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#### TENSION PULLEY WRENCH V/V RIBBED BELTS

#### Bit socket for TX screws

- •Suitable for installing and removing the V belt
- · For operating the tension pulley securing screws
- Internal square drive to DIN 3120/ISO 1174 with ball reception
- •With press fitted nickel plated insert bit •For manual operation
- Matt finish
- ·Chrome vanadium

Application range: Japanese vehicles, etc.







		D mm	L mm	T mm	g	
911.1361	T20	22.0	55.0	17.0	70	
911.1362	T25	22.0	55.0	17.0	700	
911.1363	T27	22.0	55.0	17.0	710	
911.1364	T30	22.0	55.0	17.0	710	
911.1365	T40	22.0	55.0	17.0	730	
911.1366	T45	22.0	55.0	17.0	90	
911.1367	T50	22.0	55.0	17.0	90	
911.1368	T55	22.0	55.0	17.0	770	
911.1369	T60	22.0	55.0	17.0	90	

## V-belt and tooth belt wrenches

- •12-point
- · For loosening the automatic clamping device
- Problem free changing of the belt
   Saves the cooling unit service on VAG
   For hard to reach places
- · With plastic-coated handle
- Chrome vanadium

Application range: Audi A4, Volkswagen Passat > 97 with TDI or pump injector engines Opel, DOHC 4- / 6 cylinder (e.g., Astra F with cooling), Saab V6 engines, Mitsubishi



	mm	L mm	g
150.1206	10	460.0	320
150.1207	11	460.0	320
150.1208	12	460.0	320
150.1201	13	460.0	320
150.1209	14	460.0	320
150.1202	15	460.0	320
150.1203	16	460.0	320
150.1204	17	460.0	320
150.1213	18	460.0	320
150.1205	19	460.0	320

#### Universal wedge and timing belt wrench set

- For relaxing the automatic clamping device
  Problem free changing of the belt
- For VAG in the service position for the cooling system
- For hard to reach places
- · With plastic coated handle
- · Chrome vanadium

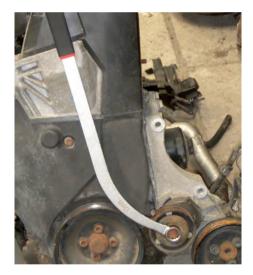
**Application range:** Audi A4, Volkswagen Passat after 97 with TDI or Pump-Nozzle Engine Opel DOHC 4- / 6-Cylinder (e.g. Astra F with air conditioning), Saab V6-Engines, Mitsubishi



			kg	
150.120	<b>0</b> 5 pcs	Universal wedge and timing belt wrench set	2.18	

#### consists of:

		g	
150.1201	Wedge and timing belt wrench, dim. 13, length 460 mm	320	
150.1202	Wedge and timing belt wrench, dim. 15, length 460 mm	320	
150.1203	Wedge and timing belt wrench, dim. 16, length 460 mm	320	
150.1204	Wedge and timing belt wrench, dim. 17, length 460 mm	320	
150.1205	Wedge and timing belt wrench, dim. 19, length 460 mm	320	



## ersal V-belt and tooth belt wrenches

- •TX-E-Profile
- For loosening the automatic clamping device Problem free changing of the belt

- For hard to reach placesWith plastic-coated handle
- Chrome vanadium



		L mm	9	
150.1214	E8	460.0	320	
150.1216	E10	460.0	320	
150.1217	E12	460.0	320	
150.1218	E14	460.0	320	
150.1219	E16	460.0	320	
150.1221	E18	460.0	320	
150.1222	E20	460.0	320	
150.1223	E22	460.0	320	

#### VAG V belt and timing belt wrench

- For loosening the automatic clamping device
- Problem free changing of the beltFor hard to reach places
- With plastic-coated handle
   Chrome vanadium

