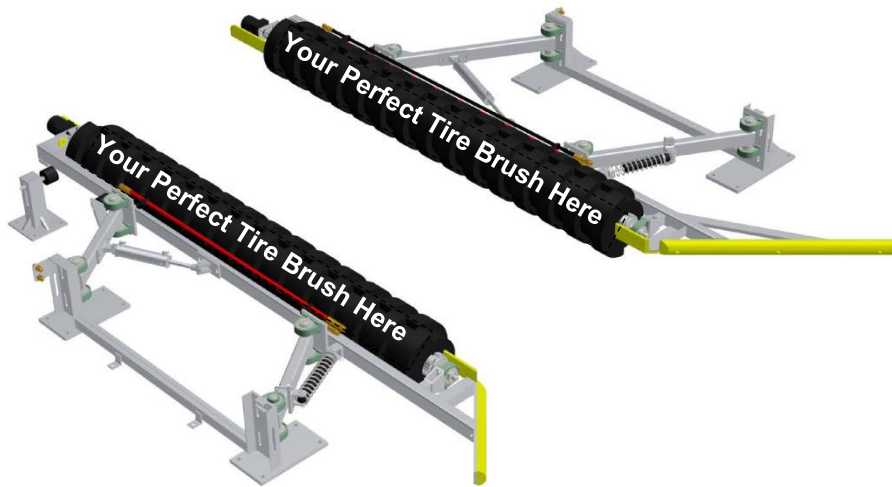




# Tire Brushes



**Poodle Brush Plus™**



**Ninja Brush™**



**Bison Brush™**

## Owner's Manual

Sonny's Enterprises LLC  
5605 Hiatus Road  
Tamarac, Florida 33321



Tire Brushes Owner’s Manual  
Poodle Brush Plus™ , Ninja Brush™ , Bison Brush™  
TBG Series

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 Poodle Brush Plus, Ninja Brush and Bison Brush are trademarks of Sonny’s Enterprises LLC  
 Products mentioned herein are for identification purposes only and may be registered trademarks of their respective companies.  
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## **WARNING \*SAFETY REQUIREMENTS\* WARNING**

1. All employees must be thoroughly trained in safe operation and standard maintenance practices. All employees must review this entire manual monthly.
2. Do not enter the wash tunnel when the equipment is operating. Death or dismemberment may occur.
3. 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 death or dismemberment.
4. 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.
5. 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.
6. Only those employees specifically instructed and trained by the location management are permitted to enter the wash tunnel to perform inspections or maintenance. At least two qualified maintenance people must be present when performing equipment repairs or preventive maintenance.
7. Do not perform any maintenance or work on equipment unless you first perform Lock-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.
8. When working on any equipment that is higher than your shoulders, always use a fiberglass ladder that is in good condition.
9. Do not attempt to repair or adjust any pressurized liquid or pneumatic part, hose, pipe or fitting while that equipment is in operation.
10. Electrical connections and repairs must be performed by a Licensed Electrician Only.
11. 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.
12. Do not operate any piece of equipment that requires safety covers with those covers removed or improperly installed. Do not operate any piece of equipment if any component of that piece is suspected to be defective or malfunctioning.



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13. Store all cleaning and 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.
14. All hydraulic and electric systems in the wash tunnel equipped with a torque relief or overload should be checked and set at the minimum amount that will allow for proper functionality under normal washing conditions.
15. No unauthorized people should ever be permitted in the wash tunnel or near the equipment at any time.

\* \* \*

## !! CAUTION !!

When a piece of equipment must be in operation during inspection or maintenance, one qualified technician must stay at the power disconnect switch while another qualified technician performs the inspection or maintenance.



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# **\*INTRODUCTION\***

This Manual contains information that is vital to the successful installation, operation and maintenance of your SONNY'S vehicle washing equipment.

Please read, and understand, the full contents of this manual before installation and operation of the equipment. Keep this booklet in a location where it may be used for ongoing reference.

Should you have any questions on the operation or servicing of this equipment please contact

TECHNICAL SERVICES DEPT.  
SONNY'S ENTERPRISES INC.

