

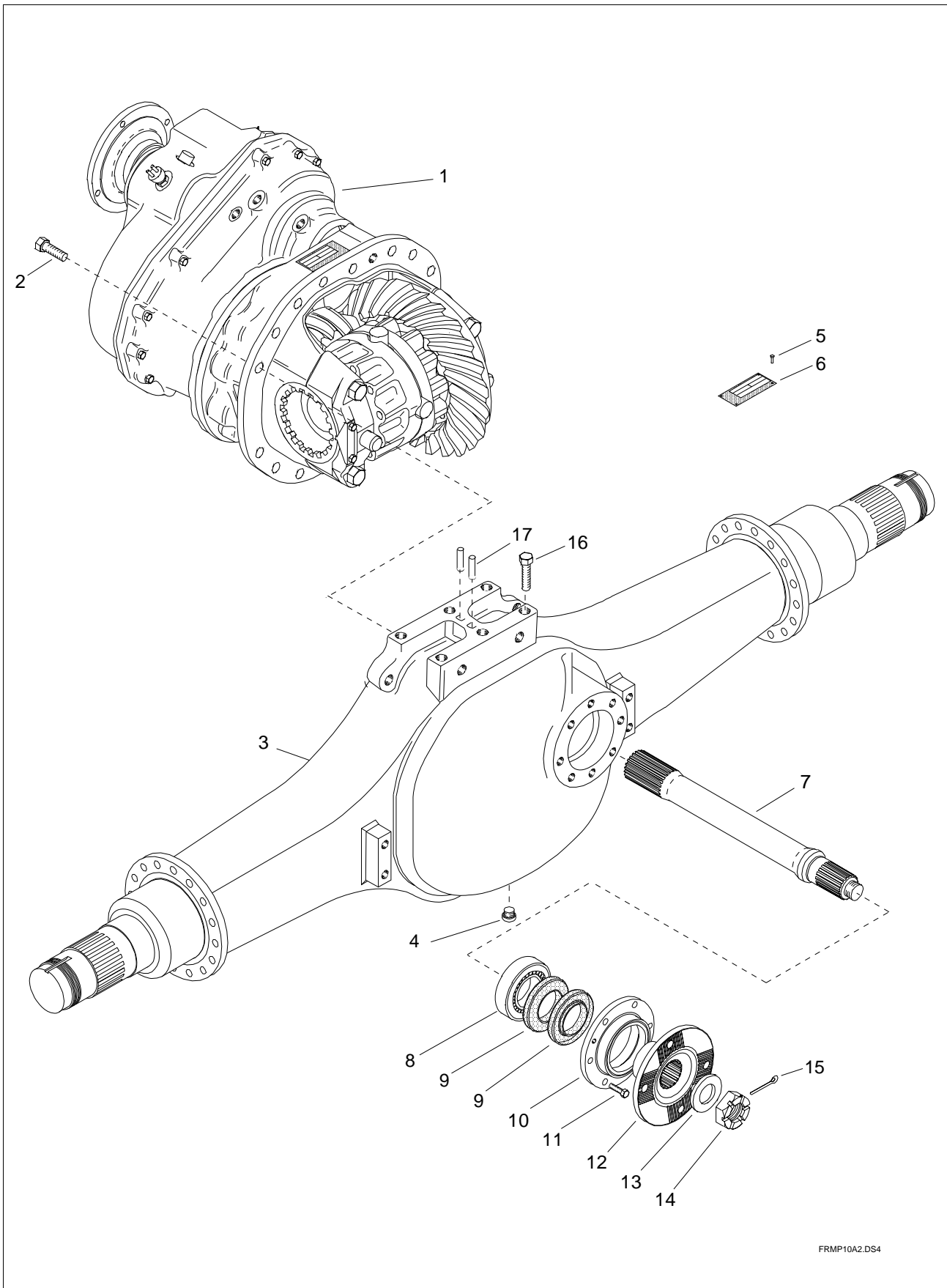
SISU AXLES

SPARE PARTS BOOK

**Foremost Tandem Axle
FRMP
FRMP-11-S**

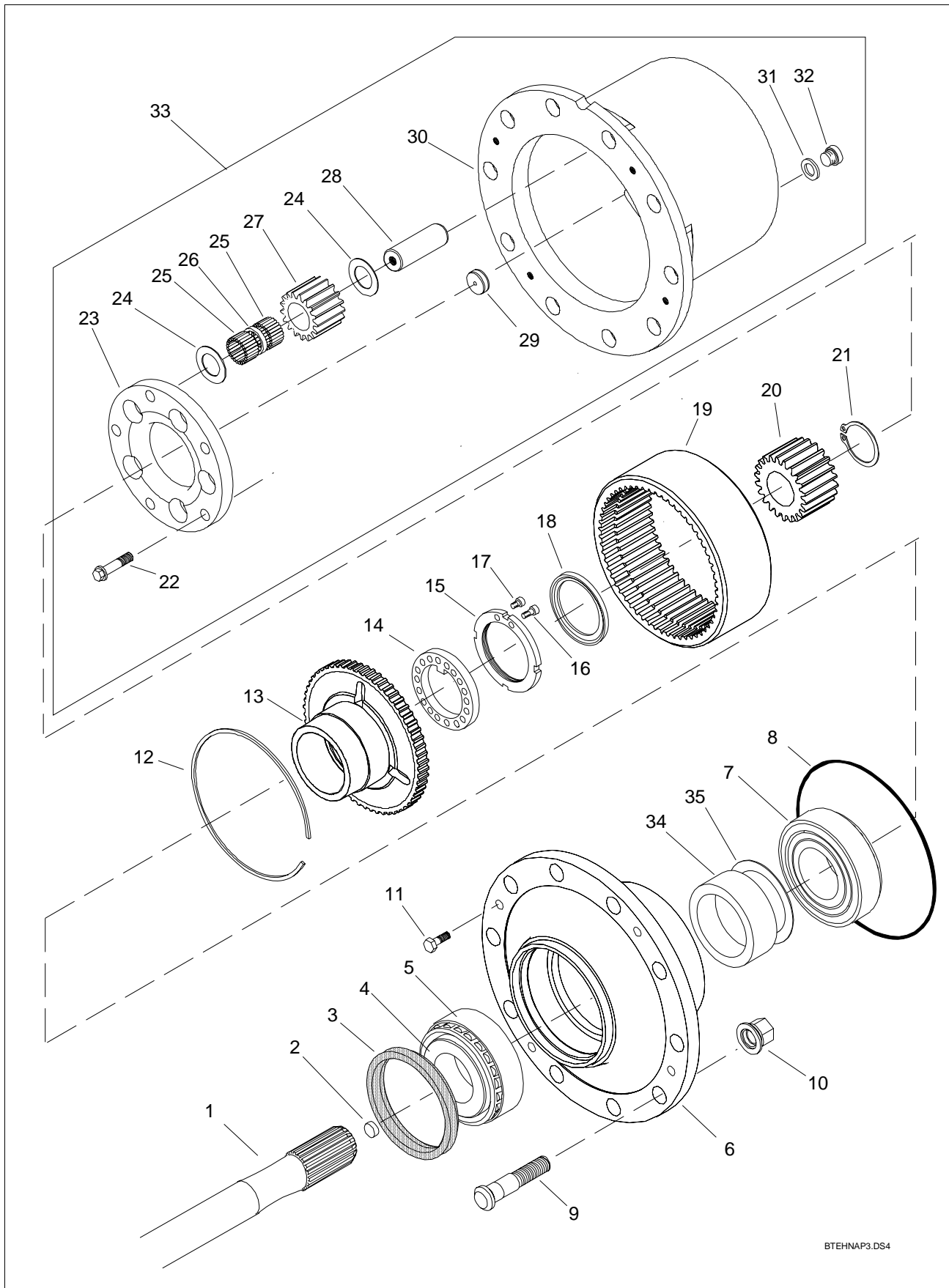
Book No. 203 (3/2007)

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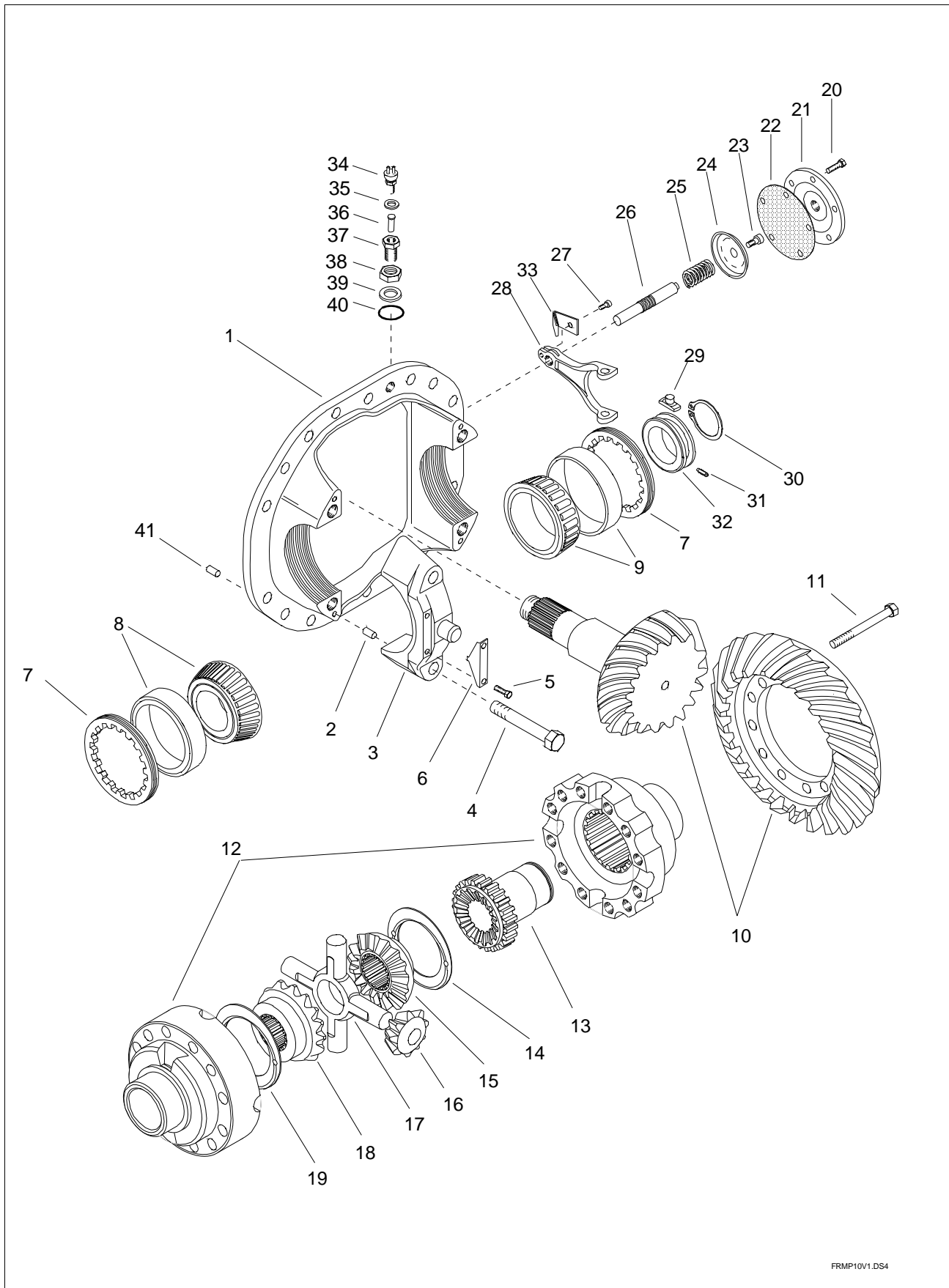
FRMP10A2.DS4

| Item | Qty. | Order no. | Description | Note |
|------|------|---------------------|--------------------------|------------------------------------|
| 1 | 1 | 544-206-3113 | Diff. Carrier Assembly | FR 4.63, flanges HS1700/1800 |
| 1 | 1 | 544-206-3117 | Diff. Carrier Assembly | FR=4.63, Splined Yoke 1710 flanges |
| 1 | 1 | 544-206-3737 | Diff. Carrier Assembly | FR=5.54, Splined Yoke 1710 flanges |
| 2 | 10 | 90303-16507 | Hex Screw | M16x50 |
| 2 | 1 | 90311-16508 | Allen Screw | M16x50 |
| 3 | 1 | 543-116-4510 | Axle Housing | |
| 4 | 1 | 90873-22109 | Oil plug | M22x1.5 |
| 4 | 1 | 91201-22150 | Seal ring | Cu |
| 5 | 4 | 90111-29054 | Rivet | |
| 6 | 1 | 91600-20811 | Name plate | |
| 7 | 1 | 544-251-3710 | Output Shaft | |
| 8 | 1 | 591730-00551 | Deep groove ball bearing | |
| 9 | 2 | 91122-08505 | Shaft seal | |
| 10 | 1 | 544-321-0210 | Seal housing | |
| 11 | 8 | 90303-10303 | Hex Screw | |
| 12 | 1 | 538-918-0610 | Output flange | HS 1700/1800 |
| 12 | 1 | 538-967-0410 | End Yoke | Splined Yoke 1710 |
| 13 | 1 | 90705-43069 | washer | |
| 14 | 1 | 90546-42653 | Nut | |
| 15 | 1 | 90621-63633 | Split pin | |
| 16 | 6 | 90303-18503 | Hex Screw | |
| 17 | 2 | 90602-14323 | Spring cotter | |



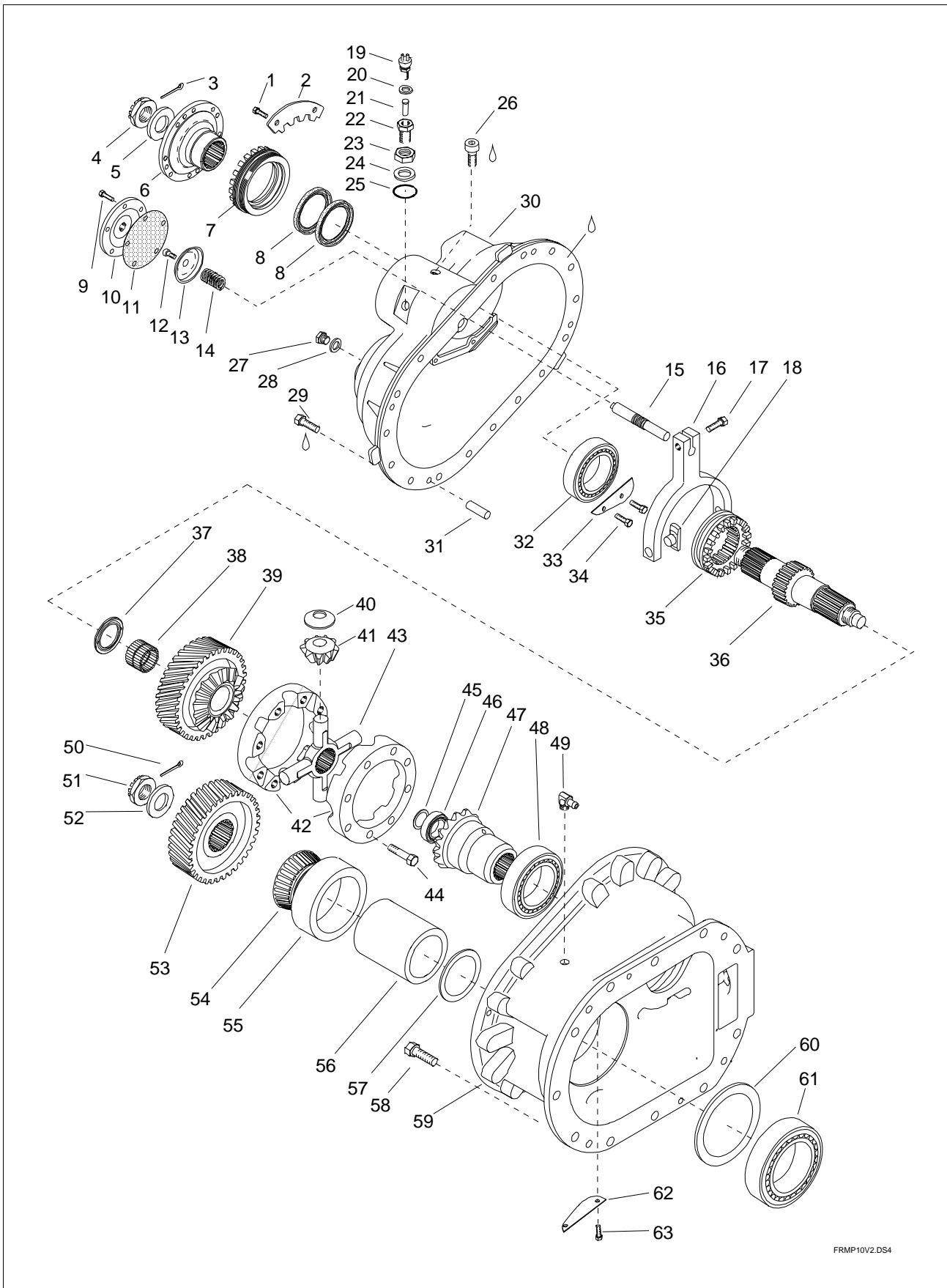
BTEHNAP3.DS4

| Item | Qty. | Order no. | Description | Note |
|------|------|---------------------|--------------------|-----------------------------------|
| 1 | 1 | 543-511-8000 | Axle Shaft | LH, FRMP, W52x2x24, L=1087 |
