

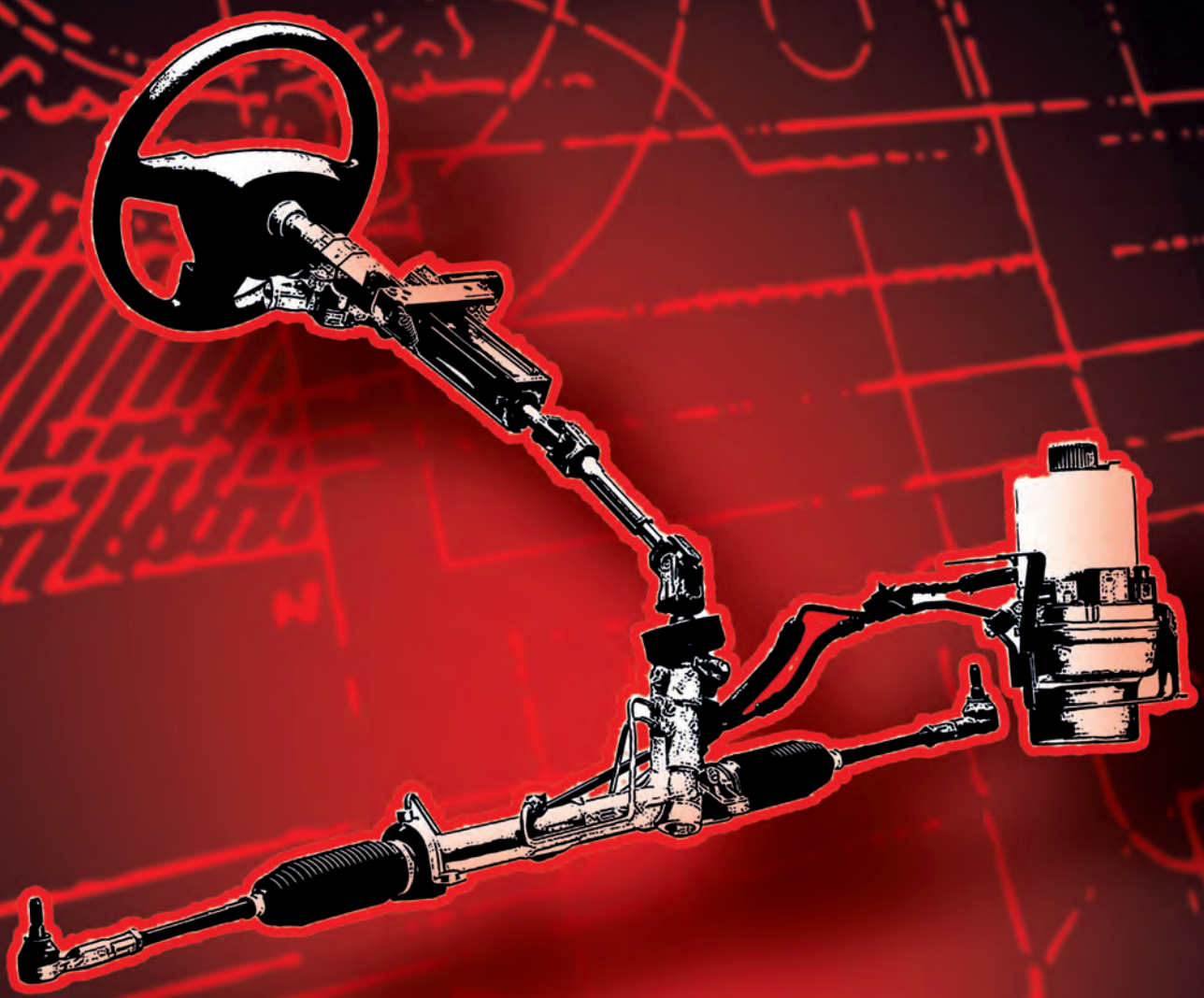
K15



KS TOOLS



STEERING AND STEERING GEOMETRY



Innovation is
our mission!

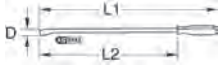


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LEVER / PRY BARS

Pry bar

- Ideally suited to assembly and disassembly work
- For pressure testing securely-fitted parts
- Suitable for positioning parts or holding parts in place
- 1 piece handle
- Hardened
- Chrome molybdenum



	D mm	L1 mm	L2 mm	kg
911.8101	11.0	200.0	115.0	130
911.8102	15.0	300.0	185.0	220
911.8103	18.0	450.0	320.0	420
911.8104	18.0	600.0	470.0	560

Pry bar sets

- Ideally suited to assembly and disassembly work
- For pressure testing securely-fitted parts
- Suitable for positioning parts or holding parts in place
- 1 piece handle
- Hardened
- Chrome molybdenum



		kg
911.8100	4 pcs 11 x 115 mm - 15 x 185 mm - 18 x 320 mm - 18 x 470 mm	1.33

Mechanics pry bar

- Angular lever end guarantees non-slip surface
- With go through blade and hammer cap
- Ideally suited to assembly and disassembly work
- For pressure testing securely-fitted parts
- Suitable for positioning parts or holding parts in place
- Suitable for the testing of defective bearings
- With two component handle
- Heavy design especially for commercial vehicles
- Special steel



	Bend radius	L mm	kg
911.8411	0°	900.0	1.70
911.8412	45°	900.0	1.75
911.8413	75°	600.0	1.17
911.8414	90°	600.0	1.20
911.8415	45°	1120.0	4.75

Mechanics pry bar set

- Angular lever end guarantees non-slip surface
- With go through blade and hammer cap
- Ideally suited to assembly and disassembly work
- For pressure testing securely-fitted parts
- Suitable for positioning parts or holding parts in place
- Suitable for the testing of defective bearings
- With two component handle
- Heavy design especially for commercial vehicles
- Special steel
- In durable plastic storage case



		kg
911.8410	4 pcs Mechanics pry bar set	8.70

consists of:

		kg
911.8411	Mechanics pry bar, straight 900 mm	1.70
911.8412	Mechanics pry bar 45°, angled head 900 mm	1.75
911.8413	Mechanics pry bar 75°, angled head 600 mm	1.17
911.8414	Mechanics pry bar 90°, angled head 600 mm	1.20

Intexable ratchet pry bar

- Extremely versatile and robust execution
- Variable adjustable roll head
- Maximum power transmission in the narrowest area
- Optimal leverage in minimal work area
- Ideally suited for commercial vehicles
- Special steel



	L mm	Assembly levels	kg
911.8176	250.0	5	600
911.8177	300.0	5	600
911.8178	400.0	5	600
911.8179	620.0	5	1810

Adjustable joint roll head pry bar set

- Extremely versatile and robust execution
- Variable adjustable roll head
- Maximum power transmission in the narrowest area
- Optimal leverage in minimal work area
- Ideally suited for commercial vehicles
- Special steel



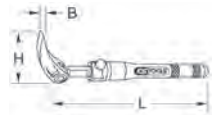
		kg
911.8175	3 pcs Adjustable joint roll head pry bar set	1.20

consists of:

		kg
911.8176	Ratched pry bar, 10"	600
911.8177	Ratched pry bar, 12"	600
911.8178	Ratched pry bar, 15"	600

Roller head telescopic pry bar

- Handle can be lengthened by the push button in ratchet steps
- Rolling head adjustable in stages
- Extra thin with embedded rolling head
- Maximum power in the smallest areas
- Optimal leverage in minimal work area
- Ideally suited to assembly and disassembly work
- For pressure testing securely-fitted parts
- Suitable for positioning parts or holding parts in place
- Suitable for the testing of defective bearings
- Ideal for use in passenger cars and commercial vehicles
- Special steel



	L mm	H mm	B mm	kg
911.8186	325-460	90.0	12.0	780
911.8187	600-915	120.0	20.0	1900
911.8188	865-1350	145.0	24.0	4260

WISHBONE DISASSEMBLY

Universal axle lever

- Special lever for the correct and protective dismantling and assembly of axle parts
- Through multiple adjustability of the breadth most different designs it lets itself move without large power expense required
- Protective and certain installation and extension
- The injury risk minimizes
- No second person required
- Universal application by revolving and adjustable claw
- High power, firm seat and time savings also
- Stable construction - optimal stop
- Special steel



	L mm	kg
700.1460	1000.0	4.36

Universal slide hammer

- Extra heavy and solid execution
- For universal use for automobiles + trucks
- Enormous impact delivery of up to 11 tonnes
- With 6 kg impact weight
- Includes 3 kg additional weight
- With M 20 x 1.5 mm connection thread
- Additional weights can be screwed together
- Special steel



	L mm	kg
700.1415	850.0	12.00

accessories:

	kg
700.1411 Wheel hub/drive flange dismatling tool	2.55
700.1421 Adaptor ET UN 1.1/2" x IT M20 x 1.5	0.72
700.1423 Adaptor for double hook	0.27
700.1424 Universal hook M20 x 1.5 for ball joints + car body	2.40
700.1425 Double hook	0.75
700.1428 Adaptor ET UN 1.1/2" x IT M16 x 2.0	0.72
700.1430 Adaptor ET UN 1.1/2" x IT M16 x 1.5	0.72
152.1056 Single screw adaptor AG M17 x 1	0.24

Bracket hook

- For disassembly of the wishbone from the ball joint clamp bore
- Special shape allows it to be placed very close to the ball joint
- For use alongside a slide hammer
- Internal thread M20 x 1.5
- Special steel



	kg
700.1424 M20x1,5	2.40

AXLE PLAY TEST TOOL

Axle play detector bar

- For localising sources of faults in the vehicle axle area
- Testing under load
- Large time savings during fault diagnostics
- Suitable for all passenger cars up to 3.5 t
- Special steel

Application range: Dome bearings / silent bearings / carrier joint / track rod end / coupling rod / wheel bearings / axial joint / steering gear / stabiliser, etc.

	L1 mm	L2 mm	D1 mm	D2 mm	kg
700.1465	400.0	400.0	25.0	50.0	1.90

Movement test device

- Universal usage tool for the determination of sign of wear
- By means of the universal wheel hub flange the lever is secured directly to the wheel hub and serves therefore as an extended arm to the absolutely sensitive locating of excess mobility or changes in the area
- Ideal suited for wheel housings, Silent baerings, ball joints (Tie rod joints) suspension joints/coupling rods etc



	Ø mm	L mm	kg
700.1455	36.0	840.0	6.00

consists of:

	kg
700.1411 Wheel hub/drive flange dismatling tool	2.55
700.1450 Movement Test lever , Reception AG 1.1/2" x 16G	3.24

Electronic professional stethoscope

- For the professional defect diagnosis
- Serves the acoustic test and judgment of a component under load
- Delivers fast, absolutely clear and unambiguous test results over sounds
- Contains 6 independent sensors that can mounted for example on the vehicle floor or in the engine compartment for ease
- Simple coordination of the defect source through colour coded cable and colour table on the box
- In durable plastic storage case

Application range:
 Engine: Valves, baerings, piston pins
 Alternator: Bearing sounds
 Differential: Barrel sounds
 Bodywork: Creak and squeak sounds



	kg
150.1695 18 pcs Electronic professional stethoscope	2.50

consists of:

	kg
150.1695-1 Headset for 150.1695	350
150.1695-2 Amplifier for 150.1695	115
150.1695-3 Hand held stethoscope for 150.1695	165
150.1695-4 Velcro strap for 150.1695, 8 pcs	9
150.1695-5 Sensor for 150.1695	10
150.1695-6 Coulour coded cable for 150.1695, 6 pcs	755

UNIVERSAL PIVOT PIN EJECTOR

Universal ball joint separator

- For many automobiles and commercial vehicles
- Special steel



	A mm	B mm	C mm	max N·m	mm	kg
670.0101	18	40	40	50	M14x1,5x60	17 0.30
670.0102	25	50	50	120	M16x1,5x60	17 0.70
670.0103	29	60	60	160	M18x1,5x75	19 1.00
670.0104	40	80	80	280	G1/2"x14gx110	22 2.10
670.0105	45	100	90	400	G3/4"x14gx125	27 2.80
670.0106	58	80	100	280	G1/2"x14gx110	22 2.10

Universal ball joint ejector

- For many automobiles and commercial vehicles
- Special steel



	A mm	B mm	max t	mm	mm	kg
670.0061	23	55	4	17	M16x1,5 x 60	800
670.0062	28	55	4	17	M16x1,5 x 60	800
670.0063	34	63	4	19	M18x1,5 x 70	900

Universal ball joint extractor

- Tools for removing of carrier joint and tie rod joints or track rod joint studs for steering gear, suspension arm, axle casing and stabiliser
- Universal suitable for passenger cars to commercial vehicles
- Compact and durable design
- Extremely robust spindle with inductively hardened thread



	kg
670.0060 3 pcs Universal ball joint extractor	2.90

consists of:

	kg
670.0061 Ball joint separator, 23mm	800
670.0062 Ball joint separator, 28mm	800
670.0063 Ball joint separator, 34mm	900

Universal ball joint extractor

- Robust model for loosening the track heads and push pole heads
- Optimal positioning through compact design and slim fork piece
- Special steel

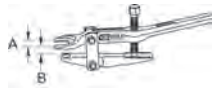


	A mm	B mm	C mm	mm	mm	kg
450.0075	45	75	63	24	M22 x 135	1.63
450.0076	55	100	76	24	M22 x 135	1.84

