



THE GLOBAL STANDARD  
FOR LIVESTOCK DATA

# ICAR Guidelines for User Manual of the Milk Meters

**SB Ezi-Test [EZ]**

Version June 2018

Network. Guidelines. Certification.

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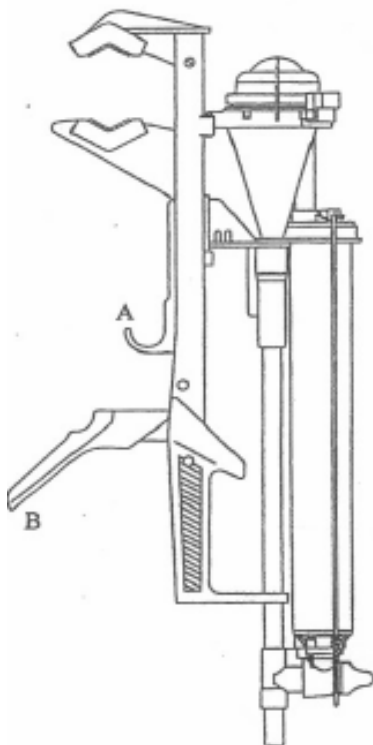
## 1 Installation and brackets

In all cases the Ezi-Test Milk Meter should be mounted in a vertical position.

- The Ezi-Test Milk Meter should be located as close as possible to the milk line.
- All milk hoses from the claw/cluster to the Ezi-Test Milk Meter, and from the Ezi-Test Milk Meter to the milk line, should be kept to a minimum to avoid sagging and possible milk yield errors.
- Your Ezi-Test Milk Meter is equipped with one of the mounting brackets (or similar) shown below.

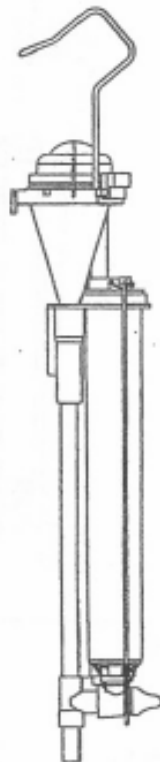
### CLAMP BRACKET

To install, extend the jaws to the open position by pulling down on the jaw extend hook (A). Place top jaw over the pipe and hold bracket down whilst closing the trigger (B). Clamp firmly onto the pipe. To remove, release trigger (B) and push Milk Meter up until the jaw extend hook engages.



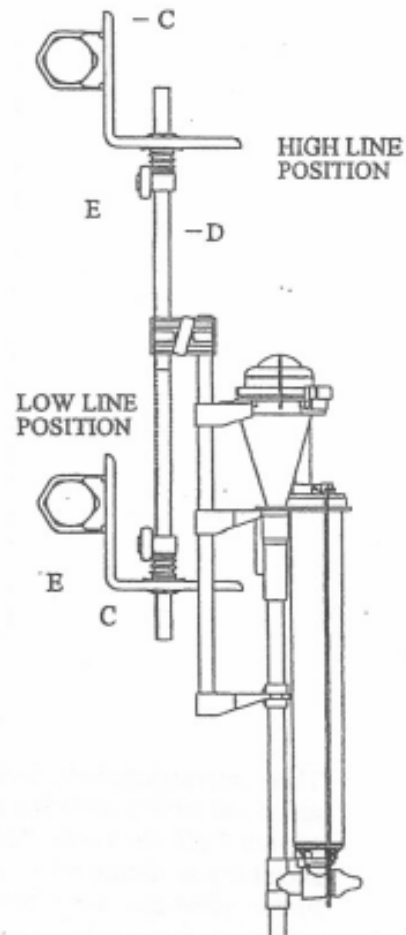
### HANGER HOOK

Simply hang meter over pipe work, taking care Milk Meter hangs as close as possible to vertical.



