STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL
AIR POLLUTION CONTROL PERMIT APPLICATION

APPLICATION FOR PERMITTING AUTOBODY SHOPS
Attach any additional information (manufacturer specifications, MSDS, etc.)
Include Drawings of All Equipment. Use additional pages if necessary

DEPARTMENT USE ONLY

Permit Number: APC-2013/0060-C/O

Received Stamp: RECEIVED SEP 04 2012 4468 AIR QUALITY MGT

1. Name of Auto Body Shop	2. Date of Application	3. Physical Location (Street Address)	City	County	Zip Code
M. R. AUTOMOTIVE, INC	9-22-2012	2905 PULASKI HWY.	NEWARK	NEW CASTLE	19702

4. Mailing Address	City	County	Zip Code
SAME			

5. Name of Owner	6. Name of Person Signing This Application	7. Title of Person Signing This Application	8. Telephone
MATTHEW RATTÉ	SAME	PRESIDENT / OWNER	302 731 2886

9. Is a Copy of the Applicant Background Information Questionnaire on Record at the Department? *(required for new permit applicants only)* ☐ Yes ☑ No

10. **Provide the make and model of the ventilated sander** used at your shop. Attach a manufacturer's specification or vendor data sheet.

Ventilated Sander (MAKE) N/A (MODEL) _____

11. **Provide the number of spray booths** at your shop and the make and model of each spray booth.

Number of Spray Booths 1 Make/Model _____

The manufacturer's specification or vendor data sheet should provide the following information at a minimum:

(1) Dimensions of the spray booth, 10 FT HT X 13 FT WIDE X 29 FT LGTH

(2) Stack exhaust exit velocity (fps) or exhaust flow rate (acfm) from the spray booth, 15200 ACFM

(3) Stack height (from grade) and diameter of the spray booth exhaust stack, 12 FT 30" DIA

(4) Removal efficiency of the filters used in the spray booth, and 98%

(5) Recommended pressure drop across the filters used in the spray booth. N/A .25-.95 IWC

(6) Distance of exhaust stack to nearest property line in feet (ft), 25'

Attach a manufacturer's specification or vendor data sheet. Attach additional pages as needed.

12. **Provide the number of spray guns or other coating applicators** used at the shop along with the make and model of each. Attach a manufacturer's specification or vendor data sheet.

MAKE: SATA MODEL: NR 2000 Tip size (mm): 1.4 Flow Rate (g/s or oz/min): _____

MAKE: DEVILBISS MODEL: FINISHLINE Tip size (mm): 1.3 Flow Rate (g/s or oz/min): _____

MAKE: _____ MODEL: _____ Tip size (mm): _____ Flow Rate (g/s or oz/min: _____

STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL
AIR POLLUTION CONTROL PERMIT APPLICATION

APPLICATION FOR PERMITTING AUTOBODY SHOPS
Attach any additional information (manufacturer specifications, MSDS, etc.)
Include Drawings of All Equipment. Use additional pages if necessary.

DEPARTMENT USE ONLY

Permit Number: APC-2013/0060-C/O

Received Stamp: RECEIVED SEP 04 2012 4468 AIR QUALITY MGT

1. Name of Auto Body Shop	2. Date of Application
M.R. AUTOMOTIVE, INC	8-22-2012

3. Physical Location (Street Address)	City	County	Zip Code
2905 PULASKI HWY.	NEWARK	NEW CASTLE	19702

4. Mailing Address	City	County	Zip Code
SAME			

5. Name of Owner	6. Name of Person Signing This Application	7. Title of Person Signing This Application	8. Telephone
MATTHEW RATTÉ	SAME	PRESIDENT/OWNER	302 731 2886

9. Is a Copy of the Applicant Background Information Questionnaire on Record at the Department? (*required for new permit applicants only*) ☐ Yes ☑ No

10. **Provide the make and model of the ventilated sander** used at your shop. Attach a manufacturer's specification or vendor data sheet.

Ventilated Sander (MAKE) N/A (MODEL) _____

11. **Provide the number of spray booths** at your shop and the make and model of each spray booth.

Number of Spray Booths 1 Make/Model _____

The manufacturer's specification or vendor data sheet should provide the following information at a minimum:

(1) Dimensions of the spray booth, 10 FT HT X 13 FT WIDE X 29 FT LGTH

(2) Stack exhaust exit velocity (fps) or exhaust flow rate (acfm) from the spray booth, ~~STACK - DIAMETER 2 FT~~ ~~1551 RPM~~ 15200 ACFM 30"

(3) Stack height (from grade) and diameter of the spray booth exhaust stack, 12 FT 30" reduced to 24" ~~BLADE~~

(4) Removal efficiency of the filters used in the spray booth, and 98%

(5) Recommended pressure drop across the filters used in the spray booth, ~~N/A~~ ~~NOT TO EXCEED 1.0 INCHES OF WATER~~ → .25 - .95 IWC

(6) Distance of exhaust stack to nearest property line in feet (ft), 25'

Attach a manufacturer's specification or vendor data sheet. Attach additional pages as needed.

12. **Provide the number of spray guns or other coating applicators** used at the shop along with the make and model of each. Attach a manufacturer's specification or vendor data sheet.

MAKE: SATA MODEL: NR 2000 Tip size (mm): 1.4 Flow Rate (g/s or oz/min): 6-12 oz./MIN

MAKE: DEVILBISS MODEL: FINISHLINE Tip size (mm): 1.8 Flow Rate (g/s or oz/min): 6-12 oz /MIN

MAKE: MODEL: Tip size (mm): Flow Rate (g/s or oz/min:

STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL
AIR POLLUTION CONTROL PERMIT APPLICATION

13. **Provide a list** (or attach additional pages as needed) of all of the coatings, reducers, catalysts, surface preparation products, and cleanup solvents used in the shop. Attach a Material Safety Data Sheet and Certified Product Data Sheet for each material and most recent 12-month VOC usage report from your coating supplier.

Coating(s) see attached

Reducer(s)

Catalyst(s)

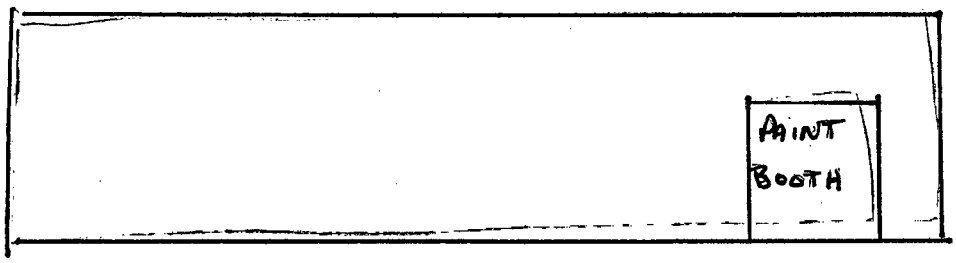
Surface Preparation Product

Cleanup Solvents

Other

14. **Attach a shop plot plan or diagram** or draw one here describing the location of your spray booths and stacks. Include the distance to your nearest neighbor or property line (in feet). 1000'

SEE ATTACHED DIAGRAM.



PROPERTY OWNED BY MATTHEW RATTÉ LINE

I, the undersigned, hereby certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all of its attachments as to the truth, accuracy, and completeness of this information. I certify based on information and belief formed after reasonable inquiry, the statements and information in this document are true, accurate, and complete. By signing this form, I certify that I have not changed, altered, or deleted any portions of this application. I acknowledge that I cannot commence construction, alteration, modification or initiate operation until I receive written approval (i.e. permit, registration, or exemption letter) from the Department. I acknowledge that I may be required to perform testing of the equipment to receive construction or operation approval, and that if I do not receive approval to construct or operate that I can appeal the decision.

MATTHEW E. RATTÉ
Owner or Authorized Agent

Signature of Owner or Authorized Agent

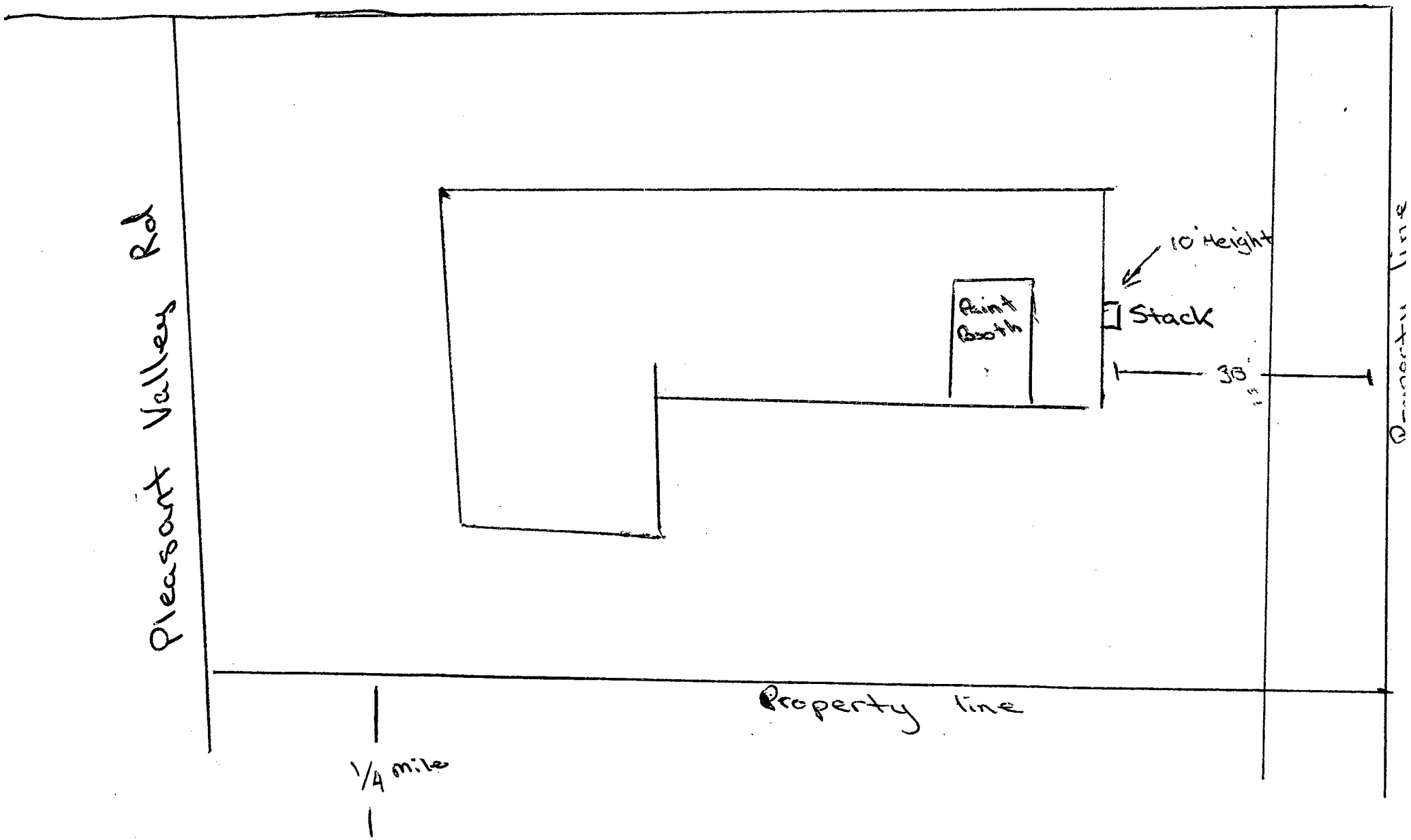
8/22/12
Date

Please submit this application and required fees to:

DNREC Division of Air and Waste Management
Air Quality Management
Attention: Laura Bogus
655 S. Bay Rd., Suite 5N
Dover, DE 19901

Make checks payable to: State of Delaware

RT 40


Pleasant Valley Rd
Paint Booth
10' Height
Stack
30'
Property line
Property line
1/4 mile

