

**RACE TUNING 4 STROKE RANGE** 



### **CAUTION!**

Before modifying the vehicle to a competition version, please ensure that your customer orders a signed repair order from the workshop in which you inform the customer of the risks and cancel the vehicle's authorisation for use on public roads.

Please do not discard the removed parts and give them to the customer.

Note: This manual is exclusively reserved for the SHERCO network, any distribution is forbidden.



## MATERIEL INSTALLATION

In the photo below, you'll find all the elements necessary for the installation of the Racing Kit.



#### This Kit inclued :

- Switchs Key Less and Front light
- Battery BS Lithium
- Plastic cap for cover the Neiman emplacement
- Rear brake sensor removal screw
- Swing arm chain slider screw
- Handlebar protection

In order to install of the above elements, you will need to have the tools that's listed below



## MATERIEL INSTALLATION

#### List necessary tools:

- A torque Wrench
- 3 Allen keys (3-4-5mm)
- 1 spring puller
- 1 T-key socket 8mm
- 2 sockets (7-19mm)
- 4 flat wrenches (10-12-14-17)
- 1 Philip screwdriver
- 1 flat screwdriver
- 1 pair of cutting pliers
- 1 pair of pliers
- 1 long bent-ose pliers

The estimated time for installing the SHERCO® Racing kit is 2 hours.



### **HEADLIGHT PLATE**

### 1. Front indicator removal

To remove the indicators, it's necessary to remove the headlight plate. Detach the two rubber straps on either side of the fork.



Once the straps are detached, grab the headlight plate by pulling it, upwards to unclip the 2 palstics pins.

Be careful to not pull the headlight plate further as, this could damage the front light and indicator connectors located behind it.



Then remove the two power terminals from each of the indicators.



Remove the square power terminal from the front light.



## **HEADLIGHT PLATE**

Once the front light connector is disconnected, you can remove the front headlight plate asssembly.



Place the headlight on a workbench to remove the inicators. Using a flat wrench, remove the turn signal mounting nut.



Before reassembling the headlight plate, the Neiman must be removed in order to install the KeyLess system.

### 2. Neiman removal

The Neiman is connected to the motorcycle by a 2pin terminal (red and black wire) and two single wire terminals (red and black).



In order to not lose the starter function, reconnect the two remaining red wires on the motorcycle.







You can now remove the Neiman. It is fixed by two palstic notches on each side. Use left/right translation movements to remove it from its two fixing notches.



Take the neiman cover cpa and insert it into the Neiman location.



### 3. Removal of original left control panel

Use a Philips screwdriver to remove the screw securing the half-shells of the control switch located below the handlebar.



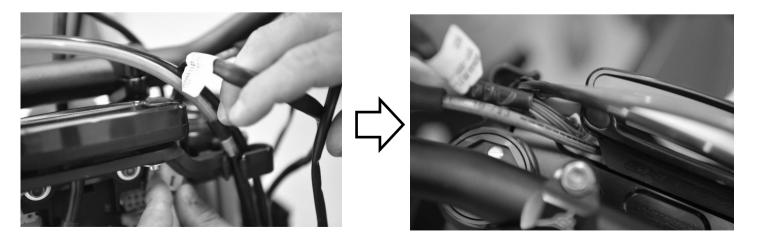
Uncouple the two half-shells.



Disconnect the two terminals from the switch (1 x 6-pin and 1 x 3 pin terminal).



Remove the rubbers securing the switch harness Extract the switch by passing the terminal on the top, between the upper plate fork and the speedometer.



Remove the handebar switch



### 4. Central indicators removal

The central indicators is located behind the headlight plate between the two suspension tubes.



Disconnect the 2 pin terminal.



All you have to do is remove the central unit from its housing bu removing it from its palstic notch and pulling it towards you.



### 5. Installation KeyLess switch

You will need to install two switches for the KeyLess system

- 1. Front light switch
- 2. Engine stop switch



Front light switch installation, use an Allen key It is positioned to the right of the clutch lever



Be careful when passing the wire witch the clutch fluid, so as not to damage it.



