

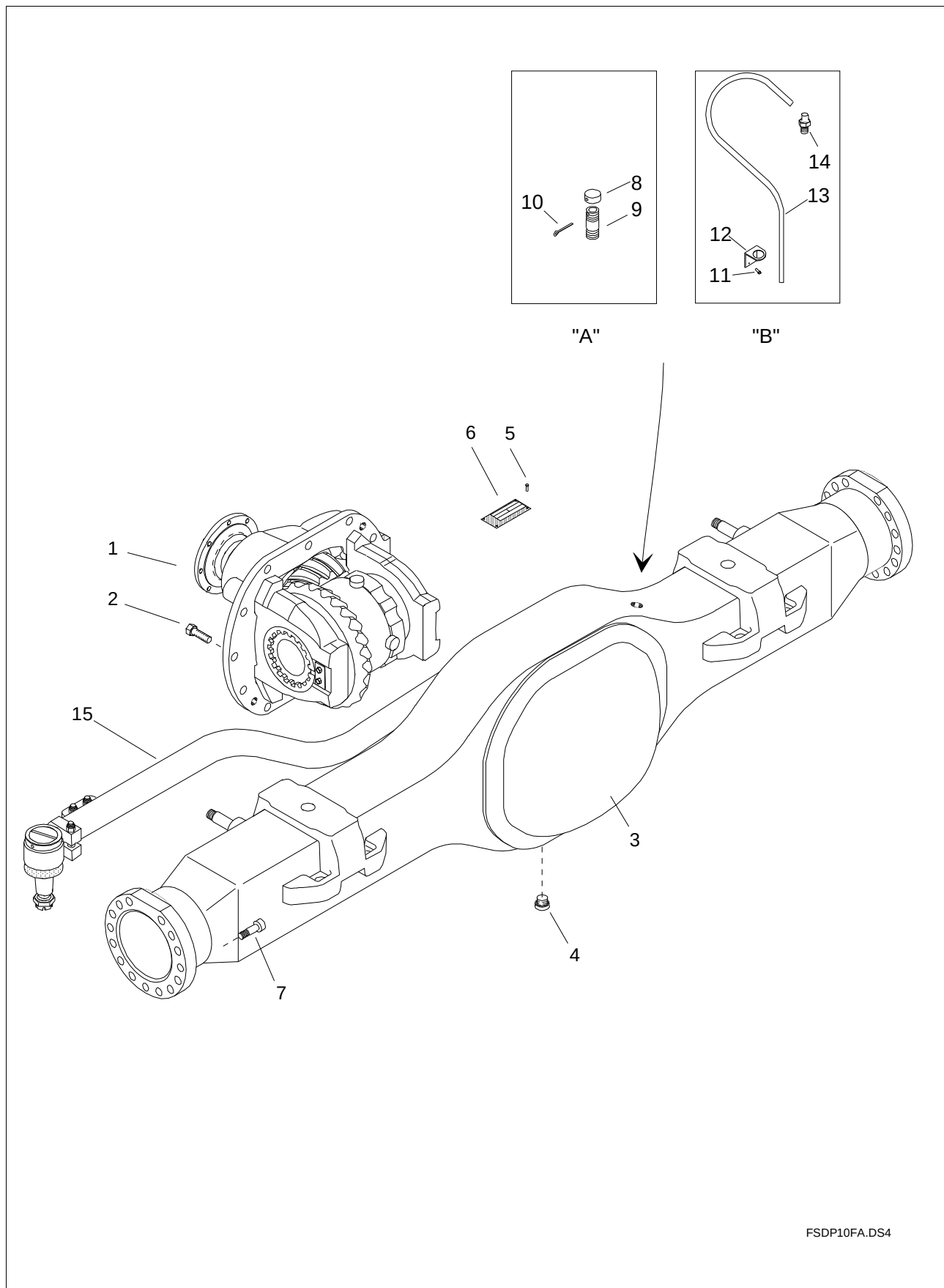
# **SISU AXLES**

## **SPARE PARTS BOOK**

**Front Axle  
FSDP-09/10-S**

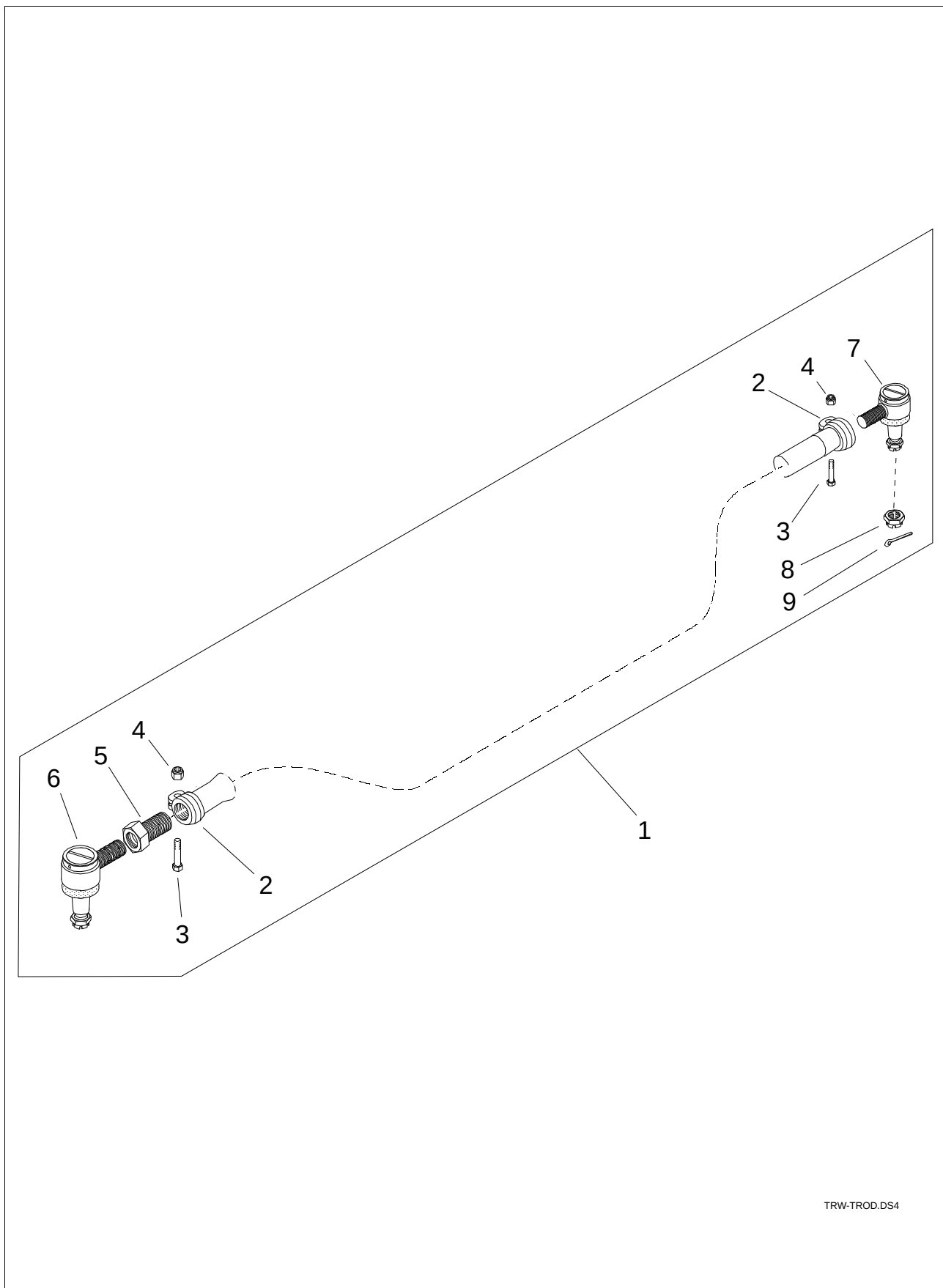
**Book No. 201 (12/2009)**

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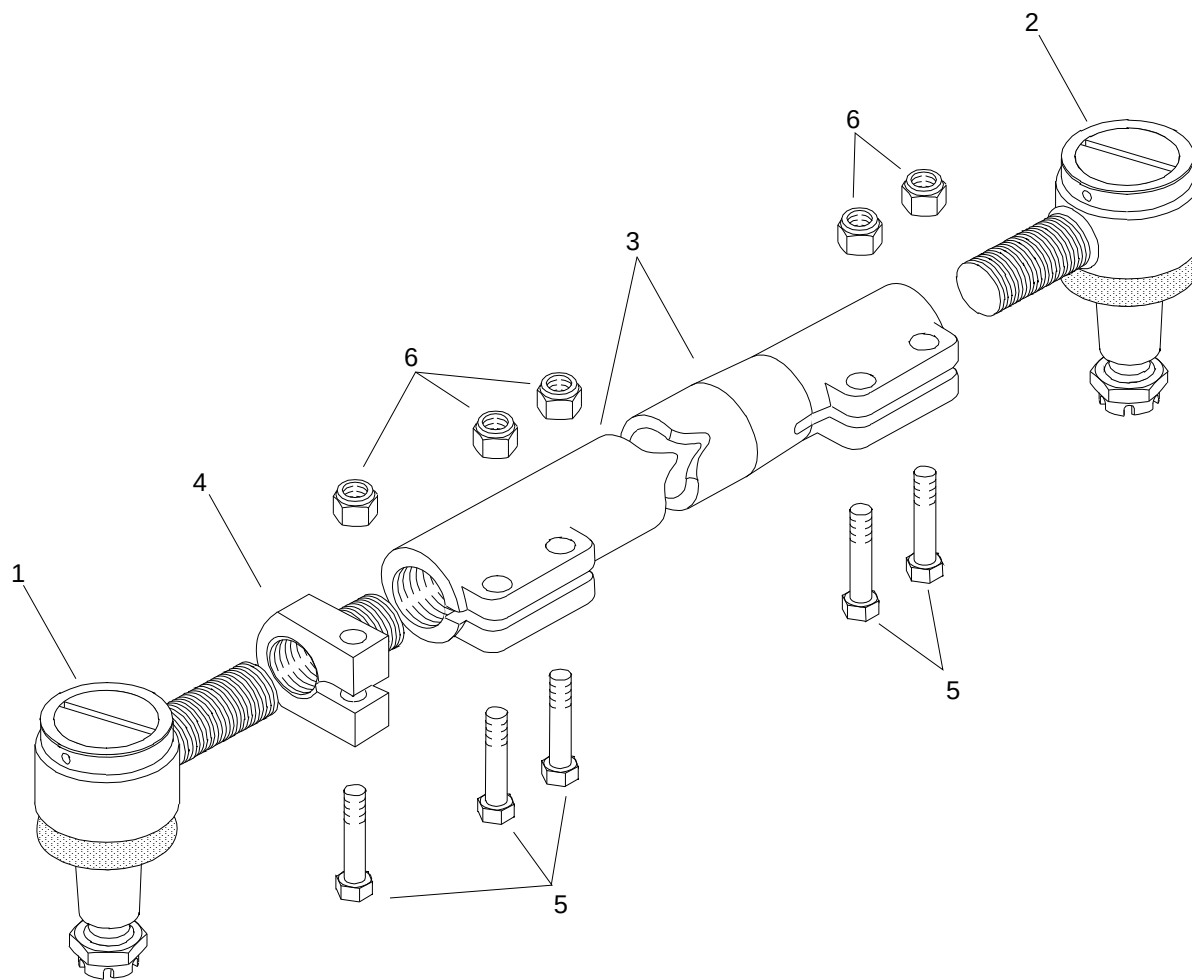


