Spare parts list for Low Pressure Spray Guns





Ecco 35 Pressure feed



Pressure feed guns

Type of gun	Paint nozzle Orifice diam., mm	Air cap	Prod. No. With paint needle of nylon	Prod. No. With paint needle of stainless steel
Ecco 35	0.9	6509	8611 3540 09	8611 3548 09
Ecco 35	1.1	6511	8611 3540 11	8611 3548 11
Ecco 35	1.4	6514	8611 3540 14	8611 3548 14
Ecco 35	1.8	6518	8611 3540 18	8611 3548 18
Ecco 35	2.1	6521	8611 3540 21	8611 3548 21
Ecco 35	2.7	6527	8611 3540 27	8611 3548 27

For further combinations, consult Ecco Finishing AB

65130 F294



Gravity feed guns with gravity cup 0.6 lit.

Type of gun	Paint nozzle Orifice diam., mm	Air cap	Prod. No. With paint needle of nylon	Prod. No. With paint needle of stainless steel
Ecco 352	0.9	6509	8611 3542 09	8611 3544 09
Ecco 352	1.1	6511	8611 3542 11	8611 3544 11
Ecco 352	1.4	6514	8611 3542 14	8611 3544 14
Ecco 352	1.8	6518	8611 3542 18	8611 3544 18
Ecco 352	2.1	6521	8611 3542 21	8611 3544 21
Ecco 352	2.7	6527	8611 3542 27	8611 3544 27

For further combinations, consult Ecco Finishing AB

65130 F295







Part numbers in **bold type** designate consumption parts.

Service set 6003 9095 35 Consisting of parts with ref. Nos. 5, 6, 8, 10, 14, 17, 18, 23, 24, 25 and 38.

	Qty			Qty					
Ref		ŝ	52		Ref		ŝ	52	
No.	Part number	Ŷ	Ŷ	Description	No.	Part number	Ÿ	Ŷ	Description
1	-	1	1	Body	35	6101 5021 00	1	_	Nipple (G 3/8 SS)
2	6004 0276 50	1	1	Restrictor 2.0	36	6001 2619 00 ^b	1	1	Nipple (G 1/4)
3	6004 0276 55	1	1	Restrictor 2.5	37	6003 9974 35	1	1	Plug (G 3/8)
4	6101 5730 00	1	1	Air valve, compl.	38	6101 5670 15 ^a	_	1	Packing (POM)
5	6101 2111 00 ^a	1	1	– Spring	39	6101 5560 86	_	1	Paint cup G6, compl. (0.6 lit.)
6	6101 5008 00 ^a	1	1	– Air valve	40	6101 3742 00	_	1	Plug (M14 x 1)
7	6101 3631 00	1	1	– Valve pin	41	(see ontional	1	1	Adapter (for paint cup 3M PPS)
8	6001 1008 00 ^a	1	1	– Packing (PE)	- 1	equinment)	'		
9	6003 2167 00	1	1	 Valve housing 	12	(soo ontional	1	1	Dlug(C 1/4)
10	6101 5716 00 ^a	1	1	– Bushing	42		1	1	Flug (G 1/4)
11	6004 0276 07	1	1	Fan width control, compl.	10	(equipment)		1	CoverCon
12	6101 3788 00	1	1	-Valve screw	43	(see optional	-	I	Cover Cap
13	6101 3790 00	1	1	– Valve pin					
14	6101 3796 00 ^a	1	1	– O-ring	44	6000 8004 00	1	1	Cleaning brush (Ø10 mm)
15	6101 3789 00	1	1	 Valve housing 	45	6000 8001 00	1	1	Cleaning brush (Ø17 mm)
16	6004 0276 08	1	1	– Knob		Optic	onal	Egui	pment
17	0333 5109 00 ^a	1	1	 Lock washer (V 3.2) 		•		•	•
18	0164 5013 00 ^a	1	1	 Screw (MKFS 3 x 6 SS A2) 	-	6101 6065 35	1	1	Retaining ring, acetal plastic (for
19	(see page 4-5)	1	1	Paint needle					air cap)
20	6101 2582 35	1	1	Spring	11	6004 0276 80	1	1	Fan width control for left handed
21	6004 0276 09	1	1	Knob	11	6003 9602 00	1	1	Quick fan width control
22	6004 0276 10	1	1	Trigger	25	6004 0276 90	1	1	Air distributor set (set of 10)
23	6004 0276 13 ^a	1	1	Screw, compl.	35	6102 9314 46	1	_	Paint inlet nipple (G 1/4 SS)
24	6004 0276 00 ^a	1	1	Needle seal	35	6003 7393 00	1	_	Paint inlet nipple (9/16" 20G SS)
25	6004 0276 02 ^a	1	1	Air distributor (set of 10 see optional	36	6000 1877 00	1	1	Air inlet nipple $(9/16"200"00)$
				equipment)	36	6002 0233 00	1	1	Air inlet nipple $(1/4" 18 \text{ NDSM})$
26	(see page 4-5)	1	1	Paint nozzle	/1	6002 0255 00	1	1	Adapter (for paint cup 3M PPS)
27	(see page 4-5)	1	1	Air cap	12	6101 5626 14	1	1	Plug (G1/I) alt for air limiter value)
28	6004 0276 03	1	1	Air limiter valve, compl.	42	6002 0522 00	1	1	Cover Cap
29	6004 0276 05 ^c	1	1	– Needle	43	4101 E247 00	1	1	Diver cap
30	6101 2111 35	1	1	– Spring	40	6101 5247 80	I	I	Plug set, for gun is not filled with
31	0301 2309 00	1	1	– Washer (BRB 3.2 x 7)	47	(004.007/.05			ran width control
32	0663 2104 41	1	1	– O-ring (3.0 x 2.0 NBR50)	4/	6004 0276 85	1	1	Back head, lockable fluid volyme
33	6004 0276 06 ^c	1	1	– Base		· · · ·			control
34	6004 0276 04	1	1	– Knob	48	6004 0276 98	1	1	Needle seal tool

