

BRIDGESTONE *by Rockford*

Service Letter

SUBJECT

BRIDGESTONE 350 GTR
ENGINE REPAIR

BSG-0070

9-1-68

BS350GTR

Listed below are the repair instructions for crankcase sealing and crankshaft end seal removal.

CRANKCASE SEALING

Proper crankcase sealing to eliminate air leaks and oil leaks is essential for proper engine performance. To correctly seal the crankcase halves, first remove the engine from the frame and remove the cylinders and pistons. Then remove the clutch assembly, clutch cover, pinion and drive gears, both rotary valve covers and the valves. Now remove the 4 top crankcase bolts, turn the engine upside down and remove the remaining 9 crankcase bolts.

Now remove the bottom crankcase half and clean both halves completely. Take special care that no old sealer is left on the two mating surfaces. (Now remove crankshaft end seals as described elsewhere in this Service Letter).

Apply a good liquid sealer evenly and generously to the entire mating surfaces of both crankcase and halves. We recommend Goodyear's "Pliobond". Assemble the crankcase halves and torque the bottom bolts, 8mm to 160 in. lbs. and 5mm to 40 in. lbs. Install the top crankcase bolts and torque them to the same as the bottom bolts. Reassemble the engine and reinstall into the cycle frame. A properly sealed crankcase will deliver thousands of miles of leak-free service.

CRANKSHAFT END SEAL REMOVAL

While the crankcases are apart, remove the crankshaft from the crankcase. Pry the two end seals from their recesses in the crankshaft. Then cut the edges of the end seals and remove them by pulling them from behind the main bearings. Do not reinstall new end seals.

NOTE: If the end seals have been damaged or are difficult to remove, examine the end seal recesses in the crankshaft to be sure there are no pieces of the end seal left which might damage the engine. To examine the end seal recesses in the crankshaft, pull the main bearings from each end of the crankshaft and then remove the two bearing spacer washers.

After examining the recesses to be sure they are clean, reinstall the spacer washers and bearings.

NOTE: The locating ring groove in the right bearing must be to the outside of the crankshaft so that when the crankshaft is installed into the crankcase the right bearing locating groove is aligned with the locating ring in the crankcase. The groove in the left bearing does not align with the locating ring in the crankcase. This locating ring retains the left bearing by positioning against the outer edge of the bearing rather than in the groove.

