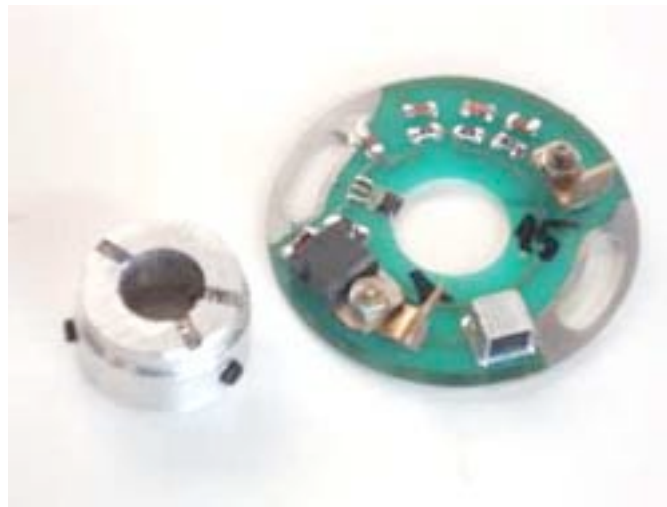


Electronic Ignition Installation Instructions.

(For Messerschmitt KR200)



Important! Before You Begin:

- This electronic ignition must only be used with a shielded spark plug cap. If the spark plug cap is not shielded, the electronic ignition unit can be damaged or may fail to work properly. Use of a non-shielded cap will void your warranty!
- Your new electronic ignition is very reliable and seldom causes problems. However, you should save all the parts from your present ignition system in case you ever need to change back to the original system.
- Please follow the installation sequence outlined in these directions. Read the instructions carefully and make sure you understand the steps before you begin.

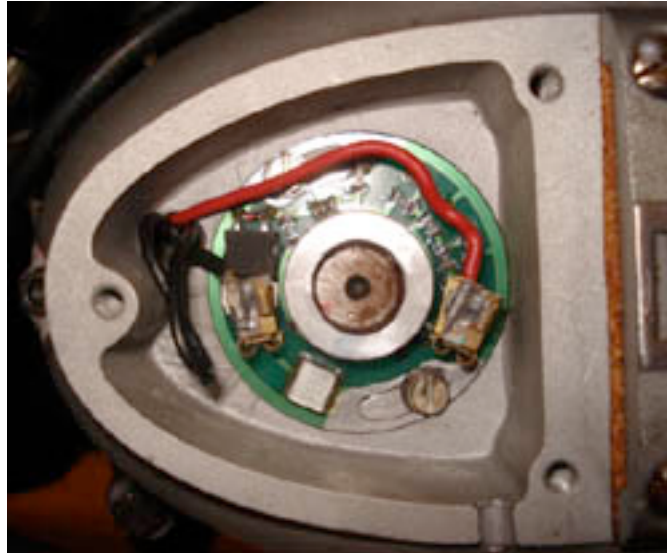
Installing the Electronic Ignition:

At the Engine

- Disconnect the battery to prevent accidental shorts.
- Take off the (SA) plate from the left side of the engine.
- Remove the old contact breaker plate from the engine. Take care not to damage the existing wires since these will be reused.
- Put the new ignition plate in place; secure it with the two M4 screws. Use the threaded holes formerly used by the contact breaker plate. Make sure the unit is centered, on the screws so it is adjustable in both directions.

- Use the supplied cable shoe to connect the black wire to the circuit board on the electronic ignition unit (number 1)
- Connect the red wire to to the circuit board on the electronic ignition unit (number 15).

