

Reference to Figure 36 Offwing Escape Slide&CLS Mechanism

## 25-00 OFFWING SLIDE/ CARGO LOADING SYSTEM

### OFFWING ESCAPE SLIDE DEPLOY MECHANISM (A318/319/320)

#### CARGO LOADING SYSTEM (IF INSTALLED)

##### Slide Inflation Reservoir

The inflation reservoirs are installed in the AFT cargo compartment, behind the sidewall panels.

Each inflation reservoir includes a pressure gage and valve/regulator assembly.

The valve/regulator assembly is connected to the release mechanism of an emergency exit with release cables. The release mechanism is operated when one of the emergency exits is opened.

##### Slide Deploy Mechanism

The offwing escape slide inflates when one of the emergency exit hatches is removed. As the exit hatch is removed the hatch latch-pin engages a release lever installed in the exit fuselage frame.

Movement of the release lever causes a tension in the release cable which opens the reservoir valve (of the valve/regulator assembly). The initial gas supply releases the blow-out door installed in the stowage compartment attach-panel. It then inflates the offwing escape slide through the flexible hose and aspirator inlet assembly. The inflation procedure takes approximately 5s.

If the automatic inflation system does not operate the reservoir valve (of the valve/regulator assembly) can be opened with the manual inflation handle. The manual inflation handle is red in color and can be seen when the emergency exit hatch is removed.

#### CARGO LOADING SYSTEM LATCH MECHANISM

When the POWER ON/OFF switch is set to ON, power is supplied to the system when the YZ-latches of the door sill latches are lowered. The joystick controls the operation of the PDU. The joystick is gated to permit the manual selection of one operation at a time. The four positions available are:

- IN-the lateral PDU operates in the load direction,
- OUT-the lateral PDU operates in the unload direction,
- FWD-the longitudinal PDU operate in the flight direction,
- AFT-the longitudinal PDU operate against the flight direction.

##### Manually operated YZ-Latch

The manually operated YZ latch locks the ULD in the door area in position. When you push the release lever on the side of the door sill latch down, the pawl disengages and permits a spring to lower the YZ-latch manually until the pawl locks it in position. When the YZ-latch moves, it operates a limit switch.

The **YZ-Latch limit switch** prevents the normal operation of the cargo compartment door when the YZ

latch is lowered and electrically isolates the cargo loading system when the YZ-latch is in the lifted position.

##### Overrideable Y-LATCH

A ULD (underfloor loading device) can move over the Y-latch, but only in the load direction when the ULD pushes the Y-latch down. Thus the latch prevents the accidental roll-out of a ULD. To unload a ULD you must lower the Y-latch. To lower the Y-latch electrically, you operate the SILL LATCH switch on the control panel.

When you operate the SILL LATCH switch, the electric motor of the actuator starts to turn and lowers the Y-latch through an actuating mechanism.

If an electrical malfunction occurs, you can lower the Y-latch manually by operating the manual door-sill latch lever which is installed between the door sill latches.

The **overrideable Y-Latch limit switch** prevents the normal operation of the cargo door when the latch is lowered.

##### XZ-Single Latch

The manually operated XZ-single latches are in the FWD and AFT cargo compartments.

The latching elements can lock and secure the ULD. A yellow marked safety indicator is located on the surface of the locking element, this shows if the latch is in the fully locked or unlocked condition. A proximity switch is below each XZ-single latch. The proximity switches are wired in series with the PDUs. Thus power is only available at the PDU when the latches are lowered.

