

REGISTRY OF RADIOACTIVE SEALED SOURCES AND DEVICES  
SAFETY EVALUATION OF A SEALED SOURCE  
(AMENDED IN ITS ENTIRETY)

No.: NR-0155-S-104-S

DATE: March 7, 2006

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SOURCE TYPE: Radioluminous Lamp

MODEL: 11729510-1 or 11729510-2

MANUFACTURER/DISTRIBUTOR: Department of the Army  
U.S. Army TACOM Life Cycle  
Management Command  
AMSTA-CS-CZR  
(Previously U.S. Army Tank-  
Automotive & Armaments Command)  
Rock Island, IL 61299-7630

ISOTOPE:

MAXIMUM ACTIVITY:

Hydrogen-3

0.05 Curie (1.85 Gbq) for 11729510-1  
0.075 Curie (2.78 Gbq) for 11729510-2

LEAK TEST FREQUENCY:

As specified in the user's materials  
license

PRINCIPAL USE: (R) Gas Sources

For use in the following device model numbers:

M14A1 Fire Control Quadrant

M18 Fire Control Quadrant

M134A1 Mount Telescope

M171 Mount Telescope and  
Quadrant

M1A2 Gunner Quadrant

M17 Fire Control Quadrant

M187 Mount, Telescope and Quadrant  
Sight Unit (Model 11729510-1 only)

M64 Sight Unit (Model 11729510-1 only)

CUSTOM SOURCE:  YES  NO

CUSTOM USER: U.S. Department of Defense

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DIAGRAM:

See Attachments 1 through 8.

REFERENCES:


The following supporting documents for the Model 11729510-1 and 11729510-2 radioluminous lamp are hereby incorporated by reference and are made a part of this registry document.

- Department of the Army letter dated March 20, 1995, requesting changes to specific certificates, and letters dated January 22, 2001, May 23, 2001, and March 24, 2004, with enclosures thereto.
- Department of the Army email received September 23, 2005, with enclosures thereto.
- Department of the Army facsimile dated December 12, 2005, with enclosures thereto.
- U.S. Department of the Army License No. 12-00722-06.

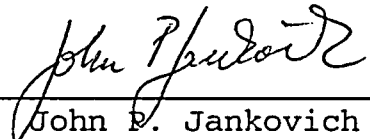
ISSUING AGENCY:

US Nuclear Regulatory Commission

Date: March 7, 2006

Reviewer:   
Tomas Herrera

Date: March 7, 2006

Concurrence:   
John P. Jankovich

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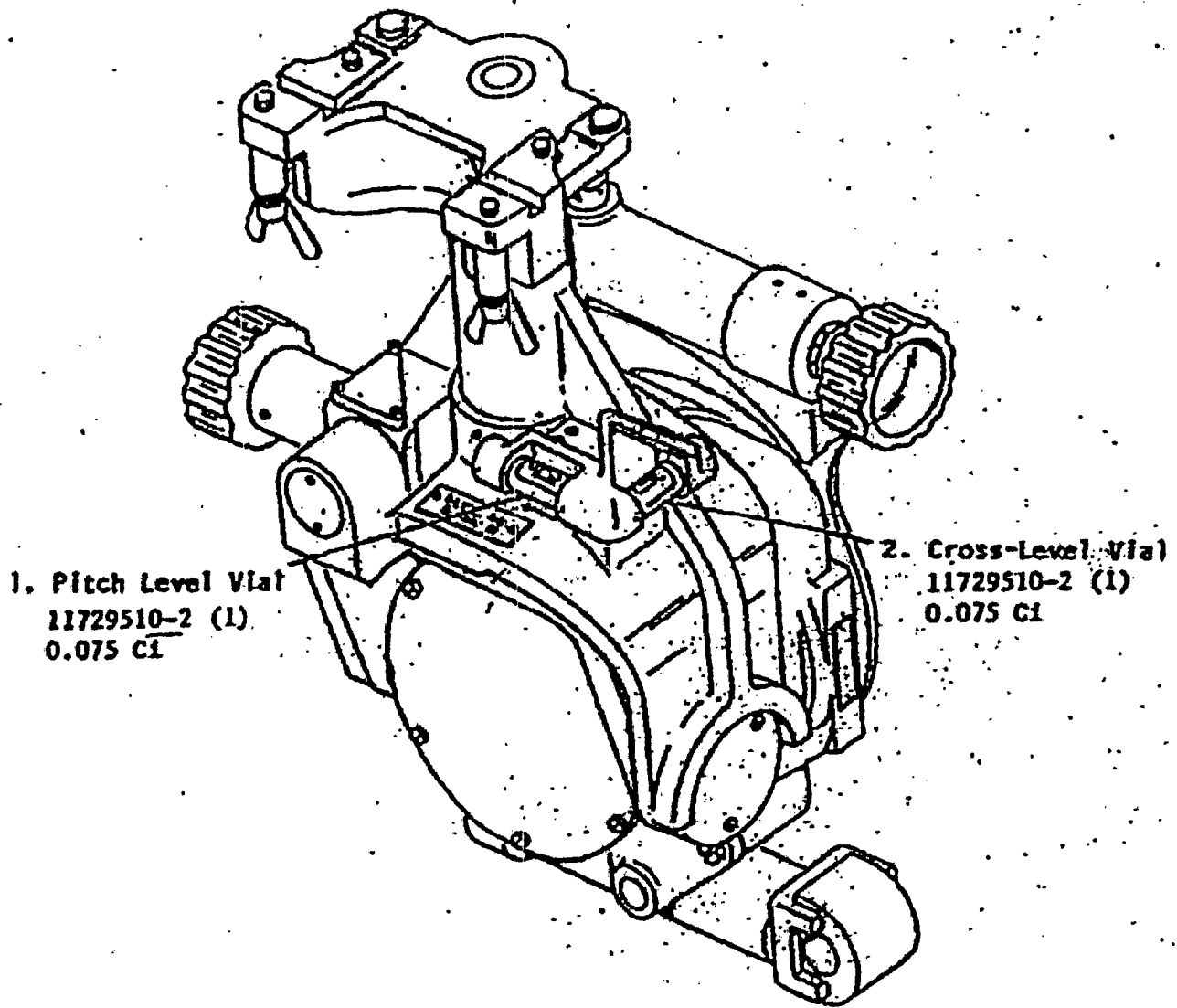
ATTACHMENT 1 OF 8

