



DEALER PARTS and SERVICE BULLETIN

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SERVICE BULLETIN

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= SUBJECTS =

BALANCING ON "A" MODELS

Occasionally the need arises for a quick method of rebalancing on "A" model Twin Cylinder machines where the conventional and proper methods of balancing involving dismantling of the engine and the use of the regular BSA balancing weights cannot be employed. The method used by one shop operation, who report considerable success, is somewhat unorthodox on a rule-of-the-thumb, fit-and-try basis but is, by report, entirely satisfactory and seldom takes more than 1½ hours maximum. The description of the method is for dealer information only and it emphasized that proper procedures as outlined in the regular service manuals should be employed wherever possible.

Briefly the "Practical Balance" method consists of removing the sump plate (Scavenge Plate No. 67-1285) a simple 4-bolt operation that exposes the flywheel. The engine is then turned over until the original balancing holes are visible. Using a half-inch electric drill, a 1/2" hole is drilled to a depth of 3/16" alongside the original balancing hole. The sump plate is then replaced and the machine road tested. If it runs smoother the indication is that the counterweight was too heavy. If further refinement is needed an additional hole is drilled adjacent. In some cases it may be necessary to perform the operation a third time or deepen the first two holes drilled.

If the first road test discloses an increase in vibration this indicates a light counterweight. In short - by drilling the first hole you have lightened the counterweight and vibration intensity increased thus indicating that the counterweight was already too light. Remedy for this is to turn the engine one-half revolution to the opposite side from the original balancing holes and drill two holes to the same specification. The first of these compensates for the original hole, the second removes some metal from the heavy side of the wheel and starts you going in the right direction. It may be necessary to "fit and try" several times but each operation can be accomplished in about 30 minutes and thus the sum total of the labor involved is small.

Overboring - the problem of getting too many holes in the rim - is very simply resolved by using a 1/2" bottoming tap and threading the not-to-be-used hole. A regular 1/2" bolt is then sawed to appropriate length, a screwdriver slot cut in the top and this bolt section is firmly screwed into position. The thread edge is then centerpunched to prevent backing out and thus the wheel is returned to the original mass.

A square hole can be cut in the center of your motorcycle repair stand which will permit of using the electric drill vertically from the floor with a board for leverage. Under such conditions drilling to depth takes only about three minutes and expedites the operation considerably.

This information is presented as a "shop kink" only for use when time and circumstances do not permit of conventional procedures being followed. Best results are always achieved by following service manual practises.