

When the Alert Transmitter (on the crewmember) trips the Alert Receiver (on the vessel), the Receiver closes its relay contacts, available as screw clamp terminals on the back panel socket. These relay contacts are used to kill the engine. Our receiver relay contacts are rated at 1 amp max, so if you want to shut down an engine whose electrical shut down circuit draws more than 1 amp, use an external relay, fed by our relay

The Receiver relay contacts on the back panel socket are labeled as:

NO (normally open): This terminal of the internal relay is normally open (not connected) to the C (common) terminal, and closes to the C (common) terminal when the Receiver detects an Alert Transmitter signal.

NC (normally closed): This terminal of the internal relay is normally closed (connected) to the C (common) terminal, and opens (disconnects) from the C (common) terminal when the Receiver detects an Alert Transmitter signal.

C (common): This terminal of the internal relay is normally connected to the NC terminal, and disconnects from the NC terminal and connects to the NO terminal when the Receiver detects an Alert Transmitter signal.

Directions for an engine that needs power REMOVED in order to shut it down: (See Alert Rcvr Wiring Diagram for engine shutdown if power cut.pdf)

- 1. Find and cut the wire coming out of the key switch that needs power **<u>cut</u>** to shut the engine down. (This wire is hot when the engine is running, and dead when the engine is shut down.)
- 2. Connect one side of the cut to your external relay to a normally closed terminal, and connect the other side of the cut to your external relay to the common terminal on the same set of relay contacts.
- 3. You can extend the wires with more wire of a similar gauge if needed, so you can mount the relay in a convenient and dry location.
- 4. Run 2 wires from your relay to the receiver, connecting one relay coil terminal to receiver terminal NO, then connecting the other relay coil terminal to receiver terminal GND. Again, you can extend the wires with more wire of a similar gauge if needed, so you can mount the receiver in any convenient location.
- 5. Then add a short jumper from receiver terminal C to receiver terminal +12.

Directions for an engine that needs power APPLIED in order to shut it down: (See Alert Rcvr Wiring Diagram for engine shutdown if power applied.pdf)

- 1. Find the wire coming out of the key switch that needs power <u>applied</u> to shut the engine down. (This wire is dead when the engine is running, and hot when the engine is being shut down, and often feeds power to an engine shutdown solenoid or other similar device which kills the engine when power is applied.)
- 2. Connect the key switch wire that needs power **applied** to shut the engine down to your external relay to a normally open terminal, then connect the key switch hot wire (This wire is always hot.) to your external relay to the common terminal on the same set of relay contacts.
- 3. You can extend the wires with more wire of a similar gauge if needed, so you can mount the relay in a convenient and dry location.
- 4. Run 2 wires from your relay to the receiver, connecting one relay coil terminal to receiver terminal NO, then connecting the other relay coil terminal to receiver terminal GND. Again, you can extend the wires with more wire of a similar gauge if needed, so you can mount the receiver in any convenient location.
- 5. Then add a short jumper from receiver terminal C to receiver terminal +12.