



STAG-TAP-01/02

Timing Advance Processor

CONNECTION AND PROGRAMMING INSTRUCTIONS

V1.3.2



Manufacturer:

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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. 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.

3. 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.

4. 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.

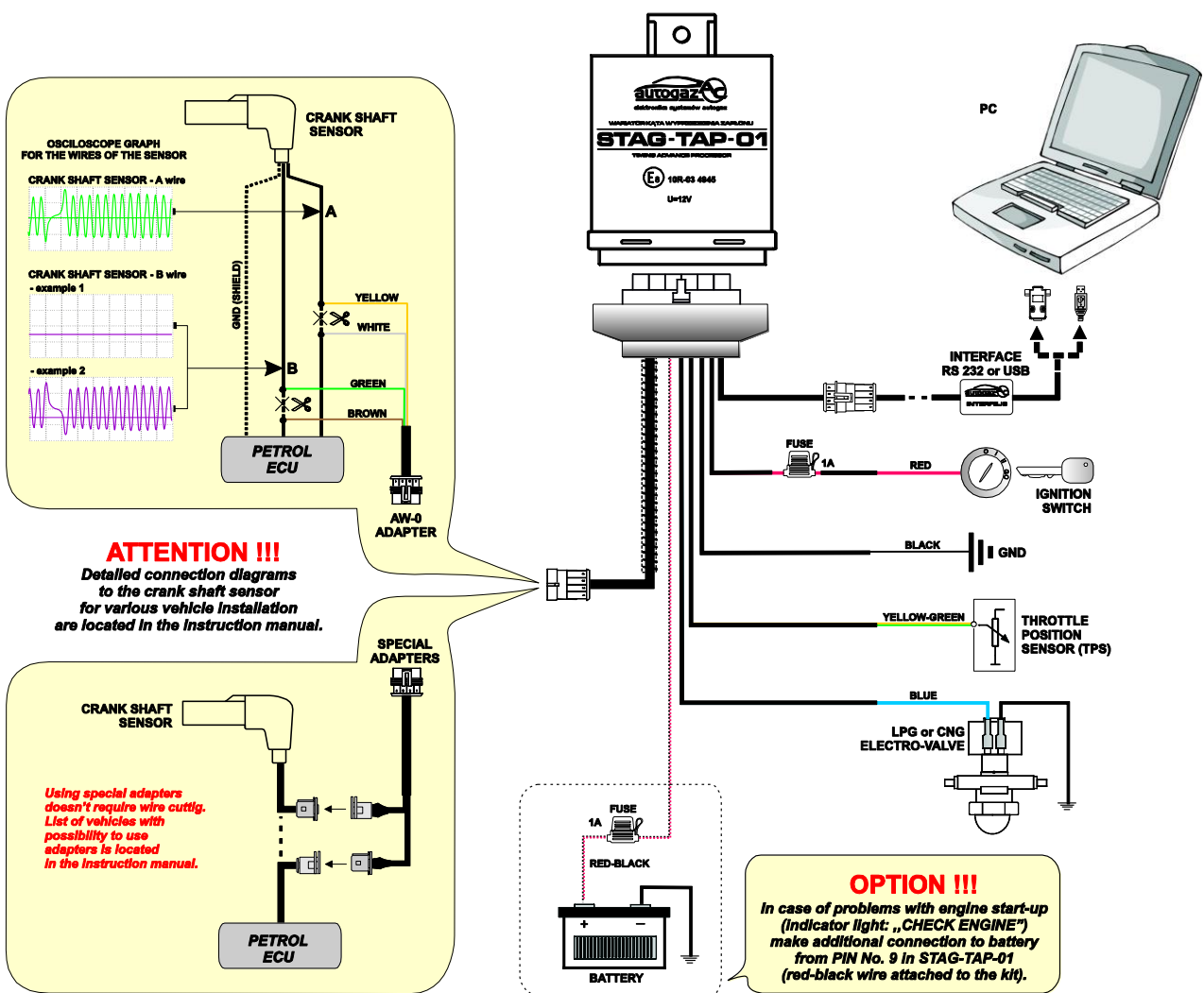
Rubber gaskets protecting the bundle socket should be installed carefully in order to seal the whole casing.



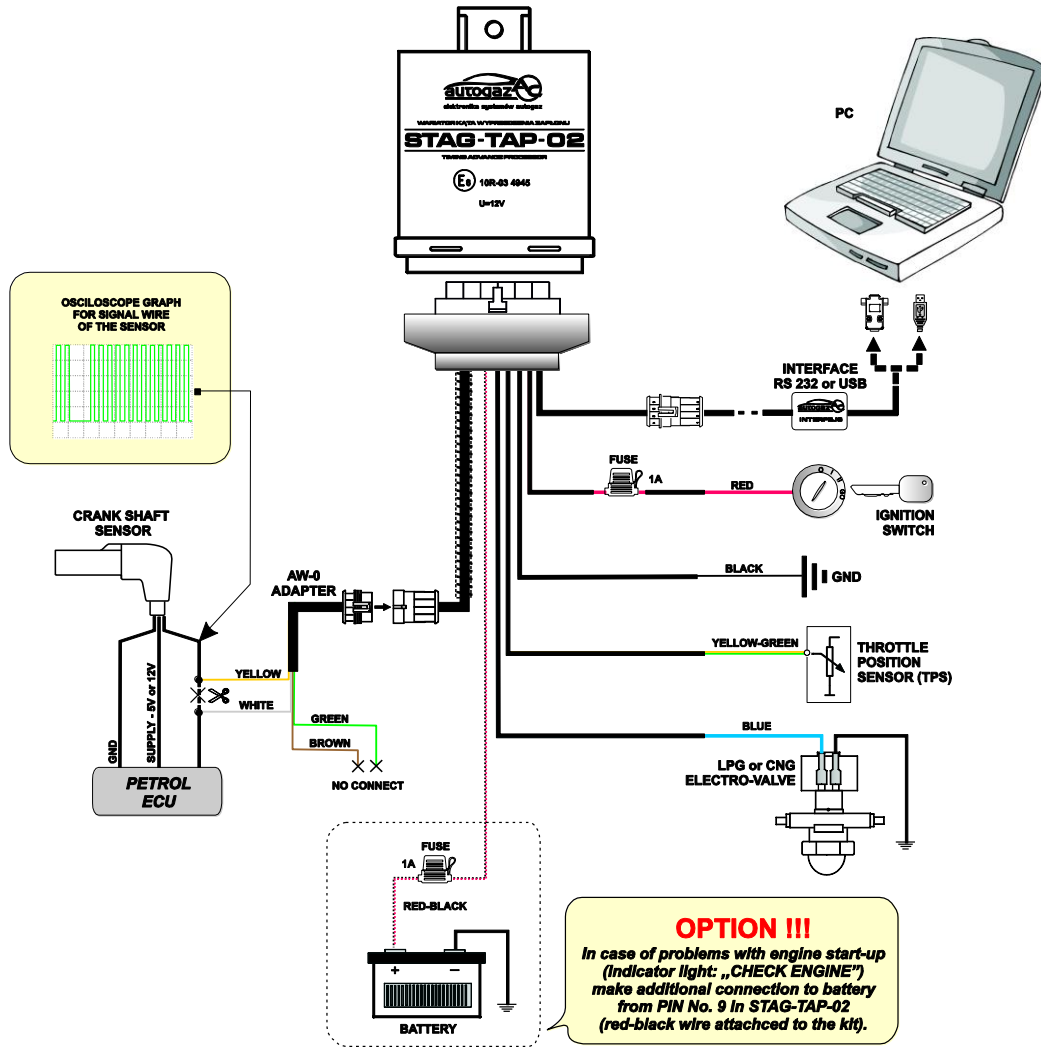
Electric connections should be soldered, carefully insulated and protected from short circuits and dampness.

The method of determining the sensor type:

- a) 2-pin connector – inductive sensor,
resistance for a typical sensor is approximately 1000 ohms.
- b) 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.
- c) 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).

5. 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



6. 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.

7. 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.

Operation mode:	MANUAL (switches)	PC (RS232 interface)		
SW 4	OFF	ON		
TPS type:	Standards	Reverse		
SW 3	OFF	ON		
Ignition advance:	6 degrees	8 degrees	10 degrees	12 degrees
SW 2	OFF	OFF	ON	ON
SW 1	OFF	ON	OFF	ON

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]

8. 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.

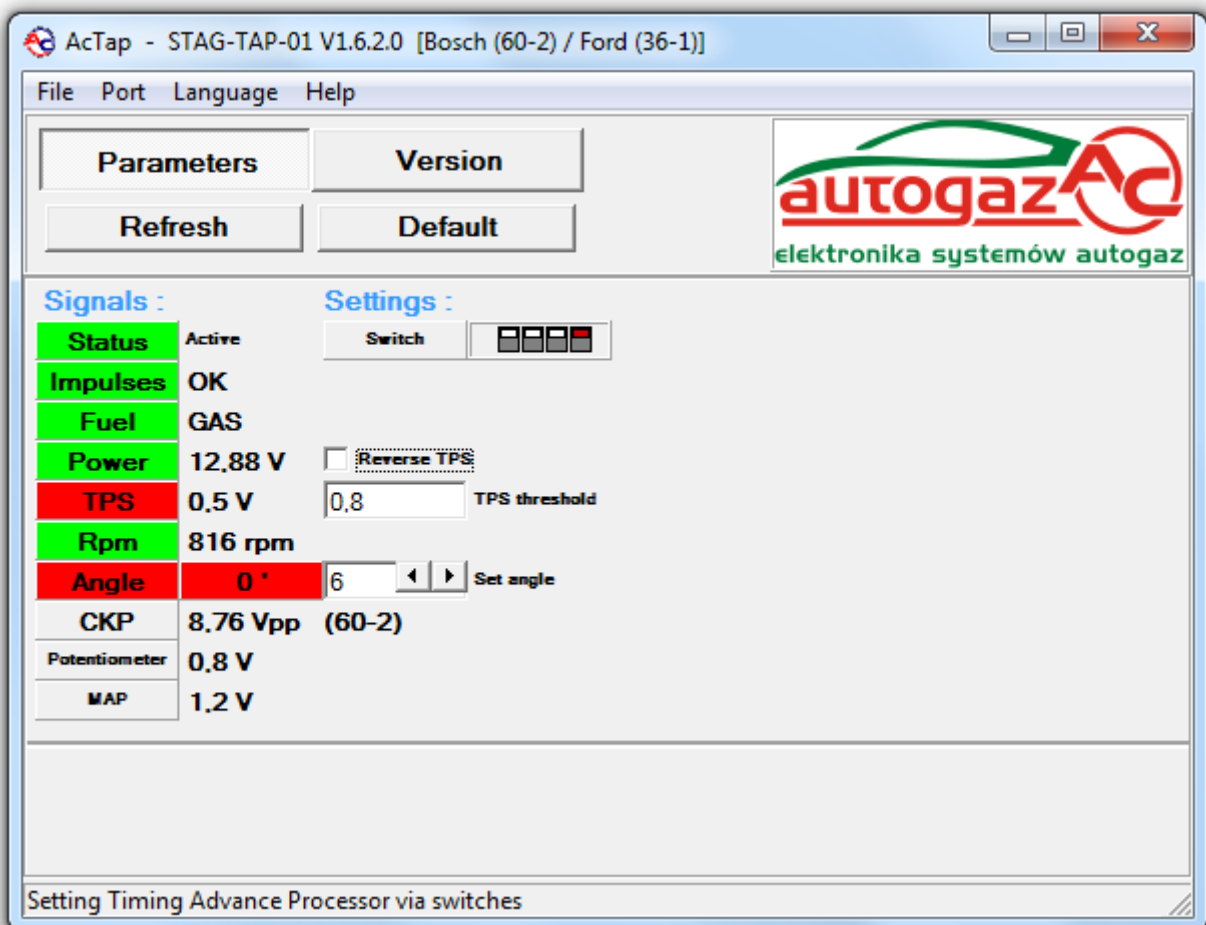


RPM threshold - this option, if available, defines engine rev value below which generation of shifted impulses is disabled.

