

CABLE LASHERS—USE

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1. GENERAL		
1.01 This section covers the use of cable lashers, lashing wire, and C lasher guard.		
1.02 This section is reissued to include information on the J cable lasher (Model 2), to delete reference to the ZB lasher, and to make miscellaneous changes. Since this issue covers a general revision, the arrows ordinarily used to indicate changes have been omitted.		
1.03 The description, care, and maintenance of cable lashers and the lasher guard are covered in the 081 Division of the Bell System Practices.		
1.04 When not in use, cable lashers should be stored in cable lasher cases.		
1.05 The following lashers are rated manufacture discontinued (MD):		
● B Cable Lasher		
		2. PRECAUTIONS
	2.01	Use the type of lashing wire recommended for the particular type of cable lasher being used. This information is covered in Part 3.
	2.02	Avoid abuse or rough handling of cable lashers.
	2.03	When working aloft, always raise and lower a cable lasher with a handline.
	2.04	When transferring a cable lasher around a pole, use the bridle assembly as outlined in this section to prevent damage to the lasher in case it is accidentally dropped.
		<i>Warning: The lasher gate will not withstand shock loads. DO NOT TRANSFER THE LASHER WITH THE LASHER BRIDLE ATTACHED TO THE GATE.</i>
	2.05	A cable lasher should be protected from unnecessary exposure to dirt, grit, and other foreign matter. Avoid setting the lasher on the ground.
	2.06	Towing lines should be a minimum 3/8-inch diameter rope fitted with snap hooks that have a rated load equal to or greater than the breaking strength of the rope.
	3. LASHING WIRE	
	3.01	Lashing wire is used to lash an aerial cable to a supporting strand or to an existing cable and strand.

NOTICE

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3.02 Lashing wire is furnished in preformed coils of suitable size for insertion into the magazine of a cable lasher.

3.03 When estimating the length of lashing wire required for a job, add about 10 percent to the cable length for cables approximately 1-1/2 inches in diameter, and about 20 percent to the cable length for cables larger than 1-1/2 inches in diameter.

3.04 The three types of lashing wire are as follows:

(1) **B Steel Lashing Wire**—A zinc-coated steel wire 0.091 inch in diameter which is intended for use only in locations where corrosion conditions are not severe. This lashing wire is for use in B cable lashers.

(2) **C Steel Lashing Wire**—A chromium steel wire which has good rust-resisting properties and is intended for general use as well as in areas where corrosion conditions are severe. This wire, in either size, may be used to lash cable over railroads. It is also used when lashing cable to 6M CR steel strand. C steel lashing wire is available in the following sizes:

(a) 0.045-inch diameter for use in J (Model 2), C, D, F, H, and J cable lashers.

Note: The C and F lashers may be equipped with drive wheels for use with 6.6M strand.

(b) 0.065-inch diameter for use in B cable lashers and D neal spinners.

Note: Surface discoloration may appear on this wire in a short time after installation if corrosive conditions are particularly severe. This brown stain has the appearance of rust but, unlike rust, it does not affect the strength of the wire.

(3) **D Steel Lashing Wire**—0.045-inch diameter wire for use in lashing aerial cable to 10M and 16M CR steel strand. This lashing wire is made of the same material as CR steel strand to minimize galvanic corrosion when used in severe seacoast atmospheres. This wire is for use in J (Model 2), C, D, F, H, and J cable lashers, and is distinguishable from 0.045C steel

lashing wire by the cotton binders which are RED instead of WHITE.

3.05 Occasionally, special types of lashing wire are prescribed to meet particular conditions. These have included neoprene-jacketed wire and another type similar in appearance to C steel lashing wire, but manufactured from a different alloy. Place special lashing wire in the manner prescribed for B, C, and D steel lashing wires, except as modified by special instructions.

4. J CABLE LASHER (MODEL 2)

4.01 Use of the J cable lasher (Model 2) is outlined in the following paragraphs.

4.02 The J lasher (Model 2) uses 0.045 steel lashing wire and is used to:

(1) Lash aerial cable on suspension strands up to and including 25,000-pound strand.

(2) Lash two or more cables simultaneously to a single suspension strand provided the diameter of the cable assembly does not exceed 3 inches.

(3) Lash an additional cable to an existing lashed cable and strand provided the diameter of the cable assembly does not exceed 3 inches.

4.03 Prepare the lashing wire coil as follows:

(1) Cut and remove the coil binding which holds the looped end of the wire at the center (inside end) of the coil.

(2) Pull out the looped end of the wire until the first turn is tight against the binding and cut off the loop. Unwind about 1 foot of wire from the inside of the coil. The loose end should emerge from the face side of the coil.

(3) Cut off the loop on the end of the lashing wire on the outside of the coil to prevent snarling of the coil.

4.04 Place the coil of lashing wire in the lasher as follows:

(1) Loosen the wing nut on the cover latch and open the latch. The cover will open automatically.

(2) Place a coil in the magazine. The face of the coil should be toward the open side of the magazine. Position the coil with the two coil bindings in the recesses. Feed the loose end (inside end) of the wire from the center of the coil through the throat in the cover. This is illustrated in Fig. 1.

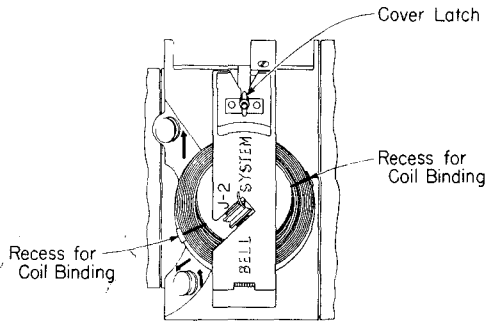


Fig. 1—Placing Wire Coil in J Cable Lasher

- (3) Close the cover latch and tighten the wing nut until the cover contacts the coil slightly.
- (4) Cut the two remaining bindings and remove them. (If portions of the bindings are not removed, they may cause snagging of the lashing wire.)
- (5) Tighten the wing nut by hand. Do not use pliers.
- (6) Thread the lashing wire around the snubbing pulleys in the direction of the indicating arrows and wind the free end of the lashing wire as illustrated in Fig. 2. The lashing wire should not project or dangle from the lasher.

4.05 If the lasher guard is to be used, install it on the lasher as outlined in Section 081-400-112.

4.06 After the lashing wire (and the lasher guard, if used) is installed, proceed as follows to lash a single cable to a suspension strand.

- (1) Make certain that the pulling plate gate is open and that the rotating drum is locked in position.

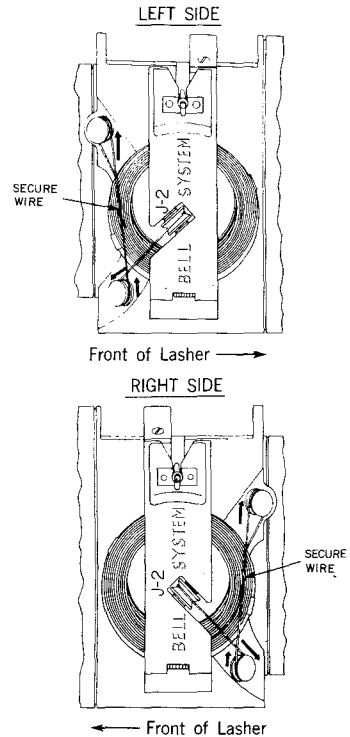


Fig. 2—Threading J Cable Lasher

- (2) Adjust the rear vertical cable rollers to their widest opening.
- (3) Open the rear cable lifter (Fig. 3) and adjust it to the lowest position.
- (4) Open the strand tensioning roller. When the strand drive wheels at the top of the lasher) is crosswise, the roller is in the open position. (See Fig. 4.)
- (5) Attach a handline to the handle and raise the lasher to the strand.
- (6) In placing the lasher on the strand, be sure that the strand drive wheels and small rear trailer wheel are properly positioned on the strand.

