



## CZP HRK Hydraulics Relocation Kit - VQ35HR and VQ37VHR Manual Transmission Installation Guide



Thank you for your purchase of the CZP HRK. Please make sure your kit came with all of the necessary components listed below:

- 1x Billet Chromoly Clutch Fork
- 1x Adjustment Bolt and Jam Nut
- 1x Bent Steel Base Plate
- 1x Central Guide Column
- 1x Throw Out Bearing and Bearing Carrier
- 1x Clutch Slave Cylinder
- 1x Aluminum Slave Cylinder Mount
- 1x Bent Aluminum Slave Cylinder Heat Shield
- 1x Stainless Steel Replacement Clutch Line w/ banjo bolt & washers
- 1x Chromoly Pivot Ball and Washer
- 1x Pivot Ball Retaining Clip
- 1x Fork Retaining Clip
- Misc. Mounting Hardware

It is recommended to read through the full instructions and familiarize yourself with the process before attempting to install the kit. (Additional modification is necessary when using the HRK with an OEM clutch & pressure plate, for more information, see page 8)

1. Drop the transmission as instructed in the Nissan FSM (MT-18).
2. Remove the factory concentric slave cylinder and its hardline/bleeder that mounts to the bellhousing.



3. Remove the two 12MM head M8 bolts at the 4 and 5 O'clock positions when you are facing the input shaft of the transmission. Mount the bent steel base plate and the central guide column loosely using the countersunk M6 bolts using some blue or orange threadlocker. Thread in the new flanged M8 bolts also using some blue or orange threadlocker and tighten all 4 bolts now securing the base plate to the transmission. **(Torque spec for the M6 countersunk bolts is 7 - 10 ft-lbs and for the M8 flanged bolts is 12 - 15 ft-lbs)**



4. Install the chromoly pivot ball with its washer on the threaded boss on the base plate. **(Torque spec for the pivot ball is 28 - 30 lb-ft)**
5. Grease the pivot point of the chromoly fork and insert the retaining spring into the groove, making sure it's all the way seated down in the groove.



6. Now mount the fork onto the pivot ball, it should want to just clip into the socket.
7. Grease the two fingers of the fork that will contact the throw out bearing carrier.



- Grease the inside of the throw out bearing carrier, you can fully fill the groove with grease. Also add a dab of grease to the bottom of the two 'wings' of the throw out bearing carrier and install the retaining spring for the fork onto the bottom of the carrier.



- Now slide the throw out bearing carrier onto the center guide shaft and seat the fingers of the fork on the wings of the carrier, making sure to slip the ends of the spring into the grooves on the back of the fingers on the fork and clip the two parts together. (it should look like this when it's all together on the inside).



10. Cut a small slit in the old rubber boot that went around the hardline/bleeder and slip it over the fork. It can help to not have the adjustment bolt and jam nut on the fork.



11. Install the braided clutch line, reusing the factory insulative sleeve if possible with some new zip ties. Take a second to add a dab of grease to the contact point of the fork adjustment bolt. **(Torque spec for the union is 11-12 lb-fts)**



12. Reinstall the transmission according to the Nissan factory service manual but don't install the two bolts that mount the starter yet.

13. Mount the heat shield and slave cylinder to the bracket. (It is best to run the slave mounting bolts facing upwards to have increased clearance of the lower starter bolt but either direction can fit) **(Torque spec for the M8 slave to bracket bolts is 12 - 15 ft-lbs)**



14. Go ahead and also connect the other end of the clutch line to the slave cylinder using the banjo bolt and crush washers included with the line. **(Torque spec for the clutch banjo bolt is 13 - 14 lb-ft)** With the line already connected, mount the slave cylinder assembly to the bulge in the bellhousing where the starter lives using the two longer flanged M10 bolts. It can help to have the fork adjustment bolt threaded in fully so there is as much room as possible to maneuver it in. **(Torque spec for the M10 starter bolts is 52 - 59 ft-lbs)**



15. One of the last few steps is to bleed the slave cylinder and adjust the fork bolt till the clutch mechanism fully releases and then tighten the jam nut to lock everything in place. **(Torque spec for the M12 jam nut is 52 - 59 ft-lbs)**
16. Once the slave is bled and fork adjusted, all that is left is to check the adjustment of the clutch pedal. There should be approximately 2-4mm of free play in the pedal when actuated by hand, before the throw out bearing should make contact with the pressure plate and resistance can be felt. If needed, adjust the Clutch Pedal position as outlined in Nissan FSM (CL-5). You're all done!

### **CZP HRK Torque Specs**

M6 Countersunk Base Plate Bolts: 7 - 10 ft-lbs

M8 Hex Head Base Plate Bolts: 12 - 15 ft-lbs

M10 Starter Bolts: 52 - 59 ft-lbs

M8 Slave Cylinder Bolts: 12 - 15 ft-lbs

Pivot Ball: 28 - 30 ft-lbs

M12 Fork Adjustment Jam Nut: 52 - 59 ft-lbs

Clutch Line Banjo Bolt: 12 - 14 ft-lbs

Clutch Line Union is 11 - 12 ft-lbs

**For those using an OEM Nissan or Infiniti clutch and pressure plate:**

Below is a picture of the modification necessary to use the HRK with an OEM clutch and pressure plate. You must trim the inner ring that protrudes off of these three tabs on the pressure plate as the fingers will interfere with the clutch fork if left alone. Just cut along the 6 small red marks as shown and discard the inner ring.

