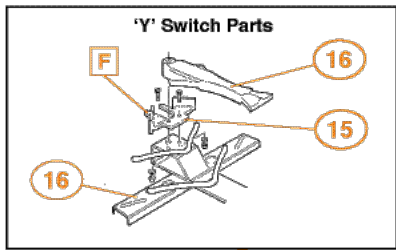


# Ball Return Assembly

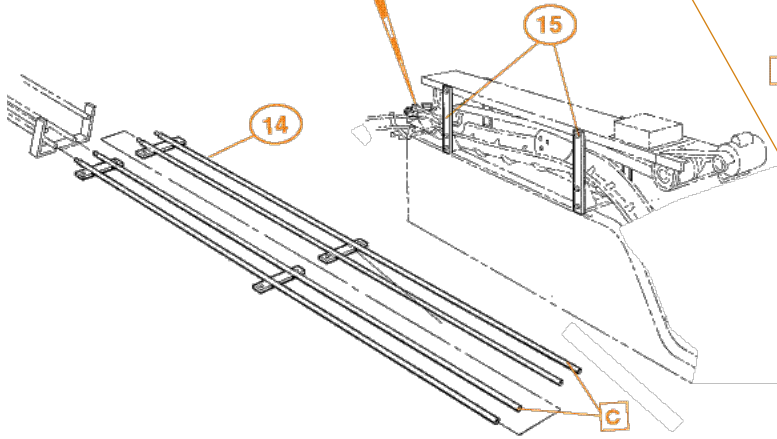
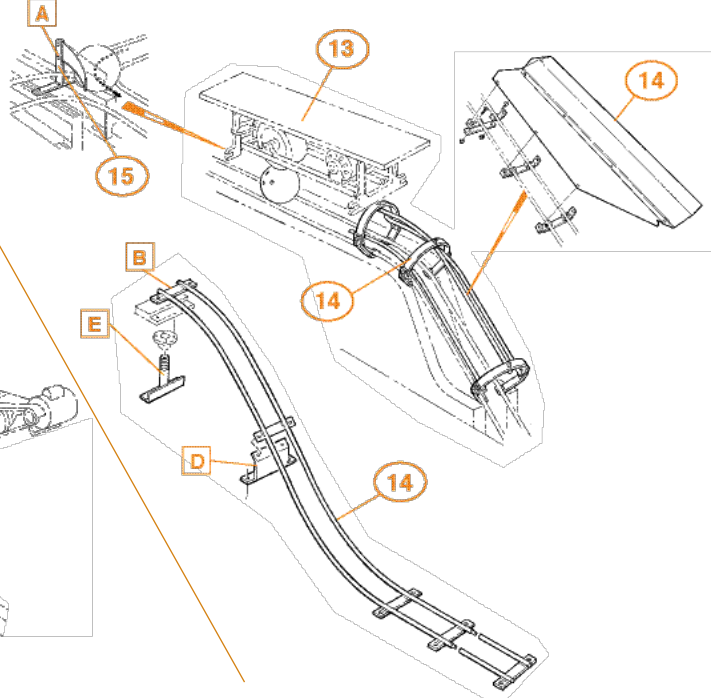
## Index

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

### For 'A2' and Jetback Pinsetters



### For Straight 'A', ZOT Conversion and Mini Jetback



ZOT #	Description	Brunswick #
A. 420284	Ball Deflector Assembly	12-750536-000
B. 420330	Drop Sweep Tube Track 'A'	19-201015-051
C. 640101	Tube Track Assembly (144")	19-088167-000

ZOT #	Description	Brunswick #
D. 620158	Support Bracket 'A'	19-088155-000
E. 640075	Support Pipe 'A'	19-088437-000
F. 420072	Rear Stop 'Y' Switch Conversion	12-862570-000

Ball Return Assembly

## ZOT Front Ball Lift Relay Box

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

**#400208**

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

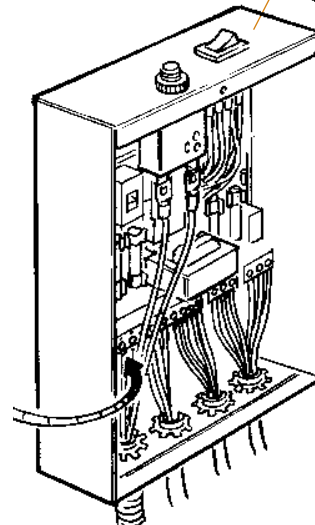
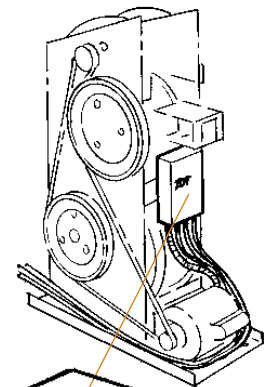
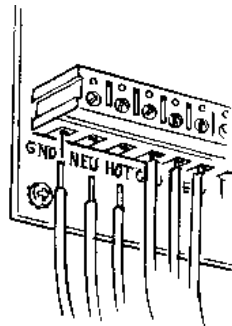
### Check out these benefits

