

## Tommy Car Wash Systems Vacuum Stations



Part No : **"Tommy Vacuum" (Various Configurations)**

Description : **Dual Drop Vacuum Systems**

Updated : **1.23.18**

## General Warning

It is important that you read this manual in its entirety attempting to install, operate, or service the corresponding Tommy Car Wash Systems equipment. Observe all safety information and any additional instructions included with this equipment. Failure to observe these instructions may result in personal injury and / or property damage.

## Product Description & Specification

### System Description:

Each Tommy Car Wash Systems' dual drop vacuum station offers two full-size vacuum hoses, allowing customers to vacuum out both sides of their vehicle without dragging a single hose back and forth, reducing effort, wear, and tear. The stainless steel stanchion design is 100% weatherproof for all-climate use. Likewise, the custom-fitted canopy system is built for durability and offers partial shade for visiting customers. The top light can be fitted with decals and is available in a number of different colors upon request. System fits 13" Tommy Dual Motor Vacuum or Central Vacuum Producer Kit.

### Technical Data - Stanchion

- Construction: Stainless Steel
- Dimensions: 13' - 15' stalls / 10' 6" tip to tip / hoses hang approx. 11' apart
- Shipping Weight: 209 lbs.
- Function: Self Service Vacuum Stanchion
- Noise Level: 65dB (approximate, all systems)

### Technical Data – 13" Dual Motor Vacuum

- Construction: Stainless Steel
- Power Requirements: 220V / 13.4 amps (peak demand)
- Shipping Weight: 40 lbs.
- Function: Producer / Canister for Self Service Car Wash Vacuums

### Technical Data – Semi-Central Vacuum

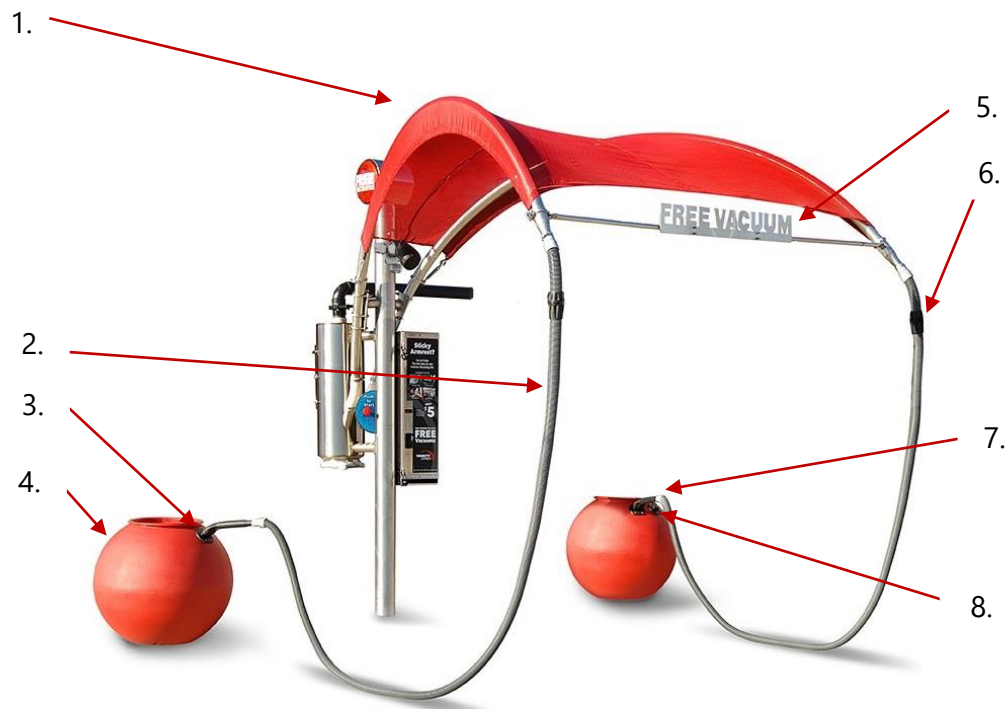
- Construction: Stainless Steel (Canister), ABS Plastic
- Power Requirements: 220V / 13.4 amps (peak demand)
- Shipping Weight: 40 lbs.
- Function: Producer / Canister / Piping for Self Service Car Wash Vacuums

## General Safety Information

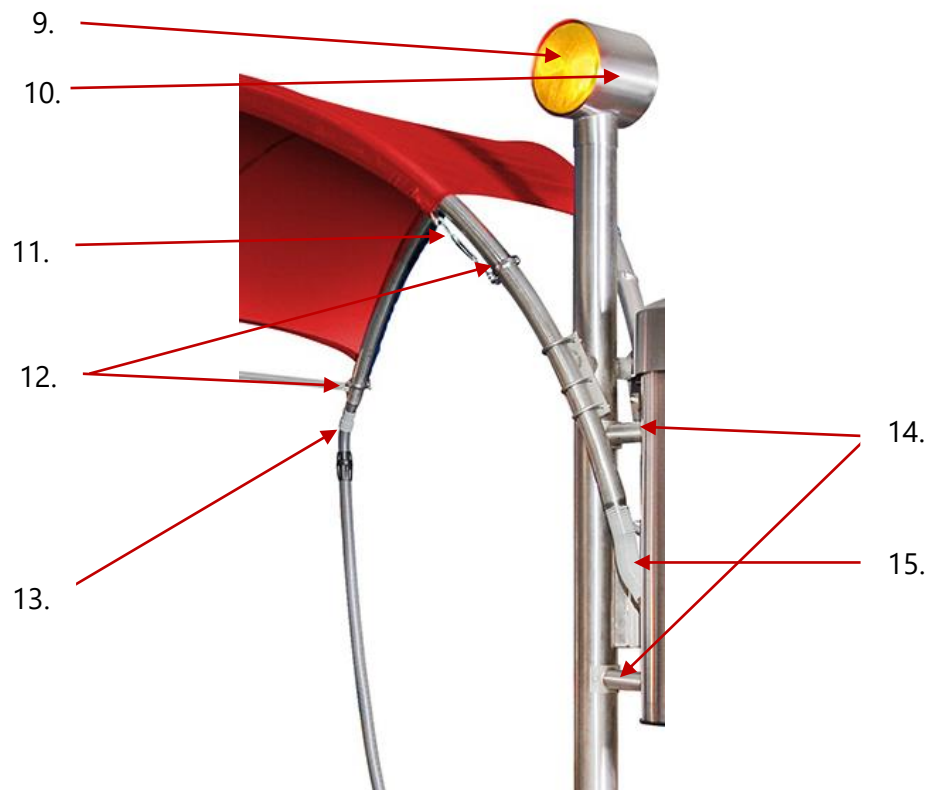
All WARNINGS, CAUTIONS, AND ADVISEMENTS below concern the safe installation, operation, and service of your Tommy Car Wash Systems equipment. This safety information is included for your protection and should be reviewed thoroughly prior to working with or near this equipment.

