



TARIMTAŞ

TARIM ARAÇLARI SANAYİ VE TİCARET A.Ş.

STZR

VACUUM PUMP UNITS OPERATING AND MAINTENANCE MANUAL



A Tarımtaş Quality Document

CE

TO OUR VALUED CUSTOMERS,

⚠ Before using your machine, please read carefully and store in a safe place for further reference.

Our products have been designed to work efficiently and with the up most ease, without harming the environment.

If you experience any problems other than those discussed in our manual please contact either the dealer from which you bought your machine or us directly and inform us about the following information:

A-Your address, telephone and fax number, machine type and production number,

B- A description of the problem.

This information is required for us to ascertain the exact problem.

We take all of our customer needs seriously. Therefore, please take note that if you require a specialised unit that is not one of our standard models, we will do our up most, within reasonable parameters, to meet your needs. We hope you enjoy using your new machine.

Machines with not original spare parts are out of warranty.

If there is a problem with your machine that cannot be resolved by us, an application can be made to the consumer arbitration committee.

In case of dispute, Istanbul Enforcement Offices and Courts are authorized and Turkish Law is applied in disputes.

PRODUCER:

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Tarımtaş reserves the right to make any technical changes to its machines, in regards to production techniques, materials used, and measurements implemented etc., based on its improvement aims and/or customer needs.

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1. TECHNICAL INFORMATION



VACUUM PUMP UNIT

VACUUM PUMP TYPE	Oil Type
VACUUM PUMP CAPACITY	From 400 lt/min up to 2800 lt/min
MOTOR POWER, ROTATION	From 1.1 Kw to 7,5 kW
VOLTAGE-FREKANS	220 Volt (AC) - 50 Hz. or 380 V (AC) 50 Hz
DRIVING (PUMP)	Pump fitted to electric motor with V belt
WORKING PRESSURE	0.42 bar. (kPa).
OIL TYPE (in oil types)	No 32 or 37 or equivalent.
WEIGHT	From 80 kg to 240 kg.
DIMENSIONS (width x depth x height)	From 44x97x107 cm to 68x120x155 cm
MILKING CAPACITY	4 to 30 cows at same time

1. HEALTH AND SAFETY RULES

- Do not remove the protective cover at the back of the motor.
- Do not remove the pulley belt system protective cover in front of electric motor.
- Always follow the rules in the Electrical Set-up Section. (**Section 2**)
- The electric motor and cables must never be in contact with water.

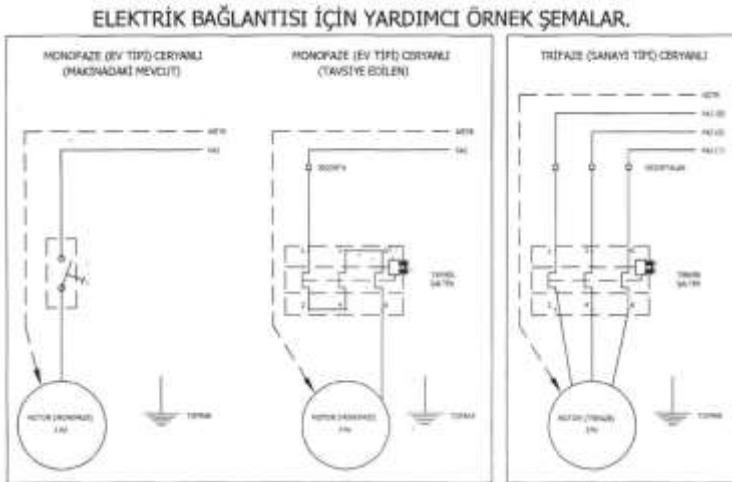
This product has been designed for use of adults. Keep out of reach of children. Do not allow children to operate this machine.

2. ELECTRICAL SET-UP

⚠ Electric cables must be without fault. The electrical connection for the pump unit **must be installed by a qualified electrician. The motor must be connected to ground.** (There is a ground wire inside the wire box.) In order to protect the motor from high or low voltage, you should install a fuse or an automatic switch. (Please see the examples below.)

Because you will be using your machine in a wet environment electrical supply leads and switches should be minimum 40 cm above floor level.

