

# *The Integrator Kit* by M. D. Wright, Inc.

**g** Please check with local authorities, as this product (i.e. removing your rear turn signals) may not be legal in all areas for public road use. You can also use the Integrator in conjunction with rear turn signals.

**gg** **Warranty is void if installation instructions are not followed exactly,** or if the Integrator Kit is opened or tampered with. This product should be installed by a qualified person, who has read and understands *all written instructions and wire diagrams*, ***BEFORE*** installing.

**ggg** These instructions are for motorcycles with a dual bulb brake light. If you want to use this product in a different way, or have any questions, please contact M. D. Wright, Inc. at (800)980-3517 for help.

Before starting, get a few tools together. You will need: wire cutters, pliers, and tools to disconnect your battery in addition to any tools you may need to remove the seat or body panels to gain access to the brake light wiring.

**FIRST!** - - - Make sure that the brake light and turn signals are working **100%** correctly **BEFORE** starting. Any problems must be corrected before installing the Integrator Kit.

Do not attempt installation on bikes with only 3 brake light wires (i.e. some Ducati's, and all bikes with factory LED brake lights).

1. Disconnect battery.
2. Find a suitable place to securely mount the Integrator kit so it cannot move around or come loose. You will want to mount it with the long wire tie towards the back of the bike to insure that you will have enough wire to connect to the factory wiring. Often, there is space between the side panels and the frame, or you may have space right in front of the brake light assembly.
3. Locate and verify the following wires close to the brake light assembly - Brake light, Tail light, Left turn signal, Right turn signal, and a **good** ground wire. Most of the time you will find a good ground attached to the brake light bulbs, along with the Brake and the Tail light wires. The ground will often be at the base of the bulbs, with **un**-insulated connectors. (see typical wire color list).

***Important Note: Do not cut the ground wire!! Both bulbs and Integrator need to be grounded.***

4. **Cut** and separate the Brake light\* and Tail light\*\* wires about 3"-4" from the bulbs. Don't cut the ground!

***Important Note: The Integrator Kit will work only if both tail and brake wires are cut!***

**You should have a short wire going to each bulb, which is not connected to anything else!!!!**

These connect to the Integrator purple, blue, white and brown wires, and nothing else (see diagram). The other side of the wires you cut (tail and brake) will come together, possibly in a connector, going into the bikes main wiring harness. Connect one of these cut taillight wires to Integrator green, and one cut brake wire to Integrator red wire. Tape off other wires ends to prevent them from grounding out.

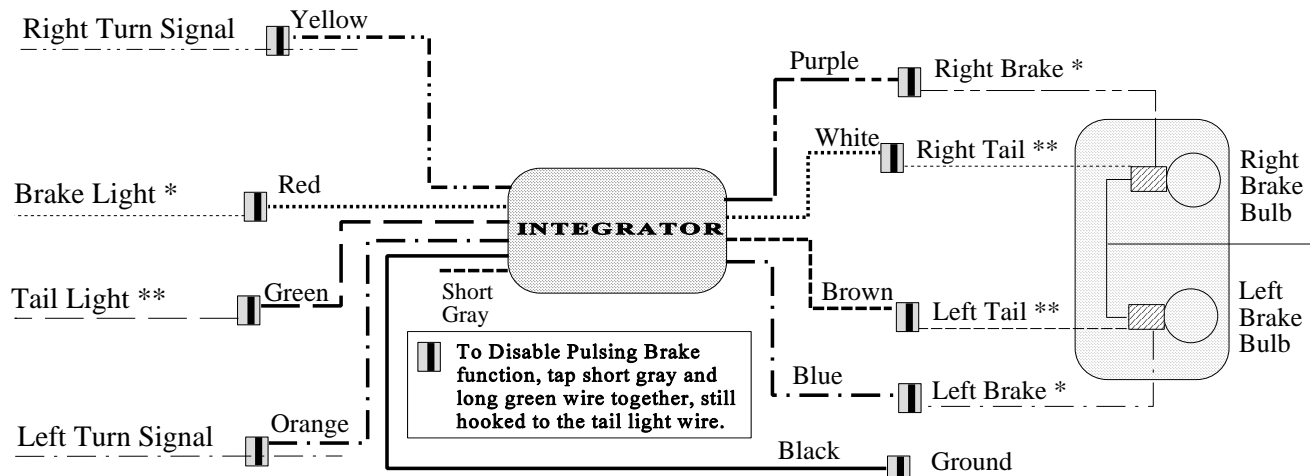
5. Disconnect rear turn signal wires. There should be two wires per side, a ground and a turn signal output (going towards front of bike, often into wiring harness). Only hook up the turn signal output to Integrator. Note, if you want to keep the rear turn signals on, do not disconnect the factory wires, simply tap into them.
6. To use the quick tap connectors, simply insert both wires into the slots (always put Integrator wire in back slot, butted all the way up to the plastic stop, and the bikes wire in open slot), and then squeeze the metal tab **very-very tightly** into the plastic until it is flush. Fold locking flap over until it snaps in place.
7. Route and **connect** the bikes ground wire to the ***Integrator ground wire first*** using a quick tap connector. Then, using the remaining quick tap connectors, route and attach the rest of the wires as shown in the wire diagram (when routing, make sure all wires are out of the way and will not be pulled tightly or pinched).
8. After double checking all connections are secure, and tape any exposed wire ends, connect battery.
9. Turn the ignition on and check the operation of the turn signals, with and without the brake on. The brake lights will only pulse when neither turn signal is on. The brake light will always be steady when either turn signal is on. The tail light will stay off for a moment after cancelling that sides turn signal. Ensure both turn signals and the brake lights work properly.  
**Note:** To disable the pulsing brake option, use a quick tap connector to tap the short gray and long green Integrator wires together, while keeping the long green wire hooked to the tail light wire.
10. After everything checks out OK, then insure all wires and the Integrator kit are secure. Replace and secure the seat and any removed body panels. Enjoy!

