

Transmission Report

Volume 9, No. 2

July 2018

Introducing Premium GM 6L80 Series Remanufactured Valve Bodies!

Sonnax now offers premium-quality 6L80 series remanufactured valve bodies! Contact your distributor today for early- and late-style GM 6L45/50/80/90, and R&R service on BMW 6L45s.

Each of these Sonnax 6L80 series valve bodies are designed to address common issues such as: burnt clutches; TCC slip complaints and harsh TCC apply; bumpy, harsh or flared shifts; bind-ups; wrong gear starts; and various trouble codes. Please note, these do not have the TEHCM attached, but there are aftermarket options so you can repair or replace the original TEHCM.

These units can be easily mistaken for each other — and cannot be interchanged — so reference the ID guide on pages 1–3 (also available at www.sonnax.com).

OE Performance Without the OE Price

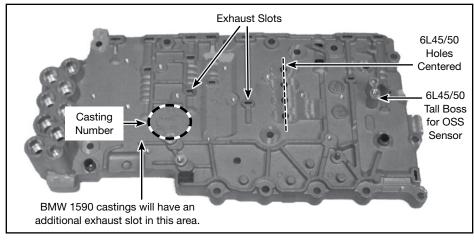
No more paying top-shelf prices for GM 6-speeds — Sonnax innovation, quality and testing guarantee a combination of performance and value you won't find anywhere else.

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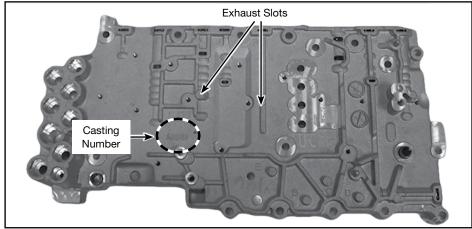
GM & BMW 6L80 Family Identification Guide (Continued Inside)

Part No.	Units	Fits
GM6L45E	GM 6L45, 6L50	'06–'09 GM Units
GM6L45L	GM 6L45	'10-Later GM Units
GM6L50L	GM 6L50	'10-Later GM Units
GM6L80E	GM 6L80	'06–'09 GM Units
GM6L80L	GM 6L80	'10-Later GM Units
GM6L90E	GM 6L90	'06-'09 GM Units
GM6L90L	GM 6L90	'10-Later GM Units
BMW6L45E	BMW 6L45	Early Design Separator Plate (Plate ID on page 3)
BMW6L45L	BMW 6L45	Late Design Separator Plate

6L45/50 Early-Style ('10-Earlier) Upper Casting



6L45/50 Late-Style ('10-Later) Upper Casting



Sonnax Introducing Premium GM 6L80 Series

		Upper Cast	ting Number	Center Support	Lower Casting Number	
Make	Unit	'10-Earlier	'10-Later	Feed Holes	'10-Earlier	'10-Later
	6L45	9405	7114	Centered	9581	0945
CN4	6L45	9405	7117	Centered	9581	0945
GM	6L80	9404	0955	Offset Front	9581	0945
	6L90	9404	0955	Offset Rear	9581	0945
BMW	6L45	1590	N/A	Centered	9581 or 6351	N/A

Continued from page 1

Achieving OE performance starts with the build. At our dedicated facility in New Jersey, expert technicians verify casting flatness, vacuum test each bore and repair any that don't meet minimum levels. Next, valves, plates, checkballs and seals are all inspected, repaired and replaced as needed. Every build features topquality Sonnax parts to optimize valve body function and prevent future wear.

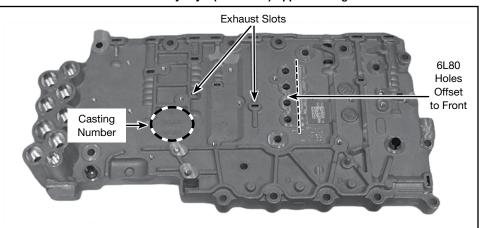
Once we build, we test. Rigorously. To guarantee optimum shift feel and timing, Sonnax uses state-of-the-art equipment to verify that actuator feed limit pressure, clutch pressures, torque converter pressures and compensator feed pressures match OE specifications. While the 6L80 series remanufactured valve bodies are sold without an accompanying TEHCM, each is thoroughly tested with advanced testing equipment using an OE TEHCM with the solenoids driven per OE strategy.

