### **ELECTRICAL POWER, EXTERNAL - SERVICING**

## TASK 12-00-07-861-801 1. Connect and Energize External AC Power

#### A. Reference Information

REFERENCE	DESIGNATION
TASK 10-10-01-867-801	Grounding of the Aircraft
TASK 12-00-07-861-802	Remove External AC Power
TASK 24-00-00-861-801	Connect Electrical Power to the Aircraft

#### B. Tools and Equipment

REFERENCE	DESIGNATION
GSE 24-40-01	Unit, Ground Power AC (480V/60HZ)

NOTE: Refer to the Illustrated Tool and Equipment Manual to make sure that you use the correct equipment configuration.

#### C. Job Set-Up

WARNING: GROUND THE AIRCRAFT BEFORE YOU CONNECT THE EXTERNAL

ELECTRICAL POWER. YOU CAN CAUSE INJURIES TO PERSONS

AND DAMAGE TO THE EQUIPMENT.

(1) Ground the aircraft (TASK 10–10–01–867–801).

(2) Open the access door that follows:

ACCESS	DESIGNATION
122BR	Door, AC Ground–Power Connection

#### D. Procedure

Refer to Figure 301.

- (1) Connect the ground power unit to the ac receptacle.
- (2) Set the ground power unit to 115 volts at 400 hertz.
- (3) Start the ground power unit.

#### CL-604 AIRCRAFT MAINTENANCE MANUAL - PART II

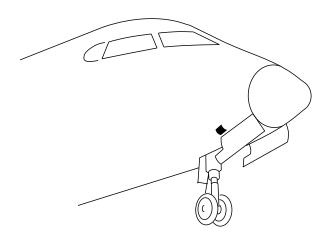
NOTE: Make sure you use the correct electrical power source necessary for the specified maintenance task (TASK 24–00–00–861–801).

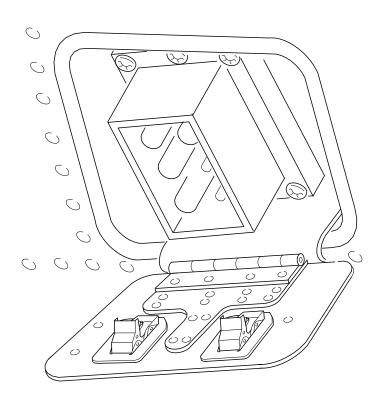
- (4) Put the BATT MASTER switch to the ON position.
- (5) On the ELECTRICAL POWER control panel, make sure that the AVAIL part of the EXT POWER AC switch/light comes on (green).
- (6) Push the EXT POWER AC switch/light.
- (7) Make sure that the IN USE part of the EXT POWER AC switch/light comes on (white).
- (8) Make sure that the AVAIL part of the EXT POWER AC switch/light goes off.

#### E. Close Out

- (1) Remove all tools, equipment, and unwanted materials from the work area.
- (2) Remove the external ac power (TASK 12-00-07-861-802).

CL-604 AIRCRAFT MAINTENANCE MANUAL - PART II





Connection of External AC Power – Servicing Figure 301

EFFECTIVITY: ALL

LMM1200073\_001

#### TASK 12-00-07-861-802 Remove External AC Power

2.

#### A. Reference Information

REFERENCE	DESIGNATION
TASK 12-00-07-861-801	Connect and Energize External AC Power
TASK 24-00-00-861-802	Remove Electrical Power from the Aircraft

#### B. Tools and Equipment

REFERENCE	DESIGNATION
GSE 24-40-01	Unit, Ground Power AC (480V/60HZ)

NOTE: Refer to the Illustrated Tool and Equipment Manual to make sure that you use the correct equipment configuration.

#### C. Job Set-Up

(1) Make sure that the aircraft is in the same configuration as for connection of external ac power.

NOTE: Make sure you use the correct electrical power source necessary for the specified maintenance task (TASK 24–00–00–861–802).

#### D. <u>Procedure</u>

Refer to Figure 301.

- (1) On the ELECTRICAL POWER control panel installed in the flight compartment, put the BATT MASTER switch to the OFF position.
- (2) Push the EXT POWER AC switch/light.
- (3) Make sure that the IN USE part of the EXT POWER AC switch/light goes off.
- (4) Make sure that the AVAIL part of the EXT POWER AC switch/light comes on (green).
- (5) Stop the ground power unit.

NOTE: Make sure you use the correct electrical power source necessary for the specified maintenance task (TASK 24–00–00–861–802)

(6) Disconnect the ground power unit from the ac receptacle.

