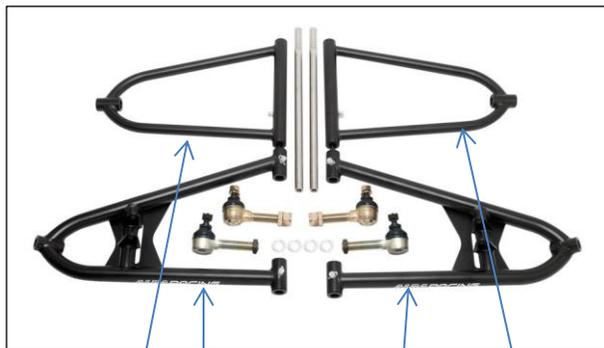
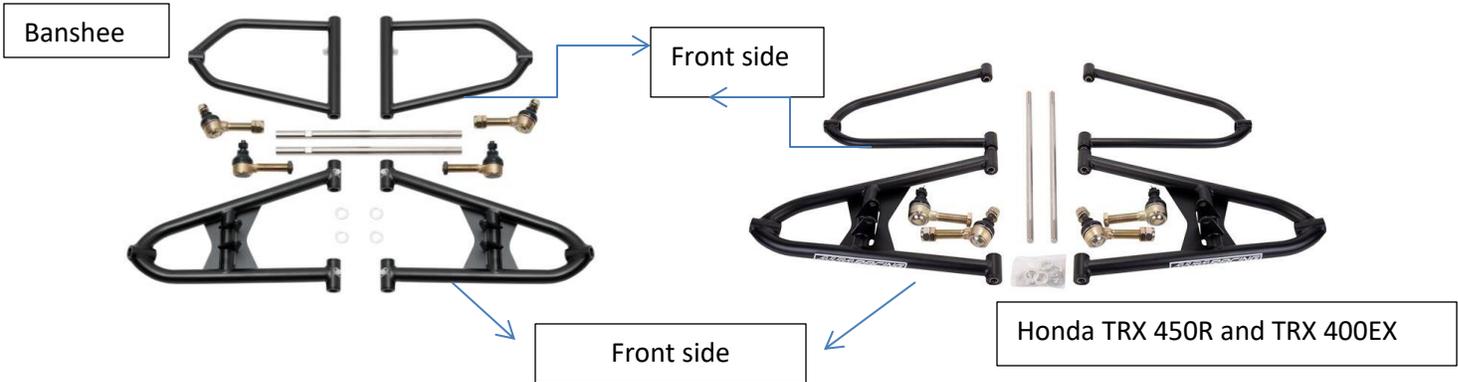


## TEAM ALBA RACING RECREATIONAL A-ARM INSTALLATION

**Parts included:** 2 upper and 2 lower a-arms, 2 tie rods, 2 upper and 2 lower balljoints, 4 spacers for the upper a-arms, 2 decals

**Stock parts reused:** Yamaha—the steel sleeves and the dust caps

**Torque spec and instructions:** Please refer to your ATV manufacturer's service manual. Follow the recommendations for bolt and nut torque specifications, disassembly and assembly procedures unless otherwise noted.



Front side (Raptor 660, Raptor 700 and YFZ 450) See the arrows.



This is a lower a-arm. The nut for the ball joint goes on the back side of the arm.  
See the arrow for placement of nut.

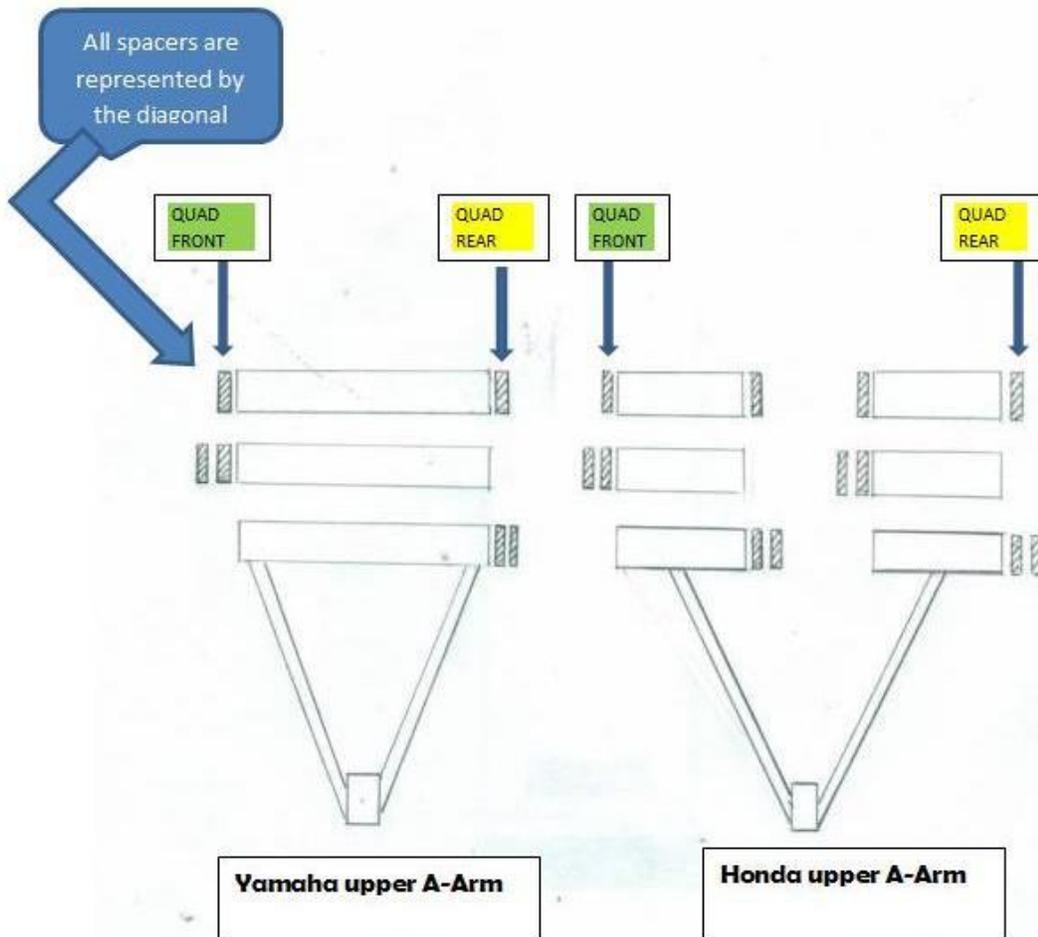
The upper a-arm has one bend that is slightly smaller than the other side. This is the front side of the arm (as shown in these pictures). The upper ball joint has two nuts. The jam nut goes on the front side and the nylock nut goes on the back side of the a-arm. (see last pic).

