



## 6.3 GP3 / R Floor Standing Spare Parts

**Sorvall:**

Legend XF,  
Legend XFR

**Thermo Scientific:**

SL40F,  
SL40FR,  
Multifuge X3F  
Multifuge X3FR

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# Centrifuges Overview

- Sorvall Legend XF
  - Thermo Scientific SL 40F
  - Thermo Scientific Multifuge X3F
- Sorvall Legend XFR
  - Thermo Scientific SL 40FR
  - Thermo Scientific Multifuge X3FR



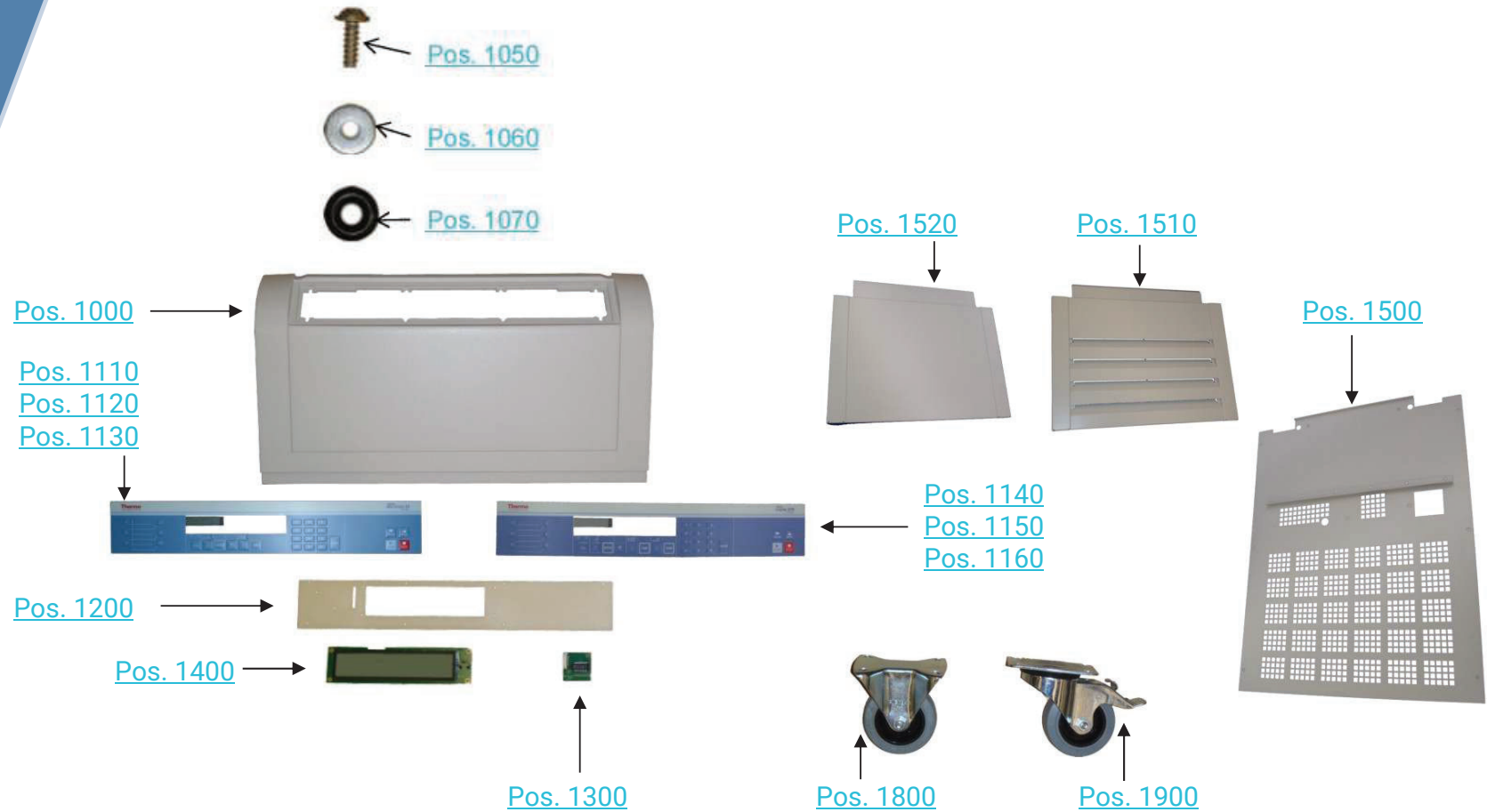
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# Outer Casing Overview



