

## INSTALLATION OF FORWARD FUEL PUMP

**A. APPLICABILITY:**

All aircraft equipped with engine Rotax 912 iS.

**B. MATERIAL AND TOOL INFORMATION:**

The following tools are required to perform this procedure:

ITEM	QUANTITY
Oetiker clamping tool	1 pc
Knife	1 pc
Brush	1 pc
Forward fuel pump KIT	1 pc
Isopropyl alcohol	As required
Sand paper 120	As required

**NOTE**

**EPOXY RESIN L285, HARDENER 287 AND COTTON FLOCKS MATERIAL IS NOT DELIVERED.**

**C. PROCEDURE:**

**WARNING**

**GROUND THE EXHAUST PIPE OUTLET AND FUEL SERVICE EQUIPMENT PRIOR TO AIRCRAFT REFUELING/DEFUELING!**

**ENGINE IGNITION MUST BE SWITCHED OFF. DISCONNECT NEGATIVE TERMINAL OF AIRCRAFT BATTERY.**

**DRAINING ALL FUEL FROM THE FUEL SYSTEM IS NOT POSSIBLE, BE CAREFUL DURING DISASSEMBLING THE FUEL SYSTEM!**

**Aircraft with fixed landing gear:**

- 1) Attachment point bonding:
  - a) Make sure that the **IGNITION** switches are set to OFF.
  - b) Disconnect negative terminal of battery.
  - c) Mark the position on the bellow side of the EPS system board according the Fig. 1.
  - d) Carefully remove the interior painting in size of the footprint of the attachment point using sand paper.
  - e) Stick the attachment point on the EPS board by using the epoxy mixture thickened with cotton flocks. Leave hardening for 24 hours at room temperature.

- 2) Forward fuel pump installation:
  - a) Make sure that the **IGNITION** switches are set to OFF.
  - b) Disconnect negative terminal of battery.
  - c) Drain the fuel tanks and fuel system.
  - d) Put washer (4, Fig. 2) on the attachment point screw, put fuel pump assembly (1), washer (3), check for correct orientation of the fuel pump (connectors pointed toward to firewall) and tighten with nut (2).
  - e) Cut out piece of the supply line hose in distance suitable for connecting the fuel pump.
  - f) Add hose clamps (7; 8) on the ends of the fuel hoses.
  - g) Connect the split hose ends (9; 10) to the fuel pump assembly (1) and crimp the hose clamps (7; 8).
  - h) Attach the fuel hose pointed to the fuel selector to the EPS board by using piece of fuel hose (6) and cable tie (5).
  
- 3) Electrical connection:
  - a) Make a hole into the instrument panel and install the switch to the instrument panel (Fig. 4). Connect the switch according to the scheme (Fig. 7).
  - b) Drill a hole into the instrument panel and install the circuit breaker to the instrument panel (Fig. 5). Connect the circuit breaker according to the scheme (Fig. 7).
  - c) Drill hole in to the instrument panel and install the lamp to the instrument panel (Fig. 6). Connect the lamp according to the scheme (Fig. 7).
  - d) Connect the fuel pump according to the scheme (Fig. 7).

