



CABLE FLEETER



Operation and Maintenance Model 89016

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SAFETY INSTRUCTIONS

THIS EQUIPMENT MUST ONLY BE USED BY AUTHORIZED PERSONNEL, WHO HAVE BEEN SUITABLY TRAINED AND COMPETENT TO DO SO!

THESE INSTRUCTIONS ARE TO BE MADE AVAILABLE TO OPERATORS OF THIS EQUIPMENT AT ALL TIMES.

1. Read and understand the operation and maintenance manual supplied with this equipment. Keep it in a convenient place for future reference.
2. Keep children and untrained personnel away from this equipment while in operation.
3. Keep all guards and safety devices in place. Do not operate this equipment with guards removed or damaged.
4. Keep hands, feet and loose clothing away from moving parts.
5. Always stop the machine to carry out lubrication servicing.
6. Check machine before starting for worn or damaged parts. Check that all nuts and bolts are tight.
7. If machine is left unattended, ensure that unauthorized use is prevented.
8. Never leave the machine unattended while in use.
9. Consider the use of safety barriers, especially when used in public places.
10. Beware of pinch points involved with rotating components, e.g. rope/cable drums, capstans, bull wheels, shafts and chain drives.
11. Some component and assembly parts are in excess of 70lb (32kg). When lifting care must be taken, ensure sufficient gear is available, to prevent personal injury and damage to the machine.

1.0 INTRODUCTION



Founded by engineer George M. Pfundt in 1936, GMP started operations in a downtown Philadelphia building as a specialty machine shop doing work for the local Bell Telephone company and for the electric utility company. GMP expanded to a production shop after landing a contract with Western Electric Company and, subsequently, forming a close relationship with Bell Telephone Laboratories in Murray Hill, N.J., which enabled it to manufacture prototypes of products for experimental use within the Bell System.



Having outgrown the original factory building, the company built a 100,000 square foot plant in Trevoose, PA (a Philadelphia suburb) and moved there in 1957. Today GMP is recognized as a premier worldwide supplier of specialty tools and equipment for the outside plant marketplace. The company's products are known for their robust design and durability to withstand many years of frequent use.



2.0 General Description

The GMP Cable Fleeter has been developed to enable longer lengths of fiber optical cable to be laid from a single drum.

With the increasing trend of longer cable installations with either GMP's SideWinder (P/N 70605) winching system or GMP's Tornado Cable Blowing Machine (P/N 89000), there is a need for a cable fleeter.

The need arises following the initial installation of the first half of the fiber optic cable from the drum.

The balance of the cable on the drum needs to be removed, stored safely, with the inner end of the cable ready to be placed in the cable duct. The traditional method to achieve this operation is to employ manual labor to rotate the drum while the members of the team form the cable being removed into a figure 8 configuration on the ground.

By using the fleeter this operation can be achieved in less time with less manual labor and with the cable safely stored in the cassette ensuring that the cable will not be contaminated by ground debris or damaged by passing vehicles or pedestrians.

2.1 The fleeter has been designed to fleet fiber optic cable safely without over tensioning, excessive bending or kinking of the cable. It has a nominal capacity to store up to 1/2" (13 mm) diameter cable having an approximate length of 10,000 ft. (3000 m).

SPECIFICATIONS

Capacity: 10,000 ft.(3000 m) 1/2" (13 mm) Fiber Optic Cable

Height: 96" (2438mm)

Length: 146" (3708mm)

Width: 96" (2438mm)

Weight: 1500 lbs (680kg)

Track: 88" (2235mm)

Tires: 175/80 x 13

Hitch: 2" ball (50mm)

Lighting Connector: 4-Way Flat Wiring Connector

WARNING

The principle of operation and storage rate has been designed for major cable types. However, account should be made for miscellaneous cables, which have characteristics that do not always meet this standard. This may affect the volume of cable stored or the machine may have to be run at lower speeds.

