

FANTIC RACING KIT INSTALLATION

EN

V1467005

ED. 00/2024

XEF 250

XEF 310

XEF 450

FANTIC

RACING FANTIC KIT INSTALLATION V1467005

4-Stroke - Edition 00 / 2024

⚠ This kit allows to configure the vehicle in “RACING” version. By making the following changes, the vehicle will no longer comply with the Highway Code; therefore it must be used exclusively in racetracks or areas closed to traffic.

i After the above mentioned kit has been installed, the vehicle warranty will last for 3 months.



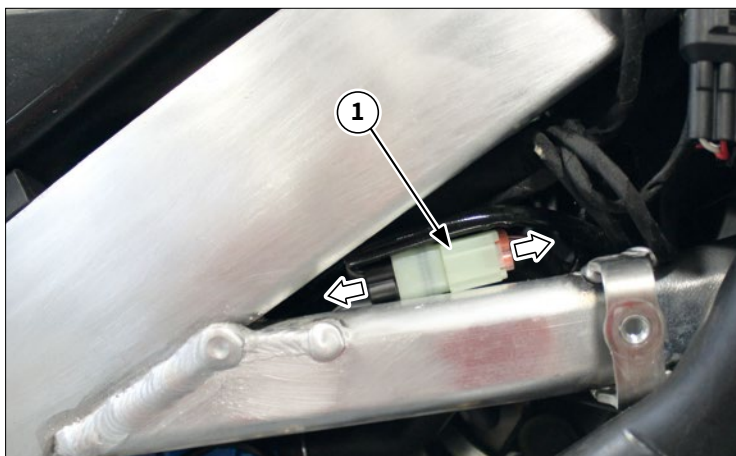
CHAIN ADJUSTMENT PLATE

- Remove the rear wheel axle nut, its washer “1” and the lock block “2” from the vehicle



- Install the chain tensioner plate “1”, the washer “2” and the wheel axle nut provided in the kit.

🔧 Tightening torque:
Wheel axle nut: 125 Nm (12.5 m•kg, 90 ft•lb)

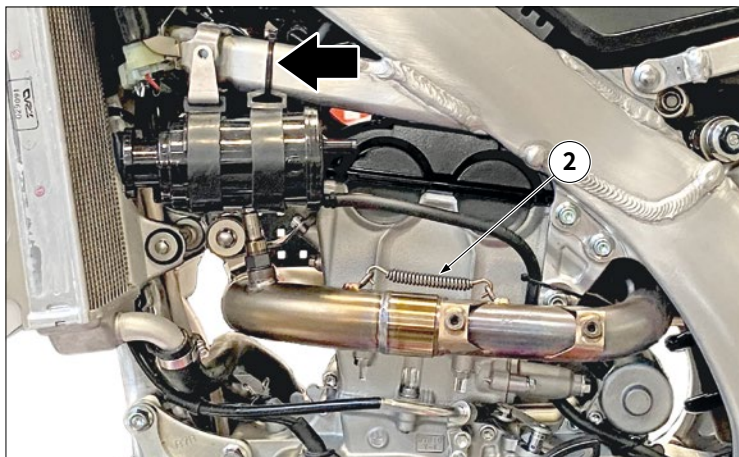


EXHAUST

- Remove the seat and the left and right conveyors from the vehicle.
- Disconnect the oxygen sensor connector “1” located on the right side of the vehicle, then remove the wiring operating on the left side of the vehicle.