UNIVERSAL BALL JOINT EJECTOR WITH LEVER

Universal ball joint separator

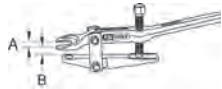
- Extra flat execution
- Forged
- Special steel



	A mm	B mm	mm	mm	kg
700.5620	18	20-37	M14 x 85	16	970

Universal ball joint separator

- Extra strong execution
- Forged
- Special steel



	A mm	B mm	mm	mm	kg
700.5625	20	20-37	M12 x 85	16	1.07

Universal ball joint separator 2 stage adjustable

- Separator 2 stage adjustable
- Ideal for confined spaces
- Spindle hexagonal with additional drive point
- Forged
- Special steel



	A mm	B mm	mm	mm	kg
700.5610	24	0-55	M16 x 90	20	1.05

Universal ball joint separator

- For separating the ball plug in the extension of the ball joint
- Suitable for many vehicles
- Special steel



	A mm	B mm	max t mm	mm	mm	kg
670.0111	18-22	50	3,5	19	M14x1,5x48	900

Universal ball joint extractor

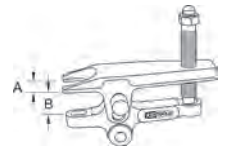
- Robust model for loosening the track heads and push pole heads
- Optimal positioning through compact design and slim fork piece
- Adjustment of the clamp by means of the spindle
- Special steel



	A mm	B mm	mm	mm	kg
450.0070	32	75	M22 x 90	30	2.49
450.0071	45	80	M22 x 90	30	2.61

Universal ball joint separator 4 stage adjustable

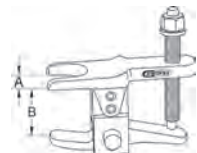
- Separator 4 stage adjustable
- Spindle hexagonal with additional drive point
- Forged
- Special steel
- Stage 1: 24 mm
- Stage 2: 30 mm
- Stage 3: 40 mm
- Stage 4: 45 mm



	A mm	B mm	mm	mm	kg
700.5630	20	24-45	M14 x 105	18	1.50

Universal ball joint separator 2 stage adjustable

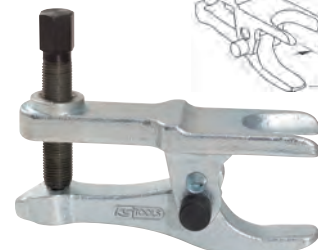
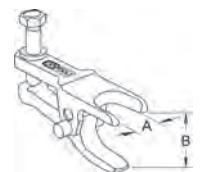
- Separator 2 stage adjustable
- Ideal for confined spaces
- Extremely high clamping range
- Spindle hexagonal with additional drive point
- Forged
- Special steel



	A mm	B mm	mm	mm	kg
700.5615	18-24	23-110	M16 x 130	16	1.20

Universal ball joint separator

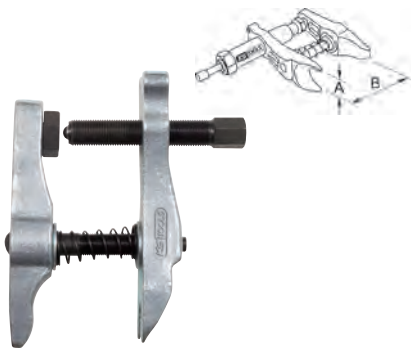
- For separating the ball plug in the extension of the ball joint
- Suitable for many vehicles + transporter
- Also suitable for aluminum undercarriages
- Special steel



	A mm	B mm	max t mm	mm	mm	kg
670.0121	24	50	3,5	17	M16x1,5x70	1.40
670.0122	24	60-80	3,5	17	M15x1,5x90	1.80

Universal ball joint separator

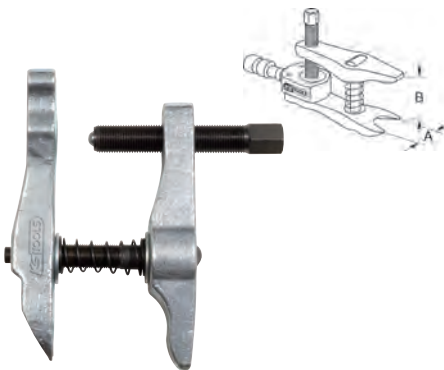
- For separating the ball plug in the extension of the ball joints
- Suitable for many vehicles + moderately heavy trucks
- Special steel



	A mm	B mm	max t	mm	mm	kg
670.0131	36	90	10	22	G1/2"x14gx110	3.70

Universal ball joint separator

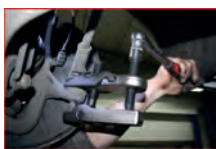
- For separating the ball plug in the extension of the ball joints
- Suitable for many vehicles + moderately heavy trucks
- For bolts Ø 27.0 - 36.0 mm
- Upgrade without hydraulic cylinder possible
- Special steel



	A mm	B mm	max t	Adjusting screw mm	Ambo spindle mm	mm	kg
670.0151	36	90	10	M18x1,5x120	G1/2"x14x110	22	3.50

Universal ball joint remover set with changeable forks

- With interchangeable forks Ø 20/22/24/27/30 mm
- For separating the ball plug when removing the ball joints
- Quick changes of the individual pressure forks due to the spring breaker system
- Maximum separation height: 125.0 mm
- In durable plastic storage case



			kg
450.0970	7 pcs	Universal ball joint remover set with changeable forks	6.00

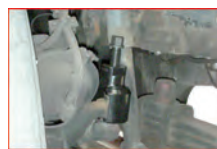
consists of:

		kg
450.0971	Universal ball pin ejector device	2000
450.0972	Pressure spindle	380
450.0973	Fork, Ø 20 mm	520
450.0974	Fork, Ø 22 mm	520
450.0975	Fork, Ø 24 mm	520
450.0976	Fork, Ø 27 mm	520
450.0977	Fork, Ø 30 mm	520

BALL PIN PULLER VIBRO IMPACT

Ball joint extractor cap „VIBRO IMPACT“

- Pressure pieces embedded in the spindle
- Enormous release power via the turn impact impulse in connection with impact screws
- Impact screws create pressure and vibration at the same time, through which the secure ball joint connections and quickly and safely removed
- Less space required
- Cast forged design
- With inspection panel
- Special steel



	A mm	B mm	mm	mm	kg
450.0060	30	58	Tr.22	18	1.10
450.0061	32	90	Tr.24	25	2.51

Impact ball joint puller

- Optimal positioning between suspension arm and axle casing
- Mouted spherical centering point
- Retrofit bar hydraulic pressure spindle
- Special steel



	A mm	B mm	mm	mm	kg
450.0085	35	60	M27 x 130	24	3.37

Ball joint extractor cap „VIBRO IMPACT“

- Pressure pieces embedded in the spindle
- Enormous release power via the turn impact impulse in connection with impact screws
- Impact screws create pressure and vibration at the same time, through which the secure ball joint connections and quickly and safely removed
- Less space required
- Cast forged design
- With inspection panel
- Special steel



	A mm	B mm	mm	mm	kg
450.0062	39	58	Tr.24	25	2.83

Ball joint puller HGV, mechanical

- Massive execution for loosening the track heads and push pole heads
- Enormous power through lever transmission
- Special steel



	A mm	B mm	mm	mm	kg
450.0051	36	70	M24x3x160	36	4.34

Hydraulic universal ball joint extractor set

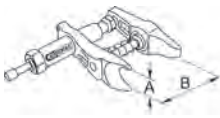
- Massive execution for loosening the track heads and push pole heads
- Enormous power through lever transmission
- Requires light expenditure of energy
- Special steel



			kg
450.0050	3 pcs	Hydraulic universal ball joint extractor set	6.55

Hydraulic universal ball joint separator

- For separating the ball plug in the extension of the ball joints
- Suitable for many vehicles + moderately heavy trucks
- For bolts Ø 27.0 - 36.0 mm
- Special steel



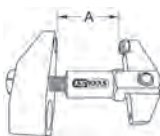
	A mm	B mm	max t	Ø mm	— mm	kg
670.0141	36	90	10	17	1.1/2"x16G	4.70

CLAMP SCREWS EJECTOR

Clamp screw ejector set without spindle

- For loosening seized clamping screws (M10) on 4-link axles
- For right and left wishbone clamping screws
- For aluminium and steel four link axles
- Release force up to max. 12 t
- Universally applicable hydraulic spindle (mounting thread 1.1/2"x16 start)
- Fine adjustment for optimum efficiency
- In durable plastic storage case

Application range: Audi A4, A6, Volkswagen Passat from 97, identical group vehicles



	A mm	kg
670.0076	3 pcs 65 - 125	2.70

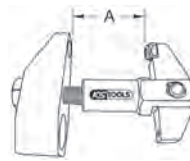
consists of:

	kg
670.0074	Clamp screw ejector 1.20
670.0077	Flat thrust piece 0.03
670.0078	Mandrel thruster 0.03

Clamp screw ejector set

- For loosening seized clamping screws (M10) on 4-link axles
- For right and left wishbone clamping screws
- For aluminium and steel four link axles
- Release force up to max. 12 t
- Universally applicable hydraulic spindle (mounting thread 1.1/2"x16 start)
- Fine adjustment for optimum efficiency
- In durable plastic storage case

Application range: Audi A4, A6, Volkswagen Passat from 97, identical group vehicles



	A mm	kg
670.0075	4 pcs 65 - 125	4.15

consists of:

	kg
670.0074	Clamp screw ejector 1.20
670.0077	Flat thrust piece 0.03
670.0078	Mandrel thruster 0.03
670.0079	Spindle M20x1.5 incl. nuts and rings 0.27

Four link drift set

- For removing the clamp screws in the four-wheel front axle on VAG vehicles
- Saves a lot of time
- Warming is no longer necessary, therefore preventing damage to the aluminium axle body
- For use with pneumatic chisel hammers on the market with a 10 mm attachment
- Special steel



	kg
700.5635	3 pcs Four link drift set 4.60

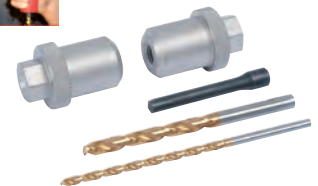
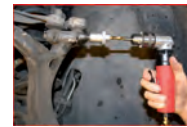
consists of:

	kg
700.5635-01	Release mandrel pneumatic chisel 100
700.5635-02	Ejector, short 40
700.5635-03	Guide sleeve 40

Reaming set for clamping screw on 4 link axles

- For exact centre drilling of the M10 clamping screw
- Without upsetting of the thread end, e.g. such as when pressing out
- Removal without damage to the axle body
- Exact centering thanks to screw-on, hardened drilling gauges
- Also suitable for new alloy screw type

Application range: Volkswagen / Audi and identical group vehicles



	kg
700.5640	5 pcs Reaming set for clamping screw on 4 link axles 43.7

consists of:

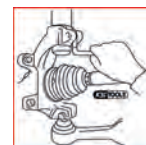
	kg
700.5641	Drilling gauge for Ø 4.5 mm 140
700.5642	Drilling gauge for Ø 7.3 mm 140
700.5643	Special drill HSS-E TIN Ø 4.5 mm 10
700.5644	Special drill HSS-E TIN Ø 7.3 mm 30
700.5645	Pressure mandrel 9.8 x 63 mm 20

SPLAY TOOLS

Flange spreader for the spring foot mounting

- Ideal for time-saving and damage-free splaying of the axle joint clamp boreholes or ball joint attachments
- Makes the assembly and disassembly easier
- For almost all common vehicle types
- 90° angled
- Continuous hardened
- Matt chrome
- Special steel

Application range: Ford, VAG, PSA, Japanese vehicles, etc.