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# Spare Parts Outer Housing

Pos.	Part Nr.:	Description:	Multi X3F	Legend XF	SL 40F	Multi X3FR	Legend XFR	SL 40FR	Required Tools	Additional Recommended Tools
1000	70902034	Front Panel	X	X	X	X	X	X	4mm Allen	
1050	20480320	Screw for plastic parts	X	X	X	X	X	X	4mm Allen, Torx 30	
1060	20480317	Washer	X	X	X	X	X			
1070	20290706	O-Ring	X	X	X	X	X			
1110	20058573	Keypad Overlay Multifuge X3F	X						4mm Allen	
1120	20058574	Keypad Overlay Legend XF		X						
1130	20058647	Keypad Overlay SL 40F			X					
1140	20058575	Keypad Overlay Multifuge X3FR				X				
1150	20058576	Keypad Overlay Legend XFR					X			
1160	20058648	Keypad Overlay SL 40FR						X		
1200	20058539	Display frame high end	X	X	X	X	X	X	4mm Allen, Torx 15	
1300	20150266	Keypad adaptor	X	X	X	X	X	X	4mm Allen, Torx 15	
1400	20150281	Display 16+24 high end	X	X	X	X	X	X		
1500	70904662	Rear panel refrigerated				X	X	X	4mm Allen, 7mm socket wrench	
1500	70904661	Rear panel ventilated	X	X	X					
1510	70902029	Air grille refrigerated				X	X	X	4mm Allen	
1520	70902031	Air grille ventilated	X	X	X					
1800	20280156	Fixed castor rear	X	X	X	X	X	X	13mm socket wrench	4mm Allen
1900	20280155	Swivel castor front	X	X	X	X	X	X		

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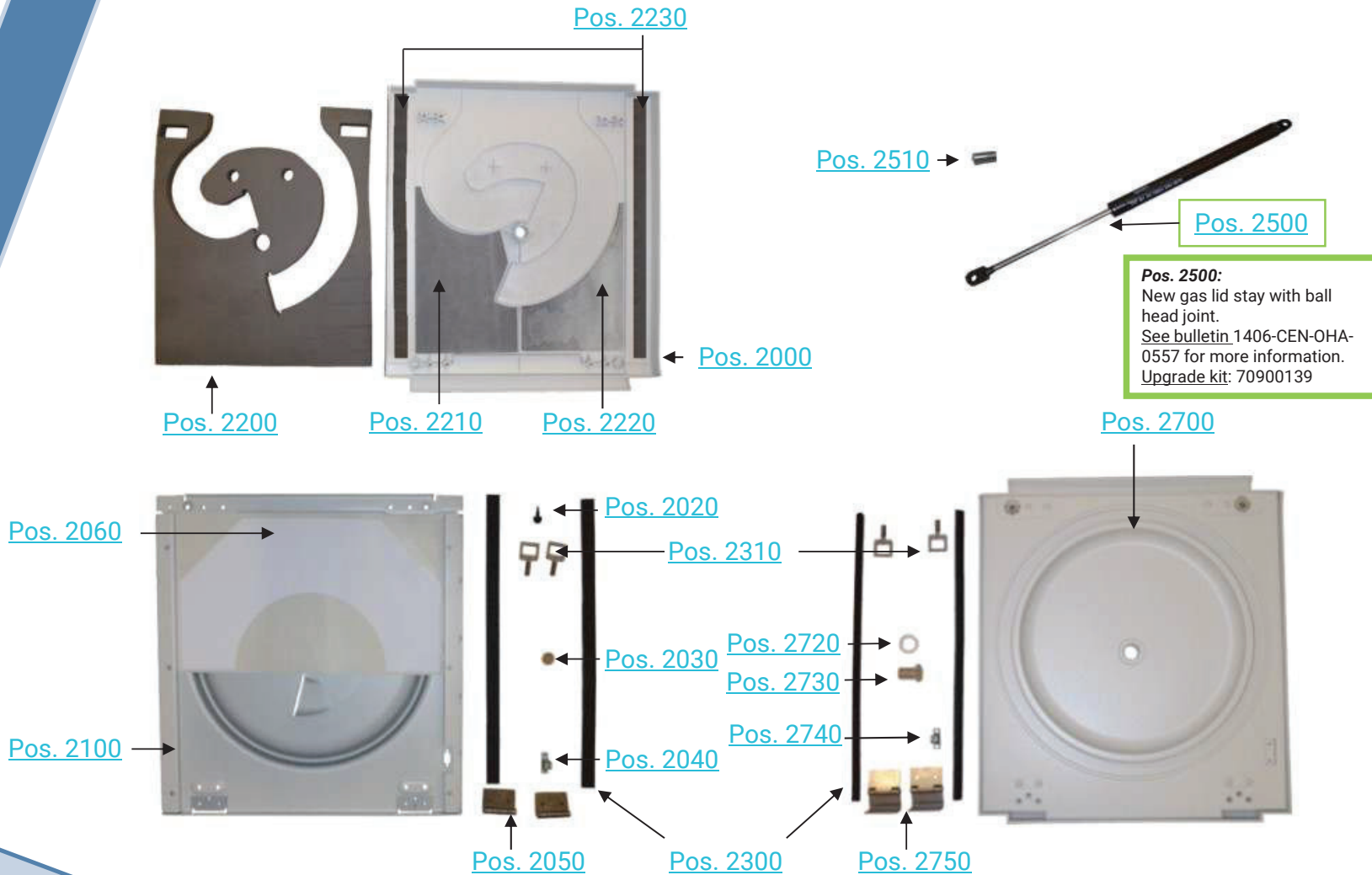
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# Lid Cover Parts



