

MIX 60 P

1193981 (115V-60Hz)

MORTAR MIXER



At **IMER U.S.A** we continually search for ways to better serve our customers. Should you have an idea or thought to share with us regarding this product we would appreciate hearing from you. Our motto is **Tools and Services for the 21st Century**. We look forward to delivering the goods.

Thank you again for your purchase,

Mace T. Coleman Jr.
President, Imer U.S.A. Inc.
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Tel (650) 872-2200
Fax (650) 873-6482

02/2002
P.N. 3210431

Dear Customer, Congratulations on your choice of purchase: IMER mixers are universal machines for MIX series: the MIX series mixers are ideal for mixing dry or wet fine particle material (gypsum, cement, ceramic tile adhesives, plaster, epoxy resin or proprietary mixed products).

WORKING IN SAFETY

To work in complete safety, read the following instructions carefully.

- This OPERATION AND MAINTENANCE manual must be kept on site by the person in charge, e.g. the SITE FOREMAN, and must always be available for consultation.


- The manual is to be considered integral part of the machine and must be kept for future reference (EN 292/2) until the machine is disposed of. If the manual is damaged or lost, a replacement may be requested from the saw manufacturer.

- The manual contains important information regarding site preparation, machine use, maintenance procedures, and requests for spare parts. Nevertheless, the installer and the operator must both have adequate experience and knowledge of the machine prior to use.

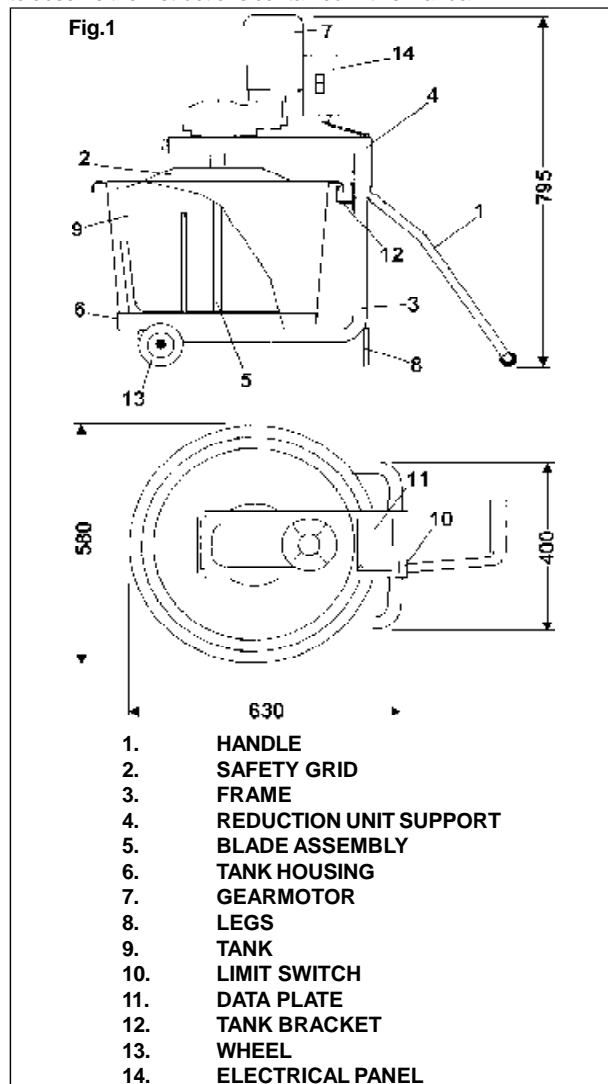
- To guarantee complete safety of the operator, safe operation and long life of equipment, follow the instructions in this manual carefully, and observe all safety standards currently in force for the prevention of accidents at work (use of safety footwear and gloves in accordance with S.I. N°3073 of 30/11/92).

