# TURKEY SHOOT
## ROM SUMMARY

<table>
<thead>
<tr>
<th>ROM</th>
<th>PART NO.</th>
<th>DESCRIPTION</th>
<th>IC NO.</th>
<th>BOARD</th>
<th>ERROR CODE OR INDICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sound ROM</td>
<td>A-5343-10706</td>
<td>PROM, 8Kx8</td>
<td>IC8</td>
<td>CPU</td>
<td>no sound</td>
</tr>
<tr>
<td>TURKEY SHOOT 2</td>
<td>A-5343-10707</td>
<td>PROM, 4Kx8</td>
<td>IC9</td>
<td>CPU</td>
<td>feathers</td>
</tr>
<tr>
<td>TURKEY SHOOT 3</td>
<td>A-5343-10708</td>
<td>PROM, 4Kx8</td>
<td>IC10</td>
<td>CPU</td>
<td>spkr clicks</td>
</tr>
<tr>
<td>TURKEY SHOOT 4</td>
<td>A-5343-10709</td>
<td>PROM, 8Kx8</td>
<td>IC11</td>
<td>CPU</td>
<td>213</td>
</tr>
<tr>
<td>TURKEY SHOOT 5</td>
<td>A-5343-10710</td>
<td>PROM, 8Kx8</td>
<td>IC12</td>
<td>CPU</td>
<td>209</td>
</tr>
<tr>
<td>TURKEY SHOOT 6</td>
<td>A-5343-10711</td>
<td>PROM, 8Kx8</td>
<td>IC13</td>
<td>CPU</td>
<td>205</td>
</tr>
<tr>
<td>TURKEY SHOOT 7</td>
<td>A-5343-10712</td>
<td>PROM, 8Kx8</td>
<td>IC14</td>
<td>CPU</td>
<td>201</td>
</tr>
<tr>
<td>TURKEY SHOOT 8</td>
<td>A-5343-10713</td>
<td>PROM, 8Kx8</td>
<td>IC15</td>
<td>CPU</td>
<td>214</td>
</tr>
<tr>
<td>TURKEY SHOOT 9</td>
<td>A-5343-10714</td>
<td>PROM, 8Kx8</td>
<td>IC16</td>
<td>CPU</td>
<td>210</td>
</tr>
<tr>
<td>TURKEY SHOOT 10</td>
<td>A-5343-10715</td>
<td>PROM, 8Kx8</td>
<td>IC17</td>
<td>CPU</td>
<td>206</td>
</tr>
<tr>
<td>TURKEY SHOOT 11</td>
<td>A-5343-10716</td>
<td>PROM, 8Kx8</td>
<td>IC18</td>
<td>CPU</td>
<td>202</td>
</tr>
<tr>
<td>TURKEY SHOOT 12</td>
<td>A-5343-10717</td>
<td>PROM, 8Kx8</td>
<td>IC19</td>
<td>CPU</td>
<td>215</td>
</tr>
<tr>
<td>TURKEY SHOOT 13</td>
<td>A-5343-10718</td>
<td>PROM, 8Kx8</td>
<td>IC21</td>
<td>CPU</td>
<td>207</td>
</tr>
<tr>
<td>TURKEY SHOOT 14</td>
<td>A-5343-10719</td>
<td>PROM, 8Kx8</td>
<td>IC23</td>
<td>CPU</td>
<td>216</td>
</tr>
<tr>
<td>TURKEY SHOOT 15</td>
<td>A-5343-10720</td>
<td>PROM, 8Kx8</td>
<td>IC24</td>
<td>CPU</td>
<td>none</td>
</tr>
<tr>
<td>TURKEY SHOOT 16</td>
<td>A-5343-10721</td>
<td>PROM, 8Kx8</td>
<td>IC25</td>
<td>CPU</td>
<td>208</td>
</tr>
<tr>
<td>TURKEY SHOOT 17</td>
<td>A-5343-10722</td>
<td>PROM, 8Kx8</td>
<td>IC26</td>
<td>CPU</td>
<td>204</td>
</tr>
<tr>
<td>Special Chip 2</td>
<td>A-5410-10003</td>
<td>Special Chip</td>
<td>IC29</td>
<td>CPU</td>
<td>--</td>
</tr>
<tr>
<td>Special Chip 2</td>
<td>A-5410-10003</td>
<td>Special Chip</td>
<td>IC30</td>
<td>CPU</td>
<td>--</td>
</tr>
<tr>
<td>Clock-ROM 1</td>
<td>A-5282-10295</td>
<td>82S123 ROM, 32x8</td>
<td>IC14</td>
<td>VIDEO</td>
<td>no video</td>
</tr>
<tr>
<td>TURKEY SHOOT 21</td>
<td>A-5343-10726</td>
<td>PROM, 8Kx8</td>
<td>IC41</td>
<td>VIDEO</td>
<td>vert lines</td>
</tr>
<tr>
<td>Horiz-sync ROM 1</td>
<td>A-5282-10294</td>
<td>82S129 ROM, 256x4</td>
<td>IC47</td>
<td>VIDEO</td>
<td>--</td>
</tr>
<tr>
<td>TURKEY SHOOT 18</td>
<td>A-5343-10723</td>
<td>ROM, 4Kx8</td>
<td>IC55</td>
<td>VIDEO</td>
<td>gobbles</td>
</tr>
<tr>
<td>TURKEY SHOOT 19</td>
<td>A-5343-10724</td>
<td>PROM, 8Kx8</td>
<td>IC57</td>
<td>VIDEO</td>
<td>vert lines</td>
</tr>
<tr>
<td>TURKEY SHOOT 20</td>
<td>A-5343-10725</td>
<td>ROM, 8Kx8</td>
<td>IC58</td>
<td>VIDEO</td>
<td>vert lines</td>
</tr>
<tr>
<td>Decoder-ROM 5A</td>
<td>A-5282-10292</td>
<td>6349 ROM, 512x8</td>
<td>IC60</td>
<td>VIDEO</td>
<td>--</td>
</tr>
</tbody>
</table>


