Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

January 18, 2008

Mr. Chris Turchi
MAACO Collision Repair and Auto Painting
8556 Hawbuck Street
Trinity, Florida 34683

Dear Mr. Turchi:

This is to acknowledge that your notification of intent to use the authority of Rule 62-210.310 to operate your facility was received on December 12, 2007. We have assigned ARMS Number 1030524-001 to this facility.

As you know, pursuant to Florida Statutes section 403.814, authority to operate under general permits commences thirty days after receipt of the registration form unless you have been notified by this office that your facility has not shown entitlement to operate pursuant to the rule provisions.

For your information, authority to operate pursuant to Rule 62-210.310 expires after 5 years. Therefore, a new registration form must be received no later than 5 years after the date your notice was received as indicated above. If your general permit rule conditions require testing, such testing must be completed within the time frame specified in the rule.

If you have any additional questions, please contact Dickson Dibble at 850/921-9586.

Sincerely,

for Sandra F. Veazey, Chief
Bureau of Air Monitoring
and Mobile Sources

SFV/pg

cc: Mr. Gary Robbins, Pinellas County

F&A RECEIPT 12 DEC 2007

SURFACE COATING OPERATIONS
AIR GENERAL PERMIT REGISTRATION FORM

Part II. Notification to Permitting Office

(Detach and submit to appropriate permitting office; keep copy onsite)

Instructions: To give notice to the Department of an eligible facility's intent to use this air general permit, the owner or operator of the facility must detach and complete this part of the Air General Permit Registration Form and submit it to the appropriate Department of Environmental Protection or local air pollution control program office which has permitting authority. Please type or print clearly all information, and enclose the appropriate air general permit registration processing fee pursuant to Rule 62-4.050, F.A.C. *($100 as of the effective date of this form)*

1030524-001

Registration Type

Check one:

INITIAL REGISTRATION - Notification of intent to:

- ☒ Construct and operate a proposed new facility.
- ☐ Operate an existing facility not currently using an air general permit (e.g., a facility proposing to go from an air operation permit to an air general permit).

RE-REGISTRATION (for facilities currently using an air general permit) - Notification of intent to:

- ☐ Continue operating the facility after expiration of the current term of air general permit use.
- ☐ Continue operating the facility after a change of ownership.
- ☐ Make an equipment change requiring re-registration pursuant to Rule 62-210.310(2)(e), F.A.C., or any other change not considered an administrative correction under Rule 62-210.310(2)(d), F.A.C.

Surrender of Existing Air Operation Permit(s) - For Initial Registrations Only

If the facility currently holds one or more air operation permits, such permit(s) must be surrendered by the owner or operator upon the effective date of this air general permit. In such case, check the first box, and indicate the operation permits being surrendered. If no air operation permits are held by the facility, check the second box.

- ☐ All existing air operation permits for this facility are hereby surrendered upon the effective date of this air general permit; specifically permit number(s): _____
- ☒ No air operation permits currently exist for this facility.

General Facility Information

Facility Owner/Company Name (Name of corporation, agency, or individual owner who or which owns, leases, operates, controls, or supervises the facility.)
Chris and Margaret Turchi, C&M Auto Body LLC.

Site Name (Name, if any, of the facility site; e.g., Plant A, Metropolis Plant, etc. If more than one facility is owned, a registration form must be completed for each.)
MAACO Collision Repair and Auto Painting

Facility Location (Provide the physical location of the facility, not necessarily the mailing address.)
Street Address: 4825 Palm Harbor Blvd.
City: Palm Harbor County: Pinellas Zip Code: 34683

RECEIVED DEC 19 2007 Bureau of Air Monitoring & Mobile Sources

Facility Start-Up Date (Estimated start-up date of proposed **new** facility.)(N/A for existing facility)
March, 2008

Owner/Authorized Representative

Name and Position Title (Person who, by signing this form below, certifies that the facility is eligible to use this air general permit.)
Print Name and Title: Chris Turchi, Owner

Owner/Authorized Representative Mailing Address
Organization/Firm: C&M Auto Body, LLC. dba MAACO Collision Repair and Auto Painting
Street Address: 8556 Hawbuck Street
City: Trinity County: Pasco Zip Code: 34683

Owner/Authorized Representative Telephone Numbers
Telephone: 727 376 5879 (Home) Fax:
Cell phone (optional):

Facility Contact (If different from Owner/Authorized Representative)

Name and Position Title (Plant manager or person to be contacted regarding day-to-day operations at the facility.)
Print Name and Title:

Facility Contact Mailing Address
Organization/Firm:
Street Address:
City: County: Zip Code:

Facility Contact Telephone Numbers
Telephone: Fax:
Cell phone (optional):

Owner/Authorized Representative Statement

This statement must be signed and dated by the person named above as owner or authorized representative

I, the undersigned, am the owner or authorized representative of the owner or operator of the facility addressed in this Air General Permit Registration Form. I hereby certify, based on information and belief formed after reasonable inquiry, that the facility addressed in this registration form is eligible for use of this air general permit and that the statements made in this registration form are true, accurate and complete. Further, I agree to operate and maintain the facility described in this registration form so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof.

I will promptly notify the Department of any changes to the information contained in this registration form.

Signature

12/1/07
Date

Material Usage Rates

If this is an **initial registration** for a surface coating operation, provide an estimate of the average quantity of volatile organic compounds in all coatings (solvents and thinners) expected to be used on a daily basis.

34 lbs/day

If this is a **re-registration** for an existing surface coating operation, provide the highest monthly average of the daily quantity of volatile organic compounds in all coatings (solvents and thinners) used in the last five years. Indicate the month and year during which this usage occurred.

