

CHANGES IN SEALING OF KING PINS AND AXLE SHAFTS IN FSDP-14, FSMP-14, FSFP-14, FSFN-14 AND FSND-12 AXLES

Change:

In steering knuckles the king pin and the axle shaft sealing against outside dirt has been changed. In the king pins the seals are now same type Foam-seals as in axle shafts. Shield cups are also installed to protect the seals in king pins and axle shafts, which makes it possible to use high pressure cleaner for cleaning the axles. This change is to improve the protection of the shaft seals.

Identify & Date of Change:

The axle product codes have been changed also, see the date of change in the list below.
The first axles in production:

Axle	Date	Serial No.
FSDP-14-G	April 3, 2001	11331
FSMP-14-G	XXXXX	XXXX
FSFP-14-G	April 5, 2001	11336
FSFN-14-G	April 4, 2001	11335
FSND-12-G	April 26, 2001	11491

Changed Parts in Production Axles:

Description	Removed Item (Qty/Axle)	Added Item (Qty/Axle)
Steering Knuckle (FSDP/FSMP/FSFP) *)	541-141-1302 (2)	541-141-1303 (2)
Upper King Pin	540-121-1710 (2)	540-121-2010 (2)
Bearing Housing, Lower King Pin	540-136-0210 (2)	540-136-0301 (2)
Seal, Upper King Pin	090-400-7000 (2)	590-561-0110 (2)
Shield Cup, Upper King Pin		590-722-1200 (2)
Spring Cotter		590602-03100 (2)
Seal, Lower King Pin	591123-06501 (2)	590-561-0200 (2)
Shield Cup, Lower King Pin		590-722-1210 (2)
Rivet		90111-29054 (2)
Seal, Steering Knuckle/Axle Shaft. *)	590-561-0000 (2)	590-561-0210 (2)
Shield Cup *)		590-711-9100 (2)
Seal, Swivel Head/Axle Shaft *)	590-561-0010 (2)	590-561-0300 (2)
Shield Cup *)		590-711-9110 (2)

*) - Not in Non-Drive FSND-12 and FSFN-14 axles.

Interchangeability:

Axles of the previous design can be modified to be comparable with the new design.

In that "Service Solution" case there are differences in the shield cups, in the king pin and the axle shaft sealing compared to the new production axle design.

See table "Service Solution" in next page.

Service Solution:

In table below there are listed the items to be replaced when modifying the earlier design with the new king pin and axle shaft sealing.

Description	Items to be removed (Qty/Axle)	Items to be added (Qty/Axle)
Upper King Pin	540-121-1710 (2)	540-121-2010 (2)
Bearing Housing, Lower King Pin	540-136-0210 (2)	540-136-0301 (2)
Seal, Upper King Pin	090-400-7000 (2)	590-561-0110 (2)
Shield Cup, Upper King Pin		590-722-1201 (2)
Spring Cotter		590602-03100 (2)
Seal, Lower King Pin	591123-06501 (2)	590-561-0200 (2)
Shield Cup, Lower King Pin		590-722-1210 (2)
Rivet		90111-29054 (2)
Seal, Steering Knuckle/Axle Shaft *)	590-561-0000 (2)	590-561-0210 (2)
Shield Cup *)		590-711-9200 (2)
Screw Taptite M4x10, DIN 7500D *)		590112-04101 (6)
Seal, Swivel Head/Axle Shaft *)	590-561-0010 (2)	590-561-0300 (2)
Shield Cup *)		590-711-9110 (2)
Bearing Cover **)	541-532-0000 (2)	541-532-0010 (2)

*) - Not in Non-Drive FSND-12 and FSFN-14 axles.

