
**OFF AIRCRAFT MAINTENANCE
WITH ILLUSTRATED PARTS BREAKDOWN**

**PURGE RELAY OPTICS ASSEMBLY
PART NUMBER 135150-1**

Reference Material

Introduction	WP002 00
Testing and Troubleshooting	WP004 00
Cleaning and Inspection	WP005 00

Alphabetical Index

<u>Subject</u>	<u>Page No.</u>
Cleaning	3
Illustrated Parts Breakdown	3
Illustration	5
Parts List	7
Inspection	3
Purging	2
Purging Relay Optics Assembly, Figure 1	4
Relay Optics Assembly, Figure 2	5

Record of Applicable Technical Directives

None

1. PURGING.

Support Equipment Required

Nomenclature	Type Designation/ Part Number	CAGE
* Adapter	GTMB8A	55719
Purge Kit (afloat)	268549	13567
Purge Kit (ashore)	SC4931-95CLJ54	19200
Purge Valve Adapter	269390-1	13567
* Tip, Hex Flat	120141	32652
* Torque Screwdriver	6C486	25795
2 - 100 Inch-Ounce		

* Part of JHMCS Torque Tool Kit 3829AS110

Materials Required

Nomenclature	Specification or Part Number
Cloth, Lint-free	MIL-C-85043 TYPE 1
Cotton Tip Swab	GG-A-616
Leak Test Compound	SNOOP 8 OZ

WARNING

Serious injury may result if the nitrogen tank valve breaks off. If the tank valve breaks, the tank can be propelled by the force of escaping gas and strike you or others. To prevent injury, always secure the tank to an upright support before removing the tank valve guard and attaching the regulator valve to the tank.

CAUTION

Do not try to remove relay optics assembly. The relay optics assembly is a matched set with the HDU.

NOTE

HDU and relay optics must remain together. If relay optics assembly is not repair-

able by purging, return HDU and relay optics assembly to depot.

a. Connect pressure regulator to nitrogen tank per applicable regulator technical publication. Refer to [figure 1](#).

b. Set pressure to zero by turning the regulator valve handle counterclockwise until there is no spring pressure on the control.

c. Slowly open nitrogen tank valve and back turn a quarter turn. The high pressure gauge should read at least 250 psi.

CAUTION

Do not hook up regulator to relay optics assembly until regulated down to 5 psi.

d. Adjust regulator pressure to 5 psi, purging line for at least 30 seconds.

e. Remove purge valve screws (1, [figure 2](#), sheet 2) and preformed packings (2, sheet 2) from purge valves of the relay optics assembly.

f. Set up the relay optics assembly so the purge valve holes are facing up. Refer to [figure 1](#).

CAUTION

Do not over torque connection between purge valve adapter and relay optics assembly purge valve.

g. Without the pressurized regulator hose attached to the purge valve adapter, screw the purge valve adapter on one of the purge valves of the relay optics assembly.

WARNING

With the pressurized purge valve adapter attached to one of the relay optics assembly purge valves, do not cover the remaining open purge valve. Over pressurization may occur resulting in seal leakage.

h. Gently press the pressurized regulator hose on the purge valve adapter. Allow 5 psi of nitrogen to run through the relay optics assembly for 5 minutes.



Leak test compound is a liquid and should be used moderately. Care should be taken not to get leak test compound on lenses or electrical components.

i. Using a cotton tip swab soaked in leak test compound, apply along seals and moldings looking for bubbles indicating a leak. If leaks are detected, return HDU to depot.

j. After 5 minutes, wipe any excess leak test compound off with a lint-free cloth.

k. Remove the pressurized regulator hose from the purge valve adapter.

l. Close the nitrogen tank valve and release the pressure on the regulator valve handle.

m. Remove the purge valve adapter from the relay optics assembly.



Be sure not to cross thread purge valve screws into purge valve.

n. Within 30 seconds of removing purge valve adapter from relay optics assembly, install preformed packings (2, sheet 2) and purge valve screws (1, sheet 2) in purge valves.



Do not overtighten purge valve screws.

o. Using hex flat tip, adapter, and torque screwdriver, tighten purge valve screws (1, sheet 2) until o-ring seal is closed. (QA)

- p. Make sure the regulator valve indicates zero.
- q. Disconnect pressure regulator from nitrogen tank. Refer to figure 1.
- r. Make sure HDU operates correctly. Do TESTING AND TROUBLESHOOTING per WP00400.
- s. Document per OPNAVINST 4790.2 series. (QA)

2. CLEANING.

Support Equipment Required

None

Materials Required

None

- a. Refer to WP00500 for cleaning.

