WIRING

12 volt Pumping systems are unique in that most problems are likely to be electrical.

If the pump motor is running and no water is coming out of the pump - you have a pump system problem.

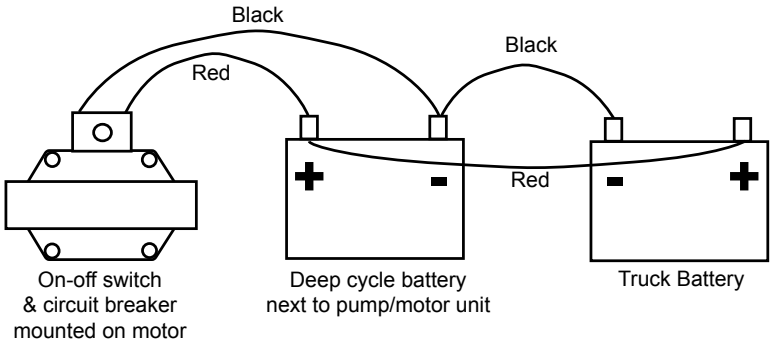
Almost every other problem will be related to electrical system.

The most common electrical problems are the connections. Among those: Corroded battery terminals, corroded ground wire, corroded wire connector, inadequate wire size and damaged wire.

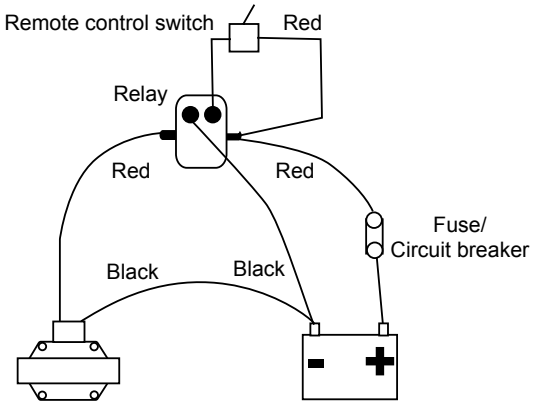
Corrosion is "resistance" and causes a voltage drop.

Motors consume watts (Volts x Amps). If voltage drops, amperage increases, thereby overloading the electrical system.

Dual Battery Installation



Remote Switch Installation



RED IS POSITIVE (+) — BLACK IS NEGATIVE (–)

RETRACE ELECTRICAL WIRES TO BATTERY TO BE ABSOLUTELY CERTAIN (+) TERMINAL ON BATTERY GOES TO RED MOTOR WIRE. BLACK WIRE ON MOTOR GOES DIRECTLY TO (–) TERMINAL ON BATTERY.

IMPORTANT: WARRANTY VOID IF YOU CONNECT ELECTRICAL WIRES BACKWARDS

WIRE AND CABLE SELCTION CHART

As a rule of thumb, consider the following a conservative guide

System Amperage	Wire Gauge	Pump Series
10	12	All
15	12	112T, 114T, 212T, 314T, 314U, 348U, 356U
20	10	212T, 314T, 314U, 348U, 356U
30	8	314T, 314U, 348U, 356U
40	6	348U, 356U
50	4	348U, 356U
60	4	356U
80	2	356U