

REGISTRY OF RADIOACTIVE SEALED SOURCES AND DEVICES
SAFETY EVALUATION OF SEALED SOURCE

NO: NR-155-S-109-S

DATE: MAR 8 1983

PAGE 1 OF 1

SOURCE TYPE: Radioluminous Lamp

MODEL: 11730922-1 or 11730922-2 or 11730922-3

MANUFACTURER/DISTRIBUTOR:

Department of the Army
U.S. Army Armament Material
Readiness Command (DRSAR-SF1) ..
Rock Island, IL 61299

MANUFACTURER/DISTRIBUTOR:

ISOTOPE: Hydrogen-3

MAXIMUM ACTIVITY: 0.4 curies (11730922-1)
0.45 curies (11730922-2)
0.5 curies (11730922-3)

LEAK TEST FREQUENCY: See License No. 12-00722-06

PRINCIPAL USE: (R) Gas Sources, for use in the following device model nos:

M113A1	Panoramic Telescope	M17	Fire Control Quadra
M14A1	Fire Control Quadrant	M18	Fire Control Quadra
M137	Panoramic Telescope		

DIAGRAM: See Attachments 1, 2, 3, 4, 5, and 6.

CUSTOM DEVICE: X YES NO

CUSTOM USER:

U.S. Department of Defense

REFERENCES: This registration document was formulated from information contained within U.S. Dept. of Army License No. 12-00722-06.

8403020080 840209
PDR FOIA
HAMMITT84-74 PDR

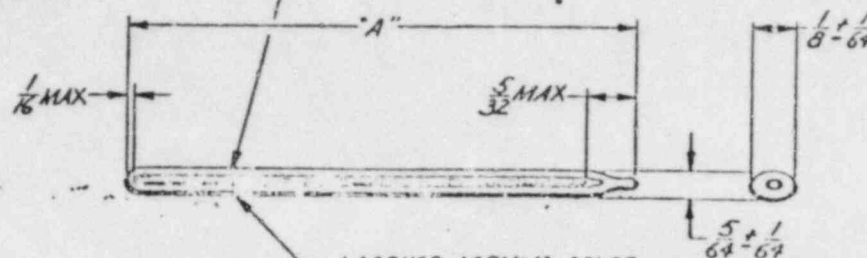
ISSUING AGENCY: U.S. Nuclear Regulatory Commission

NOTE:

VIAL FILLED WITH 99% PURE (LESS THAN 1% TITANIUM OXIDE) TRITIUM (H_3) *B* CURIE (MAX). BRIGHTNESS LEVEL 420 MICROLAMBERTS (MIN) AS MEASURED AT TIME OF MANUFACTURE. INTERNAL PRESSURE 2.50 ATMOSPHERES (NOMINAL) AT 70°F

COLOR OF PHOSPHOR: GREEN
SPECTRAL PEAK $5250\text{\AA} \pm 50\text{\AA}$
1/2 PEAK WIDTH $700\text{\AA} \pm 50\text{\AA}$

GLASS VIAL $.03 \pm .01$



REQUIREMENTS

1. MARKING, LABELING AND SHIPPING OF PACKAGES AND CONTAINERS SHALL BE IN ACCORDANCE WITH MIL-STD 1458.
2. THERE SHALL BE NO EVIDENCE OF PHYSICAL FAILURE SUCH AS FRACTURING OR LIGHT LOSS DUE TO EXPOSING THE LIGHT SOURCE TO -80°F AND 160°F FOR A PERIOD OF EIGHT HOURS AT EACH TEMPERATURE
3. AFTER SUBMERGING THE LAMP IN ROOM TEMPERATURE WATER FOR 4 HOURS, RADIOACTIVE CONTENT OF THE WATER SHALL NOT EXCEED .005 MICROCURIES

SUGGESTED SOURCE OF SUPPLY

VENDOR	VENDOR PART NO	"A"	"S"	IDENT. NO.
SELF-POWERED LIGHTING LTD (CODE IDENT NO 29218) 629 FIFTH AVE PELHAM, N.Y. 10803	NOT AVAILABLE	$1\frac{1}{2} \pm \frac{3}{64}$	0.4	11730922-1
AMERICAN ATOMICS CORP (CODE IDENT NO 27743) 425 S PLUMER AVE TUCSON, AZ, 85719	NOT AVAILABLE	$1\frac{7}{8} \pm \frac{3}{64}$	0.45	11730922-2
		$2 \pm \frac{3}{64}$	0.5	11730922-3

