### Specialty Tools



Engine Timing/Timing Belt Spark and Glow Plug Cylinder Head Valve/Piston Fuel System/Fuel Injection Cooling System/Hose Connection Diagnostics Exhaust System/Lambda Probe Pages 198-212 ►
Pages 212-214 ►
Pages 215 ►
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Pages 220-222 ►

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Gearbox



Clutch Flywheel Pages 224-225 ▶



Oil Service





Pages 226-229 ▶







Pages 230-235 ▶







Spring Vice/Shock Absorbers Wheel Bearing/Wheel Hub Silent Block Cardan Shafts Wheels/Tyres Pages 237-250 ►
Pages 251-263 ►
Pages 264-266 ►
Pages 266-267 ►
Pages 267-269 ►



Electricity/
Battery Service





Electrical Testing
Battery Service
Connections/Plug Connections
Generator

Pages 270-271 ►
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Pages 272-274 ►
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Body and Interior Equipment



Body Repair Wiper Arm Steering Wheel/Airbag Pages 277 – 282 ▶
Pages 283 – 284 ▶
Page 285 ▶



Borescope/ Inspection

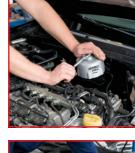


Endoscopes Borescope Pages 286-287 ▶





























# **Engine**



### **Engine Timing/Timing Belt**

**Pulley Extractor** 



- Especially suitable for areas with restricted access Application:

Extractor for pulleys with thread holes, application with:

- $\bullet$  1 crossbar, short, for pulleys 43–120 mm  $\varnothing$
- ullet 1 crossbar, long, for pulleys 95–210 mm  $\varnothing$
- 3 exchangeable pressure pieces, serving as spindle extension

Extractor for pulleys without thread holes (hook grip behind pulley), application with:

- ullet 1 crossbar, short, for pulleys 23–100 mm  $\varnothing$
- $\bullet$  1 crossbar, long, for pulleys 85–195 mm Ø
- Puller hooks for a span depth up to 68 mm or extension up to 88 mm

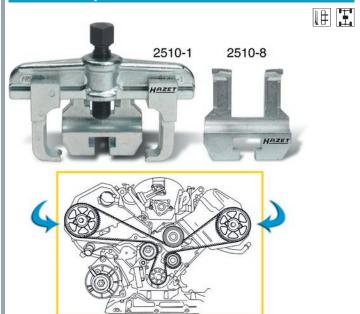
Extractor with 2 groove hooks (fit into the grooves of the pulley, if gripping behind is not possible), application with:

- 1 crossbar, short, for pulleys 80-140 mm Ø
- 1 crossbar, long, for pulleys 135–235 mm  $\varnothing$

#### Made in Germany

HAZET	EAN-No.
No.	4000896+
1789 N-1	158621

### Camshaft Sprocket Extractor



- · For the extraction of camshaft sprockets
- Application:
- 5 and 6-spoke camshaft sprockets on 4 or 6-cyl. engines TDi, engines V6- and V8, **AUDI** A 4, A 6, A 8
- Made in Germany

HAZET No EAN-No. 4000896+ 2510-1 071913

### Puller hook

2510-8

- To supplement extractor 2510-1.
- For 5-spoke camshaft sprockets on **VW/AUDI** V8 petrol engines

082063

Ingenious Tools

## Specialty Tools - Engine - Engine Timing/Timing Belt

### **Assembly Tool Set**



#### For professional installation of seals

Application: e.g. at crankshafts or camshafts of most VW/AUDI engines 15 pieces, in foam insert of plastic case, contents: Housing 2536-1

Support sleeve 2536-2 Output 360 236-3 4 5

Adapter sleeve 2536-6 7 8 9 10

Centring bushing 2536-11 12 13 14 15

### Made in Germany

HAZET	EAN-No.
No.	4000896+
2536-1/15	180622

### **Timing Belt Pulley Tool**



#### • Retainer with exchangeable pins

- For installing and removing the timing belt pulley on camshaft, crankshaft and fuel injection pump on **VW** Lupo, Polo, New Beetle, Golf, Caddy, Bora, Touran, Sharan, Transporter **AUDI** A2, A3, A4, A6, TT ŠKODA Fabia, Octavia, Superb
- Handle with dip-coating, black
- Surface: chrome-plated

HAZET	_	EAN-No.
No.	mm	4000896+
2540-1	695	110407

#### **Timing Belt Double-Pin Wrench**





#### For the professional engine repair

- For adjusting the timing belt at the tensioner roller

• AUDI A3 1.9 TDi model year 1998–2003, A4 1.6 model year 1995–2006, 1.6 l Diesel SEAT Toledo 1.6, 1.8, 2.0, 1.8 16V, 2.0 16V VW Golf 1.9 SDi, TDi model year 1997–2005, Golf, Jetta, Passat 1.6 l Diesel, Passat 1.6 model year 1996–2005, Passat 2.0 model year 2001-2005, Polo 1.9 SDi, TDi model year 1999-2006

- Offset design
- Distance of pins 18 mm, pin Ø 2.9 mm

#### Made in Germany

	,	
HAZET No.	[ mm	EAN-No. 4000896+
2587	140	017140

### **Timing Belt Double-Pin Wrench**



#### For the professional engine repair

- · For adjusting the timing belt at the tensioner roller
- AUDI A2 1.2 TDi model year 2001 2006, A3 1.9 TDi model year 2001 2006, A4 1.9 TDi model year 2001 2006, A4 2.0 and 2.0 FSi model year 2001 2006, A4 4-cyl. since 1995, A6 2.0 model year 2001 2005 SEAT Alhambra 1.9 TDi model year 1999-2006,

Using 1.9 TDi model year 2002–2006, León 1.9 TDi model year 1999–2006 WW Golf 1.9 TDi model year 2002–2006, León 1.9 TDi model year 1999–2006 WW Golf 1.9 TDi, Golf Plus 2.0 I (4-cyl.) since 2005, Lupo 3-cyl Diesel since 1999, Passat 2.0 16V model year 2002–2005, Passat TDi since 1998, Polo 1.4 TDi model year 1999–2006, Polo 1.9 TDi model year 2002–2006, Polo 3-cyl. Diesel, 4-cyl. pump-nozzle injection, Sharan 1.9 TDi model year 1996-2005 **ŠKODA** Octavia 1.9 TDi model year 2000-2005

- Distance of pins 18 mm, pin-Ø 3 mm
- Surface: matt chrome-plated

#### Made in Germany

HAZET	_	EAN-No.
No.	mm	4000896+
2587-1	250	053476



#### For the professional engine repair

- · For adjusting the timing belt at the tensioner roller
- VW Golf 3, 4, Golf 5 since 2005 1.9 TDI, 2.0 TDI petrol engine Beetle 2.0 I petrol engine since 2003, Transporter T5 4 cyl. diesel since 2004 AUDI A3
- ŠKODA Octavia
- Distance of pins 18 mm, pin-Ø 3 mm
- 15° offset
- Surface: matt chrome-plated

HAZET	EAN-No.
No.	4000896+
2587-2	072439



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### **Application**

### **Engine Timing Tools**

www.hazet.de → Tool Finder → Engine Timing Tools

◆ For Smartphones with QR-Reader (App)

### **Engine Timing Tool AUDI, VW, SEAT, ŠKODA**



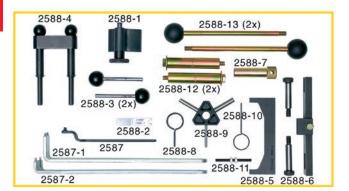
Continuation see next page







## **Engine Timing Tool AUDI, VW, SEAT, ŠKODA CLIP**



#### For the professional engine repair

- For timing belt changing and other engine repairs
- Detailed operating instructions including cross references to original part/tool numbers
- Single parts optionally available
- · Clear arrangement in high-quality plastic case with soft foam insert

Petrol engines: 1.4 1.6 1.8 1.8 T 2.0 16V AUDI 80, A2, A3, S3, A4, A6, TT

ŞEAT Arosa, Ibiza, Córdoba, León, Toledo, Inca, Alhambra (1997 up to 2006) ŠKODA Fabia, Octavia (since 1996)
VW Lupo, Polo, Caddy, Golf, Bora, New Beetle, Passat, Sharan, Touran

Diesel engines:

engines with pump-nozzle injection technology 1.2 1.4 1.9 2.0 TDi AUDI 80, A2, A3, A4, A6, Cabriolet (1995 up to 2000)

SEAT Ibiza, Córdoba, León, Toledo, Inca, Arosa, Alhambra, Altea

ŠKODA Felicia, Octavia (1993 up to 2005), Fabia VW Lupo, Polo, Caddy, Golf, Bora, New Beetle, Passat, Sharan, Touran, Transporter, 1.7 1.9 D/TD/SDi/TDi

### Assortment of 19 pieces

#### Contents:

2587 2587-1 2587-2 2588-1 2 3 (2x) 4 5 6 7 8 9 10 11 12 (2x) 13 (2x)

7 8 9 10 11 12 (2x) 13 (2x)	
H <u>AZET</u> No.	EAN-No. 4000896+
2588/19	127771
2587	017140
2587-1	053476
2587-2	072439
Crankshaft Fixing Device for locking the crankshaft, e.g. VW 1.6 I and 2.0 I Common-Rail diesel engine 2588-1	087730
Locking Plate	001100
for locking the tensioner roller	
2588-2	087747
Locking Pin	001171
for locking the camshaft sprocket e.g. VW 1.6 I and 2.0 I Common-Rail diesel engine	
2588-3	087754
Camshaft locking for locking the camshaft sprockets when changing the timing belt	
2588-4	110391
Camshaft Setting Plate	
2588-5	137107
2588-6	137114
Locking Pin	
2588-7	136896
Locking Pin for tensioning tool	
2588-8	137121
Setting Tool	·
2588-9	137565
Locking Pin	101000
2588-10	136902
Retainer	100302
2588-11	137572
	13/3/2
Support Guides	107500
2588-12	137589
2588-13	137596

### Engine Timing Tool AUDI, VW, SEAT, ŠKODA





### For the professional engine repair

Expansion for Assortment 2588/19

**Petrol engines:** 1.2 6V and 12V 3-cylinder engine, **VW** Polo and Fox, **ŠKODA** Fabia,

SEAT Ibiza/Córdoba

1.4-1.6 FSI engines:

AUDI A3, ŠKODA Octavia,

VW Polo, Golf, Touran, Tiguan, EOS, Passat

Diesel engines: 4-cylinder engines with pump-nozzle injection

technology since 2005 VW and VW group vehicles

Set of 9 pieces in soft foam insert (may be stored in tool case 2588/19)

Contents:

2588-14 15 (2x) 16 17 18 19 110

3688-10	
HAZET No.	EAN-No. 4000896+
2588/9	144181
Fixing Bolt	
2588-14	144198
2588-15	144204
2588-16	144211
Tension Pulley Screw	
2588-17	144228
Fixing tool for tension pulley	
2588-18	144334
Fixing tool	
2588-19	144341
For 4-cyl. diesel/pump-nozzle injection engines since 2005 e.g. VW 2.0 l Common-Rail diesel engine Crankshaft Fixing Device For fixing the <b>oval</b> crankshaft timing belt pulley e.g. during timing belt replacement or engine repair	
2588-110	143283
TDC Position Tool, application with dial gauge 2155-65	
3688-10	137527

Ingenious Tools





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### **Fixing Bolt Set**



#### For the professional engine repair

- Fixing bolts for the crankshaft and camshaft on 3-cyl. engines
- 1.2 6V and 12 V 3-cyl. engines, VW Polo, Fox,

#### ŠKODA Fabia, SEAT Ibiza, Córdoba Set of 4 pieces

Contents:

2588-14 15 (2x) 16

HAZET No.	EAN-No. 4000896+
2588/4	164653
Fixing Bolt	
2588-14	144198
2588-15	144204
2588-16	144211

### **Tool Set for Timing Belt Replacement**



#### For timing belt replacement, e.g. on VW engines with pump-nozzle injection technology since 1999

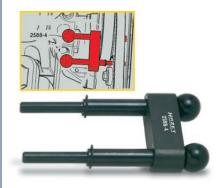
- AUDI A2, A3, A4, A6, VW Passat, Golf, Bora, Beetle, Sharan, Lupo and Touran, SEAT Alhambra, Arosa, Altea, Toledo, León, ŠKODA Octavia, Fabia, Superb, Roomster, FORD Galaxy
- The use of this tool set ensures that the engine timing is retained when changing timing belt or when carrying out engine maintenance work

Contents: crankshaft fixing device 2588-1 locking plate 2588-2 locking pin 2588-3

### **Tool Set for Timing Belt Replacement**

•	
H <u>AZET</u> No.	EAN-No. 4000896+
2588/3	087761
Crankshaft Fixing Device for locking the crankshaft, e.g. VW 1.6 I and 2.0 I Common-Rail diesel engine 2588-1	087730
Locking Plate for locking the tensioner roller 2588-2	087747
Locking Pin for locking the camshaft sprocket e.g. VW 1.6 I and 2.0 I Common-Rail diesel engine 2588-3	087754

### **Camshaft Locking Tool**





- For locking the camshaft sprockets when changing the timing belt

Engine repair on 4-valve 4-cyl. injection engines
 AUDI A2 model year 2000–2006
 SEAT Arosa, Ibiza, Leon, Toledo, Cordoba 1.6 16V model year 2000–2005,

SEAT Arosa, iniza, Leon; Toledo, Cordoba 1.6 16V model year 2000–200 Eeon 1.4 16V model year 1999–2006 ŠKODA Fabia and Octavia 1.4 16V model year 1999–2006 VW Bora 1.4 and 1.6 since 1999, Caddy 1.4 16V model year 1998–2006, Caddy since 1996, Golf 1.4 and 1.6 since 1998, Golf,

Bora 1.4 16V model year 1999-2005, Golf, Bora 1.6 16V model year 1999-2005, Lupo since 1999, Lupo, Polo 1.4 16V model year 2000-2005, Lupo, Polo 1.6 16V model year 2000 – 2005, New Beetle 1.4 since 1999, Polo since 1995, Polo Classic, Variant since 1996

HAZET EAN-No.

Camshaft locking for locking the camshaft sprockets when changing the timing belt

2588-4 110391

### **Engine Timing Tool AUDI, VW, SEAT, ŠKODA**





#### For the professional engine repair

- For checking and adjustment of engine timing
- Detailed operating instructions including cross references to original part/tool numbers
- Single parts optionally available

AUDI A1, A3

SEAT Altea/XL, Ibiza, Leon

ŠKODA Fabia II, Octavia II, Roomster, Yeti VW Caddy, Golf, Golf Plus, Jetta, Polo, Touran

Engine code:

CBZA, CBZB, CBZC

Set of 4 pieces in soft foam insert (may be stored in tool case 2588/19)

Contents:

2588-20 (1x) 21 (1x) 22 (2x)

HAZET	EAN-No.
No.	4000896+
2588-1/4	180325





EAN-No. 4000896+

180332

**%**3.





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### **Engine Timing Tool AUDI, VW, SEAT, ŠKODA**





#### For the professional engine repair

- For timing belt replacement and other engine repairs
- Detailed operating instructions including cross references to original part/tool numbers
- Single parts optionally available

VW Transporter T4, LT, Crafter (2006-)

### Motortypen:

2,4D: AAB, AJA 2,5SDi: AGX

2,5TDi: ACV, AHD, AHY, AJT, ANJ, APA, AUF, AXG, AXL, AYC, BBE, BBF 2,5 TDi: Common Rail: BJJ, BKK, BJL, BJM

Set of 5 pieces in soft foam insert (may be stored in tool case 2588/19)

Contents:

2540-3

HAZET

2588-5 7 28 32

2588-2/5	
00	O O 2588/10



#### For the professional engine repair

- Detailed operating instructions including cross references to original part/tool numbers
- Single parts optionally available

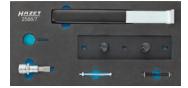
VW Touareg (2003-2008), Transporter (2003-2008) Multivan (2004-2008) Engine code: AXD, AXE, BAC, BLJ, BLK, BNZ, BPC, BPD, BPE

Set of 10 pieces in soft foam insert

Contents:

2588-29 30 31 32 33 34

HAZET	EAN-No.
No.	4000896+
2588/10	180349



#### For the professional engine repair

- Detailed operating instructions including cross references to original part/tool numbers
- Single parts optionally available

AUDI A3 (2003-2010), A4 (2002-2010), A6 (2005-2010), TT (2006-2010) **SEAT** Leon (2005–2010), Toledo (2004–2009), Altea/XL (2005–2009), Exeo (2009–2010) **ŠKODA** Octavia II (2004–2009)

VW Golf (2004-2010), Golf Plus (2005-2009), Jetta (2005-2009), Eos (2006-2010), Touran (2003-2009), Passat (2005-2010)

### Engine code:

FSi: AWA, AXW, BHD, BLR, BLX, BLY, BMB, BVX, BVY, BVZ
TFSi: AXX, BGB, BHZ, BPG, BPJ, BPY, BUL, BWA, BWE, BWJ,
BWT, BYD, BYK, BZC, CDLA, CDLB, CDLC, CDLD, CDMA

Set of 7 pieces in soft foam insert

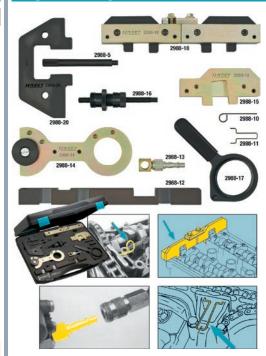
Contents:

2579-9 K

2588-8 23 26 27

HAZET	EAN-No.
No.	4000896+
2588/7	180363

### **Engine Timing Tool BMW**



#### For the professional engine repair

- Installation and removal of the camshaft/variable camshaft timing unit
- · Checking and adjustment of camshaft timing
- Detailed operating instructions including cross
- references to original part/tool numbers
- Clear arrangement in high-quality plastic case with soft foam insert For **BMW** petrol engines: M40, M43 with twin camshafts: M42, M44, M50, M52, M54, M56
- Installation, removal and timing of variable camshaft timing unit
- Checking and adjustment of camshaft timing/timing belt changing BMW:

E36: E46:

316i year 1993-99/ 316i year 1999-2004/316i Compact year 1994-2001 (M43)

318i year 1993-99 (M43) E36: E46: 318i year 1998-04 (M43)

E30:

318iS-16V, year 1989-91 (M42) 318iS/Coupé year 1992-98/318ti Compact year 1994-98 (M42) 318iS/Coupé year 1996-99/318ti Compact year 1996-2001 (M44) 320i year 1991-97/320i year 1991-99 - Single Vanos (M52) E36:

E36/E46: 320i year 1998-2006 - Twin Vanos

323i Compact year 1995–2000 – Single Vanos 323i year 1998–2001 – Twin Vanos (M52) 325i year 1991–97 / 325i year 1991–97 – Single Vanos 325i Compact year 2000–06 – Twin Vanos E46: E36:

E46:

328i year 1995–99 – Single Vanos 328i year 1998–2001 – Twin Vanos/ 330i year 2000–06 – Twin Vanos E38: F46:

518i year 1994–96 (M43) / 520i year 1989–96 E34:

E43:

520i year 1989–96 – Single Vanos 520i year 1995–99 – Single Vanos / 520i year 1998–2003 – Twin Vanos E39: E60/6:

year 2003–05 – Twin Vanos 523i year 1995–99 – Single Vanos / 523i year 1998–2001 – Twin Vanos E39:

525i year 1989–96 / 525i year 1989–96 – Single Vanos E34:

E39: 525i year 1969-967 525i year 1969-96 - E39: 525i year 2000-03 - Twin Vanos E60/E61: 525i year 2003-05 - Twin Vanos E39: 528i year 1996-2000 - Single Vanos 528i year 1998-2001 - Twin Vanos (M52)

530i year 2000-03 - Twin Vanos 530i year 2003-05 - Twin Vanos 728i year 1995-98 - Single Vanos 728i year 1998-2002 - Twin Vanos E60/61: E38:

E65/E66: 730i year 2002-05 - Twin Vanos 7301 year 2002-05 - Twin Varios X3-2.5l year 2003-06 - Twin Vanos X3-3.0l year 2003-06 - Twin Vanos X5-3.0l year 1999-2005 - Twin Vanos (M54) Z3-1.8i year 1996-99 / 1.9i year 1999-2003 (M43/M44) 2.0i year 1999-2003 - Twin Vanos (M52)

E53:

2.0i year 1997–99 – Single Vanos (M52) 2.8i year 1997–99 – Single Vanos / 2.8i year 2000–03 – Twin Vanos 3.0i year 2000–03 – Twin Vanos (M54) 24-2.2l year 2003–06 – Twin Vanos

E85:

2.5l year 2003-06 - Twin Vanos / 3.0l year 2003-06 - Twin Vanos

#### Assortment of 11 pieces

2988-5 10 11 12 13 14 15 16 17 18 20

H <u>AZET</u> No.	EAN-No. 4000896+
2988/11	148721
	_

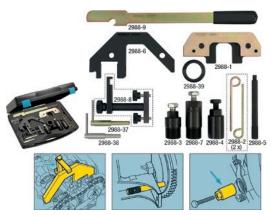






### **Engine Timing Tool BMW**

•	<b>3</b>
HAZET No.	EAN-No. 4000896+
Crankshaft Locking Tool 2988-5	149698
Locking Pin 2988-10	149872
Chain Tensioner Locking Pin 2988-11	149889
Camshaft Setting Plate 2988-12	149896
Compressed Air Connection 2988-13	149902
Mounting Plate, adjustable 2988-14	149919
Camshaft Setting Plate 2988-15	149926
Chain Tensioner 2988-16	149933
Timing Chain Tool 2988-17	149940
Camshaft Setting Plate 2988-18	149957
Camshaft Setting Plate 2988-20	149971



#### For the professional engine repair

- Installation and removal of the camshaft/variable camshaft timing unit
- · Checking and adjustment of camshaft timing
- Detailed operating instructions including cross references to original part/tool numbers
- Clear arrangement in high-quality plastic case with soft foam insert

For **BMW** diesel engines M 41, M 51, M 47–M 47 TU/T2,

M 57/TU/T2:2,0I/3.0I year 1998-2008

- Installation and removal of the camshaft/hydraulic chain tensioner
- Checking and adjustment of camshaft timing

#### BMW: E36:

318tds/318tds Compact model years 1994-2000/ 325td/tds model years 1991-1999

525td/tds model years 1991-2003 E34/E39:

725tds model years 1991 – 2003 M47/M47 TU /T2/M57 TU/T2 E38:

E87: 118d/120d

318d/318td Compact E46: 320td Compact/320d/330d

F39: 520d/525d/530d 525d/530d/535d E60/E61:

635d E63:

E38/E65/E66: 730d E83: X3, 2.0 | d/3.0 | d F53/F70:

X5,3.0 l d 316i, 316ti, 318ci, 318ti, 320i E90/E91:

E90/E91/E92/E93: 318i, 320i

Range Rover: 2.5 DT model years 1994-2002 / 3.0 TD6 model years 2002-2006

Freelander: 2.0 TD4 model years 2002-2006

#### Assortment of 13 pieces

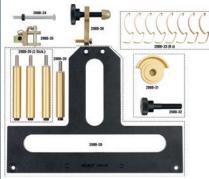
Contents:

2988-1 2 (2x) 3 4 5 6 7 8 9 37 38 39

2900-1	Z (ZX)	J	4	J	U	1	O	Э	31	30	Je	,					
HAZET No.	Ţ														N-No. 0896+		
2988/13	3													148	3714		

### **Engine Timing Tool BMW**







### For the professional engine repair

- Installation and removal of the camshaft/variable camshaft timing unit
- · Checking and adjustment of camshaft timing
- · Detailed operating instructions including cross references to original part/tool numbers
- Clear arrangement in high-quality plastic case with soft foam insert For BMW petrol engines N42, N46

#### Assortment of 18 pieces

Contents:

\*\*\*

2988-28 29 (3x) 30 31 32 33 (8x) 34 35 36	
H <u>AZET</u> No.	EAN-No. 4000896+
2988/18	149742
Carrier Bracket Mounting Fixture	
2988-28	150052
Stud Bolt, long	
2988-29	150069
Stud Bolt, short	
2988-30	150076
Inlet Camshaft Securing Tool	
2988-31	150083
Knurled screw	
2988-32	150090
Intermediate Lever Clamp	
2988-33	150106
Bolt and Nut	
2988-34	150113
Torsion Spring Tool	
2988-35	150120
Eccentric Shaft Holder	
2988-36	150137





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#### For the professional engine repair

- Installation and removal of the camshaft/variable camshaft timing unit
- · Checking and adjustment of camshaft timing
- Detailed operating instructions including cross references to original part/tool numbers
- Clear arrangement in high-quality plastic case with soft foam insert For BMW petrol engines N42, N46

### 7 pieces, in plastic case

Contents:

2988-21 22 23 24 25 26 27

2000 21 22 20 24 20 20 21	
HAZET No.	EAN-No. 4000896+
2988/7	149735
Camshaft Turning Tool 2988-21	149988
Timing Chain Tensioner Pre-Load Tool	
2988-22	149995
Sensor Wheel Locking Tool 2988-23	150007
Camshaft Setting Plate	
2988-24	150014
Camshaft Setting Plate 2988-25	150021
Fixing Screw	
2988-26	150038
Locking Pin, bent	
2988-27	150045

### **Engine Timing Tool BMW**



#### For the professional engine repair

- Installation and removal of the camshaft/variable camshaft timing unit
- Checking and adjustment of camshaft timing
- · Detailed operating instructions including cross references to original part/tool numbers
- Clear arrangement in high-quality plastic case with soft foam insert
- Assortment of 25 pieces as complete set 2988/25, consisting of two cases 2988/7 and 2988/18
- (Components/single sets see table above)
- Installation and removal of the camshaft/variable camshaft timing unit
- · Checking and adjustment of camshaft timing
- Set consisting of 2 cases

### BMW:

E87:

118i/120i – N46 engine 316i/316ti/318i/318ti – N42 engine E46:

E90/E91: 318i/320i - N46 engine Z4, 2.0 I - N46 engine E85:

HAZET	EAN-No.
No.	4000896+
2988/25	149759

### **Engine Timing Tool OPEL**





#### For the professional engine repair

- For timing belt changing and other engine repairs
- Detailed operating instructions including cross references to original part/tool numbers
- Clear arrangement in high-quality plastic case with soft foam insert

Eco Tec petrol engines:
1.0 12V 1.2 16V (since 1997) and twin camshaft engines
1.4 1.6 1.8 2.0 2.2 16V (since 1995)

OPEL Agila, Astra, Corsa, Tigra, Vectra, Zafira,

Omega, Frontera, Sintra, Signum, Meriva Eco Tec diesel engines: 1.3 CDTi 16V 1.9 CDTi 2.0 2.2 DTi

OPEL Agila, Astra, Corsa, Vectra, Tigra, Combo-C, Zafira, Omega, Frontera, Sintra, Signum

#### Assortment of 19 pieces

#### Contents:

(0x) 7 0 0 (0x) 10 11 10 10 14 15 16 17

3088-1	2 3	3 4	5	6 (2x)	7	8	9 (2x)	10	11	12	13	14	15	16	17
HAZET No.													EA1 4000	N-No. 0896+	
3088/19													127	788	
Camsha	aft S	ettin	g T	ool											
3088-1													137	138	
Cranksl <b>3088-2</b>	haft I	Lock	king	Tool									136	3704	
Injection	n Pu	mp	Loc	king Pi	า								126	3711	
Cam Sr	orool	ot /	\+t-a	hmont									100	)/	
3088-4	JIOCI	(CL /	ıııaı	JIIIIEIII									137	602	
3088-5														7077	
Camsha (price p					ed i	n p	airs)								
3088-6													137	145	
Flywhee <b>3088-7</b>	el (Cı	rank	sha	ft) Lock	ing	Piı	1						136	3728	
Chain T	ensi	onei	<sup>r</sup> Re	taining	Pin										
3088-8													136	3735	
Camsha	aft S	ettin	g T	ool									40-	7040	
3088-9	_					_							137	213	
Auxiliar	-	lt I e	nsic	oner Lo	CKII	ng I	-In						136	3759	
Cranksl	haft I	Lock	king	Tool											
3088-11													136	6742	
Camsha		ettin	g P	late											
3088-12	!												137	7091	
															<b>.</b>

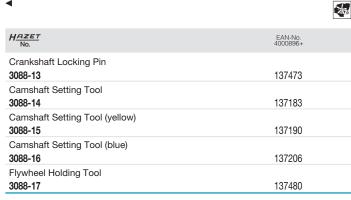
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Ingenious Tools





### **Engine Timing Tool OPEL**





#### For the professional engine repair

- For timing belt changing and other engine repairs
- Supplementary Set, 6 pieces, in soft foam insert
- For OPEL 1.6 and 1.8-16V "TWINPORT" petrol engines: Corsa D, Astra G, H, Vectra C, Signum, Meriva, Zafira B 2.2-16 V petrol engines: Astra G, H, Vectra C, Signum, Speedster/Vauxhall VX220, Zafira A, B
- Camshaft locking when replacing the timing belt
- Camshaft timing/engine timing/timing chain tensioner
- · Crankshaft positioning

#### Contents:

3088-18 19 20 21 22 23

HAZET No.	EAN-No. 4000896+
3088/7	155941
Flywheel Holding Tool 3088-18	155958
Camshaft Sprocket Locking Tool 3088-19	155965
Camshaft Setting Plate 3088-20	155972
Locking Pin for Chain Tensioner 3088-21	155989
Camshaft Setting Tool 3088-22	155996
Chain Tensioner Locking Pin 3088-23	156009



#### For the professional engine repair

- For checking and adjustment of engine timing
- Petrol engines with timing chain: 1.0-1.2-1.4 |
- OPEL Agila 2000-2008 engine code: 1.0 12V 1.2 16V 1.4 16V Astra G 1998 – 2006 engine code: X10XE, X12XE, Z14XEL Astra H 2004 – 2010 engine code: Z10XE, Z12XE, Z14XEP Combo-C 2004-2007 engine code: Z10XEP, Z12XEP Corsa B 1997-2000, Corsa C 2000-2007, Corsa D 2006-2010 Meriva 2004-2010, Tigra B 2004-2010
- SUZUKI: WagonR + model years 2005-2008

In Safety-Insert-System, 2-component soft foam insert

### 4 pieces

3088-8 Chain tensioner retaining pin

3088-12 Camshaft setting plate

3088-13 Crankshaft locking pin 3088-14 Camshaft setting tool

HAZET 3088/4

### **Engine Timing Tool OPEL**



#### For the professional engine repair

- For checking and adjustment of engine timing
- Petrol engines with timing chain: 1,0 1,2 1,4 | Turbo since 2010
- OPEL: Astra- J, Adam, Agila-B, Cascada, Combo, Corsa D, Meriva B, Mokka, Zafira Tourer
- Chevrolet: Cruze
- Engine code: A10XEP, A12XEL, A12XER, A14XEL, A14XER(LDD), A14NEL(LUH), A14NET(LUJ), LDU

In Safety-Insert-System, 2-component soft foam insert

3088-13 Crankshaft locking pin 3088-24 Camshaft setting plate 3088-25 Sensor adjustment tool

3088-26 Sensor Adjustment Tool

3088-27 Camshaft retainer

3088-8 Chain tensioner retaining pin

HAZET	EAN-No.
No.	4000896+
3088/6	186587

### **Engine Timing Tool FORD**





#### For the professional engine repair

- For timing belt changing and other engine repairs
- · Detailed operating instructions including cross references to original part/tool numbers
- Clear arrangement in high-quality plastic case with soft foam insert

### Petrol engines:

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EAN-No. 4000896+

186563

Twin camshaft engines (Zetec/Duratec)

1.25 1.4 1.6 1.7 1.8 2.0 16V

FORD Fiesta, Escort, Focus, Focus C-Max, Puma, Fusion, Mondeo, Cougar (1998 up to 2001)

#### Diesel engines:

1.8 D/TD/TDCi/TDdi: 2.0/2.4 TDdi 1.4/1.6 TDci

FORD Fiesta, Escort, Orion, Courier, Focus, Focus C-Max, Mondeo (1988 up to 2003), Fusion, Transit

Continuation see next page ▶









### Specialty Tools - Engine - Engine Timing/Timing Belt

### **Engine Timing Tool FORD**

3488-1 2 (2x) 3 4 5 6 7 8 (3x) 9 10 11 3788-21 22 23

Assortment of 17 pieces Contents:

H <u>AZET</u> No.	EAN-No. 4000896+
3488/17	127795
Camshaft Setting Plate	
3488-1	137084
Locking Pin	
3488-2	136797
3488-3	136803
Crankshaft TDC Location Pin	
3488-4	137497
Flywheel Locking Tool	
3488-5	137060
Locking Pin	
3488-6	136810
3488-7	136827
Camshaft and Injection Pump Locking Pins	
3488-8	136834
Chain Tensioner Locking Pin	
3488-9	136841
Crankshaft Location Pin	
3488-10	136773
3488-11	136780
Injection Pump and Crankshaft Locking Pin	
3788-21	136858
Flywheel Locking Tool	
3788-22	136865
Camshaft Locking Pin	
3788-23	136766



### For the professional engine repair

- For timing belt changing and other engine repairs
- Supplementary Set, 8 pieces, in soft foam insert
- For **FORD** 1.25-1.4 and 1.6-16V petrol engines: Fiesta, Fusion, Focus, C-Max 1.6 Ti-VCT-petrol engines: Focus, C-Max 1.4-1.6 TDCi-Diesel: Fiesta, Fusion, Focus, C-Max 2.0 TDCi-diesel: Focus, Mondeo, C-Max, S-Max, Galaxy
- Camshaft locking when replacing the timing belt
- Camshaft timing/engine timing/timing chain tensioner

#### Contents:

2588-8

3488-12 13 14 15 16 17 3788-21

HAZET No.	EAN-No. 4000896+
3488/8	155873
Locking Pin for tensioning tool	
2588-8	137121
Flywheel Locking Pin, bent	
3488-12	155897
Camshaft Setting Plate	
3488-13	155880
Camshaft Sprocket Holding Tool	
3488-14	155903
Crankshaft Locking Tool	
3488-15	155910
Adapter	
3488-16	155927
3488-17	155934
Injection Pump and Crankshaft Locking Pin	
3788-21	136858
Locking Pin	
3488-19	166213

### **Engine Timing Tool FORD-Duratorq**



### For the professional engine repair

- For checking and adjustment of engine timing
- For diesel engines: 2.0 2.2 2.4 3.2 I
- FORD Mondeo 2000-2007, Transit 2000-
- FIAT Ducato 2006-
- CITROËN Relay
- PEUGEOT Boxer 3 2006-
- JAGUAR X-type 2001
- LAND ROVER Defender 2007 -, LDV Convoy 2002-2006
- 2.0 I engine code ABFA, D3FA, D5BA, D6BA, F3FA, FIFA, FMBA, HJBA, HJBB, HJBC, HJBE,N7BA, N7BB
- 2.2 I engine code BG, QJBA, QJBB, QJBC, QJBD/4HM, 4HU, 4HV, P8FA, P22DTE, QVFA, QWFA
- 2.4 I engine code 244DT, D0FA, D2FA, D2FB, D4FA, F4FA, FXFA, H9FA, H9FB, HEFA, HFFA, JXFA, PHFA, ZSD424
- 3.2 I engine code SAFA

In Safety-Insert-System, 2-component soft foam insert 10 pieces

濕

3488-6 Locking pin 3488-7 Locking pin

3488-8 Camshaft and injection pump locking pins (3x)

3488-9 Chain tensioner locking pin

3488-20 Engine cover centring tool

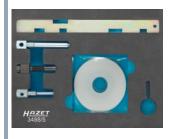
3488-21 Crankshaft seal centring tool

3488-22 Chain wheel holder 3488-23 Removal tool

HAZET No EAN-No. 4000896+ 3488/10 186945

### **Engine Timing Tool FORD/MAZDA/Volvo**





### For the professional engine repair

- · Detailed operating instructions including cross references to original part/tool numbers
- Single parts optionally available

FORD, Fiesta (1995–2009), Fusion (2002–2009), Puma (1997–2002), Focus (1998–2009), Focus C-Max (2003–2007), C-Max (2007–2009), Mondeo (1993-2009), Cougar (1998-2001), S-Max (2006–2009), Galaxy (2006–2009), Tourneo Connect (2002–2006), Transit Connect (2002–2006), Transit (2006–2009)

**MAZDA**, 121 (1995–2000), 2 (2002–2007), 3 (2003–2009), 5 (2005–2009), 6 (2002–2009), MX-5 (2005–2009), MPV (2002–2005), Tribute (2001–2004)

