system for operating the vehicle. The memory circuit **76** may be a flip-flop or may be another type of bi-stable device. The set input to the device is activated by the diagnostic operator and as long as power is provided from the battery **78** by way of line **77** device **76** will remain set. If power is interrupted by disconnecting one of the leads to the battery, then the device **76** will automatically reset. FIG. **10** is a somewhat schematic diagram of an implementation of this concept and in an actual circuit implementation there may be other connection to the device **76** so that it is assured that if either cable of the battery **78** is disconnected, that the device **76** will reset. Similarly, the device **76** may be initially reset by the diagnostic person and then would be set if either of the battery cables is decoupled.

Having described a limited number of embodiments of the present invention it should now be apparent to one skilled in the art that numerous modifications can be made therein without departing from the scope of the present invention. For example, in the embodiment shown in FIG. **2** there have been shown a plurality of filter circuits. Actually, some of these filter circuits such as filter circuits F5 and F6 need not be used as the corresponding sensing circuit connects only to one existing line. Alternatively, it is noted with regard to filter circuits F1 and F2 that these are necessary in that both of them connect to the same existing wiring of the vehicle. Also, FIG. **6** depicts a system wherein the sensing is by sequential interrogation. In an alternate arrangement at least some of the drivers could be concurrently activated thereby reducing some of the logic that is necessary in this embodiment. One reason for using either the filter or decoder selective sampling technique is to conserve power. For example, without the filters, the source sees a lower impedance and thus more power is drawn. The higher power requirement in turn dictates the use of more expensive components such as the diodes. Also, regarding FIGS. **9** and **10** it is noted that the memory circuit has been shown as being coupled to an sensing and indicating circuit of the type shown in FIG. **4**. Similarly, the memory circuit or flip-flop could also be coupled to an arrangement like the one shown in FIG. **5** wherein the flip-flop would then be coupled across the indicator lamp **16** shown in FIG. **5**.

What is claimed is:

1. In a motor vehicle having a driving compartment, a number of electrical load devices and means including separate conductor means for providing power to each of the load devices for operation thereof, a system for monitoring the operable condition of each load device comprising;

a display console disposed in the driving compartment and including a plurality of indicator means one being associated with each load device,

oscillator means for establishing a cyclic signal having a relatively low duty cycle,

means for coupling said cyclic signal to at least one of said conductor means including a unilaterally conducting device have anode and cathode electrodes and means for sensing a change in state of the load device from an operative to inoperative state,

said conductor means also including a unilaterally conducting device having anode and cathode electrodes,

power providing means for coupling load power to said conductor means,

said unilaterally conducting devices of said means for coupling and said conductor means having like electrodes intercoupled,

and means coupled from said sensing means to said indicator means and responsive to said load device assuming its inoperative state to operate the corresponding indicator means of the display console.

2. The system of claim **1** wherein said means coupling said cyclic signal includes narrow band filter means coupled from said oscillator means for receiving said cyclic signal and coupling signals of only a predetermined narrow range of frequencies through said first unilaterally conducting device.

3. The system of claim **2** including a plurality of filters each for passing a different band of frequencies and each coupling from the oscillator means to different load devices.

4. The system of claim **1** wherein said sensing means includes a current sensor and energy storage means.

5. The system of claim **1** wherein said means coupling said cyclic signal includes two filter means coupled in parallel each receiving said cyclic signal and coupling signals of two different frequencies on one of said conductor means.

6. The system of claim **5** including a second set of filter means disposed at the load end of the conductor means, each passing respective frequencies corresponding to the said two filter means.

7. The system of claim **1** including memory means coupled to said indicator means and responsive to a change in state of said load device to store an indication of this change, said memory means state being maintained even though the load device is made operative.

8. A system for use in a motor vehicle having existing conductor means coupling to load devices of the vehicle, said system to determine if a fault has occurred comprising;

a plurality of sensors each for monitoring a predetermined condition, each said sensor generally having an actuated state when a fault occurs and an unactuated state in the absence of a fault,

means responsive to the state of each sensor for causing a fault indication detectable by the driver of the vehicle when the sensor assumes it actuated state,

each said sensor and means for causing a fault indication coupling to one of said existing conductor means,

a plurality of memory storage means responsive to the state of each sensor for setting said memory means to a fault indicating state when said sensor assumes its actuated state,

said memory means maintaining said fault indicating state even though said sensor may assume its unactuated state,

and means for resetting the state of each memory means.

9. The system of claim **8** wherein said memory means includes a bistable electrical device.

10. The system of claim **8** comprising oscillator means defining a cyclic signal and means coupling said cyclic signal to at least one conductor means.

11. The system of claim **10** wherein said means coupling said cyclic signal includes narrow band filter means coupled from said oscillator means for receiving said cyclic signal and coupling signals only of a predetermined narrow range of frequencies.