

NEW 120HP TURBO UPGRADE FOR ROTAX 912 80HP

Since December the 1st 2012, we offer to our customers a new engine option for every new ordered Savage aircraft (for pending deliveries ask for upgrade option). Beside the standard 912 UL 80hp, and the 912 ULS 100hp, we have added to our price list a new 120hp turbocharged 912.

Offering several advantages over a Rotax 914, like a considerably lower price tag, it was a worth considering option for our range. This is an Italian after market kit available in the market since several years, installed very commonly on autogyros, and on some homebuilt ultralights in Italy and France. It has proven a very good performance, long service life and reliability, and some aircrafts have logged more than 1200 hours with it, without reporting problems.

We strongly believe that this is a valuable option for several of our customers, particularly those flying at high altitudes, and for serious bushflying, float versions or glider towing. The weight to power ratio reached in this configuration, is one of the best for this class of aircrafts.

MAIN CHARACTERISTICS

This turbo kit is designed with simplicity and reliability in mind: instead of an electronic control unit, the turbo wastegate is controlled mechanically. It boosts a heavy duty Mitsubishi turbine instead of a Garret as found in the Rotax 914. Engine is not modified internally so, stroke, bore, and compression are the same. There is an additional oil pump for the turbine. The turbine is set to deliver a max pressure of 0,42bar. This turbo kit offer easier maintenance and much cheaper spare parts compared to the 914. The power/torque delivery is much more linear and immediate than on a 914.

Engine installation on Savage aircrafts includes a different engine mount (ring type), an airbox, a pressure limiter for max 0,7bar fuel pressure, 2x Pierburg electric fuel pumps, an additional oil pump for the turbine (original Rotax), a KN air filter for the turbine, a modification to the carburetors. Additionally, when choosing this engine option, MAP and fuel pressure gauge are standard equipment.

Note: it is not possible to upgrade to this kit from a Rotax 912 ULS 100hp, but only from a 912 UL 80hp purchasing an additional firewall forward kit.

Specifications and performance

Max RPM	5800
Power output at 5000 rpm	95hp – 69kw
Power output at 5500 rpm	105hp – 77kw
Power output at 5800 rpm (max 1 minute)	120hp – 85,5kw
Max torque 5000rpm	148 Nm
Max MAP, take off	41 HG
Max MAP, continuous	38 HG
Max temperatures and pressures	Same as for original 912 UL 80hp
Min Fuel pressure	0,20 bar
Normal Fuel pressure	0,25 / 0,30 bar
Max Fuel pressure	0,38 bar
Max cylinder temperature	130°C
Min oil temperature	60° C
Max oil pressure	7 bar
Min oil pressure	1,8 bar
Max fuel consumption	35 l/h at 5800rpm – 120hp
TBO	1500 hours (following fleet experience will increase)
Warranty	2 years against manufacturing defects.

