



*Mix Unit*

**CME 220**

# Owners Manual



Dear User :

Thank you for choosing a FILLON PICHON product. It has been carefully designed to enable you to prepare and blend your paints with speed and ease.

Your mix unit has been shipped so as to insure easy assembly and installation. It should reach you in perfect condition. If not, we would like to know.

This manual will enable you to obtain maximum performance from your new mix unit. To prevent accidents, we strongly recommend that it be read fully by all operators, and kept in a safe place for future reference.

Yours truly,

Roger FILLON, President  
FILLON-PICHON USA Inc.

A handwritten signature in cursive script, appearing to read 'R. Fillon', written over a horizontal line.

# CONTENTS

	Page
- The Equipment	2
- Assembly & Installation	4
- Commissioning & Operation	9
- Routine & Electrical Maintenance	10
- Parts replacement	11
- Parts lists	12
- Summary of CAUTIONS	18
- Warranty	(INSIDE BACK COVER)

## MIX UNIT

### CME 220

- BASE KIT	- REF: Y00.CME4.01
- DRIVE UNIT	- REF: Y00.X22.J70
- US GALLON MIX-SHELF 11 CANS	- REF: Y00.A114.02
- US QUART MIX-SHELF 16 CANS	- REF: Y00.A116.02
- BASE STORAGE SHELF	- REF: Y00.A004.01
- US GALLON STORAGE SHELF	- REF: Y00.A004.02
- US QUART STORAGE SHELF	- REF: Y00.A004.03

# THE EQUIPMENT

## MIX UNIT CME 220

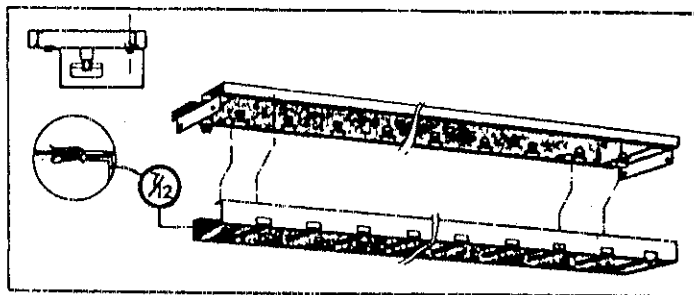
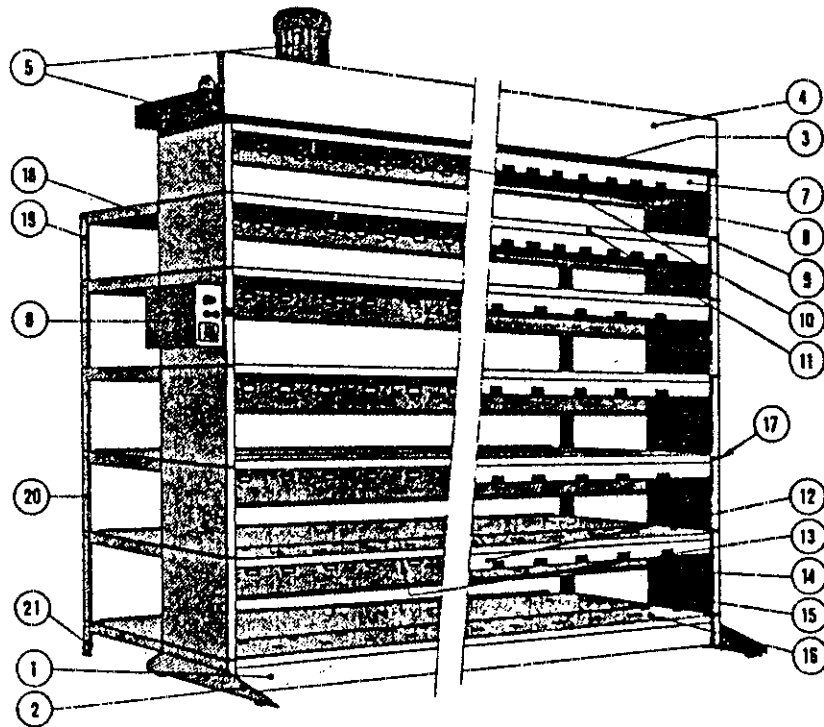
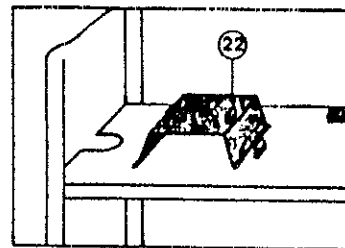


Diagram represents only one of several possible combinations of modular elements you may construct.

