

FP7000 II

DIGITAL SCALE

OWNERS MANUAL



Fillon PaintMix Systems™

Thank you for choosing the **FP7000 II Digital Scale**. This is one of a new generation of digital scales which have been specially designed for use in the paint-mixing environment. They are built "Body Shop tough" and will give you years of dependable use.

IMPORTANT NOTICE

For your own safety, and in order to get the most out of your scale, please read the installation and operating instructions carefully before operating your scale.

HAZARDOUS LOCATION APPROVAL

Your **FP7000 II Digital Scale** is fully approved for safe use in the following Hazardous Locations:

USA: FMRC APPROVAL (CLASS I, DIVISION 1, GROUP D)

CANADA: CSA APPROVAL (CLASS I, DIVISION 2, GROUP D)

SERVICE

All repairs and service to the scale **MUST** be carried out, and duly certified, by the manufacturer, in order for the Approval to remain valid. Any tampering with the scale will automatically and immediately void the Approval and Warranty, and relieve the manufacturer of any liability for subsequent damage or injury caused to or by the product.

ELECTRICAL CONNECTION

All electrical devices for use in Hazardous Locations **MUST** be installed/disconnected by a fully qualified electrician, in accordance with the National Electrical Code (NEC in USA; CEC in Canada) and all local regulations.

Canadian Department of Communications

This digital apparatus does not exceed the Class A limits for radio noise emissions from a digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

LE PRESENT APPAREIL NUMERIQUE N'EMET PAS DE BRUITS RADIOELECTRIQUES DEPASSANT LES LIMITES APPLICABLES AUX APPAREILS NUMERIQUES DE LA CLASSE A PRESCRITES DANS LE REGLEMENT SUR LE BROUILLAGE RADIOELECTRIQUE EDICTE PAR LE MINISTRE DES COMMUNICATIONS DU CANADA

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THE EQUIPMENT

Your FP7000 II scale is shipped in a single carton, containing the following items (see opposite page):

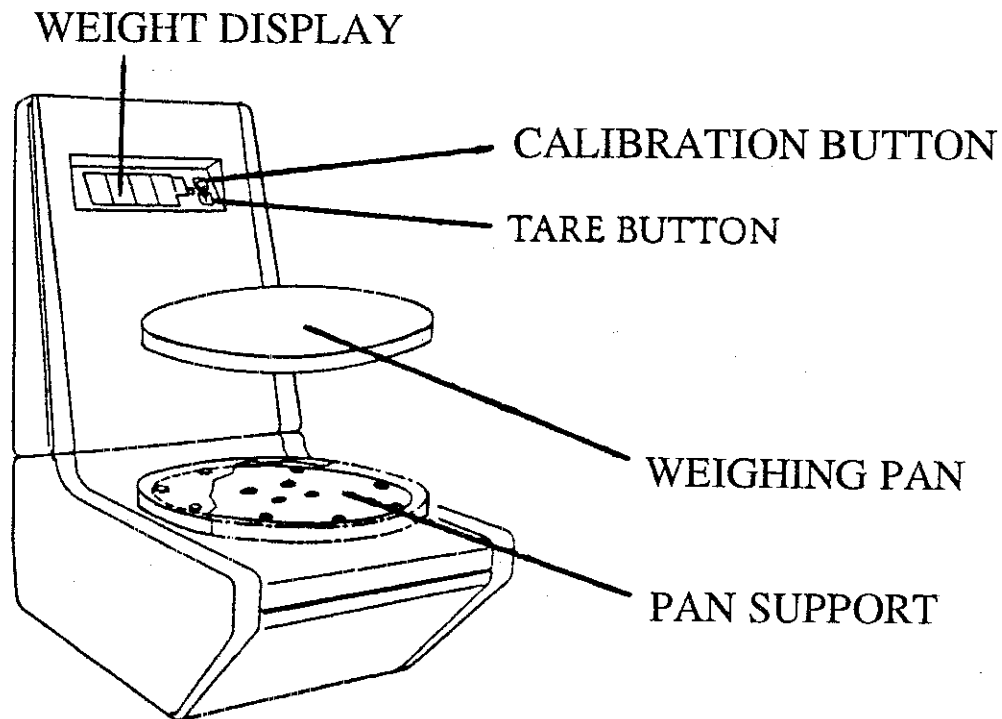
- Scale
- Weighing pan
- Product documentation (Owner's Manual, Warranty Card and Procedures, Returned Goods Card & EXTENDED WARRANTY APPLICATION)
- 1kg calibration weight (optional)
- Dust Covers (optional)

NOTE:

DO NOT DISCARD THE ORIGINAL PACKAGING, which *must* be used to return the scale for service and repair.