Google earth

feet 2000
meters 600

New Castle County eParcelView Map

Quick Start | Help | Land Use Main

Parcel #: 1102500007 **Property Class:** COMMERCIAL

Map Tools

Zoom Extent

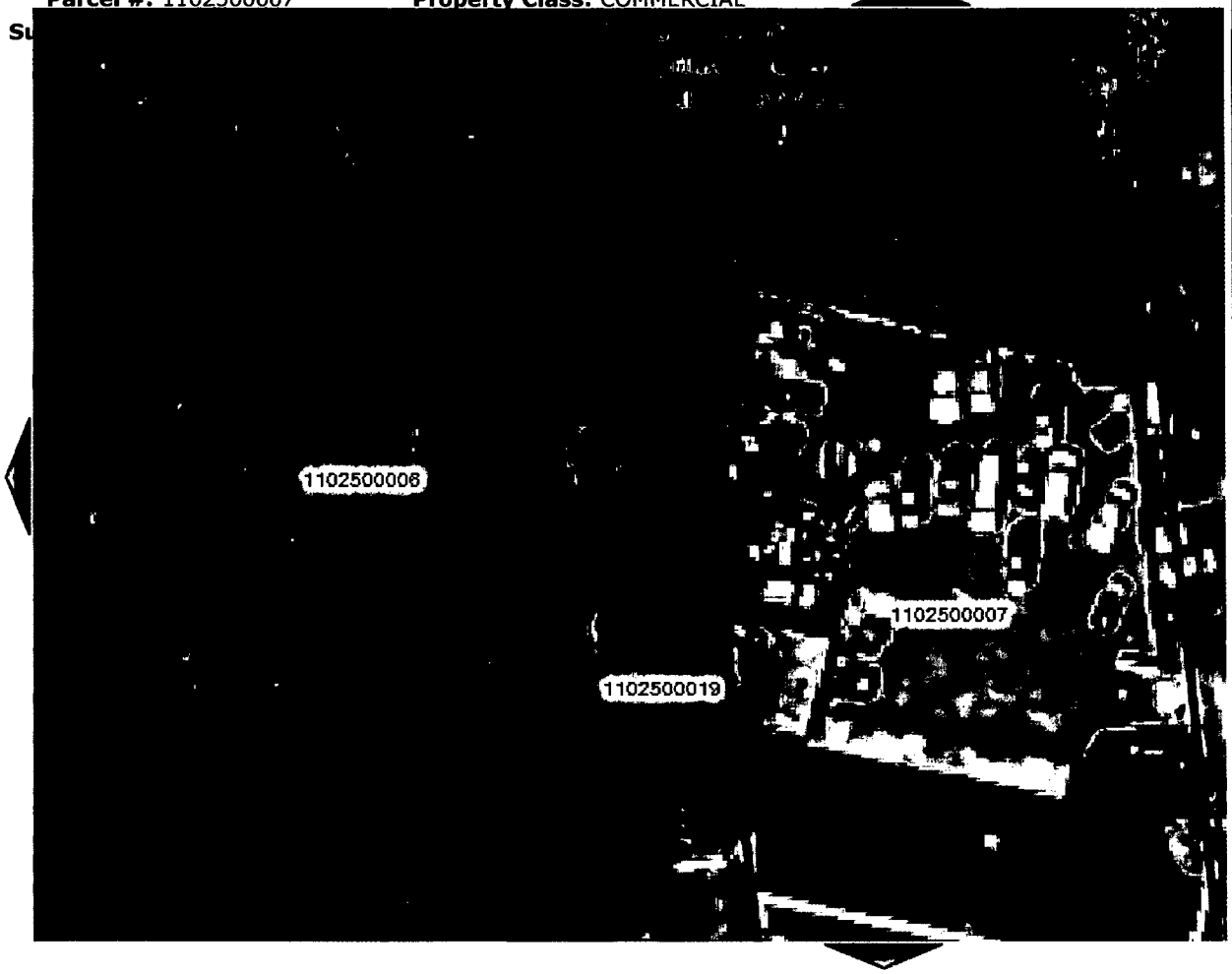
Zoom In

Zoom Out

Pan Map

Refresh Map

Identify



Map Layers

- Layers
- Land Use
- Districts
- Infrastructure
- Map Legend
- Identify
- Query
- Tools
- Measure*

X: 556470.29 **Y:** 584984.67
Lat: 39.605650
Lon: -75.770515

DELAWARE DEPARTMENT OF NATURAL RESOURCES
AND ENVIRONMENTAL CONTROL ("DNREC")

ENVIRONMENTAL PERMIT APPLICATION BACKGROUND STATEMENT

Pursuant to 7 Del. C. Chapter 79

FILING STATUS:

This Background Statement is being filed with DNREC because:

☑ 1. It is an initial application for a new permit (or permits) and the applicant or applicant company has not been issued any permits by DNREC in the previous five (5) years [See 7 Del. C. § 7902(a) and (b)];

☐ 2. It is required on an annual basis because the applicant or applicant company has been designated a chronic violator pursuant to 7 Del. C. § 7904 [See 7 Del. C. § 7902(a)(7) and (b)(2)]; or

☐ 3. It is required on an annual basis as the applicant or applicant company has been found guilty, pled guilty or no contest to any crime involving violation of environmental standards which resulted in serious physical injury or serious harm to the environment as defined in 7 Del. C. § 7902(c) [See 7 Del. C. § 7902(a)(7) and (b)(2)].

APPLICANT OR APPLICANT COMPANY'S NAME OR COMPANY'S NAME FILING STATEMENT	MATTHEW E. RATTÉ M. R. AUTOMOTIVE, INC
DATE OF APPLICATION OR DATE OF STATEMENT	8-22-2012
PERMIT(S) BEING APPLIED FOR OR STATEMENT FOR FILING STATUSES 2 OR 3	☑ Permit Type(s) Air Pollution Control ☐ Statement for filing Statuses 2 or 3—If filing under these statuses, attach a statement of the date of designation as Chronic Violator or the date of Conviction/Plea.
OTHER DNREC PERMITS HELD	☑ N/A – No other permits held with DNREC ☐ List of all DNREC permits currently held with dates of issuance and expiration attached.

ENVIRONMENTAL PERMIT APPLICATION BACKGROUND STATEMENT

Please note: Companies filing statements pursuant to Chapter 79 have the right to identify information to be afforded confidential status pursuant to 7 Del. C. § 7903(b) and the requirements set forth in Section 6, "Requests for Confidentiality" of the DNREC *Freedom of Information Act Regulation*.

PROVIDING ALL OF THE INFORMATION REQUESTED IN THIS FORM SATISFIES THE REQUIREMENTS OF 7 DEL. C. CHAPTER 79 ("ENVIRONMENTAL PERMIT APPLICATION BACKGROUND STATEMENT") UNLESS THE DELAWARE DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL ("DNREC") OR THE DELAWARE DEPARTMENT OF JUSTICE DETERMINES THAT ADDITIONAL SUBMISSIONS ARE NECESSARY. FAILURE TO PROVIDE THE INFORMATION REQUESTED OR PROVIDING ERRONEOUS INFORMATION IS GROUNDS FOR DENYING OR REVOKING AN ENVIRONMENTAL PERMIT/APPROVAL/LICENSE, AND FOR CIVIL AND/OR CRIMINAL PENALTIES.

A. **(Authority – 7 Del. C. § 7902(a)(1&2) & § 7905)** Attach a complete list (full names) of all current members of the applicant company's board of directors, all current corporate officers, all persons owning more than 20% of the applicant's stock or other resources, all subsidiary/affiliated companies with type of business performed, street addresses, all parent companies with addresses, all companies with which the applicant's company shares two or more members of the board of directors, and the name(s) of the person(s) serving as the applicant's local chief operating officer(s) with respect to each facility covered by the permit in question or for the statement required for filing Statuses 2 or 3. [Note: For companies that do not have a *facility* located in Delaware, no listing for the local chief operating officer(s) is required].

- ☑ Information attached
- ☐ Information attached, except for local chief operating officer as there is no facility located in the State of Delaware.

B. **(Authority - 7 Del. C. § 7905)** Please check one of the following selections below, showing type of ownership for the applicant or applicant/statement company:

☐	Proprietorship	List the state, county, book record and page number where the certificate is found (Attach hereto).
☐	Partnership	List the state, county, book record and page number where the certificate is found (Attach hereto).
☑	Corporation (LLCs included)	List the city, state, date of incorporation, corporation file number, current corporate standing, registered agent, and address of the registered agent (Attach hereto).
☐	Municipality	
☐	Public Institution/ Government Agency	
☐	Other	_____

C. **(Authority - 7 Del. C. § 7902(a)(3) & § 7905)** Have any of the following been issued to or agreed to by the applicant or applicant/statement company, any employee, person, entity, or subsidiary/affiliated company, specified in response to Item A, for violation of any environmental statute, regulation, permit, license, approval, or order, regardless of the state in which it occurred, during the five years prior to the date of this application/statement

OFFENSE	YES	NO
Notice of Violation(s)		✓
Administrative Order(s)		✓
Administrative Penalty(ies)		✓
Civil Action(s)		✓
Civil Penalty(ies)		✓
Civil and/or Administrative Settlement Agreement(s)		✓
Permit/License/Approval Revocation		✓
Arrest(s)		✓
Conviction(s)		✓
Criminal Penalty(ies)		✓
Criminal Plea Bargain		✓

D. **(Authority - 7 Del. C. § 7902(a)(3), (a)(4) & § 7905)** If you answered "yes" to any of the actions listed in Item C above for the applicant or applicant company or any other person identified in Item A, attach a description of the incidents or events leading to the issuance of each action, regardless of the state in which it occurred, for the 5 years prior to the date of the statement, and the disposition of each action, what state the action/offense occurred in, and any actions that have been taken to correct the violations that led to such enforcement action.

☑ N/A

☐ Information attached

E. **(Authority - 7 Del. C. § 7902(a)(5) & § 7905)** Attach a description of any felony or other criminal conviction for a crime involving harm to the environment or violation of environmental standards of any person or entity identified in Item A above that resulted in a fine greater than $1,000 or a sentence longer than 7 days, regardless of whether such fine or sentence was suspended.

☑ N/A

☐ Description attached

F. **(Authority - 7 Del. C. § 7902(a)(6) & § 7905)** Attach copies of any and all settlements of environmental claims involving the applicant, associated with actions identified in response to Item D above, whether or not such settlements were based on agreements where the applicant did not admit liability for the action.

☑ N/A

☐ Information attached

Items for Filing Statuses 2 or 3 Only

G. (Authority - 7 Del. C. § 7902(a)(7) and § 7905) If the applicant or applicant/statement company has been found guilty, pled guilty or no contest, to any crime involving violation of environmental standards which resulted in serious physical injury or serious harm to the environment attach a summary of the events involved and a copy of the disposition of the action (*See 7 Del. C. § 7902(c) for definitions of "serious physical injury" or "serious harm to the environment" before answering this question.*)

☑ N/A

☐ Yes – Information Attached.

H. (Authority - 7 Del. C. § 7902(a)(8)) – If the applicant or applicant/statement company has been designated a chronic violator under 7 Del. C. § 7904, a detailed written report from an independent inspector who has inspected the applicant's premises for the purpose of detecting potential safety and environmental hazards to employees and the surrounding community. The Secretary may waive the duty to submit a detailed written report upon a showing of good cause by the applicant. A showing by the applicant that the acts which caused it to be designated as a chronic violator did not jeopardize public health shall constitute "good cause" under this paragraph.

I. (Authority - 7 Del. C. § 7902(a)(7)) – If the applicant or applicant/statement company has been designated a chronic violation under § 7904 of this Title, ***OR*** has been found guilty or pled no contest to any crime involving violation of environmental standards which resulted in serious physical injury or serious harm to the environment, a statement made under oath by the applicant or applicant/statement company's local chief operating officer with respect to the facilities covered by the permit, stating that: (a) disclosures made by the applicant/reporting company under federal and state environmental statutes and regulations during the preceding calendar year have been, to the chief operating officer's knowledge, complete and accurate, and (b) that the facility has implemented policies, programs, procedures, standards or systems reasonably designated, in light of the size, scope, and nature of facility operations to detect deter and promptly correct any noncompliance with state environmental statutes and regulations. The statement filed pursuant to this paragraph shall include an acknowledgement by the affiant that intentionally false statements submitted in compliance with this paragraph constitute criminal perjury as defined at 11 Del. C. §§1221-1222.

STATE OF DELAWARE – DEPT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

ENVIRONMENTAL PERMIT BACKGROUND STATEMENT

CERTIFICATION

I HEREBY CERTIFY THAT I HAVE READ THE PRECEEDING SUBMISSION, HAVE PROVIDED ALL OF THE INFORMATION REQUESTED, AND THAT ALL OF THE INFORMATION PROVIDED IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

DATE: 8/22/12

SIGNATURE—APPLICANT OR
OFFICER OF APPLICANT / STATEMENT COMPANY

NAME: MATTHEW E. RATTÉ

TITLE: PRESIDENT / OWNER

COMPANY NAME: M. R. AUTOMOTIVE, INC

ADDRESS: 2905 PULASKI HWY
NEWARK, DE 19702

TELEPHONE: 302 731 2886

FAX NUMBER: 302 731 5477

REGISTERED AGENT NAME: SAME

ADDRESS:

TELEPHONE:

FAX NUMBER:

SWORN TO AND SUBSCRIBED

BEFORE ME THIS 29 DAY OF

August, 2012.

