BELL SYSTEM PRACTICES
Outside Plant Construction and Maintenance

SECTION G52.123.3
Issue 2, August, 1957
AT&T Co Standard

PRELASHING
POSITIONING AND RIGGING

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1. GENERAL

1.01 This section covers the loading and unloading of reels of cable and strand, the positioning of the trailer and the rigging of the equipment. It is reissued to include the← D Cable Leader. Issue 1 is replaced.

1.02 The sequence in which the operations are normally performed are as follows:

(1) Load cable reel
(2) Position trailer
(3) Load strand reel
(4) Rig the equipment

1.03 Under some conditions it may be found desirable to position the trailer prior to loading the cable and strand reels or it may be necessary to load the strand reel prior to positioning the trailer. Should it be necessary to move the trailer short distances with the strand reel in position, move the trailer at a slow speed and avoid obstructions which may strike the strand reel. The strand reel, in position, has relatively small ground clearance.

2. LOADING AND UNLOADING CABLE REELS

2.01 The method of loading and unloading cable reels described herein is applicable only to trailers on which prelashing equipment is mounted and counterbalanced as de-

scribed in a Section in the G90 Series. **The safety precautions and work operations described in the section covering cable reel trailers shall be observed, except as modified by this Part.**

2.02 The No. 417 cable reel is the largest that can be carried on trailers equipped for prelashing. Before loading the No. 417 reel it is necessary to remove the lags.

2.03 The operations required for loading a cable reel are as follows:

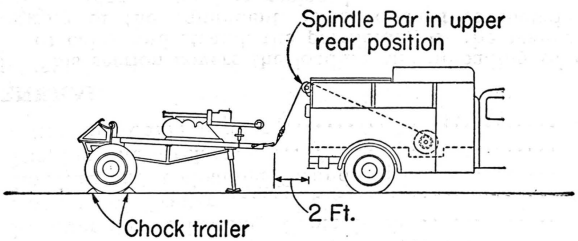
(1) Chock the trailer wheels.

(2) Before loading a cable reel, the strand reel and the strand reel mounting shaft and the band brake must be removed as described in Part 4 and the supporting jack assemblies raised to the traveling position.

(3) Loosen and back off the cable reel brake.

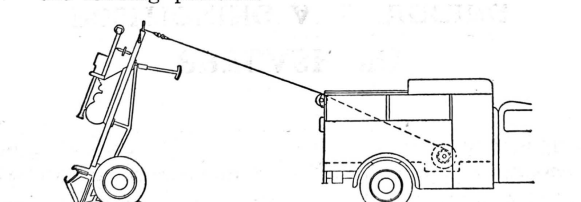
(4) Make sure that the foot post supports the trailer tongue and that the hydraulic jack is fully retracted.

(5) Pass the winch line over a sheave on the spindle bar in the upper rear position on the truck and attach the winch line to the trailer drawbar eye.

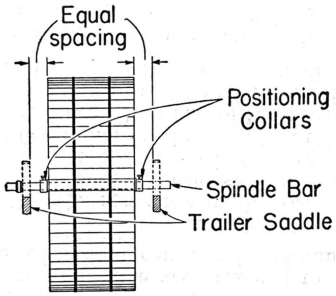


(6) Raise the tongue of the trailer slowly with the winch until the tongue of the trailer passes the balance point.

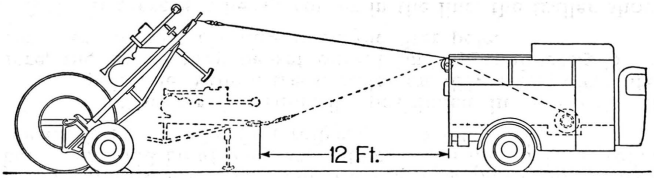
(7) Pay out the winch line slowly until the trailer rests in the loading position.



(8) Place the spindle bar in the cable reel and tighten the positioning collars so that the reel will be centrally located on the trailer.



(9) Roll the cable reel into position for loading. Slack off the winch line sufficiently to allow the vehicle to be moved to a position about 12 feet from the position where the drawbar eye of the trailer tongue will come to rest.



(10) Take up slowly on the winch line until the trailer tongue passes the balance point. Lower the tongue until the foot post rests on the ground, secure the cable reel and remove the winch line.

(11) Adjust the cable reel brake until the reel can be turned only with considerable effort by one man. Care should be exercised to set the brakes evenly so that both shoes are exerting equal braking effort.

2.04 To unload a cable reel, the operations are similar to those described in Paragraph 2.03 and are performed in the following order:

(1) Chock trailer wheels and remove strand reel. (See Part 4)

(2) Loosen cable reel brake.
(3) Unload trailer by tilting as described above.
(4) Remove spindle bar from reel and remount on trailer or on a reel to be loaded.
(5) Right trailer for traveling or prepare for reloading.

