NAVSHIPS 0967-000-0050
(Formerly NAVSHIPS 900,000.5)

NON-REGISTERED

ELECTRONICS INSTALLATION AND MAINTENANCE BOOK

RADIAC

DEPARTMENT OF THE NAVY
BUREAU OF SHIPS

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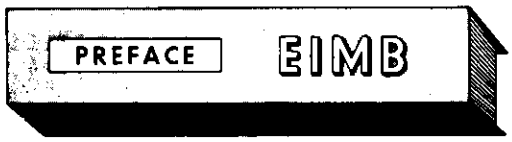

POLICY AND PURPOSE

The Electronics Installation and Maintenance Book (EIMB) has been established as the means for collecting, publishing, and distributing, in one convenient documentation source, those subordinate maintenance and repair policies, installation practices, and overall electronics equipment and material-handling procedures required to implement the major policies set forth in Chapter 67 of the Bureau of Ships Technical Manual. All data contained within the EIMB are authoritative, and derive their authority from Chapter 67 of the Bureau of Ships Technical Manual, as established in accordance with Article 1201, U. S. Navy Regulations.

Since its inception, however, EIMB has been expanded to include selected information items of general interest to electronics installation and maintenance personnel. These items are such as would generally be contained in text books, periodicals, or technical papers, and form, along with the information cited above, a comprehensive, single-source reference document. In application, the EIMB is to be used for information and guidance by all military and civilian personnel involved in the installation, maintenance, or repair of electronic equipment under cognizance, or technical control, of the Bureau of Ships. All information, instructions, and procedures in the EIMB supplement such instructions and data supplied in equipment technical manuals and other approved maintenance publications.

ORGANIZATION

The EIMB is organized into a series of handbooks to afford maximum flexibility and ease in handling. The handbooks are stocked and issued as separate items so that activities requiring extra copies of any handbook may obtain them with relative ease.

The handbooks fall within two categories: general information handbooks and equipment oriented handbooks. The general information handbooks contain data which are of interest to all personnel involved in installation and maintenance, regardless of their equipment specialty. The titles of the various general information handbooks give only an overall idea of their data content; a more complete description of each handbook is provided in the "General" handbook.

The equipment handbooks are devoted to information on a particular equipment class and provide general test procedures, adjustments, general servicing information, and field change identification data.

The following table lists all handbooks of the series, together with their old and new NAVSHIPS numbers. (The new NAVSHIPS numbers, although not presently imprinted on all handbooks of the EIMB series, serve also as the stock numbers which are to be used on any requisitions submitted.)

HANDBOOK TITLE	OLD NAVSHIPS NO.	NEW NAVSHIPS NO.
	(General Information Handbooks)	
General and Index	900,000.100	0967-000-0100
Installation Standards	900,000.101	0967-000-0110
Electronic Circuits	900,000.102	0967-000-0120
Test Methods and Practices	900,000.103	0967-000-0130
Reference Data	900,000.104	0967-000-0140
RFI Reduction	900,000.105	0967-000-0150
General Maintenance	- - -	0967-000-0160

HANDBOOK TITLE	OLD NAVSHIPS NO.	NEW NAVSHIPS NO.
	(Equipment Oriented Handbooks)	
Communications	900, 000. 1	0967-000-0010
Radar	900, 000. 2	0967-000-0020
Sonar	900, 000. 3	0967-000-0030
Test Equipment	900, 000. 4	0967-000-0040
Radiac	900, 000. 5	0967-000-0050
Countermeasures	900, 000. 7	0967-000-0070

INFORMATION SOURCES

Periodic revisions are made to provide the best current data in the EIMB and to keep abreast of new developments. In doing this, many source documents are researched to obtain pertinent information. Some of these sources include the Electronics Information Bulletin (EIB), the Bureau of Ships Journal, electronics and other text books, industry magazines and periodicals, and various military installation- and maintenance-related publications. In certain cases, Bureau of Ships publications have been incorporated into the EIMB in their entirety and, as a result, have been cancelled. A list of the documents which have been superseded by the EIMB and are no longer available is given in Section 1 of the "General" handbook.

