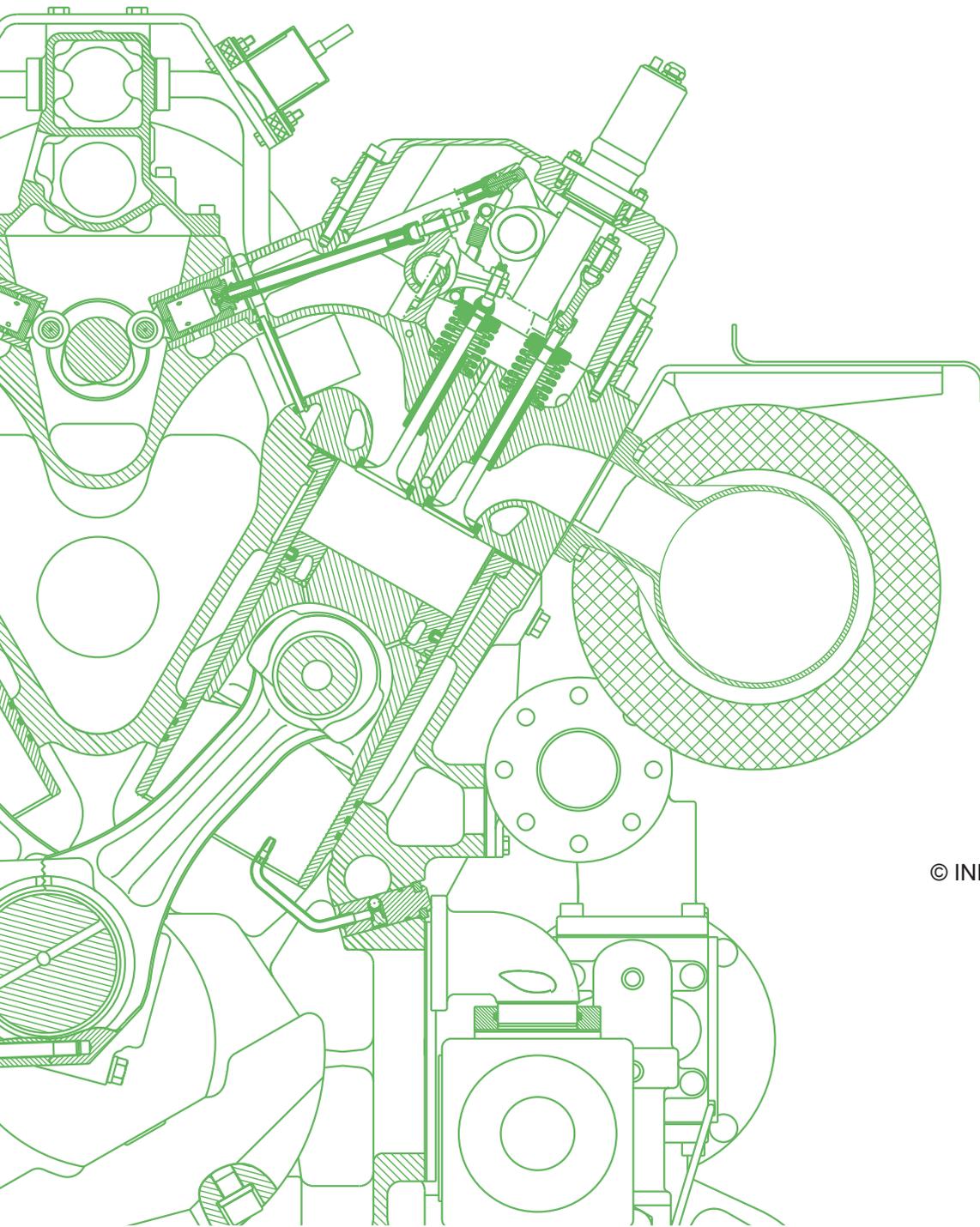




TA 1310-0010-3

Technical Instruction

Special tools catalogue Type 6



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1	Scope	1
2	Purpose.....	1
3	Safety information.....	2
4	Additional information.....	2
5	General.....	2
6	Changes	4
7	Tool kits	5
8	Special tool.....	10
8.1	Type 6 - Hydraulic system.....	10
8.2	Type 6 - Power Unit	16
8.3	Type 6 – Main bearing	21
8.4	Type 2, 3, 4, 6 - Crankshaft seal.....	24
8.5	Type 6 - Steel piston tool	26
8.6	Blow-by meter	29
8.7	Types 6, 624 – Camshaft tool	30
8.8	Type 6 - Prechamber removal	31
8.9	Type 6 - Flywheel extractor (ITH).....	33
8.10	Type 6 - Gear train.....	37
8.11	Type 6 - Venturi ring removal tool.....	41
8.12	Types 6, 624 – Crane	41
8.13	Roller tappet removal tool	43
8.14	Throttle valve bushing extractor	43
8.15	Type 6 – Set of covers	43
8.16	inspection plug / vent plug	45
8.17	Combustion chamber cleaning	47
8.18	Single tools.....	47
8.18.5	Examination.....	54
9	Index.....	56
10	Revision code.....	59

The target recipients of this document are:

Service Partners, commissioning partners, subsidiaries/branches, Jenbach location

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1 Scope

This Technical Instruction (TA) applies to the following Jenbacher Engines:

- Type 6 engines

2 Purpose

This technical instruction (TA) contains a list of available special tools required for work on Jenbacher Engines.

3 Safety information

⚠ DANGER



Personal injury due to damaged tools

If tools are not inspected at regular intervals, severe personal injury may result.

- Tools marked yellow in the tool kit overview must be inspected regularly at intervals of no more than one year. The markings are based on the periodicity at INNIO in Austria, but if local regulations are stricter, the frequency and scope of the inspection must be changed accordingly.

⚠ WARNING



Personal injury

Failure to use personal protective equipment and comply with safety instructions or employee protection information may lead to personal injury.

- Wear the relevant personal protective equipment (PPE).
- Observe the safety instructions as per TA 2300-0005.
- Observe the employee protection information as per TA 2300-0001.

4 Additional information

NOTE



Engine damage due to uncalibrated measuring instruments

If measuring instruments are not calibrated at the set intervals, this can result in engine damage due to incorrect measurement results.

- Calibrate measuring instruments at the intervals specified by the manufacturer.

Relevant documents:

TA 1310-0011 – Standard tool catalogue

TA 2300-0001 – Employee protection

TA 2300-0005 – Safety instruction

5 General

Custom products within this catalogue are used exclusively by the company GE Jenbacher (DP) GmbH & CO OG and manufactured by its subcontractors.

The special equipment and tools contained in this catalogue are to be used in accordance with the relevant regulations and TIs and must not be used by persons without the predetermined certified training.

The training required for working on engines using the special tools from Jenbacher is indicated in the Tool kits Section below. The abbreviations used there refer to the following list.

Training title (Trg)	Abbr.
Maintenance and repair training for Type 3 engines	MR3
Maintenance and repair training for Type 4 engines	MR4
Maintenance and repair training for Type 6 engines	MR6

Training title (Trg)	Abbr.
J624 training	624
ITH flywheel training - manufacturer training only with special approval	ITH

Recommendation on minimum requirements for special tools

Recommendations about minimum requirements of special tools for Jenbacher Engines serve as planning aids for our service partners.

The minimum requirements ensure that the fleet installed in a country can be serviced sufficiently and over the whole area.

To do this, the following categories are assigned to the special tools:

Abbreviation category	Designation category	Description
PREV	Preventive tool	Special tools for the activities provided for in the maintenance schedule – Preventive measures. Tools of this category may also be necessary for corrective actions.
CORR	Corrective tool	Special tool for corrective actions.
SISP	Plant-specific tool	Plant-specific tools are special tools of individual plants or devices that are required for service depending on the condition of the customer's plants.
ACCY	Accessories	Optional accessories for proper storage and safe transport of special tools.

The following list shows the recommended minimum quantities of special tools in relation to the number of motors installed in the country.

Number of motors per type in the country	Preventive tools (PREV)	Corrective tools (CORR)
<20	1	1
<50	2	1
<70	2	2
<100	3	2
<150	3	3
<200	4	3
<500	5	3
<800	5	4
<1200	6	4



The specified minimum quantities assume proper and good planning as well as trouble-free transport possibilities throughout the country. Deviations or countries larger than 800,000 km² may require larger quantities.

6 Changes

Bearing removal tool TecJet - PREV

1242638	Bearing removal tool TecJet	To remove the bearings of the TecJet	
---------	-----------------------------	--------------------------------------	-------------------------------------------------------------------------------------

Weight: -- kg
Dimensions: -- x -- x -- mm

Battery light source for borescope - PREV

1248655	Battery light source for borescope	alternative light source for borescope part no.: 1218442, wireless handling	
---------	------------------------------------	-----------------------------------------------------------------------------	--

Weight: -- kg
Dimensions: -- x -- x -- mm

Rigid borescope with LED - PREV

1218442	Rigid borescope with LED	for finding e.g. combustion chambers, incl. LED light source, camera and carrying case	
---------	--------------------------	----------------------------------------------------------------------------------------	--

Weight: -- kg
Dimensions: -- x -- x -- mm

Videoscope - PREV

1248638	Videoscope	For diagnostic purposes with interchangeable lens, 2 batteries and accessories in carrying case Alternatively part no.: 1226502	
---------	------------	------------------------------------------------------------------------------------------------------------------------------------	--

Weight: -- kg
Dimensions: -- x -- x -- mm

Magnetic cover - PREV

9031242	Magnetic cover	For covering the side crankcase openings, engine type 6	
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Weight: 0.2 kg
Dimensions: 280 x 280 x 1 mm

Conrod ejection rod clamp - CORR

1247921	Conrod ejection rod clamp	for clamping the conrod lever assembly when replacing the big-end bearing shells on type 612, 616 and 620 engines (without removing the cylinder head)	
---------	---------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------

Weight: 3.2 kg
Dimensions: 310x125x210 mm

7 Tool kits

WARNING



Personal injury due to untested tools

If tools are not inspected at regular intervals, personal injury caused by tools may result.