**Application range: Audi, Seat, Škoda** and **Volkswagen** with 2.0 TDI and 1.4 TSI engines

2.0 TDI and 1.4 TSI engines

Volkswagen Beetle (2011-2013), Eos (2007-2013), Golf (2003-2008), Golf (>2008), Golf Estate (2007-2009), Golf Estate (>2009), Golf Plus (2005-2009), Golf Plus (>2009), Golf VI Cabrio (>2011), Jetta (2005-2011), Jetta (>2011), Jetta (>2011), Tiguan (2010-2013), Polo (>2008), Passat (2005-2011), Passat (>2011), Tiguan (2010-2013), Polo (>2009), Touran (2007-2013), Audi A1 (2010-2013), Škoda Octavia (>2004), Yeti (2010-2013), engine code: CAVD, CAXA, CAVB, CAVC





	mm	Length mm	9	
400.4300	16	380.0	501	

#### Renault V belt wrench TX T45

- Suitable for installing and removing the V belt
- Required to tension the automatic tension pulley and to relax the V wedge
- For hard-to-reach places
- With plastic-coated handle
- Chrome vanadium

Application range: Renault 2.2 L Diesel engines (G8T), e.g. Safrane, Laguna, Espace, etc.



150.1226 2 pcs Renault V belt wrench TX T45 460

#### consists of:

		g	
150.1227	Special wrench with 8.0 mm hexagonal drive, 450 mm	440	
150.1228	Bit with 8.0 mm hexagonal drive for TX screws T45	20	

## VAG V belt wrench TX T60

- Suitable for installing and removing the V belt
- Required to tension the automatic tension pulley and to relax the V wedge
- For hard-to-reach placesWith plastic-coated handle
- Chrome vanadium

Application range: Audi and Volkswagen 2.7 and 3.0 V6 TDI diesel engines, e.g. Audi A5, A6, A8, Q5, Q7, Volkswagen Phaeton and Touareg



				9	
Ì	150.1229	2 pcs	VAG V belt wrench TX T60	470	

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		9	
150.1227	Special wrench with 8.0 mm hexagonal drive, 450 mm	440	
150.1233	Bit with 8.0 mm hexagonal drive for TX screws T60	20	

## BMW and Mercedes V belt wrench TX T60

- ·Suitable for installing and removing the V belt
- Required to tension the automatic tension pulley and to relax the V wedge
- For hard-to-reach places
   With plastic-coated handle
- Chrome vanadium

Application range: BMW 5 series (E60) 2.0 L petrol engine M54 and Mercedes C class (W203, W204) 1.8 L petrol engine





#### consists of:

		g	
150.1227	Special wrench with 8.0 mm hexagonal drive, 450 mm	440	
150.1236	Bit with 8.0 mm hexagonal drive for TX screws T60	20	

## Mercedes V wedge assembly lever

- •Suitable for installing and removing the V belt
- · Required to operate the automatic pulley
- · For hard-to-reach places
- Bronzed bolts
- Chrome vanadium

Application range: Mercedes Type 168, 169 (A class) and Type 245 (B class)



610.0

620

#### Mercedes V belt tension wrench

15.0

- •Suitable for installing and removing the V belt
- · Required to pull back the automatic tension pulley and to relax the V wedge
- · For hard-to-reach places
- ·Special steel

150.1238

Application range: Mercedes Transporter 208 D and 410 D range (engine code: OM601 and OM602), also for Mercedes passenger cars with hydraulic pump for the new regulations

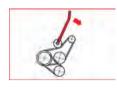


		g	
150.1239	Mercedes V belt tension wrench	60	

#### VAG V belt tension lever

- · Suitable for installing and removing the V belt
- Required to release the automatic pulley
   Universal usage thanks to the attachable head piece
- · For hard-to-reach places
- Chrome vanadium

Application range: Audi, Seat, Škoda, Volkswagen Polo, Golf,





#### **ELASTIC BELT TOOL**

#### Elastic strap tool set

- Suitable for the assembly and disassembly of the elastic V ribbed discs
- Also suitable use with double ribbed discs
- Quick, problem-free and correct changing of the belt No damage to the pulley wheel and the belt
- Minimal force required
- Large working range thanks to various assembly and disassembly tools
- In durable plastic storage case

Application range: Audi, BMW, Chrysler, Citroën, Fiat, Ford, Iveco, Peugeot, Lancia, Mazda, Mercedes, Seat, Škoda, Volvo, Volkswagen, etc.







