

OFF ROAD 101

Axles

Axles: The completed assembly of differential, shafts, bearings and seals necessary to transfer power from the driveshaft to the wheels.

Axles are the closest component of your vehicle to the ground, therefore they take the most abuse. As you go through rough terrain and bounce on rocks, etc., your axle takes the heat. Breaking an axle is the last thing you want to do because it can leave you stranded with no power being transferred to your wheels. If you plan on having a dependable four wheel drive vehicle, that will take you where no stock vehicle can, it is important that you understand the functions of your vehicle and its components. A strong axle is a good way to begin upgrading your vehicle. Remember to research what works best for you and your vehicle before making a decision.

As vehicles become more capable and trails become more challenging, the need for improved performance and increased strength becomes even more important. That is the primary reason why customers demand high performance parts and components from TeraFlex. The improvements to our axles sent the competition reeling. We wanted to provide an extreme axle for Jeep sized vehicles that would handle the abuse regularly thrown at them.

In addition to that, we engineered a Constant Radius Design (CRD) smooth bottom, which

provides improved strength, and increased ground clearance that is virtually unaffected by pinion angle. Its design forced the competition to follow, because of the innovative features that the design provides.



CRD50 Smooth Bottom

To achieve this constant radius design, the axle cover line is rotated 20 degrees on the CRD50 end- 35 degrees on the CRD60 end. This provides two immediate advantages. It maximizes ground clearance when used with a higher pinion angle, and also keeps the differential cover from coming in contact with any potential obstacles ensuring that all differential components are protected.

Tera axles have been tested by the toughest rockcrawlers in the industry and have proven themselves to be the axle that can be trusted in the heat of competition, or on the trail.

Tera CRD60R axles are the first true innovation in the axle industry in over 30 years. They are engineered and designed to maximize protection, performance and durability.

SIDE BY SIDE- There is no Comparison



The Dana 60 housing is a strong axle in stock vehicles, but has significant strength concerns when used in high performance applications. The standard, low pinion housing does not work well in short wheelbase vehicles, and the standard bearing caps will allow more flex and distortion through the housing and shafts.

The Tera60R was the original high performance off road specific differential. The Tera60R provides more ground clearance than a Dana 44. It revolutionized axle technology with advanced features like the high pinion, HD cast cover, high clearance bottom, HD bearing caps, and top mounting pad.

SIDE BY SIDE- There is no Comparison



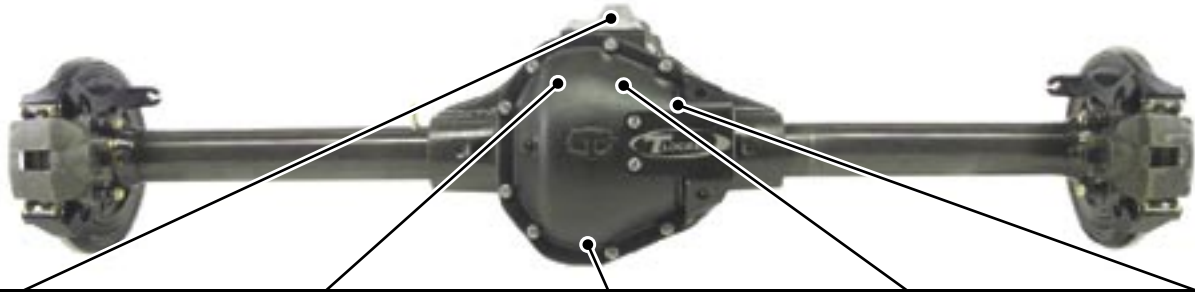
A Dana 44 housing has several limiting factors when off roading.






A low pinion makes fine tuning driveline angles extremely difficult with short wheel base vehicles. Stock bearing caps allow deflection and movement in the bearings and ultimately lead to axleshaft failure.

The Tera CRD50R incorporates several high performance features that are found in our 60 series housings such as HD bearing caps, rotated cover (20 degrees), CRD bottom and top mounting pad. These features create an axle housing that is built for ultimate strength with maximum clearance.

The New CRD60R, like the original Tera60R provides high-clearance for the trail, reinforced bearing caps for added strength, and a custom mounting pad on top for three or four-link suspensions or torque control struts.

The CRD60R is the second Tera center section to use the 'Constant Radius Design™'. This feature provides high ground clearance that is unaffected by pinion angle adjustments.



| HD Outer Bearing | Cooling Fins | Radius Bottom | Oil Skimmer | HD Bearing Caps |
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| <p>The CRD60R axle allows the use of a larger higher load bearing while still maintaining the factory seal. Other 'high performance' axles use a smaller front bearing, however, in rear applications, this bearing receives the highest load. The oil seal is easily removed for easy gear set up.</p> | <p>The CRD60 incorporates a unique finned housing to further aid in cooling the differential when used in long term or high-way applications, an area that is commonly neglected with other differentials. The fins are also designed to provide structural rigidity to the differential.</p> | <p>The CRD60R's unique, CRD smooth-bottom design provides the most ground clearance and is virtually unaffected by pinion angle, allowing it to glide over rocks and obstacles. The rotated cover line allows higher pinion angles without risk of damage to the differential.</p> | <p>The CRD60R incorporates a cast oil skimmer in the center section to increase oil flow to the pinion bearings. Tera's exclusive skimmer forces maximum lubrication at essential points of the axle to help ensure durability.</p> | <p>Designed for maximum strength, the CRD60R's side bearing caps are the thickest possible to virtually eliminate flex and distortion, one of the leading failure areas of other 60 products. The HD thick bearing caps assist the differentials core strength.</p> |

Check out the product section on our website to learn more about our axles.