SUGGESTIONS

The Bureau of Ships recognizes that users of the EIMB will have occasion to offer comments or suggestions. To encourage more active participation, a self-addressed comment sheet is provided in the back of each handbook. Complete information should be given when preparing suggestions. It is most desirable that the suggestor include his name and mailing address on the form to facilitate direct correspondence in the event that further information or clarification is required by the Bureau. An additional advantage in supplying name and address is the fact that all such comments received can be given an immediate reply from the Bureau regarding the suggestion; the lengthy delay before learning of its disposition or action being taken will be eliminated. Any communication from the Bureau of Ships to a suggestor will be made through a personal letter to the individual concerned.

If a comment sheet is not available or correspondence is lengthy, suggestions should be directed to the following:

Chief, Bureau of Ships
Department of the Navy
Washington, D. C. 20360
Attn: Fleet Electronics Effectiveness
Branch, Code 678

CORRECTIONS

Report all inaccuracies and deficiencies noted in all Bureau of Ships technical publications (including this manual, ship information books, equipment manuals, drawings, and such) by a "Planned Maintenance System (PMS) Feedback Report, OPNAV 4700.7 (Rev. 5-65)" or superseding form. If PMS is not yet installed in this ship, report technical publication deficiencies to the Bureau of Ships by any convenient means.

DISTRIBUTION

The Electronics Installation and Maintenance Book is transmitted to using activities through automatic distribution procedures. Activities not already on the EIMB distribution list and those requiring changes to the list should submit correspondence to the following:

Chief, Bureau of Ships
Department of the Navy
Washington, D. C. 20360
Attn: Code 679A2

Activities desiring extra copies of EIMB handbooks or binders should submit requisitions directly to Naval Supply Depot, Philadelphia, Pennsylvania. Complete instructions for ordering publications are given in the Navy Stock List of Forms and Publications, NAVSANDA Publication 2002.

RECORD OF CORRECTIONS MADE

CHANGE NO.	DATE	CHANGES MADE	SIGNATURE

LIST OF EFFECTIVE PAGES

PAGE NUMBERS	CHANGE IN EFFECT
Title Page	Change 3
ii-viii	Change 3
Section 1 - General	
Title Page	Change 1
1-1 thru 1-6	Change 2
Section 2 - Circuit Applications	
Title Page	Change 1
2-1	Change 1
Section 3 - Field Change Identification Guide	
Title Page	Change 1
3i thru 3iii	Change 3
3-1	Change 2
3-2, 3-3	Change 3
Section 4 - Service Notes	
Title Page	Change 1
4-1	Change 1
AN/BDQ-1:1	Change 1
AN/BDQ-3:1	Change 1
AN/PDR-18:1, 2	Change 1
AN/PDR-27:1	Change 1
AN/PDR-27CY:1	Change 1
AN/PDR-27G:1	Change 1
AN/PDR-27H:1	Change 1
AN/PDR-27J:1	Change 1
AN/PDR-43:1	Change 1
AN/PDR-45:1	Change 2
AN/PDR-47A:1	Change 1
AN/UDM-1A:1	Change 1
1M-134/WDQ:1	Change 1
1M-144A/WDQ:1	Change 1
1M-148/WDQ:1	Change 1
1M-151/WDQ:1	Change 1
Section 5 - Reference Data	
Title Page	Change 1
5-1	Change 1

NOTE

The effective cut-off date for the FCIG in this change is 5 January 1966.

TABLE OF CONTENTS

TABLE OF CONTENTS (Continued)

3-1. POLICY

a. The Bureau of Ships Manual, Chapter 67, which establishes the policy for alterations and modifications to electronic equipment, defines alterations as any change in hull, machinery, fittings, or equipment affecting design, material, number, location, or relationship of the component parts of an assembly or system.

b. Only in actual emergencies will alterations to, or modification of, electronic equipment under the cognizance of the Bureau of Ships be undertaken without prior approval of, or direction by, the Bureau. All requests for approval shall be forwarded via the chain of command; state the exact nature of the proposed alteration or modification, reason therefor (also whether for permanent or for special temporary use), and appropriation to which chargeable. Unauthorized alterations to equipment under contractual guarantee may result in the nullification or cancellation of the guarantee and financial loss to the Government, and may result in failure of the equipment to provide the service for which it was installed. If alterations are accomplished under emergency conditions, adequate consideration must be given to safety of personnel and equipment and to the basic performance requirements. The Bureau should be advised at the earliest practicable date of the actual changes made.