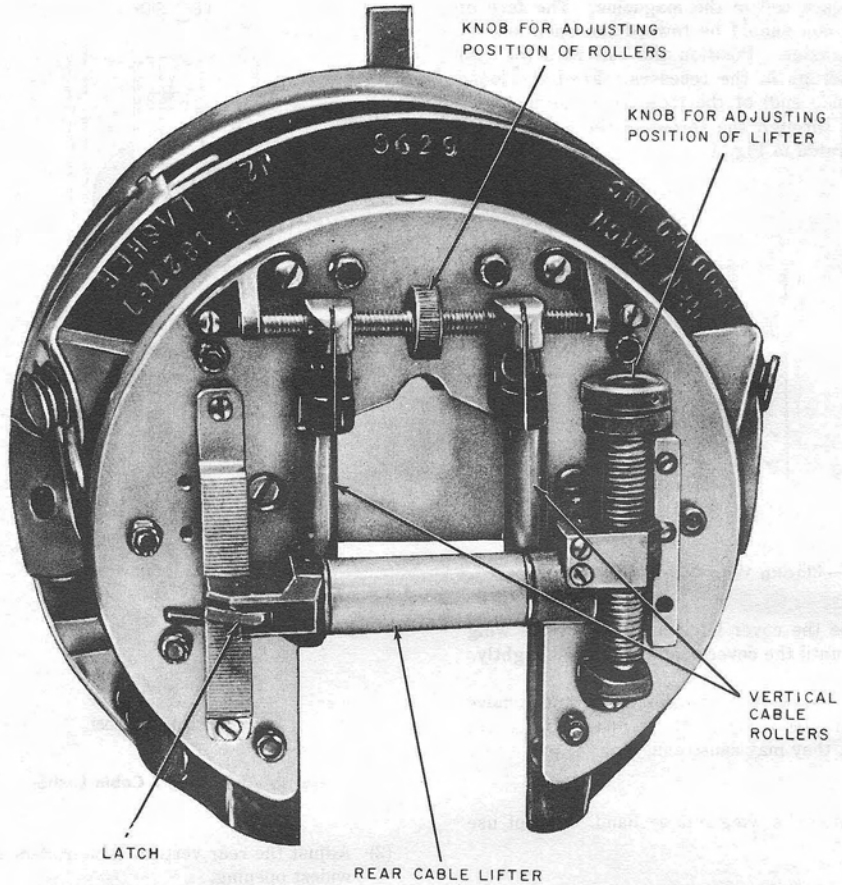


Fig. 3—Rear View of Lasher

Strand Tensioning Roller is open when lever is in crosswise position

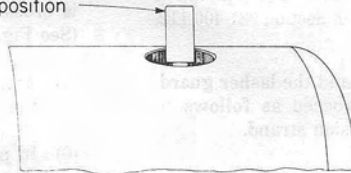


Fig. 4—Position of Lever When Roller is Open

(7) Engage the strand tensioning roller by pressing the lever all the way down, turning it counterclockwise to the end of its travel, and allowing it to rise. This locks the lasher on the strand. When the roller is in the engaged position, the lever is parallel to the strand as illustrated in Fig. 5.

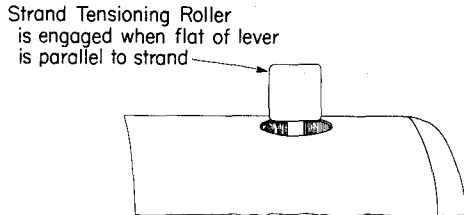


Fig. 5—Position of Lever When Roller is in Working Position

(8) Raise the cable to the strand, close the rear cable lifter, and let the cable rest on the roller. Estimate the amount the roller should be raised to elevate the cable to within 1/4 inch of the strand. Open the cable lifter, lower the cable clear of the opening, and turn the adjusting knob on top of the vertical threaded post until the lifter is raised the desired amount. Raise the cable and close the lifter. Adjust the position of the vertical cable rollers to contact the sides of the cable. These adjustments need not be changed as long as the same diameter cable is being lashed. These adjustments are illustrated in Fig. 3.

(9) Pull out sufficient lashing wire for terminating and terminate the lashing wire on the strand.

(10) Close the pulling plate gate and the gate of the lasher guard, if used.

(11) Attach the bridle assembly.

4.07 When the J lasher (Model 2) is to be used for lashing a second cable to an existing cable and strand, proceed as follows:

(1) Turn the strand tensioning roller (Fig. 4) to the open position and check lashing wire coils.

Note: The strand tensioning roller assembly of the J cable lasher (Model 2) need not be

removed when lashing the strand with cable in place as it was in the earlier J cable lasher, but is turned to one side and retracted between the drive wheel and the housing where it will remain until disengaged.

(2) Open the pulling plate gate and the gate of the lasher guard, if used.

(3) Adjust the rear vertical cable rollers to their widest opening.

(4) Open the rear cable lifter and adjust it to the lowest position.

(5) Attach a handline to the handle and raise the lasher to the strand. Place the lasher on the strand, making certain that the strand drive wheels and small rear trailer wheel are properly positioned on the strand.

(6) Raise the cable to the proper position (for alongside or underneath lashing) and close the rear cable lifter. For alongside lashing, leave the vertical cable rollers in the wide-open position and adjust the rear cable lifter so the second cable is 1/8 to 1/4 inch below the existing cable. For underneath lashing, adjust the vertical cable rollers to clear the larger of the two cables by approximately 1/8 inch and adjust the rear cable lifter so the clearance between the two cables is 1/8 to 1/4 inch.

(7) Pull out sufficient lashing wire for terminating and terminate the lashing wire on the strand.

(8) Close the pulling plate gate and the gate of the lasher guard, if used.

4.08 Under normal conditions, if the towing line is approximately in line with the pole line, the snap hooks of the lasher bridle should be attached to the top towing eyes. When lashing through trees or under other conditions where a short towing line is impractical, snap hooks may be attached to the outside holes in the pulling gate.

4.09 For all side pulls, both snap hooks should be attached on the side toward the pull. Attach one snap hook to the top towing eye and the other snap hook to the hole in the pulling gate. The top towing eyes and the holes in the pulling plate are illustrated in Fig. 6.

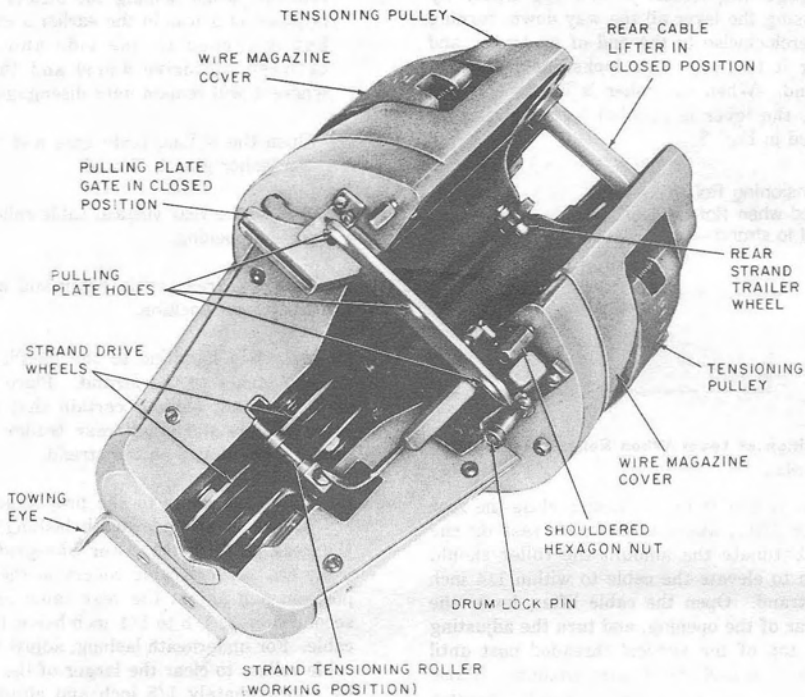


Fig. 6—Underside of Lasher

4.10 The automatic brake operates when the lasher stops and tension is removed from the towing line, and releases when towing is resumed. Tension need not be maintained in the towing line when the lasher is not in motion. To move the lasher backwards, proceed as follows:

- (1) Before releasing the brake, clamp the lashing wire to the strand.
- (2) If the lasher is within reach, release the brake by pushing back against the pulling plate.
- (3) If the lasher is not within reach, and at least one end of the lasher bridle is attached to the pulling plate, release the brake by pulling back on the towing line.
- (4) If the lasher is not within reach, and the bridle is not attached to the pulling plate,

release the brake by pulling back on the pulling plate with a wire raising tool attached to sections of tree pruner handles.

