



**GENTLE AIR BLOWN FIBER BLOWING MACHINE  
WITH CLUTCH  
for Round Fiber  
OPERATION & MAINTENANCE**



**GENTLE AIR – USA  
CABLE BLOWING MACHINE**  
Copyright © 2018 by General Machine Products (KT), LLC

QC Final Inspection by: \_\_\_\_\_ Date: \_\_\_\_\_

Unit Serial Number: \_\_\_\_\_

Build Date: \_\_\_\_\_

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*Manual Part Number 36575*

## **CONTENTS**

1. Safety Instructions
2. Critical Points
3. General Description
4. Specification
5. Operating procedures
6. Maintenance
7. Monthly Service – check list
8. Service History Record
9. Tube integrity and Lubrication
10. Recommended Spares List

## **APPENDICES**

- |                   |   |
|-------------------|---|
| <b>Appendix 1</b> | <b>Cable and tube insert selection chart.</b>       |
| <b>Appendix 2</b> | <b>Determining the correct drill torque setting</b> |
| <b>Appendix 3</b> | <b>Counter/Ratemeter Programming Instructions</b>   |

**GMP Limited Warranty can be found at <http://www.gmptools.com/warranty/>**

16. No personnel are to be in manholes or ducts when the Cable Blowing Machine is being operated.
17. The machine must be operated on firm ground.
18. Stay clear of cables or lines under tension.
19. Stay clear of pressurized air line and tube.
20. Only use the machine for its intended purpose. Do not use the roller drive without the air chamber to push or to retrieve cable or blow air in the far end of tube to help cable recovery.
21. Do not place cable drum too close to the Cable Blowing Machine.
22. Do not tamper with pressure relief valves or pressure reducing valves.
23. Ensure the cable drum rotates freely on its stand, the cable should leave from the top of the drum.
24. The cable should enter the machine in a clean and dry condition. In damp, dusty atmospheres, the cable should be cleaned continuously as it enters the machine.

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**FAILURE TO DO SO MAY RESULT IN PERSONAL INJURY, AS THE CABLE  
COULD BE EJECTED FROM THE CABLE BLOWING MACHINE WITH HIGH  
FORCE AND VELOCITY.**

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## **2. Critical points that dramatically affect the operation of the cable blowing machine.**

- Pressure on the cable should be set as per the instructions.
- Rollers to be closed at all times when cable is installed into machine.
- Cord seals in air chamber correctly fitted to provide good sealing.
- Correct cable seal fitted.
- Tube fully connected and pressure-tested.
- Tube connecting fittings are suitable for operating at 220 PSI air pressure.
- Tube clamp securely tightened.
- Compressor capacity 220 PSI and suitable for size of tube being used.
- Cable drum must be located directly behind and in line with the blowing machine.
- Air chamber, drive rollers, cable guides, must be clean and free from debris, sludge, dirt, water and lubricant.
- The cable must be hand guided into the blowing machine through a dry clean cloth by the operator wearing work gloves.
- Ensure the compressed air supply is not applied to the cable until required amount of cable has been installed.
- The counter/display is powered by (2) 9 volt batteries. To maximize battery life, turn display off by pressing power button on left side of display box when unit is not in use.

### 3. GENERAL DESCRIPTION

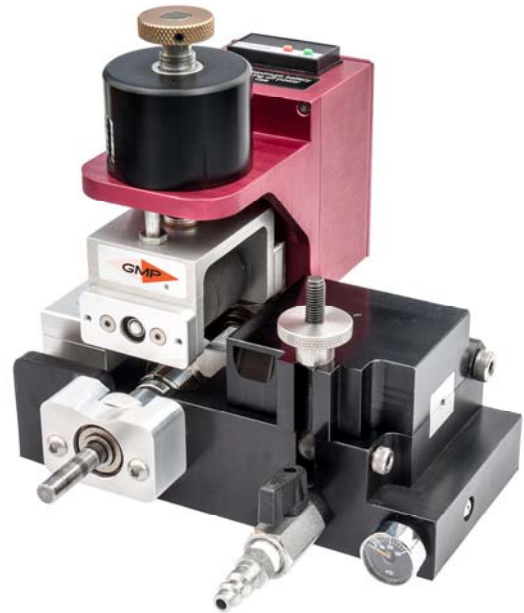
The GMP Gentle Air is designed to install blown fiber cable into micro tubes.

