### Table of Contents

<table>
<thead>
<tr>
<th>Section 1</th>
<th>Section 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foul Detectors</td>
<td>Elevator Assembly</td>
</tr>
<tr>
<td>Pages 1 – 9</td>
<td>Pages 37 – 43</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Section 2</td>
<td>Section 8</td>
</tr>
<tr>
<td>Ball Conditioner Products</td>
<td>Rake Shaft Assembly</td>
</tr>
<tr>
<td>Page 10 – 11</td>
<td>Pages 44 – 49</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Section 3</td>
<td>Section 9</td>
</tr>
<tr>
<td>Ball Return Assembly</td>
<td>Tools and Safety Products</td>
</tr>
<tr>
<td>Pages 12 – 16</td>
<td>Pages 50 – 52</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Section 4</td>
<td>Section 10</td>
</tr>
<tr>
<td>Glow Bowling Products</td>
<td>Pit Cushion Assembly</td>
</tr>
<tr>
<td>Pages 17 – 21</td>
<td>Pages 53 – 61</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Section 5</td>
<td>Section 11</td>
</tr>
<tr>
<td>Electronic Triggering</td>
<td>Pinsetter Conversion</td>
</tr>
<tr>
<td>Pages 22 – 27</td>
<td>Pages 62 – 65</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Section 6</td>
<td>Section 12</td>
</tr>
<tr>
<td>Gearbox and Deck Assembly</td>
<td>Mask &amp; Lane Products</td>
</tr>
<tr>
<td>Pages 28 – 36</td>
<td>Pages 66 – 68</td>
</tr>
</tbody>
</table>

### IMPORTANT NOTICE

All Pricing included in this catalog are the suggested Retail Prices as effective from August 1, 2012 and are applicable “Only in the USA”

All Pricing subject to change without notice.

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### ZOT Policies and Procedures

**Warranty Returns:**
ZOT Pinsetter Parts, Inc., offers a 1-year Factory Direct Warranty Exchange on any defective product. Our Factory Direct Warranty Exchange procedure is as follows:

1. Call ZOT toll-free 800-525-8116 ask for an RGA number.
2. ZOT will ship replacement product.
3. ZOT will issue an invoice for the replacement product.
4. ZOT will issue a Credit (against item three above) once the defective product has been returned and received.

**Special Orders Policy:**
Orders for custom, or customized, products, and/or packaging, cannot be altered, adjusted, or canceled. Special Orders do not qualify under the returned goods policy.

**Returned Goods Policy:**
All returns for credit must have prior authorization. The products must be listed in the current catalog, and be in saleable condition. Returns Goods Policy as follows:

1. You must contact ZOT for an RGA number, and prepay all shipping costs.
2. Acceptance of the return is subject to the amount of Abuse and Misuse of the product, and these returns are separate to products returned under warranty.
3. There will be a minimum 15% restocking charge on all returns, and additional charges if the products require reworking as a result of Misuse or Abuse.
4. Special orders do not qualify under Returned Goods Policy. (See special orders policy)

**Short Shipment Policy:**
If any products have been inadvertently short shipped, ZOT’s Customer Service Department must be notified within 7 days of receiving the order. Providing the above mentioned 7 day qualification has been met, ZOT will either ship the missing products or issue a credit.

It is not acceptable to simply deduct the value of the missing products from the invoice.

**Breakage, Damage, Loss of Goods:**
All shipments leave ZOT’s warehouse in good condition. In the event of breakage and/or damage, you should contact ZOT’s Customer Service Department. The carrier will probably send someone to inspect the package; so it’s important to retain all interior and exterior packing materials until the claim is resolved. You should also contact ZOT’s Customer Service Department if a shipment does not arrive.
### Spare Parts For Older Model Foul Detectors

#### Wizard Double Spare Parts
Brunswick & AMF

<table>
<thead>
<tr>
<th>Description</th>
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<tr>
<td>Spare Parts Kit</td>
<td>#400112</td>
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<tr>
<td>A. PC Board</td>
<td>#431034</td>
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<tr>
<td>B. Fuse (pkg. of 6)</td>
<td>#400110</td>
</tr>
<tr>
<td>C. Sensor Assembly</td>
<td>#431015</td>
</tr>
<tr>
<td>D. Reflector Only</td>
<td>#800018</td>
</tr>
<tr>
<td>E. Reflector Assembly</td>
<td>#420088</td>
</tr>
<tr>
<td>F. Lamp (pkg. of 10)</td>
<td>#400094</td>
</tr>
<tr>
<td>G. Lamp Socket Assembly</td>
<td>#440020</td>
</tr>
<tr>
<td>H. Power Harness</td>
<td>#440017</td>
</tr>
<tr>
<td>I. Scoring Harness for Brswk.</td>
<td>#440018</td>
</tr>
<tr>
<td>J. Scoring Harness for AMF</td>
<td>#440039</td>
</tr>
<tr>
<td>J. Buzzer</td>
<td>#400111</td>
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#### Foul Conversion Spare Parts
1991 Model Only

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<tr>
<td>E. Reflector Assembly</td>
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#### Wizard ‘Plus’ Spare Parts:

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<tr>
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<td>#400094</td>
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<tr>
<td>Lamp Socket Assembly</td>
<td>#440020</td>
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<td>Power Harness</td>
<td>#440017</td>
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<tr>
<td>Scoring Harness</td>
<td>#440056</td>
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<tr>
<td>Buzzer</td>
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<tr>
<td>Transformer</td>
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#### Wizard Surface Spare Parts:

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<td>Reflector Only</td>
<td>#800018</td>
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<tr>
<td>Reflector Assembly</td>
<td>#420088</td>
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<td>Lamp (pkg. of 10)</td>
<td>#400094</td>
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<td>#400111</td>
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<tr>
<td>Transformer</td>
<td>#400065</td>
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</table>
How to select the right Foul Detector product for your center

In the following seven pages you will find details of ZOT’s fine line of Wizard Foul Detector products, which fall into four categories. Identify which Foul Detector is the best fit for your center in the grid to the right and then go to the appropriate product page to find all the details.

The ZOT’s Wizard ‘Plus’ Foul Detector is universally recognized as the most reliable product in the industry. No other brand can match the features included in the ZOT product.

AMF Radaray Plus Foul Detector Conversion - For Brunswick Centers with AMF Radaray Plus Foul Detectors

#400272...............................$227.50

<table>
<thead>
<tr>
<th>Removed Parts</th>
<th>New Kit</th>
</tr>
</thead>
</table>

Replaces all problem parts: e.g. New Transformer, New Sensors and Main PC Board.

Cost Effective: the new ZOT parts will run ‘trouble-free’ for the next 20-years.

All Modular Design: all individual components simply plug into the PC Board, making troubleshooting and replacing parts easy.

Self Diagnostics: ZOT’s microprocessor automatically checks the sensors every time a foul occurs and the unit will turn itself off automatically, one lane at a time, if it detects a problem.

Alignment Indication: a 4-unit LED system indicates signal strength, assisting the installer and/or mechanic in aligning the sensors.

Light Source Recognition: ZOT’s infrared design features a special operational frequency for its emitter and receiver communications. Matching this frequency eliminates being affected by alternate light sources, e.g. overhead and cosmic/glow lighting.

Vibration Protection: The PC Board is mounted on a shock-absorbing buffer that minimizes ball-impact vibration that can damage delicate circuitry common to PC Boards.
Steel Foul Detector Covers

#420299 Wide Ball Return Cover/Black...............$114.50
#420195 Wide Ball Return Cover Aluminum.............$106.58

#420300 Narrow Divider Trim Cover Black.............$83.90
#420196 Narrow Divider Trim Cover Aluminum...........$84.14

#420291 Wide Ball Return Cover Black...............$114.50
#420193 Wide Ball Return Cover Aluminum.............$106.58

#420292 Narrow Divider Trim Cover Black.............$83.90
#420194 Narrow Divider Trim Cover Aluminum...........$84.14

Features & Benefits
Vinyl Finish: Available in black and aluminum.
Rugged Construction: ZOT’s Metal Foul Detector Covers are designed and manufactured for decades of trouble free service.

Replacement for Astro and 2000 Covers (10" [.254M])
See illustration above.

Replacement for Gold Crown and Crown Imperial Covers (7-1/4" [.184M] or 8" [.204M])
See illustration above.

Call ZOT at 1-800-525-8116 for more details
Foul Detectors

Wizard ‘Plus’
For Brunswick Subway Ball Returns
#400140 .............$429.50

Wizard Plus Features and Benefits:

**Infrared Technology:** The ZOT Wizard Plus features an infrared sensor that is solid state and rated for millions of hours of dependable service. Infrared sensors eliminate old incandescent bulbs.

**Alignment Indicators:** A 4-unit LED system indicates signal strength. This aids the installer and/or mechanic in the alignment of the sensors.

**Automatic Scoring Compatible:** ZOT Wizard Foul Units transmit the proper signal needed to communicate with automatic scoring systems. Changing the signal is as easy as: either flipping a switch.

**Marginal Signal Alert:** ZOT Wizard Foul Units will alert the mechanic to pending problems. Four different sequences of buzzer signals can occur if the unit has a failure allowing the mechanic to troubleshoot.

**All Modular Design:** All the individual components simply plug onto the PC Board, making troubleshooting and the replacement of parts simple.

**Self Diagnostics:** ZOT’s microprocessor automatically checks the sensors every time there is a foul. If the any Wizard unit detects a problem it will automatically turn itself off... one lane at a time.

**Remote Switching:** ZOT’s Wizard Plus can be disabled remotely lane by lane (e.g., from the front desk), in centers with compatible scoring systems.

**Microprocessor Efficient:** All ZOT Wizard Foul Units have State-of-the-Art Microprocessor technology. This simplifies the circuitry, making all Wizard Units more cost effective and reliable.

**Light Source Recognition:** ZOT’s infrared design features a special operational frequency for its emitter and receiver communications. Matching this frequency eliminates an affect from alternate light sources: e.g. overhead lighting, and cosmic/glow lighting.

**Vibration Protection:** The PC Board is mounted on a shock-absorbing buffer to minimize ball impact vibration that can damage delicate circuitry common to PC Boards.

Replaces Brunswick Gold Crown and Astro/2000

Only Available from ZOT: No other manufacturer or supplier offers a foul detector unit that even comes close in terms of features and benefits. Check it out for yourself.

Dust Cover (Optional Add-on)
#620145.............$15.59
ZOT Wizard Extreme
For Brunswick Subway Ball Returns

Low Voltage Power Wire Kit
Centers with no 115V power supply available at the approach area should order the ZOT Wizard Extreme Foul Detector and Covers package (see facing page) plus Wire Harness #400302........$47.67

This kit allows transformer installation at mask unit.

Kit Requires: A standard 115 Volt duplex outlet to plug the transformer into for supplying power to the Foul Unit.(e.g. on the curtain wall).

Wizard ‘Plus’ Foul Detector and Cover’s Package
#400195 Cover’s Package to Replace Astro/2000 ..............................................$536.10
#400196 Cover’s Package to Replace Gold Crown and Crown Imperial...........$536.10

Package includes: Wizard ‘Plus’ Foul Detector & One Wide and One Narrow Black Metal Cover

“Replacing Foul Detectors Improves the Bowler’s Experience...
Replacing Foul Detector Covers Improves the Image of your Center”
**Foul Detectors**

**Features & Benefits**

**Infrared Technology:** ZOT Wizard Foul Units feature infrared sensors that are solid state and rated for millions of hours of dependable service. Infrared sensors replacing troublesome incandescent bulbs.

**Self Diagnostics:** ZOT’s microprocessor automatically checks the sensors every time there is a foul. If any Wizard Foul Unit detects a problem it will automatically turn itself off one lane at a time.

**Alignment Indicators:** A 4-unit LED system indicates signal strength. This aids the installer and/or mechanic in the alignment of the sensors.

**All Modular Design:** All the individual components simply plug onto the PC Board, making troubleshooting and the replacement of parts simple.

**Vibration Protection:** The PC Board is mounted on a shock-absorbing buffer to minimize ball impact vibration that can damage delicate circuitry common to PC Boards.

**Marginal Signal Alert:** ZOT Wizard Foul Units will alert the mechanic to pending problems. Four different sequences of buzzer actions can occur if the unit has a failure allowing the mechanic to troubleshoot.

**Microprocessor Efficient:** All ZOT Wizard Foul Units have State-of-the-Art Microprocessor technology. This simplifies the circuitry, making all Wizard Units more cost effective and reliable.

**Automatic Scoring Compatible:** ZOT Wizard Foul Units transmit the proper signal needed to communicate with automatic scoring systems. Changing the signal is as easy as: either flipping a switch or moving jumpers to a different set of pins.

**No need for an Electrician to Install:** The ZOT Wizard (Surface) comes with a Transformer and Low Voltage supply cable allowing a Mechanic to complete the installation with no added help.

**Light Source Recognition:** ZOT’s infrared design features a special operational frequency for its emitter and receiver communications. Matching this frequency eliminates an affect from alternate light sources: e.g. overhead lighting, and cosmic/glow lighting.

---

**Wizard Surface for Brunswick Surface Ball Returns**

**#400287 .......................$348.50**

**Serving Two Lanes**

**Approach Mounted Transformer:** For centers with 115V Power Supply at Foul Line.


**Masking Wall Mounted:** For centers with 115V Power supply at Pinsetters.

**Purchase Separately:** New Wire Run from Transformer to Foul Unit.

**Replaces:** Brunswick Crown Imperial Telefoul.

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**Wizard Extreme Spare Parts:**

<table>
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<th>Description</th>
<th>Part Number</th>
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<tr>
<td>Spare Parts Kit</td>
<td>#400292</td>
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<tr>
<td>PC Board</td>
<td>#431097</td>
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<tr>
<td>Sensor Block Assembly</td>
<td>#431099</td>
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<tr>
<td>Reflector Only</td>
<td>#800057</td>
</tr>
<tr>
<td>Reflector Assembly (2)</td>
<td>#400169</td>
</tr>
<tr>
<td>Foul Signal LED, Including</td>
<td></td>
</tr>
<tr>
<td>Holder and Harness</td>
<td>#440145</td>
</tr>
<tr>
<td>Scoring Harness (Bswk)</td>
<td>#440155</td>
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<tr>
<td>Scoring Harness (AMF)</td>
<td>#440153</td>
</tr>
<tr>
<td>Buzzer Assembly</td>
<td>#400170</td>
</tr>
<tr>
<td>Transformer Assembly (115V60Hz)</td>
<td>#400281</td>
</tr>
<tr>
<td>Transformer Assembly (230V50Hz)</td>
<td>#400293</td>
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<tr>
<td>Sensor harness (3-wire)</td>
<td>#440146</td>
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**Wire Harness**

**#400302 ..........$47.67**

**Kit #400287 Includes:** Detector Assembly, Transformer, two Reflector Assemblies and All Mounting Hardware to install complete kit. **Power Supply Cable #400302 (order separately).**

---

**Low Voltage**

Centers with no 115V power supply available at the approach area should also order the following wire harness. This kit allows transformer installation at mask unit.

---

**Note:** Centers requiring foul indication at the foul line should add Foul Signal LED Holder and Harness #440145 ..........$45.95
**Enhanced PC Board**

*For Brunswick Astro and 2000 Telefoul Systems*

#400078 ............$145.50

---

**Infrared Head Conversion (Optional Add-on to Enhanced PC Board)**

#400075* ............$139.50

*Requires #400078

---

**Features & Benefits**

**Vibration Protection:** The PC board is mounted on a shock absorbing buffer to minimize ball impact vibration which can damage delicate circuitry common to PC boards.

**Simple Plug in Installation:** The ZOT Enhanced PC Board simply plugs into the existing equipment, with no modification necessary.

**Alignment Indicator:** A 4-unit LED system indicates when the signal is strongest. This aids the installer and the mechanic, should realignment ever be necessary.

**Self Diagnostics:** ZOT’s exclusive microprocessor circuit automatically checks sensor signal levels every time you switch the unit on, and every time there is a foul.

**Easy Conversion to Infrared:** The ZOT PC Board operates with the original photo cell and bulbs, but it also includes the drive circuit for Infrared sensors. The ZOT Infrared Sensor Source is Solid State Diode rated for millions of hours of dependable service – a great improvement over the 2,000 hours rating of the old incandescent bulbs.

**Easy to Install:** The ZOT Infrared Head Conversion simply plugs into the ZOT Enhanced PC Board.

**All the Features of the ZOT Wizard:** That’s what you get when you complete your upgrade and combine the ZOT PC Board with the ZOT Infrared Head.

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**Enhanced PC Board Spare Parts:**

<table>
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**Infrared Head Conversion Spare Parts:**

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<td>Reflector Only</td>
<td>#800018</td>
</tr>
<tr>
<td>Reflector Assembly</td>
<td>#420088</td>
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</table>

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**Note:**

For Single Lane Application: One Lane Blockout Jump Wire #400187

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Call ZOT at 1-800-525-8116 for more details
Foul Detectors

Infrared Scanner Ball Detector

*#400139 For Brunswick 79 Scanner Ball Detector .............................................. $160.14
#400151 For Brunswick 86 Scanner Ball Detector .............................................. $160.14
#400219 For Brunswick 90 and Frameworx Camera Ball Detector........ $160.14*

Features & Benefits

**Infrared Technology:** Features an Infrared Sensor Source that’s Solid State Diode rated for millions of hours of dependable service. Infrared eliminates replacement of old incandescent bulbs, which are only rated at 2,000 hours.

**Alignment Indicator:** A 4-unit LED system indicates when the signal is strongest. This aids the installer and the mechanic, should realignment ever be necessary.

**All Modular Design:** All components plug into the PC board separately, making it easy and possible to change parts and troubleshoot.

**Microprocessor Efficient:** ZOT’s State-of-the-Art Microprocessor technology simplifies the circuit, making the product surprisingly cost effective and reliable.

