

**CABLE FEEDER, C CONECS CABLE FEEDER,
D CABLE LUBRICATOR, AND LUBRICATION PUMP
DESCRIPTION AND USE**

CONTENTS	PAGE	1. GENERAL
1. GENERAL	1	1.01 This section describes the cable feeder, the C CONECS cable feeder, the D cable lubricator, and the lubrication pump. The section also describes the use of these tools in placing underground cable.
2. DESCRIPTION	2	
A. Cable Feeder	2	
B. D Cable Lubricator	2	1.02 This section is reissued to include the description and use of the C CONECS cable feeder and the lubrication pump. Since this is a general revision, arrows normally used to indicate changes have been omitted.
C. C CONECS Cable Feeder	3	
D. Pump and Hose Assembly	3	
3. USE	4	1.03 Underground cable placing methods are covered in the 628 Division of the Bell System Practices. The "rod-and-place" method using the Champion duct rodder is described in Section 649-321-100.
A. Cable Feeder	4	
B. D Cable Lubricator	4	
C. C CONECS Cable Feeder	4	
D. Pump and Hose Assembly	6	1.04 The C CONECS cable feeder (AT-8940) was designed to overcome the inadequacies of the B split feeder which has been rated manufacture discontinued (Mfr Disc.).
4. ORDER WORDING	6	

NOTICE

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

2. DESCRIPTION

A. Cable Feeder

2.01 The flexible metal hose cable feeder (Fig. 1) consists of a main section, an extension section, a 3-inch nozzle, and a 3-1/2 inch nozzle. A 3-1/2 inch S nozzle, a 4-inch nozzle, a 4-inch high strength HS nozzle, and a 4-inch S nozzle are available as optional parts of the cable feeder and must be ordered separately.

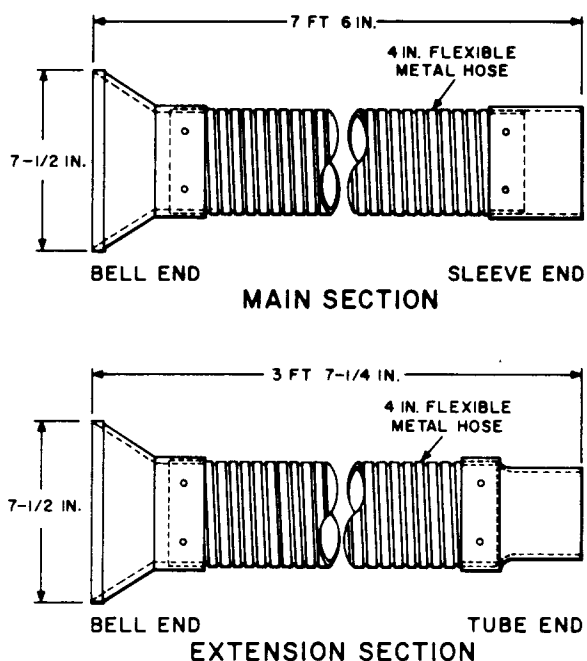


Fig. 1—Cable Feeder—Main and Extension Sections

2.02 The main section of the cable feeder is a 4-inch diameter flexible metal hose with a bell mouth on one end and a sleeve to receive a nozzle on the other end. The overall length of the main section is 7 feet 6 inches. The main section weighs approximately 35 pounds.

2.03 The extension section is a 4-inch diameter flexible metal hose with a bell mouth on one end and a tube on the other end. The tube end is designed to fit into the bell mouth so that one or more extension sections can be added to the main section. The overall length of an extension section is 3 feet 7-1/4 inches. Each extension section weighs approximately 18 pounds.

2.04 The various nozzles (Fig. 2) are split to facilitate removal from the duct and are used to join the main section to the conduit. Both halves of each nozzle are marked with the nozzle size (Table A). To prevent cable damage, make certain that matching halves are used. The superseded 3-1/4 inch nozzle and the 3-1/4 inch S nozzle have no size marking. A 4-inch HS nozzle to fit a 4-inch round bore conduit is available for use with the cable feeders. This nozzle is made with high strength steel which allows a thinner wall for passage of larger size pulling eyes.

