

AUTOMOTIVE & FURNITURE / 2026

The right part. A clearer quotation.

Vehicle references. Furniture mechanisms.
Dimensions, forces and connection details.



LIFT / HOLD / POSITION / ADJUST

**Real products.
Defined interfaces.**

AUTOMOTIVE

Cars / SUVs / pickups / vans

FURNITURE

Cabinets / beds / chairs / tables

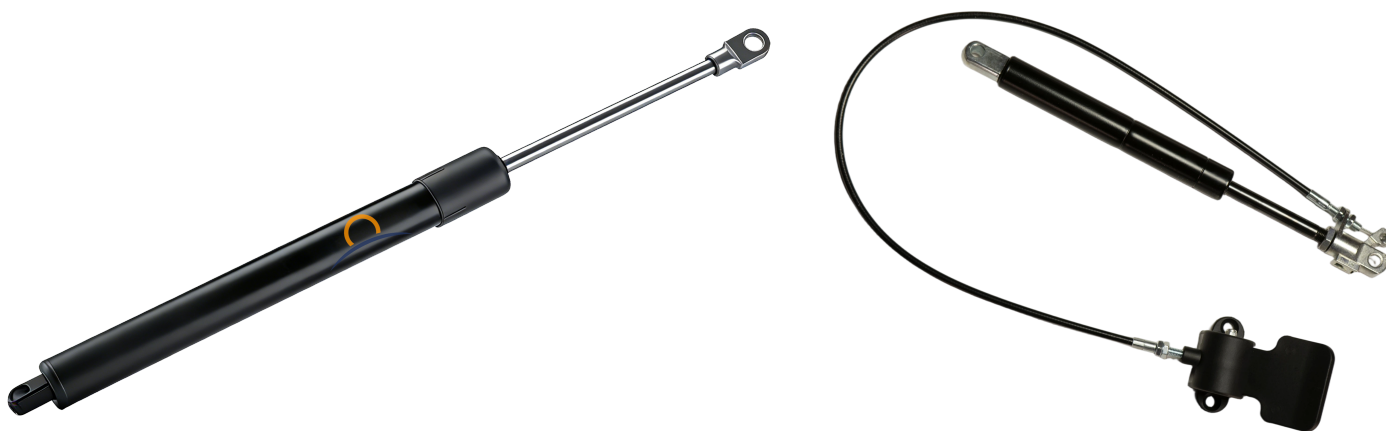
Send the reference. Add quantity. Request a quote.



PRODUCTS AT A GLANCE

Gas springs for the application.

Choose the operating function, then match the assembly.



Original product photographs. Color and exterior shape do not determine the internal function or material grade.

01 Compression gas springs

Lift assistance for hoods, tailgates, cabinet flaps, lids and covers.

02 Lockable gas springs

Release-controlled position adjustment. Match the control and locking behavior.

03 Stainless steel gas springs

Specify rod, tube and fitting materials for the exposure and cleaning conditions.

04 Traction gas springs

Pulling force toward retraction for mechanisms requiring tension assistance.

05 Chair gas lifts

Height adjustment for chairs and stools. Match taper interfaces, travel and release.

06 End fittings & brackets

Ball sockets, studs, eyes, clevis ends and brackets. Define both mounting ends.

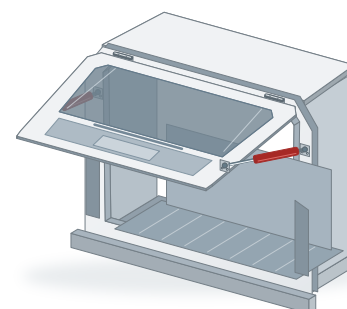
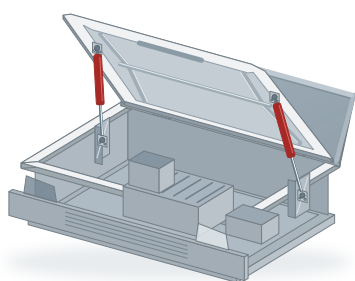
FIND YOUR REQUIREMENT

Vehicles 03-05 / Furniture 06-07 / Fittings 08 / Measurements 09 / Structure 10 / Contact 12

VEHICLE APPLICATIONS

Hood. Liftgate. Rear glass.

