

INSTALLATION INSTRUCTIONS

2650-1304-00 Rev. A

INSTALLATION



413 West Elm Street • Sycamore, IL 60178
(866)248-6357 • Fax (815)895-6786
www.dedenbear.com service@autometer.com

Throttle Stops Models

TS-1 (Std. Holley)
TS-5 (Dom. Holley)
also TS-1A (CO2 - Std. Holley)
TS-5A (CO2 - Dom. Holley)

- 1) Remove the carburetor, gasket, and mounting studs.
- 2) Install the four long mounting studs supplied with the Throttle Stop.
- 3) Install a new gasket, the Throttle Stop (solenoid forward), a 4-hole gasket and then the carburetor.
- 4) Wire the Throttle Stop as shown in the following drawings. In all cases the power to the Stop should come directly from the master cut-off switch at the back of the car.

ELECTRIC SOLENOIDS - If you are using electric solenoids, use one 10-amp circuit breaker and at least a 10 gauge wire to the solenoid's positive (+) terminal. Ground the negative (-) terminal to a carb stud.

CO2 SYSTEMS - If you are using CO2 actuator, a single 18 gauge supply wire will be sufficient. Use a 5 amp fuse in the power line.

If you are using a CO2 system, plumb the air line by taking the 1/4" diameter plastic tubing from your CO2 bottle regulator and push it into the orange air fitting on the needle valve. The tubing can be removed by pushing in on the orange locking ring and pulling on the tubing.

Recommended air line pressure from the CO2 bottle is 80-100 PSI. Minimum pressure for consistent operation is 75 PSI. Maximum pressure is 120 PSI. Use a CO2 system instead of compressed air because the compressed air systems foul up with oil and water condensation from the compressors used to fill up the bottle. They also do not maintain the consistent pressure needed for repeatable operation.

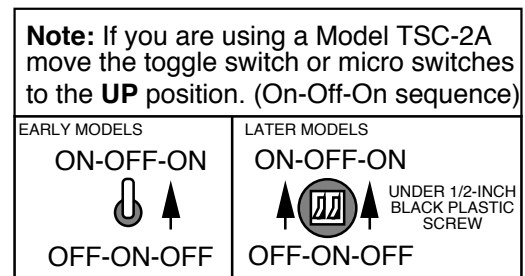
INSTALLATION TIPS:

ELECTRICAL SOLENOIDS - The electrical solenoids do not draw power with the throttle stop in the closed position. When power is applied to open the stop, the solenoids draw 30 amps while the stop is snapping open. This is only an instantaneous pulse. When the stop is wide open, the solenoid internally switches to a "hold-in" coil and draw about 1 amp. If for any reason the butterflies do not fully open, the solenoid will overheat and burn themselves out. To prevent this, a 10 amp circuit breaker must be installed in the solenoid electrical supply wire. If using a Throttle Stop Controller, install the circuit breaker in the controller's +12v wire. The purpose of using large 10 gauge wire connected directly to the master cut-off switch at the back of the car is to prevent voltage drop to the solenoid. If the voltage is low at the solenoid, the stop may not open fully and it will quickly burn itself out (or "pop" the circuit breaker). Solenoids returned with burned out coils will not be covered under warranty.

CO2 SYSTEMS - The CO2 actuated throttle stops draw very little power, about .75 amps. Therefore they only need a 18 gauge power wire. If you are using a Throttle Stop Controller, you should install a 5-amp fuse in the controller's +12v wire. The needle valve determines how fast the Throttle Stop opens. For a starting point, loosen the locking ring on the needle valve and turn it all the way in. Then back out the needle valve 4 turns and tighten the locking ring. Backing the needle valve out further opens the Throttle Stop faster and turning it in opens it slower. In general, the quicker you can open the stop, the more consistent the car will be.

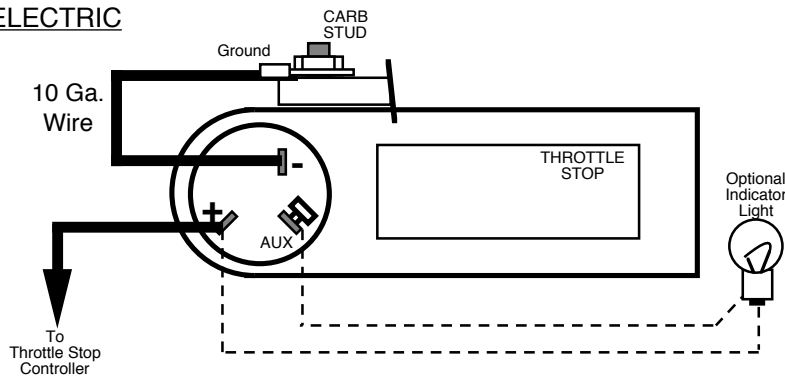
SEE REVERSE SIDE FOR WIRING DIAGRAMS

Dedenbear Throttle Stop Controllers Models TSC-2A has a "OUTPUT" switch located on the front of the box. This switch controls the polarity of the OUTPUT terminal. Early models had a small chrome toggle, while later models have two micro-rocker switches located under a 1/2-inch black plastic screw. For normal operation of Throttle Stops models TS-1 & TS-5, flip the toggle/rockers UP to the "ON-OFF-ON" output mode.