			kg	
150.3180	11 pcs	Elastic strap tool set	2.24	

## consists of:

		9	
150.3181	Engine turning adaptor	441	
150.3182	Adaptor f. water pump, Ford/Volvo	370	
150.3183	Adaptor f. Crankshaft Pulley	75	
150.3184	Belt attachmenttool type 1	225	
150.3185	Belt attachmenttool type 2	100	
150.3186	Spacer screw, 65mm	250	
150.3187	Spacer screw, 40mm	15	
150.3188	Spacer screw, 25mm	12	
150.3189	Belt attachmenttool type3	23	
150.3198	Belt stretcher	230	
150.3199	Cover	210	

#### **COUNTER HOLD TOOL**

#### Universal counter holder for V ribbed belt discs

- · With strong belt that has an adjustable flexible diameter
- •For securing belt discs
  •Ideal for water pumps, alternators, drive pulleys for pumps,
- Can be used for discs with a diameter 50.00-200.00 mm



	L mm	Replacement belt	9	
150.3152	360.0	150.3153	506	

## Universal counter holder for V ribbed discs

- · With strong belt that has an adjustable flexible diameter
- •5.0 mm groove spacing •For securing toothed-belt discs
- · Ideal for water pumps, alternators, drive pulleys for pumps, fans, etc.
- Can be used for discs with a diameter 50.00-200.00 mm

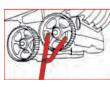


	L mm	Replacement belt	9	
150.3150	360.0	150.3151	542	

## Pulley wheel counter hold wrench

- Suitable for counter holding the timing belt wheel on the cam shaft
- Hole distance can be varied
- Adjustable, universal usageWith plastic-coated handle
- Chrome vanadium







	Length mm	9
400.9007	410.0	525

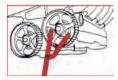
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#### Universal timing gear holder set

- · Ideally suited for almost all vehicle types
- · Universal usable tool for locking, turning and fastening for stepped timing belts
- The overall length of 520 mm guarantees an optimal lever for loosening the timing belts reinforcement screws
- Stepless adjustment of Ø 40 220 mm pin height: 35 mm
- •Includes 4 pairs of screw on plugs
- •With plastic coated handle
- ·Special steel

Application range: Timing belt wheels on camshafts and Injection pumps bleeding of wheels and couplings etc.







			kg	
150.3000	11 pcs	Universal timing gear holder set	2.20	

#### consists of:

		9	
150.3001	Loosening lever 520 mm, adjustable	1120	
150.3002	Peg, Ø 6 - 10 mm	100	
150.3003	Peg, Ø 8 - 11 mm	50	
150.3004	Peg, Ø 10 - 12 mm	40	
150.3005	Peg, Ø 11 - 16 mm	40	
150.3006	Fixing nut for pegs, knurled	20	

# Universal locking tool / counter tool for crank shaft

- · Ideally suited to almost all vehicle types
- For working areas with gear diameters 45 190 mm · With quick adjustment for setting the working area
- Universally used tool for locking, turning and securing locked
- pulley wheels

   Allows the crank shaft drive wheels to turn or for releasing the securing screws on the pulley wheel
- •Ideal leverage thanks to 390 mm total length
- · Very narrow tool for maximum access
- Quick and easy usageMaximum holding force
- With plastic-coated handleSpecial steel







	Ø mm	L mm	g	
150.2990	45-190	390.0	500	



#### Mercedes belt disc counter hold tool

- Damage-free and secure counter holding of the belt disc
- Long lever
- With suspension hole
- Chrome vanadium

Application range: Mercedes engines 602, 603, 604, 605,



	Length mm	9	
150.1252	350.0	440	

### Mercedes belt disc counter hold tool set

- For counter holding the crank shaft belt drive when releasing or tightening the crank shaft central screw
- Required when changing the belt disc or repairing the engine
- · Special steel

 $\mbox{\bf Application range:}$  Mercedes engines, e.g. M112, M113 and OM 642, etc.



150 3310 7 pcs Mercedes belt disc counter hold 2 24				kg	
tool set	150.3310	7 pcs	Mercedes belt disc counter hold tool set	2.24	

## consists of:

	X		g	
150.3311	1	Perforated disc	1219	
150.3312	3	Bolts, Ø 15 mm	126	
150.3313	3	Bolts, Ø 20 mm	215	

## VAG counter hold wrench for water pump belt discs

- Ideal for locking and releasing during assembly and disassembly of water pump belt pulleys
- · For easy releasing of secured screws
- Chrome vanadium

Application range: Audi, Volkswagen, etc.