### QUART PLATFORM (OPTIONAL)



# THE EQUIPMENT

Your CME mix-unit is shipped in several preassembled parts, and includes one or more mix-shelves and rear storage shelves.

1. THE BASE KIT, including :

- Support base and feet
- Header plate
- Upper shelf

2. DRIVE UNIT

- The fully Approved electric motor is ready mounted and shipped with its control box.

3. MIX-SHELVES, assembled and separately shipped.

Two types :

- 11 x 1 US GALLON mix-shelf
- 16 x 1 US QUART mix-shelf

4. REAR STORAGE SHELVES (OPTIONAL), non-assembled and separately shipped

Three types :

- Base storage shelf
- US GALLON storage shelf
- US QUART storage shelf

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

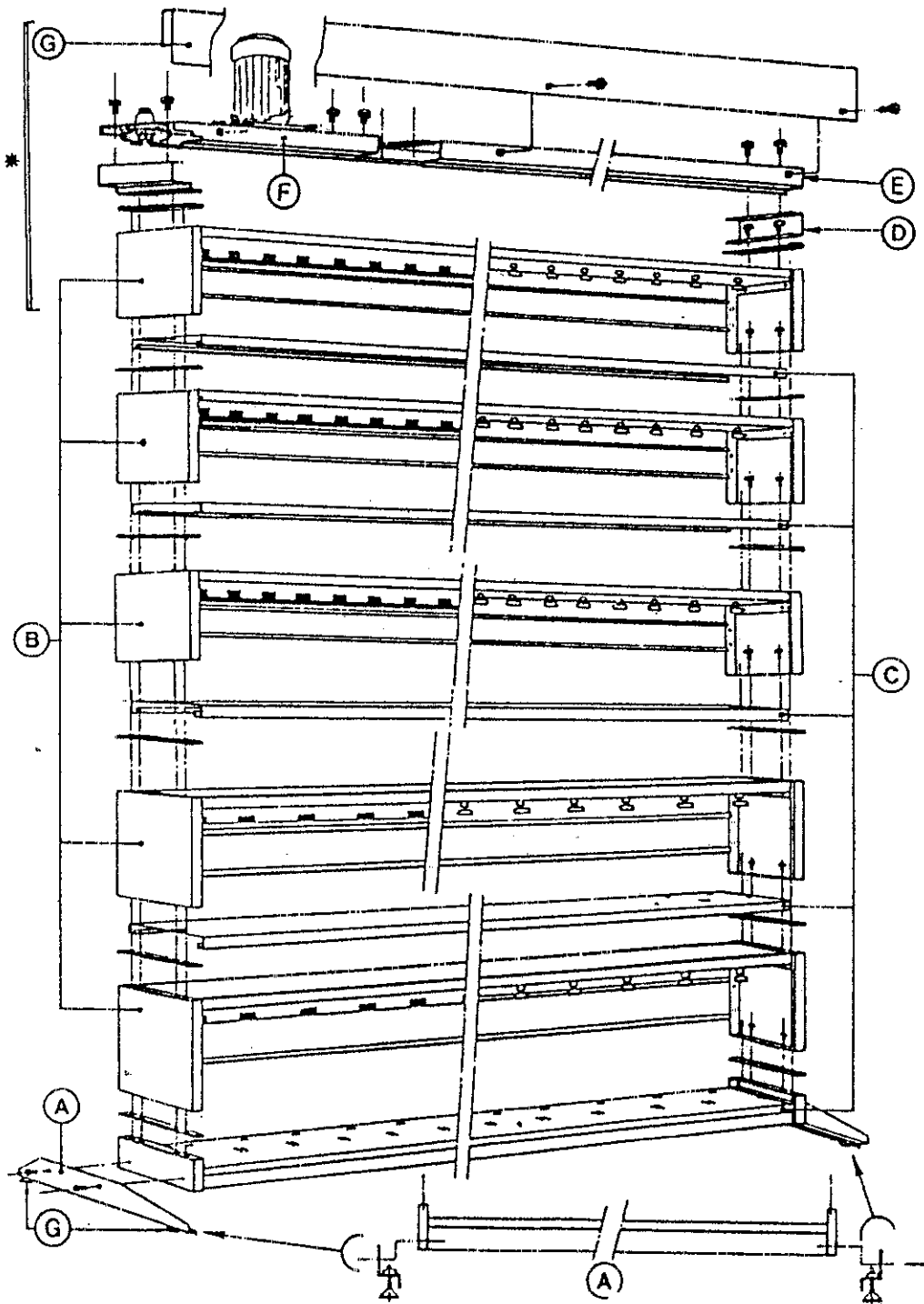
CAUTION : The top shelf should not be so high as to make access difficult. Do not handle heavy cans above head level.

