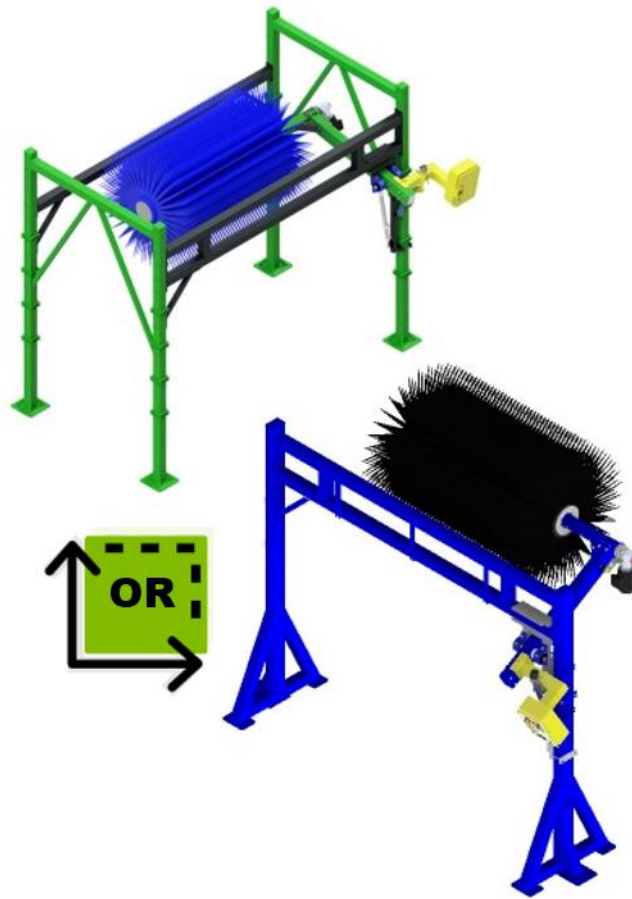


# Compact Top Brush

OWNER'S MANUAL



View all Sonny's  
Product Manuals &  
Technical Bulletins





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For Warranty Go To: <https://sonnydirect.com/warranty>

**THANK YOU FOR BEING A SONNY'S CAR WASH EQUIPMENT OWNER!**

## 2. READ ALL INSTRUCTIONS PRIOR TO OPERATING

This manual is a comprehensive step-by-step user instruction guide for the Compact Top Brush and components. To review other manuals, go online to [SonnyDirect.com](http://SonnyDirect.com) under Support Tab.

- Make sure to read, understand and follow all these instructions.
- To address any questions relating to ordering parts, operating the Compact Top Brush, installation, troubleshooting, maintenance, service, or anything else, contact Sonny's Technical Support Team.
- All deviations and alterations from these instructions MUST be reported to Sonny's The CarWash Factory<sup>®</sup>. Keep this manual in a location where it may be used for ongoing reference.

### 2.1 RECOMMENDED PPE



Eye Protection



Hearing Protection



Gloves



\* Shoes



**\* SHOES:** Toe Protection steel or composite, Impact & Top of Foot Metatarsal Bones Protection up to 75 foot-pounds, Compression Protection up to 2,500 lbs., Electric Shock Resistance up to 600 volts, Antistatic, Puncture Resistant up to 270 lbs., Dielectric Insulation, Slip Resistant Footwear, Conductive Properties to Protect Against Ignition and Volatile Chemicals.

### 2.2 PRECAUTIONS



Stop and read carefully before proceeding, these contain important information to Avoid injuries or incorrect equipment installation.

## 2. READ ALL INSTRUCTIONS PRIOR TO OPERATING

### 2.3 IMPORTANT SAFEGUARDS AND WARNINGS

- **WARNING: Do not perform any maintenance or work on equipment unless you first perform Lock-Out Tag-Out Safety Precautions. All electrically powered equipment MUST have manually operated disconnects capable of being locked in the “OFF” position. Equipment that has been “locked out” for any reason must be restarted ONLY by the person who performed the “lock out” operation. These procedures MUST be followed to avoid personal injury, death and/or dismemberment.**
- All parts and components MUST be installed by experienced and trained technicians.
- No unauthorized personnel should ever be permitted in the wash tunnel or near the equipment at any time.
- Hardhat, safety glasses with side shields, closed steel toe shoes, anti-impact and cut resistant gloves, dust mask, and earplugs if operating power tools, MUST be worn.
- When cutting or grinding any metal, safety glasses, earplugs, and dust mask MUST be worn.
- Do NOT leave a ladder or any other items such as wash down hoses or tools in the wash tunnel while equipment is running. Vehicle damage and injury, including death, can occur.
- Do NOT wear loose fitting clothing or jewelry around moving equipment. Do not allow any part of your body or other objects (including ladders, hoses, or tools) to come in contact with moving equipment. Entanglement may result causing injury, death, or dismemberment.
- Always exercise caution when walking (never run) through the wash tunnel as there may be slippery conditions. Be careful so you do not bump into or trip over equipment.
- Electrical connections and repairs MUST ONLY be performed by a Licensed Electrician.
- Plumbing connections and repairs MUST ONLY be performed by a Licensed Plumber.
- When working on any equipment that is higher than your shoulders, always use a fiberglass ladder that is in good condition.
- Use proper lifting technique. Team lifts are required for items over 50 lbs.
- Do NOT alter or modify parts in any way and do NOT interchange or substitute any components without the authorization of your supervisor and Sonny's The CarWash Factory.
- Do NOT install any parts or components into faulty materials.
- All damages and defects MUST be reported to both your supervisor and Sonny's The CarWash Factory.

## 2. READ ALL INSTRUCTIONS PRIOR TO OPERATING

### 2.3 IMPORTANT SAFEGUARDS AND WARNINGS

- If there are any malfunctions with the **Compact Top Brush**; or if any questions arise regarding the equipment operations, immediately contact your supervisor or Sonny's The CarWash Factory.
- Only use approved hardware, parts, and components with the **Compact Top Brush** or any other equipment.
- Always protect your body parts against sharp corners and edges.
- Keep loose articles of clothing, long hair, and jewelry away from the removal, installation, or operation of all equipment.
- The personnel installing the **Compact Top Brush** are responsible for making sure it works according to the instructions in this manual.
- Always remove ladders, tools, parts, etc., from the wash tunnel and backroom when finished.
- All personnel **MUST** be trained in the safe operation of all equipment, wash tunnel operations, backroom operations, safety regulations, emergency shutdown, Lock-Out Tag-Out and maintenance practices to avoid any accidents, and possible equipment failure.
- Only personnel specifically instructed and trained are permitted to enter the wash tunnel to perform inspections or maintenance. At least two qualified maintenance personnel **MUST** be present when performing equipment repairs or preventive maintenance.
- **IMPORTANT: Call Technical Support to adjust wash cycle when new equipment is installed.**
- **WARNING: All hydraulic and electrical systems in the wash tunnel equipped with a torque relief or overload should be checked and set to the minimum amount that will allow for proper functionality under normal washing conditions.**
- **WARNING: Possible wet floors and slippery conditions! To avoid an accident that might result in personal injury, death or dismemberment, all personnel MUST proceed with Caution.**
- **WARNING: Do NOT enter the wash tunnel when the equipment is operating. Personal injury, death and/or dismemberment may occur.**
- **WARNING: Make sure the proper Chemistry (Brush Lubrication) is being used in the Car Wash Tunnel to prevent vehicle and/or equipment damage.**
- **WARNING: If the Equipment Installation Dimensions at the time of installation are NOT measured correctly, it may result in equipment damage and/or failure. Dimensions MUST be verified if equipment is already installed. Contact Sonny's Technical Support Team at 1-800-327-8723 for any Installation questions.**

## 2. READ ALL INSTRUCTIONS PRIOR TO OPERATING

### 2.3 IMPORTANT SAFEGUARDS AND WARNINGS

- **WARNING:** All connections and repairs **MUST ONLY** be performed by Licensed Professionals. Perform all trade work in compliance with all applicable local and national codes.
- **WARNING:** Although building codes have been considered in developing all drawings, verification of site-specific conditions and compliance with federal, state, and local building codes is the exclusive responsibility of the customer and/or architect and engineer to verify compliance.
- **WARNING:** Do **NOT** attempt to repair or adjust any pressurized liquid or pneumatic part, hose, pipe, or fitting while that equipment is in operation.
- **WARNING:** Do **NOT** operate any equipment that requires safety covers with those covers removed or improperly installed. Do **NOT** operate any equipment if any component of that equipment is suspected to be defective or malfunctioning.
- **WARNING:** Store all cleaning, washing solutions and oils in a well-ventilated area. Clean up fluid spills immediately to prevent hazardous safety conditions. Be certain to follow all safety procedures on SDS Sheets for each chemical product used.
- **WARNING:** When a piece of equipment must be in operation during inspection or maintenance, one trained technician **MUST** stay at the power disconnect switch in the Backroom, while another trained technician performs the inspection or maintenance on the equipment in the Tunnel; and a 3<sup>rd</sup> trained technician communicates any emergency shutoff between the 1<sup>st</sup> and 2<sup>nd</sup> technician.
- **WARNING:** All Equipment **MUST** be given regular maintenance to prevent equipment damage and/or failure that will **VOID** the warranty.
- **WARNING:** Emergency “STOP” Buttons **MUST** be well marked, and their location and proper use reviewed with all personnel. Any activated “STOP” button must be reset only by the person who activated it. Clear the wash tunnel of any people, ladders, hoses, tools, and other loose items before restarting the equipment. An audible device **MUST** sound to warn people that the equipment is starting.

### SAVE THESE INSTRUCTIONS

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### 2.4 SAFETY FIRST

- **CAUTION:** Verify Safe Working Conditions
- Make sure to Have a Safety Kit Before Starting Equipment Installation, Service or Repairs
- Make Sure to Apply the Lock-Out Tag-Out to Any Equipment that Requires it
- Your Equipment Should Always be Installed by a Qualified Technician



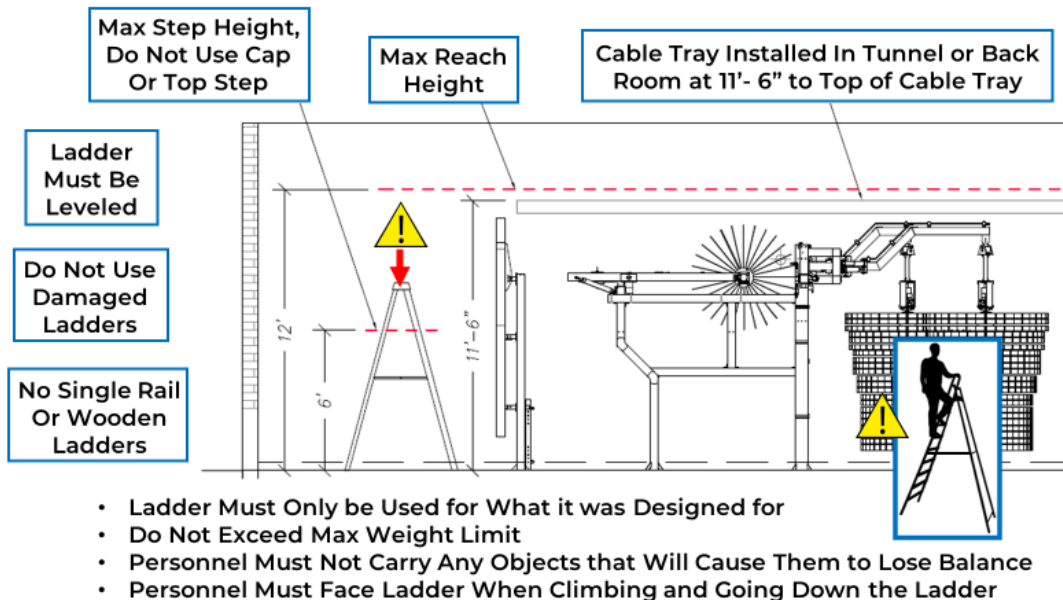
## 2. READ ALL INSTRUCTIONS PRIOR TO OPERATING

### 2.5 HOW TO MAKE A SAFE WORKPLACE

- 1 Wear Appropriate Attire
- 2 Wear Safety Equipment
- 3 Keep Aisles Clear
- 4 Keep Work Area Clean
- 5 Report Accidents
- 6 Report Any Unsafe Conditions
- 7 Place Trash In Proper Containers
- 8 No Smoking In Tunnel Or Backroom
- 9 Have a First Aid Kit For Emergencies
- 10 Have a Fire Extinguisher On Site
- 11 Lift Properly
- 12 Power Off For Install & Service



### 2.6 TUNNEL INSTALL



### 3. COMPACT TOP BRUSH FEATURES

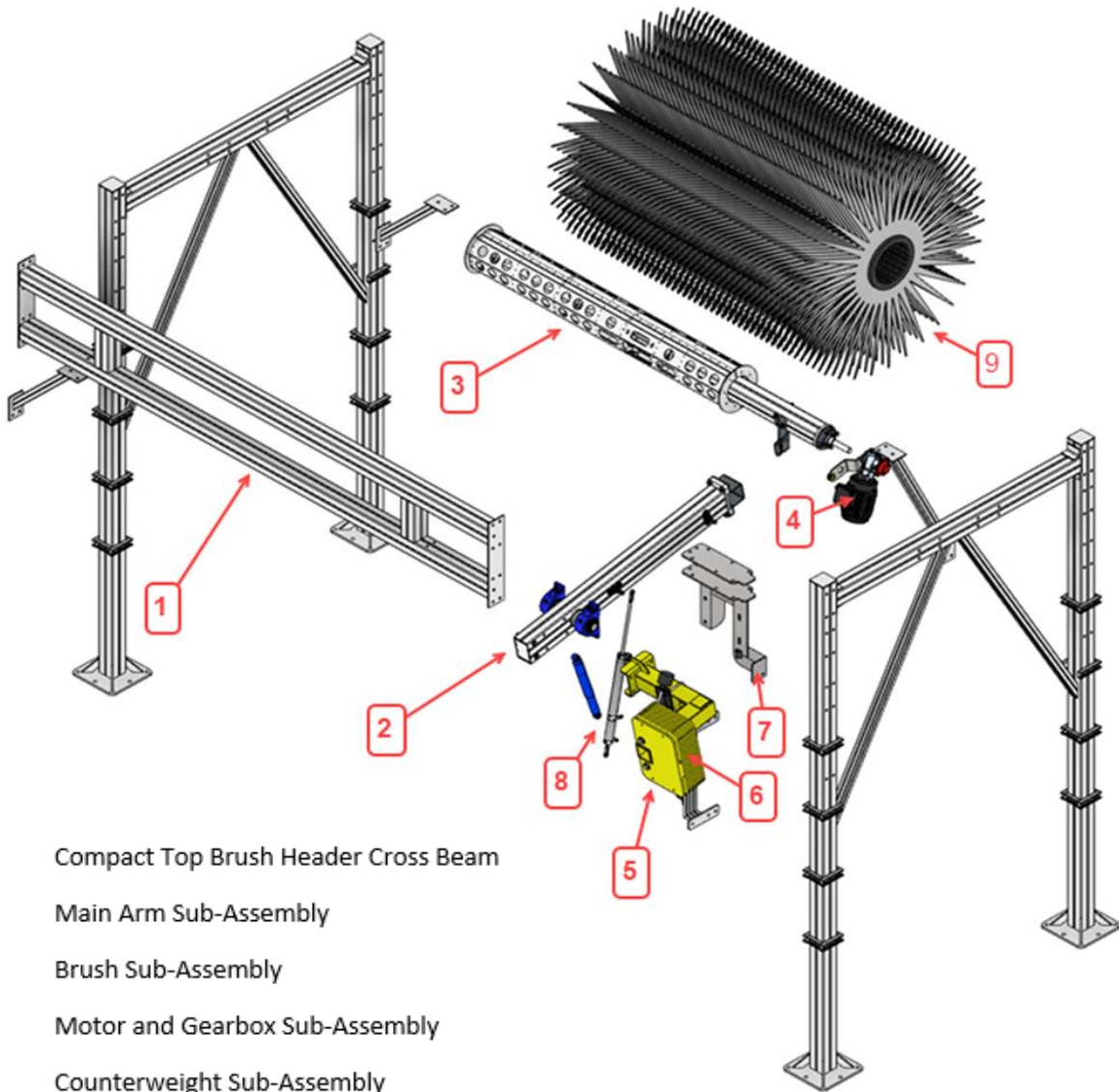
Sonny's Compact Top Brush is designed to fit in a smaller footprint and can also be retrofitted to existing front to back 901 Mitter Foundation Frame. The simple mechanical operation features a re-engineered pivot system that delivers a fluid motion over all horizontal surfaces for a more consistent wash across a wider range of vehicles.

