

# **Everything for the diesel service**

Diagnosis, Testing and Repair Tools



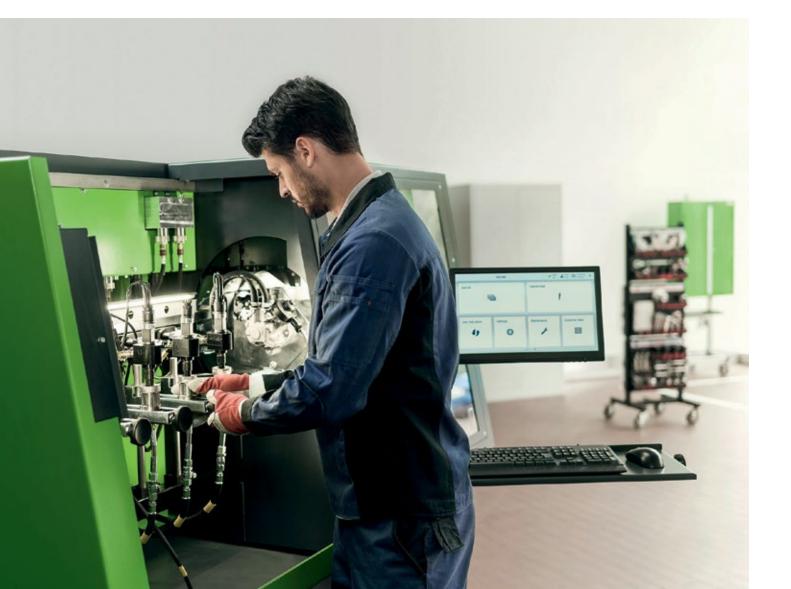
Se .....

# 04 Diesel service from Bosch

Bosch offers a comprehensive range of professional diagnostics and repair solutions for modern and conventional diesel systems.

# 06 Diagnosis on the vehicle

Bosch has a wide range of tools for easy and quick diagnosis of diesel components.



# 08 Repair tools on the vehicle

In addition to expert service, Bosch offers high-quality tools for a more efficient component repair on the vehicle.

# 10 Test equipment for components

Bosch boasts a comprehensive range of modern and userfriendly technologies for professional testing of removed diesel components.

12	<b>Common-rail</b> <b>DCI 700</b> Common-rail injector test bench	23 26	Conventional systems EPS 625 EPS 100
16	<b>DCI 200</b> Single common-rail injector test bench	28	Accessories EPS 815
20	EPS 708		

# 30 Repair tools for components

Common-rail pump test bench

In addition to expert service, Bosch offers high-quality tools for a professional repair of individual components.

# Diesel service from Bosch: precise, professional and fast

Many years of experience in diesel technology, workshop equipment and testing technology make Bosch one of the leading suppliers in this field worldwide.

Innovations in development and production have resulted in modern high-pressure systems in recent years. Bosch is pursuing a holistic approach to mobility: solutions are developed for the vehicle and beyond. With the expertise from original equipment, innovative test equipment including the corresponding software is developed in parallel.

Bosch supports workshops holistically – from straight-forward troubleshooting and efficient component testing to the repair of diesel components and systems based on their current value.

### Efficient and flexible component testing and repair

Thanks to Bosch testing solutions and numerous retrofit sets, component testing and repair can be carried out according to manufacturer specifications. This ensures that



accurate and reproducible measured values are determined



a warranty assessment is possible according to the manufacturer's specifications



a contribution is made to compliance with emission standards

# Configurator

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Check and repair diesel components



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Configure your test bench according to your requirements or get an overview of our diagnostics and repair tools. **bit.ly/AA\_Configurator** 

# Diagnosis on the vehicle

#### **Diesel sets**



Diesel set 1 For low-pressure circuit testing 월 0 986 613 100



Diesel set 2 For low-pressure system venting © 0 986 610 234

#### Measuring equipment and accessories



**Backflow meter** For determining the fuel return flow rate on CR injectors © 0 986 612 950



Connection adapter set For Bosch CRI2-18, 2-20 90° angle 100 986 613 696



Connection adapter set For Bosch CRI2-18, -20 Straight © 0 986 613 926

#### Denoxtronic



Denoxtronic 2 test set For checking metering and delivery rate with Denoxtronic 2.x 0 986 610 450



Denoxtronic PC/LD test set For exhaust gas aftertreatment with Denoxtronic 3.1 and Denoxtronic 5.x © 0 986 613 900



Upgrade kit from Denoxtronic 3.1 to 5.x upgrade set for Denoxtronic case (0 986 610 500) © 0 986 610 930

### Substitute load boxes



CRI substitute load box For testing the control signal at solenoid valve CR injectors (passenger cars only) 월 0 986 612 745

### Test cable



**HFM-7 test cable** Hot film air flow meter 4-pin

旨 1 684 463 835

#### Other accessories



PSG-5 test box For testing the PSG5 input as well as CAN-L and CAN-H signals № 0 986 612 447

Diesel sets	Description	Order number
Pressure gauge	Special gel-damped pressure gauge for measuring the pressure of the supply pump during operation at the vehicle, recommended for UI systems	1 687 231 906
Extension set of diesel set 3 and diesel set 3.1	Extension of existing diesel set 3 or diesel set 3.1 for checking the RDS function (operating range) while the engine is running	0 986 613 925
Upgrade set from diesel set 3 to diesel set 3.1	Upgrade for existing diesel set 3 to 3.1 to enable testing engines with CP4.1 and CP4.2	0 986 614 310

Substitute load boxes	Description	Order number
CRI/CRIN substitute load box	Test device for the control signal at piezo common-rail injectors (passenger cars only): a substitute load is used rather than an installed injector to test the control signal	0 986 612 793
CRI piezo substitute load box	Test device for the control signal at piezo common-rail injectors (passenger cars only): a substitute load is used rather than an installed injector to test the control signal	0 986 610 099

