

**FITTING INSTRUCTIONS**

Thank you for choosing a Newtronic contactless optical ignition system. For a speedy and successful installation, it is recommended that you first read all the way through the fitting instructions and familiarise yourself with the parts provided in the kit

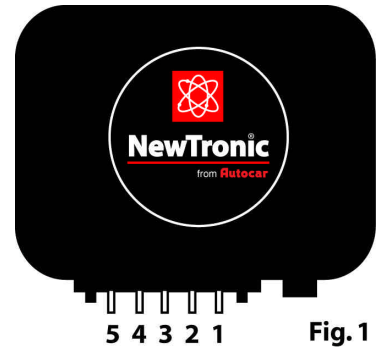
1. DISCONNECT THE BATTERY
2. Remove seat, petrol tank and side covers.
3. Remove cover over contact breaker assembly.
4. Disconnect battery earth.
5. Disconnect the contact breaker lead wire at the connector block located behind the air cleaner box.
6. Remove the 3 screws which secure the points backplate to the engine casing, and carefully pull the wires and grommet outwards while feeding the wire in from the rear.
7. Remove the complete assembly. Keep the grommet as this will be used on re-fitting. Undo the 14mm nut and washer securing the points cam to the shaft and withdraw it. Leave the three legged timing plate in situ.
8. Pull apart the six way connector block immediately in front of the coils.
9. Find a convenient site for the switching unit under one of the side panel areas and run the main loom up to the coils, connecting the new loom between the original connector halves. Secure wires to prevent chaffing.
10. Connect the blue wire to a good earth. It is preferable to use the battery negative for this purpose.
11. Using the original grommet, feed the Newtronic timing assembly wire through the crankcase up to the switching unit.

Connect the wires in the following order (Fig.1)

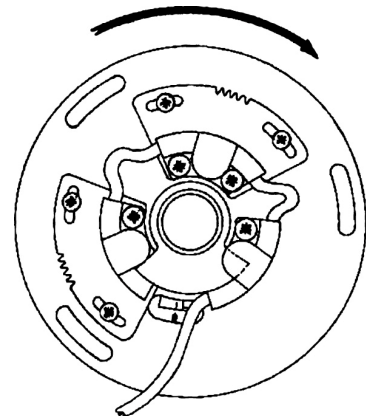
<b>550</b>	<b>380 &amp; 750</b>
1. Red	1. Red
2. Yellow	2. Yellow
3. Blue	3. Blue
4. White	4. Black
5. Black	5. White

Connect the trigger lead to the switching unit using the moulded plug cover and fill the pug with the waterproof sealant provided. Secure with the two self-tapping screws. Wipe clean the site selected for the switching unit. Remove the protective backing from the sticky pad and press firmly in place.

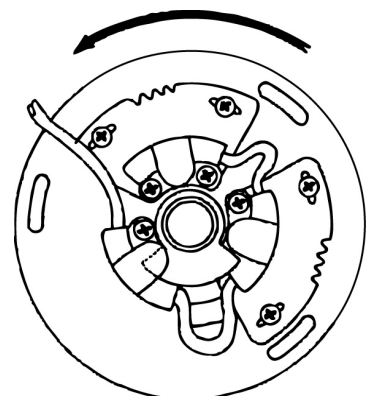
12. Turn the engine over by hand so the 'L' on the three legged timing plate aligns with the mark on the crankcase (see figure 4). Offer up the Newtronic assembly with the timing window in the plate in the correct position over the crankcase timing mark. The plate is assembled for the 380 and 750. If the kit is being fitted to a 550 the lamp holders and small base plates need to be removed and assembled on the reverse of the large baseplate.
13. Slide the rotor down the shaft with the trailing edge centred in the lamp holder fastened directly to the large baseplate. Remember the 550 rotates clockwise and the 380 and 750 anti-clockwise. Engage the rotor with its driving peg while keeping everything in the correct relationship. (See Figs. 2 & 3)



**Fig. 1**



**Fig 2.**  
Direction of rotation for 550



**Fig. 3.**  
Direction of rotation for 380 & 750

14. Refit the three baseplate securing screws loosely and the 14mm nut and spring washer. Ensure at this stage that the rotor does not strike the lamp housing by adding or removing spacers under them. Tighten the nut fully.
15. Refit the petrol tank, battery earth, seat and side covers.

