

**PRATT & WHITNEY CANADA**  
**MAINTENANCE MANUAL**  
**MANUAL PART NO. 3013242**

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IGNITION CABLES AND SPARK IGNITERS - DESCRIPTION AND OPERATION

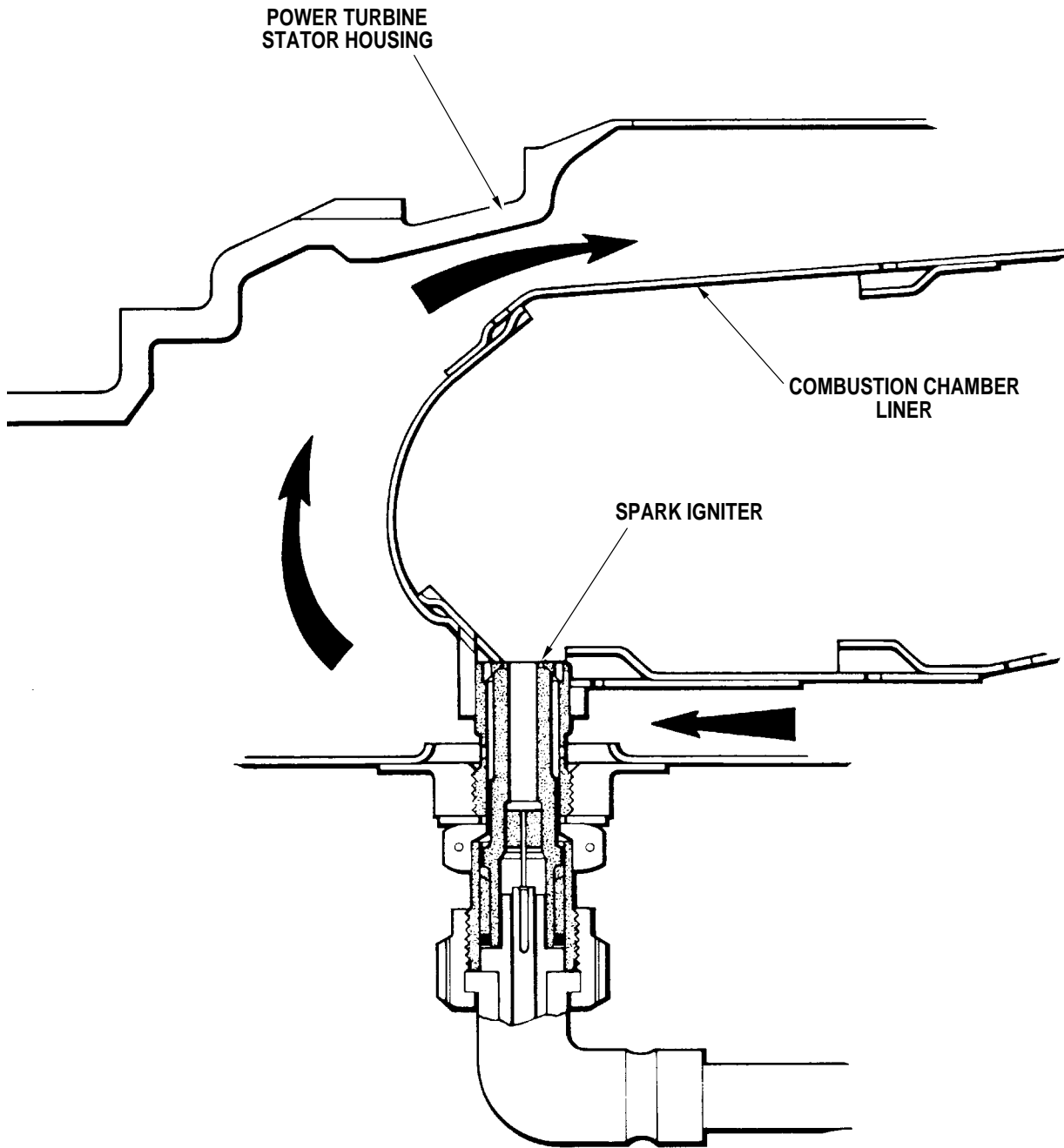
1. Description and Operation (Ref. Fig. 1)

The two individual ignition cable assemblies carry the electrical energy output from the ignition exciter to the engine mounted spark igniters. Each lead assembly consists of an electrical lead contained in a flexible metal braiding. Coupling nuts at each end of the assembly facilitate connection to the respective connectors on the ignition exciter and spark igniter. Mounting flanges for attachment to the engine fireseal mount rings are brazed onto the flexible braiding.

The spark igniters, located at the 4 and 9 o'clock positions on the gas generator case and adjacent to the fuel manifold, are in the form of a double-ended, threaded plug with a central positive electrode enclosed in an annular semi-conducting material. The electrical potential developed by the ignition exciter is applied across the gap between the central conductor and the igniter shell (ground). As this potential increases, a small current passes across the semi-conducting material. This current increases until the air between the central conductor and the shell ionizes. When ionization occurs, high energy discharges between the electrodes. The spark always occurs somewhere in the annular space between the central conductor and shell.

Spark igniters are available under several different part numbers, to cover parts obtained from different sources. Although parts may thus differ in detail appearance, the functioning is identical and they are fully interchangeable. The latest configurations feature air cooling holes for greater durability.

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C6292

Spark Igniter Installation (Typical) - Cross Section  
Figure 1



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IGNITION CABLES AND SPARK IGNITERS - MAINTENANCE PRACTICES

1. General

- A. Maintenance personnel should make reference to the INTRODUCTION section and Chapter 70-00-00 STANDARD PRACTICES of this manual to familiarize themselves with general procedures.
- B. Install suitable protective caps/covers over all disconnected tubes/lines and component openings.
- C. Lockwire used shall comply with specification AMS5687, heat and corrosion resistant steel wire MS9226-03, 0.025 inch diameter, and will not be specified in instructions.

2. Consumable Materials

The consumable materials listed below are used in the following procedures.

<u>Item No.</u>	<u>Name</u>
PWC05-058	Solder, Tin-Alloy
PWC05-066A	Tape, High Temperature
PWC06-005A	Lubricant, Fluorocarbon
PWC06-005B	Lubricant, Fluorocarbon
PWC06-009	Compound, Antiseize
PWC06-023	Compound, Antiseize
PWC11-014	Alcohol, Isopropyl
PWC11-031	Cleaner, Engine
PWC11-032	Solvent, Degreaser

3. Special Tools

Not Applicable

4. Fixtures, Equipment and Supplier Tools

The fixtures, equipment and supplier tools listed below are used in the following procedures.

<u>Name</u>	<u>Remarks</u>
Ohmmeter	Model 260

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5. Removal/Installation

**WARNING:** RESIDUAL VOLTAGE IN THE IGNITION EXCITER MAY BE DANGEROUSLY HIGH. MAKE SURE THE IGNITION IS SWITCHED OFF, AND THE SYSTEM HAS BEEN INOPERATIVE FOR AT LEAST SIX MINUTES BEFORE REMOVING ANY IGNITION COMPONENTS. ALWAYS DISCONNECT THE COUPLING NUTS AT THE IGNITION EXCITER END FIRST. ALWAYS USE INSULATED TOOLS TO REMOVE THE CABLE COUPLING NUTS. DO NOT TOUCH THE OUTPUT CONNECTORS OR COUPLING NUTS WITH BARE HANDS.

A. Removal of Glow Plug Ignition Cables (Pre-SB1196 PT6A-21 Engines) (Ref. Fig. 201)

**CAUTION:** WHEN UNSCREWING COUPLING NUTS, DO NOT ALLOW BRAIDING, FERRULES OR IGNITER TO TURN AT SAME TIME.

- (1) Disconnect left and right hand ignition cable connectors (1) from respective glow plug and ignition regulator (Ref. Details A and B).
- (2) Remove self-locking nuts and bolts securing loop clamps (4) to angle brackets (2) on center fireseal mount ring (14) and integral brackets on gas generator case (Ref. Details A and B).
- (3) Remove self-locking nuts and bolts securing cable flanges (8) to center fireseal mount ring (14) (Ref. Details A and B).
- (4) Remove self-locking nuts and bolts securing loop clamps (9) to brackets (12) (Ref. Detail C).
- (5) Remove self-locking nuts and bolts securing cable flanges (8) to rear fireseal mount ring (13) and mount ring support bracket (7) (Ref. Detail C).
- (6) Remove self-locking nuts and bolts securing loop clamps (6) to angle brackets (5) (Ref. Detail D).
- (7) Withdraw ignition cables (3) through fireseal mount rings.

B. Removal of Glow Pug Ignition Cables (Pre-SB1196 PT6A-27/-28 Engines) (Ref. Fig. 202)

**CAUTION:** WHEN UNSCREWING COUPLING NUTS, DO NOT ALLOW BRAIDING, FERRULES OR GLOW PLUG TO TURN AT SAME TIME.

- (1) Disconnect left and right hand ignition cables (2 and 3) from respective glow plug (1) and ignition regulator.
- (2) Remove self-locking nuts and bolts securing loop clamps (4) to angle brackets (5) on center fireseal mount ring, and integral brackets (6) on gas generator case (Ref. Detail A).
- (3) Remove self-locking nuts and bolts securing cable flanges (7) to center fireseal mount ring (Ref. Detail B).

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- (4) Remove self-locking nuts and bolts securing loop clamps (8) to loop clamps (9) on fuel tubes (Ref. Detail C).
- (5) Remove self-locking nuts, bolts securing loop clamps (10 and 12) to loop clamps (13) on fuel tubes and backplate (11) (Ref. Detail D).
- (6) Remove self-locking nuts and bolts securing cable flanges (14) to rear fireseal mount ring and mount ring support bracket (15) (Ref. Detail E).
- (7) Remove self-locking nuts and bolts securing loop clamps (17 and 18) to angle brackets (16) at flange E (Ref. Detail F).
- (8) Withdraw ignition cables (2 and 3) through fireseal mount rings.

C. Removal of Spark Plug Ignition Cables (Post-SB1196 and Pre-SB1482 PT6A-21 Engines) (Ref. Fig. 203)

**CAUTION:** WHEN UNSCREWING CABLE COUPLING NUTS, DO NOT PERMIT BRAIDING, FERRULES OR IGNITER TO TURN AT THE SAME TIME.

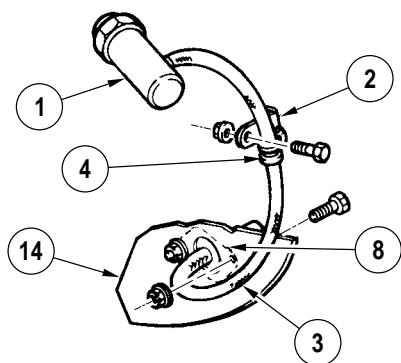
- (1) Disconnect right and left hand ignition cable (6) connectors from respective spark igniter and ignition exciter.
- (2) Remove self-locking nuts and bolts, separate loop clamps (1 and 5) from ignition cables (6) and angle brackets (2 and 3) on center fireseal (4) (Ref. Detail A).
- (3) Remove self-locking nuts and bolts to release cable (6) flanges from center fireseal. Remove two brackets (3) from center fireseal (Ref. Detail A).
- (4) Remove self-locking nut and bolt and separate clamps (7 and 8) from each other and from cables (6) (Ref. Detail B).
- (5) Remove self-locking nut, bolt and bracket (19) and separate loop clamp (18) from ignition cable (Ref. Detail C).
- (6) Remove self-locking nuts and bolts and separate loop clamps (10 and 13) from brackets (11 and 15) at front of rear fireseal mount ring (14). Remove clamps from cables (6) (Ref. Detail D).
- (7) Remove self-locking nut and bolt and separate loop clamp (9) from ignition cable (6) and bracket (20) on air inlet screen bolting flange. Remove self-locking nut and bolt and separate loop clamp (16) from ignition cable (6) (Ref. Detail D).
- (8) Withdraw both cables (6) through fireseal mount rings.

