

# sonnax<sup>®</sup> PERFORMANCE

faster

tougher

stronger



## DODGE DIESEL

TRANSMISSION • CONVERTER • DRIVESHAFT

# sonnax® PERFORMANCE

## DODGE DIESEL

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48RE, 46-47RH/RE, A727

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#### WHERE TO BUY

Ready to order? Find out where to purchase genuine Sonnax products from an online listing of authorized distributors in the U.S. and other countries.

**GET YOUR GEARHEAD ON [WWW.SONNAX.COM](http://WWW.SONNAX.COM)**

#### CONTACT SONNAX

8:30 a.m. to 5 p.m. ET  
(800) 843-2600 TOLL-FREE  
(802) 463-9722 INTERNATIONAL  
[info@sonnax.com](mailto:info@sonnax.com)

# PERFORMANCE & HD UPGRADES

## 2<sup>nd</sup> Gear Super Hold Servo Kit

Part No. 22301B-01K Fits 48RE, 46-47RH/RE, A727

### Quicker Shifts with Less Leakage

- **Easy-to-install servo improves 1-2 & 2-3 shifts**
- **16% More apply area for more band holding power**
- **15% Less leakage than other designs**

The 2nd gear super hold servo from Sonnax is the largest and most leak-free servo available. It reduces the need for aggressive lever ratios, excessively high line pressure and other radical modifications to achieve firmer shifts.

The exclusive servo design features rubber and PTFE seals that enhance positive sealing and prevent case wear. The overall result is more holding force in 2nd, firmer 1-2 shifts and 2-3 shifts that become firmer under load.



## Accumulator Piston Kit

Part No. 22841-04K Fits 48RE, 46-47RH/RE, A727

### Eliminate Cross-Leaks Between Circuits

- **Rubber D-Rings for superior sealing**
- **PTFE guide seal prevents case wear from piston contact**
- **Billet aluminum piston for improved durability**



## Kickdown Band Strut

Part No. 22825-01 Fits 48RE, 46-47RH/RE, A727

### Strongest Strut Available

- **Extra-thick cross-section for maximum toughness**
- **Solid, heat-treated steel will not bend or break like stamped struts**





# PERFORMANCE & HD UPGRADES

## Heavy Duty Input Shaft

Part No. 22121B-01 Fits 48RE, 47RH/RE

### Unmatched Durability & Performance

- One-piece design eliminates the weak connection between input shaft & direct (front) clutch hub
- Custom forged from a solid piece of ultra high-strength 300M steel

Sonnax heavy duty input shafts for hardworking Dodge trucks come with durability and performance features that are second to none.

There are several other aftermarket versions of this classic Sonnax shaft available, but no one else in the industry uses the same techniques or can manufacture the same high-quality input shaft as Sonnax.



**THE LEGENDARY #1  
DODGE PERFORMANCE SHAFT**

## Smart-Tech® High Capacity Input Shaft & Piston Kit

Part No. 22121B-02K Fits 48RE, 47RH/RE

### 20% More Direct Clutch Torque Capacity, No Modifications Required

- Thinner billet aluminum direct piston
- Longer direct (front) clutch hub
- Holds one extra, OE-thickness friction plate

Improving on the classic Sonnax input shaft, the longer hub on the Smart-Tech® input shaft combined with the custom direct piston holds one extra, OE-thickness direct friction plate to handle increased torque capacity.

This kit installs as easily as OE and is more effective than relying on thinner steels or part modifications.



# TRANSMISSION

## Extreme Duty Intermediate Shaft

Part No. 22171B-HD Fits 48RE, 47RH/RE

This groundbreaking intermediate shaft handles the extreme operating conditions of high-horsepower Dodge street, competition and towing trucks.

Rigorous lab and in-vehicle testing of the patented, ultra-strong shaft prove it's durability you can count on.

### Increase Torque & Load Capacity with Confidence



**Torsional design dissipates peak stress.**

**NEW**

**Unique modifications to lubrication channel increase lube flow to gear train.**

**Rolled splines increase durability.**

**Manufactured from 300M steel to maximize strength and resistance to fracture.**

## Extreme Duty Output Shaft Kit

Part No. 22173D-01K Fits 48RE\*

### Outstanding Protection Against Shaft Breakage

Stronger materials typically used for improving weak parts can't overcome the OE shaft's small, 23-spline cross section.

In addition to a materials upgrade, the Sonnax shaft features a significantly larger, 29-spline configuration that is based on the OE manual transmission spline.



**Larger Diameter Shaft**

Sonnax = 29 Splines  
OE = 23 Splines

**Matching New Venture 271/273 Input Gear**

Gear is configured for installation depth of 48RE transmission.

### High-Strength Alloy Balances:

- Deep-case hardness required for the one-way clutch race that is an integral part of the shaft.
- Toughness required for shaft strength.

\*This shaft is for use in 48RE 2003-2006 4WD models with NV271 or NV273 transfer cases (requires transfer case disassembly).



# CRITICAL SAFEGUARDS



## Reinforced Front Clutch Piston

Part No. 22965A-01 Fits 48RE, 46-47RH/RE, A727

### Guard Against Direct Clutch Failure

Relying on a weak OE piston is like playing Russian roulette with your rebuild. When the piston cracks, the result is an unexpected clutch failure.

Eliminate rework and liabilities by installing the redesigned, stronger Sonnax piston.



## Planetary Thrust Washers

### Zero Wear for Zero Problems

- Upgraded material for vastly improved durability
- Does not generate break-in & wear debris like OE bimetal washers

The OE thrust washers in high-wear locations generate large amounts of debris and increase endplay as they wear. Upgrading to PTFE-impregnated washers guarantees durability and consistency over the life of the transmission.



