Alternate Solution for KZ650 Oil Cooler Fittings

I fitted an oil cooler to my KZ650 using a set of fittings I purchased from a company called Klasmo who are located in Germany. However, just prior to my purchase, I was given some advice on how to make my own oil cooler engine fittings. It is not difficult but you do need to use a metal turning lathe.

As you can see from the photos below, the Klazmo fittings are one piece cast and machined items, of quiet good quality BUT you can make an equivalent item out of a standard bolt and a standard threaded hose spigot.



The fitting used (both front and rear) are all metric. M18x1.5 means it is a metric 18mm bolt with a 1.5mm thread pitch. M17x1.25 means it is a metric 17mm bolt with a 1.25mm thread pitch.

FRONT FITTING

This is a standard industry item and is a M18x1.5 bango fitting. The bolt section is 32mm long (measured from the underside of the head to the end of the bolt. These should be available at any good industrial supply / hose company. This fitting (M18x1.5) is the same of all models of the KZ650 and KZ750 four cylinder engines.

REAR FITTING

There are two types of rear fitting. They are similar but there are some important differences.

Firstly, determine which fitting you need. Have a look at the RH rear corner of the existing oil pan. If there is a standard bolt head plug, then you need the M18x1.5 rear fitting. If there is a Socket head / Allen head plug, then you need the M17x1.25 fitting.

Early model KZ650, up to approx mid 1979, used the M18 fitting while the later model KZ650, from mid 1979 onwards, and all KZ750 used the M17 fittings. You need to be sure what size is required, so look at your oil pan.

M18 REAR FITTING

NOTE: ALL MEASUREMENTS ARE TAKEN FROM THE UNDERSIDE OF THE BOLT HEAD.

* Obtain a standard M18x1.5 bolt.

* Cut the bolt so that it is 35mm long, measured from the underside of the bolt head.

* Drill a 8mm hole, through the centre point of the bolt head and down the long axis of the bolt. The hole should be 27mm deep. It should NOT go all the way through the bolt.

* Machine a "waist" section 9mm wide, starting 11mm from the underside of the bolt head. This "waist" section should be 9mm thick at its narrowest point.

* Machine down the end of the bolt, after the "waist" section, so that it is 9mm wide and 16mm in diameter.

* Machine a 4mm wide chamfer at the very end of the bolt.

* Drill a 6 mm hole complete through the "waist" section, from one side to the other. The centre for this hole is 17mm from the underside of the bolt head.

M17 REAR FITTING

NOTE: ALL MEASUREMENTS ARE TAKEN FROM THE UNDERSIDE OF THE BOLT HEAD.

- * Obtain a standard M17x1.25 bolt.
- * Cut the bolt so that it is 38mm long, measured from the underside of the bolt head.

* Drill a 8mm hole, through the centre point of the bolt head and down the long axis of the bolt. The hole should be 28mm deep. It should NOT go all the way through the bolt.

* Machine a "waist" section 9mm wide, starting 14mm from the underside of the bolt head. This "waist" section should be 9mm thick at its narrowest point.

* Machine down the end of the bolt, after the "waist" section, so that it is 9mm wide and 13mm in diameter.

* Machine a 4mm wide chamfer at the very end of the bolt.

* Drill a 6 mm hole complete through the "waist" section, from one side to the other. The centre for this hole is 17mm from the underside of the bolt head.

Once you have machined up your bolt to match the appropriate sizes for your oil pan, obtain a standard spigot hose fitting. You want is a spigot fitting that has a threaded section on one end. The threaded section should be approx. 10mm long and the Inside Diameter (ID) of the spigot should be at least 8mm

* Drill and cut a thread into the bolt head to match the thread pitch of the hose spigot.

* Apply some high temperature nylon pipe tape to the spigot's thread and screw the spigot into the bolt head.

There you go, one rear oil cooler fitting. Time to fit it to your bike.