Pay special attention to warnings bearing the following symbol: 

 **MAKE SURE THAT SIGNS ARE LEGIBLE.**

 **It is strictly forbidden to carry out any form of modification to the steel structure or working parts of the machine.**

- IMER INTERNATIONAL declines all responsibility for non-compliance with laws and standards governing the use of this equipment, in particular; improper use, defective power supply, lack of maintenance, unauthorised modifications, and partial or total failure to observe the instructions contained in this manual.



1. TECHNICAL SPECIFICATIONS

| | | |
|-----------------------------|-------|-------------|
| Drum capacity | l | 56 |
| Drum diameter | mm | 580 |
| Paddle rpm | n° | 55 |
| Machine weight | Kg | 30 |
| Machine weight with packing | kg | 32 |
| Packing dimensions | mm | 620x585x455 |
| Wheel dimensions | mm | Ø100x20 |
| Motor rating | Kw | 0.55 |
| Paddle rotation direction | | clockwise |
| Absorbed current | A | 9.2 |
| Voltage | Volts | 115 |
| Frequency | Hz | 60 |

2. DESIGN STANDARDS

The MIX 60 mixer has been designed and constructed in accordance with the following standards: I.E.C.34.4; EN 60204-1; EN 392 (91/368 CEE).

3. NOISE EMISSION LEVEL

Operator exposure to sound emission levels (continuous sound pressure levels equal to "A" weighting): the MIX 60 mixer noise level during operation is measured at 65 dB(A).

4. OPERATION SAFETY

- The Imer MIX 60 cement mixer may only be used when fitted with all required safety devices which must be in perfect working condition.

- Keep well clear of the mixing tank during operation.

- Never connect MIX 60 to defective power lines.

- Make electrical connections on the construction site where they will not be subject to damage.

- Lay power cables where they are not subject to risk of damage or penetration of water into connectors. Only use connectors electrically protected against water sprays.

- Never connect the mixer to makeshift mains connections. If necessary, consult qualified personnel.

- Repairs to electrical installations must only be carried out by qualified technicians. Do not operate the mixer during maintenance or repairs.

- Observe all accident prevention and safety standards in the work area.

5. ELECTRICAL SAFETY

The IMER MIX 60 is designed in compliance with EN 60204-1 standards and features water spray protection (IP54) and overload protection.

Connect the MIXER to a suitable earthing plant on the site by means of the relative earthing screw and a wire braid (or cable) with a minimum size of 16 mm² (see fig.2).

The mixer is also fitted with a safety system comprising a limit switch which shuts off machine operation whenever the reduction unit support is lifted.

To reset, press the on/off pushbutton located in the electrical cabinet.

6. ASSEMBLY


- Position the frame and handle as shown in fig.3.

- Insert the link pin and the cotter pin and tighten.


- Insert the tank in the circular housing, ensuring that the four handles fit onto the steel brackets. to prevent tank rotation during operation.

- Fit the safety grid, blade cover and screw the blade fully down (fig.4).

7. TRANSPORT

 **Warning: Always unplug the mixer from the power supply before handling.**

- MIX 60 is easily transported; use the handle indicated in fig.5 for manual transport of the mixer.

 **Never use the power cable to pull the machine.**

 **Never pull the power cable to unplug the machine.**

8. INSTALLATION


- Remove the machine from the packaging.

- Install the mixer on level and solid ground

 **Do not tilt the mixer during operation.**


- When transporting the machine ensure that there are no obstacles which may impair stability.






9. ELECTRICAL CONNECTION

 **Ensure that mains voltage and cable sizes correspond to specifications.**

- MIX 60 is fitted with an ac motor which must be connected to a 115 V power supply with a cable fitted with suitable wear-resistant, anti-crushing and weatherproof sheathing.

Cable length must not exceed 50 m.

 **MIX 60 must only be used when fitted with all required safety devices, which must be in perfect working condition.**


-  - Lay power cables where they are not subject to risk of damage or penetration of water into the connectors.
-  - Only use connectors electrically protected against water sprays. Do not stand the machine on the power cable.
-  - Never use the mixer with a makeshift power connection.
-  - The electrical connection must be carried out by a qualified technician.
- Ensure that the cable is securely clamped inside the plug and socket.
-  - Observe all accident prevention and safety standards in the work area.
- During mixer operation, do not insert tools or other objects in the tank to avoid damage to the mixer or operator safety hazard.