# CHALLENGER 604 CL-604 AIRCRAFT MAINTENANCE MANUAL - PART II

#### E. Close Out

- (1) Remove all tools, equipment, and unwanted materials from the work area.
- (2) Close the access door that follows:

ACCESS	DESIGNATION
122BR	Door, AC Ground-Power Connection

#### TASK 12-00-07-861-803

#### 3. Connect and Energize External DC Power

#### A. Reference Information

REFERENCE	DESIGNATION
TASK 10-10-01-867-801	Grounding of the Aircraft
TASK 12-00-07-861-804	Remove External DC Power
TASK 24-00-00-861-801	Connect Electrical Power to the Aircraft
TASK 24-00-00-910-801	Electrical/Electronic Safety Precautions

#### B. Tools and Equipment

REFERENCE	DESIGNATION
GSE 24-40-02	Unit, Ground Power DC

NOTE: Refer to the Illustrated Tool and Equipment Manual to make sure that you use the correct equipment configuration.

#### C. Job Set-Up

WARNING: GROUND THE AIRCRAFT BEFORE YOU CONNECT THE EXTERNAL

ELECTRICAL POWER. YOU CAN CAUSE INJURIES TO PERSONS

AND DAMAGE TO THE EQUIPMENT.

(1) Ground the aircraft (TASK 10-10-01-867-801).

WARNING: OBEY ALL THE SAFETY PRECAUTIONS WHEN YOU DO

MAINTENANCE ON OR NEAR ELECTRICAL/ELECTRONIC

EQUIPMENT. IF YOU DO NOT OBEY THE SAFETY PRECAUTIONS, YOU CAN CAUSE INJURY TO PERSONS AND DAMAGE TO THE

EQUIPMENT.

- (2) Obey all the electrical/electronic safety precautions (TASK 24–00–00–910–801).
- (3) Open the access door that follows:

ACCESS	DESIGNATION
312AR	Door, External DC Ground–Power Connection

#### D. Procedure

Refer to Figure 302.

- (1) Connect the ground power unit to the dc receptacle.
- (2) Set the ground power unit to 28 volts.
- (3) Start the ground power unit.
- (4) On the ELECTRICAL POWER control panel, make sure that the EXT POWER DC IN USE light comes on (white).

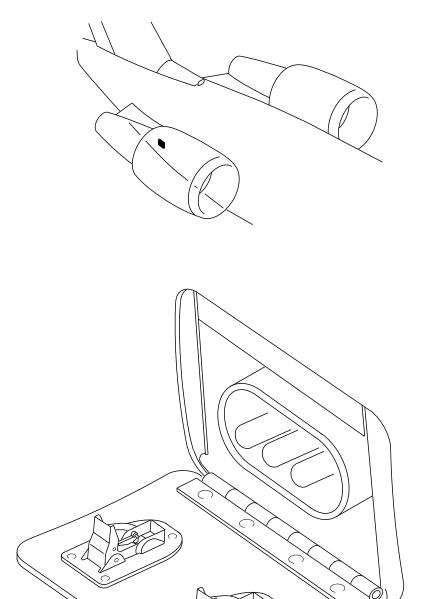
NOTE: Make sure you use the correct electrical power source necessary for the specified maintenance task (TASK 24–00–00–861–801)

- (5) Set the BATT MASTER switch to ON.
- (6) On the EICAS DC ELECTRICAL synoptic page, make sure that the APU BATT DIR BUS is powered by the EXT DC box.

#### E. Close Out

- (1) Remove all tools, equipment, and unwanted materials from the work area.
- (2) When necessary, remove the external dc power (TASK 12–00–07–861–804).

CL-604 AIRCRAFT MAINTENANCE MANUAL - PART II



LMM1200073\_002

Connection of External DC Power – Servicing Figure 302

#### CL-604 AIRCRAFT MAINTENANCE MANUAL - PART II

### TASK 12-00-07-861-804 4. Remove External DC Power

#### A. Reference Information

REFERENCE	DESIGNATION
TASK 24-00-00-861-802	Remove Electrical Power from the Aircraft
TASK 24-00-00-910-801	Electrical/Electronic Safety Precautions

#### B. Tools and Equipment

REFERENCE	DESIGNATION
GSE 24-40-02	Unit, Ground Power DC

NOTE: Refer to the Illustrated Tool and Equipment Manual to make sure that you use the correct equipment configuration.

#### C. Job Set-Up

(1) Make sure that the aircraft is in the same configuration as for connection of external dc power.

WARNING:

OBEY ALL THE SAFETY PRECAUTIONS WHEN YOU DO MAINTENANCE ON OR NEAR ELECTRICAL/ELECTRONIC EQUIPMENT. IF YOU DO NOT OBEY THE SAFETY PRECAUTIONS, YOU CAN CAUSE INJURY TO PERSONS AND DAMAGE TO THE EQUIPMENT.

(2) Obey all the electrical/electronic safety precautions (TASK 24–00–00–910–801).

#### D. <u>Procedure</u>

Refer to Figure 302.

- (1) Set the BATT MASTER switch to OFF.
- (2) Stop the ground power unit.
- (3) Disconnect the ground power unit from the dc receptacle.

#### E. Close Out

(1) Remove all tools, equipment, and unwanted materials from the work area.

#### CL-604 AIRCRAFT MAINTENANCE MANUAL - PART II

#### (2) Close the access door that follows:

ACCESS	DESIGNATION
312AR	Door, External DC Ground–Power Connection