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WATER MANAGEMENT PROJECT

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for Geographic Water Supply

**WATER METER REPAIR
FLOW - CHART
A JOB-AID**

BY

HAROLD NURSE

METER REPAIR SUPERVISOR

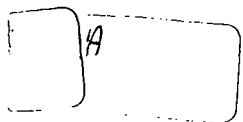
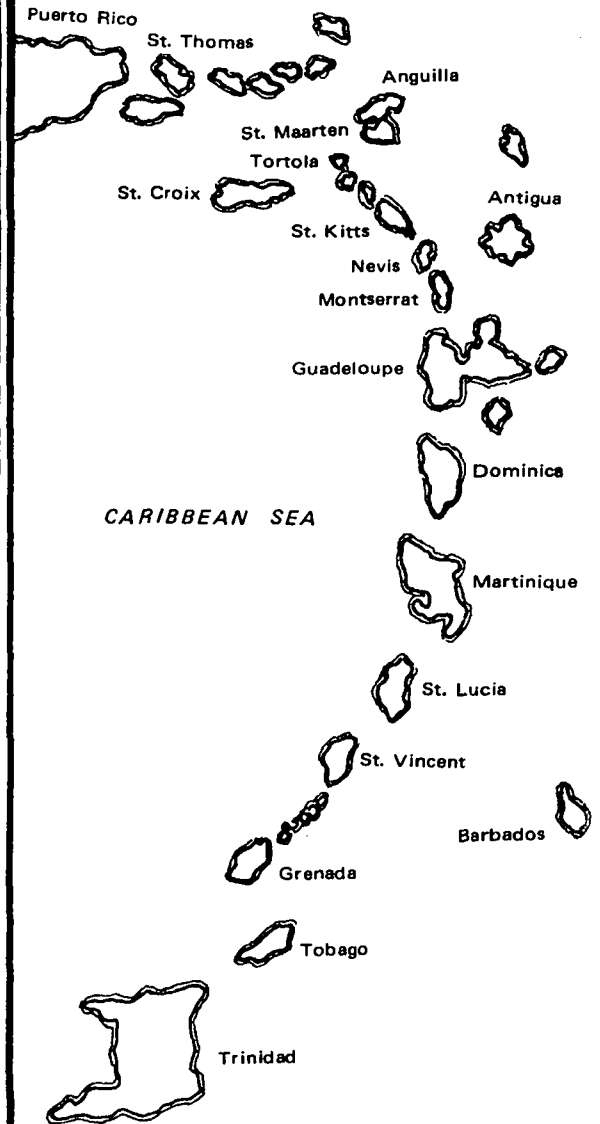
BARBADOS WATERWORKS DEPARTMENT

A JOINT-VENTURE PROJECT OF THE GOVERNMENTS OF:

**ANGUILLA, ANTIGUA, BRITISH VIRGIN ISLANDS, BARBADOS,
DOMINICA, GRENADA, MONTSERRAT, ST. KITTS/NEVIS,
ST. LUCIA, ST. VINCENT, CANADA**

AND

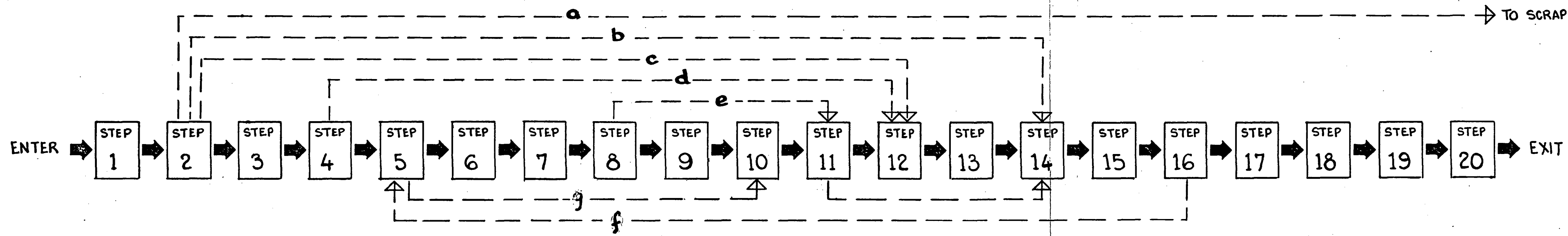
THE PAN AMERICAN HEALTH ORGANIZATION



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WATER METER REPAIR FLOW-CHART

A JOB AID



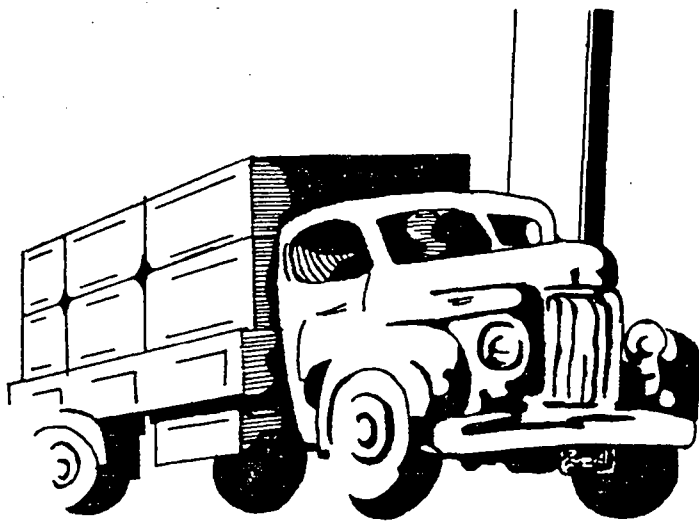
CODE ALTERNATE ROUTING

- a** [2] TO 'SCRAP' - WHEN METER IS OUT-DATED OR DAMAGED SO EXTENSIVELY IT IS TOO COSTLY TO REPAIR.
- b** [2] TO [14] - WHEN METER HAS BEEN REMOVED AT CUSTOMER'S OR DEPARTMENT'S REQUEST AND IS TO BE TESTED FOR HIGH READINGS etc.
- c** [2] TO [12] - WHEN METER WHICH HAS BEEN REMOVED IS NEW, HAS A LOW READING, OR HAS BEEN REMOVED IN ERROR.

