Service Bulletin Nº 111						
Joe Blackwell Director, Parts Sales & Technical Support	Susan Molitor Parts Sales Manager	Patty Schraps Parts Stockroom Manager	Doug Lemons Technical Support Engineer	James E. Thornton Technical Support Engineer	Linda Garza Customer Service Representative	Jay Alfer Technical Support Doc. Administrator
TO: Parts & Se	ervice Managers 18, 1999			COTT	тм	

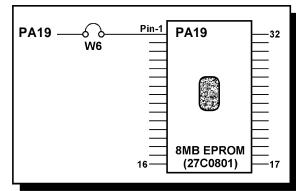
SUBJ: NEW!! EXTRA! EXTRA! South Park Pinball uses 8MB EPROM's for Expanded Speech & Sound Capabilities



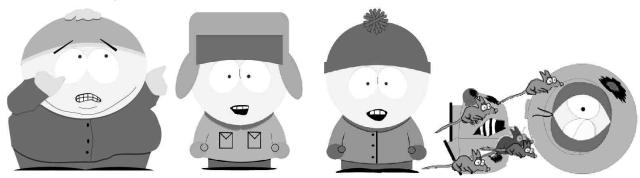
Explanation:

Located on the CPU/Sound Board at Voice Rom Locations U17, U21, U36, U37 you will find 8-MEGABYTE EPROMS (M27C801-100FI / SPI Part N° 960-5016-00, blank EPROM). Boards that use the 8MB EPROMs have Jumper "W6" installed (located to the right of "U6" 68B09E Microprocessor, see the *Component Layout* on the next page) these are **BACKWARD COMPATIBLE** with all 4MB applications. Games that use the 4MB Voice ROMs do not have "W6" installed and WILL NOT WORK CORRECTLY with 8MB EPROMS ("W6" must be installed). All future games will have CPU/Sound Board's with the jumper installed regardless of the type of voice ROMs being used to ensure compatibility.

What does the **"W6" Jumper** do? Pin-1 of the original **4MB EPROM** is **"Vpp"** which is used for programming when 12.5v DC is applied or used as an **Address Line** when in the 0v DC - 5v DC range. On our CPU/Sound Board, when **"W6"** is installed, this Pin is tied to **PA19** when removed Pin-1 is not used. If **8MB EPROMs** are used *without* **"W6"** installed, the symtoms will be garbled sound similiar to a bird chirping or an *old* 33-1/3 LP being played at 78 RPM (you older techs might remember what that sounded like).

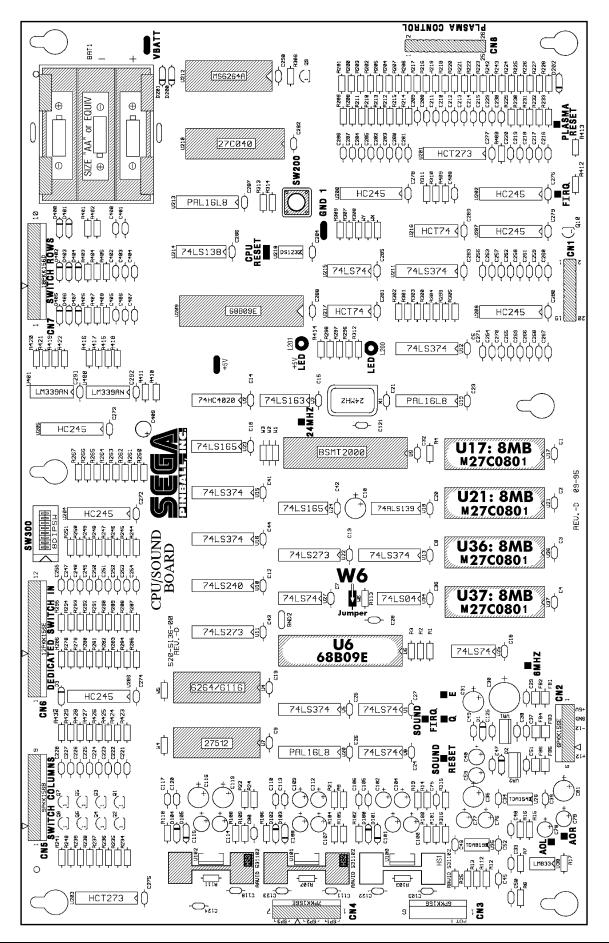


The next page shows the *Component Layout* of the **CPU/Sound Board** describing the location of **"W6"** and **ROM** *locations, etc.*



South Park Logo & characters are copyrighted trademarks of Comedy Central, TM & © 1998. All Rights Reserved. Any questions or comments, please contact Technical Support at the below numbers.

• 1990 Janice Avenue • Melrose Park, IL 60160 • Tel 708-345-7700 or Toll-Free (USA/Canada) 1-800-542-5377 • Fax 708-345-7889 •



• 1990 Janice Avenue • Melrose Park, IL 60160 • Tel 708-345-7700 or Toll-Free (USA/Canada) 1-800-542-5377 • Fax 708-345-7889 •