This could be curved cables, extremely soft cables or non-symmetrical cables. The operator must establish the correct speed of operation and loading for the cable types being employed.

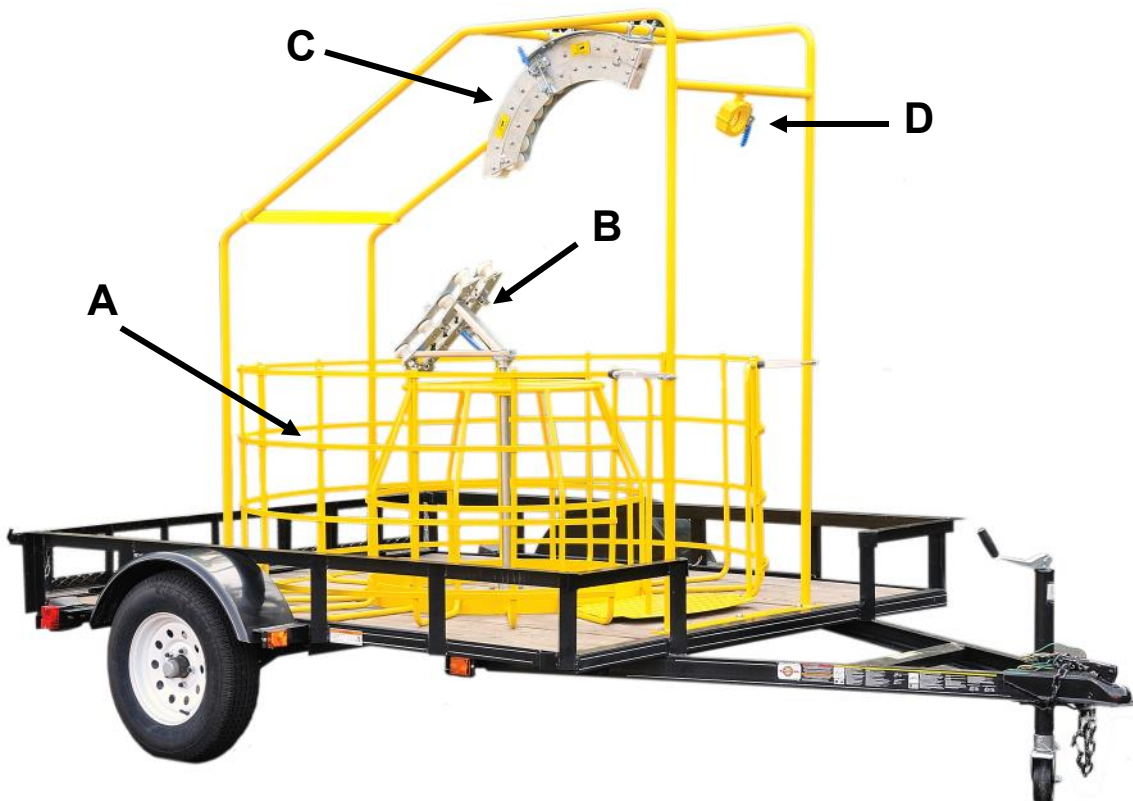
It is recommended that this should be assessed by trial on your particular cable prior to site operation.

2.2 Components

The Cable Fleeting device consists of the following major assemblies:

- (A) Cable storage cassette
- (B) Rotating Cable Guide Carousel
- (C) Fixed Cable Guide Quadrant
- (D) Duct Clamp (uses Tornado duct clamp)

Note: One duct clamp included with fleeter and must be specified at the time of purchase. 3/4-1 1/4" duct clamps available.



3.0 Cable Installation and Operating Procedure

MID POINT INSTALLATION

It is important that all personnel using or maintaining this equipment be fully trained, competent and have read the entire operating manual. General Machine Products cannot be held responsible for misuse of this equipment.