| 1 | 1 | 543-511-8010 | Axle Shaft | LH, FRFP, W52x2x24, L=1127 |
| 1 | 2 | 543-511-9310 | Axle Shaft | FRDP, W52x2x24, L=1159 |
| 1 | 1 | 543-511-9400 | Axle Shaft | RH, FRMP, W52x2x24, L=1240 |
| 1 | 1 | 543-511-9900 | Axle Shaft | RH, FRFP, W52x2x24, L=1212 |
| 2 | 2 | 140-125-0100 | Thrust pin | |
| 3 | 2 | 591122-12702 | Shaft seal | 127x160, since No. 20577 (4/2002) |
| 3 | 2 | 91122-12701 | Shaft seal | 127x159 (8/1995 -->4/2002) |
| 4 | 2 | 090-111-0000 | Bearing inner race | |
| 5 | 2 | 090-121-5700 | Bearing outer race | |
| 6 | 2 | 543-411-3510 | Wheel hub | With seal 91122-12701 |
| 6 | 2 | 543-411-3800 | Wheel hub | Since No. 20577 (03/2002) |
| 7 | 2 | 91744-01201 | T. Roller bearing | |
| 8 | 2 | 91109-50040 | O-ring | D250x4 |
| 9 | 20 | 140-911-3210 | Wheel bolt | L=122 |
| 10 | 20 | 540-916-1610 | Wheel nut | |
| 11 | 8 | 90303-10303 | Hex Screw | M10x30 |
| 12 | 2 | 91720-22001 | Retainer ring | D220x3 |
| 13 | 2 | 535-271-0611 | Ring gear hub | |
| 14 | 2 | 143-418-0510 | Lock Washer | |
| 15 | 2 | 599-290-8004 | Lock Nut | M90x2 |
| 16 | 2 | 590319-08186 | Allen Screw | M8x18 |
| 17 | 2 | 590319-08126 | Allen Screw | M8x12 |
| 18 | 2 | 090-721-8500 | Protective cup | |
| 19 | 2 | 535-261-2110 | Ring gear | |
| 20 | 2 | 535-211-1300 | Sun gear | N52x2x24 |
| 21 | 2 | 91711-05200 | Retainer ring | D52x2 |
| 22 | 10 | 590169-01670 | Special screw | |
| 23 | 2 | 535-231-1300 | Planet carrier | Up to No. 10373 (1/2001) |
| 23 | 2 | 535-231-1310 | Planet carrier | Since No. 10374 (1/2001) |
| 24 | 20 | 590-353-1100 | Spacer plate | |
| 25 | 480 | 91385-50240 | Needle roller | D5x23.8 |
| 26 | 10 | 590-354-3100 | Spacer ring | |
| 27 | 10 | 535-241-1310 | Planet gear | |
| 28 | 10 | 535-251-1400 | Planet gear shaft | Up to No. 10373 (1/2001) |
