



## **STAG-TAP-01/02**

**Timing Advance Processor**

**CONNECTION AND PROGRAMMING INSTRUCTIONS**

**V1.3.3**



**Manufacturer:**

**AC Spółka Akcyjna.**

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### **1. SET INCLUDES:**

1. STAG-TAP-01 / 02 - timing advance processor
2. Wiring bundle
3. CD – configuration software, connection and programming instructions

### **2. BEFORE BUYING**

Before purchasing the device is important to check the type of crankshaft position sensor mounted in the car, by which you can select the type of Time Advance Processor (TAP-01 – for Inductive sensor, TAP-02 –for digital sensor). Based on the type of the signal from the crankshaft position sensor which is in your car. By that, you can tell if our TAP supports the model of the vehicle you are interested in (list of supported waveforms is located in section 11 guide).

### **3. INTENDED USE**

Timing advance processor is a microprocessor based device for changing the spark lead angle of the engine powered with LPG or CNG.

Due to the higher octane number of gas fuel, the combustion time of the air and gas mix is longer than in the case of air and petrol mix. Therefore, ignition of the air and gas mix should occur earlier than in the case of petrol. Timing advance processor improves response of an engine powered with gas, reduces gas fuel consumption and reduces the risk of back-fire in the case of previous generation systems. Timing advance processor is particularly recommended in the case of CNG systems.

**STAG-TAP-01** timing advance processor has been designed for installation in cars equipped with an induction crank shaft position sensor, whereas **STAG-TAP-02** has been designed for installation in cars equipped with an Hall effect or optical crank shaft position sensor.

### **4. OPERATION OF THE SYSTEM**

Timing advance processor is incorporated in the engine crank shaft position sensor circuit and additionally into the camshaft position sensor circuit (optionally). It generates a signal sent to the petrol computer advanced in comparison to the signal from the sensor by a few or more degrees, which results in additional injection and ignition advance by the set angle value. The signal from the gas electro-valve (detecting the type of fuel) and throttle position sensor TPS (idling detection) is used to control the operation of the timing advance processor; optionally the signal from the MAP-sensor (load signal for the 2D or 3D map). Advanced ignition timing (positive angle value) results in an earlier ignition of the mixture inside the cylinder, which translates into optimised combustion process of the gas and air mixture.

### **5. CONNECTION DIAGRAM AND INSTALLATION INSTRUCTIONS**

Install the timing advance processor in the engine compartment, so that it is not exposed to high temperature, water, oil or fuel.



### NOTE!

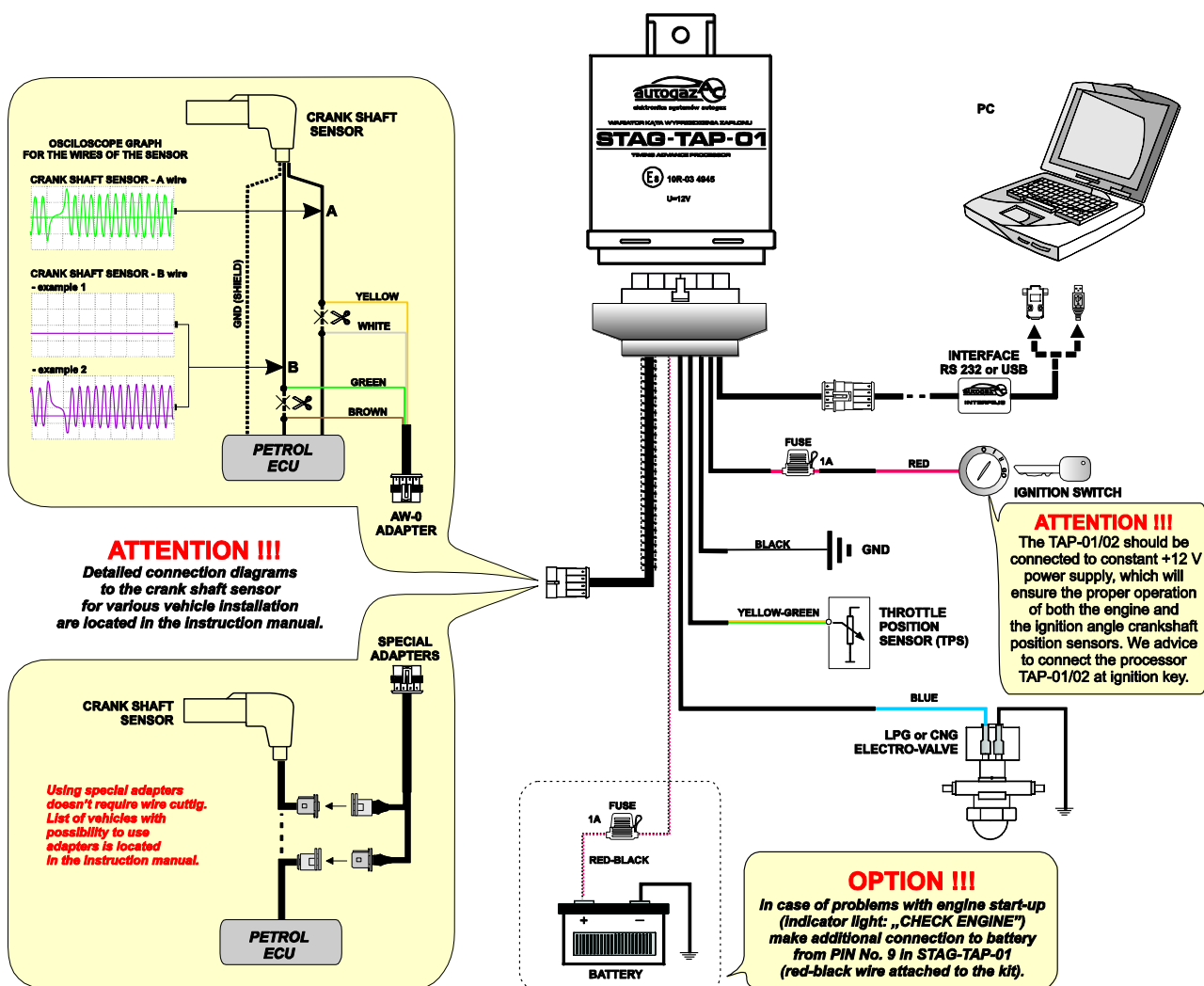
Install the controller vertically by the installation eye, using a screw; the socket must be positioned downward to protect it from water.

Rubber gaskets protecting the bundle socket should be installed carefully in order to seal the whole casing.

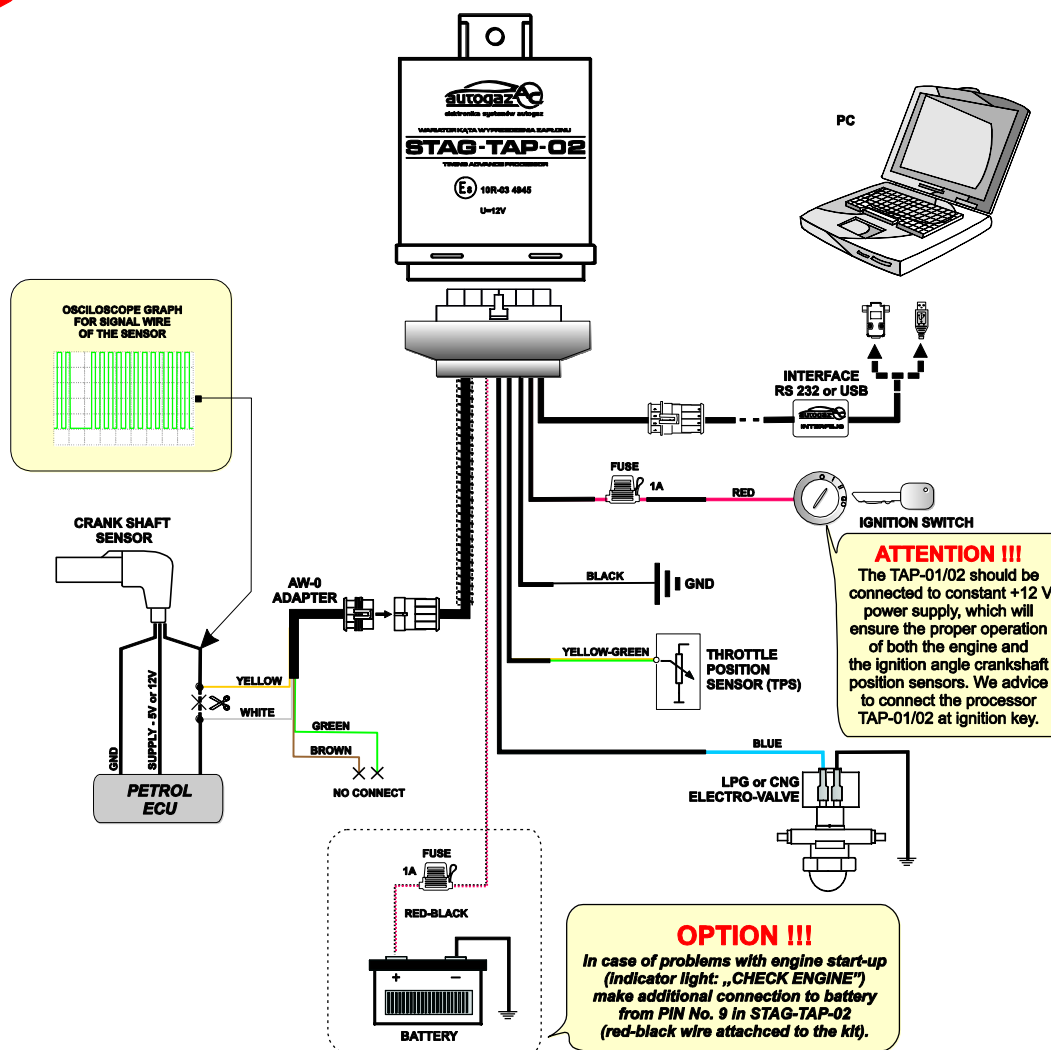
Electric connections should be soldered, carefully insulated and protected from short circuits and dampness.

The method of determining the sensor type:

- 2-pin connector – inductive sensor,  
resistance for a typical sensor is approximately 1000 ohms.
- 3-pin connector – inductive sensor (two pins – sensor, the third pin – GND):  
resistance between the two pins of the sensor should be approximately 1000 ohms, while the third pin from the ECU side should be connected to GND.
- 3-pin connector – Hall effect or optical sensor (GND, power supply, signal):  
one wire from the ECU side is connected to GND, the second to the voltage after the ignition, while the third one is a signal wire.



STAG-TAP-01 connection diagram (inductive crank shaft position sensor)



STAG-TAP-02 connection diagram (Hall effect or optical crank shaft position sensor).

## 6. LEADS OF THE TAP BUNDLE

No.	CONNECTION DESCRIPTION	COLOUR OF THE WIRE	TYPE
1	GND	Black	Power supply
2	Ignition switch	Red (1A fuse)	Power supply
3	RXD	White	Signal
4	TXD	Blue-Black	Signal
5	Camshaft ECU	Orange-Grey (optional)	Signal
6	B crank shaft ECU	Brown	Shielded
7	A crank shaft ECU	White	Shielded
8	+12 LPG or CNG	Blue	Signal
9	Battery	Red-Black (optional)	Signal
10	TPS	Yellow-Green	Signal
11	MAP	Grey (optional)	Signal
12	Camshaft sensor	Orange (optional)	Signal
13	B crank shaft sensor	Green	Shielded
14	A crank shaft sensor	Yellow	Shielded



## 7. OPERATION STATUS SIGNALLING

LED communicates operation status of the STAG-TAP.

LED		Status
Red	On	No revs (impulses from the crank shaft position sensor)
Red	Flashes	Impulse error (possibly incorrect connection of the sensor wiring)
	Off	The engine is running on petrol.
Green	Flashes	The engine is running on gas, the STAG-TAP is off – low revs (or a different cause)
Green	On	The engine is running on gas, the STGA-TAP shifts the impulses.
Green and Red	On	Software change, the failure of the STAG-TAP or its software.

## 8. CONFIGURATION VIA SWITCHES

### NOTE!

Configuration of the timing advance processor via switches and potentiometer must be performed while the **SW4** switch is **OFF**.

1) The switch controls the operation mode and basic settings.

<b>Operation mode:</b>	<b>MANUAL</b> (switches) <b>OFF</b>	PC (RS232 interface ) <b>ON</b>		
<b>TPS type:</b>	Standards	Reverse		
SW 4	<b>OFF</b>	<b>ON</b>		
<b>Ignition advance:</b>	6 degrees	8 degrees	10 degrees	12 degrees
SW 2	<b>OFF</b>	<b>OFF</b>	<b>ON</b>	<b>ON</b>
SW 1	<b>OFF</b>	<b>ON</b>	<b>OFF</b>	<b>ON</b>

2) TPS threshold potentiometer sets the idling detection point.

TPS type	Setting range
Standard TPS	0 – 2.5 [V]
Reverse TPS	5 – 2.5 [V]

## 9. CONFIGURATION VIA PC

### NOTE!

Configuration of the timing advance processor via PC must be performed while the **SW4** switch is **ON**.

Wiring bundle of the timing advance processor is equipped with a diagnostics connection. TAP may be connected to a PC via RS232 or USB interface. “AcTap.exe” software enables examining system operation and setting operation parameters.

Once the communication with the device has been established, the software shows received signals and operation status in the “**Parameters**” window. In the event the signal is correct, its name is displayed against a green background, otherwise the background in red. All signals must be correct or within a preset range for the device to start generating advanced impulses.



### Signals displayed by the software

**Status** - operation status of the timing advance processor : **Active**, **Passive** (TAP is not shifting impulses), **Disconnected** (signal from the sensor is sent directly to the output).

**Impulses** - impulses from a disconnected crank shaft position sensor:

**OK** (correctly identified impulses from the sensor, device synchronised),

**Absent** (no impulses, e.g. no engine revs),

**Error** (an incorrect connection identified at the induction crank shaft position sensor while the "Connection control" is ON – confused A and B inputs).