- Never service equipment while it is running.
- All personnel must be trained on relevant equipment and corresponding safety procedures before conducting service.
- All employees should have ready access to emergency stop buttons and should be trained on their location and operation.
- All moving and/or electrical equipment involves certain hazards. At least two qualified personnel must be on-hand during service or normal operation.
- Do not wear loose fitting clothing when working on or around moving equipment.
- All car washes must implement an audible warning system to alert employees prior to wash activation.
- Do not attempt to operate any malfunctioning equipment.
- Unauthorized personnel or foreign objects are not permitted near functioning equipment.
- Never attempt to clean or service any area near operational equipment. Keep area clear until equipment has been fully deactivated.
- Disconnect all equipment prior to servicing.
- Do not attempt to use any equipment for any function it was not intended for.

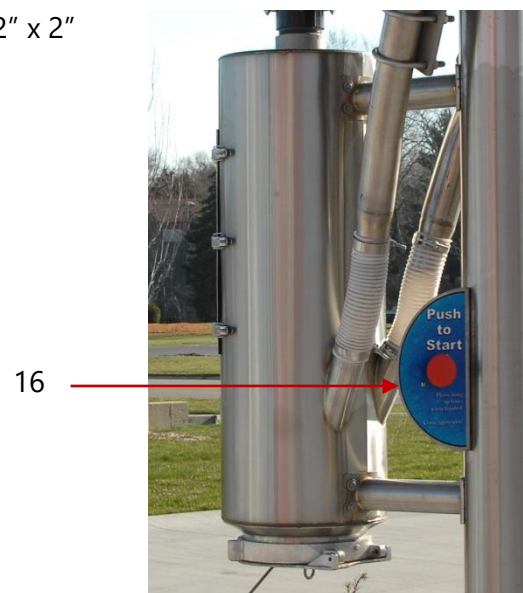
## Equipment Components



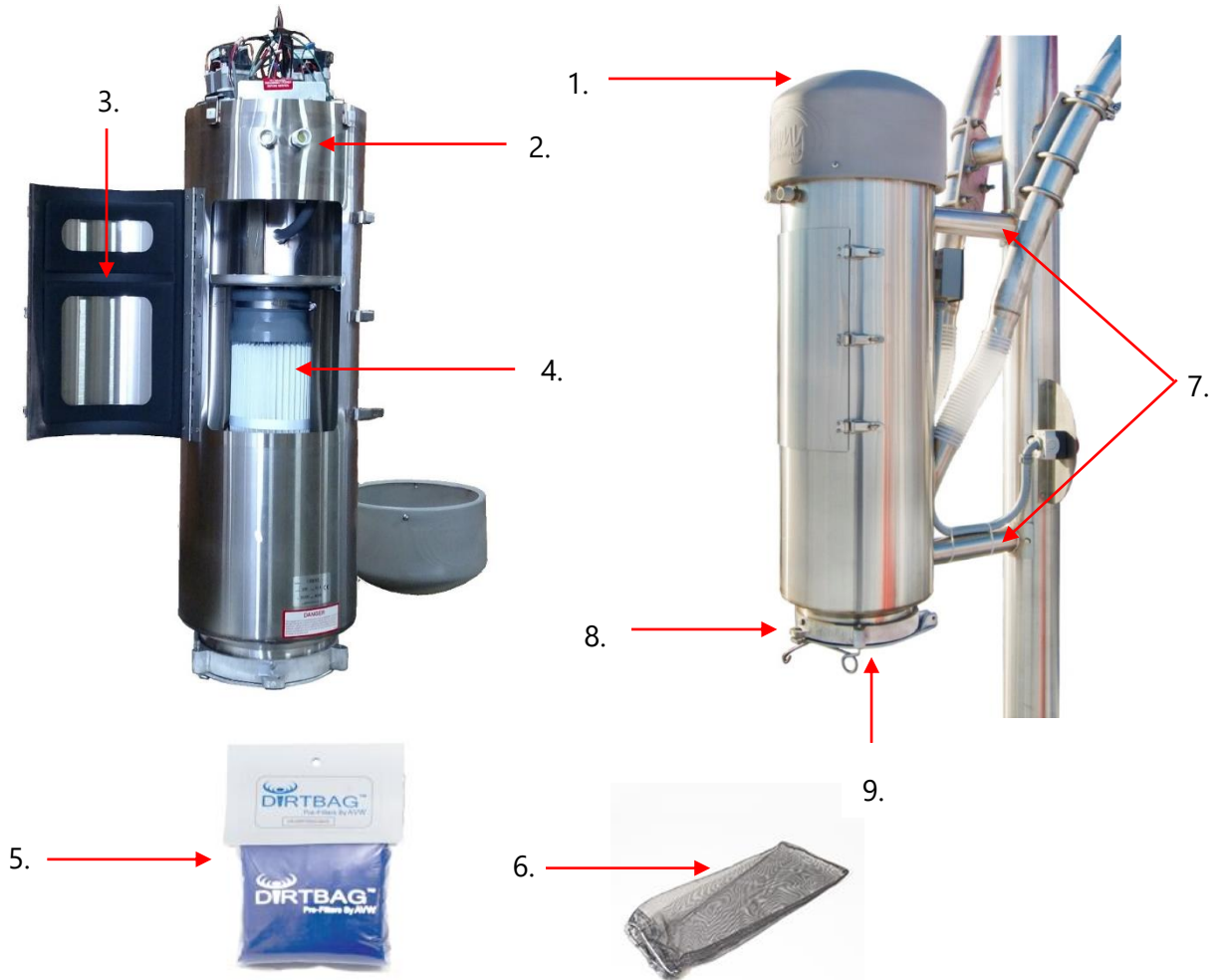
- |                  |                                   |
|------------------|-----------------------------------|
| 1. P-VAC-CPY     | Canopy                            |
| 2. P-VAC-208     | Tapered Hose                      |
| • P-VAC-208-K    | Hose Assembly (includes fittings) |
| 3. P-VAC-105HLSR | Crevice Tool Holster              |
| 4. A-Ball-TX     | Tommy Ball                        |
| 5. P-VAC-201     | "Free Vacuum" Letters             |
| 6. P-VAC-220     | Swivel Cuff                       |
| 7. P-VAC-224     | Vacuum Adapter Cuff - 1.5" x 1.5  |
| 8. P-VAC-105NZL  | Crevice Tool                      |



