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TRANSMITTAL SHEET

The Revision 7, dated MAR 07/11 is attached and covers all components held by every operator.

GENERAL :

Reasons for revision:

All pages of CMM are re-issued as a result of modifications.

Modification of following sections, INTRO for the address, DESCRIPTION, TESTING AND FAULT ISOLATION concerning the tools and DISASSEMBLY.

FILING INSTRUCTIONS:

Revision N°7 dated MAR 07/11, replaces revision N° 6 dated MAR 01/06 which is to be withdrawn and disposed of.

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(F0280)

**COMPONENT MAINTENANCE MANUAL
WITH
ILLUSTRATED PARTS LIST**

LOGO LIGHT

P/N 4292491

4328733

4358532

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RECORD OF REVISIONS

33-47-11

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RECORD OF TEMPORARY REVISIONS

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SERVICE BULLETIN LIST

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INTRODUCTION

TASK 33-47-11-990-801-A01

1. INTRODUCTION

A. Information

- (1) The Component Maintenance Manual (CMM) is written in accordance with the Air Transport Association of America Specification No. 100 (ATA100), Revision 37 and in AECMA Simplified English.
- (2) The Component Maintenance Manual gives all the procedures supplied by the manufacturer for use in the workshop, so that all persons can repair and completely overhaul the component.
- (3) The manual describes maintenance on the component in a workshop. It does not define or show the level of maintenance for all special units, but gives all the procedures necessary to let the person to do a test, disassemble, clean, check and assemble a unit which has been rejected from serviceable use. The manual does not describe maintenance on the component when it is installed on the aircraft.
- (4) Only approved persons are permitted to do the maintenance procedures given in this manual.
- (5) Maintenance Task oriented Support System (MTOSS) task and subtask identification is used in this manual. The maintenance tasks and other data have special MTOSS numbers for use of Electronic Data Processing (EDP). The user of manual can ignore the MTOSS numbers.
- (6) Where the data or procedures specified in this manual are different from those specified by the regulatory agency which controls operation of your aircraft, obey the data and procedures of the regulatory authority.
- (7) This manual contains:
 - Technical data for the component,
 - Maintenance and repair procedures for the component,
 - Illustrated Parts List (IPL) or Illustrated Parts Catalogue (IPC) with data for the component parts. The IPL Figure and item number identifies parts in all sections of the manual.

B. How to Use the Manual

- (1) Make sure the manual contains the information applicable to your component. Look on the Title Page for the part number.
- (2) If it is necessary to identify a part or find a part number, refer to the IPL (or IPC), which has an introduction to show the procedure.
- (3) The instructions in this manual must be used for all component maintenance. Read all the applicable WARNINGS and CAUTIONS before you do the work on the component.

C. Process Verification

- (1) The manufacturer has validated the "Disassembly, Testing and Fault Isolation and Assembly" procedures in this manual.

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- Disassembly: verified by performance or simulation of the specified procedures.
- Testing and Fault Isolation: verified by performance or simulation of the specified procedures.
- Assembly: verified by performance or simulation of the specified procedures.

D. Modification

- (1) All result data and illustrations in this manual are the last revision available at the time of printing. ECE supplies updates to this manual when necessary. When ECE issues a modification to units included in this manual, ECE will revise the manual to include the information.
- (2) When there is a change, each updating gives the full instructions about the page number of the pages, which must be replaced, added or removed. Revised test or new texts are located with a vertical black line in the margin.

E. Measurements

- (1) The measurements given in this manual are taken from the original reference document of the manufacturer.
- (2) All values given in this manual are in System International (SI) units or sub-divisions of these units. Imperial units or US are given in parenthesis immediately after the metric unit. The decimal point in the SI is shown by a comma and in the Imperial system by a full stop, e.g. 25,4 mm (1.00 in).
- (3) Measurement conversion table:

From: SI measurement	To: U.S. standard system
1 kPa	0.1450 psi
1 cm	0.3937 in.
1 N	0.2248 lbf
1 g	0.0353 oz
1 kg	2.2046 lb
1 L	0.2642 gal (U.S.)
1 L/min	0.2642 gal (U.S.)/min
1 mm	0.0394 in.
1 Nm	8.8507 lbf/in
1 Nm	0.7376 lbf/ft
From: U.S. standard system	To: SI measurement

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From: SI measurement	To: U.S. standard system
1 psi	6,8948 kPa
1 in.	25,4 mm
1 lbf	4,4482 N
1 oz	28,3495 g
1 in.Hg	3,3864 kPa
1 lb	0,4536 kg
1 gal (U.S.)	3,7854 L/min
1 lbf/in	0,1130 Nm
1 lbf/ft	1,3558 Nm

F. Abbreviations

(1) The abbreviations used in this manual are given below:

- Amps = Ampere
- °C = degree Celsius
- cd = candela
- cm3 = Cubic centimeter
- cmg = centimeter gramme
- cu.in = Cubic inch
- Nm = Newton meter
- °F = Fahrenheit degree
- ft.lb = feet-pound
- g/cm2 = gramme/square centimeter
- in = inch
- In.lb = Inch pound
- kg = kilogramme
- kPa = kiloPascal
- hPa = hectoPascal
- lb = pound

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- L/min = Liter per minute
- mbar = millibar
- mm = millimeter
- mm/Hg = Mercury millimeter
- MPa = MegaPascal
- mV = millivolt
- Nm = Newton-meter
- psi = pound per square inch
- rpm = revolution per minute
- SH or CW = clockwise
- SIH or CCW = counterclockwise
- VDC = volt direct current

G. Manufacturing

- (1) The Equipment is manufactured by:

E.C.E

BP113

129 bd Davout

75960 - PARIS CEDEX

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- (2) The Equipment is supported by:

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H. Repairer Facilities

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DESCRIPTION AND OPERATION

TASK 33-47-11-870-801-A01

1. **LOGO LIGHT - DESCRIPTION**

A. General

- (1) The Logo Lights are installed on the horizontal stabilizers to illuminate the logo on the aircraft fin so that the aircraft can be identified during night flight.

B. Description

Subtask 33-47-11-870-001-A01

(1) Data

- (a) Dimensions and weight P/N 4292491 and 4328733

Body diameter:	176 ± 1 mm (6.929 ± 0.0394 in)
Height:	88,8 ± 1 mm (3.496 ± 0.0394 in)
Weight:	1,200 kg (2.64 lbs)

- (b) Dimensions and weight P/N 4358532

Body diameter:	176 ± 1 mm (6.929 ± 0.0394 in)
Height:	144,5 ± 1 mm (5.689 ± 0.0394 in)
Weight:	1,751 kg (3.86 lbs)

- (c) Optical system

Sealed beam type:	GE Q4631
Power:	250 W
Voltage:	13 V
Life:	500 h

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(d) Lighting beam

Maximum lighting intensity:	6000 cd
Horizontal lighting angle:	65°
Vertical lighting angle:	50°

(e) Electrical Properties

Voltage:	115 VAC / 400 Hz
Amperage:	2,8 A Maximum

(f) Protection

- 1 Stabilization and sulfuric acid anodizing (grey).
- 2 Airbus grey paint on grey support.
- 3 Heat dissipator: anodic oxidation (black).
- 4 Hardware: steel dichromated cadmium plating or stainless.

C. Detailed description

Subtask 33-47-11-870-002-A01

(1) General (Ref. to Fig. 2)

(a) The logo light basically consists of:

- The housing assy.
- The autotransformer assy.
- Upper cover assy.
- An indicating plate (13) and an amendment plate.

1 The housing assy

a The housing assy (7) houses the light assembly.

- The light assembly contains the incandescent lamp (3) and the autotransformer assy (9).
- The housing assy (7) is fitted with the receptacle connector (12), the indicating plate (11) and the amendment plate (10) on the outside.

a The autotransformer assy

- Logo light P/N 4328733 (Ref. to Fig. 2 Sheet 2 of 3):

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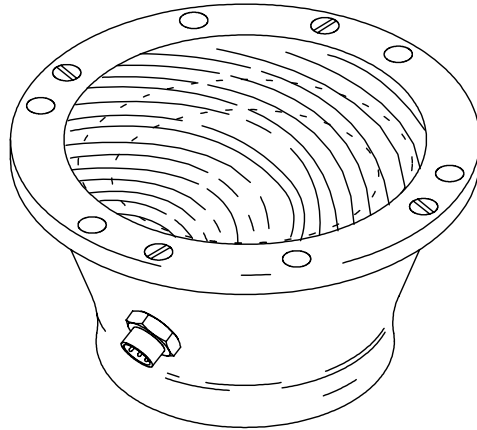
- The autotransformer assy (9) is installed on rubber washer (13).
 - The housing assy (7) has a ground terminal (14) and eight drain holes (15).
 - Logo light P/N 4358532 (Ref. to Fig. 2 Sheet 3 of 3):
 - The autotransformer assy (11) is installed on the external side of the housing assy (7). It is installed on a rubber washer (9) used as an interface between these two sub-assemblies.
 - The installation of the autotransformer assy is made through three pillars which are parts of the heat dissipator of the autotransformer assy (11).
 - The assembly is attached to the housing assy (7) with 3 screws.
 - The housing assy (7) is electrically bonded to the autotransformer assy (11) through a braid assy (10).
 - The bottom of the housing assy (7) has height drain holes and the bottom of the heat dissipator of the autotransformer assy (11) has three drain holes.
- b The upper cover assy
- The upper cover assy (1) with deflection glass (2) is assembled to the housing assy (7) by four turnlock studs (5).
 - A gasket (6) is interposed between these two components to make the assembly airtight.
- b The indicating plate and the amendment plate
- The indicating plate (13) and the amendment plate (14) are bonded to the housing assy (7).

D. Logo Light - Operation (Ref. to Fig. 4) (Ref. to Fig. 5)

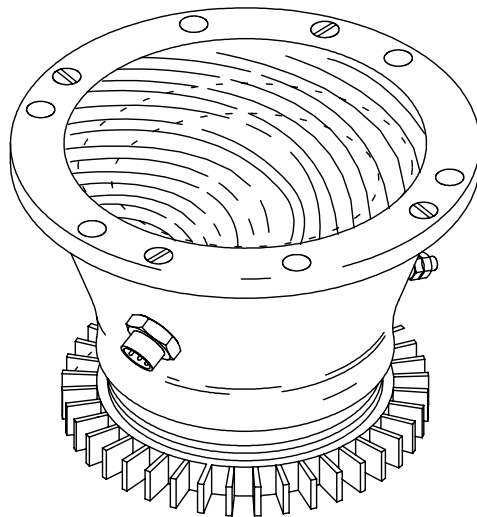
Subtask 33-47-11-870-003-A01

- (1) The aircraft power system supplies 115 VAC / 400 Hz power to the logo light which turns on. The logo light is supplied through the autotransformer which lowers the voltage to 13 VAC / 400 Hz.
- (2) When it goes through the deflection glass, the light beam increases width to 65° in the horizontal plane and 50° in the vertical plane.
- (3) The lamp is a "sealed beam" single-filament type.

