

*Class 90—Visual Signalling Apparatus*

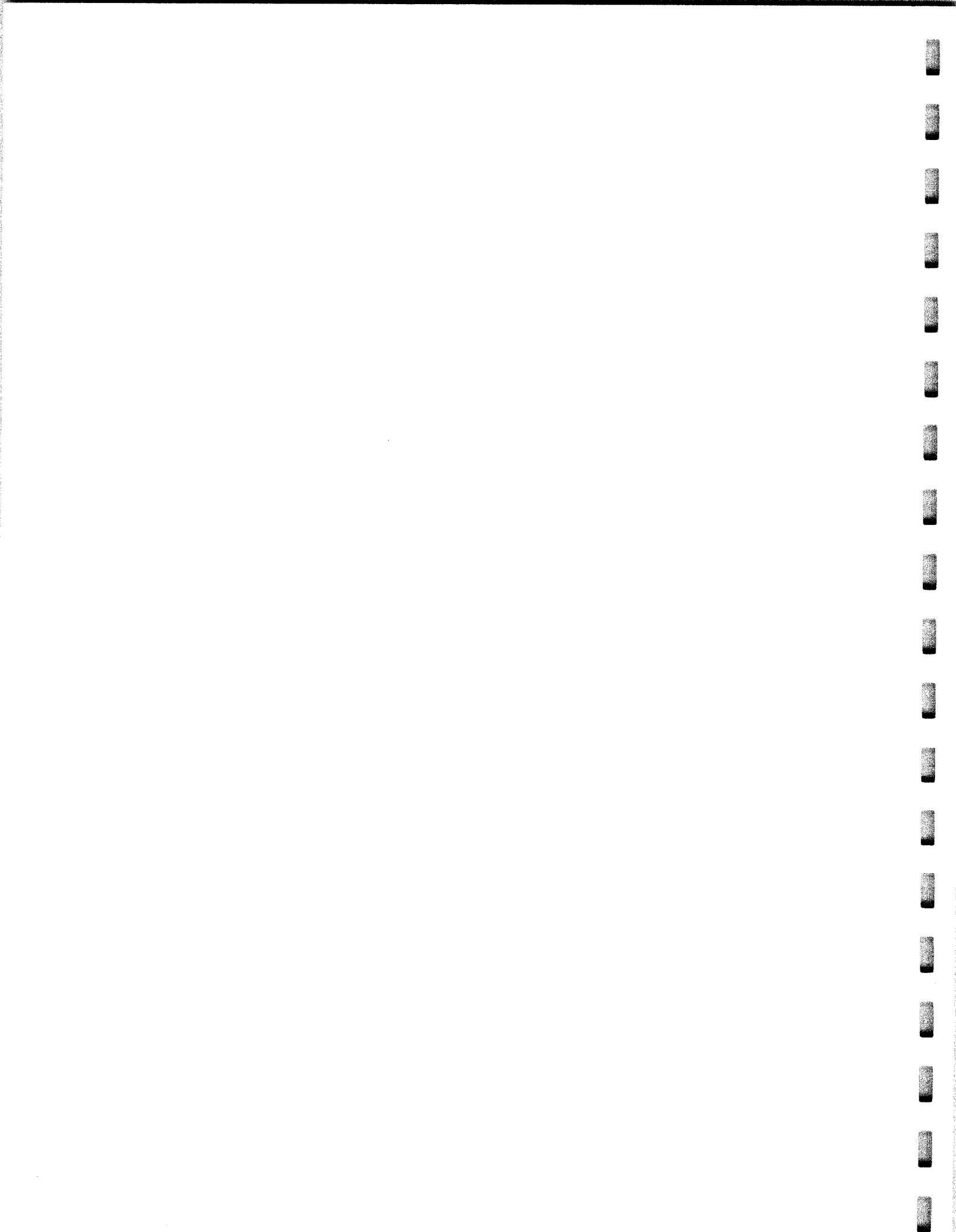
**CLASS 90**

**VISUAL SIGNALLING APPARATUS**

**INCLUDES: SEARCHLIGHTS  
SHUTTERS**

**CONFIDENTIAL**

**NAVSHIPS 900,109**



Class 90—Visual Signalling Apparatus

3.90-1

NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION
CAY 90000	12-1-22	RE 90F 102	CG-90007-A	VA-1	6RE 90J 1021A	CNF 90011	GENERAL USE	57RE90J1025A
SHUTTER - RADIAL VANE FOR 12-1-22 SEARCHLIGHTS.			24" SEARCHLIGHT PROJECTOR (INCANDESCENT / ARC). SAME AS -90007 EXCEPT FOR SLIGHT CHANGES IN COMPONENTS.			SEARCHLIGHT - 12 INCH 12 INCH SIGNALLING SEARCHLIGHT USING EITHER THE TGS-16, 1 KW LAMP 116 VOLT, A TYPE TGS-19, 1000 WATT LAMP 30 VOLT AND TYPE -90004 VENETIAN SHUTTER.		
1/28/36	NOV. 41		1/6/39	NOV. 41		2/11/39	NOV. 41	
CNF 90001	12-1-23	RE 90F 102	CG-90007-B	VA-2	6RE 90J 1041A	CNF 90011-A	COAST GUARD	57RE90J1036A
SHUTTER - RADIAL VANE FOR 12-1-23 SEARCHLIGHTS.			24" SEARCHLIGHT PROJECTOR (INCANDESCENT ARC). SAME AS -90007A EXCEPT USES ARMORED CABLE IN LIEU OF PLAIN CABLE.			SEARCHLIGHT - 12 INCH SAME AS CNF-90011 EXCEPT HAS PLATE GLASS REFLECTOR INSTEAD OF METAL MIRROR.		
1/28/36	NOV. 41		10/4/39	NOV. 41		1/11/40	NOV. 41	
CG-90002	12-1-20	RE 90F 102	CG-90007-C	VA-4		CNF 90011-B	GENERAL USE	57RE 90J 1044
SHUTTER - RADIAL VANE FOR 12-1-20 SEARCHLIGHTS.			24" SEARCHLIGHT PROJECTOR SAME AS 90007B EXCEPT HAS KEY MOUNTING BRACKET ON ARM.			SEARCHLIGHT - 12 INCH. SAME AS CNF-90011A EXCEPT FOR SLIGHT MODIFICATION IN COMPONENTS.		
1/28/36	NOV. 41		4/8/41	NOV. 41		1/10/41	NOV. 41	
CG-90003		RE 90F 103	CG-90008	VA	6RE 90J 1015A	CG-90012	VB	6RE 90J 1032A
SHUTTER - VENETIAN SHUTTER FOR 12-1-22 SEARCHLIGHTS.			ARC LAMP FOR 24" SEARCHLIGHT.			24" SEARCHLIGHT PROJECTOR (INCANDESCENT / ARC). HAS REMOTE CONTROLLED SIGNALLING SHUTTER. SAME AS -90007A EXCEPT FOR WIRING OF MAIN SWITCH FOR DC OPERATION.		
