

A.V.W. EQUIPMENT

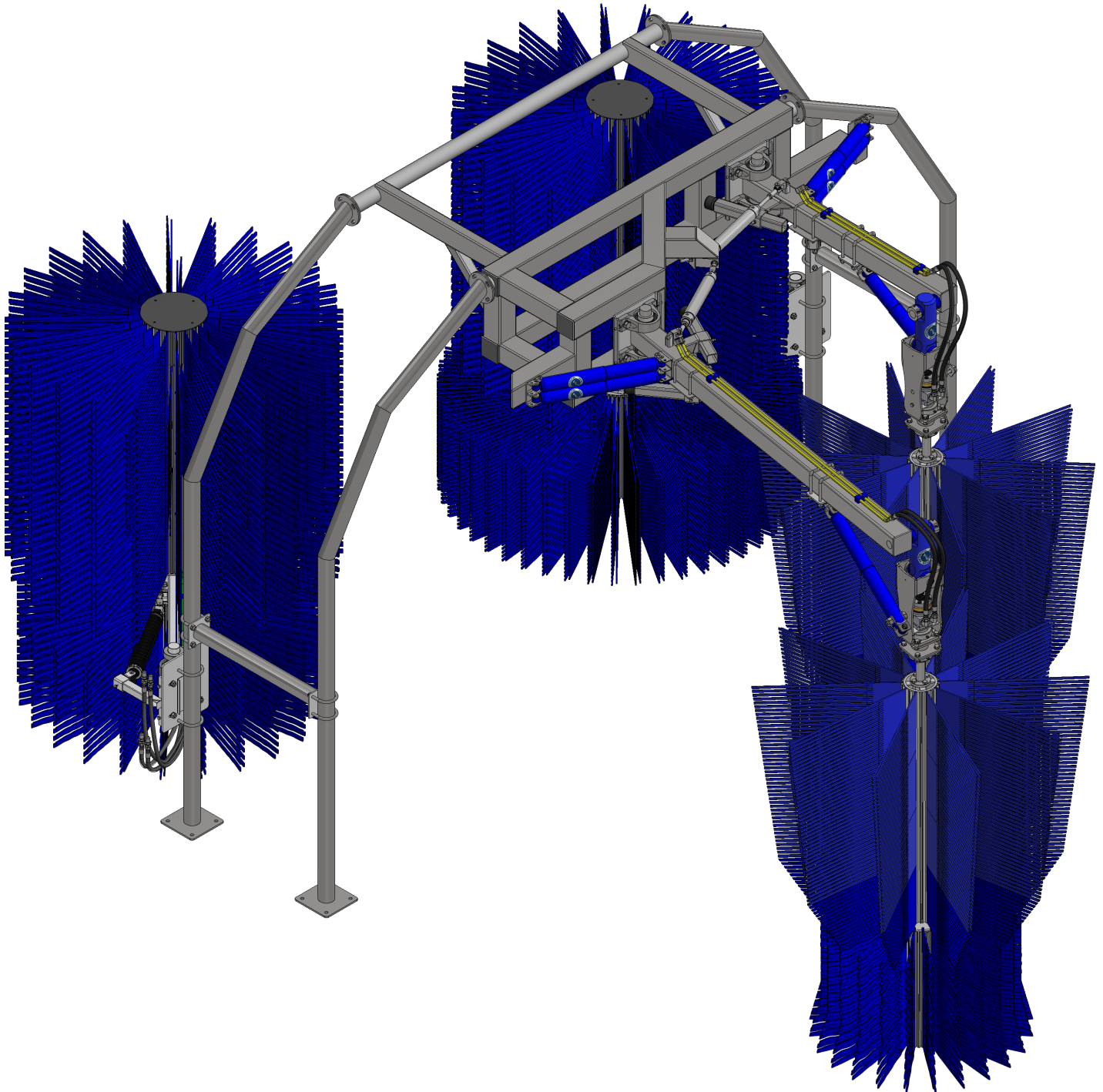
***OCTALINE
DUAL Z-WRAP MINI
MITTER COMBO***