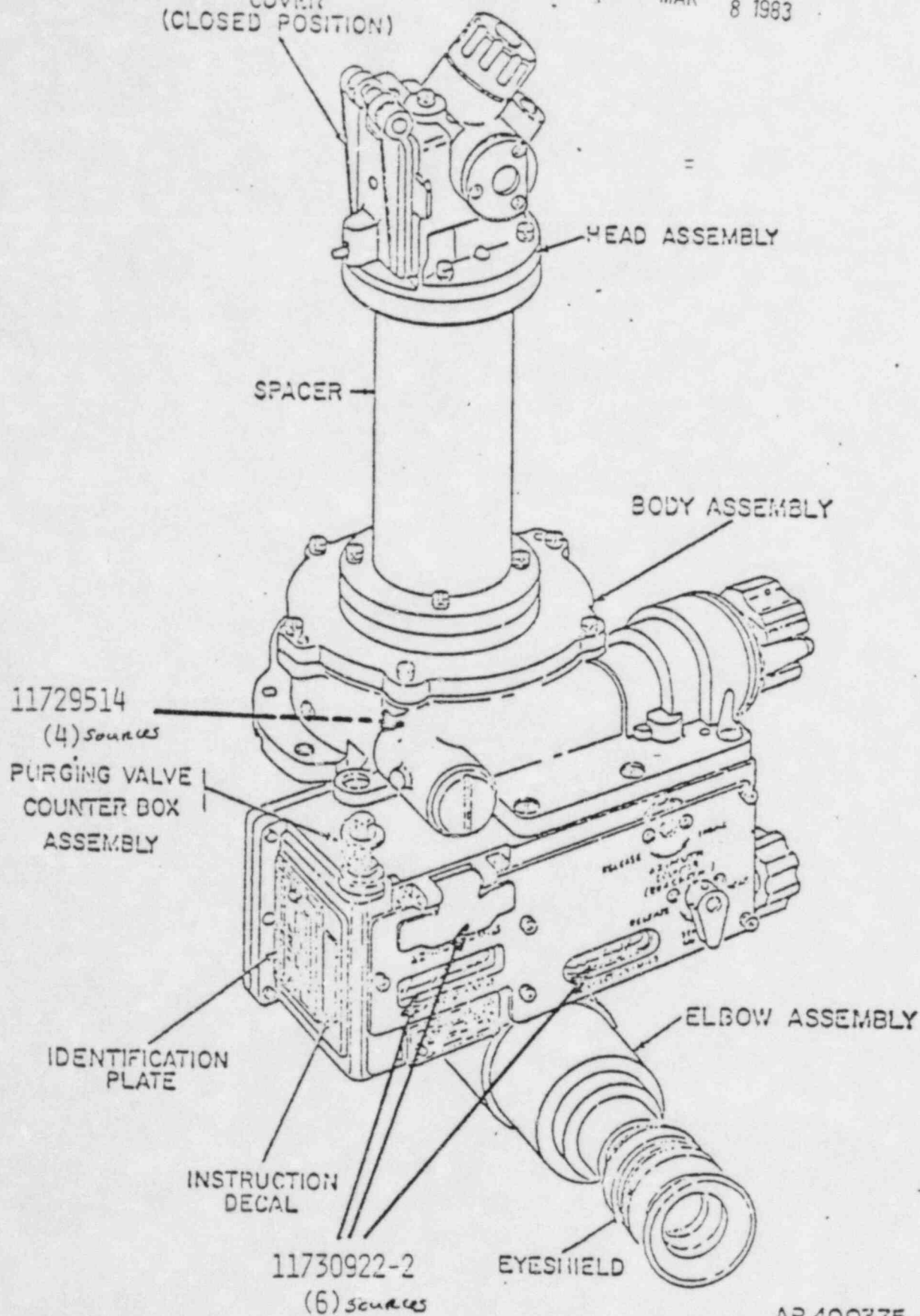
IDENT. NO. SEE TABULATION

SOURCE USED ON:
M113A1 Pan Tel
M14A1 Quad
M137 Pan Tel
M17/M18 Quads

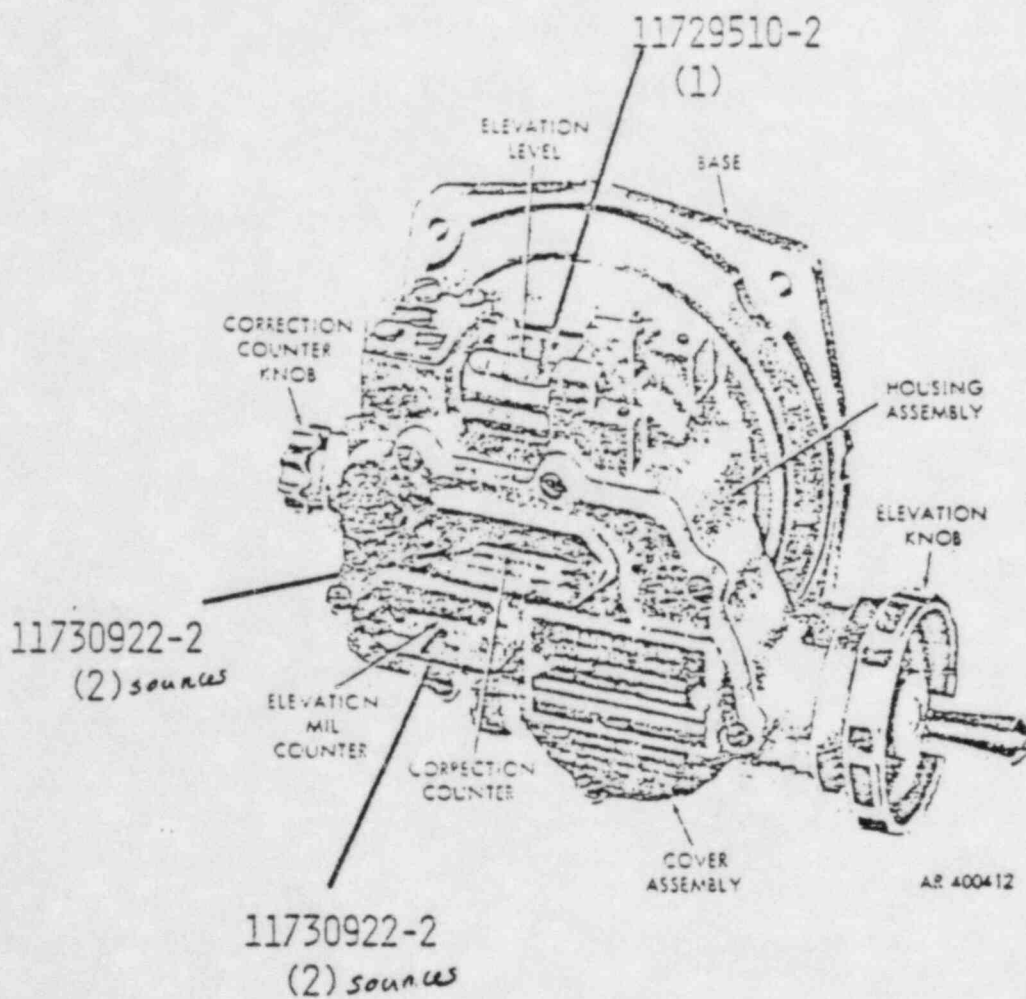
DIV. W/CH. N. PROPERTY TR _____ TS _____ PL. I _____ BA _____ DI _____ PH _____		CH172955 PAN TEL CH173027 PAN TEL CH173122 QUAD FC.		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON FRACTIONS & DECIMALS & ANGLES & MATERIALS HEAT TREAT PROTECTIVE FILM		ORIGINAL DATE JULY 1, 1969 GRANT LC ENGINEER J. J. Johnston APPROVED J. J. Johnston		U.S. ARMY QUANTICO ARSENAL PHILADELPHIA, PA. 19137	
DIV. ENGINEERING RECORD NEXT APT. USED ON APPLICATION NO. NOT APPLY PART NO.						LAMP, RADIOLUMINOUS		C 19200 11730922	

NO: NR-155-S-100-ENTRANCE WINDOW
COVER
(CLOSED POSITION)

