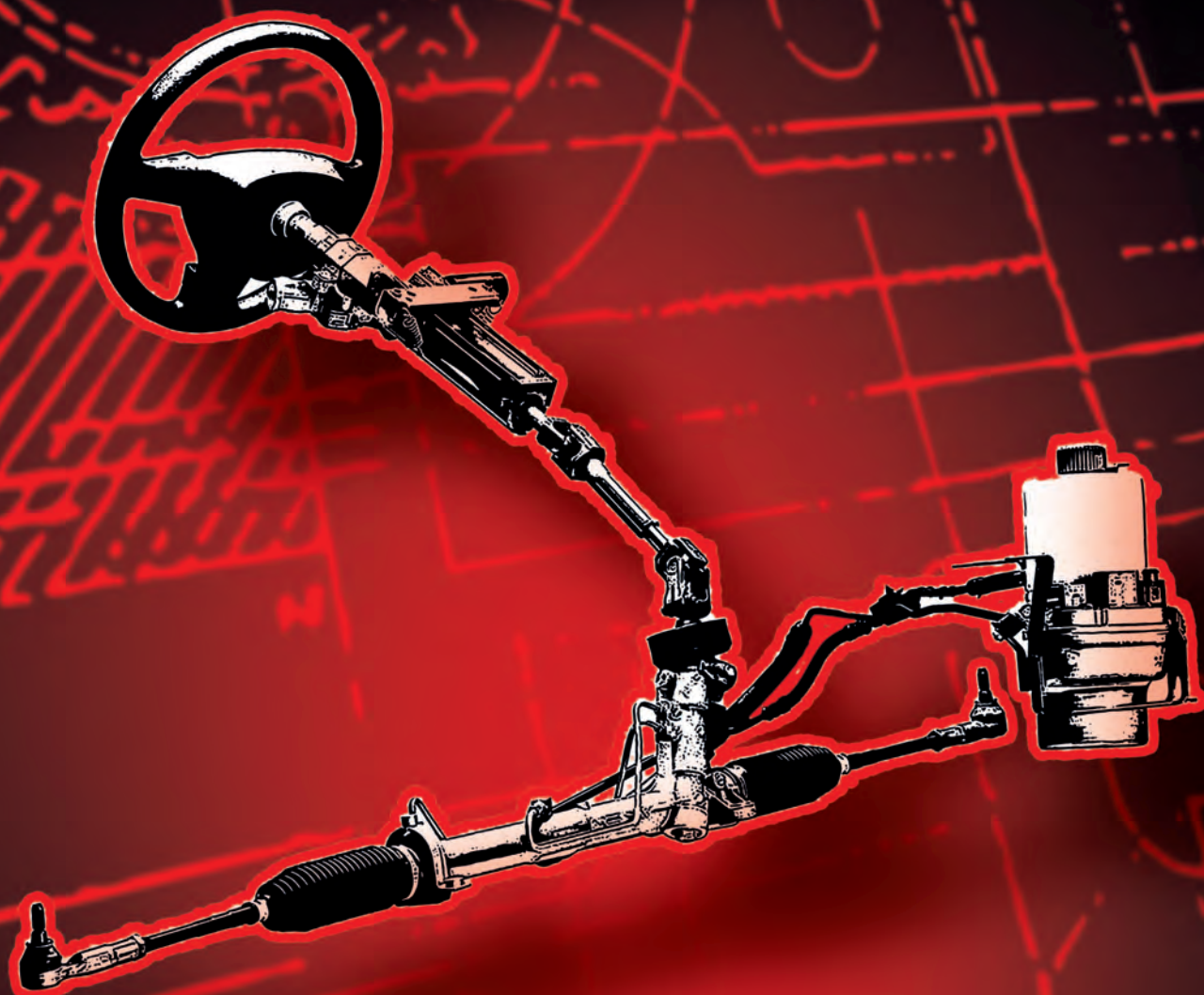


K15



KS TOOLS®





Innovation is
our mission!