3. POSITION OF TRAILER

3.01 The position of the trailer is important to the successful performance of prelashing. Although the trailer can, in most cases, be set up at either end of the pull, certain factors must be considered in selecting the location for the trailer including the following.

3.02 The trailer is positioned with its forward end directed toward the first temporary roller. The trailer drawbar eye should be at least 75 feet from the first pole to reduce the down pull on the first roller.

3.03 The trailer is ordinarily positioned in line with the pole line. Where trees, buildings, driveways, etc., interfere, the trailer may be set out of line approximately 3 feet for every 50 feet distance from the first pole.

3.04 If there is a heavy corner in the line, the trailer should be set up at the end farthest from the corner so that the minimum amount of prelashed strand and cable are pulled around and beyond the corner.

3.05 If the strand is to extend one or more spans beyond the end of the cable, the trailer must be positioned beyond the pole on which the strand is to terminate. As the ends of the strand and cable are attached to the cable leader, additional spans of strand can not be obtained at the cable leader end.

3.06 Where there is a change in the size of the cable, one of the cables may be prelashed and additional strand placed for the other cable by setting up the trailer as previously outlined. The other cable would not be prelashed but would be placed and lashed by one of the other methods before the suspension strand is brought to final tension and strand is transferred from blocks to permanent attachments.

3.07 If strand splices are to be made in the span rather than at the pole, the trailer is generally positioned in the span in which the splice is to be made. (See Section covering Terminating Strand for details.) Where this is done, the tension in the two lengths can be adjusted with the truck winch.

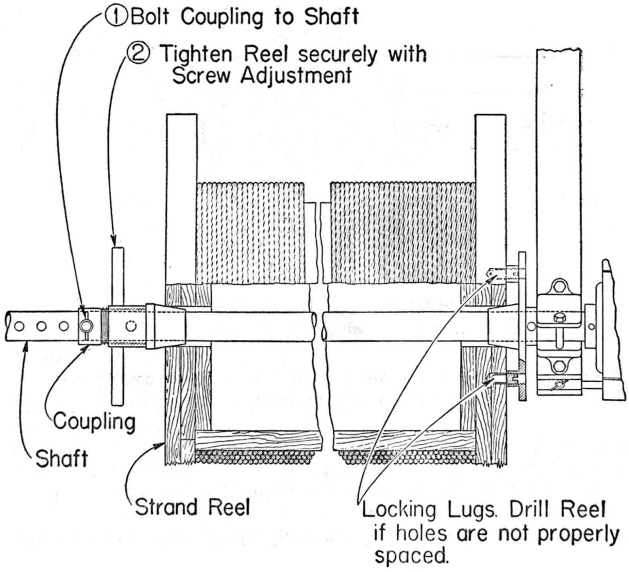
4. LOADING AND UNLOADING STRAND REELS

4.01 To load a strand reel the following operations are required:

(1) Lower the bracket and jack assemblies from the traveling position. Slide the left assembly along the truss rod toward the center of the trailer until the proper spacing between the two supports is obtained.

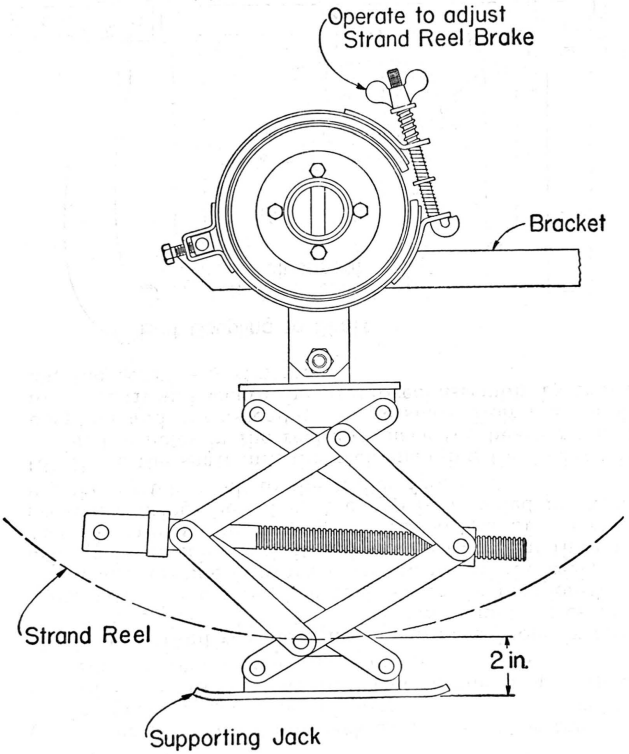
(2) If the strand reel does not have holes properly spaced to take the locking lugs, drill two 1-inch holes in the right side of the reel. The reel is usually positioned with the strand feeding forward from the top of the reel; when using a large cable reel, it is desirable to mount the strand reel with the strand paying off the bottom of the reel to prevent scoring the cable. A clamp is provided for attaching the snatch block to the trailer foot post.

