

DEVILBISS

SB-E-2-3602-US

CE  II 2 G X

Operation Manual

GTI W - HVLP Gravity Spray Gun





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GTI W – HVLP Gravity-feed Spray Gun

Important

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

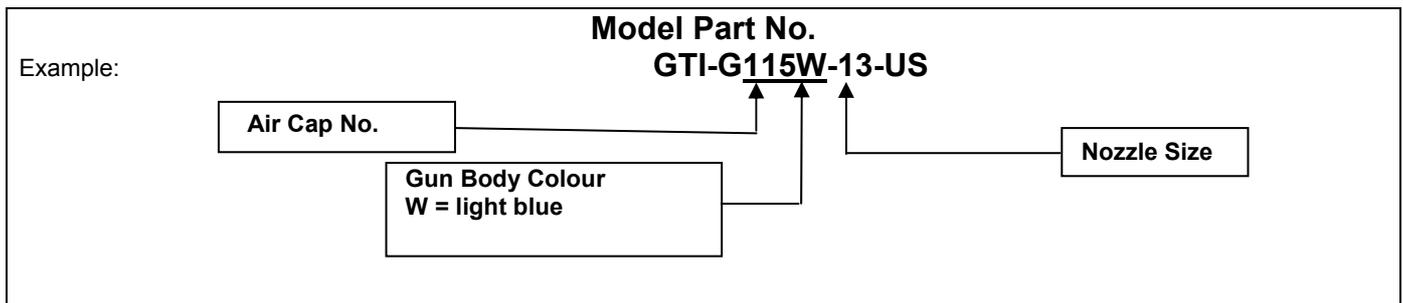
Description

The GTI W Gravity-feed Spray gun Kit is approved to ATEX regulations **94/9/EC**, protection level;

II 2 G X. Suitable for use in Zones 1 and 2

Important: *This HVLP spraygun is suitable for use with both water-based and solvent-based coating materials. The design uses EPA compliant atomising (HVLP) technology to reduce overspray and improve coating efficiency. This gun produces approximately 10 psi air cap pressure at 29 psi gun inlet pressure (complies with rules issued by SCAQMD and other air quality authorities)*

Nozzles and needles are manufactured in stainless steel. 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 Finishing direct.



EC Declaration of Conformity

We, **Finishing UK, Ringwood Rd, Bournemouth, Dorset, BH11 9LH, UK**, as the manufacturer of the **Spray gun model GTI-W**, declare, under our sole responsibility, that the equipment to which this document relates is in conformity with the following standards or other normative documents:

BS EN 292-1 PARTS 1 & 2: 1991, BS EN 1953: 1999; and thereby conform to the protection requirements of Council Directive **98/37/EEC** relating to **Machinery Safety Directive**, and;

EN 13463-1:2001, council Directive **94/9/EC** relating to **Equipment and Protective Systems intended for use in Potentially Explosive Atmospheres protection level II 2 G X**.

B. Holt, General Manager
30th June 2003

SAFETY WARNINGS



Fire and explosion



Solvents and coating materials can be highly flammable or combustible when sprayed. **ALWAYS refer to the coating material suppliers instructions and MSDS 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, by the spraying process and by cleaning non-conductive parts with cloths. To prevent ignition sources from static discharges, earth continuity must be maintained to the spray gun and other metallic equipment used. It is essential to use conductive air and/or fluid hoses.



Personal Protective Equipment



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

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 spray gun 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 spray guns 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.