**Eliminates Annoying League Interruptions:** Minimizes constant readjusting of lens and socket plate.

**Easy Access:** The units Hinged Dust Cover allows easy access to the unit, without needing a screwdriver.

**Easy To Install:** The system mounts in front of the scanner assembly (Pinsetter side), and plugs into the existing sensor connector.

### 79 Scanner Ball Detect Spare Parts:

<table>
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<th>Description</th>
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<tbody>
<tr>
<td>PC Board</td>
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<tr>
<td>Reflector Assembly</td>
<td>#420088</td>
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<tr>
<td>Power Harness</td>
<td>#440070</td>
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### 86 Scanner Ball Detect Spare Parts:

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### 90 & Frameworx Camera Ball Detect Spare Parts:

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<tr>
<td>Sensor Assembly</td>
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<tr>
<td>Power Harness</td>
<td>#440072</td>
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Foul Light Lamp Vibration Damper Kit
Retrofit for ZOT Wizard Foul Detectors
#400181 .....................$12.80

Extends The Life Of #90 Lamps: Test results confirm that this vibration system greatly reduces early failure rate of lamp filaments.
Increased Reliability: Results in reduced time on routine maintenance.
Kit Contains Parts For One Complete Unit: (E.G., Two lamp fixtures).

Cover Hold Down Kit
#420182 .....................$14.20

Secure Loose Foul Detector Covers: Steel anchor plate firmly connects to the wood approach regardless of the condition of the screw hole.
Easy Installation: Drill recess into wood approach using 1 1/2" wood bit, then fasten steel anchor to approach using two wood screws. To finish, secure foul detector cover with a 3 1/2" machine screw. All screws are included in the kit.

Scanner Ball Detect Reflector Kit
For Brunswick AS 80 And AS 90 Scoring
#420089 .....................$30.95

Improved Signal Strength: ZOT's simple modification will improve signal strength 2-1/2 times, yielding improved performance from marginal bulbs.
Cost Savings: The larger surface reflector, and special 15° retro-reflective face, will result in savings on bulbs and equipment maintenance.
Reflector Only: #800019
Guard Bracket Only: #640039

Note: Each kit includes two reflectors.

Rectangular Ball Detect Reflector
For Brunswick AS 80 And AS 90 Scoring With AMF Hide-A-Bumper System
#800041 .....................$7.82

Improved 79 Scanner Performance: When AMF's Hide-a-Bumper system is installed under the divider trim and capping, with AS 80 or AS 90 scoring, ZOT's Rectangular Ball Detect Reflector will dramatically improve marginal operating signal levels.
Saves Money: This low cost upgrade not only yields a better performance, it cuts down on bulbs, and other related equipment replacement.

Signal Strength Reflector Modification Kit
For Brunswick Astro/2000 Telefoul
#420088 .....................$14.70

Increased Signal Strength: The special high output 15° retro-reflective face of this small reflector, which will fit under your existing cover, will increase your signal strength by 50%.
Low Cost Modification: Which minimizes problems with dust, alignment and marginal bulbs.

Call ZOT at 1-800-525-8116 for more details
Ball Conditioner Products

ZOT “GlossBoss” Coin-Op Ball Conditioner
#420397 ........$8,988.00

ZOT is pleased to introduce the all-new feature rich “GlossBoss” Ball Conditioner ... a Coin-Operated machine that can generate revenues for your center or pro-shop ... even when you’re not there.

If you’re interested in adding $7,686* revenue or $7,120* profit to your bottom line ... it can happen with a ZOT “GlossBoss” Coin Operated Ball Conditioner.

*Figures based on centers with a 1000 registered winter league season bowlers.

Call ZOT at 1-800-525-8116 and ask for a copy of revenue reports.

GlossBoss Buffing Compound
# 420416 (two blocks per box) ........$137.30
- Same formula that major bowling ball manufacturers use to factory finish new bowling balls
- Designed and formulated to give a superior polish to all bowling ball compositions including: Urethane, Reactive, Particle, Plastic and Rubber.
- Date stamped for shelf-life verification

Buffing Wheel
#820017 ..............$118.20
- Longest lasting buffing wheel in the industry.
- Superior compound transfer to buffing wheel and ball.
- Non-corrosive black powder coated steel hub.

Note:
Always check the condition of the spacers when replacing the buffer wheel.

Lustre King Spacer Kit #420374 ........$53.45
Lustre Kleen Spacer Kit #420374 ........$53.45
Yes...you can make money with a Ball Conditioner

If you’re not making money with your ball conditioner ...it’s because:

You don’t have one
The one you have is out of order
The one you have doesn’t polish balls
You’re charging a 1950’s/1960’s price
You don’t have a ZOT “GlossBoss” Ball Conditioner

Promoting your Ball Conditioner Pay Attention and Keep the Ball Conditioner in Adjustment: This is really easy to do, yet it’s the number one reason ball conditioners do not yield their potential in terms of revenues and profits. If a ball conditioner does not polish balls, bowlers won’t use it. It’s as simple as that.

Promotion, Promotion, Promotion: Typically a ball conditioner is used by about 6 percent of bowlers a week, providing of course, the unit functions properly. With just a little promotion, this percentage can be substantially increased.

Introducing the ZOT GlossBoss II
#420398 ..........$6,988.00

If you have a small center, or a center with a minimal number of league bowlers (e.g. 350 or fewer) or are simply just not ready to invest in a machine that includes all the bells and whistles, ZOT's new GlossBoss II may be just the answer.

The GlossBoss II is identical to the GlossBoss except the Scrolling Message Display has been replaced with a Static Sign, and it does not include an Electronic Coin Validator, relying instead on just the Bill Acceptor. The GlossBoss II retains the same high polishing performance as the original machine – and all for a price tag that is more than 20-percent less than a GlossBoss.

“It only takes ‘ONE’ ball polish a day to pay for a GlossBoss II machine.”

ZOT Ball Conditioner Restoration and Conversion Kits
If you’re not quite ready for a GlossBoss or GlossBoss II but have an old ball conditioner that’s not functioning, ZOT manufactures restoration and conversion kits that are compatible to most brands’ ball-conditioners.
For more details, go to www.zotpinstter.com or call 1-800-525-8116
ZOT Front Ball Lift Relay Box
For all centers with Brunswick ‘S’ Style Front Ball Lift Assemblies with two Wheels/Tires
#400208 ............ $228.30

ZOT’s Front Ball Lift Relay Box is a direct replacement for the relay box on all Brunswick ‘S’ Style Front Ball Lift Assemblies with two Wheels or Tires, including AMF, Brunswick, Murrey and Vantage.

Check out these benefits

**Easy to Service:** The entire relay PC Board can be changed in minutes.

**Easy to Install:** The relay box can be changed in minutes. All wire connections feature solderless fittings.

**Simple Design:** Eliminates expensive military style connector.

**Circuit Protection:** The Motor Circuit features a resettable breaker. When a ball-jam occurs simply clear the jam and reset the breaker.

**Hand Dryer Transformer - 24 Volts output**
#400256 ............ $45.30
Features & Benefits
Faster Bowling = Increased Revenues:
ZOT’s Ball Accelerator improves the ball return time, without speeding up the pinsetter, resulting in upwards of 15% increase in ball return speed – depending on which model you install, and on which machines. This translates into potential savings of anywhere between 7 to 15 minutes for a typical league. Faster bowling makes the game more fun for both league and recreational bowlers, and adds to your bottom line.

Fastest Wheel Driven Accelerator Available:
ZOT’s acceleration time is twice as fast as any competitive wheel driven unit available, including the original manufacturers Jetback Ball Booster.

Eliminates Crisis Breakdown Time:
Whenever there is a problem with a ball booster system your machines are down for hours when using competing product. Not so with ZOT’s Ball Accelerator. It’s the most serviceable unit available. It reduces the irritation of difficult and costly accelerator maintenance to belts, pulleys, etc. And there is nothing that can happen to ZOT’s Ball Accelerator, that can prevent you from restoring your ball return function in under two minutes – guaranteed.

Proven Reliability: Has a forty year proven track record.

Installs In Under An Hour: The ZOT Accelerator can be installed by a house mechanic.

Ball Accelerator
For Mini Conversions And Straight ‘A’ Pinsetters

<table>
<thead>
<tr>
<th>Item</th>
<th>ZOT#</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>200003</td>
<td>Motor</td>
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<tr>
<td>2.</td>
<td>300006</td>
<td>Open Style Relays</td>
</tr>
<tr>
<td>3.</td>
<td>300007</td>
<td>Closed Style Relays</td>
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<tr>
<td>4.</td>
<td>400014</td>
<td>Relay Box Assembly</td>
</tr>
<tr>
<td>5.</td>
<td>420148</td>
<td>Shaft Kit</td>
</tr>
<tr>
<td>6.</td>
<td>420149</td>
<td>“T” Bolt Kit</td>
</tr>
<tr>
<td>7.</td>
<td>420236</td>
<td>3/8” x 6 x 6 1/2” Bolt (2ea.)</td>
</tr>
<tr>
<td>8.</td>
<td>420256</td>
<td>Vinyl Tubing</td>
</tr>
<tr>
<td>9A.</td>
<td>420275</td>
<td>Key 3/16” Sq. x 2 1/2” (6ea.)</td>
</tr>
<tr>
<td>9B.</td>
<td>420276</td>
<td>Key 3/16” Sq. X 1” (6ea,)</td>
</tr>
<tr>
<td>10.</td>
<td>520044</td>
<td>Shaft Only (Two Key Ways)</td>
</tr>
<tr>
<td>11.</td>
<td>640054</td>
<td>Frame for 3 3/8” Pillow Block Bearing</td>
</tr>
<tr>
<td>12.</td>
<td>640055</td>
<td>“T” Bolt Only</td>
</tr>
<tr>
<td>13.</td>
<td>650019</td>
<td>End Bracket (T-Bolt)</td>
</tr>
<tr>
<td>14.</td>
<td>650020</td>
<td>End Bracket (Standard)</td>
</tr>
<tr>
<td>15A.</td>
<td>800024</td>
<td>2” Pulley</td>
</tr>
<tr>
<td>15B.</td>
<td>800025</td>
<td>2 1/2” Pulley</td>
</tr>
<tr>
<td>15C.</td>
<td>800026</td>
<td>3 1/2” Pulley</td>
</tr>
<tr>
<td>16.</td>
<td>800028</td>
<td>Drive Wheel</td>
</tr>
<tr>
<td>17.</td>
<td>800029</td>
<td>Large Pulley</td>
</tr>
<tr>
<td>18A.</td>
<td>800030</td>
<td>Belt Slow For 2” Pulley</td>
</tr>
<tr>
<td>18B.</td>
<td>800031</td>
<td>Belt Medium For 2 1/2” Pulley</td>
</tr>
<tr>
<td>18C.</td>
<td>800032</td>
<td>Belt Fast for 3 1/2” Pulley</td>
</tr>
<tr>
<td>19.</td>
<td>800033</td>
<td>Locking Collar</td>
</tr>
<tr>
<td>20A.</td>
<td>810037</td>
<td>3 3/8” Pillow Block Bearing</td>
</tr>
<tr>
<td>20B.</td>
<td>810038</td>
<td>3” Pillow Block Bearing</td>
</tr>
</tbody>
</table>

Replacement Parts

Note: With Mini Conversions and Straight ‘A’ Pinsetters you need to add ZOT’s ‘Long’ Three-Rail Ball Guide System #420059 for ‘Maximum’ acceleration.

Call ZOT at 1-800-525-8116 for more details
Ball Return Assembly

Steel Tube Track
For Subway Ball Returns with ‘A2’, Jetback and Straight ‘A’ Pinsetters

#420319 2 each x 72” sections......$144.90

#640101 1 x 144” section......$112.50

Features & Benefits
Direct Replacement: ZOT’s Steel Tube Track is a direct replacement for the original Brunswick 144” steel tube track, and is price competitive.

Ideal for New Installations and Surface to Subway Conversions: The ZOT Track is also compatible to the ZOT Drop Sweep Ball Track Assembly #420471 and #420330.

Can be Shipped by UPS: The ZOT Part #420319 (which includes 2 x 72” sections, and connecting inserts) can be shipped by UPS, which is less expensive.

12’ Sections: ZOT #640101 A typical installation requires five plus sections per ball return run.

Drop Sweep Tube Track
For Straight ‘A’ Pinsetters and Mini Jetback with Subway Ball Returns

#420330 ..............$214.50

Features and Benefits
Direct Replacement: ZOT’s Drop Sweep Tube Track is a direct replacement for the original ‘A’ & Jetback steel drop sweep tracks, neither of which is available from Brunswick.

Ideal for New Installations: The ZOT Drop Sweep Tube Track is also compatible to ZOT Steel Tube Track Kit #420319 & #640101 shown above.

Can be Shipped by UPS: Which reduces shipping costs.

Approach Down Sweep
For Surface to Subway Conversions

#420486 Approach Down Sweep Track* ....$235.24
#420487 Odd Lane Side Guide Rail* ..........$121.47
#420488 Even Lane Side Guide Rail*.........$121.47

*Must be ordered individually

Direct Replacement: For connecting surface to subway tube track in centers where the concrete has been trenched out to enable the ball drop below the approach and feed into ‘S’ Style Power Ball Lifts with two lift wheels/tires.

Track Cover Kit
For Straight ‘A’ and Jetback Pinsetters

#420070 ..............$238.13

#420056 $213.70

Features and Benefits
Give Your Center A New and
More Modern Look: With ZOT’s Ball Track Covers.

Easy to Install: The three-piece gray metal cover kit includes all hardware necessary for easy installation.

Ships UPS: For Convenience and Savings.

Note: When used with Maximum Speed Ball Accelerators you will need to add ZOT’s ‘Short 3-Rail Ball Guide System #420056.

‘Long’ Three Rail Ball Guide System
For Mini Conversions and Straight ‘A’ Pinsetters

#420059 ....$245.84

Features and Benefits
Reduced League and Open Play Time: ZOT’s ‘Long’ Three Rail Ball Guide System holds the ball on the track as it’s propelled into the subway ball return. This allows you to double the speed of your ZOT Ball Accelerator, save 5-7 minutes on a typical league; and with reduced power consumption and maintenance.

Prevents Ball Damage: The solid steel rails are covered with a replaceable nylon insert that protects the balls.
**Ball Return Assembly**

"Solve ‘A2’ Long Belt Tracking Problems – Today"

**Accelerator Support Conversion Kit**
For ‘A2’ Pinsetters

#420206 $51.90

**Features & Benefits**

*Maintain Proper Belt Tracking:* Long belt tension adjustments are even more critical with today’s resin reactive bowling balls and lane oil conditions. ZOT’s Accelerator Support Conversion is the only affordable solution.

*Reduces Wear On Pulley And Support Shaft:* By repositioning the accelerator assembly the belts tension and lateral movement is reduced as the ball passes the apex of the track.

*Most Cost Effective Solution Available:* ZOT’s Kit is four to eight times less expensive than replacing flat surface pulleys with high crowned accelerator pulleys.

*Returns Two Or Three Balls At One Time – Without Belt Shift:* ZOT’s Kit will improve the overall belt tracking over the ball.

*Only Available From ZOT:* No other manufacturer offers this cost effective solution.

---

**‘Y’ Switch Stop Conversion Kit**
For ‘A2’ and Jetback Pinsetter

#420072 $59.90

**Features & Benefits**

*Big Cost Savings:* ZOT’s Unique Kit is a better product and costs less than half of the original manufacturers replacement.

*Reduced Maintenance:* ZOT’s ‘Y’ Switch Conversion Kit eliminates worn out bumpers and broken switch stop brackets completely. ZOT’s unique design product deadens switch bounce.

*Easy To Install And Adjust:* This fully adjustable conversion features a simple drill and bolt installation.

---

**‘Y’ Track Ball Deflector Kit**
For Mini Conversions and Straight ‘A’ Pinsetters

#420284 $79.95

**Features & Benefits**

*Prevent Ball Damage:* ZOT’s Spring Steel Ball Deflector prevents balls from being damaged by derailing as they turn into the pinsetter ‘Y’ track.

*Big Savings All Around:* This kit, which is already half the price of the original manufacturers product, pays for itself every time it prevents a resin reactive ball from contacting the pinsetter frame.

Call ZOT at 1-800-525-8116 for more details
# Heavy Duty ‘Y’ Track Weldmet
For ‘A2’ and Jetback Pinsetters
#640042 ..................$128.01

**Features & Benefits**
- **Direct Replacement:** This product has been manufactured to conform to the original mounting connections.
- **Reinforced Design:** It also incorporates **I-Beam** technology for greater durability and longer life.
- **Ten-Times Stronger at Common Failure Point.**

# Modified ‘Y’ Switch Stop Bracket
For ‘A2’ and Jetback Pinsetters
#620067 ..................$15.53

**Features & Benefits**
- **Positions Bumper Correctly:** Replacing bent ‘Y’ Switch brackets reduces ball jams.
- **Additional Mounting Holes:** If ‘Y’ Switch track breaks at stop bracket the ZOT bracket can be mounted on the kickbacks.

# Urethane ‘Y’ Switch Plate Spacer
#680007 ..................$1.55

**Features & Benefits**
- **Pull-through Retainer:** No metal stud to become exposed that may cause damage to expensive high-performance bowling balls.

# Urethane ‘Y’ Switch Bumper
#680006 ..................$2.80

**Features & Benefits**
- **Pull-through Retainer:** No metal stud to become exposed that may cause damage to expensive high-performance bowling balls.

# Flat Gutter Anchor
#420343 Complete One-Lane Kit....................$73.38
(Includes hold down screws and 4 Threaded Steel Flat Gutter Anchors for tail-plank end, & 4 Anchors for cross foundation to secure 2 x Flat Gutters)

- #420361
  Individual Anchors, Tail Plank End ..................$13.39

- #420362
  Individual Anchors, Cross Foundation ..................$11.28

---

**Ball Return Assembly**

**Reinforced Channel Iron for Greater Durability**

---

**Urethane ‘Y’ Switch**
For ‘A2’ and Jetback Pinsetters
#680005 ..................$26.95

**Features & Benefits**
- **Urethane:** Non-marking, gentle on high-end bowling balls. Rugged construction for years of dependable service.
- **Rigid Polymer:** A strong material that eliminates bending which causes ball stops. The ZOT product will never require shimming.