Part No.	Dimensions	Industry No.	OE No.
<b>6-Tab Front Washers Fit 48RE</b>			
22700FT-01	3.700" O.D. x 2.525" I.D.	D22238F	52854039AB
22700GT-01	3.700" O.D. x 2.250" I.D.	D22238G	52854076AB
<b>4-Tab Rear Washers Fit 46-47RH/RE</b>			
22700ET-01	3.400" O.D. x 2.250" I.D.	22238B	4617888



# TRANSMISSION



## Piston Retainer Kit

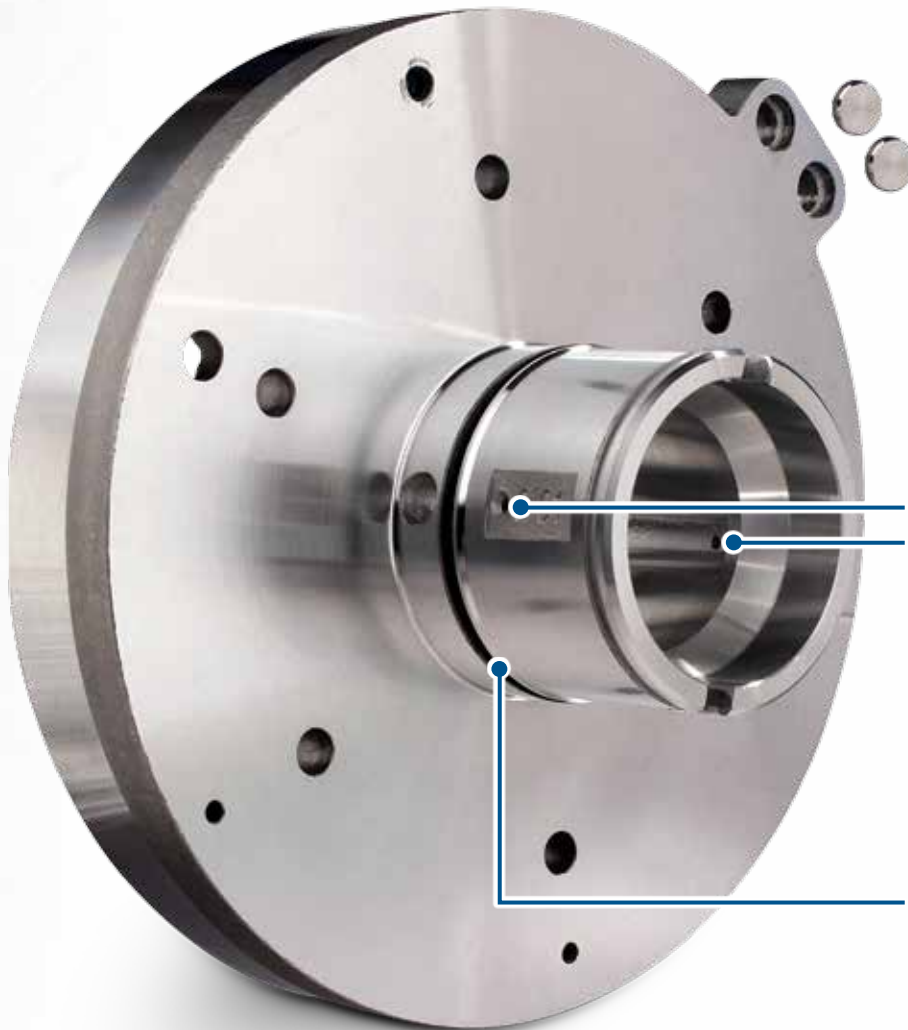
Part No. 22754N-01K Fits 48RE, 46-47RH/RE

### Maximize Gear Train Durability

- Prevents loss of lube oil between support & case
- High-quality aluminum alloy resists gauling
- Improved oil delivery at bearing journals

Many OE supports do not seal well against the case, leading to reduced lube flow to the gear train and consumption of pump volume. This patented retainer kit features redesigned oil grooves to enhance journal lubrication and upgraded aluminum for better wear resistance.

An oversized version of this kit (Part No. 22754N-02K) is available that allows salvage of a damaged Reverse drum.



Retainer kit includes two optional plugs for use in RE units.

Two sets of I.D. and O.D. grooves repositioned at key load areas improve oil delivery.

O-Ring improves case seal and prevents loss of lube oil.

# CRITICAL SAFEGUARDS

## Rear Servo Piston

### Refined Design Prevents Binding

- **Modified seal ridges prevent piston from sticking in case bore**
- **Billet aluminum won't crack like OE cast piston**

The OE piston can get wedged in the bore, causing bind in Forward. Intermittent binding leads to bore wear and band damage. The patented design and material of the Sonnax piston eliminates these concerns for consistent rear band apply.

Part No.	Application	OE Part No.	O.D.
22912C	47-48RE '97-Later*	52118745	2.46"
22912B	47RE/RH '94-'96*	4531229	2.46"
22912	46RE/RH, A727	2801281	2.80"



\*Match OE to Sonnax part using pistons shown here.

## Reverse Servo Piston Plug Kit

Part No. 22912-01K Fits 48RE, 46-47RH/RE, A727

### Steel Plug Won't Break or Wear

- **Hardened steel for more than two times the strength of OE plug**
- **Exclusive, leak-free design uses O-ring between plug & piston**
- **Universal replacement for both extended & flat-tip styles**



## Front Servo Piston Cover Kit

Part No. 22827-01 Fits 48RE, 46-47RH/RE, A727

### Improve Direct Clutch Durability

- **Added O-ring stops direct (front) clutch oil leaks**
- **Billet aluminum resists wear**

No seal between the OE cast piston cover and pin causes bore wear and direct clutch oil leaks that compromise 2-3 shift and direct clutch durability. The Sonnax billet piston cover features an O-ring between the cover and pin to prevent wear and leakage.





# TRANSMISSION

## Throttle Valve Kits

Fit 48RE, 46-47RH/RE, A727

### Improve Line Pressure Response & Shift Timing

- **Hardened steel plunger & valve increase durability, especially in 48REs**
- **Optional shims & TV spring for custom TV pressure adjustment & tuning**
- **Fits all Chrysler RWD models, including '05-later units with motorized linkage**

The TV bore wears out easily in 48RE transmissions, causing much higher rates of poor line pressure rise and inconsistent shift timing compared to earlier units. Sonnax valve kits are key to regaining proper throttle control and preventing future wear.

### Oversized Throttle Valve Kit

Part No. 22771-04K

Fully restores throttle control in bores with moderate to severe wear. Requires tool kit F-22771-TL and the VB-FIX reaming fixture to machine the bore oversized.