CODE ALTERNATE ROUTING

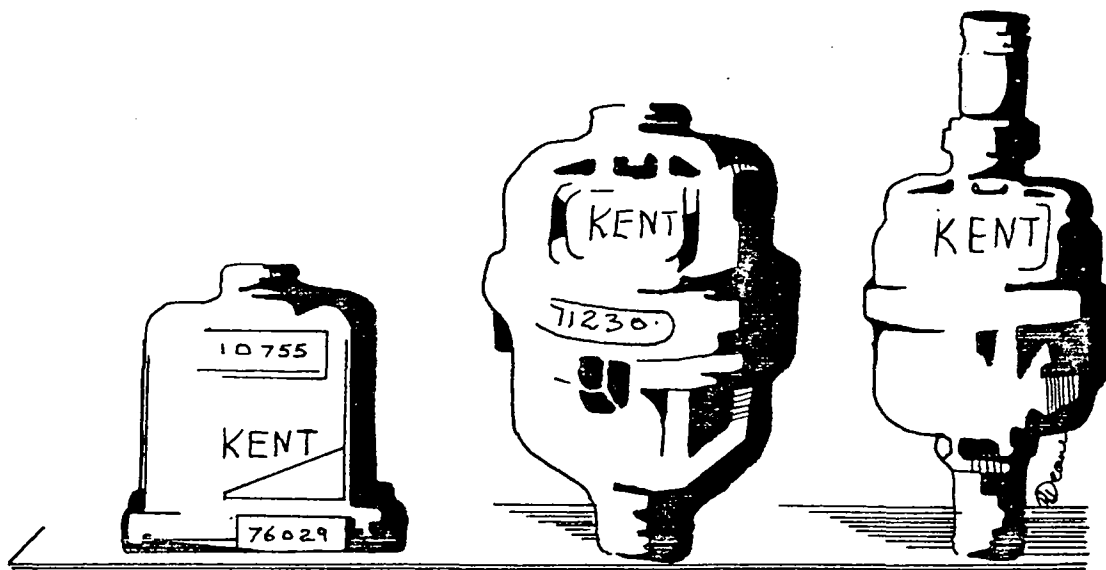
- d** [4] TO [12] - AFTER BODY OF METER IS CLEANED AND PARTS ARE NECESSARY AND READING IS LOW.
- e** [8] TO [11] - IF NO NEW PARTS ARE NEEDED.
- f** [16] TO [5] - TO DETERMINE DEFECTIVE PART(S).
- g** [5] TO [10] - TO REPLACE DEFECTIVE PART(S).

STEP 1- METER ARRIVES AT REPAIR SHOP



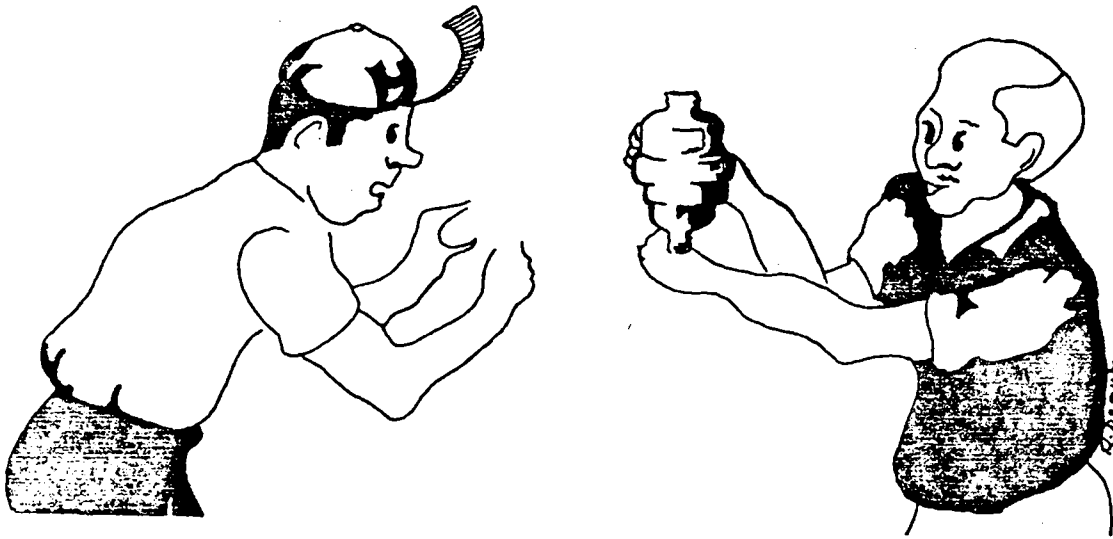
TRUCK ARRIVES WITH BOXES
OF METERS TO BE REPAIRED.