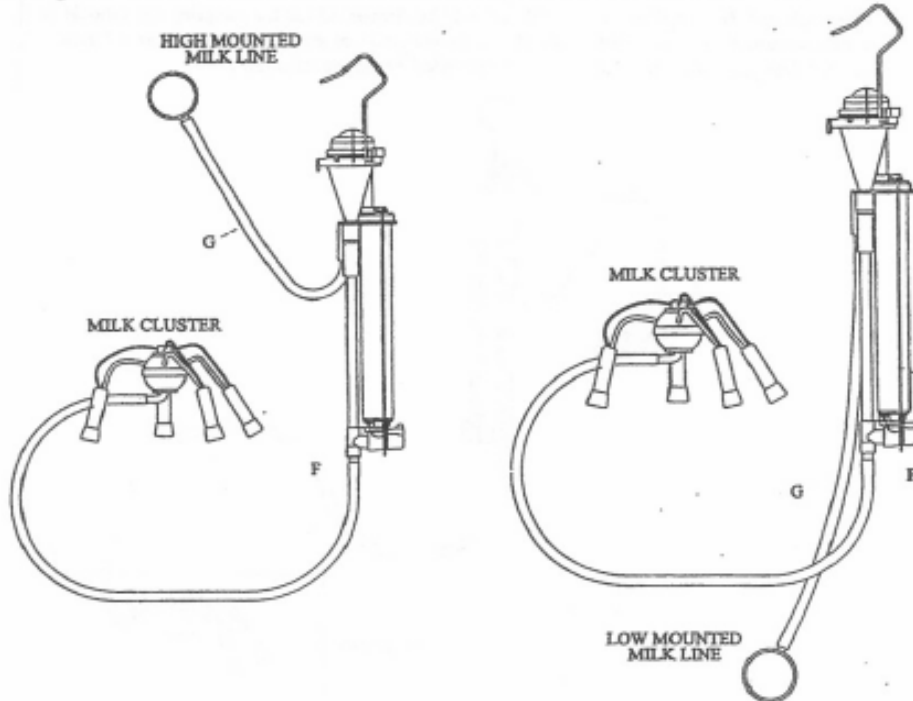
### TUBE BRACKET

Install flange (C) and mounting kit as shown below. Slide the Milk Meter extensible tube (D) through the clamp unit (E) to adjust height of Milk Meter.



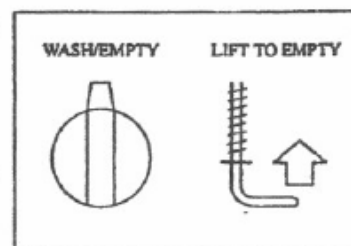
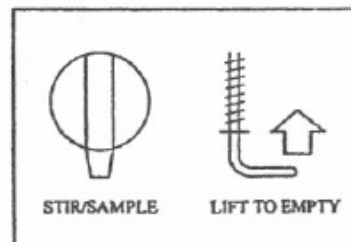
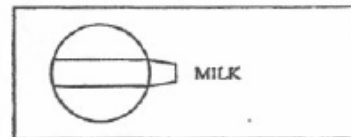
## 2 Connection of hoses

Attach the milk hoses from the milk cluster to the Milk Meter inlet tube (F) and from the Milk Meter outlet (G) to the main milk line ensuring that the hoses are kept to a minimum to avoid sagging and consequently possible errors in milk yield reading. If a take-off unit is used, connect your Milk Meter between the take-off and the milk line.