^a Including in service set. ^bLoctite No. 225. ^c Loctite No. 243.

Nozzle sets HVLP High Volume Low Pressure.

For spraying of liquids under low pressure and low atomizing air pressure.

Stainless steel and nylon versions

			-		-	-	
Stainless steel and nylon versions Consists of: Air cap of tufram-treated aluminium, paint nozzle of stainless steel and paint needle of nylon.							
Nozzle set Part number	Designation	Air cap Designation	Paint nozzle Designation	Orifice dia mm	Capacity ml/min	Paint needle Designation	
6004 0277 09	6509-35	6509	G0.9	0.9	90–200	P00435	
6004 0277 11	6511-35	6511	G1.1	1.1	150–225	P00435	
6004 0277 14	6514-35	6514	G1.4	1.4	200-270	P0435	
6004 0277 18	6518-35	6518	G1.8	1.8	200-350	P0435	
6004 0277 21	6521-35	6521	G2.1	2.1	250-400	P0435	
6004 0277 27	6527-35	6527	G2.7	2.7	250-400	P0435	

Tungsten-carbide versions

Tungsten-car Consists of: Air of paint nozzle and						
Nozzle set	Designation	Air cap	Paint nozzle	Orifice dia	Capacity	Paint needle
Part number		Designation	Designation	mm	ml/min	Designation
6004 0278 14	6514-H35	6514	GH1.4	1.4	200–270	H0435
6004 0278 18	6518-H35	6518	GH1.8	1.8	200–350	H0435
6004 0278 21	6521-H35	6521	GH2.1	2.1	250–400	H0435

Nozzle combinations HVLP High Volume Low Pressure

For spraying of liquids under low pressure and low atomizing air pressure.

