Dear Customers,

We thank for your trust for selecting AGRO ELECTRO Milking Machines. Please note that from now on over 50 years of experience is with you. Please read this manual carefully before using the machine, and keep it for the future references.

"Hope you get plentiful and fertile milk..."

IMPORTANT

- Operating voltage is 220 volts.
- For safe use, electrical installation should be grounded and set in accordance to internal plants directives. 30 mA residual current relay must be used.
- Please do not lubricate any part of the machine.

LIFETIME OF THE MACHINE

- Ten years lifetime.

CONTENTS

1. General Information About Milking..... 3
2. Introduction..... 4
3. Machine ID and Standards..... 4
4. Parts of the Machine..... 5
5. General Safety Instructions and Warnings..... 6
6. Usage of the machine..... 7
7. Important Reminders..... 9
8. Maintenance..... 9
9. Service and Spare Parts..... 9
10. Manufacturer Company..... 9
11. Probablefaults, Reasons and Results..... 10-11
12. Repairs Carried out Under Guarantee..... 12
13. Warranty Terms 13
14. Documents 14-15

1-GENERAL INFORMATION ABOUT MILKING

IMPORTANCE OF MILKING: Milk is a substance which occurs and stored in the breast and taken out by milking the animal after the calving period. The purpose in dairy cattle is to obtain large amounts of quality milk. Therefore , milk must be taken out without any harm to teat. Milk yield decrease and breast diseases occur if milking is not performed properly. Time and technique of milking must be known. Milk yield is small in bad treated cows. If milking is not performed according to milking techniques cow teats can be damaged.
Cleanliness during the milking has a great importance . Do not forget that Cow means breast.

OBTAINING MILK: To obtain milk is neural and hormonal reflex and has a great importance to get the highest amount of milk from a cow. Milk flow starts from the breasts by warning the teats with some factors such as washing and cleaning the teats, massaging, being ready in the milking area. The milking must be started within one minute of these warnings and must be completed in ten minutes . Otherwise some of the milk is likely to remain in the breast. Ill-treatment , noise or an event cause aggression may prevent receiving milk even the teats are alerted in the proper way. This event is called "to keep the milk" for a cow. Thus the milk which cannot be taken from the breast outgrows. Milking a cow must be completed within 7 - 7.5 minutes. In dairy cattle two times milking are generally rated at 12 hours intervals. Cows which are shedding their own milk or sucking their own teats can be milked 3 times a day.

MILKING MACHINE TECHNIQUE : Milking with machines in large enterprises is a method which helps the to complete milking in the shortest time and saves time and manpower. More healty and more milk is obtained by using milking machines. Milking success can be achived by using the technically right machine in the proper way, without harming the animal's health and milking in the appropriate time. It is necessary to have the appropriate milking machine which has the right technical features and use it correctly in order to make an effective milking. Milking machines are used at least twice in a day and they are in direct contact with living organisms during the operation. For this reason these machines should be checked, and maintained at certain intervals. Milking machines must be cleaned after every milking and we must be sure that they are technically feasible and in good performance. Milk is taken out by affecting the similar vacuum to the cow's teat as same as calves do.

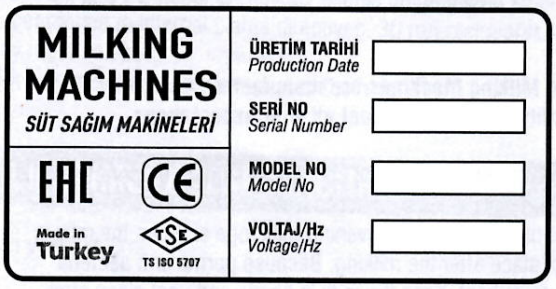
Agro Electro Milking Machines are manufactured carefully with quality materials to meet all your expectations

STORAGE OF MILK: Keep your milk containers shut if you dont want the milk smell like barn or be sure not to leave the milk in barn after the milking. Do not mix morning and evening milk toge er. Keep the milk in shade and cool place after the milking. Because germs and bacteria proliferate rapidly in heat. Keep the milk in shade and cool place after the milking. Because germs and bacteria proliferate rapidly in heat. Cool the milk as soon as possible and send it to the milk collection center as soon as possible.