c. Field changes are the means by which approved and authorized alterations or modifications are made to the Bureau of Ships electronic equipments. These changes are mandatory and shall be accomplished on equipment affected in accordance with the instructions contained in the field change bulletin.

d. Certain field change bulletins include the statement that "Bureau of Ships approval is required prior to accomplishment." Such statements should be disregarded. The only restrictions on the accomplishment of official field changes are those indicated in the Field Change Identification Guide (FCIG). Examples of such restrictions are as follows:

(1) Funding (funds must be cited).

(2) Field Change is equivalent to an alteration (ShipAlt must be assigned).

(3) Field Change is not applicable:

(a) Limited to specified serial numbered equipments (5-AN/SRT-14 applies only to serials 6 through 21).

(b) Limited to specific equipment configurations (1-RDR - applies only if equipment includes every type 10508 shock mount).

(c) Limited to applications requiring compatible interface (12-AN/SPA-8A to produce AN/SPA-32 for use in AN/SPS-39).

3-2. DOCUMENTATION

This guide is a revised list of field changes to electronics equipment under the technical control of the Bureau of Ships. It is in effect upon receipt.

3-3. OBJECTIVE

a. The objective of the FCIG is to provide a current list of field changes together with information enabling technical personnel to determine by inspection the applicable field changes that have been accomplished.

b. This guide does not indicate availability of the field change or correction material within the supply system.

3-4. DEFINITIONS

a. FIELD CHANGE. A field change is any modification or alteration authorized by the Bureau of Ships or agency concerned to be made to an electronics equipment subsequent to delivery to the government. Official field change numbers are published in the Electronics Information Bulletin (EIB) and this FCIG.

b. FIELD CHANGE KIT. A field change kit is the formal means made available to permit accomplishment of a field change. A kit may consist only of published matter or be an assembly of published matter and required material.

c. CLASSIFICATION OF FIELD CHANGE. Field changes are of the following types and classes:

(1) Types

(a) Type 1 - A Type 1 field change includes a publications package and all parts and materials required to accomplish the change to a single equipment and to revise equipment nameplates and manuals.

(b) Type 2 - A Type 2 field change consists only of publications material which provides instructions for accomplishing the change and revising the equipment nameplates and manuals. A Type 2 field change may or may not require that parts be requisitioned.

(c) Type 3 - A Type 3 field change includes a publications package and a portion of the parts and materials required to accomplish the change to a single equipment and to revise equipment nameplates and manuals.

(2) Classes (added as a hyphenated suffix to the type)

(a) Class A - Funding for installation is not required. These field changes are approved for accomplishment by forces afloat or station personnel without further reference to the Bureau of Ships.

(b) Class B - Fleet or shore funding for installation is required. These field changes are approved for accomplishment by Naval shipyards, tenders, repair facilities or shore maintenance authority without further reference to the Bureau of Ships.

(c) Class C - Bureau of Ships funding for installation is required. To meet urgent operational commitments, the Bureau may approve accomplishment of Class C field changes subject to Type Commander's funding. This class of field change includes, but is not limited to, those changes in operational improvement. Such changes are accomplished in the Material Improvement Program's order of priority. These field changes are approved for accomplishment by Naval shipyards, tenders, repair facilities, or shore maintenance activities.

3-5. INSTRUCTIONS REGARDING ACCOMPLISHMENT

a. BACKGROUND. Accomplishment of applicable field changes is essential to the proper functioning, identity, and logistic support of electronics equipments. Effective 1 October 1957, electronics field change kits were transferred from "N" to "F" cognizance. This permits the issue of field changes to ships and activities without charge to their allotments.

b. RECORDING. The completion of all official field changes, alterations, and modifications to electronic equipment shall be recorded on the Electronics Equipment History card, NAVSHIPS 536.

c. REPORTING. Except as required in Bureau of Ships Instruction 10550.1B Series, accomplishment of field changes should not be reported to the Bureau of Ships. However, the performance and operational reports, required on certain equipments, should list the field changes that have not been accomplished.