FSDP10FA.DS4

| Item | Qty. | Order no.           | Description            | Note                                              |
|------|------|---------------------|------------------------|---------------------------------------------------|
| 1    | 1    | <b>143-201-7053</b> | Diff. Carrier Assembly | FR 5.27, flange 1800S, diff. lock ind.switch      |
| 1    | 1    | <b>143-201-7063</b> | Diff. Carrier Assembly | FR 8.83, flange 1800S, diff. lock ind.switch      |
| 1    | 1    | <b>143-201-7813</b> | Diff. Carrier Assembly | FR 10.58, flange 1800 S, without lock             |
| 1    | 1    | <b>143-201-8023</b> | Diff. Carrier Assembly | FR 6.36, flange 1800S, diff. lock ind.switch      |
| 1    | 1    | <b>143-201-8043</b> | Diff. Carrier Assembly | FR 5.56, flange 1800S, diff. lock ind.switch      |
| 1    | 1    | <b>543-201-7816</b> | Diff. Carrier Assembly | FR 4.27, HS1800 flange, w/o lock                  |
| 1    | 1    | <b>543-201-7823</b> | Diff. Carrier Assembly | FR 6.36, flange 1800 S, without lock              |
| 1    | 1    | <b>543-201-7827</b> | Diff. Carrier Assembly | FR 5.66, End Yoke 1710, w/o lock                  |
| 1    | 1    | <b>543-201-7828</b> | Diff. Carrier Assembly | FR 5.66, HS1800 flange, w/o lock                  |
| 1    | 1    | <b>543-201-7843</b> | Diff. Carrier Assembly | FR 5.56, flange 1800 S, without lock              |
| 1    | 1    | <b>543-201-7853</b> | Diff. Carrier Assembly | R 5.27, flange 1800S, W/o diff. lock              |
| 1    | 1    | <b>543-201-7863</b> | Diff. Carrier Assembly | FR 8.83, HS1800 flange, w/o lock                  |
| 1    | 1    | <b>543-201-7893</b> | Diff. Carrier Assembly | FR 4.63, HS1800 flange, w/o lock                  |
| 1    | 1    | <b>543-201-8073</b> | Diff. Carrier Assembly | FR 7.01, HS1800 flange, diff. lock ind. switch    |
| 1    | 1    | <b>543-203-5724</b> | Diff. Carrier Assembly | CW, FR 4.85, HS1800 flange, w/o lock              |
| 1    | 1    | <b>543-203-5734</b> | Diff. Carrier Assembly | FR 5.54, HS1800 flange, w/o lock                  |
| 1    | 1    | <b>543-203-5854</b> | Diff. Carrier Assembly | FR 5.27, flange 1800S, diff. lock ind. in cover   |
| 2    | 11   | <b>90303-16407</b>  | Hex Screw              | M16x40, 10.9                                      |
| 3    | 1    | <b>101-0110-349</b> | Axle housing           | 10t, W/o spring pads, Caster 1.5                  |
| 3    | 1    | <b>141-113-0800</b> | Axle housing           | 9t, W/o spring pads, Caster 1.5                   |
| 3    | 1    | <b>541-113-1900</b> | Axle housing           | Superseded by item 101-0110-349                   |
| 3    | 1    | <b>541-113-3410</b> | Axle housing           | 10t, W/o spring pads, Caster 4.5                  |
| 3    | 1    | <b>541-113-4100</b> | Axle housing           | 10t, Spring pads c/c 863.6, Caster 1.5            |
| 3    | 1    | <b>541-113-5710</b> | Axle housing           | 10t, For CW diff head, Spring c/c 826, Caster 4.5 |
| 4    | 1    | <b>90831-24139</b>  | Oil plug               | R 3/4", Up to No. 00702, 2/2000                   |
| 4    | 1    | <b>90873-22109</b>  | Oil plug               | M22x1.5, since No 00703, 2/2000                   |
| 4    | 1    | <b>91201-22150</b>  | Seal ring              | Cu, since No 00703, 2/2000                        |
| 5    | 4    | <b>90111-29054</b>  | Rivet                  | D2.9x5                                            |
| 6    | 1    | <b>591600-20823</b> | Name plate             |                                                   |
| 7    | 30   | <b>90311-14508</b>  | Allen Screw            | M14x50, 12.9                                      |
| 8    | 1    | <b>179-842-0000</b> | Breather Cover         | "A"                                               |
| 9    | 1    | <b>179-841-1000</b> | Breather pipe          | "A"                                               |
| 10   | 1    | <b>90621-32253</b>  | Split pin              | "A"                                               |
| 11   | 2    | <b>590111-29064</b> | Rivet                  | "B"                                               |
| 12   | 1    | <b>143-227-0800</b> | Mounting Plate         | "B"                                               |
| 13   | 1    | <b>95242-06010</b>  | Plastic Pipe           | "B", Ø9.5/15.5 L=350                              |
| 14   | 1    | <b>592422-01603</b> | Hose clamp             | "B"                                               |
| 14   | 1    | <b>91978-30901</b>  | Binding screw          | "B"                                               |
| 15   | NLA  | <b>140-201-9711</b> | Tie rod assy           | Sisu, Superseded by 540-201-9821                  |
| 15   | 1    | <b>540-201-9821</b> | Tie rod assy           | TRW, L=1630 mm, since S/N 11959 (6/2001)          |

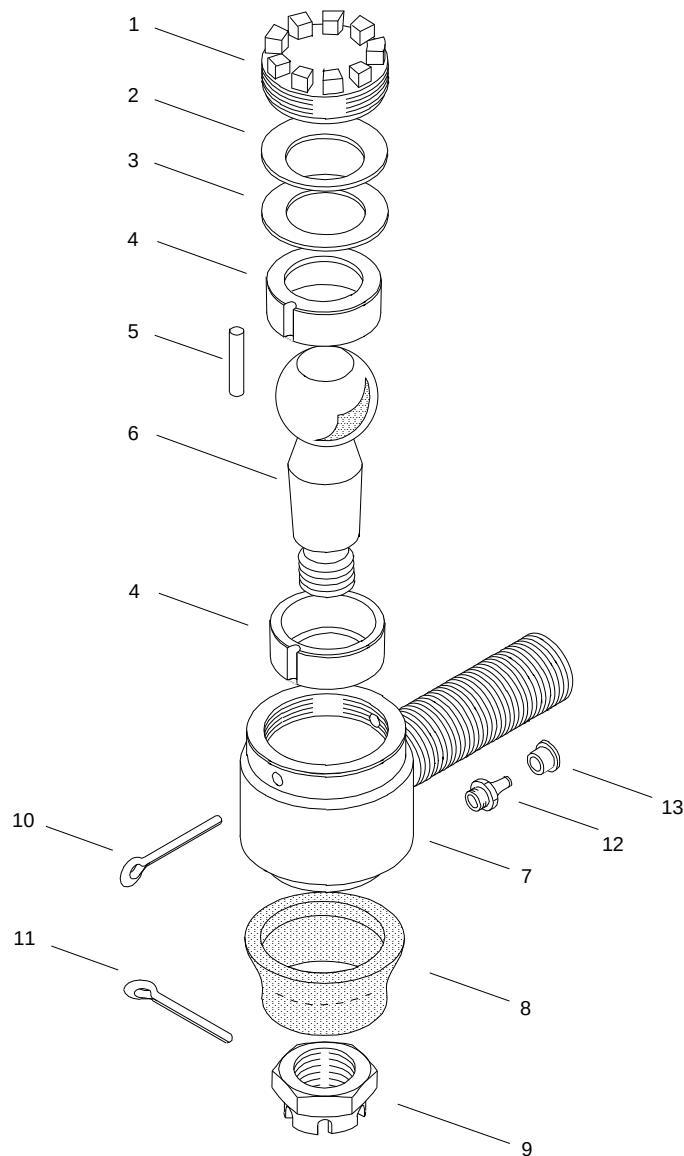


| Item | Qty. | Order no.           | Description         | Note                                         |
|------|------|---------------------|---------------------|----------------------------------------------|
| 1    | 1    | <b>540-201-9821</b> | Tie rod assy        | TRW, L=1630 mm, supercedes item 140-201-9711 |
| 2    | 1    | <b>594-104-1110</b> | Clamp               | 50 mm diameter                               |
| 3    | 2    | <b>590321-14807</b> | Hex Screw           | M14x1.5x80, DIN 960, 10.9                    |
| 4    | 2    | <b>590556-14227</b> | Nut                 | M14x1.5, DIN 980, 10                         |
| 5    | 1    | <b>540-216-0300</b> | Adj. piece          | M38x1.5LH/M30x1.5RH                          |
| 6    | 1    | <b>160-530-0183</b> | Ball Joint Assembly | RH, RH thread M30x1.5                        |
| 7    | 1    | <b>560-530-0611</b> | Ball Joint Assembly | LH, RH thread M38x1.5                        |
| 8    | 2    | <b>90546-24363</b>  | Nut                 | Included in pos. 12 & 31                     |
| 9    | 2    | <b>90621-50453</b>  | Split pin           | included in pos. 12 & 31                     |



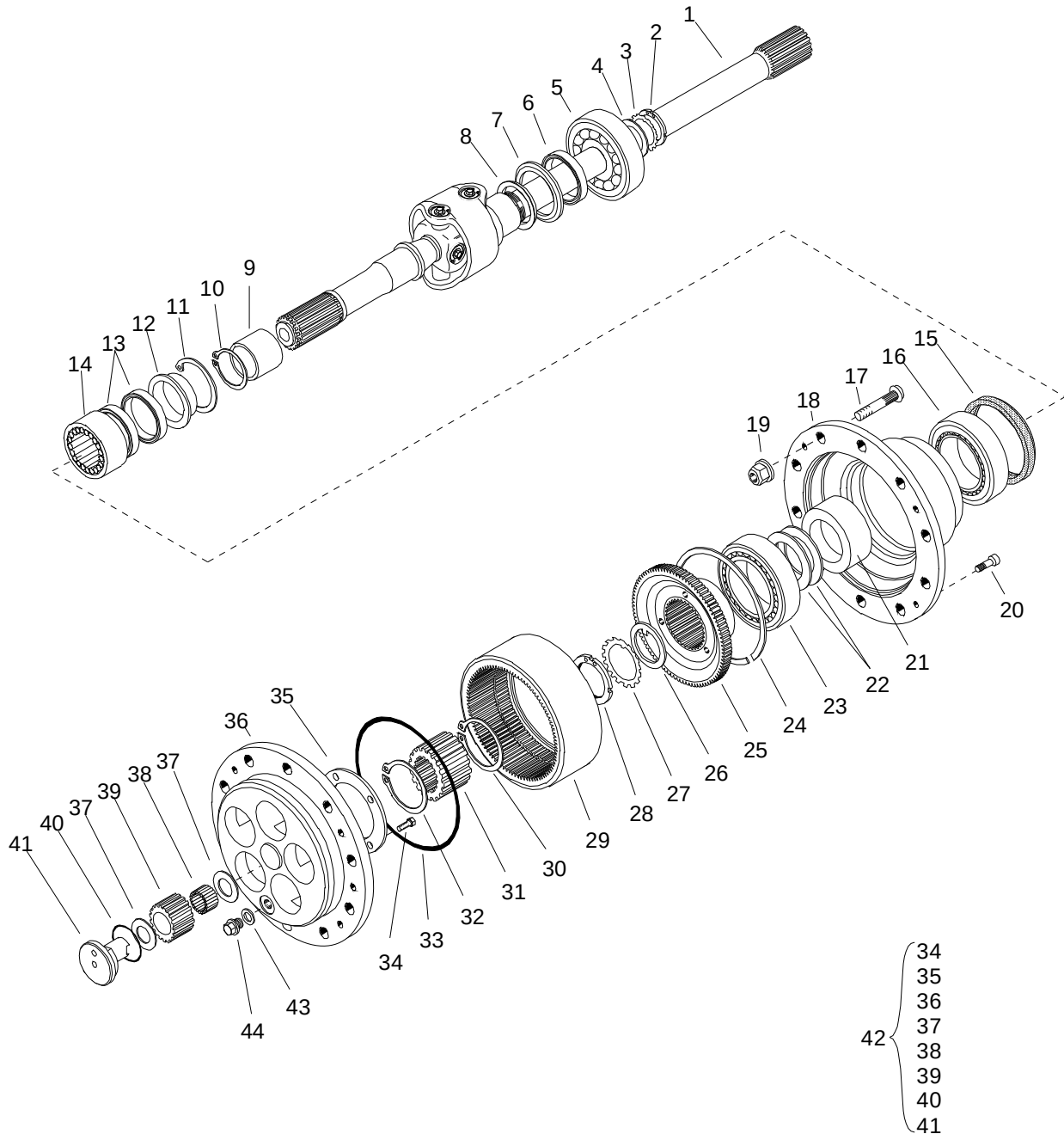
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| Item | Qty. | Order no.           | Description         | Note              |
|------|------|---------------------|---------------------|-------------------|
| 1    | 1    | <b>160-530-0035</b> | Ball Joint Assembly | M30x1.5 LH thread |
| 2    | 1    | <b>160-530-0045</b> | Ball Joint Assembly | M30x1.5 RH Thread |
| 3    | 1    | <b>140-211-4300</b> | Tie rod             |                   |
| 4    | 1    | <b>095-130-2031</b> | Binding screw       | M30x1.5(LH)/M42x3 |
| 5    | 5    | <b>90301-14703</b>  | Hex Screw           | M14x70            |
| 6    | 5    | <b>90550-14227</b>  | Nut                 | M14 self locking  |