Products & Support Designed with You in Mind

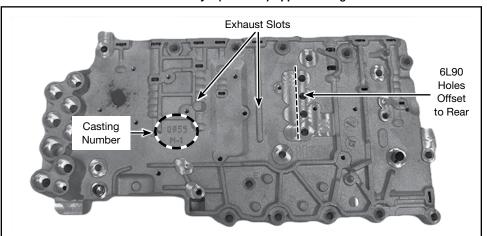
Sonnax makes sure each valve body is carefully packaged with contoured foam to prevent any damage during shipping. You can use this same packaging for core returns, saving time and protecting it from damage.

Included in every box are a Quality Report and Tech & Install Tips.

6L80 Early-Style ('10-Earlier) Upper Casting



6L90 Late-Style ('10-Later) Upper Casting



Look for machined-down boss (A, B, C or D) on the upper casting. Generally, if the A boss is machined down, this indicates an MYA/6L45 (see chart below). This identification system is not foolproof, as some valve bodies do not have any bosses machined down.

Machined-Down Boss on Upper Valve Body	Indicates Valve Body Unit*		
"A" Boss ID	MYA/6L45		
"B" Boss ID	MYB/6L50		
"C" Boss ID	MYC/6L80		
"D" Boss ID	MYD/6L90		

*Note: This is a general rule to follow, but may not always be true. Sometimes no bosses are machined.

Remanufactured Valve Bodies!



Product support is available 8:30 a.m. to 5 p.m. Eastern, Monday through Friday, at 856-848-0908. As with all Sonnax remanufactured valve bodies, your purchase is backed by a limited lifetime warranty.

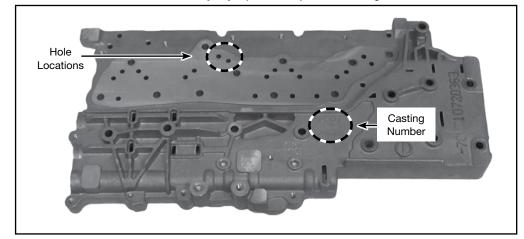
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The Quality Report gives some of the key cleaning, inspection, rebuilding and test processes that Sonnax uses for this particular application so that you can feel confident in the quality of the product. It also shows a few graphs taken during our extensive testing process on a state-of-the-art valve body test stand. We pull actual drive event information from vehicles, duplicate these events in a test and ensure each of our remanufactured valve bodies tests favorably compared to a new OE valve body. Each and every one of our 6L80 series valve bodies is tested this way.

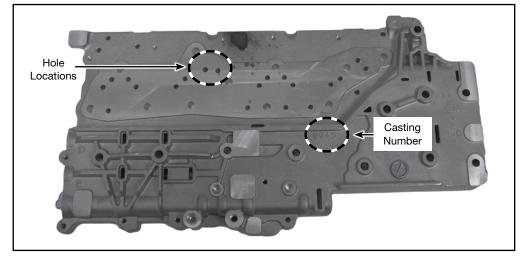
Tech & Install Tips detail specific information on how to install the remanufactured valve body. You'll also get details on resetting adapts and performing a road test to ensure the vehicle relearns correctly and the vehicle owner is happy with the drivability from mile one. We also include great bonus tech information to help with some diagnostics on common transmission complaints and their root causes, air check information and clutch and brake apply information. If you misplace your copy, don't worry — it's available anytime at www.sonnax.com.

Having all of this information readily available makes the job easier for your shop and ultimately provides a better experience and repaired vehicle to customers. ◀

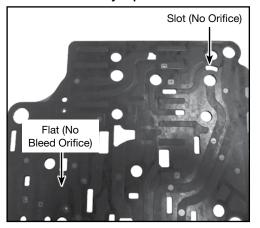
6L45-6L90 Early-Style ('10-Earlier) Lower Casting



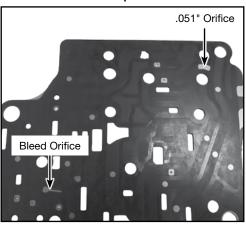
6L45-6L90 Late-Style ('10-Later) Lower Casting



BMW Early Separator Plate



BMW Late Separator Plate



BMW early versus late applications have a separator plate variation in the converter circuit. At this time, there are no known year breaks or external identification features that can be provided.

Product Development Takes the Spotlight at 2018 Meeting



The Sonnax Technical Automotive Specialties Committee (TASC) Force recently got together for its annual meeting to discuss new product needs for the market. The meeting was held May 18-19 at the Sonnax New Jersey facility and nearby Philadelphia area. In attendance were 29 TASC members, representing 17 shops from six different countries.

The meeting kicked off with a tour of Sonnax following a briefing by Remanufacturing Operations Director Mark Spaseff and remanufactured valve body Product Line Manager Maura Stafford. The tour focused on six major stations in the plant: receiving, core prep, reaming, building, testing and shipping.