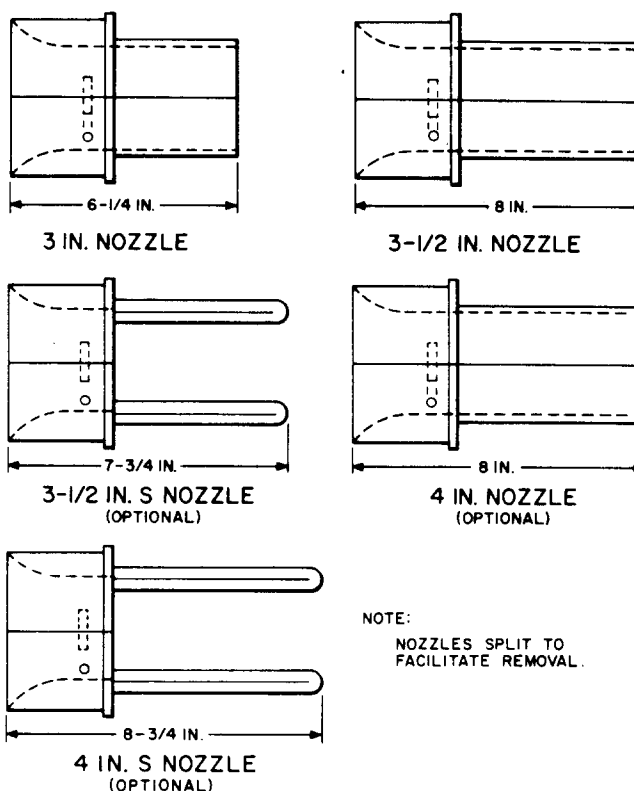


Fig. 2—Nozzle for Cable Feeder

B. D Cable Lubricator

2.05 The D cable lubricator consists of a sheet steel funnel (equipped with two handles), a flexible split-leather tube, and a hose clamp. It has a cover-type detail to fit over the bell mouth of the cable feeder. The leather tube is available as a replacement part. The D cable lubricator is illustrated in Fig. 3.

TABLE A

NOZZLE SIZE	CONDUIT SIZE
3-Inch Nozzle	3-Inch Round Bore
3-1/2 Inch Nozzle	3-1/2 Inch Round Bore
3-1/2 Inch S Nozzle	3-1/4 Inch Square Bore
4-Inch Nozzle	4-Inch Round Bore
4-Inch HS Nozzle	4-Inch Round Bore
4-Inch S Nozzle	4-Inch Square Bore (3.8-Inch actual)

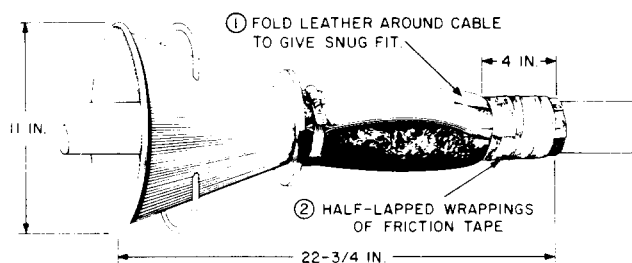


Fig. 3—D Cable Lubricator

C. C CONECS Cable Feeder

2.06 The C CONECS cable feeder consists of two assemblies—an 8-foot 2-inch main section (which incorporates a lubricator), and a 3-foot 10-inch extension. The assemblies are a series of split rings joined together with two wire ropes. When the split rings are closed to form a cable guide, the minimum internal diameter is 3.94 inches. This will allow the C CONECS cable feeder to accommodate the largest cables. The main section weighs approximately 75 pounds and the extension section weighs approximately 35 pounds (Fig. 4). The C CONECS cable feeder is marked "Bell System C."

2.07 The nozzles used with the C CONECS cable feeder for joining the main feeder section to the duct are the standard AT-6058 nozzles described in paragraph 2.04 and Table A. These nozzles must be ordered as a separate item.