| 28 | 10 | 535-251-1410 | Planet gear shaft | Since No. 10374 (1/2001) |
| 29 | 2 | 540-125-0310 | Thrust pin | |
| 30 | 2 | 541-471-0301 | Hub Housing | |
| 31 | 2 | 91201-22150 | Seal ring | D22/27x1.5 Cu |
| 32 | 2 | 90871-22193 | Plug screw | M22x1.5, hex head |
| 33 | 2 | 541-404-0151 | Planetary gear | |
| 34 | 2 | 543-416-0400 | Spacer ring | L=44 mm |
| 35 | ar | 590731-09510 | Shim | s= 0.1 mm |
| 35 | ar | 590731-09515 | Shim | s= 0.15 mm |
| 35 | ar | 590731-09520 | Shim | s= 0.2 mm |
| 35 | ar | 590731-09550 | Shim | s= 0.5 mm |



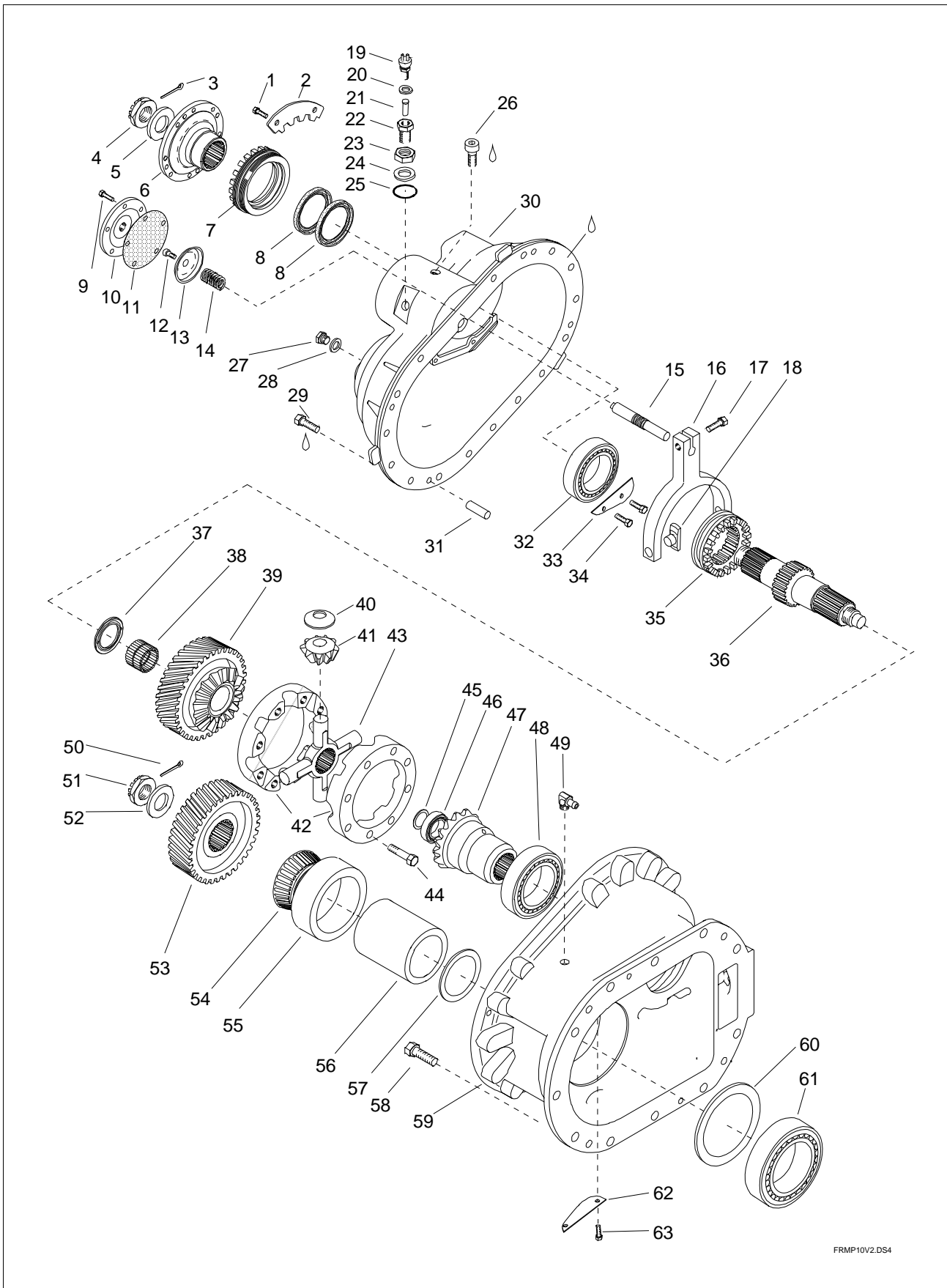
FRMP10V1.DS4

| Item | Qty. | Order no. | Description | Note |
|------|------|---------------------|--------------------------|----------------------------------|
| 1 | 1 | 544-210-1711 | Differential Carrier | Incl. Bearing case halves |
| 2 | 4 | 590604-08141 | Pin | Ø8x14 |
| 3 | 2 | 143-214-2280 | Bearing Case Half | Not serviced separately |
| 4 | 4 | 90301-20217 | Hex Screw | |
| 5 | 4 | 90303-08103 | Hex Screw | |
| 6 | 2 | 143-227-0202 | Lock Washer | |
| 7 | 2 | 143-226-1100 | Adjusting nut | |
| 8 | 1 | 91744-12001 | T. Roller bearing | |
| 9 | 1 | 91744-00753 | T. Roller bearing | |
| 10 | 1 | 543-240-3211 | Ring and pinion gear set | 22/28, Final Ratio 4.63 |
| 10 | 1 | 543-240-6521 | Ring and pinion gear set | 21/32, FR 5.54 |
| 11 | 12 | 90311-16218 | Allen Screw | M16x110 |
| 12 | 1 | 543-310-3721 | Diff. case assy | |
| 13 | 1 | 544-341-2100 | Sliding Gear | |
| 14 | 1 | 143-356-0310 | Thrust washer | |
| 15 | 1 | 543-351-4410 | Side gear | |
| 16 | 4 | 143-341-1600 | Pinion gear | |
| 17 | 1 | 143-331-1601 | Spider | |
| 18 | 1 | 543-351-4400 | Side gear | |
| 19 | 1 | 090-356-7000 | Thrust washer | |
| 20 | 5 | 90303-08203 | Hex Screw | |
| 21 | 1 | 172-161-0701 | Membrane cover | M16x1.5 |