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.

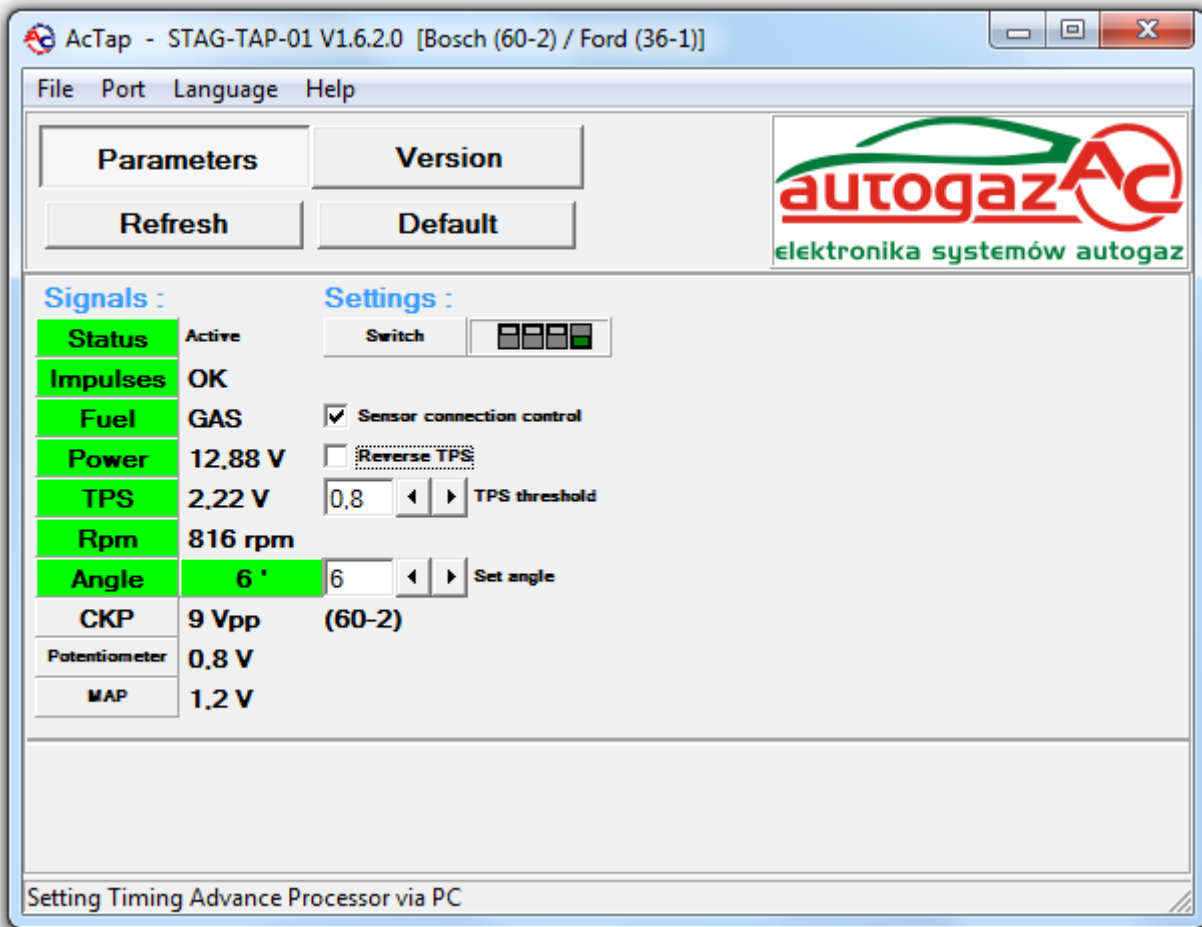


The screenshot shows the status with the TPS voltage below the preset threshold value, the timing advance processor is not shifting impulses (impulses at the output of TAP are in phase with impulses of the sensor). The screenshot also shows the configuration mode of the timing advance processor via switches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

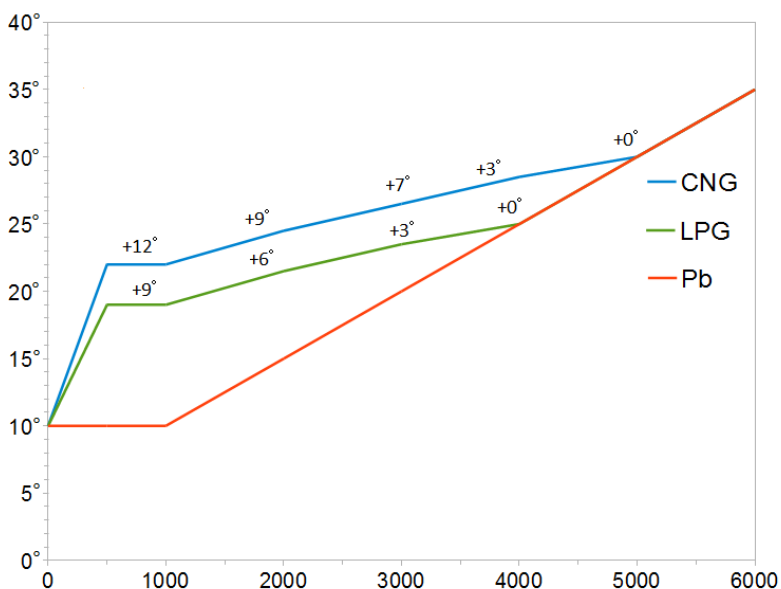
NOTE!

"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



9. 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).

AcTap - STAG-TAP-01 V1.6.3.0 [Bosch (60-2) / Ford (36-1)]

File Port Language Help

Parameters Version Refresh Default

autogaz AC
elektronika systemów autogaz

Signals :
 Status Active
 Impulses OK
 Fuel GAS
 Power 12.88 V
 TPS 2.14 V
 Rpm 3311 rpm
 Angle 17 °
 CKP 9 Vpp (60-2)
 Potentiometer 0.8 V
 MAP 2.42 V

Settings :
 Switch
 Impulse shifting
 Sensor connection control
 Reverse TPS
 TPS threshold 0.8

Ignition map adjustment
 Map OFF 2D 3D
 Signal source MAP TPS
 Load 47% 0 Min signal 5,1 Max signal

	800	1200	1600	2000	2400	2800	3200	3600	4000	4400	4800	5200	5600	6000	1000
6%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12%	0	0	8	8	8	8	8	8	8	8	8	6	6	6	6
18%	8	8	10	10	12	12	12	12	12	12	12	6	6	6	6
25%	8	10	10	10	12	12	12	12	12	12	12	6	6	6	6
31%	8	10	10	10	12	12	12	12	12	12	12	6	6	6	6
37%	8	12	10	10	12	15	15	15	15	15	12	6	6	6	6
43%	8	12	10	10	12	15	15	15	15	15	12	6	6	6	6
50%	8	12	10	10	12	15	15	15	17	15	12	8	4	4	4
56%	8	15	10	10	12	15	15	15	17	15	12	8	4	4	4
62%	8	15	10	10	12	15	15	17	15	15	12	8	4	4	4
68%	8	10	10	10	12	15	15	17	15	15	12	8	3	3	3
74%	8	10	10	10	12	15	15	17	15	15	12	8	3	3	3
81%	8	10	10	10	12	15	15	17	15	15	12	8	3	3	3
87%	8	10	10	10	12	15	15	17	15	12	10	6	3	3	3
93%	8	10	10	10	12	15	15	15	15	12	10	6	3	3	3
100%	8	10	10	10	12	15	15	15	15	12	10	6	3	3	3

Gas ignition map adjustment

3D map showing Angle [°] vs Load [%] vs Engine RPM.

To select [Shift]+[^][v][<][>], to change [Ctrl][^][v]

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.

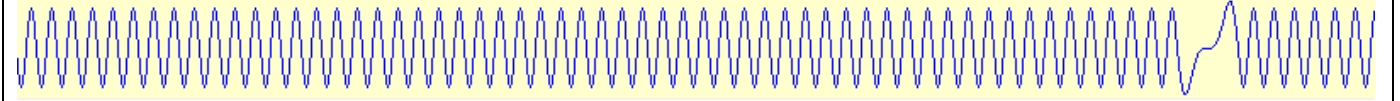
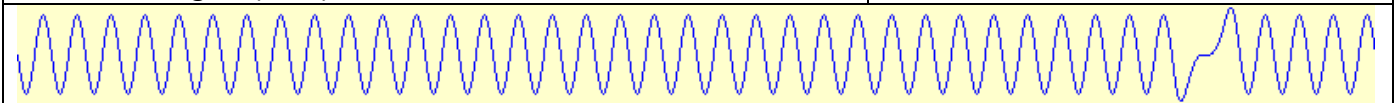
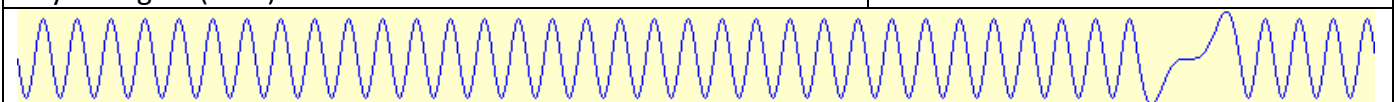


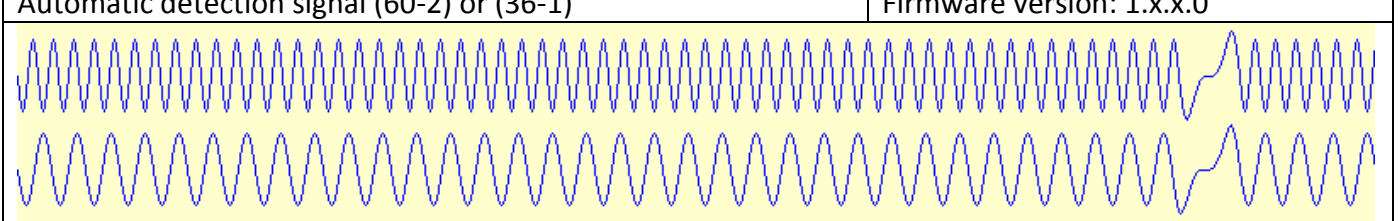
The minimum value corresponds with the 0% load, while the maximum value corresponds with the 100% load.