NOTARY PUBLIC SIGNATURE (SEAL)

Roy Mitchell

PRINTED NAME OF NOTARY PUBLIC

DE / New Castle

STATE / COUNTY

MY COMMISSION EXPIRES ON: ROY A. MITCHELL
Notary Public - State of Delaware
My Comm. Expires Dec. 15, 2012

jmb:20-24.doc/Rev. 8/2006

Department of State: Division of Corporations

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Entity Details

File Number:	**5114584**	Incorporation Date / Formation Date:	**02/15/2012** (mm/dd/yyyy)
Entity Name:	**M.R. AUTOMOTIVE, INC.**		
Entity Kind:	**CORPORATION**	Entity Type:	**GENERAL**
Residency:	**DOMESTIC**	State:	**DE**
Status:	**GOOD STANDING**	Status Date:	**03/08/2013**

REGISTERED AGENT INFORMATION

Name:	**M.R. AUTOMOTIVE, INC.**		
Address:	**2909 PULASKI HIGHWAY**		
City:	**GLASGOW**	County:	**NEW CASTLE**
State:	**DE**	Postal Code:	**19702**
Phone:			

Additional Information is available for a fee of $20.00. This information will include current franchise tax assessment, current filing history and more..

Would you like ○ Tax & History Information [Submit]

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To contact a Delaware Online Agent click here.

State of Delaware
Secretary of State
Division of Corporations
Delivered 05:20 PM 02/15/2012
FILED 05:20 PM 02/15/2012
SRV 120175677 - 5114584 FILE

CERTIFICATE OF INCORPORATION
OF
M.R. AUTOMOTIVE, INC.

FIRST: The name of this corporation (hereinafter referred to as the "Corporation") is M.R. Automotive, Inc.

SECOND: The Corporation's registered agent in the State of Delaware is to be located at 2909 Pulaski Highway, Glasgow, New Castle County, Delaware, 19702. The name of its registered agent at such address is M.R. Automotive, Inc.

THIRD: The purpose of the Corporation is to engage in any lawful activity for which corporations may be organized under the General Corporation Law of Delaware.

FOURTH: The total number of shares of stock which the Corporation is authorized to issue is one hundred (100) shares of common stock with no par value.

FIFTH: The name and mailing address of the Incorporator is Williams, Humphreys & Company LLC, 1831 Delaware Avenue, Wilmington, Delaware 19806.

SIXTH: The Board of Directors of the Corporation is authorized and empowered to make, alter, amend and repeal the By-Laws of the Corporation. Elections of Directors need not be by ballot unless the By-Laws of the Corporation shall so provide.

SEVENTH: No Director of the Corporation shall have any personal liability to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a Director; provided, however, that nothing herein shall eliminate or limit the liability of a Director: (1) for any breach of the Director's duty of loyalty to the Corporation or its stockholders; (2) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law; (3) under Section 174 of the Delaware General Corporation Law; or (4) for any transaction from which the Director derived an improper personal benefit.

I, the undersigned Incorporator, hereby acknowledge that the foregoing certificate of incorporation is my act and deed and that the facts therein stated are true, and accordingly hereunto have set my hand this 15th day of February 2012.

Donna M. Patille, Associate
Williams, Humphreys & Company, LLC

ORGANIZATIONAL MINUTES OF THE INCORPORATOR

OF

M.R. AUTOMOTIVE, INC.

The following organizational actions are hereby taken by WILLIAMS, HUMPHREYS & COMPANY, LLC, the sole incorporator of M.R. AUTOMOTIVE, INC., a Delaware corporation (hereinafter referred to as the "Corporation"), this 15th day of February 2012, at the offices of Williams, Humphreys & Company LLC, Wilmington, Delaware 19806:

The Certificate of Incorporation of the Corporation has been filed in the Office of the Secretary of State of Delaware, and the fees for filing same have been paid to the Secretary of State.

The Incorporator hereby appoints the following person to serve as the sole member of the Corporation's board of directors until the first annual meeting of stockholders or otherwise until the election and qualification of successors: Matthew E. Ratte.

No further actions are taken by the Incorporator.

Donna M. Patille, Incorporator
Williams Humphreys & Company LLC

DEVILBISS.
AUTOMOTIVE REFINISHING

11360 S. Airfield Road
Swanton, OH 43558

419.825.8100 TEL
419.825.8110 FAX
www.autorefinishdevilbiss.com

January 24, 2011

This letter is to inform you that all of the Binks and DeVilbiss spray guns listed below comply with EPA NESHAP 40 CFR, Part 63 Subpart HHHHHH. If you should have any questions concerning any code compliance issues, please contact DeVilbiss Customer Service at (800)445-3988.

GUN DESIGNATION	ORDER NUMBER	MODEL NUMBER	DESCRIPTION	AIR CAP	HVLP / COMPLIANT
CVI	802851	CVI-620G	CVI GRAVITY GUN (1.3, 1.4 - 505 & 510)	505 / 510	HVLP / COMPLIANT
CVI	802942	CVI-501-510-10	CVI PRESSURE GUN (1.0, 1.4 – 505)	505	HVLP
CVI	802949	CVI-620GW	CVI GRAVITY WATERBORNE GUN (1.3, 1.4 - 505 & 510)	505 / 510	HVLP / COMPLIANT
CVI	803373	CVI-522G	CVI UNCUPPED GRAVITY GUN (1.2, 1.3 – 505 & 510)	505 / 510	HVLP / COMPLIANT
FINISHLINE	803060	FLG-647-WB	FINISHLINE WATERBORNE VALUE KIT (1.3, 1.5, 1.8 - 3)	3	HVLP
FINISHLINE	803096	FLG-648	FINISHLINE PRIMER VALUE KIT (1.8, 2.2 - 3)	3	HVLP
FINISHLINE	803249	FLG-654	FINISHLINE SOLVENT BASE VALUE KIT (1.3, 1.5, 1.8 - 3)	3	HVLP
GTI	170156	GTI-620G	GTI HVLP GRAVITY GUN (1.3, 1.4, 1.5 - 2000)	2000	HVLP
GTI	170159	GTI-520P-11	GTI HVLP PRESSURE GUN (1.1 - 2000)	2000	HVLP
GTI	170165	GTI-546P-14	GTI HVLP PRESSURE GUN (1.4 - 46MP)	46MP	HVLP
GTI	170161	GTI-620S	GTI HVLP SUCTION GUN KIT (2.0, 2.2 - 2000)	2000	HVLP
GTI	802172	802172	GTI UNCUPPED HVLP GRAVITY GUN (1.3, 1.4, 1.5 - 2000)	2000	HVLP
M1-G	901210	6924-0000-0	M1-G HVLP GRAVITY GUN (1.4 - 93P)	93P	HVLP
MACH 1	901192	6202-1202-8	MACH 1 HVLP PRESSURE GUN (1.4 - 97AP)	97AP	HVLP
PLUS	110264	GFG-670	PLUS HIGH EFFICIENCY GRAVITY GUN (1.2, 1.3, 1.4 - 410)	410	COMPLIANT
PLUS	802170	802170	PLUS UNCUPPED HIGH EFFICIENCY GRAVITY GUN (1.2, 1.3, 1.4 - 410)	410	COMPLIANT
PRI	803248	PRI-612G	PRI HVLP GRAVITY FEED PRIMER GUN (1.4, 1.8 - 101)	101	HVLP
SRI	170177	SRI-630G-10	SRI HVLP SPOT REPAIR GUN (1.0 - 215)	215	HVLP
SRI	802150	SRI-631G-10	SRI HVLP SPOT REPAIR GUN - BUMPER DEMON (1.0 - 215)	215	HVLP
SRIPRO	803311	SRIPRO-635G-10	SRIPRO SPOT REPAIR GUN (1.0 - HS1)	HS1	HVLP
STARTINGLINE	802342	802342	STARTINGLINE AUTO PAINTING/TOUCHUP SYSTEM	HVLP	HVLP
STARTINGLINE	802343	802343	STARTINGLINE AUTO PAINTING/PRIMING SYSTEM	HVLP	HVLP
STARTINGLINE	802405	802405	STARTINGLINE DETAIL GUN	HVLP	HVLP
STARTINGLINE	802789	802789	STARTINGLINE 3-GUN KIT	HVLP	HVLP
STARTINGLINE	803067	803067	STARTINGLINE BODY PREP KIT	HVLP	HVLP
STARTINGLINE	803485	803485	STARTINGLINE HVLP PRIMER PACK	HVLP	HVLP
TEKNA	703063	703063	TEKNA HVLP (1.3 - 202 & 909)	202 / 909	HVLP
TEKNA	703064	703064	TEKNA HVLP (1.4 - 202 & 909)	202 / 909	HVLP
TEKNA	703065	703065	TEKNA HIGH EFFICIENCY (1.2, 1.3 - 7E7)	7E7	COMPLIANT
TEKNA	703086	703086	TEKNA HVLP WATERBORNE (1.3 - 202 & 909)	202 / 909	HVLP
TEKNA	703087	703087	TEKNA HVLP WATERBORNE (1.4 - 202 & 909)	202 / 909	HVLP
TEKNA	703088	703088	TEKNA HIGH EFFICIENCY WATERBORNE (1.2, 1.3 - 7E7)	7E7	COMPLIANT
TEKNA	703131	703131	TEKNA HVLP & HIGH EFFICIENCY (1.5 - 909 & 7E7)	909 / 7E7	HVLP / COMPLIANT
TEKNA	703290	703290	TEKNA UNCUPPED HIGH EFFICIENCY (1.4 - 7E7)	7E7	COMPLIANT
TEKNA	703292	703292	TEKNA UNCUPPED HIGH EFFICIENCY (1.2, 1.3 - 7E7)	7E7	COMPLIANT
TEKNA	703295	703295	TEKNA HVLP & HIGH EFFICIENCY (1.4 - 202/909/7E7)	202/909/7E7	HVLP / COMPLIANT
TEKNA	703346	703346	TEKNA UNCUPPED HIGH EFFICIENCY (1.4, 1.5 - 7E7)	7E7	COMPLIANT
TEKNA	703488	703488	TEKNA COPPER UNCUPPED HIGH EFFICIENCY (1.2, 1.3 – 7E7)	7E7	COMPLIANT
TEKNA	703489	703489	TEKNA COPPER HIGH EFFICIENCY (1.2, 1.3 – 7E7)	7E7	COMPLIANT
TEKNA	703496	703496	TEKNA COPPER UNCUPPED HIGH EFFICIENCY (1.3, 1.4 – 7E7)	7E7	COMPLIANT
TEKNA	703497	703497	TEKNA COPPER HIGH EFFICIENCY (1.3, 1.4 – 7E7)	7E7	COMPLIANT

Sincerely,

William Hofert
Controller and Regulatory Affairs

ATTENTION!

READ BEFORE ATTACHING THE AIR HOSE

HVLP AIR SUPPLY REQUIREMENTS

FULL SIZE GUN: 30 PSI inlet pressure provides 10 PSI at the air cap. Consumes 13 CFM.

TOUCHUP GUN: 30 PSI inlet pressure provides 10 PSI at the air cap. Consumes 8 CFM.

NOTE: USE 5/16" OR LARGER I.D. AIR HOSES

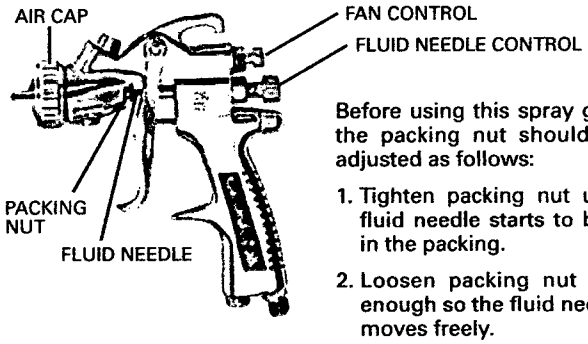
SET-UP AND ADJUSTMENT INSTRUCTIONS

1. Attach cup to gun and flush solvent through gun to remove oils.
2. Tighten packing nut—see instructions.
3. Fully open fan and fluid needle controls (turn counter-clockwise).
4. If desired, attach air adjusting valve with gauge and/or quick disconnect to air inlet, then attach hose.
5. Spray test and adjust air pressure, fan size, and fluid flow as required. Recommended spray distance is 6-8 inches.

WARNING

A failure resulting in injury or damage may be caused by pressure beyond top of scale, excessive vibration or pressure pulsation, excessive instrument temperature, corrosion of the pressure containing parts or other misuse of the air adjusting valve with gauge.

PACKING ADJUSTMENT INSTRUCTIONS



Before using this spray gun, the packing nut should be adjusted as follows:

1. Tighten packing nut until fluid needle starts to bind in the packing.
2. Loosen packing nut just enough so the fluid needle moves freely.

The packing nut is intentionally left loose so the PTFE packing does not take a "set" before the spray gun is used. This allows full utilization of the packing.

Spray a test area. Turn the fluid needle adjusting knob counterclockwise until a full coat is obtained.

If the finish is too sandy and dry, the material flow may be too low for the atomization air pressure being used. Turn the fluid needle adjusting knob counterclockwise to increase fluid flow.

If the finish sags, there is too much material flowing for the atomization air pressure being used. Turn the fluid needle adjusting knob clockwise to decrease fluid flow.

Pattern width can be altered by turning spreader adjustment valve, either clockwise to decrease the width or counterclockwise to increase the width.

