

Building a Hybrid RB26 Z

Part 9 Determining modifications for the fabrication of tubing from the front RB26 oil gallery to the rear RB 20 pickup & bowl



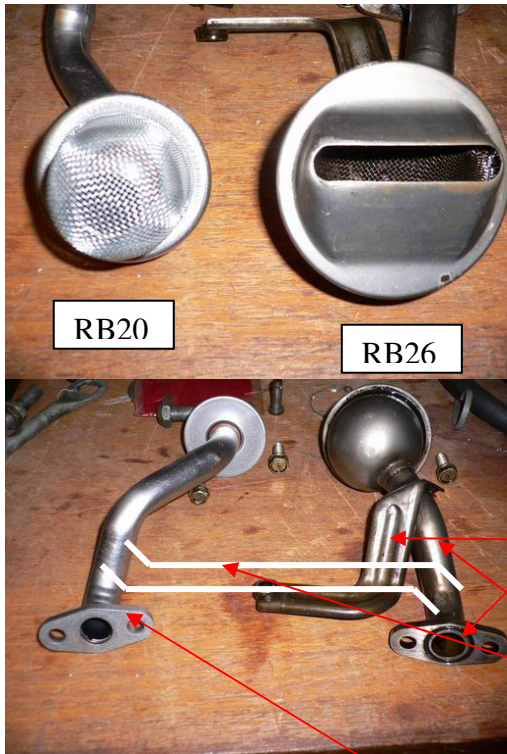
The front windage tray
The RB26 Oil Pickup support bracket attached to the windage tray here
The rear windage tray
Both these trays have to be removed to fit the RB20 sump

Original GTR oil gallery & pickup mounting point
Rear RB20 pickup point (gallery undrilled in RB26).

In fitting the RB26 motor to the Datsun Z, there are 2 sump issues to be dealt with:

- (1) The RB26 GTR original sump is 4WD, has a front bowl, and a front oil gallery & pickup mounting point
- (2) To fit the RB26 motor into the Datsun Z requires a rear bowl to clear the front cross member. The RB20 sump used in the early 300Z can be used, however in that motor the oil gallery & pickup mounting point is further back on the block (see photo above and below on page 3). On the RB26 block the rear oil gallery is not drilled, therefore a combination of the RB20 pickup and the RB26 front oil gallery mounting position has to be used. This requires additional tubing to be fabricated between the two, low enough to clear the sump, which is narrow at this point in order to clear the cross member.

To identify what is required for the fabrication, it is useful to mount the RB26 and the RB20 pickups both in position (see photo page 3), and see the required route of the tubing from front to back. The original RB26 oil pickup has a support bracket attached to the windage tray (see above photo), however both windage trays have to be removed when using the RB20 sump to enable it to fit.

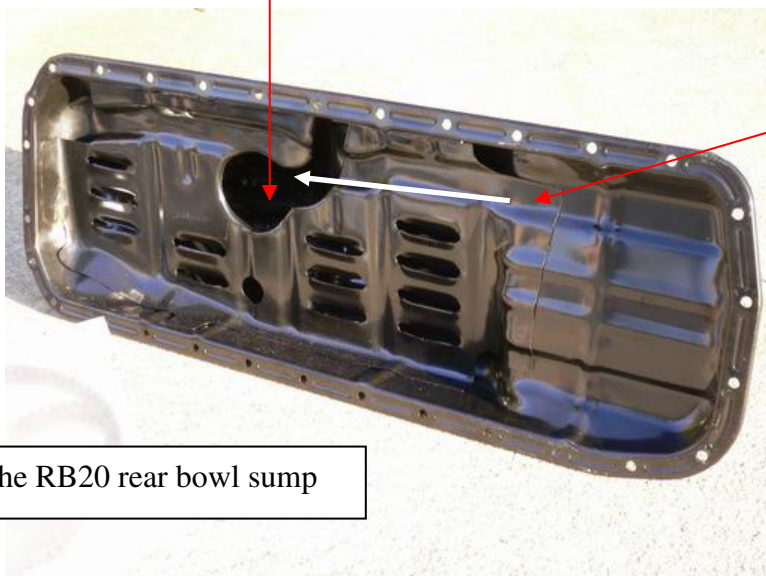


The original RB26 oil pickup on the right and the RB20 pickup on the left
See the O Ring on the RB26 pickup