10. START-UP

Press "ON" to start the mixer.

If the mixer blades do not rotate the overload cutout switch trips to shut down the machine. Press "ON" to resume operation.

11. OPERATION

-  - Ensure that the power cable is fitted with a residual current circuit breaker upline of the machine.
- Make sure that all other persons keep clear of the mixer during operation.
- Do not use the mixer in areas subject to the risk of fire.
- Switch the mixer off before leaving it unattended.
- Make sure that the mixer is completely immobile before handling or installation.
- Make sure that the mains voltage corresponds with the indications on the mixer data plate.


-  - Make sure that the mixer blades rotate clockwise.
-  - Make sure that no clothing comes into contact with mixing blades.
-  - Warning: Never start the mixer without the safety grid fitted; the cover is a safety device and must be fitted to avoid direct contact with the mixer blades.

11.1 APPLICATIONS

11.1.1 ADHESIVES FOR CERAMIC TILES, FLOORING AND WALL CLADDING


Pour in the quantity of water as required for the relative product, considering that the maximum mixer capacity 50 kg of adhesive.

Start the machine and during operation, pour the powder directly over the plastic cover to obtain a smooth mixture.

-  - Warning: when mixing large quantities, pour the product into the tank gradually.


11.1.2 PAINT

Pour in the required amount of paint and water.



-  - The use of acid, solvents, and other aggressive chemical products is strictly prohibited.

11.1.3 CEMENT

Mix 60 can also mix mortar, cement, or lime provided that a fine particle size is used.



-  - Warning: Avoid excessive stiffening of the mixture due to the addition of too much cement, lime or other water absorbing products.

12. EMERGENCY STOP




-  - In an emergency, press the emergency pushbutton and unplug the mixer.
-  - The electric motor is protected from thermal overload; if the motor overheats the mixer is shut down automatically. Allow the motor to cool before resuming operation.

13. CLEANING

After each work shift and before prolonged periods of disuse, clean the tank interior and exterior thoroughly.

-  - Always unplug the mixer from the mains before cleaning (also when using brushes, cloths or scrapers etc.).
-  - Never operate the mixer during cleaning operations.
- When using water jets for cleaning, never direct the water at the mixer drive unit.

