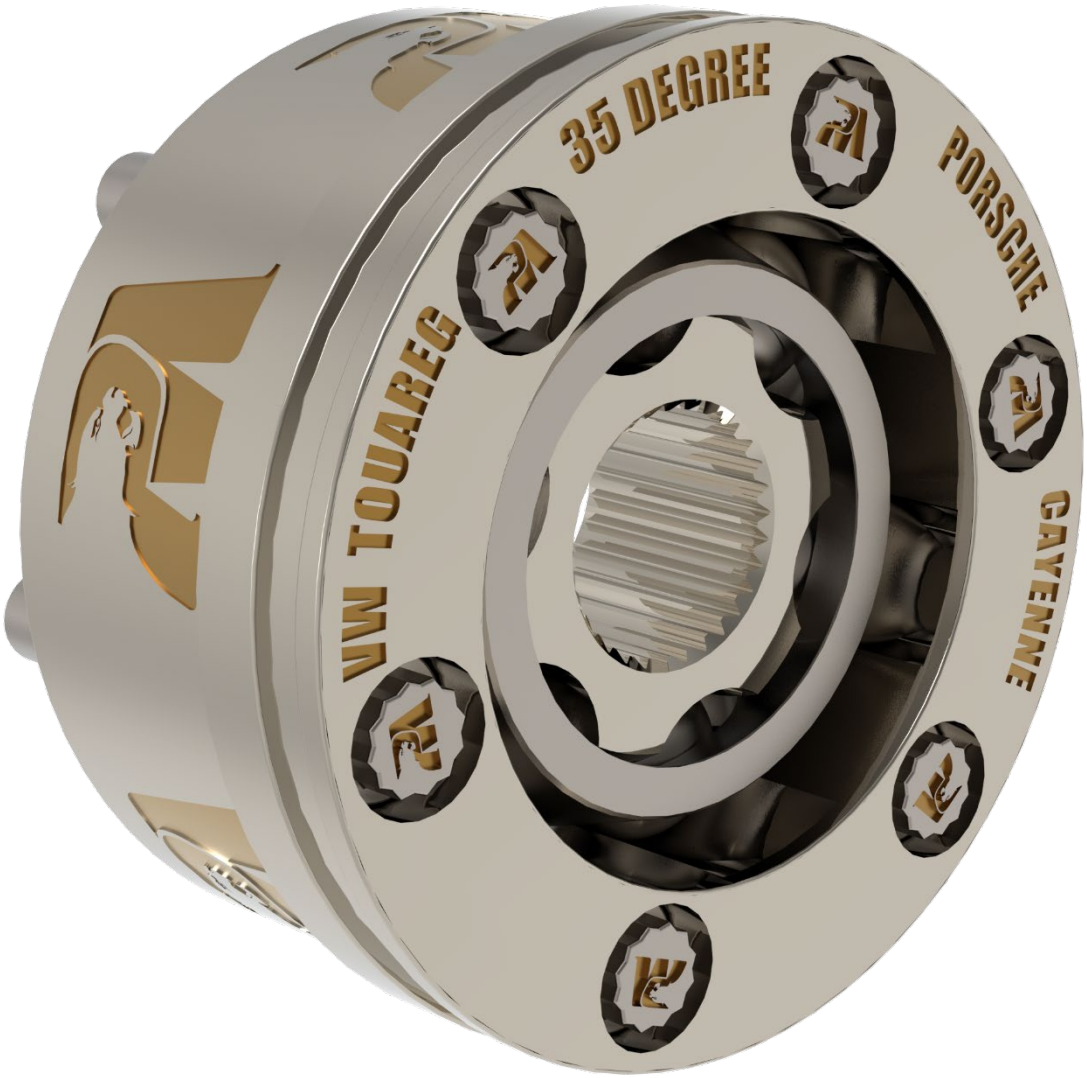
CAYENNE 30T EXTREME ANGLE CV JOINT INSTALLATION GUIDELINES



PROFORMANCE MOTORSPORT

CAYENNE - TOUAREG EXTREME CV JOINT INSTALLATION GUIDELINES

Many factors can alter the suspension geometry, CV joint Articulation angle and CV Joint Axle Plunge including:

- Lift Kits
- Aftermarket Shocks
- Non Standard Shock Lengths
- Non Standard Shock Ends/Mounts
- Extended Shock Absorber Shafts
- Shock Spacers
- Diff Drops
- Aftermarket Arms
- Diff Relocation Systems
- Arm Pivot Relocation Systems
- Aftermarket Ball Joints
- Any many more

For the above reasons, it is critical that the plunge of the Extreme Angle CV joint is checked BEFORE driving the vehicle.

AXLE REMOVAL

Remove the OEM Axle with CV joints attached

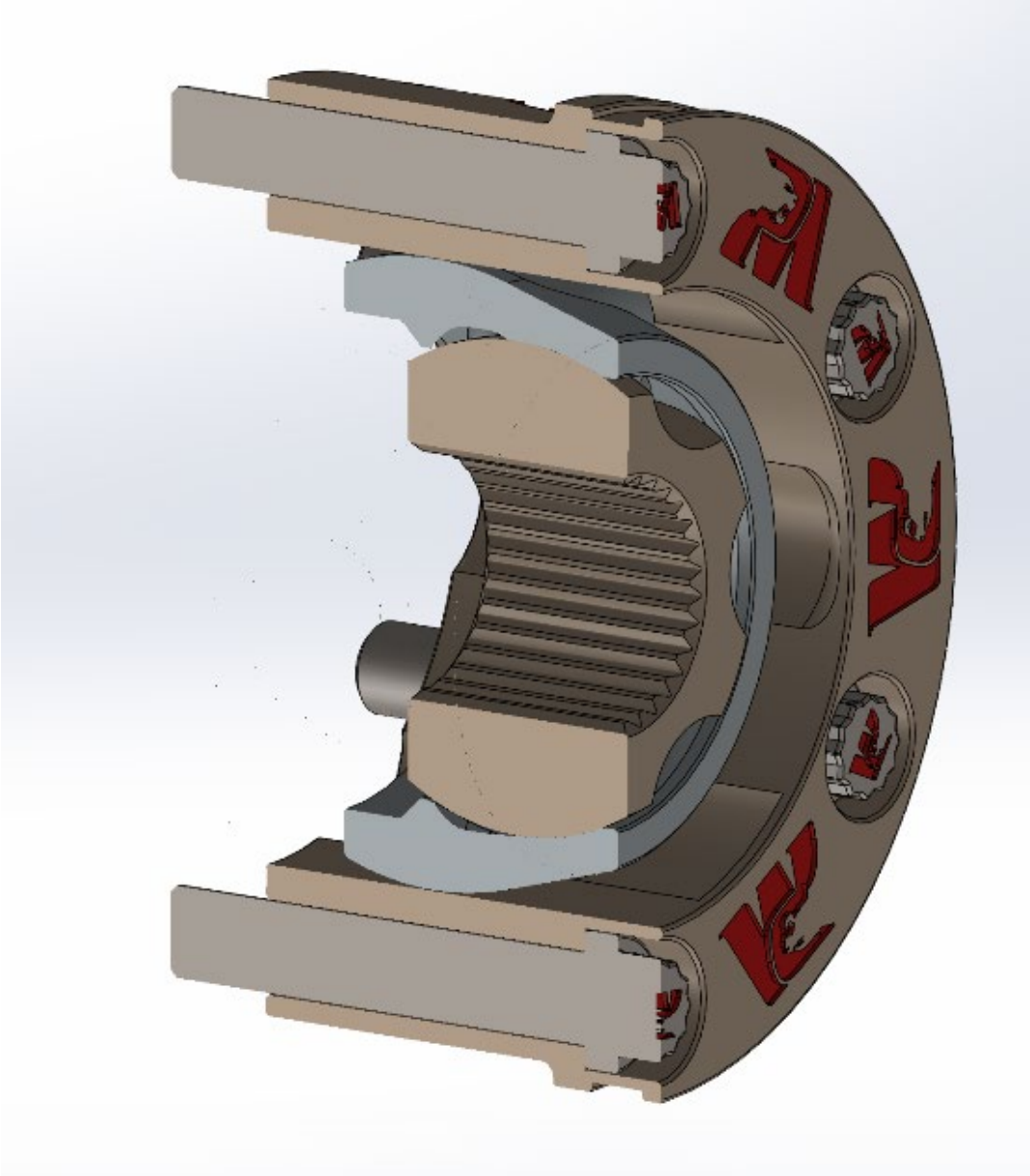
- Disconnect Upper Arm Ball Joint
- Lift and Support Upper Arm Joint
- Remove the Shock Absorber/Spring assembly
- Remove 6 x CV Joint Bolts at the Inner CV Joint
- Remove the Axle Retaining Bolt (At the hub)
- Remove the Axle Assembly with CV joints still attached