*Model **OT-WACB0405***

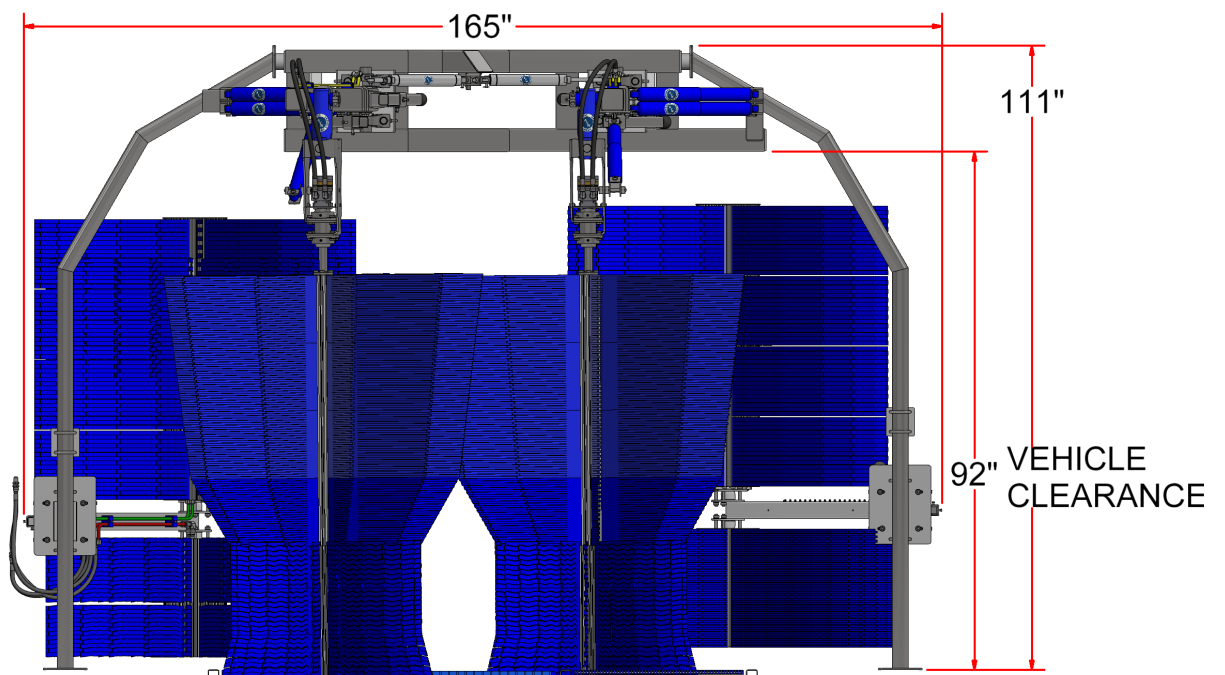
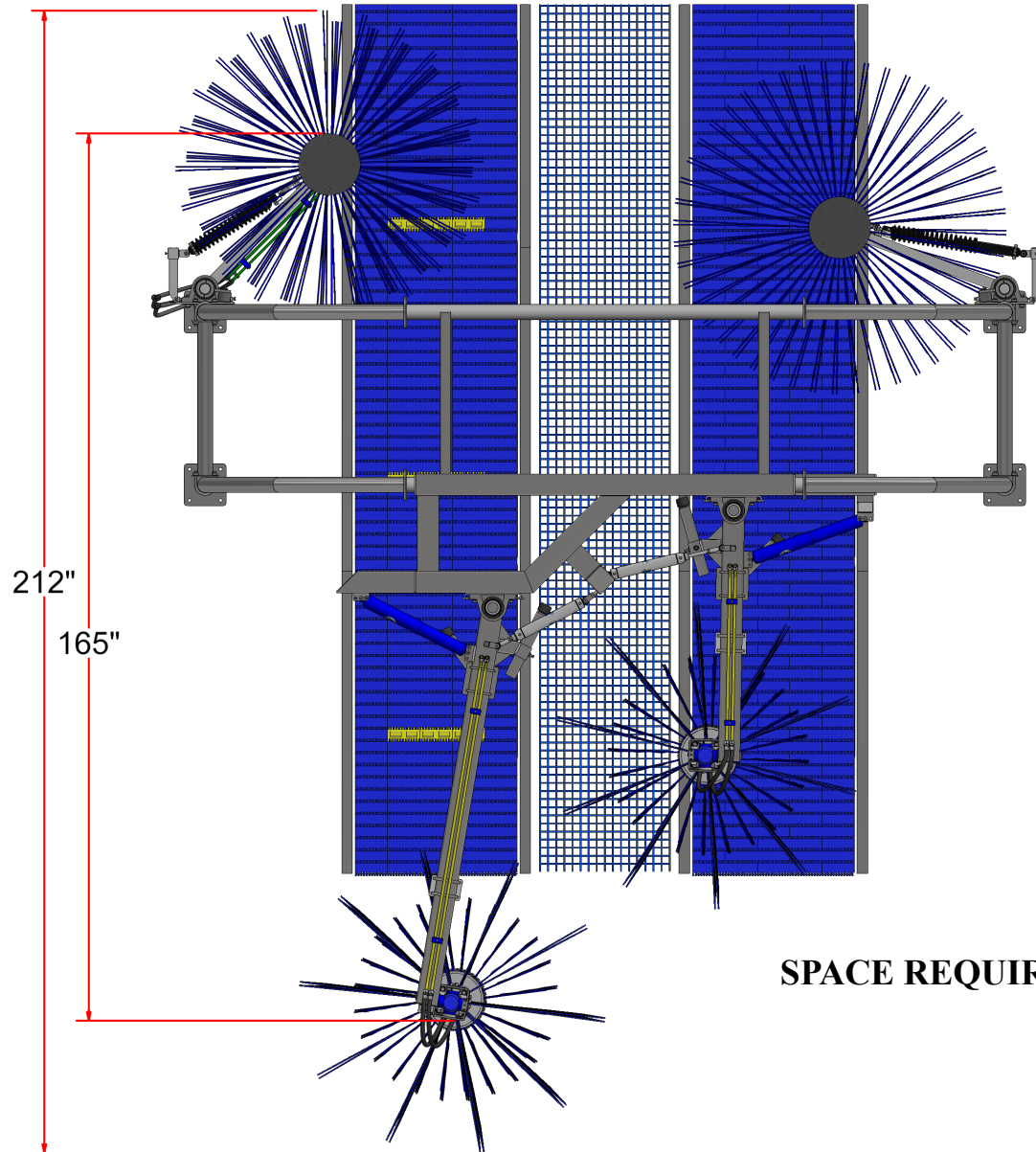


