## RTE Replacement Solid State Limiter IVR3 Manual

**Real Time Engineering** 

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The RTE IVR3 style solid state limiter replaces the limiter style that has individual wires on the back of your dash. If the back of your dash has a limiter that plugs into a circuit board, then you may need the RTE IVR4 style limiter.

Installation instructions:

1) (Optional): Pull out or Remove the dash cluster from the car. (This is optional because it is possible to replace the IVR3 style while the dash is still in the car).

2) Locate the IVR3 original style mechanical limiter on the back of the dash cluster, where it should be bolted to the circuit board.



3) Remove the three wires going to the IVR3 limiter. Remove the IVR3 style limiter from the dash cluster by removing the  $\frac{1}{4}$ " bolt that holds it on.

4) Re-install the new solid state IVR3 limiter on the dash cluster. Connect the condenser to one of the male spade terminals. Our limiter doesn't need the condenser since it doesn't have points, but we like to keep things as original as possible. The other male spade terminal is where the main under dash harness will plug into the limiter, supplying 12V to the limiter. The small wiring harness that powers the fuel/oil/temperature gauges should be plugged into the female spade terminal.

5) There is a small LED that will flash when the limiter is operating properly. If the LED is off all the time, it may mean that one or more of the gauges is shorted to ground. The limiter is short circuit protected, and once the short is removed, then the limiter will resume operation.

The RTE solid state limiter will accurately and reliably replace the original mechanical limiter. Our limiter exactly reproduces the waveform that the original limiter has, including the initial warm up time that makes the gauges come up to the proper reading quickly. Other replacement limiters don't reproduce this original warm up time.

Limiter Comparison Chart			
	Solid State Limiter	Stock Mechanical Limiter	Linear Regulator Limiter
Protects gauges if unit becomes ungrounded	yes	no	no
Quick needle movement at ignition on time	yes	yes	no
Output is short circuit protected	yes	no	yes
Built in operational display	yes	no	no
Insensitive to vibration	yes	no	yes
Low heat generation	best	good	poor
Gauge Response	good	good	fair
Battery Drain	best	good	poor

See our website for more information on other fine products that may help you with your Mopar restoration needs. <u>http://rt-eng.com</u>

Our website contains more information about which limiter style is used in which car here: <u>http://rt-eng.com/mediawiki/index.php/RTE\_limiter</u>

We also have a large amount of technical information that is useful in the FAQ sections: <u>http://rt-eng.com/mediawiki/index.php/RTE\_Faqs</u>