D. Removal of Spark Plug Ignition Cables (Post-SB1196 and Post-SB1482 PT6A-21 Engines) (Ref. Fig. 204)

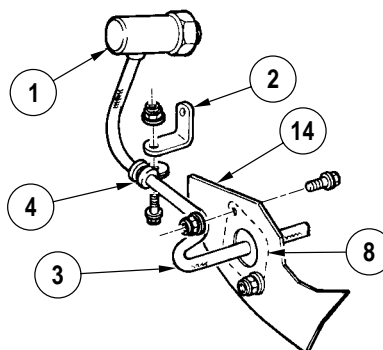
**CAUTION:** WHEN UNSCREWING CABLE COUPLING NUTS, DO NOT PERMIT BRAIDING, FERRULES OR IGNITER TO TURN AT THE SAME TIME.

- (1) Disconnect right and left hand ignition cable (6) connectors from respective spark igniter and ignition exciter.

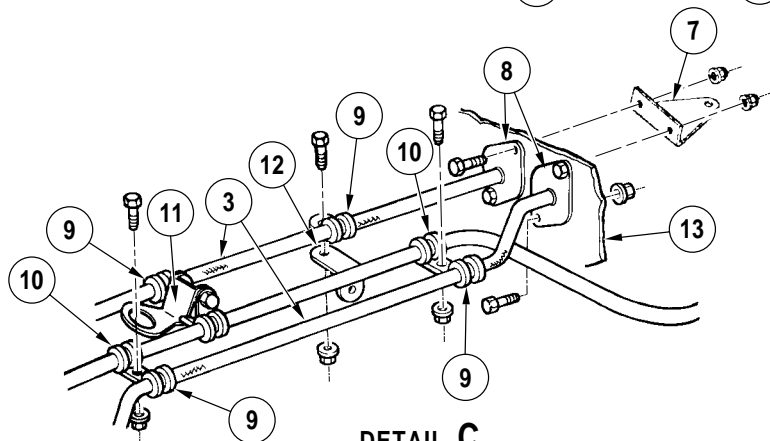
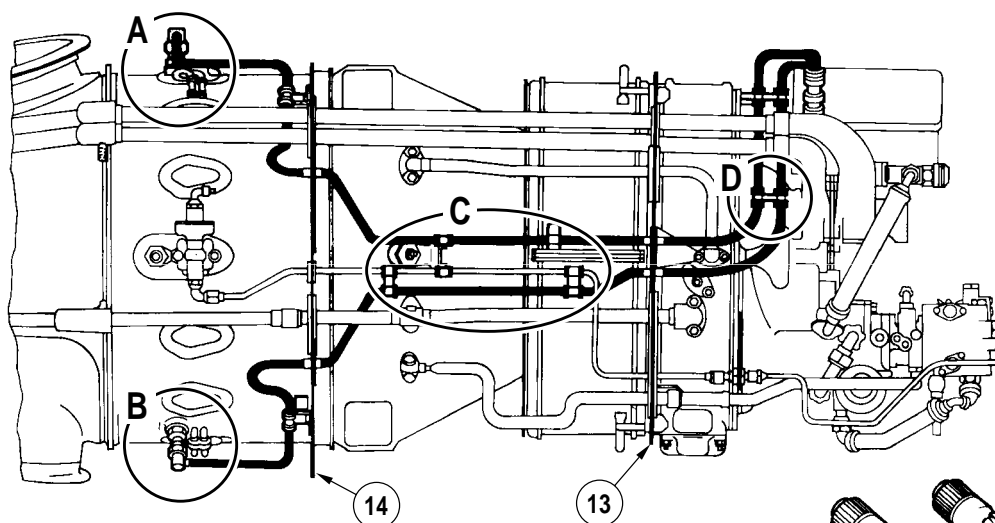
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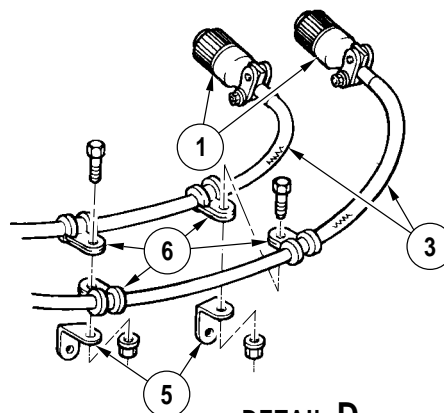
DETAIL A



DETAIL B



DETAIL C



DETAIL D

Pre-SB1196 PT6A-21 Engines

C8489B

Removal/Installation of Glow Plug Ignition Cables  
 Figure 201

**74-20-00**

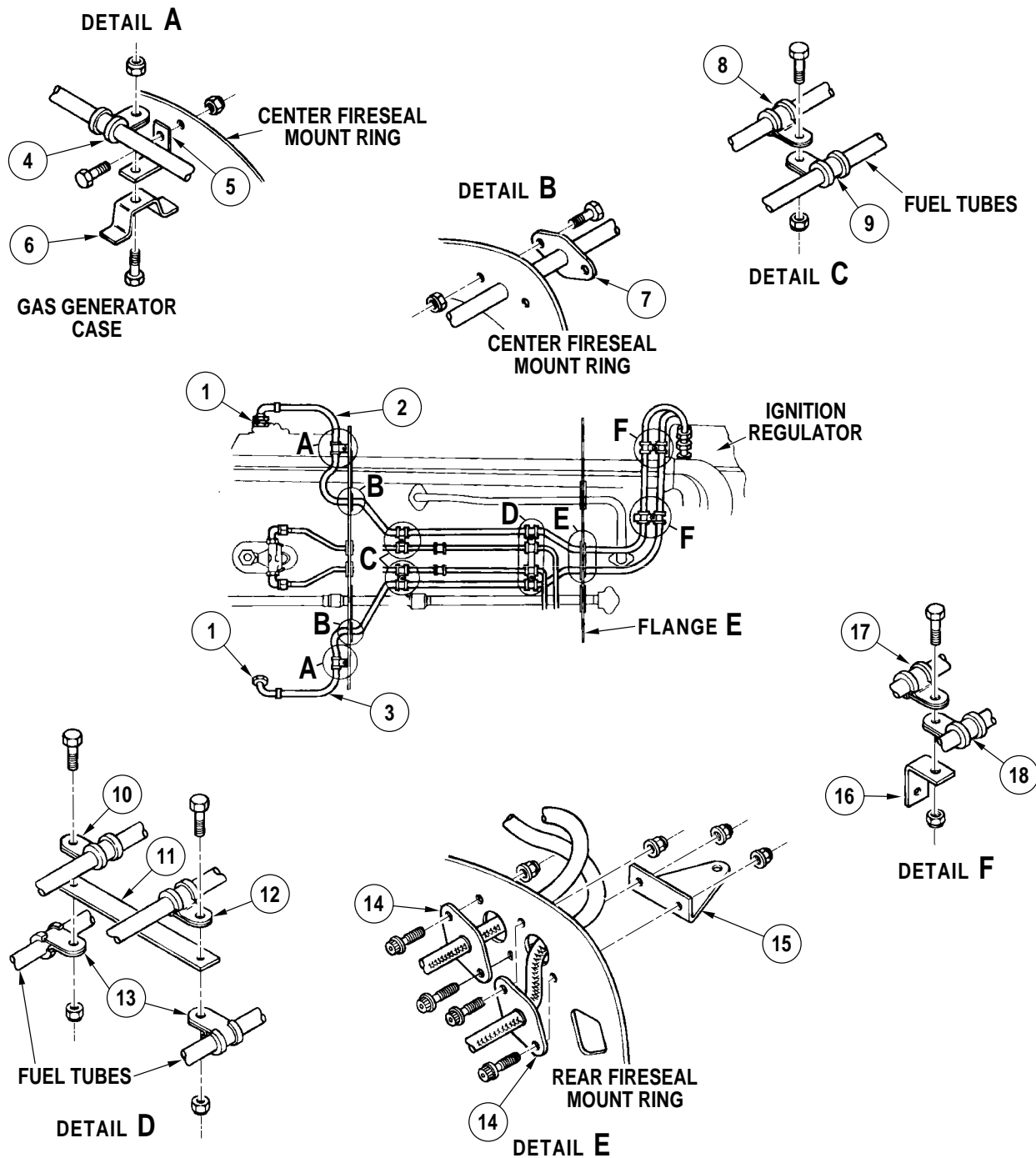
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Key to Figure 201

1. Connector
2. Bracket
3. Ignition Cable
4. Loop Clamp
5. Bracket
6. Loop Clamp
7. Mount Ring Support Bracket
8. Cable Flanges
9. Loop Clamp
10. Loop Clamp
11. Fuel Line Support Bracket
12. Bracket
13. Rear Fireseal Mount Ring
14. Center Fireseal Mount Ring

- (2) Remove self-locking nuts and bolts, separate loop clamps (1 and 5) from ignition cables (6) and angle brackets (2 and 3) on center fireseal (4) (Ref. Detail A).
- (3) Remove self-locking nuts and bolts to release cable (6) flanges from center fireseal. Remove two brackets (3) from center fireseal.
- (4) Remove self-locking nut and bolt and separate clamps (7 and 8) from each other and from cables (6) (Ref. Detail B).
- (5) Remove self-locking nut, bolt and bracket (9) and separate loop clamp (10) from ignition cable (Ref. Detail C).
- (6) Remove self-locking nut and bolt and separate loop clamp (11) from ignition cable (6) and bracket (12) on air inlet screen bolting flange. Remove self-locking nut and bolt and separate loop clamp (13) from ignition cable (6) and mount ring support bracket (Ref. Detail D).
- (7) Remove bolt and nut and separate loop clamp (13) from clamp on rear fuel pressure tube (14). Remove clamps (Ref. Detail D).
- (8) Remove bolt and nut and separate loop clamp (11) from bracket (12).
- (9) Remove bolt, nut, bracket (12) and washer from bracket (15).
- (10) Remove self-locking nuts and bolts and separate loop clamps (16 and 17) from brackets (18 and 19) at rear fireseal mount ring. Remove clamps from cables (6) (Ref. Detail E).
- (11) Withdraw both cables (6) through fireseal mount rings.

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Pre-SB1196 PT6A-27/28 Engines