OCTALINE Z-WRAP CONTOUR COMBO, Model OT-WACB0405

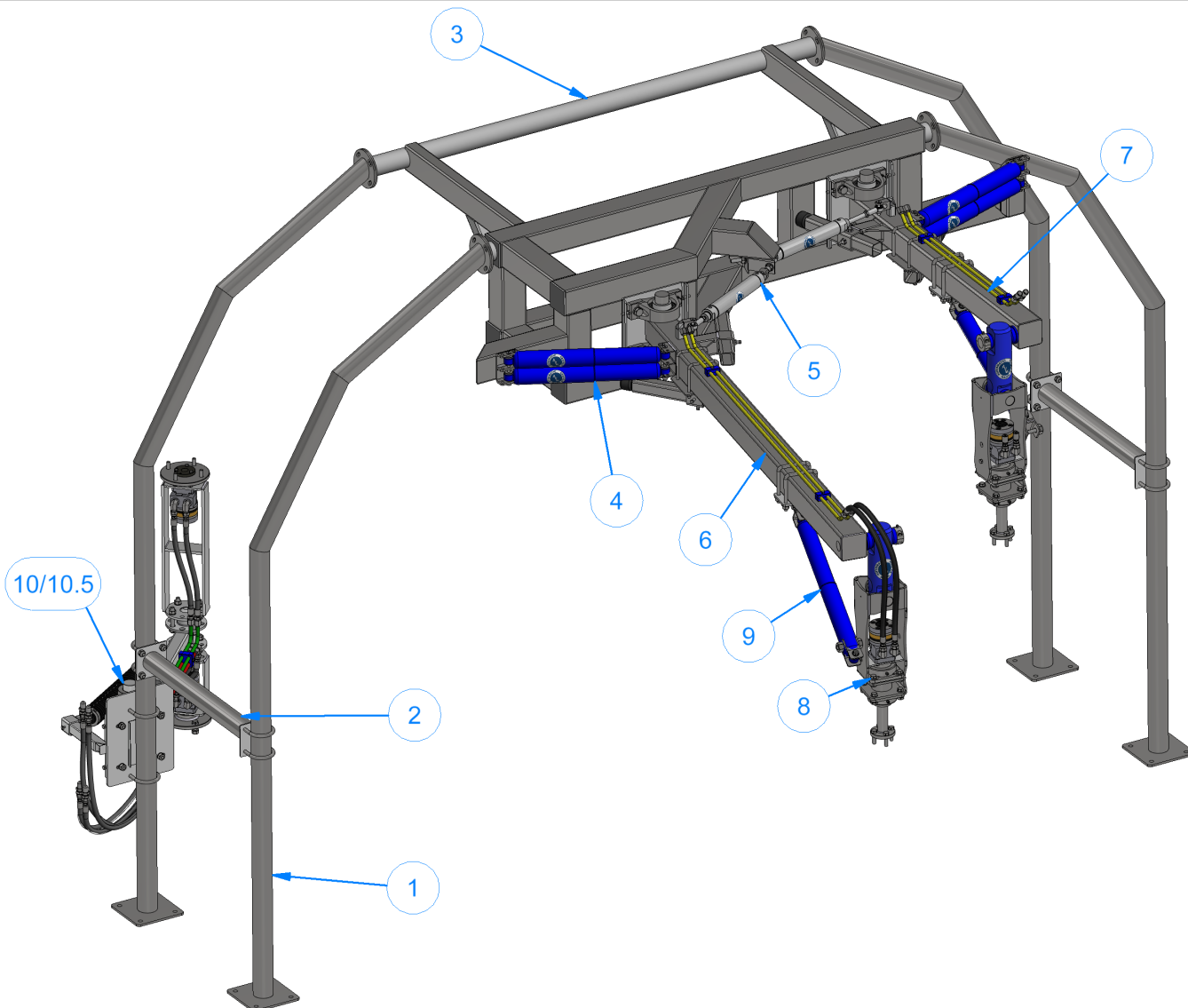
*The AVW Stainless Steel **Z-WRAP** is comprised of the simple **Z-Wrap Around** operates on gravity. No complicated controls, because of the design, it can self adjust to most conveyor speed requirements. Simple design is constructed of heavy grade Stainless steel designed to rotate reverse of the AVW Wrap Around and to provide constant pressure to the sides of vehicles.*