INNER CV JOINT REMOVAL

- Remove the Inner CV Joint End Cap (Steel Punch May Be Required)
- Remove Axle Circlip and the OEM Inner CV joint
- Remove the OEM Inner CV Joint Boot
- Clean the Axle spline

FITTING THE CV JOINT

- Ensure the new Extreme Angle CV Joint is fitted to the OEM Axle as shown below:
- The inner CV Cage must have the small end towards the wheel (Away from the diff)
- **DO NOT APPLY GREASE**
- **DO NOT FIT THE BOOT**
- Slide the CV Joint onto the Axle
- Install the Circlip on the end of the axle



END CAP CLEARANCE TEST

- Install the END CAP onto the CV Joint and confirm that the End Cap does not limit CV joint plunge when the axle is manipulated in and out at various angles
    - The inner cage must clear the inside diameter of the END CAP and allow the balls to reach the end of the tracks at all angles.
- If the END CAP limits plunge, remove the end cap and dispose of the END CAP

PLUNGE CONFIRMATION

- Install the 6 x CV Joint Bolts
- **DO NOT INSTALL THE AXLE BOLT into the end of the axle/wheel hub**
- Connect the Upper Arm Ball Joint and Tighten
- Measure the CV Plunge by Pushing the Axle in and out of the hub (axle bolt not installed in the hub) at:
    - Full Droop
    - Axle Horizontal
    - Full Bump
- The CV joint should move freely in and out as the axle slides in the hub spline and the CV joints should NOT strike the inner tracks of the CV joint.
    - The Axle should be free to move towards the diff 2-3mm as the axle slides in the hub spline at the various ride heights (Above)
- The CV joint should have at least 2-3mm of clearance from the CV ball to the end of the CV joint tracks when the axle is fully engaged into the hub at the various ride heights (Above)
- If the CV balls are striking the CV tracks when the axle is fully engaged at the hub, then the CV Joint internals may have been installed onto body the wrong way around.
    - Remove the axle and cv, and ensure the CV joint was assembled as per the images above.
- If the Balls of the CV joint are striking the CV joint tracks at any point throughout the suspension travel, please contact Proformance or your nearest reseller.

FINAL INSTALLATION

After the plunge inspection has been completed:

- Remove the axle
- Remove the CV Joint
- Fit the boot to the axle
- Apply Grease to the CV joint ***(Min 100 gms PER Joint)***
    - ***NOTE:***
        - ***The Internal components of the CV joint must be removed from the outer body BEFORE packing the joint with grease.***
        - ***Failure to do so may result in premature joint wear and void warranty***
        - ***Pack the joint completely with grease, using your hands to push the grease fully onto the joint and articulate the CV joint while applying grease.***
- Fit the CV joint to the axle
- Fit the circlip
- Apply any remaining grease to the inner and outer faces of the CV joint
- Fit Boot Clamps
- Install the Steel End Cap (If the END CAP allows correct plunge at all angles)
- Reinstall Axle, Upper Arm and Shock Absorber/Spring Assembly

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