

# ERSATZTEILLISTE / Spare parts list



Typ: / Type: MET 06-0  
Bezeichnung: / Description: Portal-Tandemachse / Portal tandem axle  
Gültig ab Fabrik-Nr.: / Valid ex Factory-No.: 01  
Erstellungsdatum: / Date of creation: 25.06.2015  
Änderungsdatum: / Date of modification: 21.10.2019

## INHALT: / Contents:

### Bezeichnung / Description:

Einbauzeichnung / Assembly drawing  
Differential / Differential  
**Differentialkorb / Differential cage**  
Achsträger S1 / Axle housing S1  
**Federspeicherzylinder / Spring brake cylinder**  
Achsträger S2 / Axle housing S2  
**Federspeicherzylinder / Spring brake cylinder**  
Portal-Tandemachsträger / Portal bogie housing  
Außenteil / Wheel end  
**Planetentrieb / Planetary gear drive**  
Änderungshistorie / Change history  
Gewährleistung / Guarantee

### Bild / Drawing

PTA 7506.117  
2401.378.C  
**2219.023.A**  
2403.463-464.B  
**5350.094.A**  
2403.463-464.B  
**5350.093.A**  
2405.189.A  
2402.303.A  
**2218.033.A**  
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## WICHTIG! / Important!

### Bei Bestellung angeben: / Indicate at order:

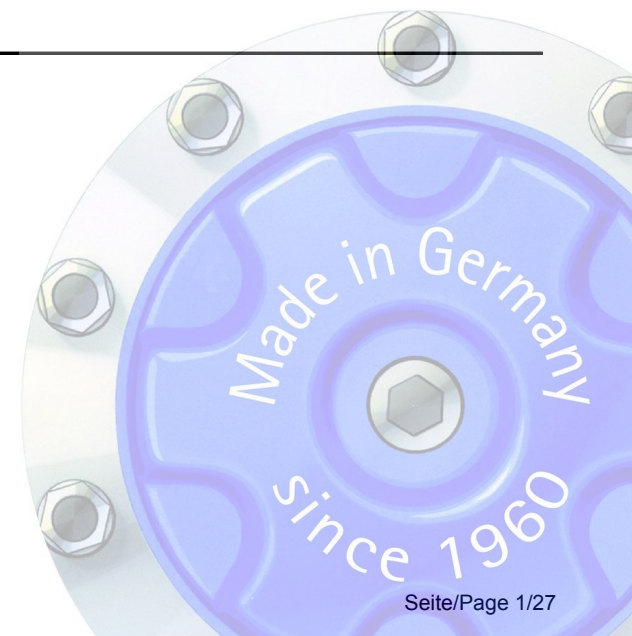
Fahrzeugtyp, Hersteller  
Vehicle type, Manufacturer  
NAF-Typ, Fabrik-Nr./ NAF-Type, Factory-No.  
Teilebezeichnung, Teilenummer / Part description, Part number  
Gewünschte Menge / Desired qty.  
Genaue Versandanschrift, Versandart  
Exact shipping address, Method of shipment

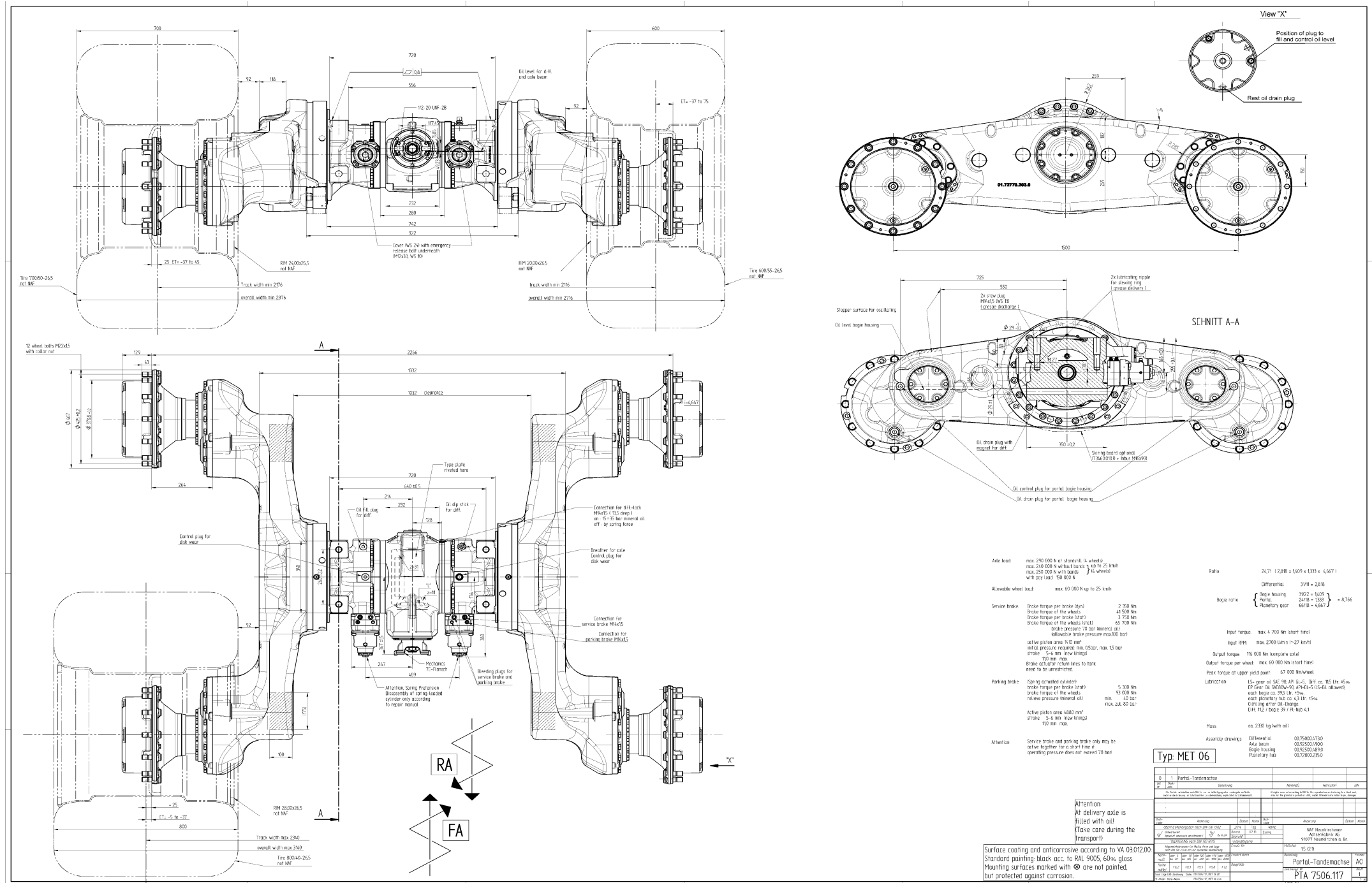
### NAF

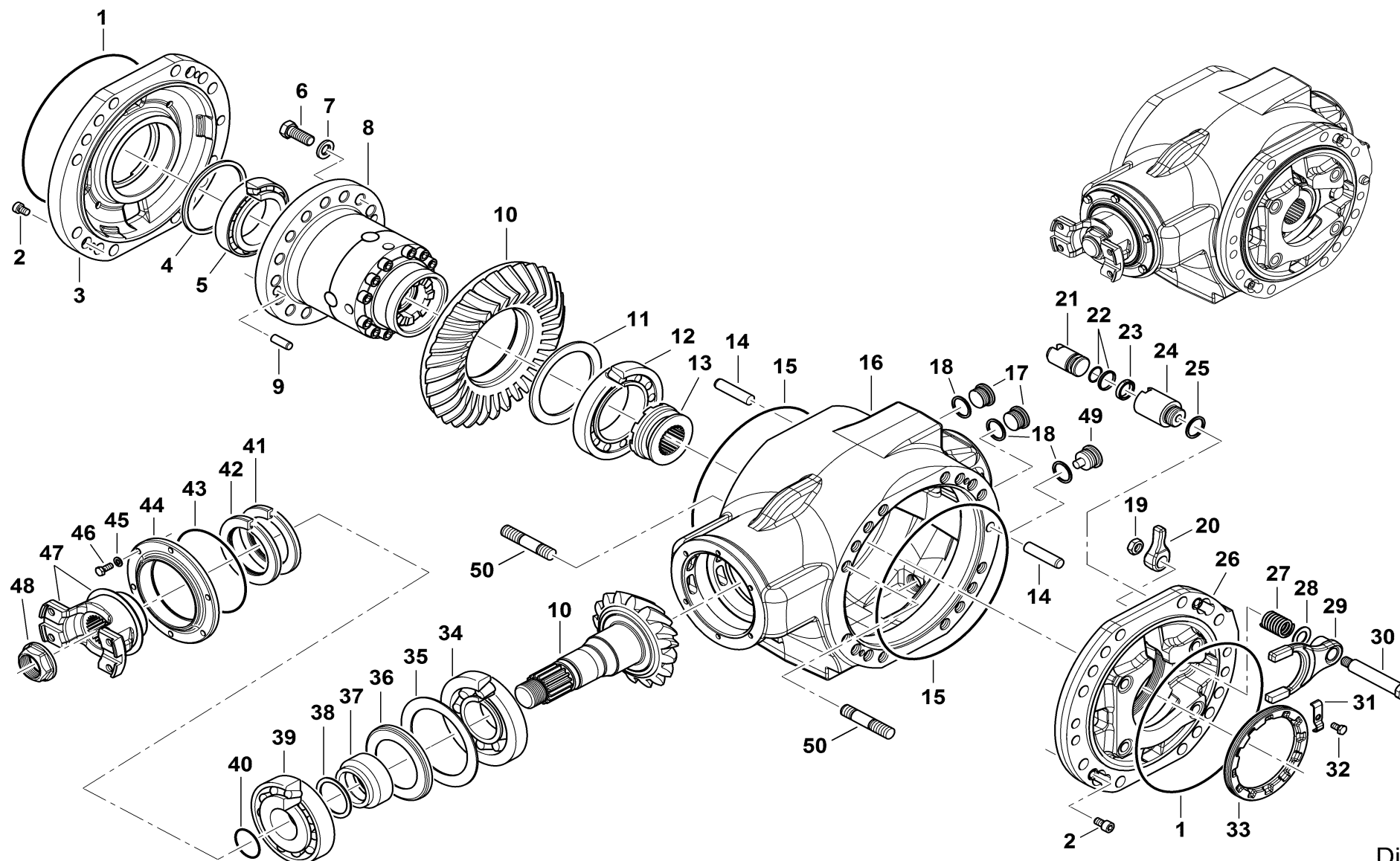
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Differential  
2401.378.C