**Warranty void if not installed by a qualified person, following *all* instructions exactly.**

Note: Please call for special instructions when installing with an alarm system.

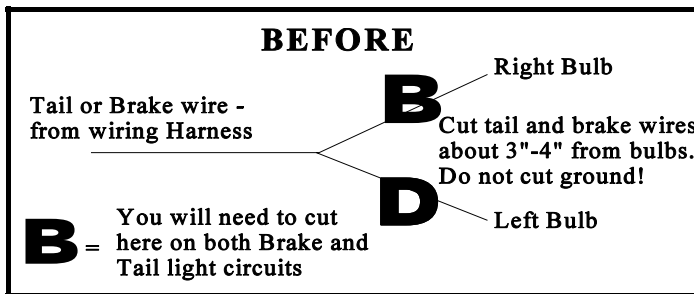
▬ = Quick Tap Connector

\* = Wires that you have to cut

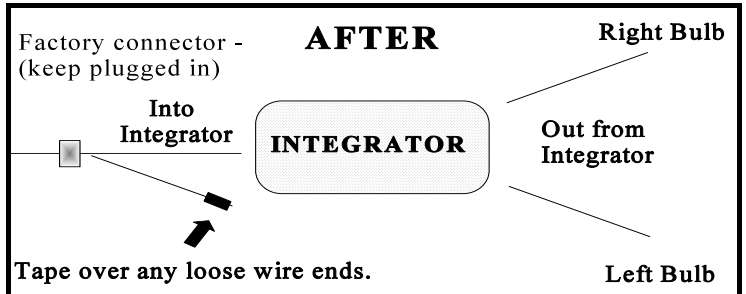


**DO NOT CUT GROUND WIRE !!! - ALL BULBS AND THE INTEGRATOR MUST BE GROUNDED!!!**

**Integrator Wiring Diagram**



Typical wiring for Brake\* and Tail light\*\* systems - this will become three (four ends) separate wires.



Typical wiring for Brake\* and Tail light\*\* systems - ***Note: the right and left bulb wires must be separated.***

**Typical wire colors by bike brand.**

Note: These colors do not apply to **all** models and years of each brand. ***Please verify*** your bikes wiring before installing the Integrator kit.

**Honda**

- Ground - Green
- Brake\* - Green / Yellow tracer
- Left turn - Orange
- Right turn - Light Blue
- Tail\*\* - Brown

**Yamaha**

- Ground - Black
- Brake\* - Yellow
- Left turn - Brown
- Right turn - Dark Green
- Tail\*\* - Blue

**Triumph**

- Ground - Black
- Brake\* - Blue
- Left turn - Green / Red tracer
- Right turn - Green / White tracer
- Tail\*\* - Red

**Kawasaki**

- Ground - Black / Yellow tracer
- Brake\* - Blue(or w/ Red tracer)
- Left turn - Green
- Right turn - Gray
- Tail\*\* - Red

**Suzuki**

- Ground - Black / White tracer
- Brake\* - White / Black tracer
- Left turn - Black
- Right turn - Light Green
- Tail\*\* - Brown

**Aprilia**

- Ground - Blue
- Brake\* - Yellow / Green
- Left turn - Light Blue
- Right turn - Red
- Tail\*\* - Yellow

**Ducati 748, 916, & 996 & All bikes with LED brakelights:**

('01-'03 R6, '02-03 R1, '02-03 Warrior, '02-03 954RR, 03 CBR600RR, 03 GSXR1000, 03 SV650/1000, 03 ZX-6R/RR, 03 Z1000) Before installing, please contact M. D. Wright, Inc. - These bikes require custom installation!

**Note for Aprilia:** You must replace the turn signal relay with a standard automotive turn signal relay.

Check out our website:

**www.integratorkit.com or www.flashalert.com**

## **Integrator Kit - Troubleshooting Problems**

Please make sure you have the front turn signals installed, and hooked up properly.