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P/N : 4292491 - 4328733

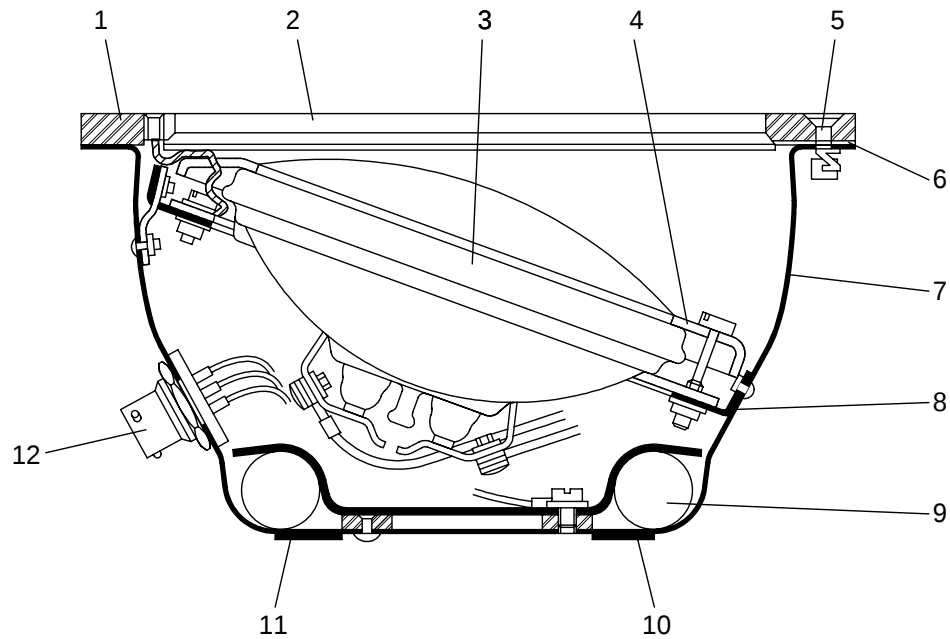


P/N : 4358532
Logo Light

33-47-11-991-001-A01-1

Logo light
Figure 1/GRAPHIC 33-47-11-991-001-A01

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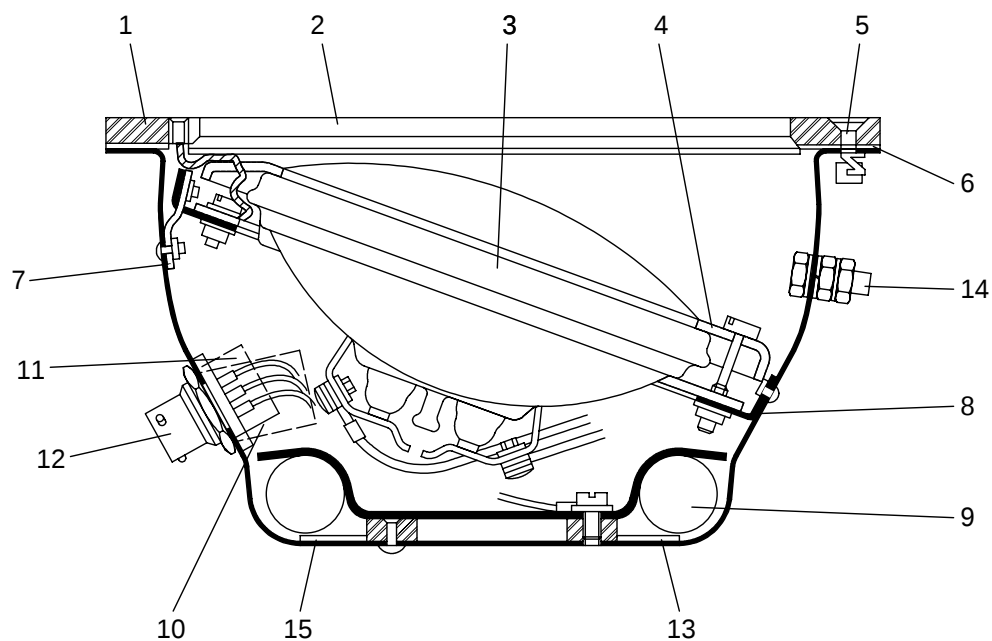
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Description Logo LightP/N 4292491 (Sheet 1 of 3)
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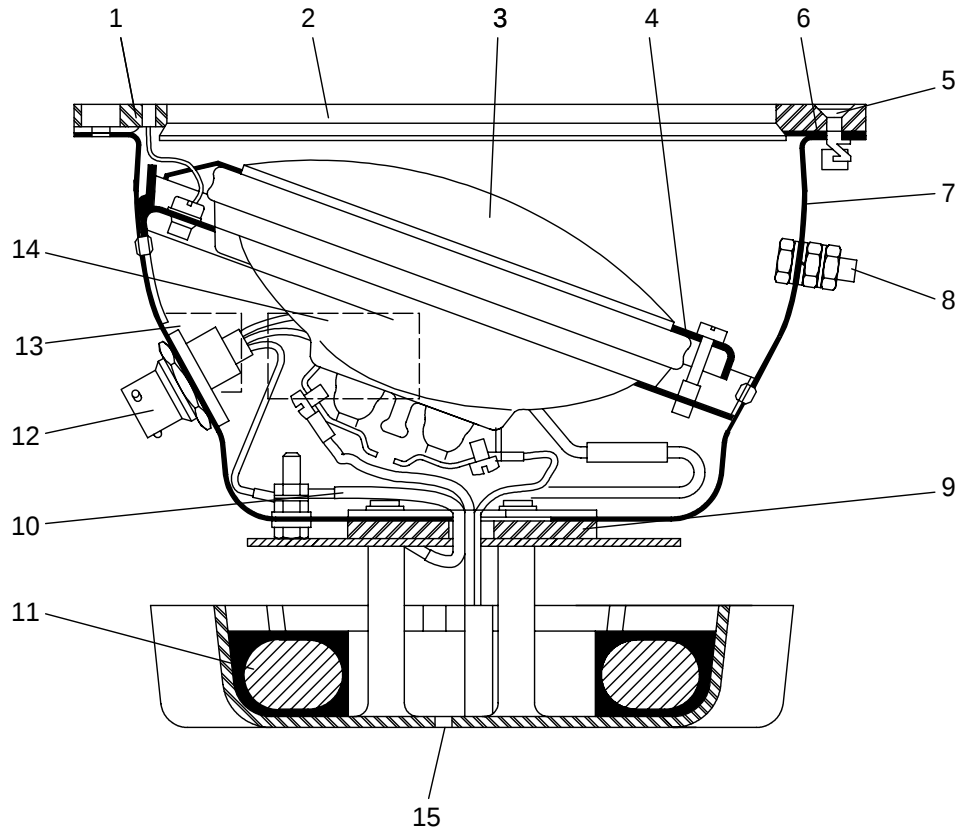
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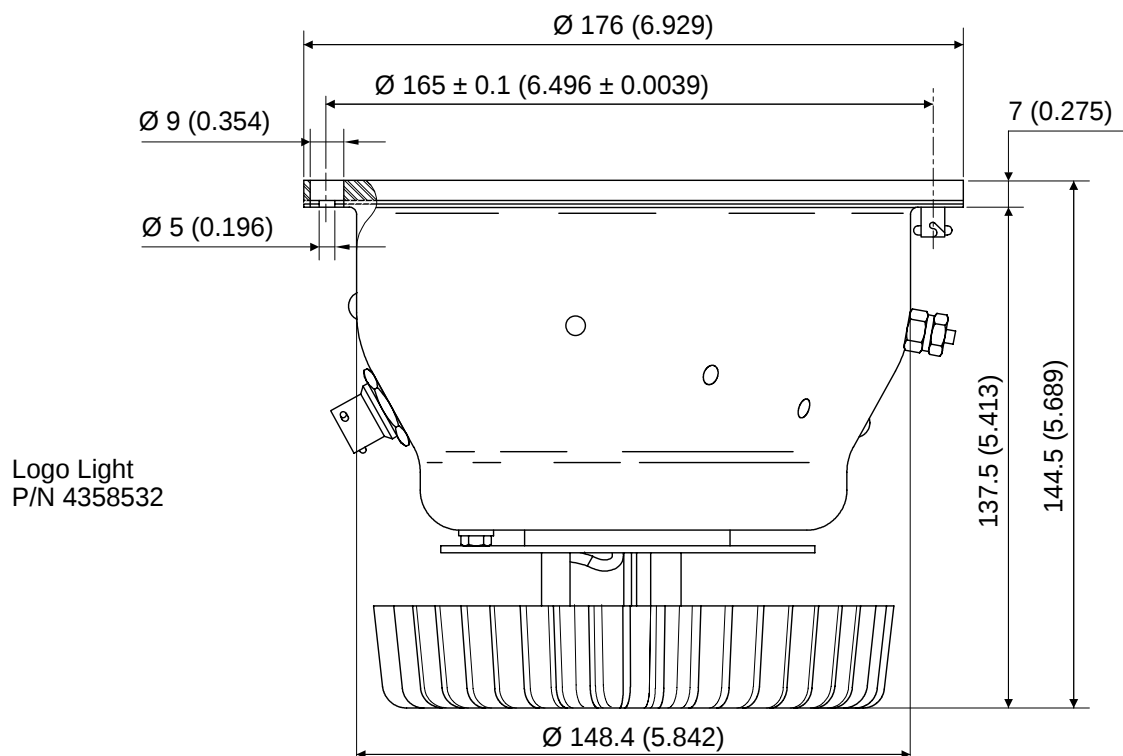
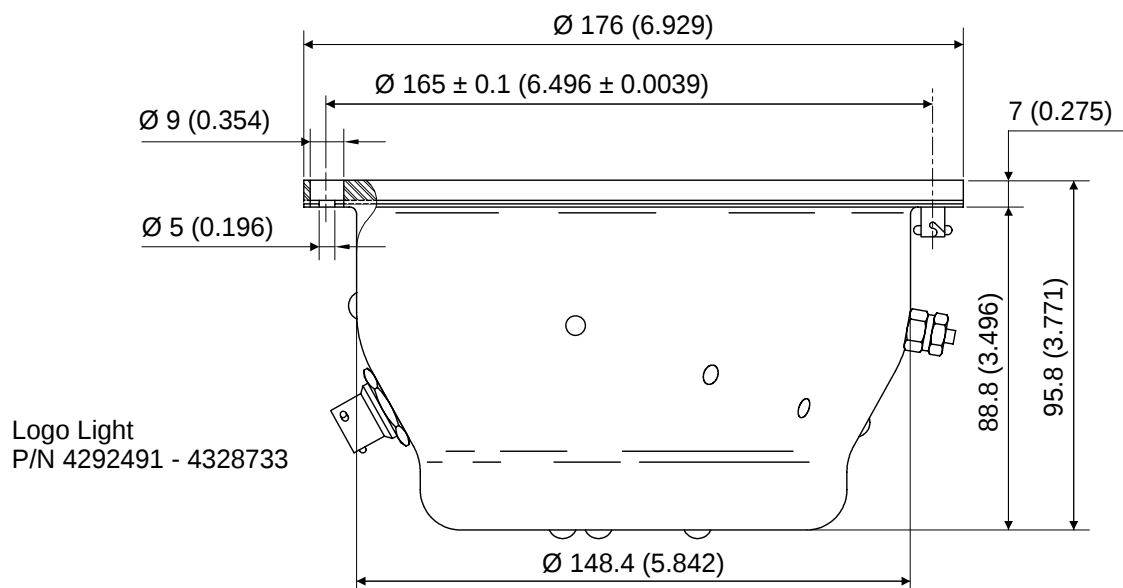
33-47-11-991-002-A01-3

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NOTE : All dimension are given in mm (inches)

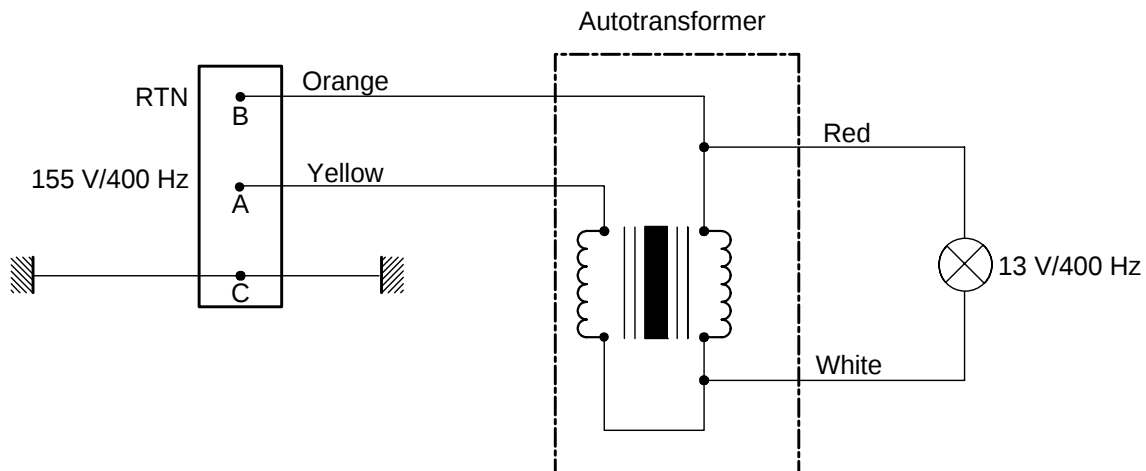
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Overall Dimensions
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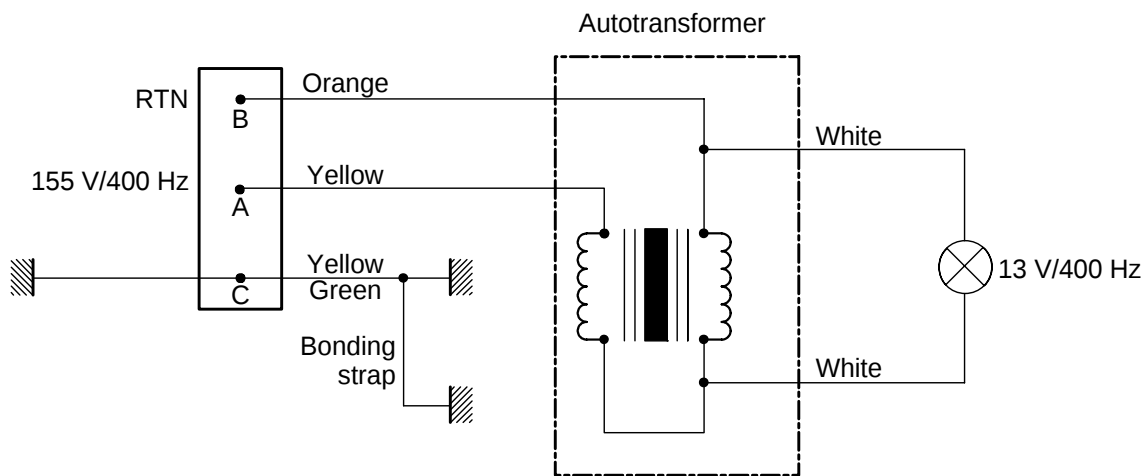
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Logo Light P/N 4292491 - 4328733



Logo Light P/N 4358532 Pre SB 4358532-33-01

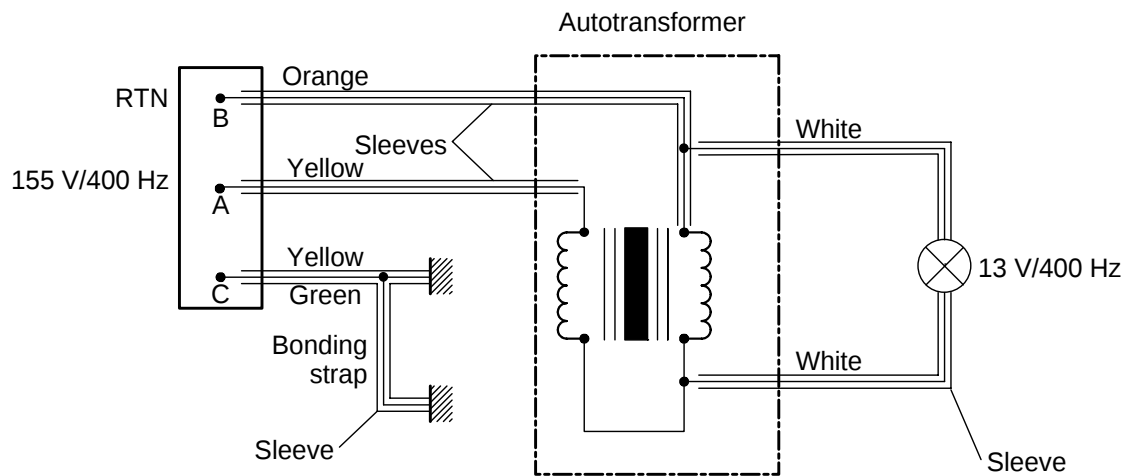
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Schematic Diagram
 Figure 4/GRAPHIC 33-47-11-991-004-A01

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Logo Light P/N 4358532 Post SB 4358532-33-01

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Schematic Diagram
 Figure 5/GRAPHIC 33-47-11-991-005-A01

TESTING AND FAULT ISOLATION

TASK 33-47-11-700-801-A01

1. **LOGO LIGHT - TESTING**

A. General

WARNING: OBEY ALL THE ELECTRICAL SAFETY PRECAUTIONS WHEN YOU DO WORK ON THE ELECTRICAL SYSTEM COMPONENT. IF YOU DO NOT THIS, YOU CAN CAUSE INJURIES TO PERSONS AND/OR DAMAGE TO EQUIPMENT.

