

182 MODIFICATIONS

BOSS 182 & GROSS WEIGHT INCREASES



Got Performance?

When you need to get the most out of your Cessna 182, Wipaire's performance- and utility-enhancing modifications are up to the task.

Start with our Boss 182 Lycoming IO-580 engine conversion. Producing 315 hp stock, and 340 hp after engine tuning by Ly-Con, it's the most powerful factory-new engine conversion available to 182 owners. Our newly designed high-flow tuned exhaust system also adds effective horsepower and a variety of propellers are available to muscle you out of the water and get you climbing.

Benefits of this modification don't stop with stellar performance. The optional heavy-duty engine mount improves not only the potential gross weight of the aircraft but also ease of maintenance by removing the awkward cross brace found in other mounts. The Wipline 3000 equipped 182 features an enhanced chord rudder that improves crosswind operations, and larger ventral fin giving directional stability that rivals the 206 or even a 208 Caravan!

Pair this phenomenal engine conversion with Wipaire's gross weight increase to 3,500 lbs for the utmost in utility while on Wipline 3000 floats. With this combination, you can carry more than your neighbor and still beat him off the water! Compared to a stock 182S or 182T at 3,250 lbs, a Boss 182 with a gross weight increase to 3,500 lbs will beat the stock-engined airplane off the water with a 23% shorter water run. Not impressive enough for you? The Boss 182 will also haul you up and away with a 40% greater rate of climb, even when equipped with our gross weight increase to 3,500 lbs.

Buy your floats and modifications from the only float company with over 55 continuous years of production and be assured we'll be there when you need support.

BOSS 182 LYCOMING IO-580 ENGINE CONVERSION

The Boss 182 engine conversion is available for the Cessna 182S and 182T models in both landplane and floatplane configurations.

STANDARD CONFIGURATION INCLUDES:

Lycoming IO-580-B1A engine (315 hp)
Hartzell Trailblazer propeller w/ spinner

- 82" composite propeller

Digital engine monitor (MVP-50 or EDM 930)

Landplane engine mount (reuse)

Overhauled prop governor

60 amp alternator (reuse)

Tuned exhaust

New vacuum manifold

Reuse firewall forward

- All hoses and lines
- Engine control cables

*Installation includes a gross weight increase to 3,158 lbs take off / 3,000 lbs landing on wheels.

ADDITIONAL CONFIGURATION OPTIONS:

MT composite propeller w/spinner

- MTV-9-B/210-58

Remarked analog gauges

Rebuild seaplane engine mount

New seaplane engine mount

New prop governor

90 amp alternator

New firewall forward

- All new hoses and lines
- New engine control cables
- New vacuum manifold

INCREASE TO 340 HP:

The Boss 182 is already an impressive performer but for even more spirited performance owners may elect to have port, polish and flow balance services completed by Ly-Con.

Dyno testing confirms that this can increase total output to 340+ hp!

PROPELLER OPTIONS:

The new carbon fiber composite Hartzell Trailblazer series 82" propeller is standard equipment. This propeller reduces take off noise while maintaining excellent take-off performance and weighs 20lbs less than the comparable aluminum prop. A natural composite MT propeller is also available.

- Hartzell Trailblazer Composite
- MT Composite

THE BENEFITS OF THE MODERN CESSNA 182S & 182T

There are many reasons besides Boss 182 eligibility to consider an S or T model over the older generation Cessna 182 models. Some of the benefits include:

- Full internal corrosion proofing using the most up-to-date epoxy-based primers and stainless cables
- A modern avionics suite and instrument panel layout with warning panel
- Improved, modern autopilot (usually with altitude pre-select and hold)
- Interior seating (usually leather) with crash worthiness standards that meet the newer Part 23 crash standards
- An up-to-date airframe with all of the latest structural improvements, including wet wing and fuselage access panels
- Twice as many fresh air vents, for the utmost in pilot and passenger comfort

"SPECTACULAR"

- M. Holt Describing his Boss 182



FEEDBACK FROM THE FIELD

"My favorite feature on wheels is its inherent stability and ground handling. With wheel pants, it was a no-fussing 145 knot airplane. On floats it's amazing. It comes off the water really sharp. You don't ever have to wonder 'at what point will it fly,' it just gets on step and goes.

I highly recommend the Boss 182, and I recommend it whether you're going to put it on fat tires, float it, or leave wheel pants on it."

- M. Holt, Boss 182 Owner & Operator

PERFORMANCE COMPARISON ON WIPLINE 3000 FLOATS

Performance data for the IO-580 with our 3,500 and 3,370 lb gross weight increases can be found on the back of this brochure.

