

B SHEAVE GUARD

DESCRIPTION AND USE

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1. GENERAL

1.01 Safety practices require that all personnel avoid grasping, handling, guiding, or otherwise contacting moving and taut winch lines. Also, a minimum distance of 3 feet must be maintained between a workman's hands and any sheave, block, eye, or from the winch drum itself. The B sheave guard is designed to block hands or clothing from being pulled between the B sheave and the winch rope if they should come in contact with the moving winch line near the sheave.

1.02 This section has been reissued to include additional safety precautions, to include reference to associated sections, and to generally update the section. Since this is a general revision, arrows normally used to indicate changes have been omitted.

1.03 Since the use of the B sheave guard is associated with winch operation, the use of wire rope, and hand signals, the following sections are considered supplements to this section:

649-305-100, Winches and Power Take-Offs, General

649-310-011, Wire Rope, General

620-020-020, Signals For Use of Outside Plant.

2. DESCRIPTION

2.01 The B sheave guard consists of two flat metal side pieces. Each side piece has a hole with a diameter that will pass freely over the spindle bar. An open loop of steel rod connects the two side pieces near one end as shown in Fig. 1. The winch line is passed through and is contained within the open loop, causing the guard to follow any changes in the angle of the winch line during work operations. The loop will effectively block hands or clothing from being drawn into contact with the sheave.

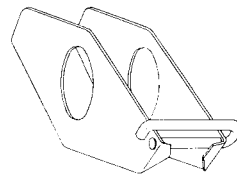


Fig. 1—B Sheave Guard

2.02 Two B sheave guards can be used to provide protection on both sides of the B sheave if work operations require moving the winch line under tension in both directions.

2.03 All vehicles that are fitted with spindle bars and use B sheaves shall be equipped with B sheave guards. To order specify:

(Quantity) Guard, Sheave, B

NOTICE

Not for use or disclosure outside the Bell System except under written agreement

3. SAFETY PRECAUTIONS

3.01 Under no conditions will the use of the B sheave guard supersede any of the safe working practices that must be exercised when working with moving winch lines. The B sheave guard is a supplementary safety device that can help prevent serious personal injury and shall be used when required.

3.02 Moving winch lines shall be handled only with gloved hands and with extreme caution at a distance no closer than 3 feet from any block or sheave.

3.03 When a winch line is under load, no one shall be permitted on the truck platform.

3.04 When passing a winch line over the B sheave with the spindle bar in the lower position, always use one guard with its protective loop on top and towards the rear of the truck.

3.05 If work operations require the winch line to be moved under tension in both directions, use two guards to provide protection in both directions.

3.06 If the winch line is passed over the sheave with the spindle bar in the upper position and there is a possibility of a person entering the truck platform, two guards shall be used.

3.07 Wire rope shall be inspected and handled as covered in Section 649-310-011, Wire Rope, General.

4. INSTALLING B SHEAVE GUARDS

4.01 To install one sheave guard, insert the B sheave between the side plates of the guard so the spindle holes in the guard and the sheave are in alignment as shown in Fig. 2.

4.02 Slide one end of the spindle bar through one of the spindle bar brackets on the truck, and then slide the B sheave guard and sheave over the end of the spindle bar. Insert the free end of the spindle bar into the other spindle bar bracket. Lock the bar in place with the pins provided. Pass the winch rope through the open loop of the guard and into the groove of the sheave.

4.03 If the spindle bar is being used in the lower position and the load is expected to cause

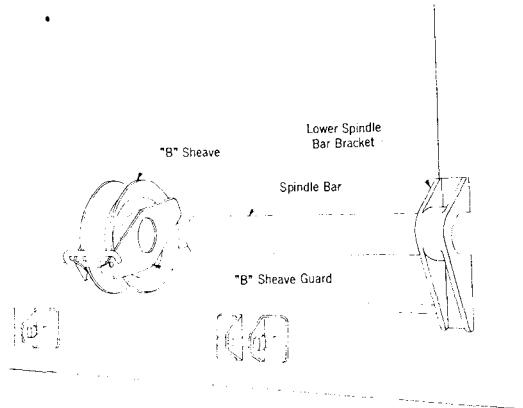


Fig. 2—Installation of B Sheave Guard

excessive deflection of the spindle bar, the standard spindle bar support should be used. Place the support prior to placing the spindle bar through both brackets. Fig. 3 shows the spindle bar support and the B sheave guard in place.

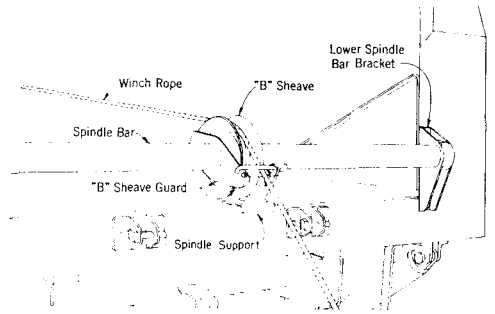


Fig. 3—Installed B Sheave Guard, Lower Position Using Spindle Bar Support

4.04 If two sheave guards are required, use the same procedure for placing as described in 4.01 and 4.02.

4.05 When placing sheave guards, the protective loop that encircles the wire rope should be at the top of the guard. This places the loop in

alignment with the angle of the rope passing over the sheave.

5. USING GUARDS

5.01 When the B sheave guard is used with the spindle bar in the lower position, one guard shall be used to provide protection at the rear when the taut winch line is moving towards the truck. In most work operations this is sufficient, since in most cases when the rope is moving in the opposite direction, it is not under tension. However, if the spindle bar is in the lower position and work operations will require the rope to be under tension in both directions, two sheave guards shall be used to provide protection in both directions.

5.02 When the B sheave is used on the spindle bar in the upper position, no sheave guard is normally required, since it is beyond the reach of anyone working at ground level. No one should be permitted on the truck platform while the winch line is being used. However, if work operations require personnel to be on the truck platform while the winch is being used, two guards shall be placed. Work operations done with the sheave in its upper position usually require the winch line to be under tension in both directions. Fig. 4 shows two sheave guards in place with the spindle bar in the upper position.

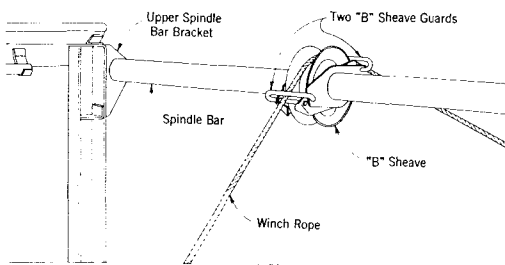


Fig. 4—Two B Sheave Guards, Spindle Bar in Upper Position

6. MAINTENANCE AND STORAGE

6.01 Guards not in use should be stored in a truck compartment where they will not be exposed to weather and damage.

6.02 If any B sheave guard shows excessive wear in the loop, it should be replaced.

6.03 Guards should be given a light application of rust inhibiting oil as required.