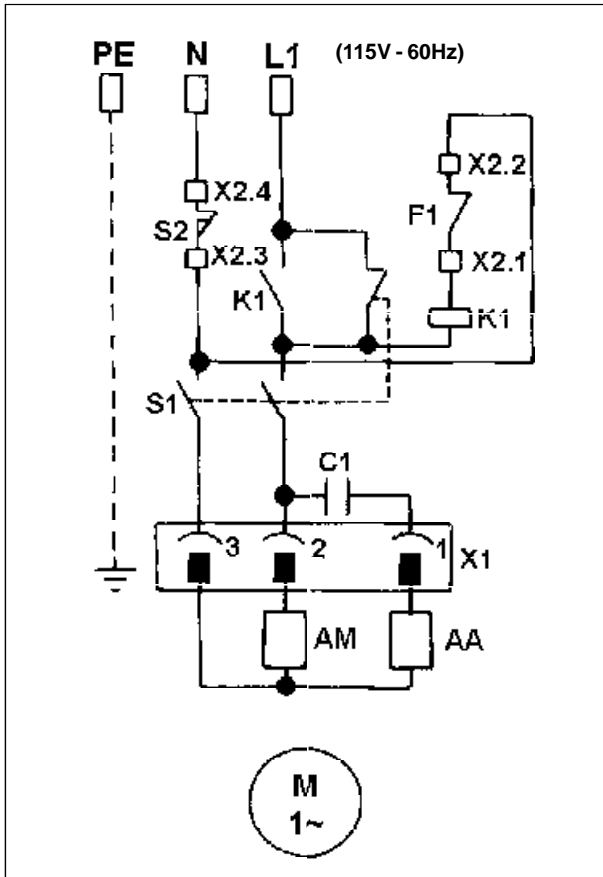
14. MAINTENANCE

-  - Warning: Always switch off the mixer and unplug from the power supply before carrying out maintenance.
- Repairs to the electrical installation must be carried out exclusively by qualified personnel. Replacement parts must be original IMER spare parts and must not be modified in any way. The IMER MIX 60 is designed for minimum maintenance requirements. However, we recommend changing the reduction unit oil after 3000 hours continuous duty with SAE 40 oil. Check that the socket/plug contacts are clean. If oxidised, clean immediately.
-  - Used oil is considered a special waste product and must be disposed of in accordance with the law.
-  - Always ensure that signs and warning notices on the machine are clearly legible.

14. TROUBLESHOOTING

| PROBLEM | CAUSE | REMEDY |
|--|--|--|
| The motor does not start when switched on | No power on power cable | Check power cables |
| | Plug not inserted correctly in socket | Ensure correct connection |
| | Faulty power cable to electrical panel | Change power cable |
| | Loose wire in electrical panel | Reconnect wire |
| | Loose wire in motor terminal board | Reconnect wire |
| | Faulty main switch | Replace switch |
| The motor does not stop when the safety grid is lifted | Residual current circuit breaker tripped | Reset switch. If it does not reset, refer to a qualified electrician to check the electrical system to ensure complete safety. |
| | Faulty limit switch | Replace limit switch |
| Motor starts with difficulty | Mixture is too stiff | Reduce mixture quantity or dilute and try again. |

WIRING DIAGRAMS



- S1 SWITCH
- S2 FINECORSIA COPERCHIO
- F1 SONDA TERMICA MOTORE
- C1 CONDENSATORE
- X1 CONNETTORE MOTORE
- PE CONDUTTORE LINEA DI PROTEZIONE
- N CONDUTTORE LINEA NEUTRO
- L1 CONDUTTORE LINEA FASE
- AM AVVOLGIMENTO MOTORE MARCIA
- AA AVVOLGIMENTO MOTORE AVVIAMENTO
- K1 RELÉ

