



SELECT A MOUNTING LOCATION THAT CAN BE REACHED EASILY BY THE TOW VEHICLE DRIVER

## INSTRUCTIONS FOR THE INSTALLATION AND OPERATION OF HAYMAN REESE ELECTRONIC BRAKE CONTROLLER FOR 2 AND 4 BRAKE SYSTEMS

**IMPORTANT: READ AND FOLLOW THESE INSTRUCTIONS CAREFULLY. KEEP THESE INSTRUCTIONS IN YOUR VEHICLE FOR FUTURE REFERENCE.**

### THIS PACKAGE INCLUDES:

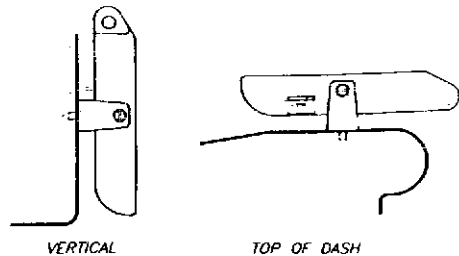
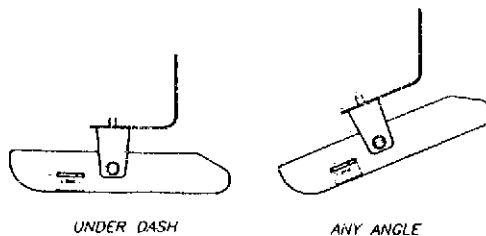
- (1) Brake Control Unit
- (1) Mounting Bracket
- (4) Mounting Screws
- (1) Wire Tap Connector
- (1) Warranty Card

### TOOLS REQUIRED:

- Assorted end wrenches
- Drill with 3mm bit
- Wire connector crimp tool
- Probe type circuit tester
- Wire cutter/stripper
- Screwdriver

### MATERIAL REQUIRED:

- 3mm or larger wire
- 20 Amp auto-reset circuit breaker
- Assorted ring terminals & butt connectors
- 100mm cable ties (6-10)

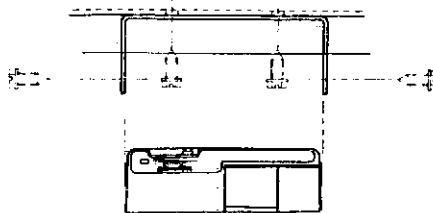


**IMPORTANT: MAKE SURE AREA BEHIND PANEL IS CLEAR BEFORE DRILLING**

USE BRACKET AS TEMPLATE TO MARK HOLE LOCATIONS.

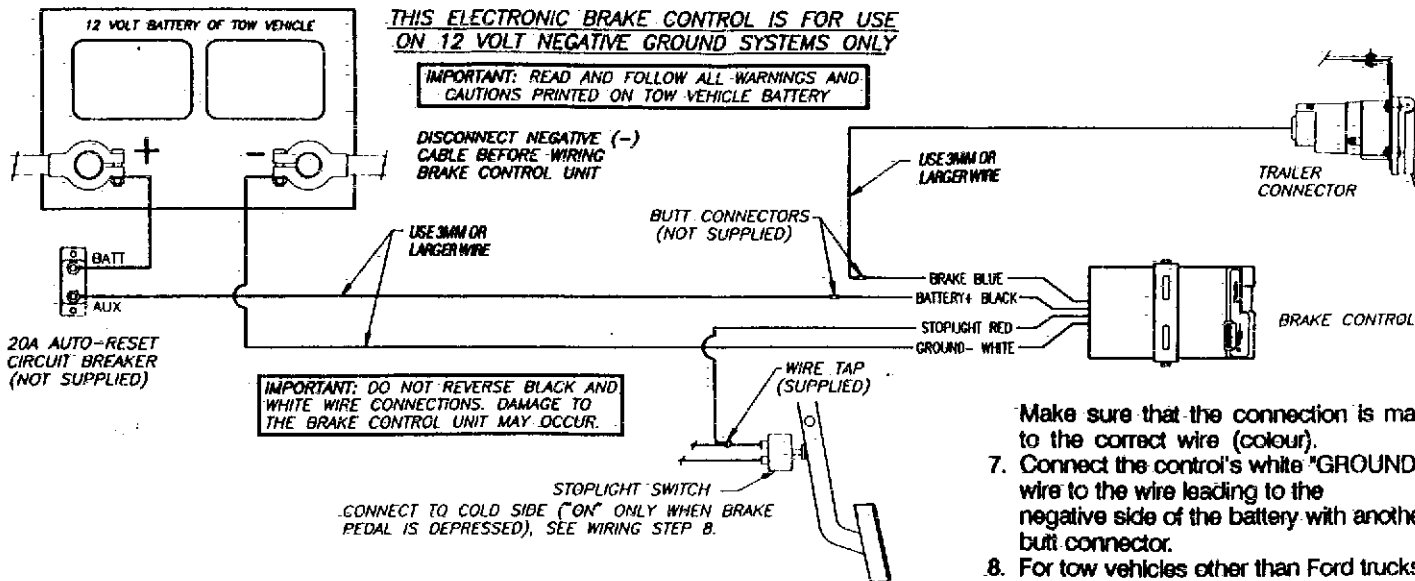
DRILL (2) 1/8" DIA. HOLES AND MOUNT BRACKET WITH SCREWS PROVIDED.