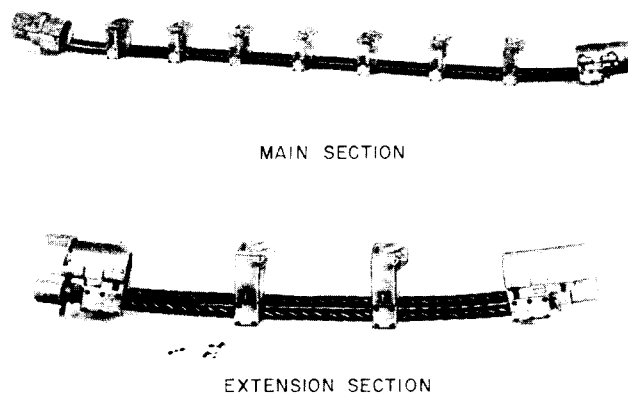


Fig. 4—C CONECS Cable Feeder

D. Pump and Hose Assembly

2.08 An optional pump and hose assembly is available for use with the C CONECS cable feeder. It consists of a pump assembly mounted on a container designed to accommodate 40 pounds of cable lubricant. The lubrication pump assembly weighs approximately 25 pounds (Fig. 5).

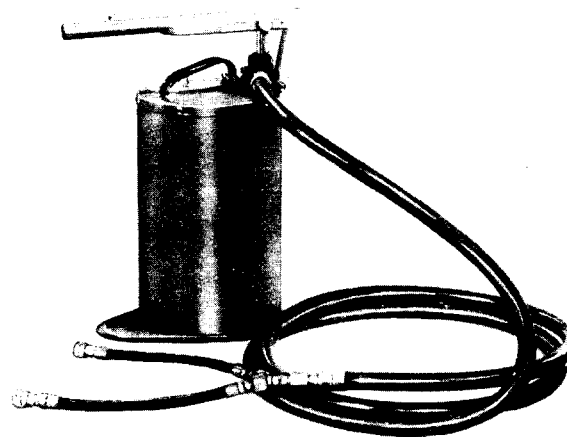


Fig. 5—Pump and Hose Assembly for C CONECS Cable Feeder

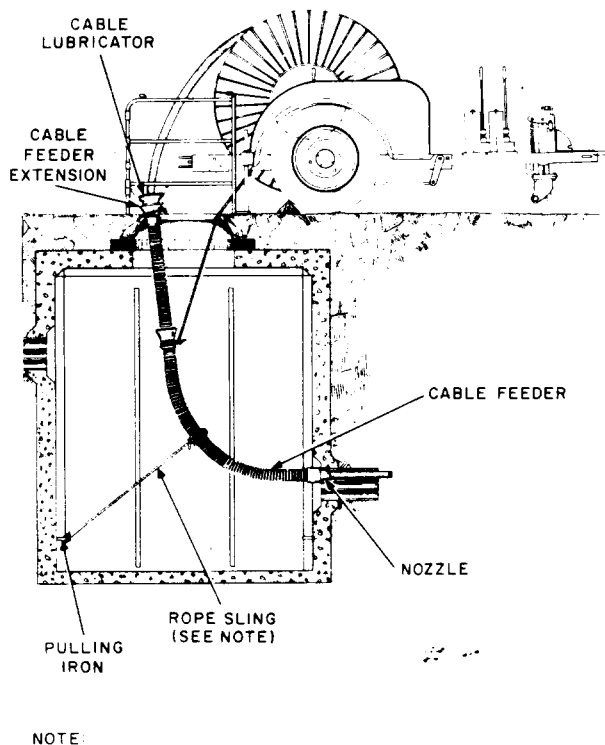
2.09 The hose assembly consists of a 16-foot length of high pressure lubrication hose which is fitted with a lubrication fitting on one

end for attachment to the pump. The other end of the hose assembly is fitted with a "Y" connection and two 12-inch lengths of high pressure lubrication hose terminated with lubrication fittings on each hose for attachment to the lubricator of the C CONECS cable feeder. The hose assembly weighs approximately 10 pounds.

