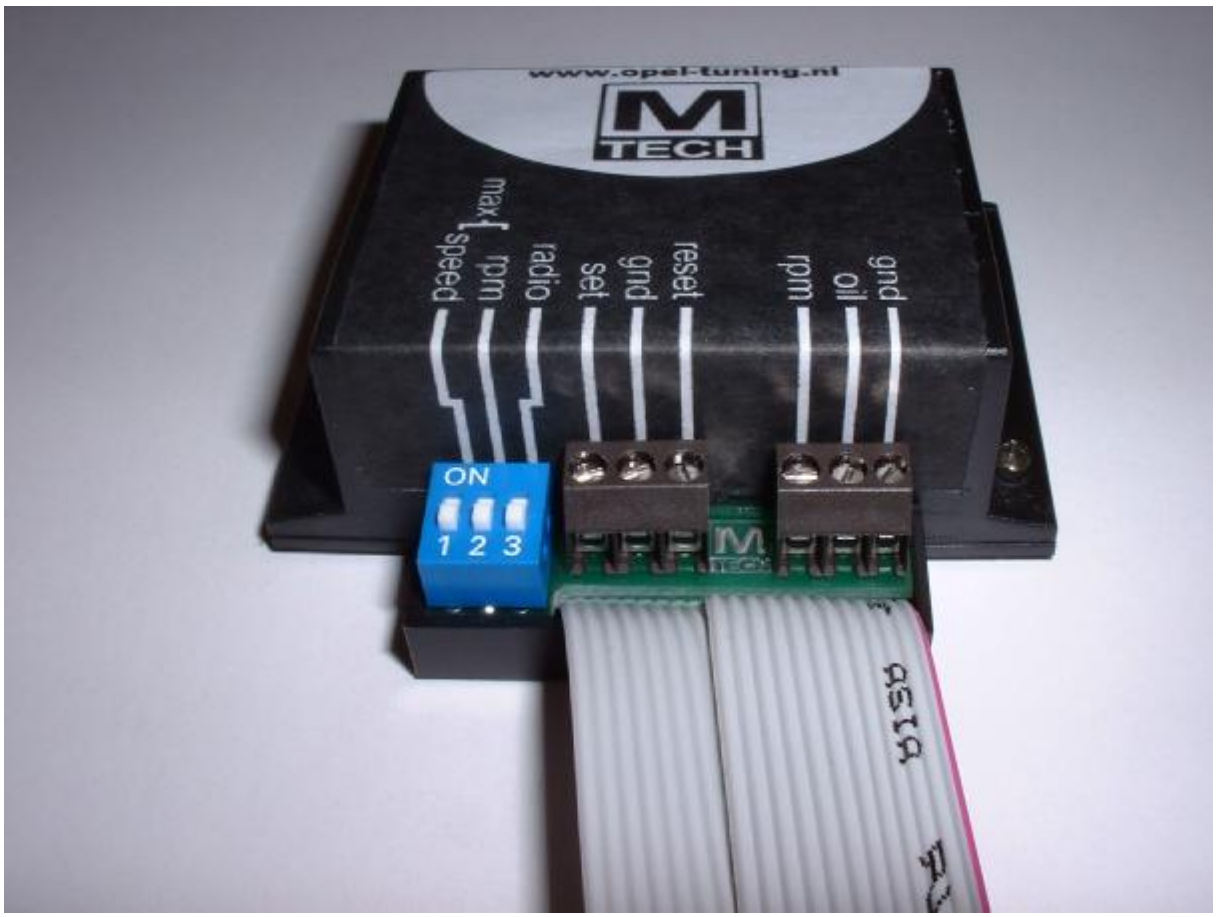
TID INFO-MODULE

Mounting guide &
Operating instructions

For Corsa-B / Tigra-A / Astra-F



Overview:

Note: Topics marked with a '*' are different for Astra-F. See chapter V for details.