## 3 Operating your milk meter

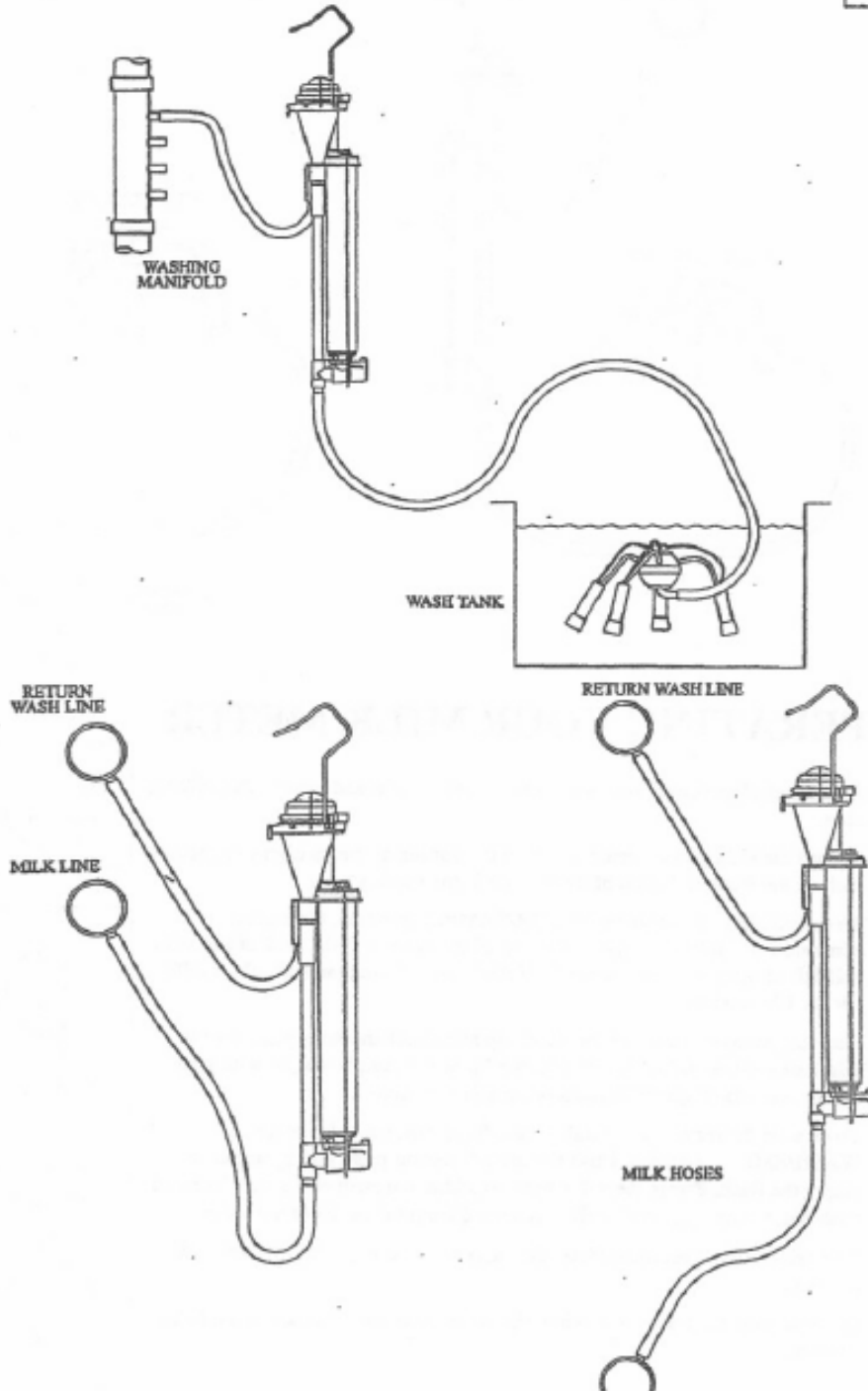
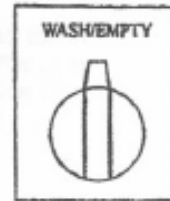
- A. At the end of each milking, shut off the claw vacuum and remove the milking claw.
- B. Record the milk yield (ensure you read the bottom of the meniscus i.e. do not include the froth at the top of the sample in the reading).
- C. To sample, turn the valve to the STIR/SAMPLE position. Controlled air admission will allow consistent stirring of the sample. If the flask is less than half full of milk, stir for 5 seconds. If the flask is more than half full of milk, stir for 10 seconds.
- D. Place the sample vial under the valve tap and simultaneously push the air admission push rod upwards with the lip of the sample vial, or with your thumb, until the required amount of sample is obtained.
- E. To remove the remainder of milk in the flask, turn the valve to the WASH/EMPTY position. Push the air admission push rod upwards to empty the flask. Purge the valve with an additional push of the air admission push rod, to ensure that all milk is removed from the inside of the valve.
- F. To wash the Ezi-Test Milk Meter the valve must be in the WASH/EMPTY position.
- G. In preparation for the next milking, the valve should be returned to the MILK position.



## 4 Washing your meter

For your convenience, the Ezi-Test Milk Meter is designed for in-line washing. Connect hoses as shown below, and turn valve to the WASH/EMPTY position. Near the end of the wash cycle, turn the valve to the STIR/SAMPLE position so that the flask drains through the sample port.

After each AM/PM sampling day, the valve should be dismantled and the sampling ports should be manually washed using the brush supplied. We recommend that abrasive detergents are not used, and that detergents are used at strengths recommended by the manufacturer.



