

LAVINA

S7 SERIES

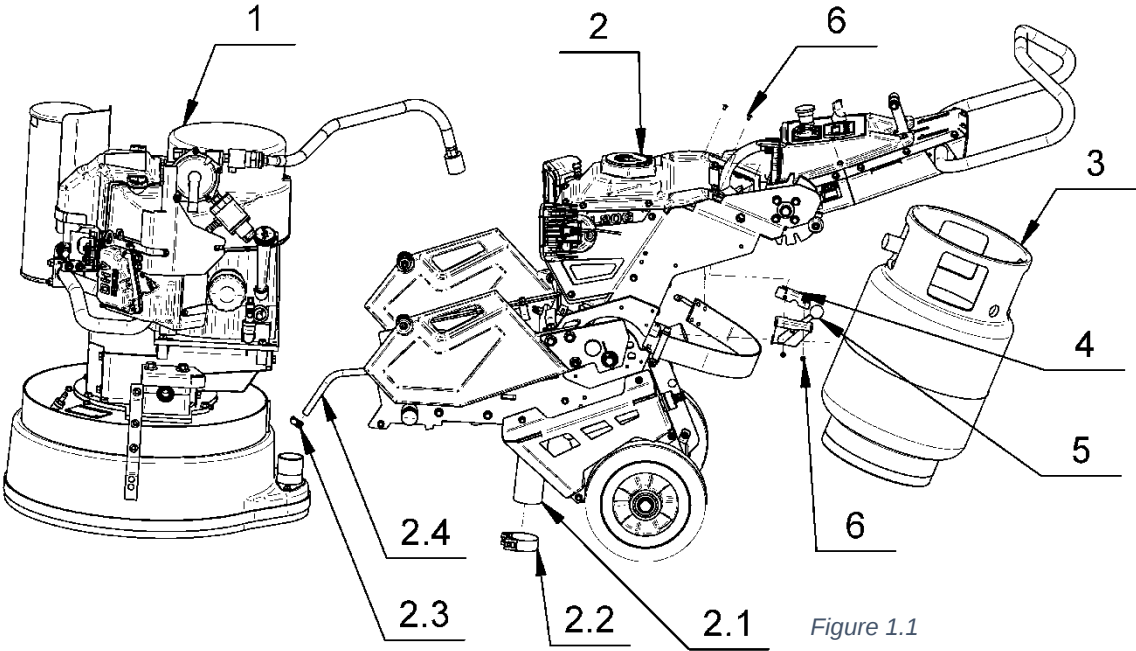
SPARE PARTS
20" Propane Grinders

L20GS7



SUPERABRASIVE
DIAMOND TOOLS AND EQUIPMENT

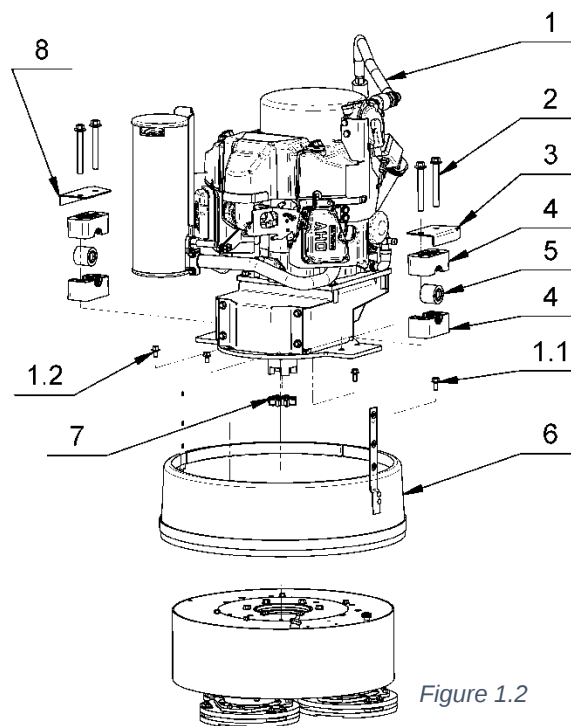
1.1 GENERAL PARTS



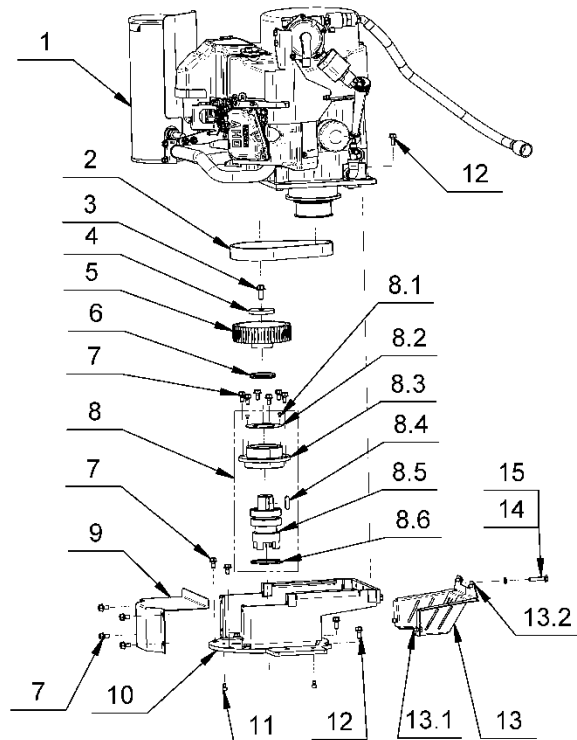
1.1 LAVINA® 20GS7 General parts					
Figure 1.1					
No.		Item No.	Description	Pcs.	
1		L20GS7.10.00.00-1	Main Head	1	
2		L20GS7.20.00.00	Carriage	1	
	2.1	L20GS7.20.00.09	Soft Vacuum Hose	1	
	2.2	30308000400	Clamp SGB 56-59	2	
	2.3	30308000402	Hose clamp	2	
	2.4	MAR16.470	PE Tube	1	
3		30313000318	Propane Tank	1	
4		L20GS7.20.19.00	Throttle cable base	1	
5		30313000071	Throttle cable	1	discontinued
5*		L20GS7.20.00.12	Throttle cable	1	
6		30301230039	Screw M4x8ISO7380F	4	

1.2 ENGINE BASE PARTS

1.2 LAVINA® 20GS7 ENGINE BASE PARTS				
Figure 1.2				
No.	Item No.	Description	Pcs.	
1	L20GS7.11.00.00-1	Engine drive kit	1	
	1.1	30301210031	Bolt M8X20DIN6921	2
	1.2	30301210072	Bolt M8X16DIN6921	2
2	30301210198	Bolt M12X100DIN6921	4	
3	L20GS7.10.00.13	Left plank	1	
4	L30GS7.00.00.02	Head carrier	4	
5	30310000013	Buffer	2	
6	L20GS7.10.40.00	Guard Assembly	1	
7	30331000000	Elastic element	1	
8	L20GS7.10.00.12	Right plank	1	



