

# The Vinyl Source rewiring kit for Rega tonearms.

Thank you for purchasing our kit. Please follow these instructions carefully for install our kit.

## **Tools you need:**

- 1.5 mm Allen key
- 2 mm Allen key
- Solder
- Soldering Iron
- Sharp blade
- Continuity tester or resistance meter
- Tweezers
- Pliers
- 2.5 or 3mm drill bit
- Nr 8 hex key

## **Parts:**

- 1 Wiring harness
- 4 cartridge pins with shrink tubes
- 400mm draw wire (already soldered to the wiring harness)

## **Instruction for the RB250 (and all the models without VTF dial)**

If you have an RB300/600/900 or any other model with the VTF dial goto to the next section.

### 1) Remove the rear stub.

- Use a pair of pliers or mole grips to remove the rear end stub. Use particular attention if you have the plastic rear stub because a jerking movement or too much force can damage the stub. Use a gentle movement without applying too much force.
- Remove the ground clip and wire from the end section of the arm. Keep the clip, it will needed later to host the new ground wire.

### 2) Remove the internal wiring and rubber grommets.

- Unscrew the 1.5mm Allen screw at the base of the tonearm. Do not remove the screw entirely because can be easily lost.
- Withdraw the plastic plug at the base of the tonearm with a gentle twisting motion. Once the plug is off cut the wires connected on the inside of the tonearm.
- Prise out the rubber stopper at the headshell end, the headshell wires exit from this rubber bung. You can use some sharp object like a thin screwdriver to take the stopper off, do not worry if the stopper and the cables will be damaged.
- At this moment you can remove the internal wires.
- Remove the rubber grommets in the wire duct through the vertical pivot tube in the arm housing, see diagram. You can use a 2.5 mm drill bit to drill out the lower grommet slowly. When the drill bit hit the end of the brass shoulder, then gently withdraw it and remove the bits of the rubber grommet.
- Remove now the top rubber grommet, gently poke it up into the arm tube where it can be tipped out.

### 3) Install the new wiring

- Feed the end of the draw wire into the tonearm's base. As the wire enters the arm tube, you can see the wire's end through the rear end of the tube. Use a pair of tweezers or a hook to catch the wire and pull it out of the rear end of the arm. Pull out the whole draw wire plus circa 250mm of Litz wires and then separate the black wire from the rest. Trim the black wire ½" outside the arm tube. Solder the black wire to the ground clip and inter the clip toward the end of the thread of the counterweight's stub
- Push the draw wire back into the tube toward the headshell.
- Gently pull the draw wire from the headshell end, make sure that the Litz wires are loose and there is no strain in upping all the rewiring kit, lay the kit on a table to avoid that is hanging under the tonearm.
- When the Litz wire with the PTFE screen is all in secure in place the cable's brass grommet. The brass grommet has a depression on it, if you have a tonearm with the 3-points mounting system you need to secure the grommet within this depression and that's because the newer tonearms have a thicker and longer grub screw. If you have an older Rega tonearm with the threaded bottom you need to screw in the grub screw anywhere else than the depressed part of the grommet.
- Once the 4 Litz wires are out of the headshell, desolder the draw wire and free the wires.

To continue to skip the next section (dedicated to the RB300 and similar tonearms) and complete the installation of the rewiring kit.

## Instructions for RB300/600/900 or any other model with the VTF dial

### 1) Remove the rear stub.

- Use a pair of pliers or mole grips to remove the rear end stub. Use particular attention if you have the plastic rear stub because a jerking movement or too much force can damage the stub. Use a gentle movement without applying too much force.
- Remove the ground clip and wire from the end section of the arm. Keep the clip, it will be needed later to host the new ground wire.

### 2) Remove the internal wiring and rubber grommets.

- Unscrew the 1.5mm Allen screw at the base of the tonearm. Do not remove the screw entirely because it can be easily lost.
- Withdraw the plastic plug at the base of the tonearm with a gentle twisting motion. Once the plug is off cut the wires connected on the inside of the tonearm.
- Pry out the rubber stopper at the headshell end, the headshell wires exit from this rubber bung. You can use some sharp object like a thin screwdriver to take the stopper off, do not worry if the stopper and the cables will be damaged.
- Set the VTF dial to 3 and use an Nr 8 hex key to remove both of the acorn nuts on both sides of the arm.
- Remove the 2 buttons headed Allen bolts under the VTF knob with the help of a 2mm Allen key. Pull off the cover. The arm is now free, and you can remove the internal wires.
- Remove the rubber grommets in the wire duct through the vertical pivot tube in the arm housing, see diagram. You can use a 2.5mm drill bit to drill out the lower grommet slowly. When the drill bit hits the end of the brass shoulder, then gently withdraw it and remove the bits of the rubber grommet.
- Remove now the top rubber grommet, gently poke it up into the arm tube where it can be tipped out.