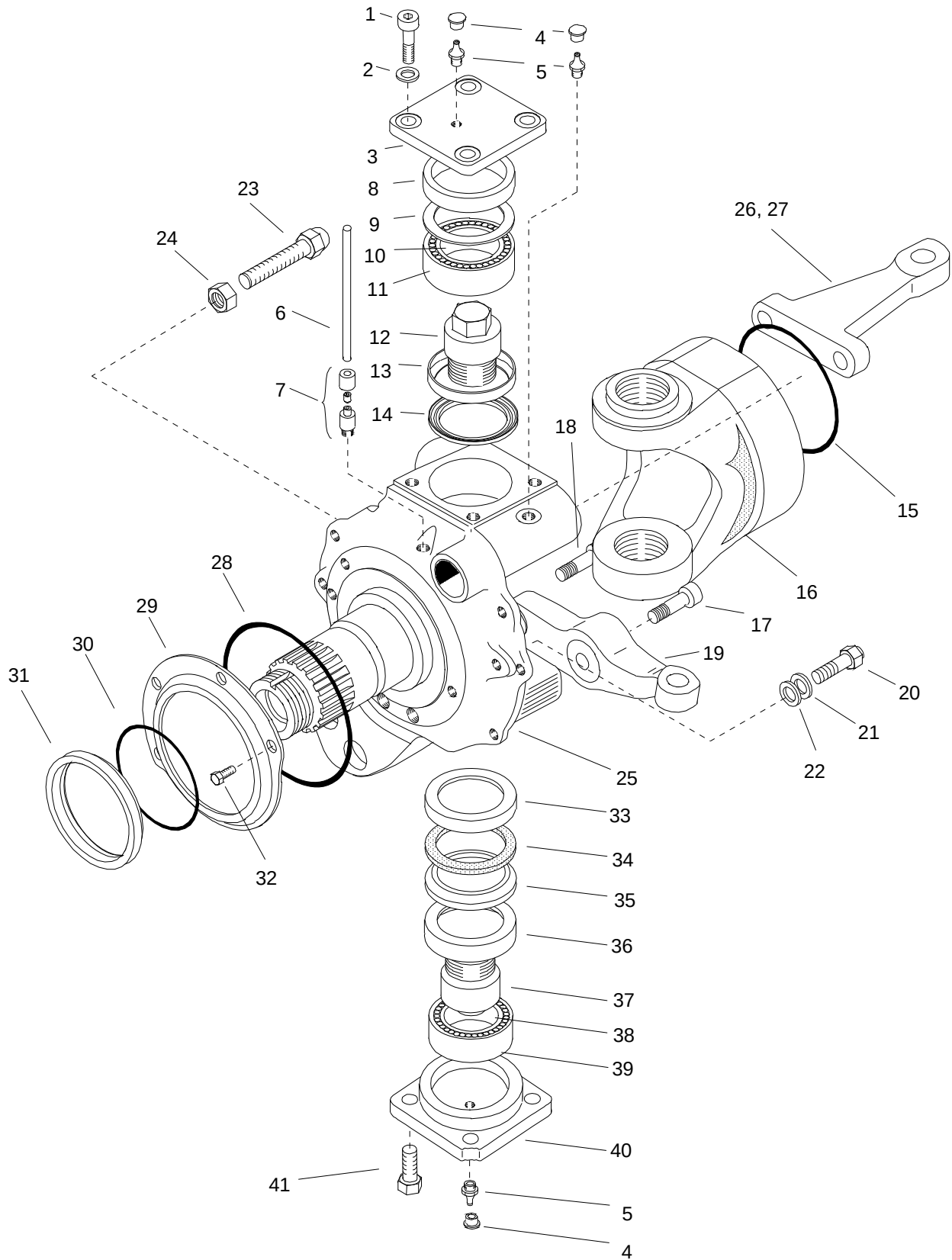
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| Item | Qty. | Order no.           | Description         | Note                               |
|------|------|---------------------|---------------------|------------------------------------|
| 0    | 1    | <b>160-530-0035</b> | Ball Joint Assembly | LH, LH Thread, includes all items  |
| 0    | 1    | <b>160-530-0045</b> | Ball Joint Assembly | RH, RH Thread, includes all items  |
| 1    | 1    | <b>140-227-0311</b> | Cover               |                                    |
| 2    | 1    | <b>92055-25460</b>  | Disc spring         | D50/25.4x1.5                       |
| 3    | 1    | <b>90700-29001</b>  | Spacer plate        | D29/50x2                           |
| 4    | 2    | <b>140-225-0400</b> | Ball seat           |                                    |
| 5    | 1    | <b>090-005-0390</b> | Needle roller       | D3x25.4                            |
| 6    | 1    | <b>140-229-1310</b> | Ball stud           | D40                                |
| 7    | 1    | <b>140-221-0810</b> | Balljoint housing   | RH Thread (for 160-530-0045)       |
| 7    | 1    | <b>140-222-0810</b> | Balljoint housing   | LH Thread (for 160-530-0035)       |
| 8    | 1    | <b>090-610-2610</b> | Dust membrane       |                                    |
| 9    | 1    | <b>90546-24363</b>  | Nut                 | M24x1.5                            |
| 10   | 1    | <b>90621-50323</b>  | Split pin           | D5x32                              |
| 11   | 1    | <b>90621-50453</b>  | Split pin           | D5x45                              |
| 12   | 1    | <b>91402-10003</b>  | Grease nipple       | M10x1, Straight (for 160-530-0035) |
| 12   | 1    | <b>91402-10453</b>  | Grease nipple       | M10x1, 45° (for 160-530-0045)      |
| 13   | 1    | <b>91421-06060</b>  | Shield hat          |                                    |
| 14   | 1    | <b>160-580-0011</b> | Service kit         | Includes items 1 - 6 & 8 -12       |



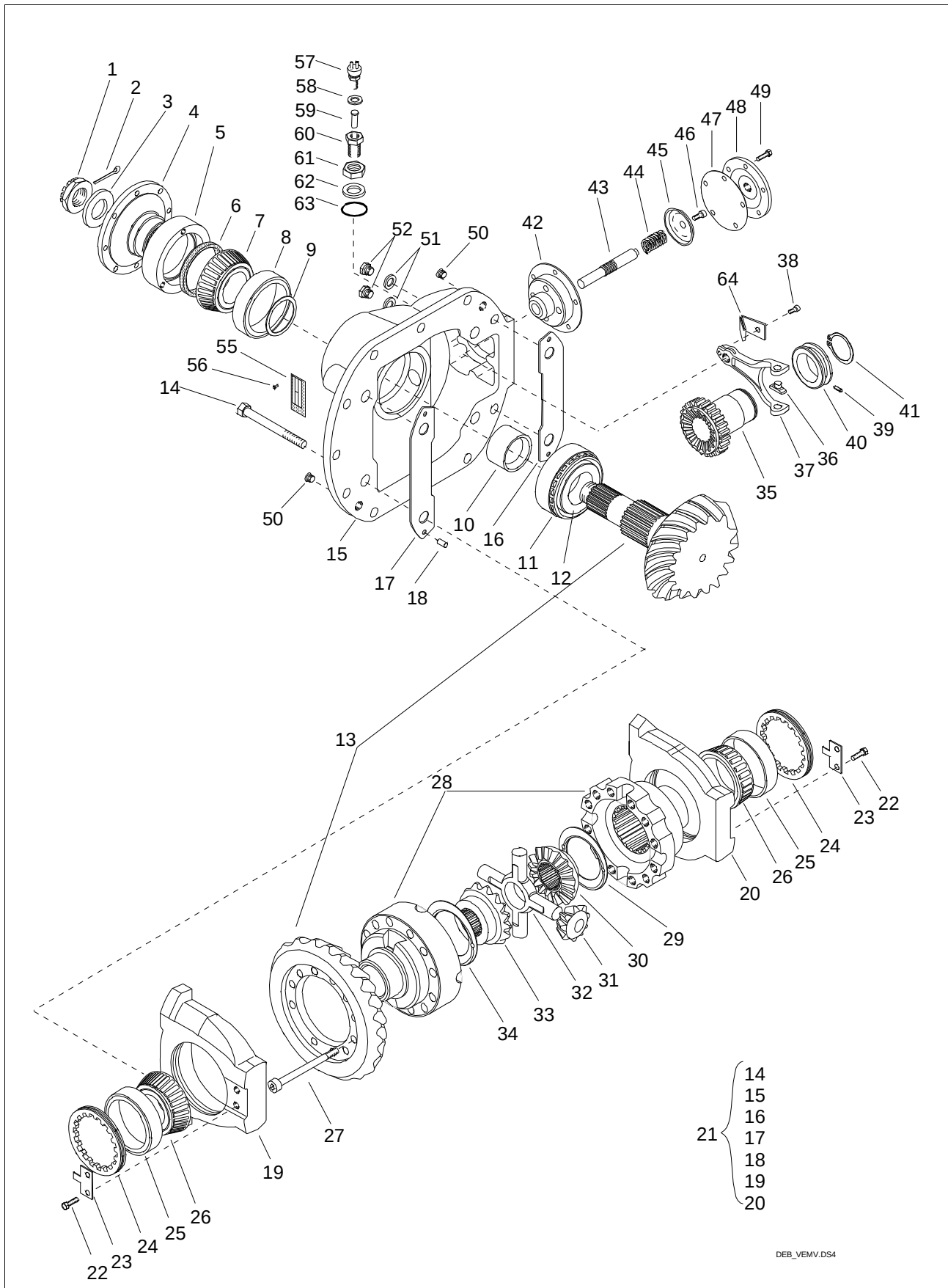
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| Item | Qty. | Order no.    | Description              | Note                               |
|------|------|--------------|--------------------------|------------------------------------|
| 1    | 2    | 141-502-0181 | Axle Shaft               | FSDP                               |
| 1    | 1    | 541-502-0421 | Axle Shaft               | LH, FSMP, L=1254                   |
| 1    | 1    | 541-502-0431 | Axle Shaft               | RH, FSMP, L=1089                   |
| 2    | 2    | 099-250-8000 | Lock nut                 | M50x1.5                            |
| 3    | 2    | 099-455-0000 | Lock washer              | D50/74x1.25                        |
| 4    | 2    | 099-455-0010 | washer                   | D50/75x4                           |
| 5    | 2    | 090-010-5020 | Deep groove ball bearing |                                    |
| 6    | 2    | 91122-06001  | Shaft seal               | D60/75x8                           |
| 7    | 2    | 91121-06001  | Seal ring                | With swivel head 141-117-0401/0910 |
| 7    | 2    | 91121-12070  | Seal ring                | With swivel head 141-117-0900      |
| 8    | 2    | 141-533-0210 | Shield ring              | With swivel head 141-117-0900      |
| 9    | 2    | 090-160-5020 | Sleeve                   | D50/60x50                          |
| 10   | 2    | 092-953-5030 | Retainer ring            | D50x2                              |
| 11   | 2    | 092-957-8000 | Retainer ring            | D80x2.5                            |
| 12   | 2    | 141-533-0110 | Shield ring              | For single shaft seal, pos. 13     |
| 12   | 2    | 141-533-0200 | Shield ring              | For double shaft seals, pos. 13    |
| 13   | 2/4  | 91122-06001  | Shaft seal               | D60/75x8                           |
| 14   | 2    | 090-060-6040 | Needle bush              | D60/72x25                          |
| 15   | 2    | 91122-14003  | Shaft seal               | D140/165x15                        |
| 16   | 2    | 91744-01051  | T. Roller bearing        |                                    |
| 17   | 20   | 140-911-2510 | Wheel bolt               | L=93 mm                            |
| 17   | 20   | 140-911-2700 | Wheel bolt               | L=113 mm                           |
| 18   | 2    | 141-411-0510 | Wheel hub                | Without ABS                        |
| 18   | 2    | 141-411-0600 | Wheel hub                | With ABS                           |
| 19   | 20   | 540-916-1610 | Wheel nut                | M22x1.5                            |
| 20   | 8    | 90303-12303  | Hex Screw                | M12x30 - DIN 933 - 8.8             |
| 21   | 2    | 143-416-0010 | Spacer ring              | D90/118x41                         |
| 22   | NLA  | 099-519-1001 | Shim                     | s=0.10 mm, D91/108, Ms             |
| 22   | NLA  | 099-519-1002 | Shim                     | s=0.20 mm, D91/108, Ms             |
| 22   | NLA  | 099-519-1003 | Shim                     | s=0.50 mm, D91/108, Ms             |
| 22   | ar   | 590731-09020 | Shim                     | s=0.20 mm, D90x110, St             |
| 22   | ar   | 590731-09030 | Shim                     | s=0.30 mm, D90x110, St             |
| 22   | ar   | 590731-09050 | Shim                     | s=0.50 mm, D90x110, St             |
| 23   | 2    | 91744-01101  | T. Roller bearing        |                                    |
| 24   | 2    | 91720-22001  | Retainer ring            | D220x3                             |
| 25   | NLA  | 135-271-0110 | Ring gear hub            | Superceded by 535-271-0800         |
| 25   | 2    | 535-271-0800 | Ring gear hub            |                                    |
| 26   | 2    | 099-458-0010 | washer                   | D80/100x2                          |
| 27   | 2    | 099-458-0000 | Lock washer              | D80/112x1,75                       |
| 28   | 2    | 90575-08040  | Lock nut                 | M80x2                              |
| 29   | 2    | 135-261-1600 | Ring gear                |                                    |
| 30   | 2    | 092-953-4710 | Retainer ring            | D47x1.5                            |
| 31   | 2    | 135-211-1000 | Sun gear                 |                                    |
| 32   | 2    | 092-953-4710 | Retainer ring            | D47x1.5                            |
| 33   | 2    | 090-512-6500 | O-ring                   | D265x2                             |
| 34   | 10   | 90303-10203  | Hex Screw                | M10 x 20 - DIN 933 - 8.8           |
| 35   | 2    | 135-259-0110 | Lock plate               |                                    |
| 36   | 2    | 141-441-0810 | Planet carrier           |                                    |
| 37   | 20   | 090-353-5020 | Spacer plate             | D57/35x1.5                         |
| 38   | 260  | 090-005-0530 | Needle roller            | D4.762x28.5                        |
| 39   | 10   | 135-241-1000 | Planet gear              |                                    |
| 40   | 10   | 91100-76025  | O-ring                   | D76x2.5                            |
| 41   | 10   | 135-251-1000 | Planet gear shaft        |                                    |
| 42   | 2    | 141-404-0071 | Planetary gear           |                                    |
| 43   | 2    | 91201-22150  | Seal ring                | D22/27x1.5 Cu                      |
| 44   | 2    | 90871-22193  | Plug screw               | M22x1.5, hex head                  |



