Phase 12: Electric System installation

Some of the necessary parts required to assemble the Cooling System and its installation to the airframe are easily identified when unpacking from the shipping crate. Small parts are in cardboard box 5 and 15 and the bolts, nuts and washers are shrink wrapped in box 18.

Parts and other components

PARTS	DESCRIPTION	CODE	QTY.	PACK
	Main Wiring Loom	CH7T_16.001.0.0	1	5
	Consol Wiring Loom	CH7T_16.002.0.0	1	5
	Battery Wiring Loom	CH7T_16.003.0.0	1	5
	Servo Motor Wiring Loom	CH7T_16.008.0.0	1	5
	Rectifier Regulator Capacitor	CH7T_16.009.0.0	1	5
	Electric Fuel Pump Capacitor	CH7T_16.010.0.0	2	5
	Diode Box	CH6B_16.004.0.0	1	5
	Fuse Case	CH7T_16.006.0.0	1	5
	Test Button	4E000H012	1	5
	Relay	4E000R904	2	5
	Dash light	4E0017-210	1	5

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	Dash light	4E0017-211	2	5
	Dash light	4E0017-212	3	5
	Dash light (Led Governor)	4E0017-410	1	5
	Dash light	4E0017-410	2	5
	Dash light	4E0017-411	1	5
	Dash light (Led Governor)	4E0017-411	1	5
	Ignition switch	4E00A5102	1	5
	Toggle switch	4E3505822	3	5
	Bipolar Toggle switch		3	5
	Circuit Breaker Klixon 3 AMP	K7274-2-3	1	5
	Circuit Breaker Klixon 5 AMP	K7274-2-5	3	5

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	Circuit Breaker Klixon 10 AMP	K7274-2-10	1	5
	Circuit Breaker Klixon 15 AMP	K7274-2-15	1	5
	Circuit Breaker Klixon 20 AMP	K7274-2-20	2	5
	Connector/ Terminal	CH7T_16.011.0.0	2	5
	Terminal 4 mm	CH7T_16.012.0.0	2	5
	Terminal 5 mm	CH7T_16.014.0.0	1	5
			TOTAL PHASE 12 PARTS:	43

Necessary tools

- Clamp
- pliers
- Crimping tool

Phase 12: Electric System installation

Assembly order

Step 1- Installation of the electric system

NOTE
Use the drawings and also the electric schematic included in the end of this phase for the installation of the electric system The PDF version can be enlarge on a computer for extra clarity.

The system consists of a number of wiring looms provided by CICARÉ.

The Cicare electrical drawings identify each wire in the loom by a plastic fitting on the wire which has the number permanently marked on it corresponding to its location in the schematic drawing.

Select the main (Largest) loom and start by fixing the set of cables from the part marked as Start onto the Airframe over the anchor of Left Rear Cross Tube.

The following images show how the looms are routed and fixed to the airframe with Zip ties.

Fig. 1

Fig. 2

Phase 12: Electric System installation

Fig. 3

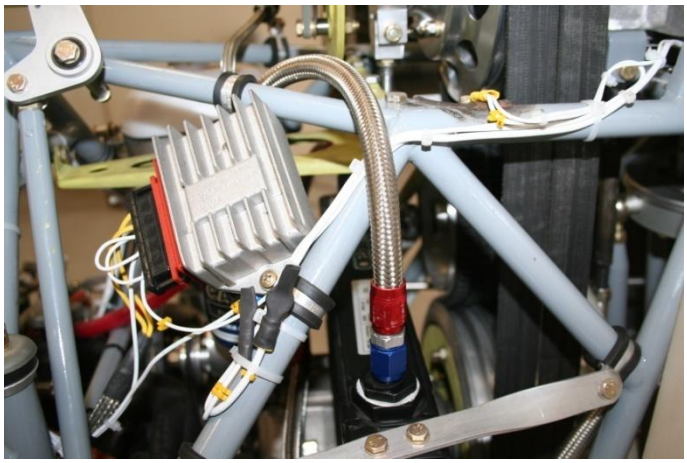

Fig. 4

Fig. 5

Phase 12: Electric System installation

Fig. 6

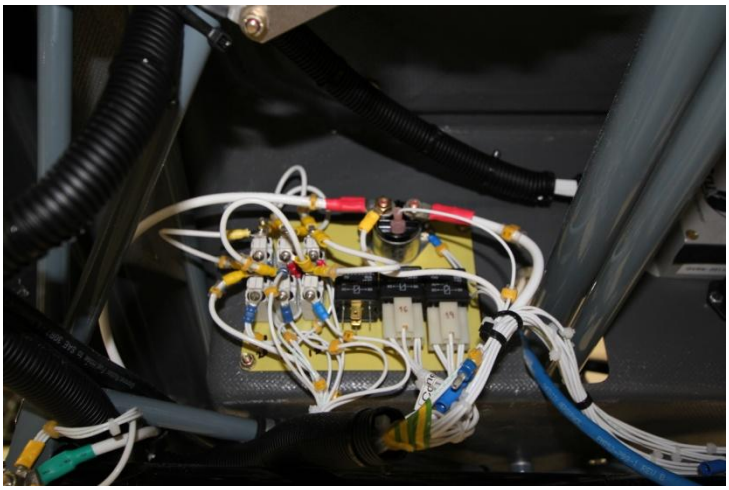

Fig. 7

Step 2- Battery installation

Install the battery on the battery support and fix it using the metal strap designed for this purpose, as shown in the following image:

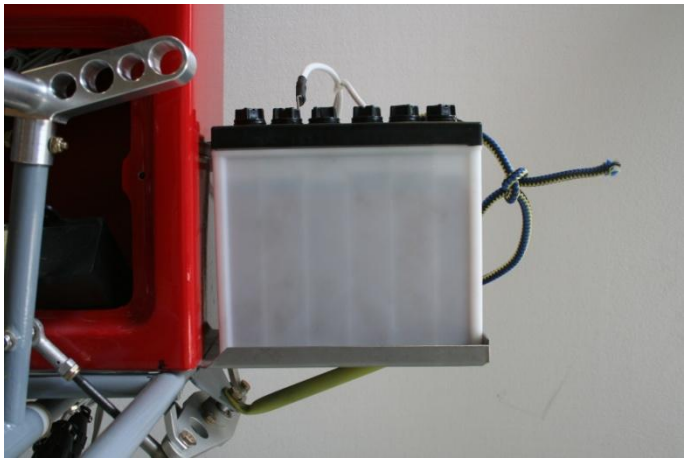

Fig. 8

Phase 12: Electric System installation

NOTE

The battery is finally installed in the end of phase 7 corresponding to the cabin installation. Previously in phase 3 installation of the TR, the battery support is partially installed with Pedals Rocker-Arm.

Step 3- Fabrication and installation of circuit breaker plate

To fabricate the circuit breaker plate prepare the inside left lower part of the cabin to fit the plate. This aluminum plate will be linked to the cabin.

The holes in the plate will house the Circuit Breakers. Besides holding the circuit breakers, the plate will also be used to hold the oil and water sensor relays.

In the following drawing, you can see the plate dimensions:

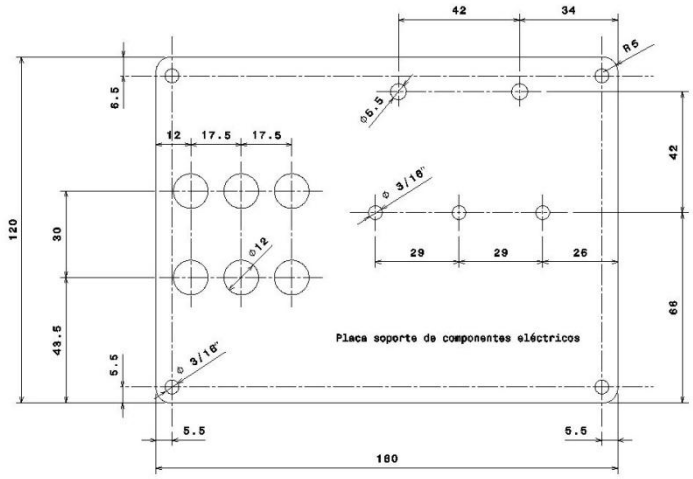

Fig. 9

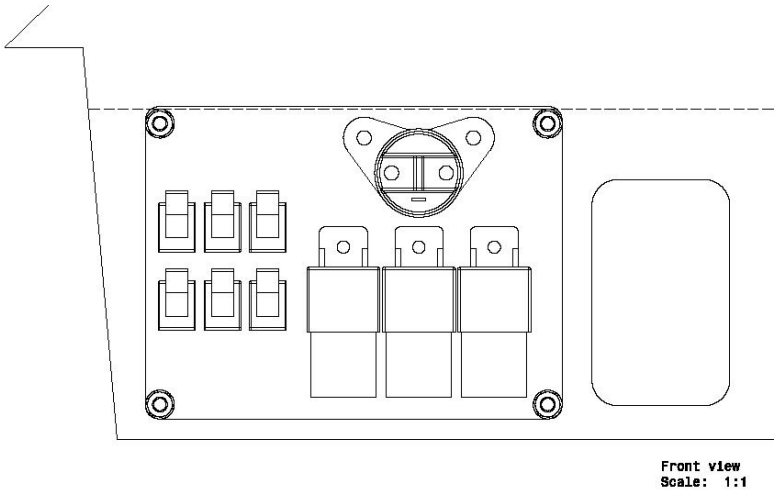

Fig. 10

Phase 12: Electric System installation

Fig. 11

Step 4- Connecting the looms.

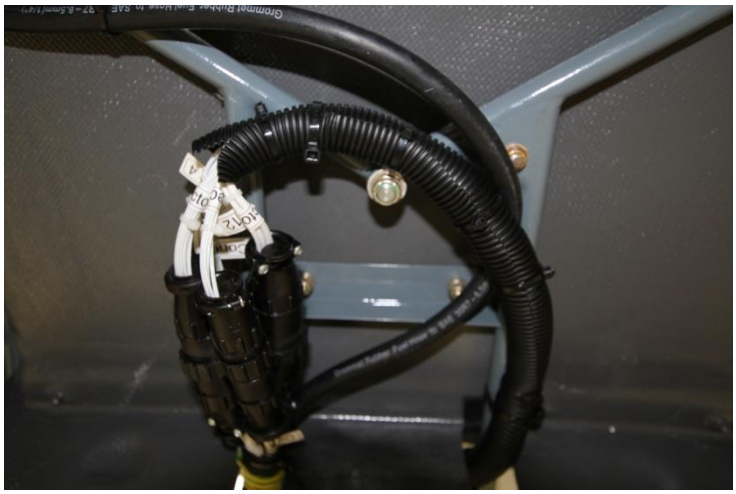

Fig. 12

The set of looms provided by CICARÉ has connectors already installed join the looms. The only wires that need connectors are the ones from the electronic ignition units on the ROTAX engine. Rotax supplies these fittings with the engine.

NOTE

Refer to the original engine installation manual for further instructions.

Phase 12: Electric System installation