

### TIS 1040 Lamptester Testing Procedure

- **FUSES** Hold the tester in either hand placing your thumb on the metal disc. Hold the fuse in the opposite hand, holding the metal part of the fuse, bring the point of the tester to the opposite side of the metal fuse and a good fuse will produce a high pitched tone and illuminate the continuity light on the tester. A blown fuse would not do either.
- **VOLTAGE** To prove a circuit is live or dead. Hold the tester in either hand placing your thumb on the metal disc. Place the metal probe of the tester onto the positive side of your Voltage supply, if the supply is live then you will hear a buzzing tone and the voltage led will illuminate on the tester.  
**\*Always test on a known supply before carrying out this test**
- **STARTERS** Hold the starter in either hand, by the plastic body. In the opposite hand hold the tester, touch either of the metal connectors of the starter with the metal probe from the tester, then depress the test button on the tester, look into the hole on the top of the starter ( between the two metal connectors ) and if the starter is good you will see it illuminate. No illumination indicates a faulty starter
- **BALLASTS** There are many different types of ballast, in general the only faults that occur are either Short Circuit or Open Circuit. Before testing you need to accustomise your hearing to the tone & illumination of the led on your tester ( ensure your battery is ok ) to do this hold the tester in either hand and with the opposite hand hold the metal probe of the tester. Then place your thumb on the metal disc of the tester and you will hear a high pitched tone & see a bright led on your tester This is the tone & light you need to hear & see when testing the ballast as follows; The test on the ballast is between live & neutral Hold the tester in either hand, placing your thumb on the metal disc, place the metal probe of the tester onto either the live or neutral connector on the ballast. With your opposite hand touch the opposite side of the connector,( to which the metal probe is connected), using a steel pin, nail or a piece of wire, clasped between your finger & thumb, this should produce the same tone & light you had earlier, if there is no tone then you have an Open Circuit Fault, if the tone is very low and the light on the tester is very dim this would indicate a Short Circuit. When carrying out testing on ballasts try to have a replacement ballast available and compare the ballasts, test by test, if you notice a difference then replace the old ballast
- **Lamps with built in ignition systems i.e. Most Fluorescents**  
When testing this type of lamp it is imperative that the ignition coil, held within the lamp is tested, in the first instance. This is carried out by holding the tube in one hand with your finger being placed on the metal pin at the end of the tube, in your other hand hold the Lamptester and place your thumb onto the round metal disc, then place the pointed metal tip of the

Lamp tester onto the adjacent pin, from the one your finger is on. If the ignition coil is good you will hear a continuous tone, no tone indicates a faulty ignition coil, which means that the lamp/tube will not light, even though the gas in the tube will. Sometimes you will see that a tube is blackened at one end this is also an indication that the ignition coil has failed. Please note that when testing tubes that both ends are fitted with ignition coils, so it is essential that both are tested, by repeating the test at the other end. Provided the ignition coils are ok, igniting the lamp with the Lamp tester will mean that the lamp is working

- **PHOTO-CELLS** In a day light situation hold the tester in either hand placing your thumb on the metal disc of the tester. In the opposite hand hold the photo-cell with the connectors of the photo-cell facing you. Place the metal probe of the tester onto the large connector marked N, using your finger (from the hand holding the photo-cell) place it onto the connector marked L1. Like with the ballast above you should hear a high pitched tone and see the continuity led on the tester illuminate, a low tone/illumination would indicate a Short whilst no tone & light would indicate an Open Circuit. When carrying out testing on photo-cells try to have a like for like replacement available and compare the tests of each, if you notice a difference then replace the old photo-cell