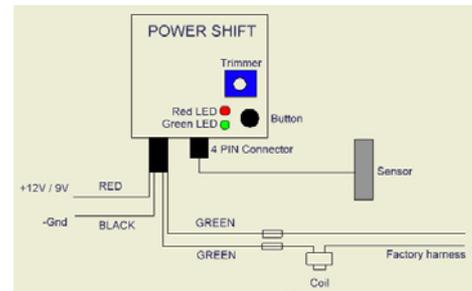


Installation and instruction manual.

Installation of the Speed version (for 4 stroke street motorbikes)

1. Shorten the shift lever rod of 34mm. and make a new thread with a M6 tap, the sensor must be installed on the engine side, (see picture).
2. Screw up the sensor between the ball joint and the rod (use the provided M6 joint if necessary). You can also make a male thread on the rod with a M6 die.
IMPORTANT: when the ball joint and rod are screwed up, keep the no. 10 spanner on the side of the sensor which is being locked, so that the sensor itself is not subjected to torque which might damage it irreparably. The sensor must therefore never be between the two spanners.
3. Position the Control Unit under or near the seat.
4. Connect the sensor to the fitting 4 PIN connector placed on the Power Shift Control Unit.
5. Find the common cable of the Coils on the bike harness.
6. Split the common cable of the Coils and connect it in series to the Power Shift Control Unit (see the drawing). On many motorcycles (ex. Ducati 749-999 etc.) it's possible to wire in the same way directly to the stand switch or to the engine run switch, some tuners prefer the connection to the common wire of the injectors.
7. Connect to ground the Black "GND" wire through the proper ring.
8. Connect the Red "+12V" wire to a positive of the harness (if possible with the key switched but not timed so that it is possible to make regulations with the engine off), a positive which is usually available is the rear brake light sensor power supply.



Installation of the ECS and GP* versions (Enduro-Cross-Supermoto or GP* motorbikes)

1. Replace the original gear lever with the one provided with Power Shift.
2. Fasten the Control Unit to the chassis through the proper adhesive.
3. Connect Power Shift's Yellow wire in series to the wire between the ignition switch and the original CDI unit (usually the White-Black wire). Attention, if you connect the Yellow wire to the one between the ignition switch and GND, Power Shift won't make the correct spark cut.
4. Fix Power Shift's GND ring underneath one of the frame screws (for example one of the coil screws) so that it's perfectly grounded with the bike.
5. Connect a common 9V type PP3 battery through the proper adapter, disconnect the battery after the practice because, also with the engine off Power Shift still uses energy.
6. Connect the lever's wire to the fitting 4PIN connector placed on the Power Shift Control Unit.

*The GP version does not use the lever but the sensor of the Speed version, on one cylinder motorbikes the cut can be made directly on the coil wire instead of the engine switch.

Setting of the neutral position of the lever

The first setting is to let *Power Shift* know the initial position of the lever:

Supply *Power Shift* with power, keeping the button pressed at the same time (don't touch the shift lever during this operation). The green LED lights up.

As the LED turns off release the button. It's possible to repeat this operation to reset the deformation of the lever after a crash.



Setting of the actuation threshold (the system works in both directions)

The minimum threshold is indicated by "0", and the maximum by "F" on the blue trimmer.

Press the gearshift with your hand until the gear is felt to "point". The red LED must come on as soon as this "pointing" is felt. If the red LED remains off, turn the selector counter-clockwise, if, on the other hand, it is activated before the gear points, turn it clockwise. The setting is correct if the red LED turns on at the exact moment of "pointing". The green LED turning on indicates that current to the plugs has been cut off.

It's suggested to optimize the setting on a road test.

Adjustment of the cut off time

The cut off time is preset to an optimal value for most engines at 5 hundredths of a second. It is, in any case, possible to set it as desired till 15 hundredths of a second.

Keeping the button pressed for at least 3 seconds, you enter the cut off time programming mode, release the button as the LEDs light on.

In this mode both the LEDs flash the same number of times as the hundredths of a second are set, after a 1 second pause they repeat the sequence.

Press the button for as many times as the hundredths of a second to be set.

Premere il pulsante tante volte quanti sono i centesimi di secondo che si vogliono impostare.

E.g.: with a factory setting of 5 hundredths of a second, the LEDs carry out sequences of 5 flashes separated by pauses of 1 seconds. To set the time to 4 hundredths, while flashing press the button four times. The LEDs will then carry out two sequences of 4 flashes and the procedure is completed.

Sport version has the same installation procedure as the Speed version but with a handle bar switch instead of the sensor, the only one setting is the cut-off time.

Power Shift is covered by a 12 month warranty against manufacturing defects.