

## HANDLING CABLE REELS

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### 1. GENERAL

1.01 This section presents the approved work methods to be used in handling and hauling cable reels. Because of the extremely heavy weights involved and the diversity of conditions encountered in the various stages of loading, unloading, hauling and general handling of cable reels, it is necessary that those who are employed in this type of work know and follow the instructions outlined herein.

This section has been reissued to provide instructions for loading empty cable reels from the ground to the truck and to change the placing of load binders from the left to the right side of the truck. It includes all of the instructions formally contained in Issue A.

1.02 The strict observance of the following precautions is of first importance in the performance of this task.

### 2. SAFETY PRECAUTIONS

2.01 Special consideration should be given to the extreme weight and rolling possibilities of the reels, and to the need for providing against unbalancing or overturning.

2.02 Forethought and concentration should be expended on every manual effort, with regard for personal safety and the protection of workmen.

2.03 Caution should be exercised in the use of pinch bars for prying purposes.

2.04 The spotting of cable reels at roadside locations, on vacant lots, or in parkways adjacent to sidewalks must be done with full consideration for the safety of and convenience to property owners and the general public. If the reels are left unattended, they must be blocked securely to prevent movement.

### 3. TRANSFERRING CABLE REELS FROM BOX CAR TO TRUCK

3.01 When unloading cable reels from a box car on a railway siding, sufficient warning signals in the form of red danger flags shall be displayed at each end of the car to indicate that work is in progress.

3.02 The following hand tools (in good condition) are required:

2 Pinch bars

1 Turning plate set, which consists of:

1 Steel plate - 3/8" thick,  
6" wide, 3' long

1 Steel plate, circular - 3/8" thick,  
12" diameter

1 Speed socket wrench for removal  
of lag screws of blocks

3.03 Before any blocking is removed from the reels, the possible unlevel position of the car, end to end, shall be determined and the blocks on the first row of reels on the lower end of the car shall be removed first.

3.04 During transit, the reels often shift to such an extent that they become bound side by side and considerable prying may be necessary to free the first reel taken from each row. The work of releasing the selected reel should be done slowly and carefully. One man shall mount the top of the reel directly behind the one selected and, with a pinch bar, shall use prying action between the reels to roll the first one forward, while other men on the floor shall attempt, with bars, to free the side binding. In no case shall workmen take positions between reels where freedom of exit is not available.

3.05 The circular turning plate is then placed flat upon the floor at the exact turning point desired and in the path of the reel, and the three-foot section of plate, equally balanced, is placed over the circular plate. With pinch bars, the reel shall be rolled and guided onto the plate until a center of balance is effected. The reel may then be turned easily into position for rolling onto the truck through the doorway of the car.

3.06 Extra reel lags or similar blocking shall be kept at hand at all times in order to check the rolling movement of reels.

3.07 The hauling truck shall now be backed into position, centered with the car doorway, the brakes set effectively and chock blocks placed forward of at least two wheels.

3.08 The winch line shall be unrolled and the eye of the line fastened with a clevis to the ring of the bumper block. It shall then be placed in the center and to the rear of the truck deck and the loop laid aside until the final binding, which is outlined in Part 4.

3.09 The hauling position of the reels on the truck should be governed largely by the reel size, composite weight and the rated capacity of the truck. If the delivery is being made direct to the job, the spotting order should also be considered. They should be placed in line with and in the center of the truck body length. The smaller reels may, if weight permits, be placed in double order on the truck deck.

3.10 As each reel is rolled through the doorway into position on the truck, blocking shall be placed behind it.

3.11 Caution is necessary when using the pinch bar to adjust the position of the reels on the steel truck deck, as the prying action of steel against steel presents a hazardous condition. A moderate movement of the bar to secure bites under the reel surface is indicated to insure against the possible backward roll of the reel.

#### 4. LOAD BINDING

4.01 When the last reel has been loaded on the truck, the loop of the winch line shall be placed in the center on top, lengthwise with the reels, and pulled up taut.

4.02 Standard log chains and chain binders shall be used to secure the reels solidly. An inspection should be made before using them to ascertain that they are in good condition.

4.03 The hook of one end of the chain shall be passed downward through the stake pocket just forward of the center of the reel to be bound. It shall then be pulled upward on the outside and the bend of the hook placed downward over the outside edge of the stake pocket. The chain shall be passed crosswise over the reel and the hook of the other end fastened in the same manner to the opposite stake pocket. The lower hook of the chain binder is fastened on a link of the chain about 18 inches above the truck deck level on the left side, the binder extended and several strains taken until the chain is taut and no further chain links can be secured. The final position of the chain should be such that the path of the chain downward, from the rear top of the reel to the stake pockets, will be in line with the axle center of the reel on each side.