C8487A

Removal/Installation of Glow Plug Ignition Cables  
 Figure 202

**74-20-00**

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Key to Figure 202

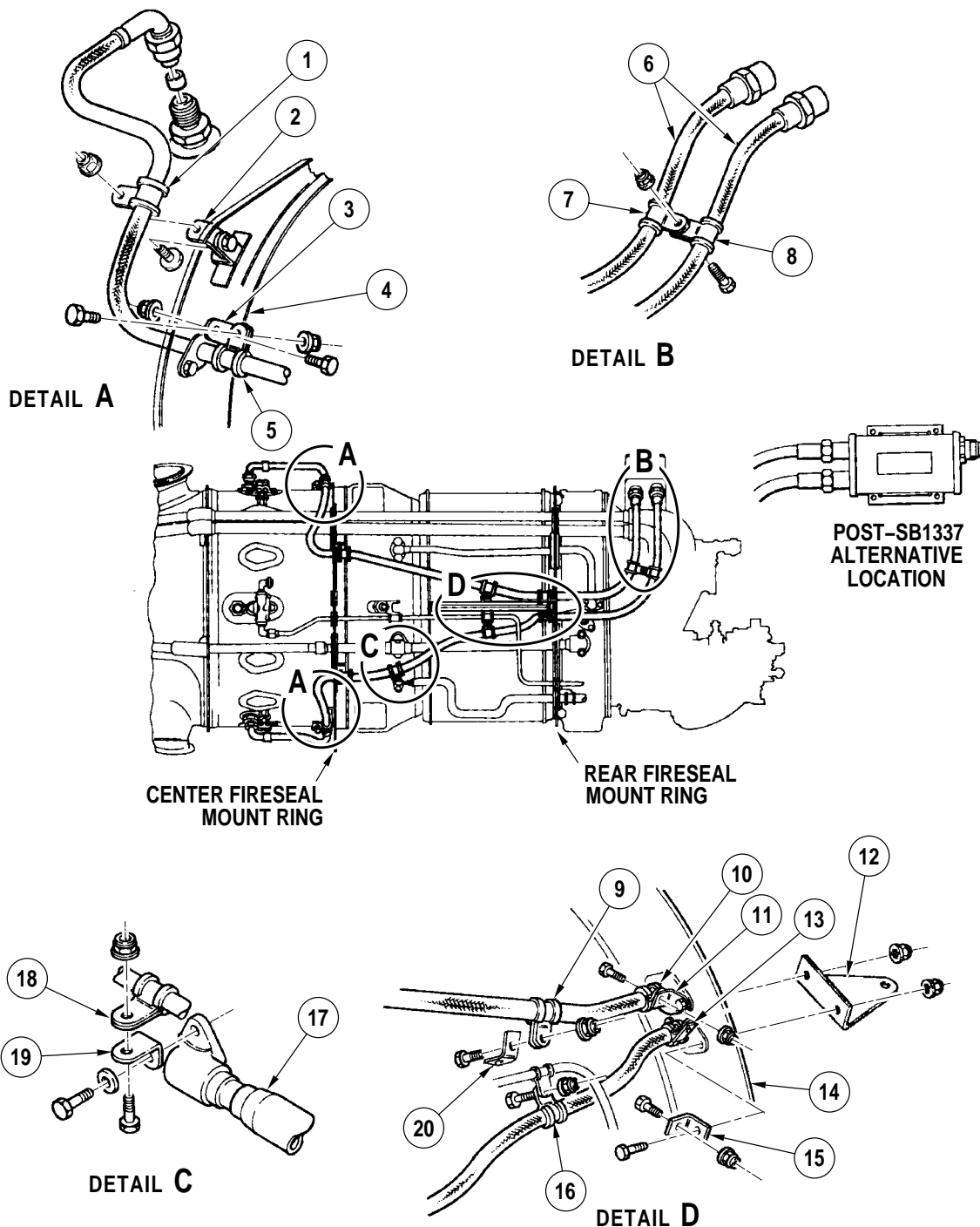
1. Glow Plug
2. Ignition Cable (L.H.)
3. Ignition Cable (R.H.)
4. Loop Clamp
5. Angle Bracket
6. Bracket
7. Cable Flange
8. Loop Clamp
9. Loop Clamp
10. Loop Clamp
11. Backplate
12. Loop Clamp
13. Loop Clamp
14. Cable Flange
15. Mount Ring Support Bracket
16. Angle Bracket
17. Loop Clamp
18. Loop Clamp

- E. Removal of Spark Plug Ignition Cables (Post-SB1196 PT6A-27/-28 Engines) (Ref. Fig. 205)

**CAUTION:** WHEN UNSCREWING COUPLING NUTS, DO NOT ALLOW BRAIDING, FERRULES OR IGNITER TO TURN AT SAME TIME.

- (1) Disconnect left and right hand ignition cables (2 and 3) from respective spark igniter (1) and ignition exciter.
- (2) Remove self-locking nuts and bolts and separate loop clamps (4), angle brackets (5 and 6), from integral brackets (7) on gas generator case (Ref. Detail A).
- (3) Remove self-locking nuts and bolts securing loop clamps (9) to angle brackets (8) (Ref. Detail B).
- (4) Remove self-locking nuts and bolts securing cable flanges (10) and angle brackets (8) to center fireseal mount ring (Ref. Detail B).
- (5) Remove self-locking nut and bolt securing loop clamp (11) to angle bracket (12) (Ref. Detail C).
- (6) Remove self-locking nuts, bolts securing loop clamps (13 and 15) to loop clamps (16) on fuel tubes and lockplate (14) (Ref. Detail D).
- (7) Remove self-locking nuts and bolts securing loop clamps (17 and 19) to angle brackets (20) (Ref. Detail E).

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Post-SB1196 and Pre-SB1482 PT6A-21 Engines

C8490D

Removal/Installation of Spark Plug Ignition Cables  
 Figure 203

**74-20-00**



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Key to Figure 203

1. Loop Clamp
2. Bracket
3. Bracket
4. Center Fireseal Mount Ring
5. Loop Clamp
6. Ignition Cables
7. Loop Clamp
8. Loop Clamp
9. Loop Clamp
10. Loop Clamp
11. Bracket
12. Mount Ring Support Bracket
13. Loop Clamp
14. Rear Fireseal Mount Ring
15. Bracket
16. Loop Clamp
17. Insulated Tube
18. Loop Clamp
19. Bracket
20. Bracket

(8) Remove self-locking nuts and bolts securing cable flanges (18) and angle brackets (20) to rear fireseal mount ring and mount ring support bracket (21) (Ref. Detail E).

(9) Remove self-locking nut and bolt securing loop clamp (22) to loop clamp (23) on igniter cables (Ref. Detail F).

(10) Withdraw ignition cables (2 and 3) through fireseal mount rings.

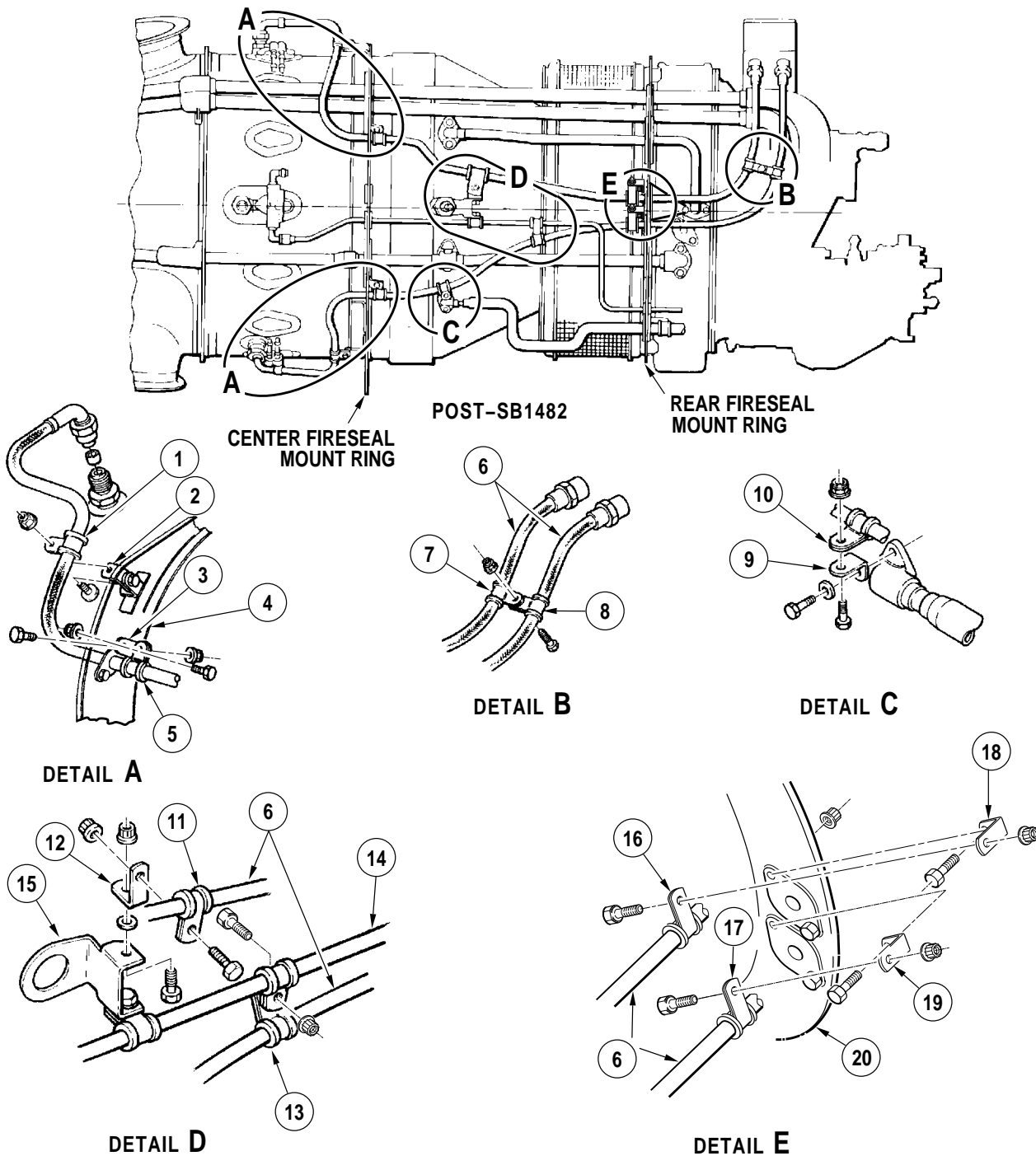
F. Installation of Glow Plug Ignition Cables (Pre-SB1196 PT6A-21 Engines) (Ref. Fig. 201)

(1) Insert both ignition cables (3) through rear fireseal (13) and center fireseal (14) apertures.

(2) Position flanges (8) of each cable on rear and center fireseal (13 and 14) and secure with four bolts and self-locking nuts. Two top bolts also secure mount ring support bracket (7). Tighten nuts and torque 36 to 40 lb.in.

NOTE: Heads of bolts securing flanges to center and rear fireseal mount rings must be located on compressor air inlet side of respective mount ring.

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Post-SB1196 and Post-SB1482 PT6A-21 Engines

C22988B

Removal/Installation of Spark Plug Ignition Cables  
 Figure 204

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Key to Figure 204

1. Loop Clamp
2. Bracket
3. Bracket
4. Center Fireseal Mount Ring
5. Loop Clamp
6. Ignition Cables
7. Loop Clamp
8. Loop Clamp
9. Bracket
10. Loop Clamp
11. Loop Clamp
12. Bracket
13. Loop Clamp
14. Rear Fuel Pressure Tube (Ref)
15. Bracket
16. Loop Clamp
17. Loop Clamp
18. Bracket
19. Bracket
20. Rear Fireseal Mount Ring

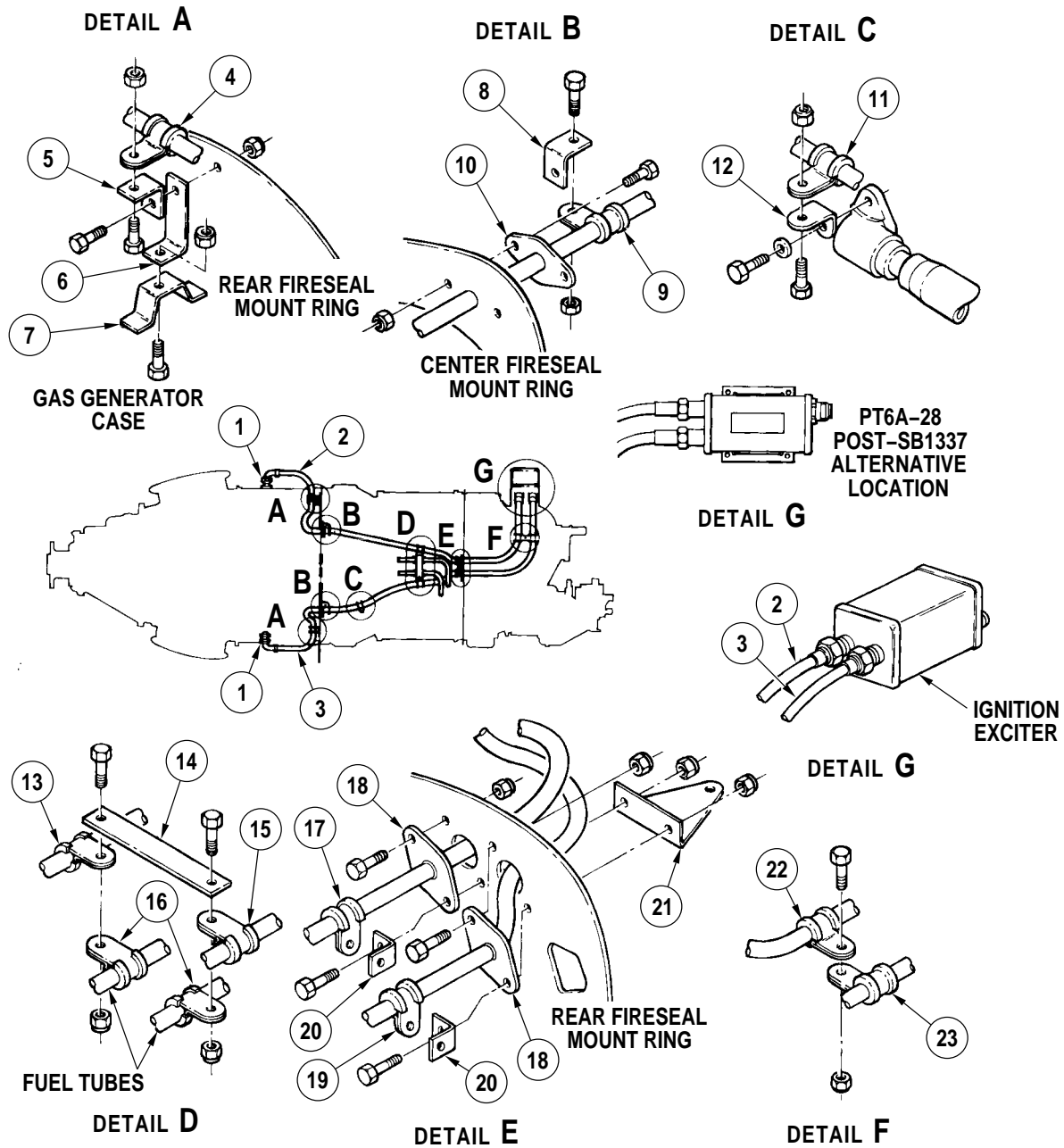
**CAUTION:** UNDER NO CIRCUMSTANCES ARE LUBRICANTS OF ANY TYPE TO BE USED ON CABLES WITH TEFLON INSULATED SLEEVES. LUBRICANTS CONTAINING GREASE, SILICONE OR PETROLATUM MUST NOT BE USED ON ANY IGNITION COMPONENTS AS CONTAMINATION OF ELECTRICAL CONTACTS WITHIN CONNECTORS OR CENTRAL CONDUCTOR OF CABLE CAN RESULT IN A HIGH RESISTANCE PATH WHICH COULD GENERATE HEAT AND OXIDATION.