I Introduction

1. Welcome!

Please read this documentation carefully; it provides a lot of useful information.
Have a lot of fun with your new info-module!

2. What's new?

M-Tech released a former version of that info-module. We now sell a new version of the module. The changes are listed below:

- Now shipped with black plastic case
- Red-Line Setup (4000 – 8500 Rpm)
- Long TID Cable Connectors
- Dual switch support (Set / Reset)
- Mounting without sawing works
- Easier Setup (now with hints!)

3. What do we provide?

In addition to the info-module (the black box, as you guessed), we supply:

- oil-temperature cable with plug (the long, red one)
- "engine-revolution-signal" cable (about 50cm, green or blue, without plug)
- Connector for rev-signal cable (green)
- Rafi-switch with mounted cable.

II Mounting Guideline

1. Removing the TID

(Better turn the ventilation off, so that no screws get lost in the duct)
Then, you have to use a small screwdriver to lever the grid towards the roof and to take it out

To dismantle the TID, you have to remove the ventilation grid first. Turn the grids down as seen on the image and use the knife as a lever to push the grid to your direction

As soon as you have removed both grids, you can loosen the screws of the TID

When you have taken the TID out, cut the white cable tie because it makes the further installation much easier.
Push the button and pull out the TID connector.

! **Please be careful when pulling out the connector. Some TID's, especially the older ones, are known to have a connector with weak soldered connection. If you discover a loose connector, it's no problem to repair it with a soldering iron. If don't know anyone with soldering experience, feel free to ask us.**
Please notice that we are not responsible for those weak soldered connections.

Now cut the cable tie, and take off the plastic cover, as shown on the photo. Please don't lose the cover.

2. Removing the instrument cluster

Below the ignition lock there are 3 screws which have to be removed

First you have to loosen the screws left and right of the steering wheel: Just turn the wheel about 90 degrees and remove the plastic caps.
Now you should able to remove the plastic housing. If you experience problems, it can be useful to remove the windshield wiper.

These screws also have to be removed. Please notice that there are 3 screws; also take a look at the right windshield wiper. Now you should be able to remove the large plastic piece.

2 more screws to remove….

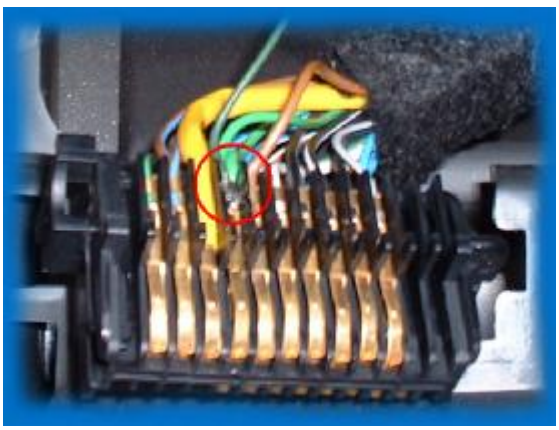
Now, you have to take a look at your tacho. If there is written K=*****, then you have an electronic tacho; it is possible to take out the instrument cluster.

-Removing the speedometer axle

If you have a mechanic speedometer (indicated by W=**** printed on the speedometer), you have to loose the
speedometer axle. Please loose the connection as it is indicated by the arrows.
Now take the instrument cluster a little bit out. Loose the speedometer axle behind the instrument cluster. Remove the whole instrument cluster now.

3. Connecting the engine revolution signal

This is the connector behind the instrument cluster. The *completely* green wire is the revolution signal.



Connect the included rpm wire with the cable connector

4. Mounting the oil temperature wire

Now we need to lay the cable for the oil-temperature. It's the long, red one. We suggest to stick the cable trough the hole where the engine hood unlocker is already laid. (Probably you want to use some spray oil). Please take care that the cable does not touch any hot engine parts.

