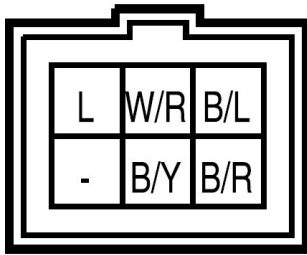


The exup servo unit includes a DC motor, a poti and a small gear box to drive the pulley. It is controlled by an electronic circuit inside the ECU (igniter box).
If the self-diagnosis comes up with an exup failure (7000 rpm “dance”) and the servo unit does not behave as expected (all mechanical issue excluded) it is likely that the exup control IC is damaged.

The following guide shows how to replace the exup servo control IC.

Exup Servo Connector for reference:

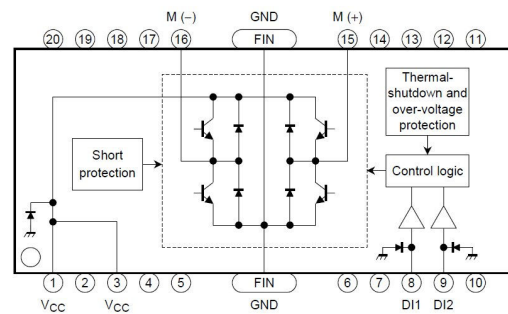
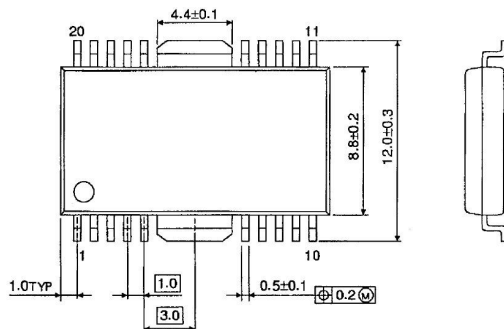


B/Y, B/R : Motor
connect 12V and ground for testing

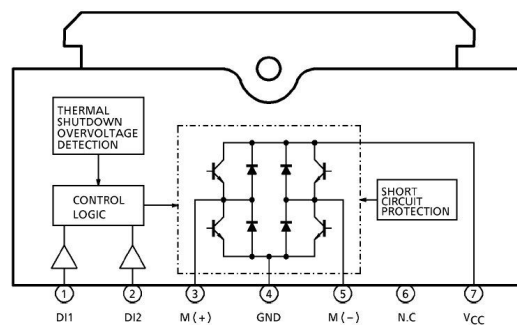
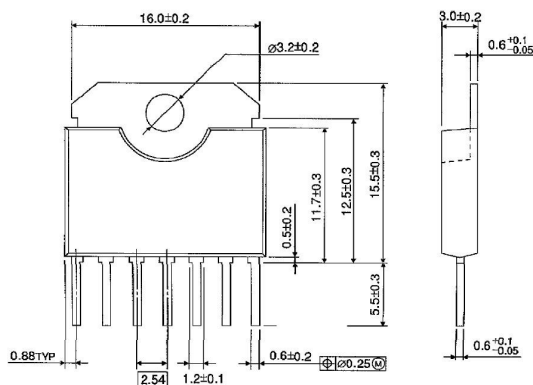
L, W/R, B/L : Poti
connect a pocket tester (ohm) to L and W/R, value 0 .. 7.5k ohm, depending on position