Representative applications with complete published part references.



HOOD / BODY-TO-PANEL

LIFTGATE / REAR BODY-TO-GATE

Vehicle	Model years	Installation position	StrongArm ref.
Toyota Camry	2012-2017	Hood	C6757
Toyota Camry	2007-2011	Hood	B6333
Toyota Avalon	2013-2018	Hood	C6757
Honda Accord	2003-2007	Hood	D4157
Honda CR-V	2007-2011	Liftgate	C6179
Honda CR-V	2012-2016	Hatch	C6665
Acura MDX	2007-2013	Hood	C6339
Acura MDX	2007-2013	Hatch	C6513
Jeep Cherokee	1997-2001	Liftgate	C4291
Jeep Grand Cherokee	1999-2004	Back Glass	E4528

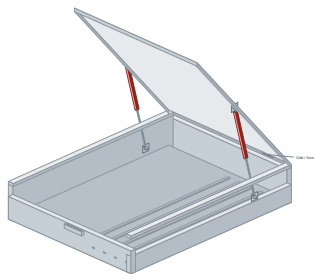
Source: StrongArm official 2023 application catalog, printed pp. 10, 30, 34, 51.

Illustrations explain the opening mechanism; they are not vehicle-specific installation drawings. More make/model searches are available on the website.

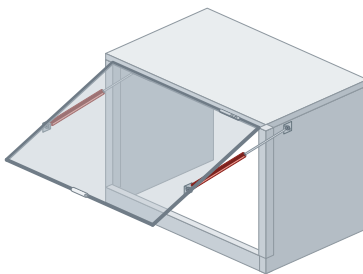
BEYOND THE PASSENGER CAR

Pickups. Vans. Cargo access.

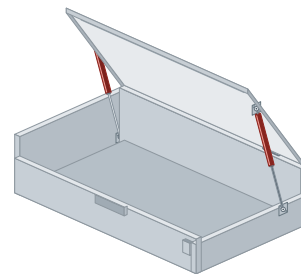
Vehicle-specific lift supports and separately identified cover or toolbox mechanisms.



HARD TONNEAU COVER



PICKUP-CAP REAR WINDOW



TOOLBOX / STORAGE LID

Vehicle	Model years	Installation position	StrongArm ref.
Ford F-150	2009-2014	Hood	E6484
Ford F-150	2005-2008	Hood	D4153
Ford F-150	2015-2020	Hood / Right	E6862
Dodge Ram 1500	2002-2008	Hood	D4364
Toyota Tundra	2015-2018	Hood	C7168
Toyota Tundra	2007-2013	Hood	B6655
Chevrolet Express 1500	2003-2014	Cargo Van Access Panel	C6900
GMC Savana 1500	2003-2014	Door / Rear	D6901
Ford Windstar	1999-2003	Liftgate	C4559
Chrysler Town & Country	2001-2007	Liftgate	C4535

Source: StrongArm official 2023 application catalog, printed pp. 21, 24, 25, 27, 29, 53.

For caps, tonneau covers, RV hatches and toolboxes, use the accessory brand and support marking. The truck model alone does not identify an aftermarket cover support.

SELECTED DIMENSIONAL REFERENCES

Read the number. Match the size.

Official StrongArm product-page values. Original inches and lbf are retained.