Volvo, S40/V50 (2004-2009), C30 (2006-2009)

**Engine types:** 1.25 16V (timing belt) DHA, DHB, DHC, DHD, DHE, DHF, DHG, F8JA, F8JB, FUJA, FUJB, M7JA, M7JB, SNJA, STJA 1.4 16V (timing belt) ASDA, ASDB, FHA, FHD, FHE, FHF, FXDA/C, FXDB/D, FXJA, FXJB, SPJA 1.6 16V (timing belt) FYDA/C, FYDB/D, FYJA, FXJB, L1F, L1J, L1L, L1N, L1Q, L1V, L1T, L1W, HWDA, HWDB 1.7 16V (timing belt) 1.8 16V (timing belt) EYBD, EYDC, EYDD, EYDE, EYDF, EYDG, EYDI, EYDJ, EYPA, EYPC, RKA, RKB, RKF, RKH, RKJ, RKK

CDBB, CGBA/B, CHBA/B, CSDA, 1.8 16V (timing chain) CSDB, QQDA, QQDB, QQDC

EDBA/C, EDBB, EDBD, EDDB, EDDC, 2.0 16V (timing belt) EDDD, EDDF, NGA, BGB, NGC, NGD

2.0 RS/Sa70 (timing belt) ALDA, HMDA 2.0 16V (timing chain) AOBA, AODA, AODB, AOWA, CJBA/B, N4JB 2,3 16V (timing chain) SEBA, SEWA, GZFA, GZFB





## Specialty Tools - Engine - Engine Timing/Timing Belt

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### **Engine Timing Tool FORD/MAZDA/Volvo**

1.25 16V DHA, FUJA, FUJB

16V FXJA, FXJB 1,4

16V FYJA 1.6

16V L8

2.0 16V LF, YF

2.3 16V L3

1.6 16V B4164S3 (timing belt)

16V B4184S11 (timing chain)

16V B4204S3 (timing chain) Set of 5 pieces, in soft foam insert

Contents:

2588-8

3488-10 11 13 15

HAZET EAN-No. 4000896+ 180318 3488/5

### **Engine Timing Tool FIAT**



### For the professional engine repair

- Detailed operating instructions including cross references to original part/tool numbers
- Clear arrangement in high-quality plastic case with soft foam insert Petrol engines: Twin camshaft engines 1.2-1.4-1.6-1.8 16V

FIAT Brava/Bravo, Barchetta, Cargo, Coupé, Marea, Palio/Weekend, Punto, Multipla, Stilo, Idea, Doblo, Marea/Weekend

Diesel engines: JTD-Diesel engines 1.9 D/TD – 1.9 JTD – 2.4 TD/JTD Brava/Bravo, Cargo, Marea/Weekend, Palio/Weekend, Punto, Multipla, Stilo, Doblo, Ulysee, Ducato, Scudo

#### Assortment of 20 pieces

Contents:

3088-11

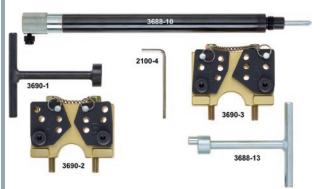
3688-1 (2x) 2 (2x) 3 5 6 7 8 10 12 13 41 42 3788-1 5 8 12 2100-04

2100 01	
HAZET No.	EAN-No. 4000896+
3688/20	167265
Crankshaft Locking Tool 3088-11	136742
Piston Position Tools 3688-1	137343
Camshaft Setting Tool 3688-2	137220
Double Pin Wrench 3688-3	137329

### **Engine Timing Tool FIAT**

•		X
HAZET No.	EAN-No. 4000896+	
Tensioner Adjuster 3688-5	137336	
Flywheel Holding Tool 3688-6	137053	
Camshaft Setting Plate (Exhaust) 3688-7	166152	
Camshaft Setting Plate (Inlet) 3688-8	166169	
TDC Position Tool, application with dial gauge 2155-65 3688-10	137527	
Flywheel Holding Tool 3688-12	137367	
Balancer Shaft Belt Tensioner Adjuster 3688-13	137374	
Camshaft Setting Plate 3688-41	137237	
3688-42	137244	
Crankshaft/Flywheel TDC Locking Pin 3788-1	136643	
Locking Pin/Bolt 3788-5	136513	
Camshaft and Injection Pump Locking Bolt/Pin 3788-8	136544	
Holding Tool for Crank Shaft Pulley Removal 3788-12	137015	
Offset Screwdriver 2100-04	011322	

### **Engine Timing Tool ALFA**



#### For the professional engine repair

- For timing belt changing and other engine repairs
- For ALFA-ROMEO 1.4-1.6-1.8 and 2.0-16V-TWINSPARK since 1995 and 2.0 JTS-petrol engine: 145, 146, 147, 155, 156, 166, Spider, GTV, GT
- · Camshaft locking when replacing the timing belt
- Camshaft timing as well as TDC determination
- Assortment of 6 pieces

Contents: 2100-04

3688-10 13 3690-1 2 3

HAZET No.	EAN-No. 4000896+
3690/6	156016
Balancer Shaft Belt Tensioner Adjuster	
3690-1	156023
Camshaft Setting Plate (Inlet)	
3690-2	156030
Camshaft Setting Plate (Exhaust)	
3690-3	156047
TDC Position Tool, application with dial gauge 2155-65	
3688-10	137527
Balancer Shaft Belt Tensioner Adjuster	
3688-13	137374
Offset Screwdriver	
2100-04	011322



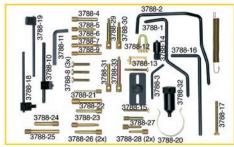


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### **Engine Timing Tool CITROËN/PEUGEOT**







#### For the professional engine repair

- For timing belt changing and other engine repairs
- Detailed operating instructions including cross references to original part/tool numbers
- · Clear arrangement in high-quality plastic case with soft foam insert

**Petrol engines:** 1.0 1.1 1.4 1.6 1.8 1.9 2.0 Turbo as well as twin camshaft engines

1.6 1.8 2.0 2.2 16V

CITROËN AX, BX, ZX, XM, Saxo, Xsara, Xantia, Synergie/Evasion, Berlingo, Dispatch/Jumpy, C 15, Relay/Jumper, Synergie, C 5 (2000 up to 2002), C 8

PEUGEOT 106, 205, 206, 306, 307, 309, 405, 406, 407, 605, 806, 807, Expert, Partner, Boxer (since 1986), 406 Coupé, 607

#### Diesel engines:

Dieset engines:
1.4 1.5 1.7 1.8 1.9 2.1 2.5 D/TD/TDi
and HDI diesel engines
1.4 1.6 2.0 2.2
CITROËN AX, ZX, XM, Visa, Xsara, Xantia, Dispatch, Synergie/Evasion, Berlingo, Dispatch, Jumpy, C 2, C 3, C 5, Relay/Jumper

PEUGEOT 106, 205, 206, 305, 306, 307, 309, 405, 406, 406 Coupé, 605, 607, 806, 807, Express, Expert, Partner, Boxer (since 1986)

#### Assortment of 37 pieces

#### Contents:

3788-1 2 3 (3x) 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 24 25 26 (2x) 27 28 (2x) 29 30 31 32

24 25 26 (2X) 21 26 (2X) 29 30 31 32 33	
H <u>AZET</u> No.	EAN-No. 4000896+
3788/37	127740
Crankshaft/Flywheel TDC Locking Pin	
3788-1	136643
3788-2	136650
3788-3	136667
Injection Pump Locking Pin	
3788-4	136506
Locking Pin/Bolt	
3788-5	136513
Injection Pump Locking Bolt/Pin	
3788-6	136520
Camshaft Locking Bolt/Pin	
3788-7	136537
Camshaft and Injection Pump Locking Bolt/Pin	
3788-8	136544
Tensioner Setting Pin	
3788-9	136551
Special Wrench for Tensioner Roller	
3788-10	136964
3788-11	136971
Holding Tool for Crank Shaft Pulley Removal	
3788-12	137015
Flywheel locking tool for the removal of the crank shaft pulley	
3788-13	137022

### **Engine Timing Tool CITROËN/PEUGEOT**







#### For the professional engine repair

- For checking and adjustment of engine timing
- For diesel engines: 1.4 Hdi: DV4 1.6 Hdi: DV6 2.0 Hdi: DW10 2.2 Hdi: DW12 2.0 JTD, 2.2 JTD
- CITROËN Xsara/Picasso, C2, C3, C4, C5, Evasion, Synergie, Relay/ Jumper, Xantia, Berlingo, Dispatch/ Jumpy
- PEUGEOT 206, 306, 307, 406/Coupé, 607, 807, Expert, Partner, Boxer
- FIAT LANCIA SUZUKI

In Safety-Insert-System, 2-component soft foam insert 16 pieces

- 3788-1 Crankshaft/flywheel TDC locking pin 3788-2 Crankshaft/flywheel TDC locking pin 3788-9 Tensioner setting pin
- 3788-13 Flywheel locking tool
- 3788-15 Crankshaft pulley remover 3788-16 Flywheel TDC locking pin 3788-18 Adjuster 3788-19 Adjuster

- 3788-20 Timing belt retaining clip
- 3788-21 Injection pump and crankshaft locking pin (2x)
- 3788-22 Flywheel locking tool 3788-23 Camshaft locking pin
- 3788-35 Setting pin
- 3788-36 Setting pin 3788-38 Locking pin

HAZET	EAN-No.
No.	400896+
3788/16	186938

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### Engine Timing Tool CITROËN / PEUGEOT / FORD/FIAT/MAZDA/Volvo



#### For the professional engine repair

- For checking and adjustment of engine timing
- For diesel engines: 1.4 HDi: DV4, 1.6 HDi: DV6, 1.4 TDCi, 1.6 TDCi
- CITROËN C1, C2, C3/ Pluriel, C4, Picasso, C5/ II/III, Xsara, Xsara Picasso, Berlingo
- PEUGEOT 107, 1007, 206/CC, 207, 307/CC, 308
- FIAT Scudo
- FORD Fiesta, Fusion, Focus, Focus C-Max, C-Max
- MAZDA 2.3
- Volvo S40, V50, C30

In Safety-Insert-System, 2-component soft foam insert

4 pieces 3788-21 Injection pump and crankshaft locking pin (2x)

3788-22 Flywheel locking tool

3788-23 Camshaft locking pin

HAZET 3788/4

EAN-No. 4000896+

186570

### **Engine Timing Tool CITROËN/PEUGEOT/MINI**



#### For the professional engine repair

- Detailed operating instructions including cross references to original part/tool numbers
- · Single parts optionally available

### CITROËN

C4 (2008-), C4 Picasso (2008-)

PEUGEOT

207 (2006-), 207CC (2007-), 308 (2007-)

MINI One R56 (2007-), Cooper R55/R56 (2006-), Cooper S R55/R56 (2006-)

Engine types:

1.4VTi (Valvetronic) EP3(8FS)

1.6VTi (Valvetronic) EP6(5FW) 1.6DHP (Direct Injection) EP6DT (5FX) EP6DTS (5FY) N12 1.4/1.6 (Valvetronic)

N14 1.6 (Direct Injection)

### Set of 9 pieces, in soft foam insert

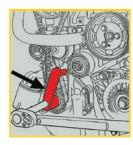
Contents: 2988-22

3788-34 35 36 37

HAZET EAN-No. 4000896+ 3788/9 180356

### **Engine Timing Tool RENAULT**

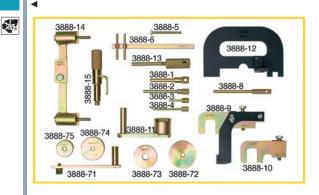




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3888-75

### **Engine Timing Tool RENAULT**



### For the professional engine repair

- For timing belt changing and other engine repairs
- Detailed operating instructions including cross references to original part/tool numbers
- · Clear arrangement in high-quality plastic case with soft foam insert

#### Petrol engines:

twin camshaft engines
1.2 1.4 1.6 1.8 2.0 16V 2.5 20V

RENAULT Clio, Twingo, R 19, Mégane, Scenic, Laguna,

Safrane, Espace, Express/Extra, Rapid, Kangoo

#### Diesel engines:

1.9 D/TD/d Ti 2.2 D/TD 2.5 D 2.8 d Ti 1.5 d Ci 1.9 d Ci 2.2 d Ci 2.5 d Ci

RENAULT Clio, Express/Extra, Mégane,

Scenic, Laguna, Espace, Safrane, Kangoo, Trafic, Master, Vel Satis, R 5, R 19, Rapid

OPEL Vivano, Movano 2.5CDTI, engine code G9U

#### Assortment of 19 pieces

#### Contents:

\*

3888-1 9 10 11 12 13 14 15

71 72 73 74 75	
H <u>AZET</u> No.	EAN-No. 4000896+
3888/19	127733
Crankshaft TDC Locking Pin	
3888-1	136575
3888-2	136582
Setting Pin	
3888-3	136599
3888-4	136605
Adjuster 3888-5	107051
	137251
Double Pin Wrench 3888-6	137268
Crankshaft Locking Tool	101200
3888-8	136612
Camshaft Setting Plate (Exhaust)	100012
3888-9	137275
Camshaft Setting Plate (Inlet)	
3888-10	137282
Tensioning Tool	
3888-11	137299
Camshaft Setting Plate	
3888-12	137305
Crankshaft Locking Tool	
3888-13	136629
Camshaft Setting Plate	
3888-14	137312
Setting Pin	
3888-15	136636
Arm	
3888-71	137503
Adapter	
3888-72	137442
Spacer	
3888-73	137510
Adapter	
3888-74	137459

137466

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### **Engine Timing Tool RENAULT**



#### For the professional engine repair

- For timing belt changing and other engine repairs
- · Supplementary Set, 8 pieces, in soft foam insert
- For **RENAULT** 1.4 and 1.6-16V petrol engines: Clio 3, Mégane 2, Scenic 2, Laguna 2, Modus, Kangoo 1.8 and 2.0-16V petrol engines: Clio 2, Mégane 1/2, Scenic 1/2, Laguna 1/2, Espace JEO/JKO, Trafic 2 1.9 dCi Diesel: Mégane 2, Laguna 2, Espace/Grand Espace 2
- · Camshaft locking when replacing the timing belt
- Camshaft timing/engine timing
- · Crankshaft positioning

Contents:

3888-16 17 18 19 (2x) 20 21 76

2000 10 17 10 10 (EX) 20 21 10	
HAZET No.	EAN-No. 4000896+
3888/8	155699
Camshaft Plate Bracket	
3888-16	155705
Camshaft Sprocket Holding Tool	
3888-17	155712
6-Point Threaded Nut	
3888-18	155729
Gear Arm	
3888-19	155835
Belt Guide Pulley Wrench	
3888-20	155842
Camshaft Sprocket Holding Tool	
3888-21	155859
Adapter	
3888-76	155866

### **Universal Engine Timing Tool Set**



#### For the professional engine repair E.g. for timing belt changing

- Suitable for single and twin camshaft petrol and diesel engines
- For locking the injection pump sprocket and retaining the camshaft timing
- The use of this locking tool ensures that the camshaft sprockets/injection pump sprockets are locked in their correct positions and crankshaft timing is retained during timing belt replacement or other engine repair

### **Universal Engine Timing Tool Set**

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- Detailed operating instructions
- Single parts optionally available
- Clear arrangement in high-quality plastic case with soft foam insert
- Assortment of 5 pieces

4794-1 2 31 32 33

H <u>AZET</u> No.	EAN-No. 400896+
4794/5	127764
Locking Device 4794-1	137534
Extension Bridge Piece 4794-2	137541
Basic unit 4794-31	137558
Locking Pin (short) 4794-32	136872
Locking Pin (long) 4794-33	136889



#### For the professional engine repair

Locking pins and tools for timing belt changing, for crankshaft and camshaft locking for petrol and diesel engines on VW, AUDI, SEAT, ŠKODA, FORD, OPEL, CITROËN, PEUGEOT, RENAULT

### Contents:

2587-1

2588-1 2 3 4 5 6 14 15 16 110

2 3 4 5 6 14 15 16 3088-15 16 19 3488-1 4 10 11 3788-1 3 4 5 7 9 10 24 28 3888-1 9 10 12

4794-1	
HAZET No.	EAN-No. 4000896+
4794/35	160594
2587-1	053476
Crankshaft Fixing Device for locking the crankshaft, e.g. VW 1.6 I and 2.0 I Common-Rail diesel engine	
2588-1	087730
<b>Locking Plate</b> for locking the tensioner roller	
2588-2	087747
Locking Pin for locking the camshaft sprocket e.g. VW 1.6 I and 2.0 I Common-Rail diesel engine	
2588-3	087754
Camshaft locking for locking the camshaft sprockets when changing the timing belt	
2588-4	110391
Camshaft Setting Plate	
2588-5	137107
2588-6	137114
Fixing Bolt	
2588-14	144198
2588-15	144204
2588-16	144211

Ingenious Tools



## Specialty Tools - Engine - Engine Timing/Timing Belt



HAZET No.	EAN-No. 4000896+
For 4-cyl. diesel/pump-nozzle injection engines since 2005 e.g. VW 2.0 I Common-Rail diesel engine Crankshaft Fixing Device For fixing the <b>oval</b> crankshaft timing belt pulley e.g. during timing belt replacement or engine repair	
2588-110	143283
Camshaft Setting Tool (yellow) 3088-15	137190
Camshaft Setting Tool (blue) 3088-16	137206
Camshaft Sprocket Locking Tool 3088-19	155965
Camshaft Setting Plate 3488-1	137084
Crankshaft TDC Location Pin 3488-4	137497
Crankshaft Location Pin 3488-10	136773
3488-11	136780
Crankshaft/Flywheel TDC Locking Pin 3788-1	136643
3788-3	136667
Injection Pump Locking Pin 3788-4	136506
Locking Pin/Bolt 3788-5	136513
Camshaft Locking Bolt/Pin 3788-7	136537
Tensioner Setting Pin 3788-9	136551
Special Wrench for Tensioner Roller 3788-10	136964
Crankshaft/Flywheel TDC Locking Pin 3788-24	136957
Locking Pin 3788-28	136940
Crankshaft TDC Locking Pin 3888-1	136575
Camshaft Setting Plate (Exhaust) 3888-9	137275
Camshaft Setting Plate (Inlet) 3888-10	137282
Camshaft Setting Plate 3888-12	137305
Locking Device 4794-1	137534

**Universal Engine Timing Tool Set** 

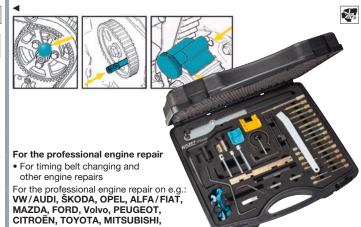
### **Universal Engine Timing Tool Set**



3788-3



### **Universal Engine Timing Tool Set**



HONDA, NISSAN etc. 48 pieces, in plastic case with soft foam insert

Conten	is:									
2540-2	2	587								
2588-1	2	3 6	110	3	088-	15	16			
3488-2	3	4 10	11	13	15	18	19			
3788-1	2	3	4	8	6	7	9	11	17	
22	23	24	25	27	28	29	30	31	33	

0400 2	0	- IC	, , ,	10	10	10	10							
3788-1	2	3	4	8	6	7	9	11	17	18	19	20	21	
22	23	24	25	27	28	29	30	31	33	34	35	36		
4788-1/6 4794-1 2														
HAZET	_												E/	4

4700-170 4794-1 2	
H <u>AZET</u> No.	EAN-No. 4000896+
4794/48	166176
Counterholder	
2540-2	166190
2587	017140
Crankshaft Fixing Device for locking the crankshaft, e.g. VW 1.6 I and 2.0 I Common-Rail diesel engine 2588-1	087730
Locking Plate for locking the tensioner roller 2588-2	087747
Locking Pin for locking the camshaft sprocket e.g. VW 1.6 I and 2.0 I Common-Rail diesel engine 2588-3	087754
Camshaft Setting Plate 2588-6	137114
For 4-cyl. diesel/pump-nozzle injection engines since 2005 e.g. VW 2.0 I Common-Rail diesel engine Crankshaft Fixing Device For fixing the <b>oval</b> crankshaft timing belt pulley e.g. during timing belt replacement or engine repair	
2588-110	143283
Camshaft Setting Tool (yellow) 3088-15	137190
Camshaft Setting Tool (blue) 3088-16	137206
Locking Pin	
3488-2	136797
3488-3	136803
Crankshaft TDC Location Pin 3488-4	137497
Crankshaft Location Pin 3488-10	136773
3488-11	136780
Camshaft Setting Plate 3488-13	155880
Crankshaft Locking Tool 3488-15	155910
Locking Pin 3488-18	166206
3488-19	166213
Crankshaft/Flywheel TDC Locking Pin 3788-1	136643

136506 Continuation see next page ▶

136650

136667









### Specialty Tools - Engine - Engine Timing/Timing Belt - Spark and Glow Plug

### **Universal Engine Timing Tool Set**

	€	ò
HAZET No.	EAN-No. 4000896+	
Locking Pin/Bolt 3788-5	136513	
Injection Pump Locking Bolt/Pin 3788-6	136520	
Camshaft Locking Bolt/Pin 3788-7	136537	
Tensioner Setting Pin 3788-9	136551	
Special Wrench for Tensioner Roller 3788-11	136971	
Locking Bolt 3788-17	137169	
Balancer Shaft Belt Tensioner Adjuster 3788-18	136988	
3788-19 Timing Belt Retaining Clip	136995	
3788-20	137176	
Injection Pump and Crankshaft Locking Pin 3788-21	136858	
Flywheel Locking Tool 3788-22	136865	
Camshaft Locking Pin 3788-23	136766	
Crankshaft/Flywheel TDC Locking Pin 3788-24	136957	
Locking Pin 3788-25	136919	
3788-27	136933	
3788-28  Camshaft Locking Pin	136940	
3788-29 3788-30	136568 136674	
Crankshaft Locking Tool 3788-31	136681	
Camshaft Locking Pin 3788-33	136698	
Setting Pin 3788-34	166220	
3788-35	166237	
3788-36	166244	
Locking Pin Set 4788-1/6	166183	
Locking Device	10750 :	
4794-1	137534	
Extension Bridge Piece 4794-2	137541	

### **Assembly Lever for V-Ribbed Belt**



- For the operation of the tensioner roller and for installing the V-ribbed belt on MERCEDES-BENZ type 168, 169 (A-Class), 245 (B-Class)
- Surface: chrome-plated, bold burnished

#### Made in Germany

HAZET	<u>[</u>	EAN-No.
No.	mm	4000896+
2714-1	600	076789

### Spark and Glow Plug

### **Overview Spark and Glow Plugs**

H <u>AZET</u> No.	<u>e</u> mm	<u>•</u>	_ mm	
880 Lg-20.8	20.8	<sup>13</sup> ⁄ <sub>16</sub>	70	10 3/8
880 TZ-20.8	20.8	<sup>13</sup> / <sub>16</sub>	70	10 3/8
880 MgT	20.8	<sup>13</sup> ⁄ <sub>16</sub>	64	10 3/8
880 A MgT	16	5/8	64	10 3/8
880 MgT-18	18	_	62	10 3/8
880 A MgT-1	16	5/8	64	10 3/8
880 KF	20.8	<sup>13</sup> /16	64	10 3/8
880 A KF	16	5/8	64	10 3/8
900 Lg-20.8	20.8	<sup>13</sup> ⁄ <sub>16</sub>	85	125 1/2
900 TZ-20.8	20.8	<sup>13</sup> ⁄ <sub>16</sub>	85	125 1/2
900 MgT	20.8	<sup>13</sup> ⁄ <sub>16</sub>	68	125 1/2
900 A MgT	16	5/8	71	125 1/2
900 KF	20.8	<sup>13</sup> ⁄ <sub>16</sub>	71	125 1/2
900 A KF	16	5/8	71	125 1/2
2505-2	20.8	<sup>13</sup> ⁄ <sub>16</sub>	137.5	10 3/8
2530 (G)	10	-	140	10 3/8
4760-1 (G)	12	-	152	10 3/8
4760-2 (G)	8	-	142	10 3/8
4760-3 (G)	9	-	142	10 3/8
4766	16	5/8	97	10 3/8
4766-1	16	5/8	270	10 3/8
4766-2	14	-	64	10 3/8
4767 A KF	16	5/8	480	125 1/2

(G) = Glow Plug

### **Spark Plug Socket Pliers**



- For installing and removing spark plug sockets
- Especially suitable for hot terminals
- With side cutter
- Ergonomically shaped 2-component plastic handle covers
- Surface: chrome-plated

### Made in Germany

HAZET	/	EAN-No.
No.	mm	4000896+
1849	195	007080



- For installing and removing straight **spark plug sockets**
- Safe application due to milled jaw profile
- Especially on MERCEDES-BENZ
- Ergonomically shaped **2-component plastic handle covers**
- Surface: chrome-plated

HAZET	_	EAN-No.
No.	mm	4000896+
1849-1	200	128037

# Specialty Tools - Engine - Spark and Glow Plug





### **Spark Plug Socket Pliers**



- · For installing and removing straight spark plug sockets
- Long jaws provide a better safety distance to the hot engine
- · Especially for deeply located spark plug sockets, e.g. on AUDI V6 and V8 engines, JAGUAR 12 cyl.
- Ergonomically shaped 2-component plastic handle covers
- Surface: chrome-plated

#### Made in Germany

HAZET	/	EAN-No.
No.	mm	4000896+
1849-2	290	007103



- For installing and removing spark plug sockets
- Especially suitable for hot terminals
- · Long style
- Ergonomically shaped 2-component plastic handle covers
- Surface: chrome-plated

#### Made in Germany

HAZET	/	EAN-No.	
No.	mm	4000896+	
1849-3	265	055098	

## **Spark Plug Socket Remover**



- For installing and removing spark plug sockets even on hot engines
- For 2.8-2.9 I VR6-engine VW Golf, Passat. Vento, Corrado, T5 2.0 I, Lupo 4-cyl. since 1999, AUDI A4, A6 with 2.6- and 2.8 I V6-engines
- Slotted tube for optimal and careful guidance of the cable

#### Made in Germany

HAZET	/	EAN-No.	
No.	mm	4000896+	
1849-6	253	007110	



#### For installing and removing spark plug sockets even on hot engines

- Now also for VW-Golf 4, 5, 6-1.6 I, Polo 5-1.2 I since 2009, Bora since 1999 and Touran since 2004 with 1.6 l, 4 cyl. injection engine with roller cam follower, New Beetle since 1999 with 2.0 l,  $\,$ 4 cyl. injection engine and 2 valve 4 cyl. injection
- engine with roller cam follower
- AUDI A3 since 2004 with 2 valve 4 cyl. injection engine
- SEAT, SKODA and SMART For Two (type 450)
- With T-handle

#### Made in Germany

made in dermany						
HAZET No.	/ mm	EAN-No. 4000896+				
1849-9	275	110476				

### Ignition Coil Remover



- coils with final output stage on **VW** Polo, Fox 1.2 I, Golf 1.4, 1.6 I, Golf Plus 1.4 I since 2005, Caddy 1.4 I, Bora 1.4, 1.6 l, Beetle 1.4 l (petrol engine since 2003), Scirocco 1,4 I since 2009, Lupo 4 cyl. direct injection engine since 1999, Passat, Touran 1.6 I, Phaeton, Transporter T4, ŠKODA Fabia
- With T-handle
- Surface: chrome-plated

#### Made in Germany

HAZET	_	EAN-No.	
No.	mm	4000896+	
1849-7	135	110353	



- For installing and removing ignition coils with final output stage on VW Golf, Bora, Eos 3.2 I since 2006, Passat, Sharan, Touareg 6-cyl. since 2003, Transporter T5 3.2 I 6-cyl. injection engine since 2004 **AUDI** TT 3.2 I model years 1999–2007, A3 3.2 I since 2004
- With T-handle
- Surface: chrome-plated

#### Made in Germany

HAZET	/	EAN-No.	
No.	mm	4000896+	
19/0.9	122	110260	



### Ignition Coil Remover

- For installing and removing ignition coils with final output stage
- VW direct injection engines 2.0: Golf (since 2004), Touran (since 2004), Passat (since 2006), Eos (since 2006), Polo (since 2002) 4 cyl. 5V, Scirocco (since 2009) 1.8 and 2.0 I, Tiguan (since 2006) 1.8 and 2.0 I, Phaeton (since 2003) 8 cyl.
- AUDI direct injection engines: A3 (since 2004 ) 2.0, A4 (since 2002) 2.0, A5 (since 2008) 3.2 and 4.2 I, A6 (since 2005) 3.2, A8 (since 2003) 3.2-4.2 and 5.2 l, TT (since 2007) 1.8 and 2.0 l, R8 (since 2008) 4.2 l Q5 (since 2008) 2.0 and 3.2 I, Q7 (since 2007) 3.6 and 4,2 I
- With T-handle
- Surface: chrome-plated

### Made in Germany

HAZET	/	EAN-No.	
No.	mm	4000896+	
1849-10	102	132201	

### **Spark Plug Wrench**





- For spark plugs with 20.8/13/16" wrench size
- With rubber ply
- Adjustable in length from 137.5 mm to 157.5 and 197.5 mm
- □ drive 10 = 3/8
- Surface: chrome-plated

#### Made in Germany

HAZET	S	/	EAN-No.	
No.	mm	mm	4000896+	
2505-2	20.8	197.5	016266	



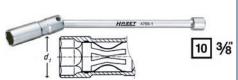
- For 16 mm (%") spark plugs (C-plugs), e.g. on motorcycles BMW C1, KAWASAKI, YAMAHA, HONDA, SUZUKI, DUCATI, MERCEDES-BENZ passenger cars e.g. A-Class (type 168, 169), B-Class (type 245), SMART (type 451)
- With ball joint
- · With fixing clamp for a firm hold of the spark plug
- Short style
- □ drive 10 = 3/8"
- Surface: chrome-plated

HAZET	S	<b>d</b> 1	<b>d</b> ₂	_	EAN-No.
No.	mm		mm	mm	4000896+
4766	16	21.4	18	97	049295





# **Spark Plug Wrench**



- For 16 mm (5%") spark plugs
   e.g. on VW, AUDI, ŠKODA, RENAULT, FIAT,
   FORD, OPEL, BMW, NISSAN, HONDA, MAZDA, MITSUBISHI, KIA, Volvo
- With ball joint
- With fixing clamp for a firm hold of the spark plugs
- □ drive 10 = 3/8
- Surface: chrome-plated

#### Made in Germany

HAZET No.	S mm	<b>d</b> ₁ mm	<i>d₂</i> mm	_ mm	EAN-No. 4000896+	
4766-1	16	21.4	18	270	048991	





- For 14 mm spark plugs
- With fixing clamp for a firm hold of the spark plug
- 12-Point profile enables application of 14 mm spark plugs with 6-Point and 12-Point
- Application on BMW E 90 N 54 engine, 335 i limousine since 2006, series 1 (F20) 118i, RENAULT Modus, Twingo, Clio, Kangoo with 1.2 | 16 V engine, PEUGEOT 207, 307 as well as CITROËN C4 with 1.4 and 1.6 | 16 V engine, C5 with 2.0 HPi engine, MERCEDES-BENZ engine M 156, engine M 276, NISSAN Micra Note, **MINI** 1.2 – 1.4 I 4-cyl. since 2007, **FORD** 1.0 EcoBoost engine, **ALFA** 1.8 TBI engine, **KIA**

#### Made in Germany

HAZET No.	S	<b>d</b> ₁ mm	<b>d</b> ₂ mm	/ mm	EAN-No. 4000896+	
4766-2	14	18	17.3	64	087655	





- With spring in the joint
- With fixing clamp for a firm hold of the spark plugs
- ☐ drive 12.5 = ½"
- Surface: chrome-plated

### Made in Germany

HAZET	S	/	EAN-No.
No.		mm	4000896+
• For 16 mr	n (5%") spai	rk pluas	

• With three outside guide collars 4767 A KF 049028

### **Spark Plug Brush**



- For cleaning of electrodes and contacts on spark plugs
- Special corrugated brass wire bristles
- 3 rows
- Trim size: 15 mm
- Wooden body

#### Made in Germany

HAZET	/	EAN-No.
No.	mm	4000896+
2131	150	012541

### **Glow Plug Socket**







- For 10 mm glow plugs
- ☐ drive 10 = 3/8"
- · With universal joint
- With ball clamping Application:
- VW, AUDI diesel direct injection engines TDi and MERCEDES-BENZ CDI, SMART
- Surface: chrome-plated

#### Made in Germany

HAZET	S	_	EAN-No.	
No.	mm	mm	4000896+	
2530	10	140	016341	

#### **Glow Plug Wrench**







- For 12 mm glow plugs, e.g. on MERCEDES-BENZ 201 and 202 with 4 valve technique as well as on OPEL, BMW and FORD diesel engines
- With ball clamping to hold the glow plug
- Universal joint providing an optimal angular movement
- □ drive 10 = ¾"
- Surface: chrome-plated

#### Made in Germany

HAZET	S	/	EAN-No.
No.		mm	4000896+
4760-1	12	152	022229

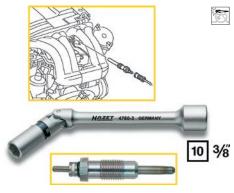
### **Glow Plug Wrench**



- For 8 mm glow plugs, e.g. on MERCEDES-BENZ, SMART, VW, FIAT and OPEL with diesel engines
- With ball clamping to hold the glow plug
- Universal joint providing an optimal angular movement
- □ drive 10 = 3/8"
- Surface: chrome-plated

#### Made in Germanv

HAZET	S	_	EAN-No.	
No.	mm	mm	4000896+	
4760-2	8	142	118670	



- For **9 mm glow plugs**, e.g. on **OPEL, FIAT, ALFA, LANCIA** diesel engines
- With ball clamping to hold the glow plug
- Universal joint providing an optimal angular movement
- ☐ drive 10 = 3/8'
- Surface: chrome-plated

### Made in Germany

HAZET	S	_	EAN-No.	
No.	mm	mm	4000896+	
4760-3	9	142	127849	

### **Glow Plug Socket Pliers**



- For installing and removing glow plug sockets
- For the new generation of diesel engines, e.g. MERCEDES-BENZ, VW, AUDI, SEAT, ŠKODA and BMW
- Offset design for the use on glow plug sockets in areas with restricted access
- The pliers' design is especially adapted to the sockets
- With recess preventing cable damage
- Ergonomically shaped 2-component plastic handle covers

HAZET	EAN-No.
No.	4000896+
4760-5	089130



## Specialty Tools - Engine - Cylinder Head - Valve / Piston

### **Cylinder Head**

**Screwdriver Socket** 

# Cylinder Head





- For the operation of Polydrivecylinder head bolts on VW engines (VW, AUDI, SEAT, ŠKODA)
- ☐ drive 12.5 = ½"

#### Made in Germany

HAZET No.	I <sub>1</sub>	l <sub>2</sub> mm	EAN-No. 4000896+	
2579-9	130	168	086931	

### **Screwdriver Socket**









- For screws on cylinder head and cardan shafts screws with internal serration XZN
- □ drive 12.5 = ½"

#### Made in Germany

HAZET No.	l₁ mm	l <sub>2</sub> mm	d	<b>d</b> ₂ mm	М	EAN-No. 4000896+
2751	100	140	23	23	10	017508

### TORX® Cylinder Head Tool











For the operation of cylinder head bolts

- TORX\* Impact Socket
- Suitable for impact wrenches
- □ drive 20 = ¾"
- Reinforced design
- Surface: phosphated

#### Made in Germany

On **MAN** commercial vehicles F 2000, F 90, F 8 and

**MAN** busses with D 25 and D 28 engines **2850-E 20** 110 18.49 079681

On **MAN** commercial vehicles with Common Rail engine (D20)

**2850-E 24** 110 22.16 146758

### Valve/Piston

### **Compressed Air Adapter**







- For keeping installed valves lifted when installing and removing the cylinder head valve keys
- On **FORD** engines except CVH engines and multi-valve engines
- Spark plug threads M 14 x 1.25 and M 18 x 1.5
- Compressed-air supply 13 mm 6-point

#### Made in Germany

HAZET	_	EAN-No.
No.	mm	4000896+
3428	140	018819

### **Piston Ring Compressor**



- With square key for tensioning
- May be locked continuously
- High-strength spring band steel

#### Made in Germany

HAZET No.	Ø	h	EAN-No. 4000896+	
794-01	40- 75	50	031597	
794-1	60-125	80	031610	
794-2	90-175	80	031641	
794-3	90-175	165	031665	

