EXPRESS VACUUM

MANUAL

REVISION PAGE

Revision Number	Revision Inserted By	Date Inserted

TABLE OF CONTENTS

TOOLS & EQUIPMENT

Tools

- *Hammer Drill*
- *Masonry Drill Bits*
- *Mallet / Hammer*
- *Screw Driver-Flat-various sizes*
- *Screw Driver-Phillips-various sizes*
- *Nut Driver-Various Sizes*
- *Sockets and Drives*
- *Conduit Bender-If applicable*
- *Utility Knife*
- *VOM/Volt-Ohm-Meter*
- *Adjustable Wrench*
- *Wrench-Various Sizes*
- *Drill Bits-Various Sizes*
- *Channel Locks*
- *OTHER NOT LISTED*

Equipment

- *Wire Nuts-Various Sizes*
- *Conduit*
- *Connectors-Conduit-Various*
- *Electrical Tape*
- *Anchors-3/8 • 4 minimum length*
- *Wire- Various gauges/sizes*
- *Fork Lift to move Vacuum*
- *OTHER NOT LISTED*

NOTICE: Other tools and equipment may be necessary for the installation of the vacuum, those listed above are only guidelines. Each site will dictate the tools and equipment needed.

STANDARD INSTALLATION

Installation of the vacuum can be divided into several sections: the anchor point, electrical installation, and anchoring the vacuum.

Anchor Point

What is the “Anchor Point”? This is where you will anchor the vacuum. Follow
the directions below.

Premier Touchless Drying Systems highly Recommends, in a standard Installation, that the vacuum be mounted on a concrete pad.

(See TABLE #1 for concrete pad Dimensions)

Pad Dimensions

	Express Vacuum
LENGTH	36”
WIDTH	36”
HEIGHT	30”

(TABLE #1: CONCRETE PAD DIMENSIONS)

Length

The length of the concrete pad is determined by the type and number of Vacuums you are installing on the pad.

Width

The width of the concrete pad is determined by the type of vacuum being installed
I.e. round or oval.

Height

The height recommendation takes into account the average bumper height of most vehicles and is the suggested height for the safety of the vacuum. Please note that you will need to consult the local regulatory agency to determine if there is height specification for the coin meter inlet chute from the ground to meet ADA, (Americans with Disabilities Act), Requirements.

Electrical Installation

Premier Vacuums arrive to the location pre-wired from the factory. The vacuum requires only a single phase service circuit with the proper: amperage, voltage, phase and wire size, connected properly to the vacuum in order to run.

(See TABLE #2 for electrical requirements)

Vac Type	VOLTS	AMPS	PHASE	Hertz (Hz)
Round 2 Motor	115/120	25	1	60
Round 3 Motor	115/120	35	1	60

(TABLE #2: ELECTRICAL REQUIREMENTS FOR VACUUMS)

NOTICE: Table #2 depicts the requirements for a standard Premier Vacuum; however, Premier Does offer vacuums to meet non domestic needs and 240 Volt single-phase applications. Please call Premier for more information concerning vacuums that require this type of application.

Electrical Circuit Installation

1) Install a conduit that "stubs-up" no higher than one (1) inch above the ground/pad directly under and in the center of the installation point for the new Premier Vacuum.

2) Pull the wires for the Vacuums Electrical Circuit through the conduit from the Service Panel to the Vacuum Pad.

NOTICE: Follow all NEC, (National Electric Code), State and Local regulations when installing the electrical service to the Vacuum.

Anchor the Vacuum

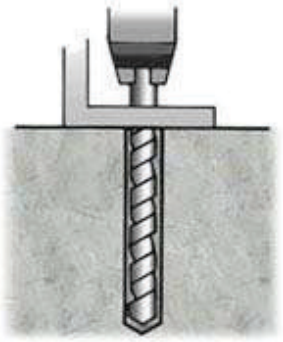
Anchoring the vacuum can be accomplished in three (3) simple steps: 1-Mark the anchor points, 2-Drill the Anchor holes and 3-Set the anchors.

Mark the Anchor Points

1) Place the Vacuum on the concrete pad using a forklift.
2) Using a Chalk Marker, mark the concrete through the anchor points on the vacuum.

Drill the Anchor Holes

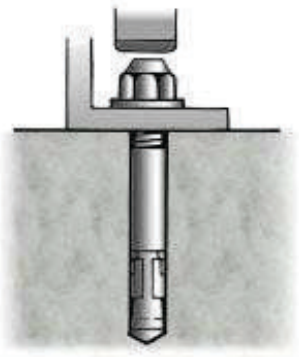
1) Shift the Vacuum to allow room to drill the marked points on the concrete pad.
2) Using a Hammer Drill and a 3/8" masonry bit drill the marked anchor points to a depth of 6"
3) Shift the Vacuum back into position over the anchor holes.



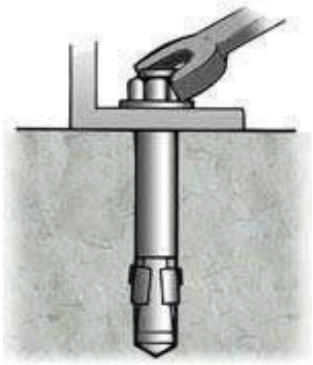
Drill hole ½ " to 1" deeper than embedment. Clean hole of debris

Set the Anchors

1) Using 3/8" x 4" concrete wedge anchors, (example: redheads, thunderstud), and a hammer or mallet hammer the anchors into the concrete with the vacuum in position.
2) Place the Nut on the anchor and tighten using the appropriate wrench or socket.