(1) Reason for the Job

- (a) The test to make sure that the equipment is fully serviceable. You must also do the test if an equipment component or subassembly is replaced.
- (b) This Page Block deals with the tests and checks required to determine the condition of the unit withdraw from service. The general test procedure is defined in the FAULT ISOLATION table, which for each test refers to a specific method specifying all parameters to be applied and those to be checked.
- (c) All measurements are made with instruments of laboratory precision type, the accuracy of which has been certified and is traceable to the French bureau of standards. The instruments used have the calibration date clearly displayed. Instrument error is accounted for in determining allowable limits of instrument reading.
- (d) Alternative test equipment shall not be used unless it can be proven to be equal or superior to that specified.

B. Job Set-up Information

(1) Tools, fixtures and equipment

- (a) The table below gives the tools, fixtures and equipment necessary to do the maintenance of the component.

NOTE: Equivalent substitutes can be used for the listed items.

P/N	QTY	NAME	SOURCE
No specific	1	115 V / 400 Hz power supply	Local supply
No specific	1	150 VAC voltmeter	Local supply
No specific	1	Digital Ammeter (20 000 pts)	Local supply
No specific	1	Megohmmeter	Local supply
No specific	1	Milliohmmeter (0-20 milliohms)	Local supply

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(2) Consumables

Not applicable.

(3) Test conditions

(a) Do all tests under normal standard test laboratory ambient conditions:

- Ambient temperature: $25 \pm 10^{\circ}\text{C}$ ($77 \pm 18^{\circ}\text{F}$).
- Atmospheric pressure: 900 to 1100 mbar (13.05 to 15.95 psi).
- Relative humidity: less than 90 %.

C. Job Set-up

Not applicable.

D. Procedure

Subtask 33-47-11-750-001-A01

(1) Operation test

(a) Test set-up data

- 1 Do the test set-up as shown in figure 1001.
- 2 Connect an ammeter and a 115 V power supply between the pins A and B of the receptacle connector.

(b) Procedure

ACTION	RESULT
<u>1</u> Apply 115 V between the two pins of the receptacle connector.	Lighting must come on.

ACTION	RESULT
<u>1</u> Connect and disconnect the circuit a number of times.	

ACTION	RESULT
<u>1</u> Measure the amperage.	The amperage must be 2,8 A maximum.

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Subtask 33-47-11-750-002-A01

(2) Insulation resistance

(a) Test set-up data

1 Do the test set-up as shown in figure 1001.

2 Connect a megohmmeter.

(b) Procedure

ACTION	RESULT
<u>1</u> Measure the insulation resistance between the two connector contacts and a position on the housing assy (1-200) or (2-260).	For P/N 4292491 and 4328733: The value must be higher than 20 Megohms at 500 VDC. For P/N 4358532: The value must be higher than 100 Megohms at 500 VDC.

Subtask 33-47-11-750-003-A01

(3) Test of bonding resistance

(a) Test set-up data

1 Do the test set-up as shown in figure 1001.

2 Connect a milliohmmeter 0 to 20 milliohms.

(b) Procedure

ACTION	RESULT
<u>1</u> Measure the ground circuit continuity from a position on the housing assy and the ground terminal.	For P/N 4358532: The value must be equal or less than a maximum of 10 milliohms under 10 A.

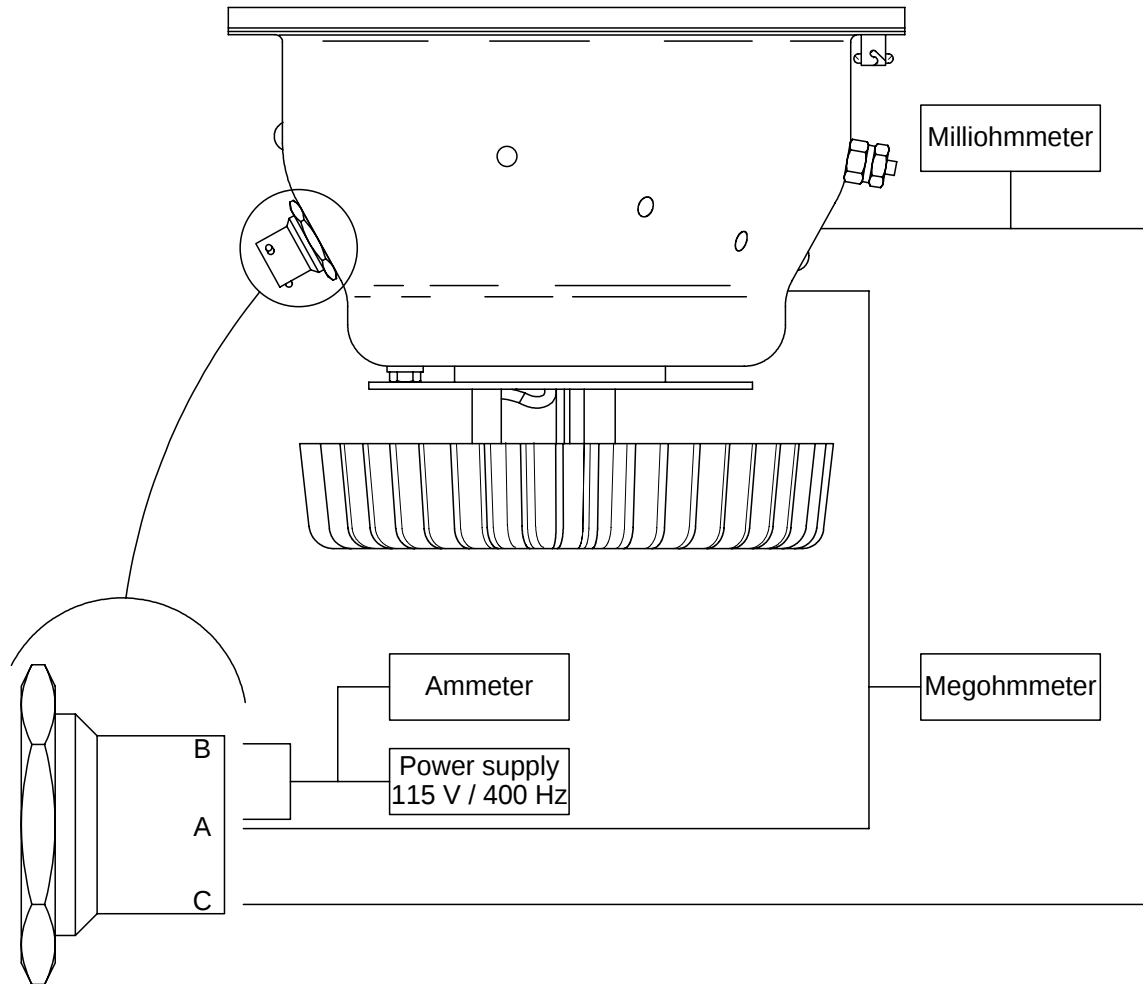
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TASK 33-47-11-810-801-A01

2. LOGO LIGHT - FAULT ISOLATION

FAULT	PROBABLE CAUSE	CORRECTION
The lamp does not come on	No main supply	Check power supply and put it on again
	Transformer defective or winding defective	Replace the transformer
	Lamp leads cut out	Cut the wires and connect them again
	The filament is blown out or cut, or the lamp is defective	Replace the lamp
The incandescent lamp comes on intermittently	Lug attachment screws are loose	Tighten the lug screws again
	The lugs are oxidized or badly crimped	Clean the lugs with emery cloth or crimp lugs correctly
Defective insulation	Ageing or moisture	Examine the defective parts and replace them

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33-47-11-991-101-A01-1

Electrical tests
Figure 1001/GRAPHIC 33-47-11-991-101-A01

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DISASSEMBLY

TASK 33-47-11-000-801-A01

1. **LOGO LIGHT - DISASSEMBLY**

A. General

NOTE: Refer to TESTING AND FAULT ISOLATION to find the necessary level of disassembly. This will give the condition of the component or the possible cause of its malfunction.

NOTE: All item numbers shown in parentheses () are the same item numbers as used in the Illustrated Parts List (IPL).

(1) Reason for the Job

- (a) Disassembly gives step-by-step instructions for a complete disassembly of a component in a logical sequence and to access any faulty sub-assembly and parts .

B. Job Set-up Information

(1) Tools, fixtures and equipment

- (a) The table below gives the tools, fixtures and equipment necessary to do the maintenance of the component.

NOTE: Equivalent substitutes can be used for the listed items.

NOTE: Refer to SPECIAL TOOLS, FIXTURES, EQUIPMENT AND CONSUMABLES for full details.

P/N	QTY	NAME	SOURCE
No specific	1	Mechanic standard tool kit	Local supply

C. Procedure

Subtask 33-47-11-050-001-A01

(1) Removal of the incandescent lamp (1-60) (Ref. to IPL Fig. 1) (Ref. to IPL Fig. 2)

- (a) Unlock the turnlock studs (1-13).
- (b) Release the upper cover assy (1-10).
- (c) Loosen the three captive screws (1-50) and remove the upper bridge clamp (1-40).
- (d) Disconnect the terminal lugs (1-110) and remove the incandescent lamp (1-60).
- (e) Post SB 4358532-33-002

1 Remove and discard the seal (1A-65) from the incandescent lamp.

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Subtask 33-47-11-050-002-A01

(2) Removal of the autotransformer assy

(a) For P/N 4292491 and 4328733

- 1 Remove the incandescent lamp (refer to Subtask 33-47-11-050-001-a01)
- 2 Remove the three screws (1-80) and then remove the upper cover assy (1-10) and the collar (1-70).
- 3 For P/N 4292491 only: If necessary, remove and discard the gasket (1-30).
- 4 Remove the safety nut of the receptacle connector and then remove the receptacle connector (1-140) from the housing assy (1-200).
- 5 Remove the three screws (1-100).
- 6 Remove the autotransformer assy (1-90).
- 7 Remove the housing assy (1-200).
- 8 If necessary, remove the terminal lugs (1-110) or (1-130) or the insulation sleeves (1-120). (refer to Subtask 33-47-11-380-002-a01).

(b) For P/N 4358532

- 1 Remove the incandescent lamp (refer to Subtask 33-47-11-050-001-a01).
- 2 Make sure that all electrical connections are disconnected.
- 3 Loosen and remove the three screws (2-140) and the washers (2-150).
- 4 Remove the washer (2-160).
- 5 Remove the rubber washer (2-170) and the support plate (2-180).
- 6 Remove the autotransformer assy (2-220).
- 7 Loosen and remove the self-locking nut (2-80) and the washer (2-70).
- 8 Disengage the terminal lug (2-60) of the grounding wire (2-90) of the electrical connector (2-30).
- 9 Disengage the terminal lug (2-200) which is attached to the braid assy (2-190).
- 10 Remove the second washer (2-70).
- 11 Loosen and remove the nut (2-250).
- 12 Remove the screw (2-230) and the two washers (2-240).
- 13 If necessary, remove the terminal lugs (2-10), (2-60), (2-200) or (2-210). (refer to Subtask 33-47-11-380-002-a01).

Subtask 33-47-11-050-003-A01

(3) Disconnection of the wires of the autotransformer assy (for P/N 4292491 and 4328733)

NOTE: Do this step only if it is necessary.

- (a) Remove the autotransformer assy (refer to Subtask 33-47-11-050-002-a01).
- (b) Remove the insulation sleeve (1-180).
- (c) Cut and discard the conductor splices (1-190) and disconnect the wires.

Subtask 33-47-11-050-004-A01

- (4) Disconnection of the receptacle connector

NOTE: The receptacle connector must not be removed unless to be replaced.

- (a) Logo light P/N 4292491 and 4328733

- 1 Remove the autotransformer assy (refer to Subtask 33-47-11-050-002-a01).
- 2 Disconnect electrical wires (1-160) from the receptacle connector (1-140).
- 3 Remove and discard the receptacle connector (1-140).

- (b) Logo light P/N 4358532

- 1 Remove the autotransformer assy (refer to Subtask 33-47-11-050-002-a01).
- 2 Remove the conductor splice (2-50).
- 3 Disconnect electrical wires (2-40) from the receptacle connector (2-30).
- 4 Remove and discard the receptacle connector (2-30).

Subtask 33-47-11-050-005-A01

- (5) Disassembly of the upper cover assy (1-10)

- (a) Remove the upper cover assy (1-10) (refer to Subtask 33-47-11-050-001-a01)

- (b) Removal of the braid assy (1-20)

NOTE: This procedure must to be done only if the braid assy (1-20) is replaced.

- 1 Remove the red varnish to clear the screw head.
- 2 Loosen and remove the braid assy attachment screw.
- 3 Remove the braid assy (1-20).

- (c) Removal of the gasket (1-25) for P/N 4328733 and 4358532

NOTE: Do this step only if the gasket is damaged.

