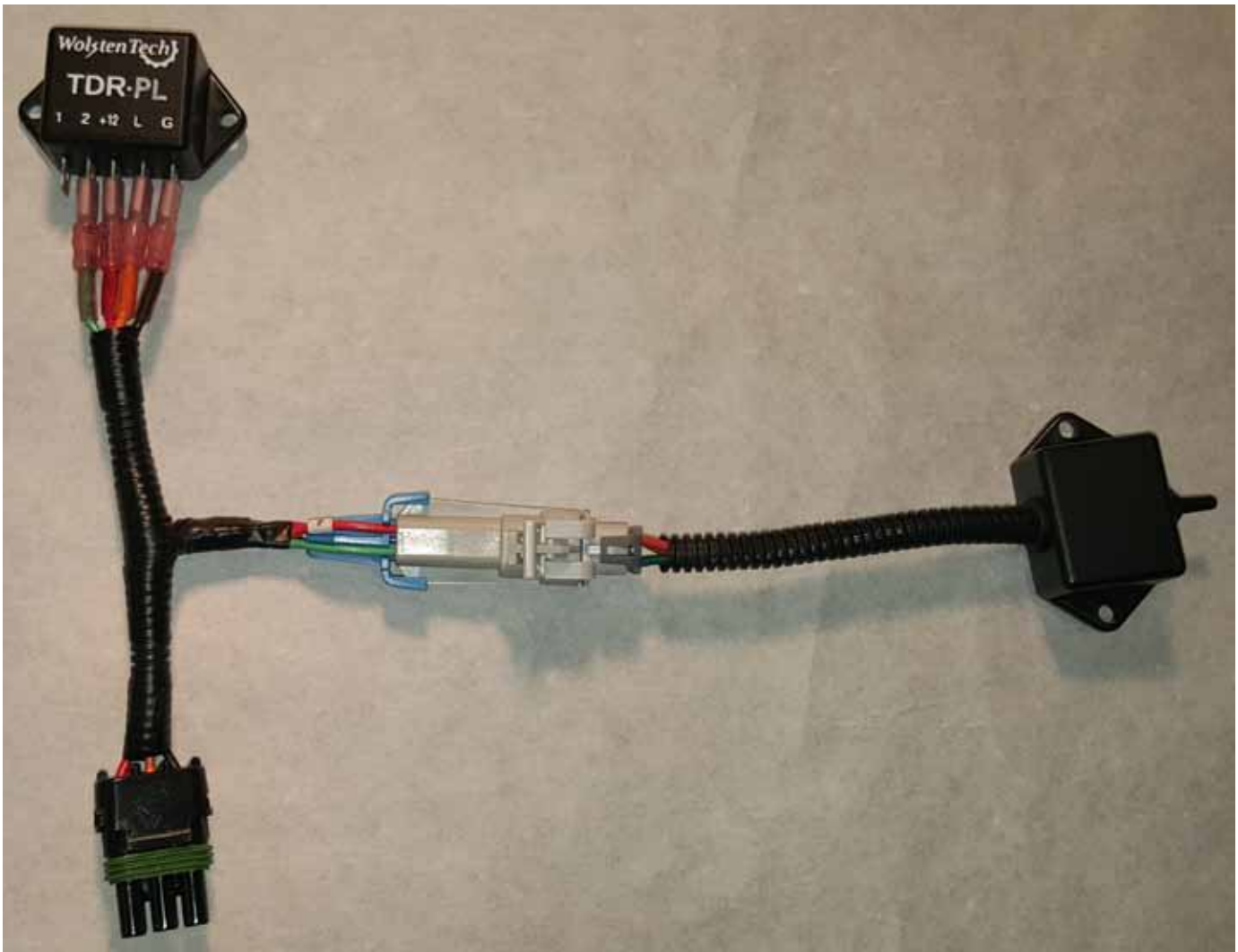


Installation Instructions for the Lingenfelter Fan and Pump Manual Override Kit



PN: L300180000

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Parts List LPE Fan and Pump Manual Override Kit (PN: L300180000)

#	Description	Part number
1	Time delay relay	WTI-TDR-PL
1	Time delay relay harness	XX05636-0005
1	Toggle switch harness	XX05636-0008
2	Hook and loop tape, per inch	06483
2	7.5" black cable tie	
4	Self tapping screws	AV16037
1	Lingenfelter decal	L920010000
1	Instructions	

Tools & Materials Required

- Phillips head screwdriver

Optional Items

Description	Part number
Lingenfelter High Capacity Gen 5 Camaro Intercooler Radiator with Temperature Controlled Auxiliary Fans	L320061410
Lingenfelter Cadillac CTS-V Intercooler Radiator Kit with Temperature Controlled Auxilliary Fans	L320030709
LPE technician's screwdriver	L950050000
Dual fan radiator wiring harness with relays and fuse holders	XX05636-0002

Description:

The LPE Fan and Pump Manual Override Kit is designed to be used with the Lingenfelter High Capacity Gen 5 Camaro (PN: L320061410) and Cadillac CTS-V Intercooler Radiator with Temperature Controlled Auxiliary Fans (PN: L320030709). The Fan and Pump Override Kit uses a time-delay relay (TDR). The TDR supplies an alternate, timer controlled, activation voltage for the TBRC and positive side of the intercooler pump. This allows you to cool down your intercooler coolant without having the ignition on. The TDR can be adjusted to shut off automatically after a specified time ranging from 0.25 seconds up to 30 minutes. The 3 position toggle switch can also be switched to the off position at anytime to turn off the TDR. The TDR has no effect on the normal operation of the TBRC or the intercooler pump.



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Wiring:

The main wiring harness has three connecting points:

- The 3 pin weather pack connector plugs directly into the intercooler radiator fan control harness.