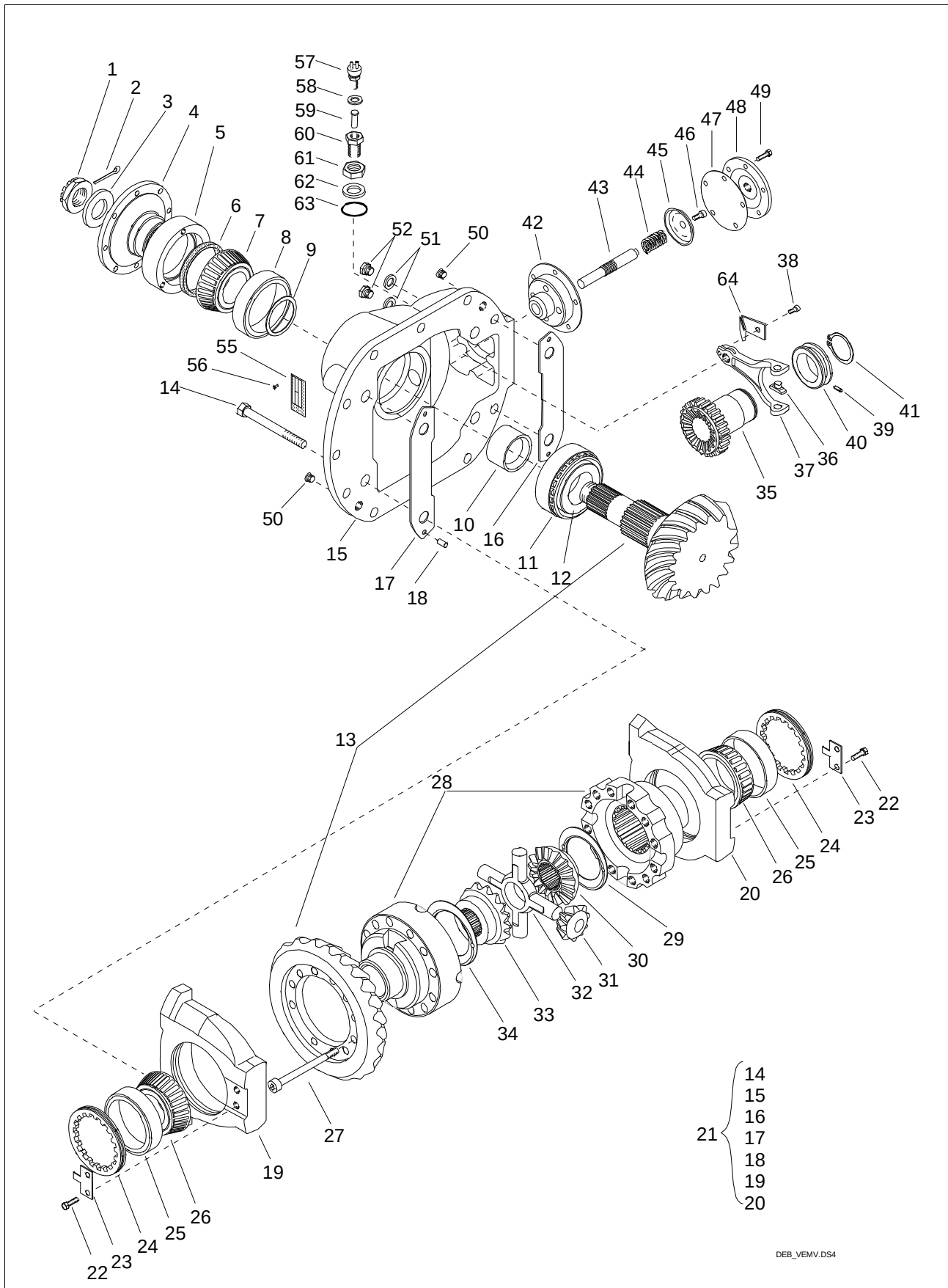
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| Item | Qty. | Order no.    | Description        | Note                                         |
|------|------|--------------|--------------------|----------------------------------------------|
| 1    | 8    | 90303-16307  | Hex Screw          | M16x30                                       |
| 2    | 0    |              |                    | Not used                                     |
| 3    | 2    | 140-123-1110 | King pin cover     |                                              |
| 4    | 6    | 91421-06060  | Shield hat         |                                              |
| 5    | 6    | 91402-10003  | Grease nipple      | M10x1, Straight                              |
| 6    | 2    | 179-614-1110 | Breather pipe      | l=0.5 m                                      |
| 7    | 2    | 91950-11010  | Pipe joint         | M10x1, 6 mm                                  |
| 8    | 2    | 099-607-6050 | Spacer ring        | D94/76.3x21.5                                |
| 9    | ar   | 099-518-0011 | Shim               | (s=0.10 mm)                                  |
| 9    | ar   | 099-518-0012 | Shim               | (s=0.20 mm)                                  |
| 9    | ar   | 099-518-0013 | Shim               | (s=0.50 mm)                                  |
| 10   | 2    | 090-110-5130 | Bearing inner race |                                              |
| 11   | 2    | 090-120-9300 | Bearing outer race |                                              |
| 12   | 2    | 140-121-1200 | King pin           |                                              |
| 13   | 2    | 090-721-7400 | Protective cup     | D74/93.3x7                                   |
| 14   | 2    | 090-400-7000 | Gamma-seal         | D70/90x5.5                                   |
| 15   | 2    | 090-511-2110 | O-ring             | D120,0 x 2,0 NBR 70                          |
| 16   | NLA  | 141-117-0401 | Swivel head        | 9 ton, Cast iron, superceded by 141-117-0910 |
| 16   | 2    | 141-117-0900 | Swivel head        | 10 ton, Steel, R88x15x29.5deg, sealed        |
| 16   | 2    | 141-117-0910 | Swivel head        | 9 ton, Steel, R85x15x30deg                   |
| 17   | 2    | 90311-24808  | Allen Screw        | M24x80, only with 140-241-5400/5410          |
| 17   | 2    | 90311-24908  | Allen Screw        | M24x90                                       |
| 18   | 2    | 90311-24708  | Allen Screw        | M24x70, only with 140-241-5400/5410          |
| 18   | 2    | 90311-24908  | Allen Screw        | M24x90                                       |
| 19   | 1    | 140-241-5400 | Tie rod arm        | RH, Superceded by 540-241-5401               |
| 19   | 1    | 140-241-5410 | Tie rod arm        | LH, Superceded by 540-241-5411               |
| 19   | 1    | 540-241-5401 | Tie rod arm        | RH, Up to No. 11958 (6/2001)                 |
| 19   | 1    | 540-241-5411 | Tie rod arm        | LH, Up to No. 11958 (6/2001)                 |
| 19   | 1    | 540-241-6600 | Tie rod arm        | RH, Since No. 11959 (6/2001)                 |
| 19   | 1    | 540-241-6610 | Tie rod arm        | LH, Since No. 11959 (6/2001)                 |
| 20   | 2    | 140-249-1400 | Stop screw         | Total L=80mm (lock angle 40 deg.)            |
| 20   | 2    | 140-249-1510 | Stop screw         | Total L=45.5mm (lock angle 48 deg.)          |
| 21   | ar   | 099-551-6001 | Spacer ring        | s = 3.0                                      |
| 22   | ar   | 099-551-6000 | Spacer ring        | s = 2.0                                      |
| 23   | 2    | 140-249-1400 | Stop screw         | Total L=80mm                                 |
| 24   | 2    | 90502-16243  | Nut                | M16                                          |
| 25   | 1    | 141-141-0700 | Steering knuckle   | RH                                           |
| 25   | 1    | 141-141-0710 | Steering knuckle   | LH                                           |
| 26   | 1    | 140-261-5300 | Steering arm       | LH, L=173.5, cone 1:8                        |
| 26   | ar   | 140-267-0100 | Spacer plate       | s=24 mm, if steering arm not installed       |
| 26   | 1    | 540-261-7010 | Steering arm       | LH, w/o taper hole                           |
| 26   | 1    | 540-261-8100 | Steering arm       | LH, L=198.5 mm, cone 1:8                     |
| 27   | 1    | 140-261-5310 | Steering arm       | RH, L=173.5, cone 1:8                        |
| 27   | 1    | 540-261-7000 | Steering arm       | RH, w/o taper hole                           |
| 27   | 1    | 540-261-8110 | Steering arm       | RH, L=198.5 mm, cone 1:8                     |
| 28   | 2    | 591101-94230 | O-ring             | 194.2x3, supercedes item 91101-90030         |
| 29   | 2    | 143-871-0100 | Shield             |                                              |
| 30   | 2    | 91101-33026  | O-ring             | 133x2.62                                     |
| 31   | 2    | 540-415-1100 | Sliding Ring       | Supersession for 140-415-0712                |
| 32   | 4    | 90303-08123  | Hex Screw          | M8x12                                        |
| 33   | 2    | 090-722-1100 | Protective cup     | D70.5/109.6x5.5                              |
| 34   | 2    | 090-551-9200 | Seal plate         | D92/108x5, oil before installation           |
| 35   | 2    | 090-400-7000 | Gamma-seal         | D70/90x5.5                                   |
| 36   | 2    | 090-722-1110 | Protective cup     | D72/111.1x11.5                               |
| 37   | 2    | 140-121-1200 | King pin           |                                              |
| 38   | 2    | 090-110-5140 | Bearing inner race |                                              |
| 39   | 2    | 090-121-1110 | Bearing outer race |                                              |
| 40   | 2    | 140-123-1010 | King pin cover     |                                              |
| 41   | 8    | 90303-16307  | Hex Screw          | M16x30                                       |

