

Freightliner Chassis's

With an

One Stage Engine Brake OR Exhaust Brake

Many hours have been spent, researching different chassis wiring schemes in order to properly wire BrakeSwitch into the various chassis electrical systems. This August 14, 2009 document is the latest wiring version which was compiled using several years of the Tiffin Freightliner chassis coaches.

Freightliner over the years has been fairly consistent with their wiring on the One Stage Engine Brake OR Exhaust Brake chassis. Freightliner changes the engine brake switch and its wiring when you get into the two stage engine braking or engine braking or/and exhaust braking.

BrakeSwitch Wiring:

The **PURPLE** (activation) wire connects to the Brake Lamp supply, wire which is numbered **36E**, SAE circuit # 1316. This connection can be made with the blue tap connector found at any automotive store. You can find this wire either under the dash behind the steering column in the large wire loom, or a better place is at the Freightliner fuse/relay block. That block is located either on the firewall under the dash near the throttle pedal or possibly under the drawer stack in front of the seats.

The **BLACK** wire connects to a ground stud, there is a stud located on the firewall near the throttle pedal. I just use a large ring terminal which will fit over the ground stud on the firewall.

Regrettably there is no simple way to access the wiring to the one stage engine brake OR exhaust brake switch except to remove the screws from the driver's side console and then lift up on the panel. You may not be able to remove all of the panel screws some may be under the dash. But you should

be able to lift the panel enough to access the engine OR exhaust brake switch harness. Disconnect the harness and move it where you can work on it. You will need to route the two white and two red (BrakeSwitch) wires, under the dash and into the console area.

The **TWO WHITE** wires are one circuit of the BrakeSwitch logic. Locate the wire attached to pin **2B** on the engine or exhaust brake switch harness this is a ground circuit, wire # 1204. The pin numbers are usually marked on the sides of the switch harness block. Cut the wire about 3 inches away from the exhaust brake switch harness block. Using blue electrical butt splices connect the **FIRST WHITE** (BrakeSwitch) wire to one of the ends of the wire you just cut. Then connect the **SECOND WHITE** (BrakeSwitch) wire to the other end of the wire you cut which is attached to pin **2B** in the block. At this point you should have a wire going to the engine brake OR exhaust brake switch harness connected to one of the white BrakeSwitch wires and the second white BrakeSwitch wire connected to the wire going to the exhaust brake switch harness block pin **2B**.

The **TWO RED** wires are the second circuit of the BrakeSwitch logic.

In this configuration the second circuit is not necessary and can be taped off.

With the BrakeSwitch wired in this way, the engine brake or exhaust brake switch (On the driver's side console) will continue to **control** the engine brake or exhaust brake through is **ON** or **OFF** positions. BrakeSwitch is now installed between the engine OR exhaust brake switch and the electronics controlling the transmission, engine brake OR exhaust brake air solenoid, dash lamp (displaying engine/exhaust braking) and the brake lights on the rear of the coach.


Use these wiring instructions in conjunction with the included Freightliner engine brake/exhaust brake harness wiring schematics and you should have no problems.