**NOTICE**

TO ORDER REPLACEMENT ROMS from your authorized WILLIAMS distributor, specify (1) part number shown above, (2) ROM-label color, (3) RRV level (number) on the label, and (4) which game the ROM is used in.
Examine your Game

1. **Inspect the outside** of the carton or game cabinet for shipping damage.

2. **Unlock and open** the bottom-rear door. Now check circuitry.

3. **Are connectors securely attached?** Reconnect any found loose. **Don't force connectors.** They're keyed and only fit one way.

4. **Are plug-in chips firmly seated** in their sockets?

5. **Unwrap the power cord** coiled inside the cabinet. **Don't plug it in yet!**

6. **Scrutinize major subassemblies,** such as the monitor, control panel, transformer chassis and power supply. Make sure they're securely-mounted.

7. **Undo the control-panel latches.** You can reach these two from the coin door by extending your arm upward and to either side. Now check connectors and circuitry as above.

**Control Locations**

// **The on-off switch** is below the back door.

// **The power-interlock switch** is behind the bottom-right corner of the back door. The interlock switch is a spring-loaded DPDT type that will turn off the game when you remove the panel. For servicing purposes, pull the switch out and the game will power up.

// **The volume-control** is inside the coin-door and to your right.

// **Three diagnostic switches** are mounted together on a bracket behind the coin door. These switches are used to access the Diagnostic-Mode Tests, the Bookkeeping Totals screen and the Game Adjustments screen.

// **The memory-protect interlock switch** is behind the coin door. This switch must be open when you clear Bookkeeping Totals or make Game Adjustments. It automatically opens when the coin door is open.

// **The CPU-board reset switch** is on the CPU board near the batteries.

// **The cashbox advance switch** found inside the cashbox door allows bookkeeping information to be audited without permitting it to be zeroed.

// **The sound diagnostic switch** is on the CPU board near the small heatsink. Refer to Sound Self-Test for information on its use.
Power Turn-On

WARNING

THREE-WIRE PLUG. This game must be plugged into a properly-grounded outlet to prevent shock hazard and to assure proper game operation. DO NOT use a "cheater" plug to defeat the ground pin on the power cord, and DO NOT cut off the ground pin.