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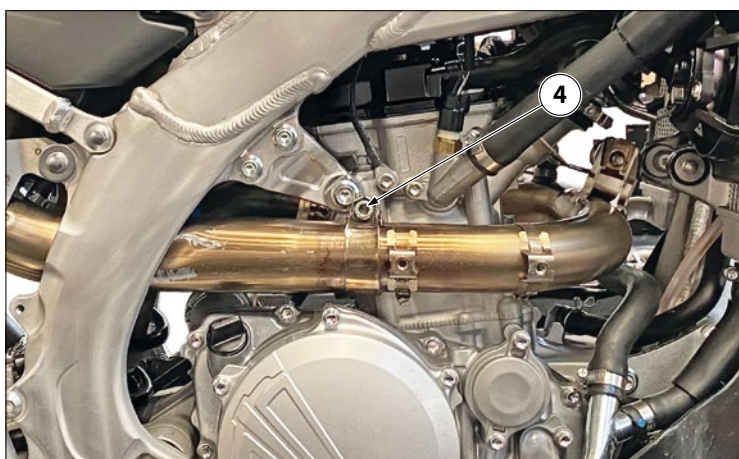
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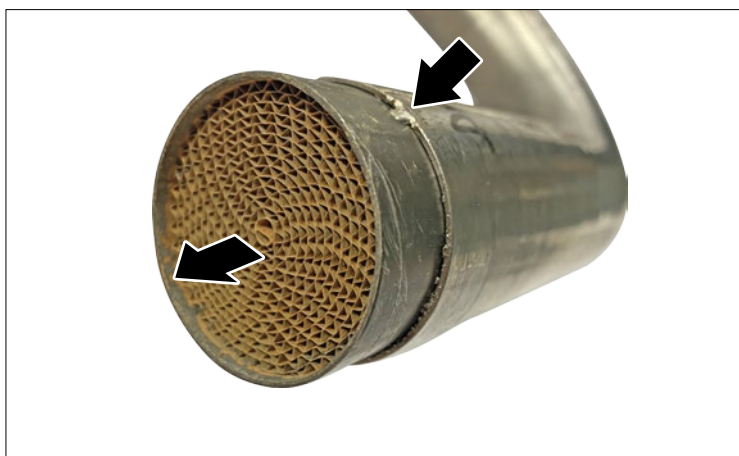
- Remove the left heat shield.
- Using a spring pulling hook wrench, release the spring "2" fastening the manifold to the intermediate exhaust pipe.
- Cut the canister clamp and remove it from the vehicle. Remove the pipes that connect the canister to the filter casing, to the tank cap and also the one with a free end.



- Remove the right number plate.
- Remove the screws "3" fastening the silencer to the frame.



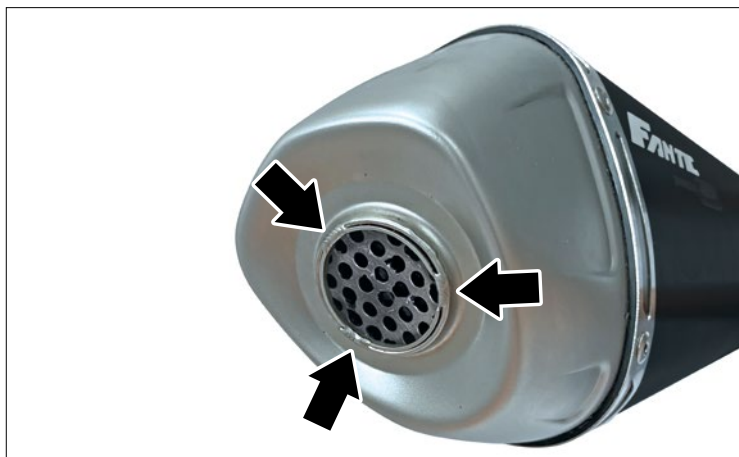
- Remove the right heat shield.
- Loosen the screw "4" of the clamp fastening the silencer to the intermediate exhaust pipe. Then pull out the silencer and remove it from the vehicle.
- Remove the intermediate exhaust pipe from the manifold, then remove it from the vehicle.



