Cost of Ownership

Compare your savings with the Haldex Life Seal® Actuator to that of competitive brands. The example of Total Cost of Ownership (TCO) at right is based on the following assumptions:

- Twelve (12) year vehicle service life
- Shop labor of 1/2 hour at $50/hr
- Downtime cost of 1/2 hour at $250/hr
- Life Seal® units replaced after seven (7) years

Haldex Sales and Service Support

Haldex believes that knowledgeable and experienced support people are an integral part of our technology. This means access to trained sales and service personnel for product specification, technical assistance, troubleshooting, field service and maintenance training programs. Rapid response for parts and service are available from the Haldex global network. Contact your local Haldex Sales Professional for a free Cost of Ownership Analysis.

Life Seal 3030 Products

**3030 2.5” Regular Stroke (64 mm)**

LP3030* ........................................ Piggyback
LP3030K* ........................................ Piggyback Kit
One piggyback, one premium rubber diaphragm and one two-piece clamp
LC3030* ........................................ Combination
LC3030CW* .................................... Combination With welded clevis and 8 gauge stud housing
LC3030HD ...................................... Combination with neoprene diaphragm, 8 gauge stud housing, dust boot and forged clevis

* Available in 40 Packs using suffix P40

**3030 3.0” Long Stroke (76 mm)**

LP3030L* ........................................ Piggyback
LP3030LX* ...................................... Piggyback Kit
One piggyback, one premium rubber diaphragm and one two-piece clamp
LC3030L* ....................................... Combination
LC3030LCW* .................................. Combination With welded clevis and 8 gauge stud housing
LC3030LHD ................................... Combination with neoprene diaphragm, 8 gauge stud housing, dust boot and forged clevis

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### Haldex Life Seal® Actuators Vocational Truck Applications

**L20567**  **Rev. 11/11**

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Innovative Vehicle Solutions

Haldex Brake Products Corporation
10930 North Pomona Avenue
Kansas City, MO 64153
Phone: 816-891-2470 / Fax: 816-891-9447

Haldex Limitée
500 Pinebush Road, Unit #1
Cambridge, ON Canada N1T 0A5
Phone: 519-621-6722 / Fax: 519-621-3924

www.haldex.com

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**Cost of Ownership**

Ordinary Life Seal® Spring Brake $85

Price for Replacement Unit $40

Replacement Costs $150

Add Line A + Line B $235

Number of Spring Brakes Per Vehicle 4

Number of times Spring Brakes will be replaced in an 11 year period 3

Total Cost $2280

Total Cost Savings, illustrated Life Seal® Total Cost (F) from Ordinary Total Cost (G)

Base replacement costs on 1/2 hour mechanic time, 1/2 hour down time and miscellaneous supplies.

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**Haldex Life Seal®**

**Actuators Vocational Truck Applications**

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**The Problem**

Ordinary spring brakes wear out too soon usually from corrosion and contamination.

Ordinary spring brakes have vent holes, some even have external breather tubes, many have missing caging tool plugs.

These ordinary spring brakes will usually perform adequately for one to three years in regular service (even less in vocational applications) but problems from water, dirt and road salt will lead to premature breakage of the power spring.

Broken power springs lead to unscheduled repair and replacement, costly downtime, roadside repairs and even unsafe or inadequate braking performance.

![Severe corrosion testing with salt and slurry](image)

**The Solution**

**Haldex Life Seal® Actuators**

The spring chamber is totally sealed so contaminants simply cannot get in!

- No vent holes
- No filters
- No caging tool plugs
- No external breather tubes
- 4-year warranty

Water, road salt and deicing chemicals that cause corrosion are the worst enemies for the highly stressed steel power spring. Protecting the spring from these corrosive agents is the reason Life Seal® Actuators last so long.

Haldex offers a four (4) year, unlimited mileage warranty on all vocational applications. Refer to Haldex Literature L20221 (found at www.haldex.com) for complete warranty policy details.

**Ordinary Spring Brake After Only 56 Days**

- **Parking Brake Application**
  - Air is exhausted from the parking side.
  - The integral caging tool and push rod maintain alignment as the main spring extends to apply the parking brake.

- **Parking Brake Applied**
  - Vehicle parked.
  - The spring chamber is totally sealed, contaminants are prevented from entering the spring chamber.

- **Parking Brake Retraction**
  - Air enters the parking side, compressing the main power spring. Air in the spring chamber is exhausted down the push rod tube, through an internal valve, and out the vehicle air service side system.

- **Parking Brake Retracted**
  - Vehicle under normal operation. Completely sealed spring chamber prevents road contaminants like water, salt and dirt from attacking the spring.

**Standard Competitor’s Spring Brake**

- **Ice & Snow**
- **Coil Clash**
- **Failed Inspection**
- **Sand**
- **Dust**
- **Oil**
- **Downtime**
- **One-year Warranty**
- **Maintenance Costs**

**How the Life Seal® Actuator works:**

- **Guided Spring & Coils**
- **Integral Caging Tool**
- **Reduced Costs**
- **Longer Spring Life**
- **Four-Year Warranty**
- **Lower Cost of Ownership**

**Haldex Life Seal® Actuators**

- **After 204 Days**
- **After 56 Days**

**4-Year Warranty**
Standard Competitor’s Spring Brake

The Problem

Ordinary spring brakes wear out too soon usually from corrosion and contamination

Ordinary spring brakes have vent holes, some even have external breather tubes, many have missing caging tool plugs.

These ordinary spring brakes will usually perform adequately for one to three years in regular service (even less in vocational applications) but problems from water, dirt and road salt will lead to premature breakage of the power spring.

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Severe corrosion testing with salt and slurry

How the Life Seal® Actuator works:

Ordinary Spring Brake After Only 56 Days

Haldex Life Seal® Actuators – not your ordinary spring brake.

The spring chamber is totally sealed so contaminants simply cannot get in!

- No vent holes
- No filters
- No caging tool plugs
- No external breather tubes
- 4 year warranty

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Severe corrosion testing with salt and slurry

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With welded clevis and 8 gauge stud housing
LC3030LHD ........................ Combination with neoprene diaphragm, 8 gauge stud housing, dust boot and forged clevis

* Available in 40 Packs using suffix P40

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### Cost of Ownership

**Ordinary Spring Brake**

- Price for Replacement Unit: $40
- Shop Replacement Costs: $150
- Sub-Total: $190
- Number of Spring Brakes Per Vehicle: 4
- Number of times Spring Brakes will be replaced in an 11 year period: 3
- Total Cost: $2280

**Life Seal® Spring Brake**

- Price for Replacement Unit: $85
- Shop Replacement Costs: $150
- Sub-Total: $235
- Number of Spring Brakes Per Vehicle: 4
- Number of times Spring Brakes will be replaced in an 11 year period: 1
- Total Cost: $940

**Sub-Total**

- Add Line A + Line B: $2280 + $235 = $2515

**Total Cost**

- Multiply Line C x D x E: $2515 x 3 x 4 = $30,180

**Total Cost Savings**

- Subtract Life Seal® Total Cost (F) from Ordinary Total Cost (F): $30,180 - $2515 = $27,665

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Haldex Life Seal®

Actuators Vocational Truck Applications

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