### **Piston Ring Pliers**



- For compression of piston rings on water- and air-cooled engines
- Tightening band (width 32 mm), can easily be released
- Surface: chrome-plated

# ■ Made in Germany

#### HAZET No. I mm Ø mm EAN-No. 4000896+ 794 U-3 332 70−100 031672

### **▼** Piston Ring Pliers



- For installing and removing piston rings
- Surface: bright nickel-plated

#### Made in Germany

HAZET No.	_ mm	Ø	EAN-No. 4000896+	
790-1	220	50-100	031412	
790-1 a	240	65-110	031429	
790-2	280	110-150	031443	



- With prism holder for safe grip of various piston ring types
- Surface: nickel-plated, prism holder burnished

#### Made in Germany

HAZET No.	_ mm	Ø	EAN-No. 4000896+	
790-3	220	60-120	031450	

### **Valve Refacer**





- With suction cup
- Made in Germany

HAZET No.	Ø mm	EAN-No. 4000896+
795-1	20	031771
795-2	25	031788
795-3	30	031795
795-4	37	031801

### Valve Spring Compressors



- With 1 pair of straight and bent jaws each, 792-1 with straight jaws sb 75-225 with bent jaws sb 45-195
  792-2 with straight jaws sb 120-280 with bent jaws sb 90-250
- Surface: bright nickel-plated

	-		
HAZET No.	_ mm	EAN-No. 4000896+	
792-1	290	031481	
792-2	380	031511	







### Valve Stem Seal Ring Pliers



- For removing valve stem seals on 2-valve engines
- On VW/AUDI, FORD, OPEL, NISSAN, etc.
- Serrated
- Hardened jaws
- Surface: nickel-plated, jaws burnished

#### Made in Germany

HAZET	_	EAN-No.
No.	mm	4000896+
791-5	250	031467



- For easy and reliable removing of deeply located valve stem seals due to the extra long jaws
- For multi-valve engines e.g. on AUDI, FORD, OPEL
- · Dip-coated jaws
- Jaws hardened, serrated
- Straight
- Surface: nickel-plated

#### Made in Germany

HAZET	/	EAN-No.
No.	mm	4000896+
791-8	270	061068



- For removing valve stem seals especially on BMWmulti-valve engines, OPEL, FORD, SEAT, ŠKODA and VW
- Jaws hardened, longitudinally toothed
- Working area dip-insulated avoiding damage to the valve timing

### Made in Germany

HAZET	/	EAN-No.	
No.	mm	4000896+	
2991	250	018352	

# Fuel System / Injection Technology

## 7

### **Turbo Charger Wrench**





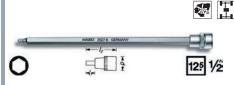
# Loosen and tighten turbocharger nuts on MAN commercial vehicles

- Bent form of the box wrench is especially adapted to the confined spaces
- Ergonomically shaped 2-component handle

#### Made in Germany

HAZET	S	_	EAN-No.	
No.	mm	mm	4000896+	
2849-15	15	266	159284	

### Ball-Head Screwdriver Socket



- For the knock sensor on V6 engine
- $\square$  drive 12.5 =  $\frac{1}{2}$
- For inside hexagon screws
- Blades made of special steel

#### Made in Germany

HAZET No.	S	<u>d</u>	l <sub>1</sub>	l <sub>2</sub> mm	EAN-No. 4000896+	
2527-8	8	23	200	238	016310	

### **Injection Line Wrench**



- Open 12-Point Socket for the operation of screwed connections on injection lines
- Surface: chrome-plated

#### Made in Germany

HAZET S [ EAN-No. 4000896+
----------------------------

 $\square$  drive 10 =  $\frac{3}{8}$ "

for **BMW** diesel engines and **OPEL** 2.5 TD engines **4550** 17 115 021680

- For injection lines on MERCEDES-BENZ 100, 130, 314, 360, 360h, 352A, 346/355, 401, 402, 403, 407h, 615, 616, 617
- Long style
- ☐ drive 12.5 = ½"

AEEO 4	17	100	001607
4550-1	17	120	021697

- For injection lines on MERCEDES-BENZ M 352, A 346/355, A, 401, 402/422, LA, 403, 407h, as well as for the dip stick guide tube on M 314
- Long style
- ☐ drive 12.5 = ½′

4550-2	19	119	021734	
--------	----	-----	--------	--









- Open 12-Point Socket for the operation of screwed connections on injection lines
- Surface: chrome-plated

### Made in Germany

HAZET S	/	EAN-No.
No. mm	mm	4000896+

- For the operation of screwed connections on injection lines of MAN commercial vehicles with D 20 engines – Common Rail injection systems
- Short style
- □ drive 10 = 3/8"

|--|

- For the operation of screwed connections on injection lines of MAN commercial vehicles with D 20 engines – Common Rail injection systems
- Short style
- □ drive 10 = 3/8"

4550-4	19	83	104291

### Injection Nozzle Socket



- 6-Point Socket for injection nozzles on MERCEDES-BENZ diesel engines MERCEDES-BENZ-types 202 (C-Class) and 210 (E-Class) with 604, 605 and 606 engines
- With side window
- ☐ drive 12.5 = ½′
- Surface: chrome-plated

### Made in Germany

HAZET	S	_	EAN-No.	
No.	mm	mm	4000896+	
4550-22	22	110	021741	



- 12-point socket for injection nozzles on diesel engines VW, AUDI, MERCEDES-BENZ, OPEL, FORD, PEUGEOT, Volvo MAZDA, NISSAN, MITSUBISHI, DAIHATSU
- Special relief to accomodate the return leakage tubes
- □ drive 12.5 = ½′
- Surface: chrome-plated

#### Made in Germany

HAZET	S	_	EAN-No.	
No.	mm	mm	4000896+	
4555 N	27	85	021840	



• 12-point socket for **injection nozzles** on **BMW** diesel

- ☐ drive 12.5 = ½"
- Surface: chrome-plated

#### Made in Germany

HAZET	S	_	EAN-No.	
No.	mm	mm	4000896+	
4555-1	27	85	021802	





- 12-point socket for injection nozzles on VW Polo 1.3 I diesel engine, NISSAN Terrano TD 25, 27
- $\bullet$  With inside bore hole 22 mm  $\varnothing$
- □ 12.5 = ½"
- Surface: chrome-plated

HAZET	S	_	EAN-No.	
No.	mm	mm	4000896+	
4555-3	22	82	021833	

# Specialty Tools - Engine - Fuel System/Injection Technology



### **Pressure Valve Holder Tool**



- Multipoint socket for installing and removing the pressure valve holder on the MRSF-ERE fuel injection pump on **MERCEDES-BENZ** diesel passenger cars,
  - 601, 602, 603, 605, 606, 615, 616, 617
- With 33 teeth
- ☐ drive 12.5 = ½"
- Surface: chrome-plated

### Made in Germany

HAZET	S	/	EAN-No.	
No.	mm	mm	4000896+	
4556	17.9 x 20	55.5	021864	

### **Pressure Nut Crown Wrench**









Made in Germany

HAZET No



EAN-No. 4000896+

- For commercial vehicles MAN and MERCEDES-BENZ M 401/421 M 402/422, LA, A, M 403/423, M 470h
- ☐ drive 12.5 = ½"

4558

021888

050529

- For commercial vehicles with EDC engines: MERCEDES-BENZ and MAN
- With hole bored through for connecting cable
- 32 mm outside hexagon drive 4558-1 120

- For e.g. commercial vehicles MERCEDES-BENZ and MAN
- With retainer for fixation between pressure nut and nozzle holder - avoids slipping down
- 32 mm outside hexagon drive

4558-2 69

057344

### **Injection Line Wrench**



- For installing and removing the injection lines e.g. on VW, AUDI diesel engines: 1.6 | 4-cyl., 2.0 | 5-cyl., 2.4 | 6-cyl.
- Surface: chrome-plated

#### Made in Germany

HAZET	S	_	EAN-No.	
No.	mm	mm	4000896+	
4560	17 x 17	221	021918	

### Injection Pump Wrench



- Single Box-End Wrench for the fastening screws at the injection pump, when replacing the toothed belt or adjusting the injection start
- Application on 1.6 I 4-cyl. diesel engine AUDI, VW Golf, Jetta, Caddy, Passat, CITROËN
- Surface: chrome-plated

#### Made in Germany

HAZET	S	/	EAN-No.	
No.	mm	mm	4000896+	
4561	13	165	021925	

### **Fuel Line Pliers**



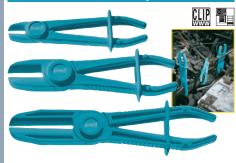
 For the operation of quick release fasteners at the fuel line and at the fuel tank aeration with slight

on FIAT/ALFA/LANCIA vehicles with 1.3 | - 1.9 | - 2.4 | diesel, **CHRYSLER, RENAULT OPEL** (diesel engine) Vectra C/Signum 1.9 I diesel engine, Astra H 1.3 I and 1.9 I diesel engine, Corsa C/Combo/Meriva 1.3 I OPEL (petrol) Corsa C, Astra G, Vectra C

#### Made in Germany

HAZET	/	EAN-No.	
No.	mm	4000896+	
4501-1	155	058624	

### Flexible Hose Clamp



### For clamping flexible hoses

- · Firm fixation with clamp ring
- Made of high-quality plastic

No.	l mm	EAN-No. 4000896+
For heating a up to 15 mm		
4590-1	150	021932
For hoses up	to 30 mm Ø	
4590-2	180	021949
For e.g. cooli	ng liquid hoses	up to 60 mm Ø
4590-3	253	055753

### **Hose Clamps Pliers Set**



HAZET No.	EAN-No. 4000896+
- Far elemening fleville be	

- or clamping flexible hoses
- 3 pieces 4590-1 -2 -3

4590/3 058266

### Intake Pipe Screwdriver Socket



- For inside hexagon screws
- ☐ drive 12.5 = ½

For the intake manifold screws on VW Golf 4, Golf 5

#### Made in Germany

HAZET No.	S	d	I <sub>1</sub>	l <sub>2</sub>	EAN-No. 4000896+	
2584-1	6	23	210	248	017058	

### **Injector Extractor**







 For removing seized or stuck common rail injectors without having to disassemble the cylinder head

### Made in Germany

HAZET No.	_ mm	EAN-No. 4000896+
engines 611	RCEDES-BEN , 612, 613 etc. uitable for the I	

- due to the cylinder head cover
- Set of 2 pieces: 4797-1 2

4797/2	460	121205	
Impact Extrac M 16 x 1.5	tor		
4797-1	460	121175	
Injector Claw M 16 x 1.5			
4797-2	130	121182	

- External Adapter with inside thread M16 x 1.5 on M27 x 1
- · For the removal of Bosch injectors with outside thread M27 x 1
- In conjunction with Impact Extractor 4797-1
- Operating mode:

The External Adapter must be used when the Injector Claw cannot be used, either because of the vehicle type or because of the lack of space. Note: Always replace the injector that has been removed with the External Adapter!

50

For the simple removal of injectors with the aid of an impact extractor, e.g. HAZET 4855-9 on **MAN** engines D08, D20, D26 and D28

- Especially suited to the limited spaces in the cylinder head
- Due to the tool's special claw, the injector may be seized with caution, damage-free removal with the aid of the impact extractor
- Injector claw with inside thread M10 x 1.5 mm for easy insertion in the impact extractor

4797-5 174 176137







### Cooling System/ **Hose Connection**

# **Hose Clamp Pliers**



- For simple hose clamps. e.g. on washing machines
- Movable jaws
- Surface: chrome-plated

#### Made in Germany

HAZET	/	sb	EAN-No.	
No.	mm	mm	4000896+	
798	206	40	031832	



- For simple hose clamps
- With locking device
- Movable jaws
- Surface: chrome-plated

#### Made in Germany

HAZET No.	_ mm	sb	EAN-No. 4000896+	
798-1	285	45	031900	

### **Hose Clamp Pliers**



- For clamping multi-use CLIC-type hose clips on fuel lines, e.g. on VW, AUDI, OPEL, PEUGEOT and ALFA
- Open and close easily by turning the pliers by 180°
- With fixed jaws, bent at 90°

#### Made in Germany

HAZET No.	_ mm	sb	EAN-No. 4000896+	
798-2	175	20	051397	

### **Hose Clamp Pliers**



For self-gripping spring band hose clamps

- AUDI, VW, OPEL, PEUGEOT, SMART and MERCEDES-BENZ
- Open and close easily by turning the pliers by 180°
- For clamping multi-use CLIC-type hose clamps
- Movable jaws for use in areas with restricted access
- Surface: nickel-plated

#### Made in Germany

HAZET	/	sb	EAN-No.	
No.	mm	mm	4000896+	
798-3	206	35	102433	



- For spring band hose clamps
- Movable jaws

#### Made in Germany

HAZET No.	_ mm	sb	EAN-No. 4000896+	
798-4	205	35	031948	



- For spring band hose clamps, e.g. on VW, AUDI and OPEL
- Movable jaws

#### Made in Germany

HAZET	_	sb	EAN-No.	
No.	mm	mm	4000896+	
798-5	210	6-40	031955	



- For spring band hose clamps, 12 and 15 mm width, 13−22 mm Ø
- Movable safety jaws

#### Made in Germany

HAZET	/	EAN-No.
No.	mm	4000896+
798-6	235	031962

### **Hose Clamp Tension Device**



- For self-gripping spring band hose clamps sb 8-52 mm ∅
- Enables working in areas with restricted access
- 6-point drive s 6 mm
- Easy working in conjunction with Reversible Ratchet 863 P, optionally with Flexible Extension 870 or 870-2 and 6-Point Socket 850-6 may also be used with Screwdriver for slotted screws (802 or 803) or Flexible Hex Nut-Driver 426-6
- Surface: galvanized

#### Made in Germany

HAZET	sb	EAN-No.	
No.	mm	4000896+	
798-7	8-52	083206	

### **Hose Clamp Pliers**



- For self-gripping spring band hose clamps, 12 and 15 mm width
- Self-adjusting joint allows easy working even on large hose clamps with large diameter
- With locking device
- Movable safety jaws
- · Handles plastic coated

### Made in Germany

HAZET No.	/ mm	sb	EAN-No. 4000896+	
798-8	290	45	076697	



- Especially for spring band hose clamps 12 and 15 mm width
- Movable jaws
- Bent at 110° allowing application in areas with restricted access
- With locking device

HAZET	_	sb	EAN-No.	
No.	mm	mm	4000896+	
798-9	250	60	072163	

Ingenious Tools

097760







- For spring band hose clamps
- Adjustable opening width
- · Fixed jaws
- · With locking device
- Especially for VW, AUDI

#### Made in Germany

HAZET No.	/ mm	sb	EAN-No. 4000896+	
798-10	320	90	031917	



- For spring band hose clamps
- Especially for 12 mm and 15 mm spring band hose clamps, e.g. on OPEL, VW, FORD, RENAULT, FIAT,
- PEUGEOT, CITROËN, PORSCHE, ALFA-ROMEO, MERCEDES-BENZ, SMART
- With locking device
- Adjustable opening width
- · Handles plastic coated

#### Made in Germany

HAZET No.	_ mm	sb	EAN-No. 4000896+	
798-12	320	80	031931	



### With movable jaws

- Enables working in areas with restricted access
- For the operation of spring band hose clamps whose three ends fit tightly on the hose, e.g. on tank ventilation lines and fuel lines on VW, AUDI, SEAT and ŠKODA

#### Made in Germany

HAZET No.	_ mm	sb	EAN-No. 4000896+	
798-13	192	27	155248	

### **Hose Clamp Pliers**



- For the operation of spring band hose clamps whose three ends fit tightly on the hose, e.g. on fuel lines and tank ventilation lines on VW, AUDI, SEAT, ŠKODA
- Surface: nickel-plated

#### Made in Germany

HAZET No.	_ mm	Sb	EAN-No. 4000896+	
798-14	177	8-20	109128	



- For the operation of self-gripping spring band hose clamps sb 7-60 mm 2
- Bowden cable (610 mm) enables application in areas with restricted access where the application of usual hose clamp pliers is not possible
- With toothed fixing device
- Newly developed slide device with integrated tension spring and adjustable reversible plate
- · Application on cooling and heating circuits
- Handles with plastic coating for better gripping comfort
- Made in Germany

### **Hose Clamp Pliers**

HAZET sb EAN-No. 875 097258 798-15 A 7-60 Bowden cable for 798-15 A complete: bowden cable, coating, 2 headless screws, spring 798-0151 A 097753 Bowden cable for 798-15 A and B



Sliding guide device for 798-15 A and B

798-0152 A

798-0153 A





#### New design with plastic coated semiflexible Bowden cable

- The Bowden cable allows working without a guiding hand
- For the operation of self-gripping spring band hose clamps on cooling and heating circuits
- Slide device with integrated tension spring and adjustable reversible plate
- · Automatic toothed fixing device
- Especially appropriate for areas with restricted access where the application of usual pliers is not possible
- · Handles with plastic coating for better gripping comfort

HAZET No.	_ mm	sb mm	EAN-No. 4000896+
798-15 B	875	7-60	117727
Flexible hose for	or 798-15	5 B	
798-0150 B	-	-	142439
Bowden cable	for 798-1	5 A and B	
798-0152 A	-	-	097760
Sliding guide d	evice for	798-15 A	and B
798-0153 A	-	-	097784









### **Hose Clamp Pliers**







#### With reinforced Bowden cable and slide device

- Especially suitable for hose clamp with parallel clamp ends, e.g. at the charge-air cooler connection on VW Passat or T5
- Bowden cable enables application in areas with restricted access
- Handles with plastic coating for better gripping comfort, with toothed fixing device and one-hand operation
- Fixing device is released by pressure lever

#### Made in Germany

		•		
HAZET No.	_ mm	sb mm	EAN-No. 4000896+	
798-16	875	3-50	149032	
Bowden cal	ole for 79	8-16		
798-0162	-	-	149056	
Sliding guid	e device	for 798-16		
708-0163	_	_	1/19063	





- For self-gripping spring band hose clamps with movable jaws
- For the operation of space-saving hose clamps on coolant and fuel hoses in the entire vehicle area, in particular on VW, AUDI, SEAT, ŠKODA

#### Made in Germany

HAZET No.	_ mm	sb	EAN-No. 4000896+	
798-17	210	40	186068	

### Vacuum-Type Cooling System Filler





Suitable in conjunction with the single and universal adapters of the HAZET range of cooling system testers 4800 or with an appropriate rubber cone of the set 4801-2/3

- Vacuum leakage test before refilling the cooling system
- Bubble-free refilling
- Easy application due to quick-release coupling
- Time-saving, no additional bleeding necessary
- Application possible on almost all types of vehicles
- In plastic case including application note

#### Made in Germany

HAZET	EAN-No.
No.	4000896+
4801-1	148806

### Cone Set for Radiator Expansion Tank



#### Universal set suitable for radiator/expansion tank

- Application in conjunction with Vacuum-Type Cooling System Filler HAZET 4801-1
- Due to the vacuum generated in the cooling system the rubber cone is stuck firmly in the radiator or expansion tank opening

#### Set of 3 pieces:

3 rubber cones with functional Ø 17–31/24–39/34–50 mm

#### Made in Germany

H <u>AZET</u>	EAN-No.
No.	4000896+
4801-2/3	152407

### **Diagnostics**

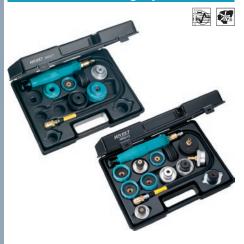


### Adapter for Cooling System

→ Tool Finder

→ Adapter for Cooling System 4800 For Smartphones with QR-Reader (App)

### **Tester for Cooling System**



#### For testing cooling systems

- By building up pressure with Cooling Pump HAZET 4800-1, it is possible to test the cooling systems of various vehicle types
- Classification to vehicles: www.hazet.de → The Tool Finder → Radiator adapter 4800

Made in Germany

HAZET No.

Application on **AUDI** A2, A3, A4, A5, A6, A7, A8, TT, **VW** Passat, Golf 3, 4, 5, Lupo (since 1998), Vento (since 1997), Jetta, EOS, Bora, T5, **CITROËN** C2, C3, C4, C5, C6, C8, Jumper,

EAN-No.

Jumpy, FIAT Tipo, Tempra, MERCEDES-BENZ type 202/203 (C-Class), 124/210 (E-Class), 129/220 (S-Class), 251 (R-Class), 164 (M-Class), MISSAM Micra, OPEL Vectra C, Astra H, Zafira A, Meriva, Signum, Corsa, PEUGEOT,

RENAULT Safrane, Mégane, Laguna, Twingo, Trafic, Master, SEAT Arosa, Córdoba, Ibiza, Toledo, León, ŠKODA Octavia, Fabia, Roomster

Assortiment with 7 pieces in plastic case, contents: 1 cooling pump 4800-1 up to 2.5 bar with quick coupling

1 intermediary piece 4800-2

flexible hose

5 radiator adapters

**4800-4 A 6 A 12 A 15 17 4800/7** 132874

Case, empty, with insert for 4800/9

**4800/9 KL** 049820



## Specialty Tools - Engine - Diagnostics



EAN-No.

128822

### **Tester for Cooling System**

### For testing cooling systems



• By building up pressure with Cooling Pump HAZET 4800-1, it is possible to test the cooling systems of various vehicle types

 Classification to vehicles:
 www.hazet.de → The Tool Finder → Radiator adapter 4800

#### Contents:

- 1 Cooling Pump 4800-1 up to 2.5 bar with in-line quick coupling
- 1 Intermediary Hose 4800-2 (flexible hose)

### Made in Germany

No. 4000896+	
<b>4800/12</b> 165483	

### **Cooling Pump**







4800-8 A

4800-6 A

#### Components

4800-3

#### Made in Germany

- wade in Germany	
HAZET No.	EAN-No. 4000896+
COMPONENTS: Cooling Pump with in-line quick coupling up to 2.5 bar	
4800-1	022243
Intermediary piece, flexible 4800-2	022274
Radiator adapters STANDARD,	

4800-5 A

e.g. MERCEDES-BENZ-Vito, Viano PORSCHE, FIAT, KIA, MITSUBISHI, SUZUKI Vitara, Samurai 4800-3

022281

Also suitable as connector for HAZET adapters for cooling system without coupling fitting Now for even more car models

(replaces adapter 4800-4) **ALFA ROMEO** 147, 164, 166, GT, Mito **CITROËN** C2, C3, C4, C5, C6, C8, Jumper, Jumpy DACIA Logan, Sandero FERRARI threaded fitting FIAT 500 since 2009, Bravo, Doblo, Fiorino, Grande Punto, Idea, Linea, Multipla, Panda, Punto, Qubo, Scudo, Seicento, Tempra, Tipo, Ulysse FORD Ka since 2009 MINI Mini since

2008 MITSUBISHI Carisma D until 2003, Space Star D **NISSAN** Micra **PEUGEOT** 206, 207, 307 since 2004, 308, 406, 807 since 2004, Expert, Partner **LAND ROVER** Freelander 2.0 DI

LANCIA Delta, Musa, Phedra, Thesis MASERATI threaded fitting RENAULT Avantime, Espace, Master, Mégane, Laguna, Trafic, Twingo **Volvo** 850, 960, C 70 until 2007, S 40 until 2003, S 60 until 2007, S 80 until 2007, V 40 until 2003, V 70 until 2007, XC 90 until 2007

4800-4 A

### **Cooling Pump**

HAZET

4800-5 A



VW Transporter T3, AUDI, PORSCHE 986, 987, 996, 997, Cayman, Carrera GT, **SMART** For Two, Roadster

161843 VW Passat, T4, Lupo since 1998 SEAT Arosa, Cordoba, Ibiza since 1999,

SEAT Vario and Léon until 1998, ŠKODA Octavia until 1998

4800-6 A 161850

OPEL Agila, Zafira A, DAEWOO/CHEVROLET, FORD Ka, Focus until 2007, Fusion, Mondeo MAN Tga, L 2000, CHEVROLET

4800-7 A 161867

BMW 5-, 7- and X-series

4800-8 A 161874

BMW 1-series (E87), 3-series, Z3, **ROVER** Range-Rover

4800-9 A 161881

### Radiator adapter



#### Optional extensions for assortments

- Threads exactly adapted to the opening of the expansion tank
- With coupling fitting for connection to the quick coupling of cooling pump 4800-1

#### Made in Germany

4800-12 A

HAZET EAN-No.

**Options for assortments: Radiator adapters RENAULT** 

4800-10 022250

SMART For Four, FORD, KIA and Japanese cars

022267

AUDI A1 (since 2010), A2, A3, A4, A5 since 2007, A6, A8, TT, Q5, Q7, R8, **VW**-Passat B5, Eos, Bora, T5, LT, Golf 4, 5, 6, Vento, Jetta,

161898

SEAT Toledo, Leon. ŠKODA Octavia, Fabia since 1998, Roomster, Superb, PORSCHE Cayenne, Panamera

### Radiator adapter





HAZET VW-Sharan, FORD-Galaxy, SEAT Alhambra

4800-13 A 161904

MERCEDES-BENZ type 168, 169 (A-Class), 245 (B-Class), CDi, 220, 129 079018

MERCEDES-BENZ type 202/203 (C-Class)

124/210/211 (E-Class) and 129/220 (S-Class), 164 (M-Class), 251 (R-Class)

4800-15 079025

MERCEDES-BENZ SLK, CLK, Sprinter since 1999 type 170, 208, 611,

MINI since 2001

4800-16 098507 OPEL Vectra C, Astra H, Meriva,

Signum, Corsa, Insignia 4800-17 109661

**MERCEDES-BENZ** Sprinter

since 2006, Viano since 2003 128815

4800-18

**VW** Crafter 4800-19

IVECO Euro-Star, Euro-Tech, Euro-Truck, MAN F90, F2000,

MERCEDES-BENZ commercial vehicles Actros, Atego 1217 until 1999, Eco 8401, SK1728

4800-20 MAZDA 3, Volvo C30, S40 since 2004, V50, FORD Focus since 2008, Fiesta since 2008,

C-Max, Galaxy since 2006, Kuga and S-Max 4800-21 A 162185

CITROËN C1, DAIHATSU Cuore L201, L501, Move L601, MAZDA 121, Demino, MITSUBISHI Grandis since 2004, L400, Pajero Pinin/Sport, Space-Gear, -Runner, -Wagon, **PEUGEOT** 107 since 2006,

ROVER 600, SUBARU B9 Tribeca, Justy, SUZUKI Alto, TOYOTA Aygo since 2006, Celica, Corolla, Rav 4, Starlet, Yaris

144266

DAIHATSU Standard, HONDA Accord, Civic, Legend, HYUNDAI, ISUZU, KIA, MAZDA 323, 626 until 2002, 6, MX5, Premacy since 2000, RX8, MITSUBISHI Carisma, Eclipse, Galant, Lancer, Outlander, Pajero, Sigma, Spacewagon D since 2003, NISSAN 350Z, Almera, Maxima, Micra bis 2004, Terrano 2, X-Trail, TOYOTA Avensis, Carina E, SUZUKI Baleno, Wagon-R, SUBARU Forester, Impreza, Legacy, Outback, OPEL Agila 1.0 and 1.2 I and SMART Forfour 4800-23 144273

## **Universal Adapter**







HAZET

ullet For radiator openings  $\varnothing$  20-41 mm

• With 3-stage rubber for rough

and precise adjustment

078202

Especially for Japanese vehicles Ø 18−24 mm

· With clamp fastening

4800-31 078196



### **Engine Leakage Tester**



Made in Germany	
HAZET No.	EAN-No. 4000896+
Tester with 1 adapter M 14 x 1.25 and M 18 x 1.5 4795-1	083770
Adapter for motorcycles thread M12 x 1.25 (external thread)	
4795-11	083787
Adapter for motorcycles and diesel engines thread M10 x 1 (external thread)	
4795-12	083794
Adapter for diesel engines thread M24 x 2 (external thread)	
4795-13	083800
Adapter for VW diesel engines incl. 4795-11 pin $\varnothing$ 7 mm	
4795-14	083817
Adapter for multi-valve engines M14 x 1.25 Length: 165 mm	
4795-15	104345

### **Optical Tester**



#### (Refractometer) - Also suitable for G12++, G13, AdBlue

- Optical tester (refractometer) with integrated lighting (LED) in the lid
- For testing the anti-freezing liquid concentration in the cooling water (also suitable for cooling fluid G12++ and G13)
- For testing the quality of AdBlue
- For testing the battery acid concentration (state of battery charging)
- Incl. pipette and operating instructions

Description of scales:

- A state of charge B AdBlue concentration
- C anti-freeze concentration
- D screenwash anti-freeze concentration 5- Light/dark line for reading the scale
- Made in Germany

- made in definally	
HAZET No.	EAN-No. 4000896+
4810 C	186402

### Cylinder Head Leakage Tester



- For radiator adapter HAZET 4800
- For the detection of damage at the cylinder head
- For the safe detection of leakages between the combustion chamber and the cooling system on water-cooled combustion engines gas, diesel, petrol
- · Reaction fluid included

#### Made in Germany

H <u>AZET</u> No.	EAN-No. 4000896+
4800-41	058891
Reaction fluid (250 ml)	
4800-041	108985

### **Cylinder Head Tightness Tester**



- For the detection of cylinder head gasket defects, leaks between the cooling system and the combustion chamber
- For water-cooled combustion engines (gas, diesel and gasoline)

HAZET No.	EAN-No. 4000896+
3 pieces in sheet metal box Contents: 4793-1 2 3 4793/3	076192
Tester 4793-1	076185
Reaction fluid (250 ml) 4793-2	076208
Flushing fluid (250 ml) 4793-3	076215

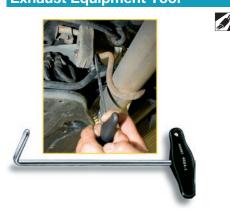






### **Exhaust System/** Lambda Probe

# **Exhaust Equipment Tool**



- Assembly hook for installing and removing rubber retainers of the exhaust equipment on e.g. FORD Fiesta, Orion, Escort, BMW, etc.
- Hook 40 mm, 9° offset
- With plastic T-handle
- Surface: chrome-plated

HAZET	/	EAN-No.
No.	mm	4000896+
4684-1	209	022199



- Assembly hook for installing and removing rubber retainers of the exhaust equipment on e.g. VW, AUDI, MERCEDES-BENZ, OPEL, Japanese cars, etc.
- Hook 17 mm, half-round, 20° offset
- With T-handle
- Surface: chrome-plated

HAZET	_	EAN-No.
No.	mm	4000896+
4684-2	209	022205

### **Chain Pipe Cutter**



- Chain pipe cutter for cutting exhaust pipes esp. suitable for pipes made of V2A steel up to a wall thickness of 2.5 mm and 80 mm  $\varnothing$
- Extended cutting diameters by using extension chain HAZET 4682-01
- Low power required due to large T-screw that - fixed by grip technique - enables easy adjustment during cutting process
- Surface: nickel-plated

### **Chain Pipe Cutter**



4682 255 022168 Repair Set (9 pieces) for cutting chain 4682-01 4682-01/9 057214



#### Suitable up to a wall thickness of 6 mm and a Ø of 113 mm

- Chain pipe cutter for cutting pipes made of galvanized or stainless (V2A) steel, copper, PVC and aluminium up to a wall thickness of 6 mm
- 15 cutting wheels made of alloyed steel
- Pipe diameter of 21 up to 113 mm
- Easy adjustment due to large T-screw during cutting process
- Surface: nickel-plated

HAZET No.	/ mm	EAN-No. 4000896+				
4682-1	315	149384				
Spare chain for 4682-1						
4682-03	-	149421				

### Lambda Probe Socket



- For lambda probes on NISSAN, FORD, VOLKSWAGEN, SEAT, ŠKODA etc.
- Optimal fit to the 6-point profile of the lambda probe
- □ drive 12.5 = ½′
- Surface: chrome-plated

### Made in Germany

HAZET	S	/	<b>d</b> ₁	EAN-No.	
No.	mm	mm	mm	4000896+	
4680-1	22	92	30.4	165605	



- For lambda probe on MERCEDES-BENZ
- ☐ drive 12.5 = ½"
- Surface: chrome-plated

#### Made in Germany

HAZET No.	S	_ mm	<b>d</b> ₁ mm	EAN-No. 4000896+	
4680-2	22	110	36	022090	

### Lambda Probe Socket







#### Socket tip with esp. narrowed outside $\varnothing$

- For lambda probes on VW Golf 7 and **AUDI** A3 since 2013. 1.6 I and 2.0 I - 4 cvl. Common Rail, 4V, turbo charger
- □ drive 12.5 = ½′
- Surface: chrome-plated

#### Made in Germany

HAZET	S	/	<b>d</b> ₁	EAN-No.	
No.	mm	mm	mm	4000896+	
4680-2 A	22	110	30	173761	





- For lambda probes on VW, AUDI
- Outside hexagon 22 mm
- ☐ drive 12.5 = ½′
- Surface: chrome-plated

### Made in Germany

HAZET No.	S	_ mm	₫₁ mm	EAN-No. 4000896+	
4680-3	22	110	41	022106	











- For installing and removing the lambda probe, e.g. on FORD, BMW, OPEL, VW, AUDI, SEAT and ŠKODA
- Double ☐ drive 12.5 = ½ or operation with hexagon drive s 30 mm
- Surface: phosphated

HAZET	S	EAN-No.
No.	mm	4000896+
4680-5	22	057870







## Tools for the following fields of application:













### **Socket for the Reverse Gear Switch**





- For the operation of switches, e.g. the reverse gear switch at the gear or the axles e.g. on MERCEDES BENZ commercial vehicles of the SK series, Actros, MAN commercial vehicles
- 27 mm 8-point special profile
- Especially relieved
- ☐ drive 12.5 = ½"
- Surface: chrome-plated
- Made in Germany

HAZET	,	EAN-No.
No.	mm	4000896+
2716-1	60	086405

### **Clutch-Centring Tool**



- For the correct centering and installation of the
- clutch plate to the pressure plate
- Fast and easy installation
- No need to center the clutch plate by the needle bearing
- Also suitable for vehicles without clutch guide
- For passenger cars and small commercial vehicles
- With 2 collets:
- size  $1 = 15-21 \text{ mm } \varnothing$ size  $2 = 21-28 \text{ mm } \varnothing$
- Plastic with metal clamping screw

HAZET	EAN-No.
No.	4000896+
2174	013609

## Specialty Tools – Gearbox





### SAC Clutch Alignment Tool Set (3-hole division)















# For the professional installation and removal of self-adjusting clutches e.g. on VW, AUDI, BMW, FORD, MERCEDES-BENZ, OPEL, RENAULT, Volvo

- High-precision, accurately fitting components manufactured according to the newest CNC production techniques guarantee optimal working
- Suitable for SAC (self-adjusting) clutches with 3 hole division
- With centring option of the clutch
- Operation of the adjusting ring possible
- Prevents distortion of the adjusting ring in the clutch pressure plate
- Optimal usage for a damage-free working on the SAC clutch
- Avoids malfunctions such as bad separating, slipping or judder
- Easy change from 3-hole to 4-hole pressure plate
- High-quality surface prevents damage of tools
- Components and Spare Parts availableSturdy case for storage of tools

- Oil-resistant foam insert
- Foam insert with option for storage of the Expansion Set 2174-2/5 (4-hole division)
- Includes detailed operating instructions

#### 34 pieces

#### Made in Germany

#### Contents:

2174-08 012 014 015 016 017 018 019 2174-6 7 8 9 10 11 13 15 (3x) 2174-15 x 23 15 x 26,5 15 x 28 15 x 34 2174-16 17 18 19 2174-171 172

HAZET	EAN-No.
No.	4000896+
2174-1/34	17//501

### **Expansion Set SAC Clutch Alignment Tool (4-hole division)**



### For SAC Clutch Alignment Tool Set 2174-1/34

- 4-hole pressure plate necessary for e.g. MERCEDES BENZ, type 169 since 2004 (A-Class) OPEL Insignia
- High-precision, accurately fitting components manufactured according to the newest CNC production techniques guarantee optimal working
- High-quality surface prevents damage of tools
- Easy storage in tool set case 2174-1/34

#### 5 pieces

### Made in Germany

Contents:

2174-6 7 8 14 15

HAZET	EAN-No.
No.	4000896+
2174-2/5	174607





# **Oil Service**



## **Overview Oil Filter Wrenches**

HAZET No.	Execution	Oil Filter	Oil Filter Wrench	Insert Depth	Total	Dr	rive
NO.	Points/Grooves	Ø mm	Ø mm	Wrench mm	Height mm	Ø mm	
2168-6	6-Point	109.5	117.5	65	77	_	10 3/8
2168-46	6-Point	46	59	15	29.5	-	10 3/8
2169	14-Point	74.4	82	30	52	27	10 3/8
2169-1	15-Point	92	102	19	48	27	125 1/2
2169-5	18-Point	135	148	41	57	24	125 1/2
2169-6	16-Point	86.7	97	44.5	55.5	24	125 1/2
2169-7	14-Point	64	76	23	43	24	125 1/2
2169-10	14-Point	74	82	20	42	27	10 3/8
2169-11	14-Point	84	97	30.5	48.5	24	125 1/2
2169-32	6-Point	32	43	18	30	-	10 3/8
2169-36	6-Point	36	49.5	15.2	29.5	-	10 3/8
2169-66	6 Grooves	66	76	23.5	43.5	24	125 1/2
2169-76	6 Grooves	76	85	21	42	24	125 1/2
2169-76 K	6 Grooves	76	85	14.5	34	24	125 1/2
2169-86	9 Grooves	86	97	24.5	44	24	125 1/2

### Specialty Tools - Oil Service



## **Application** Oil Service www.hazet.de → Tool Finder→ Oil Service

### **Fuel Filter Wrench**



For the damage-free operation of the filter housing cap when changing the fuel filter

- Drive  $10 = \frac{3}{6}$ "  $\emptyset$  109 mm with 6 grooves
- Application e.g. on FIAT/ALFA/LANCIA with 1.3 I – 1.9 I – 2.4 I diesel engines as well as **OPEL** Vectra C/Signum 1.9 I diesel, Astra H 1.3 I and 1.9 I diesel, Corsa C/Combo/Meriva 1.3 I diesel engines

Notice: The torque value for the housing cap recommended by the car manufacturers may be reached when using e.g. the HAZET Torque Wrench 6110-1 CT

#### Made in Germany

HAZET No.	Ø	EAN-No. 4000896+
2168-6	117.5	149070

10 3/8″

### Ad-Blue® Filter Wrench





For the operation of the filter housing cap when replacing the AdBlue® filter (urea solution filter) on MERCEDES-BENZcommercial vehicles with BlueTec® engines e.g. Actros, Atego, Axor, Econic

- The torque value recommended by the vehicle manufacturer (please consider manufacturers' instructions) is reached e.g. with the torque wrench HAZET 6110-1 CT
- □ drive 10 = 3%′
- Q 46 mm

#### Made in Germany

- maao m	acimany		
HAZET No.	Ø	EAN-No. 4000896+	
2168-46	59	156252	

### **Oil Filter Wrench**



- For the operation of oil filters and oil filter housing caps 14-point s 74.4 mm
- □ drive 10 = ¾" or outside hexagon 27 mm

#### Made in Germanv

HAZET No EAN-No. 4000896+

 For MANN, KNECHT and **OPEL** Longlife filters e.g. for **MERCEDES-BENZ** passenger cars with 2.2 I CDI-engine, M 102, M 103, M 104, M 110, M 111, M 119, M 120, M 613, Sprinter 2.2 I Turbo since 2006, **AUDI** A4 2.0 since. 2002,

A4 4-cyl. petrol engines since 12/2007, **BMW**, **BMW**-motorcycles, K-models = K 75-1100 LT, new series F and K VW-Passat 1.9 TDI pump-nozzle injection, Golf Plus 2.0 since 2005, Golf 6 1.6 I and 1.2/1.4/1.8/2.0 TSI, Polo 5 1.2I – 1.4I TSI, Tiguan since 2007 1.4I TSI (110kW) 2.0I TSI as well as FORD, OPEL, PORSCHE,

PEUGEOT, CITROËN, RENAULT, NISSAN, TOYOTA, MAZDA etc.

