



Service Bulletin

Bulletin No.: PIT6503B

Date: June, 2026

PRELIMINARY INFORMATION

Subject: B174W Front View Camera (ACP2) Part Restriction and Diagnostic Procedure

Brand:	Model:	Model Year:		VIN:		Engine:	Transmission:
		from	to	from	to		
Buick	Enclave	2025 - 2026		All	All	All	All
Buick	Envision	2024 - 2026		All	All	All	All
Cadillac	CT5	2025 - 2026		All	All	All	All
Cadillac	LYRIQ	2024 - 2025		All	All	All	All
Cadillac	XT4	2024 - 2025		All	All	All	All
Chevrolet	Blazer EV	2024 - 2026		All	All	All	All
Chevrolet	BrightDrop 400	2024 - 2026		All	All	All	All
Chevrolet	BrightDrop 600	2024 - 2026		All	All	All	All
Chevrolet	Corvette	2026		All	All	All	All
Chevrolet	Equinox EV	2024 - 2026		All	All	All	All
Chevrolet	Equinox	2025 - 2026		All	All	All	All
Chevrolet	Silverado EV	2024 - 2026		All	All	All	All
Chevrolet	Suburban	2025 - 2026		All	All	All	All
Chevrolet	Tahoe	2025 - 2026		All	All	All	All
Chevrolet	Traverse	2024 - 2026		All	All	All	All
GMC	Acadia	2024 - 2026		All	All	All	All
GMC	Sierra EV	2025 - 2026		All	All	All	All
GMC	Terrain	2025 - 2026		All	All	All	All
GMC	Yukon	2025 - 2026		All	All	All	All
GMC	Yukon XL	2025 - 2026		All	All	All	All

Involved Region or Country	North America
Additional Options (RPO)	Vehicles without Super Cruise (UKL) equipped with B174W Front Camera Module and associated active safety content (Forward Collision Alert, Automatic Emergency Braking, Lane Keep Assist, etc.).
Condition	<p>Some customers may comment on one or more of the following concerns on vehicles equipped with the B174W Front View Camera Module:</p> <ul style="list-style-type: none"> • Messages such as FRONT CAMERA – WINDSHIELD UNAVAILABLE, FRONT CAMERA BLOCKED, or similar forward camera unavailable messages. • Forward Collision message illuminated. • Automatic Braking message or amber AEB telltale illuminated. • Lane Keep Assist or similar lane-keeping/LDW messages illuminated.

	<ul style="list-style-type: none"> • ADAS features (Forward Collision Alert, AEB, Lane Keep Assist, etc.) operating intermittently or inoperative. • Various communication and control module DTCs set as Active or History, including but not limited to: <ul style="list-style-type: none"> - U1615 / U1616 – Lost Communication with ACP2 on CAN Bus 2 or CAN Bus 8. - U197A – Ethernet Time Synchronization Signal Invalid (set by ACP2). - U0499 – Invalid Data Received from Telematics Control Platform Module (set by ACP2). - U0235 – Lost Communication with Forward LRR sensor (set by ACP2). - B1A05 – ACP2 MCU Missing Calibration (set by ACP2). - U3000 – Control Module set by ACP2 or other ECUs. - Other network loss-of-communication DTCs involving K56 Serial Data Gateway Module and related ECUs as referenced in SI. <p>In some cases, vehicles may have had the front camera replaced previously during the same visit without full completion of diagnostics and prescribed service instructions, with no resolution of the customer concern.</p>
Cause	<p>Engineering analysis and field reviews have identified that many B174W Front View Camera module replacements are the result of incomplete diagnostics or non-camera root causes, including but not limited to:</p> <ul style="list-style-type: none"> • Vehicle power / 12 V system concerns, including low battery state-of-charge and related DTCs (e.g., P0562, U3003-16). • Serial data / CAN bus / Ethernet issues involving K56 Serial Data Gateway Module and other ECUs (engine, transmission, EBCM, steering, radar sensors, etc.). • Non-GM windshield glass or incorrect windshield installation (improper bracket alignment, incorrect glass, applied tints, or other alterations) affecting camera performance and calibration. • Improper ACP2 seating or bracket installation at the windshield. • Software anomalies or calibration issues requiring reprogramming and the Front View Camera – Windshield Learn procedure. • Other ECUs setting U3000 or related DTCs where the root cause is not the front camera module. <p>As a result, replacing the B174W Front Camera Module without following the diagnostic procedure often does not resolve the concern and contributes to unnecessary part usage</p>

