

TITLE

LIGHTS - LED LANDING/TAXI LIGHT INSTALLATION

EFFECTIVITY

MODEL	SERIAL NUMBERS
172R	17280001 thru 17281622
172S	172S08001 thru 172S08085
182S	18280001 thru 18280944
182T	18280945 thru 18282280
T182T	T18208001 thru T18209024
206H	20608001 thru 20608226
T206H	T20608001 thru T20609000

REASON

To remove the incandescent or obsolete High-Intensity Discharge (HID) landing or taxi lights with new LED lights.

NOTE: At the customer's discretion the landing or taxi light may be replaced individually or the landing and taxi light may be replaced at the same time.

DESCRIPTION

This service document provides parts and instructions to remove the existing incandescent or HID landing and taxi lights and install a either a new LED landing, taxi, or the landing and taxi lights, at the owner's discretion.

COMPLIANCE

OPTIONAL. This service document can be accomplished at the discretion of the owner.

A service document published by Textron Aviation may be recorded as *completed* in an aircraft log only when the following requirements are satisfied:

- 1) The mechanic must complete all of the instructions in the service document, including the intent therein.
- 2) The mechanic must correctly use and install all applicable parts supplied with the service document kit. Only with written authorization from Textron Aviation can substitute parts or rebuilt parts be used to replace new parts.
- 3) The mechanic or airplane owner must use the technical data in the service document only as approved and published.
- 4) The mechanic or airplane owner must apply the information in the service document only to aircraft serial numbers identified in the *Effectivity* section of the document.
- 5) The mechanic or airplane owner must use maintenance practices that are identified as acceptable standard practices in the aviation industry and governmental regulations.

December 5, 2023

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Textron Aviation is not responsible for the quality of maintenance performed to comply with this document, unless the maintenance is accomplished at a Textron Aviation-owned Service Center.

APPROVAL

Textron Aviation received FAA approval for the technical data in this publication that changes the airplane type design.

FLIGHT CREW OPERATIONS

No Changes

CONSUMABLE MATERIAL

NAME	NUMBER	MANUFACTURER	USE
Unmarked Electrical Wire (14 Gauge)	M81044/12-14-9	Commercially Available	To lengthen existing wiring.

TOOLING

No specialized tooling is required to complete this service document.

WEIGHT AND BALANCE INFORMATION

If the customer is replacing the incandescent lights with the LED lights, then the weight and balance is negligible.

The weight and balance information in the table below **ONLY** applies to customer's who have or are replacing one or both of the HID lights with the new LED lights.

MODEL	All Models (Both HID Lights Replaced)	All Models (Only one HID Light Replaced)
WEIGHT CHANGE	- 1.7 pounds	- 0.85 pounds
RESULTANT MOMENT	- 34.9 inch-pounds	- 29.7 inch-pounds
MOMENT/100	- .349 inch-pounds	- .297 inch-pounds

REFERENCES

Cessna Model 172 (Series 1996 and On) Maintenance Manual
 Cessna Model 182 (Series 1997 and On) Maintenance Manual
 Cessna Model 206 (Series 1998 and On) Maintenance Manual
 Cessna Model 172 (Series 1996 and On) Wiring Diagram Manual
 Cessna Model 182 (Series 1997 and On) Wiring Diagram Manual
 Cessna Model 206 (Series 1998 and On) Wiring Diagram Manual

PUBLICATIONS AFFECTED

Cessna Model 172 (Series 1996 and On) Illustrated Parts Catalog
 Cessna Model 182 (Series 1997 and On) Illustrated Parts Catalog
 Cessna Model 206 (Series 1998 and On) Illustrated Parts Catalog
 Cessna Model 172 (Series 1996 and On) Wiring Diagram Manual
 Cessna Model 182 (Series 1997 and On) Wiring Diagram Manual

Cessna Model 206 (Series 1998 and On) Wiring Diagram Manual

ACCOMPLISHMENT INSTRUCTIONS

1. Prepare the airplane for maintenance.
 - A. Make sure that the airplane is electrically grounded.
 - B. Make sure that all switches are in the OFF/NORM position.
 - C. Disconnect electrical power from the airplane.
 - (1) Disconnect external electrical power.
 - (2) Disconnect the main airplane battery.
 - D. Attach maintenance warning tags to the battery and external power receptacle that have **"DO NOT CONNECT ELECTRICAL POWER - MAINTENANCE IN PROGRESS"** written on them.
 - E. Depending upon the customer's airplane model use the references below as follows:
 - Cessna Model 172R/172S**
 - Refer to the Cessna Model 172 (1996 Series and On) Maintenance Manual, Chapter 33, Landing/Taxi Lights - Maintenance Practices.
 - Cessna Model 182S/182T/T182T**
 - Refer to the Cessna Model 182 (Series 1997 and On) Maintenance Manual, Chapter 33, Landing/Taxi Lights - Maintenance Practices HID and Incandescent.
 - Cessna Model 206H/T206H**
 - Refer to the Cessna Model Cessna Model 206 (Series 1998 and On) Wiring Diagram Manual, Chapter 33, Landing/Taxi Lights - Maintenance Practices.
2. Depending upon the customer's type of landing or taxi lights go to the steps as follows:
 - A. If the customer has incandescent landing or taxi lights installed, go to Step 3.
 - B. If the customer has HID landing or taxi lights installed, go to Step 4.
3. Remove and discard the incandescent landing or taxi lights.
 - A. Keep all existing hardware and brackets.

