



A Safe Fleet Brand

MANSAVER BARS

MODELS:

MSA110 ManSaver Bar

MSA120 Platform Bar

MSA300 Bench Seat Bar

MSA406, MSA410 Aerial Bar

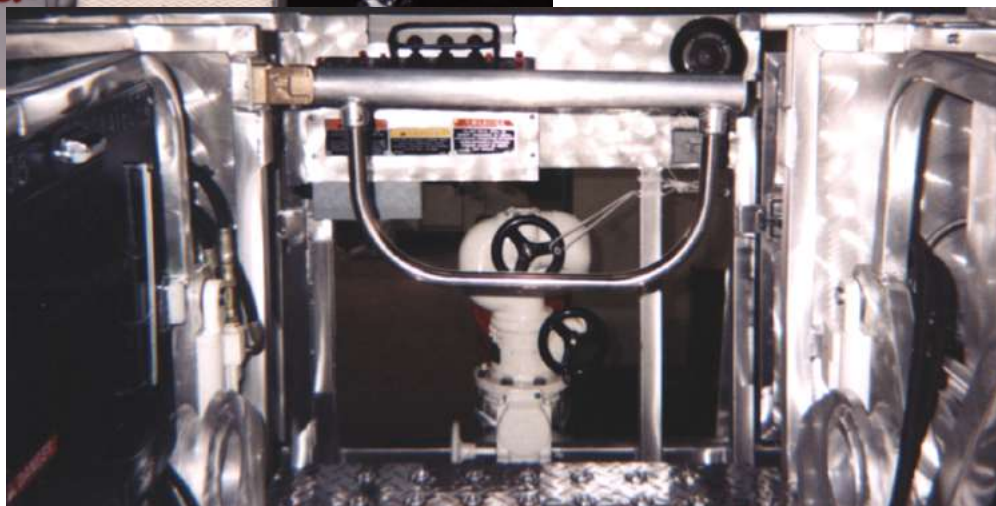
ManSaver Bars



Bench Seat Bar



Aerial Bar



FIRE RESEARCH CORPORATION

www.fireresearch.com

26 Southern Blvd., Nesconset, NY11767

TEL (631) 724-8888 FAX (631) 360-9727 **TOLL FREE 1-800-645-0074**

CONTENTS

Table of Contents

CONTENTS.....	2
List of Tables and Figures.....	2
INTRODUCTION	3
Overview.....	3
Specifications	3
WEDGE SHIMS	4
INSTALLATION	6
REPLACE VINYL COVER AND PADDING	8
SPRING REPLACEMENT	10
WIRING.....	11

List of Tables and Figures

Table 1. Wedge Shim Selection Chart.....	4
Figure 1. Wedge Shims	5
Figure 2. Mounting Bar.....	7
Figure 3. Replace Vinyl Cover and Padding.....	9
Figure 4. Spring Replacement.....	11

INTRODUCTION

Overview

TheManSaver is a safety bar that mounts across the opening on walk-through pumpers. This innovative device will help prevent a fall from a walk-through.

The ManSaver is spring loaded so that it always returns to a horizontal position. There are no hooks to latch or harnesses to buckle. This clever design helps insure that the walk-through will always be protected as firefighters do not waste time closing or latching anything behind them. To enter, push the ManSaver in or up. To exit, simply lift it.

The ManSaver is made of aluminum extrusion and aluminum bronze castings, thereby making it rust proof. It is covered with a heavy layer of foam and a tough rip-stop vinyl outer covering to protect against injuries. It is available in even sizes from 14 through 36 inches. The standard bar is provided with bright yellow vinyl cover, red is an available option.

TheManSaver must be attached to a strong surface or sturdy support. Each bar is supplied with dependable, heavy-duty, grade-8 mounting bolts.

The aerial bar is a variation on the standard ManSaver. This bar has a stainless steel U-shaped tube welded to it to cover more area and to help prevent a person from slipping underneath the bar. It is designed for use at the top of an aerial device or at the back of the bucket where the ladder leads down to the elevated turntable.

