RCV Performance
Strongest Axles on the Planet

- Manufacturer of drivetrain components for over 70 years
- RCV CV axles eliminate “Crow Hop” from u-joint style axles
- Low maintenance
- No yoke ears to break off

When operating at an angle, the geometry of a U-joint is such that the speed of the axle shaft alternately increased and decreased four times every revolution. As you turn the steering wheel the operating angle of the joint becomes tighter, and the speed variation of the shaft increased. This condition can be felt through the steering wheel as an oscillation, and is often termed as “knuckle-b-ing” or “crow-hop.” RCV axles eliminate that.

CV Joints vs. U-Joints

- Torque spread over 6 bearings with a CV, compared to only 2 bearings with a u-joint
- Equal input and output angles throughout the cycle of the CV, therefor shaft speed remains constant — hence the term “constant velocity joint.”
- Strength remains constant at any angle up to 45 degrees.

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CV joint design spreads engine torque over six ball bearings, thereby distributing load over a large surface area. Design allows tight steering angles up to 45 degrees, and provides high strength throughout range of motion.

Spherical Sealing Technology (SST) utilizes a cast polyurethane cap to provide far greater resistance to punctures and tears than a rubber CV boot. SST is rock-proof, and will not burst or balloon. This is a patented RCV technology.

RCV Torque Spreading over 6 Bearings with a CV, compared to only 2 bearings with a u-joint. Equal input and output angles throughout the cycle of the CV, therefor shaft speed remains constant — hence the term “constant velocity joint.” Strength remains constant at any angle up to 45 degrees.

RCV Performance
Ultimate CV Axles for Jeep deliver the strength and smoothness you need for wheeling on the most extreme trails. Our CV axles are designed to replace universal jointed front axle shafts and eliminate a weak link in your Jeep drive train. Ultimate CV Axles provide previously unheard of strength — even when your wheels are at radical angles and you’re giving it heavy throttle. With RCV Performance there is no worry about U-joint or axle shaft breakage.
RCV Performance manufactured the original 30-spline Toyota birfield joint and axle sets sold by Bobby Long. These original 30-spline Toyota birfield sets continue to be made by RCV Performance in the USA in Rockford, IL, and are now only available factory direct through RCV Performance or our dealers. RCV Performance now calls them the “Ultimate 30-Spline CV Axle Set.”

These have 300M internal components and gun-drilled CVs joints, which separate us from the competition. These shafts are backed by RCV Performance’s “No Questions Asked Warranty.”

30 Spline Axles

Manufactured in the U.S. using only high-strength chromoly materials, RCV Performance Ultimate 30 spline CV Axle set simply replaces your weak Toyota axle shafts with a new high-strength design. The factory axles were designed with 30 splines at the differential, and neck down to 27 or 24 spline at the CV creating a common failure point. This axle set upgrades the weak factory design at the CV to a 30 spline race eliminating the need to neck down the shaft. Ultimate CV Axles are low maintenance and operate with a smoothness you can feel — whether off road or on the street.

- Gun drilled for easy greasing
- Twice as strong as OEM
- “No Questions Asked Warranty”
- 30 Spline CVs with 300M Race available

Axle set includes right and left inner axle shafts and 2 pregreased CV joints. Black oxide coating is standard, optional nickel plating is available for extra corrosion resistance in salty environments. We can accommodate custom length inner shafts - contact us for details and pricing. 300M shaft upgrade available.

Dana 60 & Rockwell Axles

Dana 60 Axles

RCV Performance Dana 60 Ultimate CV Axles are available for GM, Ford, and Dodge applications. These CVs are developed to be the strongest option available for Dana 60. Upgraded 300M material was developed to handle major league abuse such as Ultra4 racing or hardcore rock crawling.

- “No Questions Asked Warranty” up to 47” tires
- CVs capable of up to 45 degrees
- 2 times stronger than Dana 60 CV

Rockwell 2.5 Ton Axles

Rockwell Ultimate CV Axles are designed for the most abusive environments possible. With the progression in horse power and tire size in the off-road industry, we have answered the need and provided the strongest solution available. These are designed as direct replacement for 16 spline factory length Rockwell axles, but with the development of the Rockwell CV has allowed us to increase the diameter and therefore the strength of the shaft. Rockwell axles are available in 1.75” 40 spline and the strongest axle available, the 2” 47 spline at any custom length.

- Custom length axles are available or any application using the Dana 60 CV, rear steer, custom housings, and more.
ULTIMATE CV JOINTS

930
- 300M inner race, 4340 chromoly cage
- 28 and 30 spline options
- Standard or lightened housings
- CVs available as Fixed or Plunging

934
- 300M inner race, 4340 chromoly cage
- 33 and 35 spline options
- Standard or lightened housings
- CVs available as Fixed or Plunging

SERIES 30
- 300M inner race, cage and housing
- 33, 35, 40 & 47 spline options
- CVs available as Fixed or Plunging

ULTRA CV JOINTS

PRO SERIES
AVAILABLE FOR POPULAR UTV MODELS

Designed as a hybrid between a conventional UTV plunging CV style axle, and our patented bootless technology. Tests prove Pro Series Axles to be 2 times stronger than the OEM shafts. Backed by our 90 day 100% Satisfaction Guarantee.