***) - Only in axles up to axle serial :No. 00179 (January 2000). Not included in sealing kits below.

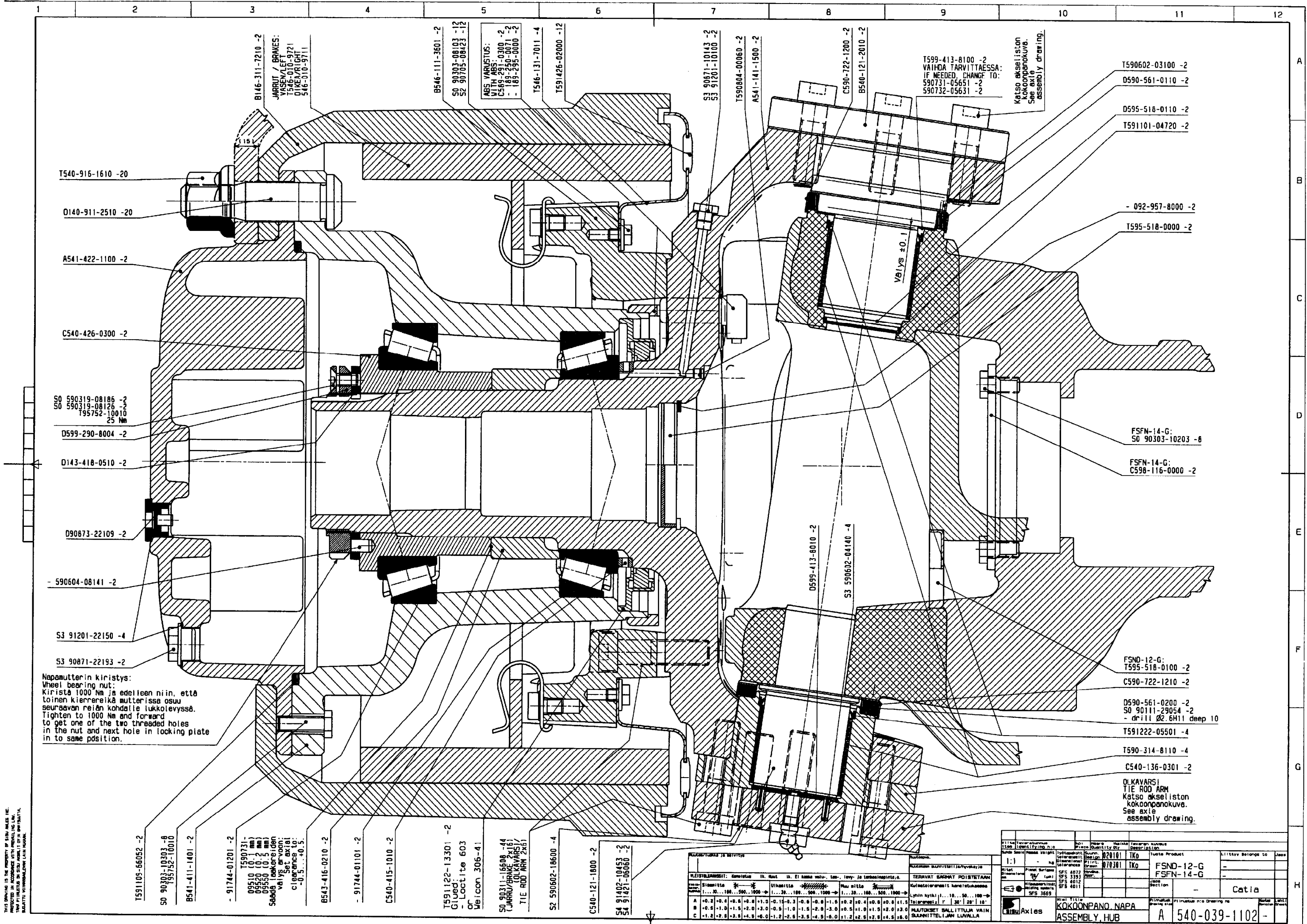
Spare part numbers for the "Service Solution" Retrofit Sealing Kits:

One Retrofit Sealing Kit includes parts for one axle (for two wheels) as in table below.

Description	FSDP, FSMP and FSFP:	FSFN and FSND:	Qty/Kit
	Kit No. 541-001-0009	Kit No. 540-001-0009	
Upper King Pin	540-121-2010	540-121-2010	2
Bearing Housing, Lower King Pin	540-136-0301	540-136-0301	2
Seal, Upper King Pin	590-561-0110	590-561-0110	2
Shield Cup, Upper King Pin	590-722-1201	590-722-1201	2
Spring Cotter	590602-03100	590602-03100	2
Seal, Lower King Pin	590-561-0200	590-561-0200	2
Shield Cup, Lower King Pin	590-722-1210	590-722-1210	2
Rivet	90111-29054	90111-29054	2
Seal, Steering Knuckle/Axle Shaft	590-561-0210	-	2
Shield Cup	590-711-9200	-	2
Screw Taptite M4x10,	590112-04101	-	6
Seal, Swivel Head/Axle Shaft	590-561-0300	-	2
Shield Cup	590-711-9110	-	2
Axle seal	591222-05501	591222-05501	4
Thrust bearing	599-413-8010	599-413-8010	2
Pin	590602-04140	590602-04140	4
Bush	590-314-8110	590-314-8110	4
Axle seal	090-500-6501	-	2
Axle seal	91122-06001	-	2
Axle seal	591122-06003	-	2
O-ring	591101-01045	-	2
O-ring	591109-66052	-	2

See separate assembly drawings for the new designs:

541-040-1103 (FSDP/FSMP/FSFP), 540-039-1102 (FSFN/FSND) and 541-040-1104 ("Service Solution").