With nut threaded past end of stud hammer into position



Tighten Finger tight with an additional 3-5 turns with a wrench

ELECTRICAL CONNECTION

Though it is not standard, all PREMIERPOWER ROUND vacuums can be ETL (Environmental Testing Laboratories) certified for those locations that require it.

Connection Point

The electrical connection for the PREMIER POWER ROUND is made beneath the vacuum at the “stub-up”. There is roughly 2’ of power cable beneath the vacuum for this purpose.

MAINTENANCE

DAILY

- ☐ Operational test of vacuum
- ☐ Empty vacuum trash collectors (if needed)
- ☐ Wipe down vacuums
- ☐ Coil hoses on hose hangers
- ☐ Inspect hoses for wear
- ☐ Empty coin collectors and bill collectors
- ☐ Pick up vacuum area
- ☐ Check door bulb cover not cracked
- ☐ Check display screen not cracked
- ☐ Inspect claws for wear and cracks

WEEKLY

- ☐ Clean out lower portion of vacuum*
- ☐ Scrub vacuum area (remove Gum, dirt buildup, etc.)
- ☐ Clean vacuum island canopy (if installed)*
- ☐ Check vacuum bags

ANNUALY

- ☐ Replace door gaskets
- ☐ Replace vacuum bags (if needed)

AS REQUIRED

- ☐ Clean coin boxes*
- ☐ Clean coin lens*
- ☐ Replace hoses and claws
- ☐ Clean dome*
- ☐ Replace decals

*When using any chemicals/cleaners follow product safety precautions and instructions at all times.

TROUBLESHOOTING

Symptoms	Possible Causes
Vacuum fails to start.	- Check power to and from transformer. - Check power to and from mercury switch. - Check power to and from vacuum motors.
Low OR Lost Suction	- Check clean out door gaskets seal - Open clean out door - Check motor gasket seal

WARRANTY

Premier Vacuum Warranty

Premier stands behind its vacuum line with a comprehensive 1-year warranty, effective from the date of invoice, covering any defects arising from workmanship or materials used under standard operating conditions. Certain components are subject to specific terms: vacuum motors are covered for 90 days, while items such as coin mechanisms, bill validators, credit card systems, compressors, timers, and electronic monitoring systems are warranted according to the terms provided by their respective manufacturers.

Please note that the warranty does not extend to any incidental costs incurred during the warranty period.

PARTS LIST

Motors/Pumps and Components

Vacuum Motor PVP601
Vacuum Motor Upgrade to 220v PVP100-220
Vacuum Motor Gasket PVP100-028
Vacuum Motor Mounting Spring PVP601-038

Electrical Components

Mercury Contactor CNT3215
Transformer 40v Amp TRF3112
Light Socket PVP200-078
Florescent Light PVP200-088

Vacuum Parts

Vacuum Bag PVP300-018
Wire Tie for Vacuum Bag Installation .....
Vacuum Hose (2" x 15 ft)* PVP300-058
Vacuum Cuff Swivel PVP300-068
Upholstery Tool PVP300-078

Miscellaneous Parts

Vacuum Dome, Round PVP500-RBL8
Round Rubber Clean Out Bucket PVP300-138
Rubber Mounting Foot Caps PVP400-048
Plug Lock Assembly PVP400-108

