

Section: XII (Bulletins)
Number: 47-466-

Date : 11/15/66

MerCruiser Radio Noise Suppression

MERCRUISER RADIO NOISE SUPPRESSION

Suggestions for Good Reception

The following suggestions regarding installation of radio receivers and other electronic equipment may be helpful:

- 1. Install antenna as far as practicable from engine and remote control cables. Also, select an antenna suitable for the frequency on which it is intended to operate.
- 2. Antenna should be shielded and shield should be grounded.
- 3. All grounds should terminate at one point in order to avoid forming a ground loop circuit.
- 4. Condition of breaker points plays an important role in preventing marginal ignition preformance, as a completely suppressed ignition system would be less tolerable of breaker point neglect. Breaker points, that are well maintained, help decrease any possible noise signals and also provide the utmost in engine performance.
- 5. Receiver-transmitter voltage must be taken directly from the battery. Tapping into the accessory ignition switch will result in feedback and intercoupling, thus causing interference between the electrical system and the radio circuit.
- 6. Alternator brushes ride directly on the slip rings. If noises, similar to direct current generator "whine" are experienced, check brush contact and clean slip rings.

Servicing MerCruiser Radio Noise Suppression Kits

Under no circumstance should the shielded cables be pierced, as this will short the cables to ground and damage them. To make connections to spark plugs for timing or scope readings use Adaptor Lead C-91-39212.

Spark plug cables are not to be repaired and require replacement if defective or damaged. Remove and replace cables as follows:

- 1. Lift snap nut off cap with screwdriver and pull cable from distributor cap.
- 2. To insert new cable, lubricate with DC4 Compound (C-92-24108) and fold insulator as shown in Figure 1, over. Press insulator and cable into distributor cap and press snap nut onto cap.

MerCruiser Radio Noise Suppression Kits are made of the finest equipment available for reduction of radio and electronic interference caused by ignition and alternator systems. When installed according to instructions, it will greatly reduce ignition and alternator interference. If radio interference is still experienced, the following may be of help in locating it:

Source of Noise	Type of Noise
Ignition System	A "popping" noise that will increase with engine RPM. Noise will stop instantly when key is turned off.
Alternator	High pitched "whine". Check brush contact and clean slip rings.
Regulator	A "rasping" noise that will continue for a short time after key is turned off at a fast idle.
Instruments	A "hissing and crackling" noise that is beard when instruments are jarred with ignition on.

A check can be made for instrument interference by following these instructions:

- 1. Turn radio on full volume.
- Turn ignition switch on and jar all instrument gauges.
- 3. Disconnect the "hot" wire of all instrument gauges except the one being checked. Temperature gauge is the most frequent offender making a "hissing or crackling" sound. A low pitched clicking noise is emitted by the oil sender.
- 4. In most cases, placing a .25 .50 mfd. bypass capacitor to ground will eliminate noise.
- 5. Touching a grounded capacitor to all electrical connections and on all unsuppressed small motors at hot input wires or brush holders often may locate more offenders. Install a bypass capacitor on any offender isolated by this check.

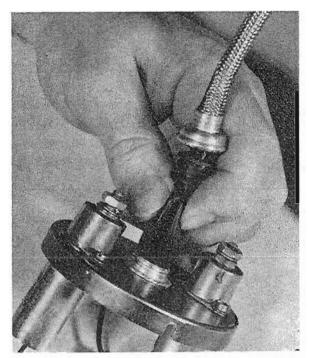


Figure 1. Folding Insulator