- For the operation of the oil filter housing cap when changing the oil filter element on MAZDA 3 with 2.0 I engine and 6 with 1.8-2.0-2.3 I engines
- Flat style: continuous 14-point profile up to the edge



For the operation of oil filters (KNECHT- and MAHLE filters) **15-point** s **92 mm** e.g. **VW, AUDI** Passat 1.9 TDi, 2.8 I, CHRYSLER 300 M, PORSCHE, OPEL, RENAULT, FORD Focus 1.8 Di since 08/1999, 1.8 TDi since 10/1998, Maverick 2.7 TD, Mondeo 2.5 I, MITSUBISHI, NISSAN, ALFA-ROMEO, HONDA, Volvo etc. MAN (commercial vehicles) F 2000

• ☐ drive 12.5 = ½" or outside hexagon 27 mm

#### Made in Germany

HAZET No.	mm	Ø	EAN-No. 4000896+	
2169-1	27	102	013357	



### **Oil Filter Wrench**

For the operation of oil filters and plastic oil filter housings □ drive 12.5 =  $\frac{1}{2}$ " or



outside hexagon 24 mm Made in Germany

HAZET No EAN-No. 4000896+ For the operation of plastic oil filter housings

18-point s 135 mm on MAN commercial vehicles of the series F 2000 and TGA

2169-5 24 100330

For the operation of plastic oil filter housings 16-point's 86 mm. e.g. on BMW 316i Limousine Touring,

316ti Compact, 318Ci Cabrio, Coupé, 318i Limousine Touring, Compact since 2001, 1 Series (E87): 116i, 118i, 120i, 130i **Volvo** V40, V70, S40, S60, S70, S80

2169-6 24 97 100293

• For the operation of oil filters 14-point s 64 mm

on TOYOTA Yaris, Corolla, MR2 until 1999, Starlet, Celica, Avensis, NISSAN Micra, Almera,

MAZDA 323, 626, MX-5, Xedo, SMART ForFour (type 454) engine 134, 135, SMART Fortwo (type 451) engine 132, as well as SUBARU, SUZUKI, DAIHATSU

Also suitable for

YAMAHA Super Ténéré XT1200 z, YZF-R1 since 2007, YZF-R6 since 2006, FZ1-S since 2006, FZ1-N since 2006, FZ6-S since 2007, FZ6-N since 2007 100224

• 14-point s 84 mm For the operation of plastic oil filter housings e.g. on

MERCEDES-BENZ V6 diesel engines OM642 among others for 164 · 203 204 · X204 · 210 · 212 · 639

2169-11 24 97 118847

10 3/8 🚒



- For installing and removing oil filters and oil filter housing caps when changing the filter element
- □ drive 10 = 3/8"
- Forged design
- · Surface: chrome-plated
  - Made in Germany

HAZET Ø EAN-No.

• 6-Point s 32 mm OPEL Astra, Corsa, 1.9 | CDTi
VW Passat, Golf 6 with 1.6 and 2.0 CR-TDI, Polo 5 1.2I-1.4I TDI, Polo 1.2 I petrol engines since 2005, Transporter T5 1.9 I diesel since 2004, Touran TDi, Tiguan since 2007 1.4l (90/118kW) 2.0l diesel engines, **AUDI** A6 3.2 l TSI, V6 since 2004, A4 diesel since 12/2007

**BMW** 530d M57 since 2008

For urea solution filter Ad-Blue  $^{\tiny{\textcircled{\scriptsize \textbf{B}}}}$  MAN e.g. TGX

2169-32 43 082346

6-Point s 36 mm

e. g. for MERCEDES-BENZ engine 116 MB, 100 D Transporter, Actros MP 1, MP 2, BMW M 52-6 cyl.: 3 Series, 5 Series, M 60-8 cyl.: 5, 7 and 8 Series, M 73-12 cyl.: 7 and 8 Series, 1 Series (E87): 118d, 120d, 1 Series (F20) 118i, **OPEL** Vectra B DI 16 V, Insignia, VW Lupo 1.2 TDi, model year 1999, Polo 5 1.2I, Golf 6 1.4I SRE/TSI, Touareg TDi, T5 2.5 D, **AUDI** 6 cyl. petrol engines since 12/2007 For **MAN** fuel filter e.g. TGA

2169-36 36 086566

# Specialty Tools - Oil Service

### **Oil Filter Wrench**



- For the operation of Purflux oil filters
- □ 12.5 = ½" or outside hexagon • 24 mm

#### Made in Germany



2169-66







100217

158188

- s 66 mm groove profile (6 grooves)
- RENAULT Clio, Twingo (also operation of the oil filter housing cap), Kangoo,

FIAT Punto, Stilo, Brava, Bravo with 1.2 I, LANCIA Y 1.2 I, MAZDA 323, 626, MX 3, Xedos, MITSUBISHI Colt, Carisma, Space Star, NISSAN Micra, Primera, Serena,

TOYOTA Yaris, Starlet, MR 2, Corolla, Carina, Avensis 24

- s 76 mm groove profile (6 grooves)
- For e.g. AUDI A3, A4, A6, CITROËN C5, Xantia, DACIA FIAT Brava, Bravo, Punto, Tipo, FORD-Fiesta, Escort, MERCEDES-BENZ passenger cars and Sprinter, e.g. Citan 1.5 l Diesel, **PEUGEOT** 106, 206, 306, 406, **RENAULT** Clio, Kangoo, Mégane, Laguna, Rapid, **HONDA** Accord, Civic, Prelude, CRX, OPEL Astra G/F, Corsa A/B, Calibra, Zafira, Frontera, SUZUKI Grand Vitara 1.9D model year 2009 VW Golf 3 + 4, Polo, Passat, Sharan, SEAT Alhambra, Toledo, León, Córdoba, ŠKODA Octavia for fuel filters

e.g. for RENAULT Espace, Laguna, R19, Volvo S 40 and V 40 until 1999

2169-76 24 85 100309

#### **Especially for BMW motorcycles**

- s 76 mm groove profile (6 grooves), reduced height
- For new **BMW** motorcycles, R1200 GS, R1200 R, R1200 RT

2169-76 K 24 85

- s 86 mm groove profile (9 grooves)
- For e.g. ALFA 145, 146, 156 1,9 JTD, 156 2,4 JTD, VW Golf 3, Sharan, Vento, Passat with TDi engine, Lupo, Polo 1.7 SDi, AUDI A4, A6 with TDi engine 85 KW/115 PS, FIAT Bravo and Brava 1.9 JTD, RENAULT Clio, R 19 with 1.4–1.7 and 1.8 I, Mégane 1.4 and 2.0 I, Rapid with 1.9 D, Laguna, Safrane and Espace III with 2.1 D, SEAT Alhambra, 1.9 TDi, Arosa 1.7 SDi, SUZUKI Grand Vitara 1.9 DDIS

for fuel filters e.g MERCEDES-BENZ

Vito, Sprinter, A-Class (type 168), C-Class

(type 202), E-Class (type 210)

2169-86 24

100323 97

### Oil Filter Wrench Set













### Oil Filter Wrench Set

#### For the operation of oil filters and oil filter housings made of plastic

- · Fast application, safe, appropriate and clean working
- The torque value recommended by the vehicle manufacturer can be safely achieved, e.g. with the torque wrenches HAZET 6110-1 CT (10 = 3/8") and HAZET 6121-1 CT (12.5 = 1/2")
- Caution: Follow vehicle manufacturer's specifications concerning torque values

#### Made in Germany

HAZET EAN-No. 4000896+

Contents:

2169 2169-1 2169-6 2169-36 2169-76 2169-86

2169/6 120628

### **Universal Strap Wrench**



- · Especially for oil filter, generator and other round screwed connections
- Cotton textile tape, rubber coated
- Non-skidding
- Surface: chrome-plated

#### Made in Germany

HAZET No.	Ø	EAN-No. 4000896+
2170	160	013371

### **Oil Filter Wrench**



- For the operation of oil filters, e.g. as assembly tool for oil and fuel filters on commercial vehicles MAN
- Adjustable steel strip

#### Made in Germanv

	•		
HAZET No.	Ø	EAN-No. 4000896+	
☐ drive 12.5	= ½"		
2171-1	80-110	013418	
With lever			
2171-2	75-110	013432	



- For removing oil filters even in areas with restricted access
- Adjustable by turning knob or 6-point 13 mm
- Replaceable steel strip (12 x 1 mm)

HAZET No.	Ø	EAN-No. 4000896+
2171-5	65-105	013449
2171-6	105-145	013456

### Oil Filter Chain Wrench













- For removing oil filters and for the operation of the granulates cartridge on commercial vehicles with compressed air dryers
- Even in areas with restricted access
- With chain
- □ drive 12.5 = ½"

#### Made in Germany

HAZET No.	Ø	EAN-No. 4000896+	
2171-8	50-150	013463	

### **Oil Filter Wrench**



- · For oil filters in areas with restricted access
- Left-hand and right-hand operation
- Universal application
- □ drive 10 = 3/8
- or 19 mm

 Forged design • Surface: galvanized

Made in Germany				
HAZET No.	Ø mm	EAN-No. 4000896+		
2172	65-115	013470		

### Ball-Head Screwdriver Socket





- For oil pan screws on VW, AUDI, SEAT, ŠKODA
- □ drive 10 = 3/8"
- For inside hexagon screws

HAZET No.	S mm	l <sub>1</sub>	l <sub>2</sub>	d	EAN-No. 4000896+	
2527-5	5	200	227	19	016303	

### Specialty Tools - Oil Service





- For the oil pan
- □ drive 10 = 3/8′
- With ball joint and T-handle
- Surface: chrome-plated

#### Made in Germany

HAZET	S	_	EAN-No.	
No.	mm	mm	4000896+	
2528-10	10	250	016327	

### **Oil Service Socket**





- For screws with internal serration (XZN) with pin
- For the oil drain plug at the gearbox AUDI A2, A3, A4, A6, TT WW Passat B5, Golf 4, LT, T4, T5 ŠKODA Fabia, Octavia, Superb PORSCHE Boxster with shift gear FORD Galaxy 1.9 TDi with 6-speed gear box
- ☐ drive 12.5 = ½"
- Surface: chrome-plated

### Made in Germany

HAZET	_	М	EAN-No.
No.	mm		4000896+
2567-16	60	16	016419

### **Oil Service Wrench**



• For oil filler screw on M 8 gearbox

13 x 14

• Surface: chrome-plated

#### Made in Germany

No.	mm	mm	4000896+	
Types 10	0, 110, 115, 1	116, 117,	615, 616, 617	
2760	14 x 17	237	017638	
	2, 103, 104, 1 119, 120, 12			

287



017652





2760-2

- For the oil filler and oil drain plug gearbox, differential, oil pan on various French passenger cars
- 8 and 10 mm outside square
- Surface: chrome-plated

#### Made in Germany

HAZET	S	_	EAN-No.	
No.	mm	mm	4000896+	
3703	8 x 10	233	018932	

### Oil Service Screwdriver Socket



- For the oil filler and oil drain plug gearbox, differential, oil pan
- ☐ drive 12.5 = ½"

Surface: chrome-plated

#### Made in Germany

HAZET No.	S mm	_ mm	EAN-No. 4000896+		
8 mm outside square     e.g. for RENAULT					
3702	8	36	018918		
10 mm outside square					
3702-1	10	36	018925		

### Oil Service Wrench





- For the oil filler and oil drain plug on gearbox, differential, oil pan e.g. on **FORD**
- With different squares 8.7 9.5 10.5 11.5 13 6.8 15.2 16.5 19.7
- Surface: chrome-plated

#### Made in Germany

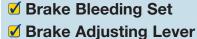
HAZET	/	EAN-No.
No.	mm	4000896+
4618	218	021994



# Your commercial vehicle specialist!







**✓** Brake Fluid Tester

**✓** Brake Piston Readjusting Set

**✓** Tube Flaring Tools

**✓** Files

✓ Tools for Hand Brakes and many more ...







### **Brake Pressure Regulator** and Wheel Bearing Socket







- 6-Point Socket
- For the adjustment of torsion bars removal of wheel bearings on VW transporter T4
- ☐ drive 12.5 = ½"
- Surface: matt chrome-plated

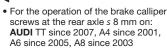
#### Made in Germany

HAZET No.	S	_ mm	EAN-No. 4000896+	
2583	27	140	017034	

### **Brake Calliper** Screwdriver Socket



### **Brake Calliper Screwdriver Socket**

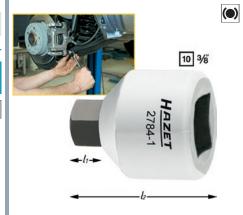


• For controlled screw tightening use a torque wrench with 10 mm = 3/8 drive, e.g. HAZET 6110-1 CT

• With fix blade (size 8 mm) for inside hexagon screws

#### Made in Germany

HAZET No.	S	<u>d</u>	l₁ mm	l <sub>2</sub> mm	EAN-No. 4000896+	
2584-8	8	19	7	24	149438	



- For the operation of the guide bolts s 7 mm at the rear brake callipers on MERCEDES-BENZ type 204 (C-Class)
- For controlled screw tightening use a torque wrench with 10 mm =  $\frac{3}{8}$ drive, e.g. HAZET 6110-1 CT
- With fix blade (size 7 mm) for inside hexagon screws

### **Brake Calliper Screwdriver Socket**

**(** 

■ Made	in G	ermar	ıy			
HAZET No.	S	d	l₁ mm	l <sub>2</sub> mm	EAN-No. 4000896+	
2784-1	7	19	7	24	148530	

### **Brake Calliper Screwdriver Socket**





For the operation of the brake calliper screws (Knorr-Bremse) on MERCEDES-BENZ commercial vehicles e.g. Actros

- Enables controlled screwing with the torque value required by the manufacturer (Follow manufacturer's instructions) e.g. with torque wrench HAZET 6144-1CT
- Drive allows transmission of high separation forces
- □ drive 20 = ¾"
- O 14 mm

HAZET No.	S	L <sub>1</sub>	<i>l<sub>2</sub></i> mm	EAN-No. 4000896+	
2784-14	14	60	110	155583	

### Specialty Tools - Brakes

### **Brake Calliper Screwdriver Socket**



- For inside hexagon screws on rear brake callipers on BMW 3, 5 and 8-series as well as on OPEL
- □ drive 10 = 3/8"

#### Made in Germany

HAZET	S	_	EAN-No.	
No.	mm	mm	4000896+	
2901 G-7	7	48.5	051816	

### Brake Calliper TORX® Socket













#### For the operation of the brake calliper screw on MAN commercial vehicles

 Operation e.g. with HAZET box-end insert tool 6630 d-22 with tool holder 6397 (screw loosening) or torque wrench 6293-1 CT or 6295-1 CT (screw tightening)

Made in Germany					
HAZET No.	_ mm	EAN-No. 4000896+			
• For e.g. MA	N TGM and TGL				
2871-E 18	39.5	176175			
• For e.g. MAN-TGM, TGA – outside TORX® E 20					
2871-E 20	39.5	148790			
• For e.g. <b>MAN</b> -TGA, TGS, TGX – outside TORX® E 24					
2871-E 24	39.5	148783			

### **Brake Bleeding Wrench Set**



 5 pieces, 7–11 mm Made in Germany

Contents:

4968-7 8 9 10 11

4069/E 096535	HAZET No.	EAN-No. 4000896+
4900/3	4968/5	086535

### **Application Chart for Brake** Bleeding Wrenches No. 4968

			S mm		
BMW	7				
CITROËN		8	9		
DAIHATSU		8			
FIAT	7	8			
FORD	7	8	9	10	11
HONDA		8		10	
MAZDA		8			
MERCEDES-BENZ			9		11
MITSUBISHI				10	11
NISSAN				10	11
OPEL			9		
PEUGEOT	7	8	9	10	11
RENAULT	7	8	9		11
SEAT	7	8			
SUZUKI				10	
TOYOTA		8		10	
Volvo		8		10	11
VW-AUDI	7				11

### **Brake Bleeding Wrench**



- For brake bleeding without dismounting the wheels, replacement of wheel brake cylinder, master brake cylinder and tube connections
- Bent and offset
- Equal hexagon size on both sides
- Surface: chrome-plated

#### Made in Germany

HAZET No.	S mm	_ mm	EAN-No. 4000896+	
4968- 7	7	190	085705	
4968- 8	8	208	085699	
4968- 9	9	208	085682	
4968-10	10	236	085712	
4968-11	11	236	085729	

### **Special Tool for Brakes**







- For installing and removing spring plates and the holding device of brake linings on drum brakes, e.g. on VW, SEAT, ŠKODA, OPEL and **RENAULT** with rear drum brakes
- Push- and turn-part with carbide coating layer in front working area
- Plastic handle
- Surface: chrome-plated

#### Made in Germany

HAZET	/	EAN-No.	
No.	mm	4000896+	
4963-1	237	050383	

### **Assembly Tool**





- · For installing and removing the draw spring of hand brake shoes, e.g. on MERCEDES-BENZ passenger cars with rear disc brakes as well as on VW Crafter since 2006 and LT
- Hook with T-Handle
- Surface: chrome-plated

HAZET	_	EAN-No.	
No.	mm	4000896+	
4964-1	162	055708	

### Cartridge Wrench







For loosening the granulates cartridge on commercial vehicles with compressed air dryer e.g. on MERCEDES-BENZ and MAN

- Design "Made by HAZET"
- Negative position of arms
- Forged design

**(** 

- MAN-No. 8099606-0307
- ☐ drive 12.5 = ½′
- Surface: burnished

HAZET	Ø	EAN-No.
No.	mm	4000896+
2195	90-140	014101

Specialty Tools - Brakes

290 x 173 x 50 mm

- · For metal tubes and pipes with a wall thickness of 0.7 und 1.0 mm pipe-Ø 4.75-10 mm
- For open (F) or double (E) flares according to DIN 74234, for normal 90°- and 180° flares
- For flares on rolled and drawn pipes
- With replaceable hinged gripping jaws

#### Note: For plastic coated brake lines use HAZET 2193/4K!

- Special cast steel
- Set of 12 pieces
- In sheet metal box
- Surface: lacquered

Contents:

- 1 Tube Cutter 2181-1 1 Tube Flaring Unit 2191
- 1 Gripping Jaw 2191-1
- 1 Tube Deburring Tool 2191-2
- 1 Base Block 2191-3
- 6 Thrust Blocks 2191-4 to 2191-10
- 1 90°- Thrust Block 2191-90

### Made in Germany

Contents:

2181-1 2191 2191-1 2 3 4

6 8 9 10 90

HAZET EAN-No. 2191/12 K 013890

### **Basic unit**



• For tubes with a wall thickness of 0.7 and 1.0 mm Made in Germany

made in definiting	
HAZET No.	EAN-No. 4000896+
2191	013784

### **Gripping Jaw**



- For E and F-flares 4.75 up to 10 mm
- Made in Germany

HAZET EAN-No. **2191-1** 4.75-5-6-8-9-10 mm 013791

### Tube Deburring Tool



- For tube deburring
- ullet For tubes with outside  $\varnothing$  of 4–32 mm

#### Made in Germany

HAZET	Ø	EAN-No.	
No.	mm	4000896+	
2191-2	4-32	013814	

### **Base Block**



• For E, F and 180° flares 4.75 up to 10 mm

#### Made in Germany

HAZET No.	Ø	EAN-No. 4000896+	
2191-3	4.75-10	013821	

### **Thrust Block**



- For E and F-flares
- Surface: burnished

### Made in Germany

HAZET No.	Ø mm	EAN-No. 4000896+
2191- 4	4.8	013838
2191- 5	5	013845
2191- 6	6	013852
2191- 8	8	013869
2191- 9	9	013876
2191-10	10	013807

### **Thrust Block**



- For E flares and simple flares 4.75 up to 10 mm
- Surface: burnished
- Made in Germany

HAZET No.	Ø	mm	EAN-No. 4000896+	
2191-90	4.75-10	(3/16"-3/8")	013883	

### **Tube Flaring Tool Set**



#### In sheet metal box

- Especially for plastic-coated brake lines 4.75 mm Ø
- Set of 4 pieces
- Made in Germany

Contents:

2181-1 2193 A 2193-1 2

HAZET No.		EAN-No. 4000896+	
2193/4 K		014088	

### **Tube Flaring Unit**



- Lightweight and easy to handle
- Especially for F-flares on plasticcoated brake lines  $\varnothing$  4.75 mm
- May be clamped into a vice, also allows manual operation under vehicles

#### Made in Germany

HAZET No.	Ø	EAN-No. 4000896+	
2103 A	/ R	1/2538	

### **Replacement Thrust Block**

With dowel pin

HAZET	EAN-No.
No.	4000896+
2193/02	014071





### Specialty Tools - Brakes

# **Bending Tool**



with a Ø of 4.75 mm

#### Made in Germany

HAZET No.	Ø	EAN-No. 4000896+
2193-1	4.8	014057

#### **Tube Deburring Tool**



• For inside and outside deburring of tubes Made in Germany

HAZET No.	Ø	EAN-No. 4000896+
2193-2	4.8	014064

#### **Brake Calliper File**





- Extra slim style (width 10 mm), especially appropriate for Japanese vehicles
- · For removal of stubborn brake dust, rust and dirt from the brake calliper
- With integrated flat scraper at the front end for removing crude residues

HAZET No.	l₁ mm	L <sub>2</sub>	EAN-No. 4000896+	
4968-5	155	265	129379	

#### **Brake Calliper Brush**



- · For removal of brake dust and dirt from the brake calliper
- · For vehicles with disc brakes
- Slim design
- Plastic handle with suspension hole

#### Made in Germany

- made in definiting				
HAZET No.	_ mm	EAN-No. 4000896+		
4968-2	225	084821		

#### **Brass Brake Calliper Brush**



- For cleaning aluminium brake callipers
- · Soft brass bristles facilitate damage-free cleaning
- Slim design allows working in areas with restricted access
- Plastic handle with suspension hole

#### Made in Germany

	•		
HAZET No.	/ mm	EAN-No. 4000896+	
4968-3	225	089147	

#### **Brake Calliper File**



Width: 12 mm

()

**(** 

(E) (O)

- For removal of stubborn brake dust, rust and dirt from the brake calliper
- · For vehicles with disc brakes
- Coarse bevel cut on one side
- One-sided cut prevents damage of the dust boot at the brake piston
- Plastic handle

HAZET No.	I <sub>1</sub>	L <sub>2</sub>	EAN-No. 4000896+	
4968-1	165	275	084739	

#### **Anti-Lock Braking** System (ABS) Reamer







**(** 

#### For cleaning the ABS sensor receptacle e.g. on all MAN commercial vehicles

- · Operation with ratcheting combination wrench, e.g. HAZET 606-16
- Before refitting the new ABS sensor it is advisable to clean the ABS sensor receptacle
- Blades Ø 16 mm on 18 mm
- Trouble-free removal of deposits (dirt, corrosion and other residues) from the ABS sensor receptacle
- Functional length: 85 mm

#### Made in Germany

H <u>AZET</u> No.	l₁ mm	l <sub>2</sub>	Ø	EAN-No. 4000896+	
4968-1618	85	130	16-18	177684	

#### **Brake Adjusting Lever**





- · For adjusting of drum brake shoes with excenter
- For adjusting hand brakes with excenter
- Surface: chrome-plated

#### Made in Germany

HAZET	/	EAN-No.	
No.	mm	4000896+	
2582	304	017027	

#### **Hand Brake Tool**



- For installing and removing fixing springs of the hand brake shoes on disc brakes
- T-handle
- With guide groove

HAZET	_	EAN-No.
No.	mm	4000896+
2730	142	017423

#### **Brake Fluid Tester**



- User guidance in 7 languages on the display: D, GB, F, E, NL, P, TR
- Portable (for everywhere use) to be connected to battery, replaces a stationary installation
- · Boiling point tester higher testing accuracy in comparison to other testing methods
- Easy application in most vehicles, brake fluid remains in its fluid reservoir
- Time saving the test can be carried out directly in the fluid reservoir
- Security for the user no fluid loss (environmentally sound)
- Approved by vehicle manufacturers
- Approved by TÜV Austria
- DOT 3, DOT 4, DOT 5.1 brake fluid
- Measuring temperature up to 320° C (608° F)
- Operating voltage 12 V

HAZET	EAN-No.
No.	4000896+
4954-1	129201

#### **Calliper Gauge for Brake Discs**





- For measuring the thickness of the brake discs (wear/abrasion of the brake disc). Follow vehicle manufacturer's instructions!
- With fixing screw and sliding vernier (vernier ½10)
- With crowned measuring surfaces
- In leather case

#### many

Made in Ger
HAZET No.
• For passenger

EAN-No. 4000896+

- senger cars and motorcycles
- Measuring range up to 60 mm
- Jaw length 75 mm

4956-1 073160

- For commercial vehicles
- Measuring range up to 100 mm
- Jaw length 115 mm

4956-2 073177







#### **Calliper Gauge for Brake Drums**



- For the abrasion test at the drum brakes of passenger cars and commercial vehicles (follow vehicle manufacturer's instructions)
- Scale and slide made of aluminium profile
- Jaws made of stainless steel, 150 mm long
- Inside measuring with immediate reading
- Vernier 1/20
- With fixing screw
- Measuring range up to 500 mm
- In wooden box

#### Made in Germany

HAZET	EAN-No.
No.	4000896+
4955-1	073153

#### **Brake Test Tool Set**



# For checking the lateral run-out of the brake disc

- 1 micrometer screw for exact determination of the thickness of the brake disc
- 1 precision dial gauge for checking the lateral run-out
- 1 hinged bracket with magnetic base as mounting and for an exact positioning of the dial gauge to the vehicle
- Set of 3 pieces in high-quality plastic case with soft foam insert

HAZET	EAN-No.
No.	4000896+
4968/3	149179

#### **Brake Bleeding Valve Tool**





- · Simple tool for the tight connection of filling and bleeding sets, such as 4969-1/3 to the brake bleeding valve
- · Application of common vacuum filling and bleeding systems possible
- · Hose connection: 6 mm inside diameter
- For operation and controlled screw tightening use a torque wrench with ■ drive 6.3 mm = ¼ e.g. HAZET 5108-2 CT
- Integrated non-return valve, non-drip

#### Made in Germany

HAZET	EAN-No.
No.	4000896+
4968-100	159857

#### **Pneumatic Brake Fluid Bleeder Set**





#### Brake fluid bleeder for the extraction of brake fluid on wheel brake cylinders/brake callipers

- · Also suitable for ABS brakes (Caution: Always follow manufacturer's specifications)
- By means of compressed air, the integrated Venturi-system creates a vacuum, enabling thus the bleeding of the brake system
- With universal plastic nozzle, suitable for all common vehicle types • Clear transparent brake fluid hose enables easy visual check
- Air consumption: 180 I/min/working pressure: 6 to 8 bar
- Incl. coupler plug, nominal size 7.2
- · Contents:
- 1 brake fluid bleeder (container capacity 0.75 l)
- 1 refill container with fix nozzle
- 1 refill container with flexible nozzle (container capacity: 1 litre each)

HAZET	EAN-No.
No.	4000896+
4969-1/3	149445

# Specialty Tools - Brakes



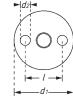


#### Brake Piston Readjusting Set





- For readjusting (pushing or turning) brake pistons on floating calliper systems with or without locking device for hand brakes
- Thrust bearing avoids damaging of the dust boot
- With additional outside hexagon s 13 mm for flexible application of operating tools, e.g. reversible ratchets
- Universal application suitable for all common vehicle types www.hazet.de → Tool Finder → Brake Piston Readjusting Sets



052974

Made in Germanv

No.	<b>U</b> 1 mm	☐2 mm	4000896+
Set of 6 pieces in plas	tic box		
Contents:			
4970-1 5 6 7 8 9			
4970/6	-	-	088867
Set of 9 pieces in plas	tic box		
Contents:			
4970-1 5 6 7 8 9	10 11 12		
4970/9	-	-	157464
Basic unit			
4970-1	-	-	088874
Adapter with 2 pins for			

AUDI A4 since 2004 and since 2007, VW Golf 4, Golf 5 since 2004, New Beetle since 2006, Passat since 2002, Polo since 2004, T4, T5 since 2004

OPEL Astra H since 2007, Astra GTC since 2005, Zafira model year 1999-2005, Zafira since 2005, FORD Galaxy since 2003, Transit since 2007, PEUGEOT 307 SW since 2002, 407, CITROËN C4 since 2008, C5 since 2006,

Xsara since 2002, ALFA 156 since 2004, 147 model year 2005, model year 2008, 166 since 2004, RENAULT Trafic since 2005, Espace since 2000,

**SEAT** Leon since 2001, Ibiza since 2003, Altea since 2004, Toledo since 2001, **ŠKODA** Octavia since 2007, Fabia since 2004,

FIAT Croma since 2006

	.000		
4970-5	35	5	052943
Adapter VW-AUDI	inside hexagon 12 mm		
4970-6	30	-	052950

Adapter with 2 pins for:

FORD Focus until 2003, Mondeo since 2001, OPEL Astra G, SMART For Four, MAZDA 6 since 2003,

RENAULT Kangoo 4x4 since 2005, TOYOTA Corolla since 2000

4970-7 052967 Adapter with 2 pins for: CITROËN, VW, AUDI

4970-8

Adapter with 4 pins for: HONDA Jazz since 2006, FORD Mondeo, Focus since 2004, SAAB, RENAULT Mégane since 2001, Scénic since 2001, Scénic 2,

VW GOLF 4, Polo since 2003, NISSAN Almera, OPEL Tigra B since 2007 4970-9 052981

Adapter with 2 pins for

OPEL Vectra C, RENAULT Scenic since 2005

consider brake calliper execution

4970-10 35 126019

#### **Brake Piston Readjusting Set**

HAZET ď₂ EAN-No. Adapter with 2 pins for: FIAT Panda 4x4 since 2006, RENAULT Espace since 2004, Vel Satis since 2002, Laguna 2, OPEL Vectra C

consider brake calliper execution 4970-11 35 146581

Adapter with 2 pins for:

FORD rear wheel brake: Focus since 2005, C-Max since

2003, Mondeo, S-Max since 2006, KIA Sorento

149766 4970-12 40

#### **Brake Piston Resetting Tool**



For damage-free readjusting brake pistons (floating callipers/fixed callipers) on disc brakes

- Suitable for all common vehicle types without integrated locking device for hand brakes
- Fast and uniform readjusting without tilting
- Avoids damaging of the boots and pistons
- · High accuracy as well as high stability allow continuous use
- · Reduced expenditure of force due to exact guidings

#### Made in Germany

HAZET	EAN-No.
No.	4000896+
4971-1	156245

#### **Brake Spring Pliers**





- For installing and removing the brake shoe recuperating spring on riveted brake linings
- Surface: chrome-plated

#### Made in Germany

	,	
H <u>AZET</u> No.	_ mm	EAN-No. 4000896+
796	215	031818







- For glued and riveted brake linings
- With movable claw
- Surface: chrome-plated

#### Made in Germany

HAZET No.		EAN-No. 4000896+
797	317	031825

#### **Lockring Pliers**





- For the operation of deeply located lockrings e.g. on calipers and gear boxes
- With long bent jaws (90°)
- Ergonomically shaped 2-component plastic handle covers
- Surface: chrome-plated

HAZET	_	W mm	EAN-No.
No.	mm		4000896+
1846 b-1.6	195	1.6	061457





# Specialty Tools for famous car manufacturers:

ALFA • AUDI • BMW • CHRYSLER • CITROËN • DAEWOO DAF • DAIHATSU • FIAT • FORD • HARLEY-DAVIDSON HONDA • HYUNDAI • ISUZU • IVECO • JAGUAR • KIA MAN • MAZDA • MERCEDES-BENZ • MITSUBISHI NISSAN • OPEL • PEUGEOT • PORSCHE • RENAULT SAAB • SCANIA • SEAT • SKODA • SMART • SUBARU SUZUKI • TOYOTA • Volvo • VW



## **Specialty Tools for:**

Engine Timing / Engine Electricity

Gearbox and Shafts

Chassis and Brakes

Body and Interior Equipment

**✓** Fuel Supply

Oil Service and many more ...



