

## PHASE I



### Phase I

#### ZOT Infrared Triggering

**#400150 .....\$427.75**

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

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

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

**#400145** Time Delay Plus System .....\$168.55

**#400147** Expander Card .....\$69.50

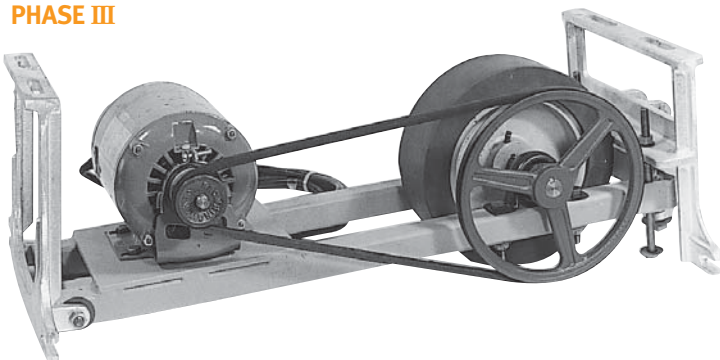
**#400144** Infrared Sensor 'add-on' Kit.....\$69.90

**#420001** Electronic Gearbox Trip Assembly....\$119.80

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

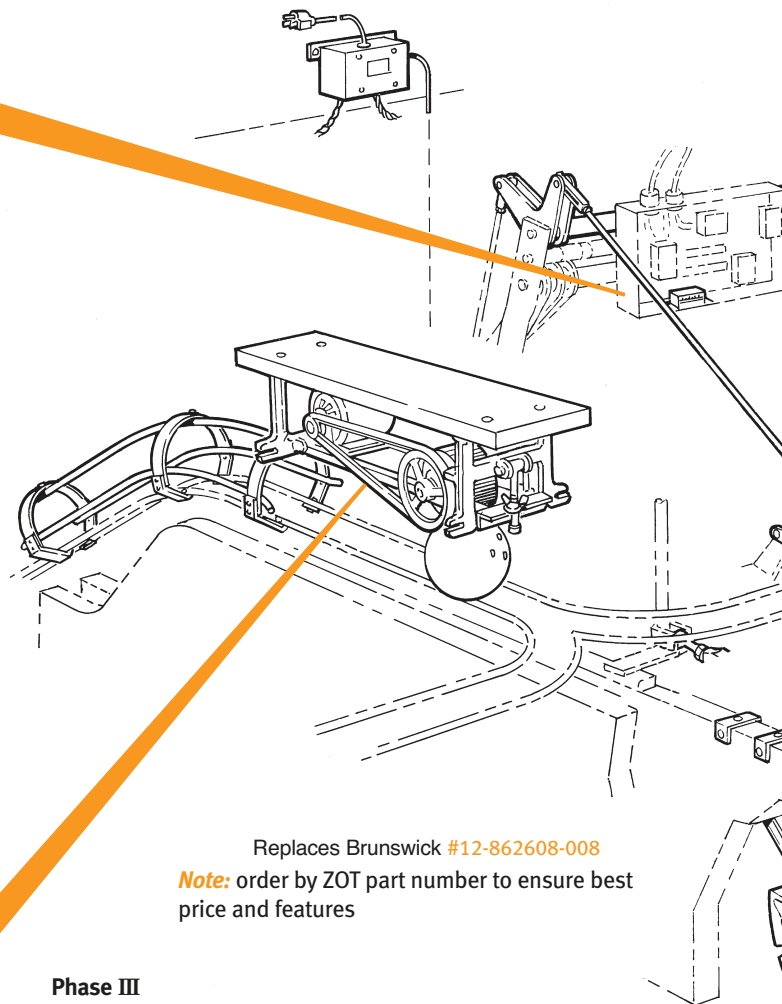
**Note:** For a more detailed description of ZOT triggering, see pages 22-27.