The Gentle Air uses a user supplied variable speed drill to drive a drive roller.

The pressure the roller applies to the cable is adjustable.

A full range of accessories is available to allow the machine to handle a wide range of cables and micro tubes.

The Gentle Air may be placed on a stand or on the optional tripod kit to bring the cable to a suitable height. The Gentle Air is supplied with a reinforced soft case which will protect the machine from damage during transit and storage.



*On left is the Whisper assembled for a typical blowing operation. Shown is the unit with the optional Tripod Mounting Kit (P/N 89945) and a user supplied variable speed drill.*

## 5. OPERATING PROCEDURE

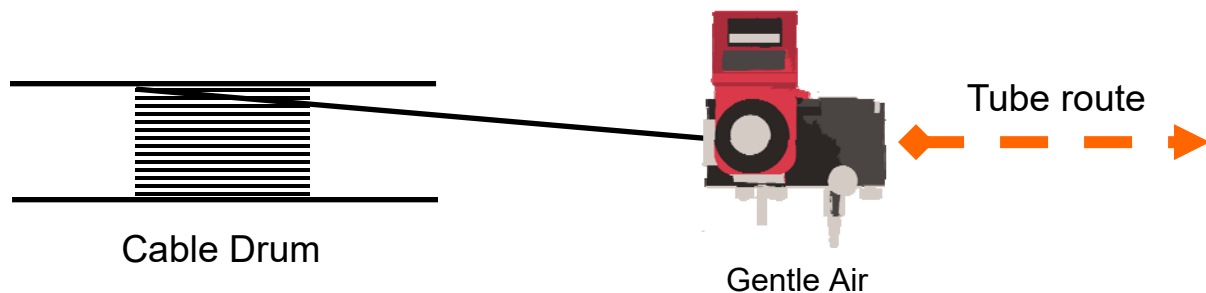
IT IS IMPERATIVE THAT ALL PERSONS USING, OPERATING OR MAINTAINING THIS CABLE BLOWING MACHINE:

- HAVE RECEIVED COMPREHENSIVE TRAINING IN THE USE OF THIS MACHINE.
- ARE COMPETENT AND AUTHORIZED TO USE IT AND HAVE READ AND UNDERSTAND THIS MANUAL.

GENERAL MACHINE PRODUCTS (KT), LLC CANNOT BE HELD RESPONSIBLE FOR MISUSE OF THIS EQUIPMENT.

**Set up for installing cable with the machine mounted above ground:**

1. Position the machine in line with the route of the duct.
2. Position the cable drum behind the machine and in line with the machine. See illustration below (this shows a plan view of the recommended set up).



3. Ensure the machine is secure (either on its own stand or a separate suitable stand).
4. Ensure the machine is fitted with the appropriate guides and collets to suit the cable being installed and the tubes into which the cable is to be installed. (See appendix 1 for details of interchangeable parts).

**To set the machine up to install cable it will be necessary to:**

1. Fit the tube into which the cable is to be installed into the tube clamp and air box .
2. Fit the cable through the machine. Adjust drive roller tension.
3. Connect the air supply to the machine.
4. Connect the variable speed drill to the machine.

## Preparing the Gentle Air for the proper duct size

Measure the OD of the duct.  
Select the corresponding tube collar and clamps



### TUBE COLLET AND CLAMP ASSEMBLIES

89918	04mm O.D.
89919	05mm O.D.
89926	07mm O.D.



Loosen the thumb nut, rotate the swing bolt to open the air box

Insert the the top and bottom airbox halves and tighten the screws

Insert the top and bottom tube clamps aligning the grooved edge to the outside. Tighten the 4 screws.