**‘Y’ Switch Shaft**
#520159 ..................$9.21

**Features & Benefits**
- **Longer Threads:** Allows shimming of ‘Y’ Switch height.
- **Protective Finish:** Wear resistant finish for years of dependable service.

**Urethane ‘Y’ Switch Bumper**
#680006 ..................$2.80

**Features & Benefits**
- **Pull-through Retainer:** No metal stud to become exposed that may cause damage to expensive high-performance bowling balls.

**Urethane ‘Y’ Switch Stop Mounting Bracket Kit**
#420304 ..................$21.31

**Features & Benefits**
- **Bolting ZOT’s Modified ‘Y’ Switch Stop Bracket #620067 to the kickbacks reduces breakage to the ‘Y’ Track weldmet.**
- **Adding ZOT’s Auxiliary ‘Y’ Stop Mounting Bracket Kit to the Modified ‘Y’ Track weldmet ensures the fixture remains secure.**

**Modified ‘Y’ Switch Stop Bracket**
For ‘A2’ and Jetback Pinsetters
#620067 ..................$15.53

**Features & Benefits**
- **Positions Bumper Correctly:** Replacing bent ‘Y’ Switch brackets reduces ball jams.
- **Additional Mounting Holes:** If ‘Y’ Switch track breaks at stop bracket the ZOT bracket can be mounted on the kickbacks.

**Urethane ‘Y’ Switch Plate Spacer**
#680007 ..................$1.55

**Features & Benefits**
- **Isolates Vibration:** Reduces breakage to track weldment and other related metal parts.
“Help for Dual Pindeck Lamp Fixtures”

Pindeck Light Relay Control
#400154 .................. $77.90

Features and Benefits
Replaces Toggle Switch at Rear of Pinsetter with Relay Controller: Enables switching from White to Black (Glow) light to be managed from the Front Desk, Mechanics Tool Room or any other remote location as needed. Enables switching from White to Black (Glow) Light on up to 24-lanes in unison.

![Diagram of Pindeck Light Relay Control](image)

Note: One Relay Controller operates a pair of lanes. Requires one Two-Conductor Wire runs per 24-lanes (not included) to connect Front Desk Transformer & Switch Kit to Curtain Wall. Order #312003 $0.12 per foot (order by the foot). Requires one #400162 to operate up to 24-lanes.

Spare Parts for Pindeck Lights

<table>
<thead>
<tr>
<th>Item</th>
<th>ZOT#</th>
<th>Description</th>
<th>Item</th>
<th>ZOT#</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1A</td>
<td>290008</td>
<td>Single Lamp Ballast (115V/60Hz) (6-wire multi purpose 34, 35, &amp; 40 Watt)</td>
<td>4A</td>
<td>620162</td>
<td>Switch Bracket (Rear Machines Control)</td>
</tr>
<tr>
<td>1B</td>
<td>290019</td>
<td>Double Lamp Ballast (115V/60Hz) (8-wire multi purpose 34, 35, &amp; 40 Watt)</td>
<td>4B</td>
<td>400163</td>
<td>Switch Bracket (Front Desk Control)</td>
</tr>
<tr>
<td>2A</td>
<td>240009</td>
<td>48” Lamp F40 T12 BLB (Black Light Blue)</td>
<td>5</td>
<td>330029</td>
<td>Spring Loaded Lamp Socket (ZOT)</td>
</tr>
<tr>
<td>2B</td>
<td>240016</td>
<td>48” Lamp F40 T12 BL (Black Light)</td>
<td>6</td>
<td>330030</td>
<td>Stationary Lamp Socket (ZOT)</td>
</tr>
<tr>
<td>2C</td>
<td>240011</td>
<td>48” Lamp F40 T12 D (Day Light)</td>
<td>7</td>
<td>620165</td>
<td>ZOT Ballast Cover</td>
</tr>
<tr>
<td>2D</td>
<td>240017</td>
<td>48” Lamp F40 T12 IR (Infrared Light)</td>
<td>8A</td>
<td>431049</td>
<td>PC Board Only (ZOT Relay Controller)</td>
</tr>
<tr>
<td>3A</td>
<td>300023</td>
<td>Toggle Switch (SPDT) (Rear Machine Control)</td>
<td>8B</td>
<td>431054</td>
<td>PC Board Only (Brunswick Relay Controller)</td>
</tr>
<tr>
<td>3B</td>
<td>300026</td>
<td>Toggle Switch (DPDT) (Front Desk Control)</td>
<td>9</td>
<td>312003</td>
<td>Wire 2 Conductor 18 Gauge (Order by the foot)</td>
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<td>11</td>
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<td></td>
<td>10</td>
<td>400160</td>
<td>Transformer (Front Desk Control)</td>
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<td></td>
<td>11</td>
<td>440058</td>
<td>Wire Harness 2 Conductor 14 ft. (Relay Controller)</td>
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<td>12</td>
<td>330051</td>
<td>48” Infrared Lamp Cover (Navy Blue)</td>
</tr>
</tbody>
</table>

Note: To order individual parts refer to parts grid shown below

Call ZOT at 1-800-525-8116 for more details
Some thoughts about Glow Bowling

Recreation centers – centers that have the flexibility to provide an environment for both entertainment and sport bowling – are centers that make the most money and the highest profits for proprietors today. And, there’s no better place to start introducing Glow Bowling than at the pindeck…by adding ZOT Glow Pindeck Light or GlowVision fixtures. Some proprietors have done it the other way around, added Glow lighting to everything in their center…except the pindeck.

“Those proprietors have missed the point.” Whether we’re talking about Sport or Recreation bowling, the game’s about pins…and trying to knock them down. And, if the pins don’t “Glow” you’re really not in the Glow Bowling business.

Adding ZOT Glow Pindeck or GlowVision Lights is also the quickest and least expensive way to get started in the Glow bowling business. Combine a Glow Pindeck with a good promotion plan, and your customers and your business will both profit from the Glow Bowling Experience.

Control up to 24-lanes with One Switch with ZOT’s Front Desk Switch Control

Logically the First Choice

Take Control of Your Fixtures

Control Each Lane Individually with ZOT’s Switch Control on the Rear of the Pinsetting machine

When ZOT researched and developed its Glow Pindeck Light system it was obvious that proprietors were looking for options that are the best fit for their individual center needs. For example, switch control* options that enable switching from white (sport bowling) to ultra-violet (recreation bowling) light from the front desk, or the rear of the pinsetting machine.

Both are better options than other brands offered that has the switch control on the fixture…which requires the mechanic to walk across the lanes to access the switch…and, in full view of your customers. For more details on ZOT GlowVision and Two-Lamp Glow Pindeck light systems contact your ZOT Distributor, or call ZOT directly at 1-800-525-8116.

Note: Pindeck Lights are powered (turned on and off) by the Pinsetter. Pindeck Light Switch Controls change the lights from White to Black (Glow) and vice versa…they do not turn the Pindeck lights on or off.
ZOT Two-Lamp Glow Pindeck Light Fixture

“An opportunity that’s too good to miss! ZOT’s Two-Lamp Glow Pindeck Light costs less than replacing an original Brunswick single lamp fixture”

Front Desk Switching Option (See page 18 for control)

#420335 (115V/60Hz)......$311.50
*MUST ORDER IN PAIRS*

For all Domestic (US) applications, and some overseas markets, as appropriate.

#420354 (230V/50Hz)......$322.00
*MUST ORDER IN PAIRS*

For some overseas markets, as appropriate.

This option enables switching from White to Black Light on all lanes in unison from the Front Desk.

Note: For every two units you order of either of the above part numbers ZOT automatically includes one Relay Box Switch Control and 14’ of connecting wire for every two units.

When you order either of the above part numbers you will also require:

A. One length run of wire #312003 for up to 24-lanes to extend from Curtain wall to Front Desk (order by the foot).
B. One each #400162 Transformer & Switch Kit (serves up to 24-lanes).

Rear of Pinsetter Switching Option (See page 18 for control)

#420333 (115V/60Hz)......$297.50

For all Domestic (US) applications, and some overseas markets, as appropriate.

#420341 (230V/50Hz)......$308.50

For some overseas markets, as appropriate.

This option enables easy switching from White to Black light lane by lane from the rear of the pinsetter. Each unit comes complete with a Toggle Switch and mounting bracket.

Features and Benefits

Welded Steel Construction: ZOT’s Two Lamp Glow Pindeck light fixtures are built with 20-gauge steel and will withstand years of excessive vibration in the pindeck area.

Spring Loaded Lamp Sockets: ZOT includes Industrial Style Spring Loaded lamp sockets designed to extend lamp life and prevent lamps from shaking loose and shattering on the pindeck. (see illustration)

High Power Ballast: Each ZOT fixture includes Two High-Power Ballast’s that yield reliable service and a wide range of power supply.

Compatibility: The ZOT Ballast’s are compatible with the original Brunswick lamps, enabling reuse of lamps you already have. And the mounting holes on the ZOT fixture are of the same dimensions as the original ‘A2’ and Jetback Single lamp fixture.

Switching Options Suit Your Needs: ZOT offers the option of switching from Sport to Recreation (Glow) Bowling from the Front to Desk or the Rear of the Pinsetter.

Light Reflective Finish: ZOT’s Unique formula Ultra-White finish reflects a high degree of Ultra-Violet light onto the pindeck.

ZOT’s Two-Lamp Glow Pindeck light fixtures are recommended for centers with the following scoring systems:

- AMF MagicScore
- Brunswick AS 80
- AMF Boss Scoring
- Brunswick FrameWorx with VPS Cameras & Vector Scoring

and many other current model scoring systems available from independents, including: Qubica, Steltronic & Twelve-Strike.

*May require camera software upgrade - call ZOT for details.*

Call ZOT at 1-800-525-8116 for more details
Replacement Pit Light Ballast
For Brunswick Brand Original Pit Lights
#290019 ...................$37.89

Features and Benefits
Adjust to Power Demands: This 115V/60Hz High Power Factor unit operates in high or low voltage conditions, adjusting to power demands as necessary.
Universal Operation: This Ballast will operate with either the old style 40 Watt Daylight lamps, or with the newer style 34/35 Watt Energy Saver lamps. The Ballast automatically adjusts the power (AMP) to provide the correct output.

Universal Lamp Socket
For Brunswick Brand Original Pit Lights (American or Japanese)
#420373 ...................$18.50

Features and Benefits
Industrial Style: Spring Loaded Lamp Sockets prevent lamps from shaking loose, and shattering on the pindeck.
Adapts to Other Brands: The Universal Lamp Socket can be made to fit other brands, with minimal modifications.

ZOT GlowVision

“ZOT’s 3-Lamp GlowVision costs less...a lot less...than the original manufacturer’s 2-Lamp fixture.”

Here’s How and Why ZOT’s GlowVision Works
Combining a Black Light Blue Lamp with an Infrared Lamp substantially enhances a CCD Camera’s ability to read pins...thereby virtually “Eliminating Scoring Miscounts”
ZOT has filtered the White Light from the Infrared lamp to maintain the bright blue “Glow” effect of the Black Light Blue Lamp; while still improving the camera’s ability to read pins.

Light Spectrum
Ultra Violet Black Light
Infrared White Light
Too light to see
Too dark to see

Ultra Violet light is at the Low-End of the Light Spectrum; Infrared Light is at the High-End of the Light Spectrum. Brunswick CCD Cameras are designed to perform best on the mid-range of the light spectrum. By having the Ultra Violet and Infrared lamps lit simultaneously, ZOT’s GlowVision has maximum compatibility with the CCD cameras range in the light spectrum.

ZOT’s GlowVision Pindeck Light Fixture is recommended for centers that have one of the following scoring systems:
- Brunswick AS90
- Brunswick ASK
- Brunswick FrameWorx with CCD Cameras
- Brunswick AS80 Upgrade to CCD-AS90
and other alternative scoring systems, e.g., Mendez, Dacos, VanTech ComScore, etc.
ZOT GlowVision Pindeck Light Fixture
“A 3-lamp Glow Pindeck Light that virtually eliminates scoring miscounts in a Glow Bowling environment”
“An opportunity that’s too good to miss! ZOT’s GlowVision Pindeck Light costs less than replacing an original Brunswick double lamp fixture”

**Front Desk Switching Option** (See page 18 for control)

#420465 (115V/60Hz).......$364.50
*MUST ORDER IN PAIRS*
For all Domestic (US) applications, and some overseas markets, as appropriate.

#420466 (230V/50Hz).......$389.48
*MUST ORDER IN PAIRS*
For some overseas markets, as appropriate.

This option enables switching from White to Black Light on all lanes in unison from the Front Desk.

**Features and Benefits**

Switching Options to Suit Your Needs:
ZOT offers the option of switching from Sport to Recreation (Glow) Bowling from the Front Desk, or the Rear of the Pinsetter.

ZOT’s GlowVision Unit Includes: One Infrared Lamp and Visible Light Filter. The Black Light Blue and White Lamps are not included.

If you have Brunswick CCD or earlier models of other brands of cameras with your scoring system, and you’ve been holding off buying Glow Pindeck Lights for your center because you’ve heard about the high incidence of scoring miscounts...your worries are over.

With ZOT’s new GlowVision, a custom designed and custom built 3-Lamp Glow Pindeck Light Fixture, the incidence of scoring miscounts has been virtually eliminated.

---

**Transformer and Switch Kit**

#400162 (115V/60Hz) Transformer and Switch Kit ..........$82.30

#400212 (230V/50Hz) Transformer and Switch Kit ..........$95.87

**Features and Benefits**

Transformer: Plugs into wall outlet and send 12Volt DC to Controller.
Switch Kit: Includes Mounting Box.

*Note:* One transformer and switch kit required for every 24-lanes.

Some overseas applications may require a different transformer to those listed. If the transformer is being sourced locally, to purchase the Switch and Mounting Box only, order: #400163 $42.04.

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**Rear of Pinsetter Switching Option** (See page 18 for control)

#420464 (115V/60Hz).......$349.50
For all Domestic (US) applications, and some overseas markets, as appropriate.

#420467 (230V/50Hz).......$373.88
For some overseas markets, as appropriate.

This option enables easy switching from White to Black light lane by lane from the rear of the pinsetter. Each unit comes complete with a Toggle Switch and mounting bracket.

---

**Spring Loaded Lamp Socket**

Rear of Pinsetter Switching Option (See page 18 for control)

#420464 (115V/60Hz).......$349.50
For all Domestic (US) applications, and some overseas markets, as appropriate.

#420467 (230V/50Hz).......$373.88
For some overseas markets, as appropriate.

This option enables easy switching from White to Black light lane by lane from the rear of the pinsetter. Each unit comes complete with a Toggle Switch and mounting bracket.
Electronic Triggering

For Triggering Brunswick Pinsetters
“At last! The product that customers have been asking for...a Pinsetter Triggering & Scanner Ball Detector System...combined in ‘ONE’ product.”

Triggering Improvements that Promote Bowling

ET 2001 “Dual Lane” Electronic Triggering

ZOT’s ET 2001 “Dual Lane” Electronic Triggering, for Brunswick Pinsetters, features the latest and most advanced infrared technology available in the industry, to guarantee 100% Positive Triggering...ball after ball after ball...you know it makes sense.

It only takes a few seconds a game to save thousands of dollars a year in lost linage, revenues, power consumption, and machine wear and tear – and to improve customer satisfaction levels.

At bowling centers everywhere, you see youngsters, seniors, and bowlers using light balls – especially in centers with bumper bowling – frustrated, and wasting time, either because they’re slow to react in pressing the reset button, or because they don’t know what to do, when the machine fails to cycle.

That same few seconds will pay for ZOT’s ET 2001 “Dual Lane” Electronic Triggering system several times over in its first year, and, thereafter, the additional revenues, savings and improved customer relations, translate into clear, and measurable, increased profits.

Features and Benefits

World Class PC Design: ZOT’s new Micro-Processor technology simplifies the circuit, making the ET 2001 (Electronic Triggering) Dual Lane Ball Detector surprisingly cost-efficient.

Superior Sensor Design: The ET 2001 retains the same sensor design as ZOT’s single-lane Magic Eye. With more than a decade in the marketplace, this miniature and ruggedly constructed sensor system has a proven track record of minimizing damage by balls and pins; and it’s not sensitive to vibration.

Alignment Indicator: ZOT’s ET 2001 features an exclusive 4-unit LED system, that indicates when the sensors signal is strongest. The LED’s can be viewed from either the sensor area, or from the top of the pinsetter, without opening the cover.

Control Box Protection: ZOT’s Dual Lane Control Box mounts on the back of the masking unit curtain wall, out of the way of potential damage by balls or pins.

Infrared Technology: The ET 2001 features an Infrared Sensor source that’s Solid State Diode Rated for millions of hours of dependable service.

Safety System: The ET 2001 has a built-in Safety System which prevents the machine from cycling if a person is in the area where the sensors are mounted.

All Modular Design: All components plug into the PC Board separately, making it possible and easy to change parts, and troubleshoot.

Remote Trigger Ports: ZOT’s ET 2001 can be triggered by external sources, e.g., scoring system remote switch.

Diagnostic Indicator: ZOT has added an LED system which indicates when an output signal is occurring.

(continued on next page)
Features and Benefits (continued)

**Simple Installation:** ZOT’s ET 2001 installs in three easy steps:

1. Wall transformer plugs into 115 Volt outlet for power supply.
2. Two conductor outputs for each Pinsetter simply quick-splice to the bowlers reset button wires.
3. The Infrared Emitter and Receiver are simply plugged in, leveled and secured at each lane.

**Note:** The ET 2001 has two adjustable time delay outputs, each of which serve two lanes.

**Reduces Wear/Eliminates Scoring Miscounts:** The ET 2001 is secondary to the triggering system on Brunswick machines, which:

1. Reduces wear and tear on the take data relay.
2. Eliminates scoring miscounts because Brunswick’s scoring system is activated from the cluster gears.

