F-16 DF 400 ARF
Motor Timing Bulletin

We have received a small number of reported cases related to motor failure. We believe some of these instances could have been prevented if the motor timing on the electronic speed control was set properly for 2-pole motors.

It is very important to follow the instructions mentioned on page 14 in the F-16 instructions. “Be sure to set the speed control to the correct timing for this type of motor. The timing should be set for 2-pole motors.”

When the timing is set correctly to 2-pole, our testing shows it lowers the current and significantly reduces heat build-up in the motor when compared to having it set incorrectly to a higher pole setting. Excessive heat build-up will cause or contribute to early motor failure.

Many electronic speed controls including the E-flite 25A Pro (EFLA1025) and 30A Pro (EFLA1030) have pre-programmed defaults set for higher pole-count motors, including popular outrunner motors. These default settings must be changed to 2-pole on the E-flite 25A or 5 degrees on the E-flite 30A before flying the F-16. The ESC instructions are linked below. For other manufacturer’s controllers, please consult the instructions included with the controller.

http://www.horizonhobby.com/ProdInfo/Files/EFLA1025_manual.pdf

http://www.horizonhobby.com/ProdInfo/Files/EFL30AProBrushlessESCInstSheet.pdf