*Other tube sizes available –Contact GMP for information.*

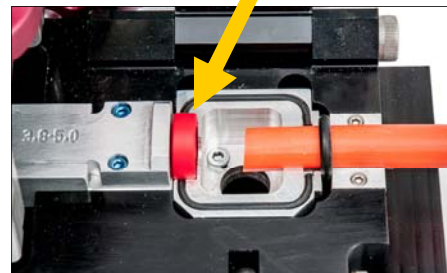
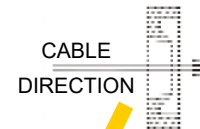
### Fit the tube into the air box and tube clamp.

Slide a tube seal, sized for the tubing you are using, over the end of the tube.

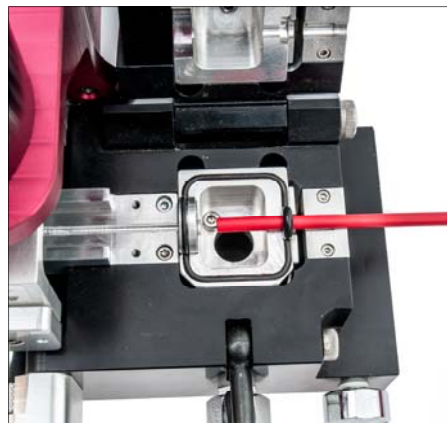
Fit the tube into the air box housing as shown in the photo, positioning the tube seal so that it sits against the seal face.

Positioning the tube further into the air box helps prevent the buckling of the fiber.

Place a cable seal sized to the cable you are blowing.



*Typical setup when blowing 2-3mm fiber*



*Typical setup when blowing 1-2mm fiber*

## Connect the air supply to the machine.



The air inlet to the machine is a male fitting for a quick release coupling.

## Connect the variable speed drill to the machine.



The Gentle Air is designed to operate with a commercial quality 3/8" variable speed drill, preferably 18 volts or larger and brushless.

**See appendix 2 for proper setting of Gentle Air's clutch.**

Check the battery with

**The machine is now ready to start the cable installation.**

**NOTE: THE MACHINE MUST NOT BE SUBMERGED IN WATER.**

## Installing Cable

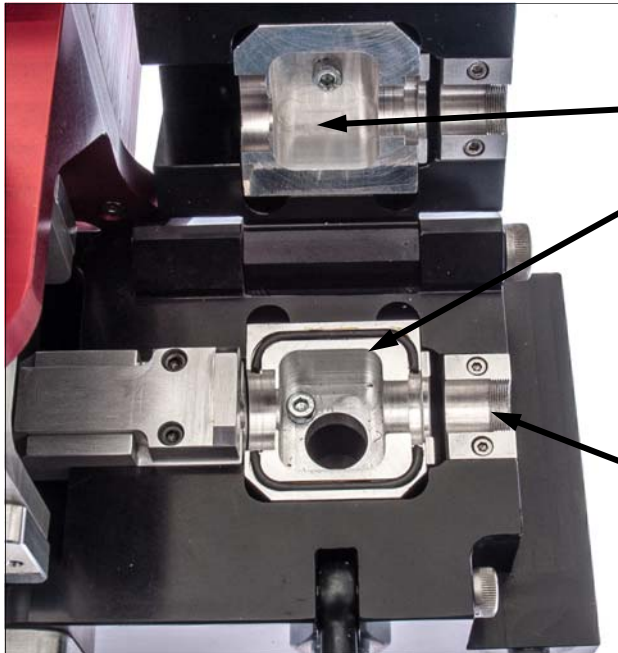
### Speed Distance indicator:

This device will measure and display the distance traveled by the cable and also the speed at which the cable is traveling. The functions are controlled by the small green push button on the right of the display. If this button is depressed twice, the display will "toggle" between speed and distance. Pressing the red button will reset the display to zero. Before starting an installation, it will be necessary to depress the red button to set the distance display to zero. Should it be necessary to replace the speed distance measuring indicator, it will be necessary to reprogram it.