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

OPTIONAL :

- Quart platforms, enabling Quart cans to be installed at Gallon stations, can be ordered individually, and may be shipped separately or with the drive 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

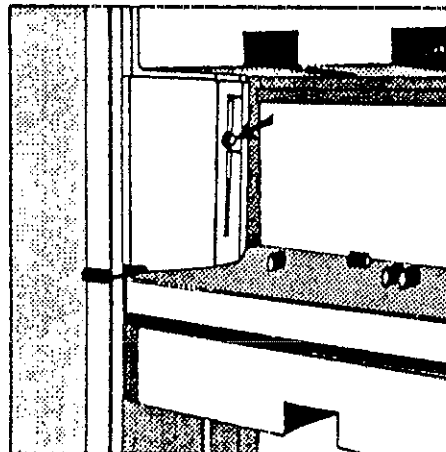
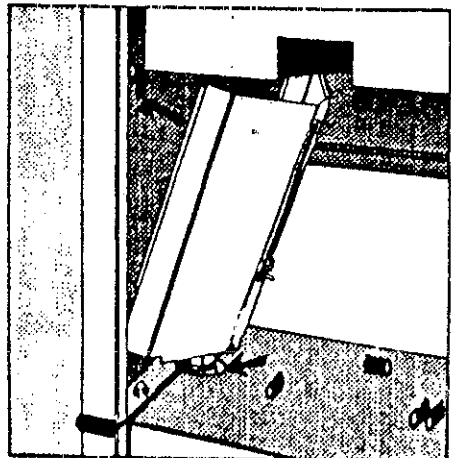
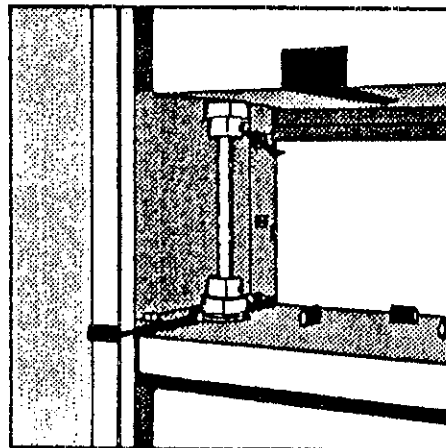
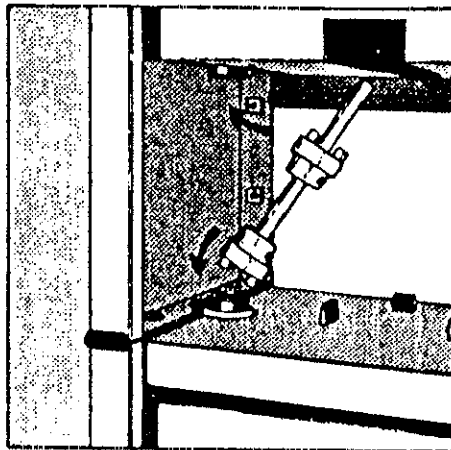
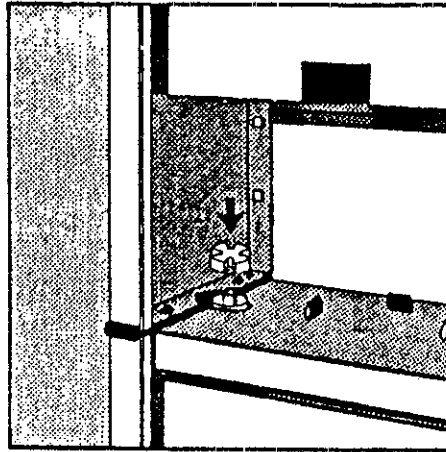
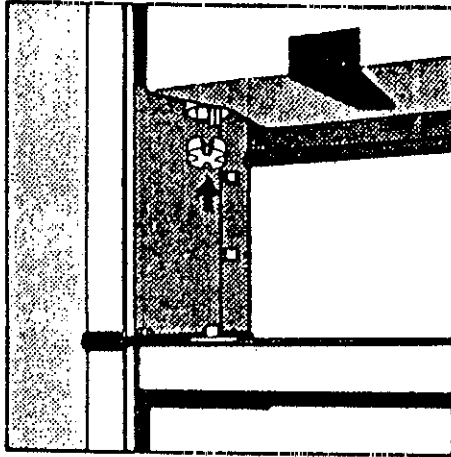


\* Attach drive unit to upper mix-shelf before mounting on top of mix-unit.

