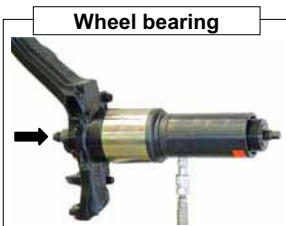
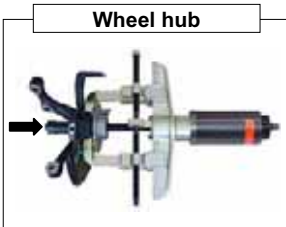
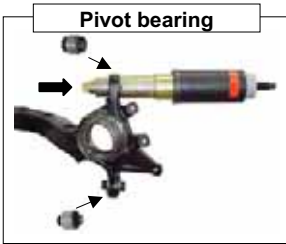
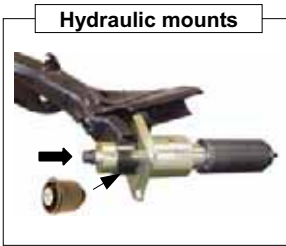
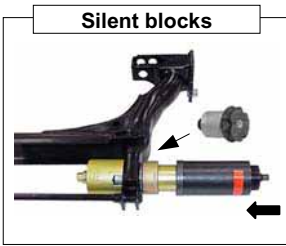


Range of applications:



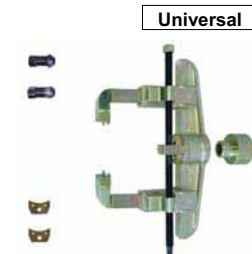
The modular system

Universal application of KLANN Hydraulic Cylinder with Pulling side

Bush Extractors



Wheel hub extractor



Wheel bearing tool sets



The Hydraulic Cylinder KL-0040-2500 is applicable for Pulling and Pressing

An hydraulic pump is required to operate the Hydraulic Cylinder KL-0040-2500. (see page 4-08)

e.g. KL-0215-35 M25

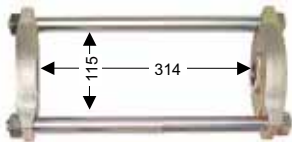


e.g. KL-0215-36 M25



The modular system

Universal application of KLANN Hydraulic Cylinder with *Pressing Side*



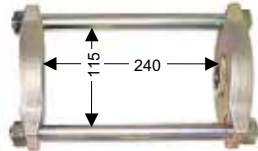
Press/Support tube sets (long)

e.g. VW-Audi



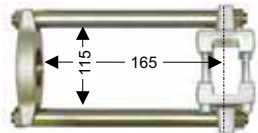
Press/Support tube sets (short)

e.g. BMW



Supplement sets

e.g. VW Polo



e.g. VW T4



Sleeve sets

e.g. Mercedes



Puller sets

KL-0174-Series



Range of applications:

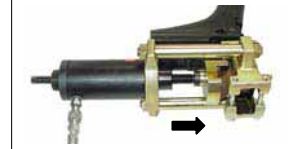
Bushes



Ball Joint



Bushes



VW Ball Joints



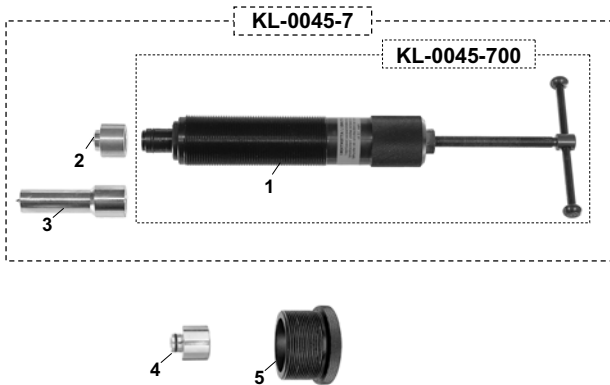
Mercedes Ball Joints



Drive Shafts

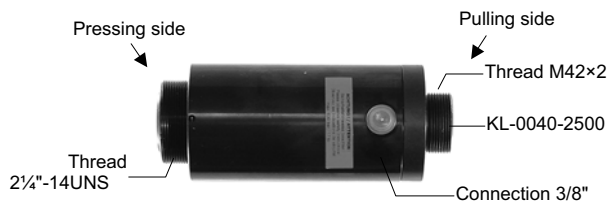


KL-0045-70



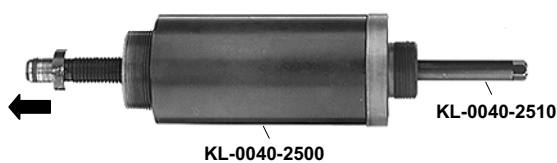
Pos.	Part No.	Description
	KL-0045-70	Hydraulic Spindle
	<i>consists of:</i>	
1	KL-0045-700	Hydraulic Spindle Basic Tool
2	KL-0045-7009	Press Tool short (Length 10 mm)
3	KL-0045-7020	Press Tool long (Length 70 mm)
4	KL-0043-8206	Adaptor for Hydraulic Spindle Piston
5	KL-0174-552	Adaptor 2 1/4"-14UNS to M42x2

KL-0040-2500



Note: A hydraulic pump will be required to drive the Hydraulic Cylinder KL-0040-2500.

KL-0215-10



KL-0040-25



KL-0045-70 Hydraulic Spindle 12 t

The **KL-0045-70** is a hydraulic spindle with a 120 kN (12 t) capacity designed to fit a range of KLANN tool systems.

The tool consists of a machined, case hardened, threaded steel body with a pressure tip at one end which is fitted with a O-ring.

Technical Data:

Maximum force	120 kN (12 t)	Length without 'T' Handle	240 mm
Maximum stroke	16 mm	Weight	2,3 kg
Thread of Cylinder	M42x2		

KL-0045-700 Hydraulic Spindle 12 t M42x2

Tool Body without Press Tool and Adaptor

KL-0174-552 Adaptor 2 1/4"-14 UNS to M42x2

Required when using **KL-0174 Series** Puller Discs or the Klann Press Frame series KL-0043-82 / 85, etc.

KL-0043-8206 Adaptor for Hydraulic Spindle Piston

Adaptor for mounting the Press/Support Tools onto the Hydr. Spindle.

KL-0045-7009 Press Piece short

e.g. for extraction of Hubs in conjunction with Puller Discs series **KL-0174-...**

KL-0045-7020 Press Piece long

e.g. for extraction of Hubs in conjunction with Puller Discs series **KL-0174-...**

KL-0040-2500 Hydraulic Cylinder 17 t

Due to it's special design, the Hydraulic Cylinder **KL-0040-2500** may be used to perform pulling or pressing functions according to the type of Spindle chosen as an accessory.

Applications:

The **KL-0040-2500** Hydraulic Cylinder may be used in conjunction with other KLANN tools to remove and replace Drive-Shafts, Hubs, Wheel Bearings, Bushes and Ball Joints.

Technical Data:

Maximum force:	170 kN (17 t)
Maximum stroke:	45 mm
Maximum Volume of Oil:	122 cm ³
Piston Area:	27 cm ²
Piston Thread:	M20
Retaining Thread Pressure Side:	2 1/4"-14 UNS
Retaining Thread Puller Side:	M42x2
Cylinder Outer Diameter:	80 mm
Overall Length Retracted:	202 mm
Overall Length Extended:	247 mm
Hydraulic Fluid Connection:	3/8"NPT
Weight:	5,2 kg

KL-0215-10 Hydraulic Cylinder with Pressure Spindle

consists of:

Part No.	Description
KL-0040-2500	Hydraulic Cylinder (17 t) without spindle
KL-0040-2510	Pressure Spindle, length 350 mm

KL-0040-25 Hydraulic Cylinder with Pulling Spindle

For use with the KLANN wheel-bearing tool or the wheel-hub puller **KL-0330**.

consists of:

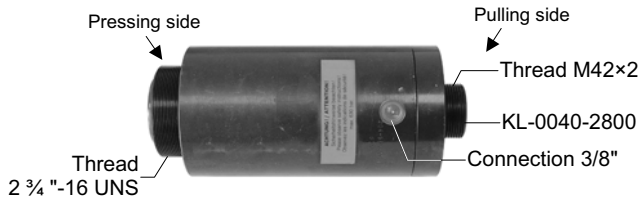
Part No.	Description
KL-0040-2500	Hydraulic Cylinder (17 t) without spindle
KL-0040-2512	Pulling Spindle, length 435 mm

KL-0040-2200



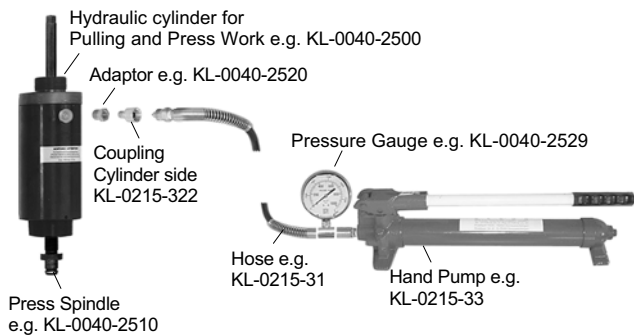
Note: A hydraulic pump will be required to drive the hydraulic cylinder KL-0040-2200.

KL-0040-2800



Note: A hydraulic pump will be required to drive the hydraulic cylinder KL-0040-2800.

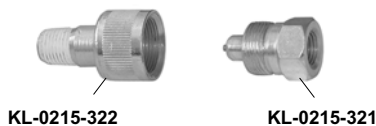
Hydraulic drive:



Hydraulic Adaptors for Hydraulic Cylinder



Hydraulic Connectors



KL-0040-2561



Adaptor



KL-0040-2200 Hydraulic Cylinder 10 t

Due to its special design, the Hydraulic Cylinder **KL-0040-2200** may be used to perform pulling or pressing functions according to the type of Spindle chosen as an accessory.

Technical Data:

Maximum force:	105,8 kN (10 t)
Maximum stroke:	45 mm
Maximum Volume of Oil:	75,91 cm ³
Piston Area:	15,11 cm ²
Piston Thread:	M16/Ø 16,5
Retaining Thread Pressure Side:	2 1/4"-14 UNS
Retaining Thread Puller Side:	M42x2
Cylinder Outer Diameter:	69 mm
Overall Length Retracted:	217,5 mm
Overall Length Extended:	262,5 mm
Hydraulic Fluid Connection:	3/8"NPT
Weight:	4,65 kg

KL-0040-2800 Hydraulic Cylinder 28 t

Due to its special design, the Hydraulic Cylinder **KL-0040-2800** may be used to perform pulling or pressing functions according to the type of Spindle chosen as an accessory.

Technical Data:

Maximum force:	285 kN (28 t)
Maximum stroke:	50 mm
Maximum Volume of Oil:	216,3 cm ³
Piston Area:	40,6 cm ²
Piston Thread:	M24
Retaining Thread Pressure Side:	2 3/4"-16 UNS
Retaining Thread Puller Side:	M42x2
Cylinder Outer Diameter:	99 mm
Overall Length Retracted:	235 mm
Overall Length Extended:	285 mm
Hydraulic Fluid Connection:	3/8"NPT
Weight:	9,6 kg

Hydraulic Accessory - Adaptors

If an existing Hydraulic Pump is to be used to power Hydraulic Cylinder **KL-0040-2500**, it should be noted that Hydraulic Cylinder **KL-0040-2500** is supplied with 3/8"NPT Connector coupling. It is likely that an adaptor will be required to connect the existing Pump to Hydraulic Cylinder **KL-0040-2500** (see Table below).

Part No:	Description
KL-0040-2520	Adaptor 3/8"NPT to 1/4"NPT (eg. KLANN, Longus, Rodcraft)
KL-0040-2521	Adaptor 3/8" NPT to M16x1.5 (eg. Matra)
KL-0040-2522	Adaptor 3/8" NPT to M18x1.5 (eg. Weber)
KL-0040-2523	Adaptor 3/8" NPT to G1/4" (eg. Nike)

Note: Hydraulic Cylinders from Blackhawk, Car Bench, Celette, Enerpac, OTC and Yale have 3/8"NPT-couplings

Hydraulic Accessory - Couplings

Part No:	Description
KL-0215-321	Coupling Hose side 1/4" NPT
KL-0215-322	Coupling Cylinder side 1/4" NPT

Press Piece

KL-0040-2561 Press Piece

Suitable for the **KL-0040-2510** Spindle used in conjunction with the **KL-0040-2500** Hydraulic Cylinder to press out Loctited Drive-Shafts.

Adaptor

KL-0040-2552 M42x2 to Ø30 mm

Required if the various Press/Support Tools of the KLANN **KL-0043-82** and **KL-0043-85** Press Tools are to be used.

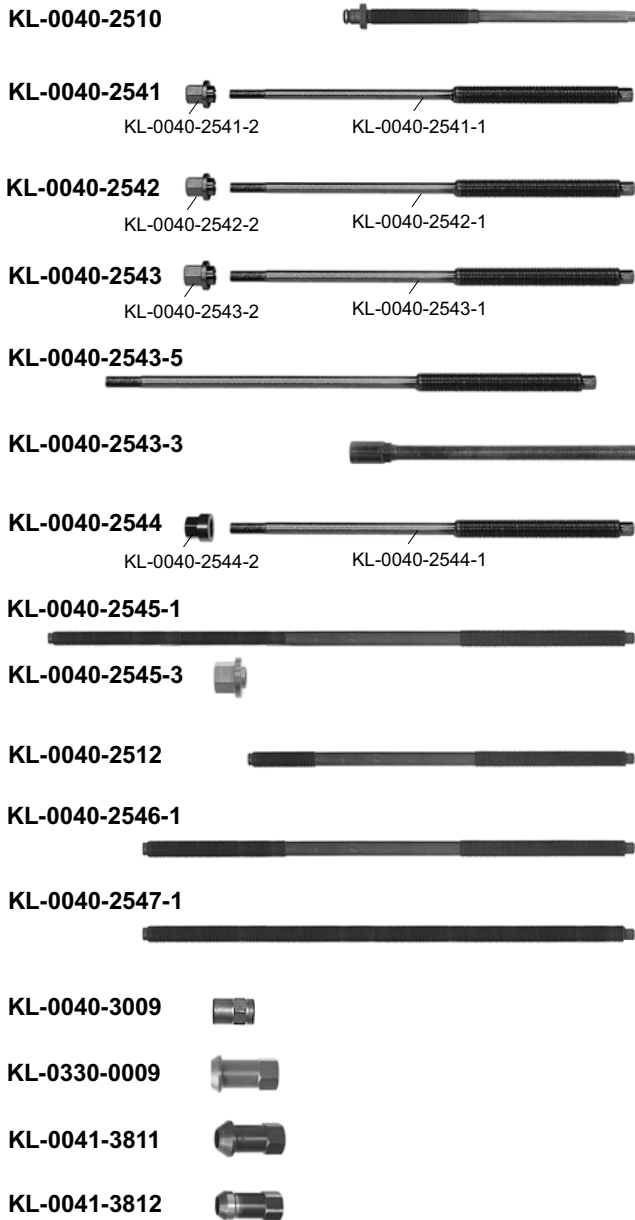
KL-0040-2551 M42x2 to Ø30 mm

Required if the various Pressure Discs of the KLANN **KL-0040-...** Series Wheel Bearing Tool are to be used.

KL-0174-559 Adaptor 2 1/4"-14UNS to 2 1/4"-14UNS

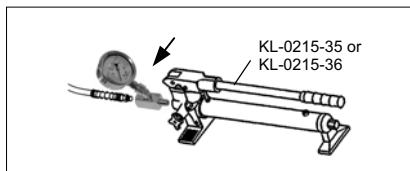
Required for the use of Hydraulic Cylinders **KL-0215-10** and **KL-0040-25** in conjunction with Puller Discs size 1 and 2 with PCD Ø of 90 - 102 mm.

Spindles and nuts



Note: For further spindles and nuts of the KL-0039-..Series see page 4-11.

KL-0040-2529



KL-0040-2590



Accessories for KL-0040-2500 Hydr. Cylinder (17t.)

Spindles and Nuts

- KL-0040-2510 Press Spindle**
Length:..... 350mm Load max 20 t.
- KL-0040-2541 Pull Spindle M10x1,25, with Nut**
Length:..... 470mm Load max 5 t
consists of:
KL-0040-2541-1 - Pull Spindle M10x1,25
KL-0040-2541-2 - Nut M10x1,25
- KL-0040-2542 Pull Spindle M12, with Nut**
Length:..... 470mm Load max 7 t
consists of:
KL-0040-2542-1 - Pull Spindle M12
KL-0040-2542-2 - Nut M12
- KL-0040-2543 Pull Spindle M14, with Nut**
Length:..... 470mm Load max 9 t
consists of:
KL-0040-2543-1 - Pull Spindle M14
KL-0040-2543-2 - Nut M14
- KL-0040-2543-5 Pull Spindle M14**
Length:..... 550mm Load max 9 t
- KL-0040-2543-3 Pull Spindle extension M14**
Length:..... 345mm Load max 9 t
- KL-0040-2544 Pull Spindle M16, with Nut**
Length:..... 470mm Load max 13 t
consists of:
KL-0040-2544-1 - Pull Spindle M16
KL-0040-2544-2 - Nut M16
- KL-0040-2545-1 Pull Spindle M18**
Length:..... 650mm Load max 16 t
- KL-0040-2545-3 Nut M18**
- KL-0040-2512 Pull Spindle M20**
Length:..... 465mm Load max 20 t
- KL-0040-2546-1 Pull Spindle M20**
Length:..... 550mm Load max 20 t
- KL-0040-2547-1 Pull Spindle M20**
Length:..... 550mm Load max 20 t
- KL-0040-3009 Hex Nut M20**
KL-0330-0009 Tension Nut (for Wheel Hubs) M20
KL-0041-3811 Hex Nut Ø 38 mm
KL-0041-3812 Hex Nut Ø 30 mm

KL-0040-2529 Pressure Gauge

The Pressure Gauge can be connected between the Hydraulic Pump and the Hose so that the hydraulic pressure can be controlled during operation.

The pressure gauge is fitted with an additional tonne scale, which was made to suit our Hydraulic Cylinder **KL-0040-2500**.

Technical Data:

Measuring Range	1000 bar
Manometer Ø mm	71 mm
Connection thread	1/4" NPT

KL-0040-2528 Pressure Gauge (not ill.)

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

KL-0040-2590 Safety belt

By using the safety belt **KL-0040-2590** on the vehicle and on the Hydraulic Cylinder **KL-0040-2500**, the latter is prevented from falling off.

Spindles and nuts

KL-0040-2241



KL-0040-2242



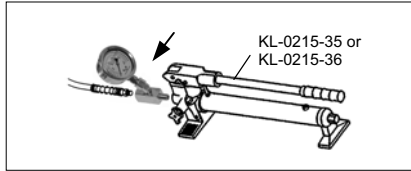
KL-0039-1916-2

KL-0040-2242-1

KL-0040-2229



1/4"



KL-0215-35 or
KL-0215-36

KL-0040-2290



Spindles and Nuts

KL-0040-2810



KL-0040-2812



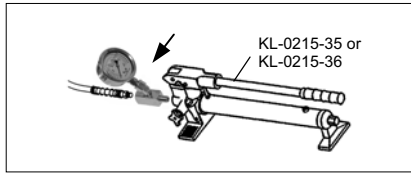
KL-0040-2812-2

KL-0040-2812-1

KL-0040-2829



1/4"



KL-0215-35 or
KL-0215-36

KL-0040-2890



Accessories for

KL-0040-2200 Hydraulic-Cylinder (10 t.)

Spindles

KL-0040-2241 Press Spindle

Length: 350 mm

Load _{max.} 13 t.

KL-0040-2242 Pull Spindle M16 x 590 with nut

Length: 590 mm

Load _{max.} 13 t

consists of:

KL-0040-2242-1 - Pull spindle M16 x 590

KL-0039-1916-2 - Nut M16

KL-0040-2229 Pressure Gauge

The Pressure Gauge can be connected between the Hydraulic Pump and the Hose so that the hydraulic pressure can be controlled during operation

The pressure gauge is fitted with an additional tonne scale, which was made to suit our Hydraulic Cylinder **KL-0040-2200**.

Technical Data:

Measuring Range	1000 bar
Manometer Ø mm	71 mm
Connection thread	1/4" NPT

KL-0040-2228 Pressure Gauge (not ill.)

As **KL-0040-2229** but with connector thread 3/8" NPT.

(e.g. für KL-0215-37)

KL-0040-2290 Safety belt

By using the safety belt **KL-0040-2290** on the vehicle and on the Hydraulic Cylinder **KL-0040-2200**, the latter is prevented from falling off.

Accessories for

KL-0040-2800 Hydraulic-Cylinder (28 t.)

Spindles

KL-0040-2810 Press Spindle

Length: 405 mm

Load _{max.} 28 t.

KL-0040-2812 Pull Spindle M24 x 590 with nut

Length: 590 mm

Load _{max.} 28 t

consists of:

KL-0040-2812-1 - Pull spindle M24 x 590

KL-0040-2812-2 - Actuating nut Ø42, M24

KL-0040-2829 Pressure Gauge

The Pressure Gauge can be connected between the Hydraulic Pump and the Hose so that the hydraulic pressure can be controlled during operation

The pressure gauge is fitted with an additional tonne scale, which was made to suit our Hydraulic Cylinder **KL-0040-2800**.

Technical Data:

Measuring Range	1000 bar
Manometer Ø mm	71 mm
Connection thread	1/4" NPT

KL-0040-2828 Pressure Gauge (not ill.)

As **KL-0040-2829** but with connector thread 3/8" NPT.

(e.g. für KL-0215-37)

KL-0040-2890 Safety belt

By using the safety belt **KL-0040-2890** on the vehicle and on the Hydraulic Cylinder **KL-0040-2800**, the latter is prevented from falling off.

KL-0215-35 M25



Note:

Hydraulic hand pump with pressure gauge suitable for the hydraulic cylinder **KL-0040-2200** (10 t.) or **KL-0040-2800** (28 t.) on request.

KL-0215-37 M25



Note:

Hydraulic foot pump with pressure gauge suitable for the hydraulic cylinder **KL-0040-2200** (10 t.) or **KL-0040-2800** (28 t.) on request

KL-0215-36 M25



Note:

Air driven hydraulic pump with pressure gauge suitable for the hydraulic cylinder **KL-0040-2200** (10 t.) or **KL-0040-2800** (28 t.) on request.

KL-0215-35 M25 Hydraulic Hand Pump

The Hydraulic Hand Pump **KL-0215-35 M25** may be used in conjunction with Hydraulic Cylinder (17 t.) **KL-0040-2500** to operate a variety of KLANN Pulling and Pressing tools.

Note: Hydraulic pressure and the necessary force can be checked while operating the pump at pressure gauge **KL-0040-2529**, (supplied with the tool set) and additional drum-type scale matched to our **KL-0040-2500** hydraulic cylinder (17 t.).

Specification: (KL-0215-35 M25)

Part No.	Description	Qty.
KL-0215-33	Hydraulic Hand Pump (without Hose)	1
KL-0215-31	Hydraulic Hose 1,8 m with hose-side connector	1
KL-0215-322	Cylinder-side connector 1/4"NPT	1
KL-0040-2520	Adaptor 3/8"NPT to 1/4"NPT	1
KL-0040-2529	Pressure Gauge	1

Weight: 7,5 kg Max. Pressure: 700 bar

KL-0215-35 Hydraulic Hand Pump (not ill.)

As **KL-0215-35 M25**, but without pressure gauge **KL-0040-2529**.

KL-0215-37 M25 Hydraulic Foot Pump

The Hydraulic Foot Pump **KL-0215-37 M25** can be used to power KLANN Press and Puller Tools fitted with Hydraulic Cylinder (17 t.) **KL-0040-2500**.

Advantage: *Both hands free to work.*

Note: Hydraulic pressure and the necessary force can be checked while operating the pump at pressure gauge **KL-0040-2528**, (supplied with the tool set) and additional drum-type scale matched to our **KL-0040-2500** hydraulic cylinder (17 t.).