- (3) Lightly spray insulated ends of cable conductors with fluorocarbon dry-spray lubricant (PWC06-005A).

**CAUTION:** DO NOT ALLOW BRAIDING, FERRULES OR GLOW PLUG TO TURN WHEN SCREWING ON COUPLING NUTS.

- (4) Connect coupling nuts on ignition cables (3) to respective glow plugs, and connectors on ignition regulator. Screw couplings onto mating thread by hand, making sure no binding occurs between coupling nuts and cable.
- (5) Tighten coupling nut connectors to glow plugs fingertight plus 45 degrees. Tighten ignition regulator fingertight plus 5 degrees. Lockwire coupling nut at ignition regulator end.
- (6) Assemble one loop clamp (4) on each cable (3). Secure to bracket (2) on center fireseal (14) and integral bracket on gas generator case with bolts and self-locking nuts. Tighten nuts and torque 36 to 40 lb.in. (Ref. Detail A).

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**Post-SB1196 PT6A-27/-28 Engines**

C8488A

Removal/Installation of Spark Plug Ignition Cables  
 Figure 205

**74-20-00**

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Key to Figure 205

1. Spark Igniter
2. Igniter Cable (L.H.)
3. Ignition Cable (R.H.)
4. Loop Clamp
5. Angle Bracket
6. Angle Bracket
7. Bracket
8. Angle Bracket
9. Loop Clamp
10. Cable Flange
11. Loop Clamp
12. Angle Bracket
13. Loop Clamp
14. Bookplate
15. Loop Clamp
16. Loop Clamp
17. Loop Clamp
18. Cable Flange
19. Loop Clamp
20. Angle Bracket
21. Mount Ring Support Bracket
22. Loop Clamp
23. Loop Clamp

- (7) Assemble four loop clamps (9) on ignition cable (3) (Ref. Detail C).
- (8) Secure two of these loop clamps to loop clamps (10) on fuel tube with bolts and self-locking nuts (Ref. Detail C).
- (9) Secure third loop clamp to bracket (12) on air inlet screen with bolt and self-locking nut (Ref. Detail C).
- (10) Secure fourth loop clamp to fuel line and ignition support bracket (11) with bolt and self-locking nut (Ref. Detail C).
- (11) Tighten all self-locking nuts and torque 36 to 40 lb.in.
- (12) Assemble four loop clamps (6) on ignition cable (3) and secure in pairs to brackets (5) on flange E with bolts and self-locking nuts. Tighten nuts and torque 36 to 40 lb.in. (Ref. Detail D).

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G. Installation of Glow Plug Ignition Cables (Pre-SB1196 PT6A-27/-28 Engines) (Ref. Fig. 202)

- (1) Install overhauled ignition cables (2 and 3) between center and rear fireseal mount rings, passing cable ends through respective holes in mount rings.
- (2) Install cable flanges (7) on center fireseal mount ring and secure with bolts and self-locking nuts. Tighten nuts and torque 36 to 40 lb.in. (Ref. Detail B).

**NOTE:** Heads of bolts securing flanges to center and rear fireseal mount rings must be located on compressor air inlet side of respective mount ring.

- (3) Install cable flanges (14) on rear fireseal mount ring and secure with four bolts and self-locking nuts. Two top bolts also secure mount ring support bracket (15). Tighten nuts and torque 36 to 40 lb.in. (Ref. Detail E).

**CAUTION:** UNDER NO CIRCUMSTANCES ARE LUBRICANTS OF ANY TYPE TO BE USED ON CABLES WITH TEFLON INSULATED SLEEVES. LUBRICANTS CONTAINING GREASE, SILICONE OR PETROLATUM MUST NOT BE USED ON ANY IGNITION COMPONENTS, AS CONTAMINATION OF ELECTRICAL CONTACTS WITHIN CONNECTORS OR CENTRAL CONDUCTOR OF CABLE CAN RESULT IN A HIGH RESISTANCE PATH WHICH COULD GENERATE HEAT AND OXIDATION.

- (4) Lightly spray insulated ends of cable conductors with fluorocarbon dry-spray lubricant (PWC06-005A).

**CAUTION:** DO NOT ALLOW BRAIDING, FERRULES OR GLOW PLUG TO TURN WHEN SCREWING ON COUPLING NUTS.

- (5) Connect coupling nuts of ignition cables (2 and 3) to respective glow plugs (1), and connectors on ignition regulator. Screw couplings onto mating thread by hand, making sure no binding occurs between coupling nuts and cable.
- (6) Tighten coupling nuts at glow plugs fingertight plus 45 degrees . Tighten at ignition regulator fingertight plus 5 degrees. Lockwire coupling nuts at ignition regulator end.
- (7) Secure loop clamps (4) on cables (2 and 3) to angle brackets (5) on center fireseal mount ring, and integral brackets (6) on gas generator case, with bolts and self-locking nuts. Tighten nuts and torque 36 to 40 lb.in. (Ref. Detail A).
- (8) Secure loop clamps (8) on cables (2 and 3) to loop clamps (9) on fuel tubes with bolts and self-locking nuts. Tighten nuts and torque 36 to 40 lb.in. (Ref. Detail C).
- (9) Secure loop clamps (10 and 12) on cables (2 and 3) to loop clamps (13) on fuel tubes, with backplate (11), bolts and self-locking nuts. Tighten nuts and torque 36 to 40 lb.in. (Ref. Detail D).
- (10) Secure loop clamps (17 and 18) to angle brackets (16) on flange E with bolts and self-locking nuts; torque nuts 36 to 40 lb.in. (Ref. Detail F).

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H. Installation of Spark Plug Ignition Cables (Post-SB1196 and Pre-SB1482 PT6A-21 Engines) (Ref. Fig. 203)

- (1) Insert both ignition cables (6) through rear fireseal (14) and center fireseal (4) apertures.

**NOTE:** Heads of bolts securing cable flanges to fireseals to be located on air inlet side of respective mount ring.

- (2) Position flanges of each cable (6) on center fireseal (4) with brackets (3) located on rear face of upper hole. Secure together at each cable flange position with two bolts and self-locking nuts. Tighten nuts and torque 36 to 40 lb.in. (Ref. Detail A).
- (3) Position flanges of each cable (6) on front of rear fireseal (14) with brackets (11 and 15) positioned over one hole in cable flange. Secure together at each cable flange location with two bolts and self-locking nuts. Tighten nuts and torque 36 to 40 lb.in. (Ref. Detail D).

**CAUTION:** UNDER NO CIRCUMSTANCES ARE LUBRICANTS OF ANY TYPE TO BE USED ON CABLES WITH TEFLON INSULATED SLEEVES. LUBRICANTS CONTAINING GREASE, SILICONE OR PETROLATUM MUST NOT BE USED ON ANY IGNITION COMPONENTS AS CONTAMINATION OF ELECTRICAL CONTACTS WITHIN CONNECTORS OR CENTRAL CONDUCTOR OF CABLE CAN RESULT IN A HIGH RESISTANCE PATH WHICH COULD GENERATE HEAT AND OXIDATION.

- (4) Taking care not to spray electrical contacts, lightly spray insulated ends of cable conductors with fluorocarbon dry-spray lubricant (PWC06-005A).

**CAUTION:** DO NOT ALLOW BRAIDING, FERRULES OR IGNITER PLUG TO TURN WHEN SCREWING ON COUPLING NUTS.

- (5) Connect coupling nuts at ends of ignition cables (6) to respective spark igniters and connectors on ignition exciter. Screw couplings onto mating threads by hand, making sure that no binding occurs between coupling nut and cable. Tighten cable coupling nuts fingertight plus 45 degrees. Secure coupling nuts at ignition exciter end with lockwire.
- (6) Attach bracket (2) to angle bracket on center fireseal (4) (two places) with bolts and self-locking nuts. Tighten nuts and torque 36 to 40 lb.in. (Ref. Detail A).
- (7) Assemble loop clamps (1 and 5) on both ignition cables and secure to angle brackets (2 and 3) (already installed) with bolts and self-locking nuts. Tighten nuts and torque 36 to 40 lb.in. (Ref. Detail A).

**CAUTION:** LOOP CLAMPS MUST BE POSITIONED TO REDUCE POSSIBLE CHAFING OF THE IGNITION CABLE WITH THE FUEL LINE IN THE VICINITY OF CENTER FIRESEAL AND AIR SCREEN.

- (8) Assemble loop clamp (16) on ignition cable (6). Secure loop clamp to rear fuel pressure tube with bolts and self-locking nuts. Tighten nuts and torque 36 to 40 lb.in. (Ref. Detail D).

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- (9) Assemble loop clamp (9) on ignition cable (6). Secure clamp to bracket (20) on air inlet screen. Tighten nuts and torque 36 to 40 lb.in. (Ref. Detail D).
  - (10) Assemble loop clamps (10 and 13) on ignition cables (6) and secure to brackets (11 and 15) (already installed) with bolts and self-locking nuts. Tighten nuts and torque 36 to 40 lb.in. (Ref. Detail D).
  - (11) Assemble loop clamp (18) on ignition cable (6) and secure to angle bracket (19) with bolt and self-locking nut fingertight (Ref. Detail C).
  - (12) Assemble loop clamps (7 and 8) on ignition cables (6) and secure together with bolt and self-locking nut. Tighten nut and torque 36 to 40 lb.in. (Ref. Detail B).
- I. Installation of Spark Plug Ignition Cables (Post-SB1196 and Post-SB1482 PT6A-21 Engines) (Ref. Fig. 204)
- (1) Insert both ignition cables (6) through rear fireseal (20) and center fireseal (4) apertures.  
  
