



***TWIN & TriPlus***  
**Automatic Greasing Systems**

EP1701

**Groeneveld Transport Efficiency B.V.**

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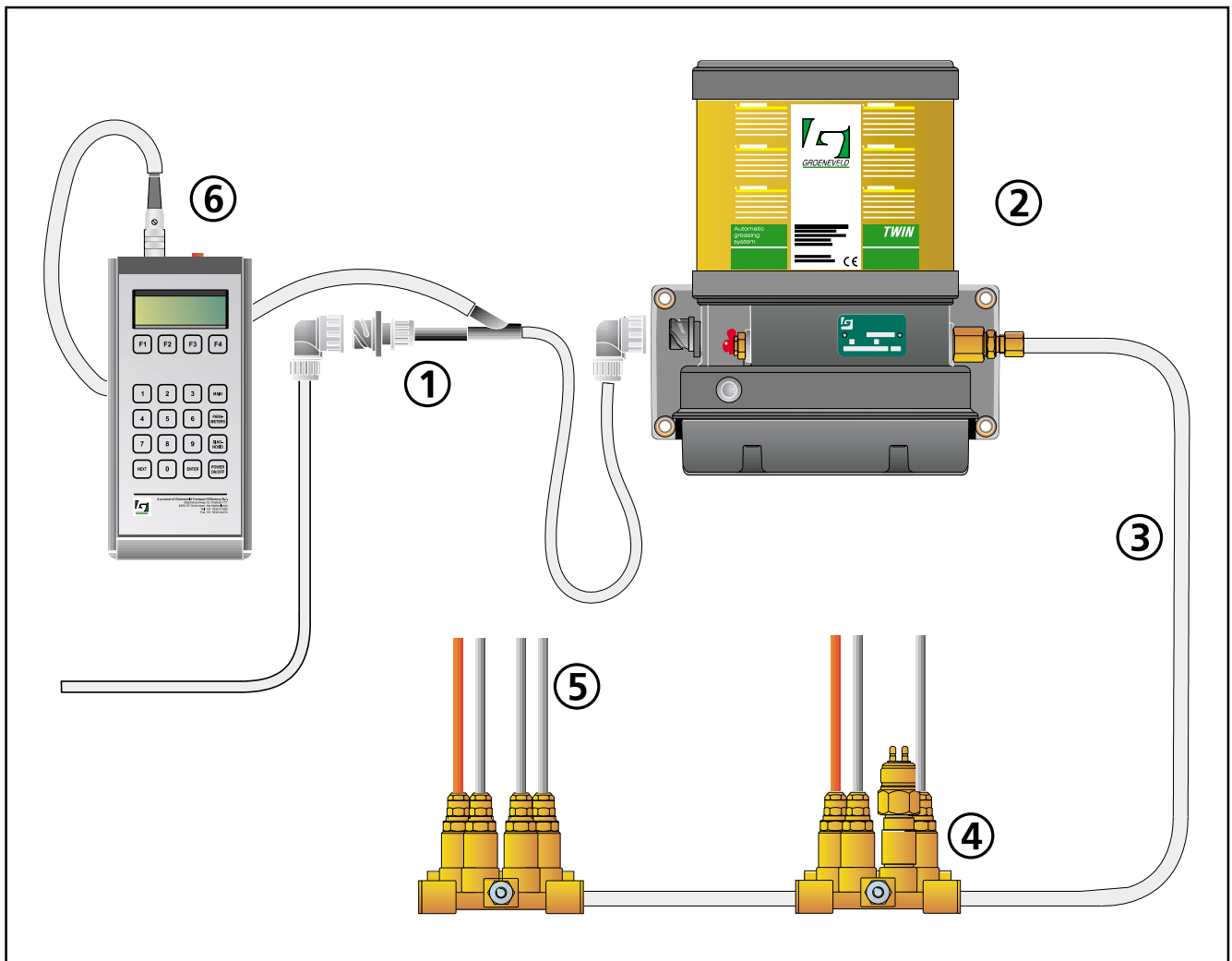
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# ***TWIN & TriPlus*** **Automatic Greasing Systems**

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## INTRODUCTION

This book gives an overview of the frequently used parts of the Automatic *TWIN* & *TriPlus* Greasing Systems of Groeneveld.

The chapters 1 until 5 contain each a part of the complete Greasing System. The parts represented in these chapters are shown in a whesent way, representing clearly their functionality. In chapter 6 several parts are listed such as clamping materials and GreenLube-EP-2 grease. Chapter 7 gives an overview of the *TriPlus* Greasing Systems.

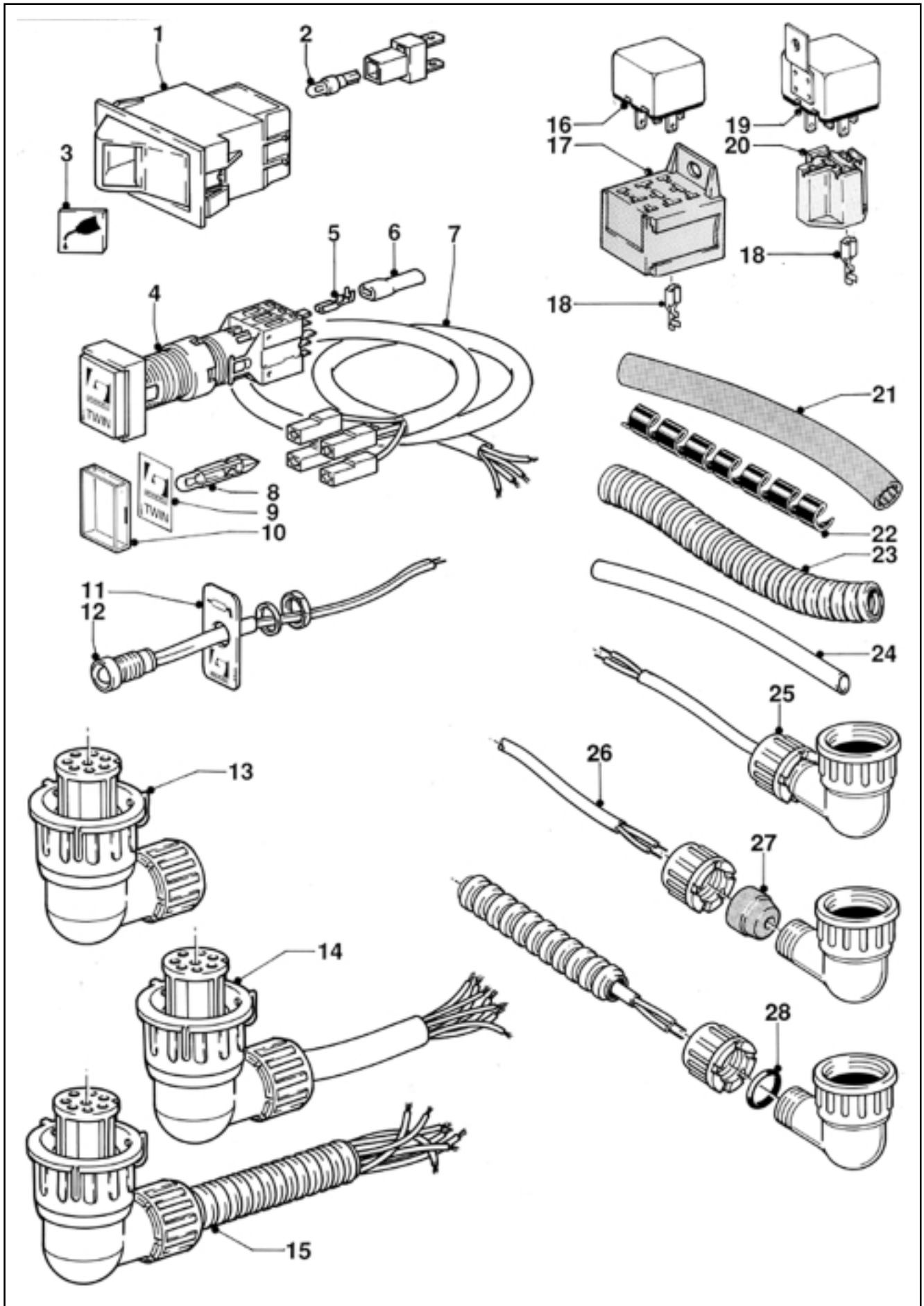
### Material indication

|       |                          |
|-------|--------------------------|
| BR    | Brass (Messing)          |
| PA    | Polyamide (synthetic)    |
| ST-YG | Steel, yellow passivated |
| ST-G  | Steel, galvanised        |
| SST   | Stainless steel          |

### How to order?

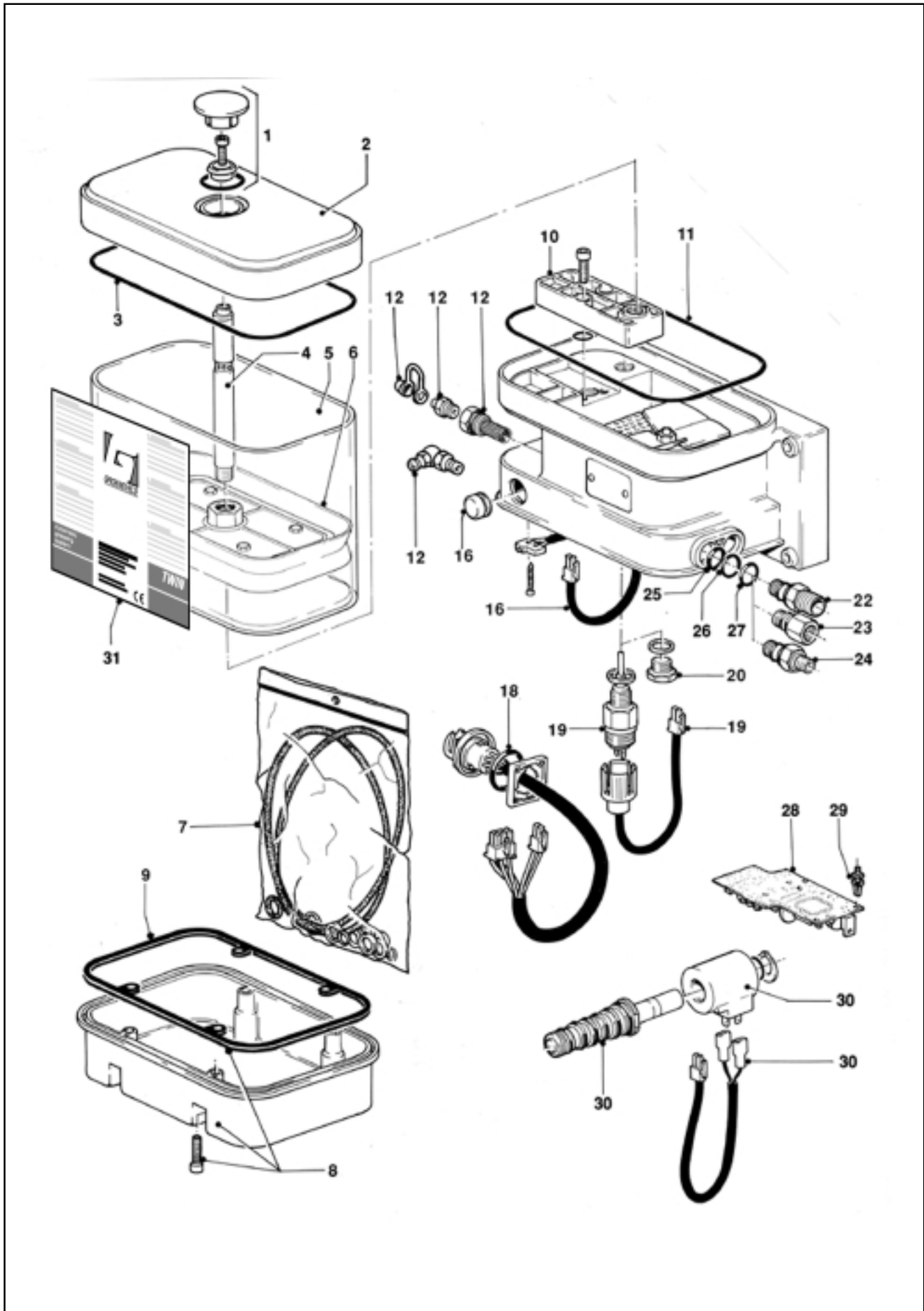
Mention by each order:

- Article number
- Required quantity
- Length (by tubes)



# 1 - CONTROL ELEMENTS AND CONNECTING MATERIAL

| Lamp alarm water-tight 56122 + 56222 |                |  |
|--------------------------------------|----------------|--|
| <i>pos.</i>                          | <i>art.nr.</i> | <i>description</i>                       |
| 1                                    | 128.17         | Mode-selection pushbutton / Lamp         |
|                                      | 169.22         | Mode-selection pushbutton / Lamp         |
| 2                                    | 123.22         | Control lamp 24V                         |
|                                      | 133.22         | Control lamp 12V                         |
| 3                                    | 164.22         | Lamp lens, yellow ('alarm')              |
| 4                                    | 132.33         | Mode-selection pushbutton / Lamp         |
|                                      | 713.22         | Mode-selection pushbutton / Lamp         |
|                                      | F171540        | Lamp ip67                                |
| 5                                    | 005.17         | Receptacles 1,5mm <sup>2</sup> (2,8)     |
| 6                                    | 006.17         | Insulation shell for 00517               |
| 7                                    | 150.33         | Wiring harness for 13233 / 97201         |
|                                      | 972.01         | Wiring harness for 12817                 |
| 8                                    | 206.33         | Lamp pushbutton 24/28V                   |
|                                      | 249.33         | Lamp pushbutton 12V                      |
| 9                                    | 869.01         | Display panel Twin for 13233             |
| 10                                   | 868.01         | Yellow lens for 13233                    |
| 11                                   | 976.01         | Display panel Twin for LED               |
| 12                                   | 240.09         | LED yellow                               |
| 13                                   | 736.01         | Twin conn. set 8p. (ADR)                 |
| 14                                   | 822.01         | Pump wiring harness 7 core/15m.          |
|                                      | 823.01         | Pump wiring harness 7 core/7m.           |
|                                      | 898.01         | Pump wiring harness 7 core/3m.           |
| 15                                   | 952.01         | Pump wiring harness 9m./ADR/Truck        |
|                                      | 002.17         | Wiring harness 7m./VLG for 70001         |
| 16                                   | 700.09         | Relay 24V, 5-poles without blade         |
| 17                                   | 707.09         | Plug socket 5-p. relay (+blade)          |
| 18                                   | 678.06         | Receptacles 1,5 mm <sup>2</sup>          |
| 19                                   | 356.06         | Relay 24V, 5-poles with blade            |
|                                      | 708.09         | Relay 12V, 5-poles with blade            |
| 20                                   | 683.06         | Plug socket 5-p. relay (-blade)          |
| 21                                   | 018.08         | Heat shrink tubing l=15cm                |
| 22                                   | 019.08         | Spi-wrap 5 mm                            |
|                                      | 020.08         | Spi-wrap 8 mm                            |
| 23                                   | 140.08         | Flex. synthetic hose                     |
| 24                                   | 234.22         | Protection hose Ø 6 mm ID                |
| 25                                   | 048.12         | Pressure switch wiring harness 8m.       |
|                                      | 049.12         | Pressure switch wiring harness 15m.      |
|                                      | 224.01         | Wiring harness,Con.24mm 2-core 6m        |
|                                      | 821.01         | Wiring harness,Con.24mm 2-core           |
| 26                                   | 578.06         | Electric cable 1.5 mm <sup>2</sup> GL+BR |
| 27                                   | 190.08         | Connectorset 2-core                      |
| 28                                   | 191.08         | Connectorset 2-core VLG                  |

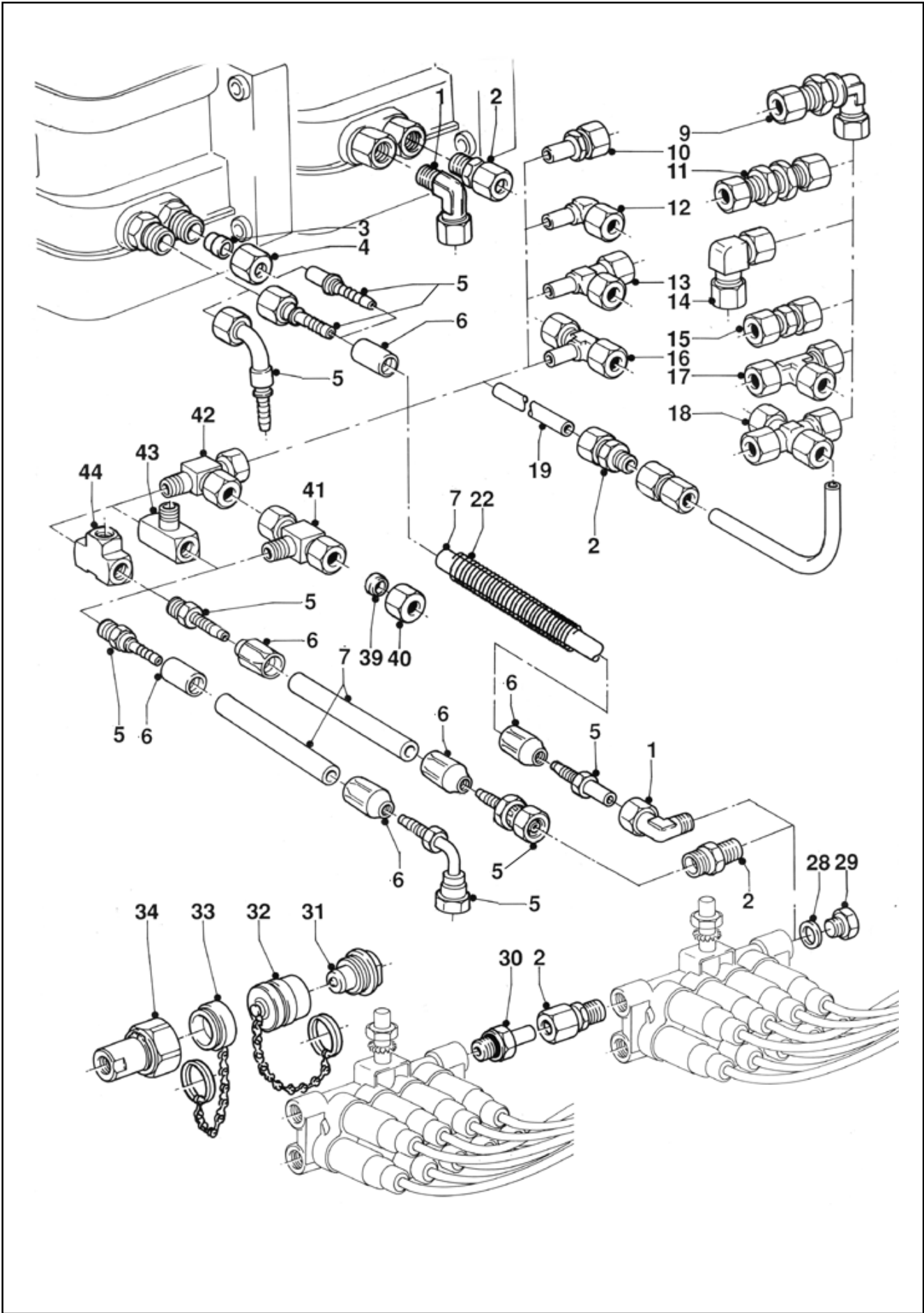




## 2 - TWIN GREASE PUMPS AND BRACKETS

| <b>TWIN Grease pump</b>                        |                     |   |                |                |                |                |                |
|--|---------------------|---|----------------|----------------|----------------|----------------|----------------|
| <i>property</i>                                |                     | <i>article number</i>   |                |                |                |                |                |
|  | <i>incl. grease</i> | <b>F112589</b>  | <b>F112126</b> | <b>F112484</b> | <b>F112942</b> | <b>F111842</b> | <b>F111956</b> |
|  | <i>excl. grease</i> | 636.01  | 637.01         | 638.01         | 700.01*        | 834.01         | 835.01         |
| Delivery                                       | cc/min.             | 12  | 12             | 12             | 12             | 12             | 12             |
| Max. grease pressure                           | bar                 | 250   | 250            | 175            | 250            | 250            | 250            |
| Contents reservoir                             | litres              | 4   | 4              | 2              | 3              | 3              | 3              |
| Supply voltage                                 | V dc                | 12  | 24             | 24             | 24             | 24             | 12             |
| Current draw                                   | A                   | 10  | 5              | 5              | 5              | 5              | 10             |
| Follower piston                                |                     | yes   | yes            | yes            | yes            | yes            | yes            |
| Minimum level switch                           |                     | yes   | yes            | yes            | yes            | yes            | yes            |
| Connector type                                 |                     | bayonet   | bayonet        | bayonet        | bayonet        | bayonet        | bayonet        |
| Mass   | kg                  | 6,4   | 6,4            | 6,2            | 6,2            | 6,2            | 6,2            |
| Operating temperature                          | °C                  | -20/+80   | -20/+80        | -20/+80        | -20/+80        | -20/+80        | -20/+80        |
| Thread-adapter                                 |                     | M16x1,5   | M16x1,5        | 1/4" inv.      | M16x1,5        | M16x1,5        | M16x1,5        |
| *) For external control (without control unit) |                     |   |                |                |                |                |                |
| <i>pos.</i>                                    | <i>art.nr.</i>      | <i>description</i>  |                |                |                |                |                |
| 1  | 597.01              | Fixing set, reservoircap  |                |                |                |                |                |
| 2  | 887.01              | Reservoircap with O-ring  |                |                |                |                |                |
| 3  | 306.01              | Reservoir O-ring  |                |                |                |                |                |
| 4  | 013.17              | Follower piston guide (4 l-reservoir)                                 |                |                |                |                |                |
|  | 888.01              | Follower piston guide (3 l-reservoir)                                 |                |                |                |                |                |
|  | 889.01              | Follower piston guide (2 l-reservoir)                                 |                |                |                |                |                |
| 5  | 011.17              | Reservoir set 4 l   |                |                |                |                |                |
|  | 891.01              | Reservoir set 2 l   |                |                |                |                |                |
|  | 892.01              | Reservoir set 3 l   |                |                |                |                |                |
| 6  | 012.17              | Follower piston 4 l   |                |                |                |                |                |
|  | 890.01              | Follower piston 2-3 l   |                |                |                |                |                |
| 7  | 884.01              | Gasket and O-ring set   |                |                |                |                |                |
| 8  | 877.01              | Bottom cap (complete)   |                |                |                |                |                |
| 9  | 084.17              | Gasket  |                |                |                |                |                |
| 10   | 894.01              | Bridge piece follower piston guide (2-3 l reservoir)                  |                |                |                |                |                |
|  | 173.16              | Bridge piece follower piston guide (4 l reservoir)                    |                |                |                |                |                |
| 11   | 893.01              | Reservoir O-ring (bottom)   |                |                |                |                |                |
| 12   | F170206             | Filling set + quick-disconnect coupling                               |                |                |                |                |                |
|  | F170207             | Filling set + grease nipple   |                |                |                |                |                |
| 16   | F170210             | Test button   |                |                |                |                |                |
| 18   | 007.17              | Internal wiring harness with a connector for the pump 700.01          |                |                |                |                |                |
|  | 875.01              | Internal wiring harness with a connector                              |                |                |                |                |                |
| 19   | F170211             | Minimum level switch  |                |                |                |                |                |
| 20   | 599.01              | Plug with O-ring M16x1,5  |                |                |                |                |                |
| 22   | 967.01              | Thread-adapter set M14x1,5 - M16x1,5 ferrule connector (incl. O-ring) |                |                |                |                |                |
| 23   | 789.01              | Thread-adapter set M14x1,5-1/4" - inside (incl. O-ring)               |                |                |                |                |                |
| 24   | 824.01              | Thread-adapter set M14x1,5-1/4" - outside (incl. O-ring)              |                |                |                |                |                |