If you are using Lockhart/Phillips Flush Mount turn signals, take the assembly apart to see which wire is soldered to the light bulb socket. This wire is the ground. Most of the time, the red is the turn signal wire, the black is the running light wire, and the black with white wire is the ground. Please make sure you double check this wiring, despite the instructions on the turn signal package.

Double check that all wires are connected exactly as the instructions state. Also ensure that all quick tap connectors are squeezed very tightly, so the metal tab is flush with the plastic, then fold the cover over. Another easy check to determine if you have a wiring problem or bad bulb, is to simply switch bulbs.

1. If neither tail light, brake light, nor turn signals work,  
Make sure both bulbs and Integrator are grounded. Check fuses. Make sure battery has voltage.
2. If turn signals work, but nothing else does.  
Make sure Integrator is grounded.
3. If both tail and brake light work, but turn signals do not  
Check the Integrator's orange and yellow wires, make sure that they are connected to the turn signal wires coming from the bike, not the actual turn signals, or bulbs.
4. If tail light does not go out on the side that a turn signal is on.  
Make sure that you did cut the factory tail light wires, so that they are 100% separate, from side to side. For example, the white Integrator wire should **only** have contact with the right tail light wire. It can **not** also have contact with the left tail light wire. The Integrator must be able to control each bulb independently. This goes for the brake light wires also.
5. If both bulbs flash when a turn signal is on,  
Make sure that you did cut the factory brake light wires, so that they are 100% separate from side to side. For example, the purple Integrator wire should **only** have contact with the right brake light wire. It can **not** also have contact with the left brake light wire. The Integrator must be able to control each bulb independently. This goes for the tail light wires also.
6. If the tail light and the turn signals work, but the brake light doesn't.  
The long red wire must be hooked up to the brake light input. This wire must be cut and separated from the brake light wires that go to the bulbs. If you wanted to disable the flashing brake light function, the short gray wire needs to be hooked to the long green wire, which still needs to be connected to the tail light wire.

If you have a test light or multi-meter you can make the following checks:

### INTEGRATOR WIRE COLORS

What is on	Black	Green	Red	Brown	Blue	Orange	White	Purple	Yellow
T	0	12	0	12	0	0	12	0	0
T / L	0	12	0	0	12 flashing	12 flashing	12	0	0
T / R	0	12	0	12	0	0	0	12 flashing	12 flashing
T / B	0	12	12	12	12 *pulsing	0	12	12 *pulsing	0
T / B / L	0	12	12	0	12 flashing	12 flashing	12	12	0
T / B / R	0	12	12	12	12	0	0	12 flashing	12 flashing

T=tail light on, L=Left turn signal, R=Right turn signal, B=Brake

0 = -0.5v to +0.5v / 12 = 11.0v - 14.5v

Flashing = 0v to 12v, turn signal speed / \*Pulsing = rapid (Note: not pulsing if short gray is connected to long green.)

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## OTHER PRODUCTS

### **Flexible LED light strips**

Solid colors = \$50 per kit RGB set = \$70 per kit

12" long with 12 LEDs each. Strips can be cut at 3", 6" or 9" lengths. Connectors at both ends, so you can cut one strip to make two. Red, Green, Blue, Amber, White, and RGB (automatically fades through rainbow of colors). Kit comes with two 12" strips, wiring, switch, and connectors. Lifetime warranty.

### **Remote control**

\$40

On/ Off remote control. Turn on accessories (like LED or Neon lights) from up to 150' away. Easy to install. Very small unit, so you can hide it completely. Comes with two remote key fobs. Lifetime warranty.

### **Harley Davidson® LED tail light insert.**

Tail/Brake = \$89.95

Tail/Brake/Turn Signal = \$99.95

Replace the factory light bulb with this LED panel. Two versions available: Tail light / Brake light, or Tail light / Brake light & Turn signals. Both units come with a user selectable Flash-Alert! Feature (pulsing brake light). Installs inside your stock or aftermarket H.D.® brake light assembly. Lifetime warranty.

### **Resistor Set (for LED turn signal installations)**

\$14.95

Slows the turn signal rate back to normal when you replace the stock turn signal bulbs with LEDs. This set has a much larger reserve capacity than any other on the market. Ours will not get hot – guaranteed! Easy to install. Set includes two resistors with connectors. Lifetime warranty.

### **Flash-Alert!**

\$12.95

The Flash-Alert! works on all motorcycle brake lights and automobile third brake lights. This product makes your third brake light flash rapidly, warning other drivers that you are braking. Your brake light will pulse for as long as you have the brake applied, so it does not matter how long you have been stopped you will be able to grab the attention of the people behind you. This extra time could mean the difference between a rear-end collision and a near miss. Lifetime warranty.

### **CBR F2 & F3 Trunk Kit**

\$89.95

With our first product, the CBR F2 & F3 Trunk Kit, you can have a large completely concealed storage compartment for your hat, glasses, gloves, etc. This kit locks and unlocks your seat electronically using your ignition key. It also gives you quick access to your battery or tools, without ever having to remove your side panels again. Lifetime warranty.