

MM220

Instruction Manual



CONTENTS

| | Page |
|------------------------------------|------|
| - The Equipment | 2 |
| - Assembly & Installation | 4 |
| - Commissioning & Operation | 9 |
| - Routine & Electrical Maintenance | 10 |
| - Parts replacement | 11 |
| - Parts list | 15 |
| - Summary of CAUTIONS | 22 |
| - Trouble-Shooting Chart | 23 |
| - Warranty (Inside back cover) | |

MIX UNIT - MM220

| | |
|------------------------|----------------------|
| - BASE UNIT | - Ref. : Y64.MM04.03 |
| - MIX-SHELF 11 CANS | - Ref. : Y64.A114.01 |
| - MIX SHELF 16 CANS | - Ref. : Y64.A164.01 |

THE EQUIPMENT

MIX UNIT - MM 220

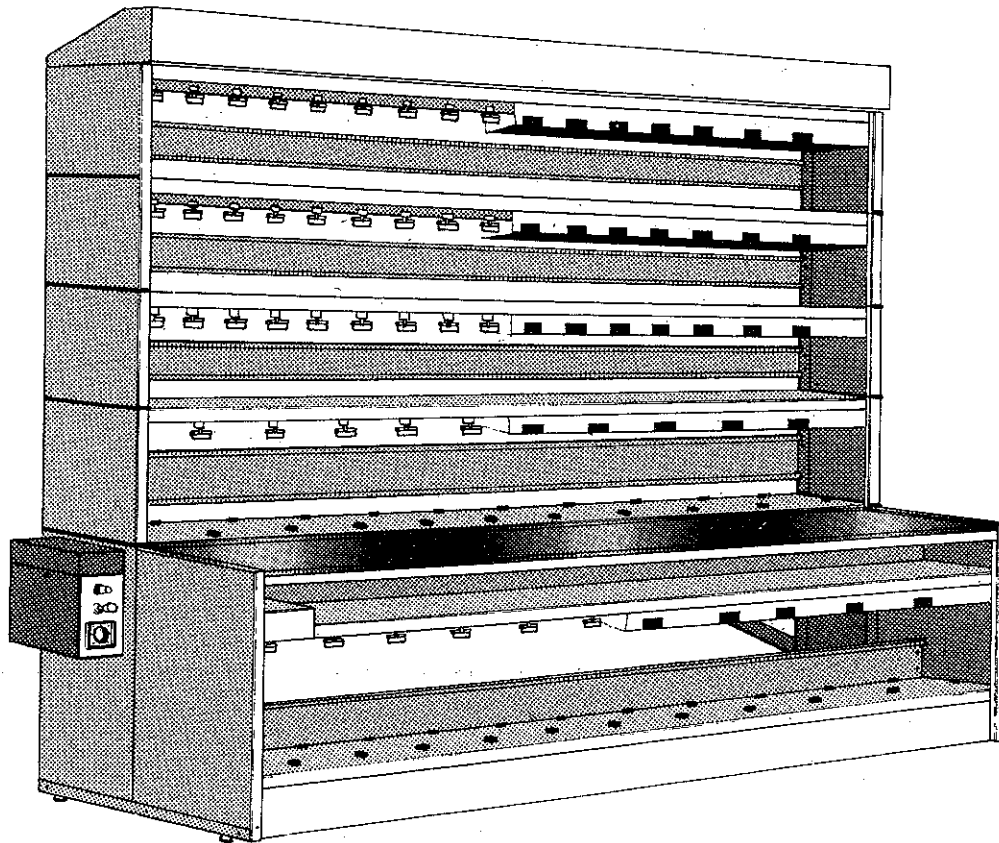


Diagram represents only one of the several possible combinations of modular elements you may construct.

THE EQUIPMENT

Your MM 220 mix unit is shipped in two or more pre-assembled parts, according to the number of mix-shelves ordered :

1. The drive unit, together with the header plate and adjustable feet. The fully Approved electrical motor is ready mounted.
2. Additional Mix-shelves, each fully assembled and separately shipped.
Two types :
 - 11 x 1 gallon mix-shelf
 - 16 x 1 quart mix-shelf

You may mount as many mix-shelves as you require, in any configuration of 11 can or 16 can shelves.

CAUTION : The top shelf should not be so high as to make access difficult. Do not handle heavy cans above head level.

3. Control box, packed separately with the base unit, is connected to the motor, and cable is fully adjusted.

IMPORTANT : When mounting the control box on to the left hand side of the base unit, be careful not to bend or crimp the cable.

CAUTION : Electrical connections and installation should be carried out in accordance with all Federal, State, and local regulations, and only by a fully qualified electrician.

Optional

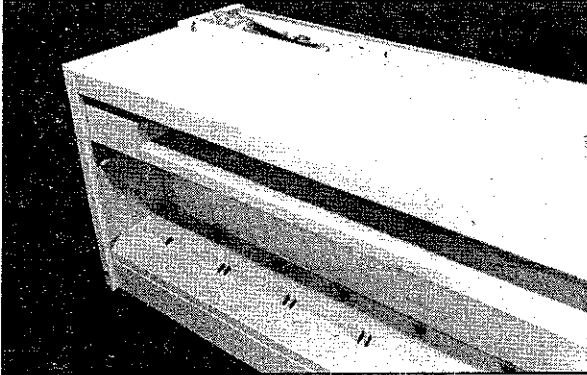
- Detachable Quart platforms, enabling quart cans to be mounted at gallon stations, can be ordered individually, and may be shipped separately or with the base unit or with the mix-shelf.
- Agitator lids, in gallon or quart sizes, incorporating safety handles and Patent flow control system, are ordered and shipped separately.

ASSEMBLY & INSTALLATION

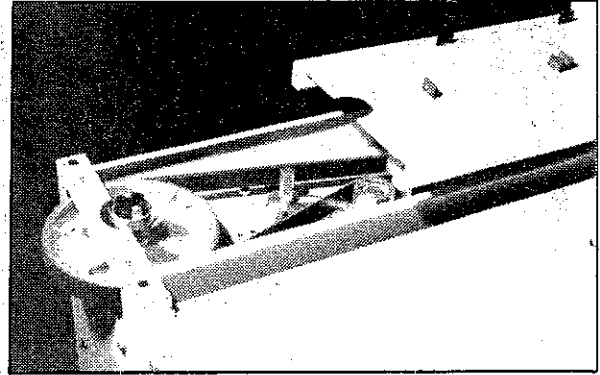
SUMMARY OF OPERATIONS

1. Base unit fully assembled.
2. Install mix-shelf cover behind work surface ; control panel and pulley protection housing mounted on side of base unit.
IMPORTANT : DO NOT BEND OR CRIMP THE CONTROL CABLE.
- 3.&4. Mounting spacers between mix-shelves.
- 5.&6. Placing and securing mix-shelves.
7. Mix unit before final mix-shelf is installed.
8. Plastic cap mounted on upper drive block.
9. Header plate in position.
10. Upper mix-shelf mounted.
- 11.&12. Mounting drive cross-pieces.
- 13.&14. Installing and securing drive shafts.
- 15.&16.&17. Installing and securing shaft covers.
18. Mix unit fully assembled.