| 22 | 1 | 172-351-1202 | Membrane | |
| 23 | 1 | 90319-08206 | Screw | M8x20 |
| 24 | 1 | 172-361-0410 | Push plate | |
| 25 | 1 | 097-122-0100 | Return spring | |
| 26 | 1 | 172-212-1710 | Sliding Shaft | |
| 26 | 1 | 572-212-1711 | Sliding Shaft | Superseded by 172-212-1710 |
| 27 | 1 | 90313-06208 | Allen Screw | |
| 28 | 1 | 544-751-1600 | Control fork | |
| 29 | 2 | 133-348-0710 | Sliding shoe | |
| 30 | 1 | 91711-06000 | Retainer ring | |
| 31 | 1 | 90335-05108 | Stopping screw | |
| 32 | 1 | 544-348-0100 | Sliding ring | |
| 33 | | 541-812-0210 | Guide plate | Superseded by 541-812-0211 9/99 |
| 33 | 1 | 541-812-0211 | Guide plate | Substitute for 541-812-0210 9/99 |
| 34 | 1 | 186-490-0281 | Signal Lamp Switch | |
| 35 | 1 | 91201-12150 | Seal ring | |
| 36 | 1 | 141-812-0100 | Control pin | D8/10x26 |
| 37 | 1 | 141-812-0000 | Binding screw | M12x1.5/M18x1.5 |
| 38 | 1 | 91842-18243 | Lock Nut | |
| 39 | 1 | 91838-18010 | Pressure ring | |
| 40 | 1 | 91838-18100 | O-ring | |
| 41 | 2 | 90604-10201 | Cotter Pin | |



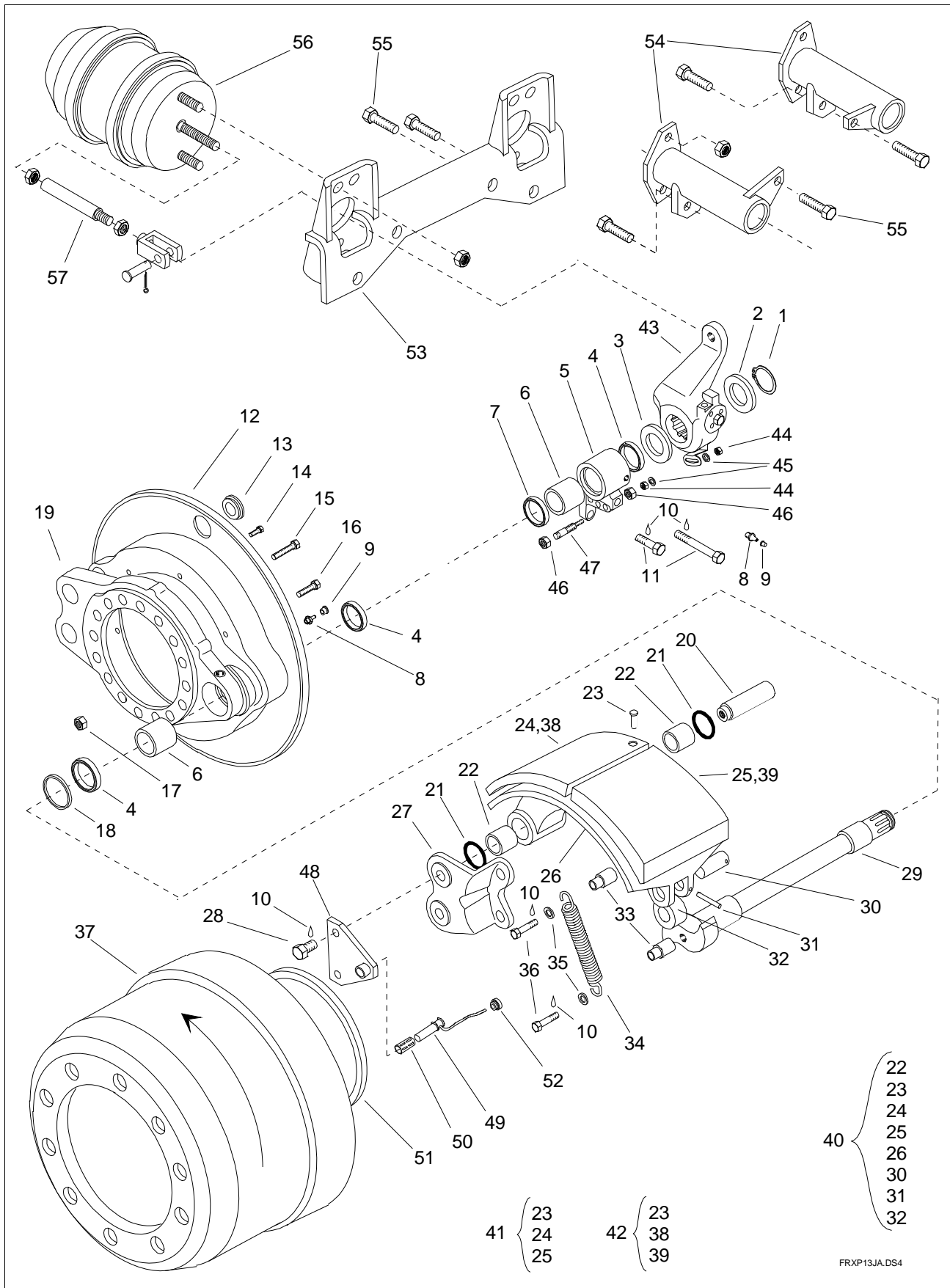
FRMP10V2.DS4

| Item | Qty. | Order no. | Description | Note |
|------|------|--------------|---------------------|----------------------------|
| 1 | 2 | 90303-08203 | Hex Screw | M8x20 |
| 2 | 1 | 143-227-0710 | Lock Washer | |
| 3 | 1 | 90621-63633 | Split pin | D6.3x63 |
| 4 | 1 | 90546-42653 | Nut | M42x1.5 |
| 5 | 1 | 90705-43069 | washer | D43/80x6 |
| 6 | 1 | 538-918-0600 | Flange | HS 1700/1800 |
| 6 | 1 | 538-918-0801 | Flange | ISO 8667-T180 |
| 6 | 1 | 538-967-0400 | End Yoke | Splined Yoke 1710 |
| 7 | 1 | 543-226-1300 | Adjusting nut | |
| 8 | 2 | 91122-08505 | Shaft seal | D85/105x10 |
| 9 | 5 | 90303-08203 | Hex Screw | M8x20 |
| 10 | 1 | 172-161-1401 | Membrane cover | Superceded by 572-161-1501 |