Fig.2

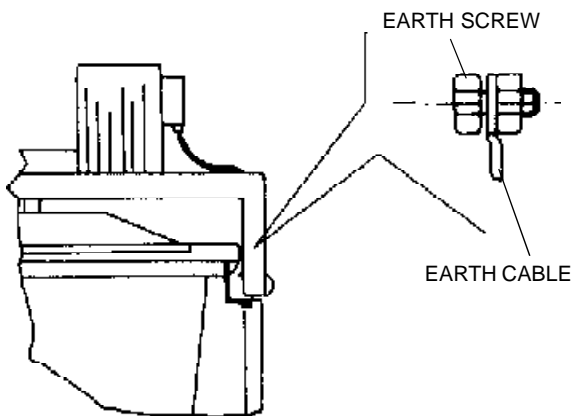


Fig.3

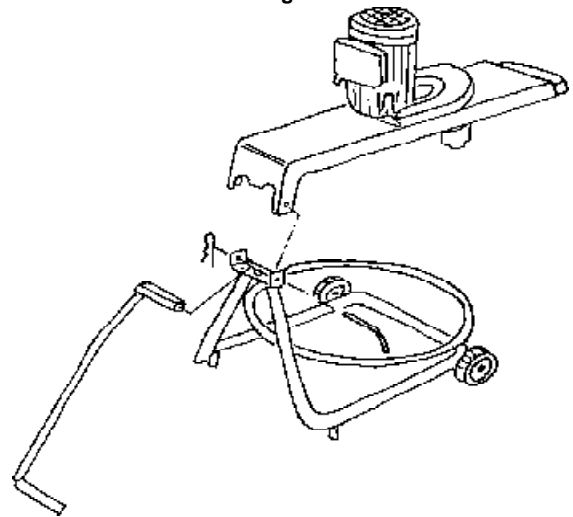
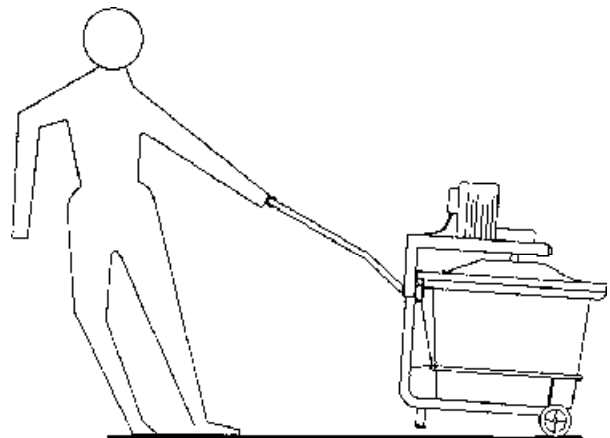
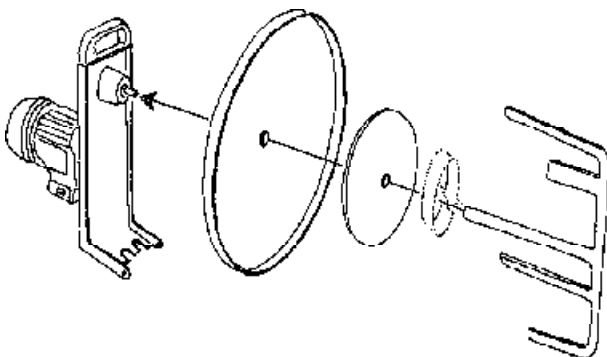


Fig.4





SPARE PARTS

SYMBOL

Interchangeability (example):

| Ref. | P.n. | Description | Notes |
|------|---------|----------------|-------|
| 1 | 3204530 | Reduction gear | 5240 |
| 1.1 | 3204520 | Reduction gear | 5241 |

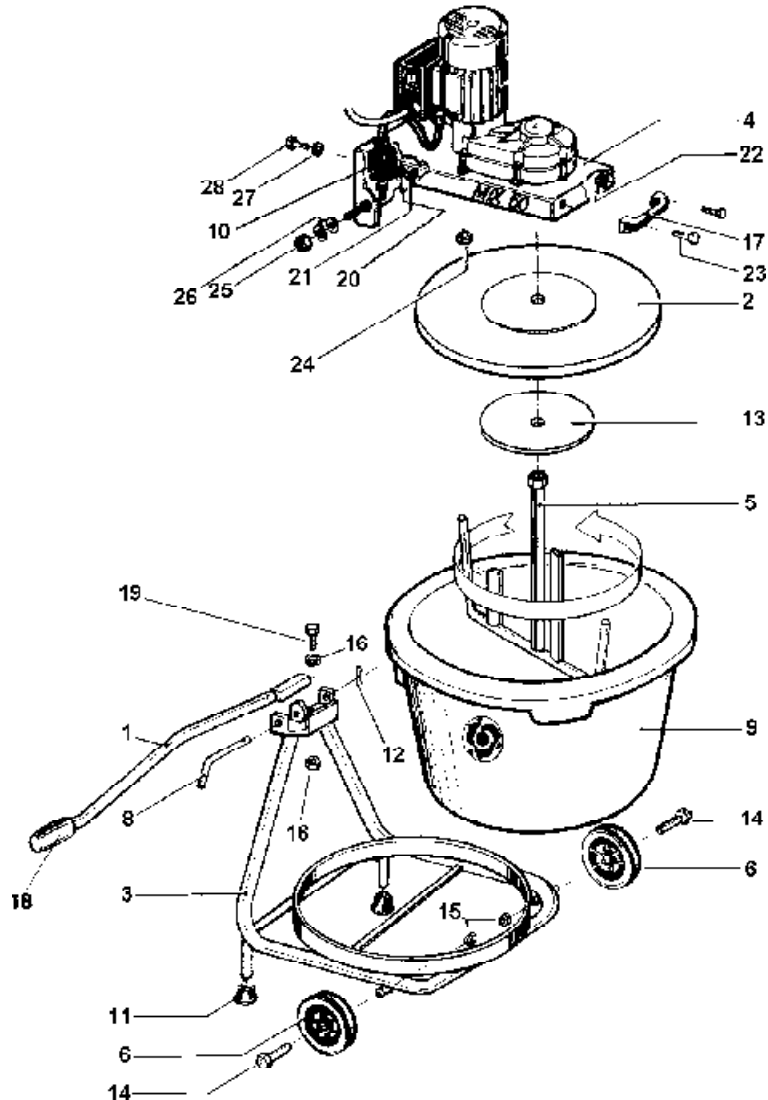
Ref.1 P.n. 3204530 was installed on machincs up to N° 5240 and Pos.1.1 P.n. 3204520 installed on machine N° 5241 onwards.