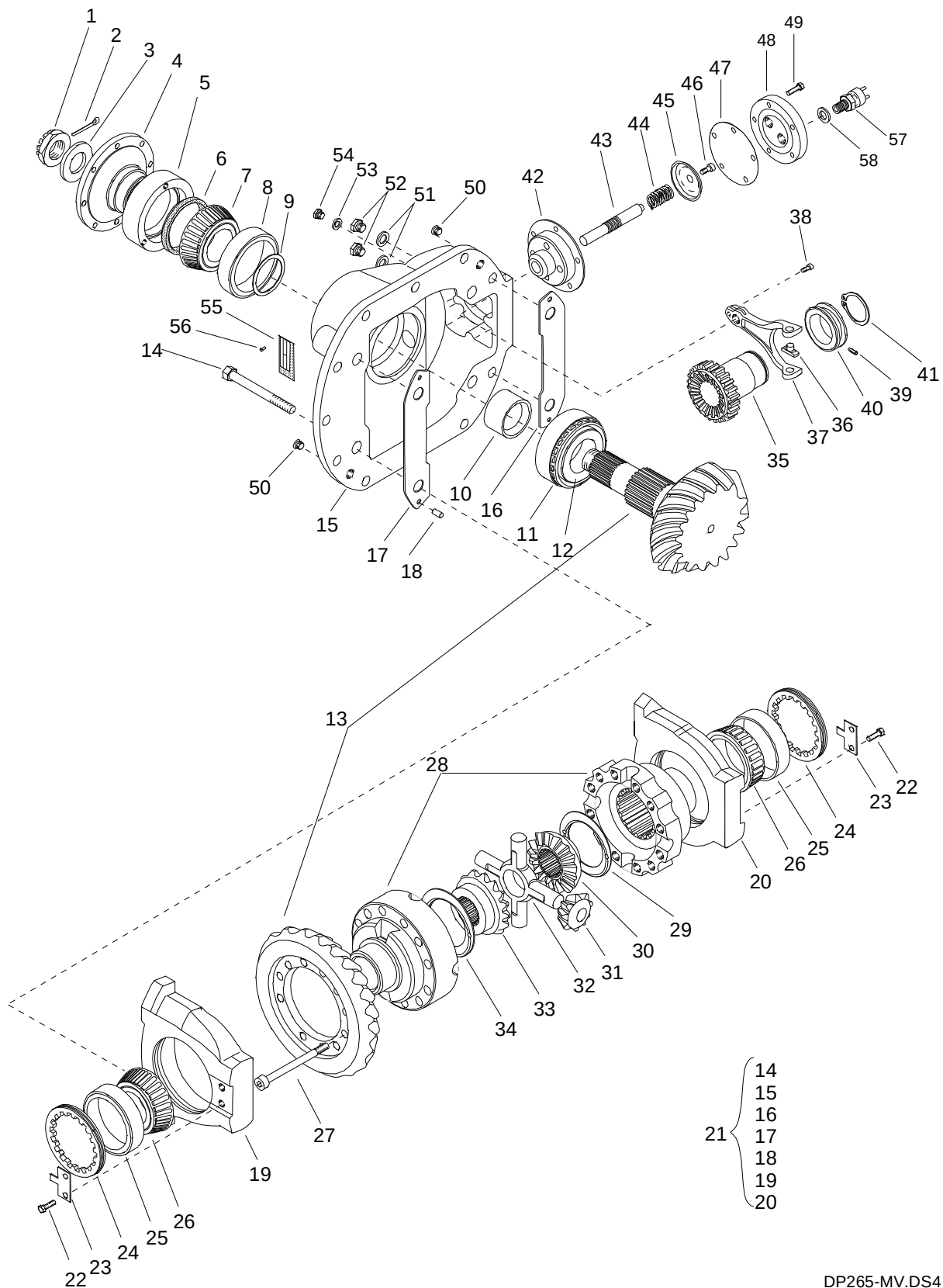


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| Item | Qty. | Order no.           | Description              | Note                             |
|------|------|---------------------|--------------------------|----------------------------------|
| 1    |      | <b>099-233-3000</b> | Nut                      | M33x1.5                          |
| 2    | 1    | <b>90621-04503</b>  | Split pin                | D4x50                            |
| 3    | 1    | <b>90705-33043</b>  | washer                   | D33/56x3.5                       |
| 4    | 1    | <b>138-916-1810</b> | Flange                   | HS1600                           |
| 4    | 1    | <b>138-917-2400</b> | Flange                   | HS1800                           |
| 4    | 1    | <b>138-946-0100</b> | Flange                   | DIN 165                          |
| 4    | 1    | <b>538-916-2911</b> | Flange                   | ISO 8667 - T 150                 |
| 4    | 1    | <b>538-967-0200</b> | End Yoke                 | Splined Yoke 1710                |
| 5    | 1    | <b>143-234-0210</b> | Seal housing             |                                  |
| 6    | 1    | <b>090-500-6501</b> | Shaft seal               | D65/90x10                        |
| 7    | 1    | <b>090-110-5150</b> | Bearing inner race       |                                  |
| 8    | 1    | <b>090-121-1310</b> | Bearing outer race       |                                  |
| 9    | ar   | <b>099-515-1066</b> | Spacer ring              | (s=0.3 mm)                       |
| 9    | ar   | <b>099-515-1067</b> | Spacer ring              | (s=0.4 mm)                       |
| 9    | ar   | <b>099-515-1068</b> | Spacer ring              | (s=0.5 mm)                       |
| 10   | ar   | <b>143-261-0111</b> | Spacer ring              | (l=30.20 mm)                     |
| 10   | ar   | <b>143-261-0113</b> | Spacer ring              | (l=30.24 mm)                     |
| 10   | ar   | <b>143-261-0115</b> | Spacer ring              | (l=30.28 mm)                     |
| 11   | 1    | <b>090-121-2400</b> | Bearing outer race       |                                  |
| 12   | 1    | <b>090-110-6600</b> | Bearing inner race       |                                  |
| 13   | 1    | <b>143-240-2411</b> | Ring and pinion gear set | 22/28, Final Ratio 4.63          |
| 13   | 1    | <b>143-240-2419</b> | Ring and pinion gear set | 23/27, Final Ratio 4.27          |
| 13   | 1    | <b>143-240-2451</b> | Ring and pinion gear set | 20/29, Final Ratio 5.27          |
| 13   | 1    | <b>143-240-2461</b> | Ring and pinion gear set | 14/34, Final Ratio 8.83          |
| 13   | 1    | <b>143-240-2811</b> | Ring and pinion gear set | 11/32, Final Ratio 10.58         |
| 13   | 1    | <b>143-240-2812</b> | Ring and pinion gear set | 18/28, Final Ratio 5.66          |
| 13   | 1    | <b>143-240-2821</b> | Ring and pinion gear set | 16/28, Final Ratio 6.36          |
| 13   | 1    | <b>143-240-2831</b> | Ring and pinion gear set | 23/26, Final Ratio 4.11          |
| 13   | 1    | <b>143-240-2841</b> | Ring and pinion gear set | 17/26, Final Ratio 5.56          |
| 13   | 1    | <b>543-240-2871</b> | Ring and pinion gear set | 14/27, Final ratio 7.01          |
| 13   | 1    | <b>543-240-3821</b> | Ring and pinion gear set | 24/32, Final Ratio 4.85          |
| 13   | 1    | <b>543-240-3831</b> | Ring and pinion gear set | 22/33, Final Ratio 5.45          |
| 13   | 1    | <b>543-240-3841</b> | Ring and pinion gear set | 21/32, Final Ratio 5.54          |
| 14   | 4    | <b>90311-20218</b>  | Allen Screw              | M20x110, 12.9                    |
| 15   | 1    | <b>143-211-1480</b> | Diff. Carrier Housing    | Not serviced separately          |
| 16   | ar   | <b>144-239-1710</b> | Shim                     | (s=1.00 mm)                      |
| 16   | ar   | <b>144-239-1711</b> | Shim                     | (s=0.50 mm)                      |
| 16   | ar   | <b>144-239-1712</b> | Shim                     | (s=0.20 mm)                      |
| 16   | ar   | <b>144-239-1713</b> | Shim                     | (s=0.10 mm)                      |
| 17   | ar   | <b>144-239-1800</b> | Shim                     | (s=1.00 mm)                      |
| 17   | ar   | <b>144-239-1801</b> | Shim                     | (s=0.50 mm)                      |
| 17   | ar   | <b>144-239-1802</b> | Shim                     | (s=0.20 mm)                      |
| 17   | ar   | <b>144-239-1803</b> | Shim                     | (s=0.10 mm)                      |
| 18   | 4    | <b>590604-08141</b> | Pin                      | Ø8x14                            |
| 19   |      | <b>143-217-0080</b> | Bearing housing          | Not serviced separately          |
| 20   |      | <b>143-217-0180</b> | Bearing housing          | Not serviced separately          |
| 21   | 1    | <b>143-210-1311</b> | Differential Carrier     |                                  |
| 22   | 4    | <b>90303-08103</b>  | Hex Screw                | M8x10                            |
| 23   | 2    | <b>143-227-0202</b> | Lock plate               |                                  |
| 24   | 2    | <b>143-226-1100</b> | Adjusting nut            | D136x12 (5 11/32-12-2A)          |
| 25   | 2    | <b>090-121-3200</b> | Bearing outer race       |                                  |
| 26   | 2    | <b>090-110-7610</b> | Bearing inner race       |                                  |
| 27   | 12   | <b>90301-16118</b>  | Hex Screw                | Final ratios 4.11 & 4.27         |
| 27   | 12   | <b>90311-16908</b>  | Allen Screw              | Not for final ratios 4.11 & 4.27 |
| 28   | 1    | <b>143-310-1621</b> | Diff. case assy          |                                  |
| 29   | 1    | <b>143-356-0310</b> | Thrust washer            | D81/115x1.5                      |
| 30   | 1    | <b>143-351-3110</b> | Side gear                |                                  |
| 31   | 4    | <b>143-341-1600</b> | Pinion gear              |                                  |
| 32   | 1    | <b>143-331-1601</b> | Spider                   |                                  |
| 33   | 1    | <b>143-351-2800</b> | Side gear                |                                  |
| 34   | 1    | <b>090-356-7000</b> | Thrust washer            | D66.5/100x1.5                    |

