MAK

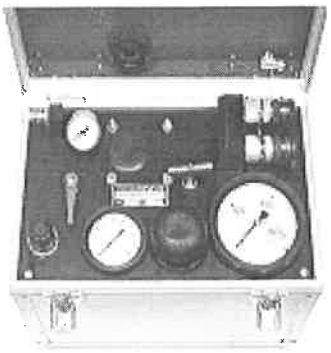
# Werkzeug-Zusammenstellung
# List of tools
# Liste des Outils
# Lista de las herramientas
# Lista de ferramentas
# Verktøy-oversikt
# Oversigt over værktøj
# Compilazione degli utensili

# M 25

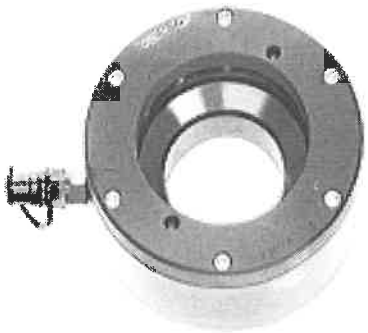
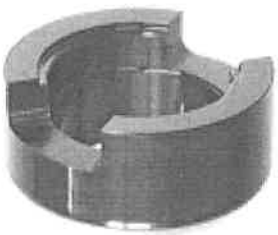
| | | | |
|---|---|---|---|
| Kostenträger-Nr.<br>Record No.<br>De Référence No.<br>De Referencia No.<br>Pedido No.<br>Saksbehandler<br>Nr. opdrachtgever<br>Ordregivernummer<br>Fattore di costo n. | 271844 | Motor-Nr.<br>Engine No.<br>Moteur No.<br>Motor No.<br>Motor nr.<br>Motornummer<br>Motore n. | 44 549 - 550 |

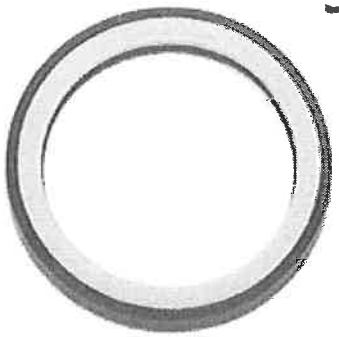
N = Normalwerkzeug
Standard tools
Outillage normal
Herramientas normales
Ferramentas normais
Normal verktøy
Normalt værktøj
Standaardgereedschap
Utensile normale

S = Sonderwerzeug
Special tools
Outils spécial
Herramientas especial
Ferramentas especials
Special verktøy
Specialværktøj
Specialgereedschap
Utensile speciale

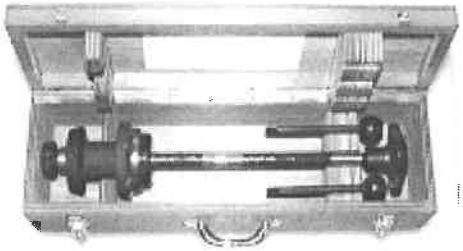
| Benennung<br>Description | Stück<br>Qty. | Werkzeug-Nr.<br>Tool-No. | Bild<br>Figure |
|---|---|---|---|
| Steckschlüssel<br><br>Socket wrench | 1 | 1.9100-060 | <br>N |
| Aufbewahrungskasten<br><br>Tool case | 1 | 259101 B | <br>N |
| Hydraulikkofferpumpe<br><br>Hydraulic portable pump | 1 | 0.9204 N |  <br>S |
| Hochdruckschlauch 3m<br><br>High-pressure hose 3m | 1 | 0.9205 A | <br>N |

JUNE 13th 2014

| Benennung<br>Description | Stück<br>Qty. | Werkzeug-Nr.<br>Tool-No. | Bild<br>Figure |
|---|---|---|---|
| Hochdruckschlauch 1 m<br>High-pressure hose 1m | 4<br>4 | 0.9205 B | <br>N ✓ |
| Anzugselement, hydraulisch<br>Hydraulic jack | 4<br>4 | 0.9213 C |  <br>N ✓ |
| Verteiler<br>Distributor | 1<br>1 | 0.9203-008 | <br>N ✓ |
| Stützring<br>Supporting sleeve | 2<br>2 | 0.9203-209 |  <br>N ✓ |

| Benennung<br>Description | Stück<br>Qty. | Werkzeug-Nr.<br>Tool-No. | Bild<br>Figure |
|---|---|---|---|
| Stift<br>Pin | 1<br>1 | 0.9203-110 | <br>N ✓ |
| Profilring-Dichtsatz<br>Set of seal rings | 1<br>✓ | 0.9213-022 | - 1 set<br> <br>N ✓ |
| Profilring-Dichtsatz<br>Set of seal rings | 1<br>✓ | 0.9213-023 | - 1 set<br>  <br>N ✓ |
| Stützring<br>Supporting sleeve | 2<br>2 | 0.9203-018 | <br>N ✓ |

