



### Fitting a Disposable Pipette Tip



Press down with  
a rotating motion



Avoid hammering  
the tip into the  
pipette

#### To Fit a Disposable Tip on a PIPETMAN Single Channel

Hold the micropipette in one hand, lower the pipette into the tip, and use a slight twisting movement to seat the tip firmly on the tip holder of the micropipette to ensure an air-tight seal.

To protect your pipette, avoid tapping the tip onto the pipette like a hammer. Tips are available in TIPACK racks for easy mounting with no hand contact.

Exert a light vertical  
force followed by a  
slight lateral rocking  
movement to secure  
the tip fitting



#### To Fit a Disposable Tip on a PIPETMAN Multichannel

To avoid damage to your pipette, Gilson does not recommend hammering or pounding on the tips.

The patented ROCKY RACK™ system available on TIPACK, TOWERPACK, BLISTER REFILL and RELOAD PACK makes it extremely easy to fit tips on a multichannel pipette. Tips will not fall off nor will they have to be positioned manually.

**Figure 7**

Fit a Disposable Pipette Tip on Single and Multichannel Pipettes

## To Fit a Capillary Piston (CP) on a MICROMAN

1. Place the plunger button to the second stop.
2. Place the pipette over the tip. The jaws on the pipette will open automatically and seize the piston.
3. Press the pipette down to attach the capillary to the pipette.
4. Return the plunger to the rest position.
5. Press the plunger to the first stop to complete tip attachment.

For an easy CP fitting, choose the new MICROMAN E. The QuickSnap feature makes it as easy to use as a regular pipette.

1. Press the MICROMAN E onto the capillary piston until it is firmly seated.
2. Pick up the CP from the rack.
3. Slowly press the plunger button until you feel and hear a slight click and continue to press to the first stop. Then pipette the liquid.

For maximum protection against contamination, capillary pistons for MICROMAN pipettes are available pre-assembled, racked and presterilized.

## Ejecting the Used Tip

To avoid touching contaminated tips, hold the pipette over the waste container and press the tip ejector push button.

To eject the tip from MICROMAN, depress the push button completely to the second stop. Discarded tips contain liquid residues, particularly when a pipette is used in reverse mode. Take suitable precautions when discarding disposables.

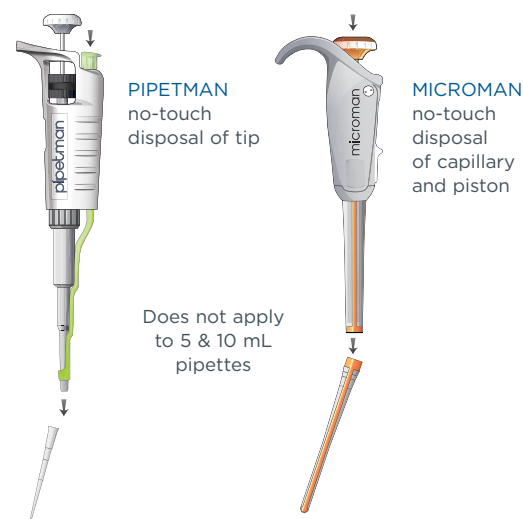
## When to Change a Tip?

**When transferring single samples of different liquids, select a new pipette tip for each new liquid.** It is strongly recommended to pre-rinse every new pipette tip.

For repetitive dispensing of the same liquid (diluent, buffer, or reagent), use the same pipette tip. This method is economical and efficient. It is advisable to pre-rinse the tip at the beginning of the test series.



**Figure 8**  
CP Fitting on MICROMAN E



**Figure 9**  
Ejecting the Tips

## Choosing the Best Tip for Your Application

PIPETMAN Tips are available in a variety of packaging options to suit virtually all needs and applications:

### Autoclavable Tips

#### Loose in bulk packaging

An economical solution for routine applications. May be hand loaded in empty tip racks for convenience or for autoclaving in the laboratory.

