

## FABRIC BODY BELTS AND SAFETY STRAPS

### DESCRIPTION AND USE

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#### 1. GENERAL

1.01 This section describes the standard fabric body belts and safety straps and covers instructions and precautions pertaining to their use and care.

1.03 The degree of comfort and satisfactory service a workman obtains from a body belt depends to a large extent on the locations of the Dee rings with respect to the prominent portions of the hip bones. The Dee rings should be slightly in front of the prominent portions of the hip bones. To obtain a properly fitting belt, measure the distance across the back to the desired locations of the Dee rings and order a belt of the size that comes nearest to this dimension. Body belt sizes are in inches

and are determined by measuring the distance between Dee rings with the belt lying flat.

1.04 Information on tool holsters and the handline carrier for use with body belt is given in Section 081-720-111.

#### 2. DESCRIPTION

##### C BODY BELT

2.01 The C Body Belt is a lightweight belt intended primarily for use by workmen who have only occasional need for a belt.

2.02 The C Body Belt is equipped with drop forged circular type Dee rings and buckle, and three or four tool loops depending on belt size. The 3-inch wide body section of the belt is made of three-ply neoprene impregnated nylon cloth and the buckle strap and tool loops of four-ply neoprene impregnated nylon cloth. The belt is furnished in four sizes designated 20, 22, 24, and 26. The belt weighs about 1-3/4 pounds for the sizes 20 through 24 and about 2 pounds for size 26.

2.03 Fig. 1 shows a C Body Belt as a "Left" belt. To be worn as a "Right" belt, the belt is turned over so that the belt buckle is on the left side of the wearer. When ordering combination holsters for use with the belt, specify either "Left" or "Right" type.

##### D BODY BELT

2.04 The D Body Belt includes a six-ply neoprene impregnated nylon fabric strap and buckle section that is permanently riveted to a 4-1/2 inch three-ply, neoprene impregnated nylon backing which incorporates two standard Dee rings. The backing is cushioned with chrome tanned leather for the comfort of the wearer. Leather tool loops, a wrench keeper, a tape thong, and accommodations for a combination holster are provided.



Fig. 1—C Body Belt

2.05 The six-ply strap has adequate strength to permit the wearer to secure himself with a safety strap attached to only one Dee ring. The D Body Belt is available as a "Left" or "Right" belt in sizes 18, 20, 22, 24, 26, and 28. The D Body Belt (Right) is illustrated in Fig. 2.

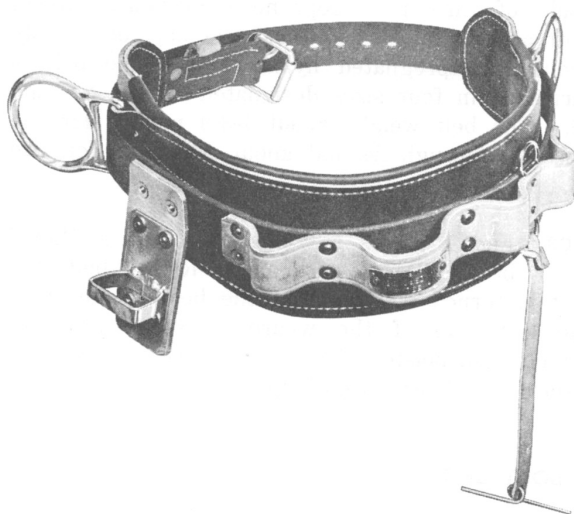


Fig. 2—D Body Belt

#### E BODY BELT

2.06 The E Body Belt is identical to the D Body Belt except that it is equipped with four

small Dee rings for use with suspenders or waist belt. The E Body Belt is illustrated in Fig. 3.



Fig. 3—E Body Belt

#### F BODY BELT

2.07 The F Body Belt is identical to the C Body Belt except that the strap portion is of six-ply construction, instead of four-ply construction, which provides adequate strength to permit the wearer to secure himself with a safety strap attached to only one Dee ring. The F Body Belt is illustrated in Fig. 4.