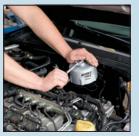


















# Chassis







# **HAZET – Safety Spring Vice 4900**







# Safety Spring Vice Basic Unit



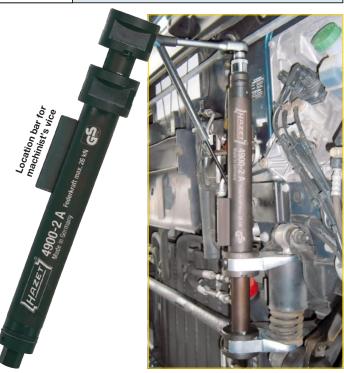


#### **Application**

#### Safety Spring Vice

www.hazet.de → Tool Finder → Safety Spring Vice

◆ For Smartphones with QR-Reader (App)



# For installing and removing the coil spring when changing shock absorbers

#### Suitable for approx. 200 different vehicle types

- Max. span 309 mm
- High capacity of 26000 N
- Suitable for impact operation, e.g. HAZET 9012 MG in conjunction with impact socket HAZET 900 S-27 or 900 S Lg-27
- Closed system maintenance-free!
- Variable system due to easily replaceable tensioning jaws
- Plastic inserts for the protection of the lacquered spring surfaces preventing coil damage due to corrosion.
- With location bar for machinist's vice
- GS mark Tested Safety
- Tempered cylindrical and guiding tube
- Forged and tempered tensioning jaws
- · Also suitable for spring struts with stop spring in the shock absorber
- No need of further specialty tools

Classification to vehicles see table or in the internet: www.hazet.de  $\rightarrow$  Products  $\rightarrow$  Tool Finder  $\rightarrow$  Safety spring vice

#### Made in Germany

No.	EAN-No. 4000896+
Safety Spring Vice Basic Unit	
4900-2 A	077267



Replacement set for Spring Vice **4900-1 A and -2 A** consisting of 2 straight pins and 1 O-ring

4900-02 A/3

Replacement set for Spring Vice **4900-1** and **4900-2** consisting of: 5 straight pins and 2 O-rings

063437

# Safety Spring Vice Set



069415

Set with 3 pieces, 4900-2 A/3: suitable for approx. 50 different vehicle types

Set with 5 pieces, 4900-2 A/5: suitable for approx. 100 different vehicle types.

 Refer to table "Classification to vehicles" in the Internet: www.hazet.de or from page 244 on





# For installing and removing the coil spring when replacing shock absorbers

- Suitable for impact wrenches
- Closed system maintenance-free!
- Variable system due to easily replaceable tensioning jaws
- Plastic inserts for the protection of the lacquered spring surfaces preventing coil damage due to corrosion.
- With location bar for machinist's vice
- 4900-2 A also suitable for spring struts with stop spring in the shock absorber
- No need of further specialty tools
- Max. span: 309 mm
- High capacity of 26000 N
- GS mark Tested Safety
- Tempered cylindrical and guiding tube
- Forged and tempered tensioning jaws

#### Made in Germany

HAZET EAN-No. 4000896+

1 Basic Appliance and 2 Tensioning Jaws 4900-11
Suitable for approx. 50 different vehicle types
Contents: 4900-2 A 11 (2x)

**4900-2 A/3** 149483

1 Basic Appliance and 4 Tensioning Jaws (2x 4900-11 and 2x 4900-12). Suitable for approx. 100 different vehicle types

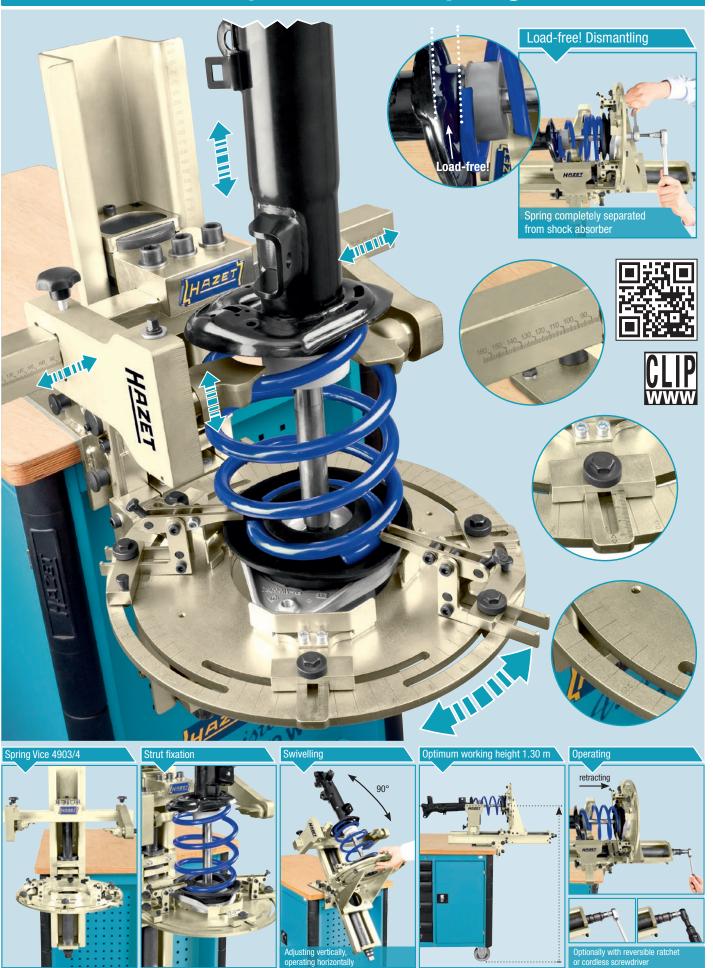
Contents: 4900-2 A 11 (2x) 12 (2x)

**4900-2 A/5** 086054





# Stationary Universal Spring Vice



4903-2

# Specialty Tools - Chassis - Spring Vice/Shock Absorber

# **Stationary Universal Spring Vice**

## Increased safety - thanks to load-free installation!

### Can be used for almost any spring strut/shock absorber

## New seating and assembly concept

- Swivelling in horizontal or vertical working position, HAZET recommends ergonomic working height: adjust vertically, operate horizontally
- · Damage to shock absorbers and head plated impossible (no overload risk)
- · Simple, lockable strut mount

## High safety

- · Consistently reliable seating of head plates
- Thread damage to piston rod impossible
- · Permanent fixation of spring throughout operation

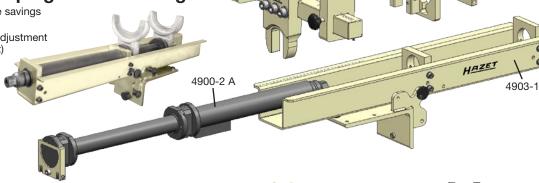
## Secured investment by using existing components of SYSTEM 4900

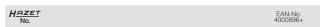
- Existing basic units 4900-2A and all tensioning jaws of System 4900 may be used
- · Use of future applications is assured

### Allows record keeping due to scaling

• If recurring, significant time savings due to scaling

 Firm fixation eliminates readjustment at the same strut (left/right)





Perfect basic equipment if the basic unit 4900-2 A already exists 179824

The perfect starter kit for the installation and removal of Mc Pherson struts, given that the basic unit 4900-2 A

does not exist yet

4903/2 A

4900-2 A Safety spring vice basic unit

4903-1 Basic support

By using the clamping disc and the universal tensioning jaw, the basic support 4903-1 or the set 4903/2 A becomes a completely stationary universal spring vice Contents:

4903-2 universal clamping disc (adjustable)

4903-3 universal tensioning jaw (adjustable), safety adapter included

180530

The perfect choice if the safety spring vice basic unit 4900-2 A already exists

Contents:

4903-1 Basic support

4903-2 clamping disc (adjustable)

4903-3 tensioning jaw (adjustable), safety adapter included

4903/3 180554

180561

The perfect complete package

Contents:

4900-2 A safety spring vice basic unit

4903-1 basic support

4903-2 clamping disc (adjustable)

4903-3 tensioning jaw (adjustable), safety adapter included

Components and Spare Parts see pages 288 to 293







4903-2 Clamping disc (adjustable)





_
EAN-No. 4000896+
179831
179848
077267
181704

4 steps to success

1. Mount strut on clamping disc above gripper and spring-loaded brake

2. Grip spring with universal tensioning jaw

3. Compress clamps either with reversible ratchet or cordless screwdriver

4. Remove shock absorber load-free and

install new one (then reverse order)

## Specialty Tools - Chassis - Spring Vice/Shock Absorber

# Tensioning Jaw Application see classification table



#### Made in Germany

HAZET No.	EAN-No. 4000896+
4900-10	059706
Plastic Insert	
4900-100	061136



#### Made in Germany

HAZET No.	EAN-No. 4000896+
4900-11	059713
Plastic Insert	
4900-110	061143



#### Made in Germany

HAZET No.	EAN-No. 4000896+
4900-12	059720
Plastic Insert	
4900-120	061150



#### Made in Germany

HAZET No.	EAN-No. 4000896+
4900-13	059737
Plastic Insert 4900-130	061167



#### Made in Germany

HAZET	EAN-No.
No.	4000896+
4900-14 A	064649

# Tensioning Jaw Application see classification table



#### Made in Germany

HAZET	EAN-No.
No.	4000896+
4900-15 A	121472



#### Made in Germany

HAZET	EAN-No.
No.	4000896+
4900-16	062164



#### Made in Germany

HAZET	EAN-No.
No.	4000896+
4900-17	062171



#### Made in Germany

HAZET No.	EAN-No. 4000896+
4900-18	100378
Plastic Insert	
4900-180	074327



#### Made in Germany

HAZET	EAN-No.
No.	4000896+
4900-19	085842



#### Made in Germany

HAZET	EAN-No.
No.	4000896+
4900-22	062188

# Tensioning Jaw Application see classification table



#### Made in Germany

#### **Plastic Insert**

- Special insert in conjunction with HAZET tensioning jaws 4900-23 and safety spring vice 4900-2 A
- For the operation of the front axle springs on BMW since 2001 E65: 735i, 745i, 730d, 740d E66: 7

088959 4900-231



#### Made in Germany

HAZET No.	EAN-No. 4000896+
4900-24	062201
Spacer Ring for the tensioning jaw 4900-24	

• Especially advantageous if HAZET 4900-22 and -24 already exists 4900-243 162932





#### Made in Germany

No.	4000896+
• For driver's cabin with steel sprir	ngs

MERCEDES-BENZ Actros (MP-1) since 1996, Atego since 1998 4900-25 121670





#### Made in Germany

HAZET No.		EAN-No. 4000896+

• For driver's cabin with steel springs MERCEDES-BENZ Actros (MP-1) since 1996, Atego since 1998 4900-26 121687

### Specialty Tools - Chassis - Spring Vice/Shock Absorber

# Tensioning Jaw classification table



#### Made in Germany

HAZET	EAN-No.
No.	4000896+
4900-30	100514



#### Made in Germany

HAZET No.	EAN-No. 4000896+
4900-31	138036
Plastic Insert	
4900-310	167715



#### Made in Germany

HAZET	EAN-No.
No.	4000896+
4900-33	138043



#### Made in Germany

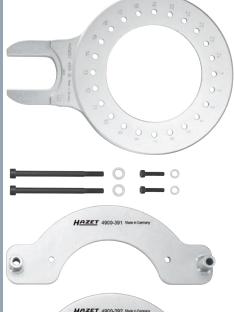
HAZET	EAN-No.
No.	4000896+
4900-34	121731



#### Made in Germany

H <u>AZET</u> No.	EAN-No. 4000896+
4900-35	121212

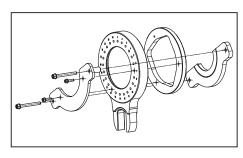
#### **MERCEDES-BENZ Tensioning Jaw Set**





#### With brake

- For the operation of the coil springs of the front axle on MERCEDES-BENZ, type 204 (C-Class), type X 204 (GLK-Class), type 212 (E-Class with standard chassis)/type 212 (E-Class with sports chassis)
- To be used together with HAZET Safety Spring Vice 4900-2 A
- Enables safe positioning of the spring struts with pivot bearing
- To be used together with HAZET Safety Spring Vice 4900-2 A, suitable tensioning jaw, e.g. 4900-17 and suitable centring insert (choose according to vehicle type. Note: Please follow the instructions of the manufacturer!)



#### Made in Germany

H <u>AZET</u>	EAN-No.
No.	4000896+
4900-39/11	167678

#### Centring Insert for MERCEDES-BENZ, type 204 (C-Class)

 To be used with HAZET safety spring vice 4900-2 A, tensioning jaw 4900-17 as well as round tensioning jaw with brake 4900-39/11

#### 4900-393 167722

#### Centring Insert for MERCEDES-BENZ, type X204 (GLK-Class)

• To be used with HAZET safety spring vice 4900-2 A, tensioning jaw 4900-17 and plastic spring protection insert 4900-120 as well as round tensioning jaw with brake 4900-39/11

#### 4900-394

#### Centring Insert for MERCEDES-BENZ, type 212 (E-Class) with standard chassis

 To be used with HAZET safety spring vice 4900-2 A, tensioning jaw 4900-31 and plastic spring protection insert 4900-310 as well as round tensioning jaw with brake 4900-39/11

#### 4900-395

# Centring Insert for MERCEDES-BENZ, type 212 (E-Class) with sports chassis

To be used with HAZET safety spring vice 4900-2 A, tensioning jaw 4900-17 as well as round tensioning jaw with brake 4900-39/11

4900-396









#### **Classification examples:**

For more information and older models see our website: www.hazet.de → Products → Tool Finder → Safety Spring Vice

Technical modifications of the vehicle manufacturers are subject to change without notice

= no information available.

\*\* = Use on BMW coil springs only in conjunction with the corresponding plastic spring protection inserts. BMW prescription: Spring vices must be operated with hand tools only!

Туре	Model Year	Tensioning Jaws		Plastic Spring Protection Inserts / Centring Inserts	Tensioning Jaws	6	Plastic Spring Protection Inserts/ Centring Inserts
ALFA ROMEO							
Alfa 147	2003	4900-11 (2x)	<b>-&lt;-</b>		4900-11 (2x)	-<-<	
Alfa 156	1998-2003	4900-10 (2x)	<b>4</b>	*	*		*
Mito	2009	4900-11 (2x)	<b>-&lt;</b> -<		4900-11 (2x)	-<-<	
AUDI							
A2	2000	4900-11 (2x)	<b>-&lt;-</b> <	*	*		*
A3	2000-	4900-11 (2x)	<b>-&lt;=</b>	*	4900-10 (2x)	<b>4</b>	*
A4	1996	4900-11 (2x)	<b>-&lt;=</b>	*	*		*
A5	2007-	4900-12 (2x)	<b>-&lt;=</b>	*	*		*
A6	1996	4900-11 (2x)	<b>-&lt;=</b>	*	*		*
A8	1996	4900-11 (2x)	<b>-&lt;</b> -<	*	*		*
BMW							
1 (E87) **: 116i/118i/120i/118d/120d	2004-	4900-11 (2x)	<b>-&lt;</b> -<	4900-110 (2x)	4902/6	99	-
3 (E46) **	1998-	4900-22 24	<b>-(</b> =0	4900-220 240	*		-
3 (E90) **: 320i/325i/330i/320d Limousine	2004-	4900-22 24	<b>-(</b> =0	4900-243	4902/6	99	-
3 (E91) **: 320/325/330/Touring	2005-	4900-22 24	<b>4</b> =0	4900-243	4902/6	99	-
3 (E92): 320/323/325/328/330/335	2005-	4900-22 24	<b>4</b> =0	4900-243			
3 (E93): 320/325/328/330/335	2006-	4900-22 24	<b>4</b> =0	4900-243			
5 (E39) **: 528i	1995-2000	4900-12 (2x)	<b>=&lt;=</b> (	4900-120 (2x)	*		*
5 (E60) **	2004-	4900-22 24	<b>4</b> =0	4900-220	*		*
7 (E38) **	1993-2000	4900-23 (2x)	<b>=&lt;=</b> (	4900-230 (2x)	*		*
7 (E65) **: 735i/745i/730d/740d	2001 –	4900-23 (2x)	<b>-&lt;-&lt;</b>	4900-231 (2x)	4900-19 (2x)	<b>-&lt;-</b> <	4900-190 (2x)
7 (E66) **: 735Li/745Li	2001 –	4900-23 (2x)	<b>-&lt;-</b> <	4900-231 (2x)	4900-19 (2x)	<b>-&lt;=</b>	4900-190 (2x)
E46, 318ti Compact	2001-	4900-12 (2x)	<b>-&lt;-&lt;</b>				
Mini	2001	4900-11 (2x)	<b>-&lt;-</b> <		4900-10 11	<b>=</b> (=(	
X3 (E83)	2006-	4900-31 33	<b>-&lt;-</b> <				
X5 (E70)	2006	4900-10 11	<b>⊐€</b> €	4900-100 110			
Z3 **	1996-	4900-12 (2x)	<b>-&lt;-</b> <	4900-120 (2x)	*		*
CHRYSLER							
300M (LH)	1998-2001	4900-12 (2x)	<b>-&lt;-&lt;</b>	*	4900-11 (2x)	<b>-(=(</b>	*
Jeep Wrangler (TJ)	1997-2006	4900-11 (2x)	<b>-&lt;-&lt;</b>	*	*		*
Stratus (JA/JX)	1996-2001	4900-16 (2x)	<b>-&lt;-&lt;</b>	*	*		*
Voyager (GS)	1996-2000	4900-13 (2x)	<b>-&lt;</b> -<	*	*		*







Туре	Model Year	Tensioning Jaws	100	Plastic Spring Protection Inserts / Centring Inserts	Tensioning Jaws	6	Plastic Spring Protection Inserts/ Centring Inserts
CITROËN							
Jumper	1997-2002	4900-13 (2x)	<b>-&lt;-</b>	*	*		*
Nemo	2008	4900-11 (2x)	<b>-&lt;-</b>		4900-11 (2x)	<b>-&lt;=</b>	
DACIA							
Logan 1,6i	2005-	4900-11 (2x)	<b>-&lt;-</b>	*	*		*
FIAT							
500	2007-	4900-12 (2x)	<b>-&lt;-</b>				
Doblo	2010	4900-11 (2x)	<b>-&lt;-</b>		4900-11 (2x)	<b>-&lt;=</b>	
Ducato	1995-2002	4900-13 (2x)	<b>-(=(</b>	*	4900-13 (2x)	<b>-(=(</b>	*
Ducato	2006	4900-13 (2x)	<b>-&lt;-</b>				
Grande Punto	2005-	4900-11 (2x)	<b>-&lt;-</b>	*	4900-11 (2x)	<b>-(=(</b>	*
Qubo	2009	4900-12 (2x)	<b>-&lt;-</b>		4900-12 (2x)	<b>-(=(</b>	
Stilo	2002	4900-11 (2x)	<b>-&lt;=</b>	*	*		*
FORD							
C-Max	2006	4900-12 (2x)	<b>-&lt;</b>				
Fiesta	2002-2005	4900-11 (2x)	<b>-&lt;</b> -<				
Fiesta	2005-2008	4900-11 (2x)	<b>-(-(</b>				
Fiesta	2009-	4900-12 (2x)	<b>-(-(</b>				
Focus	1998-2004	4900-11 (2x)	<b>-&lt;-</b>	*	*		*
Focus	2004-2010	4900-12 (2x)	<b>-&lt;-</b>		4900-10 (2x)	<b>44</b>	
Focus	2010-	4900-11 (2x)	<b>-&lt;-</b>		4900-10 (2x)	<b>4</b>	
Fusion	2005	4900-11 (2x)	<b>-&lt;-</b>				
Ка	1996-2008	4900-11 (2x)	<b>-&lt;-</b>		4900-10 (2x)	<b>4</b>	
Mondeo	1996-2000	4900-12 (2x)	<b>-&lt;-</b>	*	4900-11 12	<b>-&lt;=</b>	*
Mondeo	2000-2007	4900-12 (2x)	<b>-&lt;-</b>		4900-11 (2x)	-<-<	
Mondeo	2008	4900-12 (2x)	<b>-&lt;-</b>				
S-Max	2006	4900-11 (2x)	<b>-&lt;-</b>				
MERCEDES-BENZ							
A-Class Type 168	1997-2004	4900-15 A (2x)	=C=C	*	4900-14 A (2x)	<b>3(3(</b>	*
A-Class Type 169	2004-	4900-17 (2x)	<b>-&lt;-</b>	*	4900-35 (2x)	-<-<	*
Actros (MP-1) Commercial Vehicle	1996-	Special applicati	ion: Driver's cabi	n 4900-25 26 55			
Atego Commercial Vehicle	1998-	Special applicati	ion: Driver's cabi	n 4900-25 26 55			
B-Class Type 245	2005	4900-17 (2x)	<b>-&lt;</b> -<		4900-35 (2x)	-<-<	
C-Class/Type 203	2000-	4900-17 18	<b>-(-</b> -()	4900-180	*		*
C-Class/Type 204	2007-	4900-39/11 17	<b>≠0</b> >> <b>&lt;</b>	4900-393			
E- Class Type 211/Type 219	2003-	4900-19 30	<b>-(=</b> 0	*	*		*
E-Class /Type 212	2009-	4900-39/11 31	<b>≠0</b> >> <b>&lt;</b>	4900-395 310			
E-Class 4MATIC/Type 210	1997-2002	4900-14 A (2x)	<b>3(3(</b>	*	*		*









Specialty 7	Tools – C	hassis – S	pring V	lice/Shoc	k Absorber
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Туре	Model Year	Tensioning Jaws	204	Plastic Spring Protection Inserts / Centring Inserts	Tensioning Jaws	6	Plastic Spring Protection Inserts / Centring Inserts
MERCEDES-BENZ							
E-Class/Type 212 sports chassis	2009-	4900-39/11 17	<b>₹</b>	4900-396			
GLK-Class/Type X204	2008-	4900-39/11 17	<b>₹</b>	4900-394 120			
ML- Class Type 164	2005 –	4900-35 (2x)	<b>&lt;&lt;</b>	*	*		*
ML-Class/Type 163	1997-2005	*		*	4900-16 (2x)	<b>&lt;&lt;</b>	*
SLK/Type 171	2004-	4900-18 34	<b>&lt;&lt;</b>	4900-180	*		*
Vito, V-Class/Type 638	1996-2002	4900-17 (2x)	<b>&lt;&lt;</b>	*	*		*
Vito/Viano Type 639	2003-	4900-23 (2x)	<b>-&lt;-</b>	4900-230 (2x)	*		*
NISSAN							
Primera (P11)	1996-2002	4900-10 11	<b>◄</b> €	*	4900-10 (2x)	<b>4</b>	*
OPEL							
Astra F	1991-2000	4900-11 (2x)	<b>-&lt;-</b>	*	*		*
Astra G	1998-2004	4900-11 (2x)	<b>-&lt;-</b>	*	4900-11 (2x)	<b>-&lt;-</b>	*
Astra H	2004-2010	4900-12 (2x)	<b>-&lt;-</b>	*	*		*
Corsa B	1993-2000	4900-11 (2x)	<b>-&lt;-</b>	*	*		*
Corsa C	2000-2006	4900-11 (2x)	<b>-&lt;=</b>				
Corsa D	2006	4900-11 (2x)	<b>-&lt;=</b>		4900-10	<b>=</b>	
Meriva	2010-	4900-11 (2x)	<b>-&lt;=</b>				
Omega B	1997-2003	4900-12 (2x)	<b>-&lt;-</b>	*	*		*
Tigra	1994-2001	4900-11 (2x)	<b>-(=(</b>	*	4900-11 (2x)	<b>-&lt;=</b>	*
Vectra B	1995-2002	4900-12 (2x)	<b>-(-(</b>	*	*		*
Vectra C	2002-2008	4900-12 (2x)	<b>-&lt;-</b>	*	*		*
Zafira	1999-2003	4900-12 (2x)	<b>-(-(</b>	*	*		*
PEUGEOT							
106	1997-2003	4900-12 (2x)	<b>-&lt;-</b>	*	*		*
307 SW	2002-2008	4900-11 (2x)	<b>-&lt;-</b>		4900-12 (2x)	<b>-&lt;=</b>	
406	1997-2004	4900-12 (2x)	<b>-(-(</b>	*	*		*
806	1999-2002	4900-13 (2x)	<b>-&lt;-</b>	*	4900-11 (2x)	<b>-&lt;=</b>	*
Boxer	*	4900-13 (2x)	<b>-&lt;-</b>	*	*		*
Partners	1996-2003	4900-12 (2x)	<b>-&lt;-</b>		4900-12 (2x)	<b>-&lt;=</b>	
Partner	2006–	4900-12 (2x)	<b>-(=(</b>				
PORSCHE							
911 Carrera RS (Type 993)	1995 –	4900-16 (2x)	<b>-&lt;-</b>	*	4900-14 A (2x)		*
Boxster/Boxster S (Type 986 )	1996-2004	4900-15 A 22	<b>=C</b> = <b>€</b>	*	4900-11 (2x)	<b>44</b>	*
Boxster/Boxster S (Type 987 )	2004	4900-15 A 22	<b>=C</b> = <b>€</b>	*	4900-22 (2x)	<b>44</b>	*
Carrera 2/4 (Type 997)	2004	4900-15 A 22	<b>=C=€</b>	*	4900-22 (2x)	<b>4</b>	*
Carrera 2/4/Turbo (Type 996)	1998-2004	4900-15 A 22	<b>=C</b> = <b>€</b>	*	4900-16 (2x)	<b>44</b>	*
Cayenne	2004-	4900-16 (2x)	<b>-&lt;-</b>	*	4900-16 (2x)	<b>&lt;</b> <	*







Туре	Model Year	Tensioning Jaws	<b>1</b> 0	Plastic Spring Protection Inserts / Centring Inserts	Tensioning Jaws	6	Plastic Spring Protection Inserts / Centring Inserts
PORSCHE							
Cayman	2006-	4900-15 A 22	<b>=C=</b> €	*	4900-22 (2x)	-<-<	*
RENAULT							
Clio 2	2001	4900-11 (2x)	<b>-&lt;-</b>				
Clio 3 1,5 dci	2005	4900-12 (2x)	<b>-&lt;-</b>	4900-120 (2x)	*		*
Espace 2	2004	4900-13 (2x)	<b>-&lt;-</b>		4900-13 (2x)	-<-<	
Espace 2,0 turbo	2003	4900-17 (2x)	<b>-&lt;-</b>	*	*		*
Kangoo 1,5	2004	4900-15 A (2x)	=C=C	*	*		*
Laguna 2,0 dci	2005-	4900-12 (2x)	<b>-&lt;-</b>	*	4900-11 (2x)	-<-<	*
Megane	1996-2002	4900-12 (2x)	<b>-&lt;-</b>	*	*		*
Megane	2008-	4900-12 (2x)	<b>-&lt;-</b>				
Megane 2 1,9dci	2003-2008	4900-12 (2x)	<b>-&lt;-</b>	4900-120 (2x)	*		*
Modus 1,5dci	2005-	4900-12 (2x)	<b>-&lt;-</b>	*	*		*
Safrane B544	1996-2000	4900-11 12	<b>-&lt;</b> -<				
Scenic 1,5dci	2005-	4900-12 (2x)	<b>-(=(</b>	4900-120 (2x)	*		*
Traffic	2005	4900-11 (2x)	<b>-&lt;-</b>		4900-11 (2x)	<b>-&lt;</b> -<	
Twingo	2007-	4900-11 (2x)	<b>-(=(</b>	*	*		*
Twingo 1,2	1998-2007	4900-11 (2x)	<b>-&lt;=</b>	*	*		*
SAAB							
93	2002	4900-12 (2x)	<b>-(=(</b>		4900-12 (2x)	<b>-&lt;</b> -<	
SEAT							
Altea	2006	4900-11 (2x)	<b>-(=(</b>				
Ibiza	2002	4900-11 (2x)	<b>-(=(</b>	*	4900-10 (2x)	44	*
Ibiza	2006	4900-11 (2x)	<b>-(=(</b>				
Leon	2002	4900-11 (2x)	<b>-(=(</b>	*	4900-10 (2x)	<b>4</b>	*
ŠKODA							
Fabia	2001	4900-11 (2x)	<b>-(=(</b>	*	*		*
Oktavia	1996-2000	4900-11 (2x)	<b>-&lt;=</b>	*	*		*
Roomster	2007	4900-11 (2x)	<b>-(=(</b>		4900-11 (2x)	<b>₹</b> €	
Superb	2002	4900-11 (2x)	<b>-&lt;-</b>	*	*		*
SMART							
fortwo	2009	4900-10 (2x)	<b>44</b>				
SUZUKI							
Ignis	2000-2003	4900-10 (2x)	<b>44</b>	*	*		*
Wagon R+	2000-2006	4900-10 (2x)	<b>4</b>	*	*		*
ТОУОТА							
Corolla	1997-2002	*			4900-11 12	<b>₹</b> €	
Picnic	1996-2001	4900-11 (2x)	<b>-&lt;-</b>		*		









Туре	Model Year	Tensioning Jaws	<b>1</b> 0	Plastic Spring Protection Inserts/ Centring Inserts	Tensioning Jaws	6	Plastic Spring Protection Inserts / Centring Inserts
VOLKSWAGEN							
Amarok	2010	4900-11 (2x)	<b>₹</b> €				
Caddy	2006	4900-11 (2x)	<b>₹</b> €				
Golf 4	1997-2003	4900-11 (2x)	<b>-(=(</b>		4900-10 (2x)	<b>4</b>	
Golf 5	2003-2008	4900-11 (2x)	-<-<				
Golf 6	2008-2012	4900-11 (2x)	-<-<				
Lupo	1998-2005	4900-11 (2x)	-<-<		4900-10 (2x)	<b>4</b>	
Passat 3C	2010-	4900-11 (2x)	-<-<		4900-10 (2x)	<b>4</b>	
Passat B4	1993-1997	4900-11 (2x)	-<-<		4900-10 (2x)	<b>4</b>	
Passat B5	1996-2005	4900-11 (2x)	-<-<				
Passat B6	2005-	4900-11 (2x)	-<-<				
Polo	2001 – 2009	4900-11 (2x)	-<-<		4900-11 (2x)	<b>-&lt;-</b>	
Polo 9N	2006	4900-11 (2x)	-<-<				
Sharan	1995-2010	*			4900-12 (2x)	<b>-&lt;</b> -<	
Sharan	2010-				4900-10 (2x)	<b>4</b>	
T5 (Transporter)	2003-	4900-13 (2x)	-<-<				
Tiguan	2008	4900-11 (2x)	-<-<				
Touran	2003-	4900-11 (2x)	-<-<		4900-10 (2x)	<b>4</b>	
Touran	2010-	4900-11 (2x)	-<-<				
Volvo							
S 80	1998-2003	4900-12 (2x)	-<-<		4900-12 (2x)	-<-<	



# **Inside Spring Vice Set**





• Optimally suited to the limited spaces when installing and removing the coil spring at the rear axle of the following vehicles:

BMW - 1 Series E87 (since 2004): 116i, 118i, 118d, 120i, 120d, 130i

- 3 Series E90 (since 2004): 320i; 320d; 325i; 330i lim.
- 3 Series E91 (since 2005): 20; 325; 330 Touring
- Pendulum 6-point head provides a uniform distribution of power with the integrated twist protection
- Internal guidance of the tensioning jaws prevents the spring from sliding out
- Both-sided spindle operation possible

#### Made in Germanv

HAZET No.	EAN-No. 4000896+	
Set of 6 pieces consisting of: - inside spring vice 4902-1 - tensioning jaw 4902-10 - tensioning jaw 4902-11 - tubular box wrench s 10 4902 - tubular box wrench s 24 4902 - reversible ratchet 4910-1		
4902/6	121694	
Inside Spring Vice		
4902-1	122639	
Tensioning Jaw		
4902-10	122646	
4902-11	122653	
Tubular Box Wrench, size 10 m	m	
4902-210	122677	
Tubular Box Wrench, size 24 m	m	
4902-224	122660	
Reversible Ratchet		
4910-1	062133	



# **Shock Absorber Tool Set**









For repair work at the spring strut e.g. shock absorber, spring strut bearing, coil spring

- For retaining the piston rod when removing and installing the spring strut
- Caution: Follow vehicle manufacturer's specifications concerning torque values
- Application e.g. with torque wrench, e.g. HAZET 6291–1 CT in conjunction with Box-End Insert Tool 6630 d-21 Application of an impact wrench may damage the thrust bearing and the piston rod
- Set of 13 pieces in plastic case

#### Made in Germany

Contents:

4910/13

4910-1

4910-6 7 8 4910-16 17 18 19 21 22 24 4910-58 68 HAZET No. EAN-No. 4000896+



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#### Specialty Tools - Chassis - Spring Vice/Shock Absorber

#### **Reversible Ratchet**



For repair work at the spring strut e.g. shock absorber, spring strut bearing, coil spring

- For retaining the piston rod when removing and installing the spring strut
- Caution:

Follow vehicle manufacturer's specifications concerning torque values

#### Made in Germany

H <u>AZET</u>	EAN-No.
No.	4000896+
Reversible Ratchet 4910-1	062133

#### **Retainer for Piston Rod**



For repair work at the spring strut e.g. shock absorber, spring strut bearing, coil spring

- For retaining the piston rod when removing and installing the spring strut
- Caution:

Follow vehicle manufacturer's specifications concerning torque values

#### Made in Germany

HAZET No.	_ mm	mm	EAN-No. 4000896+
4910-6	94.5	<b>O</b> 6	062089
4910-7	94.5	<b>O</b> 7	062096
4910-8	94.5	08	062102



For repair work at the spring strut e.g. shock absorber, spring strut bearing, coil spring

- For retaining the piston rod when removing and installing the spring strut
- Caution:

Follow vehicle manufacturer's specifications concerning torque values

#### Made in Germany

	,				
HAZET No.	_ mm	mm	EAN-No. 4000896+		
4910-58	94.5	<b>O</b> 5 x 8	062119		
4910-68	94.5	<b>O</b> 6 x 8	062126		
For <b>PORSCHE</b> Cayenne S, <b>VW</b> -Touareg, Touran, Sharan					
4910-71	94.5	<b>O</b> 7.1 x 9.6	091195		

#### **6-Point Socket**



For repair work at the spring strut e.g. shock absorber, spring strut bearing, coil spring

- For retaining the piston rod when removing and installing the spring strut
- Caution:
- Follow vehicle manufacturer's specifications concerning torque values
- drive s 21 mm

#### 6-Point Socket

Made in Germany

HAZET No.	_ mm	mm	EAN-No. 4000896+
4910-16	82	16	062010
4910-17	82	17	062027
4910-18	82	18	062034
4910-19	82	19	062041
4910-21	82	21	062058
4910-22	82	22	062065
4910-24	82	24	062072

#### **Retainer for Piston Rod**



For repair work at the spring strut e.g. shock absorber, spring strut bearing, coil spring

- For retaining the piston rod when removing and installing the spring strut
- Caution: Follow vehicle manufacturer's specifications concerning torque values 

  Made in Germany

	•				
HAZET No.	<u>[</u> mm	mm	EAN-No. 4000896+		
For <b>OPEL</b> Astra H, <b>MERCEDES-BENZ</b> C-Class (204), E-Class (212), E-Class Coupé (207)					
4910-T 50	122.5	OT 50	120598		

#### **Shock Absorber Crown Wrench**



- For the operation of shock absorber screw connections on VW, SEAT and AUDI vehicles
- • drive 22 mm, b = width of pins
- Surface: chrome-plated

#### Made in Germany

HAZET No.	mm	<i>b</i>	Ø	EAN-No. 4000896+
For front axle 2593-4	22	5	14.5	017263
2093-4	22	J	14.5	017203



- For the operation of **shock absorber screw connections** on **MERCEDES-BENZ** type 203 (C-Class since 2000)
- • drive 22 mm, b = width of pins
- Surface: chrome-plated

H <u>AZET</u> No.	mm	<b>b</b>	EAN-No. 4000896+
2780-1	22	2.6	082858



#### Wheel Bearing/Wheel Hub

#### **Ball Joint Puller**



- For removing ball joint pivots of steering tie rods, stabilizers, etc.
- a =Jaw opening
- Surface: galvanized

#### Made in Germany

HAZET No.	<b>b</b>	<b>a</b> mm	st mm	EAN-No. 4000896+	
1779-18	40	18	33	136001	
1779-23	50	23	42	136018	
1779-27	54	27	54	136025	
1779-37	75	37	77	136032	
E.g. for commercial vehicles MAN, MERCEDES-BENZ, etc.					
1779-55	77	55	80	136407	

#### **Universal Ball Joint Puller**





- For removing the **ball joint pivots** of steering arms, steering tie rods, stabilizers, etc.on the most common vehicles
- Great clamping range due to continuous vertical adjustment and turn-over of the lower part

#### Made in Germany

HAZET	<b>□</b>	sb	EAN-No.
No.	mm	mm	4000896+
1779-1	23	65	135974

#### **Ball Joint Puller**



- For removing the **ball joint pivots** of steering arms, steering tie rods, steering knuckles, stabilizers, etc.
- Clamping range 50-80 mm
- Length of the jaw 35 mm

#### Made in Germany

HAZET	a	s <i>b</i>	EAN-No.
No.	mm		4000896+
1779-22	20	50-80	141654

#### **Universal Ball Joint Puller**





- For removing the ball joint pivots of steering arms, steering tie rods, stabilizers, etc. on the most common vehicles
- Sturdy execution and deep location groove enabling a safe and universal application e.g. for light commercial vehicles

#### Made in Germany

HAZET No.	a mm	sb	EAN-No. 4000896+	
1779-3	32	85	135998	

#### **Ball Joint Puller**



- For removing the **ball joint pivots** of steering arms, steering tie rods, stabilizers, etc. on heavy commercial vehicles
- Surface: galvanized, yellow passivated (free from Cr 6)
- For heavy commercial vehicles

HAZET	a	s b	EAN-No.
No.	mm		4000896+
1790-3	40	85	145454







Į.

