

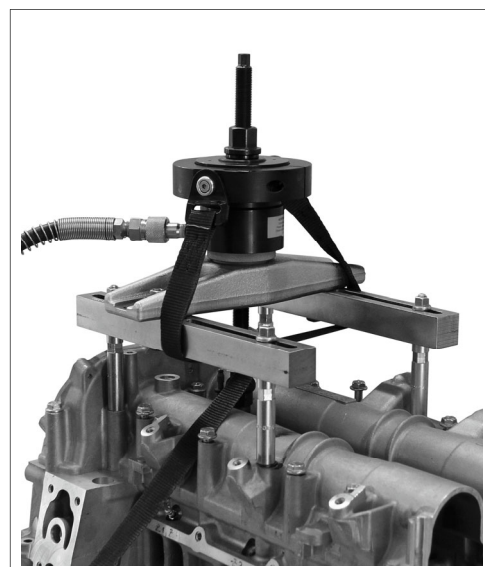
GEDORE

TOOLS FOR LIFE

Hydraulic Cylinder, 17t (short design) with Shoulder Nut and Safety Belt



KL-0040-170 A



0040-170A_EN220409

GEDORE Automotive GmbH

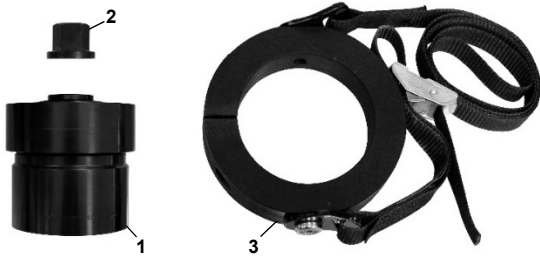
Breslauer Straße 41
78166 Donaueschingen

Postfach 1329
78154 Donaueschingen - GERMANY

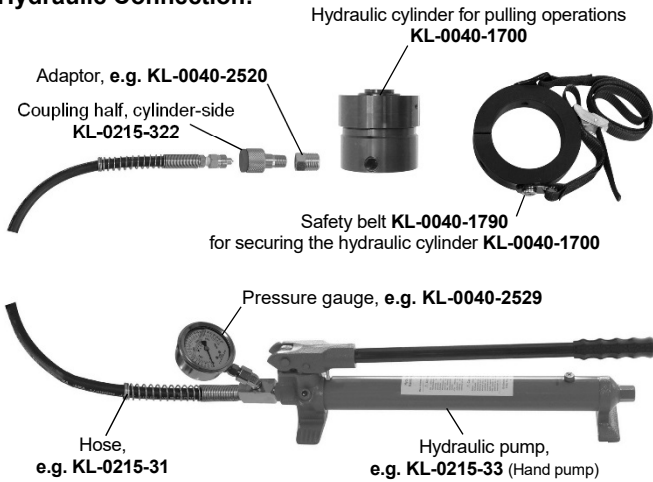
Phone: +49 (0) 771 / 8 32 23-0
Fax: +49 (0) 771 / 8 32 23-90

Email: info@gedore-automotive.com
Internet: www.gedore-automotive.com

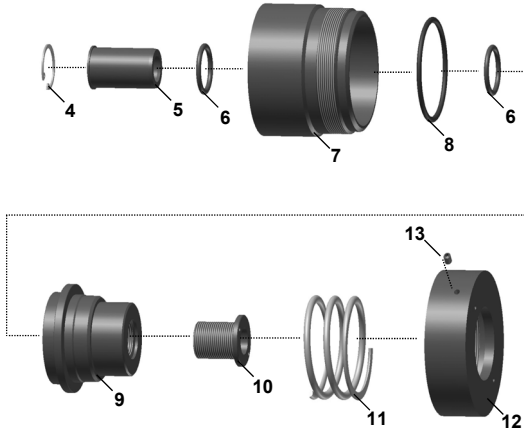
KL-0040-170 A



Hydraulic Connection:



Spare Parts/Exploded View of KL-0040-1700 Hydraulic Cylinder



Warnings and Notes

- Observe maximum load capacity of the hydraulic cylinder!
- Use hydraulic pump with pressure gauge **KL-0040-2529**.
- Secure hydraulic cylinder with the **KL-0040-1790** safety belt. (See examples of use)
- When using the **KL-0186-122** support bars, it is essential to secure the hydraulic cylinder with the **KL-0040-1790** safety belt via the engine! (See examples of use)
- When working with hydraulic tools, specific safety precautions need to be taken and observed.
- Any work on vehicles/engines should only be performed by qualified specialist personnel observing and complying with the directions, provisions, and safety regulations specified by the vehicle manufacturer.
- Always refer to the vehicle manufacturer's data and instructions as only these apply to all work that is carried out on the vehicle.
- Only use genuine spare parts from GEDORE Automotive.
- Always keep all parts of your body away from the axial extension of the hydraulic cylinder.
- Before use, lubricate spindle with molybdenum disulphide paste **KL-0014-0030**.

KL-0040-170 A - Hydraulic Cylinder, 17t (short design) with Shoulder Nut and Safety Belt

Designed for the controlled extraction of very tight-fitting/seized injector nozzles. The tool is used in conjunction with a special pull spindle, a **GEDORE Automotive** injector nozzle puller with extraction bridge, and a **GEDORE Automotive** hydraulic pump with pressure gauge.

The **KL-0040-1700** hydraulic cylinder along with the special pull spindle (part no. ending with H) is placed onto the extraction bridge instead of the mechanical drive. The special pressure gauge **KL-0040-2529** or **KL-0040-2528** of the hydraulic pump **KL-0215-35 M25** or **KL-0215-37 M25** allows the applied force to be monitored during the extraction process.

By fastening the **KL-0040-1790** safety belt (supplied with the kit) to the vehicle and to the hydraulic cylinder **KL-0040-1700**, the latter is prevented from falling.

Note:

A hydraulic hand pump such as the **KL-0215-35 M25** or **KL-0215-37 M25** is required to drive the hydraulic cylinder **KL-0040-170 A**.

The injector nozzle pullers **KL-0369-46 K** and **KL-1383-10 KA** additionally require the use of spacer ring **KL-0040-1751**.

Technical Data

Maximum admissible force:	170 kN (17t)
Maximum oil volume:	41cm ³
Maximum oil pressure:	700bar
Piston area:	27cm ²
Maximum stroke:	15mm
Oil connection:	3/8"-18 NPT
Through bore in tubular piston:	Ø 16.5mm
Cylinder overall height (piston retracted):	89mm
Cylinder overall height (piston extended):	104mm
Cylinder outer diameter	79mm
Weight:	2.7kg

Scope of Delivery

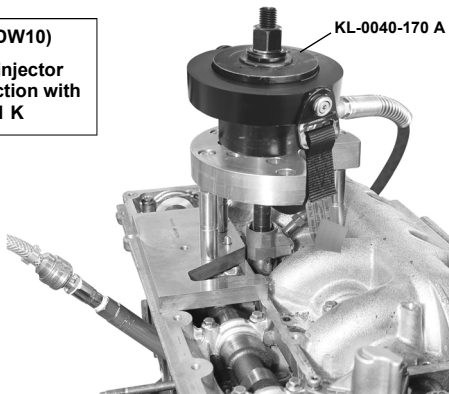
Pos.	Part No.	Description	Qty
-	KL-0040-170 A	Hydraulic Cylinder, 17t (short design) with Shoulder Nut and Safety Belt	1
<i>composed of:</i>			
1	KL-0040-1700	Hydraulic Cylinder, 17t (short design)	1
2	KL-0040-1741-2	Shoulder Nut, M16x1.5	1
3	KL-0040-1790	Safety Belt	1

Pos.	Part No.	Description	Qty
-	KL-0040-1700	Hydraulic Cylinder (17t)	1
<i>composed of:</i>			
4	KL-0040-2209	Circlip I26	1
5	KL-0040-1703	Inner Tube	1
6	KL-0040-2207	Sealing Ring, Ø 24mm	2
7	KL-0040-1701	Housing	1
8	KL-0040-2507	Sealing Ring, Ø 65mm	1
9	KL-0040-1702	Piston	1
10	KL-0040-2216	Threaded Sleeve (short), Ø 16.5mm	1
11	KL-0040-1705	Pressure Spring	1
12	KL-0040-1704	Threaded Ring	1
13	KL-0040-2214	Set Screw, M5x6mm	1