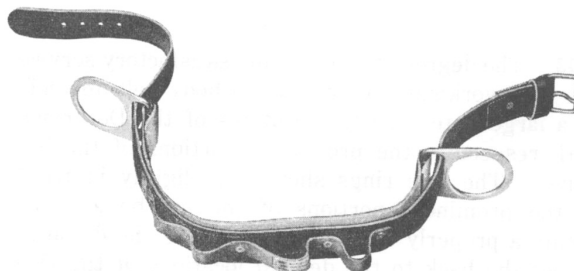


Fig. 4—F Body Belt

**D SAFETY STRAP**

**2.08** The D Safety Strap is a six-ply neoprene impregnated, nylon fabric strap. The center plies are of a contrasting color (red) from that of the outer plies. Exposure of the center plies by wear indicates that the strap should be removed from service.

**2.09** The D Strap (Fig. 5) is available in one size only. It is adjustable in length in increments of 1-1/2" from 36" to 61-1/2".



Fig. 5—D Safety Strap

**3. PRECAUTIONS**

**3.01** The safety strap, when in use, should be as short as practicable to minimize the potential falling distance.

**3.02** Before climbing a pole, see that the tongue of the buckle is properly seated in the desired hole in the safety strap.

**3.03** Do not allow a fabric body belt or safety strap to be run over by trucks, trailers, reels, or other heavy equipment or be subjected to damage caused by heavy objects falling or being dropped on the body belt or safety strap.

**3.04** *Never attach two or more safety straps together for additional length.* If one safety strap cannot be lengthened sufficiently, the method of doing the work shall be changed. If tree pruning operations are involved, only a rope sling shall be used.

**3.05** Do not use the body belt to assist in piking poles. If the pike pole should slip down between the belt and workman's body, serious injury could result.

**3.06** A workman may improve his security by placing the strap around the pole at a point directly above a crossarm, strand, pole step, or other secure attachment which is to remain in place while he is on the pole, provided the attachment is one foot or more from the top of the pole. Do not place a strap around an insulator pin, a bolt, or other insecure attachment.

**3.07** Never use electric light, power, or foreign signal circuit attachments as supports for the safety strap.

**3.08** Where either the snap hook or buckle of the safety strap is likely to contact the cable sheath, provision should be made to protect the sheath from damage. This protection may be provided by slipping a B Cable Guard over the cable or by wrapping the cable with muslin or friction tape at the place of contact.

**3.09** *See that the snap hook and Dee ring are properly engaged. Do not rely on feel or on the click of the keeper* in the snap hook when attaching a safety strap as an indication that the fastening is secure. The workman shall **look** and **know** that the snap hook is properly engaged before placing his weight on the strap. Always have keeper of snap hook on safety strap away from the body when engaged in the Dee ring.

**3.10** Never place or carry tools or materials in the Dee rings of the body belt. These items should be carried in holsters or other approved carriers. Foreign materials in Dee rings may prevent proper engagement of the snap hooks or give false indication of snap hook engagement.

**3.11** When climbing or working on a pole, do not fasten an uncoiled handline directly to the body belt or to tools carried in the belt. With the handline fastened to the belt, the workman could be pulled off the pole if the handline should be caught either on an obstruction or a passing vehicle. To allow the handline to pull free of the

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belt if it should be caught, use one of the following methods to carry or support a handline aloft:

- (1) Form the end of the handline into a loop and place the loop in the handline carrier.
- (2) Form the end of the handline into a bight and tuck the bight up under the body belt.

**3.12** *A workman shall never secure himself with a safety strap that is placed around a pole, strand, or other support in such a manner that both snap hooks are engaged in the same Dee ring of the body belt except in specific instances covered in this practice and then only when using the D, E, or F Body Belts. The D, E, and F belts may be readily identified by a metal instruction plate as shown in Fig. 6.*



**Fig. 6—Instruction Plate for D, E, and F Body Belts**

**3.13** The following are additional precautions:

- (a) Exercise care when working aloft so the keeper of the snap hook is not depressed accidentally by contact with wires, strand, crossarm braces, guys, and other attachments, or by crossarms, guard arms, cable cars, etc., that may be supported on the safety strap in the course of performing certain work operations.

