A self-test feature has been added to TURBO. Initiated
by pressing the Test Switch located on the left-hand side
of the cabinet, behind the coin mechanism, this
program runs in the following order:

> RAM Test
> ROM Test
> Input Ports
> > Coining
> > DIP SW. 1 & 2
> > Steering wheel
> > Accelerator Pedal
> LED Test
> Sound Board Test

The RAM and ROM tests by IC No., either GOOD or BAD. Coin
mech.s and DIP SW. settings are displayed OPEN or CLOSED.
The Steering wheel when moved will display digital-to-
analog outputs of the photo sensors. An analog display
of 0-3 tests the Accelerator Pedal. The Start button tests
the LED's and each Sound Board output, 1-11. Sound #8
is not used.

SEGA®/Gremlin®

An error has been found on page 124 of the TURBO Owner's Manual (420-0681).

Please correct the page title in your manual to reflect the following:

(IS)	(WAS)
SENSOR BOARD	SOUND BOARD
UPRIGHT/COCKPIT	834-0123
834-0119	

SEGA®/Gremlin®

A program change has been made to TURBO. On page 8 of your

TURBO Owner's Manual, please change your documentation to reflect the

following:

IC No.	ROM No.	Device Type	Function
76	EPR-1363	2764 (1262)	Main Program
89	EPR-1364	2764 (1263)	Main Program
103	EPR-1365	2764 (1264)	Main Program

On page 104, please change the parts list to show these new

Gremlin Part No.s:

ITEM NO.	PART NO.	QTY REQD	DESCRIPTION
154	316-1363	1	IC 2764 EPR-1363
155	316-1364	1	IC 2764 EPR-1364
156	316-1365	1	IC 2764 EPR-1365

PLEASE NOTE- In the advent of an EPROM failure, the self-test

program will display the number of the OLD EPROM, corresponding

to that of the new EPROM (i.e. 1262,1263,1264). A self-test

display of:/EPROM-1263 BAD/ correlates to an EPROM-1364 failure,

and so on.

SEGA®/Gremlin®

On page 5, of the TURBO Owner's Manual (P/N 420-0681) we suggest that you add the following notes:

1.   When the CPU Board DIP Switch #1 is set in the "SKILLED" position, game time is automatically set to 55 seconds. Option switch settings have no effect.

2.   Regardless of "GAME TIME" option selection, the displayed countdown begins at 99 seconds, but does vary its rate of countdown according to option selection settings of DIP Switch #2 position 1 & 2.

3.   DIP Switch #1 position 5 is an option used for game testing purposes. Set in the "OFF" position, the game will operate normally. Set in the "ON" position however, your car will not crash. In other words, DIP Switch #1 position 5 is an "endless game" option.

SEGA®/Gremlin®

SERVICE NOTE

EFFECT: TURBO

NUMBER: 010   2/4/82

There have been some errors identified in the TURBO Owner's Manual (P/N 420-0681). Please make the following corrections on the pages indicated:

1. Pg. 15, ITEM NO. 15, PART NO. <u>SHOULD READ</u> 834-0220

2. Pg. 31, ITEM NO. 11, PART NO. <u>SHOULD READ</u> 834-0229

3. Pg. 32, ITEM NO. 23, PART NO. <u>SHOULD READ</u> 834-0090

    ITEM NO. 24, PART NO. <u>SHOULD READ</u> 834-0091

4. Pg. 49, ITEM NO. 45, PART NO. <u>SHOULD READ</u> 834-0234

    ITEM NO. 47, PART NO. <u>SHOULD READ</u> 834-0233

5. Pg. 58, ITEM NO. 17, PART NO. <u>SHOULD READ</u> 834-0142

    ITEM NO. 18, PART NO. <u>SHOULD READ</u> 834-0230

    ITEM NO. 19, PART NO. <u>SHOULD READ</u> 834-0231

    ITEM NO. 20, PART NO. <u>SHOULD READ</u> 834-0232

A typographical error has been found on page 66 of the TURBO Owner's Manual (P/N 420-0681). Please correct your Manual as follows:

ITEM NO.	QTY. REQ'D	PART NUMBER	DESCRIPTION
102	1	601-0472	Vacuum Gauge (Paramount 540810-B)

If you are experiencing moving white vertical bars over or at the location of buildings and/or cars in the display, we recommend you perform the following procedure:

1. Turn the game off and visually inspect the 16 (sixteen) 100pf capacitors located in the area of U50, U51, U43, U44, and U45 on the PROM Board (P/N 834-0111). This is the bottom board of the stack, and the Component Location Diagram can be found on pg. 112 of the TURBO Owner's Manual (P/N 420-0681). The PROM Board schematic is on pg. 143, Sheet 1 of 10, Zone 4B-D.

2. You should be looking for a physical seperation (splitting) of one or more of these caps, primarily C21, C27 or C28. If a faulty capacitor is found, it should be replaced with a 100pf 1KV Ceramic cap (P/N 151-0002) or equivalent.

3. If all the caps appear good, re-assemble the game, turn it on, and while watching the video display, adjust VR1 and/or VR2 until the bars disappear. These two potentiometers are bias level adjustments and as such may have to be "tweaked" from time to time as the components in the circuit age.

There have been two errors identified in the TURBO Owner's Manual (P/N 420-0681); please correct your documentation to reflect the following:

Page No. 16

ITEM NO.	PART NO.	QTY.REQ'D.	DESCRIPTION
26	601-0701	1	Case, IC Board

Page No. 84

ITEM NO.	PART NO.	QTY.REQ'D.	DESCRIPTION
9	834-0104	1	IC Buffer Board