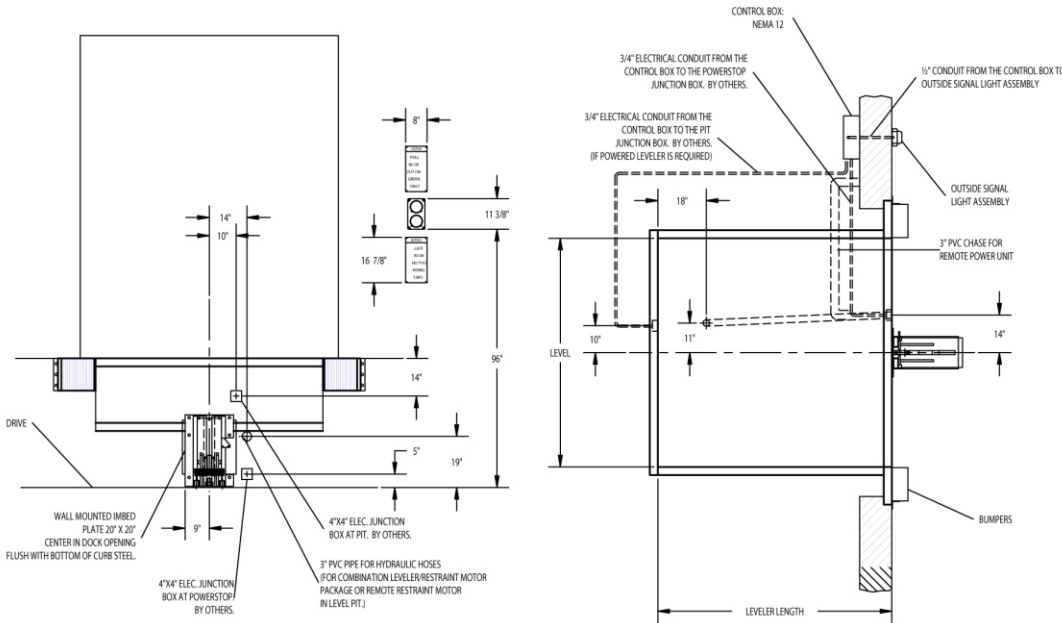


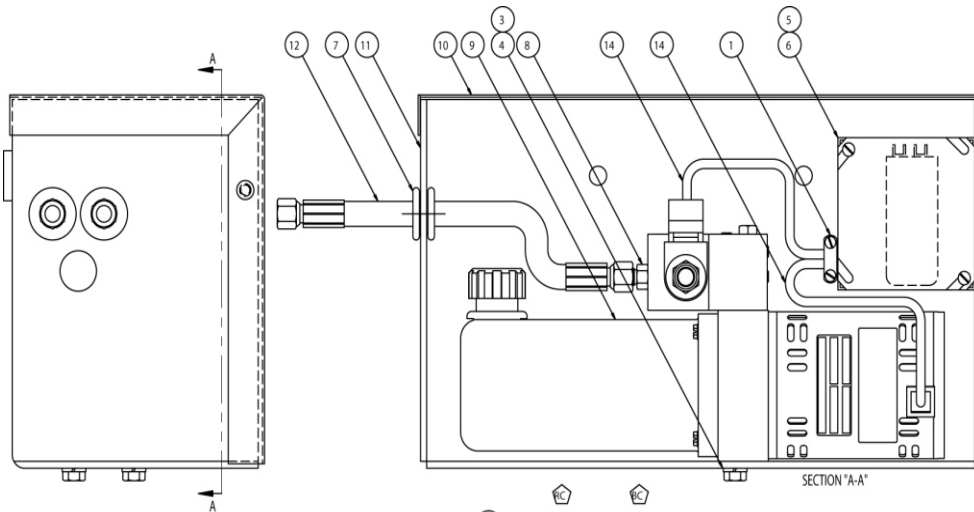
Automatic PowerStop Installation Overview

For comprehensive installation instructions of the Automatic PowerStop (PowerStop^{AAL}) read and understand the Installation and Operation Manual.