Operating

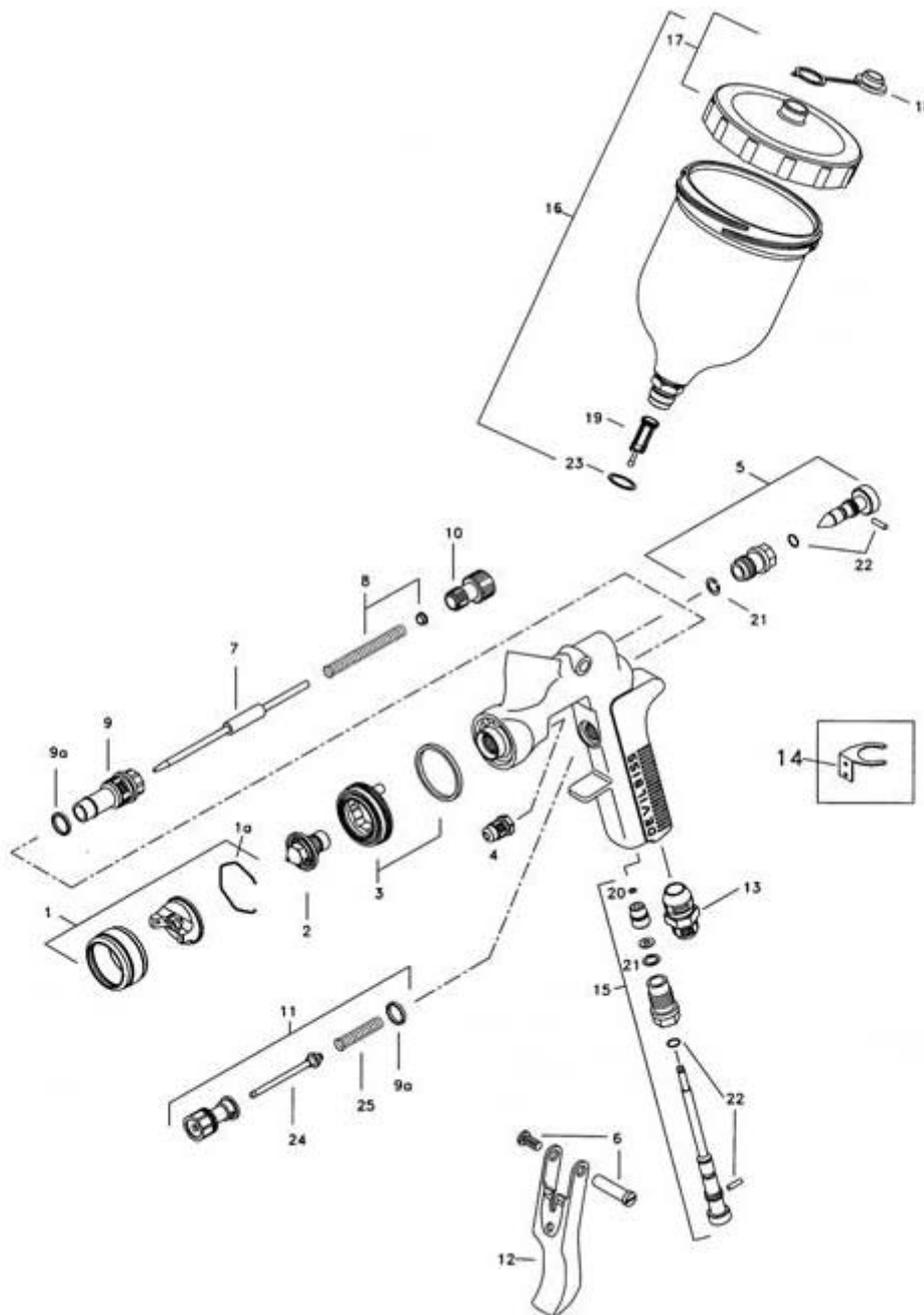
Spray equipment using high pressures may be subject to recoil forces. Under certain circumstances, such forces could result in repetitive strain injury to the operator.

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Parts List

Ref. No	Description	Part Number	Qty
1	Air cap/Retaining ring	GTI -407-115	1
1a	Spring clip	JGA-156-K10	1
2	Nozzle (up to 1.5 mm)	GTI -213--K	1
3	Baffle & seal	GTI -425	1
	Baffle seal – Kit of 5	GTI -33-K5	1
4	Packing	GTI -439-K2	1
5	Spreader valve	GTI -404	1
6	Stud and screw	GTI -408-K5	1
7	Needle	GTI -413	1
8	Spring and pad	GTI -409-K5	1
9	Bushing		1
9a	Seal kit of 5	JGS-72-K10	1
10	Needle adjusting screw	GTI -414	1
11	Valve assembly	JGK-449	1
12	Trigger	GTI -108	1
13	Connector	P-MB-51	1
14	Gun hook		1
15	Air flow valve	GTI -415	1
16	1/2 Ltr gravity cup kit	GFC-501	1
17	Cup lid	GFC-402	1
18	Drip check lid		1
19	Filter	KGP-5-K5	1
20	Circlip		1
21	Circlip		2
22	Seal & pin kit (+ SST-8434-K5)	GTI-428-K5	2
23	Washer	GFC-17-K5	1
24	Air-valve stem assembly		1
25	Spring		1

** Denotes Fluid tip size – Available sizes GTI-213 1.2, 1.3, 1.4, 1.5



Specification

Air supply connection -	Universal ¼" BSP and NPS
Maximum static inlet pressure -	P ₁ = 9 bar (130 psi)
Nominal gun inlet pressure with gun triggered -	2 bar (29 psi)
Maximum service temperature -	40°C
Gun weight (with cup) -	775 g

Materials of Construction

Gun body	-	Anodised aluminium
Nozzle	-	Stainless steel
Needle	-	Stainless steel
Cup	-	Acetal and stainless steel

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 hose must be conductive and electrical bond from the spray gun to earth should be checked with an ohmmeter. A resistance of less than $10^6\Omega$ is recommended.
2. Air supply should be filtered and regulated.

