INSTALLATION INSTRUCTIONS

Marine Shift Assist Part No. 4489

Parts Included In This Kit

1 - MSD P/N 4489 Marine Shift Assist Unit

1 - MSD P/N 8867 Adapter Harness

4 - Wire Splice Device

1 - Sheet Metal Screw

1 - Instruction Manual

The MSD P/N 4489 Marine Shift Assist device is used in marine applications when the existing Shift Interrupt System does not fuction after installing an MSD Ignition Unit.

MOUNTING THE UNIT

Mount the unit in an area where it will not be subjected to water and the cables will reach the distributor and the MSD Ignition Unit. Remove the paper backing off of the double-sided tape and press firmly onto the chosen mounting surface. A sheet metal screw is also provided for mounting the unit.

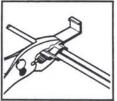
POWERING THE UNIT

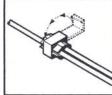
The MSD P/N 4489 Shift Assist requires a 12 volt source and a Ground. Connect power to the unit as follows:

RED

Connect to the same source as the small gauge red wire on the MSD Ignition. The wire splice device may be used. (See Figure 1 for instructions on using the wire splice device).

ORIGINAL EQUIPMENT WIRE





BLACK

Connect to a Ground.

Follow the above diagram to use the supplied Wire Splice Devices.

Figure 1

ELECTRONIC SHIFT ASSIST SYSTEM

Most marine engines are equipped with an Electronic Shift Assist System (ESA) module, an interrupter switch, an overstroke switch and necessary wiring and connectors. The ESA Module is generally mounted aft of the intake manifold and the interrupter and overstroke switches are mounted side by side on the shift bracket at the starboard rear of the power plant. The ESA system helps reduce shifting effort and allows for smoother operation when shifting from forward to reverse. This operation is done by momentarily grounding the negative side of the coil and therefore reducing the load on the gears.

CONNECTING THE SHIFT ASSIST UNIT TO THE ESA MODULE

The MSD Shift Assist unit will be activated by the ESA module. Locate the Gray wire from the ESA module that is attached to the negative side of the coil. Make sure that the Gray wire you have chosen is from the ESA module by tracing it back to the ESA module. Refer to the wiring diagram located in your factory owner's manual for more information on where to locate the ESA module. Disconnect this wire from the negative side of the coil and connect it to the Gray wire from the MSD Shift Assist unit.

CONNECTING THE SHIFT ASSIST UNIT TO THE MSD IGNITION UNIT

For all applications the MSD P/N 4489 Shift Assist will be connected to the white points input wire on the MSD Ignition Unit. The drawings below show an MSD 6 Series Ignition (Figure 2 & 2A) and an MSD 6M-2 Marine Ignition (Figure 3 & 3A).

Hookup Using AN MSD 6 Series Ignition with Points Distributor

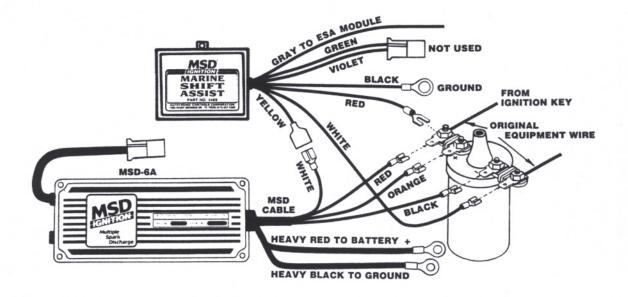


Figure 2

Hookup Using An MSD 6 Series Ignition with Magnetic Distributor

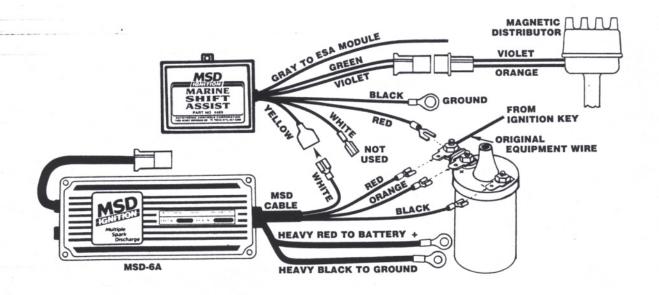


Figure 2A

Hookup Using An MSD Marine Ignition with Points Distributor

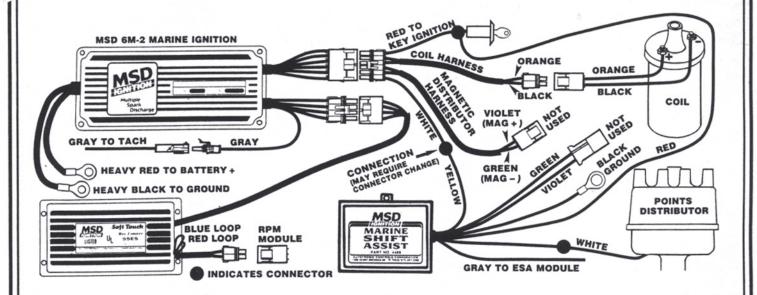


Figure 3

Hookup Using An MSD Marine Ignition with MSD or GM HEI Distributor

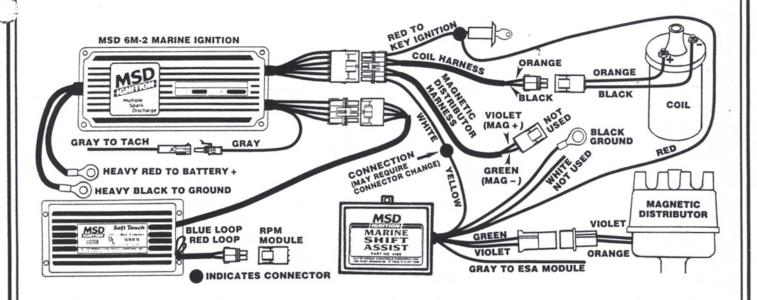


Figure 3A

Limited Warranty

Autotronic Controls Corporation warrants MSD Ignition products to be free from defects in material and workmanship under normal use and if properly installed for a period of one year from date of purchase. If found to be defective as mentioned above, it will be replaced or repaired if returned prepaid along with proof of date of purchase. This shall constitute the sole remedy of the purchaser and the sole liability of Autotronic Controls Corporation. To the extent permitted by law, the foregoing is exclusive and in lieu of all other warranties or representations whether expressed or implied, including any implied warranty of merchantibility or fitness. In no event shall Autotronic Controls Corporation be liable for special or consequential damages.

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