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ReOpus Fitting Instructions

Notes:

The REOPUS replacement board is purchased as a kit for the owner/home mechanic to install. Please read the instructions thoroughly before you start.

If you are not comfortable fitting it yourself, we strongly recommend you take the REOPUS and these instruction sheets, to any auto electrician. He should be able to fit it to your car inside an hour. If you don't want to, you don't even have to take your car... just unbolt and disconnect your original amplifier, then take it with your new REOPUS kit to be soldered into place.

We also recommend you read, and take action on, the web site V12 owner tips and FAQ. pages to ensure you are getting the best from your new unit.

Introduction:

The REOPUS circuit board is installed into the original Lucas OPUS amplifier case and utilises the original Lucas magnetic pickup, ferrite rod timing disc, and existing wiring.

Three decades later, advanced high-grade electronics allowed us to dramatically improve on the original's capabilities. However, the circuit still functions in a similar manner.

In redesigning the electronics we have followed the original approach of the OPUS designers to ensure compatibility with the rest of the vehicle electrical system.

We have included 2 diagnostic LED's on the circuit board to check the power supply and pickup operation.

The ReOpus Kit includes:

- Easy to follow, installation instructions.
- Replacement ReOpus amplifier circuit board.
- Installation kit comprising 2 x ¼ NC bolts 2 x ¼ spring washers 2 x aluminium spacers 2 x ¼ flat washers.

Fitting the "ReOpus" circuit board into your amplifier casing.

- 1) Disconnect the pickup connector, the ballast resistor connector, and the positive and negative wires from the coil.
- 2) Remove the OPUS amplifier unit from your car if access to the case for soldering is difficult. Often, just unbolting the amplifier is sufficient. It depends on the location used on your car.
- 3) Remove the 4 base plate screws from the bottom of the amplifier unit.
- 4) Carefully lever off the base plate, taking care not to damage the paper gasket, which should be reused when fastening the plate after installation.



- 5) Remove the 6 Posidrive screws holding down the OPUS circuit board and carefully remove the board from the amplifier case. You will need to push the wires and rubber grommet from the top of the case to provide enough wire length to do this.
- 6) Depending on the model of amplifier, the board will have 5 or 6 wires attached to it. The 6th. wire is a Blue/White Tachometer (also known as a Rev-counter) wire and if not present, the Tachometer will be driven off the coil. This is not a problem and the Blue/White wire can be ignored.
- 7) Carefully cut the wires as close to the circuit board as possible, to ensure they will be long enough to solder to the pads on the ReOpus board. The board is covered in a creamy white rubberized material, so scrape that off to reveal where the wires attach to the board. **IMPORTANT: Keep any colour code sleeves, bands, or collars on the respective wires. (See photos below and tables in step 10) ALSO, on early type wiring, do not confuse the Black wire with a Red Band ONLY, and the Black wire with a Red Band PLUS a Black Band. (Black Bands on Black wiring can be difficult to see!)**
- 8) The ReOpus board makes the components on the base plate redundant. Cut off and discard the wire between the components on the base plate and the OPUS board. If you wish, you can remove the components on the base plate but you will need to seal any holes with a silicone sealant.



9) Fit the wires through the aluminium cable slot of the ReOpus circuit board and position the circuit board into the amplifier case. Reposition the wires and rubber grommet in the top of the case and seal with a silicone sealant to prevent water ingress. Using 4 of the original screws fasten the circuit board into the case.

NOTE COLOURED BANDS, OR COLLARS ON WIRES



10) Carefully strip the ends of the wires and pre-solder them. Using a small soldering iron, solder the wires onto the solder pads 1, 2, 3 and A, B, T on the component side of the ReOpus circuit board in the positions as detailed in the following lists. Remember the Blue/White Tachometer wire might not be present, in which case ignore the instructions for this wire.

Early Type Pickup

- Pad 1 = (Primary) - Red Band
- Pad 2 = (Center tap) - Black Wire (No band)
- Pad 3 = (Secondary) - Yellow Band

Pickup (Later Type)

- Pad 1 = Red wire
- Pad 2 = Black wire
- Pad 3 = Yellow wire

+ Battery, Coil and Tachometer (Rev-counter).

- Pad A = Batt + Black / Red Bands
- Pad C = Coil - Black / White Band
- Pad T = Tachometer Blue / white Bands

+ Battery, Coil and Tachometer (Later Type).

- Pad A = Red/black wire
- Pad C = Black/white wire
- Pad T = Blue/white wire

11) Next, reconnect the pickup module and the Ballast resistor to the amplifier. **DO NOT RECONNECT THE POSITIVE AND NEGATIVE COIL WIRES AT THIS STAGE.**

12) Turn the amplifier so that you can see the ReOpus board. Using a lead with crocodile clips, connect the amplifier case to a good earth on the vehicle. This can be done by using one of the long bolts and spacers supplied in the kit and bolting the amplifier upside down into the engine valley in front of the distributor. If the bolt holes are not easily accessible on your car then use a lead.

13) Turn the Ignition to the run position (do not start the engine) and the **Red** LED on the circuit board should be ON. If not,

check the soldered connections on the board, all wiring and finally the earth connection.

14) Now turn over the engine on the starter motor. The **Red** LED will be ON and the **Green** LED will flash (6 times per engine revolution) indicating the pickup circuit is OK. Turn OFF the ignition switch. If the Green LED does not flash, then check the connections, wiring and earth. This could indicate a problem with the pickup, particularly if the vehicle would not start with the old amplifier connected.

15) Remove the amplifier case if bolted down and refit the base plate using the original screws and paper gasket. Apply a small amount of sealant to each side of the gasket to prevent water ingress.

16) Refit the amplifier in its original position.

17) Reconnect the the coil wires positive (White/Green) and negative (White/Black) and ensure the pickup and the ballast resistor are connected to the amplifier

18) Now its time for your Road test.

The ReOpus unit will not alter the existing ignition timing, however we recommend the ignition timing be checked using an ignition stroboscope as detailed in the service manual for ultimate performance and economy.

ReOpus 5 Year Warranty.

The manufacturer warrants, for a period of FIVE years from the date of shipment, that the ReOpus circuit board is free from defects in material and workmanship.

The manufacturer's obligations under this warranty are limited to the ReOpus circuit board only when it is used as a replacement for the Lucas Opus Type AB3 ignition trigger amplifier together with the original car manufacturers pickup sensor and an appropriate coil.

All warranty claims will require you to return the unit to our manufacturing facility, at your cost, for examination. If the unit is found to be defective we will either repair or replace it at our discretion and return it to you free of charge.

The warranty shall not apply to any units which been repaired or altered except by the manufacturer or which have been subjected to misuse.