Exup control and driver IC:
TA8050F, Toshiba

HSOP20-P-450-1.00



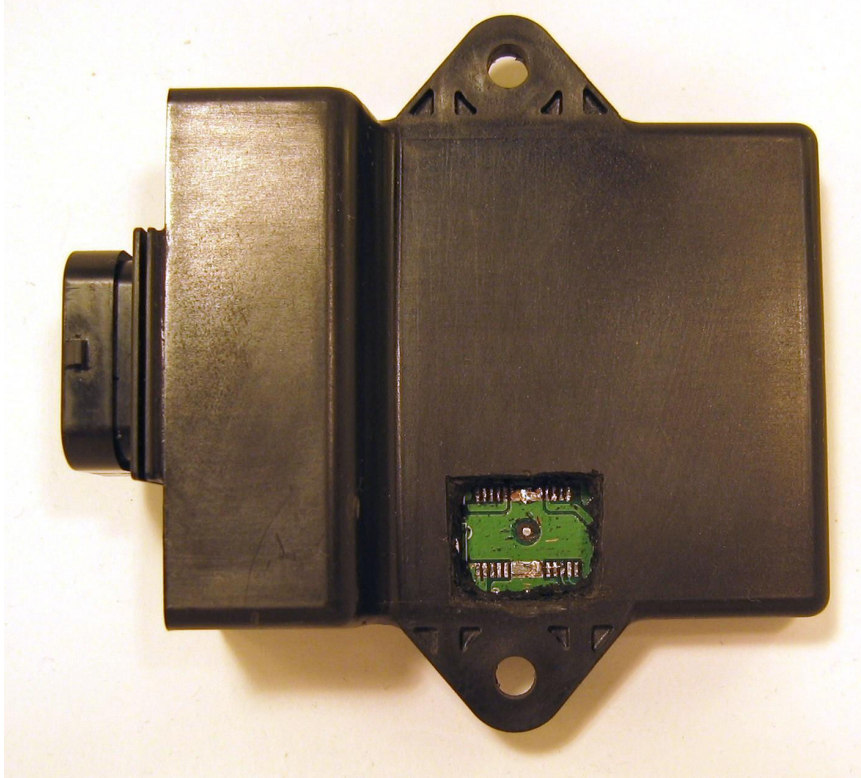
Alternative, different housing:
TA8050P, Toshiba



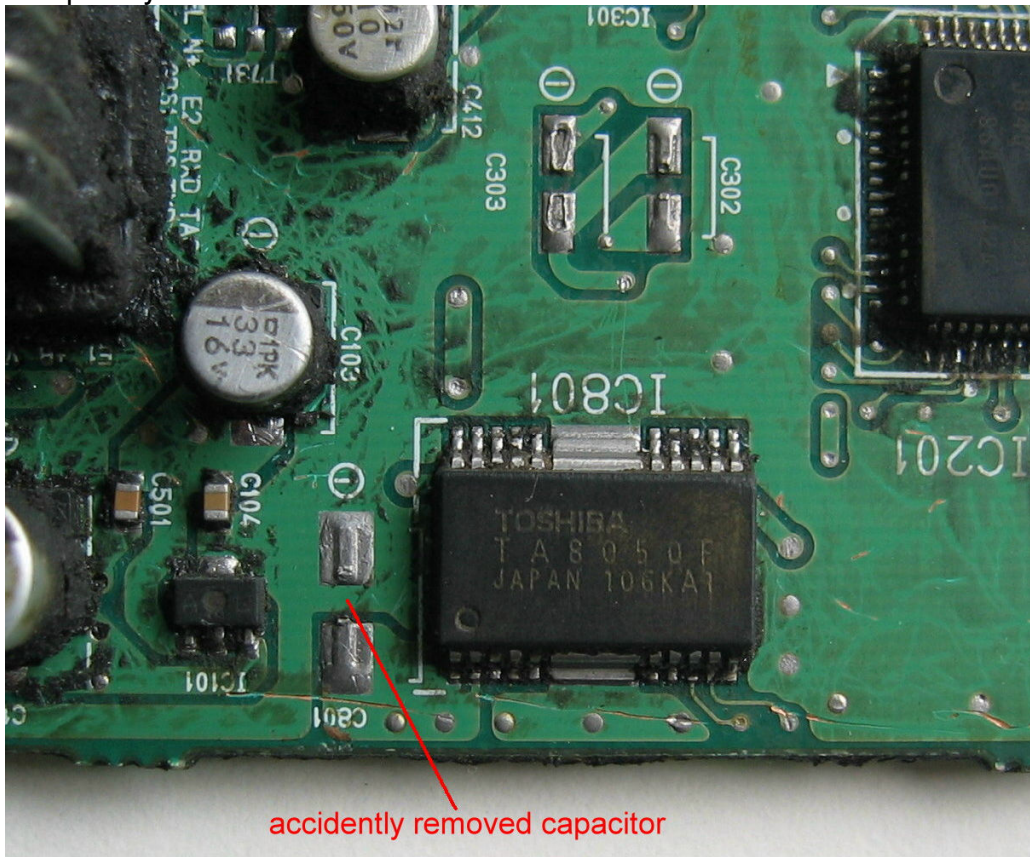
Caution: Swap M(+) and M(-) when replacing the TA8050F with TA8050P! Same naming but reversed logic.