EXAMPLE SYSTEMS FOR THE CONNECTION OF MAINS ELECTRICITY



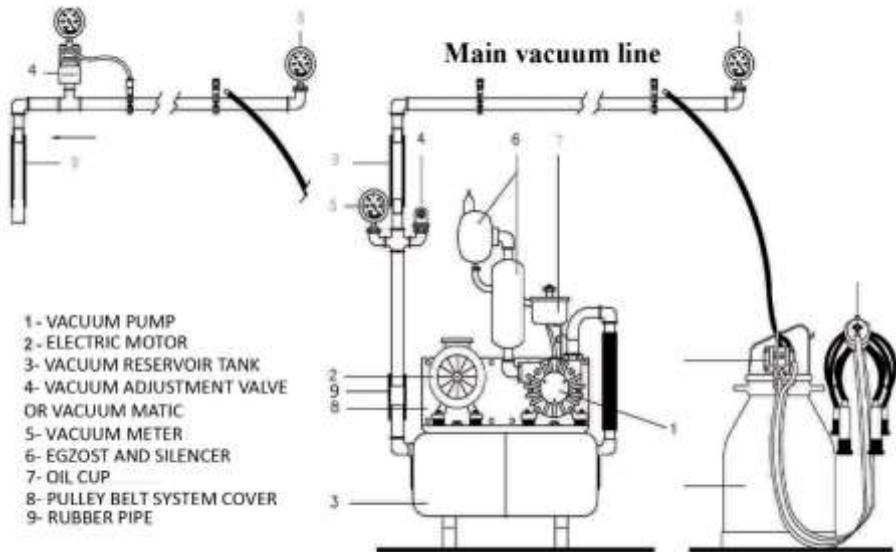
3. VACUUM LINE SETUP

Main vacuum line pipe for the parlour must be same size with tank reservoir entrance. Place the vacuum pump unit so that vacuum tank entrance comes in line with main vacuum line (See picture below). Connect these two with rubber tube (9). Tighten them with the supplied screw clamp so that there is no vacuum leakage.

4. VACUUM REGULATOR SETUP

Vacuum regulator or vacuum adjustment valve must be installed in middle of 50 cm straight portion of vacuum line.

VACUUM MATIC VERSION VACUUM ADJUSTMENT VALVE



5. PERIODIC MAINTENANCE

a- Oil Check

- Check the oil levels each 50-hour working period.
- Clean the oil depot after each 500-hour working period.
- As the oil levels drop, replace with suitable oil. (No.32 or 37 hydraulic oil or equivalent).

b- Cleaning the Vacuum-matic (Once a month) (See 153-72-1029 A - VACUUM-REGULATOR)

- Remove and clean the dust filters.
- Dismantle the wire spring.
- Remove the top lid.
- Clean the air vents, membranes and the pieces inside.
- Replace membranes if any are hardened or torn off.



c- Cleaning the Vacuum Reservoir (Once every 3 months)

- Gently pull the cork on the underneath of the vacuum reservoir and empty any water or milk from inside.
- Remove the plastic lids and clean the inside of the reservoir.

d- Cleaning the Vacuum Adjustment Valve (every 3 months) (See 153-72-1019 - VACUUM ADJUSTMENT VALVE)

- Unscrew the plastic cover and remove it.
- Clean the metal filter inside or replace it if necessary.

e- Cleaning vacuum pump

Vacuum pump should be flushed out at least once yearly. Vacuum pump must generate vacuum during flushing. First remove wicks from oil reservoir and pour ¼ lt of flushing oil or cold cleaning agent (Chlorothen NU or similar) Collect flushing oil from the return hose of the oil trap separately. After flushing allow same quantity of pump oil in the same way.

f- Cleaning Exhaust and Silencer

Silencer and oil trap should be dismantled and cleaned inside with oil and dirt solvents every two years. When reassembling ensure that all threads are screwed up oiltight. (with hemp or sealing compound.)

6. ADJUSTING THE VACUUM PRESSURE

Whilst the machine is working, if the vacuum indicator shows a level different from 42kPa, the vacuum pressure must be re-adjusted.

a- ADJUSTING THE VACUUM ADJUSTMENT VALVE

Remove the lid of the vacuum pressure valve, loosen the two counter nuts that you can see, turn the nut at the bottom, left or right, to adjust the indicator to 42 kPa. While adjusting lower nut, pull the upper nut up to avoid rotation of main shaft. When pressure is 42 kPa hold the nut in place and tighten the nut at the top (this created a counter effect) and stabilise the vacuum pressure. Replace the lid.

b- ADJUSTING VACUUM-REGULATOR

Remove the plastic protection, loosen the nut and twist the bolt, left or right, to adjust the pressure to 42kPa. Once adjusted tighten the nut, without moving the bolt (creating a counter effect) and stabilise the vacuum pressure. Replace the protection.