## PHASE III



## ZOT II Conversion Components

“Featured are the main components—and how they work and relate to your Straight ‘A’ Pinsetters”



Replaces Brunswick #12-862608-008

**Note:** order by ZOT part number to ensure best price and features

### Phase III

#### ZOT Ball Accelerator

**#420301 (Maximum Acceleration).....\$979.00**

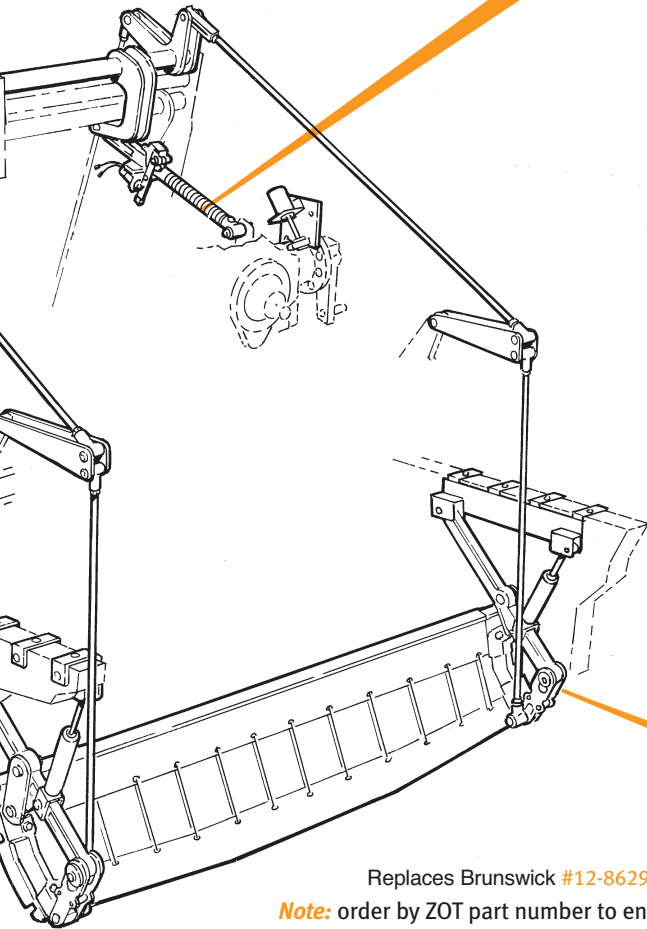
**#420130 (Standard Acceleration).....\$979.00**

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

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

**Ball Guide:** Order a Three-Rail-Guide, or Down-Sweep-Cover separately (for a more detailed description of these products, see page 66).

“ZOT Offers ‘Four’ Attractive Options to Update Your Straight ‘A’ Pinsetters”



Replaces Brunswick #12-862907-000

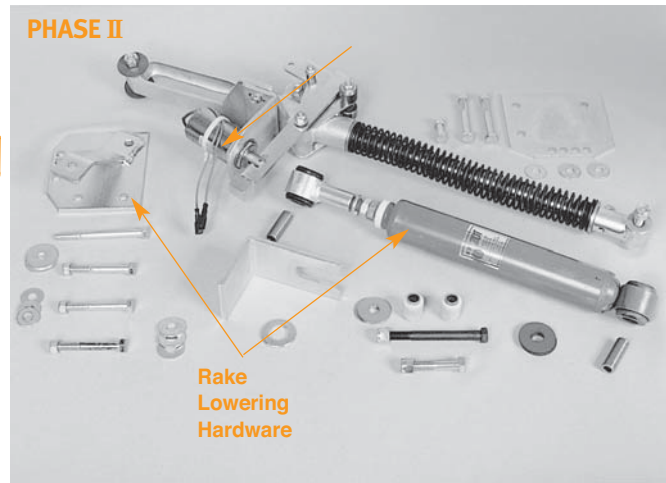
**Note:** order by ZOT part number to ensure best price and features

