

Model VS-20-5 Specs:

- 20" W x 5" D non-skid stepping surface
- 6" drop
- Sustains a static load of 500lbs.
- Meets NFPA 1901-09 requirements for slip resistance and static load
- Only requires 24" W x 9" D mounting surface
- Only requires 2-1/2" drop mounting flanges to clear components
- Deploys in under 2 seconds

A Step Above the Rest

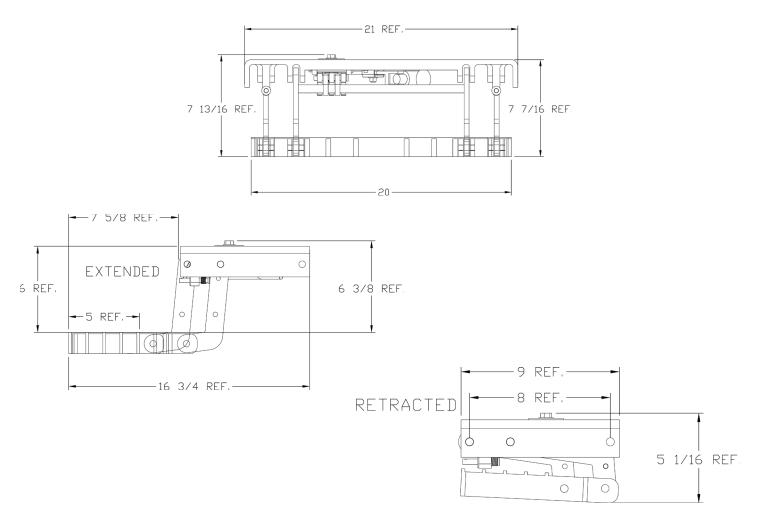
Model VS-20-5 Features:

- Mounts in smaller, more restrictive spaces where most other steps can't fit making it ideal for tilt cabs and other apparatus with depth limitations, such as cylindrical air filters (see below)
- Powered by a 12v electric actuator with a patented over-center locking mechanism to hold extended step rigidly in place
- Step may be wired into the door interlock system to automatically extend when door opens and retract when door is closed
- May be retrofitted onto existing apparatus
- Low maintenance
- Made from high strength aluminum alloy and steel for durability
- Powder-coated and plated for corrosion resistance



MODEL	DESCRIPTION	WT./@ IN LBS.
VS-20-5	Retractable Vehicle Step	28

Dimensions



Wiring Information

MODE OF OPERATION

* PROVIDE POWER TO VS-20-5

EXTEND MODE:

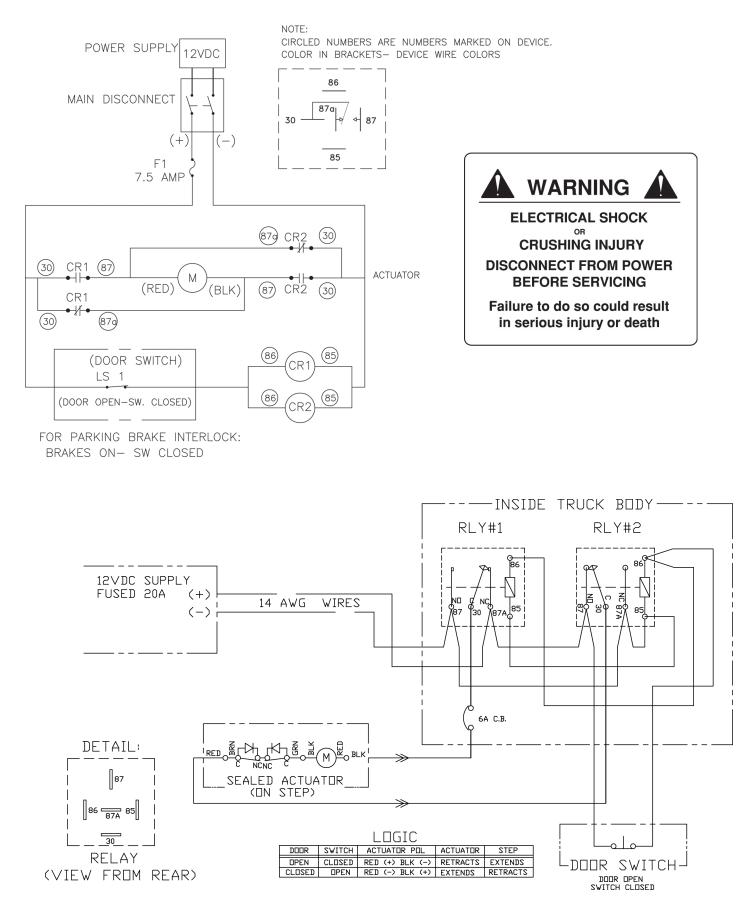
- * STEP WILL AUTOMATICALLY EXTEND AS SOON AS THE DOOR IS OPENED.
- * STEP WILL REMAIN EXTENDED SO LONG AS DOOR REMAINS OPEN.