Specifications

Standard kit includes one bar and mounting hardware.

Kit Numbers

ManSaver Bar	MSA110-AXX
Platform Bar (w/o Pad and Cover)	MSA120-AXX
Bench Seat Bar	MSA300-AXX
Aerial Bar with 6" loop	MSA406-AXX
Aerial Bar with 10" loop	MSA410-AXX

XX = Length (in inches)

ManSaver/Platform bar length: 14,16,18,20,22,24,26,28,30,32,34,36 inches

Bench Seat bar length: 16,18,20,22,24 inches

Aerial bar length: 24,26 inches

OPTIONS: Cover Color • Decal • Upright Pin • Rail Bracket

WEDGE SHIMS

To mount a bar at an angle, wedge shims will be required.

Measure for the Bar

1. Measure the distance between mounting surface and opposite surface to obtain the ManSaver length L. (Refer to Figure)
2. Be sure to leave at least 1/2" clearance at the free end of the bar.
3. Measure how much wider one surface is than the other to obtain the offset width W. (Refer to Figure)
4. Use the wedge shim selection chart.

Using the Wedge Shim Selection Chart (Refer to Table)

For this example L=26", W=7"

1. On the left side of the chart find the Length (L).
For the example this is 26.
2. Read across the chart horizontally, select the offset width (W) that is equal to or less than the actual width measured.
For the example the closest value is 6 1/2".
3. Look to the top choose the corresponding shim type.
In the example the wedge shim required is Type C.

Table 1. Wedge Shim Selection Chart

		Wedge Shim Type			
		A	B	C	D
Mansaver Bar Length (L) in Inches	18	2	3	4½	6
	20	2	3½	5	7
	22	2	4	6	7½
	24	2	4	6	8
	26	2½	4½	6½	9
	28	2½	5	7	9½
	30	2½	5	7½	10
	32	3	5½	8	11
	34	3	6	9	11½
			Offset Width (W) in Inches		