#### Racked for easy mounting with no hand contact

TIPACK have a hinged lid to protect against dust. Convenient 96-well format for filling microplates with a PIPETMAN multichannel and color-coded for easy identification. Ready for autoclaving in the laboratory. Tip racks may be reused.

#### Racked and sterilized for working in sterile conditions

Factory sterilized and delivered in a sealed tip rack.

#### TOWERPACK refill system

High quality tips in an economic, easy-to-use and eco-friendly rack refill system. The reload box is reusable and can be repeatedly autoclaved. Also available in sterilized packaging.

### Sterilized Filter Tips

#### TIPACKS are racked and sterilized with filter

Tips with a filter prevent contaminating aerosols from entering the pipette. PIPETMAN filter tips are factory irradiated delivered in a sealed tip rack.

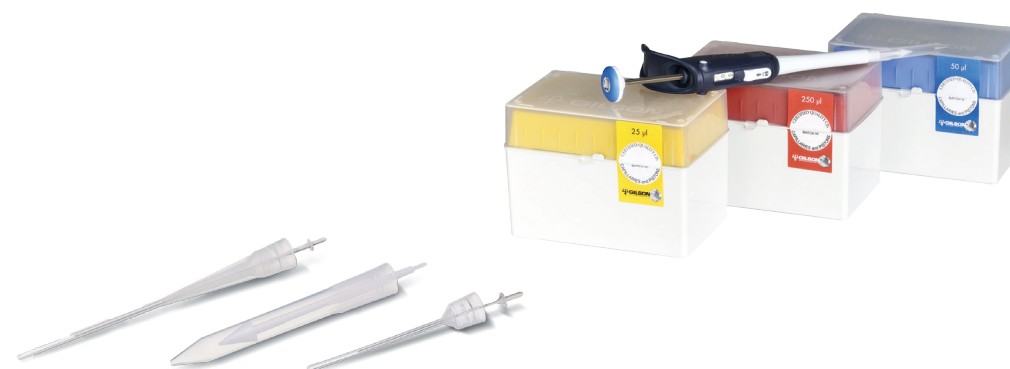
#### STERILPACKS are individually wrapped and sterilized

Opened just before use so the benefit of sterilization is assured right up to the last minute. A good solution when you only need a few tips.

### Capillaries and Pistons for Positive-Displacement Pipettes

#### Safety first!

Gilson capillary pistons for MICROMAN are made of plastic, eliminating the risk of injury associated with broken glass.