- (b) A safety strap should never be used as a means of riding suspension strand.
- (c) Never use an improvised substitute of rope, wire, etc., for a safety strap or body belt.
- (d) Do not punch extra holes in a safety strap.
- (e) While wearing a safety strap which is not in use, both ends of the safety strap should be snapped into the same Dee ring. Care should be exercised to see that the safety strap does not catch on pole steps, and other attachments when climbing poles.
- (f) When climbing past another workman who has his safety strap in place around the pole, exercise care to avoid dragging the climber gaffs over his strap.
- (g) Avoid swinging rapidly around a pole in a safety strap.
- (h) Do not throw or drop a safety strap or body belt.
- (i) Exercise care to prevent damage to a safety strap and body belt from heat by contact with, or placing it near, a furnace, pot of hot solder, torch, or hot soldering copper.
- (j) Do not stand near a fire while wearing a safety strap or body belt.

**3.14** The following precautions should be observed when storing the safety strap and body belt when not in use:

- (a) Keep strap and belt away from radiators, stoves, steam pipes, fires, and other places where the fabric would be subjected to excessive heat.
- (b) A damp or wet strap or belt should not be packed in a locker, box, tool case, grip, or other container until it has been wiped with a dry cloth and allowed to dry completely by ventilation.
- (c) Straps and belts should never be stored with tools unless such tools are equipped with

satisfactory guards. When body belts, safety straps, and climbers are kept in the same container, the climbers should be fitted with gaff guards to avoid cutting or puncturing the strap or belt with the climber gaffs.

- (d) Store straps and belt in a location free from excessive humidity to prevent mildew.

#### 4. USE

**4.01** A man working on a pole shall secure himself with a body belt and safety strap. To accomplish this, attach one snap hook to a Dee ring and pass the free end of the safety strap around the pole. The strap should be flat against the pole without turns or twists. Engage the snap hook in the other Dee ring.

#### 4.02 Working from an extension ladder

(a) A man working from an extension ladder that is securely lashed to a suspension strand or other support shall use one of the following methods to secure himself with his body belt and safety strap. Attach one snap hook to a Dee ring, and either:

- (1) Pass the free end of the safety strap between two rungs and around one side rail, and engage the snap hook in the other Dee ring (Fig. 7) or
- (2) Pass the free end of the safety strap around a rung and engage the snap hook in the other Dee ring, or
- (3) Pass the free end of the safety strap over the suspension strand so as to loop the strand and engage the snap hook in the other Dee ring.

(b) A man working from an extension ladder which is properly placed on the strand but **not lashed** shall use the following method to secure himself with his body belt and safety strap. Attach one snap hook to a Dee ring and pass the free end of the safety strap around the strand and side rail, between two rungs, and engage the snap hook in the other Dee ring.

(c) When working from an extension ladder under conditions not covered above, a safety strap should not be used.



**Fig. 7—Method of Using Safety Strap When Working From Ladder**

**4.03** A man working from an aerial platform that is supported by a suspension strand or other support shall secure himself with his body belt and safety strap using one of the following methods:

(a) Attach one snap hook to a Dee ring and pass the free end across the front of the body, through the other Dee ring, and engage the other snap hook on the suspension strand. Use this method with belts other than the D, E, or F Body Belt. Fig. 8 shows this method used by a workman on an aerial platform.

