中国民用航空局 CIVIL AVIATION ADMINISTRATION OF CHINA

C A A C
适 航 指 令

AIRWORTHINESS DIRECTIVE

本指令根据中国民用航空规章《民用航空器适航指令规定》（CCAR-39）颁发，内容涉及飞行安全，是强制性措施。如不按规定完成，有关航空器将不再适航。

编号：CAD2015-B757-03　　修正案号：39-8526

一. 标题： 适航限制-发动机和 APU 燃油截流阀-修订

二. 适用范围：

本适航指令适用于所有审定型别的波音B757-200,-200PF, -200CB, and -300系列飞机。

三. 参考文件：

1. FAA AD 2015-19-04(2015 年 10 月 21 日生效)；

四. 原因、措施和规定

1. 本指令是由一份关于在更换燃油滤清器过程中出现的燃油截流阀（shutoff valves）潜在失效的报告引起的。发布本指令的目的是对发动机和辅助动力装置（APU）的燃油截流阀潜在失效进行检测和纠正。这种情况下，可能导致发动机和APU的截断燃油功能失效，并且在某些起火的情况下无法控制并导致结构性失效。

2 除非已经完成，否则应采取以下措施：

2.1. 本指令生效起30天内，修订适用的维修或检查计划，根据本指令表1和表2对持续适航说明中的适航限制进行合并，增加适航限制Nos. 28-AWL-ENG和28-AWL-APU。对本指令表1和表2中提及的完成措施符合性时间为完成本段内要求的维修或检查计划版本

后的10天内。

本指令表1-发动机燃油截流阀（燃油翼梁活门<Spar Valve >）位置指示操作检查

Figure 1 to Paragraph (g) of This AD-Engine Fuel Shutoff Valve (Fuel Spar Valve) Position Indication Operational Check

AWL No.	Task	Interval	Applicability	Description
28-AWL-ENG	ALI	DAILY INTERVAL NOTE: Not required on days when the airplane is not used in revenue service. The check must be done before further flight once the airplane is returned to revenue service	ALL APPLICABILITY NOTE: Only applies to airplanes with an MA20A2027 (S343T003-56) or MA30A1001 (S343T003-66) actuator installed at the engine fuel spar valve position	Engine Fuel Shutoff Valve (Fuel Spar Valve) Position Indication Operational Check. Concern: The fuel spar valve actuator design can result in airplanes operating with a failed fuel spar valve actuator that is not reported. A latently failed fuel spar valve actuator could prevent fuel shutoff to an engine. In the event of certain engine fires, the potential exists for an engine fire to be uncontrollable. Perform one of the following checks/inspection of the fuel spar valve position (unless checked by the flightcrew in a manner approved by the principal operations inspector). A. Operational check during engine shutdown 1. Do an operational check of the left engine fuel spar valve actuator. a. As the L FUEL CONTROL switch on the quadrant control stand is moved to the CUTOFF position, verify the left SPAR VALVE disagreement light on the quadrant control stand illuminates and then goes off. b. If the test fails (light fails to illuminate), before further flight, repair faults as required (refer to Boeing AMM 28-22-11). 2. Do an operational check of the right engine fuel spar valve actuator. a. As the R FUEL CONTROL switch on the quadrant control stand is moved to the CUTOFF position, verify the right SPAR VALVE disagreement light on the quadrant control stand illuminates and then goes off. b. If the test fails

				(light fails to illuminate), before further flight, repair faults as required (refer to Boeing AMM 28-22-11). B. Operational check during engine start 1. Do an operational check of the left engine fuel spar valve actuator. a. As the L FUEL CONTROL switch on the quadrant control stand is moved to the RUN position, verify the left SPAR VALVE disagreement light on the quadrant control stand illuminates and then goes off. b. If the test fails (light fails to illuminate), before further flight, repair faults as required (refer to Boeing AMM 28-22-11). 2. Do an operational check of the right engine fuel spar valve actuator. a. As the R FUEL CONTROL switch on the quadrant control stand is moved to the RUN position, verify the right SPAR VALVE disagreement light on the quadrant control stand illuminates and then goes off. b. If the test fails (light fails to illuminate), before further flight, repair faults as required (refer to Boeing AMM 28-22-11). C. Operational check without engine operation 1. Supply electrical power to the airplane using standard practices. 2. Make sure all fuel pump switches on the Overhead Panel are in the OFF position. 3. If the APU is running, open and collar the L FWD FUEL BOOST PUMP (C00372) circuit breaker on the Main Power Distribution Panel. 4. Make sure LEFT and RIGHT ENG FIRE switches on the Aft Aisle Stand are in the NORMAL (IN) position. 5. Make sure L and R Engine Start Selector Switches on the Overhead Panel are in the OFF position. 6. Do an operational check of the left engine fuel spar valve actuator. a. Move L FUEL CONTROL