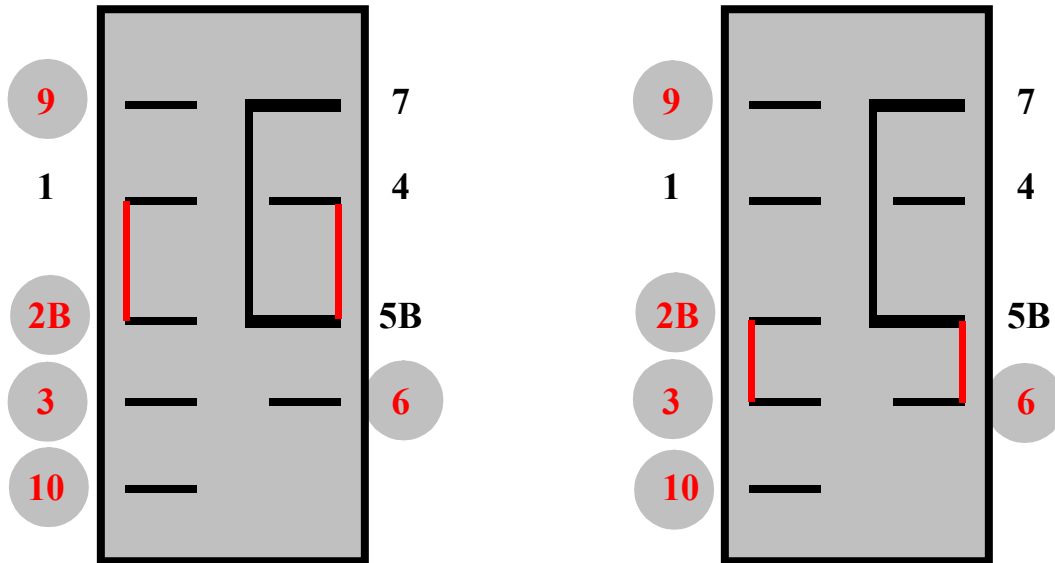
Engine Brake Paddle Switch (A06-30769-072)

OR

Exhaust Brake Rocker Switch (A06-30769-119)

Bottom View of Switch

 < Denotes wire in Harness



 Denotes External Switch Jumper

 Denotes internal switch contacts

SWITCH **OFF**

SWITCH **ON**

2B = Wire # GRD 1204
3 = Wire # 440M 1502
6 = Wire # GRD 1204


9 = Wire # 81C 1102 (**IGN 12VDC**)
10 = Wire # 29A 1304 (**DASH LIGHTS**)

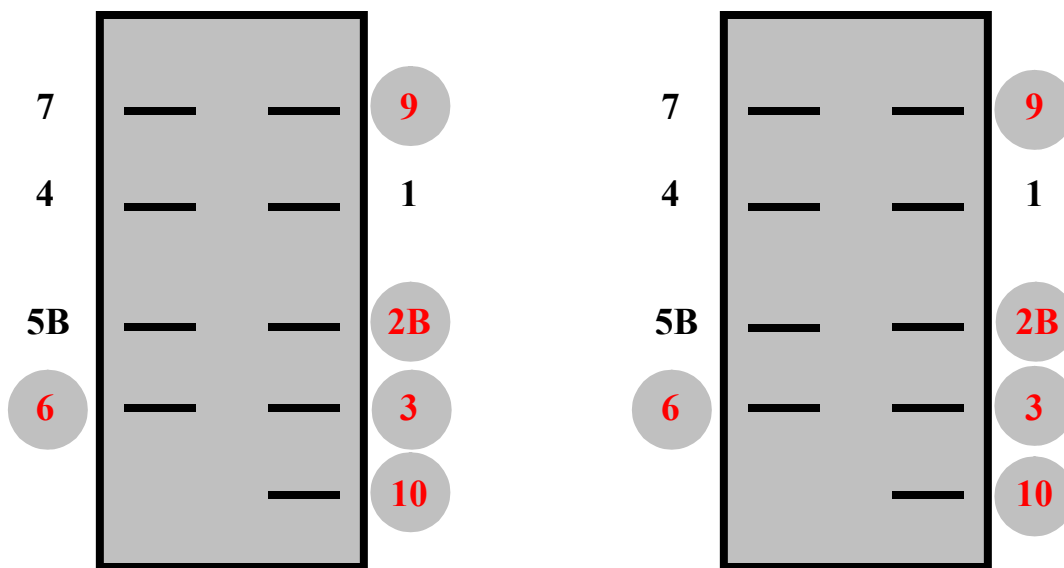
Engine Brake Switch Harness

OR

Exhaust Brake Switch Harness

Top View of Engine/Exhaust Brake Switch Harness

 < Denotes wire in Harness



2B = Wire # GRD 1204

3 = Wire # 440M 1502

6 = Wire # GRD 1204

9 = Wire # 81C 1102 (**IGN 12VDC**)

10 = Wire # 29A 1304 (**DASH LIGHTS**)