	L	•	
	mm	9	
150.3026	250.0	490	

# Holding wrench for water pump belt pulleys for low-down

- · Ideal for locking and releasing during assembly and disassembly of water pump belt pulleys
  • Easy to remove fixed screws
- For low-down water pumps on engines with air condition
- Chrome vanadium

Application range: Audi, Volkswagen (engines with air condition), etc.





	L mm	9	
150.3028	300.0	560	

#### VAG belt disc counter hold wrench

- · Simple assembly and disassembly of the crank shaft belt disc and the crank shaft toothed-belt wheel
- Versatile usage
- · Long lever
- With plastic-coated handle
- Chrome vanadium

Application range: Audi A2, A4, A6, Seat, Škoda, Volkswagen Lupo, Polo, Golf 4, Bora, Passat, Beetle, Sharan, etc. engine code: AGP, AGR, AMF, AJM, ATJ, AEE, AEX, APE, AEH, AKL, APF, AWH, ALN, ANA, ARM, AUA, ADX, AEA, AFH, AFK, AHW, etc.





	Length mm	kg	
150.1244	687.0	2.06	

## Universal belt pulley rotary lever

- Universal adjustable lever
- For the spinning of the endine by means of the belt pulley
   With plastic coated handle
- Chrome vanadium

**Application range:** Audi/Volkswagen, BMW, Ford, Opel, Peugeot, Renault, Rover, Japanese Models etc.





	L mm	9	
150.3029	325.0	650	

#### **VISCO FAN TOOL**

#### Universal Visco ventilator wrench

- For removing the hubs and bleeding with viscous couplings
- •Especially slim design •Enables easy access
- •PVC dipped handle
- ·Special steel

Application range: BMW, Ford, Opel, GM etc.







	mm	Suitable for	g	
150.3022	32	for clamping the viscous coupling drive shaft on BMW, Ford	300	
150.3027	36	For counter holding the Visco coupling drive shaft BMW, Ford, GM	340	
150.3023	41	for twisting the water pump on Opel and GM	422	
150.3024	46	for twisting the water pump on Opel and GM	405	

## Ford fan hub wrench

- For the professional engine repair
- •Simple assembly and disassembly of the Visco coupling rotor •Makes it possible to secure the pulley wheel of the water
- pump and at the same time release the heating filter ·Special steel
- Very high degree of accuracy

Application range: Ford Transit (2001 - 2006)



	Pin key mm	9	
400.9014	69.0	133	

#### Visco ventilator wrench

- Ideally suited to removing the hubs on ventilators with viscous coupling
- •Especially slim design
- Allows for easy accessWith suspension hole
- ·Special steel

Application range: Mercedes engines M103 (6 cylinder), M104 (6 cylinder 4 valve), M119 (8 cylinder 4 valve), M120 (12





	mm	Length mm	9	
150.3301	65	400.0	472	

#### Visco ventilator wrench

- · Ideally suited to removing the hubs on ventilators with viscous coupling
  • Especially slim design
- Allows for easy access
- Specially curved
- · With suspension hole
- · Special steel

Application range: Mercedes (engine: M 111.979, 112, 113, 119.985)





		L mm	9	
150.3008	Visco ventilator wrench	410.0	370	

#### Holding wrench for Visco ventilator

- For counter holding the ventilation valve when disassembling the Visco ventilator
- Especially slim designAllows for easy access
- ·Special steel

Application range: BMW engine M10, M20, M21, M30, M50, M51, M52, M52TU, M54, M56, M70, M73, S14 and S38

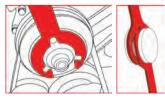




## Land Rover fan hub wrench set

- For counter holding the Visco coupling drive shaft
- · Makes it possible to secure the pulley wheel of the water
- pump and at the same time release the heating filter
  •Also suitable for the removal of the viscous connecting socket on the cooler ventilator
- Special steel

