

 **MITYFLEX** PERISTALTIC PUMPS

PERISTALTIC PUMP  
OWNERS MANUAL

FOR MODELS: 4000 VARIABLE  
4500 OEM

*QUALITY MANAGEMENT SYSTEM REGISTERED  
TO ISO9001 INTERNATIONAL STANDARDS*



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***ANKO PRODUCTS INC. PUMP DIVISION***

3007-29<sup>th</sup> Avenue East · Bradenton, FL 34208 · 800-446-2656

**[www.ankoproducts.com](http://www.ankoproducts.com)**

Thank you for purchasing an Anko Mityflex® Peristaltic pump. We are sure you will be completely satisfied with its performance. Should you need assistance or have questions regarding the use or installation, please visit our website at [www.ankoproducts.com](http://www.ankoproducts.com).

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Every precaution for accuracy has been taken in the preparation of this manual, however, ANKO PRODUCTS, INC. neither assumes responsibility for any omissions or errors that may appear nor assumes liability for any damages that result from the use of the products in accordance with the information contained in this manual.

## LIMITED WARRANTY

ANKO PRODUCTS, INC., warrants equipment of its manufacture and bearing its identification to be free from defects in workmanship and material. ANKO PRODUCTS, INC.'s liability under this warranty extends for a period of one year from the date of delivery from our factory or authorized distributor. It is limited to repairing or replacing any device or part of any device which is returned, transportation prepaid, to the factory within one year of delivery to the original purchaser, and which is proven to be defective upon examination by us. ANKO PRODUCTS, INC. disclaims all liability for consequential damage of whatever nature, damage of equipment during transportation, damage, damage due to improper handling, installation or improper operation or for determining suitability for the particular use intended by a purchaser. Replaceable parts including tubes supplied with the product are not covered by any warranties either expressed or implied. ANKO PRODUCTS, INC., makes no warranties either express or implied, including implied warranty or merchantability, other than those stated above. No representative has authority to change or modify this warranty in any respect. Jurisdiction and venue for enforcement of this warranty may be brought only in the State of Florida. This warrant gives you specific legal rights, and you may also have other rights which vary from state to state.

## WARNING

ANKO PRODUCTS, INC. assumes no responsibility or liability for chemical compatibility of our tubing in specific applications. ALWAYS pretest tubing in accordance with tubing manufacturer's specifications. Tubing that shows signs of swelling, embrittlement, or other deterioration should not be used.

## WARRANTY RETURNS

Please direct all warranty requests to the appropriate distributor the product was purchased from.

The MITYFLEX® 4000 variable speed drives are powered by a DC gearmotor. A specially designed electronic speed control system converts AC to DC while providing smooth acceleration control over the entire flow range. The three position on/off switch allows the user to maintain speed setting when unit is turned off or reversed. The MITYFLEX® 4500 OEM models are fixed speed AC units.

#### 4000 FEATURES (includes 4500\*)

1. \*ELECTRICAL: 115 VAC, 60HZ
2. REVERSIBLE VARIABLE SPEED CONTROL FOR VARIABLE FLOWRATES
3. MAXIMUM AND MINIMUM SPEED CONTROL ADJUSTMENT
4. \*FACTORY PRESET FLOWRATE: 2000 ml/min
5. REPLACEABLE MOTOR BRUSHES. (Replacement instructions page 6).
6. EXTERNAL FUSE HOLDER. (Fuse replacement instructions page 6).

#### INSTALLATION INSTRUCTIONS

1. POWER REQUIREMENTS: Voltage and frequency of power supply must be the same as shown on unit.
2. WIRING CONNECTIONS: All wiring and electrical connections must comply with local and national electrical codes.
3. MOUNTING: 4000 Case enclosed model may be placed on any flat surface assuring space is provided at the back of the case for air circulation through ventilation holes. 4500 Bracket or Case mount assuring space provided for air flow. Do not allow tubing to be crimped.
4. MOUNTING LOCATION: Pump should be placed in a dry location with adequate cooling provided. The ambient temperature should not exceed 35°C.

**This unit should not be used in outdoor or hazardous locations.**

**CAUTION:** Motor life will be drastically reduced if left in the stalled position for extended periods.

## TUBING INSTALLATION/PUMP HEAD ASSEMBLY

Inspect all tubing regularly and replace if any sign of deterioration occurs. Always wear safety glasses and protective clothing when working with chemicals. (See Illustrations on page 6).