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

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

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

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



## Hand Dryer Transformer - 24 Volts output

**#400256**

## Features & Benefits

### Faster Bowling = Increased Revenues:

ZOT's Ball Accelerator improves the ball return time, without speeding up the pinsetter, resulting in upwards of 15% increase in ball return speed – depending on which model you install, and on which machines. This translates into potential savings of anywhere between 7 to 15 minutes for a typical league. Faster bowling makes the game more fun for both league and recreational bowlers, and adds to your bottom line.

### Fastest Wheel Driven Accelerator Available:

ZOT's acceleration time is twice as fast as any competitive wheel driven unit available, including the original manufacturers Jetback Ball Booster.

### Eliminates Crisis Breakdown Time:

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

**Proven Reliability:** Has a forty year proven track record.

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

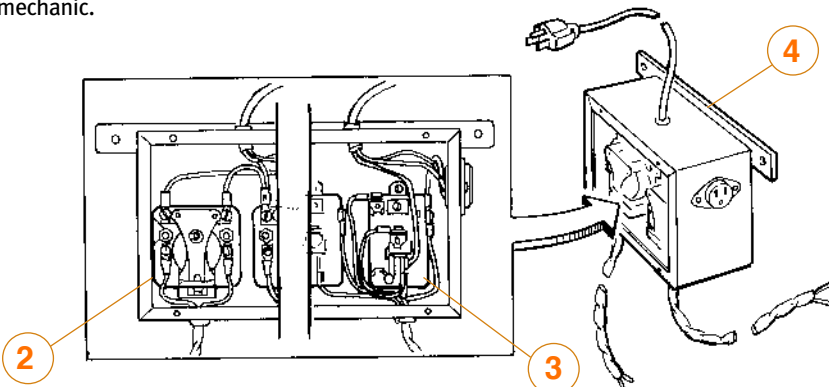
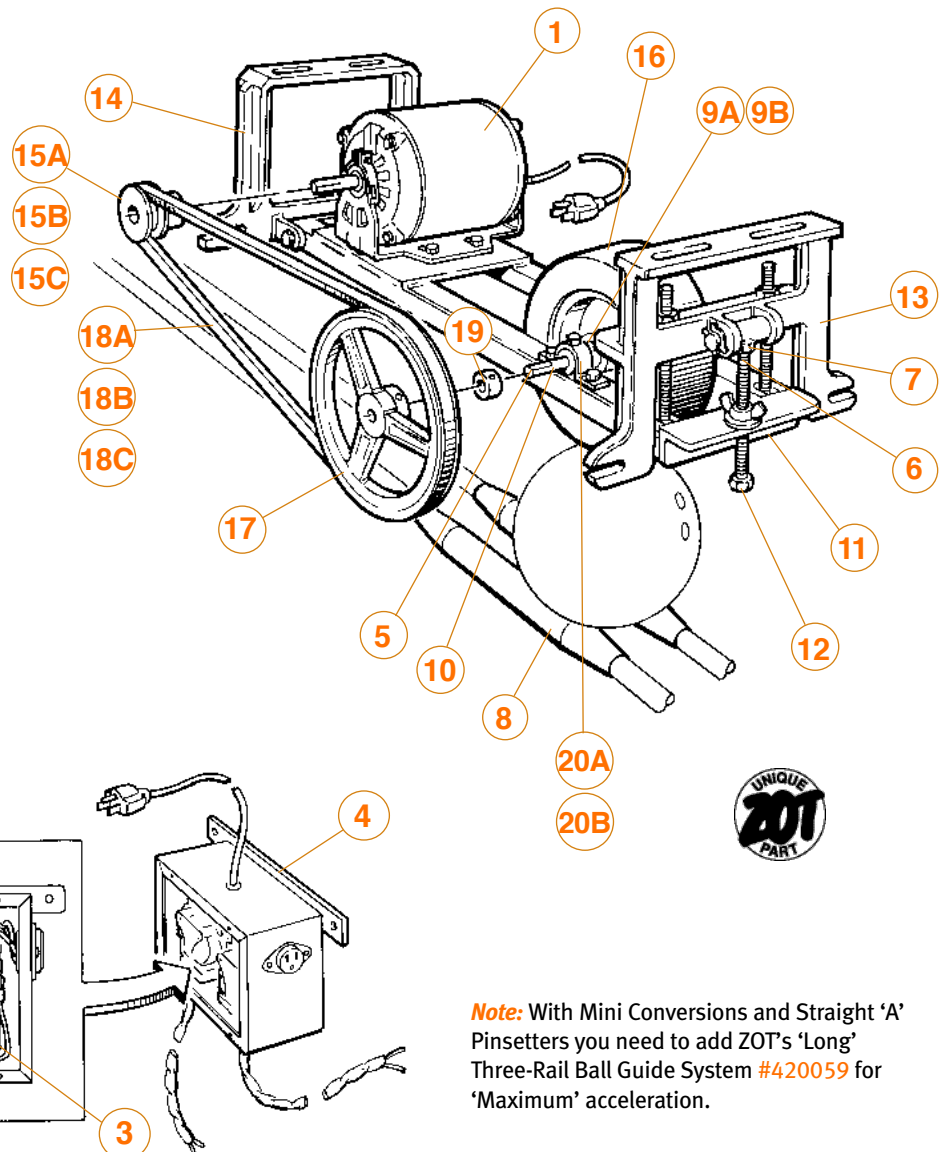
## Ball Accelerator

