



SAB HELI DIVISION

TRANSMISSION SETUP

It is important to choose the right reduction ratio to maximize efficiency based on your required flight performance. The Goblin has many possible reduction ratios at your disposal. It is possible to optimize any motor and battery combination. It is recommended to use wiring and connector appropriate for the currents generated in a helicopter of this class.

If you are using a head speed calculator which requires a main gear and pinion tooth count, use 206 teeth for main gear (this takes into account the two stage reduction) and the tooth count of your pulley as the pinion count.

Below is a list of available reduction ratios:

H0215-16-S-16T	Pinion = ratio	12.9:1	H0215-20-S-20T	Pinion = ratio	10.3:1
H0215-17-S-17T	Pinion = ratio	12.2:1	H0215-21-S-21T	Pinion = ratio	9.8:1
H0215-18-S-18T	Pinion = ratio	11.5:1	H0215-22-S-22T	Pinion = ratio	9.4:1
H0215-19-S-19T	Pinion = ratio	10.9:1	H0215-23-S-23T	Pinion = ratio	9:1
			H0215-24-S-24T	Pinion = ratio	8.5:1

These are pulleys for motors with a 6 mm shaft. Each pulley includes an adapter for motors with a 5 mm shaft.

Some example configurations:

GOBLIN 570 CONFIGURATIONS						
Performance	Battery	Motor	ESC	Pinion	RPM Max	Pitch
GENERAL and 3D	6S - 5500 (5000 / 5500)	Scorpion HKIII4025-1100	EDGE 130	22T / 23T	2350 / 2450	± 12,5
			Jive 100LV YGE 120 LV	21T / 22T		
		Quantum 4125-1100	EDGE 130	22T / 23T		
			Jive 100LV YGE 120 LV	21T / 22T		
		Kontronik Pyro 650-1150	EDGE 130	21T / 22T		
			Jive 100LV YGE 120 LV	20T / 21T		
3D and HARD 3D	12S - 3000 (2600 / 3300)	Quantum 4125-560 Scorpion HKIII 4025-550	EDGE 80 HV	22T / 23T	2400 / 2500	± 12,5
			Jive 80 HV YGE 90 HV	21T / 22T		
		Quantum 4125-560 Scorpion HKIII 4025-550	EDGE 120 HV	22T / 23T / 24T	2400 / 2500 / 2600	
			Jive 120 HV YGE 120 HV	21T / 22T / 23T		
		Kontronik Pyro 650-620	EDGE 80 HV	20T / 21T	2400 / 2500	
			Jive 80 HV YGE 90 HV	19T / 20T		
		Pyro Competition 650-620	EDGE 120 HV	20T / 21T / 22T	2400 / 2500 / 2620	
			Jive 120 HV YGE 120 HV	19T / 20T / 21T		

Note: Although the Goblin can fly at high RPM, for safety reasons we recommend not exceeding 2600 RPM.