

Copy of Mechanism Spec Received from

ILLEGIB

CONFIDENTIAL**10. Packaging and Packing****10.1 Unit Package Components**

- 10.1.1 Clockwork Delay, 21-Day, including cocking device _____
- 10.1.2 Instruction Sheet _____
- 10.1.3 Can, round, tear-strip MIL-C-1243, Type 3
- 10.1.4 Special adapter, aluminum _____
- 10.1.5 Primer, standard coupling base, with plastic JAN-B-268; QQ-2-363;
or US Army 57-93-2
- 10.1.6 Foil, aluminum MIL-A-148A
- 10.1.7 Tape, adhesive, pressure sensitive JAN-P-127
- 10.1.8 Nut, hexagonal, steel _____
- 10.1.9 Washer, flat, steel _____
- 10.1.10 Cushioning disc, flat, corrugated fiberboard JAN-P-108
- 10.1.11 Cushioning Disc, "doughnut," corrugated
fiberboard JAN-P-108
- 10.1.12 Liner, cushioning, single-faced corrugated
fiberboard _____
- 10.1.13 Solder, 50-50 tin-lead _____
- 10.1.14 Gas, nitrogen, oil pumped _____

10.2 Description of Unit Package Components

- 10.2.1 The Clockwork Delay, 21-Day, shall be as supplied by the Contracting Authority, and shall include a cocking device, safety screw (marked "BLIND") and an arming screw (Marked "SHARP").
- 10.2.2 The Instruction Sheet shall be as supplied by the Contracting Authority and shall be enclosed in a heat-sealed plastic protective envelope.
- 10.2.3 The can, round, tear-strip, shall be in general accordance with Specification MIL-C-1243, Type 3, and shall have the following

atures and dimensions

CONFIDENTIAL

- 10.2.3.1 Size: 3-3/4" I.D. x 9-3/8" net I.H. (approx.)
9-5/8" OAH)
- 10.2.3.2 Stock: Can body and end closures shall be of .015"
electro-plated tern-plate stock
- 10.2.3.3 Seals: Body seals shall be rolled and soldered. Top
and bottom seals shall be of double-seam type and compound
lined. The bottom closure, on the opposite end from
the tear-strip score, shall be installed and sealed
during manufacture. Side and bottom seams shall be
pressure tested to establish their tightness. The
internal tear-strip score shall be vinyl-coated.
- 10.2.3.4 Finish: Can body and end closures shall be wash-primed
in accordance with Specification MIL-P-15328 (Ships) and
spray-painted one (1) coat of lusterless green #3409,
Specification TT-P-141.
- 10-2.3.5 Marking: The legend, "CLOCKWORK -21 DAY" shall be
stencilled in yellow 1/2" letters across the can body.
- 10.2.3.6 Keys: Two (2) extra-heavy tear strip keys shall be pro-
vided for each can, but not installed at the time of can
manufacture.
- 10.2.4 The special adapter, aluminum to adapt the coupling base primer
to the metric clockwork threads shall be as provided by the
Contracting Authority.
- 10.2.5 The primer, standard coupling base, with plastic cap, shall be as
provided by the Contracting Authority.
- 10.2.6 The foil, aluminum, shall be of the usual "household" or
commercial variety which in general complies with Specification
MIL-A-148A, size 12" x 12".
- 10.2.7 The tape, adhesive, pressure sensitive, shall be 1/2" or 3/4" wide
and shall be in accordance with Specification JAN-P-127.

- 10.2.8 The nut, hexagonal, steel, shall be any standard hardware item having a 5 m.m. - 1.5 pitch thread.⁽¹⁾
- 10.2.9 The washer, flat, steel, shall be any standard hardware item, size 9/16" OD x 3/16" ID x approx. 1/32" thick.
- 10.2.10 The cushioning disc, flat, shall be of double-faced corrugated fiberboard, type W₅C or W₆C, size 3-11/16" OD x 1/8" thick.
- 10.2.11 The cushioning disc, "dough-nut", shall be of material as above, size 3-11/16" OD x 1-1/16" ID x 1/8" thick.
- 10.2.12 The liner, cushioning, shall be of single-face corrugated fiberboard, in accordance with Specification MIL-C-11791, type 3B, size 6-1/4" x 12-1/2", with corrugations parallel to the 6-1/4" dimension.
- 10.2.13 The solder used shall be any commercial solid or rosin-flux 50/50 tin/lead solder. Acid-flux core solder IS NOT to be used. Pre-cut pieces 1/16" D x 1/4" long are recommended for the sweat-soldering of keys.
- 10.2.14 The gas, nitrogen, shall be any standard commercial grade oil-pumped (moisture-free) bottled product.

10.3 Method of Component Preparation

- 10.3.1 Can Tops and Bottoms shall be drilled with a 1/16" D drill at a point on the diameter and 1-3/8" from the periphery. An area 1/4" x 1/2" shall be scraped clean to prepare for sweat-soldering to seal the hole and hold the tear-strip key in place.
- 10.3.2 "Dough-nut" discs shall be punched with three (3) 1/4" D holes on centers 120° apart and 3/4" from the periphery. After oven drying of the discs, the plastic-capped ends of two (2) primers shall be screwed tightly into the disc holes. One (1) aluminum adapter shall be screwed tightly to one of the protruding primer end bases. (The third hole in the disc is reserved for the arming screw chained to the clockwork case).