10.COMPATIBLE CRANK SIGNALS

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

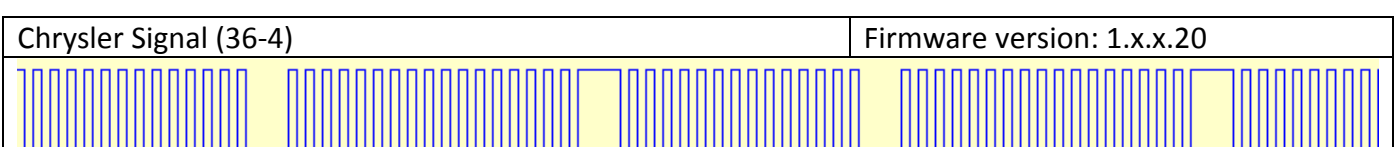
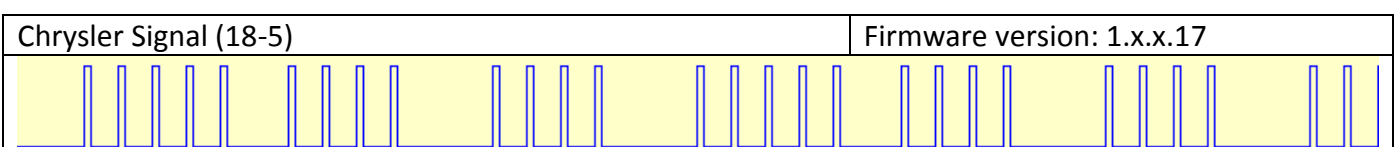
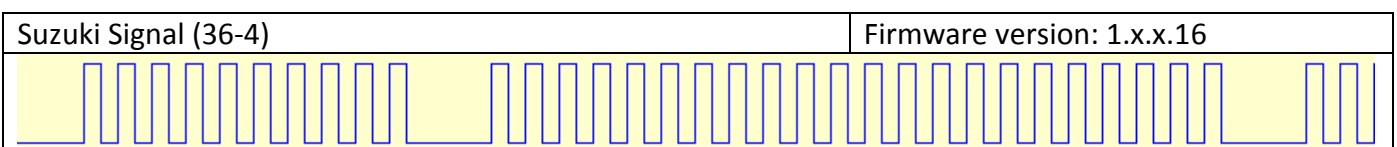
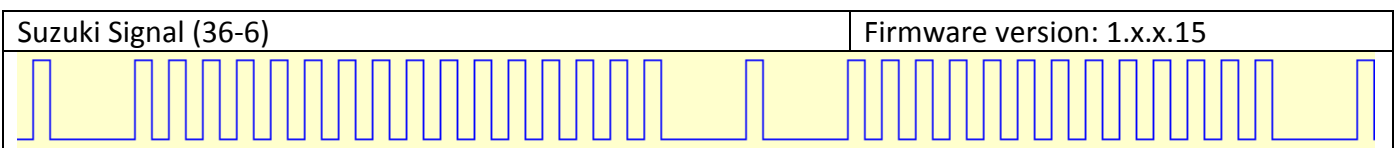
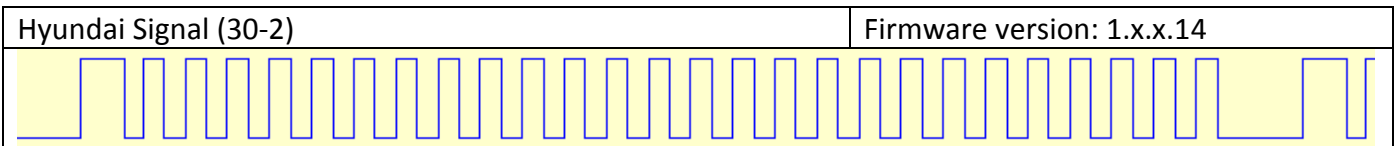
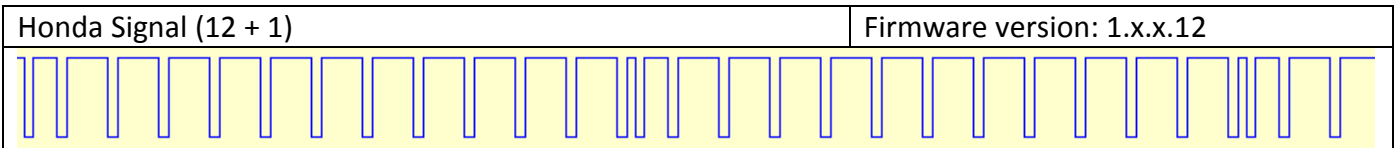
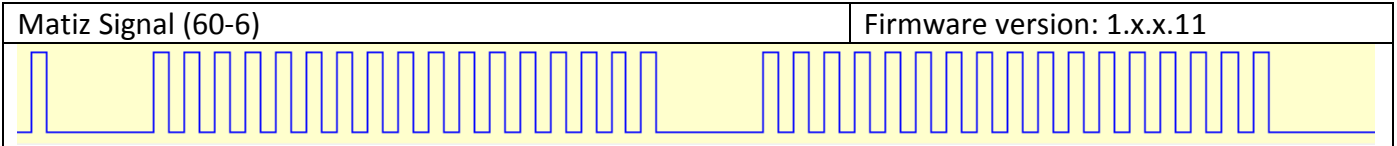
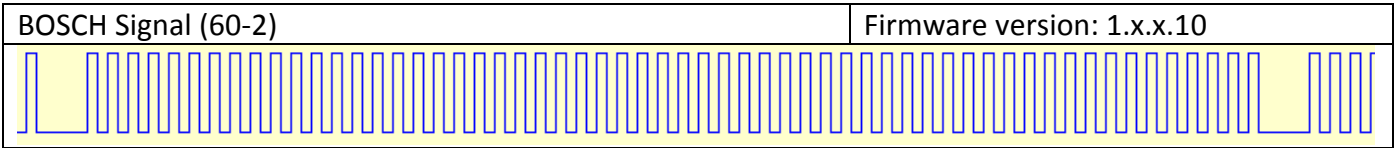
TAP-01

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 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



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.



11. 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!

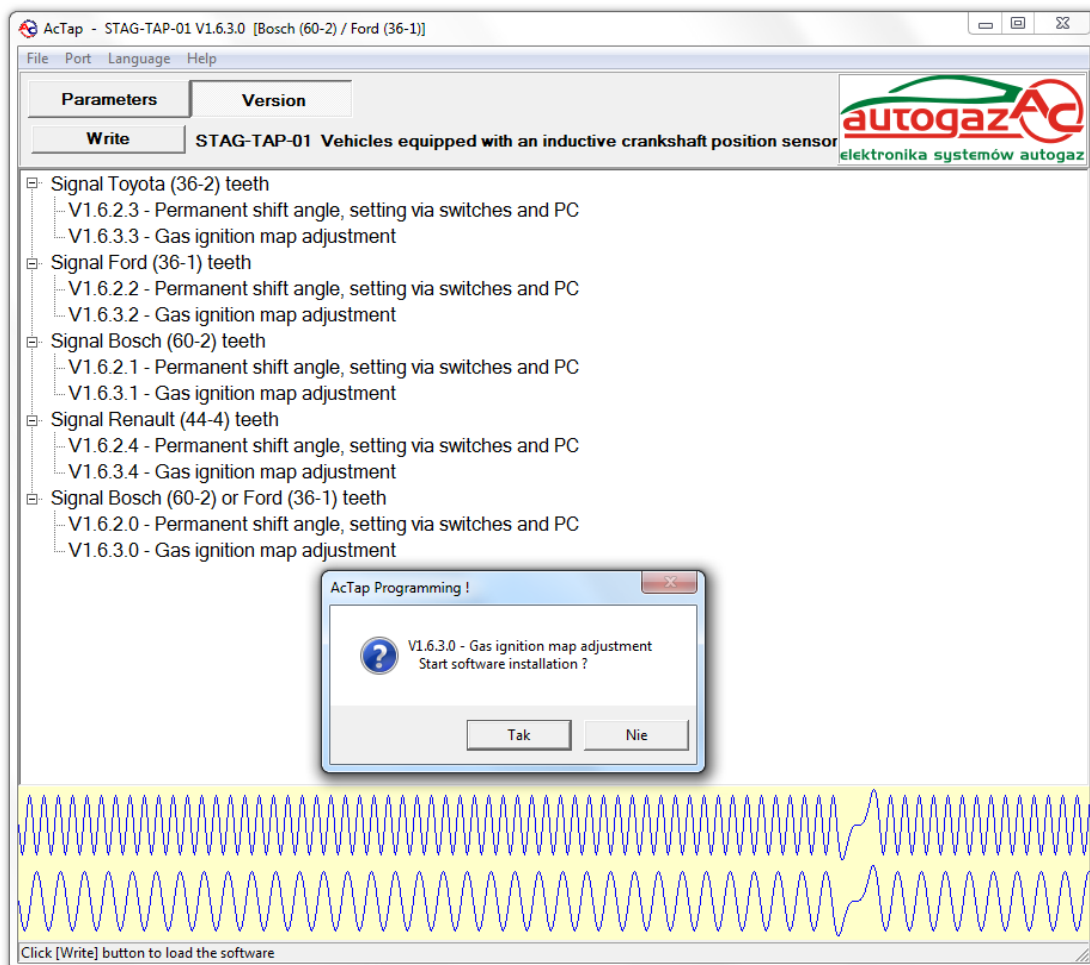
Do not turn the PC off, close the software, deactivate the car ignition switch or disconnect the RS232 or USB interface wire while programming.

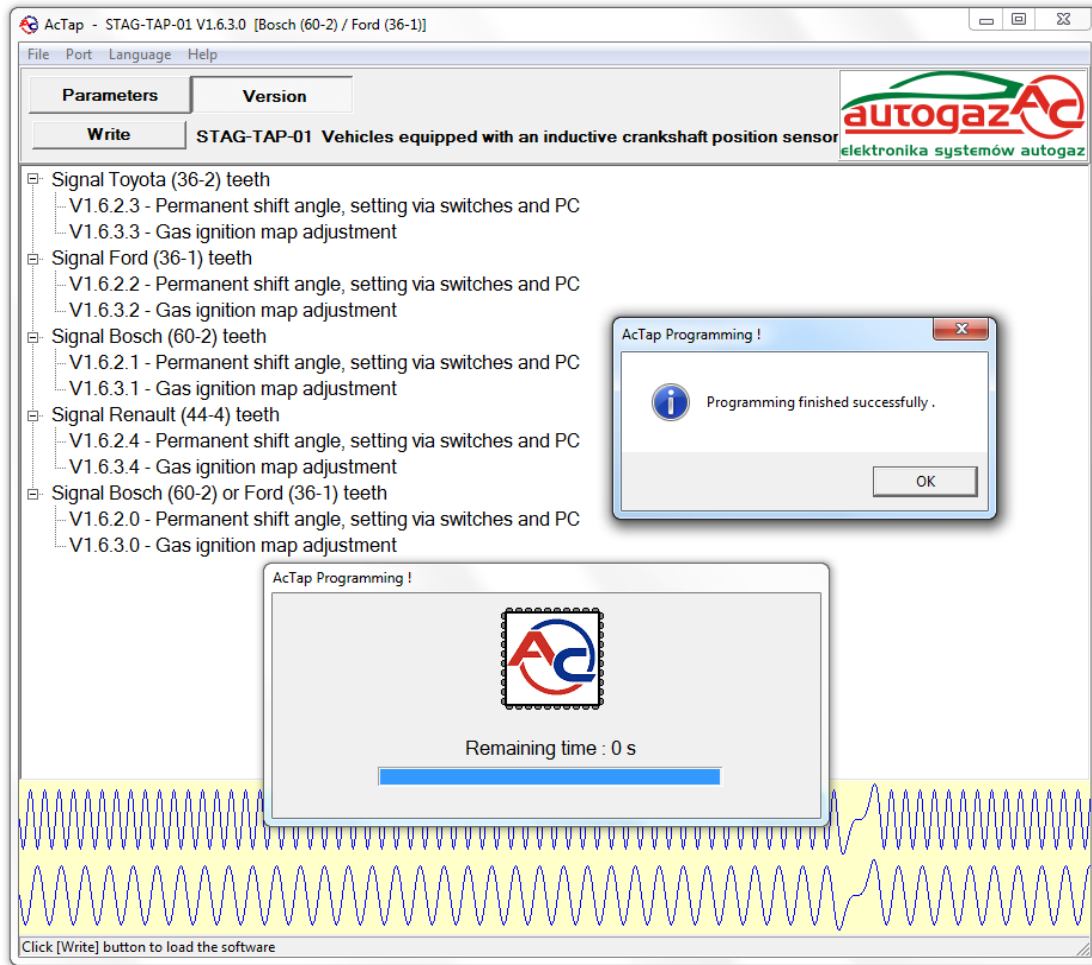
Press OK once “Programming finished successfully” message has been displayed.

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.