# ERSATZTEILLISTE / Spare parts list



|                             |              |              |
|-----------------------------|--------------|--------------|
| Typ: / Type:                | MET 06-0     | MET 06-0     |
| Bezeichnung: / Description: | Differential | Differential |
| Bildnummer: / Drawing no.:  | 2401.378.C   | 2401.378.C   |
| Erstellungsdatum:           | 25.06.2015   |              |
| Date of creation:           |              | 25.06.2015   |

| Pos. | Teilenummer     | Teilebezeichnung       | Part description                  | Menge    | Bemerkung                   |
|------|-----------------|------------------------|-----------------------------------|----------|-----------------------------|
| Pos. | Part number     |                        |                                   | Qty.     | Remark                      |
| ---  | <b>2401.378</b> | <b>DIFFERENTIAL</b>    | <b>Differential</b>               | <b>1</b> |                             |
| 1    | 1170.701        | O-RING                 | O-Ring                            | 2        |                             |
| 2    | 1020.212        | INBUSSCHRAUBE          | Allen screw                       | 4        |                             |
| 3    | 7527.190        | FLANSCH                | Flange                            | 1        |                             |
| 4    | <b>2108.072</b> | <b>SCHEIBENPAKET</b>   | <b>Shim kit</b>                   | <b>1</b> | <b>s=0.7-2.0 / step 0.1</b> |
|      | 7317.365        | EINSTELLSCHEIBE        | Adjusting washer                  | n/a      | s=1.0                       |
|      | 7317.366        | EINSTELLSCHEIBE        | Adjusting washer                  | n/a      | s=1.1                       |
|      | 7317.367        | EINSTELLSCHEIBE        | Adjusting washer                  | n/a      | s=1.2                       |
|      | 7317.368        | EINSTELLSCHEIBE        | Adjusting washer                  | n/a      | s=1.3                       |
|      | 7317.369        | EINSTELLSCHEIBE        | Adjusting washer                  | n/a      | s=1.4                       |
|      | 7317.370        | EINSTELLSCHEIBE        | Adjusting washer                  | n/a      | s=1.5                       |
|      | 7317.371        | EINSTELLSCHEIBE        | Adjusting washer                  | n/a      | s=1.6                       |
|      | 7317.372        | EINSTELLSCHEIBE        | Adjusting washer                  | n/a      | s=1.7                       |
|      | 7317.373        | EINSTELLSCHEIBE        | Adjusting washer                  | n/a      | s=1.8                       |
|      | 7317.374        | EINSTELLSCHEIBE        | Adjusting washer                  | n/a      | s=1.9                       |
|      | 7317.714        | EINSTELLSCHEIBE        | Adjusting washer                  | n/a      | s=0.7                       |
|      | 7317.715        | EINSTELLSCHEIBE        | Adjusting washer                  | n/a      | s=0.8                       |
|      | 7317.716        | EINSTELLSCHEIBE        | Adjusting washer                  | n/a      | s=0.9                       |
|      | 7317.717        | EINSTELLSCHEIBE        | Adjusting washer                  | n/a      | s=2.0                       |
| 5    | 1110.016        | KEGELROLLENLAGER       | Tapered roller bearing            | 1        |                             |
| 6    | 1010.501        | SECHSKANTSCHRAUBE      | Hexagon bolt                      | 16       |                             |
| 7    | 7316.045        | SCHEIBE                | Washer                            | 16       |                             |
| 8    | <b>2219.023</b> | <b>DIFF.-KORB KPL.</b> | <b>Differential cage assembly</b> | <b>1</b> |                             |
| 9    | 1200.229        | ZYLINDERSTIFT          | Dowel pin                         | 2        |                             |
| 10   | 2101.344        | TELLERRAD/RITZEL       | Crown wheel/pinion                | 1        | Z=31/11                     |
| 11   | 1210.157        | SEEGER-STUETZSCHEIBE   | Seeger support washer             | 1        |                             |
| 12   | 1110.175        | KEGELROLLENLAGER       | Tapered roller bearing            | 1        |                             |
| 13   | 9813.059        | SCHIEBEMUFFE           | Shifting sleeve                   | 1        |                             |
| 14   | 1200.206        | ZYLINDERSTIFT          | Dowel pin                         | 2        |                             |
| 15   | 1170.716        | O-RING                 | O-Ring                            | 2        |                             |
| 16   | 7506.282        | DIFFERENTIALGEHAEUSE   | Differential housing              | 1        |                             |

# ERSATZTEILLISTE / Spare parts list



|                             |              |              |
|-----------------------------|--------------|--------------|
| Typ: / Type:                | MET 06-0     | MET 06-0     |
| Bezeichnung: / Description: | Differential | Differential |
| Bildnummer: / Drawing no.:  | 2401.378.C   | 2401.378.C   |
| Erstellungsdatum:           | 25.06.2015   |              |
| Date of creation:           |              | 25.06.2015   |

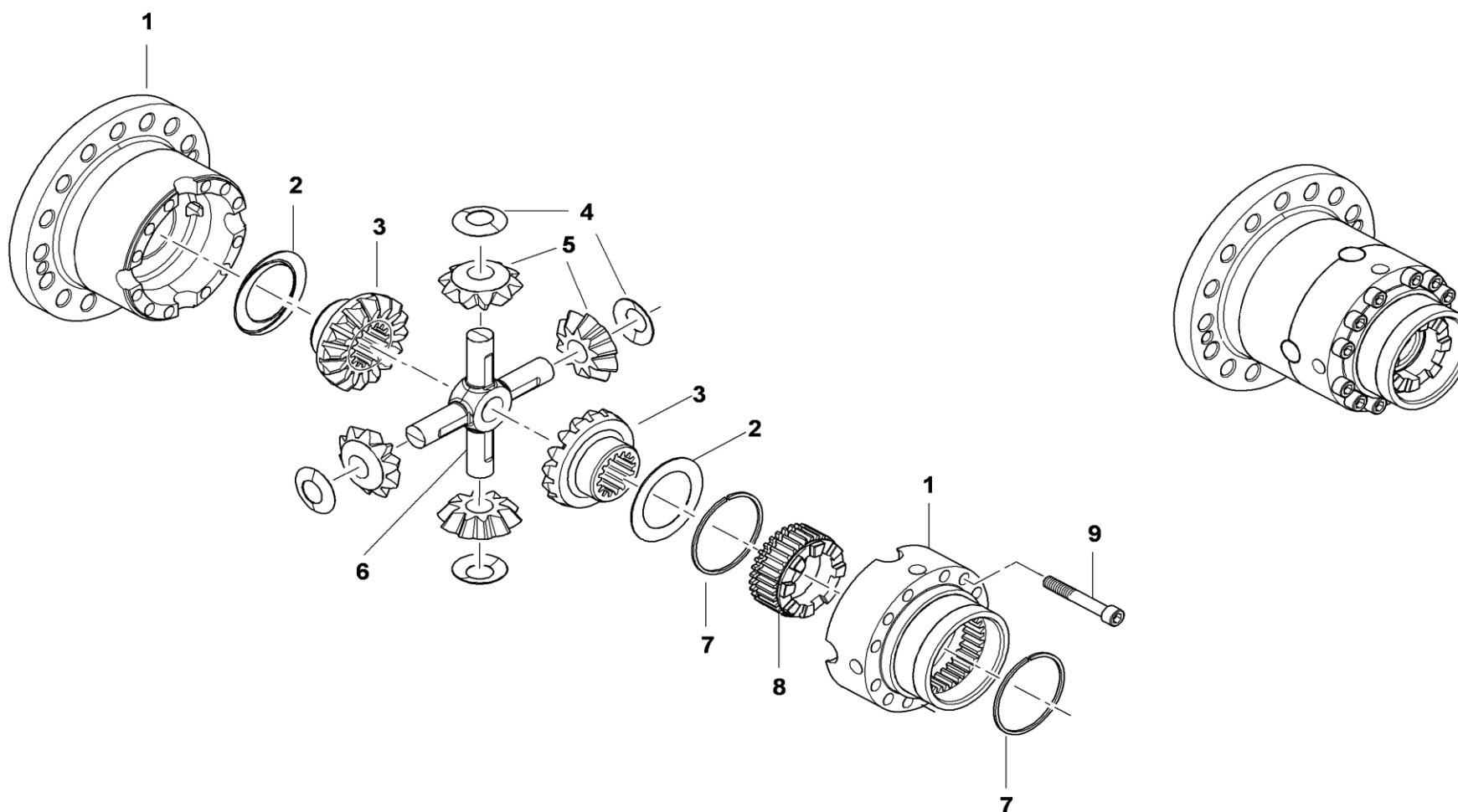
| Pos.      | Teilenummer     | Teilebezeichnung      | Part description       | Menge    | Bemerkung                   |
|-----------|-----------------|-----------------------|------------------------|----------|-----------------------------|
| Pos.      | Part number     |                       |                        | Qty.     | Remark                      |
| 17        | 1040.103        | VERSCHLUSSSCHRAUBE    | Screw plug             | 2        |                             |
| 18        | 1180.507        | DICHTRING             | Seal ring              | 3        |                             |
| 19        | 1060.003        | SECHSKANTMUTTER       | Hexagon nut            | 1        |                             |
| 20        | 9809.116        | SCHALTHEBEL           | Shifting sleeve        | 1        |                             |
| 21        | 5252.100        | KOLBEN                | Piston                 | 1        |                             |
| 22        | 1180.811        | KOLBENDICHTUNG        | Piston packing         | 1        |                             |
| 23        | 1180.734        | NUTRING               | Lip seal               | 1        |                             |
| 24        | 5263.092        | ZYLINDER              | Cylinder               | 1        |                             |
| 25        | 1180.507        | DICHTRING             | Seal ring              | 1        |                             |
| 26        | 7527.132        | FLANSCH               | Flange                 | 1        |                             |
| 27        | 7331.016        | DRUCKFEDER            | Compression spring     | 1        |                             |
| <b>28</b> | <b>7317.023</b> | <b>EINSTELL-PAKET</b> | <b>Adjusting kit</b>   | <b>1</b> | <b>s=1.5/2.0/2.5/3.0</b>    |
|           | 7317.111        | EINSTELLSCHEIBE       | Adjusting washer       | n/a      | s=1.5                       |
|           | 7317.112        | EINSTELLSCHEIBE       | Adjusting washer       | n/a      | s=2.0                       |
|           | 7317.113        | EINSTELLSCHEIBE       | Adjusting washer       | n/a      | s=2.5                       |
|           | 7317.114        | EINSTELLSCHEIBE       | Adjusting washer       | n/a      | s=3.0                       |
| 29        | 9809.090        | SCHALTGABEL           | Shifting fork          | 1        |                             |
| 30        | 9816.132        | SCHALTWELLE           | Shifting rod           | 1        |                             |
| 31        | 9566.010        | SICHERUNGSBLECH       | Locking plate          | 1        |                             |
| 32        | 1010.129        | SECHSKANTSCHRAUBE     | Hexagon bolt           | 1        |                             |
| 33        | 7329.012        | MUTTER                | Nut                    | 1        |                             |
| 34        | 1110.088        | KEGELROLLENLAGER      | Tapered roller bearing | 1        |                             |
| <b>35</b> | <b>2108.069</b> | <b>SCHEIBENPAKET</b>  | <b>Shim kit</b>        | <b>1</b> | <b>s=2.6-3.0 / step 0.1</b> |
|           | 7317.354        | EINSTELLSCHEIBE       | Adjusting washer       | n/a      | s=3.0                       |
|           | 7317.706        | EINSTELLSCHEIBE       | Adjusting washer       | n/a      | s=2.6                       |
|           | 7317.707        | EINSTELLSCHEIBE       | Adjusting washer       | n/a      | s=2.7                       |
|           | 7317.708        | EINSTELLSCHEIBE       | Adjusting washer       | n/a      | s=2.8                       |
|           | 7317.709        | EINSTELLSCHEIBE       | Adjusting washer       | n/a      | s=2.9                       |
| 36        | 7301.133        | DECKEL                | Cover                  | 1        |                             |
| 37        | 7311.147        | DISTANZBUECHSE        | Spacer bushing         | 1        |                             |

