

**DEVILBISS**

SB-E1-2-361



**OPERATION MANUAL**  
**GTi —SUCTION FEED SPRAYGUN**



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# DEVILBISS



## Operation Manual

GTi – Suction Feed Spraygun



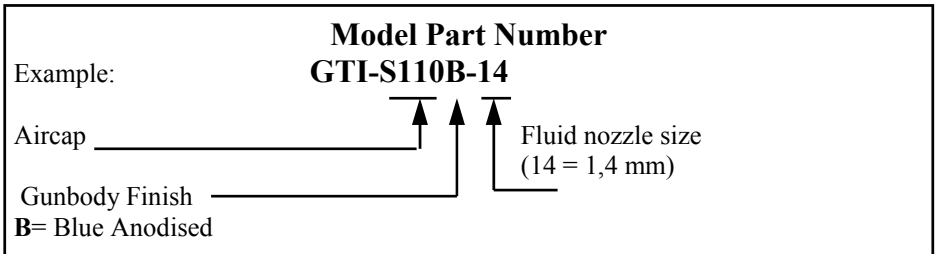
### Important

*Read and follow all instructions and Safety Precautions before using this equipment*

### Description

This product is suitable for use with both waterbased and solvent based coating materials. The design uses EPA compliant atomising technology to reduce overspray and improve coating efficiency.

**Important:** *These guns are not designed for use with highly corrosive and/or abrasive materials and if used with such materials it must be expected that the need for cleaning and/or replacement of parts will be increased. If there is any doubt regarding the suitability of a specific material contact your local Distributor or ITW Finishing direct.*



### Declaration of Conformity

We, ITW Finishing UK, Ringwood Road Bournemouth Dorset England declare under our sole responsibility that this product is in conformity with BS EN 292: parts 1 and 2 :1991 and BS EN 1953:1999, following the provisions of the Machinery Directive 89/392/EEC. This product also complies with the requirements of the EPA guidelines, PG6/34. Transfer efficiency certificates are available on request.

**B. Holt**, General Manager



# SAFETY WARNINGS

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## Fire and explosion

Solvents and coating materials can be highly flammable or combustible when sprayed. **ALWAYS refer to the coating material suppliers instructions and COSHH sheets before using this equipment**



Users must comply with all local and national codes of practice and insurance company requirements governing ventilation, fire precautions, operation and house-keeping of working areas



This equipment, as supplied, is **NOT** suitable for use with Halogenated Hydrocarbons.

Static Electricity can be generated by fluid and/or air passing through hoses. To prevent such a risk, earth continuity to the spray equipment and the object being sprayed should be maintained.

## Personal Protective Equipment



*Toxic vapours – When sprayed, certain materials may be poisonous, create irritation or be otherwise harmful to health. Always read all labels and safety data sheets for the material before spraying and follow any recommendations. **If In Doubt, Contact Your Material Supplier***



The use of respiratory protective equipment is recommended at all times. The type of equipment must be compatible with the material being sprayed

Always wear eye protection when spraying or cleaning the spraygun

Gloves must be worn when spraying or cleaning the equipment



**Training** – Personnel should be given adequate training in the safe use of spraying equipment.

## Misuse

Never aim a spraygun at any part of the body

Never exceed the max. recommended safe working pressure for the equipment

The fitting of non-recommended or non-original spares may create hazards

Before cleaning or maintenance, all pressure must be isolated and relieved from the equipment

The product should be cleaned using a gun washing machine. However, this equipment should not be left inside gun washing machines for prolonged periods of time.

## Noise Levels

The A-weighted sound level of sprayguns may exceed 85 dB (A) depending on the set-up being used. Details of actual noise levels are available on request. It is recommended that ear protection is worn at all times when spraying