7. POSSIBLE PROBLEMS AND REMEDIES

1) The power switch is on, but the machine doesn't work.

If there's power in the network but the machine doesn't work, call a qualified electrician.

2) The motor is working or having trouble working, while the pump is not working,

a) There could be rust on the pump or a broken vane etc. causing a blockage. Call for maintenance.

b) A pump with a V-belt could have a loose, twisted, displaced or split belt. Dismantle the belt protection, loosen the bolts on the machine's legs, follow the instructions on the protector, stretch the belt and tighten the bolts again.

3) The machine is making an abnormal sound,

a) The oil could be finished in an oil type pump. Add oil to oil cup.

(No.32 or 37 or equivalent)

b) The pump vane could be broken or worn out. Call for maintenance.

4) The pump works but the vacuum pressure is low,

a) For bucket milking systems one of the bucket lids could be open or broken. The lid gasket could be placed incorrectly. Check the position of the lid and the gasket.

b) The cluster or the bucket lid could have been cracked. If so, replace broken parts.

c) The vanes could be stuck. Call for maintenance.

5) The machine is milking slowly,

a) The milk cluster gasket could have fallen off during cleaning or the vacuum stopper could be blocked. (Pls see p. 18) Unblock it with the tip of a needle.

b) There could be a tear or a hole in the milk hose. Replace it.

c) The liners lose their elasticity over time. Replace them every 6 months.

d) The hoses linked to the machine could have a tear or be displaced. The lid of the vacuum tank might have been placed incorrectly. Replace any ripped pieces. Re-mantle any hoses that have moved out of position.

e) If the vacuum gauge is showing a level less than 42 kPa, re-adjust vacuum level.

f) If the pulsator is working abnormally (less or more than 60 beats per minute) or if the pulsator isn't working. Request maintenance or return to our factory.

6) Water or milk is filling the sanitary trap (can cause a slower machine)

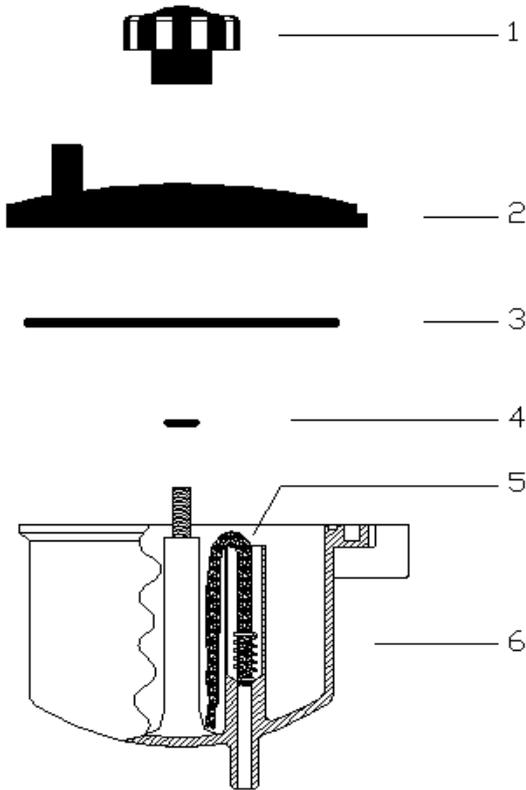
a) Milk transfer pump may not be working properly. Call maintenance.

7) The vacuum pressure is normal, but it's not extracting,

a) The pulsator could be faulty. Call for maintenance.

b) The hoses which enable the vacuum to reach the teat heads could be blocked.