### For Mini Conversions And Straight 'A' Pinsetters

**#420301 Maximum Acceleration (115V/60Hz)**

**#420130 Standard Acceleration (115V/60Hz)**

**#420322 Standard Acceleration (230V/50Hz)**



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

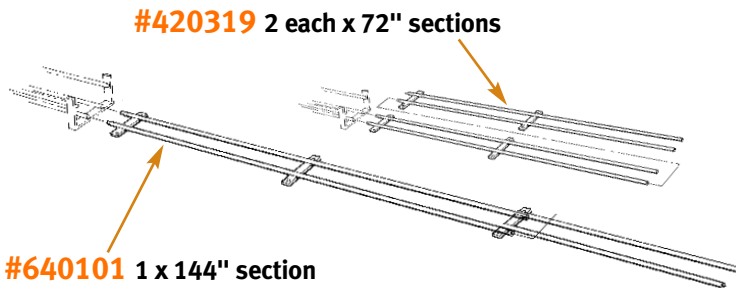
## Replacement Parts

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 Bearing	17.	800029	Large Pulley
4.	400014	Relay Box Assembly	12.	640055	"T" Bolt Only	18A.	800030	Belt Slow For 2" Pulley
5.	420148	Shaft Kit	13.	650019	End Bracket (T-Bolt)	18B.	800031	Belt Medium For 2 1/2" Pulley
6.	420149	"T" Bolt Kit	14.	650020	End Bracket (Standard)	18C.	800032	Belt Fast for 3 1/2" Pulley
7.	420236	3/8" - 16 x 6 1/2" Bolt (2ea.)	15A.	800024	2" Pulley	19.	800033	Locking Collar
8.	420256	Vinyl Tubing	15B.	800025	2 1/2" Pulley	20A.	810037	3 3/8" Pillow Block Bearing
9A.	420275	Key 3/16" Sq. x 2 1/2" (6ea.)				20B.	810038	3" Pillow Block Bearing

## Ball Return Assembly

### Steel Tube Track

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



#### Features & Benefits

**Direct Replacement:** ZOT's Steel Tube Track is a direct replacement for the original Brunswick 144" steel tube track, and is price competitive.

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

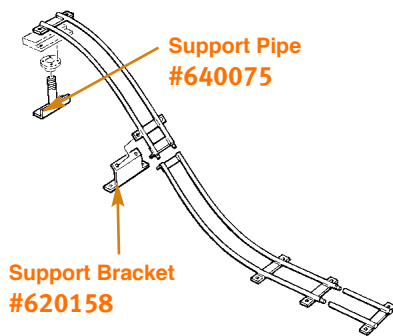
**Can be Shipped by UPS:** The ZOT Part #420319 (which includes 2 x 72" sections, and connecting inserts) can be shipped by UPS, which is less expensive.

