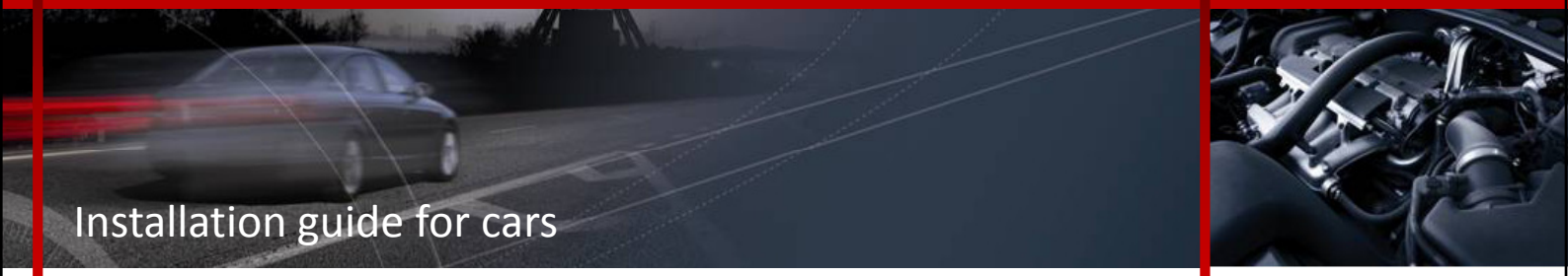
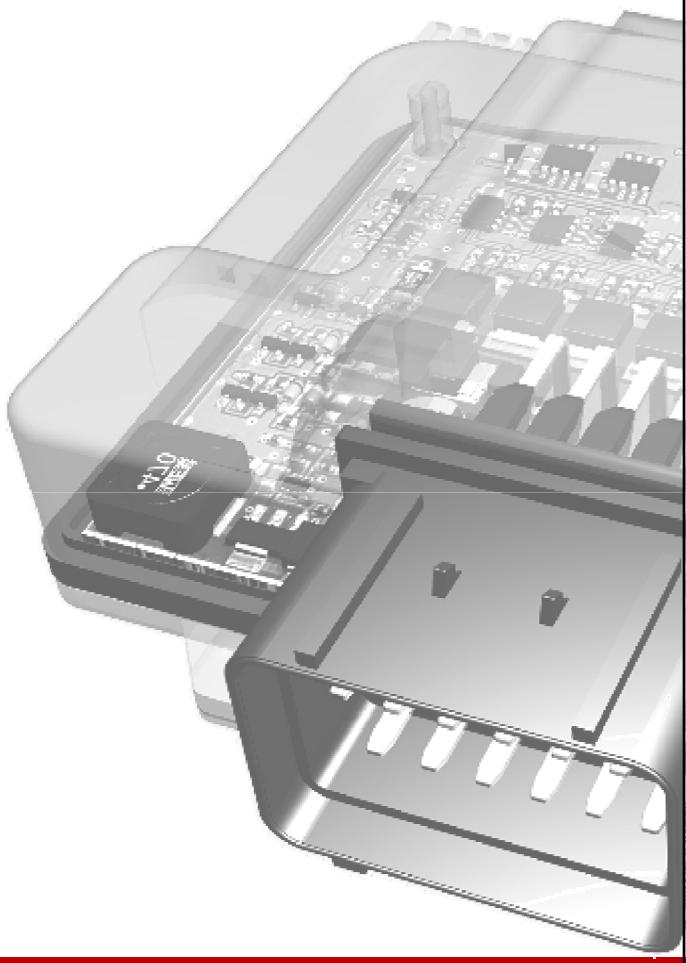


Installation guide for cars

BMW

1 Series
3 Series
5 Series
X1
X3

1995 cc



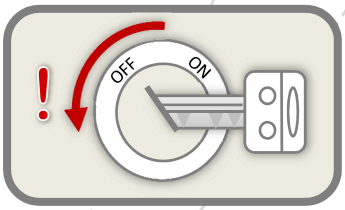
General instructions

Read this installation guide carefully before starting the installation so that you will be able to use all the technical advantages of the systems and do not start with the installation before you have read and understood the instructions.

