

ZONES: 211 212
 A/C NUMBER:
 REV. DATE: 11/15/07
 FREQUENCY: 4C

W/C NUMBER: 321F2902 DATE:

TOOLS	DESCRIPTION	QTY
COMMON	Stopwatch, Accurate to 1 Second (Commercially Available)	1

REFERENCES

AMM 12-12-00, 24-22-00, 29-09-00, 29-11-00, 29-11-01, 29-22-11, 29-22-21,
 32-09-00

MECH INSP

MPD ITEM: 29-260-00

FUNCTIONALLY CHECK THE POWER TRANSFER UNIT.

1. Power Transfer Unit (PTU) System Test

XXXXX A. Prepare for the Test

(1) Fill the hydraulic reservoirs if it is necessary. To fill them, do this task: Hydraulic Reservoir Servicing (AMM TASK 12-12-00-610-801).

(2) Do this task: Supply Electrical Power (AMM TASK 24-22-00-860-811).

(3) Make sure the two Stall Warning Vanes (AOA) are at the zero position.

WARNING: MAKE SURE THAT THE CHOCKS ARE INSTALLED AT THE WHEELS. OPENING THE FOLLOWING CIRCUIT BREAKERS MAY CAUSE THE BRAKES TO RELEASE. THIS MAY CAUSE THE AIRPLANE TO MOVE SUDDENLY. INJURY TO PERSONS AND DAMAGE TO EQUIPMENT MAY OCCUR IF CHOCKS ARE NOT INSTALLED AT THE WHEELS.

(4) Open these circuit breakers and attach DO-NOT-CLOSE tags:

(a) F/O Electrical System Panel, P6-2:

1) 6A15 HYDRAULIC SYSTEM PTU VALVE CONT 1

(b) F/O Electrical System Panel, P6-3:

1) 6C16 LANDING GEAR AIR/GND SYS 1

(c) Power Distribution Panel Number 2, P92:

1) 92F2 STANDBY HYDRAULIC PUMP

- (5) Retract the flaps if they are not fully retracted:

WARNING: KEEP PERSONS AND EQUIPMENT CLEAR OF THE FLIGHT CONTROL SURFACES, THE THRUST REVERSERS, AND THE LANDING GEAR. THESE COMPONENTS CAN MOVE SUDDENLY WHEN YOU SUPPLY HYDRAULIC POWER. THIS CAN CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

- (a) Pressurize hydraulic power to the hydraulic system B. To pressurize it, do this task: Hydraulic System A or B Pressurization (AMM TASK 29-11-00-860-801).
- (b) Move the flap control lever on the control stand to the UP position.
- (c) Make sure the flaps are in the fully retracted position.
- (d) Remove the hydraulic power from the hydraulic system B. To remove it, do this task: Hydraulic System A or B Power Removal (AMM TASK 29-11-00-860-805).
- (6) Make sure the position indicator on the PTU control valve is in the closed position.

NOTE: The position indicator will point approximately 45 degrees forward of inboard when the valve is open. The position indicator will point approximately 45 degrees aft of inboard when the valve is closed.

B. PTU System Test

- _____ XXXXX (1) Move the ALTERNATE FLAPS arm switch on the P5 panel to the ARM position.

WARNING: MAKE SURE PERSONS AND EQUIPMENT ARE CLEAR OF THE SLATS AND FLAPS DURING THIS PROCEDURE. THE SLATS AND FLAPS WILL MOVE DURING THIS PROCEDURE.

- _____ XXXXX (2) Move the ALTERNATE FLAPS control switch to the DOWN position to extend the trailing edge flaps to the 1

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unit position.

(a) Move the ALTERNATE FLAPS arm switch to the OFF position.

(b) Make sure the PTU control valve moves to the open position.

_____ XXXXX (3) Move the ALTERNATE FLAPS arm switch to the ARM position.

(a) Move the ALTERNATE FLAPS control switch to the DOWN position to extend the trailing edge flaps to the 15 unit position.

(b) Make sure the PTU control valve moves to the closed position.

_____ XXXXX (4) Move the ALTERNATE FLAPS control switch to the UP position to retract the trailing edge flaps to the 1 unit position.

_____ XXXXX (5) Move the ALTERNATE FLAPS arm switch to the OFF position.

(a) Make sure the PTU control valve moves to the open position.

_____ XXXXX (6) Remove the DO-NOT-CLOSE tags and close these circuit breakers:

(a) F/O Electrical System Panel, P6-2:

1) 6A15 HYDRAULIC SYSTEM PTU VALVE CONT 1

(b) F/O Electrical System Panel, P6-3:

1) 6C16 LANDING GEAR AIR/GND SYS 1

(c) Make sure the PTU control valve moves to the closed position.