4.11 In transferring the lasher around a pole, proceed as follows:

- (1) Clamp the lashing wire to the strand.
- (2) Pull out sufficient wire for terminating or lashing past a pole.
- (3) Attach the lasher bridle as illustrated in Fig. 7.
- (4) Open the front and rear gates.
- (5) Lift the lasher off the strand and move it over into place on the strand on the other side of the pole. If the lasher is accidentally

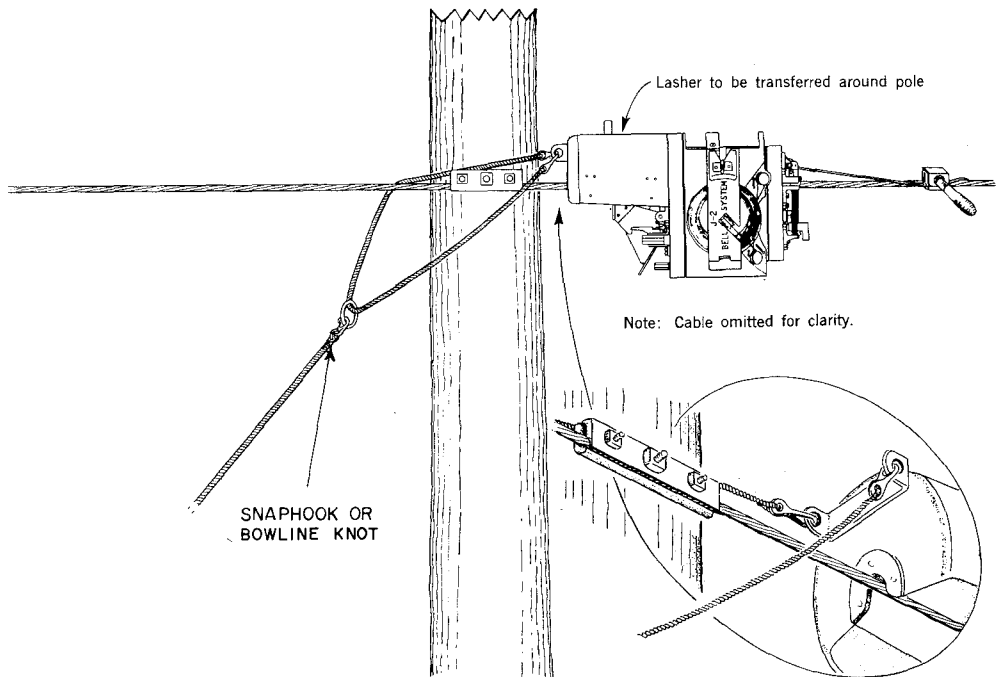


Fig. 7—Method of J or F Lasher Transfer

dropped during the transfer, the bridle straddling the strand will keep it from falling to the ground.

4.12 The operations for removing the lasher from the strand are essentially the same as for transferring around a pole except that a handline is attached to the lasher handle, the lasher bridle is disconnected, and the lasher is lowered to the ground.

5. C AND H CABLE LASHERS

Note: The C and H cable lashers are identical except the H comes from the manufacturer equipped with 6.6M strand drive wheels.

5.01 The C and H cable lashers use 0.045 steel lashing wire and are used to lash cable up to 1-1/2 inches in diameter.

Note: The C cable lasher may be equipped with drive wheels for 6.6M strand.

5.02 To place lashing wire in the lasher magazine, proceed as follows:

- (1) Cut and remove the coil binding at the loop which is in the center (inside end) of the coil.
- (2) Cut and remove the opposite binding. Do not cut the other two bindings.

- (3) Cut off the loop of wire from the outer end of the coil.
- (4) Cut off the loop of wire and unwind about 1 foot of wire from the inside of the coil. The loose end should emerge from the face side of the coil.

5.03 If coils are installed aloft, engage the strand tensioning roller, open the front cable lifter, and rotate the drum of the lasher until it locks.

- (1) Loosen the wing nut on the cover latch and open the latch. The cover will open automatically.
- (2) Place a coil of wire in the magazine. The face of the coil should be toward the open side of the magazine. Position the coil with the two coil bindings in the recesses. Feed the loose end (inside end) of wire from the center of the coil through the throat in the cover. A coil of lashing wire properly positioned in the magazine is illustrated in Fig. 8.

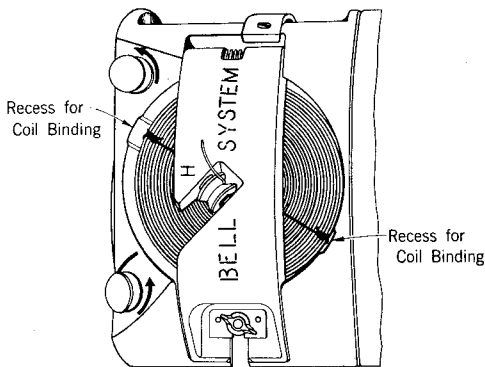


Fig. 8—Placing Wire Coil in H Cable Lasher

- (3) Close the cover and latch. Tighten the wing nut part way.
- (4) Cut the two remaining bindings and remove them. (If portions of the bindings are not removed, they may cause snagging of the lashing wire.)
- (5) Tighten the wing nut.

- (6) Thread the lashing wire around the snubbing pulleys and wind the free end of the lashing wire as shown in Fig. 9 so it does not project or dangle from the lasher.

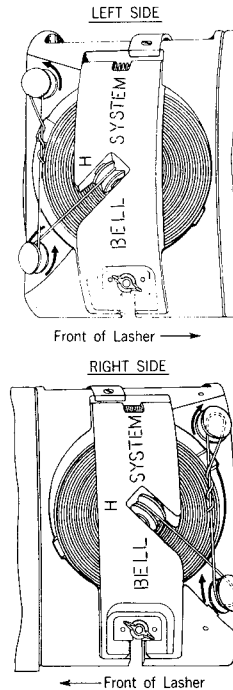


Fig. 9—Threading H Cable Lasher

5.04 After removing the lasher from the carrying case and installing the lashing wire, proceed as follows:

- (1) Open the front cable lifter and rotate the drum of the lasher until it locks.
- (2) Close the rear cable lifter and adjust it to the lowest position.
- (3) Adjust the rear vertical cable rollers to their widest opening.
- (4) The strand tensioning roller should be in the open position. When the strand tensioning roller lever (between strand drive wheels at the

top of the lasher) is crosswise, the roller is in the open position (Fig. 10).

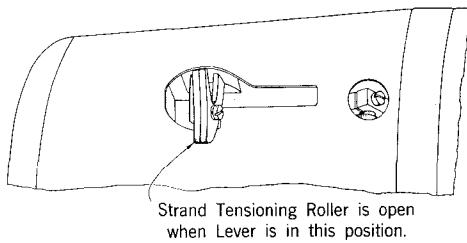


Fig. 10—Position Of Lever When Roller is Open (H Cable Lasher)

5.05 Raise the lasher by means of a handline attached to the handle of the lasher.

- (1) Open the rear cable lifter.
- (2) In placing the lasher on the strand, be sure that the strand drive wheels and the small rear trailer wheel are properly positioned on the strand.
- (3) Engage the strand tensioning roller by pressing the lever all the way down, turning it counterclockwise to the end of its travel, and allowing it to rise. This locks the lasher on the strand. When the roller is in the engaged position, the lever is parallel to the strand (Fig. 11).

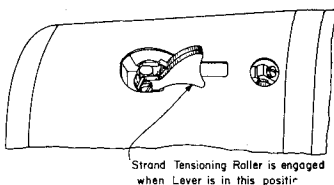


Fig. 11—Position of Lever When Roller is in Working Position (H Cable Lasher)

- (4) Close the rear cable lifter. Turn the knob to adjust the position of the lifter so that the top of the cable will be from 1/8 inch to 1/4 inch from the underside of the strand. Raise large cables off the roller when making this

adjustment. Adjust the position of the vertical cable rollers to clear the cable by approximately 1/8 inch. These adjustments need not be changed as long as the same diameter cable is being lashed. These parts are illustrated in Fig. 12.