Description of Facility

Below, or as an attachment to this form, provide a description of the surface coating operations at the facility in sufficient detail to demonstrate the facility's eligibility for use of this air general permit and to provide a basis for tracking any future equipment or process changes at the facility. Describe all air pollutant-emitting processes and equipment at the facility, and identify any air pollution control measures or equipment used.

C&M Auto Body, LLC. dba MAACO Collision Repair and Auto Painting, is an auto body shop used for the refinishing and resurfacing of automobiles. This facility is installing a Garmat Tier 1 Paint Spray booth and Oven. The paint spray booth is a pressurized semi-downdraft booth with glass fiber filtration media (96.5% efficiency) for particulate control. The booth and oven each contain a 997,000 Btu natural gas fired burner. The emissions from the equipment will consist of VOC's and a small amount of particulate after filtration. Criteria pollutants from the combustion of natural gas are also emitted. (Detailed emission calculations are attached) The applicator is a high efficiency gravity feed gun that provides equal or better efficiency of transfer than HVLP. A Hercules GW/R-T totally enclosed gun washer will also be used for cleanup.

MAACO AUTO PAINTING

Process Flow Diagram

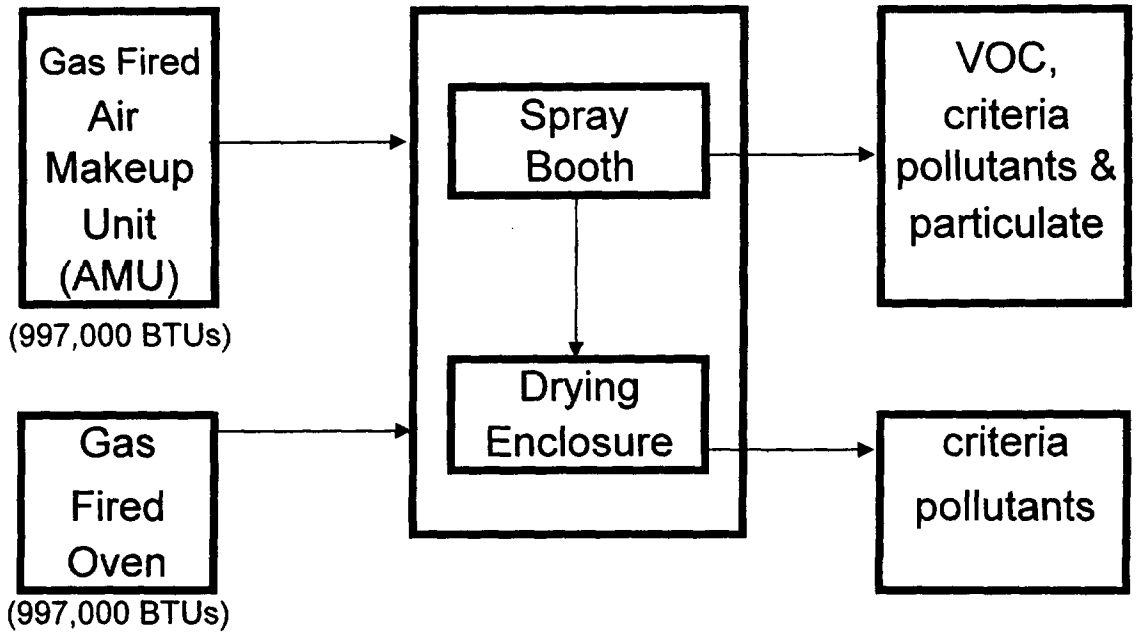


Table 1. Topcoat Analysis

Coating	Parts	Product	Subproduct	Product #	Weight % Solids	Weight % Vol.	Density	LE VOC
			Topcoat (1/3)	430-52	34.84	65.16	7.96	5.2
			Binder (2/3)	435-90	41.51	58.49	7.73	4.1
	8	Ful-Base Enamel			39.29	60.71	7.81	4.5
	1	Catalyst Plus		483-08	40.0	60.0	8.16	4.9
	2	Reducer		441-22	0	100	6.91	6.9
Ful-Base Enamel					**32.2**	**67.8**	**7.68**	**4.9**
			Topcoat (1/3)	430-52	34.84	65.16	7.96	5.2
			Binder (2/3)	435-94	40.4	59.6	7.98	4.8
	8	Ful-Cryl II			38.6	61.4	7.97	4.9
	1	Catalyst		483-11	75	25	9.01	2.2
	2	Reducer		441-22	0	100	6.91	6.9
Ful-Cryl II Acrylic Enamel					**34.9**	**65.1**	**7.87**	**5.0**
			Toner (1/3)	430-52	34.84	65.2	7.96	5.2
			Binder (2/3)	435-91	42.8	57.2	8.11	4.6
	8	Ful-Base System Toner			40.1	59.9	8.06	4.8
	1	Catalyst		483-15	90	10	9.35	0.9
	2	Reducer		441-22	0	100	6.91	6.9
Ful-Thane 2K Urethane					**37.4**	**62.6**	**7.97**	**4.8**
	1		Basecolor "K" (see Table 2)		43.9	56.1	7.99	5.5
	1		Basemaker	7160S	0.2	99.8	6.61	6.6
	1	Basecoat			22.0	78.0	7.3	6.0
	4		Clear	496-00	35.9	64.1	7.98	4.2
	1		Catalyst	483-79	44.1	55.9	8.36	4.7
	2	Clearcoat			37.5	62.5	8.06	4.3
Chromabase Basecoat/Clearcoat					**39.6**	**60.4**	**7.80**	**4.9**