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# Spare Parts Lid Cover

Pos.	Part Nr.:	Description:	Multi X3F	Legend XF	SL 40F	Multi X3FR	Legend XFR	SL 40FR	Required Tools	Additional Recommended Tools
2000	20058531	Lid cover	X	X	X				4mm Allen, Torx 30	
2020	20058221	Distance buffer	X	X	X					
2030	20050543	Window	X	X	X				32mm jaw wrench	
2040	20056650	Mounting bracket	X	X	X				4mm Allen	Striker pin, hammer, pipe wrench
2050	20058525	Hinge	X	X	X				4mm Allen, 8mm socket wrench	Torx 30, striker pin, hammer, pipe wrench
2060	20058558	Cover foil	X	X	X				Torx 30, 4mm Allen	striker pin, hammer, pipe wrench
2100	20058645	Insert	X	X	X				Torx 30, 4mm Allen	striker pin, hammer, pipe wrench
2200	20058553	Insert	X	X	X				4mm Allen, 8mm socket wrench	
2210	20058593	Damping mat left	X	X	X				Torx 30	
2220	20058594	Damping mat right	X	X	X					
2230	20058579	Damping stripes	X	X	X					
2300	20058642	Seal stripe	X	X	X	X	X	X		
2310	20058480	Hook	X	X	X	X	X	X	17mm jaw wrench, pipe wrench	
2500	50144266	Gas lid stay (ball head joint)	X	X	X	X	X	X	Striker pin, hammer, pipe wrench	
2510	50151808	Pin notch	X	X	X	X	X	X	Striker pin, hammer	
2700	20900508	Lid cover				X	X	X		
2720	20056625	Window lower part				X	X	X	17mm jaw wrench	
2730	20056732	Window upper part				X	X	X		
2740	20023748	Mounting bracket				X	X	X	4mm Allen	
2750	20058500	Hinge				X	X	X	4mm Allen, 8mm socket wrench	

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# Electronics



[Pos. 3000](#)

[Pos. 3700](#)

[Pos. 3110](#)

[Pos. 3120](#)

[Pos. 3130](#)

**Pos. 3000:**  
Pos. 3000 includes all parts: 3110, 3120 and 3130, but not 3700!

[Pos. 3250](#)

**Pos. 3250:**  
Ferrite core after serial no. 41020953.  
Before this serial no. use ferrite core kit 70900131.  
See bulletin no. 0110-CEN-OHA-0412

[Pos. 3140](#)



[Pos. 3500](#)



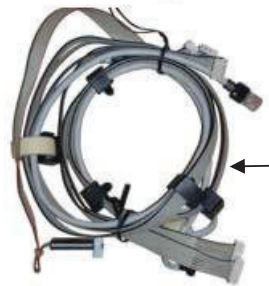
[Pos. 3400](#)



[Pos. 3610](#)



[Pos. 3620](#)



[Pos. 3600](#)



[Pos. 3450](#)



**Always use the dedicated power cable.**

[Pos. 3200](#)



[Pos. 3300](#)



**Pos. 3200:**  
Installation of motor grounding after serial no. 41655083.  
Before this serial no. use motor grounding kit 50144139.  
See bulletin no. 1406-CEN-OHA-0558

