

Primary Case Lubrication

One of the areas of concern to owners of classic British motorcycles is lubrication of the clutch. You know about the “freeing the clutch” drill that’s done each time before cranking a British motorcycle. When rarely ridden classic bikes sit, the clutch may not always break free easily, and in some cases may require drastic measures, such as disassembly. This bonding condition is generally worsened by the use of the traditionally specified 20W motor oil in the primary case.

Additionally, modern engine oils starting with API rated SG, SH, SJ and later, have been doped with extremely low-friction compounds to enhance automobile fuel mileage. Oil manufacturers now warn that using modern automotive motor oil in your primary case may make your clutch slip. So the vintage owner could conceivably go from frozen clutch to slipping clutch in one day!

Almost all British motorcycles use a “wet clutch”. This is a misnomer since only the primary chain operates in the liquid lubricant. The clutch actually operates in a mist that is thrown up by the chain. Considering these 3 issues, many owners of classic machinery with a separate primary case oil requirement now use Type-F ATF (automatic transmission fluid). Type-F ATF meets the extreme pressure demands of the primary chain, does not include the advanced anti-friction compounds of automotive motor oils, is designed to reduce clutch bonding issues, and is readily available at lower prices.

WARNING: ATF should NOT be used in 1970 and later Triumph twins or 1971 and later BSA singles, all of which share the engine oil with the primary oil.

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