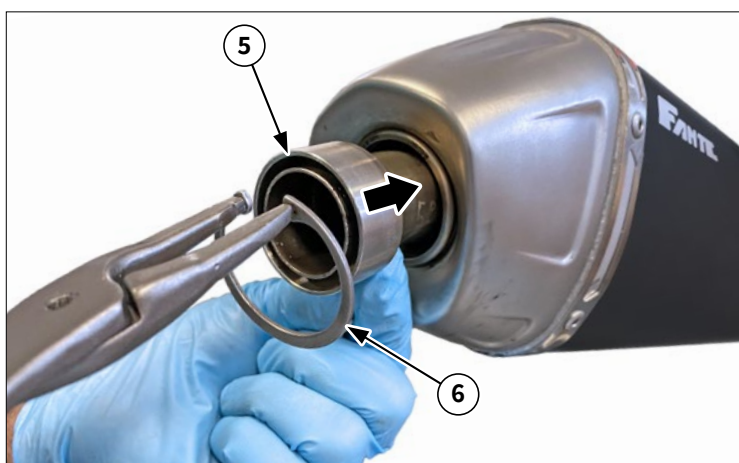
- Remove, using an angle grinder, the welding points that fasten the catalyst to the intermediate exhaust pipe, at the junction point with the silencer. Then remove the catalyst from the exhaust.

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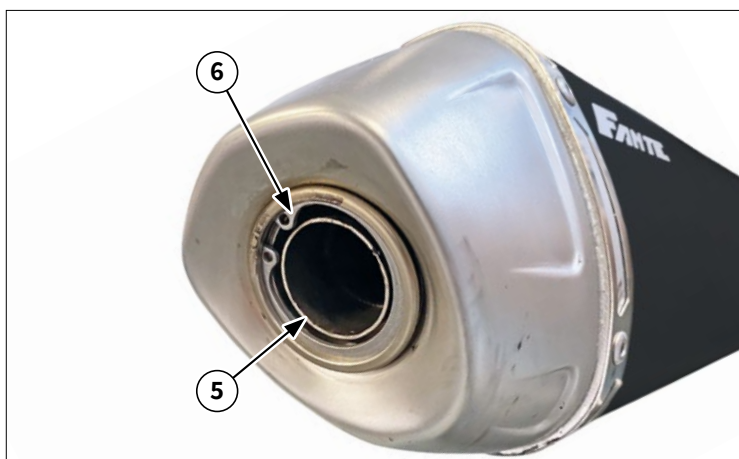
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- Remove, using an angle grinder, the welding points that fasten the Db-Killer to the silencer and remove it.



- Completely insert the specific Racing “1” Db-killer into the exhaust port of the silencer.



- Insert the seeger “2” in the groove to lock the Db-Killer “1” suitable for the Racing version.

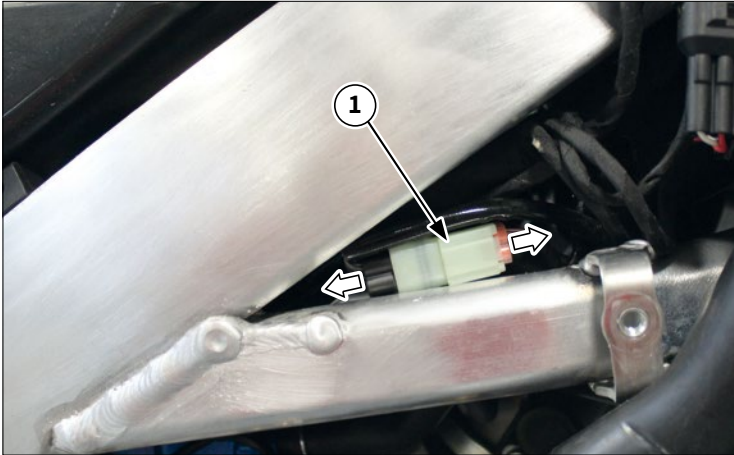


- Reassemble the intermediate exhaust pipe, silencer and related heat shields on the vehicle, following the disassembly operations in reverse.
- Tighten the screws “3” fastening the silencer to the specified torque.
- Reassemble the right number plate, the seat and the conveyors.