(b) The straps of the D, E, and F Body Belts are constructed of material that is of sufficient strength to allow the belt to loop the strand with both ends of the safety strap attached to the same Dee ring as shown in Fig. 9. *The*



**Fig. 8—Method of Using Safety Strap When Working From Aerial Platform**

*method shown is not to be used with any body belt other than the D, E, or F body belts.*

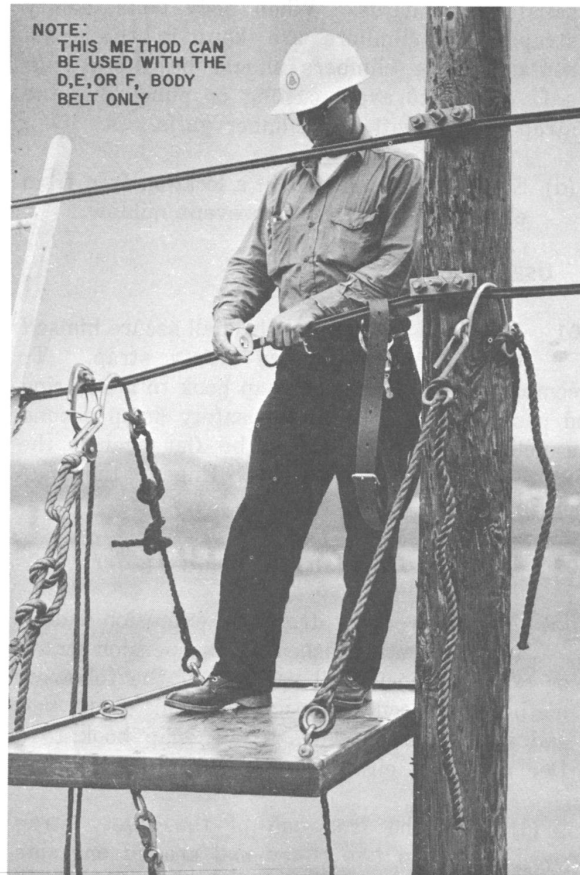
**4.04** A person working from a truck platform ladder shall loop his safety strap through the platform framework unless the platform is equipped with safety chains. If safety chains are provided, the chains shall be attached to the Dee rings of the body belt.

**4.05** A person working from the basket of an aerial lift shall secure himself in the basket. When working from a SERVI-LIFT or SKYWORKER aerial lift, the workman shall secure himself by attaching his safety strap to the eye (Fig. 10) provided in the basket. When working from a TELSTA aerial lift, use the method shown in Fig. 11.

**4.06** The D, E, or F Body Belt should be used at B-type cross-connecting terminals as shown in Fig. 12.

## 5. INSPECTION AND MAINTENANCE

**5.01** Each employee, when receiving a safety strap or body belt and at least once a week



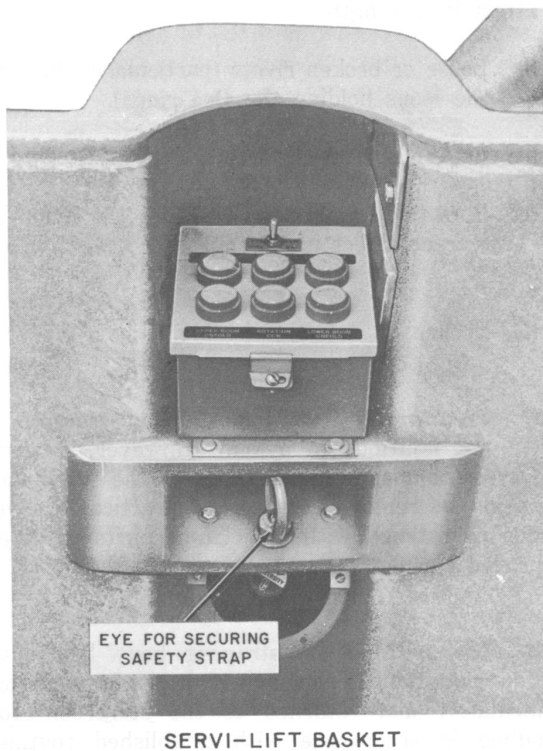
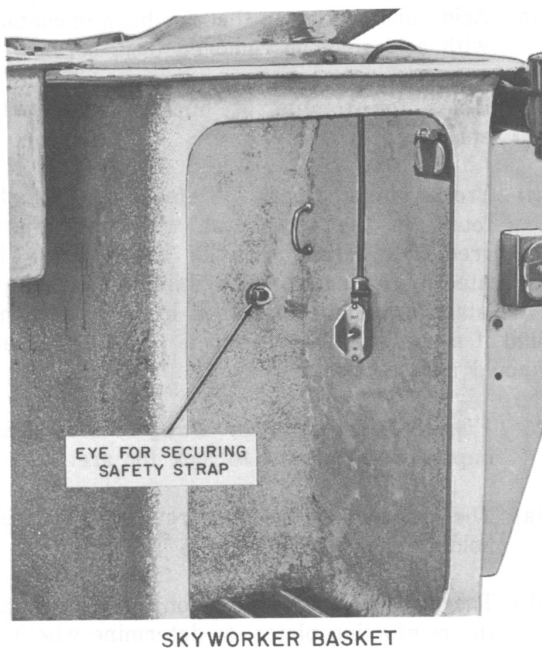
**Fig. 9—Method of Using D, E, or F Body Belt With Safety Strap on Self-Supporting Cable**