Specification: (KL-0215-37 M25)

Part No.	Description	Qty.
KL-0215-370	Hydraulic Foot Pump (without Hose)	1
KL-0215-371	Hydraulic Hose 2,5 m with hose-side connector	1
KL-0215-322	Cylinder-side connector 1/4"NPT	1
KL-0040-2520	Adaptor 3/8"NPT to 1/4"NPT	1
KL-0040-2528	Pressure Gauge	1

Weight: 11 kg Max. Pressure: 700 bar

KL-0215-37 Hydraulic Foot Pump (not ill.)

As **KL-0215-37 M25**, but without pressure gauge **KL-0040-2528**.

KL-0215-36 M25 Air-Driven Hydraulic Pump

Compressed air is used to operate the **KL-0215-36 M25** Operation is by a foot-pedal with 3 positions - forwards, stop and backwards.

The air-operated Hydraulic Pump can be used in conjunction with Hydraulic Cylinder (17 t.) **KL-0040-2500** and KLANN tools for Bushes, Ball-Joints, Bearings, Drive-Shafts etc.

Note: Hydraulic pressure and the necessary force can be checked while operating the pump at pressure gauge **KL-0040-2529**, (supplied with the tool set) and additional drum-type scale matched to our **KL-0040-2500** hydraulic cylinder (17 t.).

Technical Data:

Maximum Pressure:	700 bar
Operating Pressure:	8 - 12 bar
Weight:	8 kg

Specification: (KL-0215-36 M25)

Part No.	Description	Qty.
KL-0215-360	Hydraulic pump (without Hose)	1
KL-0215-362	Hydraulic Hose 2,5 m with hose-side connector	1
KL-0215-322	Cylinder-side connector 1/4"NPT	1
KL-0040-2520	Adaptor 3/8"NPT to 1/4"NPT	1
KL-0040-2529	Pressure Gauge	1

KL-0215-36 Air-Driven Hydraulic Pump (not ill.)

As **KL-0215-36 M25**, but without pressure gauge **KL-0040-2529**.

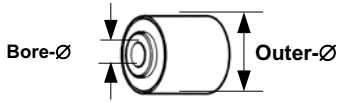
The new KLANN Wheel Bearing/Bush Tool KL-0039-Series !!!!!

Application example: *Bush extraction / insertion by using a Puller Spindle.*

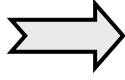
1. Configuration of the required pieces and tool assembling:

Measure bush-Ø, identify spindle, pressure and support sleeve. (See table page 4-11, 4-12)

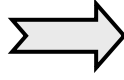
Measure bearing-Ø and bore-Ø.



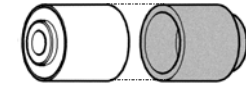
Identify support sleeve
(with outer-Ø measure)



(Support sleeve-Ø = BushA.-Ø + approx. 10%)

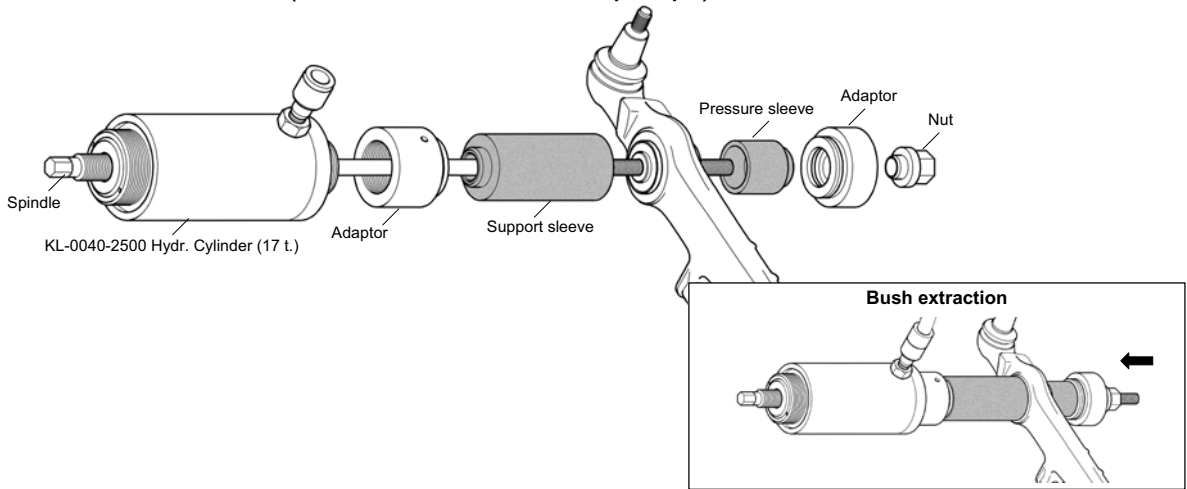


Identify pressure sleeve
(with outer-Ø measure)



(Pressure sleeves o.-Ø = Bush o.-Ø)

2. Mount the tool and extract the bush. (The insertion follows the same principle)



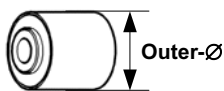
4

Application example: *Ball Joint / Bush extraction / insertion with Press Frame.*

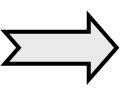
1. Configuration of the required pieces and tool assembling:

Measure the bush outer-Ø, identify pressure and support sleeve. (See table page 4-11, 4-12)

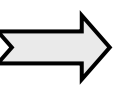
Measure bearing-Ø.



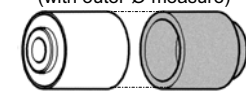
Identify support sleeve
(with outer-Ø measure)



(Support sleeve i.-Ø = Bush o.-Ø + approx. 10%)

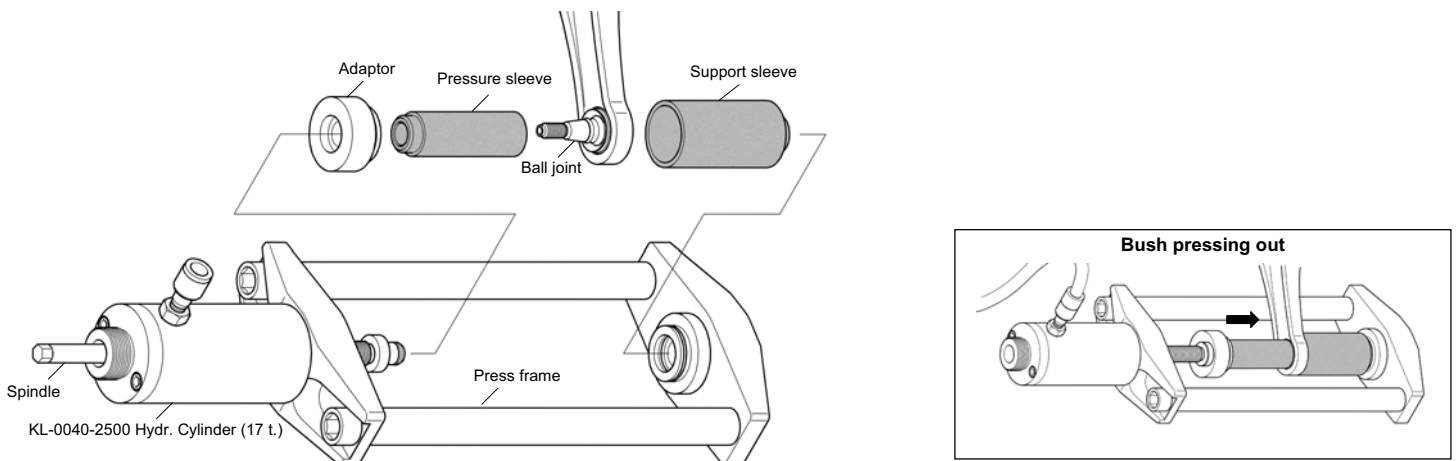


Identify pressure sleeve
(with outer-Ø measure)



(Pressure sleeve o.-Ø = Bush o.-Ø)

2. Mount the tool and press the ball joint out. (The insertion follows the same principle)



Note: The hydraulic cylinder KL-0040-2500 shall be operated by a hydraulic pump. See page 4-08.

The new KLANN Wheel Bearing/Bush Tool KL-0039-Series !!!!!

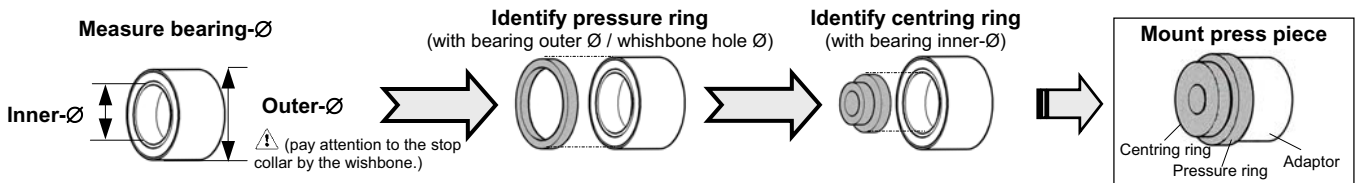
The big advantages of the new and unique bearing/bush tools are:

- Modular system provided with a versatile hydraulic drive (KL-0040-2500), two adaptors and universally combinable centring and pressure rings as well as pressure and support sleeves.
- Universal field of application.
- Huge time and cost savings due to the easy assembling of the required tool.

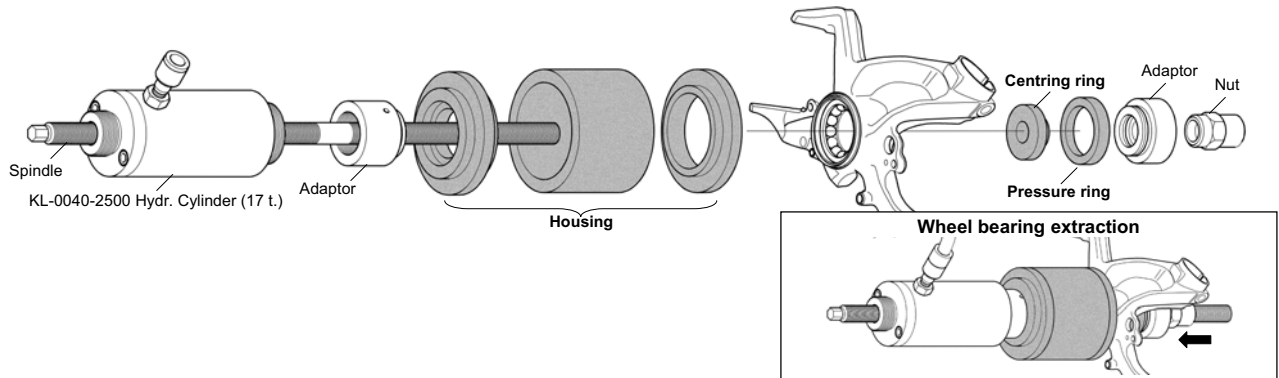
Application example: *Wheel bearing extraction.*

1. Configuration of the required pieces and tool assembling:

Measure inner-/outer-Ø, identify pressure and centring rings. (see table page 4-11)



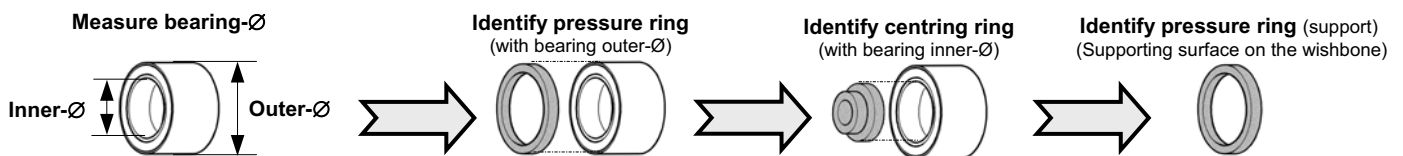
2. Mount the tool on the wishbone and extract wheel bearing.



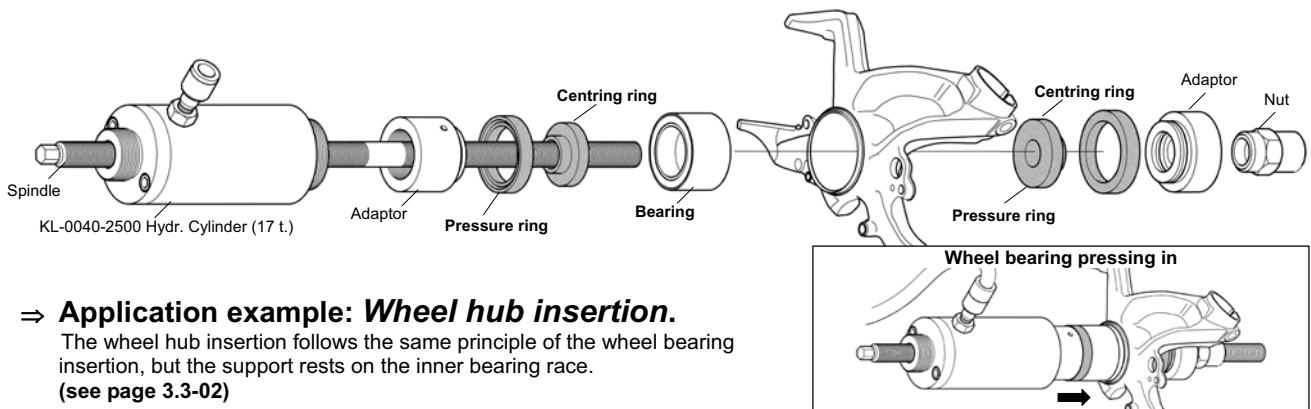
Application example: *Wheel Bearing insertion.*

1. Configuration of the required pieces and tool assembling:

Measure inner-/outer-Ø, identify pressure and centring ring (wheel bearing), identify pressure ring (wheel bearing housing support) (see table page 4-11)



2. Mount the tool on the wishbone and press the wheel bearing in.

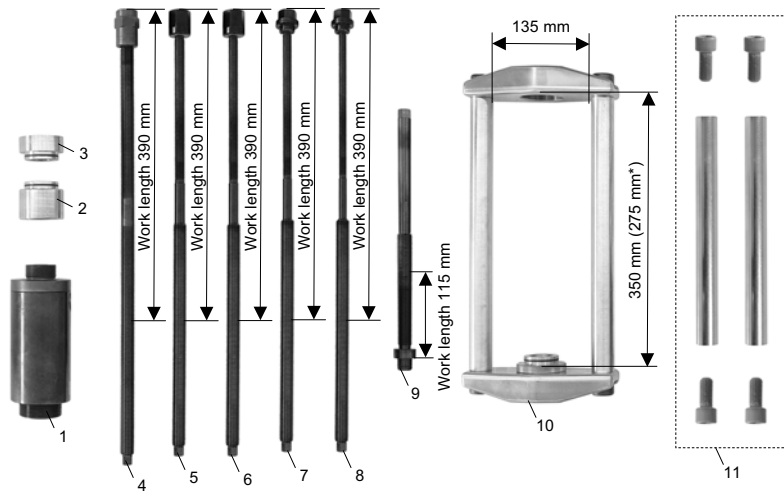


⇒ Application example: *Wheel hub insertion.*

The wheel hub insertion follows the same principle of the wheel bearing insertion, but the support rests on the inner bearing race. (see page 3.3-02)

Note: The hydraulic cylinder KL-0040-2500 shall be operated by a hydraulic pump. See page 4-08.

KL-0039-Series Wheel Bearing / Silent Block Tool



Drive and base parts

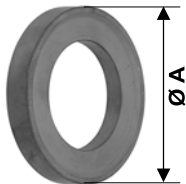
Pos.	Part No.	Description	Qty.
Cylinder:			
1	KL-0040-2500	Hydraulic-cylinder 17 t	1
Adaptor:			
2	KL-0039-1003	Retain adaptor for hydraulic cylinder	1
3	KL-0039-1002	Retain adaptor for Nut M20	1
Spindeln:			
4	KL-0039-1920	Spindle M20 with clamping nut	1
5	KL-0039-1916	Spindle M16 with shoulder nut	1
6	KL-0039-1914	Spindle M14 with shoulder nut	1
7	KL-0039-1912	Spindle M12 with shoulder nut	1
8	KL-0039-1910	Spindle M10x1.25 with shoulder nut	1
9	KL-0039-1930	Pressure Spindle	1
Press frame:			
10	KL-0039-1130	Press frame	1
Zubehör:			
11	KL-0039-111	Frame rods 285 mm long	1

* If using the frame rods KL-0039-111.

4

Application parts ⇒ Wheel bearing

Pressure ring:



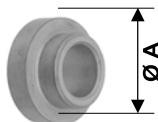
KL-0039-120 Pressure ring set Ø 54 - 90 mm (Inner-Ø 46 mm):

Part No.	Description	Ø A
KL-0039-1254	Pressure ring Ø54	Ø54
KL-0039-1260	Pressure ring Ø60	Ø60
KL-0039-1261	Pressure ring Ø61	Ø61
KL-0039-1262	Pressure ring Ø62	Ø62
KL-0039-1263	Pressure ring Ø63	Ø63
KL-0039-1264	Pressure ring Ø64	Ø64
KL-0039-1265	Pressure ring Ø65	Ø65
KL-0039-1266	Pressure ring Ø66	Ø66
KL-0039-1267	Pressure ring Ø67	Ø67
KL-0039-1268	Pressure ring Ø68	Ø68
KL-0039-1269	Pressure ring Ø69	Ø69
Accessory:		
KL-0039-1502	Pressure ring Ø93	Ø93

Part No.	Description	Ø A
KL-0039-1270	Pressure ring Ø70	Ø70
KL-0039-1271	Pressure ring Ø71	Ø71
KL-0039-1272	Pressure ring Ø72	Ø72
KL-0039-1273	Pressure ring Ø73	Ø73
KL-0039-1274	Pressure ring Ø74	Ø74
KL-0039-1275	Pressure ring Ø75	Ø75
KL-0039-1276	Pressure ring Ø76	Ø76
KL-0039-1277	Pressure ring Ø77	Ø77
KL-0039-1278	Pressure ring Ø78	Ø78
KL-0039-1279	Pressure ring Ø79	Ø79
KL-0039-1280	Pressure ring Ø80	Ø80

Part No.	Description	Ø A
KL-0039-1281	Pressure ring Ø81	Ø81
KL-0039-1282	Pressure ring Ø82	Ø82
KL-0039-1283	Pressure ring Ø83	Ø83
KL-0039-1284	Pressure ring Ø84	Ø84
KL-0039-1285	Pressure ring Ø85	Ø85
KL-0039-1286	Pressure ring Ø86	Ø86
KL-0039-1287	Pressure ring Ø87	Ø87
KL-0039-1288	Pressure ring Ø88	Ø88
KL-0039-1289	Pressure ring Ø89	Ø89
KL-0039-1290	Pressure ring Ø90	Ø90

Centring ring:



KL-0039-130 Centring ring set Ø 25 - 60 mm:

Part No.	Description	Ø A
KL-0039-1325	Centring ring Ø25	Ø25
KL-0039-1326	Centring ring Ø26	Ø26
KL-0039-1327	Centring ring Ø27	Ø27
KL-0039-1328	Centring ring Ø28	Ø28
KL-0039-1329	Centring ring Ø29	Ø29
KL-0039-1330	Centring ring Ø30	Ø30
KL-0039-1331	Centring ring Ø31	Ø31
KL-0039-1332	Centring ring Ø32	Ø32
KL-0039-1333	Centring ring Ø33	Ø33
KL-0039-1334	Centring ring Ø34	Ø34
KL-0039-1335	Centring ring Ø35	Ø35
KL-0039-1336	Centring ring Ø36	Ø36

Part No.	Description	Ø A
KL-0039-1337	Centring ring Ø37	Ø37
KL-0039-1338	Centring ring Ø38	Ø38
KL-0039-1339	Centring ring Ø39	Ø39
KL-0039-1340	Centring ring Ø40	Ø40
KL-0039-1341	Centring ring Ø41	Ø41
KL-0039-1342	Centring ring Ø42	Ø42
KL-0039-1343	Centring ring Ø43	Ø43
KL-0039-1344	Centring ring Ø44	Ø44
KL-0039-1345	Centring ring Ø45	Ø45
KL-0039-1346	Centring ring Ø46	Ø46
KL-0039-1347	Centring ring Ø47	Ø47
KL-0039-1348	Centring ring Ø48	Ø48

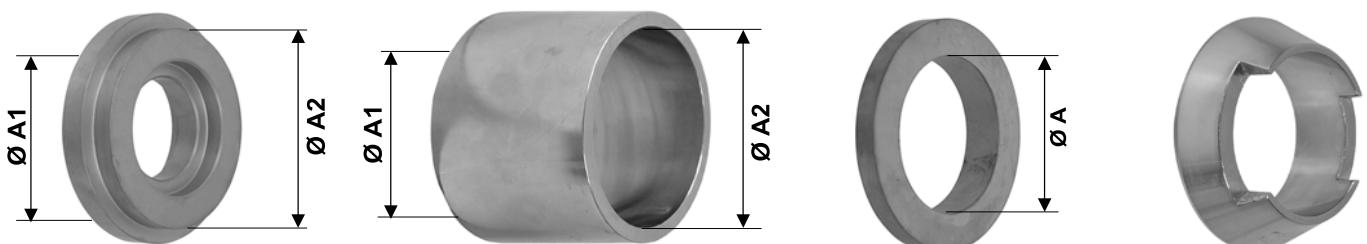
Part No.	Description	Ø A
KL-0039-1349	Centring ring Ø49	Ø49
KL-0039-1350	Centring ring Ø50	Ø50
KL-0039-1351	Centring ring Ø51	Ø51
KL-0039-1352	Centring ring Ø52	Ø52
KL-0039-1353	Centring ring Ø53	Ø53
KL-0039-1354	Centring ring Ø54	Ø54
KL-0039-1355	Centring ring Ø55	Ø55
KL-0039-1356	Centring ring Ø56	Ø56
KL-0039-1357	Centring ring Ø57	Ø57
KL-0039-1358	Centring ring Ø58	Ø58
KL-0039-1359	Centring ring Ø59	Ø59
KL-0039-1360	Centring ring Ø60	Ø60

KL-0039-140 Housing set (bearing extension):

Bearing cap:		Housing:		Centring rings:	
Part No.	Description	Part No.	Description	Part No.	Description
KL-0039-1401	Bearing cap Ø A1: 84 / Ø A2: 90	KL-0039-1402	Housing Ø A1: 84 / Ø A2: 90	KL-0039-1413	Centring ring Ø A: 70
				KL-0039-1414	Centring ring Ø A: 75
				KL-0039-1415	Centring ring Ø A: 80

Special plates:

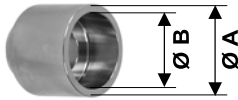
Part No.	Description
KL-0039-1503	Adaptor ring conical
KL-0039-1504	Adaptor ring conical
KL-0039-1505	Adaptor ring cylindric



KL-0039- Series Wheel Bearing / Silent Block Tool

Application pieces ⇒ **Silent Block**

Press/Support Tube Type 1:

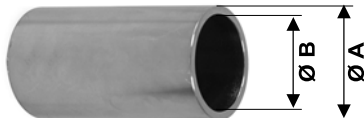


KL-0039-160 Press/Support Tube Set Ø30 - 90mm Type 1 (Length: 45 mm):

Part No.	Description	Ø A	Ø B	Part No.	Description	Ø A	Ø B
KL-0039-1630	Press/Support Tube short Ø30	Ø30	Ø22	KL-0039-1642	Press/Support Tube short Ø42	Ø42	Ø34
KL-0039-1632	Press/Support Tube short Ø32	Ø32	Ø24	KL-0039-1644	Press/Support Tube short Ø44	Ø44	Ø36
KL-0039-1634	Press/Support Tube short Ø34	Ø34	Ø26	KL-0039-1646	Press/Support Tube short Ø46	Ø46	Ø38
KL-0039-1636	Press/Support Tube short Ø36	Ø36	Ø28	KL-0039-1648	Press/Support Tube short Ø48	Ø48	Ø40
KL-0039-1638	Press/Support Tube short Ø38	Ø38	Ø30	KL-0039-1650	Press/Support Tube short Ø50	Ø50	Ø42
KL-0039-1640	Press/Support Tube short Ø40	Ø40	Ø32	KL-0039-1652	Press/Support Tube short Ø52	Ø52	Ø44