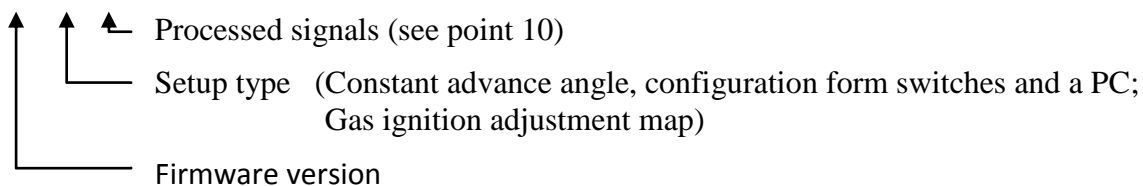
The following screenshots show subsequent stages of the software update procedure.





Firmware No. marking method:

v1.6 .1 .0



12. 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]



13. 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.

VEHICLE	INJECTION SYSTEM	Number of connection diagram (adapter AW-0)	Number of special adapter	Type of TAP	Firmware version
ALFA ROMEO					
33 1.3i 16v	Mpi MARELLI IAW 8F	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
33 1.5i 16v	Mpi BOSCH Motronic ML4-	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
33 1.7i 16v	Mpi BOSCH Motronic ML4-	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
145 1.3i	Mpi MARELLI JAW 8F	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
145 1.4i 16v Twin Spark	Mpi BOSCH M2.10.4	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
145 1.6i	Multipoint	Fig. 9.	AW-9	STAG-TAP-01	x.x.x.1
145 1.6i 16v Twin Spark	Mpi BOSCH M2.10.4	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.1
145 1.7i 16v	Mpi BOSCH M2.10.3	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
145 1.8i 16v Twin Spark	Mpi BOSCH Motronic	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
146 1.3i	Mpi MARELLI JAW 8F	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
146 1.4i 16v Twin Spark	Mpi BOSCH M2.10.4	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
146 1.6i	GM Multipoint GM	Fig. 9.	AW-9	STAG-TAP-01	x.x.x.1
146 1.6i 16v Twin Spark	Mpi BOSCH M2.10.4	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.1
146 1.7i 16v	Mpi BOSCH Motronic	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
146 1.8i 16v Twin Spark	Mpi BOSCH M2.10.4	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
147 1.6i 16v Twin Spark	Multipoint BOSCH ME7.3	Fig. 6. Fig. 25.		STAG-TAP-01	x.x.x.0
147 1.6i 16v T. S. 77KW (OBD)	Multipoint BOSCH ME7.3	Fig. 6.		STAG-TAP-01	x.x.x.0
147 1.6i 16v T. S. 88KW (OBD)	Multipoint BOSCH ME7.3	Fig. 6.		STAG-TAP-01	x.x.x.0
155 1.6i 16v Twin Spark	Mpi BOSCH M2.10.4	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
155 1.7i Twin Spark	Mpi BOSCH Motronic M1.7	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
155 1.8i Twin Spark	Mpi BOSCH Motronic M1.7	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
155 1.8i 16v Twin Spark	Mpi BOSCH Motronic	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
155 2.0i Twin Spark	Mpi BOSCH Motronic M1.7	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
155 2.0i 16v Twin Spark	Mpi BOSCH Motronic	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
155 2.5i V6 24v	Mpi BOSCH Motronic M1.7	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
156 1.6i 16v Twin Spark	Mpi BOSCH M2.10.4	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
156 1.8i 16v Twin Spark	Multipoint BOSCH MP1.5.5	Fig. 6. Fig. 26.		STAG-TAP-01	x.x.x.0
156 1.8i 16v Twin Spark	Multipoint BOSCH ME7.3	Fig. 6. Fig. 25.		STAG-TAP-01	x.x.x.0
156 2.0i 16v Twin Spark	Multipoint BOSCH MP1.5.5	Fig. 6. Fig. 26.		STAG-TAP-01	x.x.x.0
164 2.0i Twin Spark	Mpi BOSCH M1.7	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
AUDI					
80 1.6i 101cv	Multipoint	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
A3 1.6i 101 cv	Multipoint	Fig. 27.		STAG-TAP-01	x.x.x.0
A3 1.8i 20v	Multipoint	Fig. 27.		STAG-TAP-01	x.x.x.0
A3 1.8i 20v (OBD) - APG	Multipoint BOSCH	Fig.31.		STAG-TAP-01	x.x.x.0
A4 1.6i 101 cv	Multipoint	Fig. 27.		STAG-TAP-01	x.x.x.0
A4 1.8i 20v ADR	Multipoint	Fig. 8.	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
A4 2.0i 20v (OBD) - ALT	Multipoint BOSCH ME7.5	Fig. 27.		STAG-TAP-01	x.x.x.0
A4 2.8i ALG	BOSCH	Fig. 27.		STAG-TAP-01	x.x.x.1
A6 1.8i 20v	Multipoint	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
A6 1.8i 20v Turbo - AEB	Multipoint BOSCH M3.8	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
A6 2.8i	BOSCH	Fig. 27.		STAG-TAP-01	x.x.x.1
A6 2.4i V6 - ALF	BOSCH	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.1
Q5 3.2 FSI V6 - CAL	BOSCH	Fig. 36.		STAG-TAP-02	x.x.x.10
BMW					
Serie 3316i- 164E2	Mpi BOSCH M1.7.2	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Serie 3316i	Mpi BOSCH M1.7.3	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Serie 3318i - 184E2	Mpi BOSCH M1.7.2	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Serie 3318i	Mpi BOSCH M1.7.3	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Serie 3320i 24v	BOSCH	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.1
Serie 5520i 24v	BOSCH	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.1
CHEVROLET					
Aveo 1.2i – B12S1	Siemens	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.1
Blazer 2.2i	Singlepoint GM	Fig. 9.	AW-9	STAG-TAP-01	x.x.x.0
C20 4.1	Mpi DE LUXE 6cil.	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Silverado 4.1	Multipoint 6cil.	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Vectra 2.0i 16v	Multipoint BOSCH	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
CHRYSLER					
300M 2.7i	Multipoint	Fig. 35.		STAG-TAP-02	x.x.x.17
Sebring 2.7i	Multipoint	Fig. 35.		STAG-TAP-02	x.x.x.17
Voyager 3.3i - EGA	Multipoint	Fig. 35.		STAG-TAP-02	x.x.x.20
Voyager 3.8i - EGH	Multipoint	Fig. 35.		STAG-TAP-02	x.x.x.20
CITROEN					
AX 1.1i	SPI MARELLI G6	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
AX 1.4i GTI	Mpi BOSCH MP3.1	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Berlingo 1.4i	MARELLI IAW 1AP 40	Fig. 3.	AW-3	STAG-TAP-01	x.x.x.1
Berlingo 1.4i	Mpi MARELLI IAW 1AP 40	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.1
Berlingo 1.6i	NRF10FX7L BOSCH	Fig. 3.	AW-3	STAG-TAP-01	x.x.x.1
Berlingo 1.8i	Mpi MARELLI IAW 1AP 50	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.1
C3 1.6i 16v	Mpi BOSCH ME7.4.4	Fig. 7.	AW-7	STAG-TAP-01	x.x.x.1
Saxo 1.0i-1.1i	BOSCH MA 3.1	Fig. 3.	AW-3	STAG-TAP-01	x.x.x.0
Saxo 1.0i	Spi BOSCH MA 3.1	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Saxo 1.1i	Spi BOSCH MA 3.1	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Saxo 1.4i	Mpi MARELLI IAW 1AP 40	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Saxo 1.4i	MARELLI IAW 1AP 40	Fig. 3.	AW-3	STAG-TAP-01	x.x.x.0
Saxo 1.6i	BOSCH MP 5.1	Fig. 3.	AW-3	STAG-TAP-01	x.x.x.0
Saxo 1.6i	Mpi BOSCH MP 5.1	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Xsara 1.4i	MARELLI IAW 1AP 40	Fig. 3.	AW-3	STAG-TAP-01	x.x.x.0
Xsara 1.4i	Mpi MARELLI IAW 1AP 40	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Xsara 1.6i	BOSCH MP 5.1	Fig. 3.	AW-3	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 1.6i	Mpi BOSCH MP 5.1	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Xsara 1.8i	Mpi BOSCH MP 5.1	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Xsara 1.8i 16v	Mpi BOSCH MP 5.1.1	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Xsara 2.0i 16v	Mpi BOSCH MP 5.1.1	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Xsara Picasso 1.6i	BOSCH	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Xantia 1.6i	Mpi MARELLI IAW 8P	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Xantia 1.8i	Mpi MARELLI IAW 8P	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Xantia 1.8i	Mpi BOSCH MP 5.1	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Xantia 2.0i	Mpi MARELLI IAW 8P	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.1
DAEWOO					
Lanos 1.3i	Multipoint GM	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Lanos 1.5i	Multipoint GM	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Tacuma 1.8i (OBD)	Multipoint KEMSCO	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Tacuma 2.0i 16v - T20SFD	Multipoint DELCO	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Leganza 2.0i 16v	Multipoint GM	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Leganza 2.0i 16v (OBD)	Multipoint	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Kalos 1.2i	Mpi	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Kalos 1.4i	Mpi	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Nubira 1.6i	Mpi	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
DODGE					
Caravan 3.3i - EGA	Multipoint	Fig. 35.		STAG-TAP-02	x.x.x.20
FIAT					
Barchetta 1.8i 16v	Multipoint HITACHI	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Bravo 1.2i 16v (OBD)	Multipoint BOSCH	Fig. 6.		STAG-TAP-01	x.x.x.1
Brava - Bravo 1.2i 16v	Mpi BOSCH MP 1.5.5	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Brava - Bravo 1.4i 12v	Singlepoint BOSCH MA	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Brava - Bravo 1.6i 16v	Mpi MARELLI IAW 1AF	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.1
Brava - Bravo 1.6i 16v	Mpi MARELLI IAW 49F	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.1
Brava - Bravo 1.8 16v	Multipoint HITACHI	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Cinquecento 900i	Spi MARELLI IAW 6F - 16F	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Coupe 1.8i 16v	Multipoint HITACHI	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Coupe 2.0 20v	Multipoint BOSCH	Fig. 6. Fig. 25.		STAG-TAP-01	x.x.x.0
Croma 2.0i 16v	Motronic	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Marea 1.6i 16v	Mpi MARELLI IAW 1AF	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.1
Marea 1.6i 16v	Mpi MARELLI IAW 49F	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.1
Marea 1.6i 16v (OBD)	Mpi MARELLI IAW 4EF	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.1
Marea 1.8i 16v	Multipoint HITACHI	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Marea 1.8i 16v	Multipoint HITACHI HVC	Fig. 15.		STAG-TAP-01	x.x.x.0
Marea 2.0i 20v	Mpi BOSCH Motronic M2.	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Panda 1.0i	Spi MARELLI IAW 6F - 16F	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Panda 1.1i 4x4	Spi MARELLI IAW 6F - 16F	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Punto 1.2i 16v	Multipoint BOSCH ME 7.3	Fig. 6. Fig. 20.		STAG-TAP-01	x.x.x.1
Punto 1.2i 16v (OBD)	Multipoint BOSCH ME 7.3	Fig. 6. Fig. 20.		STAG-TAP-01	x.x.x.1
Punto 55 1.1i	Spi MARELLI IAW 6F - 16F	Fig. 8.	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
Punto 60 1.2i	Spi MARELLI IAW 6F - 16F	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.1
Punto 75 1.2i	Mpi MARELLI IAW 8F	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.1
Punto 75 1.2i	Mpi MARELLI IAW 49F	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.1
Punto 75 1.2i	Mpi MARELLI IAW 59F	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.1
Punto 85 1.2i 16v	Mpi MARELLI IAW 18F	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.1
Punto 90 1.6i	Multipoint GM	Fig. 9.	AW-9	STAG-TAP-01	x.x.x.0
Palio 75 1.2	Mpi MARELLI IAW 18F	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Palio 1.6	Spi MARELLI IAW 1G7	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Palio 1.6 16v	Mpi MARELLI IAW 1AF	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Siena 1.6	Spi MARELLI IAW 1G7	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Siena 1.616v	Mpi MARELLI IAW 1AF	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Stilo 1.6i 16v	Mpi MARELLI IAW 5NF	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Tipo 1.4i	Spi BOSCH MonoMotronic	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Tipo 1.6i	Spi BOSCH MonoMotronic	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Tipo 1.8i	Mpi MARELLI IAW 8F	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Tempra 1.4i	Spi BOSCH MonoMotronic	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Tempra 1.6i	Spi BOSCH MonoMotronic	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Tempra 1.6i	Multipoint GM	Fig. 9.	AW-9	STAG-TAP-01	x.x.x.0