5605 Hiatus Road

TAMARAC, FLORIDA 33321

TELEPHONE: 800-327-8723      FAX: 800-495-4049

THANK YOU FOR YOUR CONFIDENCE IN SONNY'S !!!!!





# Tire Brushes Owner's Manual

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## Product Specifications

- Accepts 6, 7, or 8 inch diameter tire brushes, 96 inches long
- Aluminum or stainless steel frame and hangers
- UHMW plastic approach guides
- Height adjustable
- Mechanically adjustable shock absorber control is standard
- Retract air cylinder control standard
- 3 or 4 bolt spindle type brush mounting
- Economical and reliable aluminum motor coupler
- Greaseable bearings throughout
- 14 ft. 2 in. (170") of tunnel length required for passenger side brush unit
- 12 ft. (144") of tunnel length required for driver side brush unit
- 17 ft. (204") of length is required for InBay units



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For Parts/Accessories Information Please Reference our Catalog or Website.



**Problem:**

You need clean tires AND wheels at fast chain speeds.

**Solved:**

SONNY'S TBG200 Tire Brush with three re-buildable brush designs delivers the performance to clean road grime from tires while loosening dirt and brake dust from wheels with a brush most effective for your particular wash. All brushes are interchangeable with our standard TBG200 frame and each brush can be rebuilt by replacing only worn sections, providing a cost saving option to deliver a clean tire and wheel every time.

- UHMW guide rails on both entrance and exit of brush prevent wheel damage and premature wear
- UniHub design simplifies maintenance
- Tapped base bearings for smooth operation
- Torque-channel design increases motor life
- Optional air retract with inward pressure
- Optional powder coating



Electric or Hydraulic Drive to Meet Your Requirements



FoundationFrame Attachment to Grow Your Business



LifeTime Limited Weldment Warranty for Generations to Come

**Specifications**

	TBG200	
	Inches	Metric
Footprint Length	173in	4.39m
Footprint Width	144in	3.65m
Hydraulic Option	6GPM	
Electric Option	1HP 3-Phase 208-460V per Motor	

**Hub Configuration**

	PoodlePlus	Bison	Ninja
Flange	3-Bolt	4-Bolt	4-Bolt
Hub	4Key-In	4Key-In	4Key-Out
Brush Section	4in	3in	6in



Hydraulic Motors on all Tire Brushes



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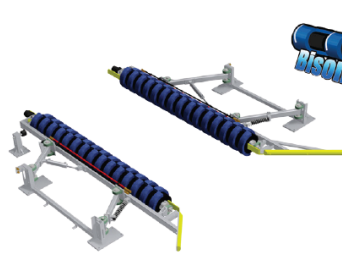


### TBG200 Poodle Brush PLUS™

SONNY'S re-buildable Poodle Brush™ PLUS features 4inch molded rings of short and tall flagged bristle material that deliver both the power to clean raised white lettering while reaching deep into rims. Each section of the brush simply slides on and off an extruded 4-Key hub providing a money saving option to rebuild only worn sections of the brush.



Replaceable Unica Rings

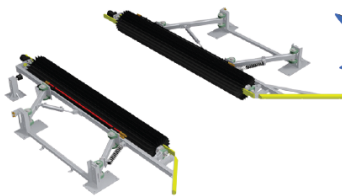


### TBG200 Bison Brush™

SONNY'S re-buildable Bison Brush™ cleans a wide range of tires and rims better while reducing operating costs. Alternating short and tall flagged bristle on each 3inch molded ring provides staggered cleaning that improves contact time while reaching deeper into rims for maximum cleaning. Each 3inch section of the brush can be replaced individually to save money.



Replaceable Unica Rings



### TBG200 Ninja Brush™

SONNY'S re-buildable Ninja Brush™ features alternating ultra-safe NeoGlide® closed-cell wash material stars able to safely clean even the lowest profile rims common in some markets. Each 6inch section of the brush can be replaced as needed to reduce the maintenance cost of delivering a consistently clean wheel.