- Inspect tools highlighted in yellow in the overview at regular intervals of no more than one year.
- The markings are based on the periodicity at INNIO in Austria, but if local regulations are stricter, the frequency and scope of the inspection must be changed accordingly.



Spare parts for complete kits are marked with a "-". They are included in the complete kit, but can also be ordered separately.

If a value has been entered for tools in the sub-assembly column, the entire sub-assembly must be ordered. The individual parts cannot be used on their own.

Special tool	Part number	Training	Number	Module
Type 6 - Hydraulic system [CYLH/6/XX/000/01-03] - PREV				
<i>Type 6 Hydraulic system - Complete kit</i>	373279	MR6	1	
- Face spanner	1209979		1	
- Punch 6 mm	1209981		1	
- Hard-shell carrying case, Peli	1209982	MR6	1	
- Manometer for hydraulic hand pump ITH	1234344		1	
- Bolt-tensioner without adapter bushing and support sleeve	426567	MR6	4	

Special tool	Part number	Training	Number	Module
- Adapter bushing M30x2	426568	MR6	4	
- Support sleeve M30x2	426569		4	
- Adapter bushing M33x2	426570	MR6	2	
- Support sleeve M33x2	426571	MR6	2	
- Seal kit for bolt-tensioner	426574		1	
- High-pressure hand pump, 1350 bar	426575		1	
- Seal kit for high-pressure hand lever pump	426576	MR6	1	
- High-pressure hose 2m	426578		4	
- High-pressure hose 3 m	426579		1	
- High-pressure coupling distributor (4-way)	426580		1	

Type 6 - Power unit [CYLH/6/XX/000/02-03] - PREV

Circlip pliers	1203577	MR6	1	
Foam insert	1209971		1	
Case	1210486		1	
Cylinder liner lifting tool	1237183	MR6	1	
Piston ring pliers	194603		1	
Position gauge for piston cooling nozzles on Type 6 engines, version C	277247	MR6	1	
Position gauge for piston cooling nozzles on Type 6 engines, version E	285852	MR6	1	
Assembly plate for big-end bolts	289936	MR6	1	
Cylinder liner extractor	310580	MR6	1	
Holding-down tool for cylinder liner	474145		2	
Device for fitting conrods, 2-part	660093	MR6	1	
Lifting tool for pistons	9006995	MR6	1	
Protective tube for Type 6 engines	9014392	MR6	nach Bedarf	
Insertion sleeve for pistons	9016124	MR6	1	
Locking screw for big-end bearing, long arm	9017200	MR6	1	
Locking screw for big-end bearing, short arm	9017492	MR6	1	
Positioning device for big-end bearing cap, Type 6 engines	9017515	MR6	1	
Bolt-tensioning cylinder	9020948		1	

Type 6 – Main bearing [CYLH/6/XX/000/03-03] - PREV

Crankcase spreader	1205054	MR6	1	
Case	1208506		1	
Extension (210 mm, 1")	1208508		1	
Extension (125 mm, 1")	1208509		1	
Nut for main-bearing tie-rod bolts	1208510		1	
Foam insert	1209972		1	
Multiplier, 3-part	344082		1	
Hex bit socket (19 mm, 1")	344084		1	

Special tool	Part number	Training	Number	Module
Main bearing removal tool	9023213		1	
Main bearing cap lowering device	9027878	MR6	1	

Types 2, 3, 4, 6 – Crankshaft seal [SEAL/2346/XX/000] - PREV

Case	1208506		1	
Foam insert	1209888		1	
Stud M16x1.5	156911	MR3;MR4; MR6	1	
Assembly sleeve	285455		1	
PVC ring for pre-assembly	315403	MR3;MR4; MR6	1	
Assembly aid for fitting the crankshaft seal - Type 6 engines	519902		1	

Type 6 - Steel piston tool [CYLS/6/XX/000/01-01] - PREV

Circlip pliers	1203577	MR6	1	
Foam insert	1209973		1	
Case	1210487			
Piston ring pliers	194603		1	
Position gauge for piston cooling nozzles on Type 6 engines with steel pistons	456563	MR6	1	
Device for fitting conrods, 2-part	660093	MR6	1	
Lifting tool for pistons	9006995	MR6	1	
Insertion sleeve for pistons	9016126	MR6	1	
Adapter ring for piston cooling nozzle adjustment device	9020769		1	

Blow-by meter [BBMD/346/XX/000/01-01] - PREV

Blow-by meter hose	1210773		2	
Blow-by meter	1230601		1	

Camshaft tool – Type 6 engines - CORR

Twin-arm extractor	1237323	MR6	1	
Camshaft sliding sleeve	290008	MR6	1	
Camshaft bearing fitting tool	9024088	MR6	1	

Type 6 - Prechamber removal [PCEX/6/XX/000/01-01] - PREV

Spark plug sleeve seat lapping tool ("F" cylinder heads)	1241846	MR6	1	
Spark plug sleeve seat lapping tool ("H" cylinder heads)	1242554	MR6	1	
Spark plug sleeve adapter M35x1.5	303388		1	
Valve spring removal tool	317585		1	
Spark plug sleeve adapter M42x2	567458		1	

Special tool	Part number	Training	Number	Module
Spark plug sleeve adapter M36x1.5	7002321		1	
Prechamber removal power tool	9003104	MR6	1	
Prechamber removal device, universal joint	9003554	MR6	1	Prechamber removal tool
Prechamber extension tool, extension	9004381	MR6;624	1	Prechamber removal tool
Prechamber removal tool hammer	9004382	MR6;624	1	Prechamber removal tool
Prechamber gas valve removal tool	9013489	MR6	1	
Spark plug sleeve adapter M48 x 1	9023750			
Spark-plug sleeve pretensioning tool	9028131	MR6	1	

Type 6 – Flywheel puller [GEAR/6/XX/000/01-02] - CORR

- Face spanner	1209979		1	
- Punch 6 mm	1209981		1	
- High-pressure hand pump, 1350 bar	426575		1	
- High-pressure hose, 3 m	426579		1	
Flywheel extractor	Auf Anfrage	ITH	1	

Type 6 – Gear train [GEAR/6/XX/000/02-02] - CORR

Gear train hand tool	---		1	
Slotted nut socket M45	1215800	MR6	1	
Slotted nut socket M80	1215801	MR6	1	
Hex bit socket (22 mm, 1")	1229999	MR6	1	
Hydraulic three-arm puller	1235485		1	
Twin-arm extractor	1237323	MR6;624	1	
Increasing adapter 3/4"⇒1"	1247842		1	
Torque spanner, 1" 350-800 Nm	152022		1	
Multiplier, 3-part	344082		1	
Torque spanner, 1" 75-400 Nm	414739		1	
Camshaft idler gear assembly tool	7003805		1	
Oil pump idler gear assembly tool	8000080		1	

Type 6 - Venturi ring removal tool [Venturi] - PREV

Venturi ring removal tool, Type 6	1215924	MR6	1	
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Type 6 – Crane [MCRA/6/xx/000] - SISP

Crane basic module	1232227	MR6	1	
Mounting bracket	9019243	MR6	1	

Roller plunger removal device [TAPS/6/xx/000] - CORR

- Roller tappet guide removal tool	1243459	MR6	1	
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Special tool	Part number	Training	Number	Module
Throttle valve bush pulling device [TVBP/6/xx/000] - CORR				
- Throttle valve bushing extractor, Type 6 engines	1211612	MR6	1	
Type 6 – Set of covers - PREV				
Case	1247381		1	
- Stopper Set J624	1247143		1	
Set of covers – Complete kit	1247620		1	
- Protective tube for Type 6 engines	9014392	MR6;624	24	
- Blanking plug liner landing	9018694		24	
Type 6 – Stopper - PREV				
Sealing plug D	1226716		nach Bedarf	
Sealing plug E	1226717		nach Bedarf	
Sealing plug C	1229311		nach Bedarf	
Stopper Set J612	1247138		1	
Stopper Set J616	1247139		1	
Stopper Set J620	1247140		1	
Stopper Set J624	1247143		1	
Combustion chamber cleaning - CORR				
Combustion chamber cleaning consumables	1242666		1	
O-ring	376488		1	
Spark Plug Tool [SPAT/6/xx/000] - PREV				
Extension magnet for reinforcing the spark plug socket wrench	1237586		1	
Spark plug adjustment tool	9011882		1	
Adapter for slotted capstan nut - PREV				
Hose	200593		1	Adapter for slotted capstan nut
Adapter	9025143		1	Adapter for slotted capstan nut
set screw	9025145		3	Adapter for slotted capstan nut
Type 6 – Version C [HELD/6C/xx/000] - PREV				
Exchange bushing, long M30x2	---		1	
Support sleeve M30 x 2 for main bearing	1223400		1	
2-part rod for fitting conrods, Type 6C engines	660094		1	
Jacking equipment set for Type 6 engines, version C	7004451		1	

Special tool	Part number	Training	Number	Module
Type 6 – Piston cleaning tool [PRGC/6/XX/000] - CORR				
<i>Piston bracket for Type 6 engines</i>	7004555		1	
<i>Piston ring groove cleaning tool for Type 6 engines</i>	7004556		1	
Single tools - PREV / CORR				
<i>Turning device</i>	1234890	MR6	1	
<i>Mixture cooler lifting plate</i>	1235264	MR6	1	
<i>Shaft alignment laser device</i>	1235971		1	
<i>Hydraulic lifting cylinder</i>	1235972		1	
<i>Support plate package for "weak" cylinder heads</i>	1237463		1	
<i>Vibration measuring instrument</i>	1238948		1	
<i>Accumulator pump for ITH hydraulic system</i>	1241906	MR6	1	
<i>Bolt-tensioner, four-part, M33 x 2</i>	1241908	MR6	2	optional for 426570 und 426571
<i>Torque screwdriver</i>	1242516	MR3;MR4;MR6	1	
<i>Bearing removal tool TecJet</i>	1242638		1	
<i>Torque wrench for tie bolts</i>	1243235		1	
<i>Ring spanner attachment for prechamber nut</i>	1246988	MR6	1	
<i>Conrod ejection rod clamp</i>	1247921	MR6	1	
<i>O-ring press-in tool</i>	605953	MR6	1	
<i>Scraper ring removal tool</i>	9014095	MR6	1	
<i>Coupling element replacement tool</i>	9029785		1	
<i>Magnetic cover BR6</i>	9031242		1	
Examination				
<i>Rigid borescope with LED</i>	1218442		1	
<i>Videoscope</i>	1248638		1	
<i>Battery light source for borescope</i>	1248655		1	

8 Special tool

8.1 Type 6 - Hydraulic system



The complete kit includes all tools mentioned below. All tools with a part number can also be ordered as spare parts.