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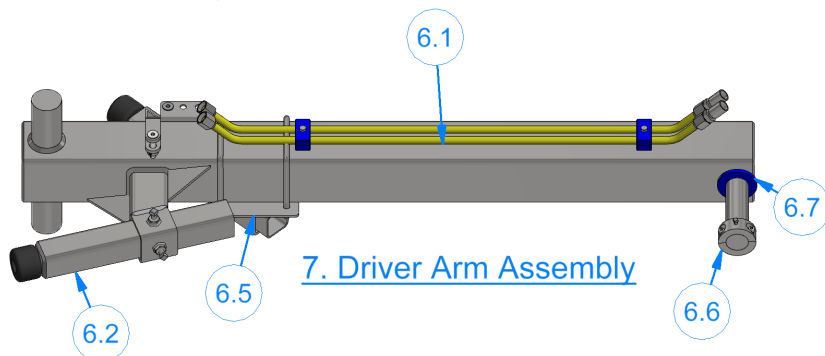
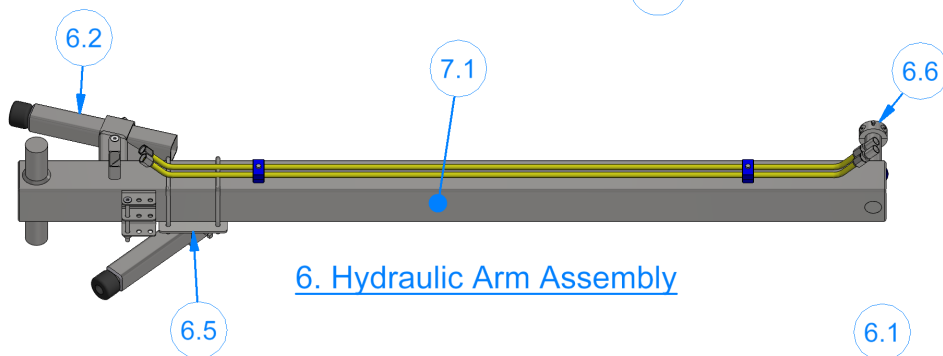
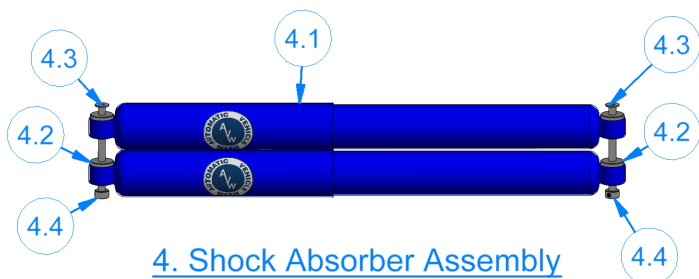
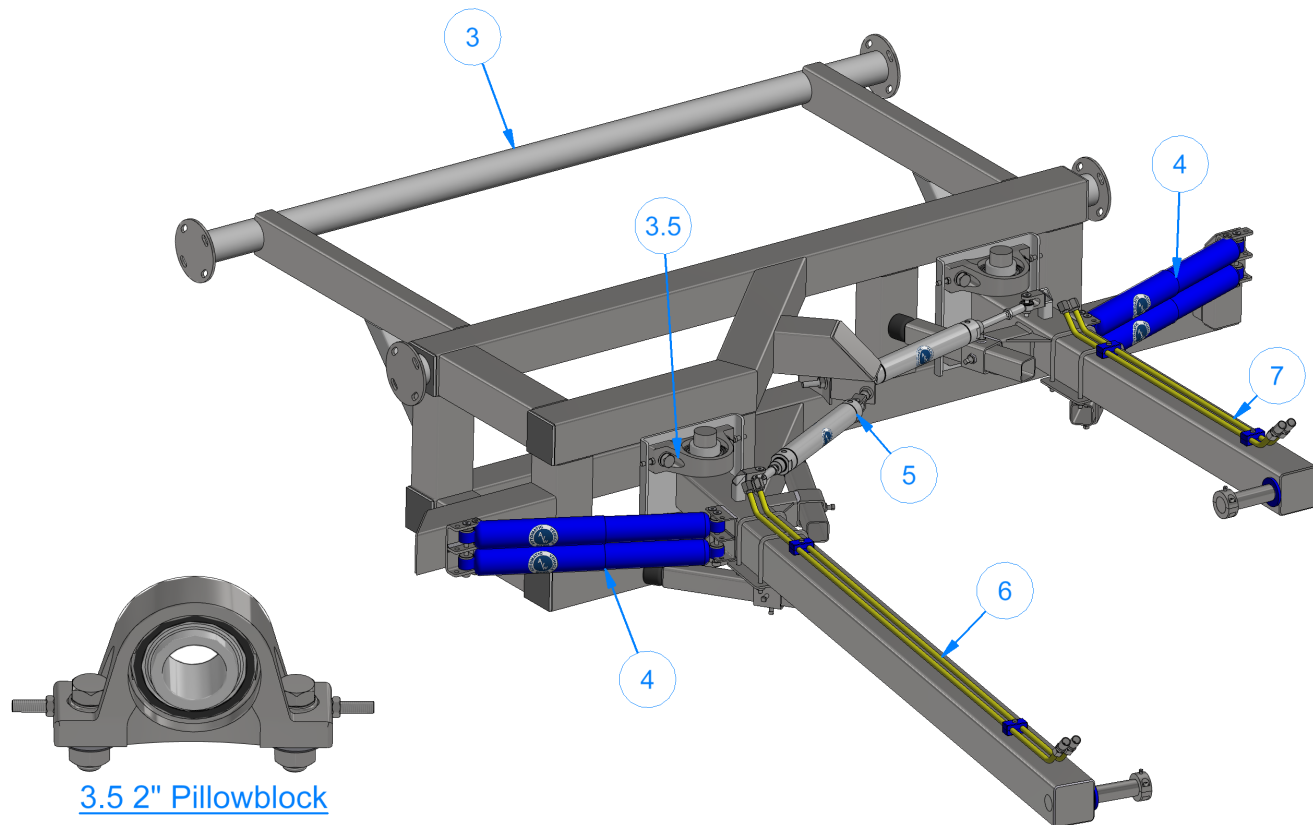
OCTALINE Z-WRAP CONTOUR COMBO, Model OT-WACB0405



ITEM	DESCRIPTION	PART NO.
1	LEG ASSEMBLY	OT-AA0A
2	HORIZONTAL BRACE BAR	HBB-212SCH10-36
3	OCTOLINE TOP FRAME	OT-DWA1C
3.5	2" PILLOWBLOCK	WA1WB
4	SHOCK ABSORBER ASSEMBLY	WA1FA
5	AIR CYLINDER ASSEMBLY	AC2X10
6	PASSENGER ARM ASSEMBLY	WA1E
7	DRIVE ARM ASSEMBLY	WA1D
8	MOTOR ASSEMBLY / WRAP AROUND SHAFT ASSEMBLY	WA1KM
9	WRAP STABILIZER KIT	WA2F-0318
10 10.5	CONTOUR BRUSH ASSEMBLY –DRIVER CONTOUR BRUSH ASSEMBLY –PASSENGER	CB0405A CB0405B
11	BRUSH ASSEMBLY	WA1M-5/10X72
12 12.5	COUNTOUR BRUSH ASSEMBLY—UPPER CONTOUR BRUSH ASSEMBLY—LOWER	RB2AE RB1AE