RETRACTED MODE:

- * STEP WILL AUTOMATICALLY RETRACT AS SOON AS THE DOOR IS CLOSED.
- * STEP WILL REMAIN RETRACTED AS LONG AS DOOR REMAINS CLOSED.

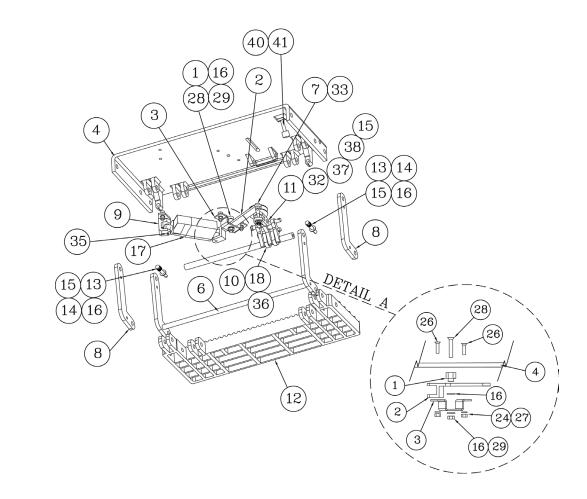
ITEM	DESIGNATION	PART NO.	DESCRIPTION	QTY.
1	\mathbb{M}	3094-020-113	Actuator	1
2		0000-025-101	Fuseholder	1
3	F1	3094-200-157	Circuit Breaker, 6 Amp, Self Resetting	1
4	LS1	3097-270-105	Door Switch	1
5	CR1, CR2	3094-200-163	Relay	2
6		3094-200-165	Connector w/Terminals	2
7		3097-270-113	Butt Splice, Blue	4