**Rake/Sweep Path Sensor Mounting:** The Sensors can be mounted behind the Rake/Sweep (in the Rake/Sweep path).

**Note:** The Kit for Brunswick Machines includes two Mercury Switches, to facilitate this feature.

**Flip Top Cover:** The Control Box Cover hinges from the top, which means no screwdriver is needed to view the PC Board. Simply flip the cover up for inspection, and down again when finished.

**Rake Down Diagnostic Indicator:** The ET 2001 for Brunswick machines, features an ‘Active Rake Down’ indicator.

---

**Optional Ball Detect for Brunswick Scoring**

If you’re dissatisfied with your present AS80 and AS90 Series Ball Detect System, the ZOT ET 2001’s ability to double as an improvement to your automatic scoring system makes it the most cost effective ball detect system available.

The following are the wire harness options necessary to activate the automatic scoring ball detect feature: (The wire harness options below are only compatible to ZOT ET 2001).

- **#400159 Brunswick AS 79 Scanner** .................................................$64.50
- **#440080 Brunswick AS 86 Scanner** .................................................$52.80
- **#400194 Brunswick AS 90 Camera & FrameWorx** ...................$64.50

**Note:** Wire harness options are only compatible to ZOT ET 2001.
**Electronic Triggering**

**Single Mercury Switch**
For Use as a Manual PC Board Reset Kit
For ‘A2’, Jetback and Straight ‘A’ Pinsetters with ZOT Triggering

#400021 .................. $38.90

**Sensor Location:** This feature enables you to install the ball detector sensors within the rake sweep path, which is preferable.

**Note:**
1. #440045 wire harness required when installing to ZOT Magic Eye or Time Delay Plus Systems. $12.16
2. #450007 wire harness required when installing to ZOT ET 2001 Systems. $23.46

**Spare Parts for Older Model ZOT Triggering**

ZOT’s Electronic Triggering related products are Unique in the industry because they are modular by design, enabling the mechanic to replace the various components – right there in the bowling center.

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**In the Chart below you will find details of ZOT’s replacement Spare Parts for Triggering related products.**

<table>
<thead>
<tr>
<th>Item</th>
<th>Kit Description</th>
<th>Kit Sales Number</th>
<th>Designed For</th>
<th>PC Board</th>
<th>Fuse</th>
<th>Emitter Blue Block</th>
<th>Flat Grey Emitter Cable</th>
<th>Receiver Gray Block</th>
<th>Coaxial Receiver Cable</th>
<th>XFormer/Power Cable</th>
<th>Sensor Shims</th>
<th>Sensor Lens Kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Super Dual</td>
<td>400042</td>
<td>Straight ‘A’</td>
<td>400011</td>
<td>400084* (6 ea.)</td>
<td>400001</td>
<td>450001</td>
<td>450005</td>
<td>450002</td>
<td>440008</td>
<td>400121* (25 ea.)</td>
<td>400032</td>
</tr>
<tr>
<td>2a</td>
<td>Super Single</td>
<td>400043</td>
<td>‘A2’ &amp; Jetback</td>
<td>400012</td>
<td>400084*</td>
<td>400001</td>
<td>450001</td>
<td>450005</td>
<td>450002</td>
<td>440001</td>
<td>400121* (25 ea.)</td>
<td>400032</td>
</tr>
<tr>
<td>b</td>
<td>Super Single</td>
<td>400044</td>
<td>‘A2’ &amp; Jetback</td>
<td>400012</td>
<td>400084*</td>
<td>400001</td>
<td>450001</td>
<td>450005</td>
<td>450002</td>
<td>440002</td>
<td>400121* (25 ea.)</td>
<td>400032</td>
</tr>
<tr>
<td>c</td>
<td>Super Single</td>
<td>400041</td>
<td>Straight ‘A’</td>
<td>400012</td>
<td>400084*</td>
<td>400001</td>
<td>450001</td>
<td>450005</td>
<td>450002</td>
<td>440003</td>
<td>400121* (25 ea.)</td>
<td>400032</td>
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<tr>
<td>d</td>
<td>Super Single</td>
<td>400040</td>
<td>Voltage Output/Mercury Switch</td>
<td>400012</td>
<td>400084* (6 ea.)</td>
<td>400001</td>
<td>450001</td>
<td>450005</td>
<td>450002</td>
<td>440004</td>
<td>400121* (25 ea.)</td>
<td>400032</td>
</tr>
<tr>
<td>3</td>
<td>Mini-Magic Relay</td>
<td>400008</td>
<td>‘A2’ &amp; Jetback</td>
<td>400009</td>
<td>400083* (6 ea.)</td>
<td>400001</td>
<td>450001</td>
<td>450005</td>
<td>450002</td>
<td>440009</td>
<td>400121* (25 ea.)</td>
<td>400032</td>
</tr>
<tr>
<td>4</td>
<td>Mini-Magic Power</td>
<td>400007</td>
<td>‘A2’ &amp; Jetback</td>
<td>400010</td>
<td>400082* (6 ea.)</td>
<td>400001</td>
<td>450001</td>
<td>450005</td>
<td>450002</td>
<td>440010</td>
<td>400121* (25 ea.)</td>
<td>400032</td>
</tr>
<tr>
<td>5</td>
<td>Power Rectifiers</td>
<td>400106</td>
<td>Straight ‘A’, Jetback &amp; ‘A2’</td>
<td>451003</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>440037</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Photo Cell Sensor #400023**

1982–1986 Production

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**PC Board Exchange**

ZOT offers its customers a Factory Direct Exchange program for repairs to PC Boards after the Warranty has expired. If you have a PC Board that needs repairing simply call ZOT’s Customer Service Department at 1-800-525-8116.
Universal Time Delay ‘Plus’ Module
For Brunswick ‘A2’ and Jetback Pinsetters
#400149 ...............$118.50

Adjustable Time Delay

The Time Delay ‘Plus’ from ZOT Pinsetter Parts is a standalone product that’s a Direct Replacement for all brands of time delay modules on American and Japanese Brunswick ‘A2’ and JetBack Pinsetters.

The wiring sequence for the ZOT product is identical to other brands, including the original Brunswick Time Delay Module which makes installation fast and easy. Simply detach the wires from the old module and attach them to the ZOT Time Delay ‘Plus’ in the same order.

To activate integrated Take-Data order #450011 – Cable Assembly

Features & Benefits
Diagnostic Indicators: LED’s clearly indicate: when the Module is powered, when an output signal is occurring, rake down and second ball.
Reset Button Lockout: Reading the Rake Down: preventing hanging 180’s.
Microprocessor Design: ZOT’s simplified circuitry design: is cost effective and reliable ... making it possible for ZOT to add several innovative and exciting features.
Direct Replacement: The Only Direct Replacement Available: that enables you to add Electronic Triggering.

Time Delay with Electronic Triggering for Straight ‘A’ Pinsetters & ZOT Conversion
#400037 ...............$216.75

Includes:
#400145 .............. $180.55
Time Delay Plus System
#400144 ...............$75.50

Electronic Triggering

Infrared Sensor “Add-On Kit
#400144 ...............$75.50
#450011 – Cable Assembly included $6.44

To transform ZOT’s Universal Time Delay ‘Plus’ into Electronic Triggering, simply add sensors for: Positive machine cycle regardless of ball weight or speed.

Features & Benefits
• Infrared Technology
• Alignment Indication
• Safety System
• Proven History

Expander Card
#400147 ...............$70.90

The ZOT Expander Card provides the 32-Volt DC outputs which enable you to use: ZOT’s Gearbox Trip Assembly and Electronic Fast Drop Rake.

Features & Benefits
Separate and Adjustable Timing: Both outputs are timed separately, and both are adjustable.

Note: This kit is required if you have AMF AccuScore or AccuScore Plus in combination with #400037 kit.

Spare Parts:
#431047 .............$74.45 PC Board

Infrared Sensor “Add-On” Kit
#400144 ...............$75.50
#450011 – Cable Assembly included $6.44

Call ZOT at 1-800-525-8116 for more details
Electronic Triggering

Power Pack ... for A2 & Jetback Pinsetters

“Instantaneous Fast Drop Rake”

*Utilizes your existing Electronic Triggering / Scoring System

Reduce Dead Wood: Rake drops instantly; regardless of scoring time delay parameters.
100 % Positive Instant Rake Drop: regardless of ball weight or speed
No Second Triggering System Required: The ZOT Power Pack is compatible with the following ... 
  a. Qubica Scoring  b. Brunswick Scoring with Brunswick Electronic Triggering
  c. AMF Scoring with AMF Electronic Triggering
Possible other brands:
  d. Vantech  e. Steltronic  f. 12th Strike.
Also compatible with the following electronic triggering:
  a. ZOT ET 2001  b. Bowltronics
Note: Requires at least one of the following to operate (#420164, #420159, #420001). This is not a standalone product

Power Pack for ZOT Electronic Fast Drop Rake Trip

#400286 ................$134.90

Use your present Electronic Triggering system: to trip ZOT’s Electronic Rake Trip assembly

ZOT’s Power Pack: accepts the Start Signal from your existing triggering system and delivers the 32-Volt DC Output required for ZOT Rake Trip Assembly

Greater Reliability. ZOT’s Power Pack is powered from a standard 115-Volt wall outlet (transformer included in the kit) and is therefore not dependent on Brunswick’s low voltage system, thereby ensuring a full power delivery; regardless of how overloaded your system may be.
Adjustable Timing: ZOT’s Power Pack has two outputs ... each having an adjustment from ‘0’ to 6-seconds.

Electronic Rake Trip Assembly

#420164 ............$138.90

ZOT’s Electronic Rake Trip Assembly will always give a positive Rake Drop, regardless of whether the ball makes contact with the cushion.

Features & Benefits

Ideal With Automatic Scoring: The ZOT Electronic Rake Trip Assembly is a great system to use with automatic scoring, which eliminates scoring miscounts. The rake is always down when scoring systems are trying to read the pins.

Reduce Dead Wood: Instantaneous rake drop will stop pins from rolling out from the pindeck, onto the lane surface - eliminating the need to retrieve pins.

Note: Solenoid requires 32-Volt DC Output to operate.

Optional Add-On

#400214 ...............$30.88

Rake Trip Solenoid Lock-Out

Note: Solenoid requires 32-Volt DC Output to operate.

Infrared Sensor Add-On Kit Spare Parts:

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solenoid</td>
<td>#400024</td>
</tr>
<tr>
<td>Internal Lock Washer 1”</td>
<td>#740106</td>
</tr>
<tr>
<td>Hex Jam Nut 1”</td>
<td>#730148</td>
</tr>
<tr>
<td>New Style Sol. Plunger</td>
<td>#520090</td>
</tr>
<tr>
<td>Casting</td>
<td>#650001</td>
</tr>
<tr>
<td>New Style Trip Arm</td>
<td>#620107</td>
</tr>
<tr>
<td>New Style Spring Pin 7/32 X 3/4”</td>
<td>#700026</td>
</tr>
<tr>
<td>Flat Head Allen Screw 10-24 X 1 1/4”</td>
<td>#710244</td>
</tr>
<tr>
<td>Cam Follower Bearing</td>
<td>#810002</td>
</tr>
<tr>
<td>Standoff</td>
<td>#520074</td>
</tr>
<tr>
<td>Torsion Spring</td>
<td>#850015</td>
</tr>
<tr>
<td>Solenoid Angle Bracket</td>
<td>#620062</td>
</tr>
<tr>
<td>Bushing</td>
<td>#520088</td>
</tr>
<tr>
<td>Steel Spacer</td>
<td>#420185</td>
</tr>
</tbody>
</table>
Electronic Fast Drop Rake System
For Straight ‘A’ and ZOT Conversion Pinsetters

#420159 ...............$449.50

Features & Benefits

Faster Ball Return: Instantaneous rake drop will elevate the cushions sooner, for a ball return that’s 4-seconds faster. This may not sound like much, but it translates into a saving of 15 to 17 minutes, for a typical 5-person team league!

Reduce Dead Wood: Instantaneous rake drop will stop pins from rolling out of the pin deck, onto the lane surface – eliminating the need to retrieve the pin; and score correction problems caused by inexperienced bowlers.

Equipment Upgrades = Increased Profits: Improving on your machine’s performance makes the game far more enjoyable for your bowlers – which creates an opportunity to acceptably increase prices, especially if you combine the upgrade with a good promotional program.

Years of Proven Reliability: ZOT’s Electronic Shotgun features State-of-the-Art technology, and is engineered for years of reliable performance. ZOT’s unit has been the first choice for over 5,000 installations, proving its superior performance.

Electronic Gearbox Trip

#420001 ...............$121.90

Features & Benefits

More Reliable: Unlike the original solenoid, which only tripped in the 10th frame, the ZOT Electronic Gearbox Trip is designed to cycle with every ball, which significantly improves performance and reliability.

Extended Solenoid Life: Combining ZOT’s Gearbox Trip Assembly with Triggering eliminates the original solenoid from having to cycle the pinsetter.

ZOT’s Electronic Gearbox Trip Assembly is a more reliable way to cycle your ‘A’ pinsetters.

Electronic Gearbox Trip Spare Parts:

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solenoid</td>
<td>#400024</td>
</tr>
<tr>
<td>Cycle Rod Plunger</td>
<td>#520001</td>
</tr>
<tr>
<td>Angle Bracket (solenoid)</td>
<td>#620001</td>
</tr>
<tr>
<td>Male Uniball</td>
<td>#810001</td>
</tr>
<tr>
<td>Bronze Flange Bushing</td>
<td>#810003</td>
</tr>
</tbody>
</table>

Note: For serial numbers below 24,000, #420066 is also required.

Note: Solenoid requires 32-Volt DC Output to operate.

Call ZOT at 1-800-525-8116 for more details
Cam Follower Shaft Support Bracket
For ‘A2’, Jetback and Straight ‘A’ Pinsetters

# 420502 ........ $39.80

Prevents Crisis Breakdowns:
Installing ZOT’s Cam Follower Shaft Support Bracket “Today” prevents interruptions (breakdowns) during peak/league times “Tomorrow”.

ZOT’s Cam Follower Shaft Support Bracket Secures the Moving Deck Cam Follower for months after the Cap Screw (“B” Bolt) has broken; thereby preventing “Crisis Breakdown” at the least opportune time.

Prevents Damage to expensive 1 to 1 plates (part # 12-100207-000).

Prolongs the Life of the Cap Screw
Flexible Maintenance Schedule repairs can be scheduled when time permits, and not during peak bowling times.

** Every Brunswick Pinsetter Should Have One **
Deck Right Deck Saver
For 'A2', Jetback and Straight 'A' Pinsetters

#420084 ............ $121.50

Features and Benefits
Reduce Respots of 5-8-9 Pins: If the pinsetter often sweeps off the 5, 8 or 9 pins, instead of resetting them for the second ball, the deck is probably crowned. A straight edge will soon confirm this (see illustration). The ZOT Deck Right Deck Saver will permanently eliminate the crown, restoring your deck to maximum efficiency.

Minimizes Deck Shift Problems: If the deck does not shift freely (the tell-tale signs are rub marks, made by the pulley, on the inside of the Geneva Plates), the ZOT Deck Right Deck Saver offers a simple and permanent solution.

No More Need for Costly Replacement...Removal -or- Welding of Decks: And shimming deck pads to make them thicker will eventually crack them.

Permanent Repair

Scissor Spring Pivot Repair Kit
For 'A2', Jetback and Straight 'A' Pinsetters

#420285 ............ $19.95

Features and Benefits
No Welding Required: Simply drill and bolt on the ZOT Scissor Spring Pivot Repair Kit for an easy and permanent repair.

Labor and Time Saving: A much faster repair than removing the stationary deck for rework. The ZOT Repair Kit installs in minutes.

Prevent Crisis Breakdowns: Why wait? If your decks are worn at the scissor spring eyelet, install ZOT’s repair kit – today; and prevent league interruptions – tomorrow!

Use straight edge to check for crown on deck.
Gearbox and Deck Assembly

Replacement Deck Shield
For ‘A2’, Jetback and Straight ‘A’ Pinsetters

#620154.................$84.20

Features and Benefits
If Your Deck-Shields Are Beyond Repair:
Why not replace them and upgrade the image of your center in the process.

Standard Gray: Direct replacement deck-shield’s are of the finest quality available.
And, For An Added Touch of Image Enhancement: Have a local silk screener add your center name or logo to the new deck-shield before you install.

Deck Shield Repair Kit
For ‘A2’, Jetback and Straight ‘A’ Pinsetters

#420038...............$34.70

Features and Benefits
Big Cost Savings: The ZOT Deck Shield Repair Kit effectively renews worn mounting slots on your existing shield: A far less expensive option than replacing the whole shield.
Installs in Less Than 15 Minutes: ZOT’s Deck Shield Repair Kit is simple to install and will secure your deck shield – without having to remove it from the Pinsetter.

Note: The Complete Kit includes all mounting hardware.
Collapsible Rake Link
For ‘A2’, Jetback and Straight ‘A’ Pinsetters

Features and Benefits
Eliminates Rake Link Replacement: Never again will you need to replace a bent rake link. ZOT’s unique Spring-Loaded Collapsible Rake Link returns to full-length – automatically; should the rake be impacted by a ball, or drop behind the deck.

Extended Life: ZOT’s Shock Absorbing design extends the life of the rake shaft weldmet, the 4 to 1 crankshaft, the key; and other related parts.

Prevents Crisis Breakdowns: The ZOT Collapsible Rake Link is designed and built for no downtime.

A ZOT Original Product: That’s often imitated by other manufacturers, but never surpassed!

Starter Bellcrank Stud
For Straight ‘A’ Pinsetters

Features and Benefits
Eliminates Next to Impossible Drilling: Pivot Stud broken or loose inside the gearbox housing? No problem! With the ZOT Starter Bellcrank Stud you simply leave the broken stud inside and re-support the pivot stud from the housing to the 4 to 1 flange; and eliminating almost impossible repair by drilling the gearbox housing.