Part No.	Description	Ø A	Ø B	Part No.	Description	Ø A	Ø B
KL-0039-1654	Press/Support Tube short Ø54	Ø54	Ø46	KL-0039-1674	Press/Support Tube short Ø74	Ø74	Ø66
KL-0039-1656	Press/Support Tube short Ø56	Ø56	Ø48	KL-0039-1676	Press/Support Tube short Ø76	Ø76	Ø68
KL-0039-1658	Press/Support Tube short Ø58	Ø58	Ø50	KL-0039-1678	Press/Support Tube short Ø78	Ø78	Ø70
KL-0039-1660	Press/Support Tube short Ø60	Ø60	Ø52	KL-0039-1680	Press/Support Tube short Ø80	Ø80	Ø72
KL-0039-1662	Press/Support Tube short Ø62	Ø62	Ø54	KL-0039-1682	Press/Support Tube short Ø82	Ø82	Ø74
KL-0039-1664	Press/Support Tube short Ø64	Ø64	Ø56	KL-0039-1684	Press/Support Tube short Ø84	Ø84	Ø76
KL-0039-1666	Press/Support Tube short Ø66	Ø66	Ø58	KL-0039-1686	Press/Support Tube short Ø86	Ø86	Ø78
KL-0039-1668	Press/Support Tube short Ø68	Ø68	Ø60	KL-0039-1688	Press/Support Tube short Ø88	Ø88	Ø80
KL-0039-1670	Press/Support Tube short Ø70	Ø70	Ø62	KL-0039-1690	Press/Support Tube short Ø90	Ø90	Ø82
KL-0039-1672	Press/Support Tube short Ø72	Ø72	Ø64				

Press/Support Tube Type 2:



KL-0039-170 Press/Support Tube Set Ø30 - 90mm Type 2 (Length: 115 mm):

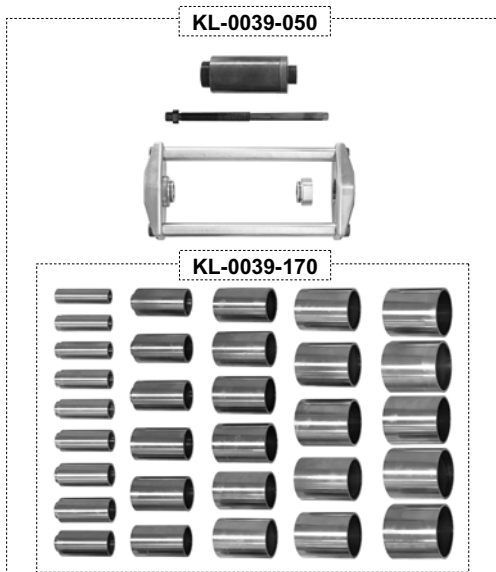
Part No.	Description	Ø A	Ø B	Part No.	Description	Ø A	Ø B
KL-0039-1730	Press/Support Tube long Ø30	Ø30	Ø22	KL-0039-1742	Press/Support Tube long Ø42	Ø42	Ø34
KL-0039-1732	Press/Support Tube long Ø32	Ø32	Ø24	KL-0039-1744	Press/Support Tube long Ø44	Ø44	Ø36
KL-0039-1734	Press/Support Tube long Ø34	Ø34	Ø26	KL-0039-1746	Press/Support Tube long Ø46	Ø46	Ø38
KL-0039-1736	Press/Support Tube long Ø36	Ø36	Ø28	KL-0039-1748	Press/Support Tube long Ø48	Ø48	Ø40
KL-0039-1738	Press/Support Tube long Ø38	Ø38	Ø30	KL-0039-1750	Press/Support Tube long Ø50	Ø50	Ø42
KL-0039-1740	Press/Support Tube long Ø40	Ø40	Ø32	KL-0039-1752	Press/Support Tube long Ø52	Ø52	Ø44

Part No.	Description	Ø A	Ø B	Part No.	Description	Ø A	Ø B
KL-0039-1754	Press/Support Tube long Ø54	Ø54	Ø46	KL-0039-1774	Press/Support Tube long Ø74	Ø74	Ø66
KL-0039-1756	Press/Support Tube long Ø56	Ø56	Ø48	KL-0039-1776	Press/Support Tube long Ø76	Ø76	Ø68
KL-0039-1758	Press/Support Tube long Ø58	Ø58	Ø50	KL-0039-1778	Press/Support Tube long Ø78	Ø78	Ø70
KL-0039-1760	Press/Support Tube long Ø60	Ø60	Ø52	KL-0039-1780	Press/Support Tube long Ø80	Ø80	Ø72
KL-0039-1762	Press/Support Tube long Ø62	Ø62	Ø54	KL-0039-1782	Press/Support Tube long Ø82	Ø82	Ø74
KL-0039-1764	Press/Support Tube long Ø64	Ø64	Ø56	KL-0039-1784	Press/Support Tube long Ø84	Ø84	Ø76
KL-0039-1766	Press/Support Tube long Ø66	Ø66	Ø58	KL-0039-1786	Press/Support Tube long Ø86	Ø86	Ø78
KL-0039-1768	Press/Support Tube long Ø68	Ø68	Ø60	KL-0039-1788	Press/Support Tube long Ø88	Ø88	Ø80
KL-0039-1770	Press/Support Tube long Ø70	Ø70	Ø62	KL-0039-1790	Press/Support Tube long Ø90	Ø90	Ø82
KL-0039-1772	Press/Support Tube long Ø72	Ø72	Ø64				

Note:
For more info require the specific brochure!

Accessories

Part No.	Description	Ø A	Ø B	Part No.	Description	Ø A	Ø B
KL-0039-1802	Centring tube long Ø27.5	Ø27.5	Ø20.5	KL-0039-1803	Centring tube long Ø29.7	Ø29.5	Ø22



KL-0039-050 Hydraulic Press Tool Kit

Universally suitable to press in and out bushes, ball joints, sockets, etc.

The compact structure of the press frame allows operation flexibility as well as the possibility to operate directly by the vehicle.

The possibility to complete the tool kit with further components of the **KL-0039-.. Serie** such as puller spindle, thrust sleeve, support sleeve or eccentric ring and thrust pad makes this tool almost universally applicable e.g. also for bush extractors, wheel bearing tools, wheel hub press tools, etc.

Specification:

Part No.	consists of: (Tool sets are marked fat)
KL-0039-050	KL-0039-1130, KL-0039-1002, KL-0040-2500, KL-0039-1930, KL-0039-170
KL-0039-170	Single parts see above!

KL-0043-82



Ball joint insertion



KL-0043-83



Bush extraction



KL-0043-85



Ball joint extraction



KL-0043-850



Note: To use the Hydraulic Cylinder **KL-0040-2500** a hydraulic pump is necessary.

Hydraulic Press Tool Kits

The following hydraulic press tool kits allow the exchange of metalastic bushes, ball joints and steering joints without dismantling the suspension.

The large variety of pressing tubes and the special design of the press frame gives this tool a universal application.

The following tool kits differ only in their contents.

KL-0043-82 Press Tool Set Univ.

consists of:

Part No.	Description
KL-0045-70	Hydraulic Spindle 12 t
KL-0043-8200	Press Frame (long)
KL-0043-8295	Press Tube Set (long)
KL-0043-8290	Wooden Plate

KL-0043-820 Press Tool Kit without drive

As **KL-0043-82**, but **without** hydraulic spindle **KL-0045-7**. (not ill.).

KL-0043-83 Press Tool Set Univ.

consists of:

Part No.	Description
KL-0045-70	Hydraulic Spindle 12t
KL-0043-8510	Press Frame
KL-0043-8295	Press Tube Set (long)
KL-0043-8595	Press Tube Set (short)
KL-0043-8550	Wooden Plate

KL-0043-85 Press Tool Set Univ.

As **KL-0043-83**, but with Hydraulic Cylinder **KL-0215-10** (17 t) instead of hydraulic spindle **KL-0045-70**.

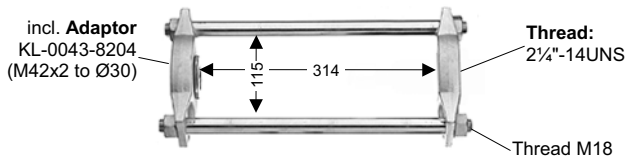
KL-0043-850 Press Tool Kit without drive

As **KL-0043-85**, but **without** hydraulic cylinder **KL-0215-10**.

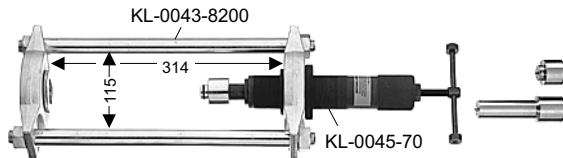
Note:

When the press tool kit **KL-0043-850** has to be used together with the hydraulic spindle **KL-0045-70** the adaptors **KL-0043-8206** and **KL-0174-552** are required.

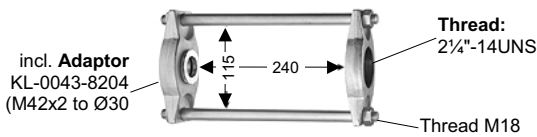
KL-0043-8200



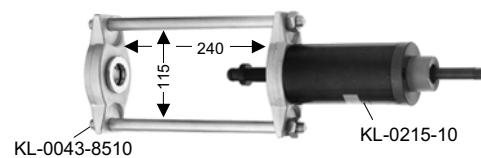
KL-0043-8211



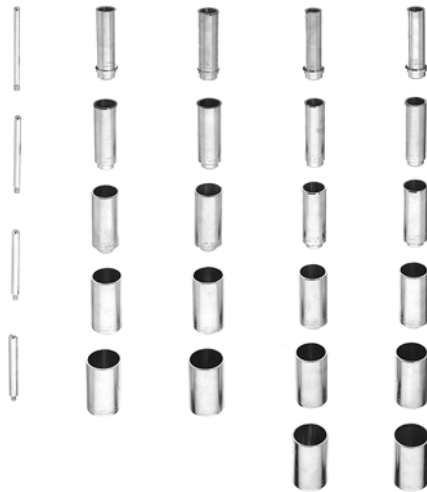
KL-0043-8510



KL-0043-8512



KL-0043-8295 Press Tube Set long (Length 110 mm)



KL-0043-8595 Press Tube Set short (Length 40 mm)



KL-0043-8200 Press Frame (max. 17 t)

Long version, without drive.

Inner Overall Length: 314 mm

Inner Width: 115 mm

consists of:

Part No.	Description	Qty.
KL-0043-8501-A	Base plate M42 X 2	1
KL-0043-8501-C	Base plate 2 1/4"-14 UNS	1
KL-0043-8202-P	Towing bar M18 (long) with hex. Nuts	1
KL-0043-8204	Adaptor of M 42 X 2 on Ø30 with O-ring	1

Note: The Press Frame **KL-0043-8200** is always to be used with two long Press/Support Tubes.

KL-0043-8210 Press Frame (max. 17 t)

As **KL-0043-8200** but with the **KL-0174-552** Adaptor to accept the **KL-0045-7** Hydraulic Spindle (not Ill.)

Inner Overall Length: 314 mm

Inner Width: 115 mm

KL-0043-8211 Press Frame (max. 17 t)

As **KL-0043-8210**, but inclusive Hydraulic Spindle **KL-0045-70** (12 t).

KL-0043-8510 Press Frame (max. 17 t)

Short version, without drive.

Inner Overall Length: 240 mm

Inner Width: 115 mm

consists of:

Part No.	Description	Qty.
KL-0043-8501-A	Base plate M42 X 2	1
KL-0043-8501-C	Base plate 2 1/4"-14 UNS	1
KL-0043-8202-P	Towing bar M18 (long) with hex. Nuts	1
KL-0043-8204	Adaptor of M 42 X 2 on Ø30 with O-ring	1

Note: The Press Frame **KL-0043-8510** is always to be used with one long and one short Press/Support Tube.

KL-0043-8512 Press Frame (max. 17 t)

As **KL-0043-8510**, but inclusive Hydraulic Cylinder **KL-0215-10** (17 t).

KL-0043-8295 Press Tube Set long (110 mm)

Part No.	Outer-Ø	Inner-Ø	Part No.	Outer-Ø	Inner-Ø
KL-0043-8260	26 mm	18 mm	KL-0043-8273	52 mm	44 mm
KL-0043-8261	28 mm	20 mm	KL-0043-8274	54 mm	46 mm
KL-0043-8262	30 mm	22 mm	KL-0043-8275	56 mm	48 mm
KL-0043-8263	32 mm	24 mm	KL-0043-8276	58 mm	50 mm
KL-0043-8264	34 mm	26 mm	KL-0043-8277	60 mm	52 mm
KL-0043-8265	36 mm	28 mm	KL-0043-8278	62 mm	54 mm
KL-0043-8266	38 mm	30 mm	KL-0043-8279	64 mm	56 mm
KL-0043-8267	40 mm	32 mm	KL-0043-8280	66 mm	58 mm
KL-0043-8268	42 mm	34 mm	KL-0043-8281	68 mm	60 mm
KL-0043-8269	44 mm	36 mm	KL-0043-8244	10 mm	
KL-0043-8270	46 mm	38 mm	KL-0043-8245	12 mm	
KL-0043-8271	48 mm	40 mm	KL-0043-8246	14 mm	
KL-0043-8272	50 mm	42 mm	KL-0043-8247	16 mm	

Accessories:

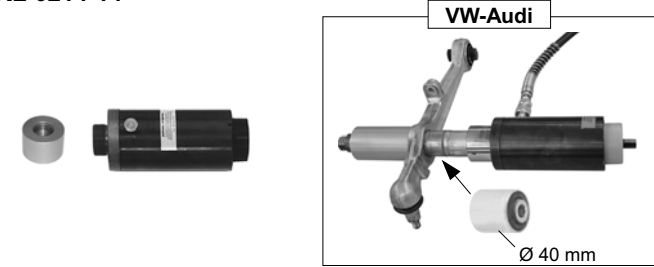
Part No.	Outer-Ø	Inner-Ø
KL-0043-8283	72 mm	64 mm

Part No.	Outer-Ø	Inner-Ø
KL-0043-8287	80 mm	70 mm

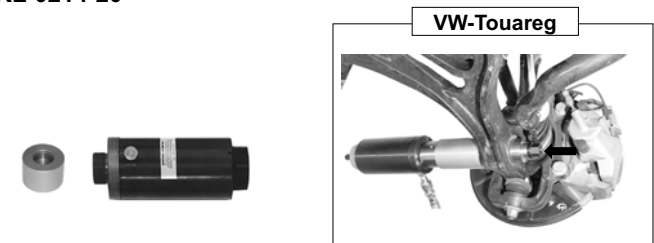
KL-0043-8595 Press Tube Set short (40 mm)

Part No.	Outer-Ø	Inner-Ø	Part No.	Outer-Ø	Inner-Ø
KL-0043-8560	26 mm	18 mm	KL-0043-8573	52 mm	44 mm
KL-0043-8561	28 mm	20 mm	KL-0043-8574	54 mm	46 mm
KL-0043-8562	30 mm	22 mm	KL-0043-8575	56 mm	48 mm
KL-0043-8563	32 mm	24 mm	KL-0043-8576	58 mm	50 mm
KL-0043-8564	34 mm	26 mm	KL-0043-8577	60 mm	52 mm
KL-0043-8565	36 mm	28 mm	KL-0043-8578	62 mm	54 mm
KL-0043-8566	38 mm	30 mm	KL-0043-8579	64 mm	56 mm
KL-0043-8567	40 mm	32 mm	KL-0043-8580	66 mm	58 mm
KL-0043-8568	42 mm	34 mm	KL-0043-8581	68 mm	60 mm
KL-0043-8569	44 mm	36 mm	KL-0043-8544	10 mm	
KL-0043-8570	46 mm	38 mm	KL-0043-8545	12 mm	
KL-0043-8571	48 mm	40 mm	KL-0043-8546	14 mm	
KL-0043-8572	50 mm	42 mm	KL-0043-8547	16 mm	

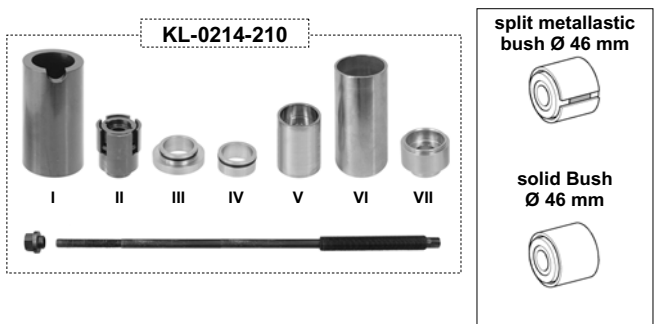
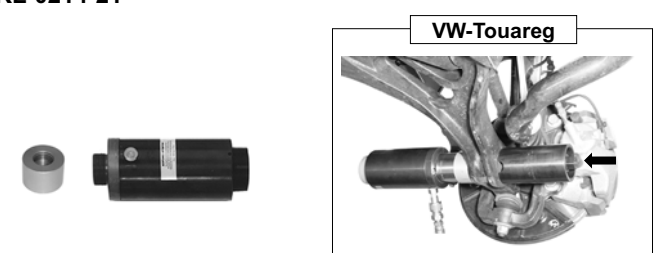
KL-0214-14



KL-0214-20



KL-0214-21



Note: To use the Hydraulic Cylinder **KL-0040-2500** a hydraulic pump is necessary.

KL-0214-14 Bush Extractor with Hydr. Cylinder

Suitable for Audi A4, A6, A8, Skoda Superb and VW Passat suspension strut on the front wishbone.

For the quick and safe removal and installation of the bushing at the suspension strut mounting without removing the wishbone.

KL-0214-140 Bush Extractor without Hydr. Cylinder

As **KL-0214-14**.

If Hydraulic Cylinder **KL-0040-2500** and Adaptor **KL-0040-2552** are already available.

consists of:

Part No.	Description
KL-0043-8567	Press/Support Tube (short)
KL-0043-8272	Press/Support Tube
KL-0040-2543	Puller Spindle M14 with Shoulder Nut

KL-0214-20 Bush Extractor with Hydr. Cylinder

Suitable for VW Touareg suspension strut on the front wishbone (with a solid bush for bore-Ø 46 mm).

consists of:

Part No.	Description
KL-0040-2500	Hydraulic Cylinder 17 t.
KL-0040-2552	Adaptor M42x2 to Ø 30
KL-0214-200	Bush Extractor without Hydraulic Cylinder

KL-0214-200 Bush Extractor without Hydr. Cylinder

As **KL-0214-20**.

If Hydraulic Cylinder **KL-0040-2500** and Adaptor **KL-0040-2552** are already available.

consists of:

Part No.	Description
KL-0214-2005	Support Tube short (V)
KL-0214-2006	Support Tube long (VI)
KL-0214-2007	Press Piece Extraction (VII)
KL-0040-2543-5	Puller Spindle M14
KL-0040-2543-2	Shoulder Nut

KL-0214-21 Bush Extractor with Hydr. Cylinder

Suitable for VW Touareg suspension strut on the front wishbone (with a slotted or closed metallastic bush for bore-Ø 46 mm).

consists of:

Part No.	Description
KL-0040-2500	Hydraulic Cylinder 17 t.
KL-0040-2552	Adaptor M42x2 to Ø 30
KL-0214-210	Bush Extractor without Hydraulic Cylinder

KL-0214-210 Bush Extractor without Hydr. Cylinder

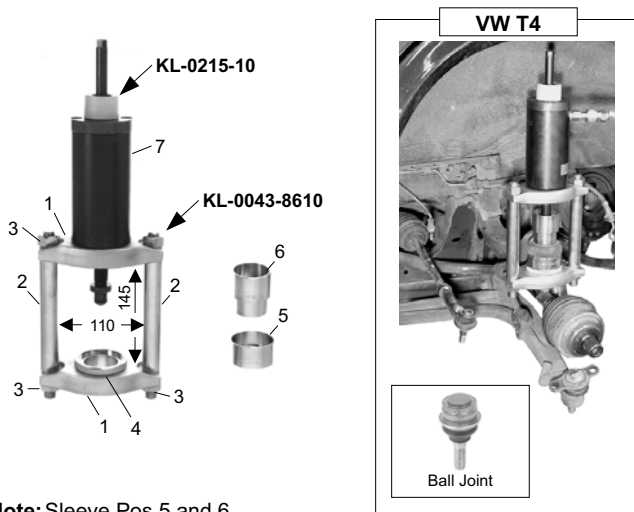
As **KL-0214-20**.

If Hydraulic Cylinder **KL-0040-2500** and Adaptor **KL-0040-2552** are already available.

consists of:

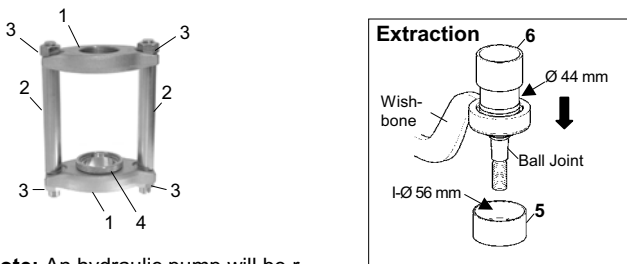
Part No.	Description
KL-0214-2001	Conical Tube (I)
KL-0214-2002	Sprung Press Tool (II)
KL-0214-2003	Ring (III)
KL-0214-2004	Ring (IV)
KL-0214-2005	Support Tube short (V)
KL-0214-2006	Support Tube long (VI)
KL-0214-2007	Press Piece Extraction (VII)
KL-0040-2543-5	Puller Spindle M14
KL-0040-2543-2	Shoulder Nut

KL-0043-861



Note: Sleeve Pos.5 and 6 can be used reversible.

KL-0043-8610



Note: An hydraulic pump will be required to drive the KL-0040-2500.

KL-0043-8611



Note: Conversion items to press frame KL-0043-8510

KL-0043-8502-P



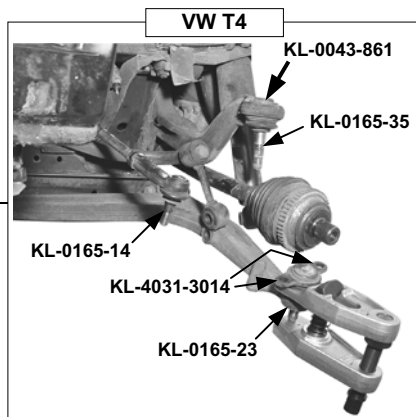
KL-0043-8501-A



KL-0043-8204



KL-4031-3014



KL-0043-861 Hydraulic Press Tool VW-T4

Suitable for VW T4 front axle upper ball-joint.

The upper ball-joint may be removed and replaced within 30 minutes using the new Press Tool KL-0043-861, without the need to dismantle the upper wishbone.

Note: Press the guide-joint pin out of the steering knuckle with the ball-joint Extractor KL-0165-35.

Advantages

- Large time savings (2 - 3 hours).
- Simple and precise to use.
- High safety.

Specification:

Pos.	Part No:	Description	Qty.
	KL-0043-861	Hydraulic Press Tool 17t. VW-T4	1
	<i>consists of:</i>		
	KL-0043-860	Press Tool VW-T4	1
7	KL-0215-10	Hydraulic Cylinder with Spindle	1
	KL-0043-860	Press Tool VW-T4 (not ill.)	1
	<i>consists of:</i>		
	KL-0043-8610	Press Frame	1
5	KL-0043-8661	Lower Sleeve VW-T4	1
6	KL-0043-8662	Upper Sleeve VW-T4	1

KL-0043-8610 Press Frame

consists of:

Pos.	Part No:	Description	Qty.
1	KL-0043-8501-C	Base Plate 2 1/4"-14 UNS	2
2	KL-0215-4004	Frame Rods	2
3	KL-0049-3004	Hex Nut M18	4
4	KL-0043-8601	Adaptor 2 1/4"-14UNS to Ø60mm	1

KL-0043-8611 Supplement Kit VW T4 for KL-0215-4...

