

Himax

ACC4966 Offset Gearbox

Specifications:

- Weight: ~50g (1.60oz)
- Maximum Power: 50+W
- Input Shaft size: 4.0mm
- Non-Regulated output 5.9 volts @ 4000 RPM - 23 Volts @15000 RPM
- Regulated output 4.8 - 8.0 Volts (1 volt less than the non-regulated output)
- Power Output: 50+W

Introduction:

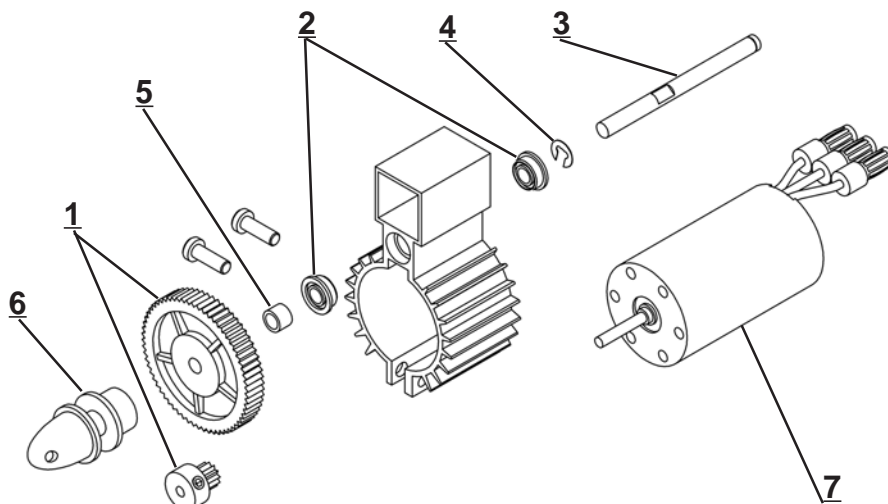
The ACC4966 gearbox is specifically designed to fit **Himax** HA2025 series motors for use on models with 10x10mm stick mounted offset gearboxes. The design allows easy gear changes and shaft replacement. The sturdy aluminum gearbox frame holds gear mesh under load and acts as a heatsink to keep the motor cool. Please read the entire manual for proper operation.

Assembly:

1. The gearbox is supplied with the 6.6: ratio spur gear installed on the output shaft. The ratio is changed by loosening the setscrew in the spur gear and pulling it off the front of the shaft. Gears **MUST** be used in sets, do not mix gears. The gear teeth will always total 76 teeth, the 66 tooth spur is used in conjunction with the 10 tooth pinion. Use thread locking compound if necessary to prevent setscrews from loosening.
2. The motor is slipped into the frame and clamped securely. The gear mesh is fixed by design and should be accurate when used with **Himax** HA20xx series motors. Gear mesh can be adjusted by removing the labels from the motor, or using foil shims between the frame and motor. Gear mesh should be as tight as possible without binding. Binding of the gears can lead to excessive gear wear and motor shaft breakage from fatigue stress.
3. The pinion gear should be installed in the orientation pictured below as close to the motor as possible to reduce stress on the motor shaft. Use thread locking compound if necessary. Be sure the gear teeth engage fully to achieve maximum gear life.
4. Do not lubricate the gears. Greasy lubricants attract dirt causing rapid gear wear. Liquid lubricants can compromise the plastic of the spur gear, softening it, leading to early failure. Dry, non-aerosol, lubricants may extend the life of the gears, but the effects are unproven.
5. Disable the brake in the speed control and use a soft start. If the controller causes the motor to stutter on start up, using a faster start mode will cause less wear on the gears than stuttering.
6. Install the propeller after proper rotation has been determined. The supplied collet type prop adapter is slipped onto the shaft and the prop is installed. Note: **DO NOT** use a "prop saver". The prop nut is tightened until the assembly is tight on the shaft. Be sure the shaft is free of dirt and grease. Also be sure the prop and spacers slip onto the prop adapter easily. If the prop binds on the adapter it will not clamp the shaft resulting in loss of the assembly.
7. Install the gearbox in the aircraft per kit recommendations.
8. Replace the gearbox shaft if it becomes damaged. Bent output or motor shafts will cause rapid gear wear.

Parts List:

1. ACC4966-1 6.6:1 Gear set
ACC4966-2 5.3:1 Gear set
ACC4966-3 4.4:1 Gear set
ACC4966-1A 6.6:1 Spur 2pcs
ACC4966-2A 5.3:1 Spur 2 pcs
ACC4966-3A 4.4:1 Spur 2pcs
ACC4966-1B 6.6:1 Pinion 2pcs
ACC4966-2B 5.3:1 Pinion 2pcs
ACC4966-3B 4.4:1 Pinion 2pc
2. ACC4966-4 Bearing 2 pcs
3. ACC4966-5 Shaft, Plain
ACC4966-11 Shaft, Hollow
4. ACC4966-6 C-Clip 5 pcs
5. ACC4966-7 Spacer 5 pcs
6. ACC368 Adapter, Collet
7. 20mm Motor HA2025/HA2015



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