### To install cable:

1. Attach drill to Gentle Air drive motor shaft (if not already attached) and tighten drill chuck. Be sure that the drill is set in the forward or clockwise rotation setting and low speed.
2. Set the clutch torque setting starting at the minimum and work your way up.
3. Start air compressor and open air output valve, or if using nitrogen open the tank output valve to full flow. Keep the valve on the Gentle Air closed.
4. Activate cordless drill to desired speed and monitor distance and speed with the counter. Average installation speeds are between 150-300 FPM. It is sometimes necessary to gently hand assist the fiber cable into the cartridge to initiate forward motion. (Do Not Bend or Over Stress the cable.) When approximately 150' of cable is installed, gradually open the air valve on the Gentle Air
5. When cable exits duct end, take the desired amount of slack, stop drill and turn off air valve and allow it to vent all the residual air before opening airbox.
6. **Turn the power off on the counter to preserve battery life when not in use.**





**Air box parts:** Keep clean. A build up of moisture and dust will prevent the joint faces from mating, preventing the housing seal from sealing. Use any traditional workshop cleaning agent.

**Tube clamp inserts:** Keep clean. A build up of moisture and dust, particularly in the grooves, will reduce the clamping effect. Use any traditional workshop cleaning agent.

As a general rule, every time an interchangeable part is removed and replaced by a part of a different size, the part being removed should be thoroughly cleaned before being returned to its box. Similarly the cavity from which it was removed can also be cleaned prior to the assembly of the replacement part.

The machine should be returned to the General Machine Products (KT), LLC Trevose, Pa. after every 1000 hours use (or at intervals of 12 months) for a major service.

## 7. Monthly service – check list

This section includes a list of suggested checks, it is recommended that these checks be carried out on a regular basis, depending on use. Monthly checks are convenient; a few minutes can be set aside on the same day of each month to complete these simple checks. The next section of this manual is an empty table, the dates when these checks and all other service and repair jobs are completed can be entered into the spaces provided in this table. This will give the user a record of what service has been carried out and when.

1. Check the tool box, ensure all tools and interchangeable parts are present, clean and ready for use.
2. Clean the outside of the machine, take care not to damage the rollers.
3. Check the top idler roller and ensure it runs freely, and that the speed/distance functions respond when the wheel is rotated.
4. Check the condition of the bottom drive roller, replace accordingly.
5. Clean the exposed threads on the swing bolts that hold the air box and tube clamp assembly together. Add a smear of grease/oil\* to prevent build up of surface corrosion and to insure smooth operation of the thumb nuts.

\*Care should be given not to expose the drive roller to any grease or oil.

## 9. Tube integrity and Lubrication

**Tube integrity and lubrication are entirely the responsibility of the operator.**

To be sure that the tube into which the cable is to be inserted is installed appropriately, it is recommended that its integrity and lubrication be checked.

**Check that the tube is:**

1. Not blocked
2. Not crushed
3. Continuous (no breaks)
4. Also check that any couplers are pressure tight
5. Finally check that the tube is appropriately lubricated

The easiest and most straightforward way to complete these checks is to set the machine up for a normal cable insertion but fit a seal in place of the cable. The tube can then be pressurized without running the roller drive.

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**CAUTION:** *Any object inadvertently left in the tube during the tube installation may be expelled from the end of the tube with high force and velocity. It is imperative that no personnel be in the vicinity of the end of the tube or that a suitable device is fitted to the end of the tube to arrest any expelled object.*

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The checks listed at 1-4 (inclusive) above may all be carried out at the same time using one check. The procedure is outlined below. Set up the air box and tube clamp as shown.

Fit the appropriate solid plug as shown



Fit the tube and tube seal in position as for normal cable installation.

When the air box has been set up as shown in the photo, the air box and tube clamp should be closed as for usual cable installation.

