



G FORCE Performance Products

G Force Performance Crossmembers are high quality, heavy duty, race proven, and made in USA. Each crossmember has a unique design made to fit into a specific vehicle to install a specific transmission. G Force crossmembers remove the guesswork to give you a perfect fit every time!

All Transmission Crossmembers feature:

- Durable black-satin, powder-coated finish that will resist scrapes, scratches, chipping, and rust
- Patented double-hump, dual-exhaust design that fits all diameter sizes of headers & exhaust pipes
- Boxed steel tubing construction with high-strength, robotic welds able to take the most severe abuse
- Designed as a bolt-in-place direct factory replacement with no welding, no cutting, and no drilling
- Applications include the installation of almost any transmission you want into popular GM & Ford vehicles

Whatever vehicle you have whether it's a daily driver, weekend cruiser, show car, collector car, street/strip car, vintage muscle car, or professional race car, G Force Performance Products has the crossmember for you. Our extensive product line of crossmembers allows you install just about any transmission you would want, whether automatic or manual, into your very own project car or truck. So, go ahead let us help you build your car, your way!

Why not make your vehicle perform even better than GM or Ford did back when it was brand new!



G Force Performance crossmembers are all made for dual exhaust pipes to be installed for any size required. The patented double-hump design that allows dual exhaust with all crossmembers is shown below.



GM G-Body Photo 1

This photo shows the thick steel plate used to make the twin exhaust humps which are 1/2" thick and 6-7" wide, allowing any size exhaust pipes to be installed easily, and passed through this large exhaust hump.

Also, you don't have to worry about ground clearance issues with the exhaust hanging too low. All G Force crossmembers are designed to sit higher than stock, and closer to the floor, to give you plenty of area to hang your exhaust higher.

No need to run side pipes or lake pipes because you have no room under your car, and no need to have an expensive, custom made exhaust installed. You can use stock size exhaust or larger exhaust pipes if you want.

The photo to the right shows long tube headers installed with the collectors and U-bolts passing through the dual exhaust humps on the crossmember with plenty of room for collectors & clamps both.

As a bonus, all G Force crossmembers are built super tough with a heavy duty boxed steel tubing that can handle any amount of frame-twisting horsepower and torque you can throw at it from your Big-Blocks, Blowers, Twin-Turbos & Super-Chargers.



GM G-Body Photo 2



Convertibles, El Caminos, and some factory high performance models like GTO & GS

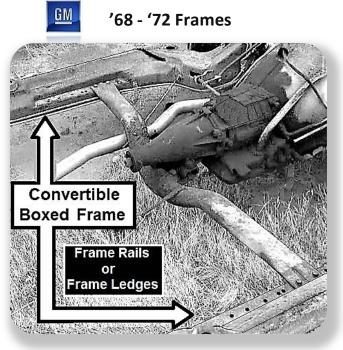
Since convertibles do not have a steel roof to help support the vehicle's chassis, their frame needs to be extra strong, that's why Boxed Frames are used. In fact, El Caminos & Convertibles both used Boxed Frames to give the vehicle much added strength. This boxed frame in El Camino models used a convertibles crossmember. When installing the crossmember, it is placed between the boxed frame rails, on small frame ledges. This means these crossmembers must be shorter to fit in between the frame on the Convertibles and El Caminos.

Note, GM Convertibles use SHORTER crossmembers.



The width is shorter because Convertible crossmembers attach on the inside of boxed frame rails, on frame ledges.





'68 – '72 Convertibles have Boxed Frame Rails like above

GM A-Body Convertibles & El Caminos from '64 -'67 have the Boxed Frame below with mounting plates welded onto the inside of the boxed frame rails. This creates a Ledge for the Transmission Crossmember to be mounted to. See Photos below for more details.





This End Flange sits on top of the Frame Rail Ledges.

Convertibles & El Caminos

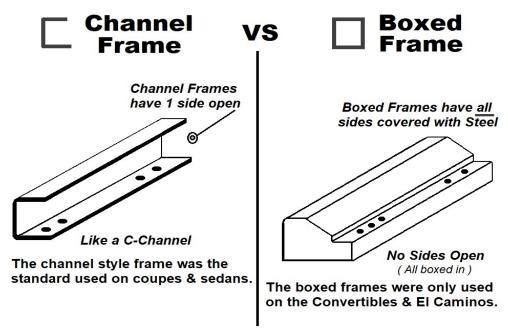




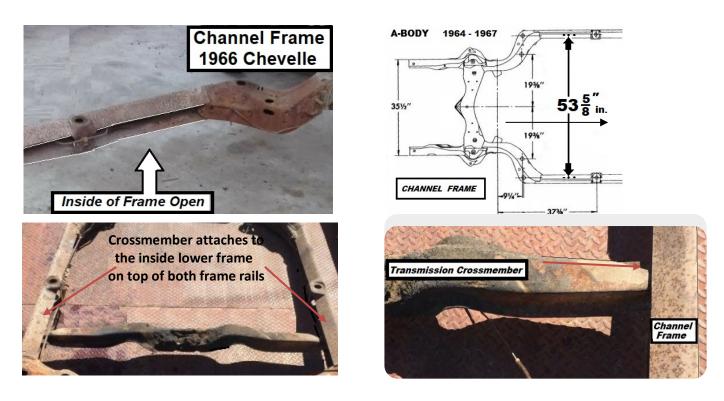


Some popular GM early A-Body Platforms included the Chevelle, El Camino, Malibu, Pontiac GTO, Le Mans, Tempest, Custom, Buick Gran Sport, Skylark, GS, Special, Deluxe, Oldsmobile Cutlass, F/85, 4-4-2, Hurst Olds, Cutlass Supreme and many other A-body models from 1964 to 1967.