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# Spare Parts Electronics I

Pos.	Part Nr.:	Description:	230V	120V	230V 60Hz	100V	Required Tools	Additional Recommended Tools
3000	20150331	Main PCB General Purpose 120V air,ref.		X			8mm socket wrench	4mm Allen
3000	20150269	Main PCB General Purpose 230V ref.	X		X			
3000	20150284	Main PCB General Purpose 100V air, ref.				X		
3000	20150259	Main PCB General Purpose 230V air	X					
3110	20210443	Fan	X	X	X	X	Replace main PCB	
3120	20180732	Panel Plug 120V 10A		X				
3120	20180748	Panel Plug 230V 16A	X		X			
3130	20180747	Overcurrent switch	X	X	X	X		
3140	20058590	Grounding bar	X	X	X	X		
3200	20210429	Motor General Purpose	X	X	X	X	13mm socket wrench	AutoLock Tool kit, 4mm Allen
3250	20170355	Ferrite core	X	X	X	X	3mm Allen	
3300	70902026	Autolock Assy SH65y	X	X	X	X	AutoLock Tool kit	
Not shown	50114901	O-ring AutoLock (green)	X	X	X	X		

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# Spare Parts Electronics II

Pos.	Part Nr.:	Description:	230V	120V	230V 60Hz	100V	Required Tools	Additional Recommended Tools
3400	20150270	PCB speed imbalance rotor	X	X	X	X	4mm Allen	8mm socket wrench
3450	20210444	Fan side 24V (only refrigerated)	X	X	X	X	3mm Allen	4mm Allen
	50157507	Sensor Cap Motor Cover Kit GP	X	X	X	X		
3500	70902692	Lid Latch	X	X	X	X	4mm Allen	
3600	50116520	Cable package	X	X	X	X	Small screwdriver	4mm Allen
3610	20190363	Line in cord 120V		X				
3620	20190264	Line in cord 230V	X		X			
Not shown	20190349	Line in cord 100V				X		
Not shown	20190270	Line in cord only for 75004523 / 75004541			X			

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# NV-RAM

Pos.	Part Nr.:	Description:	Catalog Number:	230V	120V	230V 60Hz	100V	Required Tools	Additional Recommended Tools
3700	70904689	Thermo Scientific Multifuge X3F	75004530	X				Chip removal tool or small screwdriver	4mm Allen
	70904689	Sorvall Legend XF	75004532	X					
	70904689	Thermo Scientific SL 40F	75004542	X					
	70904691	Thermo Scientific Multifuge X3FR	75004536	X					
	70904691	Sorvall Legend XFR	75004538	X					
	70904691	Thermo Scientific SL 40FR	75004543	X					
	70904688	Thermo Scientific Multifuge X3F	75004531		X				
	70904688	Sorvall Legend XF	75004533		X				
	70904688	Thermo Scientific SL 40F	75004544		X				
	70904690	Thermo Scientific Multifuge X3FR	75004537		X				
	70904690	Sorvall Legend XFR	75004539		X				
	70904690	Thermo Scientific SL 40FR	75004545		X				
	70904702	Sorvall Legend XF	75004535			X			
	70904703	Sorvall Legend XFR	75004541			X			
	70904700	Sorvall Legend XF	75004534				X		
	70904701	Sorvall Legend XFR	75004540				X		

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# Service Kits



Pos. 4000

**Pos. 4000:**  
Without gas lid stay. Please order separately, refer to [bulletin](#) 1406-CEN-OHA-0557 for more information.  
New gas lid stay: 50144266, Upgrade kit: 70900139



Pos. 4100

**Pos. 4100:**  
Refer to bulletin 1808-CEN-OHA-0653.



Pos. 4500

**Pos. 4500:**  
With instruction number 50119249.  
Tool kit includes parts that make it easier to:

- Remove the AutoLock
- Check function of the AutoLock
- Do a rotor emergency release
- Change anti-vibration mounts

Pos.	Part Nr.:	Description:	Multi X3R	Mega 40R	Legend XTR	ST 40R	SL 40R	Required Tools	Additional Recommended Tools
4000	70904694	Service Kit anti - vibration mounts	X	X	X	X	X	13mm socket wrench / jaw wrench	4mm Allen
4100	50157507	Sensor Cap Motor Cover Kit GP	<b>230V / 230V 60Hz / 120V / 100V</b>						
4500	70904693	Tool Kit AutoLock	X	X	X	X	X		

# Cooling System 100V / 120V (no changes due to f-gas)



# Spare Parts Cooling System 100V / 120V

Pos.	Part Nr.:	Description:	120V	100V	Required Tools	Additional Recommended Tools
5000	20240668	Compressor	X	X	4mm Allen, Philips 2	
5010	20240577	Liquid Collector	X	X	4mm Allen	
5020	50120382	Over pressure switch Floorstanding	X	X	4mm Allen	Small side cutter
5030	20058481	Condenser	X	X	4mm Allen, 8mm socket wrench	
5040	20240608	Expansion valve	X	X	4mm Allen	Small side cutter
5100	20210436	Fan 120V	X	X	4mm Allen	Small side cutter
5200	50116267	Temperature sensor	X	X	4mm Allen	
5300	20058545	Gasket	X	X	4mm Allen, 8mm socket wrench	Striker pin, hammer, pipe wrench