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LEVER / PRY BARS

Pry bar

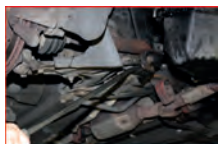
- Ideally suited to assembly and disassembly work
- For pressure testing securely-fitted parts
- Suitable for positioning parts or holding parts in place
- 1 piece handle
- Hardened
- Chrome molybdenum



	D mm	L1 mm	L2 mm	g
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





	D mm	L1 mm	L2 mm	g
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



	D mm	L1 mm	L2 mm	g
911.8410	4 pcs	Mechanics pry bar set		8.70

consists of:

	D mm	L1 mm	L2 mm	g
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	g
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



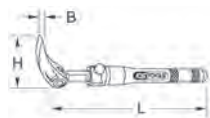
				
911.8175	3 pcs	Adjustable joint roll head pry bar set	1.20	

consists of:

	D mm	L1 mm	L2 mm	g
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	g
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 set and time savings also
- Stable construction - optimal stop
- Special steel



	L mm	g
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 dismounting 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



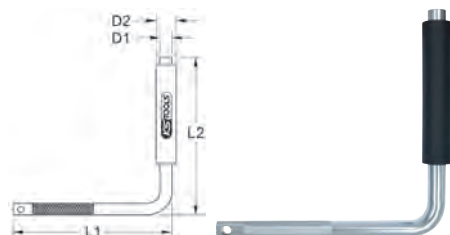
	L mm	kg
700.1424	M20x1,5	2.40

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 bearings, 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 dismounting 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 be 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, bearings, 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 or 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 Colour 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	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

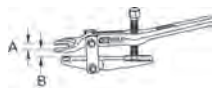


	A mm	B mm	C mm	mm	mm	kg
450.0075	45	75	63	24	M22 x 135	1.63
450.0076	55	100	76	24	M22 x 135	1.84

UNIVERSAL BALL JOINT EJECTOR WITH LEVER

Universal ball joint separator

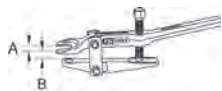
- Extra fl t execution
- Forged
- Special steel



	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 spa es
- 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

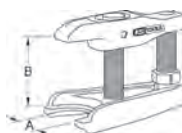
- For separating the ball plug in the extension of the ball joint
- Suitable for many vehicles
- Special steel



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

Universal ball joint extractor

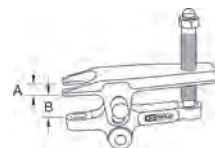
- Robust model for loosening the track heads and push pole heads
- Optimal positioning through compact design and slim fork piece
- Adjustment of the clamp by means of the spindle
- Special steel



	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

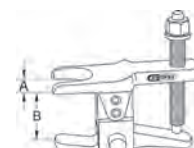
- Separator 4 stage adjustable
- Spindle hexagonal with additional drive point
- Forged
- Special steel
- Stage 1: 24 mm
- Stage 2: 30 mm
- Stage 3: 40 mm
- Stage 4: 45 mm



	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

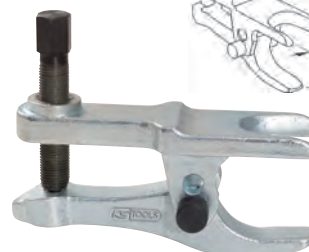
- Separator 2 stage adjustable
- Ideal for confined spa es
- Extremely high clamping range
- Spindle hexagonal with additional drive point
- Forged
- Special steel



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

Universal ball joint separator

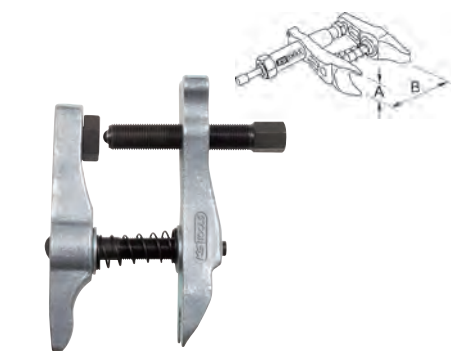
- For separating the ball plug in the extension of the ball joint
- Suitable for many vehicles + transporter
- Also suitable for aluminum undercarriages
- Special steel



	A mm	B mm	max t	mm	mm	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

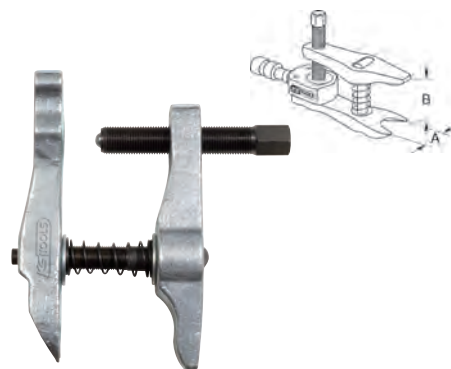
- For separating the ball plug in the extension of the ball joints
- Suitable for many vehicles + moderately heavy trucks
- Special steel