Replaceable 6in sections





# **\*INSTALLATION\***

## **Utilities Requirements**

**UTILITIES INTERCONNECTION AND THE MATERIALS REQUIRED FOR INTERCONNECTION TO SONNY'S EQUIPMENT ARE THE RESPONSIBILITY OF THE CUSTOMER !  
PERFORM ALL TRADES WORK TO ALL APPLICABLE LOCAL AND NATIONAL CODES !**

### **Optional Brush Retract Kit Installation**

#### **Pneumatic**

- The Customer's Plumber is to supply and install 3/8 inch line from the Air Compressor (100PSI @1.0CFM) through the supplied air regulator on the Air Distribution Manifold.

#### **Electric**

- The Customer's Electrician is to supply materials and install single phase power (120VAC or 24VAC) from the tunnel equipment controller tire brush programmable retract function to the Sonny's supplied air solenoid valve for selective retract of the tire brushes.
- Where 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.

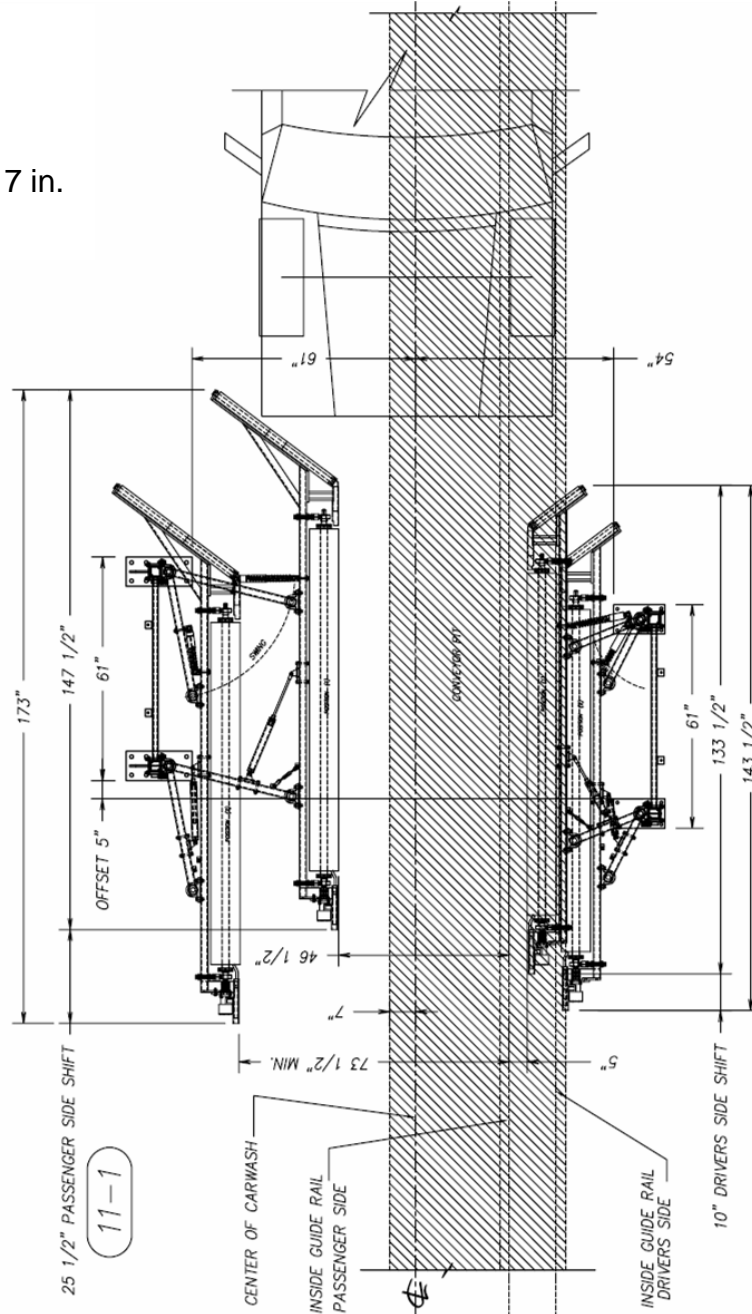
#### **Technical Disclaimer**

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

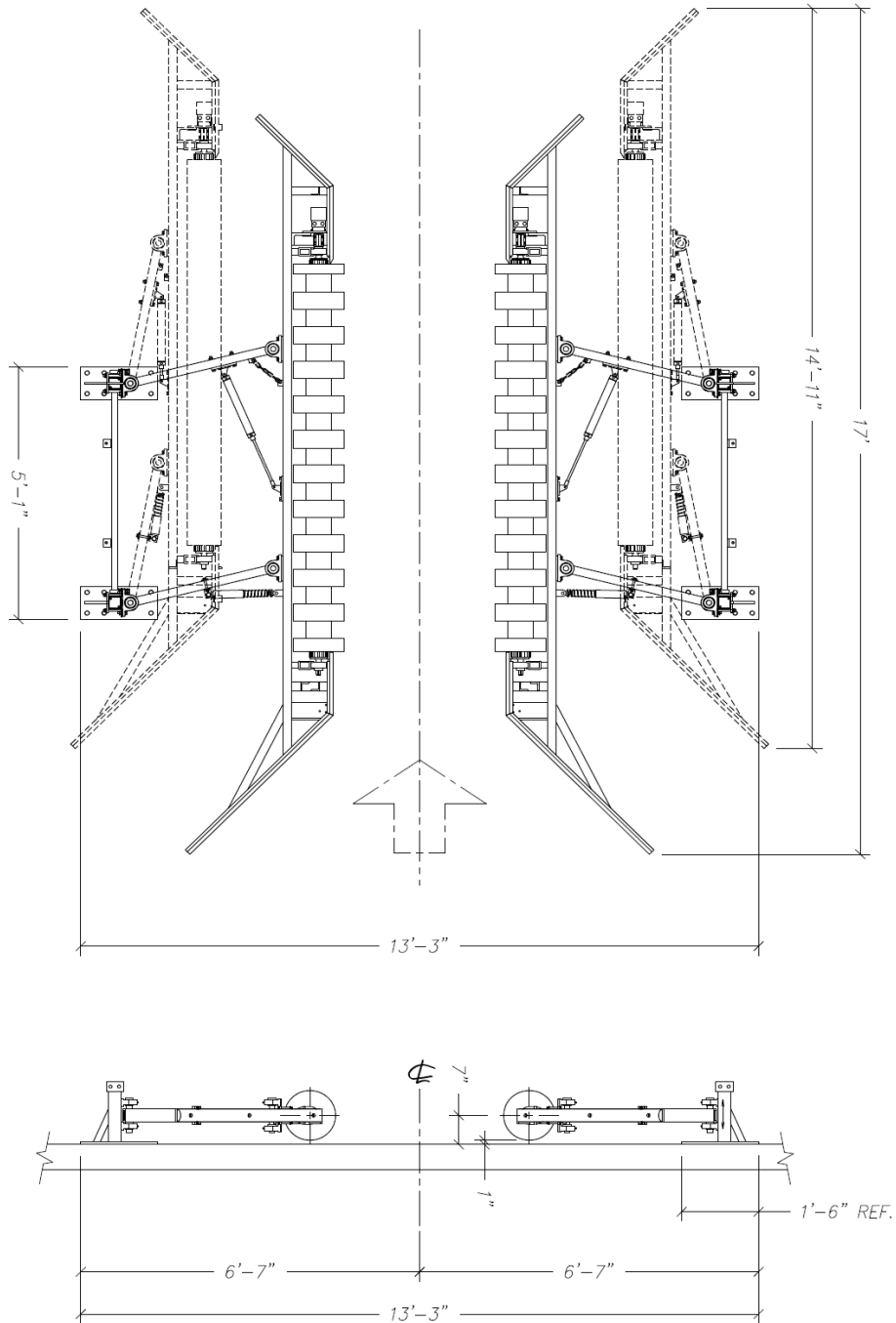
## Dimensions

Brush height from finished floor:

TBG200 - 6 in.  
Poodle Brush Plus – 7 in.  
Ninja Brush – 7 in.



