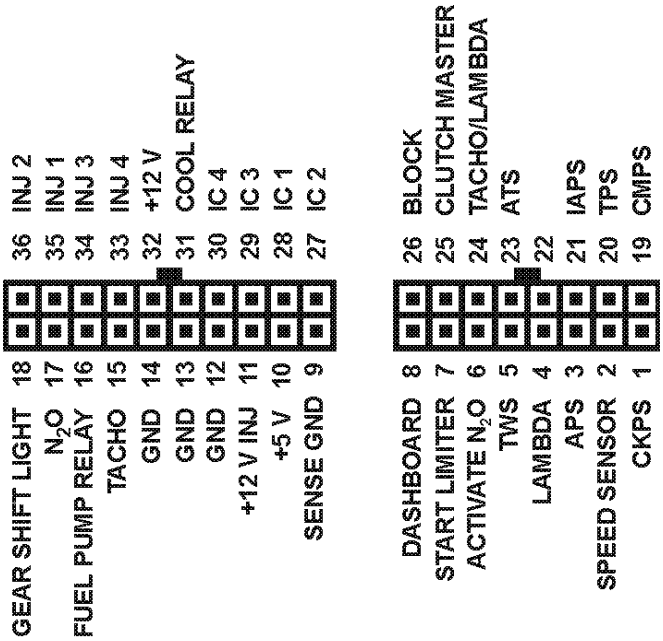
IGNIJET MAX POWER 02

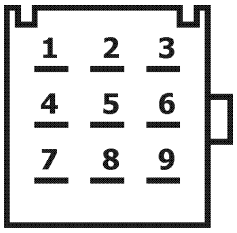
- particulars

1. Hardware

Main connector connection (unit IGNIJET 02 view):



Secondary connector connection (on conductor bundle):



1	GEAR SHIFT LIGHT	6	CLUTCH MASTER
2	N_2O	7	TACHO/LAMBDA
3	START LIMITER	8	LAMBDA
4	BLOCK	9	SENSE GND
5	ACTIVATE N_2O		

Water temperature sensor TWS.
Input for standard motorbikes thermo sensors. Resistance as function of temperature is for check in table.

TW [°C]	R [kΩ]
-10	10,8
20	2,48
50	0,81
80	0,32
110	0,14

One outlet of the TWS should be connected to connector (pin 5) and the other one should be connected to SENSE GND (pin 9).

Air temperature sensor ATS.
Input for standard motorbikes thermo sensors. Resistance as function of temperature is the same as by water temperature sensor. One outlet of the ATS should be connected to connector (pin 23) and the other one should be connected to SENSE GND (pin 9).
Attention !!! Kawasaki ZX12R use other air thermo sensor - it must be changed (from other motorbikes type).

Throttle position sensor TPS.
Input for standard motorbikes TPS sensors. Voltage range is 0 to 5V. Setting up for individual type of motorbikes is done by program IGNIJET 02. The TPS is supplied by reference voltage + 5 V (pin 10) and SENSE GNG (pin 9). The TPS sensor output should be connected to connector (pin 20).

LAMBDA.
Input for standard motorbikes and cars lambda sensors (voltage for pro stechiometric air-gasoline mixture is 0, 4 to 0,8 V). Input voltage range is 0 - 5 V. Lambda sensor voltage is not used for control air-gasoline mixture but only for displaying on monitor by software IGNIJET 02. One outlet of the LAMBDA sensor should be connected to connector (pin 4) and the other one should be connected to SENSE GND (pin 9).

Air pressure sensor APS.
Input for three types motorbikes sensors. The first one is used by motorbikes Honda, the second one by motorbikes Yamaha and the third one by other motorbikes. Input voltage range is 0 - 5 V. Voltage as function of air pressure is for check in table.

motorbikes HONDA:

AP [kPa]	U [V]
110	3,15
100	2,87
90	2,60
80	2,33
70	2,05
60	1,78
50	1,51

motorbikes YAMAHA:

AP [kPa]	U [V]
110	4,36
100	3,96
90	3,56
80	3,16
70	2,76
60	2,36
50	1,96

other motorbikes:

AP [kPa]	U [V]
110	3,90
100	3,61
90	3,32
80	3,03
70	2,74
60	2,45
50	2,16

The sensor type is set by software IGNIJET 02 according the type of motorbikes that is chosen.
The APS is supplied by reference voltage + 5 V (black) and SENSE GNG (pin 9). APS output should be connected to connector (pin 3). If there is no APS on motorbike, air pressure is used for IAPS. If there is no IAPS, normal air pressure 100 kPa is used.

Induction manifold pressure sensor IAPS.
The sensor is the same as the APS but is measuring induction manifold pressure instead of air pressure. According this value is evaluated dose of fuel if TPS < 5 % (or TPS has error). If there is no IAPS, TPS is always used for evaluating dose of fuel. The IAPS is supplied by reference voltage + 5 V (pin10) and SENSE GNG (pin 9). The IAPS output should be connected to connector (pin 21).

Crankshaft position sensor CKPS.
Input for standard motorbikes pick-up sensors CKPS. One outlet of CKPS should be connected to connector (pin 1) and the other one should be connected to SENSE GND (pin 9) see table.

Cam shaft position sensor CMPS.
Input for standard motorbikes pick-up sensors CMPS.
One outlet of CMPS should be connected to connector (pin 19) and the other one should be connected to SENSE GND (pin 9). By motorbikes Yamaha R1 and R6 is used Hall sensor. Matching is done by connecting conductor bundle for Yamaha R1, R6

DASHBOARD.
Connecting serial communication with dashboard. By means of serial communication is to dashboard send information of water temperature (all motorbikes SUZUKI a YAMAHA) and speed (motorbikes YAMAHA). These are display on dashboard. Output DASHBOARD (pin 8) should be connected according table. Immobiliser should be disconnect for proper function.

Injectors INJ 1, INJ 2, INJ 3, INJ 4.
Injector outputs for standard motorbikes injectors (coil resistance approx 13 Ohm).
One outlet of injectors should be connected to key switched + 12 V and the other one should be connected to corresponding connector pin INJ 1 to pin 35, INJ 2 to pin 36, INJ 3 to pin 34, INJ 4 to pin 33.
The configuration by motors in line is valid only for motors with order of cylinders 4, 3 , 1, 2. By two cylinders motors are INJ 1 a INJ 4 front cylinder a INJ 2 a INJ 3 back cylinder .

Gear change indicator - GEAR SHIFT LIGHT.
The maximal output current is 5 A (lamp till 50 W). Revolution are set in software IGNIJET 02.
One outlet of the pilot light should be connected to connector (pin 18) and the other one should be connected to key switched + 12 V.

Injection N_2O output
The maximal output current is 10 A for a short time max 30 s. The N_2O is injected only if "N2O enable" in program IGNIJET 02 is checked, TPS > 85 %, input ACTIVATE N_2O is active, start limiter isn't active and revolution are greater than 2000 rpm. After deactivation of start limiter is injection N_2O is delayed and has building up time from value "N_2O 1" to "N_2O 2". (all set by software IGNIJET 02). Advance is reduced (so-called retard). It has delay, building time from value "retard 1" to "retard 2" (all set by software IGNIJET 02).
One outlet of N_2O injector should be connected to connector (pin 17) and the other one should be connected to key switched + 12 V.

Revolution indicator output - TACHO.
The revolution indicator output is compatible with the most of motorbikes board measuring instrument. Pulse number for one revolution is set by program IGNIJET 02.
TACHO is supplied by voltage + 12 V and GNG. TACHO output should be connected to connector (pin 15).

Fuel pump relay output FUEL PUMP RELAY.
The fuel pump relay output is switch on if the motor revolve and 4 s after it. It is also switch on for 4 s after switch on of the unit. One outlet of FUEL PUMP RELAY coil should be connected to connector (pin 16) and the other one should be connected to key switched + 12 V. Switched circuit of FUEL PUMP RELAY should be connected according to wiring diagram!!! Note the polarity of fuel pump!!!

Inhibit input BLOCK.
One outlet of BLOCK (fall senzor) N_2O should be connected to connector (pin 26) and the other one should be connected to SENSE GND (pin 9) or GND (12, 13, 14). If switch BLOCK is on, the ignition is blocked. Opposite logic of input could be set by program IGNIJET 02..

Input ACTIVATE N_2O
One outlet of ACTIVATE N_2O should be connected to connector (pin 6) and the other one should be connected to SENSE GND (pin 9). If switch ACTIVATE N_2O is off, the N_2O couldn't be injected. Opposite logic of input could be set by program IGNIJET 02..

Start limiter input START LIMITER.
One outlet of the limiter 1 switch should be connected to connector (pin 7) and the other one should be connected to SENSE GND (pin 9). If start limiter switch is on start limiter is active and injection of N_2O is inactive. Opposite logic could be set by the program IGNIJET 02.

Clutch master input CLUTCH MASTER.
One outlet of clutch master switch should be connected to connector (pin 25) and the other one should be connected to SENSE GND (pin 9) or GND (12, 13, 14). If clutch master switch is on, ignition is inactive for the time set by program IGNIJET 02. It enable to change to the next higher gear without clutch and shut-off the gas, thereby minimize time losses. Opposite logic could be set by program IGNIJET 02.

Revolution/lambda indicator switch input TACHO/LAMBDA.
One outlet of revolution/lambda indicator switch input should be connected to the connector (pin 24) and the other one should be connected to SENSE GND (pin 9) or GND (12, 13, 14). If revolution/lambda indicator switch is on, lambda voltage is displayed on revolution display unit otherwise revolutions are displayed. Sensitivity of displaying lambda is 0,4 V to 0.9V is displayed as 0 to 12000 RPM. Opposite logic could be set by program IGNIJET 02.

Induction coil IC 1, IC 2, IC 3, IC4.
Outputs for standard motorbikes induction coils used on motorbikes with injection (resistance of primary coil approx 1 to 2 Ohm).
One outlet of the induction coils should be connected to key switched + 12 V and the other one should be connected to corresponding pin (1 to pin 28, IC 2 to pin27, IC 3 to pin29, IC 4 to pin 30).
The configuration by motors in line is valid only for motors with order of cylinders 4, 3 , 1, 2. By two cylinders motors are IC 1 and IC 4 front cylinder a IC 2 a IC 3 back cylinder .