Be sure to complete the Warranty Card. Return one copy and keep a duplicate for your own records.

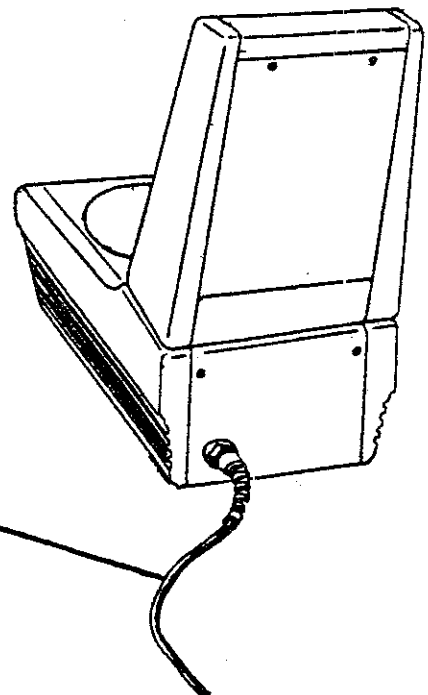
FP 7000 II DIGITAL SCALE



IMPORTANT NOTES:

- a. The scale must not be attached to any structure in the Hazardous location, Class I, Division 1, Group D for FMRC Approval.
- b. Tampering with or replacement of any system component will void Approval.
- c. Installation must be in accordance with I.S.A. RP 12.6.
- d. The AC mains cable must be terminated in accordance with National Electrical Code (115vac \pm 10% 50/60 Hz).

AC MAINS POWER CABLE



INSTALLATION

WARNING: This equipment has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when this equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case, the user will be required to correct the interference at his/her own expense.

1. First - Choose a suitable site for the scale, as far away as possible from sources of heat, vibration, and air currents.
2. Then - Install dust covers on base and tower of scale (optional). Adhesive tabs are provided to secure dust covers so that they do not interfere with the weighing pan. The dust cover on the base may have been installed at the factory. To replace see routine maintenance, page 7.
3. NEXT- POWER CONNECTION

IMPORTANT: Installation in Hazardous Location must be in accordance with diagram on page 13.

CAUTION: THE ELECTRICAL CONNECTIONS MUST CONFORM TO ALL FEDERAL, STATE AND LOCAL REGULATIONS. THE AC MAINS CONNECTION IS TO BE WIRED DIRECTLY TO THE AC MAINS SUPPLY AND ONLY BY A QUALIFIED ELECTRICIAN.

NOTE: A digital scale is an electrically sensitive instrument. We therefore recommend that it be protected by an independent circuit, and not run on the same circuit as equipment with large power requirements.

COMMISSIONING AND OPERATION

1. POWER

- a. Once the mains power is applied, the display will light up and an automatic test of all electronic functions will take place. The scale will display "HELLO" , followed by, "5", "4", "3", "2", "1".
- b. Upon successful completion of the test, the display will indicate: 0.o. Allow fifteen minutes for warm-up. If display is not 0.o, press the TARE button. If an Error Code is displayed (e.g. HHHH), see Troubleshooting. If scale will not TARE to zero (0.o), call Fillon PaintMix Systems at 1-800-777-1583.
- c. The display may be turned off if no weighing operation is to be performed. Press and hold down the TARE button for about 5 seconds. Weighing operations may be resumed by momentarily touching the TARE button.

2. CAPACITY AND UNITS

- a. The **FP7000 II** is designed for weighing in grams.
- b. Your scale can measure up to a maximum of 7kg (= 7000 grams), in increments of one tenth (1/10) of a gram.
- c. The large digits on the display represent whole units of one gram. The last (smaller) digit represents tenths of a gram.

3. CALIBRATION

To ensure accurate results, all precision scales should be calibrated regularly, and especially after new installation or relocation.

Failure to calibrate will not result in bad mixes, but volumes mixed may not be correct.,

- a. After the initial scale warm-up, press the TARE button to obtain a zero reading: 0.o.
- b. The scale has the ability to determine what size calibration weight is being used, as long as it is in 1Kg increments (i.e. 1, 2, 3, 4, 5, 6 and 7kg weights).

Example: Place a 1kg weight in the center of the weighing pan. The display should read: 1000.o

COMMISIONING AND OPERATION

(Continued)

If not, press "CAL" button and hold it down for two seconds. The display will read: "ACAL" - indicating that the scale is in calibration mode. After approximately two seconds, display will change to read 1kg: 1000.o. or whatever the value of the weight used (a 3kg calibration weight will read 3000.o, a 5kg calibration weight, 5000.o).