1.3 ENGINE DRIVE KIT



1.3 LAVINA® 20GS7 ENGINE DRIVE KIT				
Item No. L20GS7.11.00.00-1				
Figure 1.3				
No.	Item No.	Description	Pcs.	
1	L20GS7.11.30.00-1	Engine kit	1	
2	30308000161	Timing Belt	1	
3	30301210096	Bolt M10X25DIN6921	1	
4	L30GS7.10.00.21	Front Washer	1	
5	L20GS7.11.00.01	Pulley Unit	1	
6	30302000013	V-Ring Type A	1	
7	30301210072	Bolt M8X16DIN6921	12	
8	L20GS7.11.10.00	Shaft Assembly	1	
	8.1	30301230331	Screw M4X6DIN912	2
	8.2	L20GS7.11.10.04	Ring	1
	8.3	L20GS7.11.10.03	Bushing	1
	8.4	30301260092	Key	1
	8.5	L20GS7.11.10.00-K	Shaft Set	1
	8.6	30301250012	Retaining Ring	1
9	L30GS7.10.00.15	Front Guard	1	
10	L20GS7.11.20.00	Engine frame	1	
11	30301230289	Screw M6X10DIN912	2	
12	30301210031	Bolt M8X20DIN6921	2	
13	L20GS7.11.01.00	Back Guard	1	
	13.1	30301210058	Bolt M8X12DIN6921	2
	13.2	30301210043	Bolt M6X10DIN6921	2
14	30301221004	Washer M8DIN125	1	
15	30301210004	Screw M8X40DIN933	1	

1.4 ENGINE KIT

1.4 LAVINA® 20GS7 ENGINE KIT				
Item No. L20GS7.11.30.00-1				
Figure 1.4				
No.	Item No.	Description	Pcs.	
1	30301210031	Bolt M8X20DIN6921	2	
2	L20GS7.11.30.02	Holder	1	
3	A125.00.00.00	REGULATOR SET	1	
4	A132.00.00	Heat Exchanger	1	
5	KFS481	Complete Engine Assembly	1	
6	L20GS7.11.30.01	Engine Plate	1	
7	30313000086	Bolt HCS 3/8"-16x1.25" ITEM 92323A556	4	
8	L25G-10.00.66	Tensioning Device Support	1	
9	30301220022	Spring Washer M8DIN7980	2	
10	30301230004	Screw M8X25DIN912	2	
11	L25GS7.10.02.06	Clutch Washer	1	
12	30313000312	Electric Clutch	1	discontinued
12*	A133.00.00.00.00	Electric Clutch	1	
13	L25GE10.02.02	Washer	1	
14	30313000689	Bolt HCS 7/16"-20x1.25"	1	
15	L25GEB10.10.00-1	L25GEB Kawasaki wiring	1	
16	30313000581	Cable for Grinding head	1	
17	30313000582	Battery cable single L20GE	1	
18	30311000874	3/8" Battery Post Cover Red	3	

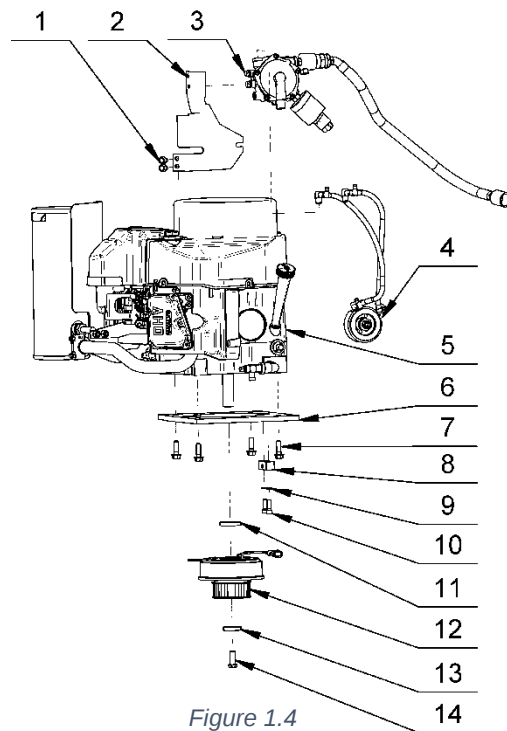


Figure 1.4

No. 12 is replaced by Item No. A133-K

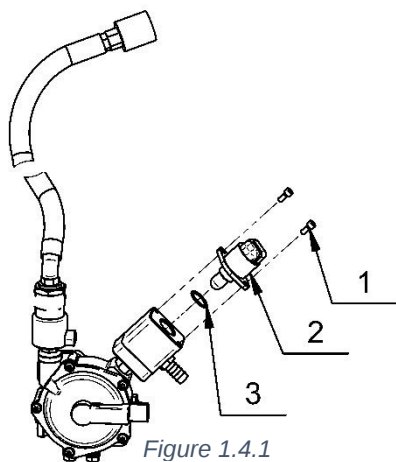


Figure 1.4.1

1.4.1 LAVINA® 20GS7 Regulator set			
Item No. A125.00.00.00			
Figure 1.4.1			
No.	Item No.	Description	Pcs.
1	30301230009	Screw M5x12 DIN912	2
2	30305000070	Idle speed motor	1
3	30302000156	O-Ring	1

1.4.2 LAVINA® 20GS7 Heat Exchanger			
Item No. A132.00.00			
Figure 1.4.2			
No.	Item No.	Description	Pcs.
1	30302000168	O-Ring	1
2	30308000406	Hose Clamp	4
3	MAR8.392	Oil Pipe	2

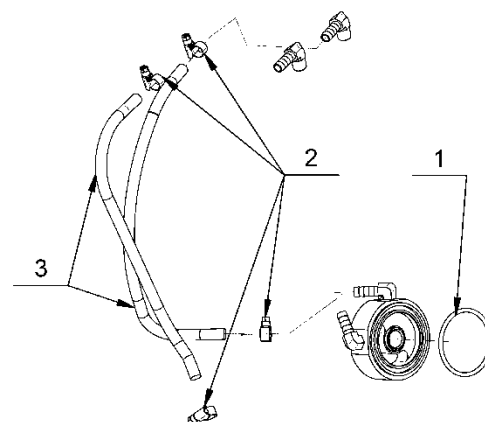
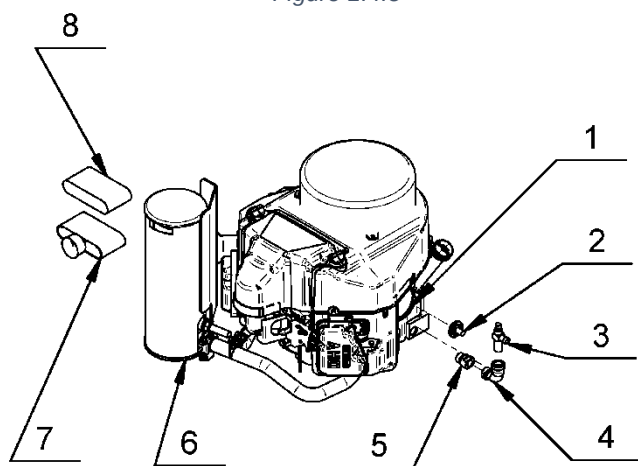


Figure 1.4.2

Figure 1.4.3



1.4.3 LAVINA® 20GS7 KAWASAKI FS481V Engine parts

Figure 1.4.3			
No.	Item No.	Description	Pcs.
	KFS481	Complete Engine Assembly	
1	K49065-7007	Oil Filter	1
2	W1325	Oil Pressure Switch	1
3	30313000559	Oil Drain Valve	1
4	120	Elbow	1
5	123	Joint	1
6	K201	Vertical Cat Muffler Assy.	1
7	K11013-7049	Element Air Filter	1
8	K11013-7046	Foam pre-Filter	1

