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ZOT Pinsetter Parts Catalog

ZOT Pinsetter Parts Catalog is divided into easy-to-use sections, as determined by assembly, e.g., Gearbox & Deck, Elevator, Foul Detectors, Triggering, etc. Each section starts with its own index in which the ZOT parts are identified in bold outlines, and noted with the page number where you will find more details (photos, Illustrations and description) of the product.



The symbol as applied to selected products in this catalog, identify those products which have very distinct added features. benefits and/or functions not found in the original parts or assemblies supplied by the various pinsetter manufacturers.

AMF and/or Brunswick, as used throughout this catalog, are the registered trademark of QubicaAMF Worldwide, LLC. and Brunswick Bowling and Billiards Corp., respectively; and neither are in any way associated with ZOT Pinsetter Parts, Inc.

Table of Contents

Section 1 **Foul Detectors** Pages 1 - 9

Section 2 **Ball Conditioner Products** Page 10 – 11

> Section 3 **Ball Return Assembly** Pages 12 - 16

Section 4 **Glow Bowling Products** Pages 17 - 21

> Section 5 **Electronic Triggering** Pages 22 - 27

Section 6 Gearbox and Deck Assembly Pages 28 – 36













Section 7 **Elevator Assembly** Pages 37 – 43

Section 8 **Rake Shaft Assembly** Pages 44 – 49

Section 9 **Tools and Safety Products** Pages 50 – 52

Section 10 Pit Cushion Assembly Pages 53 – 61

Section 11 **Pinsetter Conversion** Pages 62 - 65

Section 12 Mask & Lane Products Pages 66 - 68

Price List Pages 69

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 $\overline{7}$ 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.

IMPORTANT NOTICE

All Pricing included in this catalog are the suggested Retail Prices as effective from June 1, 2009 and are applicable "Only in the USA"

All Pricing subject to change without notice.

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 replace ment product.
- 4. ZOT will issue a Credit (against item three above) once the defective product has been returned and received.

Special Orders Policy:

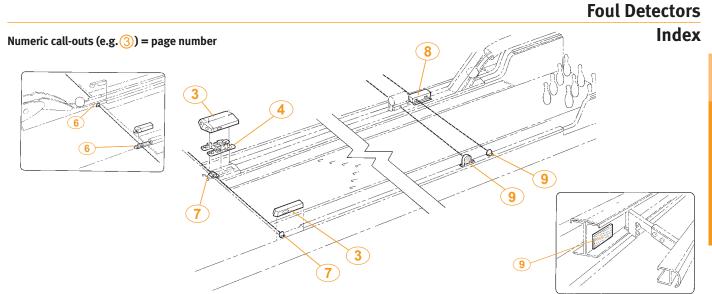
Orders for custom, or customized, products, and/or packaging, cannot be altered, adjusted, or canceled. Special Orders do not qualify under the returned goods policy.

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 num ber, 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)





Spare Parts For Older Model Foul Detectors

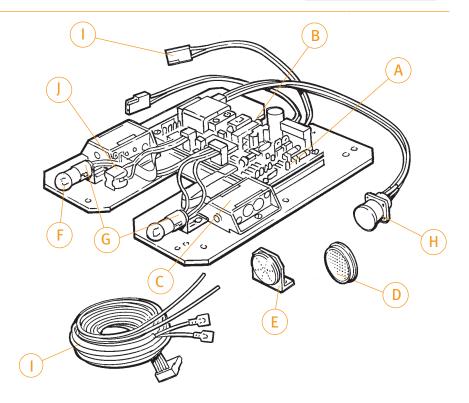
Wizard Double Spare Parts Brunswick & AMF

Spare Parts Kit A. PC Board B. Fuse (pkg. of 6) C. Sensor Assembly D. Reflector Only E. Reflector Assembly F. Lamp (pkg. of 10) G. Lamp Socket Assembly H. Power Harness	Part Number #400112 #431034 #400110 #431015 #800018 #420088 #400094 #440020 #440017 c #660018
	#440017

Foul Conversion Spare Parts 1991 Model Only

Description	Part Number
C. Sensor Assembly	#431015
D. Reflector Only	#800018
E. Reflector Assembly	#420088

See Page 69 for Pricing



Wizard 'Plus' Spare Parts:			Wizard Surface Spare Parts:	
Description	Part Number		Description	Part Number
Spare Parts Kit	#400137		Spare Parts Kit	#400113
PC Board	#431043		PC Board	#431025
Fuse (pkg. of 6)	#400110		Sensor Assembly	#431027
Sensor Assembly	#431015		Reflector Only	#800018
Reflector Only	#800057		Reflector Assembly	#420088
Reflector Assembly	#400052		Lamp (pkg. of 10)	#400094
Lamp (pkg. of 10)	#400094		Lamp Socket Assembly	#440020
Lamp Socket Assembly	#440020		Power Harness for #400064	#440042
Power Harness	#440017		Power Harness for #400066	#440043
Scoring Harness	#440056		Scoring Harness	#440041
Buzzer	#400111		Buzzer	#400111
Transformer	#431040		Transformer	#400065
See Page 69 for Pricing		See Page 69 for Pri	cing	

How to select the right Foul Detector product for your center

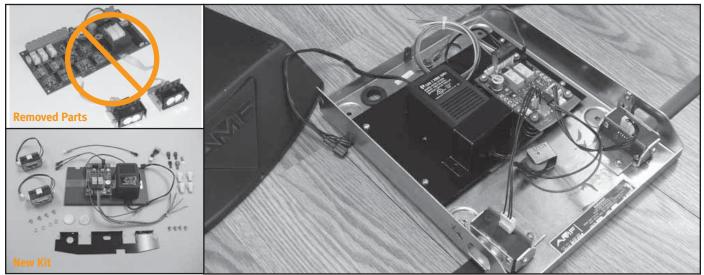


ZOT's Wizard 'Extreme' Foul Detector is universally recognized as the most reliable product in the industry. No other brand can match the features included in the ZOT product.

If you have:	Order:
Subway (Underlane) Ball Returns	Wizard Extreme #400283 (115V60Hz) or # 400289 (220V50Hz) See Page 4
Subway Ball Returns with no 115V available at the foul line — replaces early model Brunswick Telefoul	Wizard Extreme Foul Detector & Covers Package #420295 or #420296 (plus Wire Harness #440043) See Page 4 & 5
Surface (overlane) Ball Returns	Wizard Extreme Surface #400287 (plus wire harness #400302) See page 6
Modification for ASTRO/2000 System	Modification for ASTRO/2000 System #400078 & #400075 See page 7

AMF Radaray Plus Foul Detector Conversion - For Brunswick Centers with AMF Radaray Plus Foul Detectors #400272......\$196.50





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.

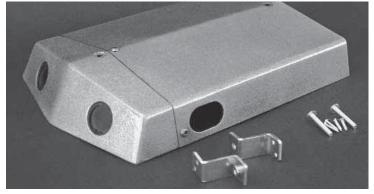
All Modular Design: all individual components simply plug into the PC Board, making troubleshooting and replacing parts easy. **Self Diagnostics:** ZOT's microprocessor automatically checks the sensors every time a foul occurs and the unit will turn itself off automatically, one lane at a time, if it 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.

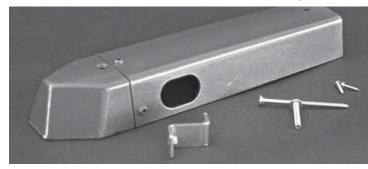
Vibration Protection: The PC Board is mounted on a shockabsorbing buffer that minimizes ball-impact vibration that can damage delicate circuitry common to PC Boards.

Steel Foul Detector Covers

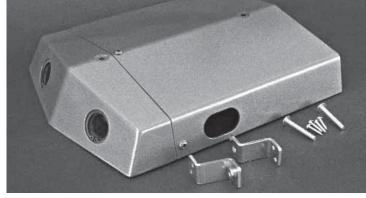
#420299 Wide Ball Return Cover/Black	\$ 99.50
#420195 Wide Ball Return Cover Aluminum	\$ 99.5 0



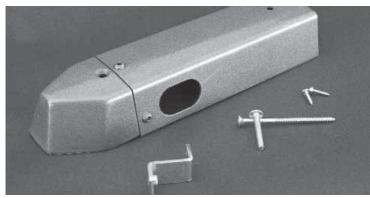
#420300 Narrow Divider Trim Cover Black......\$78.55 #420196 Narrow Divider Trim Cover Aluminum\$78.55



#420291 Wide Ball Return Cover Black\$99.50 #420193 Wide Ball Return Cover Aluminum\$99.50



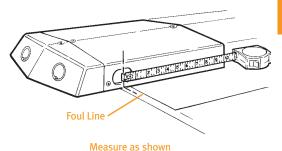
#420292 Narrow Divider Trim Cover Black......\$78.55 #420194 Narrow Divider Trim Cover Aluminum\$78.55



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.

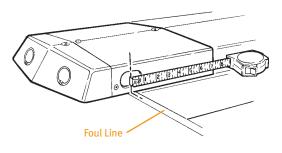


Replacement for Astro and 2000 Covers (10" [.254M]) See illustration above.

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.

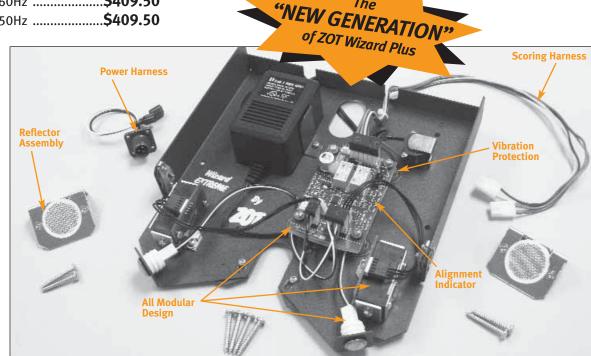


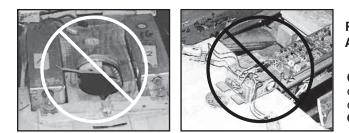
Measure as shown

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

ZOT Wizard Extreme

For Brunswick Subway Ball Retu	urns	
#400283 115V/60Hz	\$409 . 50	
#400289 220V/50Hz	\$409.50	





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.**

Wizard Extreme Features and Benefits:

Infrared Technology: The ZOT Wizard Extreme 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 Extreme can be disabled remotely lane by lane (e.g., from the front desk), in centers with compatible scoring systems.

Foul Indication LED's: ZOT's Wizard Extreme uses LED's for Foul Indication which have a life expectancy that's 100 times longer than older technology incandescent lamps.

Notes: To order the older model **ZOT Wizard Plus** use **ZOT #400140**

If you need **Spare Parts** for an original **ZOT Wizard Plus** refer to the Spare Parts Grid on Page 1.

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......\$43.90



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 Foul Detector and Cover's Package



Wizard Extreme Spare Parts:	
Description P	art Number
Spare Parts Kit	#400292
PC Board	#431097
Sensor Block Assembly	#431099
Reflector Only	#800157
Reflector Assembly (2)	#400169
Foul Signal LED, Including	
Holder and Harness	#440145
Scoring Harness (Bswk)	#440155
Scoring Harness (AMF)	#440153
Buzzer Assembly	#400170
Transformer Assembly (115V60Hz)	#400281
Transformer Assembly (230V50Hz).	#400293
Sensor harness (3-wire)	

See Page 69 for Pricing

#400295 (replacement for Astro & 200 Covers)......**\$528.30** (see page 3 for more details) #400296 (replacement for Gold Crown & Crown Imperial Covers)....\$528.30 (see page 3 for more details)

Package includes: ZOT's Wizard Extreme 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"

Feature for feature ... Dollar for dollar... the best deal in the market



For individual product information, including features and benefits, See pages 3, 4, and 5.



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 offone 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 Extreme Spare Parts:

Description	Part Number
Spare Parts Kit	#400292
PC Board	#431097
Sensor Block Assembly	#431099
Reflector Only	#800157
Reflector Assembly (2)	#400169
Foul Signal LED, Including	
Holder and Harness	#440145
Scoring Harness (Bswk)	#440155
Scoring Harness (AMF)	#440153
Buzzer Assembly	#400170
Transformer Assembly (115V60Hz	2)#400281
Transformer Assembly (230V50Hz))#400293
Sensor harness (3-wire)	#440146

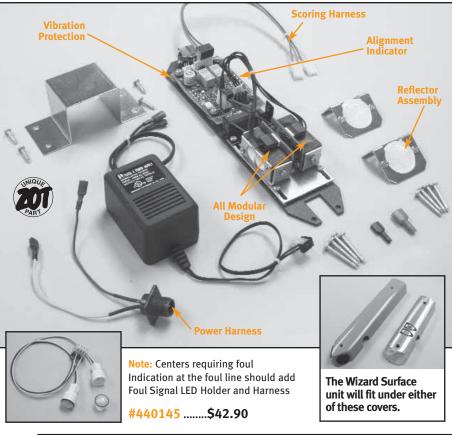
See Page 69 for Pricing

Wizard Surface for Brunswick Surface Ball Returns

#400287.....\$324.50

Serving Two Lanes

Approach Mounted Transformer: For centers with 115V Power Supply at Foul Line. **Replaces:** Brunswick Gold Crown and Astro/2000. 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.



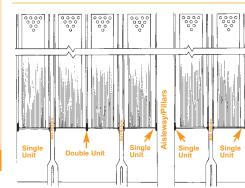
Low Voltage

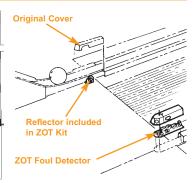
Centers with no 115V power supply available at the approach area should also order the following wire harness. This kit allows transformer installation at mask unit.



Wire Harness #400302\$43.90

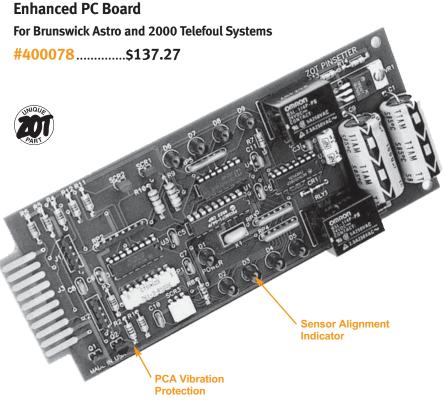
Kit #400287 Includes: Detector Assembly, Transformer, two Reflector Assemblies and All Mounting Hardware to install complete kit. Power Supply Cable #400302 (order separately).





Example: 6-Lane Center with Aisleway

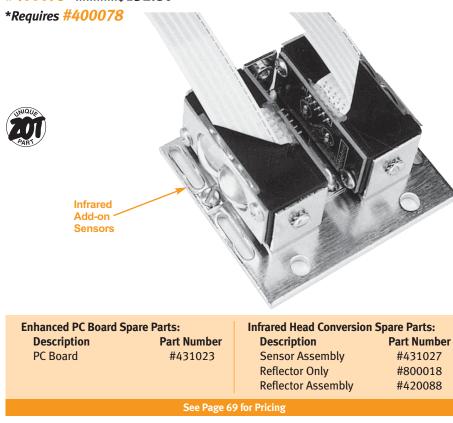
Enhanced P C Board Infrared Head



Note:

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

Infrared Head Conversion (Optional Add-on to Enhanced PC Board) #400075*......\$132.80



Removed Original Parts

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.