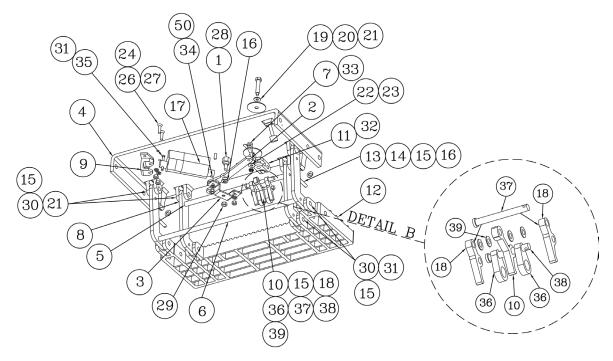
FIGURE 1 - FIELD WIRING DIAGRAMS

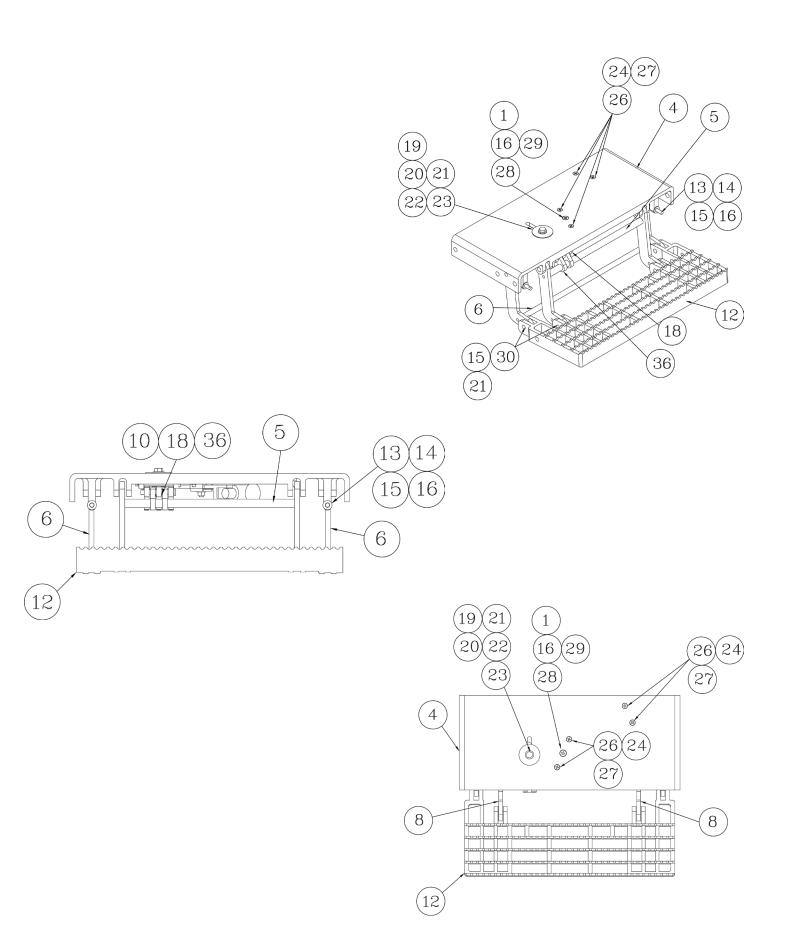


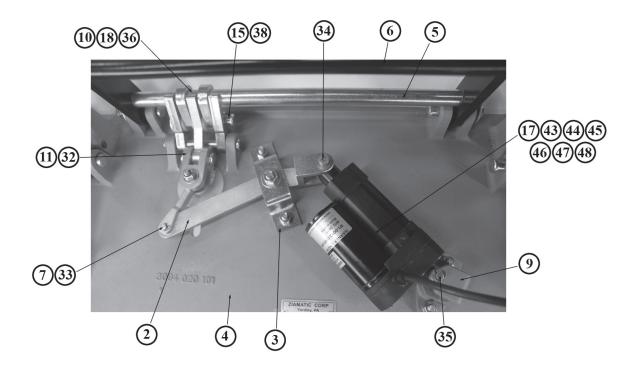
Parts Breakdown

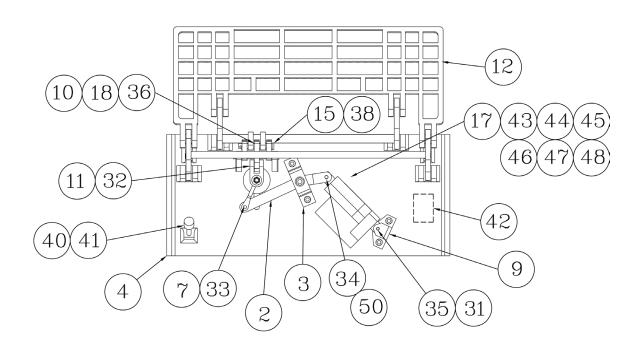
ITEM NO.	PART NO.	DESCRIPTION	QTY.	ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	3094-020-109	Short Step Spacer	1	25	9110-102512	Screw, 5/16-24 x 3/4, Hex	2
2	3094-020-111	Short Step Linear Link C	1		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Hd., SS	_
3	3094-020-115	Short Step Bridge	1	26	9010-462516	Screw, Flat Hd. 1/4-20 x 1"	4
4	3094-020-101	Short Step Base	1	27	9015-172500	Nut, 1/4"-20	4
5	3094-020-119	Short Step Rod A (12.750")	1	28	9110-363128	Screw C'Sink 5/16-18 x 1-3/4"	1
6	3094-020-105	Short Step Arm Weldment	1	29	9012-103100	Nut, 5/16"-18	1
7	3094-020-121	Step Linear Link B	1	30	9080-004332	Clevis Pin, 7/16 x 2"	8
8	3094-020-117	Short Step Arm	4	31	9170-000608	Cotter Pin, 1/16" x 1/2", S.S.	3
9	3094-020-107	Short Step Actuator Mount	1	32	9080-003720	Clevis Pin, 3/8" x 1-1/4"	1
10	3094-020-123	Short Linear Link A	1	33	9080-002512	Clevis Pin, 1/4" x 3/4"	1
11	3094-020-125	Short Step Universal link	1	34	9010-312524	Shoulder Bolt, 1/4" x 1-1/2"	1
12	3094-020-103	Short Step Thread	1	35	9080-002528	Clevis Pin, 1/4" x 1-3/4"	1
13	3094-020-139	Compression Spring	2	36	3094-020-133	Short Step Lock Joint A	2
		.48" O.D., .067 1.25" L, S.S.		37	9080-003752	Clevis Pin, 3/8" x 3-1/4"	1
14	9080-003132	Clevis Pin, 5/16" x 2"	2	38	9080-003742	Clevis Pin, 3/8" x 2-5/8"	1
15	9170-001212	Cotter Pin, 1/8 x 3/4; SS	16	39	3097-105-130	Washer, Nylon 3/8" I.D.	4
16	9114-113100	Washer, 5/16" Nom. S.S.	6	40	1027-105-133	Red Bumper	1
17	3094-020-113	Actuator	1	41	9010-573132	5/16-18 x 2" Threaded Rod	1
