

GTCP85-98D operation

1) Checks

Check the oil level. Check for oil leaks, damaged connectors, check for fuel leaks next to the nozzle drain.



(1) nozzle drain

2) Wiring

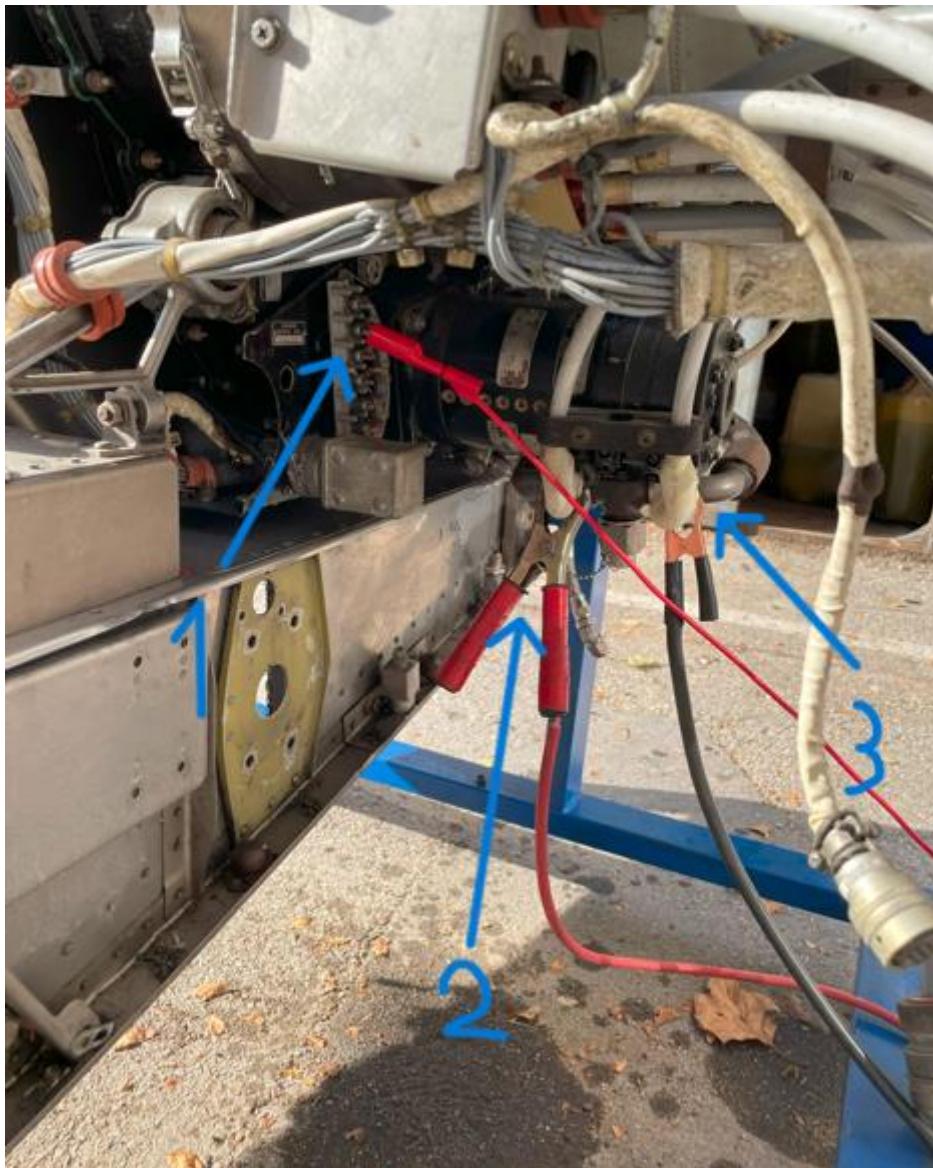
2.1) Fuel



(1) fuel inlet

Plug the fuel tank on the fuel inlet, make sure that the tank is high enough in the air in order to have sufficient fuel pressure.

2.2) Electrical connexions



(1) Terminal block (28V on the second bolt), (2) Starter positive, (3) Starter negative

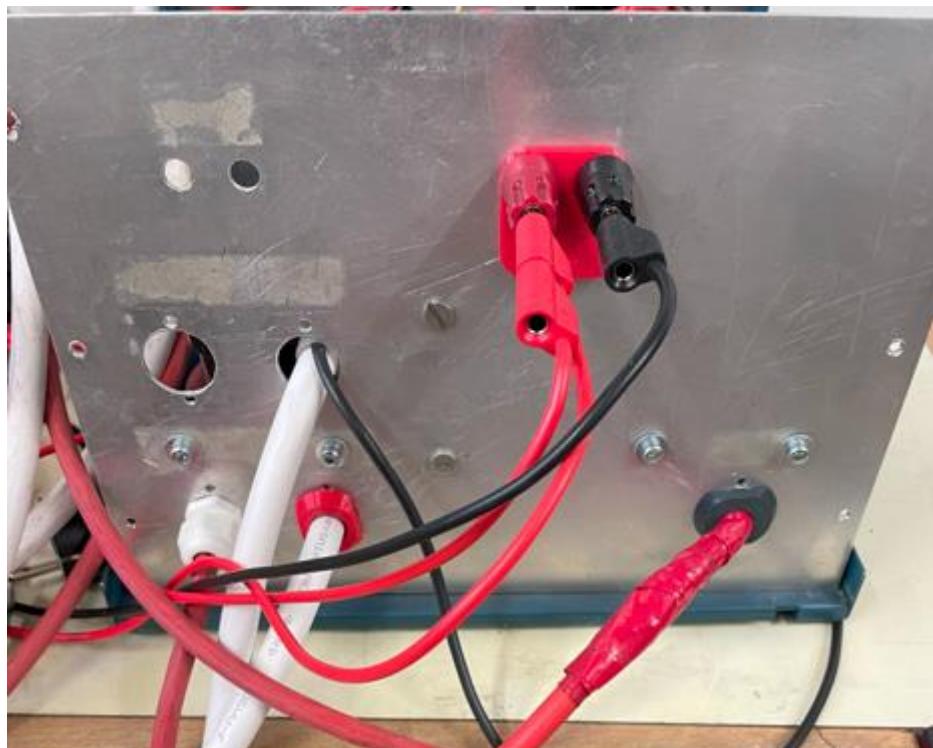
You should have a power supply of 28V DC (max 10A) on the terminal block. You should have a power supply of 28V DC (max 300A) on the starter, for example two batteries wired in series.