Application range: Land Rover Discovery II, Range Rover, Defender 1990-2006 with Td5 or V8 engines





			kg	
400.4175	2 pcs	Landrover	18.29	

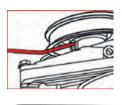
#### consists of:

		kg	
400.0176	Holding wrench for Visco fan for Land Rover	1.05	
400.0177	Visco fan wrench 36.0 mm for Land Rover	14.78	

## entilator coupling counter hold for Mercedes

- · Ideally suited to securing the ventilator coupling
- Especially slim design Allows for easy access
- Especially curved for use Special steel

Application range: Mercedes (engine: M 103, 104)





## Mercedes belt disc wrench 8.0 mm

- · Suitable for the installation and removal of the fan coupling and the belt disc
- Required when changing the water pump For hard-to-reach places
- · With plastic-coated handle
- Chrome vanadium

**Application range:** Mercedes engines M102, M103, OM601, OM602, OM603, OM605, OM606





			9	
150.1303	2 pcs	Mercedes belt disc wrench 8.0 mm	460	

#### consists of:

		9
150.1227	Special wrench with 8.0 mm hexagonal drive, 450 mm	440
150.1307	Bit with 8.0 mm hexagonal drive for internal hexagonal screws 8.0 mm	20



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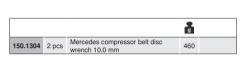


#### Mercedes compressor belt disc wrench 10.0 mm

- · Suitable for releasing the screws on the compressor belt disc
- Required when changing the water pump For hard-to-reach places
- · With plastic-coated handle
- · Chrome vanadium

Application range: Mercedes engines M102, M103, OM601, OM602, OM603, OM605, OM606





#### consists of:

		g	
150.1227	Special wrench with 8.0 mm hexagonal drive, 450 mm	440	
150.1308	Bit with 8.0 mm hexagonal drive for internal hexagonal screws 10.0 mm	20	

#### Ventilator hub wrench set

- •For counter holding the Visco coupling drive shaft
- Makes it possible to secure the water pump's belt pulley and
- release the heating ventilator at the same time
  •Also suitable for the removal of the viscous connecting socket on the cooler ventilator
- Special steel
- In durable plastic storage case

Application range: BMW, Mercedes and Ford





			kg	
150.3320	12 pcs	Ventilator hub wrench set	1.89	

#### consists of

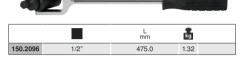
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		g	
150.3008	Visco ventilator wrench	370	
150.3009	Ventilator coupling counter hold for Mercedes Benz	105	
150.3022	Viscous fan spanner, BMW, Ford, 32mm	300	
150.3024	Viscous fan spanner, Opel, GM, 46mm	405	
150.3027	Viscous fan spanner, BMW, Ford, GM, 36mm	340	
150.3301	Visco ventilator wrench	472	
150.3306	Holding wrench for Visco ventilator	330	
150.3321	Adapter, short, Ø 20 mm	5	
150.3322	Adapter, Ø 8 mm	22	
150.3323	Adapter, Ø 10 mm	29	
150.3324	1/2" Holding wrench	635	
151.26025	BASIC key wrench, hex. short, 2.5mm	10	

## **SLOGGING SPANNER**

#### Hand impact wrench

- · Ideal for loosening extremely jammed screws
- Also usably to the tightening of screws and/or nuts
   Square drive adaptor to DIN 3120 / ISO 1174 with ball lock
- •Optimal 8:1 torque ratio
- •360° rotating head
- Impact screw can be combined with every 1/2" drive nut
- · With one component handle





- For the installation and extension of compensational corrugated discs without extension of the struts
- For loosening of stuck stop screws

- Especially suitable for narrow hard to access areas Square drive adaptor to DIN 3120 / ISO 1174 with ball lock
- Can be combined with every any 1/2" drive nut
   Optimal loosening moment through blow effect