Wedge Type	Degree of Angle
A	5°
B	10°
C	15°
D	20°

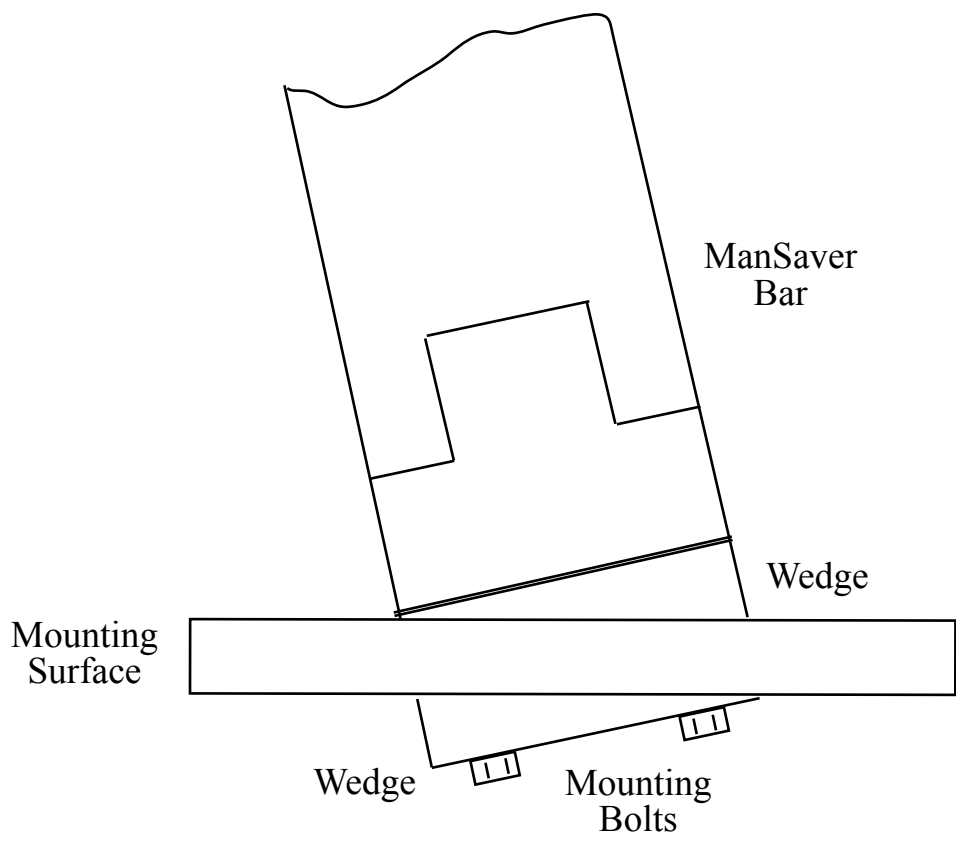
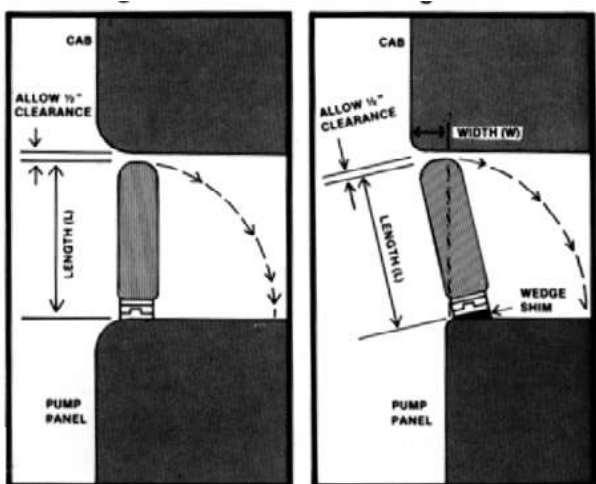


Figure 1. Wedge Shims

INSTALLATION

Ensure that the mounting area is strong enough to absorb the loads that the ManSaver bars will impose upon it. A reinforcing plate (1/4" thick minimum) should be used to brace the mounting area.

ManSaver bars can be mounted to the left or right. Ensure that the bar is oriented correctly so that it opens to the up and in positions. (Bench Seat bars will only open up.)

1. Measure and mark mounting location for drilling mounting holes. (Refer to Figure 2.)
2. Drill four 3/8" holes for the mounting bolts.

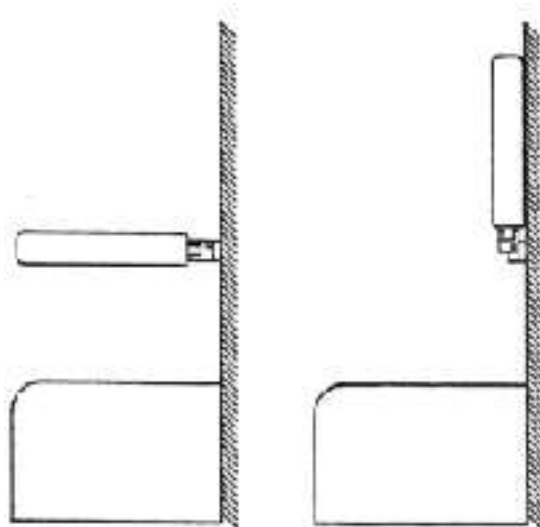
Note: Ensure that the bolts reach a minimum depth of 5/8" into the mounting block portion of the ManSaver bar.

3. Place bar (and wedges and reinforcing plate if used) in position (ensure that the bar is oriented correctly so that it opens to the up and in positions) and secure with four bolts.

For kits that use the rail bracket option:

1. Place the bracket in position and tighten the four bracket bolts.
2. Place the bar in position (ensure that the bar is oriented correctly so that it opens to the up and in positions) and secure with the four bolts.