Hydraulic system for Type 6 engines - complete kit - PREV

373279	Hydraulic system for Type 6 engines - complete kit		
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Weight: 72 kg
Dimensions: 860 x 800 x 570 mm

Face spanner - PREV

1209979	Face spanner	For opening the bolt-tensioners for replacing the adapter bushings	
---------	--------------	--------------------------------------------------------------------	-------------------------------------------------------------------------------------

Weight: 0.8 kg
Dimensions: 220x40x20 mm

Punch 6 mm - PREV

1209981	Punch 6 mm	For hand-tightening the round capstan nuts on the cylinder head and main bearing	
---------	------------	----------------------------------------------------------------------------------	---------------------------------------------------------------------------------------

Weight: 0.4 kg
Dimensions: 210 x 30 x 30 mm
Manufacturer / No.: FACOM / 539915

Hard-shell carrying case, Peli - PREV

1209982	Hard-shell carrying case	Type 6 - Box 1/3	
---------	--------------------------	------------------	-------------------------------------------------------------------------------------

Weight: 6.2 kg
 Dimensions: 570x350x240 mm
 Details: Peli Case 1510

Bolt-tensioner without adapter bushing and support sleeve - PREV

426567	Bolt-tensioner without adapter bushing and support sleeve	Tensioning the cylinder head bolts in order to enable the hole nuts to be tightened	
--------	-----------------------------------------------------------	-------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------

Weight: 6.8 kg
 Dimensions: 210x140x120 mm

Adapter bushing M30x2 - PREV

426568	Adapter bushing M30x2	Adapter bushing for bolt-tensioner for cylinder head bolts	
--------	-----------------------	------------------------------------------------------------	---------------------------------------------------------------------------------------

Weight: 2.8 kg
 Dimensions: 90x90x90 mm

Adapter bushing M33x2 - PREV

426570	Adapter bushing M33x2	Adapter bushing for bolt-tensioner for main bearing reduced-shaft bolts	
--------	-----------------------	-------------------------------------------------------------------------	-------------------------------------------------------------------------------------

Weight: 2.8 kg
Dimensions: 90x90x90 mm

Support sleeve M30x2 - PREV

426569	Support sleeve M30 x 2	Replaceable support sleeve (bolt-tensioner) for cylinder head bolts	
--------	------------------------	---------------------------------------------------------------------	-------------------------------------------------------------------------------------

Weight: 2.0 kg
Dimensions: 90 x 90 x 50 mm

Support sleeve M33x2 - PREV

426571	Support sleeve M33x2	Replaceable support sleeve (bolt-tensioner) for main bearing reduced-shaft bolts	
--------	----------------------	----------------------------------------------------------------------------------	---------------------------------------------------------------------------------------

Weight: 2.0 kg
Dimensions: 90 x 90 x 50 mm

Seal kit for high-pressure hand lever pump - PREV

426576	Seal kit for high-pressure hand lever pump	Replacement seal set for hand pump	
--------	--------------------------------------------	------------------------------------	-------------------------------------------------------------------------------------

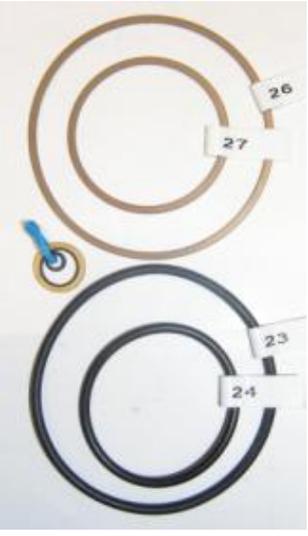
Weight: 0.1 kg
 Dimensions: 100x100x10 mm

High-pressure hand pump, 1350 bar - PREV

426575	High-pressure hand pump, 1350 bar	For building up pressure for the bolt-tensioner	
--------	-----------------------------------	-------------------------------------------------	---------------------------------------------------------------------------------------

Weight: 9.2 kg
 Dimensions: 620x260x240 mm

Seal kit for bolt-tensioner - PREV

426574	Seal kit for bolt-tensioner	Replacement seal kit for bolt-tensioner	
--------	-----------------------------	-----------------------------------------	-------------------------------------------------------------------------------------

Weight: 0.1 kg
Dimensions: 100x100x10 mm

High-pressure hose, 2m - PREV

426578	High-pressure hose, 2m	Connecting hose from the pump to the distributor	
--------	------------------------	--------------------------------------------------	---------------------------------------------------------------------------------------

Weight: 1.6 kg
Dimensions: 30x30x2000 mm

High-pressure coupling distributor (4-way) - PREV

426580	High-pressure coupling distributor (4-way)	For equal distribution of pressure across the four bolt-tensioners	
--------	--------------------------------------------	--------------------------------------------------------------------	---------------------------------------------------------------------------------------

Weight: 1.8 kg
Dimensions: 150x200x30 mm

Manometer for hydraulic hand pump ITH - PREV

1234344	Manometer for hydraulic hand pump ITH	Spare part Monometer for hydraulic hand pump ITH 426575, display pane 1600 bar	
---------	---------------------------------------	--------------------------------------------------------------------------------	-------------------------------------------------------------------------------------

Weight: 1.1 kg
Dimensions: 145x110x60 mm

High-pressure hose, 3 m - PREV

426579	High-pressure hose, 3 m	Connecting hose from the pump to the distributor	
--------	-------------------------	--------------------------------------------------	-------------------------------------------------------------------------------------

Weight: 2.4 kg
Dimensions: 30x30x3000 mm

Bolt-tensioner, four-part, M33 x 2 - PREV

1241908	Bolt-tensioner, four-part, M33 x 2	For tensioning the main bearing reduced-shaft bolts	
---------	------------------------------------	-----------------------------------------------------	---------------------------------------------------------------------------------------

Weight: 6.8 kg
Dimensions: 140 x 160 x 210 mm

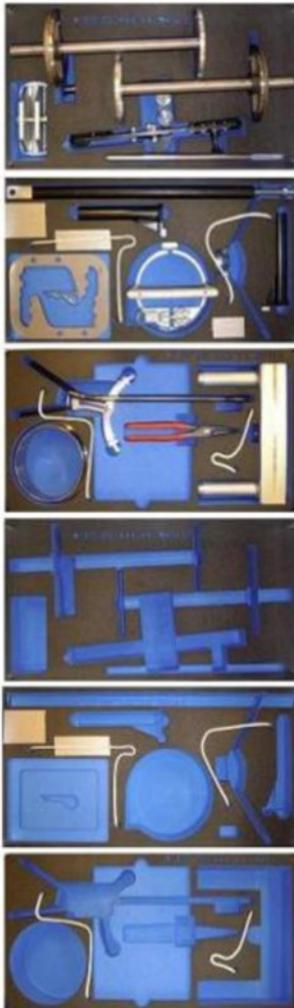
8.2 Type 6 - Power Unit

Circlip pliers - PREV

1203577	Circlip pliers	For fitting and removing circlips	
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Weight: 0.6 kg
Dimensions: 330x60x20 mm
Details: Knipex J4
Manufacturer part no.: 49 11 A2

Foam insert - ACCY

1209971	Foam insert	Type 6 engine power unit tool kit	
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Weight: 3.6 kg
Dimensions: 870 x 470 x 380 mm

Case - ACCY

1210486	Case		
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Weight: 6.9 kg
Dimensions: 890x490x400 mm

Piston ring pliers - PREV

194603	Piston ring pliers	Fitting and removal of piston rings – Type 6 engines	
--------	--------------------	------------------------------------------------------	-------------------------------------------------------------------------------------

Weight: 0.8 kg
Dimensions: 230x330x20 mm

Position gauge for piston cooling nozzles on Type 6 engines, version C - PREV

277247	Position gauge for piston cooling nozzles on Type 6 engines, version C	For inspecting the position of the piston cooling nozzles	
--------	------------------------------------------------------------------------	-----------------------------------------------------------	-------------------------------------------------------------------------------------

Weight: 6.6 kg
Dimensions: 220 x 280 x 560 mm
Application: This device is to be used according to the relevant instructions for the various engine types

Position gauge for piston cooling nozzles on Type 6 engines, version E - PREV

285852	Position gauge for piston cooling nozzles on Type 6 engines, version E	For inspecting the position of the piston cooling nozzles	
--------	------------------------------------------------------------------------	-----------------------------------------------------------	---------------------------------------------------------------------------------------

Weight: 6.6 kg
Dimensions: 220 x 280 x 530 mm
Application: This device is to be used according to the relevant instructions for the various engine types