<p><b>1-DESCRIPTION</b></p> <p>1-1. SOURCE IDENTIFICATION: SOURCE CLASS: APTX 90-0-0-00</p> <p>1-2. SOURCE IDENTIFICATION: SOURCE CLASS: APTX 90-0-0-00</p> <p>1-3. SOURCE IDENTIFICATION: SOURCE CLASS: APTX 90-0-0-00</p> <p>1-4. SOURCE IDENTIFICATION: SOURCE CLASS: APTX 90-0-0-00</p> <p>1-5. SOURCE IDENTIFICATION: SOURCE CLASS: APTX 90-0-0-00</p> <p>1-6. SOURCE IDENTIFICATION: SOURCE CLASS: APTX 90-0-0-00</p> <p>1-7. SOURCE IDENTIFICATION: SOURCE CLASS: APTX 90-0-0-00</p> <p>1-8. SOURCE IDENTIFICATION: SOURCE CLASS: APTX 90-0-0-00</p> <p>1-9. SOURCE IDENTIFICATION: SOURCE CLASS: APTX 90-0-0-00</p> <p>1-10. SOURCE IDENTIFICATION: SOURCE CLASS: APTX 90-0-0-00</p> <p>1-11. SOURCE IDENTIFICATION: SOURCE CLASS: APTX 90-0-0-00</p> <p>1-12. SOURCE IDENTIFICATION: SOURCE CLASS: APTX 90-0-0-00</p> <p>1-13. SOURCE IDENTIFICATION: SOURCE CLASS: APTX 90-0-0-00</p> <p>1-14. SOURCE IDENTIFICATION: SOURCE CLASS: APTX 90-0-0-00</p> <p>1-15. SOURCE IDENTIFICATION: SOURCE CLASS: APTX 90-0-0-00</p> <p>1-16. SOURCE IDENTIFICATION: SOURCE CLASS: APTX 90-0-0-00</p> <p>1-17. SOURCE IDENTIFICATION: SOURCE CLASS: APTX 90-0-0-00</p> <p>1-18. SOURCE IDENTIFICATION: SOURCE CLASS: APTX 90-0-0-00</p> <p>1-19. SOURCE IDENTIFICATION: SOURCE CLASS: APTX 90-0-0-00</p> <p>1-20. SOURCE IDENTIFICATION: SOURCE CLASS: APTX 90-0-0-00</p>	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:10%;"></td> <td style="width:10%;"></td> <td style="width:10%;"></td> <td style="width:10%;"></td> <td style="width:10%;"></td> <td style="width:10%;"></td> <td style="width:10%;"></td> <td style="width:10%;"></td> <td style="width:10%;"></td> <td style="width:10%;"></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table> <p><b>SOURCE USED ON:</b></p> <p>M134A1 MOUNT, TELESCOPE</p> <p>M14A1 QUADRANT, FIRE CONTROL</p> <p>M17 FIRE CONTROL QUADRANT</p> <p>M171 MOUNT, TELESCOPE &amp; Q</p> <p>M18 FIRE CONTROL QUADRANT</p> <p>M187 MOUNT, TELESCOPE</p> <p>M1A2 QUADRANT, FIRE CONTROL</p> <p>M64 SIGHTONIT</p> <p>M64A1 SIGHTONIT</p> <div style="text-align: center;"> </div> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>DATE</th> <th>TIME</th> <th>INITIALS</th> <th>REMARKS</th> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>																					DATE	TIME	INITIALS	REMARKS								
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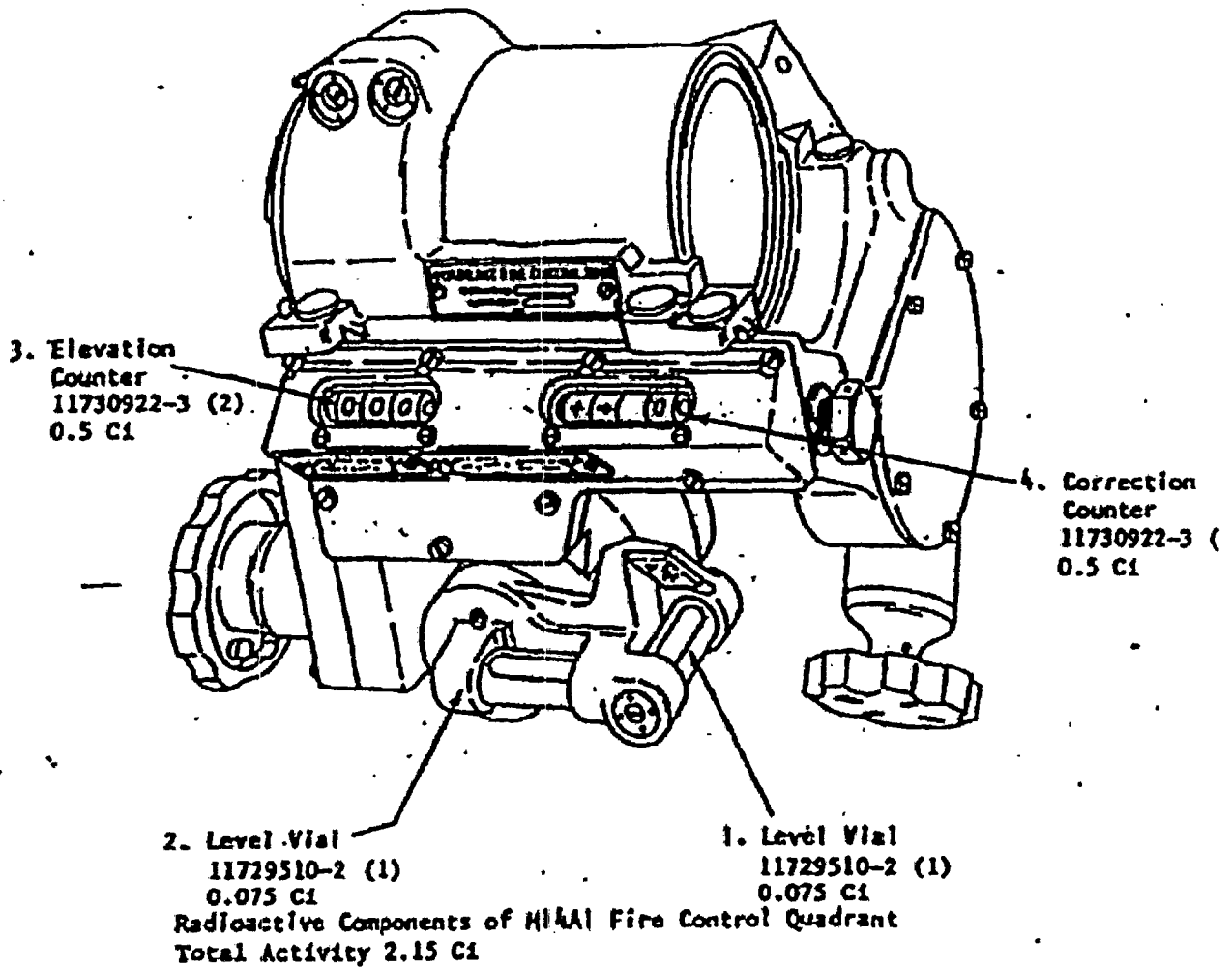