Examples of use:

Peugeot 2.0 (DW10)

Extracting the injector nozzle in conjunction with KL-1383-11 K

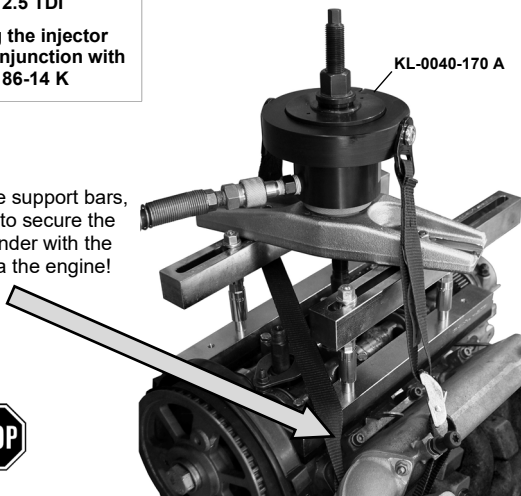


Audi 2.5 TDI

Extracting the injector nozzle in conjunction with KL-0186-14 K



When using the support bars, it is essential to secure the hydraulic cylinder with the safety belt via the engine!



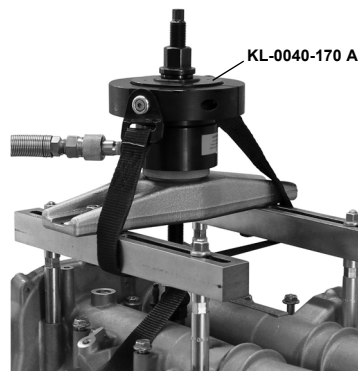
Peugeot 2.2 (DW12)

Extracting the injector nozzle in conjunction with KL-1383-11 K



Iveco 3.0 JTD

Extracting the injector nozzle in conjunction with KL-0186-14 K



Important Note:

It is imperative that the KL-0040-1700 hydraulic cylinder is always secured against falling/being ejected by means of the KL-0040-1790 safety belt.

Examples of Use:

When using the hydraulic cylinder with a GEDORE Automotive injector nozzle puller (e.g. KL-0186-xx, KL-0583-10 KA, KL-1283-11 K, KL-1383-11 K or KL-1383-14 K), the following pull spindles are necessary:

Note: Each of the pull spindles has a maximum load capacity of 13t.

Accessory:

KL-1383-1113 H - Pull Spindle, M14x1.5 (not shown)

Suitable for injector nozzles with an M14x1.5 external thread.

Connection thread M14x1.5

Length: 240mm

KL-0583-1032 H - Pull Spindle, M14x1.5 (not shown)

Suitable for injector nozzles with an M14x1.5 external thread.

Connection thread M14x1.5

Length: 315mm

KL-0369-4606 H - Pull Spindle, M17x1 (not shown)

Suitable for injector nozzles with an M17x1 internal thread.

Connection thread M17x1

Length: 240mm

KL-0583-1005 H - Pull Spindle, M17x1 (not shown)

Suitable for injector nozzles with an M17x1 internal thread.

Connection thread M17x1

Length: 315mm

KL-0186-1711 H - Pull Spindle, M18 (not shown)

Suitable for the injector nozzle puller set KL-0186-17 K.

Connection thread M18

Length: 250mm

KL-0186-1611 H - Pull Spindle, M20x1 (not shown)

Suitable for injector nozzles with an M20x1 internal thread/injector nozzle puller set KL-0186-161 K.

Connection thread M20x1

Length: 250mm

KL-0186-1611 HA - Pull Spindle, M20x1

with 2 M25 Union Nuts (not shown)

Suitable for injector nozzles with an M20x1 internal thread/injector nozzle puller sets KL-0186-161 KA and KL-0186-22 K.

