

**BELL SYSTEM PRACTICES**  
**Outside Plant Construction**  
**and Maintenance**

**SECTION G51.114.1**  
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## **PLACING STRAND FROM A MOVING REEL**

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### **1. GENERAL**

1.01 This section covers the general procedures to be followed when placing strand from a moving reel on non-joint and jointly used pole lines.

1.02 Where the terrain is suitable for the operation of a vehicle along the same side of the pole line on which the strand and cable is to be placed and there are no obstructions such as trees, guys, etc., which would prevent raising the strand into position, the strand may be placed from a moving reel. Along highways this method is facilitated by placing strand and cable on the road side of the line. Severe traffic conditions or frequent road crossings may limit the use of the method along highways.

1.03 Placing should be done with the vehicle moving in the direction of traffic wherever practicable. Warning signs, flags or flagmen are required when traffic may be hindered by the slowly moving vehicle or where hills, curves or other obstructions to vision are encountered.

1.04 All workmen should be thoroughly familiar with the signals to be used.

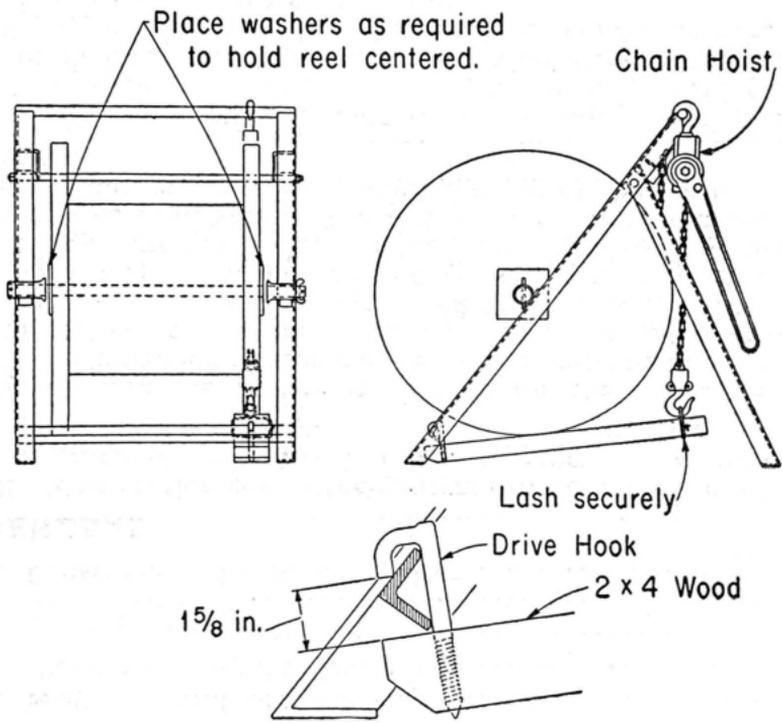
1.05 Suitable permanent or temporary guys are required at all poles where it is necessary to temporarily snub the tensioned strand.

### **2. MOUNTING AND BRAKING REEL**

2.01 Mount the strand reel in a strand pay-out frame in the truck body.

2.02 The rear legs of the frame should be secured by rope slings to suitable supports in the front of the truck body in such a manner that the ropes will not interfere with the operation of the truck or winch.

2.03 It is desirable to brake the reel so that it may be left unattended during the placing operations. The following figure shows an adjustable brake which can be made locally.



### 3. PLACING—NON-JOINT USE LINES

3.01 Dead-end the strand temporarily to the base of a pole at the start of the run or permanently at the proper attachment level.

3.02 Proceed slowly down the line allowing the strand to pay off on the ground. The reel brake should be sufficiently tight to prevent the strand from overrunning on the reel should it be necessary to stop the truck.

3.03 Workmen following on foot should raise the strand into the suspension clamps with a handline and tighten the clamps sufficiently to hold the strand in position but not tight enough to cause binding during the tensioning operation. Do not attempt to raise the strand at any pole until the moving vehicle is at least 500 feet down the line.

