

# Operation and Maintenance of single camera hole and camera door for Cessna Caravan Serial Number 208B2107.

The cargo pod must be removed for operation of the camera system. Refer to Cessna 208B maintenance manual chapter 25-52-00 Cargo Pod maintenance practices and cargo pod removal/installation.

**For camera aircraft use before flight, if interior and pod were installed:**

1) With electrical power on the aircraft select door open using the door control switch and indicators located on the center instrument panel next to the right control wheel shaft until the amber door open light illuminates. Return the door control switch to the off (center position) once the door is open. Remove aircraft power.

Open indicator (Amber)  
Closed indicator (Green)



2) Remove the belly camera hole close out panel. This panel may be left off for continued operation when in use as a camera aircraft with the camera door installed. The panel is required to be installed if the aircraft is operated with out the pod and camera door assembly removed.

Close out panel



3) If the navigation sight port is to be used removed the belly cover and cabin floor plates. These plates must be installed if the camera equipment is not installed.



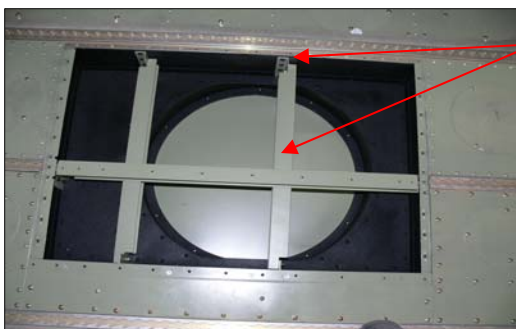
Sight belly close out panel

Sight hole inside floor panel location



4) Restore electrical power and close the camera door by moving the control switch to the closed position until the Green indicator light illuminates and return the switch to the off position.

5) Remove aircraft seats form fuselage stations FS228.5 to FS294.5. Remove right center and left center carpets. Remove floor located at fuselage station FS243.0 to FS269.0, right butt line 14 to left butt line 9. Remove three H-beams and H-beam brackets located under the removable floor.



H-beams and brackets

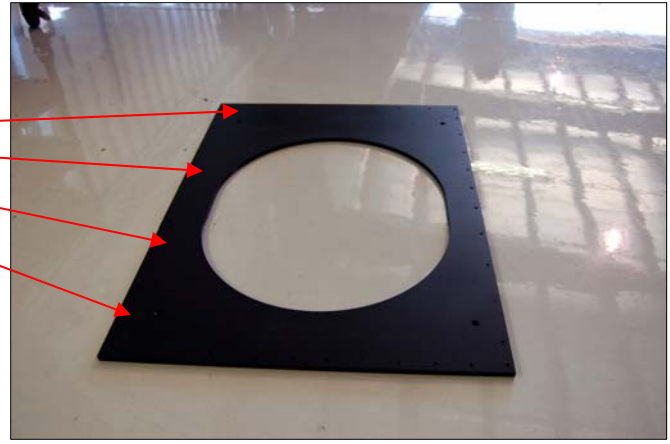
Carpet and removable floor panel location



6) Install RC30 camera interface mounting plate or other camera mounting plates using the same nut plates as used for the removable floor panel. Install the camera as per camera manufactures instructions.

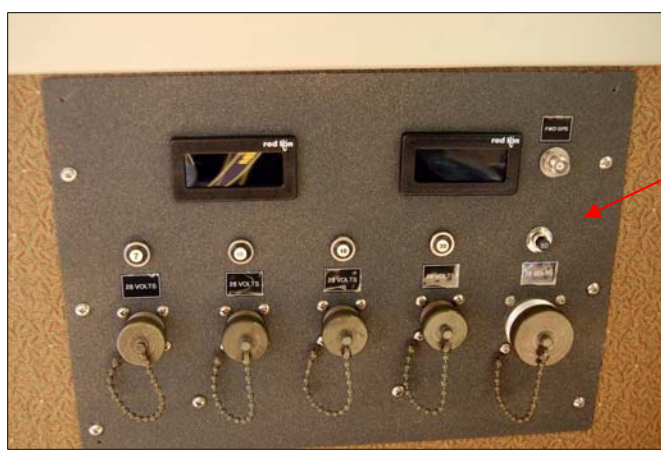
Mounting holes

Camera Mounting Plate



**Camera Operation:**

1) Power is available from the installed power panel located on the LH aft cabin wall just forward of the LH aft cabin door. Connect the camera to the power panel. The power panel can then be powered by turning on the two guarded switches located in the center panel just right of the camera door controls. Each power outlet plug on the power panel is equipped with its own circuit protection.



Power Panel

Power panel control power switches



2) When the camera is ready for use and aircraft in flight, select camera door open on the door selector switch. When the door is fully open the green open door light will illuminate. Return the switch to the off position once the green light is illuminated.

3) To close the camera door in flight select the closed position on the door selector switch until the amber light illuminates and then return the switch to the off position.

**Manual Operation of the Camera door:**

If the electrical motor were to fail or no electrical power was available the camera door can be opened manually.