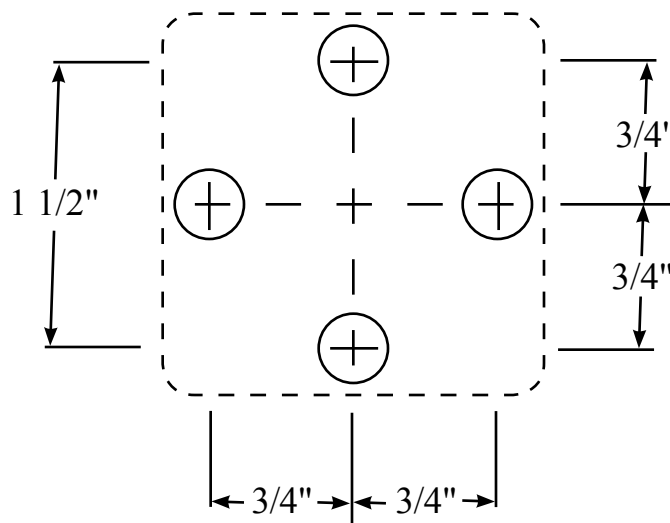
The Bench Seat bar can be pinned in the up position when not in use.



Bolt Hole Pattern

Drill 3/8" diameter holes. Ensure that the mounting area is strong enough to absorb the loads that the ManSaver will impose upon it.

The mounting block holes are pre-threaded for 5/16-18 bolts.

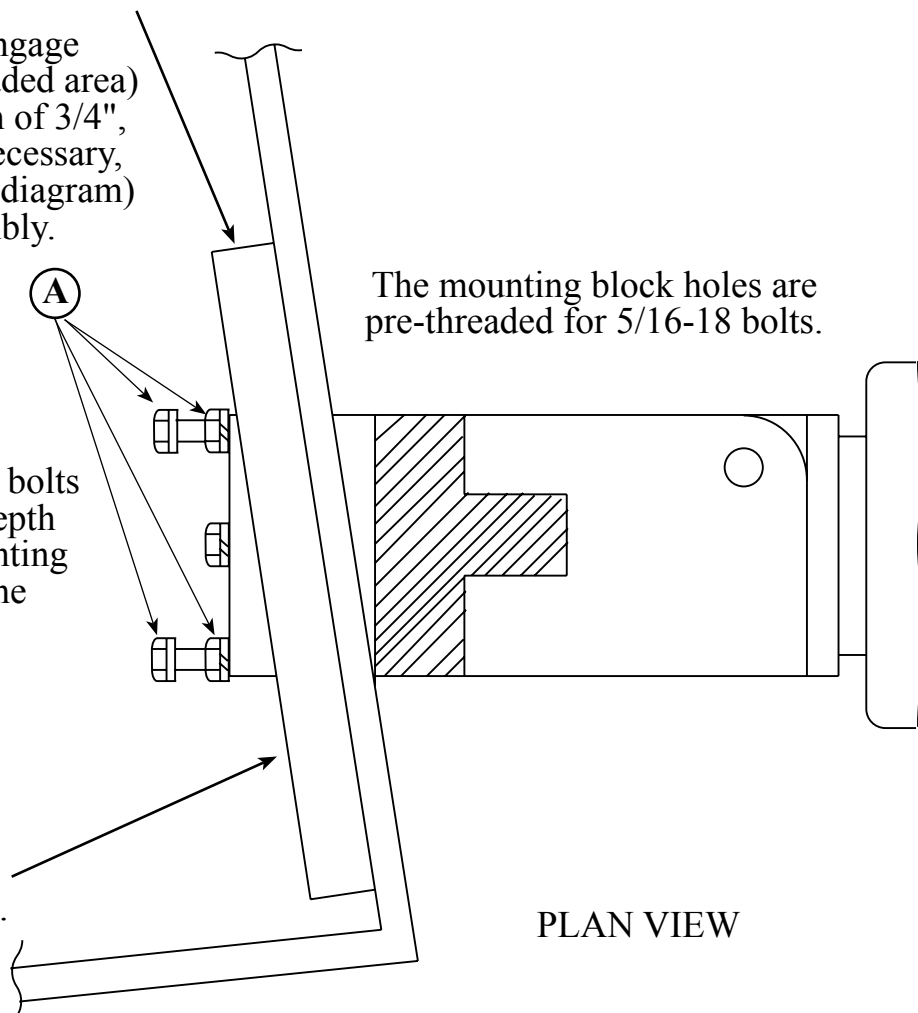


Reinforcing plate
(1/4" thick minimum)
is recommended.