Replacing the driver IC:

Cut away the plastic housing at the given position. Remove the black glue with hot air and a screwdriver. Cut the leads of the IC with a blade (destroy the IC), remove it and clean the landing pads.

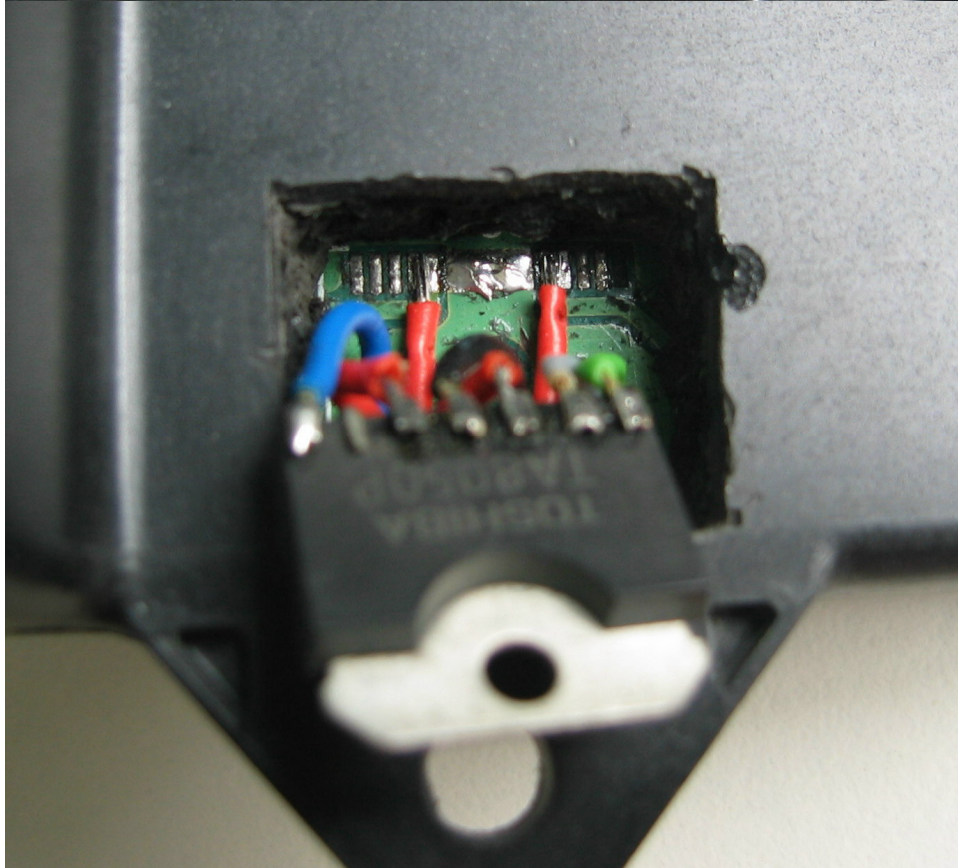
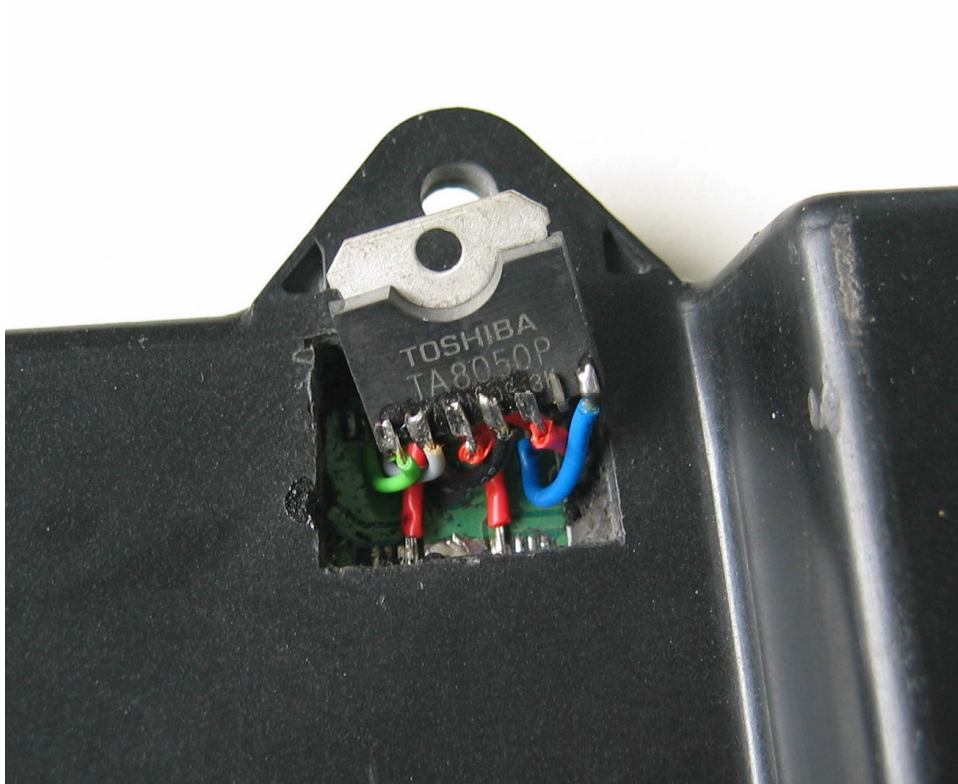