3.04 At any pole where there is an upward change in grade or where there is a corner where the strand tends to pull away from the pole, stop the placing vehicle just past that pole and tie the strand securely to the base of the pole. When the strand is laid up in the suspension clamps at these poles, the placing vehicle should again be stopped.

#### 4. PLACING—JOINT USE LINES

4.01 Placing operations on joint use lines are similar to those described for non-joint use lines except as modified by the following paragraphs.

4.02 **All workmen having occasion to handle the strand, reel, ropes, etc., during the placing, raising and tensioning operations shall wear rubber gloves.**

4.03 If the strand is permanently dead-ended at the start of the run, tie the strand to the base of the second pole to minimize whipping should snagging occur during the placing operations.

4.04 Do not raise the strand while the placing vehicle is moving. It is advisable to place about one-quarter mile of strand on the ground, stop the placing operation, raise the strand into the suspension clamps and tighten the clamps sufficiently to hold the strand in position but not tight enough to cause binding during the tensioning operation.

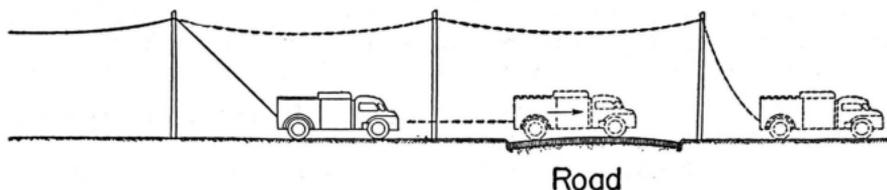
4.05 Tension the strand sufficiently to reduce the sag in the spans to a point where the strand can not contact the supply lines should whipping occur and snub it at a suitably guyed pole. Usually about one half the stringing tension is sufficient. During this operation observe the entire line for snags or obstructions, and guard against whipping.

#### 5. ROAD CROSSINGS

5.01 At road crossings, driveways or other locations where strand on the ground or sagging low between poles might create a hazard, the strand must be raised sufficiently to clear such locations and snubbed immediately after placing.

5.02 Stop placing operations in the span before the crossing and raise and tension all strand previously placed.

- 5.03 Stop traffic on road being crossed and pay out strand past the first pole on the other side.



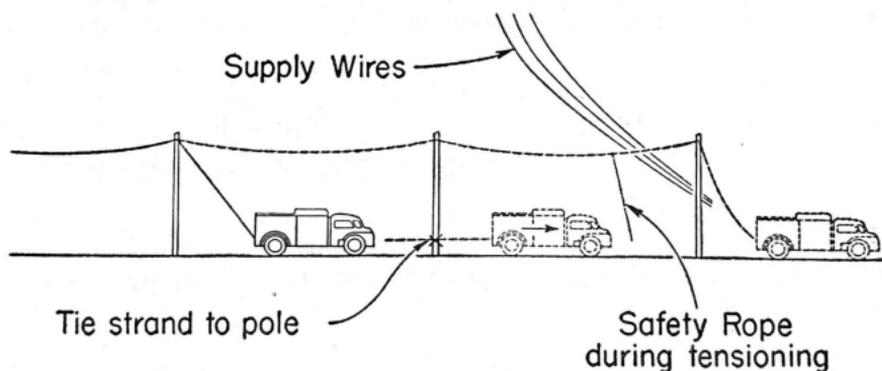
- 5.04 Raise strand into position on both crossing poles and tension and snub it before allowing traffic to proceed.

## 6. CROSSINGS UNDER SUPPLY WIRES

6.01 All workmen having occasion to handle the strand, reels, ropes, etc., during the placing, raising and tensioning of the crossing span shall wear rubber gloves.

6.02 Stop placing operations in the span before the crossing and raise and tension all strand previously placed.

6.03 Place strand along ground tying it securely to the butt of the first crossing pole before making the crossing to minimize danger of strand whipping up. Place strand past the first pole on the other side of the crossing.



6.04 Raise strand into position on both crossing poles, tension strand slowly and snub it. Hold strand with a 3/8-inch or larger manila rope in the crossing span during raising and tensioning operations to prevent accidental contacts.