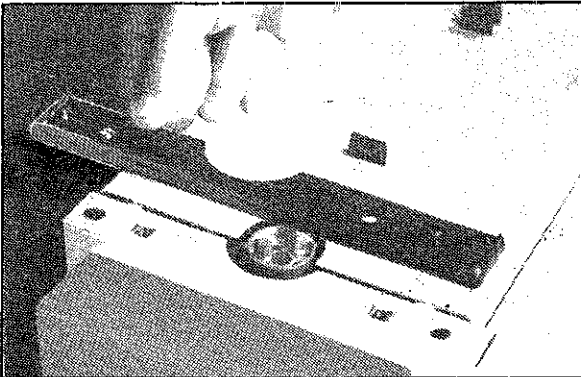
ASSEMBLY & INSTALLATION



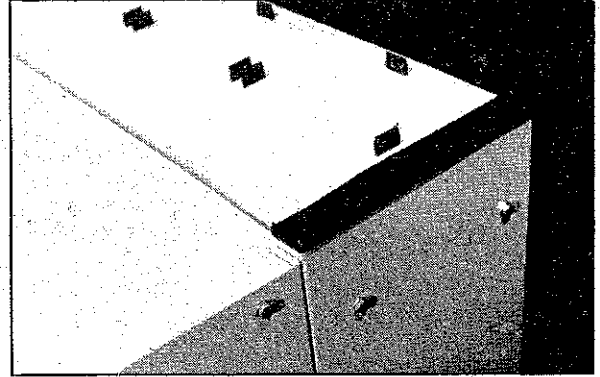
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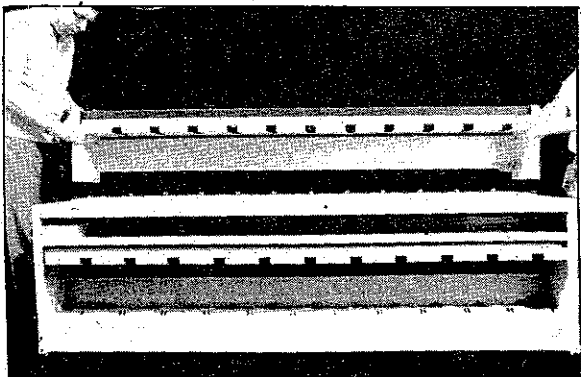
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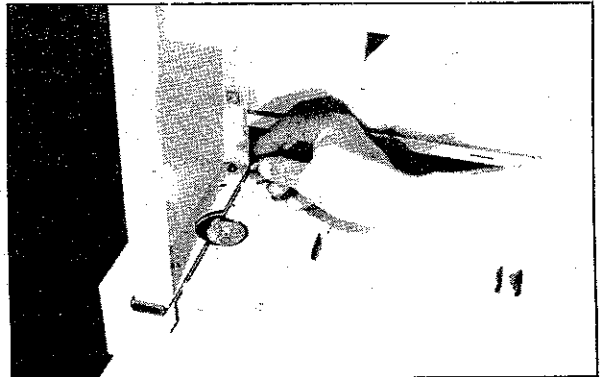
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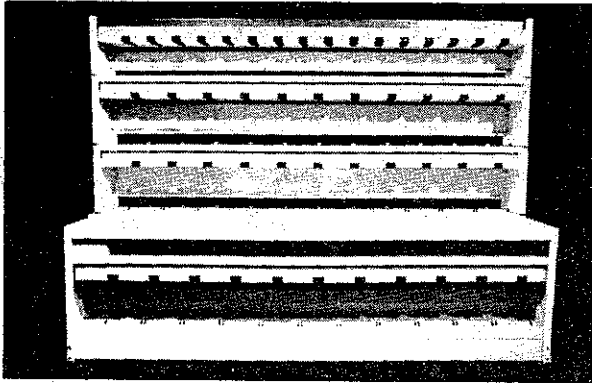


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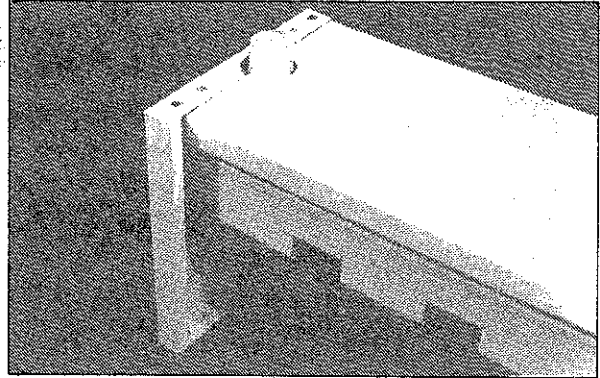


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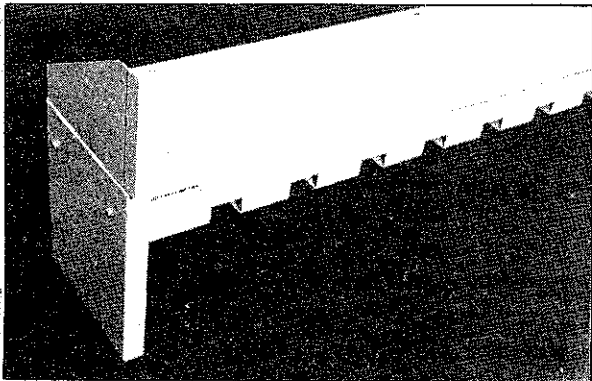
ASSEMBLY & INSTALLATION



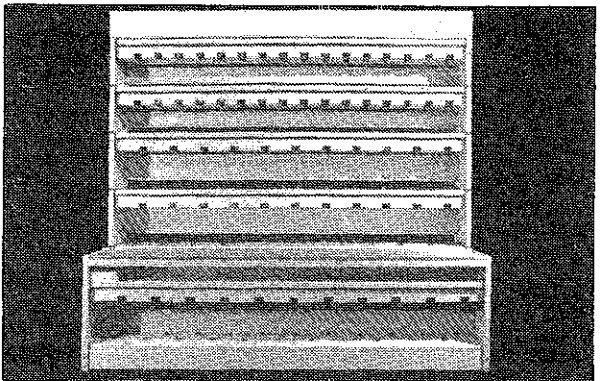
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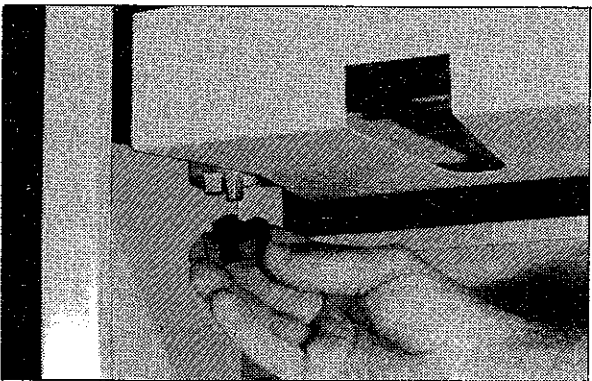
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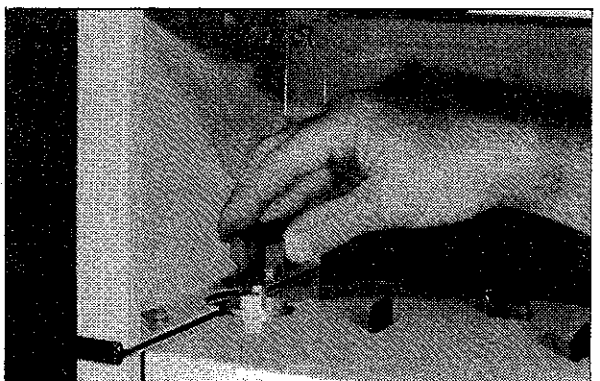
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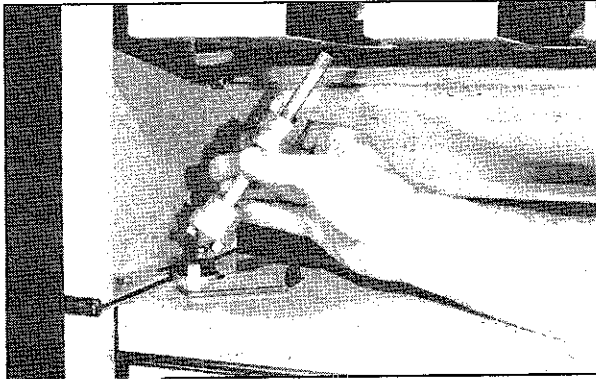