8. EXPLANATION OF SPARE PARTS
153-72 1121 - OILING RESERVOIR



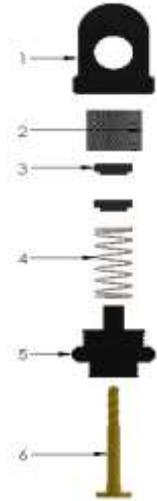
<u>List No</u>	<u>CODE No</u>	<u>NAME OF PIECE</u>
1	153-72-1081A	Assembly Spanner
2	153-72-1081	Lid
3	153-72-1039	O-RiNG (↓ 103, 8x2, 95)
4	153-83-1003	O-RiNG (↓ 6, 5x2, 8)
5	153-72-1031	Oil wick
6	153-72-1080	Oil reservoirs

Note: Oil wick part number changes according to pump type. Part number lists are explained in pump spare parts lists table



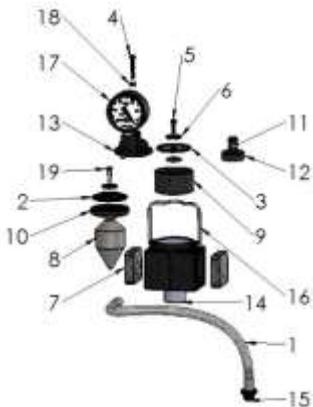
153-72-1019 - VACUUM ADJUSTMENT VALVE

<u>List No</u>	<u>CODE No</u>	<u>NAME OF PIECE</u>
1	153-72-1091	Vacuum Regulator Cover
2	153-72-1018	Vacuum Regulator Filter
3	153-72-1092	Adjustment Spanners
4	153-72-1093	Spring
5	153-72-1094	Body
6	153-72-1095	Adjustment Screw



Note: Can be used simultaneously in the milking of 1-4 cows.

153-72-1029 A - VACUUM-REGULATOR



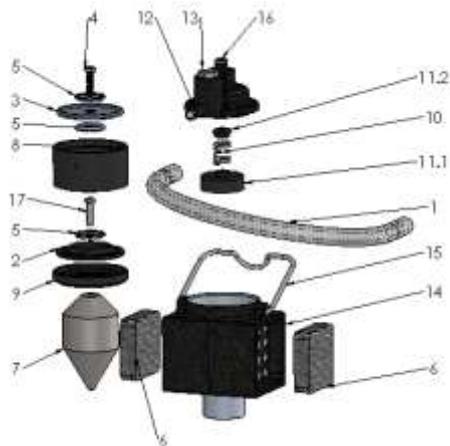
<u>NO.</u>	<u>PART NUMBER</u>	<u>PART NAME</u>	<u>QUAN</u>
1	153-71-1037	6,5X12 PVC HOSE	1
2	153-72-1089-A	DIAPHRAM WITH HOLE	1
3	153-72-1090	VACUMMMATIC FLAT MEMBRANE	1
4	153-72-1098	ADJUST SCREW	1
5	153-72-1099	VACUMMMATIC ADJUSTMENT SCREW	1
6	153-72-1100	MEMBRANE WASHER PLS	3
7	153-72-1101	FILTER	2
8	153-72-1102	VACUMMMATIC WEIGHT	1
9	153-72-1103-A	MEMBRANE HOLDER UPR	1
10	153-72-1103-B	MEMBRANE HOLDER LWR	1
11	153-72-1104	VACUMMMATIC SPRING	1
12	153-72-1105	VACUMMMATIC BEDDING	1
13	153-72-1106	VACUMMMATIC COVER	1
14	153-72-1126	VACUUM REGULATOR BODY LWR	1
15	153-72-1127	VACUUM REGULATOR NIPPLE	1
16	153-72-1129	REGULATOR COVER SPRING	1
17	153-75-1001	VACUUM GAUGE Ø63 SÜTZER	1
18		Hexagon Nut M5	1
19		SCREW 5 x 20 -N	1

Note: Can be used simultaneously in the milking of more than 4 up to 20 cows.

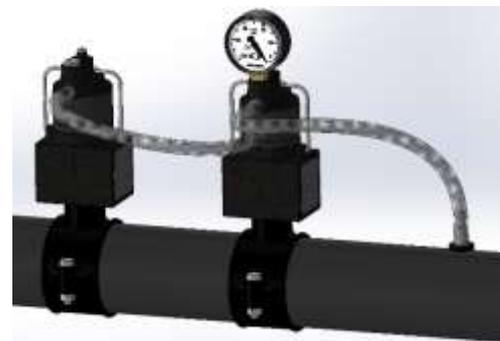
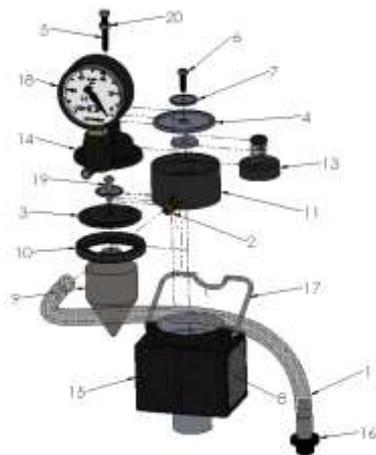
For YPM325 pump units two different vacuum regulators (153-72-1029-C and E) need to be connected as in picture below. All part details are also listed below in next page.