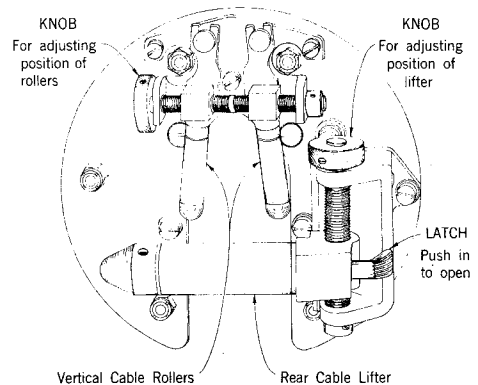


Fig. 12—Rear View of H Cable Lasher

- (5) Pull out sufficient lashing wire for terminating and clamp the lashing wire to the strand. The lashing wire should be clamped on the strand at least 1 foot behind the lasher.
- (6) Close the front cable lifter.

5.06 A lasher bridle is provided with the C and H lashers to provide a means of preventing damage in case the lasher is accidentally dropped during transfer operations. The bridle for the C lasher is provided as a replacement part and is interchangeable with the bridle for the modified D, F, J, or J (Model 2) lashers.

5.07 Attach the lasher bridle to the lasher as shown in Fig. 13. The tow rope is attached to the floating ring on the lasher bridle by means of a snap hook or bowline knot.

5.08 Where practicable, the towing line should be kept in line with the pole line as side pull tends to swing the cable out of plumb and may result in excessive wear on the strand wheels.

5.09 The automatic brake operates when the lasher stops and tension is removed from

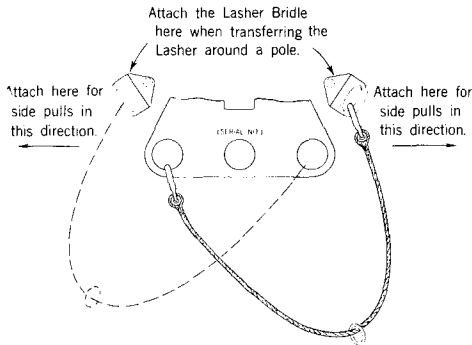


Fig. 13—Bridle Attached To Lasher

the towing line and releases when the towing is resumed. Tension need not be maintained in the towing line when the C or H cable lasher is not in motion. To move the lasher backwards, proceed as follows:

- (1) Before releasing the brake, clamp the lashing wire to the strand.
- (2) If the lasher is within reach, release the brake by pushing against the pulling plate.
- (3) If the lasher is not within reach and the lasher bridle is attached to the pulling plate, as shown in Fig. 13, release the brake by pulling back on the towing line.

5.10 In transferring the lasher around a pole, from one span to another, proceed as follows:

- (1) Clamp the lashing wire to the strand.
- (2) Pull out sufficient wire for terminating or lashing past a pole.
- (3) Open the front and rear cable lifters.
- (4) Move the lasher forward or backward along the strand until the drum locks.
- (5) Attach the lasher bridle as illustrated in Fig. 14.

(6) Release the strand tensioning roller by swinging the lever forward and then rotating it to a position crosswise to the strand. This unlocks the lasher from the strand.

(7) Raise the lasher from the strand and place it on the strand in the next span.

(8) Before lashing the next span, check the amount of lashing wire remaining in the lasher. When a coil has been used to the point where the thickness of the remaining portion is about 1/4 inch, approximately 200 feet of wire is left. If there is not enough wire remaining in the coil to lash the next span, wind the free end of the lashing wire around the upper snubbing pulley so it does not project or dangle from the lasher unless the coil is to be replaced at this time.

5.11 In removing the lasher from the strand preparatory to lowering it to the ground, proceed as follows:

- (1) After the lashing wire has been clamped to the strand and sufficient lashing wire has been pulled out and cut off, secure the end of the lashing wire around the upper snubbing pulley.
- (2) Move the lasher forward or backward along the strand until the drum locks.
- (3) Remove the towing line, attach a handline to the lasher handle, and release the strand tensioning roller.
- (4) Open the front and rear cable lifters and disconnect the lasher bridle.
- (5) Raise the lasher from the strand, close the front of the rear cable lifters, and lower the lasher.

6. F AND J CABLE LASHERS

6.01 The use of the F and J cable lashers is identical to the use of the J cable lasher (Model 2) (4.01 through 4.12) except as follows:

Note: F and J lashers may be equipped with drive wheels for 6.6M strand.

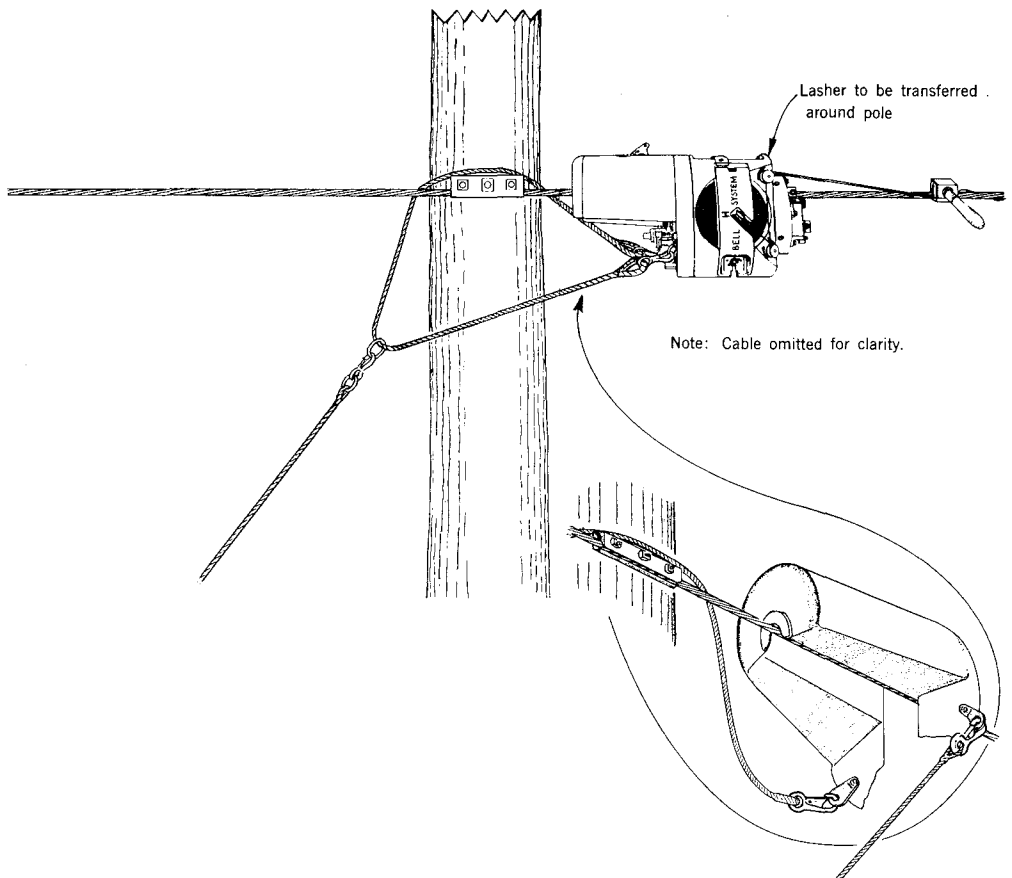
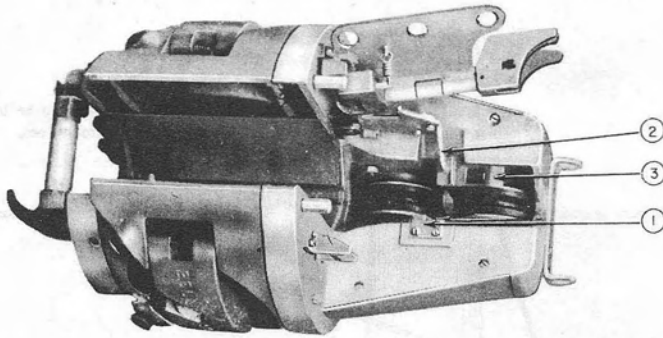


Fig. 14—Method of H Cable Lasher Transfer

6.02 When the J or F lasher is to be used for lashing a second cable to an existing cable and strand proceed as follows:

- (1) Remove the strand tensioning roller knob and shaft assembly. Remove the forward part of the hold-down lever and the strand roller stop. Replace the screws in the strand roller stop mounting plate and the hold-down lever and tighten them securely. Store the removed parts in the lasher case. Figure 15 illustrates the F lasher before and after removal of the parts.
- (2) Install the lashing wire (see 4.04) and the lasher guard, if used.
- (3) Proceed as outlined in 4.07 (2) through 4.12.