Assembly plate for big-end bolts - PREV

289936	Assembly plate for big-end bolts	Aid for fitting the big-end bolts	
--------	----------------------------------	-----------------------------------	---------------------------------------------------------------------------------------

Weight: 2.0 kg
Dimensions: 280x220x10 mm

Cylinder liner extractor - PREV

310580	Cylinder liner extractor	Dismantling the cylinder liner from engine block	
--------	--------------------------	--------------------------------------------------	-------------------------------------------------------------------------------------

Weight: 11.6 kg
Dimensions: 260x360x840 mm

Holding-down tool for cylinder liner - PREV

474145	Holding-down tool for cylinder liner	For holding down the cylinder liner while positioning the crankshaft For holding down the cylinder liner while removing the pistons	
--------	--------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------

Weight: 1.0 kg
Dimensions: 250x90x60mm
Application: Place on the cylinder head bolts and fix with hexagonal nut M30x2

Lifting tool for pistons - PREV

9006995	Lifting tool for pistons	For assembly and dismantling of aluminium and steel pistons	
---------	--------------------------	-------------------------------------------------------------	---------------------------------------------------------------------------------------

Weight: 3.4 kg
Dimensions: 240x240x190 mm

Insertion sleeve for pistons - PREV

9016124	Insertion sleeve for pistons	Tool for inserting Type 6 pistons into the cylinder liner with scraper ring	
---------	------------------------------	-----------------------------------------------------------------------------	---------------------------------------------------------------------------------------

Weight: 2.8 kg
Dimensions: 220x220x100 mm

Locking screw for big-end bearing, short arm - PREV

9017492	Locking screw for big-end bearing, short arm	Fixing big-end bearing shells after separation of the conrod	
---------	----------------------------------------------	--------------------------------------------------------------	-------------------------------------------------------------------------------------

Weight: 0.2 kg
Dimensions: 60x30x40 mm

Locking screw for big-end bearing, long arm - PREV

9017200	Locking screw for big-end bearing, long arm	Fixing big-end bearing shells after separation of the conrod	
---------	---------------------------------------------	--------------------------------------------------------------	-------------------------------------------------------------------------------------

Weight: 0.2 kg
Dimensions: 60x30x40 mm

Positioning device for big-end bearing cap, Type 6 engines - PREV

9017515	Positioning device for big-end bearing cap, Type 6 engines		
---------	------------------------------------------------------------	--	---------------------------------------------------------------------------------------

Weight: 0.8 kg
Dimensions: 25 x 25 x 15 mm

Hydraulic cylinder - PREV

9020948	Hydraulic cylinder	For pulling fixed cylinder liners	
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Weight: 4 kg
Dimensions: 130x140x80 mm

Cylinder liner lifting tool - PREV

1237183	Cylinder liner lifting tool	For lifting the cylinder liner	
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Weight: 0.8 kg
Dimensions: 254 x 105 x 55 mm

Device for fitting conrods, 2-part - PREV

660093	Device for fitting conrods, 2-part	For removing pistons and conrods	
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Weight: 7.4 kg
Dimensions: 220x230x600 mm

Protective tube for Type 6 engines - PREV

9014392	Protective tube, Type 6 engines	For protecting the crankpin while the conrod is removed	
---------	---------------------------------	---------------------------------------------------------	-------------------------------------------------------------------------------------

Weight: 0.5 kg
Dimensions: 150 x 150 x 58 mm

8.3 Type 6 – Main bearing

Crankcase spreader - PREV

1205054	Crankcase spreader	For spreading the crankcase in order to replace the main bearing shells in Type 6 engines	
---------	--------------------	-------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------

Weight: 6.4 kg
Dimensions: 380x140x80 mm

Case - ACCY

1208506	Case		
---------	------	--	---------------------------------------------------------------------------------------

Weight: 5.4 kg
Dimensions: 580x380x260 mm

Extension (125 mm, 1") - PREV

1208509	Extension (125 mm, 1")	Extension for fitting and removing main bearing anchoring bolts	
---------	------------------------	-----------------------------------------------------------------	-------------------------------------------------------------------------------------

Weight: 1.2 kg
Dimensions: 60x60x130 mm

Extension (210 mm, 1") - PREV

1208508	Extension (210 mm, 1")	For fitting and removing main bearing anchoring bolts	
---------	------------------------	-------------------------------------------------------	-------------------------------------------------------------------------------------

Weight: 1.6 kg
Dimensions: 60x60x210 mm

Foam insert - ACCY

1209972	Foam insert	Type 6, 624 engine main bearings tool kit	
---------	-------------	-------------------------------------------	--------------------------------------------------------------------------------------

Weight: 0.4 kg
Dimensions: 560 x 360 x 240 mm

Multiplier, 3-part - PREV

344082	Multiplier, 3-part	In order to mechanically produce high torques more easily or at all ⇒ main bearing anchoring bolts, flywheel extractor	
--------	--------------------	------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------

Weight: 6.2 kg
Dimensions: 280x130x110 mm

Hex bit socket (19 mm, 1") - PREV

344084	Hex bit socket (19 mm, 1")	For tightening the main bearing anchoring bolts	
--------	----------------------------	-------------------------------------------------	--------------------------------------------------------------------------------------

Weight: 0.8 kg
Dimensions: 50x50x90 mm

Main bearing removal tool - PREV

9023213	Main bearing extractor	For removing the upper main bearing	
---------	------------------------	-------------------------------------	---------------------------------------------------------------------------------------

Weight: 0.07 kg
Dimensions: 189x50x18 mm

Nut for main-bearing tie-rod bolts - PREV

1208510	Nut for main-bearing tie-rod bolts	For setting/releasing the tie-rod bolts	
---------	------------------------------------	-----------------------------------------	---------------------------------------------------------------------------------------

Weight: --- kg
Dimensions: --- mm

Main bearing cap lowering device - PREV

9027878	Main bearing cap lowering device	Simplifies lowering or lifting the main bearing cap into or out of the crankcase.	
---------	----------------------------------	-----------------------------------------------------------------------------------	-------------------------------------------------------------------------------------

Weight: 16 kg
Dimensions: 1300 x 320 x 235 mm

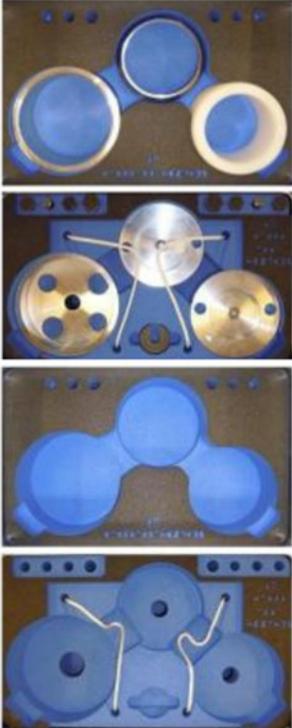
8.4 Type 2, 3, 4, 6 - Crankshaft seal

Case - ACCY

1208506	Case		
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Weight: 5.4 kg
Dimensions: 580x380x260 mm

Foam insert - ACCY

1209888	Foam insert	Type 2, 3, 4, 6 engines - crankshaft seal tool kit	
---------	-------------	----------------------------------------------------	---------------------------------------------------------------------------------------

Weight: 0.4 kg

Dimensions: 560 x 360 x 240 mm

Stud M16x1.5 - PREV

156911	Stud M16x1.5	For fitting and removing the flywheel as well as dampers	
--------	--------------	----------------------------------------------------------	-------------------------------------------------------------------------------------

Weight: 0.6 kg
Dimensions: 20x20x150 mm

Assembly sleeve - PREV

285455	Assembly sleeve	For fitting the Simmerring on the crankshaft	
--------	-----------------	----------------------------------------------	--------------------------------------------------------------------------------------

Weight: 1.5 kg
Dimensions: 170x170x80 mm

PVC ring for pre-assembly - PREV

315403	PVC ring for pre-assembly	Expansion of the Simmerring to fit onto crankshaft	
--------	---------------------------	----------------------------------------------------	---------------------------------------------------------------------------------------

Weight: 1.3 kg
Dimensions: 170x170x120 mm

Assembly aid for fitting the crankshaft seal - Type 6 engines - PREV

405724	Assembly aid for fitting the shaft seal - Type 6 engines	For fitting the Simmering ring (⇒ usage in combination with assembly flange, assembly sleeve and spacer sleeve)	
--------	----------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------

Weight: 10.00 kg
Dimensions: 200 x 200 x 200 mm

The assembly aid for fitting the crankshaft seal Type 6 consists of the following tools:

-	Mounting bracket	For fitting the Simmerring (⇒ usage in combination with assembly flange and assembly sleeve)	
-	Assembly flange	Flange for pressing on the Simmerring or spacer sleeve	
-	Spacer sleeve	Spacer sleeve for fitting the Simmerring	

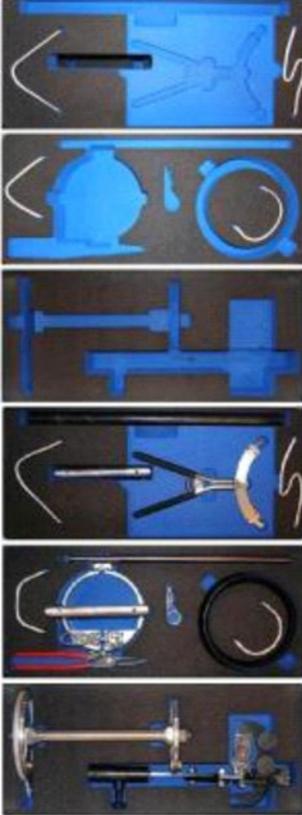
8.5 Type 6 - Steel piston tool

Circlip pliers - PREV

1203577	Circlip pliers	For fitting and removing circlips	
---------	----------------	-----------------------------------	---------------------------------------------------------------------------------------