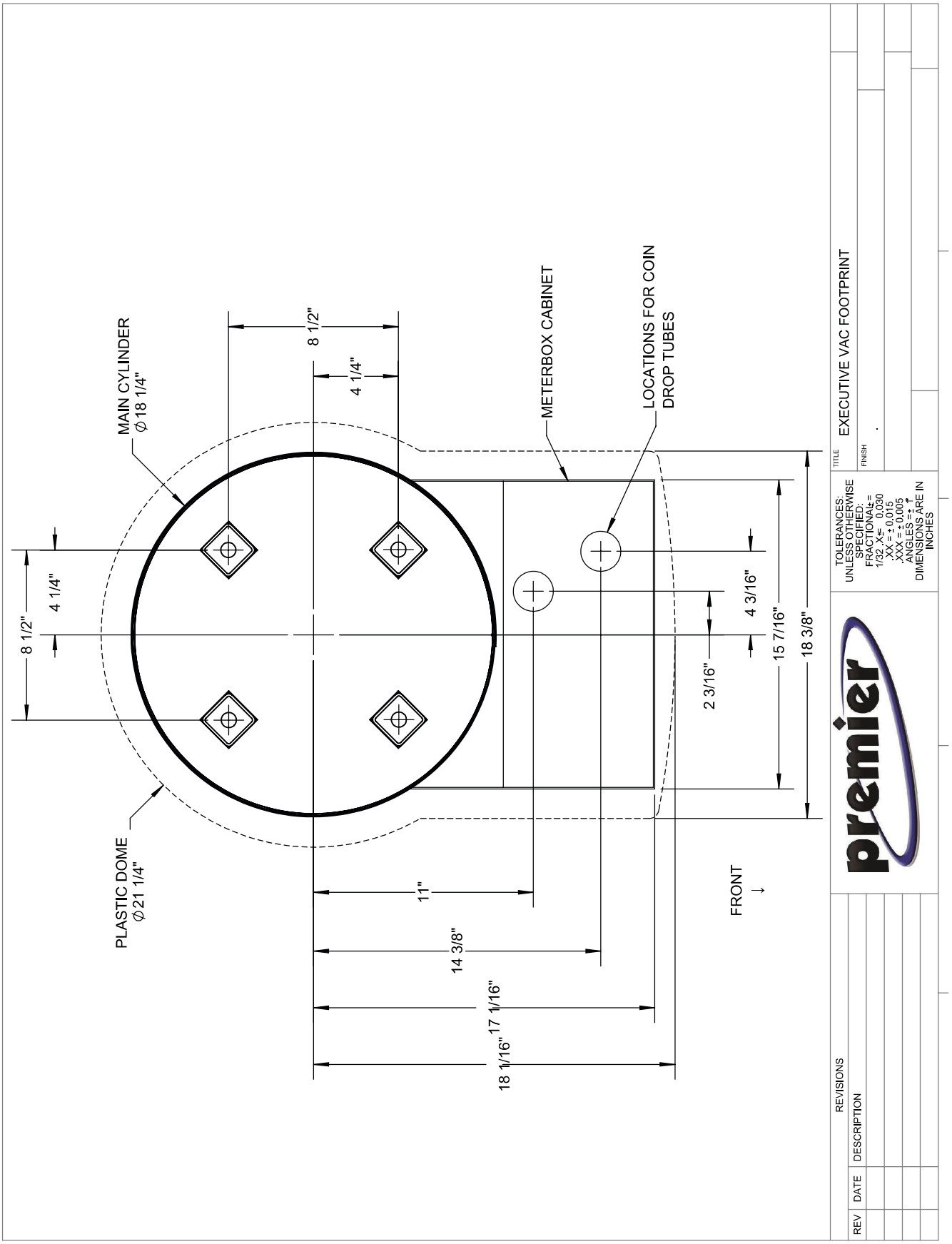
Decals

Full Set of Decals** PVP400-1018

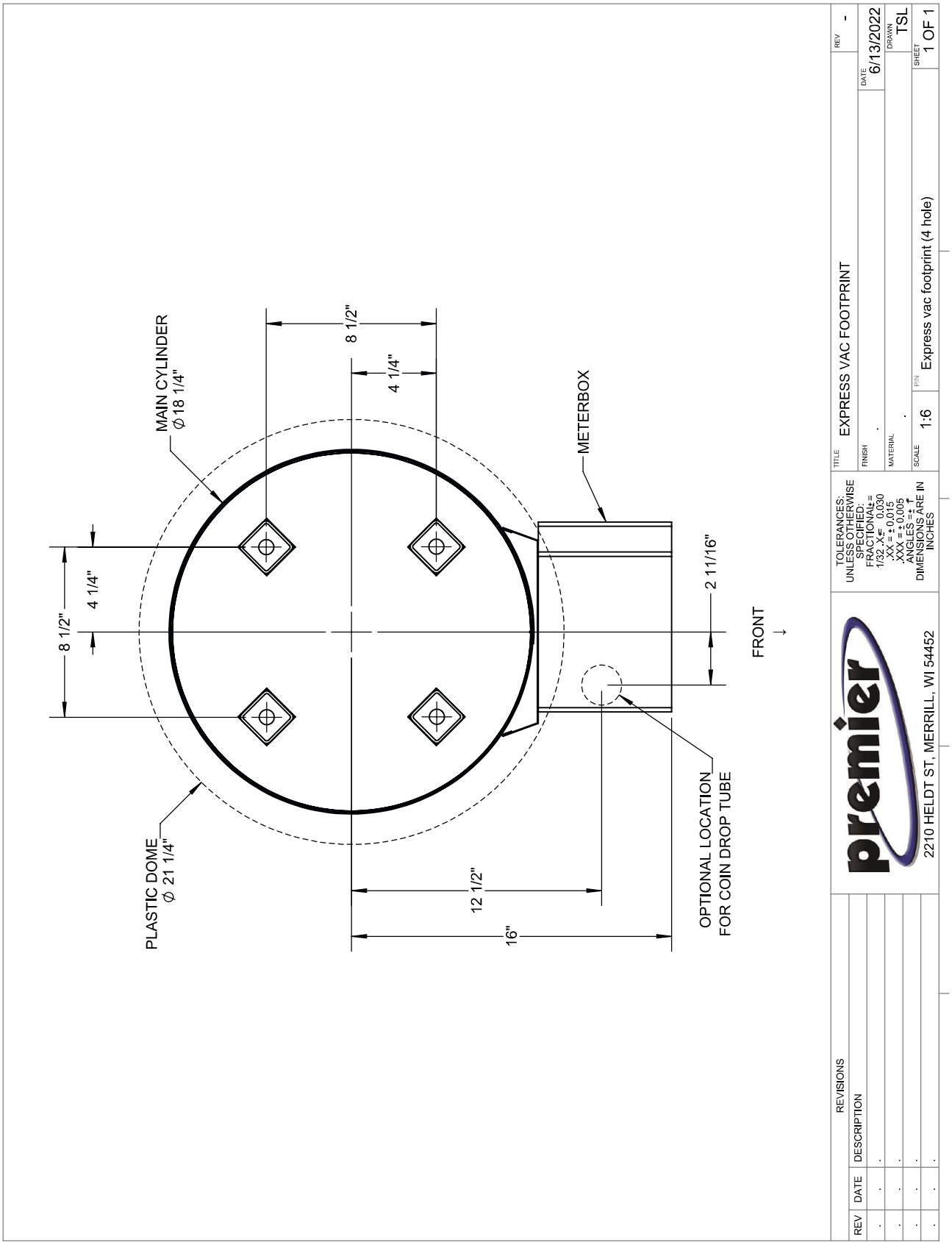
*Other colors available per request.
**Decals for meter doors with bill acceptors or other custom options must be specified when ordering.
***Check our website for current Meter Door Components offers or inquire about your custom request.