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## Parts List

Ref. No	Description	Part Number	Qty
*1	Air Cap/Retaining ring	GTI-407-*	1
1a	Spring Clip	JGA-156-K5	1
+**2	Nozzle (up to 1.5 mm)	GTI-213-**-K	1
	Nozzle (1.6 mm to 2.2 mm)	GTI-214-**-K	1
3	Baffle & Seal	GTI-425-K	1
	Baffle seal—Kit of 5	JGS-72-K5	1
+4	Packing	GTI-439-K2	1
5	Spreader Valve	GTI-405-K	1
6	Stud and Screw	GTI-408-K5	1
+7	Needle (for GTI-214 Tip)	GTI-420-K	1
	Needle (for GTI-213 Tip)	GTI-413-K	1
+8	Spring and Pad	GTI-409-K5	1
9	Bushing	GTI-402-K	1
9a	Seal kit of 5	JGS-72-K5	1
10	Needle Adjusting Screw	GTI-414-K	1
11	Valve Assembly	JGK-449	1
12	Trigger	GTI-108	1
13	Connector	JGA-158	1
14	Airflow Valve	GTI-415-K	1
15	Lock Nut	JGA-51-K5	1
16	Seal	23165-001	1
17	Fluid Inlet Connector and seal	JGA-159-K	1
18	Fluid Tube	KRW-456-B	1
19	Yoke	KR-77-1	1
20	Washer - kit of 5	KS-48-K5	2
21	Cam	KR-130	1
22	Washer	KRW-40	1
23	Lid Gasket - kit of 3	KR-11-K3	1
24	Nut - kit of 5	KR-94-K5	1
25	Drip free diaphragm—kit of 5	KR-115-K5	1
26	Cup - Blue anodised	KRW-401-K	1
	Cup - PTFE coated	KR-494-1-K	1
27	Cup lid assembly	KR-4001-B	1
28	Cup - Blue anodised	KRW-502-B	1
29	Circlip	25746-007-K5	1
30	Circlip	SST-8434-K5	2
31	Seal & Pin Kit	GTI-428-K5	2
32	Air valve stem assembly	JGS-431-1	1
33	Spring	JGV-262-K5	1

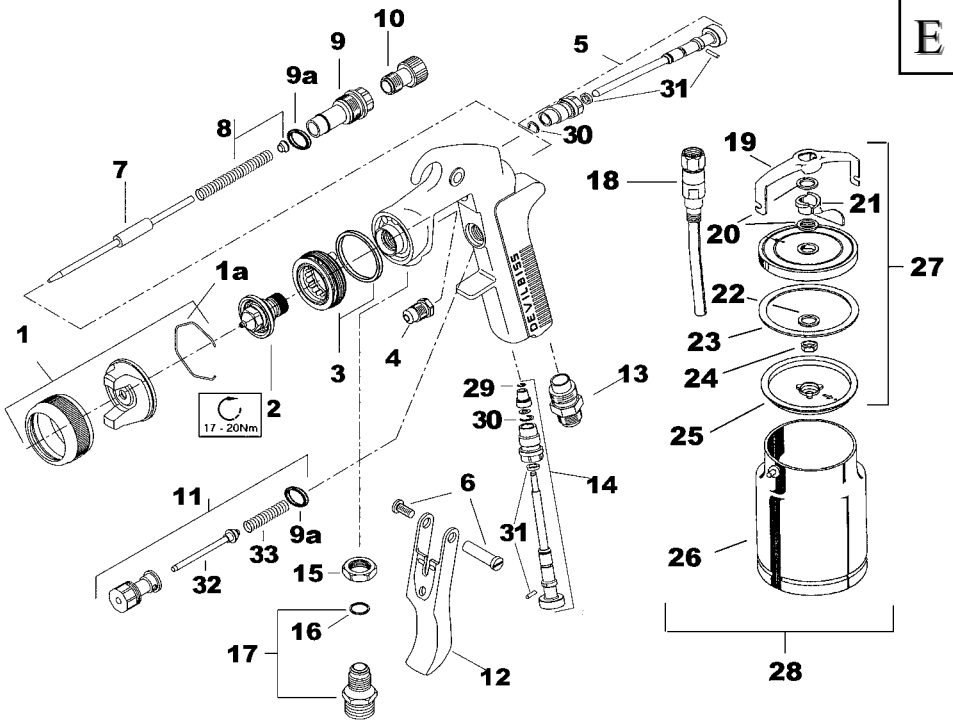
\* - \* Denotes Aircap Number - Available Aircaps No's 105 and 110

\*\* - \*\* Denotes Fluid Tip Size -

Available Sizes; GTI-213 0.85, 1.0, 1.1, 1.2, 1.3, 1.4, 1.5 mm

GTI-214 1.6, 1.8, 2.0 and 2.2 mm

+ - Parts included in service Kit (see accessories)



## Specification

Air supply connection -	Universal $\frac{1}{4}$ BSP and NPS
Fluid Supply Connection -	Universal $\frac{3}{8}$ BSP and NPS
Maximum static inlet pressure -	$P_1 = 9$ bar (130 psi)
Maximum static fluid pressure -	$P_2 = 9$ bar (130 psi)
Nominal gun inlet pressure with gun triggered -	2 bar (29 psi)
Gun Weight -	500 g
Cup Weight -	460g

