

# ALCOLOCK™ Focus



Installation and services manual

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# SAFETY AND PRECAUTIONS

The ALCOLOCK Focus camera is designed for easy and safe operation. The following precautions should be followed:

## **ATTENTION!**

- This guide is intended for authorized service technicians only
- Ensure that the vehicle's gear is in park (or neutral with the parking brake engaged) and there is sufficient ventilation for vehicle exhaust before beginning this procedure
- Ensure that the vehicle engine is off before and during the installation of the ALCOLOCK Focus camera
- DO NOT connect the ALCOLOCK Focus camera before the vehicle electrical system has been inspected
- The ALCOLOCK LR device, ALCOLOCK Focus camera and all cabling must be positioned so as not to obstruct vehicle operation
- Keep the ALCOLOCK LR device, ALCOLOCK Focus camera and all cabling away from components that may move or become hot
- Use existing hardware and holes where available to minimize vehicle modification
- All wire connections must be soldered, taped and sealed only after the ALCOLOCK LR device and ALCOLOCK Focus camera have been installed and function verified
- DO NOT use butt or clip connectors to seal wiring, as this may lead to corrosion, intermittent power, intermittent functionality and other avoidable issues

# INTRODUCTION

The ALCOLOCK Focus camera is used as part of the ALCOLOCK LR alcohol interlock system in compliance monitoring programs. It is necessary in jurisdictions which require photographic evidence that the correct person is providing a breath alcohol test. It is mounted on an interior surface (dashboard or similar) and aligned to point at the face of the driver.

This manual provides instruction for the connection, positioning, removal and troubleshooting of the ALCOLOCK Focus camera (79-009236). The process outlined in this manual should be performed in conjunction with the corresponding processes outlined in the *ALCOLOCK LR Installation and services manual* (60-000249). These processes are referenced throughout this manual.

## REQUIRED TOOLS

- Hexagonal key 0.050"
- Miniature precision Torx T-2 driver

## ACS PARTS

- Camera full assembly (79-009236)
- Double sided tape (68-000060)
- Tamper proof plug (58-000713)
- Heat-shrink (79-000251)
- ALCOLOCK LR Installation and services manual (60-000249)

# CAMERA INSTALLATION

## WIRING

1. Strip 1-2 cm (1/3" – 5/8") off the wire ends of the ALCOLOCK Focus camera cable.
2. Connect the BLACK wire to a ground source (GND).
3. Connect the RED wire to a source of 12V DC.
4. Connect the YELLOW (CANH) wire from the ALCOLOCK FOCUS camera cable to the YELLOW-RED wire from the ECU Harness Cable (13-001102).
5. Connect the BLUE (CANL) wire from the ALCOLOCK Focus camera cable to the BLUE-WHITE from the ECU harness cable.
6. Solder and seal heat-shrink (79-000251) over each soldered connection once the camera has been tested and confirmed to be functioning.

## MOUNTING CAMERA

1. Locate a flat area suitable for camera mounting where the camera will not obstruct the view of the driver.
2. Use alcohol wipes to clean the mounting area thoroughly.
3. Peel the backing off one side of the double-sided adhesive (68-000060) and stick it to the base of the camera.
4. Peel the backing off the other side of the double-sided adhesive and secure the camera to the prepared mounting location.

## HANDSET INSTALL PROCEDURE WITH CAMERA

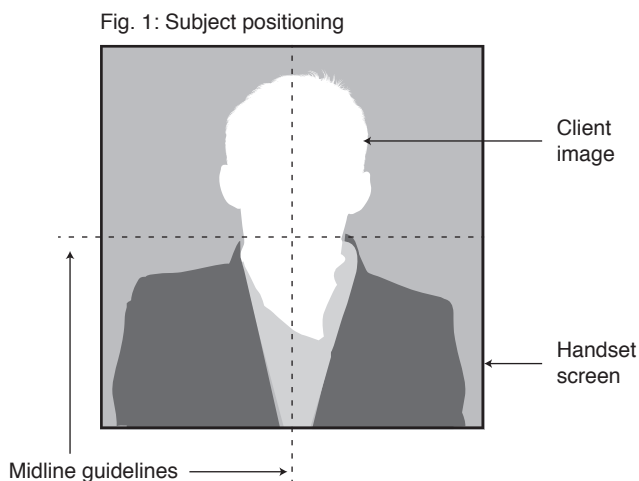
**NOTE:** The process detailed below should be completed concurrently with the "HS Install Procedure and ITE Install Transaction" process described in section 16.0 of the LR installation and services manual (60-000249).

1. In the **Service** menu, scroll to the **Install** option by pressing **Prev** or **Next**, then press **Select**.
2. The screen will display **Camera installed?** Press **Yes**.
3. Continue with the steps of a standard install procedure. At the end of the procedure, the LR screen should display a live feed from the ALCOLOCK Focus camera.
4. Confirm and acknowledge camera function by pressing **Continue**. If the camera is not functioning properly, you will have to replace the camera and begin again.

5. Once the in-car service is complete, the handset will display “**Install Complete Connect to PC**”. Disconnect the handset and proceed to the PC/ITE service outlined in section 16.4 of the LR installation and services manual (60-000249).