1.5 ENGINE FRAME

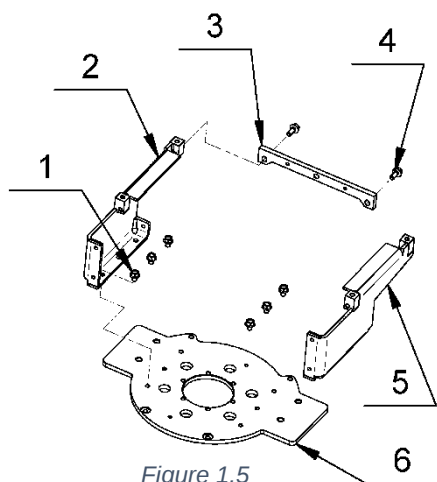
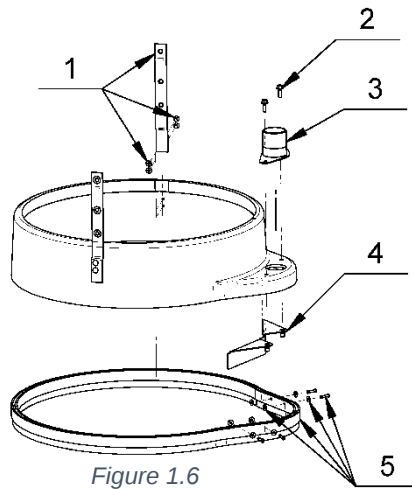


Figure 1.5

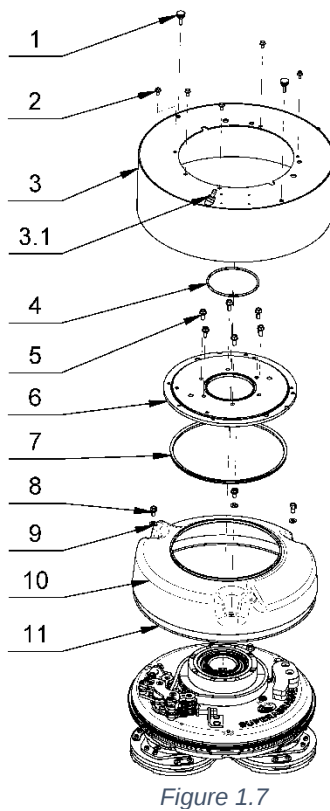
1.5 LAVINA® 20GS7 ENGINE FRAME			
Item No. L20GS7.11.20.00			
Figure 1.5			
No.	Item No.	Description	Pcs.
1	30301210058	Bolt M8X12DIN6921	6
2	L20GS7.11.22.00	Right Plate Assembly	1
3	L20GS7.11.20.02	Profile	1
4	30301210031	Bolt M8X20DIN6921	2
5	L20GS7.11.21.00	Left Plate Assembly	1
6	L20GS7.11.20.01	Flange	1

1.6 GUARD ASSEMBLY



1.6 LAVINA® 20GS7 Guard Assembly			
Item No. L20GS7.10.40.00			
Figure 1.6			
No.	Item No.	Description	Pcs.
1	L30GS7.10.71.00-K	Restriction strip set	2
2	30301210117	Bolt M6x20DIN6921	2
3	L20E10.72.00	Vacuum Port	1
4	L20E10.71.00	Bottom Vacuum Port	1
5	FBL1350-435857-K	Brush set	1

1.7 TOP COVER



1.7 LAVINA® 20GS7 TOP COVER				
Figure 1.7				
No.		Item No.	Description	Pcs.
1		30329000065	Knob Bolt M6X20	2
2		30301210048	Bolt M6X12DIN6921	5
3		L20GS7.10.50.00	Top Cover Assembly	1
	3.1	30316000015	Water connection	1
4		D4X2X435	Seal	1
5		30301210031	Bolt M8X20DIN6921	6
6		L20GS7.10.00.09	Base plate	1
7		30302000061	V-Ring Type L	1
8		30301210072	Bolt M8X16DIN6921	3
9		30301221013	Washer M8DIN134	3
10		L20GS7.10.00.11	Cover	1
11		D4X2X1465	Seal	1

1.8 PLANETARY DRIVE PARTS

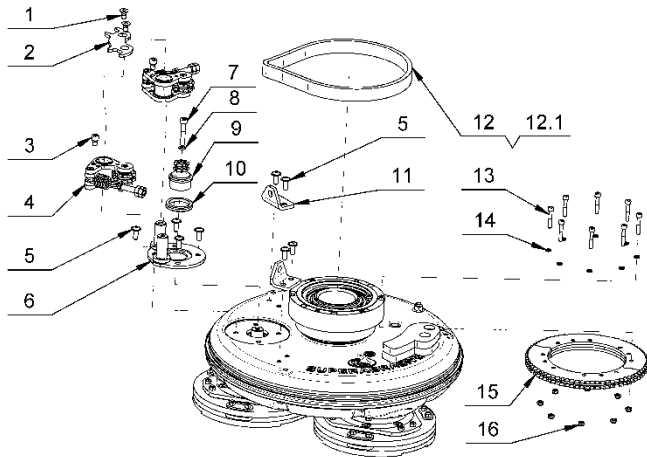


Figure 1.8

1.8 LAVINA® 20GS7 PLANETARY DRIVE PARTS				
Figure 1.8				
No.		Item No.	Description	Pcs.
1		30301230056	Screw M8X16DIN7991	2
2		L20GS7.10.00.10	Sector	1
3		30301230300	Screw M8X12DIN912	2
4		L20GS7.10.30.00	Chain tensioner	2
5		30301230101	Screw M8x20ISO7380F	8
6		L20GS7.10.11.00	Base plate	1
7		30301230112	Screw M8X45DIN912	1
8		30301220022	Washer M8DIN7980	1
9		L20GS7.10.00.06	Sprocket set	1
10		30302000010	V-Ring Type A	1
11		A115.10.00.01	Holder	2
12		06B-2-79-OL	Chain	1
	12.1	30312000317	Chain link	1
13		30301230041	Screw M6X35DIN912	8
14		30301220013	Washer M6DIN7980	8
15		L20GS7.12.21.00	Sprocket set	1
16		30301240103	Nut M6DIN985	8

1.8.1 LAVINA® 20GS7				
Chain tensioner				
Item No. L20GS7.10.30.00				
Figure 1.8.1				
No.		Item No.	Description	Pcs.
1		30301230013	Screw M6X12DIN7991	4
2		L30GS7.14.00.02	Top plate	1
3		L30GS7.14.10.00	Base assembly	1
	3.1	30303000102	Slide bearing	2
4		L30GS7.15.00.01	Axle	1
5		30301250003	Retaining Ring	1
6		L20GS7.10.31.00	Sprocket Set	1
7		L20GS7.10.30.01	Axle	1
8		L30GS7.14.00.03	Springs	1
9		L30GS7.14.03.00	Capstan screws	1
10		30301240099	Nut M10DIN934	2