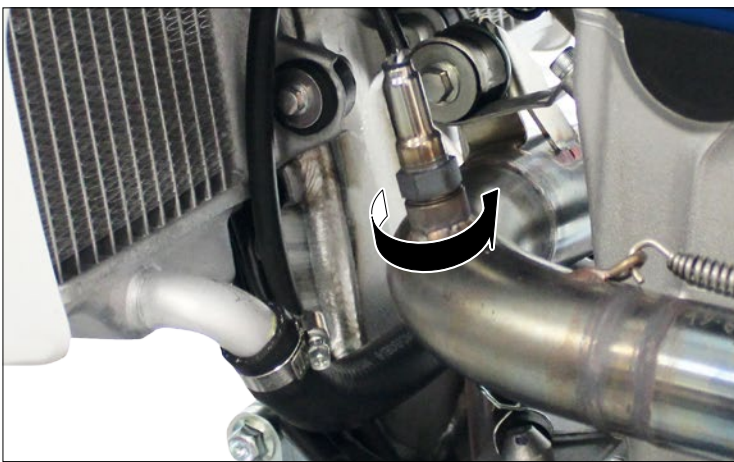
 **Tightening torque:**
Fastening screws: 30 Nm (3.0 m•kg, 22 ft•lb)

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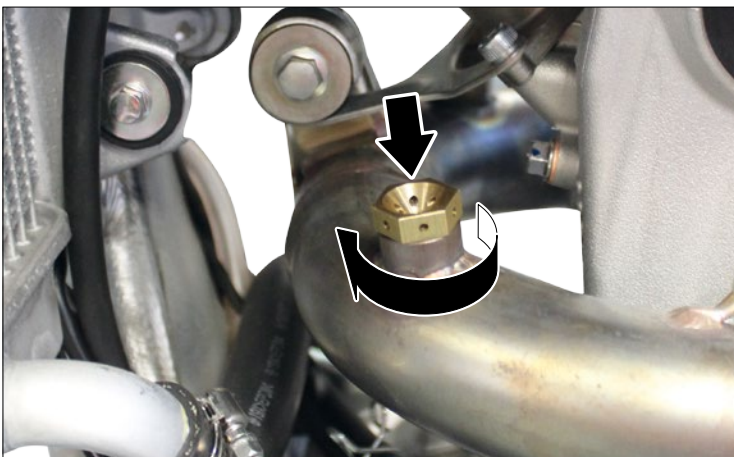
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OXYGEN SENSOR

- Remove the seat and the left and right conveyors from the vehicle.
- Disconnect the oxygen sensor connector "1" located on the right side of the vehicle, then remove the wiring operating on the left side of the vehicle. Cover the vehicle's wiring connector with electrical tape to prevent water and dirt from entering.



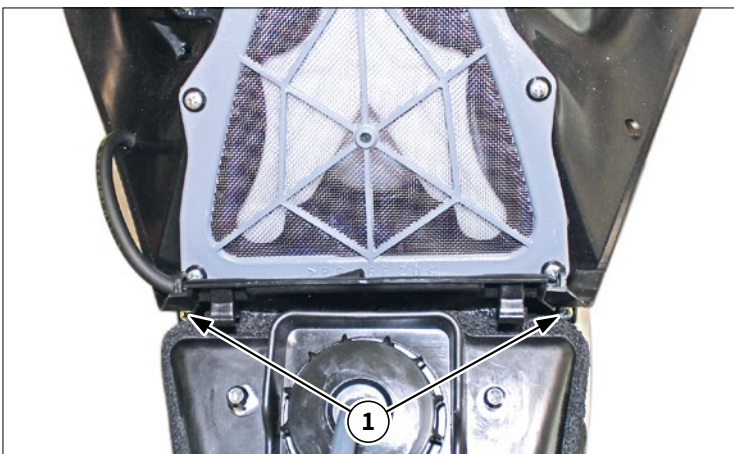
- Unscrew the oxygen sensor from the exhaust manifold and store it in a suitable place so that it can be reinstalled if you wish to return the vehicle to the approved version.



- Install the cap, supplied in the kit, into the oxygen sensor housing on the exhaust manifold.

i It is recommended to tie the cap with wire, using the holes provided.