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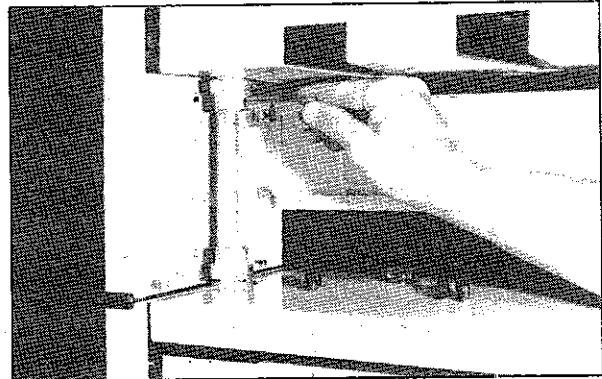


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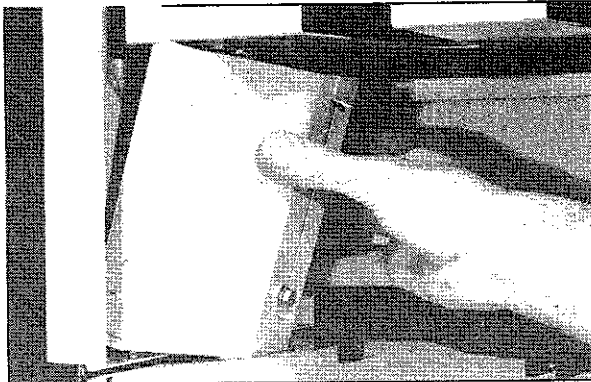
ASSEMBLY & INSTALLATION



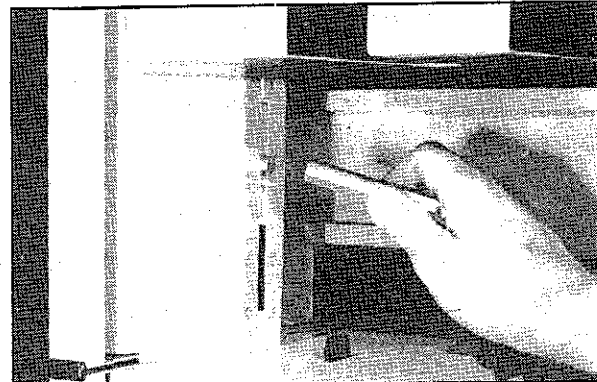
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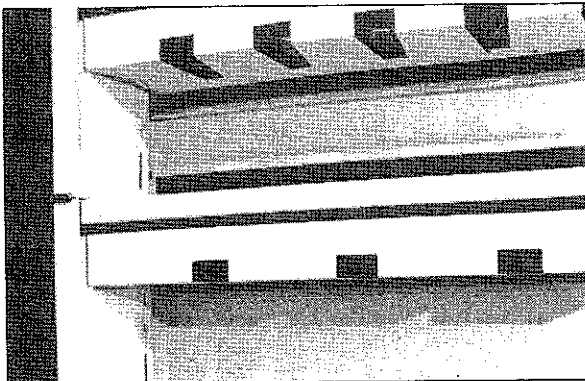
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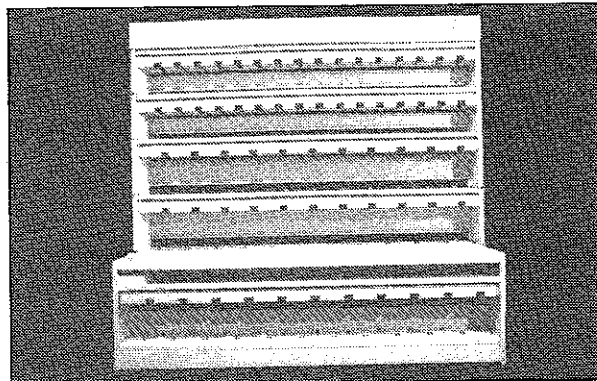
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16



17



18

ASSEMBLY & INSTALLATION

Check that the assembled mix-unit is perfectly level, by means of the bubble level included with the base unit. The feet of the unit can be adjusted for height by turning clockwise or anti-clockwise.

ELECTRICAL INSTALLATION

Your mix-unit is supplied with an explosion-proof (Class I, Div. I, Group D) fully Approved electric motor.

Power supply and other electrical connections should conform to all Federal, State, and local regulations, and should be carried out only by a fully qualified electrician.

Electrical Supply : 110 volts - 60 Hz - Single-phase.

IMPORTANT

1. Mix-units driven by a non-explosion-proof electrical assembly should not be used in any area where there is possible risk of paint vapor ignition.
2. Check that the shaft of the motor rotates clockwise. Arrow labels are provided to guide you.
3. The mix-unit must be fully grounded.
4. The mix-unit must not be installed in a damp place.

COMMISSIONING & OPERATION

COMMISSIONING

Before first using your mix-unit, check that :

1. The operator has seen and read all CAUTION markings and texts on the mix-unit and in the Service Manual.
2. The power supply is compatible with the power rating of the mix-unit.
3. All protective covers are firmly in place.
4. All electrical connections are covered.
5. All nuts and bolts are tight. They may have worked loose in transport.
6. Belts are correctly adjusted (see Routine Maintenance). If they are too loose, they will slip ; if too tight, you may overload the motor.
7. All belts are securely in place and running smoothly after 2 - 3 minutes operation.
8. Can clamps are correctly mounted. At each station, the notch on each of the three clamps should point outwards.
9. The unit is installed away from any source of heat (explosive vapors).
10. Do not use dented cans. Check manually that the agitator blades turn freely, before placing can in mix-unit.

OPERATION

1. Paint cans may be safely placed in, or removed from the mix-unit, whether the unit is in operation or not.
2. Make sure that agitator lids are firmly locked in position before placing cans in mix-unit.

Agitator lids should preferably incorporate a handle, to make can handling easier and safer.
3. DO NOT OVERREACH when placing cans in, or removing cans from the mix-unit.
4. Mix small (quart) cans rather than larger (gallon) cans on higher mix-shelves, for easier handling and greater safety.
5. Make sure that all cans are securely in position before switching mix-unit ON.
6. Do not sit on the work table.

ROUTINE & ELECTRICAL MAINTENANCE

CAUTION : Before removing any protective covers, and prior to any maintenance or repair operation, make sure the unit is switched OFF (disconnect the unit, if possible).

Your mix unit will serve you longer, and risk of accidents will be reduced if regular maintenance is carried out.

DAILY : Remove all dust and paint residues after each use of the mix-unit, or at the end of the day. Use a standard, non-abrasive thinner. NEVER USE WATER TO WASH DOWN THE MIX-UNIT.

MONTHLY : Check condition and tension of all drive belts. To adjust :

- mix-unit drive belts : adjust tension regulator (106)
- under-table mix-shelf drive belt : untighten wing-nut, hold knob and slide pulley support plate until correct belt tension is obtained. Retighten wing-nut.

ANNUALLY : Check condition and tension of motor drive belt. Adjust belt by means of tension regulator 119.

ELECTRICAL MAINTENANCE

CAUTION : Any check, adjustment, or repair to any electrical component (motor, connections, etc.....) should be carried out only by a fully qualified electrician.