All the necessary components are now fitted and it only remains to set the ignition timing. This should not be done in bright sunlight or the the timing will be affected. Setting the timing is basically no different to the procedure adopted when using contact breakers. The firing order is left, middle, right. It should be remembered that the coil fires as the timing rotor leaves the lamp housing.

#### SETTING THE TIMING:

1. Using a dial gauge, set the piston position to the correct B.T.D.C. setting (this can be obtained from the manual.) This is on the left cylinder. If the three legged timing plate does not align with the crankcase mark, scribe a line on it in the correct place. (Fig.4)
2. Remove dial gauge etc. and connect a stroboscope to the left cylinder. Check again that the trailing edge of the timing rotor is in the mouth of the lamp house screwed directly to the large baseplate.
3. Start the engine.
4. Move the large baseplate on its adjusting slots to align the timing marks for 'L' cylinder. Do the same for 'C' cylinder, but adjust the lamp housing on the next small baseplate to align the timing marks. 'R' cylinder is set using the remaining small baseplate.
4. Check all screws are tight and refit the cover and gasket over the points housing.

Having installed your Newtronic system following this step by step guide, you should soon be enjoying years of improved starting and performance, fuel saving and reliable tuning.

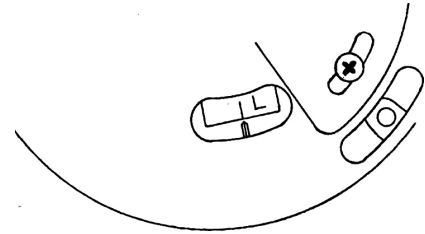


Fig 4.  
View of timing marks through baseplate window

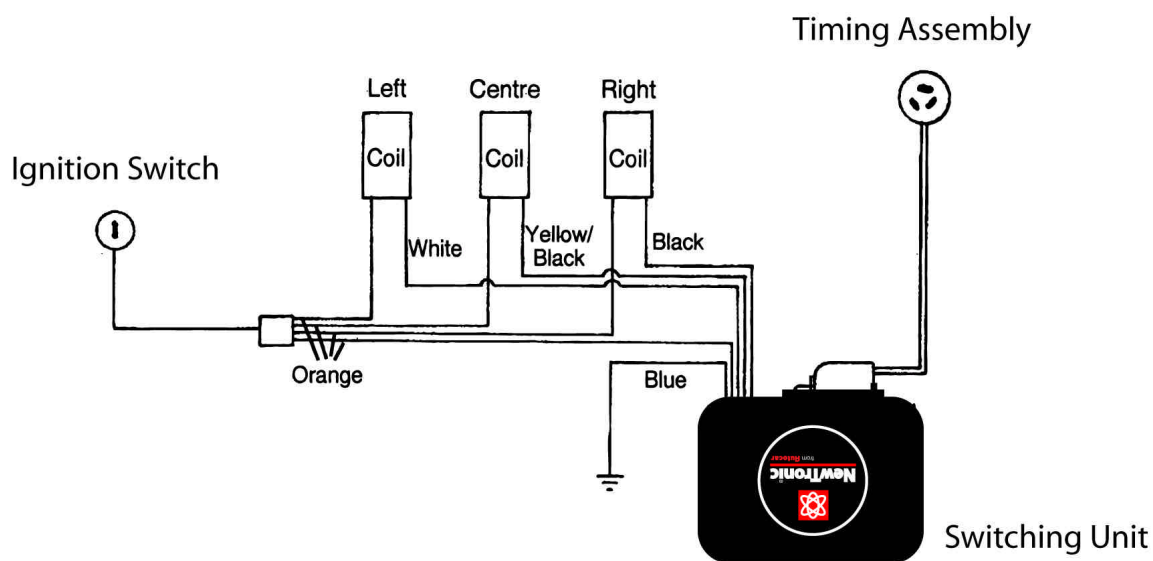


Fig. 5