PARTS TO REMOVE FOR LASHING TO AN EXISTING CABLE AND STRAND

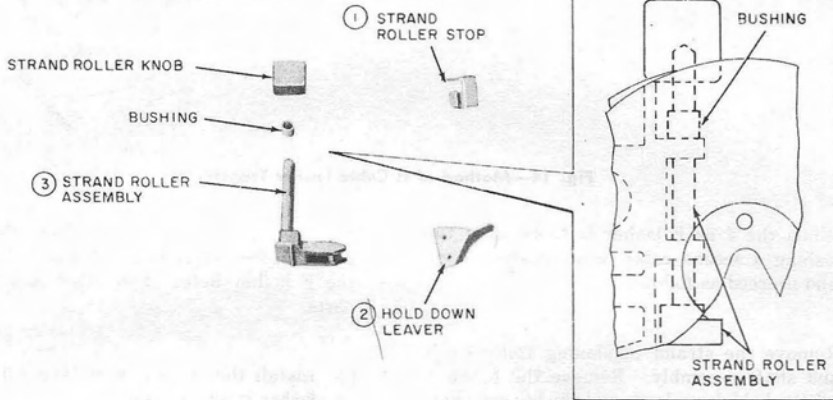
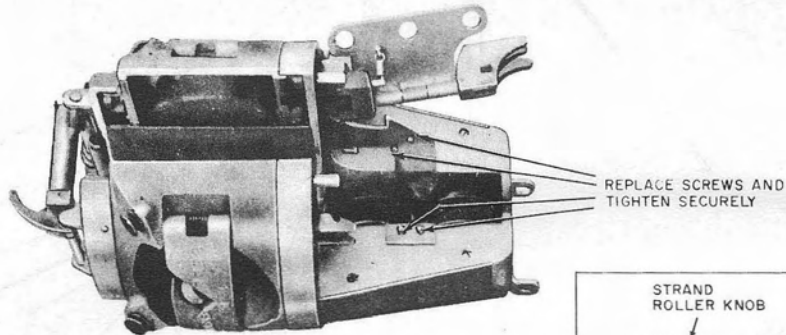


Fig. 15—Removing Strand Roller Assembly—Modified D, F, and J Cable Lashers

7. C LASHER GUARD

7.01 The C lasher guard may be attached to the D, F, J, or J (Model 2) cable lasher as outlined in Section 081-400-112.

7.02 When lashing close to tree limbs, drop wire, etc, the C lasher guard will keep these obstructions from being caught in the lasher.

7.03 The E cable lasher case will accommodate the J (Model 2), D, F, or J cable lasher either with or without the C lasher guard installed.

7.04 The superseded D cable lasher case will only accommodate the D or F cable lasher without the lasher guard installed.

7.05 *Repeated loosening of the hexagon nuts which are used to hold the superseded B lasher guard in place can adversely affect the adjustment of the cable lasher.* Either of the following will eliminate the necessity for loosening these nuts.

(a) Leave the superseded B lasher guard permanently in place and use an E cable lasher case for storing the lasher when not in use.

(b) Replace the hexagon nuts with shouldered nuts as outlined in Section 081-400-112, and use the C lasher guard.

7.06 The C lasher guard installed on an F cable lasher is illustrated in Fig. 16.

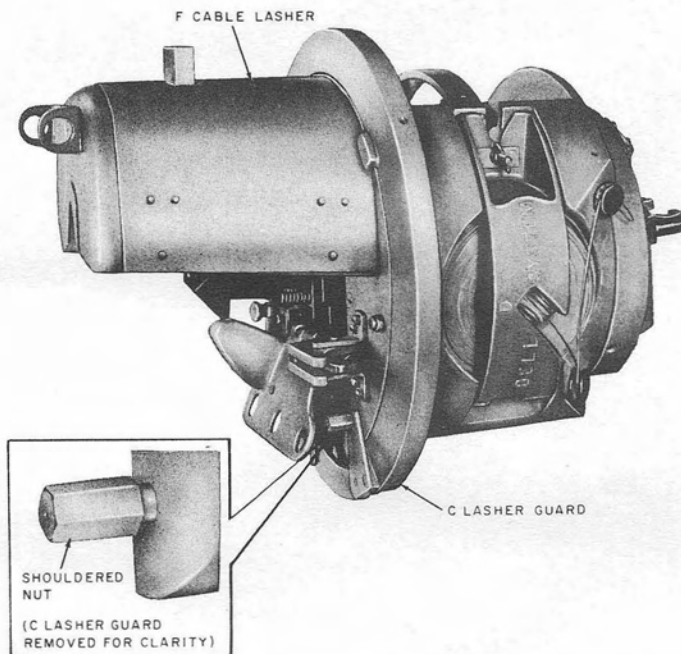


Fig. 16—C Lasher Guard Installed

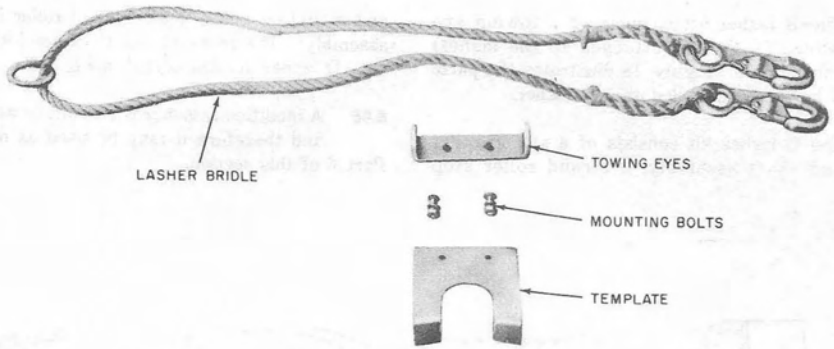
8. MODIFYING THE SUPERSEDED D CABLE LASHER

8.01 All superseded D lashers may be converted to modified D lashers by equipping them with the parts from B and C lasher kits.

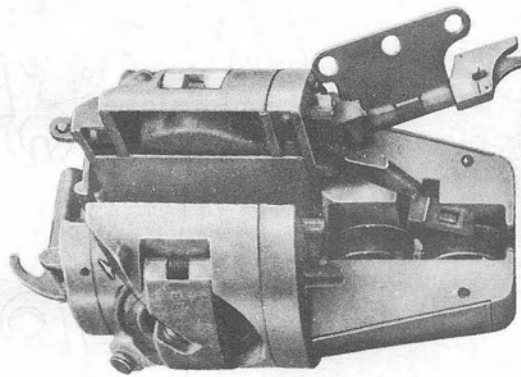
8.02 Installation of the B lasher kit provides a lasher bridle that will withstand shock loads which would result from accidentally dropping a

lasher during the transfer around a pole or other obstruction.

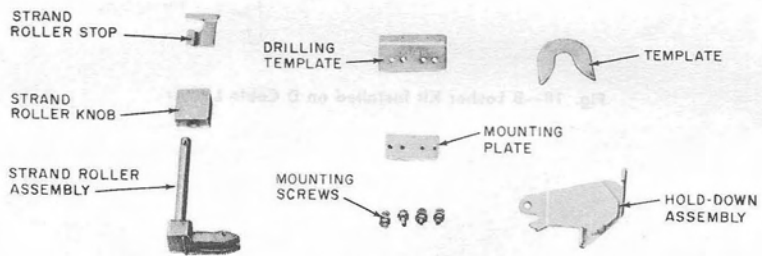
8.03 Installation of the C lasher kit will allow the use of the lasher when lashing an additional cable to an existing lasher cable and strand when the diameter of the cable assembly does not exceed 3 inches. The D lasher and the parts of the B and C lasher kits are illustrated in Fig. 17.