2-INTRODUCTION

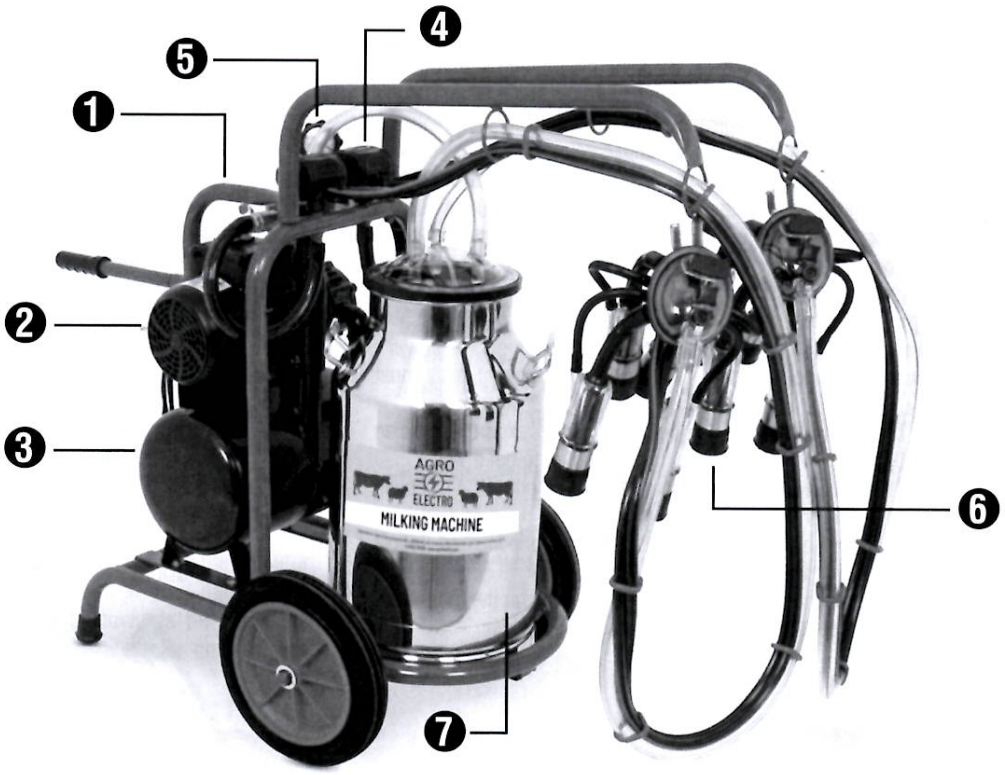
- This Users' Guide Booklet, is prepared to make the operation and the maintenance in safety for your Agro Electro Milking Machine.
- Carefully read the manual before you begin using your machine.
- Failure to observe safety instructions and warnings can result in accidents.
- Fail to comply operating and maintenance instructions shorten the life of your machine.
- Instruction manual booklet, is a part of Agro Electro Milking Machine and always must be kept near the machine.
- If the instruction manual is lost, please be sure to request from us a new one free of charge.

3-MACHINE IDENTIFICATION AND STANDARDS



- The content of the Machine Label are ; brand, model, serial number, date of manufacture and the manufacturer data.
- CE marking and declaration of conformity, show that the machine produced according to 2006/42/EC directives
- Certification mark of TSE means that your machine is manufactured in accordance to Frameworks for the TS ISO 5707 Milking Machines Turkish Institute of Standards.