The Bush Tool KL-0215-4... Series may also be used to replace the upper ball-joint on VW T4 by using the Supplementary Kit KL-0043-8611.

consists of:

Pos.	Part No:	Description	Qty.
1	KL-0043-8501-C	Base Plate 2 1/4"-14 UNS	1
4	KL-0043-8601	Adaptor 2 1/4"-14UNS to Ø60mm	1
5	KL-0043-8661	Lower Sleeve VW-T4	1
6	KL-0043-8662	Upper Sleeve VW-T4	1

Note: Component parts required to convert the press frame to KL-0043-8510

The Press Tool KL-0043-861 can be converted to press frame KL-0043-8510, by using the base plate M42 x 2 KL-0043-8501-A, the adaptor from M42x2 to Ø30 KL-0043-8204 and the pair of frame rods M18 with hex. nuts KL-0043-8502-P.

(⇒ KL-0043-8510 see page 4-14)

KL-4031-3014 Special Socket Insert XZN M14

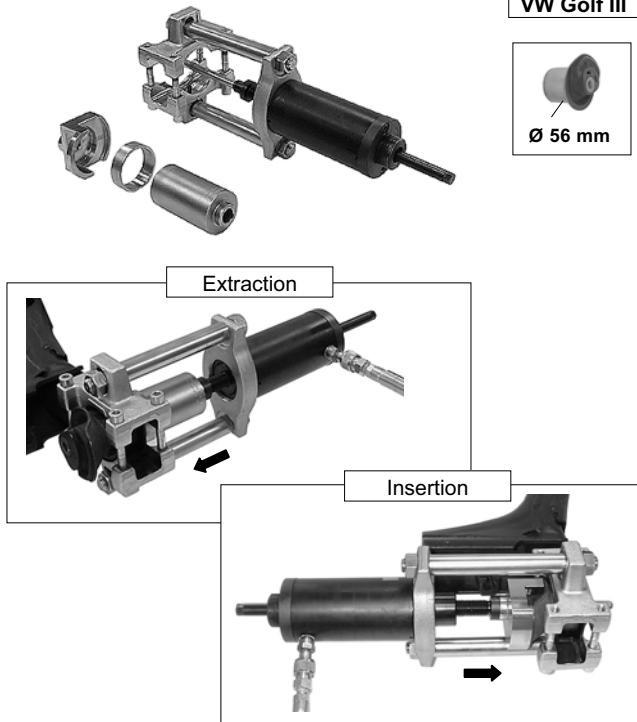
For removal of the upper ball-joint on VW T4 Transporters.

Length:..... 55 mm Drive:..... 1/2"□ Weight: 110 g

Note: Ball-joint pressing-out tool suitable for the KL-0165-Series e.g. KL-0165-14, KL-0165-23 and KL-0165-35 for easy separation of the ball-joint connections. See chapter 2.

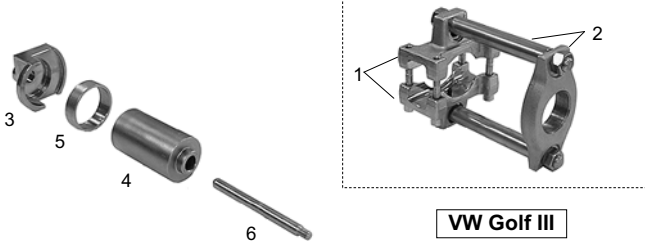
KL-0215-41

VW Golf III



KL-0215-410

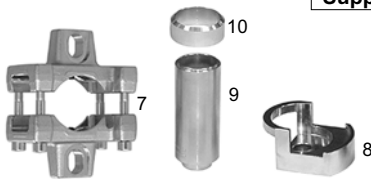
KL-0215-411



VW Golf III

KL-0215-402

Supplement kit VW Golf II



KL-0215-422

Supplement kit VW Polo



Note: Conversion items to press frame KL-0043-8510

KL-0043-8502-P



KL-0043-8501-A



KL-0043-8204



KL-0215-41 Press Tool Kit with hydr. Cylinder (German Utility Model)

The Hydraulic Press Tool Kit **KL-0215-41** allows quick, easy and safe extraction and replacement of stubborn rusted or defective Bushes with diameter Ø 56 mm on the rear axle of VW Golf III.

Time savings of up to 3 hours can be achieved.

Part No.	Description
KL-0215-41	Hydraulic Press Tool Kit VW Golf III
<i>consists of:</i>	
KL-0215-410	Press Tool Kit VW Golf III without hydr. cylinder
KL-0040-2500	Hydraulic Cylinder 17t.
KL-0040-2510	Press Spindle

KL-0215-410 Press Tool Kit VW Golf III without Hydraulic Cylinder

As **KL-0215-41**.

If Hydraulic Cylinder **KL-0215-10**, consisting of Hydraulik Cylinder **KL-0040-2500** and Spindle **KL-0040-2510**, is already available.

consists of:

Pos.	Part No.	Description
	KL-0215-411	Frame Golf III
3	KL-0215-0017	Insertion Tool Golf III
4	KL-0215-0026	Extraction Sleeve Golf III
5	KL-0215-0027	Support Sleeve for extraction Golf III
6	KL-0043-8245	Guide Ø12 mm

Pos.	Part No.	Description
	KL-0215-411	Frame Golf III
<i>consists of:</i>		
1	KL-0215-413	Chuck Jaws Golf III
2	KL-0215-404	Base Frame

Note for VW Passat (35i) and Golf III Variant.

The **KL-0215-41** Puller may be used in conjunction with the **KL-0215-0015** Press Tool to *insert* the bushes on the rear axle of VW Passat (35i) and Golf III Estate.

KL-0215-402 Supplement Kit Golf II for Press Tool KL-0215-41

Suitable for VW Golf II.

The Hydraulic Press Tool Kit **KL-0215-41** may also be used for bush diameter Ø 44 mm on VW Golf II by the use of Supplementary Kit **KL-0215-402**.

consists of:

Pos.	Part No.	Description
7	KL-0215-403	Chuck Jaws Golf II
8	KL-0215-0015	Insertion Tool Golf II
9	KL-0215-0028	Extraction Sleeve Golf II
10	KL-0215-0029	Support Tool for extraction Golf II

KL-0215-422 Supplement Kit vw Polo

Hydraulic Press Tool Kit **KL-0215-41** together with the additional set **KL-0215-422** can also be used for the **VW Polo 1995 - 2001** models.

consists of:

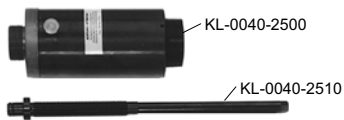
Part-No.	Description
KL-0215-4201	Press Sleeve (insertion)
KL-0043-8274	Press Sleeve (extraction)
KL-0043-8244	Guide 10 mm

Note: Component parts required to convert the press frame to KL-0043-8510

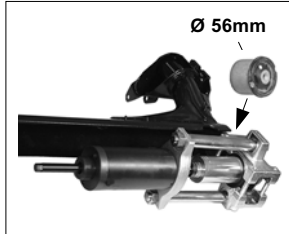
The Press Tool **KL-0043-861** can be converted to press frame **KL-0043-8510**, by using the base plate M42 x 2 **KL-0043-8501-A**, the adaptor from M42x2 to Ø30 **KL-0043-8204** and the pair of frame rods M18 with hex. nuts **KL-0043-8502-P**.

(⇒ KL-0043-8510 see page 4-14)

KL-0215-42



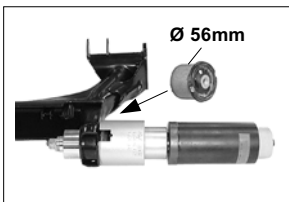
VW Polo



KL-0215-422



KL-0215-53



KL-0215-530



KL-0215-531



VW Polo

KL-0215-58

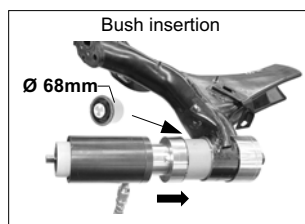
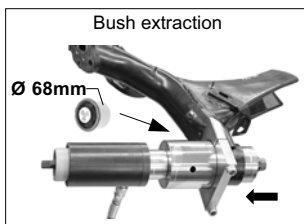


VW Polo, Škoda Fabia

KL-0215-580



KL-0215-581



Note: The use of the safety belt KL-0040-2590 (see page 4-06) is always recommended when working with the Hydraulic Cylinder KL-0040-2500 on the vehicle.

KL-0215-42 Hydraulic Press Tool Kit

(German Utility Model)

Suitable for VW Polo 1995 - 1999 rear axle.

The Hydraulic Press Tool Kit KL-0215-42 allows quick, easy and safe extraction and replacement of rear axle Bushes. Even severely corroded and stubborn bushes may be replaced within a few minutes.

consists of:

Part No.	Description	Qty.
KL-0040-2500	Hydraulic Cylinder 17 t.	1
KL-0040-2510	Spindles	1
KL-0215-411	Press Frame	1
KL-0215-422	Sleeve Set VW Polo	1

KL-0215-422 Sleeve Set VW Polo

consists of:

Part No.	Description	Qty.
KL-0043-8274	Press-/Support Sleeve 54 mm	1
KL-0215-4201	Insertion Sleeve	1
KL-0043-8244	Guide Ø10 mm	1

KL-0215-53 Bush Extractor with Hydr. Cylinder

Suitable for VW Polo 1995 - 1999 rear axle

For removal and replacement of bushes on the rear axle.

consists of:

Part No.	Description	Qty.
KL-0040-2500	Hydraulic Cylinder 17 t.	1
KL-0040-2552	Adaptor M42x2 to Ø 30	1
KL-0215-530	Bush Extractor without Hydr. Cylinder and without Adaptor	1

KL-0215-530 Bush Extractor without Hydr. Cylinder

consists of:

Part No.	Description	Qty.
KL-0040-2541	Puller Spindle M10x1,25 with Nut	1
KL-0215-531	Sleeve Set	1

KL-0215-531 Sleeve Set

consists of:

Part No.	Description	Qty.
KL-0215-4201	Insertion Sleeve	1
KL-0043-8574	Press-/Support Sleeve short 54/46	1
KL-0215-5001	Support Sleeve	1

KL-0215-58 Bush Extractor with Hydr. Cylinder

Suitable for VW Polo '02 onwards, Polo Classic '04 onwards; Škoda Fabia '00 onwards; Seat Ibiza '02 onwards and Seat Cordoba '03 onwards.

KL-0215-58 allows quick, easy, clean and safe removal and replacement of bushes on the rear axle.

consists of:

Part No.	Description	Qty.
KL-0040-2500	Hydraulic Cylinder 17 t.	1
KL-0040-2552	Adaptor M42x2 to Ø 30	1
KL-0215-580	Bush Extractor without Hydr. Cylinder and without Adaptor	1

KL-0215-580 Bush Extractor (without Hydr.-Cylinder)

consists of:

Part No.	Description	Qty.
KL-0040-2542	Puller Spindle M12 with Nut	1
KL-0215-581	Sleeve Set	1

KL-0215-581 Sleeve Set

consists of:

Part No.	Description	Qty.
KL-0215-5201	Support Tube	1
KL-0215-5802	Chuck Jaws with bolts	1
KL-0215-5803	Press Piece Extraction	1
KL-0215-5804	Press Piece Extraction	1
KL-0215-5805	Support Tube Insertion	1
KL-0215-5806	Press Piece Insertion	1
KL-0215-5205	Press Piece Insertion	1

KL-0215-52 A



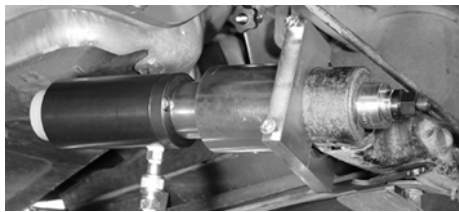
Audi A3,
VW Golf IV

Rubber-to-plastic
bushing Ø 72mm

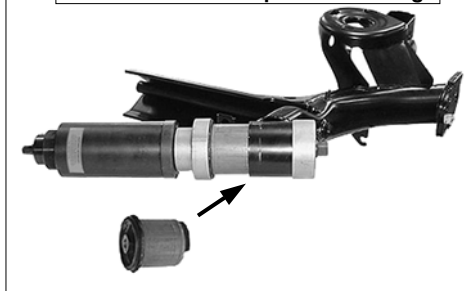
Rubber-to-metal silentbloc-
type bushing Ø 69mm



Extraction rubber-to-metal



Insertion rubber-to-plastic bushing



Note: The use of the safety belt **KL-0040-2590** (see page 4-06) is always recommended when working with the Hydraulic Cylinder **KL-0040-2500** on the vehicle.

KL-0215-52 A Bush Extractor Audi A3, VW Golf IV RA with Hydraulic Cylinder

Suitable for Audi A3; VW Bora, Beetle, Golf IV; Seat Leon, Toledo '01 onwards and Škoda Oktavia '97 onwards rear axle.

For quick, easy removal of the rubber-to-metal silentbloc-type bushing (**KL-0215-522** with **KL-0040-2500** and **KL-0040-2552**), and for removing and installing the rubber-to-plastic bushing (**KL-0215-520** with **KL-0040-2500** and **KL-0040-2552**) at the rear axle.

Contents:

Part No.	Description	Qty.
KL-0215-52 A	Bush Extractor Audi A3, VW Golf IV rear axle with Hydraulic Cylinder	1
<i>consists of:</i>		
KL-0040-2500	Hydraulic Cylinder 17t	1
KL-0215-520 A	Bush Extractor Audi A3, VW Golf IV rear axle without Hydraulic Cylinder	1

KL-0215-520 A Bush Extractor without Hydraulic Cylinder

As **KL-0215-52 A** if Hydraulic Cylinder **KL-0040-2500** and Adaptor **KL-0040-2552** are already available.

Contents:

Part No.	Description	Qty.
KL-0215-520 A	Bush Extractor Audi A3, VW Golf IV rear axle without Hydr. Cylinder	1
<i>consists of:</i>		
KL-0215-2552	Adaptor M42X2 to Ø30	1
KL-0215-520	Bush Extractor without Hydraulic Cylinder (for rubber-to-plastic bushing)	1
KL-0215-522	Supplement Kit (for rubber-to-metal silentbloc-type bushing)	1

KL-0215-520 Bush Extractor without Hydraulic Cylinder (only rubber-to-plastic bushings)

Contents:

Part No.	Description	Qty.
KL-0215-520	Bush Extractor without Hydraulic Cylinder	1
<i>consists of:</i>		
KL-0215-5201	Support Sleeve	1
KL-0215-5202	Chuck Jaws with bolts	1
KL-0215-5203	Press Sleeve (extraction)	1
KL-0215-5204	Support Sleeve (insertion)	1
KL-0215-5205	Press Sleeve (insertion)	1
KL-0040-2542	Puller Spindle M12 with Nut	1

KL-0215-522 Supplement Kit for rubber-to-metal silentbloc without Hydraulic Cylinder

Contents:

Part No.	Description	Qty.
KL-0215-522	Supplement Kit for rubber-to-plastic bushing without Hydraulic Cylinder	1
<i>consists of:</i>		
KL-0040-2512	Puller Spindle	1
KL-0040-3009	Nut	1
KL-0215-523	Press/Support Sleeve Set	1

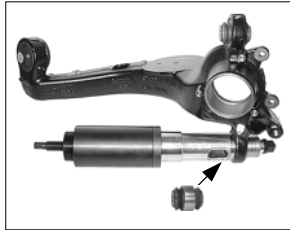
KL-0215-523 Press/Support Sleeve Set

Contents:

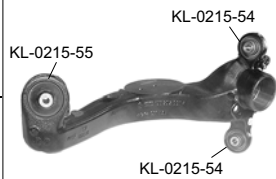
Part No.	Description	Qty.
KL-0215-523	Press/Support Sleeves	1
<i>consists of:</i>		
KL-0215-5222	Support Sleeve (extraction)	1
KL-0215-5221	Press Sleeve (extraction)	1
KL-0043-8569	Press/Support Sleeve short 44/36	1

KL-0215-54

VW Golf
4-Motion

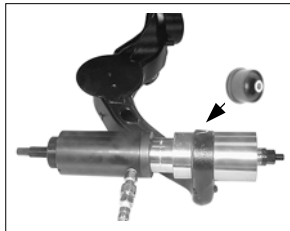


Rear Trailing Arm
required Tools



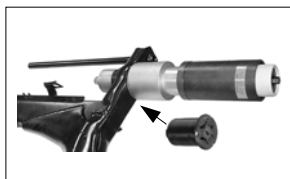
KL-0215-55

VW Golf
4-Motion



KL-0215-50

Audi



Note: The use of the safety belt KL-0040-2590 (see page 4-06) is always recommended when working with the hydraulic cylinder KL-0040-2500 on the vehicle.

KL-0215-54 Bush Extractor with Hydraulic Cylinder

Suitable for VW Golf 4-Motion Rear Trailing Arm.

The Bush Extractor KL-0215-54 allows quick, clean and safe removal and replacement of the upper and lower bushes in the rear trailing arm.

consists of:

Part No.	Description	Qty.
KL-0040-2500	Hydraulic Cylinder 17 t.	1
KL-0040-2550	Adaptor M42x2 to Ø 30	1
KL-0215-540	Bush Extractor without Hydr. Cylinder	1

KL-0215-540 Bush Extractor without Hydraulic Cylinder

consists of:

Part No.	Description	Qty.
KL-0215-5401	Support Sleeve	1
KL-0215-5402	Press Sleeve	1
KL-0040-2542	Puller Spindle M12 with Nut	1

KL-0215-55 Bush Extractor with Hydraulic Cylinder

Suitable for VW Golf 4-Motion Rear Trailing Arm.

The Bush Extractor KL-0215-55 allows quick, clean and safe removal and replacement of the Metallastic Bushes in the rear trailing arm.

consists of:

Part No.	Description	Qty.
KL-0040-2500	Hydraulic Cylinder 17 t.	1
KL-0040-2552	Adaptor M42x2 to Ø 30	1
KL-0215-550	Bush Extractor without Hydr. Cylinder	1

KL-0215-550 Bush Extractor without Hydraulic Cylinder

consists of:

Part No.	Description	Qty.
KL-0215-5501	Support Sleeve	1
KL-0215-5502	Press Sleeve (insertion)	1
KL-0215-5503	Press Sleeve (extraction)	1
KL-0040-2542	Puller Spindle M12 with Nut	1

KL-0215-50 Bush Extractor with Hydraulic Cylinder

Suitable for Audi 80 (B4) 1991 - 1996 Rear Axle.

The Bush Extractor KL-0215-50 allows quick, easy, clean and safe removal and replacement of bushes on the rear axle.

consists of:

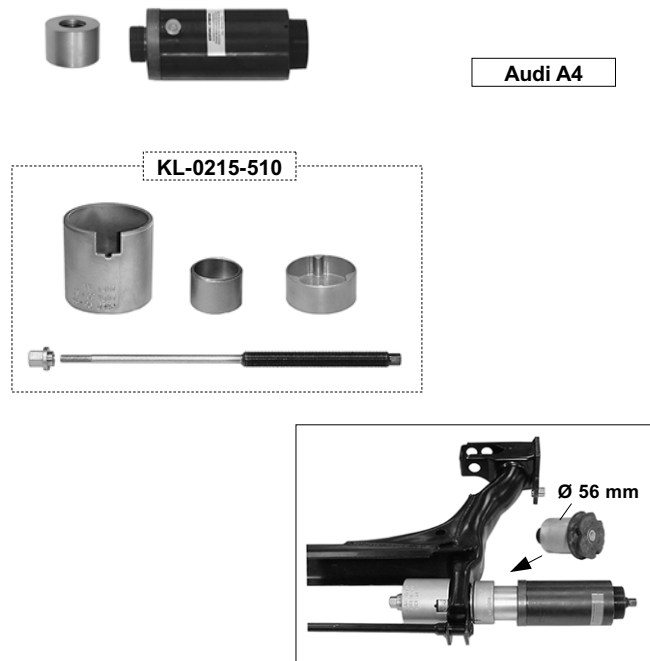
Part No.	Description	Qty.
KL-0040-2500	Hydraulic Cylinder 17 t.	1
KL-0040-2552	Adaptor M42x2 to Ø 30	1
KL-0215-500	Bush Extractor without Hydr. Cylinder	1

KL-0215-500 Bush Extractor without Hydraulic Cylinder

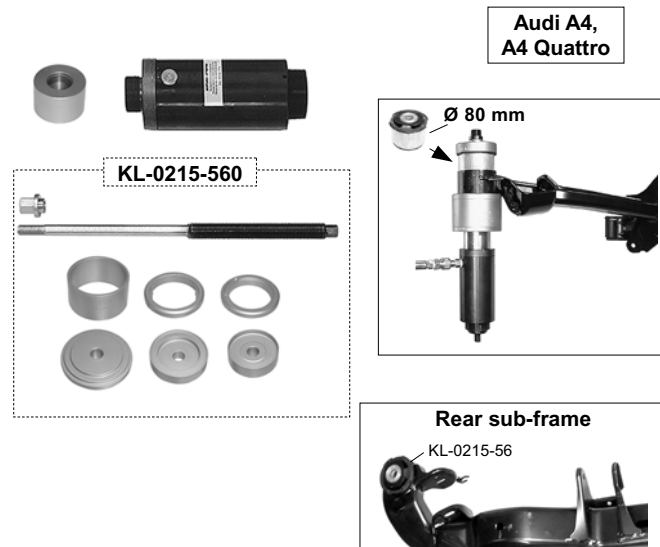
consists of:

Part No.	Description	Qty.
KL-0215-5001	Support Sleeve	1
KL-0215-5002	Press Support (extraction)	1
KL-0215-5003	Press Support (insertion)	1
KL-0040-2542	Puller Spindle M12 with Nut	1

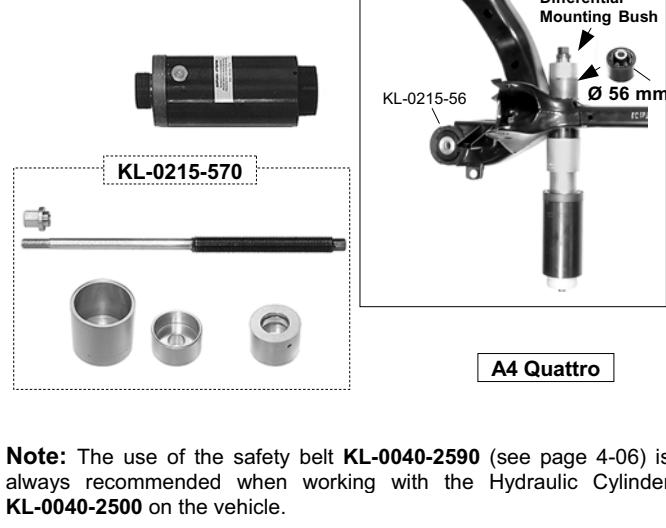
KL-0215-51



KL-0215-56



KL-0215-57



Note: The use of the safety belt **KL-0040-2590** (see page 4-06) is always recommended when working with the Hydraulic Cylinder **KL-0040-2500** on the vehicle.

KL-0215-51 Bush Extractor with Hydraulic Cylinder

Suitable for Audi A4 from '96 - '01 Rear Axle.

For removal and replacement of bushes on the rear axle.

consists of:

Part No.	Description	Qty.
KL-0040-2500	Hydraulic Cylinder 17 t.	1
KL-0040-2552	Adaptor M42x2 to Ø 30	1
KL-0215-510	Bush Extractor without Hydr. Cylinder and Adaptor	1

KL-0215-510 Bush Extractor without Hydraulic Cylinder

consists of:

Part No.	Description	Qty.
KL-0215-5001	Support Sleeve	1
KL-0215-5002	Press Sleeve (extraction)	1
KL-0215-5103	Press Sleeve (insertion)	1
KL-0040-2542	Puller Spindle M12 with Nut	1

KL-0215-56 Bush Extractor with Hydraulic Cylinder

For Audi A4 and A4 Quattro 2001-onwards rear sub-frame.