Measuring equipment and accessories	Description	Order number
Sealing parts set	Closure part-set: For return lines pipes made of hard plastic to close these pipes (1 set = 6 pcs) for back flow measuring device 0 986 612 950	0 986 612 900
Connection adapter set for Delphi CR injectors	Hydraulic return connection at Delphi injectors for testing the return flow rate with return flow rate measuring device 0 986 612 950 (1 set = 6 units)	0 986 613 902
Connection adapter set for Siemens, VDO CR injectors	Hydraulic return connection at Siemens, VDO injectors for testing the return flow rate with return flow rate measuring device 0 986 612 950 (1 set = 6 units)	0 986 613 906
Connection adapter set for Bosch piezo CR injectors	Hydraulic return connection with return holding valve at Bosch piezo injectors for testing the return flow rate with return flow measuring device 0 986 612 950 (1 set = 6 units)	0 986 613 922
Connection adapter set for Denso CR injectors	Hydraulic return connection at Denso injectors for testing the return flow rate with return flow rate measuring device 0 986 612 950 (1 set = 6 units)	0 986 613 923
Connection adapter for Delphi CR injectors 45° angle	Hydraulic return connection at 45° angle at Delphi injectors for testing the return flow rate with 0 986 612 950 (1 adapter = 1 unit)	0 986 610 976
Connection adapter for Delphi CR injectors 90° angle	Hydraulic return connection at 90° angle at Delphi injectors for testing the return flow rate with 0 986 612 950 (1 adapter = 1 unit)	0 986 610 979
Connection adapter for Siemens, VDO CR injectors	Hydraulic return connection on Siemens, VDO injectors for testing the return flow rate with return flow rate measuring device 0 986 612 950 (1 adapter = 1 unit)	0 986 610 908

Test cable	Description	Order number
HFM5	Test cable with 5V voltage stabiliser chip for testing the HFM5 (hot film air flow meter) in the dismantled state	0 986 610 129
HFM6	Test cable for testing the HFM6 (hot film air flow meter, 4-pin) at the vehicle	0 986 610 067
HFM6	Test cable for testing the HFM6 (hot film air flow meter, 4-pin) at the vehicle	0 986 610 195
HFM6	Test cable for testing the HFM6 (hot film air flow meter, 5-pin) at the vehicle	0 986 610 196
HFM6	Test cable for testing the HFM6 (hot film air flow meter, 5-pin) at the vehicle	0 986 610 441
HFM6	Test cable for testing the HFM6 (hot film air flow meter, 5-pin) at the vehicle	0 986 610 651
HFM7	Test cable for testing the HFM7 (hot film air flow meter, 4-pin) in Fiat Group, Ford and Suzuki vehicles	1 684 463 738
HFM7	Test cable for testing the HFM7 (hot film air flow meter, 8-pin) in GM Group vehicles	1 684 463 836

Denoxtronic	Description	Order number
Denoxtronic 2.2	A special metering module must be used to be able to assess the delivery capacity of the Denoxtronic 2.2 delivery module	0 986 610 522
Other accessories	Description	Order number
Measuring sensor KDEP 1880	M10x1 measuring sensor, 48 mm long, for precise pump/motor allocation. Enables the pre-stroke or K1-FB measuring point at distributor pumps (VE.E. VE.F)	0 986 612 480

# **Repair tools** on the vehicle

**Mounting sleeves** 

#### **Cleaning tools**



**Suction device** For cleaning the sealing surface

追0 986 613 111

O-ring mounting sleeve For mounting the common-rail injector/CRIN-O-ring 追0986612930

#### **Measuring devices**



Start of delivery dial gauge For setting the start of delivery

CRI/CRIN injector removal tool

追1687233012

CRI injector lifter

in Iveco Turbo Daily

追0986612374

**CRI** piezo extractor

員 0 986 612 885

CR injector removal tool for

Bosch Piezo CRI and unit

pumps in conjunction with

0 986 611 499 or 0 986 612 727

#### **Extraction and removal tools**



Impact tool Impact tool for CR injectors

員 0 986 612 727



CRI universal removal tool CR injector removal tool in conjunction with 0 986 612 727 or 0 986 611 499

追0986612782

#### **Diesel sets**



Diesel set 2 For CR system venting

追0986610234

Puller

or 0 986 612 872



追0 986 611 499 **CRI extractor claw** CR injector removal tool in conjunction with 0 986 612 727

In conjunction with 0 986 612 885

or 0 986 612 782 or 0 986 612 728

or 0 986 611 499 in Mercedes-Benz and PSA Group vehicles 追0986612872

#### Other accessories



Workbench Specifically for the repair of diesel products 追 0 986 613 300



Denoxtronic 3.1 tool set for removing the heating chamber from the tank 追0986610680



Workshop tip

### **Testing technology** and service kits

Diagnosis is carried out with a KTS device and Denoxtronic tool set (see Fig.): this determines which modules are faulty and need to be replaced.



