

# Cheap copies cost lives



# Inferior copies are potential killers



## A dangerous choice

A vehicle is only as safe as its brake components. Choose poor quality brake parts which fail or disintegrate on the road and the results can be devastating – for the vehicle driver, other road users and pedestrians.

We want to alert you to the dangers of buying inferior copies of Haldex parts. Cheap copies are accidents waiting to happen.

The success of Haldex, the world's leading supplier of automatic brake adjusters for heavy vehicles, is based on high product quality which maximises safety for road users.

Our patent protection has expired. Opportunists are trying to cash in on the reputation of Haldex by making poor quality copies of our parts.

Would you knowingly buy parts which put lives at risk? For safety, it is vital to distinguish between original parts and potential killer copies.

## Beware of imitations

Our claims are backed by hard evidence. Haldex test results show that copies:

- wear out far sooner than Haldex originals – some disintegrate during braking tests.
- are made in low-grade materials with inferior processing and inadequate quality control.
- can fail at any time on the road endangering lives.

## Why take the risk?

Would you choose quality Haldex original parts that maximise safety or low-performance, high-risk copies? Why put lives in danger? Why jeopardise your business? Always fit Haldex original brake parts. Look for the Haldex name on our products – it assures quality and vehicle safety.

## False economy

Buying copies of Haldex parts is a false economy. Poor-quality parts mean more frequent servicing and higher maintenance costs.

Cheap copies put your business at risk. Defective parts mean more breakdowns. Your service to customers suffers. Customers turn to more reliable competitors who use high quality components.

# Tests reveal dangerous defects in clone parts



**Haldex** Original

## Breaking points

Cheap copies may appear identical to Haldex parts. On the road, differences in quality and safety soon become evident, as copies wear out, fail or disintegrate with dangerous consequences.

Haldex has the proof to back up its assertions about defective copies.

Some copies last longer than others, but none come even close to the originals. **In tests, no copy has reached more than 50% of the life expectancy of a Haldex original part. Many copies manage only 1%.** Other clones should be labelled fragile – they are not even robust enough to survive installation.

On these pages are examples of component comparison testing carried out, according to Haldex's standards, at the Haldex test lab in Landskrona, Sweden. They represent a typical sample of the inferior quality revealed by tests in a brake simulation chamber. The sample copies came from different non-original part manufacturers.

## Copy defects mean danger

- Clutch spring: broken during fitting of automatic brake adjuster.
- Gearwheel: too brittle to survive installation.
- Thrust washer: fell apart after only 1,000 applications.
- Worm shaft: dangerously broken after 500,000 applications.



**Short life.** Adjuster housing copy: broke after 45,000 applications in a fatigue test. Note cracks and porosity defects. In the same test, a Haldex original lasts 800,000 applications – minimum..

**Non-starter**  
Fragile clutch spring copy broke during installation.



**High performer**  
Original clutch spring survives tough testing



**Wearing away**  
Clone worm shaft: broken after 0.5 million applications.



**Wearing well**  
Original worm shaft lasts over 2.5 million applications



**Three-way split**  
This gearwheel copy broke before testing started.



**Geared for quality**  
Original gearwheel designed for optimum performance during lengthy testing.



**Worn out**  
Deformed coil spring copy after 0.65 million applications.



**Long life ahead**  
Original coil spring lasts at least 2.5 million applications.





**Safety assured**

*Now compare clone part performance with the originals. A complete Haldex brake adjuster, and many of its spare parts, is designed to withstand a minimum of 2.5 million applications.*

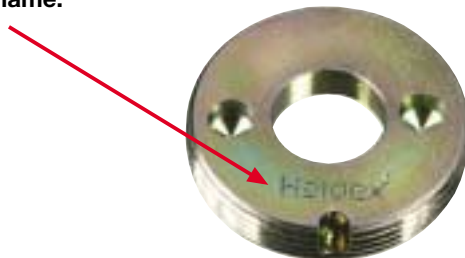
**Marking the difference**

Using a non-Haldex part in a Haldex brake adjuster not only erodes safety and performance, it also invalidates any Haldex warranty. How can you be sure you are buying Haldex original parts?