1. Disconnect power to the pump.
2. Disconnect the suction and discharge tubing from the pump tubing. (If the product pumped is not caustic, tubing may be removed by running pump and pulling on the discharge tube until tubing is removed. In this case skip steps 4-5).
3. Remove (2) screws (E) to release pump head assembly.
4. Remove tube housing (D) by gently rocking side to side while pulling off. (In most cases roller bracket should stay on shaft. In the event that it is removed with the housing, line up flat on shaft with flat on inside on bracket and push back into place. There is also a tubing cover ring (A) that should be on up against the motor case. This is free floating until the tube housing is replaced).
5. Remove tubing from roller bracket.
6. Clean roller race inside of tubing housing, removing and particles that could damage tubing. Be sure all cleaning solvents are removed prior to installing new tube.
7. To reassemble, rotate roller bracket assembly so that the rollers are in the 10:00, 2:00, and 6:00 positions (see Illustration 1-1). Lay the tube over the top rollers and hold the ends together at the 6:00 position. Put the tube housing (with tube inlet and outlet restraints down) over the roller assembly and the tube, locating the ends of the tubing into the tube inlet and outlet restraints.
8. Press tube housing onto shaft while gently pulling down to align shaft into tube housing bearing. Press tube housing flush to motor case and replace screws.

**CAUTION:** Be sure not to twist or leave the tubing pinched while installing, as this will affect your flow and tubing life.

### WARNING

ANKO PRODUCTS, INC. assumes no responsibility or liability for chemical compatibility of our tubing in specific applications. ALWAYS pretest tubing in accordance with tubing manufacture's specifications. Tubing that shows signs of swelling, embrittlement, or other deterioration should not be used.

## FOR 4000 CASE MODELS ONLY

### FUSE INSTALLATION

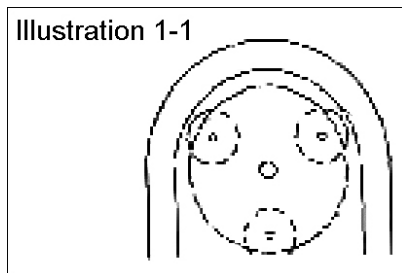
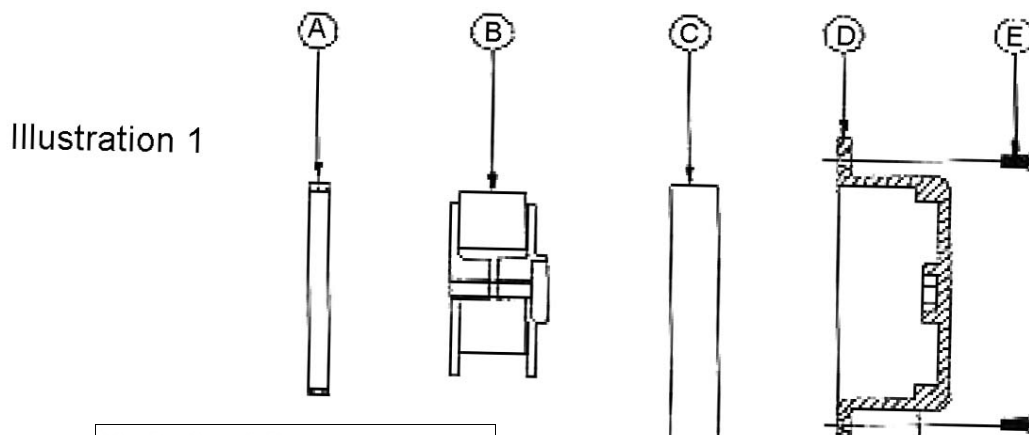
(See page 7 for fuse ordering information).

1. Disconnect power to pump.
2. The fuse holder is located on the back of the case.
3. Turn the knob counterclockwise.
4. Slide the fuse out.
5. Remove old fuse and replace with new fuse.
6. Slide back in and push while turning clockwise to lock.

### MOTOR BRUSH REPLACEMENT

(See page 7 for brush ordering information).

1. Disconnect power to pump.
2. Remove case cover by removing 6 screws.
3. With a small flat head screwdriver remove the brush caps on both sides of the DC motor.
4. Remove old brush and replace with new brush. (Slide in horizontally).
5. Push metal plate on the end of the brush inside and hold it while replacing brush cap.
6. Replace case cover.



Replacement Parts List

Contact your local distributor to order. Please remember to include the complete model number when you place your order for replacement parts.

Item	Unit Number
Tube.....	TU-1225-3856-01
Pump Kit.....	400-205-000-13
Includes tubing housing w/bearing, cover ring, roller bracket assembly, and two screws.	
For Case Models Only:	
Motor Brushes (2/pack).....	BR-1140-01-00
Fuse (5/pack).....	FU-1127-03-00

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