B LASHER KIT



D CABLE LASHER



C LASHER KIT

Fig. 17—B and L Lasher Kits

8.04 The B lasher kit consists of a towing eye (which is directly attached to the lasher) and a lasher bridle. Figure 18 illustrates the parts of the B lasher kit installed on a D lasher.

8.05 The C lasher kit consists of a strand roller and shaft assembly, a strand roller stop

and mounting plate, and a strand roller hold-down assembly. The parts of the C lasher kit mounted on a D lasher are illustrated in Fig. 19.

8.06 A modified D lasher is essentially an F lasher and therefore it may be used as outlined in Part 6 of this section.

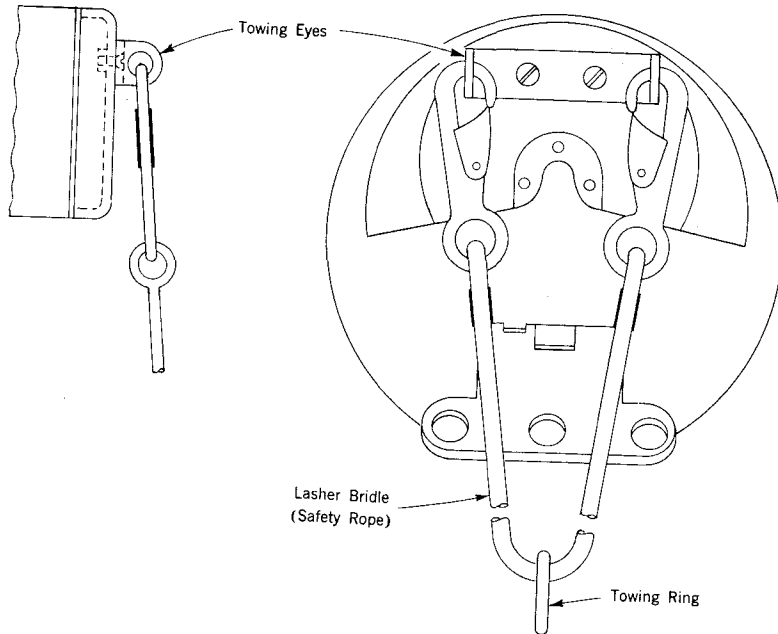


Fig. 18—B Lasher Kit Installed on D Cable Lasher

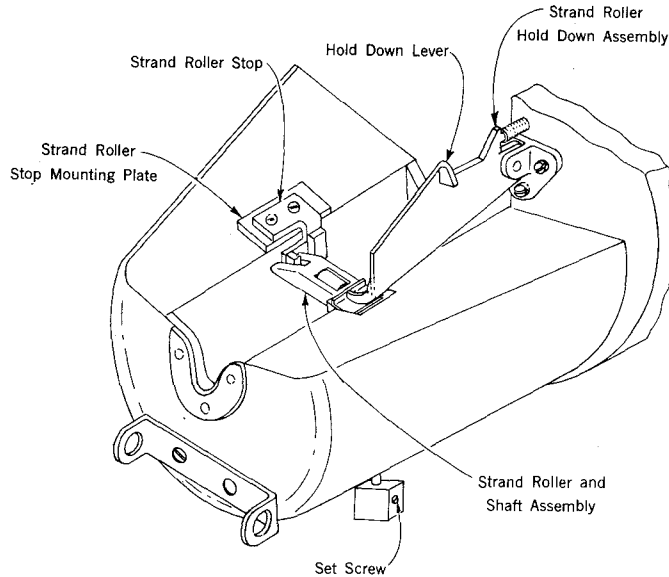


Fig. 19—C Lasher Kit Installed on D Cable Lasher

9. SUPERSEDED D CABLE LASHER

9.01 The use of the D cable lasher is outlined in the following paragraphs.

9.02 This lasher uses 0.045 C steel lashing wire and is used to lash aerial cables on suspension strands up to and including 25,000-pound strand. The D lasher may also be used to lash two or more cables simultaneously to a single suspension strand provided the diameter of the cable assembly does not exceed 3 inches, which is the maximum diameter which will pass through the lasher.

9.03 Prepare the lashing wire coil as follows:

- (1) Cut and remove the coil binding which holds the looped end of the wire at the center (inside end) of the coil.
- (2) Cut and remove the opposite binding. Do not cut the other two bindings.

(3) Pull out the looped end of the wire until the first turn is tight against the binding and cut off the loop. Unwind about 1 foot of wire from the inside coil. The loose end should emerge from the face side of the coil.

(4) Cut off the loop on the end of the lashing wire on the outside of the coil to prevent snarling of the coil.

9.04 Place the coil of lashing wire in the lasher as follows:

- (1) If the coils are installed aloft, see that the strand tensioning roller is engaged under the strand, the rear cable lifter is closed, the pulling gate is open, and the rotating drum of the lasher is locked.
- (2) Loosen the wing nut on the cover latch and open latch. The cover will open automatically.

- (3) Place a coil in the magazine. The face of the coil should be toward the open side of the magazine. Position the coil with the two coil bindings in the recesses. Feed the loose end (inside end) of the wire from the center of the coil through the throat in the cover (Fig. 20).
- (4) Close the cover, latch, and tighten the wing nut until the cover contacts the coil lightly.
- (5) Cut the two remaining bindings and remove them. (If portions of the bindings are not removed, they may cause snagging of the lashing wire.)
- (6) Tighten the wing nut by hand. Do not use pliers.
- (7) Thread the lashing wire around the snubbing pulleys in the direction of the indicating arrows and wind the free end of the lashing wire as shown in Fig. 21. The lashing wire should not project or dangle from the lasher.

9.05 After removing the lasher from the carrying case and installing the lashing wire, proceed as follows:

- (1) Make certain that the pulling plate gate is open and that the rotating drum is locked in position.
- (2) Open the rear cable lifter, adjust it to the lowest position, and close it.
- (3) Adjust the rear vertical cable rollers to their widest opening.
- (4) The strand tensioning roller should be in the open position. When the strand tensioning roller lever (between strand drive wheels at the top of the lasher) is crosswise, the roller is in the open position (Fig. 22).

9.06 Raise the lasher with a handline attached to the handle.

- (1) Open the rear cable lifter.
- (2) In placing the lasher on the strand, be sure that the strand drive wheels and the small rear trailer wheel are properly positioned on the strand.

(3) Engage the strand tensioning roller by pressing the lever all the way down, turning it counterclockwise to the end of its travel, and allowing it to rise. This locks the lasher on the strand. When the roller is in the engaged position, the lever is parallel to the strand (Fig. 23).

(4) Raise the cable to the strand, close the rear cable lifter, and let the cable rest on the roller. Estimate the amount the roller should be raised to elevate the cable to within 1/4 inch of the strand. Open the cable lifter, lower the cable clear of the opening, and turn the adjusting knob on top of the vertical threaded post until the lifter is raised the desired amount. Raise the cable and close the lifter. Adjust the position of the vertical cable rollers to contact the side of the cable. These adjustments need not be changed as long as the same diameter cable is being lashed. These adjustments are illustrated in Fig. 3.

(5) Pull out sufficient lashing wire for terminating and clamp the lashing wire to the strand at least 1 foot behind the lasher.

(6) Close the pulling plate gate.

9.07 Attach the towing link to the gate, using one of the towing positions illustrated in Fig. 24.

9.08 The automatic brake operates when the lasher stops and tension is removed from the towing line, and releases when towing is resumed. Tension need not be maintained in the towing line when the D lasher is not in motion. To move the lasher backwards, proceed as follows:

(1) Before releasing the brake, clamp the lashing wire to the strand.

(2) If the lasher is within reach, release the brake by pushing back against the pulling plate.

(3) If the lasher is not within reach and the towing line is attached to the pulling plate, release the brake by pulling back on the towing line.