- · Hand protection grip
- Special steel



		L mm	kg	
150.2090	1/2"	560.0	1.32	

## **ALTERNATOR WRENCH**

## CHROMEplus® Starter and block spanner

- FlankTraction profile (12 point)
- · Especially suitable for narrow hard to access areas
- Chrome plated and mirror polished
- Chrome vanadium





	mm	A1 mm	A2 mm	B1 mm	B2 mm	L mm	9
518.0852	10x12	6.5	6.6	15.6	17.9	142.0	57
518.0853	11x13	8.0	8.2	17.9	20.7	164.0	90
518.0856	14x17	8.2	9.2	21.4	25.1	190.0	133
518.0857	16x18	8.8	9.6	24.8	27.7	216.0	166
518.0859	19x22	10.0	11.1	27.6	33.0	255.0	244

#### CHROMEplus® half moon - and manifold spanner set

- FlankTraction profile
- Especially suitable for narrow hard to access areas Chrome plated and mirror polished
- Chrome vanadium



			g	
518.0850	5 pcs	10x12 - 11x13 - 14x17 - 16x18 - 19x22 mm	860	

#### Alternator tension wrench

- Suitable for engines in which the V ribbed belt is only ten-• With strengthened and ribbed pins to relax the V ribbed belt
- Ribs prevent the pins from displacing from the bore holes of the alternator
- Special steel

Application range: Volkswagen engines





	Pin key mm	g	
150.3037	157.0	440	

## FREE-RUNNING BELT DISC TOOL

## V-Ribbed Alternator combination key - internal hexagon • For the assembly and disassembly of free-running belt discs

- when changing alternator or the belt disc
- Locking the alternator is done with the special bit
   Actuation of the screws is carried out with the union nut
- Also for checking screws
  Allows for the releasing and securing of the central nut at the
- same time as counter holding the belt disc shaft
  •Internal square drive to DIN 3120/ISO 1174 with ball reception





	mm	Nut Ø mm	Tooth	L mm	9	
150.3155	8,0	22,0	33	96.0	163	

#### V-Ribbed Alternator combination key - internal hexagon

- For the assembly and disassembly of free-running belt discs when changing alternator or the belt disc

  • Locking the alternator is done with the special bit
- · Actuation of the screws is carried out with the union nut
- · Also for checking screws
- · Allows for the releasing and securing of the central nut at the same time as counter holding the belt disc shaft
  •Internal square drive to DIN 3120/ISO 1174 with ball reception



	mm	Nut Ø mm	Tooth	L mm	9	
150.3156	10,0	22,0	33	96.0	163	

#### V-Ribbed Alternator combination key - XZN

- For the assembly and disassembly of free-running belt discs when changing alternator or the belt disc
- Locking the alternator is done with the special bit
- · Actuation of the screws is carried out with the union nut
- Also for checking screws
- Allows for the releasing and securing of the central nut at the same time as counter holding the belt disc shaft.
- Internal square drive to DIN 3120/ISO 1174 with ball reception

Application range: Audi, BMW, Seat, Škoda, Mercedes, Opel, Peugeot, Porsche, Renault, etc.



		Nut Ø mm	Tooth	mm	g	
150.3102	M10	19,5	33	115.0	170	

### V-Ribbed Alternator combination key - XZN

- For the assembly and disassembly of free-running belt discs when changing alternator or the belt disc
- Locking the alternator is done with the special bit
- · Actuation of the screws is carried out with the union nut Also for checking screws
- · Allows for the releasing and securing of the central nut at the same time as counter holding the belt disc shaft
- Internal square drive to DIN 3120/ISO 1174 with ball reception

Application range: Renault Megane, Scenic, Kangoo



#### V-Ribbed Alternator combination key - TX

- For the assembly and disassembly of free-running belt discs when changing alternator or the belt disc

  - Locking the alternator is done with the special bit
- · Actuation of the screws is carried out with the union nut
- Also for checking screws
- · Allows for the releasing and securing of the central nut at the
- same time as counter holding the belt disc shaft
  •Internal square drive to DIN 3120/ISO 1174 with ball reception

Application range: BMW F20, Mercedes A class, C class, Renault 1.9 DTI



## V-Ribbed Alternator combination key - internal hexagon

- For the assembly and disassembly of free-running belt discs when changing alternator or the belt disc

  - Locking the alternator is done with the special bit
- · Actuation of the screws is carried out with the union nut Also for checking screws
- · Allows for the releasing and securing of the central nut at the same time as counter holding the belt disc shaft
  • Internal square drive to DIN 3120/ISO 1174 with ball reception

Application range: Volvo, etc.



