

STARTER MOTOR COMPONENTS

ALL ABOUT STARTER MOTOR

RENAULT TRUCKS DELIVER

PRODUCT COMMERCIAL KNOWLEDGE



THE STARTER MOTOR CONSISTS OF THE FOLLOWING COMPONENTS:

- 1 Solenoid
- 2 Motor
- 3 Gearbox
- 4 Pinion (drive gear wheel)



PRACTICAL ADVICE

MAXIMISE THE SALE

Don't just sell the starter motor – look for further opportunities to maximise the sale:

- Flywheel ring gear – if engagement has caused damage.

RENAULT FITTED-PART

- One year warranty..
- Fitted by Renault Trucks trained technicians.

RENAULT TRUCKS 24/7

- Professional roadside assistance 24 hrs a day, 7 days a week, 365 days a year.
- Dedicated to getting customers' trucks back on the road with minimum delay.



renault-trucks.com

Renault Trucks SAS with a capital of 50 000 000 € - 954 506 077 RCS Lyon Crédit photos : © Renault Trucks - 01/2017



renault-trucks.com



FACT

Don't run the risk of extensive damage and unplanned downtime – fit a GENUINE Renault Trucks starter motor.

Cold, wet, dark winter mornings put an extra strain on the starter motor. A faulty starter motor can place an undue strain on the battery, which will quickly drain and consequently fail to start. The starter motor is a key component that must offer 100% reliability. The intensive short period it is used during every engine start-up means that it must be robust enough to offer maximum performance even in the most extreme winter conditions.

THE DIAMOND DISTINCTION

1 | Renault trucks engagement accuracy

A GENUINE Renault Trucks starter motor provides the perfect engagement between the motor and the ring gear on the flywheel, reducing the risk of damage to either component, rather than as in a spurious part where the pinion June be a compromise to fit a range of truck marques.

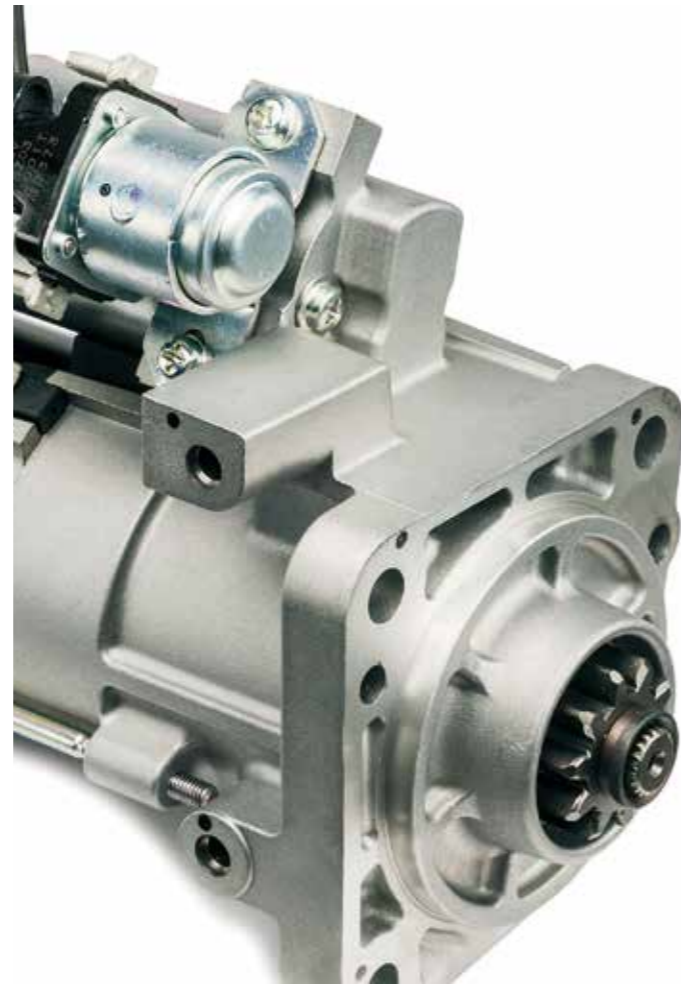
GENUINE Renault Trucks starter motors are designed to work in harmony with each Renault Trucks engine and the architecture of the truck's electrical system to ensure the optimum service life and elimination of unplanned and costly downtime.

RISKS OF FITTING NON GENUINE

A truck's starter motor is a key component that must be extremely reliable in all conditions to get the truck moving and delivering.

If a non-genuine starter motor is used, there is a considerable risk that you are compromising on performance – which could ultimately result in an operator's truck not starting and expensive unplanned downtime –not to mention failure to deliver the truck's load.

FEATURES	BENEFITS
Complete and ready to install.	Shortest possible downtime in workshop.
Best possible engagement process between starter motor and the flywheel ring gear.	Minimum risk of damage to flywheel ring gear or the starter motor pinion (drive gear wheel).
Adapted clutch function on starter motor to provide the best protection if there is a problem with the motor.	Long service life for starter motor.



STARTER MOTOR HOW IT WORKS

STARTER MOTOR (PRE-ENGAGED)

The Starter Motor is a powerful electric motor which converts electrical energy into mechanical energy. Its task is to turn the flywheel and crankshaft round, to make the engine start.

When the ignition key is turned, a current flows from the vehicle's battery to the starter motor so that the starter pinion (4) engages with the flywheel ring gear. – the starter motor now turns the crankshaft and the engine starts.

When the engine starts and gains speed, the starter is disengaged automatically and reverts to its resting position.

On pre-engaged starter motors, the drive has an internal one way clutch – which slips in one direction and locks up in the other direction.

SOLENOID

Mounted above the starter. When the starter is switched, the solenoid pulls a plunger into itself which pushes the pinion (drive gear wheel) from position A to B to engage into the ring gear of the flywheel. The pinion has a turning movement to ensure a positive engagement every time. The plunger in the solenoid has the function of not only engaging the pinion but also making the connection between the battery and the starter motor and thus the flow of electricity to turn the motor.

MOTOR

Which consists of a commutator.

GEARBOX

The motor is connected to the pinion through a gearbox. The purpose of the gearbox is to ensure maximum torque and allow for a reduction in size of the starter motor and hence save weight.



Position A



Position B



Solenoid



Gearbox



**A GENUINE
RENAULT TRUCKS
STARTER MOTOR
PROVIDES THE PERFECT
ENGAGEMENT
BETWEEN THE MOTOR
AND THE RING GEAR**

TWO PARTS MAY LOOK ALIKE BUT...

The quality of these non-genuine makes naturally varies as much as their prices but a Renault Trucks part is designed and produced to meet our toughest requirements.

However, even if a well-known non-genuine Renault Trucks make is chosen – it is by no means certain that the starter motor is tailored and to the specification of a Renault Trucks electrical system in the same way as a GENUINE Renault Trucks part.