Radioactive Components of M134A1 Mount Telescope  
Total Activity 0.15 Ci

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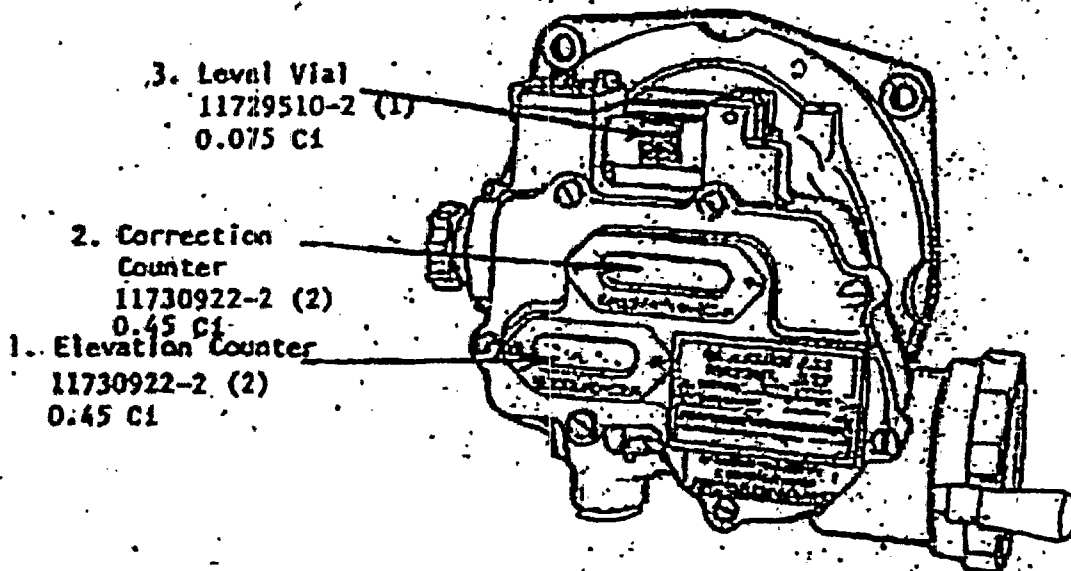
ATTACHMENT 3 OF 8



