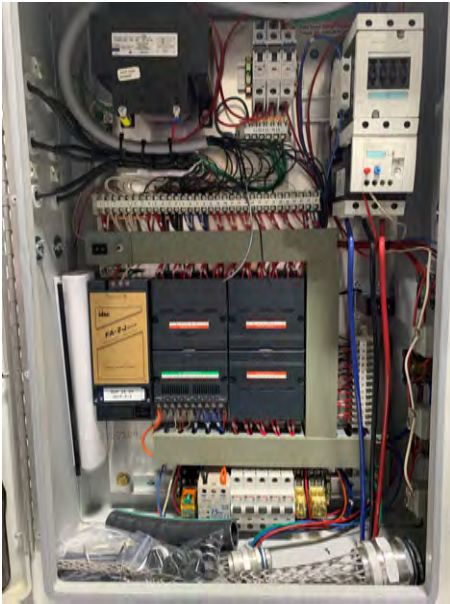
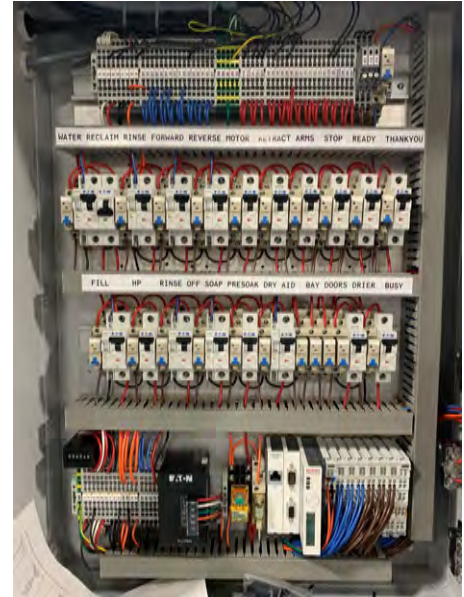


How to Determine 2K Vs 2.5K Vs 3K Machines

2K inside of control panel has a gold colored controller that says FA-2J or FA-1J.



2.5K Control panel has only one control panel mounted on the machine and it has the digital display in lower part of the panel and no Ethernet cable.



3K Machine has 2 control panels.

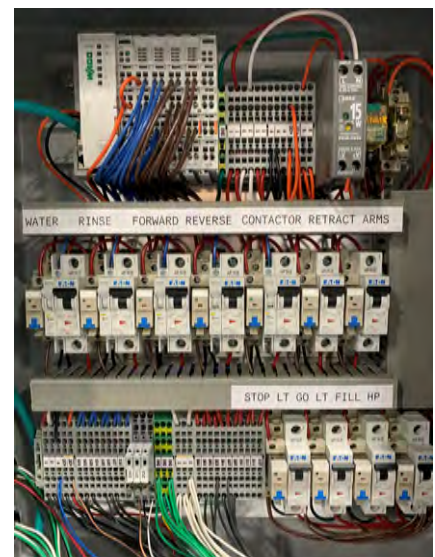
1 mounted on the machine and 1 mounted on the wall away from machine.

The controller on the wall is called the off board panel and has a digital display and has an ethernet cable coming out of left side of controller from the machine control panel.



3K On board panel.

The controller on the machine does not have a digital display and should have an ethernet cable coming out of left side of controller running to the other panel on the wall.



Carwash lights and what they mean.

Most of the washes have a Green/Yellow/Red Led style light on them. This light does different flashing or solid displays and helps with identifying an issue with the wash.

No light at all:

1. Light burnt out or bad. Check light/relay on the controller to see if it is on.
 - a. The LED light shorting out can cause unknown random or intermittent results with the controller. When in doubt disconnect cord at the light to verify.
2. Check if MCR relay light is on.
 - a. Check if Emergency stop button is stuck. Could be either on or off board panel. look at indicator light on the controller.
 - b. Communication issue. Check if Bus light is flashing and reseal comm cables and/or check the splice at the J-Box
 - c. If they have a code box, you need to enter a code to get a green light.
 - i. If no code box. Check the Program number on the controller.

Solid Green:

1. The carwash is ready to go. Machine will not run unless the light is green.

Solid Yellow:

1. Wash has completed its cycle and time to pull the vehicle off the treadle pad
2. The proximity sensor might be stuck on and the wash thinks the cycle is done. Check the lights on the controller when the machine sensors are not over a floor magnet.
3. Treadle pad may be stuck and is acting like it is waiting for the vehicle to pull off the pad.
4. Touch Free – Photo eyes may be blocked or misaligned.

Solid Red:

1. A Vehicle is on the treadle pad and machine should be running.
2. If no vehicle on the Treadle pad then the treadle pad is stuck.

Flashing Green:

1. FlexWrap – Low hyd oil

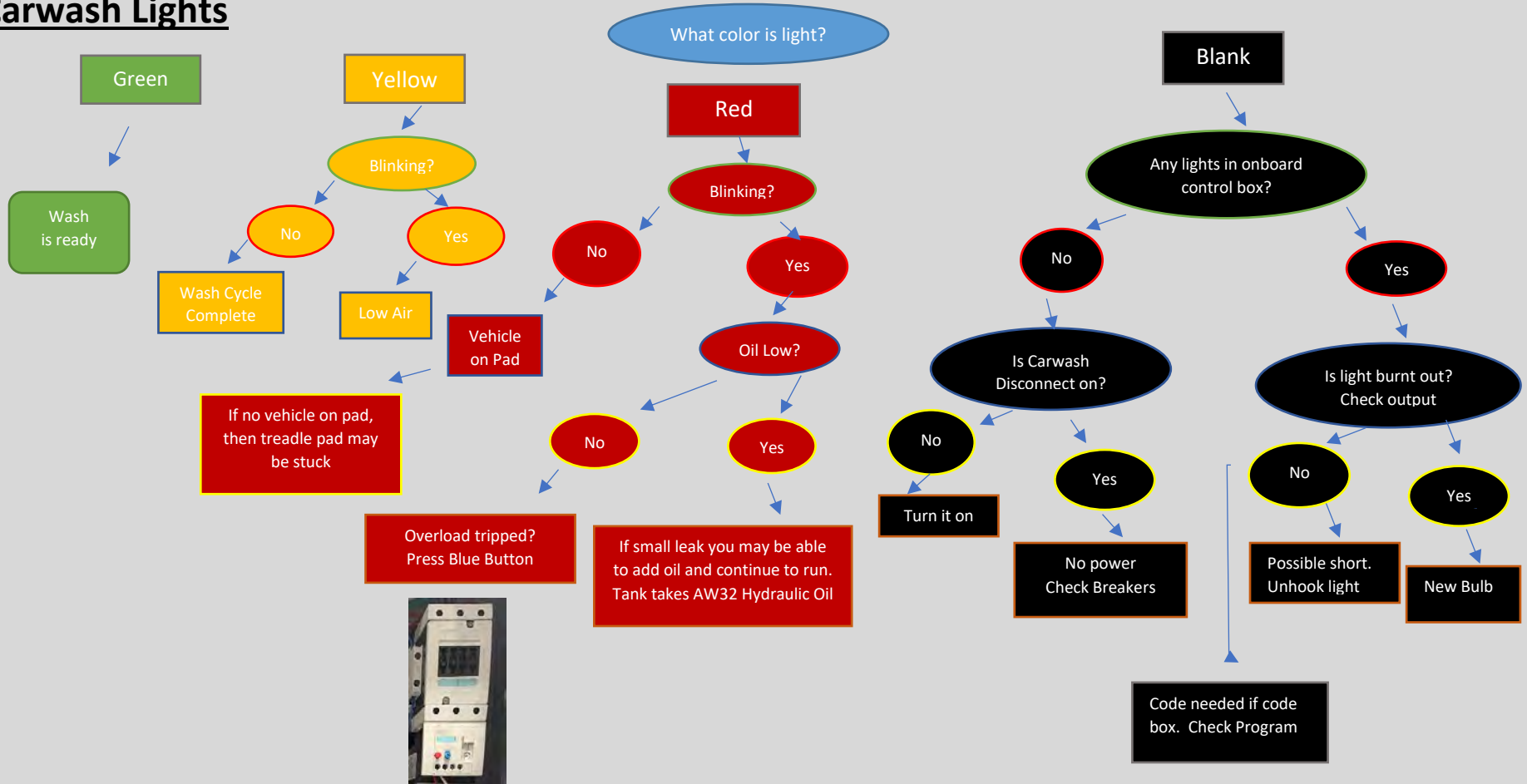
Flashing Yellow:

1. This is an error of low main air pressure. Check air compressor and main air regulator should be at 80-85 PSI.
2. When machine first starts it requires a big quantity of air. If you watch the main air gauge and it drops below 60 PSI and jumps back to 80-85PSI. There is most likely something restricting the air flow in the main air line. Drain Air Lines, Air Compressor, Clean main air auto drain.

