All G1 and G2 drives are to be grounded at the end of 2007 and replaced with a generation 3 unit.

It has now been shown that it is time to update all previous engines with the latest technology reduction drive unit. This will continue to maintain a very low failure rate. Generation 3 drive units are available at eaainc@aol.com with a return of the earlier drive.

Jan Eggenfellner

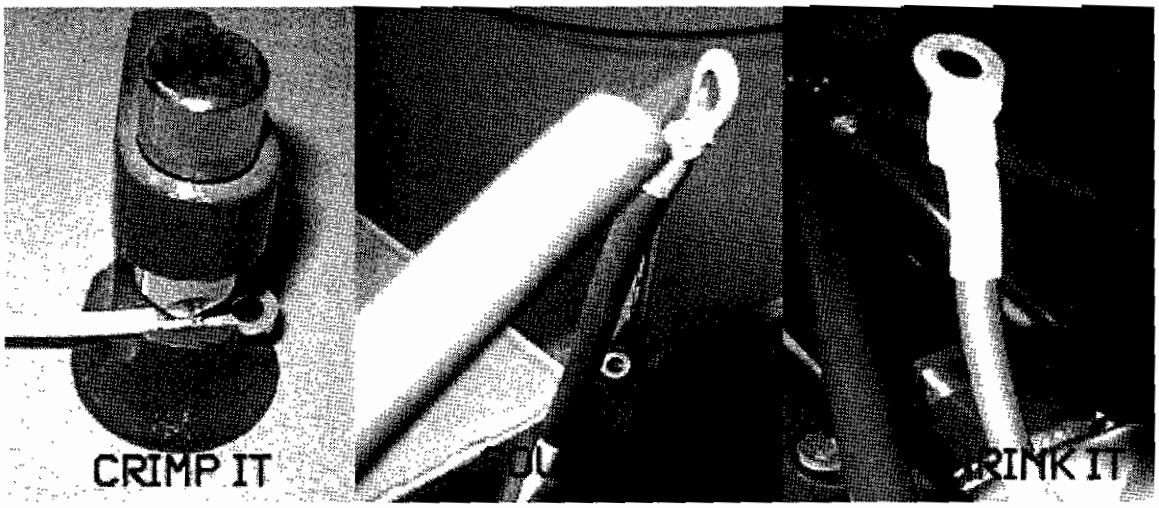
- GEN-III Propeller Gearbox Upgrade
- Propeller Gearbox Alignment Procedure
- Quinti Brush Block for G3 Gearbox (Service Bulletin)
- FRONT SEAL REPLACEMENT PROCEDURE ON A G3 DRIVE UNIT
- Pictures of G3 drive unit upgrade procedure
- EIS Tachometer Enable procedure on some instruments
- Oil cooler mounting supports -2007 and earlier E-6
- Oil cover plates - 2007 E-6 only (Yellow valve covers)
- Timing Wheel - 2007 E-6 only (Yellow valve covers)
- Quinti Slip ring mod to fit G3 drive unit
- The importance of proper electrical cable fabrication

ADDITIONAL SERVICE BULLETINS HERE

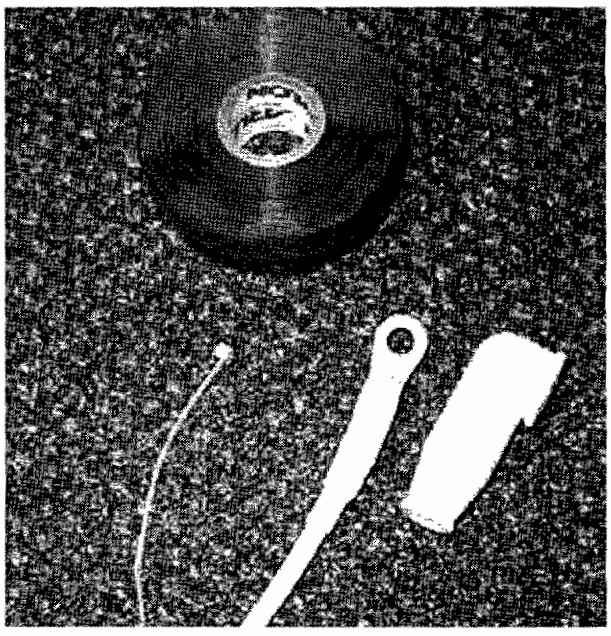
FOR 2007 - NON TURBO - DELIVERED ENGINES WITH YELLOW VALVE COVERS

Creating Good Cable Connections

All battery cables should be constructed from 6AWG Teflon coated cable. Most other high-current cables will be constructed from 8AWG cable. Good cable terminal ends can be constructed by crimping, then soldering and cleaning the terminal lugs, then covering them with shrink tubing and finally silicone rubber boots at the battery ends. The large-size crimping tool shown below was purchased at a local hardware store for about $15. Unfortunately, it has no vendor markings or part number, but you can get these at most good hardware or electric supply stores. One good whack with a hammer makes an excellent crimp! Many electrical stores will also rent large-size crimping tools. If you've got your ducks lined up, you can crimp all of the connections in under an hour.



High-Temp Silicone Rubber Tape and Silicone Rubber Cable Boots



Cable Lugs, Step by Step

OK Clark Cable, let's give it a try!

1. Use sharp cable-cutters to cut the cables to length. Leave a little extra length to ease maintenance and prevent tugging on the battery terminals.
2. Carefully cut away a short section of the insulation from your cable end. Remove only as much as needed for the lug you are using.
3. Slip one or two pieces of shrink-tubing about 2" long over your cable. Slide them far enough down the cable so the heat of soldering will not cause them to shrink. I like to color-code my cables, red for positive, black for negative, and white for all others. You can also use a piece of clear shrink tubing over printed labels to make professional looking labeled wiring.
4. Place a lug over the bare wire and position the assembly in your cable end crimping tool with the lug seam facing up
5. Strike the crimping tool with a hammer hard enough to form a secure crimp.
6. Clamp the cable in a vise about six inches away from the terminal lug with the lug angled slightly upward.
7. Fire up your propane torch and apply just enough heat to the loop-end of the lug to melt solder. Self-igniting trigger-type torches are well worth their extra price.
8. Apply enough solder to flow into the lug and make a good airtight connection. Some prefer to touch solder to the cuff-side of the lug, but this is not necessary if you have the right amount of heat.
9. Let the assembly cool.
10. Clean off any excess solder flux with alcohol or equivalent flux cleaner.
11. Slide the first section of heat-shrink tubing up-to-but-not-over the cuff of the lug and shrink it with an electric heat-gun..
12. Slide the second section of heat-shrink tubing over the first section and over the cuff of the lug. Shrink it.
13. Where attaching to a battery, insert a silicone rubber boot. It is not strictly necessary to install boots on grounds, but it makes for a nicer appearance and helps to protect the connection from the elements.

All your cables should be secured with Adel clamps and/or tie-wraps to relieve any strain from the terminal bolts or screws. This is particularly important where the cables are attached to circuit breakers since these use only a small screw for attaching the terminal lugs. When properly clamped, with all strain relieved, a terminal lug should remain in it's right location even when you remove the screw or bolt that secures it. This little detail will go a long way towards improving the reliability of your electrical system.

Tie-wraps are great for holding bundles of wires together, but avoid using them to attach wires to metal components that might cause abrasion against the wires. Also beware of using them in high-temperature locations. Use padded Adel clamps for these cases. Waxed lacing string is also commonly used for bundling wires, but for obvious reasons, avoid using this method in high-temperature locations.