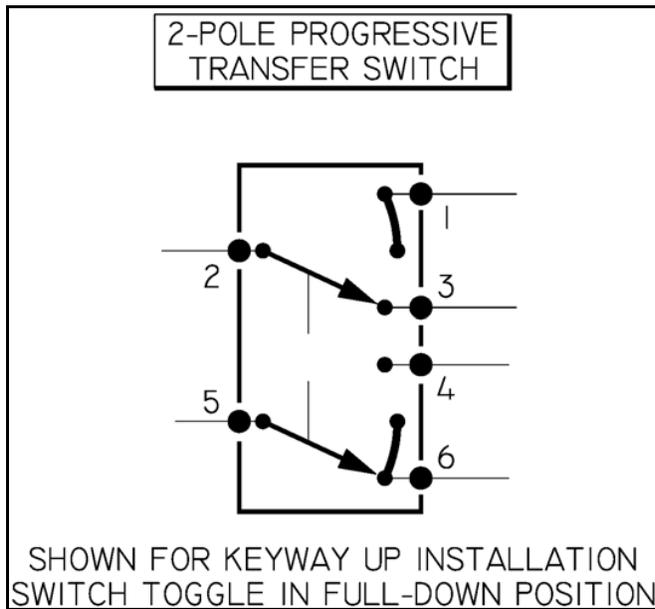




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Interchange Data: Progressive-Transfer Toggle & Split-Rocker Master Switches



Z-FIGURES IN THE AEROELECTRIC CONNECTION FEATURE THE TWO-POLE, THREE-POSITION, PROGRESSIVE TRANSFER TOGGLE SWITCH WITH A SCHEMATIC AND TERMINAL NUMBERING CONVENTION AS ILLUSTRATED HERE.

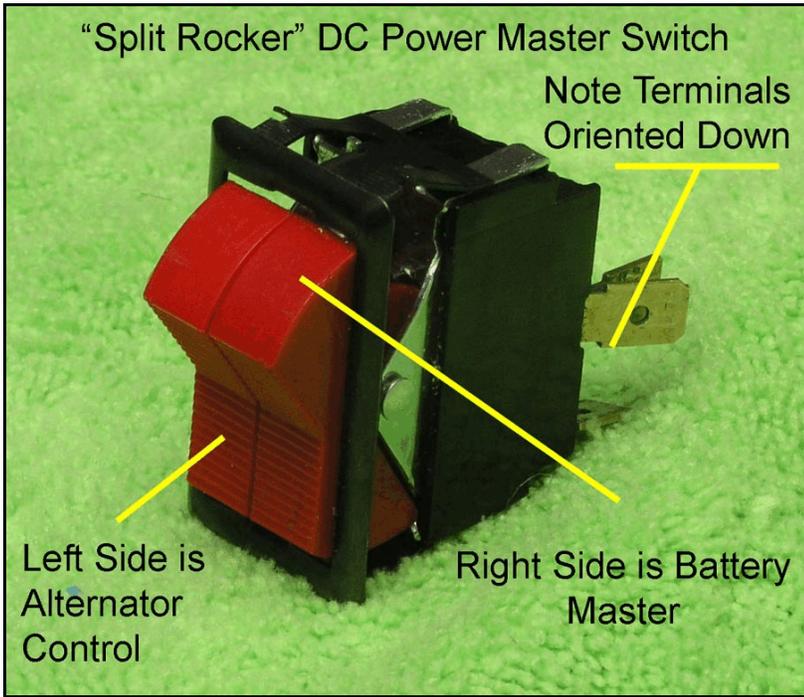
THE UPPER HALF OF THE SWITCH CONTROLS THE BATTERY MASTER CONTACTOR THROUGH TERMINALS 1 AND 2. THE LOWER HALF CONTROLS THE ALTERNATOR THROUGH TERMINALS 5 AND 4.

POSITIONED FULL DOWN, BOTH CIRCUITS ARE OFF. WHEN MOVED TO THE CENTER POSITION, TERMINALS 2 AND 1 ARE CONNECTED WHICH CLOSES THE BATTERY CONTACTOR LEAVING THE ALTERNATOR OFF. WHEN MOVED TO THE TOP POSITION, TERMINALS 5 AND 4 ARE "MADE" THUS ADDING THE ALTERNATOR.

NOT ALL MANUFACTURERS FOLLOW THE SAME NUMBERING CONVENTIONS. MICROSWITCH (HONEYWELL) DEVICES USE THE PATTERN ON THE RIGHT WHILE CARLING USES THE PATTERN ON THE LEFT. NOTICE THAT THE COLUMNS ARE SIMPLY SWAPPED BETWEEN THE TWO BRANDS. THE S700 SERIES SWITCHES FROM B&C ARE MADE BY CARLING.



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MANY LIGHT AIRCRAFT IN GENERAL AVIATION HAVE BEEN FITTED WITH A TWO-POLE, INTERLOCKED, "SPLIT ROCKER" SWITCH FOR THE PURPOSE OF CONTROLLING DC POWER IN THE AIRCRAFT. THE FUNCTION OF THIS SWITCH IS TO ALLOW THE BATTERY TO BE TURNED ON WITHOUT ALSO HAVING THE ALTERNATOR ON; BUT PREVENTING THE ALTERNATOR FROM BEING LEFT ON WHILE THE BATTERY IS OFF.

THE LESS EXPENSIVE (AND MORE UNIVERSALLY AVAILABLE) PROGRESSIVE TRANSFER, TOGGLE SWITCHES HANDILY EMULATE THE INTERLOCKING OPERATION OF THE POPULAR "SPLIT ROCKER" SWITCH, SOME BUILDERS OPT TO INCORPORATE THIS TRADITIONAL DEVICE INTO THEIR OWNER BUILT AND MAINTAINED PROJECTS.

THESE SWITCHES ARE ALSO MADE BY CARLING AND HAVE THE SAME NUMBERING CONVENTION AS THEIR TOGGLE SWITCHES EXCEPT THAT TERMINALS 3 AND 6 ARE LEFT OFF THE ASSEMBLY. FURTHER, THE AIRFRAME MANUFACTURERS HAVE IDENTIFIED VALUE IN HAVING DUAL SPADE TERMINALS AT POSITIONS 2 AND 4. EXCEPT FOR THE DUAL TERMINALS AND DELETED TERMINALS, THE FUNCTIONALITY OF THE "SPLIT ROCKER" SWITCH IS EXACTLY THE SAME AS THE S700-2-10 TOGGLE SWITCHES ILLUSTRATED IN THE Z-FIGURES.



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