Tempra 1.8i	Mpi MARELLI IAW 8F	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Tempra 2.0i	Spi MARELLI	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
FORD					
Escort 1.6i 16v - 1.8i 16v	Multipoint EEC - V	Fig. 5.	AW-5	STAG-TAP-01	x.x.x.2
Explorer V6	Multipoint	Fig. 5.	AW-5	STAG-TAP-01	x.x.x.0
F150 4.6i V8	Multipoint EEC - V	Fig. 5.	AW-5	STAG-TAP-01	x.x.x.0
F150 Triton 5.4i V8	Multipoint EEC - V	Fig. 21.		STAG-TAP-01	x.x.x.0
Fiesta 1.2i 16v - Zetec - S	Multipoint EEC - V	Fig. 5.	AW-5	STAG-TAP-01	x.x.x.0
Fiesta 1.2i 16v (OBD) - DHF	Multipoint Zetec - S	Fig. 20.		STAG-TAP-01	x.x.x.0
Fiesta 1.3i - Endura - E	Multipoint EEC - V	Fig. 5.	AW-5	STAG-TAP-01	x.x.x.0
Focus 1.6i 16v	Multipoint EEC - V	Fig. 5.	AW-5	STAG-TAP-01	x.x.x.2
Focus 1.8i 16v - 2.0i 16v	Multipoint EEC - V	Fig. 5.	AW-5	STAG-TAP-01	x.x.x.2
Fusion 1.4i 16V DURATEC	Multipoint	Fig. 20.		STAG-TAP-01	x.x.x.2
Fusion 1.6i 16V DURATEC	Multipoint	Fig. 5.	AW-5	STAG-TAP-01	x.x.x.2
Ka 1.3i - Endura - E	Multipoint EEC - V	Fig. 5.	AW-5	STAG-TAP-01	x.x.x.0
Mark VII 4.6i V8	Multipoint EEC - V	Fig. 5.	AW-5	STAG-TAP-01	x.x.x.0
Mondeo 1.6i - 1.8i - 2.0i 16v	Mpi EEC IV - EEC - V	Fig. 5.	AW-5	STAG-TAP-01	x.x.x.2
Mondeo 2.5 V6 24v	Multipoint EEC - V	Fig. 17.		STAG-TAP-01	x.x.x.0
Orion 1.6i 16v - 1.8i 16v	Multipoint EEC - V	Fig. 5.	AW-5	STAG-TAP-01	x.x.x.2
Ranger 2.3i	Multipoint	Fig. 21.		STAG-TAP-01	x.x.x.0
Transit / Turneo 2.0i	Multipoint	Fig. 5.	AW-5	STAG-TAP-01	x.x.x.2
HONDA					
Civic 1.4i D1426		Fig. 35.		STAG-TAP-02	x.x.x.12
CR-V 2.0i		Fig. 35.		STAG-TAP-02	x.x.x.12
HYUNDAI					
Accent 1.3i 12v (OBD)	Multipoint KEFICO	Fig. 5.	AW-5	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
Accent 1.5i 16v	Multipoint BOSCH	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Coupe 1.6i 16v	Multipoint	Fig. 5.	AW-5	STAG-TAP-01	x.x.x.0
Elantra 1.6! 16v (OBD)	Multipoint	Fig. 5.	AW-5	STAG-TAP-01	x.x.x.0
Getz 1.3i 12v	Multipoint KEFICO	Fig. 5.	AW-5	STAG-TAP-01	x.x.x.0
i10 1.1i – G4HG	Multipoint	Fig. 35.		STAG-TAP-02	x.x.x.14
i20 1.2i – G4LA	Multipoint	Fig. 5.	AW-5	STAG-TAP-01	x.x.x.1
i30 1.4i – G4FA	Multipoint	Fig. 26.		STAG-TAP-01	x.x.x.1
Matrix 1.6i 16v	Multipoint	Fig. 5.	AW-5	STAG-TAP-01	x.x.x.0
Tucson 2.0i 16v	Multipoint	Fig. 36.		STAG-TAP-02	x.x.x.10
KIA					
Shuma 1.5i 16v	Multipoint SIEMENS	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Sportage 2.0i 16v (OBD)	Multipoint BOSCH	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
LANCIA					
Dedra - Delta 1.6i	Multipoint GM	Fig. 9.	AW-9	STAG-TAP-01	x.x.x.0
Dedra - Delta 1.6i	Spi BOSCH MonoMotronic	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Dedra - Delta 1.6i 16v	Mpi MARELLI IAW 49F	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Dedra - Delta 1.6i 16v	Mpi MARELLI IAW 1AF	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Dedra - Delta 1.8i	Mpi MARELLI IAW 8F	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Dedra - Delta 1.8i 16v	Multipoint HITACHI	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
MAZDA					
626 2.0i 16v	Multipoint	Fig. 23.		STAG-TAP-01	x.x.x.2
6 2.0i 16V	Multipoint	Fig. 34.		STAG-TAP-01	x.x.x.2
MERCEDES					
A 140 1.4i	Multipoint VDO - MSM	Fig. 22.		STAG-TAP-01	x.x.x.0
A 160 1.6i	Multipoint VDO - MSM	Fig. 22.		STAG-TAP-01	x.x.x.0
C 180 1.8i 16v	Multipoint HFM	Fig. 10.		STAG-TAP-01	x.x.x.0
C 180 2.0i 16v (OBD)	Multipoint SIEMENS 5WK9	Fig. 13.		STAG-TAP-01	x.x.x.1
C 200 2.0i 16v	Multipoint HFM	Fig. 10.		STAG-TAP-01	x.x.x.1
C 280 2.8i 16v	Multipoint HFM	Fig. 10.		STAG-TAP-01	x.x.x.0
CLK200 2.0i 16v	Multipoint BOSCH	Fig. 12.		STAG-TAP-01	x.x.x.1
E 200 2.0i 16v	Multipoint HFM	Fig. 10.		STAG-TAP-01	x.x.x.1
ML 320 3.2i V6	Multipoint BOSCH	Fig. 14.		STAG-TAP-01	x.x.x.0
NISSAN					
Micra 1.0i 16v (OBD) - CG10	Multipoint	Fig.32.		STAG-TAP-01	x.x.x.0
OPEL					
Astra 1.4i	Multipoint GM	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Astra 1.4i 16v - X14XE	Multipoint DELCO GM	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.1
Astra 1.4i 16v (OBD) - Z14XE	Multipoint DELCO	Fig. 6. Fig.28.		STAG-TAP-01	x.x.x.1
Astra 1.6i - C16SE	Multipoint GM	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.1
Astra 1.6i 16v - X16XEL	Multipoint GM	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.1
Astra 1.6i 16v (OBD) - Z16XE	Multipoint DELCO	Fig. 6. Fig.28.		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 1.6i 16v - X16XEL	Multipoint DELCO GM	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.1
Astra 1.8i 16v	Multipoint SIEMENS 5WK9	Fig. 18.		STAG-TAP-01	x.x.x.1
Corsa 1.0i 12v-X10XE	Multipoint BOSCH M1.5.5	Fig. 11.		STAG-TAP-01	x.x.x.0
Corsa 1.2i - 12XZ/X12SZ	Singlepoint GM	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.1
Corsa 1.2i 16v-X12XE	Multipoint BOSCH M1.5.5	Fig. 11.		STAG-TAP-01	x.x.x.1
Corsa 1.2i 16v (OBD) - Z12XE	Multipoint BOSCH	Fig. 16.		STAG-TAP-01	x.x.x.1
Corsa 1.4i - C14SE	Multipoint GM	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Corsa 1.4i 16v (OBD) - Z14XE	Multipoint DELCO	Fig. 6. Fig.28.		STAG-TAP-01	x.x.x.0
Corsa 1.4i 16v - X 14XE	Multipoint GM	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Corsa 1.6i 16v-X16XEI/C16XE	Multipoint GM	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Frontera 2.0i 8v - X20SE	Multipoint BOSCH M1.5.4	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Frontera 2.2 16v - X22SE	Multipoint	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Vectra 1.6i - X16SZ	Singlepoint GM	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.1
Vectra 1.6i 16v - X16XE	Multipoint GM	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.1
Vectra 1.6i 16v - X16XEL	Multipoint DELCO GM	Fig. 24.		STAG-TAP-01	x.x.x.1
Vectra 1.6i – Y16XE	Multipoint	Fig. 27.		STAG-TAP-01	x.x.x.1
Vectra 1.8i - X18SZ	Singlepoint GM	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.1
Vectra 1.8i – X18XE1	Siemens - Simtec	Fig. 19.		STAG-TAP-01	x.x.x.1
Vectra 2.0i – X20XEV	Siemens Simtec 56.5	Fig. 36.		STAG-TAP-02	x.x.x.10
Zafira 1.8i 16v	Multipoint SIEMENS 5WK9	Fig. 18.		STAG-TAP-01	x.x.x.0
PEUGEOT					
106 1.0i	Spi BOSCH MA 3.1	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.1
106 1.0i-1.1i	BOSCH MA 3.1	Fig. 3.	AW-3	STAG-TAP-01	x.x.x.1
106 1.1i- HDY/Z	Spi BOSCH MA 3.1	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.1
106 1.1i- HDZ	Singlepoint MARELLI G6	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.1
106 1.4i	MARELLI IAW 1AP 40	Fig. 3.	AW-3	STAG-TAP-01	x.x.x.0
106 1.4i	Mpi MARELLI IAW 1AP 40	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
206 1.4i	MARELLI IAW 1AP 81	Fig. 3.	AW-3	STAG-TAP-01	x.x.x.0
3061.4i	MARELLI IAW 1AP 40	Fig. 3.	AW-3	STAG-TAP-01	x.x.x.0
306 1.1i- HDZ	Spi MARELLI G6	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.1
306 1.4i - KDX	Spi MARELLI G6	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
306 1.4i	Mpi MARELLI IAW 1AP 40	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
306 1.4i- KDX	Spi BOSCH MA3.0	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
3061.6i	BOSCH MP 5.1	Fig. 3.	AW-3	STAG-TAP-01	x.x.x.1
306 1.6i- NFZ	Mpi BOSCH MP 5.1 - 5.2	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.1
306 1.6i- KDX	Spi MARELLI G6	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
306 1.8i- LFZ	Mpi MARELLI IAW 8P	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
306 1.8i	Mpi BOSCH MP 5.1	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.1
306 1.8i 16v	Mpi BOSCH MP 5.1.1	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.1
306 2.0i	Mpi BOSCH MP 5.1	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.1
306 2.0i 16v	Mpi BOSCH MP 5.1.1	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.1
405 1.4i- BDY	Spi MARELLI G6	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
405 1.4i - KDX	Spi BOSCH MA3.0	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
405 1.6i- BDY	SPI MARELLI G6	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
405 1.8i- LFZ	Mpi BOSCH MP5.1	Fig. 8.	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
406 1.8i 16v - LFY	Mpi BOSCH MP5. 1.1	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.1
406 2.0i 16v - RFV	Mpi BOSCH MP5. 1.1	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.1
605 2.0i - R6A	Mpi MARELLI G5	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Partner 1.4i - KFX	MARELLI IAW 1AP 40	Fig. 3.	AW-3	STAG-TAP-01	x.x.x.1
Ranch 1.4i	Mpi MARELLI IAW 1AP 40	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
Ranch 1.4i	MARELLI IAW 1AP 40	Fig. 3.	AW-3	STAG-TAP-01	x.x.x.1
RENAULT					
19 1.4e 8V – E6J	SIEMENS	Fig. 20.		STAG-TAP-01	x.x.x.4
Clio 1.2i	MPI BOSCH	Fig. 2.	AW-2	STAG-TAP-01	x.x.x.19
Clio 1.2i	MPI SAGEM	Fig. 7.	AW-7	STAG-TAP-01	x.x.x.5
Clio 1.4i	MPI SIEMENS	Fig. 7.	AW-7	STAG-TAP-01	x.x.x.5
Clio 1.6i	MPI SIEMENS	Fig. 7.	AW-7	STAG-TAP-01	x.x.x.5
Laguna 1.6i-1.8i 16V	MPI SIEMENS-SIRIUS 32	Fig. 7.	AW-7	STAG-TAP-01	x.x.x.5
Laguna 1.8i-2.0i	MPI SIEMENS	Fig. 2.	AW-2	STAG-TAP-01	x.x.x.5
Megane 1.4i	MPI SIEMENS	Fig. 2. Fig. 7.	AW-2 or AW-7	STAG-TAP-01	x.x.x.4
Megane 1.6i	MPI SIEMENS	Fig. 2. Fig. 7.	AW-2 or AW-7	STAG-TAP-01	x.x.x.5
Megane Scenic 1.4i	MPI SIEMENS	Fig. 2. Fig. 7.	AW-7	STAG-TAP-01	x.x.x.5
Megane Scenic 1. 6i	MPI SIEMENS	Fig. 2. Fig. 7.	AW-2 or AW-7	STAG-TAP-01	x.x.x.5
Safrane 2.5i		Fig. 5.	AW-5	STAG-TAP-01	x.x.x.4
Twingo 1.2i	MPI SAGEM	Fig. 7.	AW-7	STAG-TAP-01	x.x.x.5
SAAB					
900 2.0i	Mpi BOSCH Motronic	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
SEAT					
Toledo 1.8 20V	SIEMENS – Simos	Fig. 19.		STAG-TAP-01	x.x.x.1
Toledo 1.6 SR 8V	Multipoint	Fig.30.		STAG-TAP-01	x.x.x.0
Toledo 1.6 - BCB	Multipoint	Fig.31.		STAG-TAP-02	x.x.x.10
SKODA					
Fabia 1.4i 16V - BXW	Multipoint	Fig. 36.		STAG-TAP-02	x.x.x.10
Octavia 1.6i 101cv	Multipoint	Fig.31.		STAG-TAP-01	x.x.x.0
Octavia 1.8i 20v	Multipoint BOSCH M3.2	Fig. 19.		STAG-TAP-01	x.x.x.0
Octavia 2.0i - AQY	Multipoint	Fig. 19.		STAG-TAP-01	x.x.x.0
SUZUKI					
Wagon R+ 1.2i 16v (OBD)	Multipoint	Fig. 1.		STAG-TAP-01	x.x.x.0
Baleno 1.3i 16v	Multipoint	Fig. 1.		STAG-TAP-01	x.x.x.0
TOYOTA					
Corolla 1.8 – 2ZR	Multipoint Toyota	Fig. 20.		STAG-TAP-01	x.x.x.3
Camry 3.0i V6 – 1MZ-FE	Multipoint Toyota	Fig. 20.		STAG-TAP-01	x.x.x.3
VOLKSWAGEN					
Golf 1.6i	Multipoint SIEMENS 5WP4	Fig. 19.		STAG-TAP-01	x.x.x.0
Golf 1.6i (OBD) - APF	Multipoint SIEMENS 5WP40	Fig.30.		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
Passat 1.6i	Multipoint SIEMENS 5WP4	Fig. 19.		STAG-TAP-01	x.x.x.0
Passat 1.8i	Multipoint	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.1
Passat 1.8i 20v Turbo (OBD)	Multipoint BOSCH ME7.5	Fig. 27.		STAG-TAP-01	x.x.x.1
Passat 2.0i 20v (OBD) - AZM	Multipoint SIEMENS 5WP40	Fig.33.		STAG-TAP-01	x.x.x.1
Sharan 2.8i VR6	Mpi BOSH Motronic	Fig. 8.	AW-8	STAG-TAP-01	x.x.x.0
VOLVO					
S40 1.6i 16v (OBD) - B4164S2	Multipoint	Fig. 5.	AW-5	STAG-TAP-01	x.x.x.5
S40 1.8i 16v (OBD)	Multipoint	Fig. 5.	AW-5	STAG-TAP-01	x.x.x.5
S40 2.0i 16v (OBD)	Multipoint	Fig. 5.	AW-5	STAG-TAP-01	x.x.x.5
V40 1.6i 16v (OBD) - B4164S2	Multipoint	Fig. 5.	AW-5	STAG-TAP-01	x.x.x.5
V40 1.8i 16v (OBD)	Multipoint	Fig. 5.	AW-5	STAG-TAP-01	x.x.x.5
V40 2.0i 16v (OBD)	Multipoint	Fig. 5.	AW-5	STAG-TAP-01	x.x.x.5
S40 1.6i-1.8i-2.0i 16v	SIEMENS	Fig. 4.	AW-4	STAG-TAP-01	x.x.x.5
S60 2.4i 20v (OBD) - B5244S	Multipoint DENSO	Fig.29		STAG-TAP-01	x.x.x.1
S80 2.5i Turbo - B5254T2	Multipoint	Fig. 20.		STAG-TAP-01	x.x.x.1