www.premiercompaniesusa.com/vac-information

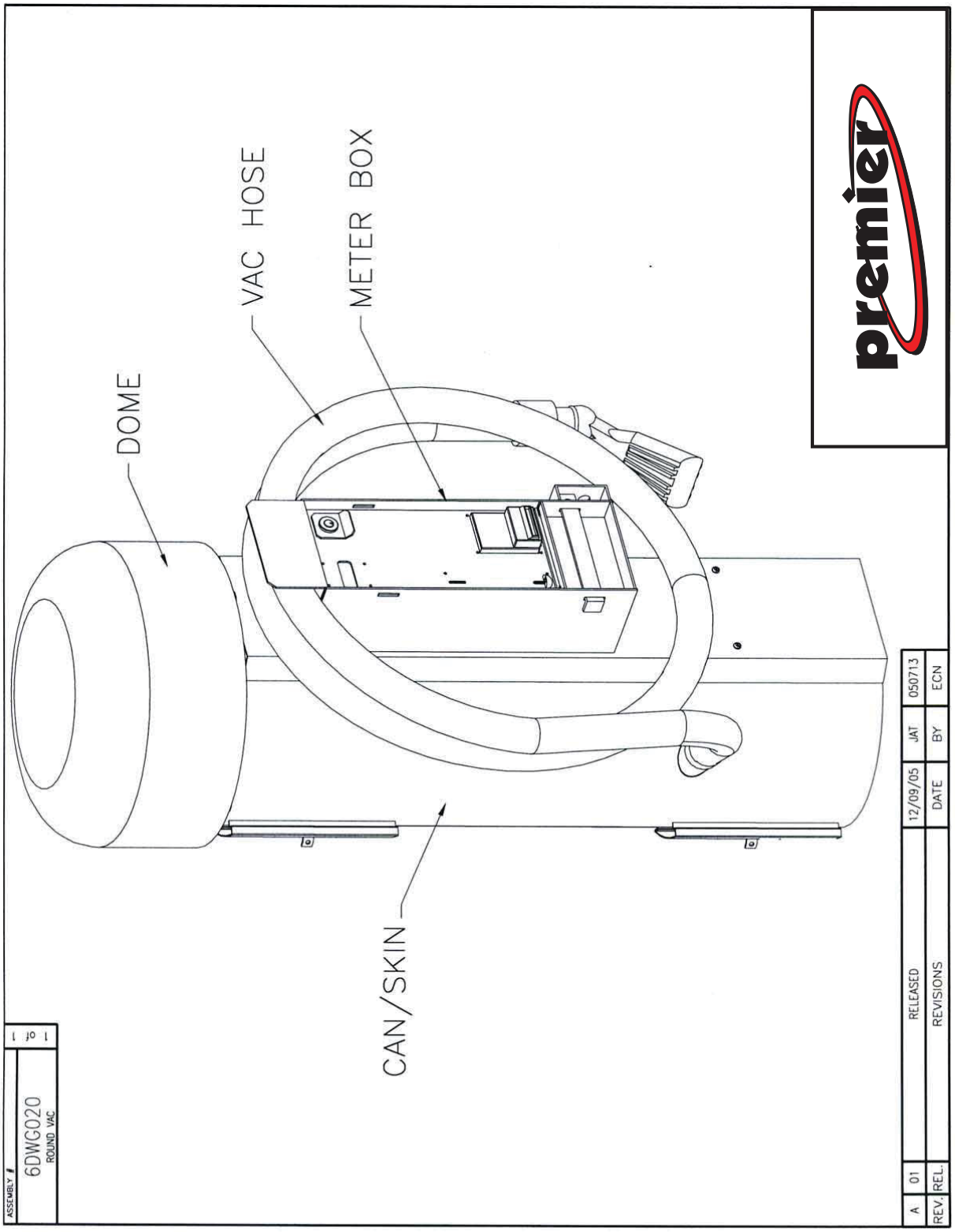
DRAWINGS AND DIAGRAMS



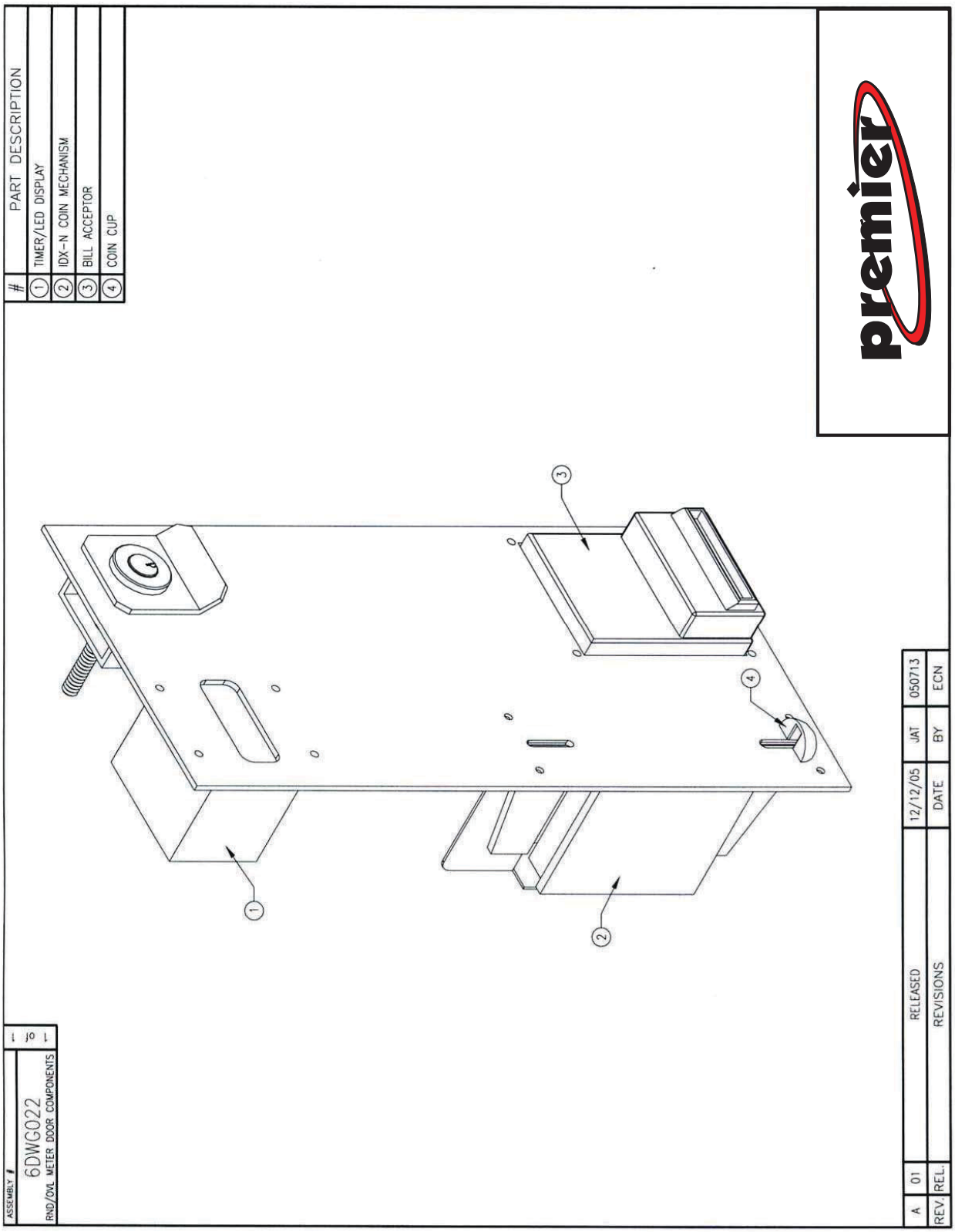
Executive Vacuum Dimensions



