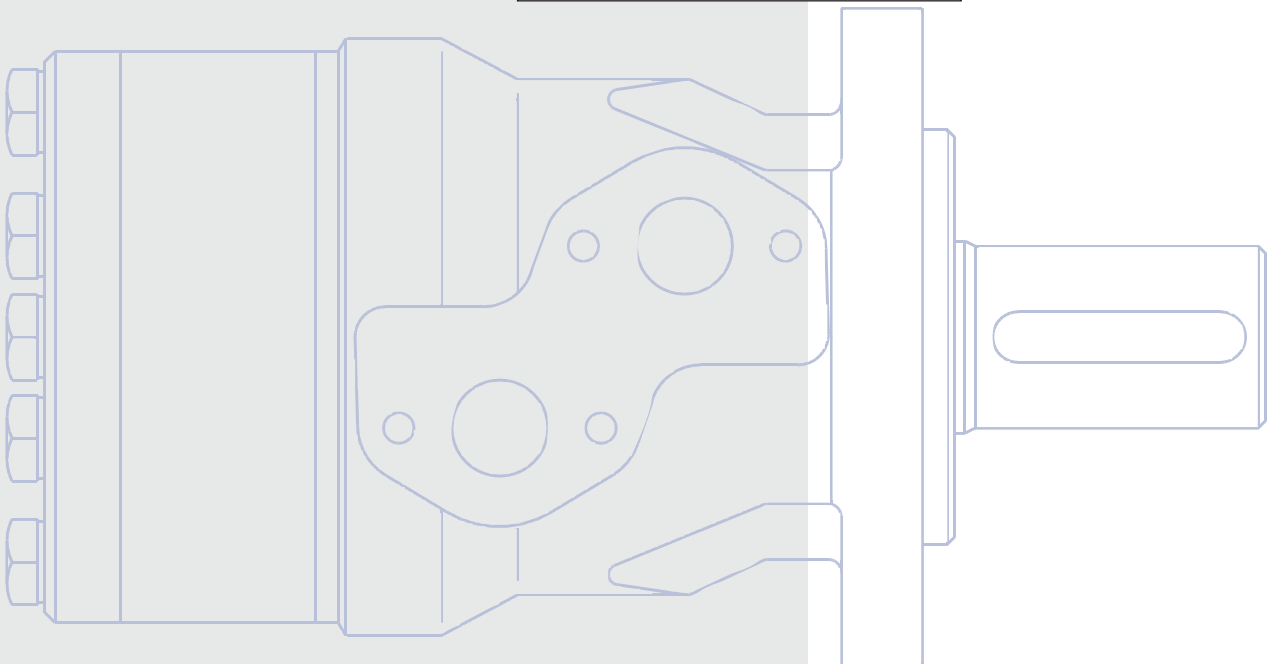
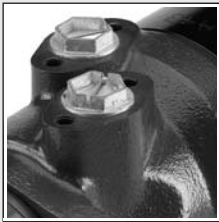


OMH

Repair Instructions



**Revision View**

Date	Page	Changed	Revision
Jun 2006		New	AA
Apr 2010	16	Japan location	AB
Sep 2010	16	New back cover	AC

**Safety Precautions**

Always consider safety precautions before beginning a service procedure. Protect yourself and others from injury. Take the following general precautions whenever servicing a hydraulic system.

**Unintended machine movement**

**▲ Warning**

Unintended movement of the machine or mechanism may cause injury to the technician or bystanders. To prevent unintended movement, secure the machine or disable / disconnect the mechanism while servicing.

**Flammable cleaning solvents**

**▲ Warning**

Some cleaning solvents are flammable. To eliminate the risk of fire, do not use cleaning solvents in an area where a source of ignition may be present.

**Fluid under pressure**

**▲ Warning**

Escaping hydraulic fluid under pressure can have sufficient force to penetrate your skin causing serious injury and/or infection. This fluid may also be hot enough to cause burns. Use caution when dealing with hydraulic fluid under pressure. Relieve pressure in the system before removing hoses, fittings, gauges, or components. Never use your hand or any other body part to check for leaks in a pressurized line. Seek medical attention immediately if you are cut by hydraulic fluid.

**Personal safety**

**▲ Warning**

Protect yourself from injury. Use proper safety equipment, including safety glasses, at all times.

