

Which rebuild kit is right for me?

What is your main goal with your rebuild?

- A. Save money/time?
- B. Do it right and eliminate weaknesses?
- C. Upgrade your transmission's performance?
- D. All of the above



Things to Consider

- What year is the vehicle that needs a rebuild?
(refer to Year Ranges chart)
- Is the transmission a 700R4, a 4L60E, or a 4L65E?
(refer to Transmission Model chart)
- How damaged is the subject transmission? Do I need hard parts? (refer to Symptom Diagnosis chart)
- What filter does the transmission require?
(Deep vs Shallow)
- Molded rubber pistons or piston lip seals?
(refer to Year Range chart)
- Bonded VB Plate? Wedge Pump Seal or Gasket & O-Ring? (refer to Year Ranges chart)

Year Ranges

Year Range	Transmission	Pan/Filter	Pump Seal	OEM Pistons	Valve Body Plate	Kit Code (Options Chart)
1983-1984	700R4	700R4	O-Ring & Gasket	Lip Seals	Gaskets C+V	A1
1985-1987	700R4	700R4	O-Ring & Gasket	Lip Seals	Gaskets C+V	A2
1988-1992	700R4	700R4	O-Ring & Gasket	Lip Seals	Gaskets	A3
1993	700R4/4L60E	Shallow	O-Ring & Gasket	Lip Seals	Gaskets	700R4 A3 4L60E B1
1994-1996	4L60E	Shallow	O-Ring & Gasket	Lip Seals	Gaskets C+V	B1
1997	4L60E	Shallow/Deep	O-Ring & Gasket	Molded Rubber	Gaskets C+V	B1
1998-2000	4L60E	Deep	O-Ring & Gasket	Molded Rubber	Gaskets C+V	B1
2001-2003	4L60E/4L65E	Deep	O-Ring & Gasket	Molded Rubber	Gaskets CA+VB	B1
2004	4L60E/4L65E	Deep	Wedge	Molded Rubber	Gaskets CA+VB	B2
2005-2006	4L60E/4L65E	Deep	Wedge	Molded Rubber	Gaskets CA+VB	B2
2007-Up	4L60E/4L65E	Deep	Wedge	Molded Rubber	Bonded	B3

Transmission Model

	700R4	4L60E	4L65E
Year Range	1982-1993E	1993-Present	2001-Present
Case Style	1 Piece	1 Piece/ 2 Piece	2 Piece
Pan Style	Shallow	Shallow 93-97 Deep 97-Up	Deep
OEM Planets	4 Pinion	4 Pinion	5 Pinion
Engine Application	Any	93-00 Any 01-Up All but 6.0L	Only 6.0L 1/2 Ton
Throttle Control	Cable	Electronic	Electronic
Electrical Connector	4 Pin Drivers Side	13/14 Pin Passenger Side	13/14 Pin Passenger Side
Castings	MD8	M30	M32

Symptom (Rough) Diagnosis

Symptom **Possible Cause** **Potential Hard Parts Needed**

ATF very dark and/or burnt smelling	Burnt clutches/band (likely the 3/4 pack)	Steels (at least for the burnt pack), Bushings
Fine metal shavings in the pan (sand grain size)	Metal on metal grinding	Ring Gears, Bearings, Bushings, Steels, Drums, Pump, Valve Body
Large metal chunks in the pan (1/8" or bigger)	Gear train failure	Planetary Gears, Sprags, Center Support
Sudden loss of all movement, whining noise	Pump failure	Pump
Slipping in or loss of overdrive or 3rd gear	Piston wear, clutch wear	Steels, Input Drum, Pistons
Complete loss of reverse/grinding in reverse	Sunshell	HD Sunshell
Grinding noise	Planet failure, sunshell failure, pump failure	Planets, HD Sunshell, Pump
Water/antifreeze in ATF	Radiator failure (cross-leaked into transmission)	Potentially anything that can rust (lots)
Loss of 2nd gear	Servo, band, or reverse input drum failure	Corvette Servo, Band, Reverse Input Drum

Rebuild Recommendations

- Always replace all friction materials (clutches and band) and filter when doing a rebuild.
- OEM 700R4/4L60E's had inherent weak points in the sunshell and 3/4 clutch packs. Always use an aftermarket sunshell even if the OEM sunshell is fine. There are numerous aftermarket upgrades available. Use them.
- Always replace the rear case, pump body, and front stator tube bushings. If the others look worn or scratched replace them too.
- If you had a P1870 code either install a Sonnax TCC Isolator Valve and Sleeve Kit or buy a valve body with one in it or you will get it again.
- If you intend to tow heavy loads or push lots of horse power install 5-pinion planets.
- Always, always, always use a new or remanufactured torque converter after a rebuild.
- Use a can of Kooler Clean transmission flush to clean out your cooler of all the gunk and shavings.
- Always remanufacture or install a remanufactured valve body on a rebuilt transmission.

Kit Options Chart

NOTE: This chart is meant as a general guideline. It is impossible to 100% diagnose a transmission without tearing it completely down and inspecting every part. When grouping kit components together there are multiple things to consider, year range being most important. The Year Range Chart should be referenced to find your kit code. If your transmission has some of the symptoms mentioned in the Symptom Diagnosis chart I would recommend having the corresponding hard parts on hand prior to starting the rebuild. This charts shows you the 3 basic level of kit options and the minimum recommended OEM weak point upgrades to do.

Overhaul= Seals, gaskets, o-ring, and soft parts needed to rebuild a transmission.

Banner= Overhaul and friction module (clutches)

Master= Overhaul, frictions, steels, band, filter, bushings.

Kit Code	Overhaul Kit	Banner Kit	Master Kit	Minimum Upgrade
A1	82-93 700R4	82-84 700R4	82-84 700R4	Hardened Sunshell Corvette Servo
A2	82-93 700R4	85-87E 700R4	85-87E 700R4	Hardened Sunshell Corvette Servo
A3	82-93 700R4	87L-93 700R4	87L-93 700R4	Hardened Sunshell Corvette Servo
B1	93-03 4L60E	93-03 4L60E	93-03 4L60E 97-03 4L60E	Hardened Sunshell Corvette Servo 99-03 Sonnax TCC
B2	04-13 4L60E/65E	04-13 4L60E/65E	04-13 4L60E/65E	Hardened Sunshell Corvette Servo Sonnax TCC
B3	07-11 4L60E/65E/70E	07-11 4L60E/65E	07-11 4L60E/65E	Hardened Sunshell Corvette Servo

All these kits, and more, are available at:

www.GMTransmissionParts.com

or by phone (740) 500-6099

or toll free (844) 298-6404

or by email Orders@GMTransmissionParts.com