	L mm	Width mm	Spread dim mm	kg
150.9407	205.0	5.0	7.0	65

Flange splayed bit socket set for the spring foot mounting

- Ideal for time-saving and damage-free splaying of the axle joint clamp boreholes or ball joint attachments
- Makes the assembly and disassembly easier
- For almost all common vehicle types
- Continuous hardened
- Matt chrome
- Special steel

Application range: BMW, Ford, VAG, PSA, Japanese vehicles, etc.



	kg
150.9490	2 pcs Flange splayed bit socket set for the spring foot mounting 120



item	Description	700.1760 20 pcs	700.2355 22 pcs	700.1700 36 pcs	700.1735 12 pcs
Pressure nut					
700.1701	Thrust bolt, M10 with bearing		2 x	2 x	2 x
700.1702	Thrust bolt, M12	2 x	2 x	2 x	2 x
700.1703	Thrust bolt, M14 with bearing			2 x	2 x
700.1704	Thrust bolt, M16	2 x		2 x	2 x
700.1800-19	Thrust bolt TR 20 with bearing 2 pcs		1 x		
700.1800-10	Check nut M 10		1 x		
700.1800-11	Check nut M 12		1 x		
Step plate					
700.1706	Stepped plates,#1	1 x	1 x	1 x	
700.1707	Stepped plates,#2	1 x	1 x	1 x	
700.1708	Stepped plates,#3	1 x	1 x	1 x	
700.1709	Stepped plates,#4	1 x	1 x	1 x	
Spindles					
700.1710	Spindle, M10		1 x	1 x	1 x
700.1711	Spindles, M12	1 x	1 x	1 x	1 x
700.1712	Spindle, M14			1 x	1 x
700.1713	Spindles, M16	1 x		1 x	1 x
700.1800-17	Spindle TR 20, short		1 x		
Step pressure sleeve					
700.2356	Step pressure sleeve, internal Ø 14 mm, external Ø 24 mm		1 x		
700.2357	Step pressure sleeve, internal Ø 16 mm, external Ø 26 mm		1 x		
700.2358	Step pressure sleeve, internal Ø 18 mm, external Ø 28 mm		1 x		
700.2359	Step pressure sleeve, internal Ø 20 mm, external Ø 30 mm		1 x		
700.2361	Step pressure sleeve, internal Ø 22 mm, external Ø 32 mm		1 x		
700.2362	Step pressure sleeve, internal Ø 24 mm, external Ø 34 mm		1 x		
700.2363	Step pressure sleeve, internal Ø 26 mm, external Ø 36 mm		1 x		
700.2364	Step pressure sleeve, internal Ø 28 mm, external Ø 38 mm		1 x		
700.2365	Step pressure sleeve, internal Ø 30 mm, external Ø 40 mm		1 x		
700.2366	Step pressure sleeve, internal Ø 32 mm, external Ø 42 mm		1 x		
Pressure sleeve					
700.1714	Pull sleeve, internal Ø 34mm, external Ø 44mm	1 x		1 x	
700.1715	Pressure sleeve, internal Ø 36 mm, external Ø 46 mm			1 x	
700.1716	Pressure sleeve, internal Ø 38 mm, external Ø 48 mm			1 x	
700.1717	Pressure sleeve, internal Ø 40 mm, external Ø 50 mm			1 x	
700.1718	Pull sleeve, internal Ø 42mm, external Ø 52mm	1 x		1 x	
700.1719	Pull sleeve, internal Ø 44mm, external Ø 54mm	1 x		1 x	
700.1720	Pull sleeve, internal Ø 46mm, external Ø 56mm	1 x		1 x	
700.1721	Pressure sleeve, internal Ø 48 mm, external Ø 58 mm			1 x	
700.1722	Pressure sleeve, internal Ø 50 mm, external Ø 60 mm			1 x	
700.1723	Pull sleeve, internal Ø 52mm, external Ø 62mm	1 x		1 x	
700.1724	Pressure sleeve, internal Ø 54 mm, external Ø 64 mm			1 x	
700.1725	Pressure sleeve, internal Ø 56 mm, external Ø 66 mm			1 x	
700.1726	Pressure sleeve, internal Ø 58 mm, external Ø 68 mm			1 x	
700.1727	Pressure sleeve, internal Ø 60 mm, external Ø 70 mm			1 x	
700.1728	Pressure sleeve, internal Ø 62 mm, external Ø 72 mm			1 x	
700.1729	Pull sleeve, internal Ø 64mm, external Ø 74mm	1 x		1 x	
700.1730	Pressure sleeve, internal Ø 66 mm, external Ø 76 mm			1 x	
700.1731	Pressure sleeve, internal Ø 68 mm, external Ø 78 mm			1 x	
700.1732	Pull sleeve, internal Ø 70mm, external Ø 80mm	1 x		1 x	
700.1733	Pull sleeve, internal Ø 72mm, external Ø 82mm	1 x		1 x	
Thread width					
980.1090	Special thread grease	2 x			
980.1085	Special thread grease				1 x

Press and pull sleeve set

- For the disassembly and assembly of bearings
- Ideally for silent bearings, hydro bearings, bushings, ball bearing, simmerrings, etc
- Universal use for automobile, truck, municipally, country and forestry technology, etc.
- Outstanding to use also in connection with workshop press or hollow piston cylinder
- According to use application the sheaths individually can be reworked
- Pressure bearing protects against increased friction during the process
- In durable plastic storage case

Attention: the spindles need to be greased with a good lubricant for each application! Do not overload spindles, otherwise the thread lengthens and the pitch of the nut and spindle no longer match. The result: the nuts will seize up. Always check the applied force at the drive with a torque wrench!

Maximum permitted torque:

- Spindle M10x1,5 60 Nm
- Spindle M12x1,5 100 Nm



700.2355	22 pcs	Press and pull sleeve set	8.74
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consists of:

700.1701	Thrust bolt, M10 with bearing	125
700.1702	Thrust bolt, M12	124
700.1706	Stepped plates, #1	350
700.1707	Stepped plates, #2	390
700.1708	Stepped plates, #3	420
700.1709	Stepped plates, #4	450
700.1710	Spindle, M10	170
700.1711	Spindles, M12	253
700.1800-10	Check nut M 10	350
700.1800-11	Check nut M 12	350
700.1800-17	Spindle TR 20, short	350
700.1800-19	Thrust bolt TR 20 with bearing 2 pcs	350
700.2356	Step pressure sleeve, internal Ø 14 mm, external Ø 24 mm	260
700.2357	Step pressure sleeve, internal Ø 16 mm, external Ø 26 mm	280
700.2358	Step pressure sleeve, internal Ø 18 mm, external Ø 28 mm	300
700.2359	Step pressure sleeve, internal Ø 20 mm, external Ø 30 mm	320
700.2361	Step pressure sleeve, internal Ø 22 mm, external Ø 32 mm	360
700.2362	Step pressure sleeve, internal Ø 24 mm, external Ø 34 mm	380
700.2363	Step pressure sleeve, internal Ø 26 mm, external Ø 36 mm	400
700.2364	Step pressure sleeve, internal Ø 28 mm, external Ø 38 mm	420
700.2365	Step pressure sleeve, internal Ø 30 mm, external Ø 40 mm	440
700.2366	Step pressure sleeve, internal Ø 32 mm, external Ø 42 mm	460



Press and pull sleeve set BASIC

- For the disassembly and assembly of bearings
- Ideally for silent bearings, hydro bearings, bushings, ball bearing, simmerrings, etc
- Universal use for automobile, truck, municipally, country and forestry technology, etc.
- Outstanding to use also in connection with workshop press or hollow piston cylinder
- According to use application the sheaths individually can be reworked
- Pressure bearing protects against increased friction during the process
- In durable plastic storage case

Attention: the spindles need to be greased with a good lubricant for each application! Do not overload spindles, otherwise the thread lengthens and the pitch of the nut and spindle no longer match. The result: the nuts will seize up. Always check the applied force at the drive with a torque wrench!

Maximum permitted torque:

- Spindle M10x1,5 60 Nm
- Spindle M12x1,5 100 Nm
- Spindle M14x1,5 180 Nm
- Spindle M16x1,5 250 Nm



700.1760	20 pcs	Press and pull sleeve set BASIC	8.32
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consists of:

700.1702	Thrust bolt, M12	124
700.1704	Thrust bolt, M16	130
700.1706	Stepped plates, #1	350
700.1707	Stepped plates, #2	390
700.1708	Stepped plates, #3	420
700.1709	Stepped plates, #4	450
700.1711	Spindles, M12	253
700.1713	Spindles, M16	473
700.1714	Pull sleeve, internal Ø 34mm, external Ø 44mm	250
700.1718	Pull sleeve, internal Ø 42mm, external Ø 52mm	300
700.1719	Pull sleeve, internal Ø 44mm, external Ø 54mm	320
700.1720	Pull sleeve, internal Ø 46mm, external Ø 56mm	330
700.1723	Pull sleeve, internal Ø 52mm, external Ø 62mm	370
700.1729	Pull sleeve, internal Ø 64mm, external Ø 74mm	440
700.1732	Pull sleeve, internal Ø 70mm, external Ø 80mm	480
700.1733	Pull sleeve, internal Ø 72mm, external Ø 82mm	490

Press and pull sleeve set

- For the disassembly and assembly of bearings
- Ideally for silent bearings, hydro bearings, bushings, ball bearing, simmerrings, etc
- Universal use for automobile, truck, municipally, country and forestry technology, etc.
- Outstanding to use also in connection with workshop press or hollow piston cylinder
- According to use application the sheaths individually can be reworked
- Pressure bearing protects against increased friction during the process
- In durable plastic storage case

Attention: the spindles need to be greased with a good lubricant for each application! Do not overload spindles, otherwise the thread lengthens and the pitch of the nut and spindle no longer match. The result: the nuts will seize up. Always check the applied force at the drive with a torque wrench!

Maximum permitted torque:

- Spindle M10x1,5 60 Nm
- Spindle M12x1,5 100 Nm
- Spindle M14x1,5 180 Nm
- Spindle M16x1,5 250 Nm



700.1700	36 pcs	Press and pull sleeve set	14.80
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consists of:

700.1701	Thrust bolt, M10 with bearing	125
700.1702	Thrust bolt, M12 with bearing	124
700.1703	Thrust bolt, M14 with bearing	130
700.1704	Thrust bolt, M16 with bearing	130
700.1706	Stepped plate, #1	350
700.1707	Stepped plate, #2	390
700.1708	Stepped plate, #3	420
700.1709	Stepped plate, #4	450
700.1710	Spindle, M10	170
700.1711	Spindle, M12	253
700.1712	Spindle, M14	350
700.1713	Spindle, M16	473
700.1714	Pressure sleeve, Internal Ø: 34 mm, External Ø: 44 mm	250
700.1715	Pressure sleeve, Internal Ø: 36 mm, External Ø: 46 mm	260
700.1716	Pressure sleeve, Internal Ø: 38 mm, External Ø: 48 mm	280
700.1717	Pressure sleeve, Internal Ø: 40 mm, External Ø: 50 mm	290
700.1718	Pressure sleeve, Internal Ø: 42 mm, External Ø: 52 mm	300
700.1719	Pressure sleeve, Internal Ø: 44 mm, External Ø: 54 mm	320
700.1720	Pressure sleeve, Internal Ø: 46 mm, External Ø: 56 mm	330
700.1721	Pressure sleeve, Internal Ø: 48 mm, External Ø: 58 mm	340
700.1722	Pressure sleeve, Internal Ø: 50 mm, External Ø: 60 mm	350
700.1723	Pressure sleeve, Internal Ø: 52 mm, External Ø: 62 mm	370
700.1724	Pressure sleeve, Internal Ø: 54 mm, External Ø: 64 mm	380
700.1725	Pressure sleeve, Internal Ø: 56 mm, External Ø: 66 mm	390
700.1726	Pressure sleeve, Internal Ø: 58 mm, External Ø: 68 mm	410
700.1727	Pressure sleeve, Internal Ø: 60 mm, External Ø: 70 mm	420
700.1728	Pressure sleeve, Internal Ø: 62 mm, External Ø: 72 mm	430
700.1729	Pressure sleeve, Internal Ø: 64 mm, External Ø: 74 mm	440
700.1730	Pressure sleeve, Internal Ø: 66 mm, External Ø: 76 mm	460
700.1731	Pressure sleeve, Internal Ø: 68 mm, External Ø: 78 mm	470
700.1732	Pressure sleeve, Internal Ø: 70 mm, External Ø: 80 mm	480
700.1733	Pressure sleeve, Internal Ø: 72 mm, External Ø: 82 mm	490

Press and pull sleeve kit

- For the assembly and disassembly of bearings
- Ideally for silent bearings, hydro bearings, bushings, ball bearings, simmer rings, etc.
- Universal use for passenger cars, trucks, communal, agricultural and forest vehicles
- Outstanding to use also in connection with workshop press or hollow piston cylinder
- According to use application the sheaths individually can be reworked
- Pressure bearing protects against increased friction during the process
- In durable plastic storage case

Caution: The spindles must be greased before first use! Overloading leads to unwanted material stresses or breakage. Always check the power settings on the drive with a torque wrench. Not to be combined with other systems.

