



MONITOR & TROUBLESHOOT



Monitor, Troubleshoot, and make adjustments remotely or at the machine

The Roadtec Guardian™ Telematics System consists of software, on-machine viewing screens, and wireless signal boosters to send and receive data at the machine. Numerous functions such as engine data and fuel consumption can be viewed at the machine or on your computer screen from a remote location.

The Roadtec Guardian™ Telematics System is standard on e-series cold planers and e-series pavers. Software is automatically updated when a new version is released.

Help from Roadtec service is only a phone call away. They see the same information you see and can guide you through the fix or do it for you.

Monitor & Troubleshoot

- Fuel Consumption
- Engine Codes
- Alarms
- Starting Circuit

- Cutter Circuit
- Water
- Conveyor Speeds
- Propel Functions
- Load Control

- Steering Circuit
- Cutter
- Grade & Slope
- Hydraulics
- Engine



CONNECTED TO DEVICE WITH DATA

RX-600e Machine Serial No. 2002

Power Alarms Start Cutter Water Conv Propel Tract Cont Load Cont Steer Housing Elevation Hyd Engine Moba GPS PID

Fuel PSI 147.9	Turbo Boost PSI 32.77	Engine % Load 84	
Fuel Temp °F 96	Coolant Temp 183	Inlet Air Temp 134	Travel Speed FPM 60
Battery Voltage 27.5	Oil PSI 42.92	Fuel Usage GPH 27.77	Total Fuel Used 1106.1
Engine Speed 1891.1	Engine Hours 91.7	Engine % Soot 0	Hours Until Service 158.3

Active Engine Fault Codes

Fault Code	FMI	Count

Active engine fault codes are displayed automatically and are not requested. You may request previously active fault codes (if not cleared) using the request button below.

Previously Active Engine Fault Codes

Fault Code	FMI	Count
Coolant Level Sensor	Data valid but below normal operational range – moderately severe level	1

Request Previously Active Fault Codes

Clear Fault Codes

Real-time Machine Data

See everything instantly: from fuel consumption, fault codes, time to service intervals, machine speed, grade and slope settings, or even the exact location of the machine (via GPS).

Designed by Roadtec for Roadtec

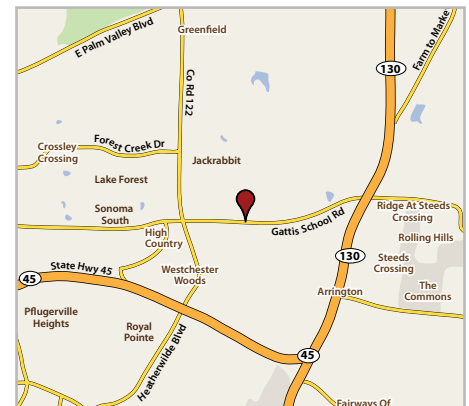
Guardian™ Telematics is for Roadtec customers who are looking to dramatically lower operating costs and increase productivity.

View Remotely and On-board the Machine

Log into the machine from your computer or you can view the information on the machine's display screens.

Strong Signal with Cell Booster

The connection to and from the machine is wireless and uses a cell booster to ensure a strong signal. If an Internet connection is unavailable at any given location, the on-board computer stores faults until the connection is restored and then sends the e-mail.