YPM325 VACUUM REGULATOR SETUP

153-72-1029-C



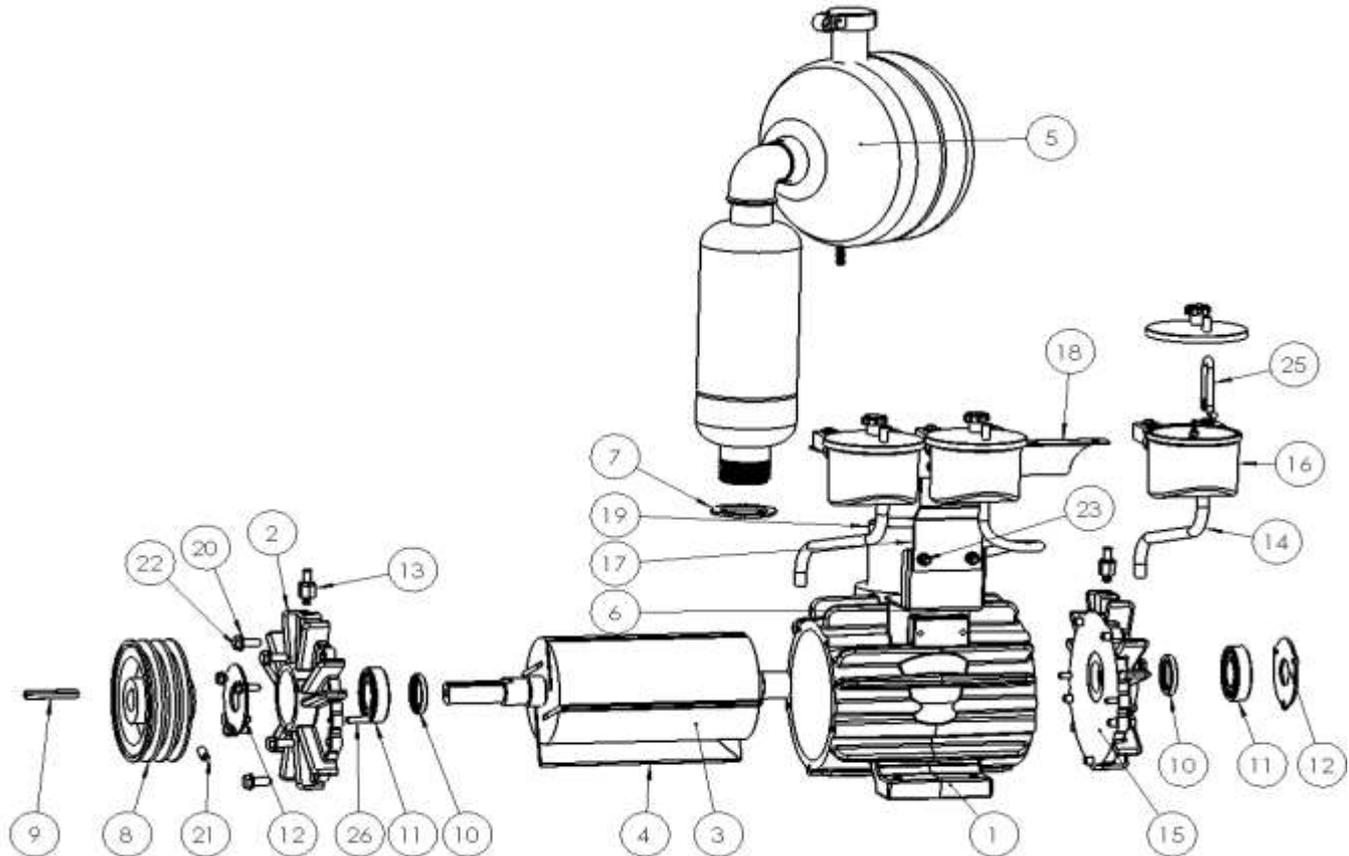
153-72-1029-E



NO.	PART NUMBER	PART NAME
1	153-71-1037	6,5X12 PVC HOSE
2	153-72-1089-A	DIAPHRAM WITH HOLE
3	153-72-1090	VACUMMATIC FLAT MEMBRANE
4	153-72-1099	VACUMMATIC ADJUSTMENT SCREW
5	153-72-1100	MEMBRANE WASHER PLS
6	153-72-1101	FILTER
7	153-72-1102	VACUMMATIC WEIGHT
8	153-72-1103-A	MEMBRANE HOLDER UPR
9	153-72-1103-B	MEMBRANE HOLDER LWR
10	153-72-1104	VACUMMATIC SPRING
12	153-72-1105	VACUMMATIC BEDDING
11	153-72-1105-01	SPRING BEDDING LWR
11	153-72-1105-02	SPRING BEDDING UPR
12	153-72-1106	VACUMMATIC COVER
13	153-72-1111	ST ST PLUG 1/4"
14	153-72-1126	VACUUM REGULATOR BODY LWR
15	153-72-1129	REGULATOR COVER SPRING
16	DIN EN ISO 7045 - M5 x 8 - Z - 8N	
17	M5x20-SOC-BUT-ZP	

