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Location:

The transponder is fitted to the front of the steering rack mount. This is shown on the attached drawing and is the only approved position to locate this timing unit; it is preferable to drill holes as shown and mount it with screws and nuts. A drill with a right angle chuck drive may be a great help!!!

If you have fitted the alloy undertray you will need to cut a hole in it, to allow the transponder to actually "see" down to ground level. Be careful when jacking your car up at the front that you do not catch the transponder with the jack.

Wiring:

After fitting the transponder to the chassis it is then simple to run the double wire up from this unit towards the brake pipe union. The black earth wire can then be fitted with an eye terminal and attached to the chassis via the brake pipe fitting.

The transponder's red wire then needs to be spliced to an in-line fuse holder (not supplied). Fit a 5A fuse. A wire from the other end of the fuse-holder needs to be connected to the car's 12v supply, after the ignition switch, to avoid constant battery drain. The suggested location for wiring this connection is as follows:

Rover engines (Super-Grads):

Splice into (soldered connection or 3M splice connector) the switched power supply (white wire alongside the white with red trace) from the female side of the grey 14 pin connector mounted alongside the plastic manifold.

Vauxhall engines

Splice into the white wire that is one of the three that plug into the lower part of the ignition coil.

Ford engines

Use a double spade connector to share a connection to the "live" terminal of the ignition coil - the terminal which is normally connected with a white wire.

[View the diagram here](#)

Splice connectors, spade terminals, eye terminals and in-line fuse-holders can be bought at any good car accessory shop. Thanks to Derek Moore at Caterham Midlands for all this information.

Regards
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Update 10th March:

I've just fitted a transponder to Sheila's Vauxhall Grads car and it wasn't too hard. Here are some tips.

Drilling the Steering rack mount: A 90 degree drive for your drill chuck would be a great help I suspect. But I don't have one. I found it very easy if you first remove the radiator! No need to take it right off; leave the hoses in place - just remove the four nuts securing it and lift it up; chock it in place with something like a brick.

Wiring: I routed the transponder cable up to the brake pipe "T" and cut it off with about 4" of spare wire. I crimped an eye terminal onto the blue wire and secured it with the other earth wires at the brake pipe's "T" mounting stud.

I then crimped the transponder's brown wire to one end of the in-line fuse-holder. And found a bit of old scrap wire to crimp to the other end of the fuse-holder. I routed the scrap wire along the diagonal chassis brace to the coil, leaving the in-line fuse holder accessible near the brake-pipe "T". This wire is going to be connected to the battery positive when switched on so ensure that all the connections are properly insulated.

The scrap wire needed to be spliced into the white wire feeding the coil, as referred to in my earlier instruction (before I'd looked at a car!). This wire is not normally visible since it is one of three wires which make up the cable-form going to the coil. I just made a slit into this cable-form carefully with a blade and found the three wires. I bought one of those nifty crimp blocks which enables you to splice two cables together without cutting through either (without even stripping the insulation from either) - I don't know what they're called but that's what they do! Find them at Halfords in their rack of little plastic bags of electrical bits and pieces.

Removing an inch or two of the outer insulation (insulating tape) covering the three wires enabled me to splice my scrap wire into the white wire. I then re-wrapped the whole schmozzle with insulating tape. I put a fuse into the holder, switched on (master switch and ignition) and - Hey Presto! - the little red light came on!!!

Two more ideas for the transponder's live connection:

- Simon Reader suggests connecting to the "live" terminal of the rad fan thermal switch. (Which is "live"? Dunno. Try both, see which one makes the transponder's light come on!). Connection can be made with a "piggy-back" spade connector (I would suggest then wire-locking it in place).

- Simon Congdon points out that we could connect to the white wire on the back of the ignition switch barrel; a "piggy-back" spade connector would do this - but I think the transponder wire will have to be extended to reach to this point.

VIEW ON FRONT OF STEERING RACK PLATFORM FIGURE ONE