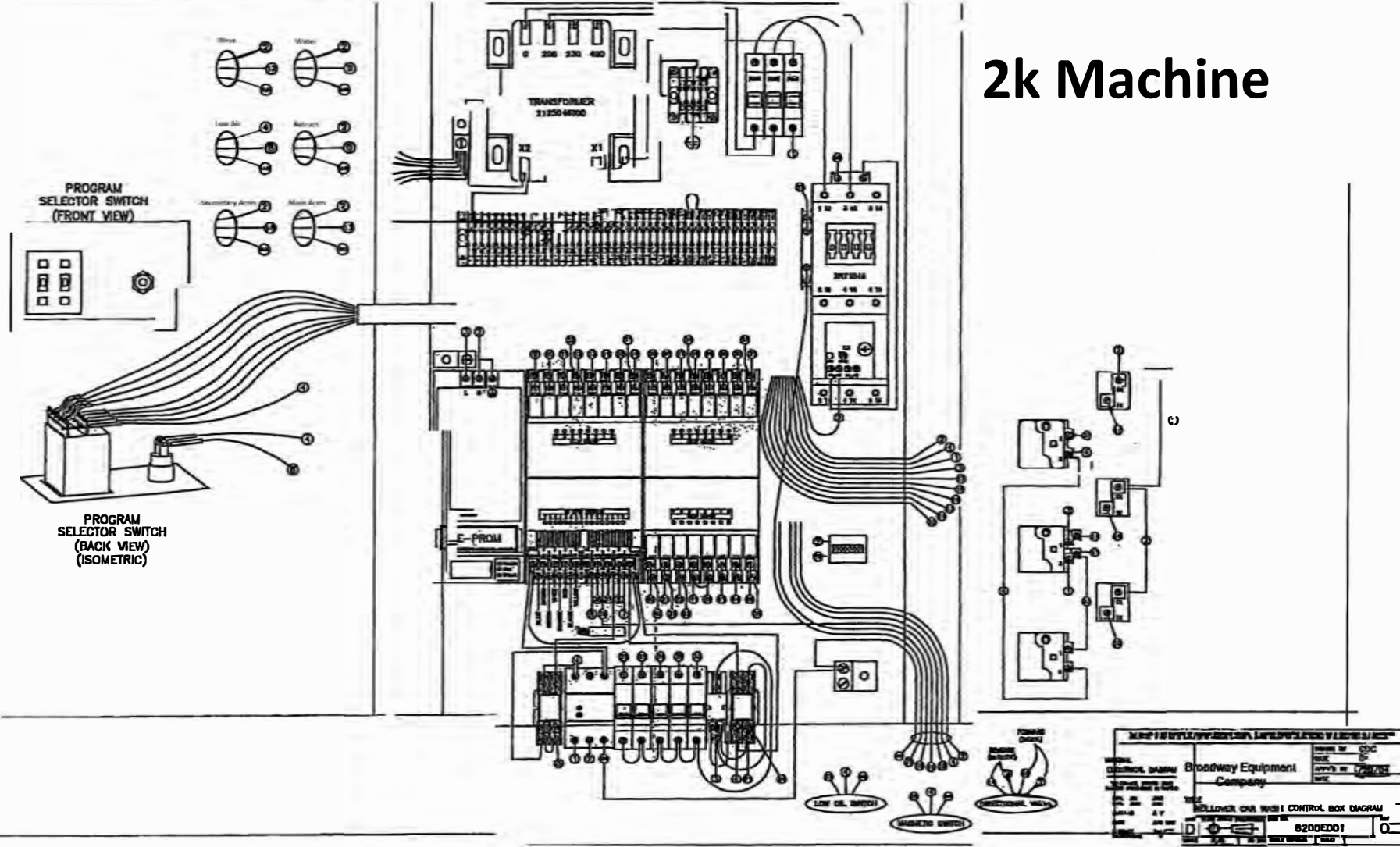
Flashing Red: 2K-2.5K-3K

1. This is an error of being low on hydraulic fluid.
 - a. Check fluid level and check for leaks.
 - b. Check the fitting on top of low oil switch. If plugged it will cause vapor lock and cause low oil switch to read low.
 - c. For a 2K machine with FA-1J or FA-2J controller, it may indicate a tripped Overload.
 - d. For a 2K machine with FA-1J or FA-2J controller, it may indicate Auxiliary relay is bad.

2K Carwash Lights

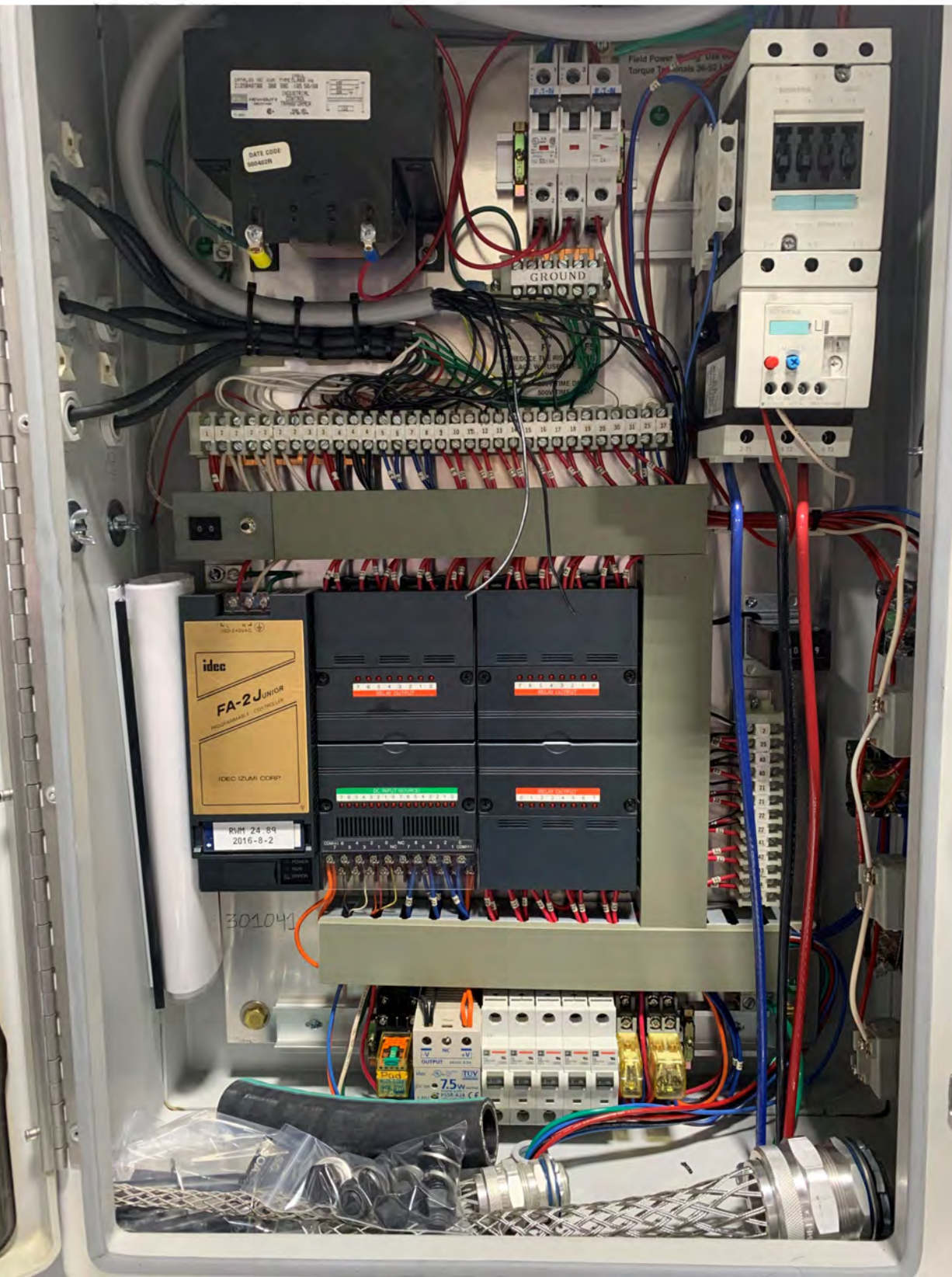


2k Machine

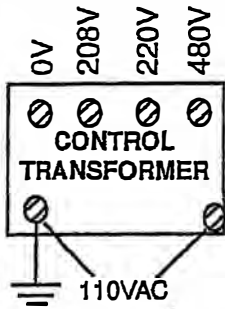


MODEL CONTROL BOX MANUFACTURED BY BROADWAY EQUIPMENT COMPANY		DRAWING NO. 8200001 DATE 1/1/82
TITLE ROLLOVER CAR WASH CONTROL BOX DIAGRAM		0
8200001		0