MOUNT BRAKE CONTROL TO BRACKET USING THE REMAINING (2) SCREWS.



### MOUNTING

1. Determine a suitable mounting location.
  - A) The unit must be mounted securely to a solid surface.
  - B) The unit must be easily reached by the driver.
  - C) The area behind the mounting location must be clear so nothing will be damaged when drilling.
2. Hold the mounting bracket in the position selected and mark hole locations through the slots in the bracket.
3. Using a 1/8" dia. bit, drill holes in the marked locations.
4. With a screwdriver or a 1/4" nut driver, secure the bracket in place using (2) self tapping screws (provided). Be careful not to strip the holes by over-tightening.
5. Mount the brake control unit in the bracket using the other (2) self tapping screws as shown in the illustration.



**IMPORTANT: A brake control that is not properly grounded may operate intermittently or not at all. Make sure all connections are solid.**

**WARNING: Do not connect the black "BATTERY" wire to the fuse panel or tie into accessory wiring. Connecting to existing wiring may damage vehicle wiring and cause trailer brake failure. Do not reverse black "BATTERY" wire and white "GROUND" wire connections. Even a momentary misconnection can damage the brake control unit.**

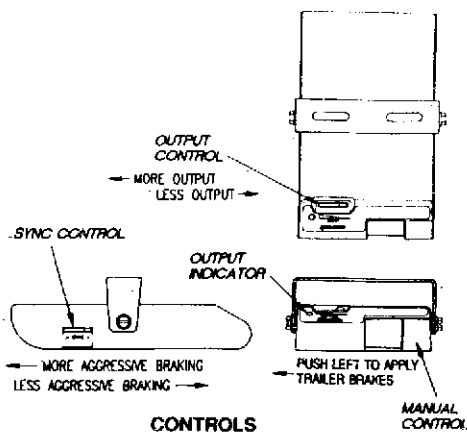
### WIRING

1. Disconnect the tow vehicle's negative (-) battery cable.
2. Mount a 20 Amp auto-reset circuit breaker as close to the positive (+)

3. battery terminal as possible. Using 3mm or larger stranded wire and crimp type ring terminals connect the "BATT" side of the circuit breaker to the positive battery terminal.
3. Feed two, different coloured, 3mm or larger stranded wires from the brake control location to the tow vehicle battery area.
4. Connect one of the wires (noting the colour) to the "AUX" side of the circuit breaker with a ring terminal.
5. Connect the other wire to the negative battery cable with a ring terminal.
6. Attach the control's "BATTERY +" wire to the wire connected to the "AUX" terminal of the circuit breaker using a butt connector.

Make sure that the connection is made to the correct wire (colour).

7. Connect the control's white "GROUND -" wire to the wire leading to the negative side of the battery with another butt connector.
8. For tow vehicles other than Ford trucks and vans equipped with anti-lock brakes determine which side of the stoplight switch is the cold side. To determine the cold side, probe the terminals of the switch with a test light until one is found that is only on when the brake pedal is depressed.
9. Using the wire tap connector (provided) splice the brake control's red "STOPLIGHT" wire to the wire attached to the cold side of the stoplight switch as determined in step 6.
10. Secure all loose wires with cable ties so that they will not be damaged and reconnect battery. See vehicle's owners manual for special reconnection instructions.



**CONTROLS**

### OUTPUT CONTROL

The output control is located on the front of the brake control unit at the top left side.

The output control establishes the maximum amount of power available to the trailer brakes.

As the settings is moved to the left more power will be available to the brakes when the brake pedal is pressed or the manual control is used.

The output control would be adjusted when trailer load changes, when different trailers are used or to adjust for a change in road conditions.

### SYNC CONTROL

The sync control is located on the left side of the brake control unit, forward of the mounting bracket.

The sync control adjusts brake aggressiveness or the time it takes to reach the full output set by the output control when the brake pedal is pressed. The sync adjustment has no effect on the manual control.

The brakes become more aggressive as the switch is moved toward the front of the tow vehicle.

The sync control should be adjusted for individual driver preference or changing road conditions.

### MANUAL CONTROL

The manual control is located on the front of the brake control unit at the right side.

The manual control applies only the trailer brakes and would be used in situations when it is desirable to reduce speed slowly.