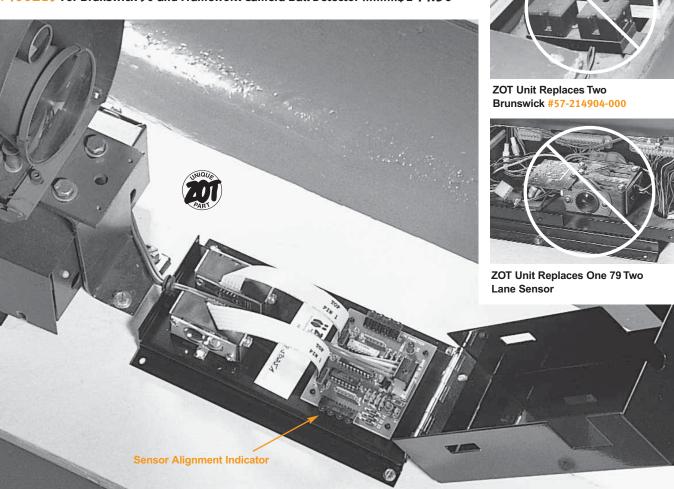
All the Features of the ZOT Wizard: That's what you get when you complete your upgrade and combine the ZOT PC Board with the ZOT Infrared Head.

7

Infrared Scanner Ball Detector

#400139 For Brunswick 79 Scanner Ball Detector	\$144.50
#400151 For Brunswick 86 Scanner Ball Detector	\$144.50
#400219 For Brunswick 90 and Frameworx Camera Ball Detector .	\$144.50





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:		
Description	Part Number	
PC Board	#431042	
Sensor Assembly	#431027	
Reflector Only	#800018	
Reflector Assembly	#420088	
Power Harness	#440070	

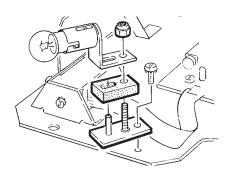
6 Scanner Ball Detect Spare Parts:		
Description		Part Numb
PC Board		#43103
Sensor Asse	embly	#43102
Reflector Or	nly	#80001
Reflector As	sembly	#42008
Power Harn	ess	#44007

etect Sp	oare Parts:
	Part Number
	#431031
ly	#431027
	#800018
nbly	#420088
	#440071

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

Description	Part Number
PC Board	#431031
Sensor Assembly	#431027
Reflector Only	#800018
Reflector Assembly	#420088
Power Harness	#440072

See Page 69 for Pricing



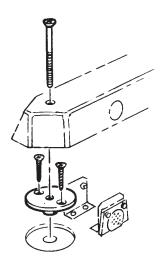
Extends The Life Of #90 Lamps: Test results confirm that this vibration system greatly reduces early failure rate of lamp filaments.

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\$12.95



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\$29.95



Improved Signal Strength: ZOT's simple modification will improve signal strength 2-1/2 times, yield-ing 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

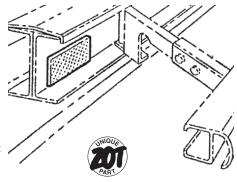
Note:

Each kit includes two reflectors.

Rectangular Ball Detect Reflector For Brunswick AS 80 And AS 90 Scoring With AMF Hide-A-Bumper System

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\$11.61



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.

ZOT "GlossBoss" Coin-Op Ball Conditioner

#420397.....\$8,875.00

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.

Scrolling Color Message & Advertising Display





Customer Friendly Display

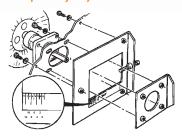
Bill Acceptor



Mechanical Compound Advance System







Buffer Pressure Meter



Electronic Coin Validator

Easy to Program Control Box

GlossBoss Buffing Compound

420416 (two blocks per box)\$134.50

- 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.....\$106.50

- 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\$49.50 Lustre Kleen Spacer Kit #420399\$49.50



2 Ball Conditioner

10

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.

Features and Benefits

Customer Friendly Display: The customer display screen shows price, money's deposited, cycle-time and cycle-time remaining, plus house-ball and Sold-out modes.

Four Easy-to-Program Price Levels: A simple two-button operation. Hold down one button and pulse the other until the illuminated LCD's on the Display panel show the desired Price levels This feature enables you to periodically increase the price as and when desired.

Four Easy-to-Program Run Times: A simple two-button operation. Enables you to adjust the run times to maximize revenues and the number of users.

Electronic Coin Validator: Programmable for promotional tokens and single coins of any denomination (e.g. Quarters or Dollar Coins in the US) and most currencies, subject to size (maximum 34mm diameter and 3.4mm thick).

Bill Acceptor: ZOT's internally mounted Bill Acceptor will typically increase machine usage anywhere from 15 – 30 percent. A ZOT Bill Acceptor also reduces the frequency in making change for customers, and makes cashing out the machine easier.

Mechanical Compound Advance System: A time tested proven system makes it easy to maintain a high quality polish without the constant need for adjustment and readjustment.

Easy-Adjust Buffer Shaft: Enables you to easily set the buffing wheel adjustment correctly and guarantee the Ball Conditioner "Really Polishes Bowling Balls", ball after ball after ball. Simply loosen six bolts and rotate a calibrated jackscrew each time the compound block is replaced.

Double-ended Bearing Support on Buffing Wheel: Makes wheel replacement easy and yields a smooth running operation without the tricky balancing exercise required with older machines.

Scrolling Message and Advertising Display: This easy to program multi-color digital display enables centers to develop their own promotional and advertising messages to their customers.

Buffer Pressure Meter: Takes the guesswork out of measuring the pressure between the buffing wheel and surface of bowling ball for optimal ball polishing performance.

Introducing the ZOT GlossBoss II #420398......\$6,895.00

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.

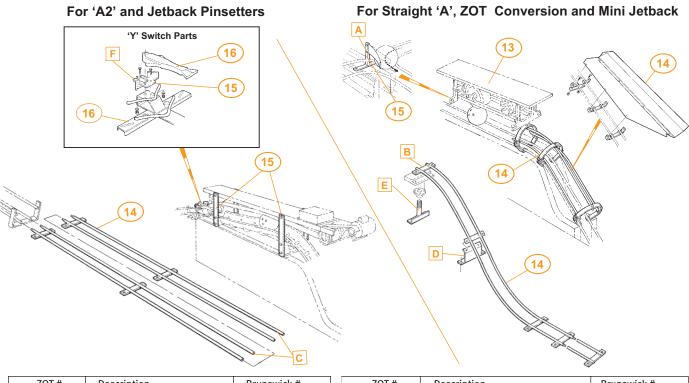


ZOT Ball Conditioner Restoration and Conversion Kits

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**

Ball Return Assembly Index

Numeric call-outs (e.g. (3)) = page number



		-			
ZOT #	Description	Brunswick #	ZOT #	Description	Brunswick #
A. 420284	Ball Deflector Assembly	12-750536-000	D. 620158	Support Bracket 'A'	19-088155-000
B. 420330	Drop Sweep Tube Track 'A'	19-201015-051	E. 640075	Support Pipe 'A'	19-088437-000
C. 640101	Tube Track Assembly (144")	19-088167-000	F. 420072	Rear Stop 'Y' Switch Conversion	12-862570-000

ZOT Front Ball Lift Relay Box For all centers with Brunswick 'S' Style Front Ball Lifts with two Lift Wheels/Tires

#400208.....\$199.50

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

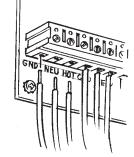
Easy to Service: The entire relay PC Board can be changed in minutes.

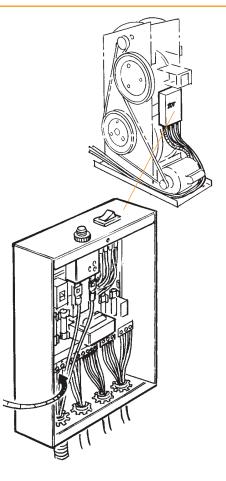
Easy to Install: The relay box can be changed in minutes. All wire connections feature solderless fittings.

Simple Design: Eliminates expensive military style connector.

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







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

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.

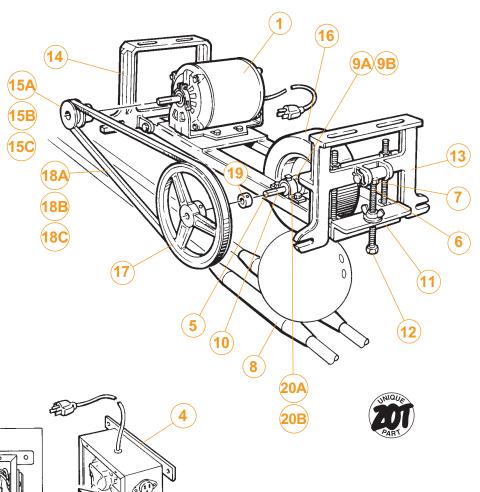
Installs In Under An Hour: The ZOT Accelerator can be installed by a house mechanic.

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Ball Accelerator

For Mini Conversions And Straight 'A' Pinsetters

#420301	Maximum Acceleration (115V/60Hz)	\$ 979.0 0
#420130	Standard Acceleration (115V/60Hz)	\$ 979.0 0
#420322	Standard Acceleration (230V/50Hz)	\$ 998.5 0



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

Replacement Parts										
	Item	ZOT#	Description	Item	ZOT#	Description	Item	ZOT#	Description	
	1.	200003	Motor	9B.	420276	Key 3/16" Sq. X 1" (6ea.)	15C.	800026	3 1/2" Pulley	
	2.	300006	Open Style Relays	10.	520044	Shaft Only (Two Key Ways)	16.	800028	Drive Wheel	
3. 300007 Closed Style Relays		11.	640054	Frame for 3 3/8" Pillow Block	17.	800029	Large Pulley			
	4.	400014	Relay Box Assembly			Bearing	18A.	800030	Belt Slow For 2" Pulley	
	5.	420148	Shaft Kit	12.	640055	"T" Bolt Only	18B.	800031	Belt Medium For 2 1/2" Pulley	
6. 420149 "T" Bolt Kit				13.	650019	End Bracket (T-Bolt)	18C.	800032	Belt Fast for 3 1/2" Pulley	
7. 420236 3/8"- 16 x 6 1/2" Bolt (2ea.)			3/8"- 16 x 6 1/2" Bolt (2ea.)	14.	650020	End Bracket (Standard)	19.	800033	Locking Collar	
8. 420256 Vinyl Tubing				15A.	800024	2" Pulley	20A.	810037	3 3/8" Pillow Block Bearing	
	9A.	420275	Key 3/16" Sq. x 2 1/2" (6ea.)	15B.	800025	2 1/2" Pulley	20B.	810038	3" Pillow Block Bearing	
		See Page 69 for Pricing								

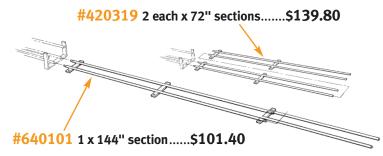
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3

Ball Return Assembly

Steel Tube Track

For Subway Ball Returns with 'A2', Jetback and Straight 'A' Pinsetters



Features and Benefits

able from Brunswick.

& #640101 shown above.

shipping costs.

Features and Benefits

Give Your Center A New and

More Modern Look: With

Easy to Install: The three-

piece gray metal cover kit

sarv for easy installation.

and Savings.

includes all hardware neces-

Ships UPS: For Convenience

ZOT's Ball Track Covers.

Direct Replacement: ZOT's Drop Sweep Tube Track is a direct replacement for

sweep tracks, neither of which is avail-

Drop Sweep Tube Track is also compatible to ZOT Steel Tube Track Kit **#420319**

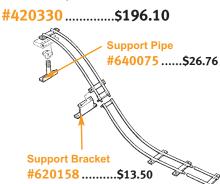
Can be Shipped by UPS: Which reduces

the original 'A' & Jetback steel drop

Ideal for New Installations: The ZOT

Drop Sweep Tube Track

For Straight 'A' Pinsetters and Mini Jetback with Subway Ball Returns



Approach Down Sweep

For Surface to Subway Conversions

#420486 Approach Down Sweep Track*\$213.79

#420487 Odd Lane Side Guide Rail*\$99.22

#420488 Even Lane Side Guide Rail*......\$99.22

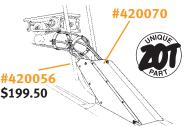
*Must be ordered individually

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\$222.30



Modern Appearance to Enhance Your Center

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

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.

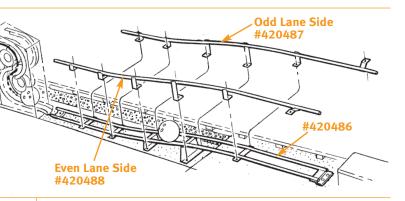
Can be Shipped by UPS: The ZOT Part **#420319** (which includes 2 x 72" sections, and connecting inserts) can be shipped by UPS, which is less expensive.

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

For Jetback with Subway Ball Returns

#420471 \$146.81

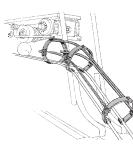




'Long' Three Rail Ball Guide System

For Mini Conversions and Straight 'A' Pinsetters

#420059....\$211.50



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.

"Solve 'A2' Long Belt Tracking Problems – Today"

Accelerator Support Conversion Kit For 'A2' Pinsetters

#420206.....\$49.60



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.

'Y' Switch Stop Conversion Kit

For 'A2' and Jetback Pinsetter

#420072.....\$57.50

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.

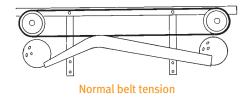


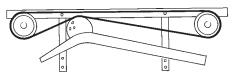
Most Cost Effective Solution Available: ZOT's Kit is four to eight times less expensive than replacing flat surface pulleys with high crowned accelerator pulleys.

Long belt rolls off top of ball: Shifting belt sideways as ball Is propelled

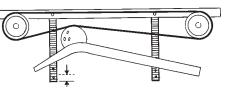
Returns Two Or Three Balls At One Time – Without Belt Shift: ZOT's Kit will improve the overall belt tracking over the ball.

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





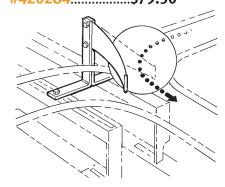
Belt tension when ball is at apex of track





'Y' Track Ball Deflector Kit For Mini Conversions and Straight 'A' Pinsetters

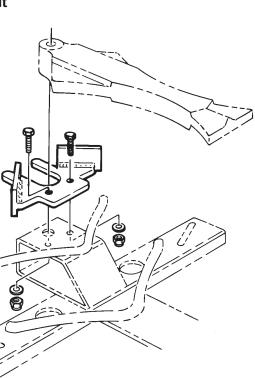
#420284.....\$79.50



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.



Ball Return Assembly

Heavy Duty 'Y' Track Weldmet For 'A2' and Jetback Pinsetters **#640042**.....\$116.50



Modified 'Y' Switch Stop Bracket For 'A2' and Jetback Pinsetters #620067.....\$14.50

With added securing options

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 For 'A2' and letback Pinsetters #680005.....\$24.50

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.....\$8.60

Features & Benefits

of 'Y' Switch height.



Protective Finish: Wear resistant finish for years of dependable service.