Proper Pivot Positioning Automatically: With the ZOT Starter Bellcrank Stud there is no misalignment to damage trigger sensitivity.

Permanent Repair: Restores to like new working condition.

40-7/8" (1.038M) Straight End Rod
#420009 .................$39.95

40" (1.016M) Tapered End Rod
#420008 .................$41.95

40-7/8" (1.038M) Straight End Rod
#420009 .................$39.95

40" (1.016M) Tapered End Rod
#420008 .................$41.95

40-7/8" (1.038M) Straight End Rod
#420009 .................$39.95

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40" (1.016M) Tapered End Rod
#420008 .................$41.95

40-7/8" (1.038M) Straight End Rod
#420009 .................$39.95

40" (1.016M) Tapered End Rod
#420008 .................$41.95
Gearbox Clutch Bearing Assembly Kit
For ‘A2’, Jetback and Straight ‘A’ Pinsetters
#420048.................$49.50

Features and Benefits
Reduced Maintenance: ZOT’s Roller Bearings are permanently lubricated for extended life and reduced maintenance.
Compatible: Buy the complete kit, or any of the three component parts separately. The bushing, bearing and retainer disc are all interchangeable with the original manufacturers parts.

Extended Life: The ZOT improved design features a 4-hole, high tensile strength Bronze bushing which substantially minimizes wear and permits re-positioning of the dowel pin – up to 4-times – for extended life.

Clutch Yoke Screw Conversion
For ‘A2’, Jetback and Straight ‘A’ Pinsetters
#420034.............$54.90

Features and Benefits
Big Time Saver: The ZOT Clutch Yoke Screw Conversion will save you upwards of 28-minutes anytime you have to access the clutch spline or rotor disc. The original screw alone takes about 15 minutes to reinstall because of the long threads and difficulty in accessing and positioning the pivot pin.
Installs in One Minute: The unique ZOT Break-a-Way, quarter turn release, screw design installs or removes in just 1-minute; and its clutch lever support spring holds the clutch lever up – automatically.
Reduces Wear and Tear: Eliminates excessive clutch face wear and vibration.
Easier Preventive Maintenance: Reduces the number of clutch adjustments and eliminates the tedious task of realigning the yoke screw and pivot pin when reassembling. Easy access for lubrication which extends life, preventing costly replacement of clutch drive disc and related parts.
Only Available From ZOT: No other original manufacturer or supplier offers this unique and easy solution.
Deck Lift Shaft Repair Kit
For ‘A2’, Jetback and Straight ‘A’ Pinsetters
#420037 .................. $59.10

Features & Benefits
Prevent Crisis Breakdowns: Install the ZOT Deck Lift Shaft Repair Kit before a crisis breakdown happens during league play.
Time Saving – No Welding: The ZOT Repair Kit’s easy drill and bolt-on application installs in just minutes; and without welding.
Big Cost Savings: The ZOT Repair Kit renews your deck lift shaft at only a fraction of the cost of replacing the original equipment.
Only Available From ZOT: No other supplier, or original manufacturer, offers this time saving, low cost, permanent repair solution.

Modified Interlock Link
For ‘A2’, Jetback and Straight ‘A’ Pinsetters
#420283 .................. $6.50

Features & Benefits
Modified Design Solution: ZOT’s Interlock Link is longer from center to center than the original (see illustration). Once installed on your pinsetters it repositions the Interlock Probe and prevents jams.
Prevents 5-Pin Chute Pin Jams: Years of use bends the pin release lever making it more difficult to trip, or activate, turret indexing.
Note: You will need to order two ZOT Links per machine. The ZOT Modified Interlock Link cannot be used in conjunction with an original.

Spring Eyelet Repair Kit (Turret Release)
For ‘A2’, Jetback and Straight ‘A’ Pinsetters
#420178 .................. $52.95

Features & Benefits
Replaces Worn Pivot Eyelet: If the release spring on the turret support frame is worn out, the ZOT Spring Eyelet Repair Kit offers a simple solution.
Installs Easily In Minutes: And with NO drilling through the turret frame; which weakens it further: And NO disassembly.
Eliminates Welding: No need to remove the frame or re-weld.
Adjustable Spring Tension: The ZOT Spring Eyelet Repair Kit’s unique design allows for greater adjustment and re-adjustment of the release spring tension.
Link Belt
For Brunswick Pinsetters

#420189 1/2" Link Belt ........$186.80
#420190 5/8" Link Belt ........$215.35

Tired of having to stock dozens of V-belts in dozens of different lengths...only to find you’re missing the one you need, when you need it most? Purchases both sizes (1/2" & 5/8") of ZOT Link Belts and you’ll no longer need to worry whether you have the right combinations of matching belt lengths in inventory (e.g., for motor to gear box, elevator and turret drive, etc.). ZOT’s Link Belt comes in 20-foot lengths per box, and, with a simple twist of the wrist, you’ll have a belt that’s a perfect fit for your needs: Check these features:

Features & Benefits
Permanent Replacement: Of endless and spliced V-belts.
Eliminates the Need: To stock extensive line of replacement belts.
Easy Installation: Without dismantling pinsetter drives.
Extended Life: Oil and Chemical resistant composite polyurethane/polyester construction.

#420189 ...............$186.80

Suitable for:
- All 7 Motor to Gearbox Belts (1/2")
- All 4 Motor to Elevator Belts (1/2")
- Long Turret Drive Belts (1/2")
- Pit Conveyor Drive Belt (1/2")
- Short Turret Drive Belt (1/2")
- Cross Conveyor 'V' Drive Belt (1/2")
- Jack Shaft Drive Belt (1/2")

#420190 ...............$215.35

Suitable for:
- Endless Ball Wheel Belt (5/8")
- Spliced Ball Wheel Belt (5/8")
- Pin Wheel Belt (5/8")

Rubber Scissor Gripper Pad
For ‘A2’, Jetback and Straight ‘A’ Pinsetters

#820021 .......$2.41

Features & Benefits
Neoprene Rubber: Oil-resistant material characteristics. Install by sliding onto scissor arm.

Snap-on Urethane Scissor Gripper Pad
For ‘A2’, Jetback and Straight ‘A’ Pinsetters

#420470 ..........$12.90

Features & Benefits
Urethane: Soft non-marking oil resistant material extends service life.
Snap-On: Easy to install even when the scissor arm is in place on the pinsetter.
Nylon Tie Wraps: Secure the pad to the scissor arm with the nylon tie-wrap and the ZOT pad stays in place.
Easy to Install: Saves time ... Saves money.
Urethane Deck Chutes
For 'A2', Jetback and Straight 'A' Pinsetters

“Three Styles to Fit all Ten Positions”

Features & Benefits

Lowest Coefficient of Friction: ZOT's specially formulated urethane reduces friction between pins and chute and prevents pins from sticking.

Heavy Duty Reinforced Rib: Increasing the thickness of the material (urethane) at the stress points where chutes typically break prematurely extends the life of the ZOT product.

Chute Identification: All chutes are clearly marked for easy selection.

Larger Inside Skirt Diameter: Ensures fewer pin jams.

Pin Positioning Etched on Combo: An embossed number alongside each mounting hole clearly identifies which hole should be used for a specific pin position on the Combo.

Universal 7, 10 & 1-Pin Chute: Reduce inventory by using ZOT's 7-10 pin chute which is easily modified for use in the 1-pin position.

Urethane Deck Roller
For 'A2', Jetback and Straight 'A' Pinsetters

#680010 ...............$8.95

Features & Benefits

Rigid and Durable: The characteristics of the material reduces pin-bounce that causes deck or turret jams typical of harder urethane rollers.

Urethane: Will not mark pins and is oil resistant for longer life.

Self Lubricating Hub: Graphite filled hexagon insert ensures that the hub spins on the pin.

Widest Diameter Pin Opening available in the industry.

Steeper Angle to Horizontal Pin Resting Position – ensuring the pin sits more upright in the chute.

Increased Radius or Contour for easier pin transition from horizontal to vertical.
Gearbox and Deck Assembly

Urethane Deck Pads
For 'A2', Jetback and Straight ‘A’ Pinsetters
Only ZOT offers a choice between standard and long-life Deck Pads

- Sold in packages of ten
- Soft; open-cell foam: Prevents neck checking and head scalping of pins and reduces bending and cracking of expensive aluminum deck castings.
- Threaded mounting studs: For easy installation – simply insert the deck-pad into the holes and secure with nuts.
- Universal: Purchase a Deck Pad Drill Template (ZOT #620083 – below) and modify your old style decks faster than you can remove old leftover glue residue.

Dura-Life Deck Pad
#420297 .................$160.14 (Package of 10)

“Lasts 3-Times Longer”

ZOT’s Dura-Life Deck Pad features a rugged outer skin for greater durability. Accelerated controlled testing revealed that the average life-cycle of this great new chemically engineered polymer product from ZOT, is “three times longer” compared to the original manufacturer’s product.
ZOT’s Dura-Life Deck Pads not only last 3-times longer, they’re easier to install.

Standard Urethane Deck Pad
#420294 ...............$99.95 (Package of 10)

“Twice the Life”

Accelerated test results proved that ZOT’s Standard Deck Pad will last twice as long as the original manufacturer’s product – and they’re much easier to install.

Features & Benefits
Easy to Use: Put an end to messy glue on the deck pads.
Convert your older style deck to use current bolt-on type deck pads.
Save Time: It’s faster to modify your aluminum moving deck than to clean and glue new deck pads in place.

Deck Pad Drill Template
#620083 .................$24.26

Great Price
Ball Lift Rod Spring Conversion Kit
For 'A2', Jetback and Straight 'A' Pinsetters
#420036..............$56.95

Features and Benefits

Fully and Easily Adjustable: The ZOT Spring Conversion features a stronger and fully adjustable tension spring that can be fine tuned, and without disassembly.

Easy to Install: A simple bolt-on installation.

Prevents Jams and Ball Calls: ZOT’s Ball Lift Rod Spring Conversion Kit prevents jams caused by the ‘Yoyo’ effect of balls spinning halfway up the riser rod; saving countless ball calls.

Adjustable Ball Lift Rod Clamp
For 'A2', Jetback and Straight 'A' Pinsetters
#420050..............$45.55

Features & Benefits

Eliminates Pin Carry Into the Ball Track: ZOT’s adjustable Ball Lift Rod Clamp flips pins back into the pit before they reach the midway point of the riser rods, thereby preventing pins from carrying up into the ball track.

Restores Ball Lift Performance: Once installed on the riser rods, ZOT’s Adjustable Ball Lift Rod Clamp adjusts the pressure on the ball to equal, or exceed, the pressure at the top of the rods, ensuring a positive lift.

Easy to Install: The ZOT Adjustable Ball Lift Clamp simply clamps permanently in place – a far superior alternative to non-adjustable strapping devices and: it’s “Goodbye” to Ball Wheel Glue-on-Strips, which wear out quickly, or fall off as the glue fails.

Fully Adjustable: Once in position, this permanent positive ball lift solution easily adjusts to maintain the required pressure, and compensate for wear and tear in other related parts and assemblies. Narrower adjustment of the lift rods yields more positive pressure from the ball to ball wheel.

Only Available From ZOT: No other manufacturer or supplier offers this problem solving solution.
Tiger Grip Strips
For All Brunswick Ball Wheels

#420403 ............... $37.90

Features and Benefits
Stop Ball Wheel Lift Problems
Positive Smooth Ball Lift: Regardless of ball composition, or type of lane dressing.
Durable: Soft rubber material has proven Long-Lasting reliability. The Neoprene blended Rubber composition withstands oil and dirt, and will not break down or harden with age.
Excess Oil Management: The Ball Contact Surface is textured with a series of raised dots, in varying diameters and heights, which sheds any excess oil to recessed areas, much like treads on a tire, for increased ball surface contact and traction.
Easy Installation: The ZOT Tiger Grip Strip’s Self-Adhesive backing provides a quick-and-easy installation.

Ball Lift Rod Stud Modification Kit
For ‘A2’ and Jetback Pinsetters

#420205 ............... $89.95

Features and Benefits
Reduced Ball and Pin Damage: ZOT’s Ball Lift Rod Stud Modification Kit prevents pins from getting trapped between the ball and lift rod stud, enabling pins to fall back into the pit area freely.
Decreased Retrieval of Pins From Subway: ZOT’s Stud Modification significantly reduces pin carry up the ball lift rods, which often results in having to retrieve pins from the subway.
Adjustable Spring Tension: The Modification features a strong, fully adjustable, tension spring that can be fine tuned, without disassembly.
Elevator Assembly

Power Ball Spin Eliminator Kit
For ‘A2’, Jetback and Straight ‘A’ Pinsetters

#420179 ............ $164.50

Features and Benefits
Eliminates Ball Calls: ZOT’s Power-Driven Ball Spin Eliminator stops all trouble calls caused by balls spinning in the pit area, resulting in smoother running leagues that finish earlier; and happier bowlers.

Positive ‘Powered’ Ball Return: ZOT’s Power Ball Spin Eliminator is belt driven by the cross conveyor drive system. A rotating paddle gently, but positively, steers the spinning ball to the three critical contact points on the riser rods that begin the elevator process.

Installs in Minutes: This permanent solution installs, with a simple drill and bolt, in just minutes...and the belt tension adjusts easily.

Only Available From ZOT: Other manufacturers and suppliers only offer non-powered solutions to the ball spin problem... and with very limited results. ZOT’s Power-Driven Ball Spin Eliminator is the only one that offers positive and reliable results.

ZOT Spinning Ball Eliminator
#420004 ............ $62.35

Features and Benefits
Prevents Ball Calls: Caused by balls spinning in the pit area with ZOT’s Ball Spin Eliminator for smoother, faster running leagues, open play, and happier customers.

NO DRIVING MECHANISM REQUIRED!
Arm Includes Cover for Better Grip: ZOT’s specially formulated Cover ensures positive contact with spinning balls, regardless of ball composition or type of lane dressing.

Easy Installation: Simply drill two holes and bolt in place.
Return Track Mounting Bridge Kit
For Straight 'A', Mini Jetback and ZOT I Conversions
#420031 ................ $199.95

Features and Benefits
No More League Interruptions: Caused by rear frame ball track support arm failure.
Installs in 30-Minutes: There’s far less down time with ZOT’s Return Track Mounting Bridge Kit than with any alternative repair option, therefore it’s less costly.

And; it’s drill-and-bolt installation eliminates hazardous, on-machine, welding.
Permanent Repair: That’s 10-times stronger than the original equipment. ZOT’s Bridge Support absorbs all downward pressure and impact.

Easy To Maintain: The kit includes a replaceable, oil impregnated, bronze bushing that’s far superior to the original steel bushing.
Only Available From ZOT: Have one on hand at all times – it’s such a quick and simple solution to a major problem.

Pin Retainer Kit
For ‘A2’, Jetback and Straight ‘A’ Pinsetters
#420180 ............ $88.90

Features and Benefits
Reduce 180° Stops: ZOT’s Spring Loaded – extended flexible wiper surface – Pin Retainer Kit prevents pins from slipping out of the pin sockets because of worn or missing pin wheel buttons.
Simple and Permanent Installation: The kits simple drill-and-bolt installation is far easier than alternative and hazardous welding and grinding – and it’s permanent.

Wheel Guard Bracket Repair Kit
For ‘A2’, Jetback and Straight ‘A’ Pinsetters
#420086 (7-Pin Side) ........... $69.95
#420087 (10-Pin Side) ........... $69.95

Features and Benefits
Reduced Pin Damage: ZOT’s Wheel Guard Bracket Repair Kit prevents pin damage caused by the heads and necks getting trapped between the shaker board and pin wheel.
No Welding: This easy to install, drill and bolt-on, kit resupports the lower wheel guard bracket without hazardous repair operations.
Permanent Repair: That’s much stronger than the original equipment.
Only Available From ZOT: No other manufacturer or supplier offers this problem solving solution.
Elevator Assembly

Fourth Rail Ball Guide
For ‘A2’ and Jetback Pinsetters
#420203..............$70.65
On Even Numbered Lanes Rear Ball Tracks

Features & Benefits
Stop Ball Damage: The ZOT solution: Adding a Fourth Ball Guide Rail at the point where the ball sometimes leaves the upper track rail and contacts the cross conveyor pulley – resulting in ball damage and unhappy bowlers.

Minimize ‘Y’ Switch Jams: ZOT’s Fourth Rail keeps light weight balls on the original track, forcing them to stop at the ball preference system.

Reduce Ball Calls: The Fourth Rail system prevents light weight balls from rolling off the top rail and falling into the pit, which result in ball calls and, potentially, even more damaged balls.

For Straight ‘A’, Mini Jetback and ZOT Conversions
#420331 (Even Lane Rear Ball Tracks) ..$113.16
#420332 (Odd Lane Rear Ball Tracks) .....$88.37

Ball Damage Deflector
For ‘A2’, Jetback and Straight ‘A’ Pinsetters
#420204..............$21.75
On Odd Numbered Lanes Rear Ball Tracks

Features & Benefits
Stops Ball Damage: The ZOT Ball Deflector bumper pad reduces damage to bowling balls that leave the track and make contact with the cross conveyor pulley assembly.

Simple Design: A Vinyl capped steel bushing secures the bumper pad.

Shaker Pulley Arm Pivot Repair Kit
For ‘A2’, Jetback and Straight ‘A’ Pinsetters
#420329..............$47.90

Features & Benefits
No More League Interruptions: Caused by rear frame shaker arm support bracket failure. Inspect for cracked brackets, and prevent major machine breakdown, by installing a ZOT Repair Kit before the failure occurs.

No Welding: This ZOT exclusive, easy to install, drill and bolt on, kit resupports the shaker pulley arm pivot bracket, without hazardous welding repair operations.
Location Pin Conversion (Magnetic Clutch)

For Straight ‘A’, Jetback and ‘A2’ Pinsetters

#420079 ............... $24.50

Eliminate Magnetic Clutch failure: a high percentage of Magnetic Clutch replacement is the result of Location Pin damage, or the Pin falling out. When the Location Pin is damaged or missing the entire unit will rotate until it’s stopped by the power core; which sometimes causes permanent damage where the power core is connected to the Clutch Coil; or it can damage the Power Cord Strain Relief at the outer case. ZOT’s Location Pin Conversion will prevent this kind of damage.