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

### Drop Sweep Tube Track

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

#420330



#### Features and Benefits

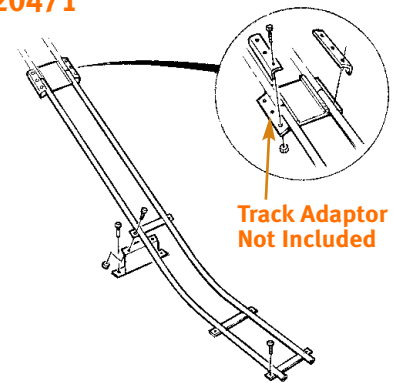
**Direct Replacement:** ZOT's Drop Sweep Tube Track is a direct replacement for the original 'A' & Jetback steel drop sweep tracks, neither of which is available from Brunswick.

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

**Can be Shipped by UPS:** Which reduces shipping costs.

For Jetback with Subway Ball Returns

#420471



### Approach Down Sweep

For Surface to Subway Conversions

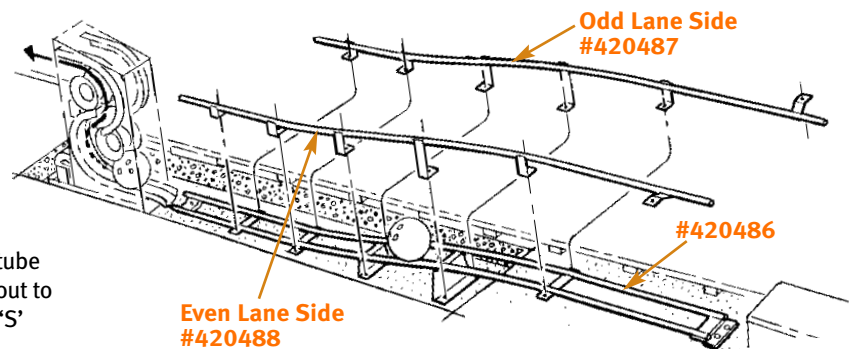
#420486 Approach Down Sweep Track\*

#420487 Odd Lane Side Guide Rail\*

#420488 Even Lane Side Guide Rail\*

\*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



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 and Benefits

**Give Your Center A New and More Modern Look:** With ZOT's Ball Track Covers.

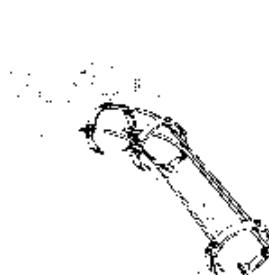
**Easy to Install:** The three-piece gray metal cover kit includes all hardware necessary for easy installation.

**Ships UPS:** For Convenience and Savings.

### 'Long' Three Rail Ball Guide System

For Mini Conversions and Straight 'A' Pinsetters

#420059



#### 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.

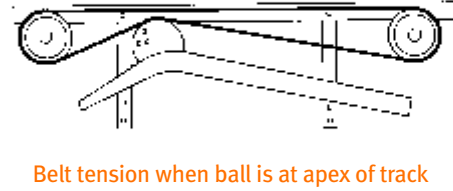
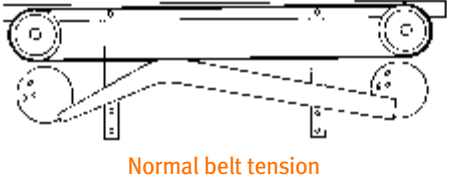
**Prevents Ball Damage:** The solid steel rails are covered with a replaceable nylon insert that protects the balls.

“Solve ‘A2’ Long Belt Tracking Problems – Today”

Accelerator Support Conversion Kit

For ‘A2’ Pinsetters

#420206



Features & Benefits

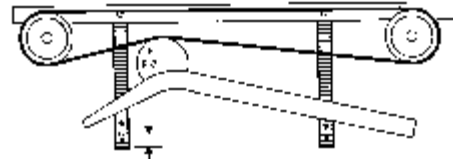
**Maintain Proper Belt Tracking:** Long belt tension adjustments are even more critical with today’s resin reactive bowling balls and lane oil conditions. ZOT’s Accelerator Support Conversion is the only affordable solution.

