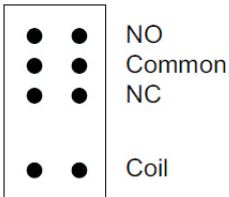


VBSD1-S5-S12-SIP

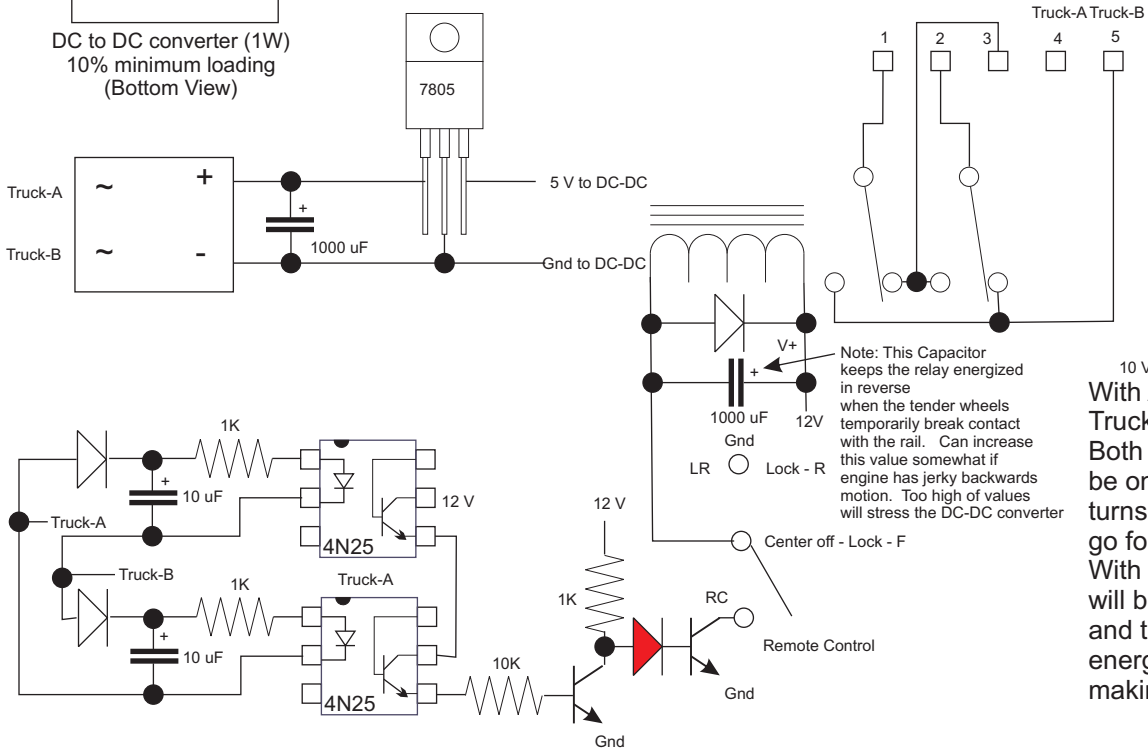


DC to DC converter (1W)
10% minimum loading
(Bottom View)

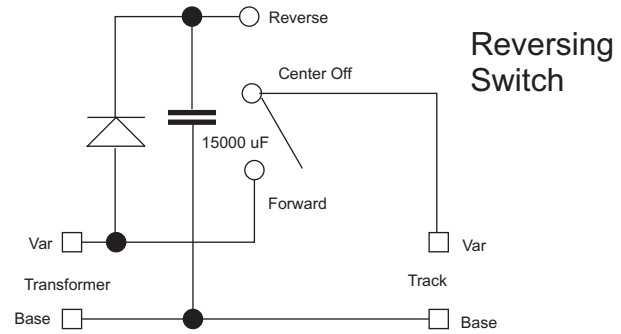
Note: At very low DC voltages, the 7805 can not produce 5V and the DC-DC converter therefore can not produce 12V. Hence there is a minimum speed setting on the transformer that will result in reverse motion (about "40" on a 4B transformer)



Rayex LM2-12D Relay



10 V
With AC on Truck A and Truck B Both 4N25 outputs will be on, turning on Q1 which turns off Q2, making train go forward.
With DC, one of the 4N25 will be off, turning Q1 off and turning Q2 on which energizes the relay coil making the train reverse



Action Cars will still work with wheel pick-up on the Base

AC-DC E-reversing unit
Rev F
Norbert Doerry
May 16-30, 2011