Preventative Modification saves Maintenance Cost:
Modifying your pinsetters using ZOT’s Location Pin Conversion in advance will save you the cost of a total replacement of the unit. You can modify ten (10) machines for less than the cost of replacing one (1) Magnetic Clutch Assembly

Prevent major Breakdowns: Check the Pin and modify your pinsetter before the Pin goes missing.

Easy to Install: no disassembly required to install the ZOT Location Pin.

Rear Elevator Panel

#420485 ............... $84.50

Direct Replacement: For original A2 Rear Elevator Panel. Also compatible with Jetback and Straight ‘A’ machines.

Stop Welding: ZOT’s replacement Rear Elevator Panel is a far better alternative to repetitive patching and welding – in fact many rear panels are beyond welding and are no longer fully functional.

Universal Urethane Wheel Guard

For Straight ‘A’, Jetback and ‘A2’ Pinsetters

#420305 ............... $29.95

Keeps pins away from moving belts and elevator wheel; to prevent costly pin damage.

- Durable half-inch Urethane wheel guard that does not mark balls or pins.
- Designed to mount on either the right or left side of the elevator.
- Mounting holes are square to fit the head of carriage bolt mounting hardware.
- All mounting hardware is included.

Call ZOT at 1-800-525-8116 for more details
Rake Lift Arm Bumper Kit

For ‘A2’, Jetback and Straight ‘A’ Pinsetters

ZOT’s Link Plates are a direct replacement for the Original Equipment Manufacturers (OEM) product.

For ‘A2’, Jetback and Straight ‘A’ Pinsetters

ZOT’s one-piece greasable Rod End’s are a better alternative to the old style of bushings, spacers and washers, and will help improve pinsetter triggering.

Link Plate for ‘A2’ & Jetback

#620037 $7.44

Rod End for ‘A2’ & Jetback

#420321 $36.37

Greasable ‘X’ Washer Pin (At Rake Arm)

For ‘A2’, Jetback and Straight ‘A’ Pinsetters

#420316 $21.21

Rake Latch Assembly

A. 420041

<table>
<thead>
<tr>
<th>ZOT #</th>
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<tbody>
<tr>
<td>A.</td>
<td>420041 Rake Latch Assembly</td>
<td>12-252301-000</td>
</tr>
<tr>
<td>B.</td>
<td>640011 Tube 46 5/8”</td>
<td>12-252364-003</td>
</tr>
<tr>
<td>E.</td>
<td>420013 Rake Spring (Straight ‘A’ Style)</td>
<td>12-250051-000</td>
</tr>
<tr>
<td>F.</td>
<td>520040 Spring Wheel</td>
<td>10-376009-000</td>
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<tr>
<td>G.</td>
<td>420016 Rake Lift Arm Bumper Kit</td>
<td>12-252092-000</td>
</tr>
<tr>
<td>H.</td>
<td>420316 X Washer Pin (Greasable Kit)</td>
<td>12-250010-007</td>
</tr>
<tr>
<td>I.</td>
<td>420321 Rod End (‘A2’ &amp; Jetback)</td>
<td>12-252365-000</td>
</tr>
<tr>
<td>J.</td>
<td>850007 Rake Spring (‘A2’ Style HD)</td>
<td>12-250051-000</td>
</tr>
<tr>
<td>M.</td>
<td>420062 Counter Ballance Pivot Wheel Kit</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Great Price

Hex shaped steel tips provide wrench holding capabilities and eliminates deformed ends resulting from nut jamming.

#640010 35 3/8”

#640011 46 5/8”

Counter Balance Pivot Wheel Kit

For ‘A2’, Jetback and Straight ‘A’ Pinsetters

#420062 $10.12

Rake Spring (Straight ‘A’ Style)

H. 420013

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Rake Shaft Assembly

Heavy Duty Counter Balance Springs

Speeds up rate of Rake Descent

Fewer Scoring Miscounts: Faster or Sharper Rake Drop rate. Provides more time for the cameras to read pins

Less Dead Wood

For A2 and Jetback Pinsetters

#850007 ..................$28.80

28% Higher Preload than Brunswick branded A2 Spring

Saves Time for Mechanics: ZOT’s more dependable and sharper rate of rake descent reduces valuable time spent making difficult camera adjustments.

Eliminates rake Creep Down

ZOT’s Redeveloped Heavy Duty Springs include the following:

Swivel Hook that reduces lateral stress on the hook, thereby reducing the incidence of hook breakage

Larger Diameter Spring Steel is used on the Swivel Hook, as compared to the original stationary hook

Premium Grade Spring Steel is used in the construction of the body of the Spring ... a far superior grade of steel than the original stationary spring product.

Adjustable Counter Balance Spring Tension Kit

#420478 7 & 10-pin side .....$43.87

The Tension Kit connects to the lower end of the Counter Balance Spring making it easy to create the optimal rate of Rake descent by adjusting the overall length of the spring. Longer yields more tension, shorter yields less.

Clutch Actuator Guide
for ‘A2’ & Jetback

#420080 ..................$8.46

Eliminate Clutch Actuator Link Hang Ups: this simple slide shield (Guide Bracket) prevents the ‘X’ Washer pins from binding on the gearbox housing upon activation.

Easy Installation: assemble on the machine at one existing bolt.

Save Money: a great improvement for one-tenth (1/10th) of the cost of replacing a worn clutch plunger lever, clutch actuator link and clutch reset lever assembly.

For Straight ‘A’ and ZOT Conversions

#420013 ..................$28.80

9% Higher Pre-Load than original Straight ‘A’ Spring

Brunswick no longer builds the Original ‘A’ Spring. Brunswick’s A2 Spring has 22% less tension:

A2 Cushion = 70lbs

‘A’ Cushion = 90lbs

Correct Spring Tension is Critical when installing any Fast Drop Rake System on Straight ‘A’ Pinsetters
Rake Shaft Assembly

Rake Tube Conversion
For ‘A2’, Jetback and Straight ‘A’ Pinsetters

For Pinsetters with Serial Numbers
24,000 and Over, Order:
(Gray painted machines)

#420068 (7-Pin Side)........$166.35
#420069 (10-Pin Side) ......$166.35

For Pinsetters with Serial Numbers
24,000 and Under, Order:
(Green painted machines)

#420082 (7-Pin Side)........$166.35
#420083 (10-Pin Side) ......$166.35

Features and Benefits

Big Savings: ZOT's Rake Tube Conversion converts the original rake shaft assembly to a 3-piece module; and at a fraction of the cost of replacing the complete assembly. Each side of the ZOT Conversion costs about a third of the cost of a complete replacement rake shaft assembly.

Stronger Design: ZOT's Rake Tube Conversion features added Steel reinforcing at the common rake tube breakage points, ensuring longer life.

Save Your Good Parts: Rake Crossover Tubes are rarely damaged, so why replace them just because the sides are broken? With ZOT's Conversion you only need to replace the side that is damaged.

Save Time: It's faster to replace two sides with the ZOT Conversion, than to replace the entire rake assembly – which is rarely necessary.

Note: Only Available From ZOT.

Note: ZOT Counter Balance Pivot Wheel Kit #420062 is necessary for all pinsetters with serial numbers below 24,000 when replacing the rake assembly.

Rake Lift Arm Lever Repair Kits
For ‘A2’, Jetback and Straight ‘A’ Pinsetters

“V” Lever Repair
#420071...............$41.95

“C” Lever Repair
#420090...............$37.95

Shock Mount Pivot Repair
#420310...............$47.95

Features and Benefits

Cover Elongated Rabbit Ear Holes: Prevents triggering failure, improper rake drop and automatic scoring miscounts.
Rake Return Pivot Repair Kit
For ‘A2’, Jetback and Straight ‘A’ Pinsetters

#420181 ...............$63.90

Features and Benefits
Big Cost Savings: Repairs the Rake-to-Spring tube pivot point at a fraction of the cost of a replacement rake assembly; and prevents severe damage to the rake tube cylinder and rake assembly.
No Welding Required: Installation of ZOT’s Return Pivot repair requires no more than a simple cold saw, and a bolt-on application.
Time Saving: It’s much faster to install ZOT’s permanent repair kit, than to weld, or replace, the complete assembly.
Easy to Maintain: The specially designed pin features a Grease Zerk, which yields positive lubrication to all three new bronze bushings.

Pin Only: Zerk Type Pin
#420274 .......... $16.01

Rake Arm Repair Kit
For ‘A2’, Jetback and Straight ‘A’ Pinsetters

#420033 ...............$53.95

Features and Benefits
Back to Work in Just Five Minutes: That’s all it takes to get a broken rake arm fully operational with ZOT’s Rake Arm Repair Kit – a welcome benefit during league play. It’s wedging action provides a strong repair, requiring only a 7/16” open end wrench to install.
Becomes Permanent: At a more convenient time the quick repair can be made more permanent by drilling two holes and installing two bolts (included in the kit).
Compatible: The ZOT kit fits both American and Japanese made Brunswick machines.
Most Durable: The ZOT kit is engineered in high tensile strength Bronze, making its design 2-times stronger and more durable than competitive aluminum products.
Only Available From ZOT: Be prepared for that ‘crisis’ breakdown – order one today.
Rake Shaft Assembly

Three-Piece Modular Rake Shaft Assembly
For 'A2', Jetback and Straight 'A' Pinsetters

#420150 ............... $298.80

Features and Benefits

Eliminates Welding: The ZOT Three-Piece Modular Rake Shaft Assembly features added Steel reinforcing at the common rake tube breakage points, ensuring two to three times longer life; and eliminating welding and lengthy league interruptions.

Lasts Longer – Saves Money: The ZOT Three-Piece Assembly is so much stronger than all the others that the benefits of quick and easy installation becomes secondary.

Additional Savings: If one side of your 3-piece assembly should ever break, you can simply replace the broken part – without having to replace the entire assembly. It’s faster, easier, and 50% less expensive.

Easy to Ship – Easy to Store: Our Three-Piece Assembly packs easily into a ‘small’ carton, for big savings on UPS shipping costs. And a spare assembly can be stored without using up an entire room!

Product Painted Black to Eliminate Scoring Miscounts.

Note: ZOT Counter Balance Pivot Wheel Kit #420062 is necessary for all pinsetters with serial numbers below 24,000 when replacing the rake assembly.

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Rectangular Tubing is 40% Stronger than the Original Round Tubing

New Style Spare Parts #420150: (Black)

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Rake Arm Weldmet (10-pin side) Square</td>
<td>#640147</td>
</tr>
<tr>
<td>Rake Arm Weldmet (7-pin side) Square</td>
<td>#640148</td>
</tr>
<tr>
<td>Center Tube Weldmet</td>
<td>#640149</td>
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Older Model Spare Parts #420032: (Grey)

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
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<tbody>
<tr>
<td>Rake Tube (7-pin side)</td>
<td>#640013</td>
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<tr>
<td>Center Tube</td>
<td>#640014</td>
</tr>
<tr>
<td>Rake Tube (10-pin side)</td>
<td>#640015</td>
</tr>
</tbody>
</table>
### Electronic Fast Drop Rake System

For Straight 'A' and ZOT Conversion Pinsetters

**#420159 ............$449.50**

#### Features and Benefits

**Faster Ball Return:** Instantaneous rake drop will elevate the cushions sooner, for a ball return that’s 4-seconds faster. This may not sound like much, but it translates into a saving of 15 to 17 minutes, for a typical 5-person team league!

**Reduce Dead Wood:** Instantaneous rake drop will stop pins from rolling out of the pin deck, onto the lane surface – eliminating the need to retrieve the pin; and score correction problems caused by inexperienced bowlers.

**Equipment Upgrades = Increased Profits:** Improving on your machines performance makes the game far more enjoyable for your bowlers – which creates an opportunity to acceptably increase prices, especially if you combine the upgrade with a good promotional program.

**Years of Proven Reliability:** ZOT’s Electronic Shotgun features State-of-the-Art technology, and is engineered for years of reliable performance. ZOT’s unit has been the first choice for over 5,000 installations, proving its superior performance.

### Rake Latch Replacement Parts

For Brunswick Original and/or ZOT

<table>
<thead>
<tr>
<th>ZOT #</th>
<th>Description</th>
<th>Brunswick #</th>
<th>ZOT #</th>
<th>Description</th>
<th>Brunswick #</th>
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<tr>
<td>AA</td>
<td>650025</td>
<td>ZOT Body</td>
<td>N/A</td>
<td>K</td>
<td>640058</td>
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<tr>
<td>BB</td>
<td>400024</td>
<td>Solenoid</td>
<td>N/A</td>
<td>L</td>
<td>810044</td>
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<tr>
<td>CC</td>
<td>520077</td>
<td>Plunger (Shotgun)</td>
<td>N/A</td>
<td>M</td>
<td>520074</td>
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<tr>
<td>DD</td>
<td>640059</td>
<td>Trip Lever</td>
<td>N/A</td>
<td>N</td>
<td>520076</td>
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<tr>
<td>EE</td>
<td>520062</td>
<td>7/32” Roll Pin</td>
<td>N/A</td>
<td>O</td>
<td>620055</td>
</tr>
<tr>
<td>FF</td>
<td>700007</td>
<td>1/8” Roll Pin</td>
<td>N/A</td>
<td>P</td>
<td>520071</td>
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<td>A</td>
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<td>Bearing (Plain Bronze) Main (Bruns.)</td>
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<td>Q</td>
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<tr>
<td>A</td>
<td>810041</td>
<td>Bearing (Plain Bronze) Main (ZOT)</td>
<td>11-420098-000</td>
<td>R</td>
<td>850013</td>
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<tr>
<td>B</td>
<td>520046</td>
<td>Spacer</td>
<td>12-250011-020</td>
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<td>850012</td>
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<td>810027</td>
<td>Bearing (Plain Bronze)</td>
<td>11-420096-000</td>
<td>T</td>
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<tr>
<td>D</td>
<td>810042</td>
<td>Bearing (Plain Bronze)</td>
<td>11-420097-000</td>
<td>U</td>
<td>810039</td>
</tr>
<tr>
<td>E</td>
<td>520067</td>
<td>Spacer</td>
<td>12-100185-022</td>
<td>V</td>
<td>640057</td>
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<tr>
<td>F</td>
<td>620054</td>
<td>Roller Bracket</td>
<td>12-252326-000</td>
<td>W</td>
<td>810005</td>
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<tr>
<td>G</td>
<td>520068</td>
<td>Spacer</td>
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<td>H</td>
<td>810002</td>
<td>Roller Bearing</td>
<td>11-450303-000</td>
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<tr>
<td>I</td>
<td>850014</td>
<td>Spring (extension)</td>
<td>12-252330-000</td>
<td>Z</td>
<td>740100</td>
</tr>
</tbody>
</table>
| J     | 810043 | Bearing (Plain Bronze) | 11-420035-000 | **Note:** Is Your Triggering Compatible: You must have electronic triggering for this system. Check to see whether your triggering is compatible! Obviously the Electronic Fast Drop Rake System is compatible with ZOT Electronic Triggering.

<table>
<thead>
<tr>
<th>ZOT #</th>
<th>Description</th>
<th>Brunswick #</th>
</tr>
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<tbody>
<tr>
<td>AA</td>
<td>650025</td>
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<td>400024</td>
<td>Solenoid</td>
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<td>Plunger (Shotgun)</td>
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<tr>
<td>DD</td>
<td>640059</td>
<td>Trip Lever</td>
</tr>
<tr>
<td>EE</td>
<td>520062</td>
<td>7/32” Roll Pin</td>
</tr>
<tr>
<td>FF</td>
<td>700007</td>
<td>1/8” Roll Pin</td>
</tr>
<tr>
<td>A</td>
<td>810026</td>
<td>Bearing (Plain Bronze) Main (Bruns.)</td>
</tr>
<tr>
<td>A</td>
<td>810041</td>
<td>Bearing (Plain Bronze) Main (ZOT)</td>
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<td>B</td>
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<td>Spacer</td>
</tr>
<tr>
<td>C</td>
<td>810027</td>
<td>Bearing (Plain Bronze)</td>
</tr>
<tr>
<td>D</td>
<td>810042</td>
<td>Bearing (Plain Bronze)</td>
</tr>
<tr>
<td>E</td>
<td>520067</td>
<td>Spacer</td>
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<tr>
<td>F</td>
<td>620054</td>
<td>Roller Bracket</td>
</tr>
<tr>
<td>G</td>
<td>520068</td>
<td>Spacer</td>
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<tr>
<td>H</td>
<td>810002</td>
<td>Roller Bearing</td>
</tr>
<tr>
<td>I</td>
<td>850014</td>
<td>Spring (extension)</td>
</tr>
<tr>
<td>J</td>
<td>810043</td>
<td>Bearing (Plain Bronze)</td>
</tr>
</tbody>
</table>

Note: For serial numbers below 24,000, #420066 also required.

### ZOT Rake Latch Assembly Only

**#420154 ............$334.75**

#### Note:

- For straight ‘A’ and ZOT conversion pinsetters, call ZOT at 1-800-525-8116 for more details.
Turret Rebuild Tool

For 'A2', Jetback and Straight 'A' Pinsetters

#420039 ..............$100.16

Features & Benefits

Clean Up Turret Jams - Easily: If a mechanic has scrambled to capture, or reassemble, the 149 bearings in the turret just once, they're certain to put off doing the job again until it's critical. ZOT's unique Turret Rebuild Tool puts an end to all that. Now the task can be tackled fearlessly, since ZOT's Rebuild Tool has made the job so much easier.

Trouble Free Turret: Turret bearings become sticky with dust (including from resurfacing), dirt and heavy grease accumulation. Your Turret will run more smoothly and trouble free after cleaning and reassembly. ZOT's Turret Rebuild Tool just made the job much easier.