3. USE

A. Cable Feeder

3.01 The cable feeder is used in placing underground cable to protect the cable and guide it into the duct. Figure 6 shows the cable feeder and extension in place while feeding cable into the duct. The cable-placing procedure using the cable feeder is explained in Section 628-200-208.



NOTE:
ATTACH 3/4 IN ROPE SLING OR EQUIVALENT FROM CABLE FEEDER TO PULLING IRON TO MAINTAIN PROPER CURVATURE.

Fig. 6—Cable Feeder and Extension In Use

B. D Cable Lubricator

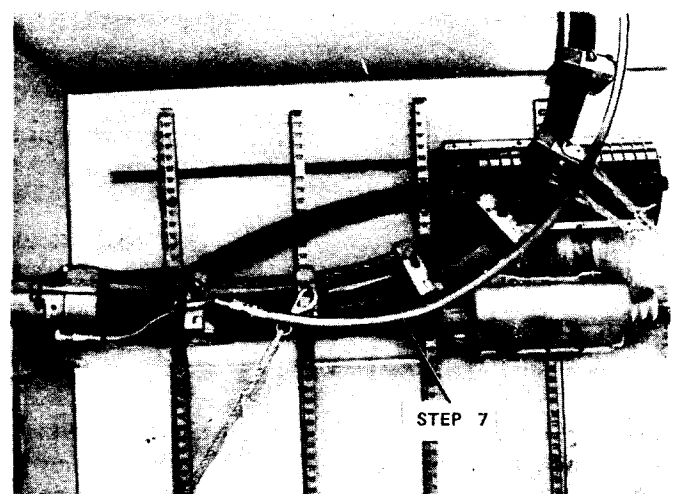
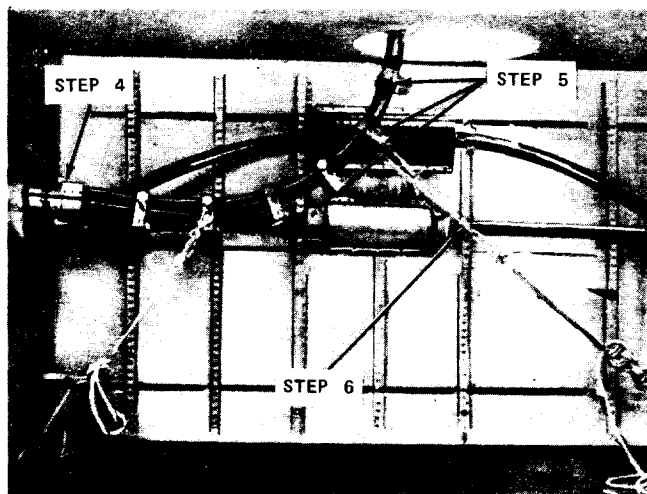
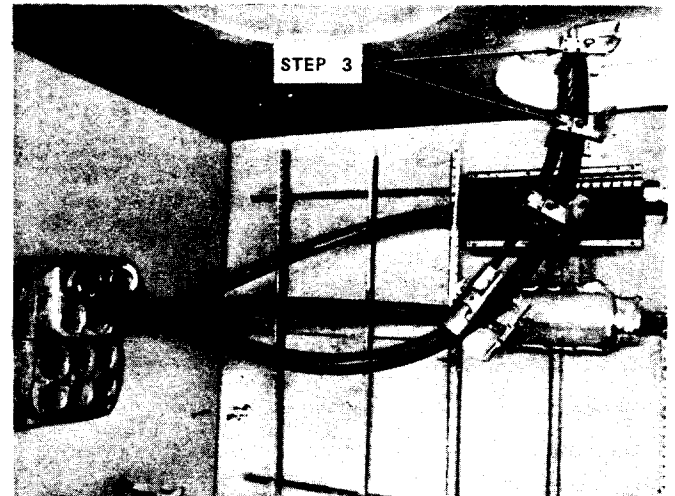
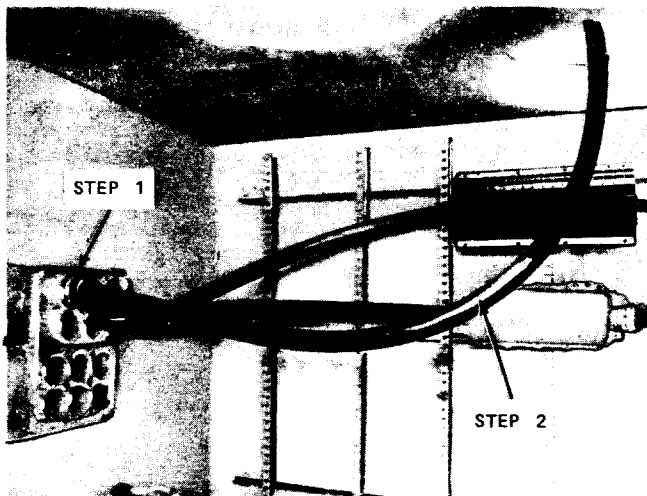
3.02 The D cable lubricator is used in applying lubricant to underground cable while it is being placed (Fig. 3).