**Figure #1 – Conveyor**



**Figure #2 – In-Bay Automatic**



## **Equipment Installation**

### **Tire Brush – Tunnel Mechanical Installation – See Figure #1**

#### **Tools**

1. Safety Glasses and Gloves
2. ½" Drive Ratchet
3. ½" Drive Ratchet
4. Combo Wrenches
5. Large Standard Screwdriver
6. 1" Hammer Drill
7. 3 lb. Sledgehammer
8. Tape Measure

#### **Consumables**

1. Stainless Shims
2. PTFE Tape
3. PTFE Paste
4. Nylon Cord

#### **Work Force**

Two (2) persons

#### **Time (assuming no problems)**

2.00 - 3.00 hours

#### **Installation Steps**

1. Determine where the Tire Brushes are to be installed.
2. Sweep any debris from where the Tire Brushes will sit.
3. Set the Tire Brushes in place.
4. Tie the Passenger side unit temporarily in its full retracted position.
5. Measure 74 inches from the outer edge of the plastic angle that protects the hydraulic brush drive motor to the inside of the conveyor inside guide rail.
6. Secure the passenger side exit base plate with one floor anchor.
7. Square the frame by using the pillow block bearing mounting channels that are welded to the base plates as the reference.
8. When the unit is square complete the base plates anchoring.
9. Untie the cord and allow the passenger side unit to extend toward the center of the wash tunnel
10. Adjust the hanger heights equally so that the bristles of the tire brush just clear the floor with the brush fully extended.



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11. The Driver side unit entrance base plate is to be placed 13 inches closer to the exit of the car wash than the passenger side entrance base plate.
12. With the brush hangers fully extended measure 5 inches from the entrance and exit tips of the brush bristles to the inside of the conveyor inside guide rail.
13. Square the driver side unit in the same manner as that used for the passenger side unit. Mark the floor for proper base plate placement.
14. Mark the conveyor outside guide rail for cutting with the driver side unit fully extended and full retracted.
15. Remove the driver side unit and cut the conveyor outside guide rail where it was previously marked and anchor the driver side unit in the marked floor position.
16. Adjust the driver side brush height so that the rotating brush will have minimal contact with conveyor pusher rollers and no contact with vehicle wheel covers.
17. Run and connect the 1/2 inch PRESSURE line from the Hydraulic Power Pack to the 1/2 inch male pipe thread fitting on the BLACK high pressure hose on the leg of the Tire Brush. (Wire the motor if using electric)
18. Run and connect the 1/2 inch RETURN line to the Hydraulic Power Pack to the 1/2 inch male pipe thread fitting on the RED high pressure hose on the leg of the Tire Brush. (Wire the motor if using electric)
19. Rotation of the Brushes is toward the tire and downward.
20. Run and connect the air lines from the Air Distribution Manifold to the air cylinder for each retract.
21. If air pressure is going to be used for inward "washing" a second Mac valve kit will be required. It is also necessary to remove the spring from the shock mounted on the tire brush frame.



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## Tire Brush – In-Bay Mechanical Installation – See Figure #2

### Tools

1. Safety Glasses and Gloves
2. ½" Drive Ratchet
3. ½" Drive Sockets
4. Combo Wrenches
5. Large Standard Screwdriver
6. 1" Hammer Drill
7. 3 lb. Sledgehammer
8. Tape Measure

### Work Force

Two (2) persons

### Consumables

1. Stainless Shims
2. PTFE Tape
3. PTFE Paste
4. Nylon Cord

### Time (assuming no problems)

2.00 - 3.00 hour

### Installation Steps

1. Determine where the Tire Brush is to be installed, it is to be placed after the In Bay.
2. Sweep any debris from where the Tire Brush will sit.
3. Tie both driver side and passenger side units temporarily in its full retracted position.
4. Position the driver side and passenger side units in the general area where they will be installed, but **do NOT anchor at this time!**
5. Measure **74"** from the center line toward the passenger side and place a mark.

**Note:** See Figure #2 for drawing.

6. Set the rear of the exit end mounting plate on the mark made in step #5 and secure the passenger side exit base plate with one floor anchor.
7. Square the frame by measuring 74" from the center line, place a mark near the rear mounting plate.
8. When you are satisfied the unit is squared and you have double checked the dimensions you may finish anchoring the base plates for the passenger side unit to the floor.
9. Adjust the hanger height so that the vertical center of the Brush is 7 inches above the floor.
10. The mechanical retract stop position may be adjusted by moving the rubber bumper stops on the base plates vertical posts.