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|                             |              |              |
|-----------------------------|--------------|--------------|
| Typ: / Type:                | MET 06-0     | MET 06-0     |
| Bezeichnung: / Description: | Differential | Differential |
| Bildnummer: / Drawing no.:  | 2401.378.C   | 2401.378.C   |
| Erstellungsdatum:           | 25.06.2015   |              |
| Date of creation:           |              | 25.06.2015   |

| Pos. | Teilenummer | Teilebezeichnung      | Part description       | Menge | Bemerkung               |
|------|-------------|-----------------------|------------------------|-------|-------------------------|
| Pos. | Part number |                       |                        | Qty.  | Remark                  |
| 38   | 7317.037    | EINSTELL-PAKET        | Adjusting kit          | 2     | s=0.96-1.44 / step 0.04 |
|      | 7317.185    | EINSTELLSCHEIBE       | Adjusting washer       | n/a   | s=0.96                  |
|      | 7317.184    | EINSTELLSCHEIBE       | Adjusting washer       | n/a   | s=1.00                  |
|      | 7317.183    | EINSTELLSCHEIBE       | Adjusting washer       | n/a   | s=1.04                  |
|      | 7317.182    | EINSTELLSCHEIBE       | Adjusting washer       | n/a   | s=1.08                  |
|      | 7317.181    | EINSTELLSCHEIBE       | Adjusting washer       | n/a   | s=1.12                  |
|      | 7317.180    | EINSTELLSCHEIBE       | Adjusting washer       | n/a   | s=1.16                  |
|      | 7317.179    | EINSTELLSCHEIBE       | Adjusting washer       | n/a   | s=1.20                  |
|      | 7317.178    | EINSTELLSCHEIBE       | Adjusting washer       | n/a   | s=1.24                  |
|      | 7317.177    | EINSTELLSCHEIBE       | Adjusting washer       | n/a   | s=1.28                  |
|      | 7317.176    | EINSTELLSCHEIBE       | Adjusting washer       | n/a   | s=1.32                  |
|      | 7317.175    | EINSTELLSCHEIBE       | Adjusting washer       | n/a   | s=1.36                  |
|      | 7317.174    | EINSTELLSCHEIBE       | Adjusting washer       | n/a   | s=1.40                  |
|      | 7317.173    | EINSTELLSCHEIBE       | Adjusting washer       | n/a   | s=1.44                  |
| 39   | 1110.229    | KEGELROLLENLAGER      | Tapered roller bearing | 1     |                         |
| 40   | 1170.013    | O-RING                | O-Ring                 | 1     |                         |
| 41   | 1160.208    | SIMMERRING            | Oil seal               | 1     |                         |
| 42   | 1160.261    | SIMMERRING            | Oil seal               | 1     |                         |
| 43   | 1170.570    | O-RING                | O-Ring                 | 1     |                         |
| 44   | 7301.132    | DECKEL                | Cover                  | 1     |                         |
| 45   | 1190.024    | SPERRKANTRING         | Detent edged ring      | 6     |                         |
| 46   | 1010.101    | SECHSKANTSCHRAUBE     | Hexagon bolt           | 6     |                         |
| 47   | 2107.102    | KARDANFL./SCHUTZKAPPE | Cardan flange/cap      | 1     | 7C-FLANGE               |
| 48   | 7329.057    | MUTTER                | Nut                    | 1     |                         |
| 49   | 7323.013    | VERSCHLUSSSCHRAUBE    | Screw plug             | 1     |                         |
| 50   | 7322.089    | STIFTSCHRAUBE         | Stud                   | 2     |                         |
| ---  | 7340.027    | TYPENSCHILD           | Name plate             | 1     | nicht gez. / not drawn  |
| ---  | 1200.112    | KERBNAGEL             | Pin                    | 4     | nicht gez. / not drawn  |



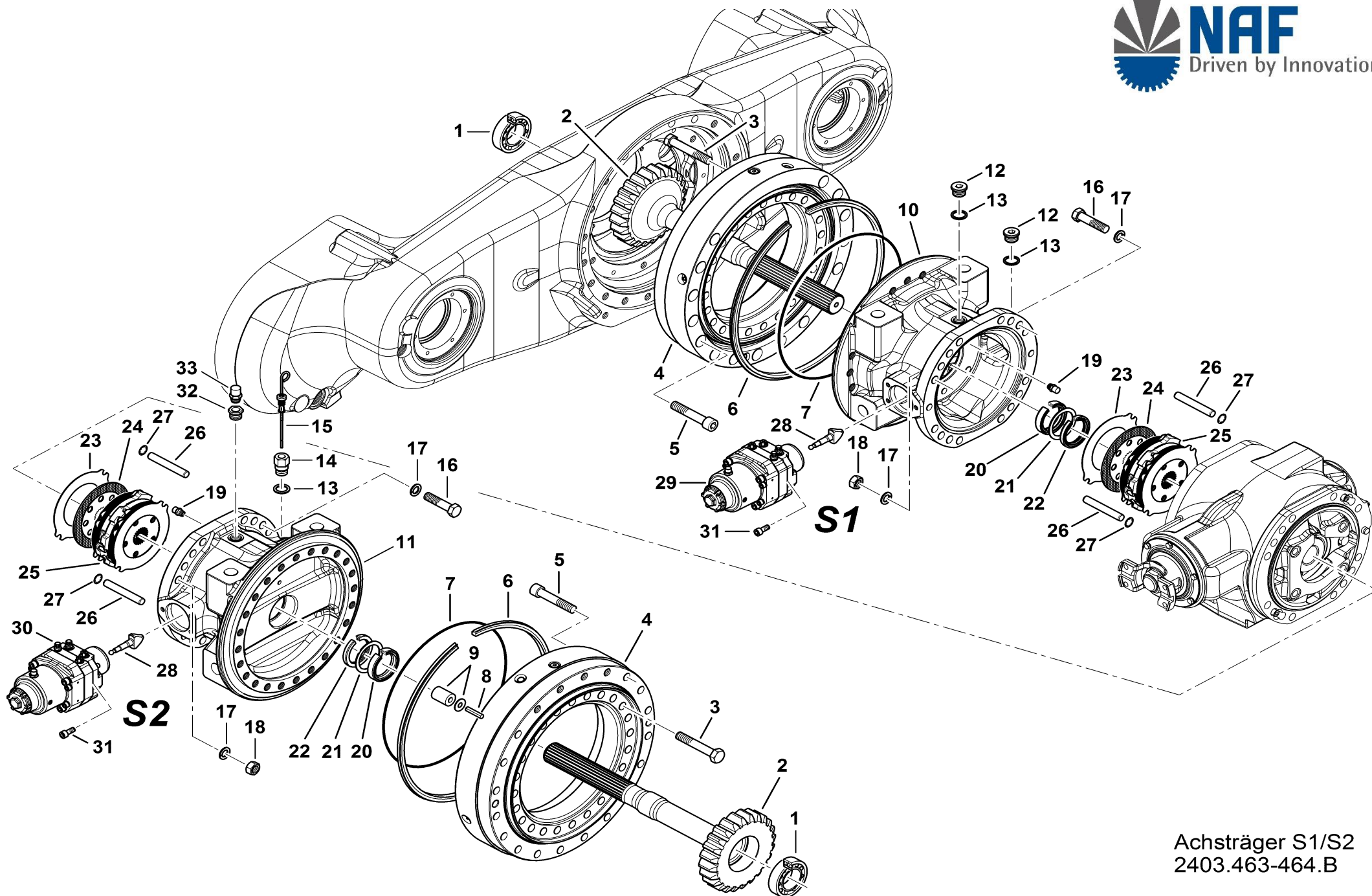
Diff.-Korb  
2219.023.A

# ERSATZTEILLISTE / Spare parts list



|                             |                  |                   |
|-----------------------------|------------------|-------------------|
| Typ: / Type:                | MET 06-0         | MET 06-0          |
| Bezeichnung: / Description: | Differentialkorb | Differential cage |
| Bildnummer: / Drawing no.:  | 2219.023.A       | 2219.023.A        |
| Erstellungsdatum:           | 25.06.2015       |                   |
| Date of creation:           |                  | 25.06.2015        |