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 Frontpage: F301 214, Drawing 151-134

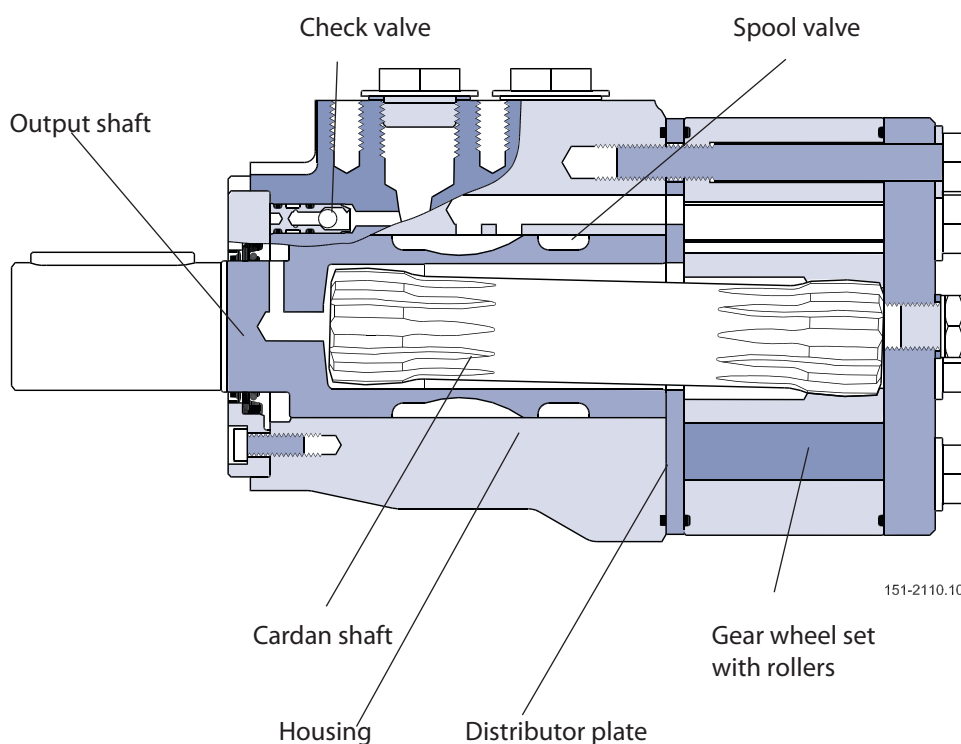
**Special Versions**

The list of spare parts cannot be used when ordering parts for special OMH versions. In this respect, please contact the sales organisation for Sauer-Danfoss.