Allows quick and easy replacement of Bushes in the rear sub-frame without the need to remove the sub-frame from the vehicle.

consists of:

Part No.	Description	Qty.
KL-0040-2500	Hydraulic Cylinder 17 t.	1
KL-0040-2552	Adaptor M42x2 to Ø 30	1
KL-0215-560	Bush Extractor without Hydr. Cylinder and Adaptor	1

KL-0215-560 Bush Extractor without Hydraulic Cylinder

consists of:

Part No.	Description	Qty.
KL-0215-5601	Housing Cover	1
KL-0215-5602	Housing	1
KL-0215-5603	Support Ring - removal	1
KL-0215-5604	Press Tool - removal	1
KL-0215-5605	Support Ring - replacement	1
KL-0215-5606	Press Tool - replacement	1
KL-0040-2543	Puller Spindle M14 with Nut	1

KL-0215-57 Bush Extractor with Hydraulic Cylinder

For Audi A4 Quattro 2001-onwards Differential Mounting Bush.

To replace the Differential Mounting Bush in the rear sub-frame

consists of:

Part No.	Description	Qty.
KL-0040-2500	Hydraulic Cylinder 17 t.	1
KL-0215-570	Bush Extractor without Hydr. Cylinder	1

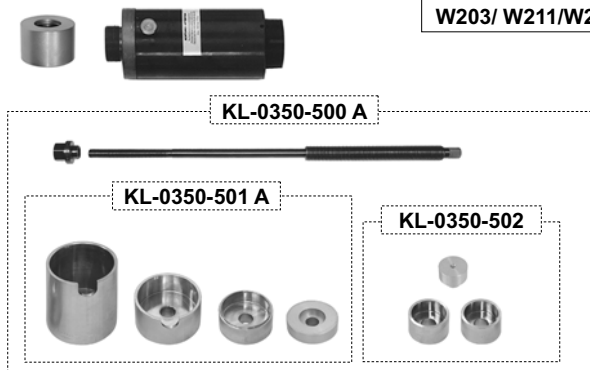
KL-0215-570 Bush Extractor without Hydraulic Cylinder

consists of:

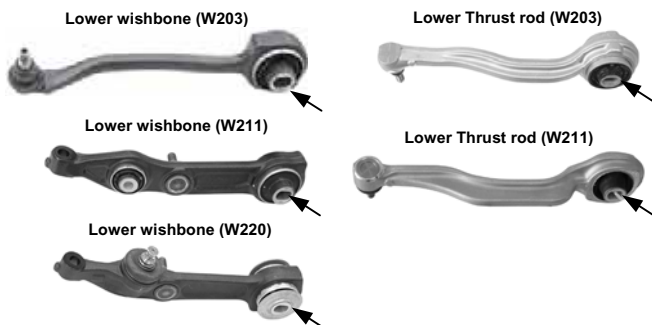
Part No.	Description	Qty.
KL-0215-5701	Support Sleeve	1
KL-0215-5702	Press Sleeve	1
KL-0040-2552	Adaptor M42x2 to Ø 30	1
KL-0040-2542	Puller Spindle M12 with Nut	1

KL-0350-50 A

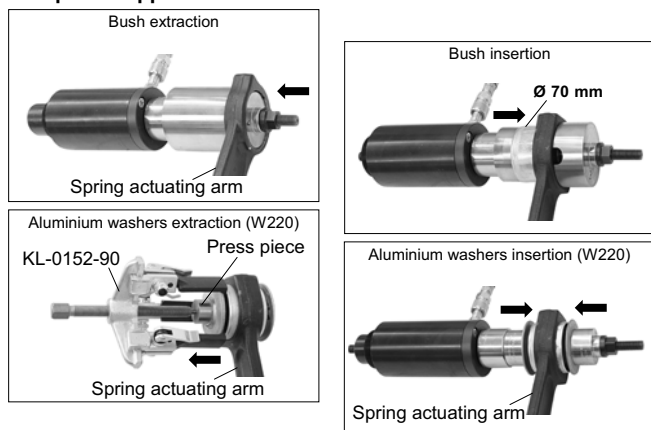
Mercedes
W203/ W211/W220



Wishbone / Thrust rod:

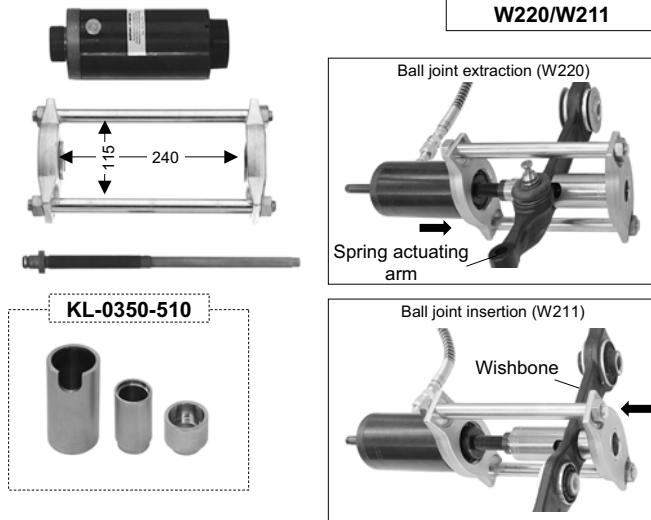


Examples of application



KL-0350-51

Mercedes
W220/W211



KL-0350-50 A Bush Extractor with Hydraulic Cylinder

Suitable for Mercedes W203 (C-Klasse), W211 (E-Klasse) and W220 (S-Klasse) front axle.

For quick, safe removal and installation of the silentbloc-type bushings in the suspension wishbone (W203 - C Class and W211 - E Class) and in the leading link and suspension arm (W220 - s Class).

KL-0350-50 A Bush Extractor with hydr. cyl.

consists of:

Part No.	Description	Qty.
KL-0040-2500	Hydraulic-Cylinder 17 t. (without coupling)	1
KL-0040-2552	Adaptor M42x2 auf Ø 30	1
KL-0350-500 A	Bush Extractor without Hydr. Cylinder	1

KL-0350-500 A Bush Extractor without Hydraulic Cylinder

As KL-0350-50 A, if Hydraulic Cylinder KL-0040-2500 and the adaptor KL-0040-2552 are already available.

consists of:

Part No.	Description	Qty.
KL-0040-2543-1	Pull spindle M14	1
KL-0040-2543-2	Nut M14	1
KL-0350-501 A	Sleeve set (Silentbloc)	1
KL-0350-502	Sleeve set (Aluminium washers)	1

KL-0350-501 A Sleeve Set (Silentbloc)

Press and support sleeve set to remove or install the silentbloc-type bushing in conjunction with the above listet parts (not fat marked).

consists of:

Part No.	Description	Qty.
KL-0350-5001	Support Sleeve (extraction)	1
KL-0350-5002	Support Sleeve (insertion)	1
KL-0215-5503	Press Piece	1
KL-0350-5004	Press Piece	1

KL-0350-502 Sleeve Set (Aluminium washers)

Necessary to remove or install the aluminium washers on the spring actuating (W220) see ill. Examples of application.

consists of:

Part No.	Description	Qty.
KL-0043-8572	Press Sleeve	2
KL-0350-5003	Press Piece	1

Note:

- The KL-0350-50 A puller is based on the KL-0350-50 puller together with the KL-0350-5004 thrust block. The application area has now been extended to include the lower front wishbones and front-axle leading links on the Mercedes W203 (C Class).
- To remove and install the silentbloc-type bushing on the leading link or spring arm of the Mercedes W211 (E Class), the KL-0350-501 A set of sleeves together with the hydraulic cylinder KL-0040-2500, the adapter KL-0040-2552 and the puller spindle KL-0040-2543 are needed.

Accessories:

KL-0152-90 K Puller Set Twin- / Triple-Arm with fast-clamp lever (not ill.)

To pull off discs, wheels or ball bearings.

The two- or three-arm puller with rapid clamping hook from the set of pullers can be used either as an internal or external puller if the hooks are repositioned.

Note: Further Informations to KL-0152-90 K see Page 8-05.

KL-0350-51 Press Tool with Hydraulic Cylinder

Suitable for Mercedes W220 (S-Class) and W211 (E-Class) Front Axle.

The ball joint in the spring actuating arm (W211 - E Class) or in the wishbone (W220 - S Class) can be removed and installed quickly and safely using pressing-out tool KL-0350-51. The suspension components do not have to be removed from the vehicle.

consists of:

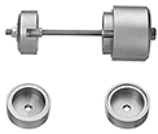
Part No.	Description	Qty.
KL-0040-2500	Hydraulic Cylinder 17 t. (without coupling)	1
KL-0040-2510	Pressure Spindle	1
KL-0043-8510	Press Frame	1
KL-0350-510	Press Tool without Hydraulic cylinder	1

KL-0350-510 Press Tool without Hydraulic Cylinder

consists of:

Part No.	Description	Qty.
KL-0350-5101	Support Sleeve (extraction)	1
KL-0350-5102	Press Piece	1
KL-0043-8567	Support Sleeve (insertion)	1

KL-0350



Mercedes W124, W201



KL-0350-1



KL-0350-100



Mercedes W202



KL-0350-2



KL-0350-200



Mercedes W210



KL-0351-1

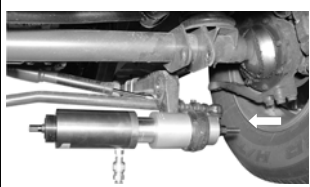


KL-0351-100



Mercedes
G-Model

Bush extraction (front axle)



Bush extraction (rear axle)



KL-0350 Insertion Tool for Rubber Bush

Suitable for Mercedes W124 and W201 Front Axle.

To insert the front and rear torsion rubber bushes on the front wishbone.

This tool allows the replacement of the torsion bushes without the need to dismantle the wishbone.

The automatic flaring of the aluminium sleeve occurs only when the correct compression of the bush has been achieved.

Time savings approx. 1 hour.

KL-0350-1 Bush Extractor with Hydraulic Cylinder

Suitable for Mercedes W202 (C-Class) and W170 (SLK) Front Axle.

The KL-0350-1 allows both the split front bush as well as the solid rear bush to be quickly, easily and safely replaced on the front lower wishbone. Removal of the wishbone from the car is *not* necessary.

The Hydraulic Cylinder KL-0040-2500 used with the appropriate adaptors makes light work of stubborn, corroded bushes.

KL-0350-100 Bush Extractor without Hydraulic Cylinder As KL-0350-1.

If Hydraulic Cylinder KL-0040-2500 is already available.

KL-0350-2 Bush Extractor with Hydraulic Cylinder

Suitable for Mercedes W210 (E-Class) front axle.

For quick, easy and safe replacement of the both the divided front bush and also the solid compact rear bush in the front lower wishbone. Removal of the wishbone from the car is *not* necessary.

KL-0350-200 Bush Extractor without Hydraulic Cylinder As KL-0350-2.

If Hydraulic Cylinder KL-0040-2500 is already available.

KL-0351-1 Bush Extractor with Hydraulic Cylinder

For use on Mercedes G-Class front- and rear-axle locating links with 65 mm or 70 mm diameter silentbloc-type bushings.

The silentbloc-type bushings in the front- and rear-axle locating links can be extracted or inserted quickly and safely with the KL-0351-1 puller. The locating link does not have to be removed.

KL-0351-1 consists of:

Part No.	Description
KL-0040-2500	Hydraulic Cylinder (without coupling)
KL-0040-2552	Adaptor
KL-0351-100	Bush Extractor without Hydr. Cylinder

KL-0351-100 Bush Extractor without Hydraulic Cylinder

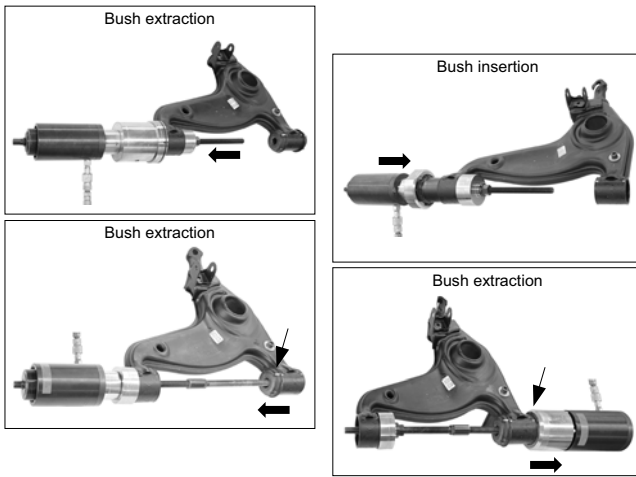
consists of:

Part No.	Description
KL-0351-1001	Press Sleeve short 65/58 rear axle
KL-0351-1002	Support Sleeve 80 mm
KL-0351-1003	Press/Support Sleeve 70 mm front axle
KL-0040-2544	Puller Spindle M16 with Nut

Note: The use of the safety belt KL-0040-2590 (see page 4-06) is always recommended when working with the hydraulic cylinder KL-0040-2500 on the vehicle.

KL-0350-40

Mercedes W140,
W170, W202, W210



KL-0350-40 Bush Extractor with Hydraulic Cylinder (German Utility Model)

Suitable for Mercedes **W140 (S-Class), W170 (SLK), W202 (C-Class) and W210 (E-Class)** front axle wishbone.

At last a hydraulic tool set has been introduced for quick, simple and safe removal and installation of the silentbloc-type bushings in the front-axle wishbones of Mercedes **W140, W170, W202 and W210** models.

Hydraulic drive, using Hydraulic Cylinder **KL-0040-2500**, means that even very firmly seated or rusted-in bushings can be removed and inserted without difficulty.

KL-0350-40 Bush Extractor with Hydraulik Cylinder

Suitable for Mercedes **W140 (S-Class), W170 (SLK), W202 (C-Class) and W210 (E-Class)**.

KL-0350-400 Bush Extractor without Hydraulik Cylinder

As **KL-0350-40**, if Hydraulic Drive (see specification table) is already available

KL-0350-41 Bush Extractor with Hydraulik Cylinder

Suitable for Mercedes **W140 (S-Class)**.

KL-0350-410 Sleeve Set

As **KL-0350-41**, if Hydraulic Drive (see specification table) is already available

KL-0350-42 Bush Extractor with Hydraulik Cylinder

Suitable for Mercedes **W210 (E-Class)**.

KL-0350-420 Sleeve Set

As **KL-0350-42**, if Hydraulic Drive (see specification table) is already available

KL-0350-43 Bush Extractor with Hydraulik Cylinder

Suitable for Mercedes **W170 (SLK) and W202 (C-Class)**.

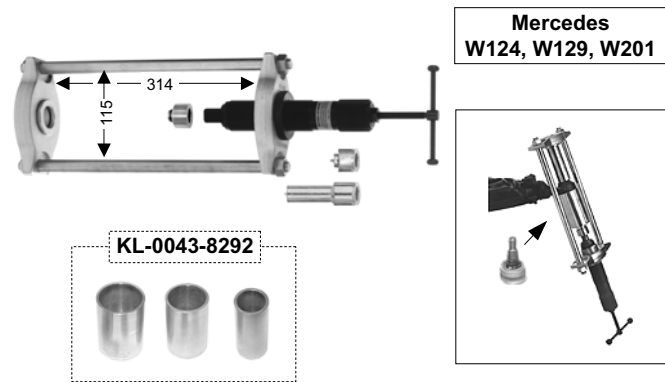
KL-0350-430 Sleeve Set

As **KL-0350-43**, if Hydraulic Drive (see specification table) is already available

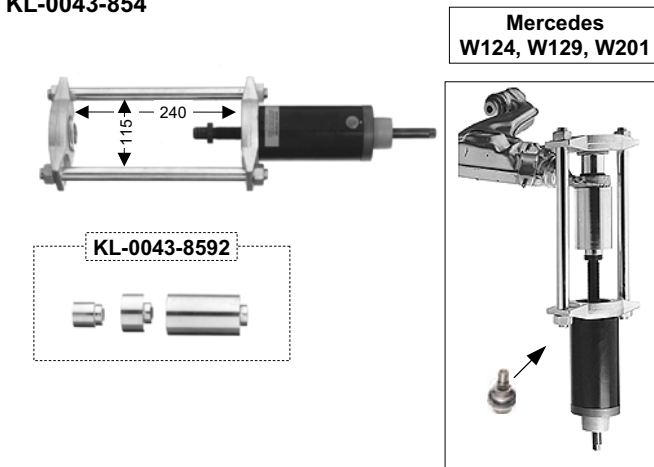
Specification:

Pos.	Part No.	Description	Part No.	KL-0350-40 (W140, W170, W202, W210)	KL-0350-400 (W140, W170, W202, W210)	KL-0350-41 (W140)	KL-0350-410 (W140)	KL-0350-42 (W210)	KL-0350-420 (W210)	KL-0350-43 (W202, W170)	KL-0350-430 (W202, W170)
1	KL-0350-4001	Support Sleeve		•	•					•	•
2	KL-0350-4002	Press Piece		•	•					•	•
3	KL-0350-4003	Puller dome		•	•					•	•
4	KL-0350-4004	Press Piece		•	•					•	•
5	KL-0350-4005	Press Piece		•	•			•	•	•	•
6	KL-0350-4006	Support Sleeve		•	•			•	•	•	•
7	KL-0350-4007	Puller dome		•	•			•	•	•	•
8	KL-0350-4008	Press Piece		•	•			•	•	•	•
9	KL-0350-4009	Press Piece		•	•			•	•		
10	KL-0350-4010	Press Piece		•	•			•	•		
11	KL-0350-4011	Support Sleeve		•	•	•	•	•	•		
12	KL-0350-4012	Press Piece		•	•	•	•				
13	KL-0350-4013	Puller dome		•	•	•	•				
14	KL-0350-4014	Press Piece		•	•	•	•				
15	KL-0350-4015	Puller dome		•	•	•	•				
16	KL-0350-4016	Press Piece		•	•	•	•				
17	KL-0350-3006	Support Sleeve		•	•	•	•				
18	KL-0350-2002	Supporting segment Set (3 Pcs.)		•	•	•	•	•	•		
19	KL-0040-2543-3	Spindle extension M14		•	•	•	•	•	•	•	
20	KL-0040-2543	Puller Spindle M14 with Shoulder Nut		•	•			•	•	•	
21	KL-0040-2552	Adaptor M42x2 to Ø30		•		•		•		•	
22	KL-0040-2500	Hydraulic Cylinder		•		•		•		•	

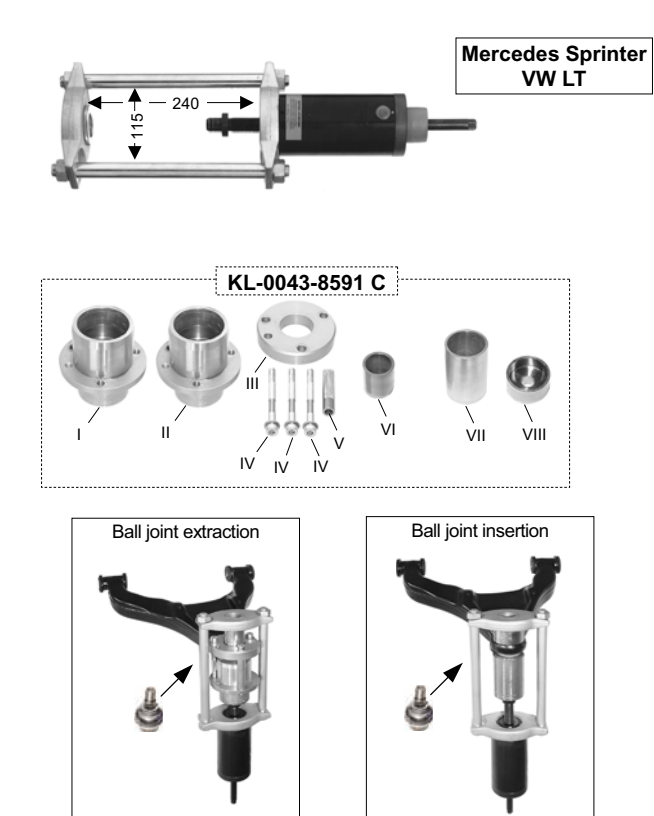
KL-0043-822



KL-0043-854



KL-0043-855 C



Note: A hydraulic pump will be required to drive the Hydraulic Cylinder KL-0040-2500.

KL-0043-822 Press Tool with Hydraulic Spindle

Suitable for Mercedes W124, W129 and W201 Front Axle.

To renew suspension joints on the vehicle without dismantling the wishbone.

consists of:

Part No.	Description	Part No.	Description
KL-0045-70	Hydraulic Spindle 12 t	KL-0043-8292	Press/Support Tube Set
KL-0043-8200	Press Frame long		

KL-0043-8292 Press/Support Tube Set

consists of:

Part No.	Description	Part No.	Description
KL-0043-8265	Press/Support Tube	KL-0043-8277	Press / Support Tube
KL-0043-8275	Press/Support Tube		

KL-0043-854 Press Tool with Hydraulic Cylinder

Suitable for Mercedes W124, W129 and W201 Front Axle.

To renew suspension joints on the vehicle without dismantling the wishbone.

As KL-0043-852 but with Hydraulic Cylinder KL-0215-10 (17 t) instead of Hydraulic Spindle KL-0045-70.

consists of:

Part No.	Description	Part No.	Description
KL-0215-10	Hydraulic Cylinder 17 t	KL-0043-8592	Press/Support Tube
KL-0043-8510	Press Frame short		

KL-0043-8592 Press/Support Tube Set

consists of:

Part No.	Description	Part No.	Description
KL-0043-8565	Press/Support Tube	KL-0043-8277	Press/Support Tube
KL-0043-8575	Press/Support Tube		

KL-0043-855 C Press Tool with Hydraulic Cylinder (Patented)

Suitable for Mercedes Sprinter '95 onwards and VW LT '96 onwards.

To remove and insert ball joints with the special manufactured press and support sleeves within a few minutes on the vehicle.

Advantages:

- High time savings
- Easy to operate.
- Tool cannot tilt to one side.
- Avoid mischances.
- Hydraulic Cylinder 17 to. KL-0040-2500 is all-purpose also with other KLANN-tools useable.

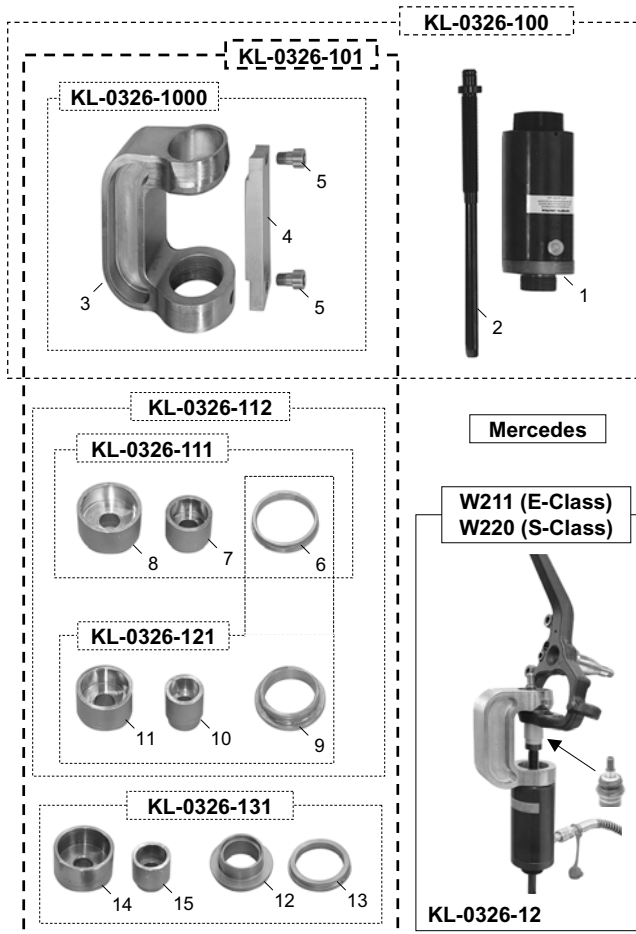
Specification:

Part No.	Description	Qty.
KL-0043-855 C	Press Tool with Hydraulic Cylinder	1
<i>consists of:</i>		
KL-0043-8510	Press frame short	1
KL-0040-2500	Hydraulic cylinder 17t. (without coupling)	1
KL-0040-2510	Press spindle	1
KL-0043-8591 C	Press/ support sleeve set	1

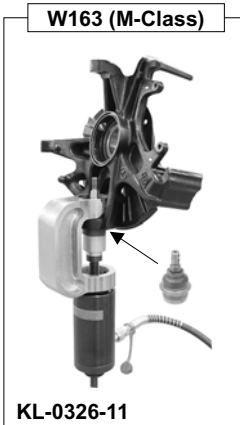
Part No.	Description	Qty.
KL-0043-8591 C	Press/ support sleeve set	1
<i>consists of:</i>		
KL-0043-8236-1	Support sleeve (I)	1
KL-0043-8236-2	Support sleeve (II)	1
KL-0043-8236-3	Clamping plates (III)	1
KL-0043-8236-4	Cylinder screw (IV)	3
KL-0043-8236-5	Distance tube (V)	1
KL-0043-8531	Press sleeve (VI)	1
KL-0043-8279	Press sleeve (VII)	1
KL-0043-8578	Press/support sleeve (VIII)	1

Note: Further press tool sets with Hydraulic Cylinder KL-0040-2500 e.g. for HGV's see chapter 11.