- 300M axle shaft
- CVs feature 4340 chromoly body & 300M internals
- Inner CV plunges 2.25"
- 100% manufactured and assembled in the USA
- Direct OEM fit replacement
- 33 spline 300M center bar with plunging inboard CV eliminates halfshaft pull-out
- Designed for extreme racing conditions

UTV AXLES

NO QUESTIONS ASKED LIMITED LIFETIME WARRANTY
No horsepower limit or tire size

SPLINE PART NUMBER

930/Size 15 CV Joints

301174CC
301174CC-28M
301174HF-28
301174HF-28M
SI-15RF
301174CC-30M
301174HF-30
301174HF-30M
SI-15RF-30T

SPLINE PART NUMBER

934/Size 21 CV Joints

VL21-80RCVP
VL21-80-33M
VL21-80F
VL21-80F-33M
SI-21RF
SI-21RF-33M
VL21-80-35
VL21-80F-35M
SI-21RF-35
SI-21RF-35M

SPLINE PART NUMBER

SERIES 30 CV Joints

SI30VL-33
SI30RF-33
SI30VL-35
SI30RF-35
SI30VL-40
SI30RF-40
SI30VL-47
SI30RF-47

LONG TRAVEL BALL SPINE
DESIGNED FOR LONG-TRAVEL APPLICATIONS

- RCV's patented bootless technology used on both inner and outer CV’s
- 33 spline triple sealed ball spline mid shaft allows over 3” of low friction plunge travel
- Custom lengths available for long travel suspension kits
- Designed for maximum angle beyond OEM limits

300M BALL JOINT
AVAILABLE FOR POPULAR UTV MODELS

Tests prove our 300M ball joints are 3times stronger than OEM, and over 2.5 times stronger than other aftermarket options.

- Adjustable to compensate wear
- Grease fitting for extended life
- Polyurethane boot joint sealing

300M CENTER SHAFT
AVAILABLE FOR ALL POPULAR UTV MODELS

Take your factory axle shafts to the next level with these full 300M replacement bars. These are the toughest shafts available, 3 times stronger than OEM. Simply drop this shaft into the factory CV joint and go! Custom applications available.
CUSTOM CAPABILITIES
- Over 70 years of experience in manufacturing
- Each and every part designed, manufactured, and tested in-house
- Extensive history of designing and building custom applications
- Knowledge in different coating options for the best performance

CUSTOM AXLES

CUSTOM FRONT AXLES
OEM MEASURING GUIDE

4340 & 300M AXLES
Ultimate 4340 and 300M Axles are the best solution for your custom axle needs, and are made in the USA from the highest quality chrome moly steel. These shafts are fully customizable, and are available with spline ranges of 16-47 spline and lengths up to 57”. Backed by RCV’s “No Questions Asked Limited Lifetime Warranty.”

3D PRINTING AVAILABLE FOR DESIGNING CUSTOM PROTOTYPE PARTS

“NO QUESTIONS ASKED” LIMITED LIFETIME WARRANTY
We are so confident in the quality and reliability of Ultimate CV Axles that we provide a "No Questions Asked" lifetime warranty. You break it we replace it. Have you ever been on the trail and your U-joint breaks and damages your axle shaft? What happens if two different companies manufacture the joint and the shaft— which one do you call for the warranty? With our products there is not any confusion: ONE MANUFACTURER, ONE WARRANTY.

RCV CUSTOMER SERVICE
At RCV we understand the value of excellent service, and strive to promptly provide you with expert technical and sales support. Our staff is comprised of off road enthusiasts who fully understand the products we manufacture, the vehicles in which they will be installed, and the conditions in which you will use them.

RCV ULTIMATE CV AXLES ARE THE ULTIMATE SOLUTION
While we identified the CV joint as a potential solution for binding and strength issues, we found there are no existing CV joints that could be used in place of universal jointed axle shafts which would withstand the rigors of extreme off road use. To provide a strong solution, we took what we learned and engineered RCV Ultimate CV Axles for AAM, Dana and GM axle applications. Even with big tires, big power and short gears there are no worries. With RCV you can put the power down with confidence.
To ensure RCV axles will fit your vehicle, please verify your current axle shaft specifications match the OEM specifications listed above. Please note in some cases RCV axles may use different series of bearings. RCV axles are offered with standard or custom lengths. Please measure your existing axles to ensure a proper fit and consult with our technical staff if you have any questions.

To order these parts, please call 800-354-RVLS, or email sales@rockwellperformance.com. Photos are for reference only; part numbers and specifications are subject to change. RVLS recommends using a professional to perform this work. RVLS is not responsible for any errors or omissions in this catalog.
TONY PELLEGRINO
GENRIGHT OFF ROAD, INC.
UNLIMITED CLASS ULTRA4 CAR #4485
“I have been racing on RCV axles for 3 years. We have podium’d twice at the King of the Hammers in that time! As a driver, my favorite feature is that I am able to turn my long wheel base car sharper due to the RCV design. If these axles can hold up to my kind of abuse, then it proves they must be the strongest on the planet.”

BOBBY TANNER
“SCREAMIN’ BLUE”
ROCK BOUNCER
“I have been running RCV axles for five years and haven’t wanted any other kind since. From winning the King of the Hammers Backdoor Shootout, to playing around in the backwoods, RCV axles prove to be the toughest axles through and through. The customer service you receive is always top notch. Kraig and the rest of the crew always take good care of Screaming Blue. If these axles can hold up to my kind of abuse, then it proves they must be the strongest on the planet.”

BRITTNEY CARDONE
HCR RACING
“Great product with customer service to match! At HCR Racing we pride ourselves in only using high quality, american made products for our suspension components, and RCV is just that. The HCR and RCV combination easily provide the strongest UTV suspension solution on the market.”

RCV Performance is the premier manufacturer of UTV driveline components. Components include full CV replacement axle shafts, 300M OEM replacement center shafts, ball joints and CV joint boot kits. All RCV Performance products are designed, manufactured, and tested in Rockford, IL.