- Gentle NeoGlide® Foam Hush Brush™ does not absorb water and delivers a consistent balanced wash, every time, regardless of volume, while reducing noise
- Single Arm Cantilevered Design
- High Strength Aluminum Alloy Top Brush Frame
- 304 Stainless Steel Main Support Weldment
- 304 Stainless Steel Counterweight Assembly is Powder Coated Safety Yellow
- Brush tracks the contour of the vehicle using only a counterweight
- Available as a Top Brush Spider, which allows for mounting of Entrance Wraps, Exit Wraps, Tire Brush Attachments, Top Mount and Bottom Mount Side Brushes
- Octagonal Sheetmetal Core Hub for light weight, smooth operation, and ease of NeoGlide® replacement
- Double Roller Pillow Block Bearings, 2" HD Pivot Shaft
- Light Touch Shock for smooth operation and retract
- 2 Position Air Cylinder for optimal brush position control



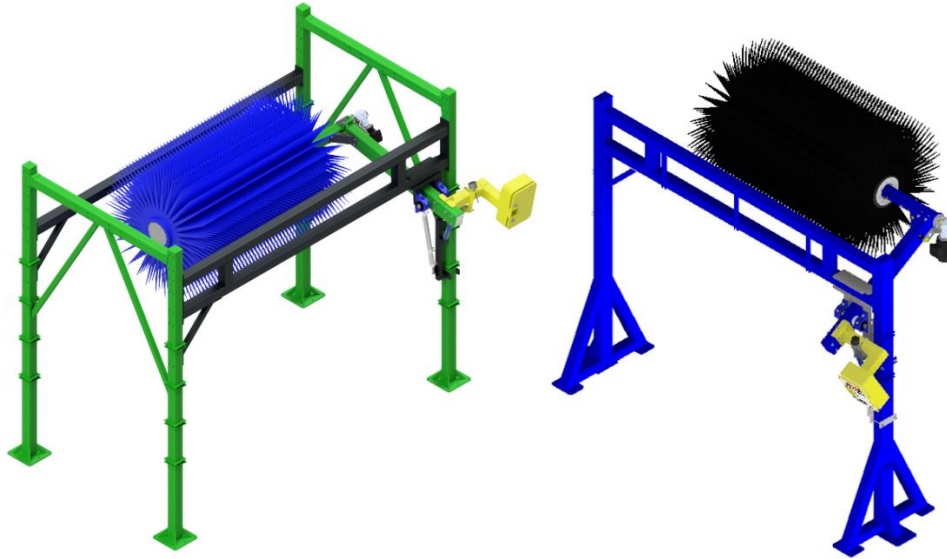
# 3. COMPACT TOP BRUSH FEATURES

## 3.1 CALLOUTS



1. Compact Top Brush Header Cross Beam
2. Main Arm Sub-Assembly
3. Brush Sub-Assembly
4. Motor and Gearbox Sub-Assembly
5. Counterweight Sub-Assembly
6. Counterweight Plates
7. Main Support Frame
8. Air Cylinder and Shock Mount Weldment
9. NeoGlide Brush Material

## 4. EQUIPMENT SPECIFICATIONS



<b>Footprint Length</b>	<b>98"</b>
<b>Footprint Width</b>	<b>144"</b>
<b>Height</b>	<b>140"</b>
<b>Vehicle Clearance</b>	<b>90"</b>
<b>RPM</b>	<b>75 - 85</b>
<b>Drive Electric</b>	<b>1 HP Transtecno</b>

## 5. UTILITIES REQUIREMENTS

Utilities interconnection and the materials required for interconnection to Sonny's equipment are the responsibility of the customer.



All connections and repairs **MUST ONLY** be performed by Licensed Professionals. Perform all trade work in compliance with all applicable local and national codes.

### WATER - THE CUSTOMER'S PLUMBER IS RESPONSIBLE FOR:

- The Customer's Plumber is to provide and install a 1/2" water line @60PSI (nominal) to the solenoid valve on the chemical distribution system for the Washer.

### FOAM APPLICATION

- Foam and soap must be applied on vehicle and brushes. For proper machine operation, it is important for there to be lubricity between brush and vehicle.

### ELECTRIC - THE CUSTOMER'S ELECTRICIAN IS RESPONSIBLE FOR:

- The Customer's Electrician is to provide and install single phase power from the (24 or 110 VAC as determined at time of order) from the Customer's Controller system to the liquid solenoid valve for the brush spray bars. If required, the motor starter coil for the hydraulic power pack feeding the brush, and any pump motor for the chemical distribution system.
- If applicable, the Customer's Electrician is to provide materials and install 208VAC or 230VAC or 460VAC, 3-phase, 60Hz power to the electric motor on the hydraulic power pack; or VFD panel from a properly sized three pole circuit breaker, and motor starter with three thermal overloads.
- The Customer's Electrician is to provide and install single phase power from the remote push-button station, through the tunnel equipment programmer; to the supplied air solenoid valve, on the Air Distribution Manifold for retract of both washers upon selective signal.

### COMPRESSED AIR - THE CUSTOMER'S PLUMBER IS RESPONSIBLE FOR:

- The Customer's Plumber is to provide and install a 1/2" compressed air line from the Air Compressor to the Air Distribution Manifold for the retract functions.

### TECHNICAL DISCLAIMER

Although building codes have been considered in developing all drawings, verification of site-specific conditions and compliance with federal, state, and local building codes, it is the exclusive responsibility of the customer and/or architect and engineer to verify compliance.

# 6. IMPORTANT INFORMATION

## 6.1 INSPECT YOUR SYSTEM

Before transporting your Compact Top Brush or removing it from the pallet, check for any damage that could have occurred during shipping. If damage is found, contact Sonny's Customer Service at 800-327-8723 or [CustomerService@SonnysDirect.com](mailto:CustomerService@SonnysDirect.com).

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## 6.2 TRANSPORTING

Secure Compact Top Brush to restrict movement and avoid equipment damage before transporting.

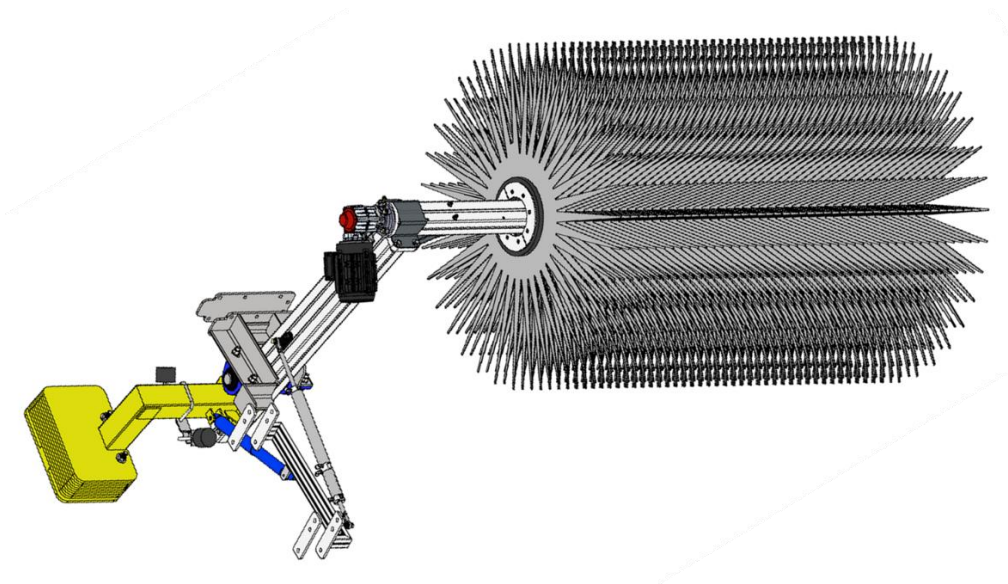
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## 6.3 STORAGE

In the event your system needs to be stored or out of service for more than 90 days, take the following steps:

1. Using a shop towel or rag, wipe exposed surfaces with a rust preventative.
2. Secure Compact Top Brush to restrict movement and avoid equipment damage before putting it in storage.

***Outdoor storage not recommended.***



# 7. INSTALLATION INSTRUCTIONS

## 7.1 SAFETY WEAR REQUIRED FOR INSTALLATION



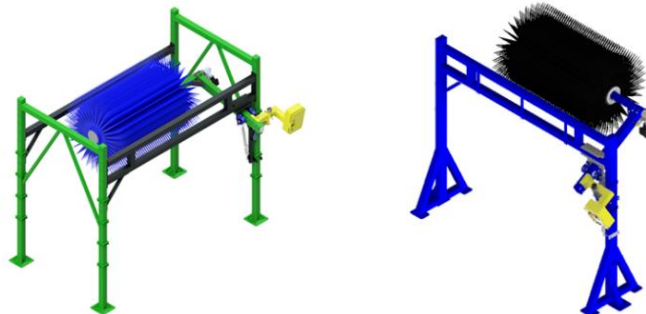
**WARNING:** Make sure to follow Local and State Safety Wear Required Regulations to ensure the safety of all personnel. Failure to follow Safety Regulations may result in personal injury, death and/or dismemberment.

## 7.2 TOOLS REQUIRED FOR INSTALLATION

TOOLS	TOOLS
Safety Glasses	C Clamp
Gloves	Ratchet Strap or S-Hooks
Hard Hat	Tape Measure
Impact Gun with Socket Set	Rubber Mallet
Hammer Drill with 5/8" Concrete Bit	Sledgehammer
Allen Key Set	Nip Scissor
Wrench Set and Screwdriver	Anti-Seize Compound Never-Seez®
Torque Wrench	2 Ladders
Level Tool	Forklift

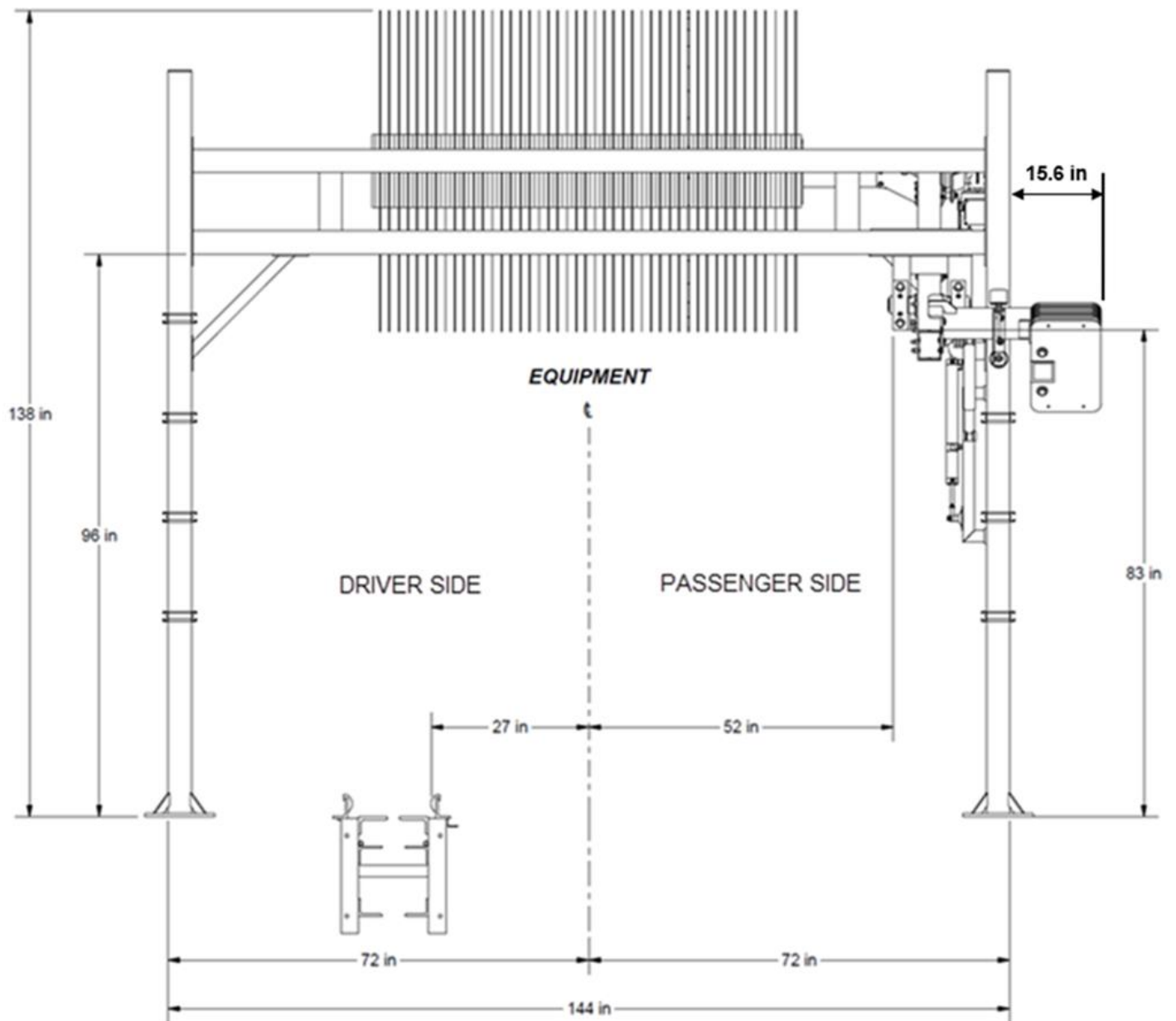
## 7.3 QUICK START COMPACT TOP BRUSH INSTALLATION MANUAL

Go online to [SonnysDirect.com](http://SonnysDirect.com) under Support Tab.