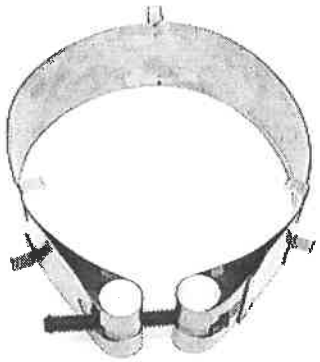
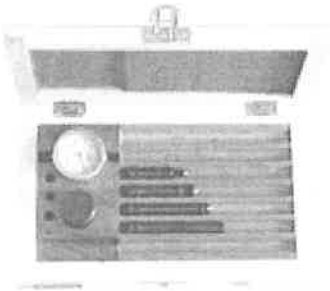
| Benennung<br>Description | Stück<br>Qty. | Werkzeug-Nr.<br>Tool-No. | Bild<br>Figure |
|---|---|---|---|
| Gewindehülse<br>Bolt extension | 2 | 0.9206-002 | N |
| Gewindehülse<br>Bolt extension | 2 | 0.9206-001 | N |
| Sitzschaber<br>Seat scraper | 1 | 259122 A | N |
| Ventilfederspannvorrichtung<br>Valve spring compressor | 1 | 259222 A | N |

| Benennung<br>Description | Stück<br>Qty. | Werkzeug-Nr.<br>Tool-No. | Bild<br>Figure |
|---|---|---|---|
| Ventilschleifvorrichtung<br><br>Valve grinding device | 1 | 259224 A | <br>N |
| Ventilsitzfräsvorrichtung<br><br>Valve reseating tool | 1 | 259224 B |  <br>Z |
| Spitzendruckindikator<br><br>Demand indicator | 1 | 1.9410 K | <br>S |
| Ein- und Ausbauvorrichtung für Zylinderkopf<br><br>Device for mounting and removing for cylider-head | 1 | 0.9221 B | <br>N |

M 25

| Benennung<br>Description | Stück<br>Qty. | Werkzeug-Nr.<br>Tool-No. | Bild<br>Figure |
|---|---|---|---|
| Zapfenschlüssel<br><br>Pin type face wrench | 1 | 0.9105 A | <br>N |
| Andrückvorrichtung für Ventilsitzring<br><br>Jacking device for valve rings | 1 | 259222 B | <br>N |
| | | | |
| | | | |

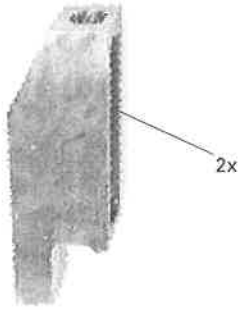
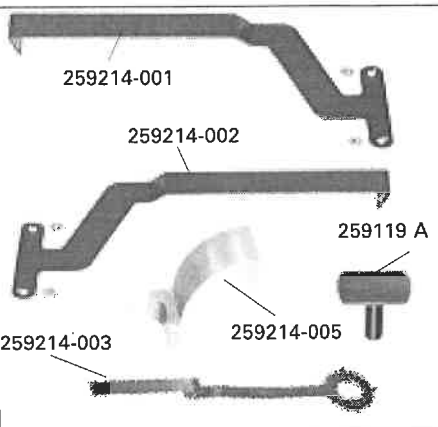
| Benennung<br>Description | Stück<br>Qty. | Werkzeug-Nr.<br>Tool-No. | Bild<br>Figure |
|---|---|---|---|
| Montagebügel für Pleuellager<br><br>Clamp for big-end bearing shells | 1 | 259125 A | <br>N |
| Drehmomentschlüssel<br><br>Torque wrench | 1 | 1.9454-800 | <br>N |
| Umschaltknarre<br><br>Ratchet | 1 | 1.9495-036 | <br>N |
| Einsatz SW 36<br>Einsatz SW 41<br><br>Socket wrench SW 36<br>Socket wrench SW 41 | 1<br>1 | 1.9450-036<br>1.9450-041 | <br>N |

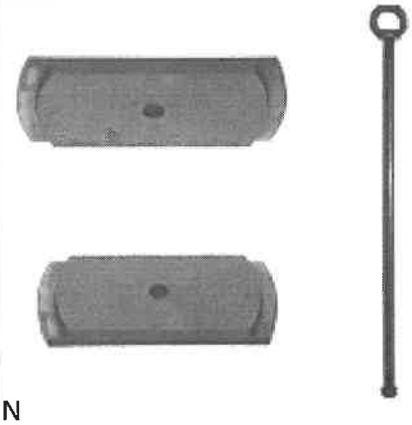
| Benennung<br>Description | Stück<br>Qty. | Werkzeug-Nr.<br>Tool-No. | Bild<br>Figure |
|---|---|---|---|
| Manschette<br><br>Piston ring cuff | 1 | 259220 A |  <br>N |
| Kolben-Montagering<br><br>Mountingsleeve for pistons | 1 | 259220 B | <br>N |
| Montagezange für Kolbenring<br><br>Piston ring expander | 1 | 259227 A | <br>N |
| Kurbelwangenmeßgerät<br><br>Crank web deflection dial gauge | 1 | 1.9425-300 |  <br>S |