3-6. HOW TO USE THIS GUIDE

a. USE. Equipment designations are arranged alphanumerically. Space has been provided on each page for pen and ink additions or corrections published in the EIB. Periodically, the Index will be updated by the issuing of revised pages.

(1) Information on each field change is given in the following sequence:

(a) The field change number

(b) The field change title

(c) Correction material - temporary corrections, and revisions to existing equipment publications, complementary technical manuals, and technical manuals accomplishing field change kits.

(d) The type - class (the type and preferred activity to accomplish the field change, i.e., Types 1, 2, and 3, Classes A, B, and C.

(e) The modifying activity (i.e., FA - forces afloat, YF - yard forces) and the number of manhours required to accomplish the field change.

(f) The bulletin NAVSHIPS number or other reference.

(g) The Federal Stock Number assigned to a particular field change. Suffixes are given to identify various categories and for record purposes. They are as follows:

SUFFIX	MEANING
C	FSN cancelled; material disposed of
C1	FSN cancelled in accordance with BUSHIPS ltr ser 880-276 of 18 April 1957
C2	FSN cancelled in accordance with BUSHIPS ltr ser 880C-285 of 22 April 1957
C3	FSN cancelled in accordance with BUSHIPS ltr ser 880C-295 of 26 April 1957
C4	FSN cancelled in accordance with BUSHIPS ltr ser 880D-398 of 22 May 1957

Where the word "None" appears, the field change is either a Type 1 kit which was not converted to a Federal Stock Number or a Type 2 kit not requiring a stock number.

(h) The serial numbers or applicable conditions of specific equipments affected by a particular field change. "BUSHIPS" indicates that specific field changes to indicated equipments are as designated by the Bureau of Ships. Accomplishment of these changes should be arranged for in accordance with current instructions.

(i) The identification information applicable to each field change for use in determining its accomplishment.

(2) Reference to field changes should always be by use of the assigned field change number and the equipment designation; for example, 6-AN/SPS-6C represents the 6th field change to AN/SPS-6C.

b. ABBREVIATIONS. Except for those listed below, the abbreviations used in the FCIG were taken from Standard Abbreviations (JANAP 169), Military Standard Abbreviations for Use on Drawings (MIL-STD-12A).

ACU	Antenna control unit
ATDIR	Attack director
ATF	Automatic target follower
ATR	Anti-transmit-receive
BDI	Bearing direction indicator
BKT	Bracket
CCL	Communication control link
CPLR	Coupler
DLVD	Delivered
DPLXR	Duplexer
FC	Field Change
FE	Field engineer
FS	Frequency shift
GTT	Generated target training
HYDPH	Hydrophone
IMPED	Impedance
I & S	Installation and Service Bulletin
LSTN	Listening
MAGGY	Magnetron
MCC	Maintenance close contact
MFD	Microfarad
MFI	Multiple feature
MODIF	Modification
MTB	Maintenance true bearing
MTR	Meter
NLM	Noise level monitor
NOR	Norfolk
NRTC	Naval Reserve Training Center
NS	NavShips
N. T. -	Navy type
ODN	Own doppler nullifier
PERFRM	Performance
P/N	Part number
P/O	Part of
RA	Receiver-amplifier
RAI	Receiver-amplifier-indicator
RCG	Reverberation controlled gain
RECVR	Receiver
RHI	Remote height indicator
RIB	Radio Installation Bulletin
RMB	Radio Maintenance Bulletin
RNG	Range
RPPI	Remote plan position indicator
RTRB	Reliable true and relative bearing
SMB	Sonar Maintenance Bulletin
TB	Terminal board
TDC	Torpedo data computer
TDR	Time delay relay
TRB	True and relative bearing
TVG	Time variation of gain
VSWR	Voltage standing wave ratio
WGT	Weight
XDUCER	Transducer
XFMR	Transformer
( )	Series

c. CORRECTIONS. Recommendations for correction of errors and the addition of pertinent information to this guide should be reported to the Electronics Publications Section (Code 679A2), Bureau of Ships, and include:

(1) Designation of affected equipment.

(2) Location of error by page and line.

(3) Description of error and indication of what change should be made.