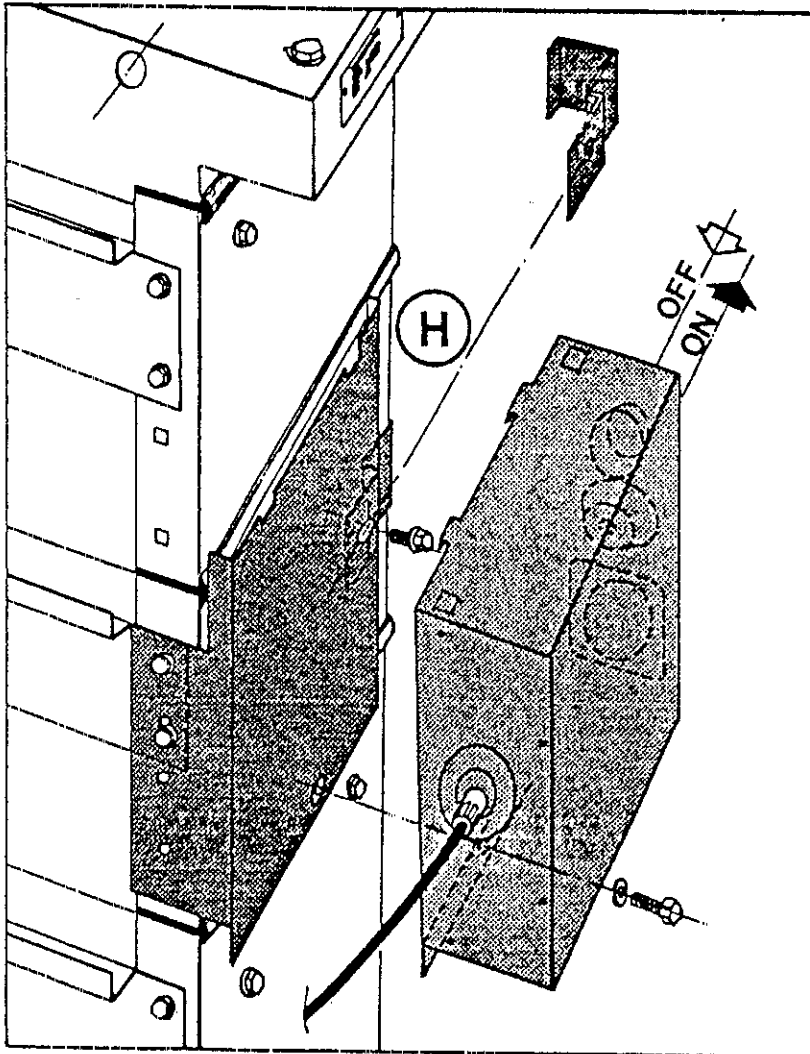
# ASSEMBLY & INSTALLATION

## MIX SHELVES

Drive shafts and protection covers

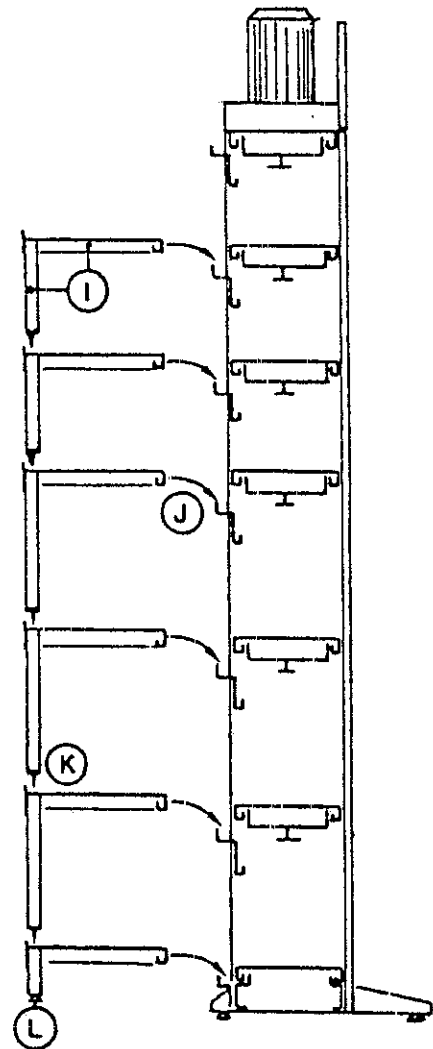


# ASSEMBLY & INSTALLATION



TO MOUNT CONTROL BOX

REAR STORAGE SHELF  
ASSEMBLY





# ASSEMBLY & INSTALLATION

## I. MIX UNIT ASSEMBLY

- Assemble the various components as shown in the example on Page 4. Mix-shelves may be mounted in any configuration. Ensure that the feet are installed correctly, as illustrated on Page 4.
- Attach drive unit, with header plate, to top mix-shelf. Then raise and mount this assembly on to body of mix-unit.
- Check that the assembled mix-unit is perfectly level. A bubble level is provided. The feet of the unit can be adjusted for height by turning clockwise or anti-clockwise.