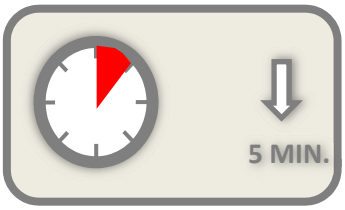
Your tuning system was designed and manufactured with great care and therefore should be also handled with care. If you comply with the advice given below you will avoid an early termination of the product guarantee and you will be enjoying your product for years to come.

Never install the system if the ignition is on. Pull the ignition key. After switching off the ignition, wait for 5 minutes until all electric devices are turned off.

Please absolutely consider these references.



Ignition switch off .



Wait after switching the ignition off 5 min.

If possible, install the module in a dry area in the engine compartment. Humidity and wetness contain minerals which cause corrosion to the electronic circuits. Fix the harness and protect it from humidity. Before every engine wash, remove the entire tuning system.

Install splash-proof

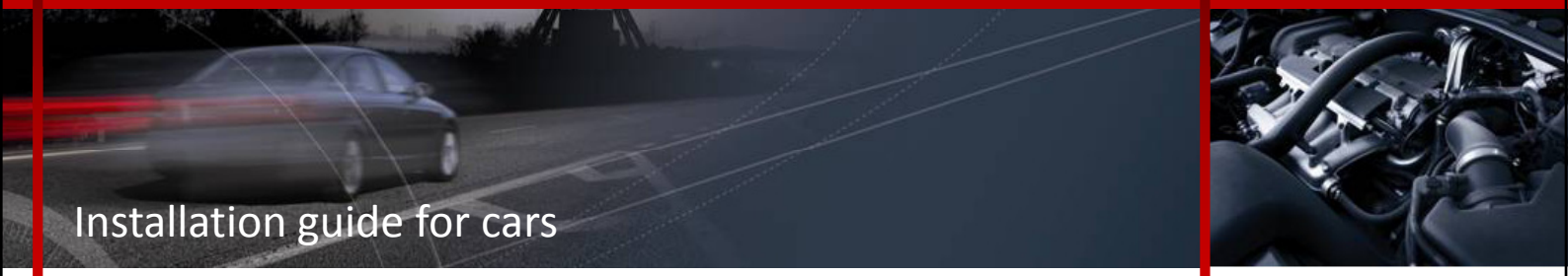
Attention with engine washing.

No installation on hot engine parts.

Do not fix tuning systems to engine parts that could heat up. Never fix the module directly or close to the engine (engine block). High temperatures can reduce the lifespan of electronic devices and can deform or melt specific plastics materials.

Take care that the harness does not touch the parts in motion and the metal parts to avoid friction. Do not make any changes to the harness (do not make it any longer or shorter).

In case of the malfunctioning of the system due to any non-compliance with the instructions during the installation of the tuning modules, the product guarantee will be terminated.



Installation guide for cars

BMW 1 Series / 3 Series / 5 Series / X1 / X3 / 1995 cc

Installation

Localise the rail pressure sensor (**1**), the boost pressure sensor (**2**) and the camshaft sensor (**3**). Open each of the connectors and connect the cable adapter with the sensors. Connect the red cable on the +12V Connector in the engine compartment. Connect the ground cable to the car body mass.

Advice! You can't find the sensors? The 3-pin rail pressure sensor (**1**) is located directly in front of the common rail bar. The 3-pin boost pressure sensor (**2**) is located right next to the common rail bar. The 3-pin camshaft sensor (**3**) is located rear left side of the common rail bar. Note that you don't connect the adapter cable on other plugs. On the following pages you will find an illustrated guide.

Move the adapter cable not in parallel with injection pipelines or ABS-control device connecting leads. Keep to very big distances. Fix the cable harness with cable binders. Connect the module with the adapter cable.

The module should be obstructed possibly against warmth and splash water protected.

Settings

The module is preset on the vehicle and needs no other change of the settings. Now the vehicle is ready for a test run.

The Performance tuning can obtain a different result throughout the series. It's possible that the engine power turns out to be too high or too low.