## 10. Recommended spares list

1. Tube Seals - See appendix 1
2. Cable Seals- See appendix 1
3. Drive Roller - 36573
4. Lubricant - 89568 (Polywater, 6 bottles per case)
5. Seal Cord - 89691
6. 9V Lithium Batteries - 30069 (pair)
7. Replacement Top Roller Kit - 36592

**note:** 36592 is for unit with pickup wheel only.  
Call the factory if you have an encoder model.



### GMP Gentle Air Tool

89581



89691



32604



30069

89588



34757



For spare parts always quote the machine type and serial number and contact:

**General Machine Products (KT), LLC**

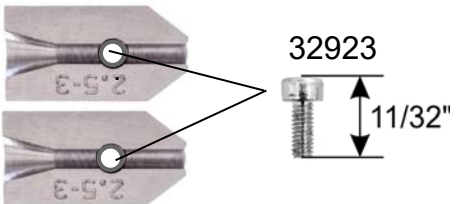
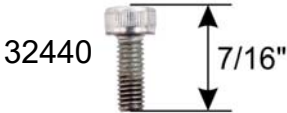
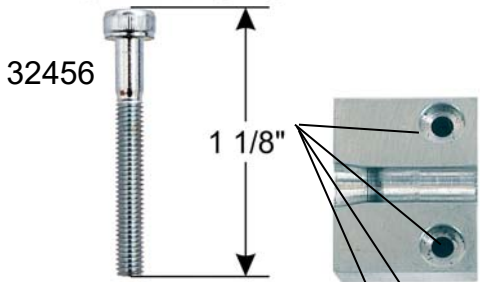
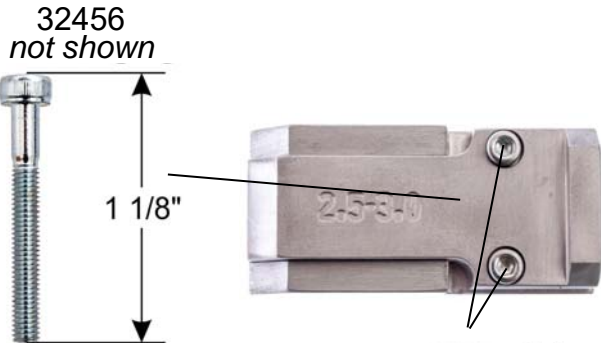
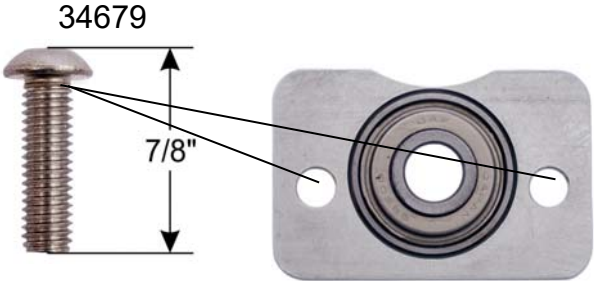
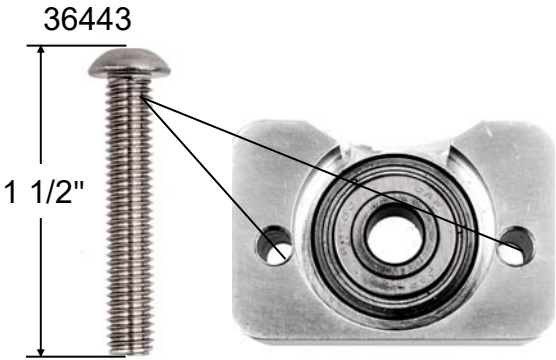
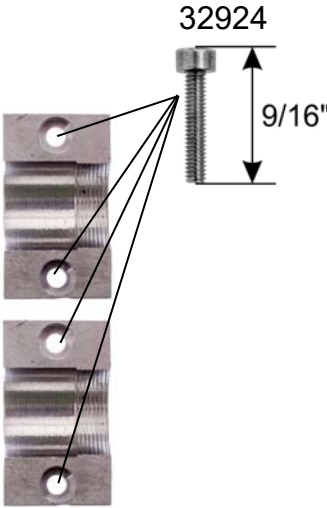
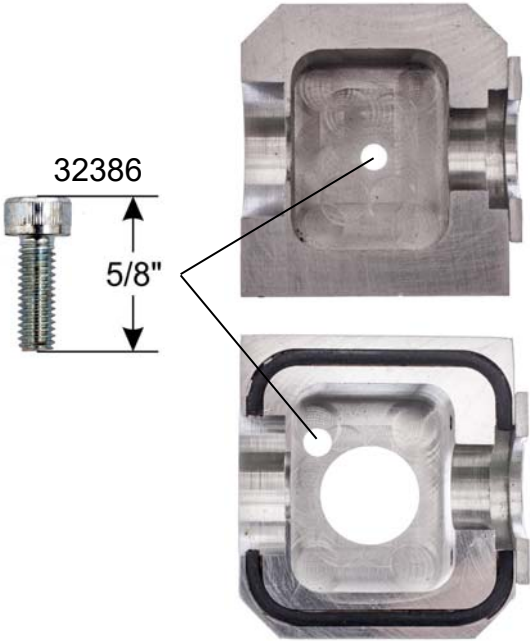
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# GMP Gentle Air Configuration

