



Technical Service Bulletin

SUBJECT:		No: TSB-21-54A-003	
LOW BEAM HEADLIGHT VERTICAL ADJUSTMENT		DATE: October 2021	
		MODEL: 2022 Outlander	
CIRCULATE TO:	<input type="checkbox"/> GENERAL MANAGER	<input checked="" type="checkbox"/> PARTS MANAGER	<input checked="" type="checkbox"/> TECHNICIAN
<input checked="" type="checkbox"/> SERVICE ADVISOR	<input checked="" type="checkbox"/> SERVICE MANAGER	<input checked="" type="checkbox"/> WARRANTY PROCESSOR	<input type="checkbox"/> SALES MANAGER

PURPOSE

Customers may express a concern with their low beam headlights causing a minor glare to oncoming drivers. Although the low beam headlights may have been set to specifications on the production line, to address the customer concern, the low beam headlight can be readjusted to the lower end of the of specification.

Upon customer complaint basis, please adjust the headlights, according to the Service Manual Volume 1, Chassis Electrical, Group 54, Pages 5-7 as outlined below.

AFFECTED VEHICLES

- 2022 Outlander vehicles built prior to July 2021 (Cut-off is VIN JA4J4VA86NZ022334 built on 6/23/2021).



PROCEDURE

Please refer to the following pages obtained from the Service Manual Volume 1, Chassis Electrical, Group 54A, Pages 5-7. The Service Manual follows SAE J599 (+0.38°) inspection guideline. Adjust the headlamp aiming to the range between horizontal line and +50.5 mm (+0.38°) at 7.6 m distance on customer complaint basis.

HEADLIGHT

SERVICE SPECIFICATIONS

M15401002A0576

Item		Standard value	Limit
Headlight aiming [at 7.62 m (25.0 ft)]	Low-beam	Vertical direction	Horizontal line (H) + 50.5 mm (+ 2.0 in) (+ 0.38 degrees angle)
		Horizontal direction	± 133.3 mm (± 5.2 in) (± 1 degrees angle) from the axis, which is 266.1 mm (10.5 in) (2 degrees angle) rightward from the vertical line (V)
Headlight intensity cd (at high-beam)		-	40,000 or more {when a screen is set 18.3 m (60 ft) ahead of the vehicle}

PRECAUTIONS ON HOW TO USE THE HEADLIGHT ASSEMBLY

Be careful with the following items as resin lenses are used in the headlight assembly.

- Don't illuminate the headlight for three minutes or more when the headlight is covered with scratch protector.
- Don't tape the outer lens.
- Don't scratch the outer lens surface with a sharp edged special tool.

ON-VEHICLE SERVICE

HEADLIGHT AIMING

M15401005A0168

PRE-AIMING INSTRUCTION (LOW-BEAM)

Inspect for badly rusted or faulty headlight assemblies.

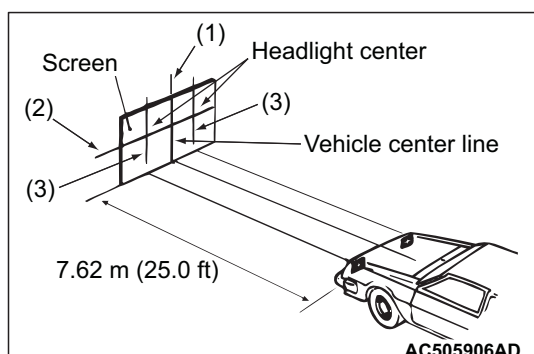
1. These conditions must be corrected before a satisfactory adjustment can be made.
2. Inspect tire inflation, and adjust if it is necessary.
3. If the fuel tank is not full, place a weight in the trunk of the vehicle to simulate weight of a full tank [3 kg (6.6 pounds) per gallon].
4. There should be no other load in the vehicle other than driver or substituted weight of approximately 68 kg (150 pounds) placed in driver's position.
5. Change the vehicle posture, and then operate the actuator of headlight levelling unit once.
6. Thoroughly clean the headlight lenses.

54A-6

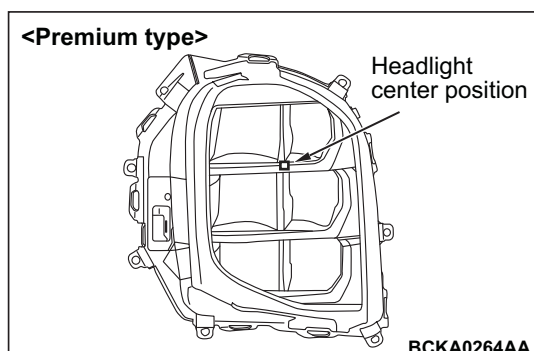
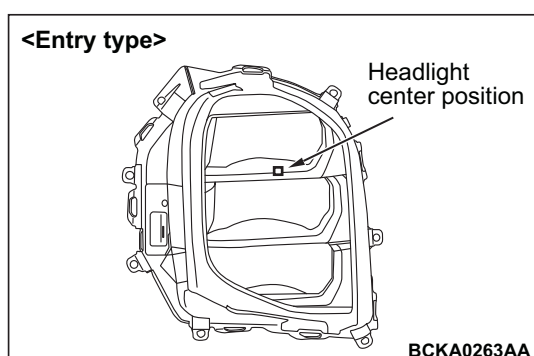
CHASSIS ELECTRICAL HEADLIGHT

⚠ CAUTION

Check that the round shaped marking is on the lens surface.