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

Universal ball joint separator without hydraulic cylinder

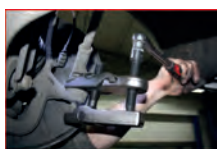
- For separating the ball plug in the extension of the ball joints
- Suitable for many vehicles + moderately heavy trucks
- For bolts Ø 27.0 - 36.0 mm
- Special steel
- For use with 640.0140



	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

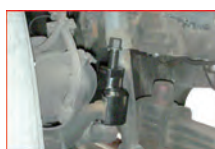
consists of:

		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

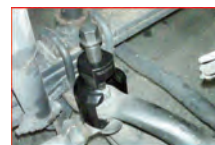
- Optimal positioning between suspension arm and axle casing
- Mouted spherical centering point
- Special steel



	A mm	B mm	mm	mm	kg
450.0085	35	60	M27 x 130	24	2.52

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

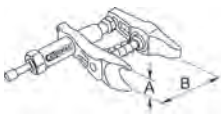
- Massive execution for loosening the track heads and push pole heads
- Enormous power through lever transmission
- Requires light expenditure of energy
- Special steel



		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



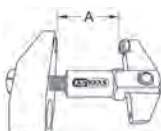
	A mm	B mm	max t	Ø mm	mm	kg
670.0141	36	90	10	17	1.1/2"x16G	4.70

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

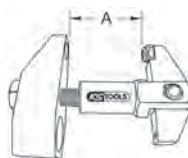
consists of:

	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
615.0001	Hydraulic pressure spindle, 17mm, UN 1.1/2"x16Gx260mm 1600
670.0074	Clamp screw ejector 500
670.0077	Flat thrust piece 32
670.0078	Mandrel thruster 33

Four link drift set

- For removing the clamp screws in the four-wheel front axle on VAG vehicles
- Saves a lot of time
- Warning 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 168

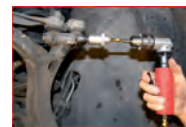
consists of:

	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:

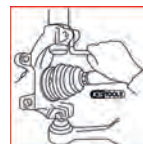
	kg
700.5641	Drilling gauge for Ø 4.5 mm 140
700.5642	Drilling gauge for Ø 7.3 mm 140
700.5643	Special drill HSS-E TIN Ø 4.5 mm 10
700.5644	Special drill HSS-E TIN Ø 7.3 mm 30
700.5645	Pressure mandrel 9.8 x 63 mm 20

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

consists of:

150.9491	1/2" flange splay bit socket, 5.0 x 7.0 mm	60	
150.9492	1/2" flange splay bit socket, 5.5 x 8.2 mm	60	

Ball joint splitter set

- For the exact centred bores of the clamp screws without compressing the thread end, e.g. when removing
- No damage to the axle body when removing
- Exact centring thanks to unscrewable, hardened bore jig
- Also suitable for new aluminium screw types

Application range: Volkswagen/Audi and similar vehicles in the VW group



700.5650	11 pcs Ball joint splitter set	750	

consists of:

	X		
700.5651	1 Basic unit for clamp bore holes splay tool, short	100	
700.5652	1 Guide bolt set, 2 part, 8 x 10 mm	100	
700.5653	1 Guide bolt set, 2 part, 10 x 12 mm	100	
700.5654	1 Splay wedge black, 5 mm	100	
700.5655	1 Splay wedge silver, 8 mm	100	
700.5656	1 Internal hexagon wrench, 3 mm	100	
700.5658	1 Spindle to 700.5650	50	
700.5659	2 Arm to 700.5650	100	

MASTER clamp bore hole splay tool set

- An additional bridge allows for the use of two wedges at the same time
- Especially for Audi and Volkswagen 4 wheel steering axle
- Ideal for splaying the axle joint clamp boreholes, or ball joint attachments
- It is necessary to remove the secured spring absorber unit from the axle joint clamp boreholes
- Makes the assembly and disassembly easier
- Damage to the axle joint housing (cast or aluminium) is avoided
- Universal usage due to 2 pairs of different splay clamps and securing bolts
- Without compressing the thread ends, e.g. when pressing together
- Optimal adjustment, therefore slips are almost impossible
- Exact centring due to the screw-on and toughened bore jigs
- External drive hexagonal socket 13.0 mm
- Special steel

Application range: Audi, BMW, Ford, Peugeot, Seat, Volkswagen, etc.