4-PARTS OF THE MACHINE



1- Chassis
2- Vacuum Pump and Motor
3- Vacuum Tank
4- Pulsator
5- Vacuum gauge
6- Milking Cluster
7- Milk Bucket

5-GENERAL SAFETY INSTRUCTIONS AND WARNINGS

- The machine whose maintenance, adjustment and test has been done is ready to be used before delivery..
- Your producer has used the best raw material and eguipments on the machine for the best performance and safety.
- You must use the machine as it is stated in the manual.
- The people using and maintaining the machine must read the instruction in the manual and take the training to learn how to use the machine. Don't change any part of the machine please. Otherwise, your machine may be out of warranty and may have dangerous consequences for your security.
- The machine must be stopped and the electricity must be cut off before maintanance,cleaning and adjustment of it.
- The machine starts working with 220 V-50 Hz. Make sure that your electricity wiring is suitable to the inner electricity regulations and it is grounded for safety of your machine.
- Get an electric technician to do the electricity connection of the machine by Using V-automotic kind of switch in accordance with engine power , delayed fuse and grounded socket . 30 mA leakage current relay must be used.
- Don't try to repair any kind of electrical fault, get an expert electrician repair,istead.Don't wash the engine and be careful not to get it wet.
- Don't use the machine without motor shaft protection cover.If it's broken or lost then get a new one and install it.
- Keep the machine out of reach of both children and uneducated people and unsuitable weather conditions.
- Warning labels to use the machine effectively is written on the machine.If it's torn or lost then get a new one from your supplier, please.

WARNING LABELS



Attention!



Read the manual,please.



Don't connect the cord into the wall outlet with wet hands.



Disconnect it from the electricity before the repairement.



Use grounded socket.



Hot ground (surface)



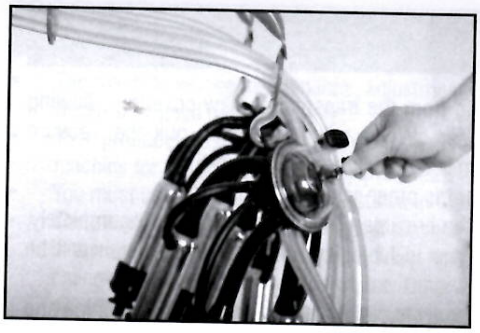
Don't get the electricity power,cord and plug wet.



Rotating shaft.

6-USE OF MACHINE

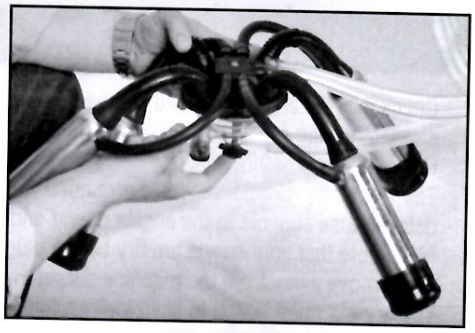
- Check if all the animals are tied, the barn is clean and vantilated before strating milking.
- Clean the teats before milking.
- The electricity wiring must have grounded wiring and you must use a delayed fuse suitable to the engine power and grounded socket.
- Make sure that your hands are dry before plugging the power cord.
- Don't move away from the machine during the milking.
- The ground must be flat to keep the machine stable during milking.
- In order not the have any loss of vacuum make sure that the bucket lids are closed tightly.
- Open the switch and pull the vacuum stopper from the milking claw **(Picture-1)**
- While milking cattle the vacuum indicater must be 0,45 - 0.50 bar pressure and the pulsator must start pulsation movement.
- While milking sheep and goat the vacuum indicator must be 0,35 bar pressure. Adjust the vacuum indicator with a regulator. **(Picture-2)** (don't exceed 0,5 bar pressure)
- The compression cycle in a pulsator must be 60 times for the cattle regarding to pulsation movements, 90 times for the goat,120 times for the sheep in a minute.(Description for the setting is in MAINTENANCE section.)
- When the vacuum level reaches to the optimum level, and the pulsator starts pulsation, turn the miliking cluster down in your hand in the position that vacuum stoper on claw will be towards the floor and push the vacuum stoper. (Picture-3) in this position teats covering will hang downside and will avoid vacuum leakage.
- Install the teats covering to the teats as it is shown in the Pictures. **(Picture-4)**
- Follow the milk flowing from the transparent claw covering , flowing indicator and milk hose. When milking finishes pull the vacuum stopper and take the milking equipment. **(Picture-5)**
- Do the same things for the other animals.
- Be carefull to empty the buckets with out being filled up completely. Otherwise,vacuum pump will be damaged with milk which will be moved in.
- In order to empty the buckets close the switch, stop the machine and push the vacuum stopers in trolley machines. In fixed models, close the vacuum valves and push the vacuum stoper.
- After finishing miking and taking the milk from the bucket start the machine by pushing the vacuum stopper and sinking the milking cluster into the warm water. In this way, clearing (pre-rinse) will have been done with the water being sucked and collected in the bucket. Then empty the bucket by stopping the vacuum. Clean (disinfect) the machine doing this activity again with some warm water and bucket cleaning detergent. Finally, repeat that action with clean cold water. **(Picture-6)**
- You can wash all parts of the machine except electrical parts and the engine of the machine.
- Keep the machine in a safe place which it won't be damaged with unsuitable weather condtions and children and animals.