Reference	Extended in	Compressed in	Stroke in	Max. force lbf	Tube / rod mm
E6484	14.34	9.34	5.0	103	19 / 8
D4153	15.76	10.26	5.5	84	15 / 6
E6862	15.31	9.81	5.5	51	18 / 8
D4364	18.98	11.21	7.77	106	19 / 8
C6757	26.38	15.63	10.75	37	18 / 8
B6333	27.4	15.9	11.5	33	19 / 8
C6179	24.62	16.62	8.0	119	22 / 10
C6665	23.84	14.84	9.0	95	19 / 8
C6339	22.38	13.63	8.75	30	18 / 8
C4559	24.61	14.74	9.87	163	22 / 8

MEASURED LENGTHS AND THE FORCE LABEL MATTER

Extended and compressed lengths refer to the complete assembly. Preserve the end connections. The source label is **maximum force**, not a generic F1 rating or the supported panel weight.

1 inch = 25.4 mm | **1 lbf ≈ 4.44822 N**

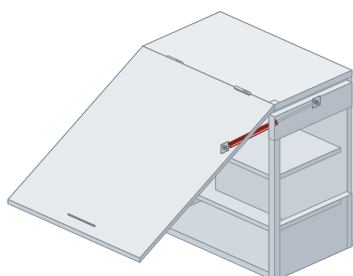
Official specification pages (click a reference):

[E6484](#)[D4153](#)[E6862](#)[D4364](#)[C6757](#)[B6333](#)[C6179](#)[C6665](#)[C6339](#)[C4559](#)

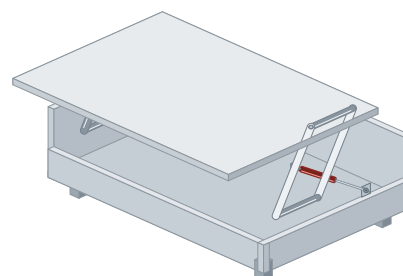
FURNITURE MECHANISMS

Cabinet flaps. Moving tabletops.

Match the mechanism first; a gas spring and a complete lifting column use different specifications.



UPWARD CABINET FLAP



LIFT-TOP TABLE CONCEPT

SUSPA CABINET-FLAP EXAMPLES

All three: extended 244 +/- 2 mm | maximum stroke 85 mm

Reference	Force N	Width mm	Height mm	Mass kg	Qty / flap
S01625512	50	600	351-400	2.5-2.8	2
S01625513	80	450	300-350	1.6-1.8	1
S01625514	100	600	501-550	3.5-3.9	2

Installation conditions: 18 mm MDF/chipboard, 90-degree source mounting arrangement, C9 rod-side and C7 tube-side attachments. Width, height, mass and quantity in each row form one example.

SUSPA Lifeline Furniture, PDF pp. 5-6: mounting arrangement and standard flap examples.

SUSPA 13652067

Pneumatic table column

Retracted / extended: 435 / 660 mm

Adjustment: 225 mm; lift force: 120 N

Tube diameters: 75 / 70 mm

These are complete-column values.

Häfele 643.12.201

Lift-top coffee-table mechanism

Installation width: 698 mm

Source load rating: 5 kg

32 mm system mounting holes

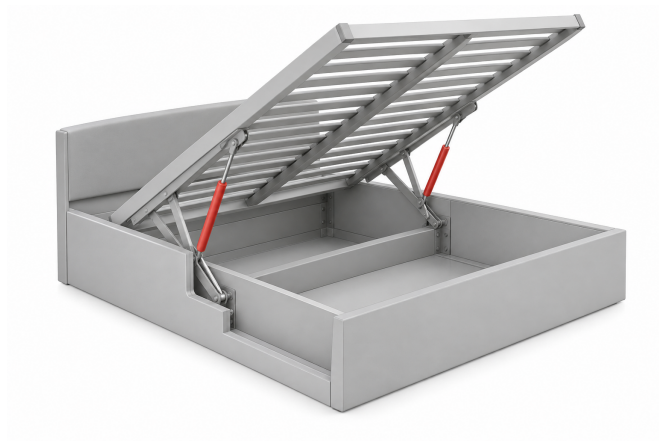
Values describe the complete mechanism.



LIFT. ADJUST. POSITION.

