In Part 1, we showed you the tear down of Project 04. In Part 2, TOL Designs installed the HHI Neck Rake Kit. Now, it is time to install the HHI Raked Triple Trees that will allow us to run a 26" front wheel with proper rake and trail. We will also install lowers for a complete HHI front end, and finish it off with extended slider covers from Paul Yaffe’s Bagger Nation. We may have forgotten to mention that we are turning our 2004 Ultra into a Big Wheeled Road King. We end this chapter with a raked nacelle from Bad Dad.

The HHI neck rake kit has been installed and Project 04’ Road King is now ready for the new front end.

1. We start by applying a very light coat of assembly lubricant to the outer bearing races.
2. Insert the upper bearing race in the new HHI neck. Lightly seat it at this point.
3. Now, insert the lower bearing race, ensuring it is properly oriented.
4. Place the JIMS bearing race driver in place, and use a rubber mallet to gently seat the bearings.
5. Using the rest of the JIMS necking bearing race installer, drive the races in, until they bottom out.
6. Remove the bearing race installer from the neck.
7. The bearing races should be fully seated until they bottom out, as in this picture.

8. Now, install the collar and upper riser bushing in the top triple tree.

9. Flip the upper tree over, and install the lower riser bushing.

10. Install the included bolts from the bottom of the top triple tree.

11. Include the stock ground wire on the riser bolt. The other side gets a washer.

12. Thread the bolt to the stock risers by hand for now.
NECK RAKE KIT PART 3: TRIPLE TREE INSTALLATION

13. Just snug the riser bolts down at this time.

14. Apply a light coat of anti-seize to the neck stem threads.

15. Liberally apply bearing grease to the upper and lower neck bearings. A bearing packer is best if available.

16. Also, apply bearing grease to the lower bearing race you installed in the neck previously.

17. From the underside of the bottom triple tree, install the HHI neck stem.

18. First, install the included rubber dust shield, and then the lower Timken bearing on to the neck stem.

19. The lower neck bearing should bottom out on the lower tree, as seen here.

20. Apply a liberal amount of bearing grease to the upper bearing race previously installed.

21. Insert the upper bearing into the neck.

22. The stock upper dust cover will be re-used in this step. Place it over the upper bearing.

23. Guide the lower tree and neck stem into the motorcycle’s neck.

24. Use caution to guide it through the upper bearing and dust cover.
Gently thread the neck stem into the upper tree. Tighten the neck stem using a 3/8" ratchet.

Holding the lower tree in place, install the upper triple tree.

Apply a blue thread locker to the included bolts for the upper fork slider covers.

Position the upper fork slider in place.

Start the bolts in each one by hand.

Final tighten the bolts in each upper fork slider cover.
Remove the top plug to gain access to add fork oil. Measure out and add the appropriate grade of fork oil for the application. Then re-install the plug.

Apply a light coat of anti-seize to the threads of the fork leg extensions. Guide the fork leg into the lower triple tree.

Thread the leg extension into the top triple tree. Go until it bottoms out and stops. Repeat the process with the other fork leg.

Don’t forget the second fork stop. With the legs threaded in place, torque the neck stem to 30 ft/lbs of torque. Apply blue thread locker to the top nut.
Using a 1 ½" socket, torque the top nut to 80 ft/lbs.

Pause and check the range of motion of the front end. You are looking for smooth movement.

Install the set screw in the back side of the lower triple tree. Don’t forget to use thread locker on it.

Tighten the set screw by hand.

Apply thread locker to the four bolts that serve as fork clamping hardware.
**NECK RAKE KIT PART 3: TRIPLE TREE INSTALLATION**

49. Insert two bolts per side of the lower triple tree.

50. Alternately, tighten the two bolts per side by hand.

51. Then final tighten to be 25 ft/lbs of torque. Repeat this process on the other leg.

52. Apply thread locker to the included specialty hardware each side of the triple trees.

53. The longer of the two belong in the top tree.

54. Install the shorter ones in each side of the lower triple tree.

55. Tighten by hand, and then final torque all four to 15 ft/lbs.

56. Using thread locker, and then a 5/16" socket, next install the bolt that secures the ground wire for the handlebars.

57. It should be routed with no strain on the wire or terminals.

58. As we are installing a Road King-style raked nacelle, we temporarily remove the risers so the nacelle can slip over the triple trees.

59. Slide the raked nacelle over the triple tree from the top.

60. Position the nacelle in place, aligning the pre-drilled holes with the hardware installed on the outside of the triple trees.
Loosely, install the included hardware by hand, until you have all four bolts started.

Tighten the two upper bolts by hand.

Next, tighten the two lower bolts in the same fashion.

Re-install the handlebar risers, again by hand. We will final tighten and torque them when the handlebars are installed.

Project 04’ is now starting to resemble a Road King.