- 1 Remove the gasket (1-25) which is bonded to the upper cover (1-10).
- 2 Discard the gasket (1-25).

Subtask 33-47-11-050-006-A01

- (6) Disassembly of the housing assy

- (a) Disconnect the receptacle connector (refer to Subtask 33-47-11-050-004-a01).

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- (a) Removal of the ground terminal from the housing assy (1-200) (for P/N 4328733)
- 1 Remove the first nut (1-198) and keep the lock washer (1-196) and the flat washer (1-194).
 - 2 Remove the second nut (1-198) and keep the lock washer (1-196) and the flat washer (1-194).
 - 3 Remove the screw (1-192) and the flat washer (1-194).
- (b) Removal of the ground terminal from the housing assy (2-260) (for P/N 4358532)
- 1 Remove the first nut (2-130) and keep the lock washer (2-120) and the flat washer (2-110).
 - 2 Remove the second nut (2-130) and keep the lock washer (2-120) and the flat washer (2-110).
 - 3 Remove the screw (2-100) and the flat washer (2-110).
- (b) If necessary, remove the indicating plate (1-110) or (2-300).
(refer to Subtask 33-47-11-380-003-a01).
- (c) If necessary, remove the amendment plate (1-220) or (2-310).
(refer to Subtask 33-47-11-380-003-a01).

CLEANING

TASK 33-47-11-100-801-A01

1. **LOGO LIGHT - CLEANING**

A. General

WARNING: USE CLEANING AGENTS ONLY IN AN AREA WITH A GOOD SUPPLY OF AIR. OBEY LOCAL SAFETY AND HEALTH INSTRUCTIONS. OBEY THE MANUFACTURER'S INSTRUCTIONS. PUT ON PROTECTIVE CLOTHING. DO NOT DRINK SOLVENTS/CLEANING AGENTS. DO NOT SMOKE. DO NOT BREATHE THE FUMES. SOLVENTS/CLEANING AGENTS ARE POISONOUS AND FLAMMABLE. USE THE APPROVED HAND AND EYE PROTECTION WHEN YOU APPLY THE CLEANING AGENT. IT IS A SKIN IRRITANT.

WARNING: IF YOU GET THE CLEANING AGENT ON YOUR SKIN OR IN YOUR EYES:

- CLEAN THE PARTS IN A ROOM WHICH HAS A GOOD FLOW OF AIR.
- DO NOT CLEAN THE PARTS NEAR AN OPEN FLAME.

CAUTION: USE ONLY SPECIFIED CLEANING MATERIALS AND SOLUTIONS, OR THEIR EQUIVALENTS. THE SURFACE PROTECTION COULD BE DAMAGED IF UNSPECIFIED MATERIALS ARE USED.

NOTE: The cleaning agents used are listed in the LIST OF MATERIALS section.

(1) Reason for the Job

- (a) This section gives the procedure for cleaning the unit externally and internally. Do all the work with clean workbench, tools and parts. After cleaning, put all items in sealed containers to prevent contamination by dust or unwanted materials.

B. Job Set-up Information

(1) Tools, fixtures and equipment

- (a) The table below gives the tools, fixtures and equipment to do the maintenance of the component.

NOTE: Equivalent substitutes can be used for the listed items.

NOTE: Refer to SPECIAL TOOLS, FIXTURES, EQUIPMENT AND CONSUMABLES for full details.

P/N	QTY	NAME	SOURCE
No specific	1	Dry compressed air supply source with a pressure reducing valve	Local supply

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(2) Consumables

(a) The table below gives the consumables to do the maintenance of the component.

NOTE: Equivalent substitutes can be used for the listed items.

NOTE: Refer to SPECIAL TOOLS, FIXTURES, EQUIPMENT AND CONSUMABLES for full details.

P/N	NAME	SOURCE
No specific	Clean and soft, lint-free cloth	Local supply
No specific	Solvent 60 SK FP	Local supply
No specific	Emery cloth	Local supply

C. Job Set-up

Not applicable

D. Procedure

Subtask 33-47-11-140-001-A01

(1) External Cleaning of logo light

- (a) Clean all parts with a chlorothene moist cloth. This does not include electrical parts.
- (b) Clean the autotransformer assy (1-90) or (2-220), the receptacle connector (1-140) or (2-30) and the plates (1-210), (1-220), (2-300) and (2-310), with low-pressure compressed air only.
- (c) Clean the lamp terminals fully and remove corrosion from the lugs with emery cloth.
- (d) Remove all bonding agent material from housing assy (1-200) or (2-260) if lamp unit gasket (1-25) or (1-30) has to be replaced.

CHECK

TASK 33-47-11-200-801-A01

1. **LOGO LIGHT - CHECK**

A. General

CAUTION: THE VISUAL CHECK OF THE COMPONENTS MUST BE DONE BEFORE YOU ASSEMBLE THE UNIT.

(1) Reason for the Job

- (a) After cleaning, all the parts are very carefully examined to find all possible defects that could prevent correct operation. This inspection is visual but it can be helped by the use of simple workshop fixtures.

B. Job Set-up Information

Not applicable.

C. Job set-up

Not applicable.

D. Procedure

Subtask 33-47-11-220-001-A01

(1) Inspection of the anticorrosion treatment condition

- (a) Examine the aspect and the protection layer of all the parts, do a check on the good condition of the anticorrosion protection layers (cadmium plating, dichromating, etc.).
- (b) For cadmium dichromate plating, do a check to make sure that the layer is constant, fine grained and does not show cracking.

1 If necessary, make a paint touch-up with:

- Epoxy LAY 1030 primer with TPY 2670 activator. Use solvent LDY 800.
- AIRBUS Grey RBY 40529 lacquer with RBY 5039 activator. Use solvent TFY 5114.

Subtask 33-47-11-220-002-A01

(2) Inspection of the electrical parts

- (a) Make sure that the optical glass of the lamp or the deflector glass has no scratches.
- (b) Make sure that there is no unstick area on the reflector layer on inner side of the lamp.

Subtask 33-47-11-220-003-A01

(3) Turnlock studs inspection

- (a) Do a visual inspection of all the turnlock studs and make sure that:

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- 1 Turnlock stud (1-13), installed on upper cover assembly (1-10), operates correctly, without seizure, and that there is no corrosion or significant wear.
 - 2 The retaining ring (1-17) is in good condition and has a snug fit.
- (b) If the results of the inspection are not entirely satisfactory, replace all the turnlock studs. (refer to Subtask 33-47-11-380-001-a01).

Subtask 33-47-11-220-004-A01

(4) Terminal lugs inspection

- (a) Do a check of all terminal lugs and make sure that the lugs are correctly crimped.
- (b) If the results of the inspection is not entirely satisfactory, replace the faulty terminal lug. (refer to Subtask 33-47-11-380-002-a01).

REPAIR

TASK 33-47-11-300-801-A01

1. **LOGO LIGHT - REPAIR**

A. General

WARNING: MAKE SURE THAT YOU OBEY ALL THE HEALTH AND SAFETY PRECAUTIONS OF THE MANUFACTURER'S FOR MATERIALS.

(1) Reason for the Job

- (a) Use this procedure to protect the bonding areas or to repair the anodic coating of aluminum alloy components where the surface protection is damaged or removed.
- (b) This section gives the full description of the procedures for the repair and overhaul of worn or damaged parts.
- (c) The components are identified by their "Figure - Item" number in the Illustrated Parts List.

NOTE: To use workshop consumables or special equipment necessary for the repair, refer to section "TOOLS AND SPECIAL EQUIPMENT" and "LIST OF MATERIALS".

B. Job Set-up Information

(1) Tools, fixtures and equipment

- (a) The table below gives the tools, fixtures and equipment to do the maintenance of the component.

NOTE: Equivalent substitutes can be used for the listed items.

NOTE: Refer to SPECIAL TOOLS, FIXTURES, EQUIPMENT AND CONSUMABLES for full details.

P/N	QTY	NAME	SOURCE
600306321	1	Retaining ring installation tool	F0214
Hand tooling 69710 AMP MATRIX 39327	1	Crimping pliers	F0286

(2) Consumables

- (a) The table below gives the consumables to do the maintenance of the component.

NOTE: Equivalent substitutes can be used for the listed items.

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NOTE: Refer to SPECIAL TOOLS, FIXTURES, EQUIPMENT AND CONSUMABLES for full details.

P/N	NAME	SOURCE
3111548	Mastinox interposition compound	F1419

C. Procedure

Subtask 33-47-11-380-001-A01

(1) Replacement of turnlock stud

(a) Removal of the turnlock studs (1-13)

- 1 Put the upper cover assy (1-10) on the workbench so as to the operator can see the turnlock studs (1-13).
- 2 Remove the retaining rings (1-17) with a brass drift or a pair of half-pliers. Discard the retaining rings.
- 3 Remove the four turnlock studs (1-13) and discard them.

(b) Installation of the turnlock studs (1-13)

(Ref. to Fig. 6001)

- 1 Introduce the four turnlock studs (1-13) in the holes provides for them in upper cover assembly (1-10).
- 2 Install on each turnlock stud (1-13) a retaining rings (1-17) with retaining ring installation tool P/N 600306321.

Subtask 33-47-11-380-002-A01

(2) Terminal lugs replacement

(a) Removal of the terminal lug

- 1 Cut the wire at the back of the faulty terminal lug (1-110), (1-130), (2-10), (2-60), (2-200) or (2-210).

(b) Installation of the terminal lug

- 1 Remove the insulation from the end of the electrical wire over 6 mm (0.236 in).
- 2 Crimp the new terminal lug (1-110), (1-130), (2-10), (2-60), (2-200) or (2-210) on the electrical wire with crimping tool.

Subtask 33-47-11-380-003-A01

(3) Plates replacement

(a) Removal of the plates

CAUTION: BEFORE REMOVAL OF THE PLATES, MOVE THE APPLICABLE DATA FROM THE REMOVED PLATE TO THE REPLACEMENT PLATE.

- 1 Remove the indicating plate (1-210) or (2-300) from the housing assy (1-200) or (2-260).
- 2 Remove the amendment plate (1-220) or (2-310) from the housing assy (1-200) or (2-260).
- 3 Remove all traces of adhesive that stay on the housing assy (1-200) or (2-260).
- 4 Clean the applicable area. (refer to TASK 33-47-11-100-801-a01).

(b) Installation of the indicating plate

- 1 Install the new indicating self-adhesive plate (1-210) or (2-300) on the housing assy (1-200) or (2-260).

(c) Installation of the amendment plate

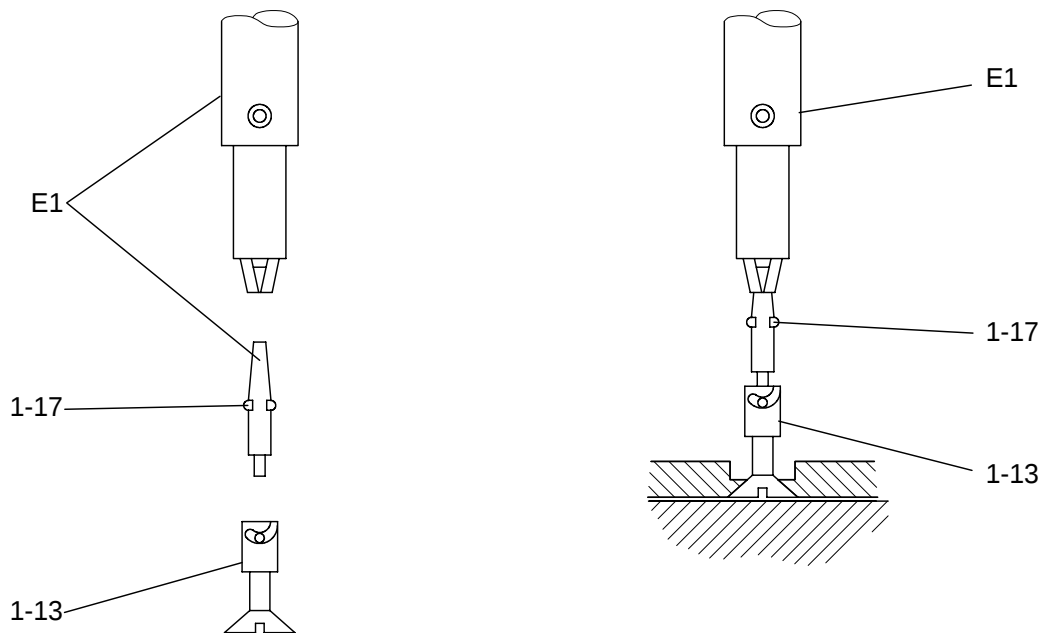
- 1 Install the self-adhesive amendment plate (1-220) or (2-310) on the housing assy (1-200) or (2-260).

Subtask 33-47-11-380-004-A01

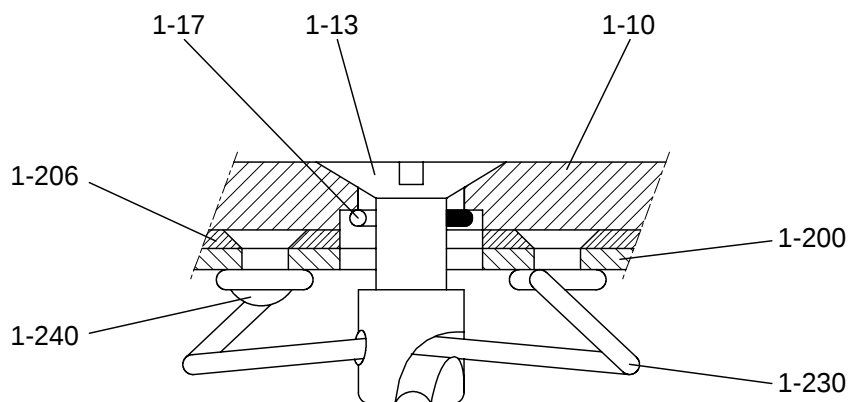
(4) Repair of the receptacle connector

- (a) Remove a 6 mm (0.236 in) length of insulation from the end of each wire.
- (b) Use the applicable tool to crimp connector pins on electrical wires.
- (c) Refer to the schematic diagrams ((Ref. to Fig. 4) and (Ref. to Fig. 5)) to use the applicable tool to install the electrical contacts by the rear of the connector.

