



# Bosch Ignitech Basic Guide V1.1

info@beltandbevel.com.au  
www.beltandbevel.com.au



software and correct a mis-wired bike, but it is just as easy in most cases to swap the 6 pin connectors Vertical and Horizontal. To identify the Vertical and Horizontal wiring from the pickups, intermediate loom and Ignitech is relatively simple. The ignition pickup wiring at the terminal will have a rubber ring with either a V or O marked on it, V for Vertical and O for Orizzontale. The same rubber V and O will be on the wiring entering the back of the 6 pin intermediate loom connector, shown in figure 3b and 3c, You will need to slide the rubber protecting boot back to reveal the letter. The 6 pin Ignitech connector with the **Orange wire** goes to the intermediate loom connector with the **O marking**. Ignitech units sold by Belt and Bevel after May 2018 also include O and V marking on the Ignitech loom for simplicity.

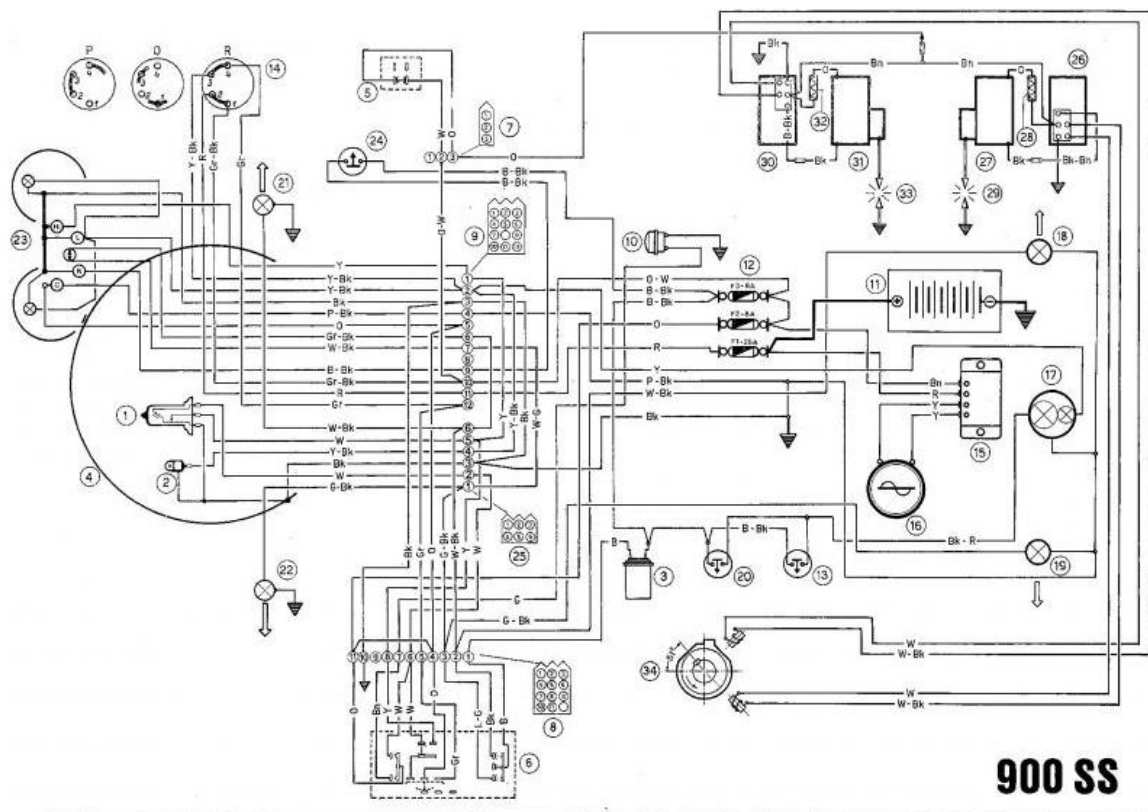


Fig 2

# Bosch Ignitech Basic Guide V1.1

info@beltandbevel.com.au

www.beltandbevel.com.au



Fig 3a



Fig 3b



# Bosch Ignitech Basic Guide V1.1

info@beltandbevel.com.au  
www.beltandbevel.com.au

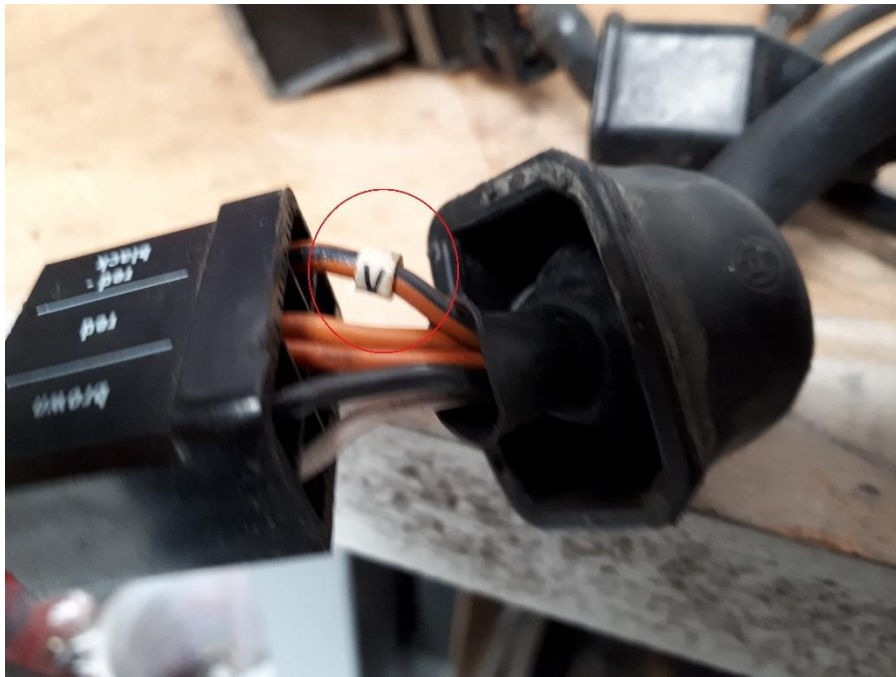


Fig 3c

For owners who want to modify their bike the following table (figure 4) is included to assist with inputs and outputs available on the Ignitech unit. The white rows are the basic loom and the light grey rows are additional circuits able to be added.

Wire colour	Pin	Description	Function
Orange	1	Induction coil 1	IC 1
Yellow/black	2	Induction coil 3	IC 3
Purple	3	Multifunction output 1	Power out 1
Green	4	Servomotor output	M
Green	5	Servomotor output	M
Grey	6	Engine load sensor	TPS, IAP
Blue	7	Ground, Sensor reference	GND, SENSE GND
Black	8	Multifunction input 1	INPUT 1
Yellow	9	Crankshaft position sensor 1	CKPS 1
White	10	Induction coil 2	IC 2
Red/black	11	Induction coil 4	IC 4
Blue/white	12	Multifunction output 2	Power out 2