Weight: 0.6 kg
 Dimensions: 330x60x20 mm
 Details: Knipex J4
 Manufacturer part no.: 49 11 A2

Foam insert - ACCY

1209973	Foam insert	Type 6 engines - steel piston tool kit	
---------	-------------	----------------------------------------	--------------------------------------------------------------------------------------

Weight: 3.8 kg
 Dimensions: 760 x 360 x 310 mm

Piston ring pliers - PREV

194603	Piston ring pliers	Fitting and removal of piston rings – Type 6 engines	
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Weight: 0.8 kg
 Dimensions: 230x330x20 mm

Position gauge for piston cooling nozzles on Type 6 engines with steel pistons - PREV

456563	Position gauge for piston cooling nozzles on Type 6 engines with steel pistons	For inspecting the position of the piston cooling nozzles	
--------	--------------------------------------------------------------------------------	-----------------------------------------------------------	-------------------------------------------------------------------------------------

Weight: 3.6 kg
 Dimensions: 540 x 280 x 220 mm
 Application: This device is to be used according to the relevant instructions for the various engine types

Device for fitting conrods, 2-part - PREV

660093	Device for fitting conrods, 2-part	For removing pistons and conrods	
--------	------------------------------------	----------------------------------	--------------------------------------------------------------------------------------

Weight: 7.4 kg
 Dimensions: 220x230x600 mm

Lifting tool for pistons - PREV

9006995	Lifting tool for pistons	For assembly and dismantling of aluminium and steel pistons	
---------	--------------------------	-------------------------------------------------------------	---------------------------------------------------------------------------------------

Weight: 3.4 kg
 Dimensions: 240x240x190 mm

Piston insertion sleeve - PREV

9016126	Insertion sleeve for pistons	Tool for inserting Type 6 steel pistons into the cylinder liner without scraper ring	
---------	------------------------------	--------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------

Weight: 3.6 kg

Dimensions: 250x100 mm

Adapter ring for piston cooling nozzle adjustment device - PREV

9020769	Adapter ring for piston cooling nozzle adjustment device	For adapting the piston cooling nozzle adjustment device (456563) to the scraper ring version	
---------	----------------------------------------------------------	-----------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------

Weight: 0.8 kg
Dimensions: 196 x 196 x 27 mm

Case - ACCY

1210487	Case		
---------	------	--	--------------------------------------------------------------------------------------

Weight: 5.0 kg
Dimensions: 780x380x330 mm

8.6 Blow-by meter

Blow-by meter

1230601	Blow-by meter	For measuring the blow-by flow	
---------	---------------	--------------------------------	---------------------------------------------------------------------------------------

Weight: 5.0 kg
Dimensions: 310 x 280 x 200 mm

Blow-by meter hose - PREV

1210773	Blow-by meter hose	Hose for measuring the blow-by flow. Only for use with the blow-by meter.	
---------	--------------------	---------------------------------------------------------------------------	-------------------------------------------------------------------------------------

Weight: --- kg
Dimensions: --- mm

8.7 Types 6, 624 – Camshaft tool

Camshaft bearing fitting tool - CORR

290008	Camshaft sliding sleeve	For fitting and removing the camshaft	
--------	-------------------------	---------------------------------------	-------------------------------------------------------------------------------------

Weight: 4 kg
Dimensions: 270 x 105 x 105 mm

Twin-arm extractor - CORR

1237323	Twin-arm extractor	For removing the crankshaft gear	
---------	--------------------	----------------------------------	---------------------------------------------------------------------------------------

Weight: 3.1 kg
Dimensions: 250 x 250 x 50 mm
Details: Firm of KUKKO, size 20-3, span width/depth 250/200

Camshaft bearing fitting tool - CORR

9024088	Camshaft bearing fitting tool	For pressing the camshaft bearing bushes in and out	
---------	-------------------------------	-----------------------------------------------------	---------------------------------------------------------------------------------------

Weight: --- kg
Dimensions: --- mm

8.8 Type 6 - Prechamber removal

Spark plug sleeve adapter M35x1.5 - PREV

303388	Spark plug sleeve adapter M35x1.5	Adapter for spark plug sleeves of various designs	
--------	-----------------------------------	---------------------------------------------------	-------------------------------------------------------------------------------------

Weight: 0.2 kg
Dimensions: 40x40x40 mm

Valve spring removal tool - PREV

317585	Valve spring removal tool	For removing valve springs by pressing down on the valve head	
--------	---------------------------	---------------------------------------------------------------	--------------------------------------------------------------------------------------

Weight: 2.2 kg
Dimensions: 200x60x120 mm

Spark plug sleeve adapter M36x1.5 - PREV

7002321	Spark plug sleeve adapter M36x1.5	Adapter for spark plug sleeves of various designs	
---------	-----------------------------------	---------------------------------------------------	---------------------------------------------------------------------------------------

Weight: 0.2 kg
Dimensions: 40x40x40 mm

Spark plug sleeve adapter M42x2 - PREV

567458	Spark plug sleeve adapter M42x2	Adapter for spark plug sleeves of various designs	
--------	---------------------------------	---------------------------------------------------	---------------------------------------------------------------------------------------

Weight: 0.2 kg
Dimensions: 50x50x40 mm

Prechamber removal power tool - PREV

9003104	Prechamber removal power tool	For removing jammed prechambers	
---------	-------------------------------	---------------------------------	---------------------------------------------------------------------------------------

Weight: 7.8 kg

Dimensions: 425x75x75 mm

Prechamber gas valve removal tool - PREV

9013489	Prechamber gas valve removal tool	For removing prechamber gas valves	
---------	-----------------------------------	------------------------------------	-------------------------------------------------------------------------------------

Weight: 0.2 kg
Dimensions: 400x15x15 mm

Spark plug sleeve adapter M48 x 1 - PREV

9023750	Spark plug sleeve adapter M48 x 1	Adapter for spark plug sleeve	
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Weight: 0.32 kg
Dimensions: 48 x 48 x 35 mm

Spark plug sleeve seat lapping tool ("F" cylinder heads) - PREV

1241846	Spark plug sleeve seat lapping tool ("F" cylinder heads)	For lapping the spark plug seat Incl. 100 sanding pads 100 grit	
---------	----------------------------------------------------------	--------------------------------------------------------------------	--------------------------------------------------------------------------------------

Weight: --- kg
Dimensions: --- mm

Spark plug sleeve seat lapping tool ("H" cylinder heads) - PREV

1242554	Spark plug sleeve seat lapping tool ("H" cylinder heads)	For lapping the spark plug seat Incl. 100 sanding pads 100 grit	
---------	----------------------------------------------------------	--------------------------------------------------------------------	---------------------------------------------------------------------------------------

Weight: --- kg
Dimensions: --- mm

Spark-plug sleeve pretensioning tool - PREV

9028131	Spark-plug sleeve pretensioning tool		
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Weight: --- kg
Dimensions: --- mm

Prechamber removal tool hammer - PREV

9004382	Prechamber removal tool hammer	For removing the prechamber. Part of the prechamber removal device	
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Weight: 2.7 kg
Dimensions: 220 x 60 x 60 mm

Prechamber removal device, universal joint - PREV

9003554	Prechamber removal tool, universal joint	For removing the prechamber. Part of the prechamber removal device	
---------	------------------------------------------	-----------------------------------------------------------------------	--------------------------------------------------------------------------------------

Weight: 0.1 kg
Dimensions: 60x60x60 mm

Prechamber extension device, extension - PREV

9004381	Prechamber extension device, extension	For removing the prechamber. Use with main part and universal joint.	
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Weight: 0.7 kg
Dimensions: 200x60x60 mm

8.9 Type 6 - Flywheel extractor (ITH)

Flywheel extractor - CORR



The complete kit includes all tools mentioned below. All tools with a part number can also be ordered as spare parts.

Part number on request	Flywheel extractor		
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Weight: 76 kg
Dimensions: 930 x 515 x 245 mm

The flywheel extractor consists of the following tools:

-	High-pressure hand pump, 2500 bar	For building up pressure in the extension tube Weight: 12.1 kg Dimensions: 870x270x240 mm	
-	Bolt tensioner	Hydraulic cylinder for fitting the flywheel Weight: 11.5 kg Dimensions: 250 x 220 x 140 mm	
-	Extension tube G1/4	Extension for building pressure in the hydraulic coil of the flange on the crankshaft Weight: 1.0 kg Dimensions: 30 x 30 x 360 mm	
-	Hydraulic hose, 2 metres/2500 bar	Connecting hose from pump to extension tube Weight: 1.8 kg Dimensions: 30x30x2000 mm	

-	Slotted capstan nut, M42	Weight: 0.3 kg Dimensions: 70x70x30 mm	
-	Ratchet 1/2"	For screwing the bolt-tensioners on to the cylinder head bolts Weight: 1.2 kg Dimensions: 260x40x40 mm Details: Proxxon 1/2" ratchet wrench Manufacturer part no.: NO 23 334	
-	Positioning plate for Type 6 engines	Weight: 0.5 kg Dimensions: 80 x 80 x 50 mm	
-	Positioning plate For J624	Weight: 0.5 kg Dimensions: 80 x 80 x 50 mm	
-	Dial gauge	For measuring the installation position of the flywheel Weight: 0.2 kg Dimensions: 130x60x30 mm	
-	Adapter for dial gauge	Extension of the dial gauge for measuring the installation position of the flywheel	

-	Sleeve for shaft seal, Type 6 engines	Assembly aid for installing the shaft seal Weight: 1.3 kg Dimensions: 200 x 200 x 120 mm	
-	Sleeve for shaft seal, J624 engines	Assembly aid for installing the shaft seal Weight: 1.3 kg Dimensions: 200 x 200 x 120 mm	

Punch 6 mm - PREV

1209981	Punch 6 mm	For hand-tightening the round capstan nuts on the cylinder head and main bearing	
---------	------------	-------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------

Weight: 0.4 kg
Dimensions: 210 x 30 x 30 mm
Manufacturer / No.: FACOM / 539915

High-pressure hand pump, 1350 bar - PREV

426575	High-pressure hand pump, 1350 bar	For building up pressure for the bolt-tensioner	
--------	--------------------------------------	----------------------------------------------------	---------------------------------------------------------------------------------------

Weight: 9.2 kg
Dimensions: 620x260x240 mm



The following parts are **not** included in the complete kit. These tools must be ordered separately.