STEP 2 - METER GOES TO STORAGE AREA 'A'



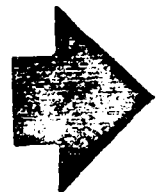
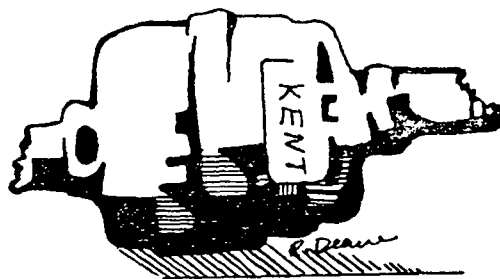
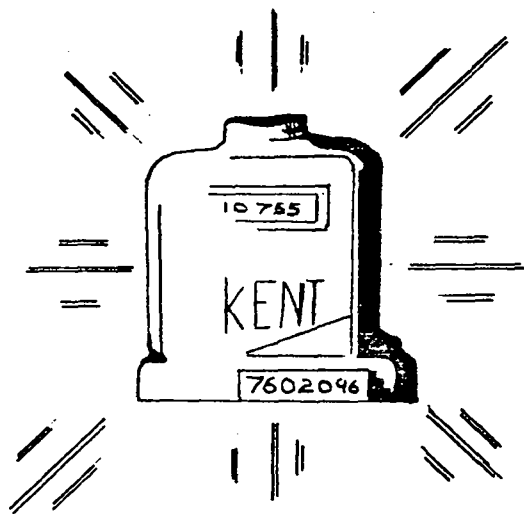
PACK IN RACKS ACCORDING
TO SIZE AND BRAND OF
THE METER.

STEP 3 - METER LEAVES STORAGE FOR REPAIRS



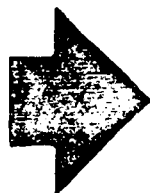
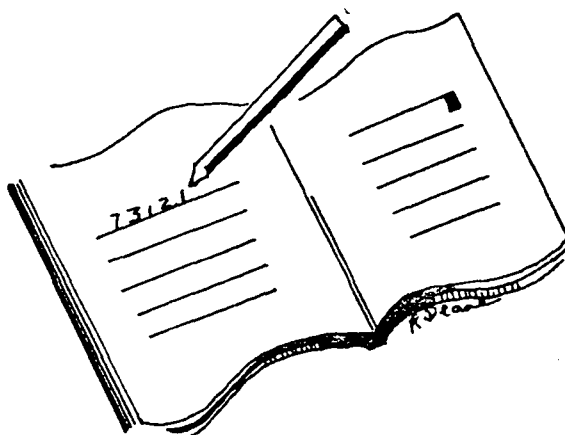
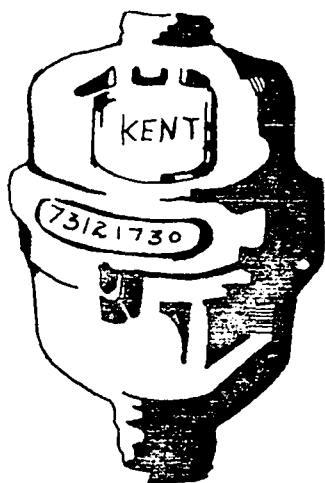
SUPERVISOR DISTRIBUTES
METERS TO BE REPAIRED .

STEP 4. OUTER CASING OF METER CLEANED AND DEFECTS VERIFIED



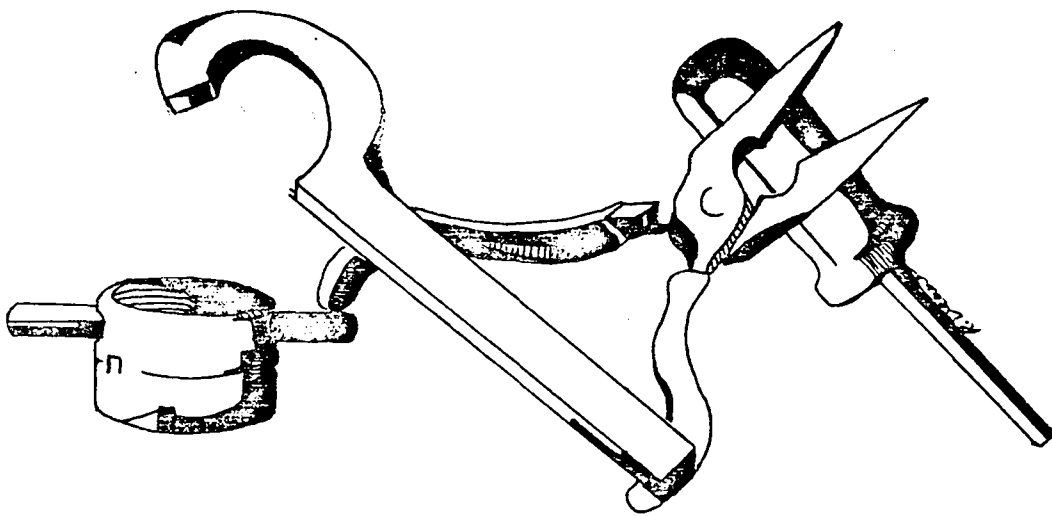
INSPECT METER FOR VISIBLE
DAMAGE FOR WHICH THE
CUSTOMER MAY HAVE TO
PAY.