3.1

IMPORTANT: Before installation of the cable as in (**Fig 1**), a suitable length of Innerduct should be connected between the Tornado Blowing unit and the innerduct in the ground using a **split duct coupling** to connect the two. Ensure the length of Innerduct is long enough to allow connection to the fleeter's **Duct Clamp** on completion of the first stage of installation.

- a) Position the Cable Fleeter in line and adjacent to the manhole (**Fig 1**) and leveled up by adjusting the rear props and the jockey wheel until the level bubble is centered.

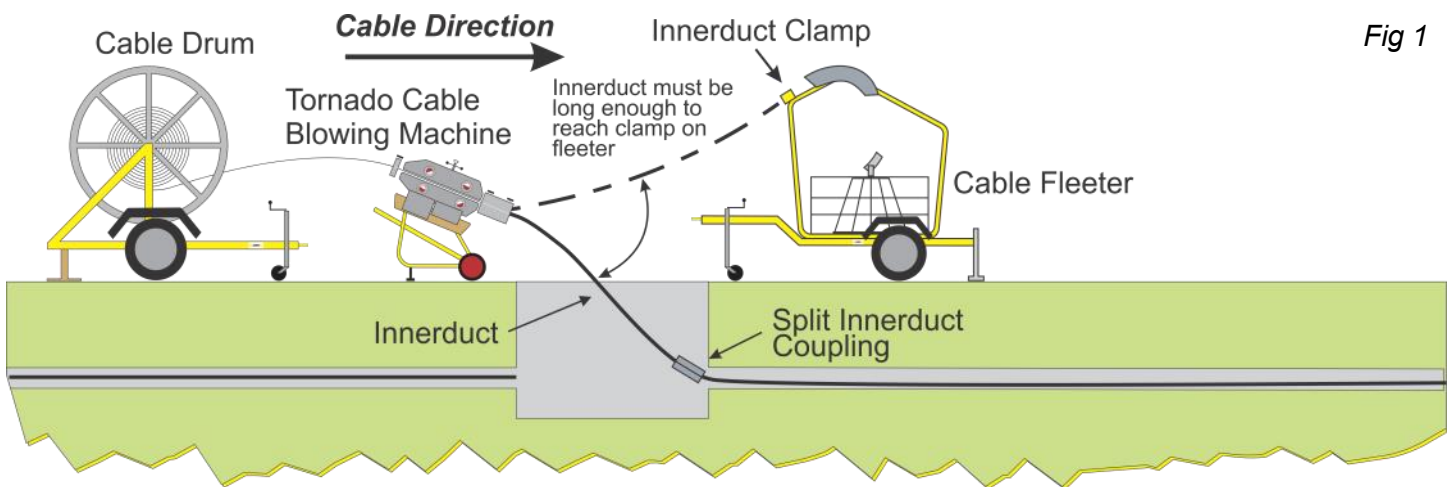
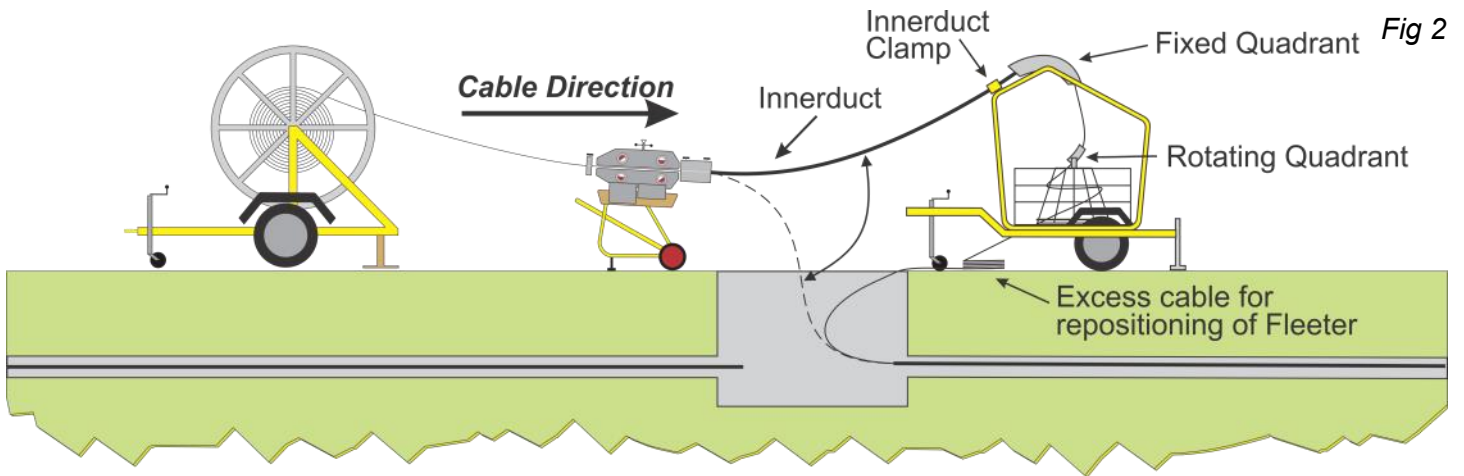