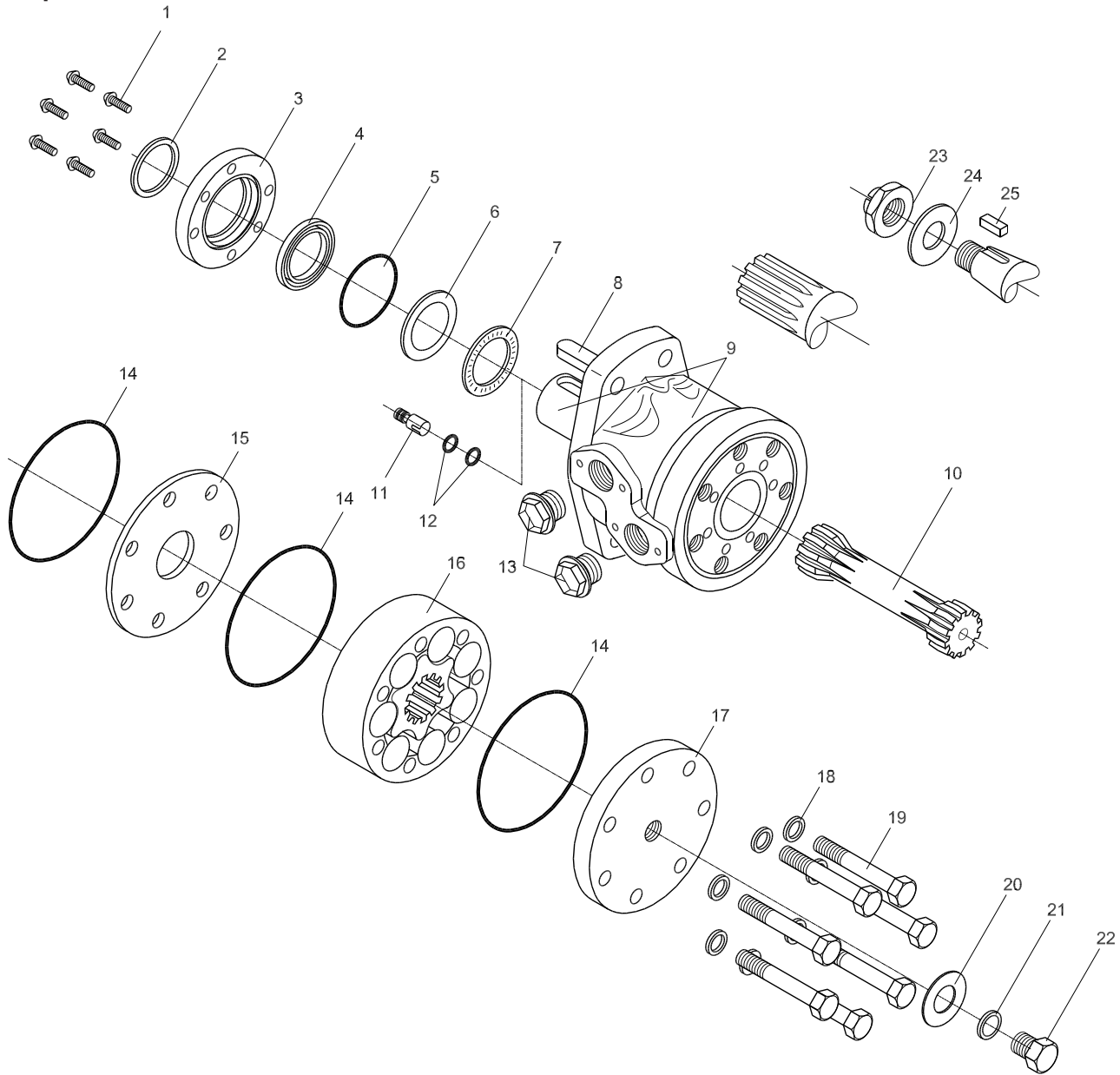
**Cost-free Repairs**

Please note that cost-free repairs as mentioned in Sauer-Danfoss General Conditions of Sale, are carried out only at Sauer-Danfoss Nordborg or at service shops authorised by Sauer-Danfoss.

**OMH**



**Exploded View OMH,  
and Spare Parts**



151-1344.15.10


Tightening torque		
Item	N·m	lbf·in
1	5 - 8	45 - 70
19	52 - 57	460 - 500
22	30 - 60	265 - 530
23	190 - 210	1680 - 1860