Cleaning tools	Description	Order number
7.2 mm sealing cone	Sealing cone with a diameter of 7.2 mm. Used to close the nozzle/injector bore when cleaning the surface/face (6 sealing cones and 1 retaining rod)	0 986 612 917
9.2 mm sealing cone	Sealing cone with a diameter of 9.2 mm. Used to close the nozzle/injector bore when cleaning the surface/face (6 sealing cones and 1 retaining rod)	0 986 612 909
CRI/CRIN cleaning brush	This special wire brush must be used for cleaning the CR injector installation hole. It is also suitable for UI as well as for nozzles. Sealing cones 0 986 612 917 or 0 986 612 909 must be used to close the nozzle opening	0 986 612 729
Puller and extractor tools	Description	Order number
CRI turning device	For CR injectors with HP connection on the side: the injector is loosened by twisting it slightly to make it easier to remove	0 986 611 481
Support wench	Retaining tool for disassembly/assembly of the drive coupling on the CP2 pump	0 986 612 857
Puller	Removal tool for disassembly of the drive coupling on the CP2 pump	0 986 612 859
Puller	UI extractor from VW Group 1.9l with UIS/PDE diesel engines	0 986 612 750
Mounting sleeves	Description	Order number
Mounting sleeves O-ring mounting sleeve		Order number 0 986 612 787
	Description           Tool for mounting the CR pressure control valve O-ring without damaging the	
O-ring mounting sleeve	DescriptionTool for mounting the CR pressure control valve O-ring without damaging the DRVMounting sleeves for mounting the O-rings on unit injectors (passenger cars)	0 986 612 787
O-ring mounting sleeve O-ring mounting sleeve set	DescriptionTool for mounting the CR pressure control valve O-ring without damaging the DRVMounting sleeves for mounting the O-rings on unit injectors (passenger cars) of 1st generation VW Group vehicles (1 set = 3 units)Mounting sleeves for mounting the O-rings on unit injectors (passenger cars)Mounting sleeves for mounting the O-rings on unit injectors (passenger cars)	0 986 612 787 0 986 613 824
O-ring mounting sleeve O-ring mounting sleeve set O-ring mounting sleeve set	DescriptionTool for mounting the CR pressure control valve O-ring without damaging the DRVMounting sleeves for mounting the O-rings on unit injectors (passenger cars) of 1st generation VW Group vehicles (1 set = 3 units)Mounting sleeves for mounting the O-rings on unit injectors (passenger cars) of 2nd generation VW Group vehicles (1 set = 2 units)	0 986 612 787 0 986 613 824 0 986 611 490
O-ring mounting sleeve O-ring mounting sleeve set O-ring mounting sleeve set O-ring mounting mandrel	DescriptionTool for mounting the CR pressure control valve O-ring without damaging the DRVMounting sleeves for mounting the O-rings on unit injectors (passenger cars) of 1st generation VW Group vehicles (1 set = 3 units)Mounting sleeves for mounting the O-rings on unit injectors (passenger cars) of 2nd generation VW Group vehicles (1 set = 2 units)Tool for damage-free assembly of the return O-ring at the CR piezo injector	0 986 612 787 0 986 613 824 0 986 611 490 0 986 614 030
<ul> <li>O-ring mounting sleeve</li> <li>O-ring mounting sleeve set</li> <li>O-ring mounting sleeve set</li> <li>O-ring mounting mandrel</li> <li>Measuring devices</li> <li>Start of delivery measuring</li> </ul>	DescriptionTool for mounting the CR pressure control valve O-ring without damaging the DRVMounting sleeves for mounting the O-rings on unit injectors (passenger cars) of 1st generation VW Group vehicles (1 set = 3 units)Mounting sleeves for mounting the O-rings on unit injectors (passenger cars) of 2nd generation VW Group vehicles (1 set = 2 units)Tool for damage-free assembly of the return O-ring at the CR piezo injectorDescription Measuring device for FB adjustment with VP44 (BMW and MAN), included	0 986 612 787 0 986 613 824 0 986 611 490 0 986 614 030 Order number

# **Test equipment** for components

### Common-rail systems



**DCI 700** CR injector test bench

	Conventional pumps	-
	Common-rail pumps	-
	Common-rail injectors CRI1, CRI1-16, CRI1-18, CRI1-20, CRI14 S2, CRI14 S3, CRI2, CRI2-18, 2-20, 2-22, 2-25 MV injectors	•
A STATE	Common-rail injectors CRI3-16, 3-18, 3-20, 3-22, 3-25, 3-27 piezo injectors	•
ALL DO	CRIN1, CRIN2-16, 3-18, 3-20, 3-22, 3-25, CRIN14 S3, CRIN18 C, CRIN20 C, CRIN20 L injectors	•
ALL AL	CRIN4.2 injectors, CRIN4-21, 4-25, 4-27 injectors	•
No. of the second se	Nozzle holder (conventional and UP)	-
₽ ₽	UI nozzles (with adapter)	_

# Conventional systems





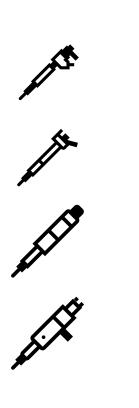




<b>DCI 200</b> Single injector test bench	<b>EPS 708</b> CR pump test bench	<b>EPS 625*</b> Conventional test bench	<b>EPS 100</b> Injection nozzle testing device
-	_	•	-
-	•	_	-
•	_	_	-
•	_	_	-
•	_	_	-
•	-	_	-
_	_	_	•
_	_	_	•

\* While stocks last

# Common-rail injector test bench **DCI 700**





DCI 700	400 V, 3 PH, 50/60 Hz	© 0 683 725 001
DCI 700	200 V, 3 PH, 50/60 Hz	厚 0 683 725 002

#### Precision and speed

Current emission standards as well as future directives make the accurate testing of common-rail injectors in modern diesel engines increasingly more important. The DCI 700 test bench has advantages for the workshop. Companies benefit equally from the short assembly and testing times as well as its user-friendly operation.

## Benefits

- Time saving and high throughput thanks to clamping and unclamping of 4 standard injectors in only 5 minutes and an average test time of 15 minutes
- Testing of all diesel injectors for passenger cars and commercial vehicles - Bosch and third-party manufacturers
- VCC and NCC technologies testable according to manufacturer specifications
- High coverage rate of more than 95% of CRI and CRIN injectors

- First-class quality, reliability and transparency thanks to fast and precise testing including IMA/NIMA coding
- High effectiveness thanks to ergonomic workflows and intuitive operating concept
- Software updates and test schedules can be downloaded quickly and conveniently online
- Low maintenance costs because there is no longer a need for sensitive high-pressure hoses

# Accessories DCI 700



CRIN Bosch For testing CR commercial vehicle injectors made by Bosch 월 1 687 010 607

CRI Bosch\* For testing CR injectors made by Bosch ⊯ included in the scope of delivery