| Pos. | Teilenummer     | Teilebezeichnung       | Part description                  | Menge    | Bemerkung                |
|------|-----------------|------------------------|-----------------------------------|----------|--------------------------|
| Pos. | Part number     |                        |                                   | Qty.     | Remark                   |
| ---  | <b>2219.023</b> | <b>DIFF.-KORB KPL.</b> | <b>Differential cage assembly</b> | <b>1</b> |                          |
| 1    | 2102.177        | DIFFERENTIALKORB       | Differential cage                 | 1        |                          |
| 2    | <b>7517.015</b> | <b>EINSTELL-PAKET</b>  | <b>Adjusting kit</b>              | <b>2</b> | <b>s=1.5/1.7/2.0/2.2</b> |
|      | 7517.021        | ANLAUFSCHIEBE          | Thrust washer                     | n/a      | s=1.5                    |
|      | 7517.022        | ANLAUFSCHIEBE          | Thrust washer                     | n/a      | s=1.7                    |
|      | 7517.023        | ANLAUFSCHIEBE          | Thrust washer                     | n/a      | s=2.0                    |
|      | 7517.024        | ANLAUFSCHIEBE          | Thrust washer                     | n/a      | s=2.2                    |
| 3    | 7513.044        | AUSGLEICHSRAD          | Differential gear                 | 2        |                          |
| 4    | 7518.021        | DRUCKSCHIEBE           | Thrust washer                     | 4        |                          |
| 5    | 7514.029        | TRABANTENRAD           | Compensating gear                 | 4        |                          |
| 6    | 7515.021        | KREUZBOLZEN            | Cross bolt                        | 1        |                          |
| 7    | 1220.311        | SPRENGRING             | Snap ring                         | 2        |                          |
| 8    | 9813.114        | KUPPLUNGSMUFFE         | Coupling sleeve                   | 1        |                          |
| 9    | 1020.374        | INBUSSCHRAUBE          | Allen screw                       | 12       |                          |



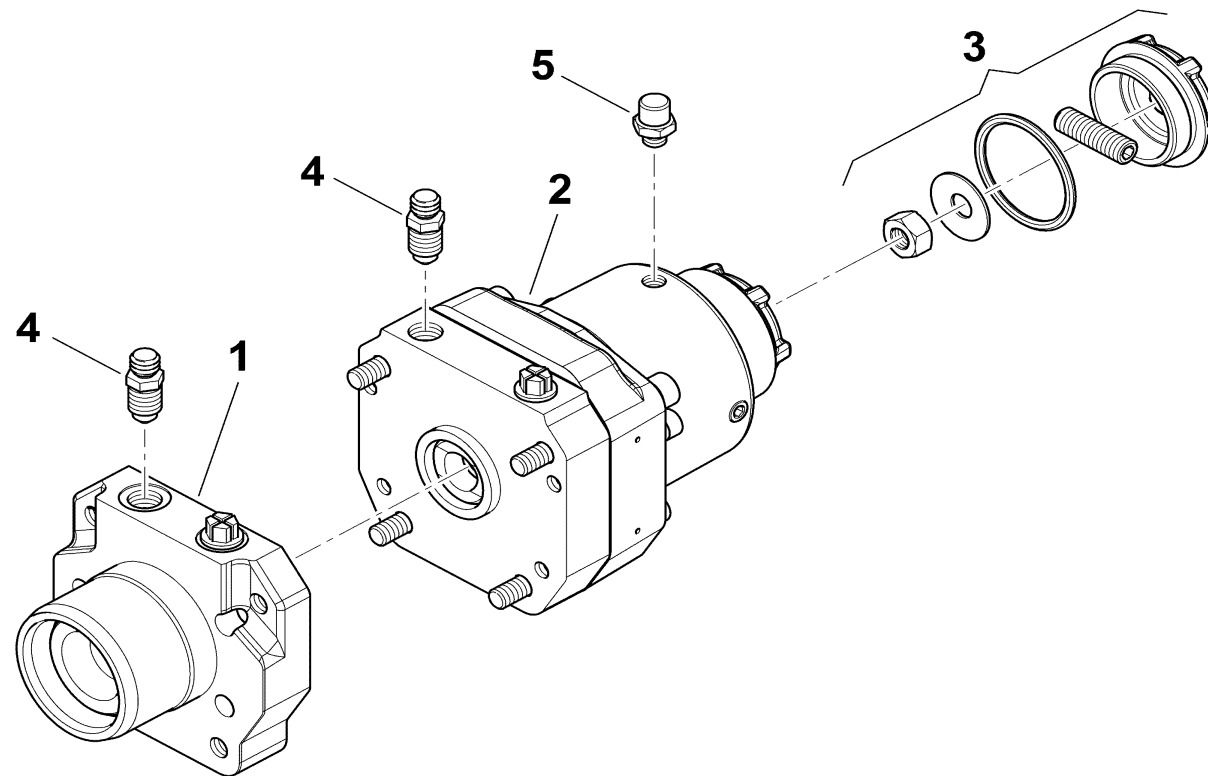
Achsträger S1/S2  
2403.463-464.B

# ERSATZTEILLISTE / Spare parts list



|                             |                |                 |
|-----------------------------|----------------|-----------------|
| Typ: / Type:                | MET 06-0       | MET 06-0        |
| Bezeichnung: / Description: | Achsträger S1  | Axle housing S1 |
| Bildnummer: / Drawing no.:  | 2403.463-464.B | 2403.463-464.B  |
| Erstellungsdatum:           | 25.06.2015     |                 |
| Date of creation:           |                | 25.06.2015      |

| Pos.      | Teilenummer     | Teilebezeichnung             | Part description             | Menge    | Bemerkung                  |
|-----------|-----------------|------------------------------|------------------------------|----------|----------------------------|
| Pos.      | Part number     |                              |                              | Qty.     | Remark                     |
| ---       | <b>2403.463</b> | <b>ACHSTRAEGER S1</b>        | <b>Axle housing S1</b>       | <b>1</b> |                            |
| 1         | 1130.072        | ZYLINDERROLLENLAGER          | Cylindrical roller bearing   | 1        |                            |
| 2         | 7818.293        | SONNENRADWELLE               | Sun gear shaft               | 1        | Z=22                       |
| 3         | 1010.684        | SECHSKANTSCHRAUBE            | Hexagon bolt                 | 24       |                            |
| 4         | 7305.047        | KUGELDREHKRANZ               | Slewing ring                 | 1        |                            |
| 5         | 1020.623        | INBUSSCHRAUBE                | Allen screw                  | 16       |                            |
| 6         | 7308.121        | ABSTREIFRING                 | Scraper ring                 | 1        |                            |
| 7         | 1170.758        | O-RING                       | O-Ring                       | 1        |                            |
| 8         | ---             |                              |                              |          |                            |
| 9         | ---             |                              |                              |          |                            |
| <b>10</b> | <b>7276.188</b> | <b>ACHSTRAEGER</b>           | <b>Axle housing</b>          | <b>1</b> |                            |
| 11        | ---             |                              |                              |          |                            |
| 12        | 1040.151        | VERSCHLUSSSCHRAUBE           | Screw plug                   | 2        |                            |
| 13        | 1180.541        | DICHTRING                    | Seal ring                    | 2        |                            |
| 14        | ---             |                              |                              |          |                            |
| 15        | ---             |                              |                              |          |                            |
| 16        | 7322.109        | SECHSKANTSCHRAUBE            | Hexagon bolt                 | 15       |                            |
| 17        | 1190.020        | SPERRKANTRING                | Detent edged ring            | 16       |                            |
| 18        | 1060.065        | SECHSKANTMUTTER              | Hexagon nut                  | 1        |                            |
| 19        | 1250.002        | ENTLUEFTER                   | Breather                     | 1        |                            |
| 20        | 7308.064        | DICHTRING                    | Seal ring                    | 1        |                            |
| 21        | 7315.188        | SCHEIBE                      | Washer                       | 1        |                            |
| 22        | 1160.211        | SIMMERRING                   | Oil seal                     | 1        |                            |
| 23        | 7344.040        | ZWISCHENSCHIEBE              | Intermediate disk            | 6        |                            |
| 24        | 7345.040        | BELAGSCHEIBE                 | Lined disk                   | 6        |                            |
| 25        | 5504.006        | BETAETIGUNGSSCHIEBE          | Operating disk assembly      | 1        |                            |
| 26        | 7321.161        | BOLZEN                       | Pin                          | 4        |                            |
| 27        | 1190.202        | SEEGER-ZACKENRING            | Toothed ring                 | 2        |                            |
| 28        | 7835.001        | KEIL                         | Wedge                        | 1        |                            |
| <b>29</b> | <b>5350.094</b> | <b>FEDERSPEICHERZYLINDER</b> | <b>Spring brake cylinder</b> | <b>1</b> | <b>komplett / complete</b> |
| 30        | ---             |                              |                              |          |                            |
| 31        | 1020.217        | INBUSSCHRAUBE                | Allen screw                  | 3        |                            |
| 32        | ---             |                              |                              |          |                            |
| 33        | ---             |                              |                              |          |                            |