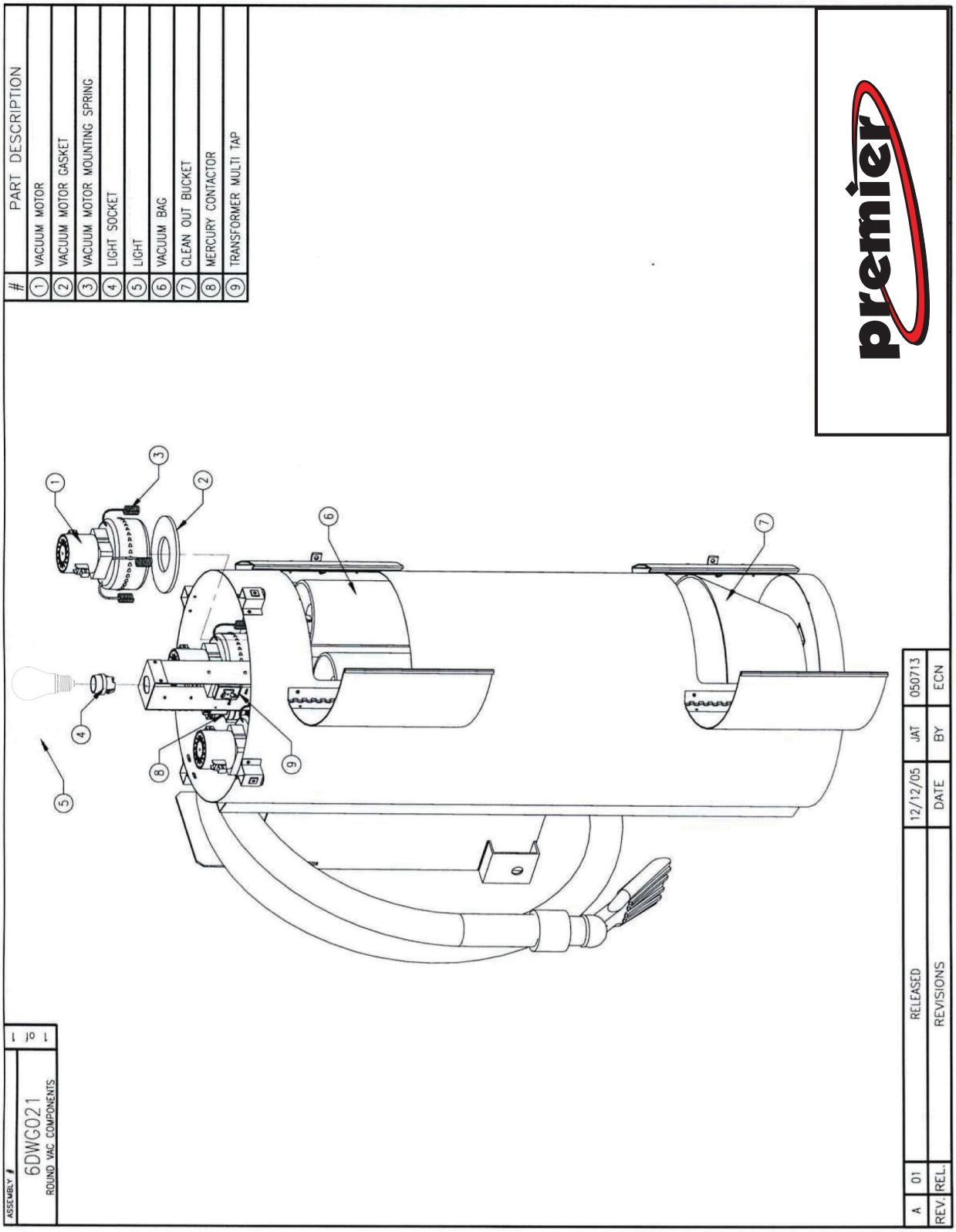
Express Vacuum Dimensions



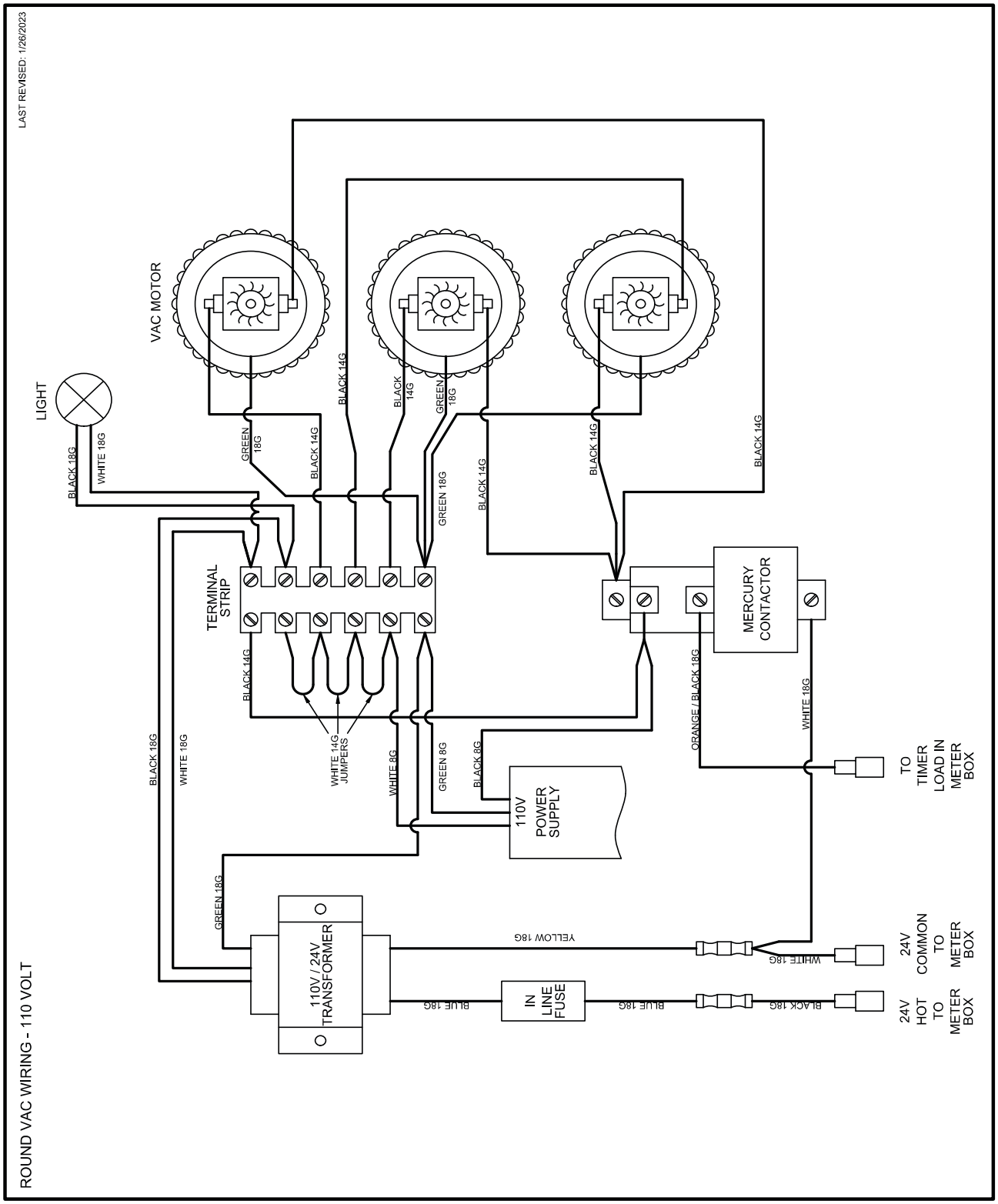
Power Round Vacuum



Round Vacuum Door Assembly



Round Vacuum Components