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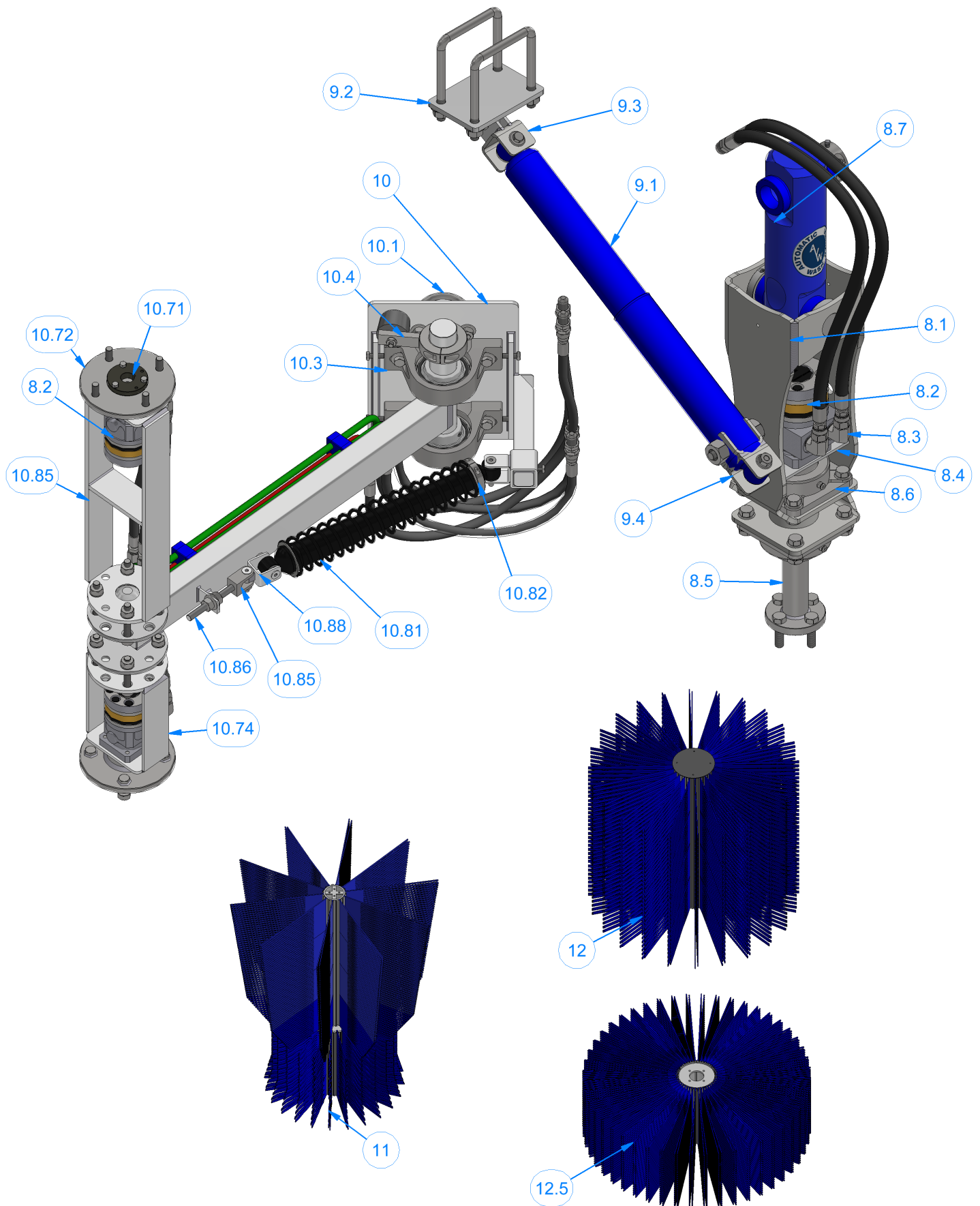


OCTALINE Z-WRAP CONTOUR COMBO, Model OT-WACB0405

ITEM	DESCRIPTION	DRIVER PART NUMBER	QTY	PASSENGER PART NUMBER	QTY
3	OCTOLINE TOP FRAME		1		1
3.5	PILLOW BLOCKS 2" w/Screw fastener set Hex Head Cap Screw ½" – 13 x 2¼" LG. Flat Washer ½" I.D. x 1 ¼" O.D. Split Lock Washer ½" Hex Nut ½" – 13	WA1WB - HHCS1213225 FW12125 SLW12 HN1213	2 - 4 8 4 4	WA1WB - HHCS1213225 FW12125 SLW12 HN1213	2 - 4 8 4 4
4	SHOCK ABSORBER ASSEMBLY:	WA1FA	2	WA1FA	2
4.1	SHOCK ABSORBER Model MN32238	WA1FAA	2	WA1FAA	2
4.2	UHMW Bushing 3/8" I.D.	WA1FA1	4	WA1FA1	4
4.3	PIN Ø 3/8" x 3" LG.	TB1AEA	4	TB1AEA	4
4.4	COLLAR 3/8" x 3" LG	WA1FC	4	WA1FC	4
5	RETRACT KIT:	-	4	-	4
5.1	AIR CYLINDER 2"x10"	AC2x10	4	AC2x10	4
5.2	Ball Joint Rod End	BJ1-2-20	4	BJ1-2-20	4
5.3	Rear Mount	WA2GA	4	WA2GA	4
-	-Clevis	WA2GA1	4	WA2GA1	4
-	-Threaded Rod 1/2"-13x5"LG	WA2GA2	4	WA2GA2	4
-	-Hex Nut 1/2"-13	HN1213	12	HN1213	12
5.4	Rear Pin 3/8 x 1½" LG.	WA1GB	4	WA1GB	4
5.5	Cotter Pin	CP3-8	4	CP3-8	4
-	Front pin ½" x 2" LG.	WA1GC	4	WA1GC	4
-	Collar ½"	WA1GD	4	WA1GD	4
-	Jam Nut 1/2"	JN1220	4	JN1220	4
6/7	ARM ASSEMBLY	WA1D	1	WA1E	1
6.1/7.1	ARM 46" + ARM 76"	WA1DA	1	WA1EA	1
6.2	RUBBER STOP ARM ASSEMBLY	WA1DB	1	WA1DB	1
6.3	STOP ARM	WA1DBA	1	WA1DBA	1
6.4	RUBBER BUMPER	WA1DBB	2	WA1DBB	2
-	SCREW FASTENER SET 3/8"	-	4	-	4
-	HEX HEAD CAP SCREW 3/8" - 16 X 1-11/4" LG	HHCS3816125	4	HHCS3816125	4
-	FLAT WASHER 3/8" I.D. X 7/8" O.D.	FW380875	4	FW380875	4
-	HEX NUT 3/8" -16	HN3816	4	HN3816	4
6.5?	ADJUSTABLE LOWER RUBBER STOP ARM [OPTIONAL]	WA3DB-2639	1	WA3DB-2639	1
-	SQUARE HEAD SCREW 1/2" - 13 X 1-1/2" LG [STOP ADJMT]	SQHS3816075	4	SQHS3816075	4
6.6	SPLIT COLLAR	WA150SCC	1	WA150SCC	1
6.7	UHMW BUSHING	WA1H2	1	WA1H2	1



