

Service-Information



Group: 11 Engine	November 1982	Bulletin No.: 11 019 81 (2031)
---------------------	------------------	-----------------------------------

- For U.S.A. and Canada only -

RE: ENGINE MODIFICATIONS

Dear Dealer:

A. Crankcases:

Since January 1980, a different crankcase has been used. The oil passageway routing and distribution point was modified whereby the oil is now forced from the oil filter outlet through a cast-in passageway and distributed in a channel located on the outer diameter of the front main bearing holder. From there the oil is distributed directly to the camshaft bushing, front main bearing and rear main bearing surfaces.

New crankcases are now standard on all BMW U.S. Models after:

R65	US	VIN	6 381 867
R80/7	US	VIN	6 126 171
R100T	US	VIN	6 170 415
R100S	US	VIN	6 165 103
R100RS	US	VIN	6 185 422
R100RT	US	VIN	6 196 045

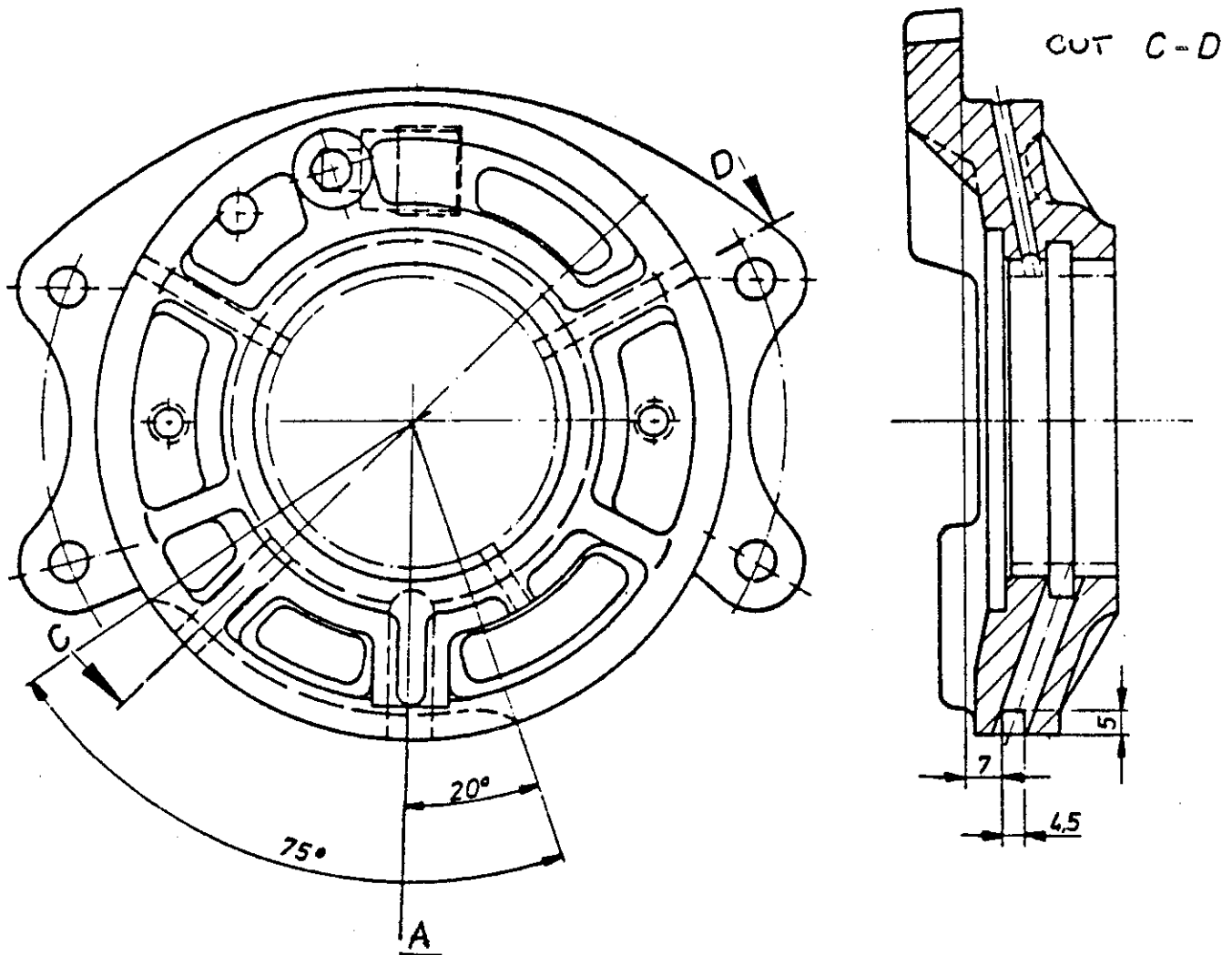
The new crankcases are identified by the trade mark "Alcan" found on the clutch side of the crankcase as a cast mark.



When an "Alcan" crankcase is used as a replacement on models which utilize a duplex (double row) timing chain camshaft drive (models 1970 to 1978), you must do one of two things:

- (1) replace the front main bearing holder with a new design, part No. 11 11 1 259 593,
- (2) modify the existing main bearing holder to provide an oil distribution passage on the outer edge.

If you choose to modify the main bearing holder rather than replace it, use drawing below:



If the above-mentioned modification or exchange is not done, no oil pressure will be obtained.

Either above-mentioned main bearing holders can also be used on any of the crankcase designs used previously by BMW.

When an "Alcan" crankcase is used as a replacement on models produced before the above-listed VIN numbers that utilize a single row timing chain camshaft drive system (models 1979-1980), the only modification required (assuming that the outer distribution passage exists) is to ensure that the oil passageway A (found on Diagram #1) has a minimum diameter of 6.2 mm \varnothing . If it does not, you must enlarge it to this figure or replace it with part No. 11 11 1 337 293 main bearing holder.

B. Rocker Arms:

We also modified the rocker arm shafts, easily identified as the ends of the shafts are no longer plugged, the oil ways are drilled at an angle.

If you are in the process of tearing down the top end on a later model, this can be recognized by a center punch mark which is on the top of the rocker arm shafts, facing to the opposite side of the cylinder head for easy reinstallation. You must use extreme caution to align the oil ways in order to lubricate the needle rollers in the rocker arms.

C. Cylinder Head Torque:

The torque figures for the 1981 cylinder heads have been changed:

1980 Models and Before is: 38 + 4Nm 27.5 - 29.5 lb./ft.
1981 Models and Up is: 35 + 4Nm 25.0 - 28.0 lb./ft.

After the replacement of the head gasket, it is advisable to recheck the cylinder head torque after test riding when the engine is cold again.

In closing, please be cautious in all three foregoing changes and alert your service department personnel immediately.

Yours truly,

BMW OF NORTH AMERICA, INC.



H. Neas
National Service Manager

HN/cs