Supply voltage + 12V.
Nominal supply voltage is 14 V. The supply voltage range is 8 to 16 V. In this range unit operates optimal. The positive outlet of supply voltage should be connected to pin +12 V (pin 32) and the negative one should be connected to GND (pin 12, 13, 14 -all should be interconnect).

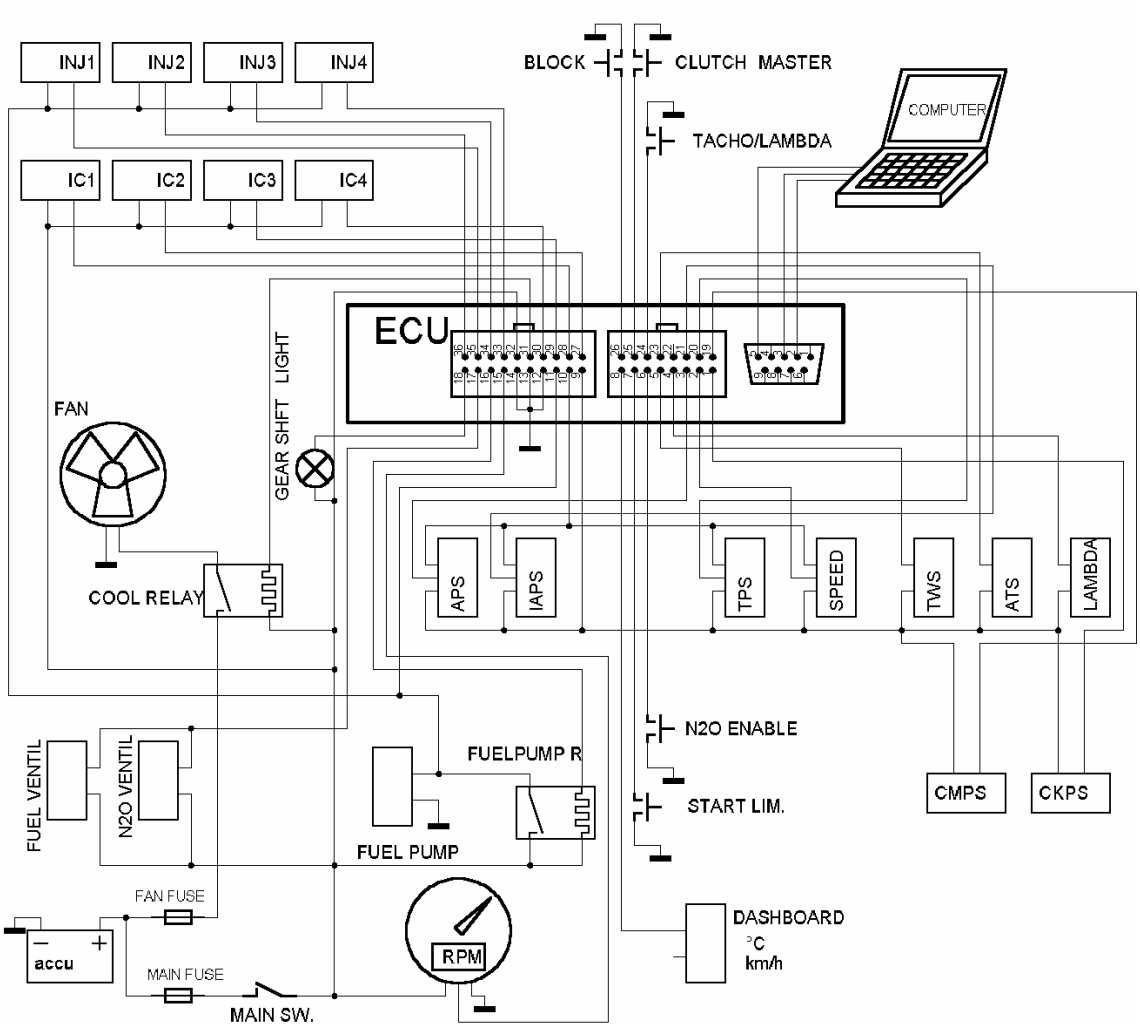
Sensor ground SENSE GND.
Sensor ground (pin 9) is used for connection and supply of sensors.

Reference voltage output + 5 V.
Reference voltage output + 5 V (pin 10) is used for supply of sensors.

Measurement of injector supply voltage input +12 V INJ.
Because the characteristics of injectors are very much depend on supply voltage, this one must be connect to the injection unit to the input + 12 V INJ (pin 11). Unit measure supply voltage and does the correction. Below 7 V and above 18 V is unit switch off.

Cooling switch output COOL RELAY.
The cooling relay should be connected according wiring diagram. One outlet of cooling relay coil should be connected to cooling switch output (pin 31) the other one key switched + 12 V. After the supply voltage is switch on cooling relay is switch on for 1 s. This is used for ventilator check.