(1) 37-pin connector

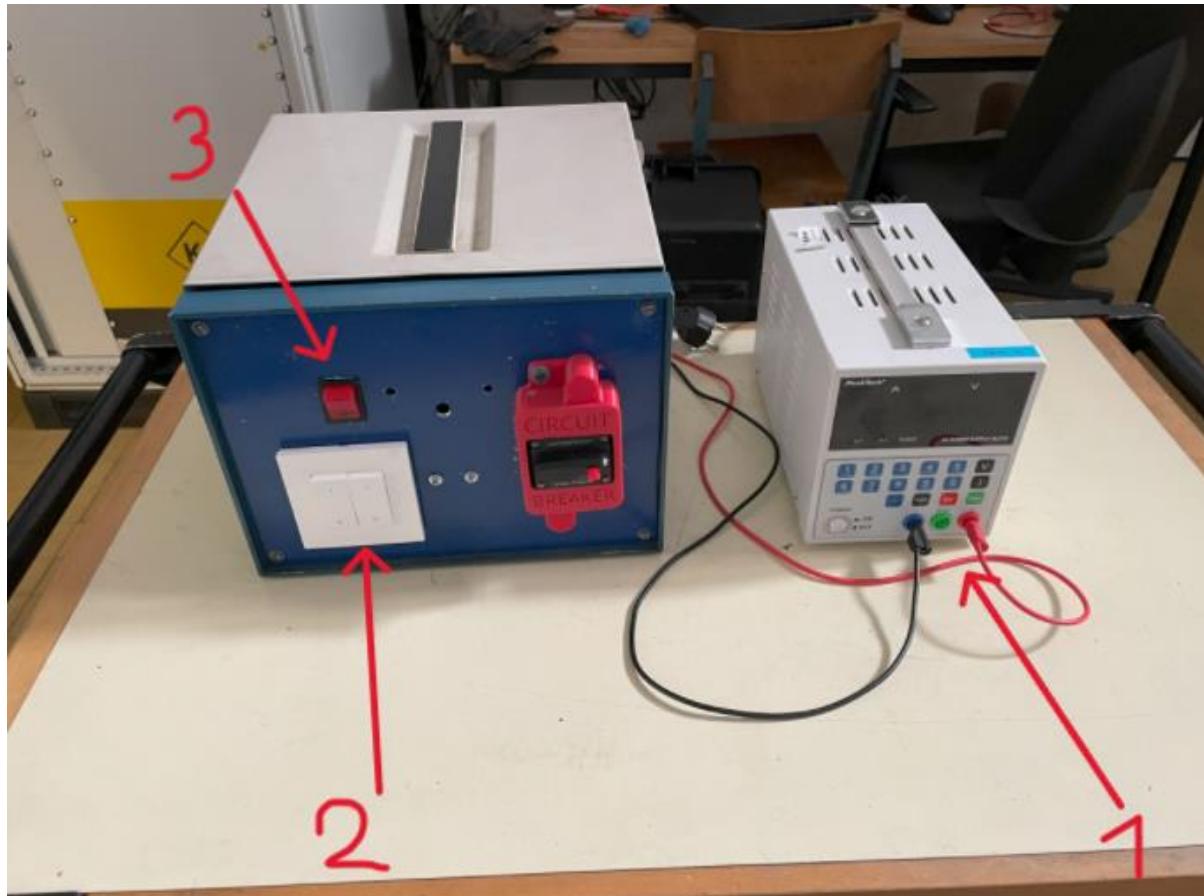


2 twelve-volts batteries wired in series, the red cable goes into the control pannel, the black one goes on the negative of the starter.



Connect 28V DC (max 10A) to the back of the control panel. Notice that a second wire is plugged in the positive cable of the control panel to power the terminal block on the APU with 28V DC.

3) Starting procedure



(1) Power supply, (2) Run switch, (3) Start switch

First step : turn the power supply on, set it to 28V DC, press the output switch, make sure that the output light is on

Second step : turn the run switch on, it is currently composed of 2 white switches. You need to flip them on at the same time.

Third step : Turn the start switch (red) on for a second. After that you should immediately turn it off.

The starter will begin to crank the compressor wheel until the combustion begins and sustains the rotation of the turbine. After that the APU should automatically shut down the starter and sustain its speed at 40000rpm. Sometimes the APU needs to warm up so several starting procedures might be necessary.

The APU should normally shut down when turning the run switch off. However, the test from 13/08/2025 showed that it is not the case. The only way we found for this is to shut down the power supply and cut the fuel.