



THUREN FABRICATION RAM TRUCKS ALIGNMENT SPECS

These specs can be used for any solid axle Ram truck, from 1994 to present, as long as you have a continuous uninterrupted tie-rod, from knuckle-to-knuckle. You do not need our suspension to use these specs, as they are great for stock trucks, too. Pre-2009 year, see below diagram for diagnosing tie-rod type.

These specs should also cross over well for any solid axle full size trucks, of any brand, as long as you have a one-piece tie rod as shown below.

- **2009 year to present...** All Ram solid axle trucks come factory with a continuous tie-rod, so no need to verify your steering tie-rod type. You are ready to set to these specs.
- **2003-2008...** All solid axle Ram trucks came from the factory with Y-steering, but many trucks have been upgraded already to the 2009-2013 style, so you need to verify which you have. If you have the Y-steering, we suggest you upgrade to the OEM Mopar 2009+ version/kit, as it is better all around, and you can then use these specs. If you keep the Y-steering, align to OEM factory specs.
- **1998-2002....** Trucks came either way from the factory, so you need to verify steering type. If "Y" type steering, use OEM specs. If a continuous tie rod, you can use these specs. 2000-2002 year trucks can upgrade to the 2009-2013 OEM Mopar steering. 1994-1999 can not as the pin tapers are off spec.
- **1994-1997....** All trucks had Y-linkage steering from the factory, so you must have aftermarket continuous tie rod steering to use these specs, for those years. If you have Y-steering, use OEM specs.

!! READ THE IMPORTANT NOTES BELOW !!

- 1) Toe being set close to dead-zero, is the key here. Even 0.1* degree is too much toe-in. If the toe is not within our range noted here, correct that first before adjusting caster.
- 2) As long as the truck is driving good, the actual caster degree spec is not that important. If the steering wheel feels heavy, you need a bit less caster. Too much caster wears components quicker, and the front driveline can start to grumble/vibrate at speed. If the steering feels light and twitchy at speed, you need a little more positive caster tuned in. You can adjust this yourself and you do not need a machine to make small changes to the cams. More in-set wheels like OEM, usually likes a bit more positive caster, and wider more outside-the-fender wheels, will like less caster.
- 3) To add more caster, rotate the cams so the differential flange at the driveshaft drops down, closer to the ground, when adjusted. To remove some caster, rotate the cams so the differential flange lifts up, higher.
- 4) On 2013+ 3500, 2014+ 2500, and 2014+ Power Wagons, these trucks have radius arms and the caster cams MUST remain very close to being in phase/mirrored/matching, driver side to passenger side. Even mild cross-caster adjusted in will make the truck lean to one side, and the handling will also suffer. **Always** loosen the upper radius arm bolt before making your cam adjustments. If you do play with some cross-caster on a radius arm truck, do so at your own risk, and watch the chassis lean.
- 5) 1994-2013 4-link trucks, it is OK to use a little bit of cross caster to adjust a left or right pull.

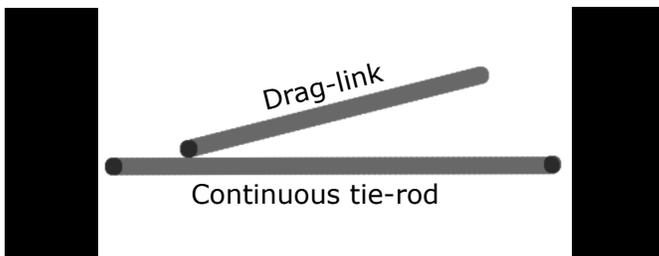
ALIGNMENT SPECS

1994-2009 Diesel trucks	{ 0.00 to 0.05* TOTAL toe-in / 3.8*-4.2* caster }
2010-2019 Diesel trucks	{ 0.00 to 0.05* TOTAL toe-in / 3.2*-4.0* caster }
1994-2009 Gas trucks	{ 0.00 to 0.05* TOTAL toe-in / 4.0*-4.8* caster }
2010-2019 Gas trucks	{ 0.00 to 0.05* TOTAL toe-in / 3.5*-4.0* caster }

IMPORTANT: Especially regarding the 2003+ years, cross-caster is welded into the axle. With the cams close to in phase, do not worry about up to .75* more caster on the passenger side. This is permanent, normal, and can not be adjusted out.

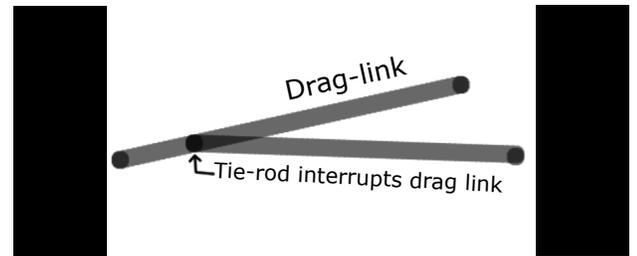
YES, USE THUREN FAB SPECS

CONTINUOUS SOLID TIE-ROD STEERING



DO NOT USE THUREN FAB SPECS

Y-LINKAGE STEERING



FRONT VIEW