KL-0326-10



KL-0326-12



KL-0326-11



KL-0326-13

Note: A hydraulic pump will be required to drive the Hydraulic Cylinder KL-0040-2500.

KL-0326-20



W163 (M-Class)

KL-0326-10 Press Tool with Hydr. Cyl. (German Utility Model)

Suitable for Mercedes W163 (M-Class) Front Axle / Rear Axle and W211 (E-Class), W220 (S-Class), W124, W201 Front Axle.

The support joint can be pressed into and out of the lower wishbone quickly and easily with the KL-0326-10 hydraulic press tool kit. The support joint can often be removed or installed from the vehicle in only a few minutes, without removing the wishbone.

Specification:

Pos.	Part-No.	Description	Qty.
	KL-0326-10	Press Tool with Hydr. Cyl. 17t.	1
<i>consists of:</i>			
	KL-0326-100	Hydraulic Press Frame	1
	KL-0326-112	Sleeve Set W163, W211, W220	1
	KL-0326-131	Sleeve Set W124, W201	1
KL-0326-100 Hydraulic Press Frame			
<i>consists of:</i>			
1	KL-0040-2500	Hydraulic Cylinder 17 t.	
2	KL-0040-2510	Press Spindle	
	KL-0326-1000	Press Frame (without Drive and Sleeves)	
KL-0326-1000 Press Frame (without Drive and Sleeves)			
<i>consists of:</i>			
3	KL-0326-1001	Press Frame	1
4	KL-0326-1002	screwable selvedge	1
5	KL-0326-1003	fillister head screw M12x20	2
KL-0326-112 Sleeve Set W163, W211, W220			
<i>consists of:</i>			
6	KL-0326-1111	Support Ring 1	1
7	KL-0043-8568	Press/Support sleeve short 42/34	1
8	KL-0043-8576	Press/Support sleeve short 58/50	1
9	KL-0326-1211	Support Ring 2	1
10	KL-0043-8564	Press/Support sleeve short 34/26	1
11	KL-0043-8572	Press/Support sleeve short 50/42	1
KL-0326-131 Sleeve Set W124, W201 (Front Axle)			
<i>consists of:</i>			
12	KL-0326-1311	Press Ring	1
13	KL-0326-1312	Support Ring	1
14	KL-0326-1313	Support Ring	1
15	KL-0043-8566	Press- / Support Sleeve short 38/30	1

KL-0326-101 Hydraulic-Press Tool Kit without Drive

As KL-0326-10 but without the Hydraulic Cylinder KL-0040-2500 and the Spindle KL-0040-2510.

KL-0326-11 Press Tool with Hydr. Cyl. (not ill.)

As KL-0326-10, but specially for W163 (M-Class).

consists of:

Part-No.	Description	Qty.
KL-0326-100	Hydraulic Press Frame	1
KL-0326-111	Sleeve Set W163	1

KL-0326-12 Press Tool with Hydr. Cyl. (not ill.)

As KL-0326-10, but specially for W211 (E-Class), W220 (S-Class).

consists of:

Part-No.	Description	Qty.
KL-0326-100	Hydraulic Press Frame	1
KL-0326-121	Sleeve Set W211, W220	1

KL-0326-13 Press Tool with Hydr. Cyl. (not ill.)

As KL-0326-10, but specially for W124, W201.

consists of:

Part-No.	Description
KL-0326-100	Hydraulic Press Frame
KL-0326-131	Sleeve Set W124, W201

KL-0326-20 Toothed Socket

For tightening the support joint retaining nut on the Mercedes W163 (M-Class) steering knuckle.

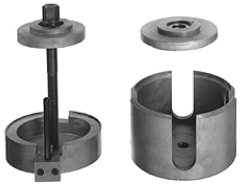
Technical Data

Diameter - outer:.....63,0 mm Diameter - inner:..... 52,5 mm
 Tooth Width:.....7,5 mm Weight:..... 0,50 kg

Note:

Ball joint puller to separate ball joint connections see page 2-18 till 2-28.

KL-0356-4



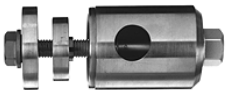
Mercedes



KL-0356-4 Bush Extractor for Rubber Bushes

To replace the bushes on the front sub-frame **Mercedes W140** Models. The work can be carried out without dropping the front sub-frame.

KL-0355-1



Mercedes



KL-0355-1 Bush Extractor

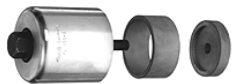
Suitable for **Mercedes W124 rear sub-frame**.

For removal and replacement of the rear sub-frame bushes (Differential Mountings).

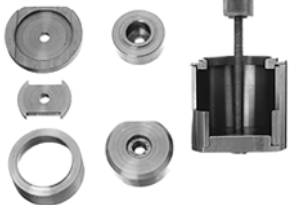
Advantage:

Bushes may be replaced without removal of the Differential.

KL-0355-2



KL-0356-1



Mercedes



KL-0355-2 Bush Extractor

Suitable for **Mercedes W140 rear sub-frame**.

Bush Tool for removal and replacement of the rear sub-frame bushes (Differential Mountings).

KL-0356-1 Bush Extractor for Rubber Bushes

Suitable for **Mercedes W124 und W201**.

For removal and replacement of both front and rear mounting bushes of the rear sub-frame.

Advantage:

The bushes may be replaced on the car without the need to lower the rear sub-frame.

KL-0356-5



Mercedes

KL-0356-6



Mercedes

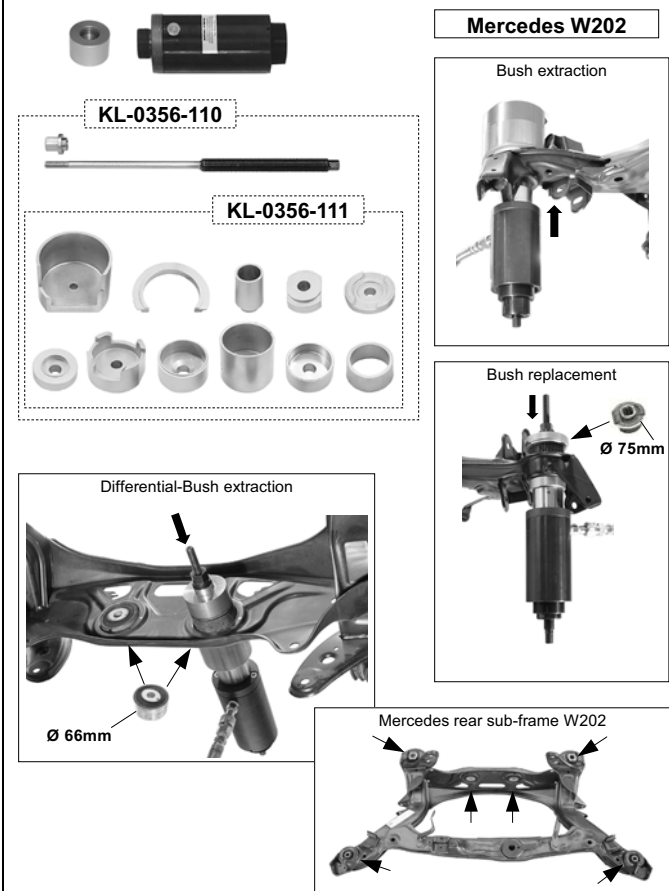
KL-0356-5 Bush Extractor for Rubber Bushes

To replace the **front** bush on the **rear** sub-frame on **Mercedes W140** Models.

KL-0356-6 Bush Extractor for Rubber Bushes

To replace the **rear** bush on the **rear** sub-frame on **Mercedes W140** Models.

KL-0356-11



KL-0356-11 Bush Extractor with Hydr. Cylinder

Suitable for Mercedes W202 (C-Class), W208 (CLK) rear sub-frame.

The **KL-0356-11 Bush Extractor** allows *all* bushes on the rear sub-frame (also Differential Mounting Bushes) to be quickly and easily removed and replaced.

Removal of the sub-frame is *not* necessary.

Advantages:

- Fast ⇒ High Time savings, of 3 hours.
- Safe ⇒ Hammer, chisel etc. not needed.
- Universal ⇒ Hydr. Cylinder 17 t. **KL-0040-2500** is applicable for many KLANN- Tools.

KL-0356-11

consists of:

Part No.	Description
KL-0040-2500	Hydraulic Cylinder (without coupling)
KL-0040-2552	Adaptor
KL-0356-110	Bush Extractor with Hydraulic Cylinder

KL-0356-110 Bush Extractor without Hydr. Cylinder

consists of:

Part No.	Description
KL-0040-2542	Puller Spindle M12 with Shoulder Nut
KL-0356-111	Sleeve Set

KL-0356-111 Sleeve Set

consists of:

Part No.	Description	Part No.	Description
KL-0356-1101	Support Sleeve	KL-0356-1106	Press Piece
KL-0356-0005	Adaptor Ring	KL-0356-1107	Support Sleeve
KL-0356-1102	Press Sleeve	KL-0356-1108	Support Sleeve
KL-0356-1103	Press Piece	KL-0356-1109	Press Sleeve
KL-0356-1104	Press Piece	KL-0355-2002	Support Ring
KL-0356-1105	Support Plate		

KL-0356-12 Bush Extractor with Hydr. Cylinder

Suitable for Mercedes W210 (E-Class) rear sub-frame.

The **KL-0356-12 Bush Extractor** allows *all* bushes on the rear sub-frame (also Differential Mounting Bushes) to be quickly and easily removed and replaced.

Removal of the sub-frame is *not* necessary.

Advantages:

- Fast ⇒ High Time savings of 3 hours.
- Safe ⇒ Hammer, chisel etc. not needed.
- Universal ⇒ Hydr. Cylinder 17 t. **KL-0040-2500** is applicable for many KLANN- Tools.

KL-0356-12

consists of:

Part No.	Description
KL-0040-2500	Hydraulic Cylinder (without coupling)
KL-0040-2552	Adaptor
KL-0356-120	Bush Extractor with Hydraulic Cylinder

KL-0356-120 Bush Extractor without Hydr. Cylinder

consists of:

Part No.	Description
KL-0040-2542	Pull Spindle M12 with Shoulder Nut
KL-0356-121	Sleeve Set

KL-0356-121 Sleeve Set

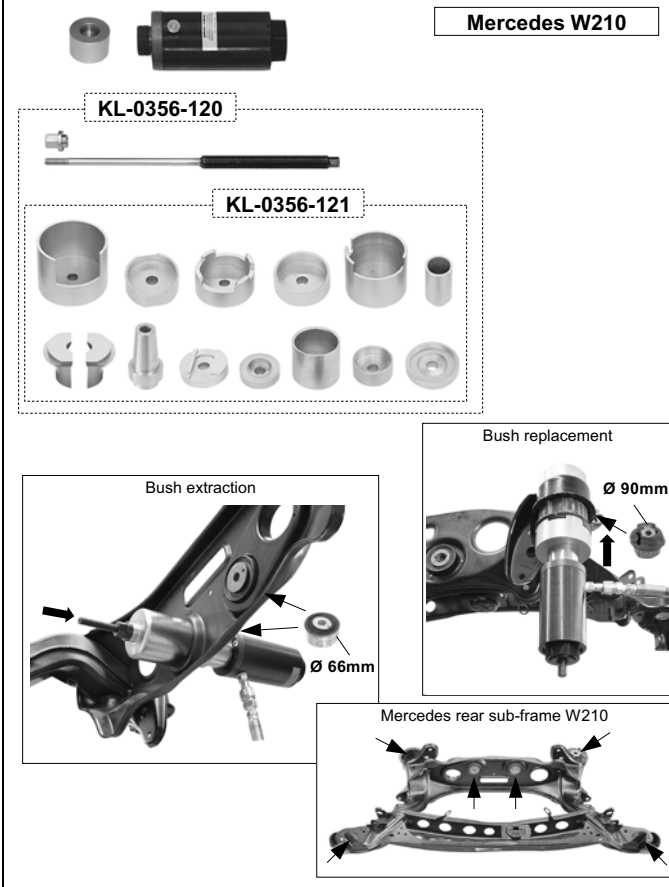
consists of:

Part No.	Description	Part No.	Description
KL-0356-1201	Support Sleeve	KL-0356-1208	Mandrel
KL-0356-1202	Press Piece	KL-0356-1209	Press Piece
KL-0356-1203	Press Piece	KL-0356-1105	Support Plate
KL-0356-1204	Support Sleeve	KL-0356-1108	Support Sleeve
KL-0356-1205	Support Sleeve	KL-0356-1211	Press Sleeve
KL-0356-1206	Press Sleeve	KL-0356-1212	Press Piece
KL-0356-1207	Tension segment (2 Pcs.)		

Note: The use of the safety belt **KL-0040-2590** (see page 4-06) is always recommended when working with the Hydraulic Cylinder **KL-0040-2500** on the vehicle.

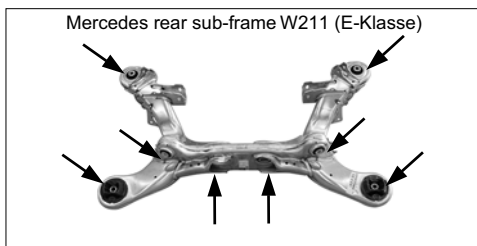
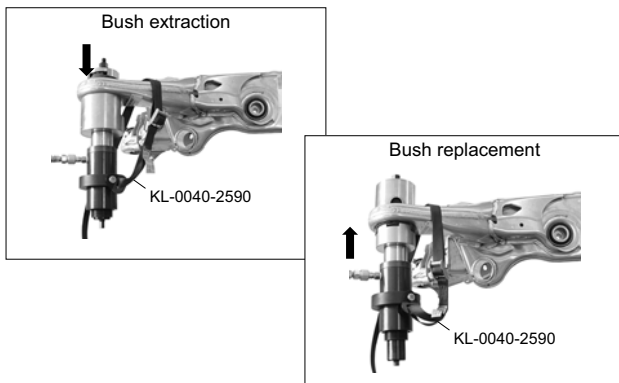
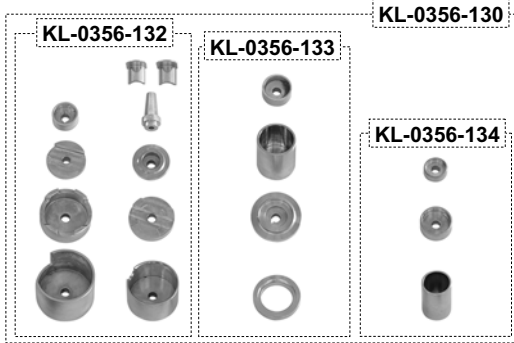
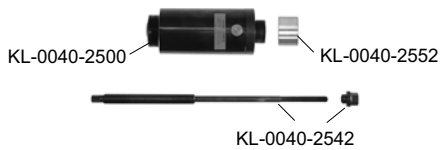
4

KL-0356-12



KL-0356-13

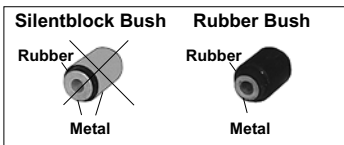
Mercedes W211



Note: A hydraulic pump will be required to drive the Hydraulic Cylinder KL-0040-2500.

KL-0352

Mercedes



KL-0356-13 Bush Extractor with Hydraulic Cylinder

Suitable for Mercedes W211 (E class) rear sub-frame.

With the new **KL-0356-13** tool set, all silentbloc-type bushings at the rear axle subframe (including those holding the differential) can be removed or installed very quickly without the rear axle subframe having to be removed.

Advantages:

- Fast ⇒ Time savings of up to 3 hours.
- Safe ⇒ no hammer, chisel or similar tools needed.
- Universal ⇒ **KL-0040-2500** hollow-piston hydraulic cylinder for removal and installation of wheel hubs, wheel bearings, support joints and silentbloc-type bushings.

KL-0356-13 Bush Extractor with Hydraulic Cylinder.

consists of:

Part No.	Description
KL-0040-2500	Hydraulic Cylinder (without coupling)
KL-0040-2552	Adaptor
KL-0040-2542	Puller Spindle M12 with Shoulder Nut
KL-0356-130	Sleeve Set

KL-0356-130 Sleeve Set

consists of:

Part No.	Description
KL-0356-132	Sleeve Set (for 75.5mm/90mm diameter rubber bushings)
KL-0356-133	Sleeve Set (für 66mm diameter differential bushings)
KL-0356-134	Sleeve Set (for 51mm diameter lateral link bushings)

KL-0356-132 Sleeve Set for Rubber Bushes (Ø75.5mm/Ø90mm)

consists of:

Part No.	Description	Part No.	Description
KL-0356-1311	Press Piece	KL-0356-1203	Press Piece
KL-0356-1312	Support Sleeve	KL-0356-1208	Mandrel
KL-0356-1321	Press Piece	KL-0356-1323	Press Piece
KL-0356-1322	Tension segment	KL-0356-1324	Support Sleeve
KL-0356-1201	Support Sleeve		

KL-0356-133 Sleeve Set for Differential Bush (Ø66mm)

consists of:

Part No.	Description	Part No.	Description
KL-0356-1331	Support Ring	KL-0043-8287	Press Piece
KL-0356-1332	Support Sleeve	KL-0356-1211	Press Piece

KL-0356-134 Sleeve Set for Cross Strut Bush (Ø51mm)

consists of:

Part No.	Description	Part No.	Description
KL-0356-1341	Press Piece	KL-0043-8577	Press Sleeve
KL-0043-8277	Press Sleeve		

Note: The use of the safety belt **KL-0040-2590** (see page 4-04) is always recommended when working with the hydraulic cylinder **KL-0040-2500** on the vehicle.

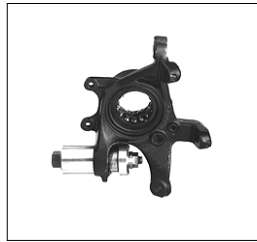
KL-0352 Bush Extractor for Rubber Bushes

To replace the inner bush on the lower rear wishbone on Mercedes W201 and W124.

The Bush Extractor **KL-0352** allows quick, easy and safe replacement of the inner bush of the lower rear wishbone. This tool is not intended for use with Silentblock Bushes (rubber bushes with metal outer housing).

KL-0043-11

Mercedes W124
and W201



KL-0043-11 Bush Extractor

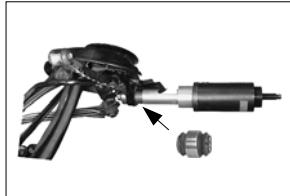
Suitable for Mercedes W124 and W201 Rear Axle.

To replace the bush in the rear wheel-hub housing. The tool contains an axial bearing and a corresponding distance piece which ensures that the replacement bush is correctly positioned within the housing.

KL-0352-1



KL-0352-100



Mercedes W124, W201

KL-0352-1 Bush Extractor with Hydraulic Cylinder

Suitable for Mercedes W124, W201 Rear Axle.

The Bush Tool KL-0352-1 allows quick, easy and safe replacement of the bushes in the wheel bearing housing of the rear axle, without the need to dismantle the bearing housing.

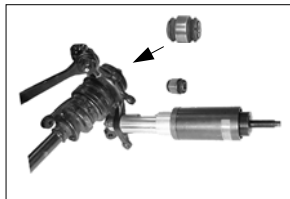
consists of:

Part No:	Description	Qty.
KL-0040-2500	Hydraulic Cylinder 17 t	1
KL-0040-2552	Adaptor M42x2 to Ø30	1
KL-0352-100	Bush Extractor without Hydr. Cylinder	1

KL-0352-2



KL-0352-200



Mercedes W140

KL-0352-100 Bush Extractor without Hydraulic Cylinder

consists of:

Part No:	Description	Part No:	Description
KL-0352-1001	Sleeve (extraction)	KL-0043-1104	Sleeve (extraction)
KL-0352-1002	Press Piece (insertion)	KL-0043-1105	Nut M14
KL-0043-1103	Sleeve (insertion)	KL-0040-2543-1	Puller Spindle M14

KL-0352-2 Bush Extractor with Hydraulic Cylinder

Suitable for Mercedes W140 (S-Class) Rear Axle.

The KL-0352-2 allows simple, quick and safe replacement of bushes in the rear wheel-bearing housing, without the need to dismantle the bearing housing.

consists of:

Part No.	Description	Qty.
KL-0040-2500	Hydraulic Cylinder 17 t.	1
KL-0040-2552	Adaptor M42x2 to Ø 30	1
KL-0352-200	Bush Extractor without Hydr. Cylinder	1

KL-0357-10

Mercedes W168



KL-0352-200 Bush Extractor without Hydraulic Cylinder

consists of:

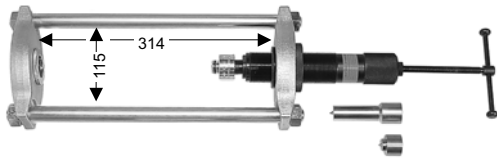
Part No:	Description	Part No:	Description
KL-0352-1001	Sleeve (extraction)	KL-0043-1104	Sleeve (extraction)
KL-0352-1002	Press Piece (insertion)	KL-0043-1105	Nut M14
KL-0352-2001	Sleeve (insertion)	KL-0040-2543-1	Puller Spindle M14

KL-0357-10 Bush Extractor for Trailing Arm Bearing

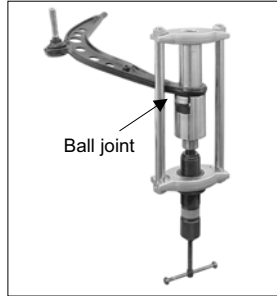
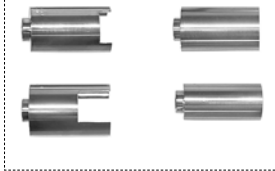
For Mercedes W168 (A-Class) Rear Trailing Arm.

Allows precise extraction and insertion of the inner and outer Taper Roller Bearings and Seals.

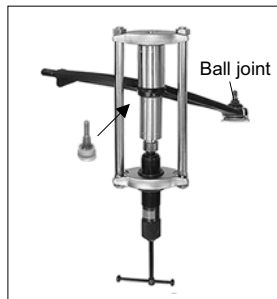
KL-0043-823



KL-0043-8294

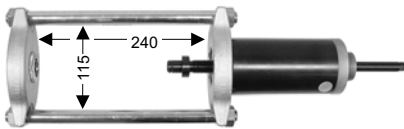


Accessories: KL-0043-8231

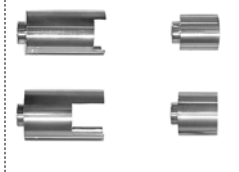


KL-0043-859

BMW E36

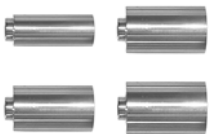


KL-0043-8594



KL-0043-8296

BMW E30



KL-0043-823 Press Tool with Hydraulic Spindle

Suitable for BMW E36 front lower wishbone.