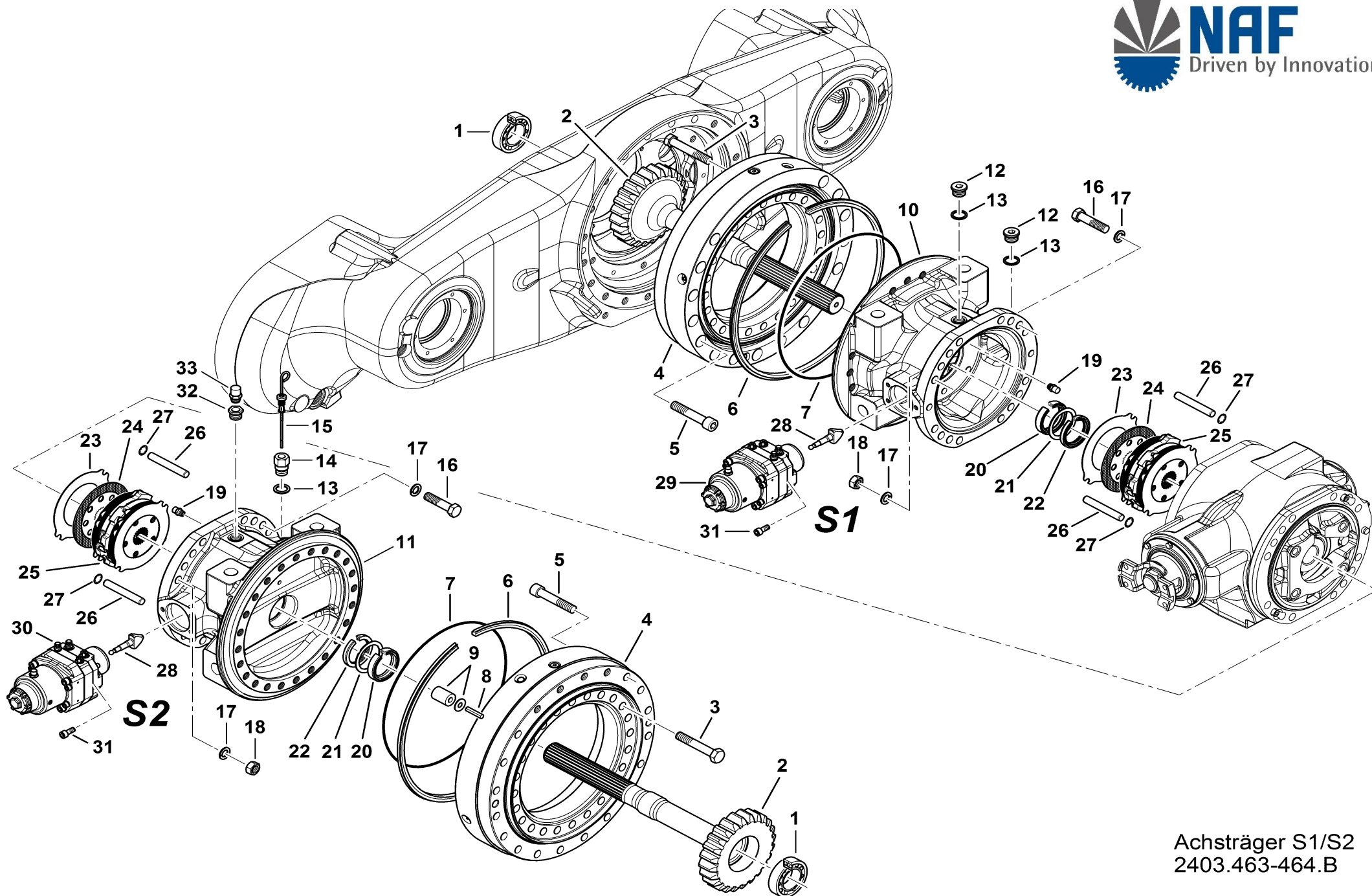
Federspeicherzylinder  
5350.094.A

# ERSATZTEILLISTE / Spare parts list



|                             |                       |                       |
|-----------------------------|-----------------------|-----------------------|
| Typ: / Type:                | MET 06-0              | MET 06-0              |
| Bezeichnung: / Description: | Federspeicherzylinder | Spring brake cylinder |
| Bildnummer: / Drawing no.:  | 5350.094.A            | 5350.094.A            |
| Erstellungsdatum:           | 25.06.2015            |                       |
| Date of creation:           |                       | 25.06.2015            |

| Pos. | Teilenummer     | Teilebezeichnung             | Part description             | Menge    | Bemerkung  |
|------|-----------------|------------------------------|------------------------------|----------|------------|
| Pos. | Part number     |                              |                              | Qty.     | Remark     |
| ---  | <b>5350.094</b> | <b>FEDERSPEICHERZYLINDER</b> | <b>Spring brake cylinder</b> | <b>1</b> |            |
| 1    | 5350.106        | BREMSZYLINDER (Unterteil)    | Brake cylinder (lower part)  | 1        |            |
| 2    | 5350.100        | FEDERSPEICHER (Oberteil)     | Spring brake (upper part)    | 1        |            |
| 3    | 2208.004        | NOTLÖSEEINRICHTUNG           | Park brake release kit       | 1        |            |
| 4    | 1250.598        | ENTLUEFTERVENTIL             | Breather valve               | 2        | M14x1.5    |
| 5    | 1250.002        | ENTLUEFTER                   | Breather                     | 1        | M10x1 keg. |



Achsträger S1/S2  
2403.463-464.B

# ERSATZTEILLISTE / Spare parts list



|                             |                |                 |
|-----------------------------|----------------|-----------------|
| Typ: / Type:                | MET 06-0       | MET 06-0        |
| Bezeichnung: / Description: | Achsträger S2  | Axle housing S2 |
| Bildnummer: / Drawing no.:  | 2403.463-464.B | 2403.463-464.B  |
| Erstellungsdatum:           | 25.06.2015     |                 |
| Date of creation:           |                | 25.06.2015      |

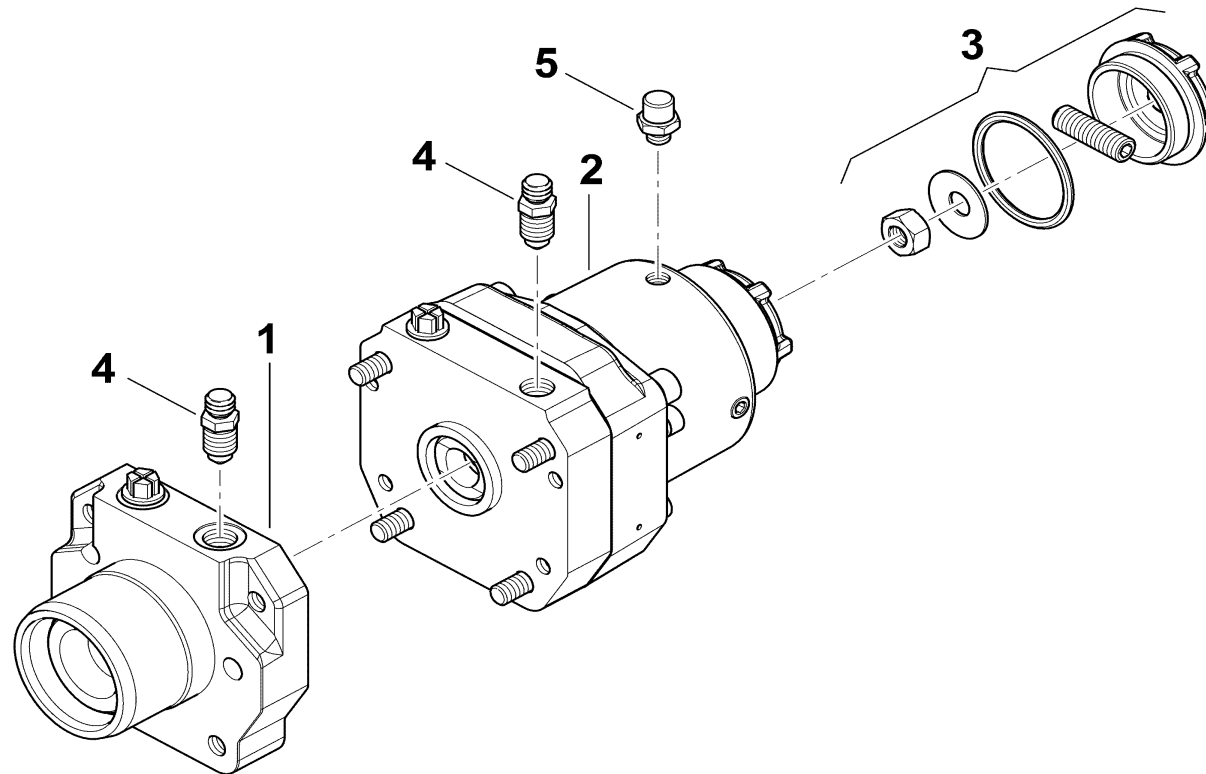
| Pos.      | Teilenummer     | Teilebezeichnung      | Part description           | Menge    | Bemerkung |
|-----------|-----------------|-----------------------|----------------------------|----------|-----------|
| Pos.      | Part number     |                       |                            | Qty.     | Remark    |
| ---       | <b>2403.464</b> | <b>ACHSTRAEGER S2</b> | <b>Axle housing S2</b>     | <b>1</b> |           |
| 1         | 1130.072        | ZYLINDERROLLENLAGER   | Cylindrical roller bearing | 1        |           |
| 2         | 7818.293        | SONNENRADWELLE        | Sun gear shaft             | 1        | Z=22      |
| 3         | 1010.684        | SECHSKANTSCHRAUBE     | Hexagon bolt               | 24       |           |
| 4         | 7305.047        | KUGELDREHKRANZ        | Slewing ring               | 1        |           |
| 5         | 1020.623        | INBUSSCHRAUBE         | Allen screw                | 16       |           |
| 6         | 7308.121        | ABSTREIFRING          | Scraper ring               | 1        |           |
| 7         | 1170.758        | O-RING                | O-Ring                     | 1        |           |
| 8         | 1200.480        | SPANNSTIFT            | Clamping sleeve            | 1        |           |
| <b>9</b>  | <b>2108.101</b> | <b>EINSTELL-PAKET</b> | <b>Adjusting kit</b>       | <b>1</b> |           |
|           | 7321.186        | EINSTELLBOLZEN        | Pin                        | 1        | 34.0 long |
|           | 7315.300        | SCHEIBE               | Washer                     | n/a      | 1.0 thick |
|           | 7315.301        | SCHEIBE               | Washer                     | n/a      | 1.5 thick |
| 10        | ---             |                       |                            |          |           |
| <b>11</b> | <b>7276.184</b> | <b>ACHSTRAEGER</b>    | <b>Axle housing</b>        | <b>1</b> |           |
| 12        | ---             |                       |                            |          |           |
| 13        | 1180.541        | DICHTRING             | Seal ring                  | 1        |           |
| 14        | 7322.064        | SCHRAUBSTUTZEN        | Threaded stud              | 1        |           |
| 15        | 7325.023        | OELMESSSTAB           | Oil dip stick              | 1        | L=55      |
| 16        | 7322.109        | SECHSKANTSCHRAUBE     | Hexagon bolt               | 15       |           |
| 17        | 1190.020        | SPERRKANTRING         | Detent edged ring          | 16       |           |
| 18        | 1060.065        | SECHSKANTMUTTER       | Hexagon nut                | 1        |           |
| 19        | 1250.002        | ENTLUEFTER            | Breather                   | 1        |           |
| 20        | 7308.064        | DICHTRING             | Seal ring                  | 1        |           |
| 21        | 7315.188        | SCHEIBE               | Washer                     | 1        |           |
| 22        | 1160.211        | SIMMERRING            | Oil seal                   | 1        |           |
| 23        | 7344.040        | ZWISCHENSCHIEBE       | Intermediate disk          | 6        |           |
| 24        | 7345.040        | BELAGSCHIEBE          | Lined disk                 | 6        |           |
| 25        | 5504.006        | BETAETIGUNGSSCHIEBE   | Operating disk assembly    | 1        |           |
| 26        | 7321.161        | BOLZEN                | Pin                        | 4        |           |
| 27        | 1190.202        | SEEGER-ZACKENRING     | Toothed ring               | 2        |           |