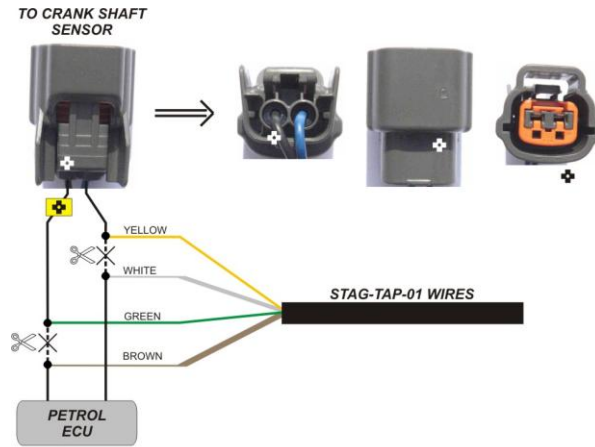


Fig. 1.

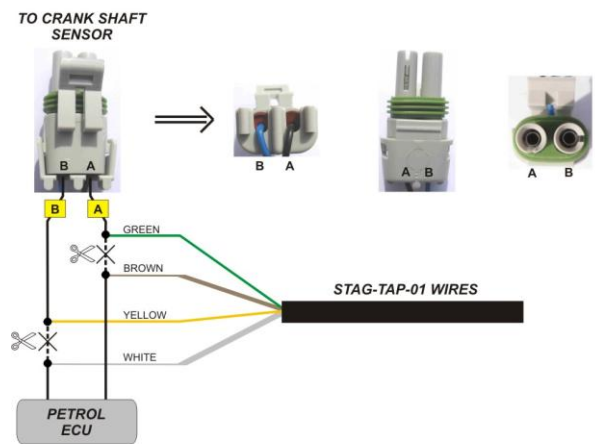


Fig. 2.

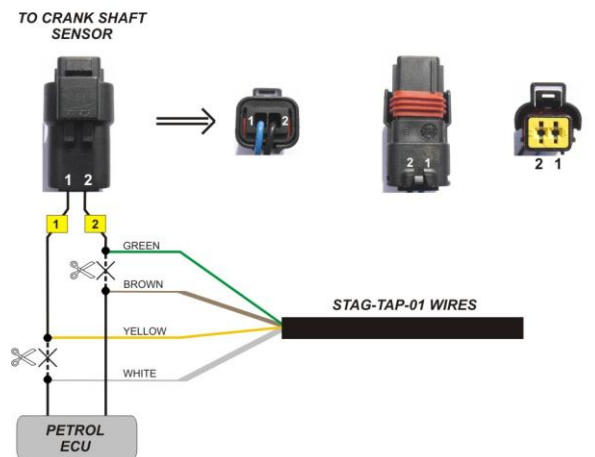


Fig. 3.

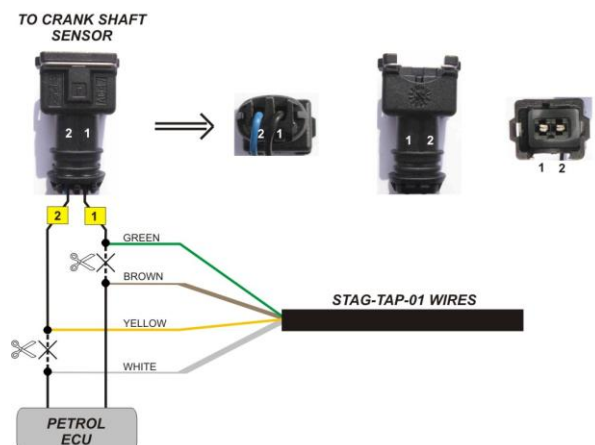


Fig. 4.

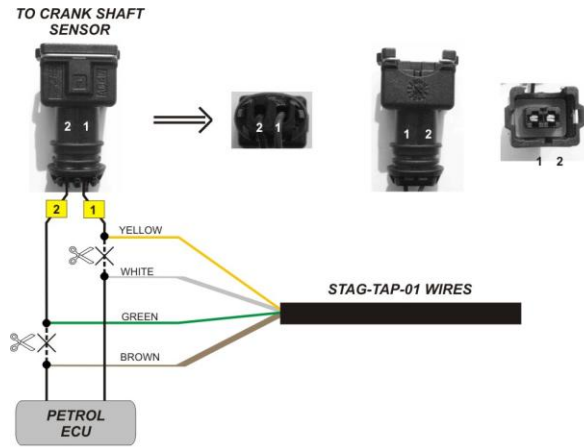


Fig. 5.

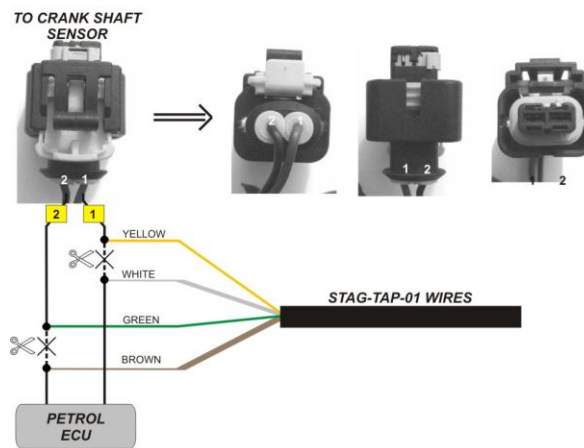


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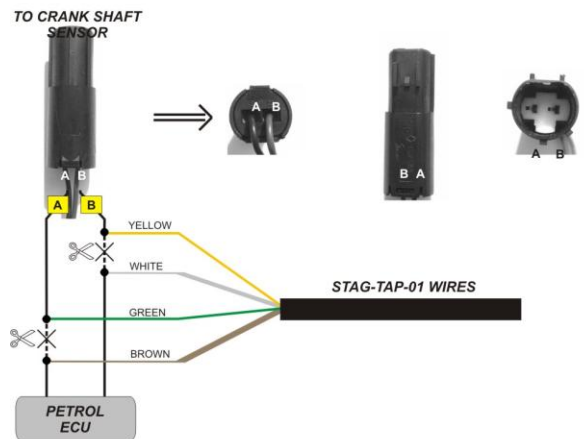


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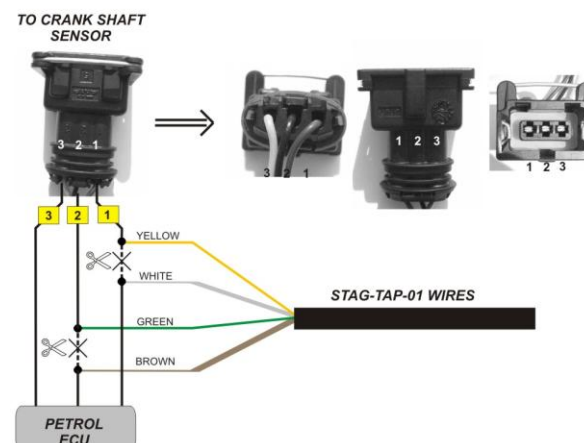


Fig. 8.