## II. MOUNTING DRIVE SHAFTS AND SHAFT COVERS (page 5)

- Start by mounting the 2 cross-pieces, one on the lower drive block, the other on the upper drive sleeve, of each mix-shelf.
  - . Locate the drive sleeve, fixed at the end of the shaft, on to the lower cross-piece, and push down firmly until it is fully engaged.
  - . Unscrew the other drive sleeve and slide it up the shaft. Again, make sure it is fully engaged into the upper cross-piece. Lock the drive sleeve by tightening screw against flat surface of shaft. Allen wrench is provided.
- Insert lug(s) at base of shaft covers into the space(s) provided in the lower shelf cover. By pulling together the 2 lugs in the center of the covers, the upper section is drawn up into place. Secure with bolt provided.

## III. REAR STORAGE SHELVES

- Start by mounting the feet or uprights on to each shelf. (I Page 6). There are 3 types :
  - a) Feet, for the base shelf.
  - b) Gallon uprights, for Gallon shelves.
  - c) Quart uprights, for Quart shelves.
- Mounting the shelves (J & K Page 6) :
  - : Start by mounting base shelf.
  - . Then mount the other shelves on top of each other, taking care to fit the correct size storage shelf behind each mix-shelf.
  - . Each shelf hooks on to the top of the back plate of its corresponding mix-shelf. The uprights are bolted into the storage shelf beneath.
- Check that the whole assembly is level.

# ASSEMBLY & INSTALLATION

## 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 must conform to all Federal, State, and local regulations, and should be carried out only by a fully qualified electrician.

Electrical Supply : 115 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. The unit will not operate until the timer has been set.
7. 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 mix-shelf drive belts. To adjust :

- use tension regulator 106 (see Page 14).

ANNUALLY : Check condition and tension of motor drive belt. Adjust belt by means of tension regulator 119 (see Page 14).

## 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.

# PARTS REPLACEMENT

## SPARE PARTS REPLACEMENT

- 1 - Drive cross-piece (101)
  - 1.1 - Remove the shaft cover.
  - 1.2 - Unscrew lower drive sleeve, push it up, and remove drive shaft.
  - 1.3 - Replace defective cross-piece, reinstall shaft and protection cover.
- 2 - Mechanical shelf belt (108), drive block (102), adjustable tension regulator (106), fixed belt roller (107), pulley (109 or 133), autolube ring (110).
  - 2.1 - To replace any of these parts, first remove the shaft cover (123), the shaft (124), and the slotted shelf of the mix-shelf involved  
NOTE :For the topmost shelf, remove the top cover and the drive unit.  
Slacken belt (108) by loosening adjustable tension regulator (106) and fixed belt rollers (107).
  - 2.2 - Mechanical shelf belt (108)
    - Remove the defective belt and install new one. Make sure that it is correctly positioned with regard to the adjustable tension regulator (106) and the fixed belt rollers (107).
    - Adjust the fixed belt rollers (107) to ensure correct belt tension.
  - 2.3 - Drive block (102)
    - Remove the shaft cover and shaft from the shelf immediately below the shelf involved.
    - Remove belt (108) and replace defective block.
  - 2.4 - Adjustable tension regulator (106)  
Simply replace
  - 2.5 - Fixed belt rollers (107)  
Unscrew to replace
  - 2.6 - Mechanical shelf pulley
    - Remove protective driving device cover.
    - Drive out pin (112) to release driving device.  
Replace pulley (109 or 133), and reinstall all parts in reverse order.
  - 2.7 - Autolube ring (110)
    - Remove protective driving device cover.
    - Drive out pin (112) to release driving device.
    - Remove ring, and reinstall all other parts in reverse order.
3. DRIVE BELT (114)
  - 3.1 - Remove header plate, then the motor module (Page 14-b) together with the control box, taking care not to crimp the cable.
  - 3.2 - Slacken drive belt by loosening tension regulator (119).  
Replace belt, and reinstall all parts in reverse order.