Wiring:


INJ1
INJ2
INJ3
INJ4
IC1
IC2
IC3
IC4
BLOCK
CLUTCH MASTER
TACHO/LAMBDA
COMPUTER
ECU
FAN
GEAR SHFT LIGHT
COOL RELAY
APS
IAPS
TPS
SPEED
TWS
ATS
LAMBDA
N2O ENABLE
START LIM.
CMPS
CKPS
FUEL VENTIL
N2O VENTIL
FUELPUMP R
FUEL PUMP
FAN FUSE
accu
MAIN FUSE
MAIN SW.
RPM
DASHBOARD
°C
km/h

1. Software IGNIJET 02

Pull down menu

File - items	**New**	- Set default parameters
	Open	- Open file with parameters
	Save	- Save parameters to file
	Print	- Print of parameters
	Exit	- End of program

Attention!!! After click to New, default parameters for this motorbike are set.

Com - items	**Com1 to 6**	- Set number of com
Device - items	**Read**	- Reading parameters from unit
	Verify	- Compare parameters on PC with parameters of ignition
	Program	- Programming set parameters to unit
Tools - items	**Curve A-**	- Advance minus 1 degree
	Curve A+	- Advance plus 1 degree
	Jet-	- Injection time minus 1 %
	Jet+	- Injection time plus 1 %
Language - items	**English**	- English language
	Czech	- Czech language
	German	- German language
Help - items	**Contents**	- open manual.doc)
	About	- version and date of program Jetset02

Icon menu

 New - Set default parameters

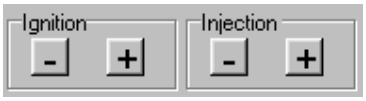
Attention!!! After click to New, default parameters for this motorbike are set.

 Open - Open file with parameters

 Save - Save parameters to file

 Print - Print of parameters

- Read, Verify, Program- (see pull down menu).



- Curve A- , Curve A+, Jet-, Jet+ (see pull down menu).

- Programming after every change of parameters.

- No reading, After programming with this box checked is not possible to read parameters.

Tab sheet Ignition

Motorbike - the unit can work on this motorbikes:

APRILIA	RSV MILE	98´ - 02´
HONDA	CBR600FS	01´ - 02´
	CBR900RR	02´
	VTR1000 SP1	00´ - 01´
KAWASAKI	ZX6R PCE (amendment ZX6R 02´for injection - query pce.cz@worldonline.cz)	
	ZX12R	00´ - 02´
SUZUKI	GSX-R600	01´ - 02´
	GSX-R750	00´ - 02´
	GSX-R1000	01´ - 02´
	TL1000	98´
YAMAHA	YZF-R6	03´
	YZF-R1	02´

10 points revolution/advance

Starting limiter - set revolution of starting limiter
Limiter - set revolution of limiter
Clutch master - set time for switch off ignition during gear shift
Gear shift light - set revolution for gear shift light

Tachometer 2x - two pulse for revolution instead of one

Activation by switch on - if the box is checked the function is activated by switch on input tot he GND.

Tab sheet Fuel map

Fuel map has 10 columns for adjustable revolutions and 10 rows for various TPS. 100% means series setting. Whole column can be changed by arrows bellow.

Tab sheet Miscellaneous

Corrections of Cylinder 2 and 3 - correction of injection time for cylinder 2 and 3 in 10 points (in % to injection time of cylinder 1 and 4 - 100% means same time for all cylinders).

Start injection - asynchronous injection into all cylinders at start of engine. (time is for water temperature 80°C - for 20°C is two time longer- etc.)
Injection time in first 30 seconds for cold motor is also longer.

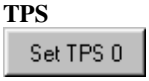
Cooling - Setting of temperature for switch on cooling output.

Acceleration injection - Asynchronous injection in all cylinders in time off rapid growth of TPS. (gas)
Threshold - minimal growth of TPS for acceleration injection.
Size - time of any acceleration injection (period is 10 ms)

Temperature water - correction for water temperature (100 % means serial setting for 80°C)

Air temperature - correction for air temperature(intake) (100 % means serial setting for 50°C)

TPS - setting of terminal value TPS [mV]



- measure and adjust 0 % TPS (power supply on, unit connected to PC, no gas)

- - measure and adjust 100 % TPS (power supply on, unit connected to PC, full gas)

Tab sheet N_2O

- software activation of controller N_2O injection

N_2O	**N_2O 1**	- start N_2O injection
	N_2O 2	- steady-state N_2O injection
	Build up time	- time from start injection to steady-state injection.
	Delay	- time from meeting the condition for N_2O injection to start of injection.
Retard	**Retard 1**	- Start retard (advance decrease)
	Retard 2	- steady-state retard
	Build up time	- time from start retard to steady-state retard.
	Delay	- time from meeting the condition for N_2O injection to start of retard.

Tab sheet Monitor

Monitor display sensors value and some operating value of motors.

- switch on extended mode. There are more items an voltage of some sensors in this mode.

RPM	- revolution per minute [1/min]
TP	- throttle position sensor [%]
TW	- water temperature [°C]
AT	- air temperature (intake) [°C]
AP	- Air pressure [kPa]
IAP	- induction-manifold pressure [% AP]
U	- supply voltage for injectors [V]
Inj. time	- injection time for cylinders 1, 4 (by two-cylinder engine front cylinder) [µs]
Advance	- advance of ignition [°]
LAMBDA	- lambda sensor voltage [mV]
Blocking	- blocking activation signalling
Clutch master	- clutch master activation signalling
Start limiter	- start limiter activation signalling
Tacho/lambda	- displaying voltage lambda sensor on tachometer activation signalling
Activate N_2O	- N_2O controller activation signalling (only if N20 enable is checked)
Number of programming	- Number of programming unit by this software.