Flat Gutter Anchor

#420343 Complete One-Lane Kit......\$68.50 (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\$13.62



#420362

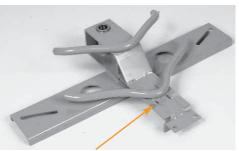
Individual Anchors. Cross Foundation\$11.87

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.



Reinforced Channel Iron for Greater Durability

Auxiliary 'Y' Stop Mounting Bracket Kit #420304.....\$19.89

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.

Note: The Auxiliary 'Y' Stop Mounting Bracket kit requires #620067.



Urethane 'Y' Switch Bumper

Features & Benefits

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

Urethane 'Y' Switch Plate Spacer

#680007.....\$1.40

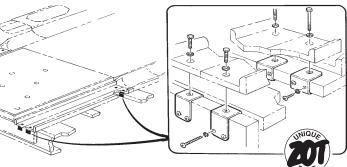
Features & Benefits

Isolates Vibration: Reduces breakage to track weldment and other related metal parts.









"Help for Dual Pindeck Lamp Fixtures"

Pindeck Light Relay Control

#400154.....\$76.88

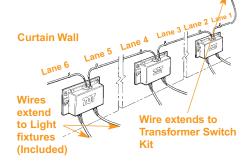
Features and Benefits

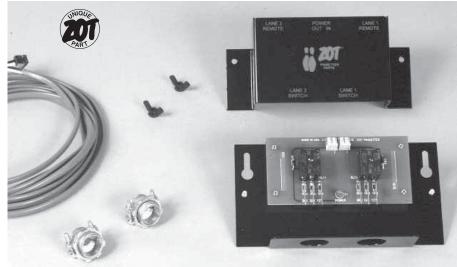
3**B**

300026

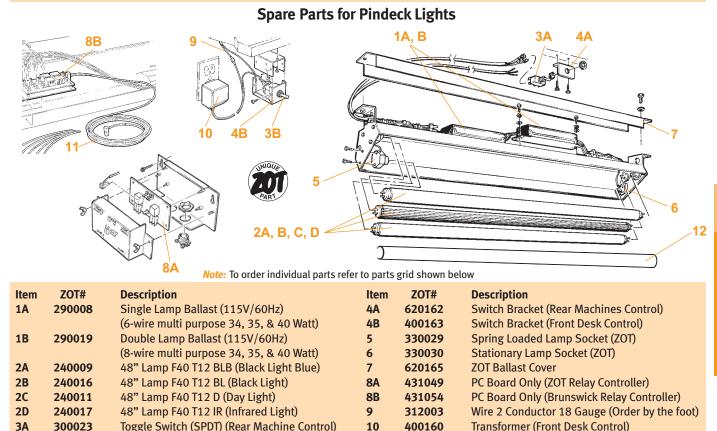
Replaces Toggle Switch at Rear of Pinsetter with Relay Controller: Enables switching from White to Black **(Glow)** light to be managed from the Front Desk, Mechanics Tool Room or any other remote location as needed.

Enables switching from White to Black **(Glow)** Light on up to 24-lanes in unison.





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 (order by the foot). Requires one #400162 to operate up to 24-lanes.



See Page 69 for Pricing

11

12

440058

330051

Toggle Switch (DPDT) (Front Desk Control)

Wire Harness 2 Conductor 14 ft. (Relay Controller)

48" Infrared Lamp Cover (Navy Blue)

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.

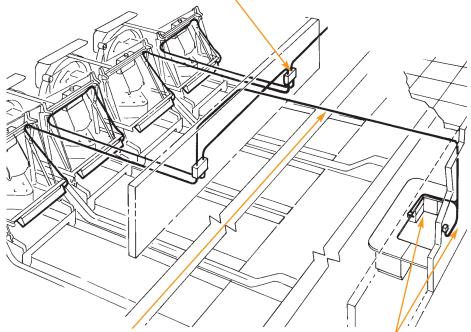
And, there's no better place to start introducing Glow Bowling than at the pindeck...by adding **ZOT Glow** Pindeck Light or **GlowVision** fixtures. Some proprietors have done it the other way around, added **Glow** lighting to everything in their center...except the pindeck.

"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

ZOT Brand Relay Box Switch Control included with Front Desk Controlled Glow Pindeck Light fixture

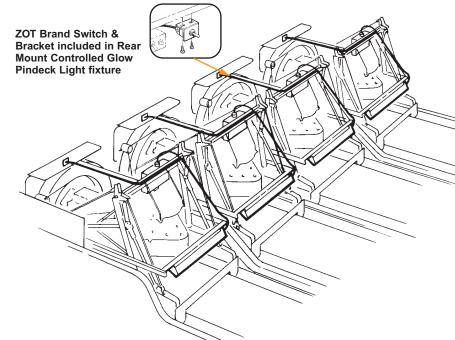


ZOT Two-conductor Wire #312003 Order by the foot (Order Separately)

Transformer & Switch Kit #400162 See page 21 (Order Separately)

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)......\$294.50 *MUST ORDER IN PAIRS*

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

#420354 (230V/50Hz)......\$314.50 *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.

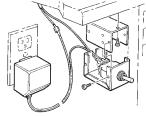
Note: For every two units you order of either of the above part numbers ZOT automatically includes one Relay Box Switch Control and 14' of connecting wire for every two units.



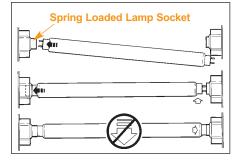
When you order either of the above part numbers you will also require:

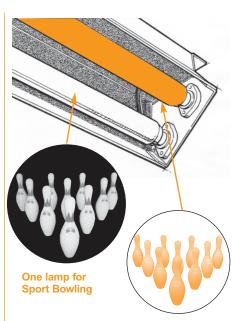
A. One length run of wire **#312003** for up to 24-lanes to extend from Curtain wall to Front Desk (order by the foot).

B. One each **#400162** Transformer & Switch Kit (serves up to 24-lanes).



Transformer & Switch Kit (Order Separately)





One lamp for Recreation Bowling

All it takes is a flip of a switch to convert your center from a Sport to Recreation center...and it starts with **ZOT** Two-Lamp **Glow** Pindeck Lights

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

#420333 (115V/60Hz)......\$279.50

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

#420341 (230V/50Hz)......\$299.50

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 20gauge 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
 - AMF AccuScore*
- Brunswick AS 80
 AMF Boss Scoring
- AMF AccuScore Plus*
 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.

Replacement Pit Light Ballast For Brunswick Brand Original Pit Lights

#290008.....\$29.50



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.....\$17.50



Features and Benefits

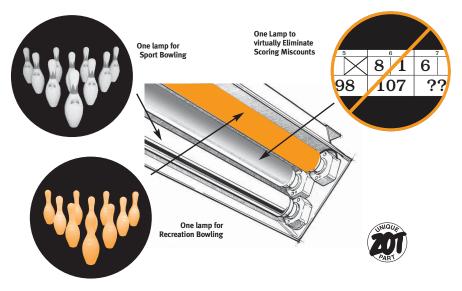
Industrial Style: Spring Loaded Lamp Sockets prevent lamps from shaking loose, and shattering on the pindeck.

Adapts to Other Brands: The Universal Lamp Socket can be made to fit other brands, with minimal modifications.

^{zor} GlowVision

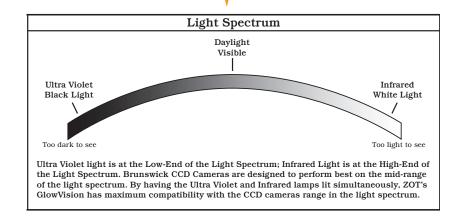
A 3-Lamp Glow Pindeck Light that virtually "Eliminates Scoring Miscounts" in a Glow Bowling environment.

"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.



ZOT's GlowVision Pindeck Light Fixture is recommended for centers that have one of the following scoring systems:

- Brunswick AS90
- Brunswick FrameWorx with CCD Cameras
- Brunswick ASK
- 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"

> 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

ZOT's GlowVision Unit Includes: One

If you have Brunswick CCD or earlier

models of other brands of cameras with

your scoring system, and you've been

for your center because you've heard about the high incidence oof scoring mis-

With ZOT's new GlowVision, a custom

Pindeck Light Fixture, the incidence of scoring miscounts has been virtually

designed and custom built 3-Lamp Glow

Spring Loaded Lamp Socket

counts...your worries are over.

holding off buying Glow Pindeck Lights

Infrared Lamp and Visible Light Filter. The

Black Light Blue and White Lamps are not

Features and Benefits

Pinsetter.

included.

eliminated.

Front Desk Switching Option (See page 18 for control)

#420465 (115V/60Hz)......\$360.03 *MUST ORDER IN PAIRS*

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

#420466 (230V/50Hz)......\$380.03 *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 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).

Transformer & Switch Kit (Order Separately) See Below

Transformer and Switch Kit

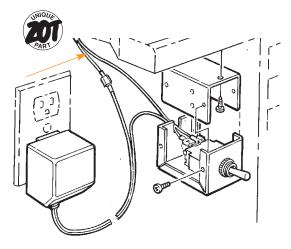
#400162 (115V/60Hz) Transformer and Switch Kit......\$79.50 #400212 (230V/50Hz) Transformer and Switch Kit.....\$89.50

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.



#420464 (115V/60Hz)......\$345.39

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

#420467 (230V/50Hz)......\$363.39

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 #400130 (115V/60Hz).....\$419.50 #400036 (2)

#400036 (230V/50Hz)\$429.50

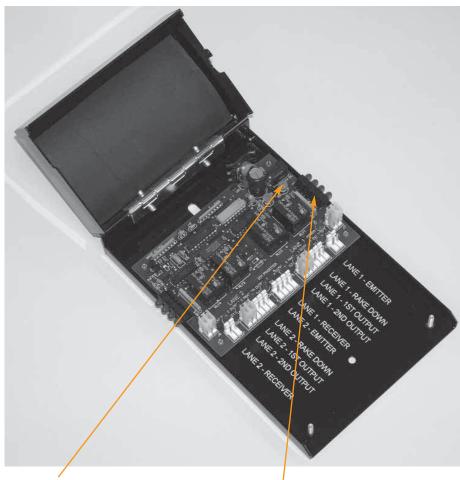
ZOT's ET 2001 "Dual Lane" Electronic Triggering, for Brunswick Pinsetters, features the latest and most advanced infrared technology available in the industry, to guarantee **100% Positive Triggering...**ball after ball after ball...you know it makes sense.

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.**



Adjustable Time Delay New Alignment LED's

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 costefficient.

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.

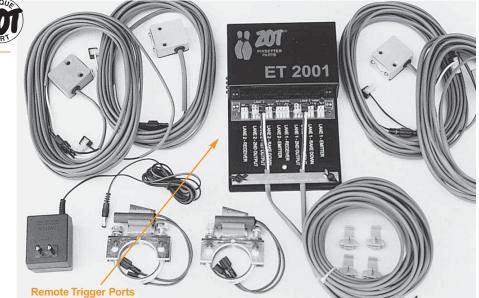
All Modular Design: All components plug into the PC Board separately, making it possible and easy to change parts, and troubleshoot.

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)





Electronic

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.

ET 2000 & ET 2001 Spare Parts 115V & 230V:

Description	Part Number
Spare Parts Kit	#400072
PC Board	#432052
Blue Emitter Block	#400001
Flat Gray Emitter Cable	#450005
Gray Receiver Block	#400133
Transformer for 115V	#290005
Transformer for 230V	#290006
Sensor Shims	#400121
Sensor Lens Kit	#400032

See Page 69 for Pricing

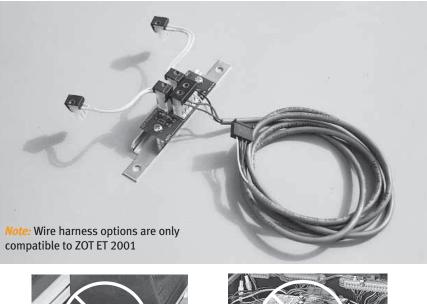
Remote Trigger Ports Note: To activate the Brunswick Scoring Feature this product requires a specific harness (see below for details)

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	\$58.90
#440080 Brunswick AS 86 Scanner	\$48.95
#400194 Brunswick AS 90 Camera & FrameWorx	\$59.50





ZOT Unit Replaces two Brunswick #57-214904-000



ZOT Unit Replaces 79 Scanner Ball Detect

Electronic Triggering

Single Mercury Switch

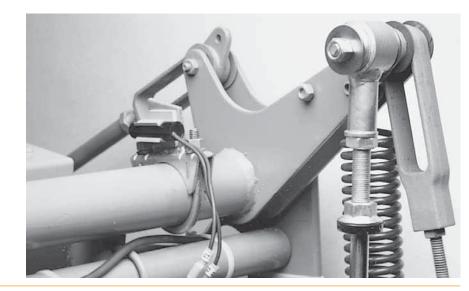
For Use as a Manual PC Board Reset Kit For 'A2', Jetback and Straight 'A' Pinsetters with ZOT Triggering

#400021.....\$37.95

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

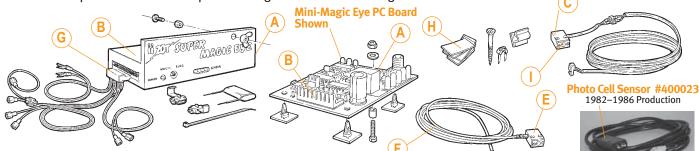
Note: **1. #440045** wire harness required when installing to ZOT Magic Eye or Time Delay Plus Systems.

Note: 2. #450007 wire harness required when installing to ZOT ET 2001 Systems.



Spare Parts for Older Model ZOT Triggering See Page 69 for Pricing

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.



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

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ltem	Kit Description	Kit Sales Number	Designed For	PC Board	Fuse	Emitter Blue Block	Flat Grey Emitter Cable	Receiver Gray Block	Coaxial Receiver Cable	XFormer/ Power Cable	Sensor Shims	Sensor Lens Kit
1	Super Dual	400042	Straight 'A'	400011	400084* *(6 ea.)	400001	450001	400005	450002	440008	400121* *(25 ea.)	400032
2a	Super Single (Relay Output/Trigger S	400043 Switch)	'A2' & Jetback	400012	400084*	400001	450001	400005	450002	440001	400121*	400032
b	Super Single (Voltage Output/Rake S	400044 Solenoid)	'A2' & Jetback	400012	400084*	400001	450001	400005	450002	440002	400121*	400032
С	Super Single (Relay Output/Mercury	400041 Switch)	Straight 'A'	400012	400084*	400001	450001	400005	450002	440003	400121*	400032
d	Super Single (Voltage Output/Gearb	400040 ox Solenoid)	Straight 'A'	400012	400084* *(6 ea.)	400001	450001	400005	450002	440004	400121* *(25 ea.)	400032
3	Mini-Magic Relay	400008	'A2' & Jetback	400009	400083* *(6 ea.)	400001	450001	400005	450002	440009	400121* *(25 ea.)	400032
4	Mini-Magic Power	400007	'A2' & Jetback	400010	400082* *(6 ea.)	400001	450001	400005	450002	440010	400121* *(25 ea.)	400032
5	Power Rectifiers	400106	Straight 'A', Jetback & 'A2'	431003	N/A	N/A	N/A	N/A	N/A	440037	N/A	N/A
6	Magic-Eye 1988 **when replacing origir	42050-0 nal single-unit,	Straight 'A', Jetback & 'A2' order both emitter a	400012 ind cable	400084* *(6 ea.)	400001**	450001**	400005	450002	Same as Corresponding Super-Single	400121* *(25 ea.)	400032

Item	Kit Description	Kit Sales Number	Equipment Type	Mercury Switch	Solenoid	Wire Harness
7a	Mercury Switch	400021	N/A	400022	N/A	440011
b C	Rake Trip By-Pass Double Switch	400107 400108	N/A N/A	400109 400109 & 400022	N/A N/A	N/A N/A
d	Reset Lockout Switch	10170-0	N/A	400022	N/A	N/A
8	Rake Trip	420164	N/A	N/A	400024	440011
9	Gearbox Trip	420001	N/A	N/A	400024	N/A
10	Fast Drop Rake	420159	N/A	N/A	400024	440011
11	Alternative Power Supply 24-VAC	400153	N/A	N/A	N/A	N/A

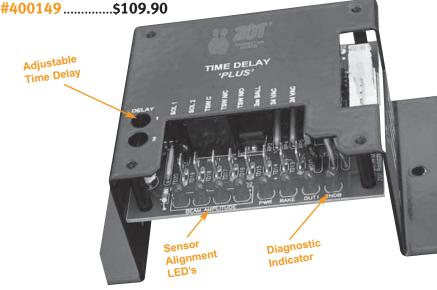
PC Board Exchange

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.