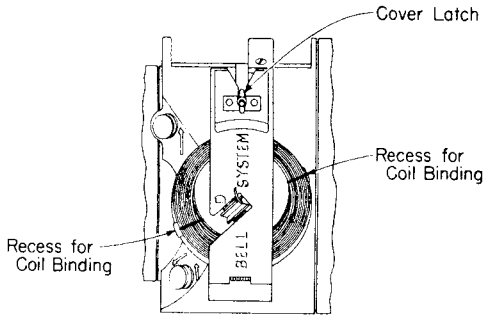


Fig. 20—Placing Wire Coil in D Cable Lasher

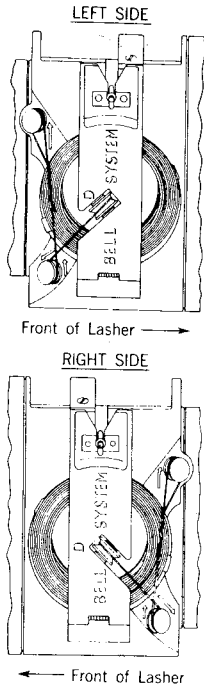


Fig. 21—Threading D Cable Lasher

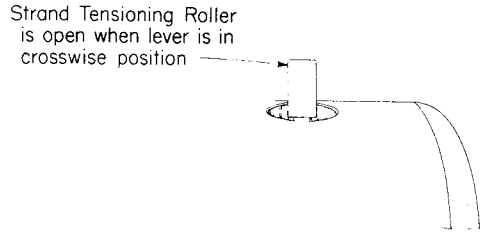


Fig. 22—Position of Lever on D Cable Lasher When Roller is Open

Strand Tensioning Roller is engaged when flat of lever is parallel to strand

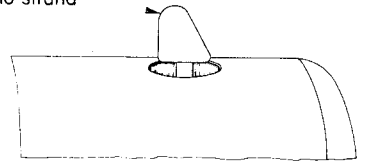
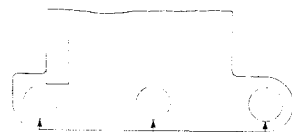


Fig. 23—Position of Lever on D Cable Lasher When Roller is in Working Position



Use center hole of Pulling Plate if towing line is approximately in line with the pole line.

Use side hole of Pulling Plate for the side pulls

Fig. 24—Pulling Plate of D Cable Lasher

9.09 In transferring the lasher around a pole from one span to another, and at strand crossovers, proceed as follows:

- (1) Clamp the lashing wire to the strand.
- (2) Pull out sufficient wire for terminating or lashing past a pole.
- (3) Open the pulling plate gate.
- (4) Move the lasher forward or backward along the strand until the drum locks.
- (5) Connect the towing ring snap hook to the suspension strand on the other side of the pole and open the rear cable lifter (Fig. 25).
- (6) Press down on the strand tension roller lever and turn it clockwise to a position crosswise to the strand. This unlocks the lasher from the strand.
- (7) Raise the lasher from the strand and place it on the strand in the next span.
- (8) Disconnect the towing ring snap hook from the strand.
- (9) Before lashing the next span, check the amount of lashing wire remaining in the lasher. When a coil has been used to the point where the thickness of the remaining portion is about 1/4 inch, approximately 200 feet of wire is left. If there is not enough wire remaining in the coil to lash the next span, wind the free end of the lashing wire around the upper snubbing pulley so it does not project or dangle from the lasher (unless the coil is to be replaced at this time).

9.10 In removing the lasher from the strand to lower it to the ground, proceed as follows:

- (1) After the lashing wire has been clamped to the strand and sufficient lashing wire has

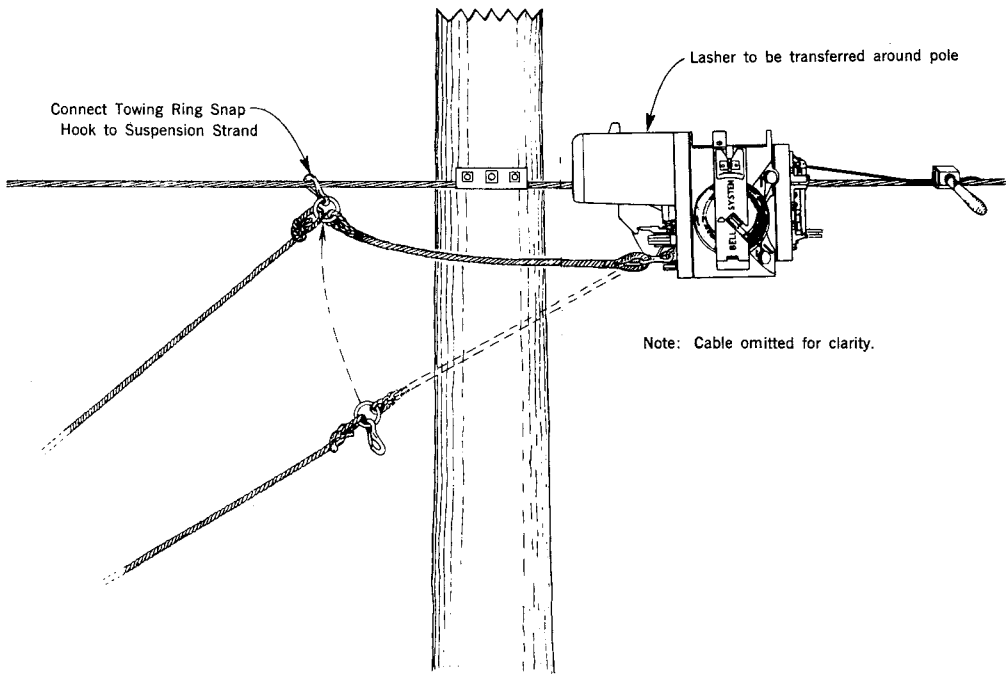


Fig. 25—Method of D Cable Lasher Transfer

been pulled out and cut off at the lasher, secure the end of the lashing wire around the upper snubbing pulley.

- (2) Open the pulling plate gate.
- (3) Move the lasher forward or backward along the strand until the drum locks.
- (4) Open the rear cable lifter.
- (5) Remove the towing line, attach the handline to the lasher handle, and release the strand tensioning roller.
- (6) Raise the lasher from the strand, close the rear cable lifter, and lower the lasher.

9.11 A superseded D cable lasher can be modified by equipping with the parts from the B and C lasher kits and may then be used as outlined in Part 6 of this section.

9.12 The method of modifying the superseded D lasher with the B and C lasher kits is explained in Part 8 of this section.

10. SUPERSEDED B CABLE LASHER

10.01 The use of the B cable lasher is outlined in the following paragraphs.

10.02 To obtain tight lashing, be sure to use the proper tensioning pulley. Mount the pulley on the bracket so the large diameter side of the tapered portion is adjacent to the bracket. Select the pulley on the basis of the lashing wire to be used as follows.

Size of Tensioning

Pulley Required	Kind of Lashing Wire
1-1/4 Inch	0.091 B Steel Lashing Wire
3/4 Inch	0.065 C Steel Lashing Wire

10.03 To place a coil of wire in the lasher, open the reel cover by releasing the latch. Place the coil of wire on the spindle with the surface (which is flush with the inner end of wire) facing out. Place the looped end of the wire coil in the slot so the loop is in the center of the spindle.

Hold the wire coil against the bottom flange of the reel with one hand and cut the cotton tape bindings. Grasp the bindings near the knits and pull them out one at a time. Pull the outer end of the wire through the slot in the revolving unit and latch the reel cover. Pull out sufficient wire for terminating and take one turn in a clockwise direction around the tensioning pulley. When closing the reel cover, the latch should be operated by hand. **Do not slam the cover shut.** Figure 26 illustrates the method of placing a coil of lashing wire in the B cable lasher.

10.04 The reel flange should fit snugly against the coil. If it does not, the wire may wedge, causing it to bind. If it is necessary to adjust the cover to secure a snug fit on the wire coil, the locknut of the threaded sleeve should be loosened and the sleeve turned by means of the pin provided for this purpose. The locknut should then be tightened. If the cover does not close sufficiently to latch properly, back off the adjusting pin to provide satisfactory operation.

10.05 The rear cable lifter should be positioned so the top of the cable will be approximately 1/4 inch from the underside of the strand.

10.06 Only one adjustment of the rear lifter is necessary for a given size of cable. To adjust, turn the knurled nut on the hinge post until the cable lifter is in the desired position. This adjustment should be made while the roller is in the open position.