Paint nozzle		Paint need	dle of nylon	Paint need	lle of steel	Air cap		
0-141-1	Q			AL CONTRACTOR		a la		
diameter mm	Designation	Part number	Designation (a)	Part number	Designation	Part number	Designation	Part number
0.6 0.8 0.9	G0.6 G0.8 G0.9	6003 9206 00 6003 9208 00 6003 9209 00	P00435	6004 0276 20	00435	6004 0276 30	6509	6003 9232 00
1.1	G1.1	6003 9211 00	P00435	6004 0276 20	00435	6004 0276 30	6511	6003 9235 00
1.2	G1.2	6003 9212 00	P0435	6004 0276 16	0435	6004 0276 26		
1.4 1.4	G1.4 GH1.4 ^b	6003 9214 00 6003 9650 14	P0435	6004 0276 16	{0435 {H0435	6004 0276 26 6004 0276 45	<pre>{6514 } ↓ 16578</pre>	6003 9237 00 6003 9579 35 [°]
1.6	G1.6	6003 9216 00	P0435	6004 0276 16	{0435 { H0435	6004 0276 26 6004 0276 45		
1.8 1.8	G1.8 GH1.8 ^b	6003 9218 00 6003 9650 18	P0435	6004 0276 16	{0435 H0435	6004 0276 26 6004 0276 45	\$ 6518	6003 9239 00
2.1 2.1	G2.1 GH2.1 ^b	6000 9275 00 6000 9881 00	P0435	6004 0276 16	0435 H0435	6004 0276 26 6004 0276 45	} {6521	6003 9242 00
2.7	G2.7	6003 9227 00	P0435	6004 0276 16	0435	6004 0276 26	6527	6003 9246 00

^a The letter *P* before the designation denotes nylon design.
 ^b The letter *H* before the figures (e.g., H1.4) denotes tungsten-carbide design.
 ^c Acetal plastic retaining ring.

Nozzle sets Conventionality

Stainless-stee Consists of: Air of paint nozzle and	el versions cap of tufram-tr paint needle s	eated aluminiu stainless steel.	ım, 🔓		S	a and a second s
Nozzle set	Designation	Air cap	Paint nozzle	Orifice dia	Capacity	Paint needle
Part number		Designation	Designation	mm	ml/min	Designation
6004 0282 11	T278-1.1	T278	09-7	1.1	150–225	00435
6004 0282 31	T374-1.1	T374	09-7	1.1	150–225	00435
6004 0282 73	T274-1.3	T274	1.5-7	1.3	200–350	0435
6004 0282 33	T374-1.3	T374	1.5-7	1.3	200–350	0435

Nozzle combinations Conventionality

Paint nozzle			Paint need	dle	Air cap (b) (c) (d)		
Orifice diam. mm	Designation	Part number	Designation	Part number	Designation	Part number	Air consumption I/min at 4 bar
0.8	0–7	6001 0241 00	_ 1		170	6101 2588 00	215
0.8	B0-7	6001 0966 00	00435 P00435	6004 0276 30 6004 0276 20	270 271 273 275 T272 T278	6101 2589 00 6101 5249 00 6103 3159 00 6101 2590 00 6101 2599 00 6101 5614 00	285 380 370 380 480 480
1.1	09–7	6001 1068 00			T272 T272 ^f T278 T278 ^f	6101 2599 00 6102 3992 00 6101 5614 00 6102 3991 00	480 480 480 480
1.2	1–7 P1–7	6001 0276 00 6001 1476 00	1		170	6101 2588 00	215
1.3	1.5–7 P1.5–7 H1.5–7	6001 0999 00 6001 1477 00 6001 1092 00			271 273 T272 T272 ^f T274 PT274 T278 T278 ^f	6101 5249 00 6103 3159 00 6101 2599 00 6102 3992 00 6101 2602 00 6101 5785 00 6101 5614 00 6102 3991 00	380 370 480 480 480 480 480 480 480
1.5	1.5	6103 1303 00	0435 P0435 H0435	6004 0276 26 6004 0276 16 6004 0276 45	270 271 273 T272	6101 2589 00 6101 5249 00 6103 3159 00 6101 2599 00	285 380 370 480
1.8	2–7 P2–7 H2–7	6000 9140 00 6001 1478 00 6001 0768 00			M270 270 271 273 275 T274 PT274	6101 3293 00 6101 2589 00 6101 5249 00 6103 3159 00 6101 2590 00 6101 2590 00 6101 5785 00	155 285 380 370 380 480 480
2.1	3–7 P3–7 H3–7	6000 9141 00 6001 1479 00 6000 9876 00			M370 375 T374	6101 3294 00 6101 2591 00 6101 2603 00	265 385 510
2.7	4–7 H4–7	6000 9142 00 6000 9877 00	_		M470 475 T474	6101 3295 00 6101 2592 00 6101 2604 00	305 385 510

^a The letter "H" before the designation denotes tungsten-carbide design.