	IO-580 at 3,100 lb GW	IO-540 at 3,100 lb GW
Engine	Lycoming IO-580 (315 HP)	Lycoming IO-540 (230 HP)
Take off run (land)	808 ft (246 m)	981 ft (299 m)
Take off run over 50 ft obstacle (land)	1,423 ft (434 m)	1,444 ft (440 m)
Take off run (water)	1,189 ft (363 m)	1,392 ft (425 m)
Take off run over 50 ft obstacle (water)	1,833 ft (559 m)	2,098 ft (640 m)
Rate of climb (per/min)	1,290 ft (393 m)	833 ft (253 m)

PERFORMANCE COMPARISON ON WHEELS

	Fully Loaded Performance Data		Typical Load Performance
	IO-580 at 3,158 lb GW	IO-540 at 3,100 lb GW	IO-580 at 2,839 lbs GW
Engine	Lycoming IO-580 (315 HP)	Lycoming IO-540 (230 HP)	Lycoming IO-580 with Port & Polish (340 HP)
Take off run (land)	640 ft (195 m)	795 ft (243 m)	410 ft (125 m)
Take off run over 50 ft obstacle (land)	1,292 ft (394 m)	1,514 ft (462 m)	908 ft (277 m)
Rate of climb (per/min)	1,426 ft (434 m)	924 ft (281 m)	1,600 ft (488 m)
Cruise Speed (80% Power at 6,000 ft)	171 MPH (149 KTAS)	161 MPH (140 KTAS)	175 MPH (152 KTAS) (75% Power at 3,000 ft)

"Fully Loaded" VS "Typical Load" Performance Data

For FAA certification of new modifications Wipaire performs extensive performance tests with the aircraft loaded to gross weight. This certification data represents the minimum performance expected out of an aircraft loaded to maximum gross weight. In order to better represent the level of performance most pilots will see we are providing performance specs taken with a "typical load" of pilot, co-pilot, 60 gallons of fuel and testing instrumentation. This gave us a weight of 2,839 lbs.

GROSS WEIGHT INCREASES

Our selection of gross weight increases will help you get the most utility out of your 182. These gross weight increases boast a greatly improved forward CG envelope that gives you more loading flexibility. You will no longer need to add weight to the baggage compartment to carry two people and full fuel or four people with half tanks.

GROSS WEIGHT INCREASE TO 3,500 LBS TAKE OFF / 3,350 LBS LANDING*

- 182S and 182T, when equipped with the Wipaire IO-580 conversion and Wipline 3000 floats.
- 182Q and 182R, when equipped with the AirPlains IO-550 conversion and Wipline 3000 floats.

GROSS WEIGHT INCREASE TO 3,370 LBS TAKE OFF / 3,350 LBS LANDING*

- 182S and 182T, when equipped with the Wipaire IO-580 engine conversion and Wipline 3000 floats.
- Cessna 182P, 182Q, and 182R, when equipped with the AirPlains IO-550 engine conversion and Wipline 3000 floats.

*Note: The gross weight increase requires the installation of 4-point float struts. Conversion kits are available to upgrade existing 3-point strut configurations to the 4-point design.

PERFORMANCE AT GROSS WEIGHT ON WIPLINE 3000 FLOATS

	IO-580 at 3,500 lb GW	IO-580 at 3,370 lb GW
Gross weight	3,500 lbs (1,587 kg)	3,370 lbs (1,528 kg)
Engine	IO-580 (315 HP)	IO-580 (315 HP)
Take off run (land)	987 ft (301 m)	958 ft (292 m)
Take off run over 50 ft obstacle (land)	1,836 ft (560 m)	1,765 ft (538 m)
Take off run (water)	1,257 ft (384 m)	1,241 ft (378 m)
Take off run over 50 ft obstacle (water)	2,463 ft (751 m)	2,414 ft (736 m)
Rate of climb (per/min)	1,048 ft (319 m)	1,123 ft (342 m)
Cruise speed (75% at 6000 ft)	124.5 KTAS 15.5 GPH	124.5 KTAS 15.5 GPH

Note: All take off run data calculated at International Standard Atmosphere.
Performance data for Lycoming IO-580 is calculated using the Hartzell Trailblazer prop.



BENEFITS OF THE WIPLINE FLOAT KIT

When you add the versatility of Wipline 3000 floats to your Cessna 182 you will gain more than just the freedom to explore! Developed by Wipaire's experienced team of engineers, you are getting the best float and rigging kit available for the 182.

- 4-point strut configuration enhances stability and is eligible for gross weight increase options
- 2" of expanded forward CG envelope allows for loading with pilot, co-pilot AND full fuel!
- Large chord rudder for improved crosswind operations (meeting FAR Part 23 standards)
- Large ventral fin improves directional stability to equal that of a 206 or even a Caravan