#### Connecting the starter switch

Pass the wire between the speedometer and the upper plate fork.



Connect terminal 6 pins.



### **Connecting the engine stop switch**

Install the engine stop button to the left of the clutch lever attachment. Pay attention to the direction of the mounting collar







Pass the stop button wire under the handlebar, joining the starter switch wire.

You will need to connect the black and purple wires of the two switches.



Place a rubber collar recovered from the original switch to properly secure the two switch harness.

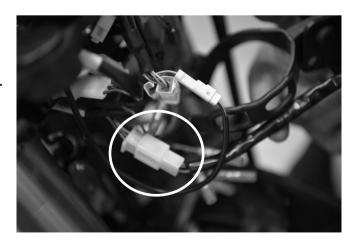


#### Refitting the headlight plate

Use the space of the central unit to accomodate the electrical wires so as not to damage them when refitting headlight plate.

Connect the square terminal of the front light power supply.

Place the headlight plate in front of its pins, then push it lightly to clip it.



Proceed to the reverse step of disassembly, replace the two rubbers securing the healight plate.



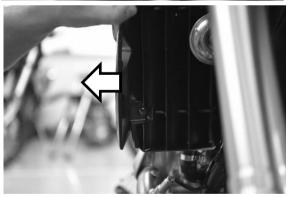
#### **Horn removal**

The horn is fixed on the right radiator guard. To remove it, it's necessary to remove the radiator guard

Remove the screw holding the guard.



Then separate the right side of the tank, the radiator guad



You can unclip the radiator guard from its housing



# HORN REMOVAL

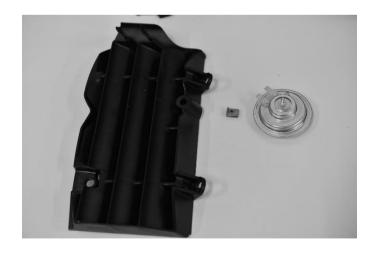
You now have access to the horn power terminals. Disconnect both terminals



The horn is held screwed to a clip. Grasp it and unscrew it by hand.



Remove the horn from its clip.



# REAR BRAKE SWITCH REMOVAL

#### Remove the rear brake switch

Remove the right frame protection. Cut the 4 Rilsan and unscrew the fiixing screw.











Remove the rear brake sensor nut using a 14mm flat wrench.



Then disconnect the tow-pin terminal located behind the frame.







# REAR BRAKE SWITCH REMOVAL

Take the banjo bolt.



Usinga 12mm socket torque wrench, tighten the bolt to a torque of 20 Nm.

Re-bleed the rear brake fluid completely.



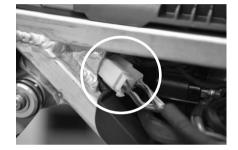
# PLATE SUPPORT REMOVAL

Reverse the removal, refit the right frame protection, the tank, the two radiator guard.

Remove the two side headlight plates held by a screw at the bottom right.



Disconnect the two square terminals located behind the right side plate.



Remove the two 8mm screws located under the rear light and the 4 plastic screws holding the license plate holder.







Separate the mud flap from the rear mudguard.



## PLATE SUPPORT REMOVAL

To remove the mud flap and the palte support, remove the two terminals thorugh the hole provided for this purpose, spread the mud flap slightly and remove the two terminals.



Place the mud flap on a workbench and remove the rear light.



Remove the plate support consisting of the plate light and the indicators.



Refit the two plastic screws.









## PLATE SUPPORT REMOVAL

Screw the two remaining plastic screws under the mud flap.



Using a pair of angled pliers, grasp the terminal to reconnect it to motorcycle harness.

Be careful to not damage it by tightening too hard.



Reconnect the terminal.

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Tighten the two screws with Loctite® blue threadlocker.



Reassemble the right side plate.