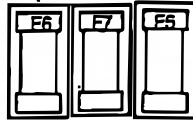
2K Control Box



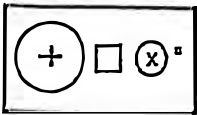
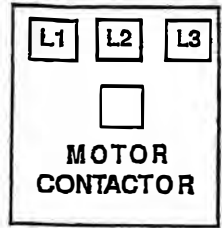
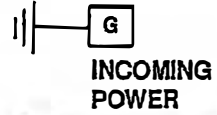
2K Layout Labels



Transformer Primary Fuses

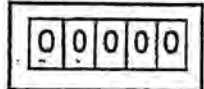


Transformer Secondary Fuse

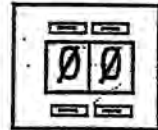


Overload Relay

COUNTER



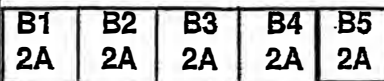
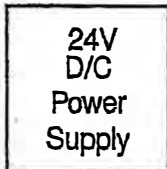
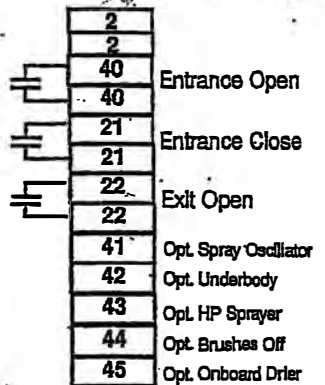
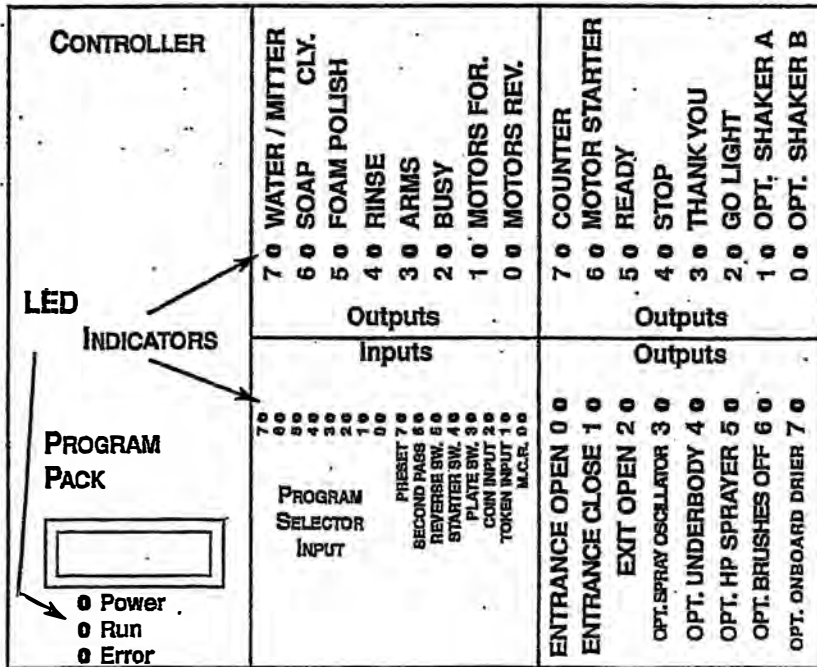
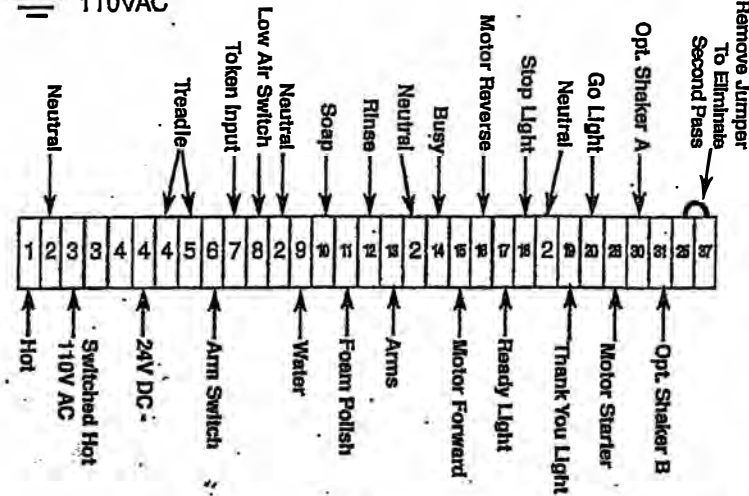
Program Selector



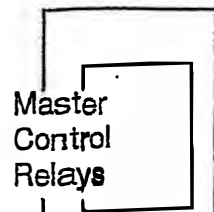
Enter Button

MSD

LSD



OUTPUT BREAKERS



	MSD →									
	0	1	2	3	4	5	6	7	8	9
0	00	10	20				6	6	6	12
1	01	11	21				12	12	12	18
2							12	18	18	24
3			23				15	24	24	30
4			24				18	30	30	36
5	05	15					21	21	21	27
6	06	16					24	42	42	48
7							27	48	48	54
8							30	54	54	60
9							33	60	60	66
							sec	sec	sec	sec