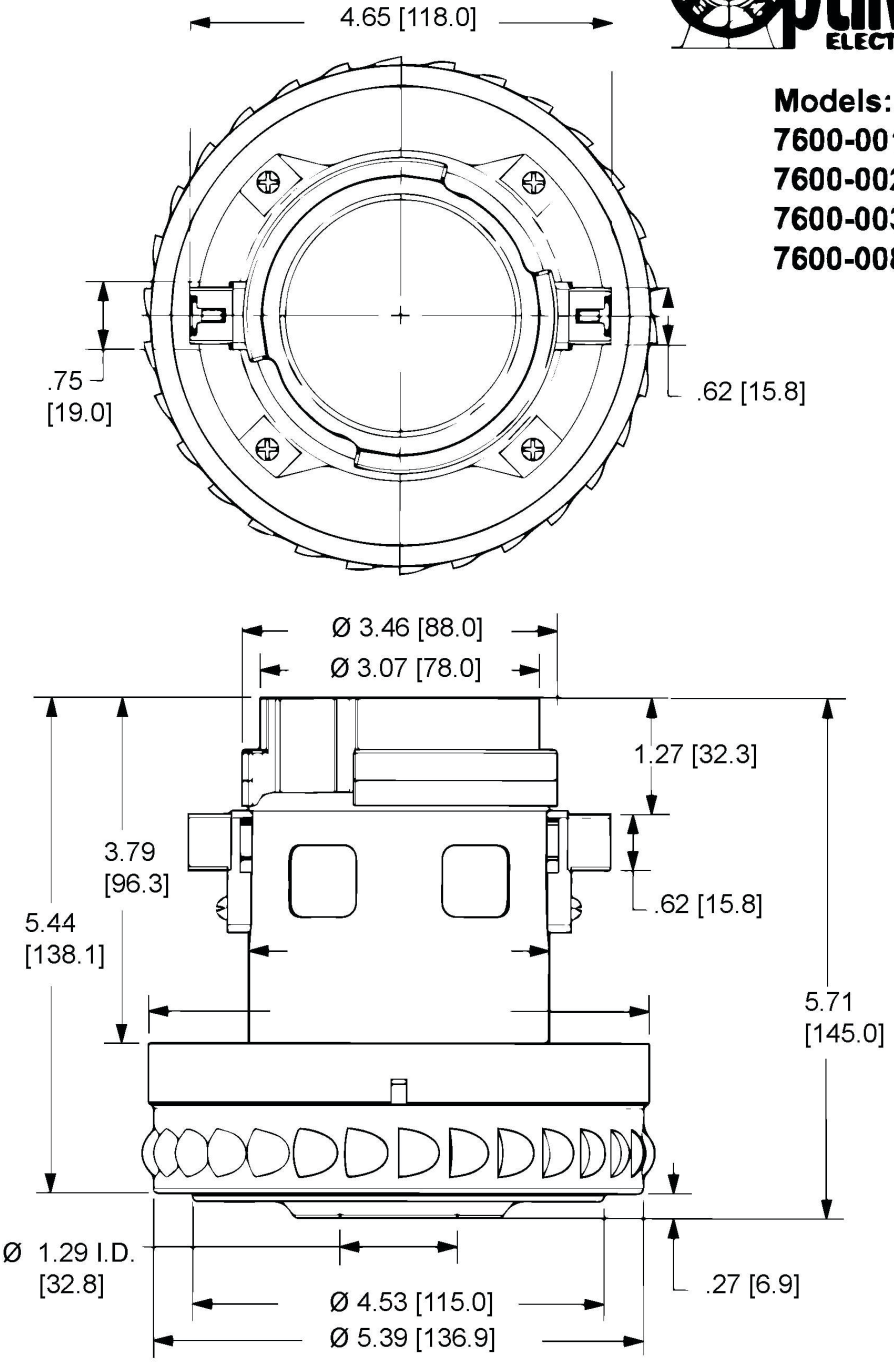


RoundVacuum Motor Wiring Diagram

MOTOR DATA

OptiMotor LLC ELECTRICAL PRODUCTS

Models:
7600-001
7600-002
7600-003
7600-008



Note: Dimensions are for reference only
and subject to change.
Tolerance of up to +/- .040" [1.0mm]
Can be expected.

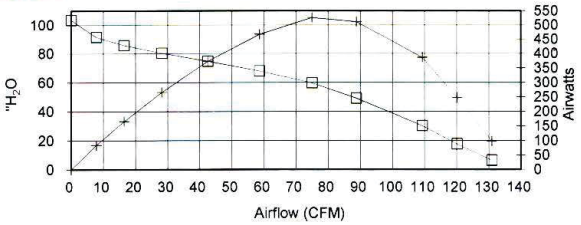
MOTOR DATA (Con't)