**CRIN Bosch 4.2** For testing CRIN 4.2 commercial vehicle injectors made by Bosch 1 687 010 608

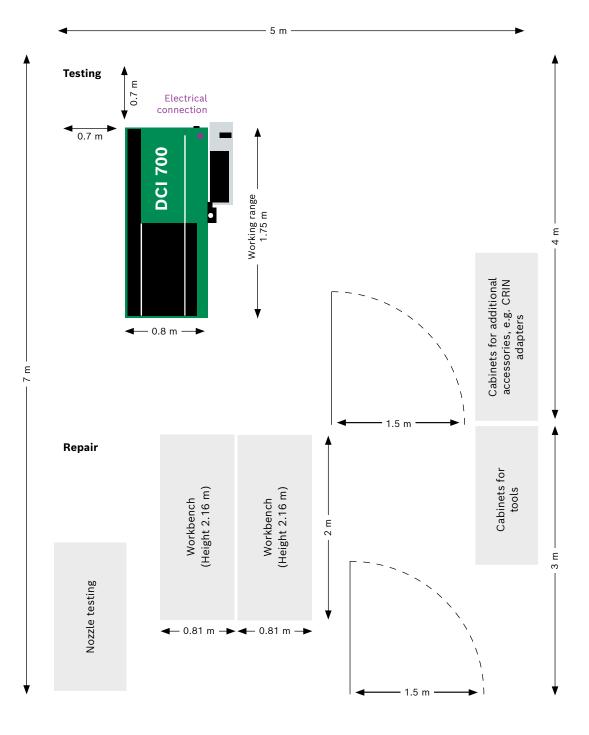


**CRI/CRIN 3rd party** For testing CR injectors made by third-party manufacturers 1 687 010 609

\* For associated CRIN adapters, see optional accessories on page 15



# Facility concept **DCI 700**



### Ideal workbench for diesel service (0 986 613 300)

The workplace for repairing diesel injectors and components must meet very high standards of cleanliness, functionality and straight-forward design. Otherwise, even the smallest dirt particles in diesel systems can lead to malfunctions.

### **Recommended facility properties:**

- Sealed concrete floor
- Sufficient ventilation by means of an exhaust air system to remove vapours
- Sound insulation is recommended

# Accessories DCI 700

Adapter	Description	Order numbe
Adapter set – A1i	CRIN-Bosch for Cummins, Dongfeng, VW, Ford, DCEC	1 687 016 072
Adapter set – A2i	CRIN-Bosch for Valtra Tractors, Sisu Motors, AGCO, Alis, Deutz, AP Inc	1 687 016 08
Adapter set – A3i	CRIN-Bosch for FPT, Iveco, CASE New Holland, Cummins, Dongfeng, VW/Ford, TATA Motors, GCIC, CNHI, DCEC, DDC, Quanchai, YTO, Yunnei	1 687 016 11
Adapter set – A4i	CRIN-Bosch for Renault, Dongfeng	1 687 016 082
Adapter set – A5i	CRIN-Bosch for MAN, Liebherr, KOEL	1 687 016 099
Adapter set – A6i	CRIN-Bosch for MAN, CNHTC	1 687 016 083
Adapter set – A7i	CRIN-Bosch for Ford Otosan, JMC	1 687 016 084
Adapter set – A8i	CRIN-Bosch for DHIM, Doosan, Yuchai	1 687 016 085
Adapter set – A9i	CRIN-Bosch for Deutz	1 687 016 086
Adapter set – A10i	CRIN-Bosch for FAW, Yuchai	1 687 016 087
Adapter set – A11i	CRIN-Bosch for Dongfeng, DCD	1 687 016 088
Adapter set – A12i	CRIN-Bosch for Ashok Leyland	1 687 016 089
Adapter set – A13i	CRIN-Bosch for Renault, Fendt, Deutz, FAW, Yuchai, Foton, Weichai, Volvo, CAMC, SDEC, TAFE	1 687 016 090
Adapter set – A14i	CRIN-Bosch for MAN, Liebherr, Renault, International Harvester, MWM, Navistar, MTU, Ford Otosan, Volvo, Agrale, AGCO, MHEPL, JND, SANY, Neoplan, Mahindra, JMC	1 687 016 09
Adapter set – A15i	CRIN-Bosch for MAN, Shanqi, Foton, CNHTC, Weichai	1 687 016 093
Adapter set – A16i	CRIN-Bosch for DHIM, Yuchai, CAMC	1 687 016 09
Adapter set – A17i	CRIN-Bosch for MAN, Navistar	1 687 016 19
Adapter set – A18i	CRIN-Bosch for FAW	1 687 016 20
Adapter set – A19i	CRIN-Bosch for Scania	1 687 016 21
Adapter set – A20i	CRIN-Bosch for Caterpillar	1 687 016 22
Adapter set – A21i	CRIN-Bosch for VECV – Ltd.	1 687 016 23
Adapter set – A22i	CRIN-Bosch for John Deere	1 687 016 23
Adapter set – A23i	CRIN-Bosch for AGCO	In preparatio
Adapter set – A1e	CRIN-Bosch for Deutz, FAW-Dalian, Volvo	1 687 016 09
Adapter set – A2e	CRIN-Bosch for Hino	1 687 016 09
Adapter set – A3e	CRIN-Bosch for CASE New Holland, FPT	1 687 016 09
Adapter set – A4e	CRIN-Bosch for Mitsubishi, Fuso	1 687 016 09
Adapter set – A6e	CRIN-Bosch for Mahindra	1 687 016 14
Adapter set – A7e	CRIN-Bosch for FPT, Iveco, CASE New Holland	1 687 016 14
Adapter set – A8e	CRIN-Bosch for Hino	1 687 016 14
Adapter set – A9e	CRIN-Bosch for MTU	1 687 016 15
Adapter set – A10e	CRIN-Bosch for Caterpillar/Perkins, Deutz, Yuchai, SFH PT, BFCEC, CNHTC, Yunnei, Weichai	1 687 016 15
Adapter set – A11e	CRIN-Bosch for FAW Mahindra	1 687 016 20

# Single common-rail injector test bench **DCI 200**





### DCI 200 200 V, 1 PH, 50/60 Hz 3 0 683 225 001 (Fig. with accessories)

#### Precision and speed

Current emission standards as well as future directives make the accurate testing of common-rail injectors in modern diesel engines increasingly more important. The DCI 200 single injector test bench has advantages for the workshop. Companies benefit equally from the short assembly and testing times as well as its user-friendly operation.