- |                |  |
|----------------|--|
| 9. P-LED-RND   | 12" Round LED Indicator                  |
| 10. P-VAC-215  | Light Can                                |
| 11. P-VAC-2019 | Turnbuckle                               |
| 12. P-SE-2006  | Hinge Clamp                              |
| 13. P-VAC-209  | Vacuum Arch to Hose Adapter Cuff 2" x 2" |
| 14. P-VAC-2035 | Standoff Brackets                        |
| 15. P-VAC-2030 | Suction Hose                             |
| 16. E-VAC-209  | Push Button Kit                          |

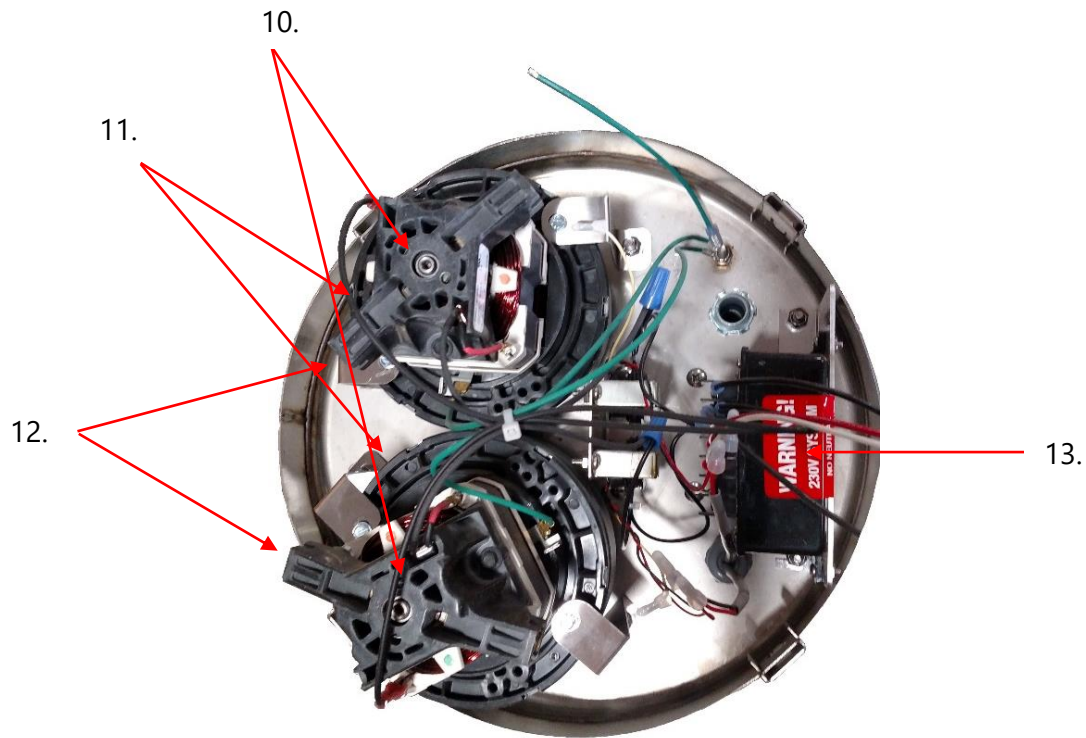


### 13" Dual Motor Vacuum (Onboard Producer)



- |               |                           |
|---------------|---------------------------|
| 1. P-VAC-245  | Dome 13"                  |
| 2. P-VAC-247  | Indicator Lights          |
| 3. P-VAC-236  | Door Gasket Set           |
| 4. P-VAC-230  | Pleated Filter            |
| 5. P-VAC-255  | Pleated Filter Protector  |
| 6. P-VAC-256  | Dirtbag Vacuum Pre-Filter |
| 7. P-VAC-2035 | Standoff Brackets         |
| 8. P-VAC-2032 | Neoprene Foam Rubber Disk |
| 9. P-VAC-246  | Dump Door                 |

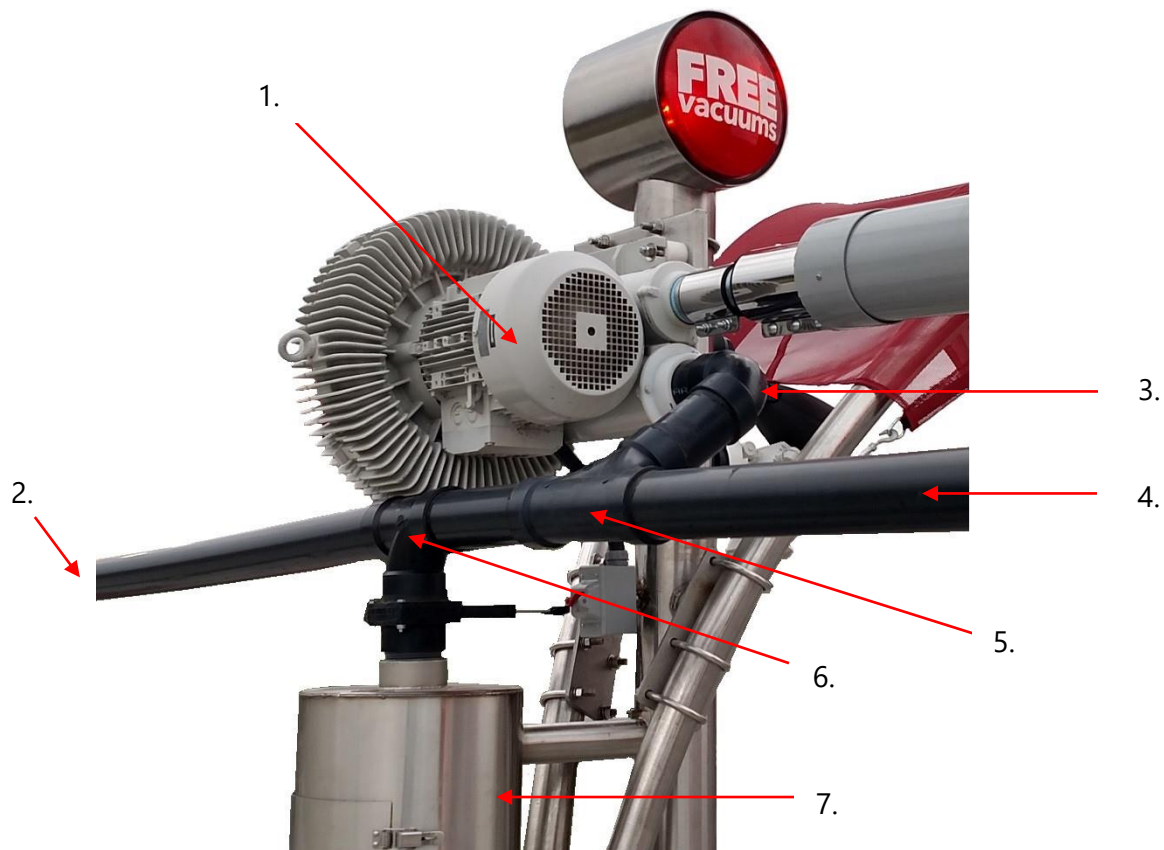




- 10. P-VAC-106
- 11. P-VAC-225
- 12. P-VAC-234
- 13. E-VAC-107/8/9/10

Extreme Power Vacuum Motor  
Foam Gasket  
Brush Kit for Motor (110 or 220V)  
Timer