5. Mounting the push button

We have designed your module with 2 push button variations. You can choose if you want to install the single push button, or you can take the original Opel or Vauxhall windshield wiper switch with 2 push buttons. If you decide for the windshield wiper switch solution, you have some advantages: Original Opel-design in your car, no "self-made" feeling. And, you have the advantage to use both (set / reset) switches. If you decide for the single button solution, don't worry. You don't have any lack of functionality.

- Mounting the single push button

You can mount your push button wherever you want. We prefer this solution, because it has some advantages. In case to sell your display-module, it's easy to get a new cover.
And, the place is easy reachable.

Connect the switch at the terminal called *set* and *gnd*. The order is not relevant.

- Mounting the windshield wiper with BC function

Replace the old windshield wiper switch with the new one. Just pull off the connector, then press the plastic lockings at the top and the bottom of the wiper. Now pull it out and replace them.
This is a picture of the windshield wiper switch. It is necessary to extend the existing wires (the red, the white and the grey one). We used simple cable connectors (as used for the rpm-signal). Depending on the place where you want to mount your info module, it could be sufficient to cut off the connector and to connect the wires to the terminal directly.

Connecting the cables of the windshield wiper wires. As you can guess, it is important which wire belongs to which terminal.

red	=	*set*
white	=	*reset*
brown	=	*gnd (ground)*

6. Mounting the info-module

Now it's time to mount the info-module itsself.

As you guessed, the red "oil-wire" is connected to the terminal *oil*, the engine revolution signal is connected to the *rpm* terminal. Please note that it is not necessary to connect the *gnd* terminal next to the *oil* terminal. That is only necessary if you experience problems caused by bad grounding of your oil temperature sensor.

Now lay the grey cables to the original TID connector. Perhaps you'll need a little bit patience…

Now connect the TID connector as shown. Please note that the red cables are on the "shorter" side of the connector. The connector only fits one way. Don't use violence. This is a quite critical step, if you are unsure, don't hesitate to ask us.

Another critical connection: Connect the male connector to the TID. ***Attention***: Make sure that the connector is connected *exactly as shown on the photo*. Connecting it vice versa will inmediately destroy your TID (tested!). Also notice the yellow box at *II.1.*

7. Storing the info-module

The best place to store the info-module is near the ignition lock or near its plastic cover. It's quite important to mount the module to a place you can easily access. But we are covinced you will find a good place.
Now you can insert the instrument cluster. (Make sure you can access the DIP-Switches after insertion).

8. The first operation:

Now it's time to start the module. Make sure you switched off your radio and turn the key to "*II*". The TID should now illuminate and M-Tech should appear. If the TID stays dark or no text appears, please check all cable connections once more. The connector to the TID has to fit quite tight. Push it a little bit more. Also check the TID for cold soldered connections (Refer to *II.1*). Try to reconnect the original TID-connector to the info-module. *NEVER* try to insert connectors vice versa. That will lead to death of the TID and/or the info module.

III Setup

1. Glossary

The setup of the info module is controlled by 3 dip-switches. Switch 3 "on" means that the right switch is pushed to top, switch 3 "off" means that it is pushed to the bottom again.

2. Radio Setup

Original Opel-radio which originally used the TID	=	Radio (3) ***OFF*** (!)
Third-Party radio without TID Information	=	Radio (3) ***ON*** (!)

3. Speed –Setup

- Switch off the module. (turn radio and ignition off).
- push DIP switch "speed" (1) ON
- Turn the key; "***SPEED-S***" appears, then ***" 0 IMP"***
- Now you should drive exactly 100 metres for calibration. Please do that exactly. We recommend to take a piece of chalk, a large ruler and drive to a calm road and begin to make your own 100m
- If you need another try, please press the "set" button. The counting starts from zero again.
- When you are ready and confident, push DIP switch "speed" (1) OFF. "****SAVED****" appears.
- If you have done something wrong or accidently pushed the DIP switch "speed", then you can reject the actual measurement. Switch off your ignition. "****CANCEL****" appears, no chances have been stored.