STEP 5. METER IS ASSIGNED TO METER - REPAIRER



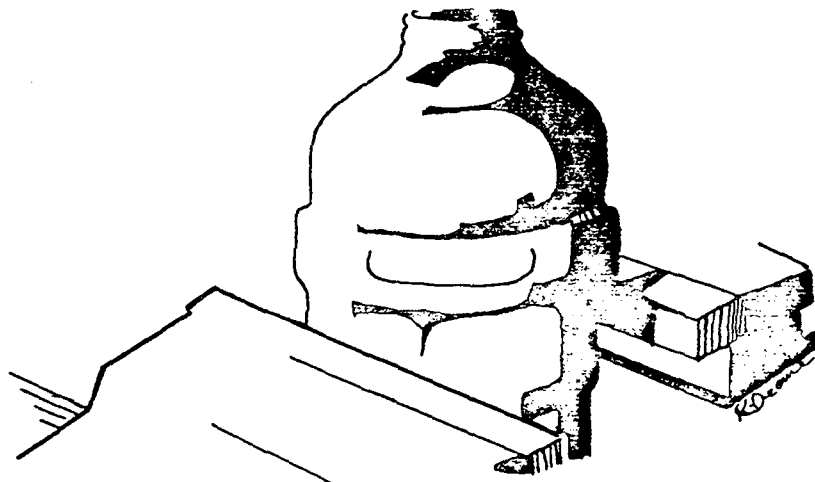
WRITE SIZES, NUMBERS, READING
AND DAMAGE TO METER IN NOTE
BOOK. SUPERVISOR COPIES THE
SAME INFORMATION INTO LOG
BOOK IN CASE OF ENQUIRIES
AT A LATER DATE.

STEP 6. METER REPAIR TOOL REQUIRE- MENTS ASSESSED



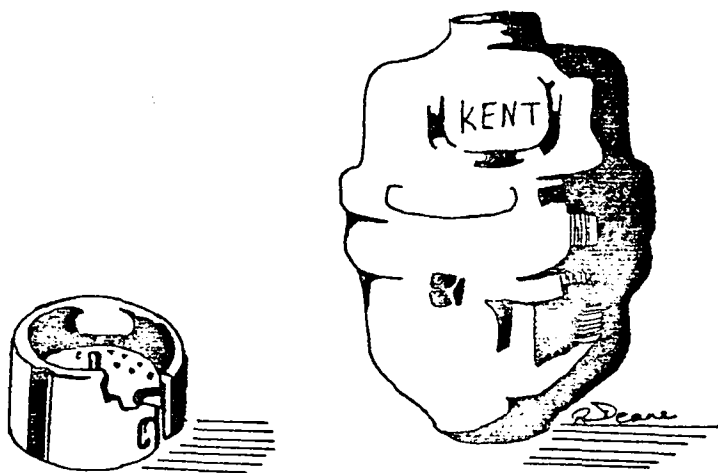
SELECT TOOLS TO SUIT
METER BEING REPAIRED.

STEP 7. METER'S OUTER CASING INSPECTED AND METER DISMANTLED



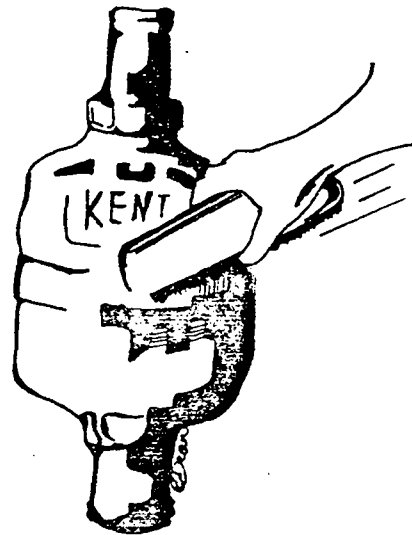
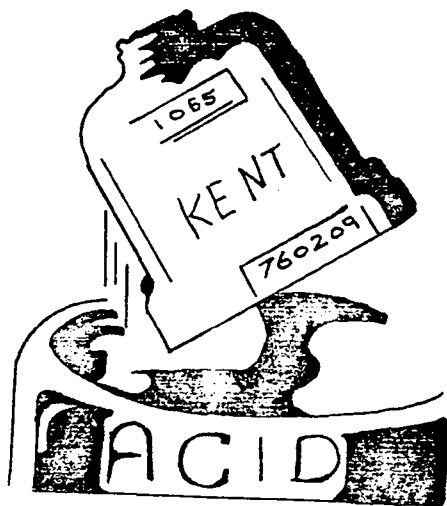
SECURE END OF METER IN
BENCH VICE BY GRIPPING
THE FLATS ON THE BODY.
CAUTION. DO NOT OVERTIGHTEN