4.04 When operating the chain binder, do not assume an "out of balance" position. Keep the feet on the ground. If necessary, one man may assist from the truck deck.

4.05 When the binder is finally closed, the loop of the unused chain shall be placed between its forks to prevent it from springing open.

4.06 Place the binder on the right side of the truck so that the operator will not be in the path of oncoming traffic.

#### 5. UNLOADING CABLE REELS

5.01 At the point of unloading, whenever possible, the truck should be maneuvered so that the rear end is slightly lower than the front. This position will eliminate having to use the pinch bar and blocking in order to place the reel in the unloading position.

5.02 The calked loading shoes shall be placed on the rear rack of the truck in such a way that, as the reel breaks over the truck edge, the metal lag binding strips will not be broken. For the wooden reels, the shoes shall be spread so as to be on the outer edges of the binding strap. For the metal reels, the shoes shall be placed inside the metal flange or shoulder.

5.03 The binding chains shall be removed successively as the reels are unloaded. After the chain is removed, the winch line shall be taken up sufficiently to remove the blocking behind the reel and slackened only as the reel rolls or is worked backward to the edge of the truck. The winch line shall then be adjusted to the center of the reel to prevent tipping when lowered.

5.04 All workmen shall take positions away from the winch line or path of the reel when it is finally lowered over the edge.

5.05 If the reel is to be placed in a parkway between walk and curb, the truck shall be backed at an angle sufficient to allow it to overhang the curb. A board, 1" x 3" x 3' long, placed directly under the lowered reel will facilitate turning the reel by hand to a position parallel with the curb. If the ground is soft and the board will not provide a raised surface, the reel may be turned into place by truck power, as described in Paragraph 6.02.

## 6. LOADING REELS FROM THE GROUND

6.01 Whenever possible, the site selected for loading shall be such that the rear of the truck will be somewhat lower than the front, in order to lessen the strain required to raise the reel over the rear of the truck deck.

6.02 If conditions will not permit backing the truck in line with the reel for loading, and it is necessary to turn the reel by the use of truck power, the following method is prescribed:

(a) Place a bar through the center hole of the reel with the bit or flattened end opposite the direction of pull.

(b) Fasten one end of a log chain to the bit end of the bar, pass it around the rear and just below the center of the reel, and fasten the other end to the truck trailer connection.

(c) Place a chock block in front of the reel on the side opposite the direction of pull. Then move the truck forward slowly until the reel is in position for loading.

6.03 The iron loading shoes shall be put in place and adjusted in the manner described in Para. 5.02.

6.04 The load binding methods as covered in Part 4 shall be used.

## 7. LOADING REELS ON TRAILER

7.01 In order to load cable reels on a flat decked trailer, they shall first be loaded on the truck as outlined in the foregoing paragraphs and then transferred to the trailer by backing trailer and truck end to end.

7.02 The method of chain binding cable reels on trailers differs from the method described previously in this section only to the extent that the direction of pull must be provided from each end to the center of the trailer.

## 8. LOADING EMPTY CABLE REELS FROM GROUND TO TRUCK

8.01 All empty cable reels shall be left lying flat on the ground by the construction forces. When work is being done in rolling country, empty cable reels shall be left where the ground is fairly level and not on hillsides nor where the ground is sloping.

8.02 When steel cable reels are to be loaded, use a long steel rope sling with an eye in each end or a long chain with a ring in each end.

(a) Place one end of the sling or chain around a spoke of the steel reel.

(b) Fasten both ends of the sling or chain to the pulling line by means of a clevis.

8.03 When wooden cable reels are to be loaded, loop a steel rope sling around the spool of the reel with the free end on the opposite side of the reel from the truck.

(a) Place the free end of the steel rope sling up and over the reel flange, in a direct line with the truck.

(b) Connect the steel rope to the pulling line by means of a clevis.

- 8.04 Attach the free end of the pulling line to the drawbar on the trailer.
- 8.05 If it appears that the reel will roll sideways when it reaches a vertical position, place logs or blocks on the low side.
- 8.06 The helper shall be in a safe position, preferably to the left and rear of the truck before the truck is driven ahead.
- 8.07 The truck shall be driven ahead slowly, raising the reel to a vertical position.
- (a) Turn reel one-quarter around so that the reel flanges are in a position to load over the end of the truck bed.
  - (b) Loop the winch line over and around the spool of the reel and equidistant between the reel flanges.
  - (c) The driver shall then take up the slack in the winch line.
  - (d) Make certain that the reel flanges are properly placed against the rear end of the truck bed for pulling into the truck.
  - (e) The truck helper shall stand in the clear in a position to the left of the truck where proper signals to the driver may be given as the cable reel starts to leave the ground.
- 8.08 The load binding methods covered in Part 4 shall be followed in securing the reels on the truck.