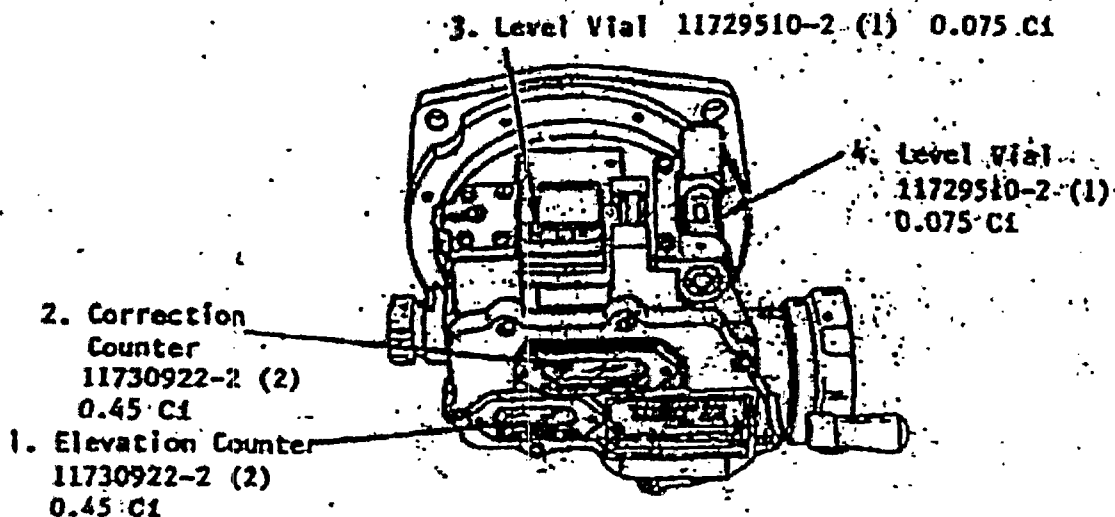
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Radioactive Elements of the M17 Fire Control Quadrant  
Total Activity 1.875 Ci



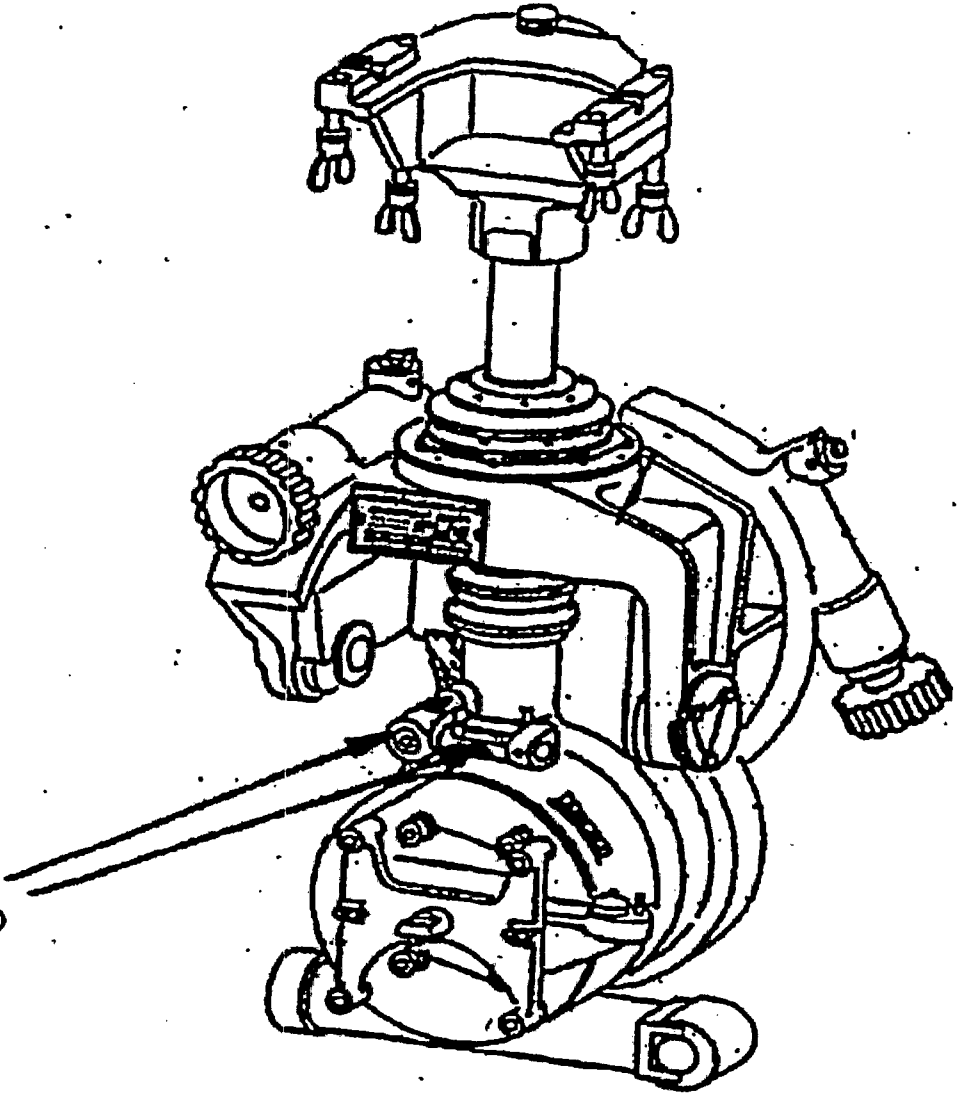
Radioactive Elements of the M18 Fire Control Quadrant  
Total Activity 1.95 Ci