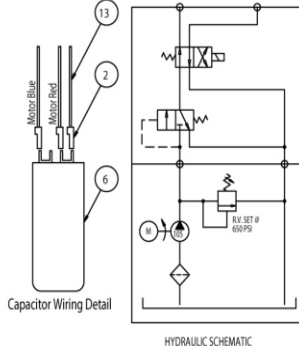


POWERSTOP^{AAL} POWERPACK

Conduit, flexible or rigid, must be connected between the limit switch on the restraint and the powerpack. Wiring to and from the restraint must be limited to restraint wires only. Do not run high voltage lines through the same conduit as restraint wires. Conduit and associated hardware to complete wiring and mounting of powerpack are to be supplied by others.



ITEM	QTY	PART NO.	DESCRIPTION	SIZE
1	1	1431-0011	Connector - 2-Screw	3/8
2	3	1431-0086	Insulated Terminal	16-14 AWG
3	2	2101-0017	Hex Head Capscrew	3/8-16 UNC X 1
4	2	2101-0140	Lock Washer	3/8
5	1	2751-0016	Cover - J-Box	4 X 4
6	1	3051-0058	Capacitor - Motor Start	64-77mf - 330V
7	2	6431-0001	Grommet	1-3/8 OD X 3/4 ID
8	2	9301-0164	Fitting Conn Str Thrd	#4 ORB X #4 JIC
9	1	9391-0009	Powerpac - PowerStop	1PH - 115V - 1/4 HP - 1 GPM
10	1	9392-0045	Cover - PowerStop	8 CAD
11	1	9393-0025	Powerpac Mounting Weldment	8 CAD
12	2	9904-0097	Hyd Hose Assy - 1/4" 100R1 X 24.00	#4 JIC SWVEL BOTH ENDS
13	1	RS13-0050	Wire	16 GA RED X 5.00'
14	2	RS98-0090	Split Flex Conduit	1/4" X 9.00'



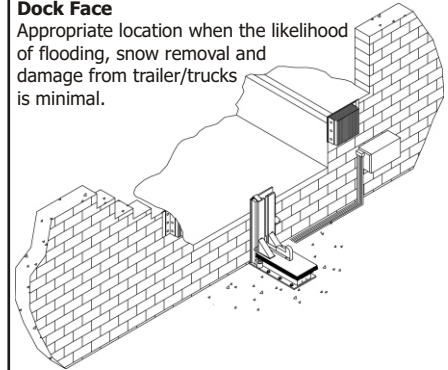
NOTE	DESCRIPTION
BC	CONNECT TO BASE END OF RELEASE CYL.
RC	CONNECT TO ROD END OF RELEASE CYL.

POWERPACK LOCATION OPTIONS

Coordinate powerpack location and hose length for proper placement.

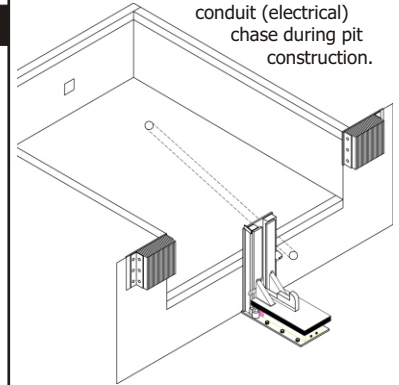
Dock Face

Appropriate location when the likelihood of flooding, snow removal and damage from trailer/trucks is minimal.