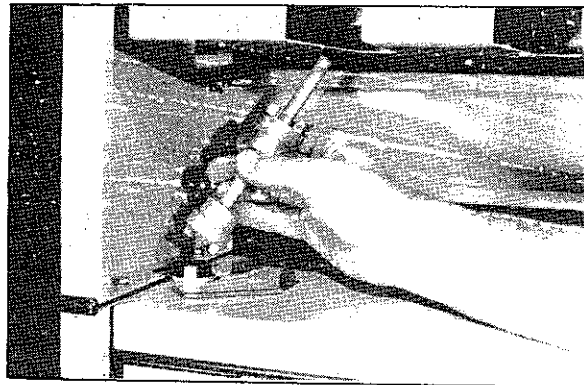
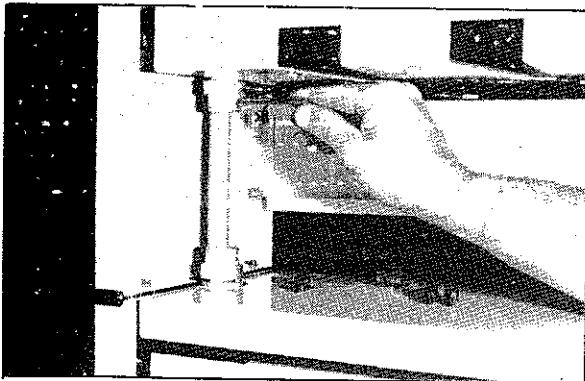
"IMPORTANT:

YOUR MIX UNIT IS FITTED WITH A FULLY APPROVED EXPLOSION-PROOF MOTOR. ANY REPAIRS MUST BE CERTIFIED IN CONFORMANCE WITH APPROVAL CONDITIONS.

BEFORE YOU CALL AN ELECTRICIAN TO INVESTIGATE A MOTOR PROBLEM, IT IS THEREFORE MOST IMPORTANT TO CALL FILLON PICHON USA INC. FOR THE APPROPRIATE INSTRUCTIONS : 401 431 1580

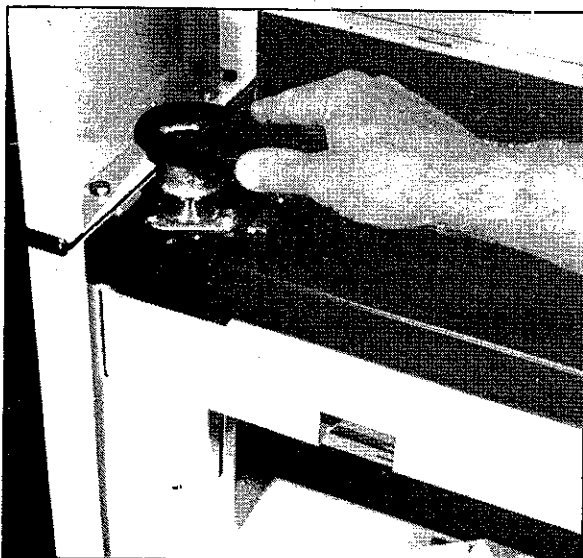
PARTS REPLACEMENT

1. DRIVE CROSS-PIECE



REPLACE CROSS-PIECE, THEN RE-INSTALL SHAFT AND COVER PLATE

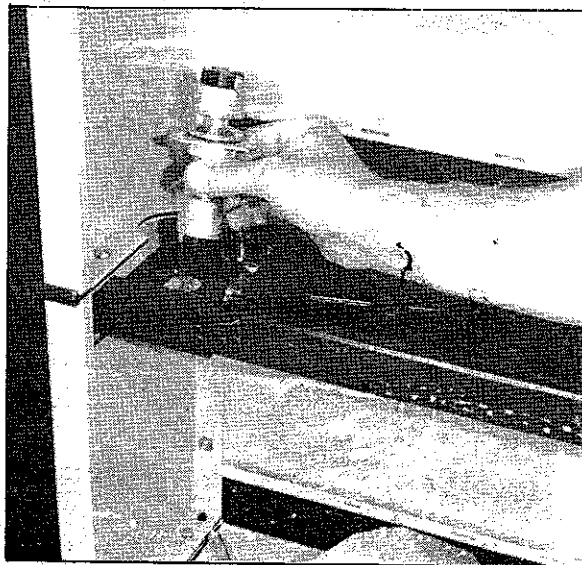
2. MIX-SHELF BELT



IF THE BELT IS DEFECTIVE, INSTALL A NEW ONE. MAKE SURE THAT THE NEW BELT IS CORRECTLY LOCATED AROUND THE TENSION ROLLERS.

RE-ADJUST TENSION ROLLERS TO OBTAIN CORRECT TENSION.

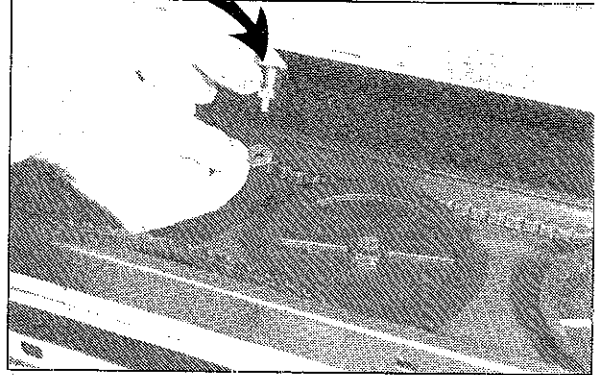
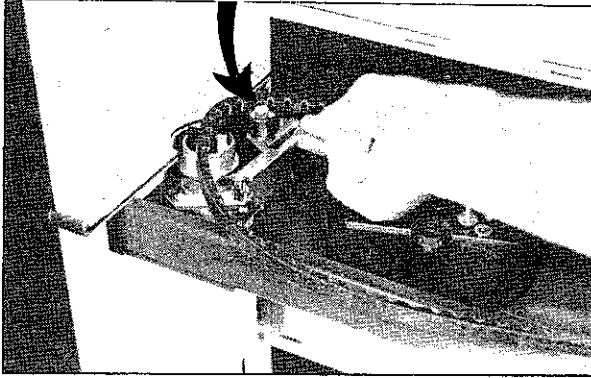
3. DRIVE BLOCK



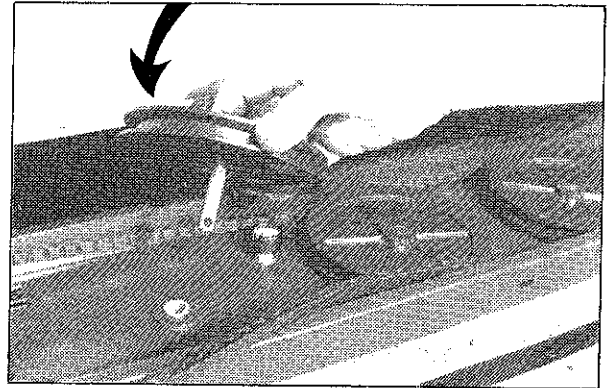
REMOVE BELT AND REPLACE DEFECTIVE BLOCK.