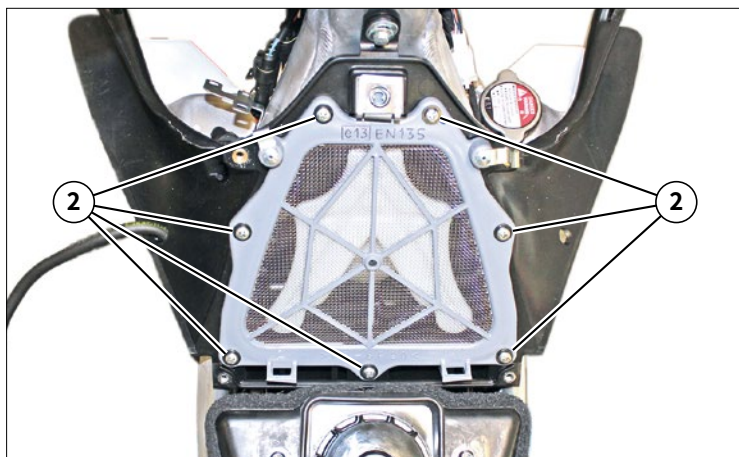
- Reinstall the conveyors and the seat on the vehicle.


INTAKE BOTTLENECK

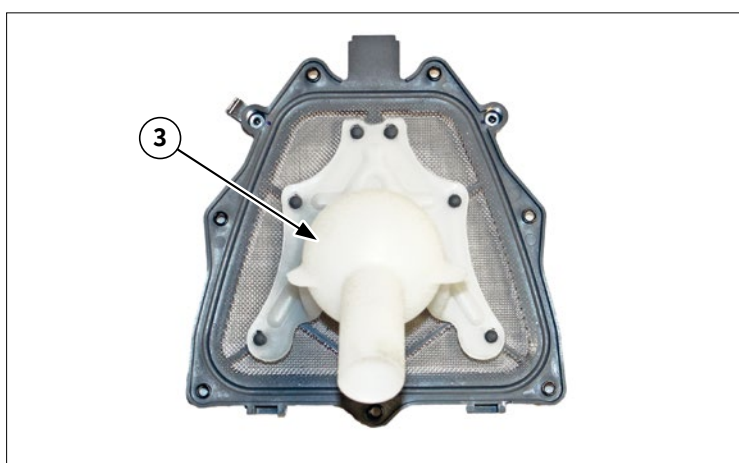
- Remove the air filter.
- Remove the bulkhead of the filter casing removing the two fastening screws "1".

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- Remove the flame arrester from the filter casing removing the fastening screws “2”.



- Remove the intake duct bottleneck “3”, installed on the internal side of the flame arrester.



- Remove the bottleneck sleeve “4”, installed in the intake duct.
- Refit the flame arrester, the bulkhead of the filter casing and install the air filter on the vehicle.

ENGINE CONTROL UNIT MAPPING

⚠ Following removal of: Db-Killer, catalyst, oxygen sensor and intake duct bottleneck, the engine control unit must be remapped to allow the engine to work in the best conditions and avoid breakage.

- Go to an authorised Fantic motor dealer or workshop to have the Racing mapping uploaded to the E.C.U. (engine control unit).

⚠ The RACING mapping can only be uploaded by an authorised Fantic motor dealer or workshop. Uploading the RACING mapping to the vehicle prohibits its use on roads open to traffic, regardless of whether it is the only modification made to the vehicle.

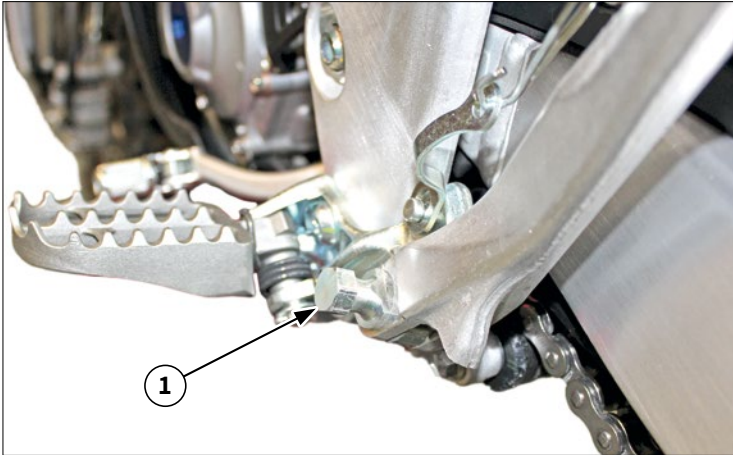
- Once the RACING mapping has been uploaded into the engine control unit, it is possible to modify its parameters using a smartphone, connecting to the control unit through the appropriate App.

i The WiGET App can be downloaded for both Apple and Android smartphones through the relevant AppStore.

i To connect to the E.C.U. control unit and change its parameters, refer to the instructions inside the App.