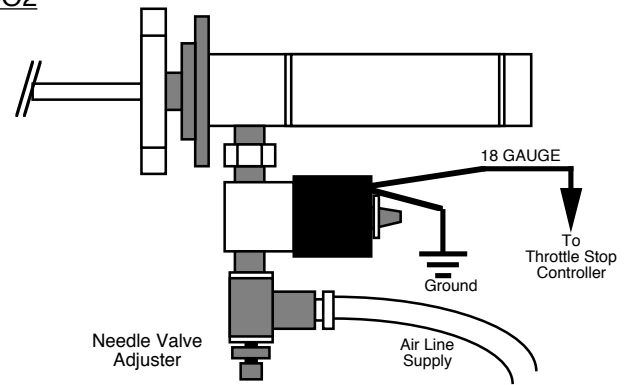


WIRING & PLUMBING: Use 10 gauge wire for Electric Solenoids & 18 gauge for CO2 systems.

ELECTRIC

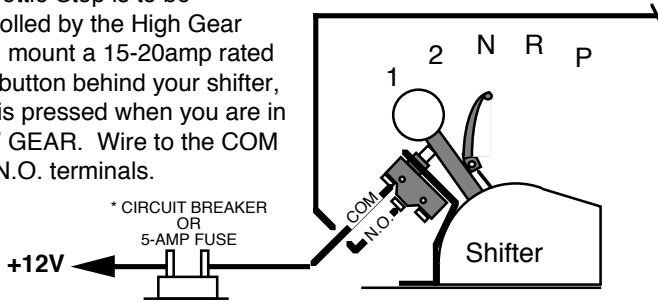


CO2

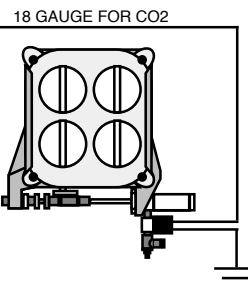


HIGH GEAR SHIFT

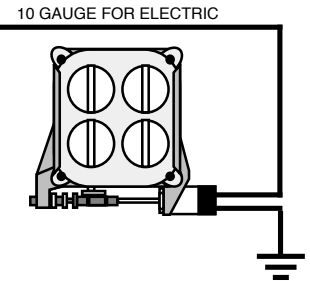
If Throttle Stop is to be controlled by the High Gear Shift, mount a 15-20amp rated pushbutton behind your shifter, so it is pressed when you are in LOW GEAR. Wire to the COM and N.O. terminals.



CO2 actuator

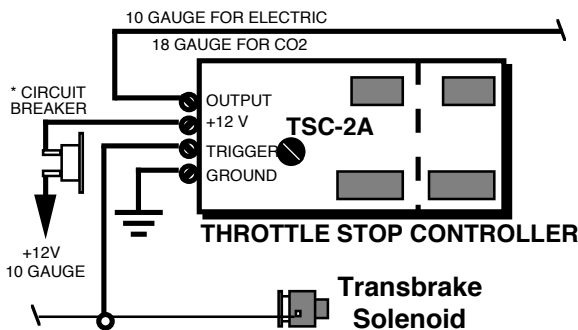


Electric Solenoid

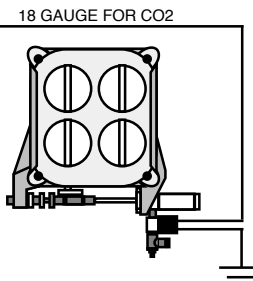


- Install a 10-amp circuit breaker for ELECTRIC systems.
- Install a 5-amp fuse for CO2 systems.

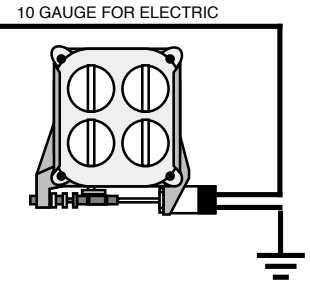
SINGLE CONTROLLER



CO2 actuator



Electric Solenoid



- Install a 10-amp circuit breaker for ELECTRIC systems.
- Install a 5-amp fuse for CO2 systems.

LIMITED 1 YEAR WARRANTY

DEDENBEAR Products, Inc. warrants to the consumer that all DEDENBEAR Products purchased from an Authorized DEDENBEAR Reseller will be free from defects in material and workmanship for a period of twelve (12) months from date of the original purchase. Products that fail within this 12 month warranty period will be repaired or replaced at DEDENBEAR's option, when determined by DEDENBEAR that the product failed due to defects in material or workmanship. This warranty is limited to the repair or replacement of parts in the DEDENBEAR Product and the necessary labor done by DEDENBEAR to effect the repair or replacement of the DEDENBEAR product. In no event shall DEDENBEAR's cost to repair or replace a DEDENBEAR under this warranty exceed the original purchase price of the DEDENBEAR Product. Nor shall DEDENBEAR Products, Inc. be responsible for special, incidental or consequential damages or costs incurred due to the failure of a DEDENBEAR Product. This warranty applies only to the original purchaser of the DEDENBEAR Product and is non-transferable. This warranty also applies only to DEDENBEAR Products purchased from an Authorized DEDENBEAR Reseller. All implied warranties shall be limited in duration to the said 12 month warranty period. Breaking the instrument seal, improper use or installation, accident, water damage, abuse, unauthorized repairs or alterations voids this warranty. DEDENBEAR disclaims any liability for consequential damages due to the breach of any written or implied warranty on all products manufactured by DEDENBEAR Products, Inc.

FOR SERVICE SEND TO: **DEDENBEAR PRODUCTS, INC** 413 W. Elm St. Sycamore, IL 60178 USA (866) 248-6357

Email: service@autometer.com

CUSTOMER SERVICE & TECH. SUPPORT: (866)248-6357 Mon-Fri 8am-5pm CST