Electronic Triggering

Universal Time Delay 'Plus' Module

For Brunswick 'A2' and Jetback Pinsetters



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.....\$234.50

Includes:

#400145 Time Delay Plus System **#400144** Infrared Sensor "Add-On Kit

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



Integrated 'Take-Data' Signal: The ZOT product can obsolete: the Brunswick Take-Data Relay Board. For Brunswick Scoring systems only: Take-Data is initiated when cushion impact does not drop the rake, and a scoring signal is needed simultaneously to the machine cycling, because the rake and deck come down at the same time.

All Modular Design: Troubleshooting is easy: all components plug into the ZOT PC Board independently, making component exchanges fast and easy.

Adjustable Time Delay: Easily adjustable: from 3/4 of a second to 8-seconds.

Expander Card

#400147.....\$68.50

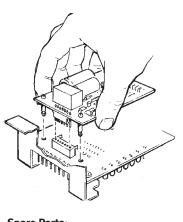
The ZOT Expander Card provides the 32-Volt DC outputs which enable you to use: ZOT's Gearbox Trip Assembly and Electronic Fast Drop Rake.

Features & Benefits

Simple Installation: The Expander Card just plugs into the ZOT Universal Time Delay 'Plus' Module.

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.

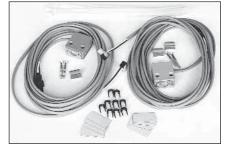


Spare Parts: #431047 PC Board



#450011 – Cable Assembly included

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
- 2

VISA Call ZOT at 1-800-525-8116 for more details

ELECTRONIC FAST DROP RAKE ... 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

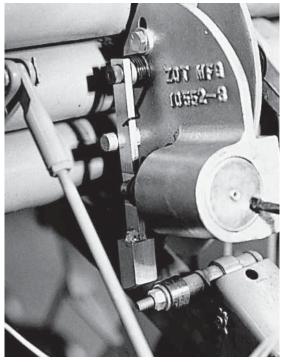
#400286.....\$**98.50**

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.



Great Rake Trip System for Use with Automatic Scoring



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.....\$28.83

Rake Trip Solenoid Lock-Out

Infrared	Sensor	Add-On	Kit S	pare	Parts:

innarea sensor naa on nae spare rares.					
Description	Part Number				
Solenoid	#400024				
Internal Lock Washer 1	" #740106				
Hex Jam Nut 1"	#730148				
New Style Sol. Plunger	#520090				
Casting	#650001				
New Style Trip Arm	#620107				
New Style Spring Pin	#700026				
7/32 X ³ /4"					
Flat Head Allen Screw	#710244				
10-24 X 1 ¹ /4"					
Cam Follower Bearing	#810002				
Standoff	#520074				
Torsion Spring	#850015				
Solenoid Angle Bracket	t #620062				
Bushing	#520088				
Steel Spacer	#420185				

See Page 69 for Pricing

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

ELECTRONIC FAST DROP RAKE ... for Straight 'A' Pinsetters

Electronic Fast Drop Rake System

For Straight 'A' and ZOT Conversion Pinsetters

#420159.....\$419.50

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 rollingout 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.

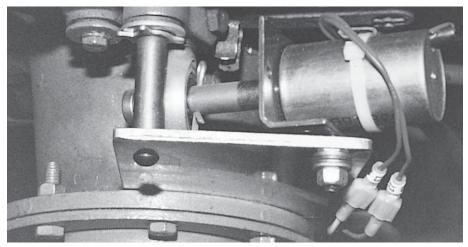
Straight 'A' Pinsetters and ZOT Conversion Universal Time Delay 'Plus' Module with Electronic Triggering

compatible!

Triggering

Electronic Gearbox Trip

#420001.....\$118.50



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.

Note: Is Your Triggering Compatible: You

Obviously the Electronic Fast Drop Rake

System is compatible with ZOT electronic

must have electronic triggering for this sys-

tem. Check to see whether your triggering is

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

Electronic Gearbox Trip Spare Parts:				
Description	Part Number			
Solenoid	#400024			
Cycle Rod Plunger	#520001			
Angle Bracket (solenoid)	#620001			
Male Uniball	#810001			
Bronze Flange Bushing	#810003			

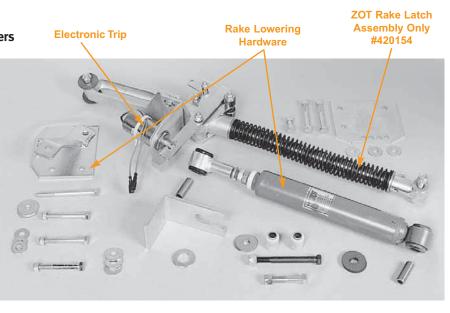
See Page 69 for Pricing

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

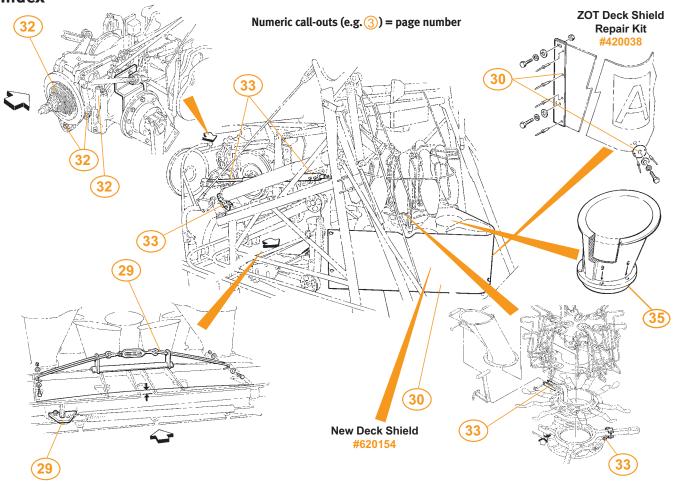
Note: For serial numbers below 24,000, #420066 is also required.

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

Only Available from ZOT: No other manufacturer or supplier offer a 'True' Electronic Fast Drop Rake System.



Gearbox and Deck Assembly Index



Cam Follower Shaft Support Bracket

For 'A2', Jetback and Straight

'A' Pinsetters

420502\$36.90

Prevents Crisis Breakdowns:

Installing ZOT's Cam Follower Shaft Support Bracket "Today" prevents interruptions (breakdowns) during peak/league times "Tomorrow".

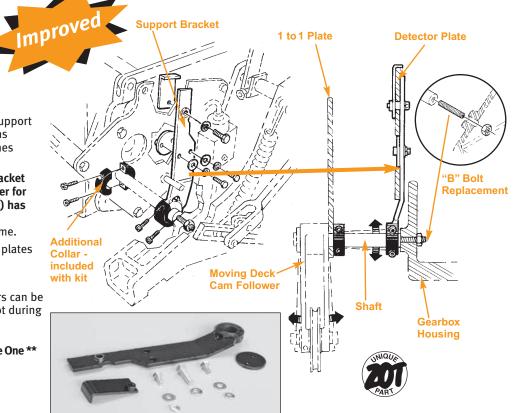
ZOT's Cam Follower Shaft Support Bracket Secures the Moving Deck Cam Follower for months after the Cap Screw ("B" Bolt) has broken: thereby preventing "Crisis Breakdown" at the least opportune time.

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.

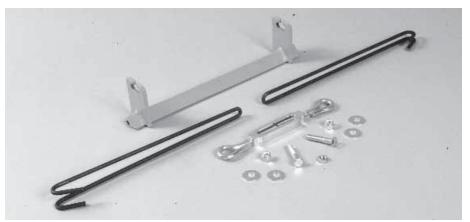
** Every Brunswick Pinsetter Should Have One **



Deck Right Deck Saver

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

#420084.....\$117.80



Features and Benefits

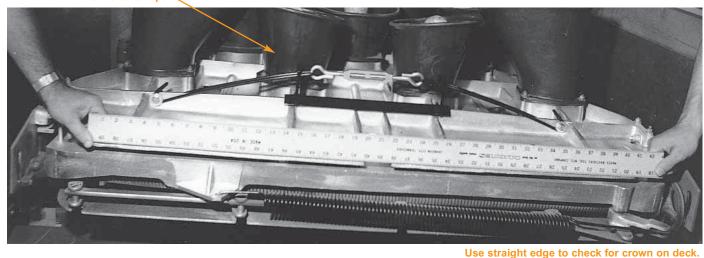
Reduce Respots of 5-8-9 Pins: If the pinsetter often sweeps off the 5, 8 or 9 pins, instead of resetting them for the second ball, the deck is probably crowned. A straight edge will soon confirm this (see illustration). The ZOT Deck Right Deck Saver will permanently eliminate the crown, restoring your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

Permanent Repair



Scissor Spring Pivot Repair Kit

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

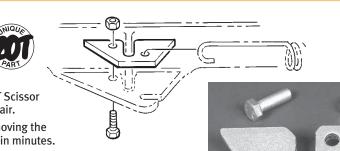
#420285.....\$19.90

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!





VISA Call ZOT at 1-800-525-8116 for more details

Replacement Deck Shield

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

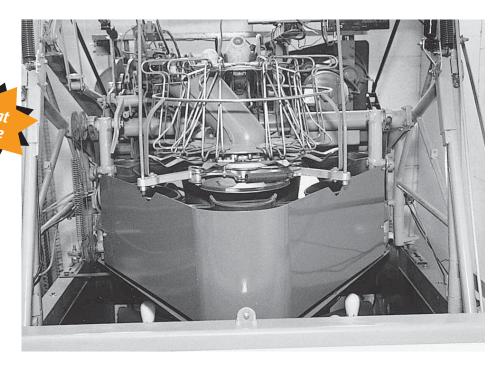
#620154.....\$82.50

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.

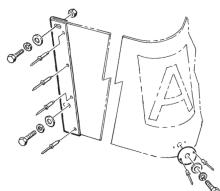
And, For An Added Touch of Image Enhancement: Have a local silk screener add your center name or logo to the new deck-shield before you install.

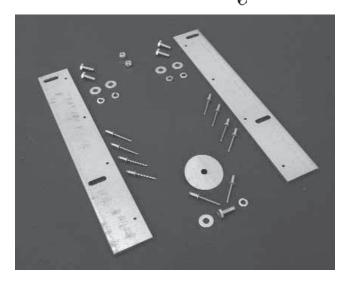


Deck Shield Repair Kit

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

#420038.....\$32.95





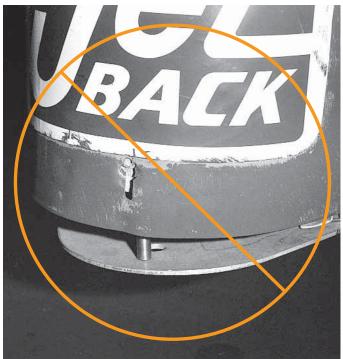
Features and Benefits

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

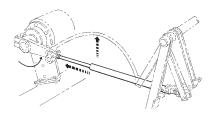
Features and Benefits

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.

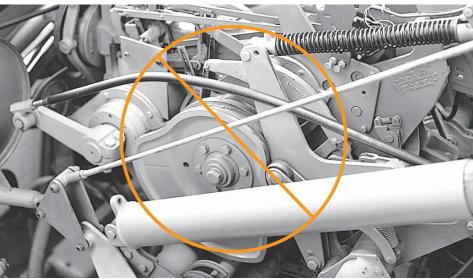
Prevents Crisis Breakdowns: The ZOT Collapsible Rake Link is designed and built for <u>no down</u> <u>time.</u>

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





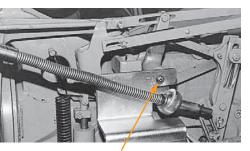
40" (1.016M) Tapered End Rod #420008\$39.95



Starter Bellcrank Stud For Straight 'A' Pinsetters

> Improved Feature

#420014.....\$69.90



Resupport Pivot Stud

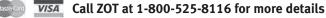
NIQ

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.



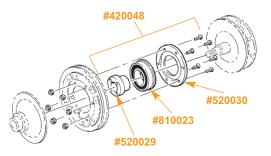
Gearbox Clutch Bearing Assembly Kit For 'A2', Jetback and Straight 'A' Pinsetters #420048......\$61.90

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 <u>Bronze</u>, bushing which substantially minimizes wear and permits re-positioning of the dowel pin – up to 4-times – for extended life.



Lowest Price in the Industry!

Clutch Yoke Screw Conversion

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

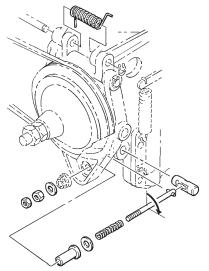
#420034.....\$52.95





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.

eyelet worn out?

Features & Benefits

simple solution.

out, the ZOT Spring Eyelet Repair Kit offers a

Installs Easily In Minutes: And with NO

drilling through the turret frame; which

weakens it further: And NO disassembly.

Gearbox and Deck Assembly

Deck Lift Shaft Repair Kit

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

#420037.....\$57.90

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

#420283......\$5.25

Features & Benefits

Probe and prevents jams.

original.

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

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

Link cannot be used in conjunction with an

per machine. The ZOT Modified Interlock

Spring Eyelet Repair Kit (Turret Release) For 'A2', Jetback and Straight 'A' Pinsetters For 'A2', Jetback and Straight 'A' Pinsetters #420178......\$49.90

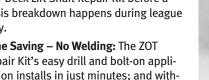


frame or re-weld.

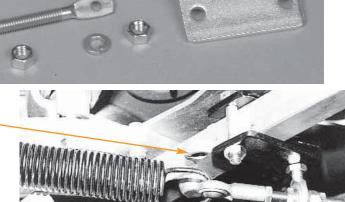
Adjustable Spring Tension: The ZOT Spring Evelet Repair Kit's unique design allows for greater adjustment and re-adjustment of the release spring tension.