After the tour, the group returned to the hotel where they were welcomed by Sonnax Transmission Company President Steve Boyer (see article on page 5). Boyer thanked everyone for attending the meeting and expressed his excitement to be there. He had heard much about what TASC means to Sonnax and how it supports the new product development needs of the industry.

Meeting topics included new product suggestions, Sonnax quality and industry trends that the automatic transmission aftermarket is facing today.

This year, more than 90 new product ideas were submitted, of which the group then voted on in regards to their importance to rebuilding today's transmissions. Sonnax Vice President of Product Line Management Steve Jaussaud noted the progress that his team has made: nine out of the 15 TASC picks from previous meetings are now available from Sonnax, and the other six are currently in development for future release.



Tour guides share their knowledge during the event at the New Jersey facility.



Sonnax President Steve Boyer addresses the TASC members.



Attendees learn about the company's laser-focus on quality: the strides made over the past few years and plans to continuously improve its products and service.



Some current and former TASC requests were among parts on display.

Here are some parts that have come directly from TASC meeting requests.

Aisin Seiki AS68RC

Front Stator Bearing 99520-03 K2 Clutch Hub 99572-01 Rear Stator Bearing 99520-04

Chrysler 68RFE

Smart-Tech® Overdrive Clutch Housing Kit 72960-06K

Ford 6R140

Smart-Tech® Converter Clutch Kit FD-CP-20K

Ford 4F27E, FNR5 Mazda FN4A-EL, FS5A-EL

Oversized Solenoid PR or Converter Relief Valve 46892-03

GM 4L60

VJCX Converter Front Cover GM-CC-18

GM 4L80-E, 4L85-E

Boost Valve Kit 34200-10K

GM 4T60-E, 4T65-E

Extended Length Forward Servo Pin Kit 84571-01K

GM 6L45/50/80/90

Pressure Regulator Valve Kit 104520-03K

GM 6L45/50/80/90, Gen. 1 6T70/75

Pressure Switch Rebuild Master Pack 124740-28K

GM 6L45

Manual Valve Assembly 104740-24K BMW only

Jatco/Nissan RE5R05A

Reverse Brake Pressure Control Valve Kit 63741-27K '04-'08 Only

Jatco/Nissan JF010E (REOFO9A)

Oversized Pump Flow Control Valve 113741-07

Requires F-113741-TL7C & VB-FIX

Revving Up an Exciting New Chapter for Sonnax

Please allow me to introduce myself. I'm Steve Boyer, the new president of Sonnax Transmission Company. As you may have already heard, on March 31, 2018, Sonnax was acquired by Marmon Holdings, a Berkshire Hathaway company.

I am thrilled to be at Sonnax and promise to continue the Sonnax tradition that has meant so much to the aftermarket transmission industry. We will continue supplying you with the innovative products that help you build better transmissions for your customers.

So...who is Steve Boyer? First of all, I am a car guy! I am an engineer by education, and my first job out of college was with Goodyear, designing engine belts and eventually racing tires for IndyCar and NASCAR. The association with Goodyear racing



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— Steve Boyer, President, Sonnax Transmission Company

tires led to the next phase of my career in NASCAR racing. I served as race engineer, crew chief, technical director and team manager at Chip Ganassi Racing, Hall of Fame Racing and Michael Waltrip Racing.

Although the world of racing is certainly exciting, being away from home 38 weekends each year makes it tough to raise a family. That reality led me to the difficult decision to leave racing. I was fortunate enough

to get a "civilian" job with Marmon after the 2012 season, which brought me to this outstanding opportunity at Sonnax. I promise we will continue the legacy of quality, innovation and service that you have come to expect from Sonnax.

I look forward to meeting many of you at transmission industry events in the near future!

— Steve Boyer, Sonnax President

Clean Up Your Shifts with Sonnax Line Pressure Booster Kits



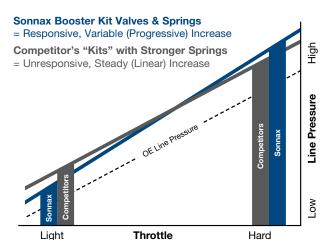
- Classic large-ratio boost valve action for crisp, clean shifts without harshness
- · No special installation tools required
- Ideal for heavy-duty & modified vehicles as well as hard-working daily drivers
- Improved shift feel & durability reduces comebacks & complaints



Sonnax booster kit components are uniquely designed for precision pressure control.

At low-end pressures, they deliver normal engagements, normal light throttle shifts and smooth coastdown shifts.

When vehicles are pushed harder, components increase pressure to ensure shifts aren't too soft.