# 7. INSTALLATION INSTRUCTIONS

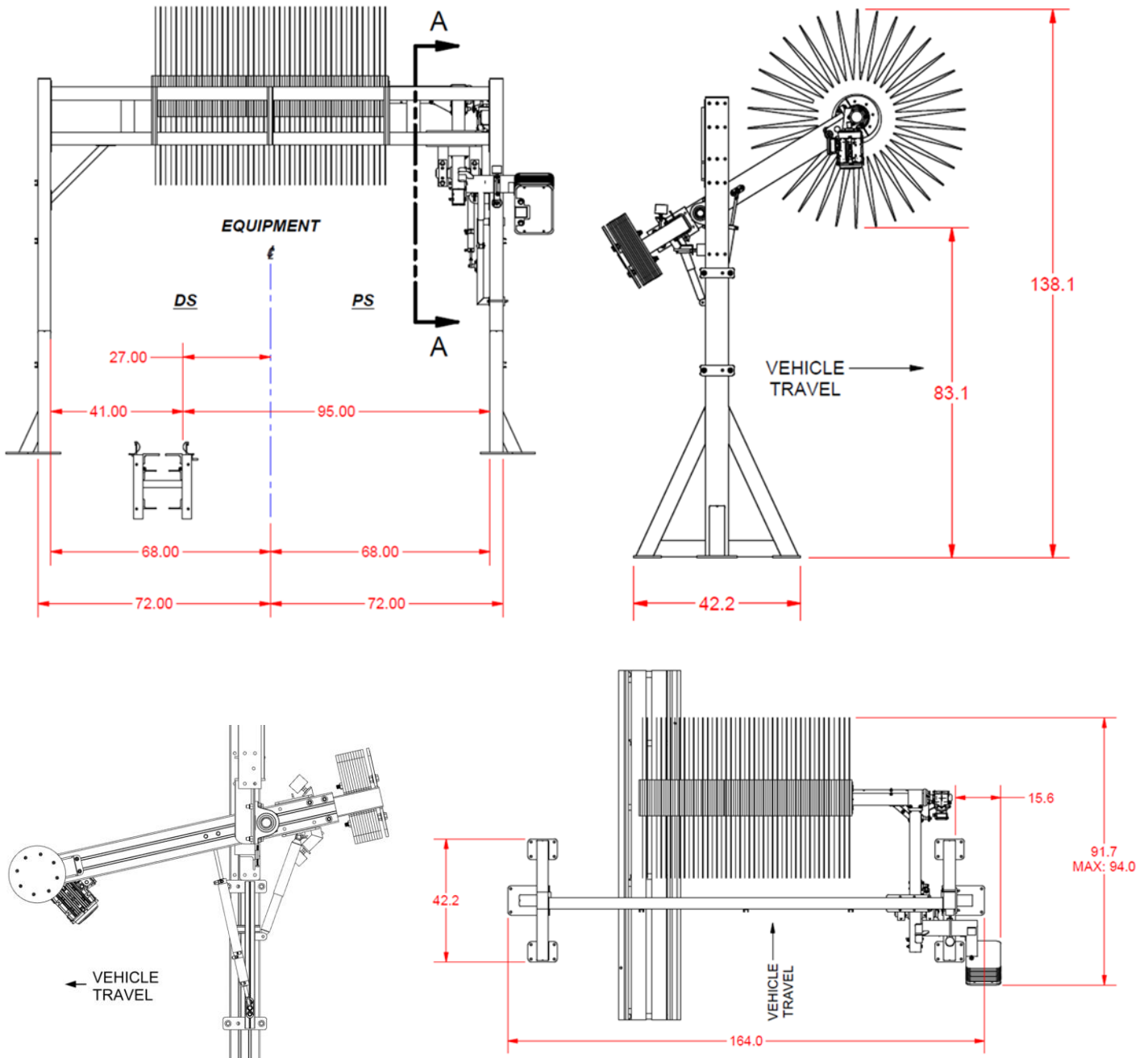
## 7.4 INSTALLATION DIMENSIONS FOR FOUNDATION FRAME





# 7. INSTALLATION INSTRUCTIONS

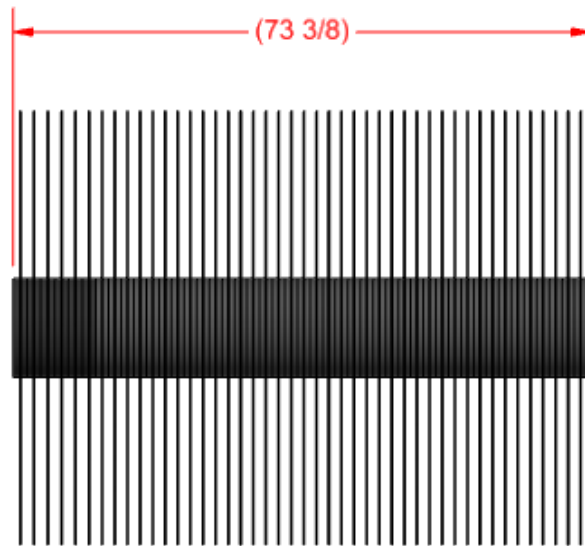
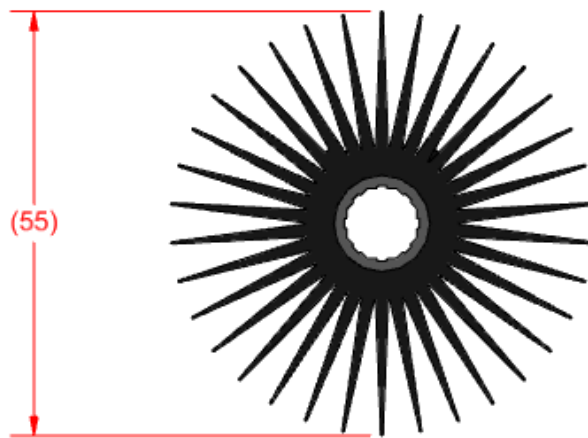
## 7.5 INSTALLATION DIMENSIONS FOR STANDALONE FRAME



# 7. INSTALLATION INSTRUCTIONS

## 7.6 BRUSH DIMENSIONS

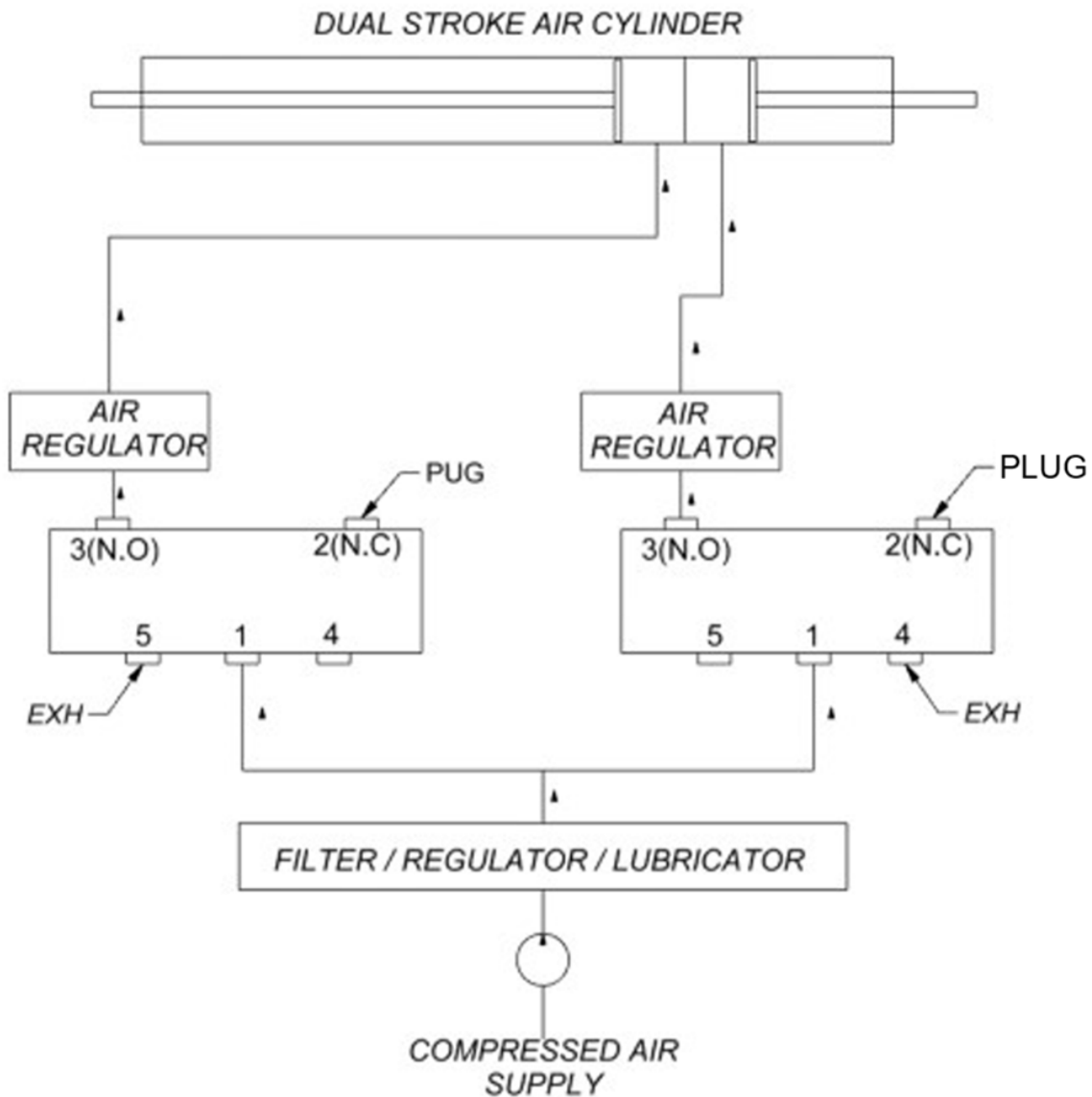
Diameter	55"
Length	73" (Nominal)



# 7. INSTALLATION INSTRUCTIONS

## 7.7 AIR CYLINDER POSITIONS

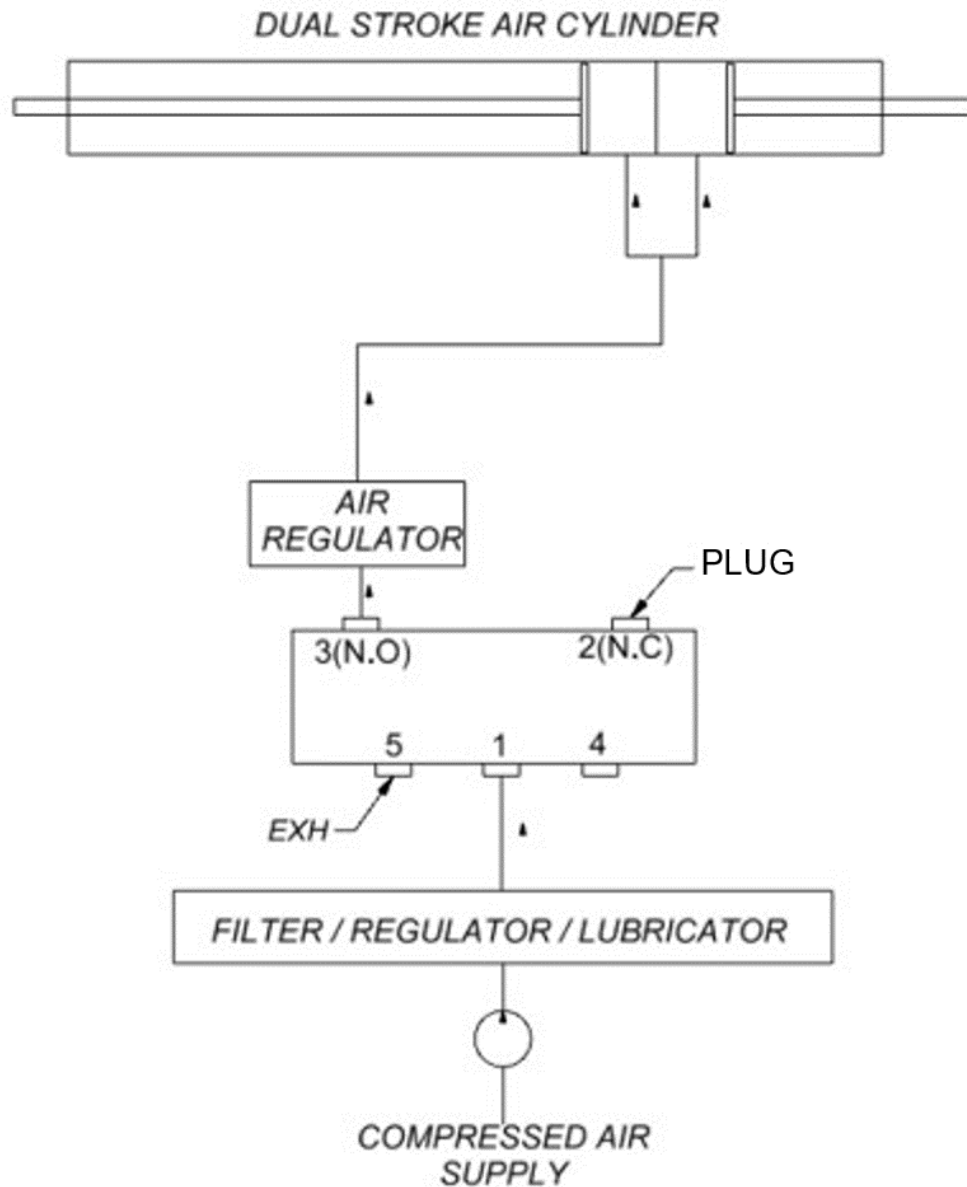
Compact Top Brush - Pneumatic Diagram  
Three Position Control



# 7. INSTALLATION INSTRUCTIONS

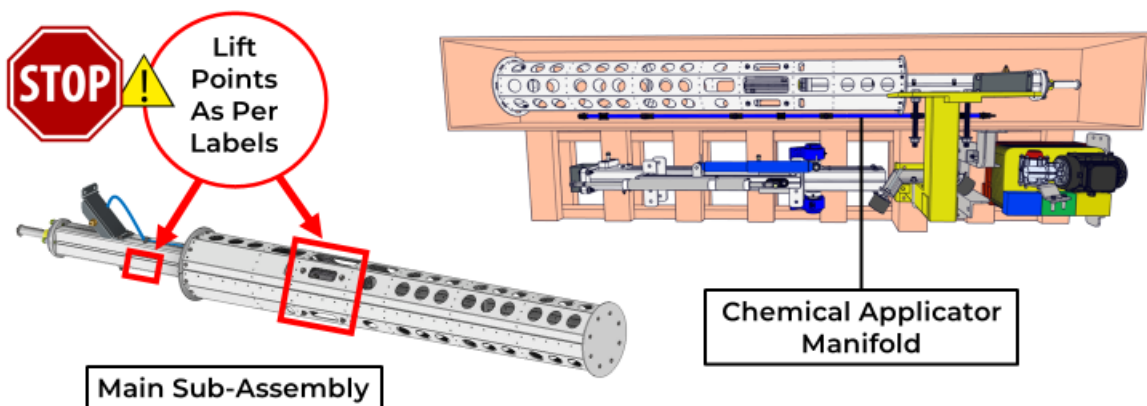
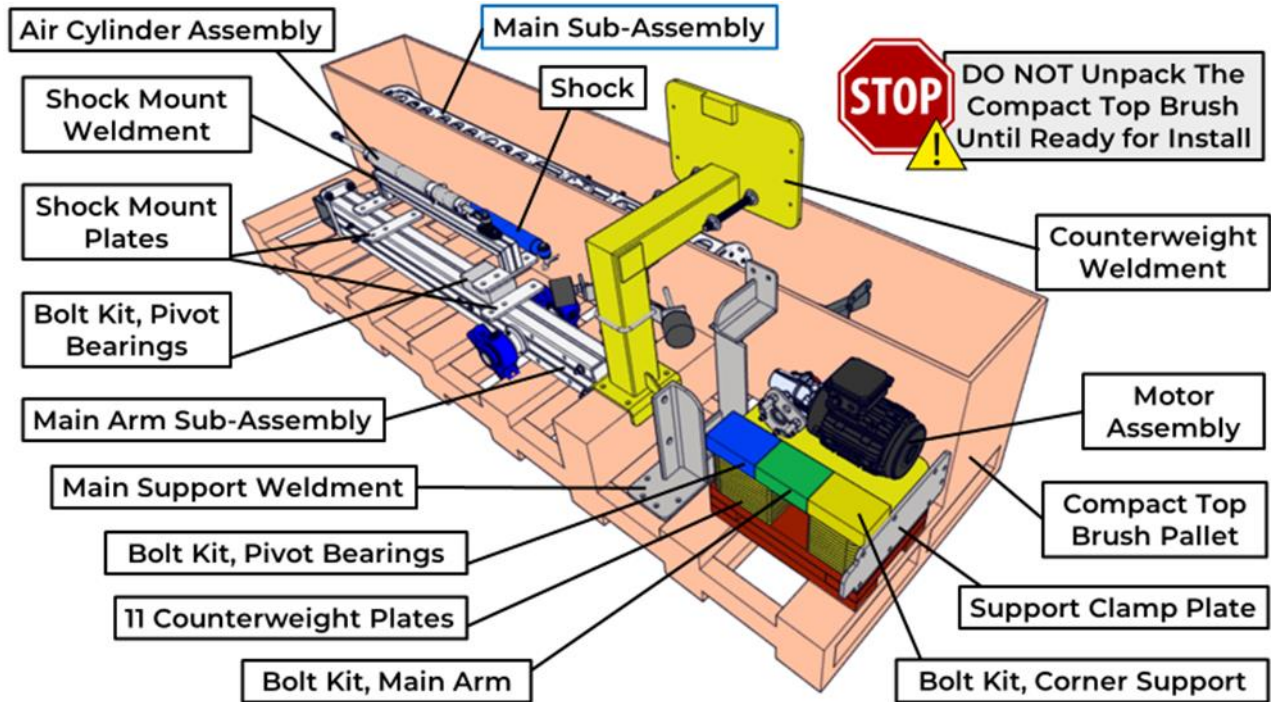
## 7.7 AIR CYLINDER POSITIONS

### Compact Top Brush - Pneumatic Diagram Two Position Control



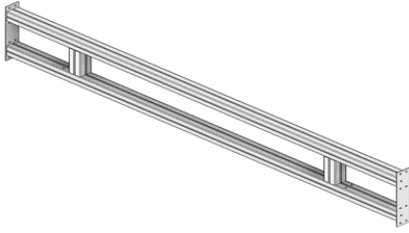

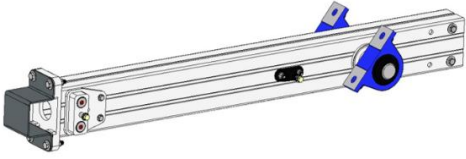

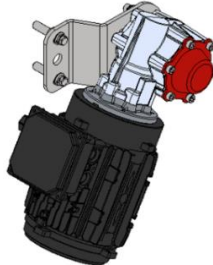
# 7. INSTALLATION INSTRUCTIONS

## 7.8 UNPACKING THE COMPACT TOP BRUSH




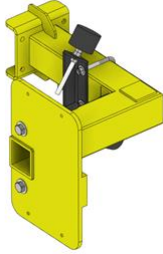




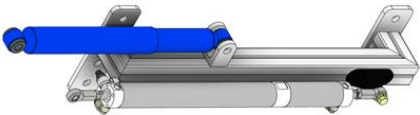
# 7. INSTALLATION INSTRUCTIONS

## 7.9 SUB-ASSEMBLIES REQUIRED FOR INSTALLATION

<p><b>Compact Top Brush Header Cross Beam (Only if NO Wrap Header is available)</b></p>		
<p><b>Main Arm Sub-Assembly</b></p>	<p> <b>Hardware Kit # 10013864</b></p> <p><b>4 Hex Bolts (5/8" – 11 X 3" Zc)</b>  <b>1 Hex Bolt (3/8" – 16 X 4" SS)</b>  <b>10 Flat Washers (5/8" Zn)</b>  <b>4 Hex Nuts (5/8" – 11 Zc)</b></p>	
<p><b>Brush Sub-Assembly</b></p>		
<p><b>Motor and Gearbox Sub-Assembly</b></p>		