# ERSATZTEILLISTE / Spare parts list



|                             |                |                 |
|-----------------------------|----------------|-----------------|
| Typ: / Type:                | MET 06-0       | MET 06-0        |
| Bezeichnung: / Description: | Achsträger S2  | Axle housing S2 |
| Bildnummer: / Drawing no.:  | 2403.463-464.B | 2403.463-464.B  |
| Erstellungsdatum:           | 25.06.2015     |                 |
| Date of creation:           |                | 25.06.2015      |

| Pos. | Teilenummer | Teilebezeichnung      | Part description      | Menge Qty. | Bemerkung Remark    |
|------|-------------|-----------------------|-----------------------|------------|---------------------|
| Pos. | Part number |                       |                       |            |                     |
| 28   | 7835.001    | KEIL                  | Wedge                 | 1          |                     |
| 29   | ---         |                       |                       |            |                     |
| 30   | 5350.093    | FEDERSPEICHERZYLINDER | Spring brake cylinder | 1          | komplett / complete |
| 31   | 1020.217    | INBUSSCHRAUBE         | Allen screw           | 3          |                     |
| 32   | 1750.705    | REDUKTIONSNIPPEL      | Reducing nipple       | 1          | R3/4"x1/2"          |
| 33   | 9556.030    | ENTLUEFTER            | Breather              | 1          | R1/2" 0.3 bar       |



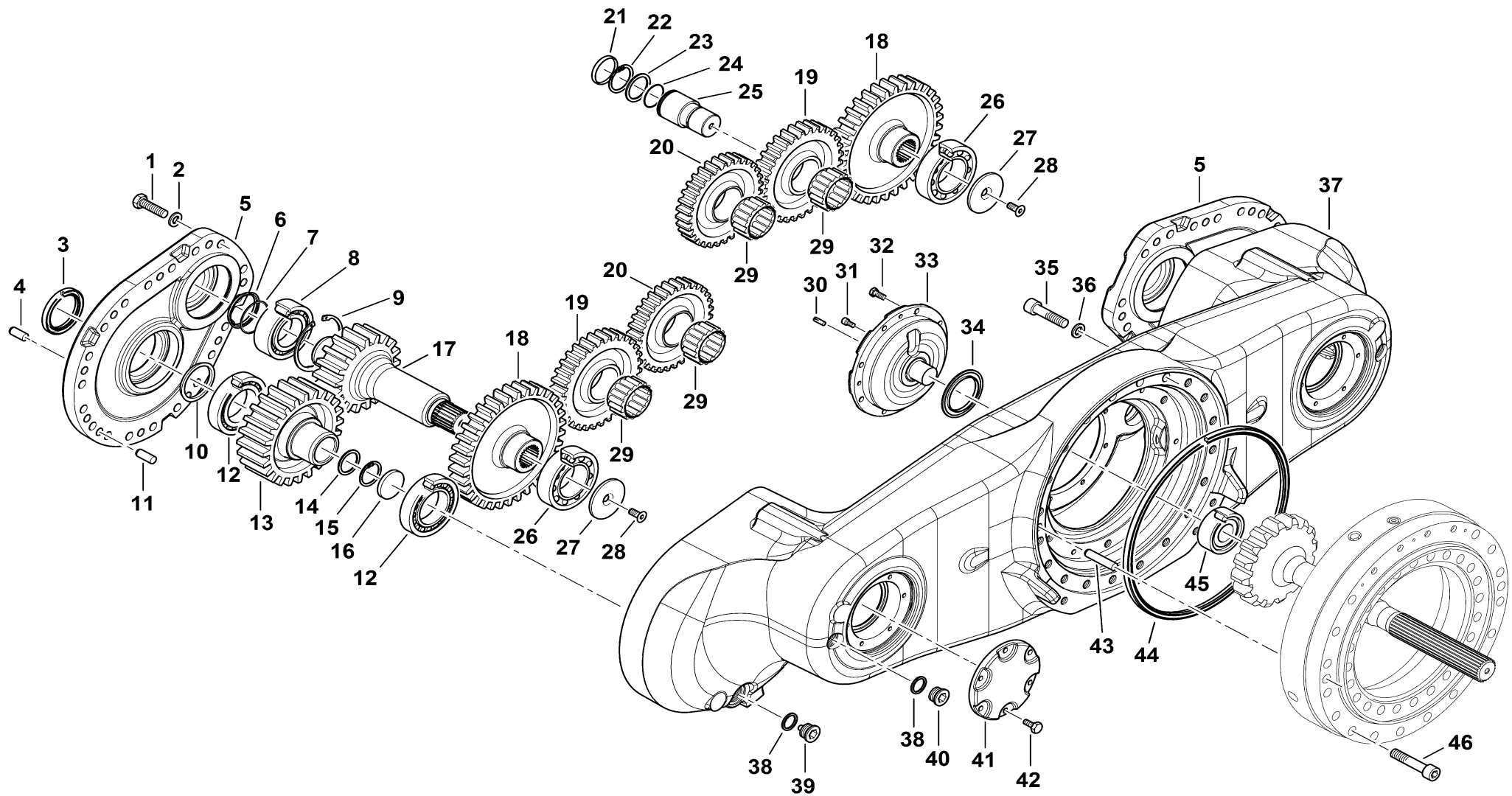
Federspeicherzylinder  
5350.093.A

# ERSATZTEILLISTE / Spare parts list



|                             |                       |                       |
|-----------------------------|-----------------------|-----------------------|
| Typ: / Type:                | MET 06-0              | MET 06-0              |
| Bezeichnung: / Description: | Federspeicherzylinder | Spring brake cylinder |
| Bildnummer: / Drawing no.:  | 5350.093.A            | 5350.093.A            |
| Erstellungsdatum:           | 25.06.2015            |                       |
| Date of creation:           |                       | 25.06.2015            |

| Pos. | Teilenummer | Teilebezeichnung          | Part description            | Menge Qty. | Bemerkung Remark |
|------|-------------|---------------------------|-----------------------------|------------|------------------|
| Pos. | Part number |                           |                             |            |                  |
| ---  | 5350.093    | FEDERSPEICHERZYLINDER     | Spring brake cylinder       | 1          |                  |
| 1    | 5350.105    | BREMSZYLINDER (Unterteil) | Brake cylinder (lower part) | 1          |                  |
| 2    | 5350.100    | FEDERSPEICHER (Oberteil)  | Spring brake (upper part)   | 1          |                  |
| 3    | 2208.004    | NOTLÖSEEINRICHTUNG        | Park brake release kit      | 1          |                  |
| 4    | 1250.598    | ENTLUEFTERVENTIL          | Breather valve              | 2          | M14x1.5          |
| 5    | 1250.002    | ENTLUEFTER                | Breather                    | 1          | M10x1 keg.       |



Tandemachsträger  
2405.189.A

# ERSATZTEILLISTE / Spare parts list



|                             |                         |                      |
|-----------------------------|-------------------------|----------------------|
| Typ: / Type:                | MET 06-0                | MET 06-0             |
| Bezeichnung: / Description: | Portal-Tandemachsträger | Portal bogie housing |
| Bildnummer: / Drawing no.:  | 2405.189.A              | 2405.189.A           |
| Erstellungsdatum:           | 25.06.2015              |                      |
| Date of creation:           |                         | 25.06.2015           |