Adjust bolts to engage mounting block (shaded area) to a maximum depth of 3/4", minimum 5/8". If necessary, use locknuts ("A" in diagram) to secure assembly.

Note: Ensure that the bolts reach a minimum depth of 5/8" into the mounting block portion of the ManSaver bar.

Drawing is shown with wedges installed.



The mounting block holes are pre-threaded for 5/16-18 bolts.

PLAN VIEW

Figure 2. Mounting Bar

REPLACE VINYL COVER AND PADDING

Kit Contents

- Vinyl cover with foam padding insert.
- Two part quick setting epoxy package.
- Wood stick for mixing and applying the epoxy.
- NO STEP sticker.

Tools Required

- Sharp Knife or razor.
- 50-80 grit coarse sandpaper.

Preparation

1. Make sure that the cover and padding are the right size for the bar. The vinyl cover should be 1 1/2" longer than the foam padding. If it is longer, cut the excess off.
2. Slide the cover over the padding and tuck the open end of the cover back into the center of the hole in the padding.
3. Remove the old cover from the bar.
4. Cut and/or scrape the old foam padding from the bar.
5. Sand the surface of the bar with rough sand paper.

Open end of cover
tucks into padding.



Install Cover

1. Clean the bar with alcohol or other metal degreaser. The bar must be free of grease and oil.

Note: The epoxy mixture will harden in approximately 3 minutes.
Read the following steps before mixing the epoxy. *These steps must be accomplished quickly.*

2. Cut the end of the epoxy packet and squeeze the epoxy and hardener out onto a clean disposable surface. Mix thoroughly with the wood stick.
3. Apply the epoxy mixture around the bar. (Spread a 6" swath around the mid section of the bar.)
4. Push the padding and cover onto the bar with a twisting motion. Ensure the cover and padding is snug up against the knuckle and bottomed out at the outer end.
5. Do not disturb the cover and padding for at least 2 hours while the epoxy cures.
6. Apply the NO STEP sticker (or other appropriate decal) 4-6 inches from the outer edge of the bar.