| 10 | 1 | 572-161-1501 | Membrane cover | M16x1.5, side connection |
| 11 | 1 | 172-351-1202 | Membrane | |
| 12 | 1 | 90319-08206 | Screw | M8x20 |
| 13 | 1 | 172-361-0410 | Push plate | D70x12 |
| 14 | 1 | 097-122-0100 | Return spring | D29.5x43 |
| 15 | 1 | 172-212-1710 | Sliding Shaft | D16/20x125 |
| 16 | 1 | 544-751-1610 | Control fork | |
| 17 | 1 | 90313-08208 | Allen Screw | M8x20 |
| 18 | 2 | 133-348-1701 | Sliding shoe | |
| 19 | 1 | 186-490-0281 | Signal Lamp Switch | |
| 20 | 1 | 91201-12150 | Seal ring | D12/15.5x1.5 Cu |
| 21 | 1 | 141-812-0100 | Control pin | D8/10x26 |
| 22 | 1 | 141-812-0000 | Binding screw | M12x1.5/M18x1.5 |
| 23 | 1 | 91842-18243 | Lock Nut | M18x1.5 |
| 24 | 1 | 91838-18010 | Pressure ring | Ms DR/R 18x23 |
| 25 | 1 | 91838-18100 | O-ring | Ø16x2.5 |
| 26 | 1 | 90871-10143 | Plug screw | M10x1, hex head 14 mm |
| 27 | 2 | 90871-22193 | Plug screw | M22x1.5, hex head |
| 28 | 2 | 91201-22150 | Seal ring | D22/27x1.5 Cu |
| 29 | 16 | 90303-12308 | Hex Screw | M12x30 |
| 30 | 1 | 544-221-0800 | Diff. Carrier Cover | |
| 31 | 2 | 90604-10201 | Cotter Pin | D10x20 |
| 32 | 1 | 91744-00656 | T. Roller bearing | |
| 33 | 1 | 546-167-1200 | Oil Plate | |
| 34 | 2 | 90303-08203 | Hex Screw | M8x20 |
| 35 | 1 | 544-274-0810 | Sliding Ring | |
| 36 | 1 | 544-251-3700 | Intermediate Shaft | |
| 37 | 1 | 544-282-0300 | Thrust washer | |
| 38 | 1 | 91738-40621 | Needle bush | |
| 39 | 1 | 544-269-1000 | Gear | |
| 40 | 4 | 143-345-1010 | Thrust washer | D29.5/63 |
| 41 | 4 | 543-341-1800 | Pinion gear | |
| 42 | 1 | 543-310-4611 | Diff. case assy | |
| 43 | 1 | 543-331-2000 | Spider | |
| 44 | 10 | 90303-12603 | Hex Screw | M12x60 |
| 45 | ar | 90731-03510 | Shim | (0.1 mm) |
| 45 | ar | 90731-03520 | Shim | (0.2 mm) |