NO.	PART NUMBER	PART NAME
1	153-71-1037	6,5X12 PVC HOSE
2	153-72-1041-09	OIL OUTLET NIPPLE
3	153-72-1089-A	DIAPHRAM WITH HOLE
4	153-72-1090	VACUMMATIC FLAT MEMBRANE
5	153-72-1098	ADJUST SCREW
6	153-72-1099	VACUMMATIC ADJUSTMENT SCREW
7	153-72-1100	MEMBRANE WASHER PLS
8	153-72-1101	FILTER
9	153-72-1102	VACUMMATIC WEIGHT
10	153-72-1103-B	MEMBRANE HOLDER LWR
11	153-72-1103-C	MEMBRANE HOLDER UPR WITH NIPPLE
12	153-72-1104	VACUMMATIC SPRING
13	153-72-1105	VACUMMATIC BEDDING
14	153-72-1106	VACUMMATIC COVER
15	153-72-1126	VACUUM REGULATOR BODY LWR
16	153-72-1127	VACUUM REGULATOR NIPPLE
17	153-72-1129	REGULATOR COVER SPRING
18	153-75-1001	VACUUM GAUGE Ø63 SÜTZER
19	M5x20-SOC-BUT-ZP	
20	M5	

153-72-1006 to 1011 - VACUUM PUMP (OIL LUBRICATED – YPM 70,100;150;200,250,325)