## 5 Maintenance

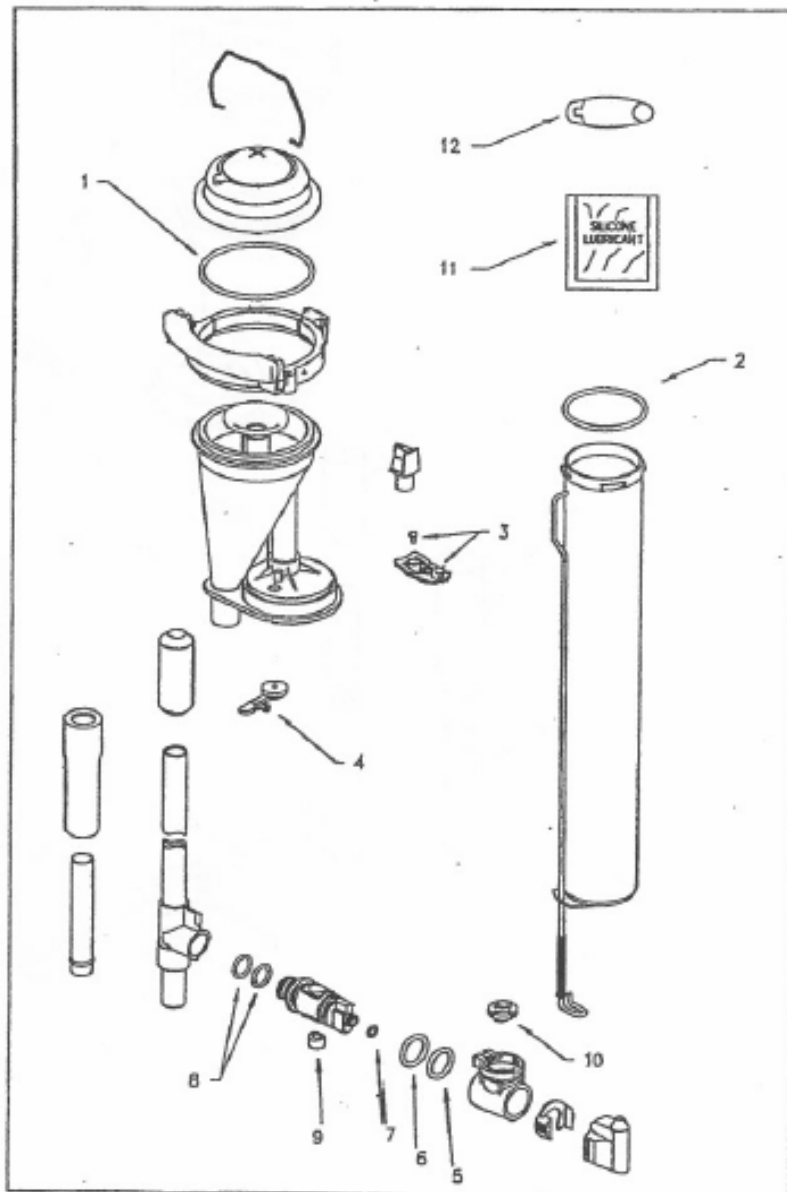
- Periodically disassemble the wash valve and smear valve inner and O-rings with a silicone based food grade lubricant - we recommend Dow Corning No. 7 Release Compound (supplied in the *TRU-TEST* MSK90000 Service Kit). **DO NOT USE HYDRO-CARBON (PETROLEUM) BASED LUBRICANTS** as damage to the valve, O-rings or grommets may occur, resulting in valve failure.
- **WHEN NOT IN USE, THE WASH VALVE SHOULD BE LEFT IN THE MILK POSITION.**