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# Cooling System 230V (refer to serial number cut)



# Spare Parts Cooling System 230V

Pos.	Part Nr.:	Description:	Beschreibung:	230V	230V 60Hz
<b>Units produced with &amp; prior serial number "42585178" used refrigerant R404a.</b>					
5000	20240651	Compressor	Kompressor	X	X
5010	20240577	Dryer	Trockner	X	X
5020	50120543	Over pressure switch Floorstanding	Pressostat Standgerät	X	X
5030	20058481	Condenser	Verflüssiger	X	X
5040	20240671	Expansion valve	Expansionsventil	X	X
5100	20210437	Fan 230V	Wandring Axial Lüfter 230V	X	X
5200	50116267	Temperature probe	Temperaturfühler	X	X
5300	20058545	Seal	Kesseldichtung	X	X
<b>Units produced with &amp; above serial number "42585179" are using refrigerant R134a due to f-gas regulations.</b>					
5000	20240675	Compressor	Kompressor	X	X
5010	20240577	Dryer	Trockner	X	X
5020	50120382	Over pressure switch Floorstanding	Pressostat Standgerät	X	X
5030	20058481	Condenser	Verflüssiger	X	X
5040	20240672	Expansion valve	Expansionsventil	X	X
5100	20210437	Fan 230V	Wandring Axial Lüfter 230V	X	X
5200	50116267	Temperature probe	Temperaturfühler	X	X
5300	20058545	Seal	Kesseldichtung	X	X



Take care which refrigeration system is inside and take this and the serial number cut as basis to order new spare parts.  
 An **old** system needs also **old** spare parts but **recycled refrigerant** which is written down on the nameplate.  
 A **new** system needs **new** spare parts and **refrigerant** which is written down on the nameplate.

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# Technical Bulletin I

Bulletin Number	Titel
0110-CEN-OHA-0412	New ferrite cores for motor cable
0110-CEN-OHA-0413	rotor speed imbalance
0210-CEN-OHA-0424	highconic II magnets
0303-CEN-OHA-0399	recommend spare parts GP3
0310-CEN-OHA-0425	New version of main pcb to fix E97
0410-CEN-OHA-0431	Unexplained imbalance information
0410-CEN-OHA-0432	New version of main pcb to fix E97
0904-CEN-OHA-400	Spare parts change
0905-CEN-OHA-402	Software bug in 3L GP centrifuge (routine version only)
0905-CEN-OHA-403	Software bug in 3L GP centrifuge (routine version only)
1007-CEN-OHA-0441	Fix E44-45 on GP1 GP3 revised
1008-CEN-OHA-0445	Temperature display differences between routine and high end models
1011-CEN-OHA-0442	Spare parts harmonization
1103-CEN-OHA-0469	New software and NVRAM version
1108-CEN-OHA-0482	Two new versions of the GP3 unit
1205-CEN-OHA-0471	Technical update of temperature sensor
1307-CEN-OHA-0527	Improvement of EMC compatibility to avoid abnormal errors and short cicuits
1311-CEN-OHA-0528	Installation of the motor cover after service visit in GP units

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# Technical Bulletin II

Bulletin Number	Titel
1311-CEN-OHA-0541	New rotors are available by NVRAM update for the 1 – and 3 liter GP units
1406-CEN-OHA-0557	New improved gas spring design for improved reliability
1406-CEN-OHA-0558	Installation of motor grounding kit
1410-CEN-OHA-0561	Coated rotors don't need to lubricate
1411-CEN-OHA-0562	Correct installation and check of AutoLock handle
1411-CEN-OHA-0566	Information of a new latch system design
1502-CEN-OHA-0573	Returne of failed GP1/GP3/GP4 main pcb's for investigation
1504-CEN-OHA-0584	Returne of failed GP1/GP3/GP4 lid latches for investigation
1509-CEN-OHA-0586	New improved main pcb for improved reliability
1508-CEN-OHA-0589	Spare part harmonization
1809-CEN-OHA-0635	GP software update rotor
1808-CEN-OHA-0653	Sensor motor cover
1810-CEN-OHA-0654	GP1 and GP3 gas spring harmonization

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