

# 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.  
207 Lawrence Avenue  
So. San Francisco, CA 94080  
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.

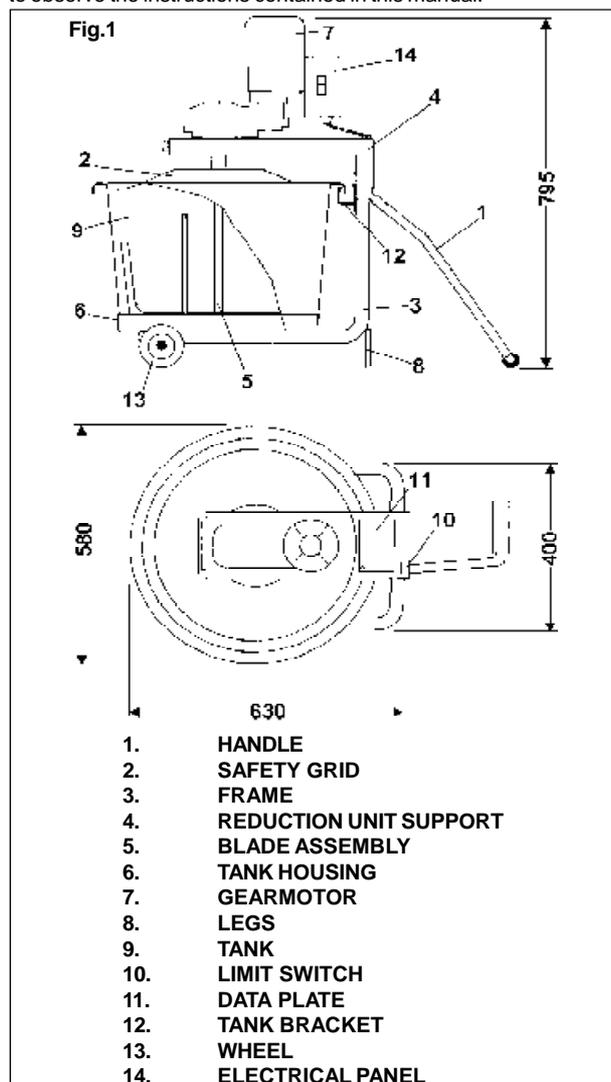
- To guarantee complete safety of the operator, safe operation and long life of equipment, follow the instructions in this manual carefully, and observe all safety standards currently in force for the prevention of accidents at work (use of safety footwear and gloves in accordance with S.I. N°3073 of 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 mm<sup>2</sup> (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.

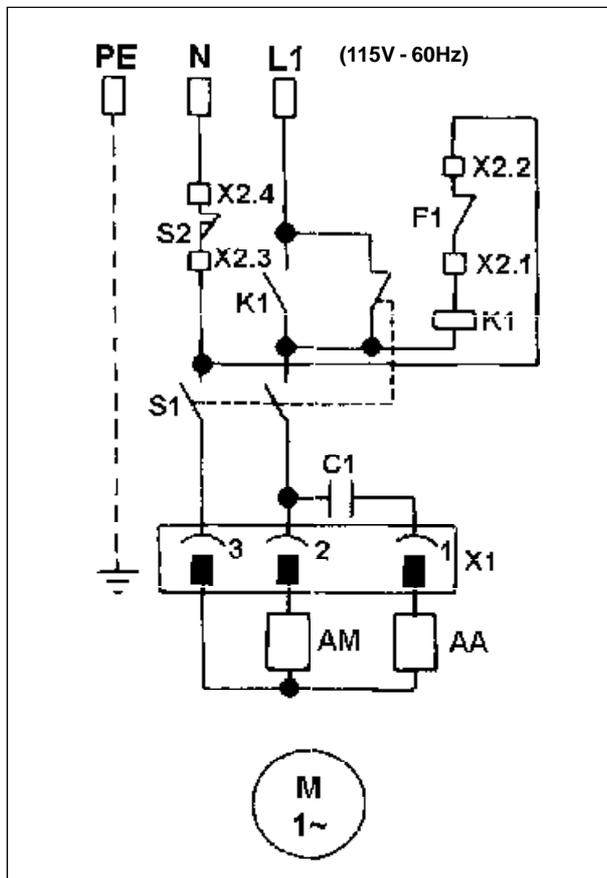
#### **14. MAINTENANCE**

-  - 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 FINECORSA 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