- c. Remove weight; the reading should return to zero: 0.o. The scale is now ready for weighing operations.
- d. If the calibration process does not function properly, the display will read (noCAL). Remove the weight and press TARE button to return to zero: 0.o. Start over using a whole kg weight (1Kg, 2Kg, 3Kg, etc.)

4. TARE BUTTON

- a. By pressing the Tare button, the reading will go to zero (0.o).
- b. To weigh paint:
 - Place empty can on weighing pan
 - Press TARE button to obtain 0.o
 - Pour paint
 - If you wish to separately weigh each component of your paint mix, simply press the TARE button before each component.
 - Maximum TARE range: 7kg

NOTICE: To prevent damage to the weighing mechanism, NEVER secure a lid onto a paint can while it is on the weighing pan.

5. FLASHING DISPLAY

A flashing display means that a negative number (less than zero) is being indicated. If this happens, verify that weighing pan is properly positioned and unobstructed. Press the TARE button to return to 0.o.

6. ELECTRICAL DISTURBANCES

All electrical devices are susceptible to interferences from changes in the power line (i.e. lightning, linespikes and surges, etc.) If your display does not function normally and you suspect such an occurrence, turn the power off, wait 10 seconds, and then turn the power back on again. The scale will go through its normal start-up procedure.

ROUTINE MAINTENANCE

DAILY

1. Clean weighing pan thoroughly (top, bottom and edges) to remove any materials which may have accumulated.
2. Similarly, thoroughly clean the area immediately beneath the weighing pan.
3. Paint splashes may be safely removed from the face of the scale and from the display. Both are covered with a solvent - and abrasion - resistant material. IMPORTANT: DO NOT USE WATER to clean the scale. Use a mild thinner.

MONTHLY

1. Calibrate scale
2. For safety reasons, check that the AC mains cable has no visible signs of damage.

CLEANING DUST COVERS

To avoid the build-up of static electricity, which may interfere with the scale operation, it is important to clean dust covers -

- a. in a non-Hazardous location, and
- b. with a **grounded** damp cloth

When re-installing dust covers, check that there is no interference with the weighing pan.

Replace dust covers as soon as they become deformed or damaged.

NOTICE: To replace the base dust cover: With a 9/64th inch Hex (Allen) key, remove the 4 screws securing the pan support. Next, remove and replace the dust cover. Lastly, re-secure the pan support.

TROUBLESHOOTING

SERVICE CODES

The following service codes may appear on the display and are provided to alert you to some of the problems commonly met when using digital scales.

- bUSY This indicates that the scale can not produce a stable reading. Check for excessive drafts or vibration.
- HHHH The 7kg capacity has been exceeded.
- LLLL a. Scale may have been switched on with no weighing pan. Set pan on scale, and press TARE button.
b. Interference beneath pan. Make sure area beneath pan is clean and that dust cover is not touching the pan
- noCAL The calibration cannot proceed. Refer to "CALIBRATION" for the right procedure.

PROBLEM

REMEDY

NO LED READ-OUT

- a. Press and release the TARE button. The read-out should appear.
- b. Make sure AC mains power is being supplied to the scale.
- c. Turn the AC power off for 10 seconds, then turn it back on.
- d. If still no read-out, call Fillon PaintMix Systems at: 1-800-777-1583.

CALIBRATION PROBLEM

- a. Is calibration weight being used undamaged and in whole increments of 1Kg to 7Kg?
- b. Is there interference beneath weighing pan? If so, clear.
- c. Call Fillon PaintMix Systems at: 1-800-777-1583.

FLASHING DISPLAY

A flashing display means that a negative number (less than zero) is being indicated. If this happens, verify that weighing pan is properly positioned and unobstructed. Press TARE button to return to 0.0.

SERVICE AND REPAIRS

1. **IMPORTANT:** All repairs and service to the scale **MUST** be carried out, and duly certified, by the manufacturer in order for the Approval to remain valid. Any tampering with the scale will automatically and immediately void the Approval and Warranty, and relieve the manufacturer of any liability for subsequent damage or injury caused to or by the product.
2. **CAUTION:** All electrical devices for use in Hazardous Locations **MUST** be installed/disconnected by a fully qualified electrician , in accordance with the National Electrical Code (NEC in USA;CEC in Canada) and all local regulations.
3. If you have any problem with your scale, first consult the TROUBLE-SHOOTING chart on page 8.