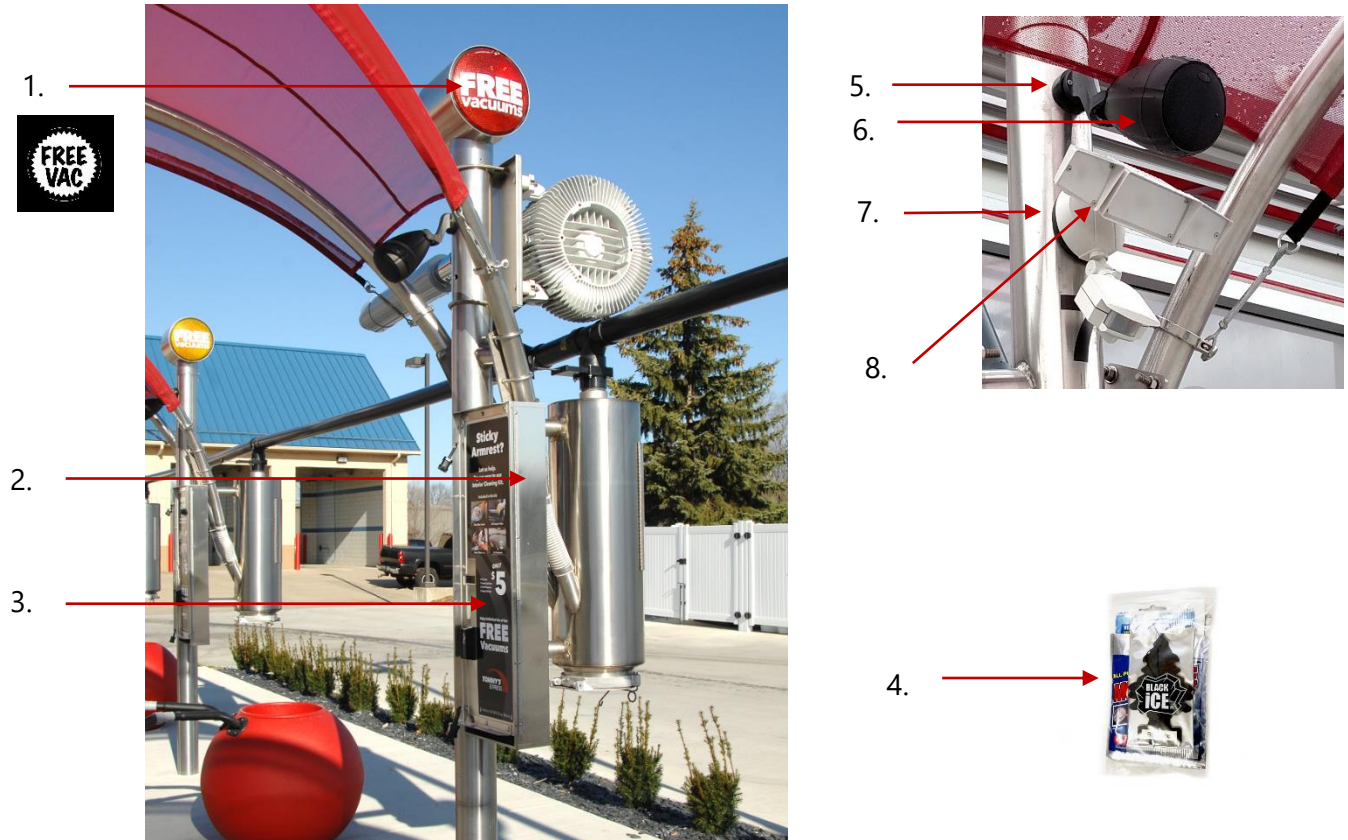
## Semi-Central Vacuum



- |                   |  |
|-------------------|--|
| 1. E-VAC-SC-204-K | Central Vacuum Producer Kit with Mount     |
| 2. P-VAC-SC-250-K | Complete Semi-Central Vac Piping Kit       |
| 3. P-VAC-253      | 90 Degree Pipe Elbow 3"                    |
| 4. P-VAC-254      | 3" 20ft Pipe (cut to lengths)              |
| 5. P-VAC-252      | 3" Pipe Sweep Tee                          |
| 6. P-VAC-251      | 3" Pipe Tee                                |
| 7. E-VAC-222-CV   | Separator Assembly for Semi-Central Vacuum |