These early A-body platforms with hard-tops, like Coupes, Fastbacks, & Sedans all used *Channel Frames*, while the Convertibles & El Caminos used the much stronger *Boxed Frames*. (See Comparisons below)



Some actual early style GM A-Body Channel Frames are shown below.





Since different transmissions sometimes share certain fitment dimensions, they can also sometimes share the same transmission-crossmembers. These transmissions have been placed into groups that all share the same crossmembers. Please see the 5 transmission groups below.

Most popular transmissions listed	Ν	/lost	popular	transmissions	listed
-----------------------------------	---	-------	---------	---------------	--------

GM Transmission Group – 1* = TH350, Muncie, Powerglide, BW T10, Saginaw, BW Super T10, TH200, and TH250 **GM Transmission Group – 2*** = 700R4, 4L60, 4L60E, 4L75E, Tremec TKO-500 and TKO-600 **GM Transmission Group – 3*** = 2004R and TH400 (*Short Tail-Shaft Only*) **GM Transmission Group – 4*** = 4L80E, 4L85E GM Transmission Group – 5* = 6L80E, Tremec T56, Magnum T56, XL T56, TR6060, and Richmond 6-Speed

* The five groups above each show the transmissions that all share the same crossmember within that group.

Some additional transmission part numbers need to be added to the GM Groups listed above. These transmissions will all have the same measurement from the front of the bellhousing to the transmission mount location. For a complete list of which transmissions share the same crossmembers, refer to various GM groups below.



242 Turbo Hyd	242 Turbo Hydra-Matic 350 (TH350)		GM Transmission Group - 2		
244 Turbo Hyd	ra-Matic 200 (TH200)	246 Turbo Hydra-Matic 700R4 (TH700R4)			
242 Turbo Hyd	ra-Matic 250 (TH250)	Hydra-Matic 4L60 t	ransmission		
351 Muncie tra	 351 Muncie transmission 451 Muncie M-21 transmission 452 Muncie M-20 transmission 453 Muncie M-22 transmission 410 Borg-Warner T-10 (AS-3) 		transmission		
451 Muncie M					
452 Muncie M					
453 Muncie N			Tremec TKO 4615 Tremec TKO 4616		
410 Borg-Warn					
411 Borg-Warn	ner T-10 (Super T10)	Tremec TKO 4617			
412 Borg-Warn	er T-10 transmission	Tremec TKO 4618			
413 Borg-Warn	er T-10 transmission	Tremec TKO 5008 Tremec TKO 5009			
414 Borg-Warn	414 Borg-Warner T-10 transmission 454 Richmond/ Borg-Warner Super T10				
454 Richmond/			GM		
343 Saginaw tra	ansmission	Borg-Warner T-5			
441 Saginaw tra	ansmission	Tremec T-5 #1352-000-251			
456 Saginaw tra	ansmission <u>GM</u>	Г			
245 Powerglide	e transmission		GM Transmission Group - 5		
	la seconda de		468 Borg-Warner T-56 transmission		
GM Transmission	Group 3		Tremec T-56 transmission		
Givi Transmission	Group - S	1 Ph	Tremec Magnum 11009 6-spd		
Turbo Hydra-Matic 2004		and and	Tremec Magnum 11010 6-spd		
Turbo Hydra-Matic 400			Tremec Magnum 11011 6-spd		
Turbo Hydra-Matic 375	(TH375)		Tremec Magnum 11012 6-spd Tremec Magnum XL #12019 6-spd		
	-		Tremec Magnum XL #12019 6-spd Tremec Magnum XL #12021 6-spd		
A.C.	GM Transmission	Group - 4	Temet Waghum AL #12021 0-500		
		1 01000 - 4	1		



Here's just a few of our more Popular Crossmembers!



GForcePerformanceProducts.com

330-753-5300



GM Transmission Facts

Automatics VS Manuals: Seems the Automatics have won the argument over which transmission is preferred in America. In 1995, over 70% of all cars on the road were automatics, which left about 30%, or almost a third with manual transmissions. Then a big decline in popularity started because by 2013, only 4% of all cars sold in the U.S. were equipped with manual transmissions. That's quite a change for an entire country, in just 18 years! (Interesting sidenote, 80% of all cars in Europe & Japan are still manual transmissions.)