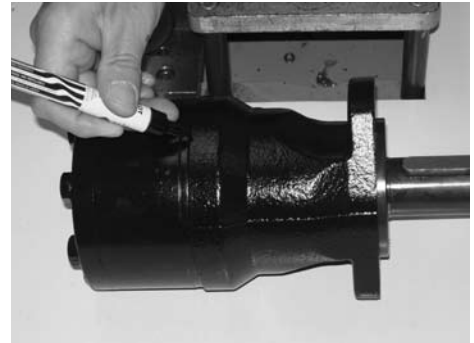
Item	Spare Part	Dimensions	Code no.	Number per motor
1	Screw	M6: l = 20 mm, Torx T30	681X1989	6
2	Dust seal ring	28.56 • 35 • 4 mm	151-1313	1
		36 • 42 • 3.5 mm	633B3396	1
3	Spigot flange		151H0386	1
			151H0301	1
4	Shaft seal	28.56 • 42 • 5.5 mm NBR	633B3385	1
		36 • 48 • 5.5 mm NBR	633B3395	1
5	O-ring	53 • 2 mm	633B1528	1
6	Bearing race	37 • 52 • 3 mm	981X9224	1
7	Axial needle bearing	36 • 52 • 3 mm	981X9223	1
8	Parallel key ø 32 mm and ø 35 mm	A10 • 8 • 45	682L8019	1
			151-4109	1
9	Housing and output shaft		Not sold separately	
10	Cardan shaft	OMH 200 L = 124.5 mm	151H0338	1
		OMH 250 L = 131.5 mm	151H0339	1
		OMH 315 L = 140.0 mm	151H0340	1
		OMH 400 L = 151.5 mm	151H0341	1
		OMH 500 L = 161.5 mm	151H0342	1
11	Check valve	(incl. Item 12)	151-1076	2
13	Seal plug	½" EU -version	633X0074	2
		7/8 - 14 UNF US-version	633X0017	2
14	O-ring	105 • 2 mm	633B1807	3
15	Distributor plate		151H0305	1
16	Gearwheel set	OMH 200 L = 27.8 mm	151H1253	1
		OMH 250 L = 34.8 mm	151H1254	1
		OMH 315 L = 43.5 mm	151H1255	1
		OMH 400 L = 54.8 mm	151H1256	1
		OMH 500 L = 65.0 mm	151H1257	1
17	End cover	¼" EU-version	151H0310	1
		7/16 - 20 UNF US version	151H0311	1
18	Washer	10.5 • 20 • 2 mm	684X1090	7
19	Screw M10 • 1.5	OMH 200 L = 65.0 mm	681X1501	7
		OMH 250 L = 70.0 mm	681X1502	7
		OMH 315 L = 80.0 mm	681X1503	7
		OMH 400 L = 90.0 mm	681X0388	7
		OMH 500 L = 100.0 mm	681X1347	7
20	Name plate		151A0445	1
21	Washer	13.5 • 1.0 mm	684X2120	1
22	Drain plug	¼" EU-version	151-1524	1
		7/16 - 20 UNF US version	151-5439	1
23	Castellated nut	M 20 • 1.5	681X8235	1
24	Washer	20.5 • 1.0	684X2530	1
25	Parallel key tapered	B6 • 6 • 20 mm	684L8021	1



Set of seal OMH	Code number
Seal set incl. items 2, 4, 5, 14, 18 and 21	
OMH with $\varnothing 32$ mm shaft, $\varnothing 35$ mm shaft, $\varnothing 1 \frac{1}{4}$ " shaft, $1 \frac{1}{4}$ " splined and 35 mm tapered shaft	151H1100
OMH with 1" splined shaft 6B	151H1102

**Disassembly**

1. To ensure correct assembly/location of motor parts, provide identification marks. 



F301 564

2. Remove parallel key (8 or 25) on cylindrical or tapered shafts, nut (24) on tapered shaft and plastic plugs (13).




F301 565

3. Fix motor in holding tool SJ 151-9000-1.



F301 566

4. With a  16 mm key loosen the seven bolts (19) in the end cover.

Remove washers (18) .




F301 567

**Disassembly**

5. Lift end cover (17)



F301 568

6. Take out gear wheel set (16) and O-rings (14). 



F301 569

7. Remove cardan shaft (10).



F301 570

8. Remove distributor plate (15) and O-ring (14). 



F301 571





**Disassembly**

9. Remove output shaft.  
With the housing standing on the working table, press the shaft out of the housing.




F301 572

10. With a torx-spanner T30  loosen six screws (1) in the spigot flange (3). Remove the axial needle bearing (7), bearing race (6) and O-ring (5). 



F301 573

11. Press out shaft seal  $\varnothing 36$  mm (6) with mandrel SJ151H9000-1 and shaft seal  $\varnothing 28.56$  mm (6) with mandrel SJ 151-9000-7 by using hydraulic pressure equipment. 



F301 574


12. Remove the check valves (11) with ground 3.5 mm screw tap

After dismantling, clean all parts in low aromatic kerosene.  
Replace all O-rings and shaft seal.  
Immediately before assembly, lubricate all parts with hydraulic oil and grease rubber parts with vaseline.



F301 575

**Assembly**

1. Place the shaft seal  $\varnothing 36$  mm (6) on mandrel SJ 151-9000-1 or the shaft seal  $\varnothing 28.56$  mm (6) on mandrel SJ 151.9000-7 and mount the shaft seal in the spigot flange (3) by using hydraulic pressure equipment. 




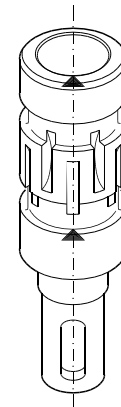
F301 576

2. Mount the check valves (11) in their bores and fit them with a light blow of a plastic hammer.  
*Remember new O-rings!*



F301 577

3. The rear shaft end must be marked before fitted. The mark must be positioned vertically above a commutation slot leading up to the front annular channel. 