Adjust inlet air pressure to provide a uniform dispersion of atomized paint throughout the pattern. Keep air pressure as low as possible to minimize bounce-back and overspray. Excessive pressure will result in split spray patterns. Inadequate pressures will cause heavy centered patterns and poor atomization.

Fluid Tip Size (mm)	Applications
1.0	General purpose, light to medium viscosity material.
1.3	Top coats.
1.5	Top coats and primer sealers.
1.8	Primers.

CLEANING

For routine cleaning, it is not necessary to remove cup from gun. Remove lid and properly dispose of any excess paint. Pour in a small amount of clean solvent. The amount will vary with different coatings and solvents. Reinstall lid. Shake cup to wash down the inside surfaces. Pull trigger to allow some solvent to be flushed through gun. Remove lid and pour out dirty solvent. Add a small amount of clean solvent and repeat procedure. Wipe exterior of lid with a clean cloth and clean solvent.

If a paint filter was used in the bottom of the cup outlet, it should be removed and cleaned at this time.

To clean air cap and fluid tip, brush exterior with a stiff bristle brush. If necessary to clean cap holes, use a broom straw or toothpick if possible. If a wire or hard instrument is used, extreme care must be used to prevent scratching or burring of the holes which will cause a distorted spray pattern.

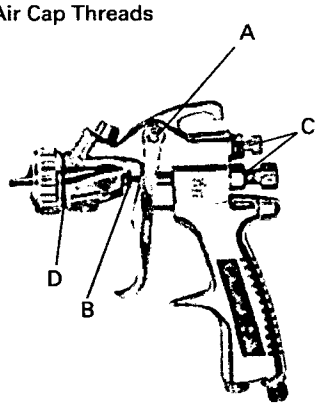
To clean fluid passages, remove excess material at source, then flush with a suitable solvent. Wipe gun exterior with a solvent dampened cloth. Never completely immerse in solvent as this is detrimental to the lubricants and packings.

PREVENTIVE MAINTENANCE

Spray Gun Lubrication

Apply a drop of SSL-10 spray gun lube at trigger bearing stud and the stem of the air valve. The shank of the fluid needle where it enters the packing nut should also be oiled. The fluid needle packing should be kept soft and pliable by periodic lubrication. Make sure the baffle and retaining ring threads are clean and free of foreign matter. Before assembling retaining ring to baffle, clean the threads thoroughly, then add two drops of SSL-10 spray gun lube to threads. The fluid needle spring and air valve spring should be coated with a very light grease, making sure that any excess grease will not clog the air passages. For best results, lubricate the points indicated, daily.

A. Trigger Points
B. Packing
C. Adjusting Valve
D. Baffle/Air Cap Threads



STARTINGLINE.
by DeVilbiss

Service Bulletin
SB-2-610-H
Replaces SB-2-610-G

ATTENTION!

READ BEFORE ATTACHING THE AIR HOSE

HVLP AIR SUPPLY REQUIREMENTS

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TOUCHUP GUN: 30 PSI inlet pressure provides 10 PSI at the air cap. Consumes 8 CFM.

NOTE: USE 5/16" OR LARGER I.D. AIR HOSES

¡ATENCIÓN!

LEA ANTES DE FIJAR LA MANGUERA DE AIRE

REQUISITOS DE SUMINISTRO DE AIRE DE ALTO VOLUMEN BAJA PRESIÓN (HVLP)

PISTOLA HVLP: Una presión de entrada de 30 PSI (libras por pulgada cuadrada) proporciona 10 PSI en la boquilla. Consume 13 CFM (pies cúbicos por minuto).

PISTOLA RE-TOQUE: Una presión de entrada de 30 PSI (libras por pulgada cuadrada) proporciona 10 PSI en la boquilla. Consume 8 CFM (pies cúbicos por minuto).

NOTA: UTILICE MANGUERAS CON DIÁMETRO INTERNO DE 7.94 MM (5/16 DE PULG.) O MÁS GRANDE

ATTENTION !

LIRE AVANT DE FIXER LE TUYAU D'ARRIVÉE D'AIR

HVLP AIR SUPPLY REQUIREMENTS
EXIGENCES HVLP CONCERNANT L'ALIMENTATION EN AIR

PISTOLET Á PEINTURE: Une pression à l'admission de 2,07 BAR (30 PSI) donne une pression de 0,69 BAR (10 PSI) à l'anneau déflecteur. Utilise 0,37 m³ (13 pi³) à la minute.

PISTOLET DE RETOUCHE: Une pression à l'admission de 2,07 BAR (30 PSI) donne une pression de 0,69 BAR (10 PSI) à l'anneau déflecteur. Utilise 0,23 m³ (8 pi³) à la minute.

REMARQUE : UTILISER UN TUYAU D'UN DIAMÈTRE INTÉRIEUR DE 7,94 MM (5/16 PO) AU MINIMUM.

1.4 primer

ATTENTION!

READ BEFORE ATTACHING THE AIR HOSE

HVLP AIR SUPPLY REQUIREMENTS

FULL SIZE GUN: 30 PSI inlet pressure provides 10 PSI at the air cap. Consumes 13 CFM.
TOUCHUP GUN: 30 PSI inlet pressure provides 10 PSI at the air cap. Consumes 8 CFM.

NOTE: USE 5/16" OR LARGER I.D. AIR HOSES

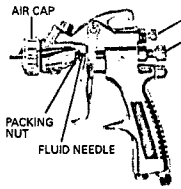
SET-UP AND ADJUSTMENT INSTRUCTIONS

1. Attach cup to gun and flush solvent through gun to remove oils.
2. Tighten packing nut—see instructions.
3. Fully open fan and fluid needle controls (turn counter-clockwise).
4. If desired, attach air adjusting valve with gauge and/or quick disconnect to air inlet, then attach hose.
5. Spray test and adjust air pressure, fan size, and fluid flow as required. Recommended spray distance is 6-8 inches.

WARNING

A failure resulting in injury or damage may be caused by pressure beyond top of scale, excessive vibration or pressure pulsation, excessive instrument temperature, corrosion of the pressure containing parts or other misuse of the air adjusting valve with gauge.

PACKING ADJUSTMENT INSTRUCTIONS



Before using this spray gun, the packing nut should be adjusted as follows:

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The packing nut is intentionally left loose so the PTFE packing does not take a "set" before the spray gun is used. This allows full utilization of the packing.

Spray a test area. Turn the fluid needle adjusting knob counterclockwise until a full coat is obtained.

If the finish is too sandy and dry, the material flow may be too low for the atomization air pressure being used. Turn the fluid needle adjusting knob counterclockwise to increase fluid flow.

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Adjust inlet air pressure to provide a uniform dispersion of atomized paint throughout the pattern. Keep air pressure as low as possible to minimize bounce-back and overspray. Excessive pressure will result in split spray patterns. Inadequate pressures will cause heavy centered patterns and poor atomization.

Fluid Tip Size (mm)	Applications
1.0	General purpose, light to medium viscosity material.
1.3	Top coats.
1.5	Top coats and primer sealers.
1.8	Primers.

CLEANING

For routine cleaning, it is not necessary to remove cup from gun. Remove lid and properly dispose of any excess paint. Pour in a small amount of clean solvent. The amount will vary with different coatings and solvents. Reinstall lid. Shake cup to wash down the inside surfaces. Pull trigger to allow some solvent to be flushed through gun. Remove lid and pour out dirty solvent. Add a small amount of clean solvent and repeat procedure. Wipe exterior of lid with a clean cloth and clean solvent.

If a paint filter was used in the bottom of the cup outlet, it should be removed and cleaned at this time.

To clean air cap and fluid tip, brush exterior with a stiff bristle brush. If necessary to clean cap holes, use a broom straw or toothpick if possible. If a wire or hard instrument is used, extreme care must be used to prevent scratching or burring of the holes which will cause a distorted spray pattern.

To clean fluid passages, remove excess material at source, then flush with a suitable solvent. Wipe gun exterior with a solvent dampened cloth. Never completely immerse in solvent as this is detrimental to the lubricants and packings.

PREVENTIVE MAINTENANCE

Spray Gun Lubrication
Apply a drop of SSL-10 spray gun lube at trigger bearing stud and the stem of the air valve. The shank of the fluid needle where it enters the packing nut should also be oiled. The fluid needle packing should be kept soft and pliable by periodic lubrication. Make sure the baffle and retaining ring threads are clean and free of foreign matter. Before assembling retaining ring to baffle, clean the threads thoroughly, then add two drops of SSL-10 spray gun lube to threads. The fluid needle spring and air valve spring should be coated with a very light grease, making sure that any excess grease will not clog the air passages. For best results, lubricate the points indicated, daily.

A. Trigger Points
B. Packing
C. Adjusting Valve
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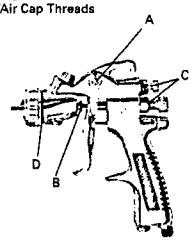


DEVILBISS

SERVICE BULLETIN
SB-2-775-A
Replaces SB-2-775
Gun Repair Kit FLG4-488-K

ENGLISH

FLG4 GRAVITY FEED SPRAY GUN AND CUP

IMPORTANT: Before using this equipment, read all safety precautions on page 2 and instructions. Keep for future use.

GUN DESCRIPTION

The FLG4 is a light weight, anodized aluminum, general purpose gravity feed spray gun designed for use in various types of spraying applications. Various models are available to handle HVLP, water based, and solvent based spraying applications.

These guns are sold with either a 900 cc aluminum cup (702576) or a 20 oz. Acetal cup (GFC-501). These guns are suitable for use with water based materials **ONLY** if used with a Acetal cup, or with a disposable cup system.

WARNING

Halogenated hydrocarbon solvents - for example; 1, 1, 1- trichloroethane and methylene chloride - can chemically react with the aluminum in this gun and cause an explosion hazard. Read the label or data sheet for the material you intend to spray. Do not use spray materials containing these solvents with this spray gun.

IMPORTANT: This gun may be used with most common coating and finishing materials. It is designed for use with mildly corrosive and non-abrasive materials. If used with other high corrosive or abrasive materials, it must be expected that frequent and thorough cleaning will be required and the necessity for replacement of parts will be increased.

HVLP MODELS:

HVLP models of this gun were manufactured to provide maximum transfer efficiency by limiting air cap pressure to 10 psi (complies with rules issued by SCAQMD and other air quality authorities).

HVLP models of this gun will produce approximately 10 psi cap pressure at 23 psi gun inlet pressure, as measured at the gun inlet. An air cap test kit (see Accessories) should be used to insure 10 psi cap pressure is not exceeded.

The No. 3 (HVLP) air cap requires a 13 cfm air supply at the gun inlet of 23 psi max., measured with the trigger pulled.

CUP DESCRIPTIONS

702576 – 900 cc Aluminum Cup

The cup is constructed from durable aluminum to provide trouble-free operation. The cup insert is electroless nickel plated brass. The disposable cup lid is recyclable and is constructed with recycled polyethylene. The lid has a unique drip check to prevent paint from dripping out of the vent in the lid.

190252 *(GFC-501)* – 20 oz. Acetal Cup

The cup and screw-on lid are constructed from durable Acetal to provide trouble-free operation. The lid has a unique drip check to prevent paint from dripping out of the vent in the lid. The cup also has a high grade stainless steel connector which is compatible with water based and all common coating materials.

ASSEMBLY OF CUP TO GUN

This gun has been assembled with a cup gasket (12) (blue) in the fluid inlet of the gun body. Place filter (15) in the cup outlet at this time if desired. See Cup Drawing on page 4. Assemble cup to gun and tighten hand tight.

INSTALLATION

Note

Protective coating and rust inhibitors have been used to keep the gun in good condition prior to shipment. Before using the gun, flush it with solvents so that these materials will be removed from fluid passages.

For maximum transfer efficiency, **do not use more pressure than is necessary to atomize the material being applied.**

Connect the gun to a clean, moisture and oil free air supply using a hose size of at least **5/16" I.D.** hose. Do not use 1/4" I.D. hose. (25' x 1/4" hose at 18 CFM has a pressure loss of 25 psi. 25' x 5/16" hose at 18 CFM has a pressure loss of 8 psi.)

Note

Depending on hose length, larger I.D. hose may be required. Install a DeVilbiss air adjusting valve at the gun handle and air cap test kit over tip. When gun is triggered on, adjust regulated pressure to desired setting to provide a maximum of 10 psi at the air cap. **Do not use more pressure than is necessary to atomize the material being applied.** Excess pressure will create additional overspray and reduce transfer efficiency.

Note

If quick connects are required, use only high flow quick connects approved for HVLP use, such as DeVilbiss HC-4419 and HC-4719. Other types will not flow enough air for proper gun operation.

Note

If an air adjusting valve is used at the gun inlet, use a DeVilbiss model. Some competitive adjusting valves have significant pressure drop that can adversely affect spray performance. DeVilbiss air adjusting valves have minimal pressure drop, which is important for HVLP spraying.