NOTE: Heads of bolts securing cable flanges to fireseals to be located on air inlet side of respective mount ring.
  - (2) Position flanges of each cable (6) on center fireseal (4) with brackets (3) located on rear face of upper hole. Secure together at each cable flange position with two bolts and self-locking nuts. Tighten nuts and torque 36 to 40 lb.in. (Ref. Detail A).
  - (3) Position flanges of each cable (6) on front of rear fireseal (20) with brackets (19 and 18) positioned over one hole in cable flange. Secure together at each cable flange location with two bolts and self-locking nuts. Tighten nuts and torque 36 to 40 lb.in. (Ref. Detail E).
- CAUTION:** UNDER NO CIRCUMSTANCES ARE LUBRICANTS OF ANY TYPE TO BE USED ON CABLES WITH TEFLON INSULATED SLEEVES. LUBRICANTS CONTAINING GREASE, SILICONE OR PETROLATUM MUST NOT BE USED ON ANY IGNITION COMPONENTS AS CONTAMINATION OF ELECTRICAL CONTACTS WITHIN CONNECTORS OR CENTRAL CONDUCTOR OF CABLE CAN RESULT IN A HIGH RESISTANCE PATH WHICH COULD GENERATE HEAT AND OXIDATION.
- (4) Taking care not to spray electrical contacts, lightly spray insulated ends of cable conductors with fluorocarbon dry-spray lubricant (PWC06-005A).
- CAUTION:** DO NOT ALLOW BRAIDING, FERRULES OR IGNITER PLUG TO TURN WHEN SCREWING ON COUPLING NUTS.
- (5) Connect coupling nuts at ends of ignition cables (6) to respective spark igniters and connectors on ignition exciter. Screw couplings onto mating threads by hand, making sure that no binding occurs between coupling nut and cable. Tighten cable coupling nuts fingertight plus 45 degrees. Secure coupling nuts at ignition exciter end with lockwire.
  - (6) Attach bracket (2) to angle bracket on center fireseal (4) (two places) with bolts and self-locking nuts. Tighten nuts and torque 36 to 40 lb.in. (Ref. Detail A).



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- (7) Assemble loop clamps (1 and 5) on both ignition cables and secure to angle brackets (2 and 3) (already installed) with bolts and self-locking nuts. Tighten nuts and torque 36 to 40 lb.in. (Ref. Detail A).

**CAUTION:** LOOP CLAMPS MUST BE POSITIONED TO REDUCE POSSIBLE CHAFING OF THE IGNITION CABLE WITH THE FUEL LINE IN THE VICINITY OF CENTER FIRESEAL AND AIR SCREEN.

- (8) Assemble loop clamp (13) on ignition cable (6). Secure loop clamp to rear fuel pressure tube (14) with bolts and self-locking nuts. Tighten nuts and torque 36 to 40 lb.in. (Ref. Detail D).
- (9) Assemble loop clamp (11) on ignition cable (6). Secure clamp to bracket (12) with bolt and self locking nut, and bracket (12) to bracket (15) using bolt, washer and self-locking nut. Tighten nuts and torque 36 to 40 lb.in. (Ref. Detail D).
- (10) Assemble loop clamps (16 and 17) on ignition cables (6) and secure to brackets (19 and 18) (already installed) with bolts and self-locking nuts. Tighten nuts and torque 36 to 40 lb.in. (Ref. Detail E).
- (11) Assemble loop clamp (10) on ignition cable (6) and secure to angle bracket (9) with bolt and self-locking nut fingertight (Ref. Detail C).
- (12) Assemble loop clamps (7 and 8) on ignition cables (6) and secure together with bolt and self-locking nut. Tighten nut and torque 36 to 40 lb.in. (Ref. Detail B).
- J. Installation of Spark Plug Ignition Cables (Post-SB1196 PT6A-27/-28 Engines) (Ref. Fig. 205)
- (1) Install overhauled ignition cables (2 and 3) between center and rear fireseal mount rings, passing cable ends through respective holes in mount rings.
- (2) Locate cable flanges (10) on center fireseal mount ring and position bracket (8) on rear face of flange. Secure with bolts and self-locking nuts and torque 36 to 40 lb.in. (Ref. Detail B).

**NOTE:** Heads of bolts securing flanges to center and rear fireseal mount rings must be located on compressor air inlet side of respective mount ring.

- (3) Install cable flanges (18) on rear fireseal mount ring and position angle brackets (20) on front face of each flange upper hole position. Secure with four bolts and self-locking nuts. Top two bolts also secure mount ring support bracket (21). Tighten nuts and torque 36 to 40 lb.in. (Ref. Detail E).

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**CAUTION:** UNDER NO CIRCUMSTANCES ARE LUBRICANTS OF ANY TYPE TO BE USED ON CABLES WITH TEFLON INSULATED SLEEVES. LUBRICANTS CONTAINING GREASE, SILICONE OR PETROLATUM MUST NOT BE USED ON ANY IGNITION COMPONENTS, AS CONTAMINATION OF ELECTRICAL CONTACTS WITHIN CONNECTORS OR CENTRAL CONDUCTOR OF CABLE CAN RESULT IN A HIGH RESISTANCE PATH WHICH COULD GENERATE HEAT AND OXIDATION.

- (4) Taking care not to spray electrical contacts, lightly spray insulated end of cable conductors with fluorocarbon dry-spray lubricant (PWC06-005B).

**CAUTION:** DO NOT ALLOW BRAIDING, FERRULES OR IGNITER PLUG TO TURN WHEN SCREWING ON COUPLING NUTS.

- (5) Connect coupling nuts at end of ignition cables (2 and 3) to respective spark igniters (1) and connectors on ignition exciter. Screw couplings onto mating threads by hand, making sure that no binding occurs between coupling nut and cable. Finger tighten coupling nuts plus 45 degrees. Lockwire coupling nuts at ignition exciter with lockwire.
- (6) Secure two brackets (6) to bracket (7) with one bolt and self-locking nut. Tighten nut and torque 36 to 40 lb.in.
- (7) Secure one angle bracket (5) to angle bracket (6) and center fireseal mount ring (two places) with bolts and self-locking nuts. Tighten nuts and torque 36 to 40 lb.in. (Ref. Detail A).
- (8) Secure one loop clamp (4) on each cable (2 and 3) to angle brackets (5) with bolts and self-locking nuts. Tighten nuts and torque 36 to 40 lb.in.
- (9) Secure loop clamps (9) on cables (2 and 3) to angle brackets (8), on center fireseal mount ring, with bolts and self-locking nuts. Tighten nut and torque 36 to 40 lb.in. (Ref. Detail B).
- (10) Secure one loop clamp (11) on cable (3) to angle bracket (12) with bolt and self-locking nut. Tighten nut fingertight (Ref. Detail C).
- (11) Secure loop clamps (13 and 15) on cables (2 and 3) to loop clamps (16) on fuel tubes with backplate (14), bolts and self-locking nuts. Tighten nuts and torque 36 to 40 lb.in. (Ref. Detail D).
- (12) Secure loop clamps (17 and 19) on cables (2 and 3) to angle brackets (20), on rear fireseal mount ring, with bolts and self-locking nuts. Tighten nuts and torque 36 to 40 lb.in. (Ref. Detail E).
- (13) Secure loop clamp (22) on cable (2) to loop clamp (23) on cable (3) with bolt and self-locking nut. Tighten nut and torque 36 to 40 lb.in. (Ref. Detail F).

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**I** K. Removal of Spark Igniters (Ref. Fig. 206)

**WARNING:** RESIDUAL VOLTAGE IN THE IGNITION EXCITER MAY BE DANGEROUSLY HIGH. MAKE SURE THE IGNITION IS SWITCHED OFF, AND THE SYSTEM HAS BEEN INOPERATIVE FOR AT LEAST SIX MINUTES BEFORE REMOVING ANY IGNITION COMPONENTS. ALWAYS DISCONNECT THE COUPLING NUTS AT THE IGNITION EXCITER END FIRST. ALWAYS USE INSULATED TOOLS TO REMOVE THE CABLE COUPLING NUTS. DO NOT TOUCH THE OUTPUT CONNECTORS OR COUPLING NUTS WITH BARE HANDS.

- (1) Isolate the power from the ignition system.
- (2) Remove the coupling nuts of the ignition cables from the respective spark igniters (Ref. 74-20-00 and 74-20-01).

**CAUTION:** WHEN UNSCREWING THE COUPLING NUTS, DO NOT ALLOW THE BRAIDING, FERRULES OR IGNITER PLUGS TO TURN AT THE SAME TIME.

- (3) Remove the spark igniters (2) from the gas generator case.
- (4) Remove the copper gasket (1) from each spark igniter.

**I** L. Installation of Spark Igniters (Ref. Fig. 206)

- (1) Install a new copper gasket (1) on each spark igniter (2).
- (2) If necessary, chase igniter boss threads (Ref. 72-30-04, Approved Repairs).

**CAUTION:** APPLY COMPOUND TO IGNITER THREADS OR IGNITER BOSS THREADS ONLY.

- (3) Apply a thin coat of anti-seize compound (PWC06-009 or PWC06-023) to spark igniter threads.

**NOTE:** Spark igniter threads must not be lubricated with oil.

- (4) Install spark igniters in bosses at 4 o'clock and 9 o'clock positions on gas generator case. Tighten igniters 300 lb.in., loosen to zero, and retighten 300 to 360 lb.in.
- (5) Insert central conductor of ignition cable into respective spark igniter.

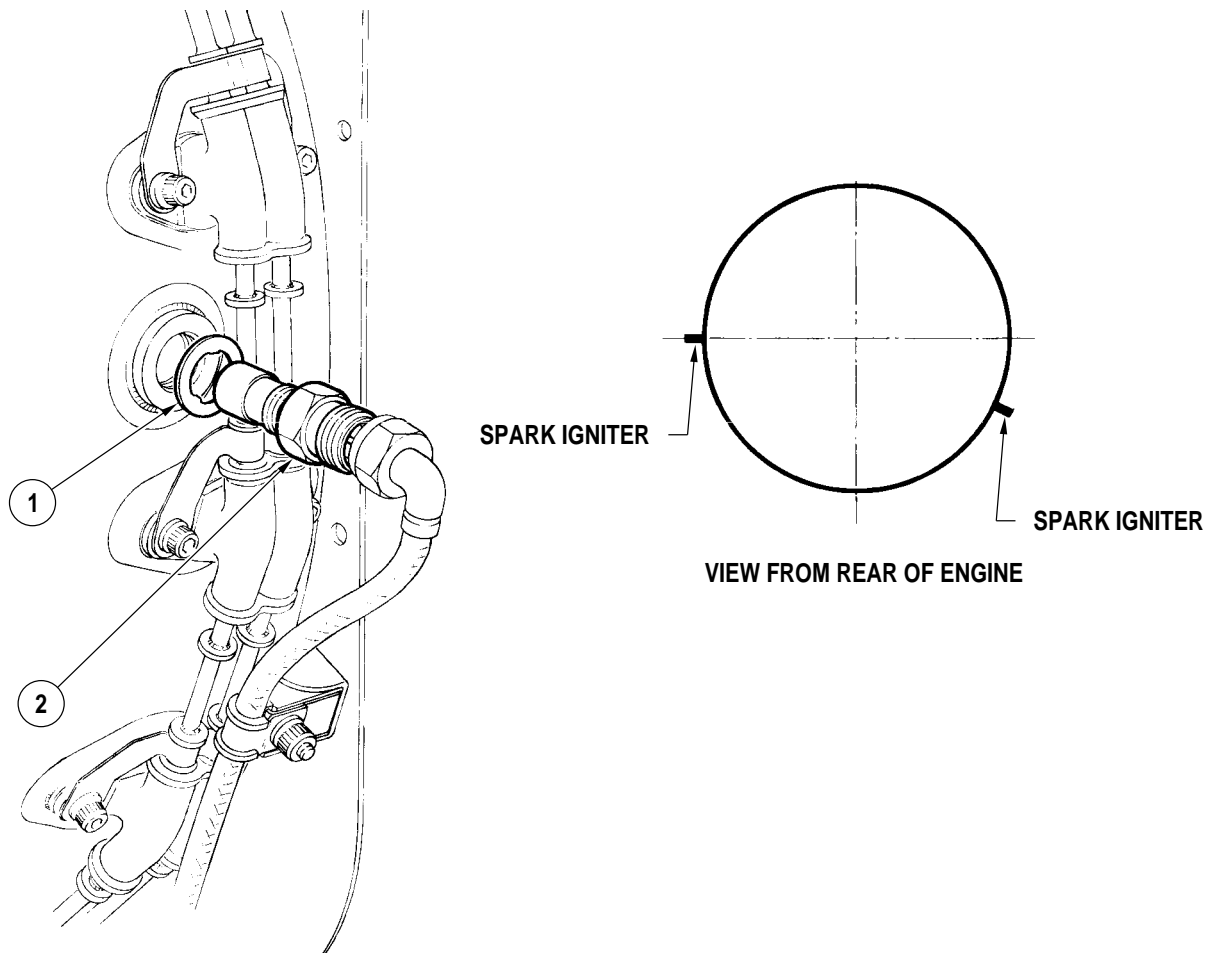
6. Cleaning/Painting

A. Spark Igniters

**CAUTION:** DO NOT CLEAN THE NOSE (FIRING) END OF THE IGNITERS. DO NOT REMOVE CARBON FROM THE ELECTRODES OR FROM ANNULAR GAP AREAS. CARBON DEPOSITS IN THE GAP AREA ACT AS AN AID IN IGNITER OPERATION.