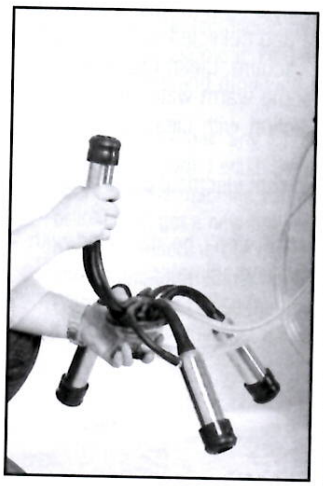
Picture-1



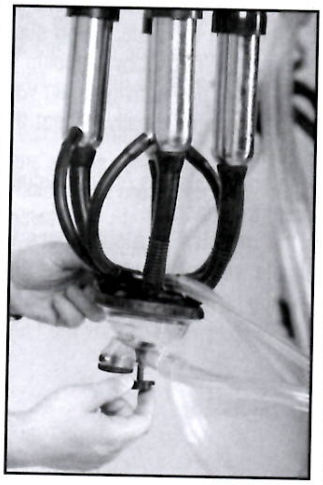
Picture-2



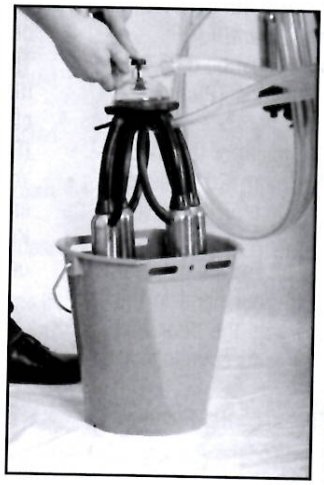
Picture-3



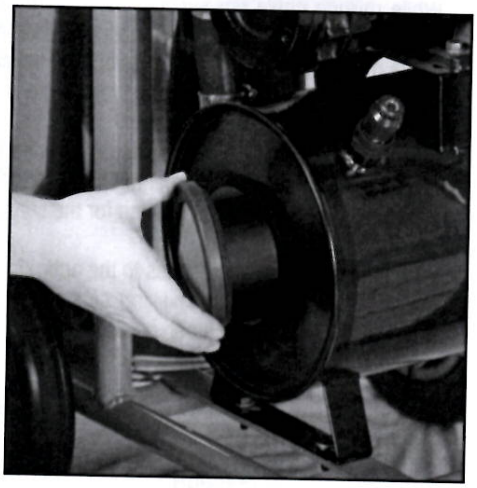
Picture-4



Picture-5



Picture-6



Picture-7

7-IMPORTANT REMINDERS

- The electric motor is out of warranty.
- Don't oil any part of your machine.
- Keep your machine clean and keep it out of bad weather conditions. (rain,snow,ice...etc)
- While milking, empty the bucket without wating for it to be full.
- Don't change the level of vacuum and pulsation of the pulsator; they must be at the level which is stated in the usage section .
- The Agro Electro milking machine has been produced the best quality that will enable you to use it for years so try to use the original parts when needed.

8-MAINTENANCE

DAILY MAINTENANCE :

• Check if the machine's electrical cable and plug is ok and the vacuum and milking hose are in the right place before each milking.

• You must clean the machine according to the manual after each milking process.