ADJ. SHORT TRACK

ADJ. SOAP TIME

ADJ. WAX TIME

ADJ. RINSE TIME

↑ LSD

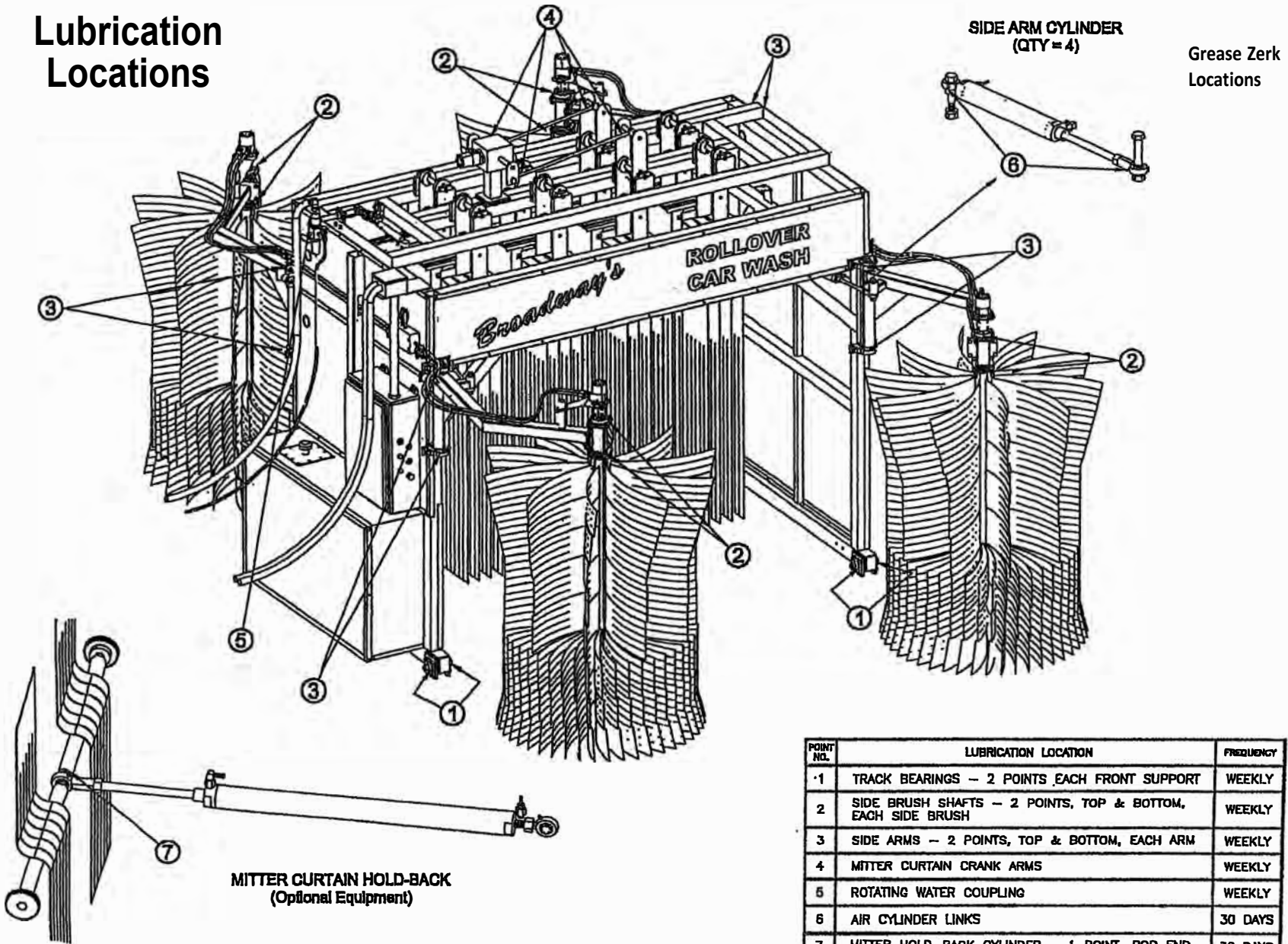
= DEFAULT VALUES

CODE PROGRAM

- 00 = STANDARD WASH
- 01 = STANDARD 15 SEC. PLATE DELAY
- 05 = RINSE ON WAY BACK & AFTER WASH
- 06 = BYPASS PAD SWITCH
- 10 = STANDARD SHORT TRACK
- 11 = STANDARD SHORT TRACK 15 SEC PLATE DELAY
- 12 = 15 SEC PLATE DELAY & RINSE ON WAY BACK
- 15 = RINSE ON WAY BACK & SHORT TRACK
- 16 = BYPASS PAD SWITCH & SHORT TRACK
- 20 = COIN BOX OPERATE INTERNAL
- 21 = SHORT TRACK COIN BOX
- 23 = CODE BOX
- 24 = CODE BOX SHORT TRACK
- 55 = TEST-OUTPUTS (ALL)

PROGRAM SELECTIONS AND TIMER ADJUSTMENTS

Lubrication Locations



POINT NO.	LUBRICATION LOCATION	FREQUENCY
1	TRACK BEARINGS - 2 POINTS EACH FRONT SUPPORT	WEEKLY
2	SIDE BRUSH SHAFTS - 2 POINTS, TOP & BOTTOM, EACH SIDE BRUSH	WEEKLY
3	SIDE ARMS - 2 POINTS, TOP & BOTTOM, EACH ARM	WEEKLY
4	MITTER CURTAIN CRANK ARMS	WEEKLY
5	ROTATING WATER COUPLING	WEEKLY
6	AIR CYLINDER LINKS	30 DAYS
7	MITTER HOLD-BACK CYLINDER - 1 POINT, ROD END	30 DAYS

No more Air Muffler (Breather Stone)

We are no longer going to be shipping the air muffler (stone) that was typically installed on the top of the low oil switch. Instead, we are going to be shipping the machine with a 45 deg 1/4" barbed fitting in top of the low air switch. We ask that you completely cut off the hose that is installed for shipping purposes. Leave the 45 deg 1/4" hose barb in the top of the switch ONLY.

We feel that if the breather stone were to get wet for any reason (oil too full/ water spray), that when it dries it can lose its ability to ventilate, causing an air lock to happen and a false low oil signal can occur. With a 1/4 "barb opening, there will always be an ability to ventilate.

