Chevy S-10 Clutch for GT

There is a significant difference between standard clutch and Chevy S-10 clutch:



Flywheel modified and unmodified

Flywheel Stock - 22 lbs Flywheel Modified - 18.6 lb

Stock Pressure Plate - 10.62 lb 2.8 L Pressure Plate - 9.5 lb

1.9L Clutch Disc - 1.6 lb 2.8L Clutch Disc - 3.0 lb

Flywheel = -3.4 lb PP = -1.12 lb CD = +1.4 lb

So the S-10 Clutch setup is 3.12 lbs lighter than stock setup or almost 10%.

There is difference of diameter as well.



The correct Chevy S-10 clutch for use in a GT should be from 85 and up 2.8 V6 Chevy S-10. The 2WD clutch is the standard duty and has less spring pressure than the HD or 4WD unit, so the engagement is softer because it had less initial clamping.

Part number is: RCF4203

Product Features: # of Splines: 14, Disc Hub ID/Input Shaft Size:1", Disc O.D.:9

1/8"

Disc Size: 9 1/8"-14-1" w/ Flat Flywheel w/ Raised Diaphragm



The weight of stock flywheel is anywhere between 22.5 to 23.25 lbs typically. It can be lightened by milling the step, then work on the inertia ring. 17lbs is about right for a street car.

One thing that everyone needs to be aware of, Opel flywheels are cast iron and before whittling them down too thin and subjecting them to more heat and higher RPM's they WILL fly apart and when they come through the aluminum bell housing and sheet metal floor they will make a mess.

If you're using grade 8.8 attaching bolts, 18 ft lbs is correct torque. I like using grade 10.9 bolts, and I torque them to 26-28 ft lbs. I've never used Loctite, as that skews the torque numbers. I use 10w-30 oil on the threads and under the head of the bolt, with a hardened flat washer under the bolt. Never use a split lock washer, if it breaks you lose all the bolt torque.

The S-10 clutch, because of the longer diaphragm fingers, requires a different clutch adjustment than that of the stock Opel item. There's more travel required on the clutch arm to fully release the clutch. Generally, instead of a lower clutch arm adjustment of 4.25", I set it to 4.75". The downside to this is that the clutch arm pivot stud will then be at the end of its adjustment, that is the stud lock nut will be right at the end of the threads, so if you need to adjust for wear later on, there's nothing to adjust to. The only thing that will work is tightening up the clutch cable, but it creates a higher pedal that is much stiffer from bad leverage.

The solution is to make a longer stud for this application, at least 1/2". McMaster Carr has the part #92770A135 http://www.mcmaster.com/#92770a135/=fue3xq . I have the head turned down for a few bucks if you know somebody with a lathe. You can also use a lug bolt for a Mercedes Benz (M12 x 1.50 x 80mm) available here http://www.ezaccessory.com/Lug Bolt 12x1 50 Ball Seat 60mm Shank Silver p/959svr.htm