### Heavy Duty Throttle Valve Kit

Part No. 22771-HDK3

Ideal for earlier, wide-open throttle shift points in new or lightly used valve bodies. The modified valve reduces gear hunting and the need to back off the throttle when shifting under heavy load. An optional balance spring improves throttle control if the bore shows minimal wear.

### Throttle Valve Kit

Part No. 22771-03K

A basic durability enhancement with an optional balance spring to help revive throttle control in bores with minimal wear.

## Lube Regulated

## PR Valve Part No. 22771A-02K

Fits 48RE, 46-47RH/RE, A727

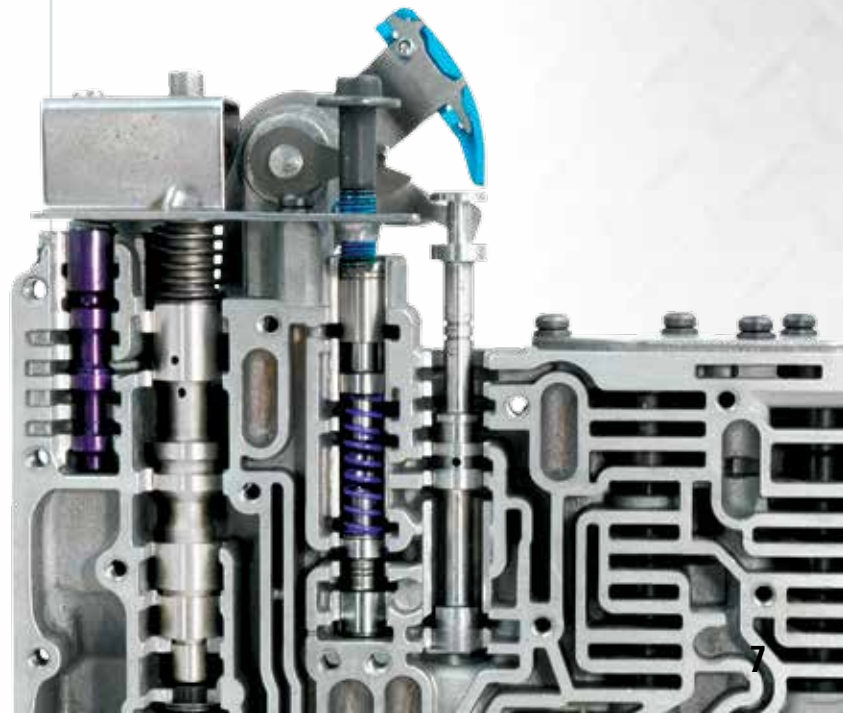
OE Pressure regulator valve must match '78-later design.

### Enhance Converter Charge & Prevent Drainback Problems

- **Improves converter feed/lube oil flow at critical low RPM & high load conditions**
- **Redesigned valve prevents fluid drainback & slow engagements**
- **Helps charge the converter in Park**

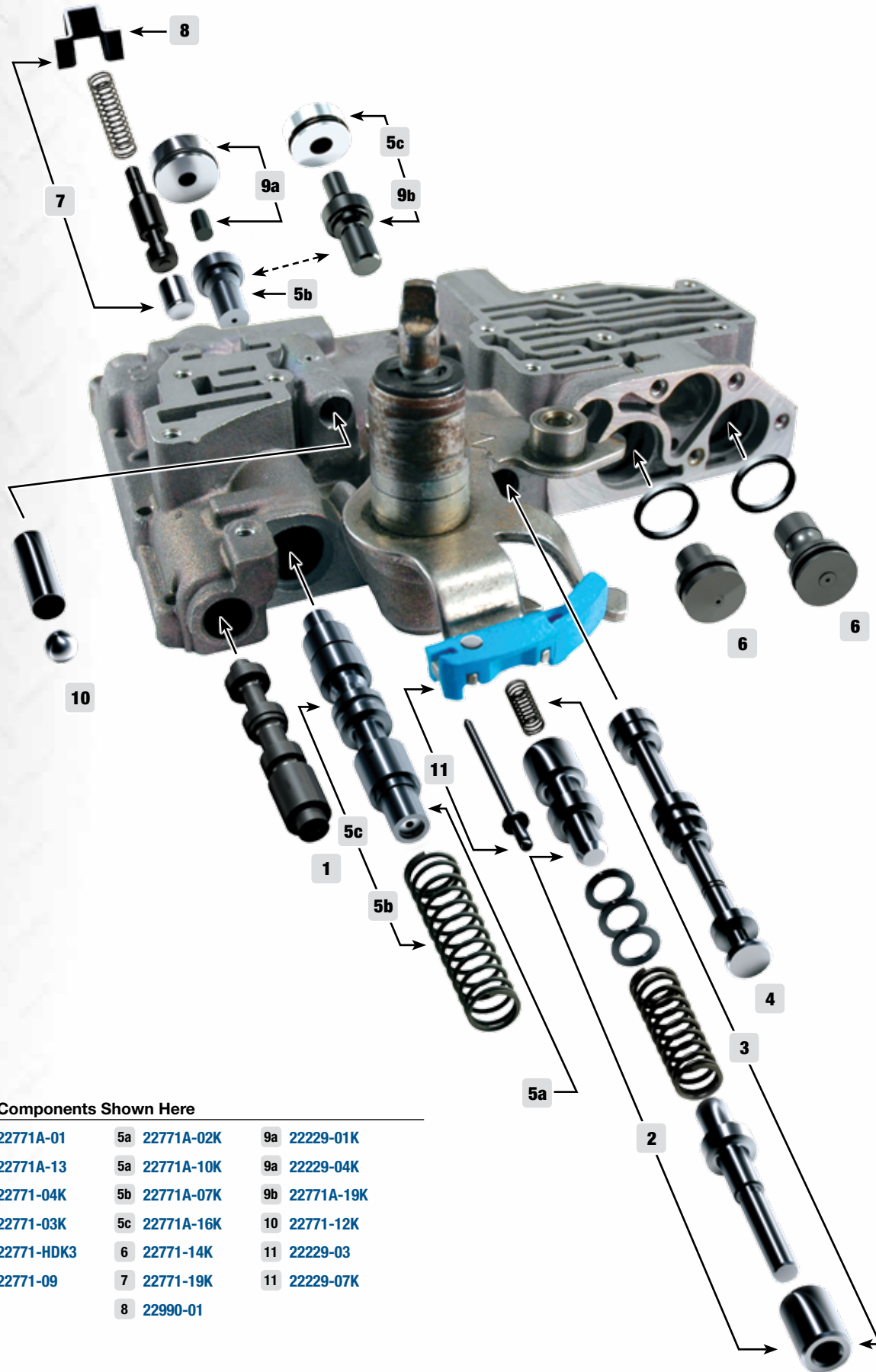
Under extreme pressure or temperature conditions, the converter/lube circuit can be restricted by the PR valve. The practice of drilling a hole between passages is problematic. This outdated technique contributes to slow engagements or - if the hole is improperly drilled - excessive converter pressure and low line pressure.