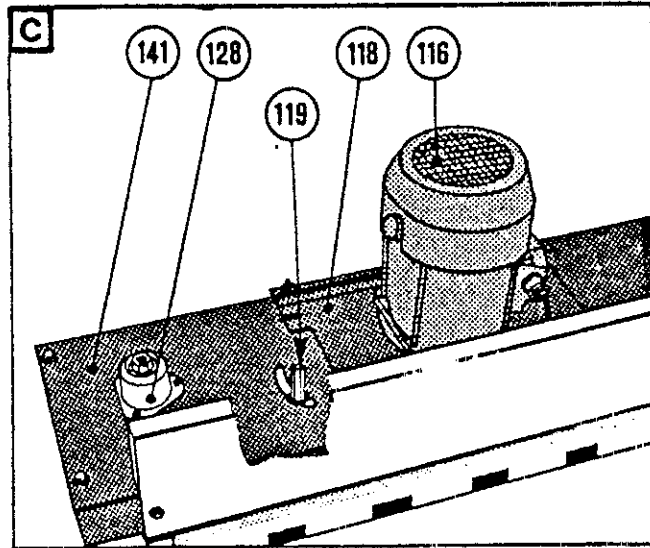
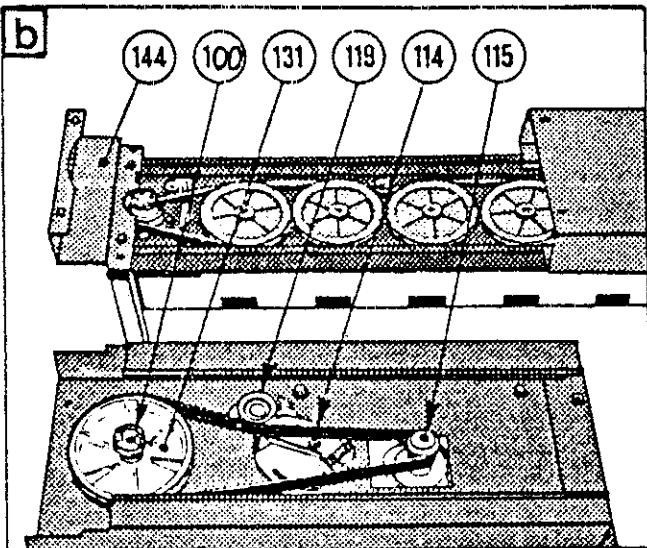
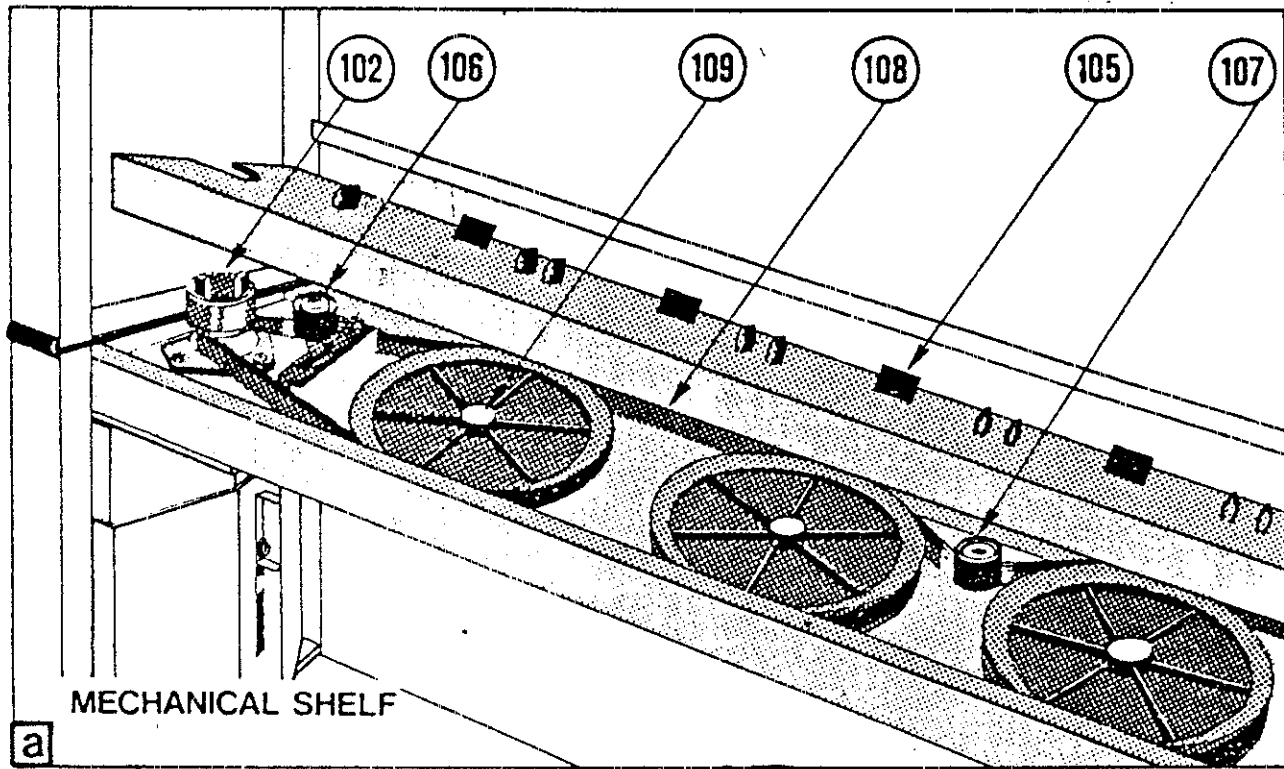
# PARTS LIST