OPERATION

Mix, prepare and strain the p
be sprayed according to the pa
turer's instructions.

FILLING WITH PAINT

Fill the cup with paint to th
or to bottom of the th
not overfill.

INSTALLING THE

Place plastic lid
push in the cer
(702576) or s
Fold vent ca
of lid (if ver

SAFETY PRECAUTIONS

This manual contains information that is important for you to know and understand. This information relates to USER SAFETY and PREVENTING EQUIPMENT PROBLEMS. To help you recognize this information, we use the following symbols. Please pay particular attention to these sections.

WARNING

Important safety information – A hazard that may cause serious injury or loss of life.

CAUTION

Important information that tells how to prevent damage to equipment, or how to avoid a situation that may cause minor injury.

NOTE

Information that you should pay special attention to.

WARNING

The following hazards may occur during the normal use of this equipment. Please read the following chart before using this equipment.

CA PROP 65

PROP 65 WARNING
WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

HAZARD	CAUSE	SAFEGUARDS
Fire 	Solvent and coatings can be highly flammable or combustible especially when sprayed.	Adequate exhaust must be provided to keep air free of accumulations of flammable vapors. Smoking must never be allowed in the spray area. Fire extinguishing equipment must be present in the spray area.
Solvent Spray 	During use and while cleaning and flushing, solvents can be forcefully expelled from fluid and air passages. Some solvents can cause eye injury.	Wear eye protection.
Inhaling Toxic Substances 	Certain materials may be harmful if inhaled, or if there is contact with the skin.	Follow the requirements of the Material Safety Data Sheet supplied by your coating material manufacturer. Adequate exhaust must be provided to keep the air free of accumulations of toxic materials. Use a mask or respirator whenever there is a chance of inhaling sprayed materials. The mask must be compatible with the material being sprayed and its concentration. Equipment must be as prescribed by an industrial hygienist or safety expert, and be NIOSH approved.
Explosion Hazard - Incompatible Materials 	Halogenated hydrocarbon solvents - for example; methylene chloride and 1,1,1, - Trichloroethane are not chemically compatible with the aluminum that might be used in many system components. The chemical reaction caused by these solvents reacting with aluminum can become violent and lead to an equipment explosion.	Guns with stainless steel internal passageways may be used with these solvents. However, aluminum is widely used in other spray application equipment - such as material pumps, regulators, valves, and this gun and cup. Check all equipment items before use and make sure they can also be used safely with these solvents. Read the label or data sheet for the material you intend to spray. If in doubt as to whether or not a coating or cleaning material is compatible, contact your material supplier.
General Safety	Improper operation or maintenance of equipment.	Operators should be given adequate training in the safe use and maintenance of the equipment (in accordance with the requirements of NFPA-33, Chapter 15). Users must comply with all local and national codes of practice and insurance company requirements governing ventilation, fire precautions, operation, maintenance, and housekeeping. These are OSHA Sections 1910.94 and 1910.107 and NFPA-33.
Cumulative Trauma Disorders ("CTD's") **CTD's, or musculoskeletal disorders, involve damage to the hands, wrists, elbows, shoulders, neck, and back. Carpal tunnel syndrome and tendonitis (such as tennis elbow or rotator cuff syndrome) are examples of CTD's.**	Use of hand tools may cause cumulative trauma disorders ("CTD's"). CTD's, when using hand tools, tend to affect the upper extremities. Factors which may increase the risk of developing a CTD include: 1. High frequency of the activity. 2. Excessive force, such as gripping, pinching, or pressing with the hands and fingers. 3. Extreme or awkward finger, wrist, or arm positions. 4. Excessive duration of the activity. 5. Tool vibration. 6. Repeated pressure on a body part. 7. Working in cold temperatures. CTD's can also be caused by such activities as sewing, golf, tennis, and bowling, to name a few.	Pain, tingling, or numbness in the shoulder, forearm, wrist, hands, or fingers, especially during the night, may be early symptoms of a CTD. Do not ignore them. Should you experience any such symptoms, see a physician immediately. Other early symptoms may include vague discomfort in the hand, loss of manual dexterity, and nonspecific pain in the arm. Ignoring early symptoms and continued repetitive use of the arm, wrist, and hand can lead to serious disability. Risk is reduced by avoiding or lessening factors 1-7.

PAINTING

Open the spreader adjustment valve (6) (Fan) by turning the valve stem counterclockwise.

Close the fluid needle adjusting knob (7) by turning clockwise.

Turn on air supply and set gun inlet pressure; 23 psi for HVLP use. Some materials can be sprayed at lower pressures, improving transfer efficiency.

Spray a test area. Turn the fluid needle adjusting knob (7) counterclockwise until a full coat is obtained.

If the finish is too sandy and dry, the material flow may be too low for the atomization air pressure being used. Turn the fluid needle adjusting knob (7) counterclockwise to increase fluid flow.

If the finish sags, there is too much material flowing for the atomization air pressure being used. Turn the fluid needle adjusting knob (7) clockwise to decrease fluid flow.

Pattern width can be altered by turning spreader adjustment valve (6), either clockwise to decrease the width or counterclockwise to increase the width.

Adjust inlet air pressure to provide a uniform dispersion of atomized paint throughout the pattern. Keep air pressure as low as possible to minimize bounce-back and overspray. Excessive pressure will result in split spray patterns. Inadequate pressures will cause heavy centered patterns and poor atomization.

CLEANING

Note

For routine cleaning, it is not necessary to remove cup from gun. Do not remove washer (12) from gun. If washer (12) is removed, it must be replaced.

The 702576 cup lid is designed to be disposable but may be cleaned and reused if slightly contaminated with overspray. **If lid becomes tight, or does not fit, it is due to extended soaking in solvent. Let lid air dry overnight and the lid should return to its original size and fit.**

CAUTION

Do not soak the lid in solvent for extended periods of time. Doing so could cause cup/lid sealing problems and leakage.

Remove lid and properly dispose of any excess paint. Pour in a small amount of clean solvent. The amount will vary with different coatings and solvents. Reinstall lid. Shake cup to wash down the inside surfaces. **Hold 702576 lid while shaking to prevent lid from coming off.** Pull trigger to allow some solvent to be flushed through gun. Remove lid and pour out dirty solvent. Add a small amount of clean solvent and repeat procedure. Wipe exterior of lid with a clean cloth and clean solvent.

If a paint filter was used in the bottom of the cup outlet, it should be removed and cleaned or replaced at this time. Dispose of used cup lid if contaminated and replace with new.

To clean air cap and fluid tip, brush exterior with a stiff bristle brush. If necessary to clean cap holes, use a broom straw or toothpick if possible. If a wire or hard instrument is used, extreme care must be used to prevent scratching or burring of the holes which will cause a distorted spray pattern.

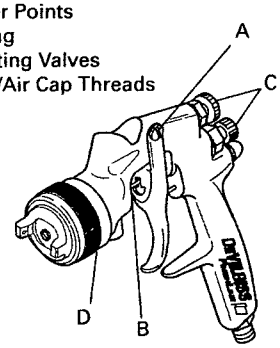
To clean fluid passages, remove excess material at source, then flush with a suitable solvent. Wipe gun exterior with a solvent dampened cloth. Never completely immerse in solvent as this is detrimental to the lubricants and packings.

PREVENTIVE MAINTENANCE

Spray Gun Lubrication

Daily, apply a drop of SSL-10 spray gun lube at trigger bearing stud (11) and the stem of the air valve (9). The shank of the fluid needle (8) where it enters the packing nut (8) should also be oiled. The fluid needle packing (8) should be kept soft and pliable by periodic lubrication. Make sure the baffle (5) and retaining ring (1) threads are clean and free of foreign matter. Before assembling retaining ring to baffle, clean the threads thoroughly, then add two drops of SSL-10 spray gun lube to threads. The fluid needle spring (7) and air valve spring (9) should be coated with a very light grease, making sure that any excess grease will not clog the air passages. For best results, lubricate the points indicated, daily.

A. Trigger Points
B. Packing
C. Adjusting Valves
D. Baffle/Air Cap Threads



PARTS REPLACEMENT

Note

When replacing the fluid tip or fluid needle, replace both at the same time. Using worn parts can cause fluid leakage. Also, replace the needle packing and fluid tip seal at this time. Lightly lubricate the threads of the fluid tip before reassembling. Torque to 15-20 ft-lbs. Do not overtighten the fluid tip.

The fluid tip part number and tip size are stamped around the outside of the fluid tip.

See Chart 2 for selecting the proper size fluid tip for the material you are spraying.

CAUTION

To prevent damage to the fluid tip (3) or fluid needle (8), be sure to either 1) pull the trigger and hold while tightening or loosening the fluid tip or 2) remove fluid needle adjusting screw (7) to relieve spring pressure against needle collar.

Chart 1 – Air Caps

Air Cap (Ref. No. 2) Part No.	Computer No.	Application
FLG-1-1	690000	Conventional
FLG-1-3	690001	HVLP

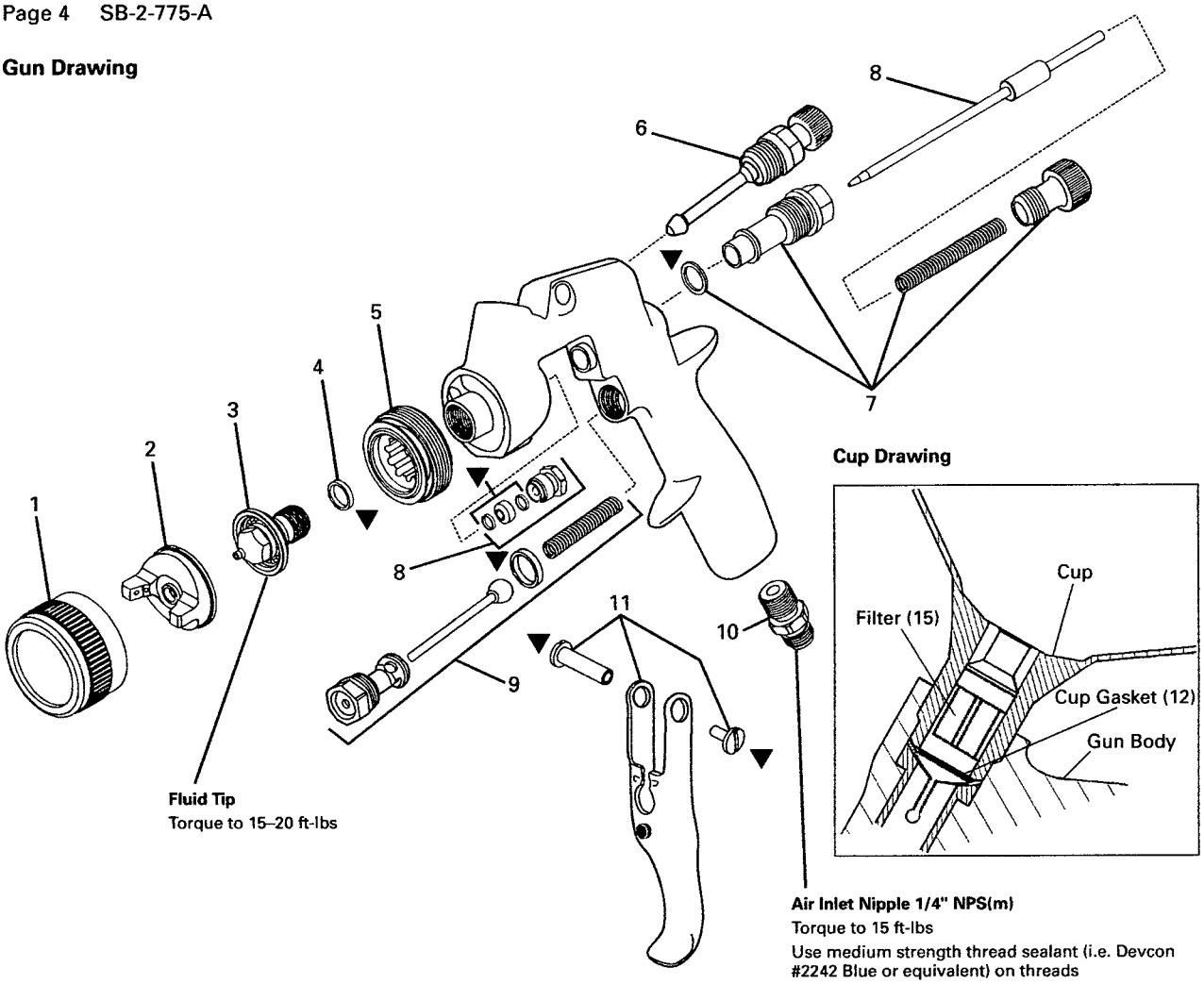
Chart 2 – Fluid Tips

Fluid Tip (Ref. No. 3) Part No.	Computer No.	Fluid Tip Size (in.)	Fluid Tip Size (mm)	Applications
FLG-332-13K	803051	0.051	1.3	Stains, lacquers, basecoats, clears.
FLG-332-15K	803052	0.059	1.5	General purpose, light to medium viscosity material.
FLG-332-18K	803053	0.070	1.8	Primers and medium viscosity materials.
FLG-332-22K	803054	0.086	2.2	Latex and heavy materials.