Replaces Worn Pivot Eyelet: If the release spring on the turret support frame is worn

Eliminates Welding: No need to remove the









Gearbox and Deck Assembly

Link Belt

For Brunswick Pinsetters #420189 1/2" Link Belt

#420190 5/8" Link Belt

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:

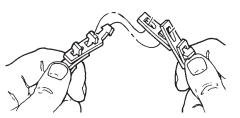
Features & Benefits

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\$167.50



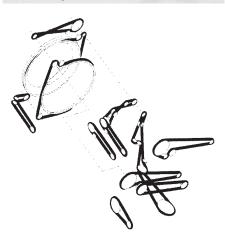
All 7 Motor to Gearbox Belts (1/2") All 4 Motor to Elevator Belts (1/2") Long Turret Drive Belts (1/2") Pit Conveyor Drive Belt (1/2") Short Turret Drive Belt (1/2") Cross Conveyor 'V' Drive Belt (1/2") Jack Shaft Drive Belt (1/2")

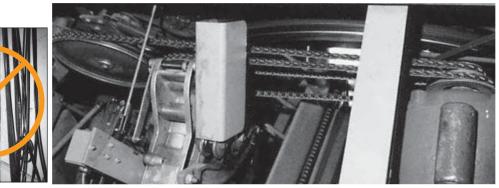
#420190\$189.50



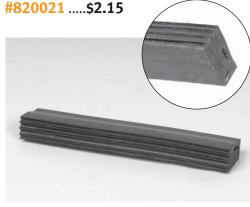
Suitable for: Endless Ball Wheel Belt (5/8") Spliced Ball Wheel Belt (5/8") Pin Wheel Belt (5/8")



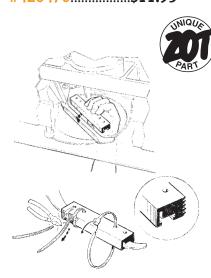




Rubber Scissor Gripper Pad For 'A2', Jetback and Straight 'A' Pinsetters



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.....\$11.95





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"



For 7-10 pin and modification for 1-pin

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.

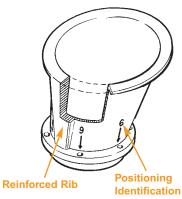
Pin Positioning Etched on Combo: An embossed number alongside each mounting hole clearly identifies which hole should be used for a specific pin position on the Combo.

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.

Features & Benefits

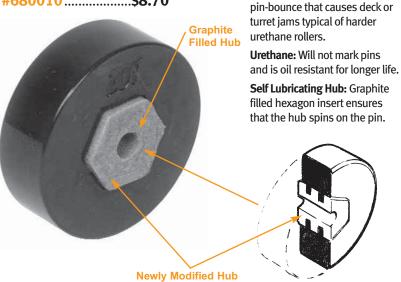
Rigid and Durable: The characteristics of the material reduces

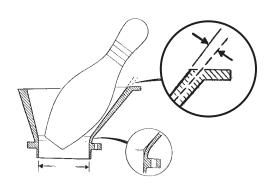




Urethane Deck Roller

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





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.

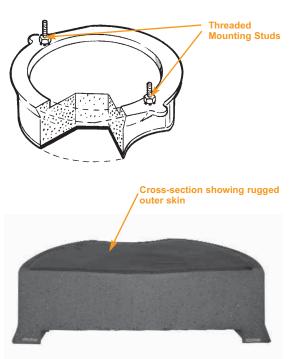
VISA Call ZOT at 1-800-525-8116 for more details

Urethane Deck Pads

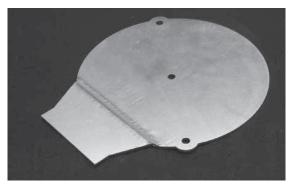
For 'A2', Jetback and Straight 'A' Pinsetters

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.



Deck Pad Drill Template #620083.....\$20.84



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.

Dura-Life Deck Pad

#420297\$149.50 (Package of 10)

"Lasts 3-Times Longer"



Dura-Life Deck Pad

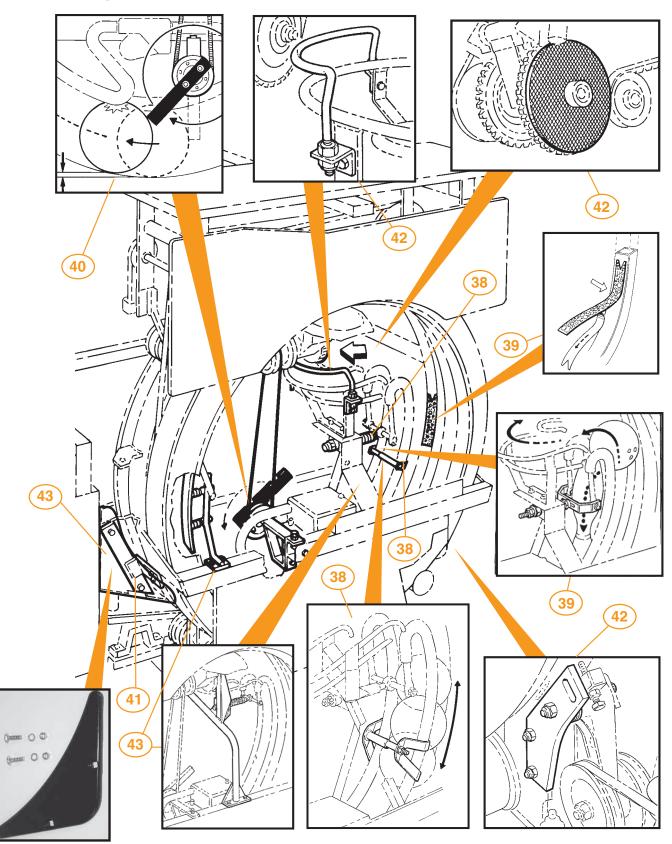
ZOT's Dura-Life Deck Pad features a rugged outer skin for greater durability. Accelerated controlled testing revealed that the average life-cycle of this great new chemically engineered polymer product from ZOT, is **"three times longer"** compared to the original manufacturer's product. ZOT's Dura-Life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



Standard Deck Pad

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.

Numeric call-outs (e.g.(3)) = page number



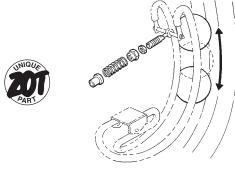
Ball Lift Rod Spring Conversion Kit

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

#420036.....\$54.50

Ball Lift Rod Spring Conversion Kit Spare Parts:								
Description Part Number								
A. Arbor Stem	#520023							
B. Threaded Stem	#520024							
C. Retainer Spring Nut	#520025							
D. Compression Spring	#850006							

See Page 69 for Pricing



Prevents 'Yo-Yo' Effect

Adjustable Ball Lift Rod Clamp For 'A2', Jetback and Straight 'A' Pinsetters

#420050.....\$39.80

Features & Benefits

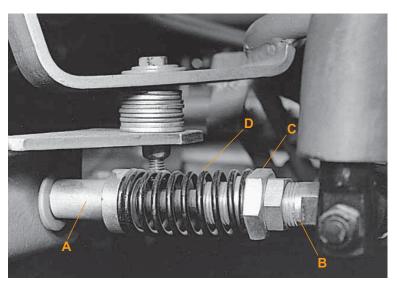
Eliminates Pin Carry Into the Ball Track: ZOT's adjustable Ball Lift Rod Clamp flips pins back into the pit before they reach the midway point of the riser rods, thereby preventing pins from carrying up into the ball track.

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.

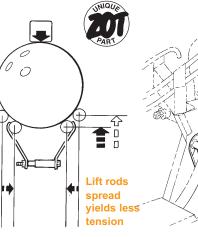


Features and Benefits

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.

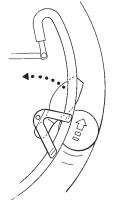


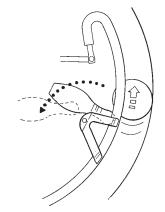


Narrow lift rods yields more tension

Prevents 'Yo-Yo' Effect







Prevents Pin Carry

Elevator Assembly

Tiger Grip Strips For All Brunswick Ball Wheels

#420403.....\$35.95

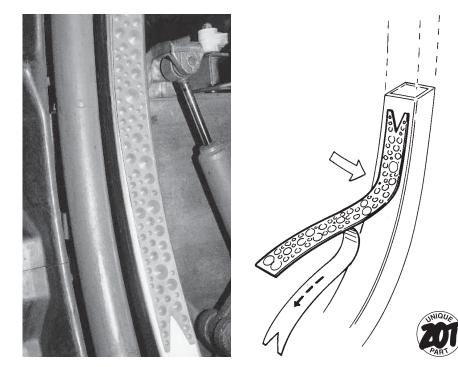
Features and Benefits

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.



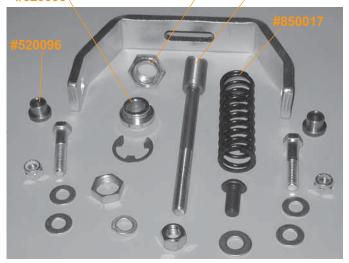
Ball Lift Rod Stud Modification Kit

For 'A2' and Jetback Pinsetters

#420205.....\$85.95

#520095

#520094 #520093

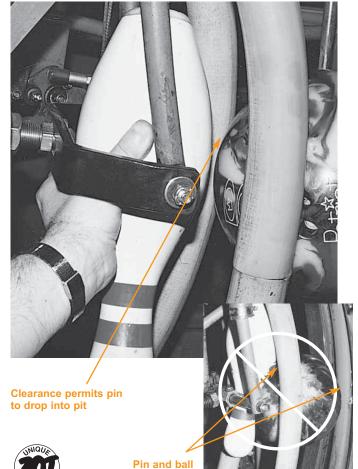


Features and Benefits

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.



jamming at lift rods

Power Ball Spin Eliminator Kit

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

#420179.....\$154.50



Link Belt #620156

Rubber Pulley Protector #420394

Replacement Paddle #420324

Newly Designed Paddle Break Resistant, Reinforced Webbing

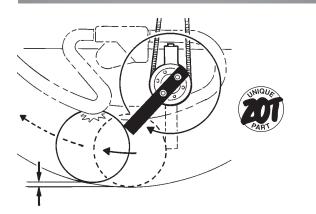
Features and Benefits

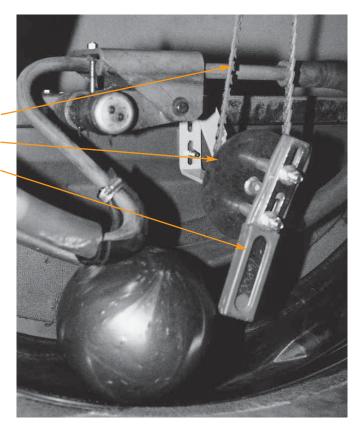
Eliminates Ball Calls: ZOT's Power-Driven Ball Spin Eliminator stops all trouble calls caused by balls spinning in the pit area, resulting in smoother running leagues that finish earlier; and happier bowlers.

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.



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.

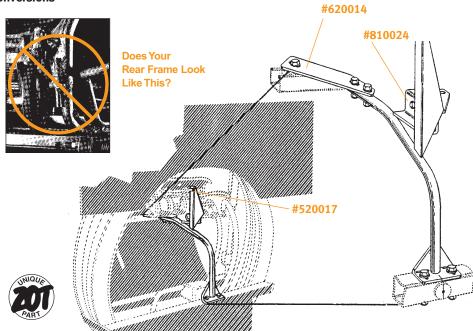
Easy Installation: Simply drill two holes and bolt in place.

Return Track Mounting Bridge Kit

For Straight 'A', Mini Jetback and ZOT I Conversions

#420031.....\$198.50





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.

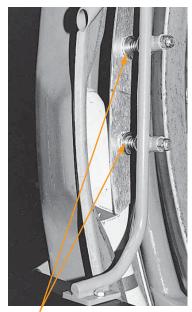
Permanent Repair: That's 10-times stronger than the original equipment. ZOT's Bridge Support absorbs all downward pressure and impact. **Easy To Maintain:** The kit includes a replaceable, oil impregnated, bronze bushing that's far superior to the original steel bushing.

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.....\$87.30



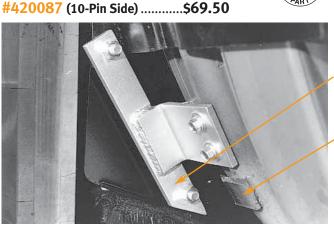
Spring Loaded: Flexible wiper surface

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.



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.

Wheel Guard Bracket Repair Kit

For 'A2', Jetback and Straight 'A' Pinsetters #420086 (7-Pin Side)\$69.50

No Welding: This easy to install, drill and bolt-on, kit resupports the lower



New Lower Support

Broken Guard Bracket

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.....\$65.95

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.

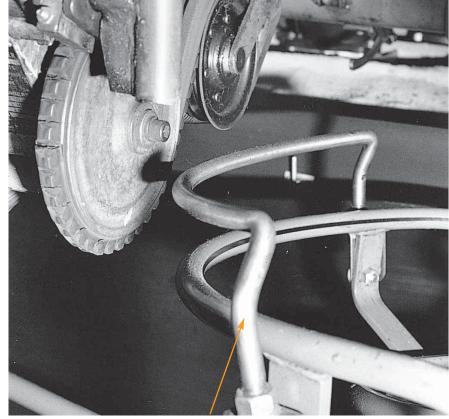
Reduce Ball Calls: The Fourth Rail system prevents light weight balls from rolling off the top rail and falling into the pit, which result in ball calls and, potentially, even more damaged balls.



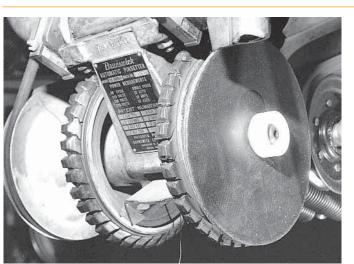
For Straight 'A', Mini Jetback and ZOT Conversions

#420331 (Even Lane Rear Ball Tracks) ..\$105.64

#420332 (Odd Lane Rear Ball Tracks)\$82.50



Fourth Rail



Ball Damage Deflector

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

#420204.....\$20.95



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.

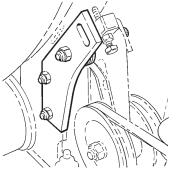


Features & Benefits

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.





Elevator Assembly

Gum Rubber Lift Rod Cover #420503 — 50 foot roll......\$252.50 #420504 — 90 inch cover......\$65.50

Replace worn and damaged Lift Rod Covers with ZOT's All-Natural Tan Gum Rubber Covers to restore optimum performance and reliability to your ball lifts and returns.

ZOT's Gum Rubber Lift Rod Covers are manufactured to the same specifications and surface texture as the Original Equipment Manufacturers (OEM) product.

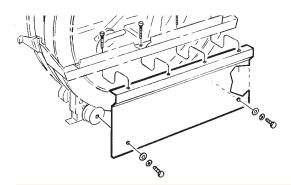


Rear Elevator Panel

#420485.....\$82.80

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.



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

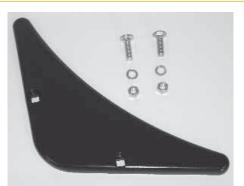
Prevent major Breakdowns: Check the Pin and modify your pinsetter before the Pin goes missing.