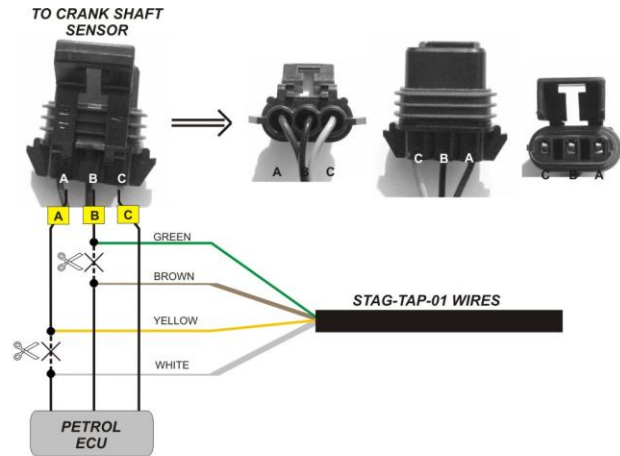


Fig. 9.

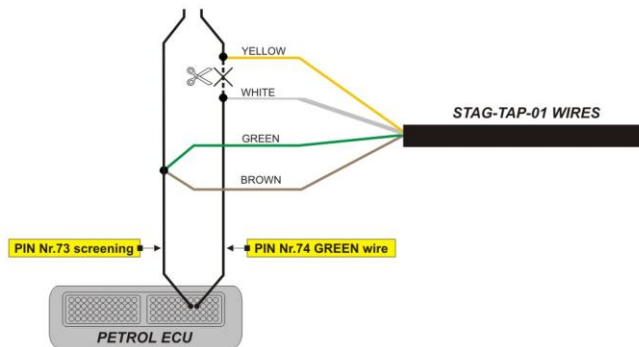


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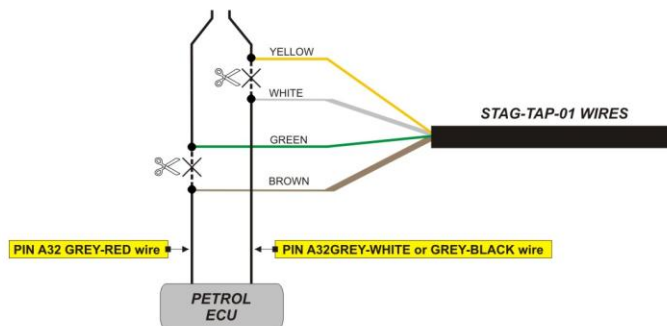


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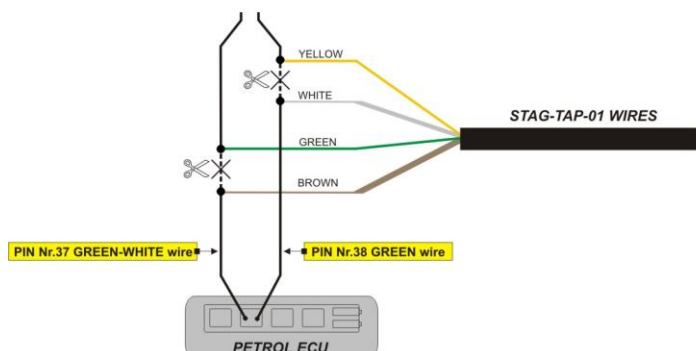


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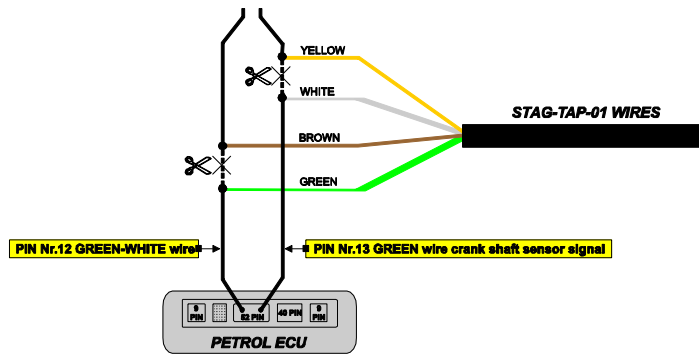


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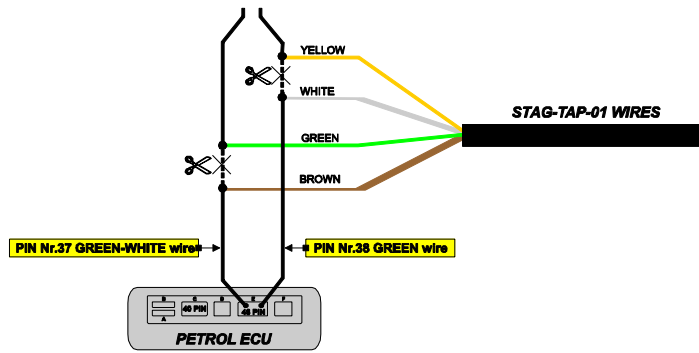


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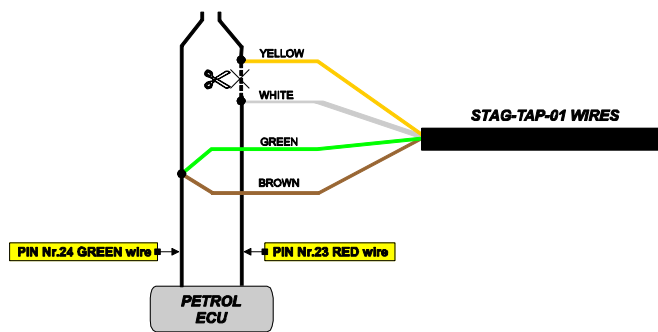


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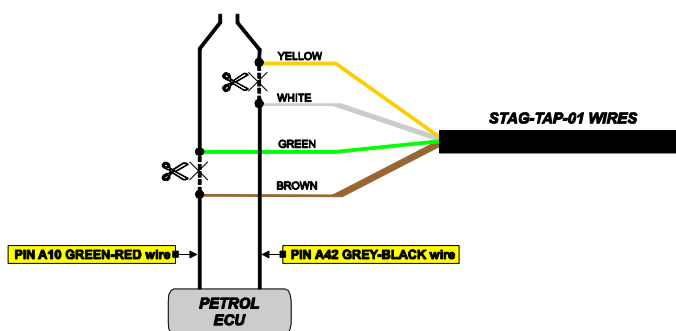


Fig. 16.

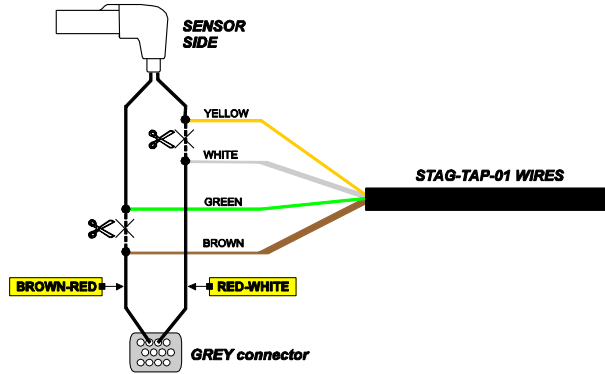


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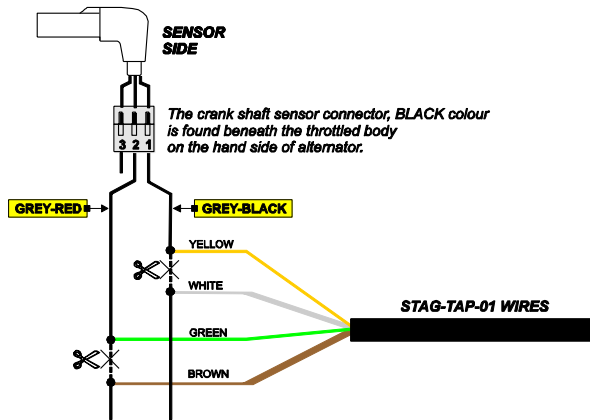


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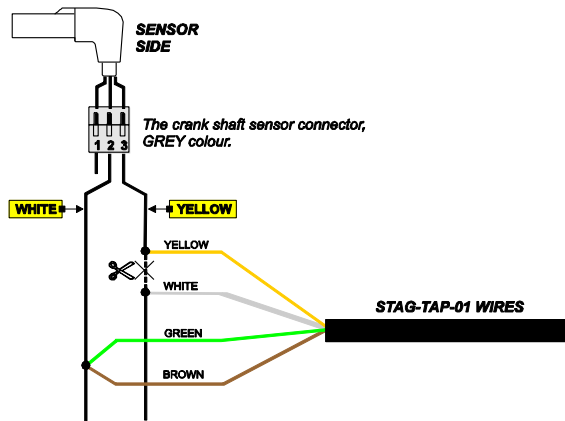


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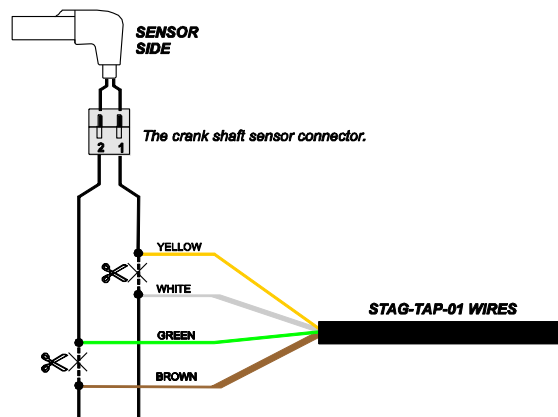


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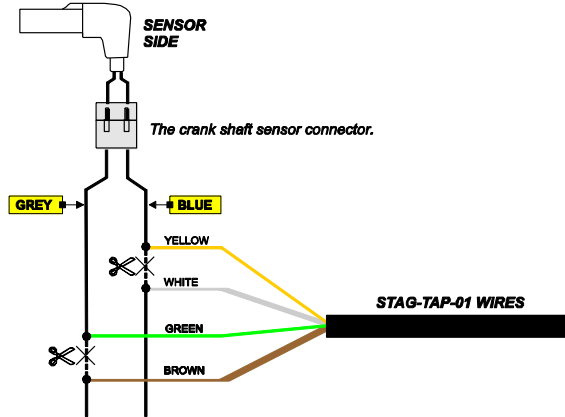


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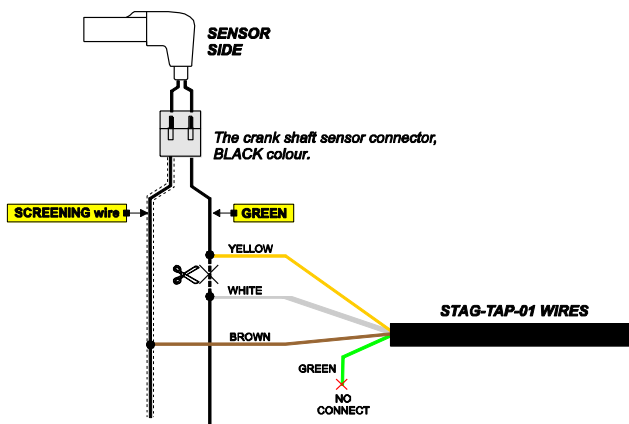


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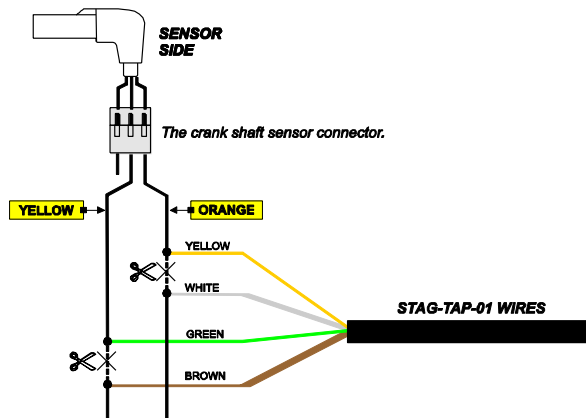


Fig. 23.