## 6 Service kit

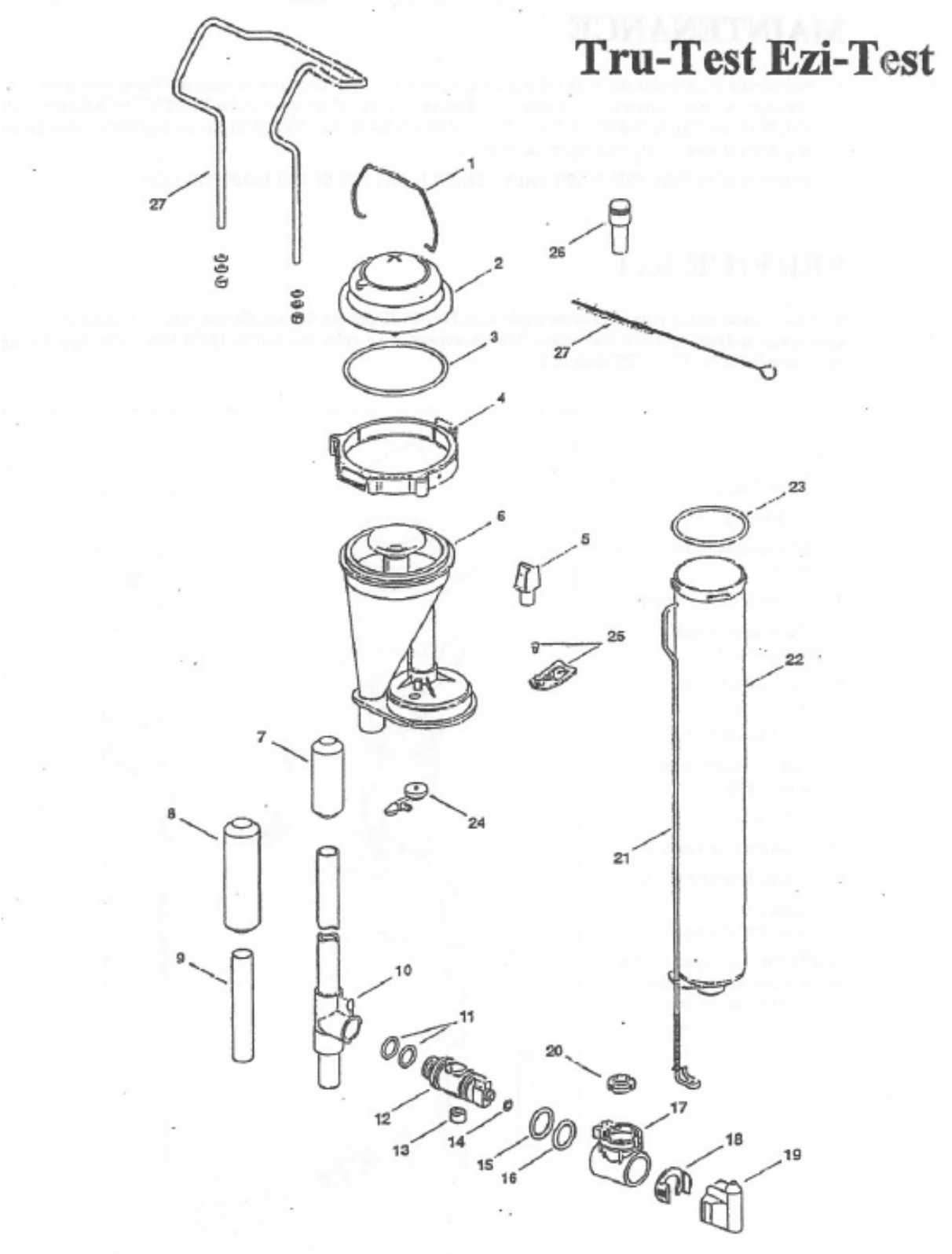
To assist in maintaining your Milk Meter equipment, *TRU-TEST* offers a Service Kit complete with all rubber components and easy to follow instructions. We recommend you service your Ezi-Test Milk Meter with the following parts provided in the *TRU-TEST* Service Kit:

1. Cover O-ring
2. Flask O-ring
3. Air admission valve, seal & screw
4. Rocker & seal assembly
5. Valve Inner O-ring (medium size)
6. Valve inner O-ring (large size)
7. Valve handle O-ring
8. Valve T-piece O-rings (2 included)
9. Valve Seal
10. Valve outer grommet
11. Silicone lubricant sachet
12. Safety pin (to remove O-rings)