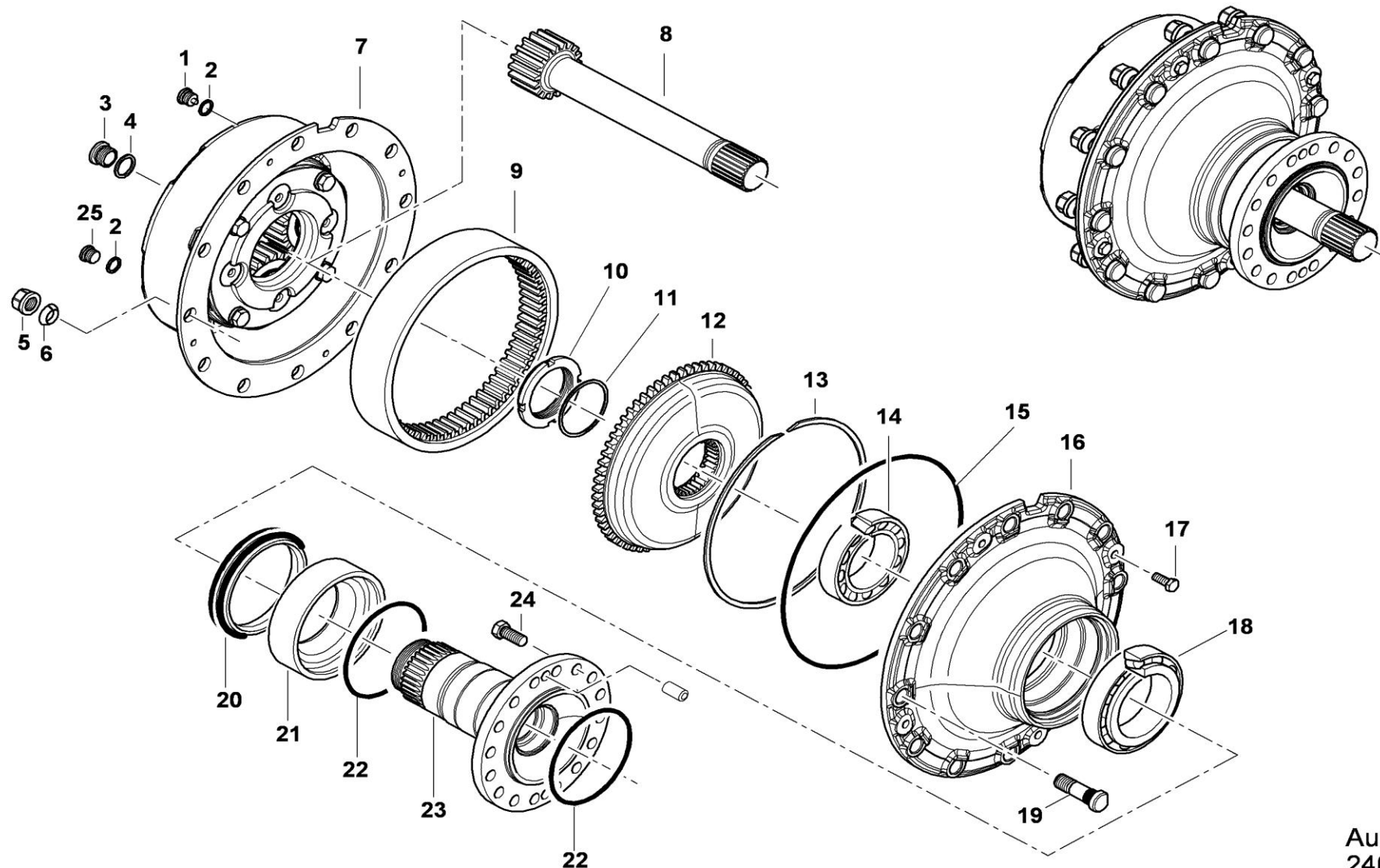
| Pos. | Teilenummer | Teilebezeichnung         | Part description           | Menge | Bemerkung |
|------|-------------|--------------------------|----------------------------|-------|-----------|
| Pos. | Part number |                          |                            | Qty.  | Remark    |
| ---  | 2405.189    | PORTAL-TANDEMACHSTRAEGER | Portal bogie housing       | 2     |           |
| 1    | 1010.537    | SECHSKANTSCHRAUBE        | Hexagon bolt               | 38    |           |
| 2    | 7316.045    | SCHEIBE                  | Washer                     | 38    |           |
| 3    | 1160.209    | SIMMERRING               | Oil seal                   | 2     |           |
| 4    | 1200.286    | ZYLINDERSTIFT            | Dowel pin                  | 4     |           |
| 5    | 7525.245    | FLANSCH                  | Flange                     | 2     |           |
| 6    | 7307.175    | EINFUEHRRING             | Guiding ring               | 2     |           |
| 7    | 1220.305    | SPRENGRING               | Snap ring                  | 2     |           |
| 8    | 1130.088    | ZYLINDERROLLENLAGER      | Cylindrical roller bearing | 2     |           |
| 9    | 1220.802    | SEEGER-RING              | Seeger circlip ring        | 2     |           |
| 10   | 7312.123    | BUECHSE                  | Bushing                    | 2     |           |
| 11   | 1200.228    | ZYLINDERSTIFT            | Dowel pin                  | 20    |           |
| 12   | 1130.092    | ZYLINDERROLLENLAGER      | Cylindrical roller bearing | 4     |           |
| 13   | 9804.578    | STIRNRAD                 | Spur gear                  | 2     | Z=24      |
| 14   | 1210.110    | SEEGER-STUETZSCHEIBE     | Seeger support washer      | 2     |           |
| 15   | 1220.714    | SEEGER-RING              | Seeger circlip ring        | 2     |           |
| 16   | 1230.030    | VERSCHLUSSKAPPE          | Plug                       | 2     |           |
| 17   | 7818.225    | RITZELWELLE              | Pinion shaft               | 2     | Z=18      |
| 18   | 9804.593    | STIRNRAD                 | Spur gear                  | 2     | Z=31      |
| 19   | 9804.566    | STIRNRAD                 | Spur gear                  | 2     | Z=24      |
| 20   | 9804.565    | STIRNRAD                 | Spur gear                  | 2     | Z=22      |
| 21   | 1230.029    | VERSCHLUSSKAPPE          | Plug                       | 4     |           |
| 22   | 1220.707    | SEEGER-RING              | Seeger circlip ring        | 4     |           |
| 23   | 1210.109    | SEEGER-STUETZSCHEIBE     | Seeger support washer      | 4     |           |
| 24   | 1170.058    | O-RING                   | O-Ring                     | 4     |           |
| 25   | 7321.142    | BOLZEN                   | Pin                        | 4     |           |
| 26   | 1130.606    | PENDELROLLENLAGER        | Spherical roller bearing   | 2     |           |
| 27   | 7315.269    | SCHEIBE                  | Washer                     | 2     |           |
| 28   | 1040.207    | SENKSCHRAUBE             | Countersunk bolt           | 2     |           |
| 29   | 7305.055    | ZYLINDERROLLENLAGER      | Cylindrical roller bearing | 4     |           |
| 30   | 1200.309    | PASSKERBSTIFT            | Grooved dowel pin          | 1     |           |

# ERSATZTEILLISTE / Spare parts list



|                             |                         |                      |
|-----------------------------|-------------------------|----------------------|
| Typ: / Type:                | MET 06-0                | MET 06-0             |
| Bezeichnung: / Description: | Portal-Tandemachsträger | Portal bogie housing |
| Bildnummer: / Drawing no.:  | 2405.189.A              | 2405.189.A           |
| Erstellungsdatum:           | 25.06.2015              |                      |
| Date of creation:           |                         | 25.06.2015           |

| Pos. | Teilenummer | Teilebezeichnung         | Part description           | Menge | Bemerkung |
|------|-------------|--------------------------|----------------------------|-------|-----------|
| Pos. | Part number |                          |                            | Qty.  | Remark    |
| 31   | 1020.113    | INBUSSCHRAUBE            | Allen screw                | 2     |           |
| 32   | 1010.234    | SECHSKANTSCHRAUBE        | Hexagon bolt               | 8     |           |
| 33   | 7321.145    | LAGERBOLZEN              | Bearing pin                | 1     |           |
| 34   | 1180.841    | AXIAL-WELLENDICHTRING    | Shaft seal                 | 1     |           |
| 35   | 1020.630    | INBUSSCHRAUBE            | Allen screw                | 4     |           |
| 36   | 7316.044    | SCHEIBE                  | Washer                     | 4     |           |
| 37   | 7277.203    | PORTAL-TANDEMACHSTRAEGER | Portal bogie housing       | 1     |           |
| 38   | 1180.507    | DICHTRING                | Seal ring                  | 4     |           |
| 39   | 7323.013    | VERSCHLUSSSCHRAUBE       | Screw plug                 | 2     |           |
| 40   | 1040.103    | VERSCHLUSSSCHRAUBE       | Screw plug                 | 2     |           |
| 41   | 7302.096    | DECKEL                   | Cover                      | 2     |           |
| 42   | 1010.234    | SECHSKANTSCHRAUBE        | Hexagon bolt               | 12    |           |
| 43   | 1200.206    | ZYLINDERSTIFT            | Dowel pin                  | 2     |           |
| 44   | 7308.036    | DICHTRING                | Seal ring                  | 1     |           |
| 45   | 1130.072    | ZYLINDERROLLENLAGER      | Cylindrical roller bearing | 1     |           |
| 46   | 1020.623    | INBUSSCHRAUBE            | Allen screw                | 16    |           |



Aussenteil  
2402.303.Aa

# ERSATZTEILLISTE / Spare parts list



|                             |             |             |
|-----------------------------|-------------|-------------|
| Typ: / Type:                | MET 06-0    | MET 06-0    |
| Bezeichnung: / Description: | Außenteil   | Wheel end   |
| Bildnummer: / Drawing no.:  | 2402.303.Aa | 2402.303.Aa |
| Erstellungsdatum:           | 25.06.2015  |             |
| Date of creation:           |             | 25.06.2015  |