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Retaining ring installation (17)



Turnlock stud replacement

33-47-11-991-601-A01-1

Turnlock stud replacement
 Figure 6001/GRAPHIC 33-47-11-991-601-A01

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ASSEMBLY

TASK 33-47-11-400-801-A01

1. **LOGO LIGHT - ASSEMBLY**

A. General

CAUTION: DO THE ASSEMBLY ON A CLEAN WORKBENCH IN A ROOM FREE FROM DUST AND MOISTURE. PARTS SHALL BE PROTECTED FROM IMPACT DAMAGE.

CAUTION: MAKE SURE THAT ALL THE COMPONENTS ARE CLEAN BEFORE ASSEMBLY.

NOTE: All items number shown in parenthesis () are the same item numbers as used in the Illustrated Part List (IPL).

(1) Reason for the Job

(a) This section gives the procedures for the full assembly of the logo light.

(b) The components are identified by their "Figure - Item" number in the Illustrated Parts List.

NOTE: The materials used are listed in the LIST OF MATERIALS Section.

B. Job Set-up Information

(1) Tools, fixtures and equipment

(a) The table below gives the tools, fixtures and equipment necessary to do the maintenance of the component.

NOTE: Equivalent substitutes can be used for the listed items.

NOTE: Refer to SPECIAL TOOLS, FIXTURES, EQUIPMENT AND CONSUMABLES for full details.

P/N	QTY	NAME	SOURCE
No specific	1	Mechanic standard tool kit	Local supply
Hand tooling 69710 matrix 39327	1	Crimping pliers	F0286
No specific	1	Heat gun	Local supply

(2) Consumables

(a) The table below gives the consumables to do maintenance of the component.

NOTE: Equivalent substitutes can be used for the listed items.

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NOTE: Refer to SPECIAL TOOLS, FIXTURES, EQUIPMENT AND CONSUMABLES for full details.

CODE	P/N	NAME	SOURCE
-	3068448	SILASTIC RTV 734	71984
-	-	White indelible ink	Local supply
-	3096307	LOCTITE 648	F7121
-	3084082	LOCTITE 222	F7121
-	-	LOCTITE vernishop 7400	F7121
-	3124961	Rhodorsil CAF 4	F7286

C. Procedure

Subtask 33-47-11-460-001-A01

(1) Assembly of the housing assy

NOTE: If necessary, install the indicating plate (1-110) or (2-300). (refer to Subtask 33-47-11-380-003-a01).

NOTE: If necessary, install the amendment plate (1-220) or (2-310). (refer to Subtask 33-47-11-380-003-a01).

(a) Installation of the ground terminal on the housing assy (1-200) (Logo light P/N 4328733)

- 1 Install the screw (1-192) with the flat washer (1-194), from the internal side of the housing assy (1-200).
- 2 Install the flat washer (1-194) and the lock washer (1-196) on the screw (1-192).
- 3 Install and tighten the first nut (1-198) on the screw (1-192).
- 4 Install the flat washer (1-194) and the lock washer (1-196) on the screw (1-192).
- 5 Install and tighten the second nut (1-198) on the screw (1-192).

(b) Installation of the ground terminal on the housing assy (2-260) (Logo light P/N 4358532)

- 1 Install the screw (2-100) with the flat washer (2-110), from the internal side of the housing assy (2-260).
- 2 Install the flat washer (2-110) and the lock washer (2-120) on the screw (2-100).
- 3 Install and tighten the first nut (2-130) on the screw (2-100).
- 4 Install the flat washer (2-110) and the lock washer (2-120) on the screw (2-100).

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- 5 Install and tighten the second nut (2-130) on the screw (2-100).

Subtask 33-47-11-460-002-A01

- (2) Assembly of the upper cover assy (1-10)

NOTE: If necessary, replace the turnlock studs (1-13).
(refer to Subtask 33-47-11-380-001-a01).

- (a) Installation of the gasket (1-25) (Logo light P/N 4328733 and 4358532)

NOTE: Do this step only if the gasket is damaged.

- 1 Bond the gasket (1-25) to the upper cover assy with RTV 734. Make sure that you align the notch with the hole that has a thread in the upper cover. Also align the holes with the upper cover attachments.
- 2 Write the part number of the upper cover assy (1-10) on the gasket (1-25) with white indelible ink.

- (b) Assembly of the braid assy

NOTE: This procedure is not to be carried out unless the braid assy is replaced.

- 1 Coat with Loctite strong thread-locking compound the thread of the screw located at one of braid assy (1-20) ends.
- 2 Tighten the braid screw into upper cover assy (1-10) until flush with the outer surface.
- 3 Put a drop of Loctite vernistop 7400 on the screw head and let dry.

Subtask 33-47-11-460-003-A01

- (3) Assembly of the receptacle connector (1-40) and (2-30)

NOTE: If necessary, replace the receptacle connector.
(refer to Subtask 33-47-11-380-004-a01).

NOTE: This procedure is not to be carried out unless the receptacle connector is replaced.

- (a) Remove the insulation from the electrical wires over a length of 6 mm (0.236 in).

- (b) POST SB 43585532-33-001

- 1 Logo light P/N 4358532: Install insulation sleeves (2-20A) on each electrical wire (2-40) to the receptacle connector (2-30).

- (c) Crimp the electrical wires (1-160), (2-40) on the contacts of the receptacle connector (1-140), (2-30) with crimping pliers.

- (d) POST SB 43585532-33-001

- 1 Logo light P/N 4358532: Install insulation sleeves (2-20A) on the electrical wire (2-90).

- (e) Logo light P/N 4358532 - Crimp the electrical wire (2-90) to the contact of the receptacle connector (2-30) with crimping pliers.

- (f) Put the heat-shrinking insulation sleeve on the soldered joints and heat-shrink the insulation sleeve with a heat gun.

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- (g) Engage the other end of the electrical wires (1-160), (2-40) and (2-90) into the contacts from the rear of the receptacle connector (1-140), (2-30), as shown on the wiring diagram (Ref. to Fig. 7001). Use insertion/extraction tool.

Subtask 33-47-11-460-004-A01

(4) Electrical wires connection

- (a) Connect the autotransformer leads as applicable to electrical wires (1-60) or (2-40) of receptacle connector (1-140) or (2-30) as follows:
 - (b) POST SB 43585532-33-001
 - 1 Logo light P/N 4358532: Install insulation sleeves (2-20) on each wire to the autotransformer assy (2-220).
 - 2 Put a "A" hel-twin bushing (2-25) on the insulation sleeve of the yellow wire.
 - 3 Put a "B" hel-twin bushing (2-26) on the insulation sleeve of the orange wire.
 - (c) Logo light P/N 4292491 and 4328733: Put each electrical wire through a length of insulation sleeve (1-180).
 - (d) Crimp the electrical wires (1-160) or (2-40) inside conductor splices (1-190) or (2-50), with crimping pliers.
 - (e) From logo light P/N 4328733 and 4358532: crimp each end of the electrical wires into conductor splices (1-190B) or (2-50) with crimping pliers P/N: hand tolling 69710 matrix 39327.
 - (f) Install the insulation sleeving (1-180) on the crimped conductor splices (1-190B) or (2-50).
 - (g) Retract the insulation sleeving (1-180) with a heat gun. (Ref. to Fig. 7002).

Subtask 33-47-11-460-005-A01

(5) Assembly of logo light P/N 4292491 and 4328733

NOTE: If necessary, replace the terminal lugs. (refer to Subtask 33-47-11-380-002-a01).

- (a) Installation of the autotransformer assy (1-90)
 - 1 Put the autotransformer assy (1-90) inside housing assy (1-200).
 - 2 Install the grounding electrical wire terminal lug (1-130) on the autotransformer mounting bracket bonding area.
 - 3 Coat the threads of screws (1-100) with Loctite weak thread-locking compound.
 - 4 Tighten the screws (1-100).
 - 5 Install the receptacle connector (1-140) onto housing assy (1-200).
 - 6 Coat the threads of the nut with Loctite weak thread-locking compound.
 - 7 Tighten the nut of the receptacle connector (1-140).
- (b) Install the collar (1-70) onto the lower clamp mounted in housing assy (1-200) and secure it with two screws (1-80).

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NOTE: The third screw (1-80) attaches the braid assy (1-20).

- (c) On Logo light P/N 4292491, apply Rhodorsil CAF 4 to the top flange of the housing assy (1-200). Install the gasket (1-30) (make sure that you align the attachment holes correctly).
- (d) Insert braid assy (1-20) through the hole provided in upper bridge clamp (1-40), attach its terminal lug onto collar (1-70) with the third screw (1-80).
- (e) Keep the cover-gasket-clamp assembly away from housing assy (1-200) to let the installation of incandescent lamp (1-60).
- (f) Connect the power supply leads fitted with terminal lugs (1-110) and heat-shrinking insulation sleeving (1-120) to the terminal screws on incandescent lamp (1-60).
- (g) Install the incandescent lamp (1-60) on the collar (1-70). Make sure that the locator is in the correct position.
- (h) Install the upper bridge clamp (1-40) and tighten the three captive screws (1-50) to safety the incandescent lamp (1-60).
- (i) On Logo light P/N 4328733, apply Rhodorsil CAF 4 to the mating face of the gasket (1-25).
- (j) Install the upper cover assy (1-10) and lock the four turnlock studs (1-13).

Subtask 33-47-11-460-006-A01

- (6) Assembly of logo light P/N 4358532

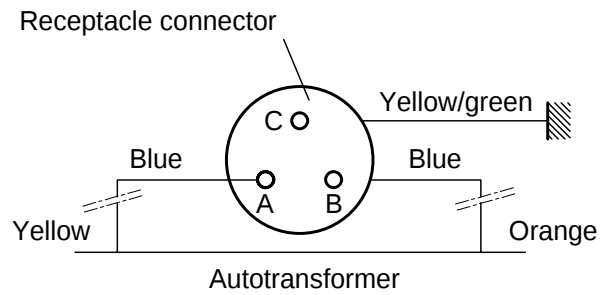
NOTE: If necessary, replace the terminal lugs. (refer to Subtask 33-47-11-380-002-a01).

- (a) Installation of the autotransformer assy (2-220)
 - 1 Install the receptacle connector (2-30) on the housing assy (2-260).
 - 2 Apply a layer of Loctite weak thread-locking compound to the threads of the nut.
 - 3 Tighten the nut of the receptacle connector (2-30).
 - 4 Install the grounding electrical wire (2-90) and the terminal lug (2-60) in the housing assy (2-260).
 - 5 Put the screw (2-230) and the washer (2-240) into the hole in the external surface of the housing assy (2-260).
 - 6 Install the washer (2-240).
 - 7 Install the nut (2-250).
 - 8 Install the flat washer (2-70).
 - 9 Install the terminal lug (2-200) of the braid assy (2-190).
 - 10 Install the terminal lug (2-60) of the grounding electrical wire (2-90).
 - 11 Install and tighten the flat washer (2-70) and the nut (2-80) on the screw (2-230).
 - 12 Put the braid assy (2-190) through the hole in the housing assy (2-260).
 - 13 Put the washer (2-160) in position.

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- 14 Install the three screws (2-140) and the three flat washers (2-150) into the housing (2-260).
 - 15 Put the rubber washer (2-170) and the support plate (2-180) in position on the three screws (2-140).
 - 16 Install the terminal lug (2-210) of the braid assy (2-190) on the screw (2-140).
 - 17 Put the autotransformer assy (2-220) in position and tighten the three screws (2-140) from the internal side of the housing.
- (b) Put the braid assy (1-20) through the hole in the upper bridge clamp (1-40).
 - (c) Keep the cover-gasket-clamp assembly away from the housing assy (2-260) to let the assembly of the incandescent lamp (1-60).
 - (d) Connect the power supply leads which have the terminal lugs (2-10) and the heat-shrinking insulation sleeving (1-120) to the terminal screws on the incandescent lamp (1-60).
 - (e) Put the incandescent lamp (1-60) in position in the housing assy (2-260).
- NOTE: Make sure the locator is in the correct position.
- (f) Install the upper bridge clamp (1-40).
 - (g) Tighten the three captive screws (1-50) to attach the incandescent lamp (1-60).
 - (h) Apply Rhodorsil CAF 538 to the mating face of the gasket (1-25).
 - (i) Install upper cover assy (1-10) and lock the four turnlock studs (1-13).

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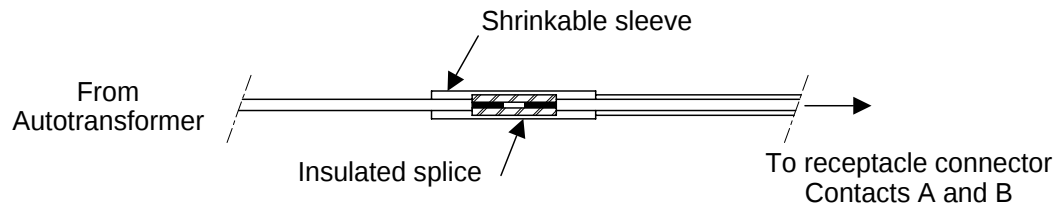
33-47-11-991-701-A01-1

Wiring diagram
Figure 7001/GRAPHIC 33-47-11-991-701-A01

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33-47-11-991-702-A01-1

Detail of wiring joint
Figure 7002/GRAPHIC 33-47-11-991-702-A01

SPECIAL TOOLS, FIXTURES, EQUIPMENT AND CONSUMABLES

TASK 33-47-11-940-801-A01

1. **LOGO LIGHT - SPECIAL TOOLS, FIXTURES, EQUIPMENT AND CONSUMABLES**

Subtask 33-47-11-940-001-A01

A. Special Tools

(1) The table below gives the special tools used to do the maintenance of the component.

