

FABRIC BODY BELTS AND SAFETY STRAPS
DESCRIPTION, USE, AND MAINTENANCE

1. GENERAL

- 1.01 This practice replaces CTSP 405-600-100, CTSP 405-600-603 and CTSP 405-600-604 and is issued to update information on the description, use, and maintenance of fabric (nylon) body belts and safety straps.
- 1.02 In accordance with the Company's established routine, all body belts or safety straps that have major defects will be *tagged defective*, withdrawn from service immediately, and returned to the storeroom. To prevent reissue or reuse, defective belts and/or straps must be destroyed by being cut into small pieces.

2. DESCRIPTION

- 2.01 *Body Belt*: The body belt (lineman's tool belt) is fitted with a knife snap, tape thong, ring for utility pouch, four suspension rings, and five leather loops for tools.
- 2.02 *Safety Strap*: The safety strap is a red centered impregnated nylon strap, 1-3/4 inches wide. It is equipped with pointed drop forged round nose snap hooks and a tongue type buckle. The safety strap is available in two lengths, 7 feet and 9 feet, and is adjustable at 1-inch and 1-1/2-inch increments.

NOTE: Exposure of the red center ply by wear indicates that the strap should be removed from service, as instructed in paragraph 1.02.

3. SAFETY PRECAUTIONS

- 3.01 When working aloft, a body belt and safety strap shall be worn at all times. They shall be worn when working on poles, cable cars, aerial platforms, truck ladder platforms (when chains are not used), other ladder platforms, and ladders lashed to strand.
- 3.02 When in use, the safety strap should be adjusted as short as possible to minimize potential falling distance.
- 3.03 Before climbing a pole, make sure that the tongue of the buckle is properly seated in the desired hole in the safety strap.
- 3.04 Do not allow a fabric body belt or safety strap to be run over by trucks, trailers, reels, or other heavy equipment.
- 3.05 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.
- 3.06 **Body belts should not be worn while working on the ground. For example, do not use a body belt to assist in piking poles. If the pike pole should slip down between the belt and the craftsman's body, serious injury could result.**
- 3.07 Security may be increased by placing the safety strap around the pole at a point directly above a crossarm, strand, pole step, or other secure attachment that will remain in place while work is being performed. Do not place a strap around an insulator pin, bolt, or other insecure attachment. Do not place a strap around a pole within one foot of the top of the pole unless there is a crossarm or cable attachment on the pole *above the strap*.

NOTE: Electric light, power and foreign signal circuit attachments shall never be used as supports for safety straps.

- 3.08 When 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 cable guard over the cable or by wrapping the cable with muslin or friction tape at the place of contact. See Figure 1.



FIGURE 1.

- 3.09 When a safety strap is placed around a pole, strand, or other support, never engage both snap hooks of the safety strap in the same D ring of the body belt.

NOTE: The body belt buckle and tongue are not designed to carry a craftsman's weight; both D rings must be engaged.

- 3.10 Make sure that the snap hook and D ring are properly engaged. Do not rely on the feel or the click of the keeper in the snap hook; look and know that the snap hook is properly engaged before placing weight on the safety strap. When engaged in the D ring, the keeper of the snap hook on the safety strap must always be away from the body, as shown in Figure 2.

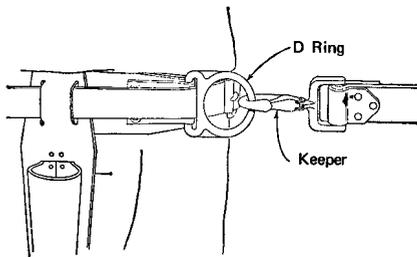


FIGURE 2. View of Craftsman's Right Side

- 3.11 Additional safety precautions are:

- a. Never use an improvised substitute of rope, wire, etc., as a safety strap.

- b. Do not punch extra holes in a safety strap.
 - c. A safety strap should never be used as a means of riding suspension strand.
 - d. While wearing a safety strap that is not in use, both ends should be snapped into the same D ring. When climbing poles, be very careful that the strap does not catch on pole steps and other attachments.
 - e. When working aloft, be very careful that the keeper of the snap hook is not accidentally depressed 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 while certain work operations are being performed.
 - f. When climbing past another employee who has his safety strap in place around a pole, be very careful not to drag climber gaffs over his strap.
 - g. Avoid swinging rapidly around a pole while wearing a safety strap.
 - h. Never throw or drop a body belt or safety strap.
 - i. Do not allow a body belt or safety strap to come in contact with heat by being placed near a furnace, pot of hot solder, torch, or hot soldering copper.
 - i. Do not stand near a fire while wearing a body belt or safety strap.
- 3.12 **[k. Do not place any metal such as rivets on the body side of the belt.]** Never place or carry tools or materials in the D rings of a body belt; they may prevent the snap hooks from engaging properly or give false indication that they are properly engaged. These items should be carried in holsters or other approved carriers.
- 3.13 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 craftsman could be pulled off the pole if the handline should catch either on an obstruction or a passing vehicle. To allow the handline to pull free of the belt if it should be caught, use one of the following methods to carry or support a handline aloft:
- a. Form the end of the handline into a loop and place the loop in the handline carrier.
 - b. Form the end of the handline into a bight and tuck the bight up under the body belt.
4. USE
- 4.01 When working on a pole, the following method shall be used to secure the body belt and safety strap:
- a. Attach one snap hook to a D ring.
 - b. Pass the free end of the safety strap around the pole so that the strap rests flat against the pole surface, without turns or twists.
 - c. Engage the snap hook in the other D ring, making certain that the hooks point outward.
- 4.02 When working from an extension ladder that is securely lashed to a suspension strand or other support, use one of the following methods to secure the body belt and safety strap. Attach one snap hook to a D ring and either:

- a. Pass the free end of the safety strap between two rungs and around one side rail, and engage the snap hook in the other D ring, or
 - b. Pass the free end of the safety strap around a rung and engage the snap hook in the other D ring, or
 - c. 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 D ring.
- 4.03 When working from an extension ladder which is properly placed on the strand but *not lashed*, the following method shall be used to secure the body belt and safety strap:
- a. Attach one snap hook to a D ring.
 - b. Pass the free end of the safety strap around the strand and side rail, between two rungs.
 - c. Engage the snap hook in the other D ring.
- 4.04 When working from an aerial platform that is supported by a suspension strand or other support, the following method shall be used to secure the body belt and safety strap:
- a. Attach one snap hook to a D ring.
 - b. Pass the free end across the front of the body, through the other D ring.
 - c. Engage the other snap hook on the suspension strand. See Figure 3.



FIGURE 3. Method of Using Safety Strap When Working from Aerial Platform

- 4.05 When working from a truck platform ladder, the safety strap shall be looped through the platform framework, unless the platform is equipped with safety chains. If safety chains are provided, the chains shall be attached to the D rings of the body belt.

5. INSPECTION AND MAINTENANCE

5.01 It is the responsibility of each employee to determine that his body belt and safety strap are in good condition at all times.

5.02 When a body belt and/or safety strap are received, they should be inspected carefully by the employee. At least once each day thereafter, the belt and strap should be examined for any defects that may have developed.

5.03 The employee's immediate supervisor should inspect all body belts and safety straps monthly.

5.04 Examine the body belt and safety strap visually. If any of the conditions listed in paragraph 5.05 exist, or if the condition of the belt or strap is such that there is any doubt as to its safety, it should be exchanged immediately. (See paragraph 1.02.) A fabric body belt or safety strap should never be subjected to proof load tests.

5.05 *Visual Inspection of Body Belts and Safety Straps:*

a. The important conditions to look for when inspecting a body belt are:

- (1) The condition of the steel reinforcing plates holding the D rings.
- (2) The condition of the nylon, especially at the reinforcing plates; determine whether the nylon is worn through or crushed sufficiently to affect its strength.
- (3) Loose or broken rivets, particularly those in the loops holding the D rings.
- (4) Broken or rotted threads in the stitching.
- (5) Cuts that would tend to cause the nylon to tear or affect its strength.
- (6) Broken or defective buckle.

b. The important conditions to look for when inspecting a safety strap are:

- (1) Worn fabric, as indicated by the ply color. When two outer layers of fabric are worn through, the red ply can be seen and the strap should be removed from service.
- (2) Cuts, nicks, punctures, etc., that would affect the strength of the strap. The edges should be carefully inspected.
- (3) Loose, broken, or missing rivets; or rivets showing excessive wear.
- (4) Broken or badly worn steel guard on the ends.
- (5) Defective buckle or 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.
- (6) If holes for the tongue of the buckle are excessively enlarged, remove the strap from service.
- (7) Check for acid burns; a strap that has been in contact with acid shall be removed from service.

- (8) Charred spots on the surface of the fabric that might have been caused by flames, contact with hot solder pots, furnaces, hot soldering copper, or heated ducts and pipes. If burns are on the flat surfaces and two or more outer layers are burned through (or the red ply is visible), remove the strap from service. If burns are on the edges of the strap and more than 1/8 inch deep, remove the strap from service.
- (9) 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.

6. CLEANING

- 6.01 Remove creosote, paint, oil, grease, tar, etc., from body belts and safety straps using RP-6021 waterless hand cleaner applied directly to the straps; then wipe with a clean, dry cloth.

7. STORING

- 7.01 The following precautions shall be observed when storing body belts and safety straps, or when they are not in use:
- a. Keep the belts and straps 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, tool box, grip, or other container. The belt and/or strap should be wiped with a dry cloth and allowed to dry completely before being stored or packed.
 - c. A body belt or safety strap should never be stored with tools unless the tools are equipped with satisfactory guards. When body belts, safety straps, and climbers are kept in the same container, the climbers shall be fitted with gaff guards to avoid cutting or puncturing the belt or strap.
 - d. Store body belts and safety straps in a location free from excessive humidity to prevent mildew.