High-pressure hose, 3 m - PREV

426579	High-pressure hose, 3 m	Connecting hose from the pump to the distributor	
--------	-------------------------	--------------------------------------------------	-------------------------------------------------------------------------------------

Weight: 2.4 kg
Dimensions: 30x30x3000 mm

Face spanner - PREV

1209979	Face spanner	For opening the bolt-tensioners for replacing the adapter bushings	
---------	--------------	--------------------------------------------------------------------	-------------------------------------------------------------------------------------

Weight: 0.8 kg
Dimensions: 220x40x20 mm

8.10 Type 6 - Gear train

Gear train complete kit - CORR

---	Gear train hand tool		
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Weight: 16 kg
Dimensions: 1300 x 400 x 100 mm
Additional information: No part number is available for this tool kit. Please order the tools according to the specifications below.

The gear train complete kit consists of the following tools:

Increasing adapter 3/4"⇒1" - CORR

1247842	Increasing adapter 3/4"⇒1"	Can be added to flywheel extractor as required.	
---------	----------------------------	-------------------------------------------------	---------------------------------------------------------------------------------------

Weight: 0.1 kg
Dimensions: 200x60x120 mm

Multiplier, 3-part - PREV

344082	Multiplier, 3-part	In order to mechanically produce high torques more easily or at all ⇒ main bearing anchoring bolts, flywheel extractor	
--------	--------------------	------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------

Weight: 6.2 kg
Dimensions: 280x130x110 mm

Camshaft idler gear assembly tool - CORR

7003805	Camshaft idler gear assembly tool	For fitting the camshaft idler gear in the gear train	
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Weight: --- kg
Dimensions: --- mm

Oil pump idler gear assembly tool - CORR

8000080	Oil pump idler gear assembly tool	For fitting the oil pump idler gear in the gear train	
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Weight: --- kg
Dimensions: --- mm

Hydraulic three-arm puller - CORR

1235485	Hydraulic three-arm puller	For removal of the crankshaft gear	
---------	----------------------------	------------------------------------	-------------------------------------------------------------------------------------

Weight: 12.6 kg
Dimensions: 670x260x260 mm

Twin-arm extractor - CORR

1237323	Twin-arm extractor	For removing the crankshaft gear	
---------	--------------------	----------------------------------	--------------------------------------------------------------------------------------

Weight: 3.1 kg
Dimensions: 250 x 250 x 50 mm
Details: Firm of KUKKO, size 20-3, span width/depth 250/200

Slotted nut socket M80 - CORR

1215801	Slotted nut socket M80		
---------	------------------------	--	---------------------------------------------------------------------------------------

Weight: 1.8 kg
Dimensions: 65x125x125 mm

Slotted nut socket M45 - CORR

1215800	Slotted nut socket M45		
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Weight: 1.0 kg
Dimensions: 65x77x77 mm

Torque spanner, 1" 350-800 Nm - PREV

152022	Torque spanner, 1" 350-800 Nm	Can be added to flywheel extractor as required.	
--------	-------------------------------	-------------------------------------------------	-------------------------------------------------------------------------------------

Weight: 6.2 kg
Dimensions: 1300 x 100 x 100 mm

Torque spanner, 1" 75-400 Nm - PREV

414739	Torque spanner, 1" 75-400 Nm	Can be added to flywheel extractor as required.	
--------	------------------------------	-------------------------------------------------	---------------------------------------------------------------------------------------

Weight: 6.2 kg
Dimensions: 1300 x 100 x 100 mm

Hex bit socket (22 mm, 1")

1229999	Hex bit socket (22 mm, 1")	Use on the wheel drive BR6/J624 or on BR9 systems	
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Weight: 0.6 kg
Dimensions: 92x47x47 mm

8.11 Type 6 - Venturi ring removal tool

Venturi ring removal tool, Type 6 - PREV

1215924	Venturi ring removal tool, Type 6	Extractor for the Venturi ring in the intake system	
---------	-----------------------------------	-----------------------------------------------------	-------------------------------------------------------------------------------------

Weight: 13.2 kg
Dimensions: 400x400x900 mm

8.12 Types 6, 624 – Crane

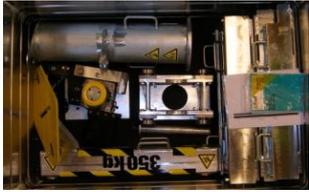
Crane basic module - SISP

1232227	Crane basic module		
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Weight: 140 kg
Dimensions: 1200x800x500 mm

The crane basic module consists of the following tools:

-	Column	Mounting piece for arm Weight: 27.5 kg Dimensions: 680x300x330 mm	
-	Large lever arm	Connection between small lever arm and column Weight: 25 kg Dimensions: 810x300x160 mm	

-	Small lever arm	Mounting piece for chain hoist Weight: 12.6 kg Dimensions: 620x140x220 mm	
-	Chain hoist	Lifting device for engine parts Weight: 20 kg Dimensions: 160x380x420 mm	
-	Bolt	Connecting bolt from column to lever arm or lever arm to lever arm Weight: 3.4 kg Dimensions: 370x70x40 mm	
-	Case	Dimensions: 1200 x 800 x 500 mm	

Mounting bracket - SISP

9019243	Mounting bracket	For attaching the crane to the engine	
---------	------------------	---------------------------------------	---------------------------------------------------------------------------------------

Weight: 48 kg
Dimensions: 603 x 374 x 240 mm

8.13 Roller tappet removal tool

Roller tappet guide removal tool - CORR

1243459	Roller tappet guide removal tool	A hydraulic cylinder for pulling out the guide	
---------	----------------------------------	------------------------------------------------	-------------------------------------------------------------------------------------

Weight: 23.2 kg
 Dimensions: 980x420x160 mm
 Remark: Replaces 1212412

8.14 Throttle valve bushing extractor

Face spanner - PREV

1209979	Face spanner	For opening the bolt-tensioners for replacing the adapter bushings	
---------	--------------	--------------------------------------------------------------------	---------------------------------------------------------------------------------------

Weight: 0.8 kg
 Dimensions: 220x40x20 mm

Throttle valve bushing extractor, Type 6 engines - CORR

1211612	Throttle valve bushing extractor, Type 6 engines		
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Weight: 5.5 kg
 Dimensions: 610 x 260 x 350 mm

8.15 Type 6 – Set of covers



The complete kit includes all tools mentioned below. All tools with a part number can also be ordered as spare parts.

Set of covers – Complete kit - PREV

1247620	Set of covers – Complete kit	Designed for a J624 engine	
---------	------------------------------	----------------------------	--

Weight: --- kg
Dimensions: --- mm

Case - ACCY

1247381	Case	Aluminium box for covers, "Set Power Unit BR6"	
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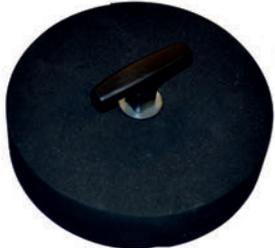
Weight: 6.9 kg
Dimensions: 900x490x380 mm (140 litres)

Protective tube for Type 6 engines - PREV

9014392	Protective tube, Type 6 engines	For protecting the crankpin while the conrod is removed	
---------	---------------------------------	---------------------------------------------------------	---------------------------------------------------------------------------------------

Weight: 0.5 kg
Dimensions: 150 x 150 x 58 mm

Blanking plug, liner landing - PREV

9018694	Blanking plug liner landing	For sealing the liner landing, to protect the crankshaft during cleaning of the water jacket's seating surface on the crankcase	
---------	-----------------------------	---------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------

Weight: 0.8 kg
Dimensions: 254 x 105 x 55 mm

Stopper Set J624 - PREV

1247143	Stopper Set J624	Consisting of part numbers: 1229311 – “C” – 48 pcs. 1226716 – “D” – 24 pcs. 1226717 – “E” – 96 pcs. Amount intended for a J624 engine	
---------	------------------	---------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------

Weight: --- kg
Dimensions: --- mm

8.16 inspection plug / vent plug

Stopper Set J612 - PREV

1247138	Stopper Set J612	Consisting of part numbers: 1229311 – “C” – 24 pcs. 1226716 – “D” – 12 pcs. 1226717 – “E” – 48 pcs. Amount intended for a J612 engine	
---------	------------------	---------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------

Weight: --- kg
Dimensions: --- mm

Stopper Set J616 - PREV

1247139	Stopper Set J616	Consisting of part numbers: 1229311 – “C” – 32 pcs. 1226716 – “D” – 16 pcs. 1226717 – “E” – 64 pcs. Amount intended for a J616 engine	
---------	------------------	---------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------

Weight: --- kg
Dimensions: --- mm

Stopper Set J620 - PREV

1247140	Stopper Set J620	Consisting of part numbers: 1229311 – “C” – 40 pcs. 1226716 – “D” – 20 pcs. 1226717 – “E” – 80 pcs. Amount intended for a J620 engine	
---------	------------------	---------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------