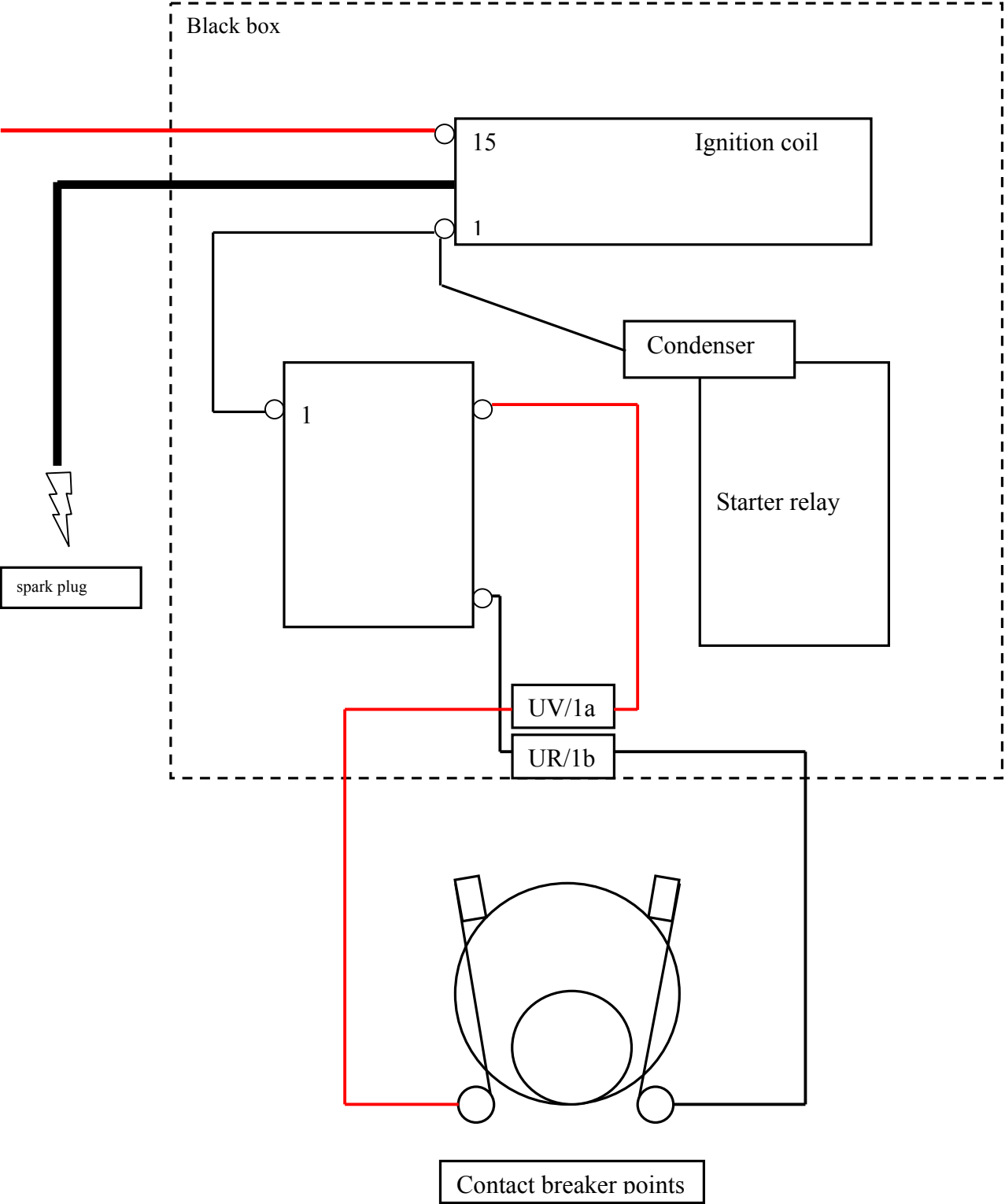
At this point in the installation your engine should look like this (except we haven't installed the magnetic ring on the end of the crank yet):