**WARNING**

**BEWARE TO ENSURE CORRECT DIRECTION OF FUEL FLOW!**

**WARNING**

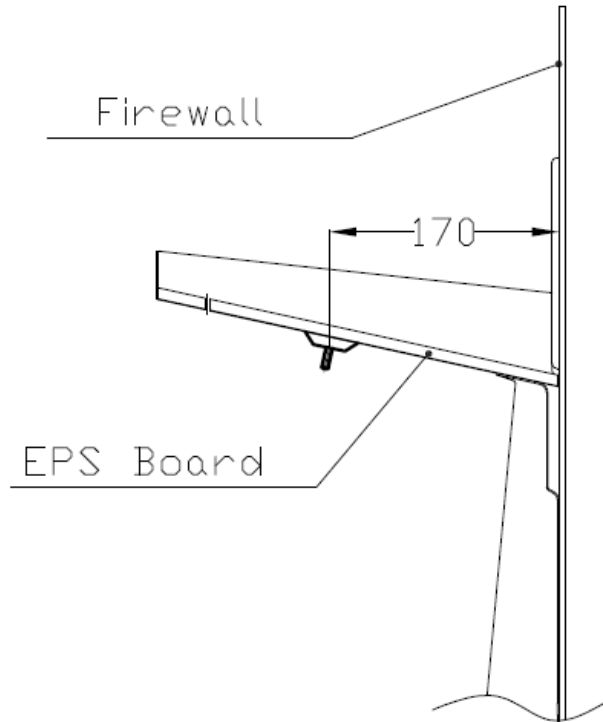
**CHECK LAMP FOR FORWARD FUEL PUMP IS NOT  
CONNECTED TO THE TEST BUTTON AND IT WILL NOT BE  
ILLUMINATED WHEN THE TEST BUTTON IS PRESSED!**

- 4) Fuel system replenishing and check:
  - a) Check if the forward fuel pump assembly is firmly secured and sealed.
  - b) Connect negative terminal of the battery.
  - c) Replenish the fuel system.
  - d) Remove the ground cable from the aircraft.
  - e) Check the forward fuel pump function and fuel system for leaks.
  - f) Carry out engine ground test.

**Aircraft with retractable landing gear:**

- 1) TBD.