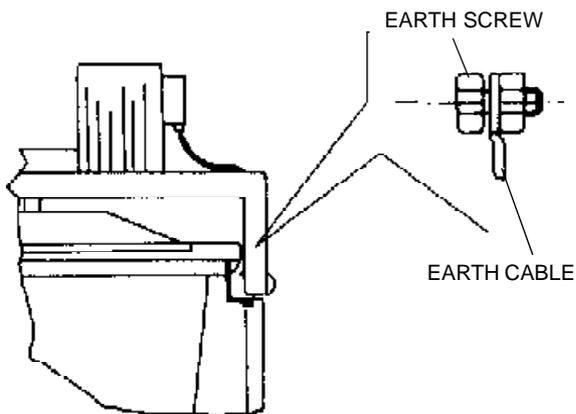


Fig.3

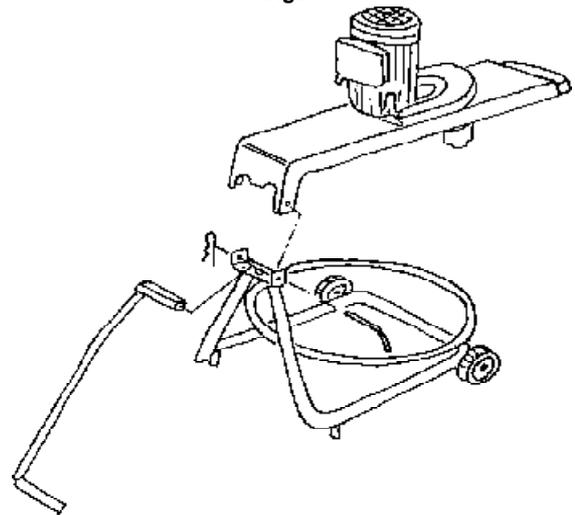
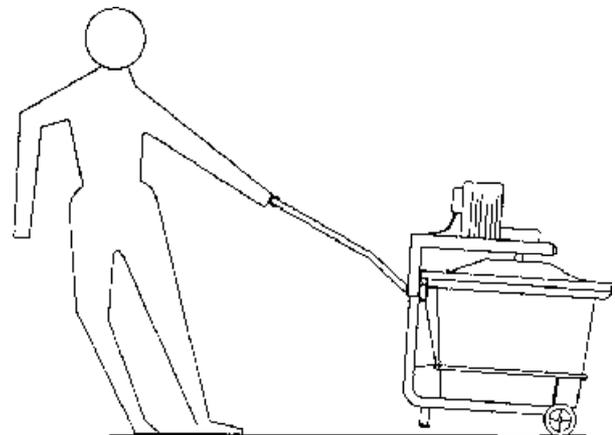
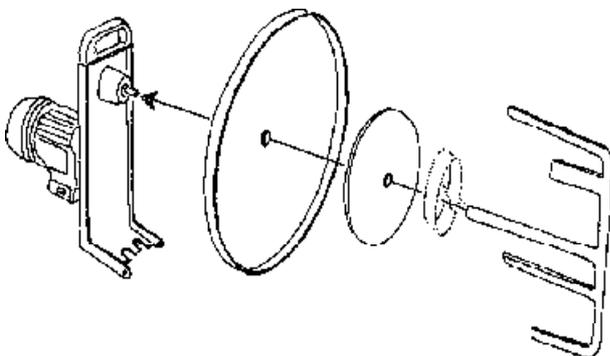


