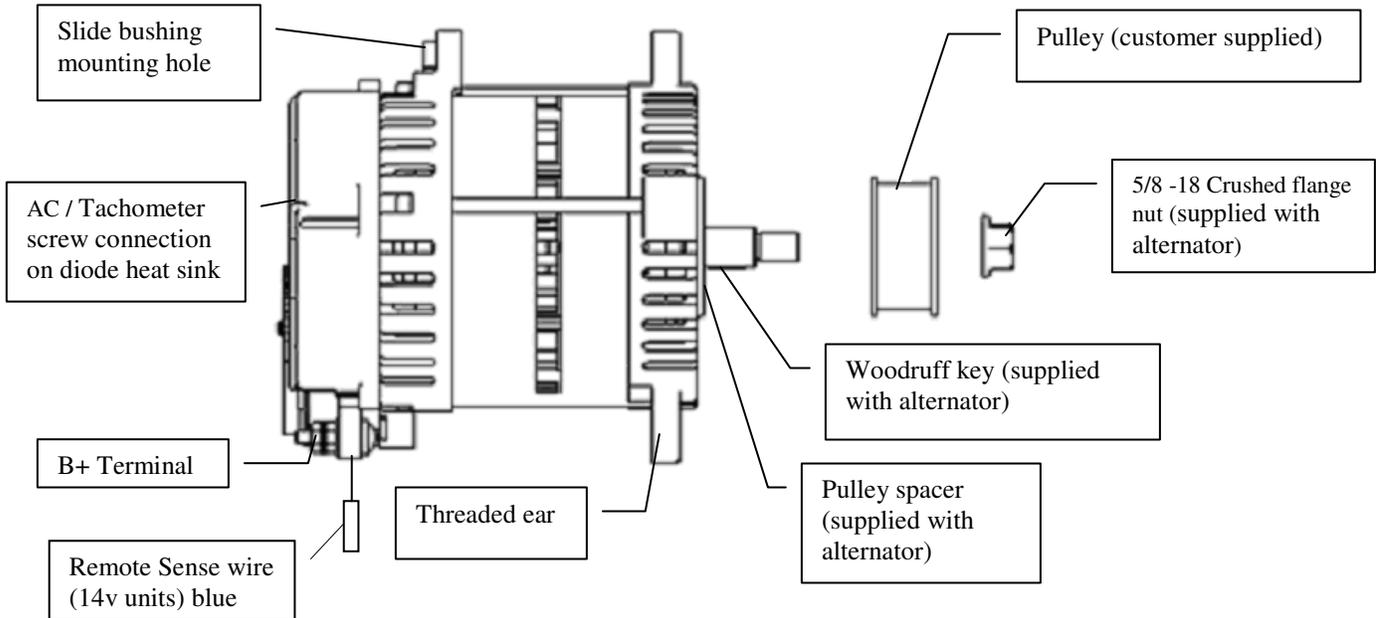


## Eco-Tech J-180 Mount Installation Instructions R1.5

**Model: E42-110J0G0, J-305-I, J9-305-I, J-28V/155-I and IJ-28V/155-I**



This Alternator is a replacement for J-180 mount alternators that have a center-to-center measurement of 8.5" between the drive end pivot hole and the threaded adjusting hole. The Alternator has the standard measurement of 4" between the inside of both pivot ears. In order to check clearance prior to installation, measure the distance from rear of old alternator pulley to the overall clearance length available for the Eco-Tech Alternator. The fit length required for Eco-Tech Alternator is 9". The existing alternator pulley will interchange and Alternator belts will align properly.

1. Disconnect the ground terminal from the battery before removing old alternator.
2. Install the pulley. Tighten nut with impact wrench. Check with torque wrench to ensure **80 ft-lbs of torque**. Always use a new crush nut with each installation of a pulley. Note: the Eco-Tech Alternator has three internal fans. Do not install any additional external fans.
3. The **E42-110J0G0, J-305-I, J9-305-I and J-28V/155-I** Eco-Tech Alternators are case ground. Therefore, both the mating surface of the Alternator and the engine brackets must be cleaned for proper electrical contact. Ground is also carried through ground cable connected to B-. The **IJ-28V/155-I** is isolated ground.
4. Apply thread lock and install Alternator mounting bolts to engine bracket. Bolt tightening sequence: Step 1 Threaded mounting hole, Step 2 Drive end mounting hole, and Step 3 Slide bushing mounting hole. Torque to 45 ft-lbs.
5. Measure belt tension. Tension should not exceed 110 lbs.

**ECOAIR CORP.**

**Twenty-One Overlook Drive, Hamden, CT 06514**

Phone (203) 230-3000, [www.ecoair.com](http://www.ecoair.com), E-mail: [sales@ecoair.com](mailto:sales@ecoair.com)



6. Connect the vehicle positive cable to the Alternator B+ terminal and vehicle ground cable to the Alternator B- terminal. Torque to 8 ft-lbs. (100 in-lbs.).
7. If vehicle is equipped with an alternator driven tachometer and/or hour meter, attach the wire lead to threaded hole in rectifier end heat sink using the screw installed on alternator.
8. The connection to no charge indicator light threaded hole is optional and only necessary when vehicle is so equipped. Location is called out on the black regulator back plate. Screw and ring terminal are provided with these instruction.
9. Insure that wire size is adequate by checking the accompanying wire sizing table below.
10. Start engine. Check Alternator output voltage at alternator B+ and B- studs for proper charging.
11. For additional installation assistance, please call 1-866-230-3100.

**NOTE: ALL Eco-Tech Alternators are equipped with soft start ramp up. This feature delays initial output approximately 3 seconds.**

### **RECOMMENDED MINIMUM WIRE SIZE For Eco-Tech Alternators**

#### 14 Volt Alternators

Cable Length	Recommended Minimum Wire Size			
	B+ and B- Cable	No Charge Indicator	AC Output Wire	Remote Sense
Less than 12 Feet	AWG 2/0	AWG 16	AWG 16	AWG 16
More than 12 Feet	AWG 4/0	AWG 16	AWG 16	AWG 16

#### 28 Volt Alternators

Cable Length	Recommended Minimum Wire Size			
	B+ and B- Cable	No Charge Indicator	AC Output Wire	Remote Sense
Less than 12 Feet	AWG 1/0	AWG 16	AWG 16	AWG 16
More than 12 Feet	AWG 2/0	AWG 16	AWG 16	AWG 16

**We recommend using cable lugs with a 5/16” stud hole, if possible.**