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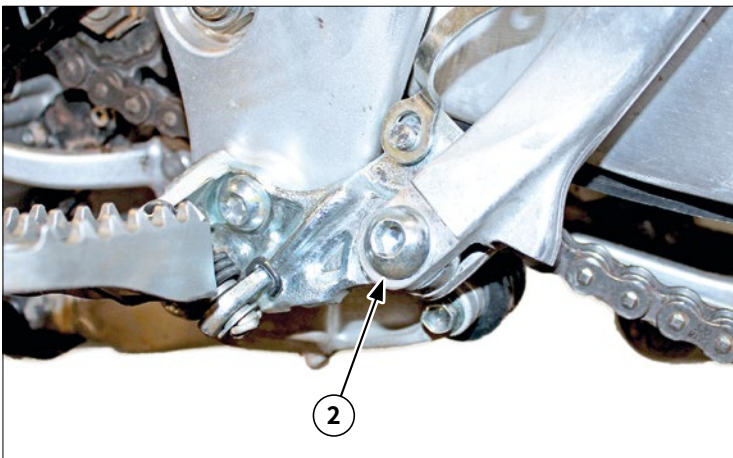
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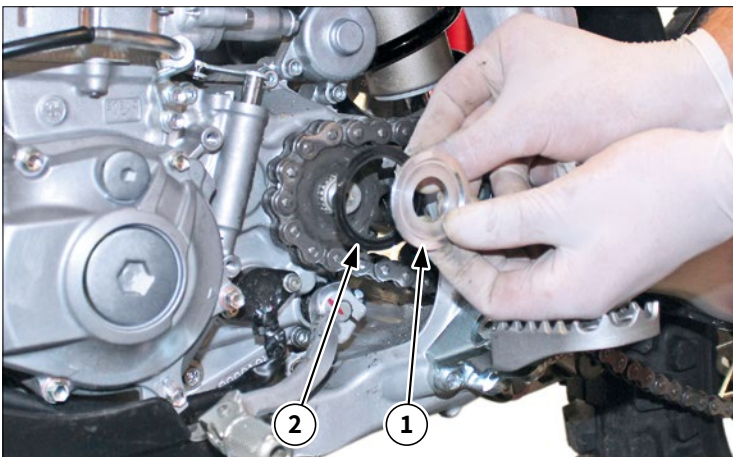
SIDE KICKSTAND

i According to the Highway Code, the vehicle kickstand closes automatically as soon as the motorcycle is lifted off the ground; therefore, in order to use the vehicle in the RACING version, the original pin must be replaced with the fastening screw supplied in the kit.

- Support the vehicle with a workshop stand, making sure it is in a stable position.
- Remove pin "1" from the kickstand.



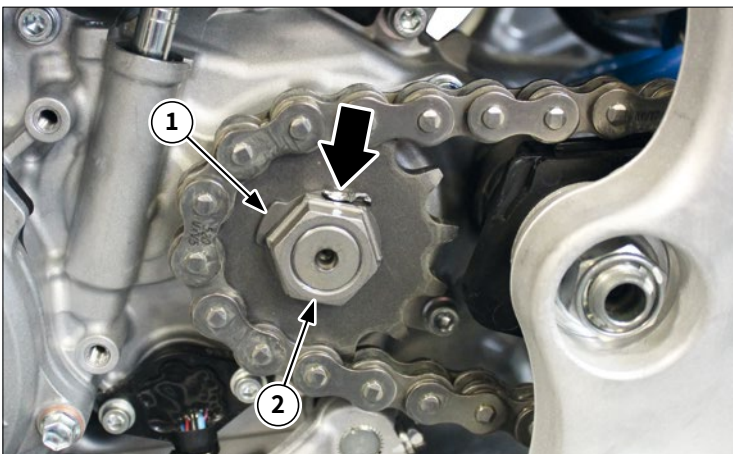
- Hold the kickstand, taking care not to release the springs from the kickstand and its support, then install the fastening screw "2" supplied in the kit.