| <b>TWIN Grease pump (continuation)</b> |                |                                     |
|--|----------------|-------------------------------------|
| <i>pos.</i>                            | <i>art.nr.</i> | <i>description</i>                  |
| 25                                     | 792.01         | O-ring                              |
| 26                                     | 086.17         | O-ring                              |
| 27                                     | 791.01         | O-ring                              |
| 28                                     | 900.17         | Control unit 24V                    |
|  | 987.01         | Control unit 12V                    |
| 29                                     | 883.01         | Lock-pins                           |
| 30                                     | F170208        | Valve 24VDC                         |
|  | F170209        | Valve 12VDC                         |
|  | F170212        | Valve 12VDC (from serialnr. 015963) |
|  | F170213        | Valve 24VDC (from serialnr. 015963) |
| 31                                     | 004.17         | Twin reservoirsticker 2-4L          |
|  | 831.01         | Twin reservoirsticker 3L            |



### 3 - MAIN LINE

| <b>Male stud elbow with ferrule</b> |                |                                   |                 |
|-------------------------------------|----------------|-----------------------------------|-----------------|
| <i>pos.</i>                         | <i>art.nr.</i> | <i>description</i>                | <i>material</i> |
| 1                                   | 56402          | Male stud elbow ø 8-1/4 NPT       | SST             |
|                                     | F170873        | Male stud elbow ø 8-1/4 NPT body  | SST             |
|                                     | 45602          | Male stud elbow ø 8-1/4 NPT       | ST-YG           |
|                                     | 72222          | Male stud elbow ø 8-1/4 NPT body  | ST-YG           |
|                                     | 47102          | Male stud elbow ø 8-3/8 NPT       | ST-YG           |
|                                     | 14422          | Male stud elbow ø 8-M14x1,5       | ST-YG           |
|                                     | 47402          | Male stud elbow ø 10-1/4 NPT      | ST-YG           |
|                                     | 72322          | Male stud elbow ø 10-1/4 NPT body | ST-YG           |
|                                     | 42801          | Male stud elbow ø 10-1/4 NPT body | ST-YG           |
|                                     | 47502          | Male stud elbow ø 10-3/8 NPT      | ST-YG           |
|                                     | 14222          | Male stud elbow ø 10-M1/4x1,5     | ST-YG           |
|                                     | 17501          | Male stud elbow ø 10-R1/4         | BR              |
|                                     | 58202          | Male stud elbow ø 10-R1/4         | SST             |
|                                     | 60102          | Male stud elbow ø 12-R1/4         | SST             |
|                                     | 49302          | Male stud elbow ø 12-R1/4         | ST-YG           |
|                                     | 24708          | Male stud elbow ø 15-1/2          | ST-YG           |
|                                     | 60122          | Male stud elbow ø 15-3/8          | ST-YG           |
|                                     | 43801          | Male stud elbow ø 5/16-G1/4       | BR              |
|                                     | 11301          | Male stud elbow ø 5/16-R1/8       | BR              |

| <b>Male stud coupling with ferrule</b> |                |                                      |                 |
|--|----------------|--------------------------------------|-----------------|
| <i>pos.</i>                            | <i>art.nr.</i> | <i>description</i>                   | <i>material</i> |
| 2                                      | 72022          | Male stud coupling ø 8-1/4 NPT body  | ST-YG           |
|  | 45502          | Male stud coupling ø 8-1/4 NPT       | ST-YG           |
|  | F170899        | Male stud coupling ø 8-1/4 body      | SST             |
|  | 22822          | Male stud coupling ø 8-1/8 NPT       | SST             |
|  | 50922          | Male stud coupling ø 8-1/8 NPT       | ST-YG           |
|  | 56302          | Male stud coupling ø 8-G1/4          | SST             |
|  | 22901          | Male stud coupling ø 8-G1/8 (cal)    | BR              |
|  | 57302          | Male stud coupling ø 8-G1/8          | SST             |
|  | 47002          | Male stud coupling ø 8-G3/8          | ST-YG           |
|  | 09708          | Male stud coupling ø 8-M12x1,5       | ST-YG           |
|  | 14322          | Male stud coupling ø 8-M14x1,5       | ST-YG           |
|  | 43101          | Male stud coupling ø 8-M16x1,5       | ST-YG           |
|  | 17401          | Male stud coupling ø 10-1/4          | BR              |
|  | 72122          | Male stud coupling ø 10-1/4 NPT body | ST-YG           |
|  | 47202          | Male stud coupling ø 10-1/4 NPT      | ST-YG           |
|  | 22422          | Male stud coupling ø 10-3/8 NPT      | SST             |
|  | 44422          | Male stud coupling ø 10-M12x1,5      | ST-YG           |
|  | 12722          | Male stud coupling ø 10-M14x1,5      | ST-YG           |
|  | 43201          | Male stud coupling ø 10-M16x1,5      | ST-YG           |
|  | 58002          | Male stud coupling ø 10-R1/4         | SST             |
|  | 47302          | Male stud coupling ø 10-R3/8         | ST-YG           |
|  | F170785        | Male stud coupling ø 12-1/4 body     | ST-YG           |
|  | 60002          | Male stud coupling ø 12-G1/4         | SST             |
|  | 49202          | Male stud coupling ø 12-G1/4         | ST-YG           |
|  | 50002          | Male stud coupling ø 12-R3/8         | ST-YG           |
|  | 36502          | Male stud coupling ø 15-1/2D         | ST-YG           |
|  | 24608          | Male stud coupling ø 15-G1/2         | ST-YG           |
|  | 55022          | Male stud coupling ø 15-M16x1,5      | ST-YG           |
|  | 22709          | Male stud coupling ø 15-M22          | ST-YG           |
|  | 24008          | Male stud coupling ø 15-M22x1,5      | ST-YG           |
|  | 80222          | Male stud coupling ø 22mm-1/2 "      | SST             |
|  | 80122          | Male stud coupling ø 22mm-1/2 "      | ST-YG           |
|  | 11201          | Male stud coupling ø 5/16 "-1/4      | BR              |
|  | 43901          | Male stud coupling ø 5/16 "-1/4      | BR              |
|  | 11401          | Male stud coupling ø 5/16 "-1/8      | BR              |

| <b>Compression ferrule</b>                  |                |   |               |               |                 |
|---|----------------|---|---------------|---------------|-----------------|
| <i>pos.</i>                                 | <i>art.nr.</i> | <i>description</i>                                |               |               | <i>material</i> |
| 3/39  | 46502          | Compression ferrule ø 8                           |               |               | BR              |
|   | 57702          | Compression ferrule ø 8                           |               |               | SST             |
|   | 46902          | Compression ferrule ø 8                           |               |               | ST-YG           |
|   | 36401          | Compression ferrule ø 10                          |               |               | BR              |
|   | 17901          | Compression ferrule ø 10 2-sides                  |               |               | BR              |
|   | 59702          | Compression ferrule ø 10                          |               |               | SST             |
|   | 48902          | Compression ferrule ø 10                          |               |               | ST-YG           |
|   | 61402          | Compression ferrule ø 12                          |               |               | SST             |
|   | 50602          | Compression ferrule ø 12                          |               |               | ST-YG           |
|   | 24508          | Compression ferrule ø 15                          |               |               | BR              |
|   | 59902          | Compression ferrule ø 15                          |               |               | SST             |
|   | 31408          | Compression ferrule ø 15                          |               |               | ST-YG           |
|   | 31908          | Compression ferrule ø 18                          |               |               | BR              |
|   | 26322          | Compression ferrule ø 22                          |               |               | SST             |
| <b>Nut</b>                                  |                |   |               |               |                 |
| <i>pos.</i>                                 | <i>art.nr.</i> | <i>size A</i>                                     | <i>size B</i> | <i>size C</i> | <i>material</i> |
| 4/40  | 46802          | 8   | M14x1,5       |               | ST-YG           |
|   | 57602          | 8   | M14x1,5       |               | SST             |
|   | 18001          | 10  | M16x1,5       |               | BR              |
|   | 48802          | 10  | M16x1,5       |               | ST-YG           |
|   | 59602          | 10  | M16x1,5       |               | SST             |
|   | 50502          | 12  | M18x1,5       |               | ST-YG           |
|   | 24408          | 15  | M22x1,5       |               | ST-YG           |
|   | 33308          | 18  | M26x1,5       |               | ST-YG           |
|   | 16101          | 5/16"   | M12x1         |               | BR              |
| <b>High pressure hose 4mm I.D./9mm O.D.</b> |                |   |               |               |                 |
| <i>pos.</i>                                 | <i>art.nr.</i> | <i>description</i>                                |               |               | <i>material</i> |
| 5   | 11816          | Elbow stand pipe 6mm (crimp)                      |               |               | ST-YG           |
|   | 11716          | Straight stand pipe 6mm (crimp) 4mm               |               |               | ST-YG           |
|   | 09516          | Elbow stand pipe + socket, screw coupling 6mm     |               |               | ST-YG           |
|   | 06416          | Straight stand pipe + socket, screw coupling 1/8" |               |               | ST-YG           |
|   | 06316          | Straigh stand pipe + socket, screw coupling 8mm   |               |               | ST-YG           |
|   | 06216          | Straigh stand pipe + socket, screw coupling 5mm   |               |               | ST-YG           |
|   | 05816          | Straigh stand pipe, screw coupling 4mm            |               |               | ST-YG           |
| 6   | 11916          | Crimp socket for 05716                            |               |               | ST-YG           |
| 7   | 05716          | H.P.H. 4mm I.D./9mm O.D.                          |               |               |                 |

| <b>High pressure hose 1/4" (crimp) with accessories</b> |                |   |                 |
|---|----------------|---|-----------------|
| <i>pos.</i>   | <i>art.nr.</i> | <i>description</i>                          | <i>material</i> |
| 5   | 83022          | Straight stand pipe ø 6 (crimp) 1/4"        | ST-YG           |
|   | 55002          | Straight stand pipe 1/4 NPT (crimp) 1/4"    | ST-YG           |
|   | 11217          | Straight stand pipe 1/4 NPT (crimp) 1/4"    | SST             |
|   | 05617          | Straight stand pipe 1/8 NPT (crimp) 1/4"    | ST-YG           |
|   | 11117          | Straight stand pipe 1/8 NPT (crimp) 1/4"    | SST             |
|   | 05117          | Straight stand pipe ø 5 (crimp) 1/4"        | ST-YG           |
|   | 10617          | Straight stand pipe ø 5 (crimp) 1/4"        | SST             |
|   | 05217          | Straight stand pipe ø 6 (crimp) 1/4"        | ST-YG           |
|   | 10717          | Straight stand pipe ø 6 (crimp) 1/4"        | SST             |
|   | 55102          | Straight stand pipe ø 8 (crimp) 1/4"        | ST-YG           |
|   | 10817          | Straight stand pipe ø 8 (crimp) 1/4"        | SST             |
|   | 55202          | Straight stand pipe ø 10 (crimp) 1/4"       | ST-YG           |
|   | 10917          | Straight stand pipe ø 10 (crimp) 1/4"       | SST             |
|   | 05317          | Straight stand pipe ø 12 (crimp) 1/4"       | ST-YG           |
|   | 11017          | Straight stand pipe ø 12 (crimp) 1/4"       | SST             |
|   | 73922          | Stand pipe + nut (45°) ø 8 (crimp) 1/4"     | ST-YG           |
|   | F117227        | Stand pipe + nut (45°) ø 10 (crimp) 1/4"    | ST-YG           |
|   | F170871        | Elbow stand pipe + nut ø 6 (crimp) 1/4"     | SST             |
|   | 55302          | Elbow stand pipe + nut ø 8 (crimp) 1/4"     | ST-YG           |
|   | 55402          | Elbow stand pipe + nut ø 10 (crimp) 1/4"    | ST-YG           |
|   | F170143        | Elbow stand pipe + nut ø 10 (crimp) 1/4"    | SST             |
|   | 05417          | Straight stand pipe + nut ø 8 (crimp) 1/4"  | ST-YG           |
|   | F170987        | Straight stand pipe + nut ø 8 (crimp) 1/4"  | SST             |
|   | 05517          | Straight stand pipe + nut ø 10 (crimp) 1/4" | ST-YG           |

| <b>High pressure hose 1/4" (screw coupling) with accessories</b> |                |  |                 |
|--|----------------|--|-----------------|
| <i>pos.</i>  | <i>art.nr.</i> | <i>description</i>                                   | <i>material</i> |
| 5/6  | 06317          | Elbow stand pipe ø 8 (screw coupling + nut) 1/4"     | ST-YG           |
|  | 06517          | Elbow stand pipe ø 10 (screw coupling + nut) 1/4"    | ST-YG           |
|  | 06717          | Straight stand pipe 1/4 NPT (screw coupling) 1/4"    | ST-YG           |
|  | 11917          | Straight stand pipe 1/4 NPT (screw coupling) 1/4"    | SST             |
|  | 06617          | Straight stand pipe 1/8 NPT (screw coupling) 1/4"    | ST-YG           |
|  | 11817          | Straight stand pipe 1/8 NPT (screw coupling) 1/4"    | SST             |
|  | 05717          | Straight stand pipe ø 5 (screw coupling) 1/4"        | ST-YG           |
|  | 11317          | Straight stand pipe ø 5 (screw coupling) 1/4"        | SST             |
|  | 05817          | Straight stand pipe ø 6 (screw coupling) 1/4"        | ST-YG           |
|  | 11417          | Straight stand pipe ø 6 (screw coupling) 1/4"        | SST             |
|  | 05917          | Straight stand pipe ø 8 (screw coupling) 1/4"        | ST-YG           |
|  | 11517          | Straight stand pipe ø 8 (screw coupling) 1/4"        | SST             |
|  | 06017          | Straight stand pipe ø10 (screw coupling) 1/4"        | ST-YG           |
|  | 11617          | Straight stand pipe ø 10 (screw coupling) 1/4"       | SST             |
|  | 06117          | Straight stand pipe ø 12 (screw coupling) 1/4"       | ST-YG           |
|  | 11717          | Straight stand pipe ø 12 (screw coupling) 1/4"       | SST             |
|  | 06217          | Straight stand pipe ø 8 (screw coupling + nut) 1/4"  | ST-YG           |
|  | 06417          | Straight stand pipe ø 10 (screw coupling + nut) 1/4" | ST-YG           |
| <b>High pressure hose 3/8" with accessories</b>                  |                |  |                 |
| <i>pos.</i>  | <i>art.nr.</i> | <i>description (screw coupling)</i>                  | <i>material</i> |
| 5  | 327.22         | Straight stand pipe 1/4 NPT (crimp) 3/8"             | ST-YG           |
|  | 325.22         | Straight stand pipe ø 10 (screw coupling) 3/8"       | ST-YG           |
|  | 810.22         | Straight stand pipe ø 10 (crimp) 3/8"                | SST             |
|  | 358.02         | Straight stand pipe ø 10 (screw coupling) 3/8"       | ST-YG           |
|  | 541.02         | Straight stand pipe ø 10 (screw coupling) 3/8"       | SST             |
|  | 326.22         | Straight stand pipe ø 12 (crimp) 3/8"                | ST-YG           |
|  | 364.02         | Straight stand pipe ø 12 (screw coupling) 3/8"       | ST-YG           |
|  | 542.02         | Straight stand pipe ø 12 (screw coupling) 3/8"       | SST             |
|  | 332.22         | Straight stand pipe ø 15 (crimp) 3/8"                | SST             |
|  | 648.02         | Elbow stand pipe + nut ø 10 (crimp) 3/8"             | ST-YG           |
|  | 809.22         | Elbow stand pipe + nut ø 10 (crimp) 3/8"             | SST             |
|  | F170783        | Elbow stand pipe + nut ø 12 (crimp) 3/8"             | ST-YG           |
|  | F170784        | Straight stand pipe + nut ø 10 (crimp) 3/8"          | ST-YG           |
|  | F170782        | Straight stand pipe + nut ø 12 (crimp) 3/8"          | ST-YG           |
| 6  | 359.02         | Screw socket 3/8"                                    | ST-YG           |
|  | 544.02         | Screw socket 3/8"                                    | SST             |
|  | 328.22         | Crimp socket 3/8"                                    | ST-YG           |
| 7  | 357.02         | H.P.H. ø 3/8" ID                                     |                 |



| <b>High pressure hose teflon RVS 1/4"</b>       |                |   |                 |
|---|----------------|---|-----------------|
| <i>pos.</i>                                     | <i>art.nr.</i> | <i>description</i>                          | <i>material</i> |
| 6   | 807.22         | Crimp socket teflon 1/4"                    | SST             |
| 7   | 806.22         | H.P.H. Teflon 1/4" ID/8.7mm OD/250b         | Teflon          |
| <b>High pressure hose 3/4" with accessories</b> |                |   |                 |
| <i>pos.</i>                                     | <i>art.nr.</i> | <i>description</i>                          | <i>material</i> |
| 5   | 788.22         | Straight stand pipe + nut 22 (crimp) 3/4"   | ST-YG           |
|   | 789.22         | Straight stand pipe + nut 22 (crimp) 3/4"   | SST             |
|   | 790.22         | Elbow stand pipe + nut 22mm (crimp) 3/4"    | ST-YG           |
|   | 791.22         | Elbow stand pipe + nut 22mm (crimp) 3/4"    | SST             |
| 6   | 792.22         | Crimp socket 3/4"                           | ST-YG           |
|   | 793.22         | Crimp socket 3/4"                           | SST             |
| 7   | 787.22         | H.P.H. 3/4"                                 |                 |
| <b>High pressure hose 1/2" with accessories</b> |                |   |                 |
| <i>pos.</i>                                     | <i>art.nr.</i> | <i>description</i>                          | <i>material</i> |
| 5   | 149.12         | Straight stand pipe 12mm (crimp) 1/2"       | ST-YG           |
|   | 150.12         | Straight stand pipe 15mm (crimp) 1/2"       | ST-YG           |
|   | 794.22         | Elbow stand pipe + nut 15mm (crimp) 1/2"    | ST-YG           |
|   | 795.22         | Straight stand pipe + nut 15mm (crimp) 1/2" | ST-YG           |
| 6   | 151.12         | Crimp socket for H.P.H. 14812 1/2"          | ST-YG           |
| 7   | 148.12         | H.P.H. 1/2" ID/22, 1mm OD/275 bar           |                 |

| <b>Panel mount elbow union (ferrule)</b>   |                |   |                 |
|--|----------------|---|-----------------|
| <i>pos.</i>                                | <i>art.nr.</i> | <i>description</i>                        | <i>material</i> |
| 9  | 240.12         | Panel mount elbow union ø 6               | SST             |
|  | 223.01         | Panel mount elbow union ø 6               | ST-YG           |
|  | 461.02         | Panel mount elbow union ø 8               | ST-YG           |
|  | 480.02         | Panel mount elbow union ø 10              | ST-YG           |
|  | 588.02         | Panel mount elbow union ø 10              | SST             |
|  | 311.22         | Panel mount elbow union ø 15              | SST             |
| <b>Reducing adaptor straight (ferrule)</b> |                |   |                 |
| <i>pos.</i>                                | <i>art.nr.</i> | <i>description</i>                        | <i>material</i> |
| 10   | 128.16         | Reducing adaptor ø 8 - ø 6 pre-assembled  | ST-YG           |
|  | 629.22         | Reducing adaptor ø 10 - ø 1/4             | SST             |
|  | 616.02         | Reducing adaptor ø 10 - ø 15              | SST             |
|  | 127.16         | Reducing adaptor ø 10 - ø 6 pre-assembled | ST-YG           |
|  | 466.22         | Reducing adaptor ø 10 - ø 8               | SST             |
|  | 482.02         | Reducing adaptor ø 10 - ø 8               | ST-YG           |
|  | 612.02         | Reducing adaptor ø 12 - ø 10              | SST             |
|  | 504.02         | Reducing adaptor ø 12 - ø 10              | ST-YG           |
|  | 125.16         | Reducing adaptor ø 12 - ø 6 pre-assembled | ST-YG           |
|  | 880.02         | Reducing adaptor ø 12 - ø 8               | ST-YG           |
|  | 211.09         | Reducing adaptor ø 15 - ø 10              | ST-YG           |
|  | 313.22         | Reducing adaptor ø 15 - ø 12              | SST             |
|  | 212.09         | Reducing adaptor ø 15 - ø 12              | ST-YG           |
|  | 662.02         | Reducing adaptor ø 15 - ø 22              | ST-YG           |
|  | 210.09         | Reducing adaptor ø 15 - ø 8               | ST-YG           |
|  | 257.02         | Reducing adaptor ø 22 - ø 10              | ST-YG           |
|  | 467.02         | Reducing adaptor ø 22 - ø 12              | ST-YG           |
|  | 594.02         | Reducing adaptor ø 22 - ø 15              | SST             |
|  | 107.22         | Reducing adaptor ø 28 - ø 10              | SST             |
|  | 593.02         | Reducing adaptor ø 28 - ø 22              | SST             |
| <b>Panel mount union (ferrule)</b>         |                |   |                 |
| <i>pos.</i>                                | <i>art.nr.</i> | <i>description</i>                        | <i>material</i> |
| 11   | 532.22         | Panel mount union ø 6                     | BR(L)           |
|  | 586.22         | Panel mount union ø 6                     | SST             |
|  | 116.01         | Panel mount union ø 8                     | BR              |
|  | 570.02         | Panel mount union ø 8                     | SST             |
|  | 462.02         | Panel mount union ø 8                     | ST-YG           |
|  | 589.02         | Panel mount union ø 10                    | SST             |
|  | 481.02         | Panel mount union ø 10                    | ST-YG           |
|  | 607.02         | Panel mount union ø 12                    | SST             |
|  | 499.02         | Panel mount union ø 12                    | ST-YG           |
|  | 310.22         | Panel mount union ø 15                    | SST             |
|  | 253.08         | Panel mount union ø 15                    | ST-YG           |
|  | 287.02         | Panel mount union ø 22                    | ST-YG           |
|  |                |   |                 |

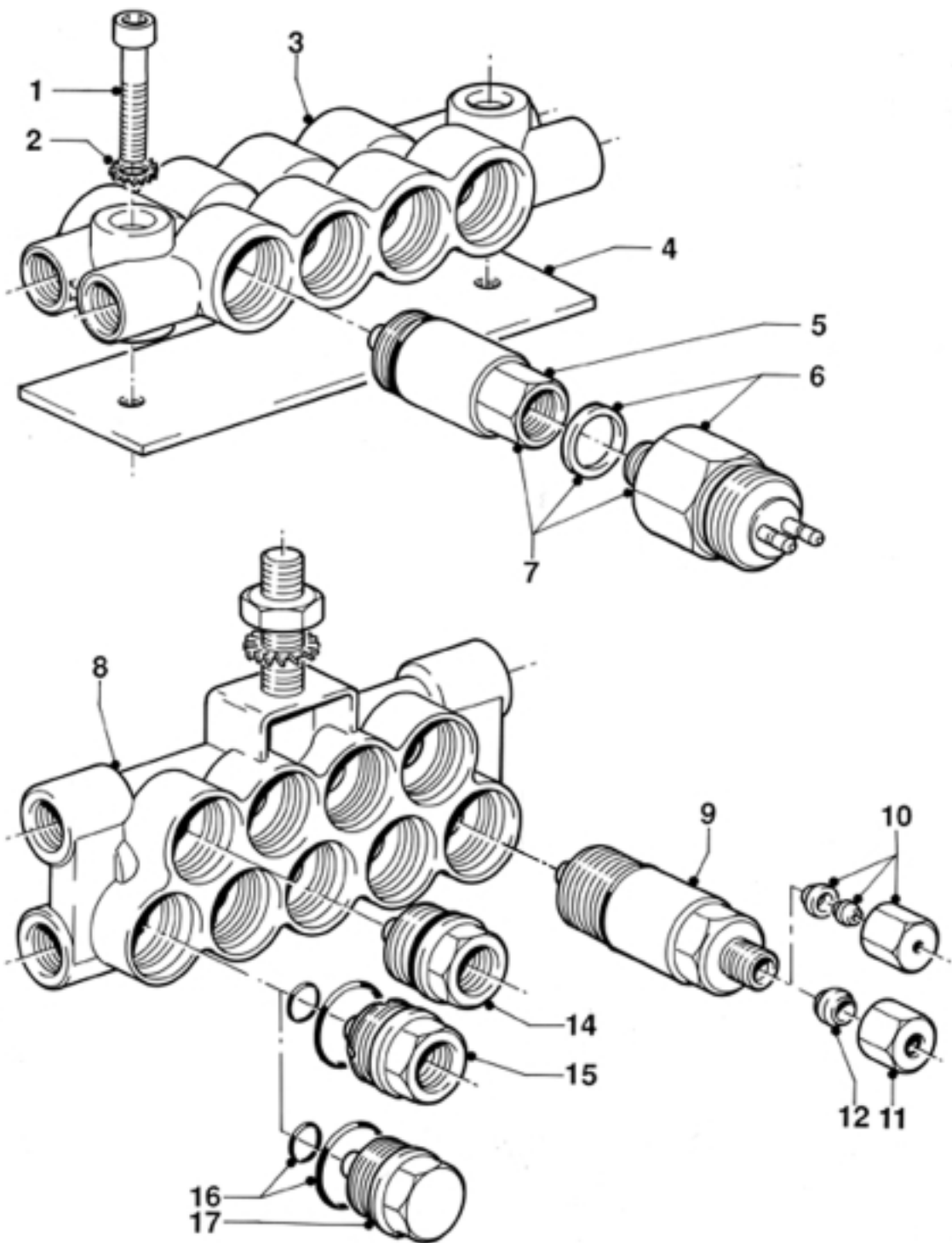
| <b>Elbow swivel coupling (ferrule)</b>           |                |  |                 |
|--|----------------|--|-----------------|
| <i>pos.</i>                                      | <i>art.nr.</i> | <i>description</i>                       | <i>material</i> |
| 12   | 094.16         | Elbow swivel coupling ø 6                | ST-YG           |
|  | 470.22         | Elbow swivel coupling ø 8                | SST             |
|  | 807.01         | Elbow swivel coupling ø 8                | ST-YG           |
|  | 471.22         | Elbow swivel coupling ø 10               | SST             |
|  | 808.01         | Elbow swivel coupling ø 10               | ST-YG           |
|  | 093.14         | Elbow swivel coupling ø 10-M16           | ST-YG           |
|  | 495.02         | Elbow swivel coupling ø 12               | ST-YG           |
|  | F170786        | Elbow swivel coupling ø 12 pre-assembled | ST-YG           |
|  | 252.08         | Elbow swivel coupling ø 15               | ST-YG           |
|  | 315.08         | Elbow swivel coupling ø 18               | ST-YG           |
| <b>L-swivel coupling (ferrule)</b>               |                |  |                 |
| <i>pos.</i>                                      | <i>art.nr.</i> | <i>description</i>                       | <i>material</i> |
| 13   | 117.08         | L-swivel coupling ø 10 - ø 10 - ø 8      | ST-YG           |
|  | 115.16         | L-swivel coupling ø 6                    | ST-YG           |
|  | 740.22         | L-swivel coupling ø 8 body               | ST-YG           |
|  | 473.22         | L-swivel coupling ø 8                    | SST             |
|  | 464.02         | L-swivel coupling ø 8                    | ST-YG           |
|  | 102.08         | L-swivel coupling ø 8 pre-assembled      | ST-YG           |
|  | 591.02         | L-swivel coupling ø 10                   | SST             |
|  | 483.02         | L-swivel coupling ø 10                   | ST-YG           |
|  | 484.02         | L-swivel coupling ø 12                   | ST-YG           |
|  | 113.22         | L-swivel coupling ø 15                   | ST-YG           |
| <b>Equal connecting elbow coupling (ferrule)</b> |                |  |                 |
| <i>pos.</i>                                      | <i>art.nr.</i> | <i>description</i>                       | <i>material</i> |
| 14   | 458.02         | Equal connecting elbow coupling ø 8      | ST-YG           |
|  | 566.02         | Equal connecting elbow coupling ø 8      | SST             |
|  | 477.02         | Equal connecting elbow coupling ø 10     | ST-YG           |
|  | 558.02         | Equal connecting elbow coupling ø 10     | SST             |
|  | 920.02         | Equal connecting elbow coupling ø 12     | ST-YG           |
|  | 610.02         | Equal connecting elbow coupling ø 12     | SST             |
|  | 243.08         | Equal connecting elbow coupling ø 15     | ST-YG           |
|  | 664.02         | Equal connecting elbow coupling ø 22     | ST-YG           |

| <b>Straight connecting coupling (ferrule)</b> |                   |                                      |                 |
|---|-------------------|--------------------------------------|-----------------|
| <i>pos.</i>                                   | <i>art.nr.</i>    | <i>description</i>                   | <i>material</i> |
| 15  | 565.02            | Straight connecting coupling ø 8     | SST             |
|   | 457.02            | Straight connecting coupling ø 8     | ST-YG           |
|   | 476.02            | Straight connecting coupling ø 10    | ST-YG           |
|   | 176.01            | Straight connecting coupling ø 10    | BR              |
|   | 584.02            | Straight connecting coupling ø 10    | SST             |
|   | 494.02            | Straight connecting coupling ø 12    | ST-YG           |
|   | 602.02            | Straight connecting coupling ø 12    | SST             |
|   | 242.08            | Straight connecting coupling ø 15    | ST-YG           |
|   | 617.02            | Straight connecting coupling ø 15    | SST             |
|   | 661.02            | Straight connecting coupling ø 22    | ST-YG           |
|   | 595.02            | Straight connecting coupling ø 22    | SST             |
|   | 115.01            | Straight connecting coupling ø 5/16" | BR              |
| <b>T-swivel coupling (ferrule)</b>            |                   |                                      |                 |
| <i>pos.</i>                                   | <i>art.nr.</i>    | <i>description</i>                   | <i>material</i> |
| 16  | 463.02            | T-swivel coupling ø 8                | SST             |
|   | 159.22            | T-swivel coupling ø 8                | ST-YG           |
|   | 590.02            | T-swivel coupling ø 10               | SST             |
|   | 809.01            | T-swivel coupling ø 10               | ST-YG           |
|   | 442.22            | T-swivel coupling ø 10 pre-assembled | ST-YG           |
|   | 166.22            | T-swivel coupling ø 12               | ST-YG           |
| <b>T-equal coupling (ferrule)</b>             |                   |                                      |                 |
| <i>pos.</i>                                   | <i>artikelnr.</i> | <i>description</i>                   | <i>material</i> |
| 17  | 567.02            | T-equal coupling ø 8                 | SST             |
|   | 459.02            | T-equal coupling ø 8                 | ST-YG           |
|   | F171375           | T-equal coupling ø 8 body            | ST-YG           |
|   | 426.02            | T-equal coupling ø 1/4"              | BR              |
|   | 17701             | T-equal coupling ø 10                | BR              |
|   | 078.08            | T-equal coupling ø 10                | BR              |
|   | 586.02            | T-equal coupling ø 10                | SST             |
|   | 478.02            | T-equal coupling ø 10                | ST-YG           |
|   | 604.02            | T-equal coupling ø 12                | SST             |
|   | 496.02            | T-equal coupling ø 12                | ST-YG           |
|   | 147.12            | T-equal coupling ø 12 - ø 8 - ø 12   | ST-YG           |
|   | 615.02            | T-equal coupling ø 15                | SST             |
|   | 306.08            | T-equal coupling ø 15                | ST-YG           |
|   | 105.22            | T-equal coupling ø 22mm              | SST             |
|   | 663.02            | T-equal coupling ø 22mm              | ST-YG           |
|   | 118.01            | T-equal coupling ø 5/16"             | BR              |

| <b>Cross union coupling (ferrule)</b> |                |                             |                 |
|---------------------------------------|----------------|-----------------------------|-----------------|
| <i>pos.</i>                           | <i>art.nr.</i> | <i>description</i>          | <i>material</i> |
| 18                                    | 117.01         | Cross union coupling ø 8    | BR              |
|                                       | 460.02         | Cross union coupling ø 8    | ST-YG           |
|                                       | 479.02         | Cross union coupling ø 10   | ST-YG           |
|                                       | 497.02         | Cross union coupling ø 12   | ST-YG           |
| <b>Pipe</b>                           |                |                             |                 |
| <i>pos.</i>                           | <i>art.nr.</i> | <i>description</i>          | <i>material</i> |
| 19                                    | 333.02         | Pipe ø 8                    | SST             |
|                                       | 320.02         | Pipe ø 8                    | ST-YG           |
|                                       | 317.02         | Pipe ø 10                   | kunifer         |
|                                       | 334.02         | Pipe ø 10                   | SST             |
|                                       | 321.02         | Pipe ø 10                   | ST-YG           |
|                                       | 510.22         | Pipe ø 10 4mtr              | ST-YG           |
|                                       | 214.12         | Pipe ø 10x50mm              | ST-YG           |
|                                       | 172.01         | Pipe ø 10x5mm               | ST-YG           |
|                                       | 652.22         | Pipe ø 10x6 2500mm          | ST-YG           |
|                                       | 653.22         | Pipe ø 10x6 3000mm          | ST-YG           |
|                                       | 246.22         | Pipe ø 10x6 800mm           | ST-YG           |
|                                       | 245.22         | Pipe ø 10x8 650mm           | ST-YG           |
|                                       | 335.02         | Pipe ø 12                   | SST             |
|                                       | 322.02         | Pipe ø 12                   | ST-YG           |
|                                       | 336.02         | Pipe ø 15                   | SST             |
|                                       | 323.02         | Pipe ø 15                   | ST-YG           |
|                                       | 256.02         | Pipe ø 22                   | SST             |
|                                       | 326.02         | Pipe ø 22                   | ST-YG           |
|                                       | 316.02         | Pipe ø 5/16"                | kunifer         |
|                                       | 103.12         | Pipe G1/8x ø 10x1750mm      | ST-YG           |
|                                       | 254.22         | Pipe G1/8x ø 10x1900mm      | ST-YG           |
| <b>Protection spiral</b>              |                |                             |                 |
| <i>pos.</i>                           | <i>art.nr.</i> | <i>description</i>          | <i>material</i> |
| 22                                    | 369.02         | Protection spiral ø 23      | ST-G            |
|                                       | 749.22         | Protection spiral ø 13,9 ID | ST-G            |

| <b>Sealing ring</b>                        |                |  |                 |
|--|----------------|--|-----------------|
| <i>pos.</i>                                | <i>art.nr.</i> | <i>description</i>                                   | <i>material</i> |
| 28   | 318.01         | Sealing ring   | BR              |
|  | 839.01         | Sealing ring   | BR              |
| <b>Threaded plug</b>                       |                |  |                 |
| <i>pos.</i>                                | <i>art.nr.</i> | <i>description</i>                                   | <i>material</i> |
| 29   | 127.01         | Threaded plug R1/4                                   | BR              |
|  | 114.02         | Threaded plug R1/4                                   | SST             |
|  | 329.01         | Threaded plug R1/4                                   | BR              |
|  | 442.01         | Threaded plug R1/4 (O-ring)                          | BR              |
| <b>Stud standpipe adaptor</b>              |                |  |                 |
| <i>pos.</i>                                | <i>art.nr.</i> | <i>description</i>                                   | <i>material</i> |
| 30   | 504.01         | Stud standpipe adaptor 10 - 1/4                      | ST-YG           |
| <b>Quick-disconnect coupling (screw)</b>   |                |  |                 |
| <i>pos.</i>                                | <i>art.nr.</i> | <i>description</i>                                   | <i>material</i> |
| 31   | 801.01         | Quick-disconnect coupling (male)                     | ST-YG           |
| 32   | 803.01         | Dust cap for 801.01                                  |                 |
| 33   | 802.01         | Dust cap for 800.01                                  |                 |
| 34   | 800.01         | Quick-disconnect coupling (female)                   | ST-YG           |
| <b>Quick-disconnect coupling (Pioneer)</b> |                |  |                 |
| <i>pos.</i>                                | <i>art.nr.</i> | <i>description</i>                                   | <i>material</i> |
| 31   | 619.02         | Quick-disconnect coupling (male)                     | ST-YG           |
| 32   | 620.02         | Dust cap for 619.02                                  | ST-YG           |
| 33   | 621.02         | Dust cap for 618.02                                  | ST-YG           |
| 34   | 618.02         | Quick-disconnect coupling (female)                   | ST-YG           |
| <b>T-male stud coupling (ferrule)</b>      |                |  |                 |
| <i>pos.</i>                                | <i>art.nr.</i> | <i>description</i>                                   | <i>material</i> |
| 41   | 467.22         | T-male stud coupling $\varnothing$ 8 - 1/4           | SST             |
|  | 507.02         | T-male stud coupling $\varnothing$ 8 - 1/4 NPT       | ST-YG           |
|  | 726.22         | T-male stud coupling $\varnothing$ 8 - 1/4 NPT body  | ST-YG           |
|  | 592.02         | T-male stud coupling $\varnothing$ 10 - 1/4 NPT      | SST             |
|  | 508.02         | T-male stud coupling $\varnothing$ 10 - 1/4 NPT      | ST-YG           |
|  | 727.22         | T-male stud coupling $\varnothing$ 10 - 1/4 NPT body | ST-YG           |
|  | 642.22         | T-male stud coupling $\varnothing$ 12 - 1/4 NPT      | ST-YG           |
|  | 146.12         | T-male stud coupling $\varnothing$ 12 - 1/4 NPT      | ST-YG           |
| <b>L-male stud coupling (ferrule)</b>      |                |  |                 |
| <i>pos.</i>                                | <i>art.nr.</i> | <i>description</i>                                   | <i>material</i> |
| 42   | 469.22         | L-male stud coupling $\varnothing$ 8 - 1/4           | SST             |
|  | 724.22         | L-male stud coupling $\varnothing$ 8 - 1/4 NPT body  | ST-YG           |
|  | 502.02         | L-male stud coupling $\varnothing$ 10 - 1/4 NPTF     | SST             |
|  | 109.22         | L-male stud coupling $\varnothing$ 10 - 1/4 NPTF     | SST             |
|  | 468.22         | L-male stud coupling $\varnothing$ 10 - 1/4          | SST             |
|  | 725.22         | L-male stud coupling $\varnothing$ 10 - 1/4 NPT body | ST-YG           |

| <b>T-threaded coupling</b> |                |               |                    |               |                 |
|----------------------------|----------------|---------------|--------------------|---------------|-----------------|
| <i>pos.</i>                | <i>art.nr.</i> | <i>size A</i> | <i>size B</i>      | <i>size C</i> | <i>material</i> |
| 43                         | 440.01         | 1/4 NPT       | 1/4 (O-ring + nut) | 1/4 NPT       | BR              |
|                            | 240.01         | 1/4 NPT       | 1/4 NPT            | 1/4 NPT       | BR              |
| <b>T-threaded coupling</b> |                |               |                    |               |                 |
| <i>pos.</i>                | <i>art.nr.</i> | <i>size A</i> | <i>size B</i>      | <i>size C</i> | <i>material</i> |
| 44                         | 087.08         | 1/8 NPT       | 1/8 NPT            | 1/8 NPT       | BR              |
|                            | 088.08         | 1/4 NPT       | 1/4 NPT            | 1/4 NPT       | BR              |



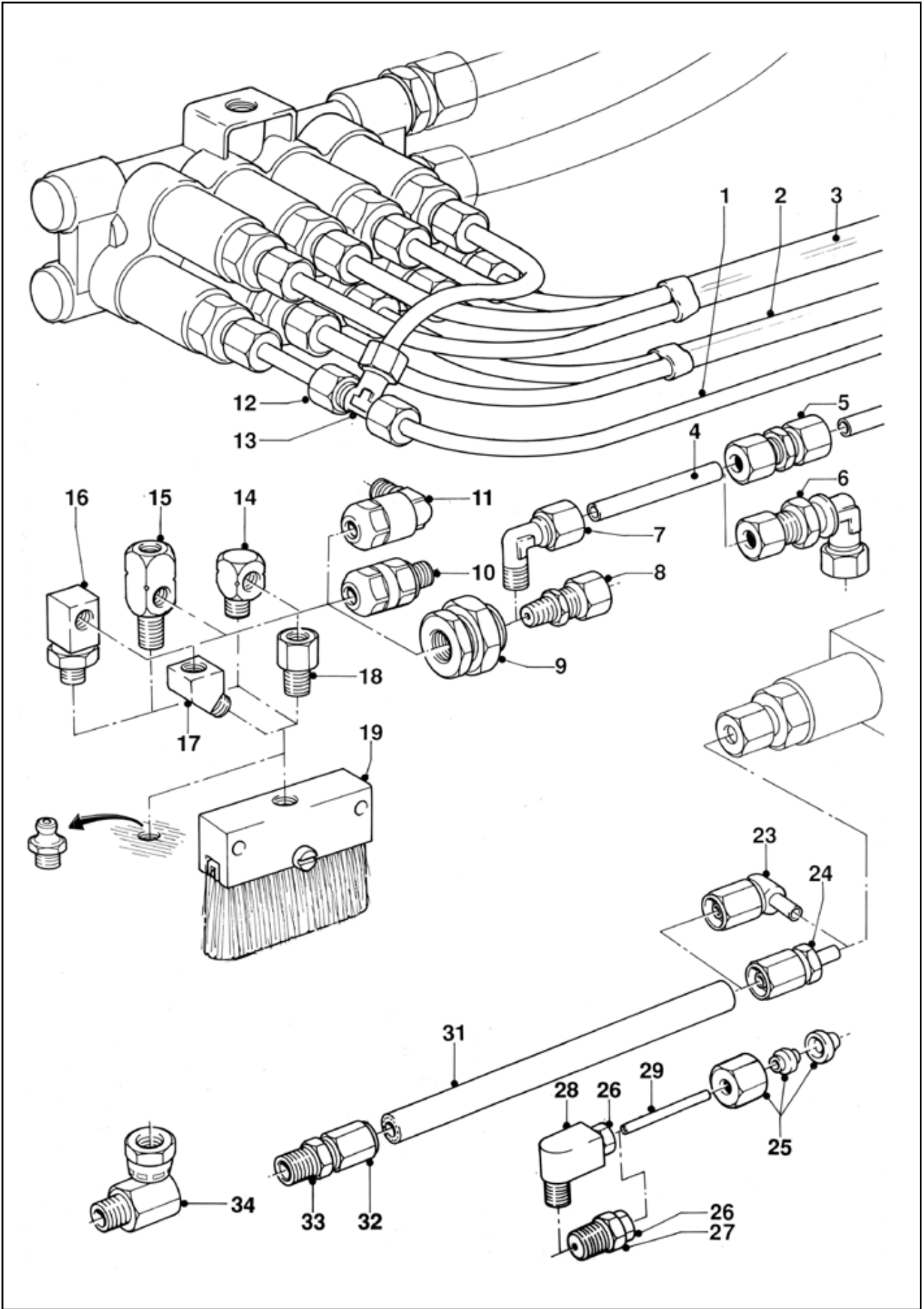


## 4 - METERING UNITS

| Metering units |               |                                 |                 |
|----------------|---------------|---------------------------------|-----------------|
| <i>pos</i>     | <i>art.nr</i> | <i>description</i>              | <i>material</i> |
| 1              | 126.030       | Allen bolt M6 x 30              | ST-G            |
|                | 136.030       | Allen bolt M6 x 30              | SST             |
| 2              | 092.02        | Serrated lock washer 6,4        | ST-G            |
|                | 350.006       | Spring washer 6,1               | SST             |
| 3              | 432.22        | 2 Port block flat               | SST             |
|                | 433.22        | 3 Port block flat               | SST             |
|                | 434.22        | 4 Port block flat               | SST             |
|                | 435.22        | 6 Port block flat               | SST             |
|                | 436.22        | 2+2 Port block flat             | SST             |
|                | 437.22        | 3+3 Port block flat             | SST             |
|                | 438.22        | 4+4 Port block flat             | SST             |
|                | 439.22        | 6+6 Port block flat             | SST             |
|                | 705.01        | 8 Port block flat               | BR              |
|                | 729.01        | 2 Port block flat               | BR              |
|                | 750.01        | 3 Port block flat               | BR              |
|                | 755.01        | 2+2 Port block flat             | BR              |
|                | 756.01        | 6 Port block flat               | BR              |
| 4              | 767.01        | 3+3 Port block flat             | BR              |
|                | 771.01        | 4 Port block flat               | BR              |
|                | 772.01        | 4+4 Port block flat             | BR              |
|                | 793.01        | 6+6 Port block flat             | BR              |
|                | 964.01        | 10+10 Port block flat           | BR              |
|                | 068.17        | 5 Port block flat               | BR              |
|                | 524.22        | 8 Port block flat               | SST             |
|                | 089.17        | Mounting plate 5 port block     | ST              |
|                | 810.01        | Mounting plate 2 port block     | ST              |
|                | 811.01        | Mounting plate 3 port block     | ST              |
| 5              | 812.01        | Mounting plate 4 port block     | ST              |
|                | 813.01        | Mounting plate 6 port block     | ST              |
|                | 814.01        | Mounting plate 8 port block     | ST              |
|                | 815.01        | Mounting plate 2+2 port block   | ST              |
|                | 816.01        | Mounting plate 3+3 port block   | ST              |
|                | 817.01        | Mounting plate 4+4 port block   | ST              |
|                | 818.01        | Mounting plate 6+6 port block   | ST              |
|                | 666.01        | Pressure switch valve           | BR              |
| 6              | 914.01        | Pressure switch valve           | SST             |
|                | 664.01        | Pressure switch 125bar (loose)  | BR              |
|                | 665.01        | Pressure switch 150bar (loose)  | BR              |
|                | 728.01        | Pressure switch 175bar (loose)  | BR              |
|                | 766.01        | Pressure switch 100bar (loose)  | BR              |
| 7              | 913.01        | Pressure switch 100bar (loose)  | SST             |
|                | 737.01        | Pressure switch 100bar complete | BR              |
|                | F170446       | Pressure switch 150bar complete | SST             |
|                | F115874       | Pressure switch 150bar complete | BR              |
|                | 143.17        | Pressure switch 250bar complete | BR              |

| <b>Metering units (continuation)</b> |               |                                 |                 |
|--------------------------------------|---------------|---------------------------------|-----------------|
| <i>pos</i>                           | <i>art.nr</i> | <i>description</i>              | <i>material</i> |
| 8                                    | 703.01        | 4 Port block M10                | BR              |
|                                      | F110628       | 4 Port block M10 without stud   | BR              |
|                                      | 704.01        | 7 Port block M10                | BR              |
|                                      | 167.17        | 7 Port block M10 without stud   | BR              |
|                                      | 025.17        | 9 Port block M10                | BR              |
|                                      | 726.01        | 9 Port block M10                | BR              |
|                                      | 080.11        | 9 Port block M10 without stud   | BR              |
|                                      | 165.17        | 9 Port block M10                | BR              |
|                                      | 885.01        | 14 Port block M10               | BR              |
|                                      | 706.01        | 12 Port block M10               | BR              |
|                                      | 836.01        | 18 Port block M10               | BR              |
|                                      | 168.17        | 18 Port block M10 without stud  | BR              |
|                                      | 166.17        | 18 Port block M10               | SST             |
|                                      | F115174       | 18 Port block M10 without stud  | SST             |
|                                      | 995.01        | 21 Port block M10               | BR              |
|                                      | 141.17        | 21 Port block M10 without stud  | BR              |
|                                      | 202.17        | 22 Port block M10               | BR              |
|                                      | 210.17        | 22 Port block M10 without stud  | BR              |
|                                      | 994.01        | 32 Port block M10               | BR              |
| 9                                    | 100.17        | Metering unit 0/M22/5mm/crimp   | BR              |
|                                      | 101.17        | Metering unit 1/M22/5mm/crimp   | BR              |
|                                      | 102.17        | Metering unit 2/M22/5mm/crimp   | BR              |
|                                      | 103.17        | Metering unit 3/M22/5mm/crimp   | BR              |
|                                      | 104.17        | Metering unit 4/M22/5mm/crimp   | BR              |
|                                      | 105.17        | Metering unit 8/M22/5mm/crimp   | BR              |
|                                      | 194.17        | Metering unit 10/M22/6mm/crimp  | SST             |
|                                      | 910.01        | Metering unit 10/M22/6mm/crimp  | BR              |
|                                      | 423.22        | Metering unit 0/M22/6mm/crimp   | SST             |
|                                      | 424.22        | Metering unit 1/M22/6mm/crimp   | SST             |
|                                      | 425.22        | Metering unit 2/M22/6mm/crimp   | SST             |
|                                      | 426.22        | Metering unit 3/M22/6mm/crimp   | SST             |
|                                      | 427.22        | Metering unit 4/M22/6mm/crimp   | SST             |
|                                      | 428.22        | Metering unit 6/M22/6mm/crimp   | SST             |
|                                      | 429.22        | Metering unit 8/M22/6mm/crimp   | SST             |
|                                      | 430.22        | Metering unit 8,5/M22/6mm/crimp | SST             |
|                                      | 431.22        | Metering unit 9/M22/6mm/crimp   | SST             |
|                                      | 708.01        | Metering unit 1/M22/6mm/crimp   | BR              |
|                                      | 709.01        | Metering unit 2/M22/6mm/crimp   | BR              |
|                                      | 710.01        | Metering unit 3/M22/6mm/crimp   | BR              |
|                                      | 711.01        | Metering unit 4/M22/6mm/crimp   | BR              |
|                                      | 712.01        | Metering unit 8/M22/6mm/crimp   | BR              |
|                                      | 727.01        | Metering unit 6/M22/6mm/crimp   | BR              |
|                                      | 794.01        | Metering unit 0/M22/6mm/crimp   | BR              |
|                                      | 795.01        | Metering unit 8,5/M22/6mm/crimp | BR              |
|                                      | 796.01        | Metering unit 9/M22/6mm/crimp   | BR              |
|                                      | 804.01        | Metering unit 5/M22/6mm/crimp   | BR              |
|                                      | 805.01        | Metering unit 7/M22/6mm/crimp   | BR              |

| <b>Metering units (continuation)</b> |                |                                |                 |
|--------------------------------------|----------------|--------------------------------|-----------------|
| <i>pos.</i>                          | <i>art.nr.</i> | <i>description</i>             | <i>material</i> |
| 10                                   | 899.01         | Reduction set Ø6mm - Ø1/8"     | BR              |
| 11                                   | 089.08         | Nut Ø6mm/M10x1/ST              | BR              |
|                                      | 147.17         | Nut Ø6mm/M10x1/ST              | SST             |
| 12                                   | 098.08         | Ferrule Ø6mm                   | BR              |
|                                      | 146.17         | Ferrule Ø6mm                   | SST             |
| 14                                   | 837.01         | Reduction adaptor M22-1/4/Z.U. | BR              |
|                                      | 917.01         | Reduction adaptor M22-1/4/Z.U. | SST             |
| 15                                   | 838.01         | Reduction adaptor M22-1/4/O.U. | BR              |
|                                      | 916.01         | Reduction adaptor M22-1/4/O.U. | SST             |
| 16                                   | 029.17         | O-ring 106 (6,75x1,78) 90g     | rubber          |
|                                      | 030.17         | O-ring 2075 (18.77x1.78) 90g   | rubber          |
| 17                                   | 707.01         | Shutt-off plug M22x1           | BR              |
|                                      | 915.01         | Shutt-off plug M22x1           | SST             |



## 5 - SECONDARY TUBES

| <b>Grease pipe, synthetic, single</b> |               |  |                 |
|---------------------------------------|---------------|--|-----------------|
| <i>pos.</i>                           | <i>art.nr</i> | <i>description</i>                               | <i>material</i> |
| 1                                     | 022.01        | Grease pipe, single, 3/16" (DIN 73378)           | PA              |
|                                       | 022.11        | Grease pipe, single, 3/16" per 3m                | PA              |
|                                       | 022.07        | Grease pipe, single, 3/16" per 5m                | PA              |
|                                       | 729.22        | Grease pipe, single, 3/16" per mtr. (ex. grease) | PA              |
|                                       | 722.01        | Grease pipe, single, 6mm per 3m                  | PA              |
|                                       | 773.01        | Grease pipe, single, 6mm per m (6x1,5 mm)        | PA              |
| <b>Grease pipe, synthetic, double</b> |               |  |                 |
| <i>pos.</i>                           | <i>art.nr</i> | <i>description</i>                               | <i>material</i> |
| 2                                     | 023.01        | Grease pipe, double, 3/16" (DIN 73378)           | PA              |
|                                       | 023.11        | Grease pipe, double, 3/16" per 3m                | PA              |
|                                       | 023.17        | Grease pipe, double, 3/16" per 5m                | PA              |
|                                       | 723.01        | Grease pipe, double, 6mm per 3m                  | PA              |
|                                       | 774.01        | Grease pipe, double, 6mm per m                   | PA              |
| <b>Grease pipe, synthetic, triple</b> |               |  |                 |
| <i>pos.</i>                           | <i>art.nr</i> | <i>description</i>                               | <i>material</i> |
| 3                                     | 024.01        | Grease pipe, triple, 3/16" (DIN 73378)           | PA              |
|                                       | 024.11        | Grease pipe, triple, 3/16" per 3m                | PA              |
|                                       | 024.17        | Grease pipe, triple, 3/16" per 5m                | PA              |
|                                       | 724.01        | Grease pipe, triple, 6mm per 3m                  | PA              |
|                                       | 775.01        | Grease pipe, triple, 6mm per m                   | PA              |
| <b>Grease pipe</b>                    |               |  |                 |
| <i>pos.</i>                           | <i>art.nr</i> | <i>description</i>                               | <i>material</i> |
| 4                                     | 319.02        | Grease pipe 6 mm x 1 mm (DIN 2445/2)             | ST-YG           |
|                                       | 331.02        | Grease pipe 6 mm x 1 mm (ASTM A-269)             | SST             |
|                                       | 315.02        | Grease pipe 3/16"                                | Kunifer         |
|                                       | 328.02        | Grease pipe 3/16" x 0,035" (ASTM A-269)          | SST             |
|                                       | 313.02        | Grease pipe Ø6                                   | BR              |
|                                       | 343.22        | Grease pipe Ø6                                   | Kunifer         |
|                                       | 330.02        | Grease pipe 1/8                                  | SST             |

| <b>Straight connecting coupling (ferrule)</b> |                |  |               |               |                 |
|---|----------------|--|---------------|---------------|-----------------|
| <i>pos.</i>                                   | <i>art.nr.</i> | <i>size A</i>                                  | <i>size B</i> | <i>size C</i> | <i>material</i> |
| 5   | 083.08         | 6  | 6             |               | BR              |
|   | 299.01         | 6  | 6             |               | ST-YG           |
|   | 408.02         | 1/8"   | 1/8"          |               | BR              |
|   | 106.01         | 3/16"  | 3/16"         |               | BR              |
|   | 555.22         | 6  | 6             |               | SST             |
| <b>Panel mount elbow union</b>                |                |  |               |               |                 |
| <i>pos.</i>                                   | <i>art.nr.</i> | <i>description</i>                             |               |               | <i>material</i> |
| 6   | 240.12         | Panel mount elbow union 6mm                    |               |               | SST             |
|   | 223.01         | Panel mount elbow union6mm                     |               |               | ST-YG           |
| <b>Male stud elbow (ferrule)</b>              |                |  |               |               |                 |
| <i>pos.</i>                                   | <i>art.nr.</i> | <i>description</i>                             |               |               | <i>material</i> |
| 7   | 422.01         | Male stud elbow $\varnothing$ 3/16 - 1/8 NPTF  |               |               | BR              |
|   | 137.01         | Male stud elbow $\varnothing$ 3/16 - M10x1 con |               |               | BR              |
|   | 121.01         | Male stud elbow $\varnothing$ 3/16 - M8x1      |               |               | BR              |
|   | 187.01         | Male stud elbow $\varnothing$ 3/16 - M8x1,5    |               |               | BR              |
|   | 102.01         | Male stud elbow $\varnothing$ 3/16 - R1/8 NPT  |               |               | BR              |
|   | 531.22         | Male stud elbow $\varnothing$ 6 - 1/4 NPT      |               |               | ST-YG           |
|   | 982.01         | Male stud elbow $\varnothing$ 6 - 1/8 NPT      |               |               | BR              |
|   | 559.02         | Male stud elbow $\varnothing$ 6 - 1/8 NPT      |               |               | SST             |
|   | 132.17         | Male stud elbow $\varnothing$ 6 - M10x1        |               |               | BR              |
|   | 439.02         | Male stud elbow $\varnothing$ 6 - M10x1        |               |               | ST-YG           |
|   | 436.02         | Male stud elbow $\varnothing$ 6 - M6x1         |               |               | ST-YG           |
|   | 133.17         | Male stud elbow $\varnothing$ 6 - M8x1         |               |               | BR              |
|   | 437.02         | Male stud elbow $\varnothing$ 6 - M8x1         |               |               | ST-YG           |
|   | 082.08         | Male stud elbow $\varnothing$ 6 - R1/4         |               |               | BR              |
|   | 562.02         | Male stud elbow $\varnothing$ 6 - R1/4         |               |               | SST             |
|   | 080.08         | Male stud elbow $\varnothing$ 6 - R1/8         |               |               | BR              |
|   | 438.02         | Male stud elbow $\varnothing$ 6 - R1/8         |               |               | ST-YG           |

| <b>Male stud coupling (ferrule)</b>          |                |  |                 |
|--|----------------|--|-----------------|
| <i>pos.</i>                                  | <i>art.nr.</i> | <i>description</i>                                   | <i>material</i> |
| 8  | 104.01         | Male stud coupling $\varnothing$ 3/16" - 1/8         | BR              |
|  | 421.01         | Male stud coupling $\varnothing$ 3/16" - 1/8 NPTR    | BR              |
|  | 138.01         | Male stud coupling $\varnothing$ 3/16" - M10x1 con   | BR              |
|  | 212.01         | Male stud coupling $\varnothing$ 3/16" - M6x1 con    | ST-YG           |
|  | 657.01         | Male stud coupling $\varnothing$ 3/16" - M6x1 con    | ST-YG(L)        |
|  | 101.01         | Male stud coupling $\varnothing$ 3/16" - M7x1        | BR              |
|  | 130.01         | Male stud coupling $\varnothing$ 3/16" - M8          | BR              |
|  | 219.01         | Male stud coupling $\varnothing$ 3/16" - M8x1 con    | BR              |
|  | 235.01         | Male stud coupling $\varnothing$ 3/16" - M8x1 con    | BR(L)           |
|  | 585.01         | Male stud coupling $\varnothing$ 3/16" - M8x1 con    | ST-YG           |
|  | 166.01         | Male stud coupling $\varnothing$ 3/16" - M8x1,25 con | BR              |
|  | 188.01         | Male stud coupling $\varnothing$ 3/16" - M8x1,25 con | BR              |
|  | 414.02         | Male stud coupling $\varnothing$ 5 - M8 con          | SST             |
|  | 413.02         | Male stud coupling $\varnothing$ 5 - R1/8            | SST             |
|  | 081.08         | Male stud coupling $\varnothing$ 6 - 1/4             | BR              |
|  | 530.22         | Male stud coupling $\varnothing$ 6 - 1/4 BSP         | ST-YG(L)        |
|  | 079.08         | Male stud coupling $\varnothing$ 6 - 1/8             | BR              |
|  | 981.01         | Male stud coupling $\varnothing$ 6 - 1/8             | BR              |
|  | 148.17         | Male stud coupling $\varnothing$ 6 - 1/8             | SST             |
|  | 561.02         | Male stud coupling $\varnothing$ 6 - G1/4            | SST             |
|  | 987.02         | Male stud coupling $\varnothing$ 6 - G1/8            | SST             |
|  | 134.17         | Male stud coupling $\varnothing$ 6 - M10x1           | BR              |
|  | 578.02         | Male stud coupling $\varnothing$ 6 - M10x1           | SST             |
|  | 435.02         | Male stud coupling $\varnothing$ 6 - M10x1           | ST-YG           |
|  | 150.17         | Male stud coupling $\varnothing$ 6 - M6x1 short      | ST-YG           |
|  | 840.01         | Male stud coupling $\varnothing$ 6 - M6x1            | BR              |
|  | 135.17         | Male stud coupling $\varnothing$ 6 - M6x1            | ST-YG           |
|  | 432.02         | Male stud coupling $\varnothing$ 6 - M6x1            | ST-YG           |
|  | 136.17         | Male stud coupling $\varnothing$ 6 - M8x1            | BR              |
|  | F170898        | Male stud coupling $\varnothing$ 6 - M8x1            | SST             |
|  | 433.02         | Male stud coupling $\varnothing$ 6 - M8x1            | ST-YG           |
|  | 434.02         | Male stud coupling $\varnothing$ 6 - R1/8            | ST-YG           |
| <b>Panel mount union (threaded coupling)</b> |                |  |                 |
| <i>pos.</i>                                  | <i>art.nr.</i> | <i>description</i>                                   | <i>material</i> |
| 9  | 209.02         | Panel mount union M15 - G1/8                         | BR              |
|  | 226.01         | Panel mount union M20 - G1/4                         | BR              |

| <b>Male plug-in coupling</b> |                |  |                 |
|------------------------------|----------------|--|-----------------|
| <i>pos.</i>                  | <i>art.nr.</i> | <i>description</i>                                       | <i>material</i> |
| 10                           | 036.11         | Male plug-in coupling $\varnothing$ 3/16 - 1/8 NPT       | BR              |
|                              | 922.01         | Male plug-in coupling $\varnothing$ 3/16 - 1/8 - 27 NPTF | BR              |
|                              | 105.01         | Male plug-in coupling $\varnothing$ 3/16 - G1/8          | BR              |
|                              | 035.11         | Male plug-in coupling $\varnothing$ 3/16 - M8x1          | BR              |
|                              | 758.01         | Male plug-in coupling $\varnothing$ 3/16 - M8x1          | BR              |
|                              | 759.01         | Male plug-in coupling $\varnothing$ 3/16 - M10x1         | BR              |
|                              | 085.16         | Male plug-in coupling $\varnothing$ 3/16 - M6x1          | ST-YG           |
|                              | 086.16         | Male plug-in coupling $\varnothing$ 3/16 - M6x1 short    | ST-YG           |
|                              | 061.11         | Male plug-in coupling $\varnothing$ 3/16 - R1/8          | BR              |
|                              | 087.16         | Male plug-in coupling $\varnothing$ 3/16 - R1/8          | ST-YG           |
|                              | 587.22         | Male plug-in coupling $\varnothing$ 4 - M6               | BR              |
|                              | 194.01         | Male plug-in coupling $\varnothing$ 6 - G1/8             | BR              |
|                              | 886.01         | Male plug-in coupling $\varnothing$ 6 - M6x1             | BR              |
| <b>Male plug-in elbow</b>    |                |  |                 |
| <i>pos.</i>                  | <i>art.nr.</i> | <i>description</i>                                       | <i>material</i> |
| 11                           | 037.11         | Male plug-in elbow $\varnothing$ 3/16 - 1/8 NPT          | BR              |
|                              | 921.01         | Male plug-in elbow $\varnothing$ 3/16 - 1/8 - 27 NPTF    | BR              |
|                              | 495.01         | Male plug-in elbow $\varnothing$ 3/16 - M8x1             | BR              |
|                              | 760.01         | Male plug-in elbow $\varnothing$ 3/16 - M8x1             | BR              |
|                              | 034.11         | Male plug-in elbow $\varnothing$ 3/16 - M8x1             | BR              |
|                              | 496.01         | Male plug-in elbow $\varnothing$ 3/16 - M10x1            | BR              |
|                              | 761.01         | Male plug-in elbow $\varnothing$ 3/16 - M10x1            | BR              |
|                              | 060.11         | Male plug-in elbow $\varnothing$ 3/16 - R1/8             | BR              |
|                              | 577.22         | Male plug-in elbow $\varnothing$ 4 - M10                 | BR              |
|                              | 664.09         | Male plug-in elbow $\varnothing$ 5 - G1/8                | BR              |
|                              | 578.22         | Male plug-in elbow $\varnothing$ 6 - 1/8 NPT             | BR              |
|                              | 191.01         | Male plug-in elbow $\varnothing$ 6 - G1/8                | BR              |
|                              | 170.33         | Male plug-in elbow $\varnothing$ 6 - M5                  | BR              |
|                              | 079.04         | Male plug-in elbow $\varnothing$ 6 - R1/8                | BR              |

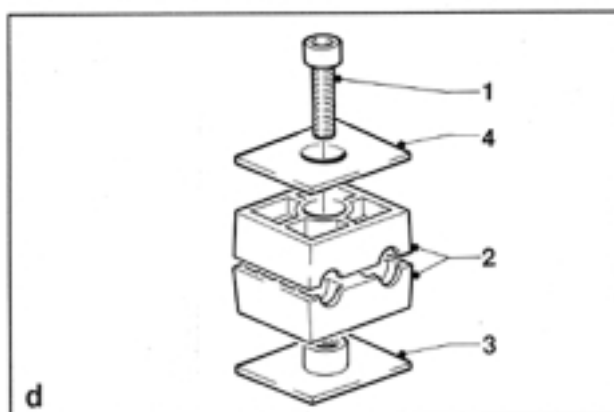
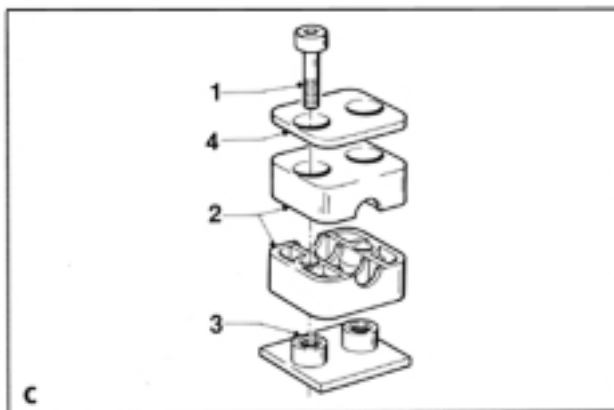
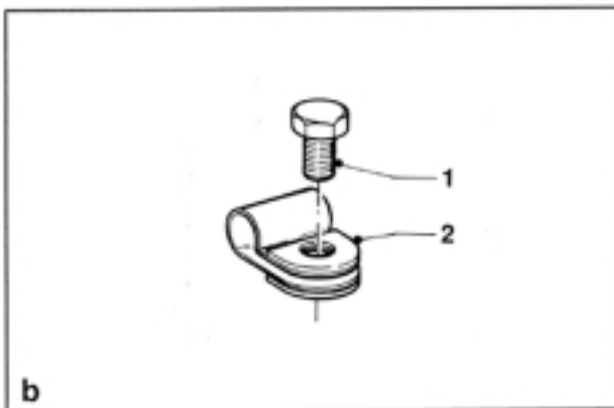
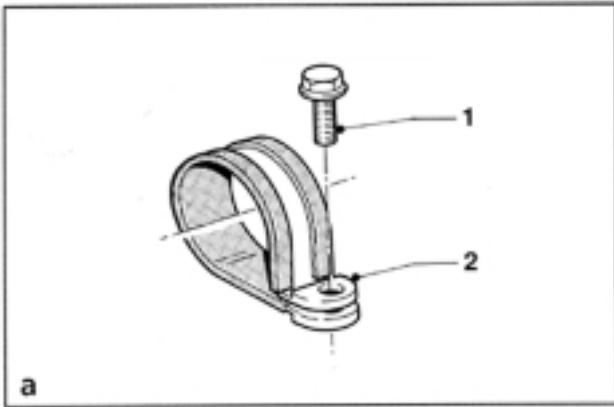


| <b>Nut / Ferrule</b>              |                |               |               |               |                 |
|-----------------------------------|----------------|---------------|---------------|---------------|-----------------|
| <i>pos.</i>                       | <i>art.nr.</i> | <i>size A</i> | <i>size B</i> | <i>size C</i> | <i>material</i> |
| <i>Nut</i>                        |                |               |               |               |                 |
| 12                                | 417.02         | 5             | M10x1         |               | SST             |
|                                   | 170.02         | 6             | M10x1         |               | ST-YG           |
|                                   | 157.01         | 3/16"         | 3/8 UNF       |               | BR              |
|                                   | 107.01         | 3/16"         | M10x1         |               | BR              |
|                                   | 089.08         | 6             | M10x1         |               | BR              |
|                                   | 013.16         | 6             | M12x1         |               | ST-YG           |
| <i>Single sided ferrule</i>       |                |               |               |               |                 |
| 12                                | 171.02         | 6             |               |               | ST-YG           |
|                                   | 429.02         | 6             |               |               | SST             |
|                                   | 158.01         | 3/16"         |               |               | BR              |
|                                   | 537.22         | 5             |               |               | SST             |
| <i>2-Sided ferrule</i>            |                |               |               |               |                 |
| 12                                | 098.08         | 6             |               |               | BR              |
|                                   | 108.01         | 3/16"         |               |               | BR              |
|                                   | 418.02         | 3/16"         |               |               | SST             |
| <b>T-equal coupling (ferrule)</b> |                |               |               |               |                 |
| <i>pos.</i>                       | <i>art.nr.</i> | <i>size A</i> | <i>size B</i> | <i>size C</i> | <i>material</i> |
| 13                                | 141.01         | 5             | 5             |               | BR              |
|                                   | 446.02         | 5             | 5             |               | SST             |
|                                   | 074.08         | 6             | 6             |               | BR              |
|                                   | 560.02         | 6             | 6             |               | SST             |
| <b>Male stud elbow</b>            |                |               |               |               |                 |
| <i>pos.</i>                       | <i>artnr.</i>  | <i>size A</i> | <i>size B</i> | <i>size C</i> | <i>material</i> |
| 14                                | 085.01         | 1/4 UNF       | 1/8G          |               | ST-YG           |
|                                   | 021.01         | 1/4 UNF       | 1/8G          |               | ST-YG           |
|                                   | 445.02         | 1/4 UNF       | 1/8G          |               | SST             |
|                                   | 979.01         | 1/8 NPTF      | 1/8 NPTF      |               | ST-YG           |
|                                   | 933.01         | 1/8 NPT.      | 1/8 NPT       |               | ST-YG           |
|                                   | 633.02         | 1/8 NPT.      | G1/8          |               | SST             |
|                                   | 150.01         | G1/8          | G1/8          |               | ST-YG           |
|                                   | 147.01         | M10x1         | M10x1         |               | BR              |
|                                   | 151.11         | M10x1         | M10x1         |               | BR              |
|                                   | 213.01         | M6x1 con      | M8x1          |               | ST-YG           |
|                                   | F170875        | M6x1 con      | M8x1          |               | SST             |
|                                   | 930.01         | M8x1,25       | M8x1,25       |               | BR              |
|                                   | 055.11         | M8x1          | M8x1          | l=44          | ST-YG           |
|                                   | 412.01         | M8x1 con      | M8x1          |               | BR              |
|                                   | 415.02         | M8x1 con      | M8            |               | BR              |
|                                   | 148.01         | M8x1 con      | M8x1          |               | BR              |
|                                   | 983.01         | M8x1 con.L.   | M8x1          |               | ST-YG           |
|                                   | 827.01         | R1/4          | R1/4          |               | ST-YG           |
|                                   | 062.11         | R1/8          | R1/8          |               | ST-YG           |

| <b>L-connector female</b>   |                |   |               |               |                      |
|-----------------------------|----------------|---|---------------|---------------|----------------------|
| <i>pos.</i>                 | <i>art.nr.</i> | <i>size A</i>                           | <i>size B</i> | <i>size C</i> | <i>material</i>      |
| 15                          | 206.01         | M8x1                                    | M8x1 con      | M8x1          | BR                   |
|                             | 239.01         | M10x1                                   | M10x1 con     | M10x1         | BR                   |
|                             | 392.02         | G 1/8                                   | M8x1          | M8x1          | BR (right execution) |
|                             | 399.02         | G 1/8                                   | M8x1          | M8x1          | BR (left execution)  |
|                             | 205.01         | G 1/8                                   | R 1/8         | G 1/8         | BR                   |
| <b>Stud elbow rotatable</b> |                |   |               |               |                      |
| <i>pos.</i>                 | <i>art.nr.</i> | <i>size A</i>                           | <i>size B</i> | <i>size C</i> | <i>material</i>      |
| 16                          | 214.01         | M8x1 con                                | M8x1 con      |               | BR                   |
|                             | 149.01         | G 1/8                                   | R 1/8         |               | BR                   |
|                             | 635.02         | G 1/8                                   | R 1/8         |               | ST-YG                |
|                             | 643.02         | 10                                      | R 1/4         |               | ST-YG                |
| <b>45°-Male stud elbow</b>  |                |   |               |               |                      |
| <i>pos.</i>                 | <i>art.nr.</i> | <i>size A</i>                           | <i>size B</i> | <i>size C</i> | <i>material</i>      |
| 17                          | 139.01         | 1/8 - 27 NPT                            | 1/8 - 27 NPT  |               | BR                   |
|                             | 327.01         | 1/4"                                    | 1/4"          |               | ST-YG                |
| <b>Reduction-adaptor</b>    |                |   |               |               |                      |
| <i>pos.</i>                 | <i>art.nr.</i> | <i>size A</i>                           | <i>size B</i> | <i>size C</i> | <i>material</i>      |
| 18                          | 811.22         | 1/4"                                    | 1/4" NPT      |               | BR                   |
|                             | 641.02         | 1/4 - 18 NPT                            | 1/4 NPT       |               | ST-YG                |
|                             | 029.01         | 1/4 - 18 NPT                            | 1/8 - 27 NPT  |               | BR                   |
|                             | 618.01         | 1/8 NPT                                 | 1/4" G        | L60mm         | ST-YG                |
|                             | 238.12         | 1/8 NPT                                 | 1/4" G        | 60            | SST                  |
|                             | F170988        | 1/8                                     | 1/8           | 80            | SST                  |
|                             | 640.02         | 1/8                                     | 27 NPTF       | 1/8 NPT       | ST-YG                |
|                             | 980.01         | 1/8 NPTF                                |               | 22mm          | BR                   |
|                             | 333.01         | 1/8 NPTF                                |               | 42mm          | ST-YG                |
|                             | 977.01         | 1/8 NPTF                                |               | 70mm          | ST-YG                |
|                             | 152.01         | G1/8                                    | 1/4           | 28 UNF        | BR                   |
|                             | F170989        | G1/8                                    | 1/4           | 28 UNF        | SST                  |
|                             | 155.01         | G1/8                                    | M8x1 con      |               | BR                   |
|                             | 116.08         | G1/8                                    | R1/8          | 80            | BR                   |
|                             | 085.08         | G1/8                                    | R1/8          |               | BR                   |
|                             | 632.02         | G1/8                                    | G1/4          |               | ST-YG                |
|                             | 129.22         | G1/8                                    | R1/8          |               | ST-YG                |
|                             | 444.02         | G1/8                                    | R1/8          |               | SST                  |
|                             | 161.11         | M10x1 vst                               |               |               | ST-YG                |
|                             | 479.01         | M10xM8                                  |               |               | ST-YG                |
|                             | 156.01         | M8x1                                    | M8x1 con      |               | ST-YG                |
| <b>Grease brush</b>         |                |   |               |               |                      |
| <i>pos.</i>                 | <i>art.nr.</i> | <i>description</i>                      |               |               | <i>material</i>      |
| 19                          | 659.02         | Grease brush G 1/8, flat (5,5 cm wide)  |               |               |                      |
|                             | 658.02         | Grease brush G 1/8, round (1,5 cm wide) |               |               |                      |
|                             | 660.02         | Grease brush G 1/8, round               |               |               | phosphor bronze      |

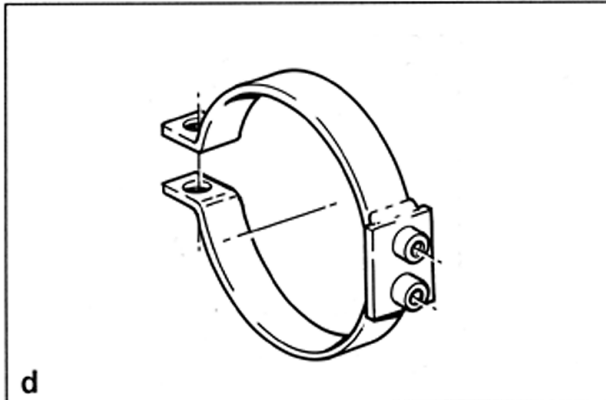
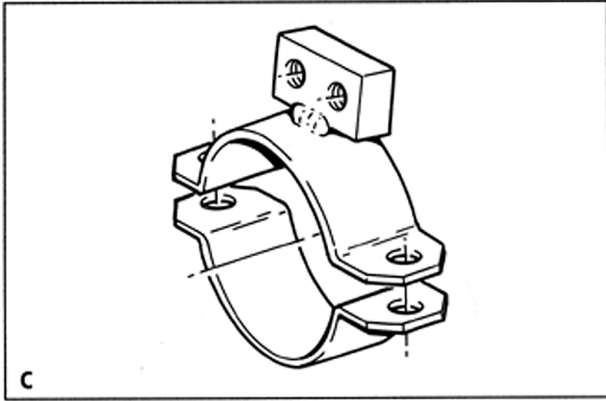
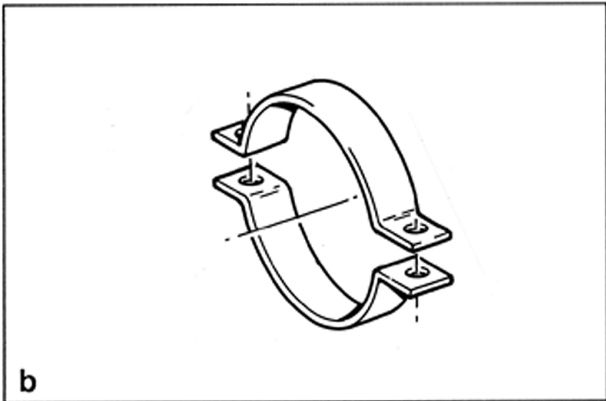
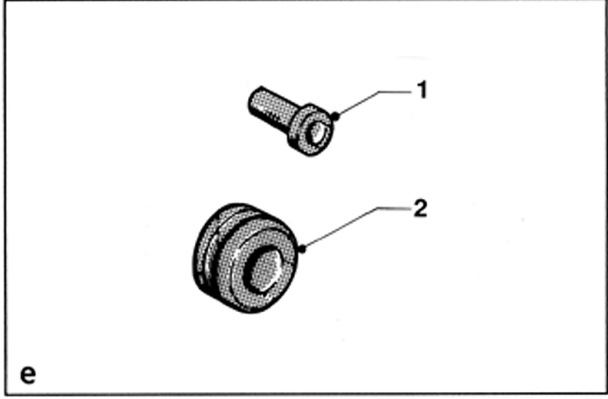
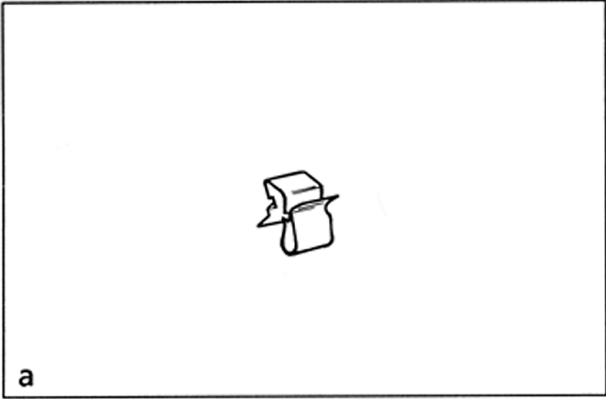
| <b>Elbow stand pipe, canvas-hose 3/16"</b>         |                |  |               |               |                  |
|--|----------------|--|---------------|---------------|------------------|
| <i>pos.</i>  | <i>art.nr.</i> | <i>description</i>                     |               |               | <i>material</i>  |
| 23   | 306.02         | Elbow stand pipe, 1/8"                 |               |               | ST-YG            |
|  | 448.01         | Elbow stand pipe, 3/16"                |               |               | ST-YG            |
|  | 168.11         | Elbow stand pipe, 6mm                  |               |               | ST-YG            |
| <b>Straight stand pipe, canvas-hose 3/16"</b>      |                |  |               |               |                  |
| <i>pos.</i>  | <i>art.nr.</i> | <i>description</i>                     |               |               | <i>material</i>  |
| 24   | 307.02         | Straight stand pipe, 1/8"              |               |               | ST-YG            |
|  | 447.01         | Straight stand pipe, 3/16"             |               |               | ST-YG            |
|  | 167.11         | Straight stand pipe, 6mm               |               |               | ST-YG            |
| <b>Reduction set</b>                               |                |  |               |               |                  |
| <i>pos.</i>  | <i>art.nr.</i> | <i>size A</i>                          | <i>size B</i> | <i>size C</i> | <i>material</i>  |
| 25   | 427.01         | 3/16"                                  | 4             |               | BR               |
|  | 236.01         | 3/16"                                  | 1/8"          |               | BR               |
| <b>Nut (feedline)</b>                              |                |  |               |               |                  |
| <i>pos.</i>  | <i>art.nr.</i> | <i>size A</i>                          | <i>size B</i> | <i>size C</i> | <i>material</i>  |
| 26   | 411.02         | 1/8"                                   | 1/8 NPT       |               | BR (feedline)    |
|  | 449.02         | 1/8"                                   | 1/8 NPT       |               | SST (feedline)   |
| <b>Male stud coupling (feedline) inclusive nut</b> |                |  |               |               |                  |
| <i>pos.</i>  | <i>art.nr.</i> | <i>size A</i>                          | <i>size B</i> | <i>size C</i> | <i>material</i>  |
| 27   | 403.02         | 1/8"                                   | 1/4-28 NPT    |               | ST-YG (feedline) |
|  | 404.02         | 1/8"                                   | 5/16-32 NPT   |               | ST-YG (feedline) |
|  | 405.02         | 1/8"                                   | 1/8-27 NPT    |               | BR (feedline)    |
|  | 447.02         | 1/8"                                   | 1/8-27 NPT    |               | SST (feedline)   |
| <b>Male stud elbow (feedline) inclusive nut</b>    |                |  |               |               |                  |
| <i>pos.</i>  | <i>art.nr.</i> | <i>size A</i>                          | <i>size B</i> | <i>size C</i> | <i>material</i>  |
| 28   | 400.02         | 1/8"                                   | 1/4-28 NPT    |               | BR (feedline)    |
|  | 401.02         | 1/8"                                   | 5/16-32 NPT   |               | BR (feedline)    |
|  | 402.02         | 1/8-27 NPT                             | 1/8 NPT       |               | BR (feedline)    |
|  | 448.02         | 1/8"                                   | 1/8 NPT       |               | SST (feedline)   |
| <b>Feedline</b>                                    |                |  |               |               |                  |
| <i>pos.</i>  | <i>art.nr.</i> | <i>description</i>                     |               |               | <i>material</i>  |
| 29   | 300.02         | Grease pipe 1/8" x 0,022"              |               |               | PA (feedline)    |
|  | 330.02         | Grease pipe 1/8" x 0,020" (ASTM A-269) |               |               | SST (feedline)   |

| <b>Canvas-hose 3/16"</b>                      |                |                                      |               |               |                 |
|---|----------------|--------------------------------------|---------------|---------------|-----------------|
| <i>pos.</i>                                   | <i>art.nr.</i> | <i>description</i>                   |               |               | <i>material</i> |
| 31  | 305.02         | Canvas-hose 3/16"-4,8 mm (SAE 30 R3) |               |               |                 |
| <b>Screw socket, canvas-hose 3/16"</b>        |                |                                      |               |               |                 |
| <i>pos.</i>                                   | <i>art.nr.</i> | <i>description</i>                   |               |               | <i>material</i> |
| 32  | 449.01         | Screw socket                         |               |               | ST-YG           |
| <b>Straight stand pipe, canvas-hose 3/16"</b> |                |                                      |               |               |                 |
| <i>pos.</i>                                   | <i>art.nr.</i> | <i>description</i>                   |               |               | <i>material</i> |
| 33  | 308.02         | Straight stand pipe, 1/8-27 NPTF     |               |               | ST-YG           |
| <b>Male stud elbow</b>                        |                |                                      |               |               |                 |
| <i>pos.</i>                                   | <i>art.nr.</i> | <i>size A</i>                        | <i>size B</i> | <i>size C</i> | <i>material</i> |
| 34  | 645.02         | 1/8-27 NPTF                          | 1/8 NPT       |               | ST-G            |
|   | 646.02         | 1/4-18 NPTF                          | 1/4 NPT       |               | ST-G            |
| <b>Male stud coupling</b>                     |                |                                      |               |               |                 |
| <i>pos.</i>                                   | <i>art.nr.</i> | <i>size A</i>                        | <i>size B</i> | <i>size C</i> | <i>material</i> |
| 36  | 640.02         | 1/8-27 NPTF                          | 1/8 NPT       |               | ST-YG           |
|   | 641.02         | 1/4-18 NPTF                          | 1/4 NPT       |               | ST-YG           |



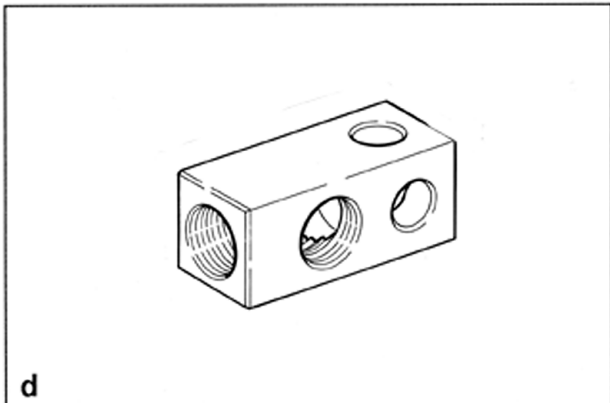
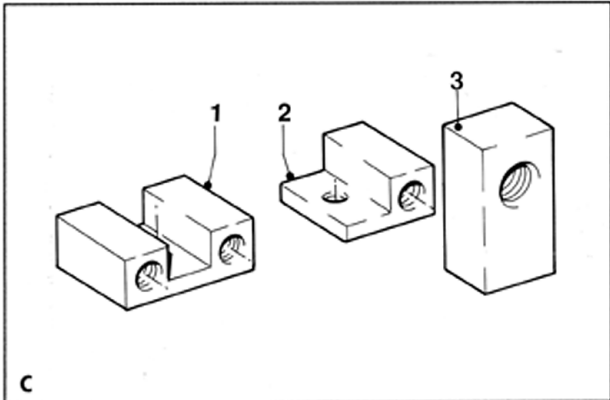
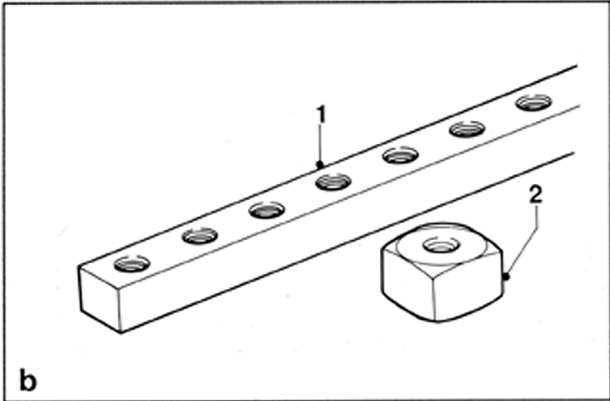
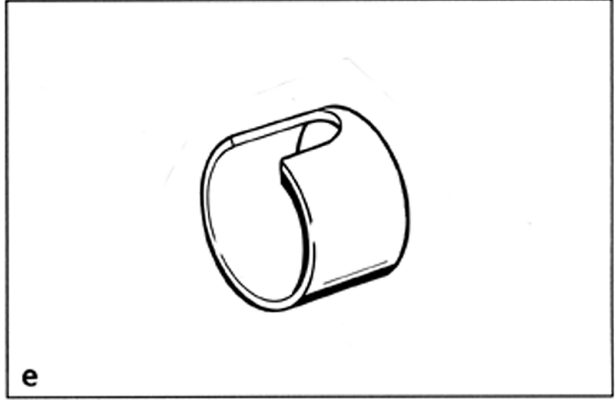
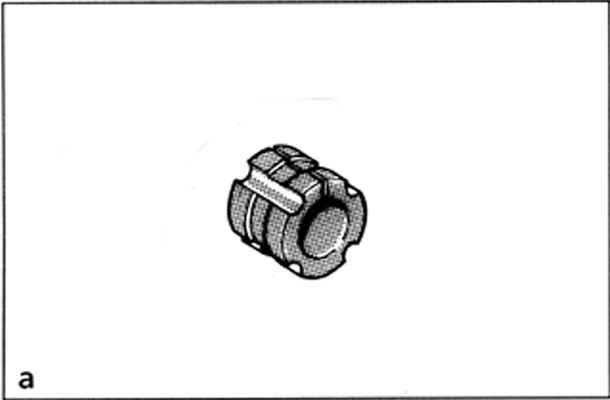
## 6 - VARIOUS MATERIALS AND PARTS

| <b>Clamping materials</b>               |                |                                     |             |                |                                     |
|---|----------------|-------------------------------------|-------------|----------------|-------------------------------------|
| <b>a. Clamp (rubber lining)</b>         |                |                                     |             |                |                                     |
| <i>pos.</i>                             | <i>art.nr.</i> | <i>description</i>                  | <i>pos.</i> | <i>art.nr.</i> | <i>description</i>                  |
| 1                                       | 027.01         | Screw, self-tapping M5x10           | 2           | 013.08         | Clamp, rubber lining 12 mm (M5)     |
|   | 814.02         | Screw M5x10 (SST)                   |             | 001.12         | Clamp, rubber lining 14 mm (M5)     |
|   | 786.06         | Screw, self-drilling 4,8x16         |             | 002.12         | Clamp, rubber lining 16 mm (M5)     |
| 2                                       | 009.08         | Clamp, rubber lining 4 mm (M5)      |             | 085.12         | Clamp, rubber lining 16 mm (M8)     |
|   | 810.02         | Clamp, rubber lining 4 mm (M5) SST  |             | 003.12         | Clamp, rubber lining 18 mm (M5)     |
|   | F170756        | Clamp, rubber lining 6 mm (M10)     |             | 008.08         | Clamp, rubber lining 18 mm (M6)     |
|   | 010.08         | Clamp, rubber lining 6 mm (M5)      |             | 230.09         | Clamp, rubber lining 18 mm (M8)     |
|   | 811.02         | Clamp, rubber lining 6 mm (M5) SST  |             | 014.08         | Clamp, rubber lining 20 mm (M5)     |
|   | 011.08         | Clamp, rubber lining 8 mm (M5)      |             | 229.09         | Clamp, rubber lining 22 mm (M6)     |
|   | 812.02         | Clamp, rubber lining 8 mm (M5) SST  |             | 143.08         | Clamp, rubber lining 25 mm (M6)     |
|   | 349.08         | Clamp, rubber lining 8 mm (M8)      |             | 181.12         | Clamp, rubber lining 28 mm (M8)     |
|   | 012.08         | Clamp, rubber lining 10 mm (M5)     |             | 231.09         | Clamp, rubber lining 28 mm (M8)     |
|   | 813.02         | Clamp, rubber lining 10 mm (M5) SST |             | 035.08         | Clamp, rubber lining 35 mm (M6)     |
|   | 142.08         | Clamp, rubber lining 10 mm (M6)     |             |                |                                     |
| <b>b. Clamp (without rubber lining)</b> |                |                                     |             |                |                                     |
| <i>pos.</i>                             | <i>art.nr.</i> | <i>description</i>                  | <i>pos.</i> | <i>art.nr.</i> | <i>description</i>                  |
| 1                                       | 027.01         | Screw, self-tapping M5x10           | 2           | 804.02         | Clamp 4 mm (SST)                    |
|   | 814.02         | Screw M5x10 (SST)                   |             | 805.02         | Clamp 5 mm (SST)                    |
|   | 786.06         | Screw, self-drilling 4,8x16         |             | 806.02         | Clamp 6 mm (SST)                    |
| <b>c. Pipe clamps with weldplate</b>    |                |                                     |             |                |                                     |
| <i>pos.</i>                             | <i>art.nr.</i> | <i>description</i>                  | <i>pos.</i> | <i>art.nr.</i> | <i>description</i>                  |
| 1                                       | 089.02         | Allen bolt M6x20                    | 3           | 820.02         | Weldplate for Ø 6-12 mm-clamp       |
|   | 126025         | Allen bolt M6x25                    |             | 821.02         | Weldplate for Ø 15 mm-clamp         |
|   | 126030         | Allen bolt M6x30                    |             | 839.02         | Weldplate for Ø 22 mm-clamp/ Ø 25mm |
|   | 193.22         | Allen bolt M6x60                    |             | 061.02         | Bracket for clamp Ø 6-12 mm, L=70mm |
| 2                                       | 815.02         | Clamp Ø 6 mm                        |             | 064.02         | Bracket for clamp Ø 15 mm, L=75mm   |
|   | 816.02         | Clamp Ø 8 mm                        |             | 065.02         | Bracket for clamp Ø 22 mm, L=80mm   |
|   | 817.02         | Clamp Ø 10 mm                       | 4           | 216.12         | Cover plate 6-12 SST                |
|   | 818.02         | Clamp Ø 12 mm                       |             | 16.012         | Cover plate 6-12                    |
|   | 819.02         | Clamp Ø 15 mm                       |             | 159.12         | Cover plate 25                      |
|   | 838.02         | Clamp Ø 22 mm                       |             | F170287        | Cover plate 27-30mm                 |
|   | 157.12         | Clamp Ø 25 mm                       |             | F170286        | Cover plate 14-18mm                 |
| <b>d. Pipe clamps with weldplate</b>    |                |                                     |             |                |                                     |
| <i>pos.</i>                             | <i>art.nr.</i> | <i>description</i>                  | <i>pos.</i> | <i>art.nr.</i> | <i>description</i>                  |
| 1                                       | 126030         | Allen bolt M6x30                    | 2           | 153.12         | Clamp, double ø 16mm                |
|   | 126035         | Allen bolt M6x35                    |             | 129.12         | Clamp, double ø 22mm                |
|   | 126040         | Allen bolt M6x40                    | 3           | 788.01         | Weldplate, clamp double 6/12mm      |
|   | 126050         | Allen bolt M6x50                    |             | 154.12         | Weldplate, clamp double 4/18mm      |
|   | 126060         | Allen bolt M6x60                    |             | 130.12         | Weldplate, clamp double 22mm        |
| 2                                       | 784.01         | Clamp, double ø 6mm                 | 4           | 241.12         | Coverplate, clamp double 20-25 SST  |
|   | 785.01         | Clamp, double ø 8mm                 |             | 215.12         | Coverplate, clamp double 6-12 SST   |
|   | 786.01         | Clamp, double ø 10mm                |             | 156.12         | Coverplate, clamp double 20-25      |
|   | 787.01         | Clamp, double ø 12mm                |             | 155.12         | Coverplate, clamp double 14-18      |
|   | 152.12         | Clamp, double ø 15mm                |             | 133.12         | Coverplate, clamp double 6-12       |

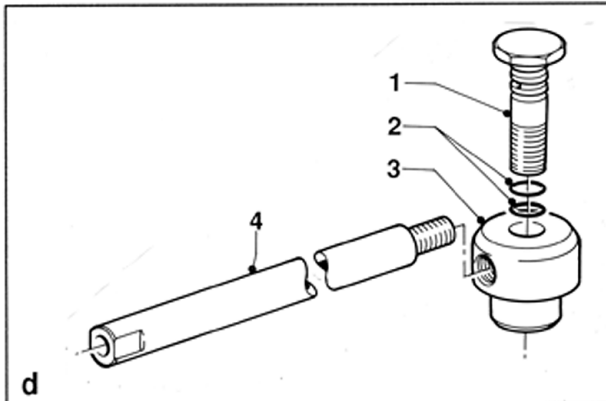
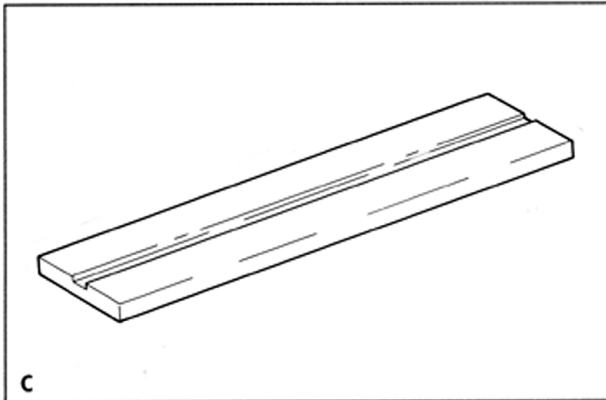
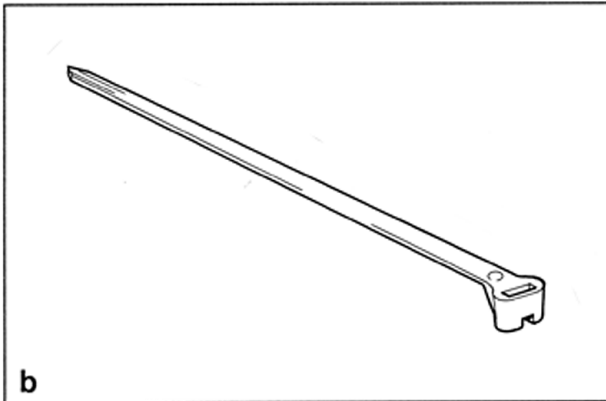
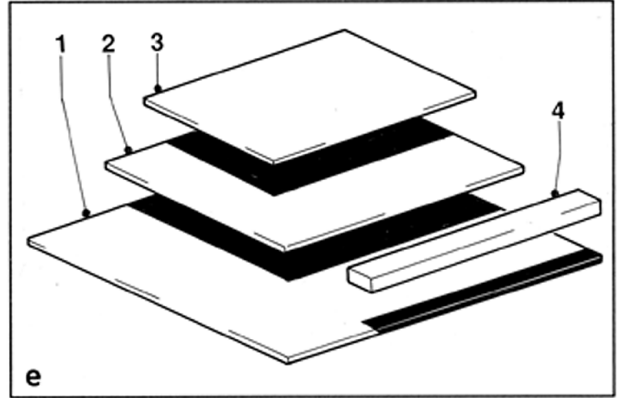
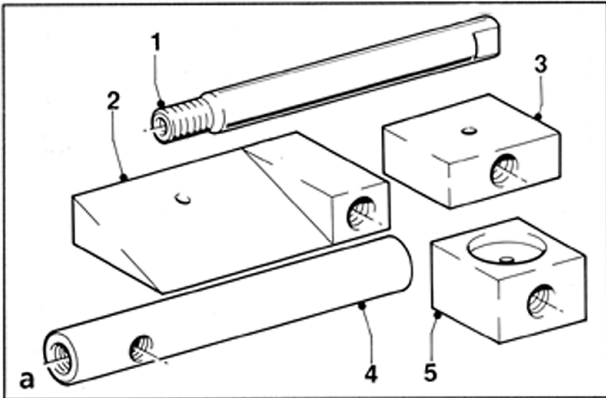


| <b>a. Chassis clip</b>                           |                |                                     |                 |
|--|----------------|-------------------------------------|-----------------|
| <i>pos.</i>                                      | <i>art.nr.</i> | <i>description</i>                  | <i>material</i> |
|  | 003.08         | Chassis clip 6 mm-3/16"             | ST              |
|  | 004.08         | Chassis clip double 8 mm-3/16"      | ST              |
|  | 005.08         | Chassis clip double 6 mm-3/16"      | ST              |
| <b>b. Clamp, 2-parts</b>                         |                |                                     |                 |
| <i>pos.</i>                                      | <i>art.nr.</i> | <i>description</i>                  | <i>material</i> |
|  | 827.02         | Clamp Ø 65                          | ST              |
|  | 828.02         | Clamp Ø 70                          | ST              |
|  | 829.02         | Clamp Ø 80                          | ST              |
| <b>c. Clamp, 2-parts with weldblock (2 port)</b> |                |                                     |                 |
| <i>pos.</i>                                      | <i>art.nr.</i> | <i>description</i>                  | <i>material</i> |
|  | 277.02         | Clamp Ø 65                          | ST              |
|  | 278.02         | Clamp Ø 80                          | ST              |
|  | 125.22         | Clamp Ø 135                         | ST              |
| <b>d. Clamp with mounting plate</b>              |                |                                     |                 |
| <i>pos.</i>                                      | <i>art.nr.</i> | <i>description</i>                  | <i>material</i> |
|  | 238.22         | Clamp Ø 100                         | ST-YG           |
| <b>e. Grommet</b>                                |                |                                     |                 |
| <i>pos.</i>                                      | <i>art.nr.</i> | <i>description</i>                  | <i>material</i> |
| 1  | 006.08         | Grommet 8 mm-5 mm                   | rubber          |
| 1  | 001.08         | Grommet 11 mm-8 mm                  | rubber          |
| 1  | 125.08         | Grommet 11,5 mm-5 mm                | rubber          |
| 1  | 126.08         | Grommet 13,5 mm-5 mm                | rubber          |
| 1  | 127.08         | Grommet 13,5 mm-8 mm                | rubber          |
| 1  | 128.08         | Grommet 16,5 mm-5 mm                | rubber          |
| 1  | 129.08         | Grommet 16,5 mm-8 mm                | rubber          |
| 2  | 021.08         | Grommet 20 mm-14 mm-4 mm            | rubber          |
| 2  | 034.08         | Grommet 20 mm-15 mm-6 mm            | rubber          |
| 2  | 243.01         | Grommet 21 mm-17 mm-5 mm (conical)  | rubber          |
| 2  | 244.01         | Grommet 19 mm-14 mm-10 mm (conical) | rubber          |

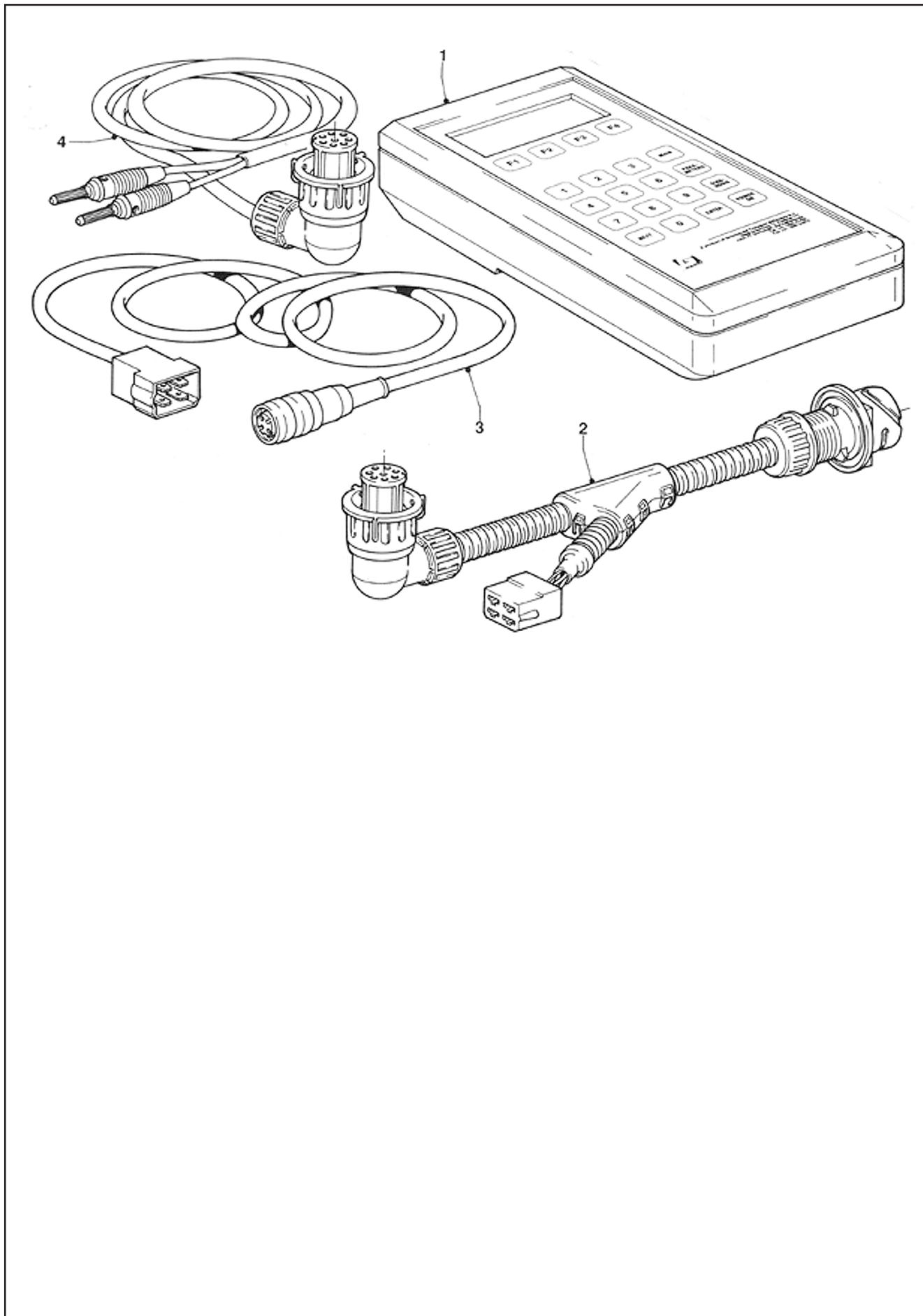




| <b>a. Brake hose rubber</b>            |                |                                      |                 |
|--|----------------|--------------------------------------|-----------------|
| <i>pos.</i>                            | <i>art.nr.</i> | <i>description</i>                   | <i>material</i> |
|  | 007.08         | Fixing rubber for brake hose         | rubber          |
| <b>b. Holes strip</b>                  |                |                                      |                 |
| <i>pos.</i>                            | <i>art.nr.</i> | <i>description</i>                   | <i>material</i> |
| 1                                      | 132.01         | Strip with 1/4" holes (10)           | ST              |
| 1                                      | 131.01         | Strip with 1/8" holes (12)           | ST              |
| 1                                      | 158.22         | Strip with 1/8" holes (12)           | SST             |
| 2                                      | 874.02         | Block with 1/8" hole (1)             | ST              |
| <b>c. Connecting block (aluminium)</b> |                |                                      |                 |
| <i>pos.</i>                            | <i>art.nr.</i> | <i>description</i>                   | <i>material</i> |
| 1                                      | 210.01         | Connecting block G 1/8, 2 ports      | aluminium       |
| 2                                      | 209.01         | Connecting block G 1/8, 1 port       | aluminium       |
| <b>d. Anchor block</b>                 |                |                                      |                 |
| <i>pos.</i>                            | <i>art.nr.</i> | <i>description</i>                   | <i>material</i> |
|  | 655.02         | Anchor block 1/8 NPT                 | ST-YG           |
| <b>e. Protection ring</b>              |                |                                      |                 |
| <i>pos.</i>                            | <i>art.nr.</i> | <i>description</i>                   | <i>material</i> |
|  | 397.02         | Protection ring Ø 60x40 (1 recess)   | ST              |
|  | 271.02         | Protection ring Ø 60x40 (2 recess)   | ST              |
|  | 398.02         | Protection ring Ø 70x40 (1 recess)   | ST              |
|  | 275.02         | Protection ring Ø 82,5x60 (1 recess) | ST              |
|  | 394.02         | Protection ring Ø 82,5x70 (1 recess) | ST              |
|  | 274.02         | Protection ring Ø 82,5x65 (1 recess) | ST              |
|  | 276.02         | Protection ring Ø 82,5x70 (1 recess) | ST              |
|  | 273.02         | Protection ring Ø 108x70 (1 recess)  | ST              |

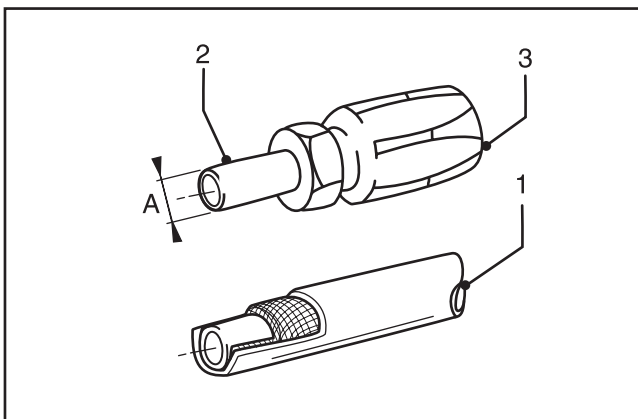
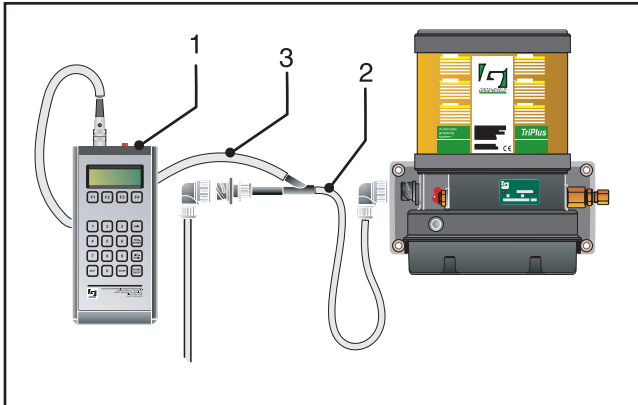


| <b>a. Welding block etc.</b> |                |                                       |                 |
|------------------------------|----------------|---------------------------------------|-----------------|
| <i>pos.</i>                  | <i>art.nr.</i> | <i>description</i>                    | <i>material</i> |
| 1                            | 651.02         | Extension piece M10x1,5 l=120         | ST              |
|                              | 367.22         | Extension piece M10x1,5 l=300         | ST              |
| 2                            | 876.02         | Welding block G 1/8, with key, left   | ST              |
| 2                            | 877.02         | Welding block G 1/8, with key, right  | ST              |
| 3                            | 875.02         | Welding block G 1/8, 16 mm thick      | ST              |
| 4                            | 239.02         | Kettingsmeerstift, 16x8x120, M8x1-1/8 | ST              |
| 5                            | 225.02         | Welding block G 1/8, 20 mm thick      | ST              |
| <b>b. Tie-wrap</b>           |                |                                       |                 |
| <i>pos.</i>                  | <i>art.nr.</i> | <i>description</i>                    | <i>material</i> |
|                              | 002.08         | Tie-wrap, black (l=186 mm)            |                 |
|                              | 111.07         | Tie-wrap, black (l=338 mm)            |                 |
|                              | 890.012        | Tie-wrap, white (l=200 mm)            |                 |
|                              | 022.08         | Tie-wrap, white (l=360 mm)            |                 |
| <b>c. Welding strip</b>      |                |                                       |                 |
| <i>pos.</i>                  | <i>art.nr.</i> | <i>description</i>                    | <i>material</i> |
| 1                            | 360.02         | Welding strip with grease sleeve      | ST              |
| <b>d. Banjo</b>              |                |                                       |                 |
| <i>pos.</i>                  | <i>art.nr.</i> | <i>description</i>                    | <i>material</i> |
| 1                            | 248.22         | Banjo bolt G1/8x35                    | ST-YG           |
| 1                            | 523.22         | Banjo bolt G1/8x45                    | ST-YG           |
| 2                            | 260.22         | O-ring 6,07x1,78                      | rubber          |
| 3                            | 247.22         | Banjo bush                            | ST-YG           |
| 3                            | 249.22         | Banjo bush                            | ST-YG           |
| 4                            | 245.22         | Pipe 10x8 650 mm                      | ST-YG           |
| 4                            | 246.22         | Pipe 10x8 800 mm                      | ST-YG           |
| <b>e. Protection plate</b>   |                |                                       |                 |
| <i>pos.</i>                  | <i>art.nr.</i> | <i>description</i>                    | <i>material</i> |
| 1                            | 253.22         | Protection plate 400x400x8            | ST              |
| 2                            | 252.22         | Protection plate 300x280x8            | ST              |
| 3                            | 251.22         | Protection plate 250x200x8            | ST              |
| 3                            | 393.02         | Protection plate                      | ST              |
| 4                            | 257.22         | Protection plate 270x30x15            | ST              |



| <b>GINA and accessories</b> |                |                           |
|-----------------------------|----------------|---------------------------|
| <i>pos.</i>                 | <i>art.nr.</i> | <i>description</i>        |
| 1                           | 865.01         | GINA progr. unit TWIN/DAF |
| 2                           | 819.01         | GINA test cable for 82001 |
| 3                           | 820.01         | GINA T-adapter for Twin   |
| 4                           | 010.17         | GINA test cable           |

| <b>GREENLUBE EP-2</b>   |   |  |  |   |
|---|---|--|--|---|
|   | Greenlube ZW-2                              | Greenlube EP-2                           | Greenlube MP-2                           | Greenlube ELT-2                           |
| NLGI-category<br>ASTM D-217<br>DIN 51 818   | 2   | 2  | 2  | 2   |
| Thickening agent<br>(kind of soap)  | lithium/<br>calcium                         | lithium                                  | lithium                                  | lithium-<br>complex                       |
| Dropping point<br>conform<br>ISO 2176,<br>mettler FP 80/83                                | 190° C                                      | 180° C                                   | 180° C                                   | 260° C                                    |
| Water resistance<br>DIN 51 807<br>part 1 by 90° C   | category 1                                  | category 1                               | category 1                               | category 1                                |
| Temperature range<br>(area of application)  | -20° C<br>+150° C                           | -25° C<br>+130° C                        | -25° C<br>+130° C                        | -55° C<br>+120° C                         |
| Basic oil Viscosity<br>by 40° C ASTM D-445  | mineral<br>oil<br>1000 mm <sup>2</sup> /s   | mineral<br>oil<br>280 mm <sup>2</sup> /s | mineral<br>oil<br>120 mm <sup>2</sup> /s | synthetic<br>oil<br>40 mm <sup>2</sup> /s |
| Corrosion protection<br>Sweet (max.)<br>Salt (max.)<br>(conform Emcor-test)<br>DIN 51 802 | category 0                                  | klasse 0                                 | category 0                               | category 0                                |
|   | category -                                  | category -                               | category 0                               | category 2                                |
| Shell Four Ball-test<br>conform IP 239<br>DIN 51 350 part 5                               | 680 kg                                      | 260 kg                                   | n.v.t. zonder<br>EP-additieven           | 200 kg                                    |
| Application   | agriculture<br>earth moving<br>(heavy duty) | universal<br>applications                | ball roll bearings with<br>high speed    | extreme low<br>temperature                |





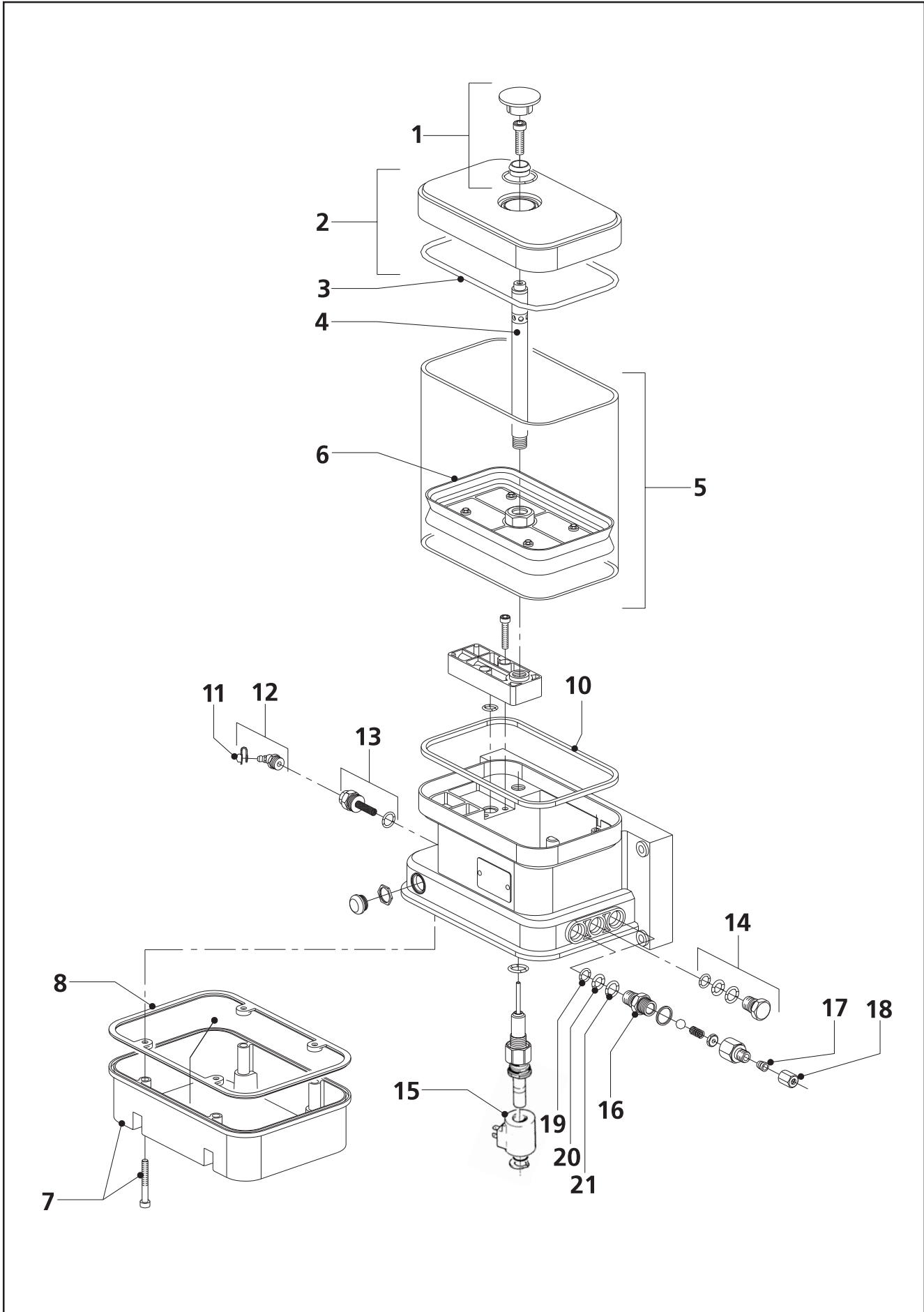
## 7 - TRIPLUS PARTS OVERVIEW

For Groeneveld Automatic Progressive Greasing Systems

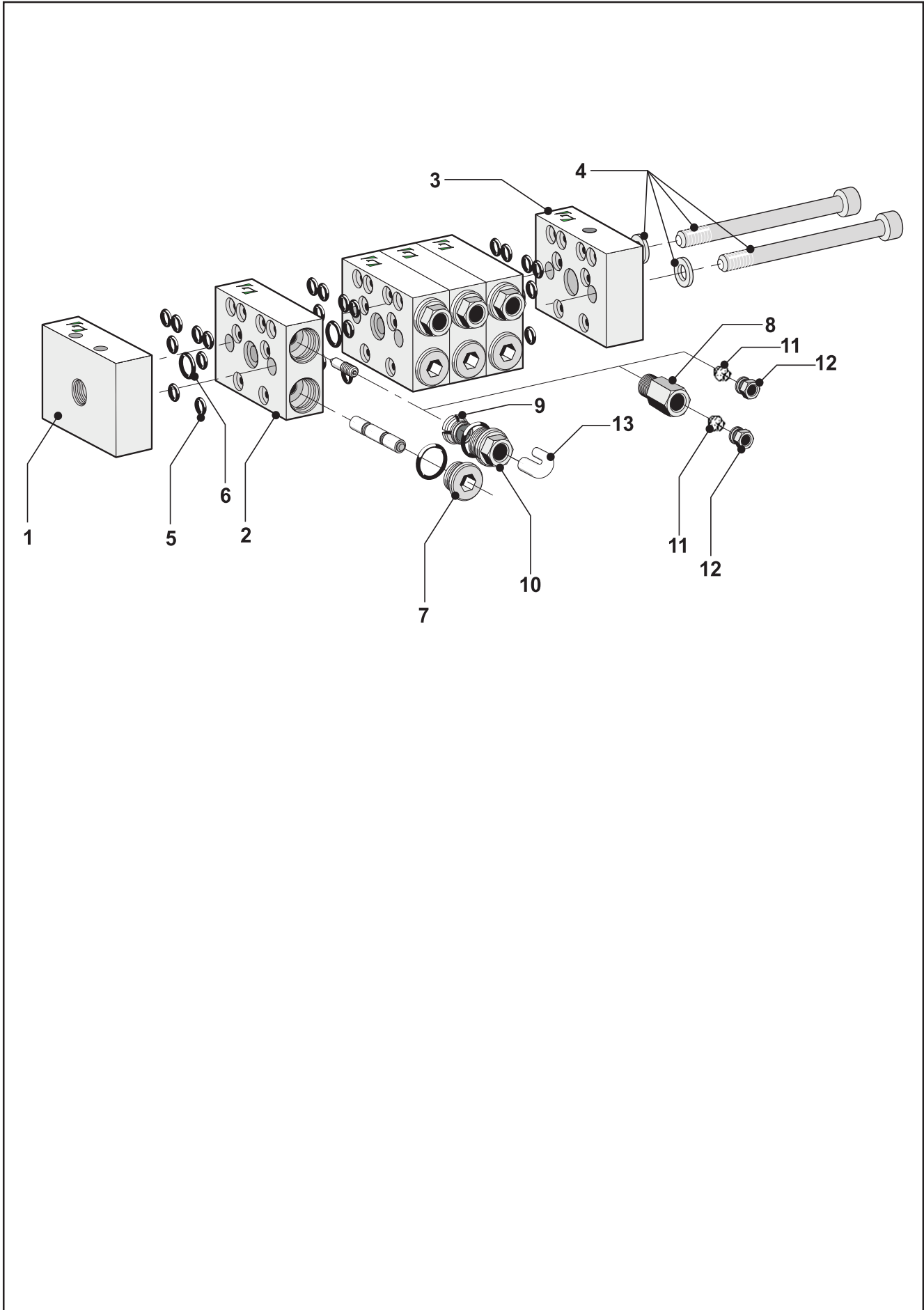
| <b>Pumps</b> |                |   |
|--------------|----------------|---|
| <i>pos.</i>  | <i>art.nr.</i> | <i>description</i>                                  |
|              | 054.16         | TriPluspump 1 outlet (1-3) 2,6cc / 12 volt / 3 Ltr. |
|              | 025.16         | TriPluspomp 1 outlet (1-3) 2,6cc / 24 volt / 3 Ltr. |
|              | 038.16         | TriPluspomp 1 outlet (1-1) 2,6cc / 24 volt / 3 Ltr. |

| <b>GINA and test cable</b> |                |  |
|----------------------------|----------------|--|
| <i>pos.</i>                | <i>art.nr.</i> | <i>description</i>                       |
| 1                          | 044.16         | GINA, test and read-out unit for TriPlus |
| 1                          | 177.16         | GINA for truck/ trailer                  |
| 2                          | 065.14         | Test cable for TriPlus-GINA              |
| 3                          | 819.01         | Read-out cable                           |

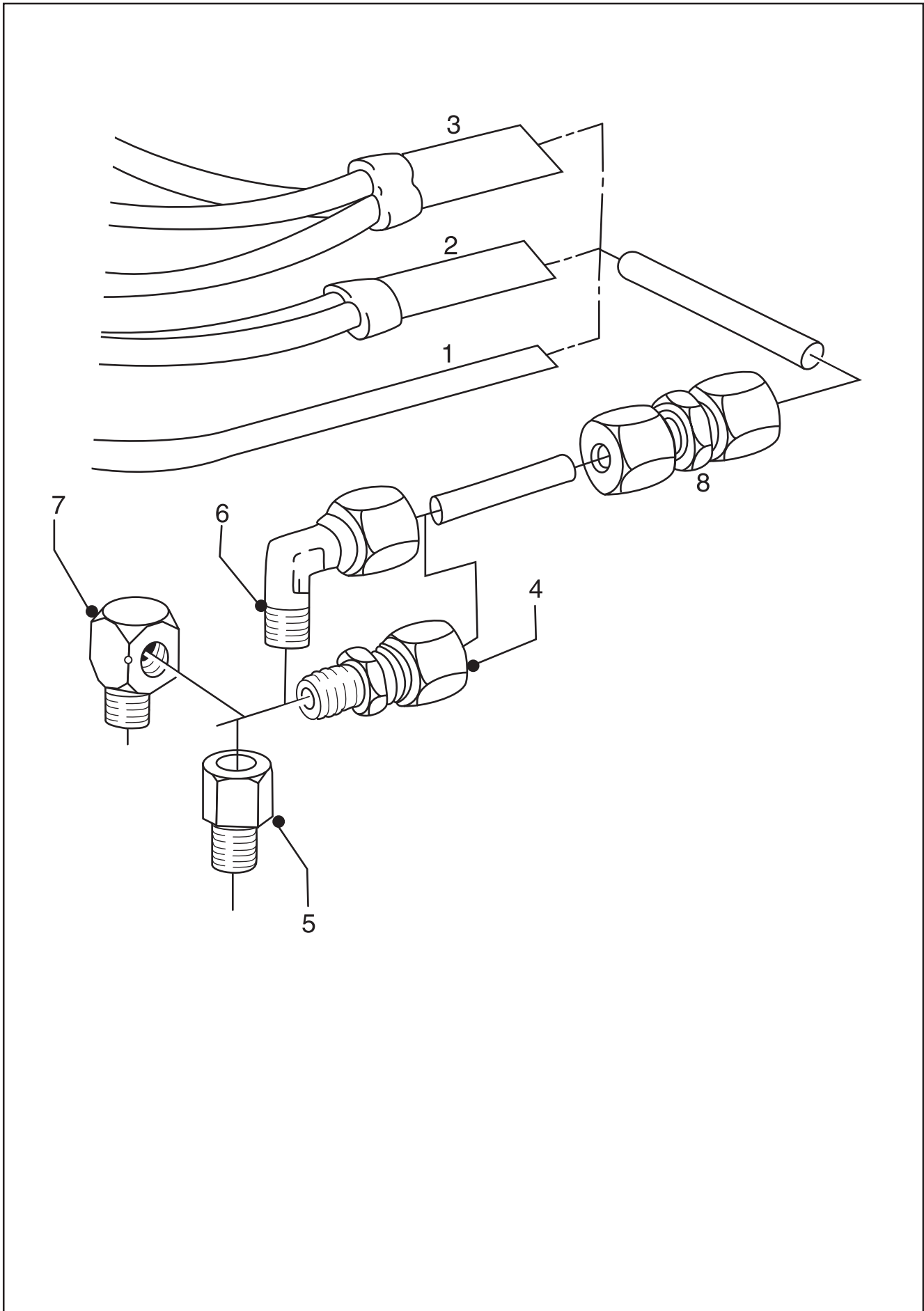
| <b>Main line</b> |                |   |                 |
|------------------|----------------|---|-----------------|
| <i>pos.</i>      | <i>art.nr.</i> | <i>description</i>  | <i>material</i> |
| 1                | 057.16         | High pressure hose $\varnothing$ 4mm ID / $\varnothing$ 9mm O.D.  |                 |
| 2                | 118.16         | Elbow stand pipe $\varnothing$ 6 (crimp) 4mm ID                   | ST-YG           |
| 2                | 117.16         | Straight stand pipe $\varnothing$ 6 (crimp) 4mm ID                | ST-YG           |
| 2                | 058.16         | Straight stand pipe $\varnothing$ 6 (screw) 4mm ID                | ST-YG           |
| 2+3              | 095.16         | Elbow stand pipe + screw socket $\varnothing$ 6 (screw) 4mm ID    | ST-YG           |
| 2+3              | 064.16         | Elbow stand pipe + screw socket $\varnothing$ 4 (screw) 4mm ID    | ST-YG           |
| 2+3              | 062.16         | Straight stand pipe + screw socket $\varnothing$ 5 (screw) 4mm ID | ST-YG           |
| 2+3              | 063.16         | Straight stand pipe + screw socket $\varnothing$ 8 (screw) 4mm ID | ST-YG           |
| 3                | 119.16         | Crimp socket for 05716  | ST-YG           |



| <b>Parts overview pump</b> |                |  |
|----------------------------|----------------|--|
| <i>pos.</i>                | <i>art.nr.</i> | <i>description</i>                         |
| 1                          | 597.01         | Fixing set, reservoircap                   |
| 2                          | 887.01         | Reservoircap with O-ring                   |
| 3                          | 306.01         | Reservoir O-ring                           |
| 4                          | 888.01         | Follower piston guide 3 Ltr. reservoir     |
| 5                          | 892.01         | Reservoir 3 Ltr.                           |
| 6                          | 890.01         | Follower piston                            |
| 7                          | 878.01         | Bottom cap                                 |
| 8                          | 084.17         | Gasket                                     |
| 10                         | 893.01         | Reservoir O-ring                           |
| 11                         | 871.01         | Dust cap                                   |
| 12                         | 870.01         | Grease nipple 1/4 NPT                      |
|                            | 021.17         | Grease nipple 45° 1/4 NPT                  |
|                            | 826.01         | Grease nipple 90° 1/4 NPT                  |
| 13                         | 872.01         | Grease filter                              |
| 14                         | 028.16         | Plug M14x1.5                               |
| 15                         | 056.16         | Extension set extra pump outlet 12 Volt    |
|                            | 037.16         | Extension set extra pump outlet 24 Volt    |
| 16                         | 029.16         | Non-return valve M14x1.5 - M12x1.5         |
| 17                         | 047.16         | Nut 6mm - M12x1.5                          |
| 18                         | 048.16         | Ferrule, single sided 6mm                  |
| 19                         | 792.01         | O-ring                                     |
| 20                         | 086.17         | O-ring                                     |
| 21                         | 791.01         | O-ring                                     |
| -                          | 082.12         | Pump bracket 8cm bended                    |
| -                          | 108030         | Bolt M8x30 ST-G                            |
| -                          | 200008         | Nut M8 ST-G                                |
| -                          | 300008         | Washer M8 ST-G                             |
| -                          | 330008         | Spring washer M8 ST-G                      |
| -                          | 386.22         | Greenlube EP-2 per 20kg                    |
|                            | 387.22         | Greenlube EP-2 per 50kg                    |
|                            | 014.22         | Greenlube EP-2 per 200kg                   |
| -                          | 081.16         | Wiring harness 8-core, 8 mtr.              |
|                            | 080.16         | Wiring harness 8-core, 15 mtr.             |
| -                          | 083.16         | Wiring harness 2-core, 12 mtr. for trailer |



| <b>SL000007 - Overview Distribution blocks &amp; parts TriPlus</b> |                |  |              |
|--|----------------|--|--------------|
| <i>pos.</i>  | <i>art.nr.</i> | <i>description</i>                         | <i>sizes</i> |
| 1  | 002.16         | Head block set                             |              |
| 2  | 005.16         | Middle block set                           | 0.045cc      |
|  | 007.16         | Middle block set                           | 0.125cc      |
|  | 009.16         | Middle block set                           | 0.200cc      |
| 3  | 003.16         | End block set                              |              |
| 4  | 019.16         | Set with bolts - 3 middle block            | M6x65        |
|  | 020.16         | Set with bolts - 4 middle block            | M6x80        |
|  | 021.16         | Set with bolts - 5 middle block            | M6x100       |
|  | 022.16         | Set with bolts - 6 middle block            | M6x115       |
|  | 023.16         | Set with bolts - 7 middle block            | M6x130       |
|  | 024.16         | Set with bolts - 8 middle block            | M6x145       |
|  | 017.16         | Set with bolts - 9 middle block            | M6x165       |
|  | 018.16         | Set with bolts - 10 middle block           | M6x180       |
|  | 052.16         | Set with bolts - 11 middle block           | M6x195       |
|  | 053.16         | Set with bolts - 12 middle block           | M6x210       |
| 5  | 029.17         | O-ring                                     | 6,75x1,78    |
| 6  | 030.17         | O-ring                                     | 18,77x1,78   |
| 7  | 010.16         | Plug                                       | M12x1        |
| 8  | 036.16         | Non-return valve                           |              |
| 9  | 012.16         | Ferrule, single sided                      | 6mm          |
|  | 066.16         | Ferrule, single sided                      | 5mm          |
| 10   | 011.16         | Nut  | 6mm-M12x1    |
|  | 065.16         | Nut  | 5mm-M12x1    |
| 11   | 014.16         | Ferrule, double sided                      | 6mm          |
| 12   | 013.16         | Nut  | 6mm-M12x1    |
|  | 067.16         | Nut  | 5mm-M12x1    |
| 13   | 049.16         | Connecting piece                           |              |
| -  | 074.16         | Mounting bracket - 3/5 middle block        |              |
|  | 077.16         | Mounting bracket - 6/8 middle block        |              |
|  | 078.16         | Mounting bracket - 9/12 middle block       |              |
|  | 079.16         | Mounting bracket - 3/8 middle block L-type |              |
| -  | 125045         | Allen bolt M5x45 ST-G                      |              |
| -  | 200005         | Nut M5 ST-G                                |              |
|  | 200010         | Nut M10 ST-G                               |              |
| -  | 300005         | Washer M5 ST-G                             |              |
|  | 300010         | Washer M10 ST-G                            |              |
| -  | 330005         | Spring washer M5 ST-G                      |              |
|  | 330010         | Spring washer M10 ST-G                     |              |



## SECONDARY TUBES

| <b>Grease pipe, synthetic, single</b> |               |   |                 |
|---------------------------------------|---------------|---|-----------------|
| <i>pos.</i>                           | <i>art.nr</i> | <i>description</i>                              | <i>material</i> |
| 1                                     | 301.02        | Grease pipe, single, 6 mm x 1,5 mm (DIN 73378)  | PA              |
|                                       | 022.01        | Grease pipe, single 3/16" (DIN 73378)           | PA              |
|                                       | 022.11        | Grease pipe, single 3/16" per 3m                | PA              |
|                                       | 022.07        | Grease pipe, single 3/16" per 5m                | PA              |
|                                       | 729.22        | Grease pipe, single 3/16" per mtr. (ex. grease) | PA              |
|                                       | 207.02        | Grease pipe, single 4mm per 1m                  | PA              |
|                                       | 542.01        | Grease pipe, single 6mm per 1m                  | PA              |
|                                       | 543.01        | Grease pipe, single 6mm per 2m                  | PA              |
|                                       | 722.01        | Grease pipe, single 6mm per 3m                  | PA              |
|                                       | 544.01        | Grease pipe, single 6mm per 4m                  | PA              |
|                                       | 193.17        | Grease pipe, single 6mm per 5m (Hard)           | PA              |
|                                       | 998.01        | Grease pipe, single 6mm per 5m                  | PA              |
|                                       | 722.17        | Grease pipe, single 6mm per 5m (6x1,5 mm)       | PA              |
|                                       | 773.01        | Grease pipe, single 6mm per m (6x1,5 mm)        | PA              |
| <b>Grease pipe, synthetic, double</b> |               |   |                 |
| <i>pos.</i>                           | <i>art.nr</i> | <i>description</i>                              | <i>material</i> |
| 2                                     | 023.01        | Grease pipe, double 3/16" (DIN 73378)           | PA              |
|                                       | 023.11        | Grease pipe, double 3/16" per 3m                | PA              |
|                                       | 023.17        | Grease pipe, double 3/16" per 5m                | PA              |
|                                       | 545.01        | Grease pipe, double 6mm per 1m                  | PA              |
|                                       | 546.01        | Grease pipe, double 6mm per 2m                  | PA              |
|                                       | 723.01        | Grease pipe, double 6mm per 3m                  | PA              |
|                                       | 547.01        | Grease pipe, double 6mm per 4m                  | PA              |
|                                       | 723.17        | Grease pipe, double 6mm per 5m                  | PA              |
|                                       | 774.01        | Grease pipe, double 6mm per m                   | PA              |
| <b>Grease pipe, synthetic, triple</b> |               |   |                 |
| <i>pos.</i>                           | <i>art.nr</i> | <i>description</i>                              | <i>material</i> |
| 3                                     | 024.01        | Grease pipe, triple 3/16" (DIN 73378)           | PA              |
|                                       | 024.11        | Grease pipe, triple 3/16" per 3m                | PA              |
|                                       | 024.17        | Grease pipe, triple 3/16" per 5m                | PA              |
|                                       | 553.01        | Grease pipe, triple 6mm per 1m                  | PA              |
|                                       | 554.01        | Grease pipe, triple 6mm per 2m                  | PA              |
|                                       | 724.01        | Grease pipe, triple 6mm per 3m                  | PA              |
|                                       | 555.01        | Grease pipe, triple 6mm per 4m                  | PA              |
|                                       | 724.17        | Grease pipe, triple 6mm per 5m                  | PA              |
|                                       | 775.01        | Grease pipe, triple 6mm per m                   | PA              |

| <b>Male stud coupling (ferrule)</b> |                |  |                 |
|-------------------------------------|----------------|--|-----------------|
| <i>pos.</i>                         | <i>art.nr.</i> | <i>description</i>                       | <i>material</i> |
| 4                                   | 104.01         | Male stud coupling ø 3/16" - 1/8         | BR              |
|                                     | 421.01         | Male stud coupling ø 3/16" - 1/8 NPTF    | BR              |
|                                     | 138.01         | Male stud coupling ø 3/16" - M10x1 con   | BR              |
|                                     | 212.01         | Male stud coupling ø 3/16" - M6x1 con    | ST-YG           |
|                                     | 657.01         | Male stud coupling ø 3/16" - M6x1 con    | ST-YG(L)        |
|                                     | 101.01         | Male stud coupling ø 3/16" - M7x1        | BR              |
|                                     | 130.01         | Male stud coupling ø 3/16" - M8          | BR              |
|                                     | 219.01         | Male stud coupling ø 3/16" - M8x1 con    | BR              |
|                                     | 235.01         | Male stud coupling ø 3/16" - M8x1 con    | BR(L)           |
|                                     | 585.01         | Male stud coupling ø 3/16" - M8x1 con    | ST-YG           |
|                                     | 166.01         | Male stud coupling ø 3/16" - M8x1,25 con | BR              |
|                                     | 188.01         | Male stud coupling ø 3/16" - M8x1,25 con | BR              |
|                                     | 414.02         | Male stud coupling ø 5 - M8 con          | SST             |
|                                     | 413.02         | Male stud coupling ø 5 - R1/8            | SST             |
|                                     | 081.08         | Male stud coupling ø 6 - 1/4             | BR              |
|                                     | 530.22         | Male stud coupling ø 6 - 1/4 BSP         | ST-YG(L)        |
|                                     | 079.08         | Male stud coupling ø 6 - 1/8             | BR              |
|                                     | 981.01         | Male stud coupling ø 6 - 1/8             | BR              |
|                                     | 148.17         | Male stud coupling ø 6 - 1/8             | SST             |
|                                     | 561.02         | Male stud coupling ø 6 - G1/4            | SST             |
|                                     | 987.02         | Male stud coupling ø 6 - G1/8            | SST             |
|                                     | 134.17         | Male stud coupling ø 6 - M10x1           | BR              |
|                                     | 578.02         | Male stud coupling ø 6 - M10x1           | SST             |
|                                     | 435.02         | Male stud coupling ø 6 - M10x1           | ST-YG           |
|                                     | 150.17         | Male stud coupling ø 6 - M6x1 short      | ST-YG           |
|                                     | 840.01         | Male stud coupling ø 6 - M6x1            | BR              |
|                                     | 135.17         | Male stud coupling ø 6 - M6x1            | ST-YG           |
|                                     | 432.02         | Male stud coupling ø 6 - M6x1            | ST-YG           |
|                                     | 136.17         | Male stud coupling ø 6 - M8x1            | BR              |
|                                     | F170898        | Male stud coupling ø 6 - M8x1            | SST             |
|                                     | 433.02         | Male stud coupling ø 6 - M8x1            | ST-YG           |
|                                     | 434.02         | Male stud coupling ø 6 - R1/8            | ST-YG           |



| <b>Reduction-adaptor</b>         |                |  |                 |
|----------------------------------|----------------|--|-----------------|
| <i>pos.</i>                      | <i>art.nr.</i> | <i>description</i>                             | <i>material</i> |
| 5                                | 811.22         | Reduction-adaptor 1/4"-1/4" NPT                | BR              |
|                                  | 641.02         | Reduction-adaptor 1/4, 18 NPTF - 1/4 NPT       | ST-YG           |
|                                  | 029.01         | Reduction-adaptor 1/4-18 NPT 1/8-27 NPT        | BR              |
|                                  | 618.01         | Reduction-adaptor 1/8" NPT - 1/4"G L60mm       | ST-YG           |
|                                  | 238.12         | Reduction-adaptor 1/8" NPT - 1/4"G-60          | SST             |
|                                  | F170988        | Reduction-adaptor 1/8-1/8-80                   | SST             |
|                                  | 640.02         | Reduction-adaptor 1/8-27 NPTF - 1/8 NPT        | ST-YG           |
|                                  | 980.01         | Reduction-adaptor 1/8 NPTF - 22mm              | BR              |
|                                  | 333.01         | Reduction-adaptor 1/8 NPTF - 42mm              | ST-YG           |
|                                  | 977.01         | Reduction-adaptor 1/8 NPTF - 70mm              | ST-YG           |
|                                  | 152.01         | Reduction-adaptor G1/8 1/4-28 UNF              | BR              |
|                                  | F170989        | Reduction-adaptor G1/8 1/4-28 UNF              | SST             |
|                                  | 155.01         | Reduction-adaptor G1/8 M8x1 con                | BR              |
|                                  | 116.08         | Reduction-adaptor G1/8 R1/8                    | BR              |
|                                  | 085.08         | Reduction-adaptor G1/8 R1/8                    | BR              |
|                                  | 632.02         | Reduction-adaptor G1/8 - G1/4                  | ST-YG           |
|                                  | 129.22         | Reduction-adaptor G1/8 - R1/8 40               | ST-YG           |
|                                  | 444.02         | Reduction-adaptor G1/8 - R1/8                  | SST             |
|                                  | 161.11         | Reduction-adaptor M10x1 vst                    | ST-YG           |
|                                  | 479.01         | Reduction-adaptor M10xM8                       | ST-YG           |
|                                  | 156.01         | Reduction-adaptor M8x1 M8x1 con                | ST-YG           |
| <b>Male stud elbow (ferrule)</b> |                |  |                 |
| <i>pos.</i>                      | <i>art.nr.</i> | <i>description</i>                             | <i>material</i> |
| 6                                | 422.01         | Male stud elbow $\varnothing$ 3/16 - 1/8 NPTF  | BR              |
|                                  | 137.01         | Male stud elbow $\varnothing$ 3/16 - M10x1 con | BR              |
|                                  | 121.01         | Male stud elbow $\varnothing$ 3/16 - M8x1      | BR              |
|                                  | 187.01         | Male stud elbow $\varnothing$ 3/16 - M8x1,25   | BR              |
|                                  | 102.01         | Male stud elbow $\varnothing$ 3/16 - R1/8 NPT  | BR              |
|                                  | 531.22         | Male stud elbow $\varnothing$ 6 - 1/4 NPT      | ST-YG           |
|                                  | 982.01         | Male stud elbow $\varnothing$ 6 - 1/8 NPT      | BR              |
|                                  | 559.02         | Male stud elbow $\varnothing$ 6 - 1/8 NPT      | SST             |
|                                  | 132.17         | Male stud elbow $\varnothing$ 6 - M10x1        | BR              |
|                                  | 439.02         | Male stud elbow $\varnothing$ 6 - M10x1        | ST-YG           |
|                                  | 436.02         | Male stud elbow $\varnothing$ 6 - M6x1         | ST-YG           |
|                                  | 133.17         | Male stud elbow $\varnothing$ 6 - M8x1         | BR              |
|                                  | 437.02         | Male stud elbow $\varnothing$ 6 - M8x1         | ST-YG           |
|                                  | 082.08         | Male stud elbow $\varnothing$ 6 - R1/4         | BR              |
|                                  | 562.02         | Male stud elbow $\varnothing$ 6 - R1/4         | SST             |
|                                  | 080.08         | Male stud elbow $\varnothing$ 6 - R1/8         | BR              |
|                                  | 438.02         | Male stud elbow $\varnothing$ 6 -R1/8          | ST-YG           |

| <b>Male stud elbow</b>                        |                |               |               |               |                 |
|---|----------------|---------------|---------------|---------------|-----------------|
| <i>pos.</i>                                   | <i>artnr.</i>  | <i>size A</i> | <i>size B</i> | <i>size C</i> | <i>material</i> |
| 7   | 085.01         | 1/4 UNF       | 1/8G          |               | ST-YG           |
|   | 021.01         | 1/4 UNF       | 1/8G          |               | ST-YG           |
|   | 445.02         | 1/4 UNF       | 1/8G          |               | SST             |
|   | 979.01         | 1/8 NPTF      | 1/8 NPTF      |               | ST-YG           |
|   | 933.01         | 1/8 NPTF      | 1/8 NPTF      |               | ST-YG           |
|   | 633.02         | 1/8 NPTF      | G1/8          |               | SST             |
|   | 150.01         | G1/8          | G1/8          |               | ST-YG           |
|   | 147.01         | M10x1         | M10x1         |               | BR              |
|   | 151.11         | M10x1         | M10x1         | 12.5          | BR              |
|   | 213.01         | M6x1 con      | M8x1          |               | ST-YG           |
|   | F170875        | M6x1 con      | M8x1          |               | SST             |
|   | 930.01         | M8x1,25       | M8x1,25       |               | BR              |
|   | 055.11         | M8x1          | M8x1          | l=44          | ST-YG           |
|   | 412.01         | M8x1 con      | M8x1          |               | BR              |
|   | 415.02         | M8x1 con      | M8            |               | BR              |
|   | 148.01         | M8x1 con      | M8x1          |               | BR              |
|   | 983.01         | M8x1 con      | L             | M8x1          | ST-YG           |
|   | 827.01         | R1/4          | R1/4          |               | ST-YG           |
|   | 062.11         | R1/8"         | R1/8"         |               | ST-YG           |
| <b>Straight connecting coupling (ferrule)</b> |                |               |               |               |                 |
| <i>pos.</i>                                   | <i>art.nr.</i> | <i>size A</i> | <i>size B</i> | <i>size C</i> | <i>material</i> |
| 8   | 083.08         | 6             | 6             |               | BR              |
|   | 299.01         | 6             | 6             |               | ST-YG           |
|   | 408.02         | 1/8"          | 1/8"          |               | BR              |
|   | 106.01         | 3/16"         | 3/16"         |               | BR              |
|   | 555.22         | 6             | 6             |               | SST             |