WARNING

FCC STICKER. Check the back of your game to see that an FCC sticker was attached to your game at the factory. All games that leave WILLIAMS' plants have been tested and found to comply with FCC Rules. As the sticker is proof of this fact, legal repercussions to the owner and distributor of the game may result if the sticker is missing. If you receive any WILLIAMS game manufactured after December 1982 that has no FCC sticker, call WILLIAMS for advice or write us a note on your game-registration card. Be sure the card bears your game's serial number.

WHEN THE GAME IS FIRST TURNED ON, general illumination should light. A moment later the scanning "rug pattern" indicating RAM-ROM test should appear on the screen.

IN A CORRECTLY-RUNNING GAME tests will be followed by the message "INITIAL CHECKS INDICATE ALL SYSTEMS GO." If failure messages come up on the screen instead, refer to Built-In Test Procedures.

DEMANETIZE THE GAME with a television degaussing-coil. Besides the monitor, remember to degauss large steel parts (for example, the back-door hinge). Do this as a daily procedure. Otherwise residual magnetism may cause color impurities that adversely affect your collections.

Game Operation

GAME START

INSERT COINS. The game allocates an adjustable number of credits per coin and displays this number on the CRT. Factory settings are one credit for two quarters. At factory settings, when two credits are displayed, pressing 2-PLAYER START initiates a two-player game.

PLAYER CONTROLS

//SHOOT mischievous turkeys with the laser gun.

//PRESS GOBBLE! Freeze the turkeys and pick them off with the gun!

//PRESS GRENADE! Eliminate several turkeys in one blast!

GAME PLAY

WITH A HAND ON HIS GUN, his GOBBLE and GRENADE buttons at the ready, the player defends his territory from marauding TURKEYS! He's given 100 missions to eliminate all the turkeys.
HE CAN TAKE AIM with his laser gun using the cursor on the screen to home in on his enemies. Or he can launch a GRENADE to blast all turkeys within range. Once each mission he can activate his Gobble button to momentarily freeze all the turkeys.

ASTUTE PLAYERS learn that most turkeys can be eliminated by a shot to the body. However the cyborg mechano-turkey persists until they hit him in the head. No turkey will succumb to a shot in the leg!

MISSIONS REQUIRE QUICK REACTIONS to clever plays such as turkey air-raids, turkeys disguising themselves as businessmen and turkey helicopter-getaways. Every 8th wave earns a rapid-fire bonus where the player has 15 seconds to eliminate as many turkeys as possible. The player can score bonus points by shooting fire hydrants and trashcans as well as by freeing hostages.

THREE FOWLUPS are allowed. These occur whenever a turkey escapes or when an innocent bystander is injured.

Bookkeeping Totals

BOOKKEEPING TOTALS SHOW YOU AT A GLANCE if game settings are bringing you a satisfactory return on your investment! Only games by WILLIAMS ELECTRONICS have this feature. Think of it as a unique way to keep your TURKEY SHOOT game the leader of the pack when it comes to earnings...location after location, week in and week out!

Diagnostic Button Switches

ENTERING BOOKKEEPING MODE. Inside the coin door is a bracket with three button switches. Set the AUTO-UP/MANUAL-DOWN (center) switch to AUTO-UP. Press the ADVANCE switch to display BOOKKEEPING TOTALS on the screen. Now check those totals. Here's what to look for...

BOOKKEEPING TOTALS

LEFT SLOT COINS 432
CENTER SLOT COINS 0
RIGHT SLOT COINS 398
PAID CREDITS 830
EXTRA MISSIONS EARNED 226
TOTAL PLAY TIME [HOUR: MIN] 34:28
TOTAL MEN PLAYED 689
TOTAL SINGLE PLAYER 548
TOTAL TWO PLAYERS 141
TOTAL CREDITS PLAYED 830
AVERAGE TIME /GAME [MIN:SEC] 2:00

Bookkeeping screen
AVERAGE TIME PER CREDIT: TWO MINUTES. Your most important figure on the BOKEKEEPING TOTALS screen is AVERAGE TIME/GAME. You'll want to pay special attention to this figure every day for this reason: Thorough field and factory research has shown that two-minute games both satisfy players and also keep the quarters flowing.

