

SAT-LDF20/SAT-LD

Stand Alone Throttle

Light-Duty Ford Gas and Diesel Vehicle Throttle



Technical Description

InPower's SAT-LDF20 Throttle provides high idle engine RPM control for vehicles with an SEIC connector (F250-F550) directly. The SAT-LD has a blunt cut wire harness available if no SEIC connector is available for direct connect under the hood connection to available wiring. The LDF20 control module connects to the vehicle's SEIC connector. The cable also includes blunt-cut wires for the operating mode inputs, RPM1, RPM2/Charge, and the speed adjustment whereas the SAT-LD has blunt cut wires for all interfaces.

Three light duty throttle models are available to meet your needs, each with one default mode and one override mode. *Note:* Module will not activate unless all chassis ready conditions are satisfied.

SAT-LDF20-01/SAT-LD-01 have one adjustable preset RPM1 as its override, activated by ground, and *Green Charge* automatic charge protect as its default.

SAT-LDF20-02/SAT-LD-02 have two adjustable presets RPM1 and RPM2. RPM1 is the override, activated by +12 volts.

SAT-LDF20-03/SAT-LD-03 have one adjustable preset RPM1 as its override, activated by +12 volts, and *Green Charge* automatic charge protect as its default.

InPower's *Green Charge* activates when the chassis battery enters a low voltage condition. It gradually raises the engine RPM to the minimum necessary RPM required to charge the battery before dropping the RPM back to the minimum idle to save fuel economy and minimize emissions.

InPower has designed the SAT-LDF20's software to support many chassis and model year variations, and more will be added to the library as they are tested. The SAT-LDF and SAT-LD throttle are re-programmable, so that software may be updated as necessary at InPower.

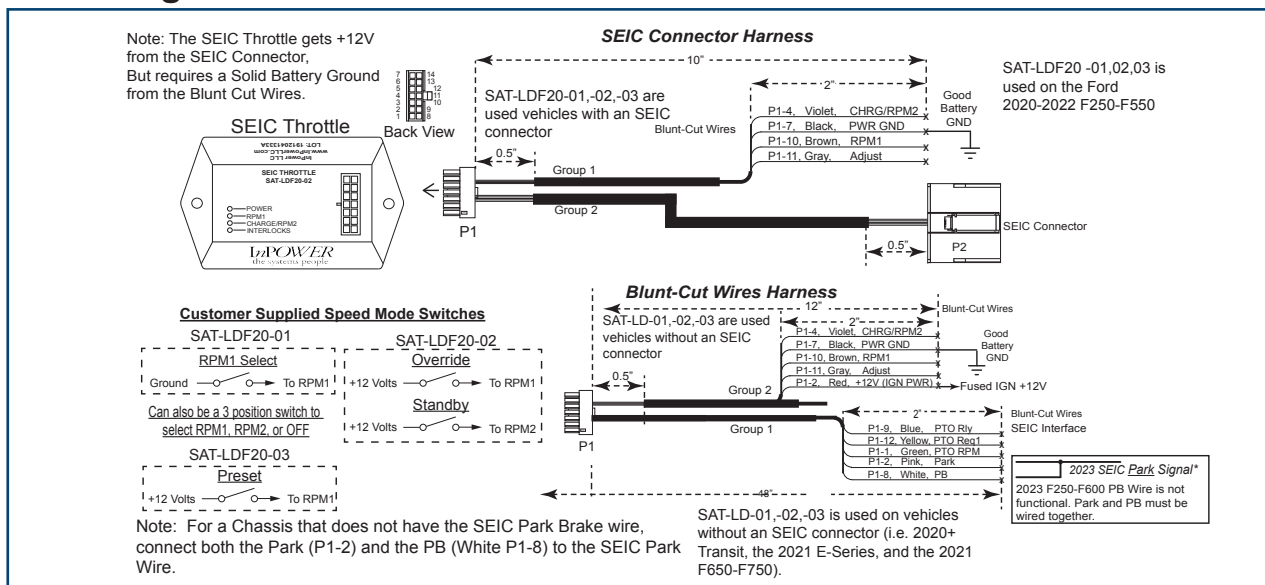
To support our customers in selecting a throttle that is compatible with their specific chassis, we provide a Throttle Selector Guide on our web site (www.InPowerLLC.com). Simply select the chassis and model year, and it will display the minimum software revision.

Key Features

- SAT-LDF20 Cable connects to SEIC connector on vehicles so equipped and the SAT-LD has a fully blunt cut harness for vehicles without
- Operation of the two are identical, and the only differentiation is the harness.
- Low cost with fast and easy installation.
- Automatic charge protect and fixed speed modes.
- Adjustable RPM Speed Settings.
- LED status and diagnostic indicators.
- Customized functions available.

System Diagram

See: http://www.inpowerelectronics.com/throttle_selector



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Specifications

Power Requirements & Notes

+12 volts:	Sourced from SEIC connector (SAT-LDF) or from fused Ignition source SAT-LD
Ground:	Sourced a Good Solid Battery Ground
RPM1:	+12 volts or ground as determined by software (see ordering guide)
RPM2:	+12 volts or ground as determined by software (see ordering guide)
Speed Adjust Input:	Adjusts preset RPM to desired value between 900 and 3000 RPM - (SEIC Max), (Chassis and Engine Dependent). Connect to +12V to increment, GND to decrement (50RPM/Sec).
Dimensions:	3.17 L x 1.92 W x 0.79 H inches
Charge Protect Mode (Activated when chassis battery voltage is low)	
Green Charge:	Gradually increases engine RPM to minimum required to charge battery, then lowers once charged.
On/Off:	Immediately increases engine RPM to 1500 to quickly charge chassis battery (Field Settable)

Chassis Ready Conditions:

1. Engine running at idle speed below 1,000 RPM.
2. No vehicle speed.
3. Automatic transmission in Park.
4. Service brake not depressed.
5. Accelerator pedal not depressed.
6. Parking brake set.
7. No Diagnostic Trouble Code (DTC).
Check Engine light must be off.

LED Status Indicators:

POWER	Power is supplied to SAT-LDF20
RPM1	Indicates elevated fixed speed mode RPM1
CHARGE/RPM2	Indicates Auto Charge or RPM2 mode
INTERLOCKS	Transmission in Park and Park Brake Set

Ordering Guide - SAT-LDF20-xx with SEIC connector, SAT-LD-xx for blunt cut only

Model	RPM1	RPM2	Activation Polarity	RPM1 Factory Setting	RPM2 Factory Setting	Highest Priority
SAT-LDF20-01 and SAT-LD-01	Preset	Green Charge	Ground	1500 Diesel 1200 Gas	N/A	RPM1
SAT-LDF20-02 and SAT-LD-02	Override Preset	Standby Preset	+12 Volt	1500 Diesel 1200 Gas	1200 Diesel 910 Gas	RPM1
SAT-LDF20-03 and SAT-LD-03	Preset	Green Charge	+12 Volt	1500 Diesel 1200 Gas	N/A	RPM1
SAT-LDF20-C and SAT-LD-C	Custom Program Operation					

Mechanical Drawing