OCTALINE Z-WRAP CONTOUR COMBO, Model OT-WACB0405



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Item	Description	DRIVER PART NUMBER	Qty	PASSENGER PART NUMBER	Qty
-	WRAP AROUND SHAFT ASSEMBLY		WA5K		2
8.1	MOTOR MOUNT		WA5KA		2
-	MOTOR RETAINING SCREW		-		4
-	HEX HEAD CAP SCREW 3/8" -16X3/4" LG		HHCS3816075		4
-	NYLON LOCK NUT 3/8"-16		NLN3816		4
8.2	HYDRAULIC MOTOR; DISPLACEMENT 11.9 [CU.IN/REV]		WA1KM		2
8.3	FITTING 90 ELBOW 1/2" JIC X 1/2" -14 NPTF		EL90STL050JIC050NPTF		4
8.4	TORQUE PLATE		WA1K1		2
-	HEX HEAD CAP SCREW 3/8" -16X3/4" LG. [MTR FSTNR]		HHCS3816075		8
8.5	BRUSH SHAFT AE 1-1/2" X10-1/2" LG		WA5KB		2
8.6	4-BOLT BEARING		WA1KCB		4
-	SCREW FASTENER SET [FOR BEARING]		-		16
-	HEX HEAD CAP SCREW 1/2"-13 X1-3/4" LG		HHCS1213175		16
-	FLAT WASHER 1/2" I.D. X 1" O.D.		FW12100		16
-	SPLIT LOCK WASHER 1/2"		SLW12		16
-	HEX NUT 1/2" -13		HN1213		16
8.7	UNIVERSAL COUPLING		WA2H-0210		2
9	WRAP STABILIZER KIT		WA2F-0318		2
9.1	SHOCK ABSORBER ASSEMBLY		WA2F-A		2
9.2	REAR STABILIZER MOUNT		WA2FC		2
9.3	STABILIZER BRACKET KIT		WA2FB-0318		2
9.4	FRONT STABILIZER MOUNT		WA2DAE-0318		2
10	ARM MOUNT ASSEMBLY	CB0405AB	1	CB0405AB	1
-	ROUND U-BOLT FASTENER SET 1/2"	RB2ABB	2	RB2ABB	2
10.1	ROUND U-BOLT 1/2" X 17" LG	RB2ABB1	2	RB2ABB1	2
-	SPLIT LOCK WASHER 1/2"	SLW1/2	2	SLW1/2	2
-	HEX NUT 1/2" - 13	HN1213	2	HN1213	2
10.2	ARM MOUNT	CB0405ABA	1	CB0405ABA	1
10.3	PILLOWBLOCK 2"	WA1WB	2	WA1WB	2
-	SCREW FASTENER SET [PILLOW BLOCK SET]	-	2	-	2
-	HEX HEAD CAP SCREW 1/2" - 13 X 2 1/2" LG	HHCS1213225	2	HHCS1213225	2
-	FLAT WASHER 1/2" I.D. X 1 1/4" O.D.	FW12125	2	FW12125	2
-	SPLIT LOCK WASHER 1/2"	SLW1/2	2	SLW1/2	2
-	HEX NUT 1/2" - 13	HN1213	2	HN1213	2
10.4	2-PIECE BUMPER MOUNT / COLLAR	CB0405ACA	1	CB0405ACA	1
-	SCREW FASTENER SET [BUMPER]	-	1	-	1
-	HEX HEAD CAP SCREW 3/8" - 16 X 1 1/4" LG	HHCS3816150	2	HHCS3816150	2
-	SPLIT LOCK WASHER 3/8"	SLW 3/8	2	SLW 3/8	2
-	HEX NUT 3/8" - 16	HN3816	1	HN3816	1
10.6	ARM	CB0405DAx32	1	CB0405DAx32	1
-	BRUSH DRIVE LOWER ASSEMBLY	RB1AE	1	RB1AE	1
10.7	MOTOR MOUNT (8" LG)	RB1AEA	1	RB1AEA	1
-	Screw Fastener Set 1/2 "	-	4	-	4
-	Hex Head Cap Screw 1/2" -13x3"lg.	HHCS1213300		HHCS1213300	
-	Flat Washer 1/2" I.D.x1 1/4" O.D.	FW12125	4	FW12125	4
-	Split Lock Washer 1/2 "	SLW1/2	4	SLW1/2	4
-	Hex Nut 1/2 "-13	HN1213	4	HN1213	4
10.71	SPLIT TAPER BUSHING 1"	SSS1420050C	4	SSS1420050C	4
-	(set w/two socket set screws 1/4 "-20x 1/2 "lg., carbon steel)	RB2AEB-P1-1-0106	1	RB2AEB-P1-1-0106	1
10.72	BRUSH CONNECTING DISK	MC2BBA3-P1-0106	1	MC2BBA3-P1-0106	1
-	Screw Fastener Set 1/2 "	-	4	-	4
-	Hex Head Cap Screw 1/2" -13x1 1/4" lg.	HHCS1213125	4	HHCS1213125	4
-	Split Lock Washer 1/2 "	SLW1/2	4	SLW1/2	4
-	Hex Nut 1/2 "-13	HN1213	4	HN1213	4