151-1572.10

4. Carefully insert shaft through housing.

Note: Cover the groove with installation sleeve.



F301 578


**Assembly**


5. Mount the bearing race (6), the axial needle bearing (7) and O-ring (5) in the spigot flange (3)

*Remember new O-ring*



F301 579

6. Place the spigot flange on the housing (9) and mount the screws (1) (6 off). With a torx-spanner T30 tighten the screws. 

Tightening torque:  
5 - 8 N•m [45 - 70 lbf•in] 

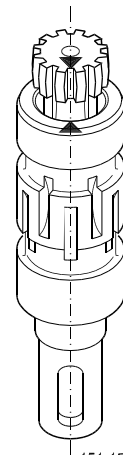
Place the motor housing with shaft downward on the holding tool SJ 151-9000-1



F301 580

7. Guide the cardan shaft (10) down into the motor housing. In case of different splines length turn the cardan shaft to ensure the long end is fitted in the output shaft.

Transfer marking from output shaft to cardan shaft. 



151-1571.10

8. Mount distributor plate (15) and O-ring (14) on motor housing.

*Remember new O-ring!*



F301 581

**Assembly**


9. Place the O-rings (14) in the O-ring groove of the gear wheel set (16).

*Remember new O-ring!*

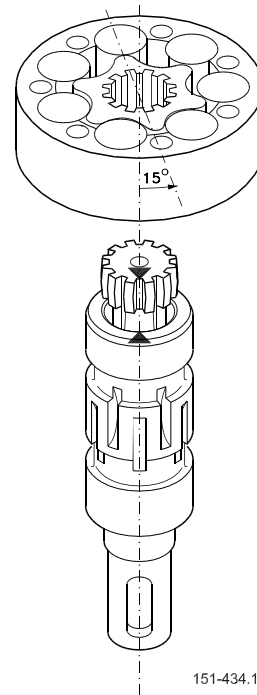


F301 582

10. In gearwheel set with non through splines place the gearwheel set with the recess in the spline hole facing down towards the housing. Place the gearwheel set (16) on the cardan shaft so that the top of a tooth in the external teeth of the gearwheel is vertically above the mark on the cardan shaft.

Turn the gearwheel set counter clock-wise until cardan shaft and the gear wheel start to mesh (15°). 

Turn the gearwheel set rim to line up the screw holes.



151-434.10



11. *Mount the end cover (17)*

*Remember new O-ring!*

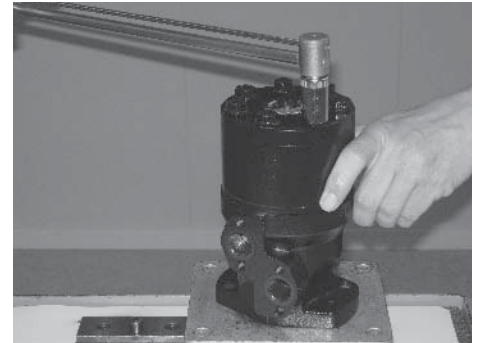


F301 568

**Assembly**

12. Renew the washer (18) and mount the screws (19).  
With 16 mm spanner  cross tighten the screws.  
Tightening torque: 52 - 57 N·m  
[460 - 500 lbf·in]. 

*Remember new washers!*



F301 583

13. After testing the motor fit the dust seal (2) into place with a plastic hammer and suitable mandrel.

*Remember new dust seal!*

Mount the parallel key (8 or 25), nut (23) and plastic plugs (13).



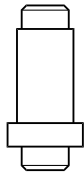
F301 565

**Special Tools**



F300 083

Main holding tool (horse shoe):  
Code No.: SJ 151-9000-1.










151-2097.10

Mandrel for shaft seal  $\varnothing 36$  mm  
SJ151H9000-1



151-2097.10

Mandrel for shaft seal  $\varnothing 28.56$  mm  
SJ151-9000-7

-  = Pull out with tool - press fit
-  = Non removable part, use a new part
-  = External hex head
-  = Mark orientation for reinstallation
-  = Press in - press fit
-  = Torque specification
-  = Note correct orientation



Orbital Motors OMH  
Repair Instructions  
Notes





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