

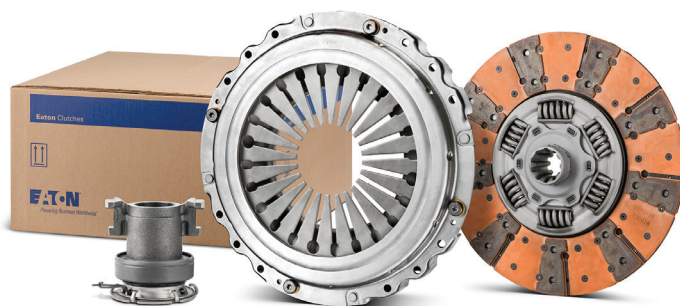
Heavy-Duty Clutches

430 mm Severe Duty



Eaton is a leading world-wide supplier of medium and heavy duty clutches to the commercial truck industry. Eaton clutches are renowned for their reliability, durability, and performance.

Manufactured and marketed globally, Eaton clutches are the number one commercial vehicle clutch in North America. Eaton is bringing this knowledge and experience to customers in Australia, South America, Europe, Middle East, and Africa.



430MM SD Clutch:

The 430mm SD (severe duty) clutch offers patented cushioned ceramic facings to provide smooth launch characteristics and maximize protection against thermal stress.

Weight Savings and Reduced Wear:

The Eaton 430mm SD offers the performance of a 400mm twin plate design from a one plate clutch, which is a weight savings. The lower inertia of the one plate design also protects transmission synchronizers from premature wear.

Maintenance and Operations:

The robust clutch design and excellent thermal robustness provide longer service life and less maintenance cost. The cushioned ceramic facings protect against truck downtime caused by clutch failures in high temperature environments.

Vibration Control:

The clutch design includes six disc springs and additional predampers are available. The design features reduce idling noise and protect the driveline components from the torsional vibrations of the engine.

Features:

- Cushioned ceramic facing advantages
 - 30 to 49% increase in coefficient of friction
 - Excellent resistance to thermal stress
 - Engagement quality at par with organic facings
- Lower initial inertia than the comparable 400mm twin plate design

Specifications:

Cover assembly:
diaphragm, pull type

Torque capacity (Nm):
2250 max.

Damper option:
6-spring damper with pre-damper as optional provision

Clutch housing compatibility:
SAE 1

Flywheel type:
flat flywheel with
475 / 470 mm pilot

Flywheel BCD (mm):
450

Release bearing option:
quick attach, permanent attach

Primary application:
severe duty

Additional applications:
linehaul, vocational, bus, coach

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430mm Severe Duty Clutches

Clutch discs are one of the most stressed components on commercial vehicles. Mounted between the clutch pressure plate and flywheel, they engage or disengage the engine from the transmission during every gear change. Friction is produced on both sides, resulting in increased temperatures and wear, making clutch disc facings that reduce both heat and wear desirable.

Launching a fully-loaded commercial vehicle, operating on steep hills, and demanding driving conditions can generate extremely high temperatures inside the coupling housing. The patented, cushioned ceramic clutch discs utilize a ceramic facing instead of traditional organic materials, which makes them more heat- and wear-resistant than conventional clutches.

Eaton offers the 430 SD clutch in both Standard and Low Inertia designs. The low inertia design was specially engineered to reduce wear on synchronized transmissions and to be used in applications with high shifting demands. Using a low inertia clutch in these applications can reduce the load placed on the transmission synchronizers. The low inertia design can help to achieve quicker shift times and increased shift quality, reduce the wear and failure of synchronizers, lower repair costs, and increase system reliability.