PARTS REPLACEMENT

4. ADJUSTABLE TENSION REGULATOR / FIXED TENSION ROLLER

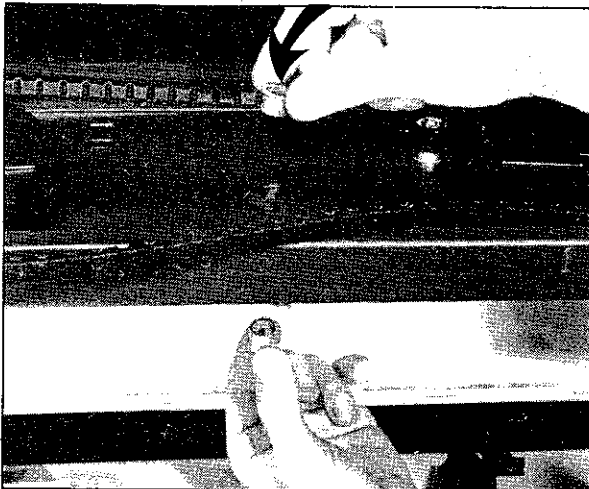


5. MIX-SHELF PLASTIC PULLEY



REPLACE PULLEY, THEN RE-INSTALL BELT, DRIVING DEVICE AND PIN, AND PROTECTIVE COVER.

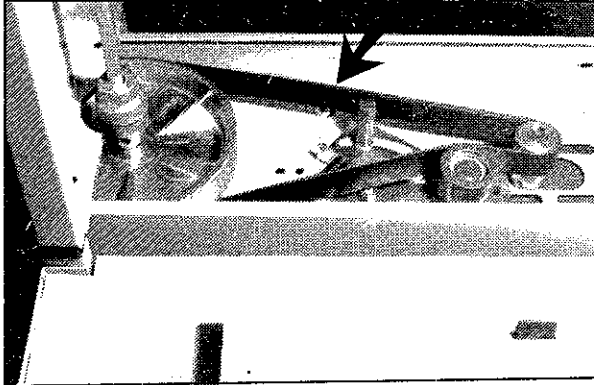
6. SELF-LUBRICATING RING



REPLACE DEFECTIVE RING.
RE-INSTALL PULLEY, BELT, DRIVING
DEVICE WITH PIN, AND PROTECTIVE
COVER.

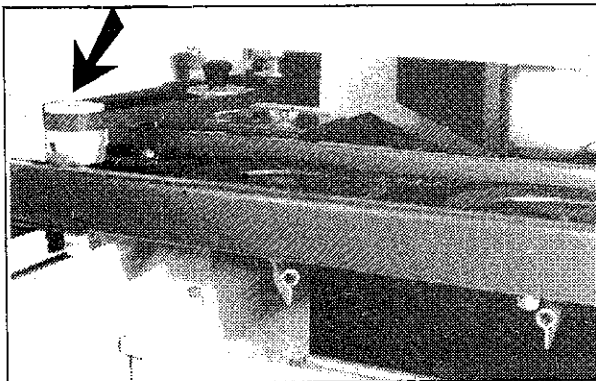
PARTS REPLACEMENT

7. MOIOR BELI



SLACKEN MOIOR BELI BY RELEASING IENSION REGULATOR. REPLACE DEFECTIVE BELI, AND RE-ASSEMBLE ALL PARTS

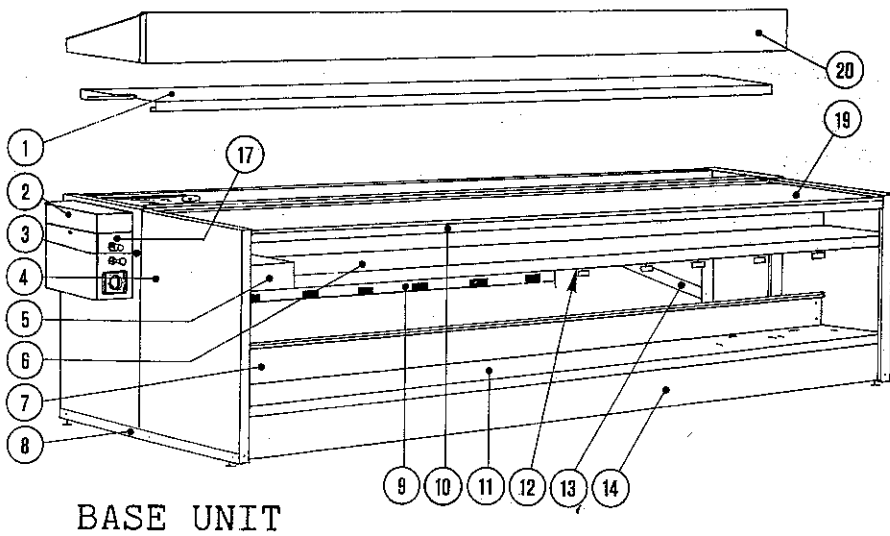
8/1. M83 DRIVE BLOCK



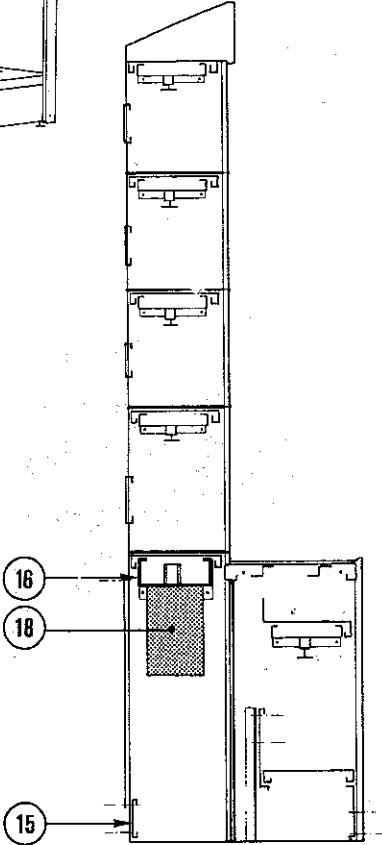
2. UNDER-SIAGE DRIVE BELT

- 1) SLACKEN UNDER-TABLE DRIVE BELT BY RELEASING IENSION REGULATOR.. REMOVE BELT AND REPLACE DRIVE BLOCK..
- 2) SLACKEN BELT BY RELEASING TENSION REGULATOR. REPLACE BELT AND RE-INSIALL PARTS IN REVERSE ORDER..

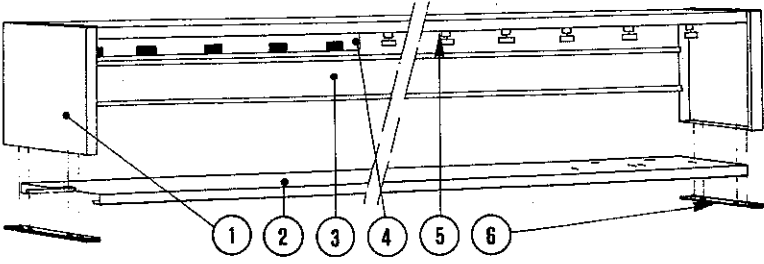
PARTS DIAGRAM



BASE UNIT



MIX-SHELF



PARTS LIST

| Item | Description | Part No. | |
|------|--|------------|--|
| | <u>BASE UNIT</u> | | |
| 1 | Upper shelf | 13 12 01 | |
| 2 | Pulley protection housing | 19 01 12 | |
| 3 | Back panel MM | | |
| | - left | 16 92 00D | |
| | - right | 16 93 00D | |
| 4 | Front panel MM | | |
| | - left | 16 94 00D | |
| | - right | 16 95 00D | |
| 5 | Drive housing | 19 19 00 | |
| 6 | Under table storage shelf | 13 07 401D | |
| 7 | Shelf support plate | 19 50 09 | |
| 8 | Stabilizer feet | | |
| | - left | 15 56 01D | |
| | - right | 16 56 02D | |
| 9 | Protective driving device cover | | |
| | - under table storage : 11 cans | 19 12 60 | |
| 10 | Work top | 14 28 00D | |
| 11 | Slotted shelf | | |
| | - under table stage : 11 cans (1 gallon) | 13 12 04 | |
| 12 | Modular mechanical shelf (with fittings) | | |
| | - under table stage : 11 cans M83 | 12 44 11 | |
| 13 | Cross brace | 25 16 00 | |
| 14 | Front skirting board | 15 19 16D | |
| 15 | Back skirting board | 15 19 108 | |
| 16 | Motor assembly shelf | 12 47 10 | |
| | <u>Explosion-proof single-phase electrical assembly 110V-60 Hz</u> | | |
| | including : | | |
| 17 | Mechanical control box, complete with cable | 24 82 00 | |
| | - Cable only, with fittings | 24 82 70 | |