If games aren't running about two minutes long, then collections probably aren't at their peak. You'll want to tailor your game to your game-playing public. It's easy. But only WILLIAMS games let you do it!

GAME ADJUSTMENTS

<table>
<thead>
<tr>
<th>Extra Fowl Every</th>
<th>50000 Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Missions for 1 Credit Game</td>
<td>3 Recommended</td>
</tr>
<tr>
<td>Attract Mode Sounds</td>
<td>YES</td>
</tr>
<tr>
<td>Pricing Selection</td>
<td>5</td>
</tr>
<tr>
<td>Left Slot Units</td>
<td>1</td>
</tr>
<tr>
<td>Center Slot Units</td>
<td>4</td>
</tr>
<tr>
<td>Right Slot Units</td>
<td>1</td>
</tr>
<tr>
<td>Units Required for Credit</td>
<td>2</td>
</tr>
<tr>
<td>Units Required for Bonus Credit</td>
<td>0</td>
</tr>
<tr>
<td>Minimum Units for Any Credit</td>
<td>0</td>
</tr>
<tr>
<td>Difficulty of Play</td>
<td>5 Recommended</td>
</tr>
<tr>
<td>Gun Recoil</td>
<td>YES</td>
</tr>
<tr>
<td>Restore Factory Settings</td>
<td>NO</td>
</tr>
<tr>
<td>Clear Bookkeeping Totals</td>
<td>NO</td>
</tr>
<tr>
<td>High Score Table Reset</td>
<td>NO</td>
</tr>
<tr>
<td>Auto Cycle</td>
<td>NO</td>
</tr>
</tbody>
</table>

[PLAYER 1 START] TO MOVE UP - [PLAYER 2 START] TO MOVE DOWN
[GOBBLE] TO INCREASE VALUE - [GRENADE] TO DECREASE VALUE

PRESS ADVANCE TO EXIT

Adjustments Screen Showing Factory Settings

Exclusive Game Adjustments

1. Inside the coin door is a bracket with three button switches. Set the AUTO-UP/MANUAL-DOWN (center) switch to AUTO-UP.

2. Press the ADVANCE switch twice. The GAME ADJUSTMENTS screen will come up.

3. Use PLAYER 2 START to move down to the desired adjustment.

4. Use PLAYER 1 START to move up.

5. Use GOBBLE (raise value or yes) or GRENADE (reduce value or no) to alter the value of an adjustment.
Now for the multiple-choice section! Choose one or more:

// Use Gobble or Grenade to choose the appropriate difficulty level (0 = easiest or extra liberal, 5 = average, 9 = hardest or extra conservative).

// SELECT GAME PRICING with standard or custom settings. See the Pricing Table later in this chapter.

