

# INSTALLATION INSTRUCTIONS



1917 OAK PARK BLVD. PLEASANT HILL, CA 94523  
(925)935-3025 FAX (925)935-2287  
www.dedenbear.com email@dedenbear.com

## Model AS-1 3-speed Air Shifter

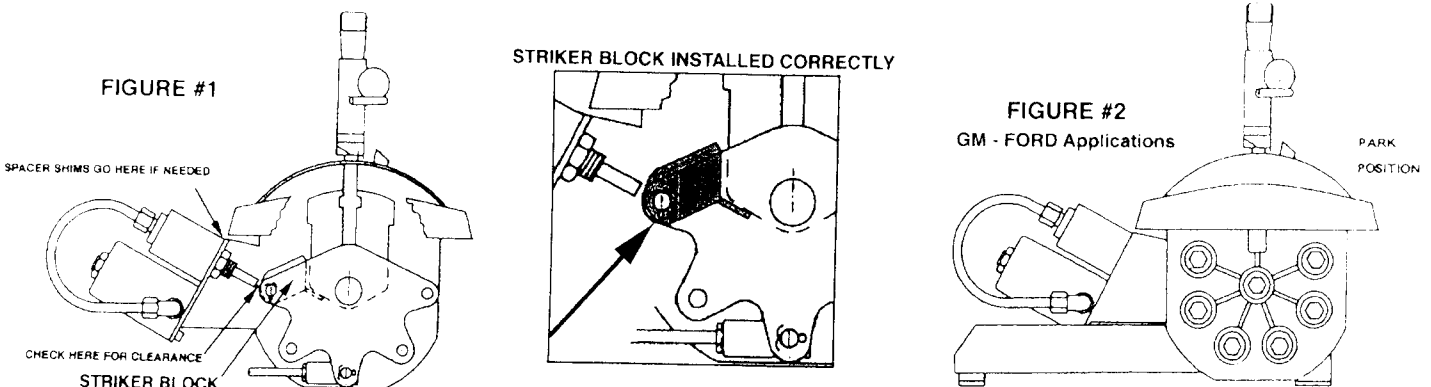
for Turbo Action Cheetah SCS shifter.  
Reverse Pattern 3 speed

The model AS-1 shifter is designed for three speed applications using the **Turbo Action Cheetah SCS shifter, reverse pattern (P,R,N,1,2,3) with 3rd gear down to the right side of the gate plate.** (Gate plates are available if your shifter has a gate with 3rd gear down to the left). Both the 1-2 and the 2-3 shift will be made automatically at the preselected rpm setting (if an rpm switch is being used). If you have a three speed with a forward pattern valve body or a two speed transmission you need Dedenbear shifter part number AS4.

### INSTALLATION

- 1) Insert the striker block between the shifter's stamped center plates as shown in figure 1. Put the shifter lever into the "neutral" position and slide the clevis pin through the stamped plates and the striker block by inserting through the access hole in the side of the shifter. The two 1/8" lips on each side of the striker block should be resting flush against the stamped plates inside the shifter and the roll pin should be under the aluminum center casting (do not insert the roll pin in the hole in the aluminum casting). Fasten the clevis pin in place with the cotter pin.
- 2) On GM and Ford shifters, slide the air shifter unit into the Cheetah shifter from the cable end as shown in figure 2. Fasten it in place with the four supplied 1/4 x 1/2" long bolts. Look down from the top of the shifter through the gate plate. Move the shift lever back and forth between first and reverse gear and look for clearance between the air cylinder rod end and the striker block. They should just barely touch or have slight clearance. If the shifter hangs up going through the neutral position, then remove the air cylinder from the bracket and insert the supplied shim to space the air cylinder outwards. Reverse the sequence and reassemble the shifter. Check for clearance again.
- 3) On Chrysler shifters, open the Mopar hardware kit and follow the included instructions for relocating the mounting legs and installing the notched dowel. Ford and GM shifters do not use any parts in the Mopar kit.
- 4) Attach the nylon air line (1/4 od) to the fitting on the air shifter solenoid. Set the CO2 bottle's pressure regulator at a pressure between 90-120 psi. The higher pressure results in quicker shifts and gives more safety margin in case of a sticky shift cable or transmission. This will also help hold the shifter lever against the gate plate during the 1-2 shift, and should keep the lever from sliding over into 3rd gear. The 10oz bottle will last for hundreds of shifts, and it's not uncommon to expect 500 shifts per bottle (250 passes). Be sure to weigh your bottle when it is first filled and weigh it again around mid season to determine exactly how much CO2 you have used. (The bottle weighs 2lb 3oz empty and 2lb 13oz full)
- 5) To test the unit, put the shifter in low gear. Ground one of the solenoid wires and momentarily touch the other wire to 12 volts. The shifter should shift from first to second. Momentarily touch the 12 volt wire again and the shifter should shift from second to third. If it doesn't shift, check for binding, lack of 12 volts, proper line pressure, or plugged air line. If it shifts from first directly to third, increase the air pressure. (Dedenbear dual gauge regulators can be set at 120 psi max.)
- 6) Mechanical installation is now complete. Wire the shifter unit as shown in the wiring diagram on the reverse side.