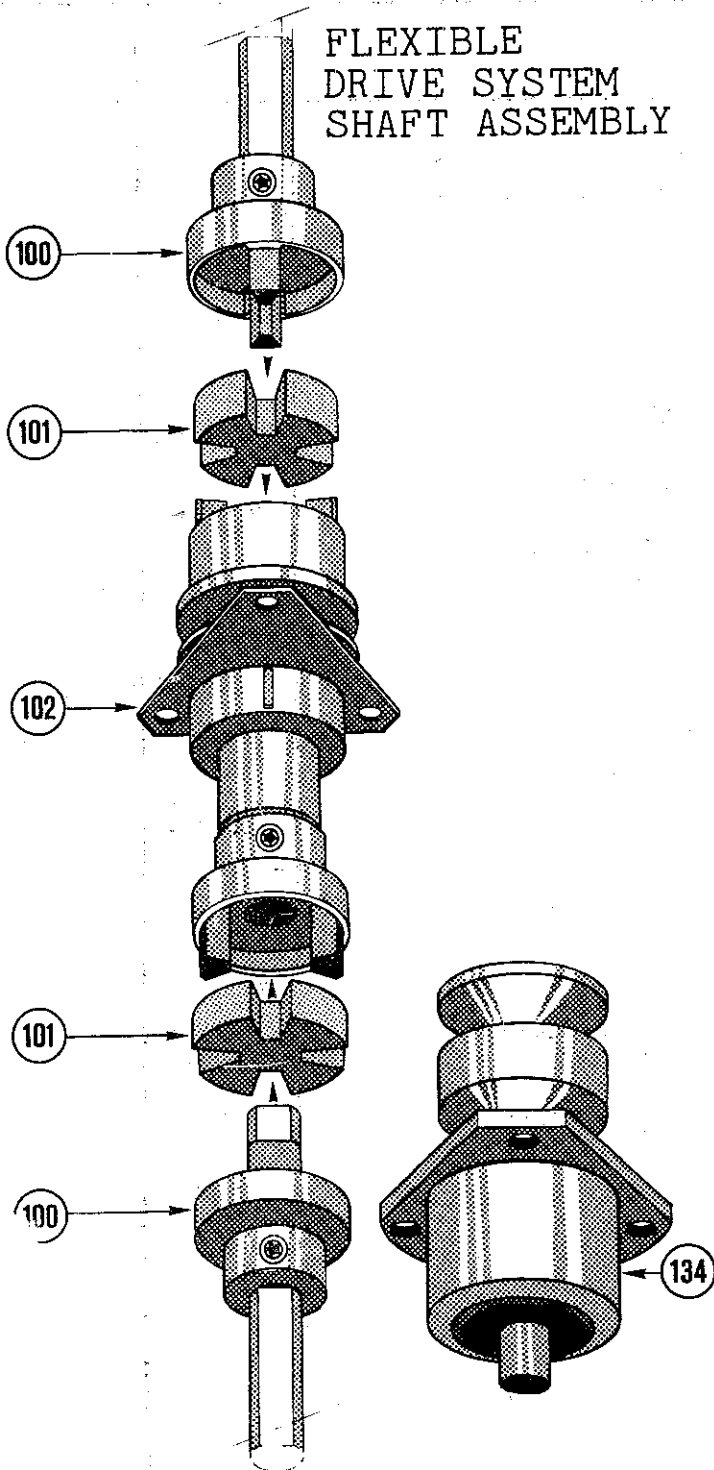
PARTS LIST

| | Item | Description | Part No. | |
|--|------|--|----------|--|
| | 18 | Motor assembly Details : see mechanical parts | | |
| | 19 | Stainless steel table top | 14 63 00 | |
| | 20 | Header plate | 18 59 00 | |

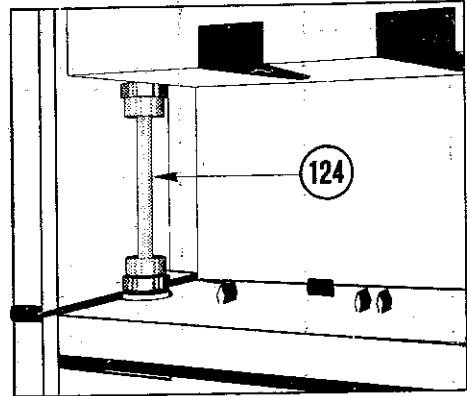
PARTS LIST

| Item | Description | Part No. | |
|------|--|------------------------|--|
| | <u>MIX-SHELF 11 CANS</u> | | |
| 1 | Modular panel large cans (1 gallon) - left - right | 11 27 01D 11 27 02D | |
| 2 | Slotted shelf - modular stage : 11 cans (1 gallon) | 13 12 02 | |
| 3 | Back plate - modular large cans for detachable quart platforms | 21 09 01 | |
| 4 | Protective driving device cover - modular stage : 11 cans | 19 12 49 | |
| 5 | Modular mechanical shelf (with fittings) - modular stage : 11 cans (1 gallon) | 12 45 11 | |
| 6 | Plastic shelf spacers | 04 20 06 | |
| | <u>MIX-SHELF 16 CANS</u> | | |
| 1 | Modular panel, small cans (1 quart) - left - right | 11 27 03D 11 27 04D | |
| 2 | Slotted shelf - modular stage : 16 cans (1 quart) | 13 12 03 | |
| 3 | Back plate - modular small cans | 19 02 11 | |
| 4 | Protective driving device cover - modular stage : 16 cans | 19 12 50 | |
| 5 | Modular mechanical shelf (with fittings) - modular stage : 16 cans (1 quart) | 12 46 11 | |
| 6 | Plastic shelf spacers | 04 20 06 | |