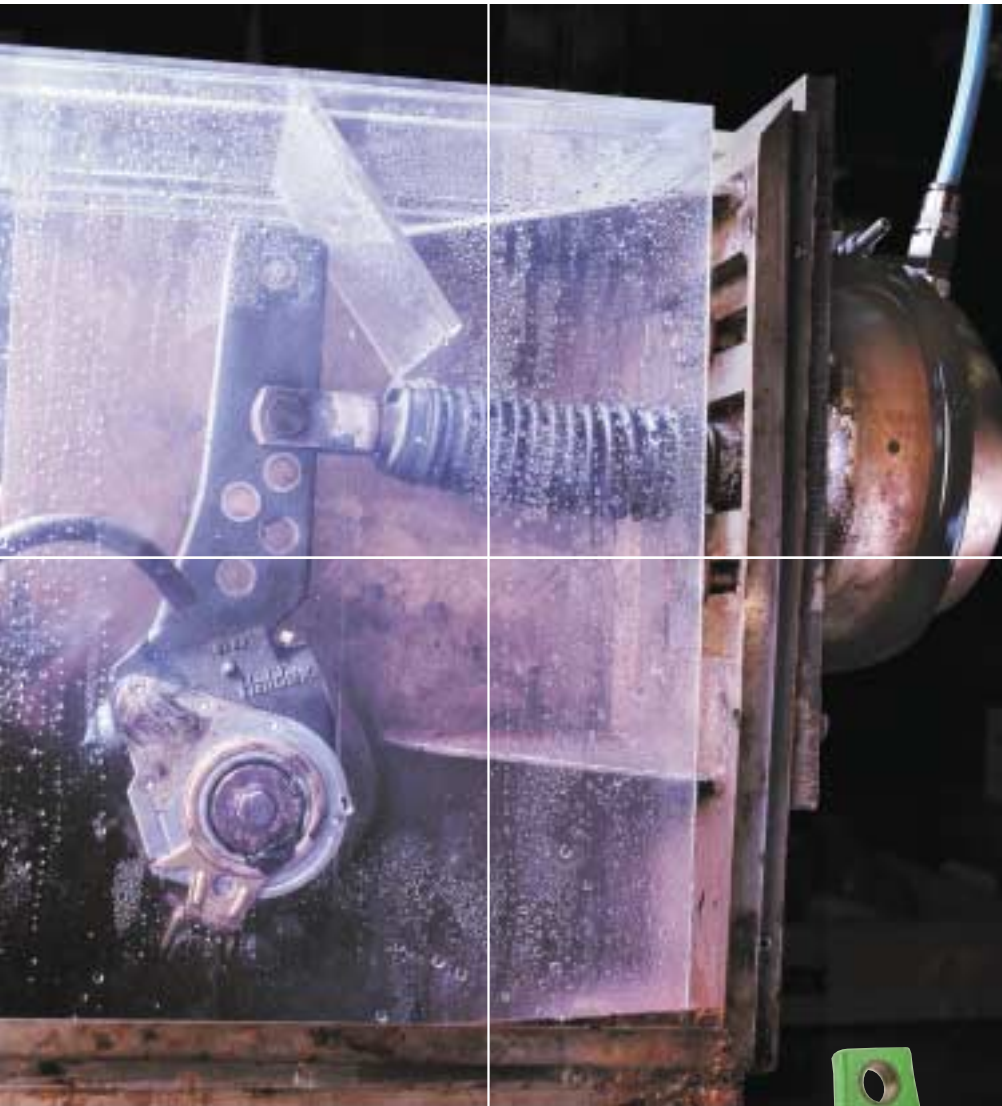
- Haldex parts are recognisable by their distinctive packaging.
- Look for the name you can trust. Almost every original component is marked with the Haldex name.
- Haldex supplies spare parts to all major heavy vehicle producers and leading axle manufactures. These companies repackage Haldex branded parts in their own spare part kits, for continued quality assurance.