Captures All The Bearings: ZOT's Turret Rebuild Tool captures all 149 bearings as the assembly is dismantled, and it spaces up the bearing and spider ring, for easy reassembly.
Steel Steps
For 'A2', Jetback and Straight 'A' Pinsetters
#420311 .................$128.44

“If Climbing Onto Your Pinsetter’s Seems Like Climbing Mount Everest...Install ZOT All Steel Steps – Today”

Features & Benefits
Increased Safety In The Workplace: No more hazardous climbing up the rear of the pinsetters. ZOT Steel Steps, which feature Diamond Plate Tread, makes access to your pinsetters easier than its ever been.

Easy To Install: ZOT’s All Steel Steps install easily with a simple drill and bolt on application.

Does Not Turn The Back End Aisle Space Into An Obstacle Course: The mounting of the steps, which only project 4” (.101M) or less from the rear of the pinsetters (depending on the style of kickback), begin at the level of the first riser, leaving the aisle and floor space free for easy access and cleaning.

Catwalk Handle
For ‘A2’, Jetback and Straight ‘A’ Pinsetters
#420312...............$23.90

Features & Benefits
Easier Access To Top Of The Machines: Whether you have ZOT’s steps or not, adding ZOT’s Catwalk Handle to the back of your catwalks makes scaling the machine far safer, specially if you are carrying tools.

Easy To Install: Simply drill and bolt the ZOT Catwalk Handle to the wooden catwalk, above the elevator wheel.

Oil Drip Pan
for A2, Jetback & Straight ‘A’ Pinsetters
#640043 ..........$58.81

Direct replacement: Same dimensions as the original Brunswick part.

Rigid Construction: All seams are welded; heavy duty 16GA steel.

Call ZOT at 1-800-525-8116 for more details
Features & Benefits

Increased Safety In The Workplace: ZOT’s Pop Top Electrical Control Box Cover is specially designed to protect employees from unnecessary exposure to the pinsetters electronic components.

Easy Access: When access to electrical components is necessary, it takes but two seconds to release the latches, allowing the cover to swing down instantly...and without using a screwdriver.

Convenient Tool Tray: Once you’ve released the latches, the cover pivots downward and provides a useful surface to use as a tool tray. Or, you can simply remove the cover by sliding it to the left.

Accommodates Larger Power Breakers: A knockout panel accommodates larger power breakers, e.g. Federal Pacific and General Electric.

No longer available from Brunswick

Note: Telephone ZOT for information on replacement Brunswick Electronic Control Box.

ZOT PC Board Repair-Exchange Policy & Procedures

PC Board Repair Exchange Policy

Most ZOT PC Boards are repairable, on a Factory Direct Exchange basis. You send us your problem board, we will send you a comparable rebuilt board in exchange, and at a fraction of the cost of a replacement board...you just pay for the repairs.

Note: When exchanging PC Boards, you must return the problem board directly to ZOT.

Procedures

1. Call ZOT toll-free or ask for an RA (return authorization) number.
2. Write the RA number on the outside of the package in permanent marker.
3. Be sure to send Exchange PC Boards directly to ZOT’s Denver Address.
4. Send package prepaid freight (keep shipping documentation in case package is lost).

Address

ZOT Pinsetter Parts, Inc.
10975 E. 55th Ave. Unit #D
Denver, CO 80239
Toll Free Line # 800-525-8116
Local Line # 303-824-1031
Facsimile # 303-824-1036

Hours

Monday – Friday 8:30a.m. to 4:30p.m. (Mountain Time)
For ‘A2’ and Jetback Pinsetters

<table>
<thead>
<tr>
<th>ZOT#</th>
<th>Description</th>
<th>Brunswick#</th>
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<tbody>
<tr>
<td>A. 620093</td>
<td>Curtain Rod Bracket LH</td>
<td>12-252269-000</td>
</tr>
<tr>
<td>B. 620094</td>
<td>Curtain Rod Bracket RH</td>
<td>12-252268-000</td>
</tr>
<tr>
<td>C. 420175</td>
<td>Cushion Mount Bracket</td>
<td>12-252341-000</td>
</tr>
<tr>
<td>D. 620072</td>
<td>Support Arm (cushion)</td>
<td>12-252073-000</td>
</tr>
<tr>
<td>E. 800006</td>
<td>Shock Absorber (cushion)</td>
<td>12-252173-000</td>
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<tr>
<td>F. 810011</td>
<td>Rod End (uniball) LH THD</td>
<td>12-252060-000</td>
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<tr>
<td>G. 640010</td>
<td>Tube (cushion lift 35-3/8”)</td>
<td>12-252364-002</td>
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<td>H. 420321</td>
<td>Rod End (lift tube)</td>
<td>12-252365-000</td>
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<td>I. 800017</td>
<td>Pit Cushion (‘A2’ &amp; JB)</td>
<td>12-862578-000</td>
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<td>J. 810029</td>
<td>Cushion Facing (‘A2’ &amp; JB)</td>
<td>12-252308-000</td>
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<td>K. 520012</td>
<td>Grooved Bearing (bronze)</td>
<td>10-424001-000</td>
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<tr>
<td>L. 620010</td>
<td>Link (cushion)</td>
<td>12-252069-000</td>
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<tr>
<td>M. 520014</td>
<td>Bushing (cushion link)</td>
<td>12-252350-000</td>
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<td>N. 810013</td>
<td>Plain Bearing (bronze)</td>
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<td>O. 810014</td>
<td>Urethane Follower Link Roller</td>
<td>12-252351-000</td>
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<td>P. 650005</td>
<td>Follower Link (steel casting)</td>
<td>12-252366-000</td>
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<td>Q. 520010</td>
<td>Spacer (grommet steel bushing)</td>
<td>12-250011-002</td>
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<tr>
<td>R. 520015</td>
<td>X Washer Pin (short)</td>
<td>10-229601-000</td>
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<tr>
<td>S. 520016</td>
<td>X Washer Pin (long)</td>
<td>10-229602-000</td>
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<td>T. 810005</td>
<td>Rubber Bearing (urethane grommet)</td>
<td>12-250189-000</td>
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<td>U. 420218</td>
<td>X Washer 1/4”(pkg. 25)</td>
<td>11-230005-001</td>
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<td>V. 620037</td>
<td>Link Plate (‘A2’ &amp; B tri)</td>
<td>12-252359-000</td>
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<td>W. 420223</td>
<td>Washer (fiber _” ID)</td>
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<td>Spacer (tri-plate link)</td>
<td>12-250011-003</td>
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<td>Y. 810007</td>
<td>Bearing (bronze tri-plate)</td>
<td>12-250248-000</td>
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<td>Z. 520011</td>
<td>Spacer (follower roller)</td>
<td>12-252369-000</td>
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<td>Spacer (follower casting)</td>
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<td>Washer 13/32” ID (special follower)</td>
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<td>Tube 46 5/8”</td>
<td>12-252364-003</td>
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<td>DD. 710204</td>
<td>Cushion Arm Bolt</td>
<td>12-252325-000</td>
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<td>EE. 650054</td>
<td>Follower Link (aluminum casting)</td>
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<td>FF. 710111</td>
<td>Hex Screw 2-20 x 3 1/2</td>
<td>11-250074-002</td>
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<td>GG. 760118</td>
<td>1/2 SAE Washer</td>
<td>11-250074-002</td>
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<tr>
<td>HH. 710337</td>
<td>Screw 3/8-24 x 2 1/4</td>
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<td>II. 710156</td>
<td>Hex Screw 3/8-24 x 2 3/4</td>
<td>11-250074-002</td>
</tr>
</tbody>
</table>

Cushion Arm Rebuilding Kit
For ‘A2’ and Jetback Pinsetters

**#420018 $138.72**

**#420063 $117.30**

**Kit includes:**
- **Steel Follower Link casting**
- **Aluminum Follower Link casting**

**Features & Benefits**

**Improved Triggering:** ZOT’s Cushion Arm Rebuilding Kit includes all parts necessary to rebuild one cushion arm to better-than-new condition.

**Reduced Maintenance:** Kit includes pre-grease grooved bushings and Steel Cushion Link with built in grease zerk for easy and reduced maintenance.

**Cost Savings:** Kit includes ZOT “Steel” Follower Links that outlast all others.

**“Mini” Cushion Arm Rebuild Kit**

**#420509 $59.61**

Good Cushion Arm maintenance is essential to ensure a “Smooth Running” cushion operation. ZOT’s “Mini” Cushion Arm Rebuild Kit offers an affordable option to restore your Cushion Arm assemblies.

Call ZOT at 1-800-525-8116 for more details
“Steel” Follower Link
For ‘A2’ and Jetback Pinsetters
#650005 ........ $23.95

Features & Benefits
Outlasts All Others: ZOT’s precision engineered “Steel” Follower Link has nearly three times the tensile strength of the cheaper aluminum followers favored by the original and other suppliers.
Big Cost Savings: ZOT’s “Steel” Follower Link could last 5 to 6 times longer than aluminum. In fact, if used in conjunction with ZOT’s Super Follower Link, this may be the LAST Follower Link you ever need to buy.
Improved Triggering: Replacing worn follower links will always improve triggering.
Only Available From ZOT: No other manufacturer or supplier offers an all “Steel” Follower Link!

Urethane Follower Link Roller
#810014 ........ $1.82

High impact and wear resistant urethane is used in the manufacture of this bushing for the ‘A2’ cushion linkage.

Enhanced Cushion Link
For ‘A2’ and Jetback Pinsetters
#420067 ........ $26.24

Features & Benefits
Improved or Restored Triggering: With ZOT’s hardened steel Cushion Link.
Easy Maintenance: ZOT’s Cushion Link features a Grease Zerk which eliminates having to dismantle the assembly for preventive maintenance.

Cushion Link
#620010 ........ $8.52

Direct replacement for original product.

Curtain Bracket Nut Plate Kit
For ‘A2’ and Jetback Pinsetters
#420020 ........ $13.87

Features & Benefits
Nuts are Stationary: Prevents nuts from rotating or becoming loose through machine vibration.
Easy to install: Easy to position and hold in place. Saves installation time and frustration.

Tri-Plate Bushing Kit
For ‘A2’ and Jetback Pinsetters
#420017 ........ $27.74

Features & Benefits
Restore to ‘Like New’ Condition: The ZOT replacement bushings are manufactured to the precise specifications of the original bushings.
Extended Life: ZOT Pre ‘Grease-Grooved’ Bushings will outlast the originals even with infrequent or irregular additional lubrication.

Urethane Follower Link #810014 ........ $1.82

Note: Two brackets per kit

Curtain Bracket Nut Plate Kit
For ‘A2’ and Jetback Pinsetters
#420020 ........ $13.87

Note: Two brackets per kit

Cushion Mount Bracket
#420175 ........ $39.42

- Solid Steel Construction
- Includes Factory Installed Bronze Groove Bushing

Tri-Plate Bushing Kit
For ‘A2’ and Jetback Pinsetters
#420017 ........ $27.74

Features & Benefits
Restore to ‘Like New’ Condition: The ZOT replacement bushings are manufactured to the precise specifications of the original bushings.
Extended Life: ZOT Pre ‘Grease-Grooved’ Bushings will outlast the originals even with infrequent or irregular additional lubrication.

Note: Kits do not include Tri-Plates which must be purchased separately.

Link Plate
#620037 ........ $7.44

ZOT’s Link Plates are a direct replacement for the Original Equipment Manufacturers (OEM) product.

Curtain Bracket Nut Plate Kit
For ‘A2’ and Jetback Pinsetters
#420020 ........ $13.87

Note: Two brackets per kit
Mount Bolt Repair Kit
For ‘A2’ and Jetback Pinsetters
#420074 ............... $35.95

Features & Benefits

No Drilling: Simply leave the broken bolt in the metal plate, file it flat; and install the new ZOT Flat-Head screw and Hold-Down plate.

Versatile: The ZOT Flat-Head screw can be installed in any one, or two, of the four mounting holes in the kickback plate.

Save Time: The ZOT Mount Bolt Repair Kit, for kickback plates, will save you hours. Always Have a Kit on Hand

Easy Permanent Repair of Broken Cushion Brackets Bolts

Rubber Pit Curtain
For ‘A2’ and Jetback Pinsetters
#800005 ............... $187.50

Features & Benefits

Non Reflective Surface: Matte or dull surface finish prevents scanner washout preventing scoring miscounts.

American Made: Two-ply, nylon reinforced rubber belting that’s made in the USA.

Smooth Surface: That’s oil resistant, easy to clean and non marking.

Rugged Construction: Rod loops are bonded with industrial strength adhesive.

Call ZOT at 1-800-525-8116 for more details
Features & Benefits

**Reduced Wear and Tear:** ZOT’s Unique Super Follower Link — which is precision engineered in ‘High Tensile’ steel — features stationary, and recently reinforced, welded and hardened studs which prevent the followers from shifting during every cycle; even when the nuts loosen. It’s this shifting, or ‘Play’ in the follower link castings that’s the major cause of life-shortening wear and tear on the assemblies rollers and bushings.

**Improved Triggering:** Installing ZOT’s Super Follower Link will improve triggering sensitivity by helping to keep the complete assembly in top shape.

**Compatibility:** If parts of your present system are still in good condition you can extend their life by assembling them on the ZOT Super Follower Link weldmet. All Brunswick components are compatible.

**Additional Features:** The Complete ZOT Follower Link Kit, includes all related component parts, including: ZOT’s ‘Steel’ Follower Link, which has nearly 3-times the tensile strength of the aluminum followers favored by the original and other suppliers.

**Reduced Maintenance = Increased Savings:** The ZOT Super Follower Link will substantially reduce the frequency that you have to rebuild this assembly, resulting in cost savings.

---

Super Follower Link

For ‘A2’ and Jetback Pinsetters

* #420060 Complete Kit (10 Pin Side) $89.95
* #420064 Complete Kit (7 Pin Side) $89.95
* #420061 Base Only (10 Pin Side) $48.95
* #420065 Base Only (7 Pin Side) $48.95
For Straight ‘A’ Pinsetters

Numeric call-outs (e.g. 5) = page number

ZOT # Description Brunswick#
A. 420005 RH Pit Cushion Arm (10 P/S) 12-250074-000
B. 420006 LH Pit Cushion Arm (7 P/S) 12-250073-000
C. 810005 Grommet 12-250189-000
D. 810007 Steel Spacer (tri plate link) 12-250011-003
E. 810007 Bearing Bronze (tri plate) 12-250248-000
F. 620019 Link Tri Plate (Model ‘A’) 12-250016-000
G. 420010 Bracket Assy. Wishbone (LH) 12-350800-052
H. 420011 Bracket Assy. Wishbone (RH) 12-350800-052
I. 810009 Spacer (Grommet Steel Bushing) 12-250011-002
J. 420218 Washer 11-230005-000
K. 420012 Pit Cushion Assy. (Model ‘A’) 12-250166-051
L. 420027 Pit Cushion Facing Leather (‘A’) 12-250012-000
M. 620023 LH Mounting Brackets 12-252005-003
N. 620031 RH Mounting Brackets 12-252005-002
O. 730176 Clamp Nut (spring Assembly) 11-180006-000
P. 810006 Bearing (bronze) 12-25075-000
Q. 420026 Rubber Patch Kit 12-250281-000

#420513 ...............$219.90
Mini Cushion Support Hardware
Includes: all parts plus bolts & nuts, for one-lane

#420514 ...............$78.70
Mini Cushion Starter Hardware
Includes: 4-each “U” Brackets plus Bolts & Nuts.
One kit required per center

Bolt-on Wishbone Brace Permanent Repair Kit
For ‘A2’, Jetback and Straight ‘A’ Pinsetters

#420010 (7-Pin Side)............$74.50
#420011 (10-Pin Side)............$74.50

Features & Benefits

No More Hazardous Welding in The Pit Area: This easy to install bolt-on kit re-supports the Tri-Plate and Cushion Arms to the proper pivot location.

Instant Alignment: Eliminates misalignment problems affecting Triggering sensitivity.

Easy Lubrication: Features built-in grease zerk.

Mini Cushion Support Hardware
Includes: all parts plus bolts & nuts, for one-lane
Replacement Pit Cushion Arms
For Straight 'A' Pinsetters
#420006 (7-Pin Side).......$398.50
#420005 (10-Pin Side) ......$378.50

Features & Benefits
Twice the Strength of Original Arms: ZOT Replacement Pit Cushion Arms feature added steel reinforcing gusset plates at the main stress points for twice the strength of the original arms.

No Hazardous Welding or Modifications: The ZOT replacement arms simply bolt on.

Prevents Major Breakdowns: The ZOT reinforced design helps to keep your pinsetters running smoothly.

Compare Our Price: We think you will be pleasantly surprised.

Tri-Plate Bushing Kit
For Straight ‘A’ Pinsetters
#420007 .............$29.89

Features & Benefits
Restore to ‘Like New’ Condition: The ZOT replacement bushings are manufactured to the precise specifications of the original bushings.

Extended Life: ZOT Pre ‘Grease-Grooved’ Bushings will outlast the originals even with infrequent or irregular additional lubrication.

Note: Kits do not include Tri-Plates which must be purchased separately.

Model “A” Tri-Plates Only
#620019 .......$16.01

Stabilizer Link Bushing Kit
For Straight ‘A’ Pinsetters
#420003 .........$32.89

Features & Benefits
Restores assembly to peak performance, reduces league play interruptions, and improves trigger sensitivity.
Polyvinyl (PVC) Cushion Covers
For ‘A2’ & Jetback Pinsetters
#810029 .............. $67.50
(Includes Tie-Wrap)

Features & Benefits
Polyvinyl (PVC): for Long Lasting Ball and Cushion damage protection.
Two-sided: One side features a Light Gloss Black heavy duty Rubber coating.
NOTE: Once installed the coating will dull after a few weeks. The second side is comprised of Heavy Duty Fabric with a Matt Finish.
Longer Lasting: When the cover is installed with the Gloss side facing outwards the ball makes contact with a thick rubber coating which makes the ZOT Cover more durable.
Lane Oil Friendly: Some mechanics prefer to install the ZOT Cover with the Matt surface facing outwards. The Matt side features a lighter rubber coating over the fabric yielding less transfer of rubber after saturation by lane oil.

