



**VINTAGE SPEED**

## Installation instructions for Vintage Speed Black Mamba and Classic Sport Shifters



### Inspect shift rod bushing and bracket

Remove your old shifter by loosening the two 8mm (13mm socket) bolts that hold it to the tunnel. You won't be using any of the items from the original shifter. Using needle nose pliers, reach inside the opening and grab the shift rod socket (it's the cup shaped recess in the front portion of the rod.) Pull up and down on the rod to check for excessive movement. If it feels like there is metal to metal contact, your shift rod bushing is bad or missing. On 1960 and later cars, you can replace the bushing (VW part number 111-701-259A.) The replacement involves disconnecting the shift rod from the transmission (the shift coupler is under the rear seat), and pulling the rod out the front of the chassis. You may find an old round wire snap ring on your shift rod. Some parts suppliers will supply this snap ring with the plastic bushing. We do not recommend using this snap ring, as it adds tension to the rod, and may affect smooth shifting. The plastic bushing and rod should be greased before installation.

On '59 and earlier cars VW did not use the plastic bushing. The drop down bracket was simply metal to metal with the shift rod. The early type bracket can be replaced with the later style for better, and quieter shifting.

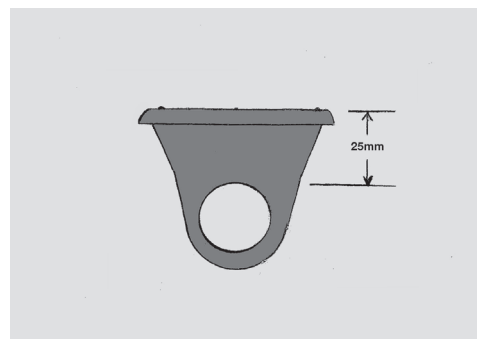
You should also install a new bracket if the hole for the bushing has been worn beyond the ability to hold a bushing. This modification should be done by a qualified mechanic familiar with the VW's shift mechanism. It involves drilling out the spot welds holding the old bracket, removing and fishing it through the back of the tunnel, and welding the new unit correctly into position.



With the shifter removed, pull the shift rod up and down with pliers to check the bushing's condition.



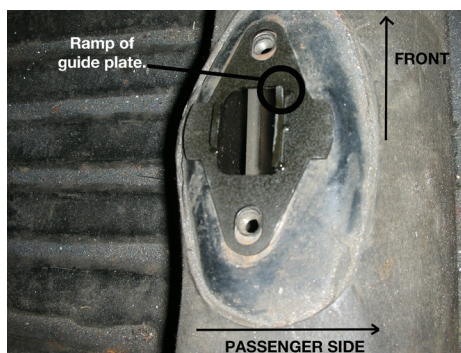
This is a new replacement bracket and bushing. The plastic bushing is available at most stores. We do not recommend using the original VW tension ring which was originally located at the arrow.



There are many poorly made brackets on the market. Be sure the dimension from the top of the plate to upper circumference of the rod hole is very close to 25mm.

### Installing and adjusting the Vintage Speed shifter

Place the shifter guide plate over the opening in the tunnel. The "ramp" of the guide plate will be on the passengers side of the opening (see photo). Bolt the main shifter housing over the guide plate. Install the Allen head bolts and washers through the shift housing, and into the tunnel. Tighten very loosely at first (approx 5 foot pounds). Try the shifting action at this point, checking to see if you can find all four gears and reverse. If the shifter does not find all the gears, experiment by tapping the shift housing right or left with a rubber mallet until you can find all the gears. The Vintage Speed shifter also offers the advantage of being able to fine tune the relationship of the shift housing to the guide plate. With the mounting bolts still half-tight against the tunnel, you can tap the guide plate right or left independent of the shift housing. You can fine tune the the shifter by experimenting with the position in this way. Finish tightening the hold-down Allen bolts to 13 ft/lbs.



Position the Vintage Speed guide plate with the "ramp" on the right side. The tallest part of ramp goes forward.



Fine tune the relationship of the shift housing to the guide plate by tapping the plate left or right under the shift housing. Do this operation with the hold down bolts half tight.



If you have the latest billet Black Mamba, you can loosen the base set screw, and rotate the tension-ring for the perfect feel.

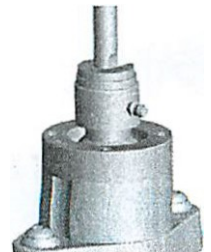
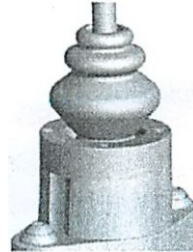
## **VINTAGE SPEED SHIFTERS**

### **INSTALLING AND MAINTENANCE**

The bottom ball of the shifter should be cleaned and greased all moving parts with universal grease once a year, or anytime when shifting difficulty.

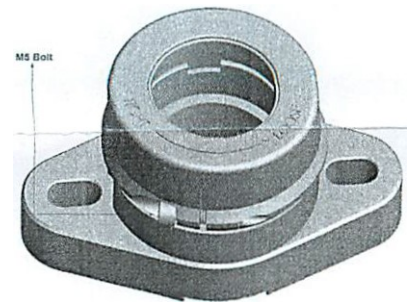
#### **TO GREASE CLASSIC SPORT SHIFTERS**

Please pull up the rubber boot, and install the grease fitting to the shifter. It should be greased anytime when shaft is difficult to pull up.



#### **TO ADJUST CNC MACHINE BASE FOR TIGHTER OR LOOSER FEEL**

1. Loosen the M5 bolt near the base of the shifter (see photo)
2. Adjust the feel of the shift lever by turning the top of the housing. (see photo)
3. After setting up the housing tension, tighten the M5 bolt to 7.3 ft\lbs. ( 10Nm.)



#### **SHIFTING PROBLEMS AND SOLUTIONS**

##### **PROBLEM 1:**

RESERVE GEAR CAN BE ENGAGED W/O PULLING THE REVERSE HOOK LOCK  
PUSH THE BOTIOM STEEL PLATE TO THE LEFT

##### **PROBLEM 2:**

1ST. & 3RD. WON'T ENGAGE

PUSH THE ALUMINUM SHIFTER BASE TO THE FRONT

##### **PROBLEM 3:**

2ND. & 4TH. WON'T ENGAGE

PUSH THE ALUMINUM SHIFTER BASE TO THE REAR

NO.	ITEM	QTY.
1	SHIFTER	1
2	SPECIAL WASHER	2
3	M8 bolt	2
4	Reverse Stop Plate	1