Bed mechanisms and chair columns.

Storage-bed lifts, foldaway beds and seat-height columns are separate product requirements.



STORAGE-BED LIFT CONCEPT



CHAIR HEIGHT-ADJUSTMENT CONCEPT

FOLDAWAY / WALL-BED EXAMPLE

Häfele 271.99.300

1300 N per gas spring

For lengthwise mechanism **271.95.203**

Quantity: **2 springs per fitting**

Source total bed mass: **70 kg**

Mass includes bed, mattress and bedding. Use the source mechanism and its required anti-tip securement.

Häfele UK, foldaway-bed selection table.

CHAIR GAS-LIFT COLUMN

Stabilus 086772

STAB-O-MAT complete column

Source length L: **395.5 mm**

Stroke: **132.5 mm**; F1: **350 N**

Standpipe B: **220 mm**

Taper position C: **94 mm**

Match both chair taper interfaces and release. F1 is extension force, not occupant capacity.

Stabilus standard program, chair column table.

Storage furniture: bed bases, ottomans and storage benches use lifting linkages matched to their lid or frame. **Seating:** chair-height adjustment, reclining and position locking need the correct release and mounting system.



END FITTINGS & BRACKETS

Choose the connection.

Use the illustration ID when discussing a shape. Confirm the thread, hole/ball size, width and mounting offset.

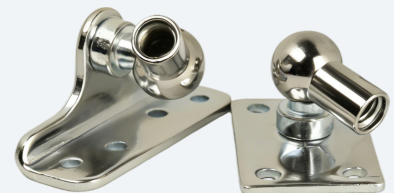
**01** Bracket + ball joint**02** Bracket + ball joint**03** Ball socket + stud**04** Clevis ends**05** Clevis ends**06** Eye ends**07** Bearing eyes**08** Threaded clevis ends**09** Threaded eye ends**10** Bracket-mounted fitting**11** Pivoting brackets**12** Angle brackets**13** Pivoting brackets**14** Ball sockets**15** Bracket + ball joint

Illustration IDs 01-15 are catalog references, not ordering part numbers. Match both ends independently; finishes in photos do not establish material grade.



SPECIFY THE ASSEMBLY

Measure the same mounting points.

Include both end fittings and use the same references in both positions.

01 / MEASUREMENT

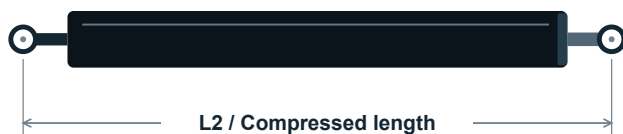
Extended and compressed length

MOUNTING CENTER TO MOUNTING CENTER

FULLY EXTENDED



FULLY COMPRESSED



STROKE

$$S = L1 - L2$$

Use the same mounting references in both positions.

Schematic. The short rod neck and end-fitting geometry depend on the actual assembly.

HORIZON REFERENCE COMBINATIONS

Reference length mm	Stroke mm	Reference force N	Tube / rod mm
200	60	100-500	15/6 or 18/8
250	85	50-600	15/6 or 18/8
280	100	90-1000	18/8 or 22/10
300	110	100-1200	18/8 or 22/10
400	160	150-600	18/8 or 22/10
500	200	200-700	18/8 or 22/10
600	260	400-900	22/10 or 25/12

The original reference table does not define the length datum. Confirm assembled length, end fittings and the agreed drawing for the quoted item. Reference sizes do not establish stock availability.