#700032 .............. $1.50
(Heavy Duty Tie-Wrap only)

Leather Cushion Covers
For Straight ‘A’ and ZOT I Conversions
#420027 .............. $352.96

Features & Benefits
Premium Grade Bull Hide: Lasts two to three times longer than synthetic covers.

Adjustable Short Link
For ‘A2’ Jetback & Straight ‘A’ Pinsetters
#420073 .................. $39.95

Minimize Turret Indexing Failure:
adjust the Turret Indexing Latch to a ‘Hair Trigger’ release.
Includes ZOT’s Indexing Latch Location Bracket: position the ZOT bracket so that the Turret Latch (#12-150-235-000) stops at the correct location.
Adjust the Short Link to achieve positive Turret Latch release with minimal Pin Trip Lever movement.
Maximize Performance Irrespective of Linkage Wear:
years of pounding pins onto the Pin Trip lever changes the pitch of that part; which in turn changes the position of the Turret Indexing Latch assembly. All of the above can be easily corrected with ZOT’s Adjustable Short Link.
#420085 .................. $10.66
(Fail to index latch)

Carpet King
#420505 .............. $87.90
ZOT’s ‘Easy-to-Maintain” Hardwearing Rubberized Woven Belting Material Carpet King does an excellent job when it comes to speeding up pins into the elevator.
Easy to Install: The ZOT Carpet King simply attaches with self-tapping screws.
Easy to Clean: ZOT’s Carpet King can be cleaned in place with a spray cleaner; without having to be removed from the pinsetter.
Pit Cushion Assembly

Factory Rebuilt Cushion Assembly
For Straight ‘A’ and ZOT I Conversions
#420012 .............$729.50

Features & Benefits
Time and Labor Saving Option: Let ZOT do the hard repair work for you. Simply purchase a ‘ready to install’ ZOT Rebuilt Pit Cushion Assembly — Today!
Long Life Durability: ZOT rebuilt cushions are covered with premium ‘Grade A’ 6-8 oz. Bull Hide, the only material that can last two to three times longer than synthetic covers.
ZOT Exclusive: No other supplier, or original manufacturer, offers this assembly for Straight ‘A’’s, new or rebuilt. Only ZOT! Due to core availability supplies may be limited.

Rubber Patch Kit
For ‘A2’, Jetback and Straight ‘A’ Pinsetters
#420026 .............$42.74

Features & Benefits
Reduce Waste: The one pound kit is divided into two easy-to-mix 2-section packets.
Easy to Mix: Simply remove the clip separating the two halves of one packet and allow the contents of the ‘A’ half to mix with the ‘B’ half by hand squeezing (knead). After thoroughly mixing cut the bag and apply compound. No more measuring to use less than a one pound kit and no messy measuring cups and stir sticks.
Reduce Maintenance Costs: Extends the life of pit cushions...saving hundreds of dollars of part replacements.
Note: We recommend use of #420046 $36.57 Rubber Primer to ensure the best adhesion to rubber surfaces.

Urethane Pit Shaker Mounts
#420507 (rear)......$19.95
#420508 (front) ...$19.95
ZOT’s Molded “Dynamic Performance Polyurethane” (DPP) Pit Shaker Mounts are specially formulated for High-Flex applications, such as shock pads. These durable Pit Shaker Mounts come complete with mounting hardware.
Upper Shaker Frame Repair Kit
#420473 ..........$103.80

Check out these features:

Say Goodbye to Welding: and re-welding broken upper shaker frames until welding is no longer an option.

Temporary or Permanent Repair: without welding.

Easy to Install: ZOT’s combination of Bolt and Clamp Repair Kit is easy to install as a temporary or permanent repair.

Added Strength: ZOT’s Repair Kit reinforces your upper shaker frame at its weakest point (with an additional gusset) at the center of the assembly on the tail plank side of the frame.

Added Support: ZOT’s Upper Shaker repair Kit is designed to enable you to add a 5th* shaker mount for added support.

*Note: The 5th shaker mount must be identical to the other four. Mismatched shaker mounts may distort and weaken the frame.

“Saves Money” the Total Cost of all the components is hundred’s of dollars less than replacing an entire frame.

Rubber Pit Mount
#420490..........$1.87

Especially engineered for mechanics that prefer a more standard form of pit frame mount. ZOT’s Rubber Pit Mount has the same specifications and Durometer readings as the Original Equipment Manufacturer’s (OEM) product.
Pinsetter Conversion Kits

**PHASE I**

ZOT Infrared Triggering

#400150 ............$458.21

100% Positive Triggering: ZOT's Triggering features an Infrared Sensor Source that's Solid State Diode rated for millions of hours of dependable service—which means 100% Positive Triggering...regardless of ball weight or speed.

Easy to Align: ZOT's Infrared Triggering features an exclusive 4-unit LED system which indicates when the sensor signal is strongest.

Kit Includes: Four Triggering components for the most complete Electronic box upgrade in the industry.

#400145 Time Delay Plus System ............$180.55
#400147 Expander Card .......................$70.90
#400144 Infrared Sensor 'add-on' Kit .........$75.50
#420001 Electronic Gearbox Trip Assembly ....$121.90

Preferred Sensor Mounting: ZOT Time Delay Plus System for Straight 'A' pinsetters include #400021 Mercury Switch Kit, enabling the installer to mount the Infrared Sensor behind the Rake (in the Rake Path).

Note: For a more detailed description of ZOT triggering, see pages 22-27.

**PHASE III**

ZOT Ball Accelerator

#420301 (Maximum Acceleration) ...........$1,048.70
#420130 (Standard Acceleration) ..........$1,048.70

Fastest Wheel Driven Accelerator Available: ZOT's Ball Accelerator improves ball return time by upwards of 15%, without speeding up the pinsetter. This acceleration time is twice as fast as any competitive wheel driven unit available.

Eliminates Crisis Breakdowns: ZOT's Ball Accelerator can be installed by a house mechanic in under an hour! There's nothing that can happen to ZOT's Ball Accelerator that can prevent you from restoring your ball return function in under two minutes — guaranteed!

Ball Guide: Order a Three-Rail-Guide, or Down-Sweep-Cover separately (for a more detailed description of these products, see page 66).
“ZOT Offers ‘Four’ Attractive Options to Update Your Straight ‘A’ Pinsetters”

Phase II

ZOT Electronic Fast Drop Rake

#420159 ..............$449.50

Faster Ball Return: Instantaneous rake drop will elevate the cushion sooner, for a ball return that’s 4-seconds faster. This may not sound like much, but it translates into savings of 15-17 minutes for a typical 5-person team league.

Reduce Dead Wood: Instantaneous rake drop will stop pins from rolling out from the pindeck, and onto the lane surface – eliminating the need to retrieve the pin; and score correction problems caused by inexperienced bowlers.

Note: For a more detailed description of this system see page 49.

Phase IV

ZOT Cushion Suspension

#420414 ..........$2,227.72

‘A2’ Cushion: Includes new ‘A2’ style cushion and retailed suspension hardware, made to the same specifications as the original manufacturers product. Several of the ZOT parts are of a heavier duty design, but all of the parts in this phase are interchangeable with parts from the original equipment.

Pivoted Suspension: The ‘A2’ style Cushion Suspension Kit features a pivoted cushion which allows the cushion to ‘roll’ with the ball impact. A hydraulic shock absorption system greatly reduces damaging ball impact to the pit cushion – resulting in huge cost savings.

Extended Pinsetter Life: In Phase IV, hundreds of worn, and metal fatigued, parts are replaced. This high wear area of your pinsetter is replaced with an upgrade system. Some of the parts you discard are no longer available from the original manufacturer.

Note: 1. You must have Phase I installed to yield peak performance from Phase IV.

2. This kit now includes a mechanical trip rake latch and trip linkages

Note: order by ZOT part number to ensure best price and features
Pinsetter Conversion Kits

ZOT I Conversion Service Manual

#160082 .............. $46.49

Includes:

• Total exploded diagrams of all models produced from 1964 to present.
• Adjustment Section.
• Trouble Shooting Section.
• Lubrication Guide.

ZOT I Conversion Suspension Package (includes exchange cushion)

#420166 ........ $1,922.80

Section C — Lift Spring Assembly

Section D — Stabilizer Arm Assembly

Section E — Suspension Bolt Assembly

Complete Cylinder & Piston Assembly

#420127 .... $299.40
Section A — Miscellaneous

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<th>Part Description</th>
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<td>Grommet (Hour Glass Shape)</td>
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Section B — Tri-Plate Assembly

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<td>Nylatron Washer</td>
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Section C — Lift Spring Assembly

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Section D — Stabilizer Arm Assembly

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<td>End Mount (Arm End)</td>
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<td>Fiber Washers Arm End (Thin)</td>
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<td>Fiber Washers Mach. End</td>
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<td>Urethane Grommet Mach. End</td>
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For Accelerator parts see page 13
For Electronic Fast Drop Rake parts see page 49

Section E — Suspension Bolt Assembly

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Section F — Air Shock Absorber Assembly

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For Accelerator parts see page 13
For Electronic Fast Drop Rake parts see page 49
ZOT PermaDeck Back-End Lane Products

ZOT Pinsetter Parts is pleased to introduce a new line of back end lane products including flat gutters, kickback plates, edge boards and tail plank tops. All of these products are made from industrially engineered HDPE (High Density Polyethylene) As the name would imply, HDPE is durable, requires no maintenance, and it never needs recoating with finish. To maintain quality and durability none of ZOT’s HDPE products use recycled materials. ZOT's back end lane products are also ABC approved.

- ZOT’s Kick Back Plates are undrilled enabling the installer to drill holes and screw the kick back plates into kick back surfaces where there are no old or enlarged holes, ensuring a secure installation.

Heavy Duty PermaDeck Flat Gutter Kit
For AMF & Brunswick

#420479 (for one lane) ................. $218.50

Check out these features:
- Costs less than comparable products.
- Virtually maintenance free and durable.
- Made of 1” thick “Warp Resistant” HDPE for maximum strength and life. Note: less expensive brands use 3/4” plastic which tends to warp and has a much shorter lifespan.
- Easy to install: either by the center mechanic or a lane resurfercer.

ZOT PermaDeck Kickback Plates
For AMF & Brunswick
(Black & Undrilled)

#420482 ............... $43.60
15” x 33” fits all AMF and early model Brunswick

#420483 ............... $41.45
19” x 23 3/4” for early model Brunswick

#420484 ............... $50.85
16” x 40” for late Brunswick

Check out these features:
- Highly durable.
- Restore your kickbacks to ABC Specifications.
- Improves scorability and reduces pin damage.
- Easy to install.

ZOT PermaDeck Tail Plank Tops
Fits AMF & Brunswick Wood Pindecks

#420481 ............... $44.95
1 3/4” x 1 1/2” x 43” (per lane)

#420511 ............... $41.90
Fits Brunswick & Synthetic/HPL Pindecks
1/2” x 2 3/8” x 41 7/8”

Check out these features:
- Restores your tailplanks to ABC Specifications.
- Improves scorability.
- Extend the life of your pins.
Call for quotation for sizes not listed.

ZOT PermaDeck Edge Boards
Fits AMF & Brunswick Wood Pindecks

#420480 ............... $41.90
1” x 2 1/2” x 46” (each)

#420510 ............... $41.90
Fits Brunswick & Synthetic/HPL Pindecks
1/2” x 2 3/8” x 47 5/8”

Check out these features:
- Restores your wooden pindecks to ABC Specifications.
- Helps improve scorability.
- Extends the life of your pins.
Call for quotation for sizes not listed.

ZOT PermaDeck Flat Gutter Kit
For AMF & Brunswick

#420479 (for one lane) ................. $218.50

Check out these features:
- Costs less than comparable products.
- Virtually maintenance free and durable.
- Made of 1” thick “Warp Resistant” HDPE for maximum strength and life. Note: less expensive brands use 3/4” plastic which tends to warp and has a much shorter lifespan.
- Easy to install: either by the center mechanic or a lane resurfercer.

ZOT PermaDeck Kickback Plates
For AMF & Brunswick
(Black & Undrilled)

#420482 ............... $43.60
15” x 33” fits all AMF and early model Brunswick

#420483 ............... $41.45
19” x 23 3/4” for early model Brunswick

#420484 ............... $50.85
16” x 40” for late Brunswick

Check out these features:
- Highly durable.
- Restore your kickbacks to ABC Specifications.
- Improves scorability and reduces pin damage.
- Easy to install.

ZOT PermaDeck Tail Plank Tops
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1/2” x 2 3/8” x 47 5/8”

Check out these features:
- Restores your wooden pindecks to ABC Specifications.
- Helps improve scorability.
- Extends the life of your pins.
Call for quotation for sizes not listed.
ZOT GlowRod Fascia and Quarter Round Trim for Approaches

ZOT’s GlowRod Fascia and Quarter Round Trim products are designed to improve the appearance and highlight the riser or step from the bowlers settee area to the approach. The GlowRod Fascia and Quarter Round Trim (shown in the illustration below) clearly highlights the riser in either a Glow or Non-Glow Bowling environment which, in addition to enhancing the image of your center, brings safety to the equation too — especially during Glow-Bowling activities.

**GlowRod Fascia & Quarter Round Trim**

**Check these features:**

**Improved Safety:** The GlowRod Fascia illuminates in an Ultra Violet (Glow Bowling) lighting environment, clearly highlighting the riser or step-up to the approach. The UV additive in the rod will Glow under Ultra Violet Light with no additional power necessary.

**Durable:** Made of virtually indestructible industrially engineered HDPE (High Density Polyethylene) that will outlive the life of your approaches.

**Maintenance Free:** ZOT’s GlowRod Fascia and Quarter Round Trim never needs painting, and will look good for 10-15 years without cracking or splitting.

**Cost Effective:** Costs about the same as replacing the original, and less durable, worn and damaged maple fascia.

**Note:** ZOT’s GlowRod is sold by the foot and separately from the Fascia. See below for color selection and part numbers, etc.

How it all works: You start by measuring the height of the riser (step) from the settee area to the approach, and then the length of the fascia needed to extend across the width of the approaches.

**Note:** Fascia and Quarter Round Trim (with or without GlowRod) is a custom product that’s “Made-to-Order”.

Once you have the specifications and place an order with ZOT it will take a few weeks to process (custom build) and ship the finished product.

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**Here are three options:**

**Option 1**

ZOT’s HDPE Fascia and Quarter Round Trim is designed to be used as a replacement for the original wood fascia.

**Option 2**

HDPE Fascia and Quarter Round Trim is also available with a groove to accommodate the installation of a Glow Rod, which is an optional add-on.

**Option 3**

Glow Dowels can also be added to either Option 1 or 2.

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**Part #** | **Description** | **Price Per Foot**
--- | --- | ---
800137 | 1” – NO/Quarter Round Trim – NO GLOW | $2.83
800138 | 1.5” NO/Quarter Round Trim – NO GLOW | $3.95
800139 | 2” W/ Quarter Round Trim | $7.94
800140 | 2.5” W/ Quarter Round Trim | $9.17
800141 | 3” W/ Quarter Round Trim | $10.06
800142 | 3.5” W/ Quarter Round Trim | $11.28
800143 | 4” W/ Quarter Round Trim | $12.43
800144 | 4.5” W/ Quarter Round Trim | $14.45
800145 | 5” W/ Quarter Round Trim | $14.88
800146 | 5.5” W/ Quarter Round Trim | $16.01
800147 | 6” W/ Quarter Round Trim | $17.39
800148 | 6.5” W/ Quarter Round Trim | $18.76
800149 | 7” W/ Quarter Round Trim | $20.07
800150 | 7.5” W/ Quarter Round Trim | $21.43

**Part #** | **Description** | **Price Per Foot**
--- | --- | ---
800151 | Quarter Round Trim & Glow Dowels | $2.99
420694 | Glow Rod – Green | $11.59
420695 | Glow Rod – Red | $11.59
420696 | Glow Rod – Orange | $11.59
420501 | Glow Dowels – Four Dowels per foot | $14.90

* Products priced by the foot must be purchased in five (5) foot lengths

- Glow Dowels are factory installed in the Fascia
- All orders for Fascia include Mounting Screws Fascia, Quarter Round Trim and GlowRod are shipped in 5-foot lengths and can therefore be shipped by UPS

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Call ZOT at 1-800-525-8116 for more details
**Mask Light Conversion Kit**

**#400262** ..............$24.95

- **Stop Constant Replacement:** of older technology incandescent lamps. # 90, #94, #624, and #68 lamps are rated to last 750 hours. LED Technology will run for 100-thousand hours — that’s a life expectancy that’s more than 100-times longer
- **Discard Aging and Worn Sockets:** remove problem sockets, obsolete worn contacts and aging wires.
- **Simple Mounting:** easy drill & screw LED & Lens system to the front of the mask unit.
- **Saves Power:** The LED Light uses less than 1/10th of the power (current) than the old #90 incandescent lamp.
- **Optional Wire Replacement:** easy screw/wire connection at the LED PC Board enables you to connect with a 6” jump-wire, or you can replace the complete run using your own wire.

**ZOT Pinsetter Parts, Inc., Warranty**

1. ZOT Pinsetter Parts, Inc., Warrants Products to be free from defects in material and workmanship under normal conditions of use and service. The obligation of ZOT Pinsetter Parts, Inc., Under this warranty, being limited to making good, at the factory, any part manufactured by ZOT Pinsetter Parts, Inc., which shall within one (1) year after delivery to the original purchaser be returned to the factory of ZOT Pinsetter Parts, Inc., with transportation charges paid.

2. Except as herein above provided, there is no warrant, express, or implied, and none shall be implied by law, and ZOT Pinsetter Parts, Inc., expressly denies on the part of any person or entity to incur or assume, for ZOT Pinsetter Parts, Inc., any other liability in connection with the sale of any ZOT products.