***YOU MUST REMOVE THE HOSE COMPLETELY, IF YOU DO NOT AND THE HOSE FALLS, A SIPHON CAN BE CREATED AND THE 30 GALLONS OF OIL CAN COMPLETELY DRAIN OUT**



Mitter Curtain Layout

2K Single Retract/3K Single & Double Retract

Driver Front			Pass Front
72 72 72 72	78 78 78 78	78 78 78 78	72 72 72 72
78 78 78 78	72 72 72 72	72 72 72 72	78 78 78 78
Driver Rear			Pass Rear

Rollover Drive in/back out

Driver Front			Pass Front
66 66 66 66	72 72 72 72	72 72 72 72	66 66 66 66
72 72 72 72	66 66 66 66	66 66 66 66	72 72 72 72
Driver Rear			Pass Rear

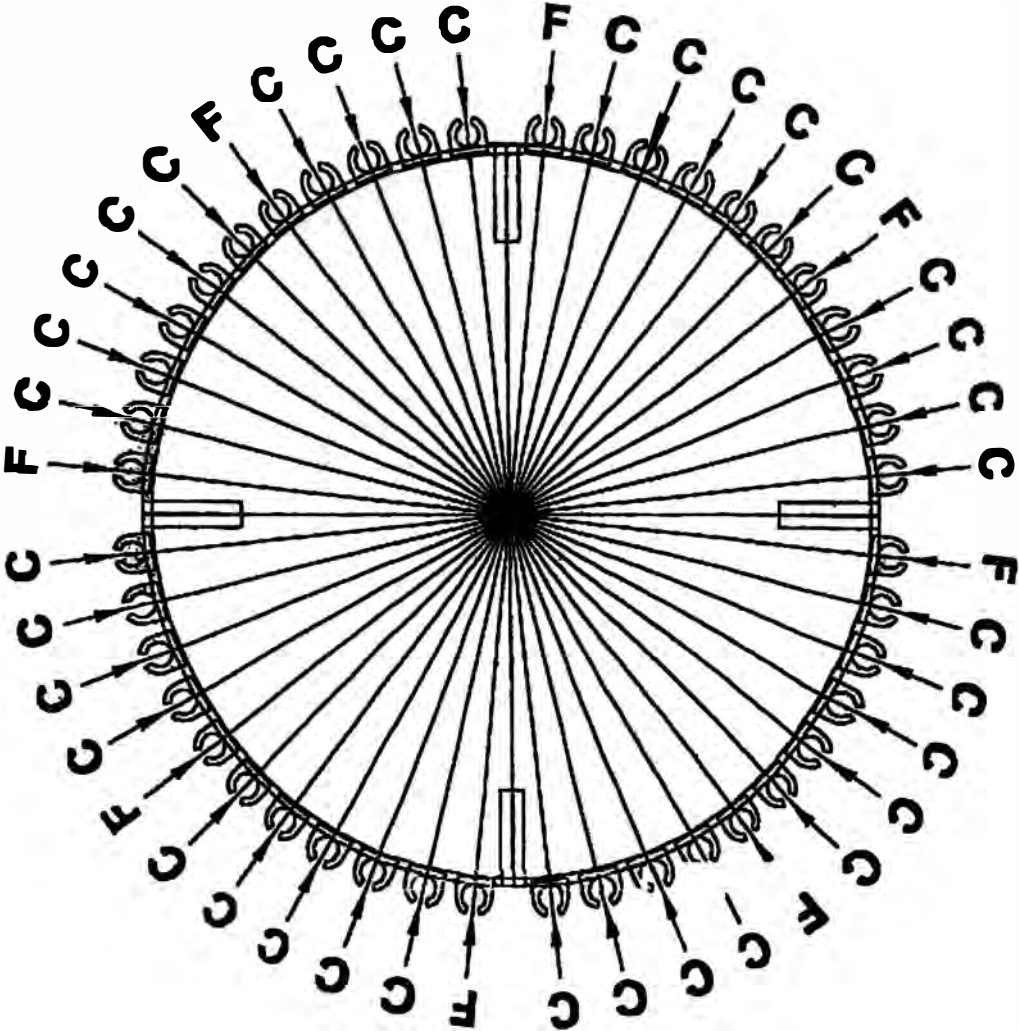
2K Double Retract

Driver Front			Pass Front
84 84 84 84	90 90 90 90	90 90 90 90	84 84 84 84
1-ply	1-ply 2-ply	2-ply 1-ply	1-ply
90 90 90 90	84 84 84 84	84 84 84 84	90 90 90 90
Driver Rear			Pass Rear