NOTE: Equivalent substitutes can be used for the listed items.

FIGURE / ITEM	PART NUMBER	DESIGNATION	SUPPLIERS CODE OR NAME AND ADDRESS	PAGE BLOCK WHERE USED
-	No specific	Dry compressed air supply source with pressure reducing valve	Local supply	4001
-	600306321	Retaining ring installation tool	F0280	6001
-	Hand tooling 69710 MATRIX 39327	Crimping pliers	F0286	6001

(2) The tables below gives the stripping/crimping/insertion and extraction tools used to do the maintenance of the component.

(a) Stripping characteristics

CONTACT SIZE	WIRE		STRIPPING TOOL	
	GAUGE	LENGTH A (mm)	STRIPMASTER P/N	COLOR
14	24 to 18	7	45-020-1	Blue
18	24 to 18	4.5	45-020-1	Blue
20	24 to 14	4.5	45-020-1	Blue

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(b) Crimping tool

		HAND CRIMPING TOOL					
CONTACT P/N	WIRE GAUGE	TOOL		TURRET/LOCATOR			
		NORM	P/N	COLOR	SELECT OR		
006-093 7-20A	20	MIL	22520/2- 01	MIL	22520/1- 02 22520/2- 02	RED	4 4
	18	MIL	22520/1- 01	MIL	22520/1- 02	BLUE	6
	14	MIL	22520/1- 01	MIL	22520/1- 02	YELLOW	7

(c) Insertion and extraction tool

CONTACT			INSERTION AND EXTRACTION TOOL		
P/N	SOCKET CHARACTERISTICS		NORM	P/N	COLOR
006-0937-20 A	006-0912-20 A	WIRED	MIL	81969/14-0 2	RED/WHIT E

Subtask 33-47-11-940-002-A01

B. Special Fixtures

Not applicable.

Subtask 33-47-11-940-003-A01

C. Special Equipment

- (1) The table that follow gives the necessary equipment used to do the maintenance of the component.

DESCRIPTION	RANGE	ACCURACY
Power supply	115 V / 400 Hz	-

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DESCRIPTION	RANGE	ACCURACY
Voltmeter	150 VAC	-
Ammeter	5 A	-
Megohmmeter	-	-
Milliohmmeter	-	-

Subtask 33-47-11-940-004-A01

D. Consumables

(1) The table that below gives the consumables used to do the maintenance of the equipment.

NOTE: Equivalent substitutes can be used for the listed items.

CODE	MATERIAL P/N	DESIGNATION AND SPECIFICATION	SUPPLIER'S CODE OR NAME AND ADDRESS	PAGE BLOCK WHERE USED
-	Local supply	Solvent 60 SK FP	Local supply	4001
-	Local supply	Clean and soft, lint free cloth	Local supply	4001
-	Local supply	Emery cloth	Local supply	4001
-	-	Epoxy LAY 1030 primer with TPY 2670 activator and LDY 800 solvent	D6309	5001
-	-	AIRBUS grey RBY 40529 lacquer with RBY 5039 activator and TFY 5114 solvent	D6309	5001
-	3111548	Mastinox interposition compound	F1419	6001
-	3068448	SILASTIC RTV 734	71984	7001
-	-	White indelible ink	Local supply	7001
-	3096307	LOCTITE 648	F7121	7001
-	-	LOCTITE vernishop 7400	F7121	7001
-	No specific	Methyl alcohol	Local supply	7001

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CODE	MATERIAL P/N	DESIGNATION AND SPECIFICATION	SUPPLIER'S CODE OR NAME AND ADDRESS	PAGE BLOCK WHERE USED
-	3084082	LOCTITE 222	F7121	7001
-	3124961	Rhodorsil CAF 4	F0107	7001
-	No specific	Polythene bag	Local supply	15001
-	No specific	Cardboard box	Local supply	15001
-	No specific	Cardboard or polystyrene	Local supply	15001
-	No specific	Adhesive tape	Local supply	15001
-	No specific	Desiccant	Local supply	15001
-	No specific	Transparent protection product	Local supply	15001

STORAGE AND TRANSPORTATION

TASK 33-47-11-550-801-A01

1. **LOGO LIGHT - STORAGE INSTRUCTIONS**

A. General

(1) Reason for the Job

- (a) Storage instructions give the procedures to use after assembly or testing, including any special requirements applicable to the component.

B. Job Set-up Information

(1) Consumables

- (a) The table below gives the consumables to do the maintenance of the component.

NOTE: Equivalent substitutes can be used for the listed items.

NOTE: Refer to SPECIAL TOOLS, FIXTURES, EQUIPMENT AND CONSUMABLES for full details.

CODE	P/N	NAME	SOURCE
-	No specific	Polythene bag	Local supply
-	No specific	Cardboard box	Local supply
-	No specific	Cardboard or polystyrene	Local supply
-	No specific	Adhesive tape	Local supply
-	No specific	Desiccant	Local supply
-	No specific	Transparent protection product	Local supply

C. Job Set-up

Not applicable.

D. Procedure

Subtask 33-47-11-620-001-A01

(1) Preservation

- (a) At the end of the test, put the unit in a polythene bag of 0,2 mm (0.008 in) minimum thickness. The bag must be large enough to seal correctly.

(b) Remove as much air as possible from the bag and then use heat to seal it.

(c) A bonded label identifies each container by:

- 1 the manufacturer's part number,
- 2 the serial number,
- 3 the quantity,
- 4 the amendments (as applicable),
- 5 the manufacturer's name,
- 6 the date of storage.

Subtask 33-47-11-630-001-A01

(2) Packing

(a) Put the component in its initial container. Use the initial material for the protection of the component. Use bags of desiccant as necessary.

(b) If the initial container is not available:

- 1 Refer to DESCRIPTION AND OPERATION for the weight of the component.
- 2 Use a different container. Use only approved materials for the protection of the component.
- 3 Put the unit in a cardboard box with its related documents (check sheet, log card).
- 4 Safety the unit and the document in the box (cardboard - polystyrene).
- 5 Close the packing box and make the seals stronger with adhesive tape.
- 6 Identify the packing with labels and protect them with a transparent material. Make sure that:
 - a The identification label has all the related data of the component.
 - b You can read the labels easily.

Subtask 33-47-11-640-001-A01

(3) Storage

CAUTION: MAKE SURE THAT THERE IS NOT TOO MUCH WEIGHT ON THE CONTAINER, IF YOU USE THE STACK STORAGE METHOD. TOO MUCH WEIGHT ON THE CONTAINER CAN CAUSE DAMAGE TO THE COMPONENT.

CAUTION: DO NOT KEEP THE CONTAINER NEAR FLUIDS THAT CAN CAUSE CORROSION OR DAMAGE, AND DO NOT KEEP NEAR SOURCES THAT MAKE HEAT OR OZONE.

(a) Keep the container in a clean, dry room with a good supply of air.

(b) Keep the temperature of the room between 0 degree C and + 55 degree C (32 degree F to + 135 degree F). The recommended temperature is at or near 15 degree C (59 degree F).

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- (c) Keep the relative humidity at between 25 and 65 %.
- (d) Put the container where you can clearly read the identification label.
- (e) The maximum shelf-life is 60 months.
- (f) Remove the logo light from storage and examine its condition before a new extension of storage time.

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ILLUSTRATED PARTS LIST

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ILLUSTRATED PARTS LIST

TASK 33-47-11-990-802-A01

1. **INTRODUCTION**

A. General

- (1) The purpose of this Illustrated Parts List is the identification of equipment assemblies, sub-assemblies, and parts.
- (2) It is set up in conformance with the rules set forth in ATA 2200, revision 2000-1.
- (3) From time to time, the illustrated nomenclature is revised so as to incorporate recent additions, cancellations and modifications in equipment. Revisions are indicated by an "R" on the right of each revised line, and apply solely to the date of revision.

B. Use of the IPL

(1) Publication format

(a) The IPL is arranged in the following order:

- Introduction, including the Vendor Code Index (VCI),
- Equipment Designator Index (EDI),
- Numerical Index (NI),
- Detailed Parts List (DPL)

(a) Equipment designator index

This index contains the relevant reference and diagrams for each circuit symbol, as well as the corresponding marker.

The equipment designator index is alphanumerical, and is arranged in the following order:

- dash,
- letters from A through Z,
- numerals from 0 through 9.

(b) Numerical index

This index contains all Part Numbers (PN) ever included in the Detailed Parts. The part number is followed by the applicable figure and item number / variant references.

The numerical index is alphanumerical, and is arranged in the following order:

- dash,
- letters from A through Z,
- numerals from 0 through 9.

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(c) Vendor Code index

The vendor code index is alphanumerically arranged according to the manufacturer's code. This list includes the names and addresses of all manufacturers cited in the detailed nomenclature.

(2) Identification of a component part

There are several different ways to identify a component part.

(a) To find a part with a known Part Number (PN)

- 1 Refer to the Numerical Index and find the PN.
- 2 The numerical index contains the following information about the reference:
 - the reference of the part specific to the airline (column left blank),
 - the illustrated catalogue sequence number (CSN). Application: 2-150A (2 = Figure number, 150A = sequence number).
 - the quantity per CSN.
- 3 Refer to the figure in the parts list.
- 4 Find the item number on the illustration.

(b) To find a PN with a known Equipment Designator Index

This index specifies the item reference and the CSN relevant to a given symbol.

- 1 A circuit symbol is made up of:
 - 1 or 2 letters specifying the nature of the component part (letter symbol),
 - 1 or 2 numerals stating the order code of the component part in the relevant subassembly,
 - or possibly with a position suffix, containing 2 or 4 numerals, and defining the subassembly in which the component part is mounted. This suffix is chosen at random.

Application: R10 - 6

R = Letter Symbol,

10 = Order No.,

6 = Position suffix.

- 1 List of position suffixes versus the subassembly designation.

FIGURE	DESIGNATION	SUFFIX
1	Refuel panel multi tank indicator (MTI), assembly	10
2	Circuit card display	20

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FIGURE	DESIGNATION	SUFFIX
3	Circuit card assembly, CPU	32

- 2 List of sub-assemblies versus the position suffix number.

SUFFIX	DESIGNATION	FIGURE
10	Refuel panel multi tank indicator (MTI), assembly	1
20	Circuit card display	2
30	Circuit card assembly, CPU	3

- (c) To find a PN through the illustrated nomenclature

- 1 Find the illustration that shows the breakdown of the assembly.
- 2 Find the part and make a note of the item number.
- 3 Look in the parts list related to the illustration for the item number. This will also gives you the P/N and the description.

C. Use of the Detailed Parts List

- (1) The detailed parts list includes the nomenclature and illustrations of the unit components.

- 1st column: Figure and Item/Item variant number
- 2nd column: Part Number
- 3rd column: Airline Part Number
- 4th column: Indentation
- 5th column: Nomenclature
- 6th column: Units per Assembly

- (1) Figure and Item Numbers

- (a) An item number is given to each part-numbered assembly, subassembly or item in the parts list.
- (b) The figure number, which includes the items in the list, is given on the first line at the top of each page.
- (c) The highest assemblies for each figure shall be listed first. If there is more than one part number for an assembly, use alpha variant item numbers e.g. 1A, 1B, 10A, 10B etc. In the usage code column of the assembly parts, the letters are used to link parts to the correct assembly. Use alpha variant item numbers for:

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- Parts introduced by modification, product improvement, change of material etc.
- Similar parts with different usage code
- Optional parts, unless an alpha variant is listed for another reason. In this case, optional part numbers must be given in the Nomenclature column.

(d) Assemblies, sub-assemblies and parts in the list which are not illustrated are identified with a dash (-) before the item number.

(2) Manufacturer's Part Number

A manufacturer's part number is given to each assembly, subassembly and detail parts (illustrated or not).

(3) Nomenclature

(a) The nomenclature is indented to show the item relationship as follows:

1 2 3 4 5 6 7

Assembly

. Detail parts of assembly

. Subassembly

Attaching parts and/or storage parts for subassembly

* * *

. . Detail parts for subassembly

Sub-subassembly

Attaching parts and/or storage parts for sub-subassembly

* * *

. . . Detail parts for sub-subassembly

etc...

(b) A vendor code is given for all items or articles not made by the prime manufacturer of the assembly.

(c) This vendor code or the abbreviation NP (Non Procurable) is written at the far right-hand side in the first line of the nomenclature.

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(4) Effectivity Code

In a figure, the part number identified by an effectivity code shows that the coded part must be used with other parts identified with the same alpha designation. Also, coded parts can be used with all other non-coded parts (no alpha designation).

The effectivity code must begin with A and continue with B, C, ... Z. If required, the succession will follow BA, CA, DA ... ZA, CB, DB, EB, ... DC, EC, FC, etc. The succession will always begin with the subsequent alpha set which follows the last set by one alpha.

(5) Units Per Assembly

The units per assembly column shows the number of necessary units for the subsequent higher assembly. In some cases, the letters "RF" (Reference) or "AR" (As Required) replace this information.

(6) Abbreviations

- AR = As required
- DET = Detail
- LH and RH = Left and right
- NHA = Next higher assembly
- NP = Non procurable
- OLD PN = Old part number
- ORDER OVERLGTH MPN = Actual part number is more than 15 characters
- OVERSIZE = Oversize repair parts
- R = Modified
- RF = For reference
- SEL FROM = Select from parts
- POST SB = Post Service Bulletin,
- POST SL = Post Service Letter,
- SUPSD BY = Superseded by
- SUPSDS = Supersedes
- UNDERSIZE = Undersize repair parts

(a) The following letters are used in the standard index:

T	tera = 10exp(12)
G	giga = 10exp(9)
M	mega = 10exp(6)

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K	kilo = 10exp(3)
U	one = 1
MY	milli = 10exp(-3)
MU	micro = 10exp(-6)
N	nano = 10exp(-9)
P	pico = 10exp(-12)

1. The following letters are used in the standard index to indicate tolerances on electronic components.

B	0.1%
C	0.25%
D	0.50%
F	1%
G	2%
J	5%
K	10%

(1) Updating

When an item is revised, added or deleted, the letter "R" is written in the left margin (the page date of issue changes).

