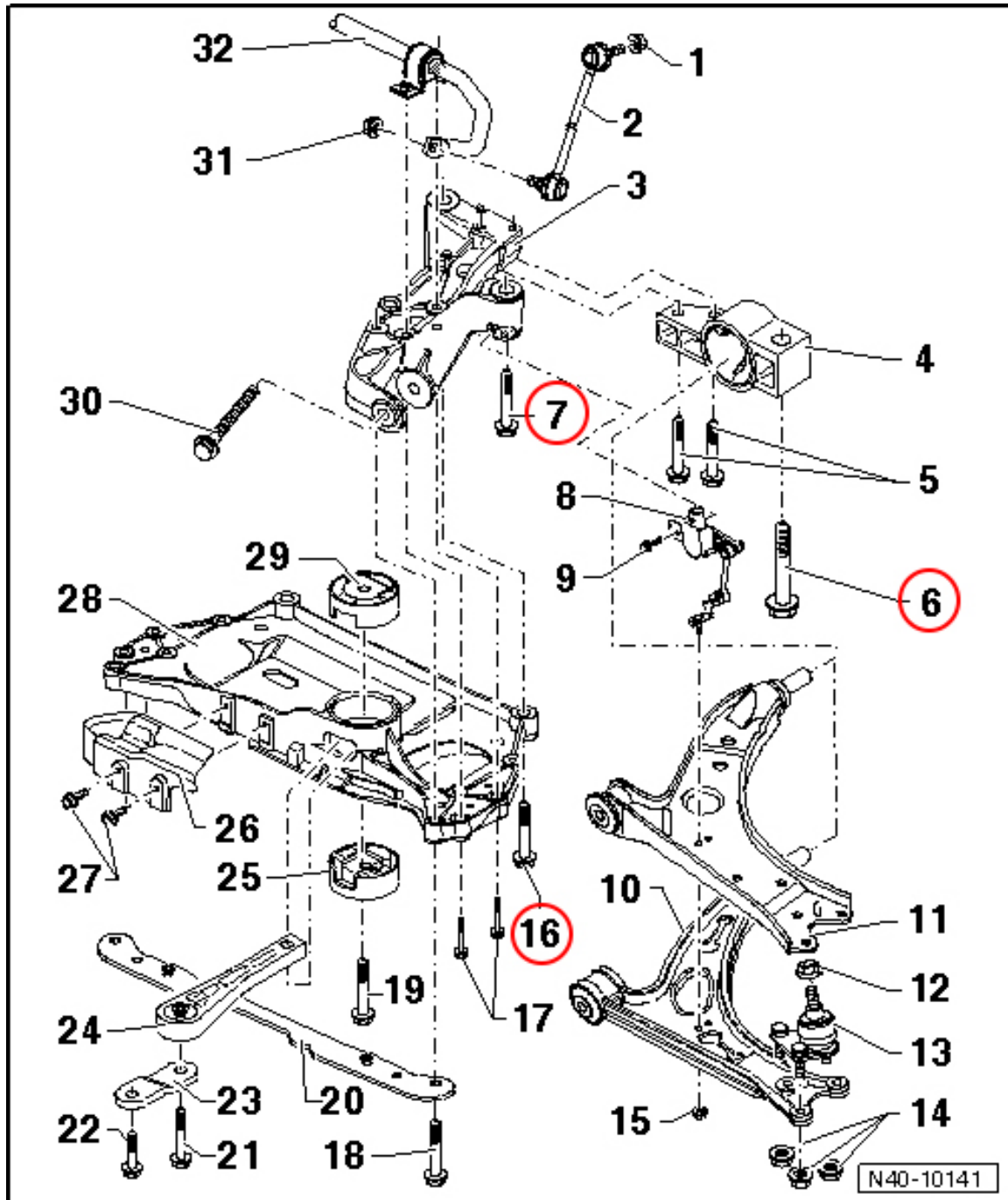


Tyrolsport Sub-frame Deadset Kit



Tyrolsport Deadset kit addresses these bolts:

Bolt #6 – control arm bracket bolt

Bolt #7 – Upper Sub-frame Bolt

Bolt #16 – Replaced with Tyrolsport x ARP bolt

Tools Required:

13mm socket

16mm socket

18mm socket

breaker bar

torque wrench (rated to at least to 90 nm)

medium pry bar (to assist in shifting the sub-frame for installation of the collars)

Scotch bright pad or fine grit sand paper – 180 and up

Optional – Red Bull ;)

We prefer ½ drive tools for removal and ¾ drive for installation. If you only have one don't stress.

Please note: Your vehicle will require an alignment after completion of this install. While your steering wheel may still be straight, your sub-frame has been dropped and relocated thus requiring an alignment.

Install tip – if this is the first time your sub-frame is dropped or its only been down once or twice, you may notice a waxy substance on the chassis in and around the bolt holes. This is VW's anti corrosion wax, it is applied at the factory and can be used to help keep the collars in place on the chassis while you try to align the sub-frame and install the bolts. It can be used as assistance adhesive or a third hand if you will. Generally during the install we apply a bit to the top collars and stick them to the chassis to help prevent damaging the smaller portion of the collar.

These instructions were written using a customer's vehicle. He had tried to do the dealer TSB correction.

The larger Passat sub-frame bolts and shims are only a temporary fix as proven by this write up.

Step 1 – Preparing the sub-frame for install.

Congratulations on your purchase.

Included in your kit:

2 Tyrolsport x ARP bolts

2 ARP specific collars

2 upper sub-frame collars

2 micro collars

6 sub-frame to chassis upper wedges

1 pack of copper anti seize



Begin by removing the two 13mm bolts on the front exhaust hangar. This is done with a 13mm socket



Next is to remove the two bolts from the dog-bone mount to the transmission. This is done with a 16mm socket.



