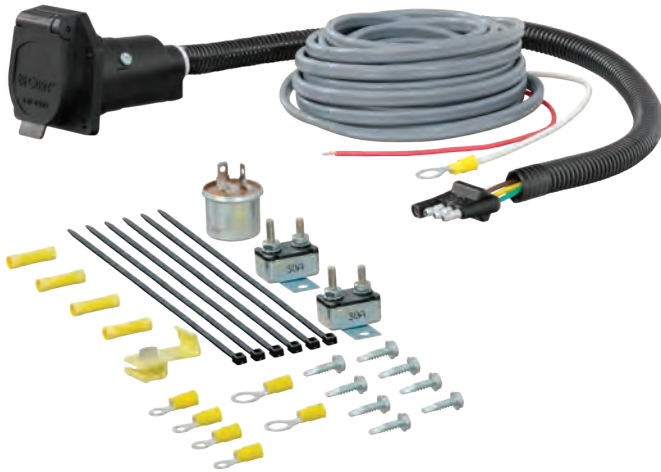




# INSTALLATION INSTRUCTIONS

**DO NOT EXCEED PRODUCT RATING OR TOW VEHICLE LAMP LOAD RATING, WHICHEVER IS LOWER**

## 57186 ADAPTER WITH BRAKE CONTROL WIRING KIT



### KIT INCLUDES

- (1) Pre-wired connector harness
- (1) 30amp circuit breaker
- (1) 40amp circuit breaker
- (5) #10 ring terminals
- (2) 3/8" ring terminals
- (1) 12-10 gauge scotch lock
- (8) Self-tapping screws
- (6) Cable ties
- (1) Heavy duty flasher
- (8) 8 1/2" cable ties
- (1) Snap lock tap connector

### NOTE

All steps must be followed to ensure the wiring kit will function properly. Once installed, test for proper function by using a test light or connecting a properly wired trailer.

### TOOLS NEEDED

- |                              |               |
|------------------------------|---------------|
| Ratchet                      | Crimping tool |
| 3/8" socket / box end wrench | Cutting tool  |
| Wire stripper                | Test light    |

### WARNING

Check vehicle owner's manual or contact the vehicle manufacturer for more information.

# INSTALLATION

Refer to the illustration on page 3 for directions.

## Step 1

Locate vehicle battery and disconnect the negative battery terminal.

## Step 2

Locate an existing 7-way connector mounting bracket or mount a bracket on the rear bumper for the 7-way connector to mount to. Use the provided self-tapping screws.

## Step 3

Route all wires from the CURT wiring harness through the mounting bracket to the backside of the rear bumper.

## Step 4

In the rear of the vehicle, locate the vehicle factory 4-flat connector. Plug the CURT wiring harness 4-flat trailer end connector into the vehicle's 4-flat connector.

**WARNING:** For the next steps, check for miscellaneous items that may be hidden behind or under any surface before drilling to avoid damage and / or personal injury.

## Step 5

Locate a suitable grounding point near the connector such as an existing screw with nut in the vehicle frame or drill a 3/32" pilot hole for the provided screw. The area should be free of rust, dirt and paint. Secure the white ground wire using the ring terminal and provided screw.

## Step 6

In the front of the vehicle, locate a spot or drill a hole in an open area of the firewall to gain access to route the blue and black wire into the cab.

## Step 7

Locate an area next to the location where the blue and black wire will be routed through the cab. Mount the two circuit breakers side-by-side on the firewall next to the opening using self-tapping screws.

## Step 8

Route the blue and black wires along the bottom of the vehicle from the rear of the vehicle to the front. Avoid any pinch points, sharp edges and hot spots that may cause damage to the wire. Secure the wires with the provided cable ties.

## Step 9

Cut back the coating on the jacketed wire taking care not to cut the two wires inside. Take the black wire from the jacketed blue and black wire, measure out enough length to cut, crimp on a #10 ring terminal and then be able to fasten black wire to 40 amp breaker. Using a 3/8" box wrench, fasten the black wire on the 40 amp auxiliary side of the breaker labeled 'AUX'.

