

20valve meal prepared by Dean Hosken and Paul Young

**How to install a 20v in RWD trim properly**

- 1) Lick the cam cover just to show it how much you love it. It helps the engine feel comfortable in its new home. Kind of like leaving your new fish floating in the "new" tank for a while before you let them out of the bag.



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- 2) You will need a crank trigger for this install. It can be seen on the front of the crank pulley in photo 2.



- 3) The hot water will now exit the engine from the big hole in the head just below the #1 intake port (check photo 3). Also the water intake is now on the RWD water pump which you already fitted 'right. We'll get back to this later

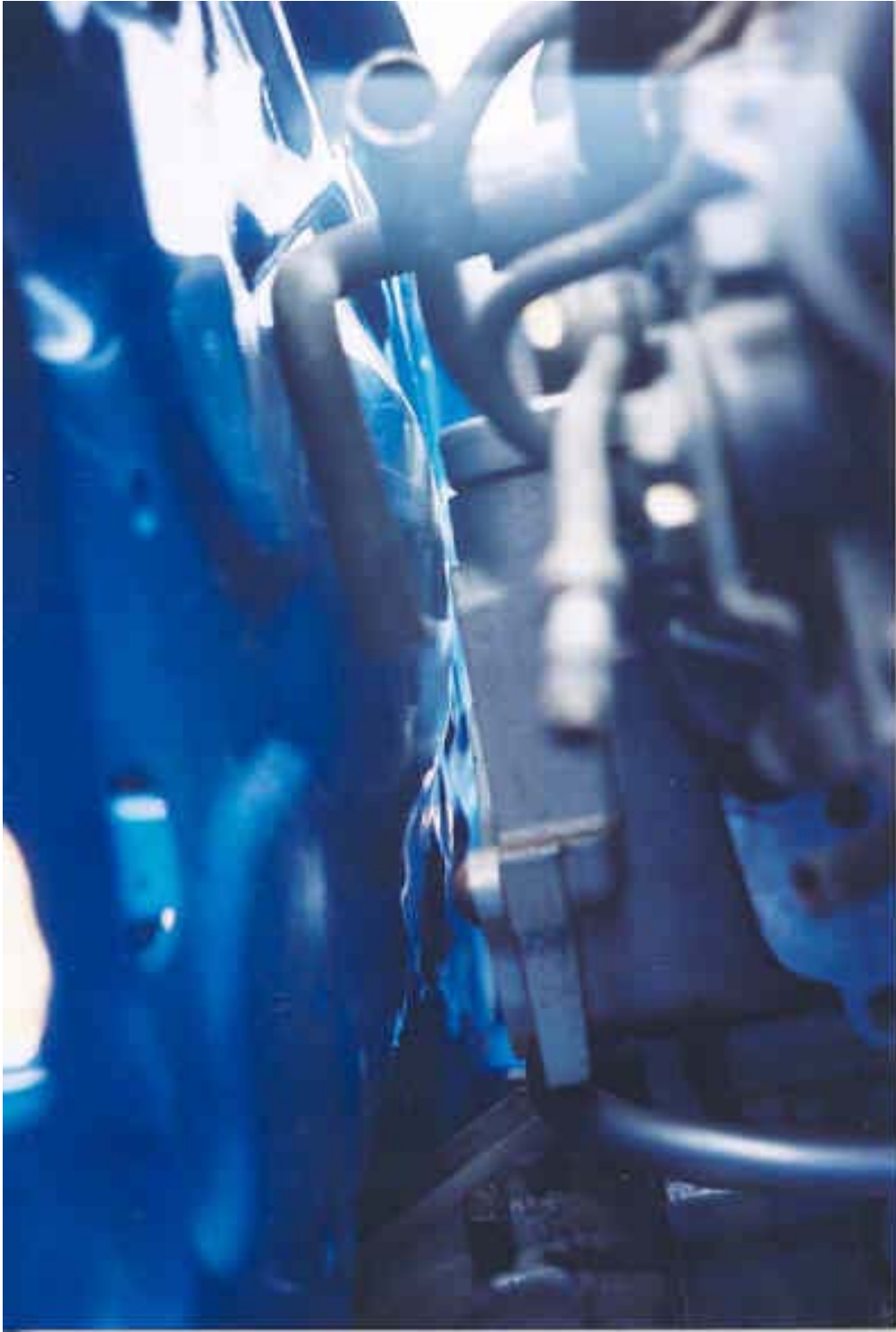


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- 4) The thermostat housing / cold water inlet (the big block thing bolted to the "back" of the head) can be removed to reveal two holes. If you put a finger in each hole and try and touch them together you will find you can't. There is a thin wall between these two water jackets in the head. Drill a hole through this so that water can get through from one side of the head to the other. You can get a long drill bit to it through the old hot water outlet (the big hole near exhaust port #4), then spend some quality time with a round file. Make it as big as possible (don't be stupid though). Oh, and stop the filings from going down into the block by plugging the holes in the head-block interface with play-dough. I used a vacuum cleaner to suck out the filings before removing the play-dough but you could just as easily use your \_\_\_ or your \_\_\_\_\_ if they can suck hard enough.

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- 5) Make up a plate to block off these two holes (not the one you just drilled dummy!) with a gasket in-between, if your sister/mom has left lipstick on it don't worry, it would probably make a good gasket goo. If you look closely at pic 5 you can kind of see the edge of this plate close to the firewall.