When the manual control is pushed to the left the control begins to apply the trailer brakes. The further to the left it is pushed the harder the brakes are applied until the maximum set by the output control is reached.

The manual control activates the tow vehicle and trailer stoplights and the output indicator on the control unit.

On properly setup and loaded tow vehicle/trailer combinations, trailer sway caused by turbulence from another vehicle, a wind gust, or a downgrade can usually be corrected with a slow, steady application of the manual control.

### OUTPUT INDICATOR

The red indicator light on the front of the control unit will glow when brakes are applied either by the brake pedal or the manual control.

The indicator will start dim and glow brighter as output increases.

The indicator light will also help confirm proper installation.

### SET UP

1. With a trailer connected set the sync control half way between + and -. Starting with the output control in the lowest position (all the way right) roll forward slowly and stop. If no trailer braking is felt adjust the output control slightly to the left. Repeat this process until firm trailer brakes are felt. If the trailer brakes lock-up or jerk adjust the output back to the right slightly.
2. Move the sync control back (toward the driver) to about 1/4 of the distance between + and -.
3. Test drive making several stops. Adjust the sync control until stops are smooth and firm. Slight adjustment of the output control may also be desirable.
4. Have someone watch the stoplights while the manual control is activated to make sure the stoplights on both the tow vehicle and trailer are working.

**Note:** If any problems occur during set up refer to the Trouble Shooting section of these instructions.

## TROUBLESHOOTING GUIDE

PROBLEM	LIGHT	POSSIBLE CAUSES	SOLUTION
Trailer braking is delayed	On	Incorrect Sync Adjustment	Adjust to more aggressive position
Trailer brakes Come on too fast	On	Incorrect Sync Adjustment	Adjust to less aggressive position
Trailer brakes are weak	On	Incorrect Output Adjustment	Adjust for more output
Trailer brakes come on too hard	On	Incorrect Output Adjustment	Adjust for less output
No trailer brakes - pedal or manual operation	Off	No power to unit thru black "Battery" Wire Output adjusted to low	Check connections at: Battery, Circuit Breaker, Brake Control Re-Adjust (see set-up)
No trailer brakes - pedal or manual operation	On (Bright)	No connection to trailer brakes thru blue "Brake" wire Trailer or trailer brakes not grounded	Check trailer connector contacts check wire connections (see wiring) Check Trailer & Brake grounds
No trailer brakes using brake pedal manual operation works	Off (Pedal) On Manual	No connection at stoplight switch thru red "Stoplight" wire	Check Stoplight connection (See wiring step 8)
Trailer brakes locked on when connected to brake control	On	Red "Stoplight" wire connected to wrong side of stoplight switch or to battery + Break-away switch activated	Check connection (See wiring step 8) Check switch & correct
Trailer brakes seem to be working	Dim or Flickers	Faulty white "Ground" wire connection	Check connections
Weak or inconsistent trailer brakes	Dim or Flickers	Short in blue "Brake" wire circuit Short in trailer brake circuit	Locate short & correct Locate Short & Repair
Brake control overheats, smells hot, low or no brake output	Dim	Black "Battery + " wire & white "Ground" wire connections reversed	Brake control unit destroyed correct wiring & replace unit

### USAGE TIPS

Light pressure on the brake pedal will activate the trailer's brakes with little or no effect on the tow vehicles brakes. This is useful for gradual slowing on steep downhill grades or before stops. This is also useful for controlling sway.

Periodic adjustment of the Sync and Output controls may be necessary to correct for changing road conditions, trailer loading, brake wear, and/or driver preference.

On some vehicles, operating the brake control's manual control will not disengage "Cruise Control".

# HAYMAN REESE

## ELECTRIC BRAKE CONTROLLER

### WARNING



This unit suits 12 volt negative ground only.  
Reversing Polarity or incorrect wiring will cause permanent damage to the controller and will void warranty.

**IMPORTANT:** Prior to attempting any installation please read enclosed fitting instructions completely. An additional step in the installation instructions must be followed when the electric brake controller is being fitted to these vehicles with cruise control/trip computer:

Ford Falcon XF Ford Fairlane ZL  
Ford LTD, FE

The red wire on the brake controller that is normally connected to the vehicle stoplight switch must not be connected in this manner to the above vehicles.

The only point to connect the red wire into the brake light circuit, in order to correctly trigger the trailer brakes, is located in the vehicle boot compartment.

1. Locate the wiring connector situated in the spare wheel well, underneath the vehicle jack.
2. Adjacent to this connector is a green wire with a red trace.
3. This wire must be connected to the red wire of the brake controller and not directly off the stoplight switch.

### **SPECIAL NOTE: OTHER VEHICLES FITTED WITH CRUISE CONTROL**

For all other vehicles fitted with Cruise Control ensure the red wire on the brake controller is connected to the stop light wire and not the Cruise Control wire.