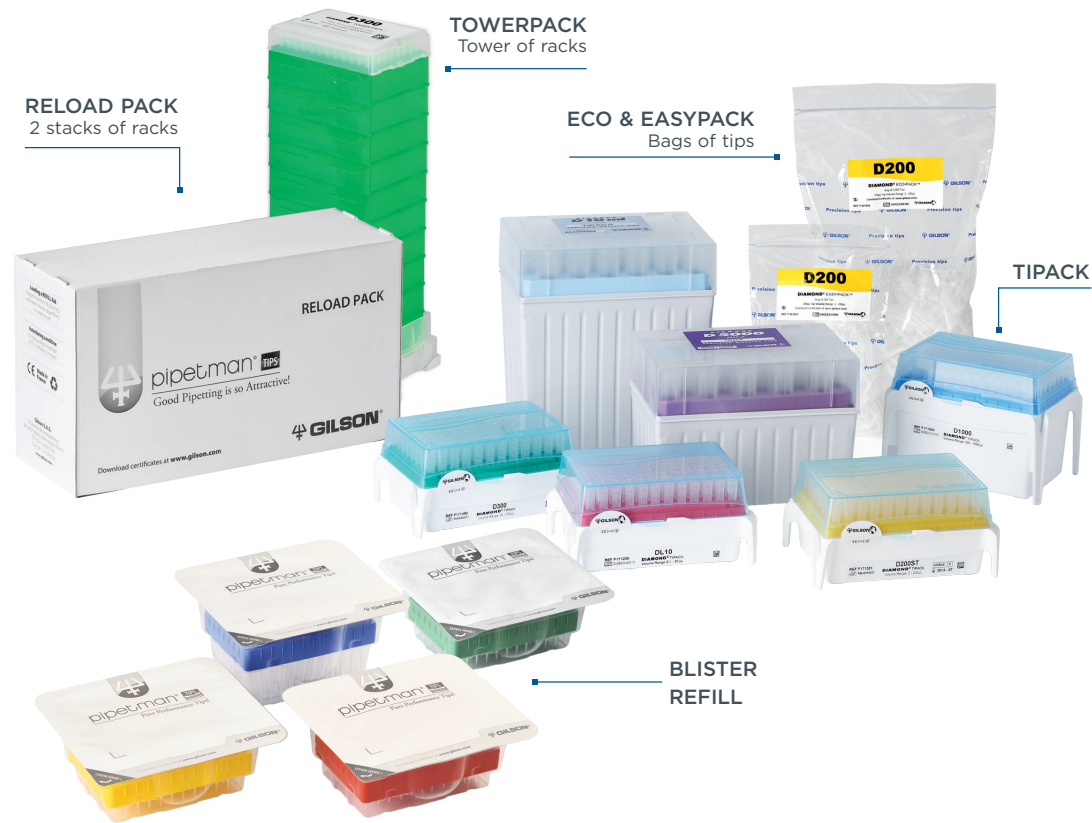


### Tip Sterilization Methods

- Beta or gamma radiation of consumables**  
This method is used by manufacturers for products sold under the label “sterile”. The penetrating rays are highly effective for the relatively inert plastics used to manufacture pipette disposables. The choice of gamma or beta rays is determined by the type of plastic used to manufacture the tips. PIPETMAN DIAMOND Tips are sterilized using gamma rays and a sterility assurance level SAL 10<sup>-6</sup> is guaranteed.
- Ethylene oxyde gas**  
If the type of plastic to be sterilized cannot withstand beta or gamma radiation, ethylene oxide is used instead. EtO is notably used to sterilize CPs.

### Gilson Tip Packaging

Gilson offers a wide range of PIPETMAN Tips packaging to suit all your needs.



**Figure 10**  
PIPETMAN Tips Packaging Options

Check the tip compatibility table in Gilson Product Guide to match your pipette model with standard or filter tips.



Check Gilson Manual  
Liquid Handling Catalog

[www.gilson.com/ecatalog/index.htm](http://www.gilson.com/ecatalog/index.htm)

### Evaluating Tip Quality

Although they may look alike, all tips are not equal. The choice of a poor quality tip may jeopardize your results. Choose the pipette tip recommended by the pipette manufacturer for the best accuracy, precision and tip fit, and always check the following points:

#### Quality of the Tip’s Raw Material

There are many different brands of tips made of varying quality plastics. Gilson selects a specific polypropylene because it is naturally hydrophobic and a low retention material.

#### Absence of Potential Contaminants

Cleanness of tips is very important as production residues, such as dust or biological contaminants coming from the production site, may contaminate your samples. Additionally, tips should be chemically resistant and free of additives, such as silicone, dyes, biocides, antistatic agents, as well as traces of metal, such as aluminum, nickel, or zinc.

A trace metal certificate can be obtained from the manufacturer upon request.

### Tip Manufacturer’s Guarantees

#### GUARANTEEING TRACEABILITY

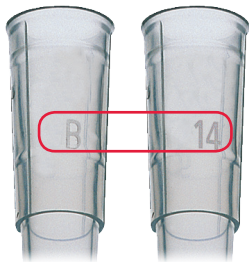
With the batch number on each box and bag, the history of the tips can be traced from packaging to delivery to the laboratory.

#### GUARANTEEING PRODUCTION QUALITY

Every PIPETMAN DIAMOND precision tip is individually marked with an identification number. With this number, the mold can be identified, and even the exact cavity which produced the tip can be located.



**Figure 11**  
PIPETMAN DIAMOND Tip,  
Identification Label



**Figure 12**  
PIPETMAN DIAMOND Tip Guaranteed  
Traceability