OCTALINE Z-WRAP CONTOUR COMBO, Model OT-WACB0405

ITEM	Description	DRIVER		PASSENGER	
		PART NO.	Qty	PART NO.	Qty
-	BRUSH DRIVE UPPER ASSEMBLY	RB2AE	1	RB2AE	1
10.74	MOTOR MOUNT (20" lg)	RB1AEA	1	RB1AEA	1
-	Screw fastener set ½"	-	4	-	4
-	(connection of the motor mount with the arm):				
-	Hex Head Cap Screw ½" -13x3"lg.	HHCS1213300	4	HHCS1213300	4
-	Flat Washer ½" I.D.x1¼"O.D.	FW12125	4	FW12125	4
-	Split Lock Washer ½"	SLW1/2	4	SLW1/2	4
-	Hex Nut ½"-13	HN1213	4	HN1213	4
10.80	SHOCK ABSORBER ASSEMBLY:	RB1AF	1	RB1AF	1
10.81	SPRING SHOCK ABSORBER	RB1AFA	1	RB1AFA	1
-	UHMW Bushing 3/8" I.D.	RB1AFA1	2	RB1AFA1	2
10.82	Spring Adjuster Assembly (2-piece collar):	RB2AFB	1	RB2AFB	1
-	- Aluminum Adjuster (2-piece collar)	RB2AFB1	1	RB2AFB1	1
-	- Hex Head Cap Screw ¼" -20 x 1¼"lg.	HHCS1420125	2	HHCS1420125	2
-	- Hex Nut ¼"-20	HN1420	2	HN1420	2
-	Plastic spacer	RB1AFC	1	RB1AFC	1
10.83	PIN Ø3/8"x3"lg.	TB1AEA	2	TB1AEA	2
10.84	COLLAR 3/8"	WA1FC	2	WA1FC	2
10.85	FRONT MOUNT:	RB1AG	1	RB1AG	1
-	- Clevis	WA2GA1	1	WA2GA1	1
10.86	- Threaded Rod ½" -13x5"lg.	WA2GA2	1	WA2GA2	1
-	- Hex Nut ½"-13	HN1213	3	HN1213	3
-	- Pin 3/8"x1½"lg.	WA1GB	1	WA1GB	1
10.87	- Collar 3/8"	WA1FC	1	WA1FC	1
10.88	- Shock Mount	RB1AGA	1	RB1AGA	1
11	BRUSH ASSEMBLY WRAP (design: 5" core, 72"lg.)	WA1M-5/10X72	1	WA1M-5/10X72	1
12	UPPER BRUSH 51" ASSEMBLY:	CB0405AM-51	1	CB0405AM-51	1
-	Brush Cloth	CB1AMA-51	1	CB1AMA-51	1
-	Aluminum Extrusion	CB1AMC-51	2	CB1AMC-51	2
-	Two-piece Collar 1½"x12 core	CB1AMB-51	2	CB1AMB-51	2
-	Screw Fastener Set 3/8", for collar	-	8	-	8
12.5	LOWER BRUSH 21" ASSEMBLY:	CB0405AM-21	1	CB0405AM-21	1
-	Brush Cloth	CB1AMA-21	1	CB1AMA-21	1
-	Aluminum Extrusion	CB1AMC-21	2	CB1AMC-21	2
-	Two-piece Collar 1½"x12 core	CB1AMB-21	2	CB1AMB-21	2
-	Screw fastener Set 3/8", for collar	-	8	-	8
-	HYDRAULIC & WATER INSTALLATION:	WA1L	-		-
-	Side water manifold assembly (on exit legs):	WA1LA	2		2
-	Water manifold (tubing 1/2" O.D. x 34"lg., w/5 water outlets)	WA1LAA	2		2
-	Hollow hex plug ½"NPTM	SAE140109P-8	2		2
-	Barb ½"x ½"NPTM	BRBPP050X050	2		2
-	Nozzle ¼"NPTM	NZ1-4	10		10
-	Water Hose ½" I.D. (reinforced polyurethane tubing)	-	-		-
-	Pipe Clamp ¾", for water hose and side water manifolds (w/screw fasteners ¼")	PPP3-4	10		10
-	Hydraulic tube assemblies:	WA1LHT	-		-
-	Hydraulic Tube Assembly, 1/2"OD x (3) Lengths-34", 60", and 90" - Cross	WA1LHTA-CB	-		-
-	Bar	WA1LHTA-DS	2		2
-	Hydraulic Tube Assembly, 1/2"OD x 34"LG, SS - Driver Side	WA1LHTA-PS	2		2
-	Hydraulic Tube Assembly, 1/2" x 64"LG, SS - Passenger Side	SAE070115-8	2		2
-	Tube Support Sleeves ½" JIC	SAE070110-8	2		2
-	Nuts ½" J	DMP12	8		8
-	Damping clamp ½",	WA1LB	8		8
-	Hydraulic hose assembly:	SAE100R7-06x34	8		8
-	Hydraulic hose 3/8" I.D. x 34"lg., thermoplastic	FC5810-0806	4		4
-	Crimp fitting SAE 37° JIC swivel (female)	(10655-8-6)	(4)		(4)
-	Crimp fitting SAE 37° JIC male flare	FC5807-0806	12		12
-	Damping clamp ½", for hydraulic tubes (w/screw fasteners ¼")	(10355-8-6)	(12)		(12)
		DMP12	8		8