Pos. 1.1 is interchangeable () with Ref. 1.

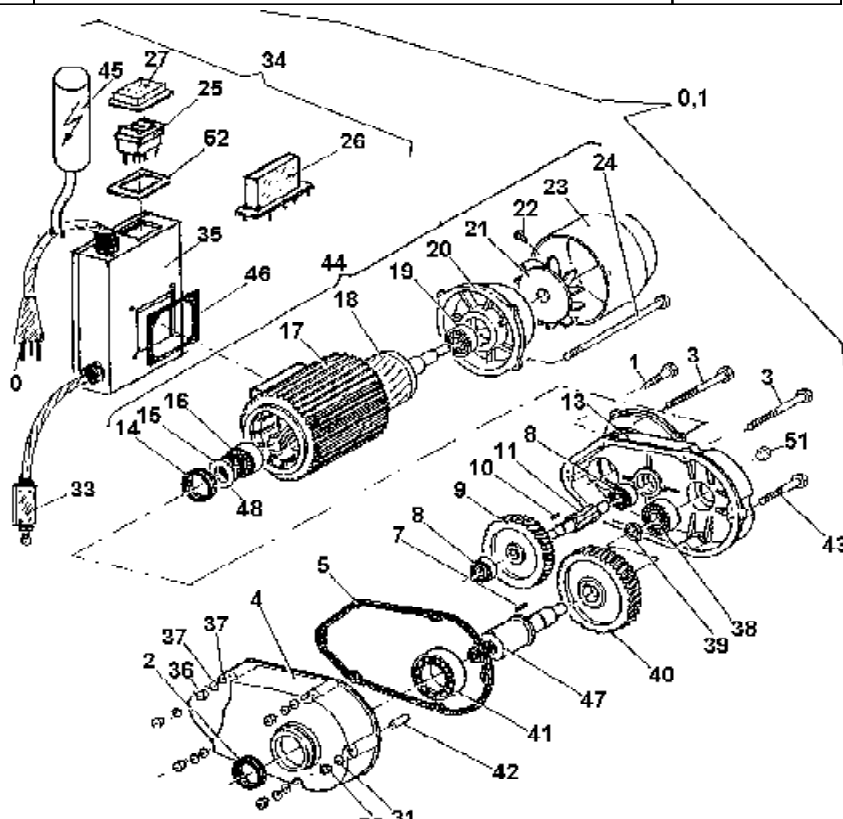
Ref. 1 and Ref. 1.1 are not interchangeable if the () symbol appears in the table.