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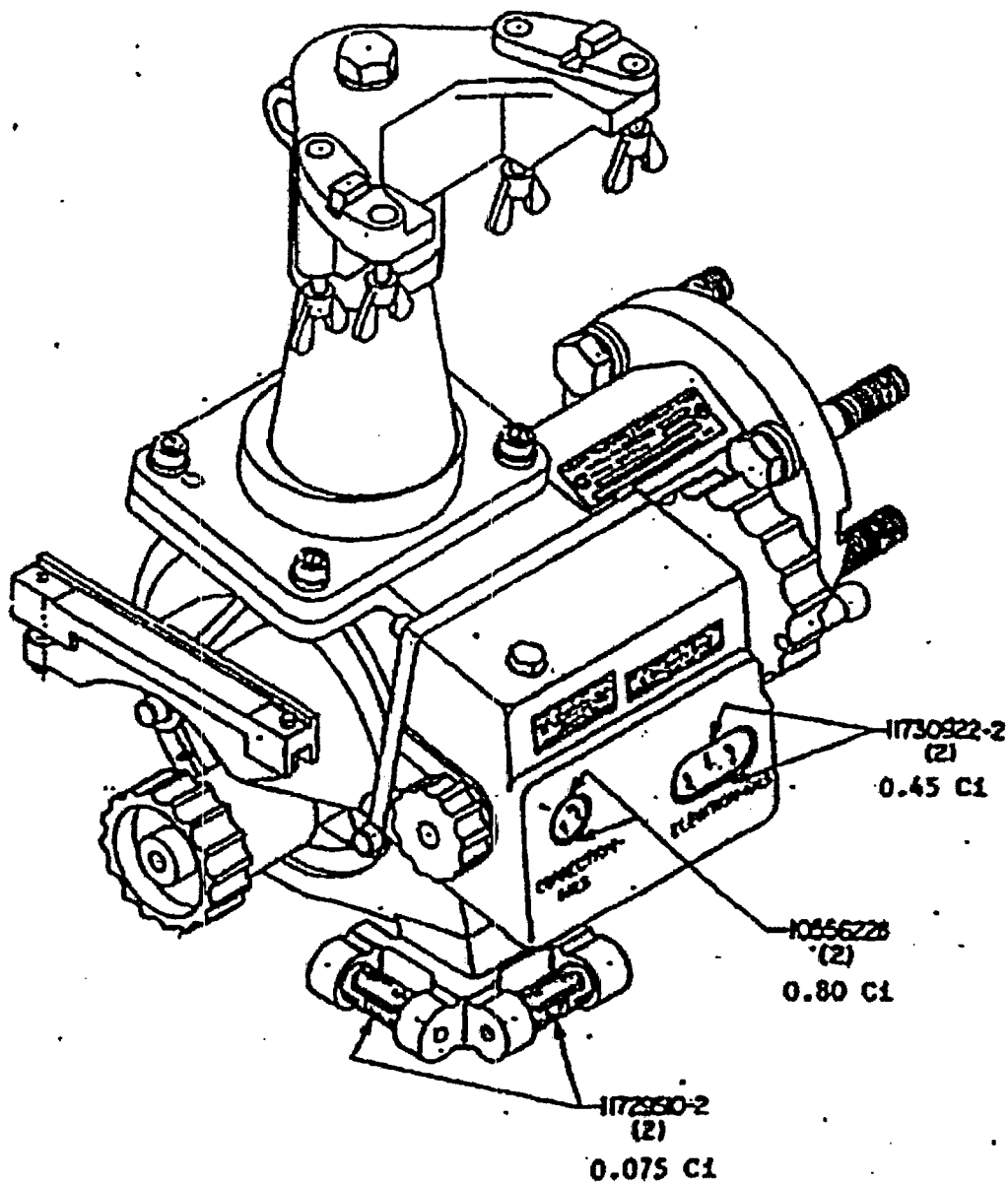
Level Vials  
11729510-2 (2)  
0.075 Ci