- (1) Using a felt swab soaked in isopropyl alcohol (PWC11-014) or engine cleaner (PWC11-031), clean the inside surface of the terminal well and contact pin.

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Removal/Installation of Spark Igniters  
Figure 206

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Key to Figure 206

1. Copper Gasket
2. Spark Igniter

- (2) Dry using clean, dry compressed air.

B. Ignition Cables

**CAUTION:** ISOPROPYL ALCOHOL, (PWC11-014), IS FLAMMABLE AND HARMFUL TO EYES AND BREATHING PASSAGES. KEEP AWAY FROM IGNITION SOURCE. WEAR PROTECTIVE CLOTHING AND USE IN PROPERLY VENTILATED AREA.

**CAUTION:** DO NOT IMMERSE CABLE IN ALCOHOL.

- (1) Clean inside of cable terminal with a wood stick (0.050 to 0.060 in. dia.) dampened with isopropyl alcohol (PWC11-014).
- (2) Spray isopropyl alcohol (PWC11-014) in terminal to remove any dirt or foreign material.
- (3) Dry using clean, dry compressed air.

7. Inspection/Check

A. Ignition Cables

- (1) Inspect cables for signs of damage to braiding and general condition.
- (2) Inspect cable coupling nuts for corrosion.
- (3) Inspect central conductor and insulation for contamination and burning.
- (4) Do retention test on igniter end of cable only:
  - (a) Connect contact with tool (Ref. Table 201).
  - (b) Contact must hold a 0.125 lb. weight.
  - (c) If contact does not hold weight, ship cable to an authorized repair shop for inner cable replacement.

TABLE 201, Retention Rest Tool Specification

Pin Diameter	Pin Surface Finish	Weight
0.0613 to 0.0617 inch	8 to 16 $\mu$ inch	0.125 lb.

B. Spark Igniters

- (1) Inspect the exterior cylindrical area of the firing end of the igniter shell for chafing wear. Wear is acceptable to a depth of 0.015 inch.

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- (2) Inspect the igniter shell and electrode for erosion (Ref. Fig. 207 and Table 202). If erosion equals or exceeds amounts shown, reject the spark igniter.
- (3) Do a functional test on acceptable and replacement spark igniters (Ref. 74-00-00, Adjustment/Test).

TABLE 202, Spark Igniter Erosion Limits

P&WC PART NO.	VENDOR NAME AND PART NO.	DIM. A (IN)	DIM. B (IN)
* 3014986	Champion: FHE-182	0.3437	0.0312
* 3014985	Bendix: 10-380700-1	0.2500	0.0310
* 3024706	A.C.: 5611760	0.2750	0.1000
** 3031213	Bendix: 10-390667-1	0.3000	N/A
**3035102	Champion: CH34055	0.3000	N/A

\* Earlier parts supplied under ordering Part No. 3014981.  
 \*\* Later parts supplied under ordering Part No. 3032096. Igniters eroded beyond limits should be replaced by latest part(s), if available.

8. Approved Repairs

A. Cable Braiding Minor Damage

- (1) Examine damaged area. Make sure damage does not exceed 0.375 inch long, edge of damage is at least 0.500 inch from nearest connector or flange and there is no damage to underlying insulation.

**WARNING:** CLEAN CABLE ASSEMBLY IN A WELL-VENTILATED AREA. AVOID PROLONGED INHALATION OF FUMES. WEAR PROTECTIVE (RUBBER) GLOVES AND WASH HANDS AFTER EXPOSURE TO CLEANER.

**WARNING:** WEAR PROTECTIVE EQUIPMENT FOR EYES AND FACE WHEN USING COMPRESSED AIR. AIR PRESSURE MUST NOT EXCEED 30 PSI MAXIMUM.

- (2) Clean damaged area of braiding with clean cloth dampened with solvent (PWC11-014) or (PWC11-032), to remove all contaminants from ignition cable.

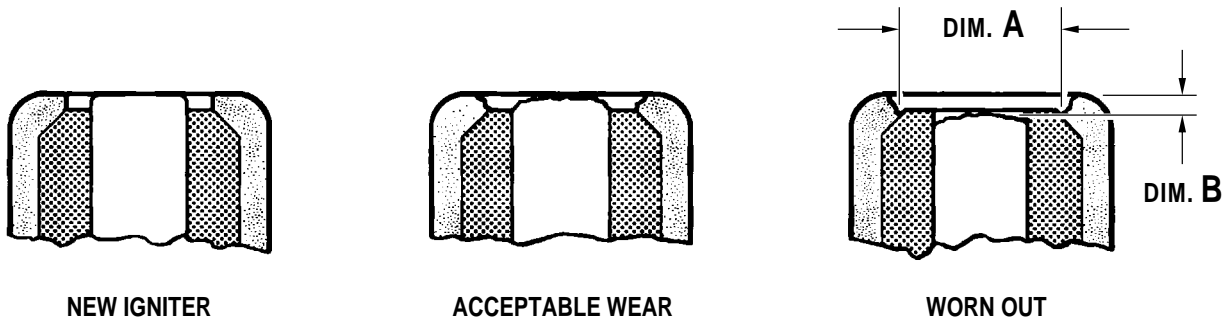
**CAUTION:** SOLDERING IRON MUST NOT EXCEED 250 WATTS. APPLY ONLY ENOUGH HEAT TO FLOW SOLDER.

- (3) Use a solder (PWC05-058) with suitable flux to solder damaged area. Overlap damaged area by approximately 0.125 inch.
- (4) Clean braiding with solvent (PWC11-014) or (PWC11-032), then dry repaired area with filtered, compressed air not exceeding 30 psi.
- (5) Smooth repaired area with abrasive cloth to blend with braided surface. Repeat Step (4), as required.

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**CAUTION:**

SHOULD AN IGNITER PLUG BE DROPPED, INTERNAL DAMAGE,  
POSSIBLY NOT DETECTABLE BY TEST, CAN OCCUR.  
RECOMMENDATION IS TO REPLACE THE IGNITER PLUG.



NOTE: FOR DIMENSIONS A AND B REFER TO TABLE 201.

C174

Spark Igniter Erosion Limits  
Figure 207

**74-20-00**

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- (6) Check cable assembly for continuity and insulation resistance prior to installation (Ref. AdjustmentTest).

**B. Cable Braiding Major Damage (Ref. Fig. 208)**

- (1) Examine damaged area. Make sure damage, (Ref. Subpara. A.), does not exceed 1.00 inch long and is at least 0.500 inch from nearest connector, flange or existing repair. Replace ignition cable assembly if damage exceeds these limits.
- (2) Remove loose strands of braiding around damaged area.
- (3) Wrap tape (PWC05-066A) around cable braiding, covering all of damaged area as shown.
- (4) Wrap repaired area with stainless steel wire as shown. Hold wrapping wire supply along length of cable braid beginning from the left. Starting at opposite end, wrap wire tightly and uniformly over cable braiding and repaired area.

NOTE: Make sure wire overlaps tape and contacts cable braiding at each end of repair.

- (5) When approximately two-thirds of wrapping is completed, allow short end of loop to remain exposed. Continue wrapping wire to complete remaining distance, shown as "1/3X".
- (6) After final turn of wrapping, insert wire "A" through loop as shown. Cut off surplus end "B" of wire so that length is approximately one-third of repair length. Pull loop and "C" until wire at "A" is snug and end "B" of wire has just disappeared underneath final turn of wrapping. Cut wire and "C" flush.
- (7) Test cable assembly for continuity and insulation resistance prior to usage (Ref. AdjustmentTest).

**9. Adjustment/Test**

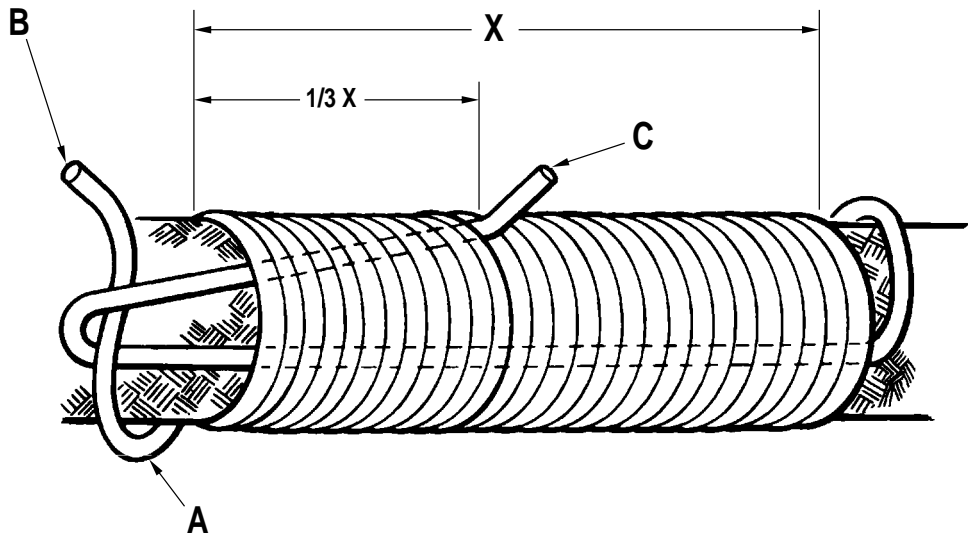
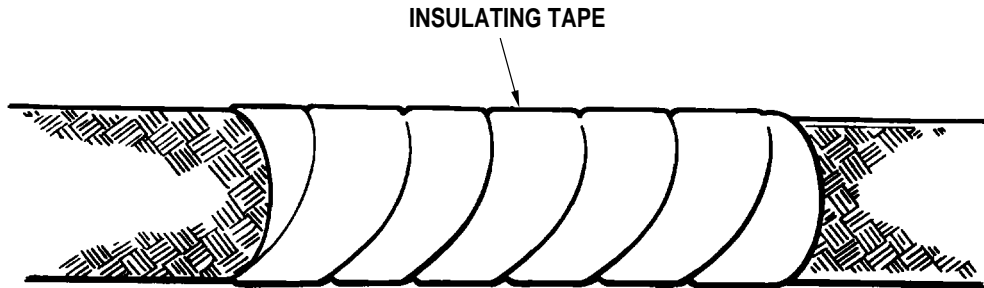
**A. Ignition Cables**

- (1) Check for continuity using an ohmmeter Model 260, or other low voltage continuity device. Resistance from terminal to terminal must be 0.5  $\Omega$  max.
- (2) Insulation resistance between metal braiding and inner cable must be 100 K $\Omega$  min.

NOTE: Return defective cables to authorized repair shop for inner cable replacement.



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Repair of Ignition Cable - Major Damage  
Figure 208

I



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IGNITION CABLES (GLOW PLUGS) - DESCRIPTION AND OPERATION

1. Description and Operation

The two individual ignition cable assemblies carry the electrical energy output from the current regulator to the glow plugs. Each cable assembly consists of an insulated copper wire contained in a flexible metal braiding. The cables are assembled to appropriate connectors for connection to glow plugs at the 4 and 9 o'clock positions on gas generator case, and to receptacles on current regulator. Two mounting flanges, brazed onto the flexible braiding of each cable, provide attachment to the center and rear fireseal mount rings.