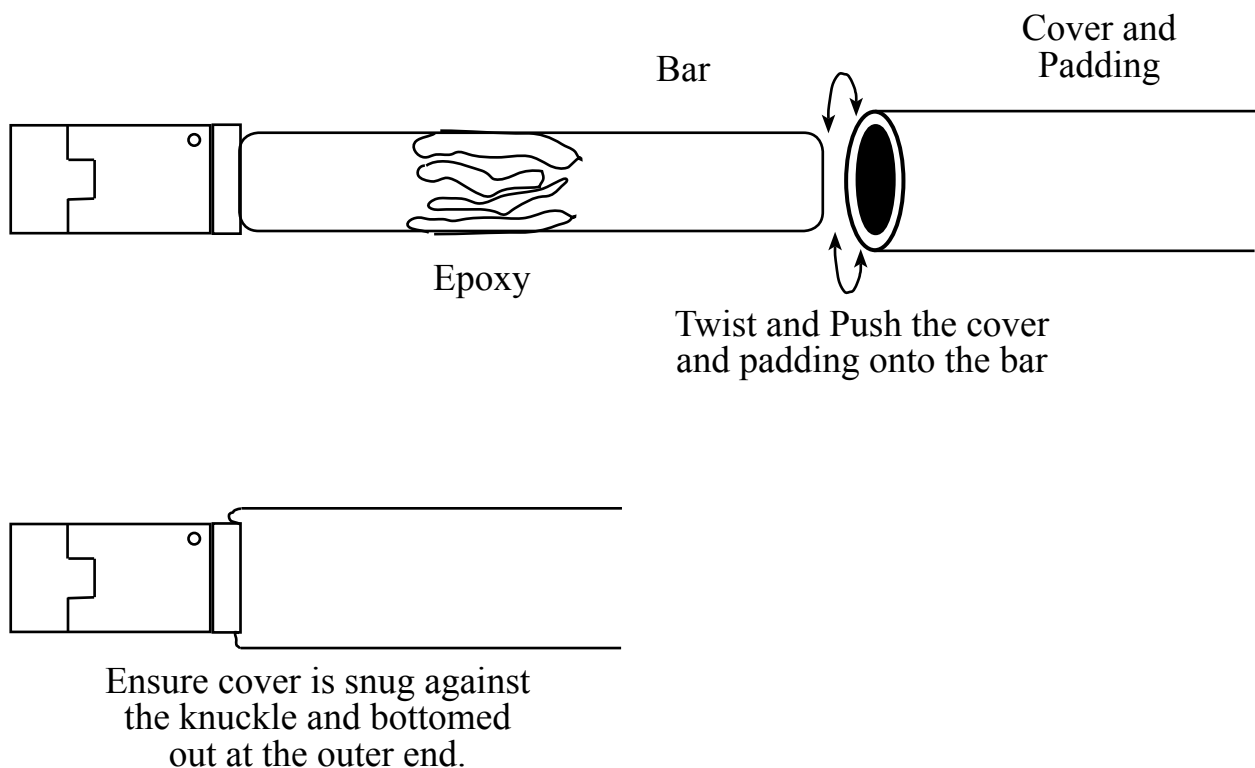


Figure 3. Replace Vinyl Cover and Padding

SPRING REPLACEMENT

1. Remove the vinyl cover and padding with a sharp knife.
2. Remove the old parts from inside the bar.
3. Insert a long piece of string through the knuckle and the bar so that it hangs out both ends. (Refer to figure 4.)
4. Place the knuckle in a vise at the edge of a table such that the aluminum bar hangs pointed downward.
5. Put the spring assembly together as follows:
 - a. Insert chain through aluminum button.
 - b. Through the last link of the chain, place one of the two short pins to hold the chain in place.
 - c. Holding button and chain, drop loose chain end through the spring.
 - d. Holding the loose end of the chain, flip the assembly over.
6. Tie the spring assembly (now hanging upside down) to the string coming out of the aluminum bar.
7. Pull the spring assembly through the bar by pulling on the other end of the string hanging out of the knuckle.
8. Make sure the spring sits into the drilled recess in the knuckle, and pull the string tightly through. As soon as you see the end of the chain, grab it with a pliers and pull it tight.
9. To keep the spring taught, pin it in place with the other pin provided.

