



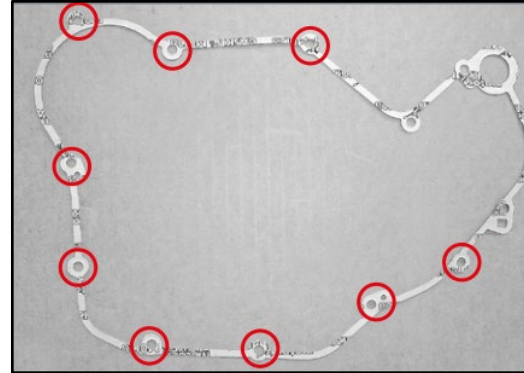
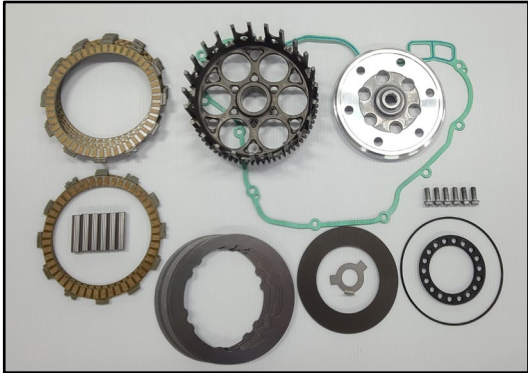
# 2022 Diaphragm clutch kit

AB-22230-430

Fits 2018-21 4 Stroke 430-500RRS,RR and Race Edition  
Installation instructions

Kit contents:

- Gasket
- Fiber and steel clutch plates
- 6 Sliding pins
- Locking tab washer
- 6 Pressure plate bolts
- Pressure plate
- Clutch basket
- Conical washer
- Preload ring - Steel ring
- Copper washer



4. Remove the 9 inner clutch cover bolts at the locations seen in the photo. Remove the inner clutch cover.

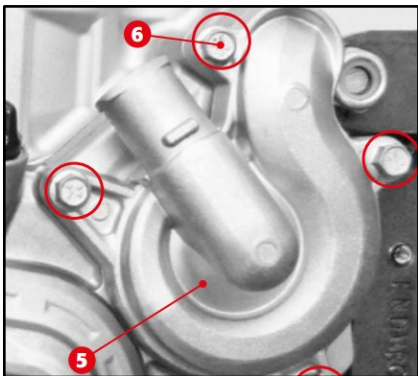


1. Remove the lower water pump bolt and washer to drain the coolant fig7. Loosen the bleed screw (figA) if applicable and radiator cap to start the flow of coolant into a clean container.

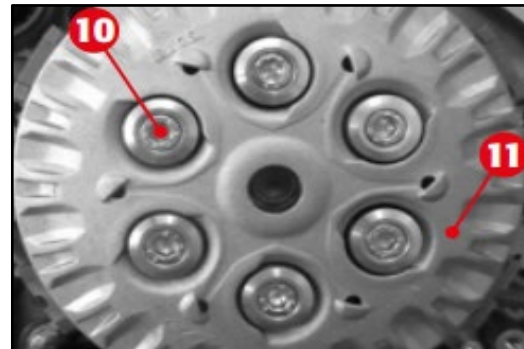


Note: Pressing on the rear brake caliper will allow the rear brake pedal to move to its lowest position making the clutch cover removal easier.

2. Remove the skid plate then drain the transmission oil.



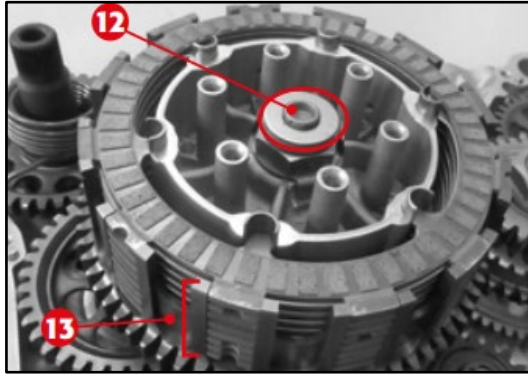
3. Remove the 3 remaining water pump cover bolts (fig 6) then remove the water pump cover fig 5.