#### **Ball Joint Puller**



- For removing ball joint pivots on vehicles with multi-link axle e.g. AUDI A6 and A8, VW Passat, Golf
- Surface: galvanized, yellow passivated (free from Cr 6)

#### Made in Germany

H <u>AZET</u>	a	s <i>b</i>	EAN-No.
No.	mm		4000896+
1790-4	30	65	145447

#### **Ball Joint Puller**



- For the safe removing of ball joint pivots and ball joints
- Supported by hydraulic system
- Surface: galvanized, yellow passivated (free from Cr 6)

#### Made in Germany

HAZET No.	<b>Q</b> mm	sb mm	EAN-No. 4000896+		
For passenger cars, vans, commercial vehicles     Max. capacity 12 tons					
1790-5	30-34	70	145461		
<ul> <li>For commercial vehicles, busses and building machinery</li> <li>Max. capacity 12 tons</li> </ul>					
1790-6	36-40	85	145478		

#### **Universal Ball Joint Puller**



- For removing the ball joint pivots of steering tie rods, stabilizers, etc. on the most common vehicles
- Jaw opening 20 mm
- Clamping range (sb) in 2 stages stage 1: up to 30 mm stage 2: up to 50 mm
- On FORD, BMW, Volvo, TOYOTA, OPEL, VW, AUDI, RENAULT

#### Made in Germany

HAZET	<b>a</b>	sb	EAN-No.
No.	mm	mm	4000896+
1790-7	20	12-50	148073

#### **Removal and Assembly Fork**



- Proven and economical system
- Easy application
- Wedge-shaped fork end allows fast removal of track rod and push rod ends, pitman arms and other parts of the steering
- Also suitable for removing shock absorbers and other separation work
- Application possible in confined spaces
- Sturdy forged design

HAZET No.	<i>L</i> ₁ mm	<i>l<sub>2</sub></i> mm	<b>b</b>	EAN-No. 4000896+
1780-18	80	340	18	133345
1780-23	80	340	23	133352
1780-29	90	350	29	133376



156368

### Specialty Tools - Chassis - Wheel Bearing/Wheel Hub

# HAZET Ingenious Tools

Į.

#### **Universal Wheel Hub Puller**



- Sliding and interchangeable pulling hooks
- With 5 hooks
- Optional accessories: hydraulic spindle 1786 H-02
- Surface: galvanized

#### Made in Germany

HAZET	Max.	sb	Spindle	EAN-No.
No.	tons	mm		4000896+
1781-5	10	115-225	G ¾" x 200 mm	136049

#### Clamping Screw Ejector, Four-Link Front Axle



- Enormous time saving (about 40 min.) due to possible usage with Chisel Hammer Set, e.g. HAZET 9035/6 (not included in delivery)
- Components do not have to be heatened up, prevents damage of aluminium axle due to improper handling

AUDI A4 model years 1995–2005, A6 model years 1998–2002 VW Passat

#### Made in Germany

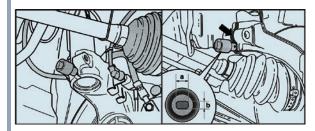
Contents:

2594-1 2 4

2004   2 4	
H <u>AZET</u> No.	EAN-No. 4000896+
3 pieces <b>2594-1/3</b>	175284
Hexagon insert 2594-1	174874
Extractor 2594-2	174881
Guide sleeve 2594-4	174980

### **Wheel Bearing Housing Tool**





- Suitable for the spring strut and ball joint mounting (separating the spring strut from the wheel bearing housing)
- ☐ drive 12.5 = ½"

#### Made in Germany

**HAZET** EAN-No. 400896+

Application on e.g

VW Fox since 2005, Polo since 2002, New Beetle, Golf from 1998 to 2004, Tiguan since 2008, Eos since 2006, Passat since 2006, Touran since 2003, Caddy since 2004, T5 since 2004

AUDI A2 since 2001, A3 since 2004, A4 years 2001 to 2008, A5 since 2008, A6 since 2008, TT since 2007 SEAT, ŠKODA

**0** 5.5 x 8 mm

4912-1

Application on e.g.
RENAULT, PEUGEOT, CITROËN

**0** 5 x 7 mm

2 155804

#### **Tool Set for Camber Adjustment**



#### Suitable for VW Golf, Jetta, SEAT Toledo, etc.

- Enables camber adjustment by one person only
- Tool significantly reduces the time required for the operation
- Sturdy 6-point spindle with s 22 mm for easy application
- Span: 135 up to 175 mm

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HAZET No.	EAN-No. 4000896+
4912-3/2	166596





# **Wheel Bearing Tool**

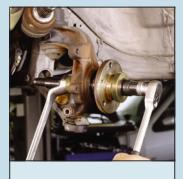






O-ring-clamping developed by HAZET retains the thrust washer on the centering bushing when installing and removing the wheel bearing.

Higher axial forces in spite of lower application of force (due to high capacity threaded spindle with special trapezoidal fine thread in conjunction with the axial cylinder roller bearing)



Optimal centering when inserting the wheel hub into the new wheel bearing

· For installing and removing wheel bearings as well as for installing wheel hubs

Centring bushing

- Change of built-in wheel bearings
- Removing the strut unit as well as (front) camber adjustment are not necessary:
  - time-saving (approx. 30 min)
- money-saving repair for the workshop customer
- Vehicles with Anti-Lock Braking System (ABS)
  - Due to the recess at the housing removal of the ABS sensor is not necessary
  - No risk of damaging the ABS sensor
  - Money and time-saving
- Centering aid due to calotte (spherical recess) at the housing

Reduction ring

Ingenious Tools

## Specialty Tools - Chassis - Wheel Bearing/Wheel Hub

#### **Wheel Bearing Tool**





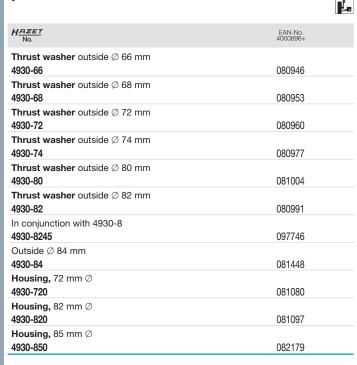
4930-34x40...-39x41

• For the replacement of built-in wheel bearings

- removing of strut unit as well as camber adjustment are not necessary -

<ul><li>removing of strut unit as well as camper adjustment</li><li>Made in Germany</li></ul>	are not necessary -
H <u>AZET</u> No.	EAN-No. 4000896+
<b>Threaded spindle</b> TR20 x 2 incl. thrust bearing, 6-point drive <i>s</i> 22 max. capacity 12 tons	
4930-1	080755
<b>Spindle nut</b> <i>s</i> 30 <b>4930-2</b>	080762
Spacer plate 4930-3	081158
4930-4	081141
4930-5	082834
Reduction ring 4930-6 for VW Polo C and PEUGEOT 106 in conjunction with housing 4930-720 4930-6	00000
	083633
In conjunction with housing 4930-850 4930-7	083640
Inside $\varnothing$ 45 mm in conjunction with 4930-8245 4930-8	097890
Centering plate for installing new wheel bearing on AUDI A4, A6 4930-9	121465
Centring bushing	121400
4930-34 x 40	081042
4930-35 x 40	081066
4930-35 x 42	081035
4930-37 x 45	081073
4930-39 x 41	081028
4930-43 x 45	097739
Thrust washer outside ∅ 60 mm	
4930-60	081011
<b>Thrust washer</b> outside ∅ 62 mm <b>4930-62</b>	080854
<b>Thrust washer</b> outside Ø 64 mm 4930-64	080939

#### **Wheel Bearing Tool**



#### **Wheel Bearing Extractor Set**



- For installing and removing wheel bearings as well as for installing wheel hubs
- Change of built-in wheel bearings
- Removing the strut unit as well as (front) camber adjustment are not necessary
- Vehicles with Anti-Lock Braking System (ABS)
- due to the recess at the housing removal of the ABS sensor is not necessary
   no risk of damaging the ABS sensor
- Centering aid due to calotte (spherical recess) at the housing
- High-quality threaded spindle with high capacity
- In tool case (expandable)
- Detailed operating instructions

	HAZET No.	EAN-No. 4000896+
ı	16 pieces for VW/AUDI, OPEL, FORD	
ı	Contents:	
ı	4930-1 2 3 4 5	
ı	4930-34 x 40 35 x 40 39 x 41	
ı	4930-62 64 66 68 72 74	
ı	4930-720 820	
	4930-1/16	121328









#### **Wheel Bearing Extractor Set**









- Wheel Bearing Extractor Set for hydraulic and mechanical operation
- Hydraulic operation together with the HAZET Hollow Piston Cylinder 4932-17 and the Hydraulic Spindle 4932-TR20

#### 22 pieces, contents:

- Threaded spindle 4930-1 TR20 x 2 incl. thrust bearing, 6-point drive s 22, capacity max. 12 tons
- Spindle nut s 30 4930-2
- Spacer plates 4930-3 4 5
- Reduction ring 4930-7
- Housing 4930-721 821 851
- Centring bushing 4930-34 x 40 39 x 41 35 x 42 37 x 45
- Thrust washer 4930-62 64 66 68 72 74 80 82 84

#### Made in Germany

HAZET	EAN-No.
No.	4000896+
4930-1/22	164776

### **Hollow Piston Cylinder**



- For threaded spindle 4932-TR20 and nut 4930-2
- Traction side: M27 x 2, alternatively M42 x 2, using the optional adapter
- Pressure side: 2-1/4" 14 UNS inside thread: TR 20, alternatively M20, using the optional adapter
- Outside diameter: 80 mm
- Cylinder height retracted: 206 mm/extended: 251 mm
- With coupling, protective cover and adapter 4932-M 20
- ₺ ₺ 5.5 kg

#### **Hollow Piston Cylinder**

HAZET

#### Made in Germany

No.	4000896+
4932-17	159741
Threaded spindle with steel cable TR 20 (for hollow piston cylinder 4932-17 and nut 4930-2) 4932-TR 20	150765
	159765
Hydraulic <b>pressure plate</b> for 4934-2572/12, -2562/6, -2566/6 using 4932-17	
4934-10	159932
Hydraulic <b>pressure plate</b> for 4934-2585/12 using 4932-17	
4934-8510	159628
<b>Housing</b> Ø 72 mm for article group 4930 using 4932-17 with 4932-TR 20 and 4930-2	
4930-721	159598
<b>Housing</b> Ø 82 mm for article group 4930 using 4932-17 with 4932-TR 20 and 4930-2	
4930-821	159604
<b>Housing</b> Ø 85 mm for article group 4930 using 4932-17 with 4932-TR 20 and 4930-2	
4930-851	159611
Adapter for spindles with M20 thread  Adapter increases compatibility of HAZET Hollow Piston Odioder with further spindles and appoints tools  Adapter for spindles and appoints tools  Odioder with further spindles and appoints tools.	

- Cylinder with further spindles and specialty tools
- Also suitable for tools of other manufacturers

4932-M 20 165681

- Adapter for Klann hollow piston cylinder KL-0040-2500
- With coupler thread for HAZET housings 4930-721 -821 -851 as well as pressure plates 4934-10 -8510 -7801
- Coupler thread: M 27 x 2 • Outside Ø: 80 mm

4932-M 27 x 2

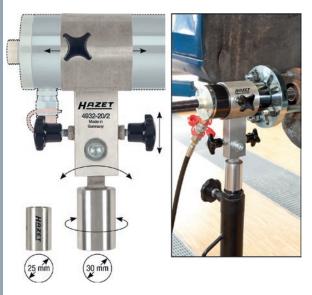
160037

Adapter for hollow piston cylinder HAZET 4932-17

- Adapter with coupler thread for operating tools made by Klann
- Coupler thread: M 42 x 2
- Outside Ø: 80 mm
- Enables working with the operating tool made by Klann for wheel bearing and silent blocks by using the HAZET hollow piston cylinder 4932-17

4932-M 42 x 2

#### Support for Hollow Piston Cylinder 4932-17



#### Perfect handling of the Hollow Piston Cylinder and specialty tools on the vehicle

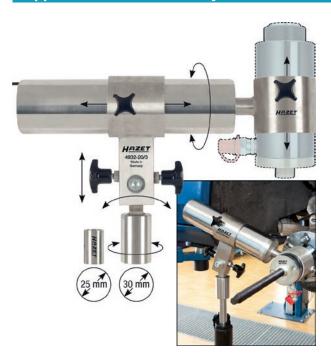
- Support for hollow piston cylinder 4932-17 (with an outside diameter of 80 mm), including the specialty tool in use, enables exact positioning of the cylinder to the vehicle
- Suitable for any standard elevator that support the exact positioning

— Wade III Germany	
HAZET No.	EAN-No. 4000896+
Allows a 4-axis movement of the hollow piston cylinder	
4932-20/2	167999

### Specialty Tools - Chassis - Wheel Bearing/Wheel Hub



#### **Support for Hollow Piston Cylinder 4932-17**



# Perfect handling of the Hollow Piston Cylinder and specialty tools on the vehicle

- Support for hollow piston cylinder 4932-17 (with an outside diameter of 80 mm), including the specialty tool in use, enables exact positioning of the cylinder to the vehicle
- Suitable for any standard elevator that support the exact positioning

#### Made in Germany

HAZET No. EAN-No. 4000896+

#### Like 4932-20/2, but additionally equipped with optional extension

 Application of the extension increases flexibility of movement to 6 axis and simplifies the exact positioning

**4932-20/3** 167951

#### Hydraulic Two-Stage Foot Pump, mechanical



- With manometer and 1.8 m hydraulic hose with coupling
- Maximum working pressure (bar): 700 bar
- Overload protection
- Basic steel frame for highest stability
- Pump head and tank made of aluminium
- Transport interlock
- Foot-controlled drain valve, precisely adjustable
- Big pedal
- Piston stroke: 23 mm
- Filling capacity: 1300cm<sup>3</sup>
- Useful capacity: 900cm<sup>3</sup>
- Dimensions: 462 x 160 x 161 mm

#### Made in Germany

HAZET	EAN-No.
No.	4000896+
4932 N-100	187195

#### Air-Hydraulic Pump



- With manometer and 1.8 m hydraulic hose with coupling
- Max. working pressure: 700 bar
- Air inlet thread: 12.91 mm (1/4")
- Hydraulic connection: **16.41 mm** = (3/8") 18 NPTF
- Big pedal: pump, hold, release
- Tank made of sheet steel
- Filling capacity: 1500 cm<sup>3</sup>
- Useful capacity: 1000 cm<sup>3</sup>

<ul> <li>Dimensions: 260 x 140 x 186 r</li> </ul>	nm

h	<u>JAZET</u> No.	EAN-No. 4000896+
4	932 N-110	187393

#### **Inner Bearing Extractor Set**



# For extracting the inner bearing rings that remain on the wheel hub when removing the wheel bearing

- Increased torque allows firm chuck tightening. Preventing from slipping-off the bearing ring
- Also suitable for types with ABS-housing
- Esp. suitable for inner bearing rings that rest against the wheel hub
- Suitable for AUDI, BMW, FORD, MERCEDES-BENZ, PEUGEOT, RENAULT, TOYOTA, VW

#### Controlle with resting a survey through all and

- Spindle with motion screw thread allows high removal forces
- Due to the torque arm, assembly may be placed into a machinist's vice
- 4 chucks (40 to 45 mm/45 to 50 mm/50 to 55 mm/55 to 61 mm) covering all diameters from 40 to 61 mm
- Clearly arranged in high-quality plastic case with soft foam insert
- Incl. detailed illustrated operating instructions

HAZET No.	EAN-No. 4000896+
4931-1/8	155538





# HAZET – Compact Wheel Hub / Wheel Bearing Tool Sets

# **Diversity with System!**

For installing and removing the wheel hub/wheel bearings of built-in parts on vehicles of VOLKSWAGEN-Group (VW, AUDI, SEAT, ŠKODA, FORD, MAZDA, Volvo)





- Provides security and effectiveness
- Suitable for all common wheel hub and wheel bearing dimensions
- ✓ Usable with spindle 4930-1 and spindle nut 4930-2
- ✓ Favourable introductory set for wheel bearings with a Ø of 72 mm
- ✓ Perfect supplementary sets for Ø 62 mm and Ø 66 mm
- ✓ Special set for units with a Ø of 85 mm completes the programme



# **Basic Working Equipment:**



4934-2572/12 - Introductory Set (Ø 72 mm) + 4934-2562/6 - Supplementary Set (Ø 62 mm) + 4934-6604/3 - Thrust rings for removal (Ø 66 mm) + 4934-6605/3 - Thrust rings for installation (Ø 66 mm)

= Perfect equipment

Single parts
available –
please contact your
HAZET partner!

#### Specialty Tools - Chassis - Wheel Bearing/Wheel Hub



#### **Classification examples:**

For more information see our website: www.hazet.de → Tool Finder → Wheel Bearings







Туре	Year of bearing installation	Note	Position	Ø Bearing	HAZET Wheel Bearing Tool Set	NTN- SNR Refe- rence
AUDI						
A1	5/2010		Front axle	72 mm	4934-2572/12 & 4930-1 & 4930-2	R157.32
A2 1.4 i/1.6 FSI/1.4 Tdi (AU24)	6/2000	With Anti-Lock Braking System (ABS)	Front axle	72 mm	4934-2572/12 & 4930-1 & 4930-2	R157.32
A2 1.2 TDi (AU24)	3/2001		Front axle	62 mm	4934-2562/6 & 4930-1 & 4930-2 & 4934-2572/12	R154.52
FORD						
C-Max (CB3)	2/2007		Front axle	78 mm	4934-3478/11 & 4930-1 & 4930-2	R152.62
Focus 2	9/2004 – 11/2007		Front axle	78 mm	4934-3478/11 & 4930-1 & 4930-2	R152.62
Focus 2 FL 1.4 i/1.6 i/1.6 TDCi/1.6 Ti-VCT/1.8i/1.8 TDCi/2.0 i/2.0 TDCi/2.5 i	12/2007		Front axle	78 mm	4934-3478/11 & 4930-1 & 4930-2	R152.62
Focus C-MAX	6/2003 – 2/2007		Front axle	78 mm	4934-3478/11 & 4930-1 & 4930-2	R152.62
Focus Coupé Cabriolet 1.6 i/2.0 i/2.0 TCDCi	7/2006		Front axle	78 mm	4934-3478/11 & 4930-1 & 4930-2	R152.62
MAZDA						,
Mazda 3 (BK) 1.4 i/1.6 DE/1.6 i/2.0 i	6/2003 – 1/2005		Front axle	78 mm	4934-3478/11 & 4930-1 & 4930-2	R170.41
SEAT			<b>'</b>	<u>'</u>		<u>'</u>
Cordoba 4	9/2002 – 6/2005		Front axle	72 mm	4934-2572/12 & 4930-1 & 4930-2	R157.32
Cordoba 4 1.2 i/1.4 i/1.4 TDi/1.6 i/ 1.9 SDi/1.9 TDi	6/2005		Front axle	66 mm	4934-2566/6 & 4930-1 & 4930-2 & 4934-2572/12	R157.49
Cordoba 4 1.9 TDi 131PS (Engine ALZ,BLT)	6/2005		Front axle	72 mm	4934-2572/12 & 4930-1 & 4930-2	R157.32
Cordoba 4 2.0 i	6/2005		Front axle	72 mm	4934-2572/12 & 4930-1 & 4930-2	R157.32
Ibiza 3	9/2001 – 6/2005	Serial identification no 6L-6-000001	Front axle	72 mm	4934-2572/12 & 4930-1 & 4930-2	R157.32
lbiza 3 1.2 12V/1.4 16V/1.4 TDi/1.6/1.9SDi	6/2005 – 11/2009		Front axle	66 mm	4934-2566/6 & 4930-1 & 4930-2 & 4934-2572/12	R157.49
Ibiza 3 1.9 TDi 100PS (Engine ATD)	5/2004 - 11/2009		Front axle	66 mm	4934-2566/6 & 4930-1 & 4930-2 & 4934-2572/12	R157.49
Ibiza 3 1.9 TDi 130PS (Engine ASZ)	6/2005 – 11/2009		Front axle	72 mm	4934-2572/12 & 4930-1 & 4930-2	R157.32
Ibiza 3 1.9 TDi Cupra 160PS (Engine BPX)	6/2005 – 11/2009		Front axle	72 mm	4934-2572/12 & 4930-1 & 4930-2	R157.32
Ibiza 3 2.0i/1.8 20V	6/2005 – 11/2009		Front axle	72 mm	4934-2572/12 & 4930-1 & 4930-2	R157.32
Ibiza 4	3/2008		Front axle	72 mm	4934-2572/12 & 4930-1 & 4930-2	R157.32
SKODA						
Fabia (6Y)	8/1999 – 7/2004	With power steering	Front axle	72 mm	4934-2572/12 & 4930-1 & 4930-2	R157.32
Fabia (6Y) [CZ]	8/1999 – 7/2002	Without power steering/speed nut Serial identification no 6Y-2-366084	Front axle	66 mm	4934-2566/6 & 4930-1 & 4930-2 & 4934-2572/12	R178.05
Fabia (6Y) [CZ]	7/2002 – 7/2004	Without power steering/double hexagon head nut/serial identification no. 6Y-3- 366085 -	Front axle	66 mm	4934-2566/6 & 4930-1 & 4930-2 & 4934-2572/12	R157.49
Fabia (6Y) [PL]	8/1999 – 9/2002	Without power steering/speed nut Serial identification no 6Y-2X-028027	Front axle	66 mm	4934-2566/6 & 4930-1 & 4930-2 & 4934-2572/12	R178.05
Fabia (6Y) [PL]	9/2002 – 7/2004	Without power steering/double hexagon head nut/serial identification no. 6Y-2X- 028028 -	Front axle	66 mm	4934-2566/6 & 4930-1 & 4930-2 & 4934-2572/12	R157.49







## Specialty Tools - Chassis - Wheel Bearing/Wheel Hub

Туре	Year of bearing installation	Note	Position	Ø Bearing	HAZET Wheel Bearing Tool Set	NTN- SNR Refe- rence
SKODA						
Fabia Facelift (6Y)	8/2004 — 12/2007	With power steering/with Anti-Lock Braking System (ABS)/wheel rims 14 inch	Front axle	72 mm	4934-2572/12 & 4930-1 & 4930-2	R157.32
Fabia Facelift (6Y)	8/2004 – 12/2007	Without power steering	Front axle	66 mm	4934-2566/6 & 4930-1 & 4930-2 & 4934-2572/12	R157.49
Fabia 2 (5J)	12/2006	With Anti-Lock Braking System (ABS)	Front axle	72 mm	4934-2572/12 & 4930-1 & 4930-2	R157.32
Fabia 2 Facelift	3/2010	Brake discs 256 mm	Front axle	72 mm	4934-2572/12 & 4930-1 & 4930-2	R157.32
Roomster	3/2006 – 3/2010	With Anti-Lock Braking System (ABS)	Front axle	72 mm	4934-2572/12 & 4930-1 & 4930-2	R157.32
Roomster Facelift 1.2 i/1.4 i/1.4 TDi/ 1.6 i/1.9 TDi	3/2010	Brake discs 256 mm	Front axle	72 mm	4934-2572/12 & 4930-1 & 4930-2	R157.32
VOLKSWAGEN						
Fox 1.2 i	11/2004	With Anti-Lock Braking System (ABS)/brake discs 239 mm	Front axle	66 mm	4934-2566/6 & 4930-1 & 4930-2 & 4934-2572/12	R157.49
Fox 1.2 i	11/2004	Brake discs 256 mm	Front axle	72 mm	4934-2572/12 & 4930-1 & 4930-2	R157.32
Fox 1.4 i	11/2004	With Anti-Lock Braking System (ABS)	Front axle	72 mm	4934-2572/12 & 4930-1 & 4930-2	R157.32
Fox 1.4 TDi	11/2004	With Anti-Lock Braking System (ABS)	Front axle	72 mm	4934-2572/12 & 4930-1 & 4930-2	R157.32
Lupo 1.2 TDi	5/1999 – 7/2005		Front axle	62 mm	4934-2562/6 & 4930-1 & 4930-2 & 4934-2572/12	R154.52
Polo 7 (9N) 1.2 i/1.4/1.4FSi/1.6	1/2002 - 10/2003	Without power steering	Front axle	66 mm	4934-2566/6 & 4930-1 & 4930-2 & 4934-2572/12	R157.49
Polo 7 (9N) 1.2 i/1.4/1.4FSi/1.6	11/2003 – 7/2004	With power steering	Front axle	72 mm	4934-2572/12 & 4930-1 & 4930-2	R157.32
Polo 7 (9N) 1.4 Tdi/1.9 Sdi/1.9 Tdi	11/2001 – 5/2005		Front axle	72 mm	4934-2572/12 & 4930-1 & 4930-2	R157.32
Polo 8 (9N) 1.2 i/1.4 i/1.4 FSi/1.4 16V/ 1.6	4/2005 – 7/2007	Without power steering	Front axle	66 mm	4934-2566/6 & 4930-1 & 4930-2 & 4934-2572/12	R157.49
Polo 8 (9N) 1.2 i/1.4 i/1.4 FSi/1.4 16V/ 1.6	4/2005 — 8/2007	With power steering	Front axle	72 mm	4934-2572/12 & 4930-1 & 4930-2	R157.32
Polo 8 (9N) 1.4 TDi/1.9 SDi/1.9 TDi	4/2005 — 8/2007		Front axle	72 mm	4934-2572/12 & 4930-1 & 4930-2	R157.32
Touareg 1 2.5 TDi	1/2003 – 10/2003		Front axle	85 mm	4934-2585/12 & 4930-1 & 4930-2	R154.58
Touareg 1 2.5 TDi	10/2003 – 11/2006		Front axle	85 mm	4934-2585/12 & 4930-1 & 4930-2	R154.62
Touareg 1	11/2002 – 11/2006	Wheel rims 16 inch/Serial identification no 4,035,000	Rear axle	85 mm	4934-2585/12 & 4930-1 & 4930-2	R154.58
Touareg 1	11/2002 – 11/2006	Wheel rims 16 inch/serial identification no. 4,035,001 -	Rear axle	85 mm	4934-2585/12 & 4930-1 & 4930-2	R154.62
Touareg 1 FL	12/2006 – 5/2010	Wheel rims 16 inch	Rear axle	85 mm	4934-2585/12 & 4930-1 & 4930-2	R154.62
Transporter 7E/7F (T5)	9/2009		Front axle	85 mm	4934-2585/12 & 4930-1 & 4930-2	R154.62
Transporter 7E/7F (T5)	9/2009		Rear axle	85 mm	4934-8507 & 4930-1 & 4930-2 & 4934-2585/12	R154.58
Transporter 7J/7H (T5)	4/2003 — 8/2003		Front axle	85 mm	4934-2585/12 & 4930-1 & 4930-2	R154.58
Transporter 7J/7H (T5)	8/2003 – 11/2009		Front axle	85 mm	4934-2585/12 & 4930-1 & 4930-2	R154.62
Transporter 7J/7H (T5)	8/2003 – 11/2009		Rear axle	85 mm	4934-8507 & 4930-1 & 4930-2 & 4934-2585/12	R154.58
Volvo						
C30	10/2006		Front axle	78 mm	4934-3478/11 & 4930-1 & 4930-2	R165.37
C70 CC	1/2006		Front axle	78 mm	4934-3478/11 & 4930-1 & 4930-2	R165.37
S40 2	3/2004		Front axle	78 mm	4934-3478/11 & 4930-1 & 4930-2	R165.37
V50	3/2004		Front axle	78 mm	4934-3478/11 & 4930-1 & 4930-2	R165.37

Ingenious Tools

# Specialty Tools - Chassis - Wheel Bearing/Wheel Hub

# **Compact Wheel Hub/Wheel Bearing Tool Set** CLIP 72 mm NTN. SNR YAZET

For installing and removing the wheel hub/ wheel bearings of built-in parts

HAZET recommends NTN-SNR wheel bearings Made in Germany

HAZET

EAN-No.

#### Introductory Set (72 mm $\varnothing$ )

Basic requirements: threaded spindle 4930-1, spindle nut 4930-2 Application:

Vehicles with a Ø 72 mm wheel bearing:

AUDI A1 since 2011, A2 since 2000, ŠKODA Fabia since 2000, VW Polo since 2002, Fox since 2005, SEAT Ibiza since 2002

- Including operating instructions with 3-dimensional illustrations
- . Set with 12 pieces in plastic case
- Foam insert with empty compartments for additional tool storage
- Contents:

pressure plate 4934-10, thrust washer 4934-7802, forcing bolt 4934-3 (5x), back-up ring 4934-4, back-up ring 4934-5, thrust washer 4934-6, 2 cylinder screws

4934-2572/12 150410

#### Components (removal)

back-up ring 4934-4, 2 cylinder screws

4934-4/3

149629

#### Components (installation)

back-up ring 4934-5, 2 cylinder screws

4934-5/3 150335



For installing and removing the wheel hub/wheel bearings of built-in parts HAZET recommends NTN-SNR wheel bearings

Made in Germany

Supplementary Set (62 mm Ø)

Application:

Vehicles with a Ø 62 mm wheel bearing:

VW Lupo, AUDI A2 1.2 I

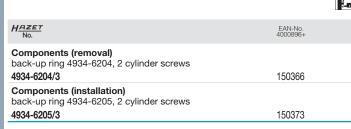
(Basic requirements: threaded spindle 4930-1, spindle nut 4930-2, as well as set 4934-2572/12)

. Set with 6 pieces, contents:

pressure plate 4934-6202, pressure plate 4934-6206, back-up ring 4934-6204, back-up ring 4934-6205, 2 cylinder screws

150403 4934-2562/6

#### Compact Wheel Hub/Wheel Bearing Tool Set











For installing and removing the wheel hub/wheel bearings of built-in parts HAZET recommends NTN-SNR wheel bearings

Made in Germany

HAZET No

EAN-No. 4000896+

Supplementary Set (66 mm Ø)

Application:

Vehicles with a Ø 66 mm wheel bearing: **VW** Polo, **ŠKODA** Fabia

Basic requirements: threaded spindle 4930-1, spindle

nut 4930-2, as well as set 4934-2572/12

· Set with 6 pieces, contents:

pressure plate 4934-6202, pressure plate 4934-6206, back-up ring 4934-6604, back-up ring 4934-6605, 2 cylinder screws

4934-2566/6 150427

Components (removal)

back-up ring 4934-6604, 2 cylinder screws

4934-6604/3

Components (installation)

back-up ring 4934-6605, 2 cylinder screws

4934-6605/3 150342



150359



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#### Compact Wheel Hub/Wheel Bearing Tool Set

#### For installing and removing the wheel hub/ wheel bearings of built-in parts

HAZET recommends NTN-SNR wheel bearings

#### Made in Germany

HAZET

EAN-No.

#### Special Set (85 mm $\emptyset$ )

#### Application:

Vehicles with a Ø 85 mm wheel bearing:

VW T5 (front and rear axle - rear axle only in conjunction with 4934-8507) and Touareg with 16 inch chassis

Basic requirements: threaded spindle 4930-1, spindle nut 4930-2

- Including operating instructions with 3-dimensional illustrations
- Set with 12 pieces in plastic case
- Foam insert with empty compartments for additional tool storage
- Contents: pressure plate 4934-8510, thrust washer 4934-7802, thrust

washer 4934-8506, forcing bolt 4934-8503 (5x) back-up ring 4934-8504, back-up ring 4934-8505, 2 cylinder screws 4934-2585/12

<b>^</b>	 	 <i></i>	N

Components (removal) back-up ring 4934-8504, 2 cylinder screws

4934-8504/3

150397

150434

Components (installation)

back-up ring 4934-8505, 2 cylinder screws

4934-8505/3

150380



















#### For installing and removing the wheel hub bearing unit with stud bolts of built-in parts

 $\bullet$  Special Tool Set  $\varnothing$  78 mm bearing unit with stud bolts for: FORD Focus 2 since 2004, Focus C-Max model years 2003 – 2007 as well as C-Max since 2007 Volvo C30 since 2006, C70 2 Cabriolet since 2006, S40 since 2004, V50 since 2004

MAZDA 3 (BK) 1.4i 1.6i, 2.0i 1.6Dl Turbo since 2003

- Mechanical operation with HAZET Threaded Spindle 4930-1 as well as Spindle Nut 4930-2
- Hydraulic operation with HAZET Hollow Piston Cylinder 4932-17, Threaded Spindle 4932-TR 20 as well as e.g. Hydraulic Foot Pump 4932-100 and Protective Cover 4934-7

#### Contents:

4934-7801 pressure plate 4934-7802 thrust washer

4934-7804 back-up ring

4934-7805 back-up ring

4934-7806 thrust washer 4934-8503 4 forcing bolt

2 cylinder screws

#### Made in Germany

HAZET	EAN-No.
No.	4000896+
4934-3478/11	166350

#### Compact Wheel Hub/Wheel Bearing Tool Set



bearing unit with stud bolts of built-in parts

 Special Set Ø 82 mm bearing unit with stud bolts for: FORD Mondeo 4, year 2007; Focus 2 2.5 RS as well as 2.5 RS 500 since 2007

HAZET recommends NTN-SNR wheel bearings

- Basic set 4934-3478/11
- Mechanical operation with HAZET Threaded Spindle 4930-1, Spindle Nut 4930-2, Pressure Plate 4934-7801 as well as 5 pieces Forcing Bolts 4934-8503
- 6 pieces, contents:
- Thrust washer 4934-8202 (removal)
- Back-up ring 4934-8204 (removal)
- Back-up ring 4934-8205 (installation) • Thrust washer 4934-8206 (installation)
- 2 cylinder screws

#### Made in Germany

HAZET	EAN-No.
No.	4000896+
4934-3482/6	174966

#### **Protective Cover**





- Serves as crush protection during hydraulic operation of the HAZET Specialty Tools 4934
- Consists of a mounting ring and plastic cover, 3 fixing screws and one additional cover

#### Made in Germany

	•	
HAZET No.		EAN-No. 4000896+
4934-7		164783

#### Adapter Ring VW T5



- To supplement the compact wheel hub/wheel bearing tool set 4934-2585/12
- Especially to be used together with pressure plate 4934-8506
- For installing the wheel hub/wheel bearings at the VW rear axle T5

HAZET	EAN-No.
No.	4000896+
4934-8507	154913

### Specialty Tools - Chassis - Wheel Bearing/Wheel Hub

#### Wheel Hub / Cardan **Shaft Extractor Set**



- For the removal of cardan shafts using the threaded spindle HAZET 4935-44-M 20
- When using the HAZET Hollow Piston Cylinder 4932-17 even tight and stuck cardan shafts will not cause any problems
- Suitable for: ALFA ROMEO, AUDI, BMW, CITRÖEN, FIAT, LADA, LANCIA, MERCEDES-BENZ, OPEL, PEUGEOT, RENAULT, SAAB, SEAT, VW etc.

