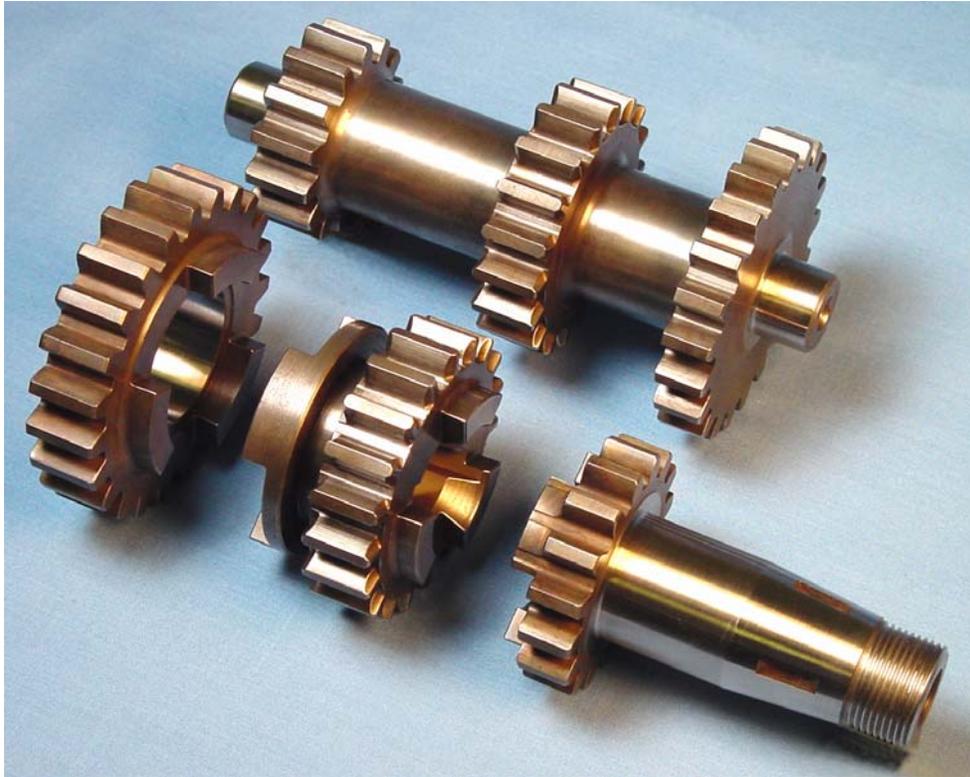


Special Road Ratio Gears for DT and SW **Douglas** Motorcycle Models



Very limited number of newly manufactured special road ratio gear sets for the vintage o.h.v. Douglas motorcycle three-speed gearbox. Providing a fractionally taller first gear than the typical Douglas 'vintage-wide', yet still giving a good spread of gear ratios.

Internal ratios¹: First: 2.16:1 Second: 1.56:1 Top: 1:1

Particularly intended to replace the ultra-close ratio gears found in many cinder-track (DT) models, making a much more usable machine for the road. Furthermore the layshaft assembly is machined from solid. Rigidity excels over that of the original layshaft assembly of gears and spacers. Mesh and alignment of the gears is augmented, improving the life of the gears and clutch dogs.

- Suitable for SG, TG, UG, and YG prefix gearboxes. As used in OC, Dirt Track, Speedway, I.o.M./TT, and certain other models.
- Direct replacements for the original gears in form, fit, and function. Including the slight 2-degree undercut on the face clutch dogs to prevent jumping out of mesh.
- Gear hobbled 9-diametral pitch stub tooth form.
- Made from premium vacuum melt Timken™ steel. Nickel-Chromium-Molybdenum alloy, 8620 AISI/SAE spec. Superior metallurgic uniformity and purity over originals.
- Sliding mainshaft gear (right). Precision wire Electrical Discharge Machine (EDM) cut internal splines. Teeth relieved as per original design to ease engagement of second. Surface finish and tolerances better than originals.



