

2019 -

Part Number: 262-TRA-2N1-19

Kit Contents

Item#	Quantity Reqd.	Description
1	1	2N1 LED Fog Lamp, Left
2	1	2N1 LED Fog Lamp, Right
1	1	DRL Extension Harness
1	1	Driver Module
1	1	6 Pin T-Harness

Conflicts

Vehicles w/o Factory Fog Lights	
LE and Hybrid Models	

General Applicability

MY19 and newer RAV4 XLE, XLE Premium, Adventure, Limited

Recommended Tools

Personal & Vehicle	Notes	
Protection		
Special Tools	Notes	
Special Tools	Notes	
Installation Tools	Notes	
#2 Phillips Screwdriver	3" long	
10mm Socket	Standard length	
1/4" drive extension	1-1/2"	
1/4" drive ratchet		
Small Nylon Removal Tool		
Drive Flexible Extension		
#2 Phillips Bit		
Special Chemicals	Notes	
•		

Legend



STOP: Damage to the vehicle may occur. Do not proceed until process has been complied with.



OPERATOR SAFETY: Use caution to avoid risk of injury.



CAUTION:

in order to reduce the risk of damage to the accessory/vehicle and to ensure a quality installation.



TOOLS & EQUIPMENT:

specific tools and equipment recommended for this process.



REVISION MARK: This mark highlights a change in installation with respect to previous issue.



SAFETY TORQUE: T

related to safety.



REGULATORY MARK: This mark indicates the component is related to regulatory compliance

Table of Contents

I.	Preparation a.) Table of Contents b.) Kit /Hardware Bag of Contents c.) Parts for Installation	2
II.	Procedures	6
	a.) Battery Preparation	6
	b.) Vehicle Preparation –Installation Process	7-12
III.	Fog Light Aiming	13
IV.	Function & Quality Check.	14

Kit/Hardware Bag Contents:

Item#	Description
1.	2N1 LED Fog lights Right and Left
2.	Cable Ties (2)
3	6 Pin T-Harness
4.	DRL Driver Module
5.	DRL Extension Harness



Parts for Installation:

Care must be taken when installing this accessory to ensure damage does not occur to the vehicle. The installation of this accessory should follow approved guidelines to ensure a quality installation. These guidelines can be found in the "Accessory Installation Practices" document.

This document covers such items as:

- Vehicle Protection (use of covers and blankets, cleaning chemicals, etc.).
- Safety (eye protection, re-checking torque procedure, etc.).
- Vehicle Disassembly/Reassembly (panel removal, part storage, etc.).
- Electrical Component Disassembly/Reassembly(battery disconnection, connector removal, etc.).

Item#	Description
1.	2N1 LED Fog lights Right and Left
2.	Cable Ties (2)
3	6 Pin T-Harness
4.	DRL Driver Module
5.	DRL Extension Harness



2019 - 2N1 LED FOG LIGHT UPGRADE

Care must be taken when installing this accessory to ensure damage does not occur to the vehicle. The installation of this accessory should follow approved guidelines to ensure a quality installation.

These guidelines can be found in the "Accessory Installation Practices" document.

This document covers such items as:-

- Vehicle Protection (use of covers and blankets, cleaning chemicals, etc.).
- Safety (eye protection, rechecking torque procedure, etc.).
- Vehicle Disassembly/Reassembly (panel removal, part storage, etc.).
- Electrical Component Disassembly/Reassembly (battery disconnection, connector removal, etc.).

Please see your Toyota dealer for a copy of this document.

1. Prepare the Vehicle

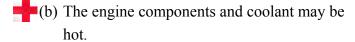
(a) Align the vehicle on lift.

NOTE: Chassis or four-post lift will work.

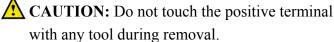
NOTE: Do not raise the vehicle.

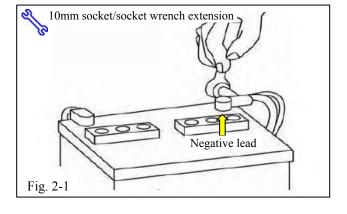
2. Disconnect the Battery

(a) Protect the fender before starting.



- (c) Check the kit for contents and any damage.
- (d) Remove the battery cable from the negative terminal (Fig. 2-1).









3. Partially Remove the Fender Liner

- (a) From inside the wheel well, remove the (3) push fasteners from the RH and LH side. RH shown (Fig. 3-1).
- (b) Remove the (1) push fastener from the RH and LH bumper. RH shown (Fig. 3-2).

NOTE: This push fastener is different from the fasteners in the previous step.

- (c) Starting on either side of the vehicle, turn the wheel outward to gain additional clearance.
- (d) Bend fender liner back to gain additional access for removal/installation of the lamp assembly.

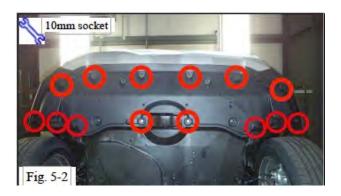
4. Raise the Vehicle

(a) Raise the vehicle to a comfortable working height.

5. Remove the Engine Under Cover

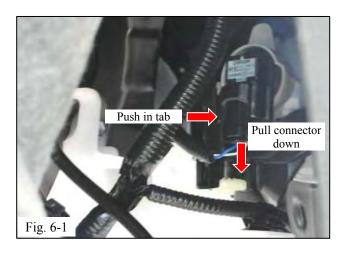
(a) From inside the wheel well, remove the screw shown. (1) on each side of the vehicle. LH shown (Fig. 5-1).