				switch on the quadrant control stand to the RUN position and wait approximately 10 seconds. NOTE: It is normal under this test condition for the ENG VALVE disagreement light on the quadrant control stand to stay illuminated. b. Move L FUEL CONTROL switch on the quadrant control stand to the CUTOFF position. c. Verify the left SPAR VALVE disagreement light on the quadrant control stand illuminates and then goes off. d. If the test fails (light fails to illuminate), before further flight, repair faults as required (refer to Boeing AMM 28-22-11). 7. Do an operational check of the right engine fuel spar valve actuator. a. Move R FUEL CONTROL switch on the quadrant control stand to the RUN position and wait approximately 10 seconds. NOTE: It is normal under this test condition for the ENG VALVE disagreement light on the quadrant control stand to stay illuminated. b. Move R FUEL CONTROL switch on the quadrant control stand to the CUTOFF position. c. Verify the right SPAR VALVE disagreement light on the quadrant control stand illuminates and then goes off. d. If the test fails (light fails to illuminate), before further flight, repair faults as required (refer to Boeing AMM 28-22-11). 8. If the L FWD FUEL BOOST PUMP circuit breaker was collared in step 3, remove collar and close. D. Perform an inspection of the fuel spar valve actuator position NOTE: This inspection may be most useful whenever the SPAR VALVE light does not function properly. 1. Make sure the L FUEL CONTROL switch on the quadrant control stand is in the CUTOFF position. NOTE: It is not

				necessary to cycle the FUEL CONTROL switch to do this inspection. 2. Inspect the left engine fuel spar valve actuator located in the left rear spar. NOTE: Access is through access panel 551EBX. a. Verify the manual override handle on the engine fuel spar valve actuator is in the CLOSED position. b. Repair or replace any actuator that is not in the CLOSED position (refer to Boeing AMM 28-22-11). 3. Make sure the R FUEL CONTROL switch on the quadrant control stand is in the CUTOFF position. NOTE: It is not necessary to cycle the FUEL CONTROL switch to do this inspection. 4. Inspect the right engine fuel spar valve actuator located in the right rear spar. NOTE: Access is through access panel 651EBX. a. Verify the manual override handle on the engine fuel spar valve actuator is in the CLOSED position. b. Repair or replace any actuator that is not in the CLOSED position (refer to Boeing AMM 28-22-11).

本指令表2-APU燃油截流阀位置指示操作检查

Figure 2 to Paragraph (g) of This AD-Auxiliary Power Unit (APU) Fuel Shutoff Valve Position Indication Operational Check

AWL No.	Task	Interval	Applicability	Description
28-AWL-APU	ALI	10 DAYS INTERVAL NOTE: Not required on days when the airplane is not used in revenue service. Must be	ALL APPLICABILITY NOTE: Only applies to airplanes with an MA20A2027	APU Fuel Shutoff Valve Position Indication Operational Check. Concern: The APU fuel shutoff valve actuator design can result in airplanes operating with a failed APU fuel shutoff valve actuator that is not reported. A latently failed APU fuel shutoff valve actuator could prevent fuel shutoff to the APU. In the event of certain APU fires, the potential exists for an APU fire to be uncontrollable. Perform the operational check of the APU fuel shutoff valve

		done before further flight with an operational APU if it has been 10 or more calendar days since last check.	(S343T003-56) or MA30A1001 (S343T003-66) actuator installed at the APU fuel shutoff valve position.	position indication (unless checked by the flightcrew in a manner approved by the principal operations inspector). A. Do an operational check of the APU fuel shutoff valve position indication. 1. If the APU is running, unload and shut down the APU using standard practices. 2. Supply electrical power to the airplane using standard practices. 3. Make sure the APU FIRE switch on the Aft Aisle Stand is in the NORMAL (IN) position. 4. Make sure there is at least 700 lbs (300 kgs) of fuel in the Left Main Tank. 5. Move APU Selector switch on the Overhead Panel to the ON position and wait approximately 10 seconds. 6. Move APU Selector switch on the Overhead Panel to the OFF position. 7. Verify the APU FAULT light on the Overhead Panel illuminates and then goes off. 8. If the test fails (light fails to illuminate), before further flight requiring APU availability, repair faults as required (refer to Boeing AMM 28-25-11). NOTE: Dispatch may be permitted per MMEL 28-25-2 if APU is not required for flight.

2.2. 除非等效符合性方法得到适航部门批准，在完成本指令2.1段要求的维修或检查计划修订后，不可使用其他替代措施（比如，检查）或间隔。

3 等效符合性方法：完成本适航指令可采用等效的符合性方法以及调整完成时间，但必须得到适航部门的批准。

五. 生效日期：2015 年 10 月 21 日

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