Outer ball-joints on the lower front wishbone may be quickly and cleanly replaced using the tool **KL-0043-823**. Replacement of the outer ball-joint can be carried out within minutes without the need to remove the wishbone from the car.

consists of:

Part No.	Description
KL-0045-70	Hydr.-Spindle 12 t
KL-0043-8200	Press frame long
KL-0043-8294	Press/ support sleeve set

KL-0043-8294 Press/ support sleeve set long

Suitable for BMW E36 front lower wishbone

The press/ support sleeve set **KL-0043-8294** offers the same capability as the hand press set **KL-0043-823** to quickly and easily replace ball-joints if the Press Frame **KL-0043-8211** and the hydraulic spindle 12t **KL-0045-70** is already available.

consists of:

Part No.	Description	Part No.	Description
KL-0043-8288-1	Press sleeve E36	KL-0043-8271	Press/ support sleeve
KL-0043-8289-1	Support sleeve E36	KL-0043-8276	Press/ support sleeve

Accessories: KL-0043-8231 Press sleeve E36

Middle ball joint on the lower front wishbone can be inserted easy and quickly with the tool set **KL-0043-823** in conjunction with the press sleeve **KL-0043-8231**.

KL-0043-859 Hydraulik Press Set

Suitable for BMW E36 front lower wishbone.

Middle ball-joints on the lower front wishbone may be quickly and cleanly replaced using the tool **KL-0043-859**. Replacement of the outer ball-joint can be carried out within minutes without the need to remove the wishbone from the car.

consists of:

Part No.	Description
KL-0040-2500	Hydraulic cylinder
KL-0040-2510	Press spindle
KL-0043-8510	Press frame short
KL-0043-8594	Press/ support sleeve set

KL-0043-8594 Press/support sleeve set

Suitable for BMW E36 front lower wishbone.

The Press/support tube set **KL-0040-8594** allows quick and easy removal and replacement of the outer ball-joint if the press frame **KL-0043-8510**, the pressure spindle **KL-0040-2510** and the Hydraulic Cylinder 17t **KL-0040-2500** is already available.

consists of:

Part No.	Description	Part No.	Description
KL-0043-8288-1	Press sleeve E36	KL-0043-8571	Press/ support sleeve
KL-0043-8289-1	Support sleeve E36	KL-0043-8576	Press/ support sleeve

KL-0043-8296 Press-/Support Tube Set long

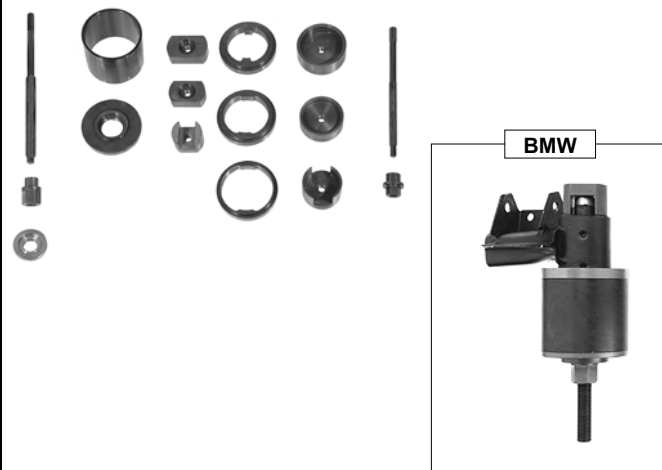
Suitable for BMW E30 front lower wishbone.

The press/ support sleeve set **KL-0043-8296** allows quick and easy removal and replacement of the outer ball-joint if the press frame **KL-0043-8200** and the hydraulic spindle 12t **KL-0045-70** is already available.

consists of:

Part No.	Description	Part No.	Description
KL-0043-8267	Press/ support sleeve	KL-0043-8273	Press/ support sleeve
KL-0043-8272	Press/ support sleeve	KL-0043-8276	Press/ support sleeve

KL-0515-1



KL-0515-1 Bush Extractor (with mechanical Drive)

For replacing the mounting bushes of rear **sub-frame**.

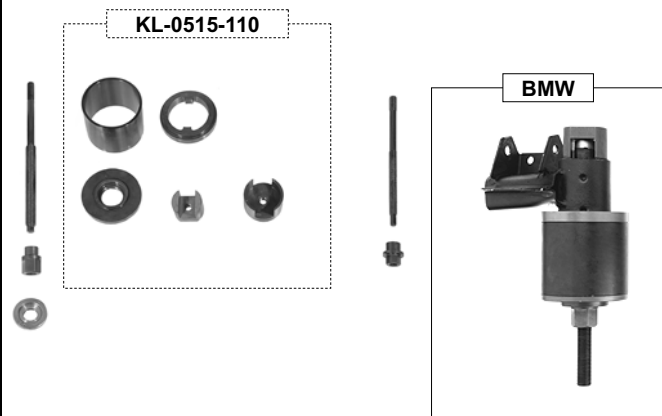
Suitable for BMW E30 (3 series 1982 to 1990),
E36 Compact / Z3
E28 (5 series 1981 to 1987),
E34 (5 series 1988 to 1995),
E32 (7 series 1986 to 1994).

Stubborn or corroded bushes are quickly, cleanly and safely replaced using the **KL-0515-1** on the car. Dropping the sub-frame is eliminated.

KL-0515-100 Bush Extractor without Drive

As **KL-0515-1** but for hydraulic drive,
 If the Puller Spindle **KL-0040-2543-1** and Hydraulic Cylinder **KL-0040-2500** are already available.

KL-0515-11



KL-0515-11 Bush Extractor (with mechanical Drive)

For replacing the mounting bushes of rear sub-frame..

Suitable for BMW E30 (3er series 1982 to 1990),
E36 Compact / Z3

Stubborn or corroded bushes are quickly, cleanly and safely replaced using the **KL-0515-11** on the car. Dropping the sub-frame is eliminated.

KL-0515-110 Bush Extractor without Drive

As **KL-0515-11** but for hydraulic drive,
 If the Puller Spindle **KL-0040-2543-1** and Hydraulic Cylinder **KL-0040-2500** are already available.

KL-0515-2



KL-0515-2 Bush Extractor with Hydraulic Cylinder

Suitable for BMW E36 (3 series 1990-1998).
 not E36 Compact / Z3.

The **KL-0515-2** Bush Extractor allows *all* bushes on the rear sub-frame to be quickly and easily removed and replaced.

Removal of the sub-frame is **not** necessary.

Advantages:

- Large time savings as sub-frame must not be removed.
- Precise removal and insertion of the bushes due to the Hydraulic Cylinder **KL-0040-2500** included in the tool.

KL-0515-200 Bush Extractor with Hydraulic Cylinder

As **KL-0515-2**.
 If Hydraulic Cylinder **KL-0040-2500** is already available.

Note: The use of the safety belt **KL-0040-2590** (see page 4-06) is always recommended when working with the Hydraulic Cylinder **KL-0040-2500** on the vehicle.

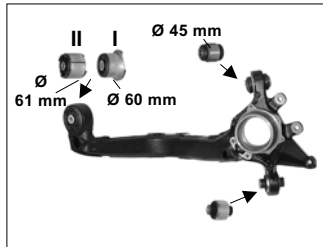
4

KL-0515-3



BMW E36, E46

KL-0515-300



KL-0515-3 Bush Extractor with Hydraulic Cylinder

Suitable for BMW E36, E46 (3 series) Limousine, Touring and convertible rear trailing arm.
(not E36 Compact / Z3)

Bushes and Pivot Bearings on the rear trailing arm may be replaced within a few minutes using the KL-0515-3. Stubborn, corroded bushes present no problem. Extraction and insertion of earlier "I" (E36) version bushes as well as the later split steel version "II" (E36, E46) is possible.

This work may be carried out without removal of the trailing arm.

Specification:

Part No.	Description	Qty.
KL-0515-3	Bush Extractor with Hydraulic Cylinder	1
<i>consists of:</i>		
KL-0040-2500	Hydraulic cylinder 17 t.	1
KL-0040-2552	Adaptor M42x2 auf Ø30	1
KL-0515-300	Bush Extractor without Hydraulic Cylinder	1

KL-0515-300 Bush Extractor without Hydraulic Cylinder

As KL-0515-3.

If Hydraulic Cylinder KL-0040-2500 and Adaptor KL-0040-2552 are already available.

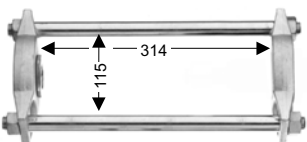
Specification:

Part No.	Description	Qty.
KL-0515-300	Bush Extractor without Hydraulic Cylinder	1
<i>consists of:</i>		
KL-0515-3001	Support tube old bush	1
KL-0515-3002	Support tube new bush	1
KL-0515-3003	Press piece	1
KL-0515-3004	Support tube	1
KL-0515-3005	Press piece	1
KL-0515-3006	Support tube insertion	1
KL-0040-2542	Puller spindle M12 with nut	1

KL-0516-10



BMW E30, E36 Compact, Z3



KL-0516-100



KL-0516-10 Press Tool with Hydraulic Cylinder

Suitable for Bushes BMW E30 / E36 Compact / Z3 Rear Trailing Arm.

Bushes on the Rear Trailing Arm can be removed and replaced within a few minutes with the KL-0516-10. Even stubborn, corroded Bushes present no problem.

This operation can be performed without the need to remove the Trailing Arm from the vehicle.

Specification:

Part No.	Description	Qty.
KL-0516-10	Press Tool with Hydraulic Cylinder	1
<i>consists of:</i>		
KL-0040-2500	Hydraulic cylinder 17 t.	1
KL-0040-2510	Press spindle	1
KL-0043-8200	Press frame, long	1
KL-0516-100	Sleeve set for BMW Z3 / E30 / E36 Compact	1

KL-0516-100 Sleeve Set E30 / E36 Compact / Z3 rear trailing arm.

As KL-0516-10.

If Hydraulic Cylinder KL-0040-2500, Spindle KL-0040-2510 and Press Frame KL-0043-8200 are already available.

Specification:

Part No.	Description	Qty.
KL-0516-100	Sleeve set for BMW Z3 / E30 / E36 Compact	1
<i>consists of:</i>		
KL-0516-1001	Support tube	1
KL-0516-1002	Press piece extraction	1
KL-0516-1003	Press piece insertion	1

Note: A hydraulic pump will be required to drive the Hydraulic Cylinder KL-0040-2500.

KL-0516-2

BMW E39



KL-0516-200

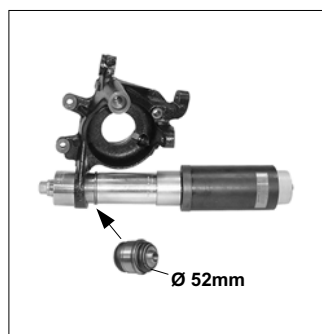


KL-0515-4

BMW E38, E39



KL-0515-400



Note: The use of the safety belt **KL-0040-2590** (see page 4-06) is always recommended when working with the Hydraulic Cylinder **KL-0040-2500** on the vehicle.

KL-0516-2 Bush Extractor with Hydraulic Cylinder

Suitable for BMW E39 (5 series 1995 - 2003) front axle.

The **KL-0516-2** allows quick, easy and safe removal and replacement of Bushes in the front tension strut.

consists of:

Part No.	Description	Qty.
KL-0040-2500	Hydr. Cylinder 17 t.	1
KL-0040-2552	Adaptor M42x2 to Ø30	1
KL-0516-200	Bush Extractor without Hydraulic Cylinder and Adaptor	1

KL-0516-200 Bush Extractor without Hydr. Cylinder

As **KL-0516-2**.

If Hydraulic Cylinder **KL-0040-2500** and Adaptor **KL-0040-2552** are already available.

consists of:

Part No.	Description
KL-0516-2001	Press piece
KL-0516-2002	Press-/support tube
KL-0040-2542-1	Puller spindle M12
KL-0040-2542-2	Nut M12

KL-0515-4 Bush Extractor with Hydraulic Cylinder

Suitable for BMW E38 7 series, E39 5 series (rear axle).

The **KL-0515-4** allows quick, clean and easy removal and replacement of the bottom bush in the rear wheel-bearing housing.

consists of:

Part No.	Description	Qty.
KL-0040-2500	Hydraulic Cylinder 17 t	1
KL-0040-2552	Adaptor M42x2 / Ø30	1
KL-0515-400	Bush Extractor without Hydraulic Cylinder	1

KL-0515-400 Bush Extractor without Hydr. Cylinder

As **KL-0515-4**.

If Hydraulic Cylinder **KL-0040-2500** and Adaptor **KL-0040-2552** are already available.

consists of:

Part No.	Description
KL-0515-4001	Sleeve (extraction)
KL-0515-4002	Press Piece (extraction)
KL-0515-4003	Sleeve (insertion)
KL-0515-4004	Press Piece (insertion)
KL-0040-2543-1	Puller Spindle M14
KL-0040-2543-2	Nut M14

Note: A hydraulic pump will be required to drive the Hydraulic Cylinder **KL-0040-2500**.

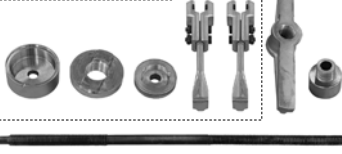
KL-0515-50



BMW E39

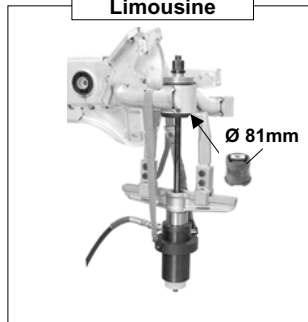
KL-0515-500

KL-0515-5000

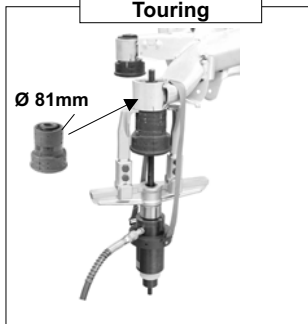


KL-0040-2590

Limousine



Touring



Accessories: KL-0515-501

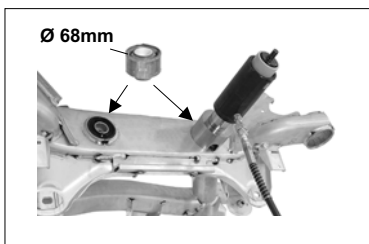


KL-0515-51



BMW E39

KL-0515-510



Note: The use of the safety belt **KL-0040-2590** (see page 4-06) is always recommended when working with the Hydraulic Cylinder **KL-0040-2500** on the vehicle.

KL-0515-50 Bush Extractor with Hydraulic Cylinder

Suitable for BMW E39 (5 series) Limousine and Touring Rear Sub-frame.

The **KL-0515-50** Bush Extractor allows bushes on the rear sub-frame to be quickly and easily removed and replaced.

Removal of the sub-frame is **not** necessary.

consists of:

Part No.	Description	Qty.
KL-0515-50	Bush Extractor with Hydraulic Cylinder	1
consists of:		
KL-0040-2500	Hydraulic Cylinder 17 t	1
KL-0040-2590	Safety belt for hydr. cylinder KL-0040-2500	1
KL-0515-500	Bush Extractor without Hydr. Cylinder	1

KL-0515-500 Bush Extractor without Hydraulic Cylinder

As **KL-0515-50**.

If Hydraulic Cylinder **KL-0040-2500** and safety belt **KL-0040-2590** are already available.

consists of:

Part No.	Description	Qty.
KL-0515-500	Bush Extractor without Hydraulic Cylinder	1
consists of:		
KL-0515-5001	Bridge	1
KL-0515-5002	Adaptor M42x2 to M34	1
KL-0040-2545-1	Puller spindle M18	1
KL-0040-2545-3	Nut M18	1
KL-0515-5000	Hook, press piece set	1

Part No.	Description	Qty.
KL-0515-5000	Hook, press piece set	1
consists of:		
KL-0515-5003	Puller	2
KL-0515-5004	Press Piece (extraction)	1
KL-0515-5005	Press Piece (insertion)	1
KL-0515-5006	Support Sleeve (insertion)	1

Accessories: KL-0515-501 Supplement Kit for BMW X5

For removal and replacement of the bushes on the rear sub-frame (**BMW X5**) in conjunction with the bush extractor **KL-0515-50**.

consists of:

Part No.	Description	Qty.
KL-0515-5011	Press Piece (extraction)	1
KL-0515-5012	Support Sleeve	1

KL-0515-51 Bush Extractor with Hydraulic Cylinder

Suitable for BMW E39 rear axle differential-suspension.

For quick and easy regenerate the both bushes (Ø-68 mm) on the rear axle differential-suspension.

consists of:

Part No.	Description	Qty.
KL-0040-2500	Hydraulic cylinder 17 t	1
KL-0040-2552	Adaptor M42x2 / Ø30	1
KL-0515-510	Bush Extractor without Hydraulic Cylinder	1

KL-0515-510 Bush Extractor without Hydraulic Cylinder

As **KL-0515-51**.

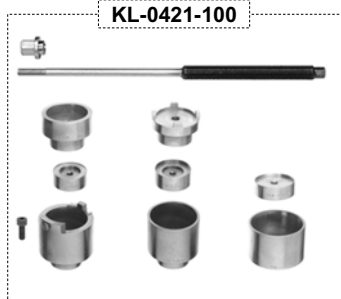
If the Hydraulic Cylinder **KL-0040-2500** and Adaptor **KL-0040-2552** are already available.

consists of:

Part No.	Description	Qty.
KL-0515-5101	Support Sleeve	1
KL-0515-5102	Support Sleeve	1
KL-0040-2542	Puller spindle M12 with nut	1

KL-0421-1

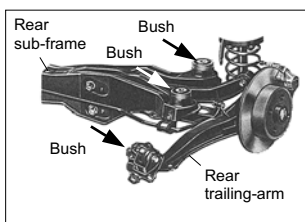
Opel Vectra



KL-0421-100



Bush extraction



Bush insertion

KL-0421-1 Bush Extractor with Hydraulic Cylinder

Suitable for Opel Vectra 1995-onwards
rear trailing arm and rear sub-frame.

The removal and replacement of the bushes on the rear trailing-arm and rear sub-frame can be performed in minutes with the new tool **KL-0421-1** quickly, safely and cleanly without the need to dismantle the suspension or sub-frame.

Advantages:

- Fast ⇒ Time savings of up to 3 hours.
- Safe ⇒ Hammer, Chisels or oxy-torches not needed.
- Simple ⇒ Precisely formed press-tools ensure extraction and replacement without risk of damage to the bush.
- Universal ⇒ Hydraulic Cylinder 17 t. **KL-0040-2500** may be used in conjunction with many KLANN tools.

KL-0421-100 Bush Extractor without Hydraulic Cylinder

As **KL-0421-1**.

If Hydraulic Cylinder **KL-0040-2500** is already available.

consists of:

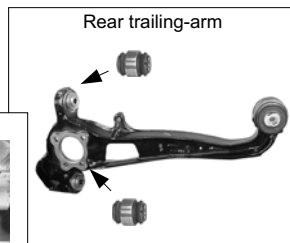
Part No.	Description
KL-0421-1001	Support Sleeve (trailing-arm)
KL-0040-2511	Bolt M8 x 16
KL-0421-1002	Press Piece (trailing-arm)
KL-0421-1003	Press Piece (trailing-arm)
KL-0421-1004	Support Sleeve (trailing-arm)
KL-0421-1005	Support Sleeve (sub-frame)
KL-0421-1006	Press Piece (sub-frame)
KL-0421-1007	Support Sleeve (sub-frame)
KL-0421-1008	Press Piece (sub-frame)
KL-0040-2542-1	Puller Spindle M12
KL-0350-2007	Shoulder nut M12

KL-0421-2 A

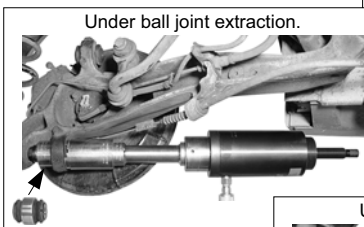
Opel Vectra



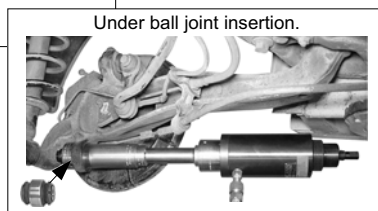
KL-0421-200 A



Rear trailing-arm



Under ball joint extraction.



Under ball joint insertion.

KL-0421-2 A Bush Extractor with Hydraulic Cylinder

Suitable for Opel Vectra 1995-onwards trailing arm.

The removal and replacement of the pivot bearings on the rear trailing-arm can be performed in minutes with the new tool **KL-0421-2 A** quickly, safely and cleanly without the need to dismantle the suspension or sub-frame.

KL-0421-200 A Bush Extractor without Hydraulic Cylinder

As **KL-0421-2 A**.

If Hydraulic Cylinder **KL-0040-2500** and Adaptor **KL-0040-2552** are already available.

consists of:

Part No.	Description
KL-0421-2001	Support Sleeve
KL-0421-2002	Press Piece (extraction)
KL-0421-2003	Support Sleeve (insertion)
KL-0421-2004	Press-/Support Sleeve 46 mm
KL-0421-2005	Shoulder nut M12 flat
KL-0421-2006	Extension piece
KL-0039-1912-1	Puller spindle M12

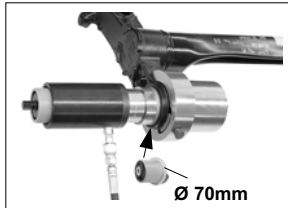
Note: The use of the safety belt **KL-0040-2590** (see page 4-06) is always recommended when working with the Hydraulic Cylinder **KL-0040-2500** on the vehicle.

KL-0421-3

Opel Astra



KL-0421-300



Note: For further Hydraulic-Tools e.g. for Ball-Joint Opel Movano see HGV-Chapter

KL-0610-10

Ford Mondeo



KL-0610-100

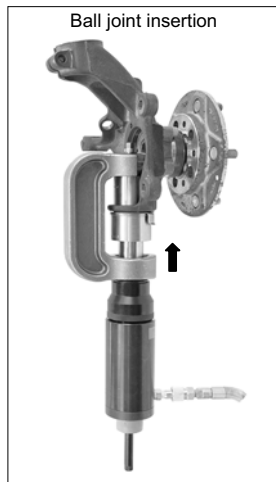


KL-0626-10

Ford Transit



KL-0626-100



Note: A hydraulic pump will be required to drive the Hydraulic Cylinder KL-0040-2500.

KL-0421-3 Bush Extractor with Hydr. Cylinder (German Utility Model)

Suitable for Opel Astra 2003 onwards Rear Axle.

Allows quick and easy replacement of Bushes on the rear axle without the need to remove the axle from the car.

KL-0421-300 Bush Extractor without Hydraulic Cylinder

As KL-0421-3

If the Hydraulic Cylinder KL-0040-2500 and Adaptor KL-0040-2552 are already available.

consists of:

Part No.	Description
KL-0421-3001	Support Sleeve with Chuck Jaws
KL-0421-3002	Press Piece
KL-0421-3003	Press Piece
KL-1001-1002	Support Sleeve, short
KL-0040-2542	Puller Spindle M12 with Nut

KL-0610-10 Bush Extractor with Hydr. Cylinder

Suitable for Ford Mondeo II 1996-00 Front Axle

The KL-0610-10 allows quick, easy and safe removal and replacement of both Bushes in the front lower wishbone without need to remove the wishbone from the car.

KL-0610-100 Bush Extractor without Hydraulic Cylinder

As KL-0610-10

If the Hydraulic Cylinder KL-0040-2500 and Adaptor KL-0040-2552 are already available.

consists of:

Part No.	Description
KL-0043-8281	Press-/Support Sleeve 68 mm
KL-0043-8575	Press-/Support Sleeve, short 56/48
KL-0043-8576	Press-/Support Sleeve, short 58/50
KL-0043-8570	Press-/Support Sleeve, short 46/38
KL-0040-2542	Puller Spindle M12 with Shoulder Nut

KL-0626-10 Hydraulic Press Tool Kit (German Utility Model)

Suitable for Ford Transit 2002 onwards, front axle.

The support joint can be pressed out of or into the wheel bearing housing quickly and without difficulty, using Press Tool KL-0626-10. The support joint can be removed from or installed on the vehicle in just a few minutes, without the wheel bearing housing having to be removed.