**Fuel** - type of fuel supplied to the engine at a given time – **PETROL** or **GAS**.

**Power** - device power supply voltage (minimum 8V).

**TPS** - throttle position sensor voltage.

**Rpm** - revolutions of the crank shaft (minimum 400, maximum 10000 rpm).

**Angle** - angle of the crank shaft rotation, in degrees, by which impulses at the device output are advanced in comparison to the impulses from the connected sensor.

**CKP** - voltage of the signal of the crank shaft position sensor.

**Potentiometer** – position of the potentiometer

**MAP** – MAP-sensor voltage value

### Available settings

**Switch** - positions of the switch at the bundle socket, defined as **ON** or **OFF**, 1 through 4.

**Impulse shifting** - in the event this option is available, it must be enabled in order for the timing advance processor to start generating shifted impulses from the crank shaft position sensor.

**Camshaft impulse shifting** - enabling this option, if available, results in generating shifted impulses from the camshaft position sensor.

**Sensor Connection control** - this option is available at the induction crank shaft position sensor; it identifies incorrect connection of the sensor (confused A and B inputs).

**Reverse TPS** - enabling this option results in changing interpretation of the TPS threshold: standard TPS – low revs below the threshold value, reverse TPS – above the threshold value.

**TPS threshold** - voltage of the throttle position sensor defining the limit for the engine operation at low revs, where generation of shifted impulses is disabled.

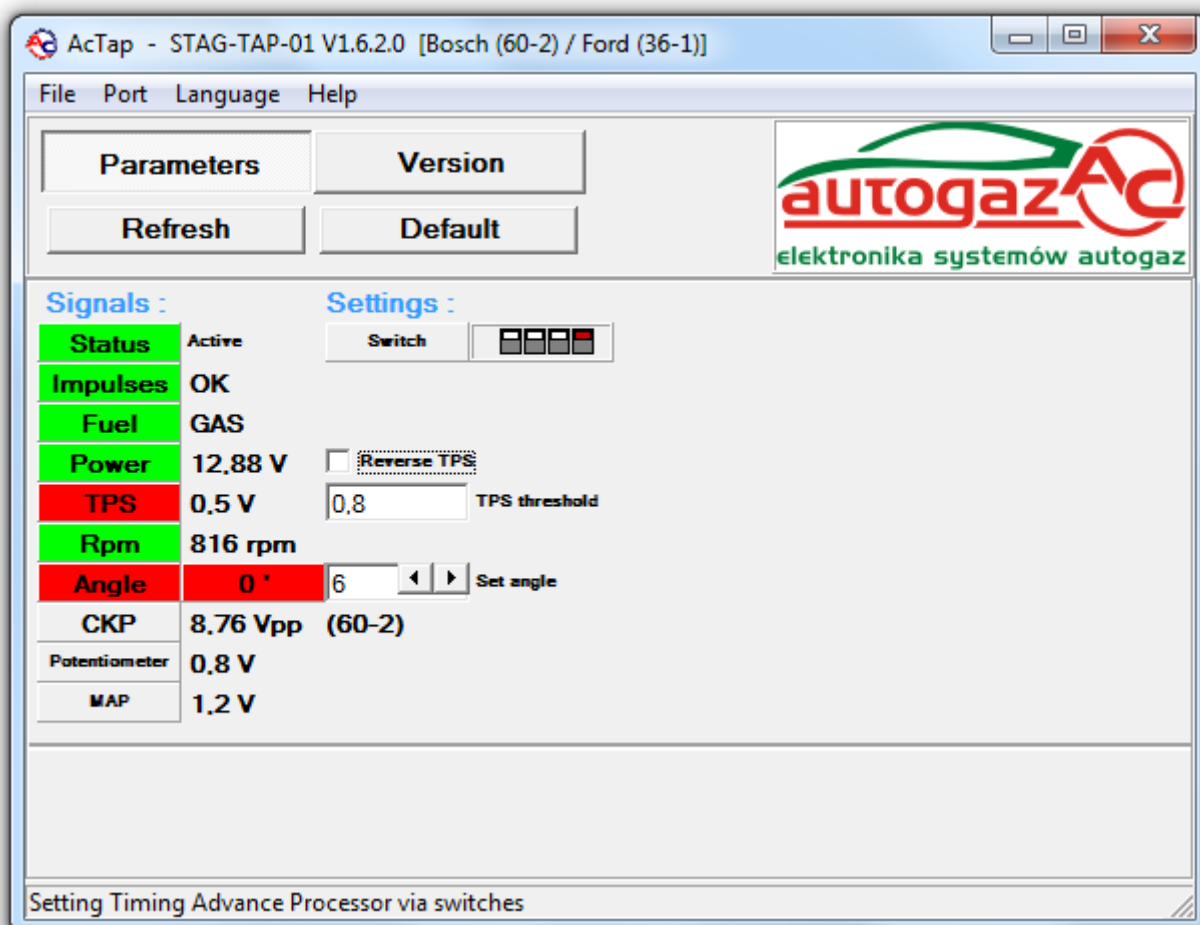


**RPM threshold** - this option, if available, defines engine rev value below which generation of shifted impulses is disabled.

**Set angle** - value of the angle of the crank shaft position, in degrees, by which impulses from the sensor will be advanced.

#### Settings available for TAP-02

**Input signal threshold** – input signal voltage value, which determines the level, at which the input signal is interpreted as high.

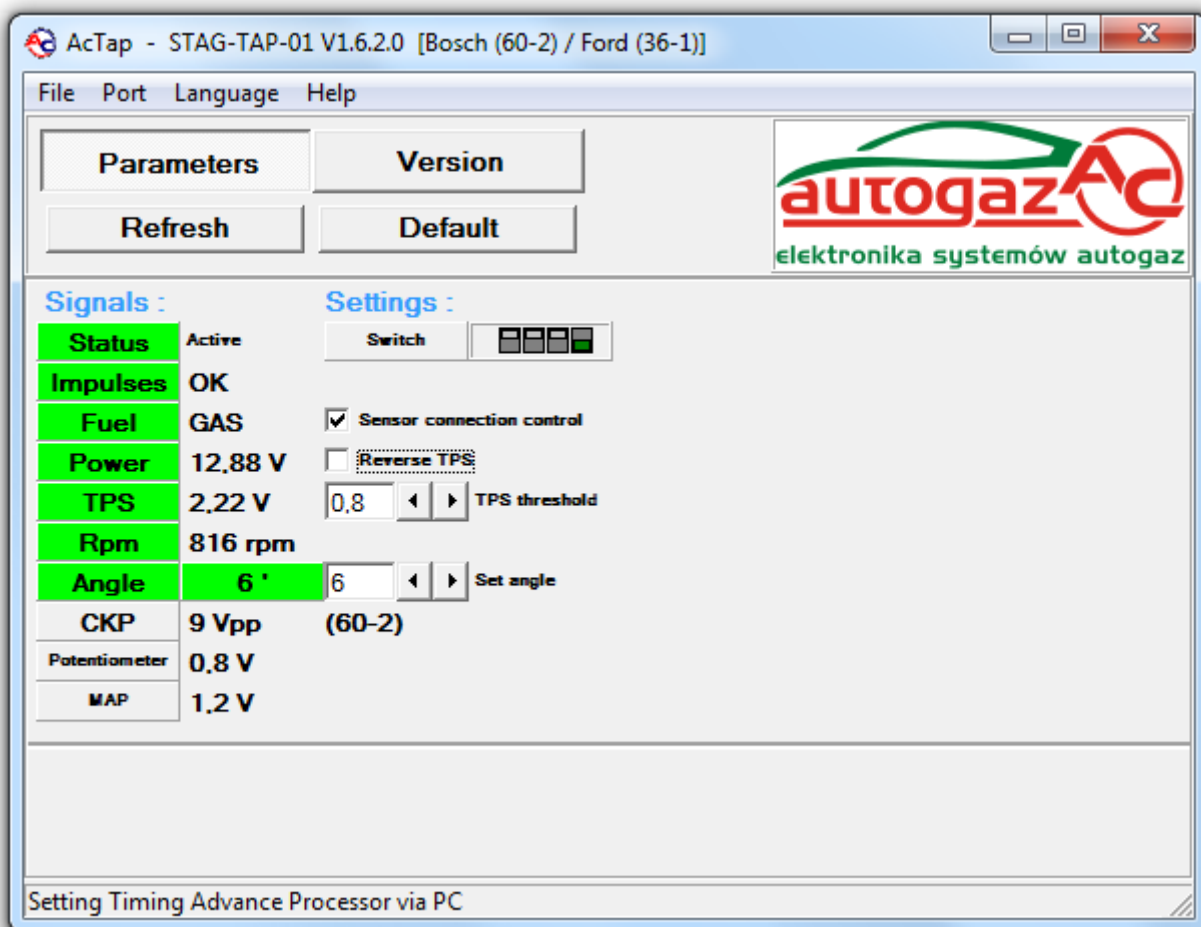


The screenshot shows the status with the TPS voltage below the preset threshold value, the timing advance processor is not shifting impulses (impulses at the output of TAP are in phase with impulses of the sensor). The screenshot also shows the configuration mode of the timing advance processor via switches (SW4 OFF).

Elements allowing changing settings are hidden or inactive and the mode is described on the status bar at the bottom of the screen. The switch and the potentiometer available at the bundle socket are active, any changes of these two elements in this configuration mode will be immediately displayed by the software ("Set Angle", "TPS Threshold", "Reverse TPS")

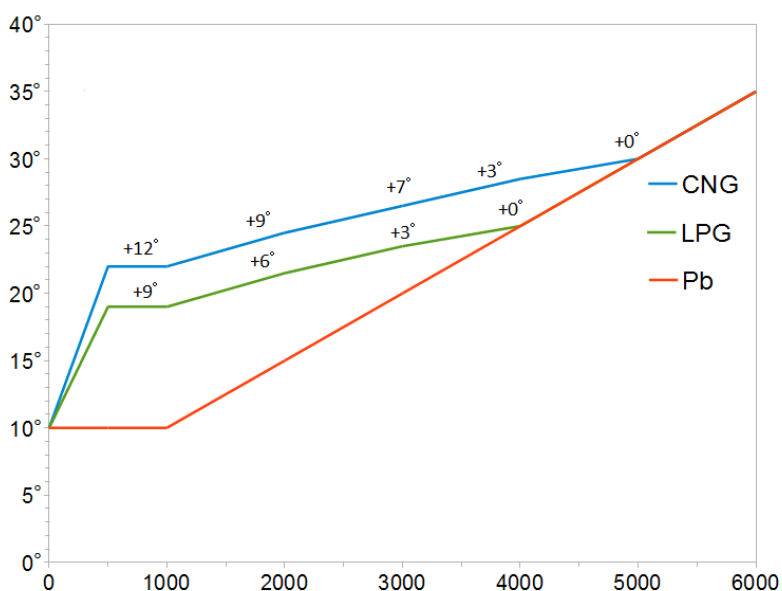
#### **NOTE!**

"TPS Threshold" value should be adjusted in such a manner as to disable impulse shifting by the timing advance processor at low revs. Changing the timing advance processor while idling may, in some cases, result in rev oscillation.



The screenshot shows the status with all signals being correct; the timing advance processor is generating impulses advanced in comparison to the signal from the connected crank shaft position sensor by the preset angle value. The screenshot also shows the configuration mode of the timing advance processor via PC (SW4 ON).

Elements allowing changing settings are visible and active, and the mode is described on the status bar at the bottom of the screen.



Recommended characteristics of ignition timing advancement for LPG and CNG fuels.

Pb – theoretic ignition timing advancement curve for petrol

LPG – ignition timing advancement curve for LPG

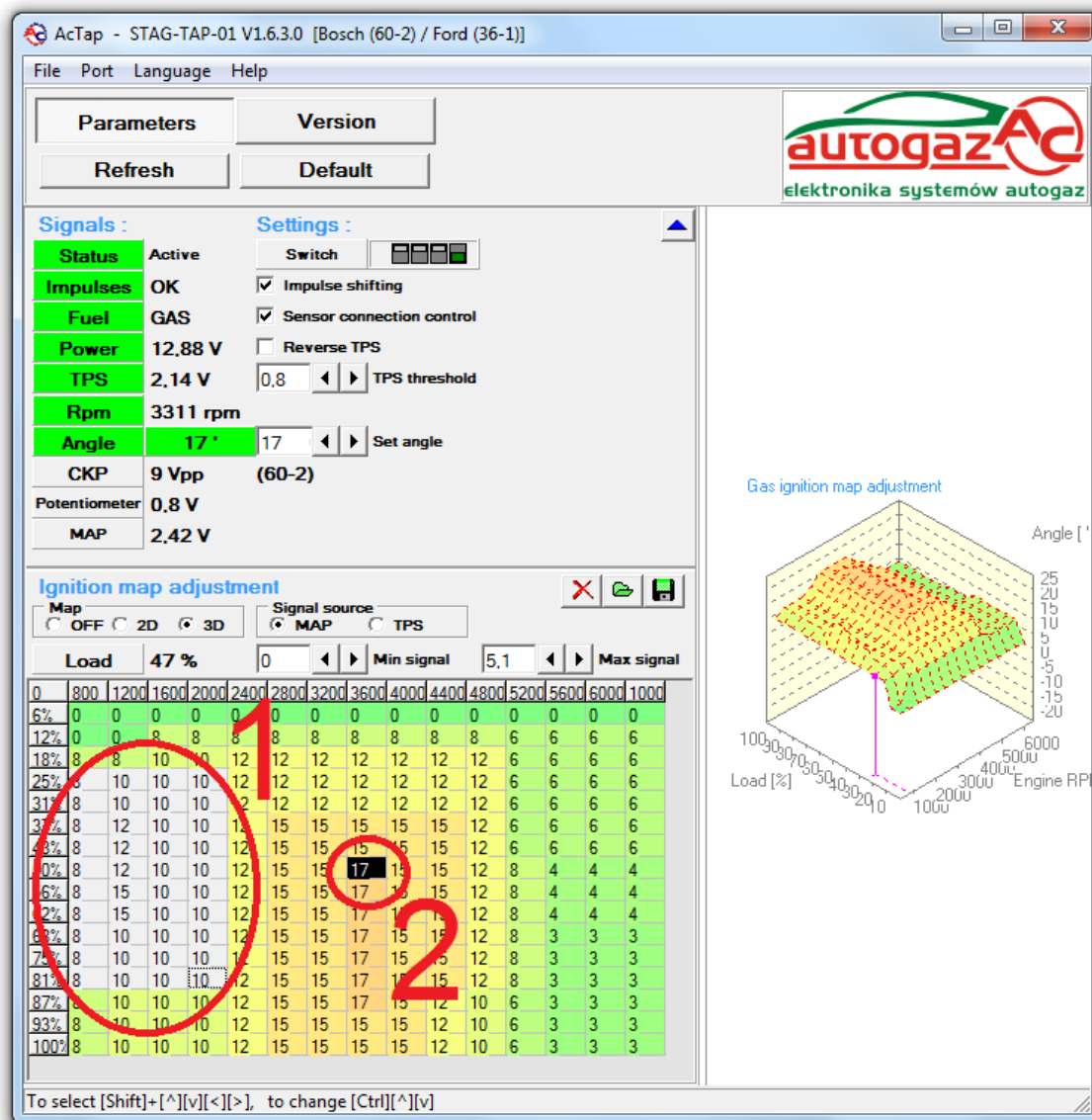
CNG – ignition timing advancement curve for CNG





## 10. IGNITION MAP ADJUSTMENT

1.x.3.x controller software versions make it possible to change the ignition angle while the engine is running on gas in the form of a 2D map (ignition angle modification within the revs function) and in the form of a 3D map (ignition angle modification within the revs function and the engine load function).



