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1 Applicability
All CT-LSA planes.

2 Workspace Preparing
Before processing make sure your workspace is prepared properly.

2.1 Tools Required
Wrench 8x10 2 pcs.
Wrench 10x13 1 pcs.
Allen key 6 1 pcs.
Allen key 5 1 pcs.
Allen key 4 1 pcs.
Screwdriver 1 pcs.
34” support with padded top 1 pcs.
Cutting pliers 1 pcs.

2.2 Level of Certification Required
Light Sport Aircraft Repairman Maintenance Airplane (LSRMA)

3 Anchoring the Aircraft
3.1 General
A. Before starting, set the parking brake on. Remove cowlings; make sure the tail area is clear.
B. Lift the forward fuselage by pushing down the tail at the narrowest part so that the nose wheel is at least 10” off the ground.
C. Insert the padded support securely just behind the firewall.
   Note: the top of the support has to be soft to prevent damage of the skin and paint.
D. Set the chocks under the wheels to prevent plane’s rolling.
4 Components Removal

4.1 Power Plant Securing

Secure the engine by connecting with strong belts to the crane and hold it. Use 3 marked points for this (see picture below). Duration: 20 min.
4.2 Engine mount offset from the Firewall

Disconnect Nose Fork Rods KA401400 by unscrewing bolts C9996218 (see picture above). Duration: 10 min

Unscrew 6 bolts M8 (Fig. 1) using Allen key 6 and Wrench 13:

1. Remove bolts (1).
2. Remove bolts (2).
3. Replace lower bolts with 2 ¾" (70 mm) longer one and insert 2" (50 mm) spacer between firewall and Engine Mount. Loosen upper bolts (3) if necessary.
4. Tight bolts (2) with nuts using Allen key 6 and Wrench 10x13.
5. Make steps 3-4 for bolts (3).

Duration: 30 min.
4.3 Tag Removing

For removal:
   - Drill out 2 tag rivets off (Fig. 2).
Duration: 5 min.

4.4 Thermic Choke Brackets Removal

For removal:
- I - take out rear clamp - see picture bellow
- II – disconnect the control cable from Air heater - see picture bellow
Duration: 15 min.
4.5 Air Inlet Removal

For removal:
- Unscrew 4 bolts M5 (Fig. 3) on both sides of the air inlet using Wrench 8 and Allen key 5.
- disconnect the control cable from Air Box

Duration: 15 min.
4.6 Overflow Bottle Clamp Removal

For removal:
- Unscrew 2 bolts M5 (Fig. 4) using Wrench 8. Put overflow bottle on the power plant.

Duration: 5 min.
4.7 Oil Tank Removal

For removal:
- take out the clamp from the oil tank (Fig. 5).

Duration: 10 min.

Fig. 5
4.8 Electric System Components Removal

4.8.1 Rectifier Removal
Disconnect all rectifier electric wires. Unscrew 2 bolts M6 on the top and bottom (Fig. 6) using Wrench 10x13. Duration: 5 min.

4.8.2 Starter Relay Removal
Unscrew 2 bolts M5 on the top (Fig. 7) using Wrench 8x10. Disconnect starter relay from positive pole. (And from other electric wires if necessary.) Duration: 10 min.
4.8.3 Battery Removal

Disconnect 2 battery clips. Unscrew 4 bolts M5 on the battery bracket (Fig. 8) using Wrench 8x10 and remove battery.
Duration: 15 min.
4.8.4 Fuel system.

Disconnect fuel line before fire wall – see picture above
Duration: 30 min

Note:
Make this operation with all steps for the fire sleeve installation procedures if possible (see “Improved Fire Protection Retro-Fit Manual for US LSA Airplanes; Fuel and Oil Tubes Securing”)

4.8.6 Engine control
Disconnect the control cables from carburetors

Duration: 15 min.
5 Coating the Firewall

Sand all surface of the firewall from the engine side by sand paper №180 for making surface rough. Make paten from cardboard or cotton. Using paten cut out the fire protecting part. Make holes in the prepared fire protecting part for all details, connected to the fire wall:

- Control rods for Nose Fork
- Ventilation pipe
- Fuel line
- Control cable for Air heater
- Bracket for Oil Tank
- Control cable for Air Box – make slit from left side
- Control cables for carburetors
- For all Electric System Components
- Holes for electric wires – make slit from right side
- Hole for ground pin

Glue this fire protecting part to the fire wall.
Duration: 10 min.
6 Components Installation

Installation process is a reverse to removal process.
Duration 2 hours

Check all system in accordance to the checklists presented in the Maintenance Manual. Make all required adjustments if necessary.

Total duration about 5.5 hours
Revisions
The Revisions pages are updated by Flight Design each time revision is issued. They contain a list of all revisions made to the Manual since its original issue.

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