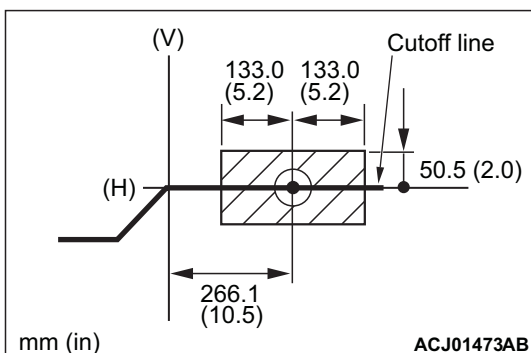
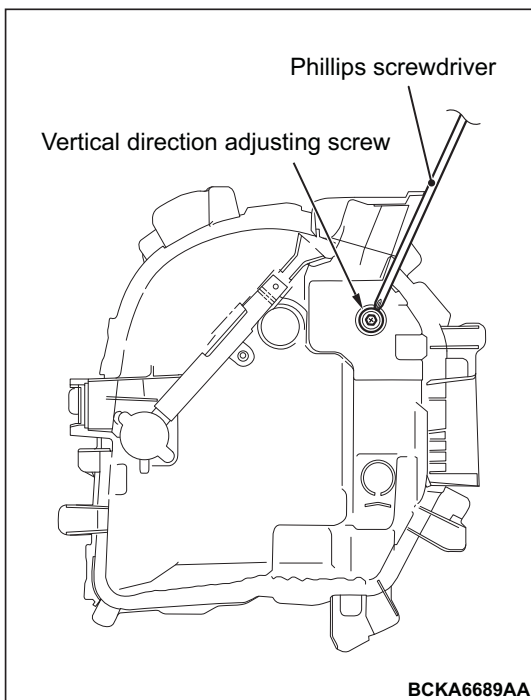
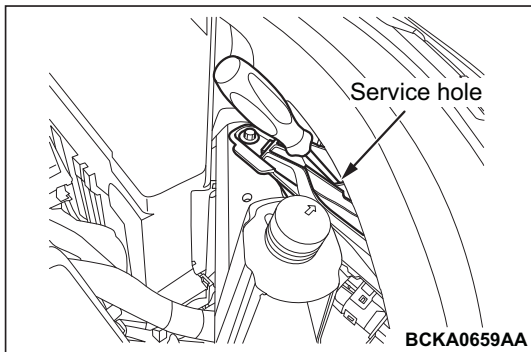
7. Place the vehicle on a level floor, perpendicular to a flat screen 7.62 m (25.0 ft) away from the headlight center-marks on the headlight lens.
8. Lock vehicle sideways to allow vehicle to assume its normal position.
9. Bounce the front suspension through three (3) oscillations by applying the body weight to hood or bumper.
10. Set the distance between the screen and the headlight center marks of the headlight as shown in the illustration.
11. Four lines of adhesive tape (or equivalent markings) are required on screen or wall:
 - (1) Position a vertical tape or mark so that it is aligned with the vehicle center line.
 - (2) Measure the distance from the headlight center position to the floor. Transfer the measurement to the screen. Horizontal tape or mark on the screen is for reference of vertical adjustment.
 - (3) Measure the distance from the center line of the vehicle to the center of each headlight. Transfer the measurement to the screen. Vertical tape or mark on the screen with reference to the center line of each headlight.



HEADLIGHT ADJUSTMENT (LOW-BEAM)

⚠ CAUTION

- Do not cover a headlight for more than three minutes to prevent the plastic headlight lens deformation.
 - Be sure to adjust the aiming adjustment screw in the tightening direction.
1. The low-beam headlight should project on the screen upper edge of the beam (cut-off).
 2. When adjusting the vertical direction side, insert the screwdriver from the service hole near the headlight assembly mounting bolts.
 3. Turn the adjusting screws to achieve the specified low-beam cut-off location on the aiming screen.



Standard value:

(Vertical direction) Horizontal line (H) + 50.5 mm (+ 2.0 in) (+ 0.38 degrees angle)

(Horizontal direction): ± 133.0 mm (± 5.2 in) (± 1 degrees angle) from the axis, which is 266.1 mm (10.5 in) (2 degrees angle) rightward from the vertical line (V)

NOTE: High-beam pattern should be correct when the low-beams are adjusted properly.

WARRANTY

This bulletin is supplied as technical information only and is not an authorization to repair. If an affected vehicle is reported with the described condition, diagnose the condition, repair as described in this bulletin and submit a normal warranty claim using the information below.

OPERATION	NATURE CODE	CAUSE CODE	COUNTRY OF ORIGIN	MODEL	LABOR OPERATION CODE	TIME ALLOWANCE
HEADLIGHT ADJUSTMENT	52D	490	USA, PUERTO RICO, CANADA	OUTLANDER	541010FL	0.3 HRS

Warranty Coverage: 5/60 Basic Coverage (Canada: 5/100)