Date Last Modified: 3/18/2014

7600-001

AIRFLOW PERFORMANCE

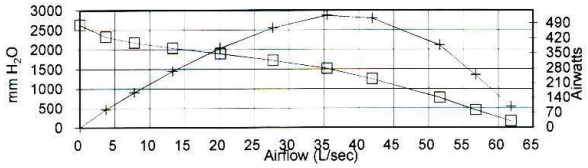
Volts = 120



OptiMotor LLC ELECTRICAL PRODUCTS

ORIFICE (Inches)	SUCTION ("H_2O)	INPUT WATTS	AMPS	RPM'S	CORR. SUCTION ("H_2O)	AIR FLOW (CFM)	CORR. INPUT WATTS	AIR WATTS	H.P.	OVERALL EFF.(%)
2	**6.08**	**1279**	**11.0**	**31,027**	6.4	130.9	1326	97.98	0.131	7.39
1.5	**16.76**	**1284**	**11.1**	**30,789**	17.6	120.1	1332	247.95	0.332	18.62
1.25	**28.77**	**1288**	**11.1**	**30,864**	30.2	109.3	1336	387.32	0.519	29.00
1	**46.83**	**1265**	**10.9**	**31,182**	49.1	88.8	1312	511.96	0.686	39.03
0.875	**56.94**	**1238**	**10.7**	**31,546**	59.8	75.0	1284	526.18	0.705	40.97
0.75	**64.76**	**1195**	**10.3**	**32,138**	68.0	58.6	1240	467.56	0.627	37.72
0.625	**71.23**	**1136**	**9.8**	**33,231**	74.8	42.6	1178	373.66	0.501	31.71
0.5	**76.62**	**1067**	**9.1**	**34,301**	80.4	28.2	1107	266.07	0.357	24.04
0.375	**81.83**	**1001**	**8.5**	**35,761**	85.9	16.5	1038	165.90	0.222	15.98
0.25	**87.34**	**943**	**8.0**	**37,127**	91.7	7.9	978	84.50	0.113	8.64
0	**98.75**	**901**	**7.7**	**38,469**	103.6	0.0	934	0.00	0.000	0.00

POLYNOMIAL PEAK AIRWATTS: **524.70**



Metric Data ORIFICE (mm)	SUCTION (mm H_2O)	INPUT WATTS	AMPS	RPM'S	CORR. SUCTION (mm H_2O)	AIR FLOW (L/sec)	CORR. INPUT WATTS	AIR WATTS	H.P.	OVERALL EFF.(%)
50.8	**154**	**1279**	**11.0**	31,027	162	61.8	1326	98.0	0.131	7.39
38.1	**426**	**1284**	**11.1**	30,789	447	56.7	1332	248.0	0.332	18.62
31.8	**731**	**1288**	**11.1**	30,864	767	51.6	1336	387.3	0.519	29.00
25.4	**1189**	**1265**	**10.9**	31,182	1248	41.9	1312	512.0	0.686	39.03
22.2	**1446**	**1238**	**10.7**	31,546	1518	35.4	1284	526.2	0.705	40.97
19.1	**1645**	**1195**	**10.3**	32,138	1726	27.7	1240	467.6	0.627	37.72
15.9	**1809**	**1136**	**9.8**	33,231	1899	20.1	1178	373.7	0.501	31.71
12.7	**1946**	**1067**	**9.1**	34,301	2043	13.3	1107	266.1	0.357	24.04
9.5	**2078**	**1001**	**8.5**	35,761	2181	7.8	1038	165.9	0.222	15.98
6.4	**2219**	**943**	**8.0**	37,127	2328	3.7	978	84.5	0.113	8.64
0.0	**2508**	**901**	**7.7**	38,469	2633	0.0	934	0.0	0.000	0.00

POLYNOMIAL PEAK AIRWATTS: **524.70**

ORIFICE (mm)	SUCTION (kPa)	INPUT WATTS	AMPS	RPM'S	CORR. SUCTION (kPa)	AIR FLOW (cu m/h)	CORR. INPUT WATTS	AIR WATTS	H.P.	OVERALL EFF.(%)
50.8	**1.513**	**1279**	**11.0**	**31,027**	1.59	222.50	1326	98.0	0.131	7.39
38.1	**4.173**	**1284**	**11.1**	**30,789**	4.38	204.15	1332	248.0	0.332	18.62
31.8	**7.165**	**1288**	**11.1**	**30,864**	7.52	185.75	1336	387.3	0.519	29.00
25.4	**11.663**	**1265**	**10.9**	**31,182**	12.24	150.83	1312	512.0	0.686	39.03
22.2	**14.183**	**1238**	**10.7**	**31,546**	14.89	127.48	1284	526.2	0.705	40.97
19.1	**16.129**	**1195**	**10.3**	**32,138**	16.93	99.61	1240	467.6	0.627	37.72
15.9	**17.742**	**1136**	**9.8**	**33,231**	18.62	72.37	1178	373.7	0.501	31.71
12.7	**19.085**	**1067**	**9.1**	**34,301**	20.03	47.90	1107	266.1	0.357	24.04
9.5	**20.381**	**1001**	**8.5**	**35,761**	21.39	27.97	1038	165.9	0.222	15.98
6.4	**21.755**	**943**	**8.0**	**37,127**	22.83	13.35	978	84.5	0.113	8.64
0.0	**24.597**	**901**	**7.7**	**38,469**	25.82	0.00	934	0.0	0.000	0.00

POLYNOMIAL PEAK AIRWATTS: **524.70**

Standard performance data is typical for a motor from a large production quantity. An individual motor's performance will vary due to normal manufacturing variations. Test standards @ 120 volts, corrected to standard atmospheric conditions: Minimum sealed vacuum = 93.28 inH20, 2369 mmH20 or 23.23 Pa, Maximum open watts = 1499 watts.