

## DC ANALOG OPERATIONS TROUBLESHOOTING

| Start Up  | Remedy   |
|---|--|
| When I apply power to the track my engine doesn't do anything. No lights, no sound, no nothing. | <p>Check to see if that section of track has power. Use a voltmeter or a lighted passenger car.</p> <p>Slide the engine a couple of feet in either direction. You may have a bad track section.</p> <p>Have you got that section electrically isolated with a toggle switch or other device?</p> |

| Sound  | Remedy  |
|--|---|
| I have no sound from my engine, but my lights are on and it moves just fine. | Check the volume pot on your tender. Full CW = Max volume.  |
| There's a crackling sound coming from my tender.                             | Check to see if a screw or some other material hasn't lodged itself in the underside of the tender. |

| Smoke                            | Remedy  |
|----------------------------------|---|
| My engine isn't smoking at all.  | <p>Make sure you've got the smoke switch ON.</p> <p>If you just added smoke fluid it may have formed a seal in the stack by forming a bubble. Gently blow into the stack to clear the air bubble.</p> <p>Check the tender/boilder drawbar connection. They must be locked together in order for the smoke unit to function.</p>   |
| My engine's smoke output is low. | <p>If you've been running your engine in DCS or DCC mode, the smoke output setting may have gotten set to low or mid-level output. With the engine running in DCS or DCC mode, set the smoke output back to high. It will remember the new setting the next time the locomotive is operated in Conventional/Analog mode.</p> <p>Check for an obstruction in the smoke stack.</p> <p>Add 10 - 12 drops of smoke fluid.</p> |

| Lights                   | Remedy   |
|--------------------------|--|
| One of my lights is out. | Most likely you had been running the engine in DCS or DCC mode and toggled that light off. Put the engine back into DCS or DCC mode and turn that light back on. The engine will remember the new setting the next time it is run in Conventional/Analog mode. |

## Operation

## Remedy

When I apply power to the track my engine starts up (lights and sound) but it won't move.

Lower the track voltage and then raise it again. The engine should start moving. If you apply greater than 9vDC quickly the engine will remain still. Lowering the voltage below 9vDC and then raising it will get the engine moving.

Check the tender/boiler drawbar connection. You've got to have them locked together.

My engine hesitates at slow speeds.

An engine may do this right out of the box if it has not been lubricated. Follow the operator's manual lubrication instructions and then try running it again.

New engines, even after lubrication, may take a little while to get everything run-in. Be a little patient and let the engine run for a while at higher voltages.

Check to see if you have any kind of binding on the side rods. There may be a piece of debris preventing the side rods from turning smoothly.