Side view



Top view

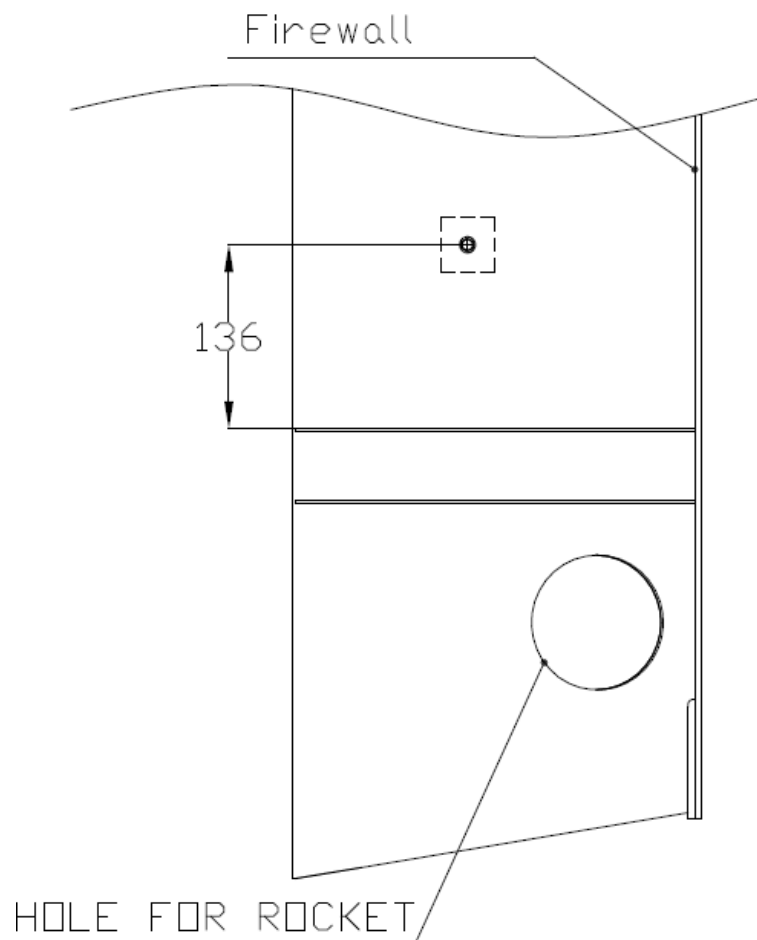