The best way to improve oil flow is to replace the OE valve with the Sonnax line-to-lube PR valve. This patented part ensures oil flow under extreme operating conditions and prevents drainback when the truck is off.



# COMPLETE REBUILD

48RE, 46-47RH/RE, A727



## Components Shown Here

1	22771A-01	5a	22771A-02K	9a	22229-01K
1	22771A-13	5a	22771A-10K	9a	22229-04K
2	22771-04K	5b	22771A-07K	9b	22771A-19K
3	22771-03K	5c	22771A-16K	10	22771-12K
3	22771-HDK3	6	22771-14K	11	22229-03
4	22771-09	7	22771-19K	11	22229-07K
		8	22990-01		

# TRANSMISSION

## Components

Parts fit 48RE, 46-47RH/RE and A727 unless otherwise noted.  
Some parts also fit other units - details at [www.sonnax.com](http://www.sonnax.com).

- Repair
- Critical Safeguard
- Performance/HD Upgrade

Application	Part	Description	Tool. Req.	Part No.
<b>Valve Body Parts</b>				
	4-Spool Switch Valve	<span style="background-color: blue; color: white; border-radius: 50%; padding: 2px;">1</span> Improves TCC timing		<a href="#">22771A-01</a>
	Oversized 4-Spool Switch Valve	<span style="background-color: blue; color: white; border-radius: 50%; padding: 2px;">1</span> Salvages worn bore for improved TCC timing	Yes	<a href="#">22771A-13</a>
	Oversized Throttle Valve Kit	<span style="background-color: blue; color: white; border-radius: 50%; padding: 2px;">2</span> Salvages worn valve bodies	Yes	<a href="#">22771-04K</a>
	Throttle Valve Kit	<span style="background-color: blue; color: white; border-radius: 50%; padding: 2px;">3</span> Replaces worn valves		<a href="#">22771-03K</a>
	Heavy Duty Throttle Valve Kit	<span style="background-color: red; color: white; border-radius: 50%; padding: 2px;">3</span> Earlier WOT shift points, reduces gear hunting		<a href="#">22771-HDK3</a>
	Manual Valve	<span style="background-color: blue; color: white; border-radius: 50%; padding: 2px;">4</span> Allows converter charge in Park		<a href="#">22771-09</a>
46-47RH/RE, A727 '78-Later	Lube Regulated PR Valve	<span style="background-color: blue; color: white; border-radius: 50%; padding: 2px;">5a</span> Improves converter & lube oil flow		<a href="#">22771A-02K</a>
A727 '62-'77	Lube Regulated PR Valve	<span style="background-color: blue; color: white; border-radius: 50%; padding: 2px;">5a</span> Improves converter & lube oil flow		<a href="#">22771A-10K</a>
46-47RH/RE, A727	Oversized Lube Regulated PR Valve Kit	<span style="background-color: blue; color: white; border-radius: 50%; padding: 2px;">5b</span> Salvages worn valve bodies	Yes	<a href="#">22771A-07K</a>
48RE	Oversized Lube Regulated PR Valve & Line/TV Pressure Plug Kit	<span style="background-color: blue; color: white; border-radius: 50%; padding: 2px;">5c</span> Salvages worn valve bodies	Yes	<a href="#">22771A-16K</a>
	Governor Bore Plug Kit	<span style="background-color: blue; color: white; border-radius: 50%; padding: 2px;">6</span> Improves shift timing on worn valve bodies, fixes 1-2 shuttle shift		<a href="#">22771-14K</a>
'90-Later	Oversized Lockup Boost Valve Kit	<span style="background-color: blue; color: white; border-radius: 50%; padding: 2px;">7</span> Fits units with boost oil delivery tube	Yes	<a href="#">22771-19K</a>
'90-Later	Boost Valve Spring Retainer	<span style="background-color: blue; color: white; border-radius: 50%; padding: 2px;">8</span> Replaces broken OE		<a href="#">22990-01</a>
46-47RH/RE, A727	Line Pressure Plug & Sleeve Kit	<span style="background-color: blue; color: white; border-radius: 50%; padding: 2px;">9a</span> Replaces worn .200" dia. plug/sleeve assembly		<a href="#">22229-01K</a>
46-47RH/RE, A727	Line Pressure Plug & Sleeve Kit	<span style="background-color: blue; color: white; border-radius: 50%; padding: 2px;">9a</span> Replaces worn .264" dia. plug/sleeve assembly		<a href="#">22229-04K</a>
48RE	Line Pressure Plug & Sleeve Kit	<span style="background-color: blue; color: white; border-radius: 50%; padding: 2px;">9b</span> Replaces worn plug/sleeve assembly		<a href="#">22771A-19K</a>
	Valve Body Detent Ball & Sleeve Kit	<span style="background-color: blue; color: white; border-radius: 50%; padding: 2px;">10</span> Salvages valve body, fixes hard to get into/out of Park	Yes	<a href="#">22771-12K</a>
46-47RH/RE, A727 '70-'02	Neutral Safety Back-Up Insulator Service Kit	<span style="background-color: blue; color: white; border-radius: 50%; padding: 2px;">11</span> With 3-terminal NSS, replaces broken OE, includes rivet		<a href="#">22229-03</a>
48RE, 46-47RH/RE '01-Later	Neutral Safety Back-Up Insulator Service Kit	<span style="background-color: blue; color: white; border-radius: 50%; padding: 2px;">11</span> With digital NSS, replaces broken OE, includes rivet		<a href="#">22229-07K</a>
48RE, 46-47RH/RE	3-4 Accumulator Spring	<span style="background-color: black; color: white; border-radius: 50%; padding: 2px;"></span> Matches OE 47RE diesel calibration		<a href="#">12861-01</a>
<b>Case Parts</b>				
	Accumulator Piston Kit	<span style="background-color: red; color: white; border-radius: 50%; padding: 2px;"></span> Improved sealing & wear resistance		<a href="#">22841-04K</a>
	Replacement Seal Kit	<span style="background-color: red; color: white; border-radius: 50%; padding: 2px;"></span> Refreshes seals in 22841-04K		<a href="#">22841-04SK</a>
	Intermediate Accumulator Sleeve Kit	<span style="background-color: black; color: white; border-radius: 50%; padding: 2px;"></span> Salvages worn case		<a href="#">22841-01K</a>
	Case Repair Bearing	<span style="background-color: black; color: white; border-radius: 50%; padding: 2px;"></span> Salvages worn case at one way roller race, 3/bag	*	<a href="#">22556-BRG</a>
	Shift Lever Case Bore Repair Sleeve	<span style="background-color: black; color: white; border-radius: 50%; padding: 2px;"></span> Salvages worn case	Yes	<a href="#">22179-02</a>
	Cooler Line Repair Kit	<span style="background-color: black; color: white; border-radius: 50%; padding: 2px;"></span> Salvages cracked cases with .25" pipe fittings		<a href="#">22000-01K</a>
<b>Servo Parts</b>				
	Front Servo Piston Cover Kit	<span style="background-color: blue; color: white; border-radius: 50%; padding: 2px;"></span> Includes O-ring for improved sealing		<a href="#">22827-01</a>
	2nd Gear Super Hold Servo Kit	<span style="background-color: red; color: white; border-radius: 50%; padding: 2px;"></span> 16% More apply area than OE, reduces leakage		<a href="#">22301B-01K</a>
	Replacement Seal Kit	<span style="background-color: red; color: white; border-radius: 50%; padding: 2px;"></span> Refreshes seals in 22301B-01K		<a href="#">22301B-01SK</a>
	Kickdown Band Strut	<span style="background-color: red; color: white; border-radius: 50%; padding: 2px;"></span> High-strength steel		<a href="#">22825-01</a>
	Reverse Servo Piston Plug Kit	<span style="background-color: blue; color: white; border-radius: 50%; padding: 2px;"></span> Steel, universal design		<a href="#">22912-01K</a>
46RH/RE, A727	Rear Servo Piston	<span style="background-color: blue; color: white; border-radius: 50%; padding: 2px;"></span> 2.800" O.D.		<a href="#">22912</a>
47RH/RE '94-'96	Rear Servo Piston	<span style="background-color: blue; color: white; border-radius: 50%; padding: 2px;"></span> No raised area by pin on top of piston		<a href="#">22912B</a>
47-48RE '97-Later	Rear Servo Piston	<span style="background-color: blue; color: white; border-radius: 50%; padding: 2px;"></span> Raised area by pin on top of piston		<a href="#">22912C</a>
	Band Strut	<span style="background-color: black; color: white; border-radius: 50%; padding: 2px;"></span> Low Reverse, .100" longer for resurfaced drum	*	<a href="#">22900-10</a>
	Band Strut	<span style="background-color: black; color: white; border-radius: 50%; padding: 2px;"></span> Low Reverse, .150" longer for resurfaced drum	*	<a href="#">22900-15</a>