Vacuum Pump Unit Spare Parts List



Table 1

List	Part Name	YPM 70	YPM 100	YPM 150	YPM 200	YPM 155	YPM 250	YPM 325
8	Pulley	153-72-1037-L 125x24 - 1 row	153-72-1037-K 120x28 - 2 row	153-72-1037-K 120x28 - 2 row	153-72-1037-K 120x28 - 2 row	153-72-1037-R 130x28 - 2 row	153-72-1037-Z 160x28 - 3 row	153-72-1037-Z 160x28 - 3 row
21	M10 Set screw							
12	Front Lid	153-72-1026-a	153-72-1026-c	153-72-1026-c	153-72-1026-c	153-72-1026-e	153-72-1026-e	153-72-1026-f
12	Rear Lid	153-72-1026-b	153-72-1026-d	153-72-1026-c	153-72-1026-c	153-72-1026-e	153-72-1026-e	153-72-1026-f
11	Ball Bearing	153-72-1027-a 6206-2RS	153-72-1027-b 6306-2RS	153-72-1027-b 6306-2RS	153-72-1027-b 6306-2RS	153-72-1027-d 6207-2RS	153-72-1027-d 6207-2RS	153-72-1027-c 6307-2RS
10	Sealing Ring	153-72-1050-b	153-72-1050-b	153-72-1050-b	153-72-1050-b	153-72-1050-e	153-72-1050-e	153-72-1050-e
2	Side Cover Frt	153-72-1028-a	153-72-1028-b	153-72-1028-b	153-72-1028-b	153-72-1028-c1	153-72-1028-c1	153-72-1028-d
15	Side Cover Rr	153-72-1028-a	153-72-1028-b	153-72-1028-b	153-72-1028-b	153-72-1028-c2	153-72-1028-c2	153-72-1028-d
13	Oiling Valve	153-72-1040	153-72-1040	153-72-1040	153-72-1040	153-72-1040	153-72-1040	153-72-1040
9	Shaft Key							
3	Rotor	153-72-1021-a	153-72-1021-b	153-72-1022-a	153-72-1022-b	153-72-1022-c	153-72-1022-d	153-72-1022-e
4	Track (Fibre)	153-72-1051	153-72-1053	153-72-1054	153-72-1055	153-72-1059	153-72-1056	153-72-1058
	8x29 pin							
1	Cylinder	153-72-1024-a	153-72-1024-b	153-72-1025-a	153-72-1025-b	153-72-1072	153-72-1070	153-72-1071
7	Spanner	153-72-1061-a	153-72-1061-a	153-72-1061-a	153-72-1061-a	153-72-1061-a	153-72-1061-b	153-72-1061-a
5	Exhaust	153-72-1043	153-72-1043	153-72-1044-a	153-72-1044-a	153-72-1044-a	153-72-1044-b	153-72-1044-a
25	Oil Wick	153-72-1031-b	153-72-1031-b	153-72-1031-b	153-72-1031-b	153-72-1031-b	153-72-1031-c	153-72-1031-d

9. CE DECLARATION



QA-AC-2281/16

QA TECHNIC – UYGUNLUK ONAYI
QA TECHNIC – ATTESTATION OF CONFORMITY

MAKİNA EMNİYETİ YÖNETMELİĞİ (2006/42/AT)
MACHINERY DIRECTIVE (2006/42/EC)

TARIMTAŞ TARIM ARAÇLARI SAN. VE TİC. A.Ş.
TUZLA ORG. DERİ SAN. BÖLG. GÜDERİ CD.NO:8 F-7 PARSEL TUZLA
İSTANBUL /TURKEY

Ürünün Tanımı Description of the Product/Product Part	: SÜT SAĞMA MAKİNASI VE SÜT SAĞIM TESİSLERİ MILKING MACHINES AND MILK MILKING PLANT
Markası Product Commercial Brand	:  TARIMTAŞ
Ürün Tipi Product Type	: TEK GÜÇÜM TEK SAĞIM, TEK GÜÇÜM İKİ SAĞIM, İKİ GÜÇÜM İKİ SAĞIM SÜT SAĞMA MAKİNELERİ, YAKI SABİT SÜT SAĞIM TESİSLERİ VE MUHTELİP KAPASİTEDE YAKUM POMPA GRUPLARI
Uygulanabilir AT Direktifi Applicable EC Directives	: 2006/42/AT 2006/42/EC
Uygulanabilir Harmonize Standartlar Uygulanabilir Ulusal Standartlar Ve Teknik Spesifikasyonlar Applicable Harmonized Standards/ Applicable National Technical Standards	: TS EN ISO 12100:2010, TS EN 60204-1
Rapor No & Rapor Tarihi Report No & Report Date	: M-LVD-1394/16, 02.05.2018

İşbu belge inceleme yapılan ürün tasarımı için geçerlidir. Ürünün değiştirilmesi halinde bu belge geçerliliğini kaybedecektir.
Ürünün ilgili direktif / direktiflere uygunluğu ile ilgili nihai sorumluluk üretici firmaya aittir.
The Present certificate is valid just for the analysed product design. The certificate shall lose its validity in case of any changes
in the product. Ultimate responsibility related with conformity of product with directive / directives, belongs to manufacturer.

İlgili yönetmelikler ve yasal mevzuat gereği ürüne
Ülmenin sorumluluğu regarding the affair of
belongs manufacturer.



İşareti ilgili mevzuat ile ilgili nihai sorumluluk üreticiye aittir.
mark according to relevant regulations and legal legislation.

Sertifika Yayın Tarihi : 24.05.2021
Certificate Issue Date
Geçerlilik Tarihi : 25.04.2023
Validity Date

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Yönetim Kurulu Başkanı
Chairman Of Executive Board