# 7. INSTALLATION INSTRUCTIONS

## 7.9 SUB-ASSEMBLIES REQUIRED FOR INSTALLATION

<p><b>Counterweight Sub-Assembly</b></p>	<p> <b>Hardware Kit # 10013865</b></p> <p><b>4 Hex Bolts (1/2" – 13 X 5 1/2" SS)</b>  <b>8 Flat Washers (1/2" SS)</b>  <b>4 Hex Nuts (1/2" – 13 SS)</b></p>	
<p><b>11 Counterweight Plates (28 lbs. Each)</b></p>		
<p><b>Main Support Frame</b></p>	<p> <b>Hardware Kit # 10013866</b></p> <p><b>8 Hex Bolts (1/2" – 13 X 6" SS)</b>  <b>2 Hex Bolts (1/2" – 13 X 5 1/2" SS)</b>  <b>24 Flat Washers (1/2" SS)</b>  <b>10 Hex Nuts (1/2" X 13 SS)</b></p>	
<p><b>Air Cylinder and Shock Mount Weldment</b></p>	<p> <b>Hardware Kit # 10013867</b></p> <p><b>4 Hex Bolts (1/2" – 13 X 6" SS)</b>  <b>8 Flat Washers (1/2" SS)</b>  <b>4 Hex Nuts (1/2" – 13 SS)</b></p>	

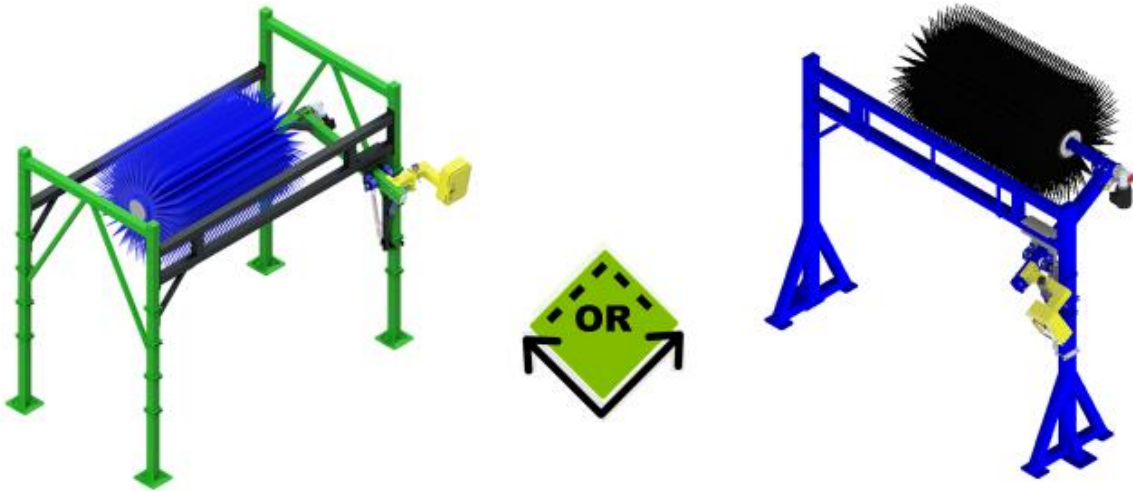
# 7. INSTALLATION INSTRUCTIONS

## 7.10 BEFORE STARTING



**IMPORTANT:** All parts and components **MUST** be installed by experienced and trained technicians. Safety wear is required for ALL personnel.

WORK FORCE	INSTALLATION TIME
2 to 4 Experience and Trained Technicians	4 to 6 Hours Without Setbacks



**IMPORTANT:** If the Equipment Installation Dimensions at the time of installation are **NOT** measured correctly, it may result in equipment damage and/or failure.

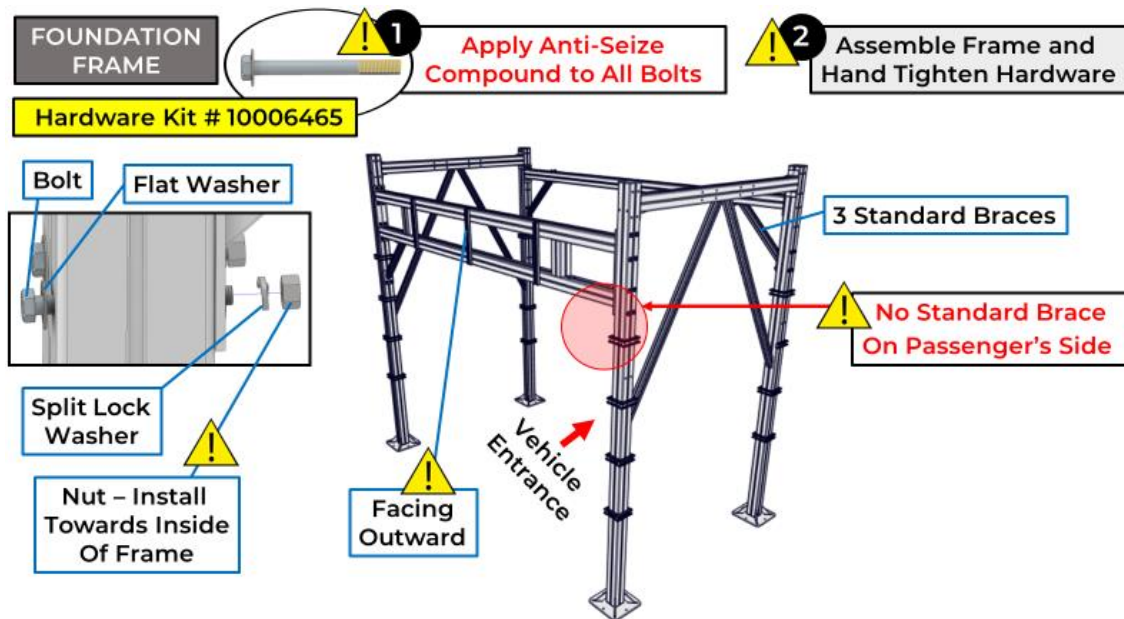


**DANGER:** Always shutoff all power to conveyor and/or equipment before starting any install, maintenance, service, or repairs. Failure to do this may result in personal injury, death, or dismemberment.

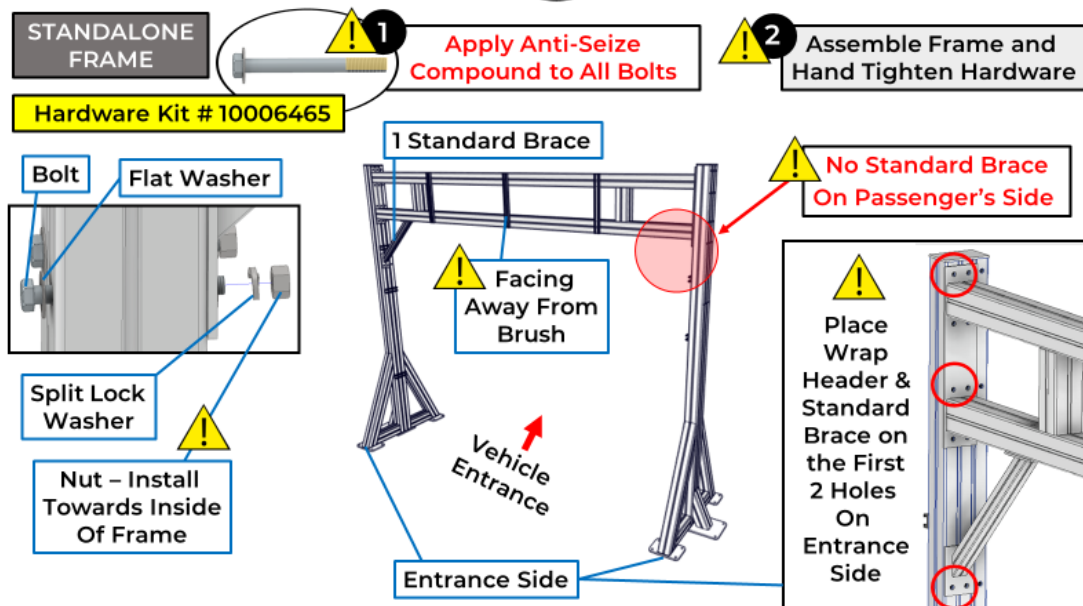


# 7. INSTALLATION INSTRUCTIONS

## 7.11 COMPACT TOP BRUSH INSTALLATION

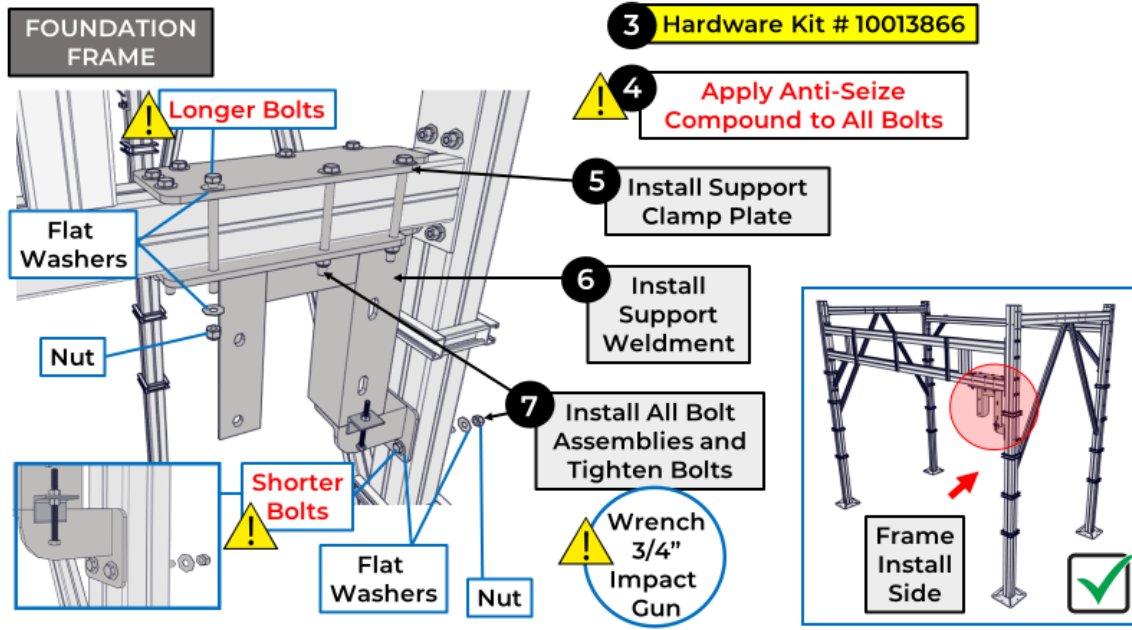


OR

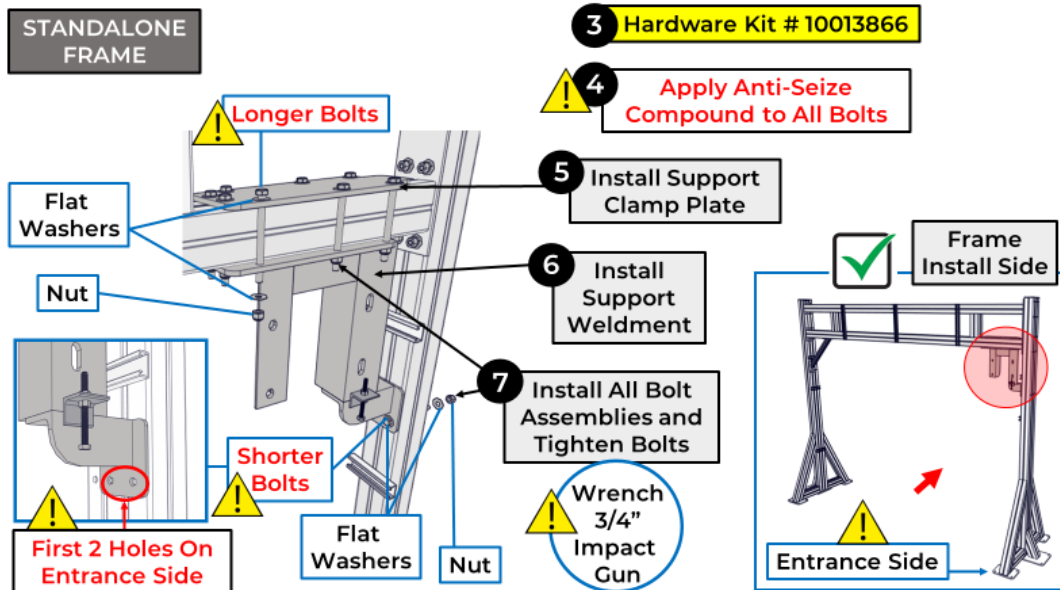


# 7. INSTALLATION INSTRUCTIONS

## 7.11 COMPACT TOP BRUSH INSTALLATION



**OR**



# 7. INSTALLATION INSTRUCTIONS

## 7.11 COMPACT TOP BRUSH INSTALLATION

**OR**

**8** Level and Square Frame with Equipment Installation Dimensions

**9** Drill Concrete Hole With a Hammer Drill 5/8" Concrete Bit

**10** Install 1 Concrete Anchor Bolt Per Frame Leg to Secure Frame

**11** Use a Sledgehammer to Install Anchor Bolt Into the Concrete

**12** Use 15/16" Impact Gun to Secure Anchor Bolt to Concrete

5/8" Nut

5/8" Flat Washer

Frame Leg

5" Concrete Anchor Bolt

Frame Leg

**13** Tighten and Torque All Frame Hardware

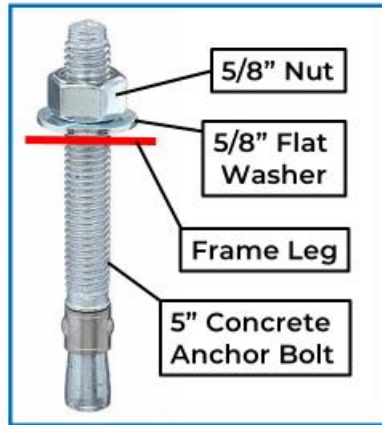
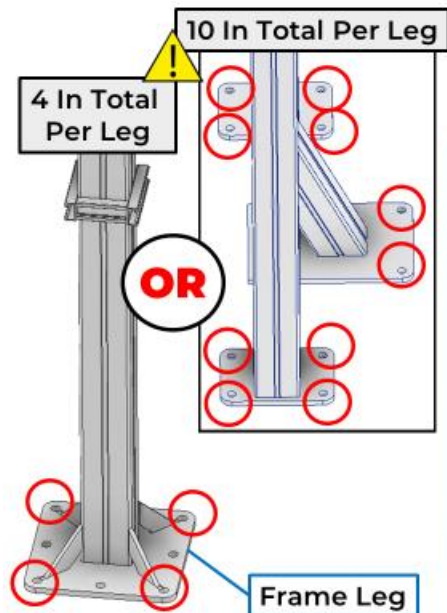
Impact Gun 3/4"

Torque 40 ft-lb

**OR**

# 7. INSTALLATION INSTRUCTIONS

## 7.11 COMPACT TOP BRUSH INSTALLATION



- 14** Drill the Rest of Concrete Holes With a Hammer Drill 5/8" Concrete Bit
- 15** Install Remaining Concrete Anchor Bolts Per Frame Leg
- 16** Use a Sledgehammer to Install All Anchor Bolts Into the Concrete
- 17** Use 15/16" Impact Gun to Tighten All Anchor Bolts to the Concrete

- 18** Make Sure Entrance & Exit Cross Beams are Level and Vertical Legs are Plumb
- Leveled and Plumb