Red	13	Power supply 12 V	+12 V
Blue	14	Ground	GND
Green/yellow	15	Revolution indicator output	TACHO
Blue	16	Sensor ground	GND, SENSE GND
White/red	17	Power supply of sensors	+5 V

# Bosch Ignitech Basic Guide V1.1

info@beltandbevel.com.au

www.beltandbevel.com.au



White/blue	18	Servo position sensor	STPS
Grey/red	19	Multifunction input 2	INPUT 2
Brown	20	Crankshaft position sensor 2	CKPS 2

Fig 4

Some notes for install.

- Mount the Ignitech unit away from the coils if possible. The ignition coils put out EMF and may cause issues. A good position for the Ignitech is mounted to the battery with double sided Velcro.
- Ballast resistors *number 25* figure 1 are not required when the Ignitech is used. These can be bypassed, follow the male connector going to the ballast and plug it straight to the coil and remove the ballast.
- Resisted spark plug caps or resisted sparkplugs **MUST** be used with Ignitech units. 5k Ohm plug caps are the safest way as it is less likely to be missed when swapping spark plugs i.e difference in BP6HS vs BPR6HS.
- Not all 6 pins in the 6 pin connectors are full, on either the original or Ignitech loom
- The Ignitech dwell time is set to auto as standard to deal with different primary resistance readings from different brand ignition coils. Avoid very high or very low resistance coils without modifying dwell times on the Ignitech software, a coil at around 3 ohms is suitable.
- New coils are always preferred with a new Ignitech ignition install as ignition coils degrade and eventually fail over time.
- Check the ignition pickup resistance and continuity. The resistance through the pickup should be 220 ohms +/-10. Also check that there is no continuity to ground from the pickup.
- Coil polarity is important. On the coil there may be a + and - cast in, or the terminals will be different sizes. The smaller terminal on a coil is -. On the original loom black is - and orange is +.