With the exhaust and dog-bone mounts detached, the sub-frame can now be loosened.

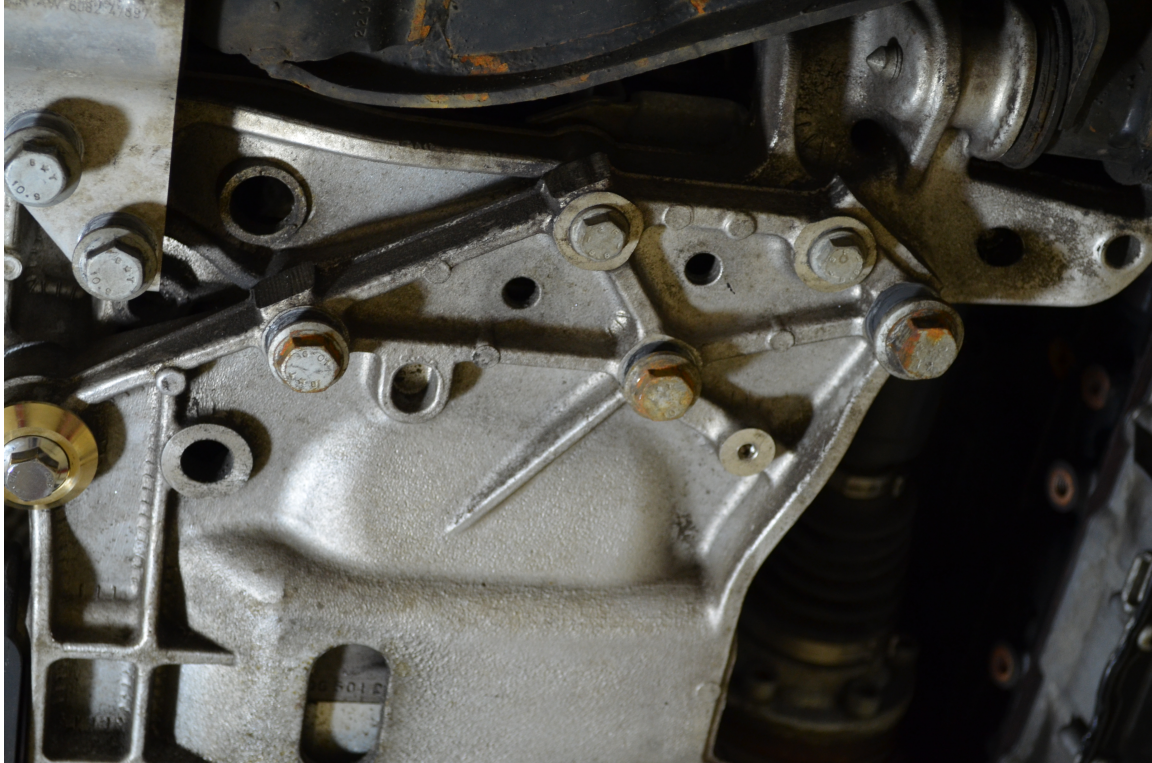
The control arm to chassis bolt will be loosened and removed as well as the upper sub-frame to chassis bolt that is accessible through the hole in the control arm. Remove these with the 18mm socket.





Loosen and remove the other sub-frame to chassis bolt. It is the green bolt shown in this photo. This is the Passat sub-frame bolt per the TSB as well as the shim.

We also take this time to loosen all of the other bolts on the sub-frame that connect the other suspension components. By loosening all of the sub-frame and steering rack bolts it makes sub-frame alignment easier. This isn't necessary on every vehicle but it does make the installation a breeze. You only need to loosen them a few turns to allow all the components to shift for proper alignment.



Prior to installing the collars and bolts please take this time to clean the mounting surfaces of the subframe and control arm bracket of any debris.





Step 2: Installing the kit

Install the collar sets one at a time. This helps retain a general position of the sub-frame and makes the installation of the collars a little easier.



The control arm mount bolt will use the micro collar. This is the smallest collar you received.



Above, the socket shown on the upper sub-frame bolt to assist in hand installing of the bolt since this one is difficult to reach. The upper sub-frame mount will receive the collar with the large diameter recess for the factory larger shoulder bolt.

Shown below is the new Tyrolsport x ARP bolt. Please apply a coating of the supplied copper anti seize. The Tyrolsport x ARP bolt will receive the collar with the smaller recess.



Install all of the bolts one at a time with the collars and let the sub-frame hang. By installing every bolt collar one at a time it keeps the sub-frame from shifting too much. Each side (passenger & driver side) will receive three collars and 3 wedges.

Make sure to thread everything in by hand or with a stubby ratchet for assistance. Make sure the bolts are going in clean (not cross threaded or excessive resistance).

You will want to gradually tighten the main sub-frame bolts that have the collars so they can locate themselves into the chassis and sub-frame.



Tighten the bolts with the collars by hand until they sit flush.



Tighten the remaining suspension and sub-frame bolts by hand.

Re-install the bolts for the torque arm / dog-bone mount and snug by hand.
Do the same for the exhaust hanger bracket.

Step 3 - Torque Specs.

The sub-frame to body bolts that require the 18mm socket are tightened 70 nm

The sub-frame / suspension bolts requiring the 16mm socket are tightened to 50 nm

The sway bar bracket bolts requiring the 13mm socket are tightened to 30 nm

The ARP bolts receive 85 nm

The torque arm / dog-bone mount bolts receive 50 nm

If you have any other questions regarding this installation, please contact us via email at info@tyrolsport.com, or by phone at 718.386.4604 for our engineering department and we will be happy to assist you.

Cheers!