## Benefits

- Time saving and high throughput thanks to clamping and unclamping of a standard injector in only
   1 minute and an average test time of 15 minutes
- Testing of all diesel injectors for passenger cars and commercial vehicles - Bosch and third-party manufacturers
- VCC and NCC technologies testable according to manufacturer specifications
- High coverage rate of more than 95% of Bosch CRI and CRIN injectors right from the start

- First-class quality, reliability and transparency thanks to fast and precise testing including IMA/NIMA coding
- High effectiveness thanks to ergonomic workflows and intuitive operating concept
- Software updates and test schedules can be downloaded quickly and conveniently online
- Low maintenance costs because there is no longer a need for sensitive high-pressure hoses

# Accessories DCI 200



**CRIN Bosch** For testing CR commercial vehicle injectors made by Bosch 월 1 687 010 207



**CRIN Bosch 4.2** For testing CRIN 4.2 commercial vehicle injectors made by Bosch 1 687 010 209

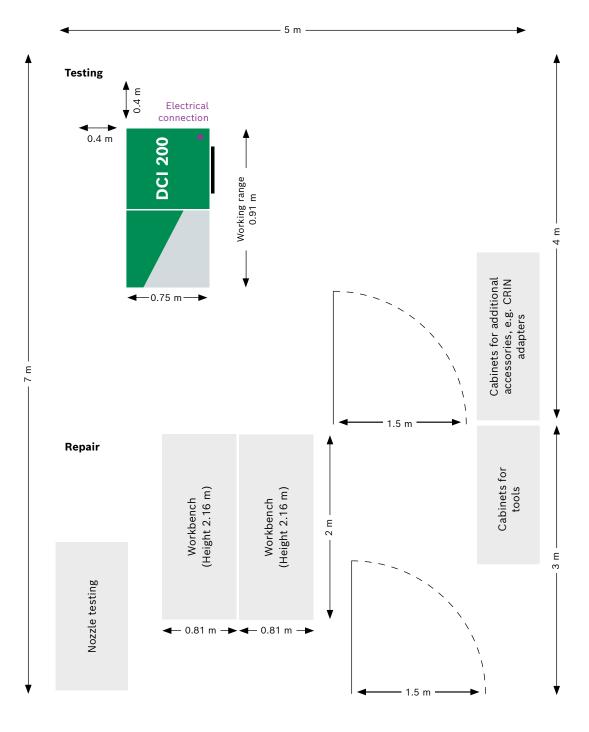


**CRI/CRIN 3rd party** For testing CR injectors made by third-party manufacturers 1 687 010 208

\* For associated CRIN adapters, see optional accessories on page 19



# Facility concept **DCI 200**



### Ideal workbench for diesel service (0 986 613 300)

The workplace for repairing diesel injectors and components must meet very high standards of cleanliness, functionality and straight-forward design. Otherwise, even the smallest dirt particles in diesel systems can lead to malfunctions.

#### **Recommended facility properties:**

- Sealed concrete floor
- Sufficient ventilation by means of an exhaust air system to remove vapours
- Sound insulation is recommended

# Accessories DCI 200

Adapter	Description	Order number
Adapter A1i	CRIN-Bosch for Cummins, Dongfeng, VW, Ford, DCEC	1 685 720 297
Adapter A2i	CRIN-Bosch for Valtra Tractors, Sisu Motors, AGCO, Alis, Deutz, AP Inc	1 685 720 314
Adapter A3i	CRIN-Bosch for FPT, Iveco, CASE New Holland, Cummins, Dongfeng, VW/Ford, TATA Motors, GCIC, CNHI, DCEC, DDC, Quanchai, YTO, Yunnei	1 685 720 296
Adapter A4i	CRIN-Bosch for Renault, Dongfeng	1 685 720 316
Adapter A5i	CRIN-Bosch for MAN, Liebherr, KOEL	1 685 720 300
Adapter A6i	CRIN-Bosch for MAN, CNHTC	1 685 720 318
Adapter A7i	CRIN-Bosch for Ford Otosan, JMC	1 685 720 320
Adapter A8i	CRIN-Bosch for DHIM, Doosan, Yuchai	1 685 720 332
Adapter A9i	CRIN-Bosch for Deutz	1 685 720 324
Adapter A10i	CRIN-Bosch for FAW, Yuchai	1 685 720 326
Adapter A11i	CRIN-Bosch for Dongfeng, DCD	1 685 720 328
Adapter A12i	CRIN-Bosch for Ashok Leyland	1 685 720 330
Adapter A13i	CRIN-Bosch for Renault, Fendt, Deutz, FAW, Yuchai, Foton, Weichai, Volvo, CAMC, SDEC, TAFE	1 685 720 332
Adapter A14i	CRIN-Bosch for MAN, Liebherr, Renault, International Harvester, MWM, Navistar, MTU, Ford Otosan, Volvo, Agrale, AGCO, MHEPL, JND, SANY, Neoplan, Mahindra, JMC	1 685 720 334
Adapter A15i	CRIN-Bosch for MAN, Shanqi, Foton, CNHTC, Weichai	1 685 720 336
Adapter A16i	CRIN-Bosch for DHIM, Yuchai, CAMC	1 685 720 338
Adapter A17i	CRIN-Bosch for MAN, Navistar	1 685 720 371
Adapter A18i	CRIN-Bosch for FAW	1 685 720 373
Adapter A19i	CRIN-Bosch for Scania	1 685 720 377
Adapter A20i	CRIN-Bosch for Caterpillar	1 685 720 392
Adapter A21i	CRIN-Bosch for VECV – Ltd.	1 685 720 395
Adapter A22i	CRIN-Bosch for John Deere	1 685 720 415
Adapter A23i	CRIN-Bosch for AGCO	In preparation
Adapter A1e	CRIN-Bosch for Deutz, FAW-Dalian, Volvo	1 685 720 340
Adapter A2e	CRIN-Bosch for Hino	1 685 720 342
Adapter A3e	CRIN-Bosch for CASE New Holland, FPT	1 685 720 344
Adapter A4e	CRIN-Bosch for Mitsubishi Fuso	1 685 720 346
Adapter A6e	CRIN-Bosch for Mahindra	1 685 720 358
Adapter A7e	CRIN-Bosch for FPT, Iveco, CASE New Holland	1 685 720 360
Adapter A8e	CRIN-Bosch for Hino	1 685 720 362
Adapter A10e	CRIN-Bosch for Caterpillar/Perkins, Deutz, Yuchai, SFH PT, BFCEC, CNHTC, Yunnei, Weichai	1 685 720 366
Adapter A11e	CRIN-Bosch for FAW Mahindra	1 685 720 375