PINION NUT AND WASHER

(XEF 250 Version)

- Remove the thin nut, then remove special washer "1" and the rubber washer "2".

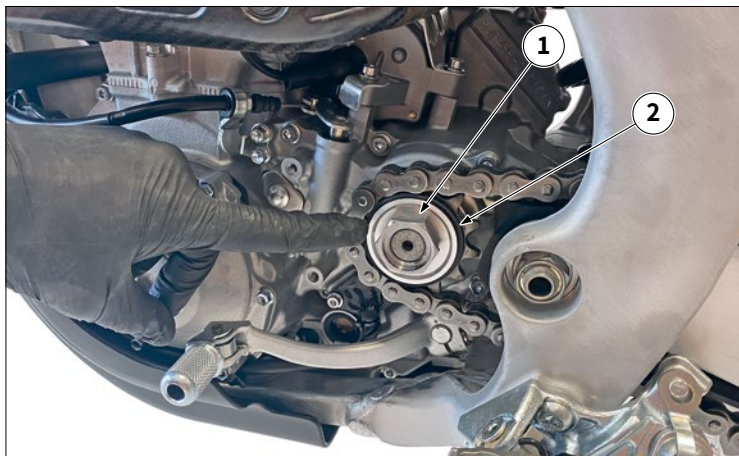


- Install washer "1" and standard nut "2" provided in the kit. Tighten the nut to the specified torque, then rivet a tooth of the washer against a flat face of the nut.

Tightening torque:
Pinion nut: 75 Nm (7.5 m•kg, 54 ft•lb)

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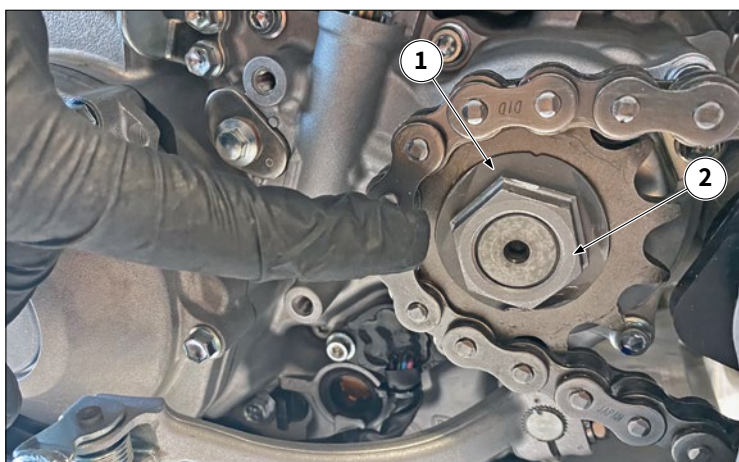
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PINION NUT AND WASHER

(XEF 450 Version)

- Remove the pinion cover;
- Remove the nut, then remove special washer “1” and the rubber washer “2”.



- Install safety washer “1” provided in the kit.
- Install nut “2” by reversing it from the original mounting position. Tighten the nut to the specified torque.

⚠ Make sure to install pinion nut by reversing it from the original mounting position. This operation will ensure proper pinion fastening.

🔧 Tightening torque:
Pinion nut: 90 Nm (9.0 m•kg, 66 ft•lb)