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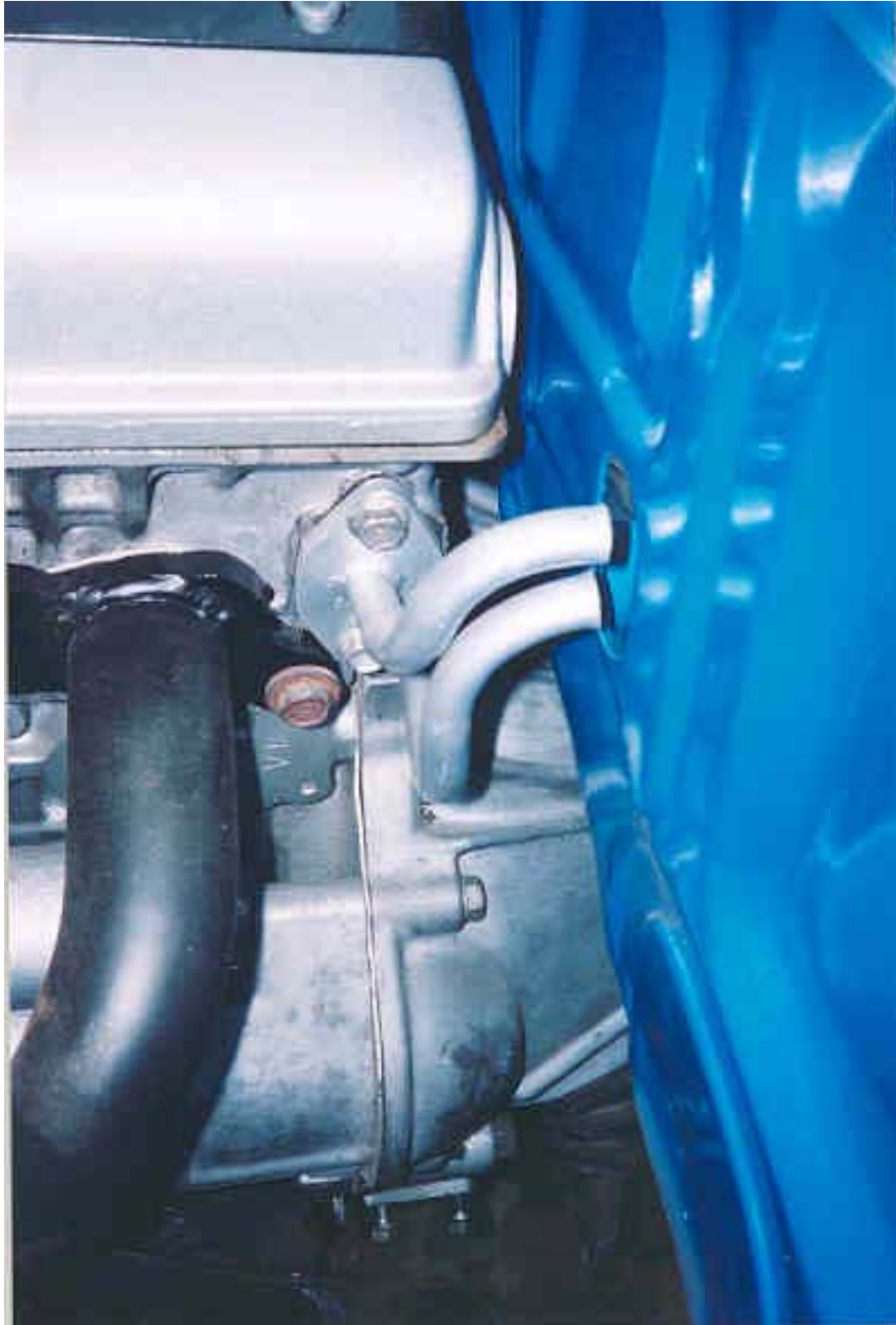
6) While you are round the back of the engine you may as well lathe up a round piece of alloy to plug the hole from the distributor which is now holding down the loose bits of paper on your study desk. And don't forget to put an O-ring on it.

7) Ahh. This bit sucks! You need to make the new hot water outlet. You just make a flange and weld a bit of bent pipe to it. Easy except that now you can't get to one of the bolts on the flange, so you grind a notch on the pipe and weld on a curved bit to fill the notch so you can get a 12mm socket through there (you can kind of see this in photo 5 (above) its on the lower side of the pipe). Now the only problem is the thermostat bypass. There is a hole on the top of the water pump behind the thermostat. Normally a pipe with an o-ring on it is pressed into here, and is tee'd into the big main hot water outlet pipe (check out a RWD 4AGE or 4AC). The problem is that there isn't much room so do the best you can. I got a piece to fit the water pump, put a o-ring on one end, pushed it into the water pump and cut it off so that there was enough protruding to fit a rubber bit of pipe on, then welded a short stump of the same pipe to the hot water outlet pipe (with a hole of course) and connected them with the aforementioned rubber hose. This can be seen in pic 6 just left of the dipstick. You can also see that hard to reach bolt to the left of the small ruber pipe.



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8) Now we just need the heater to work. Use the old hot water outlet for a small tube to go through the firewall into the cars heater (check out pic 7). And the water should return through an equal sized pipe to the one remaining hole on the back of the water pump (which just happens to be at the wrong side of the engine). I bent up some 12.7mm pipe for this which goes across the back of the head (actually tucked up under the slight overhang of the 20V head), and along the block to the pump. You can see it in pic 4. It's the shiny skinny pipe.



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9) The rest of the stuff (alternator, engine mounts, etc.) is common sense, but the remarkable thing about common sense is that it is remarkably uncommon! But I'm sure you can work it out.

10) Now go and find all your friends who said you would have to butcher the firewall or move the engine forward (stuffing the handling) and bludgeon them to death, bury them in a mass grave somewhere inconspicuous.

Footnotes: You must use crank trigger as you will no longer have a distributor, and the bird shit on the dashboard is for decorative purposes only.