700.5660	15 pcs MASTER clamp bore hole splay tool set	855	

consists of:

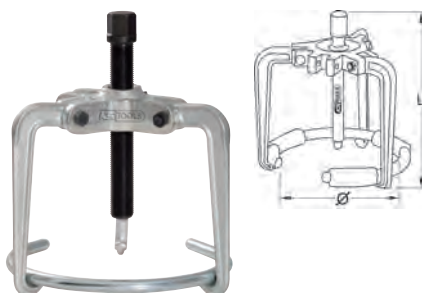
	X		
700.5651	1 Basic unit for clamp bore holes splay tool, short	100	
700.5661	1 Basic unit for clamp bore hole splay tool, long	196	
700.5652	1 Guide bolt set, 2 part, 8 x 10 mm	100	
700.5653	1 Guide bolt set, 2 part, 10 x 12 mm	100	
700.5654	2 Splay wedge black, 5 mm	100	
700.5655	2 Splay wedge silver, 8 mm	100	
700.5656	1 Internal hexagon wrench, 3 mm	100	
700.5658	2 Spindle to 700.5650	50	
700.5659	2 Arm to 700.5650	100	



STEERING WHEEL PULLER

Universal steering wheel puller 3 arm

- For steering wheels with three or four spokes
- Tie rings with rubber sleeve for protection on the steering wheel
- Special steel



	Ø mm	L mm	max t mm	mm	mm	
670.0191	160	120	4	17	M14x1.5 x 130	1.90

Universal steering wheel puller 2 arm for passenger cars

- Short and long hooks as well as pressure piece for spindle
- Extremely robust spindle with inductively hardened Thread
- Special steel

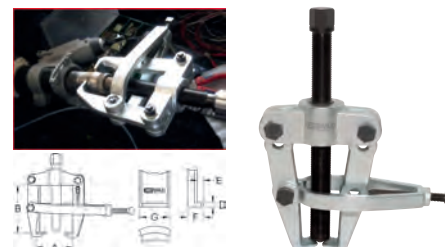





	A	B	max			D	E	F	G	
	mm	mm	t	mm	mm	mm	mm	mm	mm	g
670.0201	90	135	2,5	M14x1,5	x 130	17	5	3,5	11	7,5 900

Steering wheel distance sleeve remover for VAG

- For removing the distance sleeve on the steering spindle when changing ignition switch
- Shearing action increases the pressing power when removing
- Clamp holds hooks firmly together
- Prevents slippage
- Extremely robust spindle with inductively hardened thread
- Special steel

Application range: Audi, Volkswagen, Seat, Škoda, etc.



	A mm	B mm	max t	 mm	 D mm	E mm	F mm	G mm	 kg	
620.5401	80	90	5	M18 x 1,5 x 130	19	3	12	26	24	1.70

Steering wheel distance sleeve puller for Volkswagen

- Suitable for quick, clean and damage-free removal of the adapter sleeve on the steering arm
- External drive hexagonal socket 17.0 mm
- Extremely robust spindle with inductively hardened thread
- Special steel

Application range: Volkswagen Golf 2, Golf 3, Golf 4, Jetta, Passat > 1988



	Length mm		
450.0303	180.0	720	

Steering wheel distance sleeve mandrel

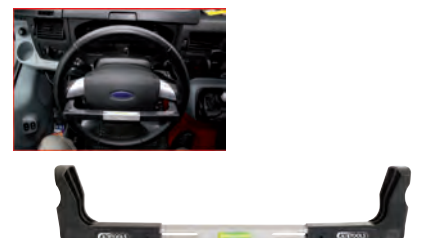
- Suitable in order to strike the adapter sleeve damage-free on the steering column
- Brass

	Length mm	Ø mm	
450.0304	150.0	30.0	720

STEERING WHEEL INSTALLATION BALANCE

Steering readout scale

- For fast and accurate alignment of the steering wheel during the wheel alignment
- For optimal use in the assembly and disassembly of steering wheels
- Large clamping range
- Ideally suitable for passenger cars, vans and trucks
- Aluminium



