

Set the bike up on the sidestand. Using a pair of pliers, apply the clutch at the crankcase lever and remove the cable. Remove the bolts holding the clutch sidecover.

Using a rubber mallet if necessary, dislodge the sidecover. There are two locator dowels in the holes where the two long bolts came out of. The cover may be stiff coming off those pins, especially if the gasket is firmly attached. If absolutely necessary, place the bare blade of from a utility knife in the gasket, near but not at those bolt holes, and tap it into the joint, splitting the gasket. Do not pry on the aluminium casting edges or you will have a devil of a time getting things sealed up again.

There's a metal baffle inside, below the clutch drum. Take careful note how it is positioned now, 'cause odds are you will disturb it soon anyway. Pack a rag into the transmission cases to catch any debris. Using a proper gasket scraper (easier to control than knife blades, paint scrapers, putty knives etc.), remove the old gasket from both the transmission cases and the sidecover. Take care not to dig into the soft aluminium with the scraper.

Remove the 5 bolts holding the clutch together. Now is a good time to measure the free length of the springs and buy new ones if necessary. Lift out the pressure plate, complete with the mushroom shaped pushrod, washer and bearings. Lift out the stack of alternating friction and plain plates. Carefully inspect the splines of the clutch boss and the tangs of the clutch drum for signs of indentation from the plates. Clutch slip or drag will result if these are not dressed smooth with a file, no matter what you do with the plates. If possible, find a nice dead flat surface (a piece of glass often works well). Check the plain plates for warpage. Rotate the plate in place to ensure the surface is truly flat. Measure any gap between the plate and the surface with feeler gauges and compare to spec. Replace any that are badly warped.

Install the plates alternately, starting and finishing with a friction plate. Insert the mushroom, washer and bearings into the pressure plate. Align the dot on the pressure plate with the dot on the clutch boss -- it will only go on fully one way and your clutch will not operate if you miss this step! Install the springs. Clean the threads of the bolts, and apply a

little blue (removable) locktite to the end threads of each. Install and torque to spec WITH A TORQUE WRENCH. Overtightening these bolts may snap off the projection of the clutch boss -- that's a much bigger job!

Carefully remove your rags, ensuring no debris enters the engine. Re-install that baffle that fell out when you removed the rag. Make or buy a new gasket. Buying a gasket from Yamaha is easy and expensive. A roll of gasket paper is only a few dollars and makes many gaskets. A single hole punch is great for bolt holes ;-). Install the gasket over the dowels (easiest if both dowels are on the same side -- either on the cover or on the transmission, not one of each). Rotate the clutch lever so it is parallel with the face of the side cover. Rotate the mushroom so the threads are 45 degrees to the bottom rear. Install the sidecover. The lever should rotate so that it is in line with the mark on the sidecover casting, but don't lose sleep over it if it's not. Install the cover bolts, ensuring that the two long ones go back in the correct holes. Take up the slack on the lever. If it does not line up straight with the casting mark, remove the circlip, lift off the lever, and replace it on the splines so that it does line up when the slack is taken up. Make sure the small return spring is properly positioned. Replace the circlip, apply the pliers to the lever again, and re-install the cable.

You are now done.

Specs for your machine are on Volume 2 of the XJCD.

tafn

dv