**IMPORTANT: For maximum safety, when using any electric or air shifter, always put the transmission in park when working on the vehicle with the engine running.**

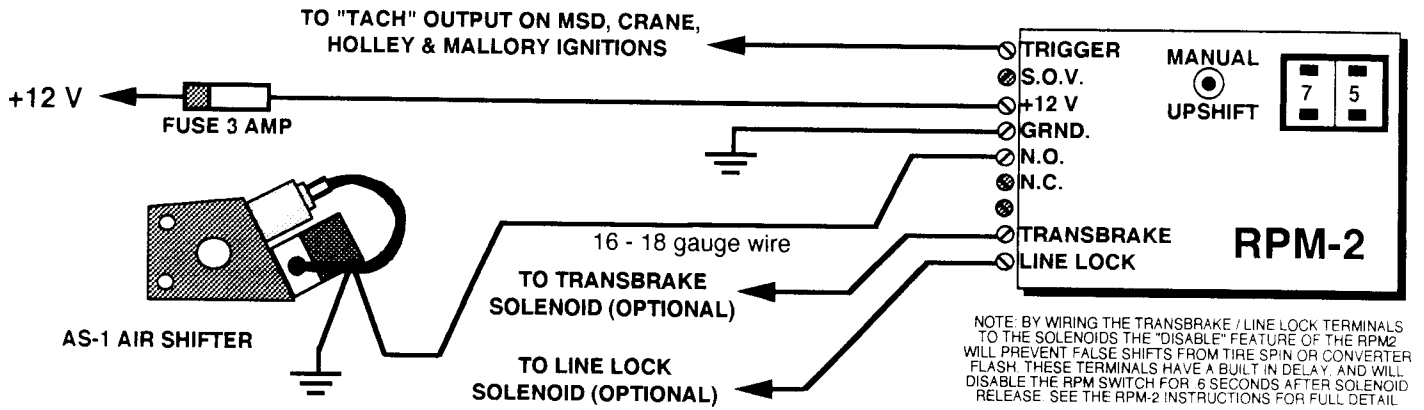


### LIMITED 1 YEAR WARRANTY

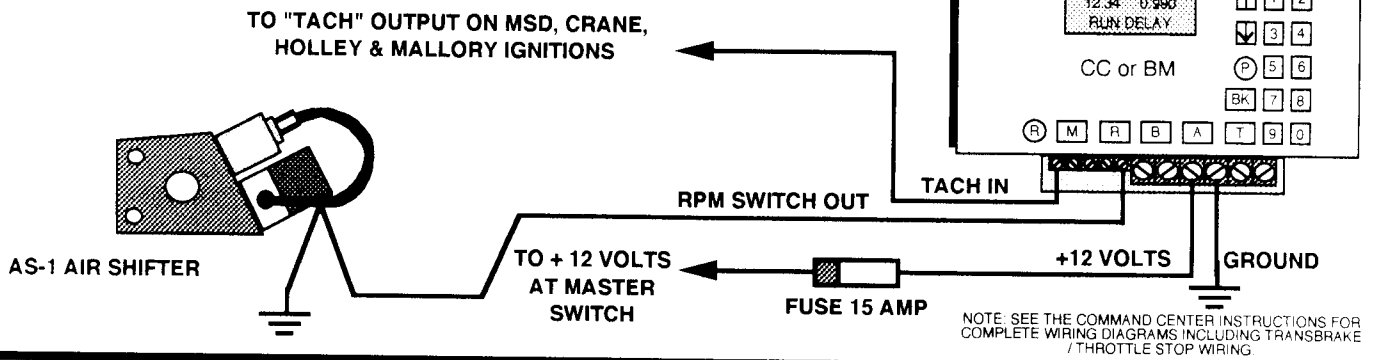
Dedenbear Products components are warranted directly by Dedenbear Products against defective material or workmanship under normal use and service for a period of one (1) year after purchase. Dedenbear Products will repair or replace the defective unit, at Dedenbear Products option, free of charge. This warranty does not cover any damage to the component caused by abuse, mishandling, alteration, accident, electrical current fluctuations, failure to follow installation/operating instructions, maintenance, storage and environmental conditions, or repair attempts made anyone other than Dedenbear Products Authorized Service facility.

DEDENBEAR PRODUCTS SHALL NOT BE LIABLE FOR INJURY, CONSEQUENTIAL, OR OTHER TYPE DAMAGES RESULTING FROM THE USE OF ITS PRODUCTS, OTHER THAN THE LIABILITY STATED ABOVE. This warranty is in lieu of all other warranties of merchantability or fitness of use. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