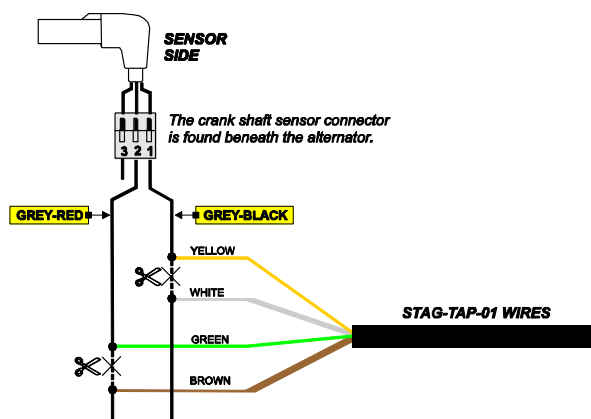


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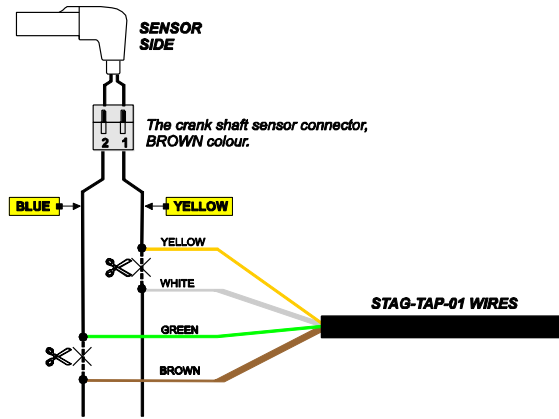


Fig. 25.

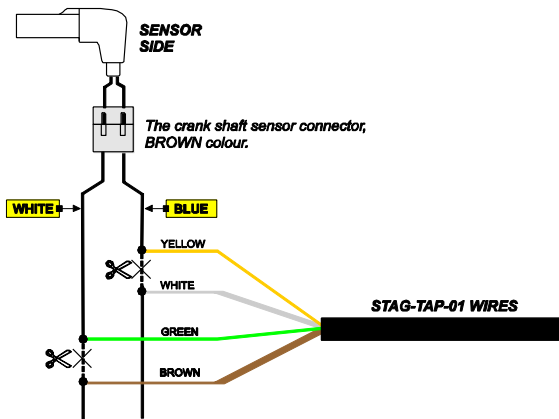


Fig. 26.

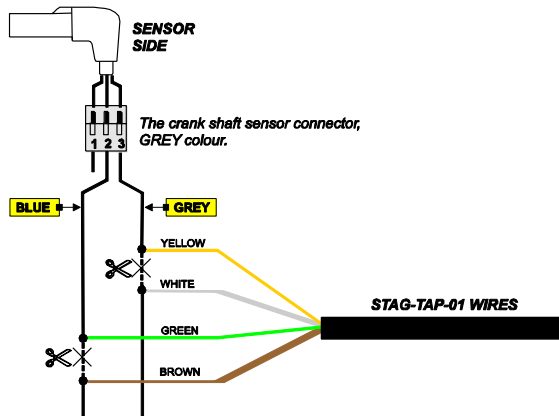


Fig. 27.

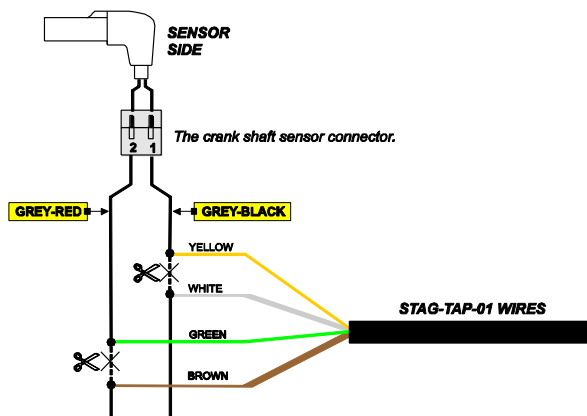


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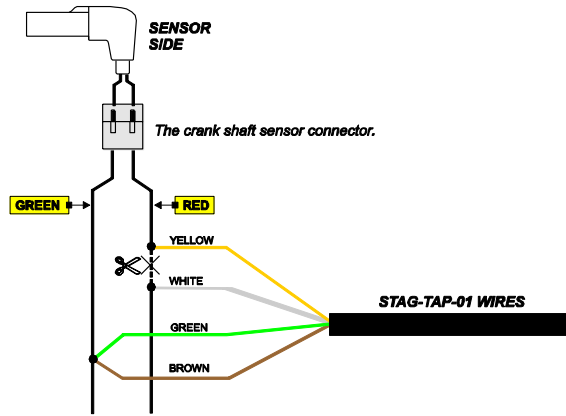


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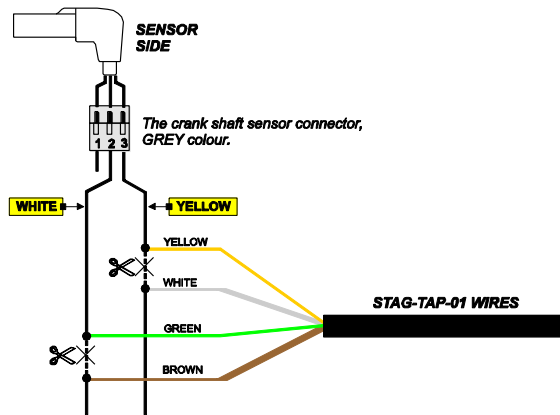


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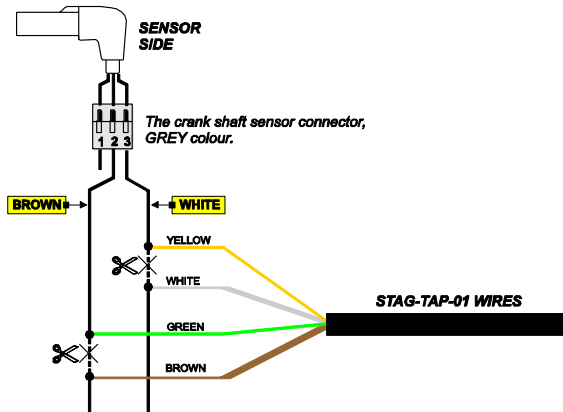


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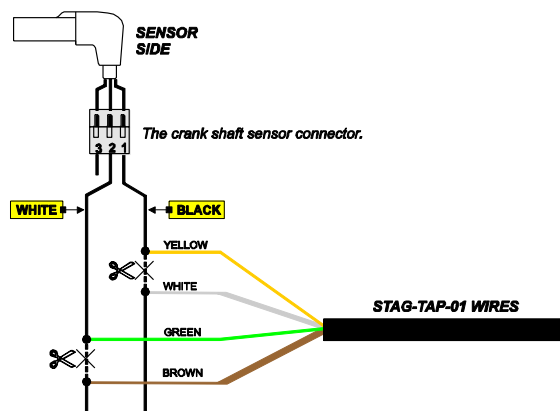


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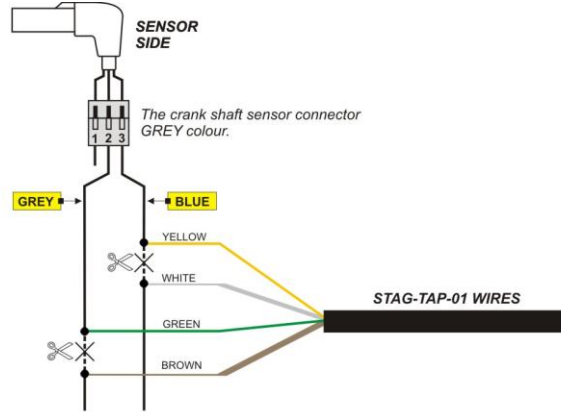


Fig. 33.

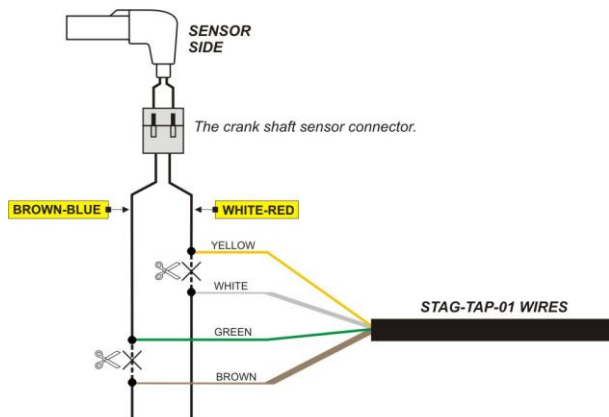


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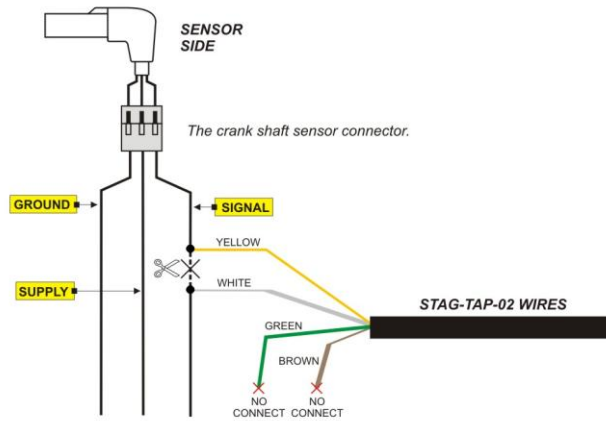


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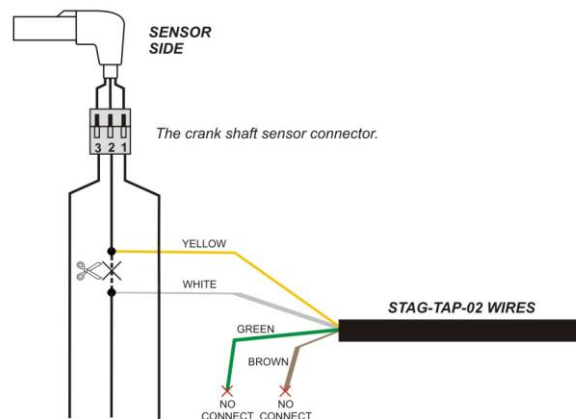


Fig. 36.