# 7. INSTALLATION INSTRUCTIONS

## 7.11 COMPACT TOP BRUSH INSTALLATION

FOLLOW SAME INSTALLATION PROCESS FOR BOTH FRAMES

**19** Hardware Kit #10013864

**20** Black Retract Attachment Bracket MUST Point Towards Inside of Frame Leg

**21** Hex Bolt 3/8"-16 x 4"

**22** Apply Anti-Seize to ALL Bolts

**23** Install Main Arm

**24** Install Bolt Assemblies

**25** Tighten All Nuts

Wrench 15/16"  
Impact Gun

Nut

Flat Washer

Bolt

OR

**26** Remove Bolts, Flat Washers and Nuts

**27** Remove Completely

**28** Remove Bolts, Flat Washers and Nuts

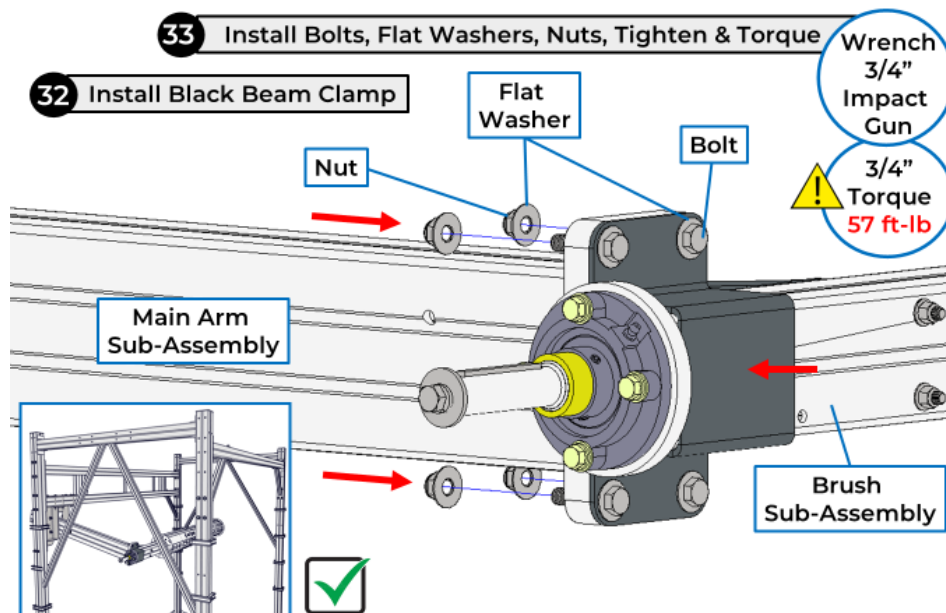
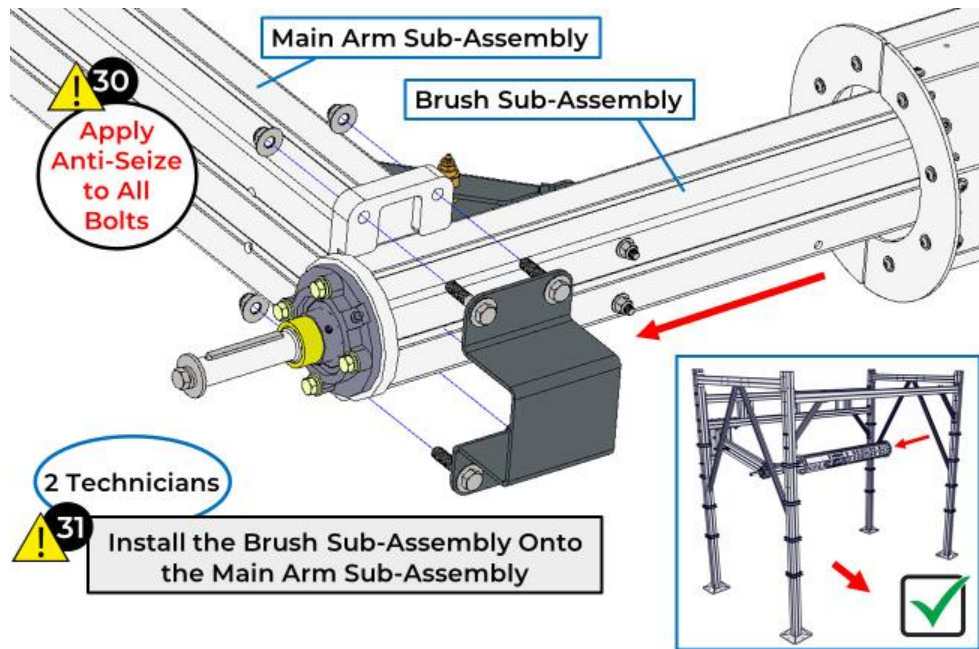
**29** Remove Black Beam Clamp

Main Arm Sub-Assembly

Wrench 9/16" 3/4"  
Impact Gun 9/16" 3/4"

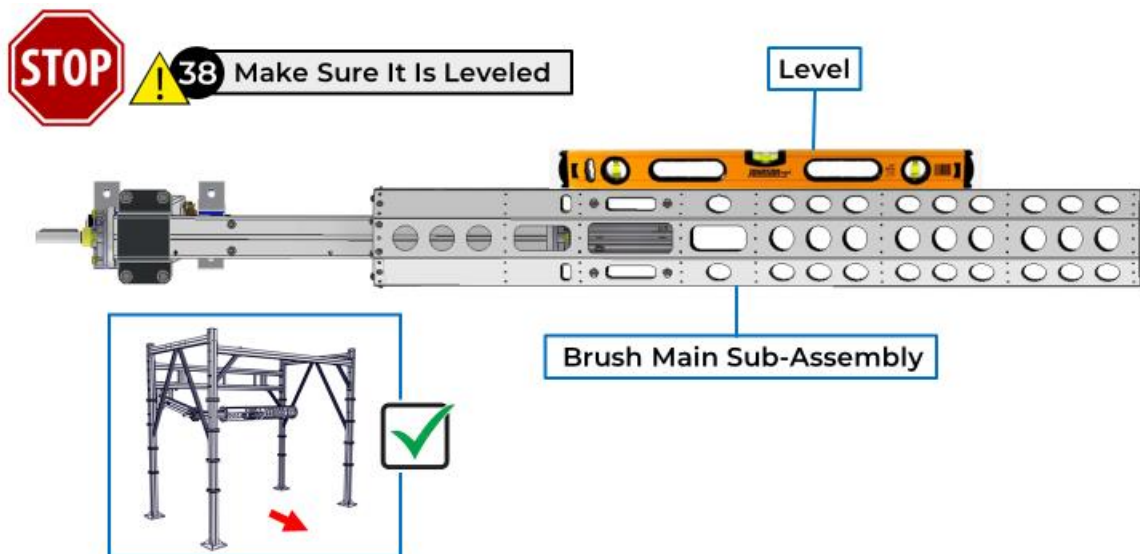
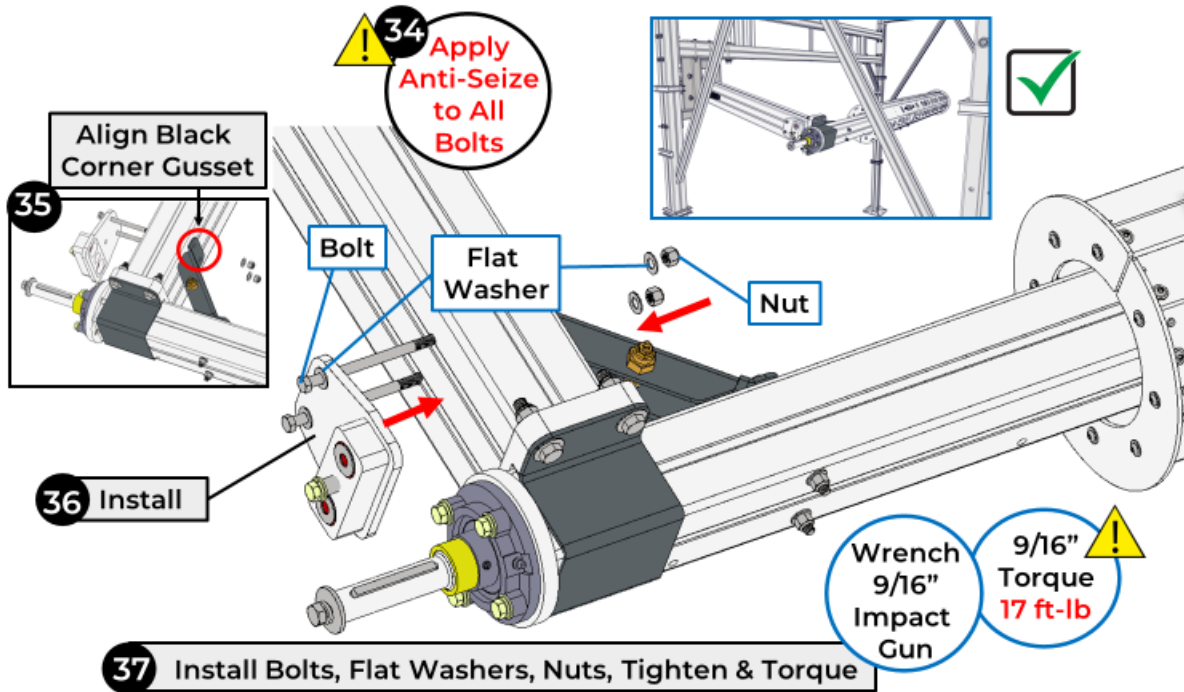
# 7. INSTALLATION INSTRUCTIONS

## 7.11 COMPACT TOP BRUSH INSTALLATION



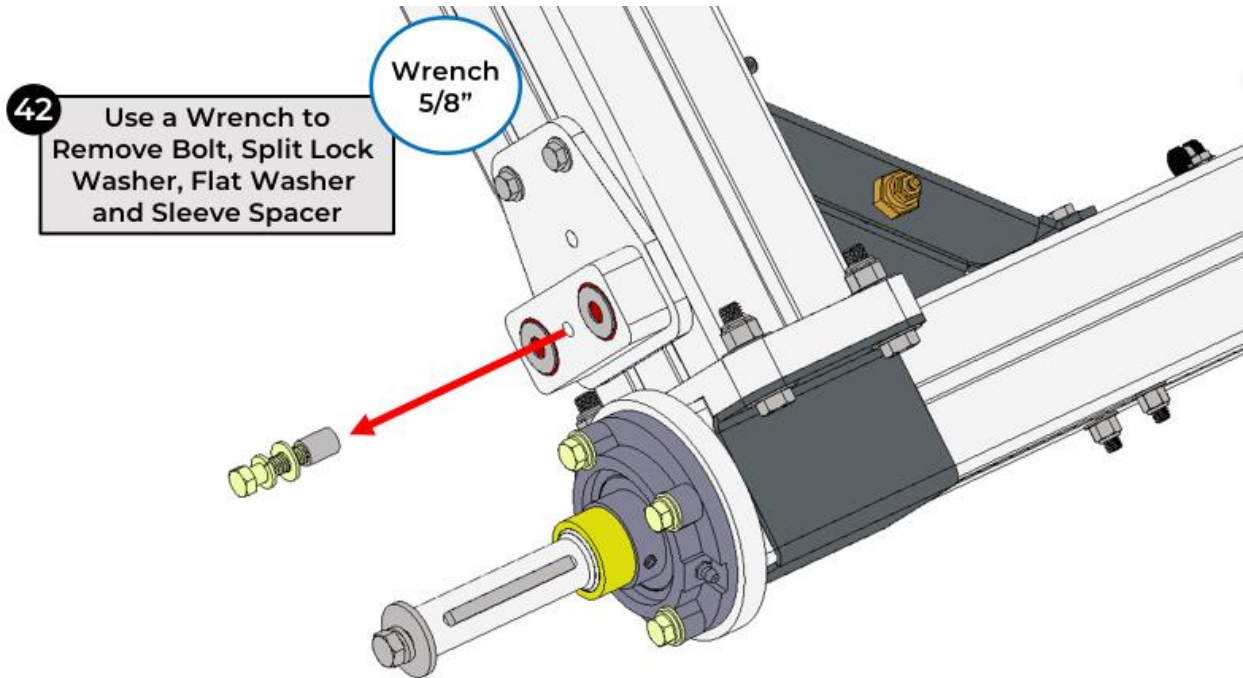
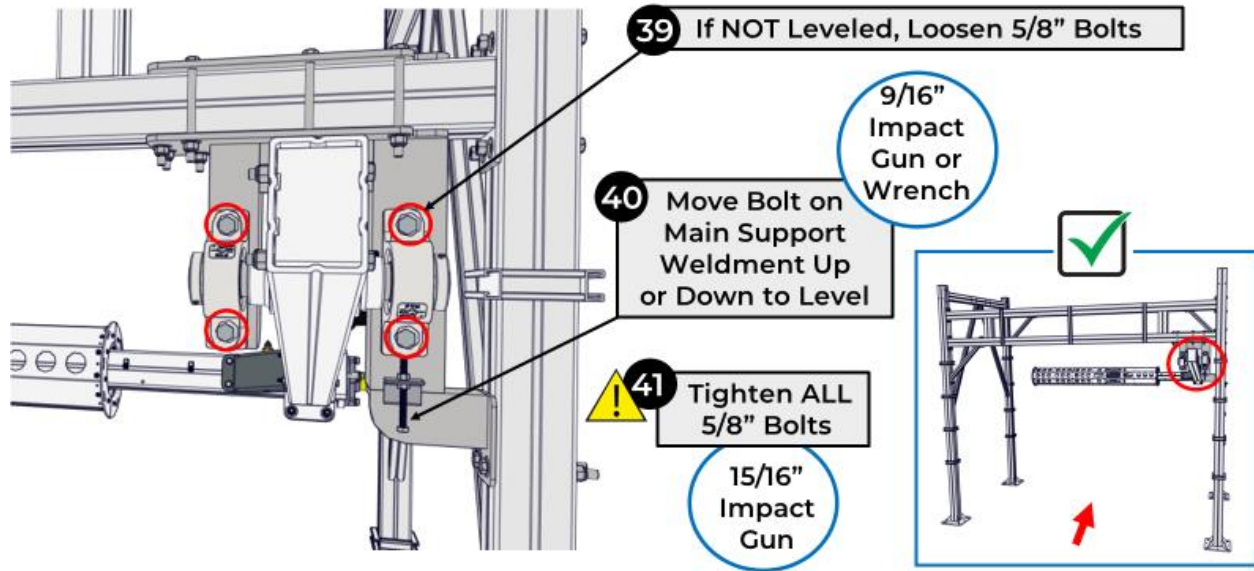
# 7. INSTALLATION INSTRUCTIONS