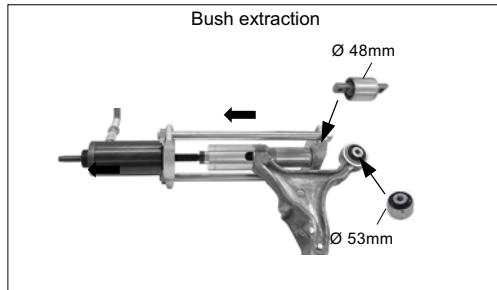
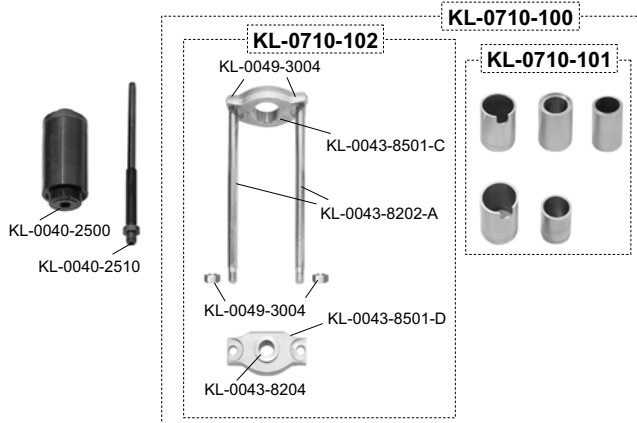
Specification

Part No.	Description	Qty.
KL-0626-10	Hydraulic Press Tool with Hydr. Cylinder	1
<i>consists of:</i>		
KL-0626-100	Hydraulic Press Tool without Hydr. Cylinder	1
KL-0040-2500	Hydraulic cylinder 17t	1
KL-0040-2510	Press spindle	1

Part No.	Description	Qty.
KL-0626-100	Hydraulic Press Tool Kit without Hyd. Cylinder	1
<i>consists of:</i>		
KL-0626-1001	Press Frame	1
KL-0626-1002	Coil screw	1
KL-0174-559	Adaptor 2 1/4"-14UNS to 2 1/4"-14UNS	1
KL-0626-1003	Press Tube (removal) Ø: 38mm	1
KL-0626-1004	Support Tube (removal) Ø: 66.5mm	1
KL-0626-1005	Support Tube (replacement) Ø: 54mm	1
KL-0626-1006	Press Tube (replacement) Ø: 56mm	1

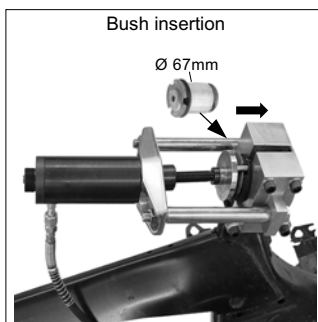
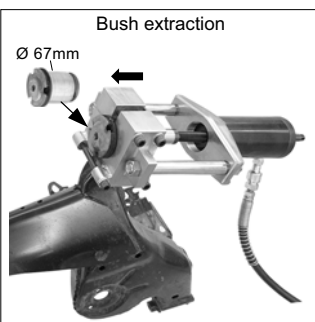
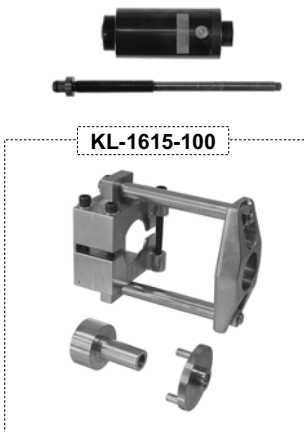
KL-0710-10

Volvo



KL-1615-10

Fiat Stilo



Note: A hydraulic pump will be required to drive the Hydraulic Cylinder KL-0040-2500.

KL-0710-10 Hydraulic Press Tool

Suitable for Volvo S60, V70, XC70 ('01 onwards) and S80 ('98 onwards) Front Axle with Bush diameter Ø48mm and Ø53mm.

For easy, safe and rapid removal and installation of the two silentbloc-type bushings on the lower suspension wishbone, without having to remove the wishbone completely.

KL-0710-100 Press Tool without Hydraulic Cylinder

As KL-0710-10.

If the hydraulic cylinder KL-0040-2500 and the spindle KL-0040-2510 are already available.

consists of:

Part No.	Description	Qty.
KL-0710-102	Press Frame without Drive	1
KL-0710-101	Sleeve Set	1

Part No.	Description	Qty.
KL-0710-102	Press Frame without Drive	1
<i>consists of:</i>		
KL-0043-8202-A	Frame Rods M18	2
KL-0049-3004	Hex Nut M18	4
KL-0043-8501-C	Base Plate 2 1/4"-14 UNS	1
KL-0043-8501-D	Base Plate M42 x 2	1
KL-0043-8204	Adaptor M42x2 to Ø30	1

Part No.	Description	Qty.
KL-0710-101	Sleeve Set	1
<i>consists of:</i>		
KL-0710-1001	Support Sleeve 62 mm; Ø54mm/Ø62mm	1
KL-0710-1002	Press Sleeve 60 mm; Ø47mm/Ø60mm	1
KL-0710-1003	Press Sleeve 53 mm; Ø42mm/Ø53mm	1
KL-0710-1004	Support Sleeve 60 mm; Ø52mm/Ø60mm	1
KL-0710-1005	Press Sleeve 48 mm; Ø40mm/Ø68mm	1

KL-1615-10 Press Tool Kit with Hydr. Cylinder

Suitable for Fiat Stilo rear axle.

The Hydraulic Press Tool Kit KL-1615-10 allows quick, easy and safe extraction and replacement of rear axle Bushes. Even severely corroded and stubborn bushes may be replaced within a few minutes.

consists of:

Part No.	Description	Qty.
KL-0040-2500	Hydraulic Cylinder 17 t.	1
KL-0040-2510	Press Spindle	1
KL-1615-100	Press Tool Kit without Hydr.Cylinder	1

KL-1615-100 Press Tool Kit without Hydraulic Cylinder

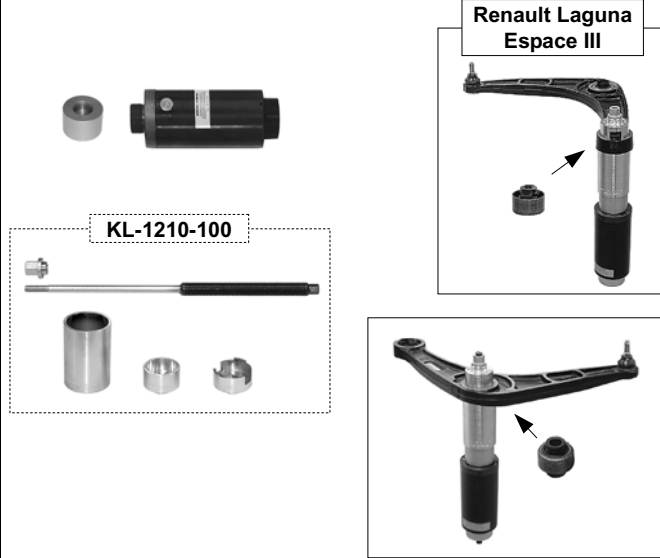
As KL-1615-10.

If the Hydraulic Cylinder KL-0040-2500 and the spindle KL-0040-2510 are already available.

consists of:

Part No.	Description	Qty.
KL-1615-101	Chuck jaws pair Ø 85mm	1
KL-0039-1101	Base plate	1
KL-0039-112	Towing bar 180 mm lang	2
KL-1615-1001	Press piece extraction	1
KL-1615-1002	Press piece insertion	1

KL-1210-1



KL-1210-1 Bush Extractor with Hydraulic Cylinder

Suitable for Renault Laguna and Espace III Front Axle.

Both middle and outer bushes may be quickly, cleanly and safely pressed out and replaced using KL-1210-1.

KL-1210-100 Bush Extractor without Hydraulic Cylinder

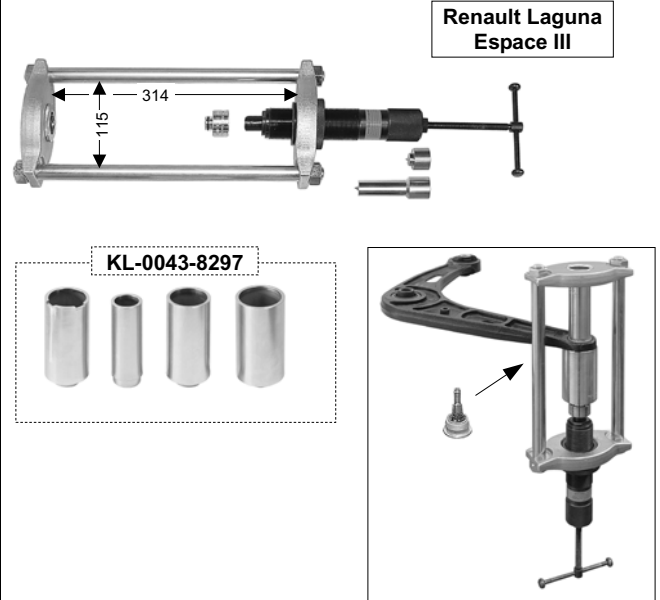
As KL-1210-1

If the Hydraulic Cylinder KL-0040-2500 and Adaptor KL-0040-2552 are already available.

consists of:

Part No.	Description
KL-0043-8281	Press-/support sleeve 68 mm (I)
KL-0043-8574	Press-/support sleeve short 54 mm (II)
KL-1210-1001	Press piece insertion (III)
KL-0040-2542	Puller spindle M12 with Shoulder nut

KL-0043-826



KL-0043-826 Press Tool Set

Suitable for Renault Laguna and Espace III.

The KL-0043-826 allows quick, easy and safe extraction and replacement of the Ball-Joint in the lower front wishbone. Replacement of the Ball-Joint is performed within a few minutes without the need to remove the wishbone from the car.

consists of:

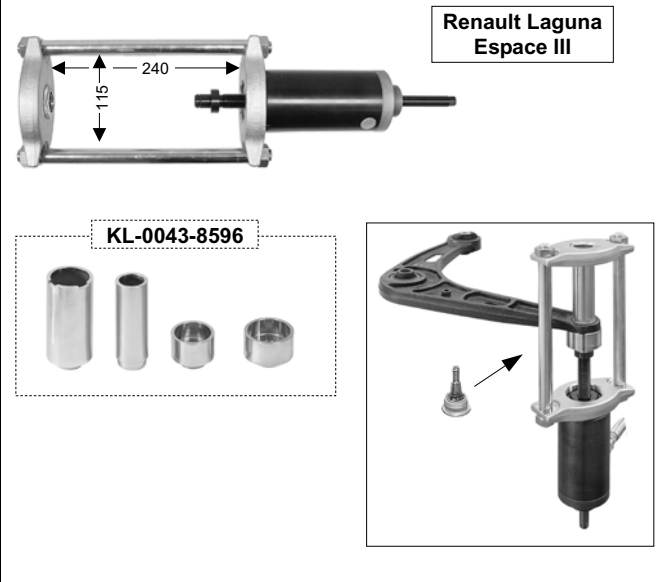
Part No.	Description
KL-0045-70	Hydraulic Spindle 12 t
KL-0043-8200	Press frame long
KL-0043-8297	Press-/support tube set

KL-0043-8297 Press-/Support Tube Set

consists of:

Part No.	Description
KL-0043-8232	Press tube for Renault Laguna
KL-0043-8264	Press-/support tube 34 mm
KL-0043-8271	Press-/support tube 48 mm
KL-0043-8274	Press-/support tube 54 mm

KL-0043-840



KL-0043-840 Hydraulic Press Tool Kit

Suitable for Renault Laguna and Espace III.

The KL-0043-840 allows quick, easy and safe extraction and replacement of the Ball-Joint in the lower front wishbone. Replacement of the Ball-Joint is performed within a few minutes without the need to remove the wishbone from the car.

consists of:

Part No.	Description
KL-0040-2500	Hydraulic Cylinder 17t
KL-0040-2510	Press spindle
KL-0043-8510	Press frame short
KL-0043-8596	Press-/support tube set

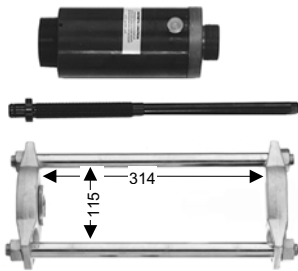
KL-0043-8596 Press-/Support Tube Set

consists of:

Part No.	Description
KL-0043-8232	Press tube for Renault Laguna
KL-0043-8264	Press-/support tube 34 mm
KL-0043-8571	Press-/support tube 48/40 mm
KL-0043-8574	Press-/support tube 54/46 mm

KL-0043-829

Opel/Vauxhall,
Renault

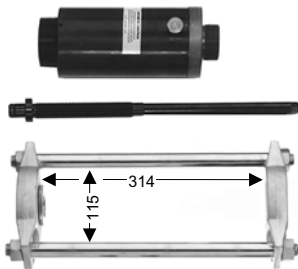


KL-0043-8298

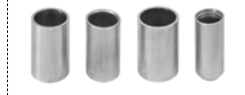


KL-0043-810

Opel/Vauxhall,
Renault



KL-0043-8101



KL-1210-2

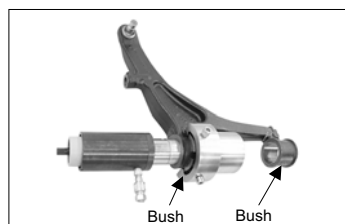
Opel/Vauxhall,
Renault



KL-1210-200



KL-1210-201



KL-0043-829 Press Tool with Hydr. Cylinder

Suitable for Renault Master II ('98 onwards) and Opel/Vauxhall Movano I ('98 onwards)

The Press Tool **KL-0043-829** allows quick, easy and safe removal and replacement of the **Ball-Joint in the upper front wishbone**. Stubborn and corroded Ball-Joints may be easily replaced within minutes.

Replacement of the Ball-Joint is performed on the vehicle, thus eliminating the need to remove and replace the wishbone.

consists of:

Part No.	Description	Part No.	Description
KL-0040-2500	Hydraulic Cylinder 17 t.	KL-0043-8200	Press frame short
KL-0040-2510	Pressure spindle	KL-0043-8298	Press-/support tube set

KL-0043-8298 Press/Support Tube Set

consists of:

Part No.	Description	Part No.	Description
KL-0043-8269	Press-/support tube	KL-0043-8276	Press-/support tube
KL-0043-8233	Press-/support tube	KL-0043-8279	Press-/support tube

KL-0043-810 Press Tool with Hydr. Cylinder

Suitable for Renault Master II ('98 onwards) and Opel/Vauxhall Movano I ('98 onwards)

The Press Tool **KL-0043-810** allows quick, easy and safe removal and replacement of the Ball-Joint in the lower front wishbone. Stubborn and corroded Ball-Joints may be easily replaced within minutes.

Replacement of the Ball-Joint is performed on the vehicle, thus eliminating the need to remove and replace the wishbone.

consists of:

Part No.	Description	Part No.	Description
KL-0040-2500	Hydraulic Cylinder 17 t.	KL-0043-8200	Press frame
KL-0040-2510	Pressing spindle	KL-0043-8101	Press/support tube set

KL-0043-8101 Press/Support Tube Set

consists of:

Part No.	Description	Part No.	Description
KL-0043-8237	Press/support tube	KL-0043-8274	Press/support tube
KL-0043-8238	Press/support tube	KL-0043-8276	Press/support tube

KL-1210-2 Bush Extractor with Hydr. Cylinder (German Utility Model)

Suitable for Renault Master II ('98 onwards) and Opel/Vauxhall Movano I ('98 onwards)

The Bush Extractor **KL-1210-2** allows quick, easy and safe removal and replacement of both Bushes in the lower front wishbone.

consists of:

Part No.	Description	Part No.	Description
KL-0040-2500	Hydraulic Cylinder 17 t.	KL-1210-200	Bush extractor without Hydraulic cylinder 17 t.
KL-0040-2552	Adaptor M42x2 / Ø30		

KL-1210-200 Bush Extractor without Hydr. Cylinder

consists of:

Part No.	Description	Part No.	Description
KL-0040-2543	Pull spindle M14 with nut	KL-1210-201	Press/support tube set

KL-1210-201 Press/Support Tube Set

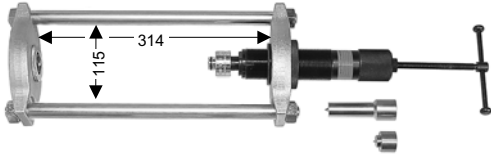
consists of:

Part No.	Description	Part No.	Description
KL-1210-2001	Support tube	KL-1210-2004	Pressure piece
KL-1210-2002	Pressure piece	KL-1210-2005	Pressure piece
KL-1210-2003	Support tube		

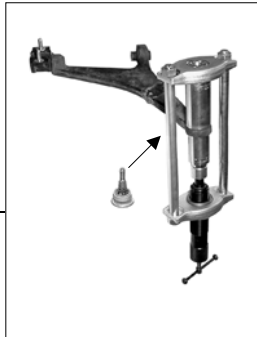
Note: A hydraulic pump will be required to drive the Hydraulic Cylinder **KL-0040-2500**.

KL-0043-828

Citroën,
Peugeot

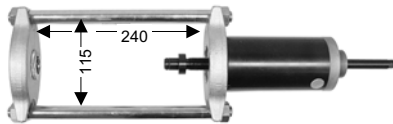


KL-0043-8293



KL-0043-858

Citroën,
Peugeot

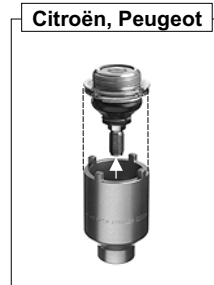


KL-0043-8593



KL-1340-10

Citroën, Peugeot



KL-0043-828 Press Tool Set with hydr. Spindle

Suitable for Citroën AX, Saxo and Peugeot 106.

The Press Tool Set **KL-0043-828** allows quick and easy removal and replacement of the bottom ball-joint in the wishbone. Removal and replacement of the ball-joint can be performed on the vehicle within a few minutes without the need to dismantle the wishbone from the car. Time-saving 2 hours plus.

consists of:

Part No.	Description
KL-0045-70	Hydraulic spindel 12 t.
KL-0043-8200	Press frame long
KL-0043-8293	Press-/support tube set

KL-0043-8293 Press-/ Support Tube Set

consists of:

Part No.	Description
KL-0043-8234	Press-/support tube
KL-0043-8262	Press-/support tube
KL-0043-8268	Press-/support tube
KL-0043-8272	Press-/support tube

KL-0043-858 Press Tool with Hydr. Cylinder

Suitable for Citroën AX, Saxo and Peugeot 106.

The Press Tool Set **KL-0043-858** allows quick and easy removal and replacement of the bottom ball-joint in the wishbone. Removal and replacement of the ball-joint can be performed on the vehicle within a few minutes without the need to dismantle the wishbone from the car. Time-saving 2 hours plus.

consists of:

Part No.	Description
KL-0040-2500	Hydraulic Cylinder 17 t.
KL-0040-2510	Press spindle
KL-0043-8510	Press frame short
KL-0043-8593	Press-/support tube set

KL-0043-8593 Press-/ Support Tube Set

consists of:

Part No.	Description
KL-0043-8534	Press-/support tube
KL-0043-8262	Press-/support tube
KL-0043-8568	Press-/support tube
KL-0043-8272	Press-/support tube

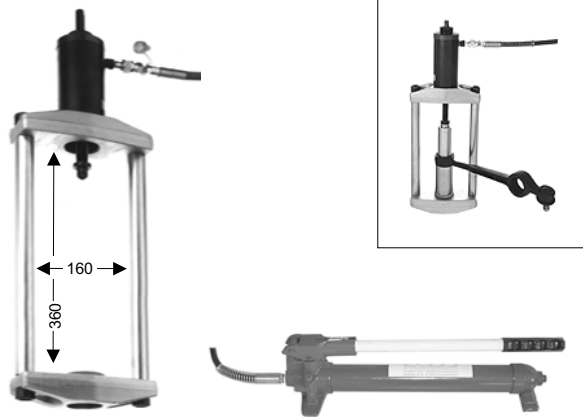
KL-1340-10 Toothed Socket

For screwing in and out the support joint (lower steering knuckle) for: Citroën BX (9-'82 to '94), Peugeot 305 (7-'82 to '90), Peugeot 405 (6-'87 onwards) etc.

Technical data

Diameter-outer: 52,0 mm
 Diameter-inner: 42,5 mm
 Tooth Width: 5,5 mm
 Weight: 0,52 kg

KL-0043-900



KL-0043-900 Hydraulic Press 17 t

The Hydraulic Press **KL-0043-900** in conjunction with Press Tools **KL-0043-8295**, **KL-0043-8595** and Press Tools **KL-0159-11** and **KL-0159-12** may be used for dismantling and assembling Drive Shafts, Suspension Bolts, Bearings, Bushes, etc.

Due to the handy construction the Hydraulic Press may also be used on the vehicle. Weight: 26,6 kg

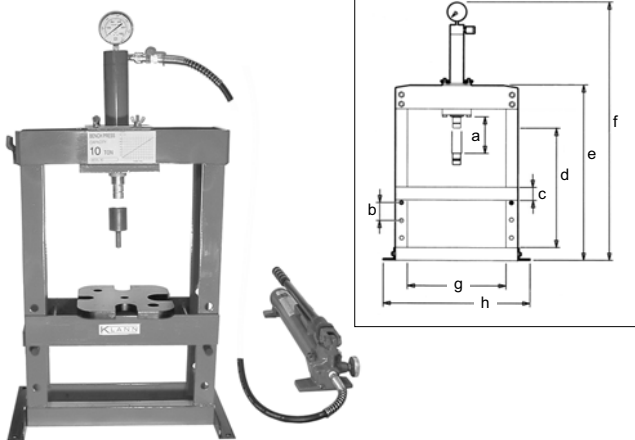
Contents:

Part No:	Description
KL-0043-900	Hydraulic Press
<i>consists of:</i>	
KL-0043-902	Press Frame
KL-0040-2500	Hydraulic Cylinder
KL-0040-2510	Spindle
KL-0215-35	Hydraulic hand pump with hose and coupling

Technical Data Press Frame KL-0043-902:

Total height	430 mm	Rod-Ø	30 mm
Working height	360 mm	Thread to accept	2 1/4"-14UNS
Total width	220 mm	Cylinder	
Working width	160 mm	Adaptor	2 1/4"-14UNS to Ø 30 mm
Depth	100 mm	Weight	14,2 kg

KL-0145-80



KL-0145-80 Hydraulic Bench Press 10 t with Hand Pump

The Hydraulic Bench Press **KL-0145-80** including Press Piece and Stripper Plate - in conjunction with Press Tools **K-0043-8295**, **KL-0043-595** and Press Tools **KL-0159-11** and **KL-0159-12** may be used for dismantling and assembling Drive Shafts, Suspension Bolts, Bearings, Bushes, etc.

Contents:

Part No:	Description
KL-0145-80	Hydraulic Bench Press 10 t with Hand Pump
<i>consists of:</i>	
KL-0145-801	Hydraulic Bench Press 10 t without Hand Pump
KL-0215-35	Hydraulic Hand pump with hose and coupling

Technical Data:

a	145 mm	c	72 mm	e	715 mm	g	460 mm
b	102 mm	d	490 mm	f	990 mm	h	540 mm

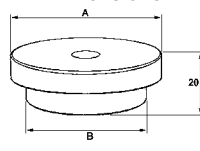
KL-0159-12



Application



Dimensions



KL-0159-11



KL-0145-801 Hydraulic Bench Press 10 t

As **KL-0145-80** but without Hydraulic Hand Pump **KL-0215-35**.

KL-0159-12 Pressure Piece Set Ø 50-78 mm

For extraction and assembly of Bearings, Shafts, Bushes, etc. in conjunction with Hydraulic Press, Puller Tools or Klann **KL-0043-82**, **KL-0043-85** and **KL-0043-90**.

Mounting diameter 20 mm, Ø A 52 - 80 mm in 2 mm steps, Ø B 50 - 78 mm in 2 mm steps.

The Set consists of a Pilot, a Blank and 15 Pressure Pieces.

KL-0159-11 Pressure Piece Set Ø 20-48 mm

As **KL-0159-12** with Mounting Diameter Ø 10 mm, Ø A 22 mm - 50 mm in 2 mm steps, Ø B 20 mm - 48 mm in 2 mm steps.

The Set consists of a Pilot, a Blank and 15 Pressure Pieces.