Knuckler Drive Thru

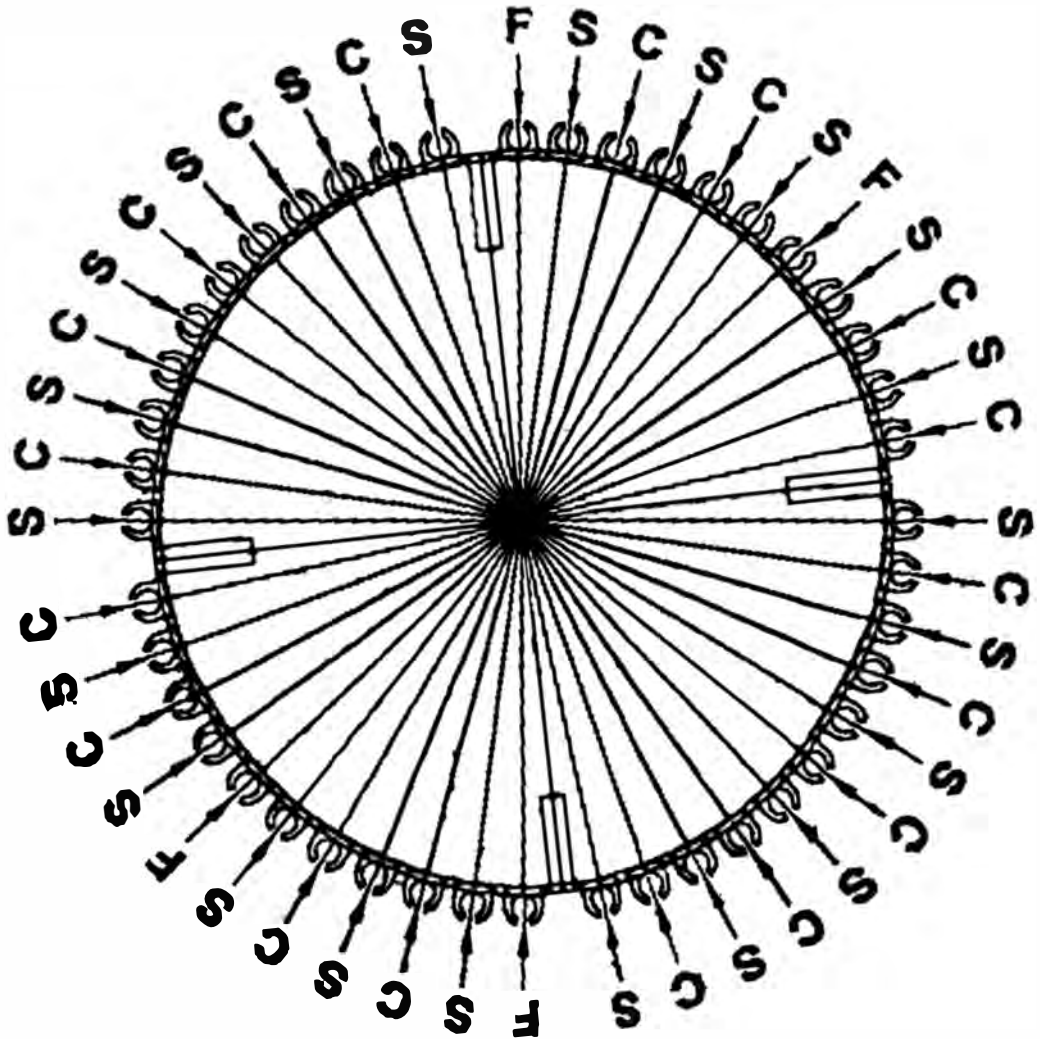
Brush Side			Pass Front
66 66 66 66	66 66 66 66	66 66 66 66	66 66 66 66
72 72 72 72	72 72 72 72	72 72 72 72	72 72 72 72
Entrance Side			Entrance Side

**Pad Sequence
Front**



F = Foam Pads
C = Cloth Pads

8x18x20
Front
Bottom Row

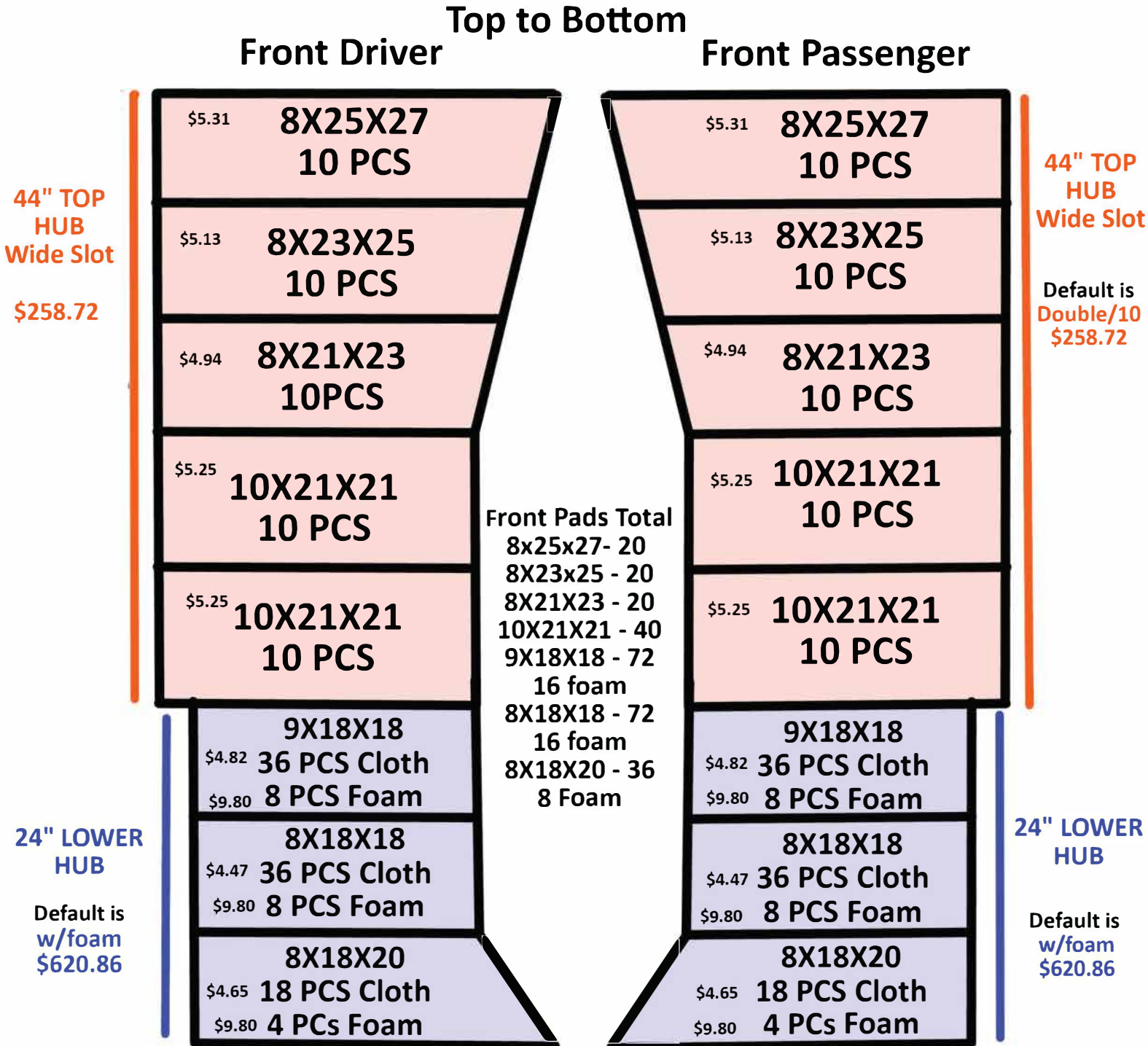


F = Foam Pads
C = Cloth Pads
S = Spacers

Car Wash Model C Foam Addition

3K / Current layout on Production Machine

10 piece PF Cloth (Double) is now what we will ship and quote unless told otherwise. Explain to dealership when quoting that we do 10 now unless they have a lot of passenger side antennae.