Note (1) Nuts obtained from Columbia Motor Co., 245 W 56th St., New York City 19, New York
Sanitized Copy Approved for Release 2011/05/04 : CIA-RDP78-03642A000600090003-3

- 10.3.3 Liners and discs shall be heated in a dry oven to approximately 200°F for at least one (1) hour prior to use. Materials allowed to remain unused or open to ambient conditions for more than two (2) hours shall be redried.
- 10.3.4 Cans and liners - two (2) dried cushioning discs shall be inserted into the can and pushed tightly against the bottom closure. A single-faced corrugated liner shall then be rolled, corrugated face inward, to fit the can I.D. and then inserted to line the can. The liner shall be expanded tightly against the can wall to prevent movement.
- 10.3.5 The clockwork mechanism, after having been finally checked, shall be prepared as follows:
- 10.3.5.1 The mainspring shall be wound one half (1/2) tight and the bottom cover cap left off.
- 10.3.5.2 The cocking device shall be removed from the neck threads of the clockwork.
- 10.3.5.3 The time setting dials shall be rotated until the tripping lever falls into the slot and the firing pin is released. The starting ring shall be turned to the "stop" (Steht) position.
- 10.3.5.4 The safety screw plug shall be screwed tightly into place in the clockwork case neck.
- 10.3.5.5 The front window retainer ring shall be loosened one (1) full turn.
- 10.3.5.6 The bottom cap shall be replaced and screwed only halfway on to the case threads.
- 10.3.5.7 The entire clockwork case shall then be placed in an evacuation chamber and slowly evacuated to at least 24" Hg vacuum and held at that pressure for at least two (2) minutes. The chamber shall be slowly filled with

nitrogen gas to return the pressure to atmospheric over a two (2) minute period. The front window retainer ring and the bottom cap shall then be quickly and tightly sealed.

10.3.5.8 The base of the clockwork case shall then be wrapped in a single layer of aluminum foil. The base shall be placed in the center of the foil and the foil edges gathered up toward the case neck. The arming screw and chain shall be led out of the foil gathering and the foil shall then be tightly compressed about the case. The foil about the neck shall be gathered and tightly secured by a double turn of tape. A one (1) inch section of tape shall be folded back upon itself to provide a removal tab for the tape.

10.3.5.9 A "doughnut" disc, complete with two (2) coupling base adapters and one (1) special aluminum adapter shall then be pushed over the neck of the clockwork case and down against the safety screw.

10.3.5.10 A washer shall then be placed over the arming screw stem and the stem pushed upward through the remaining hole in the "doughnut" disc. A second washer shall then be placed over the arming screw stem and the nut screwed tightly in place. The disc shall then be rotated about the clockwork case neck to remove all slack from the arming screw chain.

