

# MAGNETO MODIFICATION

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BENDIX 1200 SERIES

## *GENERATION 3 IGNITION*



## **BENDIX 1200 SERIES MAGNETO MODIFICATIONS:**

This section covers the most common modification examples on the installation of the ignition coil terminal stud into the magneto contact points cover. These will usually not require coil lead wire to be lengthened or modified. **Example 1:** The top cover retard stud location. **Example 2:** Top cover side stud location. The main factor to keep in mind is to locate the coil terminal stud away from any chance of grounding out on/in the magneto housing and/or other magneto components. All wires keep clear of any rotating parts and where there is a chance of wire chafing. This is the most typical Bendix S-1200 series modifications performed off the aircraft. A qualified technician familiar with aircraft ignition systems should do this modification. Follow the modification procedures for your specific magneto application.

### **EXAMPLE 1: Top cover retard stud location**

1. This is the location of the original retard stud terminal. If not already in use, this is a good place for access. Remove the top cover to gain access to the coil lead that is connected to the contact points. Remove both leads from the contacts. (Image 1c, 2c)

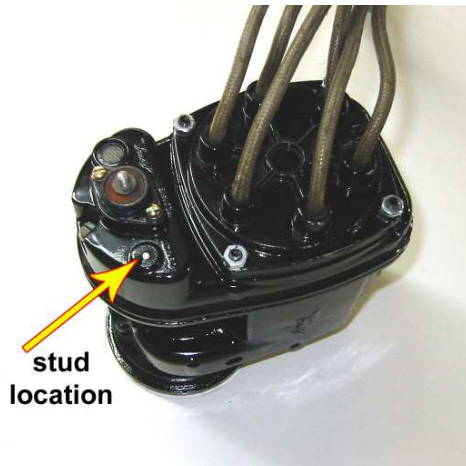


Image 1c



Image 2c

2. The coil lead is long enough to relocate to the specified terminal location on the cover without any splicing. **Note:** *If the coil lead pigtail is too short to reach the new coil terminal stud location. Splice the coil lead with 18 awg tefzel or similar wire. Crimp/solder and insulate with heat-shrink.*
3. Drill a hole sized to .250" in this location to accept the step washers and coil terminal stud hardware. (Image 3c, 4c)



Image 3c



Image 4c

4. The hardware is shown in lay out order for the ignition coil terminal stud into the magneto top cover. The male spade terminal will need to be bent to a 90° angle. Install the Coil stud terminal with male flag terminal. **Note:** *Between the two insulating shoulder washers at the cover housing place a small amount of two-part epoxy for extra rotation resistance on coil terminal stud.* Tighten to 20 – 25 in.-lbs. (Image 5c, 6c)

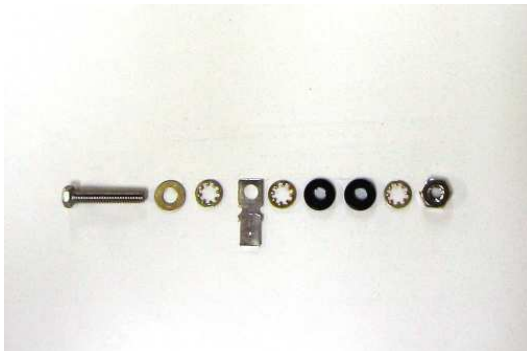


Image 5c



Image 6c

5. Coil stud terminal installed with male flag terminal. (Image 7c, 8c)



Image 7c



Image 8c

6. Connect the coil lead to the new installed spade terminal and capacitor to the contact set. Route the coil lead away from the point's cam and any moving parts to prevent interference chaffing. **Note:** Sometimes a small wire anchor can be used in a spare tapped hole to help retain and route the coil wire if there is concern. **Note:** Clean magneto housing of all drill chips and any type of contamination with compressed air before reassembly. Double check and close up, Install top cover housing screws and nuts, torque to 25-35 in.-lbs, ready to install. (Image 9c, 10c)



Image 9c



Image 10c

#### EXAMPLE 2: Top cover side stud location

1. Here is a good alternate coil stud terminal location on the side of the top cover. The gray area shown the boundary in this location. Install coil terminal stud hardware and bend male spade terminal as necessary for clearance. Follow the same assembly procedures as above. **Note:** The main factor to keep in mind is to locate the coil stud and terminal away from any to grounding out on/in the magneto housing and/or other magneto components. **Note:** Clean magneto housing of all drill chips and any type of contamination with compressed air before reassembly. (Image 11c)



Image 11c