# COMPLETE REBUILD

48RE, 46-47RH/RE, A727

Application	Part	Description	Tool. Req.	Part No.
<b>Pump Parts</b>				
48RE, 47RH/RE	Stator Support Bushing	Replaces worn bushings to prevent clutch failure		22005A-01K
<b>Internal Transmission Parts</b>				
48RE, 47RH/RE	Smart-Tech® High Capacity Input Shaft & Piston Kit	300M Steel, one-piece forging with longer hub for extra direct clutch		22121B-02K
48RE, 47RH/RE	Heavy Duty Input Shaft	300M Steel, one-piece forging		22121B-01
48RE, 47RH/RE	Extreme Duty Intermediate Shaft	300M Steel, torsional design		22171B-HD
46-47RH/RE	Intermediate Plug & Pilot Kit	Allows intermediate shaft to be cleaned, includes revised orifice		22171A-02K
48RE '03-'06 4WD	Extreme Duty Output Shaft Kit	Larger diameter, includes transfer case input gear		22173D-01K
	Reinforced Front Clutch Piston	Prevents cracks		22965A-01
48RE	6-Tab Rear Planet Thrust Washer	PTFE coated, zero wear, 2.525" I.D.		22700GT-01
48RE	6-Tab Front Planet Thrust Washer	PTFE coated, zero wear, 2.253" I.D.		22700FT-01
46-47RH/RE	4-Tab Rear Planet Thrust Washer	PTFE coated, zero wear, 2.500" I.D.		22700ET-01
46-47RH/RE, A727	Shim	Reduces endplay, .010" Thick, 10/bag		22700-Z
46RH '88-Later	Bearing Kit			SBK-C16
46-47RH/RE '90-Later	Output Pilot Bushing			12510-01
48RE, 46-47RH/RE	Piston Retainer Kit	Improved oil flow & material		22754N-01K
48RE, 46-47RH/RE	Oversized Piston Retainer Kit	Salvages Reverse drum, Improves oil flow & material	*	22754N-02K
48RE, 46-47RH/RE '95-Later	Overdrive Sun Gear	Direct replacement, 15° helical		12655C-1
	Shim Kit	Overdrive setup		12783-01K
48RE, 46-47RH/RE	Bearing & Plate Kit	O.D. sun gear to planet		12860-01K
46-47RH '90-'03	Primary Governor Valve	Replaces OE aluminum valves		12802-01
<b>Rebuild Kits</b>				
46-47RH/RE	The Sure Cure®	Comprehensive kits for big problems		SC-46/47RHE
48RE	The Sure Cure®	you don't want back	Yes	SC-48RE
<b>Tooling</b>				
	Tool Kit	For use with 22179-02		56361-TL
	Tool Kit	For use with 22771A-07K & 22771A-16K	†	F-22771A-TL7
	Tool Kit	For use with 22771-04K	†	F-22771-TL
	Tool Kit	For use with 22771A-13K		22771A-TL13
	Thread Tap	For use with 22771-12K		22771-TL12
	Tool Kit	For use with 22771-19K	†	F-22771-TL19

\*Machining Required

†Sonnax F-Tool kits designed to service a specific bore require the VB-FIX reaming fixture.