1-AN/PDR-18A – Shield, photo multiplier
Correction material: T-1 to NS 91715
A FA-1 NS98339 F6665-695-4310
SERIAL: 1-317 except 1-10, 38, 59, 110, 170, 171, 273, 283, 292, 310, 314
IDENTITY: Lead shield MS102 over 1P21 photo mult tube

2-AN/PDR-18A – Replacement of Feed-Through Insulators
Correction material:
2-B FA-1 NS981322 None
SERIAL: All
IDENTITY: Substitution of rubber feed-through insulators with 5/16 inch fibre washers in the wall separating the battery and instrument compartments.

1-AN/PDR-18B – Range action and case, modif
Correction material: Change 1 to NS 91662
1-B YF-7 NS98681 F6665-643-7329
SERIAL: All
IDENTITY: Radiation warning on battery compartment cover.

2-AN/PDR-18B – Sensitivity of radiac set AN/PDR-18B to stray magnetic fields
Correction material: None
2-A -2 NS981058 None
SERIAL: 1-2478
IDENTITY: Shield placed around the photomultiplier tube housing A-106.

3-AN/PDR-18B – Gear Stabilizer Spring Installations
2A YF
SERIAL: Radiac Set AN/PDR-18B
IDENTITY: Stabilizer Spring screw holding gear 0-107

1-AN/PDR-27C – Same as 1-AN/PDR-27 – except
Correction material: T-3 to NS 91444
A FA-1/2 NS98429 None
SERIAL: All
IDENTITY: Wire from 50 mr/hr contact on S101A to R101.

2-AN/PDR-27C – Pwr supply, modif
Correction material: TM for AN/PDR-27C, NS 91444
1-B YF-2-1/2 NS98971 F6665-543-1334
SERIAL: All
IDENTITY: Powered by eight BA-30's

3-AN/PDR-27C – Pwr supply, modif
1-A YF-3 NS981013 F6625-543-1560
SERIAL: All
IDENTITY: Results in AN/PDR-27cx

4-AN/PDR-27C – Hand probe, modif
1-B YF-1½ NS981037 None
SERIAL: 25 equips
IDENTITY: Results in AN/PDR-27 (XN-3)

1-AN/PDR-27CY – High Voltage Rectifier Replacement
Correction material:
2-A FA-1 None
SERIAL: As-needed-basis
IDENTITY:

1-AN/PDR-27D – Same as 1-AN/PDR-27 – except
Correction material: T-1 to NS 91649

2-AN/PDR-27D – Indicating circuit, modif
Correction material: T-2 to NS 91649
A FA-1/2 NS98634 None
SERIAL: All
IDENTITY: Blue lead attached to pin 7 of socket XA-201

3-AN/PDR-27D – Modification to Meter Illumination Circuit
Correction material: T-3 to NS91649, T-7 to NS91685, T-6 to NS91856
2-A FA-½ NS981694 None
SERIAL: All
IDENTITY:

1-AN/PDR-27E – Same as 1-AN/PDR-27C – except
Correction material: T-3 to NS 91685

2-AN/PDR-27E – Same as 2-AN/PDR-27D – except
Correction material T-4 to NS 91685
IDENTITY: Blue lead attached to pin 7 of socket XZ-101

3-AN/PDR-27E – Same as 3-AN/PDR-27D except correction material:

1-AN/PDR-27F – Same as 1-AN/PDR-27 – except
Correction material: T-2 to NS 91856

2-AN/PDR-27F – Same as 2-AN/PDR-27D – except
Correction material: T-3 to NS 91856
IDENTITY: Blue lead attached to pin 7 of socket XZ-101

3-AN/PDR-27F – Battery Condition Circuit Modification
Correction material: T-2 to NS92126: T-5 to NS 91856
2-A FA-¼ NS981381 None
SERIAL: All
IDENTITY: FC-3 and FC-2 stamped above the identification plates on both the Equipment Carrying Case 0-303 and the Radiacmeter Housing A-101 for Radiacmeters AN/PDR-27F and Radiacmeters AN/PDR-27H, respectively.

4-AN/PDR-27F – Same as 3-AN/PDR-27D except correction material:

1-AN/PDR-27G –
Correction material: T-2 to NS92071
2-C YF-¼
SERIAL: All
IDENTITY: Nomenclature stamped on handles of Radioactive Test Source should be either MX-1083B/PDR-27 or MX-1083C/PDR-27.