1) Make sure the camera door selector switch is in the off position and camera door motor circuit breaker is pulled to the off position.



Pull camera door breaker

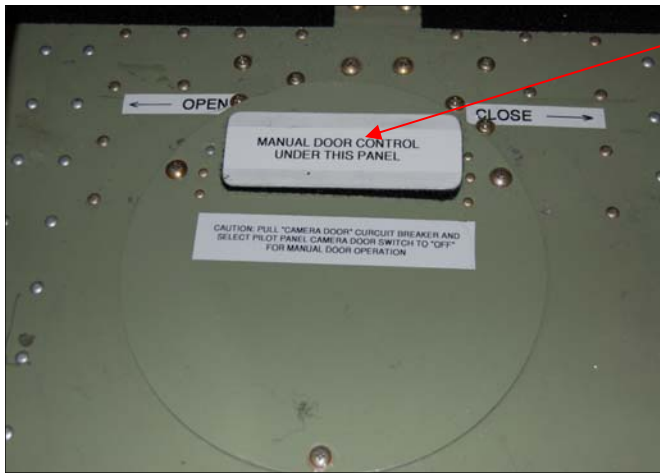
Switch is to be in the off position



2) Lift the left aft carpet at fuselage station FS352.00 just next to the LH inboard seat rail. Remove the manual crank cover, attached with Velcro located at fuselage station FS352.00. Insert the supplied ratchet wrench on the manual drive just below the floor panel. Operate the ratchet forward to open the door and to the rear to close the door as indicated on the floor. The ratchet will be easy to operate until the door is fully open or closed.

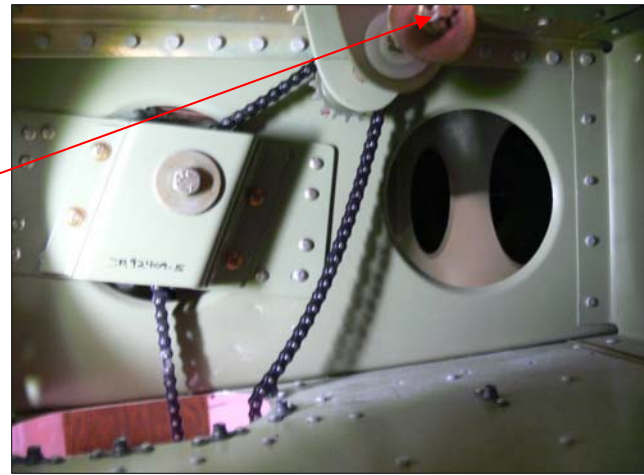
**DO NOT FORCE THE DRIVE**

Stop once resistance is felt. Remove the ratchet wrench from the manual drive and reinstall the cover plate.



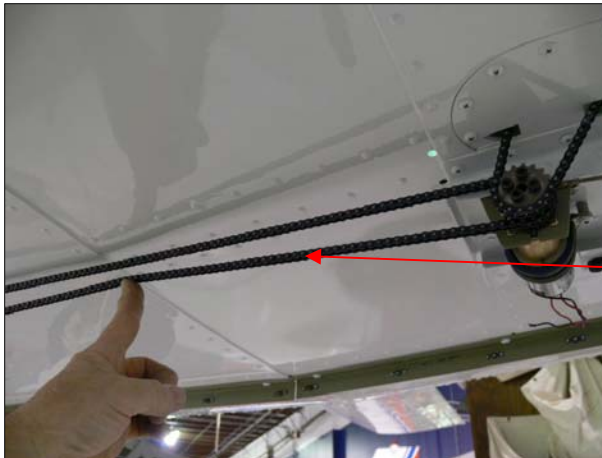
Removable cover

Attach ratchets to this drive nut under the floor



### Servicing Requirements:

- 1) Remove and install the manual drive if needed as per the installation and service document supplied with the FAA form 337.
- 2) Check drive chain tension approximately every 10 cycles of the camera door. Drive chains should only be tightened to the point of no sag and deflect with approximately 10 pound of pressure applied.



3) Lubricate the chains as needed and wipe off excessive lubricant. Use caution since excessive lubrication will attract dirt and could get on the camera lens. Use a MIL-PRF-7870C light oil such as LPS 1.

4) Keep the door tracks clean. These do not need lubrication since the tracks and door slides are Teflon. Wipe tracks and door slides clean as necessary using mild soap and water.

Chain tension check

Keep door slides and tracks clean



- 5) The Pod can be reinstalled with out removing the camera door. Reinstall close out panels prior to installing the pod.
- 6) The complete camera door system can be removed from the aircraft for operation with out a pod and camera door. Remove the aft panel. Disconnect the motor wiring at the power plugs. Disconnect the drive chain from the door. Remove the screws around the external perimeter of the door assy. Remove the motor, motor brackets, drive chains and door mounting belly channels. All screws must be reinstalled in empty nut plates and holes. All close out panels must be reinstalled. Reinstall removable interior floor panels. Pull motor circuit breaker and secure to prevent use with out the door installed. Attaching Screws

Power plugs

Rear panel removed

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