	Operation range mm	L mm	
515.3183	270-350	370.0	205

PRESS AND PULL SLEEVE SET

700.1701 - 700.1704



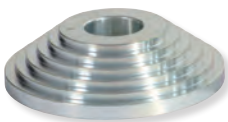
700.1800-19



700.1800-10 - 700.1800-11



700.1706 - 700.1709



700.1710 - 700.1713



700.1800-17



700.1714 - 700.1733



980.1085 - 980.1090



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

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, 350 mm	170	
700.1711	Spindles, M12, 350 mm	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

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, 350 mm	253	
700.1713	Spindles, M16, 350 mm	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

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, 350 mm	170	
700.1711	Spindle, M12, 350 mm	253	
700.1712	Spindle, M14, 350 mm	350	
700.1713	Spindle, M16, 350 mm	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

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 M12x2.0	200	
700.1553	Spindle M14x2.0	350	
700.1554	Spindle M16x2.5	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



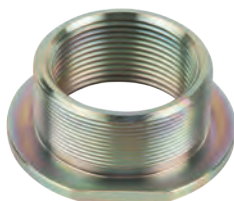
700.1751	5 pcs	Universal press frame, 5 pcs without hydraulic spindle	8.90

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	

KS hydraulic PP2 to Sauer, Müller, KS PP1 tools

- For use of the KS Tools hydraulic cylinder PP2 (8,5-22 t) with Sauer-, Müller-, KS PP1 special tools
- Adapter 1.1/2" PP2 to 2.1/4"-16 UN (Sauer, Müller, KS PP1)
- Special steel



440.0034	KS hydraulic PP2 to Sauer, Müller, KS PP1 tools	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. t	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	Width mm	max. t	Stroke mm	Ø mm	
700.1400-1	92.0	260.0	10	15.0	17	1.34	

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

		kg
700.1792	Hydraulic hand pump	5.50

Hydraulics tube, 2 m including connection

- Ideally suited for commercial vehicles



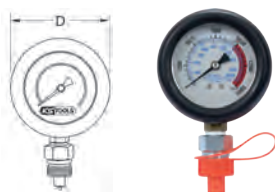
Technical data:

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

		kg
700.1793	Hydraulics tube, 2 m including connection	1.10

Manometer

- Max. 700 bar
- Special steel



	D mm	kg
700.1790-2	80.0	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



		kg
700.1790	4 pcs Hydraulic tension and pressure unit	15.40

consists of:

		kg
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 = 2.081l
- 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:

		kg
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	7.82

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



		kg
700.2305	4 pcs Pressure sleeve set Volkswagen and Mercedes	5.70

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:

		kg
700.2310	Pressure sleeve for removal on models after 2007	1.46

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



		kg
700.1620	4 pcs Pressure sleeve set for Mercedes ball joint	1.42

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		

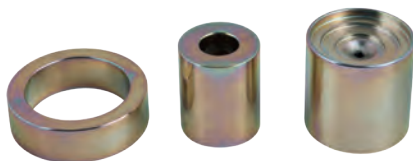
consists of:

		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		

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		

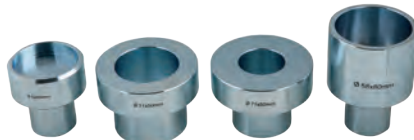
consists of:

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		

consists of:

700.2271	Pressure sleeve with recess, 71 x 50 mm	620		
700.2272	Pressure sleeve, 58 x 80 mm	710		
700.2273	Pressure sleeve, 52 x 55 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		

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
outer thread:	1.1/2"
Stroke:	25.0 mm

440.0020	4 pcs	Pressure and pull hydraulic cylinder set	2.19		

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 for connection thread 1/8"	10		

Pressure and pull hydraulic cylinder set, 16t

- 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
- Special steel



Technical data cylinder

Capacity:	16 t
Connection thread:	Cejn quick coupling
Piston:	industrial forged execution
piston-inner thread:	M22
outer thread:	1.1/2"
Stroke:	67.0 mm

440.0005	10 pcs	Pressure and pull hydraulic cylinder set, 16t	5.48		

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		
440.0011	Impact body, M22 x 2.5 mm	220		
440.0012	Adjustable pressure sleeve, M24, L = 132 mm	320		
440.0009	(CEJN-) Nipple hydraulic for connection thread 1/4"	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
- 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
outer thread:	1.1/2"
Stroke:	70.0 mm

