

## ORDERING INFORMATION

### PIPETTE

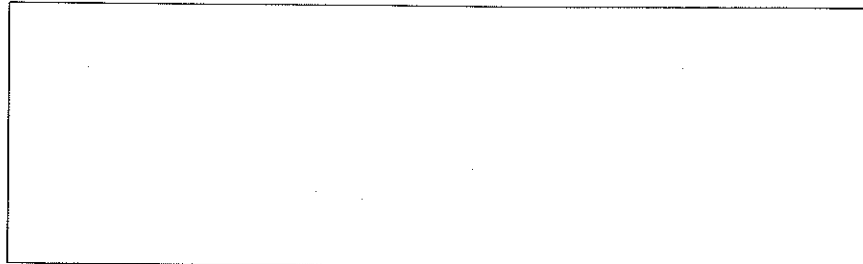
Cat. No.	Volume Range
3100-1	0.2 ~ 1.0 ml
3100-2	0.4 ~ 2.0 ml
3100-5	1.0 ~ 5.0 ml
3100-10	2.0 ~ 10.0 ml

### DISPOSABLE TIP

Cat. No.	Capacity	Q'ty/Bag
MPT-1	1.0 ml	1000
MPT-2	2.0 ml	200
MPT-5	5.0 ml	200
MPT-10	10.0 ml	200

A Model 3100 is provided with a maintenance kit and tip.

For repair service or further information you may contact your local distributor:



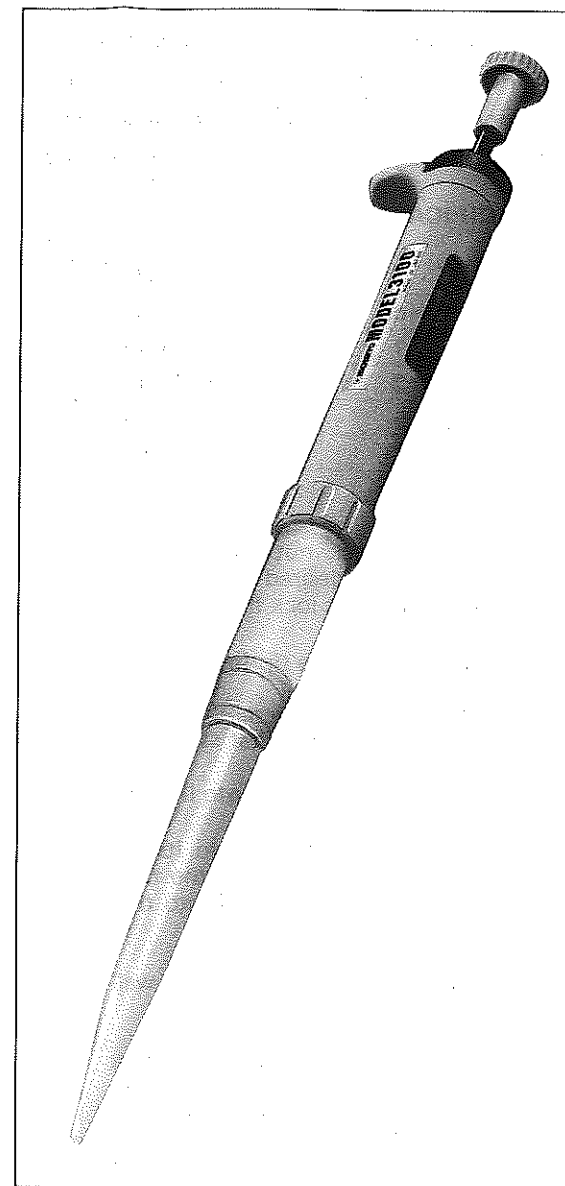
MANUFACTURER:  **NICHIRYO CO., LTD.**

Made in Japan 30C08-91(E)

 **NICHIRYO**

# MODEL 3100

## MACRO PIPETTE



## FEATURES

- Excellent accuracy and reproducibility.
- Four different volume ranges, 1 ml, 2 ml, 5 ml and 10 ml.
- Volume of pipetting is easily changed and fixed.
- Light design permits easy handling without fatigue.