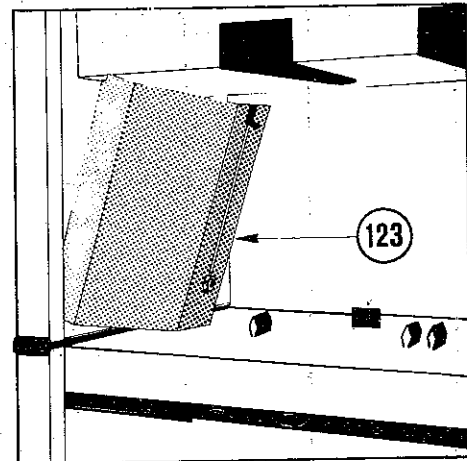
PARTS DIAGRAM



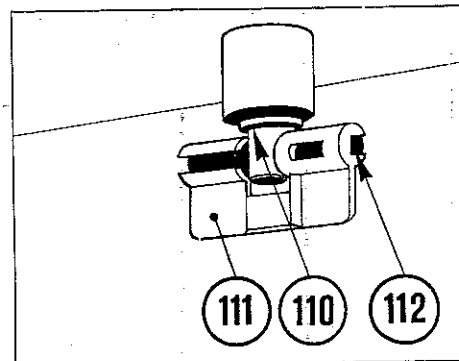
DRIVE SHAFT



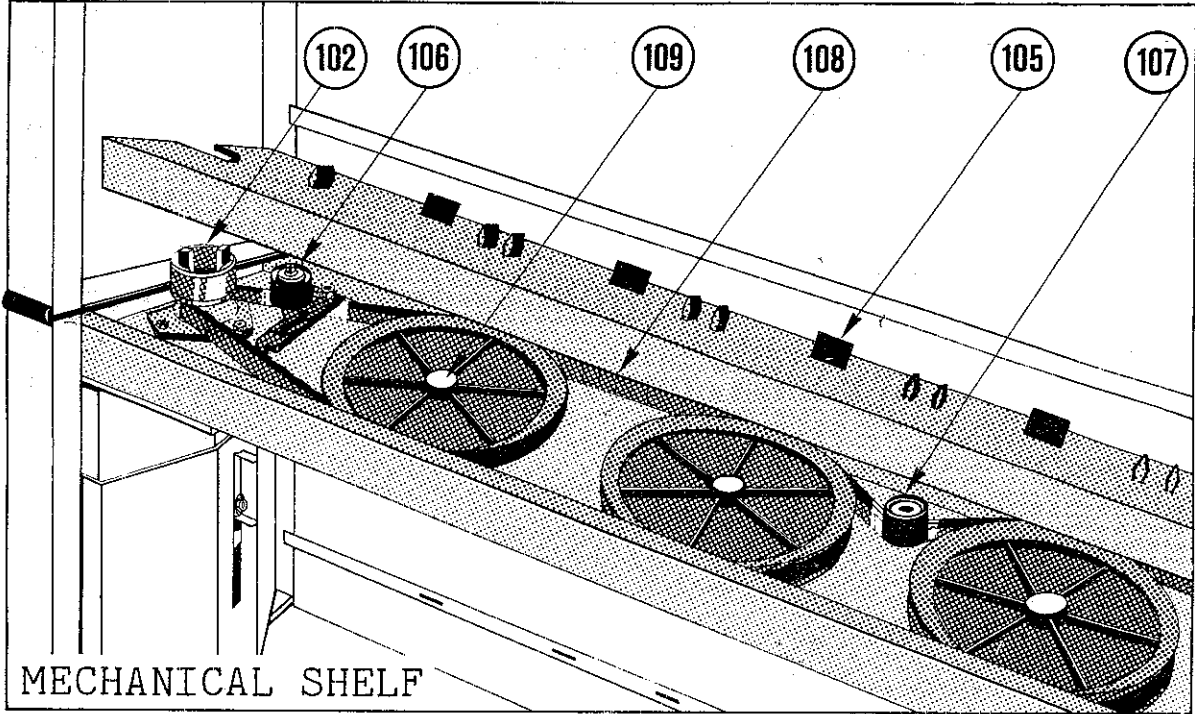
SHAFT COVER



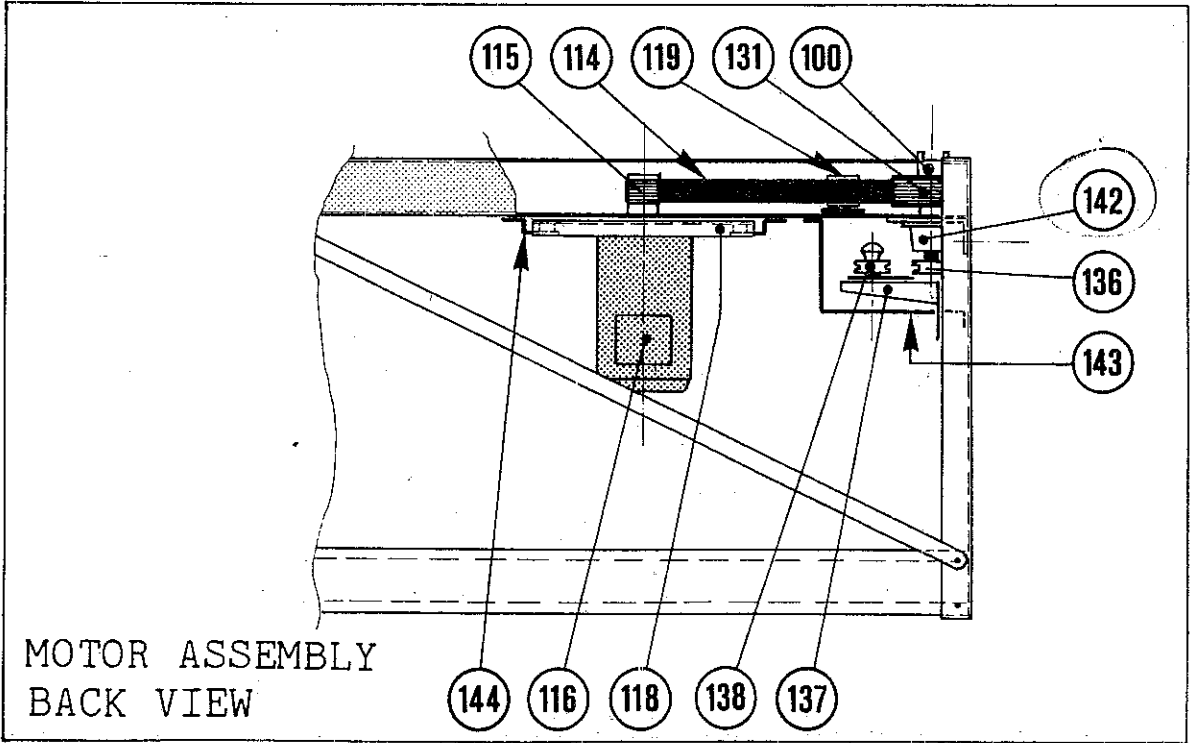
DRIVING DEVICE



PARTS DIAGRAM



MECHANICAL SHELF



MOTOR ASSEMBLY
BACK VIEW

PARTS LIST

| Item | Description | Part no. |
|--------------|---|------------------------------------|
| 100 | Drive sleeve (with screw) | 04 10 04D |
| 101 | Drive cross piece | 04 20 01 |
| 102 | Standard drive block | 08 17 00 |
| 105 | Can clamp (bag of 25 pieces) | 04 01 29E |
| 106 | Adjustable belt regulator TR83 | 08 72 00 |
| 107 | Fixed belt roller | 08 71 00D |
| 108 | Mechanical shelf drive belt 4450 | 03 01 39 |
| 109 & 133 | Mechanical shelf pulley 142 Gallon | 04 20 03 |
| | Mechanical shelf pulley 126 Quart | 04 20 04 |
| 110 | Self lubricating ring BP25.C 12x15x12 | 03 04 01 |
| 111 | Driving device | 04 20 07 |
| 112 | Driving device pin | 04 01 39 |
| 114 | Motor belt 955 | 03 01 56 |
| 115 | Motor pulley POLY V 33 .For motor with flange | 05 01 104D |
| 116 | Explosion-proof single-phase motor 1 HP (with pulley) with built-in switch .With flange .Silentblocc (with nuts) .Ground wire | 06 01 70D 03 02 03D 06 50 01 |
| 118 | Motor support bracket .For motor with flange | 20 34 10 |
| 119 | Motor belt regulator | 08 31 00 |
| 123 | Shaft cover (Gallon can stage) | 19 08 10D |
| | Shaft cover (quart can stage) | 19 08 00D |
| 124 | Drive shaft 213 (Gallon can stage) | Z08 50 64 |