440.0010	10 pcs	Pressure and pull hydraulic cylinder set	6.90	

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 for connection thread 1/4"	10	

Pressure and pull hydraulic cylinder set, 32t

- 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
- 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
outer thread:	2.1/2"
Stroke:	113.0 mm

440.0025	6 pcs	Pressure and pull hydraulic cylinder set, 32t	9.35	

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 for connection thread 1/4"	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
outer thread:	1.1/2"
Stroke:	55.0 mm

440.0015	3 pcs	Short-stroke hydraulic cylinder set	2.67	

consists of:

440.0017	Hydraulic cylinder, 14 t	2420	
440.0004	Adjustable pressure rod M24, L = 92 mm	240	
440.0009	(CEJN-) Nipple hydraulic for connection thread 1/4"	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	

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	
440.0009	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	

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	

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 hydraulic to KS PP2-tool

- For using the Klann hydraulic cylinder (17 t) with KS Tools tool 1.1/2" internal thread
- Adapter 2.1/4"-14 UNS (Klann thread) to 1.1/2" PP2
- Special steel



440.0038	Klann hydraulic to KS PP2-tool	1.08
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KS hydraulic PP2 to Klann tools

- For use with the KS Tools hydraulic cylinder PP2 (8.5-22 t) with Klann special tool
- Adapter 1.1/2" PP2 to 2.1/4"-14 UNS (Klann thread)
- Special steel



440.0036	KS hydraulic PP2 to Klann tools	200
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KS hydraulic PP2 to Klann (commercial vehicles-commercial vehicles-special tools)

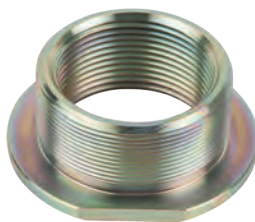
- For using the KS tools hydraulic cylinder PP2 (32t) with the Klann special tool (connection 2.3/4"-16 UNS)
- Adapter 2.1/2" PP2 to 2.3/4"-16 UNS (Klann thread)
- Special steel



440.0409	KS hydraulic PP2 to Klann (commercial vehicles-commercial vehicles-special tools)	760
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KS hydraulic PP2 to Sauer, Müller, KS PP1 tools

- For use of the KS Tools hydraulic cylinder PP2 (8.5-22 t) with Sauer-, Müller-, KS PP1 special tools
- Adapter 1.1/2" PP2 to 2.1/4"-16 UN (Sauer, Müller, KS PP1)
- Special steel



440.0034	KS hydraulic PP2 to Sauer, Müller, KS PP1 tools	230
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Paschke hydraulic to KS PP2 tools

- For using the Paschke hydraulic cylinder with KS Tools special tools PP2
- Adapter M68x2 mm (Paschke thread) to 1.1/2" PP2
- Special steel



440.0407	Paschke hydraulic to KS PP2 tools	110
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KS hydraulic to Paschke tools

- For using the Paschke KS Tools hydraulic cylinder PP2 (8.5-22 t) with Paschke special tools
- Adapter 1.1/2" PP2 auf M68x2 mm (Paschke thread)
- Special steel



440.0408	KS hydraulic to Paschke tools	330
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KS hydraulic PP2 to KS commercial vehicles-special tools

- For use with hydraulic cylinder PP2 (16 and 22 t) to KS Tools tools PP2 with 2.1/2" thread
- Adapter 1.1/2" PP2 to 2.1/2" thread PP2 (large traverse - commercial vehicles)
- Special steel



440.0037	KS hydraulic PP2 to KS commercial vehicles-special tools	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		
440.0176	1	Upper traverse with internal thread 1.1/2"	2040
440.0178	2	Connecting struts	440
440.0179	4	Screw M16 x 40 mm	80
440.0185	1	Insert ring	340
440.0204	1	Lower traverse 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:

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



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

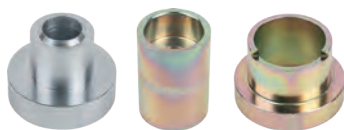
consists of:

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



440.0470	3 pcs	Pressure sleeve set, Hyundai	1.70

consists of:

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



440.0240	4 pcs	Ball joint set, Ford	1.51

consists of:

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



440.0235	2 pcs	Stabiliser ball joint set, Mercedes	630

consists of:

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



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



440.0230	4 pcs	Ball joint set, Mercedes	1.06

consists of:

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



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

consists of:

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



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

consists of:

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



440.0430	3 pcs	Pressure sleeve set Mercedes W 124	1.71

consists of:

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



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

consists of:

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



440.0450	3 pcs	Pressure sleeve set Renault	1.48	

consists of:

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



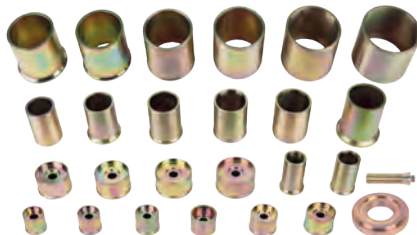
440.0445	2 pcs	Pressure sleeve set Volkswagen T4	1.34	

consists of:

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



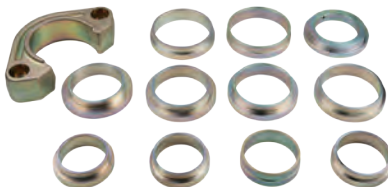
440.0300	26 pcs	Universal press tool set	9.67	

consists of:

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 69.5 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



440.0325	12 pcs	Universal press tool expansion set	4.42	

consists of:

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:

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.



700.1640	6 pcs	Carrier joint tool set	3.82	

consists of:

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, Ø40x-H30mm	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



1/2"

	Outer Ø mm	Inner Ø mm	Stud width mm	
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	g
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	g
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	g
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 fit ted 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	g
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	g
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



		g
515.3880	6 pcs Vibro impact pneumatic chisel hammer set	5.70

consists of:

		g
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!



		g
515.3885	4 pcs Special Vibro chisel set	774

consists of:

		g
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



		g
515.3961	Vibro Power punch Ø6.5mm	95
515.3967	Vibro Power fork separator 20mm	295
515.3968	Vibro Power fork separator 24mm	375
515.3969	Vibro Power fork separator 35mm	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



1/2"

	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



1/2"

	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



1/2"

	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, 360 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	mm	mm	kg
150.1600	30	35 - 45	420.0	1.82

Adjustable pliers for push rods

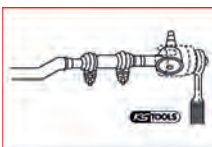
- For releasing and adjusting secure or hard-to-reach push rods with a diameter of 14-23 mm
- Special flange shape on the clamp jaw to prevent damage to the push rod
- Optimal force distribution
- With two handles
- Special steel



	mm	mm	kg
150.1602	14-23	260 / 390	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



	mm	mm	mm	kg
150.1627	57.0	35x19	23.8	490

Insertable open-ended wrench

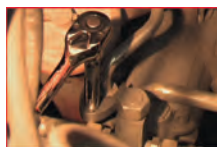
- For tightening and loosening pipe connections
- For manual operation
- Internal square drive to DIN 3120/ISO 1174
- Special steel



	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
- For tightening and loosening pipe connections
- For manual operation
- Slim design
- For hard-to-reach areas
- Burnished
- Special steel
- In durable plastic storage case



		mm	kg
913.1301	3/8"	19	62
913.1302	1/2"	21	94
913.1303	1/2"	22	112
913.1304	1/2"	24	120
913.1305	1/2"	27	153
913.1306	1/2"	30	170
913.1307	1/2"	32	168
913.1308	3/4"	36	337
913.1309	3/4"	41	400
913.1310	3/4"	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



	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



	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

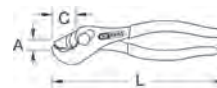
- Multi-function wrench with ratchet function
- For all screw work
- Adapts itself automatically to the screw size
- Self-clamping on flat pipes, bolts, shafts, and unscrewed bodies of hexagonal screws
- No slips thanks to the coarse teeth
- Chrome vanadium



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

Special pipe wrench

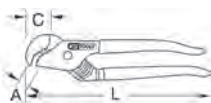
- 2-stage adjustment
- PVC dipped handle
- Ideal for round turned pipe fittings
- Polished surface
- Chrome vanadium



	mm	mm	mm	kg
115.1361	0-16	178.0	23.0	180

Special pipe wrench

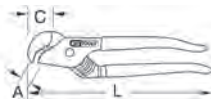
- 4 stage industrial adjustment
- PVC dipped handle
- Optimum power transfer
- Grooved handle adjustment
- Polished surface
- Ideally suited for twisting both thrust and track rods
- Usably on axle joints and exhaust pipes
- Chrome vanadium