If your scale still does not operate correctly:

FIRST - Gather the following information

- Model No (FP7000 II)
- Serial Number (Scale)
- Date of installation
- Name of supplier

THEN - Call Fillon PaintMix Systems Toll Free Service Desk at 1-800-777-1583 (9a.m. - 4:30 p.m. EST)

4. You may be asked to return goods for inspection or repair. If so, you should follow the procedure detailed below.

NOTE: DO NOT RETURN goods unless requested to do so by Fillon PaintMix Systems (a Return Authorization - RA - Number will be issued).

RETURNED GOODS PROCEDURE

1. In order to return goods for servicing, first call Fillon PaintMix Systems at 1-800-777-1583 to obtain an authorization (RA) number.
2. Enter full details on the "RA" tag included with your scale.
3. Use the original packaging to ship the scale. Attach the hard copy of the "RA" tag to the scale. Keep the paper copy for your records.
4. Ship scale pre-paid (UPS Ground) and adequately insured. (\$1000 min.). All repaired goods will be returned freight pre-paid and insured.

IMPORTANT: RETURN AUTHORIZATION MUST **ALWAYS** BE OBTAINED FROM THE MANUFACTURER BEFORE GOODS ARE RETURNED.

SPECIFICATIONS

Weighing Range	0-7000 Grams (7kg)
Increments	0.1g (tenth of a gram)
Tare Range	0-7000g
Stabilization Time	<1.5 seconds
Display Update Rate.....	6 times/sec.
Operating Temperature.....	0-40°C (32-105°F)
Weighing Pan	7.5 inches in diameter
Overall Scale Dimensions	Width: 8.25 inches Depth: 12 inches Height: 14.5 inches
Net Weight of Scale	24.4 LBS
Power Requirements	115V ± 10% 50/60Hz
Power Consumption.....	2.5 Watts

APPROVAL FOR HAZARDOUS LOCATIONS:

USA: FACTORY MUTUAL RESEARCH CORPORATION
(CLASS I, DIVISION 1, GROUP D FOR HAZARDOUS
LOCATION USE)

CANADA: CSA (CLASS I, DIVISION 2, GROUP D FOR
HAZARDOUS LOCATION USE)

THIS EQUIPMENT IS SUITABLE FOR USE IN CLASS I,
DIVISION 2, GROUP D OR NON-HAZARDOUS LOCA-
TIONS ONLY.

WARNING - EXPLOSION HAZARD - SUBSTITUTIONS
OF COMPONENTS MAY IMPAIR SUITABILITY FOR
CLASS I, DIVISION 2.

AVERTISSEMENT - RISQUE D'EXPLOSION - LA SUB-
STITUTION DE COMPOSANTS PEUT RENDRE CE
MATERIEL INACCEPTABLE POUR LES EMPLACE-
MENTS DE CLASSE I, DIVISION 2.

WARNING - EXPLOSION HAZARD - DO NOT DISCON-
NECT EQUIPMENT UNLESS POWER HAS BEEN
SWITCHED OFF OR THE AREA IS KNOWN TO BE
NON-HAZARDOUS. ADVERTISEMENT-RISQUE D'EX-
PLOSION. AVANT DE DECONNECTER L'EQUIPMENT,
COUPER LE COURANT OU S' ASSURER QUE L'EM-
PLACEMENT EST DESIGNE NON DANGEREUX.

SUMMARY OF CAUTIONS

1. **IMPORTANT:** All repairs and service to the scale **MUST** be carried out, and duly certified, by the Manufacturer, in order for the Approval to remain valid. Any tampering with the scale will automatically and immediately void the Approval and Warranty, and relieve the manufacturer of any liability for subsequent damage or injury caused to or by the product. For further information please contact Fillon PaintMix Systems 1-800-777-1583.
2. **DO NOT DISCARD THE ORIGINAL PACKAGING.** Always use the original carton for shipment or movement of the scale to a new location.
3. **WARNING:** ELECTRICAL CONNECTIONS MUST CONFORM TO ALL FEDERAL, STATE, AND LOCAL REGULATIONS. THE AC MAINS CONNECTION IS TO BE WIRED DIRECTLY TO THE AC MAINS SUPPLY AND **ONLY BY A QUALIFIED ELECTRICIAN.**
4. Do not locate the scale near sources of heat, vibration or liquid spills.
5. **NOTICE:** To prevent damage to the weighing mechanism, **NEVER** secure a lid onto a paint can while it is on the weighing pan.
6. Do not use water to clean the scale. Use a mild thinner.
7. Do not clean dust covers in Hazardous Locations.
8. Clean dust covers with grounded cloth.
9. **IMPORTANT:** RETURN AUTHORIZATION MUST ALWAYS BE OBTAINED FROM THE MANUFACTURER BEFORE GOODS ARE RETURNED.
10. **WARNING - EXPLOSION HAZARD - DO NOT DISCONNECT EQUIPMENT UNLESS POWER HAS BEEN SWITCHED OFF OR THE AREA IS KNOWN TO BE NON-HAZARDOUS.**

STANDARD WARRANTY - FP7000 II

Fillon Pichon USA Inc. (hereafter called Fillon), warrants each new scale to be free from defects in materials and workmanship.