STEP 8 - METER INSPECTED FOR DE- FECTIVE MECHANICAL PARTS



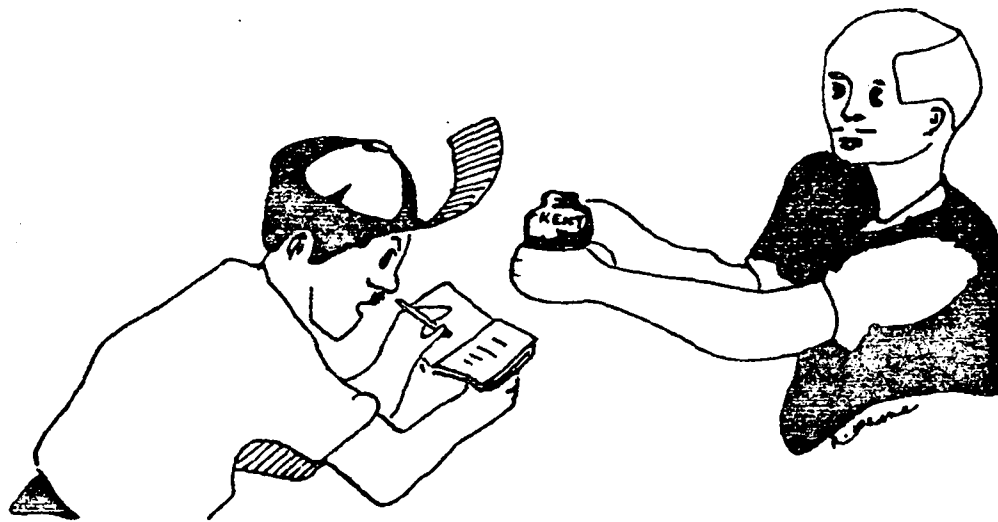
CHECK FOR BROKEN OR
DAMAGED PARTS.

STEP 9. METER PARTS CLEANED



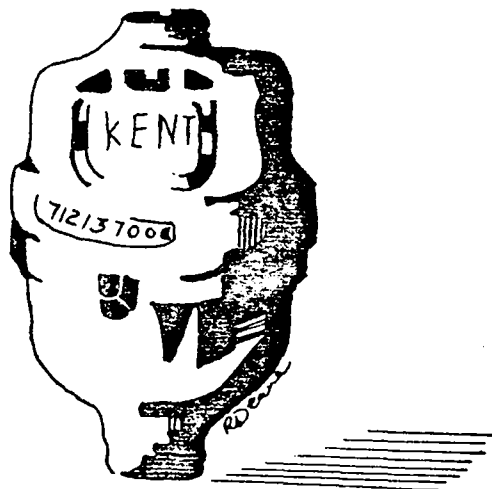
DIP IN ACID BATH, THEN
SCRUB WITH STEEL BRUSH.
WHEN CLEAN DIP IN WATER.

STEP 10- DAMAGED OR DEFECTIVE PARTS PROCURED AND RE- PLACED



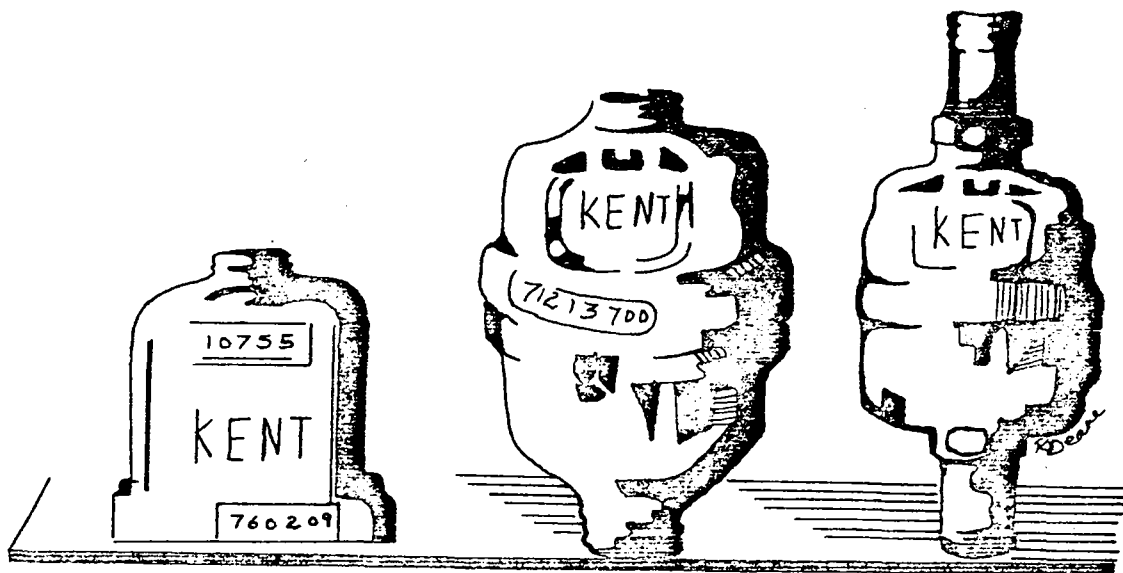
INSPECTION OF OLD PARTS BY
SUPERVISOR. WRITE ORDERS
FOR PARTS TO BE REPLACED.
ORDERS APPROVED BY
SUPERVISOR.