10.3.5.11 The cocking device shall then be screwed tightly into place in the case neck threads.

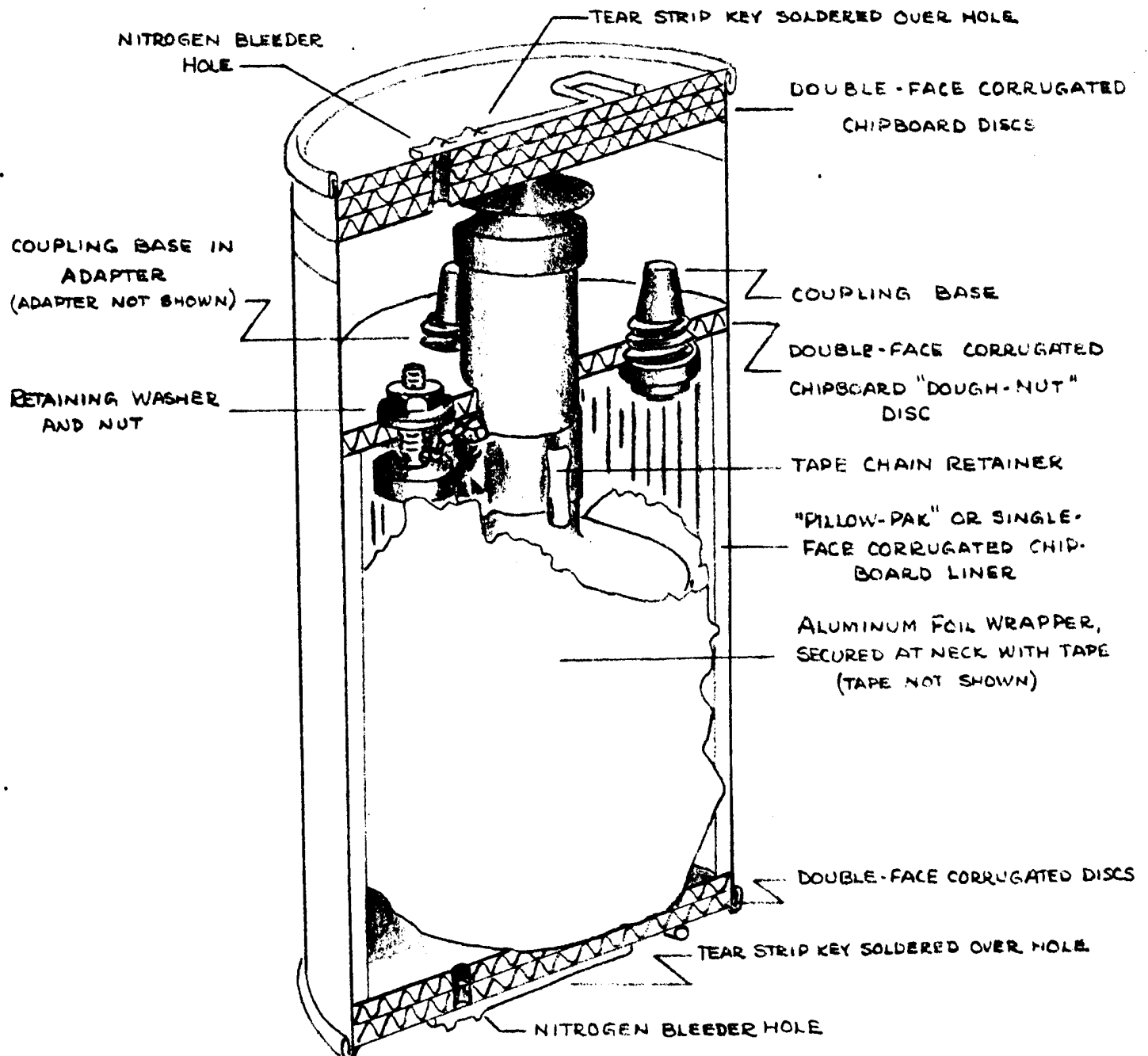
10.4 Method of Unit Packaging

10.4.1 The foil-wrapped clockwork case and its installed "doughnut" ring shall be inserted carefully into the lined can. The "doughnut"

- ring shall be guided into place to prevent its being creased or broken, and shall be pushed downward in the can until it contacts the upper edge of the can liner.
- 10.4.2 At the discretion of the Contracting Authority, the instruction sheet may be inserted into the can at this point. If this is to be done, the sheet shall be folded to approximately 4" x 1" dimensions and rolled to fit over the cocking device and around to clockwork case neck.
- 10.4.3 Three (3) flat cushioning discs shall then be placed over the cocking device and the can cover put in place.
- 10.4.4 The can cover shall then be machine-sealed in place.
- 10.4.5 The 1/16" D holes in the can covers shall then be punched through with a sharp pointed tool.
- 10.4.6 Nitrogen gas at a regulated pressure of three (3) psig maximum shall then be bled into the top hole, via a hypodermic needle or similar tube, for a minimum of three (3) minutes.
- 10.4.7 Upon removal of the gas bleeder tube, the top tear-strip key shall be immediately sweat-soldered in place over the top bleeder hole. Sufficient solder shall be used to completely seal the hole. A minimum of flux shall be used.
- 10.4.8 The same process shall be repeated immediately for the bottom bleeder hole.
- 10.4.9 Both soldered joints shall then be cleaned of excess flux and brush- or spray- coated with a moisture-proofing paint or lacquer of the same base color as that used on the can.
- 10.5 Testing and Inspection of Unit Package
 - 10.5.1 Leakage Tests shall be run on each can to establish the complete air tightness of each joint, seam and closure. This test shall consist of the following:
 - 10.5.1.1 The can shall be completely immersed in water at a

- temperature of between 140 and 160°F.
- 10.5.1.2 Bubbles entrained on the can surface at entry shall be brushed or wiped off immediately after immersion.
- 10.5.1.3 Immersion shall continue for at least two (2) minutes.
- 10.5.1.4 Acceptance of the package shall be made if no bubbles are observed from any of the seams or closures except the rolled, double-seam can-top seals. Small, slow forming bubbles for a maximum of 15 seconds from these seams are acceptable.
- 10.5.1.5 Rejection of the package shall be made if any bubbles are observed from any source but the can-top seams. Rejection shall be made if rapidly forming bubbles are observed from the can-top seams or slow continuously forming bubbles from these points are observed for more than 15 seconds after immersion.
- 10.5.1.6 Rework of any seal or closure, except the can-top seals, is acceptable. Reworked cans shall be reinspected as specified above. No resealing or rework of top rolled seams is acceptable.
- 10.5.1.7 Drying - If a can is to be reworked for reason of leakage, it shall be wiped dry immediately after removal from the water bath in order to prevent moisture entry into the package via the lead as a result of the partial vacuum formed as the can cools to ambient temperature.

CONFIDENTIAL



J-FEDER PACKAGE

A. D. LITTLE, INC.

3/31/54

REV. 6/14/56 - HFK

C-58214AB

CONFIDENTIAL