Installation manual power upgrade kit SkiDoo/Lynx ACE 900 turbo R 210 hp



210 hp power upgrade kit

Supreme of the extreme !

SkiDoo/ Lynx ACE 900 turbo

power upgrade kit

Thank you for choosing the MC Xpress power upgrade kit to your SkiDoo/ Lynx ACE 900 turbo R.

The upgrade kit is designed for racing use only.

The upgrade kit is designed to give you the best performance possible together with reliability.

During the development work we have tried to keep the snowmobile as stock as possible to make the installation easy and to keep the sled as untouched as possible.

Read this manual before you start with the installation.

We hope you will get much joy with your new investment.

The turbo snowmobile is only recommended to be used by experienced riders and for racing use only.

□ This upgrade kit greatly enhances the performance of the vehicle it is installed upon!

□ Professional training should be received by anyone that operates this modified vehicle.

 $\hfill\square$ Installation of this upgrade kit may void any warranty that is provided by the vehicle manufacturer.

 \Box A one (1) year warranty is provided on the parts only. This warranty does not cover any other parts even if the damage is caused by the installation of the upgrade kit.

□ MCXpress AB, its distributors, dealers, nor installers will not be held liable for any personal or physical damaged obtained in association with the installation or use of this product.

By installation or purchase of this product, the end user and or installer agree that the end user has been informed of this information.



Dyno testing

Begin the installation by taking off the plastic side fairings and the hood.



The hood is hold by 4 bolts.



Now you can final tighten all the turbo bolts when the muffler is in place.



Remove the throttle body from the plastic air intake manifold. Install the small nipple included with the kit on the throttle body by making an M5 thread in the throttle body like the picture. Use a 4,2 mm drill. (4,0 mm drill will also work fine)

Use for instance a vacuum cleaner when drilling and tapping to avoid alu chip from entering the intake manifold.



Install the throttle body to the plastic air intake manifold. We recommend to put some super glue on the throttle body rubber to get a stronger connection against the plastic intake manifold to prevent it from blowing off.



Install the two MAP-sensor voltage limiters, one on each sensor. Beware: It is actually possible to turn the connectors the wrong way. Double check so you turn them the right way before you press them together until it "clicks" Strap them properly so the stay in place.









Install the blow off valve on the air hose going from the intercooler to the throttle body like the picture. Connect the 4 mm hose coming from the nipple you installed on the throttle body to the blow off valve. (This hose will also be connected to the MCX EFI-box by a T fitting.)

Re-install the hood and the side fairings.

Use 98 octane fuel or higher, (Europe) or Premium only (USA and Canada)

The MCX EFI-box can be re-programmed.

This means you can adjust the boost and fuel map if you want.

The program Tuner Studio requires a license that can be bought as an option.

If you change the boost map to much, error codes may emerge.

The power doesn't rise much after 140 kPa of boost. The turbo efficiency is getting down rapidly at higher boost levels. The higher boost, the higher risk for engine damages.

If you connect as we described, the MCX EFI-box controls the boost pressure.

It is possible to let the stock ECU control the boost pressure if you prefer that.

Then you just don't connect the boost valve connector coming from the MCX EFI-box. Let the stock connector stay in place.

The MAP sensor voltage limiters will make the stock ECU to rise the boost a lot compared to stock.

The boost will then be about 244 kPa total pressure (=About 144 kPa (21 PSI) boost at sea level)

At lower rpm, the boost will be less than when the MCX EFI-box controls the boost.

Clutch setup:

Normally the clutch setup can be left stock.

Check so the rpm is less than 8300 rpm at full throttle. (After 8300 rpm the electric controlled throttle close and the power will be less)

8000 – 8100 is perfect.



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