STEP 11. METER REASSEMBLED



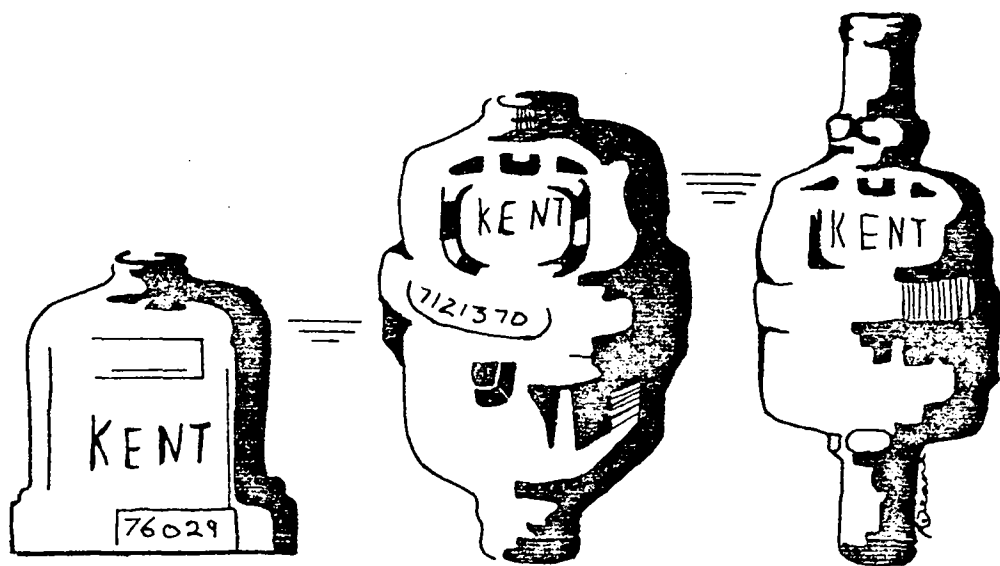
ENSURE THAT ALL PARTS
ARE PERFECTLY CLEAN AND
FREE FROM GRIT BEFORE
REPLACING SAME.

STEP 12 - METER GOES TO STORAGE 'B'



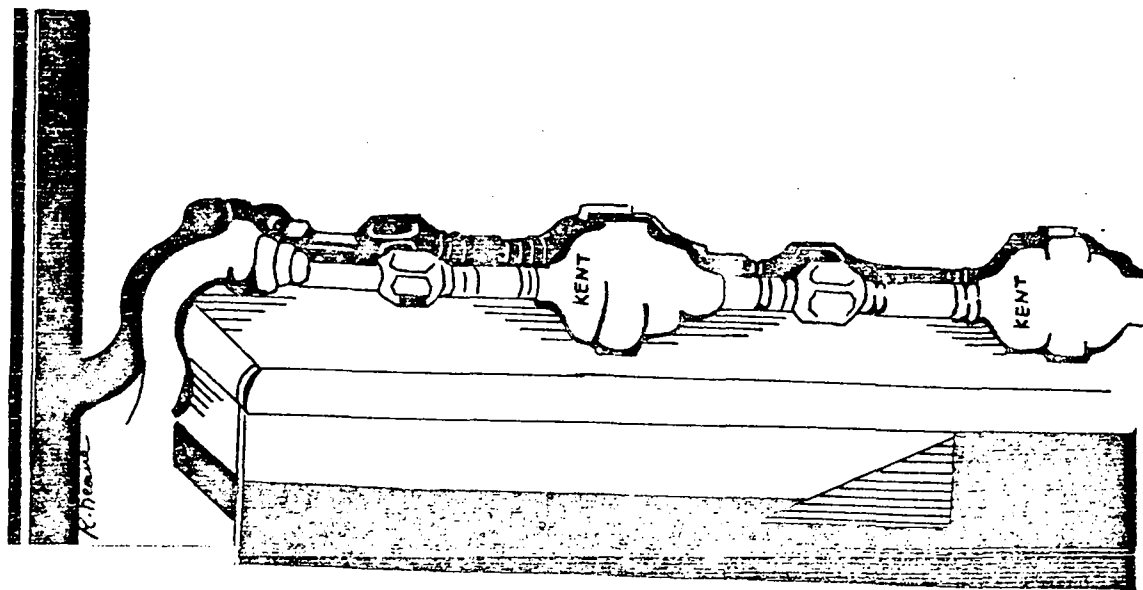
PACK ACCORDING TO SIZE
AND BRAND ON RACKS.

STEP 13: METER TAKEN FROM STORAGE



SIZES AND QUANTITY
TESTED ACCORDING TO THE
BRAND.