	A mm	L mm	
115.1362	0-30	242.0	470

Special pipe wrench

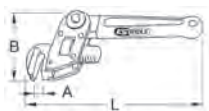
- 6 stage industrial adjustment
- PVC dipped handle
- Optimum power transfer
- Grooved handle adjustment
- Polished surface
- Ideally suited for twisting both thrust and track rods
- Usably on axle joints and exhaust pipes
- Chrome vanadium



	A mm	L mm	C mm	
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	
111.3550	1.1/2	97.0	250.0	650

TRACKING ADJUSTMENT TOOLS

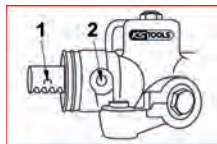


Push rod installation tools for the rear axle can be found in section 21 – Axles on page 545.

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

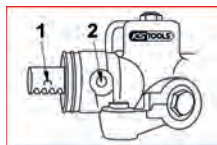


700.1694	Locking screw to the gear rack centring for VAG	20

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



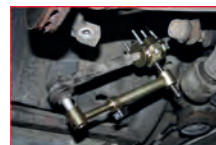
700.1690	3 pcs Locking screw set for gear rack centring	100

consists of:

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



700.1685	9 pcs Push rod gauge set	2.80

consists of:

	X		
700.1686	1	Device with guide bolts for joint head fixi g	325
700.1687	2	Clamp jaws for device	182
700.1688	1	Joint head fixi g, long, Ø 12 mm	280
700.1689	1	Joint head fixi g, short, Ø 12 mm	190
700.1695	1	Joint head fixi g, Ø 10 mm	170
700.1696	1	Joint head fixi g, Ø 17.5 mm	222
700.1697	1	Adapter for device and joint head fixi g	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



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

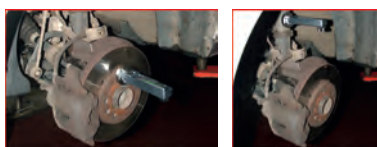
consists of:

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

Application range: Seat Toledo, Volkswagen Golf, Jetta, etc.



	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)



	Ø mm	Height mm		
150.1821	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)



	Ø mm	Height mm		
150.1822	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)



150.1820	2 pcs	BMW camber setting tool set	689	

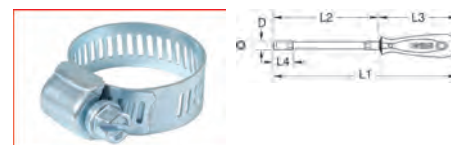
consists of:

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



	mm	D mm	L1 mm	L2 mm	L3 mm	L4 mm	g
911.1175	5	11.9	614.0	500.0	114.0	8.9	270
911.1176	6	10.9	614.0	500.0	114.0	11.3	280
911.1177	7	11.7	614.0	500.0	114.0	11.3	280
911.1178	8	11.7	614.0	500.0	114.0	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

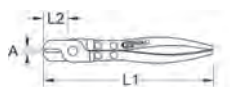
- With moveable jaws
- 45° angled head
- Suitable for the correct assembly and disassembly of Click, Click-R and Cobra clamps
- Also suitable for self-tensioning hose clamps with fl t 3 pinch ends
- Suitable for narrow spaces
- Chrome molybdenum



	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 finis
- Chrome molybdenum

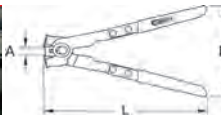


	Ø mm	Length mm	g
115.1210	100	248.0	330

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 finis
- Chrome molybdenum

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

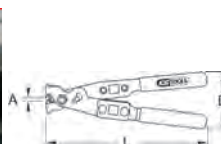


	A mm	L mm	g
115.1050	0-22	260.0	380

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 copressing 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

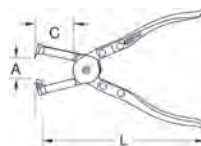
- To be sliced from earless hose clamps
- For connections on axle boots, coolers and fuel hoses
- Dipped covered handle
- Chrome vanadium




	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 diffi ult 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	