

DRL-400

Installation Guide for: DRL-400-HD-M8

Model Coverage:

2017-2023 Harley Davidson Touring Models

2018-2023 Harley Davidson Softail Models

PARTS LIST

- | | |
|------------------|--------------------------|
| 1 DRL-400 | 2 POWER COMMANDER DECALS |
| 1 SWITCH HARNESS | 2 VELCRO STRIPS |
| 2 DYNATEK DECALS | 1 ALCOHOL SWAB |

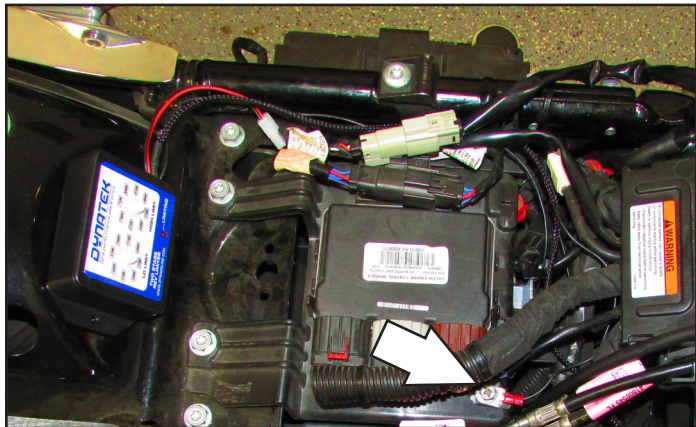
**PLEASE READ ALL DIRECTIONS BEFORE STARTING INSTALLATION.
THE IGNITION MUST BE TURNED OFF BEFORE INSTALLATION.**

INSTALLATION

The Dyna DRL-400 is a two Stage Rev Limiter that provides a low (launch) rpm limiter to assist the rider in making clean consistent launches for drag racing. The DRL-400 also has an upper rpm limiter function to provide over-rev protection. The DRL-400 can also be used in an autoshift application utilizing an air shifter.

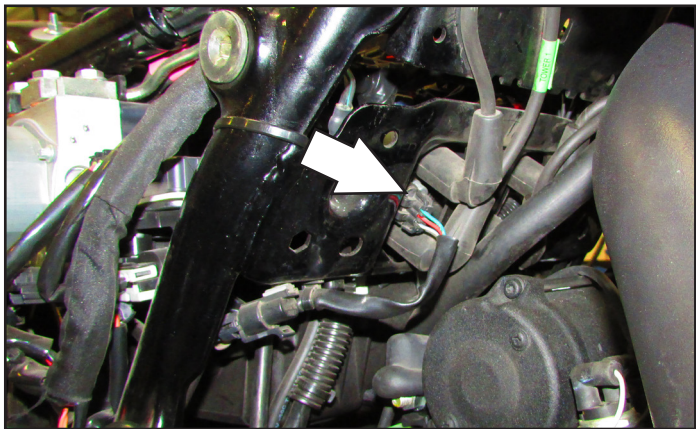
The 2017+ Touring models and 2018+ Softail models use CAN communication for the clutch switch so you cannot simply tap into the stock clutch switch to enable the 2 step. You will need to wire in an auxiliary switch to enable this function.

- 1 Remove the seat. Using the supplied velcro attach the module to a suitable location under the seat or side panel. Make sure to clean the surface before attaching the velcro.
- 2 Route the harness towards the front of the motorcycle.
- 3 Attach the ground wire of the module to the negative (-) side of the battery.

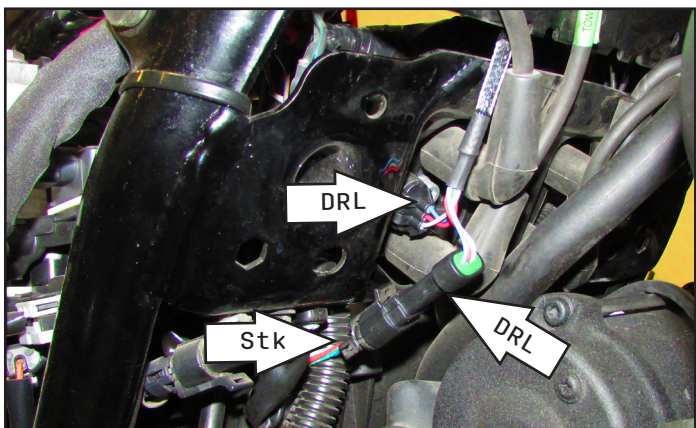


- 4 Unplug the stock wiring harness from the ignition coil.

This connection is located to the rear of the rear cylinder, near the starter.



- 5 Plug the DRL-400 in-line of the stock wiring harness and ignition coil.