PARTS LIST

| | Item | Description | Part No. | |
|--|------|--|------------|--|
| | 124 | Drive shaft 153 (Quart can stage) | Z08 50 65 | |
| | 131 | Driven pulley POLY V 165 (with screw) | 05 01 80D | |
| | 134 | Drive block M83 | Z08 24 00D | |
| | 136 | Pulley 141C (with screw) | 05 01 09D | |
| | 137 | Under table belt regulator bracket plate | 08 30 00 | |
| | 138 | Under table belt regulator | 20 23 30 | |
| | | Under table shelf belt 815 | 03 01 43 | |
| | 142 | Drive block MM | 08 29 00 | |
| | 143 | Under table drive housing | 19 01 10 | |
| | 144 | Mount for motor support bracket | 20 29 20 | |

SUMMARY OF CAUTIONS

1. The mix-unit should be installed in a damp-free place, away from any source of heat (explosive vapors). Mix-units driven by a non-explosion-proof electrical assembly should not be used in any area where there is a possible risk of paint vapor ignition.
2. Installation of the mix-unit, as well as any check, adjustment, or repair of any electrical component (motor, connections, etc.) should be carried out only by a fully qualified electrician. Installation should be in accordance with all Federal, State, and local regulations, and the mix-unit must be fully grounded.
3. All electrical connections should be fully covered at all times.
4. Protective covers should always be in position. They are provided to protect you against any possible risk of injury.
5. Before removing any protective covers, and prior to any maintenance or repair operation, make sure the unit is switched OFF (fully disconnect if possible).
6. The upper mix-shelves should be reserved for smaller cans, which are lighter, and thus safer, to handle.
7. Do not use dented cans. Check manually that the agitator blades turn freely, before placing cans in mix-unit.
8. Make sure that agitator lids are firmly secured before placing cans in the mix-unit.
9. Make sure that cans are securely in place before switching mix-unit ON.
10. Never overreach when placing cans in, or removing cans from the mix-unit.
11. Never use water to wash down the mix-unit.
12. Do not sit on the work table.

The manufacturer cannot be held responsible for any accident resulting from non-compliance with the cautions contained in this Manual or affixed to the mix-unit, nor in the case of a mix-unit modified without the prior knowledge and consent of the manufacturer.

"IMPORTANT:

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BEFORE YOU CALL AN ELECTRICIAN TO INVESTIGATE A MOTOR PROBLEM, IT IS THEREFORE MOST IMPORTANT TO CALL FILLON PICHON USA INC. FOR THE APPROPRIATE INSTRUCTIONS ; 401 431 1580

TROUBLE-SHOOTING SHART

| PROBLEM | POSSIBLE CAUSE | SOLUTION |
|---------------------------------|---|--|
| MOTOR WILL NOT TURN | <ul style="list-style-type: none"> .. No current .. Timer not activated .. Motor switch not activated .. Internal motor problem | <ul style="list-style-type: none"> .. Check power supply 115V .. Activate timer .. Check tension of spring to motor switch plate .. Adjust cable tension .. Replace cable if severely crimped .. DO NOT OPEN MOTOR. Call Fillon Pichon at (401) 431-1580 |
| NO MIX-SHELVES TURNING | <ul style="list-style-type: none"> .. Motor not turning .. Worn, loose, or slipped motor drive belt .. Loose motor pulley | <ul style="list-style-type: none"> .. See above .. If slipped, re-mount belt .. If loose, adjust tension .. If worn, replace .. Tighten pulley |
| INDIVIDUAL MIX-SHELF WON'T TURN | <ul style="list-style-type: none"> .. Mix-shelf belt slipped, loose, or worn .. Worn driving cross-piece .. Loose driving sleeve .. Fixed tension roller(s) not tight .. Drive bloc seizes or heats up .. Tension regulators seize or heat up | <ul style="list-style-type: none"> .. If slipped, re-mount .. If loose, adjust tension .. If worn, replace .. Replace cross-piece .. Tighten set-screw .. Tighten .. Change bloc .. Change tension regulator |
| AGITATOR PADDLE WON'T TURN | <ul style="list-style-type: none"> .. Dent in can .. Drive-fork not correctly located under drive-plate .. Loose drive-fork .. Broken drive-fork .. Lid badly seated on can | <ul style="list-style-type: none"> .. Transfer paint to new can .. Locate correctly .. Check position of can clamps .. Tighten set-screw .. Replace fork .. Re-locate lid |

MOTOR TROUBLE-SHOOTING SCHART

| PROBLEM | POSSIBLE CAUSE | SOLUTION |
|--------------------------|--|---|
| MOTOR WON'T START | <ul style="list-style-type: none"> ◦ TIMER NOT ACTIVATED | <ul style="list-style-type: none"> ◦ MAKE SURE TIMER IS ON WHEN MACHINE IS ACTIVATED. |
| | <ul style="list-style-type: none"> ◦ MOTOR SWITCH NOT ACTIVATED | <ul style="list-style-type: none"> ◦ TURN ROCKER SWITCH BY HAND. IT SHOULD "CLICK" ON. - IF NOT, REPLACE MOTOR. - IF SWITCH "CLICKS" ON:- ◦ CHECK/ ADJUST SWITCH SPRING. ◦ CHECK/ ADJUST CABLE TENSION. - IF CABLE IS CRIMPED, REPLACE. |
| MOTOR WON'T TURN MACHINE | <ul style="list-style-type: none"> ◦ MOTOR BELT TOO LOOSE ◦ MOTOR BELT TOO TIGHT | <ul style="list-style-type: none"> ◦ TIGHTEN ◦ SLACKEN - IF MOTOR SHAFT IS BENT, REPLACE MOTOR. |

WARRANTY

FILLON PICHON USA, INC. warrants each new mix unit to be free from defects in material and workmanship under normal use and service.

FILLON PICHON USA, INC. will replace and/or repair any part of the mix unit which it determines is defective for a period of twelve (12) months after delivery of the mix unit to the original end user. Not included under the terms of this Warranty are any parts which require replacement due to normal wear and tear (belts, fuses, etc.).

All Warranty claims should be made by contacting the company which was responsible for selling the mix unit to the original end user. Under no circumstances should the mix unit or any part thereof be returned to the factory for inspection, replacement and/or repair without the express written consent of FILLON PICHON USA, INC.

This Warranty is expressly in lieu of all other warranties and representations express or implied, and all other obligations and liabilities on the part of FILLON PICHON USA, INC.

All electrical components of the mix unit furnished by FILLON PICHON USA, INC. but not manufactured by FILLON PICHON USA, INC. are warranted specifically by their respective manufacturers and FILLON PICHON USA, INC. makes no warranties with respect to these items.

This Warranty shall be valid for the Warranty period, as long as the mix unit has been properly installed or repaired by a fully qualified electrician or mechanic. The Warranty shall be void, if the mix unit has been subjected to unauthorized modification, misuse, neglect, accident or noncompliance with instructions in the service manual.

This Warranty is for the sole benefit of the original end user and is not assignable or transferable. The term "original end user" in this Warranty shall be deemed to mean that person or entity for whom the mix unit is originally installed.

EL FABRICANTE NO SE HACE RESPONSABLE DE ACCIDENTE ALGUNO QUE RESULTE POR NO HABERSE SEGUIDO LAS ADVERTENCIAS CONTENIDAS EN EL MANUAL DE SERVICIO O QUE ESTAN ADHERIDAS A LA UNIDAD DE MEZCLAR; NI TAMPOCO, SI SE HACE ALGUNA MODIFICACION A LA UNIDAD DE MEZCLAR SIN EL PREVIO CONOCIMIENTO Y CONSENTIMIENTO DEL FABRICANTE.