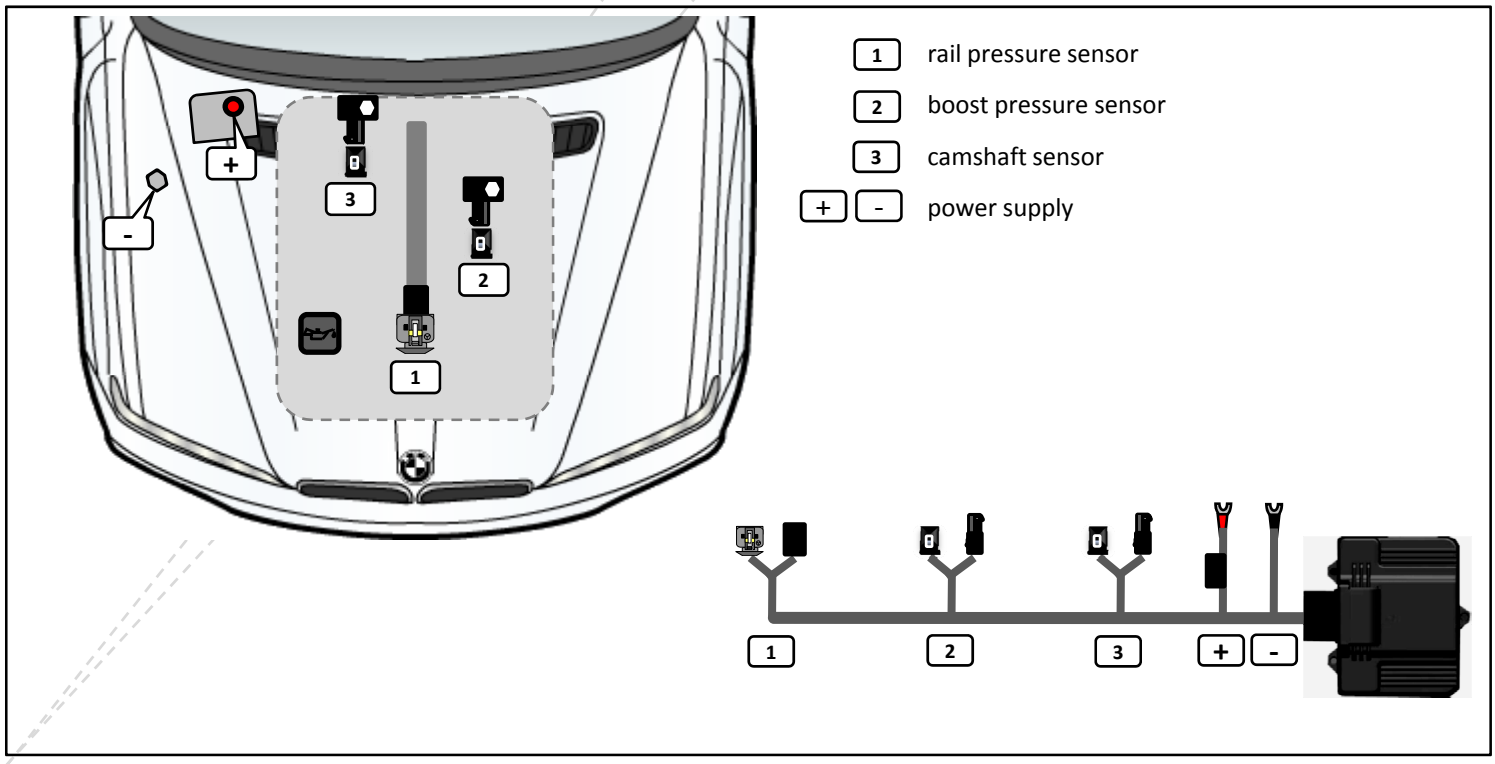
If the power should be too high, it is shown by a strong soot generation, disturbed engine run, engine misfire or the initiation of the engine emergency program.

See the attached sheet module fine settings.

If you still have questions or you are not quite sure?

Contact us, a technician will gladly help you!

