

Ball Joint Installation

- We will be adding information, along with pictures of removal and installation of new tie rods and ball joints on ball joint fronts end for VW's
- The procedure for the installation of ball joints and tie rods is fairly straightforward, but you will need a couple of special tools to complete these procedures.
- ***READ THE BENTLEY or HAYNES MANUAL FIRST!***
- ***You will need a FLAT surface to complete this repair for your safety.***
- Upper ball joints adjust the [Caster](#) and [Camber](#). The tie rods adjust [Toe in](#) and [Toe out](#)
- ***READ ALL OF THIS PROCEDURE SEVERAL TIMES SO THAT YOU UNDERSTAND IT. DO NOT PERFORM THE PROCEDURE OUT OF ORDER. THIS WILL RESULT IN DEATH OR SERIOUS INJURY.***
- ***Read our [Safety](#) page too.***
- ***Get the full size photos from [Ball Joint Installation](#) page***

TOOLS NEEDED:

1. 13mm and 19mm combination wrench
2. 13mm and 19mm Socket (3/8 or 1/2)
3. 3/8 or 1/2 drive ratchet
4. 1/2 inch drive torque wrench
5. 1/2 to 3/4 drive adapter
6. Ball Joint press (uses a 22mm socket to turn) (OTC #7065)
7. Multiple shop towels (least 15)
8. 4 lbs. dead blow hammer or Sledge hammer
9. Pliers
10. tube of Lithium Grease
11. Floor Jack (4000 lbs. capacity)
12. 2 jack stands





Parts needed:

- 1. Upper Ball Joints**
- 2. Lower Ball Joints**



Procedure for Installation

- 1. Start with the Lower Ball joints first.**
- 2. Tighten the Lower ball joints until completely down with a ball joint remover**



- 3. Tighten Down the nut on the lower Ball joint and torque to 22 foot pounds.**



- 4. Line up your Marks on the upper ball joint. This procedure is best done with**

two people.





5. Lubricate the concentric cam with [LITHIUM](#) based grease only, **DO NOT**

USE SOAP BASE GREASE.



NOTE: You will probably need to pry the upper Torsion arm in order to get the ball joint stem into the steering

knuckle.



6. Install the [tie rods](#)



7. Tighten all castle nuts down to 22 foot pounds.
8. Check steering box oil level
9. Complete the installation of the fuel tank as shown on the [Fuel Tank Installation](#) page
10. Spin down to finger tight all lug bolts on tire
11. Lower The VW using [Lowering procedure](#)
12. Tighten all lug bolts to 95 foot pounds
13. Replace hub caps on front axle.
14. Take your VW to an alignment shop along with your [Bentley manual](#) for realignment of the front end.

15. DO NOT DRIVE MORE THAN 100 MILES WITHOUT REALIGNING THE FRONT END. This will cause premature tire wear and Tire damage and possible failure of the tires.