Weight: --- kg
Dimensions: --- mm

Stopper Set J624 - PREV

1247143	Stopper Set J624	Consisting of part numbers: 1229311 – “C” – 48 pcs. 1226716 – “D” – 24 pcs. 1226717 – “E” – 96 pcs. Amount intended for a J624 engine	
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Weight: --- kg
Dimensions: --- mm

Sealing plug C - PREV

1229311	Sealing plug C	for sealing the opening at the tappet bushing (2 per cylinder)	
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Weight: --- kg
Dimensions: --- mm

Sealing plug D - PREV

1226716	Sealing plug D	for sealing the opening in the combustion chamber (1 per cylinder)	
---------	----------------	--------------------------------------------------------------------	---------------------------------------------------------------------------------------

Weight: --- kg
Dimensions: --- mm

Sealing plug E - PREV

1226717	Sealing plug E	for closing the opening in the oil and water inlets (4 per cylinder)	
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Weight: --- kg
Dimensions: --- mm

8.17 Combustion chamber cleaning

Combustion chamber cleaning consumables

1242666	Combustion chamber cleaning consumables	Abrasive and brushes for combustion chamber cleaning	
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Weight: --- kg
Dimensions: --- mm

O-ring - CORR

376488	O-ring	To protect against dirt contamination between piston and cylinder liner	
--------	--------	-------------------------------------------------------------------------	--

Weight: --- kg
Dimensions: --- mm

8.18 Single tools

Accumulator pump for ITH hydraulic system - PREV

1241906	Accumulator pump for ITH hydraulic system	For building up pressure for the bolt-tensioner	
---------	-------------------------------------------	-------------------------------------------------	---------------------------------------------------------------------------------------

Weight: 14.6 kg
Dimensions: 365x240x470 mm

Torque screwdriver - PREV

1242516	Torque screwdriver	For bolting the generator coupling ring	
---------	--------------------	-----------------------------------------	-------------------------------------------------------------------------------------

Weight: 7.7 kg
Dimensions: 560 x 265 x 455 mm

Turning device - PREV

1234890	Turning device	For turning the crankshaft manually	
---------	----------------	-------------------------------------	---------------------------------------------------------------------------------------

Weight: 8 kg
Dimensions: 341 x 300 x 156 mm

Hydraulic lifting cylinder - PREV

1235972	Hydraulic lifting cylinder	For lifting of various loads	
---------	----------------------------	------------------------------	---------------------------------------------------------------------------------------

Weight: 25.2 kg
Dimensions: 360x210x430 mm

Coupling element replacement tool - CORR

9029785	Coupling element replacement tool	for replacing coupling elements, particularly for jammed parts	
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Weight: --- kg
Dimensions: --- mm

O-ring press-in tool - CORR

605953	O-ring press-in tool	For pressing the moulded gasket into the rocker cover	
--------	----------------------	-------------------------------------------------------	-------------------------------------------------------------------------------------

Weight: --- kg
Dimensions: --- mm

Bolt-tensioner, four-part, M33 x 2 - PREV

1241908	Bolt-tensioner, four-part, M33 x 2	For tensioning the main bearing reduced-shaft bolts	
---------	------------------------------------	-----------------------------------------------------	--------------------------------------------------------------------------------------

Weight: 6.8 kg
Dimensions: 140 x 160 x 210 mm

Support plate package for "weak" cylinder heads - PREV

1237463	Support plate package for "weak" cylinder heads	For force distribution in cylinder heads at risk of breaking off	
---------	-------------------------------------------------	------------------------------------------------------------------	--

Weight: --- kg
Dimensions: --- mm

The support plate package for "weak" cylinder heads consists of the following parts:

-	Plate		
-	4 shortened support sleeves		

Vibration measuring instrument - CORR

1238948	Vibration measuring instrument	For measuring vibrations.	
---------	--------------------------------	---------------------------	-------------------------------------------------------------------------------------

Weight: 2.0 kg
Dimensions: 500x300x150 mm

Shaft alignment laser device - PREV

1235971	Shaft alignment laser device	For aligning of the shaft - Generator-gearbox-engine	
---------	------------------------------	------------------------------------------------------	--------------------------------------------------------------------------------------

Weight: 7.8 kg
Dimensions: 520x420x190 mm

Scraper ring removal tool - PREV

9014095	Scraper ring removal tool	for pressing out the scraper rings	
---------	---------------------------	------------------------------------	---------------------------------------------------------------------------------------

Weight: --- kg
Dimensions: --- mm

Torque wrench for tie bolts - PREV

1243235	Torque wrench for tie bolts	For fitting and undoing the lateral tie bolts on Type 6 and J624 engines	
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Weight: --- kg

Dimensions: --- mm

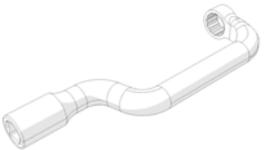
Mixture cooler lifting plate - PREV

1235264	Mixture cooler lifting plate	For lifting the mixture cooler on a Type 6 engine at its centre of gravity	
---------	------------------------------	----------------------------------------------------------------------------	-------------------------------------------------------------------------------------

Weight: 5.0 kg

Dimensions: 560 x 122 x 68 mm

Ring spanner attachment for prechamber nut - PREV

1246988	Ring spanner attachment for screwing the prechamber retainer	For loosening/tightening the prechamber gland without tilt lever disassembly	
---------	--------------------------------------------------------------	------------------------------------------------------------------------------	-------------------------------------------------------------------------------------

Weight: --- kg

Dimensions: 205x 62x 25 mm

Magnetic cover - PREV

9031242	Magnetic cover	For covering the side crankcase openings, engine type 6	
---------	----------------	---------------------------------------------------------	---------------------------------------------------------------------------------------

Weight: 0.2 kg

Dimensions: 280 x 280 x 1 mm

Bearing removal tool TecJet - PREV

1242638	Bearing removal tool TecJet	To remove the bearings of the TecJet	
---------	-----------------------------	--------------------------------------	---------------------------------------------------------------------------------------

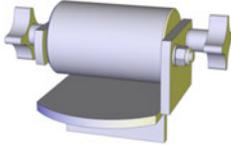
Weight: -- kg

Dimensions: -- x -- x -- mm

1247921	Conrod ejection rod clamp	for clamping the conrod lever assembly when replacing the big-end bearing shells on type 612, 616 and 620 engines (without removing the cylinder head)	
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8.18.1 Type 6 engines - piston cleaning tool

Piston bracket for Type 6 engines - CORR

7004555	Piston bracket for Type 6 engines	For securing the piston while the groove is being cleaned	
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Weight: 9.1 kg
Dimensions: 242 x 190 x 160 mm

Piston ring groove cleaning tool for Type 6 engines - CORR

7004556	Piston ring groove cleaning tool for Type 6 engines	For cleaning the piston ring groove	
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Weight: 5.1 kg
Dimensions: 380 x 250 x 45 mm

8.18.2 Type 6 engines - version C

Jacking equipment set for Type 6 engines, version C - PREV

7004451	Jacking equipment set for Type 6 engines, version C	For jacking up Type 6 engines, version C, when replacing the main bearings	
---------	-----------------------------------------------------	----------------------------------------------------------------------------	---------------------------------------------------------------------------------------

Weight: 280 kg
Dimensions: 1200 x 800 x 500 mm

2-part rod for fitting conrods, Type 6C engines - PREV

660094	2-part rod for fitting conrods, Type 6C engines	For removing aluminium pistons and conrods from Type 6C engines	
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Weight: 7.4 kg
Dimensions: 220 x 230 x 600 mm

Support sleeve M30 x 2 for main bearing - PREV

1223400	Support sleeve M30 x 2	Replaceable support sleeve (bolt-tensioner) for main bearing reduced-shaft bolts, version 6C	
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Weight: 2.0 kg
Dimensions: 90 x 90 x 50 mm

Exchange bushing, long M30x2 - PREV

---	Exchange bushing, long M30x2	Adapter bushing for bolt-tensioner for cylinder head bolts	
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Weight: --- kg
Dimensions: --- mm

8.18.3 Adapter for slotted capstan nut

Adapter - PREV

9025143	Adapter	Hose for slotted capstan nut adapter Part of the slotted capstan nut adapter assembly	
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Weight: --- kg
Dimensions: --- mm

set screw - PREV

9025145	Set screw	For securing the hose Part of the slotted capstan nut adapter	
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Weight: 0.1 kg
Dimensions: 5 x 5 x 10 mm

Hose - PREV

200593	Hose	Part of the slotted capstan nut adapter assembly	
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Weight: 0.1 kg
Dimensions: 50 x 50 x 100 mm

8.18.4 Spark plug tool

Extension magnet for reinforcing the spark plug socket wrench - PREV

1237586	Extension magnet for reinforcing the spark plug socket wrench	Aid for removing spark plugs	
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Weight: 0.11 kg
Dimensions: 81.5 x 20 x 20 mm

Spark plug adjustment tool - PREV

9011882	Spark plug adjustment tool	For adjusting P603 spark plugs	
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Weight: --- kg
Dimensions: --- mm

8.18.5 Examination

Battery light source for borescope - PREV

1248655	Battery light source for borescope	alternative light source for borescope part no.: 1218442, wireless handling	
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Weight: -- kg
Dimensions: -- x -- x -- mm

Rigid borescope with LED - PREV

1218442	Rigid borescope with LED	for finding e.g. combustion chambers, incl. LED light source, camera and carrying case	
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Weight: -- kg
Dimensions: -- x -- x -- mm

Videoscope - PREV

1248638	Videoscope	For diagnostic purposes with interchangeable lens, 2 batteries and accessories in carrying case Alternatively part no.: 1226502
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Weight: -- kg
Dimensions: -- x -- x -- mm