#### Made in Germany

Contents:

4935-40-M 12 4935-41-M 14 4935-44-M 20 4935-45-M 14 4935-42 4935-43

HAZET No.	EAN-No. 4000896+
4935-2/15	164479
<b>Tension bolt</b> M12 x 1.5 <b>4935-40-M12</b>	166749
<b>Tension bolt</b> M14 x 1.5 <b>4935-41-M14</b>	166732
<b>Bolt Circle Plate</b> Ø 160 mm, for circles with a Ø of 90 up to 130	mm
4935-42	166657
Adapter 2 1/4"-14UNS	
4935-43	166664
Threaded spindle 230 mm long	
4935-44-M 20	165629
Hexagon Collar Nut M14	
4935-45-M14	165612

#### **Sliding Hammer**



- For extracting 4-, 5- and 6-hole wheel hubs, fullfloating axles, brake discs, brake drums etc, to be used with HAZET Cardan Shaft Extractor Set 4935-2/15 or the HAZET Adapter Plate 4935-42
- Striking weight 4.8 kg

#### Made in Germany

HAZET	_	EAN-No.	
No.	mm	4000896+	
1969-16/2	690	164462	

#### **Wheel Hub Grinder**



For optimal cleaning of wheel hubs and brake discs

- Prevents the falsification of the wheel bolt tightening torque originated by corrosion
- For optimal cleaning of wheel hubs and brake discs
- · Open-pored abrasive material and cup-formed grinding pad reduce the formation of dust to a minimum
- · No formation of sparks
- Hook and loop back for quick changing of grinding wheels

- EAN-No. 4000896+
- With hexagon insert for firm hold at the device
- 8-point profile enables safe and firm fixation of the grinding wheel to the base component
- · For wheel hubs with stud bolts (diameter of grinding zone 40 or 50 mm), e.g. **FORD**, **PORSCHE**, **Volvo**, Japanese passenger cars
- Wear-resistant: approx. 50 vehicles per wheel 12 pieces, contents:
- 1 base component made of aluminium 6 grinding wheels, diameter: 50 mm 5 grinding wheels, diameter: 40 mm

4960 N-45/12 186860

5 spare grinding wheels (small)  $\varnothing$  40 mm 4960 N-40/5 187232

5 spare grinding wheels (small)  $\varnothing$  50 mm

4960 N-50/5











#### Wheel Hub Grinder

#### For optimal cleaning of wheel hubs and brake discs





- Prevents the falsification of the wheel bolt tightening torque originated by corrosion
- For optimal cleaning of wheel hubs and brake discs
- Open-pored abrasive material and cup-formed grinding pad reduce the formation of dust to a minimum
- No formation of sparks
- Hook and loop back for quick changing of grinding wheels
- 10 mm 3-point pin, e.g. for the use in (air) drills

HAZET

EAN-No. 4000896+

Optimised for use on new wheel hubs with increased inside diameter (75 mm  $\emptyset$ ), e.g. on **BMW**: X1, X3, X5, X6, 1-series, 3-series,

5-series, Touring, GT (Gran Turismo), 7-series, etc.

- $\bullet$  For wheel hubs up to a 160 mm  $\varnothing$ on passenger cars and vans
- Wear-resistant: approx. 100 vehicles per wheel
- Rotation speed: Max. 1,500 rpm
- Set with 4 pieces Contents: 1 grinding pad, 3 grinding wheels Ø 160 mm

4960-160/4 160

For wheel hubs on passenger cars and transporters up to a Ø of 200 mm, e.g. BMW, FIAT Ducato, MERCEDES-BENZ Sprinter etc.

- Wear-resistant: approx. 100 vehicles per wheel
- Rotation speed: Max. 1,000 rpm
- · Set with 3 pieces Contents: 1 grinding pad, 2 grinding wheels Ø 200 mm

4960-200/3 200 143290 3 spare grinding wheels,  $\varnothing$  160 mm

4960-0160/3 132263

2 spare grinding wheels,  $\varnothing$  200 mm

4960-0200/2 143306 200



#### For optimal cleaning of wheel hubs and brake discs

- Prevents the falsification of the wheel bolt tightening torque originated by corrosion
- For optimal cleaning of wheel hubs and brake discs
- Open-pored abrasive material and cup-formed grinding pad reduce the formation of dust to a minimum
- No formation of sparks
- Hook and loop back for quick changing of grinding wheels

HAZET EAN-No.

- With hexagon insert for firm hold at the device
- Special grinder for optimal cleaning of the bearing surface of a wheel rim (wheel hubs) on trucks and transporters with stud bolt
- 8-point profile enables safe and firm fixation of the grinding wheel to the base component
- Inside Ø max.: 23 mm
- Grinding wheel Ø: 56 mm
- Made in Germany (Base component made of aluminium)
- 12 pieces, contents:
  - 1 base component made of aluminium 5 grinding wheels for moderate soiling

6 grinding wheels for heavy soiling

186754 4961 N-23/12 5 spare grinding wheels for moderate soiling,

outside Ø 56 mm, Innen Ø max. 23 mm 4961 N-023 M/5

5 spare grinding wheels for **heavy** soiling, outside  $\varnothing$  56 mm, inside  $\varnothing$  max. 23 mm 4961 N-023 S/5 187287

#### **Silent Block**

# **Tool Set for Silent Blocks**





#### For VW, AUDI, SEAT, ŠKODA

- Extraction and insertion pressure plate, housing
- · For extracting and inserting the silent blocks located in the console of the transverse control arm at the front axle
- Enables working on built-in components
- Tool set avoids wheel alignment

VW Polo 9N model years 2002-2009, Fox since 2005 AUDI A2 model years 2000–2005 ŠKODA Fabia model years 2000–2004

SEAT Ibiza, Altea, Córdoba model years 2003-2005 5 pieces, contents:

4925-4 housing 4925-5 extraction pressure plate

4925-6 insertion pressure plate

4925-7 insertion centring plate 4925-8 A spindle

#### Made in Germany

HAZET	EAN-No.
No.	4000896+
4925-2501/5	159406



- $\bullet$  Suitable for silent blocks with a  $\varnothing$  of 56 mm on VW Golf III rear axle
- May also be used with the Hollow Piston Cylinder HAZET 4932-17 for tight silent blocks
- · Set of 6 pieces

#### Made in Germany

HAZET	EAN-No.
No.	4000896+
4925-10/6	164509

#### Supplementary set for hydraulic operation, for installation 49<u>25-2504/9</u>



- Suitable for the hydraulic installation of rubber-plastic bearings or rubber-metal bearings at the rear axle VW Golf 4
- May be used with HAZET 4932-17 and 4925-27/3 for tight silent blocks

#### Made in Germany

Contents:

4925-28 30

HAZET No.	EAN-No. 400896+
4925-2504/2	168026

#### **Tool Set for Silent Blocks**



Suitable for installation and removal of the rubber-plastic bearings or rubbermetal bearings at the rear axle

- Suitable for AUDI A3, VW Golf 4, Bora, New Beetle, **ŠKODA** Oktavia since 1997, SEAT Leon, Toledo since 2001
- Mechanical operation with spindle set 4929-1/3
- May also be used with the hollow piston cylinder HAZET 4932-17 for tight silent blocks
- Set of 9 pieces

#### Made in Germany

Contents:

4925-20 21 22 23 24 25 26 31 4930-821

HAZET	EAN-No.
No.	4000896+
4925-2504/9	168019

#### **Hydraulic Expansion Set**





For the operation of the Tool Set for Silent Blocks 4925-2505/9 with the Hollow Piston Cylinder 4932-17

- Adapter for Hollow Piston Cylinder HAZET 4932-17
- Spindle 4925-18 M14x1.5, max. capacity 9 to.
- Spindle nut

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#### Made in Germany

HAZET	/	EAN-No.	
No.	mm	4000896+	
4925-2505/3	422	167937	

#### **Tool Set for Silent Blocks**







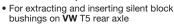






#### **Tool Set for Silent Blocks**

#### For VW T5 Transporter



- Mechanical drive with enclosed spindle
- Set of 9 pieces: centring plate with spring, 2 x thrust washer, adapter ring, washer, spindle with nuts 4925-14 TR 14 x 2, housing

#### Made in Germany

HAZET	/	EAN-No.	
No.	mm	4000896+	
4925-2505/9	259	167920	







Silent block replacement from the installed axle control arm/longitudinal control arm, wheel bearing housing and lower/inside transverse control arm as well as from the steering tie rod and the upper transverse control arm, when removed from the vehicle

- Optional spindle set 4929-1/3
- Mechanical operation with spindle set 4929-1/3
- For installation and removal of silent blocks at the rear axle on:

**VW**: Golf 5 Plus/Variant/4Motion model years 2005-2012, Jetta/Syncro model years 2006-2012, Scirocco model years 2009-2012, Beetle model year 2012, Eos model years 2006-2012 SEAT: Altea model years 2004–2012, Leon model years 2006–2012, Toledo model years 2005–2009 AUDI: A3/S3 model years 2004-2012, TT/TTS Coupe/Roadster model years 2007-2012

16 pieces

16 pieces

#### Made in Germany

Contents:

31 32 33 34 35 36 37 4925-26 38 39 40 41 42 43 44 4930-721

H <u>AZET</u>	EAN-No.
No.	4000896+
4925-2506/16	175246

### Spindle set for hydraulic operation





For tool set for silent blocks 4925-2504/9 and supplementary set 4925-2504/2

- Suitable for the hydraulic installation and removal of rubber-plastic bearings and rubber-metal bearings at the rear axle VW Golf 4, ŠKODA Oktavia since 1997, SEAT Leon, Toledo since 2001
- May be used with HAZET 4932-17 and 4925-2504/2 for tight silent blocks
- Spindle M 12 x 1.5, max. capacity 5 tons
- Set of 3 pieces

#### Made in Germanv

Contents:

4925-27 29 (2x)

H <u>AZET</u>	/	EAN-No.	
No.	mm	4000896+	
4925-27/3	422	168002	

# Specialty Tools – Chassis – Silent Block



#### Spindle Set



#### Made in Germany

#### HAZET

EAN-No. 4000896+

- For operation of the tool sets for silent blocks 4929-2901/4 2902/3 2903/2 2904/4 4925-2504/9
- · Motion screw thread at the spindle and axial groove bearing at the pressure nut cause high tractive and compressive output by low expenditure of force (torque)
- Set of 3 pieces:
   spindle TR 12 x 1.5
- nut with axial bearings 24
- hexagon nut

4929-1/3

225

156900

#### **Tool Set for Silent Blocks**





- To be used together with 4929-1/3
- Surface: galvanized, yellow passivated (free from Cr 6)

#### Made in Germany



• Pressure pieces for extracting and inserting the ball joint at the rear wheel carrier BMW types:

5-series: E39-E60-E61-E70

6-series: E63-E64

7-series: E38-E65-E66-E67

8-series: E52

· 4 pieces, contents:

4929-4 Support Bushing

4929-5 Support Disc

4929-6 Extraction Pressure Piece 4929-7 Insertion Pressure Piece

4929-2901/4

156825









- To be used together with 4929-1/3
- Surface: galvanized, yellow passivated (free from Cr 6)

#### Made in Germany



 Tools for extracting and inserting the ball joint and rubber mounting at the longitudinal control arm BMW types:

3-series: E36-E46-E83 5-series: E39-E60-E61-E70 6-series: E63-E64

7-series: E38-E65-E66-E67 8-series: E31-E52

Z4: E85-E86

3 pieces, contents:

4929-8 Extraction Spacer Sleeve 4929-9 Extraction Piece 4929-11 Insertion Spacer Sleeve

4929-2902/3 156795

#### **Tool Set for Silent Blocks**





- To be used together with 4929-1/3
- Surface: galvanized, yellow passivated (free from Cr 6)

#### Made in Germany

HAZET

EAN-No. 4000896+

156801

• For extracting and inserting the rubber mounting at the lower rear axle carrier, screw connection of the rear-axle transmission BMW types:

3-series: E36-E46-E83 8-series: E31

Z4: E85-E86

- To be used together with 4929-1/3
- 2 pieces, contents: 4929-12 Spacer Sleeve 4929-13 Pressure Piece

to be used together with 4929-14 and 4929-18

4929-2903/2



- To be used together with 4929-1/3
- Surface: galvanized, yellow passivated (free from Cr 6)

#### Made in Germany

HAZET

EAN-No.

• For extracting and inserting the rubber mounting at the front and rear gearbox mounting of the

BMW types:

1-series: E81 – E87 3-series: E36 – E46 – E83 – E90 – E91 – E92 – E93

5-series: E60-E61

6-series: E63-E64

7-series: E38-E65-E66-E67

8-series: E31 Z4: E85-E86

MINI type: Cooper S: R53

· 4 pieces, contents:

4929-14 Bushing

4929-15 Extraction Pressure Piece 4929-16 Insertion Pressure Piece 4929-17 Insertion Pressure Plate

4929-2904/4

156788

#### Tool Set for Silent Blocks











For operatiing the silent block on the rear axle longitudinal carrier

FORD Focus since 2007 as well as Volvo C30, C70 Cabriolet, S40, V50

MAZDA 3 (BK) 1.6 2.0, MAZDA 5 (CR19) 1.8 2.0 (CW) 2.0

For use with press frame set 4926-2/3 and HAZET hollow piston cylinder 4932-17 with adapter 4932-M°20 4 pieces. Contents:

4925-3401 housing (removal) 4925-3402 pressure sleeve (removal)

4925-3403 holding sleeve (installation) 4925-3404 pressure sleeve (installation)

HAZET No. EAN-No. 4000896+ 4925-3401/4 180417

#### **Tool Set for Silent Blocks**



#### For operatiing the silent block on the rear axle longitudinal carrier

FORD Focus since 2007 as well as Volvo C30, C70 Cabriolet, S40, V50 MAZDA 3 (BK) 1.6 2.0, MAZDA 5 (CR19) 1.8 2.0 (CW) 2.0

For use with e. g. HAZET hollow piston cylinder 4932-17 and adapter 4932-M 20 7 pieces, Contents:

4925-3401/4 silent block tool Set, 4 pieces 4926-2/3 press frame set, 3 pieces

HAZET No EAN-No. 4000896+ 4925-3401/7 180400

#### Universal Tool Set for Silent **Blocks and Joint Bearings**







- For the professional installation and removal of silent blocks and joint bearing with a Ø of 40-71 mm, mechanical drive with enclosed spindles (from inside bore Ø of min. 10 mm on)
- May be used optionally with hollow piston cylinder HAZET 4932-17
- Usage of a press frame enables installation and removal of silent block bushings etc. in ball joints.
- 19 pieces, contents:
- 2 Receiving adapters
- Feed shaft 4926-23M10 (max. capacity 5 tons) M 10 x 1.25 with nuts
- Feed shaft 4926-24M14 (max. capacity 9 tons) M 14 with nuts
- Pressure sleeves, short: ∅ 40, ∅ 50, ∅ 58, ∅ 66, ∅ 70, ∅ 80 mm • Pressure sleeves, long:  $\varnothing$  50,  $\varnothing$  60,  $\varnothing$  68,  $\varnothing$  76,  $\varnothing$  80 mm

HAZET	EAN-No.
No.	4000896+
4926-1/19	164493













- · For extracting and inserting silent blocks, hydraulic mounts, ball bearings, rubber mountings as well as bushings, shaft seals etc.
- Optimal for various vehicles, e.g. vans, off-road and commercial vehicles
- $\bullet$  Pressure sleeves from 74 up to 112 mm  $\varnothing$
- Set of 36 pieces

HAZET	EAN-No.
No.	4000896+
4926-1/36	161058

### **Press frame**



For use with tool set for silent blocks HAZET 4925-3401/4 and HAZET hollow piston cylinder 4932-17 with adapter 4932-M 20 3 pieces, contents:

4926-1 press frame with adapter 4926-6 4926-2-M 20 pressure spindle

4926-3 adapter

#### Made in Germany

H <u>AZET</u>	EAN-No.
No.	4000896+
4926-2/3	180301

#### **Press Frame for the Universal** Tool Set for Silent Blocks and Joint Bearings



- Expansion set. 6 pieces, for the hydraulic operation of the universal tool set for silent blocks and joint bearings 4926-1/19 together with HAZET hollow piston cylinder HAZET 4932-17
- For installation and removal of silent block bushings etc. in ball joints

#### Made in Germany

HAZET	EAN-No.
No.	4000896+
4926-2/6	164486

#### Thrust Block for Cardan Shaft



- passivated (free from Cr 6)
- For hydraulic removal of glued or pressed cardan shafts together with the HAZET hollow piston cylinder 4932-17 and pressure spindle 4926-2-M 20
- · With centring tip

#### Made in Germany

HAZET	EAN-No.
No.	4000896+
4926-5	181162

#### **Traction Device for** Joint Bearing



For installation and removal of joint bearing at wheel bearing housing or at the rear axle without removing wheel bearing housing

E.g. for **MERCEDES-BENZ** models 124, 201, 202, 203, 204, 208, 209, 210, 211, 212, 140

Traction Device for Joint Bearings consists of:

4925-14 spindle TR 14 x 2 4925-11 spindle nut TR 14 x 2,

4927-2701 housing (removal and installation) 4927-2702 pressure sleeve (removal and installation)

Spindle 4925-14 and spindle nut 4925-11 from tool set for silent blocks 4925-2505/9

Contents:

4925-11 14 4927-2701 2702

HAZET	EAN-No.
No.	4000896+
4927-2701/4	180752

#### **Cardan Shafts**

#### **Forcing Screw**



- For separating by force the outer homocinetic joint of the axle drive shaft on VW, AUDI, SEAT or ŠKODA, e.g. when replacing axle boots
- Quick and problem-free working even on pasted homocinetic joints
- The outside hexagon s 21 mm as well as the inside square 12.5 = ½" allow flexible application of different operating tools

#### Made in Germanv

HAZET No.	/ mm	M W	EAN-No. 4000896+	
2515-1	108	M 14 x 1.5	087549	
2515-2	120	M 16 x 1.5	087556	

#### **Clamp Pliers for Axle Boots**



- For installing axle boots made of Hytrel and clamps made of special steel with preset **torque values**, in conjunction with e.g. Torque Wrench HAZET 6110-1 CT
- For VW, AUDI, SEAT, ŠKODA, OPEL, FORD, etc.
- Ergonomically shaped 2-component plastic handle covers

#### Made in Germany

HAZET No.		EAN-No. 4000896+		
1847	<b>47</b> 178 050918			
Pair of Clamping Jaws for steering				

gear boots AUDI A4/A5/A6/A7/Q5 in conjunction with 1847 (for refitting) 1847-02/2

#### Clamp Pliers for **Steering Gear Boots**



#### For AUDI steering gear boots

 For installing high-strength steering gear boots and special steel clamps with pre-set torque values (please follow the instructions of the manufacturer), in conjunction with e.g. torque wrench HAZET 6110-1 CT

#### Specialty Tools - Chassis - Cardan Shafts - Wheels/Tyres

#### **Clamp Pliers for Steering Gear Boots**

- AUDI A4/A5/A6/A7/Q5
- Ergonomically shaped 2-component plastic handle covers
- ☐ drive 10 = 3/8"

#### Made in Germany

HAZET No.		EAN-No. 4000896+
1847-22	178	175185
Dair of Clamping	lavva fav ataavina	

Pair of Clamping Jaws for steering gear boots **AUDI** A4/A5/A6/A7/Q5 in conjunction with 1847 (for refitting)

1847-02/2

#### **Clamp Pliers for Axle Boots**





- For axle boot clamps on passenger cars, e.g. on VW, AUDI, OPEL, BMW, MERCEDES The state of the stat BENZ, HONDA, NISSAN, MAZDA
- With lug holding-down device
- Surface: nickel-plated

#### Made in Germany

HAZET	/	EAN-No.	
No.	mm	4000896+	
1847-1	230	007004	

#### **Hose Clamp Pliers**



• For progressively adjustable clamps without lug holding-down device, e.g. for axle boots on VW, AUDI, **MERCEDES-BENZ** and TOYOTA

#### Made in Germany

HAZET	/	EAN-No.	
No.	mm	4000896+	
1847-11	191	079520	

#### Screwdriver Socket



- For inside hexagon screws
- $\square$  drive 12.5 =  $\frac{1}{2}$
- For screwed connections on cardan shafts **VW** Passat, **AUDI**

#### Made in Germany

HAZET No.	S	I <sub>1</sub>	l <sub>2</sub> mm	<u>d</u>	EAN-No. 4000896+
2584	6	32	70	23	017041

#### **Lockring Pliers**



- Bent tips, chequered (90°)
- · Surface: chrome-plated

#### Made in Germany

HAZET	_	EAN-No.	
No.	mm	4000896+	
1847-2	200	007011	



- outside lockrings (shafts) on VW, AUDI, e.g. outside homocinetic joint
- Bent tips, chequered (10°)
- Surface: chrome-plated

#### Made in Germany

HAZET	_	EAN-No.	
No.	mm	4000896+	
1847-3	200	007028	



- For circlips, e.g. on cardan shafts and gearboxes especially on VW, AUDI, SEAT, ŠKODA
- Exterior cardan shafts/bearings
- Bent tips (30°)
- Surface: chrome-plated

#### Made in Germany

- wade in definally				
HAZET No.	/ mm	EAN-No. 4000896+		
1847-6	200	050468		



- For circlips on cardan shafts and gearboxes on flanged shaft or cardan shaft
- Especially on VW e.g. **VW** Ť 4
- Bent tips (30°)
- Surface: chrome-plated Made in Germany

HAZET	/	EAN-No.
No.	mm	4000896+
1847-61	200	058761

#### Wheels/Tyres

# **Telescopic Wheel Nut Wrench**



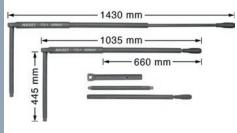
- Solid telescopic part, drop forged
- With square drive  $12.5 = \frac{1}{2}$
- For sockets of the series HAZET 900
- Surface: chrome-plated Made in Germany

HAZET No.	S mm	1 <sub>1</sub>	<i>l<sub>2</sub></i> mm	EAN-No. 4000896+	
772	125 1/2	303	535	030897	

#### **Telescopic Wheel Nut Wrench**







#### For installing and removing wheel nuts and bolts on commercial vehicles

- · Safety pin avoids unintentional loosening - removing of safety pin with pin Ø 3 mm
- 8-point extension for deeply located screwed connections
- Extended up to 1200 Nm
- Cold-insulated handle
- 3 pieces tool can be disassembled and allows space-saving storage in the storage or tool box
- For the operation of 20 3/4 sockets, e.g. HAZET 1000 S
- The fitting accuracy of interior and exterior tube provides exact and safe fit in every length
- Special welding method provides force-fit connection of inside square 20 ¾ and exterior tube
- Surface: burnished

HAZET	S	l₁	L <sub>2</sub>	EAN-No.
No.	mm	mm	mm	4000896+
772-1	20 3/4	1035	1430	123957





#### **Universal Axle and Slotted Nut Wrench Set**





- For the removal and precise installation of nearly all common axle nuts, e.g. hexagon nuts, 8-point nuts, slotted nuts, face nuts, round nuts with drilled holes, round nuts with pin holes, etc.
- Clamping range: from 35 up to 170 mm
- Max. torque 700 Nm
- □ drive 20 = ¾"

772-2/16

16 pieces in Safety-insert-System			
HAZET	EAN-No.		
No.	4000896+		



#### **Balance Weight Pliers**



- For installing, removing and cutting balance weights
- Also for expanding and compressing the retaining springs
- Surface: chrome-plated

#### Made in Germany

HAZET No.	/ mm	EAN-No. 4000896+
665	245	029204



- For installing, removing and cutting balance weights
- Also for expanding and compressing the retaining springs
- With plastic head at the hammer side
- Especially for lacquered weights
- Surface: chrome-plated

#### Made in Germany

HAZET	Į	EAN-No.
No.	mm	4000896+
665-1	245	029228



Plastic hammer head for 665-1 and 665-2 665-01 029211

#### **Four-Way Rim Wrench**

(1/3)

161041



- For passenger cars, vans and people carriers
- 705 V-02 additionally equipped with 12.5 = ½" for sockets of the 900 series
- Surface: chrome-plated
- DIN 3119, ISO 6788

#### Made in Germany

HAZET No.	S mm	_ mm	EAN-No. 4000896+
705 N	17 x 19 x <sup>13</sup> / <sub>16</sub> x 21	380	029389
705 V-02	17 x 19 x 22 x 🝱 ½	380	029396



- For passenger cars, people carriers and agricultural machinery
- High capacity
- Tested up to 500 Nm
- · Forged central piece
- With 12.5 = ½"
- for sockets of the 900 series
- Surface: chrome-plated, heads polished
- DIN 3119, ISO 6788

#### Made in Germany

HAZET	S	_	EAN-No.	
No.	mm	mm	4000896+	
715-01	17 x 19 x 22 x 125 1/2	420	029464	

#### Four-Way Rim Wrench



For commercial vehicles, tractors, agricultural and building machinery

- Tested up to 2000 Nm
- 720 S with  $\blacksquare$  20 =  $\frac{3}{4}$ for sockets of the 1000 series
- Forged central piece
- Surface: chrome-plated, heads polished
- DIN 3119

#### Made in Germany

HAZET No.	S mm	[ mm	EAN-No. 4000896+	
720-30	24 x 27 x 30 x 32	750	029518	
720 S	24 x 27 x 32 x 20 3/4"	750	029532	

#### **Tire Iron**



- Double-T profile ensures high stability
- Surface: chrome-plated

#### Made in Germany

HAZET No.	_ mm	EAN-No. 4000896+		
For motorcycles				
650-8	199	028672		
For passenger cars and vans				
650-12	303	028627		
650-16	396	028634		
650-20	500	028641		
650-24	598	028658		





- For installing and removing tyres
- For steel and aluminium rims
- With replaceable plastic coating fixed by screws
- Surface: chrome-plated

#### Made in Germany

HAZET No.	_ mm	EAN-No. 4000896+	
650 K-20	500	028696	



- For commercial vehicles, agricultural and building machinery
- Heavy design

HAZET	/	EAN-No.
No.	mm	4000896+
652	600	028702

# Specialty Tools - Chassis - Wheels/Tyres

# Ingenious Tool

## **Tire Iron**



- Especially for tubeless tyres
- · Heavy design

#### Made in Germany

HAZET	/	EAN-No.
No.	mm	4000896+
653	456	028719

### Valve Tool



- For installing and removing tyre valve cores
- For pushing in the valve pin when deflating the tyre, e.g. on passenger cars, transporters and commercial vehicles

#### Made in Germany

HAZET	EAN-No.
No.	4000896+
666-1	087136

## **Tire Tread Depth Gauge**







- Glare-free reading
- Measuring depth 30 mm
- Graduation in 0.1 mm steps for an exact determination of the tread depth
- Light weight and easy handling
- Very robust made of hard brass
- In practical storage case

#### Made in Germany

H <u>AZET</u>	EAN-No.
No.	4000896+
666-5	129164

## Pliers for Wheel Nut Caps





- Enables the damage-free removal of wheel nut caps on aluminium rims,
   e.g. on AUDI, VW and OPEL
- The pliers' jaw tips are especially shaped for the nut caps
- Surface: bright chrome-plated, handles dip-insulated
   Made in Germany

## Made in Germany

HAZET	_	EAN-No.
No.	mm	4000896+
666-10	160	110575

## **Universal Axle Lever**





- For the removal of ball joints, transverse control arms and further axle components
- Various applications; pivoting and 6 position adjustment

HAZET	EAN-No.
No.	4000896+
654-1	161089

## **Tyre Pressure Control System Set**



185 x 153 x 52 mm

HAZET BEB-1

According to an EU-regulation since 11/2012 all homologated vehicles must be equipped with tyre pressure control systems. Such a system will be obligatory for all new cars from the 1st of November 2014 onwards (see EU-regulation no. 661/2009 and ECE-regulation no. 64)

Insert-System, 2-component soft foam insert

#### Made in Germany

Contents:

Note:

666-1 850 Lg-11 12 2223-T 15 T 20 2304 6001-5.4/3

H <u>AZET</u>	EAN-No.
No.	4000896+
669-2	186709





# **Electricity/Battery Service**



## **Electrical Testing**

## **Testing Set**









- Test appliance for car electrics and electronics
- For trouble shooting on electronic components
- 3-48 V
- Tension indication with 2 LED (= tension and positive or negative pole)
- Probe tip, needle with sliding mechanism, additional set of crocodile clip and probe tip
- Cable length 130 cm

• Set of 3 pieces		
HAZET No.	_ mm	EAN-No. 4000896+
Test appliance for car e 2152/3	electricity and electronic 156	013098
Basic unit 2152	156	013067
Crocodile clip only 2152-01	62	013074
Probe tip only 2152-02	98	013081

## **Electronic Multifunction Tester**



#### With LED display and integrated lighting

- Especially for workshops (motorcycles, passenger cars, commercial vehicles, boats)
- 12-24 V
- Cable length 6 m with integrated lighting
- Short circuit proof 7.5 A
- Application: For testing electrical components, e.g. electrical fuel pumps, relays, lamps, window lift engines, etc.
- · Optimal lighting of inspection area
- Several acoustical signals
- Immediate checking of polarity due to LED-display red/green
- Detects bonding defaults
- Continuity test: e.g. relays, safety fuse, switches, wiring, etc.
- Self-testing function

HAZET	[	EAN-No.
No.	mm	4000896+
2152-5	6000	144440



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## Specialty Tools – Electricity/Battery Service – Electrical Testing – Battery Service

## Car Light Tester





- With probe tip (10 mm long) and protective cap
- Cable with crocodile clip
- 6-24 V

Not to be used on vehicles with electronic components. For vehicles with electronic components see HAZET 2152/3

#### Made in Germany

HAZET No.		EAN-No. 4000896+
2153	120	013111

## **Battery Service**

## **Battery Filler**



### Made in Germany

HAZET	_	EAN-No.
No.	mm	4000896+
4650-0	256	022007

## **Acid Tester**



- For controlling the acid content of the battery fluid
- With aerometer

#### Made in Germany

HAZET	_	EAN-No.
No.	mm	4000896+
4650-1	280	022014

## **Pole and Battery Terminal Puller**



- Optimally suited for the removal of small parts such as battery terminals, ball bearings, pulleys, sprockets, etc.
- Automatic gripping of hooks
- Manageable and rugged design, with drop-forged hooks
- 2-arm design

#### Made in Germany

HAZET No.	Max. tons	sb	st mm	Spindle	EAN-No. 4000896+	
1784-40	0.5	60	40	M 10 x 1.5 x 60 mm	133482	

## **Special Tool for Battery Plugs**



- For screwing battery plugs in and out
- Profile is especially suitable for battery plugs
- Special length allows universal application in areas with restricted access
- Ergonomic T-handle made of plastic
- Surface: chrome-plated

HAZET	<u>l</u>	EAN-No.
No.	mm	4000896+
4650-3	95	102051

## **Battery Pole and Terminal Brush**



Made	in	Germany
maac		acrimarry

HAZET	_	EAN-No.
No.	mm	4000896+
4650-4	120	022038

## **Battery Cell Tester**



- Fast diagnosis of the charging system and state of the battery
- Measuring range 6 and 12 volt for the application on passenger cars and motorcycles

HAZET	,	EAN-No.
No.	mm	4000896+
4650-5	333	022045

4674-4

Contents: 4671-4 5





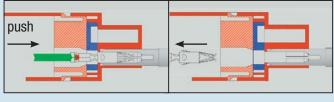
## **Connections/Plug Connections**

## **HAZET SYSTEM Release Tools**

- For professional working
- ✓ High ease of use
- Safe application

For damage-free releasing plug-type connectors, e.g. flat and round connectors

- OEM quality "Made in Germany"
- Malfunctions due to loose contacts can be remedied easily, quickly and professionally
- Universal application in the field of car electricity
- With sliding caps protecting the blades from damage and avoiding the risk of injury





## **SYSTEM-Release-Tool Assortment**



• Basic Set for about 80 % of all plug-type connections in passenger cars

• 12 pieces, in plastic case with soft foam insert

Made in Germany

Contents:

4671-1 2 3 4672-1 2 4673-1 2 3 4 3 4 5

HAZET EAN-No. 4000896+ 4670-1/12 132898





HAZET No. EAN-No. 4000896+ 4670-4/10 135530



4671-4 5 11 4672-5 6 7 4674-1 7 8 HAZET No EAN-No. 4000896+ 4670-5/12 135646



HAZET No. EAN-No. 4000896+ 4670-6/9 135776

## Specialty Tools - Electricity/Battery Service - Connections/Plug Connections



## Made in Germany

HAZET No.	EAN-No. 4000896+
ABS 4.0 mm round connector 4671-1	135219
3.5 mm round connector system 4671-2	135288
1.5 mm round connector system	
4671-3	135295
2.5 mm round connector	
4671-4	135394
LKS 1.5 mm pin-side	
4671-5	135400
LKS 1.5 mm bush-side	
4671-6	135417
Release tool for round connector system 3.5 mm	
4671-9	135622
Release tool for round connector system antenna contact	
4671-10	135639
ABS mounting help	10000
· .	105650
4671-11	135653
ABS bushing	
4671-15	135837
Round connector system	
4671-16	135844



### EAN-NO. 4000896+  Micro Timer II  4672-1 135042  Maxi Power Timer  4672-2 135073  Pit Pod/Faston 6.3 mm  4672-3 135097  JPT/SPT  4672-4 135165	- Made in dermany	
4672-1     135042       Maxi Power Timer     4672-2       4672-2     135073       Pit Pod/Faston 6.3 mm     4672-3       JPT/SPT     135097		
4672-2     135073       Pit Pod/Faston 6.3 mm     135097       4672-3     135097       JPT/SPT     135097		135042
<b>4672-3</b> 135097 JPT/SPT		135073
		135097
		135165

Continuation see next page ▶

4



## Specialty Tools - Electricity/Battery Service - Connections/Plug Connections

SYSTEM-Release-Tool

#### **SYSTEM-Release-Tool** 4 HAZET EAN-No. 4000896+ MLK 1.2 mm 4672-5 135325 SLK 2.8 mm P 135356 4672-6 LSK8 4672-7 135370 Sicma contact 2.8 mm 135387 4672-8 MCP 1.5 mm/contact width 1.5 mm 4672-11 135561 Flat connectors with 2 snap-in pins/contact width 4.8 mm (e.g. ISO-connector car radio) 4672-12 135578 Flat connectors with one housing catch/contact width 6.3 mm 4672-13 135585 DCS 2 contact 4672-14 135592 Flat connectors with 2 snap-in pins/contact width 2.8 mm 4672-15 135615 E-95 4672-16 135677 MCP 4.8 mm 4672-19 135714 MCP 2.8 mm 135738 4672-20 MCP 9.5 mm 4672-21 135790 Ducon 9.5



4	4
Made in Germany	7
HAZET No.	EAN-No. 4000896+
Micro Standard 4673-1	134946
Standard 2.72 mm <b>4673-2</b>	134953
Standard 1.48 mm <b>4673-3</b>	134977
Standard Timer 1.89 mm 4673-4	134991
Release tool for secondary locking 4673-5	135301
Additionally for single groove JPT contacts 4673-6	135332
Leaf spring connector (Micro-Timer) 4673-7	135349
Secondary locking FCI 4673-8	135424
Flat connectors with one lock catch (various contact width: 4673-12	s) Yazaki 1.5 and 2.8 135547
Flat connectors with housing catch 4673-13	135554



- wade in Germany	
HRZET No.	EAN-No. 4000896+
SLK 2.8 mm P & S 4674-1	135363
Flat connectors with 2 snap-in pins/contact width 6.3 mm	
4674-4	135608
GSK combi	
4674-7	135721
Pin 5-7 pins	
4674-8	135769
MKS/MKR 1.5	
4674-9	135806
VKR contact	
4674-10	135868





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## Specialty Tools - Electricity/Battery Service - Generator

## Generator

## **Pulley Extractor**



Extractor for pulleys with thread holes, application with:

- 1 crossbar, short, for pulleys 43-120 mm Ø
- 1 crossbar, long, for pulleys 95-210 mm Ø
- 3 exchangeable pressure pieces, serving as spindle extension

Extractor for pulleys without thread holes (hook grip behind pulley), application with:

- 1 crossbar, short, for pulleys 23 100 mm Ø
- 1 crossbar, long, for pulleys 85-195 mm Ø
- Puller hooks for a span depth up to 68 mm or extension up to 88 mm

Extractor with 2 groove hooks (fit into the grooves of the pulley, if gripping behind is not possible), application with:

- 1 crossbar, short, for pulleys 80 140 mm Ø
- 1 crossbar, long, for pulleys 135-235 mm Ø

#### Made in Germany

HAZET	EAN-No.
No.	4000896+
1789 N-1	158621

## V-Ribbed Belt Pulley Adapter











- · Adapter with internal serration XZN for installing or removing the V-ribbed belt pulley at the generator,
- For e.g. VALEO, BOSCH etc. on VW, AUDI, ŠKODA and SEAT

#### Made in Germany

HAZET	S	mm	/	EAN-No.
No.	mm		mm	4000896+
2592	19.6	17	30	057443

## **Pulley Extractor**



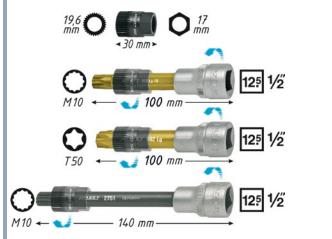
- For installing and removing the V-(ribbed) belt pulley at the generator
- · Application on VW, AUDI, ŠKODA, SEAT, PORSCHE, MERCEDES-BENZ, FORD, Volvo, etc.
- Set of 2 pieces consisting of adapter with internal serration HAZET 2592 and screwdriver socket HAZET 2751 (M 10)

#### Made in Germanv

## **Pulley Extractor**

ı	◀	
ı	Contents:	<del>)</del>
ı	2592 2751	
	HAZET No.	EAN-No. 4000896+
ı	4641/2	081479

## V-Ribbed Belt Pulley Tool



- For working on the built-in or dismantled generator
- For installing and removing the V-(ribbed) belt pulley at the generator
- · Control of the screwing
- TORX® and XZN screwdriver sockets for different inside profiles
- The generator is locked with the respective screwdriver socket and the screwing of the belt pulley is operated with the adapter with internal serration
- Application on VW, AUDI, ŠKODA, SEAT, PORSCHE, MERCEDES-BENZ, FORD, RENAULT, Volvo, etc.
- Set of 4 pieces

## Made in Germany

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HAZET No EAN-No. 4000896+ 4641/4 103157





- For installing and removing the V-(ribbed) belt pulley at the built-in generator
- · Control of the screwing
- Extra-short (69.5 mm) TORX® and XZN screwdriver sockets for different inside profiles
- The generator is locked with the respective screwdriver socket and the screwing of the belt pulley is operated with the adapter with internal serration
- Application, among others, on MERCEDES-BENZ
- Set of 3 pieces

### Made in Germany

Contents:

8802 Lg-T 50 8808 Lg 70-10 2592

HAZET	EAN-No.
No.	4000896+
4641 K/3	159314

(1/9)









## V-Ribbed Belt Pulley Tool Set



#### Suitable for approx. 95% of all common vehicle types with V-(ribbed) belt pullevs

- For installing and removing the V-(ribbed) belt pulley at the generator
- · For control of the screwing

#### In SmartCase 165-S

Safety-Insert-System, 2-component soft foam insert

5teilig 2592 V-ribbed belt pulley adapter, Ø 17 mm 2310 Lg-10 socket, Ø 10 mm 2312 Lg-10 screwdriver socket, O M 10 2324 Lg-T 50 screwdriver socket, O T 50 4642-1 6-point adapter,  $\varnothing$  19 mm

• Choose the rigth socket to lock the generator and operate the belt pulley screw with the corresponding adapter

#### Made in Germany

HAZET	EAN-No.
No.	4000896+
4641-2/5	186013

## V-Ribbed Belt Tool Set



#### Universal Set for installing and removing of elastic V-ribbed belts

- Tool set allows application on double pulleys
- Necessary specialty tool, as there is no tensioner for installation and removal of the V-ribbed belt. Among others for: ALFA-ROMEO 159 2.4 Multijet, BMW 1-Series and 3-Series, CITROËN Picasso, C4 C4 Picasso, C5, Jumpy, Berlingo 1.6 HDI, FORD Focus, C-Max 1.6 TDCI, FIAT Multipla, Bravo, Croma 1.6 Petrol und 2.4 MJ **LANCIA** Lybra 1.6 Petrol, **MAZDA** 3 1.6 DE, **PEUGEOT** 207, 308, 407, Partner, 5008, 3008 1.6 HDI

#### In SmartCase 165-S

Safety-Insert-System, 2-component soft foam insert 4 pieces.