| AG031 | | DRAWING. 1 MORTAR MIXER MIX60 | |
|-------|---------|-------------------------------|--------------|
| Ref. | P.n. | Description | Notes |
| 1 | 3205592 | HANDLE | |
| 2 | 3205607 | COVER | |
| 3 | 3206584 | FRAME | |
| 4 | 3206585 | SUPPORT | |
| 5 | 3205587 | COMPLETE PADDLE | |
| 6 | 3205257 | WHEEL | |
| 8 | 3205623 | PIN | |
| 9 | 3210432 | TANK | |
| 10 | 3200005 | WHEEL LIMIT SWITCH | |
| 11 | 3205926 | PLUG | |
| 12 | 2226703 | SPLIT PIN | |
| 13 | 3205611 | STEEL DISK | |
| 14 | 2222154 | BOLT | 5737 M10X120 |
| 15 | 2223920 | SELF LOCKING NUT | 7474 M10 |
| 16 | 2223705 | NUT | 5589 M12 |
| 17 | 3204888 | HANDLE | |
| 18 | 3206079 | HANDLE | |
| 19 | 2222083 | BOLT | 5739 M12X70Z |
| 20 | 2224950 | WASHER | DEV.C72 Ø4 |
| 21 | 2223500 | NUT | 5588 M4 |
| 22 | 2223280 | NUT | 5588 M6 |
| 23 | 2222540 | BOLT | 5931 M6X20 |
| 24 | 2223924 | NUT | AUTOBL. M 6 |
| 25 | 2223570 | NUT | 5588 M8 |
| 26 | 2224140 | WASHER | Ø 8X18 |
| 27 | 2224535 | WASHER | 6592 Ø4X16 |
| 28 | 3204186 | SCREW | 6107 M4X40 |



| 1193981 | | DRAWING 2 GEARBOX 115V/60Hz | |
|---------|---------|-----------------------------------|-----------------|
| Ref. | P.n. | Description | Notes |
| 0,1 | 3210434 | MOTOR AND REDUCTION GEAR ASSEMBLY | 115V - 50Hz |
| 1 | 2222010 | BOLT | 5739 M6X25 |
| 2 | 3213001 | OIL SEAL | 56X40X8 |
| 3 | 3203954 | BOLT | 5737 M6X55 |
| 4 | 3213004 | FLANGE CASING | |
| 5 | 2216332 | FLANGE GASKET | |
| 7 | 2229500 | KEY | |
| 8 | 2204420 | BEARING | 6201 |
| 9 | 2202493 | GEAR WHEEL | Z.79 |
| 10 | 2229249 | KEY | 5X5X12 |
| 11 | 3203797 | PINION | Z.19 |
| 13 | 3213003 | CASING | |
| 14 | 2207300 | OIL SEAL RING | 42X20X7 |
| 15 | * | SNAP RING | |
| 16 | * | BEARING | 6004 2Z |
| 17 | * | STATOR | |
| 18 | * | ROTOR | |
| 19 | * | BEARING | 6202-2Z |
| 20 | * | MOTOR+MOTOR CASING | |
| 21 | 2291471 | FAN | |
| 22 | * | SCREW | 6954 3.5X6.4 |
| 23 | 3209218 | FAN COVER | |
| 24 | * | SCREW | SPEC.M5X135 |
| 25 | 3203806 | SWITCH | |
| 26 | 3203809 | RELAY | |
| 27 | 3203807 | PROTECTION COVER | |
| 30 | 2277802 | PLUG | |
| 33 | 3200005 | WHEEL LIMIT SWITCH | |
| 34 | 3210447 | ELECTRIC PANEL | |
| 35 | 3203804 | ELECTRICAL BOX | |
| 36 | 2223260 | NUT | 5587 M6 |
| 37 | 2224530 | WASHER | 6592Ø6X12.5 |
| 38 | 2204550 | BEARING | 6205 |
| 39 | 2227240 | STOP RING | 7435 E/30 |
| 40 | 3203796 | GEAR WHEEL | Z.58 |
| 41 | 2204504 | BEARING | 6008 |
| 42 | 2228818 | PIN | Ø6X10 |
| 43 | 2222013 | SCREW | 5737 M6X40 |
| 44 | 3210205 | MOTOR | 115V-60HZ |
| 45 | 3209336 | CONDENSER | MF.50 V450 |
| 46 | 3203540 | GASKET | |
| 47 | 3203795 | MAIN SHAFT | |
| 48 | 3203067 | STOP RING | C.72 Ø42X30X0,3 |
| 51 | 2235461 | OIL PLUG | |
| 52 | 3209179 | GASKET | |



* -(Not deliverable separately)



EQUIPMENT WARRANTY

IMER U.S.A. INC.