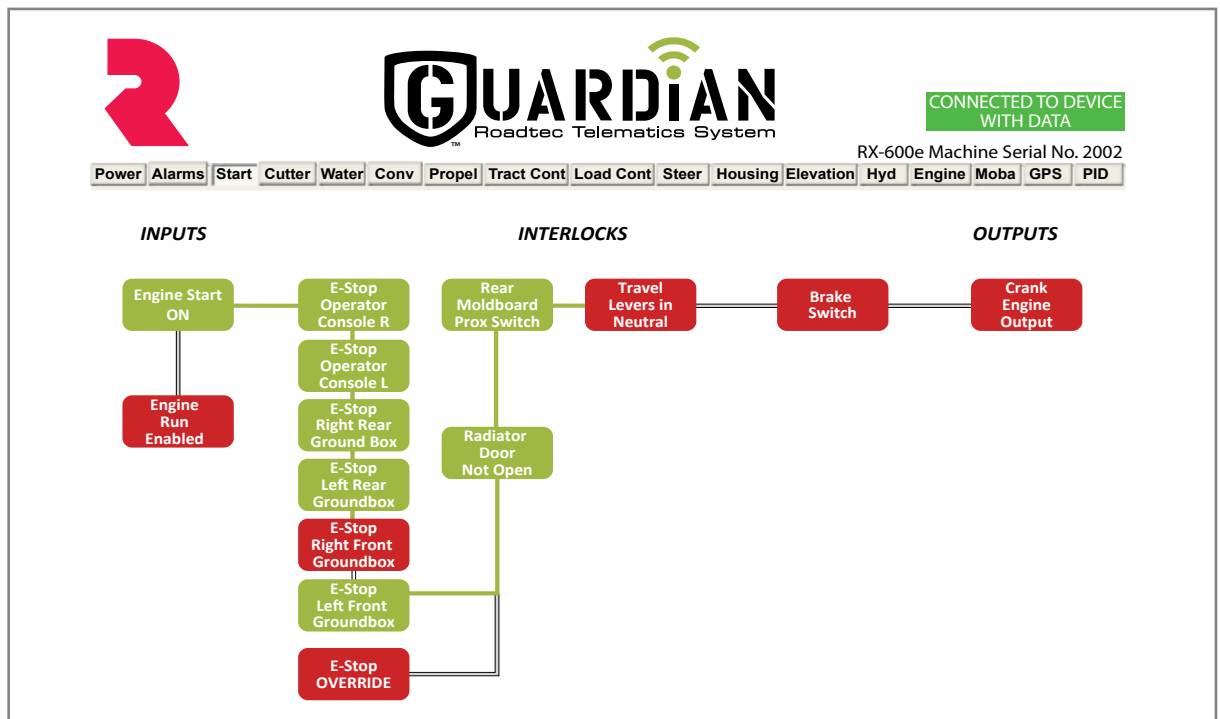


Your machine can be located by GPS using the Guardian system.

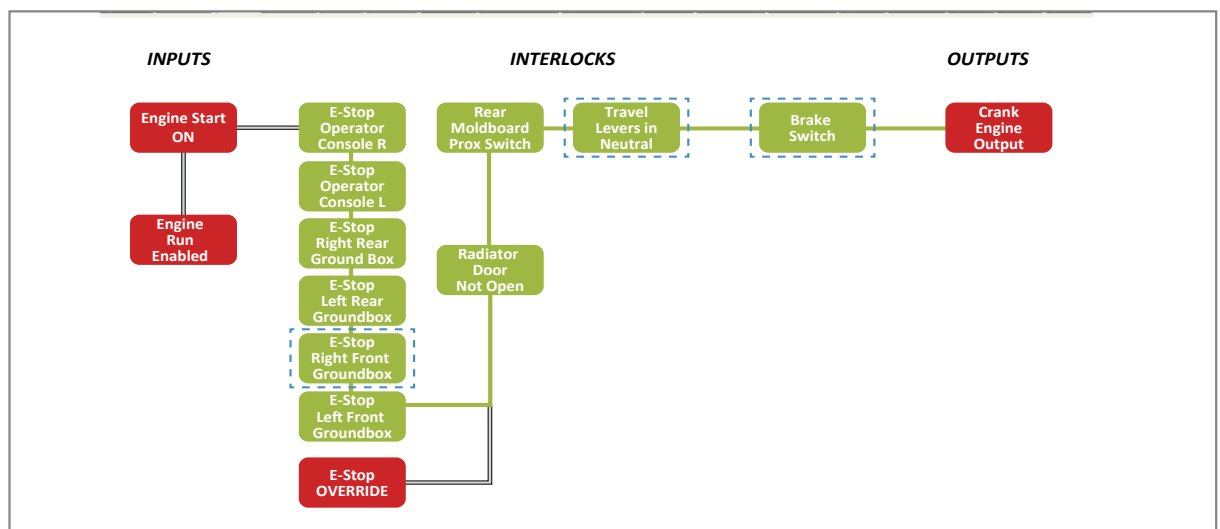
SOLVE ISSUES INSTANTLY

With the Guardian system, machine circuits & systems are shown as live schematics so issues can be solved instantly.