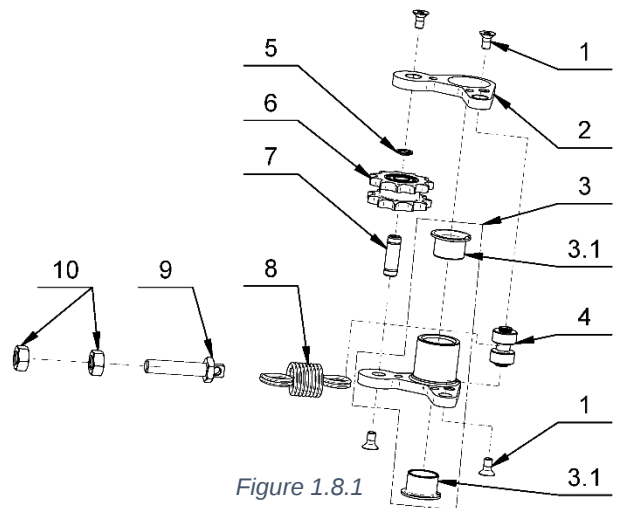


Figure 1.8.1

1.9 BOTTOM COVER 1 PARTS

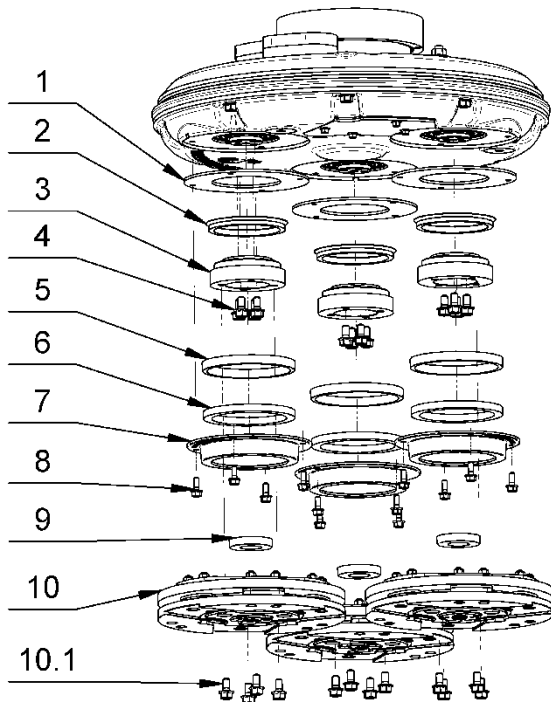


Figure 1.9

1.9 LAVINA® 20GS7 BOTTOM COVER 1 PARTS				
Figure 1.9				
No.		Item No.	Description	Pcs.
1		L30GS7.10.00.05	Pad	3
2		30302000005	V-Ring Type A	3
3		L20GS7.10.00.07	Adaptor	3
4		30301210072	Bolt M8x16DIN6921	12
5		L30GS7.10.00.04	Ring	3
6		30309000000	Felt Ring	3
7		L30GS7.10.00.06	Outer Cover	3
8		30301210051	Bolt M6x16DIN6921	12
9		L20GS7.10.00.08	Ring	3
10		A63.00.00	Tool Holder A63	3
	10.1	30301210072	Bolt M8x16DIN6921	12

1.9.1 TOOL HOLDER A63

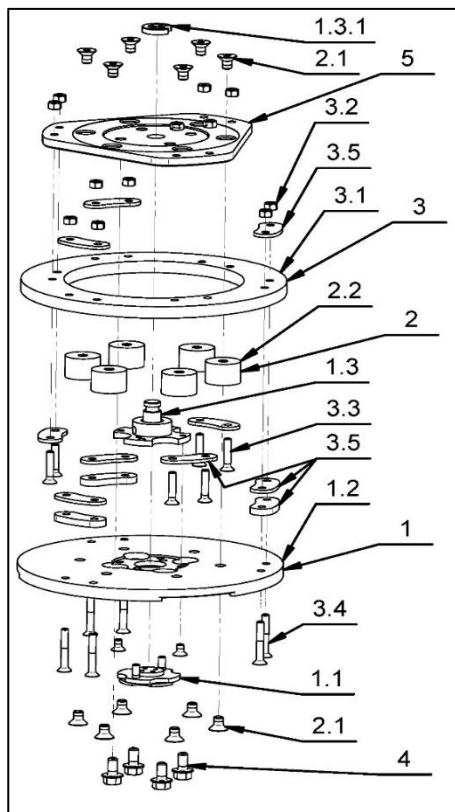
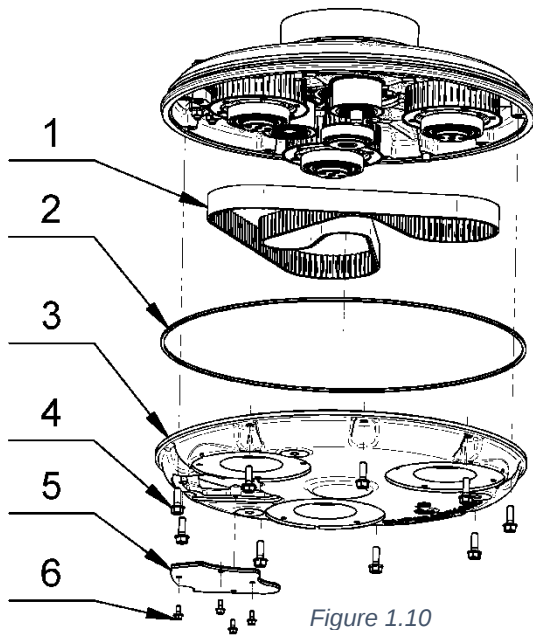


Figure 1.9.1

1.9.1 LAVINA® 20GS7 TOOL HOLDER A63				
ITEM NO. A63.00.00				
(POS.1 INCLUDE POS.1.1;1.2;1.3/POS.1.3 INCLUDE POS.1.3.1 and etc.)				
Figure 1.9.1				
No.		Item No.	Description	Pcs.
1		A63.10.00	Quick Change Assembly	1
	1.1	A63.12.00	Keylock Set	1
	1.2	A41.11.00	Quick Change plate	1
	1.3	A41.12.00	Security set	1
	1.3.1	A41.00.05	Washer A41	1
2		A25.00.10-K	Buffer with two screw	6
	2.1	30301230161	Screw M8X12DIN7991/10.9/	12
	2.2	A25.00.10	Buffer	6
3		A41.20.03-K	Driving Set A41	1
	3.1	A41.20.03	Elastic Element	1
	3.2	30301240124	Self-Locking Nut M6DIN980V	12
	3.3	30301230123	Screw M6X30DIN7991/10.9/	6
	3.4	30301230131	Screw M6X40DIN7991/10.9/	6
	3.5	A41.21.00	Set of plates	1
4		30301210072	Bolt M8x16DIN6921	4
5		A41.20.01	Flange	1

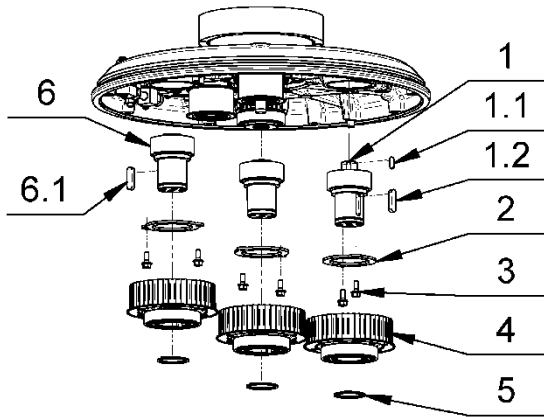
1.10 BOTTOM COVER 2 PARTS



1.10 LAVINA® 20GS7 BOTTOM COVER 2 PARTS

Figure 1.10			
No.	Item No.	Description	Pcs.
1	30308000180	Timing Belt	1
2	D4X2X1485	Seal	1
3	L20GS7.10.01.00	Bottom Cover Set	1
4	30301210038	Bolt M8X25DIN6921	9
5	L20GS7.10.07.00	Inspection Cover	1
6	30301210030	Bolt M5X12DIN6921	4

1.11 BOTTOM COVER 3 PARTS



1.11. LAVINA® 20GS7 BOTTOM COVER 3 PARTS

Figure 1.11			
No.	Item No.	Description	Pcs.
1	L20GS7.10.02.00	Shaft Assembly	1
	1.1 30301260064	Key	1
	1.2 30301260092	Key	1
2	L20GS7.10.00.02	Cover	3
3	30301210051	Bolt M6x16DIN6921	6
4	L20GS7.10.03.00	Pulley	3
5	30301250039	Retaining Ring	3
6	L20GS7.10.04.00	Shaft Assembly	2
	6.1 30301260092	Key	1