| 45 | ar | 90731-03550 | Shim | (0.5 mm) |
| 45 | ar | 90732-03510 | Shim | (1.0 mm) |
| 46 | 1 | 91744-00351 | T. Roller bearing | |
| 47 | 1 | 543-351-4500 | Side gear | |
| 48 | 1 | 91744-01001 | T. Roller bearing | |
| 49 | 1 | 591952-11212 | Fitting | Only up to No. 03684 |



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| Item | Qty. | Order no. | Description | Note |
|------|------|---------------------|-----------------------|---|
| 50 | 1 | 90621-63633 | Split pin | D6.3x63 |
| 51 | 1 | 90546-42653 | Nut | M42x1.5 |
| 52 | 1 | 90705-43069 | washer | D43/80x6 |
| 53 | 1 | 544-261-2210 | Gear | |
| 54 | 1 | 090-110-6740 | Bearing inner race | |
| 55 | 1 | 090-121-3700 | Bearing outer race | |
| 56 | ar | 599-557-1061 | Spacer ring | L=57.02 |
| 56 | ar | 599-557-1062 | Spacer ring | L=57.04 |
| 56 | ar | 599-557-1063 | Spacer ring | L=57.06 |
| 56 | ar | 599-557-1064 | Spacer ring | L=57.08 |
| 57 | ar | 099-517-1000 | Shim | (s=0.30) |
| 57 | ar | 099-517-1001 | Shim | (s=0.40) |
| 57 | ar | 099-517-1002 | Shim | (s=0.50) |
| 58 | 4 | 590313-12208 | Allen Screw | M12x20 |
| 58 | | 90303-12203 | Hex Screw | M12x20, alternative for 590313-12208 |
| 59 | 1 | 544-211-1800 | Diff. Carrier Housing | Superceded by 544-211-1801 |
| 59 | 1 | 544-211-1801 | Diff. Carrier Housing | With breather bore, up to No. 03684 (11/2000) |
| 59 | 1 | 544-211-1802 | Diff. Carrier Housing | W/o breather bore, since No. 03685 (11/2000) |
| 60 | ar | 90731-12010 | Shim | (s=0.1) |
| 60 | ar | 90731-12020 | Shim | (s=0.2) |
| 60 | ar | 90731-12050 | Shim | (s=0.5) |
| 60 | ar | 90732-12010 | Shim | (s=1.0) |
| 61 | 1 | 090-050-7001 | T. Roller bearing | |
| 62 | 1 | 546-167-1110 | Splashboard | Up to No. 03684 |
| 63 | 2 | 90303-06163 | Hex Screw | Up to No. 03684 |