The letter "R" is written in the left margin opposite the page number when all the item numbers are changed.

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VENDOR CODE	NAME-ADDRESS
V08806	GENERAL ELECTRIC CO MINIATURE LAMP PRODUCTS DEPT LIGHTING BUSINESS GROUP NELA PK CLEVELAND OH 44112 USA
V80205	NATIONAL AEROSPACE STANDARDS COMMITTEE AEROSPACE INDUSTRIES ASSOCIATION OF AMERICA INC 1250 EYE ST NW WASHINGTON DC 20005 USA
V88044	AERONAUTICAL STANDARDS GROUP DEPT OF NAVY AND AIR FORCE WASHINGTON DC 10001 USA
V96906	MILITARY STANDARDS PROMULGATED BY MILITARY DEPARTMENTS UNDER AUTHORITY OF DEFENSE STANDARDIZATION MANUAL 4120 3-M WASHINGTON DC USA
VF0225	FCI FRANCE 145 RUE YVES LE COZ 78035 VERSAILLES FRANCE
VF0241	NEXANS FRANCE 140-146 RUE EUGENE DELACROIX 91210 DRAVEIL FRANCE
VF0280	ECE - TELEFLEX SYNERAVIA CS 82012 129 BOULEVARD DAVOUT 75990 PARIS CEDEX 20 FRANCE
VF0286	TYCO ELECTRONICS FRANCE SAS 29 CHAUSSEE JULES CESAR 95300 CERGY PONTOISE FRANCE
VF0304	DZUS-FRANCE SA 4 RUE DE LA GRANDE OURSE 95800 CERGY PONTOISE FRANCE

R

R

R

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VENDOR CODE	NAME-ADDRESS
VF0331	STERLING SA-STE ELECTRIQUE 1 B RUE DE DELEMONT 68308 ST LOUIS FRANCE
VF6220	RAYCHEM SA - FABRICATIONS REPRISES PAR (FAB TAKEN OVER BY) TYCO ELECTRONICS FRANCE SAS - F0286 2 BD DU MOULIN A VENT BP 8300 95800 CERGY ST CHRISTOPHE CDX FRANCE
VF8320	OMERIN SA ZI 63600 AMBERT FRANCE
VF9556	EMHART FASTENING □ ASSEMBLY SNC ZAC DES PETITS CARREAUX 2 B AVE DES COQUELICOTS 94385 BONNEUIL SUR MARNE CEDEX FRANCE

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PART NUMBER	AIRLINE STOCK NUMBER	FIG	ITEM	TTL REQ
AN960-10L		1	194A	3
		2	110A	3
AN960-4		2	150A	3
AN960-8		2	70A	2
		2	240A	2
FDBA54-8-3APNKA499				
SEE 8525-17N8B3APNH				
JONC4		1	17A	16
KYNAR3-32X		1	170A	AR
CANCELLED				
MS21042L08		2	80A	1
		2	250A	1
MS35273-42		1	55A	1
		1	80A	3
MS35275-240		1	100A	3
MS35338-43		1	196A	2
		2	120A	2
NAS1801-04-10		2	140A	3
NAS1801-08-12		2	230A	1
NAS1801-08-5		1	80B	3
NAS1801-3-12		1	192A	1
		2	100A	1
NAS509-3		1	198A	2
		2	130A	2
Q4631		1	60A	1
S4-250		2	270A	4
S4-275		1	204A	4
TAPK36BS		1	205A	32
		2	280A	32
TAPK410BS		1	202A	3
TFE10		1	120A	AR
TFE12X		1	180A	AR

- ITEM NOT ILLUSTRATED

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PART NUMBER	AIRLINE STOCK NUMBER	FIG	ITEM	TTL REQ	
130474		2	200A	1	
130479-0		2	210A	1	
15C10		2	20A	AR	R
15C10DIA9		2	20A	AR	R
CANCELLED					
15C3		2	20B	AR	R
16392B		1	13A	4	
1900A0-93-45		1	150A	AR	
		2	90A	AR	
2100-0-60-6		1	160A	AR	
		2	40A	AR	
3023034		2	- 26A	1	R
3023041		2	- 25A	1	R
31818		1	190A	2	
330377		1	190B	2	
		2	50A	2	
4058126		1	220A	1	
		2	310A	1	
4254964		1	90A	1	
4292491		1	- 1A	RF	
4298467		1	200A	1	
4298497		1	30A	1	
4298503		1	10A	1	
4298549		1	210A	1	
4299864		1	70A	1	
4303289		1	50A	3	
4303302		1	40A	1	
4307814		1	50B	3	
4312496		1	20A	1	
4328733		1	1B	RF	
4328964		1	200B	1	
4328971		1	90B	1	
4328987		1	201A	1	
4328994		1	203A	4	
4329008		1	210B	1	
4329685		1	10B	1	
4329692		1	206A	1	
		2	290A	1	
4330784		1	25A	1	
4342027		1	90C	1	
4348091		2	170A	1	
4357231		2	180A	1	
4357745		2	260A	1	
4357983		2	300A	1	
4358466		2	160A	1	
4358532		1	1C	RF	
4358532AAA		1	85A	1	

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PART NUMBER	AIRLINE STOCK NUMBER	FIG	ITEM	TTL REQ
4358532AAA (CONT'D)		2	- 1A	RF
4358548		2	220A	1
4360509		2	190A	1
50836		1	130A	1
		2	60A	1
50840		1	110A	2
		2	10A	2
8000115Y00		1	65A	1
8525-17N8B3APNH		1	140A	1
		2	30A	1

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PART NUMBER	VENDOR PART NUMBER	VENDOR CODE	TTL REQ
8525-17N8B3APNH	FDBA54-8-3APNKA499	VF1983	2

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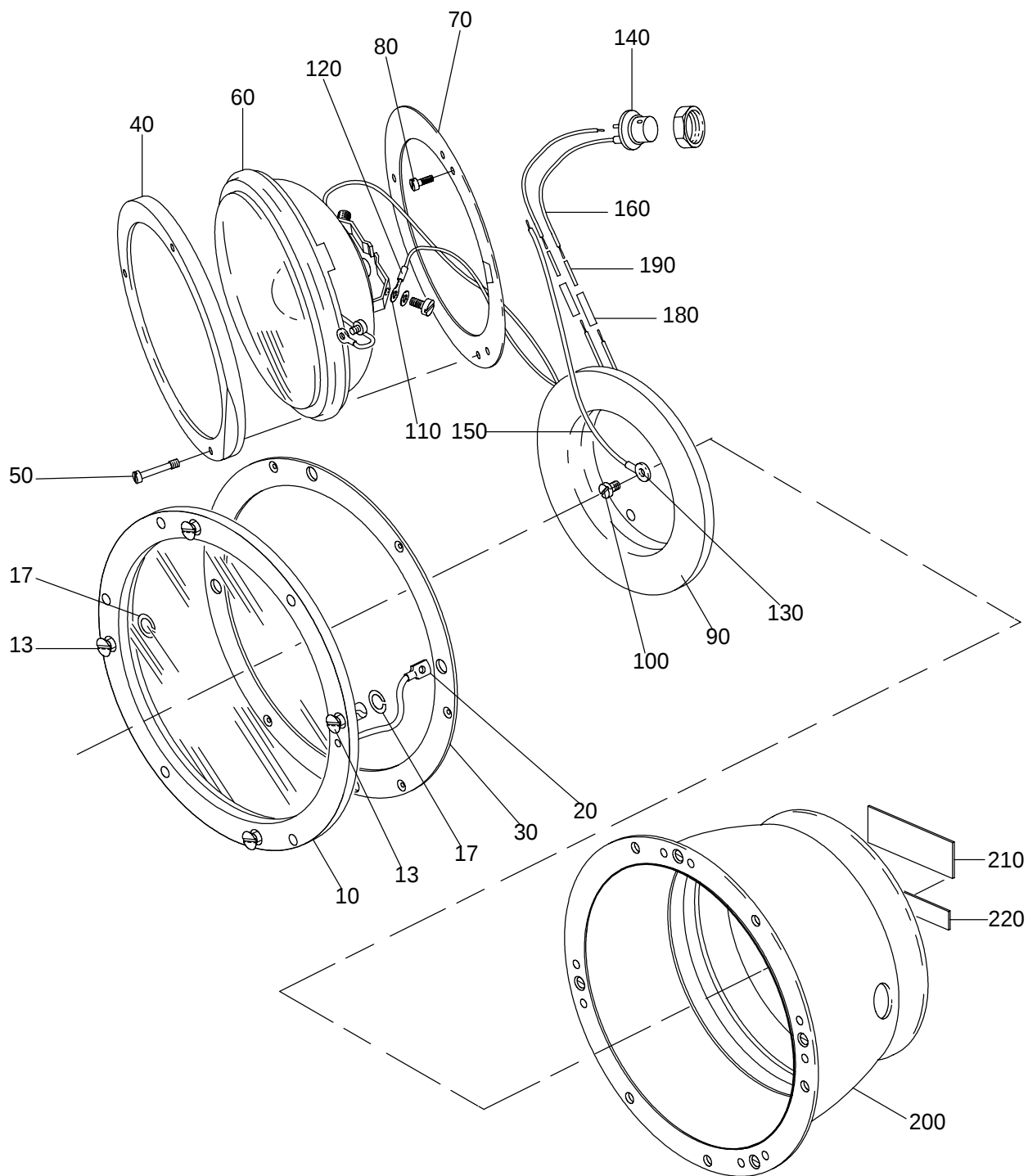
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DETAILED PARTS LIST

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LIGHT, LOGO
FIGURE 1

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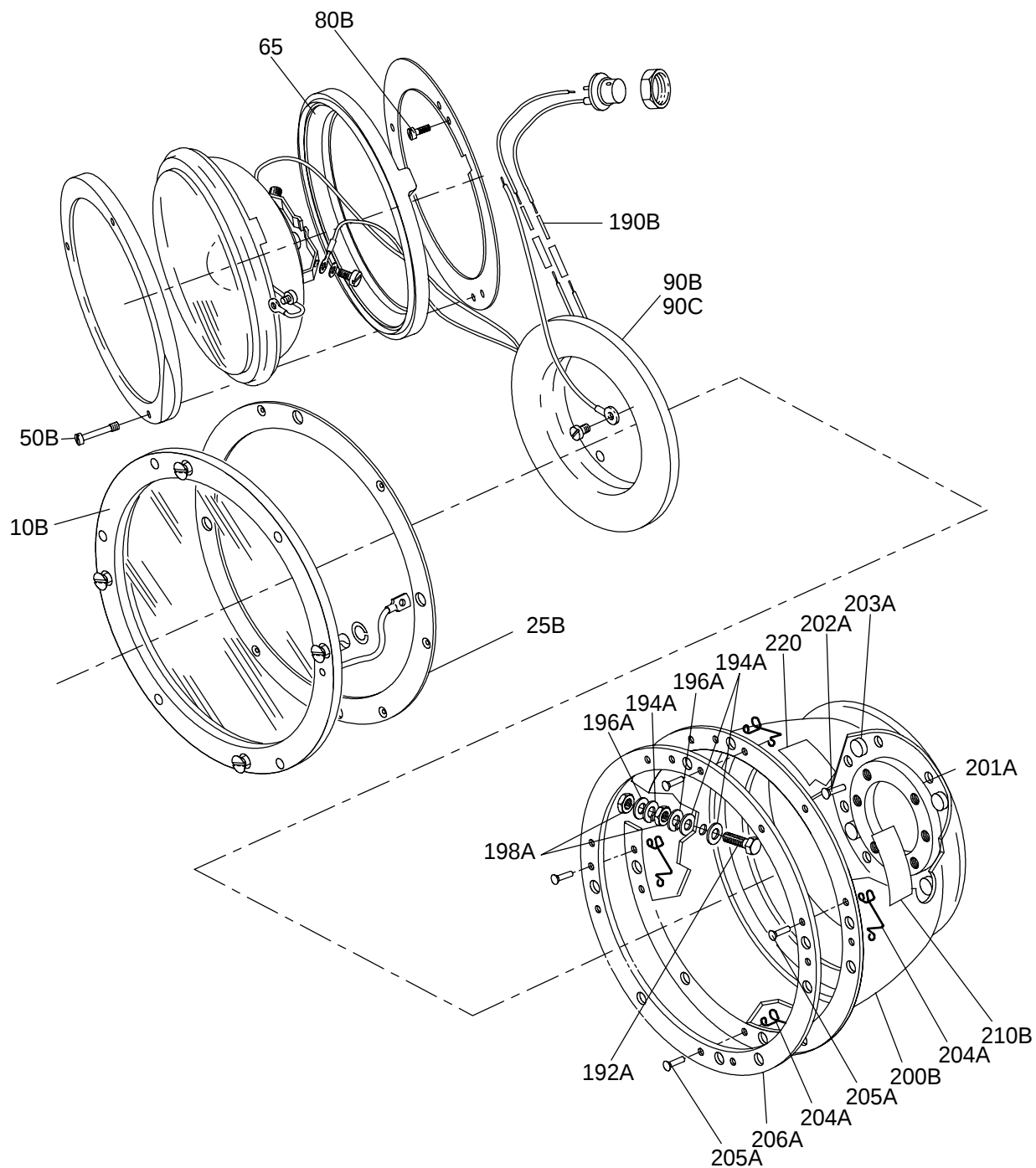
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SHT-33-47-11-991-801-A01-02

