# **IGNITION CABLES - MAINTENANCE PRACTICES**

#### 1. General

A. Maintenance practices for the ignition cable consist of removal and installation.

# 2. Description and Operation

A. The two individual ignition cable assemblies carry electrical energy output from ignition exciter to 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 respective connectors on ignition exciter and spark igniters. Mounting flanges for attachment to engine fireseals are brazed onto flexible braiding.

# 3. Tools, Equipment and Materials

A. For a list of required tools, equipment and materials, refer to Ignition - General.

# 4. Ignition Cable Removal/Installation

- A. Remove Ignition Cables (Refer to Figure 201).
  - (1) Remove engine cowling Refer to Chapter 71, Engine Cowling and Nose Cap Maintenance Practices.
  - (2) Remove inertial air separator. Refer to Chapter 71, Inertial Air Separator Maintenance Practices.
  - (3) Isolate electrical power supply from ignition system.
  - CAUTION: When unscrewing coupling nuts (5) of ignition cables, do not allow braiding ferrules or igniter to turn at same time.
  - (4) Remove safety wire from coupling nuts (5) and remove nuts from left and right ignition cables (9) and ignition exciter (3).
  - (5) Remove nuts and bolts securing fireseal mounting flanges (6) to fireseals.
  - (6) Remove nuts and bolts from clamps (10) and withdraw ignition cables (9) from induction air box. Clamps should remain on cables when same cables are to be reinstalled.
- B. Install Ignition Cables (Refer to Figure 201).
  - Thread ignition cables (9) through clearance holes in fire seals (7) and (8) (six o clock position) and install clamps (10). Secure with nuts and bolts.
  - (2) Secure fireseal mounting flanges (6) to rear fireseal (7) and front fireseal (8) with mounting bolts and nuts.

NOTE: Bolt heads should be located on induction air inlet side of fireseal.

CAUTION: Under no circumstances is any lubricant containing grease or silicone or lubricants such as petrolatum to be used on any ignition components.

CAUTION: Do not allow any lubricant to come in contact with central conductors of cables. Contact with conductors may result in a high resistance path which could generate heat and oxidation.

- CAUTION: Do not apply lubricant on any cables having teflon insulated sleeves.
- (3) Lightly spray insulated end of cables having rubber insulated sleeves with fluorocarbon spray lubricant.
- CAUTION: When screwing on coupling nuts (5) of ignition cables, do not allow braiding ferrules or igniter to turn at same time.
- (4) Connect coupling nuts (5) at ends of ignition cables to spark igniters (1) and high-tension output connectors (2) on ignition exciter (3).
- (5) Screw couplings onto mating threads by hand, ensuring that no binding occurs between coupling nut and cable.
- (6) Tighten coupling nuts and torque finger tight plus 45 degrees. Safety wire coupling nuts.
- (7) Install inertial air separator. Refer to Chapter 71, Inertial Air Separator Maintenance Practices.
- (8) Install engine cowling. Refer to Chapter 71, Engine Cowling and Nose Cap Maintenance Practices.