1.12 BOTTOM COVER 4 PARTS

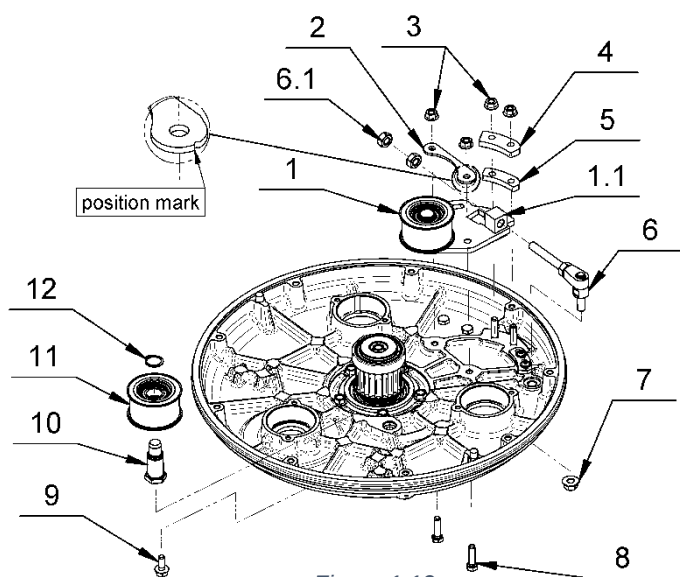


Figure 1.12

For machines with serial number 2511L20GS720462 and older get the following items in the kit: No 1; 2 and 8

1.12 LAVINA® 20GS7

BOTTOM COVER 4 PARTS

Figure 1.12

No.		Item No.	Description	Pcs.
1		L20GS7.10.05.00	Tensioning Support 1	1
	1.1	L20GS7.10.05.03	Stand	1
2		A149.00.01	Plate	1
3		30301240095	Nut M8DIN6923	4
4		L20GS7.10.00.04	Sector	1
5		L20GS7.10.00.03	Sector	1
6		L20GS7.10.13.00	Tensioning Support 2	1
	6.1	30301240099	Nut M10DIN934	2
7		30301240084	Nut M10DIN6923	1
8		30301210213	Screw M8X30DIN933	2
9		30301210031	Bolt M8X20DIN6921	1
10		L20GS7.10.10.02	Shaft	1
11		L20GS7.10.20.00	Deflection Pulley	1
12		30301250000	Retaining Ring	1

1.13 BOTTOM COVER 5 PARTS

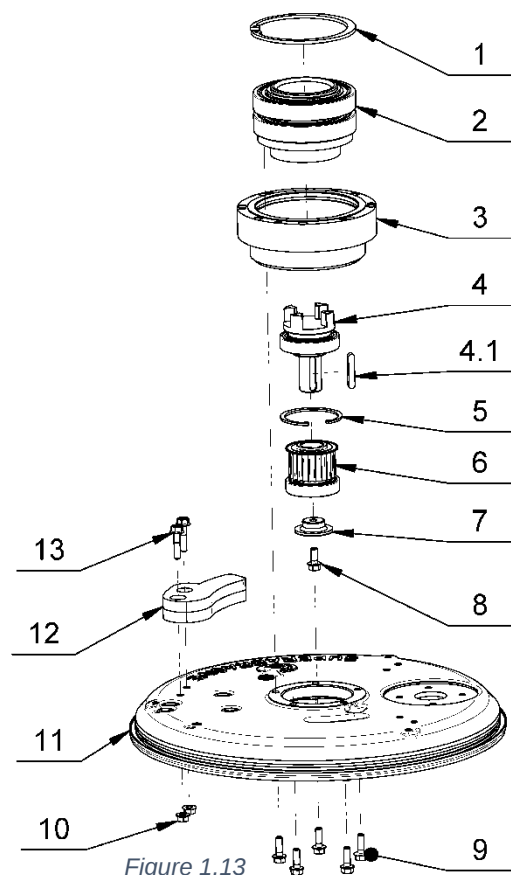


Figure 1.13

1.13. LAVINA® 20GS7 BOTTOM COVER 5 PARTS

Figure 1.13

No.		Item No.	Description	Pcs.	
1		30301250055	Retaining Ring	1	
2		L20GS7.12.11.00	Bushing center kit g	1	
3		L20GS7.12.20.01	Bushing	1	
4		L20GS7.12.12.00	Shaft Assembly	1	
	4.1	30301260065	Key	1	
5		30301250012	Retaining Ring	1	
6		L20GS7.12.13.00	Central Pulley Assembly	1	
7		L20GS7.12.10.01	Front Washer	1	
8		30301210031	Bolt M8X20DIN6921	1	
9		30301210038	Bolt M8X25DIN6921	5	
10		30301240095	Nut M8DIN6923	2	
11		L20GS7.10.10.00-K	Body Assembly L20GS7	1	discontinued
11*		L20GS7.10.10.00-1-K	Body Assembly L20GS7	1	
12		L20GS7.10.12.00	Balance	1	
13		30301210032	Bolt M8X35DIN6921	2	

No. 11 is replaced by Item No. L20GS7.10.10.00-1-K

1.14. CARRIAGE 1 PARTS

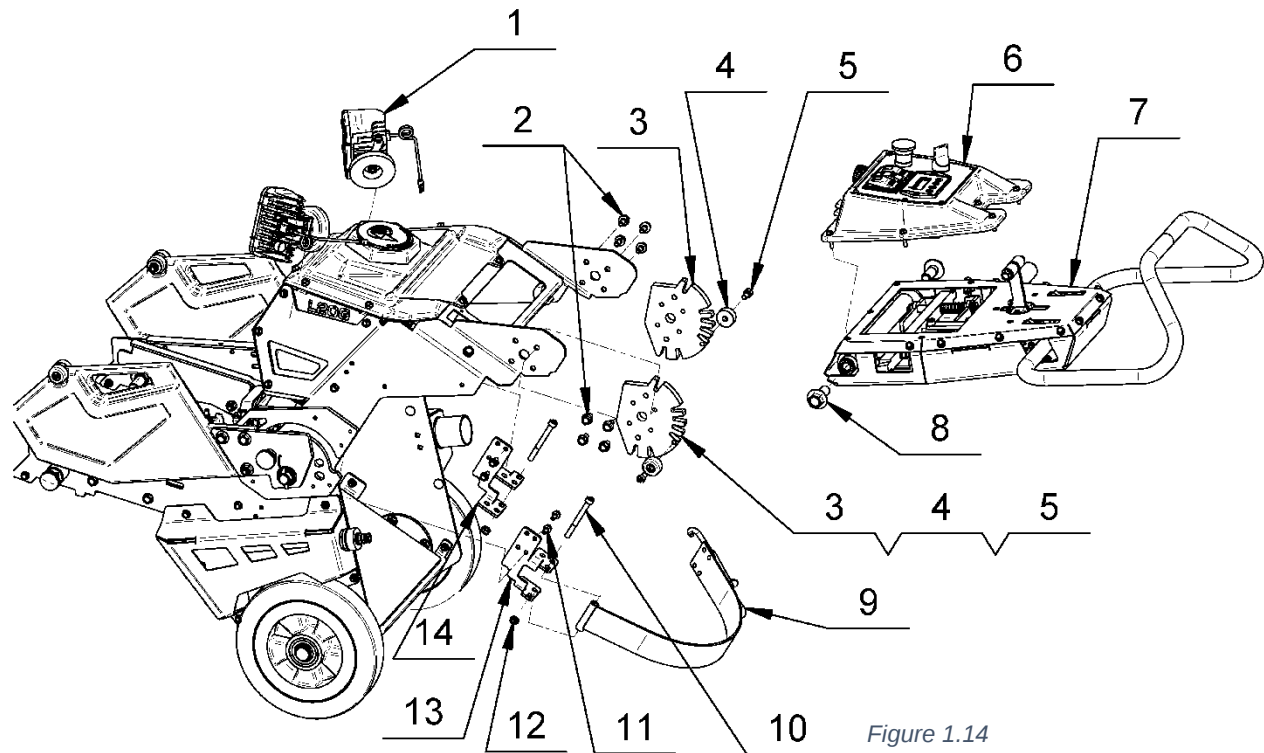


Figure 1.14

1.14 LAVINA® 20GS7 CARRIAGE 1 PARTS			
Figure 1.14			
No.	Item No.	Description	Pcs.
1	A110.00.00	LED Light	2
2	30301210072	Bolt M8x16DIN6921	8
3	L20GS7.20.00.06	Locking plate	2
4	30310000012	Buffers	2
5	30301230018	Screw M8X16DIN912	2
6	L20GS7.27.00.00	Control Board	1
7	L20GS7.23.00.00	Handlebar set	1
8	30301210136	Bolt M16X40DIN6921	2
9	L30GS7.20.30.00	Strap	1
10	30301230231	Screw M8X80DIN912	2
11	30301210051	Bolt M6X16DIN6921	4
12	30301240106	Nut M8DIN985	2
13	L20GS7.20.00.11	Strap holder left	1
14	L20GS7.20.00.10	Strap holder right	1