18	3094-020-129	Short Step Lock Joint B	2	42	3094-005-190	Disconnect Power Tag	1
19	3094-020-131	Nylon Washer, 2" O.D.,	2	43	0000-061-020	22-20 Ga. Cavity Seal, Purple	2
		.388" I.D. 1/16" Thick.		44	0000-061-018	22-18 Ga. Cavity Seal, Green	2
20	9010-622506	Shoulder Bolt 1/4-20 x 3/8 x 1.625	1	45	0000-060-002	Weather Pack Housing, Female	2
21	9014-113700	Washer, 3/8ø Nom. ZPS	9	46	0000-060-001	Weather Pack Housing, Male	2
22	9114-112500	Washer, 1/4ø Nom.	5	47	0000-062-180	20-18 Ga. Weather Pack	2
23	9013-172500	Low Profile Nylock Nut,	1			Terminal, Male	
24	9014-202500	1/4-20 Lock Washer, 1/4ø	8	48	0000-062-181	20-18 Ga. Weather Pack Terminal, Female	2
				49	9014-203100	Lock Washer, 5/16" Nom.	2
				50	9113-171900	Nyloc Nut, 10-24	1

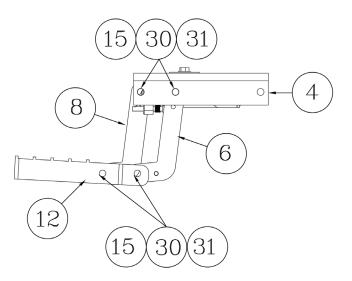


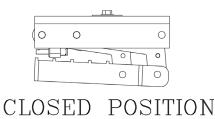












Mounting to Apparatus

A. An 8" center to center hole pattern is provided in the side flanges of the base casting, centered on the 9" deep casting. Additional holes may be added as needed.

B. Because of the component parts elevated above the base casting, a minimum of 1-3/4" is required above the center of the mounting holes.

C. The length of the base is 21".

D. Plates extending down from the apparatus structure that the step is mounted to must be strong enough to support 500 lbs. on the extended step.

E. 3/8" diameter mounting hardware, a minimum of four, is required

<u>Maintenance</u>

- A. Semi-Annually or at Scheduled Apparatus Lube Service
 - 1. Visually inspect step for excess dirt build-up and debris.
 - 2. Lubricate all joints and pivots with CRC Stor & Lube long-term lubricant and rust preventative #03032. Excess lubrication should be wiped off.