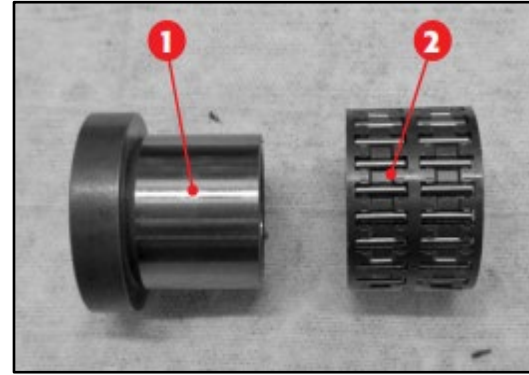
5. Remove the six bolts (fig10) holding the pressure plate (fig11) to the inner hub along with the washers and springs.

## Installation instructions

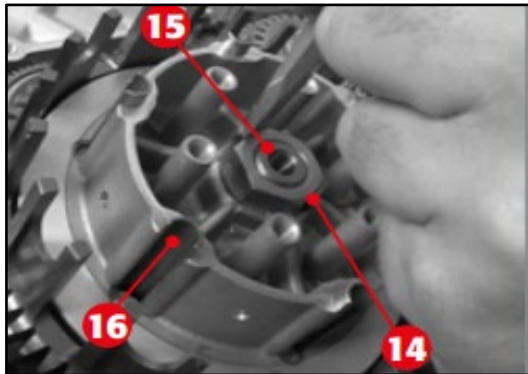
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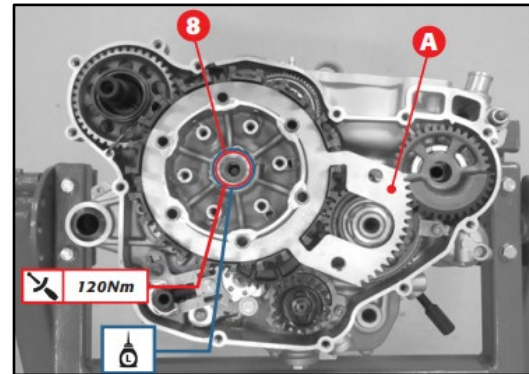
6. Remove the thrust bearing (fig12) along with all the clutch plates fig13.



**Note:** Replace the clutch basket bushing and needle bearing if traces of meshing or abnormal wear are detected.



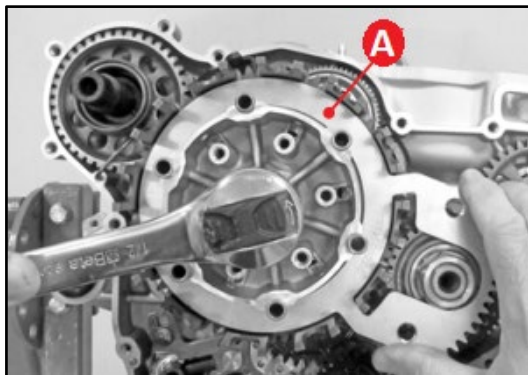
7. Use a hammer and chisel to bend the locking tabs (fig14) away from the clutch nut fig15. Remove the six sliding pins fig16.



15. Make sure the needle bearing is lubricated then install the new clutch basket, spacer, inner hub and new tab washer.

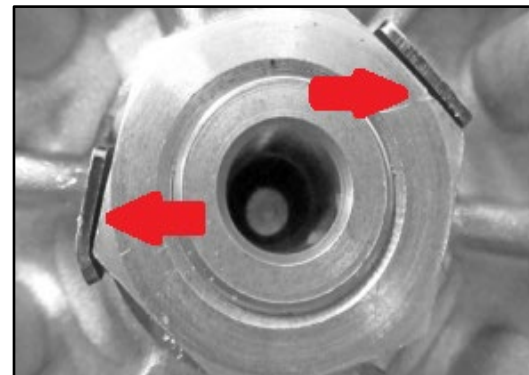
Using the clutch holding tool(figA) to lock the clutch, apply medium strength Loctite to the nut(fig 8) then torque to 120Nm.