thereafter, should inspect the strap so he may detect any fault that may have developed.

**5.02** Each employee should at all times assume the responsibility for determining that his safety strap and body belt are in good condition.

**5.03** The supervisor should inspect each safety strap and body belt periodically.

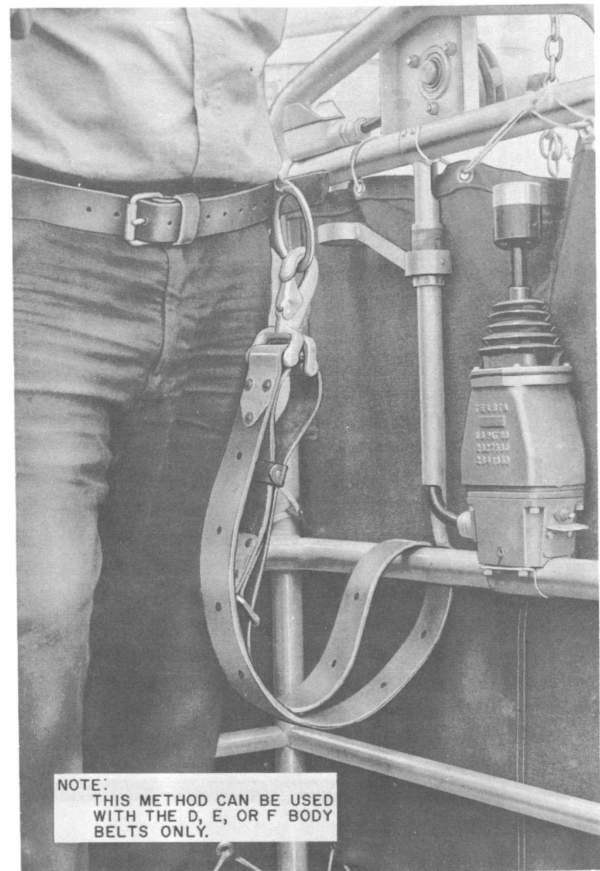
**5.04** The safety strap and body belt should be examined visually to determine their condition. If a condition exists that raises any doubt as to their safety, they should be exchanged at once for one in good condition, in accordance with established routine. A fabric safety strap or body belt should never be subjected to proof load tests.



**Fig. 10—Location of Eyes for Securing Safety Strap in Baskets of SKYWORKER and SERVI-LIFT Aerial Lifts**

**5.05 Visual Inspection of Safety Strap:** The important conditions to look for are:

- (a) Worn fabric, as indicated by the colored ply. When two outer layers of fabric are worn through, the red ply can be seen. The strap should be removed from service as soon as a red ply becomes visible.