# Common-rail pump test bench **EPS 708**





EPS 708	400 V, 3 PH, 50/60 Hz with cooling system	區 0 683 708 020
EPS 708	200–240 V, 3 PH, 50/60 Hz with cooling system	追0 683 708 021
EPS 708	400 V, 3 PH, 50/60 Hz without cooling system	追0 683 708 001
EPS 708	200–240 V, 3 PH, 50/60 Hz without cooling system	區 0 683 708 002

#### Powerful

The EPS 708 diesel test bench made by Bosch specifically for common-rail injection pumps allows testing up to 2 200 bar.

# Benefits

- Measure electronic flow for efficient common-rail component testing
- Electronic inlet pressure control for pump and lubricating oil supply
- Simple pump assembly without coupling cover
- Integrated cooling system reduces water consumption in the workshop (water cooling optionally available)
- Electronic monitoring and display of service intervals (e.g. test oil change)
- Self-diagnosis system indicates necessary filter change

# Accessories EPS 708



**CP1/CP1H/CP3 pump set** For testing CP1/CP3 pumps 월 1 687 010 346



**CP4 pump set** For testing CP4 pumps 월 1 687 010 390



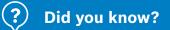
**CB18 pump set** For testing CB18 pumps 월 1 687 010 402



CP external pump set (Delphi, Denso) For testing CR pumps made by other manufacturers 1 687 010 183



VDO pump set For testing CR pumps (Continental) 월 1 687 010 193

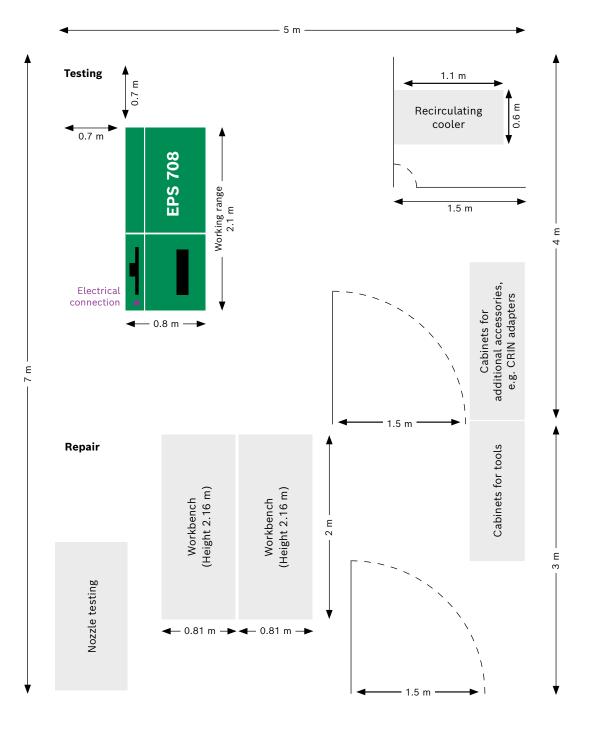


# 220 million

common-rail pumps have been produced by Bosch since 1997



# Facility concept **EPS 708**



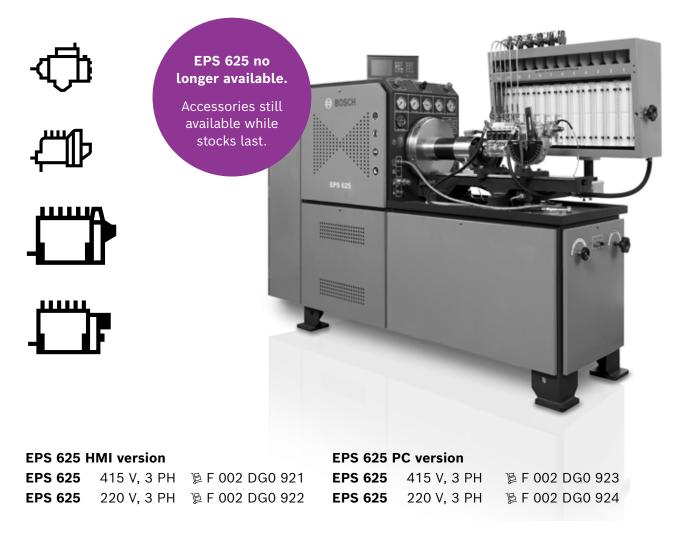
### Ideal workbench for diesel service (0 986 613 300)

The workplace for repairing diesel common-rail pumps must meet very high standards of cleanliness, functionality and straight-forward design. Otherwise, even the smallest dirt particles in diesel systems can lead to malfunctions.

### **Recommended facility properties:**

- Sealed concrete floor
- Sufficient ventilation by means of an exhaust air system to remove vapours
- Sound insulation is recommended
- A water connection with inlet and outlet or recirculating cooler

# Conventional test bench **EPS 625**



#### Injection pump test bench

The EPS 625 component test bench can be used to test powerful conventional in-line and distributor injection pumps from both Bosch and other manufacturers. The specifications of the engine and vehicle manufacturers are adhered to. The robust and easy-to-use technology makes the EPS 625 a cost-effective and long-lasting investment for the workshop.