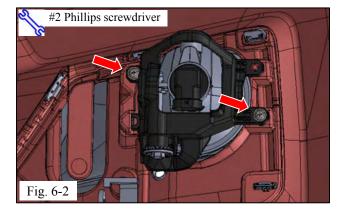
(b) From under the vehicle, remove the 10mm screws to remove the engine cover.

shown (Fig. 5-2).



6. Remove the OE Lamp Assembly

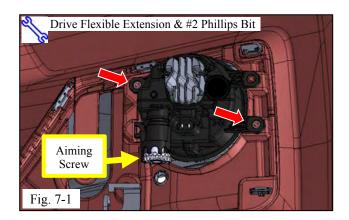
(a) Disconnect the lamp assembly from the vehicle wire harness by pressing on the release tab and pulling down. RH shown. (Fig. 6-1).



(b) Using #2 Phillips screwdriver, remove the (1) inner and (1) outer mounting screws and save for re-use (Fig. 6-2).

NOTE: The right-hand lamp has limited access due to the washer bottle.

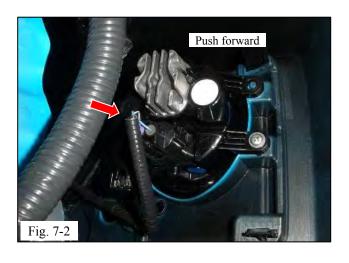
(c) Remove the OE Fog Lamp and discard.



7. Install the 2N1 LED Fog Lamp

(a) Insert the mounting tabs of the LED Fog Lamp into the mounting slots of the bumper as shown (Fig. 7-1).

NOTE: Installation is the reverse of removing OE Fog Lamp.



- (b) Secure with the (2) previously saved screws (Fig. 7-1).
- (c) Reconnect the fog lamp connector by inserting into the fog lamp and pressing forward engaging the release tab (Fig. 7-2).

8. Install the Opposite Side 2N1 Fog Lamp.

(a) Repeat Steps 6-7 on opposite side of vehicle.

9. Route DRL Extension Harness

a. Route Extension harness across lower radiator support brace to right and left side Lamp assembly.



Fig. 10-1



Fig. 10-2



Fig. 11-1

10. Connect Factory fog lamp harness and DRL Extension harness to fog lamp assembly on both the left and right side as shown in Fig 10-1 and 10-2

11. Secure DRL Extension harness with tie wraps as shown in Fig 11-1 and 11-2



Fig. 11-2



Fig. 12-1

12. Mount the DRL Control Module to the cooling fan harness located in front of air box as shown in Fig 12-1.



Fig. 13-1

13. Connect the DRL extension harness to the control module. Fig 13-1

2019 -



14. Disconnect the factory drivers side headlamp connector and connect to Tharness. Connect Tharness to Drivers side headlamp assembly. Fig 14-1



Fig. 15-1

15. Connect T-harness to the DRL Control Module. Fig 15-1



Fig. 16-1

16. Secure excess extension harness and T-harness with tie wrap Fig 16-1

17. Final Vehicle Reassembly.

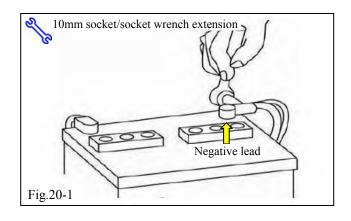
- a. Reinstall the Engine under cover.(1) The front edge of the cover will rest on top of the screw tabs.
- b. Reinstall the (2) previously removed fender liner screws (Fig. 3-3).
- c. Reinstall the 10mm engine under cover screws (Fig. 3-2)

18. Lower the Vehicle.

19. Return the Front Wheels to Straight.

20. Reconnect the Battery.

a. Reconnect the Negative (-) battery cable (Fig. 20-1)

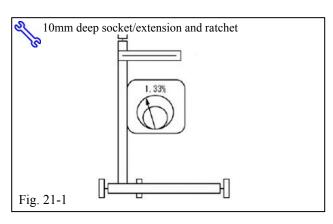




Torque: 5.4 N•m (48 in•lbs)



CAUTION: Do not touch the positive terminal with any tool.



21. Aim the Fog Lights (DIO only).

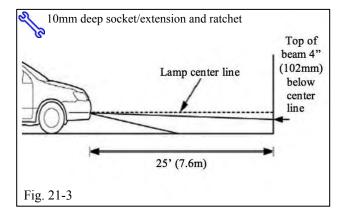
(a) Align the Fog Light Beam.



NOTE: If available, use a Hella Photometric Beam Setter (or equivalent) to align the fog light beam (Fig. 21-1).

(b) If a beam setter is not available, use a wall to aim the lights.

Fog Light Aiming



- (1) Position the vehicle on a flat surface at a distance of 25 feet (7.6m) from the fog light to a wall (Fig. 21-3).
- (2) Measure the distance from the center of the lamp to the ground and mark off the same height on the wall. This is the fog light centerline (Fig. 21-3).
- (3) Turn on the fog lights and adjust them so that the top of the beam (high intensity portion) falls 4 inches (102 mm) below the mark on the wall (the fog light centerline) (Fig. 21-3).
- (c) Use a #2 Phillips screw driver to turn the adjustment gear on the fog lights.

Functions and Quality Check

Accessory Function Checks		
Turn the headlights on	Headlights function as normal	
Turn the fog lights on	Fog lights turn on	
Switch the high beams on	Fog lights off	
Turn the headlights off	Headlights and fog lights turn off	
Vehicle Function Checks Taillights/brake lights/turn signals Reverse lights & emergency flashers	All function properly Function properly	
Vehicle Appearance Check After accessory installation and removal of protective cover(s), perform a visual	Ensure no damage (including scuffs and scratches) was caused during the	
inspection.	installation process. (For PPO installations, refer to TMNA Accessory Quality Shipping Standard.)	