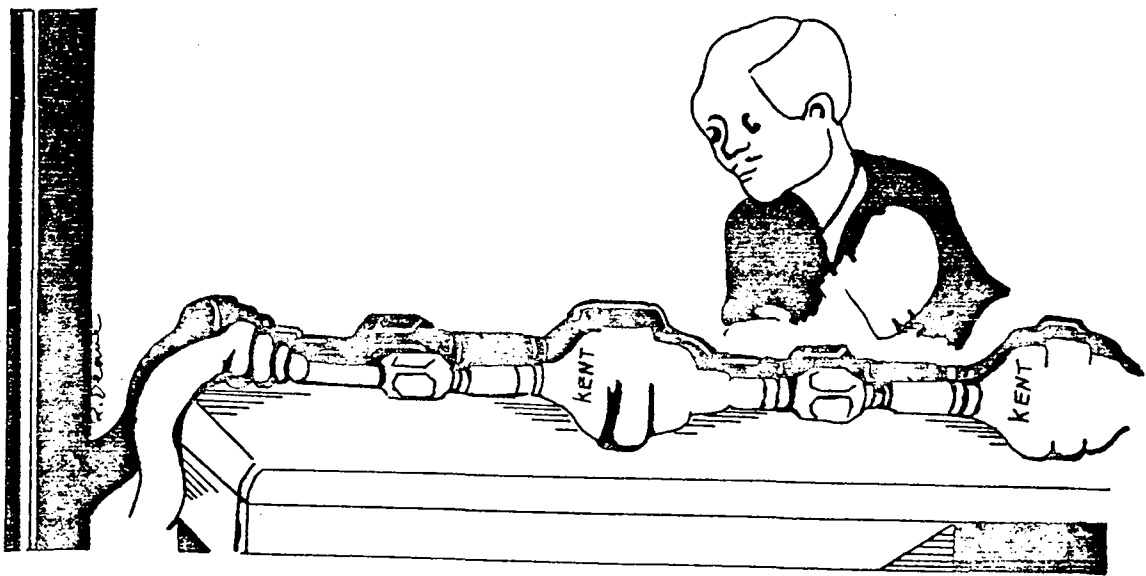
STEP 14- METER IS CONNECTED FOR TESTING



WITH LINING FOR IRON PIPE,
SOCKETS AND CAP NUTS WITH
LEATHER WASHERS ACCORD-
ING TO SIZE.

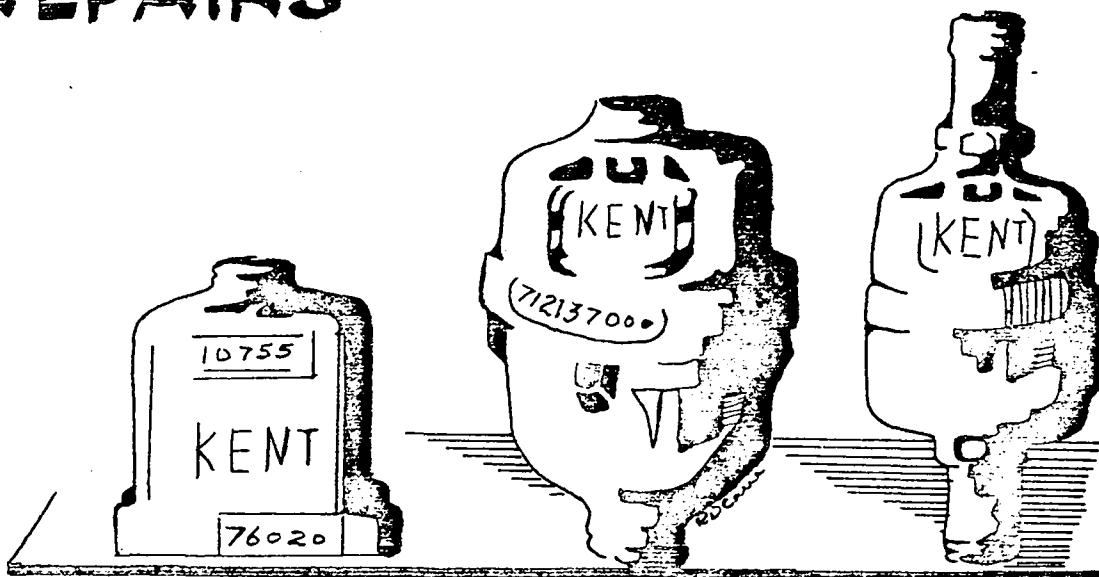
CAUTION. DO NOT OVERTIGHTEN

STEP 15' METER IS TESTED



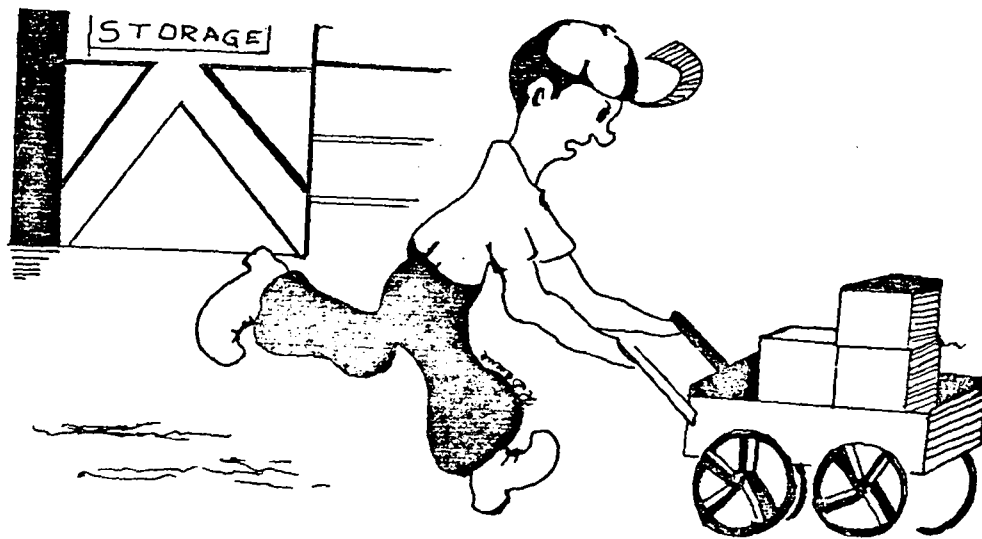
CHECK FOR LEAKS .
CALCULATE PER CENT ERROR
TO DETERMINE IF WITHIN
TOLERANCE LIMITS THEN
DISCONNECT .