**Warning:** Using an impact can cause damage.



8. Install the new sliding pins. Using the Beta clutch holding tool AB-50009-22 (fig A), remove the nut, tab washer, inner hub(stock), spacer and clutch basket. Leave the new sliding pins in the inner hub.

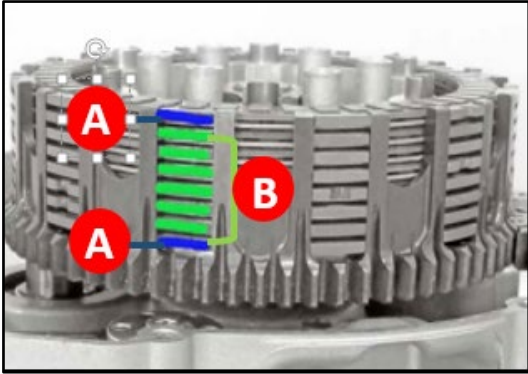
**Warning:** Using an impact can cause damage.



16. Using channel lock pliers, fold the locking tabs over against the nut.

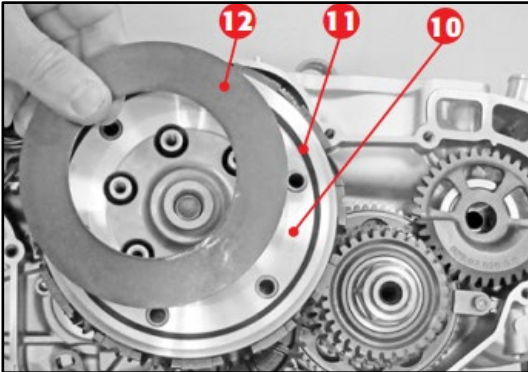
## Installation instructions

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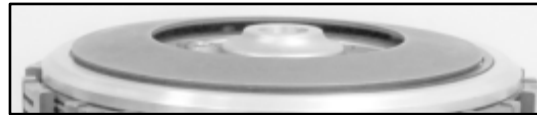


17. Soak the new fiber clutch plates in gear oil for at least 5 minutes. Install the clutch plates starting with a fiber marked with blue fig A. Install the following plates alternating between steel plates and fibers with green marks (fig B) ending with a fiber marked with blue fig A.

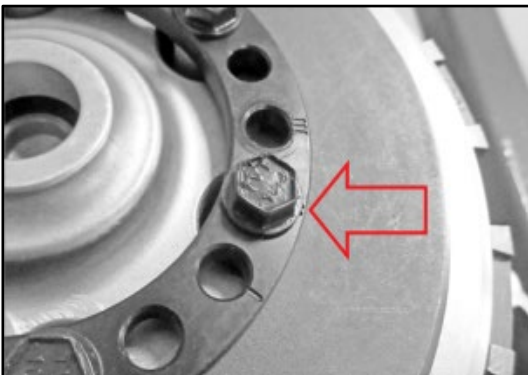
**Note:** One side of all the steel plates has a rounded edge and it should face inward.



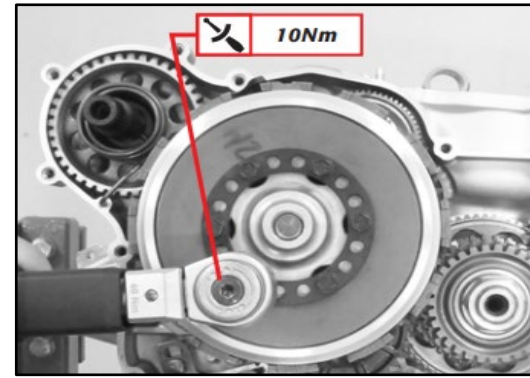
18. Reinstall the thrust bearing on to the transmission shaft. ( not shown) Install the pressure plate (fig 10), the steel ring (fig 11) and the conical washer fig12.