Fig 1

Continue with first stage installation.

b) Once the first half of the cable is placed, free the cable by releasing the Tornado's drive belts. Separate the innerducts connected in the manhole by removing the split coupling. Next, lift the **Innerduct** (connected to Tornado) out of the manhole and (while feeding extra cable off the drum by hand) connect the innerduct to the **Innerduct Clamp** on the Fleeter (**Fig 2**).



c) **IMPORTANT!** Ensure sufficient cable is pulled through and placed in a loop on the ground beside the Fleeter (**Fig 2**). This allows the Fleeter to be pushed back, making room for the repositioning of the Tornado and installation of the remaining cable. (**Fig 5**)

d) Open the segments of the **fixed** and **rotating quadrant rollers** by releasing the toggle clamps.



e) Having pulled a suitable length of cable off the drum and placed on the ground beside the Fleeter, insert the loop through the gap in the cable storage cassette and clockwise around the central frame. (**Fig 3**)

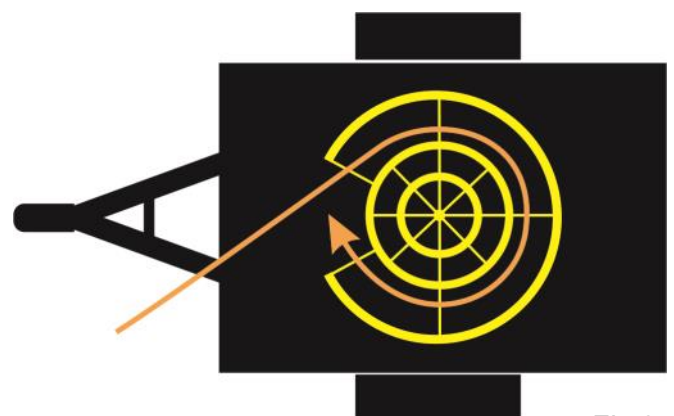
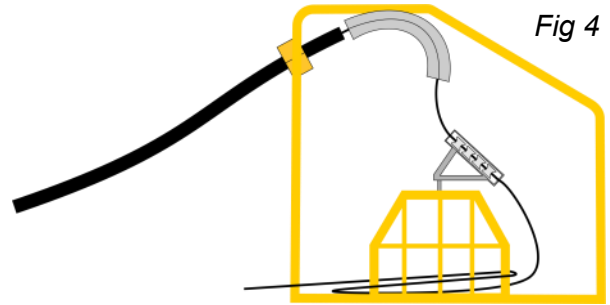


Fig 3

f) The cable loop should now be placed into the rollers of the **rotating quadrant**. This will direct the cable loop vertically upwards to the **fixed quadrant** roller mounted on the frame (**Fig 4**). Assemble the detachable segments by ensuring the locating lugs seat properly and secure with retaining toggle clamps.