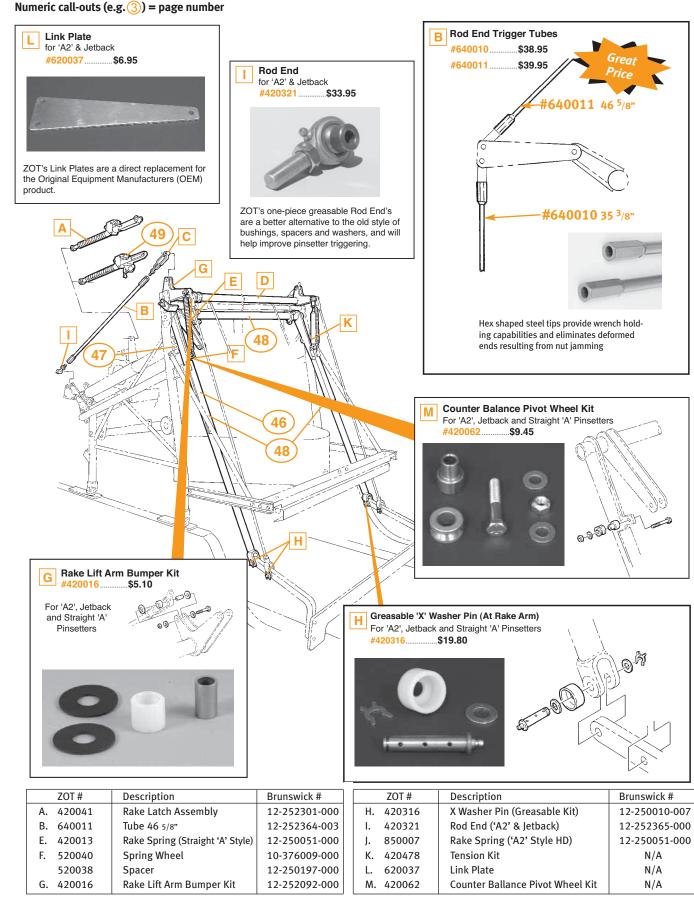
Easy to Install: no disassembly required to install the ZOT Location Pin.

Universal Urethane Wheel Guard For Straight 'A', Jetback and 'A2' Pinsetters #420305......\$25.95

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.





See Page 69 for Pricing

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\$27.95

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





#420013.....\$27.95

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

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

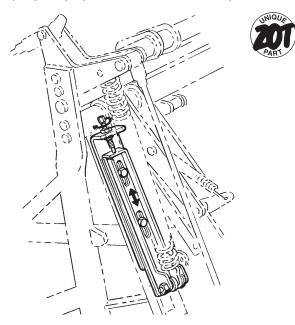
Premium Grade Spring Steel is used in the construction of the body of the Spring ... a far superior grade of steel than the original stationary spring product.

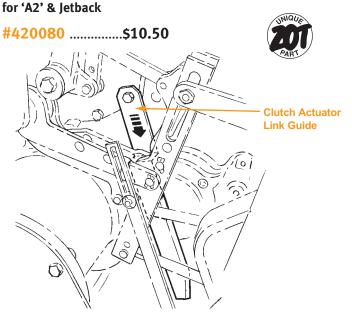
Clutch Actuator Guide

Adjustable Counter Balance Spring **Tension Kit**

#420478 7 & 10-pin side\$40.95

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.





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.

Rake Tube Conversion

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

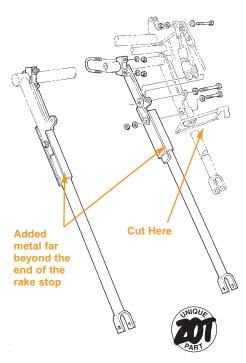
#420068 (7-Pin Side)\$159.50
#420069 (10-Pin Side)\$159.50

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



#420082 (7-Pin Side)\$159.50 #420083 (10-Pin Side)\$159.50

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



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

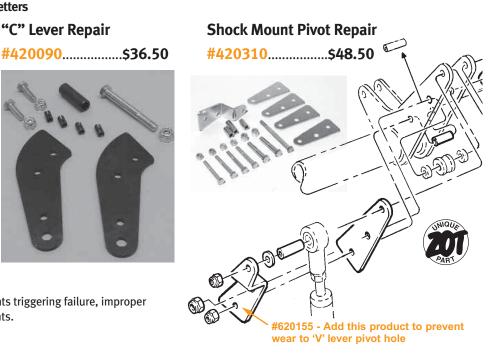
"V" Lever Repair #420071.....\$39.95

T



Features and Benefits Cover Elongated Rabbit Ear Holes: Prevents triggering failure, improper rake drop and automatic scoring miscounts.

"C" Lever Repair



Rake Return Pivot Repair Kit

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

#420181.....\$62.50

Features and Benefits

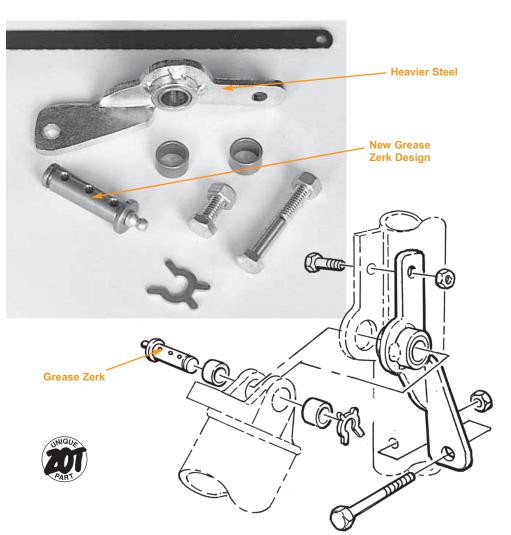
Big Cost Savings: Repairs the Rake-to-Spring tube pivot point at a fraction of the cost of a replacement rake assembly; and prevents severe damage to the rake tube cylinder and rake assembly.

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.....\$14.35





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.



Three-Piece Modular Rake Shaft Assembly

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

#420150.....\$279.50

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.

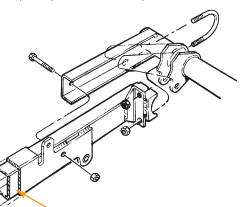
Lasts Longer – Saves Money: The ZOT Three-Piece Assembly is so much stronger than all the others that the benefits of quick and easy installation becomes secondary.

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.



Rectangular Tubing is 40% Stronger than the Original Round Tubing

New Style Spare Parts #420150: (Black)							
Description Part Number							
Rake Arm Weldmet (10-pin side) Square	#640147						
Rake Arm Weldmet (7-pin side) Square	#640148						
Center Tube Weldmet	#640149						
Older Model Spare Parts #	420032: (Grev)						

Jider Model Spare Parts #4	DescriptionPart NumberRake Tube (7-pin side)#640013					
Description	Part Number					
Rake Tube (7-pin side)	#640013					
Center Tube	#640014					
Rake Tube (10-pin side)	#640015					

See Page 69 for Pricing





Electronic Fast Drop Rake System

For Straight 'A' and ZOT Conversion **Pinsetters**

#420159.....\$419.50

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 5person 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.

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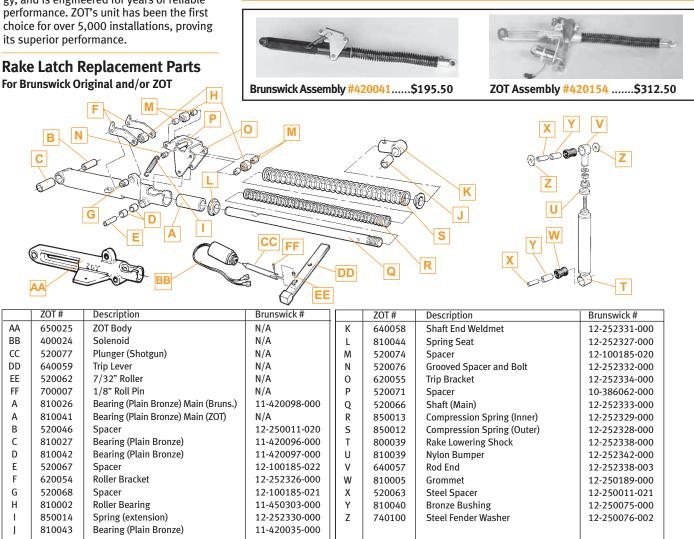
Electronic Trip Rake Lowering Hardware ZOT Rake Latch Assembly Only

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.

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

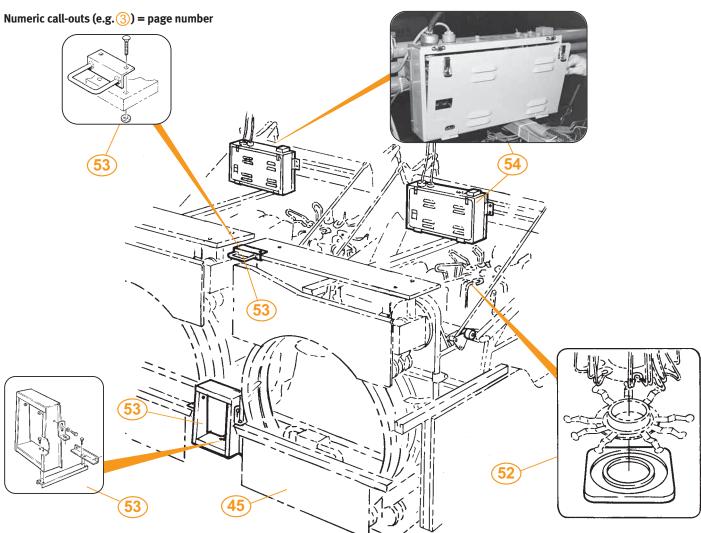
Only Available From ZOT: No other manufacturer or supplier offers a 'true' Electronic Fast Drop Rake System.



VISA Call ZOT at 1-800-525-8116 for more details

See Page 69 for Pricing

Tools and Safety Products Index



Turret Rebuild Tool

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

#420039.....\$91.05

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.....\$119.80

"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.

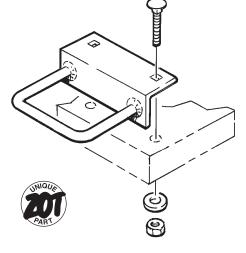


Catwalk Handle

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

#420312.....\$21.95





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.



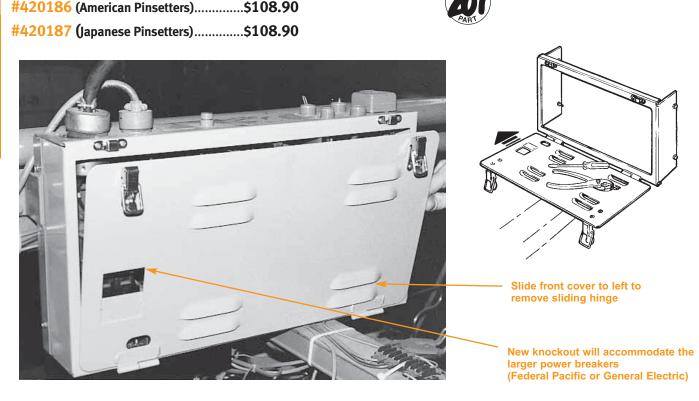
Oil Drip Pan for A2, Jetback & Straight 'A' Pinsetters

#640043.....\$45.90

Direct replacement: Same dimensions as the original Brunswick part. **Rigid Construction:** All seams are welded; heavy duty 16GA steel.

Tools and Safety Products

Pop Top Electrical Control Box Cover For 'A2', Jetback and Straight 'A' Pinsetters



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 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)

Pit Cushion Assembly Index

For 'A2' and Jetback Pinsetters

ZOT#	Description	Brunswick#	Numeric call-outs (e.g. (3)) = page number
A. 620093	Curtain Rod Bracket LH	12-252269-000	
620094	Curtain Rod Bracket RH	12-252268-000	CC
B. 420175	Cushion Mount Bracket	12-252341-000	
C. 620072	Support Arm (cushion)	12-252073-000	(54) (54)
D. 800006	Shock Absorber (cushion)	12-252173-000	
E. 810011	Rod End (uniball) LH THD	12-252060-000	
F. 640010	Tube (cushion lift 35-3/8")	12-252364-002	
G. 420321	Rod End (lift tube)	12-252365-000	
H. 800017	Pit Cushion ('A2' & JB)	12-862578-000	
I. 810029	Cushion Facing ('A2' & JB)	12-252308-000	V
	Strap on Facing Only		
J. 810012	Grooved Bearing (bronze)	10-424001-000	G G S S
K. 520012	Spacer (cushion mount pivot)	12-100185-036	
L. 620010	Link (cushion)	12-252069-000	
M. 520014	Bushing (cushion link)	12-252350-000	
N. 810013	Plain Bearing (bronze)	11-420094-000	F (55)
0. 810014	Urethane Follower Link Roller	12-252351-000	F (55)
P. 650005	Follower Link (steel casting)	12-252346-000	
Q. 520010	Spacer (grommet steel	12-250011-002	
	bushing)		
R. 520015	X Washer Pin (short)	10-229601-000	
S. 520016	X Washer Pin (long)	10-229602-000	
T. 810005	Rubber Bushing (urethane	12-250189-000	
	grommet)		
U. 420218	X Washer 1/4"(pkg. 25)	11-230005-001	
V. 620037	Link Plate ('A2' & JB tri)	12-252359-000	
W. 420223	Washer (fiber _" ID)	12-250076-002	
X. 520009	Spacer (tri-plate link)	12-250011-003	
Y. 810007	Bearing (bronze tri-plate)	12-250248-000	
Z. 520011	Spacer (follower roller)	12-252349-000	
AA. 520013	Spacer (follower casting)	10-386092-000	
BB. 740127	Washer 13/32" ID (special	11-190512-000	
CC. 640011	follower) Tube 46 5/8"	12-252364-003	
DD. 710204	Cushion Arm Bolt	12-252325-000	
EE. 650054	Follower Link (aluminum casting)	12-232325-000	
FF. 710111	Hex Screw 2-20 x 3 1/2		
GG. 740118	1/2 SAE Washer		
HH. 710337	Screw 3/8-24 x 2 1/4		
II. 710156	Hex Screw 3/8-24 x 2 3/4		
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		J (54) ^w –
	See Page 69 for Pricing		

See Page 69 for Pricing

Cushion Arm Rebuilding Kit

For 'A2' and Jetback Pinsetters

#420018#42Kit includes:Kit inSteel Follower Link castingAlum

#420063.....\$89.95 Kit includes: 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.

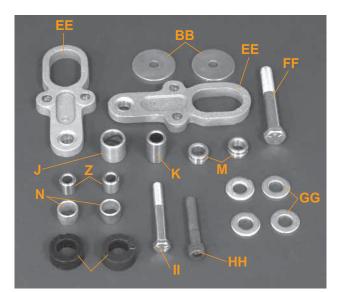
Reduced Maintenance: Kit includes pre-grease grooved bushings and Steel Cushion Link with built in grease zerk for easy and reduced maintenance. **Cost Savings:** Kit includes ZOT "Steel" Follower Links that outlast all others.

"Mini" Cushion Arm Rebuild Kit

#420509\$55.65

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.