MONTHLY MAINTENANCE :

• Check the vacuum tank's side cover by opening it and clean it when needed. If there is any water in the tank, empty it by pushing the outlet stopper at the bottom of the tank. **(Picture-7)**

• Clean the parts that come into contact with milk by using cleaning brushes such as rubber liners, short milk hoses, transparent milk hoses, milk claws.

MAINTENANCE FOR EACH 6 MONTH :

• Renew the rubber liners each every 6 months.

• Check the short milking and vacuum hoses and renew them if necessary.

• By opening the upper cover of the pulsator clean the filter. Don't open the side covers.

• Check the pulsator's pulsation level. Put your index finger into the rubber liner and push it slowly when the machine starts, the vacuum stoppers are pulled out and the vacuum level is at 0,4 bar pressure. Count the pulsation you feel, it must be 55-60 times in one minute.

• If there is any inappropriateness in pulsation level you can adjust it with the adjusting screw at the back of the pulsator. For this adjustment you must use a 2milimeter-allen adjuster. You can slow the pulsation by turning the adjuster in clock-wise or you can make it fast in the opposite direction.

9-SERVICE AND SPARE PART

• Your machine is quaranteed by **AYAZ KAUÇUK** in spare parts.

• From maintenance, repairement and spare parts of your machine you can reach to the nearest service points from where you bought the machine or from the producer company.

• Please prefer the original spare parts to use the machine longer.

10-MANUFACTURER COMPANY

Badırga Mah. Muhsin Özyenice (Bursa Deri Osb)
Cad. No: 14 Nilüfer / Bursa / TÜRKİYE
Phone : +90 (224) 411 02 70 - 71
Fax : +90 (224) 411 02 72
Web : www.ayazkaucuk.com
E-posta : info@ayazkaucuk.com

Ayaz Kauçuk
PLASTİK VE KALIP MAKİNA SAN. VE TİC. LTD. ŞTİ.

11-PROBABLEFAULTS, REASONS AND RESULTS

POINTS TO BE CARED IN GENERAL PROBLEMS

PROBLEM	REASON	SOLUTION
THE MACHINE IS NOT CONNECTED TO THE ELECTRICITY OR IT HAS A LEAKAGE CURRENT.	You may have a problem with grounded wiring.	Call an autorized service or get an expert to repair it.
	There may be some water in the box installed on the engine,in the switch or socket or the cables may be dislocated.	Call an autorized service or g et an expert repair it.
AIR INDICATOR MAY NOT DISPLAY PROPERLY OR THE VACUUM MAY NOT BE AT THE OPTIMUM LEVEL.	There may be air leakage in the vacuum hoses.	Repair it after diagnosing it.
	There may be air leakage on the air regulator.	Repair it after diagnosing it.
	There may be air leakage on the cover at the side of the air tube.	Repair it after diagnosing it.
	There may be air leakage in the emptying stoper of the air tube.	Repair it after diagnosing it.
	There may be air leakage in the milking cluster.	Repair it after diagnosing it.
	Graphite palette in the vacuum pomp may have been worn.	Renew it
	There may be air leakage in the bucket's cover or cover gasket.	Repair it after diagnosing it.
	There may be a problem mith the vacuum gauge.	Renew it
THERE IS TOO MUCH VACUUM.	Air ragulator may have stuck.	Loosen it.
PULSATORS MAY WORK TOO FAST OR SLOW.	The adjustment may have been changed by someone else.	By tightening or loosing the adjusting screw at the back of the pulsator you can enable the pulsation be 18 times in 15 seconds.
ALL ADJUSTMENT OF THE MACHINE ARE OK BUT IT IS STILL SLOW.	Rubber Liners may need to be changed.	Replace the liners in evevry six months.
	There may be some fat in milking hoses.	Clean it with the brush regularly.
	Claw transparent cover may has fat inside.	Clean it regularly.
MILKING CLUSTERS MAY NOT HOLD THE TEATS.	Vacuum stoper may not have been pushed.	Push the stoper.
	The vacuum level may be low.	Increase the level of vacuum to optimum level with the regulator.
	Clusters may not be in the position as it is stated in the manual.	Hold the clusters in a position which will prevent any air leakage.