### INTAKE

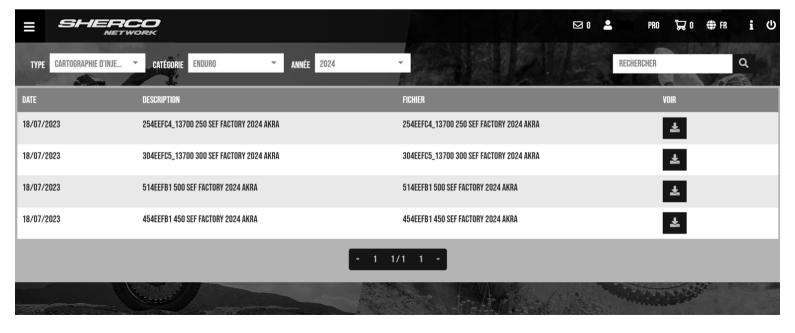
· Remove intake restriction and install filter basket



 Connect the bike to the diagnosis tool and make sure the latest mapping is installed.

All mappings are available on the Sherconetwork:

#### INFORMATION → TECHNICAL INFORMATIONS →INJECTION MAP





### **CARBURATOR**

#### • Modify the carburetor settings :

(Please note that the settings listed below are only a base, corresponding to an average temperature and altitude, and must be refined according to atmospheric conditions using the table in the workshop/owner's manual)

#### • 125cc:

Setting	Homologated	Racing
Jet needle	N84K	N1EE
Pilot jet	KEP 38	KEP 42
Main jet	KEA 115	KEA 170
Starter jet	50	85
Air screw	1 turn 1/2	1turn1/2

#### 250cc:

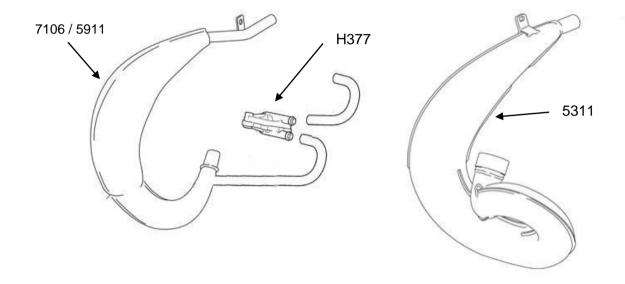
Setting	Homologated	Racing
Jet needle	N84K	N1EG
Pilot jet	KEP 38	KEP 40
Main jet	KEA 115	KEA 162
Starter jet	50	85
Air screw	1 tour 1/2	1 tour 1/2

#### • 300cc:

Setting	Homologated	Racing
Jet needle	N84K	N8RE
Pilot jet	KEP 38	KEP 40
Main jet	KEA 115	KEA 165
Starter jet	50	85
Air screw	1 tour 1/2	1tour1/2

## **EXHAUST**

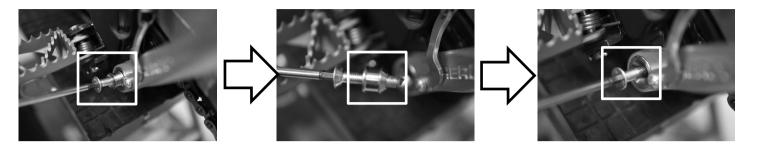
Remove catalytic exhaust pipe (250/300  $\rightarrow$  7106) (125  $\rightarrow$  5911) and AIS valve (H377) And install racing exhaust pipe. (125  $\rightarrow$  5909) (250/300  $\rightarrow$  11097)



# CHAIN PROTECTOR REMOVAL

#### Removing the side stand spacer

Remove the side stand fixing screw and remove the spacer.



#### Remove the chain guard

Remove the chain quick release



Remove the chain



Remove the twho chain guard mounting screws. One of which is located inside the swing arm.







# CHAIN PROTECTOR REMOVAL

Reinstall the two screws with Loctite® blue threadlocker.





Reassemble the chain and its connecting link.



### Installation of handlebar protection foam







# KIT RACING

In the photo below you will find all the elements that had to be removed in order to switch the bike to the non-homologated Racing configuration.

