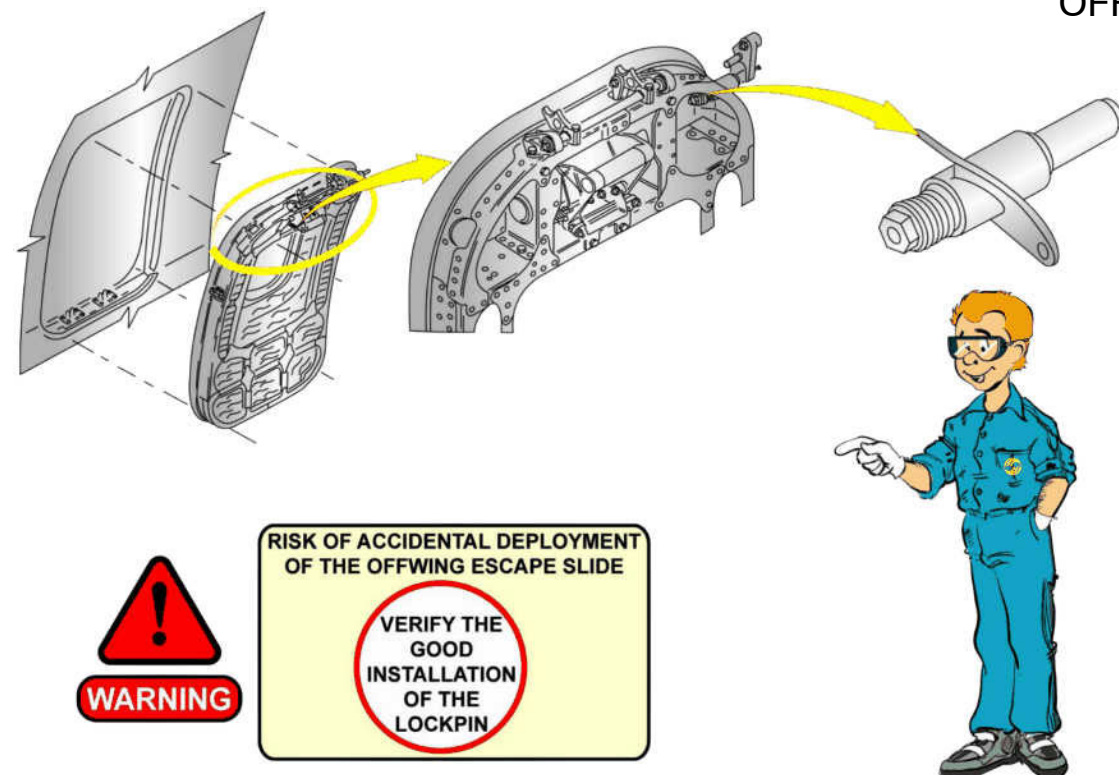
##### Door Sill Latch Switch

The Door Sill Latch Switch is a toggle switch. An internal spring keeps it in the UP position. It operates the overrideable Y-latch of the door sill latch. You can release the Door Sill Latch Switch when the ULD is above the overrideable Y-latch. It then goes back to the UP position. The actuator is then in operation and compresses a spring in the mechanism. The spring makes the overrideable Y-latch move to the lifted position when the ULD is moved away.

##### Power Indicator Light

When you put the POWER ON/OFF switch to the ON position, the power contactor in the control box closes, and AC and DC power is supplied to the system. The control box has a monitor circuit which controls the power to the POWER light. The POWER light comes on when the power supply is correct.