### 3) Install the new wiring

- Feed the end of the draw wire into the tonearm's base. As the wire enters the arm tube, you can see the wire's end through the rear end of the tube. Use a pair of tweezers or a hook to catch the wire and pull it out of the rear end of the arm. Pull out the whole draw wire plus circa 250mm of Litz wires and then separate the black wire from the rest. Trim the black wire ½" outside the arm tube. Solder the black wire to the ground clip and inter the clip toward the end of the thread of the counterweight's stub
- Push the draw wire back OUT the arm tube and then back in toward to headshell, push the draw wire until it exit from the head shell.
- Gently pull the draw wire from the headshell end, make sure that the Litz wires are loose and there is no strain in upping all the rewiring kit, lay the kit on a table to avoid that is hanging under the tonearm.
- When the Litz wire with the PTFE screen is all in secure in place the cable's brass grommet. The brass grommet has a depression on it, if you have a tonearm with the 3-points mounting system you need to secure the grommet within this depression and that's because the newer tonearms have a thicker and longer grub screw. If you have an older Rega tonearm with the threaded bottom you need to screw in the grub screw anywhere else than the depressed part of the grommet.
- Once the 4 Litz wires are out of the headshell, desolder the draw wire and free the wires.
- Reposition the arm tube in its original place so that you can thread on the acorn nut on the opposite side of the VTF spring. Tighten this nut with your fingers only and then slightly lock it with the Nr 8 hex key.
- Replace the sling cover along with its two button-headed bolts, tight the 2 bolts applying moderate force. The other acorn nut can be threaded in and fastened using the Nr 8 hex key.

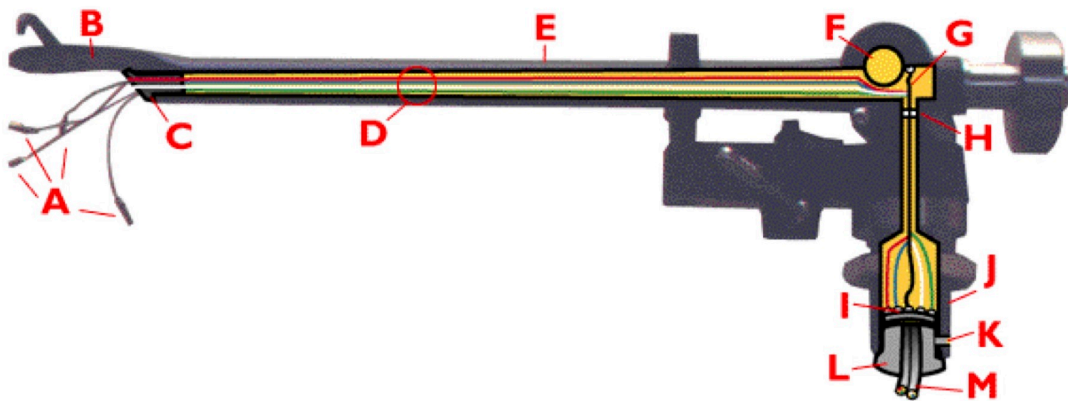
## Complete the installation of the wire.

- Gently pull the 4 Litz wires and at the same time drive the copper ring in the rewiring kit into the base of the tonearm. Lock the copper ring with tightening the 1.5mm Allen screw at the bottom of the tonearm if you didn't that already.
- The Litz wires are silk covered and are all white, to identify them the end is painted with the following colours:
- Red, Green, Blue, White (natural silk colour, unpainted).
- All the wires are already tipped and are around 2 - 3 inches longer than necessary, trim the wires, but before doing that mark the wires again with the proper colours. Bear in mind that Litz wires need to be pre-tipped before soldering since every strand of the wire is insulated, to pre-tip the wire remove 2-3mm of silk from the wire (just pull the end with your finger, and the silk will peel away) and heat the copper with a soldering iron at 400 - 430 degrees Celsius with a bit of solder.
- Check with a multimeter if there is continuity between the arm (a good testing point is the thread of the rear stub) and the ground clip of the rewiring kit.
- With the kit, we supply 4 cartridge clips with coloured shrink tubes.
- Slide the shrink tube on the wire of the same colour, solder the clip the wire and then slide the tube onto the clip, shrink the tune with the help of the tip of your soldering iron.
- Repeat this for all 4 clips.

Check with a multimeter is there is continuity between the cartridge pins and the RCA connectors, the colour scheme is as follow:

Left = white wire  
Left Ground = blue wire  
Right = red wire  
Right Ground = green wire

## Cross section of the RB 300 stock arm.



**A-** Cartridge Clips

**B-** Headshell

**C-** Rubber Cap

**D-** Tonearm Wires: Red, Green, White & Blue

**E-** Arm Tube

**F-** Horizontal Bearing

**G-** Ground Wire: Black

**H-** Itty Bitty Rubber Tube

**I-** Solder Connection Terminal

**J-** Base or Post

**K-** Set Screw

**L-** Grey Base Cap

**M-** Lead Wire

You can also follow our tutorials on our YouTube Channel: The Audio Sanity Channel

For all Rega RB without the VTF knob:



For all Rega RB with the VTF knob:

