

## COVERSHEET

## Planned document changes:


**Briefly:**



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 No planned changes.

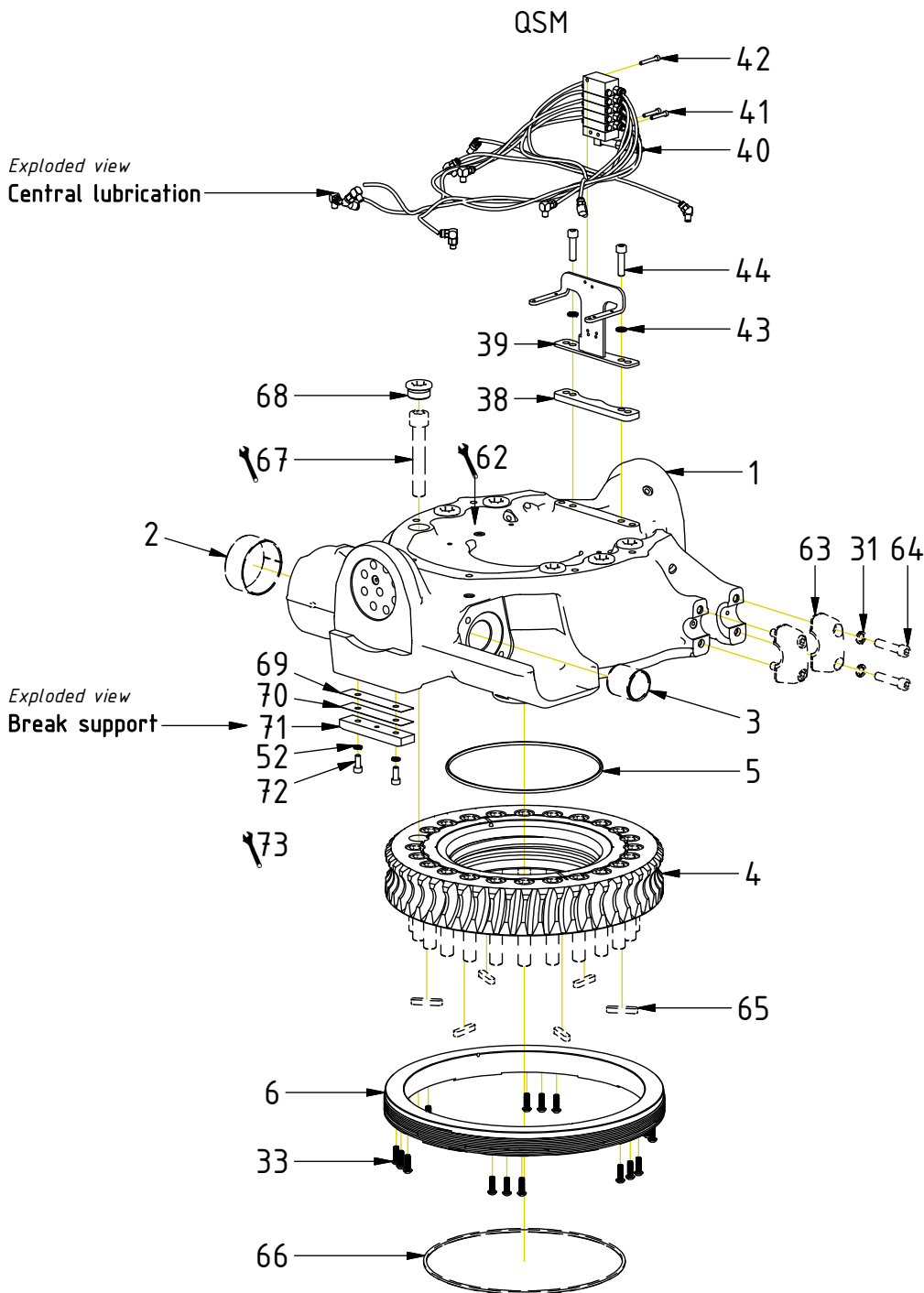
## Document changes:

| Date:      | Change:   | Rev.<br>after change: |
|------------|---|-----------------------|
| 2025-01-20 | Parts incl. in motor updated.                           | R                     |
| 2024-10-10 | Bearing ring w. screws replaced. Nippel to frame added. | Q                     |
| 2023-10-27 | Loxal added. O-ring for worm wheel updated.             | P                     |
| 2022-05-11 | EC226S added. (EC226 with ePS2 sensors).                | O                     |
| 2022-01-20 | Details for end lock added.                             | N                     |
| 2021-05-28 | Bearing ring updated.                                   | M                     |
| 2020-10-20 | Motor hose ECHF replaced. Photo replaced.               | L                     |
| 2020-08-19 | Worm wheel, bearing ring, end lock, ePS cover replaced. | K                     |
| 2020-01-23 | Layout/irrelevant.                                      | J                     |
| 2019-04-24 | QSM added (also applicable for "Without swivel")        | I                     |
| 2019-02-18 | QTY for top part details corrected.                     | H                     |
| 2018-07-31 | Part no for shim kit added.                             | G                     |
| 2018-07-03 | Layout/irrelevant.                                      | F                     |
| 2018-07-02 | Bearing ring tightening updated.                        | E                     |
| 2018-06-18 | Layout/irrelevant.                                      | D                     |
| 2017-10-18 | MACS sensor replaced, new distance 3mm.                 | C                     |
| 2017-08-07 | Layout/irrelevant.                                      | B                     |
| 2017-05-18 | Coversheet added.                                       | A                     |

*Readers note:*
 Indicates instruction.

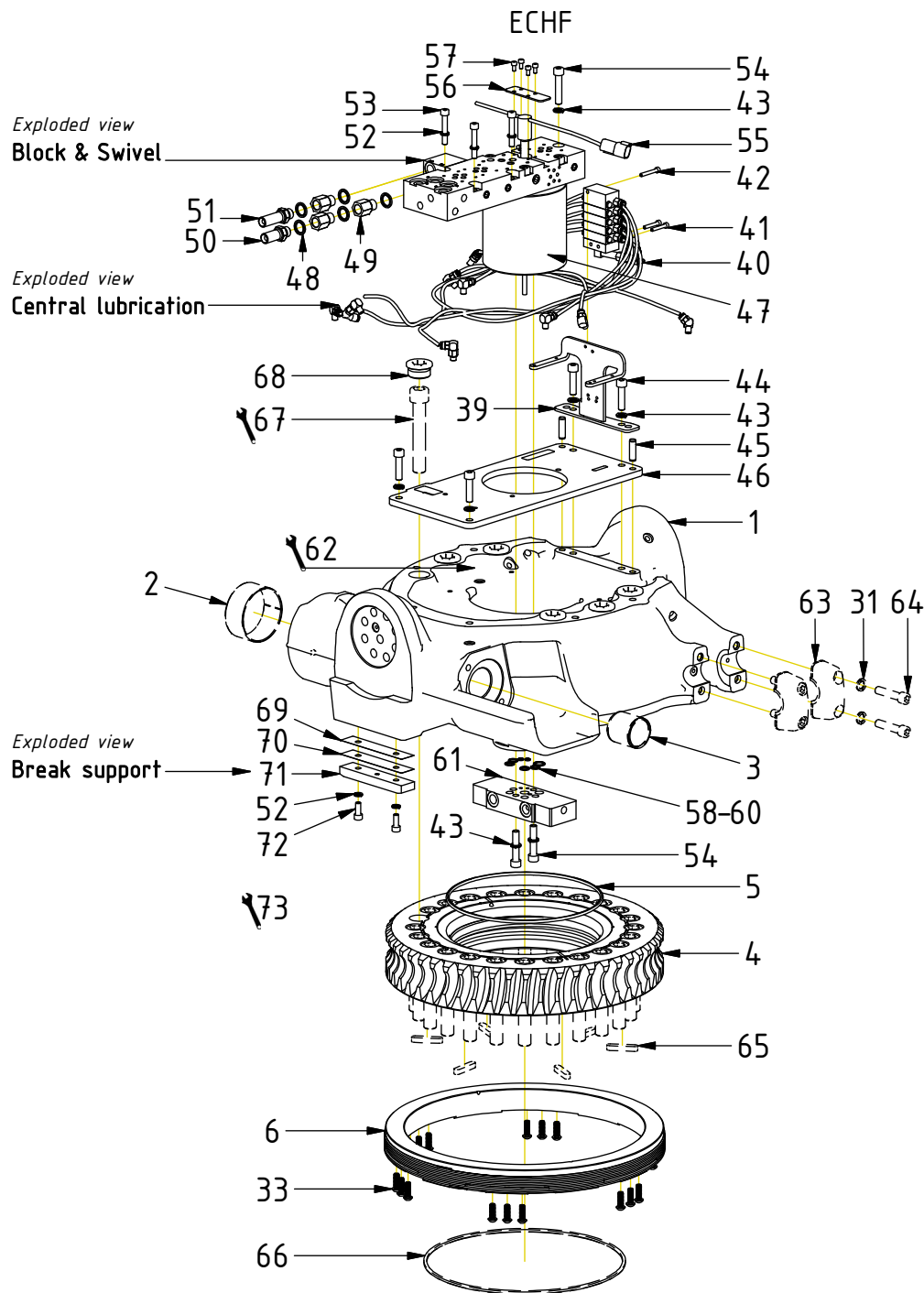
 Represents Hose.

Dashed lines for overview, mounts  
on other pages/assemblies.



| POS | DESCRIPTION                        | PART    | QTY | COMMENTS                                 |
|-----|------------------------------------|---------|-----|--|
| 1   | Rotator frame EC226 V4             | 1023732 | 1   | (POS.2-3 incl.)                          |
| 2   | Bushing 85/90x40                   | 630319  | 1   |  |
| 3   | Bushing WB802 45/50x50             | 630102  | 1   |  |
| 4   | Worm wheel EC226 24 holes          | 1057021 | 1   |  |
| 5   | O-ring 242x5 NBR 90                | 7001663 | 1   |  |
| 6   | Bearing ring EC226 with steering   | 1077002 | 1   | (Only compatible with 8x25)              |
| 31  | Washer NL 12mm                     | 611042  | 10  | QTY: 8 part of top part assembly         |
| 33  | Screw TX45 8x25 10,9 FZB           | 1078840 | 18  | Torque: 34Nm<br>Tighten in cross pattern |
| 38  | Spacer central lubrication QSM     | 1047832 | 1   |  |
| 39  | Mounting plate lube. ECHF/QSM      | 1031517 | 1   |  |
| 40  | Lubrication kit                    | 1021136 | 1   |  |
| 41  | Screw MC6S M5x30 12.9              | 610403  | 2   |  |
| 42  | Screw MC6S M5x35 12.9              | 610404  | 1   |  |
| 43  | Washer NL 10mm                     | 611041  | 2   | QTY: 7 for ECHF                          |
| 44  | Screw MC6S M10x40 12.9 ZFSL        | 612020  | 2   | QTY: 4 for ECHF. Torque: 79Nm            |
| 52  | Washer NL 8mm                      | 611040  | 2   | QTY: 5 for ECHF                          |
| 62  | Punch serial no into rotator frame |         |     |  |
| 63  | Clamping half Complete             | 1016393 | 4   | Part of top part                         |
| 64  | Screw MC6S M12x55 12.9 ZFSL        | 6000155 | 8   | Part of top part. Torque: 136Nm          |
| 65  | Feather Key                        | 650102  | 6   | Part of quick hitch                      |
| 66  | O-ring 319,3x5,7                   | 710908  | 1   | Part of quick hitch                      |
| 67  | Screws depends on quick hitch      |         | 24  | See "Quick hitch"                        |
| 68  | Pipe Plug M36x2                    | 650408  | 6   |  |
| 69  | Shim supporting plate 0,1mm        | 1023344 | 1   |  |
| 70  | Shim supporting plate 0,3mm        | 1023447 | 1   |  |
| 71  | Supporting plate                   | 1023292 | 1   |  |
| 72  | Screw MC6S M8x20 12.9 ZFSL         | 6000157 | 2   |  |
| 73  | Break play: 0,6mm - 0,8mm          |         |     | Assy. between frame & quick hitch        |

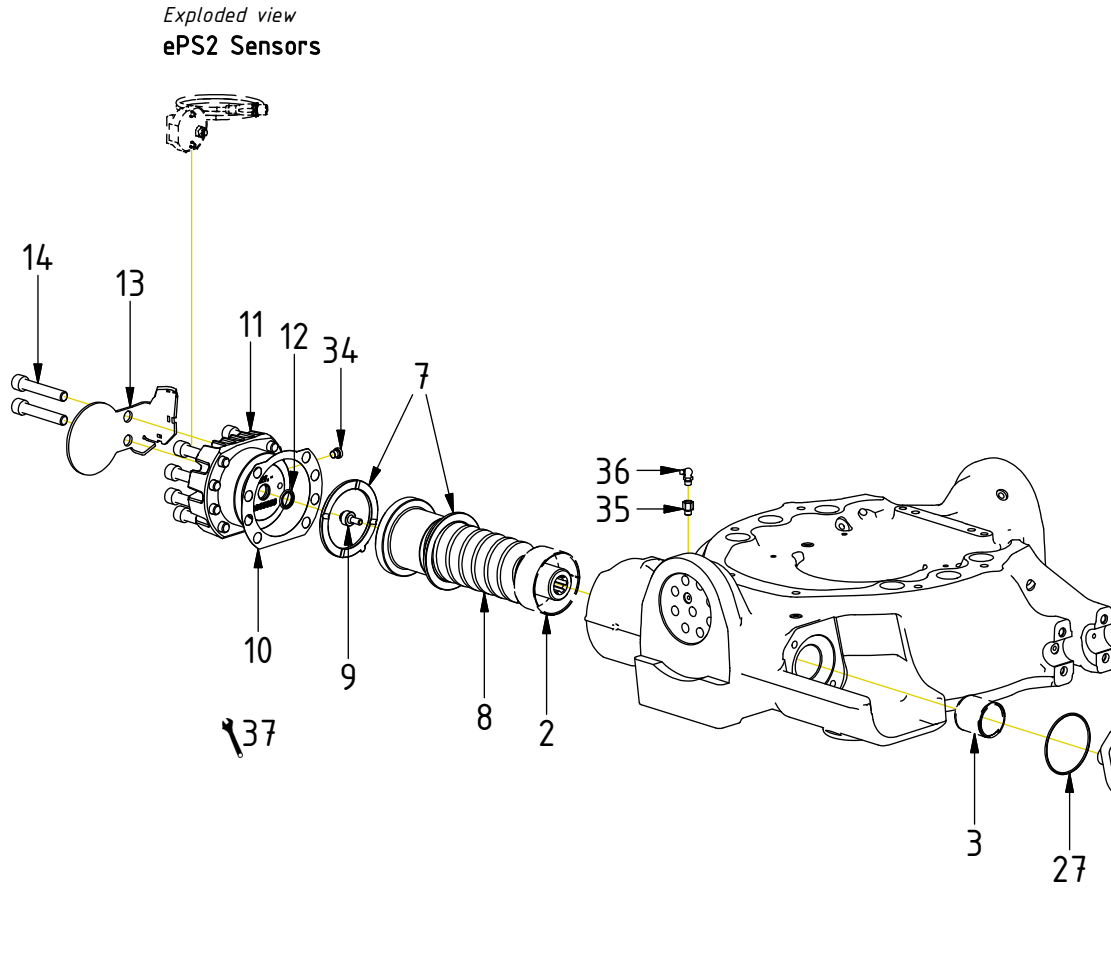
POS in order of assembly



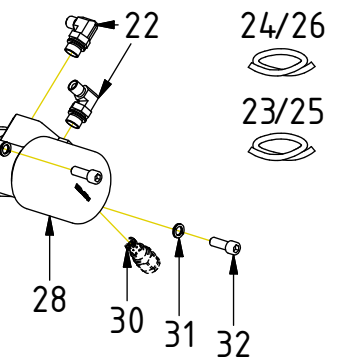
| POS | DESCRIPTION                           | PART    | QTY | COMMENTS                                 |
|-----|---------------------------------------|---------|-----|--|
| 1   | Rotator frame EC226 V4                | 1023732 | 1   | (POS.2-3 incl.)                          |
| 2   | Bushing 85/90x40                      | 630319  | 1   |  |
| 3   | Bushing WB802 45/50x50                | 630102  | 1   |  |
| 4   | Worm wheel EC226 24 holes             | 1057021 | 1   |  |
| 5   | O-ring 242x5 NBR 90                   | 7001663 | 1   |  |
| 6   | Bearing ring EC226 with steering      | 1077002 | 1   | (Only compatible with 8x25)              |
| 31  | Washer NL 12mm                        | 611042  | 10  | QTY: 8 part of top part assembly         |
| 33  | Screw TX45 8x25 10,9 FZB              | 1078840 | 18  | Torque: 34Nm<br>Tighten in cross pattern |
| 39  | Mounting plate lube. ECHF/QSM         | 1031517 | 1   |  |
| 40  | Lubrication kit                       | 1021136 | 1   |  |
| 41  | Screw MC6S M5x30 12.9                 | 610403  | 2   |  |
| 42  | Screw MC6S M5x35 12.9                 | 610404  | 1   |  |
| 43  | Washer NL 10mm                        | 611041  | 2   | QTY: 7 for ECHF                          |
| 44  | Screw MC6S M10x40 12.9 ZFSLH          | 612020  | 2   | QTY: 4 for ECHF. Torque: 79Nm            |
| 45  | Cylindrical pin                       | 1015672 | 2   |  |
| 46  | Valve plate ECHF                      | 1024824 | 1   |  |
| 47  | Valve bl. & Swivl for slipping Compl. | 1027386 | 1   |  |
| 48  | Washer GBR06 3/8                      | 710703  | 5   |  |
| 49  | Adapter 236-06-06                     | 710131  | 3   |  |
| 50  | Adapter 1260-06-32 (3/8")             | 710242  | 1   |  |
| 51  | Adapter 1260-06-43 (3/8")             | 710262  | 1   |  |
| 52  | Washer NL 8mm                         | 611040  | 2   | QTY: 5 for ECHF                          |
| 53  | Screw MC6S 8x50H 12.9                 | 610439  | 3   |  |
| 54  | Screw MC6S M10x50 12.9 ZFSLH          | 611515  | 3   |  |
| 55  | Kit slip ring ECHF DTM                | 1030298 | 1   | For QS. See "Slip rings"                 |
| 56  | Cover plate slip ring                 | 1026200 | 1   |  |
| 57  | Screw MC6S M5x10 12.9                 | 610594  | 4   |  |
| 58  | O-ring 6,07x1,78                      | 712422  | 2   |  |
| 59  | O-ring 12,42x1,78                     | 710973  | 4   |  |
| 60  | O-ring 15,6x1,78                      | 710912  | 1   |  |
| 61  | Connection block ECHF                 | 1028391 | 1   | Guide with spring pin from swivel        |
| 62  | Punch serial no into rotator frame    |         |     |  |
| 63  | Clamping half Complete                | 1016393 | 4   | Part of top part                         |
| 64  | Screw MC6S M12x55 12.9 ZFSLH          | 6000155 | 8   | Part of top part. Torque: 136Nm          |
| 65  | Feather Key                           | 650102  | 6   | Part of quick hitch                      |
| 66  | O-ring 319,3x5,7                      | 710908  | 1   | Part of quick hitch                      |
| 67  | Screws depends on quick hitch         |         | 24  | See "Quick hitch"                        |
| 68  | Pipe Plug M36x2                       | 650408  | 6   |  |
| 69  | Shim supporting plate 0,1mm           | 1023344 | 1   |  |
| 70  | Shim supporting plate 0,3mm           | 1023447 | 1   |  |
| 71  | Supporting plate                      | 1023292 | 1   |  |
| 72  | Screw MC6S M8x20 12.9 ZFSLH           | 6000157 | 2   |  |
| 73  | Break play: 0,6mm - 0,8mm             |         |     | Assy. between frame & quick hitch        |

POS in order of assembly

EC226S



| POS | DESCRIPTION                       | PART    | QTY | COMMENTS                          |
|-----|-----------------------------------|---------|-----|-----------------------------------|
| 2   | Bushing 85/90x40                  | 630319  | 1   |                                   |
| 3   | Bushing WB802 45/50x50            | 630102  | 1   |                                   |
| 7   | Axial washer (with ear)           | 1016104 | 2   | Face grooves toward worm screw    |
| 8   | Worm Screw EC226                  | 1016101 | 1   |                                   |
| 9   | Magnet Spacer Worm Screw          | 1062693 | 1   | Loxeal 83-52. Torque: 20Nm        |
| 10  | Shims kit End Lock 0,3-0,4-0,5mm  | 1043983 | 1   |                                   |
| 11  | End Lock EC226S Cast              | 1065859 | 1   | (POS.12 incl.)                    |
| 12  | Seal end lock 20x27.5x3.2         | 1063616 | 1   |                                   |
| 13  | Protection plate EC226S           | 1063521 | 1   |                                   |
| 14  | Screw MC6S M14x80 12.9 ZFSL       | 6000354 | 8   | Torque: 217Nm                     |
| 22  | Adapter 401-06-08 90° (3/8"-1/2") | 710157  | 2   |                                   |
| 23  | Hose hydraulic motor B QSM        | 7000957 | 1   | Part of quick hitch               |
| 24  | Hose hydraulic motor A QSM        | 7000958 | 1   | Part of quick hitch               |
| 25  | Hose hydraulic motor Long ECHF    | 7001404 | 1   |                                   |
| 26  | Hose hydraulic motor Short ECHF   | 7000026 | 1   |                                   |
| 27  | O-ring 82,22x2.62 N/70            | 7000920 | 1   |                                   |
| 28  | Hydraulic motor + chock valve     | 1022288 | 1   | (POS.29-30 incl.)                 |
| 29  | Hydraulic motor White 200cc       | 7001807 | 1   |                                   |
| 30  | Relief valve White 160/200cc      | 7001647 | 1   | Torque: 77Nm. Assy. before motor  |
| 31  | Washer NL 12mm                    | 611042  | 10  | QTY: 8 part of top part assembly  |
| 32  | Screw MC6S M12x35 12.9 ZFSL       | 6000150 | 2   | Torque: 136Nm                     |
| 34  | Plug Bsp 1/8"                     | 711503  | 1   |                                   |
| 35  | Extender 18mm R1/8"               | 712216  | 1   |                                   |
| 36  | Grease Nipple                     | 711409  | 1   |                                   |
| 37  | Rotation play: 0,15mm - 0,25mm    |         |     | Note rotation play on module card |

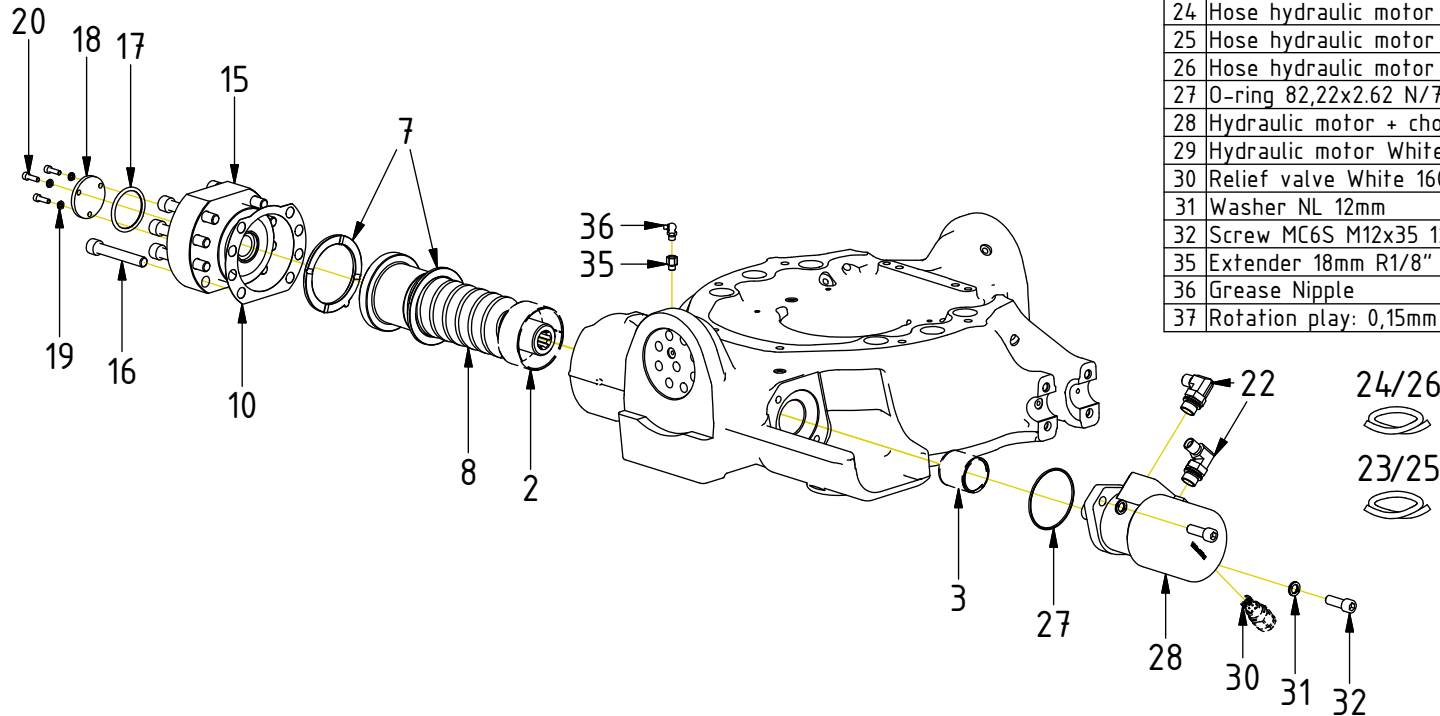
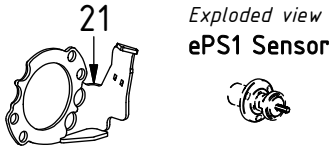


POS in order of assembly

EC226/EC226PS

| POS | DESCRIPTION                       | PART    | QTY | COMMENTS                          |
|-----|-----------------------------------|---------|-----|-----------------------------------|
| 2   | Bushing 85/90x40                  | 630319  | 1   |                                   |
| 3   | Bushing WB802 45/50x50            | 630102  | 1   |                                   |
| 7   | Axial washer (with ear)           | 1016104 | 2   | Face grooves toward worm screw    |
| 8   | Worm Screw EC226                  | 1016101 | 1   |                                   |
| 10  | Shims kit End Lock 0,3-0,4-0,5mm  | 1043983 | 1   |                                   |
| 15  | End lock EC226 V2                 | 1056095 | 1   |                                   |
| 16  | Screw MC6S M14x90 12.9 ZFSL       | 6000158 | 8   | Torque: 217Nm                     |
| 17  | O-ring 27x5                       | 7000485 | 1   |                                   |
| 18  | Cover end lock                    | 1041613 | 1   |                                   |
| 19  | Washer NL 6mm                     | 611039  | 3   |                                   |
| 20  | Screw MC6S M6x20 A4-80            | 611513  | 3   |                                   |
| 21  | Protection ePS                    | 1055677 | 1   | For ePS1                          |
| 22  | Adapter 401-06-08 90° (3/8"-1/2") | 710157  | 2   |                                   |
| 23  | Hose hydraulic motor B QSM        | 7000957 | 1   | Part of quick hitch               |
| 24  | Hose hydraulic motor A QSM        | 7000958 | 1   | Part of quick hitch               |
| 25  | Hose hydraulic motor Long ECHF    | 7001404 | 1   |                                   |
| 26  | Hose hydraulic motor Short ECHF   | 7000026 | 1   |                                   |
| 27  | O-ring 82,22x2.62 N/70            | 7000920 | 1   |                                   |
| 28  | Hydraulic motor + chock valve     | 1022288 | 1   | (POS.29-30 incl.)                 |
| 29  | Hydraulic motor White 200cc       | 7001807 | 1   |                                   |
| 30  | Relief valve White 160/200cc      | 7001647 | 1   | Torque: 77Nm. Assy. before motor  |
| 31  | Washer NL 12mm                    | 611042  | 10  | QTY: 8 part of top part assembly  |
| 32  | Screw MC6S M12x35 12.9 ZFSL       | 6000150 | 2   | Torque: 136Nm                     |
| 35  | Extender 18mm R1/8"               | 712216  | 1   |                                   |
| 36  | Grease Nipple                     | 711409  | 1   |                                   |
| 37  | Rotation play: 0,15mm - 0,25mm    |         |     | Note rotation play on module card |

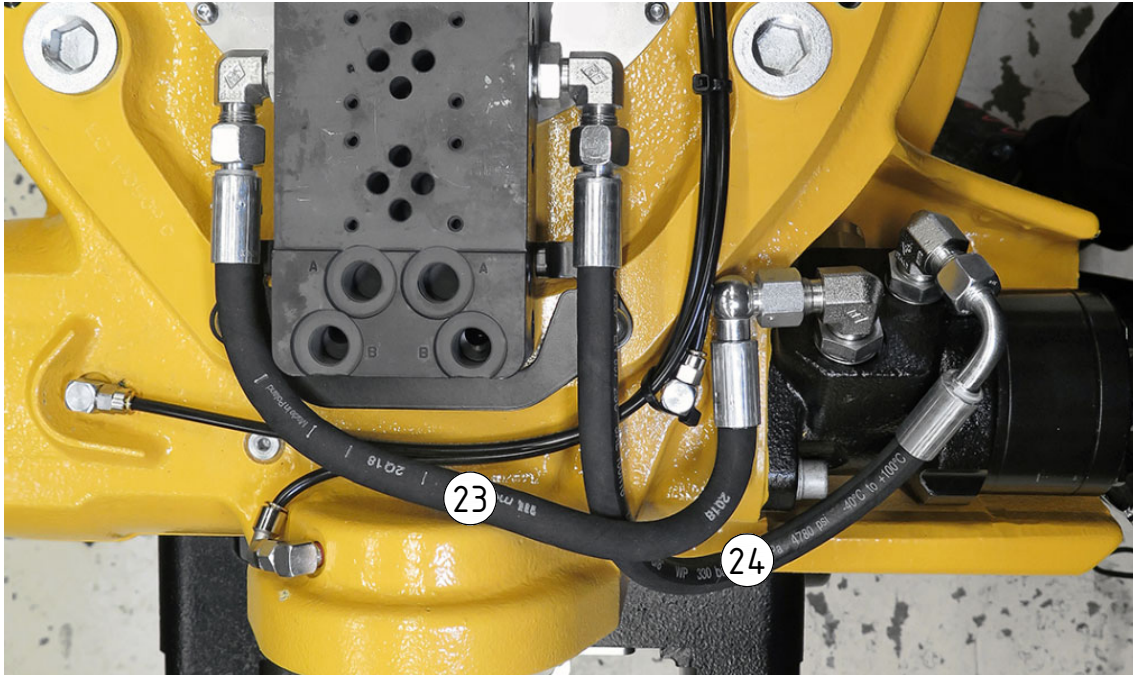
Option ePS:



POS in order of assembly

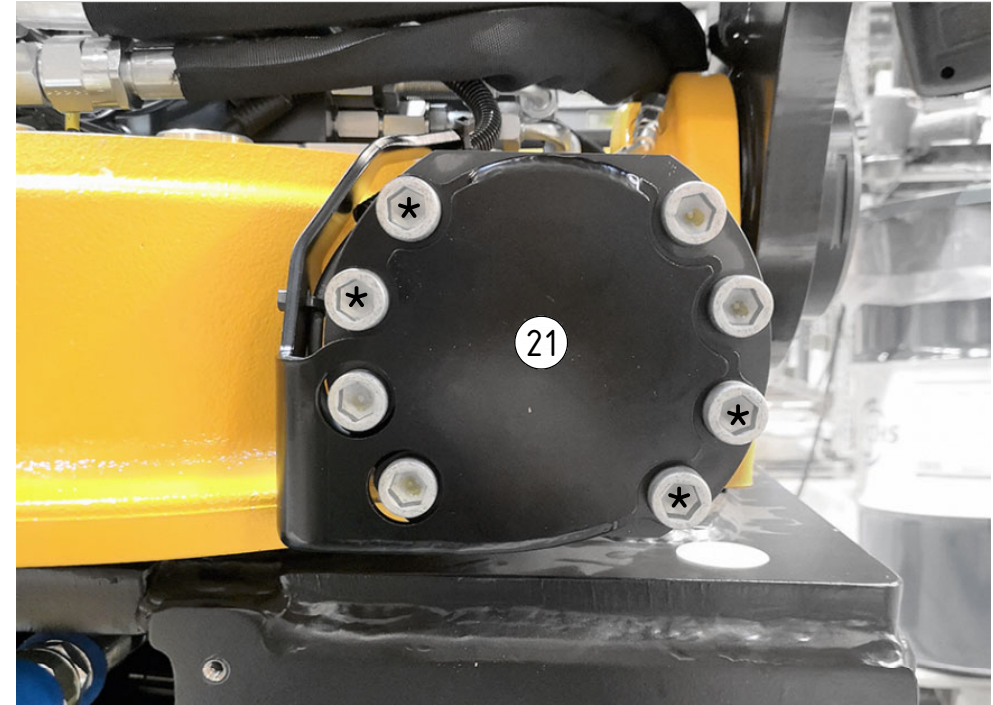


QSM:

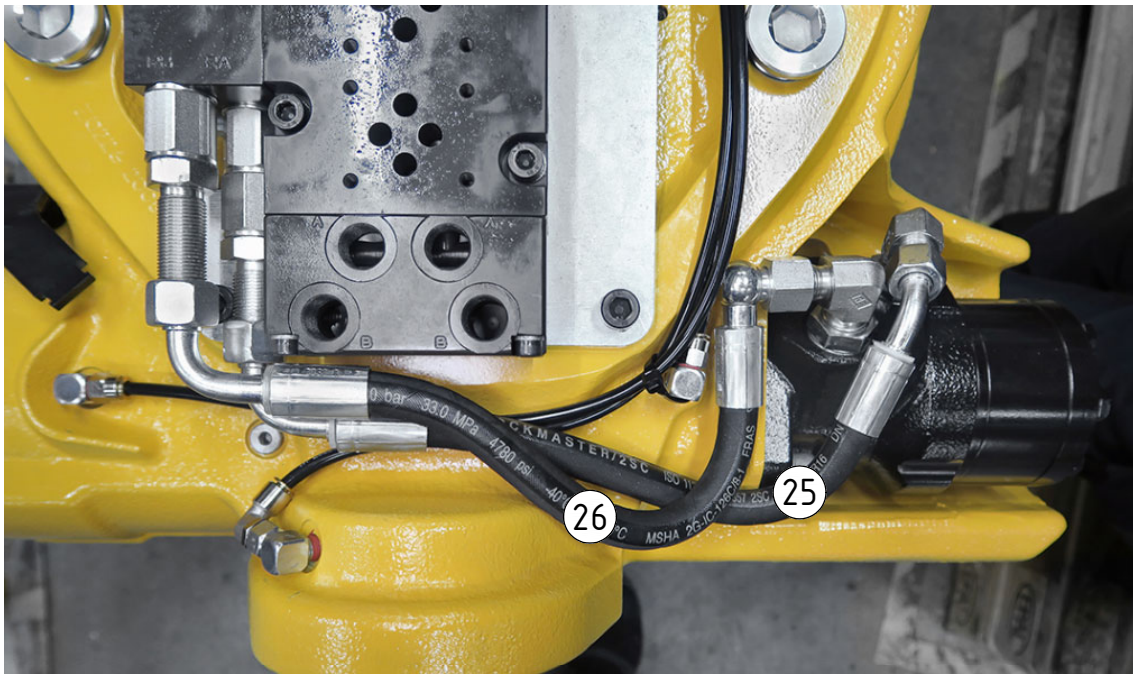


| POS | DESCRIPTION                     | PART    | QTY | COMMENTS            |
|-----|---------------------------------|---------|-----|---------------------|
| 21  | Protection ePS                  | 1055677 | 1   | For ePS1            |
| 23  | Hose hydraulic motor B QSM      | 7000957 | 1   | Part of quick hitch |
| 24  | Hose hydraulic motor A QSM      | 7000958 | 1   | Part of quick hitch |
| 25  | Hose hydraulic motor Long ECHF  | 7001404 | 1   |                     |
| 26  | Hose hydraulic motor Short ECHF | 7000026 | 1   |                     |

ePS1:



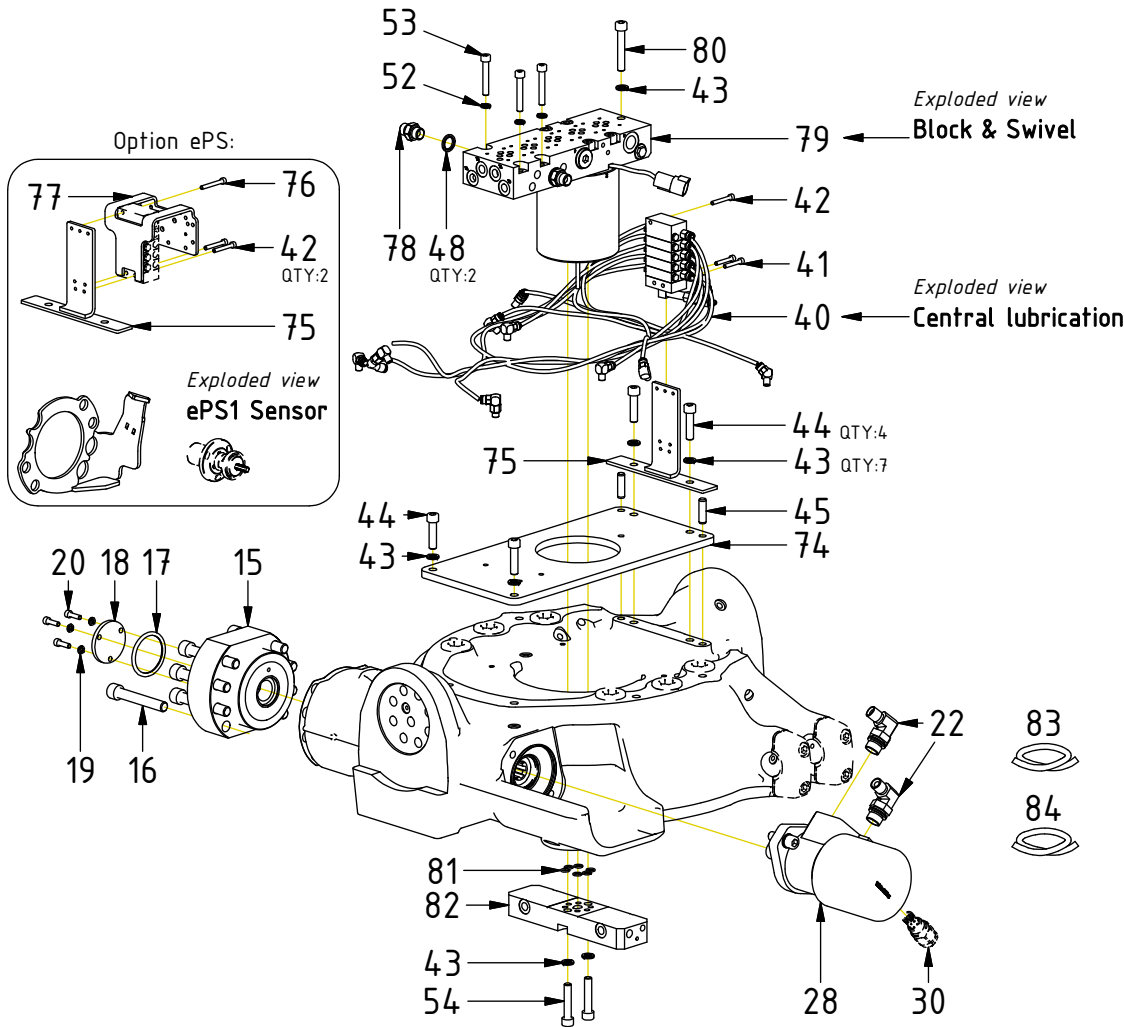
ECHF:



\* No torque until control system assembly

## SPARE PARTS

### EC226 6-ch



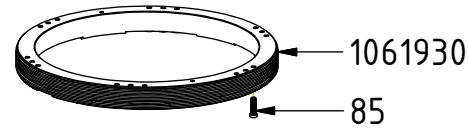
| POS | DESCRIPTION                           | PART    | QTY | COMMENTS                           |
|-----|---------------------------------------|---------|-----|------------------------------------|
| 15  | End lock EC226 V2                     | 1056095 | 1   |                                    |
| 16  | Screw MC6S M14x90 12.9 ZFSHL          | 6000158 | 8   | Torque: 217Nm                      |
| 17  | O-ring 27x5                           | 7000485 | 1   |                                    |
| 18  | Cover end lock                        | 1041613 | 1   |                                    |
| 19  | Washer NL 6mm                         | 611039  | 3   |                                    |
| 20  | Screw MC6S M6x20 A4-80                | 611513  | 3   |                                    |
| 21  | Protection ePS                        | 1055677 | 1   | For ePS1                           |
| 22  | Adapter 401-06-08 90° (3/8"-1/2")     | 710157  | 2   |                                    |
| 28  | Hydraulic motor + chock valve         | 1022288 | 1   | (POS.29-30 incl.)                  |
| 29  | Hydraulic motor White 200cc           | 7001807 | 1   |                                    |
| 30  | Relief valve White 160/200cc          | 7001647 | 1   | Torque: 77Nm. Assy. before motor   |
| 39  | Mounting plate lube. ECHF/QSM         | 1031517 | 1   |                                    |
| 40  | Lubrication kit                       | 1021136 | 1   |                                    |
| 41  | Screw MC6S M5x30 12.9                 | 610403  | 2   |                                    |
| 42  | Screw MC6S M5x35 12.9                 | 610404  | 1   |                                    |
| 43  | Washer NL 10mm                        | 611041  | 2   | QTY: 7 for ECHF                    |
| 44  | Screw MC6S M10x40 12.9 ZFSHL          | 612020  | 2   | QTY: 4 for ECHF. Torque: 79Nm      |
| 45  | Cylindrical pin                       | 1015672 | 2   |                                    |
| 48  | Washer GBR06 3/8                      | 710703  | 5   |                                    |
| 52  | Washer NL 8mm                         | 611040  | 2   | QTY: 5 for ECHF                    |
| 53  | Screw MC6S 8x50H 12.9                 | 610439  | 3   |                                    |
| 54  | Screw MC6S M10x50 12.9 ZFSHL          | 611515  | 3   |                                    |
| 74  | Valve plate                           | 1011515 | 1   |                                    |
| 75  | Mounting plate lubrication 6-ch       | 1018052 | 1   |                                    |
| 76  | Screw MC6S M5x40 12.9                 | 610405  | 1   |                                    |
| 77  | Mounting plate angle sensor ePS       | 1029973 | 1   |                                    |
| 78  | Adapter 136-06-06 (3/8")              | 710106  | 2   |                                    |
| 79  | Valve bl. & Swivel w. slipring Compl. | 1030297 | 1   |                                    |
| 80  | Screw MC6S M10x60 12.9                | 610460  | 1   |                                    |
| 81  | O-ring 9,25x1,78                      | 710901  | 6   |                                    |
| 82  | Connection block 6-ch                 | 1024045 | 1   | "1" on swivel against "X" on block |
| 83  | Hose hydraulic motor Long 6-ch        | 742332  | 1   |                                    |
| 84  | Hose hydraulic motor Short 6-ch       | 742331  | 1   |                                    |

Parts history on p.8

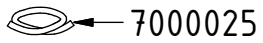


## SPARE PARTS

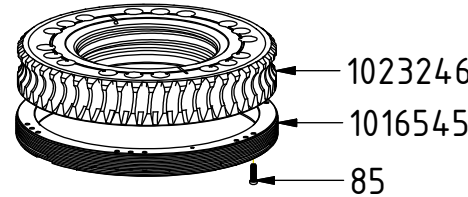
Replaced from 2024-10:



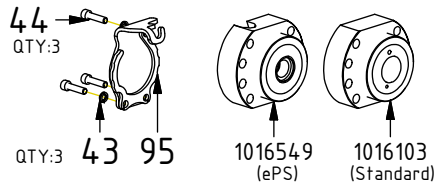
Replaced by POS.25  
from 2020-10:



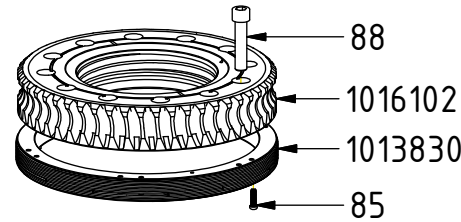
Replaced from 2020-06:



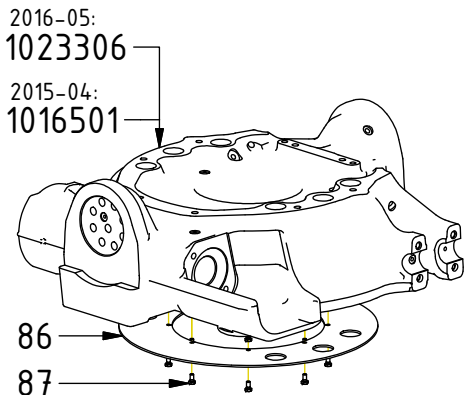
Replaced from 2020-07:



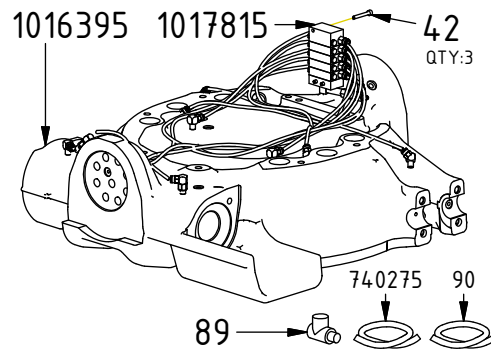
Replaced from 2013-03:



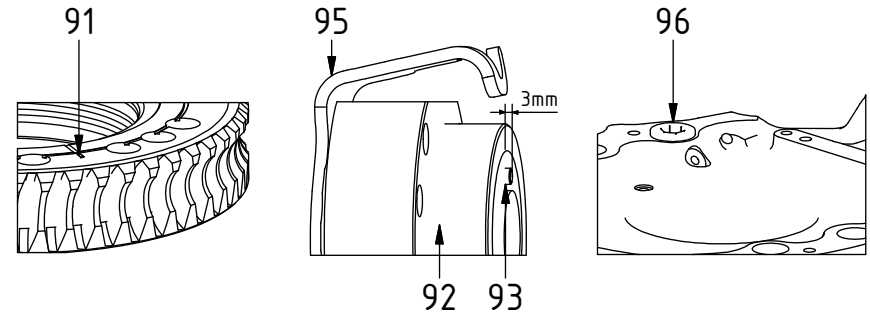
Replaced from



Replaced from 2013-01:



MACS:



| POS | DESCRIPTION                        | PART    | QTY | COMMENTS   |
|-----|------------------------------------|---------|-----|--|
| 1   | Rotator frame EC226 V4             | 1023732 | 1   | (POS.2-3 incl.)  |
| 4   | Worm wheel EC226 24 holes          | 1057021 | 1   |  |
| 6   | Bearing ring EC226 with steering   | 1077002 | 1   | (Only compatible with 8x25)                                      |
| 15  | End lock EC226 V2                  | 1056095 | 1   |  |
| 21  | Protection ePS                     | 1055677 | 1   | For ePS1   |
| 25  | Hose hydraulic motor Long ECHF     | 7001404 | 1   |  |
| 33  | Screw TX45 8x25 10,9 FZB           | 1078840 | 18  | Torque: 34Nm<br>Tighten in cross pattern                         |
| 42  | Screw MC6S M5x35 12.9              | 610404  | 1   |  |
| 43  | Washer NL 10mm                     | 611041  | 2   | QTY: 7 for ECHF  |
| 44  | Screw MC6S M10x40 12.9 ZFSHL       | 612020  | 2   | QTY: 4 for ECHF. Torque: 79Nm                                    |
| 83  | Hose hydraulic motor Long 6-ch     | 742332  | 1   |  |
| 84  | Hose hydraulic motor Short 6-ch    | 742331  | 1   |  |
| 85  | Screw TX45 M8x30 FZB 10,9          | 612201  | 18  | Torque: 34Nm. Used until 2024-10                                 |
| 86  | Wear washer                        | 1011242 | 1   | Used until 2016-05   |
| 87  | Screw M6S M6x12 8,8 FZB            | 610108  | 8   | Used until 2016-05   |
| 88  | Screw MC6S 20x90 12.9              | 610556  | 12  | Used until 2013-10   |
| 89  | Adapter DSVW-15 LR                 | 710510  | 1   | Used until 2013-03   |
| 90  | Hose hydraulic motor v1 Short 6-ch | 740274  | 1   | Replaced by POS.84 from 2013-03                                  |
| 91  | MACS Magnet 8x5x3                  | 6000047 | 1   | Loctite 415. Harden 1 minute                                     |
| 92  | MACS End Lock EC226                | 1028331 | 1   |  |
| 93  | MACS Inductive sensor M8 PNP       | 1043698 | 1   | Distance 3mm. Nut torque: 3Nm                                    |
| 94  | MACS Inductive sensor M8-M12       | 1028045 | 1   | Replaced by POS.93 from 2017-08<br>Distance 4mm. Nut torque: 3Nm |
| 95  | MACS Protection                    | 1016554 | 1   | (Also for ePS until 2020-07)                                     |
| 96  | MACS Pipe Plug M36/M8              | 650411  | 1   |  |

POS in order of assembly