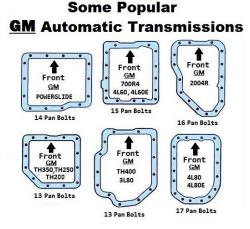
The 700R4 is a four-speed automatic transmission, developed in 1982, as a replacement for the TH350. The main reason for the new design was to create an automatic transmission that was better on fuel economy. At that time, the 700R4 was used in trucks and rear-wheel drive vehicles such as Blazer, Suburban, Corvette, Camaro, and Impala. (In 1990, the Turbo Hydra-Matic 700R4 was renamed the 4L60.)

The 4L60E is just an electronic version of the 4L60 (E = Electronic Shift) so they will both have the same case on the outside and same case measurements. (Transmissions that add the letter "E" to part # are electronic shifted.)

The 700R4 & 4L60E are both evolutions of the 3-Spd transmission that superseded the iconic GM TH350. Also, both 4L60E & 700R4 are very similar in design, so the shift linkage was interchangeable with most applications. Overall, the 4L60E was 1-¾ " longer than the Metric 200, it's 30" versus 28-¼" (Plan on getting a new shortened driveshaft when swapping out these GM transmissions.)

The TH200, TH250, and TH350 are all 3-Spd automatic transmissions that have the <u>same shape</u> <u>oil pans</u>, however, the TH200 pan will have the words: HYDRA-MATIC DIV. / METRIC stamped on bottom of pan.

Some Popular GM Automatic Transmission Pan Patterns & Ratios



GM Automatic Transmissions								
Туре	1st Gear	2nd Gear	3rd Gear	4th Gear	Overall Length	Bellhousing— to— Transmission Length		
TH-350	2.52	1.52	1.00		27-5/8" With 6″ (sho	20-3/8" ort) tailhousing		
TH-400	2.48	1.48	1.00		28-1/4" With short to	26-3/4" nilhousing		
TH-2004R	2.74	1.57	1.00	0.67	27-3/4"	26-7/8"		
TH-700R4 & 4L60	3.06	1.62	1.00	0.70	23-3/8" Except Corv	22-3/8" bette		
4L60E	3.06	1.62	1.00	0.70	30-3/4"	22-3/8"		
4L80E	2.48	1.48	1.00	0.75	31-1/2"	30-3/8"		



Next Gen Crossmembers NOW AVAILABLE! LIGHTWEIGHT GM CROSSMEMBERS



Now Lighter Weight with Same Strength, Durability, and Reliability

At G Force, refining our products does not stop at fitment. We set high standards to ensure that our Next Gen Crossmembers will withstand the demanding service you experience on the road or track.

Strength

Tested under the harshest conditions by experienced racers, our legacy Crossmembers have stood the test of time. Even though we re-engineered our most popular Crossmembers to weigh up to 30% less, they meet the same stringent standards. Additionally, the lighter weight makes our newest Crossmembers a practical choice for a broader range of projects.

Next Gen Crossmembers Independently Tested

The next generation of Crossmembers underwent the same testing as our legacy products. The results of the Load vs. Deflection test performed by an independent consulting firm, show a negligible difference in the strength of the newest Crossmembers compared to the legacy product.

Next Gen Crossmembers Proven Strong

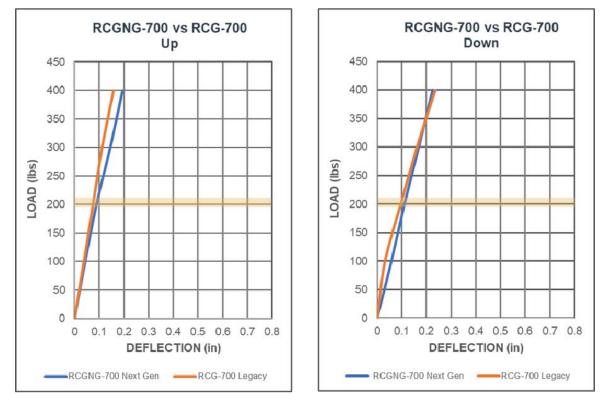
For example, the RCGNG-700 Next Gen Crossmember, compared to the RCG-700 Legacy product, shows only a slight variation between these parts during the Load vs. Deflection test. In fact, the difference is too small to be seen by the naked eye. At 200 lbs., the typical load for an installed transmission, the Next Gen Crossmember deflection measured 0.089" (up), 0.111" (down) as compared to 0.075" (up), 0.096" (down) for the Legacy part (see graph below). Tests of other Next Gen Crossmembers showed similar results.



G Force Performance Products

Transmission Crossmember Load vs Deflection

RCG-700 Next Gen compared to RCG-700 Legacy



— Note: 200 lbs is the typical load for a mounted transmission.

Purchase G Force Next Gen Crossmembers with confidence

G Force continues to revolutionize the transmission and suspension industry with our innovative product line. Our dedicated engineering team designs products with the end-user in mind. To that end, each part is rigorously tested and engineered for fitment, strength, weight, and durability. You can buy with confidence from G Force.

See our lighter weight Next Gen Crossmembers for A Body and G Body vehicles.

G Force Performance Products—Performance Engineered from Start to Finish