10.07 In placing the lasher on the strand, proceed as follows:

- (1) Make sure that the locking bolt located beneath the carrying handle on the rotating unit is in the locked position.
- (2) Raise the lasher with a handline.
- (3) Swing the ring pusher and both front and rear cable lifters open to clear the slot. The cable lifters are kept shut by means of spring latches. The latch should be operated when swinging the cable lifters to the open position rather than forcing them open, so as

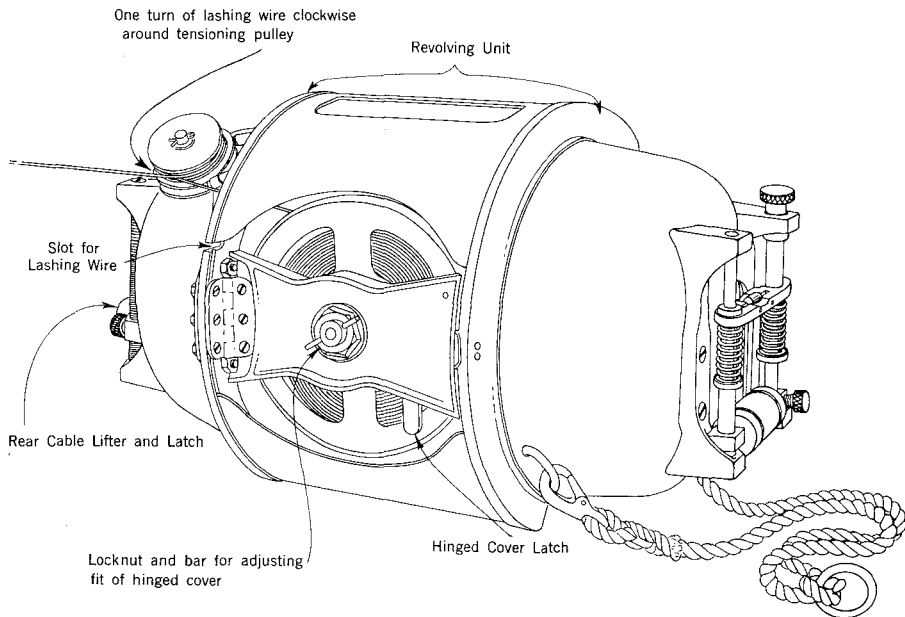
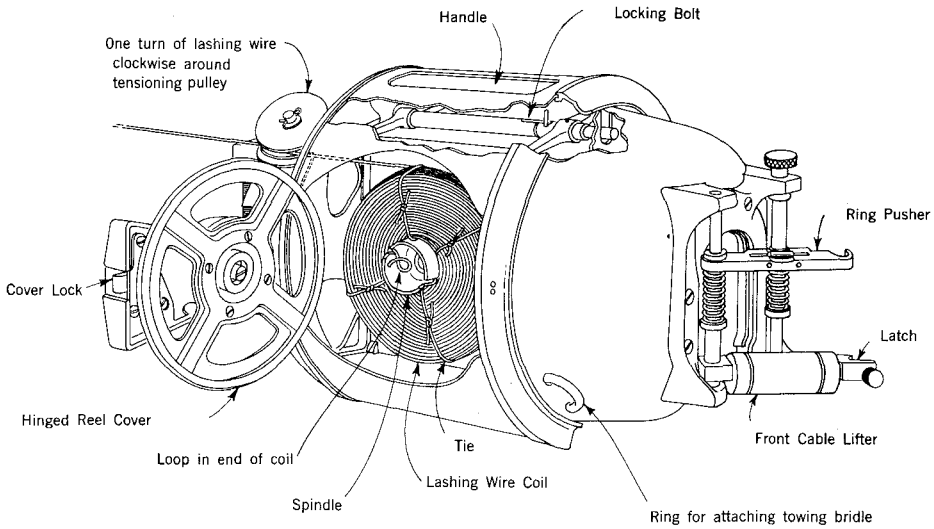


Fig. 26—Placing Wire Coil in B Lasher

not to damage the posts. A spring holds the cable lifters in the open position.

- (4) Place the lasher over the strand and cable so both rubber strand wheels rest on the strand.
- (5) Attach the snaps of the towing bridle to the pulling rings.
- (6) Raise the cable and latch the cable lifters. When closing the cable lifters, be sure to operate the latch. **Do not slam them shut** as they may damage the posts.
- (7) Check the adjustment of the rear cable lifter and make any further adjustment required.
- (8) Close the ring pusher. Turn the knob controlling the spring action in a counterclockwise direction as far as it will go. This allows the compression spring on the post to bear against the underside of the ring pusher.
- (9) Pull out sufficient lashing wire for terminating and clamp the lashing wire to the strand with a cable lashing clamp.
- (10) Release the locking bolt.

10.08 Where practicable, the towing line should be kept in line with the pole as side pull tends to swing the cable out of plumb and may result in excessive wear on the strand wheels.

10.09 In transferring the lasher around a pole from one span to another, proceed as follows:

- (1) While the towing line is still under tension, clamp the lashing wire to the strand to avoid any possibility of the wire slacking off.
- (2) Pull out sufficient wire for terminating or lashing past a pole.
- (3) Disconnect the towing bridle on the pole side of the lasher.
- (4) Bring the disconnected end of the towing bridle up behind the strand in the next span, over the suspension clamp, down behind the strand in the span just lashed, and reconnect to the lasher (Fig. 27).
- (5) Lock the locking bolt.
- (6) To release the ring pusher, turn the knob in a clockwise direction. Swing the ring pusher and both front and rear cable lifters open to clear the slot. Operate the latches when swinging the cable lifters open.
- (7) Raise the lasher from the strand and place it on the strand in the next span.

10.10 The operations of removing the lasher from the strand are essentially the same as for transferring around a pole except that the towing bridle is disconnected and the lasher is lowered to the ground by means of a handline. It is important to be sure that the locking bolt is in the locked position to prevent the revolving unit from turning.

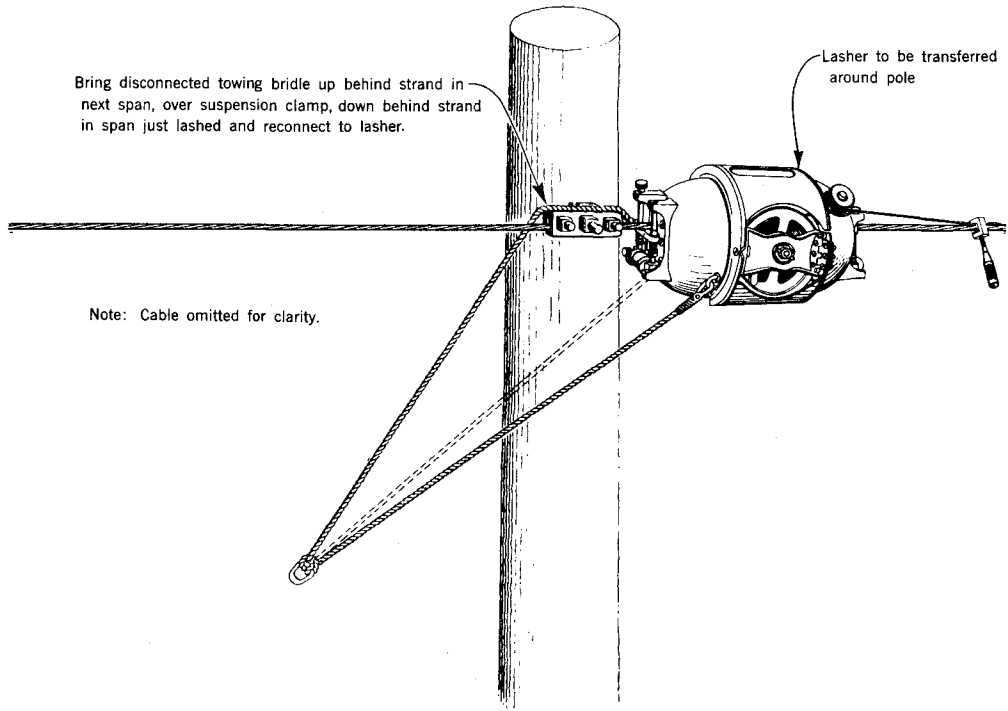


Fig. 27—Method of B Cable Lasher Transfer