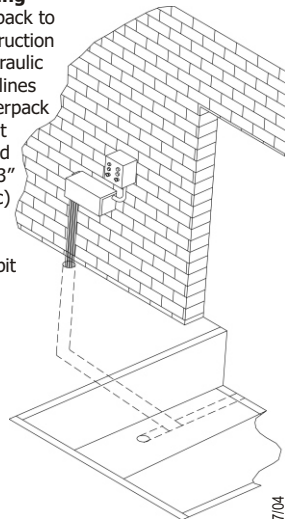
Under The Dock Leveler

When under dock location is used, make certain to locate the powerpack where leveler will not interfere in below dock conditions. The routing of hydraulic and electrical lines from the powerpack to the restraint are best placed through min. 3" PVC (hydraulic) and 3/4" conduit (electrical) chase during pit construction.



Inside Building

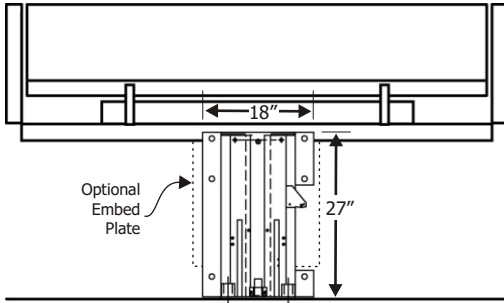
Locate powerpack to minimize obstruction potential. Hydraulic and electrical lines from the Powerpack to the restraint are best placed through min. 3" PVC (hydraulic) and 3/4" (electrical) chase during pit construction.



Automatic PowerStop Installation Overview

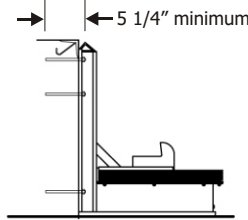
For comprehensive installation instructions read and understand the Installation and Operation Manual.

Concrete Dock Face (Standard installation)



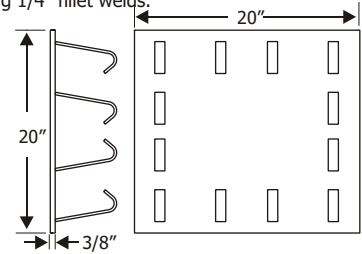
Wedge Anchors Method

Using back plate as a guide, drill six (6) holes for wedge anchors (3/4"x 5 1/4" min.) (Kit #2103-0003)

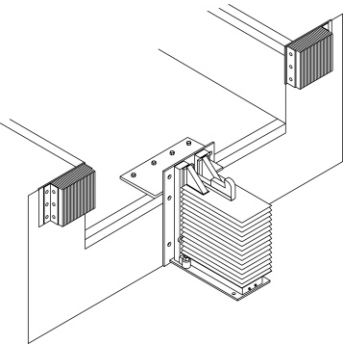


Wall Embed Method

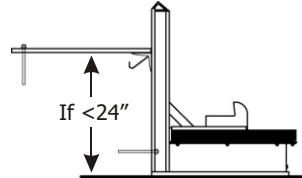
Weld three sides of PowerStop back plate to the optional embed mounting plate (Part #7953-0119) with ten (10) 4" long 1/4" fillet welds.



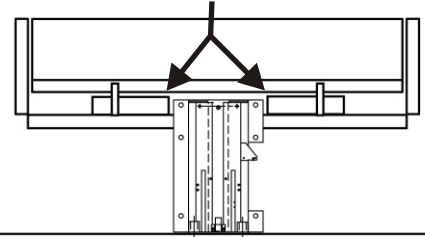
Low Pit Floor (Distance from pit floor to drive under 24")



Anchor pit floor mounting plate (minimum 3/8" x 20"W x 8" D) (Part #9414-0056) with four (4) (3/4"x 5 1/4" min.) wedge anchors. Weld mounting plate to curb steel and back plate of PowerStop with a continuous 1/4" fillet weld. Anchor back plate of PowerStop to dock face with a minimum of (4) 3/4" x 5 1/4" wedge anchors (Kit#2103-0003).



Trim or cut front frame member when necessary to allow for pit floor mounting plate.