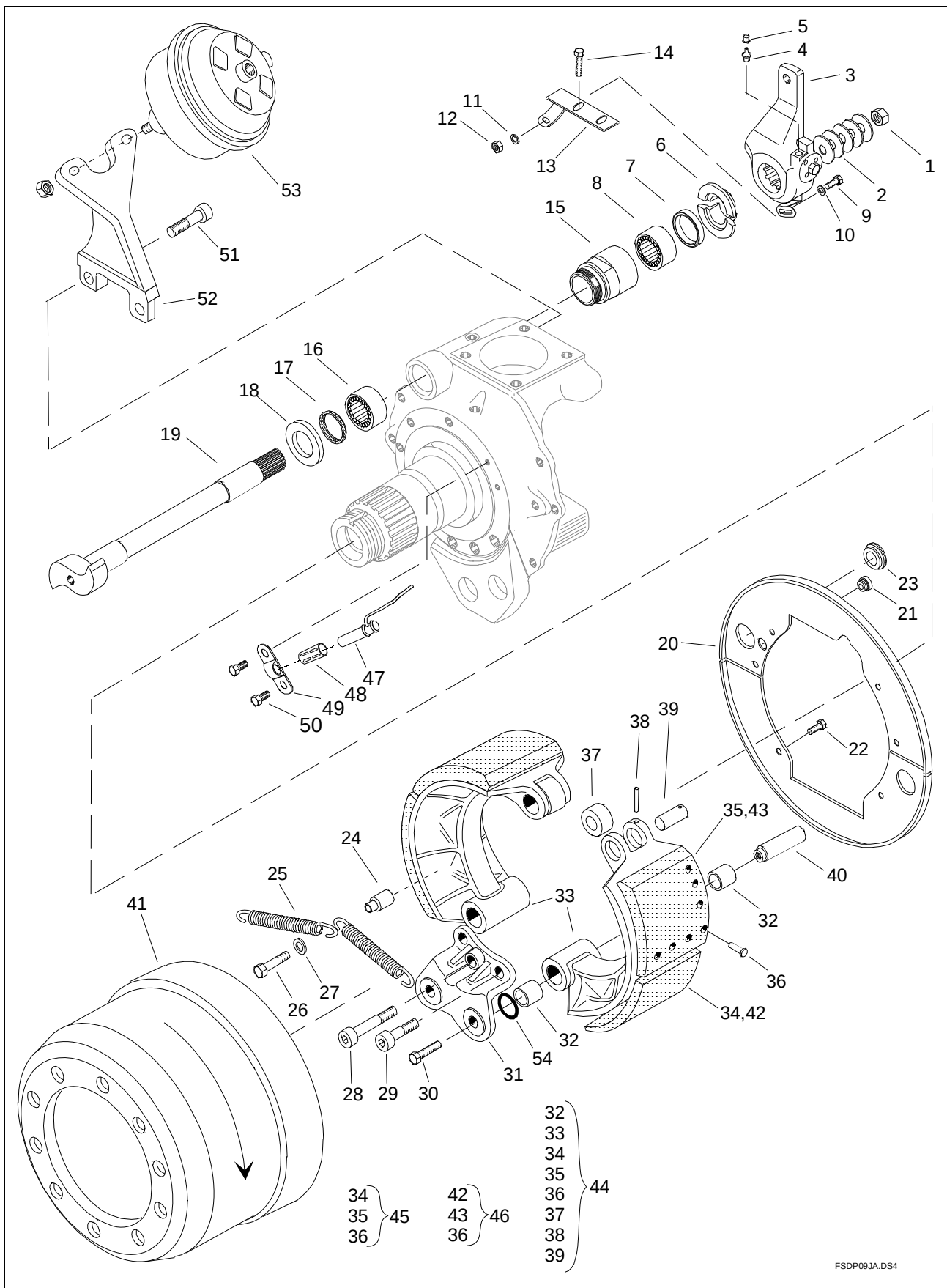


| Item | Qty. | Order no.           | Description        | Note                                               |
|------|------|---------------------|--------------------|----------------------------------------------------|
| 35   | 1    | <b>144-341-1400</b> | Sliding Gear       |                                                    |
| 36   | 2    | <b>133-348-0710</b> | Sliding shoe       |                                                    |
| 37   | 1    | <b>144-751-1000</b> | Control fork       |                                                    |
| 38   | 1    | <b>90313-06208</b>  | Allen Screw        | M6x20                                              |
| 39   | 1    | <b>90335-05108</b>  | Stopping screw     | M5x10                                              |
| 40   | 1    | <b>144-348-0010</b> | Sliding ring       |                                                    |
| 41   | 1    | <b>91711-05600</b>  | Retainer ring      | D56x2                                              |
| 42   | 1    | <b>144-732-0200</b> | Shaft housing      |                                                    |
| 43   | 1    | <b>172-212-1410</b> | Sliding Shaft      |                                                    |
| 44   | 1    | <b>097-122-0100</b> | Return spring      |                                                    |
| 45   | 1    | <b>172-361-0410</b> | Push plate         |                                                    |
| 46   | 1    | <b>90319-08206</b>  | Screw              | M8x20                                              |
| 47   | 1    | <b>172-351-1202</b> | Membrane           |                                                    |
| 48   | 1    | <b>144-736-0300</b> | Cover              | W/o diff lock                                      |
| 48   | 1    | <b>172-161-0700</b> | Membrane cover     | M18x1.5, up to S/N 60200 (2/1996)                  |
| 48   | 1    | <b>172-161-0701</b> | Membrane cover     | M16x1.5, since S/N 60201 (2/1996)                  |
| 48   | 1    | <b>572-161-1501</b> | Membrane cover     | M16x1.5, side connection, since S/N 60201 (2/1996) |
| 49   | 5    | <b>90303-08303</b>  | Hex Screw          | M8x30                                              |
| 50   | 2    | <b>91425-13120</b>  | Shield plug        |                                                    |
| 51   | 2    | <b>91201-22150</b>  | Seal ring          | D22/27x1.5 Cu                                      |
| 52   | 2    | <b>90871-22193</b>  | Plug screw         | M22x1.5, hex head                                  |
| 55   | 1    | <b>91600-20811</b>  | Name plate         |                                                    |
| 56   | 4    | <b>90111-29054</b>  | Rivet              | D2.9x5                                             |
| 57   | 1    | <b>186-490-0281</b> | Signal Lamp Switch | M12x1.5                                            |
| 58   | 1    | <b>91201-12150</b>  | Seal ring          | D12/18x1.5                                         |
| 59   | 1    | <b>141-812-0100</b> | Control pin        |                                                    |
| 60   | 1    | <b>141-812-0000</b> | Binding screw      | M12x1.5/M18x1.5                                    |
| 60   | 1    | <b>90871-18173</b>  | Plug screw         | W/o diff lock indicator switch                     |
| 60   | 1    | <b>91201-18150</b>  | Seal ring          | W/o diff lock indicator switch                     |
| 61   | 1    | <b>91842-18243</b>  | Lock Nut           | M18x1.5                                            |
| 62   | 1    | <b>91838-18010</b>  | Pressure ring      | Ms DR/R 18x23                                      |
| 63   | 1    | <b>91838-18100</b>  | O-ring             | Ø16x2.5                                            |
| 64   | 1    | <b>141-812-0010</b> | Guide plate        |                                                    |



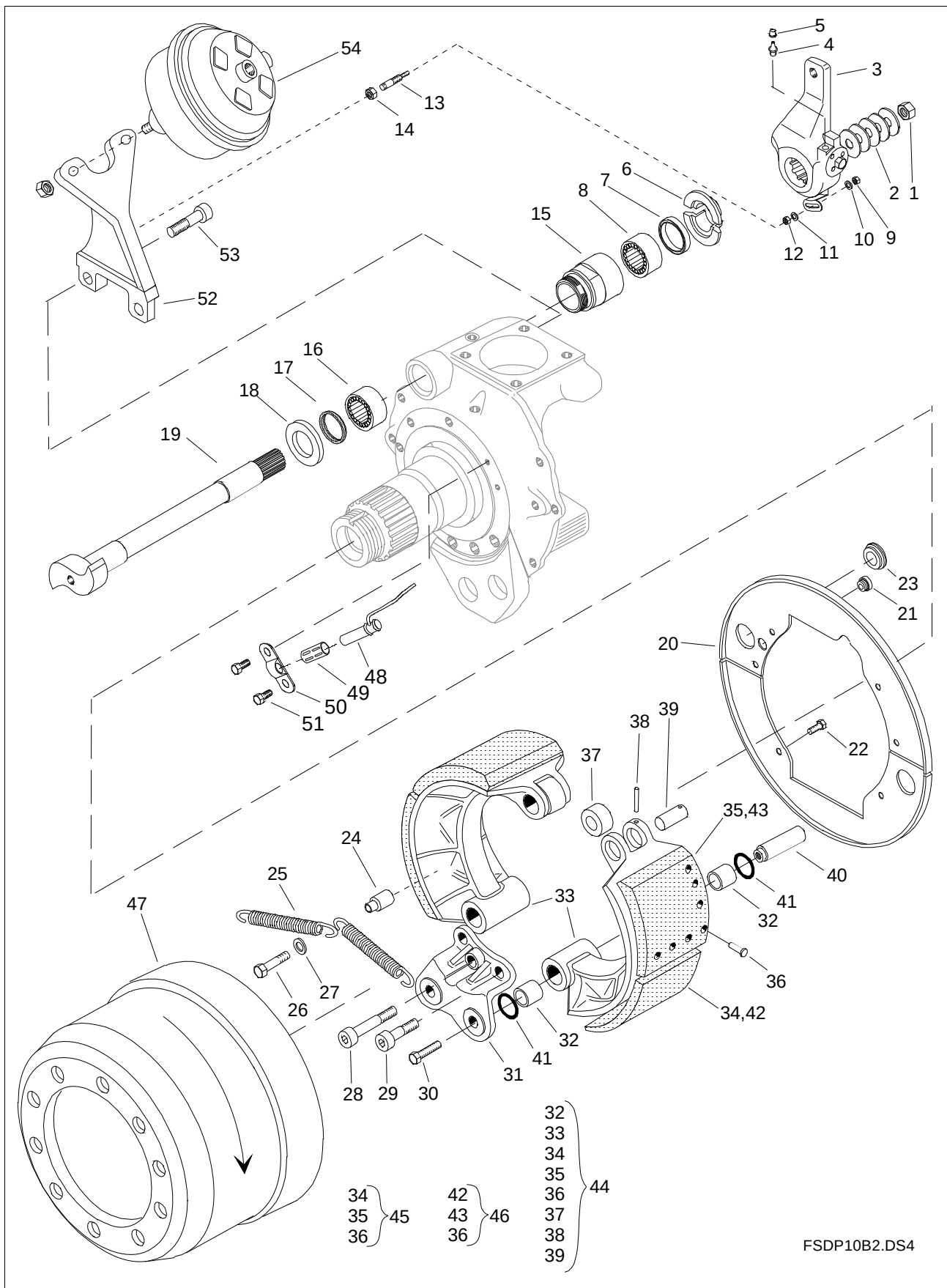
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| Item | Qty. | Order no.           | Description        | Note                                 |
|------|------|---------------------|--------------------|--------------------------------------|
| 35   | 1    | <b>144-341-1400</b> | Sliding Gear       |                                      |
| 36   | 2    | <b>133-348-0710</b> | Sliding shoe       |                                      |
| 37   | 1    | <b>144-751-1000</b> | Control fork       |                                      |
| 38   | 1    | <b>90313-06208</b>  | Allen Screw        | M6x20                                |
| 39   | 1    | <b>90335-05108</b>  | Stopping screw     | M5x10                                |
| 40   | 1    | <b>144-348-0010</b> | Sliding ring       |                                      |
| 41   | 1    | <b>91711-05600</b>  | Retainer ring      | D56x2                                |
| 42   | 1    | <b>144-732-0200</b> | Shaft housing      |                                      |
| 43   | 1    | <b>172-212-1410</b> | Sliding Shaft      | D18/20x105                           |
| 44   | 1    | <b>097-122-0100</b> | Return spring      | D29.5x43                             |
| 45   | 1    | <b>172-361-0410</b> | Push plate         | D70x12                               |
| 46   | 1    | <b>90319-08206</b>  | Screw              | M8x20                                |
| 47   | 1    | <b>172-351-1202</b> | Membrane           |                                      |
| 48   | 1    | <b>572-161-1502</b> | Membrane cover     |                                      |
| 49   | 5    | <b>90303-08303</b>  | Hex Screw          | M8x30                                |
| 50   | 2    | <b>91425-13120</b>  | Shield plug        |                                      |
| 51   | 2    | <b>91201-22150</b>  | Seal ring          | D22/27x1.5 Cu                        |
| 52   | 2    | <b>90871-22193</b>  | Plug screw         | M22x1.5, hex head                    |
| 53   | 1    | <b>91201-18150</b>  | Seal ring          | D18/22x1.5 Cu                        |
| 54   | 1    | <b>90871-18173</b>  | Plug screw         | M18x1.5                              |
| 55   | 1    | <b>591600-20823</b> | Name plate         |                                      |
| 56   | 4    | <b>90111-29054</b>  | Rivet              | D2.9x5                               |
| 57   | 1    | <b>586-490-0381</b> | Signal Lamp Switch | M18x1.5, connection M27x1.5          |
| 57   | 1    | <b>586-490-0481</b> | Signal Lamp Switch | M18x1.5, connection DIN72585 bayonet |
| 58   | 1    | <b>91201-18150</b>  | Seal ring          | D18/22x1.5 Cu                        |