# TRANSMISSION

## Remanufactured Valve Bodies

Save time and money with a quality rebuilt valve body from Sonnax.

- **Completely refurbished with genuine Sonnax parts**
- **Hydraulically & electronically tested, ready to bolt up**
- **Limited Lifetime Warranty**

**TRUST SONNAX INNOVATION  
FOR VALUE & DURABILITY**



## Beat the 48RE Shortage with Sonnax

Cores for Chrysler light-to-medium-duty trucks are scarce and often modified beyond repair. Patent-pending innovation allows Sonnax to convert plentiful early-model RE Chrysler cores into premium-quality 48REs.

OE remanufactured valve bodies – while competitively priced – undergo only minimal restoration. The Sonnax 48RE provides far more value and durability. Each valve body is carefully refurbished in critical areas to restore proper function and prevent future wear.

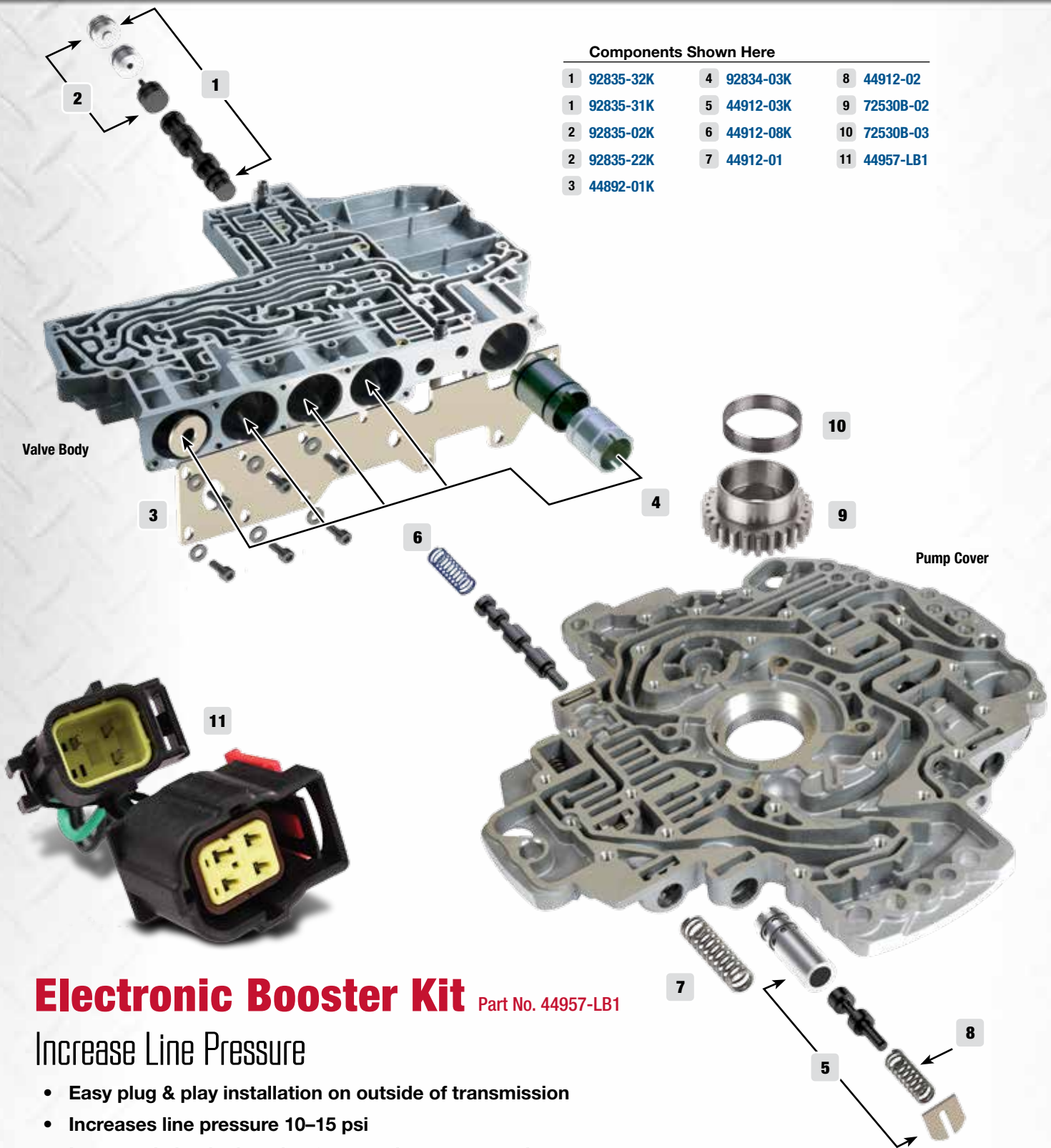
Application	Part No.
<b>48RE</b>	
See details below	<a href="#">CHR135</a>
<b>46-47RE</b>	
'00-Later, w/ Small Pump Inlet	<a href="#">CHR131</a>
'00-Later, w/ Large Pump Inlet	<a href="#">CHR132</a>
'99-Earlier, w/ Small Pump Inlet	<a href="#">CHR130</a>
'99-Earlier, w/ Large Pump Inlet	<a href="#">CHR129</a>
<b>46-47RH</b>	
Hydraulic, w/ Tube	<a href="#">CHR127</a>
'90-Later, 1 Solenoid	<a href="#">CHR124</a>
<b>A727</b>	
'94-Later, 2-Wire Solenoid	<a href="#">CHR123</a>
Non-Lockup	<a href="#">CHR120</a>
Hydraulic Lockup	<a href="#">CHR121</a>
'87-Later, 1-Wire Solenoid	<a href="#">CHR122</a>