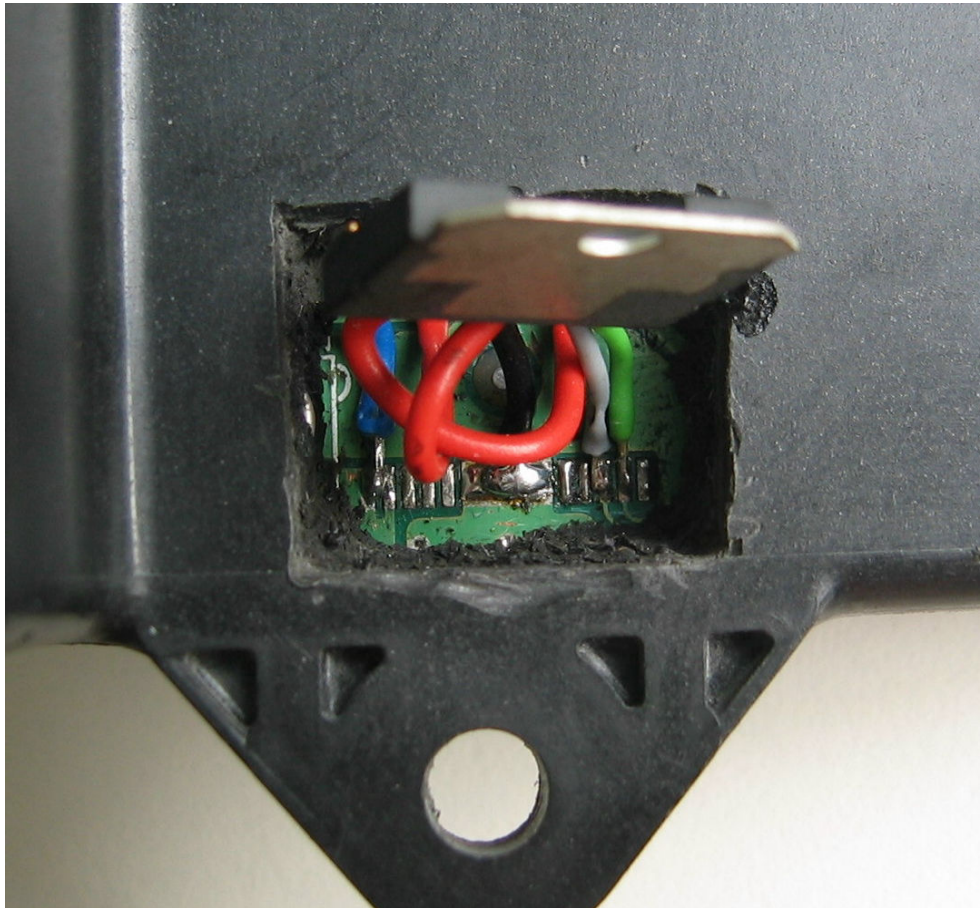
IC801 is the servo controller. Be careful to not damage any nearby parts. See this completely cleaned board for reference.



Replace IC801 with a new TA8050F. The ground flaps might be hard to solder.

Alternatively use the TA8050P and some wires. Remember to swap M(+) with M(-). Though the housing is a bit larger it should easily fit into the available space. Trim the leads to a minimum.





Push the new IC into the cavity and seal it with some epoxy glue. Try to restore the original surface height (or lower) as the ECU rests on the lower side.