M171 Mount Telescope  
Total Activity 0.15 Ci

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M187

· MOUNT, TELESCOPE, AND QUADRANT FN-1259966

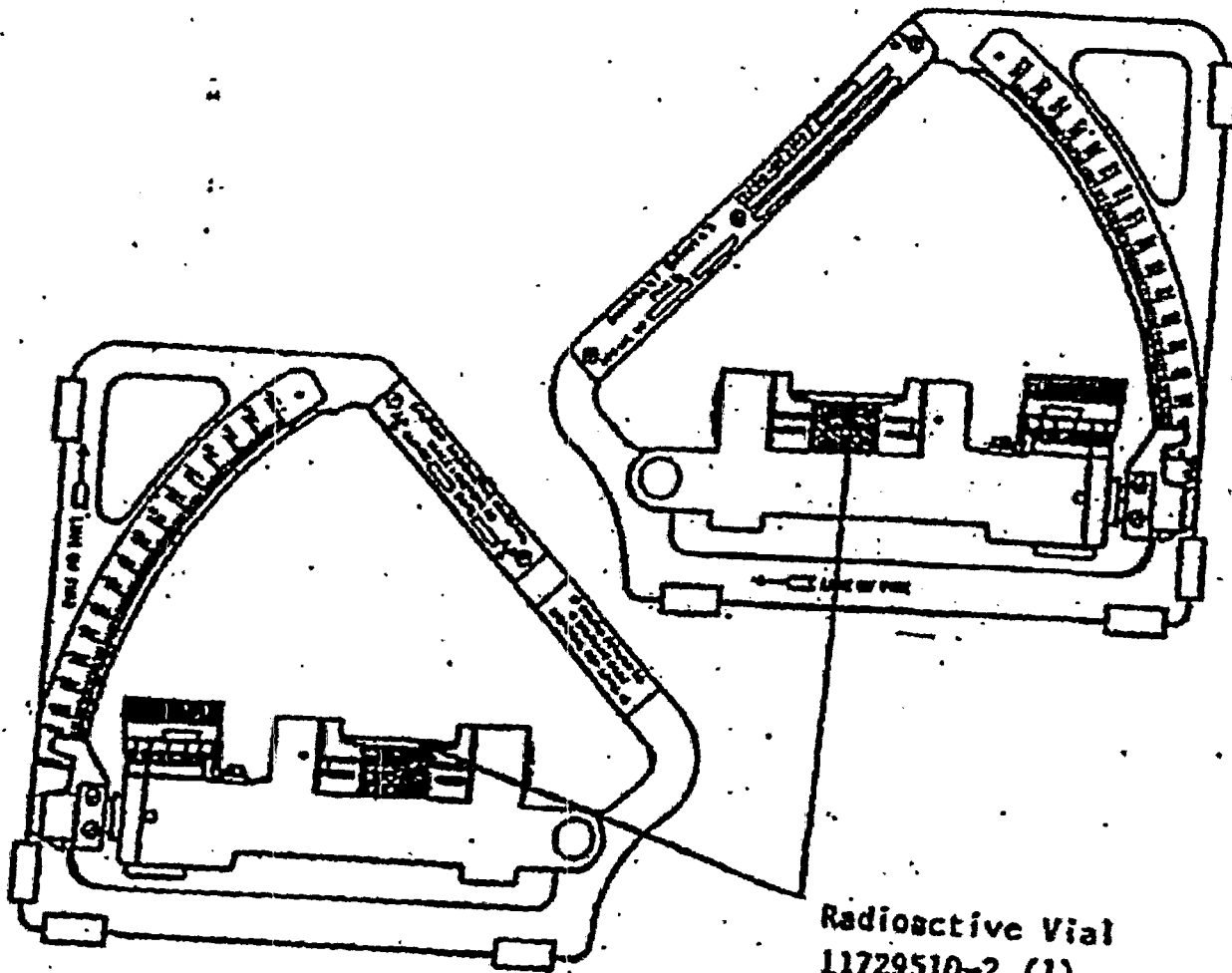
Total Activity 2.65 Ci



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Radioactive Vial  
11729510-2 (1)  
0.075 Ci