## 7.11 COMPACT TOP BRUSH INSTALLATION



# 7. INSTALLATION INSTRUCTIONS

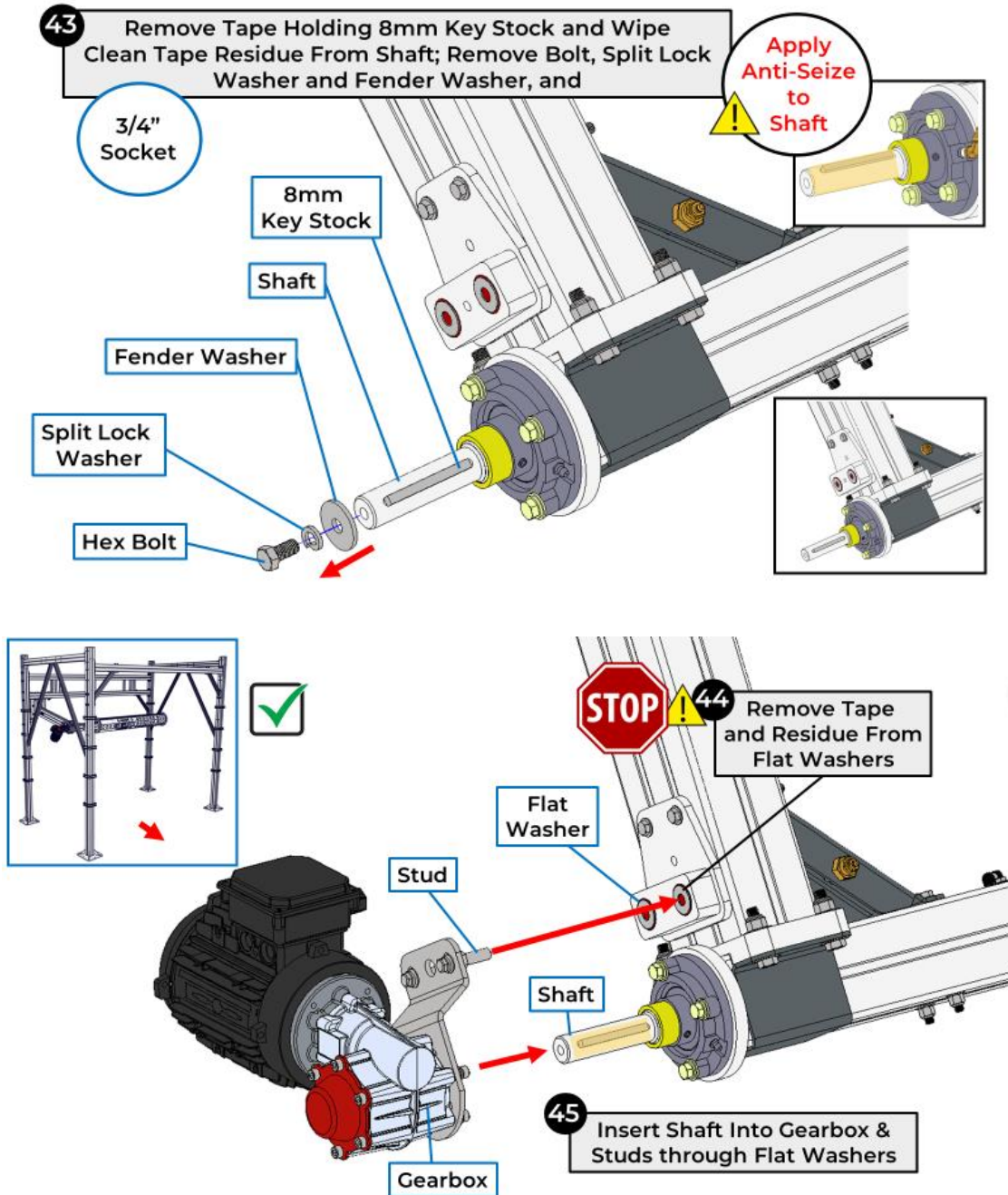
## 7.11 COMPACT TOP BRUSH INSTALLATION





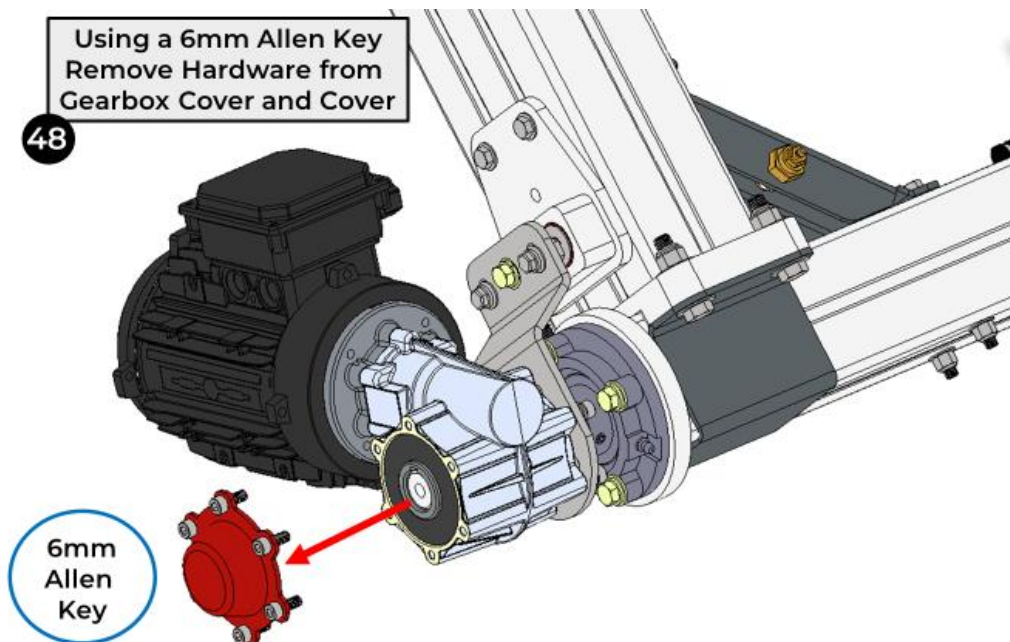
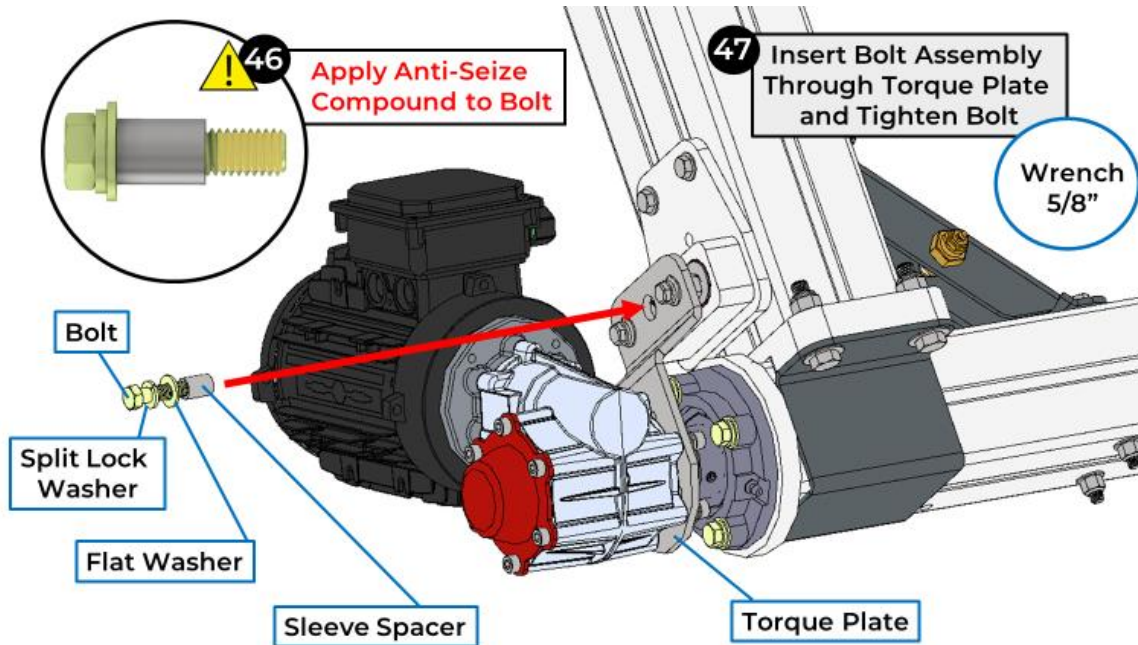
# 7. INSTALLATION INSTRUCTIONS

## 7.11 COMPACT TOP BRUSH INSTALLATION



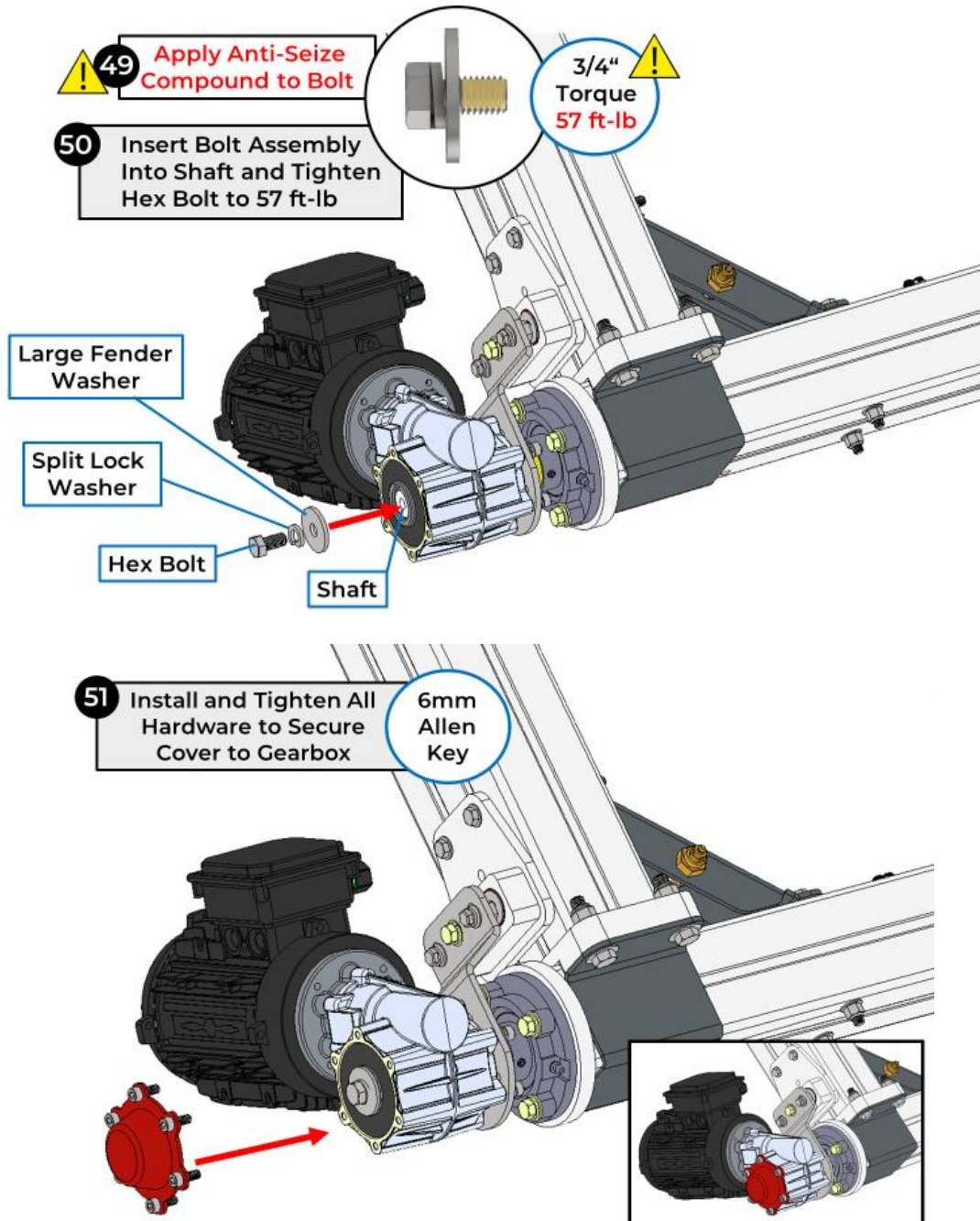
# 7. INSTALLATION INSTRUCTIONS

## 7.11 COMPACT TOP BRUSH INSTALLATION



# 7. INSTALLATION INSTRUCTIONS

## 7.11 COMPACT TOP BRUSH INSTALLATION



# 7. INSTALLATION INSTRUCTIONS

## 7.11 COMPACT TOP BRUSH INSTALLATION

**52** Hardware Kit # 10013865

**53** Install Counterweight Sub-Assembly, Insert Bolt Assemblies & Tighten

3/4" Torque 57 ft-lb

Nut

Flat Washer

Bolt

**54** Adjust Bumpers by Backing Off the Outside Nuts and Moving Bumpers

Wrench 3/4"

**55** Move Bumpers Right or Left, Center To Leg Frame by Backing Off the Outside Nuts and Moving Bumpers

Wrench 3/4"

