

Thrust Reverser Control Switch Troubleshooting and Repair

Start the clock.

Lock-out/Tag-out

1. Retrieve the tooling and equipment necessary for this task from the storage bench.
2. Pull and tag the following circuit breakers:

P18-2 Circuit Breaker Panel

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	5	C00276	ENGINE 1 THRUST REVERSER CONT

P6-2 Circuit Breaker Panel

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	7	C00277	ENGINE 2 THRUST REVERSER CONT

P8 Pedestal

WX Radar

3. Place the engine start levers in the CUTOFF position.
4. Attach a DO NOT OPERATE tag to the levers.

Access

1. Retrieve the tooling necessary for this task.
2. Remove P454 panel.

Testing

1. Retrieve the Fluke289 multimeter and test leads.
2. Locate connector D7377J and disconnect plug D7377P.
3. Rotate the dial to select the Ω function on the meter.
4. Turn the meter on by pushing the power button.
5. Connect the test leads to sockets 3 and 4 on D7377J.
6. The measured resistance will read "OL."
7. Lift the #1 Thrust Reverser Lever to the stop.

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8. The measured resistance should read less than 1 ohm.
 - a. Record the resistance value _____
9. Stow the Thrust Reverser Lever.
10. Remove the test leads from connector D7377J.
11. Locate the connector D7378J and disconnect plug D7378P.
12. Connect the test leads to sockets 5 and 6 on D7378J.
13. The measured resistance will read "OL."
14. Lift the #2 Thrust Reverser Lever to the stop.
15. The measured resistance should read less than 1 ohm.
 - a. Record the resistance value _____
16. Stow the Thrust Reverser Lever.
17. Perform the switch cleaning and repair procedure on any switch with a measured resistance of 3 ohms or greater.

NOTE: If only one switch is found to be defective, it is permissible to reinstall the serviceable switch connector.

Switch Cleaning and Repair Procedure

1. Connect the Test & Clean Module to the connector, D7377J or D7378J, for the faulty switch.
2. Connect the meter leads to the corresponding black and red jacks on Test & Clean Module.
3. Lift the Thrust Reverser lever for the side with the faulty switch.
4. Flip the switch on the Test & Clean Module to the TEST position.
5. The faulty switch resistance value will be displayed on the meter.
6. Flip the switch on the Test & Clean Module to the CLEAN position
7. Turn on the Test & Clean Module by pushing the POWER button.
8. Observe the resistance value on the meter. Once the resistance is below 3 ohms, the faulty thrust reverser control switch is clean and serviceable.

Verbally notify the judge that "the switch has been repaired."
9. Stow the Thrust Reverser Lever.
10. Return the switch on the Test & Clean Module to the neutral position.
11. Turn off the Test & Clean Module by pushing the POWER button.

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Switch Verification Procedure

1. Install the protractor on the Thrust Reverser Lever that corresponds to the switch that was repaired.
 - a. Slide protractor the over lifting knob of the corresponding Thrust Reverse Lever.
 - b. Keeping the protractor vertical, securely tighten both knurled screws by hand to secure the protractor to the thrust reverser knob.
 - c. Turn on the protractor by pressing the ON/OFF button, then press the light bulb button.
 - d. Press the ZERO button and verify the protractor reads 0 +/- 1 degrees.
2. With the meter in the same configuration as above, actuate the switch to the TEST position
3. Slowly lift the Thrust Reverser Lever to 19 +/- 2 degrees.

WARNING: Do not lift the thrust reverser lever by the protractor body.

Visually and verbally identify the protractor reading with the judge.

4. The measured resistance on the multimeter will read less than 1 ohm.
5. Continue to raise the Thrust Reverser Lever until the stop.
6. Ensure that the measured resistance remains less than 3 ohms.

Task Completion

1. Stow the Thrust Reverser Lever and remove the protractor.
2. Remove the test leads from the Test and Clean Module.
3. Disconnect the Test and Clean Module from the connector.
4. Reconnect D7377P and D7378P.
5. Check for FOD.
6. Reinstall panel P454.
7. Remove the lock-out tags and reset the circuit breakers that were pulled.
8. Return lock-out tags to storage hanger.
9. Return the tools to their proper places.
10. Ensure paperwork is complete.

Stop the Clock.

NOTE: When the clock is stopped by the competitor, the task is complete.

Competitors may not restart the clock.