- Maximum allowable torque moments:
- Spindle (ACME) M10 x P1.5 60 Nm
- Spindle (ACME) M12 x P2.0 120 Nm
- Spindle (ACME) M14 x P2.0 150 Nm
- Spindle (ACME) M16 x P2.5 250 Nm



700.1550	29 pcs	Press and pull sleeve kit	17.00
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consists of:

700.1550-34	Pull sleeve, internal Ø 34mm, external Ø 44mm	250	
700.1550-36	Pull sleeve, internal Ø 36mm, external Ø 46mm	260	
700.1550-38	Pull sleeve, internal Ø 38mm, external Ø 48mm	280	
700.1550-40	Pull sleeve, internal Ø 40mm, external Ø 50mm	290	
700.1550-42	Pull sleeve, internal Ø 42mm, external Ø 52mm	300	
700.1550-44	Pull sleeve, internal Ø 44mm, external Ø 54mm	320	
700.1550-46	Pull sleeve, internal Ø 46mm, external Ø 56mm	330	
700.1550-48	Pull sleeve, internal Ø 48mm, external Ø 58mm	340	
700.1550-50	Pull sleeve, internal Ø 50mm, external Ø 60mm	350	
700.1550-52	Pull sleeve, internal Ø 52mm, external Ø 62mm	360	
700.1550-54	Pull sleeve, internal Ø 54mm, external Ø 64mm	380	
700.1550-56	Pull sleeve, internal Ø 56mm, external Ø 66mm	390	
700.1550-58	Pull sleeve, internal Ø 58mm, external Ø 68mm	410	
700.1550-60	Pull sleeve, internal Ø 60mm, external Ø 70mm	420	
700.1550-62	Pull sleeve, internal Ø 62mm, external Ø 72mm	430	
700.1550-64	Pull sleeve, internal Ø 64mm, external Ø 74mm	440	
700.1550-66	Pull sleeve, internal Ø 66mm, external Ø 76mm	460	
700.1550-68	Pull sleeve, internal Ø 68mm, external Ø 78mm	470	
700.1550-70	Pull sleeve, internal Ø 70mm, external Ø 80mm	480	
700.1550-72	Pull sleeve, internal Ø 72mm, external Ø 82mm	490	
700.1550-75	Pull sleeve, internal Ø 75mm, external Ø 85mm	500	
700.1550-80	Pull sleeve, internal Ø 80mm, external Ø 90mm	520	
700.1551	Spindle M10x1.5	170	
700.1552	Spindle M12x1.75	200	
700.1553	Spindle M14x2.0	350	
700.1554	Spindle M16x2.0	380	
700.1555	Pressure adapter for step panel hgv size	350	
700.1556	Step panel adaptor with 3 holes, A+B side	350	
700.1551-01	Pressure nut for M10 x P1,5	30	
700.1551-02	Pressure nut with bearing for M10xP1,5	30	
700.1552-01	Pressure nut for M12 x P1,75	30	
700.1552-02	Pressure nut with bearing for M12xP1,75	30	
700.1553-01	Pressure nut for M14 x P2,0	30	
700.1553-02	Pressure nut with bearing for M14xP2,0	30	
700.1554-01	Pressure nut for M16 x P2,0	30	
700.1554-02	Pressure nut with bearing for M16xP2,0	30	

UNIVERSAL PRESS FRAME SYSTEM PP I

Universal press frame, 5 pcs without hydraulic spindle

- For the use in connection with the pressure and pull sleeve set 700.1700 for pressing out and pressing on of silent bearings, hydro bearings, bushings, etc.
- Enables de- and assembly directly on the vehicle
- Through the long trailing arm also especially high housings release themselves without problem on and pressing out
- Extremely robust spindle with inductively hardened thread
- Special steel



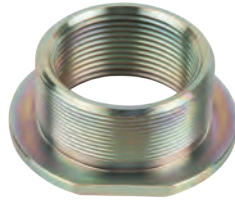
700.1751	5 pcs	Universal press frame, 5 pcs without hydraulic spindle	8.90

accessories:

700.1751-1	Connection bar 205 mm for 700.1751 (1 piece)	0.71	
700.1751-2	Connection bar 350 mm for 700.1751 (1 piece)	1.20	

Adapter for Sauer, Müller, KS PP 1

- For use of the hydraulic cylinder on Sauer, Müller, KS PP 1 with KS Tools tool
- Adapter 1.1/2" to 2.1/4"-16 UN (Sauer, Müller, KS PP 1)
- Special steel



440.0034		Adapter for Sauer, Müller, KS PP 1	230

HYDRAULIC SUPPORT SYSTEM PP I

Hydraulic pressure spindle for press frame

- Ideal for enlarging the press frame
- Compact shape with extremely high pressure (10 t)
- Extremely high and uniform power construction
- Pre-tensioning and positioning via the outer thread on the cylinder
- For a controlled and safe removal
- The hydraulics are set into motion via a hydraulic pump (3/8" NPT)
- Extremely robust spindle with hardened thread
- Special steel



	Total length mm	Screw extension mm	Width mm	max. l	Stroke mm	Ø mm	
700.1785	300.0	240.0	170.0	10	200.0	54.0	5.52

Hydraulic pressure spindle for press frame

- Ideal for enlarging the press frame
- Compact shape with extremely high pressure (10 t)
- The hydraulic pistons move in a linear way which prevents rubbing on the pressure tip
- Maximum pressure with little effort
- Pre-tensioning and positioning via the outer thread on the cylinder
- For a controlled and safe removal
- The hydraulics are set in motion with the knob or the external hexagon drive
- Extremely robust spindle with hardened thread
- Special steel



	Total length mm	Screw extension mm	Total length mm	max. l	Stroke mm	Ø mm	
700.1400-1	AG 1.1/2"-12 UNF	92.0	260.0	10	15.0	17	1.23

HYDRAULIC SUPPORT UNIVERSAL

Hydraulic hollow piston cylinder set, 12 t with spindle

- For the assembly and disassembly of silent bearings, steering pins, track rod ends, wheel bearings, etc.
- Extremely high and uniform power construction
- Maximum pressure with little effort
- Industrial design with forged piston
- Suitable for both pressurised and tensioned uses
- Special steel



Technical data cylinder

Capacity:	12 t
Connection thread:	3/8" NPT IG
Piston:	industrial forged execution
Stroke:	42.0 mm

700.1788	2 pcs	Hydraulic hollow piston cylinder set, 12 t with spindle	3.40

consists of:

700.1789		Hydraulic hollow piston cylinders, 12 t	2.20
700.1787		Hydraulic pull piston	1.20

Hydraulic hollow piston cylinder set 20 t with spindle

- For the assembly and disassembly of silent bearings, steering pins, track rod ends, wheel bearings, etc.
- Extremely high and uniform power construction
- Maximum pressure with little effort
- Industrial design with forged piston
- Suitable for both pressurised and tensioned uses
- Special steel



Technical data cylinder

Capacity:	20 t
Connection thread:	3/8" NPT IG
Piston:	industrial forged execution
Stroke:	52.0

700.1786	2 pcs	Hydraulic hollow piston cylinder set 20 t with spindle	8.80

consists of:

700.1796		Hydraulic feet shaft M20 x 2.5	1.50
700.1791		Hydraulic hollow piston cylinders, 20 t	7.30

Hydraulic hand pump

- For the dismantling and assembly of silent support, steering pin, track rod ends, wheel bearings, etc.
- Extremely high and uniform power construction
- Suitable for both pressure and train uses
- Ideally suited for commercial vehicles
- Supplied without manometer and hydraulic tube
- Special steel



Technical data:
 Connection thread: 3/8" NPT IG
 Hand pump: 700 bar high pressure pump
 Dimensions: 410 x 150 x 135

700.1792	Hydraulic hand pump	5.50
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Hydraulics tube, 2 m including connection

- Ideally suited for commercial vehicles



Technical data:
 Connection thread: 3/8" NPT AG x 3/8" NPT AG
 Length: 2000 mm

700.1793	Hydraulics tube, 2 m including connection	1.10
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Manometer

- Max. 12 bar
- 1/2" Internal and external threaded connector
- Special steel



	D mm	H mm	B mm	kg
700.1790-2	80.0	50.0	25.0	334

Hydraulic tension and pressure unit

- For the dismantling and assembly of silent support, steering pin, track rod ends, wheel bearings, etc.
- Extremely high and uniform power construction
- Industrial execution with forged piston
- Suitable for both pressure and train uses
- Ideally suited for commercial vehicles
- Special steel
- In durable plastic storage case



700.1790	4 pcs	Hydraulic tension and pressure unit	15.40
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consists of:

700.1791	Hydraulic hollow piston cylinder, 20 t	7.30
700.1792	Hydraulic hand pump, 700 bar	5.50
700.1793	Hydraulic hose, 2 m	1.10
700.1796	Feed shaft for hydraulic M20 x 500 mm	1.50

Pneumatic hydraulic pump

- Pneumatic working
- For simply agent press cylinders
- Safety valve for overload protection
- Includes pressure tube 1.8 meters
- Usable tank volume 2081cm³ = 2.081 l
- Operating pressure max. 700 bar
- Output per stroke:
 0.8 l/min up to 200 bar
 0.1 l/min up to 700 bar



	Connection thread mm	L mm	B mm	H mm	kg
640.0020	3/8" - 18 NPT	255	130	200	11.00

C-FRAME SYSTEM PP I

C-clamp and adaptor set, short

- Very robust execution
- Valuable supplement to the pressure set and hub sheath set 700.1700
- The drive can be used alternatively mechanically or hydraulically
- Suitable for impact wrenches
- Through use of trapezoid spindle and Impact screw maximum power can be transferred (Hammer impact effect)
- Removeable spindle and clamping device with staged reception plate
- Silent bearings, sheaths, bushings etc. lets it incorporated itself in that or expanded condition on and compressed
- Trapezoid thread spindle Tr.27 with ball stored pressure tip
- Special steel



	Max span width mm	Max span depth mm	Length mm	Width mm	kg	
700.1780	4 pcs	170.0	65.0	320.0	150.0	6.42

consists of:

700.1781	Uni C-clamp	5.50
700.1782	Spindle with trapezoid thread Tr.27	0.90
700.1783	C attachment set for stepped puller, 2 pcs	0.02

C-clamp and adaptor set, long

- Very robust execution
- Valuable supplement to the pressure set and hub sheath set 700.1700
- The drive can be used alternatively mechanically or hydraulically
- Suitable for impact wrenches
- Through use of trapezoid spindle and Impact screw maximum power can be transferred (Hammer impact effect)
- Removeable spindle and clamping device with staged reception plate
- Silent bearings, sheaths, bushings etc. lets it incorporated itself in that or expanded condition on and compressed
- Trapezoid thread spindle Tr.27 with ball stored pressure tip
- Special steel



	Max span width mm	Max span depth mm	Length mm	Width mm	kg	
700.1755	5 pcs	245.0	95.0	380.0	180.0	11.00

consists of:

		kg
700.1754	Threaded adaptor with AG 1-1/2" x 16G and IG trapezoid thread Tr.27	0.60
700.1756	Universal C-clamp	7.00
700.1757	Spindle with trapezoid thread Tr.27, length 300 mm, drive 24 mm	2.00
700.1758	Spindle reception adaptor	0.80
700.1759	C-Clamp reception adaptor	0.60

BALL JOINT SYSTEM PP I

Pressure sleeve set Volkswagen and Mercedes

- For the assembly and disassembly of the ball joint (ball pins) Ø 45 mm
- Can be used directly on the vehicle
- Saves a lot of time
- For use with the universal press frame 700.1751 and spindle
- Special steel

Application range: Mercedes Sprinter from 1996-2007, Volkswagen LT and Crafter from 1996-2007



700.2305	4 pcs	Pressure sleeve set Volkswagen and Mercedes	5.70
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consists of:

		kg
700.2306	Pressure sleeve for installation	1.54
700.2307	Pressure sleeve for removal, Ø 60 mm	1.64
700.2308	Pressure sleeve for removal, Ø 62 mm	1.40
700.2309	Press sleeve for installation and removal	0.42

accessories:

700.2310	Pressure sleeve for removal on models after 2007	1.46
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Pressure sleeve set for Mercedes ball joint

- Quick and problem-free assembly and disassembly of the ball joint
- For use alongside C frame 700.1780
- Special steel

Application range: Mercedes W211 and W220



700.1620	4 pcs	Pressure sleeve set for Mercedes ball joint	1.42
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consists of:

		Length mm	kg
700.1621	Pressure sleeve, 57 mm	45.0	400
700.1622	Pressure sleeve, 51 mm	75.0	390
700.1623	Pressure sleeve, 60 mm	90.0	470
700.1624	Pressure sleeve, 33 mm	41.0	150

Pressure sleeve set for Mercedes torsion bar joint

- Quick and problem-free assembly and disassembly of the torsion bar joint
- For use alongside C frame 700.1755
- Special steel

Application range: Mercedes W211 and W220



700.1625	3 pcs	Pressure sleeve set for Mercedes torsion bar joint	900
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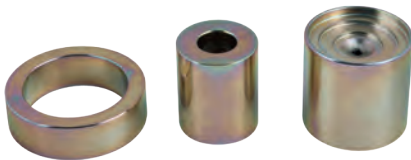
consists of:

		Length mm	
700.1626	Pressure sleeve, 34 mm	86.0	300
700.1627	Pressure sleeve, 48 mm	78.5	420
700.1628	Pressure sleeve, 37 mm	39.0	180

Pressure sleeve for Mercedes

- For the assembly and disassembly of the external ball joint (ball pins)
- Can be used directly on the vehicle
- Saves a lot of time
- For use with the universal press frame 700.1751 and spindle
- Special steel

Application range: Mercedes W124, W129, W201 on the external ball joint (ball pins)



700.2300	3 pcs	Pressure sleeve for Mercedes	1.43
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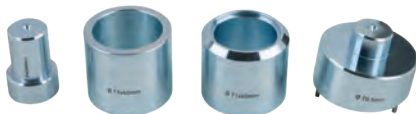
consists of:

700.2301	Pressure sleeve 52 x 52 mm	770
700.2302	Pressure sleeve 40 x 48 mm	390
700.2303	Pressure sleeve 70 x 20 mm	270

Press sleeve set for Renault Master and Opel Movano

- For the assembly and disassembly of the ball joint (ball pins) on the upper front-axle
- Can be used directly on the vehicle
- Saves a lot of time
- For use with the universal press frame 700.1751 and spindle
- Special steel

Application range: Renault Master and Opel Movano ball joint (ball pins) on the upper front axle



700.2275	4 pcs	Press sleeve set for Renault Master and Opel Movano	3.15
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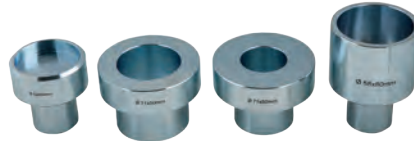
consists of:

700.2276	Pressure sleeve, 42 x 60 mm	460
700.2277	Pressure sleeve straight, 71 x 60 mm	690
700.2278	Pressure sleeve with recess, 71 x 60 mm	880
700.2279	Pressure sleeve slopes, 79.5 mm	1120