Correction

Important: Do not replace the B174W Front View Camera Module for the conditions described above unless you complete all of the steps in this procedure and PQC authorizes replacement.

Follow the steps in order. Document your answers in the RO.

Step 1 – Check for prior camera replacement this visit

1. Has the B174W Front View Camera module already been replaced during this dealer visit? (Yes/No).

- If YES:
 - Make sure you have already worked through this full procedure at least once.
 - If the concern still exists after following all steps, contact TAC before replacing any additional parts.
- If NO: continue.

Step 2 – Understand and duplicate the customer concern

2. Confirm Customer concern (for example, message text, icons shown, conditions when it happens).

3. Can you duplicate the concern? (Yes/No).

- If NO:
 - Do not replace the B174W Front View Camera module.
 - Classify as Customer Concern Not Duplicated and exit this procedure.
- If YES: continue.

4. Are there specific conditions (such as heavy rain, snow, fog, ice, condensation, or only at start-up) that cause the FRONT CAMERA – WINDSHIELD UNAVAILABLE or FRONT CAMERA BLOCKED messages? (Yes/No).

- If YES and concern only occurs in adverse weather:
- Inspect for dirt, snow, ice, or condensation in front of the camera.
- Clean and clear the area following the Owner's Manual / SI 5994682.
- Do not replace the camera for normal weather-related blockage.
- If concern still exists in normal conditions, continue.
- If YES and concern occurs only at start-up:
- Verify customization/feature settings match customer expectations.
- Use SI 25-NA-341 as needed.
- If concern still exists after settings review, continue.
- If NO: continue.

Step 3 – Verify windshield glass and camera mounting

5. Is the windshield GM original equipment glass with the correct part number and no tints or alterations? (Yes/No).

- If NO:
- Do not replace the B174W Front View Camera module.
- Follow SI 6985395 to install the correct GM OE windshield and ensure proper alignment.
- After repair, re-evaluate the concern.
- If the concern is resolved, you are done.
 - If the concern remains, continue.
 - If YES: continue.

6. Is the B174W Front View Camera module correctly seated in the windshield bracket, and is the bracket correctly mounted on the glass? (Yes/No).

- If NO:
- Do not replace the B174W Front View Camera module.
- Correct the mounting using SI 6507704.
- Re-check the concern.
- If the concern is resolved, you are done.
- If the concern remains, continue.
- If YES: continue.

Step 4 – Check communication with B174W Front View Camera module and the K56 Serial Data Gateway module.

7. Can your scan tool communicate with B174W Front View Camera module over Ethernet (wired connection)? (Yes/No).

If using WiFi, try again using a wired connection to the vehicle network.

Note: It is strongly recommended to connect 'WIRED' from the PC to the MDI2 for this procedure. This procedure involves transferring large amounts of data and needs a stable connection. Please switch to a "Wired" connection prior to programming otherwise a programming failure might occur.

Note: It is strongly recommended that the SDGM is running the latest calibrations prior to attempting ACP2 programming.

Note: It is strongly recommended to use the latest MDI firmware version.

Note: It is strongly recommended NOT to use third party scan tools (i.e Topdon, Autel, CarDAQ, Mongoose)

Can you now communicate with B174W Front View Camera module? (Yes/No).

- If YES: go to Step 5.
- If NO:
- This is most likely a scan tool or gateway communication issue, not a failed B174W Front View Camera module.
- Follow SI 5199686 and SI 5199685 to diagnose the scan tool and K56 Serial Data Gateway Module until you can communicate with K56.
- If still no communication, use schematic SI 6539608 and SI 5969120 (DTC B1A1D) to diagnose the Ethernet path between ACP2 and K56.
- Do not replace the front camera until this communication issue is resolved.
- Once communication is restored, continue with Step 5.