## Optional Components

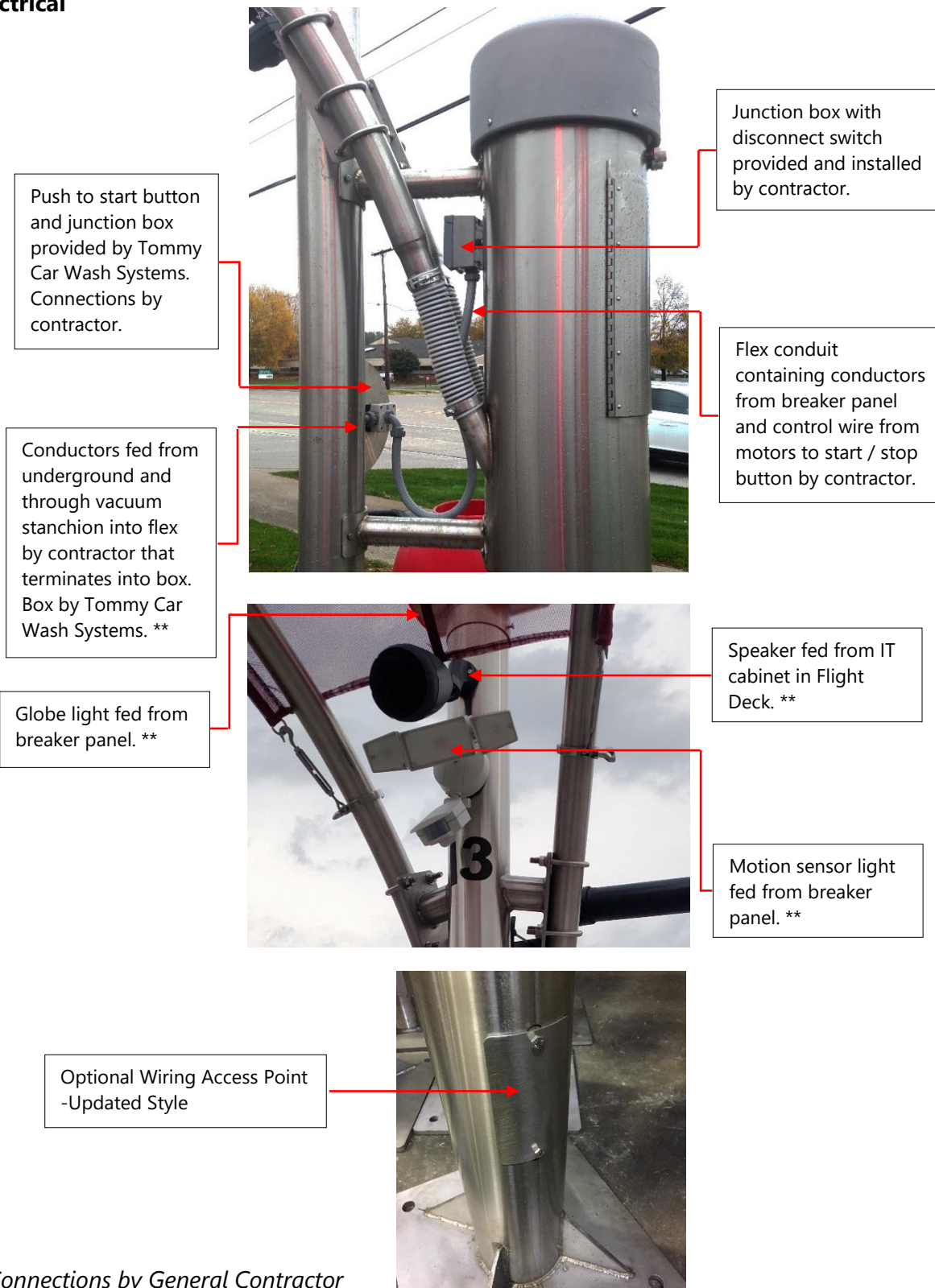


*\*Shown with Central Vacuum Producer Kit E-VAC-SC-204-K*

- |               |  |
|---------------|--|
| 1. P-VAC-246  | "Free Vac" Light Decal                       |
| 2. E-VAC-399X | Vacuum-Mount Detail Kit Vending Machine      |
| 3. N/A        | Vending Machine Decal – Call to custom order |
| 4. P-DET-KIT  | Interior Cleaning Vending Kits               |
| 5. P-VAC-261  | Polk Speaker Mounting Adapter                |
| 6. P-VAC-240  | Waterproof Speaker                           |
| 7. P-VAC-258  | Motion Light Mounting Adapter                |
| 8. P-VAC-2033 | Motion Activated Flood Light                 |