**These are examples of components marked with the Haldex name.**



# High quality means built-in safety



## Haldex quality is:

- **Comprehensive**  
Continual investment in R&D, training and manufacturing plants ensures quality in all stages of production.

- **Long-established**  
1991 – we became one of the first ISO 9001 certified Swedish companies.

- **Exhaustively tested**  
After 30 years of brake adjuster testing at the Haldex brake simulation lab, we are well qualified to judge quality. In the test chamber, brake adjusters face simulated braking forces and driving conditions for up to six months – equivalent to many years on the road.

- **Guaranteed**  
Life-saving reliability means longer product guarantees than our rivals’.

- **Profitable**  
Our parts offer higher safety and lower maintenance costs.



**Austria**

Haldex Wien Ges.m.b.H.  
Vienna  
Tel +43-1 865 16 40  
Fax +43-1 865 16 40 27  
e-mail: office@baeder-haldex.at

**Belgium**

Haldex N.V.  
Balegem (Oosterzele)  
Tel +32 9 363 90 00  
Fax +32 9 363 90 09  
e-mail: info.hbe@haldex.com

**Brazil**

Haldex do Brasil  
São Paulo  
Tel +55-11 5034 4999  
Fax +55-11 5034 9515  
e-mail: info@hbr.haldex.com

**China**

Haldex International Trading Co. Ltd.  
Shanghai  
Tel +86-21 6289 44 69  
Fax +86-21 6279 05 54  
e-mail: info@hcn.haldex.com

**France**

Haldex Europe S.A.S.  
Weyersheim (Strasbourg)  
Tel +33-3 88 68 22 00  
Fax +33-3 88 68 22 09  
e-mail: info.heu@haldex.com

**Germany**

Haldex Brake Products GmbH  
Denkendorf (Stuttgart)  
Tel +49-711 934 9170  
Fax +49-711 934 91740  
e-mail: info@hde.haldex.com

Haldex Brake Products GmbH  
Heidelberg  
Tel +49-622 170 30  
Fax +49-622 170 3400  
e-mail: info@hbpde.haldex.com

**India**

Haldex India Limited  
Nasik  
Tel +91-253 238 0094  
Fax +91-253 238 0729  
e-mail: haldex@haldexindia ltd.com

**Italy**

Haldex Italia Srl  
Muggio (Mi)  
Tel +39-039 278 2350  
Fax +39-039 796 525  
e-mail: info@hit.haldex.com

**Poland**

Haldex Sp.z.o.o.  
Praszka  
Tel +48-34 350 11 00  
Fax +48-34 350 11 11  
e-mail: info@haldex.net.pl

**South Korea**

Haldex Korea Ltd.  
Seoul  
Tel +82-2 2636 7545-7  
Fax +82-2 2636 75 48  
e-mail: info@hkr.haldex.com

**Spain**

Haldex España S. A.  
Parets del Valles (Barcelona)  
Tel +34-93 573 10 30  
Fax +34-93 573 07 28  
e-mail: haldexespana@haldex.es

**Sweden**

Haldex Brake Products AB  
Landskrona  
Tel +46-418 47 60 00  
Fax +46-418 47 60 01  
e-mail: info@hpbse.haldex.com

**United Kingdom**

Haldex Ltd.  
Newton Aycliffe  
Tel +44-1325 310 110  
Fax +44-1325 311 834  
e-mail: aycliffe.info@haldex.com

Haldex Brake Products Ltd.  
Redditch  
Tel +44-1527 499 499  
Fax +44-1527 499 500  
e-mail: info@haldex.com

**USA**

Haldex Brake Products Corp.  
Kansas City MO  
Tel +1-816 891 2470  
Fax +1-816 891 9447  
e-mail: hbsna@haldex.com

89000 Ed1 2 / 02-04 Landskrona



*Haldex is an innovator in vehicle technology and supplies proprietary products for trucks, cars and industrial vehicles on a global basis. Haldex is listed on the Stockholm Stock Exchange and has annual sales exceeding SEK 6 billion with 4,000 employees worldwide.*



[www.haldex.com](http://www.haldex.com)