3. Individual motorbikes

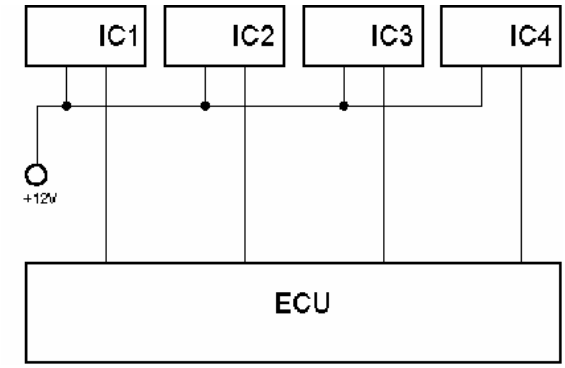
Cable reduction between connectors in IGNIJET 02 unit and in motorbike are produced for individual motorbikes. Position of individual wires in IGNIJET02 connector and colours for individual motorbikes are in tables below. There are also specific information for individual motorbikes there.

YAMAHA YZF-R6

Name, shortcut	**specification**	**pin No. IGNIJET 02**	**colour Yamaha YZF-R6**	**shortc.**
CKPS	crankshaft position sensor	1	grey	gr
SPEED SENSOR	speed sensor	2	white/yellow	w/y
APS	air pressure	3	pink	p
LAMBDA	lambda sensor	4		
TWS	temperature water	5	green/white	g/w
ACTIVATE N_2O	hardware enable N_2O injection	6		
START LIMITER	start limiter	7		
DASHBOARD	board communication	8	yellow/blue	y/bl
SENSE GND	sensor ground	9	black/blue	b/bl
SENSE GND	sensor ground	9		
SENSE GND	sensor ground	9		
+ 5 V	reference + 5V	10	blue	bl
+ 12 V INJ	+12 V for injectors	11		
GND	ground	12	black	b
GND	ground	13	black	b
GND	ground	14		
GND	ground	14		
TACHO	tachometer	15	yellow/black	y/b
FUEL PUMPE RELAY	fuel pump relay output	16	pale green	lg
N_2O	N_2O injection output	17		
GEAR SHIFT LIGHT	gear shift light	18		
CMPS	Cam shaft position sensor	19	white/black	w/b
TPS	throttle position	20	yellow	y
IAPS	Induction manifold pressure sensor	21	pink/white	p/w
STPS	secondary valve	22		
ATS	air temperature	23	brown/white	br/w
TACHO/LAMBDA	switch tachometer/lambda	24		
CLUTCH MASTER	clutch master	25		
BLOCK 1	inhibit input	26	yellow/green	y/g
IC 2	induction coil 2	27	grey/red	gr/r
IC 1	induction coil 1	28	orange	o
IC 3	induction coil 3	29	orange/green	o/g
IC 4	induction coil 4	30	grey/green	gr/g
COOL RELAY	Cooling switch output	31	green/yellow	g/y
+ 12 V	+ 12V supply	32	red/white	r/w
INJ 4	injector 4	33	orange/black	o/b
INJ 3	injector 3	34	blue/black	bl/b
INJ 1	injector 1	35	red/black	r/b
INJ 2	injector 2	36	green/black	g/b

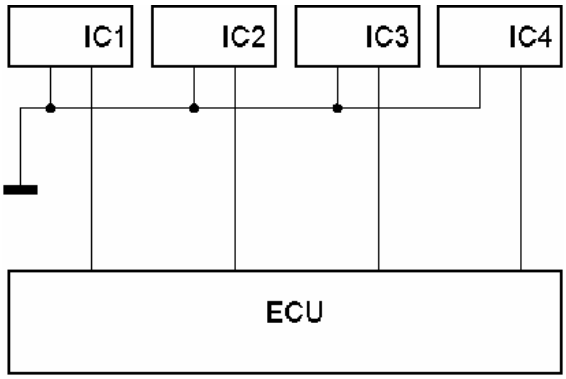
Before using IGNIJET 02 unit on motorbike YAMAHA YZF-R6 is it necessary change induction coils and their wiring. Original unit use capacitive ignition. IGNIJET 02 unit use inductive ignition. It can be used any induction coils from all others types motorbikes IGNIJET 02 unit can work with. It can be used others induction coils for inductive ignition with resistance min. 1 Ohm. Wiring must be done according figure.

Wiring of induction coils with IGNIJET 02 unit:



ATTENTION!!!!!!
Using this wiring with original coils of motorbikes YAMAHA YZF-R6 cause damage of IGNIJET 02 unit.
ATTENTION!!!!!!
By reusing of original unit, the original wiring of induction coils must be recovered. Using wiring for IGNIJET 02 unit with original unit cause damage of original unit.. Induction coils used by IGNIJET 02 unit can be used by original unit.

Wiring induction coils with original unit:



Displaying of water temperature and speed by using IGNIJET 02 unit on motorbike YAMAHA R6 perform only if immobiliser is disconnected..