Table 2. Chromabase Basecoat Details

Sample color: Gray Blue-Effect
K8620K

DuPont Color	Mix (g)	density (lb/gal)	Mix (gal)	volume percent	VOC (lb/gal)	TOTAL VOC (lb/gal)	Weight % solids		TOTAL Weight % Solids
814J	63.1	9.15	0.015204	0.041128	4.7	0.193301	48.39	0.178937	8.658773
806J	120.2	8.25	0.032121	0.086892	4.3	0.373634	47.7	0.176386	8.413601
811J	151.1	9.25	0.036013	0.097421	4.9	0.477361	47.18	0.174463	8.231159
827J	174.1	7.94	0.048341	0.130769	5.6	0.732309	28.99	0.1072	3.107718
820J	189.9	7.96	0.052595	0.142279	5.2	0.739849	34.93	0.129165	4.511722
802J	198.6	8.52	0.05139	0.139017	4.0	0.556067	53.57	0.198092	10.61178
150K	443.1	7.29	0.134002	0.362495	6.6	2.392467	9.67	0.035758	0.345779
	1340.1		0.369665			**5.464988**	270.43		**43.88054**

TOTAL DENSITY 7.992176 lb/gal

Table 3. VOC Emissions

Product Type	Amount Applied per hour (gal)	LE VOC content (# VOC/gal coating)	Actual hours per year	Potential hours per year	Actual Emissions (tons/year)	Potential Emissions (tons/year)
Topcoats & Metallic Topcoats						
Ful-Base Enamel	0.95	4.9	312	1314	0.73	3.06
Ful-cryl II Topcoat	0.95	5.0	312	1314	0.74	3.12
Ful-thane 2K urethane	0.95	4.8	416	1752	0.95	3.99
Chromabase Basecoat/Clearcoat	0.25	4.9	1040	4380	0.64	2.68
Sub-total			2080	8760		
Pretreatment Wash Primer						
1:etch primer/1: activator	0.075	6.2	1040	4380	0.24	1.02
Primer Sealer						
422-23 Ful-Seal	0.25	4.6	1040	4380	0.60	2.52
Sub-total			2080	8760		
Primer/Primer Surfacer						
2K Urethane Primer	0.075	4.6	2080	8760	0.36	1.51
Wash Thinnner (cleanup)	0.02875	6.9	2080	8760	0.21	0.87
				Total:	**4.46**	**18.77**

Note: Combining the total topcoat applications together results in an actual hourly operation of 2080 hours and a potential hourly operation of 8760 hours. Combining the pretreatment wash primer and primer sealer applications results in an actual hourly operation of 2080 hours and a potential hourly operation of 8760 hours.

Table 4. HAP Analysis

Topcoats

Coating/Regulated Toxic	Parts	Product	Subproduct	Product #	Amount Applied Per Hour (gals)	% BW in product	Density (lb/gal)	VOC (lb/gal)	actual (hrs/day)	actual emissions (lb/day)
			Topcoat (1/3)	430-52			7.96	5.2		
			Binder (2/3)	435-90			7.73	4.1		
	8	Ful-Base Enamel					7.81	4.47		
	1	Catalyst Plus		483-08			8.16	4.9		
	2	Reducer		441-22			6.91	6.9		
Ful-Base Topcoat					0.950		7.68	4.9	1.20	
ethyl benzene						1.7212%				0.15
toluene						2.7273%				0.24
ethlene glycol monobutyl ether acetate						1.4545%				0.13
1,2,4 trimethly benzene						0.6730%				0.06
isophorone diisocyanate						0.0909%				0.01
napthalene						0.0970%				0.01
xylene						6.5455%				0.57
			Topcoat (1/3)	430-52			7.96	5.2		
			Binder (2/3)	435-94			7.98	4.8		
	8	Ful-Cryl II					7.97	4.9		
	1	Catalyst		483-11			9.01	2.2		
	2	Reducer		441-22			6.91	6.9		
Ful-Cryl II Acrylic Enamel					0.950		7.87	5.0	1.2	
ethyl benzene						2.1455%				0.19
toluene						4.1540%				0.37
xylene						8.4848%				0.76
ethlene glycol monobutyl ether acetate						2.3341%				0.21
1,6-hexamethylene diisocyanate						0.0091%				0.00
1,2,4 trimethyl benzene						0.7273%				0.07
cumene						0.0000%				0.00
napthalene						0.0000%				0.00
methyl isobutyl ketone						0.5668%				0.05
			Toner (1/3)	430-52			7.96	5.2		
			Binder (2/3)	435-91			8.11	4.6		
	8	Ful-Base System Toner					8.06	4.80		
	1	Catalyst		483-15			9.35	0.9		
	2	Reducer		441-22			6.91	6.9		
Ful-Thane 2K Urethane					0.950		7.97	4.83	1.60	
ethyl benzene						1.9152%				0.23
toluene						4.0785%				0.49
xylene						7.5242%				0.91
1,6-hexamethylene diisocyanate						0.0182%				0.002
1,2,4-trimethyl benzene						0.6955%				0.08
cumene						0.0091%				0.00
napthalene						0.0000%				0.00
methyl isobutyl ketone						0.7413%				0.09
	0.041128		chromabase tint	814J			9.15	4.7		
	0.086892		chromabase tint	806J			8.25	4.3		
	0.097421		chromabase tint	811J			9.25	4.9		
	0.130769		chromabase tint	827J			7.94	5.6		

	0.142279		chromabase tint	820J			7.96	5.2		
	0.139017		chromabase tint	802J			8.58	4.0		
	0.362495		balancer	150K			7.29	6.6		
			K8620K				8.00	5.46		
	1		Basemaker	7160S			6.61	6.6		
	1	Chromabase Basecoat					7.31	6.03		
	4		Clear	496-00			7.98	4.2		
	1		Catalyst	483-79			8.36	4.7		
	2	Clearcoat					8.06	4.30		
Chromabase Basecoat/Clearcoat					0.250		7.81	4.88	4.00	
ethyl benzene						4.4089%				0.34
xylene						16.1563%				1.26
toluene						5.2667%				0.41
1,2,4 tri methyl benzene						2.0137%				0.16