NOTE: The kept hardware and brackets will be used during the installation.
 - B. Go to Step 6.
4. Remove the HID landing or taxi lights as follows:
 - A. Remove and discard the HID landing or the HID taxi lights.
 - B. Keep all existing hardware and brackets.

NOTE: The kept hardware and brackets will be used during the installation.
 - C. Remove and discard the landing or taxi light HID ballasts and associated hardware.
 - D. Go to Step 5.

5. (Refer to Figure 1, Sheet 1 and 2.) Do the wiring modifications as follows:

NOTE: The wiring modifications is only needed if the customer's airplane had a HID landing or taxi lights installed.

NOTE: The procedures below for the wiring modification is for the installation of 01-0772102-10 Landing Light. At the customer's discretion, if the 01-0772102-15 Taxi Light is being replaced then the wiring modifications would need to be repeated for the installation of 01-0772102-15 Taxi Light.

- A. Cut the existing power and ground wiring connector that connected to each HID ballast.
- B. Temporarily place the 01-0772102-10 Landing Light into the light assembly bracket.

NOTE: The 01-0772102-10 Landing Light will be installed into the inboard position of the light assembly bracket. The 01-0772102-15 Taxi Light will be installed into the outboard position of the light assembly bracket.

- C. Make sure that the cut wires from the existing HID ballast will reach the electrical connections of the 01-0772102-10 Landing Light.

(1) If the cut existing wires will not reach the electrical connections of the 01-0772102-10 Landing Light do as follows.

- (a) Splice additional M81044/12-14-9 Unmarked Electrical Wiring as required onto each cut electrical wire with one M81824/1-3 Splice.

- D. Install one MS25036-153 Ring Terminal to the end of each electrical wire.

NOTE: The electrical wire labeled BPL010 for landing light and BPL011 for taxi light should be connected to the positive terminal of the respective LED lamp assembly.

6. Install the 01-0772102-10 Landing Light or the 01-0772102-15 Taxi Light with the kept hardware and brackets.

NOTE: The installation of the 01-0772102-10 Landing Light or the 01-0772102-15 Taxi Light are the same as the incandescent light installation. The maintenance manual procedures for the incandescent light installation can be used for the new 01-0772102-10 Landing Light or the 01-0772102-15 Taxi Light.

7. Remove the maintenance warning tags and connect the airplane battery.

8. Put the Master Switches to the ON position.

9. Put the Landing and Taxi Light Switches to the ON position.

10. Make sure that the landing and taxi lights illuminate.

A. If the landing and taxi lights do not illuminate reverse the polarity of the wires at the lamp terminals.

11. At the customer's discretion, if additional light adjustment is required, Do the Light Adjustment.

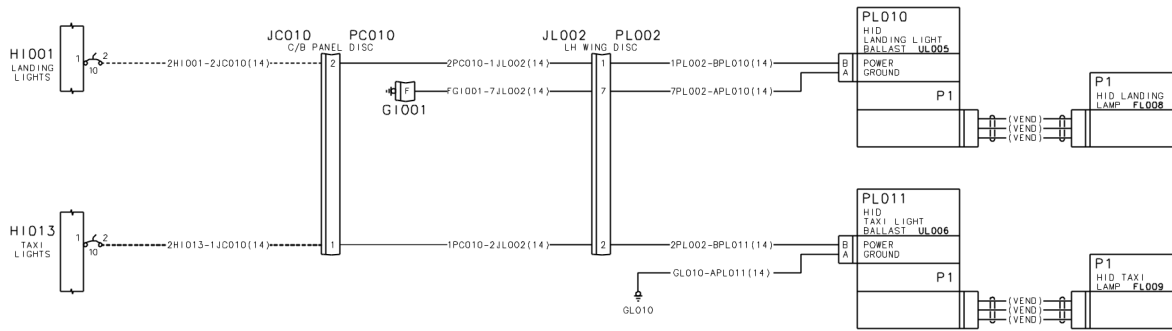
12. If the customer removed one or two HID landing lights, update the aircraft weight/balance, and the equipment list records.

A. If the incandescent lights were removed from the customer's airplane, go to Step 13.

NOTE: The Light adjustment procedures in the maintenance manual can be used for the 01-0772102-10 Landing Light and/or the 01-0772102-15 Taxi Light.

13. Make an entry in the airplane logbook indicating either the landing, taxi, or both landing and taxi lights have been replaced that states compliance and method of compliance with this service document.