## SPECIFICATIONS

Accuracy: < 1.0%      Reproducibility: < 1.0%

Cat. No.	Volume Range	Increments
3100-1	0.2 ~ 1.0 ml	0.1 ml
3100-2	0.4 ~ 2.0 ml	0.1 ml
3100-5	1.0 ~ 5.0 ml	0.5 ml
3100-10	2.0 ~ 10.0 ml	0.5 ml

## OPERATION

1. Loosen the lock nut and turn the knob until the yellow cross-line corresponds to the desired volume indicated by the volume scale, then lock by tightening the lock nut.
2. Attach a disposable tip firmly onto the syringe nozzle.
3. Depress the knob several times to ensure smooth movement of the piston. Push the knob to the first stop. (Fig. 1, B)
4. Place the disposable tip into liquid to a depth of 3 to 4 mm.
5. Slowly return the knob to its original "up" position. (Fig. 1, A) The sample will be drawn into the tip. The knob should be carefully released so not to flush the liquid into the tip of the pipette, especially for 5 ml and 10 ml model.
6. Touch the tip to the inside wall of the receiving vessel.
7. Press the knob again to the first stop to expel most of the liquid. Wait one second with the knob held in this position, then continue to push the knob to its limit (Fig. 1, C). This forces out the last

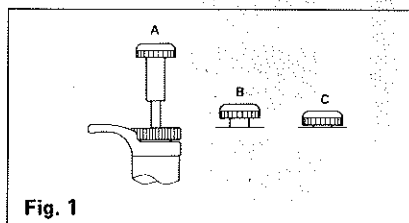
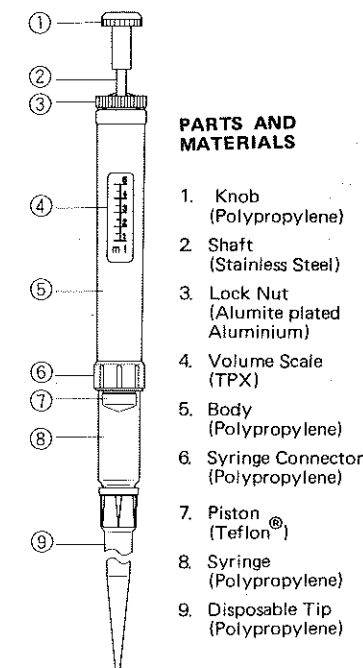


Fig. 1

remaining liquid from the tip. Keep the knob fully depressed until the tip is removed from the receiving vessel. Remove used tip from the pipette.

## REPLACEMENT OF PARTS

1. **KNOB** — It is easily removed by pulling it off the plunger.
2. **SYRINGE** — Turn it counter-clockwise to remove from the syringe connector. (Fig. 3)
3. **PISTON** — After removal of the syringe, keep the knob fully depressed, and push a pin by the probe of the piston installing tool. To install the piston, push the pin by opposite side of the tool. (Fig. 4)



### PARTS AND MATERIALS

1. Knob (Polypropylene)
2. Shaft (Stainless Steel)
3. Lock Nut (Alumite plated Aluminium)
4. Volume Scale (TPX)
5. Body (Polypropylene)
6. Syringe Connector (Polypropylene)
7. Piston (Teflon®)
8. Syringe (Polypropylene)
9. Disposable Tip (Polypropylene)

Fig. 2

### Note:

The piston should be lubricated with a small amount of silicone grease provided after certain interval or after cleaning of the piston when contaminated.

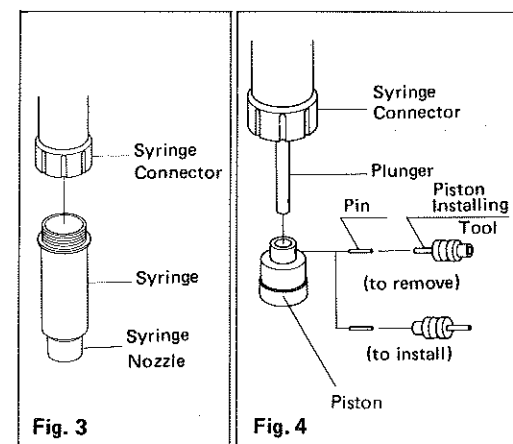


Fig. 3

Fig. 4