Pretreatment Wash Primer

	1	Etch Primer		491-17			7.90	5.70		
	1	Activator		441-43			6.86	6.70		
Etch Primer					0.075		7.38	6.20	4	
n-butyl alcohol						44.5%				0.99
methyl isobutyl ketone						6.0%				0.13

Prime Sealer

422-23 Ful-Seal Select				422-23	0.25		8.24	4.6	4	
toluene						3.0%				0.25
ethyl benzene						0.7%				0.06
napthalene						0.1%				0.01
xylene						2.7%				0.22

Primer Surface

	4	SelectPrime 2K Primer		421-17			11.88	4.4		
	1	SelectPrime Activator		483-87			8.01	5.3		
2K Urethane Primer					0.075		11.106	4.58	8.00	
ethyl benzene						5.0%				0.332
toluene						3.0%				0.20
xylene						20.0%				1.33

INDIVIDUAL HAP SUBTOTAL

	CAS	(lb/day)	(tpy)
toluene	108-88-3	1.96	0.26
xylene	1330-20-7	5.06	0.66
methyl isobutyl ketone	108-10-1	0.28	0.037
ethyl benzene	100-41-4	1.31	0.170
1,6-hexamethylene diisocyanate	822-06-0	0.0030	0.0004
1,2,4-Trimethylbenzene	95-63-6	0.34	0.0445
cumene	98-82-8	0.01	0.0011
n-butyl alcohol	71-36-3	0.9852	0.1281
napthalene	91-20-3	0.0082	0.0011
TOTAL HAP			**1.3**

Table 5. Particulate Emissions

MAACO ENTERPRISES

Particulate Emission Calculations

Without control

A	B	C	D	E	F=(B*C*D*E)
Product Type	Amount applied per week (gal)	Percent Overspray	solids content (# solids/gal coating)	Weeks per year	Emissions (lbs/year)
Pretreatment Wash Primer	2	35%	2.06	52	75
Primer/Primer Surface	3	35%	5.79	52	316
Prime Sealer	10	35%	5.11	52	930
Topcoat (as applied)	45	35%	3.04	52	2490

TOTAL:	**3810.67**

With control

Pretreatment Wash Primer	2.62 lbs/yr
Primer/Primer Surface	11.06 lbs/yr
Prime Sealer	32.56 lbs/yr
Topcoat (as applied)	87.14 lbs/yr

TOTAL:	**133.37 lbs/yr**

karen/maaco/particul

Table 6. Air Makeup Unit Emissions

EPA's AP-42 for Natural Gas

Drying Oven	pollutant	AP-42 factor lb/10^6 scf	Unit scfh	lbs/hr
	Partic	7.6	997	0.0076
	NOx	94	997	0.0937
	CO	40	997	0.0399
	SO2	0.6	997	0.0006
	VOC	5.5	997	0.0055

Spray Booth	pollutant	AP-42 factor lb/10^6 scf	Unit scfh	lbs/hr
	Partic	7.6	997	0.0076
	NOx	94	997	0.0937
	CO	40	997	0.0399
	SO2	0.6	997	0.0006
	VOC	5.5	997	0.0055

	Total Burner Emissions
Partic	0.015154
NOx	0.187436
CO	0.07976
SO2	0.001196
VOC	0.010967

Table 7.

Garmat Tier 1 Booth and Oven Emissions
Criteria Pollutants
Emission Factors for Natural Gas from EPA's AP-42

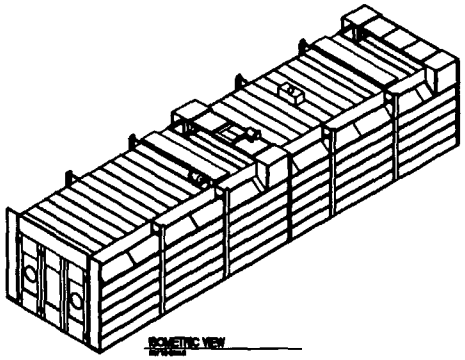
	Burners (2) 997000 Btu (lbs/hr)	**Paint Spray Booth Potential Emissions** (lbs/hr)	**Paint Spray Booth Actual Emissions 96.5 % Filter Efficiency** (lbs/hr)
Particulate	0.0152	1.83	0.0641
NOx	0.1874	0	0
SOx	0.0012	0	0
CO	0.0798	0	0
VOC	0.011	4.3	4.3

	Total Potential Emissions (lbs/hr)	(tons/yr)	(lbs/day)	**Total Actual Emissions** (lbs/hr)	(tons/yr)	(lbs/day)
Particulate	**1.8**	**8.1**	**14.8**	**0.08**	**0.08**	**0.63**
NOx	**0.19**	**0.82**	**1.50**	**0.19**	**0.19**	**1.50**
SOx	**0.0012**	**0.005**	**0.0096**	**0.0012**	**0.0012**	**0.0096**
CO	**0.080**	**0.035**	**0.64**	**0.080**	**0.08**	**0.64**
VOC	**4.3**	**18.9**	**34.5**	**4.3**	**4.46**	**34.32**