Fig.4



## SPARE PARTS

### SYMBOL

**Interchangeability (example):**

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

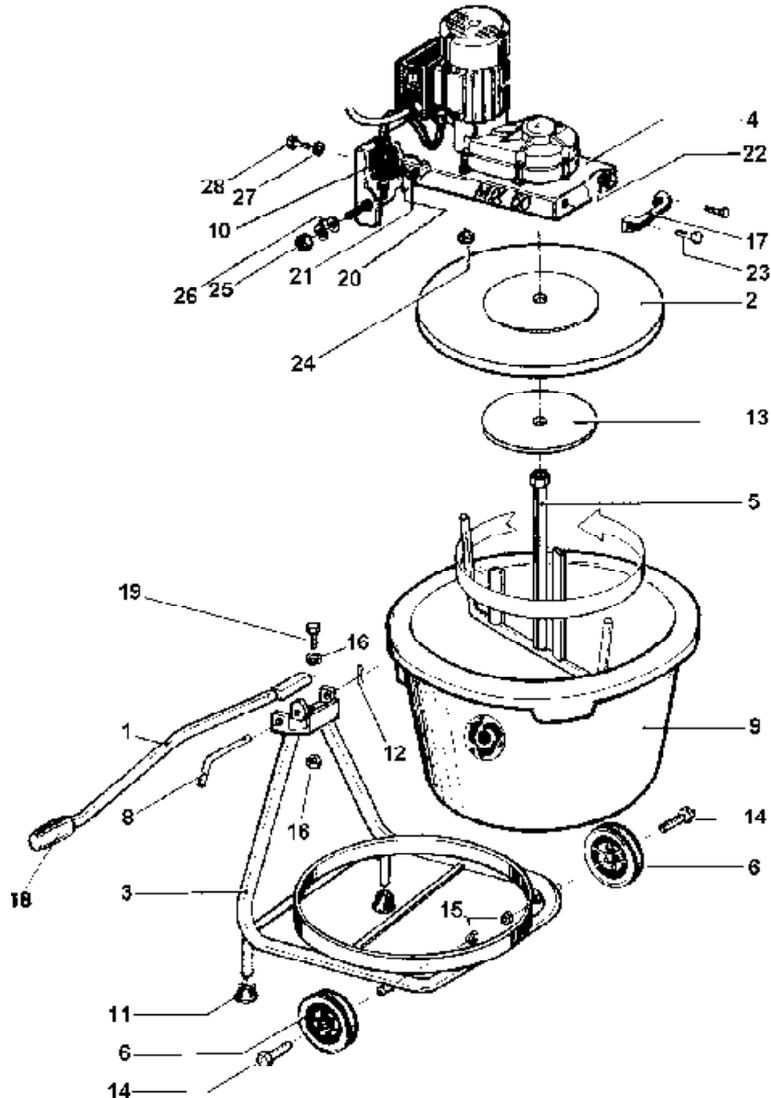
**Ref.1 P.n. 3204530 was installed on machincs up to N° 5240 and Pos.1.1 P.n. 3204520 installed on machine N° 5241 onwards.**

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

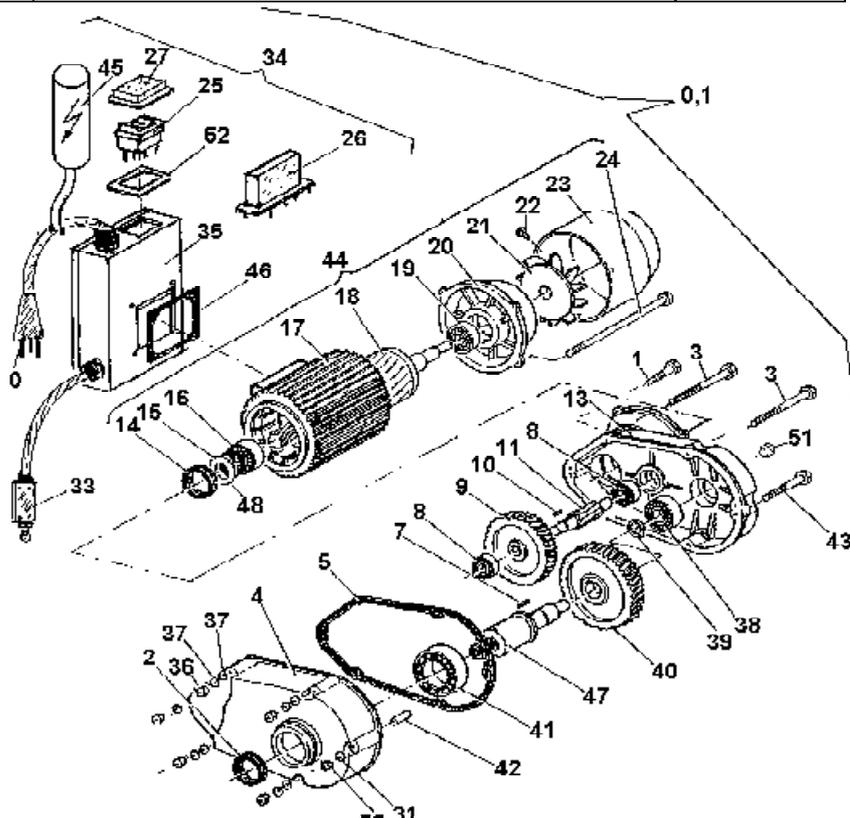
**Ref. 1 and Ref. 1.1 are not interchangeable if the (  ) symbol appears in the table.**



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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"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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So. San Francisco, CA 94080  
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.