TECHNICAL OVERVIEW

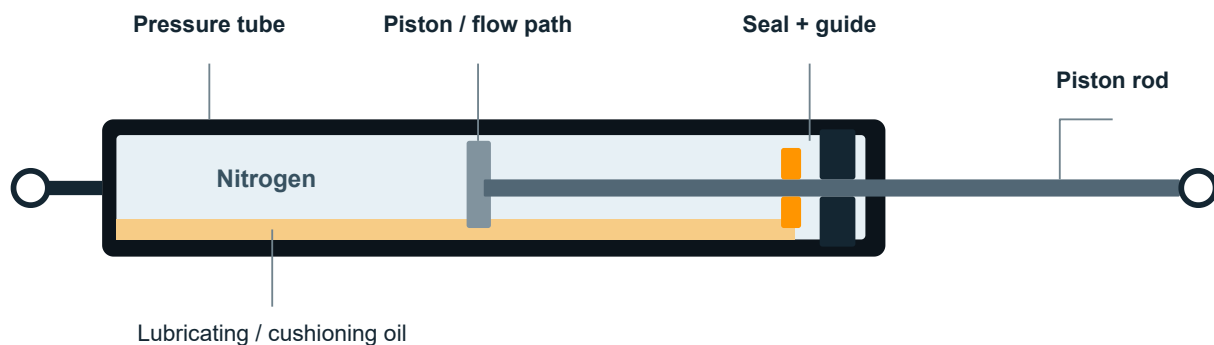
Inside the movement.

A conventional compression gas spring, shown as an educational concept.

02 / COMPONENTS

Inside a compression gas spring

SIMPLIFIED SECTION / NOT TO SCALE

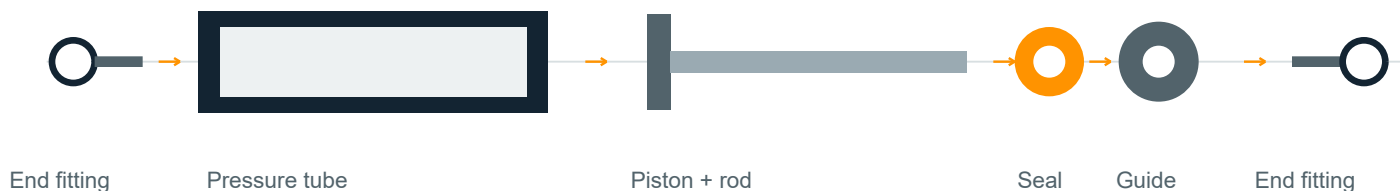
**Pressure provides outward force.**

The piston flow path, seal and guide determine how movement is controlled.

Internal details vary by design. This is not a product-specific assembly drawing.

Pressurized component: do not open, puncture or heat.

EXPLODED COMPONENT CONCEPT

**Concept, not a production drawing.**

The actual piston, valve, seal and oil arrangement varies by design. This diagram is not a disassembly or service instruction.



CONTROLS & INTERFACES

Details that define the assembly.

Identify the release control, both ends and the required behavior before matching a unit.



LOCKABLE ASSEMBLY

**Release.
Adjust.
Hold.**

Cable-operated release shown. Confirm control travel, connection and locking behavior.



Release pin / thread / nut
Match the control interface and access.



Mounting interface
Match hole, width, thread and center position.



Articulating connection
Match ball/socket and retention arrangement.

Extension force and locking load are separate specifications. Identify elastic or rigid locking and the required load direction.

FROM IDENTIFICATION TO SHIPMENT

Specify. Verify. Pack. Quote.

Agree the item, inspection requirements and packaging with your quotation.



Inspection requirements

Identify force, length, stroke and the agreed checking method.



Product protection & packing

Match labels, individual protection, carton quantity and destination.

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www.horizongasspring.com

Tianjin Horizon Machinery Trading Co., Ltd.

01 Reference + quantity

Complete part / OE number; quantity per item.

02 Application

Vehicle + year + position, or furniture mechanism.

03 Dimensions + force

Length, stroke and force marking with units.

04 Both ends

Photos plus thread, ball/hole size and width.

Multiple items? One spreadsheet, one row per part. Add delivery destination and label each photo or drawing with the same reference.

Third-party names and numbers identify published references, not Horizon stock codes, brand authorization or guaranteed interchangeability. Confirm the quoted supply specification before ordering.