

M-750, M-751 Battery Selector and Disconnect Switches

For 6-36V DC battery systems with alternators or generators.
Intermittent duty rating: 500A at 12V DC.
Continuous duty rating: 310A at 12V DC

M-750 Battery selector and disconnect switch.
M-751 Battery selector and disconnect switch with key lock.

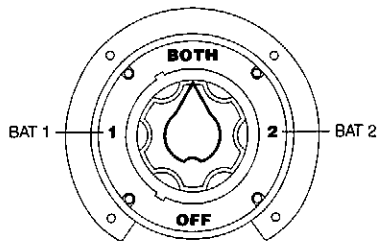
Make-before-break contact design permits selection of Battery 1 or Battery 2 or both batteries in parallel, with engine or engines running.

Off position disconnects the battery circuit only.
Important: Engines must be stopped before the switch is turned to Off. Otherwise the alternator diode might fail.

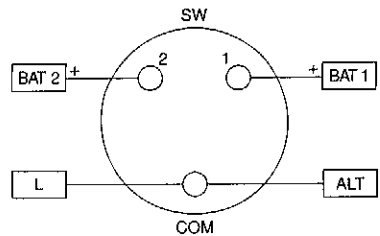
Install the switch in a safe and dry location near the batteries in order to keep the battery cable length as short as possible, in order to reduce voltage loss.
For applications requiring maximum current rating (up to 310A continuous, 500A intermittent) use 300AWG (KCM) size copper conductor cable or larger with at least 105°C rated insulation. Panel mounting may be necessary to provide space for large cables. Verify that the terminal temperature does not exceed 100°C. For applications using cable smaller than 300AWG, the maximum continuous current rating of the circuit must be de-rated accordingly. Contact Cole Hersee if additional information is required for de-rating.

The switch should be wired by a qualified electrician in accordance with NFPA 302 "Fire Protection Standards for Motor Craft," and/or applicable standards of the ABYC. www.nfpa.org www.abycinc.org
Turn off all circuit power before installing the switch.
Refer to the vehicle service manual for the correct method to interrupt the alternator field circuit with an external regulator. Alternators with an internal regulator cannot be wired with this feature.
Important: Cable connections to terminal 1 and terminal 2 must be of the same polarity. Maximum torque for tightening the hex nuts on the three terminal studs is 90 inch lbs. Terminal studs are 3/8" diameter (9.53mm).

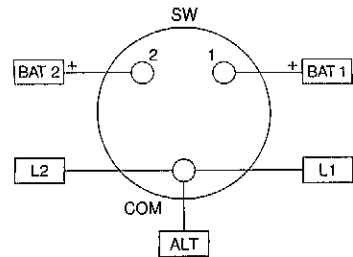
1. Operating diagram



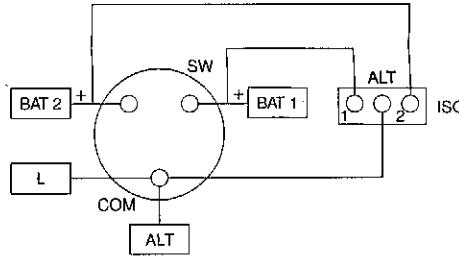
2. Two batteries, one switch, one engine, one alternator.



3. Two batteries, one switch, two engines, one alternator.

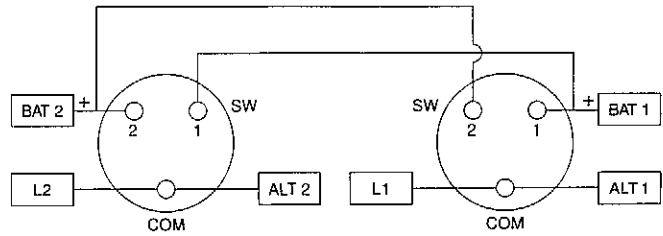


4. Two batteries, one switch, one engine, one alternator, with battery isolator.



5. Two batteries, two switches, two engines, two alternators.

Warning: After both engines are started and the alternators are charging, one selector switch must be turned to Battery 1, and the other switch to Battery 2. The two switches should not remain in the BOTH position, since this might damage the alternators.

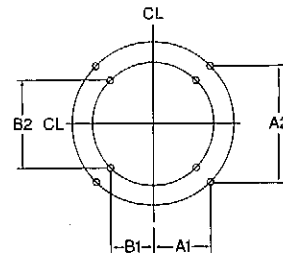


Key to the diagrams

BAT1	= Battery 1 and common
BAT2	= Battery 2 and common
ISO	= Battery Isolator
COM	= Common
SW	= Switch
L	= Starter & load
L1	= Starter No. 1 & load
L2	= Starter No. 2 & load
ALT	= Alternator
BOTH	= Common & both batteries

6. Mounting

M-750 series switches can be mounted on or behind the panel. When it is mounted behind the panel, you will need to order No. 563 self-adhesive face plate.



Surface mounting

Drill four holes on a 5.500" diameter circle (139.7mm).
Hole size 0.218" (5.53mm) diameter will accept No. 10 screws.
A1 = 1.944" (49.38mm)
A2 = 3.888" (97.78mm)
CL = Center line

Through panel mounting

Housing & knob clearance hole 3.312" diameter (84.12mm). Drill four holes on a 4.395" diameter circle (116.63mm). Hole size 0.201" (5.10mm) diameter, 0.5" (12.70mm) deep for 1/4" -20 bolts.
B1 = 1.553" (39.46mm)
B2 = 3.107" (78.92mm)
CL = Center line

Cole Hersee M-750 series switches are specially designed for battery selection and battery disconnect only. They are not recommended for switching heavy electrical loads (we make other switches for this purpose).