Press sleeve set for Renault Master and Opel Movano

- For the assembly and disassembly of the ball joint (ball pins) on the lower front-axle
- Can be used directly on the vehicle
- Saves a lot of time
- For use with the universal press frame 700.1751 and spindle
- Special steel

Application range: Renault Master and Opel Movano ball joint (ball pins) on the lower front axle



700.2270	4 pcs	Press sleeve set for Renault Master and Opel Movano	2.33
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consists of:

700.2271	Pressure sleeve with recess, 71 x 50 mm	620
700.2272	Pressure sleeve, 57.5 x 50 mm	710
700.2273	Pressure sleeve, 52 x 35 mm	480
700.2274	Pressure sleeve without recess, 71 x 50 mm	520

Pressure sleeve set for Volkswagen T4

- For the assembly and disassembly of the ball joint (ball pins) on the upper wishbones
- Can be used directly on the vehicle
- Saves a lot of time
- For use with the universal press frame 700.1751 and spindle
- Special steel

Application range: Volkswagen T4 from 1992 onwards, ball joint (ball pin) on upper wishbones



700.2290	4 pcs	Pressure sleeve set for Volkswagen T4	2.32
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consists of:

700.2291	Pressure sleeve 51 x 78 mm	653
700.2292	Pressure sleeve 73 x 31 mm	520
700.2293	Pressure sleeve 39 x 78 mm	650
700.2294	Pressure sleeve 73 x 43 mm	500



HYDRAULIC SUPPORT SYSTEM PP II

Pressure and pull hydraulic cylinder set

- For the assembly and disassembly of silent bearings, steering pin bolts, wheel bearings, etc.
- Can be used in the narrowest of spaces
- With adjustable pressure rods and impact body
- With automatic piston return
- Special steel



Technical data cylinder

Capacity:	8.5 t
Connection thread:	Cejn quick coupling
Piston:	industrial forged execution
piston-inner thread:	M22
piston-outer thread:	2.1/4"
Stroke:	25.0 mm

440.0020	4 pcs	Pressure and pull hydraulic cylinder set	2.19
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consists of:

440.0021	Hydraulic cylinder, 8.5 t	1800
440.0022	Impact body with sealing ring	140
440.0023	Adjustable pressure rod M22, L = 100 mm	240
440.0024	(CEJN-) Nipple hydraulic	10

Pressure and pull hydraulic cylinder set

- For the assembly and disassembly of silent bearings, steering pins, track rod ends, wheel bearings, etc.
- Suitable for both pressurised and tensioned uses
- With impact body for screwing in
- Extremely high and uniform power construction
- Universal usage with reduction M10-M22
- With automatic piston return
- Special steel



Technical data cylinder

Capacity:	16 t
Connection thread:	Cejn quick coupling
Piston:	industrial forged execution
piston-inner thread:	M22
piston-outer thread:	2.1/4"
Stroke:	67.0 mm

440.0005	10 pcs	Pressure and pull hydraulic cylinder set	5.48
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consists of:

440.0001	Hydraulic cylinder, 16 t	3380
440.0002	Pressure axle, M24 x 3 mm, L = 129.5 mm	600
440.0003	Pressure foot, M24 x 3 mm	90
440.0004	Adjustable pressure rod M24, L = 92 mm	240
440.0006	Protective ring for thread, 2.1/4"	100
440.0007	Collar nut, M18	80
440.0008	Pressure rod, M18/M22, L = 250 mm	440
440.0009	(CEJN-) Nipple hydraulic	10
440.0011	Impact body, M22 x 2.5 mm	220
440.0012	Adjustable pressure sleeve, M24, L = 132 mm	320

Pressure and pull hydraulic cylinder set

- For the assembly and disassembly of silent bearings, steering pins, track rod ends, wheel bearings, etc.
- Suitable for both pressurised and tensioned uses
- With impact body for screwing in
- Extremely high and uniform power construction
- Universal usage with reduction M10-M22
- With automatic piston return
- Ideally suited to transporters
- Special steel



Technical data cylinder

Capacity: 22 t
 Connection thread: Cejn quick coupling
 Piston: industrial forged execution
 piston-inner thread: M22
 piston-outer thread: 2.1/4"
 Stroke: 70.0 mm

440.0010	10 pcs	Pressure and pull hydraulic cylinder set	6.90
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consists of:

440.0013	Hydraulic cylinder, 22 t	4640
440.0011	Impact body, M22 x 2.5 mm	220
440.0003	Pressure foot, M24 x 3 mm	90
440.0004	Adjustable pressure rod M24, L = 92 mm	240
440.0006	Protective ring for thread, 2.1/4"	100
440.0014	Pressure axle, M24 x 3, L = 151 mm	740
440.0016	Adjustable pressure sleeve, M24, L = 109 mm	340
440.0007	Collar nut, M18	80
440.0008	Pressure rod, M18/M22, L = 250 mm	440
440.0009	(CEJN-) Nipple hydraulic	10

Pressure and pull hydraulic cylinder set

- Optimal for universal use in car garages
- Suitable for both pressurised and tensioned uses
- Extremely high and uniform power construction
- Industrial design with forged piston
- Pressure of the hydraulic cylinders can be combined with the impact body with impact force during use
- Universal usage with reduction M10-M22
- With automatic piston return
- Ideally used with transporters and commercial vehicles
- Special steel



Technical data cylinder

Capacity: 32 t
 Connection thread: Cejn quick coupling
 Piston: industrial forged execution
 piston-inner thread: M24
 piston-outer thread: 2.1/4"
 Stroke: 113.0 mm

440.0025	6 pcs	Pressure and pull hydraulic cylinder set	9.35
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consists of:

440.0026	Hydraulic cylinder, 32 t	8020
440.0016	Adjustable pressure sleeve, M24, L = 109 mm	340
440.0027	Protective ring for thread, 2.5	200
440.0028	Collar nut, M22	100
440.0029	Pressure rod, M22, L = 250 mm	620
440.0009	(CEJN-) Nipple hydraulic	10

Short-stroke hydraulic cylinder set

- For the assembly and disassembly of silent bearings, steering pin bolts, wheel bearings, etc.
- With adjustable pressure rod
- Maximum pressure with little effort
- Especially for use with press tool and press stand 440.0190 and 440.0180
- With automatic piston return
- Special steel



Technical data cylinder

Capacity: 14 t
 Connection thread: Cejn quick coupling
 Piston: industrial forged execution
 piston-inner thread: M24
 piston-outer thread: 2.1/4"
 Stroke: 55.0 mm

440.0015	3 pcs	Short-stroke hydraulic cylinder set	2.67
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consists of:

440.0017	Hydraulic cylinder, 14 t	2420
440.0004	Adjustable pressure rod M24, L = 92 mm	240
440.0009	(CEJN-) Nipple hydraulic	10

Pull rod, collar nut, adapter set

- Universal usage
- Extremely robust spindle with inductive hardened thread (M10-M22)
- Optimal use with trucks, transporters and commercial vehicle tools with corresponding reduction
- Ideally suited to hydraulic cylinders 440.0005, 440.0010 and 440.0020
- Special steel

Caution: The spindles must be greased before first use!



440.0040	13 pcs	Pull rod, collar nut, adapter set	1.98
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consists of:

440.0041	Pressure rod, M10	80
440.0042	Pressure rod, M12	180
440.0043	Pressure rod, M14	240
440.0008	Pressure rod, M18/M22, L = 250 mm	440
440.0029	Pressure rod, M22, L = 250 mm	620
440.0044	Adapter, M22-M10	50
440.0045	Adapter, M22-M12	50
440.0046	Adapter, M22-M14	40
440.0047	Collar nut, M10	20
440.0048	Collar nut, M12	20
440.0049	Collar nut, M14	60
440.0007	Collar nut, M18	80
440.0028	Collar nut, M22	100

Hydraulic foot pump set

- For simple acting press cylinder
- Safety valve for prevention against too much force
- With automatic return
- Includes hydraulic hose with quick coupling



Technical data:

Connection thread: Cejn quick coupling
 Volume: 0,75 l
 Operating pressure: 700 bar
 Tube length: 2200 mm

440.0060	4 pcs	Hydraulic foot pump set	7.83
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consists of:

440.0057	Hydraulic hose, 2200 mm	900
440.0058	Cejn quick coupling	200
440.0061	Hydraulic foot pump	6720
440.0070	Seal set	10

Pneumatic hydraulic pump set

- Pneumatic operation
- For simple acting press cylinder
- Safety valve for prevention against too much force
- With automatic return
- Includes hydraulic hose with quick coupling



Technical data:

Connection thread: Cejn quick coupling
 Volume: 1,4 l
 Operating pressure: 700 bar
 Tube length: 2200 mm

440.0055	3 pcs	Pneumatic hydraulic pump set	6.32
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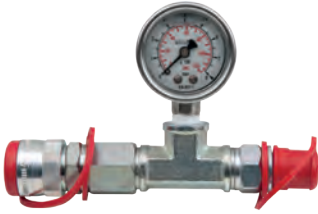
consists of:

440.0056	Pneumatic hydraulic pump	5220
440.0057	Hydraulic hose, 2200 mm	900
440.0058	Cejn quick coupling	200

Manometer

- With Cejn quick coupling for direct coupling to all KS Tools hydraulic pumps
- With easy-to-read scale in psi and bar

Caution: The maximum pressure values for the hydraulic cylinder and given in the appropriate operator's manual



440.0063	Manometer	500
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ADAPTER

Klann adapter

- For using the Klann hydraulic cylinder (17 t) with KS Tools tool 1.1/2" external thread
- Adapter 2.1/4"-14 UNS (Klann thread) to 1.1/2"
- Special steel



440.0038	Klann adapter	1.08
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Klann adapter

- For use with the KS Tools hydraulic cylinder (8.5-22 t) with Klann special tool
- Adapter 1.1/2" to 2.1/4"-14 UNS (Klann thread)
- Special steel



440.0036	Klann adapter	200
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Klann adapter

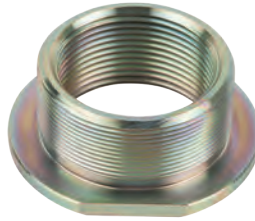
- For using the KS tools hydraulic cylinder with the Klann special tool (connection 2.3/4")
- Adapter 2.3/4"-16 UNS (Klann thread) to 2.1/2"
- Special steel



440.0409	Klann adapter	760
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Adapter for Sauer, Müller, KS PP 1

- For use of the hydraulic cylinder on Sauer, Müller, KS PP 1 with KS Tools tool
- Adapter 1.1/2" to 2.1/4"-16 UN (Sauer, Müller, KS PP 1)
- Special steel



440.0034	Adapter for Sauer, Müller, KS PP 1	230
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Paschke adapter

- For using the Paschke hydraulic cylinder with KS Tools tool
- Adapter M68 x 2 mm (Paschke thread) to 1.1/2"
- Special steel



440.0407	Paschke adapter	110
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Paschke adapter

- For using the Paschke hydraulic cylinder with KS Tools tool
- Adapter M68 x 2 mm (Paschke thread) to 1.1/2"-11G
- Special steel



440.0408	Paschke adapter	330
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Adapter for 32 t hydraulic cylinder

- For use with hydraulic cylinder 16 t (440.0005) and 22 t (440.0010) to the 2.1/2" thread from 32 t hydraulic cylinder (440.0025)
- Adapter 1.1/2" to 2.1/2"-11 UN



440.0037	Adapter for 32 t hydraulic cylinder	570
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PRESS TOOL SYSTEM PP II

Press tool

- Forged press tool for removing the ball joints and stabiliser ball pins
- Maximum force 16 t
- Ideal for use with a hydraulic cylinder
- Optimally used with ball joint sets 440.0230 and 440.0240 as well as stabiliser ball pin set 440.0235
- Secure and easy to use
- Minimum work time
- Special steel

Recommended hydraulic cylinder: 8.5 t (440.0020), 14 t (440.0015), 16 t (440.0005), 22 t (440.0010)
Application range: Mercedes, Ford



440.0190	Press tool	5.78
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PRESS STAND SYSTEM PP II

Universal press stand

- With open stand plate and adapter ring set
- Ideal for replacing ball joints and rear-axle bushes
- Can be used directly on the vehicle
- Adjustable with ball joint press sleeves from KS Tools
- For use with hydraulic cylinder
- Secure and easy to use
- Special steel

Recommended hydraulic cylinder: 14 t (440.0015), 16 t (440.0005), 22 t (440.0010)



440.0180	9 pcs	Universal press stand	5.62
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consists of:

	X		kg
440.0176	1	Plate with thread	2040
440.0178	2	Support leg	440
440.0179	4	Screw M16 x 40 mm	80
440.0185	1	Adapter plate	340
440.0204	1	Plate with open side	2040

BALL JOINT SYSTEM PP II

Pressure sleeve set BMW E30/E36, internal

- For the assembly and disassembly of the internal ball joint (ball pins)
- For use with the universal press stand (440.0180)
- Can be used directly on the vehicle
- Saves a lot of time
- Special steel

Application range: Internal ball joint for BMW E30 and E36



440.0420	3 pcs	Pressure sleeve set BMW E30/E36, internal	1.55
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consists of:

			kg
440.0184	Pressure sleeve	500	
440.0186	Pressure sleeve	430	
440.0187	Pressure sleeve	620	

Pressure sleeve set BMW E30/E36, external

- For the assembly and disassembly of the external ball joint (ball pins)
- For use with the universal press stand (440.0180)
- Can be used directly on the vehicle
- Saves a lot of time
- Special steel