### Pricing Table

<table>
<thead>
<tr>
<th>Coin-Door Mechanism</th>
<th>Games/Price</th>
<th>Left Slot Units</th>
<th>Center Slot Units</th>
<th>Right Slot Units</th>
<th>Units Req'd For Bonus</th>
<th>Min. Units Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Twin Quarter</td>
<td>1/25¢, 4/$1</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Quarter</td>
<td>1/25¢, 5/$1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Dollar, Quarter</td>
<td>2/50¢, 4/$1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Dollar</td>
<td>2/50¢, 5/$1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>1/50¢, 2/$1</td>
<td>5</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>1/50¢, 3/$1, 4/$1.25</td>
<td>0</td>
<td>3</td>
<td>12</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>1/$1</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>1/50¢, 3/$1, 7/$2</td>
<td>0</td>
<td>12</td>
<td>48</td>
<td>12</td>
<td>14</td>
</tr>
<tr>
<td>1DM, 5DM</td>
<td>2/1DM, 12/5DM</td>
<td>0</td>
<td>12</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>1/1DM, 6/5DM</td>
<td>2</td>
<td>6</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>1 Franc, 5 Franc</td>
<td>1/25¢, 3/5p only</td>
<td>4</td>
<td>1</td>
<td>16</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>25-Cent</td>
<td>1/25¢, 4/1G</td>
<td>6</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>1 Guilder</td>
<td>1/25¢, 5/1G</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>5 Franc</td>
<td>1/5p, 2/10f</td>
<td>7</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>10 Franc</td>
<td>1/10¢</td>
<td>8</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>5 Franc</td>
<td>1/2p, 4/1p</td>
<td>2</td>
<td>6</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>100 Lire, 200 Lire</td>
<td>1/200 Lire</td>
<td>8</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Twin Coin</td>
<td>1/1 Coin</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>1/2 Coins</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>1/4 Coins</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>1/2 Coins, 3/4 Coins</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>1/3 Coins, 2/5 Coins</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>1/2, 3/5</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>1-Unit</td>
<td>1/1, 5/5</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>5-Unit</td>
<td>1/3, 2/5</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Any</td>
<td>Free Play</td>
<td>9</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>
Game Pricing

**PRICING SELECTION** allows a shorthand method of setting the pricing functions. If a number from one to nine is entered into the **PRICING SELECTION** function, a corresponding standard setting (shown in the pricing table above) will be entered into the game. The rest of the pricing functions are automatically set for that standard.

**FOR CUSTOM SETTINGS** first set **PRICING SELECTION** to zero. Then set the remaining values according to the Pricing Table.

**THE GAMES : PRICE RATIO** is equivalent to the ratio \( X : VC \)

where:
- \( X = \text{SLOT UNITS} \)
- \( V = \text{COIN VALUE} \)
- \( C = \text{UNITS REQUIRED FOR CREDIT} \)

For example at factory settings with quarter chutes the variables produce 1 : 25x2 or one game for two quarters.

**Diagnostic-Mode Tests**

SET THE AUTO-UP/MANUAL-DOWN SWITCH to the MANUAL-DOWN position and press ADVANCE. The game is now in its Diagnostic Mode and a ROM test is performed. With ROM test results present on the CRT display, set the AUTO-UP/MANUAL-DOWN switch to the AUTO-UP position. Enter subsequent tests by pressing ADVANCE once more for each test. After the last test, Game-Over Mode commences.

**AUTO-CYCLE MODE** permits continuous ROM, RAM and CMOS RAM tests to detect failures that only appear after numerous checksum comparisons. If an error is detected Auto-Cycle Mode is aborted and a failure message is displayed on the CRT.

1. Open the coin door. It must remain open for AUTO CYCLE.
2. Display GAME ADJUSTMENTS.
3. Move down to AUTO CYCLE.
4. Display YES.
5. Press ADVANCE.
6. To enter Game-Over Mode turn the game off and on.

**Built-In Test Procedures**

**POWER-UP TESTS**

**RAM TEST.** A rug pattern scans across the screen. Only screen RAMS (dynamic type) are tested. A bad RAM is indicated on the CPU-board LED-indicator by an error code between 100 and 199 (eg., 1-3-1; see the table of **Screen-RAM Error Codes** below). If a RAM error is indicated, check all three DC power-voltages on the RAM indicated: -5/pin 1, +12/pin 8, +5/pin 9. None of these should have more than a few millivolts of AC on it. Never replace a RAM chip until you prove that these voltages are normal!
Screen-RAM Error Codes