| Item | Qty. | Order no. | Description | Note |
|------|------|---------------------|-------------------------|---------------------------------------|
| 1 | 2 | 91712-04000 | Retainer ring | D40x2.5 |
| 2,3 | 4 | 91726-43065 | Support ring | D43/65x3 |
| 4 | 6 | 91122-04201 | Shaft seal | D42/55x8 |
| 5 | 1 | 146-224-2310 | Bearing housing | RH |
| 5 | 1 | 146-224-2400 | Bearing housing | LH |
| 6 | 4 | 590-314-2062 | Sleeve | |
| 7 | 2 | 91122-04202 | Shaft seal | D42/55x7 |
| 8 | 4 | 91402-10003 | Grease nipple | M10x1, Straight |
| 9 | 4 | 91421-06060 | Shield hat | |
| 10 | | 95752-10010 | Thread locking compound | |
| 11 | 2 | 90301-16117 | Hex Screw | M16x100 |
| 11 | 2 | 90303-16407 | Hex Screw | M16x40 |
| 12 | 2 | 146-131-2210 | Dust Shield | 210 mm |
| 13 | 4 | 095-553-2000 | Shield plug | |
| 14 | 14 | 90303-08123 | Hex Screw | M8x12 |
| 15 | 24 | 90169-01401 | Hex Screw | M14x45 |
| 16 | 4 | 90301-14558 | Hex Screw | M14x55 |
| 17 | 28 | 90550-14227 | Nut | M14 self locking |
| 18 | 2 | 91726-43065 | Support ring | D43/65x3 |
| 19 | 2 | 146-111-2610 | Brake Bracket | |
| 20 | 4 | 146-341-1210 | Anchor bolt | |
| 21 | 8 | 91106-36212 | O-ring | D36,2x3 Viton |
| 22 | 8 | 590-313-2091 | Sleeve | |
| 23 | 96 | 91501-00819 | Rivet | |
| 26 | 4 | 146-351-4100 | Brake shoe | 210 mm |
| 27 | 2 | 146-331-0400 | Anchor support | |
| 28 | 4 | 90303-10203 | Hex Screw | M10x20, Without ABS |
| 28 | 4 | 90303-10303 | Hex Screw | M10x30, With ABS |
| 29 | 1 | 146-213-1000 | S-cam shaft | RH, L=629.5 mm, FRFP |
| 29 | 1 | 146-213-1100 | S-cam shaft | LH, L=629.5 mm, FRFP |
| 29 | 1 | 546-213-2000 | S-cam shaft | RH, L=604.5 mm, FRMP & FRDP |
| 29 | 1 | 546-213-2100 | S-cam shaft | LH, L=604.5 mm, FRMP & FRDP |
| 30 | 4 | 146-373-0201 | Pin | |