YAMAHA YZF-R1

Name, shortcut	**specification**	**pin No. IGNIJET 02**	**colour Yamaha YZF-R1**	**shortc.**
CKPS	crankshaft position sensor	1	grey	gr
SPEED SENSOR	speed sensor	2	white/yellow	w/y
APS	air pressure	3	pink	p
LAMBDA	lambda sensor	4		
TWS	temperature water	5	green/white	g/w
ACTIVATE N_2O	hardware enable N_2O injection	6		
START LIMITER	start limiter	7		
DASHBOARD	board communication	8	yellow/blue	y/bl
SENSE GND	sensor ground	9	black/blue	b/bl
SENSE GND	sensor ground	9		
SENSE GND	sensor ground	9		
+ 5 V	reference + 5V	10	blue	bl
+ 12 V INJ	+12 V for injectors	11		
GND	ground	12	black	b
GND	ground	13	black	b
GND	ground	14		
GND	ground	14		
TACHO	tachometer	15	yellow/black	y/b
FUEL PUMPE RELAY	fuel pump relay output	16	pale green	lg
N_2O	N_2O injection output	17		
GEAR SHIFT LIGHT	gear shift light	18		
CMPS	Cam shaft position sensor	19	white/black	w/b
TPS	throttle position	20	yellow	y
IAPS	Induction manifold pressure sensor	21	pink/white	p/w
STPS	secondary valve	22	white/red	
ATS	air temperature	23	brown/white	br/w
TACHO/LAMBDA	switch tachometer/lambda	24		
CLUTCH MASTER	clutch master	25		
BLOCK	inhibit input	26	yellow/green	y/g
IC 2	induction coil 2	27	grey/red	gr/r
IC 1	induction coil 1	28	orange	o
IC 3	induction coil 3	29	orange/green	o/g
IC 4	induction coil 4	30	grey/green	gr/g
COOL RELAY	Cooling switch output	31	green/yellow	g/y
+ 12 V	+ 12V supply	32	red/white	r/w
INJ 4	injector 4	33	orange/black	o/b
INJ 3	injector 3	34	blue/black	bl/b
INJ 1	injector 1	35	red/black	r/b
INJ 2	injector 2	36	green/black	g/b

It is necessary to use exhaust system without exhaust throttle.

SUZUKI GSX-R600

Name, shortcut	specification	pin No. IGNIJET 02	colour GSX-R600	shortc.
CKPS	crankshaft position sensor	1	white	w
SPEED SENSOR	speed sensor	2		
APS	air pressure	3	green/yellow	g/y
LAMBDA	lambda sensor	4		
TWS	temperature water	5	black/blue	b/bl
ACTIVATE N_2O	hardware enable N_2O injection	6		
START LIMITER	start limiter	7		
DASHBOARD	board communication	8	black/green	b/g
ground CKPS	sensor ground	9	green/white	g/w
ground CMPS	sensor ground	9	brown	br
SENSE GND	sensor ground	9	black/brown	b/br
+ 5 V	reference + 5V	10	red	r
+ 12 V INJ	+12 V for injectors	11	yellow/red	y/r
GND	ground	12	black/white	b/w
GND	ground	13	black/white	b/w
GND	ground	14	black/white	b/w
TACHO	tachometer	15	yellow/blue	y/bl
FUEL PUMPE RELAY	fuel pump relay output	16	yellow/black	y/b
N_2O	N_2O injection output	17		
GEAR SHIFT LIGHT	gear shift light	18		
CMPS	Cam shaft position sensor	19	black/yellow	b/y
TPS	throttle position	20	pink/black	p/b
IAPS	Induction manifold pressure sensor	21	green/black	g/b
STPS	secondary valve	22		
ATS	air temperature	23	deep green	dark g
TACHO/LAMBDA	switch tachometer/lambda	24		
CLUTCH MASTER	clutch master	25		
BLOCK	inhibit input	26	black	b
IC 2	induction coil 2	27	black	b
IC 1	induction coil 1	28	white/blue	w/bl
IC 3	induction coil 3	29	yellow	y
IC 4	induction coil 4	30	green	g
COOL RELAY	Cooling switch output	31		
+ 12 V	+ 12V supply	32	orange/white	o/w
INJ 4	injector 4	33	grey/red	gr/r
INJ 3	injector 3	34	grey/yellow	gr/y
INJ 1	injector 1	35	grey/white	gr/w
INJ 2	injector 2	36	grey/black	gr/b

* Yellow marked wires are in smaller connector in original bundle SUZUKI GSX-R600

It is necessary to disable secondary valve (set 100% open).