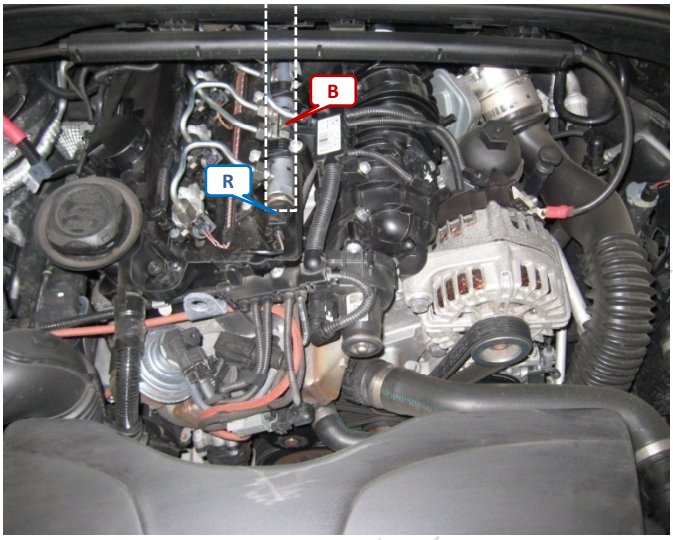
Installation principle



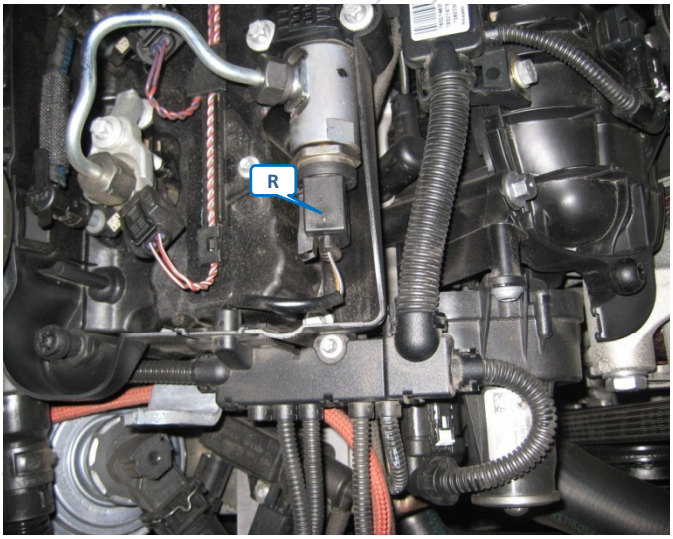
BMW 1 Series / 3 Series / 5 Series / X1 / X3 / 1995 cc

Installation example: BMW X1 2.0 d 177 hp

Open the engine hood. Remove the engine cover (**D**). The engine cover (**D**) is not screwed.



Connection rail pressure sensor (R):
Localise the common rail bar (**B**). The rail pressure sensor (**R**) is located directly in front of common rail bar (**B**).

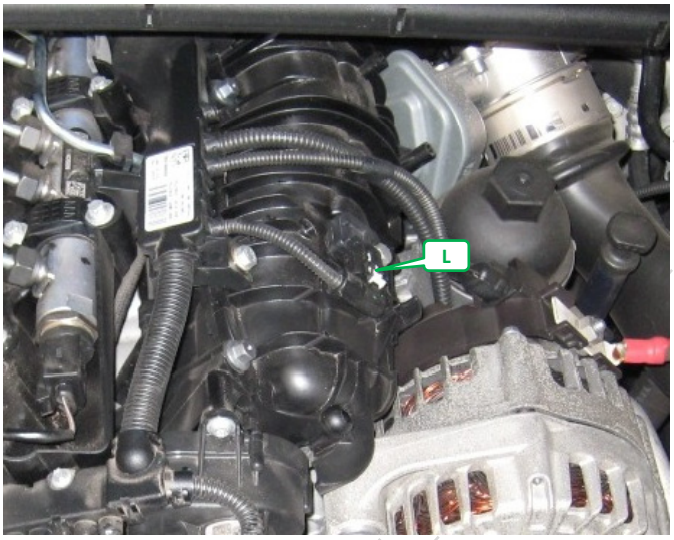


To disconnect the rail pressure plug press the locking lever. Connect the rail pressure adapter between the both connections.

BMW 1 Series / 3 Series / 5 Series / X1 / X3 / 1995 cc

Installation example: BMW X1 2.0 d 177 hp

Connection boost pressure sensor (L) :
The 3-pin boost pressure sensor (L) is located right next to the common rail bar.