## Step 10

Using a section of black wire that was cut from the jacketed wire, crimp a #10 ring terminal onto one end. Using a 3/8" box wrench, attach the ring terminal to the 20 amp auxiliary side of the circuit breaker labeled 'AUX'.

## Step 11

Route the black wire from the 20 amp breaker and the blue wire from the blue and black wire through the opening in the firewall. After wires are inside the cab, seal the opening with silicone or a rubber.

## Step 12

Locate a firm area inside the cab, under the dash, where the brake control can be mounted.

## Step 13

Measure the black and blue wire that passed through the firewall to the brake control unit. Cut the wire to length. Using butt connectors, connect the black wire to the black wire of the brake control. Connect the blue wire to the blue wire of the brake control.

## Step 14

Use a section of 10 gauge wire that will be routed from the battery to the brake control's white wire. Crimp a 3/8" ring terminal on one end of the wire that will connect to the negative (-) side of the battery. Crimp a butt connector on the other end of the wire that will connect with the brake control's white wire.

**IMPORTANT:** Make sure that ground connections are made directly to the tow vehicle battery. Connecting to existing wiring or chassis ground, other than the battery terminal, may damage vehicle circuits and could lead to trailer brake failure.

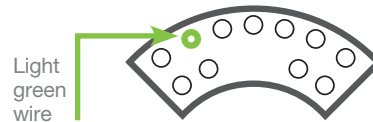
## Step 15

Route the red wire from the brake control unit to the back side of the brake switch.

## Step 16

This step is for 1989 - 1991 E-series & F-series van and trucks with anti-lock brakes. All other vehicles skip to step 17.

Locate the semi-circle turn signal harness connector (as shown) on the steering column under the dash. The connector will have two rows of wires; a row of four and a row of seven. Using a wire tap, attach the stop signal wire (typically red) from the brake control unit to the light green wire. **DO NOT** connect to the red wire with green stripe; serious damage may occur. Skip to step 18.



## Step 17

Locate the brake pedal switch on the back side of the vehicle brake pedal. Determine which side of the switch is the 'cold' or switched side by probing the terminals of the switch with a test light or volt meter. The cold terminal will only indicate power when the brake pedal is depressed. Using a wire tap, attach the red stop signal wire from the brake control unit to the cold side of the stop signal wire.

## Step 18

Inside the engine bay route a 10 gauge wire from the battery to the 40 amp circuit breaker mounted on the firewall. Crimp a 3/8" ring terminal to one end of the wire that will connect to the negative side of the battery. Crimp a #10 ring terminal to the other end of the wire. Using a 3/8" box wrench, attach the #10 ring terminal to the 40 amp battery side of the circuit breaker labeled 'BAT'.

## Step 19

Using a short piece of 10-gauge wire, crimp a #10 ring terminal to both ends of the wire. Using a 3/8" box wrench, attach the ring terminal to the 30 amp battery side of the circuit breaker labeled 'BAT' and attach the other ring terminal to the 40 amp battery side of the circuit breaker labeled 'BAT'. Reconnect negative battery terminal.