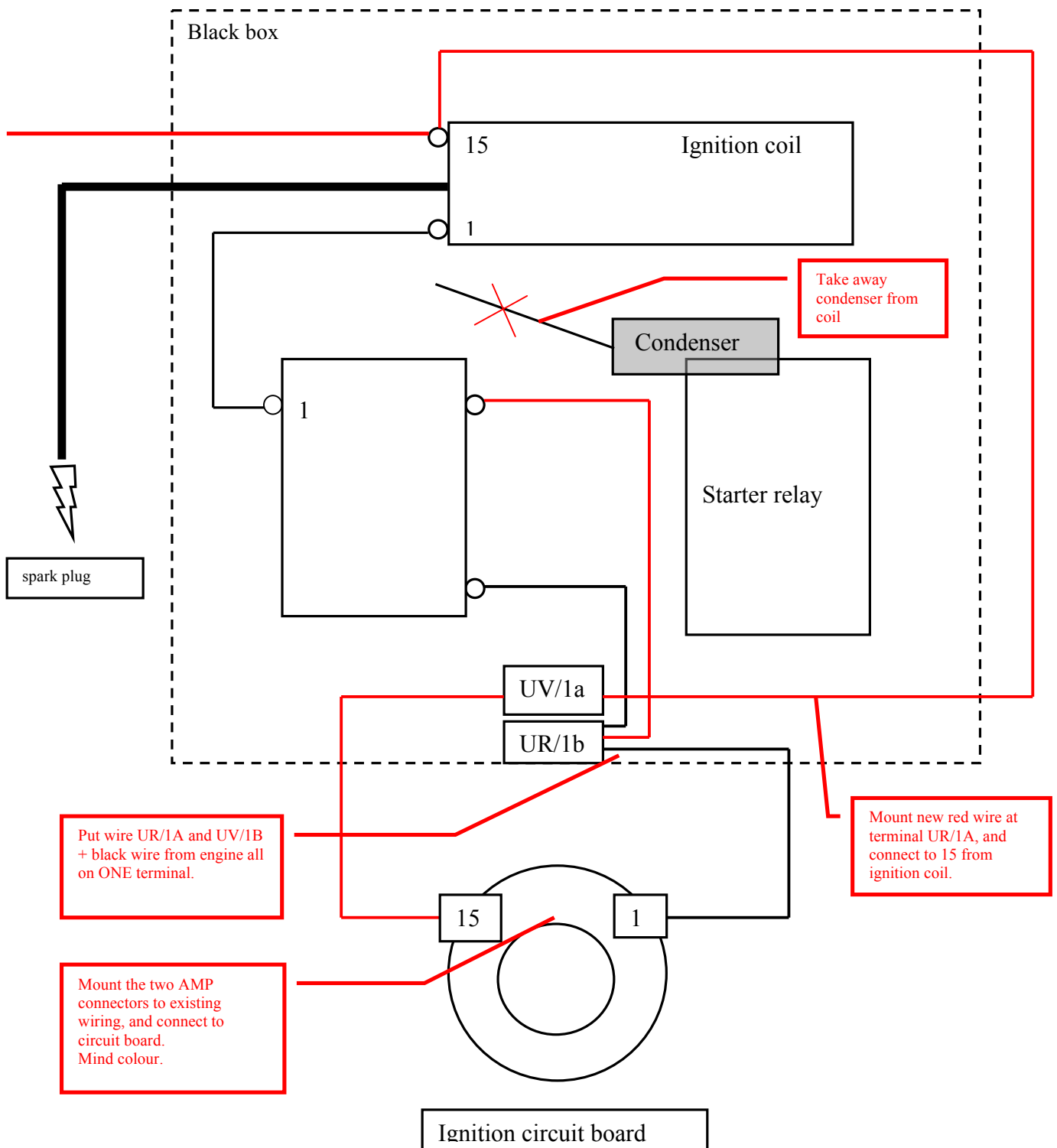
At the Black Box

- Remove the cover on the black box.
- Remove the wire from the condenser. Leave the condenser in place, just remove the wire, since the condenser is not used by the electronic ignition unit.
- Remove the nut securing the wires to terminal UV/1A. Remove the wire labelled UV/1A). Remove the nut securing UR/1B and install the wire labelled UV/1A on top of it
- Connect the black wire coming from the electronic ignition unit to UR/1b Replace the nut. (so we have three wires on ONE terminal)
- Connect the red wire coming from the engine to the now open terminal at UV/1A
- Run a wire (a red wire is supplied with the kit) from UV/1A to point 15 on the coil. (Important! Connect to Terminal 15 on the coil and NOT Terminal 1). Replace the nut on terminal UV/1A. Replace Cover on Black Box..

