FT86 Chassis Rear Lower Control Arm Kit

Installation Manual

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Document Revisions

Rev	Date	Author	Description
1	01/18/2016	E. Hazen	Initial Release
2	10/10/2017	P. Lucas	Template Change and Company Name Change

CONTENTS

1. **Overview:**
   Detailed instructions on installing the Verus Engineering Rear Lower Control Arms for the FT86 Chassis

2. **Difficulty:**
   Novice

3. **Time Required:**
   60-90 minutes

4. **Tools Needed:**
   - Jack and jack stands
   - 14mm wrench and socket
   - 15mm wrench and socket
   - 16mm wrench and socket
   - 17mm wrench and socket
   - 18mm wrench and socket
   - 3/8 ratchet
   - Few monkey wrenches (or 1", and 1.25" wrench or crows feet)
   - Torque wrench

5. **Assembly Parts:**
   5.1. (2) Assembled Billet Rear LCA's
      - Anti-Seize was used during the assembly but more can be used depending on user preference.
      - Please contact Verus Engineering if replacement parts are ever needed.

   5.2. Bag of hardware
      - (4) M12x1.75 x 80mm grade 10.9 flanged socket bolt
      - (4) M12x1.75 grade 10.9 serrated flanged nut
      - (2) M10x1.50 x 80mm grade 10.9 flanged socket bolt
      - (2) M10x1.50 grade 10.9 flanged nut
      - (4) Hard anodized bushings

5.3. Optional Autocross/STX Kit

- Kit comes with poly inboard points instead of spherical rod ends
- Hardware include (4) SS thick washers
- Poly mounts are pre-assembled and lightly greased with high quality grease

6. Installation:

6.1. We are not responsible for damage to your vehicle by following this manual.

6.2. Begin with disconnecting the battery, negative first, if this makes you feel more comfortable working on the car. It is always a good idea to disconnect the battery anytime when working on the vehicle. We were nowhere near the battery or electrical system so we left it connected for this install, but again, never a bad idea.

6.3. Jack the car up from your preferred location, we use the rear diff, then place jack stands on either side to hold the car up.

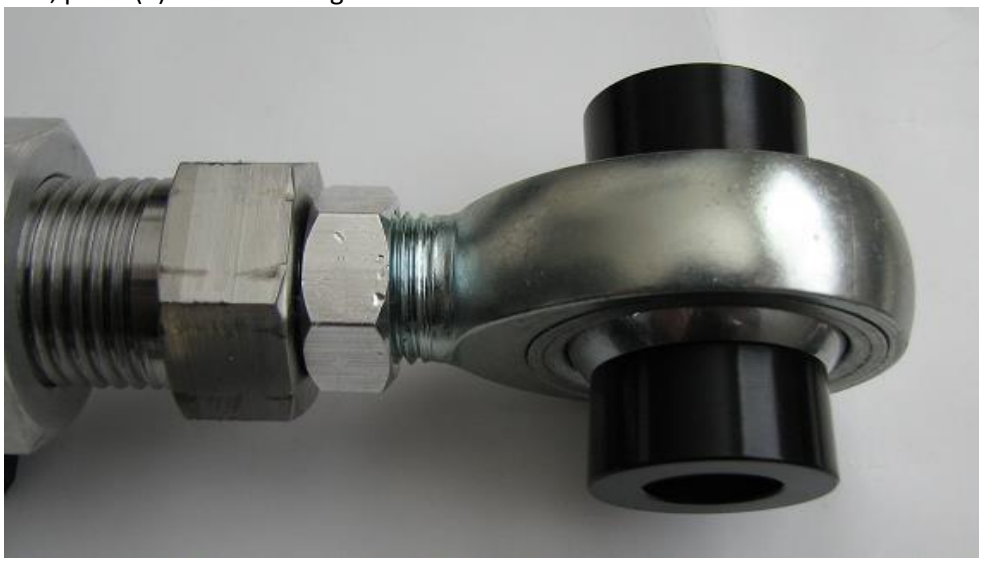
6.4. At this point, we measured camber on the rear wheels by measuring from wheel to wheel. We used the inside tread on the very bottom of each wheel, write down this measurement. You will use this to set your camber back to what factory control arms were, though it is highly recommended to head to an alignment shop directly after install.

6.5. Starting on either the passenger side or the driver side, loosen the (3) 17mm nuts and bolts from the LCA (circled in red below) and the (1) 14mm bolt (circled in blue below).

6.6. With these bolts and nuts removed, the LCA should be able to be removed from the vehicle.

6.7. Measure the OEM unit to the Velox LCA unit and ensure that they look approximately the same length. If you plan on running significant negative camber, it is recommended to extend the adjuster more than the rod end to start out (see below). This will result in a stronger inboard connection. **Neither rod end nor adjuster should ever have less than the diameter of the threads in the associated female portion of the connection.**

6.8. Once happy with the LCA set-up off car, it's time to put it on car. If you have the spherical rod end, place (2) of the bushings on either side of the rod end as shown below



6.9. If you are using the optional STX/Autocross style inboard poly mount, you will need to use (2) of the stainless steel washers, one on each side of the bushing as shown below.

6.10. Install the unit in reverse order you took the OEM off. You will re-use the inboard bolt and nut from OEM, which are both 17mm. The supplied hardware is slightly different size from OEM, the (2) larger bolts are 16mm, the (2) larger nuts are 18mm, the (1) smaller bolt is 15mm, and the (1) smaller nut is 15mm as well. The larger bolts go on the knuckle and the damper mounting point, the smaller bolts go on the anti-roll bar.

6.11. Tighten the (3) M12 bolts (chassis point not shown) to 59ft-lbs with a torque wrench. Tighten the (1) M10 bolt to 28 ft-lbs. It is recommend to use a wrench on the nut to keep it from spinning.

6.12. With the LCA fully installed, it is time to dial in camber back to OEM spec *if that is what you wish to do*. To do this, use a 1” wrench on the adjuster and thread it in and out till the measurement from left wheel to right wheel is the same as before install. Once satisfied, snug both lock nuts. The spherical/poly bushing is ¾” while the adjuster to LCA is 1.25”.

6.13. Perform the same steps on the opposite side of the car, including setting camber if you wish to do so.

6.14. Lower the car back down and take it to an alignment shop for an alignment.

6.15. Enjoy the lightest weight LCA on the market. Please contact Verus Engineering with any questions, comments, concerns via our e-mail at sales@verus-engineering.com