

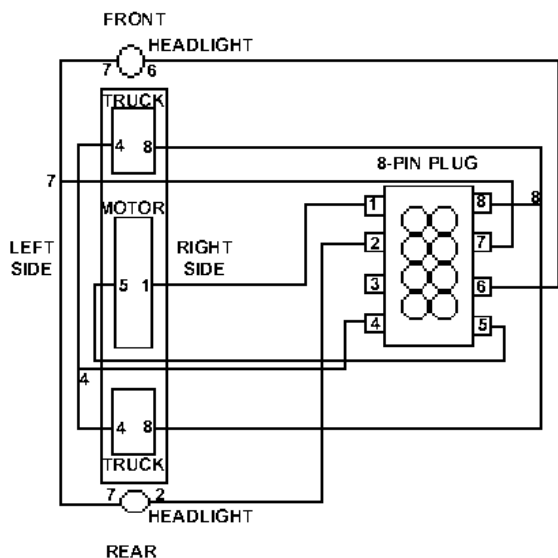
CREST Electronics LOCOMOTIVE CONVERSION FOR LOCOMOTIVES WITHOUT 8 PIN DCC PORT

Many HO locomotives do not come equipped with the female 8-pin DCC port that is required for the proper installation of the CREST HO Train Engineer Receiver. Therefore, a female 8 pin DCC port is provided. Wiring of the locomotive to the 8-pin DCC port follows the standards and practices used by DCC decoder manufactures. This provides compatibility with DCC systems.

Before wiring the 8-pin DCC port to the locomotive, you will need to establish the right-hand and left-hand sides of the locomotive. Establish which side of the locomotive is the front. You can decide which end is the front, or use the end established by the manufacturer. The front can be considered to be the side of the locomotive facing the direction of travel when the locomotive is traveling in the forward direction.

Place the locomotive with the front facing away from you. The right-hand side of the rail power pick-ups is on your right. Follow the right-hand power pick-up, it will be wires, the locomotive frame, or metal clip, to the motor. Where the right-hand power pick-up connects to the motor is the right-hand motor power pick-up. The left-hand side of the rail power pick-ups is on your left. Follow the left-hand power pick-up, it will be wires, the locomotive frame, or a metal clip, to the motor. Where the left-hand power pick-up connects to the motor is the left-hand motor power pick-up.

When wiring the 8-pin DCC port to the locomotive, it is recommended that you solder the wires to the wiring locations on the locomotive. Do NOT solder the wires to the 8-pin DCC port. Instead, use the plastic wiring caps provided with the 8-pin DCC port. Soldering the wires the 8-pin DCC port may cause damage preventing proper operation of the locomotive.



NUMBER	WIRE COLOR	WIREING LOCATION
1	orange	Motor power pick-up (right-hand)
2	yellow	Rear headlight
3	Not used	
4	black	Left-hand rail power pick-up
5	gray	Motor power pickup (left-hand)
6	white	Front headlight
7	blue	Common (+) headlight power source
8	red	Right-hand rail power pick-up

The above table shows the location number on the 8-pin DCC port, the appropriate wire color according to established DCC wiring standards, and the wiring location on the locomotive. It is necessary to maintain consistency with the 8-pin DCC port location number and the wiring location on the locomotive. While wire color does not effect proper operation of the locomotive, for the purposes of simplicity and maintenance, it is recommended that you

follow established DCC practices.

When wiring the motor, the motor must be isolated form any power source except for the orange (number 1) and gray (number 5) wires originating with the 8-pin DCC port. Many locomotives use the frame to conduct electricity through the locomotive. The motor power pick-ups must be insulated from the frame. After the power pick-ups are soldered to the orange and gray wires, isolating the motor and insulating it from the frame can be done by wrapping the power pick-ups in electrical tape.

Many manufacturers do not provide 12-volt light bulbs in their locomotives. If this is your situation, you will need to replace the manufacturers provided light bulbs with 12-volt bulbs or install resisters in the wires between the light bulbs and the 8-pin DCC port.