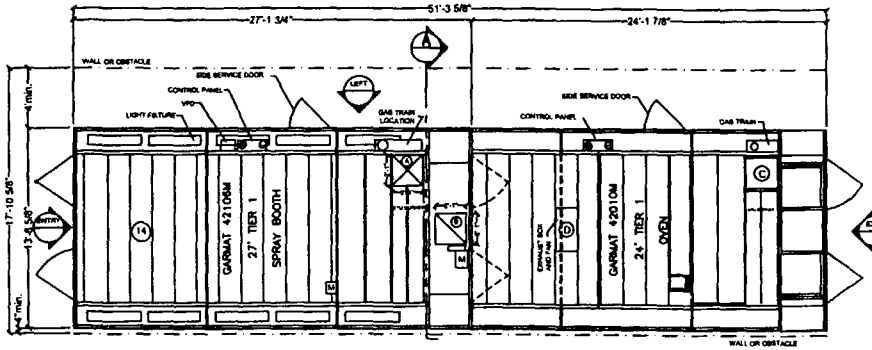
PRESSURIZED SEMI-DOWNDRAFT SPRAY BOOTH GAS FIRED OVEN

Manufacture	Type		Model #	Dimensions
GARMAT TIER 1 BOOTH or Equivalent	Pressurized Semi-Down Draft Spray Booth Exhaust: 25" x 25" 7.5 HP, 3 Phase. 10,000 CFM's. Exhaust Fan Make: NICONTRA, Model # 632N49W. Exhaust Fan Motor: Make & #, BALDOR, M3710T Air Intake Unit: 25" x 25" 7.5 HP, 3 Phase, 10,000 CFMs BTUs: 997,000 NATURAL GAS			13' - 6 5/8" x 27' 1 3/4"
GARMAT TIER 1 OVEN or Equivalent	Recirculation Gas Fired Oven. Purge Exhaust: 12" x 12" 1/3 HP, 3 Phase, 8,000 CFMs Exhaust Fan & Motor Make: GRAINGER, Model # 17F921 Intake: 12" x 12" Intake Duct w/ 5 HP, 3 Phase, 8,000 CFMs BTUs: 997,000 Natural Gas			13' - 6 5/8" x 24' 1 7/8"
	Overall Spray Booth & Oven Dimensions			13' 7" x 51' 3 5/8"
Exhaust Filter Info	**Spray Booth** - Glass Fiber Media, 96.5% efficiency	FILTRAIR	PA - 21	8) 59.5" x 24"
Intake Filter Info	**Spray Booth** - Thermally bonded & impregnated in full depth to prevent release of fibers & migration of particles larger than 5 microns. 99.5% efficiency	FILTRAIR	CC 600 G	8) 38.5" x 61.42"
	Oven - Thermally bonded & impregnated in full depth to prevent release of fibers & migration of particles larger than 5 microns. 99.5% efficiency	FILTRAIR	CC 600 G	8) 38.5" x 61.42"
Hercules	Gun Washer		GW/R-T	
DeVilbiss	HIGH EFFICIENCY GRAVITY FEED		GFG-670 Plus Gravity Gun/Cup	

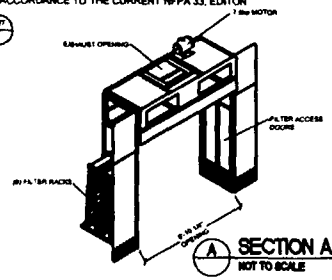
11/26/2007



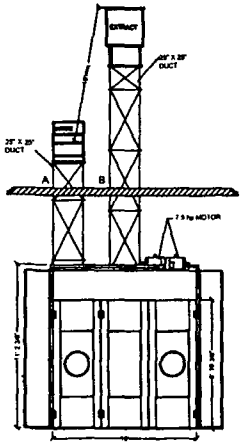
ISOMETRIC VIEW



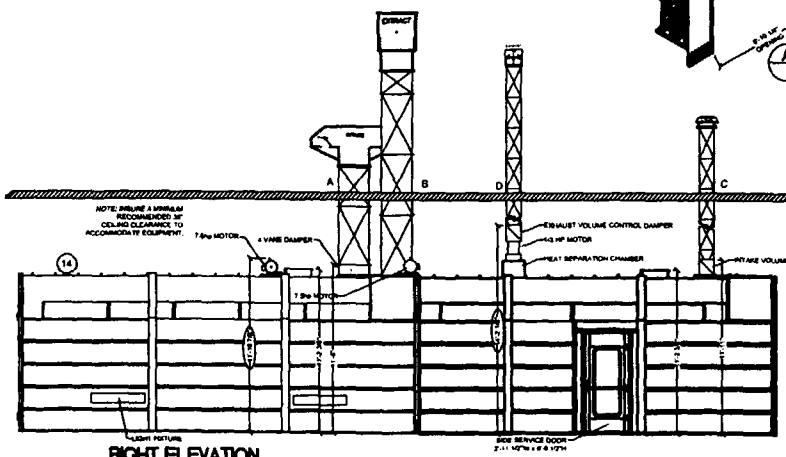
PLAN VIEW



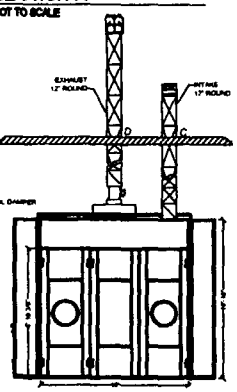
A SECTION A
NOT TO SCALE



ENTRY ELEVATION
NOT TO SCALE



RIGHT ELEVATION
NOT TO SCALE



EXIT ELEVATION
NOT TO SCALE

THE GARMAT 42106 27' TIER 1 SPRAY BOOTH WILL REQUIRE:

1. AT ELECTRICAL DROP THE LIGHTING (16, 4-TUBE INTERIOR ACCESSIBLE LIGHT FIXTURES) WILL REQUIRE TWO 120v/20amp SINGLE PHASE CIRCUITS STANDARD, OR TWO 277v/10 amp, SINGLE PHASE CIRCUITS OPTIONAL. UPGRADED LIGHTING WILL REQUIRE AN ADDITIONAL LIGHT CIRCUIT.