1.15. CONTROL BOARD

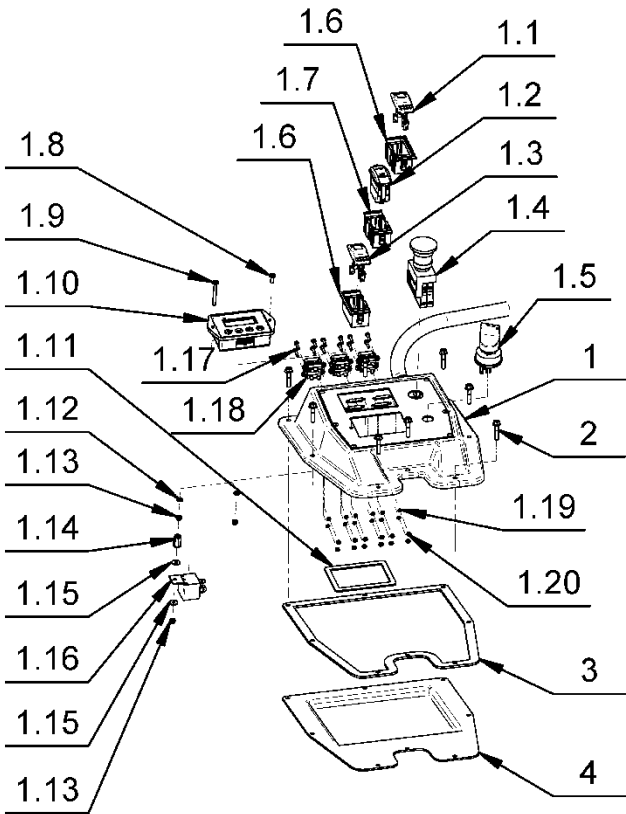


Figure 1.15

1.15. LAVINA® 20GS7 CONTROL BOARD				
Item No. L20GS7.27.00.00				
Figure 1.15				
No.	Item No.	Description	Pcs.	
1	L20GS7.27.00.00	Top cover assembly	1	
	1.1	30313000074	Light Switch	1
	1.2	30313000173	USB AS235-3.4A	1
	1.3	30313000072	Clutch Switch	1
	1.4	L30GEK21.20.00	Emergency stop button	1
	1.5	30313000263	Start-Stop Switch	1
	1.6	30313000573	Snap-in bracket-end black	2
	1.7	30313000574	Snap-in bracket-center black	1
	1.8	30301230024	Screw M4X12ISO7380F	1
	1.9	30301230036	Screw M4X40ISO7380F	1
	1.10	A97.00.00-3	Complete Monitor Assembly	1
	1.11	L30GEK21.00.02	Plate	1
	1.12	30301221001	WasherM4DIN125A	2
	1.13	30301240114	Nut M4DIN985	3
	1.14	30301240130	Rivet nut M6	1
	1.15	30301221010	Washer M4DIN9021	2
	1.16	30311000498	Relay	1
	1.17	30301230325	Screw M3X12DIN7985	12
	1.18	30313000615	Fuse holder	6
	1.19	30301220010	Washer H3DIN7980	12
1.20	30301240019	Nut M3DIN934	12	
2	30301210056	Bolt M5X25DIN6921	8	
3	30302000158	Seal	1	
4	30306000059	Bottom cover	1	

1.16 HANDLEBAR SET

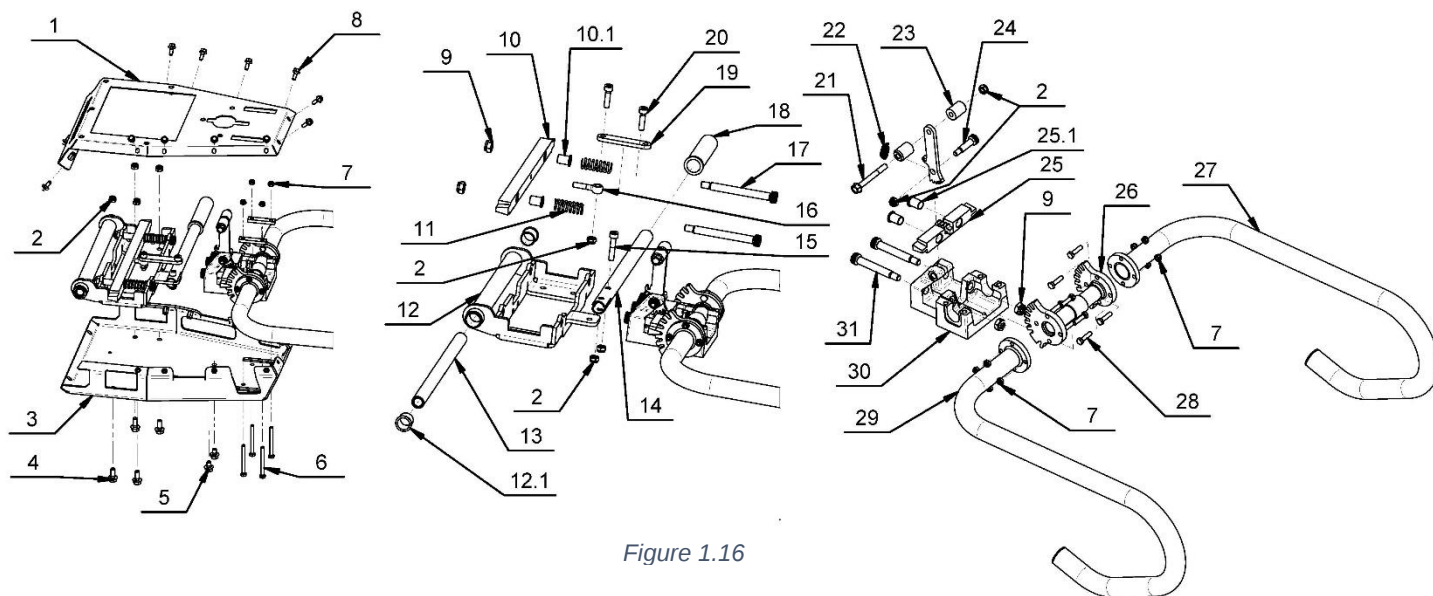
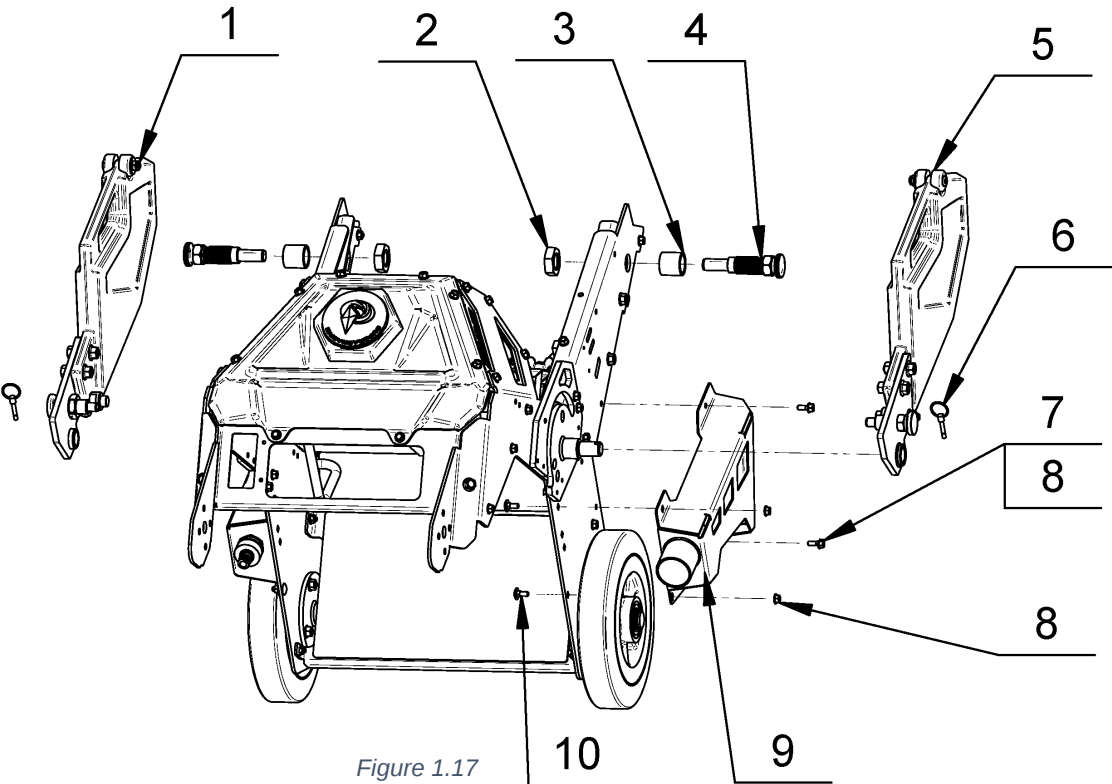