_____ XXXXX (7) Open this circuit breaker and attach a DO-NOT-CLOSE tag:

(a) F/O Electrical System Panel, P6-2:

1) 6A16 HYDRAULIC SYSTEM PTU VALVE CONT 2

(b) Make sure the PTU control valve stays in the closed position.

_____ XXXXX (8) Open this circuit breaker and attach a DO-NOT-CLOSE tag:

(a) F/O Electrical System Panel, P6-3:

1) 6C15 LANDING GEAR AIR/GND SYS 2

(b) Make sure the PTU control valve moves to the open position.

_____ XXXXX (9) Remove the DO-NOT-CLOSE tag and close this circuit breaker:

(a) F/O Electrical System Panel, P6-3:

1) 6C15 LANDING GEAR AIR/GND SYS 2

(b) Make sure the PTU control valve moves to the closed position.

CAUTION: PRESSURIZE THE SYSTEM B HYDRAULIC RESERVOIR. THE CHECK VALVE FOR THE PTU CAN BE DAMAGED IF YOU OPERATE THE PTU WITHOUT 45-65 PSIG IN THE HYDRAULIC RESERVOIR.

_____ XXXXX (10) Pressurize the hydraulic reservoirs. To pressurize them, do this task: Hydraulic Reservoirs Pressurization, (AMM TASK 29-11-01-860-801, or AMM TASK 29-09-00-860-801).

WARNING: KEEP PERSONS AND EQUIPMENT CLEAR OF THE FLIGHT CONTROL SURFACES, THRUST REVERSERS, AND THE LANDING GEAR. THESE COMPONENTS CAN MOVE SUDDENLY WHEN YOU SUPPLY HYDRAULIC POWER. THIS CAN CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

_____ XXXXX (11) Pressurize hydraulic power to the hydraulic system A at 3000 psig with a ground service cart or the engine driven pump (EDP). To pressurize it, do this task: Hydraulic System A or B Pressurization (AMM TASK 29-11-00-860-801).

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NOTE: The electric motor driven pump does not have the capacity to operate the PTU correctly.

(a) Make sure the PTU does not operate.

_____ XXXXX (12) Close this circuit breaker and remove the DO-NOT-CLOSE tag:

(a) F/O Electrical System Panel, P6-2:

1) 6A16 HYDRAULIC SYSTEM PTU VALVE CONT 2

WARNING: MAKE SURE THAT PERSONNEL AND EQUIPMENT STAY AWAY FROM THE LEADING EDGE FLAPS AND SLATS, TRAILING EDGE FLAPS, AND DRIVE MECHANISMS. THE FLAPS, SLATS, AND DRIVE MECHANISMS MOVE QUICKLY. THIS CAN CAUSE INJURIES TO PERSONNEL AND DAMAGE TO EQUIPMENT.

_____ XXXXX (13) Open these circuit breakers and install DO-NOT-CLOSE tags:

(a) F/O Electrical System panel, P6-2:

1) 6A15 HYDRAULIC SYSTEM PTU VALVE CONT 1

(b) F/O Electrical System panel, P6-3:

1) 6C16 LANDING GEAR AIR/GND SYS 1

(c) Make sure the PTU operates(after approximately 0.5 second).

WARNING: MAKE SURE THAT CHOCKS ARE INSTALLED AT THE WHEELS. PUTTING THE AIRPLANE IN THE AIR MODE WILL CAUSE THE BRAKES TO RELEASE. THIS MAY CAUSE THE AIRPLANE TO MOVE SUDDENLY. INJURY TO PERSONS AND DAMAGE TO EQUIPMENT CAN OCCUR IF CHOCKS ARE NOT INSTALLED ON THE WHEELS.

WARNING: IF THE ENGINE DRIVEN PUMP (EDP) IS USED TO PRESSURIZE THE HYDRAULIC SYSTEM, DO NOT LIFT THE AIRPLANE ON JACKS TO PUT THE AIRPLANE IN THE AIR MODE. THE AIRPLANE MAY MOVE SUDDENLY IF THE ENGINE IS RUN WITH THE AIRPLANE ON JACKS. THIS MAY CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

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_____ XXXXX (14) Put the airplane in the air mode. To do it, do this task:(Put the Airplane in the Air Mode, AMM TASK 32-09-00-860-801).

NOTE: When the airplane is put in the air mode with the engines running, the engines will advance to flight idle speed.