# Benefits

- Maintenance-free drive with high efficiency
- Long service life of the high-pressure lines, as the measuring device can be adjusted in three levels
- Excellent concentricity and speed stability ensure high repeat accuracy
- Large flywheel mass
- Speed control with extremely short speed control time
- Integrated boost pressure control unit

- Automatic test oil heating, adjustable via supply or return flow
- Easy operation thanks to high-resolution 5.7" LCD display for displaying set/actual values, drive speed, set and actual stroke, test oil tank temperature, supply and return temperature

# Accessories EPS 625



**Basic set** For H/R/A/M/MW/P/VE-pumps 월 1 687 005 018



A pump set<sup>1</sup> For testing and adjusting A-pumps made by Bosch 월 1 687 005 019



P pump set<sup>1</sup> For testing and adjusting P-pumps made by Bosch 월 1 687 005 021



VE pump set For testing and adjusting VE-pumps made by Bosch 월 1 687 005 022



Mand MW pump set<sup>1</sup> For testing and adjusting PES M and PE(S) MW pumps made by Bosch 월 1 687 005 020



H/R pump set<sup>1</sup> For testing and adjusting H-pumps and R-pumps with Electronic Diesel Control (EDC) 월 1 687 005 023

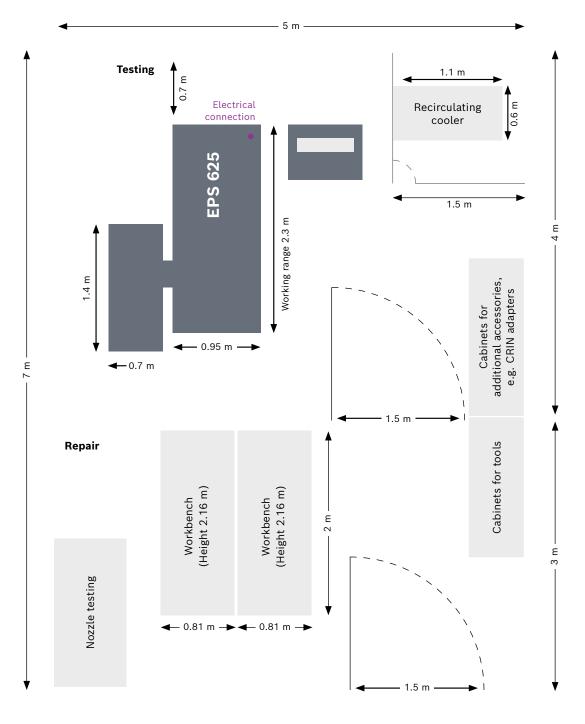
<sup>1</sup> Additionally requires specific accessories that are not included in the basic set.



**60 million** in-line injection pumps and

**75 million** distributor injection pumps have been produced by Bosch since 1997

# Facility concept **EPS 625**



### Ideal workbench for diesel service (0 986 613 300)

The workplace for repairing conventional injection pumps must meet very high standards of cleanliness, functionality and straight-forward design. Otherwise, even the smallest dirt particles in diesel systems can lead to malfunctions.

#### **Recommended facility properties:**

- Sealed concrete floor with damping at the test bench base
- Sufficient ventilation by means of an exhaust air system to remove vapours
- Sound insulation is recommended
- A water connection with inlet and outlet or recirculating cooler

# Injection nozzle testing device **EPS 100**







#### **EPS 100** 월 0 684 200 704

#### For efficient and flexible work

The EPS 100 facilitates the reading of the opening pressure of injection nozzles.

## Benefits

- Testing and adjusting the opening pressure of injection nozzles
- Assessment of the emerging jet with regard to shape and atomisation (spray pattern)
- Checking the tightness of the nozzles and the snaring properties for 2-spring nozzle holder, step holder and UI/UP applications
- Reduced total error (+/- 2.4 bar) due to high reading (1 bar) and pressure gauge accuracy
- Engine idle shaking can be avoided through the most precise analysis of the smallest leaks
- Direct extraction of oil mist when testing injection nozzles (only possible in conjunction with EPS 738)

# Accessories EPS 100

For testing the suction device	Order number
EPS 738 suction device	0 684 200 702
Nozzle holder combination	Order number
Passenger car nozzle holder combination for Opel with 20 DTH engines	1 683 391 194
Commercial vehicle nozzle holder combination for Mercedes-Benz Actros/Atego/Axor	1 683 391 193
Commercial vehicle nozzle holder combination with M16x1.5 connection thread	1 680 362 047
Commercial vehicle nozzle holder combination with M18x1.5 connection thread	1 680 362 000
Commercial vehicle nozzle holder combination with M22x1.5 connection thread	1 680 362 001
Commercial vehicle nozzle holder combination with M24x1.5 connection thread	1 680 362 044
Commercial vehicle nozzle holder combination with M26x1.5 connection thread	1 680 362 002
Commercial vehicle nozzle holder combination with M27x1.5 connection thread	1 680 362 045
Unit injector nozzle	Order number
UI nozzle for Audi, Seat, Skoda and VW	1 687 001 857
UI nozzle for Nissan	1 681 335 111
UI nozzle for DDC and Iveco with UI-N3 PDE (unit injector system)	1 687 010 338
UI nozzle for Scania, Volvo and Iveco with UI-N1 PDE (unit injector system)	1 687 010 147

? Did you know?

**950 million** nozzle holder combinations have been produced by Bosch since 1997

# Accessories EPS 815





**Basic set** For H/R/A/M/MW/P/VE-pumps 월 1 687 005 018



A pump set<sup>1</sup> For testing and adjusting A-pumps made by Bosch 월 1 687 005 019



Mand MW pump set<sup>1</sup> For testing and adjusting PES M and PE(S) MW pumps made by Bosch 월 1 687 005 020



P pump set<sup>1</sup> For testing and adjusting P-pumps made by Bosch 월 1 687 005 021



VE pump set For testing and adjusting VE-pumps made by Bosch 월 1 687 005 022



H/R pump set<sup>1</sup> For testing and adjusting H-pumps and R-pumps with Electronic Diesel Control (EDC) 월 1 687 005 023



CRS 845 basic set For CR components (CP/CRI) 월 1 687 002 845



**CP3 pump set 1** For testing CP3 pumps 월 1 687 010 182



CP1/CP1H pump set For testing 1st generation CRH pumps 월 1 687 010 341



**CP4 pump set** For testing CP4 pumps 월 1 687 010 490



**CB28 pump set** For testing CB28 pumps 월 1 687 010 496



CP external pump set<sup>2</sup> For testing CR pumps made by other manufacturers 월 1 687 010 183



**CP2/CPN2 pump set** For testing commercial vehicle CR pumps

월 1 687 010 342



CB18 pump set For testing CB18 pumps 월 1 687 010 402



**VDO pump set<sup>3</sup>** For testing CR pumps (Continental) 足 1 687 010 193

<sup>1</sup> Additionally requires specific accessories that are not included in the basic set.