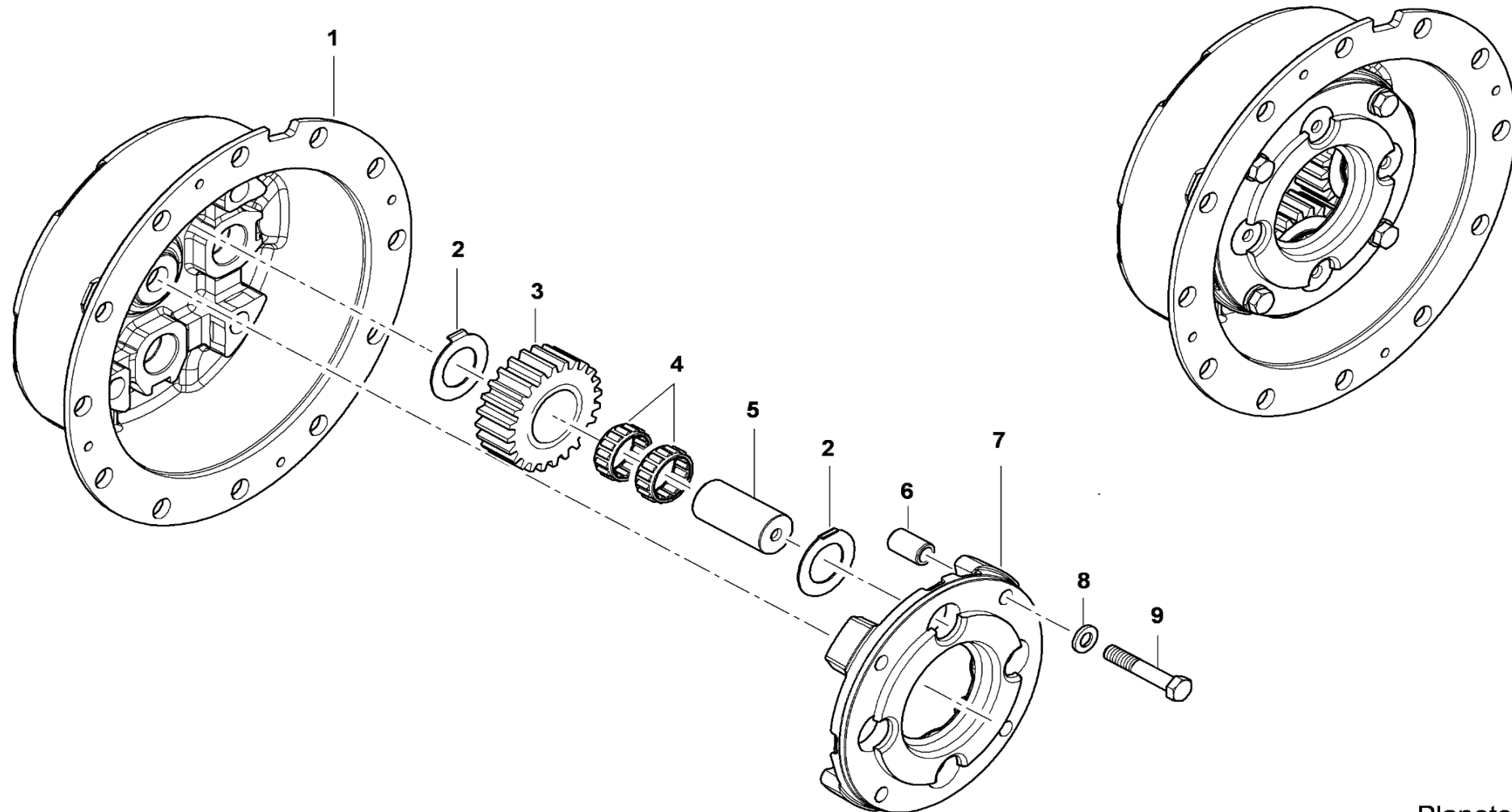
| Pos.      | Teilenummer     | Teilebezeichnung          | Part description          | Menge    | Bemerkung                         |
|-----------|-----------------|---------------------------|---------------------------|----------|-----------------------------------|
| Pos.      | Part number     |                           |                           | Qty.     | Remark                            |
| ---       | <b>2402.303</b> | <b>AUSSENTEIL</b>         | <b>Wheel end</b>          | <b>4</b> |                                   |
| 1         | 9556.021        | VERSCHLUSSSCHRAUBE        | Screw plug                | 1        |                                   |
| 2         | 1180.502        | DICHTRING                 | Seal ring                 | 2        |                                   |
| 3         | 7323.016        | VERSCHLUSSSCHRAUBE        | Screw plug                | 1        |                                   |
| <b>4</b>  | <b>2108.017</b> | <b>SCHEIBENPAKET</b>      | <b>Shim kit</b>           | <b>1</b> | <b>s=2.5/1.0/0.5/0.3/0.2</b>      |
|           | 1210.113        | SEEGER-STUETZSCHEIBE      | Seeger support washer     | n/a      | s=2.5                             |
|           | 1210.295        | SEEGER-PASSSCHEIBE        | Seeger adjusting washer   | n/a      | s=1.0                             |
|           | 1210.296        | SEEGER-PASSSCHEIBE        | Seeger adjusting washer   | n/a      | s=0.5                             |
| 5         | 1060.402        | FLACHBUNDMUTTER           | Flat collar nut           | 12       |                                   |
| 6         | 1190.302        | LIMES-RING                | Lock washer               | 12       |                                   |
| <b>7</b>  | <b>2218.033</b> | <b>PLANETENTRIEB KPL.</b> | <b>Planetary assembly</b> | <b>1</b> |                                   |
| 8         | 7818.177        | SONNENRADWELLE            | Sun gear shaft            | 1        | Z=18                              |
| 9         | 7801.042        | ZAHNKRANZ                 | Ring gear                 | 1        | Z=66                              |
| 10        | 7329.036        | MUTTER                    | Nut                       | 1        |                                   |
| <b>11</b> | <b>7317.027</b> | <b>EINSTELL-PAKET</b>     | <b>Adjusting kit</b>      | <b>1</b> | <b>s=1.375-2.500 / step 0.125</b> |
|           | 7317.121        | EINSTELLSCHEIBE           | Adjusting washer          | n/a      | s=2.500                           |
|           | 7317.122        | EINSTELLSCHEIBE           | Adjusting washer          | n/a      | s=2.375                           |
|           | 7317.123        | EINSTELLSCHEIBE           | Adjusting washer          | n/a      | s=2.250                           |
|           | 7317.124        | EINSTELLSCHEIBE           | Adjusting washer          | n/a      | s=2.125                           |
|           | 7317.125        | EINSTELLSCHEIBE           | Adjusting washer          | n/a      | s=2.000                           |
|           | 7317.126        | EINSTELLSCHEIBE           | Adjusting washer          | n/a      | s=1.875                           |
|           | 7317.127        | EINSTELLSCHEIBE           | Adjusting washer          | n/a      | s=1.750                           |
|           | 7317.128        | EINSTELLSCHEIBE           | Adjusting washer          | n/a      | s=1.625                           |
|           | 7317.129        | EINSTELLSCHEIBE           | Adjusting washer          | n/a      | s=1.500                           |
|           | 7317.130        | EINSTELLSCHEIBE           | Adjusting washer          | n/a      | s=1.375                           |
| 12        | 7804.040        | ZAHNKRANZTRAEGER          | Rim gear carrier          | 1        | Z=66                              |
| 13        | 1220.913        | SEEGER-SPRENGRING         | Seeger snap ring          | 1        |                                   |
| 14        | 1110.184        | KEGELROLLENLAGER          | Tapered roller bearing    | 1        |                                   |
| 15        | 1170.755        | O-RING                    | O-Ring                    | 1        |                                   |
| 16        | 7828.081        | RADNABE                   | Wheel hub                 | 1        |                                   |
| 17        | 1010.301        | SECHSKANTSCHRAUBE         | Hexagon bolt              | 4        |                                   |

# ERSATZTEILLISTE / Spare parts list



|                             |             |             |
|-----------------------------|-------------|-------------|
| Typ: / Type:                | MET 06-0    | MET 06-0    |
| Bezeichnung: / Description: | Außenteil   | Wheel end   |
| Bildnummer: / Drawing no.:  | 2402.303.Aa | 2402.303.Aa |
| Erstellungsdatum:           | 25.06.2015  |             |
| Date of creation:           |             | 25.06.2015  |

| Pos.      | Teilenummer     | Teilebezeichnung    | Part description       | Menge    | Bemerkung |
|-----------|-----------------|---------------------|------------------------|----------|-----------|
| Pos.      | Part number     |                     |                        | Qty.     | Remark    |
| 18        | 1110.069        | KEGELROLLENLAGER    | Tapered roller bearing | 1        |           |
| 19        | 7133.037        | RADBOLZEN           | Wheel bolt             | 12       |           |
| 20        | 1180.301        | GLEITRINGDICHTUNG   | Face seal              | 1        |           |
| 21        | 7306.021        | ACHSSCHENKELRING    | Spindle ring           | 1        |           |
| 22        | 1170.553        | O-RING              | O-Ring                 | 2        |           |
| <b>23</b> | <b>7814.330</b> | <b>ACHSSCHENKEL</b> | <b>Spindle</b>         | <b>1</b> |           |
| 24        | 7322.069        | SECHSKANTSCHRAUBE   | Hexagon bolt           | 15       |           |
| 25        | 1040.104        | VERSCHLUSSSCHRAUBE  | Screw plug             | 1        |           |



Planetentrieb  
2218.033.A

# ERSATZTEILLISTE / Spare parts list



|                             |               |                    |
|-----------------------------|---------------|--------------------|
| Typ: / Type:                | MET 06-0      | MET 06-0           |
| Bezeichnung: / Description: | Planetentrieb | Planetary assembly |
| Bildnummer: / Drawing no.:  | 2218.033.A    | 2218.033.A         |
| Erstellungsdatum:           | 25.06.2015    |                    |
| Date of creation:           |               | 25.06.2015         |

| Pos. | Teilenummer | Teilebezeichnung       | Part description       | Menge | Bemerkung |
|------|-------------|------------------------|------------------------|-------|-----------|
| Pos. | Part number |                        |                        | Qty.  | Remark    |
| ---  | 2218.033    | PLANETENTRIEB KPL.     | Planetary assembly     | 4     |           |
| 1    | 7821.272    | TRABANTENKORB          | Planet carrier         | 1     |           |
| 2    | 7316.206    | ANLAUFSCHIEBE          | Thrust washer          | 8     |           |
| 3    | 7806.087    | PLANETENRAD            | Planet gear            | 4     | Z=23      |
| 4    | 7305.071    | ROLLENKRANZ ZWEIREIHIG | Two-row roller bearing | 4     |           |
| 5    | 7807.056    | PLANETENBOLZEN         | Planetary pin          | 4     |           |
| 6    | 7313.018    | SCHERBUECHSE           | Shear pin              | 4     |           |
| 7    | 7821.265    | TRABANTENKORB          | Planet carrier         | 1     |           |
| 8    | 7316.045    | SCHEIBE                | Washer                 | 4     |           |
| 9    | 1010.536    | SECHSKANTSCHRAUBE      | Hexagon bolt           | 4     |           |

## Technische Information / Technical information

Die nachfolgende Tabelle zeigt eine Übersicht aller durchgeführten Modifikationen und Aktualisierungen. Seriennummer der Änderungsmitteilung und Version der ET-Liste sind zu beachten.

The following table shows an overview of all modifications and updates. Serial number in change notice and version of spare part list must be observed.

| Version ET-Liste<br>Version part list | Datum<br>Date | Seite/Pos.<br>Page/Pos. | Beschreibung<br>Description | Änderungshistorie<br>Change history | Seriennummer<br>Serial number | Autor<br>Author |
|---------------------------------------|---------------|-------------------------|-----------------------------|-------------------------------------|-------------------------------|-----------------|
| v1.00                                 | 2015/06/25    | --                      | Start                       | --                                  | 01                            | R.W.            |
| v1.01                                 | 2017/03/23    | note CN 14804a          | Technical modification      | CN 14804a                           | 17                            | Cl.R.           |
| v1.02                                 | 2018/06/18    | note CN 15413a          | Technical modification      | CN 15413a                           | 34                            | Cl.R.           |
| v1.03                                 | 2019/10/18    | note CN 18286           | Technical modification      | CN 18286                            | 42                            | R.W.            |

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## **Haftung und Gewährleistung für sicherheitsrelevante Baugruppen**

Für sicherheitsrelevante Baugruppen (z. B. Schaltzylinder, Lenkzylinder, Bremszylinder, Federspeicherzylinder, usw.) empfehlen wir dringend den Austausch der kompletten Baugruppe.

Nach der Demontage und dem Öffnen einer sicherheitsrelevanten Baugruppe erlischt jeglicher Garantie- und Haftungsanspruch, d. h. NAF übernimmt keine Produkthaftung für das Antriebsaggregat.

Dies gilt auch dann, wenn sich das komplette Antriebsaggregat noch in der Garantiezeit befindet.

## **Liability and Guarantees for safety related components**

We strongly recommend changing complete components in the case of safety related components such as ( control cylinders, steering cylinders, brake cylinders, spring housing cylinders, etc. ).

Once a safety related component has been disassembled or opened, all guarantees and liabilities will be void and therefore NAF will not assume product liability for the drive unit.

This also applies, even if the complete drive unit is still under guarantee.