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

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

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

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



‘Y’ Switch Stop Conversion Kit

For ‘A2’ and Jetback Pinsetter

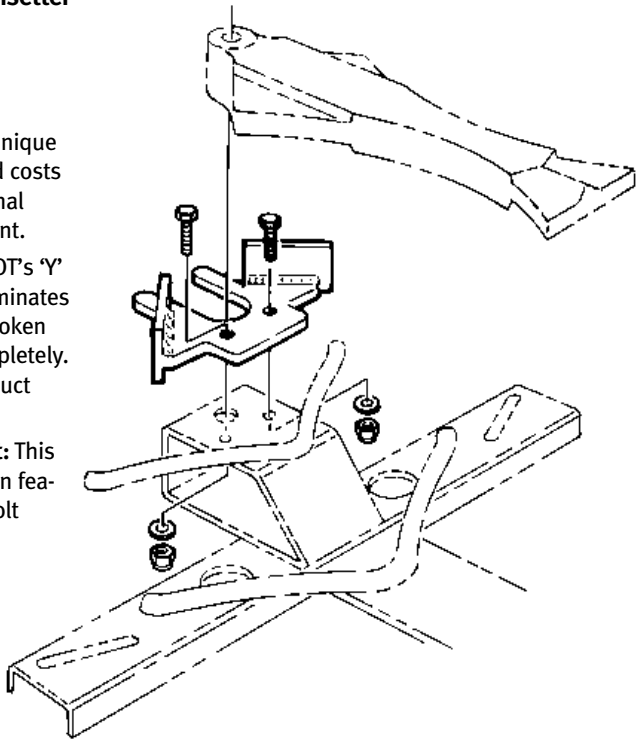
#420072

Features & Benefits

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

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

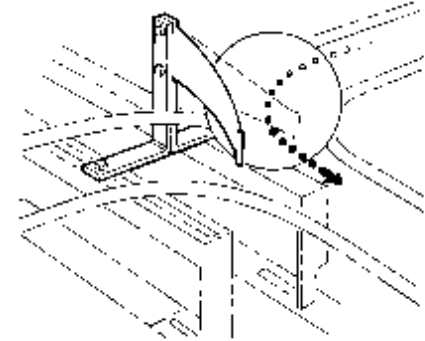
**Easy To Install And Adjust:** This fully adjustable conversion features a simple drill and bolt installation.



‘Y’ Track Ball Deflector Kit

For Mini Conversions and Straight ‘A’ Pinsetters

#420284



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.

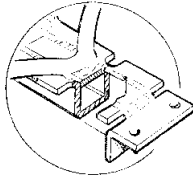
Ball Return Assembly



# Ball Return Assembly

## Heavy Duty 'Y' Track Weldmet For 'A2' and Jetback Pinsetters #640042

I-Beam  
technology

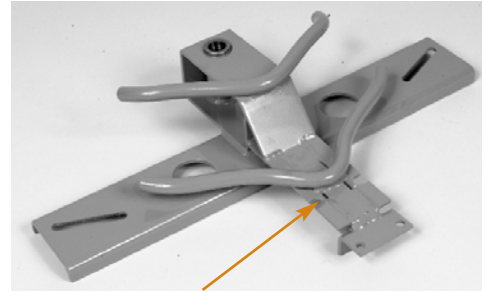


### Features & Benefits

**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

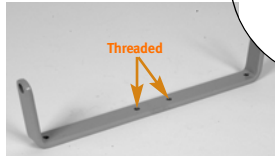
## Modified 'Y' Switch Stop Bracket For 'A2' and Jetback Pinsetters #620067

With added securing options

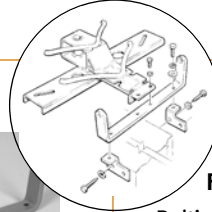
### Features & Benefits

**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.



Threaded



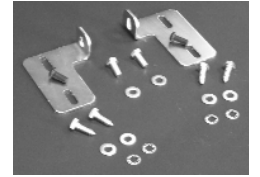
## Auxiliary 'Y' Stop Mounting Bracket Kit #420304

### 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 For 'A2' and Jetback Pinsetters #680005

### 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.



## Urethane 'Y' Switch Bumper #680006

### Features & Benefits

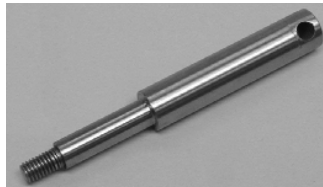
**Pull-through Retainer:** No metal stud to become exposed that may cause damage to expensive high-performance bowling balls.

## 'Y' Switch Shaft #520159

### Features & Benefits

**Longer Threads:** Allows shimming of 'Y' Switch height.

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



## Urethane 'Y' Switch Plate Spacer #680007

### Features & Benefits

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



## Flat Gutter Anchor

### #420343 Complete One-Lane Kit

(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



### #420362

Individual Anchors,  
Cross Foundation