(3) Place the shaft into the reel, engaging the locking lugs in the holes in the reel and place the bearing and the coupling and nut assembly on the shaft. Bolt the coupling to the shaft and secure the strand reel assembly by tightening the screw adjustment.



(4) Remove the shaft bearing bolts. Roll the reel into position over the shaft bearings and raise the jacks until the reel is suspended level and about 2 inches above the ground. Replace the shaft bearing bolts. If the ground is soft, provide additional footing under the jacks with cable reel lags.

(5) Slide the band brake over the drum. Be sure to engage the brake anchor rod in the sleeve and tighten the set screw.



(6) Adjust the band brake by tightening the wing nut until the reel can be turned only with considerable effort by one man.

4.02 To unload a strand reel, proceed as follows:

(1) After temporarily dead-ending strand at the first pole, release strand tension at the prelasher, then cut the strand at the pole allowing sufficient strand for termination and lower the end of strand to the ground.

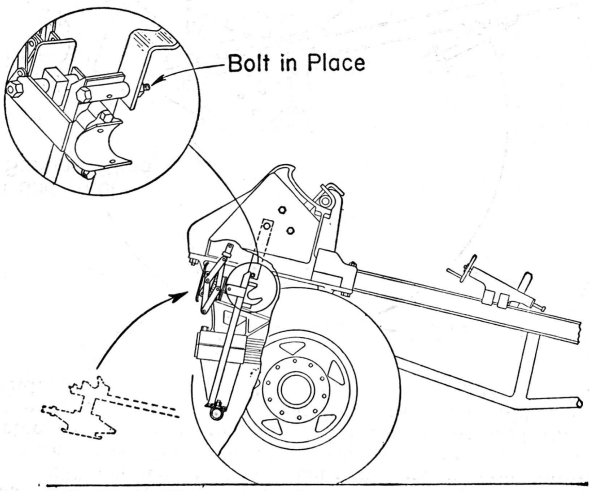
(2) Remove the strand from the C cable lasher, from under the compensator pulley, from the pretensioner and the snatch block, rewind it and staple or otherwise secure it to the reel.

(3) If extra cable has been pulled to the first pole it should be cut and lowered to the ground with the strand, the lashing wire removed and the cable rewound on the reel.

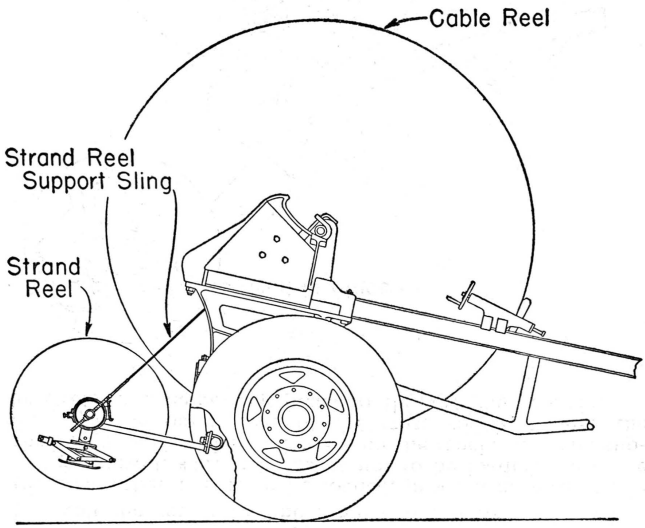
(4) Remove the band brake and the shaft bearing bolts and lower the supporting jacks until the reel rests on the ground with the shaft clear of the bearings.

(5) Roll the reel clear and remove the shaft.

(6) If another reel is to be loaded, proceed as outlined in Paragraph 4.01. If a reel is not to be loaded, store the shaft and band brake equipment on the truck, slide the supports to the outer ends of the truss rod and raise the brackets and supporting jacks to the carrying position.