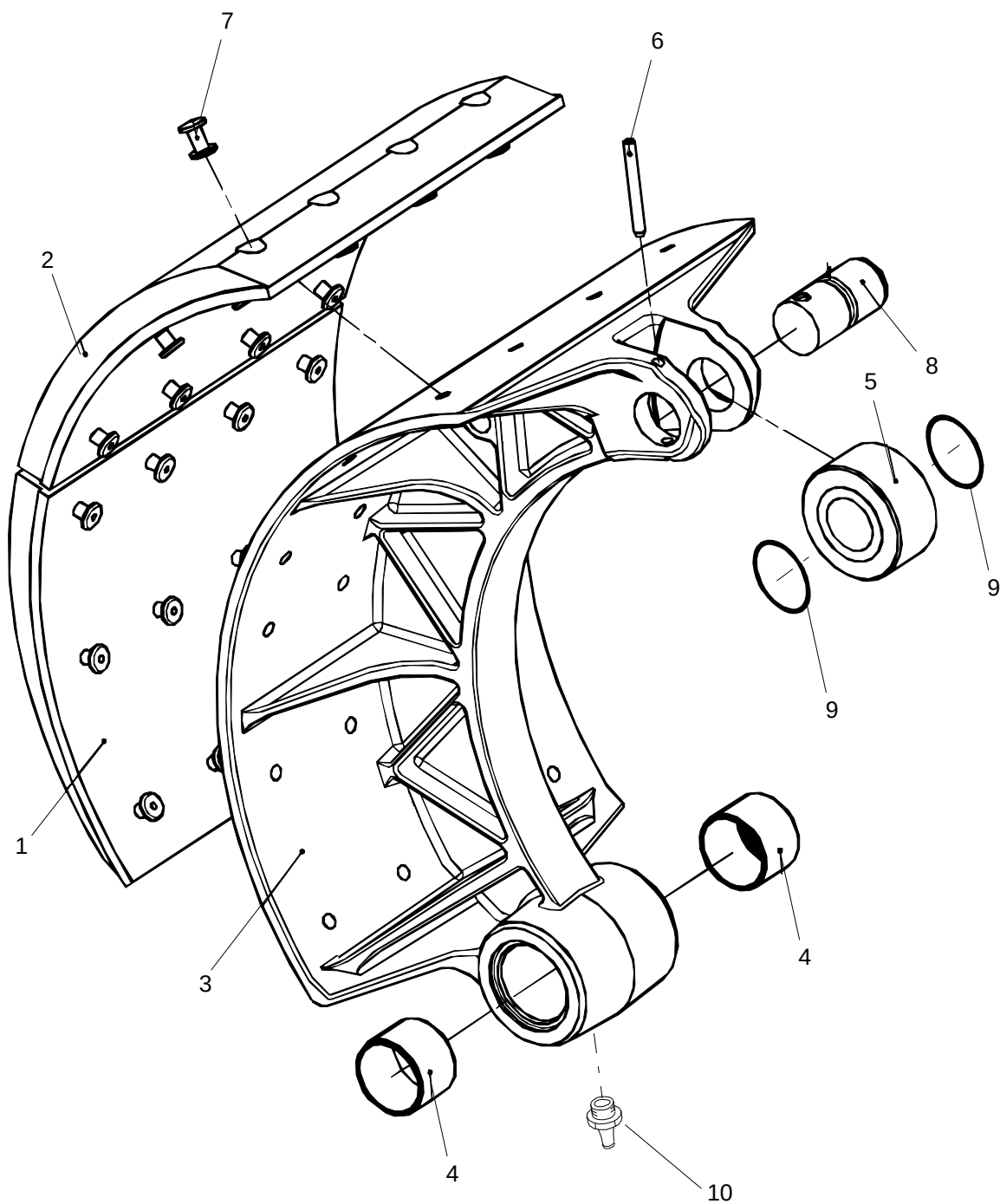
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| Item | Qty. | Order no.           | Description      | Note                                             |
|------|------|---------------------|------------------|--------------------------------------------------|
| 1    | 2    | <b>90550-16247</b>  | Nut              | M16 self locking                                 |
| 2    | 10   | <b>592055-18330</b> | Disc spring      | D18.3/35.5x0.9                                   |
| 3    | 2    | <b>146-520-1811</b> | Slack adjuster   | R145, offset 0, manual                           |
| 3    | 2    | <b>146-530-0611</b> | Slack adjuster   | R145, offset 0, automatic                        |
| 3    | 1    | <b>546-530-3211</b> | Slack adjuster   | RH, 165 mm, offset 56                            |
| 3    | 1    | <b>546-530-3221</b> | Slack adjuster   | LH, 165 mm, offset 56                            |
| 4    | 2    | <b>91402-08003</b>  | Grease nipple    | M8x1                                             |
| 5    | 2    | <b>91421-06060</b>  | Shield hat       |                                                  |
| 6    | 2    | <b>146-591-0270</b> | Retainer sleeve  |                                                  |
| 7    | 2    | <b>91122-04201</b>  | Shaft seal       | D42/55x8                                         |
| 8    | 2    | <b>090-060-4220</b> | Needle bush      | D52/42x20                                        |
| 9    | 2    | <b>90303-08203</b>  | Hex Screw        | M8x20                                            |
| 10   | 2    | <b>90705-08423</b>  | washer           | D8.4/17x1.6                                      |
| 11   | 2    | <b>90705-08423</b>  | washer           | D8.4/17x1.6                                      |
| 12   | 2    | <b>90502-08133</b>  | Nut              | M8                                               |
| 13   | 1    | <b>146-592-0600</b> | Lock plate       | RH, for slack adjuster -0611                     |
| 13   | 1    | <b>146-592-0610</b> | Lock plate       | LH, for slack adjuster -0611                     |
| 13   | 1    | <b>146-592-1000</b> | Lock plate       | RH, for slack adjuster -3211                     |
| 13   | 1    | <b>146-592-1010</b> | Lock plate       | LH, for slack adjuster -3221                     |
| 14   | 4    | <b>90303-08123</b>  | Hex Screw        | M8x12                                            |
| 15   | 2    | <b>146-221-1010</b> | Bearing housing  |                                                  |
| 16   | 2    | <b>090-060-4220</b> | Needle bush      | D52/42x20                                        |
| 17   | 2    | <b>91122-04201</b>  | Shaft seal       | D42/55x8                                         |
| 18   | 2    | <b>91726-43065</b>  | Support ring     | D43/65x3                                         |
| 19   | 1    | <b>146-211-7800</b> | S-cam shaft      | RH                                               |
| 19   | 1    | <b>146-211-7900</b> | S-cam shaft      | LH                                               |
| 20   | 1    | <b>146-131-6300</b> | Dust Shield      | RH                                               |
| 20   | 1    | <b>146-131-6310</b> | Dust Shield      | LH                                               |
| 21   | 2    | <b>590775-51550</b> | Shield plug      | D15, w/o ABS, since S/N 152541 (6/2005)          |
| 21   | 2    | <b>592234-14101</b> | Rubber bushing   | ABS, D10/14, since S/N 152541 (6/2005)           |
| 21   | 2    | <b>90775-41015</b>  | Shield plug      | D10, w/o ABS, up to S/N 152540 (6/2005)          |
| 21   | 2    | <b>92234-10031</b>  | Rubber bushing   | ABS, D3/10, up to S/N 152540 (6/2005)            |
| 22   | 12   | <b>90303-08123</b>  | Hex Screw        | M8x12                                            |
| 23   | 4    | <b>095-553-2000</b> | Shield plug      | D33/44                                           |
| 24   | 6    | <b>599-601-8900</b> | Bush             | D12/20/25x36                                     |
| 25   | 4    | <b>92052-30002</b>  | Return spring    | D30x165.5                                        |
| 26   | 6    | <b>90303-12603</b>  | Hex Screw        | M12x60                                           |
| 27   | 6    | <b>90705-13023</b>  | washer           | D13/24x2.5                                       |
| 28   | 2    | <b>90311-16608</b>  | Allen Screw      | M16x60, up to S/N 152540 (6/2005)                |
| 29   | 4    | <b>90313-16308</b>  | Allen Screw      | M16x30                                           |
| 30   | 4    | <b>90303-10203</b>  | Hex Screw        | M10 x 20 - DIN 933 - 8.8                         |
| 31   | 2    | <b>146-331-0500</b> | Anchor support   |                                                  |
| 32   | 8    | <b>590-313-2091</b> | Sleeve           | D32/36x25                                        |
| 33   | 4    | <b>146-351-4000</b> | Brake shoe       | 180 mm, o-ring sealing                           |
| 33   | 4    | <b>546-351-4600</b> | Brake shoe       | 180 mm, with grease nipple                       |
| 36   | 96   | <b>91501-00819</b>  | Rivet            | Included in brake lining set                     |
| 37   | 4    | <b>146-371-0700</b> | Roller           |                                                  |
| 38   | 4    | <b>90602-05450</b>  | Spring cotter    | D5x40                                            |
| 39   | 4    | <b>146-373-0201</b> | Pin              |                                                  |
| 40   | 4    | <b>146-341-1210</b> | Anchor bolt      | W/o grease nipple                                |
| 40   | 4    | <b>546-341-1300</b> | Anchor bolt      | With grease boring                               |
| 41   | 2    | <b>146-311-7400</b> | Brake drum       |                                                  |
| 44   | 4    | <b>546-306-0052</b> | Brake shoe assy  | 180 mm, DB5010                                   |
| 44   | 4    | <b>546-306-0252</b> | Brake shoe assy  | 180 mm, DB5010, with grease nipple               |
| 45   | 2    | <b>546-360-3012</b> | Brake lining set | 180mm, DB5010, for one wheel                     |
| 47   | 2    | <b>189-250-0071</b> | Sensor           | Wabco, up to S/N 152540 (6/2005)                 |
| 47   | 2    | <b>589-250-0081</b> | Sensor           | Knorr, protected wire, since S/N 152541 (6/2005) |
| 48   | 2    | <b>189-295-0000</b> | Bush             | ABS                                              |
| 49   | 2    | <b>189-931-0810</b> | Bracket          | ABS                                              |
| 50   | 4    | <b>90313-08208</b>  | Allen Screw      | ABS, M8x20                                       |
| 51   |      | <b>N1</b>           | Note             | See separate pages                               |
| 52   |      | <b>N1</b>           | Note             | See separate pages                               |
| 53   | 2    | <b>172-101-2241</b> | Brake chamber    | 20"                                              |
| 54   | 8    | <b>91106-36212</b>  | O-ring           | D36,2x3 Viton                                    |