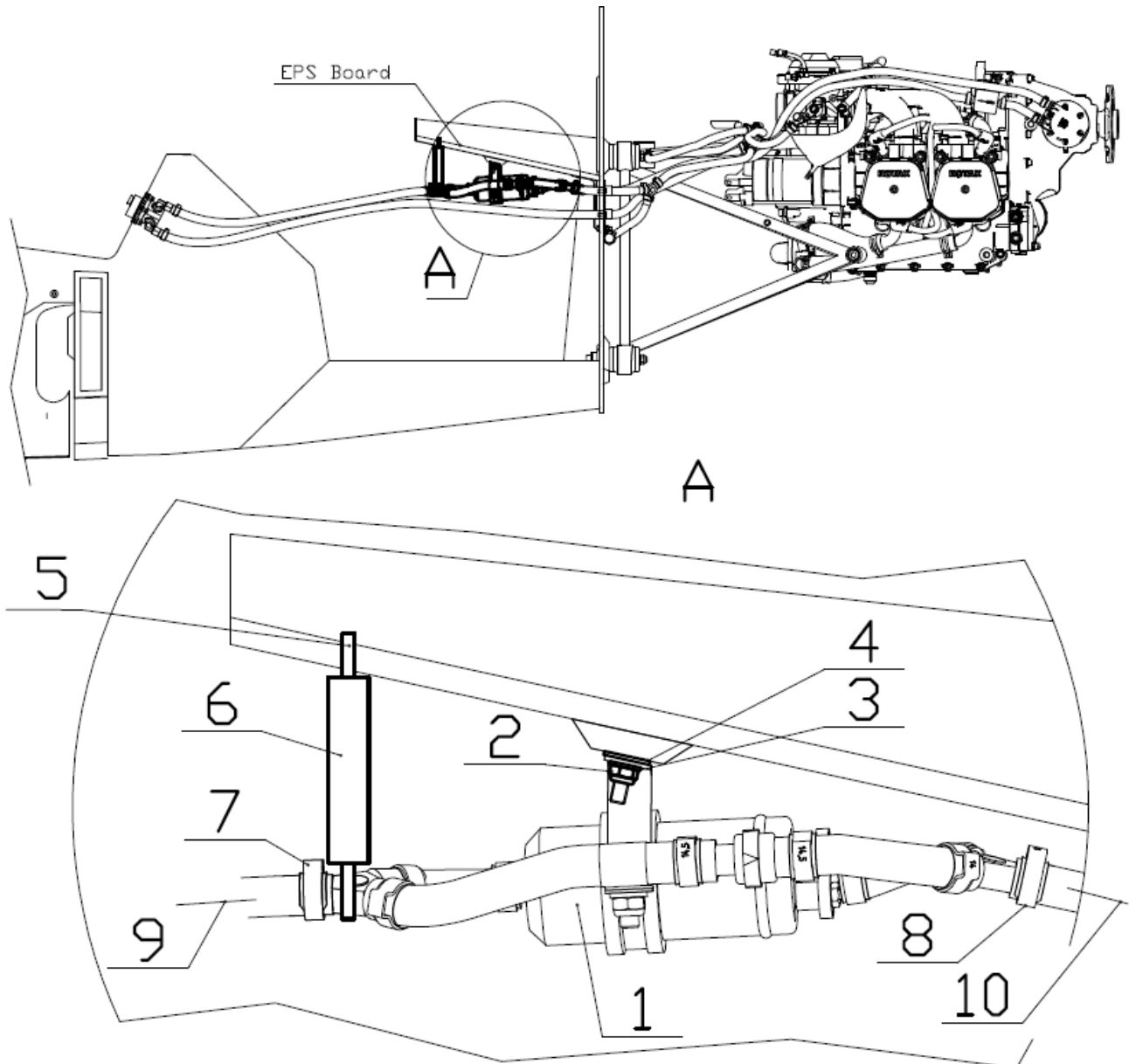
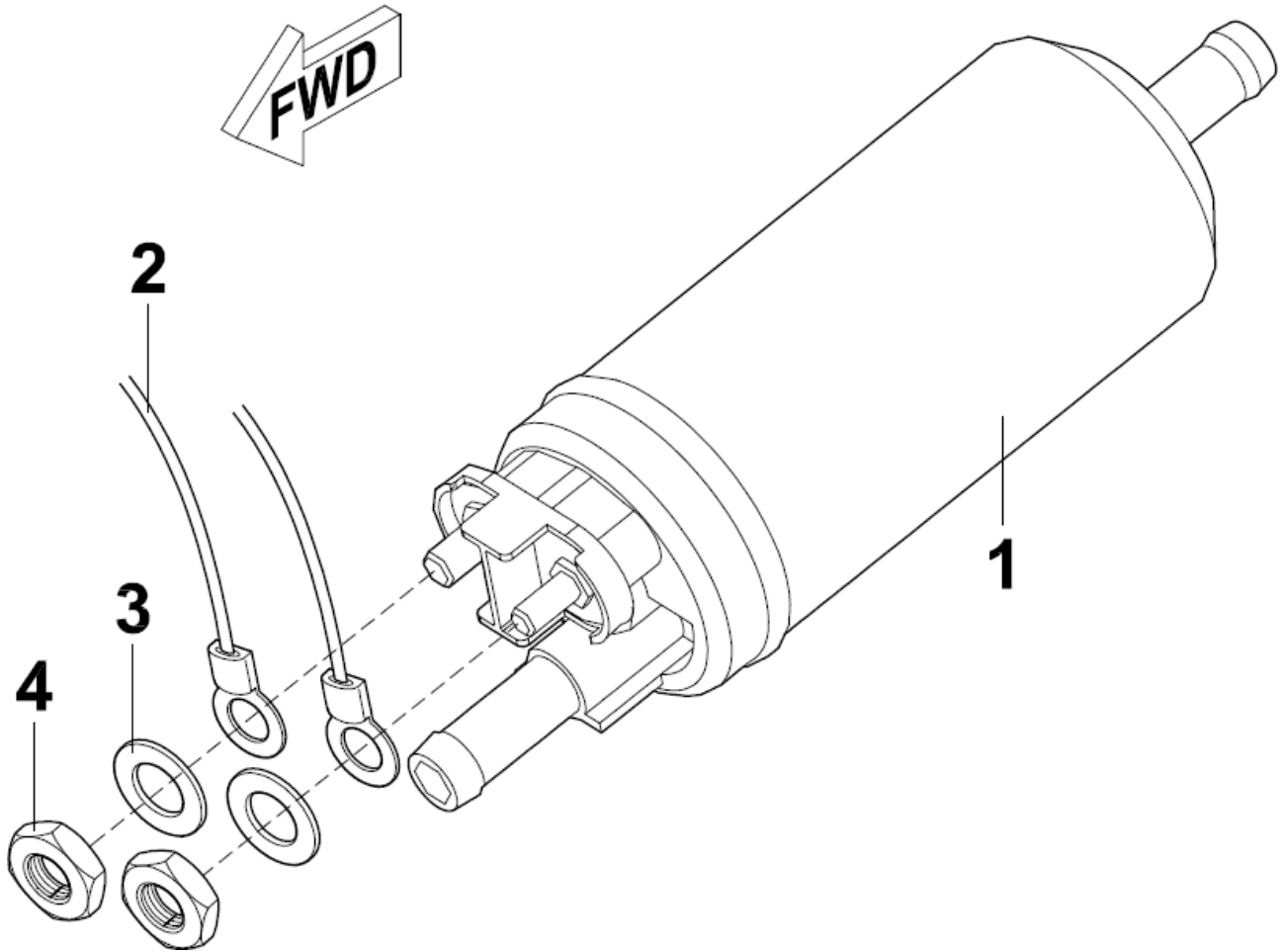


