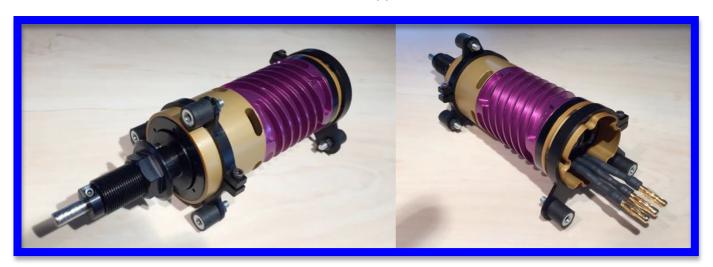


# Robin-Trumpp-CRS



# E-F-506 CRS Electric Propulsion Set for F3A-Models with 4,5 – 5,0 kg Take-off Weight

# Description

The E-Factor CRS electric propulsion set "E-F-506" presents a ready to install, perfectly tuned, and thoroughly tested "Contra-Rotating-System" to power F3A or similar aerobatic model aircraft. This ultimate motor/gearbox combination has been developed in collaboration with Hacker Motor GmbH and employs their latest 4-pol motor C-54. In addition to its high-end and durable design the "E-F-506" set features:

- High input performance
- Partial power properties with no overheating
- Reduced noise emission by elastic mounts
- Strong brake effect in downlines
- Low system mass

## **Recommended Supplementary Components**

- Controller: Hacker MasterSPIN 99 Pro OPTO

Spinner: RT-SP1

- Propellers: E-F-503-2-li / E-F-503-2-re

Propulsion battery: LiPo 10S

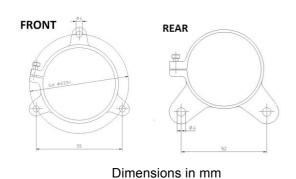
# Masses

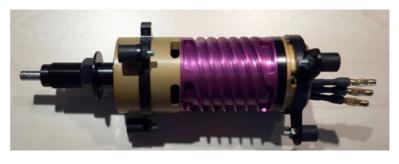
Propulsion set: 526 gInstallation mounts: 36 g

## Installation

- If a model is equipped with the previous CRS electric propulsion set "E-F-503" (Hacker 2-pol motor C-50) using the original mounting clamps, it can be simply exchanged with the "E-F-506" without any change of the mounts.
- If the propulsion set "E-F-506" is installed in a new model, the three (3) elastic mounts on the front mounting clamp will be screwed to the inside of the fuselage's bulkhead. Side thrust here is 0°, down thrust is to the instructions coming with the particular model type. Then the propulsion set will be slided rearwards through this mounting clamp far enough to achieve the correct gap between the spinner's backplate (with the rear propeller installed) and the bulkhead. Now the position of the rear mounting clamp can be determined and a fitting crossmember screwed to its two (2) elastic mounts can laminated between the side walls of the fuselage. Subsequent fine-tuning of side and down thrust can be made by moving the rear mounting clamp in elongated screw holes in the cross member. After final axial adjustment of the propulsion set, the allen screws of the two mounting clamps have to be tightened (sensitively).
- The fuselage's interior lay-out has to allow optimum cooling air-flow. Eventually existing flow barriers have to be removed and air ducts to be installed in a way, propulsion set, controller, and battery pack are in the best possible air-flow. The cooling air outlet has to be positioned behind the battery pack. R/C receiver and battery should be installed as far away as possible from the propulsion set, ie. behind the propulsion battery pack and should be protected from eventual water spray intruding along with the cooling air.

### **Installation Dimensions**





110mm (variabel)

Programming

 Set the R/C system's failsafe-function on "motor off" to disable unwanted motor starts (accident risk!), if transmitter is accidently switched-off while the receiver is still on and the propulsion circuit closed. the

- Recommended programming parameters for the controller Hacker MasterSPIN 99 Pro OPTO are available separately.

# **Safety Recommendations and Liability Disclaimer**

- Voltage reversal results in destruction of the components!
- Regard specific safefty warnings, ie. for Lithium-Polymer batteries!
- Prior to flight perform range tests (also with the propulsion set running) following the R/C manufacturer's instructions!
- Connect controller and propulsion battery only shortly before switching-on the R/C system (prior to a flight) and disconnect propulsion battery right after switching-off the R/C system (after a flight). Never store or park a model with the propulsion circuit closed or even with the R/C equipment on!
- Always switch-on transmitter first, then receiver, resp. switch-off receiver first, then transmitter!
- Always keep parts of the body and clothing securely away from propellers. You or other persons never stay in front of or in the propeller rotation plane! Extra caution to be used while programming!
- If this propulsion set is used other than described here, in particular in connection with third-party or non-approved products or components, any warranty is void!
- All safety instructions and warnings issued by Hacker Motor GmbH are applicable to this propulsion unit in addition.

Since handling of our products is beyond our control, we strictly exclude liability for any damages which may occur! The risk of operation is solely with the user!

# Maintenance and Repair

- The design of propulsion set "E-F-506" is determined for longlevity and easy handling. Correct operation provided, the only recommended maintenance measure is the occasional lubrication of the gearbox (appx. every 100-200 flights). As to that, remove the allen screw in the propeller face plate of the gearbox and inject a small amount of special grease (appx. 20mm pipette line), then insert the allen screw back. Attention, only use original Hacker special grease and don't overfill with grease, which may cause the gearbox to overheat!



- If any problem or damage should occur, please check-back with your source of purchase and obtain approval to send the complete set to Hacker Motor GmbH. Returns without prior approval would not be accepted.
- Different from 2-pol motors (C-50), 4-pol-motors (C-54) show a "pole-snap" when being rotated deactivated, which is not a defect.

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Changes and error reserved. "E-Factor" is a trafe mark of Incon GmbH, München/Grasbrunn.

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