## Step 20

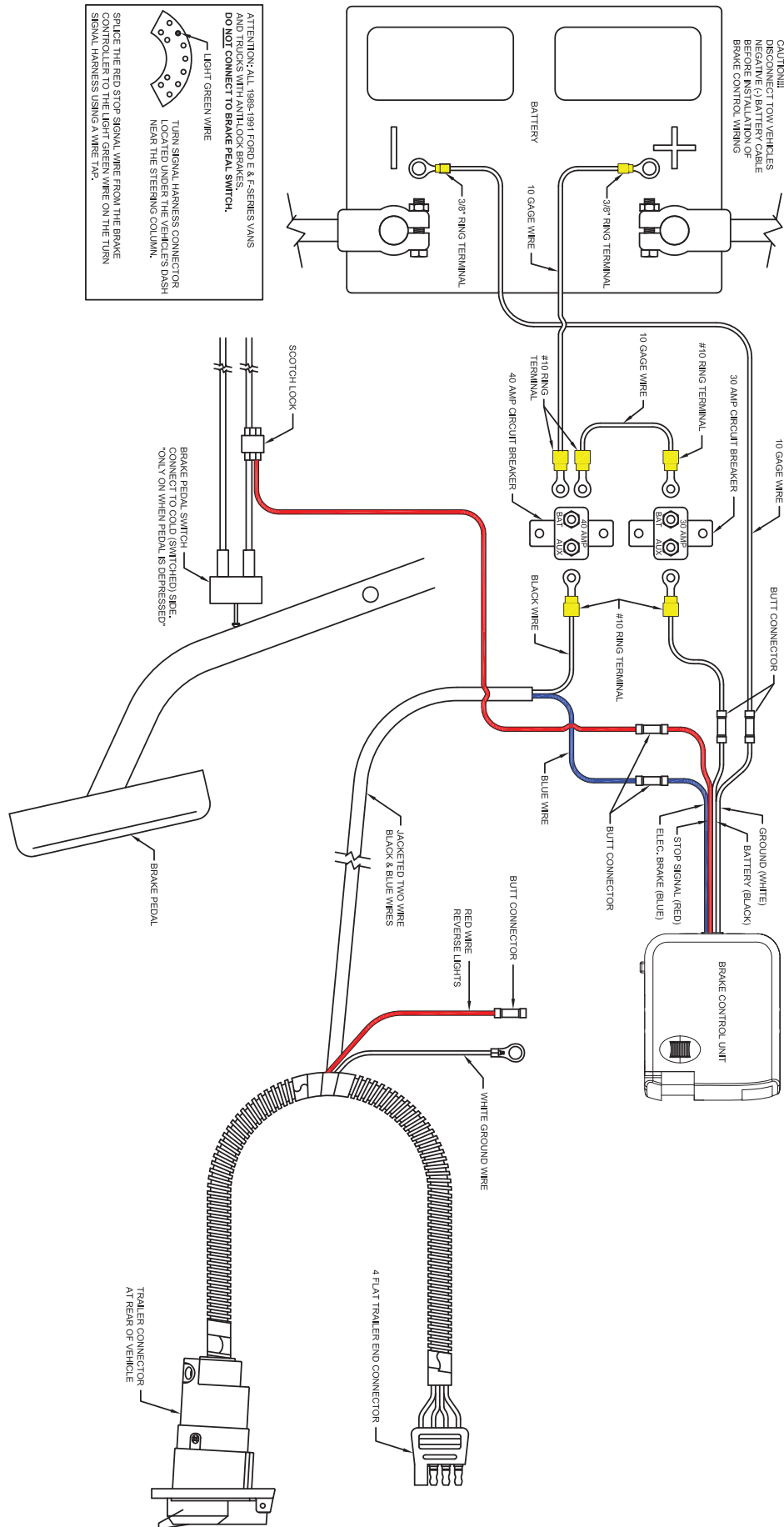
Test the 7-way connector for running lights, brakes lights, turn signals and power. Brake control output cannot be tested unless a trailer is connected to the 7-way connector or by using a 7-way brake control test box.

## Step 21

If turn signals are too fast, replace the turn signal flasher with the one provided.

**12 VOLT BATTERY**  
**IMPORTANT:**  
 READ AND FOLLOW ALL WARNINGS  
 AND CAUTIONS SHOWN ON BATTERY

**CAUTION!!!**  
 DISCONNECT TOW VEHICLES  
 NEGATIVE (-) BATTERY CABLE  
 BEFORE INSTALLATION OF  
 BRAKE CONTROL WIRING



**ATTENTION:** ALL 1988-1991 FORD E & F-SERIES VANS  
 AND TRUCKS WITH ANH LOCK BRAKES,  
 DO NOT CONNECT TO BRAKE PEDAL SWITCH.



TURN SIGNAL HARNESS CONNECTOR  
 LOCATED UNDER THE VEHICLE'S DASH  
 NEAR THE STEERING COLUMN.  
 SPLICE THE RED STOP SIGNAL WIRE FROM THE BRAKE  
 CONTROLLER TO THE LIGHT GREEN WIRE ON THE TURN  
 SIGNAL HARNESS USING A WIRE TAP.