## Replacement Hardware



## APPENDIX 3

- Press and hold both ◀ and ▶ buttons.
  - After 5 seconds 'ProG' will be displayed. Releasing the buttons will display 'no'
- Press ▶
  - 'Yes' is displayed
- Hold ◀ and press ▶
  - 'InPol' is displayed
- Press ▶ until 'nPn' is displayed
- Hold ◀ and press ▶
  - 'Filter' is displayed
- Press ▶ until 'oFF' is displayed
- Hold ◀ and press ▶
  - 'InPut' is displayed
- Press ▶ until 'Cnt.dir' is displayed
- Hold ◀ and press ▶
  - 'FAc.Cnt' is displayed
- Press ◀
- Enter value 00.0116 for meters, 00.0380 for feet
  - Use ◀ to move to next digit
  - Use ▶ to increment digit (this instruction applies to all following number inputs)
- Hold ◀ and press ▶
  - 'diV.Cnt' is displayed
- Press ◀
- Enter value 01.0000
- Hold ◀ and press ▶
  - 'dP.Cnt' is displayed
- Press ▶ until '0' is displayed
- Hold ◀ and press ▶
  - 'rES.Cnt' is displayed
- Press ▶ until 'MANrE' is displayed
- Hold ◀ and press ▶
  - 'FAc.tAc' is displayed
- Press ◀
- Enter value 00.0116 for meters, 00.0380 for feet
- Hold ◀ and press ▶
  - 'diV.tAc' is displayed
- Press ◀
- Enter value 01.0000
- Hold ◀ and press ▶
  - 'dP.tAc' is displayed
- Press ▶ until '0' is displayed
- Hold ◀ and press ▶
  - 'disPm' is displayed
- Press ▶ until 'Min-1' is displayed
- Hold ◀ and press ▶
  - 'Wait0' is displayed

(over)

# Gentle Air Optional Accessories

**Bottled Nitrogen Kit**  
**P/N 89742**  
Weight: 4.5 lbs. (2 kgs)



**Whisper Air Hose**  
**P/N 89949**  
Weight: 2 lbs. (.9 kgs)



**Mounting Plate**  
**P/N 89947**  
Weight: 1 lbs. (.45 kgs)



## Whisper Tripod Mounting Kit

- Lightweight and durable
- Positive locking clamps
- Made of space-age aluminum alloy
- Flat Head design
- Easy Setup
- Built in shoulder strap
- Folds for storage
- Max work height 63" (160 cm)

**P/N 89945** Weight: 9 lbs. (4.1 kgs)



## Drill Stand

This option helps support the drill for long fiber blows. Attaches to the tripod and fully

**P/N 89948** Weight: 2 lbs. (.90 kgs)



## Air Compressor

The Air Compressor is designed specifically for use with our Micro Fiber Cable Blowing Machines. This reliable & efficient screw compressor, powered by a gasoline engine, provides a maximum working pressure of 220 psi (15 bar) with 35.3cfm (1000 litres/m) flow.

**Engine:** Honda 21 hp  
**Fuel Cap.:** 5 gal (20 liters)  
**Length:** 42" (1070 mm)  
**Width:** 31" (800 mm)  
**Height:** 30" (780 mm)  
**Weight:** 487 lbs. (221 kg)

**P/N 89011** Weight: 487 lbs. (221 kgs)

