

EPIC Car PC Board Assembly

Rev 2024-06-12

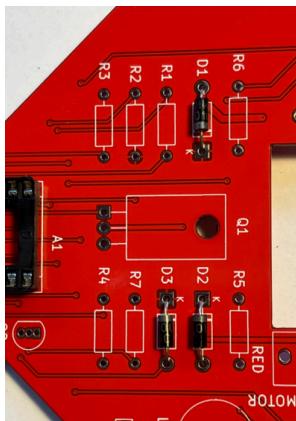
1. A1 - Arduino socket

Mount with notch matching PCB



2. D1, D2, D3 - 1N4004 diodes

Bend leads as shown, Mount with band matching PCB

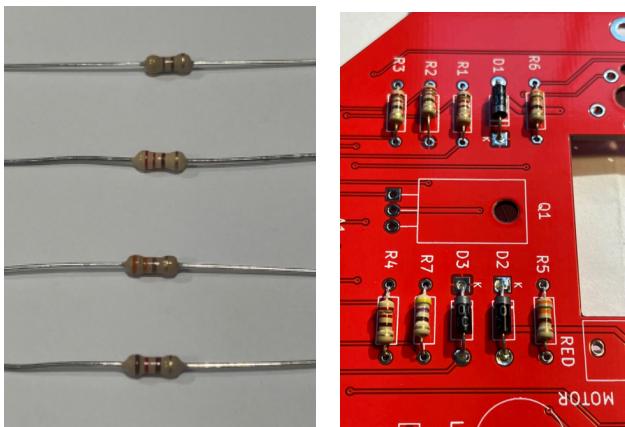


3. R1-R7 -- Resistors

Check color code! (or measure with meter)

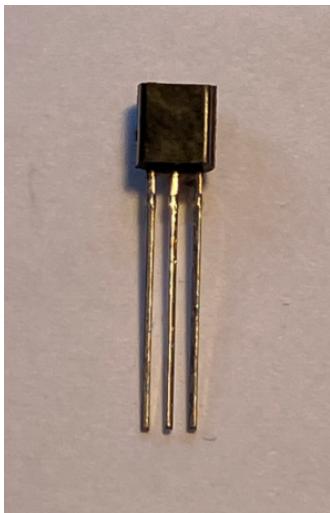
- R1 - 120 ohms - Brown, Red, Brown
- R2 - 1.8k ohms - Brown, gray, black, brown
Or Brown, Gray, Red
- R3, R4 - 220 ohms - Red, Red, brown
- R5, R6 - 330 ohms - Orange, Orange, brown
- R7 - 470 ohms - Yellow, violet, brown

Bend leads and insert.



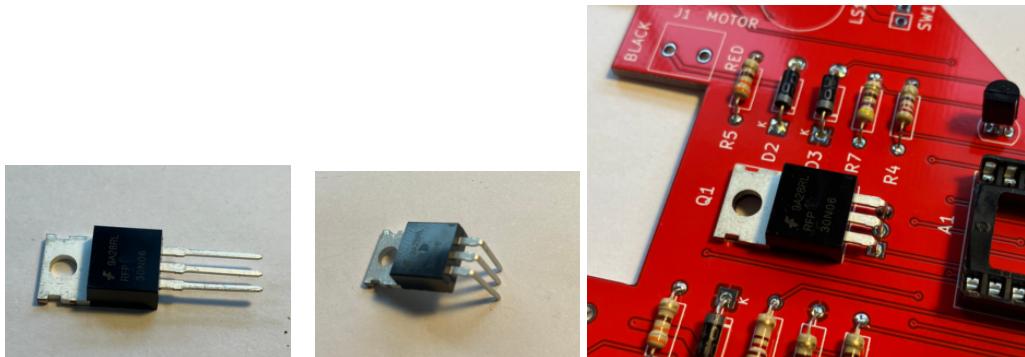
4. Q2 - 2N3904 BJT transistor

Install correct way around. Careful soldering to avoid bridges/shorts!



5. M1 - RFP30N06 or IRF540 MOSFET transistor

Bend leads and install



6. LS1 - Speaker

Install the right way around (see photo and "+" on the speaker)



7. SW2 - push-button switch

Install from bottom side. Make sure it is flat against the PC board.



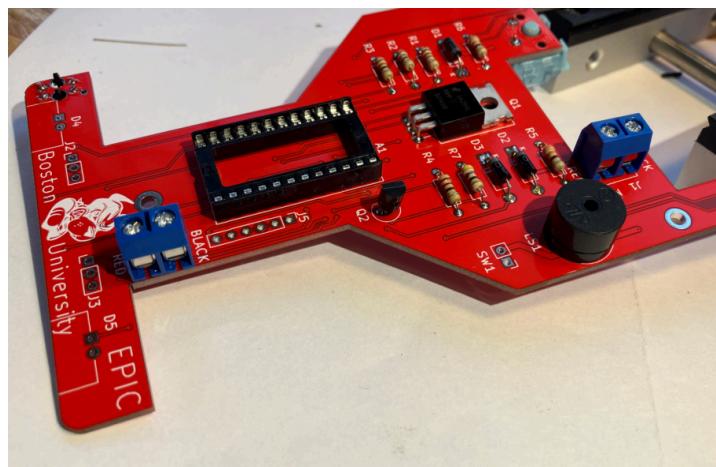
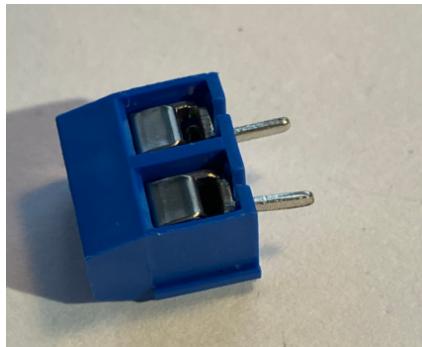
8. U1 - Optical sensor

Install from bottom side. Plastic pins go in holes in PCB and it snaps into place. Be sure it is flat agains the PC board.



9. J1, J4 - screw terminals

Install from top side. Be sure the openings for the wires are towards the outside board edge.



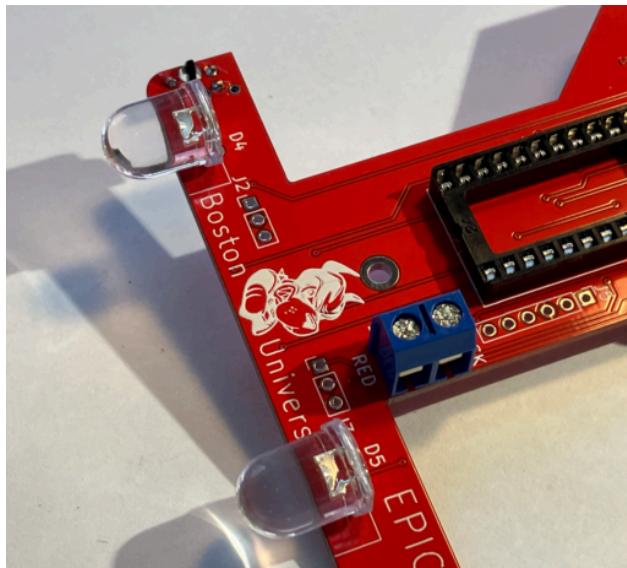
10. D6, D7 - RED LEDs (tail lights)

NOTE! One lead is longer than the other. This goes in the hole with the round silver pad
Bend the leads at right angles as shown.



11. D4, D5 - WHITE LEDs (head lights)

Install the same way on the front of the car



DONE! (with soldering)