Step 5 – Read and clear DTCs, address battery issues

8. Read and clear all DTCs and drive or operate the vehicle as needed to re-duplicate the concern.
9. Check for low-voltage / 12 V power DTCs such as P0562 or U3003-16 (or similar).
 - If any low-voltage DTCs are active or recurring:
 - Do not replace the B174W Front View Camera module.
 - Correct the 12 V power issue using SI 5696248 or related documents.
 - Fully charge the battery, allow the vehicle to enter a full sleep cycle (about 5 minutes), then clear and re-check DTCs.
 - Repeat this step until the vehicle power system is stable and low-voltage DTCs are resolved.
 - Once resolved, repeat the concern duplication and DTC readout.
 - If no low-voltage DTCs are present: continue.

Step 6 – Check for U3000 set by other ECUs

10. Is DTC U3000 (Control Module) set as Active by any ECU other than B174W Front View Camera module? (Yes/No).
 - If YES:
 - Do not replace the B174W Front View Camera module.
 - Follow the SI document for that specific ECU's U3000 diagnosis.
 - This is not an B174W Front View Camera module issue; resolve that ECU's concern first.
 - If NO: continue.

Step 7 – Evaluate B174W Front View Camera module related network and software DTCs

Work through each of these questions. After each repair, re-check whether the customer concern is resolved before moving on.

11. Is U197A (Ethernet Time Synchronization Signal Invalid) set as Active by B174W Front View Camera module? (Yes/No).
 - If YES:
 - Check for available software updates for LRR, SRR, and SBZA.
 - If a software update is available, perform the update and re-check the concern.
 - If no update is available, follow SI 6275060 for U197A diagnosis.
 - Only if the SI directs it and the concern persists should you continue to later steps.
12. Is U0499 (Invalid Data Received From Telematics Control Platform Module) set as Active by B174W Front View Camera module? (Yes/No).
 - If YES:
 - Do not replace the B174W Front View Camera module.
 - Follow SI 5873556 for U0499 diagnosis and re-check the concern.

- If the concern persists, continue to the next question.

13. Is U0235 (Lost Communication with Forward LRR sensor) set as Active by B174W Front View Camera module? (Yes/No).

- If YES:
 - Do not replace the B174W Front View Camera module.
 - Follow SI 5844053 or SI 5844054 for U0235 diagnosis, then re-check the concern.
 - If the concern persists, continue.

14. Is B1A05 (B174W Front View Camera module MCU_Missing Calibration) set as Active by B174W Front View Camera module? (Yes/No).

- If YES:
 - Follow SI 6656059 for this condition.
 - If SI directs replacement of B174W Front View Camera module, then after replacement reprogram and perform the Front View Camera – Windshield Learn procedure in SI 5969482, clear DTCs, and verify the concern.
 - If the concern still exists, continue with the following network checks.
- If NO: continue.

15. Is U3000 sym98 is set active by the B174W Front View Camera module? (Yes/No)

- If YES, follow instructions in SI 6003546 for diagnosis.
- If NO, continue.

Step 8 – CAN bus / gateway loss-of-communication checks

16. Are other ECUs setting U1615 (Lost Communication with B174W Front View Camera module on CAN Bus 2) as Active? (Yes/No).

- If YES:
 - Check whether K56 Serial Data Gateway Module is also setting loss-of-communication DTCs against other ECUs on CAN Bus 2 (for example U1611, U1643, U0131, U1610, U1615).
 - If the entire bus is impacted (multiple ECUs with comm loss):
 - Do not replace the B174W Front View Camera module.
 - Diagnose the CAN Bus 2 issue using SI 5199680.
 - If that SI leads to K56 or other module replacement, reprogram as required and then perform Front View Camera – Windshield Learn (SI 5969482).
 - If only B174W Front View Camera module is affected:
 - Diagnose using SI 6535776 for U1615.
- If NO: continue.