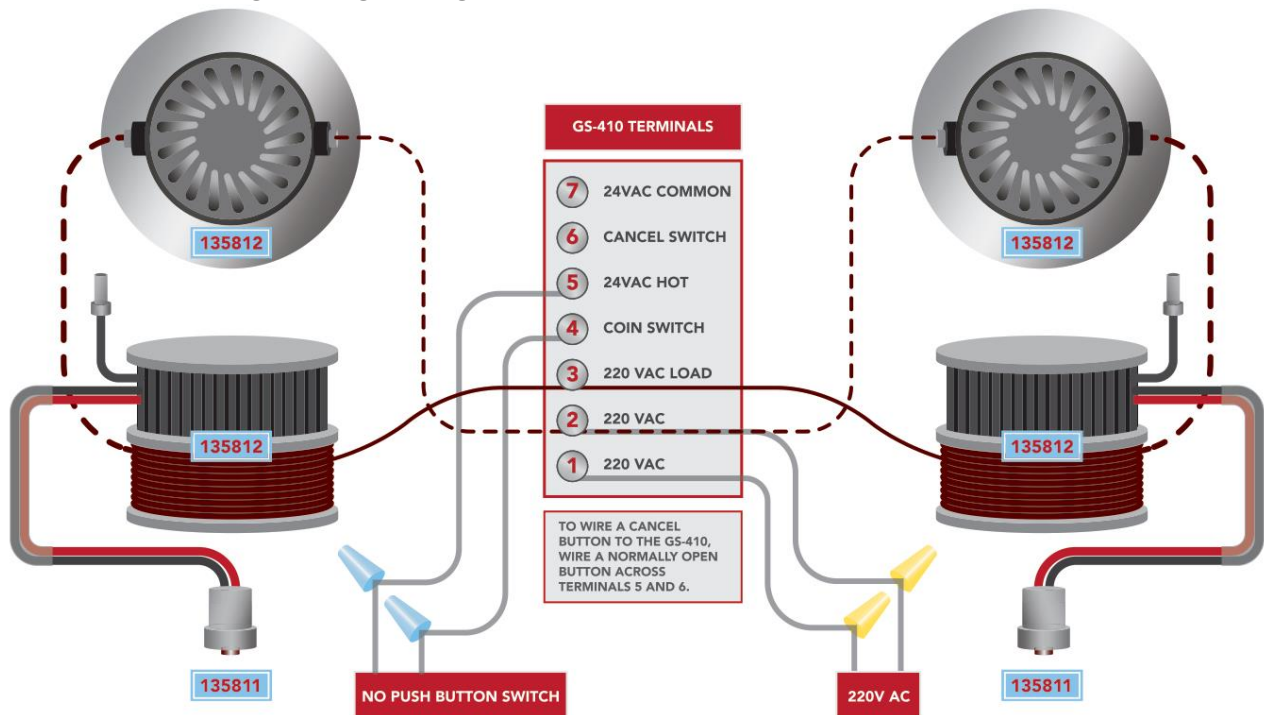
## Installation

### Electrical



**\*\*Connections by General Contractor**

## Push to Start Wiring & Programming

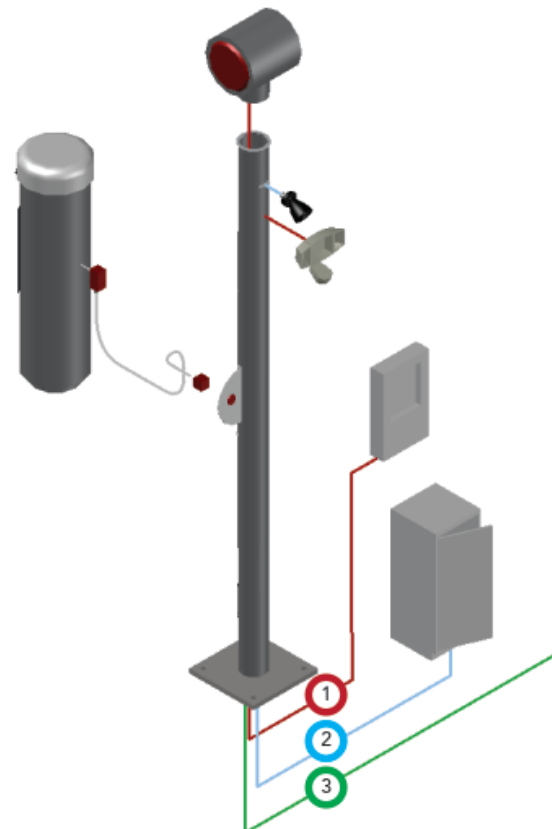


## Vacuum Stanchion Wiring

**CIRCUIT 1** 220V/110V SINGLE PHASE PRODUCER FROM BREAKER PANEL TO LED INDICATOR LIGHT AND MOTION SENSOR LIGHT.

**CIRCUIT 2** POWER FROM IT CABINET TO SPEAKER.

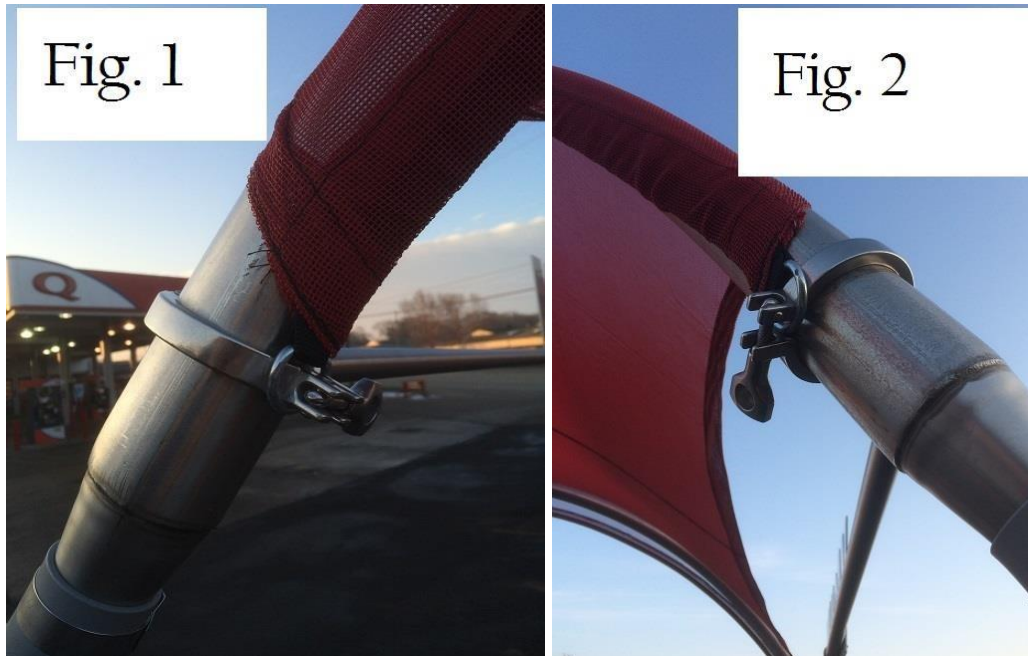
**CIRCUIT 3** SPARE FOR FUTURE USE. RUN POST TO POST OR HOME RUN TO DRY BACKROOM.





## Canopy Installation Procedure

1. Place one collar clamp (Fig 1, above) on each side of the arch cylinders 1-2 inches above the spreader bar on the wide side of the vacuum assembly. At this point the clamps should be positioned so the opening faces AWAY from the spreader bar and vacuum interior (I.E. 90 degrees counterclockwise from example shown Fig 1).



Place the wide-end canopy ring through the forward-most clamp opening projection (Fig. 2), around the threaded part of the clamp. Then thread the wing nut through, closing the clamp and securing the canopy ring to the clamp as shown (Fig. 2) (both sides). Do not over-tighten.

On the narrow end of the vacuum assembly, place remaining collar clamps about 8 inches above the metal plates securing the outer arches to the center tube, as shown (Fig. 3). Put the turnbuckle eye through the threaded bolt openings on the clamp and place the wing nut through the bolts and eye, securing the turnbuckle to the clamp (Fig. 4). Tighten clamps securely.



Fig. 3



Fig. 4

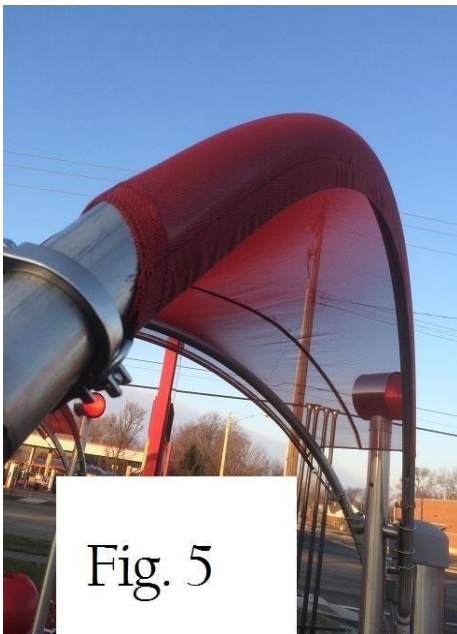


Fig. 5

Hook the turnbuckle hooks to the narrow-side canopy rings (Fig. 4). Make sure turnbuckles are fully extended.

Work the canopy up and over the arches on both sides (Fig 5). This process may require several individuals working together.

6. Rotate wide-side camps inwards and tighten securely, as shown (Fig 1.) Snug them with hammer if necessary. Also use turnbuckles to tighten the narrow-side until all wrinkles are out of the canopy.

Tip: Once the arches are wrapped tension will hold the canopy in place like a covered wagon, as shown. The metal rings, fabric, and clamps are all built for incredible tension. You cannot break them, so be

prepared to use force and “Work” the canopy around the arches until the wrinkles are out and the canopy lays smoothly.

