

## **08 Rhino HW Machined Sheave Installation Instructions**

Please read entire instructions before installation!!

For an easier install watch the install video on our site at [www.hunterworks.com](http://www.hunterworks.com)

The first few pictures were an after thought from the install video, so your cover will not already be off like you see in the first several pictures.

1. Remove the both seats and engine cover.
2. Pull the plastic cover off from under the seat only on the side closest to the engine. You will need to small screwdriver to pry the center out of the plastic keeper.



3. Remove the ignition coil from the seat support bar.



4. Remove the seat support bar by removing the two screws in the rear, two screws on the bottom front and the two screws on the top corner.



5. Remove the CVT breather tube from the CVT.
6. Using a 10mm socket remove all the screws holding the cover on the CVT. Once you have all the screws out make sure you pay attention to which bolts go where
7. Using a 22mm or 7/8" socket and an impact wrench remove the nut, fan and spacer from the secondary sheave leaving the secondary sheave on.



8. The pictures below are from a 04-07 Rhino but they are basically the same.
9. The picture below is what you will see once you remove the cover and fan.



10. Remove the X-shaped piece which is a bearing support for the drive sheave. It is held on with (4) 10mm bolts. Then remove the bearing support and set it aside. Pay attention to where the bolts go as they are different sizes. Also pay attention the dowel pins that are in the upper left and lower right of the bearing support, they maybe on the support or still on the engine.
11. Take the included 6mm bolt and screw it into one of the threaded holes on the secondary sheave and screw it in until it almost screwed all the way in. In the picture below the screw is just started but screw it in as described above. This makes the secondary sheave spread apart taking tension off the CVT belt.



- Using a 22mm socket remove the nut holding the primary sheave on. Unless you don't have an impact wrench you will have to devise a way to hold the sheave and keep it from turning.



- Slide the primary sheave off the engine once the nut and washer are off. The collar on the shaft may slide with it and may come off but you simply push it back on the shaft. Leaving the belt and collar on the engine. Set the sheave on a workbench and what you have is what you see below.



- Remove all the Phillips head screws that hold the cap on as seen in the picture above. Remove the cap, some prying may be in order to get it to come off. There is a large O-ring that goes all way around the primary sheave that will have to be place back on the HW sheave before you put the cap back on.

15. Below is what you will see once the cap is removed. Remove the part you see in the middle, it is called the fixed plate.



16. Below is what you will see after you remove the fixed plate.



17. Remove the roller weights from the stock sheave and set them aside.

18. Retrieve the new sheave apply some grease on the slides inside the sheave where the fixed plate slides on. I personally do not put all the grease that Yamaha puts in, I again just put it on the sliding parts of the fixed sheave. Let your conscience be your guide.

19. Reinstall the roller weights in the new sheave, slide the fixed plate back in, put the o-ring off the stock sheave on the HW one, put the cap back and reinstall the screws.

20. Now that the new HW sheave is all put together, pick it up making sure you don't get grease on the smooth side of it, also hold the fixed plate against the roller weights as you carry it back to the rhino and hold the fixed plate against the roller weights until the nut holding it on is back on.

21. The belt should be still on the rhino and the collar should be still on the shaft.

22. While holding the fixed plate against the roller weights slide the sheave back on the shaft and push it on until the splines on the shaft are showing thru the fixed plate. You may have to pinch the belt together with your left hand while holding the sheave on and the fixed plate against the roller weights with your right hand. The picture below is what you should see when you have it on right. Please note, in the picture I am not holding the fixed plate against the roller weights like I said do but you should do as mentioned, I moved my hand for the picture.



23. Slide the washer on and slide it over the splines and then screw the nut back on while holding the washer in place. By hand screw the nut all the way until it makes contact with the washer as shown below.



24. Step 18 is the most important step, if the washer slips off the splines and you tighten the nut up, it will eventually slide onto the splines and then the nut will be loose and the fixed plate will get stripped out. I did this the first time I installed a sheave.
25. Tighten the nut to 70ft. Lbs. or do as I do and use the impact wrench to tighten it, so for safety tighten to 70ft. lbs.
26. Remove the 6mm screw from the secondary sheave.
27. Reinstall the fan
28. Reinstall the bearing support .

29. Start engine and run the RPM up to seat the belt back in place and it will give you the opportunity to see how the CVT transmission works. Please don't stick any body parts in while you are doing this and if your wearing a tie, for Gods sake take it off first. If everything looks right go ahead and reinstall the CVT cover.
30. Put the CVT breather tubes back on, seat bracket, coil etc.
31. Reinstall the center cover, engine cover and seats.
- 32. You're Done!!**

If you have any questions don't call, just kidding give me a call or shoot me and e-mail.

WATCH THE VIDEO, it is better than my instructions!!!

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