¹ (With overall gearing of 4.8:1, would yield a 10.36:1 in 1st and 7.49:1 in 2nd)

- Sleeve gear (right) i.d. and o.d. ground. It is recommended a worn mainshaft journal be built up with hard chrome plating and precision ground to $\text{Ø}0.6875''$ for optimum bearing surface with new sleeve gear and proper running clearance. Post 1928 style long taper and 13/16-20 thread for chain wheel hub.

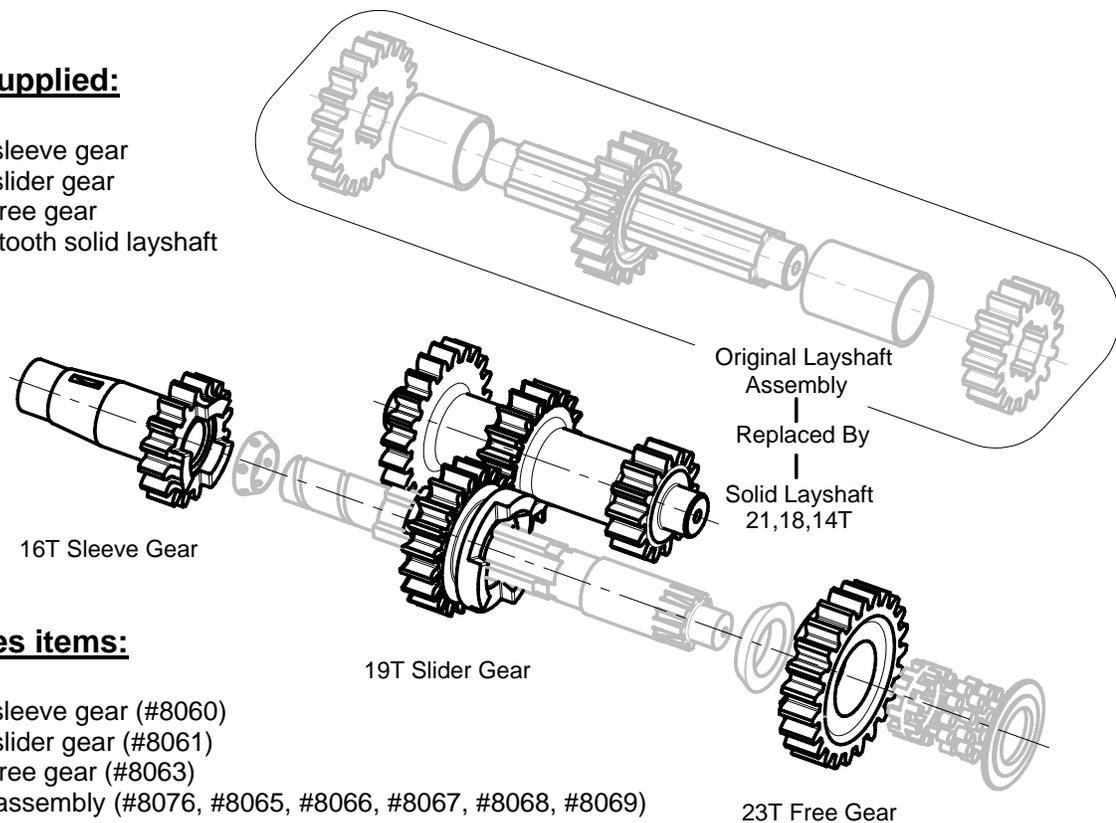


- Free gear (left) casehardened on internal diameter to 0.060" depth, for roller bearing elements.
- All other surfaces casehardened to 0.035" depth with a surface hardness of RHc 58 as per original. Core hardness of RHc 36 for excellent shock resistance. Cryogenic tempered at -300°F to a full martensitic structure in the case for enhanced wear resistance and release of residual stress in the core. Superior metallurgic refinement.



Items supplied:

16-tooth sleeve gear
 19-tooth slider gear
 23-tooth free gear
 21,18,14-tooth solid layshaft



Replaces items:

17-tooth sleeve gear (#8060)
 19-tooth slider gear (#8061)
 23-tooth free gear (#8063)
 Layshaft assembly (#8076, #8065, #8066, #8067, #8068, #8069)

Items grayed out in the above illustration are not included.

\$1800 US, sold as a set only. Packing, postage, and insurance extra.

For availability and queries email:

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