How it is, original state.



How it looks after installing the electronic ignition circuit board



Number 1 (black) replaces the breaker point function. (Switching wire)
 Number 15 (red) is the + voltage (the power supply of the ignition)

Mounting the Magnetic Ring on the Crankshaft

Slip the magnetic ring on the crank shaft end, The three magnets should be facing the ignition point. (Important Note: There are two different sizes of cranks used on Messerschmitt engines, 14mm and 15mm. If the ring does not fit on the end of the crankshaft it will need to be machined to fit by enlarging the diameter of the hole.)

Make sure the distance between the magnets and the sensor on the circuit board is 0.5mm +/- 0.2mm. Adjust as necessary. Don't worry about the position of the ring on the shaft at this point—we will position the ring correctly when setting the timing.

Setting the Timing

- Reconnect the battery. Make sure the car is not in gear. Engage the parking brake.
- Remove the spark plug from the engine. Connect the spark plug to the spark plug cap. Lay it on the engine so it is grounded and the spark is visible.
- Turn the engine clockwise (as seen from the ignition side) until the piston is at 4mm before top dead center (TDC). (TDC Can be determined by using a gauge, or, if no gauge is available, by carefully inserting a small wooden dowel of suitable length into the spark plug hole and “feeling” the movement of the piston as it moves up and down.)
- Turn the ignition switch to the “ON” position in “Forward” Mode. The ignition circuit should now be energized.
- With the engine resting at 4mm Before Top Dead Center (TDC), SLOWLY rotate the magnetic ring by turning it with your hand clockwise around the crankshaft until there is a spark at the sparkplug. You have now set the timing to fire at 4mm before TDC. (Fine adjustment can be accomplished by adjusting the circuit board screws and moving the unit clockwise or counter clockwise as required.)
- Reverse timing does not need to be manually set—the electronic ignition does this automatically so that reverse spark occurs at 2.5-3mm before TDC when the engine is turned counter clockwise. You may want to check reverse by changing the ignition switch to reverse position and rotating the engine manually in a counter clockwise direction until the spark plug fires.
- When timing is correct, tighten the magnetic ring securely to the crankshaft.

- Check the electronic ignition unit to make sure that all screws are tight and that none of the wires are rubbing on either the magnetic ring or the crankshaft. When you are satisfied, replace the side cover on the engine.
- Replace the spark plug. Turn on the fuel to the engine. Operate engine in both forward and reverse modes to check for proper operation.

Congratulations, The Electronic Ignition Unit is Now Installed

How it works (in case you were wondering). Unlike the factory system with points that open and close, the electronic system you have just installed operated with a magnet (located on the ring) and a coil sensor (located on the circuit board). When the magnet comes close to the coil sensor it disrupts the magnetic field of the sensor. This disruption is measured and amplified, and then used as a trigger for the spark instead of the original points.

Since the magnet and the sensor never come into contact with each other, there is no loss of adjustment through wear. This means: no more adjustments of the points, no more wear of the cam. Once in place your engine should start better, run better, and have a more regular idle.



TIP.

When you still have a ground plate with contact breakers, it is a good idea to get yourself a spare ignition.

Mount the plate and adjust it very carefully so it works well.

Mark the position of the base plate against the crank case.

Store it somewhere in your car, together with the two circuit drawings.

In case of a breakdown of your new ignition, you can help yourself home.

Replace the wiring to factory standards and drive off.

The new ignition seldom brakes down,

But Mr. Murphy taught us that WHEN they break down, you will be alone in the middle of nowhere, and your cell phone will be empty.