

BUS SETUP-EXACT SHIFTING POINTS

Setting the bus up is a procedure for determining exact shifting points by matching engine speed and road speed. Engine speed, or revolutions per minute (rpm), is shown on the tachometer; and the road speed is shown on the speedometer. To set up the bus, you must know the maximum revolutions per minute at which the engine will be run. This information can be found in the shop manual or in the operator's manual for the particular make and type of engine. If you are unable to find this information, then ask the shop supervisor for his recommendation on the maximum rpms.

Place the transmission in 1st or 2nd gear depending on the bus, accelerate to top R.P.M. and hold that engine speed. Determine from the speedometer the bus road speed. Shift to next highest gear and while in this gear reestablish the bus speed noted in the lower gear at top tach. Once you reestablish this road speed note the rpms on the tachometer. This is the exact shift point for shifting from the lower gear into the next highest gear.

Bring bus back up to "Top Tach" and read road speed on speedometer: determine a point between the road speed in the lowest gear and the road speed you just noted in this gear, a mark you can easily find on the speedometer. Let the bus idle back down to that road speed, read the engine speed from the tachometer; this is the exact shift point for a mid-range shift.

After completing this procedure for all the gears you will know the top and bottom road speed for each gear; the exact shift point for each gear and the mid-range shift point for each gear.

The reverse of the above process can be used for down shifting. Down shifts can be made into any gear and if the driver knows the proper R.P.M.

The maximum engine R.P.M. will vary depending upon the type of equipment being used. Proper throttle control is necessary for a smooth shift and helps reduce wear on the bus components.