The letter "P" before the designation denotes raylon design. The rear part of the nylon needle is made of steel.

^C, Air caps for round spray with "M" in the designation should be used together with stop ring 6101 3298.

^d Air caps with a "T" in the designation are designed for pressure feed only. The other air caps are designed for suction feed but can also be used for pressure feed. Fluid needle with cylindrical point.

f Acetal plastic retaining ring.

Operator's Instructions

- □ Use Ecco genuine parts and accessories only for best function and safety.
- Before starting, read through **all instructions** carefully.

Principal data

Туре	Max. working pressure ^a	Paint cup volume
Ecco	bar	1
35	7	-
352	7	0.6

 a HVLP = atomizing air pressure 0.7 bar is obtained with an air inlet of 3 bar.

Important

WARNING

Do not use halogenated hydrocarbons in coating application equipment where aluminium or galvanized parts come in contact with the solvent or coating material. Halogenated hydrocarbons e.g. 1,1,1-thrichloroethane and methylene chloride react, violently with such parts, causing corrosion and danger for explosion.





WARNING

As the equipment works under pressure the utmost care must be observed during the work. Bearing this in mind, never aim the spray gun at a person or towards any part of the body In the event of personal injury caused by the spraying pressure, immediate medical attention is essential. Before carrying out any adjustment or repair, the equipment must be switched off and the paint pressure relieved.

Paint spraying

CAUTION

Inhalation of paint, paint dust and solvent is not healthy. Make sure an approved spraybooth is used. The operator must use personal protection-breathing mask or fresh air hood.

Operation

- Install and operate the spray gun according to Fig. 1.
- Blow the paint and air hoses clean before connection.
- Check that all connections are tight (pay particular attention to the connection between paint cup and spray gun).
- Keep the spray gun clean and lubricate moving parts at regular intervals.
- Lubricants for surface-treatment equipment must **not** contain silicon.
- In the event of leakage around the paint needle, the needle seal (24 Fig.2 and 3) shall exhanged.
- For short standstill periods, for instance over a night, it will suffice to clean the air and paint nozzles on the outside. If a two-component paint is used, however, the gun **must be flushed** through immediately with solvent. This must also be done if the gun is to remain unused for a longer period of time.
- When cleaning the air cap and the paint nozzle, use a soft brush or rag dipped in solvent. Do not place the entire gun in solvent, as the oil on the lubricated parts would be dissolved. Blow the air cap dry with compressed air from both sides.
- Never use iron or steel wire to clean air holes and ducts in the nozzles.

How to operate

Recommended paint viscosity differs according to paint properties and painting conditions. 15 to 23 sec./Ford cup 4 is recommendable.

The gun is operate at low air pressure, high transfer efficiency will not be obtained if the spray distance is to far.

Set the spray distance from the gun to the work piece as near as possible within the range of 150-200 mm for HVLP nozzles and for conventionality nozzlels 150-300 mm.

Air caps

The air caps are tested and certified according to the SEAVA method. This gives a "finger print" of the spray pattern on each air cap. For further information please contact your supplier.

The retaining ring for the air cap shall only be tightened with hand force. No tools are required. Especially important when a capcleaner is used.

Air caps can be sent back for checking and comparity the performance. For further interesting please contact your supplier.

Connections and controls (see Fig. 1)

- **11** Fan width adjusting. If the knob is screwed all the way in a round fan will be obtained other positions give broad fans.
- **21** Paint flow adjusting. Clockwise turning result in a smaller paint flow and counter-clockwise turning increases the flow. The fluid flow is regulated in the first instance by the choice of paint nozzle and paint pressure.
- **28** Adjusting valve for atomizing air flow.
- 35 Paint hose connection G 3/8. Hose: Inside dia. 6.3 mm (1/4") or 9.5 mm (3/8").
- **36** Atomizing air hose connection G 1/4. Hose: Inside dia. 6.3 mm (1/4").