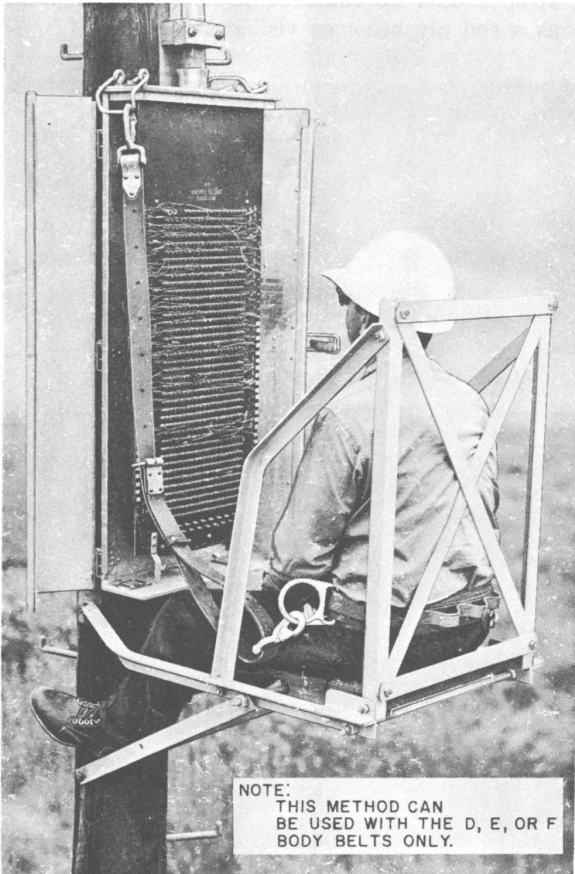


**Fig. 11—Method of Using D, E, or F Body Belt With Safety Strap in TELSTA Aerial Lift**

- (b) Broken, cut, or torn outer fibers or nicks, punctures, etc, that would affect the strength of the strap. The edges of the strap should be inspected carefully.
- (c) Loose, broken, or missing rivets, or rivets with excessive wear.
- (d) Broken or badly worn steel guard on ends of safety strap.

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(e) Defective buckle, or defective snap hook, and poor action of the keeper on the snap hook. The keeper should work freely without excessive side play, and should close securely under the spring tension.



**Fig. 12—Method of Using D, E, or F Body Belt With Safety Strap on B-Type Cross-Connecting Terminal**

(f) Charred spots on the surface of the fabric, such as might have been caused by flames, contacts with hot solder pots, furnaces, hot soldering coppers, heated ducts, and pipes. If burns are on the flat surfaces, remove strap from service if two or more outer layers are burned through, or if the colored ply is visible. If these burns are on the edges of the strap and are more than 1/8 inch deep remove strap from service.

(g) Acid burns. A strap that has been in contact with acid shall be removed from service.

(h) Holes for tongue of buckle excessively enlarged.

(i) Broken inner fibers. Defects are usually found in the section at which an injury occurred. Breakage of the inner fibers is indicated by limpness and flexibility of the strap. The strap should be examined in short sections and if a soft, flexible section is found the strap should not be used.

### **5.06 Visual Inspection of Body Belt:** The important conditions to look for are:

(a) The condition of the steel reinforcing plates holding the Dee rings.

(b) The condition of the nylon, especially at the reinforcing plates, to determine whether the nylon is worn or crushed sufficiently to affect its strength.

(c) Loose or broken rivets (particularly those in the loops holding the Dee rings).

(d) Broken or rotted threads in the stitching.

(e) Cuts that would tend to cause the nylon to tear or affect its strength.

(f) Broken or defective buckle.

**5.07 Cleaning:** Tests indicate that creosote is not injurious to nylon. However, because the creosote may stain clothing of the workman, it should be removed as soon as practicable using a cloth moistened with petroleum spirits or other approved cleaner.

**5.08 Disposition:** A strap or body belt with major defects shall be withdrawn from service immediately and returned to the storeroom for handling in accordance with established routine. Such a strap or belt shall be tagged "DANGEROUS, DO NOT USE." If practicable, it shall be marked to show the location of any defects that cannot be seen readily.