In order to edit the map, **select the table cells** (white border, see detail 1), using arrow keys [[←][→][↑][↓]] and pressing the [Shift] key at the same time, or using the mouse by pressing the left mouse button, and then **change the values** of selected items, using [↑][↓] keys and pressing the [Ctrl] key at the same time. A single active cell (striped background, see detail 2) can be changed by means of changing the “Set angle” setting.

In the case of the 3D map, the configuration software makes it possible to select the unloading signal source in the “Signal source” field:

- 1) TPS – acceleration pedal signal,
- 2) MAP – MAP-sensor signal (an additional wire in the plug under the 11 pin latch) and the definition of the voltage of this signal in volts in “Min signal” and “Max signal” fields.

The minimum value corresponds with the 0% load, while the maximum value corresponds with the 100% load.



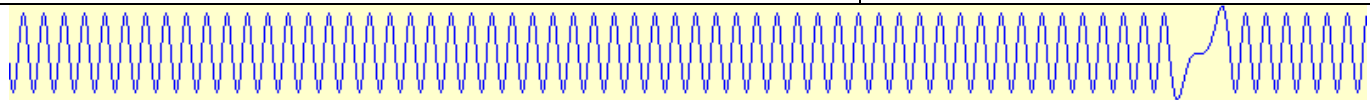
## 11. COMPATIBLE CRANK SIGNALS

The device is compatible with the following crankshaft position sensor signals:

### TAP-01

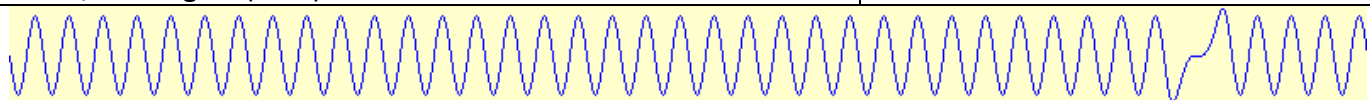
BOSCH Signal (60-2)

Firmware version: 1.x.x.1



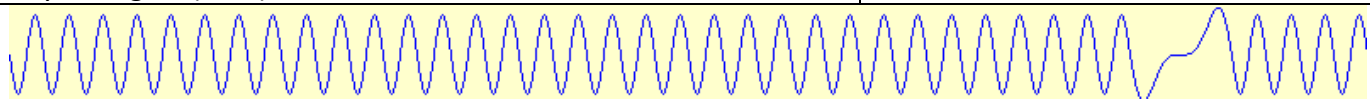
FORD/EDIS Signal (36-1)

Firmware version: 1.x.x.2



Toyota Signal (36-2)

Firmware version: 1.x.x.3



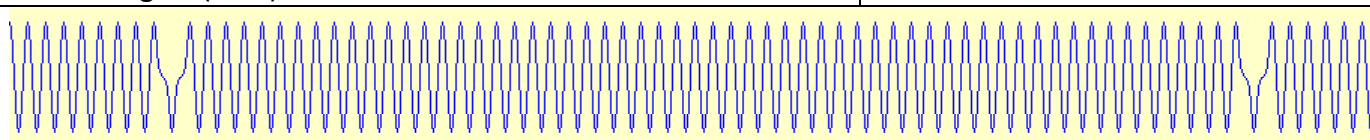
Renault Signal (44-4)

Firmware version: 1.x.x.4



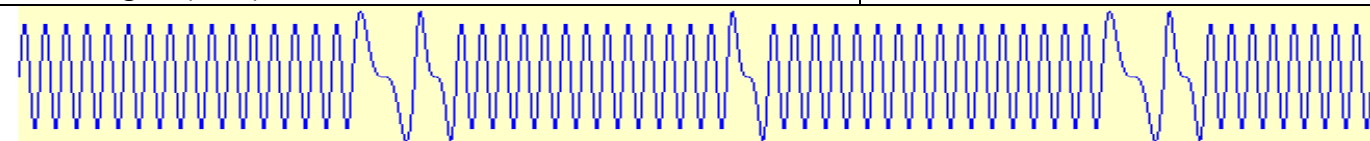
Renault Signal (60-2)

Firmware version: 1.x.x.5



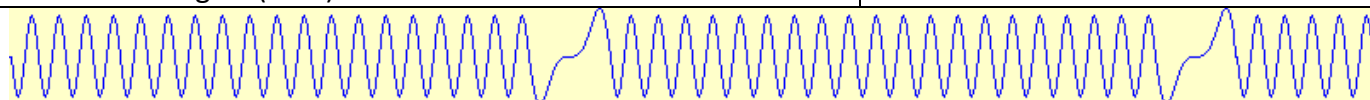
Suzuki Signal (36-6)

Firmware version: 1.x.x.9



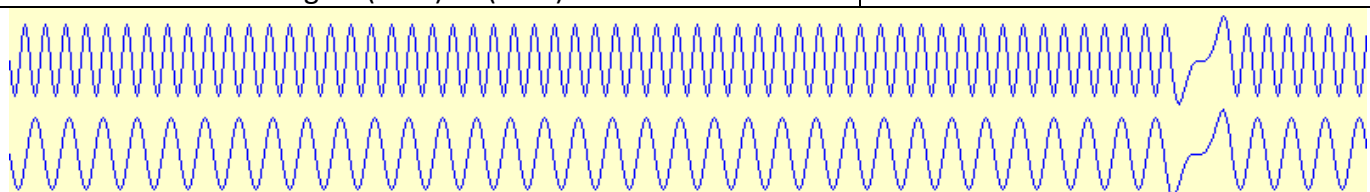
Renault Clio Signal (44-4)

Firmware version: 1.x.x.19



Automatic detection signal (60-2) or (36-1)

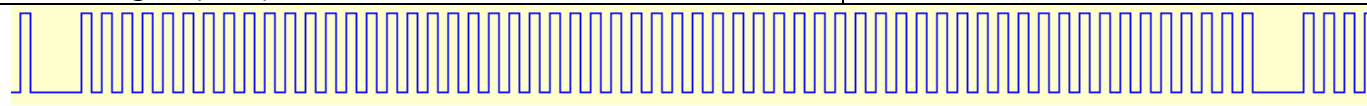
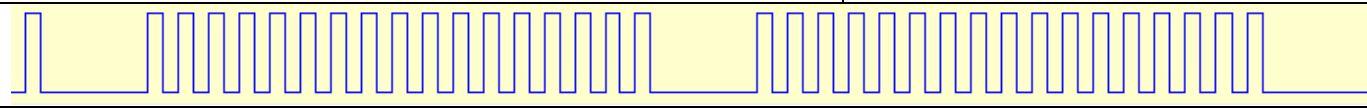
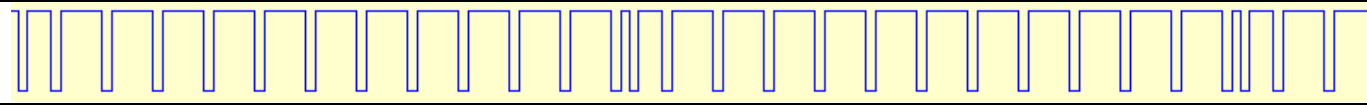
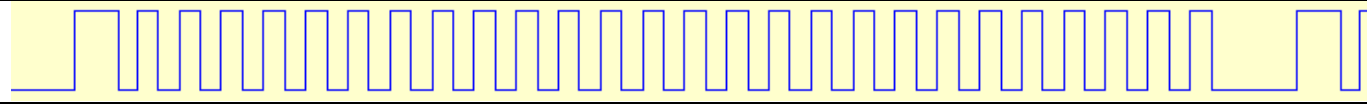
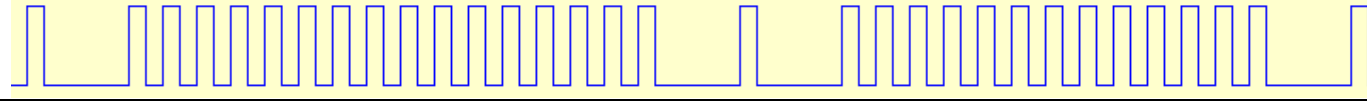
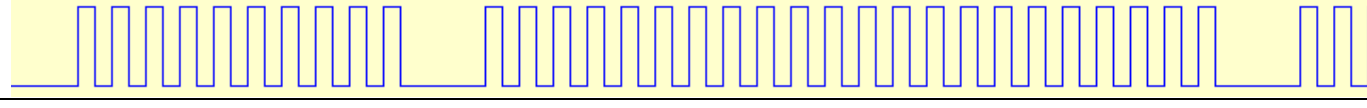

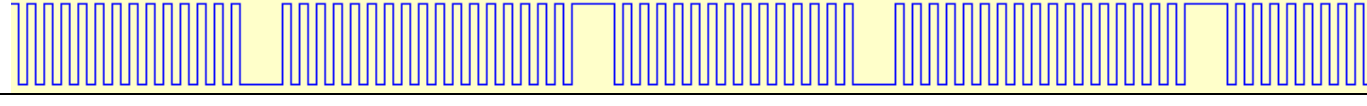
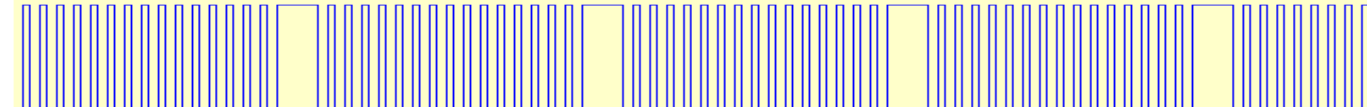
Firmware version: 1.x.x.0



1.x.2.0 firmware has been installed on the device featuring automatic identification and processing of 60-2 or 36-1 signals, a constant advance angle as well as configuration from switches and a PC capability.



## TAP-02

BOSCH Signal (60-2)	Firmware version: 1.x.x.10
	
Matiz Signal (60-6)	Firmware version: 1.x.x.11
	
Honda Signal (12 + 1)	Firmware version: 1.x.x.12
	
Hyundai Signal (30-2)	Firmware version: 1.x.x.14
	
Suzuki Signal (36-6)	Firmware version: 1.x.x.15
	
Suzuki Signal (36-4)	Firmware version: 1.x.x.16
	
Chrysler Signal (18-5)	Firmware version: 1.x.x.17
	
Chrysler Signal (36-4)	Firmware version: 1.x.x.20
	
Nissan Signal (36-4)	Firmware version: 1.x.x.21
	

1.x.2.10 firmware has been installed on the device featuring processing of 60-2 signal, a constant advance angle as well as configuration from switches and a PC capability.



## **12. UPDATING CONTROLLER SOFTWARE**

In the “**Version**” window the user may change the controller software.

Select the vehicle model/type from the list and click on “**Load**”.

This requires confirmation. Press “**Yes**” when asked “Start software installation ?”. Programming procedure will begin. Wait until the progress bar reaches the end.

### **NOTE!**

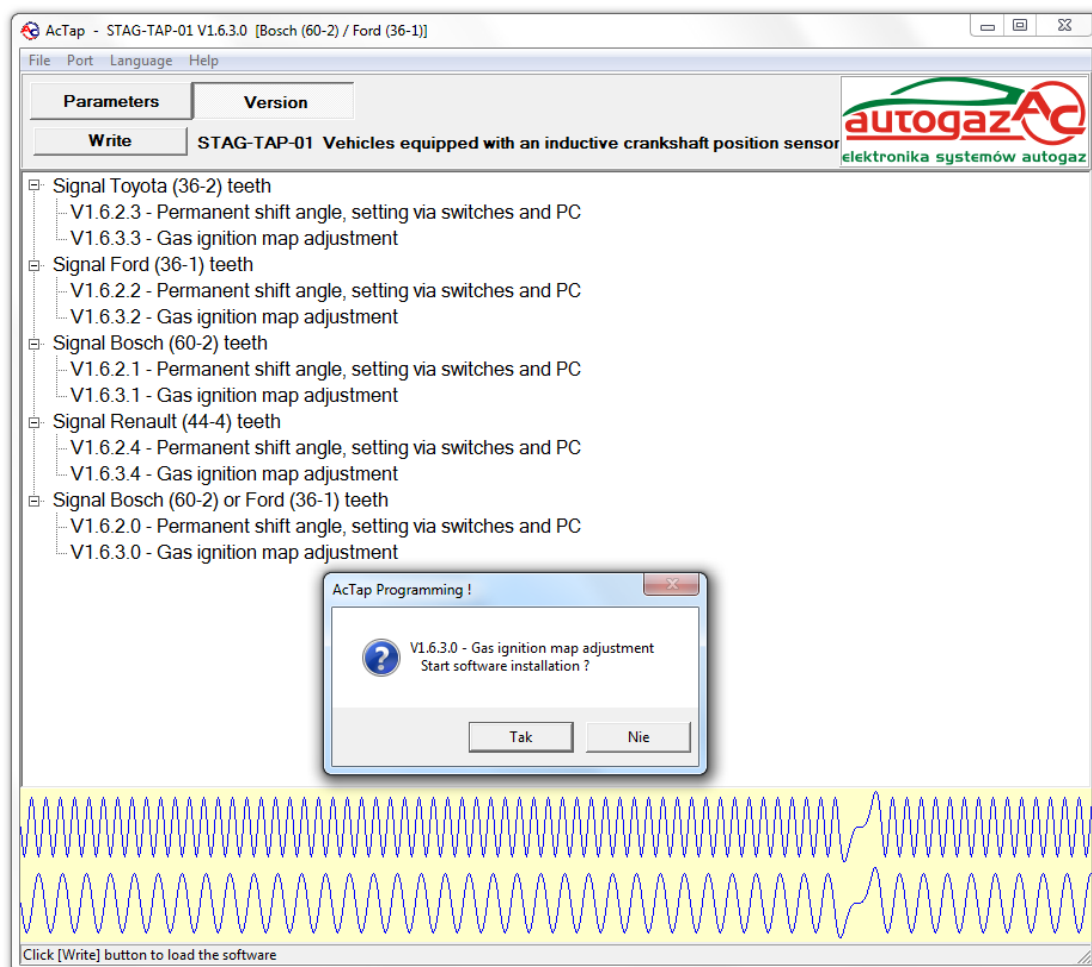
Do not turn the PC off, close the software, deactivate the car ignition switch or disconnect the RS232 or USB interface wire while programming.

