

“Highway” Vehicle Stabilization Kit Specifications

Introduction

These purchase specifications cover the minimum requirements for a Vehicle Stabilization Kit with a 10,000 minimum working load capacity (rated with a 4 to 1 safety factor) to be purchased by _____. This system will consist of four (4) individually sized Acme Thread Rescue Struts, components and accessories. This equipment is to be used by emergency personnel for stabilization of crashed vehicles, with added capabilities for excavation collapse and to stabilize damaged or collapsed structures.

Instructions to Bidders

Bidders shall conform as much as possible to these specifications. Exceptions or omissions must be set out in writing on a separate sheet entitled “Exceptions” which must accompany the bid. Failure to do so will result in automatic rejection of the bid.

The buyer shall be the sole interpreter of the intent of any clause of these specifications and shall be the sole judge as to whether the equipment or any part thereof complies with the specifications.

The buyer reserves the right to reject any and all bids, to waive informalities in bidding, to negotiate small options with the successful bidder and to accept the bid, which in the opinion of the buyer, will be in its best interests.

General Construction Features

The Acme Thread Rescue Strut (main operational component of the stabilization kit) shall consist of two extendable struts not to exceed 25 and 37 inches respectively when collapsed. The Strut shall be 3 in. (7.6 cm.) diameter extruded seamless aluminum alloy tube with a solid moveable threaded shaft. Seamless tube is required to ensure a monolithic structure with predictable strength throughout and to provide superior strength, formability and finishing best suited for pressure applications found in emergency shoring operations.

All Rescue Struts and controls shall be hard coat anodized for protection and longevity. They shall extend manually or be activated by Air, Carbon Dioxide, or Nitrogen. The Rescue Struts shall be tested and capable of supporting the following loads at the corresponding lengths and safety factors below: All Rescue Struts shall be labeled with a 4-1 safety load chart.

Rescue Strut Load Table			
Length	Working Load Chart at Following Safety Factors		
ft. (m.)	2:1	3:1	4:1
2 (0.6)	43,500 (19,731.6)	29,000 (13,154.4)	21,750 (9,865.8)
4 (1.2)	35,880 (16,275.2)	23,920 (10,850.1)	17,940 (8,137.6)
6 (1.8)	28,250 (12,814.2)	18,830 (8,541.3)	14,125 (6,407.1)
8 (2.4)	24,050 (10,909.1)	16,030 (7,271.2)	12,025 (5,454.5)

Note: Working loads shown in lbs. (kg.)

Acme Thread Rescue Struts

The Acme Threaded Rescue Strut shall be available in two sizes of extendable struts and allow for soft placement at vehicle incidents where vehicle stabilization is required. They shall extend from approximately 24 inches to 36 inches and 36 inches to 58 inches respectively. All Rescue Struts shall easily interface with the following components and accessories.

Quantity (4) (2ea-24/36 inch and 2ea-36/58 inch)

Strut Extensions

Strut Extensions shall come in two specific lengths: 12 in. (30.5 cm.) and 24 in. (60.9 cm.) and be constructed of 3 in. (7.6 cm.) diameter extruded seamless aluminum alloy tube hard coat anodized for protection and longevity. Each Strut Extension shall have a spring-loaded locking pin to permit simple and secure connection to the Rescue Struts.

Quantity (2) each (12 inch 24 inch and 36")

Base Plates

Ground Base Plates shall be designed to support the Rescue Struts during operations and be hard coat anodized for protection and longevity. They shall measure 12 inches x 12 inches and provide an aggressive ground contact surface. They shall include a fastening point to attach anchoring straps/ratchet belts and a hinged connector which will allow the Rescue Strut to move through a 90 degree range for proper placement and support.

Quantity (2)

“V” Bases shall be provided to attach to the Rescue Strut; these bases shall have a spring-loaded locking pin to permit simple and secure connection to the Rescue Struts. The “V” base shall act as a cradle to support the vehicle and be hard coat anodized for protection and longevity.

Quantity 2

Cone Bases shall be provided to attach to the Rescue Strut; these bases shall have a spring-loaded locking pin to permit simple and secure connection to the Rescue Struts. The cone base shall have a hardened steel point to penetrate into the vehicle and safely support the vehicle load.

Quantity (2)

Ratchet Belts

Ratchet Belts shall have a minimum working load rating of 3,000 pounds and have a minimum length of 15 feet. They shall have positive hook fasteners at each end to secure the ratchet belts to the vehicle and base plates.

Quantity (4)

Warranty

The seller shall be required to furnish a warranty on the complete Highway Vehicle Stabilization System as described in these specifications for the service intended of the buyer. All equipment furnished by the successful bidder shall be warranted against all defects in material and workmanship for a period of at least five years from date of acceptance. The seller agrees to replace, without charge, any parts shown to be defective under the terms of this warranty.

Use, Care and Maintenance Manual

Seller shall provide an illustrated step-by-step guide on the use, care and maintenance of the Rescue Strut System provided.