1



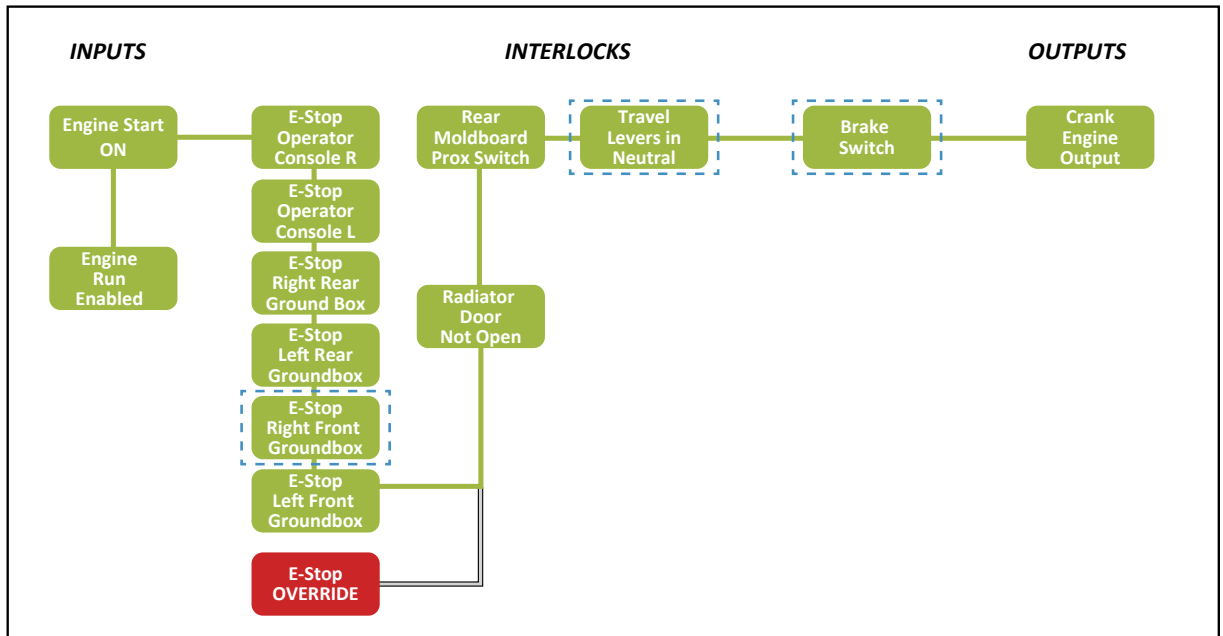
2



1. **TROUBLESHOOTING: MACHINE WON'T START**
THE START CIRCUIT VIEW SHOWS:
Right Front E-Stop activated.
Travel Levers are not in neutral.
Parking Brake is not on.

2. **MAKE CORRECTIONS**
THE START CIRCUIT VIEW SHOWS:
Right Front E-Stop is deactivated.
Travel Levers are now in neutral.
Parking Brake is now on.

3



4

Power	Alarms	Start	Cutter	Water	Conv.	Propel	Tract Cont	Load Cont	Steer	Housing	Elevation	Hyd	Engine	Moba	GPS	PID
					3.5	SE	CHANGE						3.5	SE	CHANGE	
					100	POS	CHANGE						100	POS	CHANGE	
					Centimeters	CAL	CHANGE						Centimeters	CAL	CHANGE	
					Wire Rope	S-S	CHANGE						Wire Rope	S-S	CHANGE	
					OFF	W-W	CHANGE						OFF	W-W	CHANGE	
					1	TYPE	CHANGE						1	TYPE	CHANGE	
					0.23	MIN Current UP							0.23	MIN Current UP		
					0.35	MAX Current UP							0.35	MAX Current UP		
					0.22	MIN Current DN							0.22	MIN Current DN		
					0.30	MAX Current DN							0.30	MAX Current DN		

