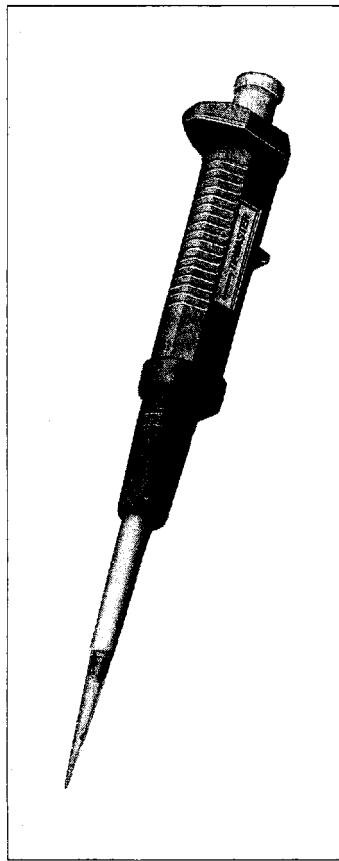




# TIPMASTER

## REPETITIVE TIP DISPENSER



5. Withdraw the tip from the sample solution. Do not wipe the tip.
6. Place the tip against the side of the receiving vessel and depress the thumb knob until it stops.
7. After dispensing, remove the disposable tip by firmly depressing the filling lever.

### SERVICE AND MAINTENANCE INFORMATION

It is recommended that the following servicing procedure be performed at regular intervals. Heavy usage or usage with corrosive fluids will require more frequent servicing.

1. Unscrew the barrel assembly from the handle and carefully pull directly away from the handle. Take special care not to bend the stainless steel plunger.
2. Remove the O-ring retainer from the barrel assembly.
3. Remove the plastic piston and the O-rings from the top and bottom of the piston.
4. Place an O-ring into the cylinder to the bottom.
5. Place an O-ring on the top of the piston and return into the cylinder.
6. MAKE SURE THAT THE O-RINGS ARE LINED UP PROPERLY WITH NO OBSTRUCTIONS. (Note: Use the cleaning wire to assist in lining up the O-ring and piston if necessary.)
7. Replace O-ring retainer onto the cylinder and piston.
8. Apply a small amount of silicon grease to the stainless steel plunger.
9. Screw the barrel assembly onto the handle.
10. After the above maintenance procedure, should the feeling of a smooth piston stroke seem different than prior to servicing; immediately disassemble the unit as in the above procedure and reassemble as per the schematics in Figures 3.

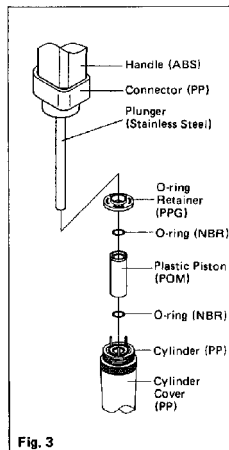


Fig. 3

### FEATURES

- Fixed volume can be dispensed 8 times without refilling.
- Built-in tip ejector provides safe disposal of used tips.
- Most universal pipette tips can be used.
- Non-metallic tip ejector shaft permits easy access to the bottom of commonly used test tubes.
- Lightweight and slender design permits comfortable handling without fatigue.
- 7 volume models available.

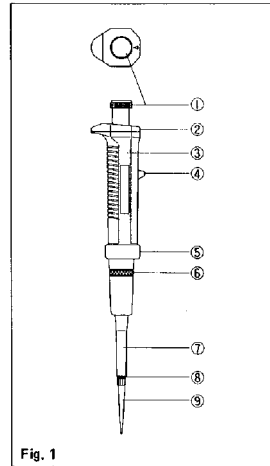


Fig. 1

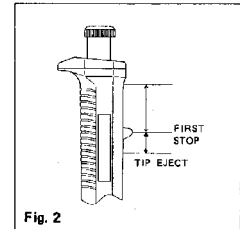


Fig. 2

### PARTS AND MATERIALS

1. Thumb Knob (POM)
2. Cap (ABS)
3. Handle (ABS)
4. Filling Lever (Aluminium)
5. Connector (PP)
6. Cylinder (PP)
7. Ejector Shaft (PP)
8. Nozzle (PP)
9. Tip (PP)

### OPERATING INSTRUCTIONS

1. Attach a pipette tip firmly to the instrument.
2. Push down on the filling lever until it stops.
3. Immerse the tip approximately 3mm into the sample solution.
4. Pull up on the filling lever to its uppermost position to fill the tip with liquid.

### SPECIFICATION

Cat. No.	Volume	Number of Dispensers	Accuracy (%)	Reproducibility (%)	Usable Tip
TM-5	5ul	8	±4.0	2.5	50T-SS
TM-10	10ul	8	±2.0	1.8	50T-S
TM-16	16ul	8	±2.0	1.8	50T-S
TM-20	20ul	8	±1.5	1.3	50T-S
TM-25	25ul	8	±1.5	1.3	50T-S
TM-50	50ul	8	±1.5	1.3	50T-L
TM-100	100ul	8	±1.5	1.3	50T-L

\* 7 volume models are available as standard. For special fixed volume model, please contact your local distributor.

### ORDERING INFORMATION

#### Dispenser

Cat. No.	Volume	Accessories
TM-5	5ul	2 Spare O-rings and a maintenance kit
TM-10	10ul	2 Spare O-rings and a maintenance kit
TM-16	16ul	2 Spare O-rings and a maintenance kit
TM-20	20ul	2 Spare O-rings and a maintenance kit
TM-25	25ul	2 Spare O-rings and a maintenance kit
TM-50	50ul	2 Spare O-rings and a maintenance kit
TM-100	100ul	2 Spare O-rings and a maintenance kit

#### Tip

Cat. No.	Capacity	Color	Q'ty/bag (or box)
50T-SS	40ul	clear	1000
50T-S	200ul	yellow	1000
50T-L	1000ul	blue	1000

(Only 50T-SS is supplied with a carton box. All others are supplied with a poly-bag.)

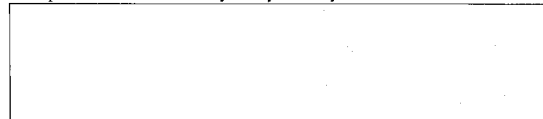
#### Racked Tip

Cat. No.	Capacity	Color	Q'ty/rack
50T-SSR	40ul	clear	100
50T-SR	200ul	yellow	96
50T-LR	1000ul	blue	100

#### Stand

Cat. No.	Description
8100S	Stand to hold two models.

For repair service or information you may contact your local distributor.



MANUFACTURER: NICHIRYO CO., LTD.

30C12-90(E)