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## Yamaha YFZ 450 04-08 and Raptor 700 Quad Lower mount stabilizer installation guide:

- 1. Identify all of the parts in the kit and their relative mounting locations by viewing all the photos first.
- 2. All the 6mm bolts in this kit should be tightened to 6-8 ft. lbs., and have blue Loc-tite on the threads.
- 3. Raise the front end of the quad so the front wheels are off the ground slightly, use a center stand or wood blocks.
- 4. Alignment is critical, so that you don't damage the stabilizer by over extending the linkarm past its intended travel.
- 5. The assembly sequence is important, in order for all the parts to physically fit in the frame due to close tolerances.
- 6. Connect one end of the Heim-strut arm to the steer tube bracket with a 6x20 Allen bolt, Loc-tite applied. Scotts logo up.
- 7. Mount the "Steer Tube Bracket", #20-0340-54, around the steer tube, with the strut arm knub to the right side facing downward. You will need to align this bracket later, so keep it tight enough to stay put for now but loose enough so you can still rotate it on the steering stem when the time comes.
- 8. Next, install the stabilizer itself to the riser block #20-7200-01 using (2) 6x20mm Allen bolts. Tighten those bolts now.
- 9. Set the upper half of the "frame bracket", #20-7300-00A, on the cross member of the frame, just in front of the steering column with the part #'s facing forward. Remove any burrs or welds on the frame that prevents the bracket plate from sitting flush against the frame. Some accessory shocks may need to be removed to gain access to the center frame.
- 10. Align the frame bracket so the 3 holes in the frame gusset match the FWD holes. Install the (2) 8x10mm Allen bolts through the frame gusset into the upper plate.
- 11. Next, install the riser block & stabilizer to the upper frame plate (#20-7300-00A) and tighten the rearward bolt in from underneath using (1) 6x20 Allen, the rearward hole. Install the FWD riser plate bolt (6x20 Allen), but use the washer under the head to prevent the head of the bolt from going through the hole in the frame.
- 12. Install the lower half of the frame bracket (#20-7300-00B) using the (2) 8x40 Allen bolts in from the bottom. The 350 uses the "B" set of 8mm holes and the 450 / 700 use the "A" set of holes.
- 13. The next steps will describe how to align everything perfectly so you can connect the strut arm to the steer tube correctly. This is a simple but important step, as our stabilizer sweeps outward from the center-line and the valving systems respond relative to where you start from. It is important to have the linkarm centered on the stabilizer when the wheels are aimed straight ahead. The overall goal when finished is: stabilizer linkarm and the steer tube bracket parallel with each other, strut arm perpendicular to those, while the wheels on the quad are aimed perfectly straight ahead.
- 14. Align the front wheels dead straight, by comparing them to your rear wheels. Use a straight board, loading ramp or straight edge of some sort. Check both sides with the board and then sit on your quad and see if the bars feel as though they aiming straight ahead. At this point, align the stabilizer link arm so it is 90 degrees to front wheels (see photo), with the wheels still dead straight ahead. This means the linkarm should be in the middle of its full travel, left to right.
- 15. Next, rotate the position of the Steer Tube Bracket (without moving the steer tube itself), and align the bracket so the Heim-strut matches the hole in the linkarm, front wheels still straight and the link arm 90 degrees to the wheels. The steer tube bracket needs to be adjusted vertically also, so that the Heim strut arm is not binding or angled (see photos).
- 16. You've now established where the Steer Tube Bracket should be positioned and you can tighten the 4 mounting bolts. It's easiest to tighten the steer tube bracket bolts by rotating it to full lock each side, giving access to the Allen heads. Obviously, you cannot rotate the to full lock until you have the bracket tight enough to not move during this process.
- 17. Locate the stainless spacer which goes between the heim and the linkarm, , chamfer goes up, as you Install the other end of the Heim strut to the linkarm using a 6x25 Allen and tighten. Once that bolt is tight, then install the 6mm jamnut on the bottom side. The Heim-strut should now be connected at both ends. The wheels should still be straight while the linkarm and steer tube bracket are parallel with each other.
- 18. The strut arm should be free floating and not binding or hitting any other parts through the full stroke of its motion. Gently turn the bars to verify this fact. Be sure to check and keep the alignment correct if you have to loosen the steer tube bracket bolts to adjust anything.
- 19. Summary: Wheels straight, linkarm at 90 degrees to wheels, strut arm should match hole in linkarm and steer tube bracket at this point.
- 20. <u>Warning:</u> Double check the steer tube bracket position by slowly turning the bars from steering lock to steering lock, making sure the steering stops make contact and that the damper itself <u>has not become the steering stop</u>. You can insure this by turning the bars to the stop, carefully remove the strut bolt, and see if the link arm on the damper will still move a few degrees farther. This should be the case at both extremes of the steering stops. If it's not aligned correctly, it will shear the "through pin" upon its first use, which is a built-in safety feature to help avoid damage. Tighten all bolts with Loc-tite when everything is aligned and matches the procedure.
- 21. There is a small hole in the steer tube bracket for an 1/8" roll pin. This is <u>only</u> for use if the steer tube bracket spins on the steering stem. We have not found any yet that spin, but we included this additional anchor point should it be needed.
- 22. Adjustment of the High-Speed valve in this confined area can be done with a dime.
- 23. If you are not sure about any of this installation, PLEASE CALL US, we're here to help you get it installed correctly.





Stainless spacer between link arm & strut



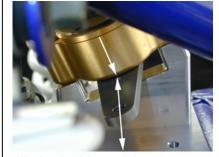
Complete assembly order off bike



Bottom view of frame bracket bolts



Bottom riser bolt with washer installed



Aligning the linkarm 90 degrees to wheels



Aligning the tires straight ahead



Be sure the Allen bolt clears the frame



Finished kit seen from the right side



Shows the extra roll pin anchor point



Finished kit seen from the left side



Adjusting the high speed with a dime



Finished kit seen from the front