207 Lawrence avenue
So. San Francisco, CA 94080
Tel.(650) 872-2200
Fax(650) 873-6482

We warrant to the original purchaser that the IMER equipment described herein (the "equipment") shall be free from defects in material and workmanship under normal use and service for which it was intended for period of one (1) year from the date of purchase by the original purchaser.

Our obligation under this warranty is expressly limited to replacing or repairing, free of charge, F. O.B. our designated service facility, such part of the equipment as our inspection shall disclose to be defective. Parts such as engines, motors, pumps, valves, electric motors, etc. furnished by us, but not manufactured by us, will carry only the warranty of the manufacturer. Transportation charges or duties shall be borne by purchaser. This shall be the limit of our liability with respect to the quality of the equipment.

This warranty shall not apply to any equipment, or parts thereof, which has been damaged by reason of accident, negligence, unreasonable use, faulty repairs, or which has not been maintained and operated in accordance with our printed instructions for the equipment. Further, this warranty is void if the equipment, or any of its components, is altered or modified in any way.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

We make no other warranty, representation or guarantee, nor is anyone authorized to make one on our behalf. We shall not be liable for consequential damage of any kind, including loss or damage resulting, directly or indirectly, from the use or loss of use of the machine. Without limiting the generality of the foregoing, this exclusion from liability embraces the purchaser's expenses for downtime, damages for which the purchaser may be liable to other person, damages to property, and injury or death of any persons.

This warranty shall not be deemed to cover maintenance parts, including but not limited to blades, belts, hoses, hydraulic oil, or filters, for which we shall have no responsibility or liability whatsoever.

When you mail the Guarantee-Registration Card below, your



IMER U.S.A. INC.

Guarantee is void unless Guarantee-Registration Card is returned to us within 10 days of delivery. (The terms of our Guarantee are given on the back of this card.)

IMER U.S.A. INC.

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Fax (650) 873-6482

"TOOLS AND SERVICES FOR THE 21st CENTURY"

FILL OUT CARD BELOW - TEAR OFF AND MAIL

Guarantee-Registration Card

(Return this card within 10 days after delivery of your new machine)

My Name _____
My Address _____
City, State _____
Zip, Code _____
Type of Machine _____
 Model _____
 Serial N. _____
Purchased from _____
City, State _____
Zip Code _____
Date Delivered _____
Condition of crate package at time of delivery _____

Information asked below is required for guarantee but will help us provide you better service.

Do you have other IMER USA Inc products?

Yes No

What type of material will be cut this Machine?

Do you wish FACTORY RECOMMENDATIONS for this type of material? _____

Yes No

Thank you for the opportunity to be of service.

IMER U.S.A. INC.

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Tel. (650) 872-2200
Fax (650) 873-6482

As soon as your Guarantee-Registration Card is received, the Serial Number of your IMER USA Inc. Machine will be registered in our log and our guarantee will be in effect.

Your IMER USA Inc. Machine is guaranteed against mechanical defects for one year from date of purchase. Special parts such as engines, motors, power transmissions, etc., not of IMER USA Inc. manufacture are guaranteed as stated in the operating instructions accompanying the machine.

"This guarantee does not apply if the above equipment 1) has been repaired without factory direction or 2) if it has been damaged by improper assembling or 3) from other cause for which the user is responsible, or 4) used for an improper purpose. Thoroughly inspect the above equipment periodically and give prompt notice of any defects if you desire this guarantee to remain effective".

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