

# TEAM ALBA RACING RECREATIONAL A ARM INSTALLATION

**Parts included:** 2 upper and 2 lower a arms, 2 tie rods, 2 upper and 2 lower ball joint assemblies, 4 spacers for the upper a arms , decals

**Stock parts re-used:** Yamaha - The stock steel sleeves, the dust caps, the a-arm mount bolts and nuts  
Honda - a arm mount bolts and nuts

**Torque spec and instructions:** You must read your quad's manufacturer service manual and follow the recommendations for bolt and nut torque specifications, disassembly and assembly procedures.

1. – **Read the disclaimer sheet** and be sure you understand all conditions. If you have questions call us – 619 562 0188

2. – **Put your quad on a stand** (be sure it is stable and won't fall off). Remove the front tires and the brake calipers. Remove the tie rods by loosening the jamb nuts and spinning the tie rod. Leave the tie rod ends attached to the spindles and steering stem.

3. – **Remove the upper and lower ball joints from the spindles.** The easiest way to do this is to use a ball joint separator (often times referred to as a pickle fork). If you don't have a pickle fork unthread the nut down to the end of the ball joint shaft, then using a hammer and a punch tap the shaft out of the spindle. Now you remove the a arms from the frame mounting brackets.  
**Note:** You will re-use the nuts bolts and washers.

4. – **Now it is time to install the new lower a arms.** Looking at the lower arms you will notice that one leg is almost straight and one leg has a large angle. The straight side goes to the front of the quad. You will know if you have it correct because the shock mount will line up straight with the shock.. On Yamahas slide the stock steel bushings in to the new a arms (thru the delrin bushings). Then install the stock dust caps. Using the stock bolts and nuts install the arms to the frame. Tighten the bolts and nuts. Honda arms do not use the dust caps.

5. – **Installing the upper a-arms**

**Yamahas** upper a-arms do not have a left and right side. One grease fitting will face up; the other will face down. The angled leg of the upper a-arm will face the back of the ATV with one exception...the Banshee. [Each Banshee upper a-arm has 2 legs. The leg with the most angle will face forward.] For all Yamaha a-arms, you can tell if the uppers are on correctly. When both the lower and upper a-arms are on correctly (see # 4) the ball joint sleeves (the part the ball joint slides into) will be lined up one on top of the other (upper and lower arm). . Note that on all Yamaha arms you will use the stock steel sleeves and the stock dust caps. You will use 2 aluminum spacers on each upper a arm. For installation of these aluminum spacers follow the instruction page for Castor Adjustment. Install the lower shock bolt and the shock to the lower a arm. Tighten all the mount bolts (a arms and shocks)

**Hondas** upper a-arms do have a left and right side. The grease nipples will point down on the Hondas. Each Honda upper a-arm has 2 legs. The one with the most angle goes to the rear of the quad. You can tell if the uppers are on correctly by looking at the ball joint sleeves at the end of the upper and lower a arms – they will be almost straight on top of each other. You will use 2 aluminum spacers on each upper a arm. For installation of these aluminum spacers follow the instruction page for Castor Adjustment.. Install the lower shock bolt and the shock to the lower a arm. Tighten all the mount bolts (a arms and shocks).

6– **Installing the lower ball joints** – Now install the lower ball joints. (this is the ball joint that is straight) Screw the lower ball joint all the way into the collar on the a arm. The ball joint pin will point straight up. Now install the jamb nut to the ball joint. (do not tighten it yet, it may be necessary to adjust this when you set your camber) Install the upper ball joints. This ball joint is angled. The narrow nut will be on the inside of the a-arm. Do not tighten them—you will adjust these later.

7. – **Install the spindles.** Tighten the lower ball joint nut just enough to have no play in the spindle. **NOTE: Do not forget to tighten this nut after you adjust your camber.** Now install the uppers following the same procedure as the lowers.

8. – **Install the new tie rods.** Match the reverse threaded end to the reverse threaded rod end. You must thread the tie rod on to both rod ends at the same time. Adjust them so the the hubs look straight to your eye (you will fine adjust them later). Do not tighten the jam nuts.

9. – **Install your brake calipers and tighten the nuts.** Install the front tires and tighten the nuts. Take the quad off the stand and be sure it is on level ground. . **You must replace your stock brake lines with +2 braided brake lines.**

10. – **Now adjust the camber.** The goal is for the top of the tires to tilt toward the center of the quad about 1/8" from 90 degrees. (if you are using a degree gauge set to 2 degrees inset) With the tire pointing straight forward use a framing square with one edge on the ground and the other edge against the bottom sidewall of the tire. If the tire is at 90 degrees the bottom and top sidewall will touch the edge of the square. You want a 1/8" gap between the top sidewall and the square. To adjust the gap you will adjust the nuts on the upper ball joint to move it in or out. When you have the correct gap tighten the ball joint nuts to 50 ft lbs of torque. If your ball joints have castle nuts be sure to insert the cotter pin and bend it so it will not come out. If you cannot get the correct measurement you can adjust the lower ball joint in or out to help.

11. – **Now adjust Toe in.** This is the angle of the front tires compared to the rear tires. The front tires need to be Angled (toed) in 1/8" on each side toward the center of the quad. This is adjusted by turning the tie rods.

A. – Get a pair of tie downs and sit on the quad. Tie the handle bar ends to the footpegs. Adjust the handlebars until they are at a 90 degree angle to the body of the quad.

B – Get a straight edge that is long enough to reach from the back of the rear tires to the front of the front tires. Also grab 2 supports that are about 10" tall (gallon paint cans work).

C – We are going to assume your rear tires are straight. The back of the straightedge will rest against the sidewalls of the rear tire with the front going past the front tires. If the front tires are wider than the rear use a spacer against the rear tires to move the straightedge out far enough to give clearance for the front tire. You are now ready to set the toe in. Measure from the center of the back of the front tire to the inside edge of the straight edge and note the measurement. Now measure the same way on the front of the tire. Subtract the 2 from each other. Turn the tie rod until the measurement equals 1/8". Now tighten the jam nuts on the tie rod. Double check the measurement. Now repeat this procedure for the other side.

12. – **Go back and check every nut and bolt for tightness. This is very important. Grave injury or death can happen if anything comes loose!! Be sure to check your nuts and bolts after your first ride and every ride thereafter.**

**Questions? Please call us at 619 562 0188**

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