g) The cable loop should then be directed over the rollers on the **fixed quadrant** and through the **duct clamp** on the frame. Reassemble the quadrant ensuring the locating lugs seat properly and secure the retaining toggle clamps.



h) Ensure the innerduct is pushed right through the duct clamp and is touching the **Fixed Quadrant** eliminating possible cable flex. (**Fig 4**)

i) Clamp the cable into the Tornado unit as normal with the 1-1/2 turns of the screw. Slowly start to push the cable into the Fleeter Basket (**No Air required**) making sure it is rotating in a clockwise direction "**Slower speeds are recommended for this application**" Care **MUST** be taken by the operator during this procedure.

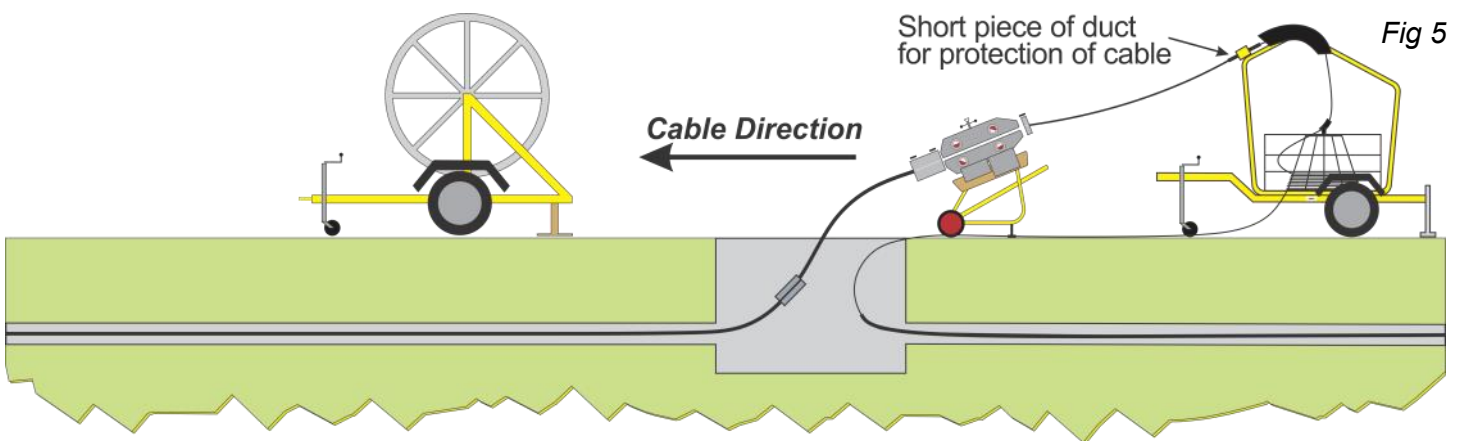
3.3.1

When the remaining cable has been pulled from the cable drum and has passed completely through the Tornado Blowing unit the cable will stop.

3.4.0

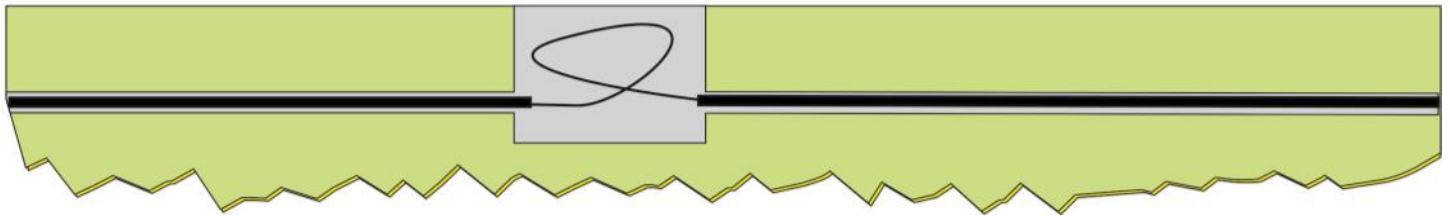
Push the Fleeter back and re-position Tornado Blowing unit as in (**Fig 5**). Re-connect using a suitable length of innerduct and a split duct coupling.

a) Leaving a short length of innerduct in the **Fleeter Duct Clamp** (to protect the cable when running through) pass the cable through the Tornado Blowing unit and continue to blow cable as normal.