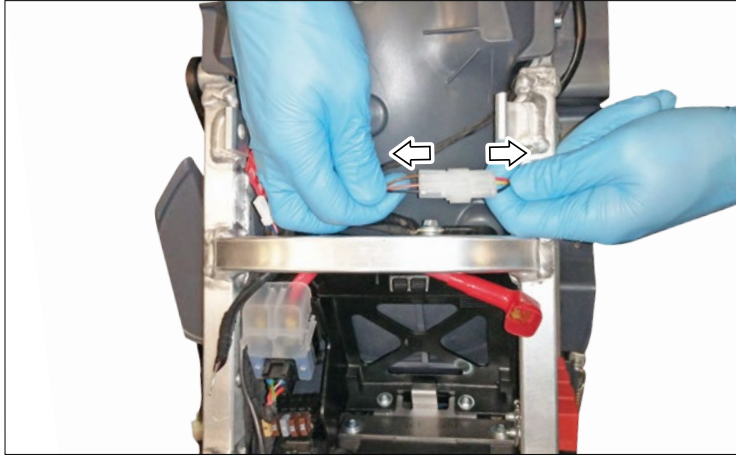
SPROCKET

- Remove the rear wheel from the vehicle, then remove the original sprocket with rubber edge.
- Install the sprocket, without rubber rim, which is included in the kit. Tighten the nuts to the specified torque, following a cross pattern.
- Reassemble the wheel on the vehicle and adjust the chain clearance as specified.

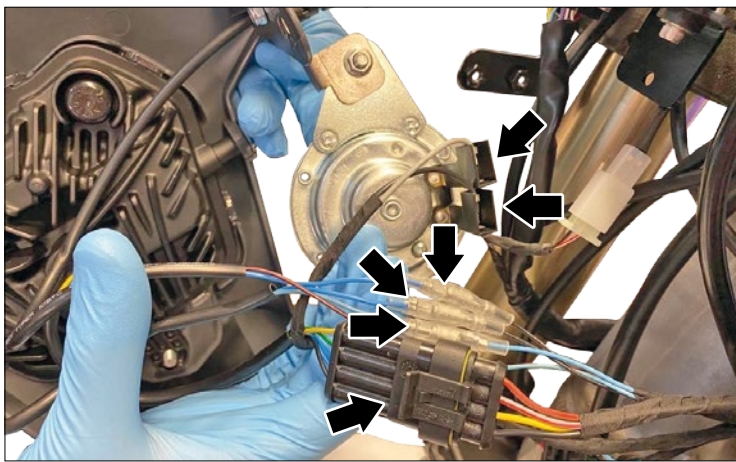
🔧 Tightening torque:
Sprocket nut: 42 Nm (4.2 m•kg, 30 ft•lb)

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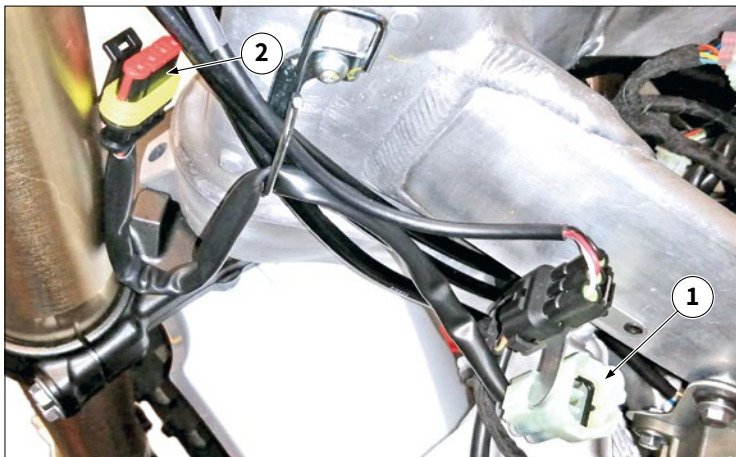
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SIMPLIFIED ELECTRICAL SYSTEM

- Remove the seat and the side number plate.
- Disconnect the tail light and direction indicators connector, then remove the direction indicators from the vehicle.



- Remove the conveyors, airbox, fuel tank.
- Unscrew the fastening screws of the front number plate and move it away from the fork plates, taking care that it does not fall out.
- Disconnect the connectors of: Headlight, direction indicators and horn. Then remove the direction indicators and the horn from the vehicle.



- Disconnect the connector and remove the road wiring from the vehicle.
- Connect the wiring harness connector "1", supplied in the kit, to the vehicle connector.
- Connect the wiring harness connector "2" to the headlight.
- Reassemble: Front number plate, airbox, conveyors, fuel tank, side number plates and seat.

