





# Clutch kit

### Renault Trucks offer

The junction point between the engine and the gearbox, the clutch fulfills three functions:

- " transmitting torque from the engine to the gearbox;
- dampen engine vibrations;
- allow smooth and easy shifting.

It is made up of different components (disc, mechanism, clutch release bearing, bearings, etc.), all available at retail in the Renault Trucks catalog, under the Genuine range (new original parts).

The eXchange range (standard exchange parts), for its part, consists exclusively of kits, including all the elements necessary for the clutch replacement operation.

FEATURES	BENEFITS
Complete replacement clutch ready to install.	Minimal downtime fo installation.
Tests to support torque in the gearbox and protect the transmission.	Minimum risk of damage to other transmission parts.
Gearbox and engine configured and balanced together.	Smooth operation. No noise. Excellent maneuverability. Driver comfort.

# Key arguments

# The DNA of a new original part

Systematic integration of the latest technical

developments applied in series.

Competitive offer potentially retaining the same weaknesses as the original.

From thousands of data collected every day in our workshops, our engineers regularly implement changes to our production clutches, in order to always push their level of quality and durability even further.

These changes are systematically applied to our eXchange production lines, in order to guarantee them the same characteristics as a Genuine product.

Only the manufacturer is capable of collecting so much data, on the entire transmission system. Choosing a competing product therefore means taking the risk of not benefiting from these technical improvements.

# A design adapted to the vehicle

- Optimized consumption / comfort / durability ratio.
- Determining characteristics for a good vehicle configuration.

During the design of the vehicle, all the elements of the kinematic chain (engine, gearbox, clutch) were developed jointly in order to achieve the best possible consumption / comfort / durability ratio. All vehicle software is therefore configured according to the characteristics of the original clutch.

By choosing different materials, design or manufacturing techniques, competing clutches potentially do not have the same characteristics as the original ones.

Choosing a competing clutch therefore means exposing yourself to changes in the behavior of the vehicle: increased consumption, jerks when changing gears, vibrations, etc.



# A test procedure that pushes the boundaries

- Test procedure defined by Renault Trucks engineers.
- A level of resistance that goes far beyond what is needed, even under the worst possible conditions of use.

In order to ensure the quality of its clutches, Renault Trucks subjects them to a series of tests which sometimes go well beyond the technical capacities of its vehicles.

For example, their resistance to bursting is proven up to 5,000 rpm.

Choosing a competing clutch means taking the risk of fitting a part whose specifications do not correspond to the manufacturer's standards.

#### All the benefits of a kit offer

- <sup>•</sup> Easy to order and manage.
- All the components required for a clutch change in one box.

In order to comply with the manufacturer's recommendations, all the components that must be replaced as part of a clutch change are included in the eXchange kit.

Thus, if the mechanism and the clutch disc are systematically included, some kits also include the thrust bearing, bearings and screws if necessary.

In addition, the use of eXchange kits facilitates the warehouse management of your integrated workshop with, for example, only 5 references to cover all Optidriver vehicles, Euro V included.

Choosing an eXchange kit is therefore securing the quality of the repair while facilitating part management.

# Customer benefits

# security

- High level of quality through a strict renovation process.
- <sup>°</sup> 2 years warranty.
- Optimal durability thanks to specific friction materials.
- Protection of the driveline against beating and vibrations.

Choosing an eXchange clutch kit means choosing more safety!

- The renovation process defined by our engineers and the systematic integration of the latest technical developments give our clutches a standard level of quality on the market.
- All our eXchange clutch kits are guaranteed for 2 years, subject to assembly by an approved repairer (see general warranty conditions).
- The friction materials and its specific design ensure optimal durability.
- The technical innovations it incorporates prevent the diffusion of engine beats and vibrations to the entire transmission system.

#### Economy

- Lower cost than all retail components
- Complete kit to avoid any additional repair costs
- Reduced environmental cost, thanks to the reuse of components and materials

Choosing an eXchange clutch kit means choosing more comfort!

- More driving comfort, through a specific design and choice of materials allowing smooth starts and smooth gear changes.
- More convenience in the repair, by bringing together all the components necessary for the replacement of the clutch in a single box.
- More comfort in stock management, through a



short range of products, reducing in-store diversity.

# Comfort

- Driving comfort like the original.
- " Repair facilitated by the kit offer.
- Simplified management with a short range of products.

Choosing an eXchange clutch kit means choosing more savings!

- The price of the kit is on average 40% lower than the price of all components, ordered at retail.
- The integration of all the elements necessary to replace the clutch avoids any unpleasant surprises at the time of invoicing.
- Reusing certain components as part of the standard exchange process reduces the amount of resources and energy required to manufacture it compared to a new clutch.