DATE: MAR 8 1983



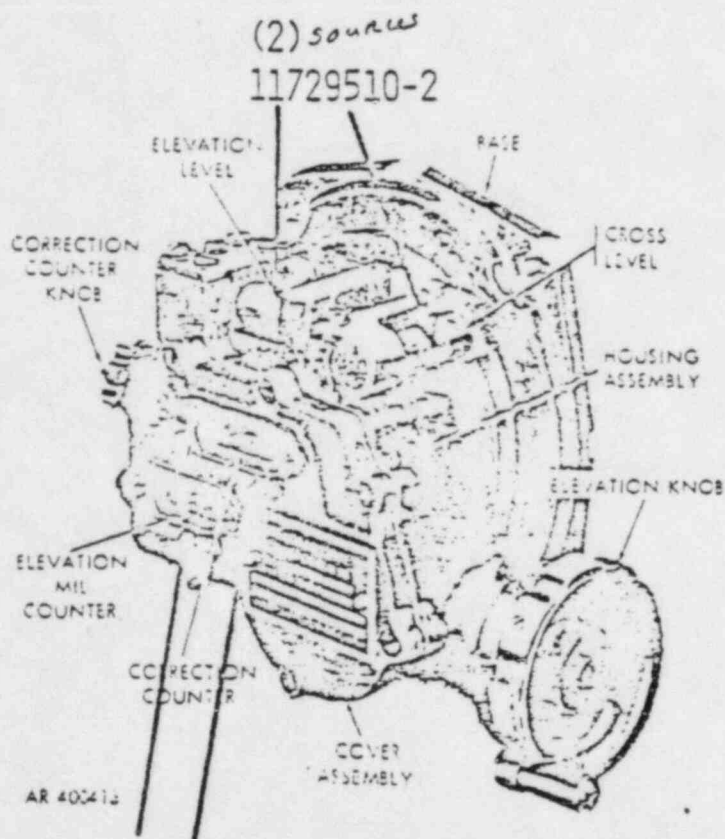
Telescope, Panoramic: M137 3/4 right rear view



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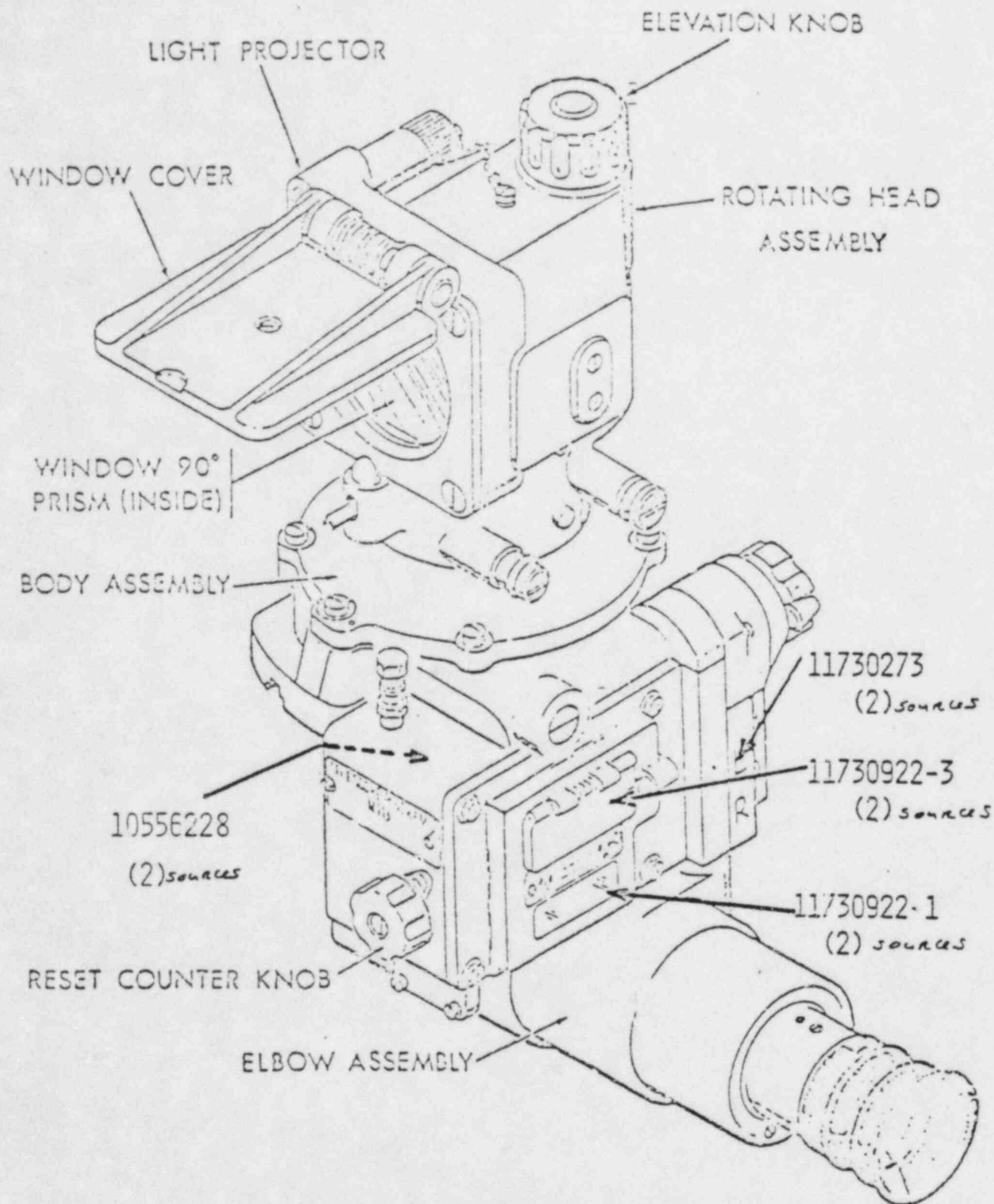
MAR 8 1983