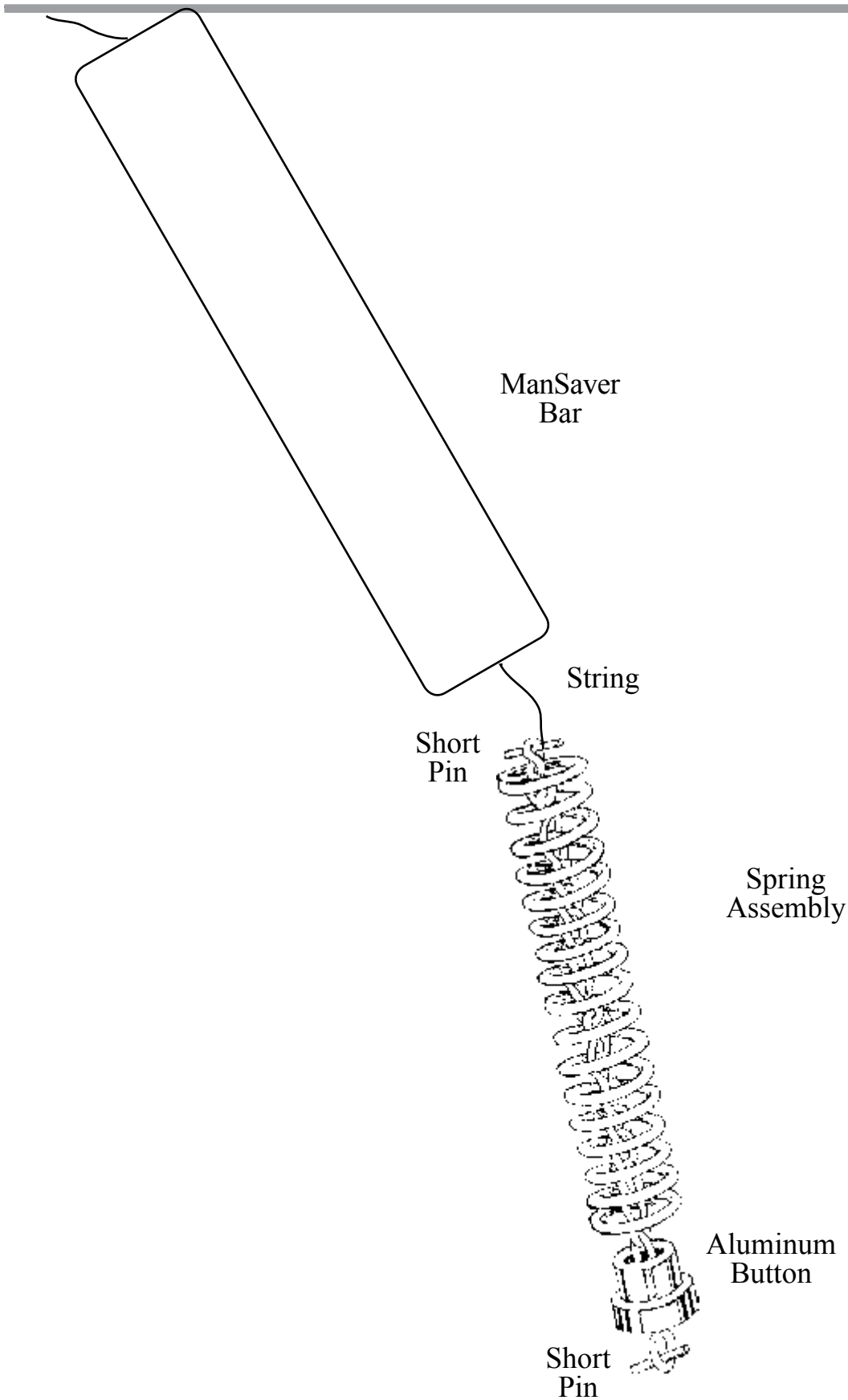


Figure 4. Spring Replacement



DANGER

PERSONAL RESPONSIBILITY CODE

The member companies of FEMSA that provide emergency response equipment and services want responders to know and understand the following:

1. Firefighting and Emergency Response are inherently dangerous activities requiring proper training in their hazards and the use of extreme caution at all times.
2. It is your responsibility to read and understand any user's instructions, including purpose and limitations, provided with any piece of equipment you may be called upon to use.
3. It is your responsibility to know that you have been properly trained in Firefighting and/or Emergency Response and in the use, precautions, and care of any equipment you may be called upon to use.
4. It is your responsibility to be in proper physical condition and to maintain the personal skill level required to operate any equipment you may be called upon to use.
5. It is your responsibility to know that your equipment is in operable condition and has been maintained in accordance with the manufacturer's instructions.
6. Failure to follow these guidelines may result in death, burns or other severe injury.



Fire and Emergency Manufacturers and Services Association, Inc.
P.O. Box 147, Lynnfield, MA 01940 www.FEMSA.org

Copyright 2006 FEMSA. All Rights Reserved