LIGHT, LOGO
 FIGURE 1A

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FIG.ITEM	PART NUMBER	AIRLINE STOCK NUMBER	NOMENCLATURE	EFFECT CODE	UNITS PER ASSY
			1234567 		
1 - 1A	4292491		LIGHT, LOGO	A	RF
A 1B	4328733		LIGHT, LOGO	B	RF
			POST SB 33-104		
A 1C	4358532		LIGHT, LOGO	C	RF
			POST SB 33-176		
10A	4298503		.COVER ASSY, UPPER	A	1
A 10B	4329685		.COVER ASSY, UPPER	BC	1
			POST SB 33-104		
13A	16392B		..STUD, TURNLOCK VF0304		4
			FASTENER		
			(3067958)		
			ATTACHING PARTS		
17A	J0NC4		..RING, RETAINING VF0304		4 R
			DIA7.15X.8 STEEL		
			(3063215)		
			* * *		
20A	4312496		..BRAID ASSY		1
A 25A	4330784		..GASKET	BC	1
			POST SB 33-104		
30A	4298497		.GASKET	A	1
40A	4303302		.CLAMP, BRIDGE, UPPER		1
			ATTACHING PARTS		
50A	4303289		.SCREW, CAPTIVE	AC	3
A 50B	4307814		.SCREW, CAPTIVE	B	3
			* * *		
A 55A	MS35273-42		.SCREW V96906	C	1
			DIA8-32UNC-2AX.312 BRASS		
			(3100319)		
60A	Q4631		.LAMP, INCANDESCENT 13V V08806		1
			250W		
			(3024401)		
A 65A	8000115Y00		.SEAL	C	1 R
70A	4299864		.COLLAR	AB	1
			ATTACHING PARTS		
80A	MS35273-42		.SCREW V96906	A	3
			DIA8-32UNC-2AX.312 BRASS		
			(3100319)		
A 80B	NAS1801-08-5		.SCREW DIA.1640-32 V80205	B	3
			UNJC-3AX.3125 STEEL CDPL		
			(3114268)		
			* * *		
A 85A	4358532AAA		.LIGHT, LOGO, SUB-ASSY NP	C	1
			SEE FIG 2 ITEM 1A FOR DET		
90A	4254964		.AUTOTRANSFORMER ASSY	A	1
A 90B	4328971		.AUTOTRANSFORMER ASSY	B	1
			POST SB 33-104		

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FIG.ITEM	PART NUMBER	AIRLINE STOCK NUMBER	NOMENCLATURE	EFFECT CODE	UNITS PER ASSY
			1234567 		
1A 90C	4342027		.AUTOTRANSFORMER ASSY POST SB 33-135 ATTACHING PARTS	B	1
100A	MS35275-240		.SCREW DIA V96906 8-32UNC2AX.188 COR. RES. STEEL (3081444) * * *	AB	3 R
110A	50840		..LUG, TERMINAL VF0286 (3040103)	AB	2 R
120A	TFE10		..INSULATION SLEEVING, VF6220 DIA4.9 (3069384)	AB	AR R
130A	50836		.LUG, TERMINAL VF0286 (3042089)	AB	1 R
140A	8525-17N8B3APNH		.CONNECTOR,RECEPTACLE, VF0225 ELECTRICAL (3099621) SEE OPTIONAL VENDOR INDEX	AB	1 R
150A	1900A0-93-45		.WIRE,ELECTRICAL VF0241 DIA1.25 YELLOW-GREEN (3068983)	AB	AR
160A	2100-0-60-6		.WIRE,ELECTRICAL DIA1 VF0241 BLUE (3068857)	AB	AR
180A	TFE12X		.INSULATION SLEEVING, VF6220 ELECTRICAL DIA3.9 TRANSPARENT (3085108)	AB	AR
190A	31818		.SPLICE,CONDUCTOR VF0286 (3042029)	AB	2
A 190B	330377		.SPLICE,CONDUCTOR VF0286 (3113613) POST SB 33-126	B	2
A 192A	NAS1801-3-12		.SCREW V80205 DIA.1900-32UNJF-3AX.75 STEEL (3102741) POST SB 33-104	B	1
A 194A	AN960-10L		.WASHER, FLAT DIA.203 V88044 STEEL CDPL (3103567) POST SB 33-104	B	3 R
A 196A	MS35338-43		.WASHER,LOCK DIA.1900 V96906 STEEL CDPL (3102757) POST SB 33-104	B	2

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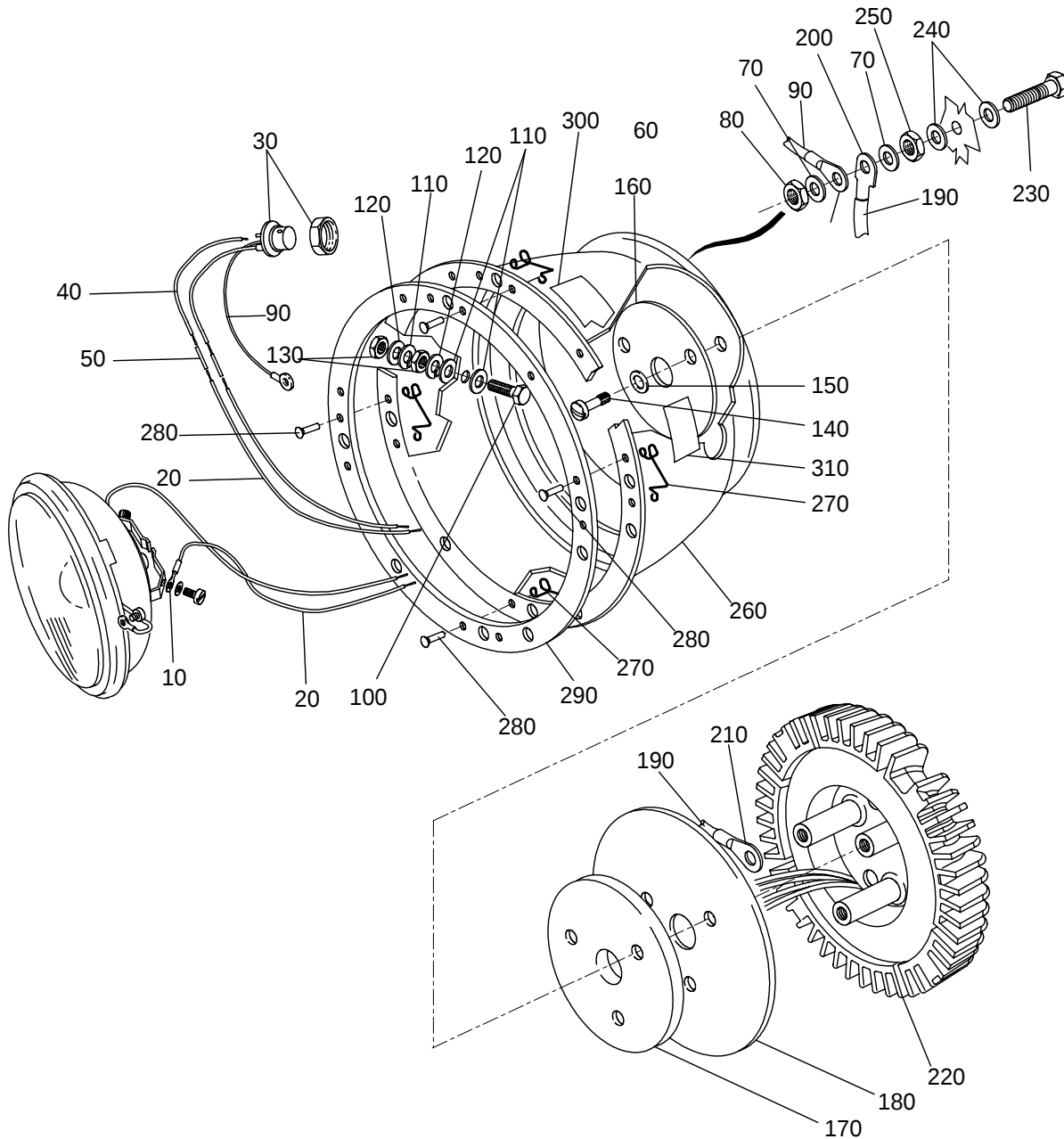
FIG.ITEM	PART NUMBER	AIRLINE STOCK NUMBER	NOMENCLATURE	EFFECT CODE	UNITS PER ASSY
			1234567 		
1A 198A	NAS509-3		.NUT,PLAIN,HEXAGON V80205 DIA.1900-32 UNJF-3B STEEL (3102764) POST SB 33-104	B	2
200A	4298467		.HOUSING ASSY	A	1
A 200B	4328964		.HOUSING ASSY POST SB 33-104	B	1
A 201A	4328987		..SPACER POST SB 33-104 ATTACHING PARTS	B	1
A 202A	TAPK410BS		..RIVET,BLIND F120 VF9556 DIA3.2X11 AG3.5 (3099875) POST SB 33-104 * * *	B	3
A 203A	4328994		..DUMPER POST SB 33-104	B	4
A 204A	S4-275		..LOCKSPRING,TURNLOCK VF0304 FASTENER (3063208) ATTACHING PARTS	B	4
A 205A	TAPK36BS		..RIVET,BLIND F120 VF9556 DIA2.4X7.5 AG3.5 (3062666) * * *	B	8
A 206A	4329692		..FLANGE POST SB 33-104	B	1
210A	4298549		.PLATE,INDICATING,ENGRAVED	A	1
A 210B	4329008		.PLATE,INDICATING,ENGRAVED POST SB 33-104	B	1
220A	4058126		.PLATE,AMENDMENT	AB	1

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SHT-33-47-11-991-802-A01-01

LIGHT, LOGO, SUB-ASSY
FIGURE 2

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FIG.ITEM	PART NUMBER	AIRLINE STOCK NUMBER	NOMENCLATURE	EFFECT CODE	UNITS PER ASSY
2 - 1A	4358532AAA		1234567 LIGHT, LOGO, SUB-ASSY NP		RF
10A	50840		SEE FIG 1 ITEM 85A FOR NHA .LUG, TERMINAL VF0286 (3040103)		2 R
20A	15C10		.INSULATION SLEEVING, VF8320 ELECTRICAL DIA9 (3097378) SUPSD BY 15C3		AR R
20B	15C3		.INSULATION SLEEVING, VF8320 ELECTRICAL DIA2-5 (3111413) POST SB 4358532-33-001 SUPSDS 15C10		AR R
- 25A	3023041		.SLEEVE, HEL-TWIN, A VF0331 (3023041PDC)		1 R
- 26A	3023034		.SLEEVE, HEL-TWIN, B VF0331 (3023034PDC)		1 R
30A	8525-17N8B3APNH		.CONNECTOR, RECEPTACLE, VF0225 ELECTRICAL (3099621) SEE OPTIONAL VENDOR INDEX		1 R
40A	2100-0-60-6		.WIRE, ELECTRICAL DIA1 VF0241 BLUE (3068857)		AR
50A	330377		.SPLICE, CONDUCTOR VF0286 (3113613)		2
60A	50836		.LUG, TERMINAL VF0286 (3042089) ATTACHING PARTS		1 R
70A	AN960-8		.WASHER, FLAT DIA.174 V88044 STEEL CDPL (3069726)		2 R
80A	MS21042L08		.NUT, SELF-LOCKING V96906 DIA.1640-32UNJC-3B STEEL CDPL (3110009) * * *		1 R
90A	1900A0-93-45		.WIRE, ELECTRICAL VF0241 DIA1.25 YELLOW-GREEN (3068983)		AR
100A	NAS1801-3-12		.SCREW V80205 DIA.1900-32UNJF-3AX.75 STEEL (3102741)		1
110A	AN960-10L		.WASHER, FLAT DIA.203 V88044 STEEL CDPL (3103567)		3 R

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FIG.ITEM	PART NUMBER	AIRLINE STOCK NUMBER	NOMENCLATURE	EFFECT CODE	UNITS PER ASSY
			1234567 		
2 120A	MS35338-43		. WASHER, LOCK DIA.1900 V96906 STEEL CDPL (3102757)		2
130A	NAS509-3		. NUT, PLAIN, HEXAGON V80205 DIA.1900-32 UNJF-3B STEEL (3102764)		2
140A	NAS1801-04-10		. SCREW V80205 DIA.1120-40UNJC-3AX.625 STEEL (3119983)		3
150A	AN960-4		. WASHER, FLAT DIA.125 V88044 STEEL CDPL (3111242)		3 R
160A	4358466		. WASHER		1
170A	4348091		. WASHER, RUBBER		1
180A	4357231		. PLATE, SUPPORT		1
190A	4360509		. BRAID ASSY		1
200A	130474		. . TERMINAL, LUG VF0286 (3051117)		1
210A	130479-0		. . TERMINAL, LUG VF0286 (3012036)		1
220A	4358548		. AUTOTRANSFORMER ASSY		1
230A	NAS1801-08-12		. SCREW DIA.1640-32 V80205 UNJC-3AX.75 STEEL (3110201)		1
240A	AN960-8		. WASHER, FLAT DIA.174 V88044 STEEL CDPL (3069726)		2 R
250A	MS21042L08		. NUT, SELF-LOCKING V96906 DIA.1640-32UNJC-3B STEEL CDPL (3110009)		1 R
260A	4357745		. HOUSING ASSY		1
270A	S4-250		. . LOCKSPRING, TURNLOCK VF0304 FASTENER (3097579)		4
			ATTACHING PARTS		
280A	TAPK36BS		. . RIVET, BLIND F120 VF9556 DIA2.4X7.5 AG3.5 (3062666)		8
			* * *		
290A	4329692		. . FLANGE		1
300A	4357983		. PLATE, INDICATING, ENGRAVED		1
310A	4058126		. PLATE, AMENDMENT		1

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