Fillon will replace and/or repair any part of the scale which it determines is defective. The Warranty is valid for a period of 24 months from date of first installation, not to exceed 30 months from date of shipment from the manufacturer.

Not included under the terms of this Warranty are parts which are damaged as a result of accident, misuse, or abuse. Damage due to lightning, power surges, normal wear and tear, modification, or tampering is not covered by the Warranty.

All warranty claims must be made by first contacting FILLON at 1-800-777-1583 (9 a.m. to 4:30 p.m. EST, Monday through Friday). Under no circumstances should the scale be returned to Fillon or its appointed Service Agents for inspection, replacement and/or repair without the express consent of Fillon. This consent will take the form of a Return Authorization (RA) number.

All repairs and service to the scale must be carried out and duly certified by the manufacturer, in order for the Warranty and Approval (FMRC and CSA) to remain valid. Any tampering with the scale will automatically and immediately void the Warranty and the Approval and relieve the manufacturer of any liability for subsequent damage caused to or by the product.

In no event will Fillon be liable to any person or Corporation for any damages, including any incidental or consequential damages, expenses, lost profits, lost savings, or other damages arising out of the use of or inability to use the scale.

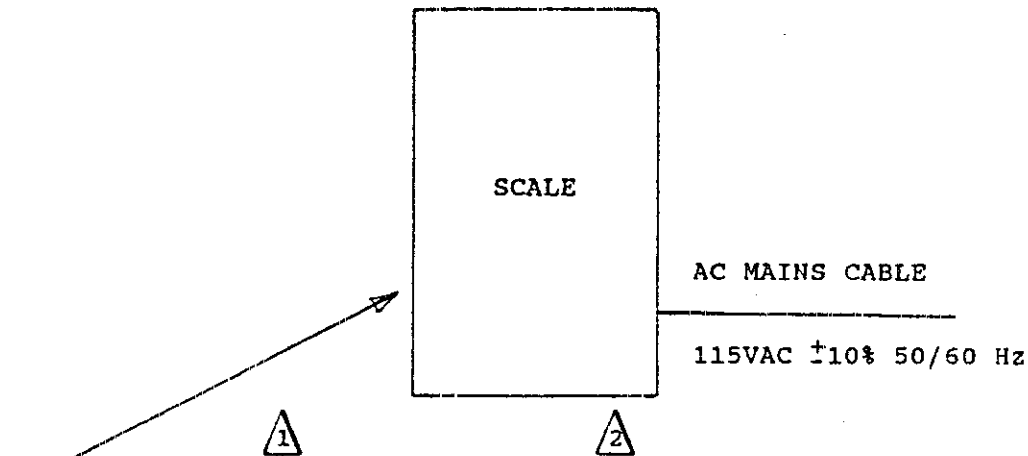
In Case of Returned Goods:

- a. The manufacturer is not responsible for AC mains disconnect or reconnect costs.
- b. All goods must be properly packaged in original packaging. Manufacturer is not liable for damage due to inadequate packaging.
- c. The RA number must be obtained prior to shipping. Freight must be prepaid and the scale insured (\$1,000 minimum).

To safeguard your Warranty - please fill out the Warranty card included with your scale and return it in the envelope provided.

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL

**ELECTRICAL INSTALLATION
HAZARDOUS LOCATIONS - CLASS I, DIVISION 1, GROUP D (USA)**




MUST NOT BE PERMANENTLY ATTACHED TO ANY STRUCTURE IN HAZARDOUS LOCATION

NOTES:

TAMPERING WITH OR REPLACEMENT OF ANY SYSTEM COMPONENT WILL VOID APPROVAL

1. INSTALLATION MUST BE IN ACCORDANCE WITH I.S.A. RP 12.6
2. MUST BE TERMINATED IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE

TITLE		 Filon PaintMix Systems™ 70 Commercial Way East Providence RI 02914				
DRAWN	<i>S F IMMS</i>	DATE	<i>9-19-91</i>	SIZE	DRAWING NUMBER	ISSUE
CHECKED	<i>S F IMMS</i>	DATE	<i>9-19-91</i>	A	7000-92	1
APPROVED	<i>[Signature]</i>	DATE	<i>9-19-91</i>			