<table>
<thead>
<tr>
<th>CHIP</th>
<th>98</th>
<th>99</th>
<th>100</th>
<th>101</th>
<th>102</th>
<th>103</th>
<th>104</th>
<th>105</th>
</tr>
</thead>
<tbody>
<tr>
<td>CODE</td>
<td>115</td>
<td>116</td>
<td>117</td>
<td>118</td>
<td>111</td>
<td>112</td>
<td>113</td>
<td>114</td>
</tr>
<tr>
<td>CHIP</td>
<td>106</td>
<td>107</td>
<td>108</td>
<td>109</td>
<td>110</td>
<td>111</td>
<td>112</td>
<td>113</td>
</tr>
<tr>
<td>CODE</td>
<td>125</td>
<td>126</td>
<td>127</td>
<td>128</td>
<td>121</td>
<td>122</td>
<td>123</td>
<td>124</td>
</tr>
<tr>
<td>CHIP</td>
<td>114</td>
<td>115</td>
<td>116</td>
<td>117</td>
<td>118</td>
<td>119</td>
<td>120</td>
<td>121</td>
</tr>
<tr>
<td>CODE</td>
<td>135</td>
<td>136</td>
<td>137</td>
<td>138</td>
<td>131</td>
<td>132</td>
<td>133</td>
<td>134</td>
</tr>
</tbody>
</table>

**ROM TEST.** A bad ROM is indicated on the CPU-board LED-indicator by an error code between 200 and 299 (e.g., 2-1-1; see the ROM Summary for codes). An error message may also appear on the CRT. Power down and replace bad chips.

**CMOS-DATA TEST.** Checksums are compared. If the CMOS RAM fails the test, FACTORY SETTINGS RESTORED appears on the CRT.

**DIAGNOSTIC-MODE TESTS.**

**RAM AND ROM TESTS...** These tests are repeated, only the ROM test is performed first. Refer to RAM Test and ROM Test above.

**CMOS-RAM TEST.** A chip error is displayed on the CRT and the LED readout on the CPU board. If the CMOS RAM is bad, the error code 3 will appear on the LED readout.

**SOUND, COIL AND LAMP TEST.** Sound-lines 1 through 6 are tested. In addition, the grenade and gun lamps, feather and gun coils are checked. One by one, sound lines, lamps or coils are pulsed. When a sound line is pulsed, its number is shown on the CRT. You should hear a separate sound for each sound line. If a sound is missing, its corresponding line is stuck high (that is, open) or stuck low (that is, shorted to ground). If two lines produce the same sound, they're shorted together. Use AUTO-UP to cycle through all the sounds, coils and lamps. With MANUAL-DOWN, you'll continuously test one sound-line, lamp or coil.

**SWITCH TEST.** The name of the switch is highlighted when that switch is closed. Opto switches (used to determine gun position) are tested in a special way. Watch the graph on the left side and bottom of the switch-test screen as you move the gun. The graph should change color ("move") smoothly. If the graph appears to "jump," adjust the optics for smooth movement. To exit the switch test you must hold ADVANCE down until the next screen appears.

**THE CROSSHATCH PATTERN** aids the technician in converging the monitor.

**THE PURITY SCREENS** (solid red, green and blue screens) are intended for monitor adjustments and for checking the color RAMs. If these screens show contamined colors, degauss the screen and adjust the purity magnets. If colors are missing, one of your color RAMs may be bad. A purity screen with vertical lines through it also signals a color-RAM error. (Please don't confuse the purity screens with the crosshatch pattern or color bars pattern.

These test patterns are supposed to have vertical lines!)
THE COLOR BARS are intended for monitor adjustments and for checking the color RAMs. The bars serve as a color and brightness reference when you adjust the color drives and cutoffs, screen and black-level controls. If colors are missing or the wrong colors are displayed, you may have a bad color RAM. From the left side of the CRT, here are the colors you should see: red, green, blue, black, white, yellow, cyan and magenta.

Sound Self-Test

1. NO SOUND IN DIAGNOSTIC-MODE TEST: Check the sound-select inputs (pins 2 through 9 of IC 4) on the CPU board for pulsing during the test. Also check for shorts between sound lines.

2. STILL NO SOUND: Turn the volume control all the way up. With the game turned on, momentarily place a powered-up AC soldering-pen on the center tap of the volume control. DO NOT use a soldering iron of over 40 watts. Cordless models will NOT work here.
   (A) If you hear a low hum, the power-amplifier chip (TDA2002A), volume control and speaker are okay.
   (B) If you don't hear a hum, try the test again with the volume control turned halfway up.