## 48RE CONVERTED VALVE BODY

- **100% Tested to ensure pressure curves & timing match 48RE OE design**
- **Great for 46/47RE pressure & lockup upgrades**
- **Rebuilt & improved with these Sonnax parts:**
  - Manual Valve
  - Oversized Throttle Valve Kit
  - Valve Body Detent Ball & Sleeve Kit
  - Oversized 4-Spool Switch Valve
  - Oversized Lube Reg. PR Valve & Line/TV Pressure Plug Kit
  - Patented Pressure Curve Components
  - Patented Lockup Conversion Components
  - 3-4 Accumulator Spring
  - New Governor Pressure Solenoid & Sensor

# COMPLETE REBUILD

68RFE



## Components Shown Here

1	92835-32K	4	92834-03K	8	44912-02
1	92835-31K	5	44912-03K	9	72530B-02
2	92835-02K	6	44912-08K	10	72530B-03
2	92835-22K	7	44912-01	11	44957-LB1
3	44892-01K				

## Electronic Booster Kit Part No. 44957-LB1

### Increase Line Pressure

- Easy plug & play installation on outside of transmission
- Increases line pressure 10–15 psi
- Increased clutch clamping force and torque capacity

Sonnax electronic booster kits modify the line pressure sensor signal that causes the computer to increase pressure. This is an ideal upgrade for a little extra pressure in aggressive driving or loaded conditions.

The kit connects between the factory harness and the line pressure sensor using OE-style connectors. No modifications or changes to the transmission are required to increase line pressure with this kit.



# TRANSMISSION

## Components

Parts fit all 68RFEs unless otherwise noted. Some parts also fit other units - details at [www.sonnax.com](http://www.sonnax.com).

- Repair
- Critical Safeguard
- Performance/HD Upgrade

Application	Part	Description	Tool. Req.	Part No.
<b>Valve Body Parts</b>				
	Oversized Solenoid Switch Valve & Plug Kit	<span style="background-color: blue; color: white; padding: 2px;">1</span> Fits bores with .420" dia. large spool OE valve	Yes	92835-32K
	Oversized Solenoid Switch Valve & Plug Kit	<span style="background-color: blue; color: white; padding: 2px;">1</span> Fits bores with .453" dia. large spool OE valve	Yes	92835-31K
	Oversized Solenoid Switch Valve Plug Kit	<span style="background-color: blue; color: white; padding: 2px;">2</span> Fits bores with .453" dia. large spool OE valve	Yes	92835-22K
	Solenoid Switch Valve Plug Kit	<span style="background-color: blue; color: white; padding: 2px;">2</span> Fits bores with .420" dia. large spool OE valve		92835-02K
	Accumulator Cover Plate	<span style="background-color: blue; color: white; padding: 2px;">3</span> Thicker plate with additional mounting holes	Yes	44892-01K
	Accumulator Piston & Sleeve Kit	<span style="background-color: blue; color: white; padding: 2px;">4</span> Salvages worn bore, firmer shift than OE		92834-03K
	Replacement Seal Kit	<span style="background-color: black; color: white; padding: 2px;"></span> Refreshes seals in 92834-03K		92834-03SK
	Solenoid Repair & Spacer Kit	<span style="background-color: black; color: white; padding: 2px;"></span> For white connector solenoids, prevents warping		44836-01K
'04-Later	Remanufactured Solenoid Block	<span style="background-color: black; color: white; padding: 2px;"></span> Late-style white connector		44836A
<b>Pump Parts</b>				
	TC Limit Valve Kit	<span style="background-color: blue; color: white; padding: 2px;">5</span> Repairs worn bore, delayed engagements, overheated converter	Yes	44912-03K
	Oversized TCC Switch Valve Kit	<span style="background-color: blue; color: white; padding: 2px;">6</span> Repairs worn bore, TCC apply & release concerns	Yes	44912-08K
	TCC Accumulator Valve Spring	<span style="background-color: blue; color: white; padding: 2px;">7</span> 5/Bag		44912-01
	Torque Converter Limit Spring	<span style="background-color: blue; color: white; padding: 2px;">8</span> 5/Bag		44912-02
	Center Pump Gear	<span style="background-color: blue; color: white; padding: 2px;">9</span> Improved design		72530B-02
	Center Pump Gear Bushing	<span style="background-color: blue; color: white; padding: 2px;">10</span> Salvages pump body	*	72530B-03
<b>Internal Transmission Parts</b>				
'07-Later	Bearing Kit	<span style="background-color: black; color: white; padding: 2px;"></span> Includes 10 bearings		SBK-C18
	OD/Reverse 4-Lug Reaction Plate	<span style="background-color: black; color: white; padding: 2px;"></span> Direct OE replacement for OE # 52119930AB		72142B-01
<b>Other Parts</b>				
	Line Pressure Booster Kit	<span style="background-color: red; color: white; padding: 2px;">11</span> 10-15 psi Increase over OE		44957-LB1
<b>Tooling</b>				
	Tool Kit	For use with 92835-22K		92835-RM22
	Tool Kit	For use with 92835-31K	†	F-92835-TL31
	Tool Kit	For use with 92835-32K	†	F-92835-TL32
	Tool Kit	For use with 44912-08K	†	F-44912-TL8
	Thread Tap	For use with 44892-01K		44892-TL
	Tool Kit	For use with 44912-03K	†	F-44912-TL

\*Machining Required

†Sonnax F-Tool kits designed to service a specific bore require the VB-FIX reaming fixture.

## Remanufactured Valve Bodies

Save time and money with a quality rebuilt valve body from Sonnax.

- **Completely refurbished with genuine Sonnax parts**
- **Hydraulically & electronically tested, ready to bolt up**
- **Limited Lifetime Warranty**

Application	Part No.
<b>68RFE</b>	
'09-Later	CHR144
'08-Earlier	CHR143

**SONNAX IS THE EXCLUSIVE SUPPLIER OF  
HIGH-CAPACITY DAMPERED MULTI-PLATE CLUTCH KITS**

# PERFORMANCE & DRIVABILITY

When diesel trucks are modified for either racing or street use, OE clutch plates slip and just do not hold. Limited damper capacity further cripples performance. Upgrading to an aftermarket multi-plate converter is the only solution.