"Steel" Follower Link For 'A2' and Jetback Pinsetters

#650005.....\$22.85



Featur Outlas

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.....\$1.70





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.....\$24.50



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.....\$7.95



Direct replacement for original product.

Curtain Bracket Nut Plate Kit For 'A2' and Jetback Pinsetters

#420020.....\$12.50



Note: Two brackets per kit

Features & Benefits Nuts are Stationary: Prevents nuts from rotating or becoming loose through

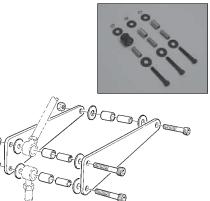
machine vibration. Easy to install: Easy to position and hold in place. Saves installation

time and frustration.



Tri-Plate Bushing Kit For 'A2' and Jetback Pinsetters

#420017.....\$25.90



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.....\$6.95

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



Cushion Mount Bracket #420175.....\$36.80

- Solid Steel Construction
- Includes Factory Installed Bronze Groove Bushing

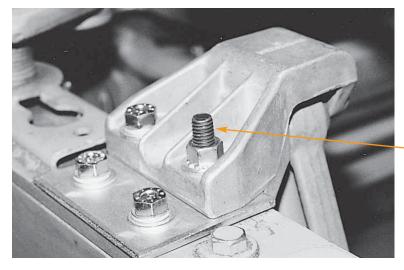


6

Mount Bolt Repair Kit

For 'A2' and Jetback Pinsetters

#420074.....\$35.95



Easy Permanent Repair of Broken Cushion Brackets Bolts

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.

No need to

remove broken bolts

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

Rubber Pit Curtain

For 'A2' and Jetback Pinsetters

#800005\$175.90



Features & Benefits

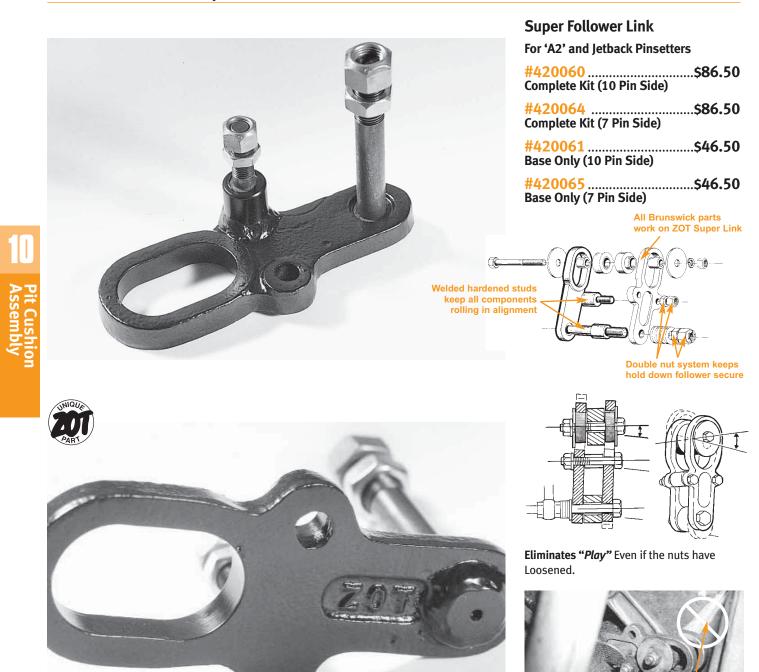
Non Reflective Surface: Matte or dull surface finish prevents scanner washout preventing scoring miscounts.

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.





Features & Benefits

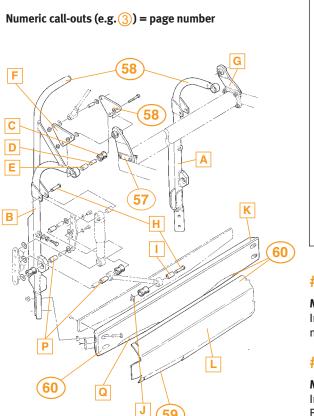
Reduced Wear and Tear: ZOT's Unique Super Follower Link — which is precision engineered in 'High Tensile' steel – features stationary, and recently reinforced, welded and hardened studs which prevent the followers from shifting during every cycle; even when the nuts loosen. It's this shifting, or 'Play' 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.

Damaged Kickbacks

Super Link is the Solution.

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.



For Straight 'A' Pinsetters

ZO	Γ#	Description	Brunswick#
Α.	420005	RH Pit Cushion Arm (10 P/S)	12-250074-000
В.	420006	LH Pit Cushion Arm (7 P/S)	12-250073-000
C.	810005	Grommet	12-250189-000
D.	520009	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
	420011	Bracket Assy. Wishbone (RH)	
Н.	520049	X Washer Pin	12-250010-006
I.	520010	Spacer (Grommet Steel	12-250011-002
		Bushing)	
J.	420218	X Washer	11-230005-000
к.	420012	Pit Cushion Assy. (Model 'A')	12-250166-051
L.	420027	Pit Cushion Facing Leather	12-250012-000
		('A')	
м.	620023	LH Mounting Brackets	12-252005-003
	620031	RH Mounting Brackets	12-252005-002
Ν.	620032	"U" Bracket	12-252006-000
0.	730176	Clamp Nut (spring Assembly)	11-180006-000
Ρ.	810006	Bearing (bronze)	12-250075-000
Q.	420026	Rubber Patch Kit	12-250281-000
		Can Dama (O few Drising	

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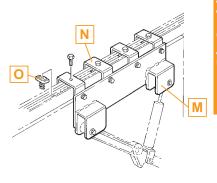
#420513.....\$249.50

Mini Cushion Support Hardware Includes: all parts plus bolts & nuts, for one-lane

#420514.....\$121.15

Mini Cushion Starter Hardware Includes: 4-each "U" Brackets plus Bolts & Nuts.

One kit required per center

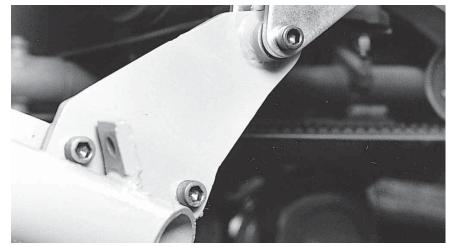


Bolt-on Wishbone Brace Permanent Repair Kit For 'A2', Jetback and Straight 'A' Pinsetters

#420010 (7-Pin Side).....\$73.50

#420011 (10-Pin Side)......\$73.50

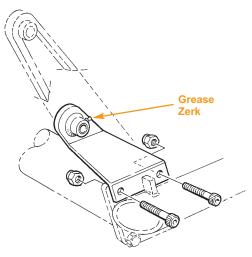




Features & Benefits

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.





Replacement Pit Cushion Arms For Straight 'A' Pinsetters #420006 (7-Pin Side)\$382.00 #420005 (10-Pin Side)\$360.75





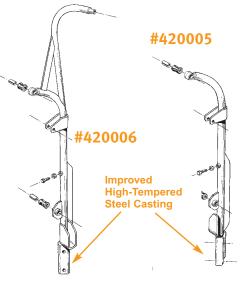
Features & Benefits

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





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...\$14.95



Stabilizer Link Bushing Kit For Straight 'A' Pinsetters



Features & Benefits Restores assembly to peak performance, reduces league play interruptions, and improves trigger sensitivity.

Polyvinyl (PVC) Cushion Covers

For 'A2' & letback Pinsetters

#810029.....\$59.95

(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\$1.40

(Heavy Duty Tie-Wrap only)

Leather Cushion Covers

For Straight 'A' and ZOT I Conversions

#420027......\$329.50

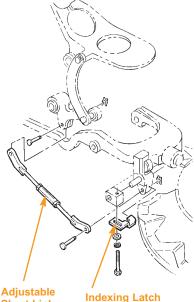
Features Benefits

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

Adjustable Short Link

For 'A2' Jetback & Straight 'A' Pinsetters

#420073.....\$35.90



Short Link

Indexing Latch Location Bracket

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\$9.95 (Fail to index latch)

Carpet King

O

#420505.....\$79.90

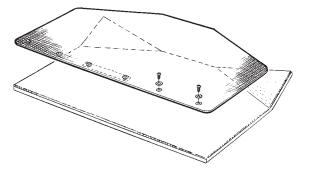
ZOT's 'Easy-to-Maintain" Hardwearing Rubberized Woven Belting Material Carpet King does an excellent job when it comes to speeding up pins into the elevator.

For Straight 'A' & ZOT I Conversion

#420024......\$71.80

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.



Factory Rebuilt Cushion Assembly

For Straight 'A' and ZOT I Conversions

#420012.....\$698.50



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.



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.

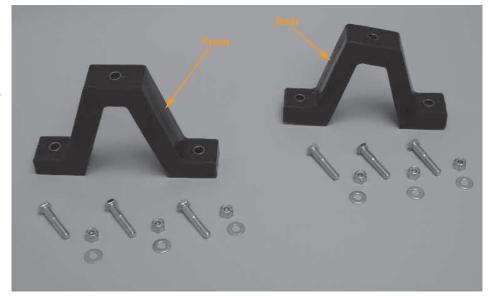
Note: We recommend use of #420046 Rubber Primer to ensure the best adhesion to rubber surfaces.

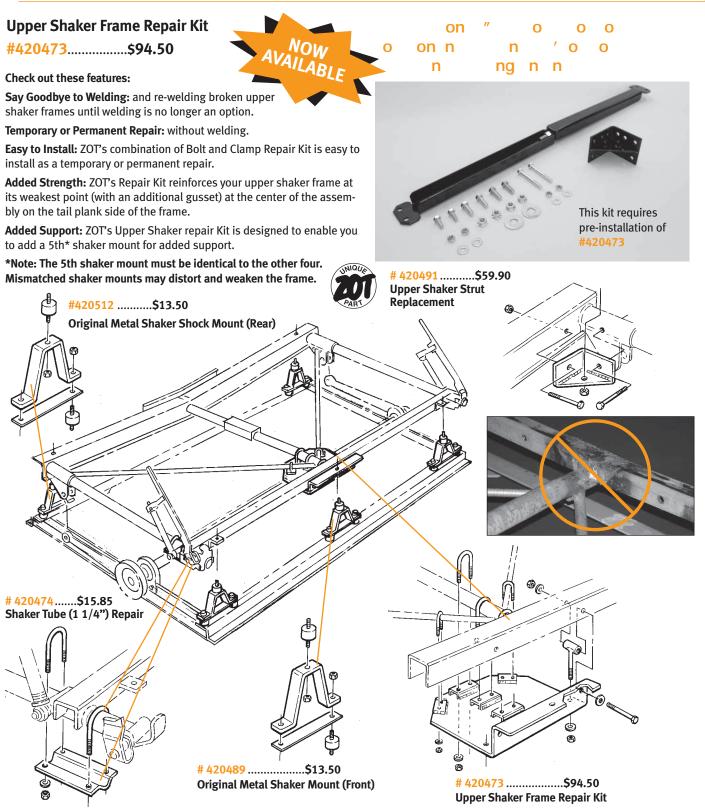
Urethane Pit Shaker Mounts

#420507 (rear)\$17.80 #420508 (front) ...\$17.80

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.









Rubber Pit Mount

#420490.....\$1.75

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



ZOT II Conversion Components

"Featured are the main components-and how they work and relate to your Straight 'A' Pinsetters"

Phase I

ZOT Infrared Triggering

#400150\$421.50

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.

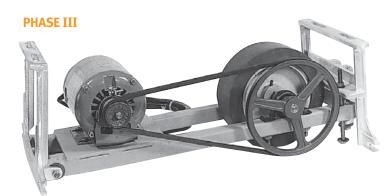
Easy to Align: ZOT's Infrared Triggering features an exclusive 4-unit LED system which indicates when the sensor signal is strongest.

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

#400145 Time Delay I	Plus System\$165.25
#400147 Expander Ca	ard\$68.50
#400144 Infrared Ser	nsor 'add-on' Kit \$69.25
#420001 Electronic Ge	earbox Trip Assembly \$118.50

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.



Replaces Brunswick #12-862608-008 *Note:* order by ZOT part number to ensure best price and features

Phase III

ZOT Ball Accelerator

#420301 (Maxii	mum Acceleration)	\$979.00
#420130 (Stand	lard Acceleration)	

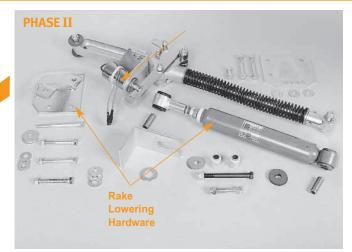
Fastest Wheel Driven Accelerator Available: ZOT's Ball Accelerator improves ball return time by upwards of 15%, without speeding up the pinsetter. This acceleration time is twice as fast as any competitive wheel driven unit available.

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).

Pinsetter Conversion Kits

"ZOT Offers 'Four' Attractive Options to Update Your Straight 'A' Pinsetters"



Phase II

ZOT Electronic Fast Drop Rake

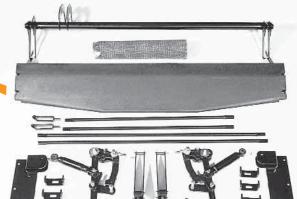
#420159\$419.50

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 I



Extended Pinsetter Life: In Phase $I \;\;$, 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

Note: You must have Phase I & II installed to yield peak perform

no longer available from the original manufacturer.

ance from Phase I .

Pinsett

Replaces Brunswick #12-862907-000 Note: order by ZOT part number to ensure best price and features

Phase I ZOT Cushion Suspension

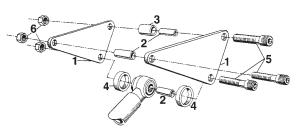
#420414\$1,975.00

'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.

ZOT I Conversion Service Manual

#160082.....\$43.40 Includes: 6:3 >5 Total exploded diagrams of all models ٠ produced from 1964 to present. • Adjustment Section. • Trouble Shooting Section. • Lubrication Guide. • ZOT I Conversion Suspension Package (includes exchange cushion) #420166\$1,795.00 2 8 Section C – Lift Spring Assembly 99 **A**3 Section D — **Stabilizer Arm Assembly** Section F --Air Shock Absorber Assembly Section E — **Suspension Bolt Assembly** with without **30**4 counterbore counterbore 26 10 56 **Complete Cylinder & Piston Assembly** #420127 \$267.80



Air Shock Seal Kits

#420146.....\$13.99

Eliminates Ball Jams in Pin Wheel: Proper operating air shock stops the ball at the cushion.

Retain: Properly operating air shock will reduce ball impact damage in related parts.



