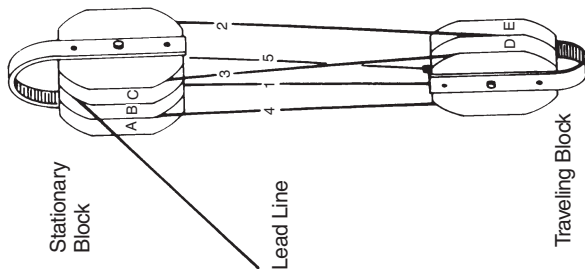
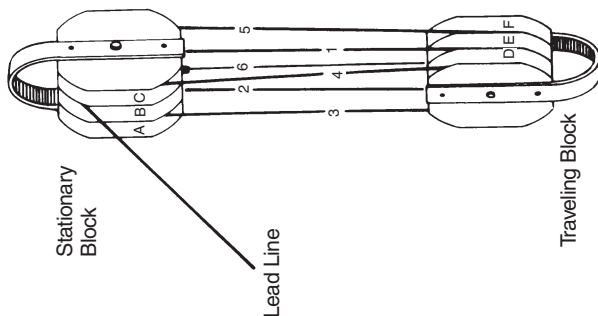


## FIVE-PART FALLS



## SIX-PART FALLS



## SEVEN-PART FALLS

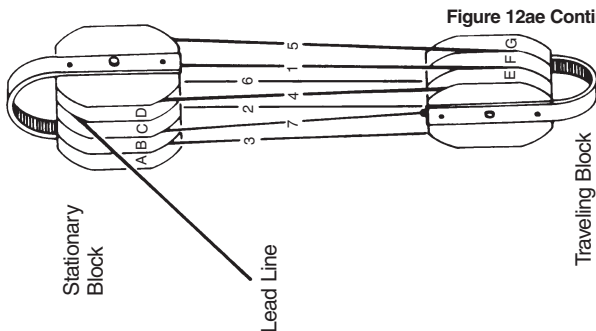


Figure 12ae Continued

This theory applies to two-part, three-part and four-part falls.

## 12.10 Manila Rope

- (a) Frozen manila rope shall not be used in load-carrying service.
- (b) Manila rope shall be protected from abrasion by padding where it is fastened or drawn over square corners, or sharp or rough surfaces.
- (c) Even the finest-quality rope deteriorates very rapidly when not given the best of care. Kinking, overheating, moisture and acid all cause deterioration, which is not readily noticeable upon casual inspection.
- (d) Manila rope shall be stored in a clean, dry location. Keep off pit floor, coil into protective device such as a drum.
- (e) Manila rope is not a substitute for wire rope. It shall only be used for lashings, tackles, tag lines, straps on light leads and temporary guy lines and light hoisting.
- (f) Points to look for during manila rope inspection are:

### **Good Characteristics**

Hard but pliant  
Silvery or pearly luster  
Inner fibers bright & clean  
Individual yarn strong  
Uncut and unabraded  
outer & inner fibers  
Stretch and spring good

### **Poor Characteristics**

Brown spots – weak, soft  
Black or dark spots – weak  
Abrasion of fibers  
Loss of stretch  
Cuts – Burns  
Dirt between inner fibers  
Freezing of rope

## 12.11 Synthetic Rope

- (a) Synthetic fiber ropes are made from nylon, polypropylene, or polyester. Synthetic fiber ropes consist of individual threads and fibers that run the full length of the rope (natural fibers are not continuous – in fact, they are short and overlapped).
- (b) Do not choose synthetic rope when burning and welding. Synthetic rope is also more likely to be affected by chemicals and it tends to be slippery.
- (c) Do not use clamps for splicing synthetic rope unless it is specifically designed for this purpose.