3. INSPECTION.

Support Equipment Required

None

Materials Required

None

- a. Refer to WP00500 for inspection.

4. ILLUSTRATED PARTS BREAKDOWN.

- a. For illustrated parts breakdown of the relay optics assembly, refer to figure 2.

- b. Refer to the Illustrated Parts Breakdown, WP00200.

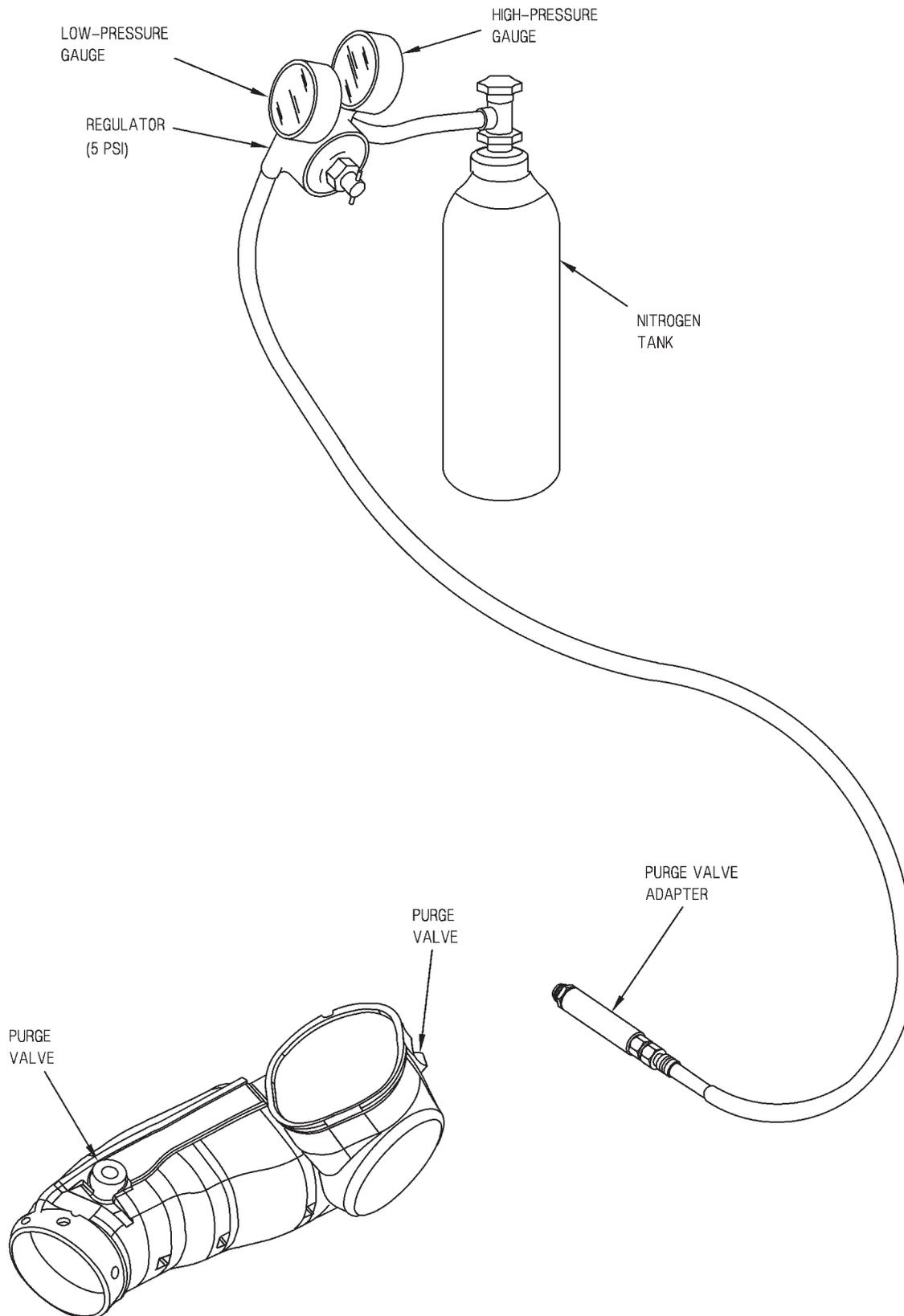


Figure 1. Purging Relay Optics Assembly

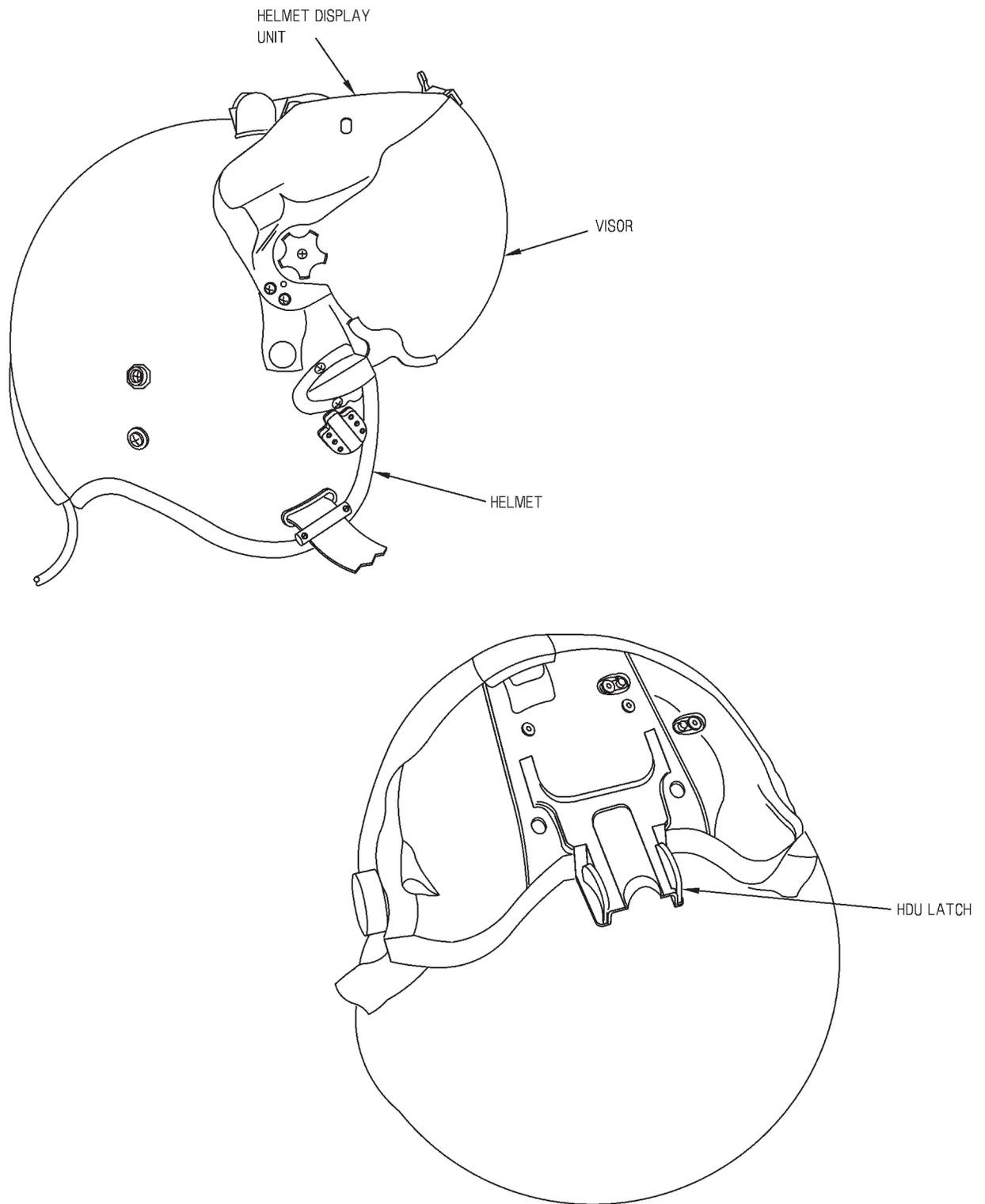


Figure 2. Relay Optics Assembly, Part Number 135150-1 (Sheet 1 of 3)

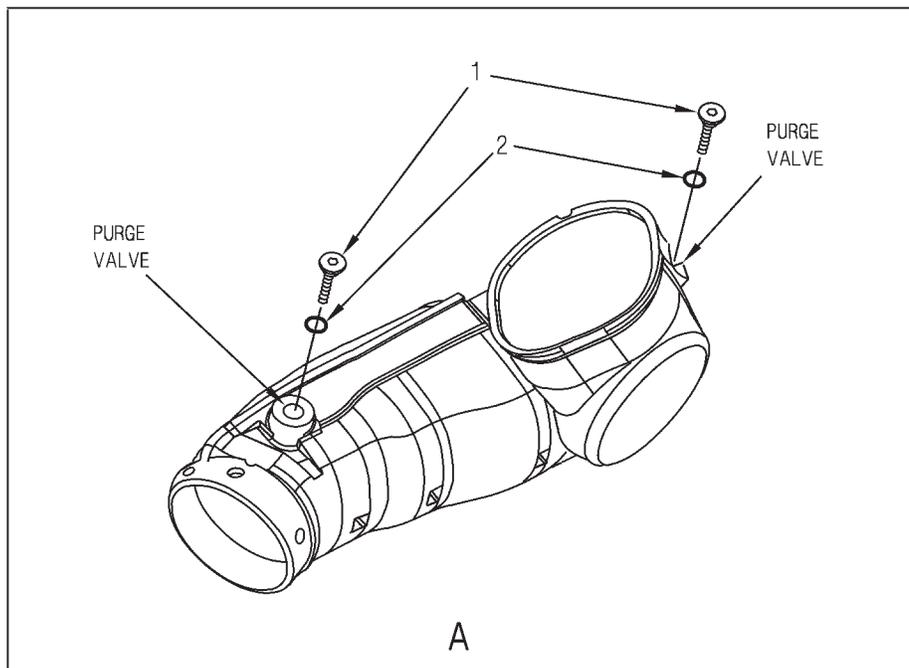
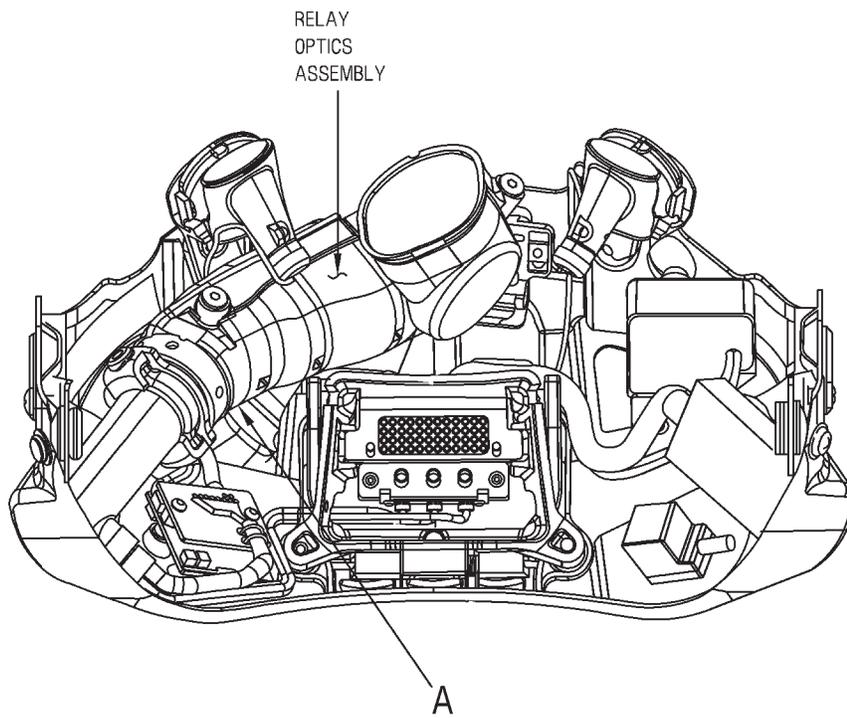


Figure 2. Relay Optics Assembly (Sheet 2)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
	135150-1	RELAY OPTICS ASSEMBLY /09344/.....							REF		PADBZ
		/NHA, WP010 00/									
1	8B10131	. SCREW, PURGE VALVE.....							2		PAOZZ
	SM-C-806612	. SCREW, PURGE VALVE /13567/.....							2	*	PAOZZ
2	AS3578-002	. PACKING, PREFORMED /81349/.....							2		PAOZZ

Figure 2. Relay Optics Assembly (Sheet 3)

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