For Quantities Less than 44 Space Evenly Around Hub

Car Wash Model C

3K / Current layout on Production Machine

This is the size cloth we will now use on all production and replacement cloth unless otherwise stated.

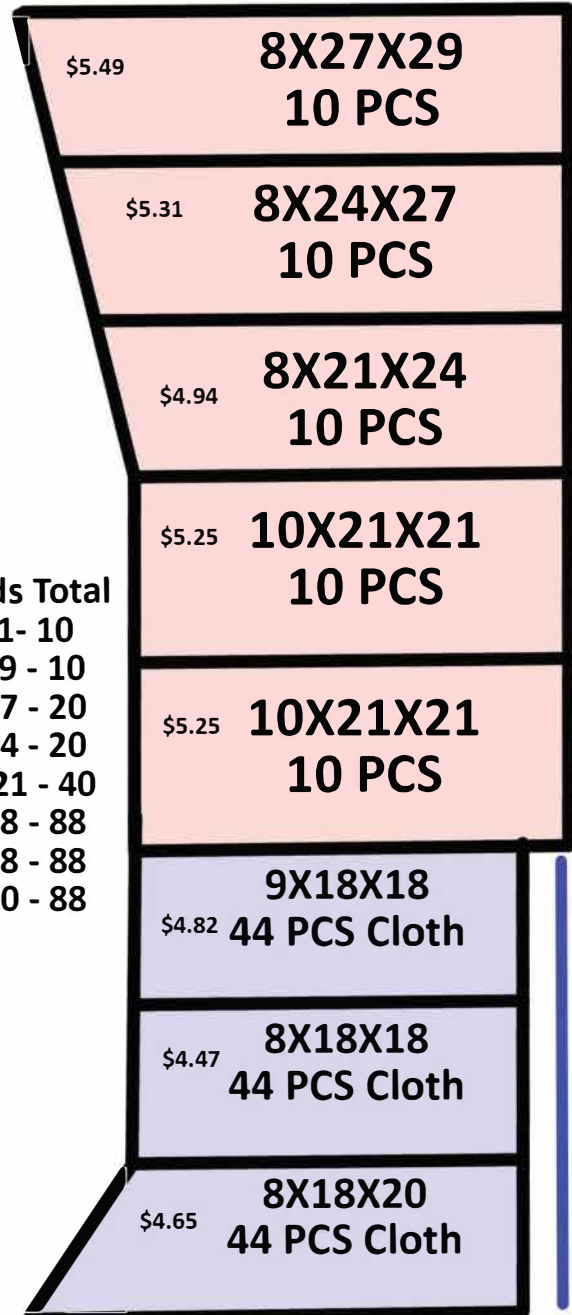
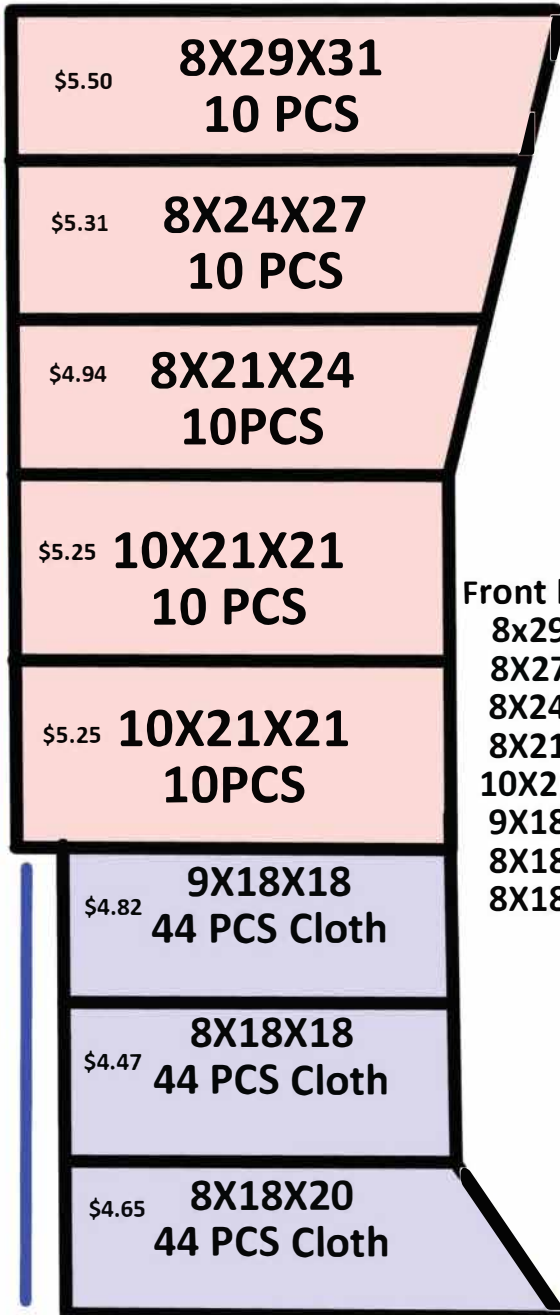
Top to Bottom

Rear Driver

Rear Passenger

44" TOP
HUB
Thin Slot

\$258.72



44" TOP
HUB
Thin Slot

\$258.72

Front Pads Total
 8x29x31- 10
 8x27x29 - 10
 8x24x27 - 20
 8x21x24 - 20
 10x21x21 - 40
 9x18x18 - 88
 8x18x18 - 88
 8x18x20 - 88

24" LOWER
HUB

Default is
w/o foam
\$613.23

24" LOWER
HUB

Default is
w/o foam
\$613.23

For Quantities Less than 44 Space
Evenly Around Hub