9 Index

Kategorie	Part number	Special tool	Page
CORR	---	Gear train hand tool	37
CORR	1211612	Throttle valve bushing extractor, Type 6 engines	43
CORR	1215800	Slotted nut socket M45	40
CORR	1215801	Slotted nut socket M80	39
CORR	1235485	Hydraulic three-arm puller	39
CORR	1237323	Twin-arm extractor	30
CORR	1238948	Vibration measuring instrument	50
CORR	1242666	Combustion chamber cleaning consumables	47
CORR	1243459	Roller tappet guide removal tool	43
CORR	1247842	Increasing adapter 3/4"⇒1"	37
CORR	1247921	Connecting Rod Fixation BR6	5
CORR	290008	Camshaft sliding sleeve	30
CORR	376488	O-ring	47
CORR	605953	O-ring press-in tool	49
CORR	7003805	Camshaft idler gear assembly tool	38
CORR	7004555	Piston bracket for Type 6 engines	52
CORR	7004556	Piston ring groove cleaning tool for Type 6 engines	52
CORR	8000080	Oil pump idler gear assembly tool	38
CORR	9024088	Camshaft bearing fitting tool	30
CORR	9029785	Coupling element replacement tool	48
CORR	Auf Anfrage	Flywheel extractor	33
PREV	---	Exchange bushing, long M30x2	53
PREV	1247381	Case	44
PREV	373279	Type 6 Hydraulic system - Complete kit	11
PREV	1203577	Circlip pliers	16
PREV	1205054	Crankcase spreader	21
PREV	1208508	Extension (210 mm, 1")	22
PREV	1208509	Extension (125 mm, 1")	22
PREV	1208510	Nut for main-bearing tie-rod bolts	23
PREV	1209979	Face spanner	11
PREV	1209981	Punch 6 mm	11
PREV	1209982	Hard-shell carrying case, Peli	12
PREV	1215924	Venturi ring removal tool, Type 6	41
PREV	1218442	Rigid borescope with LED	4
PREV	1223400	Support sleeve M30 x 2 for main bearing	53
PREV	1226716	Sealing plug D	46
PREV	1226717	Sealing plug E	47
PREV	1229311	Sealing plug C	46
PREV	1229999	Hex bit socket (22 mm, 1")	41
PREV	1230601	Blow-by meter	29
PREV	1234344	Manometer for hydraulic hand pump ITH	16

Kategorie	Part number	Special tool	Page
PREV	1234890	Turning device	48
PREV	1235264	Mixture cooler lifting plate	51
PREV	1235971	Shaft alignment laser device	50
PREV	1235972	Hydraulic lifting cylinder	48
PREV	1237183	Cylinder liner lifting tool	20
PREV	1237463	Support plate package for "weak" cylinder heads	49
PREV	1237586	Extension magnet for reinforcing the spark plug socket	54
PREV	1241846	Spark plug sleeve seat lapping tool ("F" cylinder heads)	32
PREV	1241906	Accumulator pump for ITH hydraulic system	47
PREV	1241908	Bolt-tensioner, four-part, M33 x 2	16
PREV	1242516	Torque screwdriver	48
PREV	1242554	Spark plug sleeve seat lapping tool ("H" cylinder heads)	32
PREV	1242638	Bearing removal tool TecJet	4
PREV	1243235	Torque wrench for tie bolts	50
PREV	1246988	Ring spanner attachment for prechamber nut	51
PREV	1247138	Stopper Set J612	45
PREV	1247139	Stopper Set J616	45
PREV	1247140	Stopper Set J620	45
PREV	1247143	Stopper Set J624	45
PREV	1247620	Set of covers - Complete kit	44
PREV	1248638	Videoscope	4
PREV	1248655	Battery light source for borescope	4
PREV	152022	Torque spanner, 1" 350-800 Nm	40
PREV	156911	Stud M16x1.5	25
PREV	194603	Piston ring pliers	18
PREV	200593	Hose	54
PREV	277247	Position gauge for piston cooling nozzles on Type 6 engines, version C	18
PREV	285455	Assembly sleeve	25
PREV	285852	Position gauge for piston cooling nozzles on Type 6 engines, version E	18
PREV	289936	Assembly plate for big-end bolts	18
PREV	303388	Spark plug sleeve adapter M35x1.5	31
PREV	310580	Cylinder liner extractor	19
PREV	315403	PVC ring for pre-assembly	25
PREV	317585	Valve spring removal tool	31
PREV	344082	Multiplier, 3-part	23
PREV	344084	Hex bit socket (19 mm, 1")	23
PREV	414739	Torque spanner, 1" 75-400 Nm	40
PREV	426567	Bolt-tensioner without adapter bushing and support sleeve	12
PREV	426568	Adapter bushing M30x2	12
PREV	426569	Support sleeve M30x2	13
PREV	426570	Adapter bushing M33x2	13
PREV	426571	Support sleeve M33x2	13

Kategorie	Part number	Special tool	Page
PREV	426574	Seal kit for bolt-tensioner	15
PREV	426575	High-pressure hand pump, 1350 bar	14
PREV	426576	Seal kit for high-pressure hand lever pump	14
PREV	426578	High-pressure hose 2 m	15
PREV	426579	High-pressure hose 3 m	16
PREV	426580	High-pressure coupling distributor (4-way)	15
PREV	456563	Position gauge for piston cooling nozzles on Type 6 engines with steel pistons	28
PREV	474145	Holding-down tool for cylinder liner	19
PREV	519902	Assembly aid for fitting the crankshaft seal - Type 6 engines	26
PREV	567458	Spark plug sleeve adapter M42x2	31
PREV	660093	Device for fitting conrods, 2-part	21
PREV	660094	2-part rod for fitting conrods, Type 6C engines	53
PREV	7002321	Spark plug sleeve adapter M36x1.5	31
PREV	7004451	Jacking equipment set for Type 6 engines, version C	52
PREV	9003104	Prechamber removal power tool	31
PREV	9003554	Prechamber removal device, universal joint	33
PREV	9004381	Prechamber extension device, extension	33
PREV	9004382	Prechamber removal tool hammer	33
PREV	9006995	Lifting tool for pistons	19
PREV	9011882	Spark plug adjustment tool	54
PREV	9013489	Prechamber gas valve removal tool	32
PREV	9014095	Scraper ring removal tool	50
PREV	9014392	Protective tube for Type 6 engines	21
PREV	9016124	Insertion sleeve for pistons	19
PREV	9016126	Insertion sleeve for pistons	28
PREV	9017200	Locking screw for big-end bearing, long arm	20
PREV	9017492	Locking screw for big-end bearing, short arm	20
PREV	9017515	Positioning device for big-end bearing cap, Type 6 engines	20
PREV	9018694	Blanking plug, liner landing	44
PREV	9020769	Adapter ring for piston cooling nozzle adjustment device	29
PREV	9020948	Bolt-tensioning cylinder	20
PREV	9023213	Main bearing extractor	23
PREV	9023750	Spark plug sleeve adapter M48 x 1	32
PREV	9025143	Adapter	53
PREV	9025145	set screw	53
PREV	9025145	set screw	53
PREV	9027878	Main bearing cap lowering device	24
PREV	9028131	Spark-plug sleeve pretensioning tool	32
PREV	9031242	Magnetic cover BR6	5
SISP	---	Large lever arm	42
SISP	1232227	Crane basic module	41

Kategorie	Part number	Special tool	Page
SISP	1232227	Crane basic module	41
SISP	9019243	Mounting bracket	42
ACCY	1247381	Case	44
ACCY	1208506	Case	21
ACCY	1209888	Foam insert	24
ACCY	1209971	Foam insert	17
ACCY	1209972	Foam insert	22
ACCY	1209973	Foam insert	27
ACCY	1210486	Case	17
ACCY	1210487	Case	29

10 Revision code

Revision history

Index	Date	Description / Revision summary	Expert Auditor
11	28.11.2019	1242638, 9031242, 1247921 hinzugefügt / 1242638, 9031242, 1247921 added Kit „Befundung“ (1248655, 1218442, 1248638) in Einzelwerkzeuge ergänzt / Kit „Examaination“ (1248655, 1218442, 1248638) in single tools added	Winterle H. <i>Winterle H.</i>
10	29.03.2019	Kategorisierung der Werkzeuge ergänzt / Categorization of tools added, Diverse kleine Anpassungen / Minor adaptions, Kits „Power Unit“, „Hauptlager“, „Kurbelwellendichtung“, „Blow By Messgerät“, „Nockenwellenwerkzeug“, „Vorkammerausbau“, „Kran“, „Rädertrieb“, „Version C“ aktualisiert / Kits „Power Unit“, „Main bearing“, „Crankshaft seal“, „Blow-by meter“, „Camshaft tool“, „Prechamber removal“, „Crane“, „Gear train“, „Version C“ updated	Winterle H. <i>Winterle H.</i>
9	12.10.2018	9027878 hinzugefügt / 9027878 added	Winterle H. <i>Winterle H.</i>
8	29.06.2018	Kits bei Einzelwerkzeuge, 9025145, 9025143, 200593, 9014095, 9014095, 9029785 und 1243235 hinzugefügt / Kits for single tools, 9025145, 9025143, 200593, 9014095, 9014095, 9029785 and 1243235 added	Winterle H. <i>Winterle H.</i>
7	29.03.2018	1242516, 9024088, 605953, 9011882, 1241846, 1242554, 9028131, 1242666 und 376488 hinzugefügt / 1242516, 9024088, 605953, 9011882, 1241846, 1242554, 9028131, 1242666 and 376488 added	Winterle H. <i>Winterle H.</i>
6	21.12.2017	Diverse kleine Anpassungen, 1241906 und 1241908 hinzugefügt, Kit „Baureihe 6 - Schwungradabziehvorrichtung - ITH“ angepasst / Small adaptions, 1241906 and 1241908 added, Kit „Type 6 - Flywheel extractor (ITH)“ adapted	Winterle H. <i>Winterle H.</i>