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IGNITION CABLES (GLOW PLUGS) - MAINTENANCE PRACTICES

1. General

- A. Maintenance personnel should make reference to the INTRODUCTION section and Chapter 70-00-00 STANDARD PRACTICES of this manual to familiarize themselves with general procedures.
- B. Install suitable protective caps/covers over all disconnected tubes/lines and component openings.
- C. Lockwire shall comply with specification AMS5687, heat and corrosion resistant steel wire MS9226-03, 0.025 inch diameter, and will not be specified in instructions.

2. Consumable Materials

Not Applicable

3. Special Tools

Not Applicable

4. Fixtures, Equipment and Supplier Tools

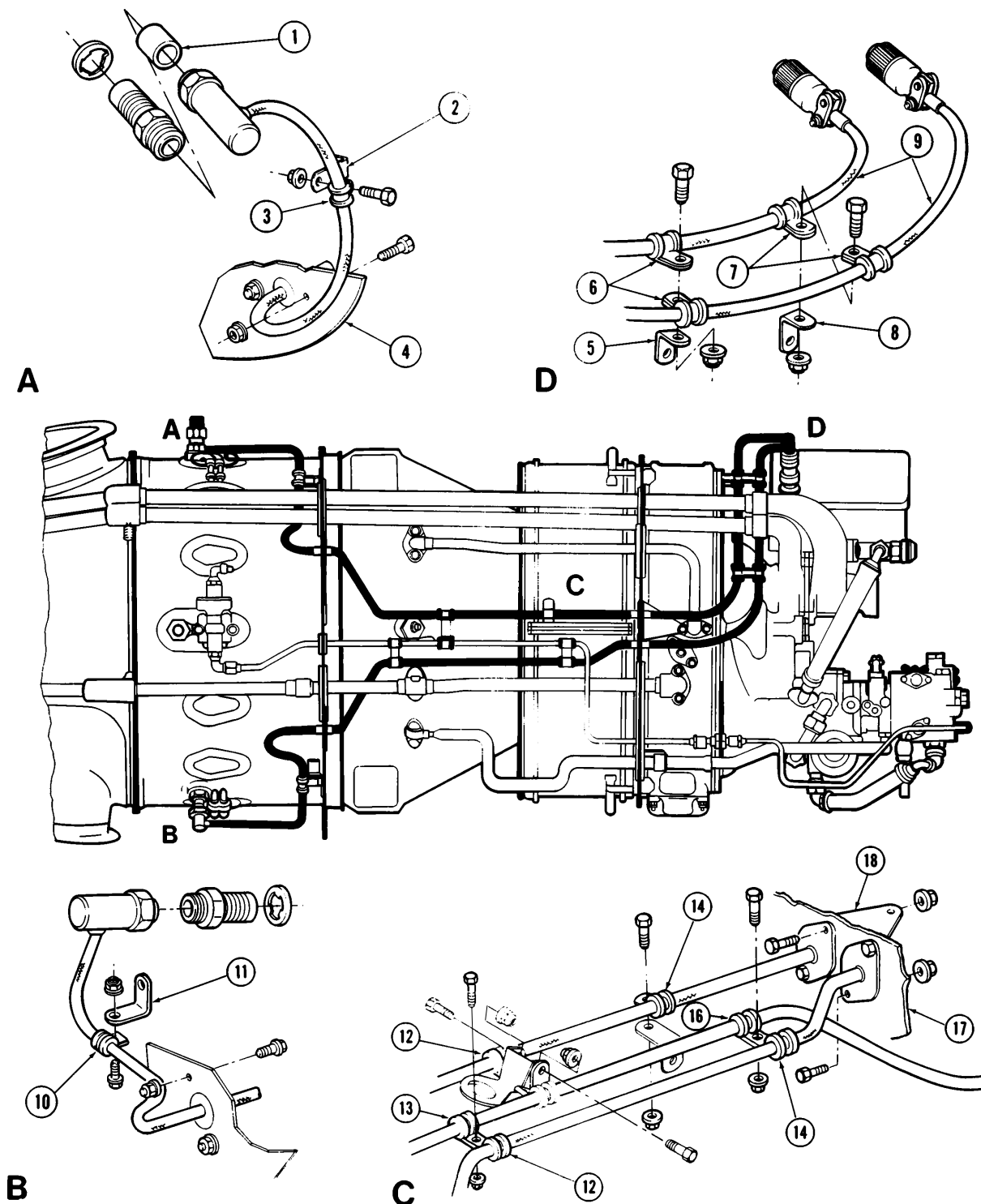
Not Applicable

5. Removal/Installation

A. Removal of Ignition Cables (Glow Plugs) (Ref. Fig. 201)

- (1) Disconnect the power input cable from the receptacle on the ignition current regulator.
- (2) Disconnect the ignition cables (9) from the receptacles on the current regulator.
- (3) Disconnect the ignition cables from the respective glow plug (Views A and B). Make sure the bushings (1) are retained within the connector of each cable.
- (4) Detach the ignition cables (9) from the engine as follows:
  - (a) Views A and B: Remove the self-locking nuts and bolts, and remove the clamps (3 and 10) securing the respective cable to the brackets (2 and 11) on the center fireseal.
  - (b) View C: Remove the self-locking nuts and bolts, and remove the clamps (12) from the respective cable; remove the self-locking nuts and bolts, and remove the back plate (15) and clamps (14). The clamps (13 and 16) may be left on the respective fuel line.
  - (c) View D: Remove the self-locking nuts and bolts, and remove the clamps (6) and (7) securing the respective cable to the brackets (5 and 8).

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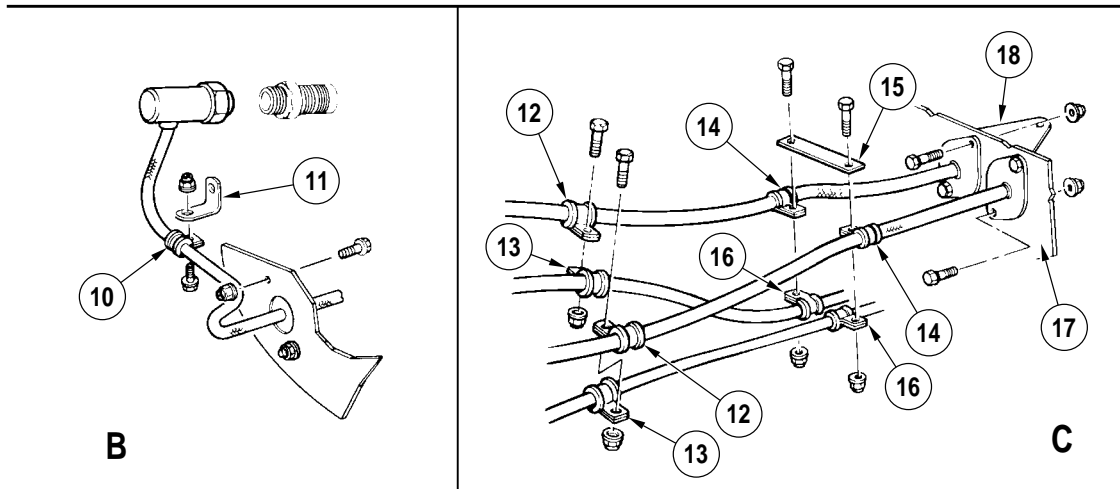
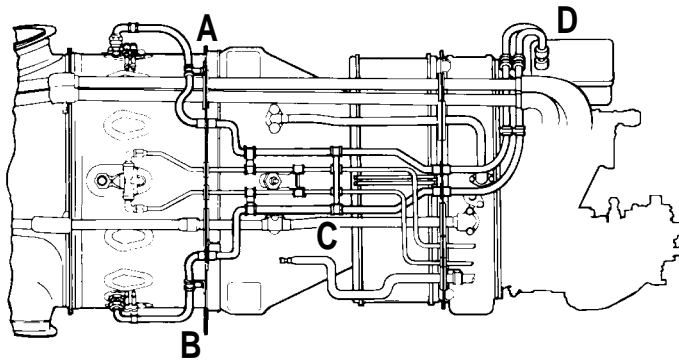
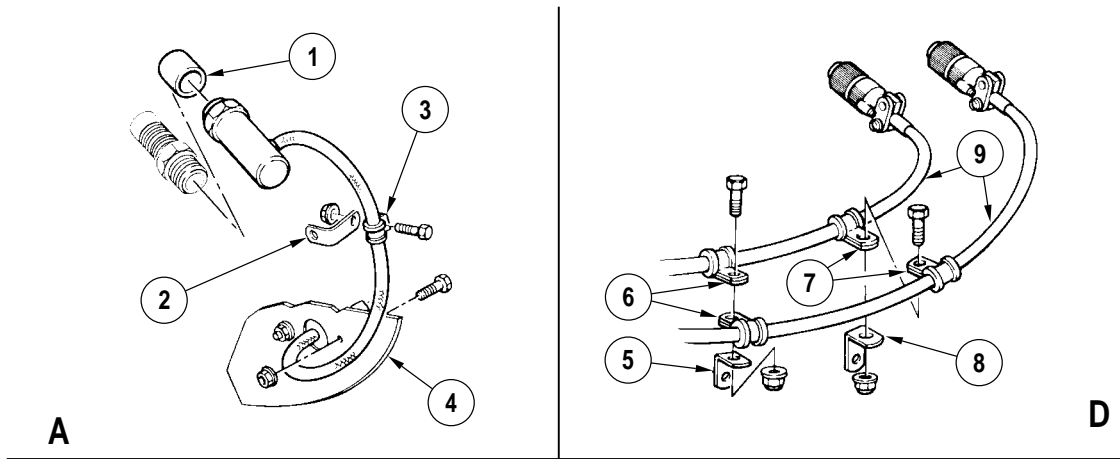
Removal/Installation of Glow Plug Ignition Cables  
 Figure 201 (Sheet 1 of 2)

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Key to Figure 201

1. Bushing
2. Bracket
3. Clamp
4. Center Fireseal (Ref.)
5. Bracket
6. Clamps
7. Clamps
8. Bracket
9. Ignition Cables
10. Clamp
11. Bracket
12. Clamps
13. Clamps
14. Clamps
15. Back Plate
16. Clamps
17. Rear Fireseal (Ref.)
18. Fireseal Support Bracket

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Removal/Installation of Glow Plug Ignition Cables  
 Figure 201 (Sheet 2)



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- (d) Remove the self-locking nuts and bolts securing the mounting flange of each cable at the respective locations on the center and rear fireseals.
  - (5) Remove the cables (9) by withdrawing rearward from the center fireseal, and forward from the rear fireseal.
- B. Installation of Ignition Cables (Glow Plugs) (Ref. Fig. 201)
- (1) Install and connect the ignition cables (9):
    - (a) Pass the elbowed connector of each cable through the center fireseal (from the rear side) and route to the respective glow plug at the 4 and 9 o'clock positions on the gas generator case.
    - (b) Make sure the bushings (1) are fitted in the connector of each cable, and connect the cables to the glow plugs. Tighten the coupling nuts fingertight plus 45 degrees.
    - (c) Route the cables rearward and pass through the rear fireseal to the ignition current regulator; connect the cables to the respective receptacle on the regulator. Tighten the connectors fingertight plus 45 degrees.
  - (2) Secure the ignition cables (9) to the engine:
    - (a) Secure the mounting flanges of each cable to the respective fireseal with bolts and self-locking nuts. The bolt heads are to be on the air inlet side of the fireseals. The upper bolts also secure the support bracket (18) to the rear fireseal.
    - (b) Views A and B: Locate the clamps (3 and 10) on the cables and secure the clamps to the brackets (2 and 11) with bolts and self-locking nuts.
    - (c) View C: Locate the clamps (12) on the cables and secure these clamps to the clamps (13) retained on the fuel lines with bolts and self-locking nuts; locate the clamps (14) on the cables and secure these clamps to the clamps (16) retained on fuel lines with the back plate (15), bolts and self-locking nuts.
    - (d) View D: Locate the clamps (6 and 7) on the cables and secure these clamps to the respective brackets (5 and 8) with bolts and self-locking nuts.
    - (e) Tighten all self-locking nuts and torque 36 to 40 lb.in.
  - (3) Connect the power input cable to the receptacle on the current regulator.