Disassembly-Reassembly (see Fig. page 1)

(see also Fig. 2 and 3)

VARNING

Before any intervention on the spray gun, shot off and relieved the compressed air supply and paint pressure to the gun.

Before reassembling the different components:

- Clean the parts with the appropriate cleaning agent by means of brush.
- Install new seals after having lubricated them with PTFE grease.
- Install new parts if necessary.

Needle packing and needle

- 1. Unscrew the control knob (21) and remove the spring (20).
- 2. Remove the paint needle (19)
- 3. Remove the air cap (27), and the paint nozzle (26).
- Pry out the the needle seal (24), use the needle seal tool (48).
 Not! The needle seal can not be refitted.
- 5. Clean everything well with cleaning agent and then blow out with air.
- 8. Fit the new needle seal (24), use the needle seal tool (48). The needle seal shall be pushed in until it reaches the bottom.
- 9. Re-fit the paint nozzle (26) (screwing torque 10 Nm) and the air cap (27) by hand.

Fan width control

- 1. Dismantle first the the fan with control (11) then the air valve (4).
- 2. Assemble first the air valve (4) before assemble the fan with control (11).
- 3. Check when fitting the valve housing (15) that the marking on the body agrees with fig. below.



Air distributor

After dismantling the paint nozzle (26), shall the air distributor (25) ${\it allways}$ exchange.



Trouble shooting

Introduction

Always commence trouble shooting by checking the general condition of the spray gun. This can most easily be determined by test spraying, which provides an opportunity for checking the spray pattern and capacity, air leakage and gasket leakage.

Trouble shoouting chart



Collection of information which makes it possible to identify the error symptoms applicable to the spray gun in the event of malfunctioning is a matter of vital importance. Identification of symptoms makes it possible to decide whether the spray gun itself is the direct cause of the malfunctioning or if this may have been caused by an external factor.

The following external factors can cause malfunctioning and should be thoroughly checked:

- 1. The quality of the air, i.e. content of moisture, dirt particles and oil.
- 2. The quality of the paint, i.e. its viscosity, purity. etc.
- 3 The air and paint pressure in relation to viscosity of the paint and nozzle combination used.
- 4. The size of the air/paint hoses.

Types of problems

Spray Pattern	Cause	Remedy
Asymmetrical to the left or to the right	a) Dried paint on holes for atomizing air.b) Damage to holes for atomizing air.c) Air cap not sufficiently tightened.	 a) Dried paint on holes for atomizing air. Clean the air holes, use appropriate clean- ing agent and a soft brush. b) Damage to holes for atomizing air. Replace the air cap with a new one. c) Air cap not sufficiently tightened. Tighten the air cap properly by hand.
Distorted in the middle	a) Damage to the tip of the paint nozzle.b) The pressure of the atomizing air in relation to the viscosity of the paint.	a) Fit a new paint nozzle.b) Adjust the air pressure of the atomizing air.
Narrowing off in the middle	a) Wrong nozzle combination.b) Fan air pressurer too high.c) Paint viscosity unsuitable.d) Incorrect spray angle.	a) Select a new nozzle combination suitable for the viscosity of paint.b) Reduce the pressure of the fan air.c) Adjust the viscosity of the paint.d) Adjust the angle with the fan width control.
Irregular spray (spitting)	 a) Paint needle gasket leaky. b Paint nozzle not tightened. c) Dirt on sealing surfaces of paint nozzle and distributor ring. d) Paint hose connection not tightened. e) Paint hose defective. 	 a) Adjust the packing screws. If this does not suffice, change the paint needle gaskets. b) Tighten the paint nozzle. c) Clean the sealing surfaces of the paint nozzle and distributor ring with solvent and blow clean. d) Tighten the paint hose connection. e) Change the paint hose.
Kontrol knob in position round spray	a) damaged the air distrubutor	a) Change the air distrubutor

Paint leaking - Air leaking	Cause	Remedy	
Paint leaking	Worn needle packing and/or needle.	Replace damaged parts with new ones.	
Paint leaking through the paint nozzle when the gun is closed.	Pollution between the needle and the nozzle or needle and nozzle worn or damaged.	Unscrew air cap (27) and nozzle (26). Clean carefully and check for any sign of damages or wear.	

Correct Spray Pattern