

INSTALLATION  
INSTRUCTIONS  
2650-1325-00 Rev. B



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Model AS-1  
3-speed Air Shifter  
for Turbo Action Cheetah  
SGS 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 a 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 21b 3oz empty and 21b 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

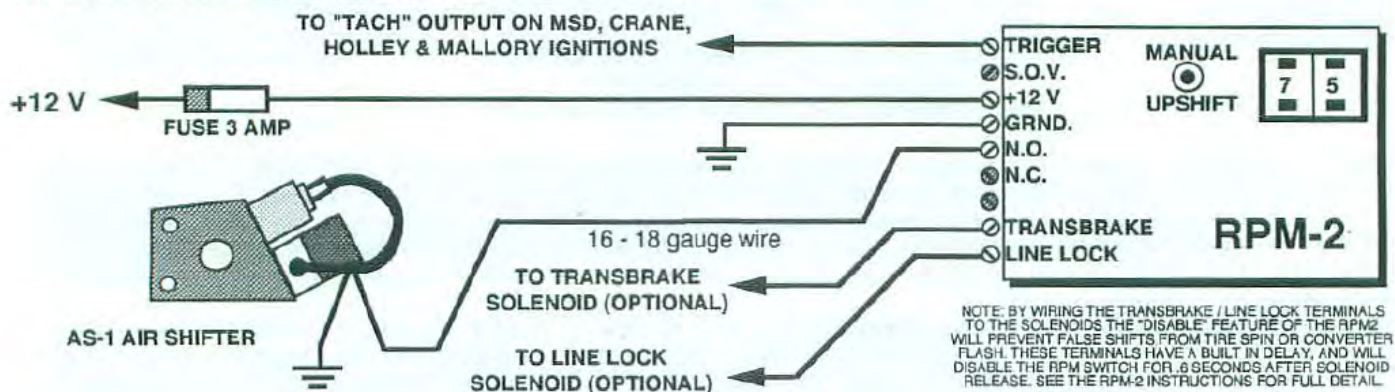
DEDENBEAR Products, Inc. warrants to the consumer that all DEDENBEAR Products purchased from an Authorized DEDENBEAR Reseller will be free from defects in material and workmanship for a period of twelve (12) months from date of the original purchase. Products that fail within this 12 month warranty period 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.

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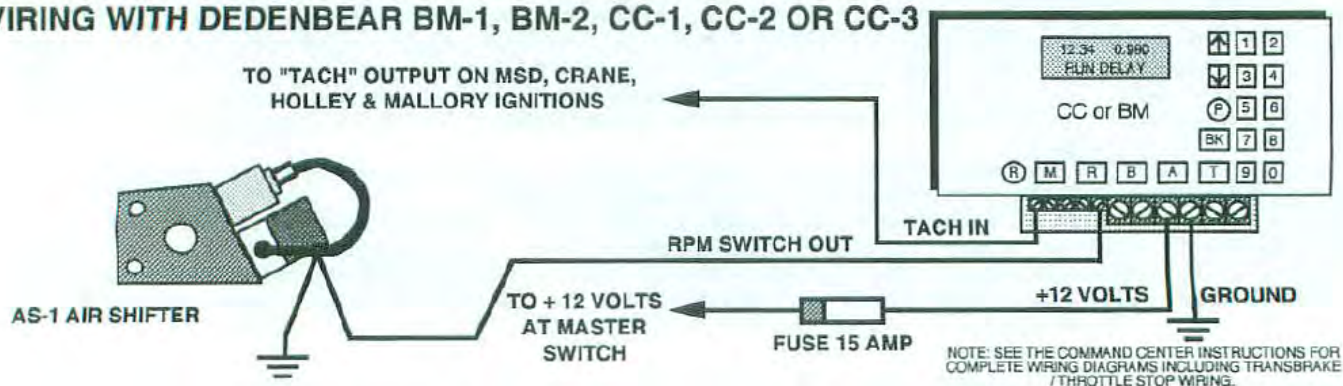
Email: service@autometer.com