| 31 | 4 | 90602-05450 | Spring cotter | D5x40 |
| 32 | 4 | 146-371-0700 | Roller | |
| 33 | 6 | 599-601-8900 | Bush | |
| 34 | 4 | 92052-30002 | Return spring | |
| 35 | 6 | 90705-13023 | washer | D13/24x2.5 |
| 36 | 6 | 90303-12603 | Hex Screw | M12x60 |
| 37 | 2 | 146-311-7910 | Brake drum | |
| 40 | 4 | 546-306-0083 | Brake shoe assy | 210mm, Beral1561 |
| 41 | ar | 546-360-3113 | Brake lining set | 210mm, Beral1561, for one wheel |
| 43 | 1 | 146-530-1011 | Slack adjuster | RH, R145, offset 56 |
| 43 | 1 | 146-530-1021 | Slack adjuster | LH, R145, offset 56 |
| 43 | 1 | 546-530-3111 | Slack adjuster | LH, 165 mm, offset 56, FRFP |
| 43 | 1 | 546-530-3121 | Slack adjuster | RH, 165 mm, offset 56, FRFP |
| 43 | 1 | 546-530-3411 | Slack adjuster | RH, R165, offset 75, FRMP & FRDP |
| 43 | 1 | 546-530-3421 | Slack adjuster | LH, R165, offset 75, FRMP & FRDP |
| 44 | 4 | 90502-08133 | Nut | M8 |
| 45 | 4 | 90705-08423 | washer | D8.4/17x1.6 |
| 46 | 4 | 90502-12193 | Nut | M12 |
| 47 | 2 | 90177-01203 | Stud bolt | M12/M8 |
| 48 | 2 | 189-931-0900 | Bracket | ABS |
| 49 | 2 | 189-250-0071 | Sensor | ABS |
| 50 | 2 | 189-295-0000 | Bush | ABS |
| 51 | 2 | 189-291-0000 | Ring gear | 100 Teeth, ABS |
| 52 | 2 | 592235-17041 | Rubber bushing | D4/17 |
| 53 | 1 | 546-721-6600 | Chamber bracket | 20 deg., c/c 340, 145 mm, FRFP |
| 53 | 1 | 546-721-6800 | Chamber bracket | 17 deg., c/c 390, 145 mm, FRMP & FRDP |
| 54 | 1 | 546-721-6500 | Chamber bracket | RH, 17 deg. for 165 mm slack adjuster |
| 54 | 1 | 546-721-6510 | Chamber bracket | LH, 17 deg. for 165 mm slack adjuster |
| 54 | 1 | 546-721-6900 | Chamber bracket | RH, 13 deg. for 165 mm slack adjuster |
| 54 | 1 | 546-721-6910 | Chamber bracket | LH, 13 deg. for 165 mm slack adjuster |
| 55 | 4 | 90303-16407 | Hex Screw | M16x40, 10.9 |