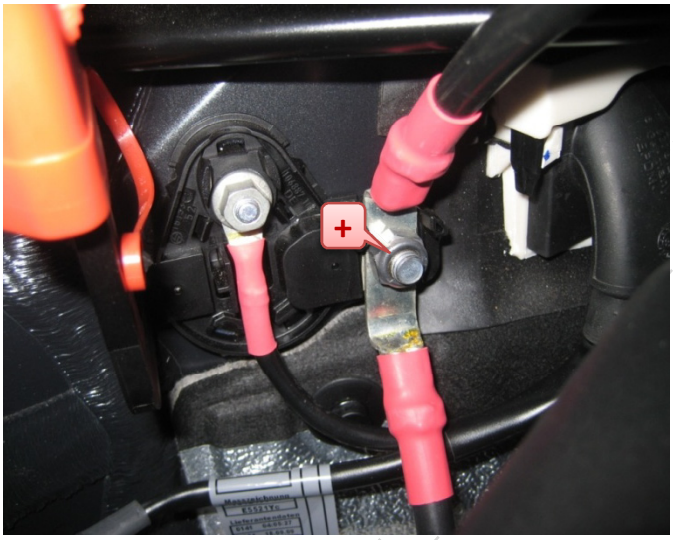
Connect the boost pressure adapter between the both connections.

Connection camshaft sensor (N):
The camshaft sensor (N) is located rear left side of the common rail bar.

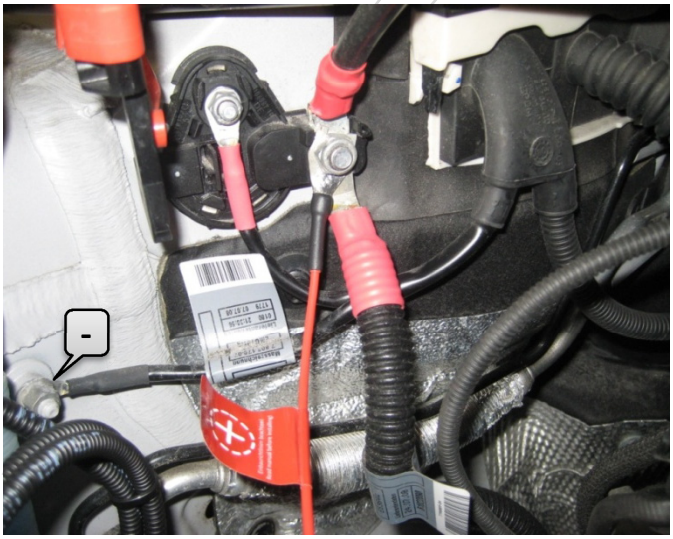
BMW 1 Series / 3 Series / 5 Series / X1 / X3 / 1995 cc

Installation example: BMW X1 2.0 d 177 hp

Connect the camshaft signal adapter between both connections.



Remove the cover from the 12V connection in the engine compartment. Connect the +12 V cable with the 12 V connection.



Connect the negative connection with the car body ground.

BMW 1 Series / 3 Series / 5 Series / X1 / X3 / 1995 cc

Installation example: BMW X1 2.0 d 177 hp

Recommended mounting position (**I**)

Move the adapter cable not in parallel with injection pipelines or ABS-control device connecting leads. Keep to very big distances. Fix the adapter cable with cable binders. Connect the module with the adapter cable.

Check all connections again and reassemble the vehicle in reverse order.

BMW 1 Series / 3 Series / 5 Series / X1 / X3 / 1995 cc

Trouble shooting

Error descriptions	Problem solution
The car doesn´t start.	- Check all connected components. - Are the adapter plugs in the right position? - Do the LED`s work properly (module fine settings)? - Are the Jumpers positioned correctly? - Is the adapter cable the right one?
The car doesn`t run smoothly. The engine is bucking.	- Are the adapter plugs in the right position? - Have you changed the jumper position (increase in performance / diminishing in performance)?
The emergency program runs immediately. The Malfunction Indication Light (MIL) flashes in the Instrument Cluster.	- Lower the performance by setting the jumper on a negative value(one or two positions →lower). - Contact the support.
The emergency program (fail-save) runs in higher rpm.	- Lower the performance by setting the jumper on a negative value (one or two positions →lower).
The car shows no extra performance.	- Raise the power by setting the jumper on a positive value (one or two positions →higher).
The car produces too much soot.	- Lower the performance by setting the jumper on a negative value (one or two positions →lower).
How can I get back to the original state of the car?	- Turn the ignition off. Wait, until all electric power consumers are switched off. Disconnect the module and the adapter from all connected components. The car is now back in the series performance.

Module fine settings

Information

The Performance tuning can obtain a different result throughout the series. It`s possible that the engine power turns out to be too high or too low.