2. AT ELECTRICAL DROP THE TWO STANDARD 7.5hp MOTORS WILL REQUIRE 208v/60amp, 240v/60amp, OR 480v/30amp, THREE PHASE SERVICE.

3. ALL ELECTRICAL CONNECTIONS SHOULD BE IN ACCORDANCE TO THE CURRENT NEC (NATIONAL ELECTRICAL CODES). VERIFY COMPLIANCE OF LOCAL CODES WITHIN THE JURISDICTION OF THE INSTALLATION SITE.

4. ALLOW ADEQUATE CLEARANCE OF 3' MINIMUM FROM ALL SPARKING ELECTRICAL COMPONENTS, TO CONFORM TO THE CURRENT NFPA (NATIONAL FIRE PROTECTION ASSOCIATION) 33, EDITION.

5. REMOTE CONTROL PANEL TO BE PLACED WITHIN 20' OF MAIN CONTROL PANEL, AND NOT TO BE WITHIN 3' OF A BOOTH OPENING, IN COMPLIANCE WITH THE CURRENT NEC EDITION.

6. SUPPLY 100 PSI COMPRESSED AIR TO MAIN GARMAT CONTROL PANEL, INCLUDING SHUT OFF VALVE (NOT SUPPLIED). CLEAN AND DRY AIR IS REQUIRED BEFORE THE SPRAY BOOTH CONTROL PANEL. A QUALITY AIRLINE DRYER (NOT SUPPLIED) CAPABLE OF A CONSTANT 17 CMF SHALL BE INSTALLED PRIOR TO MAIN CONTROL PANEL. AN ADEQUATE PRESSURE REGULATOR (NOT SUPPLIED) CAPABLE OF A CONSTANT 17 CMF AT 60 PSI IS RECOMMENDED PRIOR TO ENTERING THE SPRAY BOOTH CABIN (DO NOT MOUNT REGULATORS OR AIR FILTERS INSIDE THE BOOTH CABIN).

7. BURNER SIZE: 997,000 btu

8. SUPPLY GAS PIPING TO GAS TRAIN, INCLUDING UNION AND DRIP LEG (1 1/4" CONNECTION AT GAS TRAIN INLET). (RECOMMENDED DEDICATED LINE FROM METER WHEN POSSIBLE). GAS PRESSURE MUST BE A MINIMUM OF 1/4" psi (7" w.c.) AND A MAXIMUM OF 3/4" psi (21" w.c.). CAPACITY TO PROVIDE FOR 997,000 BTU BURNER. VENTING OF REGULATOR AND VALVES ON GAS TRAIN TO THE EXTERIOR OF BUILDING - MINIMUM OF 10' FROM INTAKE.

9. LEVEL FLOOR +/- 1/8"

10. ALLOW ADEQUATE SPACE AROUND THE BOOTH IN ACCORDANCE TO THE CURRENT NFPA 33, EDITION.

11. MEANS OF EGRESS TO CONFORM TO THE CURRENT NFPA 101, EDITION.

12. A MINIMUM CLEARANCE OF 20' IS REQUIRED FROM FRONT OF THE BOOTH TO ANY WALL OR OBSTACLE FOR OPTIMUM TURNING RADIUS.

13. HEIGHT OF BOOTH CABIN IS 11'-2 3/8". HIGHEST POINT IS 11'-10 7/8".

14. PROVIDE FOR UNOBSTRUCTED EXPLOSION RELIEF IN ACCORDANCE TO THE CURRENT NFPA 86, ED EDITION.

15. AN APPROVED AUTOMATIC FIRE EXTINGUISHING SYSTEM SHALL BE PROVIDED BY OTHERS, IN ACCORDANCE TO THE CURRENT NFPA 33, EDITION

OVEN REQUIREMENTS:

1. AT ELECTRICAL DROP LIGHTING (1, 4-TUBE INTERIOR ACCESSIBLE LIGHT FIXTURE) WILL REQUIRE ONE 120/277v, 20/10amp, SINGLE PHASE CIRCUITS. 110v STANDARD, 277v OPTIONAL. UPGRADED LIGHTING WILL REQUIRE AN ADDITIONAL LIGHT CIRCUIT.

2. AT THE ELECTRICAL DROP EACH MOTOR WILL REQUIRE 208/240/480v/575 OUTSIDE OF USA), 30/20/10amp, THREE PHASE SERVICE FOR ONE 1/3hp MOTOR AND ONE 5hp MOTOR.

3. ALL ELECTRICAL CONNECTIONS SHOULD BE IN ACCORDANCE TO THE CURRENT NEC (NATIONAL ELECTRICAL CODES). VERIFY COMPLIANCE OF LOCAL CODES WITHIN THE JURISDICTION OF THE INSTALLATION SITE.

4. ALLOW ADEQUATE CLEARANCE OF 3' MINIMUM FROM ALL SPARKING ELECTRICAL COMPONENTS, TO CONFORM TO THE CURRENT NFPA (NATIONAL FIRE PROTECTION ASSOCIATION) 33, EDITIONED .

5. REMOTE CONTROL PANEL TO BE PLACED WITHIN 20' OF MAIN ELECTRICAL PANEL, AND NOT TO BE WITHIN 3' OF A BOOTH OPENING, IN COMPLIANCE WITH THE CURRENT NEC EDITION.

6. BURNER SIZE: 997,000 btu

7. SUPPLY GAS PIPING TO GAS TRAIN, INCLUDING UNION AND DRIP LEG (1 1/4" CONNECTION AT GAS TRAIN INLET). (RECOMMENDED DEDICATED LINE FROM METER WHEN POSSIBLE). GAS PRESSURE MUST BE A MINIMUM OF 1/4" PSI (7" w.c.) AND A MAXIMUM OF 3/4" PSI (21" w.c.). CAPACITY TO PROVIDE FOR 997,000 BTU BURNER. VENTING OF REGULATOR AND VALVES ON GAS TRAIN TO THE EXTERIOR OF BUILDING - MINIMUM OF 10' FROM INTAKE.