## Materials of Construction

Gun body	-	Anodised or Nickel Plated Aluminium
Nozzle	-	Stainless steel
Needle	-	Stainless Steel
Cup (KR-494-1)-		Aluminium, internally coated with PTFE, SS pins
Cup (KRW-401-K) -		Anodised Aluminium with Brass Nickel plated pins
Lid Assembly	-	Aluminium and Brass Nickel plated
Cup Lid Gasket	-	Polyethylene
Diaphragm	-	Polyethylene

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## Installation

**Important:** *To ensure that this equipment reaches you in first class condition, protective coatings have been used. **Flush the equipment through with a suitable solvent before use.***

1. Attach air hose to connector (13). Recommended hose size 8 mm bore. The air supply should be filtered and regulated.
2. Attach the Cup Lid assembly m (27) to the Fluid Inlet connector (17).
3. Position the Yoke at right angles to the Gun with the Cam lever to the front (see picture). Make sure the vent hole in the lid is positioned under the Yoke and the hole in the diaphragm is 180° to the Lid vent hole.

## Operation

1. Mix coating material to manufacturers instructions.
2. Fill the cup with the required amount of material. Fill to no more than 25mm(1") from the top of the cup. **DO NOT OVERFILL.**
3. Attach Cup to the Lid assembly.
4. Turn needle adjusting screw (10) on the spraygun clockwise to prevent movement.
5. Turn pattern valve (5) counter-clockwise to fully open
6. Adjust inlet air pressure to give 2 bar (29psi) at the gun inlet with the gun triggered. (*pressure gauge attachment shown under Accessories is recommended for this*).
7. Turn needle adjusting screw counter clockwise until first thread shows.
8. Test spray. If the finish is too dry reduce airflow by reducing inlet pressure. If finish is too wet reduce fluid flow by turning needle screw (10) clockwise. If atomisation is too coarse, increase inlet air pressure. If too fine reduce inlet pressure.
9. The pattern size can be reduced by turning adjusting valve (5) clockwise.
10. Hold gun perpendicular to surface being sprayed. Arcing or tilting may result in uneven coating.
11. The recommended spray distance is 150-200 mm (6"-8").
12. Spray edges first. Overlap each stroke a minimum of 50%. Move gun at a constant speed.
13. Always turn off air supply and relieve pressure when gun is not in use.

### **Air Flow Valve (14)**

1. If the airflow valve (14) is fitted this can be used to reduce the inlet pressure through the gun. Screw the Adjusting Knob in to reduce pressure.

## Preventative Maintenance

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| <ol style="list-style-type: none"> <li>1. Turn off air and coating supply and relieve pressure in the supply lines, or if using QD system, disconnect from airline.</li> <li>2. Release Cup and raise the tube out of the material. Trigger the Gun and allow material to drain back into the cup.</li> <li>3. Dispose of the surplus material and clean the cup. Do not use sharp metallic tools to clean the cup they will damage the PTFE/ anodising surface.</li> <li>4. Remove air cap (1) and clean. If</li> </ol> | <p>any of the holes in the cap are blocked with coating material use a toothpick to clean. Never use metal wire which could damage the cap and produce distorted spray patterns</p> <ol style="list-style-type: none"> <li>5. Ensure the tip of the nozzle (2) is clean and free from damage. Build up of dried paint can distort the spray pattern.</li> <li>6. Lubrication – stud/screw (6), needle (7) and air valve (11) should be oiled each day.</li> </ol> |
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## Replacement of Parts

**Nozzle (2) and Needle (7) –** Remove parts in the following order: 10, 8, 7, 1 and 2. Replace any worn or damaged parts and re-assemble in reverse order. Recommended tightening torque for nozzle (2) 17-20 Nm (150-180 lbf in)

**Packing –** Remove parts 10, 8, 7. Unscrew cartridge (4). Fit new cartridge finger tight. Re-assemble parts 7, 8, and 10 and tighten cartridge (4) with spanner sufficient to seal but to allow free movement of needle. Lubricate with gun oil.

**Air valve (11) –** Remove Trigger, parts 6 and 12. Unscrew valve assembly. Re-assemble, fitting spring to valve head before fitting valve.

**Spreader valve (5) – Caution:** always ensure that the valve is in the fully open position by turning screw fully counter-clockwise before fitting to body.

### Air cap / Nozzle Selection

Refer to coating material manufacturers recommendations or ITW Finishing UK Website: [www.itweuropeanfinishing.com](http://www.itweuropeanfinishing.com)

## Accessories

**Spanner –** order SPN-5

**Cleaning Brush –** order 4900-5-1-K3

**Service Kit –** order GTi-416 add nozzle size as required (i.e. GTi-416-14)

**Pressure gauge Attachment –** order GA-515

**Gun Mounted Regulator –** order DVR-501

**Lubricant –** order GL-1-K10



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