Application range: External ball joint for BMW E30 and E36



			kg
440.0425	3 pcs Pressure sleeve set BMW E30/E36, external	1.52	

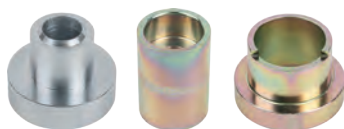
consists of:

			kg
440.0181	Pressure sleeve	860	
440.0182	Pressure sleeve	340	
440.0183	Pressure sleeve	320	

Pressure sleeve set, Hyundai

- For the assembly and disassembly of the ball joint (ball pins)
- For use with the universal press stand (440.0180)
- Can be used directly on the vehicle
- Saves a lot of time
- Special steel

Application range: Ball joint Hyundai Trajet, Santa Fe



			kg
440.0470	3 pcs Pressure sleeve set, Hyundai	1.70	

consists of:

			kg
440.0194	Pressure sleeve	720	
440.0197	Pressure sleeve	560	
440.0202	Pressure sleeve	420	

Ball joint set, Ford

- Ideal for the assembly and disassembly of ball joints together with press tool 440.0190
- Secure and easy to use
- Robust design
- Special steel

Application range: Ford Transit



			kg
440.0240	4 pcs Ball joint set, Ford	1.51	

consists of:

			kg
440.0241	Pressure sleeve	540	
440.0242	Assembly/disassembly cover	620	
440.0243	Assembly sleeve	210	
440.0244	Disassembly sleeve	140	

Stabiliser ball joint set, Mercedes

- Ideal for the assembly and disassembly of stabiliser ball joints together with press tool 440.0190
- Removal of shock absorbers not necessary
- Secure and easy to use
- Minimum work time
- Special steel

Application range: Mercedes E-class type 211, S-class type 220



			kg
440.0235	2 pcs Stabiliser ball joint set, Mercedes	630	

consists of:

			kg
440.0236	Pressure sleeve	320	
440.0237	Pressure sleeve	310	

Ball joint disassembly sleeve, Mercedes

- Expansion sleeve for ball joint set 440.0230
- Ideal for the assembly and disassembly of ball joints together with press tool 440.0190
- Secure and easy to use
- Robust design
- Special steel

Application range: Mercedes ML 163



			kg
440.0238	Ball joint disassembly sleeve, Mercedes	300	

Ball joint set, Mercedes

- Ideal for the assembly and disassembly of ball joints together with press tool 440.0190
- Secure and easy to use
- Robust design
- With ball joint disassembly sleeve (440.0238) also suitable for Mercedes ML 163
- Special steel

Application range: Mercedes E-class type 211/219, S-class type 220, SL-class type 230



			kg
440.0230	4 pcs Ball joint set, Mercedes	1.06	

consists of:

			kg
440.0231	Pressure sleeve	320	
440.0232	Assembly sleeve	120	
440.0233	Disassembly ring	300	
440.0012	Adjustable pressure sleeve, M24, L = 132 mm	320	

Pressure sleeve set Mercedes Sprinter and Volkswagen LT 35

- For the assembly and disassembly of the ball joint (ball pins)
- For use with the universal press stand (440.0180)
- Can be used directly on the vehicle
- Saves a lot of time
- Special steel

Application range: Ball joint Mercedes Sprinter, ball joint on Volkswagen LT 35



			kg
440.0435	2 pcs Pressure sleeve set Mercedes Sprinter and Volkswagen LT 35	1.04	

consists of:

			kg
440.0191	Pressure sleeve	520	
440.0192	Pressure sleeve	520	

Pressure sleeve set Mercedes Sprinter > 2007 and Volkswagen Crafter

- For the assembly and disassembly of the ball joint (ball pins)
- For use with the universal press stand (440.0180)
- Can be used directly on the vehicle
- Saves a lot of time
- Special steel

Application range: Ball joint Mercedes Sprinter > 2007, ball joint on Volkswagen Crafter



			kg
440.0440	3 pcs Pressure sleeve set Mercedes Sprinter > 2007 and Volkswagen Crafter	1.81	

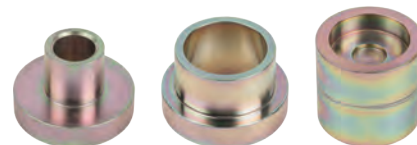
consists of:

			kg
440.0198	Pressure sleeve	760	
440.0199	Pressure sleeve	520	
440.0201	Pressure sleeve	530	

Pressure sleeve set Mercedes W 124

- For the assembly and disassembly of the ball joint (ball pins)
- For use with the universal press stand (440.0180)
- Can be used directly on the vehicle
- Saves a lot of time
- Special steel

Application range: Ball joint on Mercedes W 124



			kg
440.0430	3 pcs Pressure sleeve set Mercedes W 124	1.71	

consists of:

			kg
440.0184	Pressure sleeve	500	
440.0186	Pressure sleeve	430	
440.0189	Pressure sleeve	780	

Pressure sleeve set Renault/Nissan/Opel

- For the assembly and disassembly of the upper and lower ball joint (ball pins)
- For use with the universal press stand (440.0180)
- Can be used directly on the vehicle
- Saves a lot of time
- Special steel

Application range: Upper and lower ball joint Renault Master, Nissan Interstar, Opel Movano



				kg
440.0455	4 pcs	Pressure sleeve set Renault/Nissan/Opel		2.66

consists of:

				kg
440.0188	Pressure sleeve			600
440.0193	Pressure sleeve			820
440.0194	Pressure sleeve			720
440.0196	Pressure sleeve			520

Pressure sleeve set Renault

- For the assembly and disassembly of the ball joint (ball pins)
- For use with the universal press stand (440.0180)
- Can be used directly on the vehicle
- Saves a lot of time
- Special steel

Application range: Ball joint Renault Laguna 1, Megane 2 and Scenic 2



				kg
440.0450	3 pcs	Pressure sleeve set Renault		1.48

consists of:

				kg
440.0184	Pressure sleeve			500
440.0202	Pressure sleeve			420
440.0203	Pressure sleeve			560

Pressure sleeve set Volkswagen T4

- For the assembly and disassembly of the ball joint (ball pins)
- For use with the universal press stand (440.0180)
- Can be used directly on the vehicle
- Saves a lot of time
- Special steel

Application range: Ball joint on Volkswagen T4



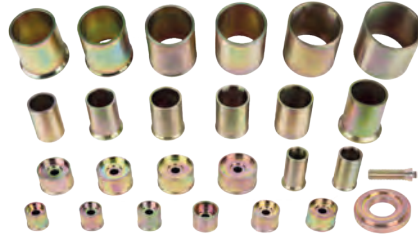
				kg
440.0445	2 pcs	Pressure sleeve set Volkswagen T4		1.34

consists of:

				kg
440.0191	Pressure sleeve			520
440.0193	Pressure sleeve			820

Universal press tool set

- For the assembly and disassembly of bearings, bushes and ball joints
- Adapter and pressure crank allow for use with the universal press stand (440.0180)
- 24 press sleeves in different sizes
- 61 various internal and external diameters between 30.5 mm and 79.7 mm
- Universal usage for passenger cars and transporters
- Excellent usage also with work bench press
- Special steel



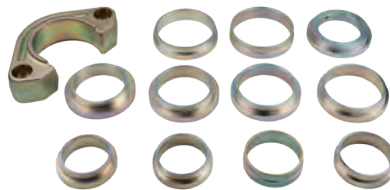
			kg
440.0300	26 pcs	Universal press tool set	9.67

consists of:

			kg
440.0348	Adapter plate		250
440.3049	Adjustable pressure rod M24 x 90 mm		280
440.0301	Press sleeve 40.7 x 42.5 x 35.2 mm		200
440.0302	Press sleeve 43.7 x 45.5 x 38.2 mm		220
440.0303	Press sleeve 46.7 x 48.5 x 41.2 mm		260
440.0304	Press sleeve 49.7 x 51.5 x 44.2 mm		280
440.0305	Press sleeve 52.7 x 54.5 x 47.2 mm		320
440.0306	Press sleeve 55.7 x 57.5 x 50.2 mm		360
440.0307	Press sleeve 58.7 x 60.5 x 53.2 mm		400
440.0308	Press sleeve 61.7 x 63.5 x 56.2 mm		440
440.0309	Press sleeve 65.7 x 67.5 x 60.2 mm		500
440.0310	Press sleeve 69.7 x 71.5 x 64.2 mm		560
440.0311	Press pipe 38.7 x 44.7 x 30.5 mm		260
440.0312	Press pipe 41.7 x 44.7 x 34 mm		260
440.0313	Press pipe 44.7 x 44.7 x 37.2 mm		260
440.0314	Press pipe 47.7 x 55 x 40.2 mm		320
440.0315	Press pipe 50.7 x 55 x 43.2 mm		320
440.0316	Press pipe 53.7 x 55 x 46.2 mm		320
440.0317	Press pipe 56.7 x 55 x 49.2 mm		340
440.0318	Press pipe 59.7 x 70 x 52.2 mm		480
440.0319	Press pipe 62.7 x 70 x 55.2 mm		480
440.0320	Press pipe 65.7 x 70 x 58.2 mm		480
440.0321	Press pipe 68.7 x 70 x 61.2 mm		480
440.0322	Press pipe 71.7 x 70 x 64.2 mm		500
440.0323	Press pipe 75.7 x 75.7 x 68.2 mm		540
440.0324	Press pipe 79.7 x 79.7 x 72.2 mm		560

Universal press tool expansion set

- Ideal sleeve assortment for expanding the press tool set (440.0300)
- For use with the universal press stand (440.0180)
- For use on passenger cars and transporters
- 11 press rings in different sizes
- Excellent usage also with work bench press
- Optimal for bushes, bearings and ball joints
- Special steel



			kg
440.0325	12 pcs	Universal press tool expansion set	4.42

consists of:

			kg
440.0204	Plate with open side		2040
440.0326	Press ring 59 x 70 x 52.2 mm		180
440.0327	Press ring 62 x 70 x 55.5		160
440.0328	Press ring 65 x 70 x 58.2 mm		140
440.0329	Press ring 68 x 70 x 61.2 mm		120
440.0331	Press ring 71 x 90 x 64.2 mm		300

consists of:

			kg
440.0332	Press ring 74 x 90 x 67.2 mm		280
440.0333	Press ring 77 x 90 x 70.2 mm		260
440.0334	Press ring 80 x 90 x 73.2 mm		240
440.0336	Press ring 84 x 90 x 77.2 mm		200
440.0337	Press ring 88 x 90 x 81.2 mm		160
440.0338	Adapter		340

BALL JOINT SYSTEM PP III

Carrier joint tool set

- For the dismantling and assembly of upper carrier joints without removing the wishbone
- Hardened spindle with ball lock for pressure sleeves
- 3 pressure sleeves adaptor for spindle
- 2 forks for installation with locking mechanism for basic unit
- Colour coding in dismantling and/or assembly tools
- In durable plastic storage case

Application: T4 bus / Multivan / California / pickup etc.



			kg
700.1640	6 pcs	Carrier joint tool set	3.82

consists of:

			kg
700.1641	Basic unit with window H=135mm		1930
700.1642	Spindle TR24, SW24 L=110mm		350
700.1643	Thrust sleeve installation, gold, Ø52xH41mm		260
700.1644	Thrust sleeve removal no.1, black, Ø40xH30mm		185
700.1645	Thrust sleeve removal no.2, black, Ø40xH30mm		195
700.1646	Fork installation, black, 55.5mm		102
700.1647	Fork installation, gold, 51mm		122
700.1648	Retaining ring for spindle		2

WRENCHES FOR BALL JOINT ASSEMBLY

Ball joint pin wrench for Mercedes M-class

- For releasing and securing the securing screws on the ball joint
- Perfectly sized for damage-free assembly
- Internal square drive to DIN 3120/ISO 1174 with ball reception
- Special steel

Application range: Mercedes M-class W163



	Outer Ø mm	Inner Ø mm	Squid width mm	kg
700.1660	63.0	53.0	7.5	280

Ball joint pin wrench for Citroën and Peugeot

- For releasing and securing the screwed in ball joint
- Perfectly sized for damage-free assembly
- Internal square drive to DIN 3120/ISO 1174 with ball reception
- Special steel

Application range: Citroën BX from 09/1982 to 1994, Citroën C5, Citroën Xantia, Peugeot 305 from 07/1982 to 1990, Peugeot 405 >06/1987, Peugeot 406, Peugeot 605, Peugeot 607



1/2"

	Outer Ø mm	Inner Ø mm	Stud width mm	kg
700.1661	52.0	42.5	5.5	500

Ball joint socket for Citroën and Peugeot

- 12-point
- For releasing and securing the screwed in ball joint
- Perfectly sized for damage-free assembly
- Internal square drive to DIN 3120/ISO 1174 with ball reception
- Special steel

Application range: Peugeot 307, Peugeot 308, Peugeot 3008, Peugeot 5008, Peugeot Partner, Peugeot RCZ, Citroën Berlingo, Citroën C4



1/2"

	mm	D1 mm	D2 mm	L mm	T mm	kg
700.1662	41	54.0	43.0	90.0	23.0	700

Ball joint socket for Renault Master and Opel Movano

- 12-point
- For releasing and securing the screwed in ball joint
- Perfectly sized for damage-free assembly
- Internal square drive to DIN 3120/ISO 1174 with ball reception
- Special steel