Chart 3 – HVLP Air Flows (#3 Cap)

Inlet Press. (PSI)	Air Flow (SCFM)	Cap Press. (PSI)
15	10	6
19	11.5	8
23	13	10

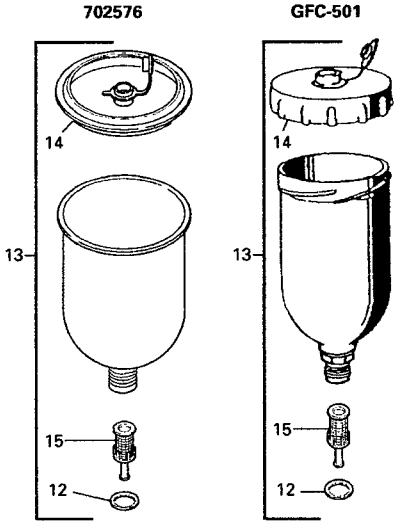
Gun Drawing



Cup Drawing

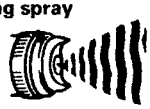
PARTS LIST

Ref. No.	Comp. Part No.	Replacement Part No.	Description	Ind. Parts Req.
1	690017	FLG-333	Retaining Ring	1
2		See Chart 1	Air Cap	1
3		See Chart 2	Fluid Tip & Seal Kit	1
4	690020	FLG-304-K5	Fluid Tip Seal (Kit of 5)	1
5	690021	FLG-305	Baffle	1
6	803528	FLG-465	Spreader Air Adjustment Valve	1
7	803525	FLG4-364-K	Needle Knob, Spring, Bushing & Gasket Kit	1
8	803526	FLG4-366-K	FLG4 Needle, Needle Packing & Nut Kit	1
9	190780	JGS-449-1	Air Valve & Gasket Kit	1
10	190287	P-MB-51	Air Inlet Nipple	1
11	191943	JGS-477-1	Trigger, Trigger Stud & Screw	1
12	192151	KGP-13-K5	Cup Gasket Kit (Kit of 5)	1
13	702576	702576	Metal Gravity Feed Cup	1
	190252	GFC-501	Acetal Gravity Feed Cup	1
14	190944	GFC-404-K2	Disposable Lid Kit (Kit of 2)	1
15	190181	KGP-5-K5	Filter Kit (Kit of 5)	1
	803527	FLG4-488-K ▼	FLG4 Gun Repair Kit (Contains 1 each: Fluid Tip Seal, Needle Packing, Trigger Stud, Trigger Screw, and Gasket for Air Valve & Needle Bushing.)	
	519210	FLG-463	Air Cap #3 HVLP Test Cap	



Additional Spray Gun Accessories on page 7.

TROUBLESHOOTING

CONDITION	CAUSE	CORRECTION
Heavy top or bottom pattern 	Horn holes plugged. Obstruction on top or bottom of fluid tip. Cap and/or tip seat dirty.	Clean. Ream with non-metallic point. Clean. Clean.
Heavy right or left side pattern 	Left or right side horn holes plugged. Dirt on left or right side of fluid tip.	Clean. Ream with non-metallic point. Clean.
	Remedies for the top-heavy, bottom-heavy, right-heavy, and left-heavy patterns: 1. Determine if the obstruction is on the air cap or the fluid tip. Do this by making a test spray pattern. Then, rotate the cap one-half turn and spray another pattern. If the defect is inverted, obstruction is on the air cap. Clean the air cap as previously instructed. 2. If the defect is not inverted, it is on the fluid tip. Check for a fine burr on the edge of the fluid tip. Remove with #600 wet or dry sand paper. 3. Check for dried paint just inside the opening; remove by washing with solvent.	
Heavy center pattern 	Fluid flow too high for atomization air. Material flow exceeds air cap's capacity. Spreader adjustment valve set too low. Atomizing pressure too low. Material too thick.	Balance air pressure and fluid flow. Increase spray pattern width with spreader adjustment valve. Thin or lower fluid flow. Adjust. Increase pressure. Thin to proper consistency.
Split spray pattern 	Atomization air pressure too high. Fluid flow too low. Spreader adjusting valve set too high.	Reduce at transformer or gun. Increase fluid flow (increases gun handling speed). Adjust.
Jerky or fluttering spray 	*Loose or damaged fluid tip/seat. Material level too low. Container tipped too far. Obstruction in fluid passage. Dry or loose fluid needle packing nut.	Tighten or replace. Refill. Hold more upright. Backflush with solvent. Lubricate or tighten.
Unable to get round spray	Spreader adjustment screw not seating properly. Air cap retaining ring loose.	Clean or replace. Tighten.
Will not spray	No air pressure at gun. Fluid needle adjusting screw not open enough. Fluid too heavy for gravity feed.	Check air supply and air lines, blow out gun air passages. Open fluid needle adjusting screw. Thin material and/or change to larger tip size.
Paint bubbles in cup	Fluid tip not tight.	Tighten tip.
Fluid leaking or dripping from cup lid	Cup lid loose. Dirty threads on cup or lid. Cracked cup or lid.	Tighten lid. Clean. Replace cup and lid.
Starved spray pattern	Inadequate material flow. Low atomization air pressure.	Back fluid adjusting screw out to first thread, or change to larger tip size. Increase air pressure and rebalance gun.
Excessive overspray	Too much atomization air pressure. Gun too far from work surface. Improper stroking (arcing, gun motion too fast).	Reduce pressure. Adjust to proper distance. Move at moderate pace, parallel to work surface.
Excessive fog	Too much or too fast-drying thinner. Too much atomization (air pressure.)	Remix properly. Reduce air pressure.
Dry spray	Air pressure too high. Gun tip too far from work surface. Gun motion too fast. Gun out of adjustment.	Reduce air pressure. Adjust to proper distance. Slow down. Adjust.
Fluid leaking from packing nut	Packing nut loose. Packing worn or dry.	Tighten, do not bind needle. Replace or lubricate.

*Most common problem.

(continued on page 6)

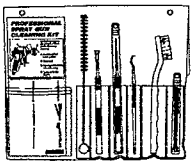
TROUBLESHOOTING (Continued)

CONDITION	CAUSE	CORRECTION
Fluid leaking or dripping from front of gun	Packing nut too tight. Dry packing. Fluid tip or needle worn or damaged. Foreign matter in tip. Fluid needle spring broken. Wrong size needle or tip.	Adjust. Lubricate. Replace tip and needle. Clean. Replace. Replace.
Fluid dripping or leaking from bottom of cup	Cup loose on gun. Cup gasket worn or missing below cup. Cup threads dirty.	Tighten. Replace cup gasket. Clean.
Runs and sags	Too much material flow. Material too thin. Gun tilted on an angle, or gun motion too slow.	Adjust gun or reduce fluid flow. Mix properly or apply light coats. Hold gun at right angle to work and adapt to proper gun technique.
Thin, sandy coarse finish drying before it flows out	Gun too far from surface. Too much air pressure. Improper thinner being used.	Check distance. Normally approximately 8". Reduce air pressure and check spray pattern. Follow paint manufacturer's mixing instructions.
Thick, dimpled finish "orange peel"	Gun too close to surface. Too much material coarsely atomized. Air pressure too low. Improper thinner being used. Material not properly mixed. Surface rough, oily, dirty.	Check distance. Normally approximately 8". Follow paint manufacturer's mixing instructions. Increase air pressure or reduce fluid flow. Follow paint manufacturer's mixing instructions. Follow paint manufacturer's mixing instructions. Properly clean and prepare.

ENGLISH

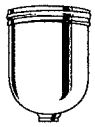
ACCESSORIES

192212 Professional Spray Gun Cleaning Kit



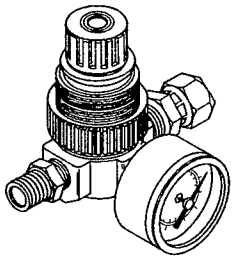
Contains six precision tools designed to effectively clean all DeVilbiss, Binks, Finishline and other brand spray guns.

702576 (Aluminum) 900 cc Cup GFC-501 (Acetal) 20 Oz. Cup Gravity Feed Cups



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

HARG-510 Air Regulator



Use to maintain nearly constant outlet pressure despite changes in inlet pressure and downstream flow.

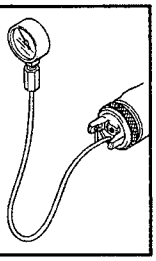
Air Adjusting Valves

HAV-500 No Gauge
HAV-512 w/0-100 psi Dial Gauge
HAV-555 w/0-160 psi Digital Gauge

Use to control air usage at gun.

FLG-463 Air Cap Test Kit (#3 air cap)

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.



Spray Gun Lube SSL-10 (2 oz. bottle)

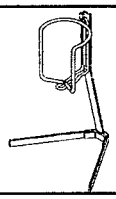
Compatible with all paint materials; contains no silicone or petroleum distillates to contaminate paint. MSDS available upon request.

40-128 Twin Cartridge, Paint Spray Respirator

NIOSH-Certified (TC84A-1623) for respiratory protection in atmospheres not immediately dangerous to life.

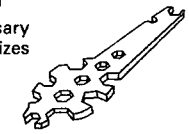
GH-505 Gun Holder

Gun holders are made to hold standard paint cups, gravity feed guns and cups, and paint filters.



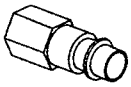
WR-103 Wrench

Contains all necessary tip, hose and nut sizes used on or with gun.

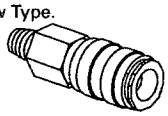


Automotive Quick Connects For HVLP Guns (Air)

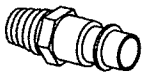
High Flow Type.



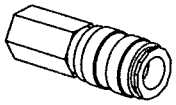
HC-4419 Stem 1/4" NPT(F)



HC-4719 Coupler 1/4" NPT(M) /NPS(M)



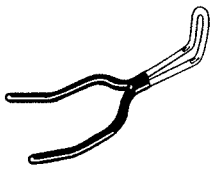
HC-1166 Stem 1/4" NPT(M)



HC-4720 Coupler 1/4" NPT(F)

192219 Gun Holder

Gun holder made to hold guns with gravity cups.

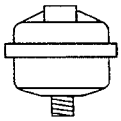


192218 Scrubs® Hand Cleaner Towels

Scrubs® are a premoistened 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.



OMX-70-K48 PAINT CUP LINER KIT

(Not for use with GFC-503 cups)

Allows quick and easy clean-up.

Consists of:
1 - Piercing Tool
48 - Disposable Liners
48 - Drain Bushings

WARRANTY

This product is covered by DeVilbiss' 1 Year Limited Warranty.

DeVilbiss Sales and Service: www.devilbiss.com

DeVilbiss Automotive Refinishing

DeVilbiss has authorized distributors throughout the world.
For equipment, parts and service, check the Yellow Pages under "Automotive Body Shop Equipment and Supplies."
For technical assistance, see listing below.

U.S.A./Canada Customer Service Office:
11360 S. Airfield Road, Swanton, OH 43558
Toll-Free Telephone: 1-800-445-3988 (U.S.A. and Canada only)
Toll-Free Fax: 1-800-445-6643

DeVILBISS
AUTOMOTIVE REFINISHING

1.3 primer

Preface

Prior to putting the unit/paint spray gun into operation, read the operating instructions completely and thoroughly. The stipulations contained therein are to be respected in any case. After that, the operating instructions are to be stored in a safe place, accessible for every user of the equipment. The unit/paint spray gun may only be put into operation by persons familiar with its use (professionals). Inappropriate use of the unit/paint spray gun, modification of any kind or combination with inappropriate other parts may cause material damage, serious hazard to the user's, other person's or animal's health or even death. SATA shall not take any responsibility for such damages (e.g. failure to respect the stipulations laid out in the operating instructions). The applicable safety, workplace and worker health protection regulations of the respective country or area/district in which the system/the paint spray gun is used are to be respected in any case (e.g. the German Rules for the Prevention of Accidents BGR 500 (BGV D25) and BGV D24 issued by the Central Office of the Professional Trade Associations, etc.) **Neither battery compartment nor the pressure measuring chamber may be opened within non-explosion-proof areas, EN 50020 (no battery replacement allowed in non-explosion-proof areas).**

To be noted

Never point paint spray guns at yourself, at other persons or animals. Solvents and thinners can cause burns. Only the respective quantities of solvents and paints required for work progress may be present in the direct surroundings of the unit (after work, solvents and paints are to be returned to their assigned storage rooms). Prior to any repair work the unit must be disconnected from the air supply.

Prior to putting the unit into operation, especially after each cleaning and each repair work, check all screws and nuts for tight fit, as well as the sealing performance of the spray guns and hoses.