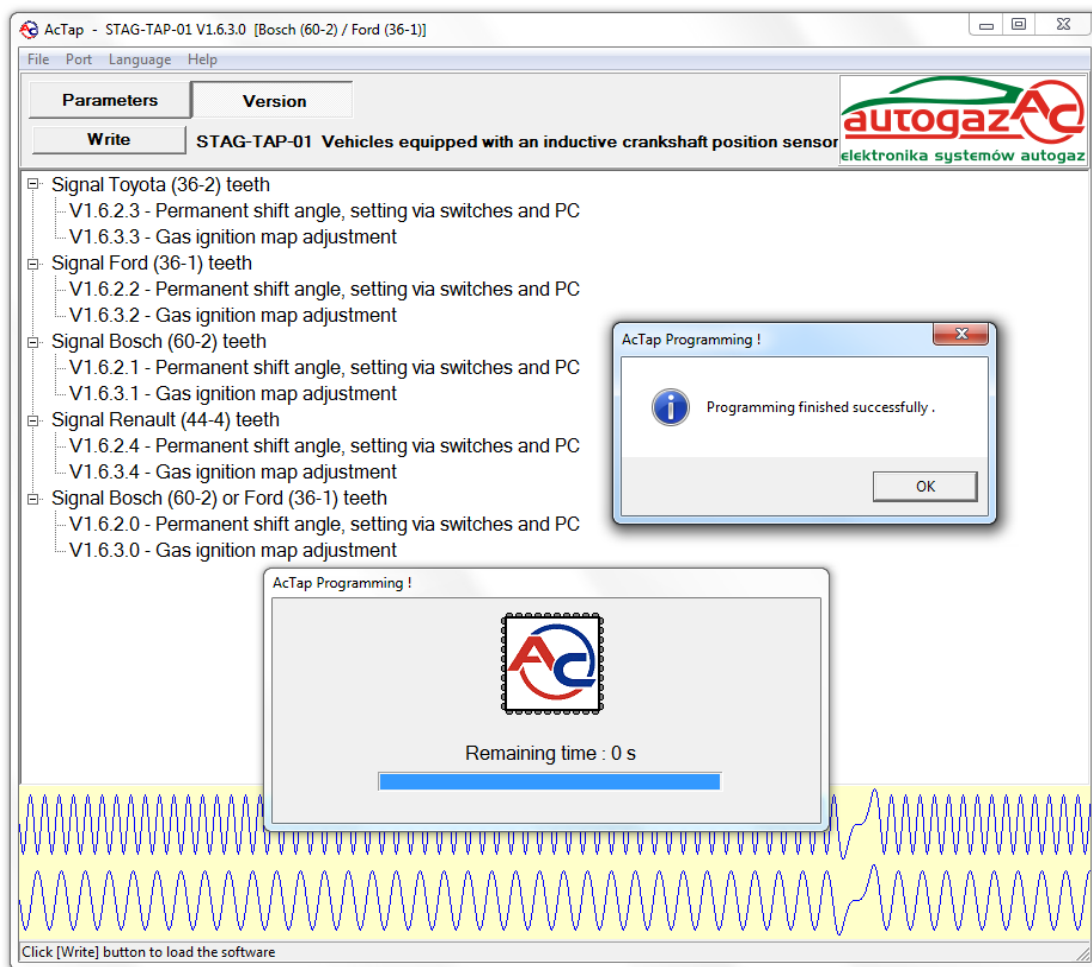
Press OK once “Programming finished successfully” message has been displayed.

The controller will be reset and will be activated with the new software version.

Diagnostics software will display “Software error...” message in the event the programming procedure is terminated or errors are detected. . In such a case press OK and repeat the controller programming procedure.

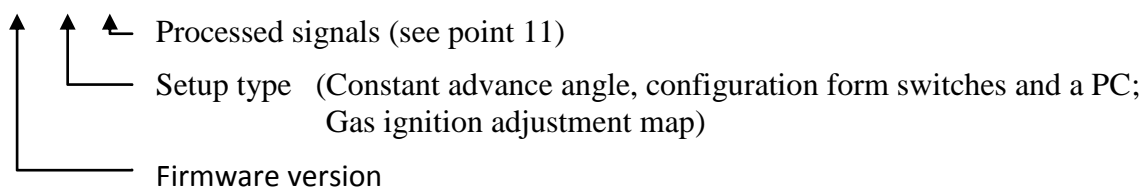
The following screenshots show subsequent stages of the software update procedure.





Firmware No. marking method:

v1.6 .1 .0



### **13. TECHNICAL SPECIFICATION**

Supply voltage	6 - 18[V]
Maximum supply current	0.1 [A]
Working temperature	-40 ÷ 90 [°C]
Protection class	IP53
Voltage of the signal from the crank shaft position sensor	2 ÷ 30 [Vpp]
Output voltage of the crank shaft position	2 ÷ 20 [Vpp]
Voltage of the signal from the camshaft position sensor	1 ÷ 12 [V]
Output voltage of the camshaft position	5 or 12 [V]
Voltage of the signal from the TPS	5 or 12 [V]
Voltage of the signal for switching the solenoid valve on	12 [V]
Voltage of the signal from the MAP sensor	1 ÷ 5 [V]



## 14. Connection diagrams for various vehicle installation.

### NOTE !!!

Using special adapters doesn't require wire cutting.

Vehicles with possibility to use adapters are mark out in the list below (grey colour).

The STAG-TAP kit includes adapter AW-0. Special adapters can be purchased separately.

Data concerning patterns of connections, number of adapters dedicated, in particular type of Time Advance Processor in the table below are only suggestions by AC SA, due to the use of different crankshaft position sensors by car manufacturers.

VEHICLE	INJECTION SYSTEM	Number of connection diagram (adapter AW-0)	Number of special adapter	Type of TAP	Firmware version
<b>ALFA ROMEO</b>					
33 1.3i 16v	Mpi MARELLI IAW 8F	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
33 1.5i 16v	Mpi BOSCH Motronic ML4-	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
33 1.7i 16v	Mpi BOSCH Motronic ML4-	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
145 1.3i	Mpi MARELLI JAW 8F	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
145 1.4i 16v Twin Spark	Mpi BOSCH M2.10.4	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
145 1.6i	Multipoint	<a href="#">Fig. 9.</a>	AW-9	STAG-TAP-01	x.x.x.1
145 1.6i 16v Twin Spark	Mpi BOSCH M2.10.4	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.1
145 1.7i 16v	Mpi BOSCH M2.10.3	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
145 1.8i 16v Twin Spark	Mpi BOSCH Motronic	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
146 1.3i	Mpi MARELLI JAW 8F	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
146 1.4i 16v Twin Spark	Mpi BOSCH M2.10.4	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
146 1.6i	GM Multipoint GM	<a href="#">Fig. 9.</a>	AW-9	STAG-TAP-01	x.x.x.1
146 1.6i 16v Twin Spark	Mpi BOSCH M2.10.4	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.1
146 1.7i 16v	Mpi BOSCH Motronic	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
146 1.8i 16v Twin Spark	Mpi BOSCH M2.10.4	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
147 1.6i 16v Twin Spark	Multipoint BOSCH ME7.3	<a href="#">Fig. 6.</a> <a href="#">Fig. 25.</a>		STAG-TAP-01	x.x.x.0
147 1.6i 16v T. S. 77KW	Multipoint BOSCH ME7.3	<a href="#">Fig. 6.</a>		STAG-TAP-01	x.x.x.0
147 1.6i 16v T. S. 88KW	Multipoint BOSCH ME7.3	<a href="#">Fig. 6.</a>		STAG-TAP-01	x.x.x.0
155 1.6i 16v Twin Spark	Mpi BOSCH M2.10.4	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
155 1.7i Twin Spark	Mpi BOSCH Motronic M1.7	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
155 1.8i Twin Spark	Mpi BOSCH Motronic M1.7	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
155 1.8i 16v Twin Spark	Mpi BOSCH Motronic	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
155 2.0i Twin Spark	Mpi BOSCH Motronic M1.7	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
155 2.0i 16v Twin Spark	Mpi BOSCH Motronic	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
155 2.5i V6 24v	Mpi BOSCH Motronic M1.7	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
156 1.6i 16v Twin Spark	Mpi BOSCH M2.10.4	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
156 1.8i 16v Twin Spark	Multipoint BOSCH MP1.5.5	<a href="#">Fig. 6.</a> <a href="#">Fig. 26.</a>		STAG-TAP-01	x.x.x.0
156 1.8i 16v Twin Spark	Multipoint BOSCH ME7.3	<a href="#">Fig. 6.</a> <a href="#">Fig. 25.</a>		STAG-TAP-01	x.x.x.0
156 2.0i 16v Twin Spark	Multipoint BOSCH MP1.5.5	<a href="#">Fig. 6.</a> <a href="#">Fig. 26.</a>		STAG-TAP-01	x.x.x.0
164 2.0i Twin Spark	Mpi BOSCH M1.7	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
<b>AUDI</b>					
80 1.6i 101cv	Multipoint	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
A3 1.6i 101 cv	Multipoint	<a href="#">Fig. 27.</a>		STAG-TAP-01	x.x.x.0
A3 1.8i 20v	Multipoint	<a href="#">Fig. 27.</a>		STAG-TAP-01	x.x.x.0



VEHICLE	INJECTION SYSTEM	Number of connection diagram (adapter AW-0)	Number of special adapter	Type of TAP	Firmware version
A3 1.8i 20v (OBD) - APG	Multipoint BOSCH	<a href="#">Fig. 31.</a>		STAG-TAP-01	x.x.x.0
A4 1.6i 101 cv	Multipoint	<a href="#">Fig. 27.</a>		STAG-TAP-01	x.x.x.0
A4 1.8i 20v ADR	Multipoint	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
A4 2.0i 20v (OBD) - ALT	Multipoint BOSCH ME7.5	<a href="#">Fig. 27.</a>		STAG-TAP-01	x.x.x.0
A4 2.8i ALG	BOSCH	<a href="#">Fig. 27.</a>		STAG-TAP-01	x.x.x.1
A6 1.8i 20v	Multipoint	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
A6 1.8i 20v Turbo - AEB	Multipoint BOSCH M3.8	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
A6 2.8i	BOSCH	<a href="#">Fig. 27.</a>		STAG-TAP-01	x.x.x.1
A6 2.4i V6 - ALF	BOSCH	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.1
Q5 3.2 FSI V6 - CAL	BOSCH	<a href="#">Fig. 36.</a>		<b>STAG-TAP-02</b>	x.x.x.10
<b>BMW</b>					
Serie 3316i- 164E2	Mpi BOSCH M1.7.2	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Serie 3316i	Mpi BOSCH M1.7.3	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Serie 3318i - 184E2	Mpi BOSCH M1.7.2	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Serie 3318i	Mpi BOSCH M1.7.3	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Serie 3320i 24v	BOSCH	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.1
Serie 5520i 24v	BOSCH	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.1
<b>CHEVROLET</b>					
Aveo 1.2i – B12S1	Siemens	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.1
Blazer 2.2i	Singlepoint GM	<a href="#">Fig. 9.</a>	AW-9	STAG-TAP-01	x.x.x.0
C20 4.1	Mpi DE LUXE 6cil.	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Silverado 4.1	Multipoint 6cil.	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Vectra 2.0i 16v	Multipoint BOSCH	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
<b>CHRYSLER</b>					
300M 2.7i	Multipoint	<a href="#">Fig. 35.</a>		<b>STAG-TAP-02</b>	x.x.x.17
Sebring 2.7i	Multipoint	<a href="#">Fig. 35.</a>		<b>STAG-TAP-02</b>	x.x.x.17
Voyager 3.3i - EGA	Multipoint	<a href="#">Fig. 35.</a>		<b>STAG-TAP-02</b>	x.x.x.20
Voyager 3.8i - EGH	Multipoint	<a href="#">Fig. 35.</a>		<b>STAG-TAP-02</b>	x.x.x.20
<b>CITROEN</b>					
AX 1.1i	SPI MARELLI G6	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
AX 1.4i GTI	Mpi BOSCH MP3.1	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Berlingo 1.4i	MARELLI IAW 1AP 40	<a href="#">Fig. 3.</a>	AW-3	STAG-TAP-01	x.x.x.1
Berlingo 1.4i	Mpi MARELLI IAW 1AP 40	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.1
Berlingo 1.6i	NRF10FX7L BOSCH	<a href="#">Fig. 3.</a>	AW-3	STAG-TAP-01	x.x.x.1
Berlingo 1.8i	Mpi MARELLI IAW 1AP 50	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.1
C3 1.6i 16v	Mpi BOSCH ME7.4.4	<a href="#">Fig. 7.</a>	AW-7	STAG-TAP-01	x.x.x.1
Saxo 1.0i-1.1i	BOSCH MA 3.1	<a href="#">Fig. 3.</a>	AW-3	STAG-TAP-01	x.x.x.0
Saxo 1.0i	Spi BOSCH MA 3.1	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Saxo 1.1i	Spi BOSCH MA 3.1	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Saxo 1.4i	Mpi MARELLI IAW 1AP 40	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Saxo 1.4i	MARELLI IAW 1AP 40	<a href="#">Fig. 3.</a>	AW-3	STAG-TAP-01	x.x.x.0
Saxo 1.6i	BOSCH MP 5.1	<a href="#">Fig. 3.</a>	AW-3	STAG-TAP-01	x.x.x.0
Saxo 1.6i	Mpi BOSCH MP 5.1	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0