4. Rpm-Setup

- Switch off the module. (Turn radio and ignition off).
- push DIP switch "rpm" (2) ON
- Turn the key, "***RPMSETUP***" appears.
- With your push button you can choose between the options:
  - ***3 CYL*** = Option for x10xe
  - ***4 CYL*** = All other engines
  - ***OFF*** = No rpm wire connected (Rpm-Option is skipped)
- When you are ready and confident, push DIP switch "rpm" (2) OFF. "****SAVED****" appears.
- You also can reject changes by first switching the ignition off. "****CANCEL****" appears.

5. "Max" Setup

With this option, you can adjust when the redline-mode is activated. The redline mode lets the TID blink when the engine revolutions exceed a maximum limit. This limit can be adjusted.

- Switch off the module. (Turn radio and ignition off).
- push DIP switch "speed" (1) *AND* "rpm" (2) ON
- Turn the key, "***MAXSETUP***" appears.
- The actual limit is shown.
- With the push button you can choose the limit. When it exceeds 8500 rpm, it starts with 4000 again.
- To save changes, push BOTH dip switch "speed" (1) and "rpm" (2) OFF. "***SAVED***" appears.

IV Operating instructions

1 General

To navigate through the different menu items just press the push-button. If you eventually dismantle the module or remove the battery of your car, you're going to lose your highscores, but not your setup data.
To reset a function, you'll just have to press the push-button for 2 seconds. Or – if you have a 2nd push-button connected, it is sufficient to press the 2nd button *shortly*.

2 Short distance counter

This mode scales automatically, that cannot be changed manually. To delete the saved data, just press the push-button for about 2 seconds, or press the "reset" button, if available.

3 Average speed

To delete the saved data, just press the push-button for about 2 seconds, or press the "reset" button, if available.

4 Voltage

This mode shows the battery voltage.

5 Oil-temperature

This function shows the actual oil-temperature. Not available when no oil-temperature sensor is connected.

6 Quartermile mode

If you select this option, you'll first see the current highscore. To start the counter, press the push-button for about 3 seconds. The display then shows "STOP CAR" until the wheels stop. When the cars stands still, the display shows "GO GO GO". As soon as you start to drive, the counter starts and stops when you've driven the distance of a quarter mile.
If you've driven a new highscore, the display will show "HISCORE" and display your time blinking. If not, your time will be displayed for a short time and then the module shows the current highscore again.
If you want to delete your highscore, turn off your ignition. Hold the button, switch on the ignition, and switch it off again, while still holding the button.

6.7 0-100km/h mode

Like Quartermile, but the counter stops as soon as you've reached exactly 100km/h.

6.8 0-200km/h mode

Like 0-100, but the counter stops as soon as you've reached exactly 200km/h.

6.9 "stehender Kilometer"
Like Quartermile, but the counter stops as soon as you've driven the distance of 1000 meters.

6.10 Vmax
This mode shows you're maximum driven velocity. To delete the saved data, just press the push-button for at least 3 seconds. Please note, that due to technical difficulties you're data will only be saved if the modes "VMAX" or "SPEED" are active.

V Mounting Instructions Astra-F

1. Mounting differences
Only few differences are to consider. We recommend to store the info-module behind the TID itsself; because there is a lot of free space behind the Astra-F TID.

2. Removing the Astra-F TID

Remove the rubber tray by pulling if off.

Behind the rubber tray, you'll find two screws (the inner ones), which fix the TID. Remove them. Now there comes the hard part: You'll have to remove the TID by pulling it out. It's a quite hard work; but with a little bit patience, you'll succeed.

3. Mounting/Storing the info-module

The TID info module is stored behind the TID. There its easy to access the dip-switches. When you have removed your TID for the first time, it's wise to remove the metal brackets which are situated on top of the TID. So its easier to remove the TID the next time.