3.03 The D cable lubricator is placed on the cable before the end of the cable is placed in the feeder tube. As the cable is fed into the feeder, guide the lubricator into the mouth of the cable feeder or extension. The cable will slide through the lubricator and become covered with lubricant. Keep the lubricator filled with the proper lubricant (Section 628-200-208) during the pull until five or six turns of cable remain on the reel. When wrapping the end of the leather tube with friction tape, be sure the tube is fitted properly and completely around the cable.

C. C CONECS Cable Feeder

3.04 Figures 7 and 8 illustrate how to use the C CONECS cable feeder. This cable feeder is used as a guide and protector for CONECS cable as well as all other types of cable. The CONECS cable feeder provides the following advantages over other cable feeders:

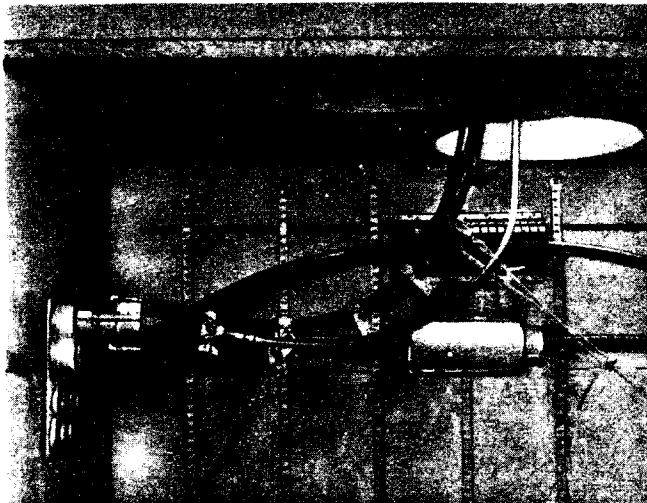
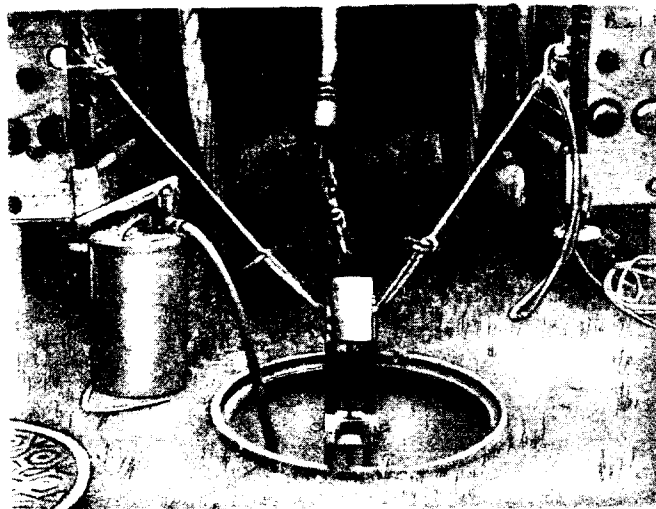
- Because of its open design, the cable is visible while passing through the feeder.
- It has a built-in lubricator which, when connected to the optional pump and hose assembly, will provide lubrication at the duct entrance. This feature keeps the cable ends clean and free of lubricant.
- The 3.94-inch inside diameter will accommodate the pulling eyes of maximum size cables when the feeder is used with the 4-inch HS nozzle.
- Tie-off rings are strategically located to accommodate easy tie off under varying manhole conditions.