Figure 1.16

1.16. LAVINA® 20GS7 HANDLEBAR SET									
Item No. L20GS7.23.00.00									
Figure 1.16									
No.		Item No.	Description	Pcs.	No.		Item No.	Description	Pcs.
1		L30GS7.22.50.00	Cover	1	16		30301210104	Bolt M8X40DIN444	1
2		30301240106	Nut M8DIN985	9	17		30301230100	Screw 12X100M10ISO7379	2
3		L30GS7.22.10.00	Body Base	1	18		30329000014	Handle	1
4		30301210031	Bolt M8X20DIN6921	4	19		L30GS7.22.00.02	Plate	1
5		30301210058	Bolt M8X12DIN6921	2	20		30301230032	Screw M8X30DIN912	2
6		30301210085	Bolt M6X65DIN933	4	21		30301210069	Bolt M8X70DIN6921	1
7		30301240103	Nut M6DIN985	12	22		30317000042	Spring	1
8		30301210051	Bolt M6X16DIN6921	12	23		L30GS7.22.30.04	Bushing	2
9		30301240092	Nut M10DIN985	4	24		30301230317	Screw 10X30M8ISO7379	1
10		L30GS7.22.40.00	Locking item	1	25		L30GS7.22.34.00	Locking item	1
	10.1	30303000110	Flange bearing	2		25.1	30303000110	Flange bearing	2
11		30317000041	Spring	2	26		L30GS7.22.31.00	Locking axle	1
12		L30GS7.22.20.00	Body	1	27		L20GS7.22.31.00	Handle right	1
	12.1	30303000103	Flange bearing	2	28		30301210077	Screw M6x25DIN933	8
13		L30GS7.22.00.01	Axle	1	29		L20GS7.22.32.00	Handle left	1
14		L30GS7.22.00.03	Lever	1	30		L30GS7.22.30.01	Base	1
15		30301230155	Screw M8X40DIN912	1	31		30301230318	Screw 12X70M10ISO7379	2

1.17. CARRIAGE 2 PARTS



1.17. LAVINA® 20GS7 CARRIAGE 2 PARTS				
Figure 1.17				
No.	Item No.	Description	Pcs.	
1	L20GS7.22.00.00	Left Weight	1	
2	30301240007	Nut M24X1.5DIN439B	2	
3	L20GS7.20.00.05	Bushing	2	
4	30329000066	Axle	2	
5	L20GS7.21.00.00	Right Weight	1	
6	30329000067	Spring Pins	2	
7	30301210051	Bolt M6X16DIN6921	2	
8	30301240098	Nut M6DIN6923	4	
9	L20GS7.20.16.00	Fender right	1	
10	30301210013	Screw M6X16DIN603	2	

1.18. RIGHT WEIGHT

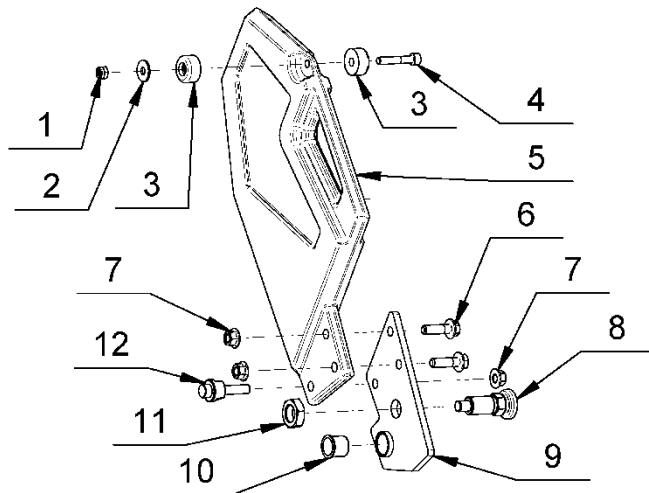


Figure 1.18

1.18. LAVINA® 20GS7 RIGHT WEIGHT				
Item No.		L20GS7.21.00.00		
Figure 1.18				
No.		Item No.	Description	Pcs.
1		30301240106	Nut M8DIN985	1
2		30301221019	Washer M8DIN9021	1
3		30310000012	Rubber Bushing	2
4		30301230112	Screw M8X45DIN 912	1
5		L20GS7.21.00.02	Weight	1
6		30301210021	Bolt M10X35DIN6921	2
7		30301240084	Nut M10DIN6923	3
8		30329000060	Indexing plunger	1
9		L20GS7.21.11.00	Carrier right	1
10		30303000103	Flange bearing	1
11		30301240015	Nut M20X1,5DIN439B	1
12		L20GS7.21.00.01	Bushing	1