1-AN/PDR-27H – Same as 2-AN/PDR-27D – except
Correction material: T-2 to NS92126

2-AN/PDR-27H – Same as 3-AN/PDR-27F
Correction material: T-2 to NS92126

1-AN/PDR-27J – Provides Directional Survey Capability and 1000 mr/hr Range. Modifies AN/PDR-27J to AN/PDR-66; IM-141/PDR-27J to IM-194/PDR-66; DT-196/PDR-27J to DT-293/PDR-27J and not supplied to DT-289/PDR-66.
Correction material: Change 2 to NS93218A
1-A YF-2 NS981738
SERIAL: Equipments as designated by Bureau of Ships.
IDENTITY: The directional detector includes a stainless steel probe with a ½-inch diameter offset handle in hemispherical shield with a cast aluminum offset handle and a phenolic plastic face plate. The radiac set and radiacmeter change is identified by an attached label plate. The dual-probe radiac detector change includes detachment from the radiacmeter and installation of a 3-pin connector at the opposite end of the coiled cable.

2-AN/PDR-27J
Correction material: T- to NS
2-C NS0987-001-9820

1-AN/PDR-27P – Encapsulation of AN/PDR-27P Radiacmeter Circuit Board
Correction material T- to NS94790
SERIAL: All
IDENTITY: The printed circuit board of the AN/PDR-27P will be encapsulated. External Decal. Field Change 1-AN/PDR-27P.

1-AN/PDR-45 – Adds Storage Chain for Radioactive Test Sample
Correction material: T-1 to NS93072(A), T-2 NS93295
1-A FA-1 NS981796 F6665-738-6319
SERIAL: All equipments
IDENTITY: A new compartment and chain used for securing test sample.

1-AN/PDR-45A – Same as 1-AN/PDR-45

1-AN/PDR-47A – Component modifications
1C YF-6 NS981147 None
SERIAL: All
IDENTITY: Twin pot in probe.

2-AN/PDR-47A – Scale Change
2B FA-YF-1/12 FL6665-L00-9565
SERIAL: All
IDENTITY: Meter readout in mr/hr

1-AN/PDR-47B – Same as 2-AN/PDR-47A

1-AN/PDR-47C – Same as 2-AN/PDR-47A

1-AN/PDR-49 – Pwr supply and battery component modifications
FA– NS981148 None
SERIAL: All
IDENTITY: Mercury batteries replaced with dry cells BA-30's

2-AN/PDR-49 – Component Modification
Correction material: T-2 to NS93058
1-A FA-4 NS981310 F6665-670-7519
SERIAL: All
IDENTITY: 15V dry cell battery installed in probe.

3-AN/PDR-49 – Component Modification
Correction material: T-3 to NS93058 and T-2 to NS93341
1-A YF-1 NS981637 F6665-953-9125
SERIAL: All
IDENTITY: Meter readout in mr/hr.

1-AN/PDR-49A – Component Modification
Correction material: T-1 to NS93341
1-A FA-4 NS981364 F6665-856-1862
SERIAL: All
IDENTITY: 15V dry cell battery installed in probe.

2-AN/PDR-49A – Same as 2-AN/PDR-49
Correction material: T-2 to N93341

1-AN/PDR-51 – Detector Replacement
Correction material: CH-1 to NS92619(A)
2-C FA-½ 0285-081-0200
SERIAL: All

1-AN/PDR-66 – Same as 2-AN/PDR-27J

1-AN/UDM-3 – Enlarge Probe Port
Correction material: CH-1 to NS95903
3-A YF-3 NS0285-078-0600 None
SERIAL: All
IDENTITY: The new probe port has inside diameter of 3-3/8 inch rather than 3 inch.

1-AN/UDM-5 – Enlarges Probe Port
Correction material:
1-A FA
SERIAL: 1 through 11
IDENTITY: The new probe port has enlarged inside diameter of 3-9/32 inch rather than 3 inch and a length of aluminum tubing fitted over standpipe in line with the probe port.