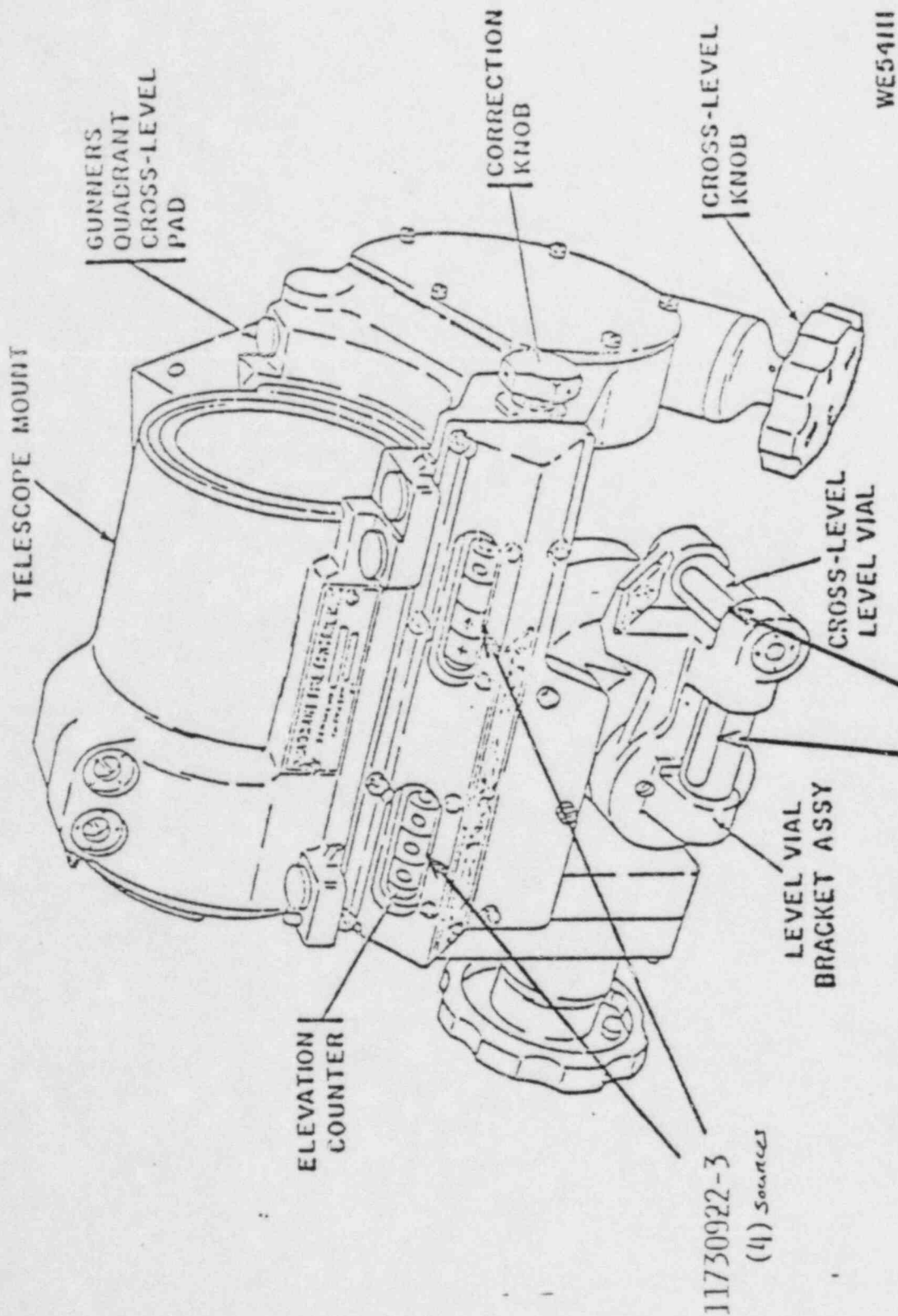
11730922-2
(4) sources

Quadrant, Fire Control, M18

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Panoramic Telescope M113A1 (1240-150-8636)
Radioactive (Left Front View)



Quadrant F.C. Ni4A1 (Radioactive)