The original RB26 oil pickup has a support bracket which bolts to the windage tray but both trays have to be removed to allow the RB20 sump to be fitted

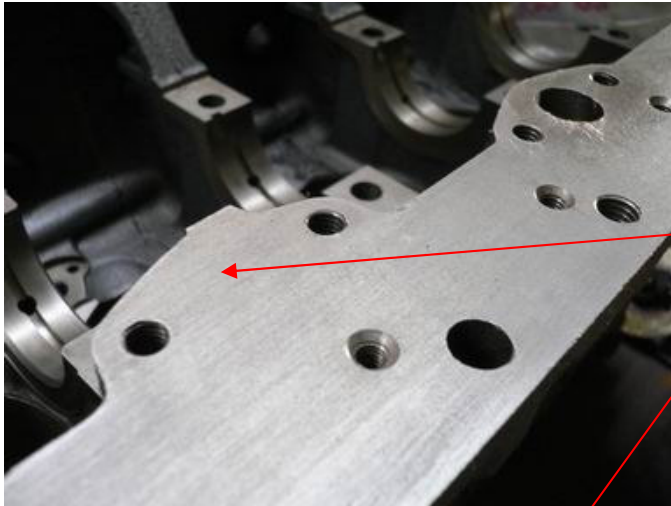
Basically, remove the RB26 pickup, bracket and most of the tube and join a new piece of pipe in a smooth curve to the RB20 tube and pickup. Fabricate a new bracket from the RB20 base bolted to the block as support for the RB20 pickup & new extended tube

The pickup point on the block on the RB26 is at the front of the motor. With the RB20 sump pan being at the rear of the motor, and its pickup emanating from the rear of the RB20 block, a combination of the RB26 base and the RB20 oil strainer will need to be made to extend the pickup from the front to the rear pan.

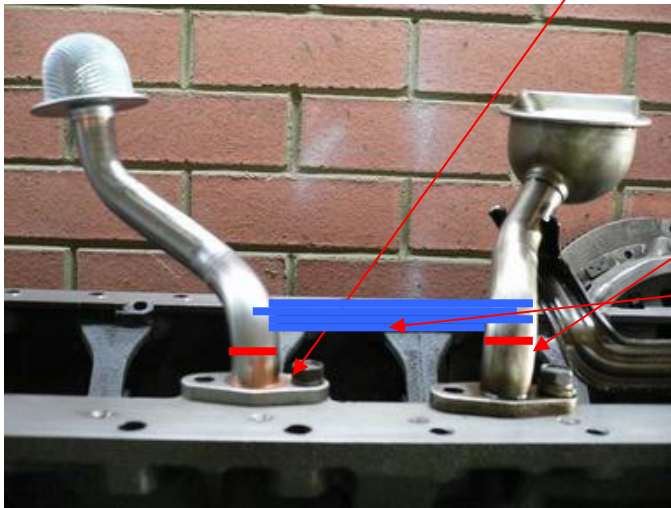


The oil pickup tubing will be extended to reach from the front to the rear

The RB20 rear bowl sump



The undrilled rear oil pickup point can be used to hold the RB20 pickup in place while designing the fabrication to the front pickup point tubing. It could be used later to anchor a support bracket for the new extended pickup, as it will need some form of support over the long length of tubing



Presumably the original RB26 pickup will be cut off low.

A new tube then fabricated to join (obviously curved smoothly between the two) to the new RB20 pickup, which would be in the position shown but cut off the current base