1-CP-95/PD – Removal of Electrical Shock Hazard Present in Certain Radiac Computer Indicator CP-95/PD.
Correction material: None
11-C YF NS981630
SERIAL: Radiac Computer-Indicator Manufactured by Admiral Corp. utilizing Simpson Electric Company Indicating Meters.
IDENTITY: Absence of grounding lug connecting meter magnet to the red point adjustment screw on meter.

1-HD-251/UD – To provide ground return on the AC input
Correction material: None
1-A FA-½ NS981470 None
SERIAL: A1 thru A109, B1 thru B30
IDENTITY: Ground wire from J101 pin b to right motor mounting plate screw

1-IM-144/WDQ – Replacement of Vacuum Pump MP-601 and Oil Separator MP-602
Correction material: Change 3 to NS93272
1-A FA-10 NS981459
SERIAL: All
IDENTITY: Absence of Oil Separator MP-602

1-IM-144A/WDQ – Same as 1-IM-144/WDQ except Change 1 to NS94045

1-IM-148/WDQ – Replacing Pressure Differential Switch S109
Correction material: T-1 to NS93331
1-A YF-8 NS981491 F6665-970-3687
SERIAL: Accomplished on equipments which monitor Reactor Compartments only.
IDENTITY: Replaced pressure differential switch S109, which is referenced to atmosphere to a type (FSN N5930-629-0766) not referenced to atmosphere.

1-IM-151/(XN-1)/WDQ – Same as 2-IM-151/WDQ except:
SERIAL: Prototype

1-IM-151/WDQ – Replacement of Resistors R-169 and R-170
Correction material: T-1 to 93580
2-A FA-½ NS981471 None
SERIAL: A1 through A21
IDENTITY: R-170 is a 1-watt, 36.5-ohm resistor

2-IM-151/WDQ – Replacement of Pump Fittings with Vented Seal
Correction material:
1-A FA-1 NS981450
SERIAL: IM-151/WDQ (Serial 1 through 21) All other sets were corrected by an identical production change.
IDENTITY: The pump face flanges will not have grease fittings. Vented iron pipe plugs appear in their place.

3-IM-151/WDQ – Replacement of Pump Fittings with Vented Seal
Correction material:
1-A FA-1
SERIAL: All Equipment Repair part air pumps for IM-151/WDQ
IDENTITY: The pump face flanges will not have grease fittings. Vented iron pipe plugs appear in their place.

4-IM-151/WDQ – Component Modification
Correction material: T- to NS93580
1-A FA-6 NS981508 F6665-973-0453
SERIAL: Accomplished on equipments which monitor Reactor Compartments only.
IDENTITY: Replaced pressure differential switch S302 with type FSN N5930-629-0766.

5-IM-151/WDQ – Rewiring of Alarm Trip Circuit
Correction material: Change 3 to NS93580
1-A FA-10 NS981668 F6665-050-8011
SERIAL: All
IDENTITY: Addition of Terminal Board E-118

6-IM-151/WDQ – Replacement of V101 and V102 (700V Regulators) With One 1400 VR Tube to Eliminate Unbalance Problems
Correction material: CH-5 to NS93580
2-A FA-1 NS0969-012-1070 None
SERIAL: All
IDENTITY: The two 700-volt regulators (Type 5962 have been replaced by a single 1400-volt regulator (Type 8615)

1-IM-151A/WDQ – Same as 5-IM-151/WDQ

2-IM-151A/WDQ – Switch S301 Interference with Pump Switch Mounting Bracket.
Correction material: None required
1-A FA-4 NS981767 F6665-740-0507
SERIAL: All
IDENTITY: The addition of 1/16 inch plastic sheet between Pressure Switch S302 and Pump Switch Mounting Bracket.

3-IM-151A/WDQ – Same as 6-IM-151/WDQ

1-PU-340/G – Improved engine speed control and shutdown.
Correction material: NS93308
1-A YF-8 NS981496 None
SERIAL: 60 (All Navy owned)
IDENTITY: New solenoid valve attached to governor.

1-PU-383/M – Improved engine speed control and shutdown.
Correction material:
1-A YF-8 NS981492 None
SERIAL: 100 Navy owned equipments.
IDENTITY: New solenoid valve attached to governor.

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