VEHICLE	INJECTION SYSTEM	Number of connection diagram (adapter AW-0)	Number of special adapter	Type of TAP	Firmware version
Xsara 1.4i	MARELLI IAW 1AP 40	<a href="#">Fig. 3.</a>	AW-3	STAG-TAP-01	x.x.x.0
Xsara 1.4i	Mpi MARELLI JAW 1AP 40	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Xsara 1.6i	BOSCH MP 5.1	<a href="#">Fig. 3.</a>	AW-3	STAG-TAP-01	x.x.x.0
Xsara 1.6i	Mpi BOSCH MP 5.1	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Xsara 1.8i	Mpi BOSCH MP 5.1	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Xsara 1.8i 16v	Mpi BOSCH MP 5.1.1	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Xsara 2.0i 16v	Mpi BOSCH MP 5.1.1	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Xsara Picasso 1.6i	BOSCH	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Xantia 1.6i	Mpi MARELLI IAW 8P	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Xantia 1.8i	Mpi MARELLI IAW 8P	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Xantia 1.8i	Mpi BOSCH MP 5.1	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Xantia 2.0i	Mpi MARELLI IAW 8P	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.1
<b>DAEWOO</b>					
Lanos 1.3i	Multipoint GM	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Lanos 1.5i	Multipoint GM	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Tacuma 1.8i (OBD)	Multipoint KEMSCO	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Tacuma 2.0i 16v - T20SFD	Multipoint DELCO	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Leganza 2.0i 16v	Multipoint GM	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Leganza 2.0i 16v (OBD)	Multipoint	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Kalos 1.2i	Mpi	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Kalos 1.4i	Mpi	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Nubira 1.6i	Mpi	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
<b>DODGE</b>					
Caravan 3.3i - EGA	Multipoint	<a href="#">Fig. 35.</a>		<b>STAG-TAP-02</b>	x.x.x.20
<b>FIAT</b>					
Barchetta 1.8i 16v	Multipoint HITACHI	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Bravo 1.2i 16v (OBD)	Multipoint BOSCH	<a href="#">Fig. 6.</a>		STAG-TAP-01	x.x.x.1
Brava - Bravo 1.2i 16v	Mpi BOSCH MP 1.5.5	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Brava - Bravo 1.4i 12v	Singlepoint BOSCH MA	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Brava - Bravo 1.6i 16v	Mpi MARELLI IAW 1AF	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.1
Brava - Bravo 1.6i 16v	Mpi MARELLI IAW 49F	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.1
Brava - Bravo 1.8 16v	Multipoint HITACHI	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Cinquecento 900i	Spi MARELLI IAW 6F - 16F	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Coupe 1.8i 16v	Multipoint HITACHI	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Coupe 2.0 20v	Multipoint BOSCH	<a href="#">Fig. 6.</a> <a href="#">Fig. 25.</a>		STAG-TAP-01	x.x.x.0
Croma 2.0i 16v	Motronic	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Marea 1.6i 16v	Mpi MARELLI IAW 1AF	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.1
Marea 1.6i 16v	Mpi MARELLI IAW 49F	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.1
Marea 1.6i 16v (OBD)	Mpi MARELLI JAW 4EF	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.1
Marea 1.8i 16v	Multipoint HITACHI	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Marea 1.8i 16v	Multipoint HITACHI HVC	<a href="#">Fig. 15.</a>		STAG-TAP-01	x.x.x.0
Marea 2.0i 20v	Mpi BOSCH Motronic M2.	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Panda 1.0i	Spi MARELLI JAW 6F - 16F	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Panda 1.1i 4x4	Spi MARELLI IAW 6F - 16F	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0





VEHICLE	INJECTION SYSTEM	Number of connection diagram (adapter AW-0)	Number of special adapter	Type of TAP	Firmware version
Punto 1.2i 16v	Multipoint BOSCH ME 7.3	<a href="#">Fig. 6.</a> <a href="#">Fig. 20.</a>		STAG-TAP-01	x.x.x.1
Punto 1.2i 16v (OBD)	Multipoint BOSCH ME 7.3	<a href="#">Fig. 6.</a> <a href="#">Fig. 20.</a>		STAG-TAP-01	x.x.x.1
Punto 55 1.1i	Spi MARELLI IAW 6F - 16F	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.1
Punto 60 1.2i	Spi MARELLI IAW 6F - 16F	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.1
Punto 75 1.2i	Mpi MARELLI IAW 8F	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.1
Punto 75 1.2i	Mpi MARELLI IAW 49F	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.1
Punto 75 1.2i	Mpi MARELLI IAW 59F	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.1
Punto 85 1.2i 16v	Mpi MARELLI IAW 18F	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.1
Punto 90 1.6i	Multipoint GM	<a href="#">Fig. 9.</a>	AW-9	STAG-TAP-01	x.x.x.0
Palio 75 1.2	Mpi MARELLI IAW 18F	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Palio 1.6	Spi MARELLI IAW 1G7	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Palio 1.6 16v	Mpi MARELLI IAW 1AF	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Siena 1.6	Spi MARELLI IAW 1G7	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Siena 1.616v	Mpi MARELLI IAW 1AF	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Stilo 1.6i 16v	Mpi MARELLI IAW 5NF	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Tipo 1.4i	Spi BOSCH MonoMotronic	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Tipo 1.6i	Spi BOSCH MonoMotronic	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Tipo 1.8i	Mpi MARELLI IAW 8F	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Tempra 1.4i	Spi BOSCH MonoMotronic	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Tempra 1.6i	Spi BOSCH MonoMotronic	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Tempra 1.6i	Multipoint GM	<a href="#">Fig. 9.</a>	AW-9	STAG-TAP-01	x.x.x.0
Tempra 1.8i	Mpi MARELLI IAW 8F	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Tempra 2.0i	Spi MARELLI	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
<b>FORD</b>					
Escort 1.6i 16v - 1.8i 16v	Multipoint EEC - V	<a href="#">Fig. 5.</a>	AW-5	STAG-TAP-01	x.x.x.2
Explorer V6	Multipoint	<a href="#">Fig. 5.</a>	AW-5	STAG-TAP-01	x.x.x.0
F150 4.6i V8	Multipoint EEC - V	<a href="#">Fig. 5.</a>	AW-5	STAG-TAP-01	x.x.x.0
F150 Triton 5.4i V8	Multipoint EEC - V	<a href="#">Fig. 21.</a>		STAG-TAP-01	x.x.x.0
Fiesta 1.2i 16v - Zetec - S	Multipoint EEC - V	<a href="#">Fig. 5.</a>	AW-5	STAG-TAP-01	x.x.x.0
Fiesta 1.2i 16v (OBD) - DHF	Multipoint Zetec - S	<a href="#">Fig. 20.</a>		STAG-TAP-01	x.x.x.0
Fiesta 1.3i - Endura - E	Multipoint EEC - V	<a href="#">Fig. 5.</a>	AW-5	STAG-TAP-01	x.x.x.0
Focus 1.6i 16v	Multipoint EEC - V	<a href="#">Fig. 5.</a>	AW-5	STAG-TAP-01	x.x.x.2
Focus 1.8i 16v - 2.0i 16v	Multipoint EEC - V	<a href="#">Fig. 5.</a>	AW-5	STAG-TAP-01	x.x.x.2
Fusion 1.4i 16V DURATEC	Multipoint	<a href="#">Fig. 20.</a>		STAG-TAP-01	x.x.x.2
Fusion 1.6i 16V DURATEC	Multipoint	<a href="#">Fig. 5.</a>	AW-5	STAG-TAP-01	x.x.x.2
Ka 1.3i - Endura - E	Multipoint EEC - V	<a href="#">Fig. 5.</a>	AW-5	STAG-TAP-01	x.x.x.0
Mark VII 4.6i V8	Multipoint EEC - V	<a href="#">Fig. 5.</a>	AW-5	STAG-TAP-01	x.x.x.0
Mondeo 1.6i - 1.8i - 2.0i 16v	Mpi EEC IV - EEC - V	<a href="#">Fig. 5.</a>	AW-5	STAG-TAP-01	x.x.x.2
Mondeo 2.5 V6 24v	Multipoint EEC - V	<a href="#">Fig. 17.</a>		STAG-TAP-01	x.x.x.0
Orion 1.6i 16v -1.8i 16v	Multipoint EEC - V	<a href="#">Fig. 5.</a>	AW-5	STAG-TAP-01	x.x.x.2
Ranger2.3i	Multipoint	<a href="#">Fig. 21.</a>		STAG-TAP-01	x.x.x.0
Transit / Turneo 2.0i	Multipoint	<a href="#">Fig. 5.</a>	AW-5	STAG-TAP-01	x.x.x.2
<b>HONDA</b>					
Civic 1.4i D1426		<a href="#">Fig. 35.</a>		<b>STAG-TAP-02</b>	x.x.x.12
CR-V 2.0i		<a href="#">Fig. 35.</a>		<b>STAG-TAP-02</b>	x.x.x.12



VEHICLE	INJECTION SYSTEM	Number of connection diagram (adapter AW-0)	Number of special adapter	Type of TAP	Firmware version
<b>HYUNDAI</b>					
Accent 1.3i 12v (OBD)	Multipoint KEFICO	<a href="#">Fig. 5.</a>	AW-5	STAG-TAP-01	x.x.x.0
Accent 1.5i 16v	Multipoint BOSCH	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Coupe 1.6i 16v	Multipoint	<a href="#">Fig. 5.</a>	AW-5	STAG-TAP-01	x.x.x.0
Elantra 1.6i 16v (OBD)	Multipoint	<a href="#">Fig. 5.</a>	AW-5	STAG-TAP-01	x.x.x.0
Getz 1.3i 12v	Multipoint KEFICO	<a href="#">Fig. 5.</a>	AW-5	STAG-TAP-01	x.x.x.0
i10 1.1i – G4HG	Multipoint	<a href="#">Fig. 35.</a>		<b>STAG-TAP-02</b>	<b>x.x.x.14</b>
i20 1.2i – G4LA	Multipoint	<a href="#">Fig. 5.</a>	AW-5	STAG-TAP-01	x.x.x.1
i30 1.4i – G4FA	Multipoint	<a href="#">Fig. 26.</a>		STAG-TAP-01	x.x.x.1
Matrix 1.6i 16v	Multipoint	<a href="#">Fig. 5.</a>	AW-5	STAG-TAP-01	x.x.x.0
Tucson 2.0i 16v	Multipoint	<a href="#">Fig. 36.</a>		<b>STAG-TAP-02</b>	x.x.x.10
<b>KIA</b>					
Shuma 1.5i 16v	Multipoint SIEMENS	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Sportage 2.0i 16v (OBD)	Multipoint BOSCH	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
<b>LANCIA</b>					
Dedra - Delta 1.6i	Multipoint GM	<a href="#">Fig. 9.</a>	AW-9	STAG-TAP-01	x.x.x.0
Dedra - Delta 1.6i	Spi BOSCH MonoMotronic	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Dedra - Delta 1.6i 16v	Mpi MARELLI IAW 49F	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Dedra - Delta 1.6i 16v	Mpi MARELLI IAW 1AF	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Dedra - Delta 1.8i	Mpi MARELLI IAW 8F	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Dedra - Delta 1.8i 16v	Multipoint HITACHI	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
<b>MAZDA</b>					
626 2.0i 16v	Multipoint	<a href="#">Fig. 23.</a>		STAG-TAP-01	x.x.x.2
6 2.0i 16V	Multipoint	<a href="#">Fig. 34.</a>		STAG-TAP-01	x.x.x.2
<b>MERCEDES</b>					
A 140 1.4i	Multipoint VDO - MSM	<a href="#">Fig. 22.</a>		STAG-TAP-01	x.x.x.0
A 160 1.6i	Multipoint VDO - MSM	<a href="#">Fig. 22.</a>		STAG-TAP-01	x.x.x.0
C 180 1.8i 16v	Multipoint HFM	<a href="#">Fig. 10.</a>		STAG-TAP-01	x.x.x.0
C 180 2.0i 16v (OBD)	Multipoint SIEMENS 5WK9	<a href="#">Fig. 13.</a>		STAG-TAP-01	x.x.x.1
C 200 2.0i 16v	Multipoint HFM	<a href="#">Fig. 10.</a>		STAG-TAP-01	x.x.x.1
C 280 2.8i 16v	Multipoint HFM	<a href="#">Fig. 10.</a>		STAG-TAP-01	x.x.x.0
CLK200 2.0i 16v	Multipoint BOSCH	<a href="#">Fig. 12.</a>		STAG-TAP-01	x.x.x.1
E 200 2.0i 16v	Multipoint HFM	<a href="#">Fig. 10.</a>		STAG-TAP-01	x.x.x.1
ML 320 3.2i V6	Multipoint BOSCH	<a href="#">Fig. 14.</a>		STAG-TAP-01	x.x.x.0
<b>NISSAN</b>					
Micra 1.0i 16v (OBD) - CG10	Multipoint	<a href="#">Fig.32.</a>		STAG-TAP-01	x.x.x.0
Sunny 1.5i 16v – HR15DE				<b>STAG-TAP-02</b>	<b>x.x.x.21</b>
<b>OPEL</b>					
Astra 1.4i	Multipoint GM	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Astra 1.4i 16v - X14XE	Multipoint DELCO GM	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.1