**Before beginning:** Read the disclaimer info to ensure you understand all conditions. If you have questions contact us 619-562-0188

1. Put your quad on a stand (be sure it won't fall off). Remove the front tires and the brake calipers.
2. Remove the upper and lower ball joints from the spindles. The easiest way to do this is to use a ball joint separator (oftentimes referred to as a picklefork). If you don't have a picklefork 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, remove the a-arms from the frame mounting bracket. **Note—you will reuse the nuts, bolts and washers.**
3. Now it is time to install the new 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. *(Note that on a **Banshee** the upper a-arm angle is reversed. The larger angle goes to the front 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. Also, note that on all Yamaha arms you will use the stock steel sleeves and the stock dust caps. When you install the upper a-arms follow the instruction page for adjusting castor entitled 'Upper a-arm spacer installation.' (See last page). Install the lower shock bolt and the shock to the lower a-arm. Tighten all the mount bolts (a-arms and shocks).
4. Now install the lower ball joints. (This is the ball joint that is straight). Remove the jam nut. Screw the lower ball joint all the way in the collar on the a-arm and then install and tighten the jam nut to 45 ft. lbs. of torque. Install the upper ball joints. This ball joint is angled. The narrow nut will be on the outside of the a-arm's collar and the large locking nut will be on the inside of the a-arm. Do not tighten them. You will adjust these later.
5. Install the spindles. Tighten the lower ball joint nut. If it is a castle nut install the cotter pin and bend it so the nut will not come off. Now install the uppers following the same procedure as the lowers.
6. 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 hubs looks straight to your eye (you will fine adjust them later). Do not tighten the jam nuts.
7. Install the 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.
8. Now adjust the camber. The goal is for the top of the tires to tilt toward the center of the quad about 1/8 inch from 90 degrees (about a 3 degree 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 inch 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 then tighten the ball joint nuts to 50 ft lbs of torque. See picture.
9. 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 inch on each side toward the center of the quad. This is adjusted by turning the tie rods.
  1. Get a pair of tie downs and sit on the quad. Tie the handlebar ends to the footpegs. The handlebars need to be at a 90 degree angle to the body of the quad.
  2. 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 inches tall (gallon paint cans work).
  3. 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 rear tire to the inside edge of the straight edge and note the measurement. Now measure in the same manner on the front of the tire. Subtract the 2 from each other. Turn the tie rod until the measurement equals 1/8 inch. Now tighten the jam nuts on the tie rod. Double check the measurement. Now repeat this procedure for the other side.
10. 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.

## CASTOR ADJUSTMENT—Upper A-Arm Spacer Installation

Your Alba Racing A-Arms are 3 way adjustable to match your quad's turning capabilities to your riding situation. The change is made by moving the aluminum spacers to the configuration shown in the diagram below. **Note...**Yamaha is represented on the left; Honda is represented on the right.



**-Recreational---**This is the neutral position. One washer on each end of the Arm. Your quad will not turn too quickly or too slowly. This is good for all around trail riding.

**-Desert riding---**This position is for any high speed riding. Both spacers are at the front of the A-Arm.

**WARNING**—The quad will **NOT** turn as quickly. At high speeds the steering will feel steady. If you are racing in the desert this is what you will need

**-MX riding---**This position is for Motocross riding. Both spacers are put at the rear of the Arm. The quad will turn very quickly. **WARNING** ---At high speeds the front end will feel 'witchy.'

Any questions? Give us a call @ 619-562-0188 [www.teamalbaracing.com](http://www.teamalbaracing.com)

Please note that you can also access the instructions on our website > tech center