At the end of the cable installation open both the Rotating and Fixed Quadrants to allow complete removal of the cable from the Fleeting Basket. It will be necessary to cut and remove innerduct from the cable using a GMP Duct Slitter (GMP P/N 10923) or Cordless Duct Saw (GMP P/N 70427). A small loop of cable will remain which should be looped and placed in the manhole. **(Fig 6)**

Fig 6



4.0 Trailer Chassis

The trailer unit is fitted with towing equipment to comply with D.O.T. Standards. The towing bracket has hand operated adjustable height jockey wheel .

4.1 Maintenance

The tire pressure should be checked daily and should be set at 35 psi (2.4 bar).

Cable Storage Cassette

This assembly will not require any maintenance. Make sure it is kept free of materials which may cause damage to fiber cables during operation.

Rotating Cable Guide Carousel

This assembly must always be secured to prevent rotation prior to travelling with trailer. Alternatively the securing device should always be removed prior to use, and freedom to rotate checked.

Ensure rollers are free to rotate and are kept free of materials which may cause damage to fiber cables during operation.

Ensure the guide retaining toggle clamps operate freely and are adjusted such that the 2 guide halves are securely held together.

Fixed Cable Guide Quadrant

Ensure the rollers are free to rotate and are kept free from materials which may cause damage to fiber optic cables during operation.

Ensure the guide retaining toggle clamps operate freely and are adjusted such that the 2 halves are securely held together.

Maintenance

The main spindle bearings and the nylon roller bearings are all sealed for life and maintenance should not be required. If however rollers become damaged or do not run freely, it is essential the roller is replaced. The concept of operation requires that the rollers are free running, otherwise friction can be induced into the cable. This friction could potentially build up to cause the cable to be damaged.

4.2 Towing Instructions Before Towing

- a. Check the ball head cup is well greased.
- b. Raise the coupling above height of the ball by use of jockey wheel provided.
- c. Reverse towing vehicle until ball is directly below the coupling.
- d. Grasp locking lever on top of coupling and lift up while pressing the trigger. Wind up jockey wheel (thereby lowering the trailer) until ball on towing vehicle enters ball cup on coupling. Continue winding up jockey wheel until the ball is firmly seated in the ball cup. Snap the locking lever shut.
- e. If ball seats properly, then continue winding the jockey wheel until it is fully retracted.
- f. Check the load is distributed to give the correct nose weight for the coupling. A positive nose weight is strongly recommended to ensure stable towing. Also ensure nose weight is within limit of towing vehicle.
- g. **If towing with a car transporter vehicle or any other vehicle which has a long rear overhang, extra forces can be applied to the coupling and towing device causing rapid wear and damage.**

Servicing

- a. Apply grease to ball and to cup of ball head after cleaning each item. (Alternatively towing eye and jaw are fitted). This to be carried out each time the trailer is to be towed.
- b. Oil all moving parts weekly having wiped away all corrosion and dirt deposits.

4.3 Spare Parts

For spare parts contact:
General Machine Products Co., Inc.
3111 Old Lincoln Hwy
Trevose, PA 19053

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Model: 89016 Fleeting Device



Tail Light
Road Side
P/N 29006



Tail Light
Curb Side
P/N 29007



Side Marker
Clearance
P/N 29008



Jockey Caster
Wheel
P/N 29014



3 Light ID Bar
P/N 29009



Lug Nut
P/N 32657



Tailgate Springlock kit
P/N 29012



Coupler Repair
Kit
P/N 29013



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