If the power should be too high, it is shown by a strong soot generation, disturbed engine run, engine misfire or the initiation of the engine emergency program.

In the emergency program the vehicle drives with a strongly decreased performance. In some vehicle models Malfunction Indication Light (MIL) flashes. The emergency program is a protective function of the engine and can be deactivated at any time.

With fine tuning these problems can be resolved. A fine tuning is normally not necessary, since the module was balanced and programmed for the respective vehicle. Before a change is made, you should contact your salesman or the manufacturer of the system. A technician will gladly help you.

Module side view

On the side window of the unit you can see two LED's and some jumpers. The left set of jumpers is used for the program selection. The right set of jumpers is used for fine-tuning the Tuning box (see ill.1).

Fine-tune jumper (right)

Only one jumper must be present in this row. Jumper on T position gives settings as made in configuration program. Now you can raise or lower the power output by setting the jumper on a positive or negative value. (see ill.2, ill.3 and ill.4). Jumpers which are put in horizontal position have no influence.

Program jumper function (left)

0, 1 or 2 jumpers can be applied in this row (see ill.5) Should a not configured program be selected, program 1 is automatically called.

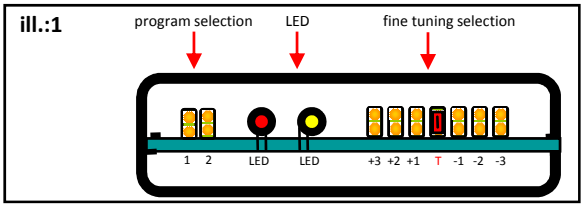
Jumper 1	Jumper 2	Program
off	off	1
on	off	2
off	on	3
on	on	4

LED`s

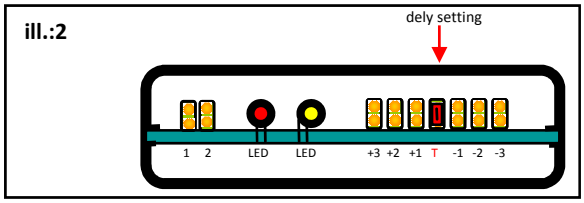
Both LED`s flashes only while driving. You can`t check the LED`s when you turn only the ignition on.

Red LED → The device is ready for use.
Yellow LED → The tuning is active.

ill.:1

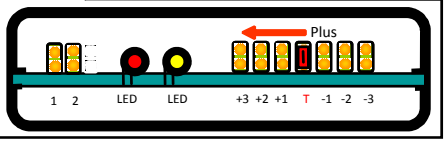


ill.:2



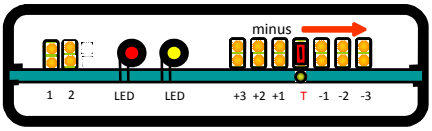
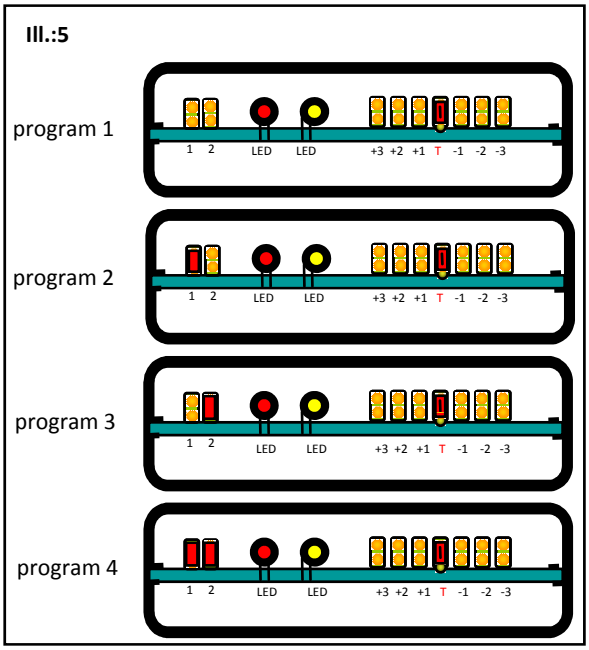
ill.:3

changing the supererogation	plus
position T	0%
position +1	+10%
position +2	+20%
position +3	+30%



ill.:4

changing the supererogation	minus
position T	0%
position -1	-10%
position -2	-20%
position -3	-30%



Ill.:5