1/2"					10
	mm	Nut Ø mm	Tooth	L mm	å
50.3157	10,0	22,0	33	70.0	163

## V-Ribbed Alternator combination key - internal hexagon

- For the assembly and disassembly of free-running belt discs when changing alternator or the belt disc
- · Locking the alternator is done with the special bit
- · Actuation of the screws is carried out with the union nut
- · Also for checking screws
- Allows for the releasing and securing of the central nut at the same time as counter holding the belt disc shaft
- •Internal square drive to DIN 3120/ISO 1174 with ball reception

Application range: Volvo C30, Toyota, etc.



#### consists of:

		g	
150.3176	Union nut 17.00 mm	40	
150.3177	Union nut with 3 pins	120	
150.3201	Socket 10mm	40	

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  • Internal square drive to DIN 3120/ISO 1174 with ball reception
- Suitable for a wide range of applications
- · Saves the removal of additional parts, e.g. cooler

Application range: Audi, BMW, Fiat, Ford, Mercedes, Opel, Porsche, Renault, Peugeot, Seat, Škoda, Volkswagen, etc.







			g	
150.3200	5 pcs	V-Ribbed Alternator combination key set	310	

#### consists of:

		g	
150.3110	10 mm special bit multi-tooth, M10, 75 mm	60	
150.3112	10 mm Special-bit TX, T50, 75 mm	60	
150.3201	Insert wrench insert 10 mm	40	
150.3202	Hexagonal adapter Ø 19 mm	110	
150.3203	Multi-toothed Adapter, Ø 17 mm	40	



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- Suitable for a wide range of applications
  Saves the removal of additional parts, e.g. cooler

**Application range:** Bosch and Magneti Marelli alternators, Audi, BMW, Fiat, Ford, Mercedes, Opel, Porsche, Renault, Peugeot, Seat, Škoda, Volkswagen, etc.





			kg	
150.3100	13 pcs	V-Ribbed Alternator combination key set	1.20	

#### consists of:

		g	
150.3101	Combination wrench 1/2", TX 50 x 33 teeth, I = 110 mm	170	
150.3102	Combination wrench $1/2$ ", XZN $^{\circ}$ M10 x 33 teeth , I = 110 mm	170	
150.3103	Multi tooth usage SW 15 x 33 tooth, bored	50	
150.3104	Multi tooth usage SW 22 x 33 tooth, bored	30	
150.3105	Adaptor for Belt Pulley wrench, SW 22, I = 30 mm, bored	70	
150.3106	Special adaptor SW 17 with 4 lugs Ø4mm, bored	120	
150.3107	Special 10 mm hexagon socket 8 mm, I = 75 mm	60	
150.3108	Special 10 mm hexagon socket 10 mm, I = 75 mm	60	
150.3109	Special bit 10 mm, XZN <sup>o</sup> M8, I = 75 mm	60	
150.3110	Special bit 10 mm, XZN <sup>o</sup> M10, I = 75 mm	60	
150.3111	Special Bit 10 mm, TX 40, I = 75 mm	60	
150.3112	Special Bit 10 mm, TX 50, I = 75 mm	60	
918.1271	1/2" CHROME <i>plus</i> ® Bit-Adapter-Socket with clamping ring, 1/2" x 10 mm	40	

## **BELT TENSION CHECKER**

## Timing belt tensions test instrument

- For inspection of the timing post tensioning
- For the timing belt on the combustion engine
- · With mm scale
- •10N (~1kp corresponds a revolution)
- Special steel

**Application range:** Can be used everywhere there is the technical data for the allowable through bend of the timing belt in mm in a certain power in N or kp revolutions





Technical data:

in mm Measurement mode mechanical (spring)

Adjusting nut revolution around 360° 1.0 Adjusting nut pitch: 1,0/10,0 mm

	L mm		9	
50 3015	100.0	0.0-20.0 mm	260	

#### Electronic timing belt tension tester

- For testing the tension of toothed belts and V-ribbed belts
- Measurement using the latest method = frequency measurement in Hertz
- · With data log, setting values and correct position of the measuring sensor on the belt drive
- ·One man operation, easy to use
- · LED display and acoustic measuring signal
- Automatic shutdown after 120 seconds
- In durable plastic storage case

