PROTOSOUND 3.0 "HO" GAUGE STEAM TROUBLESHOOTING

Start Up	Remedy
When I apply power to my DCS track my engine doesn't do anything. No lights, no sound, no nothing.	This is normal. You have to hit the start up button. Check to see if that section of track has power. Use a voltmeter or a lighted passenger car to test for power. Slide the engine a couple of feet in either direction; you may have a bad track section. Have you got that section electrically isolated with a toggle switch or other device? -- If you're using the DCS Remote Commander that comes in the Ready-To-Run sets, your engine might be addressed to a different address than the "0" default. DCS Remote Commander systems require engines to be at the default "0" in order to operate or give commands. In order to remedy this mis-addressing, the engine will have to be reset to Factory Defaults on a layout with the Full DCS system (TIU & Handheld). --
When I apply power to my DCC track my engine doesn't do anything. No lights, no sound, no nothing.	Did you press F3 yet? F3 on your DCC handheld will startup the engine. Check to see if that section of track has power. Use a voltmeter or lighted passenger car to test for voltage. Have you got that section electrically isolated with a toggle switch or other device? --
When I apply power to my Conventional AC track, only my headlight comes on, nothing else.	ONLY the "Motorola-Compatible" (-5) model engines will run on AC voltage. All other models of MTH HO engines operate on DC power ONLY. --
When I apply power to my Steam engine, I hear sounds but see no lights and can't get it to move.	Check that the drawbar is securely connected. The wires coming from the electronics within the engine to the drawbar should be checked as well. --

Lost Address	Remedy
In DCC, I can't call my engine on the address I believe it to be set at.	In DCC, Perform the 55-55-55 Reset per your Operators' manual's instructions.
	If you are trying to 'talk' to an engine on its short address, you may have set CV29 to activate long addressing. You could either try getting a hold on the engine using its last known long address, or setting CV29 to equal "6" which will tell the engine to look at its short address.
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Sound	Remedy
I have no sound from my engine, but my lights are on and it moves just fine.	If operating in DCS, you may have it turned off. Repeatedly press VOL+ to bring the Master Volume up.
	Did you turn off the ENG sounds? Press the ENG SND button on your DCS controller.
	Check that you haven't lowered any of the independent engine volume settings (ENG sounds, Bell, Whistle and Accent).
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	You may have it turned off. Repeatedly press F7 on your DCC system to cycle through the volume levels - there are 9 levels: 0 - MAX.
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	If running in AC or DC conventional power, check to be sure your Volume is turned all the way clockwise.
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When I press the Whistle Button on my DCS Remote or DCS Commander, the whistle doesn't blow.	Check if the playable whistle is active. On the DCS Commander there will be two dashes on the right side of the LCD if it's active. Press "A1" twice to ensure it's turned off. On your DCS Remote press the "SPW" button twice to ensure it's disabled.
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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.
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When I run Doppler, I can hear the Doppler shift but then the engine sounds fade out and I can't get them back.	This is normal operating in DCS. You will need to press the Doppler button on again to turn Doppler off. Once Doppler is turned off, your engine sounds will return to their normal volume setting.
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	This is normal. You will need to press the F12 button on the DCC controller again to turn Doppler off. Once Doppler is turned off, your engine sounds will return to their normal

Smoke	Remedy
My engine isn't smoking at all.	Press the smoke button: this will activate the smoke.
	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.
	Check the tender/boiler drawbar connection. They must be locked together in order for the smoke unit to function.

	Make sure you've got the smoke switch ON. It must be ON for the smoke to operate in DCC mode.
	Press F8 on your DCC controller. This will activate the smoke.
	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.
	Check the tender/boiler drawbar connection. They must be locked together in order for the smoke unit to function.

My engine barely smokes.	You may have set the smoke to Low. The smoke "volume" can be changed from Low to Med to High.
	Check for an obstruction in the smoke stack.
	Add 10 - 12 drops of smoke fluid.

	You may have set the smoke to Low. F17 will vary the smoke levels. Or, if you were running the engine in DCS mode, you may have toggled it there (if you don't have F17 on your DCC controller you will have to put it DCS mode and change it using a DCS system).
	Check for an obstruction in the smoke stack.
	Add 10 - 12 drops of smoke fluid.

Lights	Remedy
One of my lights is out.	Check that you haven't turned it off with the DCS controller. You have independent control over lights on your engine.

	Check your F keys. F0 is the headlight (also controls the backup light) and F5 will toggle the cab light.

None of my lights are on.	See "One of my lights is out" from above.
	Is the engine getting power? Check to see if there is voltage on the track or move the engine a few feet in either direction.
	Check the tender/boiler drawbar connection. You've got to have them locked together in order for the engine functions to work.

	If operating a "DCC-Ready" model in Analog DC, check that the appropriate jumpers are installed. Remember- the jumpers must be installed in analog DC for the Ditch and Number Board lights to activate.
	If operating this model in DCC, you must remove these same jumpers.

Operation	Remedy
When I apply power and hit Start-Up/F3, my engine starts up (lights and sound) but it won't move.	This is normal. Dial up the speed on your DCS Remote or DCC controller to make the engine move.
	If you've increased the speed to the engine, 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.

My engine will speed up, then stop, then speed up, then stop.	This indicates there is no tach board signal. Protosound 3.0 engines will repeatedly speed up & stop trying to obtain the speed signal that is sent from the tach reader.
	Either contact MTH Service or your nearest ASC.

There is no movement of my "DCC-Ready" engine when track power is applied.	Check that the NMRA header jumpers are installed. You must jump pin 1 to pin 8, and also pin 4 to pin5.

While operating in DCC, my "DCC-Ready" engine's motor spins at track voltage.	Check that you have removed the NMRA header jumper (both jumpers must be removed). --

Horn	Remedy
I can't get the horn to blow when I press the Horn button.	You may be pressing the button too quickly. Try pressing the Horn button more slowly, taking approximately one full second to fully depress the button. -- Only "Motorola Compatible" (-5) model MTH HO engines will be able to operate Horn/Whistle in Conventional AC. --

Bell	Remedy
I can't get the bell to ring when I press the bell button.	You may be pressing the button too quickly. Try pressing the bell button more slowly, taking approximately one full second to fully depress the button. --

PFA	Remedy
When I enter PFA all that happens is the bell rings. What do I do?	Press the DIR button. Your engine will stop and begins the arrival sequence. Pressing the DIR button will cycle you through the next 3 PFA sequences. --
I hit F4 to start PFA but the engine just keeps ringing its bell.	Bring the engine speed to 0. You will now hear the station arrival or freight yard sounds begin. Pressing F4 will cycle you through the subsequent steps in the PFA script. --
Why does my engine run away all by itself after the PFA is over?	This is normal. The engine will leave the station at the same speed it entered (when hit the PFA/F4 button). The speed setting can be changed after the bell stops ringing. --