

HEAVY DUTY BALL JOINTS

Upgraded your 4WD? Many 4WD upgrades will accelerate the wear on factory ball joints, and worn out parts can lead to 'death wobbles'. The Next Generation of Roadsafe HD 4WD Ball Joints are here. Roadsafe 'Next Gen' are designed to exceed OEM ball joints and are manufactured from high strength chromoly steel for minimal wear and longer service life.

Castellated nut replicate OE

To replicate the OE look, and provide the security of split pin installation for nut retention.

Heavy duty boot retaining clip

Ensure boot remains seated even at maximum ball joint articulation (increased over standard where



Grease nipple

Allows for the greasing of the ball joint and ongoing serviceability. When offroading roadgrime and other muck can enter the joint, grease-ability allows for the contaminants to be flushed out at the completion of your offroad activities. Greaseable ball joints require servicing at every oil change.





High quality chloropene rubber boot

CR material is treated for high ozone and weather resistance, low flammability, and high oil, fuel and chemical tolerance, offering greater resistance to contaminants and increased longevity.

Next gen high articulation, hardened ball stud with grease grooves

Ball Pin – Material

Ball Pin – Material
High strength SCM435 molybdenum and chromium
alloy steel is used to offer greater strength. The
finished ball stud offers lower friction and high
performance resulting in smoother operation and a
longer lasting component. Smooth grease groove
channel ensures the grease is distributed. Ball Pin – Hardness

Ball Pin – Hardness
Heat treatment is applied to the ball studs making
the hardness of the ball surface 20-25 Rockwell with
depth of .3-.5mm. This hardening process aids the
ball stud in reducing wear, providing for longer life of

CNC machined ball stud housing

Precise CNC machining ensures a perfect mating surface between all the individual components used to make up the ball joint mechanism resulting in smoother operation and longer lasting componentry.

Heat treated ball stud seat

Designed to work hand in hand with the high strength SCM435 molybdenum and chromium alloy steel ball stud to offer lower wear characteristics..

Revolutionary new nylon spring

Designed to maximise high static and dyn load capabilities.

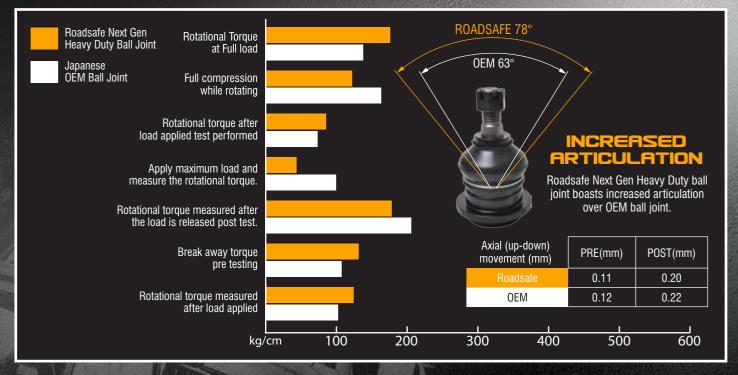
Zinc plated coin cap

Holding all the good stuff together is a considerably thicker coin cap than standard, ensuring it all stays in place preventing movement in the ball joint.



ROADSAFE HWD NEXT GEN HD BALL JOINT CYCLE TEST

1/2 a million cycles with 400kg pushing & pulling force applied while at 15° off its central axis



The Next Generation of Roadsafe 4WD Heavy duty ball joints provides a ball joint that handles the loads found in modern day 4wd's whilst enduring the loads applied with larger tyres and after market suspension systems.



In the aftermarket there are two main types of ball joint – Encapsulated and Mechanical. Encapsulated design ball joints are 'sealed for life' and completely maintenance free. They are mainly designed for passenger vehicles, and offer very little advantage for 4WD applications. The Next Generation of Roadsafe HD 4WD Ball Joints are manufactured in the 'mechanical style'. Mechanical ball joints are not sealed and are supplied with grease nipples for lubrication at regular intervals.

When it comes to deciding between encapsulated or mechanical design ball joints, Roadsafe determine the most suitable design for the application. As such the customer never needs to be concerned that they are being supplied a ball joint that may not be suitable for the vehicle.

All Roadsafe ball joints are made to exacting standards. This has been stepped up a notch for the Next Generation of Roadsafe HD 4WD ball joint designs. The revolutionary designed 'spring' is made from a unique nylon material and is designed to maximise high static and dynamic load capabilities during ball joint operation.

Where possible additional articulation over standard has been incorporated into the design, to allow for improved travel and lower potential for ball joint binding. To allow for the improved joint articulation a high quality CR (Chloropene Rubber) dust boot has been included, and retained using a heavy duty retaining clip.

Best of all the new Roadsafe 'Next Gen' HD 4WD ball joints allow you to 'flush' your ball joints with grease when you return from a day out in the bush. Whilst the high quality CR boot will limit a great percentage of contaminants from entering the ball joint, there is still a percentage that will get in. The ability to grease the joints allows you to flush out the contaminants and enjoy a ball joint that will offer you smoother performance and increased longevity.

This attention to the original equipment standards and new design techniques to suit specific vehicle applications and requirements, is what makes Roadsafe stand out from other suspension and steering suppliers in the market. The new Roadsafe 'Next Gen' HD 4WD ball joints are leading the way for the Next Generation.