Fig. 1 Attachment point bonding



- |                                |                                  |
|--------------------------------|----------------------------------|
| 1 – Forward fuel pump assembly | 6 – Fuel hose (as distance tube) |
| 2 – Nut                        | 7 – Oetiker clamp                |
| 3 – Washer                     | 8 – Oetiker clamp                |
| 4 – Washer                     | 9 – To fuel selector             |
| 5 – Cable tie                  | 10 – To engine                   |

Fig. 2 Forward fuel pump installation



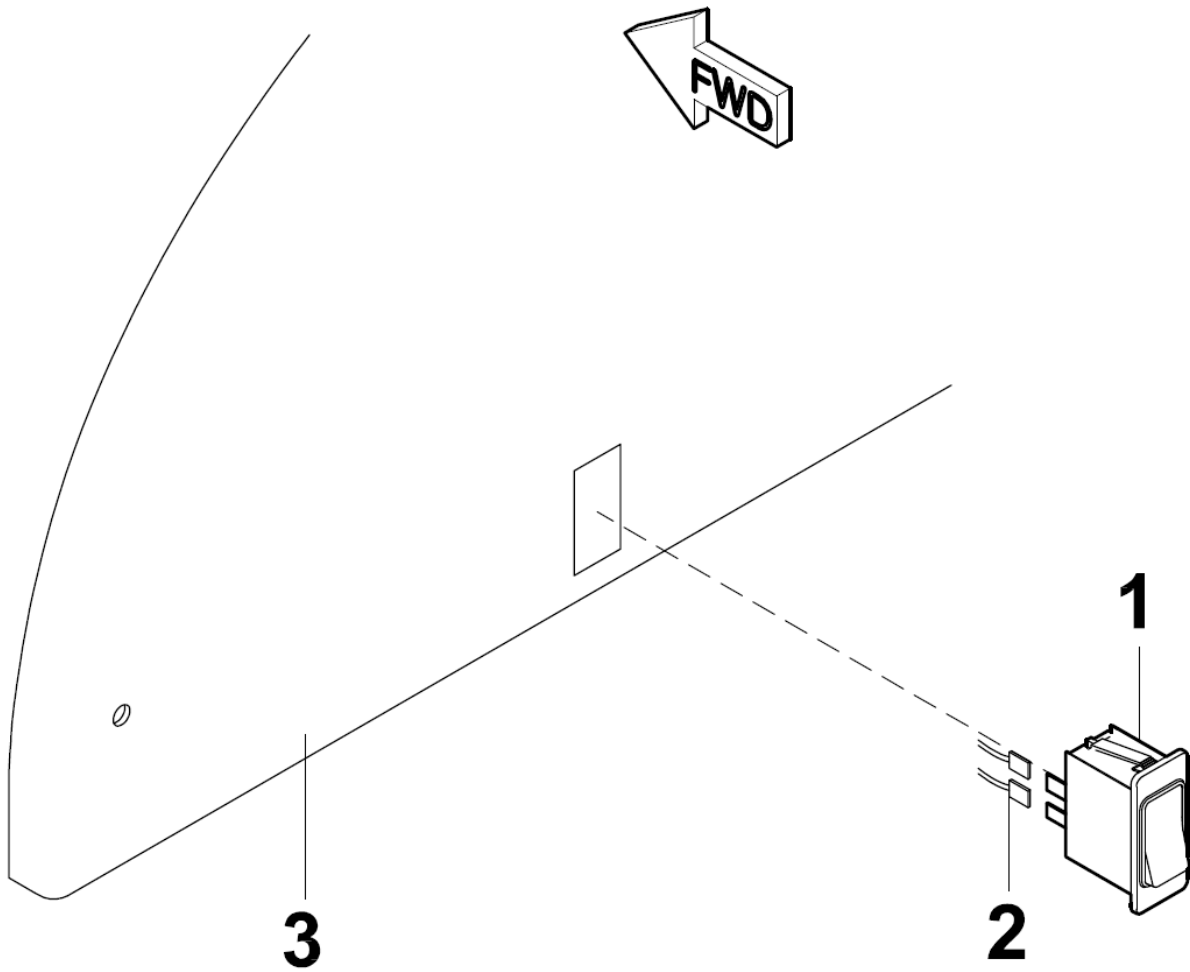
1 – Fuel pump body

2 – Connectors

3 – Washer

4 – Nut

Fig. 3 Forward fuel pump electric connection



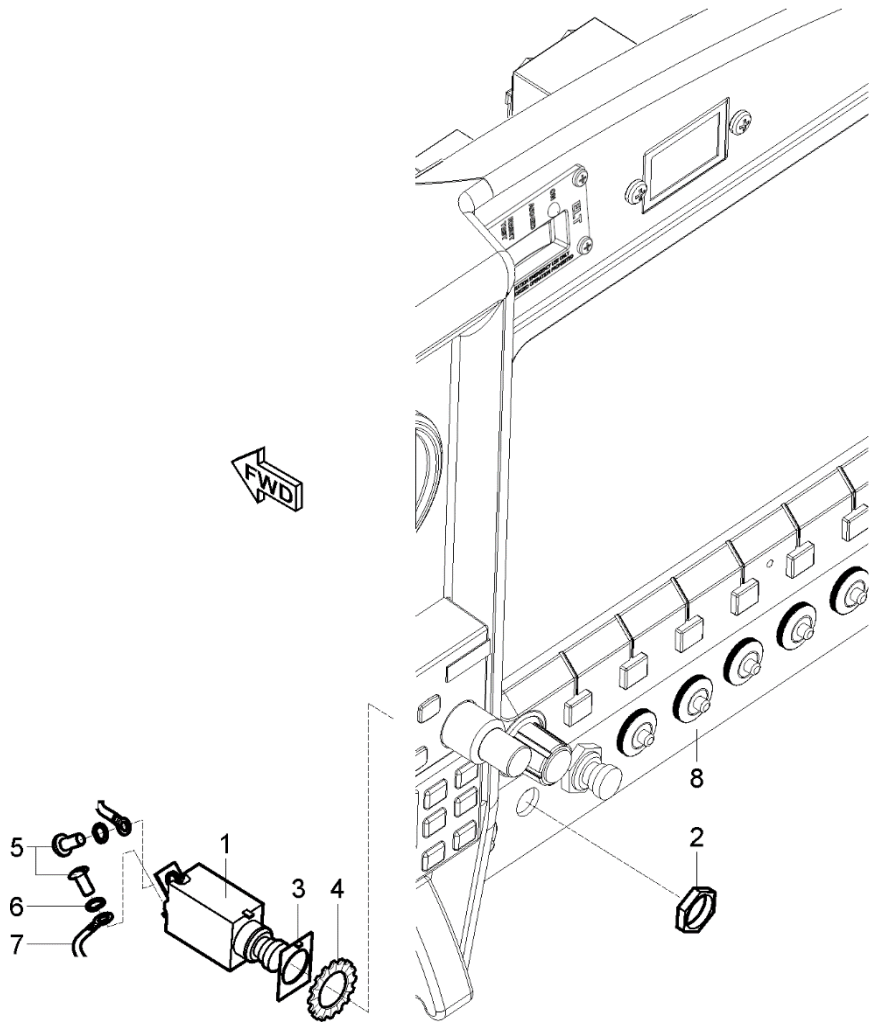
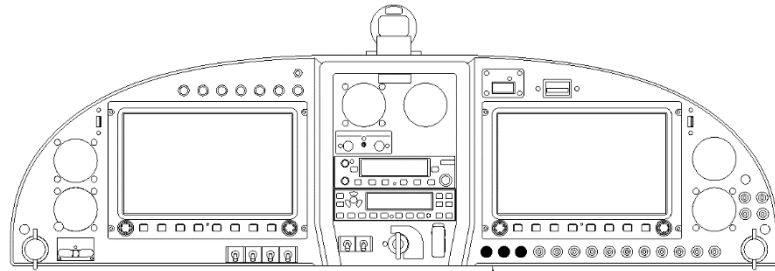
1 – Rocker switch

2 – Connectors

For information:

3 – Instrument panel

Fig. 4 Switch installation

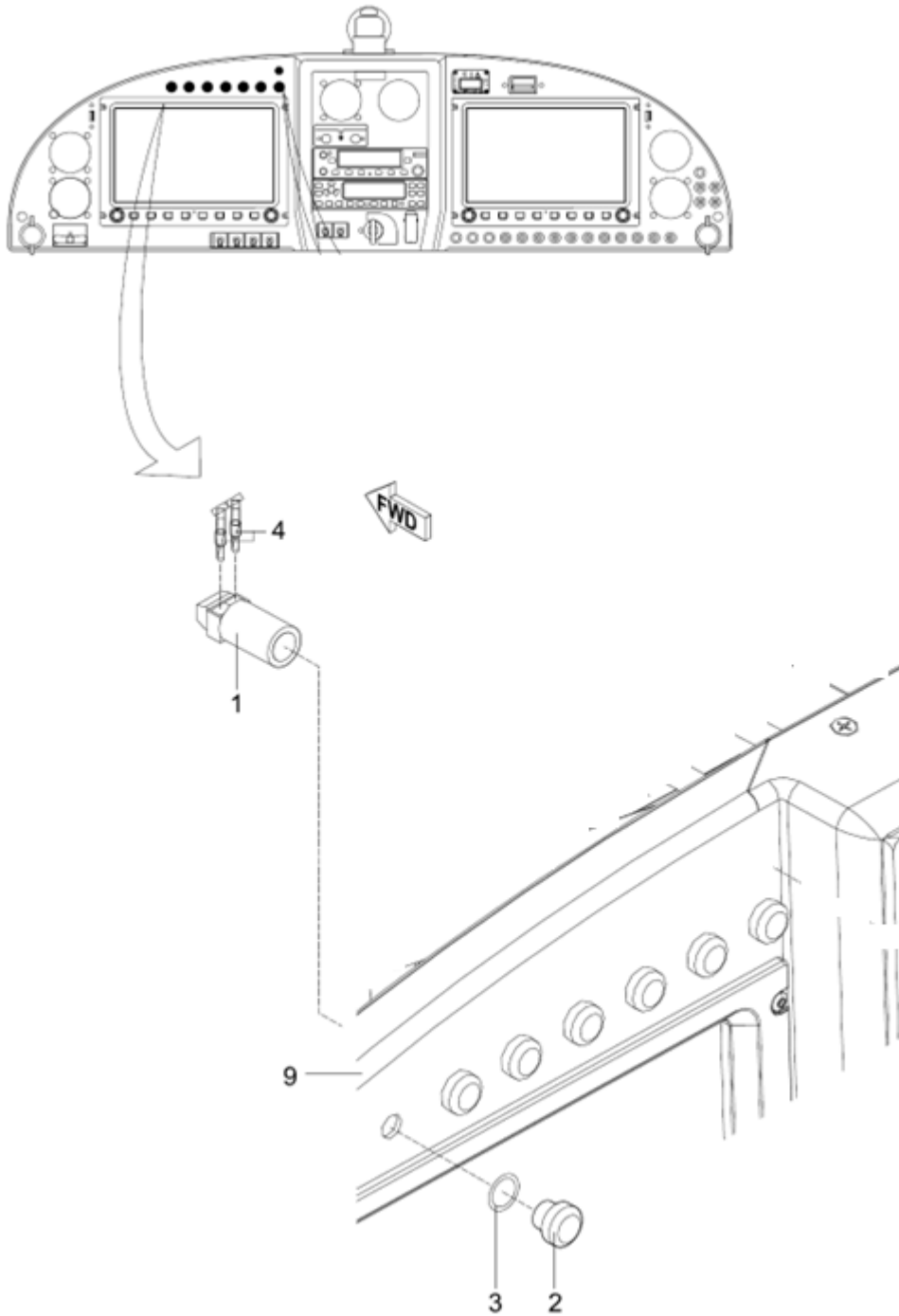


- 1 – Circuit breaker
- 2 – Nut
- 3 – Keyway washer
- 4 – Serrated washer
- 5 – Bolt