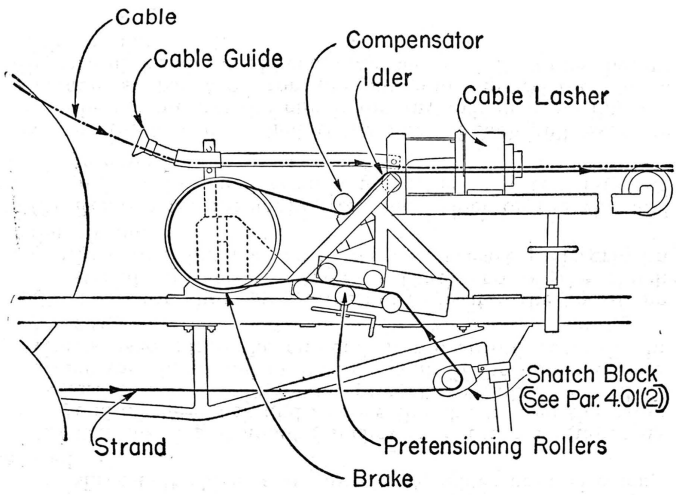
4.03 Should it be necessary to move the trailer a short distance with a strand reel mounted, the bolt end of the two wire rope slings provided for this purpose should be inserted in the holes in the strand reel shaft and the nuts tightened to hold the reel and supporting assembly off the ground.



5. RIGGING THE PRELASHER

5.01 Place a C cable lasher on the supports in an inverted position and secure it to the frame with the hooks and chain clamp. Tighten it securely in place with the screw adjustment. Load the lasher with 045 C steel lashing wire. Only C cable lashers modified to include spring operated cover latches should be used.

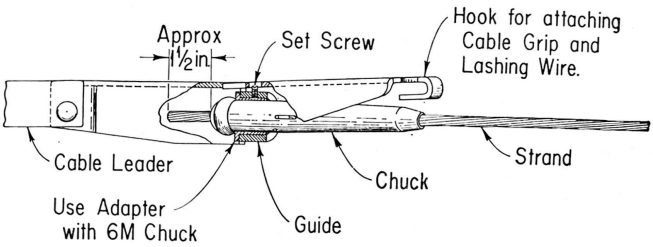
5.02 Thread the end of the strand through the equipment as shown in the following figure, and then thread the cable through.



6. ATTACHING CABLE LEADER

6.01 To attach the suspension strand to the cable leader, chucks of the proper sizes are used. The following operations are required:

(1) Select the proper chuck (6M or 10M) for the size of strand being used and place it in the cable leader. An adapter is provided for use when 6000-pound strand is to be prelashed. Tighten set screw to hold assembly secure.



(2) Check the strand end. If it is deformed or untwisted, cut off a length sufficient to insure that strand in good condition will be placed in the chuck. Clean the strand thoroughly with KS-16302 Cleaner.

(3) Insert the end of the strand into the rear (tapered) end of the chuck and push it through until it projects about 1-1/2 inches beyond the other end. Pull the strand back to lock the jaws of the chuck firmly against the strand.

6.02 To release the chuck at the completion of a pull, a three-bolt clamp and guy clamp holder or a vise may be used.

(1) Cut the strand about 8 inches from the rear (tapered) end of the chuck and remove the chuck from the cable leader. If a guy clamp and guy clamp holder are used, attach the clamp and insert the clamp in the holder or if a vise is used, place the cut end of the strand vertically in the vise.

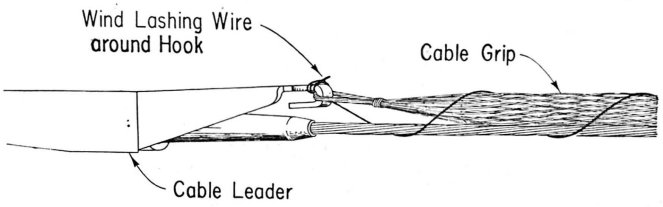
(2) Twist the chuck in a direction to tighten the lay of the strand and tap the forward (flat) end of the chuck gently with a hammer until the jaws release their grip on the strand.

(3) Remove the assembly from the holder or the vise and pull the loosened strand out of the forward (flat) end of the chuck.

6.03 As the load is applied at the start of each pull, examine the strand and the chuck for any evidence of slippage. If slippage is observed, stop the pull and replace the chuck. With careful handling chucks may be used 25 times before requiring replacement.

6.04 To attach the cable to the cable leader, place a standard cable grip of the proper size on the cable and attach the eye of the grip to the hook provided on the cable leader.

6.05 Hold the cable and strand together and pull off sufficient lashing wire to lash the two together. Hand lash the strand and cable, winding in the same direction as would be applied by the lasher. Terminate the lashing wire by wrapping it around the hook on the cable leader to which the cable grip is attached.



If lashing wire breakage is experienced at or near the Cable Leader, the first 3 lays of lashing wire should be lengthened to overcome breakage.

6.06 Connect the wire rope pulling eye of the C cable leader to the eye of the winch rope with a 1/2-inch connecting link.