**NOTE:** With recent part update, rocker & seal assembly now manufactured as one part



7 Tru-Test Ezi-Test





## 8 Ezi-Test meters part list

| <u>Drawing Reference</u> | <u>Part Number</u> | <u>Part Description</u>            |
|--------------------------|--------------------|------------------------------------|
| 3                        | 26048              | Body to Cover Seal Ring            |
| 2,3                      | 26049              | Flask to Body Seal Ring            |
| 7                        | 26053              | Inlet Tube – Rubber 9/16” x 2.5”   |
| 1                        | 26064              | Body Cover Clip                    |
| 25                       | 26483              | Air Admission Flap – White Nylon   |
| 5                        | 26513              | Nozzle (102lb) Green               |
| 8                        | 26516              | Outlet Sleeve – Rubber 5/8” x 4”   |
| 9                        | 26518              | SS Outlet Tube 3/4” x 4”           |
| 4                        | 26052              | Meter Body Mounting Ring           |
| 17                       | 26555              | Lower Valve Housing (Outer)        |
| 10                       | 26631              | T-Piece for Clamp Bracket          |
| 11-19                    | 65033              | Sampling Valve Complete            |
| 19                       | 65035              | Sampling Valve Handle              |
| 24                       | 65041              | Rocker Assembly                    |
| 10                       | 65049              | T-Piece for Lowlane Bracket        |
| 18                       | 65053              | Sampling Valve Circlip             |
| 1-6                      | 65064              | Ezi-Test Meter Body w/cap & Nozzle |
| 22                       | 65065              | Ezi-Test Flask 103 lb              |
| 21                       | 26519              | Push Rod Assembly                  |
| 12                       | 65073              | Valve Inner Complete with O-Rings  |