\*Positon the conical washer so the larger diameter is against the pressure plate.



**Note:** The preload ring has three settings... III is the stock X trainer position and has the lightest lever pull and engagement. The II is stock for all other bikes and offers medium lever pull and engagement. The I setting has the firmest lever pull and engagement.



19. Start the first bolt in the desired preload ring position then add the other 5 bolts.

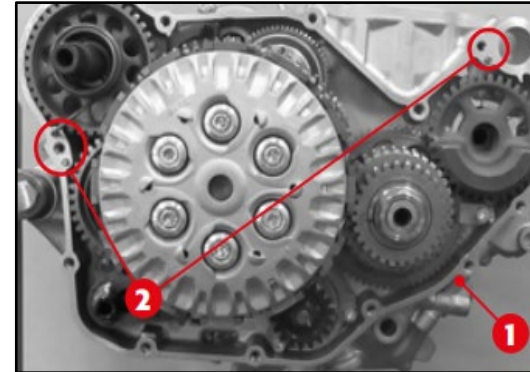
Torque the bolts to 10Nm in a criss cross pattern.

**Note:** Make sure the impeller and pump seals are in good shape.

Now would be the time to replace them if needed.

Use the service manual at [Betausa.com](http://Betausa.com) under the support tab to complete the replacement.

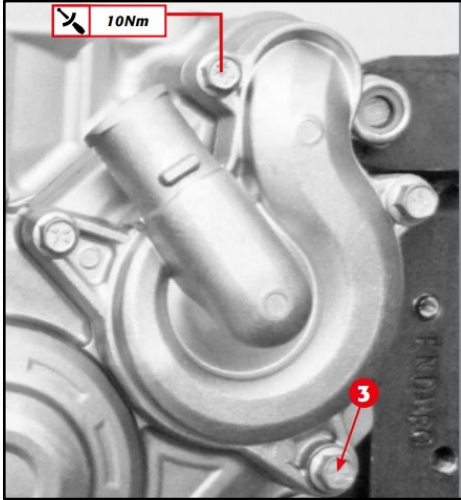
20. Install the new gasket on the right center case (fig1) using the two locating dowels to hold it in place fig2.



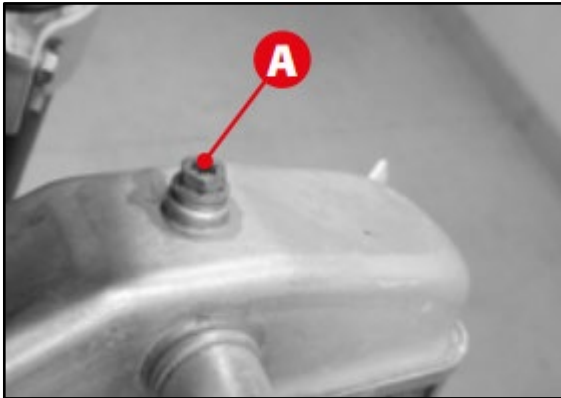
21. Install the clutch cover on center case rotating the impeller until the cover sits flush on the case. Install the 9 inner cover bolts leaving them loose.

## Installation instructions

Continued



22. Install the water pump cover and 4 bolts making sure the copper washer is under the bottom bolt fig3. Torque all 13 clutch cover and water pump bolts to 10Nm in a criss cross pattern.



23. Refill the cooling system until coolant appears from the radiator bleed hole if applicable. Install the bleed screw and washer (figA) then tighten to 10Nm.

24. Reinstall the oil drain bolt and tighten to 14Nm. Refill the transmission. (850cc)