Application range: Renault Master and Opel Movano from 2010 onwards



1/2"

	mm	D1 mm	D2 mm	L mm	T mm	kg
700.1663	46	62.0	43.0	100.0	25.0	1.00

Bit socket for spline (XZN®) screws

- Necessary for the removal of the lower ball joint
- Spline (XZN®)
- Internal square drive to DIN 3120/ISO 1174 with ball reception
- With press fitted nickel-plated insert bit
- For manual operation
- Matt finish
- Chrome vanadium

Application range: Volkswagen T4 and Volkswagen T5



1/2"

	D mm	L mm	T mm	kg	
911.1345	M14	22.0	55.0	17.0	110

Special VAG ball joint socket

- Ideally suited to assembly and disassembly of ball joints
- Special profile
- Internal square in accordance with DIN 3120/ISO 1174 or outer hexagonal drive 27.00 mm
- Extremely robust design
- Special steel

Application range: Audi A4, A5, A6, A7 > 2005, Volkswagen



	mm	Total length mm	kg
150.1712	27.0	37.0	135

VIBRO IMPACT

Vibro impact pneumatic chisel hammer set

- With non slip soft grip handle
- Air exhaust through the handle
- Ergonomic designed handle
- Ideal for industry
- Efficient, gentle loosening of screw fittings
- With stepless impact regulation
- Vibration dampened
- Cold insulated handle
- Includes 1/4" coupling connector
- Ultra light housing from two component plastic



	kg	
515.3880	6 pcs Vibro impact pneumatic chisel hammer set	5.70

consists of:

		kg
515.3881	Pneumatic chisel hammer	2.17
515.3882	Holder for pneumatic chisel hammer	1.55
515.3886	Pneumatic chisel track rod loosener, 110mm	0.14
515.3887	Pneumatic chisel hammer, 110mm	0.15
515.3888	Pneumatic chisel loosening adapter, 130mm	0.16
515.3889	Pneumatic chisel loosening mandrel, 100x25x12mm	0.19

Special Vibro chisel set

- For loosening seized screw joints and loosening components
- Gentle peeling and driving
- Vibration is transmitted directly to the screw connections
- Impact mandrel attachment as ingenious aid to any removal operation
- For hexagonal and round 10 mm machine mountings
- Including pressure plate adapter for driving out bearings, sleeves, bushings

Caution: Use only in conjunction with a pneumatic hammer chisel!



	kg	
515.3885	4 pcs Special Vibro chisel set	774

consists of:

		kg
515.3886	Pneumatic chisel track rod loosener, 110mm	138
515.3887	Pneumatic chisel hammer, 110mm	148
515.3888	Pneumatic chisel loosening adapter, 130mm	159
515.3889	Pneumatic chisel loosening mandrel, 100x25x12mm	190

Vibro Power hammer chisel accessories

- Supplements Vibro-Power System 515.3880
- Can be used universally for bodywork and chassis repairs
- Expanded areas of use
- Utilises the vibration and impact impulse of the Vibro-power pneumatic hammer
- Robust, made from one piece of forged chisel

Application: For removing ball bearing joints and bolts



		kg
515.3961	Vibro Power punch Ø6.5mm	95
515.3967	Vibro Power fork separator 20mm	295
515.3968	Vibro Power fork separator 25mm	375
515.3969	Vibro Power fork separator 32mm	395

Impact tie rod tool

- Vibration supported release of tracking rods, contoured screws or screws in the axle area, etc.
- Adjustable in connection with a pneumatic chisel hammer
- Thanks to the special vibrating mandrel, an impact impulse is given to the screws to be released
- which loosens the rust and aids the release process
- For 10 mm machine attachment
- Special steel

Caution: May only be used alongside a pneumatic chisel hammer



	Width mm	Length mm	opening mm	kg
150.1608	50.0	290.0	27.0	2.36

Vibro-Power ball joint releaser

- Vibration supported release on ball joints
- Adjustable, e.g. conical seat connections to wheel bearing houses and wishbones
- Pneumatic chisel adapter (10 mm) for use with pneumatic chisel hammers on the market
- Special steel

Caution: May only be used alongside a pneumatic chisel hammer



	Length mm	Width mm	Height mm	Drive	kg
515.3884	68.0	40.0	130.0	Ø 10 mm	340

SEPARATION AND ASSEMBLY FORK

Separation and assembly fork set

- With interchangeable fork heads
- With a manual handle grip (200 mm) for use with hammer
- Pneumatic chisel adapter (10 mm) for use with pneumatic chisel hammers on the market
- For the quick release of tracking and push rod bodies, steering arm levers and other steering parts
- Ideally suited to narrow spaces
- Special steel
- In durable plastic storage case



	kg
670.0090 5 pcs Separation and assembly fork set	1.90

consists of:

		kg
670.0085	Handle grip, 200 mm	420
670.0086	Pneumatic chisel adapter	160
670.0087	Forked head 17.5 x 70 mm	290
670.0088	Forked head 23.5 x 70 mm	300
670.0089	Forked head 28.5 x 70 mm	370

Separating and assembly fork

- For quick loosening of track and steering rod ends steering arms and additional controlling parts
- Ideal for confined spaces
- Special steel



	A mm	L mm	kg
670.0091	18	330.0	0.90
670.0092	23	330.0	0.90
670.0093	31	330.0	1.10
670.0094	35	330.0	1.30
670.0095	45	330.0	1.50

TRACK ROD TOOLS

Eccentric clamping and turning device

- Universally applicable one sided opening
- To remove and turning the tie rod joints (steering and wheel end)
- Due to the knurled eccentric cam it allows from optimal grip even at the joints without drive (round)
- Square drive 1/2"
- For use on the workbench or directly on the vehicle
- Special steel



	Ø mm	Ø mm	kg
150.1635	1-50	1-42	300

Eccentric clamping and turning device

- For the removal and rotation of the round or hexagonal track rod joints (steering and wheel end)
- Due to the knurled eccentric cam it allows from optimal grip even at the joints without drive (round)
- 1/2" drive
- For use on the workbench or directly on the vehicle
- Additional stopper prevents slipping during the splitting process
- Special steel



	Ø mm	Ø mm	kg
150.1642	25-55	25-46	800

Eccentric clamping and turning device

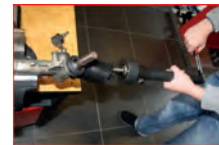
- For the removal and rotation of the round or hexagonal track rod joints (steering and wheel end)
- Due to the knurled eccentric cam it allows from optimal grip even at the joints without drive (round)
- 1/2" drive
- For use on the workbench or directly on the vehicle
- Additional stopper prevents slipping during the splitting process
- Special steel



	Ø mm	Ø mm	kg
150.1640	23-45	31-35	300

Special axial joint wrench set

- For the disassembly of axle joints on the track rods
- 3 special parts from 30-45 mm
- Usable on square, hexagonal, octagonal and round external profiles
- Gentle removal without damaging the external joint surfaces
- Frictional connection
- For narrow spaces
- Special steel
- In durable plastic storage case



	kg
150.1125 4 pcs Special axial joint wrench set	4.72

consists of:

	kg
150.1126 Drive special wrench, 200 mm	1160
150.1127 Special piece, 30-35 mm	750
150.1128 Special piece, 35-40 mm	760
150.1129 Special piece, 40-45 mm	1060

Special axial joint wrench

- For removal and installation of axial joints on track rods
- For use on square, hexagonal, octagonal and round outside profile
- Gentle removal and installation without damaging the joint outer surface
- Positive connection
- For working in confined spaces
- Special steel



	mm	Ø mm	L mm	kg
150.1600	30	35 - 45	420.0	1.82

Adjustable pliers for push rods

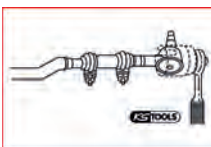
- For releasing and adjusting secure or hard-to-reach push rods with a diameter of 14-23 mm
- Special flat shape on the clamp jaw to prevent damage to the push rod
- Optimal force distribution
- Special steel



	Ø mm	Length mm	kg
150.1602	14-23	93.0	1000

Tie rod end socket

- For simple installation and removal of push rod bodies
- Universal usage
- Internal square drive to DIN 3120/ISO 1174
- Special steel



	Length mm	U opening mm	Inner Ø mm	kg
150.1627	57.0	35x19	23.8	490

Insertable open-ended wrench

- For tightening and loosening pipe connections
- For manual operation
- Internal square drive to DIN 3120/ISO 1174
- Special steel

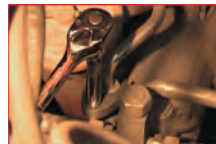


	mm	kg
913.1941	18	140
913.1942	22	150
913.1943	24	160
913.1944	27	170
913.1945	32	180
913.1946	34	220
913.1947	36	230
913.1948	37	240
913.1949	38	280
913.1950	41	380

Crows foot spanner

- 12-point
- With 1/2" internal square
- For tightening and loosening pipe connections
- For manual operation
- Slim design
- For hard-to-reach areas
- Burnished
- Special steel
- In durable plastic storage case

Application range: Commercial vehicles, construction vehicles, agricultural vehicles, town and forest vehicles, etc.



	mm	kg
913.1301	19	62
913.1302	21	94
913.1303	22	112
913.1304	24	120
913.1305	27	153
913.1306	30	170
913.1307	32	168
913.1308	36	337
913.1309	41	400
913.1310	46	632

XXL wobble extension

- Internal square to DIN 3120/ISO 1174 with ball reception
- Wobble extension with ball lock
- 8° tilt angle to each side
- For manual operation
- Matt finish
- Chrome vanadium



	L mm	kg
911.1548	350.0	150
911.1549	600.0	260

XXL wobble extension

- Internal square to DIN 3120/ISO 1174 with ball reception
- Wobble extension with ball lock
- 8° tilt angle to each side
- For manual operation
- Matt finish
- Chrome vanadium



	L mm	kg
911.1487	450.0	0.75
911.1488	600.0	1.00
911.1489	750.0	1.25

One handed multi function spanner

- Multi-function wrench with ratchet function
- For all screw work
- Adapts itself automatically to the screw size
- Self-clamping on flat pipes, bots, shafts, and unscrewed bodies of hexagonal screws
- No slips thanks to the coarse teeth
- Chrome vanadium



	mm	L mm	kg
114.0050	8-19	190.0	165
114.0051	14-32	300.0	515

Special pipe wrench

- 2-stage adjustment
- PVC dipped handle
- Ideal for round turned pipe fittings
- Polished surface
- Chrome vanadium



	A mm	L mm	C mm	kg
115.1361	0-16	178.0	23.0	180

Special pipe wrench

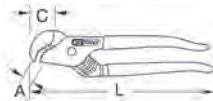
- 4 stage industrial adjustment
- PVC dipped handle
- Optimum power transfer
- Grooved handle adjustment
- Polished surface
- Ideally suited for twisting both thrust and track rods
- Usably on axle joints and exhaust pipes
- Chrome vanadium



	A mm	L mm	G kg
115.1362	0-30	242.0	470

Special pipe wrench

- 6 stage industrial adjustment
- PVC dipped handle
- Optimum power transfer
- Grooved handle adjustment
- Polished surface
- Ideally suited for twisting both thrust and track rods
- Usably on axle joints and exhaust pipes
- Chrome vanadium



	A mm	L mm	C mm	G kg
115.1363	0-51	345.0	41.0	1.10

Pipe wrench with adjustable head

- Type "Stillson"
- Aluminium cast body
- Upper jaw HRC 54-57
- Lower jaw HRC 52-55
- Stepless adjustment via milled nut
- 160° revolving handle
- Aluminium handle



	A	B mm	L mm	G kg
111.3550	1.1/2	97.0	250.0	650

TRACKING ADJUSTMENT TOOLS

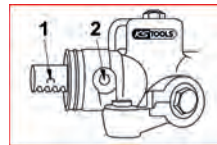


Push rod installation tools for the rear axle can be found in section 21 – Axles on page 545.