- The 4 pin square connector connects to the switch assembly.



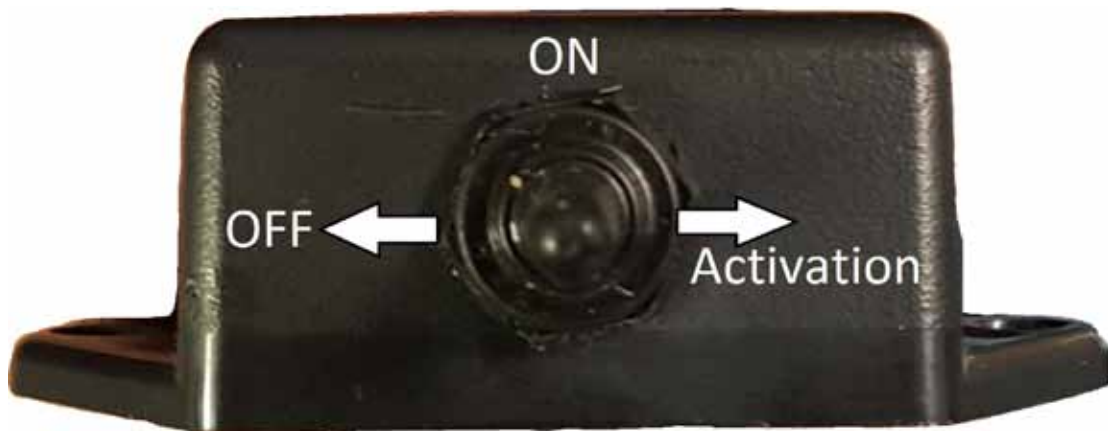
- The female spade terminals connect to the relay:
Terminal 1: not used
Terminal 2 : Activation Signal (Green wire)
Terminal +12: Voltage from Switch (Red wire)
Terminal L: Voltage out of Relay (Orange wire)
Terminal G: Ground (Black wire)



Switching:

The Fan and Pump Manual Override switch has a 3 position switch:

- In the off position, power is not being supplied to the TDR, fan, or pump.
- In the on position, power is being supplied to the TDR.
- In the momentary position (activation trigger), the timer on the TDR starts, and power will be supplied to the fan or pump for the amount of time you set on the TDR.



Time Delay Relay Settings:

Trigger:

The relay that is used can be activated with either a negative (GND) or a positive (+12v) trigger. There is a dip switch on the back of the TDR to determine which trigger is going to be used. The TDR is wired for a negative trigger, so the DIP switch should be in the "ON" position.

In relation to the image on the right:

- The DIP switch in the left position is "ON" (negative trigger).
- The DIP switch in the right position is "OFF" (positive trigger).

Delay:

There are 2 delays built into this relay, one is an ON delay and the other is an OFF delay. The delays are adjusted by turning the adjustment screws on the back of the TDR. The TDR is preset to turn ON immediately and to turn off after 5 minutes. For this application, you should not have to adjust the "ON" delay (screw marked with an I). The "OFF" delay is the screw marked with an O. The adjustment is as follows:

- Increase time delay — turn the screw clockwise
- Decrease time delay — turn the screw counter-clockwise

The screws have 20 full turns of adjustment, so it may take many turns to reach the desired time delay. When changing the delay, verify which setting the delay is currently set to. To do this use a stop watch or a watch with a second hand on it. Time how long it takes between releasing the momentary switch activation and when the pump turns off.

Note: If the coolant is below threshold set in the TBRC-001 the fans will be off.

Approximate Settings:

Note: There are 20 full turns of adjustment. There are currently no stops on the screws. When you reach the end of the adjustment limits the screws will continue to turn with no effect.

Number of Turns	Time Delay
0	0.25 seconds
1	4 seconds
2	17 seconds
3	33 seconds
4	1 minute
5	2 minutes
6	3 minutes
7	4 minutes
8	5.5 minutes
9	7 minutes
10	8.5 minutes
15	19 minutes
20	30 minutes

Example:

If your delay is currently 5.5 minutes, and you only want 3 minutes, you need to turn the screw counter clockwise approximately 2 full turns. If you wanted 8.5 minutes, you would have needed to turn the screw approximately 2 full turns clockwise



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NOTICES:

It is the responsibility of the purchaser to follow all guidelines and safety procedures supplied with this product and any other manufacturer's product used with this product.

Lingenfelter Performance Engineering assumes no responsibility for damages resulting from accident, improper installation, misuse, abuse, improper operation, lack of reasonable care, or all previously stated reasons due to incompatibility with other manufacturer's products.

Lingenfelter Performance Engineering assumes no responsibility or liability for damages incurred from the use of products manufactured or sold by Lingenfelter Performance Engineering on vehicles used for competition racing.

It is the purchaser's responsibility to check the state and local laws and sanctioning body requirements pertaining to the use of this product for racing applications. Lingenfelter Performance Engineering does not recommend nor condone the use of its products for illegal street racing.

Limited Warranty:

LPE warrants the Lingenfelter Fan and Pump Override Switch to be free from defects in material and workmanship under normal use and if properly installed for a period of 90 days from date of purchase. If the module is found to be defective as mentioned above, it will be replaced or repaired if returned prepaid along with proof of date of purchase. This shall constitute the sole remedy of the purchaser and the sole liability of LPE. To the extent permitted by law, the foregoing is exclusive and in lieu of all other warranties or representations whether expressed or implied, including any implied warranty of merchantability or fitness. In no event shall LPE be liable for special or consequential damages.

For additional product installation information and technical support, contact LPE or your LPE products distributor. You can also find technical support and usage discussions regarding this product and many other LPE products in our Internet forums:

<http://www.lingenfelter.com/LPEforumfiles>

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