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GLOW PLUGS - DESCRIPTION AND OPERATION

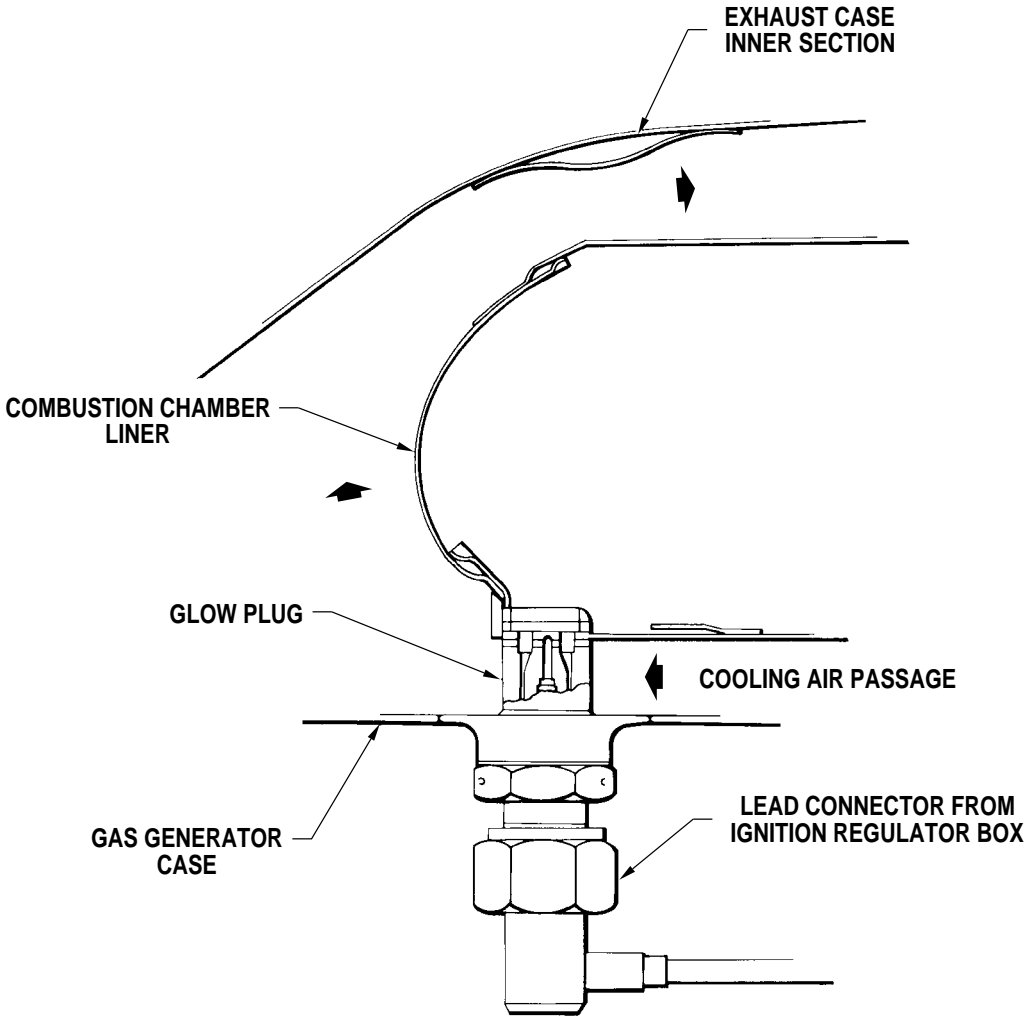
1. General (Ref. Fig. 1)

The glow plugs, located at the 4 and 9 o'clock positions on the gas generator case, adjacent to fuel manifold adapters, consist of a double-threaded body encasing a helically wound coil heating element.

Four holes, equispaced on the periphery of the glow plug body and leading into an annulus below the coil, provide passage of bleed air, derived from compressor discharge air, to promote ignition.

During starting procedure, fuel sprayed by the fuel nozzles runs into the annulus and is vaporized. The combination of bleed air and vaporized fuel is ignited by the hot coil (approximately 1260°C) element, to produce a hot streak or torching effect, which ignites the remainder of the fuel in the combustion chamber area.

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Glow Plug Installation (Typical)  
Figure 1

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GLOW PLUGS - MAINTENANCE PRACTICES

1. General

- A. Maintenance personnel should make reference to the INTRODUCTION section and Chapter 70-00-00 STANDARD PRACTICES of this manual to familiarize themselves with general procedures.
- B. Install suitable protective caps/covers over all disconnected tubes/lines and component openings.
- C. Lockwire shall comply with specification AMS5687, heat and corrosion resistant steel wire MS9226-03, 0.025 inch diameter, and will not be specified in instructions.

2. Consumable Materials

Not Applicable

3. Special Tools

Not Applicable

4. Fixtures, Equipment and Supplier Tools

Not Applicable

5. Removal/Installation

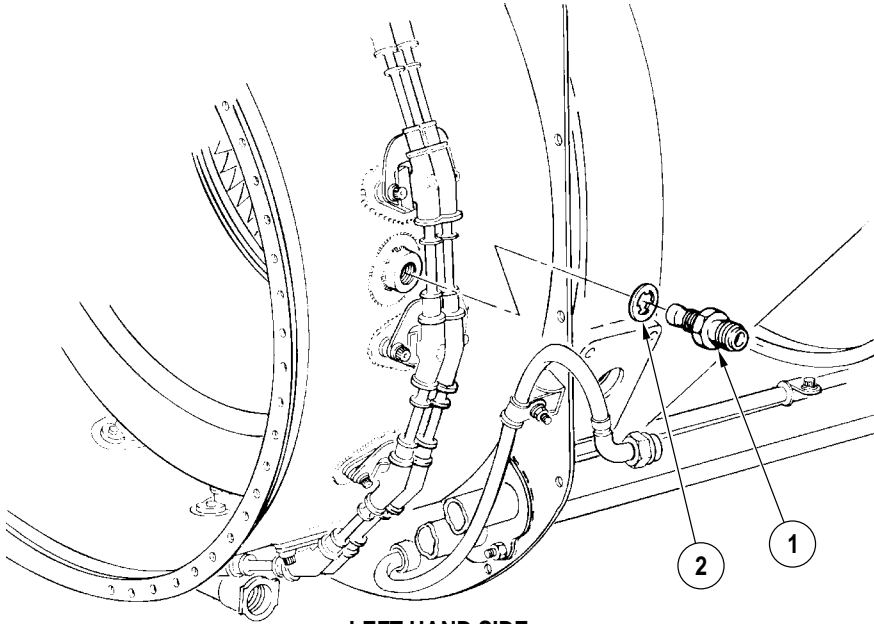
A. Removal of Glow Plugs (Ref. Fig. 201)

- (1) Disconnect the power input cable from the receptacle on the ignition current regulator (Ref. 74-10-01).
- (2) Disconnect the ignition cables from the respective glow plug (1) (Ref. 74-20-01).
- (3) Remove the glow plugs from the gas generator case and discard the gaskets (2).

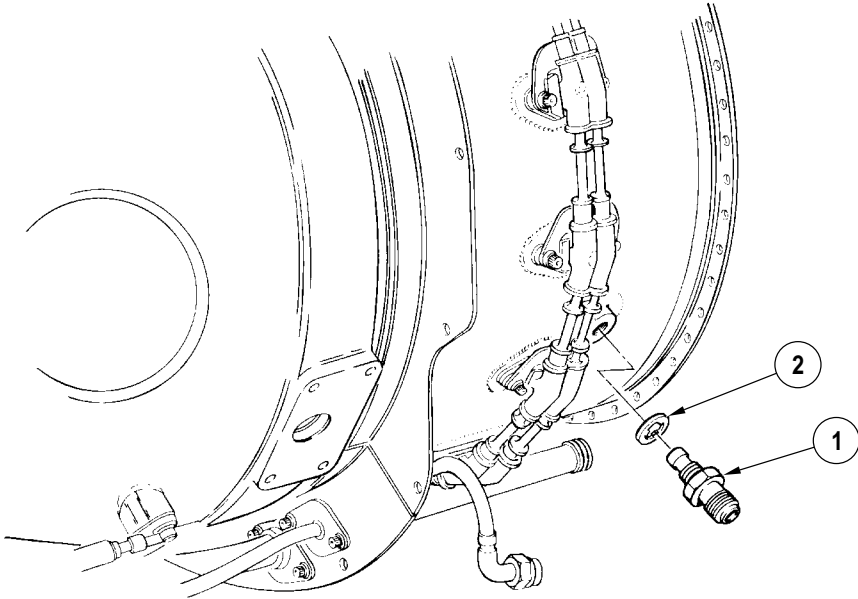
B. Installation of Glow Plugs (Ref. Fig. 201)

- (1) Install the glow plugs (1) with gaskets (2), in the bosses at the 4 and 9 o'clock positions on the gas generator case. Tighten the plugs to 300 lb.in., then loosen to zero. Retighten 300 to 360 lb.in.
- (2) Connect the ignition cables to the respective glow plug (Ref. 74-20-01).
- (3) Connect the power input cable to the receptacle on the current regulator (Ref. 74-10-01).

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**LEFT HAND SIDE**



**RIGHT HAND SIDE**

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Removal/Installation of Glow Plugs  
Figure 201

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Key to Figure 201

1. Glow Plug
2. Copper Gasket

6. Cleaning/Painting

A. Procedure

- (1) Clean the exterior surfaces of the glow plugs with solvent (PWC11-027) or (PWC11-031). Dry with clean low pressure compressed air.
- (2) Remove carbon deposits from the coil element as follows:

**WARNING:** CARBON REMOVING COMPOUND IS TOXIC AND CAUSTIC. EXERCISE ALL PRECAUTIONS TO PREVENT CONTACT WITH SKIN AND EYES, AND INHALATION OF VAPORS.

- (a) Immerse the element end of the glow plug in Turco Super Carb Compound (PWC11-021), for 10 to 30 minutes.

**CAUTION:** DO NOT USE ABRASIVE BLAST OR HIGH PRESSURE COMPRESSED AIR TO CLEAN THE ELEMENT. SUCH USE CAN CAUSE IRREPAIRABLE DAMAGE TO THE COIL.

- (b) Carefully remove the loosened carbon using a soft nylon brush.
- (c) Rinse the element end of the plug in hot water and dry with clean, low pressure compressed air.

7. Inspection/Check

A. Inspection

- (1) Inspect the glow plugs as follows (Ref. Fig. 202):
  - (a) Check the element for evidence of carbon build-up. Clean as necessary (Ref. Para. 6.).
  - (b) Check the element for the presence of fused area. The maximum fused area must be not more than 0.125 in. x 0.0312 in. (one area only). Plugs with fused area(s) greater than this limit must be discarded.
  - (c) Inspect the threads on body of the plugs for condition.

B. Check

Prior to installation (Ref. Para. 5. B.), check the operation of the glow plugs as detailed in 74-00-00.



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Glow Plug Showing Fused Area (Typical)  
Figure 202



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SPARK IGNITERS - DESCRIPTION AND OPERATION

1. Description and Operation

Information moved to chapter 74-20-00, DESCRIPTION AND OPERATION.



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SPARK IGNITERS - MAINTENANCE PRACTICES

1. General

A. Information moved to Chapter 74-20-00, MAINTENANCE PRACTICES.

2. Consumable Materials

NOTE: Information moved to Chapter 74-20-00, MAINTENANCE PRACTICES.

3. Special Tools

Not Applicable

4. Fixtures, Equipment and Supplier Tools

Not Applicable

5. Removal/Installation

Information moved to chapter Chapter 74-20-00, MAINTENANCE PRACTICES.

6. Cleaning/Painting

Information moved to chapter Chapter 74-20-00, MAINTENANCE PRACTICES.

7. Inspection/Check

Information moved to chapter Chapter 74-20-00, MAINTENANCE PRACTICES.