3/4 Speeds

4L80-E 4I 85-F

4L60/E 4L60, 4L60-E, 4L65-E, 4L70-E

4T65-E

4R70W 4R70E, 4R75E/W, AODE

4R100 E40D

350/C

400

5/6 Speeds

6L80 6L45, 6L50, 6L90

A750 A750E/F, A760E/F, A760H, A761E, A960E/F, AB60E/F

5R55S/W

RFE 45RFE, 545RFE, 65RFE, 66RFE, 68RFE Electronic Kit for Gas & Diesel Units

Sonnax New Parts Guide

Aisin Seiki AS68RC

Heat-Treated, Billet K2 Clutch Hub

The AFFORDABLE Way to Protect Your Warranty & Prevent 4-5-6 Clutch Failure

- Superior one-piece design crafted from forged steel for increased strength
- Unique heat-treatment builds in unbeatable durability
- Added oil control lip provides enhanced lube characteristics

Dodge trucks equipped with Aisin Seiki AS68RC transmissions commonly have problems with slipping/flaring in 4th, 5th and 6th Gears, and may lose these ranges altogether. Ratio codes may also be triggered. These issues can often be traced to a damaged K2 hub.

The OE two-piece K2 hub is made from soft, stamped steel which allows the clutch pack to dig into the hub splines, ultimately hanging the clutches up and burning them. Replacement OE hubs are available, but often begin to fail again in as few as 15,000 miles.

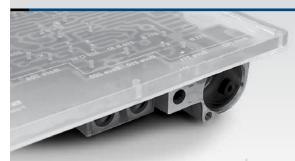
Sonnax K2 clutch hub 99572-01 features a one-piece design crafted from forged steel that is expertly heat-treated for maximum durability. It's an unbeatable value for any AS68RC rebuild, guaranteed to outperform more expensive aftermarket hubs.



notches appear and get progressively deeper. The clutches must also move up those channels, however, so once the teeth are dug in, they can't move up to apply. As a result, the clutches burn because they are slipping.

The Sonnax K2 clutch hub — stronger, thicker and expertly heat-treated - guarantees the best protection against notching and burning.

Vacuum Test Plates & Guides for SIX MORE UNITS!



4L80/85-E Kit Part No. 34994-VTP Replacement Seal Part No. 34994-VTP-S

Vacuum Test Plate Kits for GM Transmissions

Each plate seals over the entire valve body, leaving ports open at key test areas. Easy-to-follow instruction guides identify valves, symptoms of wear and the right Sonnax parts for repair. Sonnax also offers replacement silicone seals for worn or damaged original seals included in vacuum test plate kits.

4T65-E Kit Part No. 84754-VTP

Replacement Seal Part No. 84754-VTP-S

6L45/50/80/90 Kit Part No. 104740-VTP

Replacement Seals Part No. 104740-VTP-SU (Upper) Part No. 104740-VTP-SL (Lower)



New Ford & Chrysler Shafts Feature:

- · Rolled splines for increased durability
- Special heat-treating & processing for maximum toughness & straightness
- 300M ultra high-strength steel for maximum strength & fracture resistance

Input shaft failure is common as power levels are increased in Chrysler 68RFE and Ford 4R100 and 5R110W units. Sonnax heavy duty input shafts are precision engineered and manufactured for unbeatable performance in high-horsepower gas and diesel applications.



Find Vacuum Test Equipment, Guides & Videos at www.sonnax.com/vactest

FREE Vacuum Test Guides

Detailed guides to more than 40 transmission units are available to download and print from the Sonnax website. It's the fast, easy way to learn locations to test, identify common transmission problems and select the right parts for repair. Get your next rebuild off to a great start with one of these three new guides:

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GM 6T30 & Gen. 2 6T40/45/50

Toyota/Lexus U760E/F

Jatco/Nissan JF015E (RE0F11A)



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- Product Development Takes the Spotlight at TASC Meeting
- Meet Sonnax's New President
- Great New Upgrades for AS68RC, 68RFE, 4R100 & 5R110W

To update your address or request to stop this mailing, please call 800-843-2600, 8:30 a.m. to 5 p.m. ET, or email to news@sonnax.com.

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Sonnax designs, manufactures, tests and distributes a wide variety of components used to remanufacture torque converters, rebuild automatic transmissions, upgrade driveshafts and protect the driveline from over-torque damage.

Premium GM 6L80 Series Remanufactured Valve Bodies

OE Performance Without the OE Price!

No more paying top-shelf prices for GM 6-speeds — Sonnax innovation, quality and testing guarantee a combination of performance and value you won't find anywhere else.

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See Details Inside!