**Sonnax multi-plates rely on unique, top-of-the-line parts for maximum performance, consistency and outstanding durability.**

- Patented piston/damper assembly absorbs up to 1,250 ft.-lbs. of torque. That's nearly TWICE the stock capacity of the OE 47RH/RE, 48RE and 68RFE dampers.
- All-new kit components eliminate the rework and limitations associated with salvaged parts.

OE lockup converters are built with a damper to temper lockup and shift engagement. By absorbing vibration and torsional stress, the damper also protects the transmission shafts and driveline.

For extreme performance applications, an aftermarket damperless converter may be suitable if the driver is willing to sacrifice drivability and driveline durability. This is not practical for road-going vehicles.

**Sonnax dampered multi-plate kits are powerhouse upgrades that won't compromise driving experience.**

- Unique Sonnax design delivers the same torque as a damperless multi-plate.
- Piston/damper assembly controls the extra power for balanced performance.

## Dampered Multi-Plate Clutch Kits

Sonnax dampered multi-plates are ideal for diesel truck owners that want to improve holding capacity without sacrificing stock shift action. Clear instructions, minimal setup and easy assembly make these foolproof upgrades.

### 68RFE Kit

Part No. CH-RK-2A

### BorgWarner 310mm LU Kit (A618, 47RH/RE, 48RE)

Part No. BW-RK-2A

*"I've had really good luck with the Sonnax dampered multi-plate.*

*With a solid damper, we were breaking two to three input shafts a week.*

*Since we switched to the Sonnax kit and heavy duty shaft, we haven't broken a shaft once."*

**J. Garmon  
Garmon's Diesel Performance**



# TORQUE CONVERTER

## Super Strong Billet Front Cover

The fully-machined, forged steel cover is thicker in key areas to protect against ballooning and flexing.

## Rugged Friction Elements

Three, solid (non-segmented), HTE friction elements balance optimal thermal capacity and durability with ideal apply characteristics and clutch holding capacity.



## Patented Piston/Damper Assembly

- Fully-machined, forged piston & custom damper rivets won't bend under extreme lockup pressure
- Preassembled piston/damper is tuned to 1,250 ft-lbs.
- Spring end caps limit how far springs compress under load to prevent breakage
- Increased oil flow improves cooling & lubrication of clutch plates



**SONNAX IS AMERICA'S #1 SOURCE  
FOR ALUMINUM DRIVESHAFT COMPONENTS**

# **TWO-PIECE TO ONE-PIECE DRIVESHAFT CONVERSION**

- **RAISE STRENGTH & DURABILITY**
- **REDUCE MAINTENANCE COSTS**
- **INCREASE SERVICEABILITY**
- **ELIMINATE TAKEOFF SHUDDER**



## **ELIMINATE THE WEAK LINK**

The carrier bearing is one of the weakest links and highest maintenance costs associated with the two-piece driveline.

Optimize trucks running upgraded transmissions and converters with a one-piece driveshaft made from Sonnax aluminum yokes and tubing.

# DRIVESHAFT



*"We exclusively use Sonnax aluminum weld yokes and tubes for our 5" high performance truck driveshafts. They're high quality, easy to assemble and work well with our welding methods to create the quality finished product our customers are looking for."*

**B. Crownover  
Driveshaft Specialist, Inc.**

## 5" Aluminum Weld Yokes & Tubing

Once you've increased engine and transmission performance and durability, Sonnax 5" aluminum driveline components are a simple and trouble-free next step for getting power down to the ground. Tubing and weld yokes combine for shaft lengths of up to 86".

### Enhanced Strength & Durability

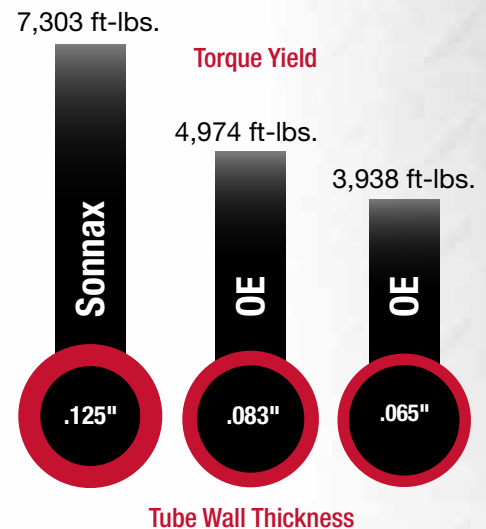
Sonnax components are made from Alcoa® 6061 T6, an aircraft-grade aluminum stronger and lighter than OE.

### Improved Torque Yield

Tubing features a .125" thick wall for torque yields of up to 7,303 ft-lbs., a dramatic improvement compared to the weaker OE .083" and .065" thick tubing.

### Precision-Machined Quality

Yokes and tubing are manufactured in the U.S.A. by skilled craftsmen at Sonnax's very own Vermont facility.



## WHERE TO BUY

Ask for Sonnax driveline components from your local driveshaft shop. Sonnax offers many sizes of aluminum tubing, weld yokes, bushings and steel slip yokes.

Sonnax product specialists are happy to help with component selection and installer referrals.





# GET YOUR GEARHEAD ON

[WWW.SONNAX.COM](http://WWW.SONNAX.COM)

## Transmission Parts & Remanufactured Valve Bodies

Whether you want to rebuild it yourself OR save time and money with a fully remanufactured valve body, Sonnax has you covered.

- Performance and heavy-duty upgrades for work and extreme sports trucks
- Critical parts to safeguard transmissions and improve everyday drivability
- Valve body components for complete transmission overhauls
- Quality remanufactured valve bodies rebuilt with genuine Sonnax parts

## Torque Converter Components

Sonnax is the world's leading, full product line supplier of aftermarket torque converter components. This extensive selection of products includes powerhouse upgrades you won't find anywhere else like high-capacity, dampered multi-plate clutch kits to maximize diesel engine performance.

## Aluminum Driveshaft Tubing & Weld Yokes

Get power down to the ground with a one-piece driveshaft constructed from the industry's finest aluminum components. Sonnax 5" tubing and weld yokes meet the toughest demands of heavy-duty diesel trucks, every piece manufactured in the U.S.A. for quality you can trust.

### Dodge Diesel Transmission/Converter/Driveshaft Product Guide Vol. 1

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