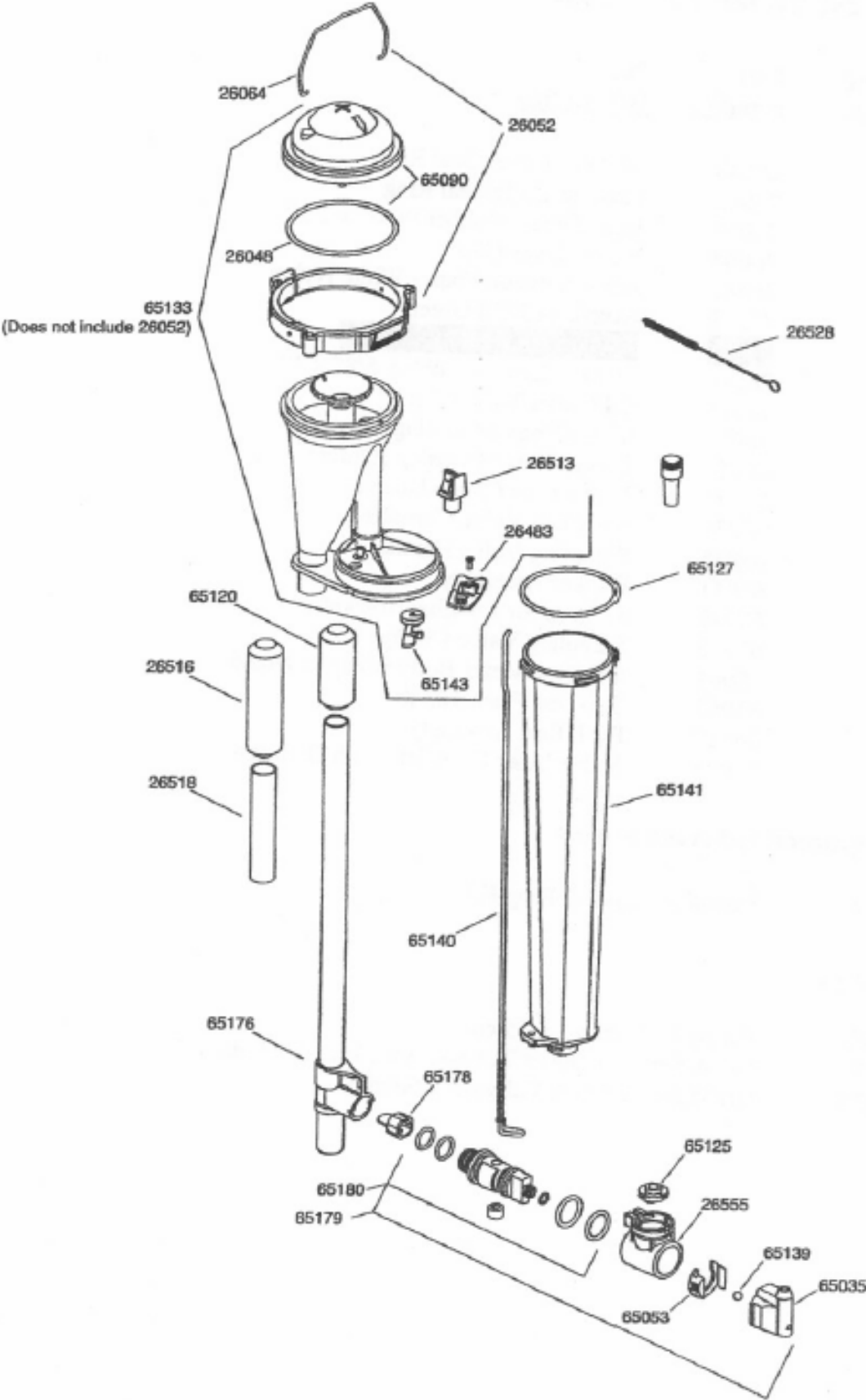
## 9 Recommended accessories

65045      Sampling Valve O-Ring Kit

## 10 Brushes

10562      Brush for Flasks-5 x 15 cm  
 26521      Brush for Inlet/Outlet Tubes-1.6 x 13 cm-5/8” dia.  
 26528      Brush for Cleaning Valves-8 x 60 mm





Product No:       **674051**

15 g nozzle  
 110 lb WB flask  
 19mm  
 inlet/outlet  
 Multigrip brkt  
 and dovetail

***Part Number    Part Description***

|       |   |
|-------|---|
| 26064 | Cover clip  |
| 65090 | Cover assembly  |
| 26048 | Cover o-ring  |
| 26052 | Mounting ring   |
| 26513 | 15g nozzle  |
| 65133 | WB Ezi-Test meter body, 15 g nozzle                             |
| 65120 | 2 ¾" rubber sleeve  |
| 26516 | 4" rubber sleeve  |
| 26518 | 4" stainless steel outlet tube                                  |
| 65176 | T-piece assembly for Mk.2 valve (180° cut out)                  |
| 65178 | WB Ezi-Test baffle  |
| 65179 | Sampling valve assembly Mk.2                                    |
| 65180 | Sampling valve inner, seal & o-rings                            |
| 65125 | Valve grommet   |
| 26555 | Valve outer   |
| 65053 | Sampling valve circlip  |
| 65139 | S/S ball for sampling valve                                     |
| 65035 | Sampling valve handle   |
| 65140 | Push rod with spring and washer, for WB flask                   |
| 65141 | 110 lb flask, with push-rod guide and English instruction print |
| 65143 | Rocker assembly, WB Ezi-Test                                    |
| 26483 | Air admission valve, seal and screw                             |
| 65127 | Flask o-ring  |
| 65194 | WB Ezi-Test 50kg/110lb flask for Super Clamp & I/line brkt      |

***Recommended Accessories***

|       |                              |
|-------|------------------------------|
| 65045 | Sampling valve service kit   |
| 65145 | WB Ezitest meter service kit |

***Cleaning Brushes***

|       |                  |
|-------|------------------|
| 26528 | Valve brush      |
| 65131 | Meter body brush |
| 10562 | Flask brush      |



## 11 Troubleshooting

### SYMPTOM

#### ABNORMAL READING

- Milk Meter more than 5 degrees from vertical
- Flask sealing ring leaking air
- Defective valve
  
- Insufficient vacuum
- Dirty Milk Meter
- Air vent in cluster cap plugged
- Cracked cap or body
- Cap deflector point damaged or blunt
- Cracked flask
- Partially plugged obstructed nozzle
- Damaged nozzle

#### FLASK FILLING TOO FAST

- Hoses reversed
  
- Wrong nozzle used
- Damaged cap or metering nozzle
- Valve in wrong position

#### NO SAMPLE IN FLASK

- Hoses not connected
- Flask Sealing Ring in Milk Meter body pinched or missing
- Damaged flask
  
- Rocker valve stuck
- Cracked or broken cap or meter body
- Milk Meter nozzle plugged
- Damaged valve leaking air
  
- Valve not in MILK position
- Air admission flap open

### SOLUTION

- Reposition to vertical
- Replace part
- Replace Sealing Rings or send Milk Meter to service centre
- Have milking plant checked
- Remove from service and clean
- Clean air vent
- Replace part
- Replace part
- Replace part
- Remove obstruction
- Replace part and recalibrate

- Install hoses correctly, milk cluster to Milk Meter inlet tube
- Use proper size nozzle
- Send to Milk Meter Service Centre or replace part
- Place in MILK position

- Connect tightly
- Replace Sealing Ring and reset properly
  
- Check sealing edge/replace or send to Milk Meter Service Centre
- Free rocker valve
- Send to Milk Meter service centre and replace part
- Carefully clean obstruction or nozzle
- Try another valve/if persists send to Milk Meter Service Centre
- Turn valve to MILK position
- Shut air admission flap