VEHICLE	INJECTION SYSTEM	Number of connection diagram (adapter AW-0)	Number of special adapter	Type of TAP	Firmware version
Astra 1.4i 16v (OBD) - Z14XE	Multipoint DELCO	<a href="#">Fig. 6.</a> <a href="#">Fig.28.</a>		STAG-TAP-01	x.x.x.1
Astra 1.6i - C16SE	Multipoint GM	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.1
Astra 1.6i 16v - X16XEL	Multipoint GM	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.1
Astra 1.6i 16v (OBD) - Z16XE	Multipoint DELCO	<a href="#">Fig. 6.</a> <a href="#">Fig.28.</a>		STAG-TAP-01	x.x.x.1
Astra 1.6i 16v - X16XEL	Multipoint DELCO GM	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.1
Astra 1.8i 16v	Multipoint SIEMENS 5WK9	<a href="#">Fig. 18.</a>		STAG-TAP-01	x.x.x.1
Corsa 1.0i 12v-X10XE	Multipoint BOSCH M1.5.5	<a href="#">Fig. 11.</a>		STAG-TAP-01	x.x.x.0
Corsa 1.2i - 12XZ/X12SZ	Singlepoint GM	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.1
Corsa 1.2i 16v-X12XE	Multipoint BOSCH M1.5.5	<a href="#">Fig. 11.</a>		STAG-TAP-01	x.x.x.1
Corsa 1.2i 16v (OBD) - Z12XE	Multipoint BOSCH	<a href="#">Fig. 16.</a>		STAG-TAP-01	x.x.x.1
Corsa 1.4i - C14SE	Multipoint GM	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Corsa 1.4i 16v (OBD) - Z14XE	Multipoint DELCO	<a href="#">Fig. 6.</a> <a href="#">Fig.28.</a>		STAG-TAP-01	x.x.x.0
Corsa 1.4i 16v - X 14XE	Multipoint GM	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Corsa 1.6i 16v-X16XE/C16XE	Multipoint GM	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Frontera 2.0i 8v - X20SE	Multipoint BOSCH M1.5.4	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Frontera 2.2 16v - X22SE	Multipoint	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Vectra 1.6i - X16SZ	Singlepoint GM	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.1
Vectra 1.6i 16v - X16XE	Multipoint GM	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.1
Vectra 1.6i 16v - X16XEL	Multipoint DELCO GM	<a href="#">Fig. 24.</a>		STAG-TAP-01	x.x.x.1
Vectra 1.6i - Y16XE	Multipoint	<a href="#">Fig. 27.</a>		STAG-TAP-01	x.x.x.1
Vectra 1.8i - X18SZ	Singlepoint GM	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.1
Vectra 1.8i - X18XE1	Siemens - Simtec	<a href="#">Fig. 19.</a>		STAG-TAP-01	x.x.x.1
Vectra 2.0i - X20XEV	Siemens Simtec 56.5	<a href="#">Fig. 36.</a>		<b>STAG-TAP-02</b>	<b>x.x.x.10</b>
Zafira 1.8i 16v	Multipoint SIEMENS 5WK9	<a href="#">Fig. 18.</a>		STAG-TAP-01	x.x.x.0
<b>PEUGEOT</b>					
106 1.0i	Spi BOSCH MA 3.1	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.1
106 1.0i-1.1i	BOSCH MA 3.1	<a href="#">Fig. 3.</a>	AW-3	STAG-TAP-01	x.x.x.1
106 1.1i- HDY/Z	Spi BOSCH MA 3.1	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.1
106 1.1i- HDZ	Singlepoint MARELLI G6	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.1
106 1.4i	MARELLI IAW 1AP 40	<a href="#">Fig. 3.</a>	AW-3	STAG-TAP-01	x.x.x.0
106 1.4i	Mpi MARELLI IAW 1AP 40	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
206 1.4i	MARELLI IAW 1AP 81	<a href="#">Fig. 3.</a>	AW-3	STAG-TAP-01	x.x.x.0
306 1.4i	MARELLI IAW 1AP 40	<a href="#">Fig. 3.</a>	AW-3	STAG-TAP-01	x.x.x.0
306 1.1i- HDZ	Spi MARELLI G6	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.1
306 1.4i - KDX	Spi MARELLI G6	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
306 1.4i	Mpi MARELLI IAW 1AP 40	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
306 1.4i- KDX	Spi BOSCH MA3.0	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
306 1.6i	BOSCH MP 5.1	<a href="#">Fig. 3.</a>	AW-3	STAG-TAP-01	x.x.x.1
306 1.6i- NFZ	Mpi BOSCH MP 5.1 - 5.2	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.1
306 1.6i- KDX	Spi MARELLI G6	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
306 1.8i- LFZ	Mpi MARELLI IAW 8P	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
306 1.8i	Mpi BOSCH MP 5.1	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.1
306 1.8i 16v	Mpi BOSCH MP 5.1.1	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.1
306 2.0i	Mpi BOSCH MP 5.1	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.1
306 2.0i 16v	Mpi BOSCH MP 5.1.1	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.1
405 1.4i- BDY	Spi MARELLI G6	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0



VEHICLE	INJECTION SYSTEM	Number of connection diagram (adapter AW-0)	Number of special adapter	Type of TAP	Firmware version
405 1.4i - KDX	Spi BOSCH MA3.0	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
405 1.6i- BDY	SPI MARELLI G6	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
405 1.8i- LFZ	Mpi BOSCH MP5.1	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.1
406 1.8i 16v - LFY	Mpi BOSCH MP5. 1.1	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.1
406 2.0i 16v - RFV	Mpi BOSCH MP5. 1.1	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.1
605 2.0i - R6A	Mpi MARELLI G5	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Partner 1.4i - KFX	MARELLI IAW 1AP 40	<a href="#">Fig. 3.</a>	AW-3	STAG-TAP-01	x.x.x.1
Ranch 1.4i	Mpi MARELLI IAW 1AP 40	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
Ranch 1.4i	MARELLI IAW 1AP 40	<a href="#">Fig. 3.</a>	AW-3	STAG-TAP-01	x.x.x.1
<b>RENAULT</b>					
19 1.4e 8V – E6J	SIEMENS	<a href="#">Fig. 20.</a>		STAG-TAP-01	x.x.x.4
Clio 1.2i	MPI BOSCH	<a href="#">Fig. 2.</a>	AW-2	STAG-TAP-01	x.x.x.19
Clio 1.2i	MPI SAGEM	<a href="#">Fig. 7.</a>	AW-7	STAG-TAP-01	x.x.x.5
Clio 1.4i	MPI SIEMENS	<a href="#">Fig. 7.</a>	AW-7	STAG-TAP-01	x.x.x.5
Clio 1.6i	MPI SIEMENS	<a href="#">Fig. 7.</a>	AW-7	STAG-TAP-01	x.x.x.5
Laguna 1.6i-1.8i 16V	MPI SIEMENS-SIRIUS 32	<a href="#">Fig. 7.</a>	AW-7	STAG-TAP-01	x.x.x.5
Laguna 1.8i-2.0i	MPI SIEMENS	<a href="#">Fig. 2.</a>	AW-2	STAG-TAP-01	x.x.x.5
Megane 1.4i	MPI SIEMENS	<a href="#">Fig. 2.</a> <a href="#">Fig. 7.</a>	AW-2 or AW-7	STAG-TAP-01	x.x.x.4
Megane 1.6i	MPI SIEMENS	<a href="#">Fig. 2.</a> <a href="#">Fig. 7.</a>	AW-2 or AW-7	STAG-TAP-01	x.x.x.5
Megane Scenic 1.4i	MPI SIEMENS	<a href="#">Fig. 2.</a> <a href="#">Fig. 7.</a>	AW-7	STAG-TAP-01	x.x.x.5
Megane Scenic 1. 6i	MPI SIEMENS	<a href="#">Fig. 2.</a> <a href="#">Fig. 7.</a>	AW-2 or AW-7	STAG-TAP-01	x.x.x.5
Safrane 2.5i		<a href="#">Fig. 5.</a>	AW-5	STAG-TAP-01	x.x.x.4
Twingo 1.2i	MPI SAGEM	<a href="#">Fig. 7.</a>	AW-7	STAG-TAP-01	x.x.x.5
<b>SAAB</b>					
900 2.0i	Mpi BOSCH Motronic	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
<b>SEAT</b>					
Toledo 1.8 20V	SIEMENS – Simos	<a href="#">Fig. 19.</a>		STAG-TAP-01	x.x.x.1
Toledo 1.6 SR 8V	Multipoint	<a href="#">Fig.30.</a>		STAG-TAP-01	x.x.x.0
Toledo 1.6 - BCB	Multipoint	<a href="#">Fig.31.</a>		<b>STAG-TAP-02</b>	x.x.x.10
<b>SKODA</b>					
Fabia 1.4i 16V - BXW	Multipoint	<a href="#">Fig. 36.</a>		<b>STAG-TAP-02</b>	x.x.x.10
Octavia 1.6i 101cv	Multipoint	<a href="#">Fig.31.</a>		STAG-TAP-01	x.x.x.0
Octavia 1.8i 20v	Multipoint BOSCH M3.2	<a href="#">Fig. 19.</a>		STAG-TAP-01	x.x.x.0
Octavia 2.0i - AQY	Multipoint	<a href="#">Fig. 19.</a>		STAG-TAP-01	x.x.x.0
<b>SUZUKI</b>					
Alto 1.0i – K10BN				<b>STAG-TAP-02</b>	x.x.x.16
Baleno 1.3i 16v	Multipoint	<a href="#">Fig. 1.</a>		STAG-TAP-01	x.x.x.0
EEO 1.2i – G12B				STAG-TAP-01	x.x.x.9
Wagon R+ 1.2i 16v (OBD)	Multipoint	<a href="#">Fig. 1.</a>		STAG-TAP-01	x.x.x.0
<b>TOYOTA</b>					
Corolla 1.8 – ZZR	Multipoint Toyota	<a href="#">Fig. 20.</a>		STAG-TAP-01	x.x.x.3



VEHICLE	INJECTION SYSTEM	Number of connection diagram (adapter AW-0)	Number of special adapter	Type of TAP	Firmware version
Camry 3.0i V6 – 1MZ-FE	Multipoint Toyota	<a href="#">Fig. 20.</a>		STAG-TAP-01	x.x.x.3
<b>VOLKSWAGEN</b>					
Golf 1.6i	Multipoint SIEMENS SWP4	<a href="#">Fig. 19.</a>		STAG-TAP-01	x.x.x.0
Golf 1.6i (OBD) - APF	Multipoint SIEMENS	<a href="#">Fig. 30.</a>		STAG-TAP-01	x.x.x.0
Passat 1.6i	Multipoint SIEMENS SWP4	<a href="#">Fig. 19.</a>		STAG-TAP-01	x.x.x.0
Passat 1.8i	Multipoint	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.1
Passat 1.8i 20v Turbo (OBD)	Multipoint BOSCH ME7.5	<a href="#">Fig. 27.</a>		STAG-TAP-01	x.x.x.1
Passat 2.0i 20v (OBD) - AZM	Multipoint SIEMENS	<a href="#">Fig. 33.</a>		STAG-TAP-01	x.x.x.1
Sharan 2.8i VR6	Mpi BOSH Motronic	<a href="#">Fig. 8.</a>	AW-8	STAG-TAP-01	x.x.x.0
<b>VOLVO</b>					
S40 1.6i 16v (OBD) - B4164S2	Multipoint	<a href="#">Fig. 5.</a>	AW-5	STAG-TAP-01	x.x.x.5
S40 1.8i 16v (OBD)	Multipoint	<a href="#">Fig. 5.</a>	AW-5	STAG-TAP-01	x.x.x.5
S40 2.0i 16v (OBD)	Multipoint	<a href="#">Fig. 5.</a>	AW-5	STAG-TAP-01	x.x.x.5
V40 1.6i 16v (OBD) - B4164S2	Multipoint	<a href="#">Fig. 5.</a>	AW-5	STAG-TAP-01	x.x.x.5
V40 1.8i 16v (OBD)	Multipoint	<a href="#">Fig. 5.</a>	AW-5	STAG-TAP-01	x.x.x.5
V40 2.0i 16v (OBD)	Multipoint	<a href="#">Fig. 5.</a>	AW-5	STAG-TAP-01	x.x.x.5
S40 1.6i-1.8i-2.0i 16v	SIEMENS	<a href="#">Fig. 4.</a>	AW-4	STAG-TAP-01	x.x.x.5
S60 2.4i 20v (OBD) - B5244S	Multipoint DENSO	<a href="#">Fig. 29</a>		STAG-TAP-01	x.x.x.1
S80 2.5i Turbo - B5254T2	Multipoint	<a href="#">Fig. 20.</a>		STAG-TAP-01	x.x.x.1

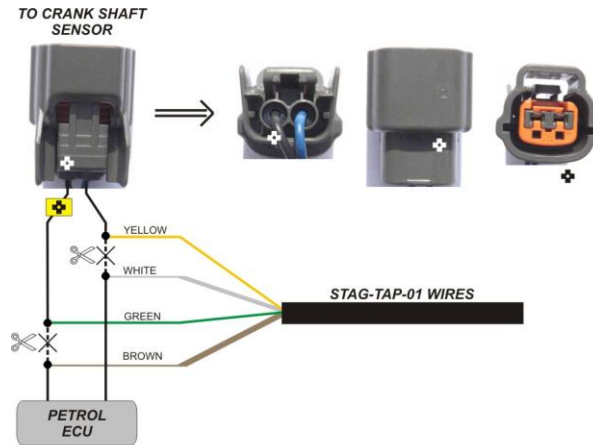


Fig. 1.

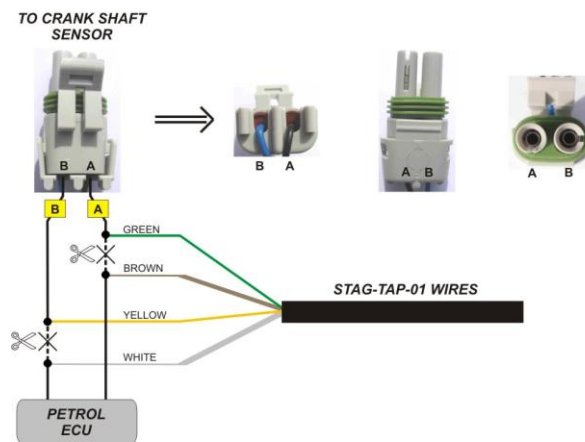


Fig. 2.