Connection thread M20x1

Union nut 1: M25x0.5

Union nut 2: M25x0.75

Length: 250mm

KL-1383-1021 H - Pull Spindle, M25x1 (not shown)

Suitable for injector nozzles with an M25x1 internal thread.

Connection thread M25x1

Length: 240mm

KL-1383-1221 H - Pull Spindle, M27x1 (not shown)

Suitable for injector nozzles with an M27x1 internal thread.

Connection thread M27x1

Length: 240mm

KL-0040-1751 - Spacer Ring (not shown)

The ring is necessary when the injector nozzle puller KL-0369-46 K or KL-1383-10 KA is to be used.

Accessories:

KL-0215-35 M25 - Hydraulic Hand Pump



Note: You will find more hydraulic pumps in our GEDORE Automotive Main Catalogue.

KL-0215-37 M25 - Hydraulic Foot Pump



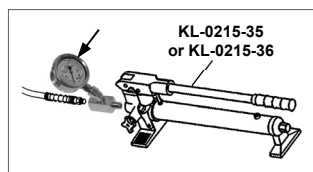
Accessory: Thread Adaptor for Hydraulic Cylinder



Accessory: Hydraulic Couplings



Accessory: Pressure Gauge



Accessories:

KL-0215-35 M25 - Hydraulic Hand Pump

The hydraulic hand pump **KL-0215-35 M25** is used to operate the **KL-0040-1700** hydraulic cylinder.

Note:

The hydraulic pressure and necessary force can be monitored while operating the pump at pressure gauge **KL-0040-2529** (supplied with the tool set). The pressure gauge features a tonne scale which is precisely adapted to our **KL-0040-1700** hydraulic cylinder (17t).

Scope of Delivery: (KL-0215-35 M25)

Part No.	Description	Qty
KL-0215-35 M25	Hydraulic Hand Pump	1
<i>composed of:</i>		
KL-0215-33	Hydraulic Hand Pump (without hose)	1
KL-0215-31	Hydraulic Hose, 1.8m, with hose-side coupling	1
KL-0215-322	Cylinder-side coupling, 1/4"NPT	1
KL-0040-2520	Adaptor 3/8"NPT to 1/4"NPT	1
KL-0040-2529	Pressure Gauge	1

Weight: 7.5kg
Maximum pressure: 700bar

Thread Adaptors

If an already existing hydraulic pump is used as a drive for the **KL-0040-1700** hydraulic cylinder, it is important that this hydraulic pump is fitted with a hose or coupling having a 3/8" NPT connection. If the pump (with hose and coupling) has a different connection size, a thread adaptor will be needed. (See table below).

Part No.	Description
KL-0040-2520	Adaptor 3/8"NPT to 1/4"NPT (e.g. GEDORE AUTOMOTIVE, Longus, Rodcraft)
KL-0040-2521	Adaptor 3/8"NPT to M16x1.5 (e.g. Matra)
KL-0040-2522	Adapter 3/8"NPT to M18x1.5 (e.g. Weber)
KL-0040-2523	Adapter 3/8"NPT to G1/4" (e.g. Nike)
Note: The hydraulic cylinders from von Blackhawk, Car Bench, Celette, Enerpac, OTC and Yale are equipped with 3/8"NPT connections.	

Couplings

(for KL-0215-35, -36 and -37)

Part No.	Description
KL-0215-321	Hose-side coupling, 1/4"NPT
KL-0215-322	Cylinder-side coupling, 1/4"NPT

KL-0040-2529 - Pressure Gauge

The pressure gauge is screw-fitted between hydraulic pump and hydraulic hose so as to allow the hydraulic pressure to be monitored during operation.

The pressure gauge features an additional ton scale that is specifically adapted to our **KL-0040-1700** hydraulic cylinder.

(e.g. for **KL-0215-35**)

Measuring range	1000bar
Pressure gauge Ø	71mm
Connection thread	1/4" NPT

KL-0040-2528 - Pressure Gauge

Like the **KL-0040-2529**, but with connection thread 3/8" NPT.
(e.g. for **KL-0215-37**)