**STOP** **56** Bumpers **MUST** Touch the Center of Leg Frame

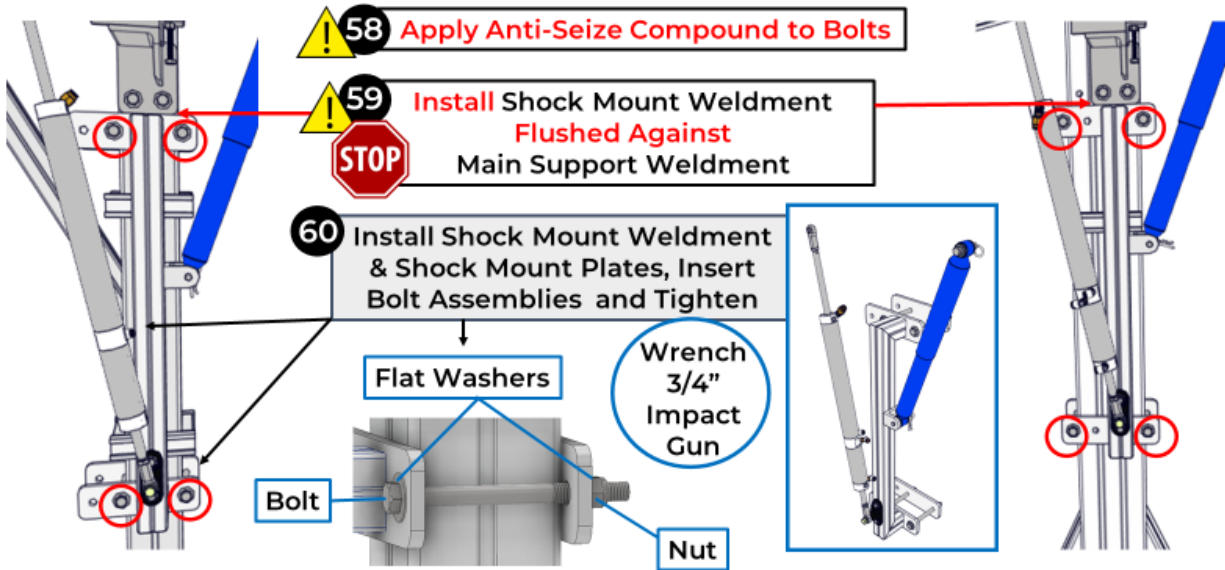
# 7. INSTALLATION INSTRUCTIONS

## 7.11 COMPACT TOP BRUSH INSTALLATION

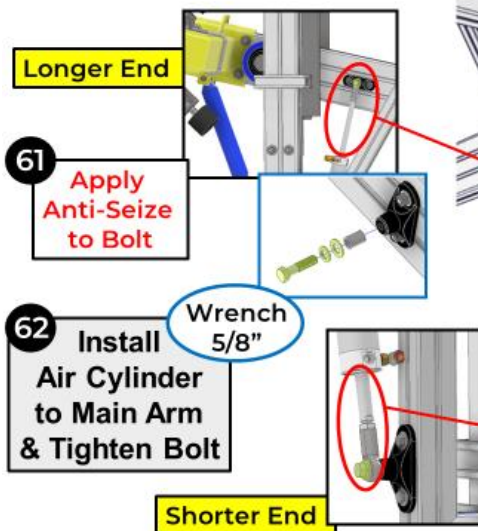
FOUNDATION FRAME

57 Hardware Kit # 10013867

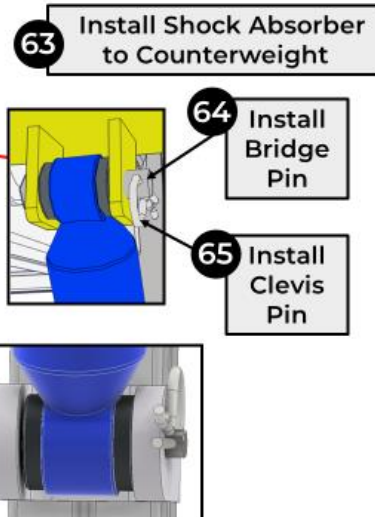
STANDALONE FRAME



AIR CYLINDER INSTALL

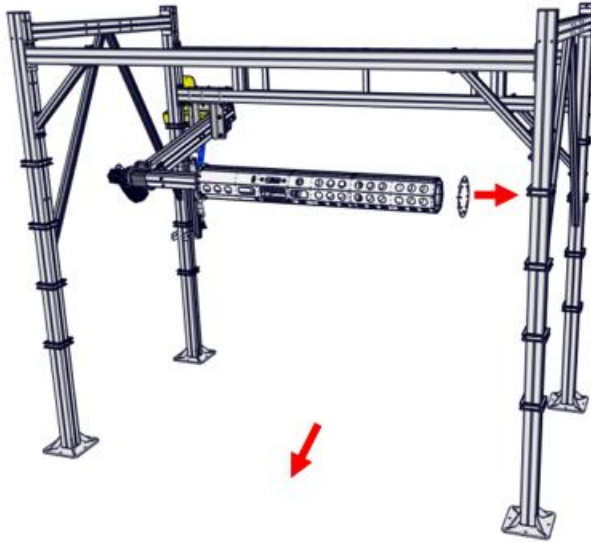


SHOCK ABSORBER INSTALL



# 7. INSTALLATION INSTRUCTIONS

## 7.11 COMPACT TOP BRUSH INSTALLATION

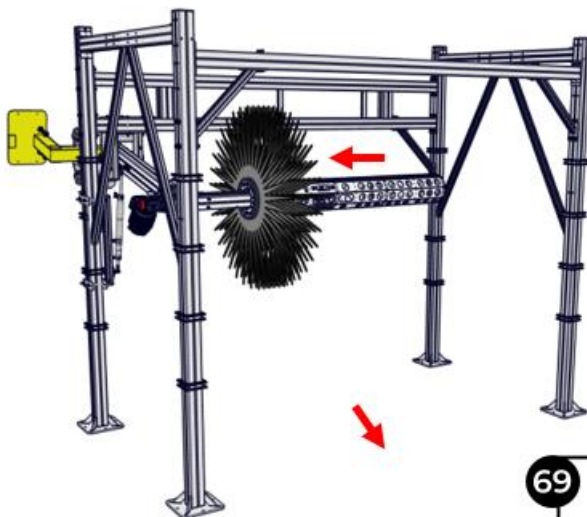


**66** Remove 1/4" Button Head Screws from End Plate

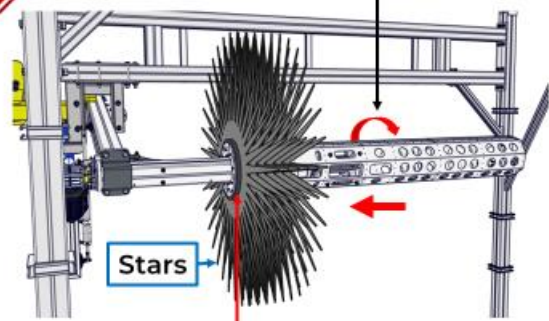
5/32" Allen Key



**67** Neoglide Stars – Look For Rotation Direction Stamped On Stars



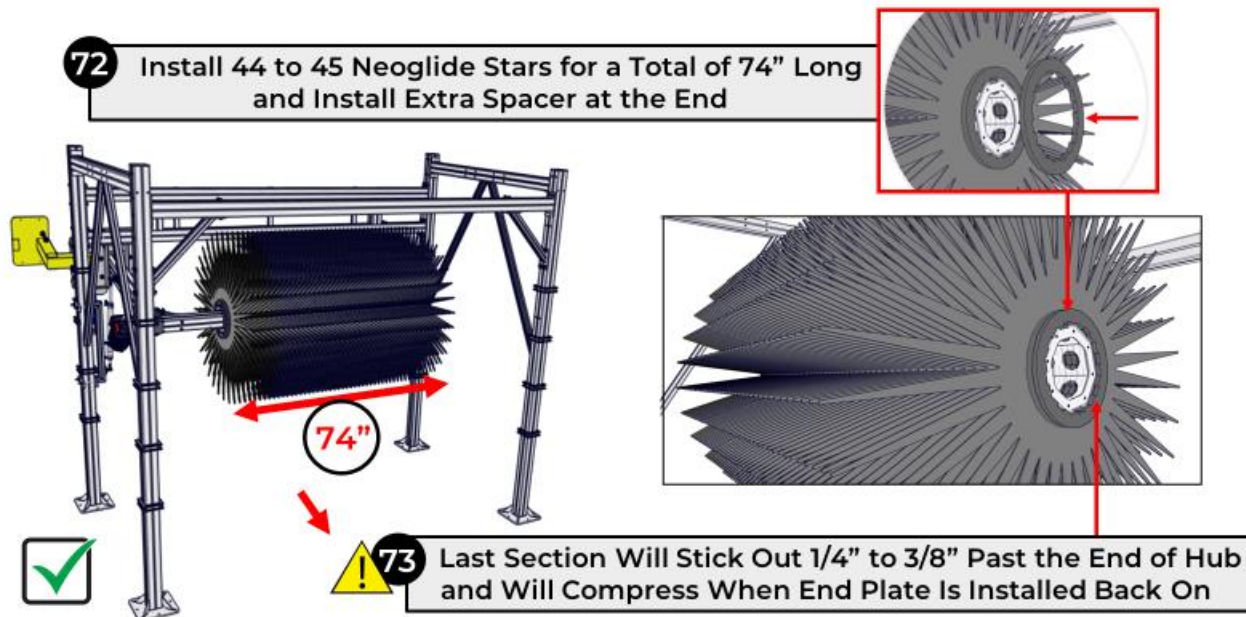
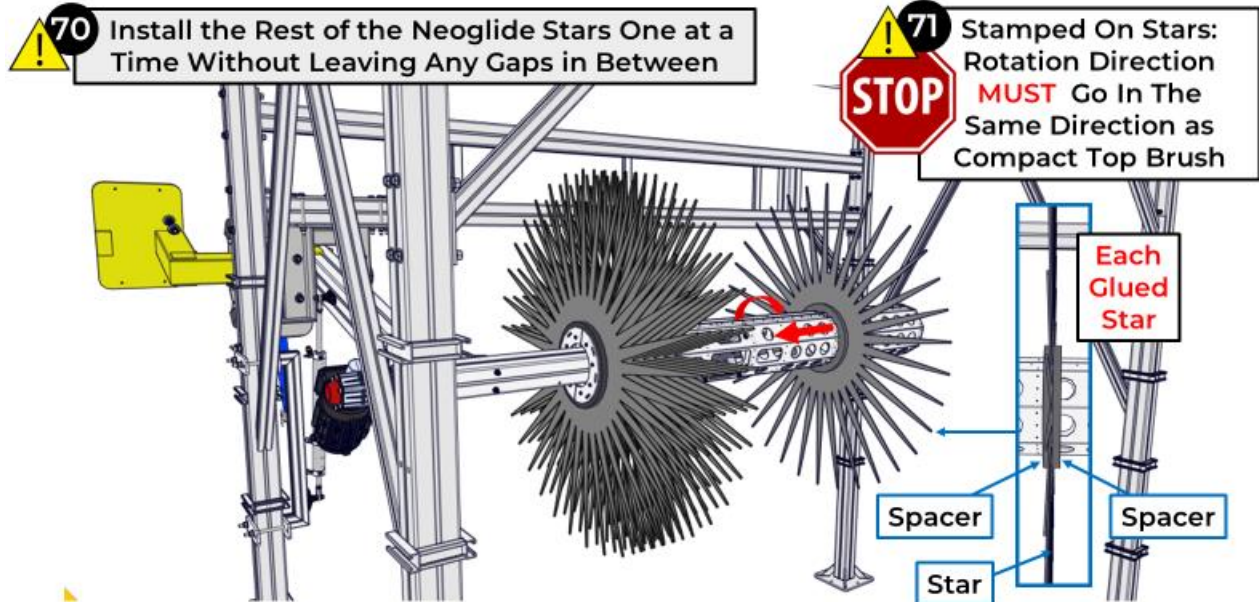
**68** Stamped On Stars: Rotation Direction **MUST** Go In the Same Direction as Compact Top Brush



**69** Install 1<sup>st</sup> Glued Neoglide Star Section – 6 Stars Slide All the Way Against the End Plate

# 7. INSTALLATION INSTRUCTIONS

## 7.11 COMPACT TOP BRUSH INSTALLATION

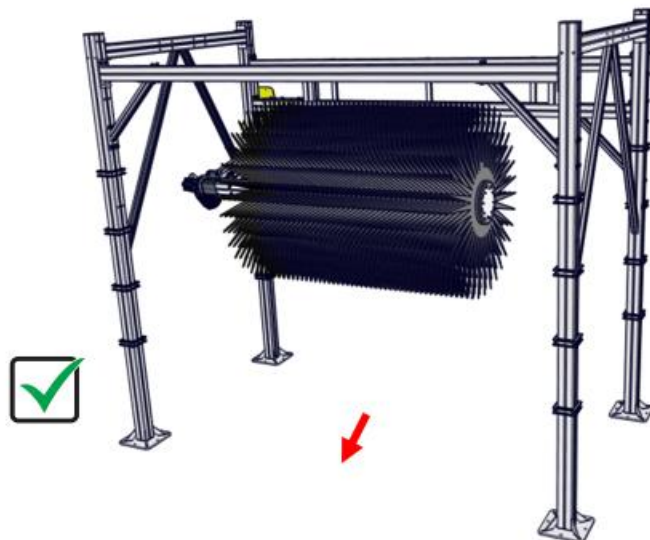
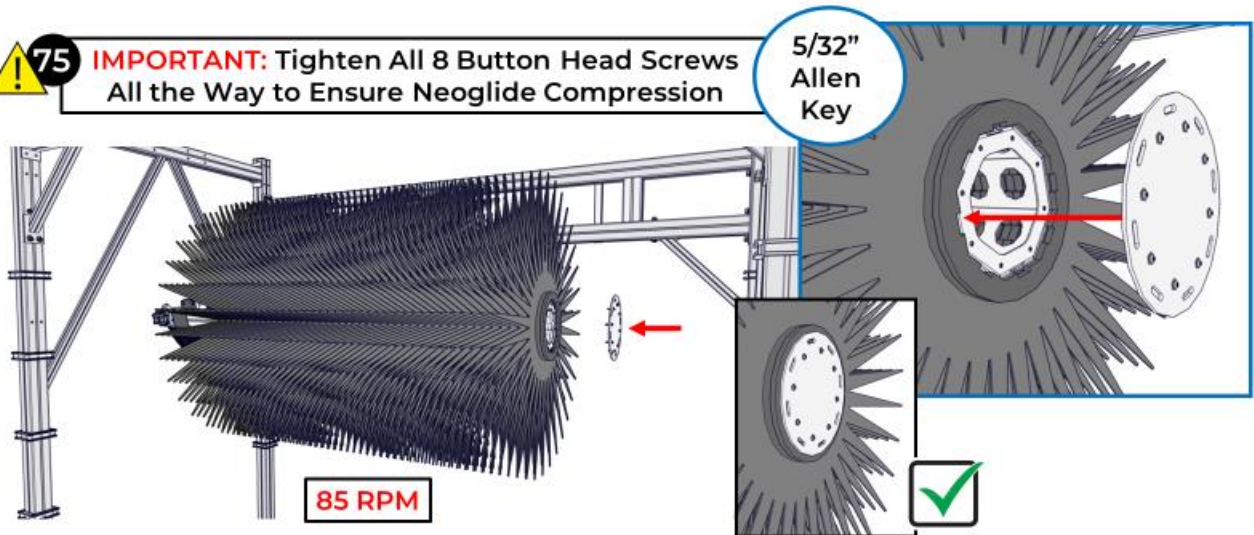


# 7. INSTALLATION INSTRUCTIONS

## 7.11 COMPACT TOP BRUSH INSTALLATION

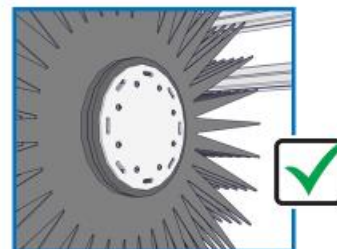
**74** Install End Plate and 1/4" Button Head Screws Onto End Plate

**75** **IMPORTANT:** Tighten All 8 Button Head Screws All the Way to Ensure Neoglide Compression



**76** **Note:** Air Is ONLY Used to Hold Brush In Retract Position

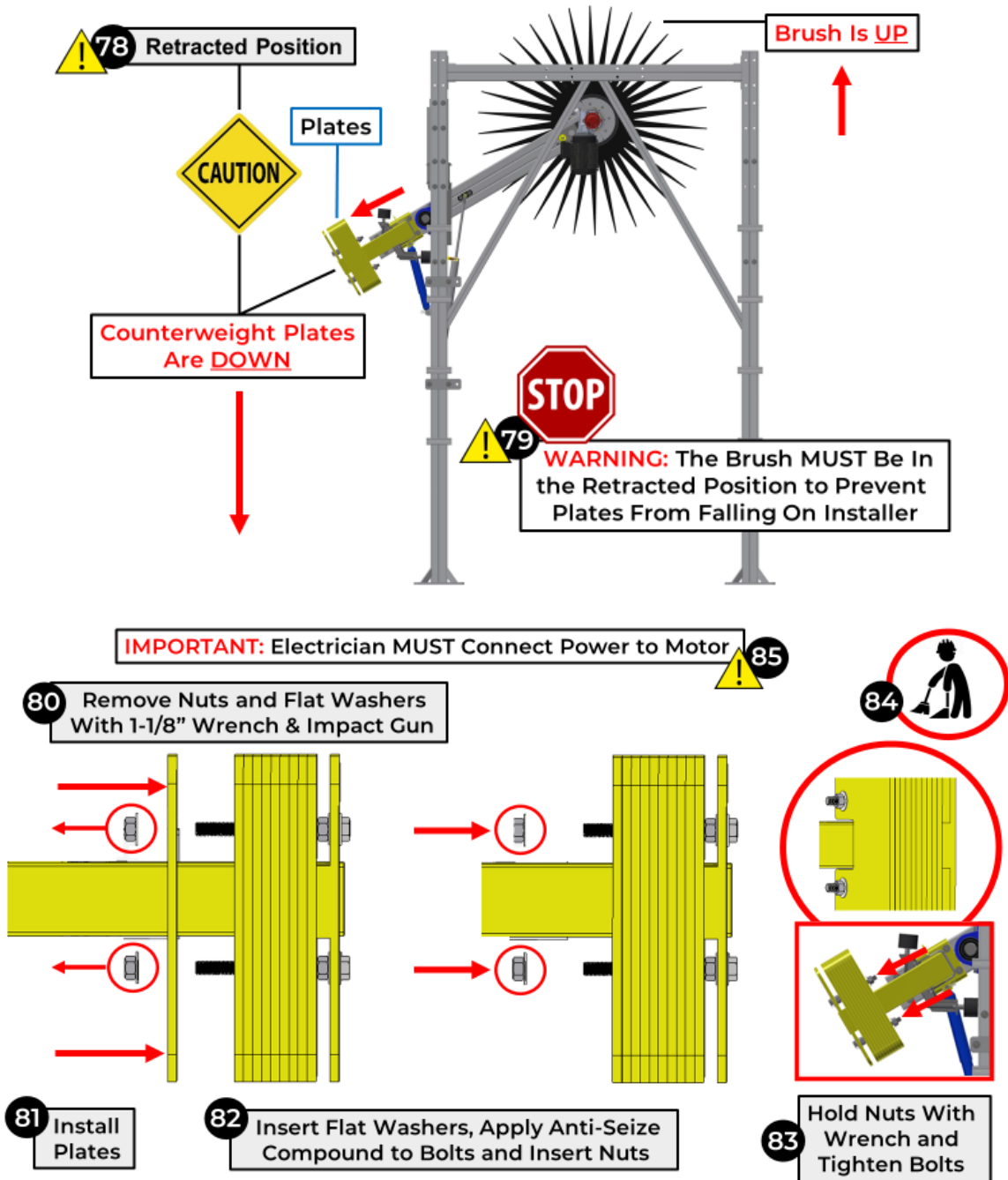
**77** **IMPORTANT:** Foam Applicator MUST Be Use Prior to Compact Top Brush





# 7. INSTALLATION INSTRUCTIONS

## 7.11 COMPACT TOP BRUSH INSTALLATION

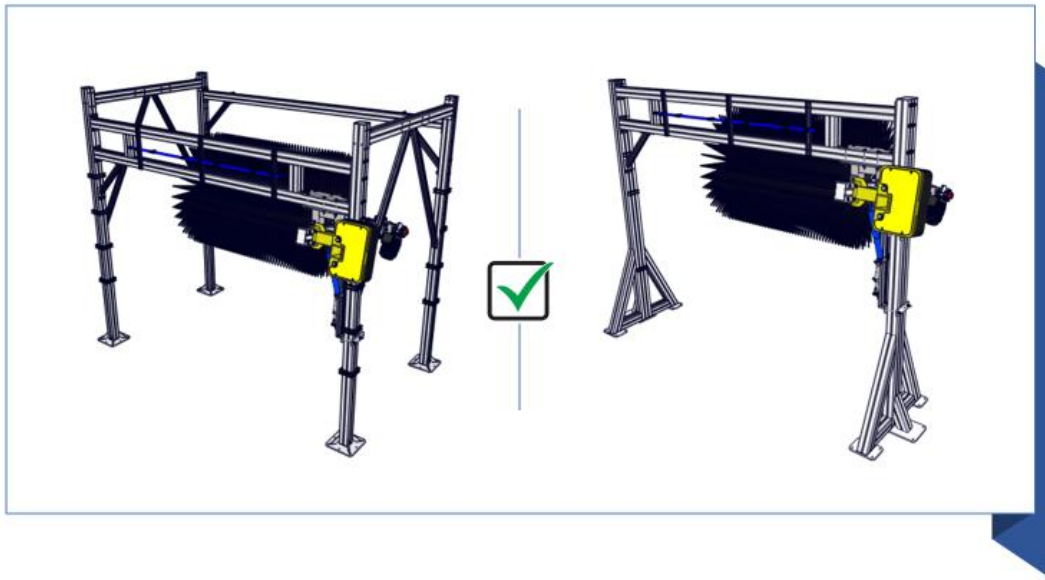
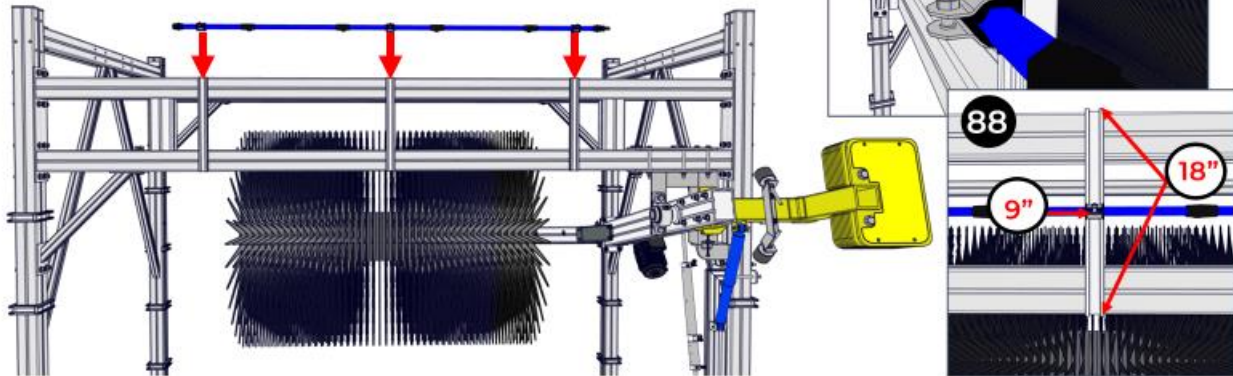


# 7. INSTALLATION INSTRUCTIONS

## 7.11 COMPACT TOP BRUSH INSTALLATION

FOLLOW SAME INSTALLATION PROCESS FOR BOTH FRAMES

**86** Install & Secure In Place The Chemical Applicator Manifold As Per The Following Dimensions To Ensure Proper Chemical Distribution Onto The Compact Top Brush



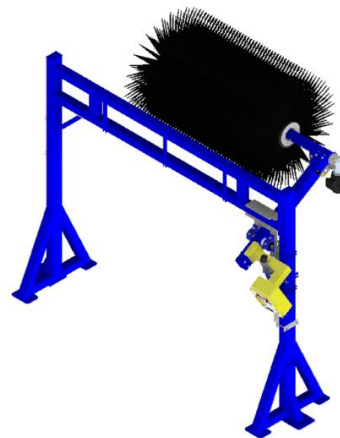
# 7. INSTALLATION INSTRUCTIONS

## 7.12 SPEED AND TORQUE ADJUSTMENT

- Compact Top Brush requires a VFD for proper smooth operation. Acceleration time should be set to 3.0 seconds.
- The speed can be adjusted on the Variable Frequency Drive (VFD).
- To increase the speed, adjust the Hertz on the VFD to a higher number.
- To decrease the speed, adjust the Hertz on the VFD to a lower number.