Figure 1

In order to get a higher application pressure at either driver side or passenger side of the machine, move the top bearings towards the center of the tunnel (toward the vehicle), or away from the center to achieve lower application pressure.

note: Application pressure is the pressure of the brush applied onto the car.

Fine tuning adjustment for getting better performance of AVW Wraps

- The RPM of the wrap hydraulic motor should be set at approximately 60 RPM to allow brush to flare out fully.
- Set hydraulic relief pressure so that brush can start to stall, when contacting the front end of the widest vehicle and then increase $\frac{1}{2}$ turn. The brush should never be able to stall on a front end of vehicle.
- Use a lot of soap and lubrication on the cloth.
- Do not use excessively worn cloth.
- Replace shock absorbers approximately every 6 months.
- Travel on back of car should not exceed $\frac{3}{4}$ of back end of vehicle.
- Keep initial adjustments light as wraps will tend to loosen up as they break in and cloth absorbs more soap and water.
- Start adjusting with bearings straight up and down, usually no more than $\frac{1}{4}$ " of bearing travel will be required
 - Set wraps for average conveyor speed, if conveyor speed increases or decreases more than 25 cars per hour up or down (50 cars per hour range) additional adjustment may be required.

Flex coupler fails or twists

Possible Causes & Troubleshooting:

- Torque settings on hydraulics is set too high.
- Flex coupler should be replaced approx. every 200,000 cars.



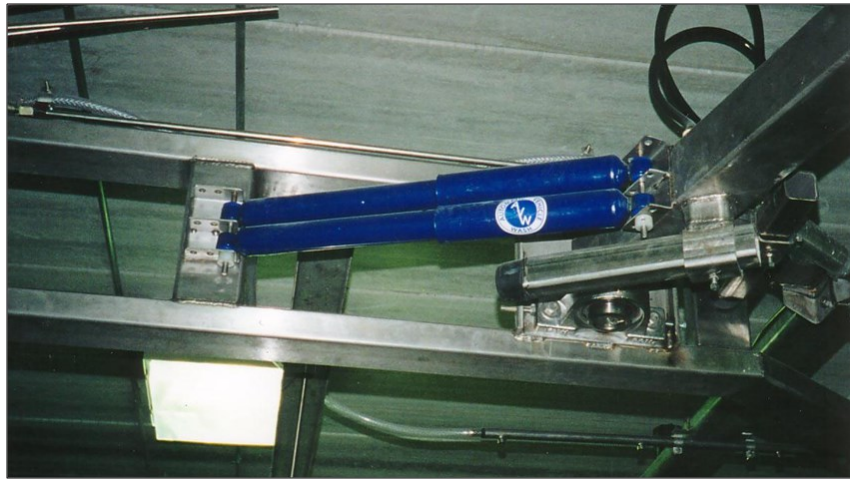


Figure 2

Brush climb up on back ends of the car

Possible Causes & Troubleshooting:

- The car is rolling ahead because of uneven floor and stopping with wrap on rear of car.
- Torque (Pressure) is set too high and brush will not stall as it climbs.
- Brush speed may be too fast. set at 60 RPM
- Brush may be set to travel more than 3/4 of backend of car / more swing after break- in period.
- Keep pivot point low as possible try not to mount over tire brushes or where high clearance is needed off the floor.
- Car may be stopping or rolling because of a treadle on floor or pocket in floor
- If the friction is too high-apply more soap or lubrication.
- The faster the brush RPM, the more travel on the back of the vehicle-adjust RPM.

Brush climbs driver side leg brace (gusset)

Possible Causes and Troubleshooting:

Frame is installed a little low or conveyor rail is a little high, causing wrap brush to grab rail and “bounce” out against gusset – raise wrap/wrap combo frame on legs.

Lower wrap cloth is custom and more dense than standard cloth configuration and grabs gusset – raise wrap/wrap combo frame on legs, and/or adjust cloth density.

Wrap cloth is “sticky” and is grabbing vehicle and gusset – work with soap supplier to provide more lubricity through soap volume, dilution ratio, or lubricity of product.

Wrap is crowded between vehicle and gusset – move wrap frame 4” off center toward driver side.

Wrap is grabbing gusset and none of the above are working or are not a factor – turn driver side leg around

(or change out to passenger side leg and turn around).

Figure 3



Mirror is damaged or broken

Possible Causes & Troubleshooting:

- Lower portion of the brush is set to high coming into contact with mirror-stay below 33” from the top of the lower fuller section of the brush.
- Arm is restricted not to swing out far enough to clear the vehicle-adjust the bumper so that brush can clear the vehicle.
- Too much tilt on the bearing causing excessive side pressure –adjust the tilt on the bearing to reduce the pressure.
- Weak shocks absorbers-replace shock absorbers.
- Brush speed incorrect-set the speed.