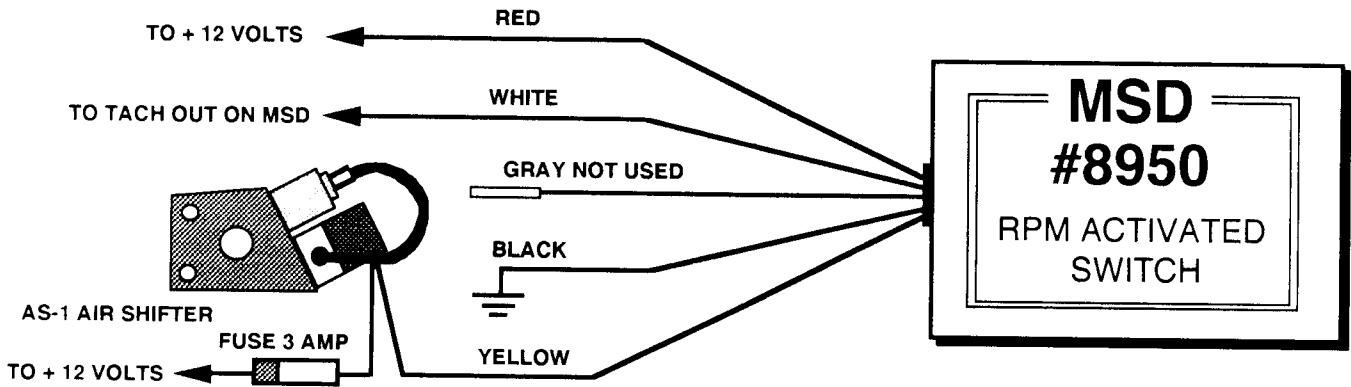
## WIRING WITH DEDENBEAR RPM-2



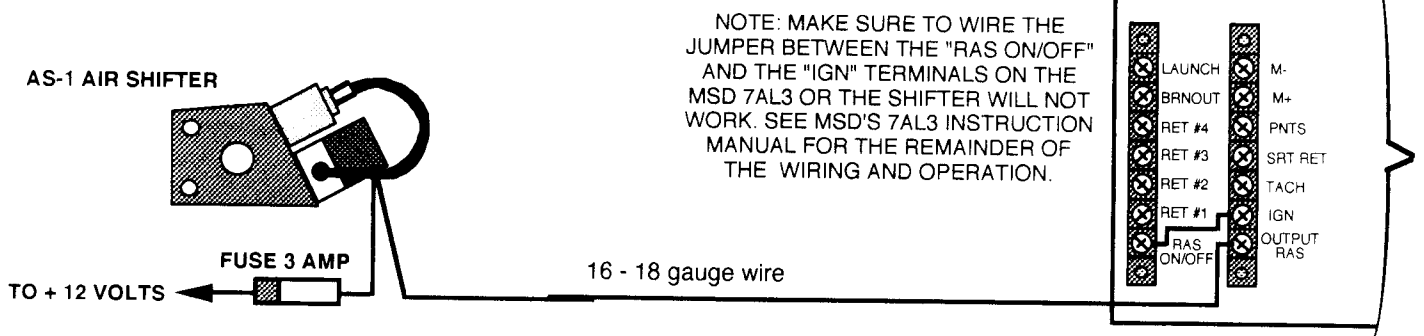
## WIRING WITH DEDENBEAR BM-1, BM-2, CC-1, CC-2 OR CC-3



## WIRING WITH MSD RPM SWITCH #8950



## WIRING WITH MSD 7AL3 IGNITION



NOTE: IF YOUR DIAGRAM IS NOT SHOWN, CALL (925) 935-3025 FOR TECHNICAL HELP

## MOPAR HARDWARE

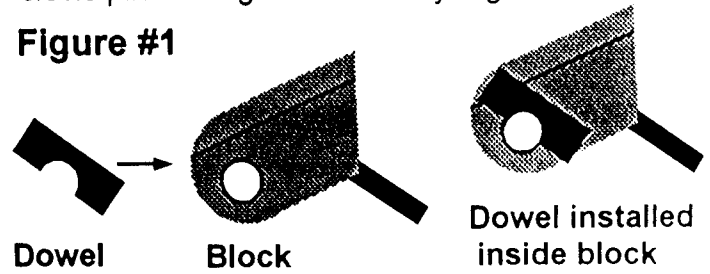
SUPPLEMENTAL HARDWARE FOR AS-1  
USED WITH TORQUEFLITE 904 AND 727  
TRANSMISSIONS

**Important:**

For maximum safety, with any air or electric shifter, always put the transmission in park when working on the car with the engine running.

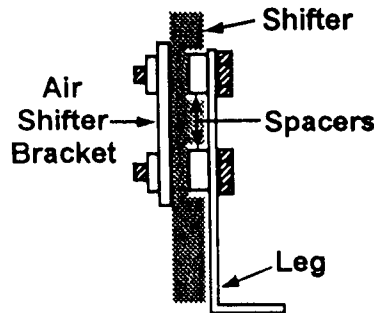
On Chrysler shifters the enclosed notched dowel **must** be installed in the striker block as shown in figure 1. Slip the striker block into the shifter, hold the dowel inside the block and slide in the clevis pin locking the assembly together.

**Figure #1**



On Chrysler versions of the Turbo Action Cheetah Shifter, the rear mounting legs must be relocated to the outside of the shifter body. Using the supplied 1/4" spacers and 7/8" long bolts, bolt the legs, spacers and air shifter in place as shown in figure #2.

**END VIEW OF LEG MOUNTING**



**Figure #2**