LEFT Grade Controller

SET
-4.9
ACT
5.6

AUTO ↶ ↷ ✳
▲ ↘ A
▼ ↙ M

RIGHT Grade Controller

SET
-4.9
ACT
5.6

AUTO ↶ ↷ ✳
▲ ↘ A
▼ ↙ M

SET MOBA DEFAULTS

SET ROADTEC DEFAULTS

CHANGE CURRENTS

SET MOBA DEFAULTS

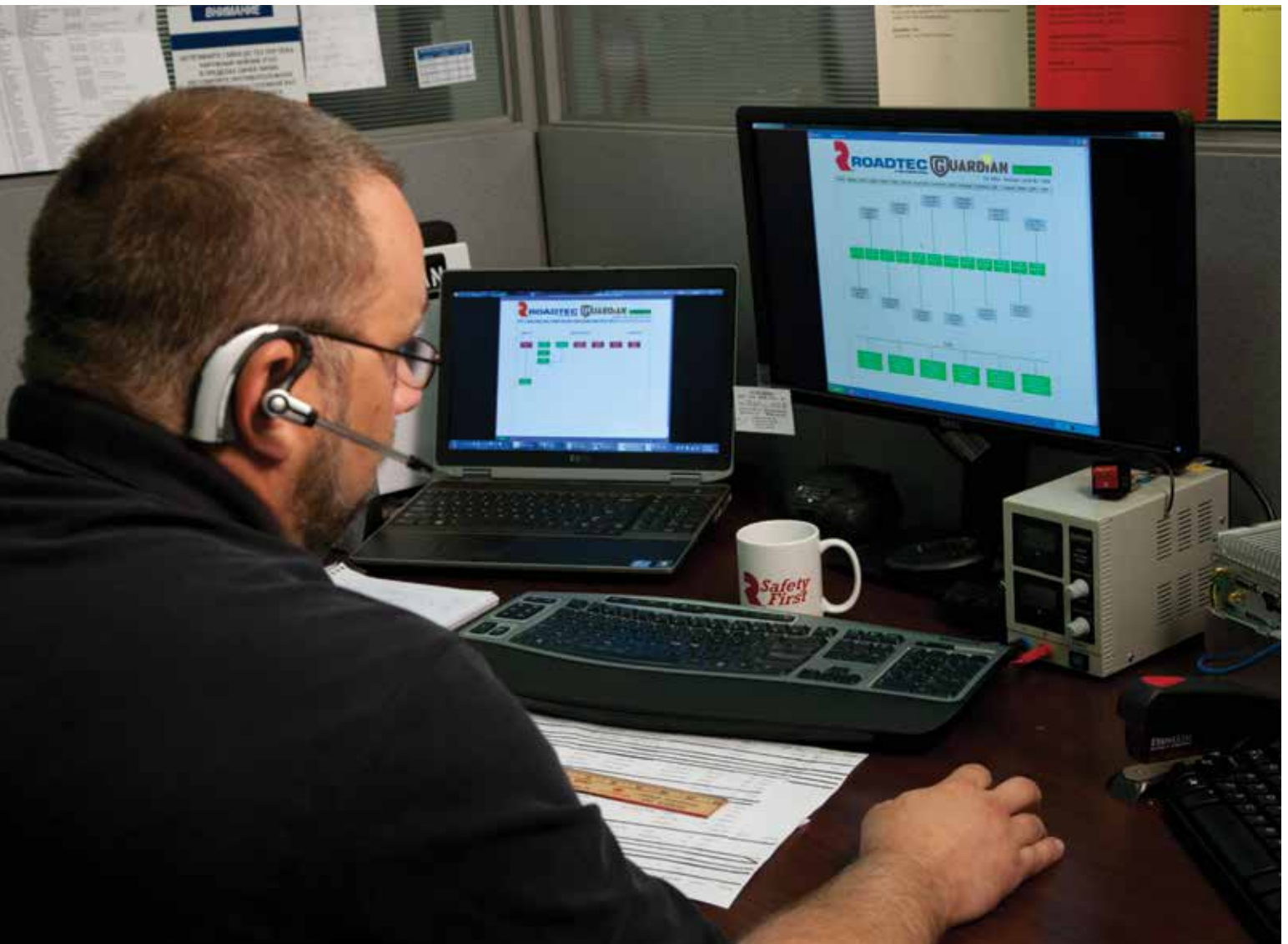
SET ROADTEC DEFAULTS

CHANGE CURRENTS

3. **START THE MACHINE**
THE START CIRCUIT VIEW SHOWS:
Circuit is complete.
Engine is running.

4. SmoothMill™ screen on the Guardian™ Telematics System. Controls up top let the operator control grade and slope on one or both sides. Now you can work with at least one less ground man.

BENEFITS



Know What's Happening

Automatically receive e-mails about maintenance schedules. See part numbers for service items such as filters. Designate someone of your choice to receive e-mails from the Guardian™ Telematics System concerning any fault codes that may be generated. Your designated people can log on to the machine and address the problems. Finally, you can also call Roadtec service, and have a Roadtec service technician dial into your machine to confirm and help resolve issues.

The Bottom Line: Benefits

- Save money spent on sending mechanics into the field to locate issues
- Minimize down time by isolating and correcting problems within minutes
- Increase machine life and uptime by performing all scheduled maintenance
- Eliminate false alarms and wasted trips
- Use production data to fine tune your operation and maximize productivity
- Monitor machine processes in real time

What Our Customers are Saying

“It’s very beneficial for us to see the fuel burn and the load on the engine from the office. That gives us some indication of run time versus the standby time.”

“We can call Roadtec and have them make a machine adjustment through the computer immediately. It’s fantastic to save the money it would cost for a mechanic to come out and hunt for the problem.”

“The calibration of the rear track steering was off. We zeroed it out over the wireless connection and were running perfectly in a matter of minutes.”

“We don’t always use the system remotely. Just trouble shooting on the system itself is a big plus. The operator is able to find the problem himself.”

“Great features such as simply being able to remotely reset the grade and slope control menu settings can save serious amounts of money and time.”

“Our people carry their smart phones and get e-mails about needed service like filter changes right away.”

Stay connected with your crew. Stay connected with Roadtec service. Address your machine issues quickly and save money by eliminating false alarms and wasted trips.



ROADTEC an Astec Industries Company

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