Locking screw to the gear rack centring for VAG

- Ideally suited to the correct gear rack centre positioning of the steering in order to also carry out the camber initial installation
- Insert screws after ensuring floor consistency of the steering with the housing boreholes
- Special steel

Application range: Audi A4, A6, Volkswagen Passat from 1997 onwards

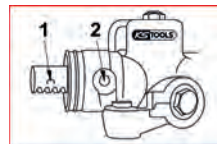


		G kg
700.1694	Locking screw to the gear rack centring for VAG	20

Locking screw set for gear rack centring

- Ideally suited to the correct gear rack centre positioning of the steering in order to also carry out the camber initial installation
- Insert screws after ensuring floor consistency of the steering with the housing boreholes
- Special steel

Application range: Mercedes W107, W114, W115, W116



		G kg
700.1690	3 pcs Locking screw set for gear rack centring	100

consists of:

		G kg
700.1691	Locking screw 1	33
700.1692	Locking screw 2	33
700.1693	Locking screw 3	33

Push rod gauge set

- Ideally suited to changing track rod heads
- No further measurement of the axle required
- Saves times and reduces costs
- Special steel
- In durable plastic storage case



		G kg
700.1685	9 pcs Push rod gauge set	2.80

consists of:

	X	G kg
700.1686	1 Device with guide bolts for joint head fixing	325
700.1687	2 Clamp jaws for device	182
700.1688	1 Joint head fixing, long, Ø 12 mm	280
700.1689	1 Joint head fixing, short, Ø 12 mm	190
700.1695	1 Joint head fixing, Ø 10 mm	170
700.1696	1 Joint head fixing, Ø 17.5 mm	222
700.1697	1 Adapter for device and joint head fixing	261
700.1698	1 Depth gauge for four-wheel drive axles (VAG)	203

VAG multi-link axle gauge auxiliary bridge set

- Ideally suited to front track centring
- Also suitable for installation
- Includes six adapter pairs
- Can also be used on lowered vehicles
- Robust design
- Aluminium bridge
- Adapter made from special steel

Application range: Audi A4, A6, A8 and Volkswagen Passat as well as all VW group vehicles with multi-drive axles



		G kg
700.1630	13 pcs VAG multi-link axle gauge auxiliary bridge set	29.10

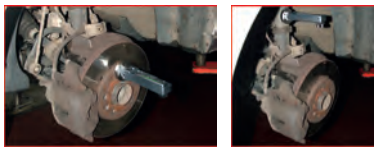
consists of:

700.1631	Axle gauge auxiliary bridge	24.20	
700.1632	Adapter set with thread, Audi A8, long, 2 pcs	1.35	
700.1633	Adapter set with thread, Audi A8, short, 2 pcs	0.22	
700.1634	Adapter set without thread, Audi A8, long, 2 pcs	0.75	
700.1635	Adapter set with thread, Audi A4, long, 2 pcs	1.02	
700.1636	Adapter set with thread, Audi A4, short, 2 pcs	0.82	
700.1637	Adapter set without thread, Audi A4, short, 2 pcs	0.49	

CAMBER ADJUSTMENT TOOLS

Camber level

- Ideally suited to adopting the prescribed camber adjustment values before removing the shock absorbers
- The level is secured with the magnetic side on the brake discs or wheel hubs and the value can be read
- Following the repair the adjustment value is easily restored
- Quick and correct work without a great amount of effort
- Saves measuring the axle
- With adjustment wheel to allow for a zero setting
- Includes strong magnetic feet
- In durable plastic storage case



Total length mm		
150.9431	125.0	450

Camber adjustment tool

- Ideally suited to setting the camber on vehicles with separated spring feet
- One-man operation
- The tool is tensioned between the rim and the bodywork (wings)
- Clear reduction in time required
- Adjustment is carried out by turning the sturdy hexagonal nut
- External drive hexagonal socket 22.0 mm
- Special steel



Clamping range mm		
150.9415	135.0 - 175.0	1.16

Camber adjustment tool

- Ideally suited to setting the camber on vehicles with separated spring feet
- One-man operation
- The tool is tensioned between the rim and the bodywork (wings)
- Clear reduction in time required
- Adjustment is carried out by turning the sturdy hexagonal nut
- External drive hexagonal socket 22.0 mm
- Special steel

Application range: Seat Cordoba, Volkswagen Polo > 1995, etc.



Clamping range mm		
150.9420	135.0 - 200.0	1.21

Camber setting tool for BMW

- Ideally suited to setting the camber on the front axle
- It is used after knocking out the locating bolt of the strut bearing in a downwards direction via the spring strut bearing
- Quick and correct work without a great amount of effort
- One-man operation
- The adjustment process is carried out via the exact alignment of the upper spring strut bearing
- Without this tool the correct and exact adjustment of the camber is almost impossible
- Aluminium

Application range: BMW 1 series (E81, E82, E87, E88), 3 series (E46, E90, E91, E92, E93), X3 (E83), X5 (E53), Z4 (E85, E86)



150.1821	Ø mm	Height mm	
	82,0	25,0	347

Camber setting tool for BMW

- Ideally suited to setting the camber on the front axle
- It is used after knocking out the locating bolt of the strut bearing in a downwards direction via the spring strut bearing
- Quick and correct work without a great amount of effort
- One-man operation
- The adjustment process is carried out via the exact alignment of the upper spring strut bearing
- Without this tool the correct and exact adjustment of the camber is almost impossible
- Aluminium

Application range: BMW 5 series, (E39, E60, E61), 6 series (E63, E64), 7 series (E38, E65, E66, E67)

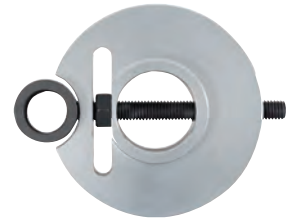
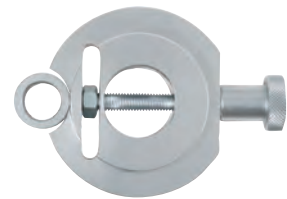


150.1822	Ø mm	Height mm	
	83,0	17,0	343

BMW camber setting tool set

- Ideally suited to setting the camber on the front axle
- It is used after knocking out the locating bolt of the strut bearing in a downwards direction via the spring strut bearing
- Quick and correct work without a great amount of effort
- One-man operation
- The adjustment process is carried out via the exact alignment of the upper spring strut bearing
- Without this tool the correct and exact adjustment of the camber is almost impossible
- Aluminium

Application range: BMW 1 series (E81, E82, E87, E88), 3 series (E46, E90, E91, E92, E93), 5 series, (E39, E60, E61), 6 series (E63, E64), 7 series (E38, E65, E66, E67), X3 (E83), X5 (E53), Z4 (E85, E86)



2 pcs		BMW camber setting tool set	689
150.1820			

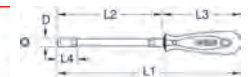
consists of:

150.1821	BMW camber adjustment tool, 1 series, 3 series, X3, X5, Z4	347
150.1822	BMW camber adjustment tool, 5 series, 6 series, 7 series	343

HOSE CLAMP TOOL

ERGOTORQUE® socket screwdriver

- 6 point
- Flexible
- Limited torque
- Double spiral shaft
- Plastic protective coating
- With hanging hole
- Chrome vanadium



	Ø mm	D mm	L1 mm	L2 mm	L3 mm	L4 mm	
911.1126	6	10.8	259.0	150.0	109.0	9.3	155
911.1127	7	11.7	259.0	150.0	109.0	10.0	155
911.1128	8	11.9	259.0	150.0	109.0	10.0	155
911.1125	10	12.5	279.0	170.0	109.0	14.3	170

ERGOTORQUE^{plus} socket screwdriver, extra long

- 6 point
- Flexible
- Limited torque
- Double spiral shaft
- Plastic protective coating
- Two component handle
- With hanging hole
- Chrome vanadium



	Ø mm	D mm	L1 mm	L2 mm	L3 mm	L4 mm	g
911.1175	5	11.9	614.0	114.0	614.0	8.9	270
911.1176	6	10.9	614.0	114.0	614.0	11.3	280
911.1177	7	11.7	614.0	114.0	614.0	11.3	280
911.1178	8	11.7	614.0	114.0	614.0	11.3	280

ERGOTORQUE[®] screwdriver set

- Flexible blade with double spiral shaft
- Limited torque
- Plastic protective coating
- Two component handle
- With hanging hole
- Contains also the most current 1/4" bits and sockets
- In display box



	g
911.1180 16 pcs ERGOTORQUE [®] screwdriver set	1.30
1 x 1/4"	
1 x 1/4"	
1 x 7 mm	
3 x 5 - 6 - 8 mm	
2 x 5.5 - 6.5 mm	
2 x PH1 - PH2	
6 x T10 - T15 - T20 - T25 - T27 - T30	



Hose clamp pliers

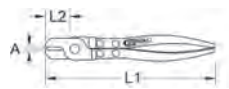
- With moveable jaws
- 45° angled head
- Suitable for the correct assembly and disassembly of Click, Click-R and Cobra clamps
- Also suitable for self-tensioning hose clamps with flat 3 pinch ends
- Suitable for narrow spaces
- Chrome molybdenum



	A mm	C mm	L mm	g
115.1057	0-30	45.0	200.0	180

Hose clamp pliers, ear type

- Knurled handle
- To the dismantling and assembly of "ear type" hose clamp
- For connections on axle boots, coolers and fuel hoses
- Universal usage
- Chrome molybdenum



	A mm	L1 mm	L2 mm	g
115.1039	0-60	230.0	25.0	320

Hose clip pliers for earless hose bands

- With PVC dipped handle
- For working of earless clamps
- Also suitable for thermoplastic axle boots
- Uniform compressing of the ear piece
- No damage to the sleeve
- With lever translation
- Nickel-plated finish
- Chrome molybdenum

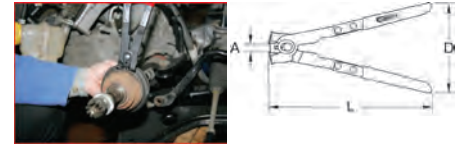


	Ø mm	Length mm	g
115.1210	100	248.0	330

Hose clamp pliers, ear type

- With PVC dipped handle
- For the fitting of ear clamps
- No sticking up of the ears during the press process
- Uniform compressing of the ear piece
- No damage to the sleeve
- Nickel-plated finish
- Chrome molybdenum

Application range: Axle boots, coolant and fuel hoses for Volkswagen, Audi, Opel, BMW, Mercedes, Honda, Nissan and Mazda



	A mm	L mm	g
115.1050	0-22	260.0	380

Hose clamp pliers

- With PVC dipped handle
- With 3/8" drive for use with a torque wrench
- For the fitting and clamping of ear clamps
- 1/2" 4-point recess in the handle for use with torque wrench
- Chrome molybdenum

Application range: Volkswagen, Opel, Seat, GM, Ford, Nissan, Mercedes, Mazda, Honda, Chrysler, BMW and Audi



	A mm	L mm	g
115.1053	0-17	240.0	540

Hose clamp pliers

- Work side
- For compressing locking hose clips
- With PVC dipped handle
- Chrome vanadium



	L mm	g
115.1185	240.0	335

Hose clamp pliers for torque wrench

- Black plastic handle
- 3/8" drive for use with a torque wrench
- Enables clamping and/or compressing of the hose clamps
- Suitable for the stainless steel hose clamps on drive shafts
- Robust cast steel construction



	A mm	L mm	
115.1056	0-45	270.0	880



Stainless steel ball-lock cable ties

- Ideal for fastening axle boots, steering joints, etc.
- Adjustable as desired
- Stainless steel 304



	Length mm	Width mm	Content	
115.1591	200.0	4.6	100	200
115.1592	250.0	4.6	100	300
115.1593	350.0	4.6	100	400
115.1594	500.0	4.6	100	500

Clamping and cutting tool for tubing bands

- Straps for attaching to CV joint boots
- Integrated clamping and cutting device
- Suitable for prefabricated and endless band clamps up to 9.5 mm
- Special steel



	L mm	
115.1059	163.0	437

Plier for stainless steel ball-lock cable ties

- Ideal for working stainless steel cable binders
- Can be used up to a tape width of 12 mm
- Controlled tensioning and precise cutting off of the cable binder in a single step
- Tensile force is determined by the operator
- Suitable for steel, stainless steel and epoxy cable binder
- Special steel



	Length mm	
115.1590	210.0	650

Hose strap cutter, angled

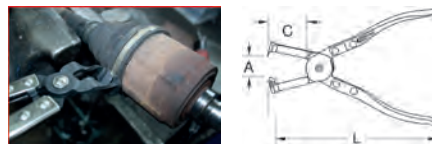
- To be sliced from earless hose clamps
- For connections on axle boots, coolers and fuel hoses
- Dipped covered handle
- Chrome vanadium



	L mm	
115.1186	220.0	345

Hose strap cutter, angled

- For cutting off earless hose clamps
- 45° angled head
- For connections on axle boots, cooler and fuel hoses
- Damage-free opening of clamps and tubing bands
- Universal usage
- Nickel-plated finish



	A mm	C mm	L mm	
115.1191	0 - 30.0	50.0	230.0	330

Automotive hose clamp pliers set

- Handle dip insulated
- Ideal for clamps low down in the engine
- Includes locking mechanism
- For self tensioning spring pipe clamps with 3 point mounting
- Self opening
- For opening and closing re/useable clic hose clamps, type Clic + Clic-R
- For difficult to reach clamps
- Special tool steel

Application area: For connecting and removing fuel, immersed ventilation, coolant, washer water and vacuum hoses, etc.

Application range: Volkswagen, Audi, Mercedes Benz, Toyota etc.



115.1104 4 pcs Automotive hose clamp pliers set	1.12

consists of:

115.1045 Hose clamp pliers (click type), 180mm	215
115.1042 Hose clamp pliers (recessed/slot), 220mm	210
115.1187 Hose clamp pliers with prism, 8-18mm	189
115.1065 Hose clamp pliers (dbl bowden cable), 600mm	540

Automotive hose clamp pliers set

- PVC dipped handle
- For opening and closing of cobra hose clamps
- Swivel pressed jaws
- Includes locking mechanism and ratchet function
- Self opening mechanism
- For the dismantling and assembly of hose clamps
- Includes bowden cable
- Chrome molybdenum



115.1055 7 pcs Automotive hose clamp pliers set	4.00

consists of:

115.1041 Hose clamp pliers (bowden cable), 650mm	470
115.1042 Hose clamp pliers (recessed/slot), 220mm	210
115.1043 Hose clamp pliers (crown profile), 220mm	240
115.1044 Hose pliers, 195mm	190
115.1045 Hose clamp pliers (click type), 180mm	215
115.1046 Hose clamp pliers (recessed/slot), 220mm	230
115.1047 Hose clamp pliers (dbl cross slot), 220mm	230

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