**IMPORTANT:** The Overload on the Motor Starter **MUST** be set at the lowest level to allow for operation. Adjust the amps in accordance with motor(s) name plate. For a 1HP Transtecno Motor, Overload Detection Level should be set to 2.3 amps.




# 7. INSTALLATION INSTRUCTIONS

## 7.13 ADJUST THE CLEANING PRESSURE OF THE WASHER

 Air pressure should **NOT** be used in the washing operation. Compact Top Brush penetration should be between 4 to 6 inches across the entire vehicle. To adjust Compact Top Brush penetration, Counterweight Plates can be added or removed.

## 7.14 ADJUST THE ROTATION SPEED OF THE BRUSH


 The Compact Top Brush speed should be adjusted using a VFD for the electric motor. Recommended Compact Top Brush speed should be around 85 RPM.

## 7.15 OPERATION SPEEDS CHART

CHAIN SPEED	BRUSH RPM
60-90 CPH	75-85
90-150 CPH	85-90
150-180 CPH	90-95

## 7.16 ADJUST FOR SMOOTH RETRACT OPERATION

To adjust the retract operation, the air pressure regulator should be adjusted to approximately 40-50 PSI in the retract position.

 The tunnel controller should be adjusted so that the Compact Top Brush is put into the wash position prior to the front of the car arriving at the Compact Top Brush. This will entail deactivating the retracts before the vehicle reaches the Compact Top Brush and setting the look ahead to check for the proximity of the next car.

 **Note:** Retract Position for the Compact Top Brush is achieved by the Extension of the Air Cylinder.

 **WARNING:** Make sure the proper Chemistry (Brush Lubrication) is being used in the Car Wash Tunnel to prevent vehicle and equipment damage.

 **WARNING:** Make sure the proper Chemistry (Brush Lubrication) is being used in the Car Wash Tunnel to prevent vehicle and equipment damage.


## 8. GENERAL OPERATION

### 8.1 COMPACT TOP BRUSH OPERATION

Compact Top Brush rotation starts and stops with a signal from the Customer Supplied Controller System to the Customer's Hydraulic Power Pack or VFD activating Compact Top Brush rotation. This Controller Start-Stop signal should also control soap solution delivery to the spray bar or manifold providing lubricity to the Compact Top Brush.


 **IMPORTANT:** Make certain that the Compact Top Brush Rotates against vehicle travel.


With the Compact Top Brush rotating (against the direction of vehicle travel and at proper RPM) the Compact Top Brush travels on vehicle's front hood and across the vehicle maintaining a steady contact; as it cleans the hood, roof, and trunk of the vehicle.

 **NOTE:** Proper Compact Top Brush penetration on flat vehicle surfaces should be 4"-6". As the Compact Top Brush rounds corners, such as on windshields, the Compact Top Brush penetration may be greater, but not deeper than half the distance to the aluminum brush core.

### 8.2 RETRACT OPERATION

When there is no vehicle approaching the Compact Top Brush, the tunnel controller will retract the Compact Top Brush from the wash position, toward the ceiling.

 **NOTE:** This can also be set up in the controller to retract for the beds of trucks to avoid problems.

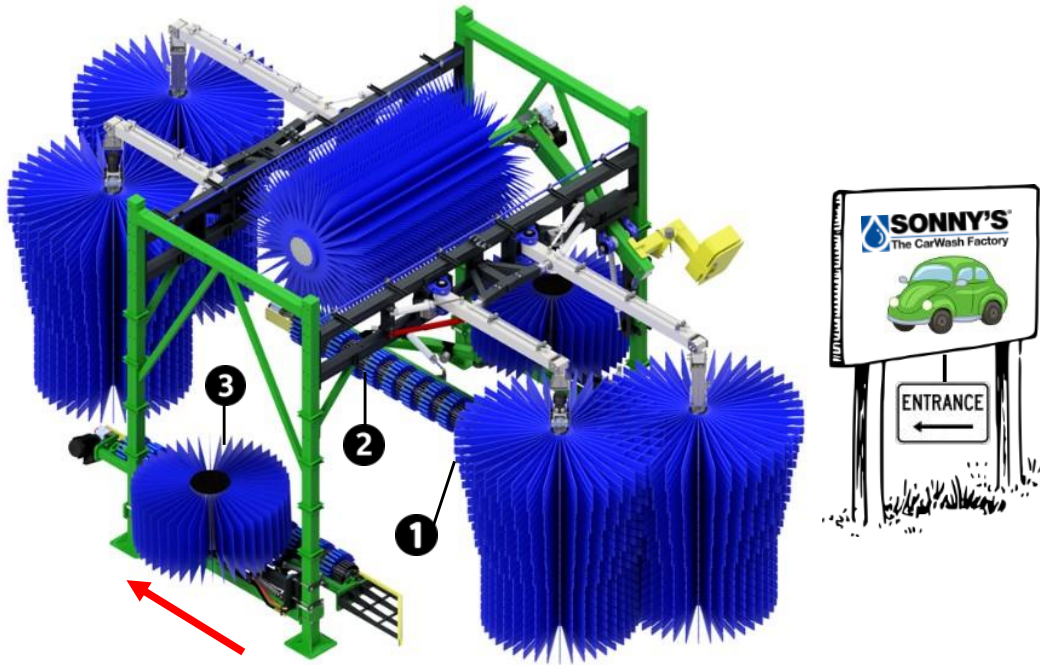
 **IMPORTANT:** It is recommended that the Compact Top Brush be retracted for:

1. ALL roof racks.
2. Sun visors mounted over the windshield.
3. Rear wipers on Acura Integra's and Mazda RX-7's unless they are taped down.
4. Open bed pickup trucks.

# 9. COMPACT TOP BRUSH COMPLEMENTARY EQUIPMENT

## 9.1 COMPACT TOP BRUSH ATTACHMENT OPTIONS

Sonny's Compact Top Brush Frame allows for multiple attachments to increase cleaning power.



Foundation Frame is compatible with all Sonny's Standard Tire Brush Attachments.

### 1 Wraps

- Options: Straight or Double Jog Arm
- Power Options: Hydraulic and/or Electric
- Placement: Entrance or Exit
- Material: NEOGLIDE® Hush or Wrap Twist™

### 2 Tire Brush

- Options: Bison™ Brush, Ninja Brush™, Poodle Brush or Poodle Brush™ PLUS
- Power Options: Hydraulic or Electric

### 3 Side Brushes

- Entrance Leg Options, Bottom Mount Side Brushes: 18" and 21"
  - Requires Air Retract Kit
- Exit Leg Options, Bottom and Top Mounts: 18", 21", 28", and 35"
  - Cannot be Combined with Exit Wraps
- Power Options: Hydraulic or Electric
- Material: NEOGLIDE® Hush or PermaColor®

# 10. MAINTENANCE

 **IMPORTANT:** For the first month of operation check all hardware and fittings for tightness each week!

 **WARNING:** Make sure the proper Chemistry (Brush Lubrication) is being used in the Car Wash Tunnel to prevent vehicle and equipment damage.

## 10.1 DAILY

1. Check all hydraulic, air and chemical lines and fittings for leaks. Repair, or replace as needed.
2. Check Compact Top Brush for proper operation, listening for any unusual noises from the equipment.
3. Inspect Compact Top Brush cloth for cuts, grease, or oil. Remove and repair, or replace, any cloth panel if any of these conditions are found.
4. Check retract and extend for proper operation, smoothness, and correct application pressure.
5. Check for proper chemical solution delivery.

## 10.2 WEEKLY

1. Spray lubricant on the Clevis Pins on both ends of the Shock Absorber.
2. Grease the brush shaft bearings. Do not allow grease to come in contact with brush cloth.
3. Grease fitting for bearing inside the Compact Top Brush Core has been extended to the Corner Gusset for accessibility and hose has been prefilled with grease.
4. Drain water from Filter Regulator Lubricator (FRL) and check lubricant level in FRL.



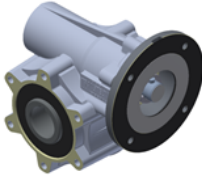

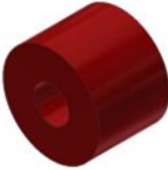
## 10.3 MONTHLY

1. Inspecting all hardware and fittings for tightness.
2. Grease the Double Roller Pillow Bearings at Compact Top Brush main pivot. Do not allow grease to come in contact with Compact Top Brush cloth.
3. Inspect the Bumper Stops for wear to ensure the Air Cylinders have not reached the end of travel. If Bumper Stops are worn, replace, as necessary.
4. Inspect soap solution Spray Nozzles for wear. Replace, as needed.
5. Thoroughly clean the equipment and framework.

## 10.4 SEMI-ANNUALLY





1. Carefully inspect Brush Equipment cloth for wear and damage. Replace, as needed.

## 11. WEAR ITEMS AND REPLACEMENT PARTS

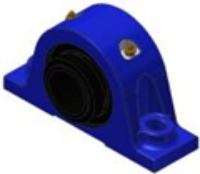




Part Number	Image	Quantity	Description
20019042		11	Compact Top Brush Counterweight Plate, Yellow PC
10011743		1	Flender Style TT Gearbox 16:1 Ratio 1HP
10011747		1	Gearbox Only, Flender Style TT 16:1
20019206		1	Torque Plate Univ Weld SS
10013946		2	Silicone Rnd 1/2" ID, 1-3/8" OD, 1" L



## 11. WEAR ITEMS AND REPLACEMENT PARTS

Part Number	Image	Quantity	Description
10013846		1	Electric Torque Plate Universal 1/4" Plate 304 SS
20018676		1	Compact Top Brush Main Arm Weldment
20018684		1	Compact Top Brush Main Pivot Shaft
10013441		1	Compact Top Brush Black Beam Clamp PC
20015333		1	Black Retract Attachment Bracket PC
20019419		1	CTB, Python, Ele Torque Ret Spacer

# 11. WEAR ITEMS AND REPLACEMENT PARTS

Part Number	Image	Quantity	Description
10007439		2	Bearing 2-Bolt Pillow Block 2" Timken
20018885		1	Compact Top Brush Header Beam Weldment
10013427		1	Compact Top Brush Support Clamp Plate
20019025		1	Compact Top Brush, Air Cylinder Assembly
10013737		1	Compact Top Brush Shock Absorber

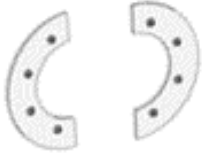




# 11. WEAR ITEMS AND REPLACEMENT PARTS

Part Number	Image	Quantity	Description
10010812		2	Rod End Bearing Female 7/16" w/Zerk
20018974		2	Compact Top Brush Shock Mount Plate
10013431		2	Bolt, Hex 3/4"-10 X 8" SS Full Threaded
10004669		2	Nut, Hex Finish 3/4"-10 SS 75 CNFHS
10003431		2	Rubber Stop 3" Diameter O.D. x 2 1/4" Length

## 11. WEAR ITEMS AND REPLACEMENT PARTS

Part Number	Image	Quantity	Description
10005706		2	1½" AMI Bearing 4-Bolt Piloted Flange
20018675		1	Compact Top Brush Beam Weldment
10013435		1	Compact Top Brush Black Corner Gusset PC
20018680		1	Compact Top Brush Shaft, Flender Elec
10013718		4	Shim Ring, 1/2" ID x 0.090 Thick 18-8 SS

# 11. WEAR ITEMS AND REPLACEMENT PARTS

Part Number	Image	Quantity	Description
10013484		2	Compact Top Brush AL End Plate Half
20018685		1	Compact Top Brush Sheetmetal Core Hub
10013483		1	Compact Top Brush AL Full End Plate
10013429		2	Compact Top Brush Core Hub Half Stiffener
10013681 10013680 10013682		1	NEOGLIDE® Compact Top Brush Kit Black NEOGLIDE® Compact Top Brush Kit Blue NEOGLIDE® Compact Top Brush Kit Red

# 12. CONTACT US

## 12.1 TECHNICAL SUPPORT

For questions regarding installation, operational issues, settings, or servicing of this equipment, please contact Sonny's Technical Support Team:

Email: [Sonnys-Support@SonnysDirect.com](mailto:Sonnys-Support@SonnysDirect.com)

SMS Text: 954-406-4363

Phone: 800-327-8723 Option #5

## 12.2 REPLACEMENT PARTS

Shop Online: <https://sonnysdirect.com/shop/>

Email: [CustomerService@SonnysDirect.com](mailto:CustomerService@SonnysDirect.com)

Phone: 800-327-8723 Option #3

## 12.3 SCHEDULE ON-SITE SERVICE AND SUPPORT

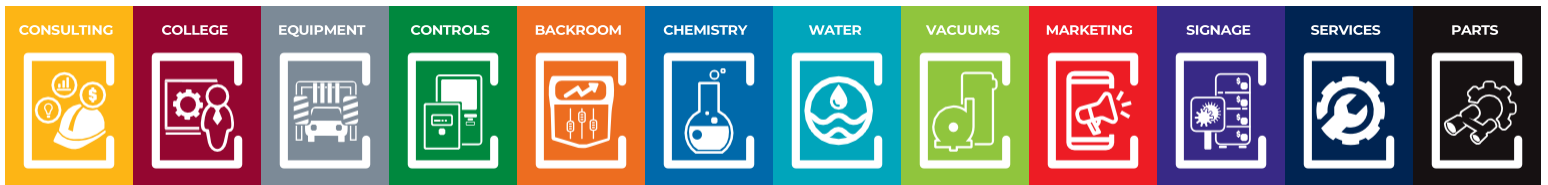
Online: <https://sonnysdirect.com/services>

Florida	407-770-1000	Email: <a href="mailto:SCWSFLservice@sonnysdirect.com">SCWSFLservice@sonnysdirect.com</a>
Southeast	770-995-5989	Email: <a href="mailto:CWSseservice@sonnysdirect.com">CWSseservice@sonnysdirect.com</a>
Mid-Atlantic	800-448-4735	Email: <a href="mailto:Service-ma@sonnysdirect.com">Service-ma@sonnysdirect.com</a>
Northeast	866-343-6680	Email: <a href="mailto:SCWSNEservice@sonnysdirect.com">SCWSNEservice@sonnysdirect.com</a>
Midwest	800-274-2777	Email: <a href="mailto:Service-indy@sonnysdirect.com">Service-indy@sonnysdirect.com</a>
Texas	800-826-0829	Email: <a href="mailto:SCWStxservice@sonnysdirect.com">SCWStxservice@sonnysdirect.com</a>
West	833-725-6353	Email: <a href="mailto:SCWSservice@sonnysdirect.com">SCWSservice@sonnysdirect.com</a>
All Others	800-327-8723	

## 12.4 EMERGENCY CELL PHONE CONTACTS



<https://sonnysdirect.com/emergency>



## COMPACT TOP BRUSH OWNER'S MANUAL