

Instructions for 4 / 5 / 6 plate clutch kits.

1. Fit your crown wheel and spider checking that the crown wheel turns freely when tightened down firmly.
2. **Dry Fit.** Fit your clutch pressure plate only (without the springs) too check that it sits almost on the floor of the crown wheel. You are checking to see if there are any restrictions, if it is all ok, then continue to fit the friction plates and steels. Next you need to fully compress the assembly using your clutch compressor, check the clearance between the top clutch plate and the top friction plate situated underneath it, this should be between 1mm and 2mm clearance. Because there are so many different types and sizes of clutch baskets and pressure plates it can occasionally be difficult to get an adequate clearance, if you do not have adequate clearance at this point there are several things you can do to achieve this which are listed below :
 - o If the assembly is tight with not enough clearance, you can add an extra 1mm clutch shim on top of the original one, you also need to add one behind the oil thrower to keep the chain aligned (these are supplied in our 6 plate kits)
 - o Change the clutch spider to a genuine SIL item as these tend to be marginally taller than most other items
 - o Change the clutch pressure plate to a taller SIL item again these can be taller than some of the other items out there
3. **Final fit with springs.** Now proceed to fit the clutch assembly together, making sure you fit all the plates in the correct order :-
 - o Four & Five plate :- As standard Lambretta clutch, friction plate first, then steel, then friction etc
 - o Six plate :- Friction plate, then plate with upturned tags facing you, then friction, steel etc
4. If everything is fitted ok with the correct clearance as in sections 1 and 2 you can now proceed to refit the clutch plates, this time when they are wet. For standard clutch corks you should soak the corks in ST90 gear box oil, ideally overnight. For our green friction plates, they can just be dipped in ST90 gear oil before you fit them. The gearbox oil for Lambrettas is ST90, you can use SAE90, or SAE 85/90, but never use an EP rated oil. Once assembled, carry out one last clearance check, when fully compressed it should be between 1mm and 2mm then you are ALMOST good to go
5. Check that the springs are seated in the recess's of the bottom clutch spider and also the recess's of the clutch pressure plate , you will here them click into place then you know that they are seated correctly. One tip is to use a torch and a phillips type screwdriver, and push the screw driver around and wiggle it to help force the springs into their recess and thus be aligned correctly. OK if you have made it this far, then you can fit the rest of the side casing back etc checking that the inside of the kick start is not rubbing on the clutch top plate. If it is, you will have to remove a small amount of material on the kick start shaft until it clears and can operate correctly.
6. **The clutch cable** one **very important** final check! Some clutch set up's can be very stiff, this is mainly because the clutch cable is fitted badly and not lubricated correctly so you need to double check the following :-
 - o Make sure the cable is routed correctly, in particular with no sharp bends, only nice sweeping bends!
 - o **Lubricate** your cable, most important, even nylon lined cables benefit from lubrication, but make sure you use the correct type of lubricant or you can melt the nylon lining.
 - o Lately it has come to our attention that the other big thing which causes most clutch problems is the small caps on the ends of the outer cable. In a lot of cases even nylon lined on cables, we suggest that you drill the hole in the end of the caps out to a slightly bigger size to allow the inner cable to pass through ok so that there is no resistance. This is most relevant at the headset end, as the inner cable enters the outer at a slight angle, thus rubbing and causing too much friction on cable outer where the cap has a small opening. This will not only give you a stiff clutch, but also lead to premature breakage of your cables.