SUZUKI GSX-R750

Name, shortcut	specification	pin No. IGNIJET 02	colour GSX-R750	shortc.
CKPS	crankshaft position sensor	1	white	w
SPEED SENSOR	speed sensor	2		
APS	air pressure	3	green/yellow	g/y
LAMBDA	lambda sensor	4		
TWS	temperature water	5	black/blue	b/bl
ACTIVATE N_2O	hardware enable N_2O injection	6		
START LIMITER	start limiter	7		
DASHBOARD	board communication	8	black/green	b/g
ground CKPS	sensor ground	9	green/white	g/w
ground CMPS	sensor ground	9	brown	br
SENSE GND	sensor ground	9	black/brown	b/br
+ 5 V	reference + 5V	10	red	r
+ 12 V INJ	+12 V for injectors	11	yellow/red	y/r
GND	ground	12	black/white	b/w
GND	ground	13	black/white	b/w
GND	ground	14	black/white	b/w
TACHO	tachometer	15	yellow/blue	y/bl
FUEL PUMPE RELAY	fuel pump relay output	16	yellow/black	y/b
N_2O	N_2O injection output	17		
GEAR SHIFT LIGHT	gear shift light	18		
CMPS	Cam shaft position sensor	19	black/yellow	b/y
TPS	throttle position	20	pink/black	p/b
IAPS	Induction manifold pressure sensor	21	green/black	g/b
STPS	secondary valve	22		
ATS	air temperature	23	deep green	dark g
TACHO/LAMBDA	switch tachometer/lambda	24		
CLUTCH MASTER	clutch master	25		
BLOCK	inhibit input	26	black	b
IC 2	induction coil 2	27	black	b
IC 1	induction coil 1	28	white/blue	w/bl
IC 3	induction coil 3	29	yellow	y
IC 4	induction coil 4	30	green	g
COOL RELAY	Cooling switch output	31		
+ 12 V	+ 12V supply	32	orange/white	o/w
INJ 4	injector 4	33	grey/red	gr/r
INJ 3	injector 3	34	grey/yellow	gr/y
INJ 1	injector 1	35	grey/white	gr/w
INJ 2	injector 2	36	grey/black	gr/b

* Yellow marked wires are in smaller connector in original bundle SUZUKI GSX-R750

It is necessary to disable secondary valve (set 100% open).

SUZUKI GSX-R1000

Name, shortcut	specification	pin No. IGNIJET 02	colour GSX-R1000	shortc.
CKPS	crankshaft position sensor	1	white	w
SPEED SENSOR	speed sensor	2		
APS	air pressure	3	green/yellow	g/y
LAMBDA	lambda sensor	4		
TWS	temperature water	5	black/blue	b/bl
ACTIVATE N_2O	hardware enable N_2O injection	6		
START LIMITER	start limiter	7		
DASHBOARD	board communication	8	black/green	b/g
ground CKPS	sensor ground	9	green/white	g/w
ground CMPS	sensor ground	9	brown	br
SENSE GND	sensor ground	9	black/brown	b/br
+ 5 V	reference + 5V	10	red	r
+ 12 V INJ	+12 V for injectors	11	yellow/red	y/r
GND	ground	12	black/white	b/w
GND	ground	13	black/white	b/w
GND	ground	14	black/white	b/w
TACHO	tachometer	15	yellow/blue	y/bl
FUEL PUMPE RELAY	fuel pump relay output	16	yellow/black	y/b
N_2O	N_2O injection output	17		
GEAR SHIFT LIGHT	gear shift light	18		
CMPS	Cam shaft position sensor	19	black/yellow	b/y
TPS	throttle position	20	pink/black	p/b
IAPS	Induction manifold pressure sensor	21	green/black	g/b
STPS	secondary valve	22		
ATS	air temperature	23	deep green	dark g
TACHO/LAMBDA	switch tachometer/lambda	24		
CLUTCH MASTER	clutch master	25		
BLOCK	inhibit input	26	black	b
IC 2	induction coil 2	27	black	b
IC 1	induction coil 1	28	white/blue	w/bl
IC 3	induction coil 3	29	yellow	y
IC 4	induction coil 4	30	green	g
COOL RELAY	Cooling switch output	31		
+ 12 V	+ 12V supply	32	orange/white	o/w
INJ 4	injector 4	33	grey/red	gr/r
INJ 3	injector 3	34	grey/yellow	gr/y
INJ 1	injector 1	35	grey/white	gr/w
INJ 2	injector 2	36	grey/black	gr/b

* Yellow marked wires are in smaller connector in original bundle SUZUKI GSX-R1000

It is necessary to disable secondary valve (set 100% open).

SUZUKI TL1000R

Name, shortcut	specification	pin No. IGNIJET 02	colour TL1000R	shortc.
CKPS	crankshaft position sensor	1	blue	bl
SPEED SENSOR	speed sensor	2		
APS	air pressure	3	violet	v
LAMBDA	lambda sensor	4		
TWS	temperature water	5	green/yellow	g/y
ACTIVATE N_2O	hardware enable N_2O injection	6		
START LIMITER	start limiter	7		
DASHBOARD	board communication	8	black/green	b/g
SENSE GND	sensor ground	9	black/brown	b/br
SENSE GND	sensor ground	9	green	g
SENSE GND	sensor ground	9	brown	br
+ 5 V	reference + 5V	10	red	r
+ 12 V INJ	+12 V for injectors	11	yellow/red	y/r
GND	ground	12	black/white	b/w
GND	ground	13	black/white	b/w
GND	ground	14	black/white	b/w
TACHO	tachometer	15	black/red	b/r
FUEL PUMPE RELAY	fuel pump relay output	16	yellow/blue	y/bl
N_2O	N_2O injection output	17		
GEAR SHIFT LIGHT	gear shift light	18		
CMPS	Cam shaft position sensor	19	black	b
TPS	throttle position	20	grey	gr
IAPS	Induction manifold pressure sensor	21	deep brown	dark br
STPS	secondary valve	22		
ATS	air temperature	23	green/red	g/r
TACHO/LAMBDA	switch tachometer/lambda	24		
CLUTCH MASTER	clutch master	25		
BLOCK	inhibit input	26	black/blue	b/bl
IC 2	induction coil 2	27	black/yellow	b/y
IC 1	induction coil 1	28	white	w
IC 2	induction coil 2	29		
IC 1	induction coil 1	30		
COOL RELAY	Cooling switch output	31		
+ 12 V	+ 12V supply	32	orange/white	o/w
INJ 4	injector 4	33	green/red	g/r
INJ 3	injector 3	34	green/blue	g/bl
INJ 1	injector 1	35	green/white	g/w
INJ 2	injector 2	36	green/black	g/b