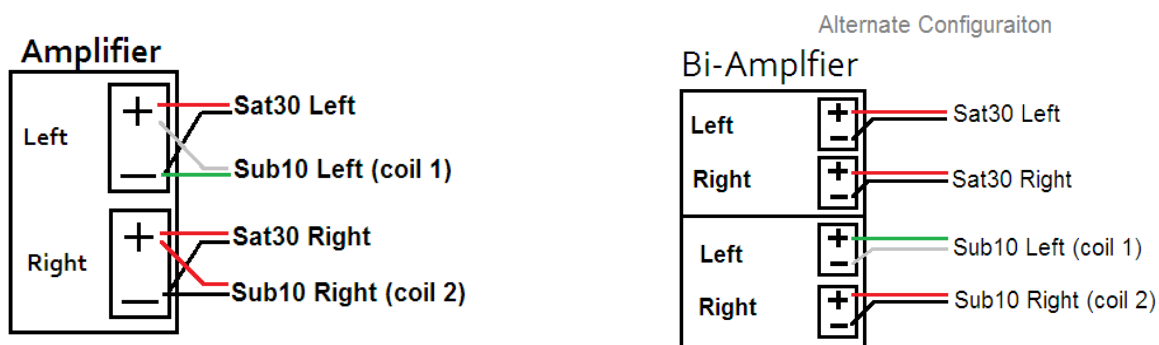
7. The canopies will stretch after about 3 weeks. Retighten the turnbuckles at that point.

## Atrium Sat30 Loudspeakers Installation Procedures

Connect only two Sat30 loudspeakers per stereo channel.

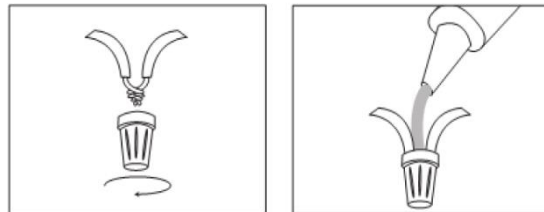
The atrium Sat30 and Atrium Sub10 each come with 3 feet of CL# speaker wire, which is rated for underground burial. The Sat30 has two conductors—one red that is labeled “+” and one that is labeled “-”. The Sub10 has four conductors, (white, green, red, and black) because it has dual voice coil. Follow the correct polarity during hookup to avoid performance issues and/or damage to your amplifier.

A standard configuration for outdoor listening includes two Sat30 loudspeakers and a single Sub10 subwoofer.



\* You must connect the left and right channels to achieve maximum output. Observe positive and negative polarity. Reversing polarity of a dual voice coil subwoofer will result in diminished bass output and possible damage.

\* Use provided wire nuts for all speaker connections. We recommend filling each wire nut with a small amount of silicone sealant to guarantee weatherproof connection.



Any number of Sat30 loudspeakers can be used in an installation. For applications requiring more than two Sat30 loudspeakers, use a separate amplifier channel for each additional pair of Sat30 loudspeakers. Do not use the A and B channels on your receiver to hook up two pairs of Sat30 loudspeakers, as this may overload and damage your receiver/amplifier circuitry.



## Motion Sensor Light Assembly Procedures

### SAFETY INFORMATION

Please read and understand this entire manual before attempting to assemble, operate or install the product.

#### WARNING

- This light fixture is designed to fit standard junction boxes as defined by the National Electrical Code. Consult a qualified electrician if you are not certain about the installation process. Always install wiring connections in accordance with local code, ordinances and the National Electric Code.

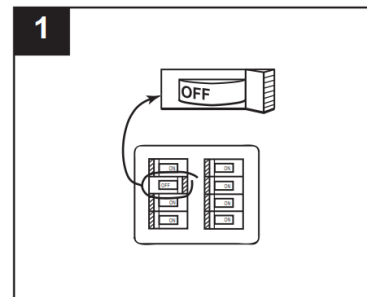
### PREPARATION

Before beginning to assemble or install lighting fixture, make sure all parts are present. Compare parts with package contents listed and shown above. If any part is missing or damaged, do not attempt to assemble, install or operate the fixture. Contact customer service for replacement parts.

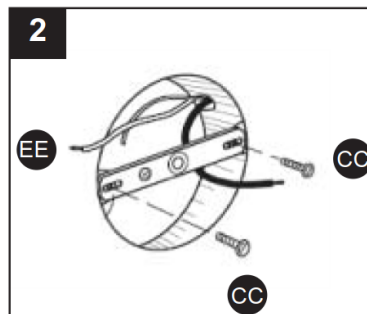
- **Estimated Assembly Time: 30-60 minutes** (Installation time will vary depending on skill level and existing wiring conditions. Estimated installation time assumes standard wall junction box and supply wiring are already installed).
- Tools Required for Assembly (not included): Phillips screwdriver, slotted screwdriver, wrench or pliers, silicone caulking adhesive and gun.
- NOTE: This fixture can be installed on a wall OR under a soffit where applicable.
- Helpful Items (not included): Wire cutters and/or wire strippers, step ladder.

### ASSEMBLY INSTRUCTIONS


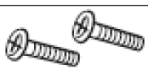


1. Turn OFF power to work area at main circuit breaker or fuse box.  
CAUTION: Do not rely on wall switch alone to turn off power.  
See Fig. 1.



2. Attach crossbar (EE) to junction box (not included) with the two crossbar screws (CC).  
See Fig. 2.



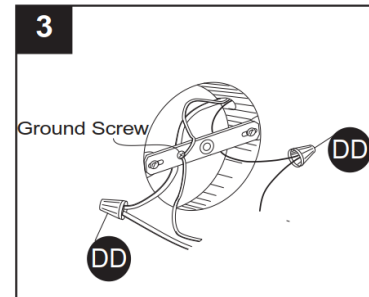
#### Hardware Used

- |   |                |   |     |
|---|----------------|---|-----|
|  | Crossbar Screw |  | x 2 |
|  | Crossbar       |  | x 1 |

## ASSEMBLY INSTRUCTIONS

3. Connect bare ground wire from the fixture to the ground screw on the crossbar (EE). (The ground screw is painted green.) Connect the white wire from the outlet box to the white wire from the light (A) by twisting a wire nut (DD) onto bare ends of the wires. Connect the black wire from the outlet box to the black wire from the light (A) by twisting a second wire nut (DD) onto the bare ends of the wires.

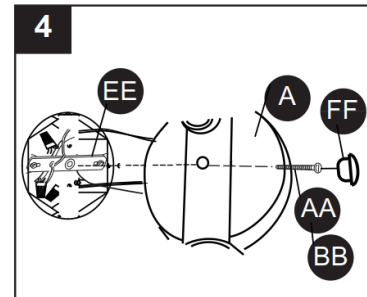
Note: The ground wire may be red and/or have a copper conductor. The white outlet box wire may be square and/or have a silver conductor.