INSTALLATION:

*****IMPORTANT***** With any microprocessor based system such as the DRL-400, you must use carbon core type suppression spark plug wires with a resistance of at least 3000 ohms per foot to reduce radio frequency interference caused by ignition sparks. Use of copper or spiral core wires may cause malfunction of this rev limiter due to severe electrical noise.

ADJUSTMENT:

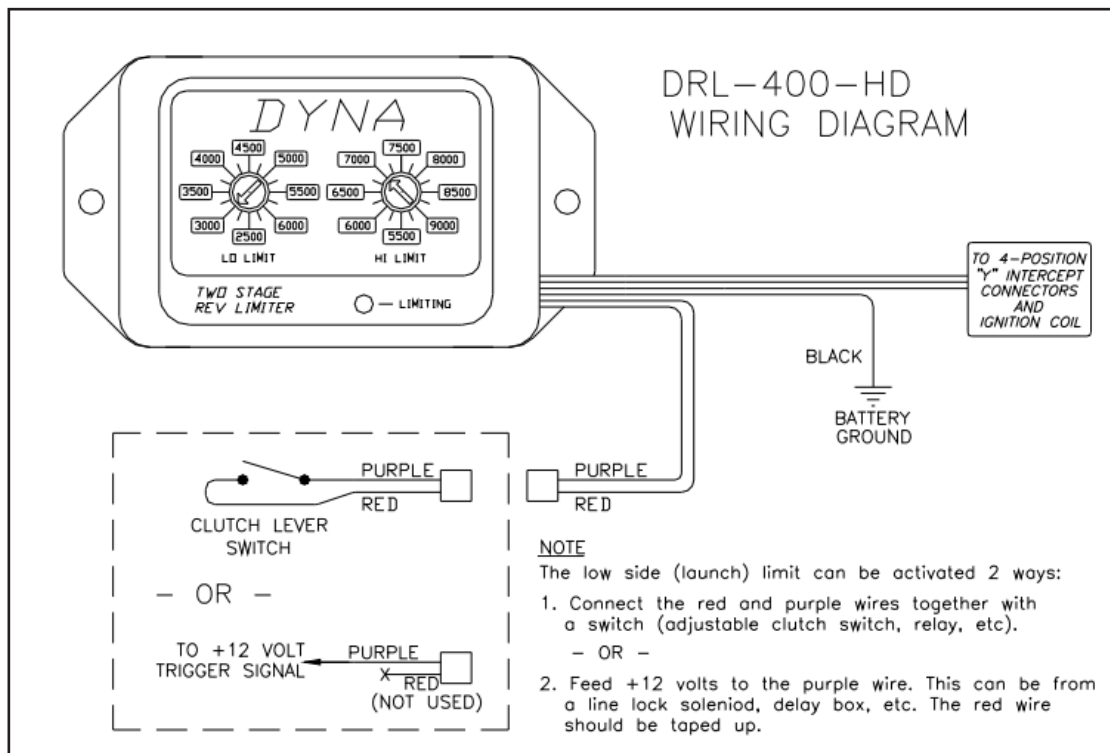
Both the low limit (launch) and the high limit (over-rev) are adjusted with the 16 position rotary switches on the top of the DRL-400. The low limit range is from 2,500 to 6,250 rpm. The high limit range is 5,500 to 9,250 rpm. Both range switches are adjustable in 250 rpm increments..

LED INDICATOR:

A red LED is located on the top of the DRL-400. This LED has two functions. First, with the power on and the engine NOT running the LED functions as a clutch lever position indicator. The LED should come on when the clutch lever is pulled in (clutch switch closed). This feature can help diagnose faulty or intermittent clutch switch wiring and aid in clutch switch adjustment. Second, with the engine running the LED indicates when the unit is limiting ignition pulses. In this mode the LED should only come on at the rpm indicated by the switch settings. If the led comes on at any other rpm, the unit is being false triggered and may cause the engine to miss. The most common cause of false triggering is excessive electrical noise. Be sure that carbon core suppression spark plug wires are used.

USING YOUR DRL-400

When the clutch lever is pulled in, the launch limit if the DRL-400 should be active. When the clutch lever is released, the high limit should be active. Clean, consistent launches can be attained by using the launch limit to hold the engine rpm at a consistent level while holding the throttle wide open at the starting line. When the clutch lever is released the engine will be allowed to rev freely while the clutch is engaging. This will allow you to launch the same way every time. Experience will help to determine the correct launch rpm and clutch switch setting.





TRUTH IN PERFORMANCE

2191 MENDENHALL DRIVE, NORTH LAS VEGAS, NV 89081 - 800-992-4993 - DYNOJET.COM
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