- 6 – Locking washer
- 7 – Wire
- For information:
- 8 – Instrument panel

Fig. 5 Circuit breaker installation





1 – Lamp body

2 – Cover

3 – Rubber washer

4 – Wire

9 – Left instrument panel

Fig. 6 Lamp installation

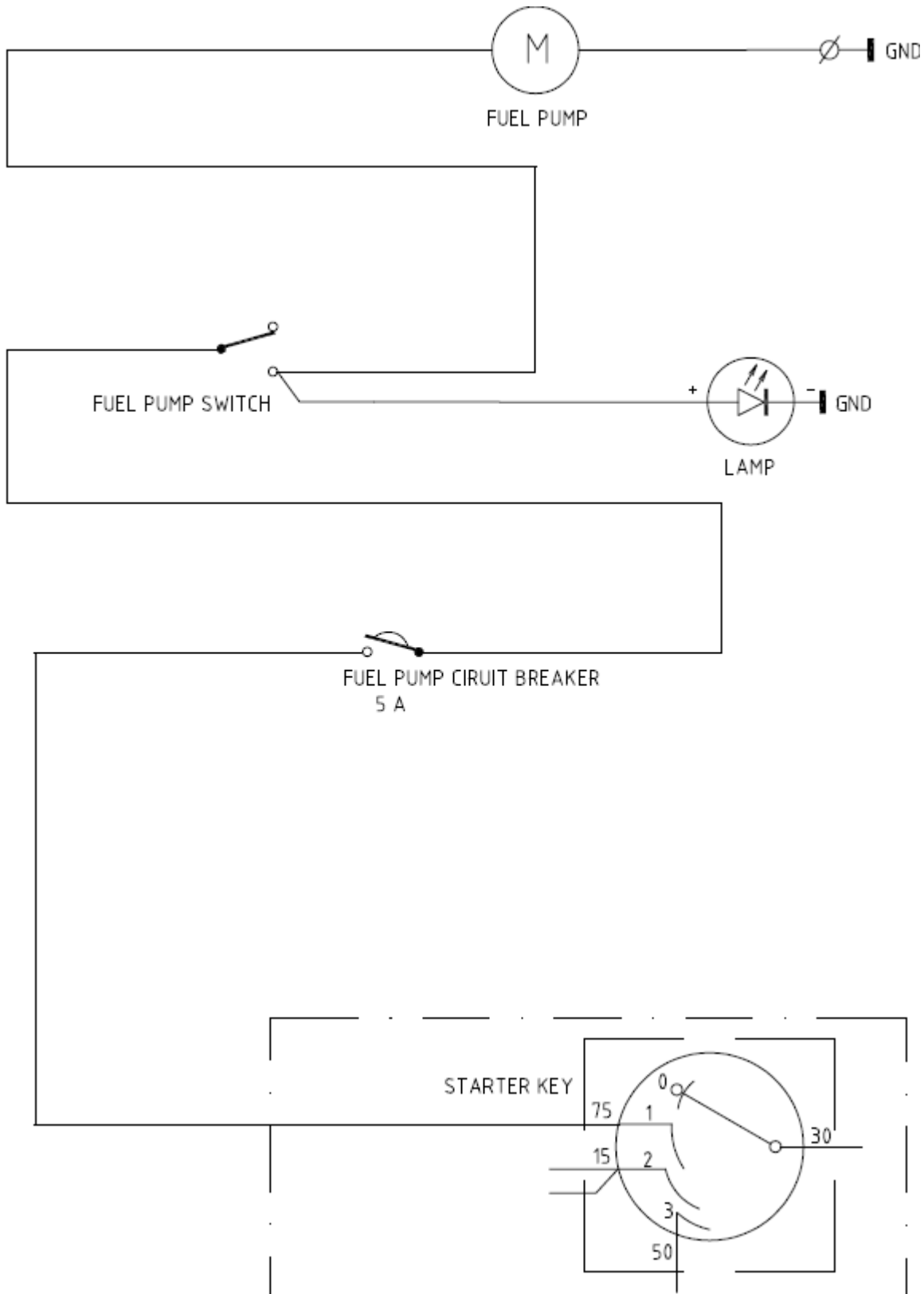


Fig. 7 Electric connection scheme