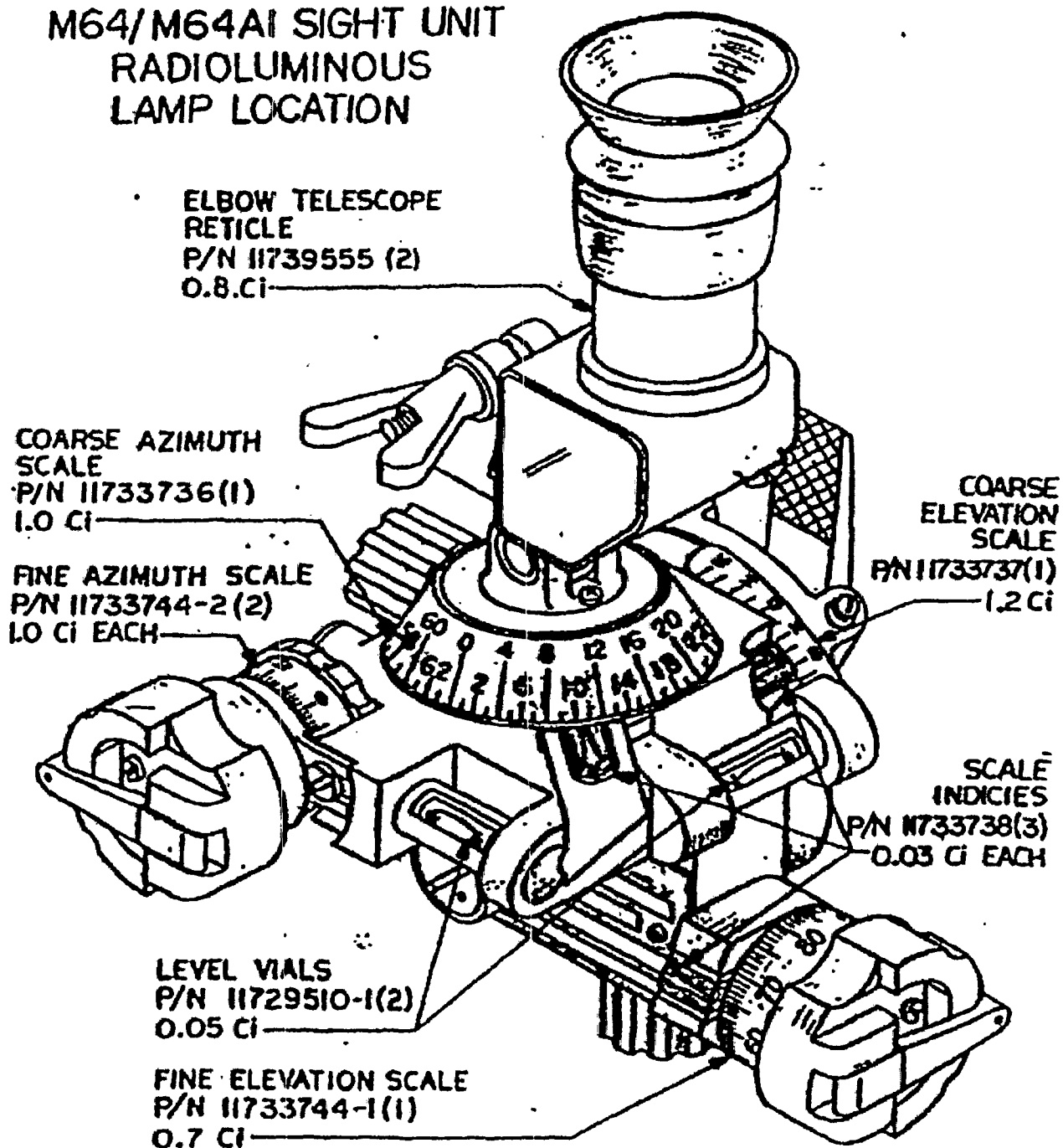
Radioactive Component of the M1A2 Gunner's Quadrant  
Total Activity 0.075 Ci

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M64/M64AI SIGHT UNIT  
RADIOLUMINOUS  
LAMP LOCATION



TOTAL TRITIUM PER SIGHT UNIT 6.69 CURIES