4643-1 Removal tool

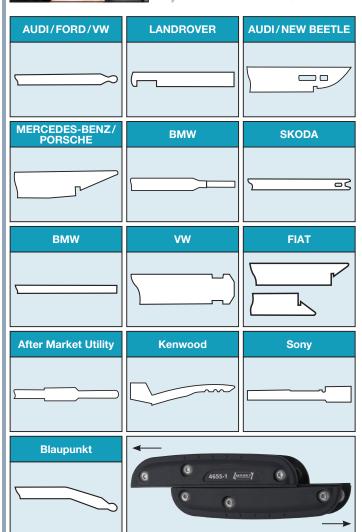
4643-2 Assembly tool

4643-3 Fixing screw, long

4643-4 Fixing screw, short Operating instructions included

H <u>AZET</u>	EAN-No.
No.	4000896+
4643/4	186648





VW, AUDI, FORD, BMW, MERCEDES-BENZ, PORSCHE, GM OPEL, ŠKODA, FIAT, LAND-ROVER, KENWOOD, SONY, CLARION, BLAUPUNKT and many others

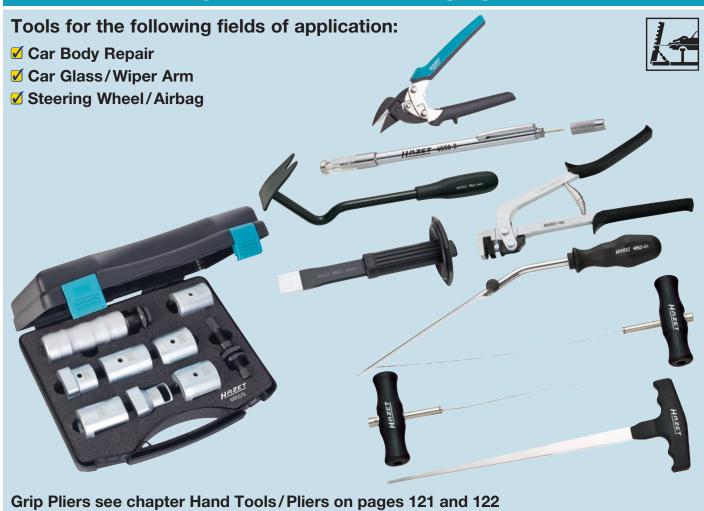
## Improved execution with many additional applications

- Universal tool for installing and removing car radios of different car and radio manufacturers
- All applications in one tool no need to search the right tool
- Practical slide for the separation of both parts
- Many unlocking types in one compact tool

HAZET	EAN-No.
No.	4000896+
4655-1	120666



# **Body and Interior Equipment**



## **Car Body Repair**

**Tool Assortment** 



## **Tool Assortment**

#### Assortment for car body work 77 pieces

• For tool trolleys HAZET Assistent

Contents:

428-6 7 8 10 11 13 600 N-8 9 10 11 12 13 14 15 17 19 22 24 745 a-6 745-4

746-1 757-10 760 N-2 799-3 801 K-55

803-25 55 65 80 100 803-PH 1 PH 2 PH 3

821-2 11 12 13 17 19 22 900-10 15

916 SP 917-5 918-10 1810-250 1850-44 1917 N 1919 N

1920 N 1921 1922 1923 1929-1 1930 1931

1934 1934-1 4 9 10 1937 K 1940 1950 1960-5

1961 L-2 1961 R-2 1965-1 2 2130 2140-3 5 2143 2165-1 2

HAZET No.

EAN-No. 4000896+ 0-1900/77 000241





## Specialty Tools - Body and Interior Equipment - Car Body Repair

## **Body and Fender Tool Set**



- For car body work
- In sheet metal box (HAZET-blue)
- 10 pieces

#### Made in Germany

Contents:

1911 1917 N 1919 N 1928 K 1930 1934 1935 1931 1938 K 1940

HAZET EAN-No. 4000896+ 1905/10 N 007448

## Hand Anvil (Dolly)



- Roof wedge-shaped
- Length 137 mm, width 55 mm

## Made in Germany

H <u>AZET</u> No.	EAN-No. 4000896+
1911	007486



- Daimler Stöckle
- 110 x 50 mm, height 50 mm

#### Made in Germany

HAZET	EAN-No.
No.	4000896+
1917 N	007509



- Wedge-shaped
- 110 x 63 mm

#### Made in Germany

HAZET	EAN-No.
No.	4000896+
1918 N	007516



- Toe-shaped
- 120 x 58 mm, height 20 mm

#### Made in Germany

HAZET No.	EAN-No. 400896+
1919 N	007523

## Hand Anvil (Dolly)



- Universal
- 76 x 56 mm and 65 x 47 mm, height 60 mm

#### Made in Germany

HAZET	EAN-No.
No.	4000896+
1920 N	007530



- All-sides ground
- Heel-shaped, flat/halfround
- 84 x 62 mm, height 34 mm

#### Made in Germany

HAZET	EAN-No.
No.	4000896+
1921	007554



- "Diabolo" style
- 59 x 61 mm, height 59 mm

#### Made in Germany

HAZET	EAN-No.
No.	4000896+
1922	007561

## **Box File**



- For body sheet planishing
- All sides with cut of a file
- 158 x 35 x 25 mm

#### Made in Germany

HAZET	EAN-No.
No.	4000896+
1923	007578

## **General Purpose Spoon**



Blade size 52 x 150 mm

#### Made in Germany

HAZET No.	/ mm	EAN-No. 4000896+
1927	275	007691

## **General Purpose Spoon**



- Cut on one side
- Blade size 60 x 30 x 200 mm

#### Made in Germany

HAZET	_	EAN-No.	
No.	mm	4000896+	
1928 K	385	007707	

## **General Purpose Spoon**



- Wide shape
- Offset and curved
- Blade size 170 x 50 mm

#### Made in Germany

HAZET	_	EAN-No.
No.	mm	4000896+
1929-1	480	007721



- Wide shape
- Deep offset and heavily curved

#### Made in Germany

HAZET No.		EAN-No. 4000896+
1930	455	007738



- Narrow shape
- Blade size 105 x 85 x 38 mm

### Made in Germany

HAZET	_	EAN-No.
No.	mm	4000896+
1930-1	315	007745

## **Bending Iron**



With leather cap

HAZET	/	EAN-No.	
No.	mm	4000896+	
1931	410	007769	





## Specialty Tools - Body and Interior Equipment - Car Body Repair

## Flange Tool



- Forms crimped edges on sheet metals up to 1 mm thickness
- Crimping capacity: 12 mm
- Plastic handle covers
- Surface: chrome-plated

#### Made in Germany

HAZET No.	_ mm	<i>b</i> mm	EAN-No. 4000896+	
1932-1	300	15	007806	
1932-2	300	30	007868	

### **Sheet Metal Punch**



- For sheet metal punching up to 1 mm during spot-welding (MAG-welding)
- Plastic handle covers
- To be used with HAZET Flange Tool 1932
- Surface: chrome-plated

#### Made in Germany

HAZET No.	/ mm	Ø	EAN-No. 4000896+	
1964-50	300	5	009039	
1964-55	300	5.5	009077	
1964-70	300	7	009121	

## Car Body Chisel



- spots, welding grooves, etc.
- With hand guard (730 HS)
- Blade size: 7 x 26 mm

## Made in Germany

HAZET	_	EAN-No.
No.	mm	4000896+
1960-5	240	008759

## **Sheet Metal Profile Snips**



## **Sheet Metal Profile Snips**

- For figure cutting and short, straight cuts
- For sheet metal up to 1.8 mm, VA-steel sheets up to 1.2 mm
- With lever transmission system
- Handles with plastic cover
- Shear head drop-forged, hardened and tempered
- · Cutting edges induction hardened

#### Made in Germany

HAZET No.	_ mm	EAN-No. 4000896+	
R = right hand 1961 R-1	d cutting 260	008803	
L = left hand cutting			
1961 L-1	260	008780	



- · For figure cutting and straight cuts
- With lever transmission system
- Handles with plastic cover
- Shear head drop-forged, hardened and tempered
- · Cutting edges induction hardened

#### Made in Germany

HAZET No.	/ mm	EAN-No. 4000896+	
R = right hand 1961 R-2	cutting 260	008810	
L = left hand cutting			
1961 L-2	260	008797	



#### Compact design enables working in confined spaces and cutting small contours.

- · For figure cutting and straight cuts
- The new geometric form of the head is perfectly suitable for cutting small radii and working in areas with restricted access
- · Compact design and a perfect leverage ratio ensure optimised working with reduced working effort.
- Ergonomically shaped handle for effortless working
- Shear head drop-forged
- For sheet thickness up to 1.2 mm (600 N/mm²)

• Eage length: 20 m	Ш	
HAZET No.	[ mm	EAN-No. 4000896+
Left hand cutting		
1961 L-3	180	176533
Right hand cutting		
1961 R-3	180	176540

## **Hand Riveting Tool**



- For safe and fast rivet joints
- For blind rivets made of aluminium and steel, up to 5 mm Ø stainless steel up to 4 mm  $\varnothing$
- Rivet snaps off with little effort
- Nose pieces and key storage in the body of the pliers

HAZET	/	EAN-No.	
No.	mm	4000896+	
1963 N-1	255	187447	

## Car Body File Holder



- Adjustable, with tightening screw
- With 1 file blade 1934-4
- For flat file blades HAZET 1934-1 up to -5

#### Made in Germanv

HAZET	_	EAN-No.
No.	mm	4000896+
1934	355	008018



- Made of wood
- Without file blade

## Made in Germany

	No.	l mm	EAN-No. 4000896+	
	For flat file bla	ades 1934-1 u	ıp to -5	
ı	1934 N-1	525	008155	
ı	For half-round	d (hollow) file I	olades 1934-7	
ı	1934 N-2	525	008179	

### **Car Body File Blade**





- Milled, diagonal cut
- Teeth (cut):
- 1 = coarse 1934-1
- 2 = medium 1934-2
- 3 = fine 1934-3• For File Holders HAZET 1934 and 1934 N-1
- DIN 7264 form A

HAZET No.		EAN-No. 4000896+
1934-1	350	008025
1934-2	350	008063
1934-3	350	008070



- Flat
- Milled, curved cut
- Teeth (cut):
- 1 = coarse 1934-4
- 2 = medium 1934-5 • For File Holders HAZET 1934 and 1934 N-1
- DIN 7264 form A

HAZET No.	_ mm	EAN-No. 4000896+	
1934-4	350	008087	
1934-5	350	008094	







## **Car Body File Blade**



#### • Half-round (hollow)

- Diagonal cut
- Teeth (cut): 1 = coarse
- For File Holder HAZET 1934 N-2
- DIN 7264 form F

HAZET	_	EAN-No.
No.	mm	4000896+
1934-7	350	008100

## Car Body File



- Cross cut
- Teeth (cut):
- 1 = coarse (1934-8) 3 = fine (1934-9)
- Cranked
- Plastic handle

Heat the bent with a welding torch. Then work the metal with the file. Due to the special alloy, the heat will be extracted when working the metal with the file and the metal will be planished.

#### Made in Germany

HAZET No.	l <sub>1</sub>	l <sub>2</sub> mm	EAN-No. 4000896+	
1934-8	350	430	008124	
1934-9	350	430	008131	

- Single cut
- Teeth (cut):

0 = coarse 1934-10

1934-10 350 430 008032

## **Body Hammer**



HICKORY handle

## Made in Germany

- Bumping and planishing hammer
- 154 mm
- 2 round faces of different sizes.

1935 308 O 40 ° 30

- · Stretching and planishing hammer
- 103 mm
- · Round faces, finely chequered, milled 1937 K 305  $\Box$  24  $\bigcirc$  32 008209
- Stretching and planishing hammer
- · Round faces, finely chequered, milled 1938 K 310 □ 35 ○ 40 008216

## **Body Hammer**



HICKORY handle

#### Made in Germany

- Made III Germany				
HAZET	_	Hammer	EAN-No.	
No.	mm	Head Form	4000896+	

- Planishing and embossing hammer
- Round face and ball
- 1940 309 ○ 40 ° 17 008230
- Planishing and cross-peen hammer
- · Round face and curved, sharp peen

309 ○ 40 **—** 15



HICKORY handle

#### Made in Germany

mado	<i></i> ασ.	inany		
HAZET	l	Hammer	EAN-No.	
No.	mm	Head Form	4000896+	

- Bumping and picking hammer
- 165 mm
- · Round face and straight peen

008278 1944 325 O 41 o 10

- Aluminium hammer
- · Flat, half-round

030 008339 1950 310

## Welding Spot Drill



- For exact welding spot reaming
- in sheet metal fabrication
- No warped or torn materials
- 7 mm hexagon shank prevents slippage in drill chuck
- · Fits power drills of all types
- Replaceable cutting crown (right-hand thread) made of high-speed steel (oiled)
- Cutting crown for use at both ends
- With screw for gauge depth adjustment (\*)

#### Made in Germany

HAZET No.	Ø	_ mm	EAN-No. 4000896+	
1967	11	70	009312	



Cutter crowns, set of 10 pieces for 1967 1967-01 009329 Center tip for 1967 1967-02 009336

## **Welding Spot Drill**





- For exact welding spot reaming
- Self-cutting centring tip resharpenable
- Heavy duty, high-speed steel, blued

#### Made in Germany

HAZET No.	_ mm	Ø	EAN-No. 4000896+	
1967-70	74	7	009343	
1967-80	79	8	009350	
1967-90	79	9	009367	

## **Special Bumping Mallet**





- With permanent plastic filler for non-damaging bumps without striation (\*)
- Assembly tool for materials that are susceptible to scratching
- For fixing trim strips, working on roof rails as well as seat installing, upholstery

#### Made in Germany

HAZET No.	/ mm	EAN-No. 4000896+		
Rubber body 70	x 70 mm			
1959-2	260	102259		
Handle adjustable to 90° Rubber body 70 x 140 mm				
1959-3	280	008728		
Handle adjustable to 90° White rubber body 70 x 140 mm				
1959-4 *	280	127221		

## Wedge



- For hot galvanized surfaces
- Beech wood

HAZET

Set of 5 pieces:						
Content	s:					
1965-1	2	3	4	5		
1065/5					000220	

## Specialty Tools - Body and Interior Equipment - Car Body Repair

## Wedge



- For car body work,
   e.g. for stripping mouldings, covers,
   graphics, etc. without damage
- Plastic

#### Made in Germany

HAZET No.	_ mm	<i>b</i>	h	EAN-No. 4000896+	
1965-20	190	25	25	009183	

## **Combination Lever**









- For fast and easy removing of mouldings and door coverings
- Operation of plugs and plastic clips
- Removing of protective caps and covers
- Avoids damage of lacquered surfaces, plastic and metal parts

H <u>AZET</u>	/	<b>b</b>	EAN-No.
No.	mm		4000896+
1965-21	270	22	087839

### **Puller hook**



- For removing the front grille of the VW Transporter
- Removal of e.g. the additional light, interior lining, interior lighting shade etc.
   VW Golf since 2004, Golf Plus since 2005, Jetta

since 2006, Crafter since 2006, Tiguan since 2008, Passat since 2006, Scirocco since 2009, **AUDI** A2, A3, A4, A5, A6, A8, Q5, Q7, R8

With T-handle

HAZET	EAN-No.
No.	4000896+
2520-1	075218

## **Aligning Tool for Doors**





- For easy and clean re-alignment of doors on passenger cars and minivans (height adjustment) as well as tailgates on hatchback vehicles (adjustment of door gap-width)
- Flat steel Chrome-Vanadium
- aligning rod made of special steel
- Surface: chrome-plated

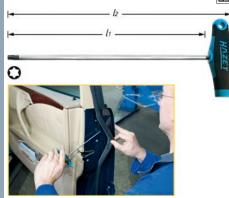
HAZET	_	EAN-No.
No.	mm	4000896+

Set of 4 pieces:

Aligning rod with 3 pins, stored in the rod's handle Contents:

1973-1 2 3 4		
1973/4	660	009718
Aligning Rod		
1973-1	660	009664
Pin 19 mm ∅		
1973-2	-	009688
Pin 12 mm ∅		
1973-3	-	009695
Pin 9.3 mm ∅		
1973-4	-	009701

## **TORX®** Screwdriver



- For inside TORX® screws
- Extra long style
- With ergonomically shaped 2-component T-handle
- Surface: chrome-plated, tips burnished
- For installing and removing the door handle on MERCEDES-BENZ type 168, type 169 (A-class), type 245 (B-class) and type 203 (C-class)
- Adjustment of the headlights on MERCEDES-BENZ Actros

HAZET No.	<b>≢</b> mm	l₁ mm	l <sub>2</sub>	EAN-No. 4000896+	
828 Lg-T 20	3.86	200	226	139941	

## Bent Bit Holder for Door Hinges



- For installing and removing the doors on VW, ŠKODA Fabia since 2010, Roomster since 2006, AUDI A5 since 2007, (screwed connection door hinges) and for door alignment
- With plug and socket connection 9x12 mm square
- With TORX® Bit T45 (HAZET 2597-01)

#### Removal

in conjunction with tool holder HAZET 6396, installation

with torque wrench HAZET 6290-1 CT

- Please follow VW torque regulations -
- see also HAZET 2251-1/2
   Surface: chrome-plated
- Made in Germany

		,		
HAZET No.	_ mm	<b>€</b> , mm	EAN-No. 4000896+	
2597	95	7.82	017379	

#### TORX® Screwdriver Bit





Screwdriver bit TORX® T 45 for 2597
 For installing and removing the doors on VW

#### Made in Germany

HAZET No.		₩E mm	EAN-No. 4000896+	
2597-01	18	7.82	017386	

## **Screwdriver Bit**





- For door aligning as well as for installing and removing the doors on VW Golf 4 (model years 1997–2006), Golf 7 (since 2012), Passat B5 (model years 1996–2000)
   SFAT Leon (model years)
- SEAT Leon (model years 1996–2000)
  in conjunction with bent bit holder HAZET 2597
- For screws with internal serration (XZN) M 10
- Similar to DIN 65254

HAZET	_	М	EAN-No.
No.	mm		4000896+
2597-02	21	10	066667

**Screwdriver Bit** 

• For door aligning as well as for installing and removing the doors on **VW** Golf 5 (model years 2003–2008), Golf 6 since 2008, Passat B6, Caddy model years 2004–2010, New Beetle since 2011, Sharan 2 since 2010, Tiguan since 2011, Touran since 2010 ŠKODA Superb since 2008

in conjunction with bent bit holder HAZET 2597

- For screws with internal serration (XZN) M 8
- Similar to DIN 65254

#### Made in Germany

HAZET	/	М	EAN-No.
No.	mm		4000896+
2597-03	21	8	118830

### **TORX®** Screwdriver Bit



- For installing and removing the driver's and co-driver's door on VW
- T 45 with special length

In conjunction with reversible ratchet HAZET 2264 or insert reversible ratchet 6408 and torque wrench 6290-1CT

- consider VW torque regulations -
- Hexagon drive ISO 1173-C 6.3 = 1/4"

#### Made in Germany

HAZET	_	<b>≢</b>	EAN-No.
No.	mm	mm	4000896+
2597-T 45	25	7.82	017393

## **Hose Clamp Pliers**







- For installing and removing the stop spring of the window crank
- Surface: chrome-plated, jaw burnished

#### Made in Germany

HAZET	_	sb	EAN-No.	
No.	mm	mm	4000896+	
799	210	8-45	031986	

## **Lever for Removing Door Panels**



- For removing fixing plugs on door panels
- · Coated for the protection of vehicle lacquer
- Jaw opening 28 mm

#### Made in Germany

HAZET	_	EAN-No.	
No.	mm	4000896+	
799-3	268	031993	

## **Pliers for Dismantling Door Panels**



- For removing the fixing bolts on door panels, mouldings and bumper rubber strips
- Coated for the protection of vehicle lacquer

#### Made in Germany

HAZET	/	EAN-No.
No.	mm	4000896+
799-4	230	032013

## **Lever for Removing Door Panels**





## **Lever for Removing Door Panels**

- For removing the fixing plugs on door panels - **VW** Sharan, Touareg, Touran, Phaeton
- SEAT Alhambra - FORD Galaxy
- Lever provides an optimal power transmission
- · Coated for the protection of vehicle lacquer
- · Ergonomic plastic handle

#### Made in Germany

HAZET	/	EAN-No.
No.	mm	4000896+
799-6	260	110346

## **Bumper Tubular Socket Wrench**







#### HAZET 2797-1

- Special tool for the operation of the rear bumper screws, MERCEDES-BENZ type 204 (C-Class) station wagon and limousine, AUDI A3 since 2004, A4 since 2001, A6 since 2005, TT since 2007 Note: Screw operation with threaded rod
- □ drive 6.3 = ½
- Enables controlled screwing with the torque value required by the manufacturer

#### Made in Germany

HAZET	S	_	EAN-No.	
No.	mm	mm	4000896+	
2797-1	10	160	154746	

### **Side Mirror Assembly Tool**







- For installing and removing the side mirror on MERCEDES-BENZ type 203 and 204 (C-class), type 211 an 212 (E-class)
- With T-handle
- For inside 5-star screws with centre pin

HAZET No.	l₁ mm	<i>l</i> <sub>2</sub> mm	EAN-No. 4000896+	
2715-20 H	200	225	118717	







## Car Glass/Wiper Arm

## **\***

## **Tool Set for Removing Car Glass**



- Suitable for all glued windscreens as well as for most side and rear windows
- 4-point cutting wire for fast and easy cutting of nearly all adhesive beads
- Sawing wire twisted of three brass-plated steel wire for very hard or large adhesive beads
- Robust wire starter made of spring steel with large T-handle to pierce the wire through the bead
- Counterholder with long shaft and stable M4-thread secures the cutting wire from inside
- Self-closing safety pull handles hold the cutting or sawing wire firmly

, in 5	
HAZET No.	EAN-No. 4000896+
Set of proven tools for removing glued car windows 6 pieces Contents: 4852-3 (2x) 4 A 5 6 7	
4852/6	129447
Pull handle 4852-3	129454
Counterholder	
4852-4 A	164769
Wire starter	
4852-5	129478
Roll of square cutting wire 0.6 x 0.6 mm, 22 metres	
4852-6	129485
Roll of round cutting wire Ø 0.8 mm, 22 metres	
4852-7	129492

## **Nozzle Adjusting Tool**





#### For adjusting the nozzles of the washing system

- The telescopic handle can be used to demonstrate the jet of the nozzles to the window
- With pocket clip
- $\bullet$  With magnetic head 6 mm  $\varnothing$
- Adjusting needle and protective cap

HAZET	L₁	<i>l<sub>2</sub></i> mm	EAN-No.
No.	mm		4000896+
4850-1	155	670	022366

## Nozzle Adjusting Tool





#### For adjusting the nozzles of the washing system

- The telescopic handle can be used to demonstrate the jet of the nozzles to the window
- With pocket clip
- With integrated LED for easy detection of parts in dark areas such as the engine compartment etc.
- With powerful magnet 8 mm Ø to pick up small parts

HAZET No.	I <sub>1</sub> mm	L <sub>2</sub> mm	EAN-No. 4000896+
4850-2	183	682	149544

## Window Extracting Knife





- Knife with pulling handle and blade with 22 mm cutting depth
- For the extraction of glued car windows

HAZET No.	EAN-No. 4000896+
4852-1	050543
Spare blades for 4852-1 set of 2 pieces, 22 mm cutting depth 4852-01/2	051496
Spare blades for 4852-1 set of 2 pieces, 15 mm cutting depth 4852-02/2	056446

## **Wiper Adjusting Tool**





- For angular adjustment of the wiper blades
- Please follow the manufacturer's instructions Not suitable for Aerotwin wipers
- Made in Germany

HAZET No.	_ mm	Ь	h	EAN-No. 4000896+
4851-1	120	65	60	048212

E L







• For removing wiper arms on passenger cars and commercial vehicles

- made in definally	
HAZET No.	EAN-No. 4000896+
9 pieces, in plastic box	
4855/9	111268
Extractor Claw	
4855-1	111084
4855-2	111091
4855-3	111107
4855-4	111114
4855-5	111121
4855-6	111237
4855-7	111244
Drive with 6-point spindle s 14 mm	
4855-8	111251
Impact extractor with connection piece	
4855-9	110964



	<b>1</b> 0		6	
Vehicle Type	Claw 4855-	Drive 4855-	Claw 4855-	Drive 4855-
AUDI				
A 80 up to 1996	1	8		
A 2	1	8		
A 3	1	8		
A 4 up to 2001	1	8	1	8
A 4 since 2001	5	8		
A 4 since 2003	7	8		
A 6 since 1997	1	8	1	8
A 8 since 2003	2	8		
TT (Hook off the bonnet shock absorber and then steeply erect bonnet)	3	8		
ALFA ROMEO				
147	1	8		
156	2	8		
BMW				
3-series E 36	3	8		
3-series Compact E 36	1	8	3	8
3-series E 46, right	2	8		
3-series E 46, left	5	8		
5-series E 39, right	5	8		
5-series E 60, right	3	8		
7-series E 38, right	2	8		
7-series E 65, right	2	8		
Mini	7	8		
CITROËN				
Berlingo	1	8	1	9
C 5	4	8	6	8
Evasion	1	8	3	9
Saxo	1	8	6	8
Xsara	1	8	6	8
Xsara Picasso	2	8	6	8
FIAT				
Seicento	3	8	3	8
Panda	1	8	3	8
Punto	1	8	3	8
Stilo	1	8	3	8
Idea	1	8	3	8
Doblo	1	8	3	8
Ulysse	  -	<u> </u>	3	8
Ducato	1	8		
FORD				
Fiesta since 1995	1	8		
Fiesta since 2001	1	8		
Focus	2	8		
Focus C-Max	2	8		
Fusion	1	8		
1 401011	_ '	1 0		

0_0	<u></u>			
Vehicle Type	Claw 4855-	Drive 4855-	Claw 4855-	Drive 4855-
FORD				
Ka	3	8		
Mondeo up to 2001	1	8		
Mondeo since 2001	1	8	6	8
Galaxy up to 2000	2	8	3	8
Galaxy since 2000	5	8	1	9
HONDA				
Accord years 1998/1999	1	8		
Civic since 2002	2	8		
MERCEDES BENZ				
A-Class	1	8		
C-Class	2	8		
E-Class since 2002				
right	5	8		
E-Class since 2002				
left	1	8		
M-Class	1	8		
SLK	4	8		
Vito/V-Class	4	8		
OPEL				
Astra F	3	8	3	8
Astra G	1	8	4	8
Astra G station wagon	1	8	3	8
Corsa B	3	8		
Corsa C	1	8	1	8
Meriva	-	-	3	8
Movano	1	8		
Signum	1	8	3	8
Vectra C	1	8	3	8
Vivaro	1	8		
Zafira	1	8	3	8
PEUGEOT				
106	1	8	6	8
206	2	8		
306	1	8		
306 Cabrio	1	8		
307	2	8	6	8
406	2	8	6	8
806	1	8		
Partner	1	8		
RENAULT				
Clio since 1998	1	8	1	8
Espace since 1996	1/2	8	1	8
Kangoo	1	8	1	8
Laguna	1	8		

Vehicle Type	Claw 4855-	Drive 4855-	Claw 4855-	Drive 4855-
RENAULT				
Laguna station wagon	1	8		
Megane since 1999	2	8		
Megane Limousine	2	8	1	8
Scenic	2	8		
Twingo	1	8		
SAAB				
9–3 up to 2003	2	8		
9–5	2	8		
SEAT				
Ibiza	1	8		
Cordoba	1	8		
Leon	1	8		
Toledo	1	8		
Arosa	1	8		
Alhambra	1	8		
SKODA				
Fabia	1	8		
Octavia	1	8		
Superb	1	8		
Volvo				
740	3	8		
850	1	8		
940	3	8		
S 60	3	8		
C 70	1	8		
S 70	1	8		
V 70 up to 2000	1	8		
V 70 since 2001	3	8		
S 80	3	8		
XC 90	1	8		
VOLKSWAGEN				
Beetle	1	8		
Golf III	1	8	1	9
Golf IV	1	8	1	9
Golf V	1	8		
Lupo	1	8	1	9
Passat up to 2000	3	8	1	9
Passat since 2001	1	8	1	9
Polo up to 1999	3	8	3	8
Polo since 1999	1	8	1	9
Sharan up to 2000	2	8	3	9
	5	8	1	9
Sharan since 2000				
Sharan since 2000 T 5 since 2003	2	8		



## Steering Wheel/Airbag





- $\bullet$  For ball bearings, toothed wheels, pinions,  $\textbf{pitman\ arms}$  and similar
- The clamp clip is used for pressing the puller jaws on the parts to be extracted
- Surface: galvanized

## Made in Germany

HAZET No.	sb mm	st mm	Spindle	EAN-No. 4000896+	
1776-85	90	85	M 18 x 1.5 x 130 mm	135943	
1776-100	90	100	M 18 x 1.5 x 130 mm	135950	
1776-140	150	140	G ½" x 175 mm	135967	





Seefarers put their trust in sea rescuers sea rescuers put their trust in HAZET Quality Tools!





# **Borescope/Inspection**



# **Professional Borescopes**



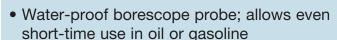












- Continuous focussing of the eyepiece provides sharp pictures (blue adjustment ring)
- The borescope probe does not get hot
- Specially coated achromatic optics for pictures without colour fringes
- On/off switch with continuous light regulation

- Bayonet catch allows fast adaptation of the battery handle to the basic appliance
- Eyepiece cup for spectacle wearers
- Included: Borescope, battery handle with 3 batteries (LR14), eyepiece cup

For expertises and the compilation of damage assessments at and in concealed areas as e.g.



- CNC machines, planetary gear, bearings and bushings, conducts, grooves, etc.
- Quality inspections in the surface area, welded joints, soldered joints, riveted joints, any kind of screwed connections, bore holes and each kind of threads

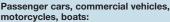


#### Aviation:

 Sporting planes with motors, helicopters, chassis, motor parts: cylinders, valves/valve bottom, pistons/piston rings

#### Construction:

 Renovation of old buildings, hollow spaces, cable shafts, etc.



- Parts of the motor like cylinder walls, pistons, valves, oil-pump, oil pan, gear,
- Diagnostics of leaks in the motor, cooling circuit, visual inspection of the catalytic converter, car body, chassis, spars, shafts, wear of the axles, e.g. bearing collars, ball bearings, wear marks in the axle shaft, axle drive shafts, etc.

6 mm Ø

## Accessories: Mirror with thread (Side View Adapter)

The borescope's outer diameter does not increase when using the 90°/110° mirror (Side-View Adapter). Safe fastening ("unlosable")





## **Application fields:**



Valves

Hollow spaces



(e.g. hollow shanks,

sliding-roof, cavities)

HEZET 1811-12 GERMAN



Axle wear



piston head



Technical Data		
HAZET No.	4811-2/2	4811-1/2
Diameter	4.2 mm	6 mm
Work distance	5 mm to infinite	10 mm to infinite
Brightness at a distance of 16 mm	15,000 Lux	50,000 Lux
Count of glass fibres	17,000	7,000
Very small bending radius	30 mm	30 mm
Useful length borescope probe	720 mm	1000 mm
Aperture angle	40°	50°
Temperature range	-20° up to + 55° C	-20° up to + 55° C
Luminous source/bulb	3.5 V	3.5 V
Other	Reduced moment of	

rotation 360° torsion

## Specialty Tools - Borescope/Inspection

## **Professional Borescope**



#### Made in Germany

HAZET No.	EAN-No. 4000896+
4811-1/2	109678



#### 90° side-view adapter (mirror) for 4811-1/2

- Extends the field of view to an aperture angle of 90°
- The borescope's outside diameter (6 mm) remains the same
- Tight screwing for safe fixation (unlosable)
- Image angle 40°

4811-2 109685



### 110° side-view adapter (mirror) for 4811-1/2

- $\bullet$  Extends the field of view to an aperture angle of  $~110^{\circ}$
- The borescope's outside diameter (6 mm) remains the same
- Tight screwing for safe fixation (unlosable)
- Image angle 40°

115891
110377

## **LED-Scope Light**



## Brilliant white light in conjunction with HAZET Borescopes 4811-1/2 and 4811-2/2

- White LED (3 Watt), 5500 K to 6000 K colour temperature • Up to 110 000 Lux
- Approx. 50,000 hours working life
- Shock and impact resistant

4811-8 154067

## **Professional Borescope**



	Made	in	Germany
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_	
HAZET No.	EAN-No. 4000896+
4811-2/2	144136



#### 90° side-view adapter (mirror) for 4811-2/2

- Extends the field of view to an aperture angle of 90°
- The borescope's outside diameter of 4.2 mm does not increase
- Tight screwing for safe fixation (unlosable)
- Image angle 40°

4811-4 144365



#### 110° side-view adapter (mirror) for 4811-2/2

- $\bullet$  Extends the field of view to an aperture angle of  $~110^{\circ}$
- The borescope's outside diameter (4.2 mm) does not increase
- Tight screwing for safe fixation (unlosable)
- Image angle 40°

4811-5 144372

Spare bulb 3.5 Volt for 4811-1/2 and 4811-2/2

4811-01 110377

### **Borescope**





- For the localization of damaged parts, e.g. axles, bearings and gearboxes
- Steel tip 180 mm
- Diaphragm with efficient transmission rate

Made in Germany		
HAZET No.	<u>[</u> mm	EAN-No. 4000896+
2151	1080	013043
Ear tips for 2151 2151-02/2	_	062287