Operation

1. Mix coating material to manufacturers instructions.
2. Turn needle adjusting screw (10) counter-clockwise until first thread shows.
3. Turn pattern valve (5) counter-clockwise to fully open.
4. 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)*
5. Test spray. If the finish is too dry, reduce air flow 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.
6. The pattern size can be reduced by adjusting valve (5).
7. Hold gun perpendicular to surface being sprayed. Arcing or tilting may result in uneven coating.
8. The recommended spray distance is 150-200 mm (6"-8").
9. Spray edges first. Overlap each stroke a minimum of 50%. Move gun at a constant speed.
10. Always turn off air supply and relieve pressure when gun is not in use.

Air Flow Valve (15)

1. If the air flow valve (15) is fitted this can be used to reduce the inlet pressure through the gun. Screw the adjusting knob in to reduce pressure.

Preventative Maintenance

1. Turn off air supply and relieve pressure in the airline or, if using QD system, disconnect from airline.
2. Empty coating material into a suitable container and clean the gun and cup, preferably in a gun wash machine.
3. **IMPORTANT– the cup must not be cleaned or rubbed with a dry cloth or paper. It is possible to generate a static charge by rubbing which, if discharged to an earthed object could create an incendive spark and cause solvent vapours to ignite. Only use a dampened cloth or antistatic wipes if additional cleaning is required within a hazardous area.**
4. Remove air cap and clean. If 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.
5. Ensure the tip of the nozzle is clean and free from damage. Build-up of dried paint can distort the spray pattern.
6. Lubrication – stud/screw (6), needle (7) and air-valve (11) should be oiled each day.

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 – Remove parts 6 and 12. Unscrew valve assembly. Re-assemble fitting spring to valve head

Spreader valve – 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
www. com

Finishing UK Website:

Accessories

GFC-501 (Acetal) 20 oz. cup & GFC-502 (Aluminium) 32 Oz Cup Gravity Feed Cups:

These gravity feed cups are designed to be used with FLG, GFG, GFHV or GTI gravity feed sprayguns.

HAV-500 or HAV-501 Adjusting Valve. The HAV-500 does not have a pressure gauge. Use to control air usage at gun.

MSP-524 Twin Cartridge Paint Spray Respirator NIOSH – Certified (TC84a-1623) for respiratory protection in atmospheres not immediately dangerous to life.

WR-103 Wrench: contains all necessary tip, hose and nut sizes used on or with gun.

192218 Scrubs: Scrubs are a pre-moistened hand cleaner towel for painters, body men and mechanics that go where you go and no water is needed.

HAF- 507 Whirlwind In Line Air Filter: Removes water, oil and debris from the air line.

Spray Gun Lube SSL-10 (2 oz bottle) Compatible with all paint materials; contains no silicone or petroleum distillates to contaminate paint. MSDS Sheet available on request.

192212 Professional Spray Gun cleaning Kit: Contains six precision tools designed to effectively clean all Devilbiss, Binks, Finishline and other brand sprayguns.

Automotive Refinish Quick Connects for HVLP Guns (Air) High Flow Type

HC-4419 Stem ¼" NPT(F) HC-???? Coupler ¼" NPT(M)/ NPS(M)

HC-1166 Stem ¼" NPT(M) HC-4720 Coupler ¼" NPT(M)

GTI-5033-115 Air Cap Test Kit: The purpose of this test kit is to measure air cap atomizing air pressure at the center air port of the air cap. Used to confirm code compliance and as a daily quality control measure.

DeVilbiss Automotive Refinishing

U.S/ Canada Customer Service Office:
 1724 Indian Wood Circle
 Suite J-K Maumee, OH 43537
 Toll-Free Telephone: 1-800-445-3988 (U.S.A and Canada only)
 Toll-Free Fax 1-800-445-6643

Finishing Systems and Products

Ringwood Road,
 Bournemouth,
 BH11 9LH,
 England.
 Tel. No. (01202) 571111
 Telefax No. (01202) 581940,
 Website address <http://www.>

com

Oberflächentechnik GmbH & Co. KG

Justus-von-Liebig-Straße 31
 63128 Dietzenbach
 Tel (060 74) 403-1
 Telefax: (060 74) 403300
 Website address <http://www.> finishing.de

Automotive Finishing UK

Anchorbrook Industrial Estate
 Lockside
 Aldridge,
 Walsall,
 UK.
 Tel. No. (01922) 423700
 Telefax No. (01922) 423705,
 Website address <http://www.>

com

Surfaces Et Finitions

163-171 avenue des Auréats B.P. 1453
 26014 VALENCE CEDEX FRANCE
 Tél. (33) 475-75-27-00
 Télex 345 719F DVILBIS
 Téléfax: (33) 475-75-27-99

Finishing Systems and Products is a Division of Ltd. Reg. Office:
 Admiral House,
 St Leonard's Road,
 Windsor,
 Berkshire,
 SL4 3BL,
 UK
 Registered in England: No 559693 Vat No 619 5461 24

Sept 06