## OFFWING ESCAPE SLIDE DEPLOY MECHANISM



HATCH RELEASE LEVER

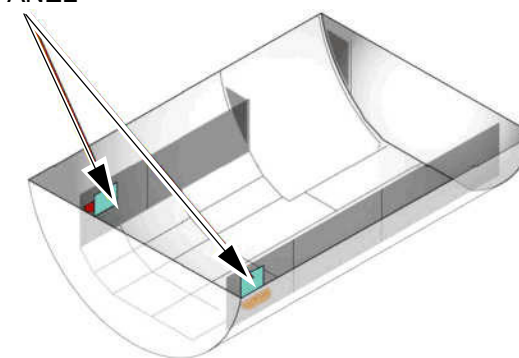


LATCH PIN ARMED

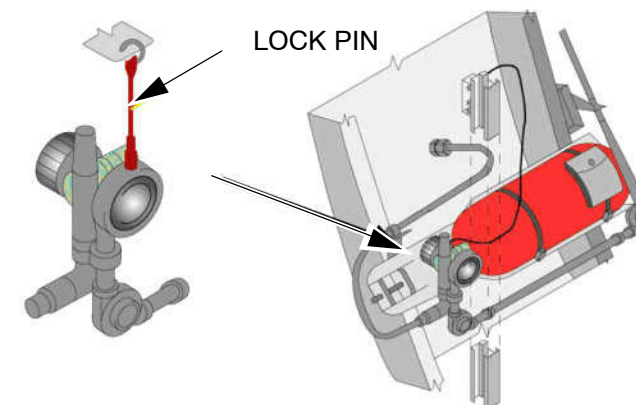


LATCH PIN DISARMED

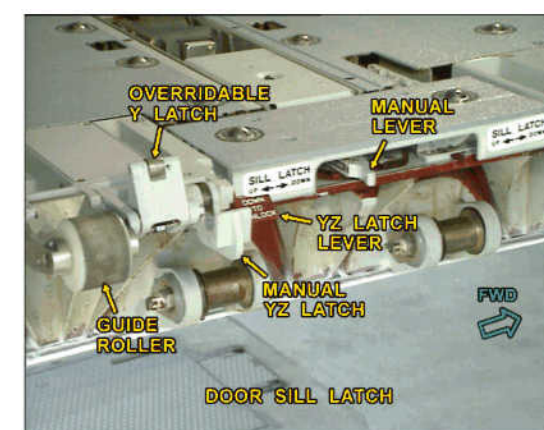
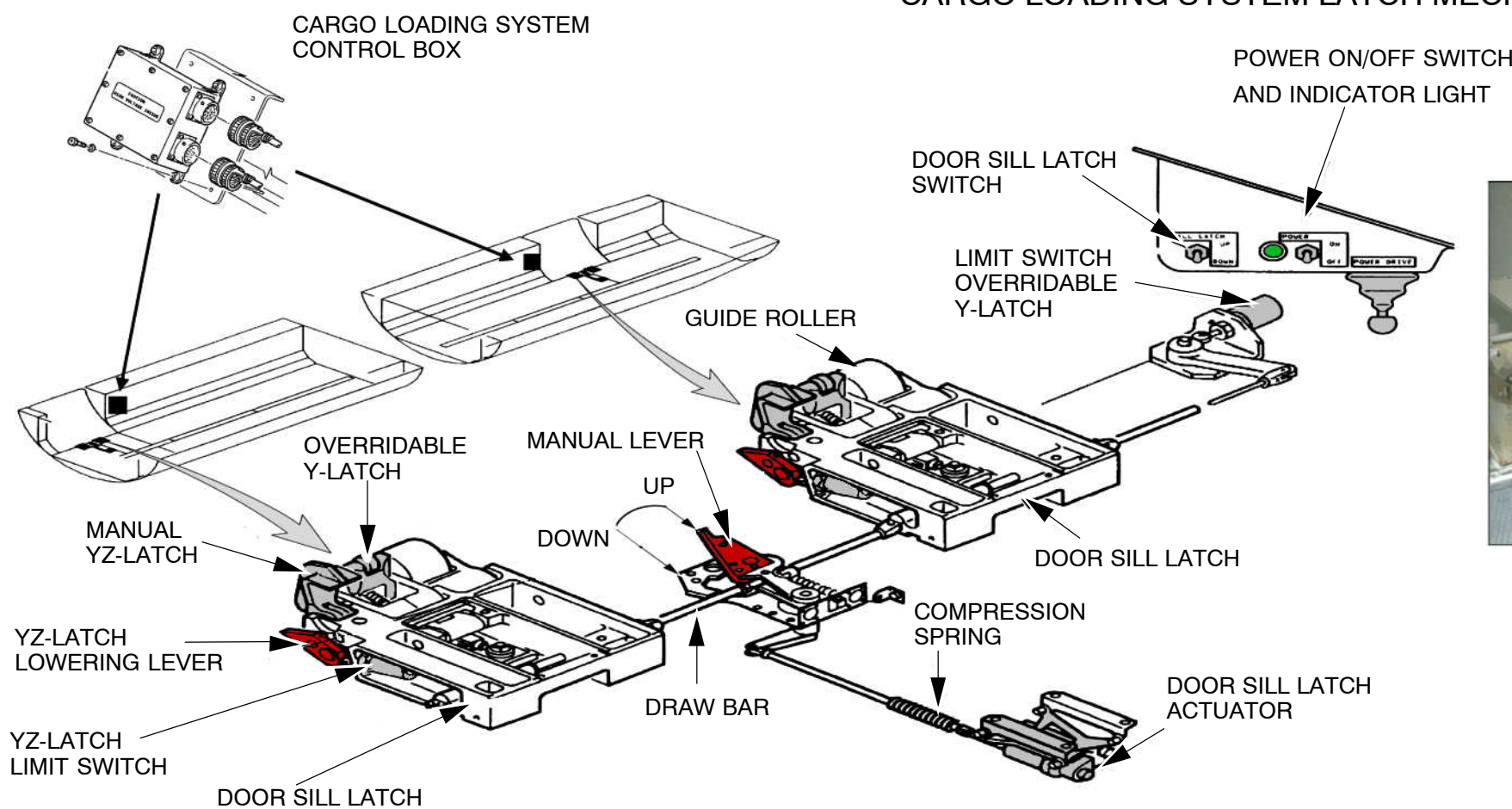
ACCESS PANEL



LOCK PIN



## CARGO LOADING SYSTEM LATCH MECHANISM



LATCH RAISED

LATCH LOWERED

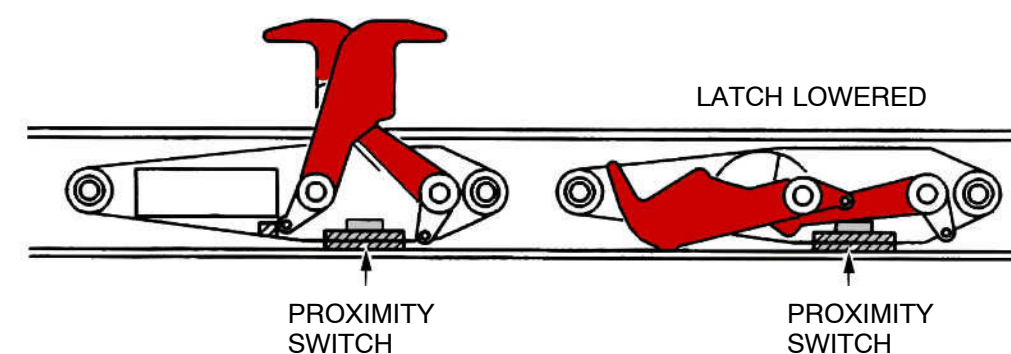


Figure 36 Offwing Escape Slide&amp;CLS Mechanism