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

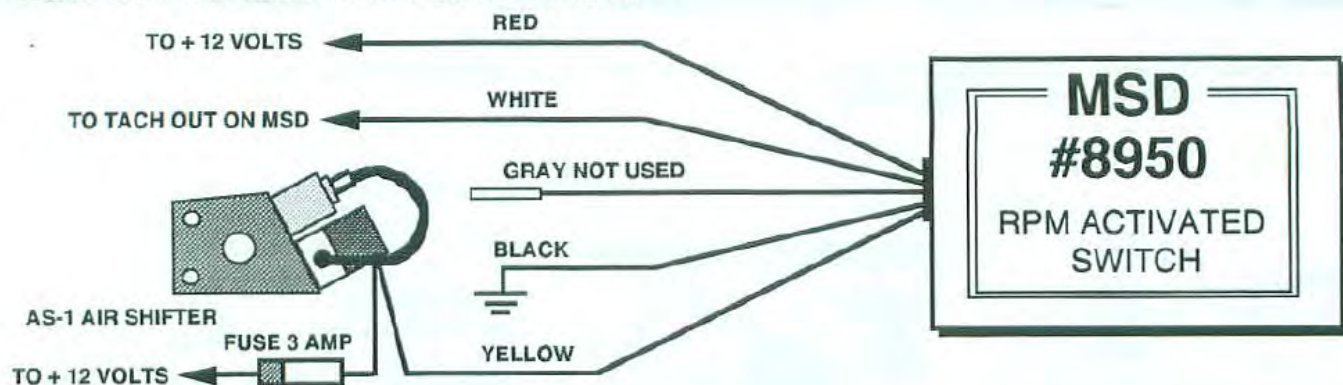
## WIRING WITH DEDENBEAR RPM-2



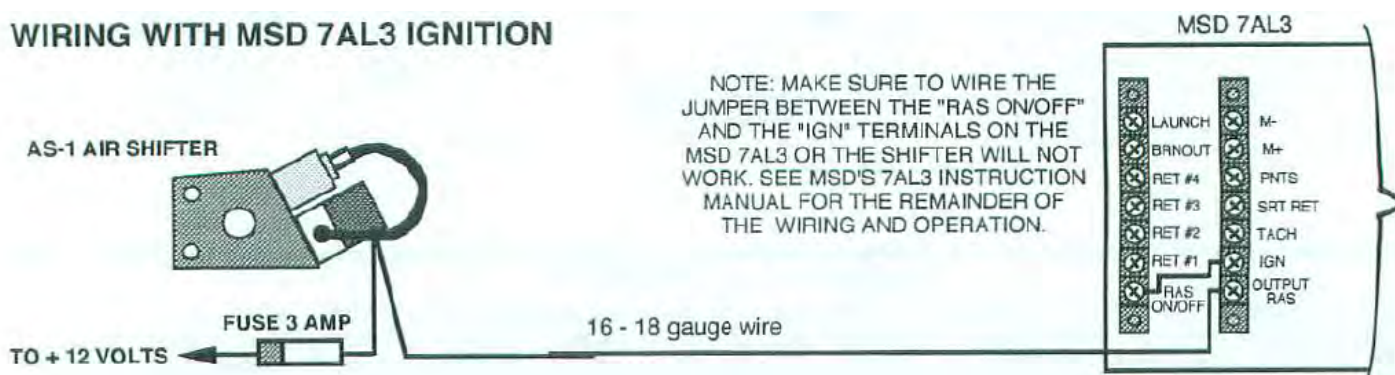
## WIRING WITH DEDENBEAR BM-1, BM-2, CC-1, CC-2 OR CC-3



## WIRING WITH MSD RPM SWITCH #8950



## WIRING WITH MSD 7AL3 IGNITION



## MOPAR HARDWARE

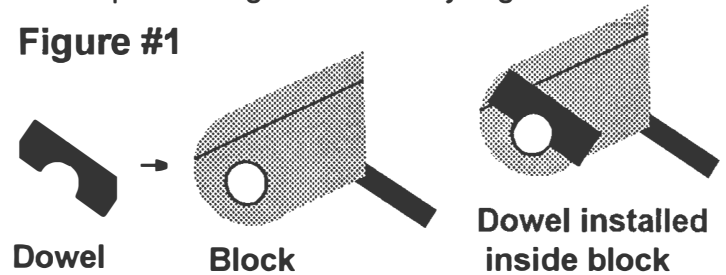
SUPPLEMENTAL HARDWARE FOR AS-1  
USED WITH TORQUEFLITE 904 AND 727  
TRANSMISSIONS

**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.

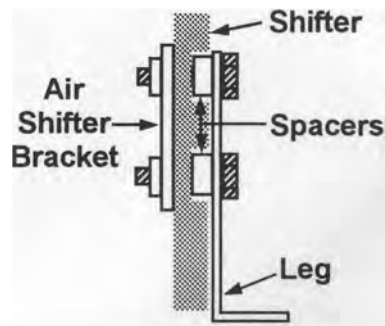
On Chrysler shifters the enclosed notched dowel **must** be installed in the striker block as shown in figure 1. Slip the striker block into the shifter, hold the dowel inside the block and slide in the clevis pin locking the assembly together.

**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**