Item	Description	Part Number
	<u>BASE KIT</u>	
1	Base Frame CME	15 39 00
2	Stabilizer feet kit : - left	15 57 01D
	- right	15 57 02D
3	Header plate	18 71 00
4	Top shelf	13 12 17
	<u>DRIVE UNIT</u>	
5	Motor assembly for details : see mechanical parts	
6	Mechanical control box, complete with cable	24 89 00
	- Cable only, with fittings (1340)	24 89 70
	- Control box bracket, with fittings	24 31 10D
	<u>MIX-SHELF : 16 CANS (US QUART)</u>	
7	Protective driving device cover	19 12 34
	- Modular stage : 16 cans	
8	Mechanical shelf (with fittings)	12 46 11
	- Modular stage : 16 cans	
9	Modular side panel (small cans) - left	11 27 03D
	- right	11 27 04D
10	Back plate CME	19 02 23
11	Slotted shelf	13 12 03
	- Modular stage : 16 cans	

# PARTS LIST

Item	Description	Part Number
	<u>MIX SHELF : 11 CANS (US GALLON)</u>	
12	Protective driving device cover - Modular stage : 11 cans	19 12 33
13	Mechanical shelf (with fittings) - Modular stage : 11 cans	12 45 11
14	Back plate CME	19 02 23
15	Modular side panel (large cans) - left - right	11 27 01D 11 27 02D
16	Slotted shelf - Modular stage : 11 cans	13 12 02
17	Plastic shelf spacers (set of 2)	04 20 06
	<u>US QUART STORAGE SHELF</u>	
18	Shelf	13 06 33D
19	Shelf uprights (quart) set of 2	11 29 18
	<u>US GALLON STORAGE SHELF</u>	
18	Shelf	13 06 33D
20	Shelf uprights (gallon) set of 2	11 29 18
	<u>BASE STORAGE SHELF</u>	
18	Shelf	13 06 33D
21	Base feet set of 2	11 29 12
22	QUART PLATFORM HEIGHT : 64 mm	21 01 06