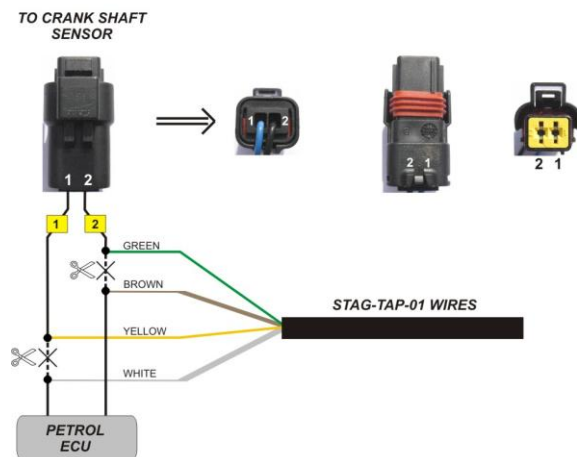


Fig. 3.

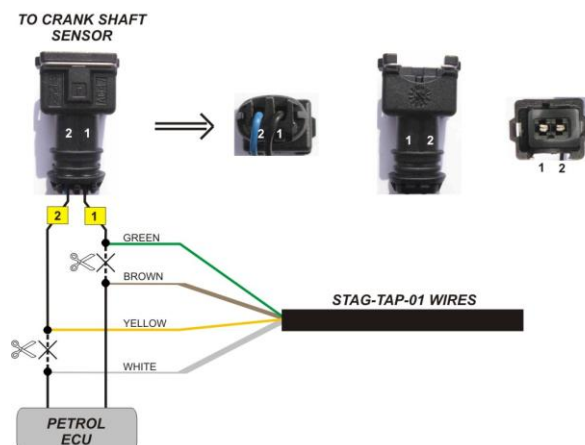


Fig. 4.

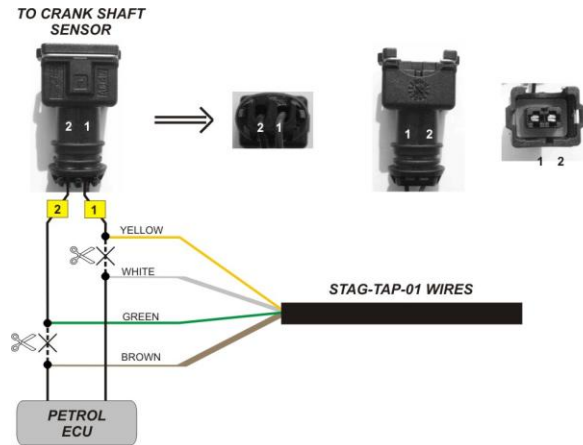


Fig. 5.

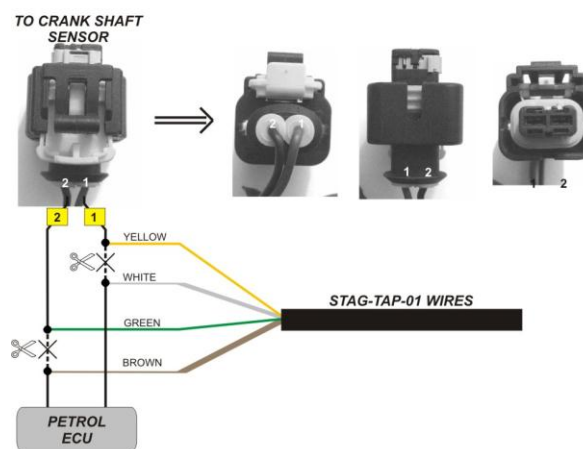


Fig. 6.

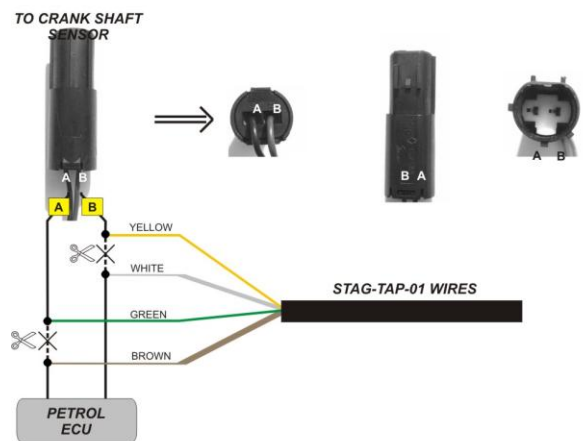


Fig. 7.

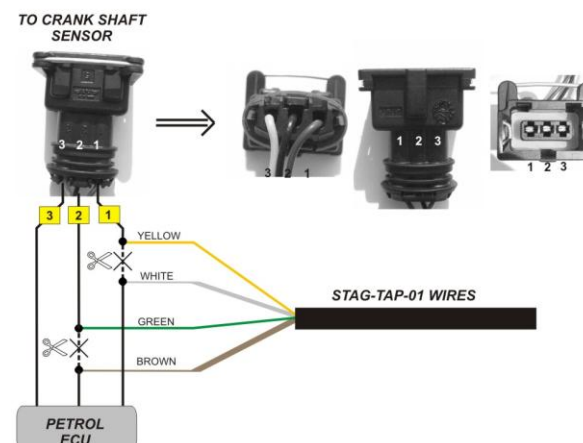
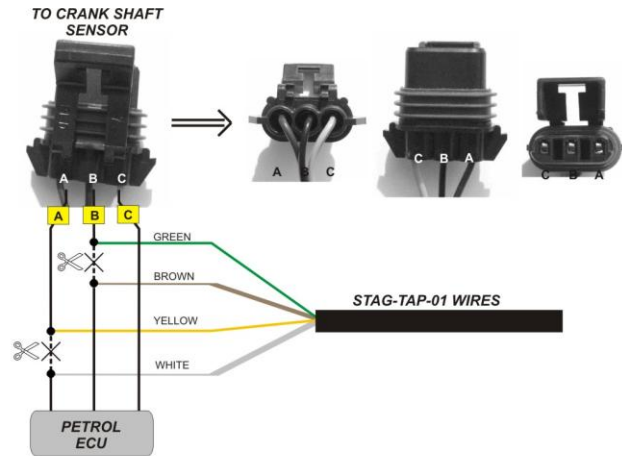
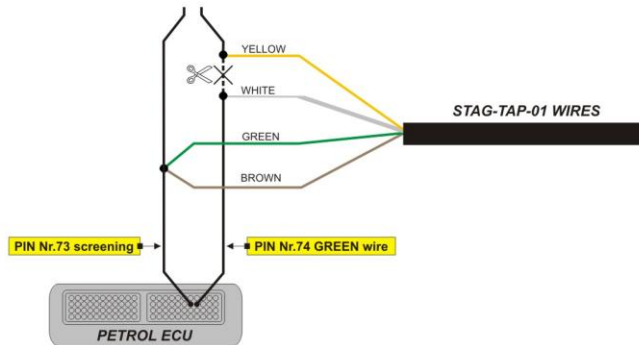


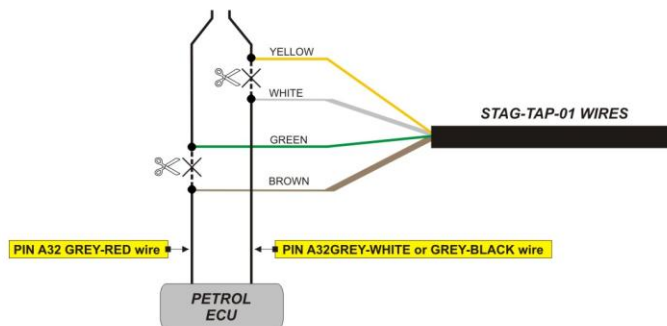
Fig. 8.



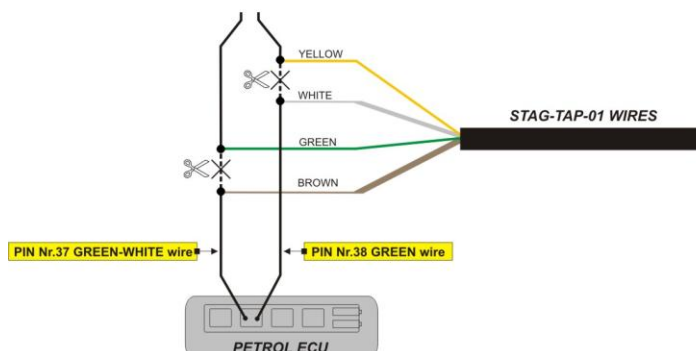
**Fig. 9.**



**Fig. 10.**



**Fig. 11.**



**Fig. 12.**



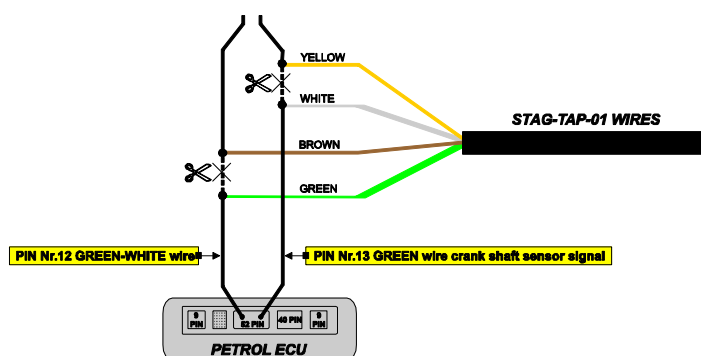


Fig. 13.

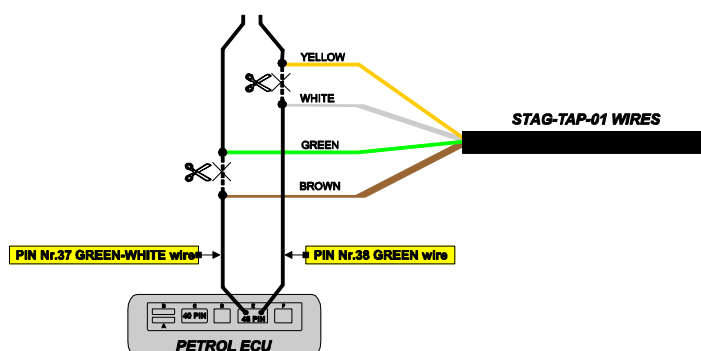


Fig. 14.

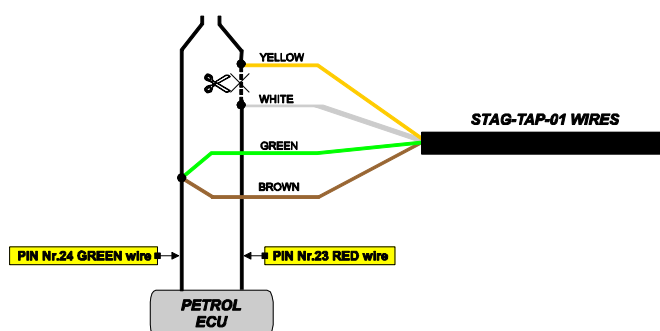


Fig. 15.

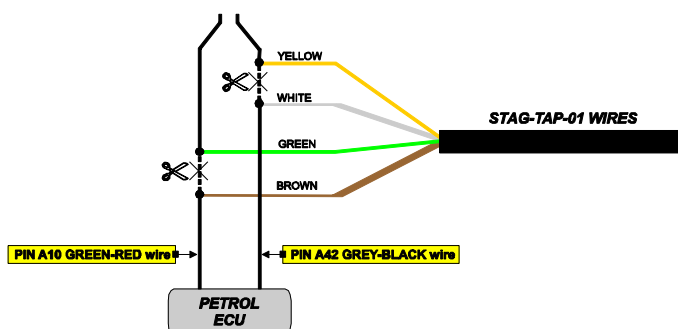


Fig. 16.

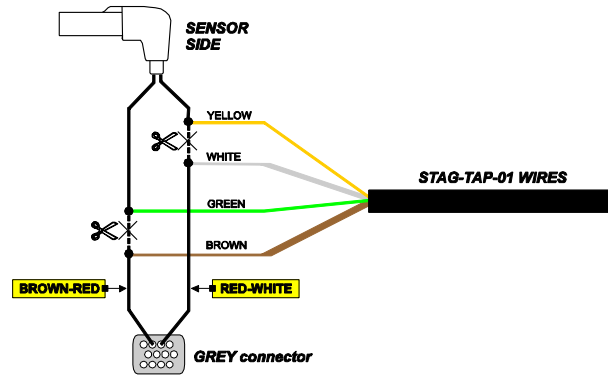


Fig. 17.

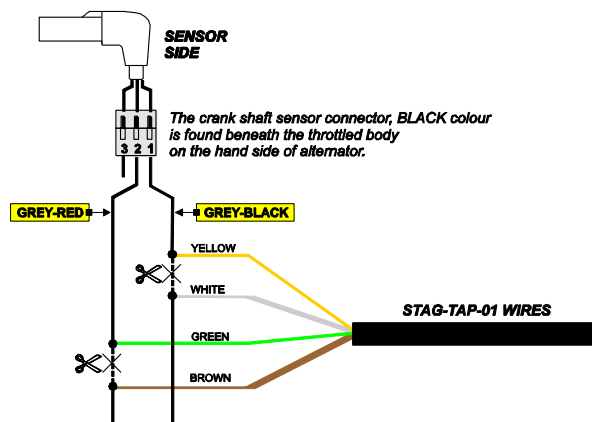


Fig. 18.