17. Is U1616 (Lost Communication with B174W Front View Camera module on CAN Bus 8) set as Active? (Yes/No).

- If YES:
 - Check whether K56 Serial Data Gateway Module is also setting loss-of-communication DTCs against other ECUs on CAN Bus 8 (for example U1126, U1127, U0235, U1616).
 - If the entire bus is impacted:
 - Do not replace the B174W Front View Camera module.
 - Diagnose the CAN Bus 8 issue using SI 5199684.
 - If a module is replaced, perform required programming and Front View Camera – Windshield Learn (SI 5969482).
 - If only B174W Front View Camera module is affected:
 - Diagnose using SI 6535777 for U1616.
- If NO: continue.

Step 9 – ADAS telltale and message checks

18. Is a FORWARD COLLISION message illuminated? (Yes/No).

- If YES, use SI 25-NA-341 (for start-up related issues) or SI 5994682 as directed.
- If NO, continue.

19. Is an AUTOMATIC BRAKING message or the amber AEB telltale illuminated? (Yes/No).

- If YES, diagnose using SI 6731495.
- If NO, Continue.

20. Is a LANE KEEP ASSIST or similar message illuminated? (Yes/No).

- If YES, diagnose using SI 5344022.
- If NO: continue.

Step 10 – Final check before requesting camera replacement

21. Have you completed all of the steps above in order? (Yes/No).

- If NO: go back and complete any missing steps.
- If YES:
 - If the concern is resolved, no further action is required.
 - If the concern is not resolved and an SI explicitly instructs replacing B174W Front View Camera Module, then:
 1. Contact PQC to request authorization.
 2. Provide:
 - A summary of the customer concern and conditions.
 - All recorded DTCs (Active and History, with FTB).
 - The specific SI number and step that directs camera replacement.
 - Confirmation that all steps in this procedure have been completed.
 3. Only after PQC approval, replace the camera with the correct restricted part number.
 4. After replacement, reprogram B174W Front View Camera module and perform the Front View Camera – Windshield Learn procedure (SI 5969482), clear DTCs, and verify the concern is resolved.

If, after all steps and TAC consultation, the concern still cannot be resolved, follow TAC/Engineering direction for next actions.

Do not replace any of the above front camera modules solely based on DTC presence or driver messages without following the full diagnostic procedure.

U.S Dealers:

PQC Attestation Questions:

Have you followed PIT6503 B174W Front View Camera Part Restriction and Diagnostic Procedure?

Have you ensured the B174W Front View Camera Module is running the latest Calibrations and software?

After following PIT6503 and the B174W Front View Camera replacement is needed, what step and step number determined this?

Please contact the Product Quality Center (PQC) by opening a new case via Dealer Case Management (DCM). From the DCM home page, click on “New PQC Case” found on the Technical Assistance tab. Then in Global Connect, click on the Support/Chat tab, TAC-PQC Tab, PQC - Parts Restrictions Templates to download the appropriate PQC - Parts Restrictions Template and save a copy to your computer. You can attach a copy of the template to your PQC Case.

Dealers in Canada :

If your diagnosis leads to a possible part replacement, please contact the PQC by email at PQC@gm.com or by calling 1-866-654-7654 to receive the PQC -Parts Restriction Template then, return the completed Parts Restriction Questions for engineering review.

Parts Information

Description	Part Number	Qty
86535062	Camera, Forward View	1
85063357	Camera, Forward View	1
85870485	Camera, Forward View	1
85673847	Camera, Forward View	1

Warranty Information

For vehicles repaired under the Bumper-to-Bumper coverage (Canada Base Warranty coverage), use the following labor operation. Reference the Applicable Warranties section of Investigate Vehicle History (IVH) for coverage information.

Labor Operation	Description	Labor Time
6620110	Front View Camera Replacement	Use Published Labor Time

Version	3
Modified	04/14/2026 - Created on 05/26/2026 - Updated PQC attestation. 06/16/2026 - Updated vehicle list.