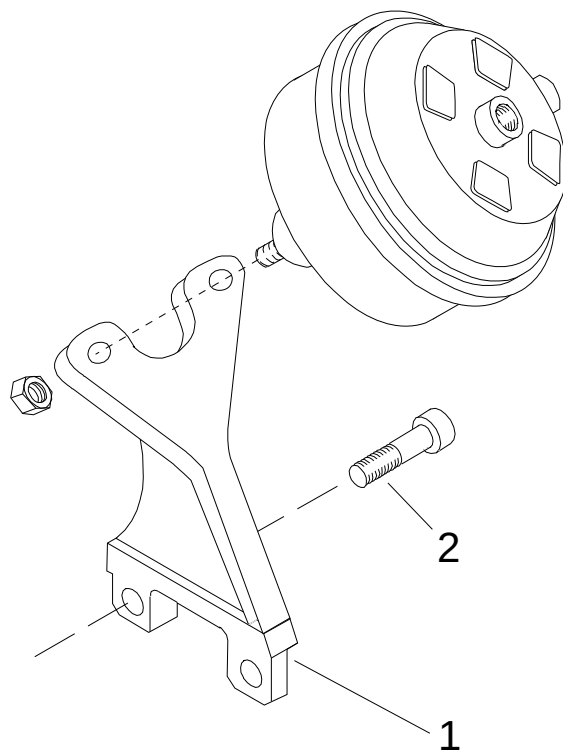
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| Item | Qty. | Order no.           | Description      | Note                                             |
|------|------|---------------------|------------------|--------------------------------------------------|
| 1    | 2    | <b>90550-16247</b>  | Nut              | M16 self locking                                 |
| 2    | 10   | <b>592055-18330</b> | Disc spring      | D18.3/35.5x0.9 (Supercedes item 92055-18323)     |
| 3    | 1    | <b>546-530-3511</b> | Slack adjuster   | RH, 165 mm, offset 28.5                          |
| 3    | 1    | <b>546-530-3521</b> | Slack adjuster   | LH, 165 mm, offset 28.5                          |
| 4    | 2    | <b>91402-08003</b>  | Grease nipple    | M8x1                                             |
| 5    | 2    | <b>91421-06060</b>  | Shield hat       |                                                  |
| 6    | 2    | <b>146-591-0270</b> | Retainer sleeve  |                                                  |
| 7    | 2    | <b>91122-04201</b>  | Shaft seal       | D42/55x8                                         |
| 8    | 2    | <b>090-060-4220</b> | Needle bush      | D52/42x20                                        |
| 9    | 2    | <b>90502-08133</b>  | Nut              | M8                                               |
| 10   | 2    | <b>90705-08423</b>  | washer           | D8.4/17x1.6                                      |
| 11   | 2    | <b>90705-08423</b>  | washer           | D8.4/17x1.6                                      |
| 12   | 2    | <b>90502-08133</b>  | Nut              | M8                                               |
| 13   | 2    | <b>90177-01203</b>  | Stud bolt        | M12/M8, L=94                                     |
| 14   | 4    | <b>90502-12193</b>  | Nut              | M12                                              |
| 15   | 2    | <b>146-221-1010</b> | Bearing housing  |                                                  |
| 16   | 2    | <b>090-060-4220</b> | Needle bush      | D52/42x20                                        |
| 17   | 2    | <b>91122-04201</b>  | Shaft seal       | D42/55x8                                         |
| 18   | 2    | <b>91726-43065</b>  | Support ring     | D43/65x3                                         |
| 19   | 1    | <b>146-211-7800</b> | S-cam shaft      | RH                                               |
| 19   | 1    | <b>146-211-7900</b> | S-cam shaft      | LH                                               |
| 20   | 1    | <b>146-131-6300</b> | Dust Shield      | RH                                               |
| 20   | 1    | <b>146-131-6310</b> | Dust Shield      | LH                                               |
| 21   | 2    | <b>590775-51550</b> | Shield plug      | D15, w/o ABS, since S/N 152541 (6/2005)          |
| 21   | 2    | <b>592234-14101</b> | Rubber bushing   | ABS, D10/14, since S/N 152541 (6/2005)           |
| 21   | 2    | <b>90775-41015</b>  | Shield plug      | D10, w/o ABS, up to S/N 152540 (6/2005)          |
| 21   | 2    | <b>92234-10031</b>  | Rubber bushing   | ABS, D3/10, up to S/N 152540 (6/2005)            |
| 22   | 12   | <b>90303-08123</b>  | Hex Screw        | M8x12                                            |
| 23   | 4    | <b>095-553-2000</b> | Shield plug      | D33/44                                           |
| 24   | 6    | <b>599-601-8900</b> | Bush             | D12/20/25x36                                     |
| 25   | 4    | <b>92052-30002</b>  | Return spring    | D30x165.5                                        |
| 26   | 6    | <b>90303-12603</b>  | Hex Screw        | M12x60                                           |
| 27   | 6    | <b>90705-13023</b>  | washer           | D13/24x2.5                                       |
| 28   | 2    | <b>90311-16608</b>  | Allen Screw      | M16x60, up to S/N 152540 (6/2005)                |
| 29   | 4    | <b>90313-16308</b>  | Allen Screw      | M16x30                                           |
| 30   | 4    | <b>90303-10203</b>  | Hex Screw        | M10 x 20 - DIN 933 - 8.8                         |
| 31   | 2    | <b>146-331-0500</b> | Anchor support   |                                                  |
| 32   | 8    | <b>590-313-2091</b> | Sleeve           | D32/36x25                                        |
| 33   | 4    | <b>146-351-4000</b> | Brake shoe       | 180 mm, o-ring sealing                           |
| 33   | 4    | <b>546-351-4600</b> | Brake shoe       | 180 mm, with grease nipple                       |
| 36   | 96   | <b>91501-00819</b>  | Rivet            | Included in brake lining set                     |
| 37   | 4    | <b>146-371-0700</b> | Roller           | D25/54x28                                        |
| 38   | 4    | <b>90602-05450</b>  | Spring cotter    | D5x40                                            |
| 39   | 4    | <b>146-373-0201</b> | Pin              | D25x50                                           |
| 40   | 4    | <b>146-341-1210</b> | Anchor bolt      | W/o grease nipple                                |
| 40   | 4    | <b>546-341-1300</b> | Anchor bolt      | With grease boring                               |
| 41   | 8    | <b>91106-36212</b>  | O-ring           | D36,2x3 Viton                                    |
| 44   | 4    | <b>546-306-0052</b> | Brake shoe assy  | 180 mm, DB5010                                   |
| 44   | 4    | <b>546-306-0252</b> | Brake shoe assy  | 180 mm, DB5010, with grease nipple               |
| 45   | 2    | <b>546-360-3012</b> | Brake lining set | 180mm, DB5010, for one wheel                     |
| 47   | 2    | <b>146-311-7400</b> | Brake drum       |                                                  |
| 48   | 2    | <b>189-250-0071</b> | Sensor           | Wabco, up to S/N 152540 (6/2005)                 |
| 48   | 2    | <b>589-250-0081</b> | Sensor           | Knorr, protected wire, since S/N 152541 (6/2005) |
| 49   | 2    | <b>189-295-0000</b> | Bush             | ABS                                              |
| 50   | 2    | <b>189-931-0810</b> | Bracket          | ABS                                              |
| 51   | 4    | <b>90313-08208</b>  | Allen Screw      | ABS, M8x20                                       |
| 52   |      | <b>N1</b>           | Note             | See separate pages                               |
| 53   |      | <b>N1</b>           | Note             | See separate pages                               |



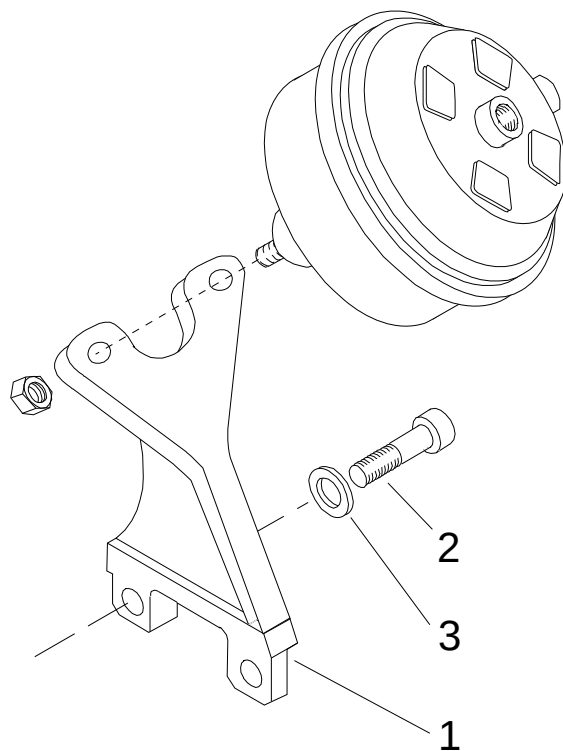
BSHOE-OR.DS4

| Item | Qty. | Order no.           | Description      | Note                            |
|------|------|---------------------|------------------|---------------------------------|
| 1,2  | ar   | <b>546-360-3012</b> | Brake lining set | 180mm, DB5010, for one wheel    |
| 3    | 1    | <b>546-351-4600</b> | Brake shoe       | 180 mm, with grease nipple      |
| 4    | 2    | <b>590-313-2091</b> | Sleeve           | D32/36x25                       |
| 5    | 1    | <b>546-371-0710</b> | Roller           | o-ring sealing                  |
| 6    | 1    | <b>90602-05450</b>  | Spring cotter    | D5x40                           |
| 7    | 24   | <b>91501-00819</b>  | Rivet            | Included in lining set (pos1,2) |
| 8    | 1    | <b>146-373-0201</b> | Pin              | D25x50                          |
| 9    | 2    | <b>91106-25232</b>  | O-ring           | D25.2x3                         |
| 10   | 1    | <b>91402-10003</b>  | Grease nipple    | M10x1, Straight                 |



M206-062.DS4

| Item | Qty. | Order no.           | Description     | Note                                   |
|------|------|---------------------|-----------------|----------------------------------------|
| 1    | 1    | <b>146-711-2600</b> | Chamber bracket | RH, for 145 mm straight slack adjuster |
| 1    | 1    | <b>146-711-2610</b> | Chamber bracket | LH, for 145 mm straight slack adjuster |
| 1    | 1    | <b>546-711-4100</b> | Chamber bracket | RH, 165 mm, offset 56, 30 deg.         |
| 1    | 1    | <b>546-711-4110</b> | Chamber bracket | LH, 165 mm, offset 56, 30 deg.         |
| 1    | 1    | <b>546-711-4300</b> | Chamber bracket | RH, 165 mm, offset 28.5, 30 deg.       |
| 1    | 1    | <b>546-711-4310</b> | Chamber bracket | LH, 165 mm, offset 28.5, 30 deg.       |
| 2    | 2    | <b>90311-20708</b>  | Allen Screw     | M20x70, Rear                           |
| 2    | 2    | <b>90311-20808</b>  | Allen Screw     | M20x80, Forward                        |



M206-079.DS4

| Item | Qty. | Order no.           | Description     | Note                             |
|------|------|---------------------|-----------------|----------------------------------|
| 1    | 1    | <b>546-711-4101</b> | Chamber bracket | RH, 165 mm, offset 56, 30 deg.   |
| 1    | 1    | <b>546-711-4111</b> | Chamber bracket | LH, 165 mm, offset 56, 30 deg.   |
| 1    | 1    | <b>546-711-4301</b> | Chamber bracket | RH, 165 mm, offset 28.5, 30 deg. |
| 1    | 1    | <b>546-711-4311</b> | Chamber bracket | RH, 165 mm, offset 28.5, 30 deg. |
| 2    | 4    | <b>90311-20708</b>  | Allen Screw     | M20x70                           |
| 3    | 4    | <b>590710-21047</b> | washer          | DIN 6916 21-37, HV10             |