WARNING: MAKE SURE THAT PERSONNEL AND EQUIPMENT STAY AWAY FROM THE LEADING EDGE FLAPS AND SLATS, TRAILING EDGE FLAPS, AND DRIVE MECHANISMS. THE FLAPS, SLATS, AND DRIVE MECHANISMS MOVE QUICKLY. THIS CAN CAUSE INJURIES TO PERSONNEL AND DAMAGE TO EQUIPMENT.

_____ XXXXX (15) Turn the left Stall Warning (AOA) Vane counterclockwise to its top.

(a) Make sure the leading edge slats extend fully, equally and smoothly.

(b) Use a stopwatch to make sure the time necessary to extend the leading edge slats is not more than 4 seconds.

WARNING: MAKE SURE THAT PERSONNEL AND EQUIPMENT STAY AWAY FROM THE LEADING EDGE FLAPS AND SLATS, TRAILING EDGE FLAPS, AND DRIVE MECHANISMS. THE FLAPS, SLATS, AND DRIVE MECHANISMS MOVE QUICKLY. THIS CAN CAUSE INJURIES TO PERSONNEL AND DAMAGE TO EQUIPMENT.

_____ XXXXX (16) Turn the left Stall Warning (AOA) Vane back to its zero position (fully clockwise).

_____ XXXXX (17) Put the airplane in the ground mode. To do it, do this task:(Return the Airplane to the Ground Mode, AMM TASK 32-09-00-860-802).

_____ XXXXX (18) Move the ALTERNATE FLAPS arm switch to the ARM position.

_____ XXXXX (19) Move the ALTERNATE FLAPS control switch to the UP position to fully retract the trailing edge flaps.

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- _____ XXXXX (20) Remove hydraulic power from the hydraulic system A. To remove it, do this task: Hydraulic System A or B Power Removal (AMM TASK 29-11-00-860-805).
- _____ XXXXX (21) Move the flap control lever to the 1 unit position.
- WARNING: MAKE SURE PERSONS AND EQUIPMENT ARE CLEAR OF THE SLATS AND FLAPS DURING THIS PROCEDURE. THE SLATS AND FLAPS WILL MOVE DURING THIS PROCEDURE.
- _____ XXXXX (22) Provide hydraulic pressure to system B with the EDP. To pressurize it, do this task: Hydraulic System A or B Pressurization (AMM TASK 29-11-00-860-801).
- _____ XXXXX (23) Move the ALTERNATE FLAPS arm switch to the OFF position.
- (a) Make sure the PTU control valve stays closed.
- _____ XXXXX (24) Remove hydraulic power from system B. To remove it, do this task: Hydraulic System A or B Power Removal (AMM TASK 29-11-00-860-805)
- _____ XXXXX (25) Move the rudder pedals (if it is necessary) until the hydraulic pressure in system A and in system B is less than 200 psig.
- (a) Make sure the PTU control valve opens.
- _____ XXXXX (26) Pressurize hydraulic power to the hydraulic system B with the EMDP or a ground service cart. To pressurize it, do this task: Hydraulic System A or B Pressurization (AMM TASK 29-11-00-860-801).
- NOTE: You cannot use the EDP because the EDP pressure switch must indicate low pressure.
- (a) Feel and listen to the PTU to make sure it does not operate.
- (b) Make sure the hydraulic pressure in system A does not increase.
- (c) If the PTU operates or the pressure in hydraulic system A increases, then do these steps:

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- 1) Replace the PTU. These are the tasks:
Power Transfer Unit (PTU) Removal
(AMM TASK 29-22-11-000-801),
Power Transfer Unit Installation
(AMM TASK 29-22-11-400-801).
 - 2) Replace the PTU check valve.
 - 3) Replace the PTU pressure filter element.
These are the tasks:
PTU Pressure Filter Element Removal
(AMM TASK 29-22-21-020-801),
PTU Pressure Filter Element Installation
(AMM TASK 29-22-21-400-802).

_____ XXXXX C. Put the Airplane Back to Its Usual Condition

- (1) Move the flap control lever to the UP position to retract the flaps and slats.
- (2) Remove hydraulic power from the hydraulic system B. To remove it, do this task: Hydraulic System A or B Power Removal (AMM TASK 29-11-00-860-805).
- (3) Remove the DO-NOT-CLOSE tags and close these circuit breakers:
 - (a) F/O Electrical System Panel, P6-3:
 - 1) 6C16 LANDING GEAR AIR/GND SYS 1
 - (b) Power Distribution Panel Number 2, P92:
 - 1) 92F2 STANDBY HYDRAULIC PUMP

*****END OF WORKCARD*****