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11. Repeat steps #5 thru #10 for the driver's side unit.
12. Run and connect the 1/2 inch PRESSURE line from the Hydraulic Power Pack to the 1/2 inch male pipe thread fitting on the BLACK high pressure hose on the leg of the Tire Brush (wire the motor if using electric).
13. Run and connect the 1/2 inch RETURN line to the Hydraulic Power Pack to the 1/2 inch male pipe thread fitting on the RED high pressure hose on the leg of the Tire Brush (wire the motor if using electric).
14. Rotation of the Brushes is toward the tire and downward.
15. Run and connect the air lines from the Air Distribution Manifold to the air cylinder for each retract.



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## Adjustments and Testing

Adjust the Passenger side hanger heights equally so that the bristles of the tire brush just clear the floor with the brush fully extended.

Adjust the driver side brush height so that the rotating brush will have minimal contact with conveyor pusher rollers.

Brush hanger tension may be adjusted by moving the shock absorber mounting brackets for more, or less tension.

Both brushes should rotate downward on the vehicle tires at 125-175RPM (Bison Brush ) 150-250RPM (Poodle Brush Plus) 300-400RPM (Ninja Brush )

Air pressure to retract the brushes is normally 40PSI. Check to ensure the tire brushes are retracting all the way to the rubber bumper.

If using inward "washing" pressure you will need to adjust the passenger and driver side pressure individually and remove the springs from the shock.

Ensure rubber bumper on the driver's side is adjusted so the plastic guide on the tire brush lines up with the plastic guide on the conveyor.

Ensure the bolt that holds the torque plate to the frame, is loose. The torque plate is designed to be loose to prevent failure of the hydraulic motor.

### Speed and Torque Adjustment (where applicable)

#### 1. Hydraulic

- a. The speed can be adjusted on the flow control for the power pack.
- b. To increase the speed move the handle on the flow control closer to the number 10.
- c. To decrease the speed move the handle on the flow control closer to the number 1.
- d. The torque must be set prior to operation and should be set between 600 and 900 PSI. For information on how to set the torque please refer to the Hydraulic Power Pack Manual.

#### 2. Electric

- a. The speed can be adjusted on the Variable Frequency Drive (VFD).
- b. To increase the speed adjust the Hertz on the VFD to a higher number.
- c. To decrease the speed adjust the Hertz on the VFD to a lower number.
- d. The Overload on the Motor Starter protector(s) must be set at the lowest level to allow for operation. Adjust the amps in accordance with motor(s) name plate.





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## **\*GENERAL OPERATION\***

### **POWER PACK OPERATION**

Starting and stopping tire brush rotation is controlled by the Customer's equipment programmer signal to the motor starter coil controlling three phase power to the Customer's hydraulic power pack that is plumbed to the tire brush hydraulic motors.

The speed of the rotation of the motor(s) being driven may be changed by the flow control valve on the hydraulic power pack.

### **OPTIONAL BRUSH RETRACT KIT OPERATION**

A selectively programmed signal from the Customer's equipment programmer to the air solenoid valve provided by Sonny's allows compressed air to pass to the air cylinder retract port on each tire brush frame. When this programmed signal is cancelled the tire brushes will extend toward the center of the wash tunnel.



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# \*PREVENTIVE MAINTENANCE\*

## DAILY

1. Check all lines and fittings for leaks. Repair, or replace, as needed.
2. Check the brushes for grease, oil, or foreign objects and clean if necessary.
3. Check both tire brushes for proper operation, listen for any unusual noises and check for vibrating, bouncing and trueness.
4. Manually check the retract operation to ensure proper travel and smoothness of operation.

## WEEKLY

1. Grease the rotational bearings on the tire brush shaft.
2. Clean the tire brush thoroughly.

FOR THE FIRST MONTH OF OPERATION CHECK ALL HYDRAULIC FITTINGS FOR TIGHTNESS EACH WEEK. PERFORM THIS INSPECTION TO THE SCHEDULE SHOWN BELOW AFTER THE FIRST MONTH OF OPERATION.