**STEP 16 - METER
GOES TO STORAGE 'C'
OR RETURNS TO [5] FOR
REPAIRS**



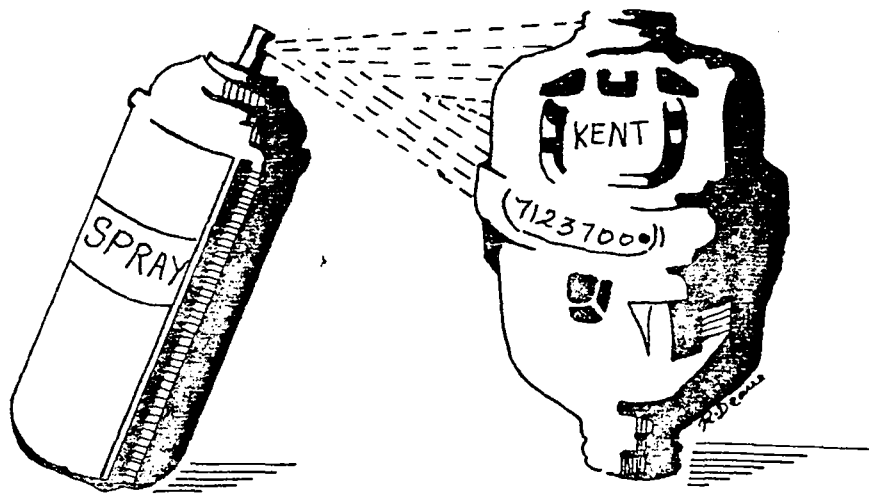
**STORED ACCORDING TO
SIZE FOR PAINTING, OR
RETURNED FOR FURTHER
REPAIRS AND CHECKS.**

STEP 17 - METER TAKEN FROM STORAGE "C"



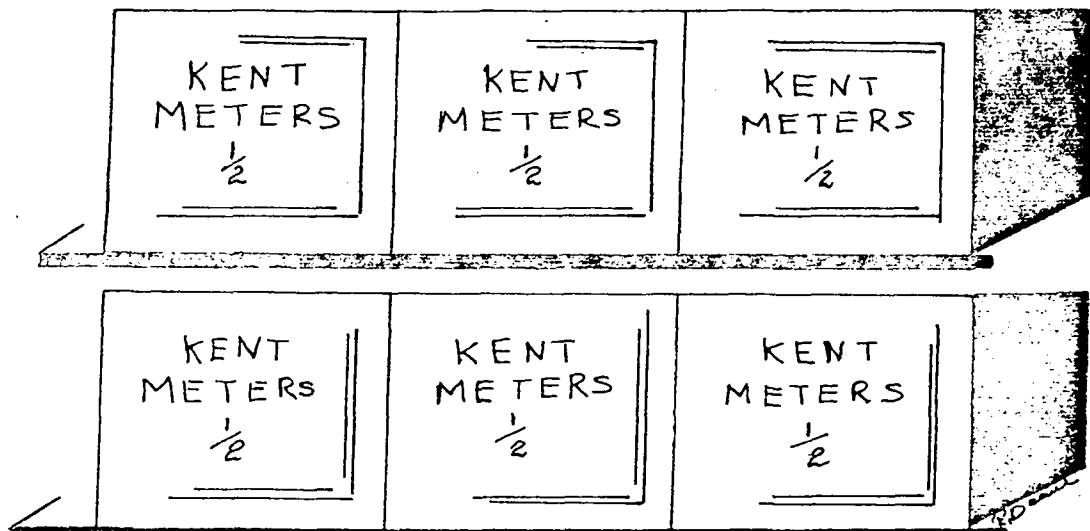
CHECKED AND PACKED IN
BOXES ACCORDING TO SIZES
AND BRANDS BY PORTER.

STEP 18' METER GOES TO PAINT SHOP



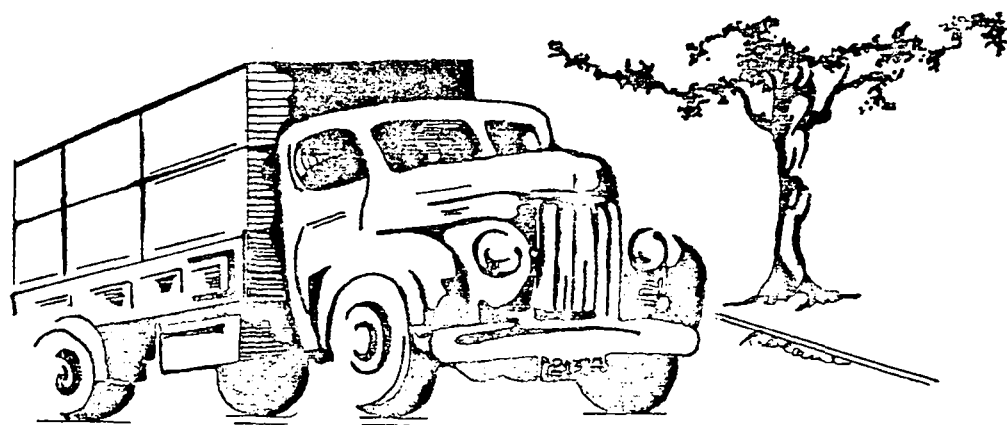
METERS ASSIGNED TO PORTER.
PAINTER SPRAYS METERS
THEN CLEANS GLASS.

STEP 19. METER GOES TO STORAGE 'D'



PACK IN BOXES PROVIDED.
LABEL THE SIZE AND
BRAND NAME.

STEP 20 - METER DISTRIBUTED TO HEAD-QUARTERS



METER IS DELIVERED UPON
REQUEST BY WRITTEN ORDER
STATING SIZE AND BRAND
NEEDED .