Defective components must be replaced or repaired accordingly. To obtain best possible coating results, and for maximum safety, only use original spare parts.

No sources of ignition (e.g. open flames, burning cigarettes, lamps without ex-protection etc.) may be present during painting, as easily flammable mixture are generated during the painting process. Occupational safety regulations must be applied when painting (respiratory protection, etc.). Appropriate ear protection muffs are required, as a sound level of 90 dB(A) is exceeded when coating with higher pressure levels. No vibration is transmitted to the upper parts of the operator's body during use of the paint spray gun. Recoil forces are negligible.

The use of this product in explosion hazard areas Zone 0 is prohibited.

1. Features and technical Data

- Paint spray gun with nozzle 1.3 HVLP
- 0,6 l QCC quick change gravity flow cup (plastic) with integrated non-drip device
- Universal spanner
- Swivel joint (depending on version)
- Cleaning brush
- 2 allen keys, key size 2/4 mm
- alternatively: nozzle 1.3 mm and 1.0 l aluminum cup (QCC) without swivel joint
- alternatively: with electronic pressure reading
- Gun inlet pressure 2 bars / 29 psi
- Maximum temperature of the coating material 50 ° C
- Air consumption: 15 cfm at 29 psi

2. Functional Description

2.1 General Points

The SATAjet 2000 HVLP paint spray gun is designed for spraying paints and laquers as well as other media (Nozzle size depends on spray viscosity). Materials that are abrasive, acidic or contain benzine must not be used. The compressed air supply required for spraying is fed to the air connection screwed into the gun grip. Squeezing the trigger as far as the first pressure point opens the air valve (pre-air control). When the trigger is squeezed further, the paint needle is pulled out of the paint nozzle. The spraying medium then flows unpressurized out of the paint nozzle due to gravity and is simultaneously atomized by the compressed air that flows the air nozzle.

The cup lid is equipped with a drip stop that prevents the material from escaping from the vent hole.

2.2 Electronic pressure indication

The electronic pressure indication, integrated into the spray gun handle, indicates after operation of the trigger and from 0.2 bar (3 psi) on, the spray gun inside pressure regulated onto the air compressed micrometer with a precision of ± 0.2 bar (2 psi).

Maximum indication value is 99 psi or 9.9 bars. When the gun inlet is not pressurized, the measuring device remains shut off in order to prolong battery life. Battery life time is 1-3 years, depending on time of use. The measuring device is hermetically protected against all external influences (maximum temperature 60° C/140° F). If there is no indication visible above 0.2 bar (3 psi), unscrew the lid of the battery compartment by using a coin (**It is only allowed to open the battery compartment in non-hazardous areas**) and replace the battery, including battery compartment cover with sealing (Order No. 14985).

Open the battery case for changing of battery only! Everytime you open the battery case, the sealing cap must be replaced by the new battery case sealing cap included in set 14985. The use of already used battery case sealing caps leads to loss of warranty!

After that, close the compartment and make sure it is tight (the battery compartment seal must not be damaged and must be inserted correctly into the groove of the closing screw). (Battery manufactured by M/S Renata, type 357). Always replace battery including complete battery compartment cover.

Work process must be stopped immediately if the pressure measuring device, the screen, the glass pane etc. suffer damage. Exclusively SATA technicians are authorized to effect repairs with the pressure measuring device.

Any intervention with the measuring chamber, by removing the front plate, is dangerous, will subsequently imply loss of the certificate of explosion-proofness, of the warranty

3. Construction

1	Nozzle set (air cap visible only)	6	ColorCodeSystem
2	Self tensioning needle packing, not visible	7	Air connection G ¼ outside
3	Trigger	8	Air piston, not visible
4	Self tensioning air piston packing, not visible	9	Air micrometer
5	Stepless regulation for round and flat spray	10	Fluid adjustment
		11	Material sieve, not visible
		12	Non-drip device
		13	Electronic pressure indication

4. Putting into Operation

Before putting into operation, and especially after each cleaning and any repair work, check to see that all screws and nuts are tight. This applies in particular for the material flow control screw (counter nut), the round/flat spray control as well as the hexagon screw, pos. 3624, for the air micrometer. The paint spray gun has been treated with an anticorrosive agent before leaving the factory and must therefore be flushed out thoroughly with thinner before use. For servicing/repair work of any kind, the system must be devoid of pressure, i.e. disconnected from the air supply. Failure to respect this safety warning may result in damage and injuries, even death at worst. SATA does not take any responsibility for possible results of such failure.

4.1. Clean spray air

...best obtained by using **a combi fine filter unit with integrated pressure regulator**, for rough spray pressure adjustment. Due to high pressure drop in the air hose/coupling, the actual dynamic air pressure should be checked and fine-adjusted at the spray gun air inlet.
part. no. 92296

4.2. Sufficient air volume

...obtained by an appropriate compressor, large air line diameters and, to avoid too much pressure drop, an air hose with minimum 9 mm inner diameter in antistatic, silicone-free and pressure-resistant version. Blow out the air hose before attaching it to the air connection (G 1/4 ext.). The air hose must be pressure-resistant for min. 145 psi and solvent-resistant. Total electric resistance: < 100 million Ohm, non-resistant against benzine and oil.
part. no. 53090 (Length 10m)

4.3. Air micrometer

For maximum air flow, fully open integrated Micrometer, i.e. put into vertical position III (not necessary when using a DIGITAL 2 version).
Pressure can be adjusted directly at the spray gun. By means of the variable adjustable air micrometer the spray gun internal pressure can be set. Connect the spray gun to the air supply, pull the trigger and adjust the requested spray gun internal pressure.

Note:

- Micrometer in vertical position (position III - parallel to the gun body) = maximum atomization and maximum internal spray gun pressure (identical with spray gun inlet pressure).
- Position I or II (across gun body) = minimum atomization, minimum internal spray gun pressure (for Spot Repair, speckling, etc.)

Attention: While the spray gun is connected to the air supply, the air micrometer fixing screw, pos. 3624, must not be removed. When the fixing screw is removed, the spray gun must not be put into operation.

4.4 Correct adjustment of the dynamic inlet pressure

a) SATAjet DIGITAL 2 guns:
Adjust the required pressure of 29 psi at the spray gun micrometer - It will be indicated directly on the display while the gun trigger is pulled.

b) Spray gun with micrometer / gauge
Ensure sufficient pressure by means of the pressure regulator. Adjust the recommended inlet pressure of 29 psi at the micrometer.
part. no. 27771

c) Spray gun equipped with compressed air control gauge
Adjust the pressure at the pressure regulator in a way that the spray gun inlet pressure required for the respective gun model is obtained.
part. no. 4002

d) Spray gun without gauge
In order to make a correct adjustment of the spray gun inlet pressure, as otherwise measureable in a) and b), without a gauge, adjust a pressure of about 9 psi higher per 10 m to inlet pressure to compensate the pressure drop in the hose.

4.5 Material flow control

Adjust material flow control
In accordance with material viscosity and required flow rate (arrow) and fix by means of the counter nut (small arrow). Under normal circumstances, the material flow control is fully open.

4.6. Round/flat spray control

Round/flat spray control
for infinitely variable adaptation of the spray fan to the object:

Turn to the left - **flat spray**
Turn to the right - **round spray**

4.7. Nozzle set

Complete, hand-checked nozzle-set, consisting of paint needle (V4A), paint nozzle (V4A) and air cap. Mount the nozzle set tightly (use universal wrench for the paint nozzle). Insert paint nozzle before putting in paint needle. The air cap should be placed in a position in which the marking is on top. Use punched hexagon socket (wrench size 12) of universal wrench for paint nozzle. Only original SATA parts guarantee highest quality and lifetime.

When mounting foreign parts, quality reduction is possible and the SATA warranty expires.

Nozzle sets

0191	for SATAjet 2000 HVLP WSB	82420	for SATAjet 2000 HVLP 1,5
82024	for SATAjet 2000 HVLP 1,0	90399	for SATAjet 2000 HVLP 1,7
82057	for SATAjet 2000 HVLP 1,2	90407	for SATAjet 2000 HVLP 1,9
82073	for SATAjet 2000 HVLP 1,3	90415	for SATAjet 2000 HVLP 2,2
82263	for SATAjet 2000 HVLP 1,4		

4.8. Spray distance

In order to avoid overspray and surface problems, we recommend a spray distance of 5 - 7(8) inches on 29 psi between air cap and object should be maintained in accordance with the chart below, depending on spray gun type and material.

4.9 Internal nozzle pressure

At an entrance pressure of more than 29 psi at the air inlet, the internal nozzle pressure exceeds 10 psi. The maximum inlet pressure permitted for HVLP use is stamped onto the gun body. For pressure above 2.0 bars the jet 2000 HVLP gun is compliant to U.K. legislation. (Lombardia (Italy): air inlet pressure below 2.5 bar / 37 psi - air cap pressure below 1.0 bar / 15 psi)

76505 Test air cap for nozzle size 1.7 cpl.
82016 Test air cap for nozzle size 1.9 and 2.2 cpl.
83477 Test air cap for nozzle size 1.0, 1.2, 1.3, 1.4 and 1.5 cpl.

5. Changing the Self-adjusting Seals

a) **Material Side:** For replacement of the self-adjusting paint needle packing the paint needle must be removed. Insert hollow key SW 4 with its cylindrical connection (part no. 9847) into the gun instead of the paint needle, and unscrew the packing screw from the gun, together with compression spring and packing. Push compression screw (part no. 14605), compression spring (part no. 14993) and new packing (part no. 23275) onto cylindrical connection of the hollow key, and screw them tight inside the gun body. Check paint needle for damage and reassemble.

b) **Air Side:** For replacing the seal retainer (pos. 82636) of the air piston rod, paint needle and trigger must be removed first; then pull out air piston rod (pos. 86843) and unscrew the seal retainer unit (pos. 82636) by means of the hollow key size 4.
Screw in new seal retainer unit and tighten thoroughly. Grease air piston rod slightly with SATA special grease (part no. 10009) and insert it, then assemble trigger and paint needle.

6. Cleaning and Maintenance

a) Flush out the gun thoroughly with thinner or cleaning fluid.
b) Clean the air nozzle with a paint brush or brush. Do not immerse the nozzle in thinner or cleaning fluid.
c) Under no circumstances try to clean clogged drillings using an unsuitable tool, since the slightest amount of damage adversely effects the spray pattern. Use SATA nozzle cleaning needles ((included in cleaning kit 54030).
d) Only remove the black air distribution ring (Order No. 97824 / set of 3) in the gun head in case it is damaged (no sealing performance at the paint nozzle). In case of removal, always insert a new air distribution ring to ensure flawless function. Insert new air distribution ring in its correct position and tighten paint nozzle again, respect mounting instructions for the air distribution ring.
e) Slightly oil movable parts with SATA special grease (order no. 10009).

A mounting instruction of the air distribution ring can be found as a PDF and as a video on our homepage www.sata.com/Media
Also more information on spray gun cleaning can be obtained from a video.

Never use force. Using improper tools such as pipe wrench, gas torch, etc. will void any warranty. In many cases proper repairs can only be carried out with the aid of special tools. In such cases, limit yourself to establishing the cause of the problem and leave the repairs to the service department. We refuse to accept liability for perfect functioning of the spray gun if it is disassembled by the customer.

Important Notice:
Gun may be cleaned with solvent or cleaning agents manually or in a conventional gun washing machine.