IMPORTANT POINTS TO BE CONSIDERED ABOUT PULSATOR

PROBLEM	REASONS	SOLUTION
THE PULSATOR DOESN'T WORK	Its valve may be closed	Open the valves.
	Machine may have no air (vacuum).	Do the preparations for milking.
	The hose for the pulsator may have not be installed.	Install the vacuum hose into the pulsator from below.
	The hose may be dirty.	Clean the vacuum hose connected to pulsator
	Pulsator adjusting screw may have been screwed to the right or left side too firmly.	Get it to the optimum level.
	Pulsator diaphgram may have been stuck in the blind spot.	Open the pulsator and install the diaphragms.
	Pulsatör toz, su veya sütten kirlenmiştir.	Open the pulsator and clean it.
	The pulsator may have been stuck with dirt of milk or water.	Renew it.
	The diagraphm may have been torn.	Open the pulsator and clean it.
	The filter in the pulsator may be dirty.	Open the pulsator and clean it.
PULSATOR WORKS SLOWLY AND UNREGULARLY	The vacuum level in milking system may be low.	Increase the vacuum level.
	Vacuum hoses and connection eguipments may be dirty or stuck.	Clean the vacuum hoses and connection eguipments.
	Rubber liners may be loose or torn.	Renew it.
	There may be looseness in the main body of the pulsator or adjuster.	Screw it in optimum level.
	Air filter may be dirty.	Clean the air canals in the pulsator.

NOTE: Undo the pulsator on a plain floor. Take care not to lose the parts. Get all the parts done firmly and correctly.

12-REPAIRS CARRIED OUT UNDER GUARANTEE

The Work Done:

Replaced Parts:

Service
Stamp - Signature

Date of Failure :...../...../.....
Repair Completion Date:...../...../.....

The Work Done:

Replaced Parts:

Service
Stamp - Signature

Date of Failure :...../...../.....
Repair Completion Date:...../...../.....

The Work Done:

Replaced Parts:

Service
Stamp - Signature

Date of Failure :...../...../.....
Repair Completion Date:...../...../.....

The Work Done:

Replaced Parts:

Service
Stamp - Signature

Date of Failure :...../...../.....
Repair Completion Date:...../...../.....

The Work Done:

Replaced Parts:

Service
Stamp - Signature

Date of Failure :...../...../.....
Repair Completion Date:...../...../.....

The Work Done:

Replaced Parts:

Service
Stamp - Signature

Date of Failure :...../...../.....
Repair Completion Date:...../...../.....

13-WARRANTY TERMS

- The warranty period starts from the date of delivery and it is 2 years.
- All parts of the machine (except Electric Motor) are under guarantee of our company.
- Repairment time is added to the warranty period, in case of malfunctions within the warranty period. The repair time can not exceed 20 working days. This time, starts from the date of notification to the authorized service station. in the absence of a service station this time starts from the date of notification to the one of the property dealer, distributor, agent, representative, importer or manufacturer. The consumer's fault notification can be done by telephone, fax, e-mail or by registered letter or in a similar possible way. However, in case of disagreement the burden of proof belongs to the consumer. The manufacturer-producer or importer of the goods have to be allocated a similar characteristics of another product unless the failure is not corrected within 10 working days.

- Labor costs, cost of replaced parts or under any other name will be repaired without any charge during the warranty period in case of failure of material, workmanship or assembly.

- The consumer can have a free replacement, price reduction or money back in the following cases;
  - the product has failed at least four times since it was delivered to the customer duing its warranty ,
  - there has been any failure six times in a year and if it prevents the customer to use it,
  - the deadline to repair it exceeds,
  - service of the company or the seller or the agency states that the repairement is impossible
- The failures resulted from improper usage of the product are out of warranty.
- You can apply to customs and trade minister ,general manager of consumer protection and market surveillance for any possible problems about warranty.

Warranty Start Date: ...../...../20.....

Machine Model: .....

Machine Serial Number: .....