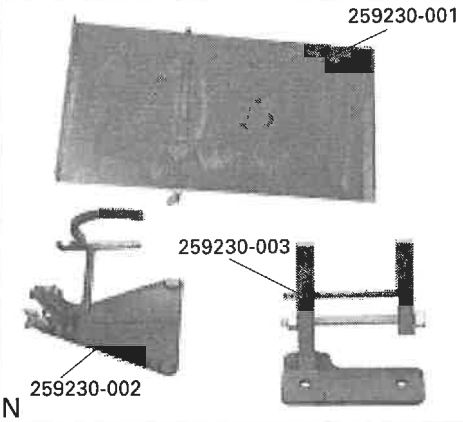
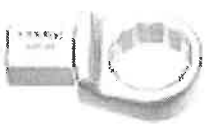
M 25

02

| Benennung<br>Description | Stück<br>Qty. | Werkzeug-Nr.<br>Tool-No. | Bild<br>Figure |
|---|---|---|---|
| Ausbauvorrichtung für Kolben<br><br>Removing device for piston | 1 | 259223 A | <br>N |
| | | | |
| | | | |
| | | | |

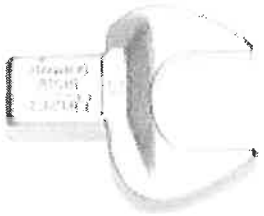
| Benennung<br>Description | Stück<br>Qty. | Werkzeug-Nr.<br>Tool-No. | Bild<br>Figure |
|---|---|---|---|
| Halter für Zylinderbuchse<br><br>Cylinder liner hold-down | 1 | 259217 B |  <br>N |
| Ausbauvorrichtung, Kalibrierring<br><br>Dismounting device for bushing combustion ring | 1 | 259216 C | <br>N |
| Einsatz SW 46<br><br>Socket wrench SW 46 | 1 | 1.9450-046 | <br>N |
| Ein und Ausbauvorrichtung für Grundlager<br><br>Mounting and removing device for bearing shells | 1 | 259214 A |  <br>N |

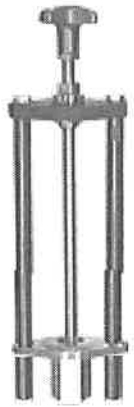
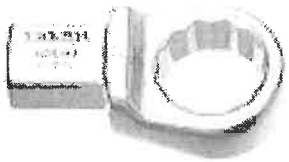
| Benennung<br>Description | Stück<br>Qty. | Werkzeug-Nr.<br>Tool-No. | Bild<br>Figure |
|---|---|---|---|
| Ein- und Ausbauvorrichtung für Zylinderlaufbuchse<br><br>Device for mounting and extracting the cylinder liners | 1 | 259216 E |  <br>N |
| Meßlehre für Laufbuchse<br><br>Ruler for cylinder liner micrometer | 1 | 259216-001 | <br>S |
| | | | |
| | | | |

| Benennung<br>Description | Stück<br>Qty. | Werkzeug-Nr.<br>Tool-No. | Bild<br>Figure |
|---|---|---|---|
| Vorrichtung für Schwinghebel<br><br>Device for rocking lever | 1 | 259235 B | <br>N |
| Ausbauvorrichtung für Steuerwelle<br><br>Removing device for camshaft | 1 | 259230 A |  <br>N |
| Drehmomentschlüssel 60-320 Nm<br><br>Torque wrench 60-320 Nm | 1 | 1.9454-320 | <br>N |
| Ringschlüssel<br><br>Ring wrench | 1 | 1.9459-022 |  <br>N |

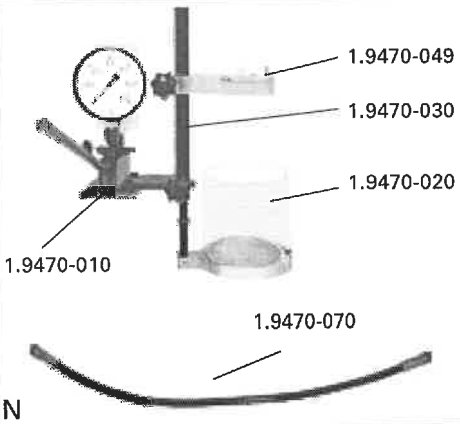
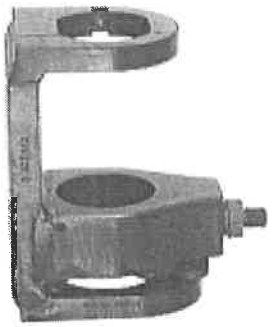
| Benennung<br>Description | Stück<br>Qty. | Werkzeug-Nr.<br>Tool-No. | Bild<br>Figure |
|---|---|---|---|
| Adapter<br><br>Adapter | 1 | 1.9459-035 | <br>N |
| | | | |
| | | | |
| | | | |

M 25

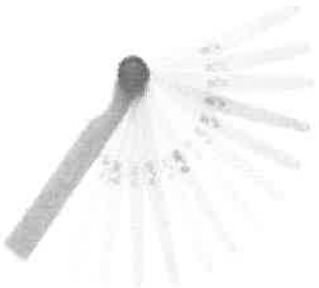
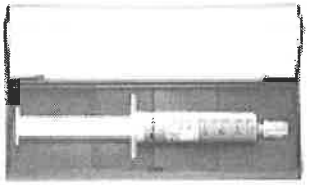
| Benennung<br>Description | Stück<br>Qty. | Werkzeug-Nr.<br>Tool-No. | Bild<br>Figure |
|---|---|---|---|
| Ringschlüssel<br><br>Ring wrench | 1 | 1.9459-030 | <br>N |
| Maulschlüssel<br><br>Single-head wrench | 1 | 1.9459-024 |  <br>N |
| | | | |
| | | | |

| Benennung<br>Description | Stück<br>Qty. | Werkzeug-Nr.<br>Tool-No. | Bild<br>Figure |
|---|---|---|---|
| Ziehvorrichtung für Einspritzventil<br><br>Removing device for fuel injector | 1 | 0.9111 E |  <br>N |
| Hebevorrichtung<br><br>Lifting gear | 1 | 259235 A | <br>N |
| Ringschlüssel<br><br>Ring wrench | 1 | 1.9459-034 |  <br>N |
| Reinigungspistole<br><br>Cleaning gun | 1 | 1.9100-114 | <br>N |

| Benennung<br>Description | Stück<br>Qty. | Werkzeug-Nr.<br>Tool-No. | Bild<br>Figure |
|---|---|---|---|
| Reinigungsrohr<br><br>Cleaning pipe | 1 | 1.9100-115 | <br>N |
| Spann- und Einstellschlüssel<br><br>Clamping and setting key | 1 | 259222 D | <br>N |
| Schlüssel für Düsenhülse<br><br>Wrench for nozzle cover | 1 | 259222-301 | <br>N |
| Verlängerung 200mm<br><br>Extension 200mm | 1 | 1.9482-094 | <br>N |

| Benennung<br>Description | Stück<br>Qty. | Werkzeug-Nr.<br>Tool-No. | Bild<br>Figure |
|---|---|---|---|
| Steckschlüssel-Einsatz SW 19<br><br>Socket wrench SW 19 | 1 | 1.9024-019 | <br>N |
| Abspritzdruckprüfvorrichtung<br><br>Nozzle tester | 1 | 1.9470 G |  <br>N |
| Adapter für Düsenhalter<br><br>Adapter for nozzle holders | 1 | 259208 B |  <br>N |
| | | | |

| Benennung<br>Description | Stück<br>Qty. | Werkzeug-Nr.<br>Tool-No. | Bild<br>Figure |
|---|---|---|---|
| Ausdrückwerkzeug für Siebkerzen<br><br>Filtre cartridge extractor | 1 | 1.9100-120 | <br>N |
| | | | |
| | | | |
| | | | |

| Benennung<br>Description | Stück<br>Qty. | Werkzeug-Nr.<br>Tool-No. | Bild<br>Figure |
|---|---|---|---|
| Werkzeugkoffer<br><br>Tool box | 1 | 1.9498-001 | <br>N |
| Plastiköler 500 cm³<br><br>Oil can 500 cm³ | 1 | 1.9490-001 | <br>N |
| Fühlerlehrensatz<br><br>Set of feeler gauges | 1 | 1.9075-003 |  <br>N |
| Diamantpaste 5 g<br><br>Diamond paste 5 g | 1 | 1.9493-002 |  <br>N |

| Benennung<br>Description | Stück<br>Qty. | Werkzeug-Nr.<br>Tool-No. | Bild<br>Figure |
|---|---|---|---|
| Dicht- u. Füllmasse Silicon<br><br>Sealing compound silicon | 1 | 1.9492-002 | N |
| Hakenschlüssel A 45-50<br><br>Hook wrench A 45-50 | 1 | 1.9001-050 | N |
| | | | |
| | | | |