Section *B* — Tri-Plate Assembly

Section A — Miscellaneous					Section <i>E</i> — Suspension Bolt Assembly			
Item	Part Description	Order Number	Old Number	Item	Part Description	Order Number	Old Number	
1	Cushion Mounting Plate Assy.	420139	10311-0-0	1	Suspension Bolt Assembly	420105	10113-01	
2	Curtain Hanger Casting	650009	10105-01	2	Urethane Grommet	810033	10213-02	
3	Grommet (Hour Glass Shape)	810005	10202-02	3	Bronze Bushing	810007	10113-03	
4	Pit Cushion Arm 10-pin side Assy	420093	10202-0	4	Fiber Washer (Thin)	420223	10113-04	
5	Pit Cushion Arm 7-pin side Assy	420094	10203-0	5	Square Head "X" Washer Pin	520058	10213-05	
6	Spring Bar 10-pin side Assy	420101	ALL	6	"X" Washer	420218	10113-06	
7	Spring Bar 7-pin side Assy	420104	ALL	7	5/8" – 18 Hex Nut	420244	10113-07	
Secti	on <i>B</i> — Tri-Plate Assembly			8	5/8" – Lock Washer	420221	10113-08	
1	Tri-Plate	620019	10101-01	9	5/8" – Flat Washer	420245	10113-09	
2	Steel Space Bushing	520009	10101-02	Secti	on <i>F</i> — Air Shock Absorber Ass	embly		
3	Bronze Bushing	810007	10101-03	1	Air Cylinder w/counterbore	640052	10218-01	
4	Nylatron Washer	420211	10101-04	11	Air cylinder w/o counterbore	640051	10181-01	
5	3/8" – 16 x 2 1/2" S.H.C.S.	420212	10101-05	2	End Mount Assembly	420147	10218-02	
6	3/8" – 16 Lock Nut	420213	10101-06	3	Urethane Grommet	810033	10281-03	
Secti	on C — Lift Spring Assembly	_1	1	4	Bronze Bushing	810006	10118-04	
1	Lift Spring	850008	10210-02	5	Steel Spacer Bushing	520009	10118-05	
2	Spring Plug	650011	10210-02	6	Fiber Washers	420223	10118-06	
2	Female Uni-ball	810045	10110-03	7	Air Intake Valve	420161	10118-07	
4	$5/16^{\circ} - 24 \times 4^{\circ}$ Stud	420231	10110-04	8	Adjustable Air Outlet Valve	420162	10218-08	
4 5	5/16" – 24 Hex Nuts	420231	10110-05	9	1/4" – 20 x 1/2" B.H.S.	420255	10118-09	
6	5/16" – 24 Hex Nuts 5/16" – Flat Washers		10110-08	10	3/8" – 16 x 1 1/4" H.H.M.S.	710131	10318-10	
7	$5/16^{\circ} - 18 \times 11/2 \text{ H.H.M.S}$	420233 420234	10110-07	11	3/8" – 16 x 2 1/4" H.H.M.S.	710141	10218-11	
8	5/16" 18 Lock ut	420234	10110-08	12	3/8" – 16 Hex Lock Nut	420213	10218-12	
9	Male Uni-Ball	810034	10111-02	13	Mount Bracket	650018	10117-01	
			10111-02	14	Piston Rod End Mount	420143	10217-02	
	on <i>D</i> — Stabilizer Arm Assembl		1	15	3/4" 16-Bulk Head Nut	420247	10117-05	
1	Turnbuckle Body	650008	10204-01	16	3/4" Split Collar (Threaded)	800020	10317-06	
2	End Mount (Mach. End)	640046	10204-02		3/4" Split Collar (No Threads)	800022	10217-06	
3	End Mount (Arm End)	640047	10204-03	17	Piston Rod (With Flat)	520053	10217-07	
4	Fiber Washers Arm End (Thin)	420223	10204-04		Piston Rod (No Flat)	520050	10417-07	
5	Fiber Washers Mach. End	420215	10104-05	18	Piston Rod Spring	420248	10117-08	
6	Urethane Grommet Mach. End	810004	10204-06	19	Spring Sleeve	420249	10117-09	
7	Bronze Bushing Mach. End	810032	10104-07	20	Washer (special)	420250	10117-10	
8	Urethane Grommet Arm End	810033	10204-08	21	Cyl. End Cap (Inc. Flange Bushing)	520051	10217-11	
9	Bronze Bushing Arm End	810007	10104-09	22	Flange Bushing	810036	10117-12	
10	"X" Washer Pin	520049	10104-10	23	Aluminum Piston	520052	10217-13	
11	"X" Washer	420218	10104-11	24	Teflon Ring	420253	10217-14	
12	5/8" – 11 R.H. Ex. Heavy Nut	420219	10104-12	25	Gasket	420251	10117-15	
13	5/8" – 11 L.H. Ex. Heavy Nut	420220	10104-13	26	Flat Machinery Shim	420254	10217-16	
14	5/8" – Lock Washer	420221	10104-14	27	"X" Washer Pin	520049	10117-18	
15	Tab Lock Washer	740129	10104-15	28	"X Washer	420218	10117-19	
For A	ccelerator parts see page 13			29	3/8" – 16 x 3 1/4" Gr. 2 MS	420252	10117-20	
				20		400044	40447.00	

30

3/8" Flat Washer

For Accelerator parts see page 13 For Electronic Fast Drop Rake parts see page 49

See Page 69 for Pricing

420241

10117-22

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)**\$192.50**

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.

#800154

#800153

#800155

• **Easy to install:** either by the center mechanic or a lane resurfacer.

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

#420482.....\$39.50

15" x 33" fits all AMF and early model Brunswick

#420483.....**\$37.50** 19" x 23 3/4" for early model Brunswick

#420484.....\$48.40

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

0

#420481.....\$35.90 1 3/4" x 1 1/2" x 43" (per lane)

#420511.....\$39.90

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.

ote:

Holes to secure the flat gutter to the foundation need to be drilled at the time of installation. Hardware is not included.

1" Thick

Hardware to install pre-drilled Flat Gutter Side-Rails is included.

Trim the finished assembly to correct length at installation.

ZOT PermaDeck Edge Boards Fits AMF & Brunswick Wood Pindecks

#420480.....\$38.70 1" x 2 1/2" x 46" (each)

#420510.....\$39.50

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 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)

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.

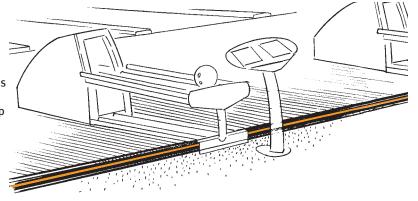
How it all works: You start by measuring the height of the riser (step) from the settee area to the the approach, and then the length of the fascia needed to extend across the width of the approaches.

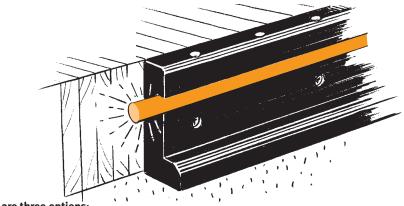
Note: Fascia and Quarter Round Trim (with or without GlowRod) is a custom product that's "Made-to-Order".

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.

Part #	Description	*Price Per Foot						
	Fascia With & Without Quarter Round Trim (Order Glow Rod and Glow Dowels Separately)							
800137	1" NO/Quarter Round Trim -NO GLOW	\$2.59						
800138	1.5" NO/Quarter Round Trim – NO GLOW	3.62						
800139	2" W/ Quarter Round Trim	7.27						
800140	2.5" W/ Quarter Round Trim	8.40						
800141	3" W/ Quarter Round Trim	9.21						
800142	3.5" W/ Quarter Round Trim	10.34						
800143	4" W/ Quarter Round Trim	11.38						
800144	4.5" W/ Quarter Round Trim	12.74						
800145	5" W/ Quarter Round Trim	13.63						
800146	5.5" W/ Quarter Round Trim	14.67						
800147	6" W/ Quarter Round Trim	15.93						
800148	6.5" W/ Quarter Round Trim	17.18						
800149	7" W/ Quarter Round Trim	18.38						
800150	7.5" W/ Quarter Round Trim	19.61						

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.





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

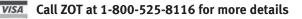
Glow Dowels can also be added to either Option 1 or 2.

Part #	Description	*Price Per Foot						
	Quarter Round Trim, GlowRod & Glow Dowels							
800151	2.74							
GLOW	ROD for installing in Fascia (add to per foot	price of fascia)						
420493	Glow Rod — Yellow/Green	10.61						
420494	Glow Rod — Green	10.61						
420495	Glow Rod — Red	10.61						
420496	Glow Rod — Orange	10.61						
	GLOW DOWELS for installing in Fascia							
420501								

* 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



Mask & Lane Products

Mask Light Bulb Replacement "Replace incandescent bulbs with LED's"

#400265 Red LED (12-Volts) for centers with AMF Pinspotters: **\$13.50 each #400261 Red LED** (24-Volts) for centers with Brunswick Pinsetters: **\$13.50 each**

ZOT has made improvements to the LED replacements for incandescent light bulbs on Mask units. The new LED's are RED (when lit), which yields a "greater degree of brightness" in typical bowling center lighting.

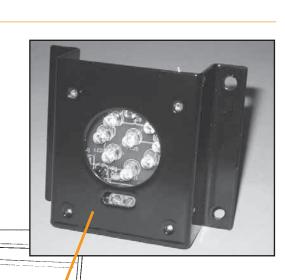
The Effective Life of the product is 100 times longer than the bulbs they replace. That's a life expectancy of 100,000 hours of run time. **Power Saving:** LED's use less than 1/10th of the power used with incandescent bulbs.

They are easy to install: Simply push and turn, just like the old bulb.

Mask Light Conversion Kit

#400262.....\$22.95

- **Stop Constant Replacement:** of older technology incandescent lamps. # 90, #94, #624, #1692 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.



"Improved" Increased Brightness Level

ZOT Pinsetter Parts, Inc., Warranty

BOWLING

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- 1. ZOT Pinsetter Parts, Inc., Warrants Products to be free from defects in material and workmanship under normal conditons 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.

Lane Products

Price List

0		0		0		о		0		0	
200003	198.24	400163	38.53	431015	41.51	520046	2.95	640046	33.20	800029	58.31
240009	29.92	400182	365.17	431023	121.51	520049	4.20	640047	33.40	800030	17.47
240011	13.70	400187	7.21	431025	165.14	520050	24.17	640051	43.90	800031	18.12
240016	24.50	400214	28.83	431027	41.51	520051	42.35	640052	49.90	800032	18.28
240017	66.63	420016	5.10	431031	96.47	520052	34.66	640054	151.04	800033	3.97
290005	29.50	420026	41.40	431034	229.78	520053	29.15	640055	15.54	800039	62.30
290006	59.01	420032	433.89	431040	50.56	520058	5.85	640057	13.90	800057	4.84
290008	29.50	420041	199.50	431042	96.47	520062	3.75	640058	16.30	800153	74.00
290019	35.37	420046	35.50	431043	156.29	520063	2.50	640059	22.60	800154	44.90
300006	55.92	420066	17.75	431046	108.88	520066	59.19	640101	101.40	800155	44.90
300007	33.17	420088	11.61	431047	58.12	520067	1.85	640147	133.68	810001	19.46
300023 300026	15.42 11.02	420093 420094	196.75 196.75	431049 431054	38.58 49.79	520068 520071	1.70 2.80	640148 640149	131.58 151.80	810002 810003	13.60 1.05
312003	0.16/ft.	420094	49.90	431054	156.85	520071	2.80	650001	33.30	810003	4.58
330029	14.24	420101	49.90	440001	31.26	520074	2.33	650005	22.85	810004	0.69
330030	10.42	420105	49.70	440002	23.77	520077	9.05	650008	32.65	810006	5.95
330051	4.90	420139	215.50	440003	19.77	520088	3.82	650009	39.95	810007	6.40
400001	38.76	420143	32.87	440004	26.44	520090	10.83	650011	13.95	810011	13.47
400005	38.76	420147	35.62	440008	42.81	520093	35.26	650018	39.95	810012	4.62
400009	127.15	420148	26.14	440009	27.45	520094	7.95	650019	71.93	810013	0.50
400010	127.15	420149	28.16	440010	24.66	520095	12.75	650020	68.65	810014	1.70
400011	220.68	420161	13.64	440011	7.80	520096	4.19	650025	78.90	810023	25.65
400012	218.65	420162	24.95	440017	38.83	620001	6.25	680005	24.50	810024	3.95
400014	201.76	420175	36.80	440018	17.81	620010	7.95	700007	0.41	810026	3.22
400021	37.95	420185	4.64	440020	28.94	620014	11.10	700026	0.29	810027	1.40
400022	22.00	420211	25.40	440034	34.27	620019	14.95	710111	1.15	810029	59.95
400023	213.43	420212	7.10	440037	25.55	620023	32.50	710131	0.41	810032	5.95
400024	63.38	420213	12.50	440039	11.85	620031	32.50	710141	0.55	810033	4.73
400029 400030	469.10 469.10	420215 420218	7.40 4.95	440041 440042	47.29 29.30	620032	28.25	710156	0.77	810034	15.10
400030	17.56	420218	4.95	440042	50.51	620037 620054	6.95 4.50	710204 710244	3.80 0.29	810036 810037	4.44 29.50
400032	234.50	420219	17.81	440043	11.31	620055	9.50	710244	1.32	810037	27.90
400052	12.21	420220	6.43	440056	21.32	620062	5.24	730148	0.64	810039	2.20
400064	499.50	420223	3.30	440058	11.55	620072	169.07	730176	1.55	810040	3.21
400065	46.27	420231	29.60	440070	11.49	620093	20.90	740100	0.90	810041	6.96
400066	499.50	420232	4.45	440071	11.85	620094	20.90	740106	0.35	810042	1.05
400072	254.10	420233	4.35	440072	41.03	620107	6.96	740118	0.09	810043	1.52
400075	125.28	420234	7.56	450001	14.90	620154	82.50	740127	0.52	810044	4.20
400078	137.27	420235	8.28	450002	25.91	620156	46.62	740129	0.95	810045	14.55
400082	11.85	420236	6.49	450005	19.24	620158	13.50	800006	44.10	810053	16.50
400083	11.85	420241	4.46	450007	21.56	620162	3.33	800018	4.94	850006	8.95
400084	12.74	420244	13.95	450011	6.25	620165	22.90	800019	5.15	850007	27.95
400094	17.50	420245	7.42	520001	13.64	640010	38.95	800020	12.95	850008	22.90
400102	498.50	420247	7.90	520009 520010	2.30	640011	39.95	800022	12.74	850012	8.15
400107 400108	36.21 58.60	420248 420249	19.95 8.90	520010 520011	1.75 1.70	640013 640014	224.71 91.97	800024 800025	23.08 27.87	850013 850014	6.25 2.80
400108	21.97	420249	9.35	520011	1.70	640014 640015	209.29	800025	32.07	850014	4.91
400109	15.89	420250	27.34	520012	2.10	640015	209.29	800028	163.01	850015	9.76
400110	21.38	420252	4.95	520013	1.48	010037					7.70
400112	308.71	420252	22.93	520014	2.45			MPORIA	NT NOTIO	.E	
400113	223.79	420254	8.50	520016	2.75						
400114	223.79	420255	11.49	520017	16.61		All Pricing	include	d in this c	atalog a	re
400121	11.44	420256	21.09	520023	18.25		the sugges				
400133	38.71	420274	14.35	520024	18.55				e 1, 2009		
400137	252.20	420275	15.49	520025	7.95				applicable		
400140	407.50	420276	14.77	520029	23.25				the USA"		
400144	69.25	420324	34.12	520030	33.54			Unity III	the USA		
400147	68.50	420331	105.64	520038	4.90		Dricing of	bioct to	change w	ithout no	tico
400153	69.50	420332	82.50	520040	3.10	All Pricing subject to change without notice.					lice.
400160	37.94	420394	13.28	520044	19.61						

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