### Hardware Used


DD Wire Nut  x 3


4. Make sure wire connections are secure. Carefully place wires into junction box. Position the light (A) cover plate over the crossbar (EE). Note: Long mounting screw (AA) and short mounting screw (BB) are provided for differences in screw hole depth. Put either long mounting screw (AA) or short mounting screw (BB) through the center hole and into the crossbar (EE) and tighten the screw until secure. Insert mounting screw cap (FF) into mounting screw hole. DO NOT overtighten.



### Hardware Used

AA Long mounting screw  x 1  
(or)

BB Short mounting screw  x 1

FF Mounting screw cap  x 1

**! IMPORTANT:** After mounting the motion-activated light, apply silicone caulking compound completely around the perimeter of the cover plate where the back of the cover plate meets the mounting surface. Silicone caulking prevents water from seeping into the junction box.

**! CAUTION:** Make sure motion detector head is not UPSIDE DOWN! Turn the head so the controls face the ground. If the head is turned upside down, the motion detector can be damaged by rain!

Your installation is now complete. Turn on power at circuit breaker and flip wall switch to ON position. Wall switch must remain in the ON position for the motion detector to work properly.

## Maintenance Schedule – 13” Dual Motor Vacuum

**Separators:** Dust collection chambers should be emptied daily. Open the side door of the separator tank. Squeeze filter bags to check for paper or large liter that may have been trapped inside bags. Tap or shake bags to remove dirt and dust. Inspect bags by sight and touch for signs of wear, and replace if holes are found. Wipe gasket and edge of door opening to ensure proper seal. Close door securely and check for proper gasket seal.

Open bottom door on separator tank. Remove dirt and trash to an appropriate trash container. Check intake tube for clogs. Wipe down gasket and door opening edges to ensure proper seal. Close door securely and check for proper gasket seal.

**Hoses:** Activate vacuum and check suction. If hoses are clogged, clear by detaching hoses and reversing end for end. Check cuffs and nozzle for wear, and then cover hose end with hand to listen and check for leaks on the hose, doors, and gaskets.

**Locks:** All locks should be lubricated monthly with graphite or another suitable lubricant.

**Surfaces:** In order to maintain shine and prevent rust, the stainless steel separator surface and other surfaces should be cleaned and polished monthly with a stainless steel cleaner and a soft cloth.

**Canister Rear Light:** If light deactivates then there is a problem with the vacuum motor.

**Steel Arch Blockages:** Use a PVC pipe as a ramrod to clear.

Maintenance Performed	Hourly	Daily	Weekly	Monthly	4 Months
Empty Trash /Wipe Down Filter	x				
Check Gasket On Vacuum Access Door		x			
Remove Filter And Dirt Bag To Clean			x		
Clean Out Stainless Steel Arch			x		
Lubricate Locks				x	
Polish Stainless Steel Surfaces				x	
Check Hose Suction			x		

## Maintenance Schedule – Central Vacuum

**Producers:** The Tommy Car Wash Systems Semi Central Vacuum system is virtually maintenance free. Interior filters are cleaned automatically with a reverse pulse jet, no oil is used for the motor function, and there are no brushes to replace during the life of the system.

**Separators:** Dust collection chambers should be emptied daily. Open the side door of the separator tank. Squeeze filter bags to check for paper or large liter that may have been trapped inside bags. Tap or shake bags to remove dirt and dust. Inspect bags by sight and touch for signs of wear, and replace if holes are found. Wipe gasket and edge of door opening to ensure proper seal. Close door securely and check for proper gasket seal.

Open bottom door on separator tank. Remove dirt and trash to an appropriate trash container. Check intake tube for clogs. Wipe down gasket and door opening edges to ensure proper seal. Close door securely and check for proper gasket seal.

**Hoses:** Activate vacuum and check suction. If hoses are clogged, clear by detaching hoses and reversing end for end. Check cuffs and nozzle for wear, and then cover hose end with hand to listen and check for leaks on the hose, doors, and gaskets.

**Locks:** All locks should be lubricated monthly with graphite or another suitable lubricant.

**Surfaces:** In order to maintain shine and prevent rust, the stainless steel separator surface and other surfaces should be cleaned and polished monthly with a stainless steel cleaner and a soft cloth.

**Steel Arch Blockages:** Use a PVC pipe as a ramrod to clear.

**Grease Turbine and Motor Bearings:** You must use Shell Gadus S2 V100 2 / Shell Alvania RL 2 (lithium base). Do not exceed 3 pumps per bearing, once per 120 days only.

Maintenance Performed	Daily	Weekly	Monthly	4 Months	Yearly
Inspect Lip Seal Gaskets	x				
Inspect Filter and Separator-Shake Bags	x				
Wash Filter Bags		x			
Replace Filter Bags					x
Empty separator dust collection chambers	x				
Lubricate Locks			x		
Polish Stainless Steel Surfaces			x		
Check Hose Suction		x			
Grease Turbine and Motor Bearings				x	

## Recommended Replacement Parts

To search products or place orders online please visit:

- [shop.tommycarwash.com/Tommy-Store/Vacuum-and-Vending](http://shop.tommycarwash.com/Tommy-Store/Vacuum-and-Vending) ([Main Components](#))
- [shop.tommycarwash.com/Tommy-Store/Vacs-and-Vending-Parts](http://shop.tommycarwash.com/Tommy-Store/Vacs-and-Vending-Parts) ([Parts Selection](#))

Part Number	Description	Comments
P-VAC-105NZL	Crevice Tool	
P-VAC-208-K	Tapered Hose Assembly	Includes Hose, Cuffs, and Fittings
P-VAC-208	Hose	
P-VAC-209	Arch to Hose Adapter Cuff	
P-VAC-220	2" Swivel Cuff	
P-VAC-224	Hose to Crevice Tool Adapter Cuff	
P-VAC-2037	2.38" to 2.69" SS T-Bolt Clamp	
E-VAC-209	Push Button Start Kit	
P-VAC-236	Door Gasket Set	
For 13" Dual Motor Vacuums		
P-VAC-2013	Vacuum Bags – Pack of 4	
P-VAC-255	Pleated Filter Protector	
P-VAC-256	Dirtbag Vacuum Pre-Filter	
P-VAC-230	Pleated Filter	
P-VAC-106	Extreme Power Vacuum Motor	120 Volt and 110 Volt
P-VAC-234	Brush Kit for Vacuum Motor	
E-VAC-10(7/8/9/10)	Push Button Timer	Select Voltage
For Optional Vending Unit		
P-DET-KIT	Interior Cleaning Vending Kits	