2/13/36	NOV. 41		6/14/37	NOV. 41	CG:WV-4978784 ALT 1	10/4/39	NOV. 41	
CAY 90004		RE 90F 103	CG-90008-A	VA-1	6RE 90J 1022A	CG-90012-A	VB-1	
SHUTTER - VENETIAN SHUTTER FOR 12-1-23 SEARCHLIGHT.			ARC LAMP SAME AS -90008 EXCEPT FOR SLIGHT MODIFICATION IN COMPONENTS.			24" SEARCHLIGHT PROJECTOR. SAME AS 90012 EXCEPT USES ARMORED CABLE IN LIEU OF PLAIN CABLE.		
2/13/36	NOV. 41	CNF:2009 DATED 10/14/39	1/6/39	NOV. 41		10/4/39	NOV. 41	
CNF 90005		RE 90F 103	CG-90009	VA	6RE 90J 1016A	CG-90012-B	VB-2 & VB-3	6RE 90J 1035B
SHUTTER - VENETIAN SHUTTER FOR 12-1-20 SEARCHLIGHT.			INCANDESCENT LAMP MOUNTING. FOR USE WITH TYPE TGS-16 2.1 KW LAMPS.			24" SEARCHLIGHT PROJECTOR. SAME AS NAVY TYPE -90012A EXCEPT THICKNESS OF METAL IN DRUM IS INCREASED FROM .06" TO 0.125" AND METAL PACKING IS USED INSTEAD OF FLAX PACKING IN TERMINAL TUBES.		
2/13/36	NOV. 41		6/14/37	NOV. 41	CG:M-4976058 ALT 4	3/19/40	NOV. 41	
CAY 90006		* SEE BELOW RE 90J 1061	CG-90009-A	VA-1	6RE 90J 1025A	CG-90012-C	VB-4	
12" SEARCHLIGHT. 12" INCANDESCENT SEARCHLIGHT, 30 VOLTS.			INCANDESCENT LAMP MOUNTING. FOR USE WITH TYPE TGS-16 2.1 KW LAMPS. SAME AS -90009 EXCEPT FOR SLIGHT MODIFICATION IN COMPONENTS.			24" SEARCHLIGHT PROJECTOR SAME AS NAVY TYPE -90012B EXCEPT HAS KEY MOUNTING BRACKET ON ARM.		
2/13/36	NOV. 41		1/6/39	NOV. 41		4/8/41	NOV. 41	
CG-90007	VA	6RE 90J 1014A	90010		RE 90J 107	CNF 90013	AT'S	57RE90J1029A
24 INCH SEARCHLIGHT PROJECTOR (INCANDESCENT / ARC). HAS REMOTE CONTROLLED SIGNALLING SHUTTER & 2.1 KW INCANDESCENT LAMP TYPE TGS-18 FOR 60 VOLT SUPPLY OR ARC FROM 75 VOLT DC SUPPLY.			SEARCHLIGHT, 12 INCH INCANDESCENT, 1000 WATT EITHER 30 OR 115 VOLTS AC OR DC.			12 INCH SEARCHLIGHT. HAND WHEEL PILOT HOUSE CONTROL, USES ONE TGS-16 1 KW LAMP AND TYPE CNF-90004 VENETIAN SHUTTER.		
5/4/37	NOV. 41		7/7/37	NOV. 41	CG:N-869538 REV 2	11/22/39	NOV. 41	CNF:2010 & 2012 DATED 10/16/39

DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	ASSIGNED ISSUED	DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	ASSIGNED ISSUED	DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER
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CNF 90014 PC'S 57RE90J1030A  
 12 INCH SEARCHLIGHT.  
 LEVER PILOT HOUSE CONTROL: USES ONE  
 TCS-16 1 KW LAMP AND TYPE CNF-90004  
 VENITIAN SHUTTER.

11/22/39 NOV. 41 CNF:2010-B & 2012B; 10/18/39

CAN 90015 QFA:  
 OPTICAL PROJECTOR:

2/13/42 MAR. 44 811941 REV 0

CAN 90015A QFA-1  
 OPTICAL PROJECTOR: SAME AS  
 BASIC NUMBER EXCEPT (1) SUBMARINE TUNING  
 CIRCLE INDEPENDENT OF SPEED, (2) ADDI-  
 TION OF VARIABLE ATTENUATION FEATURE TO  
 ECHO RESPONSE, (3) MODIFICATION OF BOMB  
 BARRAGE TO EITHER THE PATTERN LAID DOWN  
 BY EITHER A PC BOAT OR A DESTROYER, (4)  
 11/4/42 811941  
 MAR. 44 REV 0

ADDITION OF A RECTIFIER CAN 90015A  
 TO IMPROVE VOLTAGE REGULATION AND HAVE  
 THE STABILITY OF THE DOPPLER, AND (5)  
 ALTERATION OF THE RELAY AND TRANSFORMER  
 UNIT TO MAKE PROVISION FOR FLASHING OF  
 THE BARRAGE WITHOUT INTERRUPTION OF  
 MOTION OF EITHER PURSUING VESSEL OR  
 TARGET.

CAN 90016 QFA-2  
 OPTICAL PROJECTOR:  
 PERFORMS SAME FUNCTIONS AS -90015 AND  
 -90015-A, BUT HAS BEEN REDESIGNED. NOT  
 INTERCHANGEABLE.

1/12/43 MAR. 44 811941 REV 0

CAN 90017 QFA-3  
 OPTICAL PROJECTOR:  
 SIMILAR TO CAN-90016 BUT RETICLE FOR  
 BOMB PATTERN HAS BEEN ELIMINATED AND  
 COMPONENT PARTS HAVE BEEN ADDED TO GIVE  
 HYDROPHONE EFFECT AT NEM SUBMARINE  
 STATION.

2/12/43 MAR. 44 811941 REV 0

CAN 90018 QFA-2a  
 OPTICAL PROJECTOR  
 SIMILAR TO NAVY TYPE -90016 EXCEPT IN-  
 CLUDES LEFT HAND PROJECTING ELEMENT AND  
 SOUND EFFECTS SECTION AS IN NAVY TYPE  
 -90017.

4/3/44 JULY 44

CAN 90019 QFA-b, QFA-1b  
 OPTICAL PROJECTOR

4/3/44 JULY 44

CAN 90020 QFA-C, QFA-1C  
 OPTICAL PROJECTOR

4/3/44 JULY 44

CAN- 90021 QFA-5  
 OPTICAL PROJECTOR  
 SIMILAR TO -90017 EXCEPT (1) POWER AMP-  
 FILIER UNIT REDESIGNED (2) CHOPPER MOTOR  
 REDESIGNED TO A HYSTERESIS STRUCTURE AND  
 PROVIDED AS A SEPARATE INSTEAD OF A  
 BUILT-IN UNIT (3) ADDITION OF "NO DOP-  
 PLER TARGET" FEATURE (4) REDESIGN OF  
 6/6/44 811948  
 OCT. 44 REV 0

CAN- 90021  
 SOUND EFFECTS UNIT (5) RED LIGHT ADDED  
 TO COMPASS DIALS (6) REARRANGEMENT OF  
 CABINET AND TERMINAL BOARD WIRING.

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