8. LEVEL FLOOR +/- 1/8"

9. ALLOW ADEQUATE SPACE AROUND THE BOOTH IN ACCORDANCE TO THE CURRENT NFPA 33, EDITION.

10. MEANS OF EGRESS TO CONFORM TO THE CURRENT NFPA 101, EDITION.

11. A MINIMUM CLEARANCE OF 20' IS REQUIRED FROM FRONT OF THE BOOTH TO ANY WALL OR OBSTACLE FOR OPTIMUM TURNING RADIUS.

12. HEIGHT OF OVEN CABIN IS 11'-2 3/8", HIGHEST POINT 14'-2 1/8".

LEGEND

- ⊖ ELECTRICAL DROP
- M MOTOR LOCATION
- ⊗ AIR INLET
- ○ GAS TRAIN INLET
- Ⓐ 25X25 INTAKE DUCT BOOTH
- Ⓑ 25X25 EXHAUST DUCT BOOTH
- Ⓒ 12" INTAKE DUCT OVEN
- Ⓓ 12" EXHAUST DUCT OVEN

SPRAY BOOTH

FILTERS: Booth Ceiling, Filtrair CC600 G media, 99.9% efficiency, thermally bonded and impregnated in full depth to prevent release of fibers and migration of particles larger than 5 microns.

Booth Exhaust, Filtrair Paint Arrestor, glass fiber media, 98.5% efficiency, 4 self-sealing racks located in each of the two exhaust towers.

FANS: Booth Intake: 1 Dual 355 Centrifugal Fan Assembly with 7.5 HP Motor. Booth Exhaust: 1 Single 450 Spark Arresting Reverse Inciline Fan with 7.5 HP Motor.

CFM: 10,000

OVEN:

FILTERS: Oven Ceiling, Filtrair CC600 G media, 99.9% efficiency, thermally bonded and impregnated in full depth to prevent release of fibers and migration of particles larger than 5 microns.

FANS: Oven Intake: 1 Dual 315 Centrifugal Fan Assembly with a 5 HP Motor. Oven Exhaust: 1 Single Spark Arresting 12" Tube Axle Fan with a 1/3HP Motor.

CFM: 8,000

LIGHT FIXTURES: Comply with the requirements of the Standard(s) for Electric Lighting Fixtures for use in Hazardous (Classified) Locations (UL-844) and are identified with the ETL Listed Mark.