- T540-916-1610 -20
- D140-911-2510 -20
- A541-422-1100 -2
- C540-426-0300 -2
- SO 590319-08186 -2
- SO 590319-08126 -2
- T95752-10010 25 Nm
- D599-290-8004 -2
- D143-418-0510 -2
- D90873-22109 -2
- 590604-08141 -2
- S3 91201-22150 -4
- S3 90871-22193 -2
- B146-311-7210 -2
- JARRUT / BRAKES:
TÄSKEVÄLGÄ 9721
D146-01010
546-010-9711
- B546-111-3601 -2
- SO 90303-08103 -12
- S2 90705-08423 -12
- ABS VÄRJÄSTYS:
ABS VÄRJÄSTYS
C549-297-0300 -2
C549-297-0071 -2
C549-297-0000 -2
- T546-131-7011 -4
- T591426-02000 -12
- S3 90871-10143 -2
- S3 91201-10100 -2
- T590804-00060 -2
- A541-141-1500 -2
- C590-722-1200 -2
- B540-121-2010 -2
- T599-413-8100 -2
- VAIHDA TARVITTAESSA:
IF NEEDED, CHANGE TO:
S90731-05651 -2
S90732-05631 -2
- Katso akselin
kokoontenokuva.
See axle
assembly drawing.
- T590602-03100 -2
- D590-561-0110 -2
- D595-518-0110 -2
- T591101-04720 -2
- 092-957-8000 -2
- T595-518-0000 -2
- FSFN-14-G:
SO 90303-10203 -8
- FSFN-14-G:
C598-116-0000 -2
- D599-413-8010 -2
- S3 590602-04140 -4
- FSND-12-G:
T595-518-0100 -2
- C590-722-1210 -2
- D590-561-0200 -2
- SO 90111-29054 -2
- drill Ø2.6H11 deep 10
- T591222-05501 -4
- T590-314-8110 -4
- C540-136-0301 -2
- DLKAVARSI
TIE ROD ARM
Katso akselin
kokoontenokuva.
See axle
assembly drawing.

Napamutterin kiristys:
Wheel bearing nut:
Kiristä 1000 Nm ja edelleen niin, että
toinen kierrekehä mutterissa osuu
seuraavaan reiän kohdalle lukkolevyssä.
Tighten to 1000 Nm and forward
to get one of the two threaded holes
in the nut and next hole in locking plate
in to same position.

- T591109-66052 -2
- SO 90303-10303 -8
- T95752-10010
- B541-411-1401 -2
- 91744-01201 -2
- T590731:
09510 (0.1 mm)
09520 (0.2 mm)
09550 (0.5 mm)
Säädetä leikkereiden
välissä olevan
väljän arvoinen.
Set axial
clearance to:
-0.5...+0.5.
- B543-416-0210 -2
- 91744-01101 -2
- C540-415-1010 -2
- T591122-13301 -2
- Loctite 603
or
Loctite 306-41
- SO 90311-16608 -44
(JARRU/DIIVE W/ABS)
TIE ROD ARM ZAG1
- S2 590602-18600 -4
- C540-121-1800 -2
- S4 91402-10453 -2
- S4 91421-06060 -2

Yksikkö	Stabiilit	Ulkäkellet	Max nitte
1...30...100...500...1000	1...30...100...500...1000	1...30...100...500...1000	1...30...100...500...1000
A +0.2+0.4+0.6+0.8+1.0	-0.15-0.3-0.5-0.8-1.0	+0.2+0.4+0.6+0.8+1.0	+0.2+0.4+0.6+0.8+1.0
B +0.5+1.0+1.5+2.0+3.0	-0.5-1.0-1.5-2.0-3.0	+0.5+1.0+1.5+2.0+3.0	+0.5+1.0+1.5+2.0+3.0
C +1.2+2.0+3.0+4.0+6.0	-1.2-2.0-3.0-4.0-6.0	+1.2+2.0+3.0+4.0+6.0	+1.2+2.0+3.0+4.0+6.0

Yksikkö	Stabiilit	Ulkäkellet	Max nitte
1...30...100...500...1000	1...30...100...500...1000	1...30...100...500...1000	1...30...100...500...1000
A +0.2+0.4+0.6+0.8+1.0	-0.15-0.3-0.5-0.8-1.0	+0.2+0.4+0.6+0.8+1.0	+0.2+0.4+0.6+0.8+1.0
B +0.5+1.0+1.5+2.0+3.0	-0.5-1.0-1.5-2.0-3.0	+0.5+1.0+1.5+2.0+3.0	+0.5+1.0+1.5+2.0+3.0
C +1.2+2.0+3.0+4.0+6.0	-1.2-2.0-3.0-4.0-6.0	+1.2+2.0+3.0+4.0+6.0	+1.2+2.0+3.0+4.0+6.0

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