## MONTHLY

1. Grease all pivotal bearings on the hanger framework, 16 bearings total.
2. Inspect all hardware and fittings for tightness.
3. Inspect each tire brush for wear if the entrance end is worn the brush may be inverted for short term but replace as soon as possible.



# Tire Brushes Owner's Manual Poodle Brush Plus™, Ninja Brush™, Bison Brush™ TBG Series

## **\*WARRANTY\***

### **SONNY'S ENTERPRISES, INC. FACTORY LIMITED LIFETIME WARRANTY**

Equipment manufactured by SONNY'S ENTERPRISES, INC. is warranted to be free from defect in material and workmanship. Welded metal framework and other non-moving, non-wearable fabricated metal components manufactured by SONNY'S are warranted for the life of the equipment to the original purchaser. Fabricated metal wearable surface and moving components manufactured by SONNY'S are warranted for a period of one (1) year to the original purchaser of the equipment.

All components assembled to SONNY'S equipment that are manufactured by others are warranted by the appropriate manufacturer and subject to that manufacturer's limited warranty. Contact SONNY'S for the specific information on other component manufacturer's warranty terms. All new cloth shipped with new SONNY'S equipment is warranted for a period of one (1) year or 80,000, whichever occurs first.

This warranty is not assignable or transferable. The warranty period begins the first day following installation or 30 days from the original invoice date, whichever occurs first. The Seller's liability shall be limited to repair or replacement of materials found to be defective within the warranty period. In the event of repair or replacement this limited warranty is noncumulative. The Purchaser must supply the Seller with immediate written notice when any defects are found. The Seller shall have the option of requiring the return of defective material to establish the Purchaser's claim. Neither labor nor transportation charges are included in this warranty. Transportation damage claims are to be submitted to the carrier of the damaged materials.

This warranty is based upon the Purchaser's reasonable care and maintenance of the warranted equipment. It does not apply to any equipment which has been subject to misuse, including neglect, accident or exposure to harsh chemicals or chemicals that react violently with water, organic acids (e.g. acetic acid), inorganic acids (e.g. hydrofluoric acid), oxidizing agents (e.g. peroxides), and metals (e.g. aluminum). Chemicals corrosive to aluminum alloys, carbon steel, and other metals. Nor does it apply to any equipment which has been repaired or altered by anyone not so authorized by SONNY'S. Further, the equipment must be properly installed with proper accuracy of all specified plumbing, electrical, and mechanical requirements. This warranty does not apply to normal wear and tear or routine maintenance components.

EXCEPT AS EXPRESSLY STATED HEREIN, SONNY'S SHALL NOT BE LIABLE FOR DAMAGES OF ANY KIND IN CONNECTION WITH THE PURCHASE, MAINTENANCE, OR USE OF THIS EQUIPMENT INCLUDING LOSS OF PROFITS AND ALL CLAIMS FOR CONSEQUENTIAL DAMAGES. THE LIMITED WARRANTY EXPRESSED HEREIN IS IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED. SONNY'S NEITHER ASSUMES NOR AUTHORIZES ANY PERSON TO ASSUME FOR IT ANY OTHER OBLIGATION OR LIABILITY IN CONNECTION HERewith.



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## \*CUSTOMER SERVICE\*

Please contact SONNY'S Equipment Department for installation and/or operational questions regarding this piece of equipment.

Please refer to the Parts Catalog and contact SONNY'S Customer Service Order Entry Department for any replacement parts for this piece of equipment.

You can also visit the web at [www.SonnysDirect.com](http://www.SonnysDirect.com).

### DEPARTMENT

Toll Free Main Line  
Equipment Department

### PHONE NUMBERS

800-327-8723  
954-720-4100

### FAX NUMBERS

800-495-4049  
954-720-9292

Or you can email Sales at [sales@SonnysDirect.com](mailto:sales@SonnysDirect.com)

*Thank you for being a SONNY'S car wash equipment owner!*

*From all of us here at*