3. GARBLED SOUNDS: One at a time, replace microprocessor IC27 and Sound Rom IC8 on the CPU board.

4. THE SOUND DIAGNOSTIC BUTTON on the CPU board isn't used in this game. If you accidentally press this button, game sounds will be disabled until you turn the game off and on again.

TURKEY SHOOT Circuitboards & Gun Mechanism

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-10525</td>
<td>opto PC-board</td>
</tr>
<tr>
<td>C-8809</td>
<td>heatsink assembly</td>
</tr>
<tr>
<td>D-9444 or</td>
<td>power-supply PC-board</td>
</tr>
<tr>
<td>D-8784</td>
<td></td>
</tr>
<tr>
<td>D-9668</td>
<td>video PC-board</td>
</tr>
<tr>
<td>D-9886</td>
<td>power-transformer chassis</td>
</tr>
<tr>
<td>D-10395</td>
<td>CPU PC-board</td>
</tr>
<tr>
<td>D-10413</td>
<td>interface PC-board</td>
</tr>
<tr>
<td>D-10289</td>
<td>gun-mechanism</td>
</tr>
<tr>
<td>SPL-24-750-DC</td>
<td>gun coil-assembly</td>
</tr>
<tr>
<td>SPL-25-750-DC</td>
<td>feather-dispenser coil</td>
</tr>
</tbody>
</table>
WARNINGS & NOTICES

WARNING

FOR SAFETY AND RELIABILITY, WILLIAMS does not recommend or authorize any substitute parts or modifications of WILLIAMS equipment.

USE OF NON-WILLIAMS PARTS and modifications of game circuitry may adversely affect game play, or may cause injuries.

SUBSTITUTE PARTS OR EQUIPMENT MODIFICATIONS may void FCC type-acceptance.

SINCE THIS GAME IS PROTECTED by Federal copyright, trademark and patent laws, unauthorized game-conversions may be illegal under Federal law.

THIS "CONVERSION" PRINCIPLE ALSO APPLIES to unauthorized facsimiles of WILLIAMS equipment, logos, designs, publications, assemblies and games (or game features not deemed to be in the public domain), whether manufactured with WILLIAMS components or not.

WARNING

This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instructions manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user at his own expense will be required to correct the interference.

RF-INTERFERENCE NOTICE

CABLE PLACEMENT and ground-strap routing on this game have been designed to keep RF radiation and conduction within levels accepted by FCC regulations.

TO MAINTAIN THESE LEVELS, reposition harnesses and reconnect ground straps to their original placements if they should be disconnected during maintenance.

"TURKEY SHOOT" is a trademark of Williams Electronics, Inc.

©1984 Williams Electronics, Inc.
### TURKEY SHOOT GUN ASS'Y. (D-10302)

<table>
<thead>
<tr>
<th>ITEM</th>
<th>PART NO.</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>03-7890</td>
<td>GUN, MOLDED</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>B-10293</td>
<td>GUN SHAFT ASS'Y</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>03-7891-24</td>
<td>GUN NOZZLE</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>C-10423-3025-1</td>
<td>3025 BTN ASSY GRND</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>4106-01099-16B</td>
<td>S.T.S. #6 TORX (T-15) TRX-PH</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>4106-01099-18B</td>
<td>S.T.S. #6 TORX (T-15) TRX-PH</td>
<td>5</td>
</tr>
<tr>
<td>7</td>
<td>4106-01099-06B</td>
<td>S.T.S. #6 TORX (T-15) TRX-PH</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>4106-01099-26B</td>
<td>S.T.S. #6 TORX (T-15) TRX-PH</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>03-7786</td>
<td>P/GRIIP TRIGGER</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>01-7994</td>
<td>T/S TRIG. SPRING</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>5647-10163-00</td>
<td>TRIGGER SWITCH</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>H-10328</td>
<td>GUN CALE</td>
<td>1</td>
</tr>
<tr>
<td>13</td>
<td>4106-01009-06</td>
<td>SMS #6 X 3/8 P.PH P</td>
<td>4</td>
</tr>
<tr>
<td>14</td>
<td>A-10512</td>
<td>SKT. 4 BULB #1866 ASSY.</td>
<td>1</td>
</tr>
<tr>
<td>15</td>
<td>A-10441</td>
<td>COIL BRKT SUB-ASSY</td>
<td>1</td>
</tr>
<tr>
<td>16</td>
<td>01-7991</td>
<td>T/S COIL RET BRKT</td>
<td>1</td>
</tr>
<tr>
<td>17</td>
<td>02-4211</td>
<td>T/S KICKER PLUNGER</td>
<td>1</td>
</tr>
<tr>
<td>18</td>
<td>10-257</td>
<td>SPRING-CREDIT BTN</td>
<td>1</td>
</tr>
<tr>
<td>19</td>
<td>SPL-24/750-DC</td>
<td>3025 GUN COIL ASSY</td>
<td>1</td>
</tr>
<tr>
<td>20</td>
<td>23-6557-9</td>
<td>NEOFPRENE GASKET</td>
<td>2</td>
</tr>
<tr>
<td>21</td>
<td>5791-09138-00</td>
<td>9P1625 03-06-2092</td>
<td>1</td>
</tr>
<tr>
<td>22</td>
<td>RM-23-01</td>
<td>H.S. TUBING 1/8 POLY</td>
<td>1</td>
</tr>
</tbody>
</table>