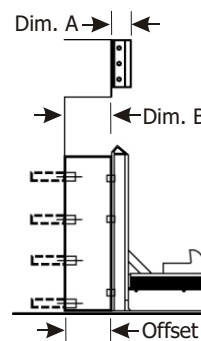
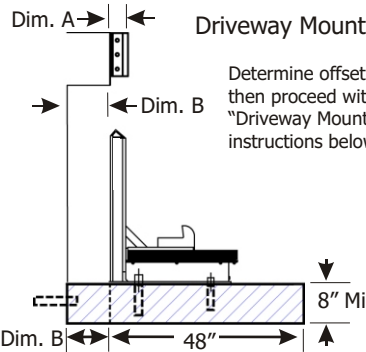


Cantilevered Dock (For bumper projection >4" or cantilevered dock or Edge-of-Dock leveler)

To determine size offset required, take total effective bumper projection (bumper size plus any cantilever) and subtract 4".

Offset Formula

Dim. A Bumper Projection	Dim. B Cantilever	Offset
4"	+ Dim B	-4" = Offset
6"	+ Dim B	
10"	+ Dim B	
15"	+ Dim B	

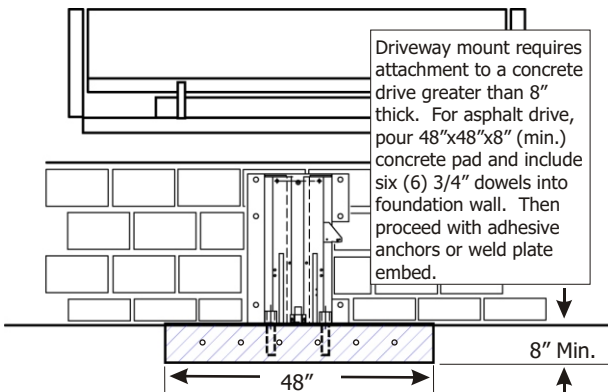


Wall Mount

For filler requirements from 1 1/2" to 7 1/2" use cantilever bracket #9414-0052 and anchor cantilever bracket to the dock face or weld to embedded mounting plate (Part #7953-0119)

For filler requirements for 8 3/4" to 13 3/4" use cantilever bracket #9414-0053 and anchor cantilever bracket to the dock face (3/4" Dia. X 5 1/4" min.) (Kit #2103-0004) or weld to embedded mounting plate (Part #9414-0052).

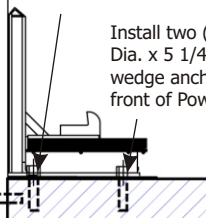
Driveway Mount (Recommended when dock face is unsuitable for PowerStop Mounting)



Driveway mount requires attachment to a concrete drive greater than 8" thick. For asphalt drive, pour 48"x48"x8" (min.) concrete pad and include six (6) 3/4" dowels into foundation wall. Then proceed with adhesive anchors or weld plate embed.

Adhesive Anchors Method (Kit #9414-0058)

Install two (2) 1" Dia. adhesive anchors into 1-1/8" Dia. x 7" deep hole at rear of PowerStop.



Install two (2) 3/4" Dia. x 5 1/4" min. wedge anchor at front of PowerStop.

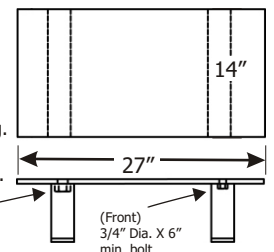
Drive Embed Method

Weld method

Properly locate and level the drive embed weld plate (Part#7953-0059) in the drive approach. Observe Cantilever conditions for proper positioning. Weld restraint to embed plate with a continuous 1/4" fillet weld.

Bolt on Method

Properly locate and level the drive embed plate (Part#9414-0057) in the drive approach. Observe cantilever conditions for proper positioning. Using the bolts included, bolt the restraint to the embed plate.



A continuing product improvement process is in effect at Systems, Inc. We reserve the right to make product changes without prior notice.