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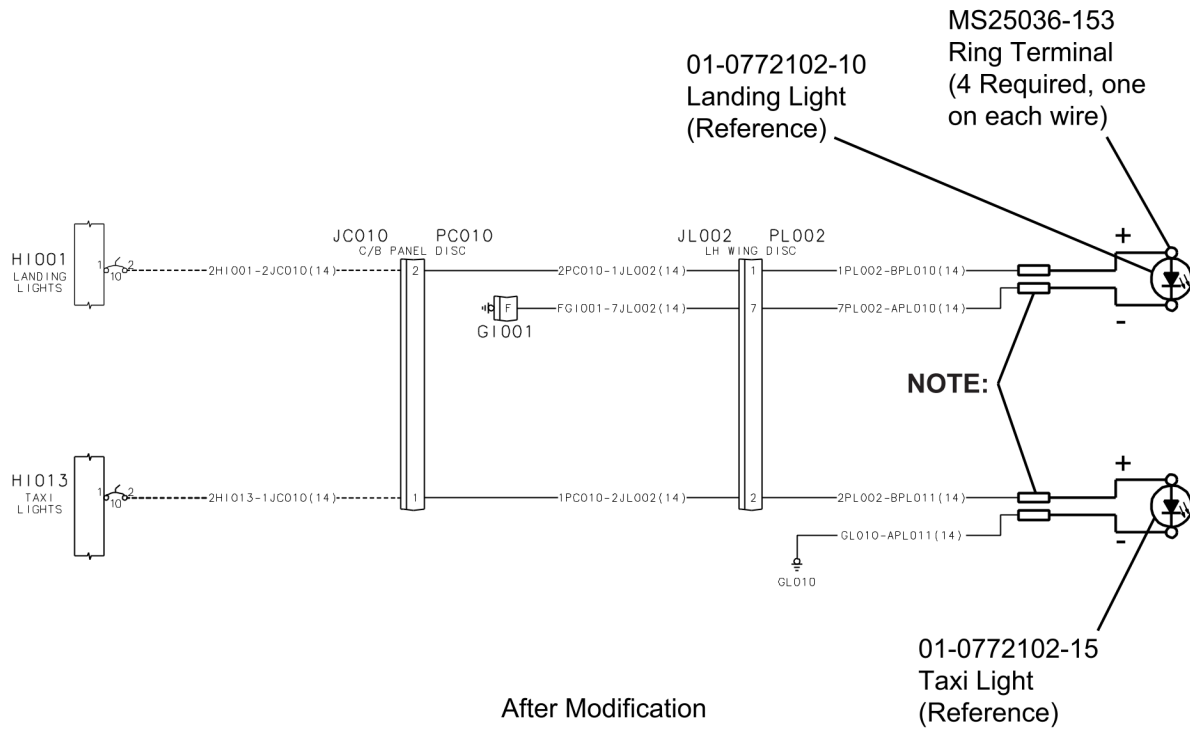


Before Modification

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Figure 1. Wiring Modifications (Sheet 1)

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Legend	
—	New Wire

NOTE: Install the M81824/1-3 Splice and M81044/12-14-9 Unmarked Electrical Wiring as required to extend the existing wiring to the 01-0772102-10 Landing Light and the 01-0772102-15 Taxi Light .

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Figure 1. Wiring Modifications (Sheet 2)

MATERIAL INFORMATION

Order the part below to install this modification.

NEW P/N	QUAN- TITY	KEY WORD	OLD P/N	INSTRUCTIONS/ DISPOSITION
01-0772102-10	1	Landing Light	81010-1 4596	Discard old. Install new.
01-0772102-15	1	Taxi Light	81010-1 4587	Discard old. Install new.
M81824/1-3	As Required	Splice	N/A	Install if HID lights were removed.
MS25036-153	4	Ring Terminal	N/A	Install if HID lights were removed.

* Please contact a Textron Aviation Authorized Service Facility for current cost and availability of parts listed in this service document.

For more information, please visit the TAPD Support & Aftermarket Account Management website at <https://ww2.txtav.com/Parts/Promos/TAPD>.

Based on availability and lead times, parts may require advanced scheduling.

TITLE

LIGHTS - LED LANDING/TAXI LIGHT INSTALLATION

TO:

Cessna Model 172R, 172S, 182S, 182T, T182T, 206H, and T206H Aircraft Owner

REASON

To remove the incandescent or obsolete High-Intensity Discharge (HID) landing or taxi lights with new LED lights.

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COMPLIANCE

OPTIONAL. This service document can be accomplished at the discretion of the owner.

LABOR HOURS

For planning purposes only:

WORK PHASE	LABOR-HOURS
Modification	As Required
Test and Inspection	As Required

MATERIAL AVAILABILITY

PART NUMBER	AVAILABILITY	COST
01-0772102-10	*	*
01-0772102-15	*	*
M81824/1-3	*	*
MS25036-153	*	*

* Please contact a Textron Aviation Authorized Service Facility for current cost and availability of parts listed in this service document.

For more information, please visit the TAPD Support & Aftermarket Account Management website at <https://ww2.txtav.com/Parts/Promos/TAPD>.

Based on availability and lead times, parts may require advanced scheduling.

WARRANTY

None

NOTE: As a convenience, service documents are now available online to all our customers through a simple, free-of-charge registration process. If you would like to sign up, please visit the Customer Access link at support.txtav.com to register.