# PARTS DIAGRAM

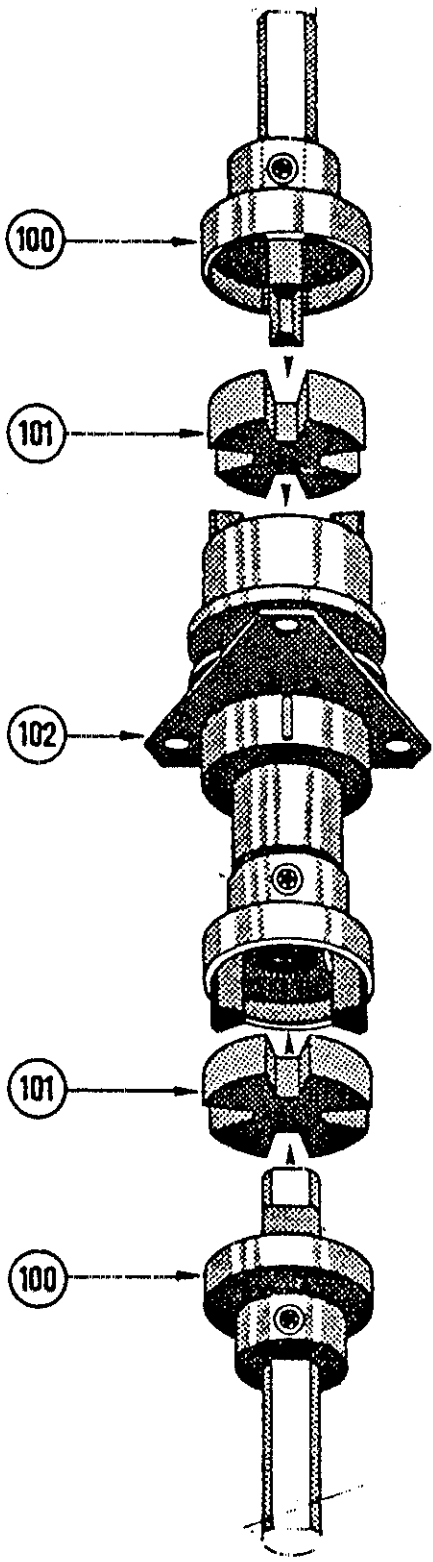


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# PARTS DIAGRAM

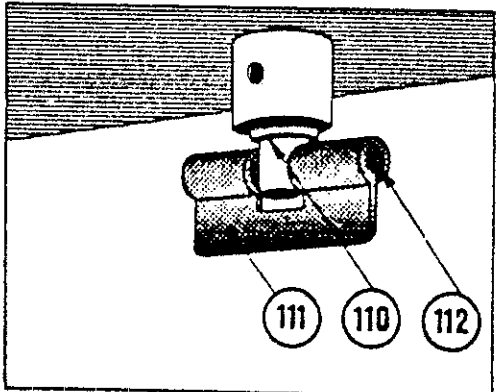
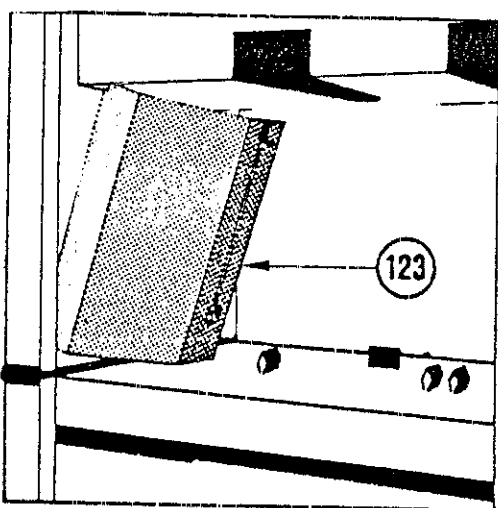
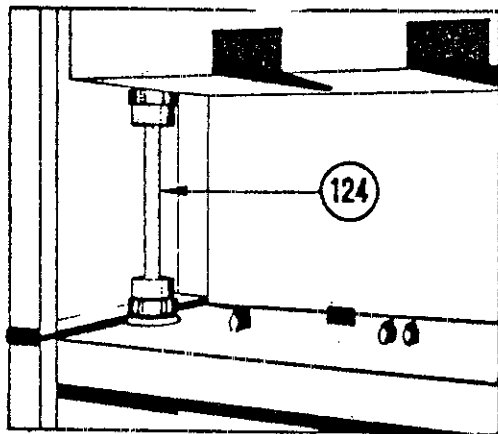
## FLEXIBLE DRIVE SYSTEM



DRIVE SHAFT

SHAFT COVER

DRIVING DEVICE



# PARTS LIST

Item	Description	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 22 00	
107	Fixed belt roller	04 01 05D	
108	Mechanical shelf drive belt 4450	03 01 39	
109	Mechanical shelf pulley Ø 150 mm	04 20 03	
	Mechanical shelf pulley Ø 126 mm	04 20 04	
110	Self lubricating ring BP25.C 12 x 15 x 12mm	03 04 01	
111	Driving device	08 05 00	
112	Driving device pin	03 03 01	
114	Motor belt L = 955 mm	03 01 56	
115	Motor pulley POLY V 33 with spacer	05 01 104D 05 01 131	
116	Explosion-proof single-phase motor 1 HP (with pulley) with built-in switch	06 01 70D	
	.. Silentblocs (with nuts)	03 02 03D	
	.. Ground wire	06 50 01	
118	Support bracket , .. for motor with flange	20 37 15	
119	Motor belt regulator	08 43 00	
123	Shaft cover (Gallon can stage)	19 08 00D	
	Shaft cover (Quart can stage)	19 08 10D	
124	Drive shaft 153 (Quart can stage)	29 2 153	
	Drive shaft 213 (gallon can stage)	29 2 213	

# PARTS LIST

Item	Description	No.	
128	Drive block CME with brace	08 41 00 05 01 93	
131	Driven pulley POLY V 165 (with screw)	05 01 80D	
141	Motor module shelf	20 37 00	
144	Support bracket : - left (motor module shelf)	20 37 03	
	- right (top shelf)	20 37 04	
	Bag of tools	08 50 01	

## 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 must 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 switch is locked in the OFF position (unit fully disconnected, 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.

# 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.