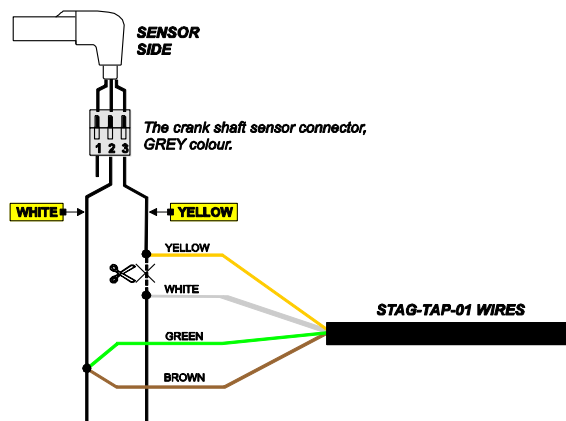


Fig. 19.

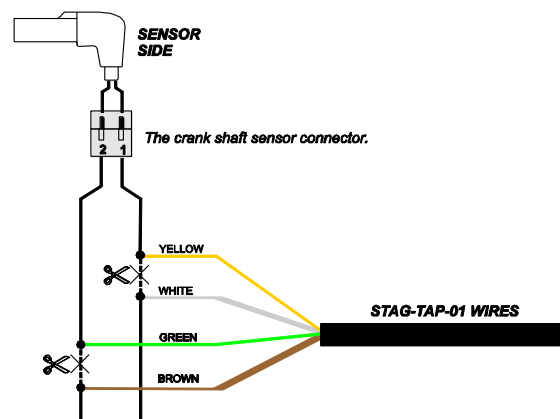


Fig. 20.

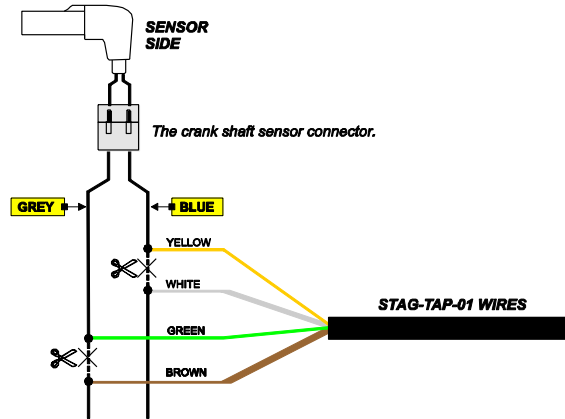


Fig. 21.

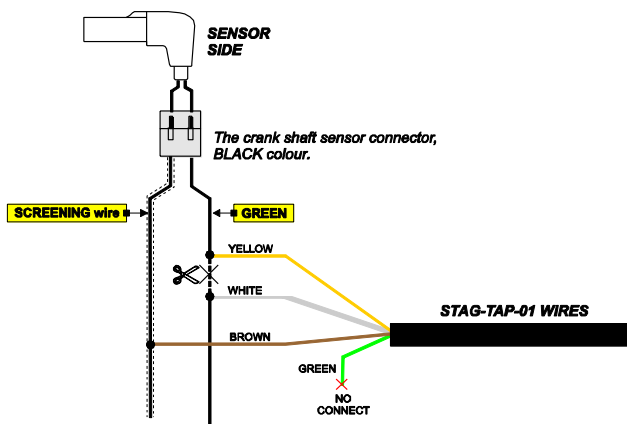


Fig. 22.

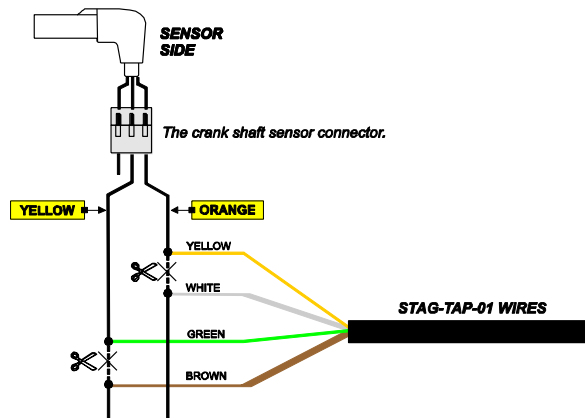


Fig. 23.

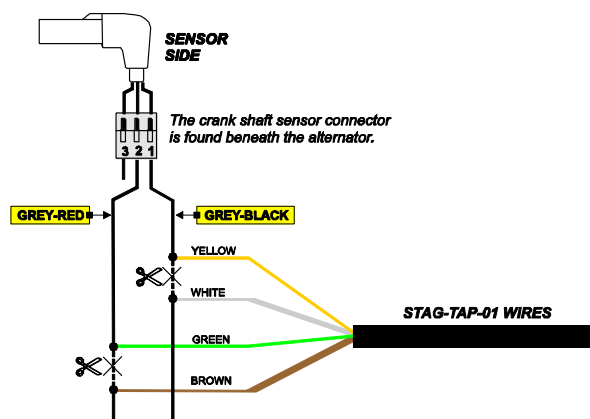


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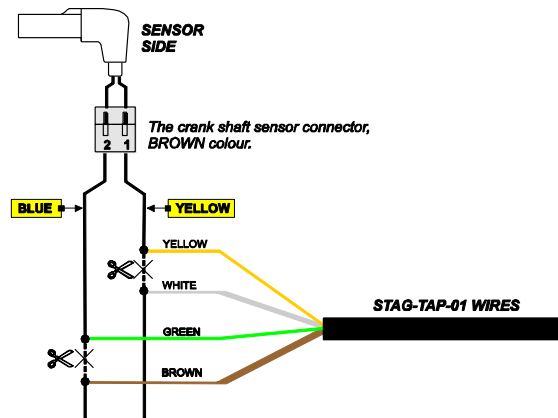


Fig. 25.

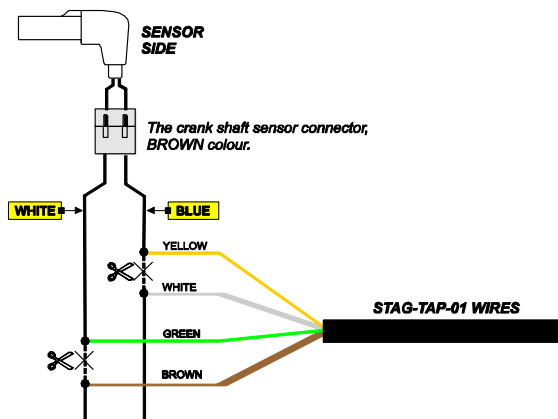


Fig. 26.

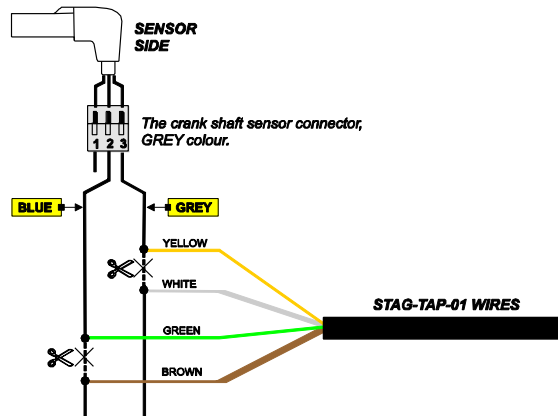


Fig. 27.

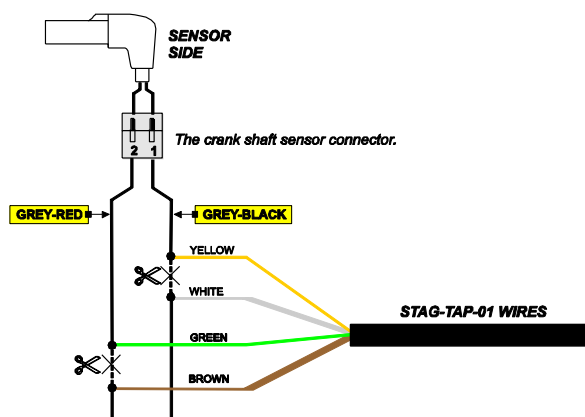


Fig. 28.

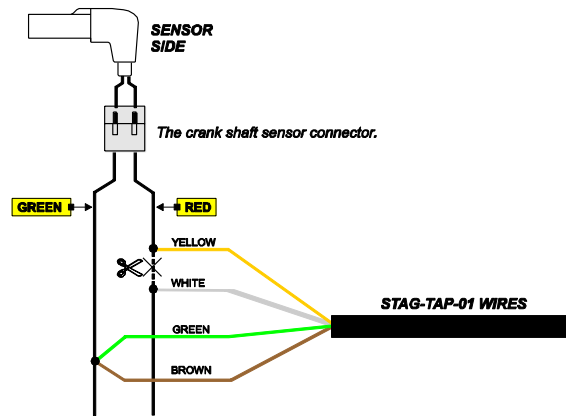


Fig. 29.

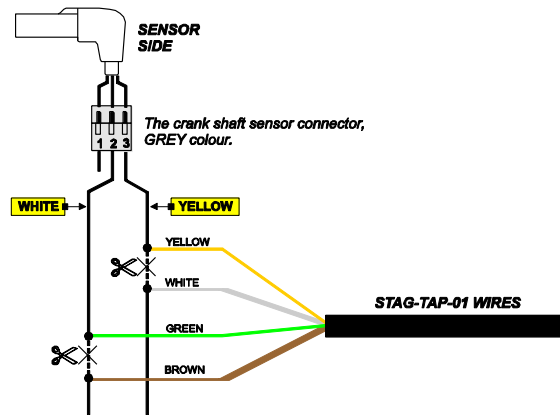


Fig. 30.

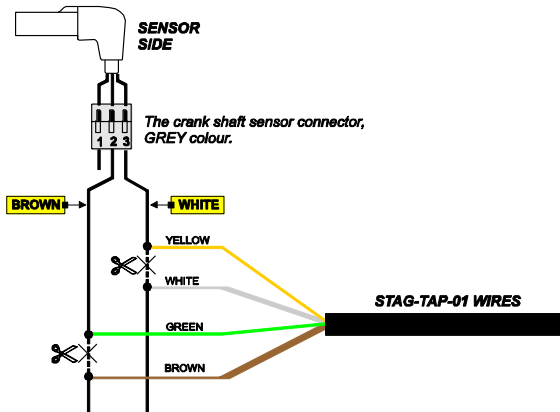


Fig. 31.

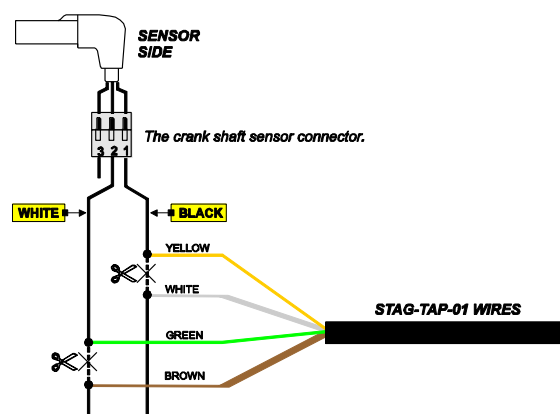
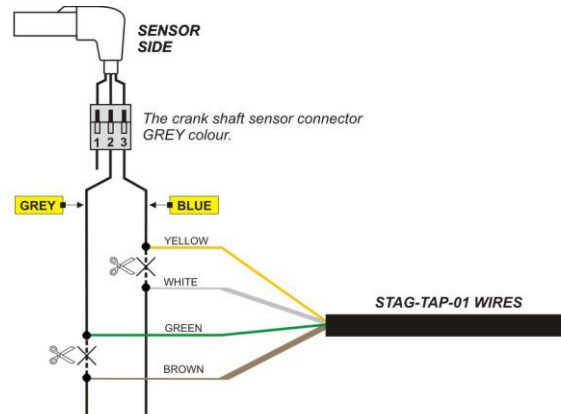
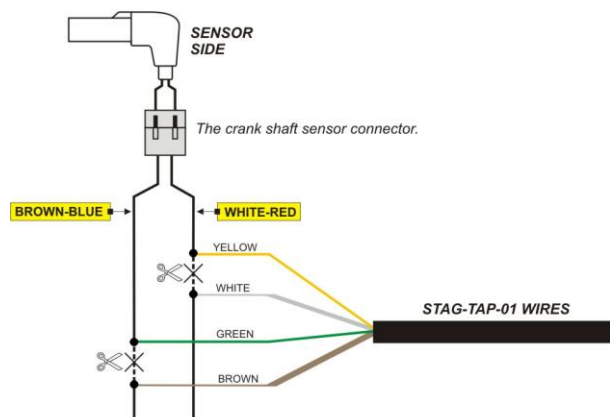


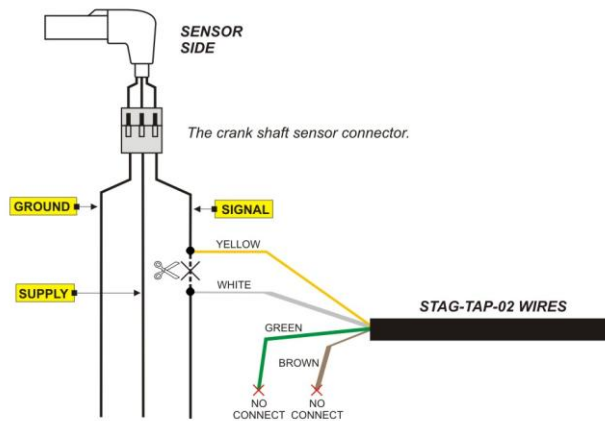
Fig. 32.



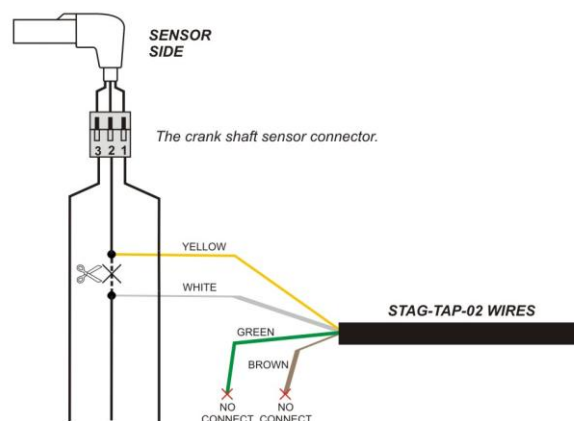
**Fig. 33.**



**Fig. 34.**



**Fig. 35.**



**Fig. 36.**