<sup>2</sup> CP from Delphi/Denso/Siemens/Continental

<sup>3</sup> Companies with Continental service contract

# **Repair tools** for components

#### **Common-rail pumps**



CP3 tool panel (I) Tool set for repairing CR high-pressure pumps 퉏 0 986 610 360



CP1/CP1H Tool set for repairing CR high-pressure pumps 10 986 614 360



CB28 Additional tools if no CB18 basic set is available 10 986 614 083

#### **Common-rail injectors**



CRI/CRIN stage 1 - Mounting device for nozzle replacement 퉏 0 986 610 130



Snap ring clipper and assembly tool **월 0 986 610 600** 

CP3 tool panel (II)

**월 0 986 610 370** 

CB18 repair tools

📙 0 986 614 081

high-pressure pumps

Tool set for repairing CR

Basic set for CB18 repair



Stage 3 CRI tool set for complete repair and adjustment of CRI incl. the solenoid valve assembly 월 0 986 610 700



CRI (case variant) Stage 3 tool set for complete repair and adjustment of CRI incl. the solenoid valve assembly 월 0 986 610 703



CRIN from Japan and USA production stage 3 월 0 986 610 845



Mounting device for common-rail injector maintenance/repair 📙 0 986 613 600

CP4 tool panels

Tool set for repairs

**0** 986 610 740

CB28 basic tools

屋 0 986 614 082

Basic set for CB28 repair



Stage 2 CRI tool set for maintenance/repair of the CRI solenoid valve assembly 10 986 613 650

#### Denoxtronic



Denoxtronic 2.2 Tool set 📙 0 986 610 561

#### **Conventional pumps**



A-pumps Repair tools for Bosch in-line injection pumps: A (I) ₿ 0 986 614 150



P-pumps Repair tools for Bosch in-line injection pumps without controller (I) 屋 0 986 614 240



P-pumps Repair tools for Bosch in-line injection pumps without controller (IV) 扈 0 986 614 270



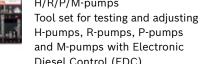
VE-pumps Tool set for repairs (I) 10 986 614 220



P-pumps Repair tools for Bosch in-line injection pumps without controller (II) 10 986 614 250



H/R/P/M-pumps



H-pumps, R-pumps, P-pumps and M-pumps with Electronic Diesel Control (EDC) **월 0 986 614 400** 



VE-pumps Tool set for repairs (II) 1 0 986 614 230



P-pumps Repair tools for Bosch in-line injection pumps without controller (III) 1 0 986 614 260



H/R/P-pumps H/R/P-pumps repair tools for repairing and testing on H-pumps, R-pumps and P-pumps 뚿 0 986 614 415



Mounting devices	Order numbe
Bosch workbench	0 986 613 300
Clamping device	0 986 611 248
Clamp holder for flange mounting	0 986 611 358
Mounting device for nozzle and clamping nut replacement of UI and basic mounting device for CRI/CRIN (accessory set 0 986 613 500 required)	0 986 613 400
Mounting device for roller plunger	0 986 611 993
Accessory set for basic mounting device, necessary for CRI/CRIN	0 986 613 500
Force measuring device for shaft seals, bushings, etc.	0 986 612 878
Force transducer for compressive forces	0 986 612 997
Tools and special accessories	Order number
Stage 3 CRIN retrofit set for CRI repair set (0 986 610 700 or 0 986 610 703) to perform CRIN repairs	0 986 610 705
CRIN starter kit, stage 3, package for beginners including case for storing tools and washers	0 986 610 710
Stage 3 CRI retrofit set for CRIN repair set (0 986 610 710) to perform CRI repairs	0 986 610 715
Upgrade set for tools for repair of CP1/CP1H high-pressure pumps (0 986 614 360) manufactured before 2022	0 986 613 750
Stage 2 tool set for the maintenance/repair of the CRIN solenoid valve assembly (incl. PEEK rings of commercial vehicle injectors)	0 986 613 699
Plunger holder for roller plunger	0 986 611 298
Mounting sleeves for mounting the O-rings in common-rail injectors (CRIN) for MAN, Ford Otosan	0 986 612 930
Suction unit for cleaning hard-to-reach surfaces	0 986 613 11
Mounting mandrel for mounting the O-rings on the return of common-rail injectors (piezo)	0 986 614 030
30 V/15A precision voltage stabiliser	1 687 022 873
PEEK ring removal tool	0 986 613 46
PEEK ring tool for mounting (8.1 mm)	0 986 613 463
PEEK ring tool for mounting (7.52 mm)	0 986 613 464
Denoxtronic	Order numbe
Special accessories (Scania) adapter module	0 986 610 173
Test adapter	0 986 610 174
Extension set from Denoxtronic 2.1 to Denoxtronic 2.2	0 986 610 54
Denoxtronic workbench	0 986 613 880

# What drives you, drives us

Bosch technologies are used in most vehicles worldwide. People, and assuring their mobility, is what we are focused on.

Therefore, we have dedicated over 130 years of pioneering spirit and expertise in research and manufacturing to achieving this.

We provide the aftermarket and workshops worldwide with modern diagnostic and workshop equipment and a wide range of spare parts for passenger cars and commercial vehicles:

- solutions for efficient vehicle repairs
- innovative workshop equipment and software
- one of the world's most comprehensive ranges of new and exchange parts
- large network of wholesale customers, for quick and reliable parts supply
- competent hotline support
- comprehensive educational and training offers
- targeted sales and marketing support

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