1.19. LEFT WEIGHT

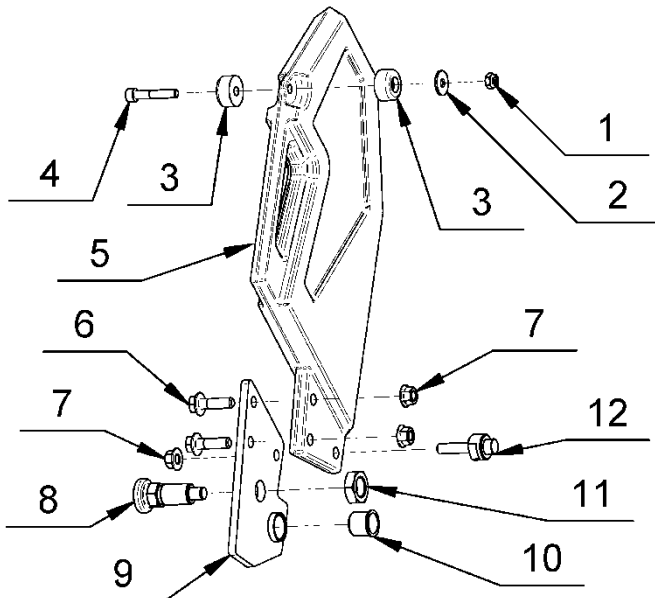


Figure 1.19

1.19. LAVINA® 20GS7 LEFT WEIGHT				
Item No.		L20GS7.22.00.00		
Figure 1.19				
No.		Item No.	Description	Pcs.
1		30301240106	Nut M8DIN985	1
2		30301221019	Washer M8DIN9021	1
3		30310000012	Rubber Bushing	2
4		30301230112	Screw M8X45DIN 912	1
5		L20GS7.21.00.02	Weight	1
6		30301210021	Bolt M10X35DIN6921	2
7		30301240084	Nut M10DIN6923	3
8		30329000060	Indexing plunger	1
9		L20GS7.22.11.00	Carrier left	1
10		30303000103	Flange bearing	1
11		30301240015	Nut M20X1,5DIN439B	1
12		L20GS7.21.00.01	Bushing	1

1.20. CARRIAGE 3 PARTS

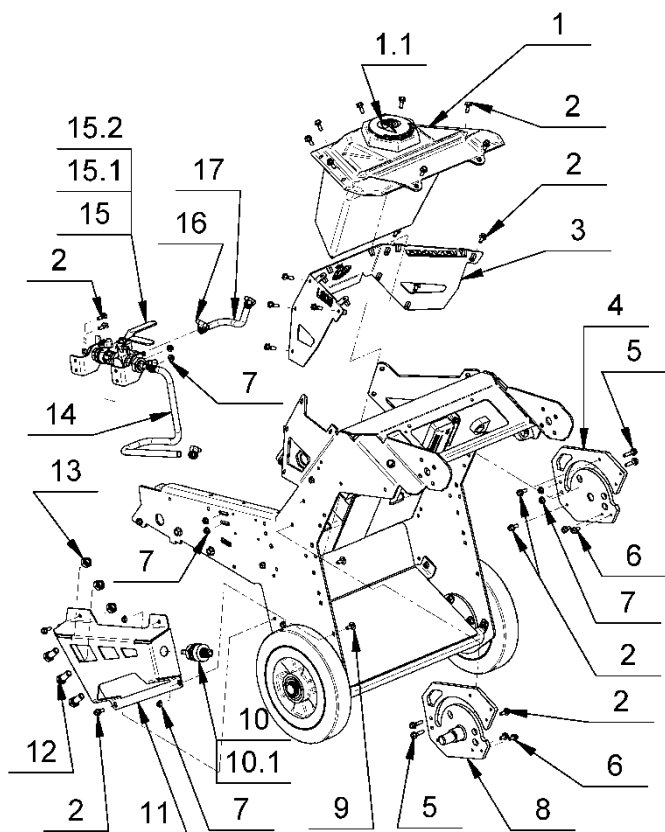


Figure 1.20

1.20. LAVINA® 20GS7 CARRIAGE 3 PARTS				
Figure 1.20				
No.		Item No.	Description	Pcs.
1		L20GS7.24.00.00	Tank Assembly	1
	1.1	L20GS7.24.11.00	Cover	1
2		30301210051	Bolt M6X16DIN6921	23
3		L20GS7.20.15.00	Console set	1
4		L20GS7.20.12.00	Right axis	1
5		30301210107	Bolt M6X25DIN6921	4
6		30301210048	Bolt M6X12DIN6921	4
7		30301240098	Nut M6DIN6923	8
8		L20GS7.20.13.00	Left axis	1
9		30301210013	Screw M6X16DIN603	2
10		L20GS7.20.17.00	Water Valve assembly	1
	10.1	30301240015	Nut M20X1.5DIN439B	1
11		L20GS7.20.00.03	Fender left	1
12		30301210071	Screw M12X30DIN933	3
13		30301240111	Nut M12DIN985	3
14		L20GS7.20.00.08	PE Tube	1
15		L20GS7.20.18.00	Water Valve assembly	1
	15.1	L20GS7.20.18.01	Plate	2
	15.2	30301240015	Nut M20X1.5DIN439B	2
16		30308000402	Hose clamp	4
17		L20GS7.20.00.07	PE Tube	1

1.21. CARRIAGE 4 PARTS

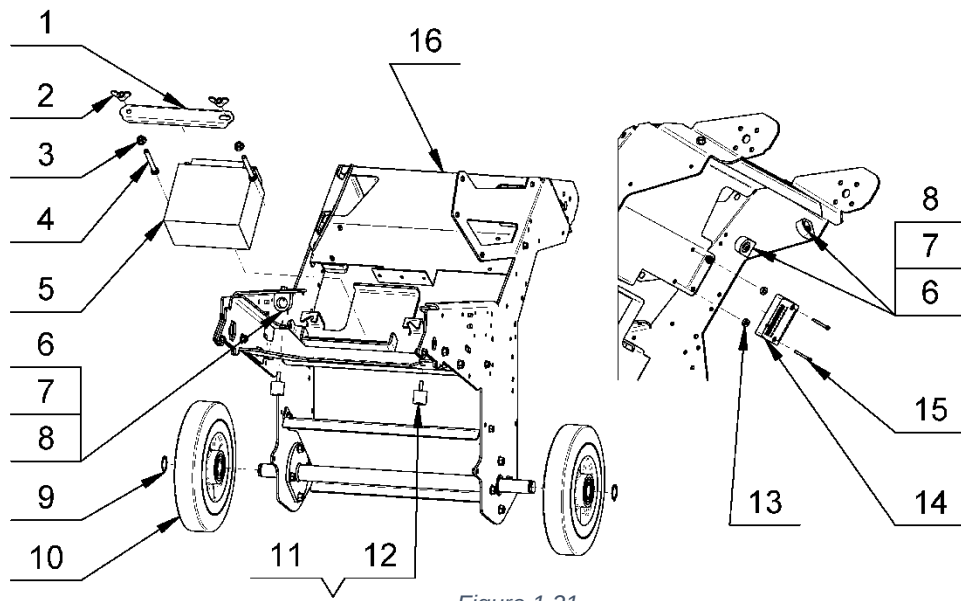


Figure 1.21

1.21 LAVINA® 20GS7 CARRIAGE 4 PARTS				
Figure 1.21				
No.		Item No.	Description	Pcs.
1		L30GS7.20.00.07	Battery Cover	1
2		30301240120	Nut M8DIN315	2
3		30301240095	Nut M8DIN6923	2
4		30301210113	Screw M8X70DIN933	2
5	5.1	30313000220	12V Battery	1
	5.2	30313000061	Cable for Battery	1
	5.3	30311000873	3/8" Battery Post Cover Black	1
	5.4	30311000874	3/8" Battery Post Cover Red	1
6		30311000506	Flexicon 21	3
7		30301210048	Bolt M6X12DIN6921	3
8		30301240022	Nut M6DIN934	3
9		30301250036	Retaining Ring	2
10		30312000004	Wheel	2
11		30310000006	Buffer	2
12		30301240098	Nut M6DIN6923	2
13		V32GX-14.00.04	Washer	2
14		30313000308	CO2 Analyzer	1
15		30301230121	Screw M4X40DIN912	2
16		L20GS7.20.00.00-K	Frame-K	1