Application range: Maintenance of vehicles, replacement of belts, suitable for passenger cars up to LCV





## Technical data:

9V block battery Working range: 30-520 Hz Cable length: 1.2 m

			kg	
150.3165	8 pcs	Electronic timing belt tension tester	1.11	

#### **PULLING TOOL**

#### Draw off lining

- For drawing off the shoulder housings interior ring of light machines, motor parts and other machine parts
- Special steel



	Ø mm	L mm	max N·m	mm	mm	kg	
670.0221	5-32	135	60	17	M14x1,5 x 130	1.40	

## Universal camshaft solid wheel puller 2 arm

- Four special hooks for 5 and 6 armed spoked wheels
- · Suitable for many VAG models
- Extremely robust spindle with inductively hardened thread





	A mm		max t	mm	mm	D mm	E	F	G mm	g	
670.0211	130	44	2,5	M14x1,5 x 55	17	4	9	20	15	900	

#### Universal 2 arm puller

- · Legs are adjustable in the working depth
- Independent pressure of the hooks
  Extremely robust spindle with inductively hardened thread
- · Special steel





	A mm	B mm	max t	mm	Ä	D mm	E	F	G mm	kg
				M10 x 105						
620.5202	10- 140	85/120	3,5	M14x1,5 x 130	17	3,5	5	10	31	0.90
620.5203	15- 140	125/155	4,5	M14x1,5 x 200	17	3,5	5	10	31	1.10

## Universal 2 arm puller set with narrow legs

- · Legs are adjustable in the working depth
- · Ideal for confined spaces
- Independent pressure of the hooks
- Extremely robust spindle with inductively hardened thread
- · Special steel





	A mm	B mm	max t	mm	min	D mm	E	F mm	G mm	kg
				M10 x 105						
620.5302	15- 140	125/155	2	M14x1,5 x 200	17	3,5	5	11	12	1.00

#### •For grooved belt pulleys

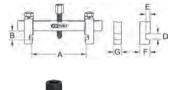
- Draw-off arms with locking device

Universal belt pulley puller 2 arm

- ·Clamp compresses hooks firmly
- Prevents slippage
- Less space requirement through compact method of building
- · Suited for working on and finishing engines
- ·Special steel









	A mm	B mm	mm	mm	D mm	E	F mm	G mm	kg	
150.3170	40-165	30	M12 x 75	17	10	9	18	35	1.60	



## Universal belt pulley puller 3 arm

- •For the damage free drawing off of pulley belts
  •Universal suitable for several diameters and different hole divisions
  •Less space requirement through compact method of building
- Suited for working on and finishing engines
- ·Special steel





#### Universal belt pulley puller 3 arm

- For the damage free drawing off of pulley belts
- Universal suitable for several diameters and different hole divisions
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- Suited for working on and finishing engines
- ·Special steel







	A mm	B mm	mm	Ä	D mm	E mm	F mm	G mm	g
150.3194	30-60	30	M14x1,5 x 75	19	10	6	11	11	745

## **STETHOSCOPE**

## Mechanics stethoscope

- · Very flexible
- Serves the acoustic test and evaluation of a component under load
- •Quick and precise error detection from the sound
- With steel tip

## Application range:

Engine: Valves, bearings, piston pins Alternator: Bearing sounds Differential: Barrel sounds

Bodywork: Creak and squeak sounds





	L mm	g	
150.1645	1120.0	200	

#### Mechanic's stethoscope, electronic

- Very flexible
  - · Serves the acoustic test and evaluation of a component under load
  - Quick and precise error detection from the sound
     Includes 9 V block battery
- · With steel tip

#### Application range:

Engine: Valves, bearings, piston pins Alternator: Bearing sounds

Differential: Barrel sounds

Bodywork: Creak and squeak sounds





	Cable length mm	Length mm	9	
150.1410	1160.0	190.0	100	

## Electronic professional stethoscope

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

# Application range:

Engine: Valves, baerings, piston pins Alternator: Bearing sounds Differential: Barrel sounds

Bodywork: Creak and squeak sounds





			kg	
150.1695	18 pcs	Electronic professional stethoscope	2.50	

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

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