K	Fits both short & long OE detent bore designs	22771-TL12
Manual lever binds, Linkage loose, No start	Valve Body Detent Spring	15 22771-36	Fits both short & long OE detent bore designs, 5/bag	
<b>High Performance/Heavy Duty Upgrades</b>				
Reduces throttle sensitivity, especially in diesel or other high torque applications	Heavy Duty Throttle Valve Kit	10 22771-HDK3	ZIP	

\* VB-FIX Required