- STEP 1. INSTALL THE PROPER AT-6058 NOZZLE IN THE DUCT. SEE TABLE A.
- STEP 2. HAND FEED THE CABLE FROM THE CABLE REEL TO THE DUCT.
- STEP 3. USING THE CABLE AS A GUIDE, LOWER THE LUBRICATOR END OF THE C CONECS CABLE FEEDER INTO THE MANHOLE. KEEP THE WIRE ROPES OF THE CABLE FEEDER ON THE INSIDE OF THE ARC FORMED BY THE CABLE. THIS WILL PREVENT THE CABLE FROM CONTACTING THE NECK AND CHIMNEY AREAS OF THE MANHOLE.
- STEP 4. CLOSE THE CABLE GUIDE ON THE LUBRICATOR END OF THE FEEDER AND SECURE BY HAND TIGHTENING THE SWING BOLTS. SLIDE THE CLOSED END OF THE FEEDER OVER THE AT-6058 NOZZLE.

- STEP 5. CLOSE THE SPRING LOADED LOCKS ON EACH INTERMEDIATE CABLE GUIDE AND SECURE THE END GUIDE SWING BOLTS HAND TIGHT.
- STEP 6. USING A ROPE YOKE WITH SNAP HOOKS ON EACH END, ATTACH THE YOKE TO THE EYE BOLTS ON EACH SIDE OF A CABLE GUIDE. TIE THE YOKES TO BOTH PULLING EYES OF THE MANHOLE. SECURE THE UPPER END GUIDE TO THE CABLE TRAILER WITH A ROPE TIE FROM BOTH EYE BOLTS.
- STEP 7. AFTER THE CABLE FEEDER IS SECURED, CONNECT THE LUBRICANT HOSE TO THE LUBRICATOR END OF THE CABLE FEEDER. PULL THE CABLE IN THE NORMAL FASHION AND BEGIN PUMPING LUBRICANT AFTER 10 FEET OF CABLE HAS ENTERED THE DUCT. CONTINUE PUMPING LUBRICANT UNTIL THE PULL IS COMPLETE.

Fig. 7—C CONECS Cable Feeder—Use



NOTE

AN ALTERNATE METHOD OF USING THE C CONECS CABLE FEEDER WOULD BE TO PLACE AND SECURE THE FEEDER (FIG. 7), EXTEND THE WINCH LINE THROUGH THE FEEDER TO THE CABLE REEL, AND PULL THE CABLE DIRECTLY FROM THE REEL.

Fig. 8—C CONECS Cable Feeder—Alternate Use

D. Pump and Hose Assembly

3.05 The lubrication pump and hose assembly is connected to the C CONECS cable feeder and is used to apply a lubricant to the cable as the cable enters the duct. Use of the pump and hose assembly eliminates the messy job of applying lubricant by hand and provides a more even coat of lubricant to the cable. It also allows the manhole end of the cable to remain free of lubricant and eliminates the job of cleaning the cable ends prior to cable setup in the manhole.

4. ORDER WORDING

4.01 The order wording for the various articles described in this section are as follows:

(Quantity) Feeder, Cable

(Quantity) Lubricator, Cable D

(Quantity) Tube, Leather, for D Cable Lubricator

(Quantity) Feeder, Cable, CONECS, C

(Quantity) Pump and Hose Assembly for C CONECS Cable Feeder

(Quantity) Pump Without Hose for C CONECS Cable Feeder

(Quantity) Hose Assembly for C CONECS Cable Feeder

(Quantity) Main Section for C CONECS Cable Feeder

(Quantity) Extension Section for C CONECS Cable Feeder