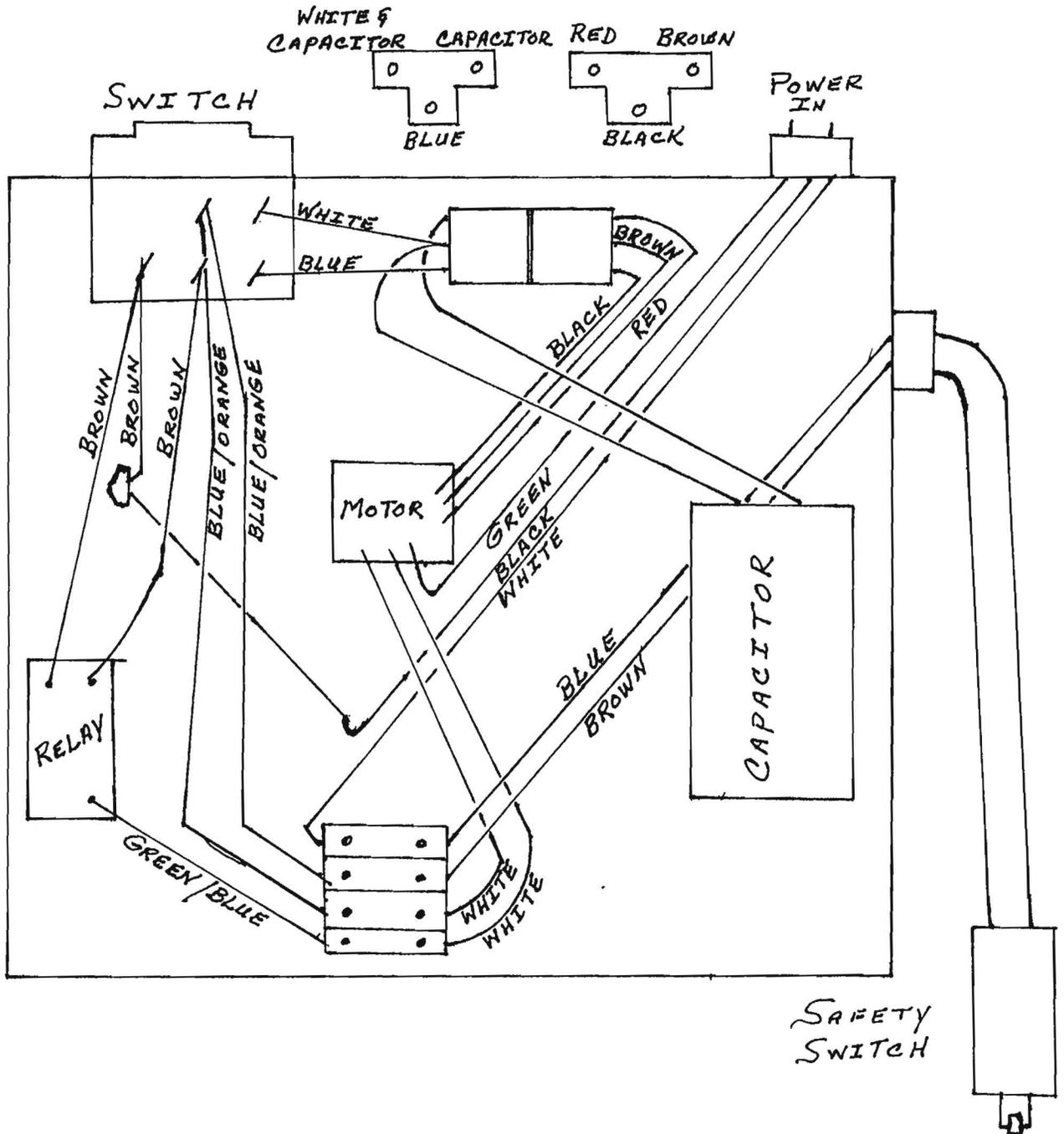
"This guarantee does not apply if the above equipment 1) has been repaired without factory direction or 2) if it has been damaged by improper assembling or 3) from other cause for which the user is responsible, or 4) used for an improper purpose. Thoroughly inspect the above equipment periodically and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

**IMER U.S.A. INC.**

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# MIX 60



12/3/09  
JW



This is a contact addendum to our manuals

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