CAROL NELSON

GARMAT
FAX (303)781-3683
PHONE (303)781-4882
1401 W. STANFORD AVE.
ENGLEWOOD, CO 80110

PRELIMINARY DRAWING ONLY NOT APPROVED FOR CONSTRUCTION

EQUIPMENT PLAN VIEW, ISOMETRIC ELEVATIONS AND SPECIFICATIONS

COMPUTER GENERATED DRAWING FOR:
MAACO PAINT CENTER

STATUS - PRELIMINARY
REVISION - 1
SHEET SIZE - D

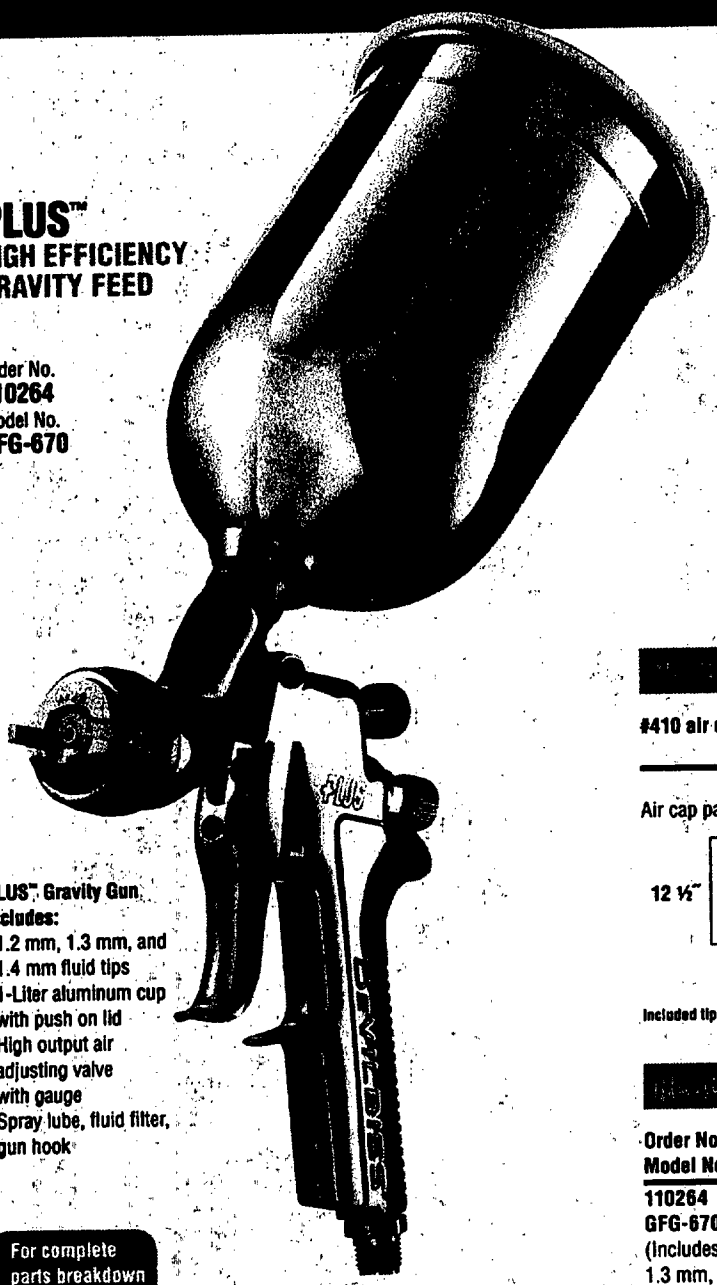
DATE 6/1/07
SCALE 1/4"=1'
SHEET NO. A

DRAWING NO.
42106Mx27_42010Mx24LA1

DEVILBISS
AUTOMOTIVE REFINISHING

PLUS™
HIGH EFFICIENCY GRAVITY FEED

Order No.
110264
Model No.
GFG-670



PLUS™ Gravity Gun Includes:
- 1.2 mm, 1.3 mm, and 1.4 mm fluid tips
- 1-Liter aluminum cup with push on lid
- High output air adjusting valve with gauge
- Spray lube, fluid filter, gun hook

For complete parts breakdown please see page 37

Experience the Power of PLUS...

- **Powerful atomization** – twice the energy available in HVLP guns
- **Powerful productivity** – super fast fluid flow for high speed painting
- **Powerful efficiency** – equal to or better than HVLP transfer efficiency

#410 air cap	Primers, base coats, clearcoats, single stage and low VOC

Air cap pattern

30-40 PSI
Gravity Tips: 9-11 CFM
1.0 mm, 1.2 mm, 1.3 mm, 1.4 mm, 1.6 mm, 1.8 mm

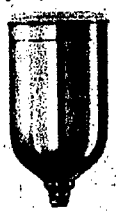
Air Cap Order No. **192174**
Air Cap Model No. **AV-440-410**

Included tip sizes shown in bold

Order No. Model No.	Fluid Tip (mm)	Inlet Air Pressure	Applications
110264 GFG-670 (includes 1.2 mm, 1.3 mm, and 1.4 mm fluid tips)	1.2 & 1.3	25-35 PSI	Base coats
		30-40 PSI	High solids clearcoats
		30-40 PSI	Single stages
		25-30 PSI	Waterbornes
	1.4	30-40 PSI	Low solids clearcoats
		30-40 PSI	Single stages

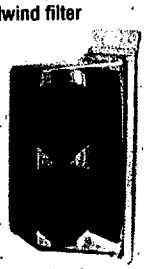
ACCESSORIES

120175
GFC-502
1-Liter aluminum gravity cup



802187
DGI-501-PSI
Digital pressure gauge

130095
HAF-507-K2
Whirlwind filter



192246
BXX-1250
Single gun case

220052
HA-5867
⅛" HVLP air hose assy. (35')

Cashlisting: **65600** Cashlist Area: **3755** Description: **DIV OF AIR RESOURCES MGMT.**
Deposit No: **281340** Date Deposited: **12/13/2007** Contact: **PATTY ADAMS**

Object	Transmittal	Dep DDN	Receipt Number	Pre-Numbered Receipt	Name	Check Number	Payment Amount	Reference Account	Payment Number	Remittance Number	Fund
002272	46067		609490		TSI COMPLIANCE SERVICES	3737	$100.00	12/21/2007 - SC 1030524-001	852891	758644	PFTF
					Object Code 002272 Subtotal:		$100.00				
002278	46066	479106	609476		ACT	5312	$200.00	46358	852974	758630	APCTF
	46066	479106	609476		ACT	5312	$400.00	46406	852975	758630	APCTF
	46066	479114	609484		ART ENVIRONMENTAL, INC.	3027	$400.00	46781	852985	758638	APCTF
					Object Code 002278 Subtotal:		$1,000.00				
					Cashlisting 65600 Total:		$1,100.00				

HARVEY-ENGELHARDT-METZ FUNERAL-CREMATORY / 1640 45884

FIELD DISBURSEMENT ACCOUNT

VENDOR: Florida Department of Envirnmental Protection

INVOICE NO.	INVOICE DATE	VOUCHER	DESCRIPTION	INVOICE AMOUNT	DEDUCTION	AMOUNT PAID
11/28/2007	12/06/2007	24112	Permit	100.00	0.00	100.00
CHECK DATE	12/06/2007		**TOTALS**	100.00	0.00	100.00

PLEASE DETACH THIS PORTION AND RETAIN FOR YOUR RECORDS

FLAT RATE POSTAGE REGARDLESS OF WEIGHT
DOMESTIC USE ONLY

FOR PICKUP CALL 1-800-222-1811

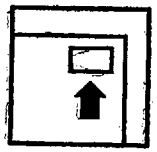
★ ★ ★ UNITED
102
4351 $04.60 0 PB8542917
8446 FORT MYERS, FL DEC 06 07
33907

PRIORITY MAIL
UNITED STATES POSTAL SERVICE ®

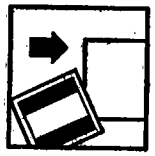
www.u

HOW TO USE:

1. COMPLETE ADDRESS LABEL AREA
Type or print required return address and addressee information in customer block (white area) or on label (if provided).



2. PAYMENT METHOD
Affix postage or meter strip to area indicated in upper right hand corner.



3. ATTACH LABEL (if provided)
Remove label backing and adhere over customer address block area (white area).

PRIORITY MAIL
UNITED STATES POSTAL SERVICE ®

www.usps.com

From:

Harvey-Engelhardt-Metz
Funeral Homes
1600 Colonial Boulevard
Fort Myers, Florida 33907

TO: FL Dept. of Environmental Protection

P.O. Box 3070
Tallahassee, Fl 32315-3070

Label 228 July 2002