* Yellow marked wires are in smaller connector in original bundle SUZUKI TL1000R

HONDA CBR600F

Name, shortcut	specification	pin No. IGNIJET 02	colour CBR 600F	shortc.
CKPS	crankshaft position sensor	1	yellow	y
SPEED SENSOR	speed sensor	2		
APS	air pressure	3		
LAMBDA	lambda sensor	4		
TWS	temperature water	5	pink/white	p/w
ACTIVATE N_2O	hardware enable N_2O injection	6		
START LIMITER	start limiter	7		
DASHBOARD	board communication	8		
SENSE GND	sensor ground	9	green/orange	g/o
+ 5 V	reference + 5V	10	yellow/red	y/r
+ 12 V INJ	+12 V for injectors	11	black/white	b/w
GND	ground	12	green	g
GND	ground	13	green/pink	g/p
GND	ground	14	green/pink	g/p
TACHO	tachometer	15	yellow/green	y/g
FUEL PUMPE RELAY	fuel pump relay output	16	brown /black	br/b
N_2O	N_2O injection output	17		
GEAR SHIFT LIGHT	gear shift light	18		
CMPS	Cam shaft position sensor	19	grey	gr
TPS	throttle position	20	red/yellow	r/y
IAPS	Induction manifold pressure sensor	21	pale green/yellow	lg/y
STPS	secondary valve	22	pale green/violet	lg/v
ATS	air temperature	23	grey/blue	gr/bl
TACHO/LAMBDA	switch tachometer/lambda	24		
CLUTCH MASTER	clutch master	25		
BLOCK	inhibit input	26		
IC 2	induction coil 2	27	yellow/white	y/w
IC 1	induction coil 1	28	blue/black	bl/b
IC 3	induction coil 3	29	red/blue	r/bl
IC 4	induction coil 4	30	red/yellow	r/y
COOL RELAY	Cooling switch output	31		
+ 12 V	+ 12V supply	32	black/white	b/w
INJ 4	injector 4	33	pink/black	p/b
INJ 3	injector 3	34	pink/green	p/g
INJ 1	injector 1	35	pink/yellow	p/y
INJ 2	injector 2	36	pink/blue	p/bl

* Yellow marked wires are in grey connector in original bundle CBR600F

HONDA CBR900RR

Name, shortcut	specification	pin No. IGNIJET 02	colour CBR900RR	shortc.
CKPS	crankshaft position sensor	1	yellow	y
SPEED SENSOR	speed sensor	2		
APS	air pressure	3		
LAMBDA	lambda sensor	4		
TWS	temperature water	5	pink/white	p/w
ACTIVATE N_2O	hardware enable N_2O injection	6		
START LIMITER	start limiter	7		
DASHBOARD	board communication	8		
SENSE GND	sensor ground	9	green/orange	g/o
+ 5 V	sensor ground	10	yellow/red	y/r
+ 12 V INJ	sensor ground	11	black/white	b/w
GND	reference + 5V	12	green	g
GND	+12 V for injectors	13	green/pink	g/p
GND	ground	14	green/pink	g/p
TACHO	tachometer	15	yellow/green	y/g
FUEL PUMPE RELAY	fuel pump relay output	16	brown/black	br/b
N_2O	N_2O injection output	17		
GEAR SHIFT LIGHT	gear shift light	18		
CMPS	Cam shaft position sensor	19	grey	gr
TPS	throttle position	20	red/yellow	r/y
IAPS	Induction manifold pressure sensor	21	pale green/yellow	lg/y
STPS	secondary valve	22	pale green/violet	lg/v
ATS	air temperature	23	grey/blue	gr/bl
TACHO/LAMBDA	switch tachometer/lambda	24		
CLUTCH MASTER	clutch master	25		
BLOCK	inhibit input	26		
IC 2	induction coil 2	27	yellow/white	y/w
IC 1	induction coil 1	28	blue/black	bl/b
IC 3	induction coil 3	29	red/blue	r/bl
IC 4	induction coil 4	30	red/yellow	r/y
COOL RELAY	Cooling switch output	31		
+ 12 V	+ 12V supply	32	black/white	b/w
INJ 4	injector 4	33	pink/black	p/b
INJ 3	injector 3	34	pink/green	p/g
INJ 1	injector 1	35	pink/yellow	p/y
INJ 2	injector 2	36	pink/blue	p/bl

* Yellow marked wires are in grey connector in original bundle CBR900RR

It is necessary to use exhaust system without exhaust throttle.