The following actions damage the gun/system, may lead to the loss of the explosion-proofness approval and entirely annull any warranty claims:

- Immersing the gun in solvent or cleaning agents, or for a period longer than required for the cleaning process as such
- Storing the gun inside the gun washing machine
- Cleaning the gun by means of ultrasound cleaning systems
- Opening of the display glass on the front
- Opening of the battery compartment without inserting an original SATA battery, a new original sealing and a new original lid (spare part no. 14985
- Cleaning of the display glass with pointed, sharp-edged or abrasive objects
- Exerting violent, inappropriate treatment

7. Possible failures in operation

	[illegible]	[illegible]	[illegible]
1.	Gun leaks from fluid tip	Foreign substances between fluid tip and needle prevent sealing	Clean fluid needle and fluid nozzle in thinner or use new set nozzle
2.	Paint emerges from fluid needle - needle sealing	Self tensioning needle sealing damaged or lost.	Replace needle sealing
3.	Spray pattern in sickle shape	Horn air holes or air circuit clogged.	Soak in thinner, afterwards clean with SATA nozzle-cleaning needle
4.	Drop-like or oval shaped pattern	Dirt on fluid pin tip or air outlet	Turn air nozzle by 180 degrees. If defective pattern remains, clean fluid tip pin and air circuit
5.	Paint spray flutters	- Too little material in cup - fluid nozzle not tight self-adjusting - needle sealing damaged, nozzle set dirty or damaged	- Refill material - tighten parts - if necessary clean or replace parts
6.	Material bubbles or „boils" in paint cup	- Atomization air flows through the paint channel to the cup. The paint nozzle is not sufficiently tightened - Air nozzle is not completely screwed on, the air net clogged - Seat is defective or nozzle insert is damaged	- Tighten parts accordingly - Clean parts - Replace parts

8. Spare parts

Part.No.	Description
1503	Countersunk screw M4 x 8 DIN 965
1826	Pack of 4 pcs. non-drip devices
3657	Control knob
3988	Paint strainers, pack of 10 pcs.
6213	Trigger set for SATAjet
7757 *1	Pack of 4 CCS-Clips
9050	Tool set
10520	Pack of 12 springs for paint needle
14985	Battery cpl. with compartment lid and sealing
15436	Fluid needle packing
18162****	Swivel joint complete (for SATAjet 2000 HVLP DIGITAL 2)
17152	Pack of 12 air piston springs
19745****	Swivel joint complete (for SATAjet 2000 HVLP)
26518	Adjust material flow control
27243	Plastic cup, 0.6 l, QCC for quick change
49395	Screw-on lid for 0.6 l plastic cup
57620 (□)	Repair kit SATAjet
76018	Pack with 10 x 10 paint strainers
76026	Pack with 50 x 10 paint strainers
82552 (•)	Air piston service unit
86843	Air piston rod
89771	Spindle cpl. for round/flat spray control
94961	Air micrometer
95091	Air connection piece (for SATAjet 2000 HVLP DIGITAL 2)
97824	Pack of 3 air distribution rings
133826	Trigger sleeve set
133934	Pack of 3 sealings for spindle round/flat spray control
133942	Seal retainer, cpl.
133959	Spring set for SATA paint spray guns w. 3 x paint needle/air piston springe each
133967	Pack of 3 fixing screws for SATA air micrometer
133983	Air connection piece G 1/4 ext.
133991	Pack of 3 air piston heads
134098	Air connection piece G 1/4 ext. - M15 x 1 ext.

*1 According to spray gun type without CCS
**** Swivel joint only available with gravity cup guns

The spare part drawings and the accessories can be found on the fold-out page at the end of this booklet

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VOC Usage

Grouped By Customer Location
Date Range: 7/1/2014 - 12/31/2014

1/21/2015
11:47 am

Item Code	Item Description	UOM	Quantity	VOC lbs	Gallonage Total	VOC Total lbs	% per Cust
Customer Location: 1 - KAYFIELD AUTOMOTIVE PAINT 1							
Customer: M.R. AUTOMOTIVE, INC - 12286 Phone: (302)731-2886							
Ship To: M.R. AUTOMOTIVE, INC - 12286 Phone: (302)731-2886							
VOC Class: Unspecified							
Manufacturer: PPG INDUSTRIES, INC. ALL							
Line: CAT							
DCH3630/QT	HIGH TEMP HARDENER DC3010/DC4010	QT	8.00	0.11	2.00	0.88	3.6%
Total for Line:	**CAT**				**2.00**	**0.88**	
Line: CLR							
DC4010/GL	VELOCITY PREMIUM CLEAR LV	GL	8.00	1.25	8.00	10.00	41.1%
Total for Line:	**CLR**				**8.00**	**10.00**	
Line: ENV							
ECS21/GL	WHITE LV SEALER	GL	1.00	1.12	1.00	1.12	4.6%
ECS25/GL	GRAY LV SEALER	GL	1.00	1.11	1.00	1.11	4.6%
ECS27/GL	BLACK LV SEALER	GL	2.00	1.12	2.00	2.24	9.2%
EH392/QT	SLOW UNDERCOAT HARDENER	QT	2.00	0.27	0.50	0.54	2.2%
T400/N2	WHITE (2L)	2L	2.00	0.43	0.50	0.86	3.5%
T4002/PT	RADIANT RED	PT	1.00	0.10	0.13	0.10	0.4%
T402/PT	TRACE WHITE	PT	1.00	0.11	0.13	0.11	0.5%
T407/N2	JET BLACK (2L)	2L	3.00	0.35	1.50	1.05	4.3%
T409/2LT	BLACK ENVIROBASE	2L	3.00	0.25	1.50	0.75	3.1%
T414/1L	RICH BLUE	1L	1.00	0.21	0.25	0.21	0.8%
T420/1L	HIGH STRENGTH BLUE	1L	1.00	0.15	0.25	0.15	0.6%
T438/1L	ROSE	1L	2.00	0.20	0.50	0.39	1.6%
T443/1L	VOILET	1L	1.00	0.19	0.25	0.19	0.8%
T444/1L	BORDEAUX	1L	1.00	0.21	0.25	0.21	0.9%
T453/1L	WHITE PEARL	1L	1.00	0.22	0.25	0.22	0.9%
T471/2L	EXTRA FINE SILVER	2L	1.00	0.45	0.50	0.45	1.8%
T473/2L	MEDIUM METALLIC	2L	1.00	0.44	0.50	0.44	1.8%
T475/2L	EXTRA FINE SILVER	2L	1.00	0.47	0.50	0.47	1.9%
T476/2L	COARSE LENTICULAR	2L	1.00	0.45	0.50	0.45	1.9%
T479/1L	COARSE SILVER DOLLAR MET	1LT	1.00	0.24	0.25	0.24	1.0%
T494/GL	DEIONIZED WATER	GL	2.00	0.17	2.00	0.34	1.4%
T581/PT	ACTIVATOR	PT	1.00	0.38	0.13	0.38	1.5%
Total for Line:	**ENV**				**14.39**	**12.01**	
Total for Manu:	**PPG INDUSTRIES, INC. ALL**				**24.39**	**22.89**	
Manufacturer: PPG INDUSTRIES, INC. PPS							
Line: SPC							
SU4901	CLEAN & SCUFF SPONGE	1	1.00	0.00	0.08	0.00	0.0%
SUA4903	ADVANCED PLASTIC BOND	1	2.00	0.73	0.26	1.46	6.0%
Total for Line:	**SPC**				**0.34**	**1.46**	
Total for Manu:	**PPG INDUSTRIES, INC. PPS**				**0.34**	**1.46**	
Total for VOC Class: Unspecified					**24.72**	**24.36**	**100.0%**
Total for Ship To: M.R. AUTOMOTIVE, INC - 12286					**24.72**	**24.36**	**100.0%**
Total for Cust: M.R. AUTOMOTIVE, INC - 12286					**24.72**	**24.36**	**100.0%**
Total for Location: 1 - KAYFIELD AUTOMOTIVE PAINT 1					**24.72**	**24.36**	

KAYFIELD AUTOMOTIVE PAINT

VOC Usage

Grouped By Customer Location
Date Range: 7/1/2014 - 12/31/2014

1/21/2015
11:47 am

Item Code	Item Description	UOM	Quantity	VOC lbs	Gallonage Total	VOC Total lbs	% per Cust
Grand VOC Total:					24.72	24.38	

Filters:

No Customer Location Specified
Transaction Loc: KAYFIELD AUTOMOTIVE PAINT 1 - 1
Customer: M.R. AUTOMOTIVE, INC - 12286
No Ship To Specified
No Item Type Specified
No Item Specified
No VOC Class Specified
No Manufacturer Specified
No Product Line Specified
No Item Attributes Specified

Records Returned: 26

No Customer Salesman Specified
No Customer Type Specified
No Product Group Specified
Vendor: PPG INDUSTRIES, INC. ALL

No Attributes Specified

10672 M.R. AUTOMOTIVE, INC. Total VOC content of Purchases in 2013

Avg. lbs of VOC/month 0.08

LINE	PART	DESCRIPTION	VOC/Container	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
			VOC in Month	25.21	15.75	12.54	14.02	23.78	25.18	17.45	16.79	5.06	0.00	0.35	0.00	156
			Weekdays/Mo	21	20	21	22	22	20	22	22	20	23	20	21	254
			Hourly rate@8hrs	0.15	0.10	0.07	0.08	0.14	0.16	0.10	0.10	0.03	0.00	0.00	0.00	0.08
SJ	399088	QT 2.8 ACTIVATOR A284	0.9								2.6					2.6
SJ	02.8	3/4 QT 2.8 POLYURETHANE NO SUFFIX	1.2								2.3					2.3
SJ	73500	PT P1 LESONAL SB MIX	0.8		0.8					0.8						1.5
SJ	73501	QT P1 LESONAL SB MIX	1.5		1.5											1.5
SJ	73504	PT P2 LESONAL SB MIX	0.8	0.8	0.8					0.8						2.3
SJ	73518	1/4 LT SB MIX P2	0.8	0.8												0.8
SJ	390166	QT SB B/C BLEND ADDITIVE 070166	1.5		1.5											1.5
SJ	390951	GAL LESONAL PROAIR CLEAR	3.9													0.0
SJ	392086	Qt 2.8-4.6 GRAY EPOXY PR 072086	0.6							0.6	0.6					1.2
SJ	392669	QT 2.1-3.8 URETHANE PRIM 072669	0.4	0.4	0.4		0.4	0.4	0.4			0.4		0.4		2.5
SJ	395360	QT 4.6 FAST EPOXY HARDNR 075360	1.4							1.4						1.4
SJ	074295	QT 4.6 MEDIUM REDUCER LESONAL (TH	1.9							1.9						1.9
SK	330868	200g TUBE KOMBI PUTTY 3005	0.5	0.5												0.5
SK	387016	14.75oz PRIMER PO 6016	0.1				0.1									0.1
WB	391583	LITRE ACTIVATOR WB	2.0	5.9	2.0	3.9	2.0	5.9	7.8	3.9						31.2
WB	394517	QT REDUCER LV (PRIMER)	0.0		0.0						0.0					0.0
WB	395176	QT URETHANE SURF HARDENER LV	2.0	2.0								2.0				4.0
WB	396194	GAL LV HS SURFACER/SEALER BLACK	0.0			0.0				0.0						0.0
WB	396195	GAL LV HS SUFACER SEALER WHITE	0.0			0.0										0.0
WB	398178	QT LV HS SEALER ACT 2.1	0.3		0.3			0.3		0.3	0.3					1.0
WB	398277	QT LV HS SURFACER\SEALER HARDNER	1.0	1.0	1.0			1.0		1.0	1.0					4.9
WB	483898	GAL LESONAL UNIVERSAL CLEAR LV	2.5	2.5		2.5	2.5	2.5	4.9		2.5					17.2
WB	483899	QT UNIVERSAL CLEAR LV HARDENER	1.9	3.7	3.7	1.9	3.7	5.6	3.7	3.7	3.7					29.6
WB	483900	QT UNIV CLEAR LV REDUCER SLOW	0.9						0.9							0.9
WB	483901	QT UNIV CLEAR LV REDUCER MED	0.9	0.9		0.9		0.9	0.9							3.4
WB	GMIX-1	GAL LES WB MIX CLASS 1	3.0													0.0
WB	HPMIX-1	1/4L LESONAL WB MIX P1	0.4	1.1	0.4	0.8	0.4	0.8	0.8		1.1	0.8				6.0
WB	HPMIX-2	1/4L LESONAL WB MIX P2	0.4			0.4	0.8									1.1
WB	HPMIX-3	1/4L LESONAL WB MIX P3	0.4		0.4	0.4		0.4			0.4					1.5
WB	LMIX-1	LITRE LES WB MIX CLASS 1	0.8	2.4	1.6		2.4	4.0	3.2	0.8		0.8				15.1
WB	LMIX-2	LITRE LES WB MIX CLASS 2	0.8							0.8						0.8
WB	LMIX-3	LITRE LES WB MIX CLASS 3	0.8						0.8							0.8
WB	PMIX-1	1/2L LESONAL WB MIX P1	0.4	1.2	1.2	1.6	0.8	2.0	1.6	1.2	1.6	1.2				12.3
WB	PMIX-2	1/2L LESONAL WB MIX P2	0.4	0.4			0.4			0.4	0.4					1.6
WB	PMIX-3	1/2L LESONAL WB MIX P3	0.4	0.4	0.4	0.4	0.4	0.4	0.4		0.4					2.8
WB	PMIX-4	1/2L LESONAL WB MIX P4	0.4				0.4									0.4
WB	03396194	QT LV HS SURF/SEALER BLACK	1.5	1.5												1.5

DNREC Division of Al+B1:G7r Quality

DE Auto Body Shop Monthly VOC Usage Report

Auto Body Shop Name	M.R. Automotive, Inc.
Shop Address	2905 Pulaski Highway Newark, DE 19702+C8
Mailing Address (if different)	same
Owner/Operator Name	Matt Ratte
Phone Number	302-731-2886
Coating Supplier Name	Till Paint Company
Purchase Period (Month & Year)	Jan - Dec 2013
Quantity of VOC Materials Purchased/Used (lbs/Gallon)	2013 = 156 lbs

Please attach monthly VOC Report provided by your coating supplier and mail with this completed form to: DNREC , Division of Air Quality, 655 S. Bay Road, Suite 5N, Dover, DE 19901 or fax the report to (302) 739-3106. Questions?: (302) 739-6402/