## SETTING THE OPTIMUM CAMERA ANGLE

1. After the PC/ITE installation procedure is complete and the handset reconnected, remove the vehicle from the garage.
2. Position the client in the driver’s seat.
3. Pivot the camera left / right at the base to centre the driver’s head horizontally as in Fig.1. Confirm the correct position via the live feed on the handset screen.
4. Tighten the screw on the back of the ALCOLOCK Focus.
5. Pivot the camera face up and down to position it so the driver’s crown (top of the head) is just below the top of the picture (as in Fig. 1). Confirm the correct position via the live feed on the handset screen.
6. Tighten the screw on the bottom of the camera.
7. Approve the image by pressing the *left* button.
8. Insert the tamper-proof plug to cover the angle adjusting screw on the base.
9. Complete the handset activation procedure.



# MONITORING

**NOTE:** *The process detailed below should be completed concurrently with the “HS Monitor Procedure, ITE Calibration and Monitor Transactions” process described in section 21.0 of the LR installation and services manual (60-000249).*

1. In the **Service** menu, scroll to **Monitor** and press **Select**. The handset screen will display **“Connect Camera to PC”**.
2. Insert the cable coming from the camera to the USB port of the PC. Once the USB cable is connected and detected by the PC, the image transfer from the camera memory begins automatically.
3. Once the image transfer has begun and is in progress, continue the standard in-car monitoring procedure. Once the standard in-car procedure is completed, the handset screen will display **“Monitor Complete Connect to PC”**.

**NOTE:** *In-car procedure and picture transfer are independent and can be done separately.*

4. Disconnect the handset.
5. Proceed with PC/ITE calibration and monitor transactions as outlined in section 21.4 of the LR installation and services manual (60-000249).
6. After the PC/ITE Monitoring transaction is complete, reconnect the handset to the vehicle. The display will read **“Drive out of garage”**.
7. Remove the vehicle from the garage and instruct the client to sit in the driver’s seat.
8. Verify that the camera is correctly angled to point at the client’s face while seated in a normal driving position (as in Fig.1, see page 4) using the live feed on the handset and that the position of the ALCOLOCK Focus camera has not been moved since the initial installation.
9. Approve the image by pressing the *left* button.
10. Complete the monitoring process.



# CAMERA REMOVAL

**NOTE:** This process detailed below should be completed concurrently with the “Device Removal” process described in section 22.0 of the LR installation and services manual (60-000249).

1. In the **Service** menu, scroll to the **Removal** option and press **Select**. The handset screen will display “**Connect Camera to PC**”.
2. Insert the USB cable into the PC port. Once the USB drive is connected and detected by the camera, the image transfer from the camera memory begins automatically.
3. Once the image transfer has begun and is in progress, continue the standard removal procedure. Once completed, the handset will display “**Removal Complete Connect to PC**”.

**NOTE:** Both ECU and camera removal processes are independent and can be run in parallel.

4. Disconnect the handset. Proceed with ITE Removal Transaction outlined in section 22.5 of the LR installation and services manual (60-000249).
5. Remove heat shrink and unsolder all wire and ground connections of the camera cable.
6. Remove the camera from mounting surface and use alcohol wipes to eliminate any residue.

**NOTE:** If all images are not downloaded from the camera memory during the removal process, the camera must be sent back to ACS for picture retrieval. The camera will not allow re-installation to another vehicle prior to being sent back to ACS.

# CAMERA EXCHANGE

If the camera is diagnosed as not able to take a picture or communicate during the install or monitor procedure, an error message will be displayed on the handset screen followed by a prompt to connect a new camera. Only use new cameras from ACS or cameras which have been fully cleared of all previous images prior to start installing. Cameras with files still on them should be sent back to ACS as soon as possible for retrieval.

In the case of physical damage to a camera, there is an opportunity to exchange the camera with a new one before the “**Connect to PC**” message appears during the Install or Monitor procedures.

# TROUBLESHOOTING

The ALCOLOCK Focus camera may not display the correct image on the handset or the image could be distorted in some way. To minimize problems, ensure that the camera is properly connected to the handset. The following is a list of problems that may occur:

ISSUE	POSSIBLE CAUSE	SOLUTION
ECU is unable to detect camera	<ul style="list-style-type: none"><li>• Camera is defective</li><li>• Camera is not connected</li></ul>	<ul style="list-style-type: none"><li>• Check connections between ECU and camera. If problem persists, use new camera and/or ECU</li></ul>
No image is displayed on the handset	<ul style="list-style-type: none"><li>• Camera optical system obstructed</li><li>• Camera defective</li></ul>	<ul style="list-style-type: none"><li>• Unobstruct view of camera</li><li>• Replace camera with new one</li></ul>
Camera is not accepted at camera exchange	<ul style="list-style-type: none"><li>• Camera memory is not empty</li><li>• Camera defective</li></ul>	<ul style="list-style-type: none"><li>• Send camera back to ACS and replace with new one</li></ul>
Camera is not accepted at install	<ul style="list-style-type: none"><li>• Camera memory is not empty</li><li>• Camera defective</li></ul>	<ul style="list-style-type: none"><li>• Send camera back to ACS and replace with new one</li></ul>