### 9-PIN MALE CONNECTOR

**PIN** | **COLOR** | **FUNCTION**
---|---|---
1 | ORG-BLK | 22 SW. GND
2 | ORG-BRN | 22 TRIGGER SW.
3 | ORG-RED | 22 GRENADE SW.
4 | BLK-RED | 22 LAMP COMMON 6V D.C.
5 | BLK-RED | 22 TRIGGER LAMP ON-OFF
6 | BLK-ORG | 22 GRENADE LAMP ON-OFF
7 | BLK-YEL | 18 TRIGGER SOLENOID ON-OFF
8 | BLK-BLU | 18 SOLENOID COMMON (+12V D.C.)
9 | NOT USED |  

**WHITE HOUSING 5791-09138-00 (REF.).** Install item 21 after wires are installed in gun shaft.

### FEATHER CHAMBER ASSY. (D-10344)

<table>
<thead>
<tr>
<th>ITEM</th>
<th>PART NO.</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>11-768</td>
<td>PTR DEVICE FRAME</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>01-7906</td>
<td>P/D GLASS CLAMP</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4206-01016-08</td>
<td>WS #6 X 1/2 P-RH</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>03-7902</td>
<td>PTR DEVICE SCREEN</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>4208-01041-10</td>
<td>WS #6 X 1/2 P-FH</td>
<td>6</td>
</tr>
<tr>
<td>6</td>
<td>01-7927</td>
<td>FEATHER GUIDE</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>01-7979</td>
<td>P/D FLOW DIVIDER</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>31-1229-3025-0</td>
<td>3025 P/D COVER</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>08-7424</td>
<td>PTR DEVICE GLASS</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>20-9435</td>
<td>FEATHERS</td>
<td>80</td>
</tr>
<tr>
<td>11</td>
<td>23-6573-4</td>
<td>NEOFPRENE GSKT 17*</td>
<td>2</td>
</tr>
</tbody>
</table>
Circuitboards & Gun Mechanism

1. CPU BOARD
2. VIDEO BOARD
3. INTERFACE BOARD
4. POWER SUPPLY
5. MONITOR
6. CABINET
7. CONTROL PANEL
8. COIN DOOR
9. CASH BOX
10. VERTICAL OPTO-BOARD
11. HORIZONTAL OPTO-BOARD
12. GUN

PART NO. | DESCRIPTION
---|---
C-10544 | Opto PC-board subassembly
C-8619 | Electro-mechanical assembly
D-9444 | Power supply PC-board
D-9868 | Printed circuit board
D-9886 | Power transformer chassis
D-9239 | CPU PC board
D-10413 | Interface PC-board
D-10269 | Gun mechanism
SFL-24-768-DC | Gun coil assembly
SFL-25-769-DC | Feed-hopper assembly