**Phase IV**  
ZOT Cushion Suspension

**#420414** .....\$2,173.00

**‘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.



**Phase II**  
ZOT Electronic Fast Drop Rake

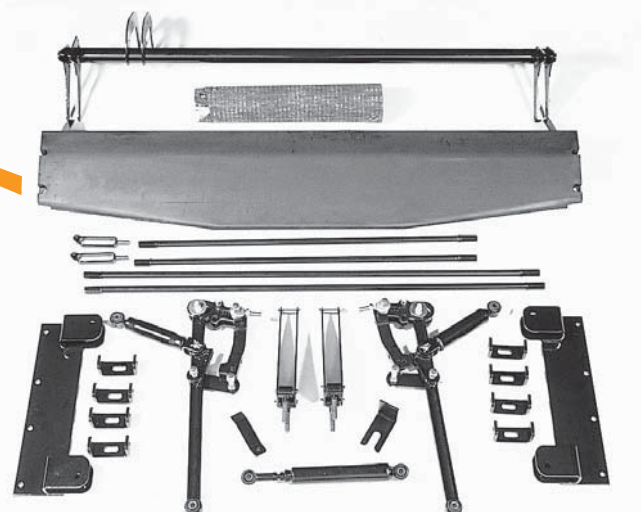
**#420159** .....\$429.50

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

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

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

**PHASE IV**



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

- Note:**
1. You must have Phase I installed to yield peak performance from Phase IV.
  2. This kit now includes a mechanical trip rake latch and trip linkages

11  
Pinsetter Conversion



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

# Pinsetter Conversion Kits

## ZOT I Conversion Service Manual

#160082.....\$43.40

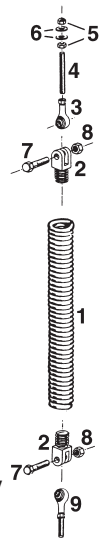
**Includes:**

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

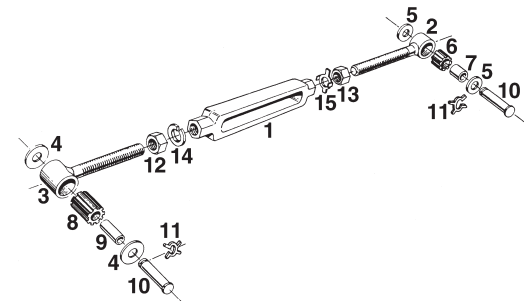


## ZOT I Conversion Suspension Package (includes exchange cushion)

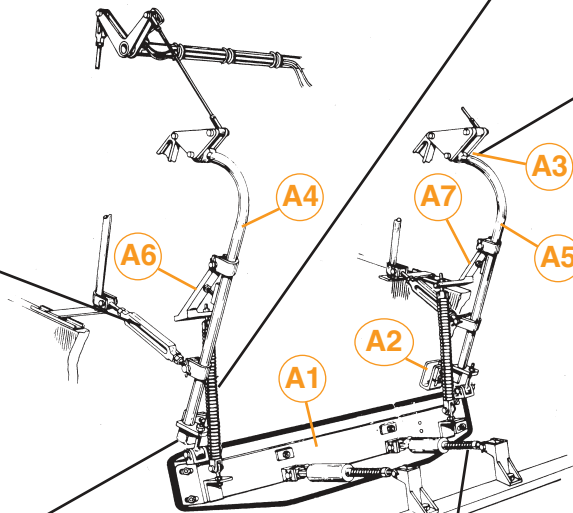
#420166 .....\$1,795.00



**Section C –  
Lift Spring Assembly**

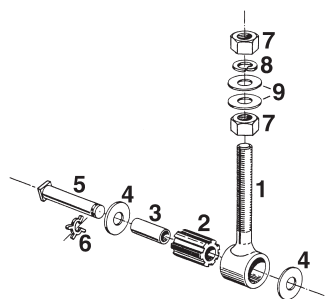


**Section D –  
Stabilizer Arm Assembly**

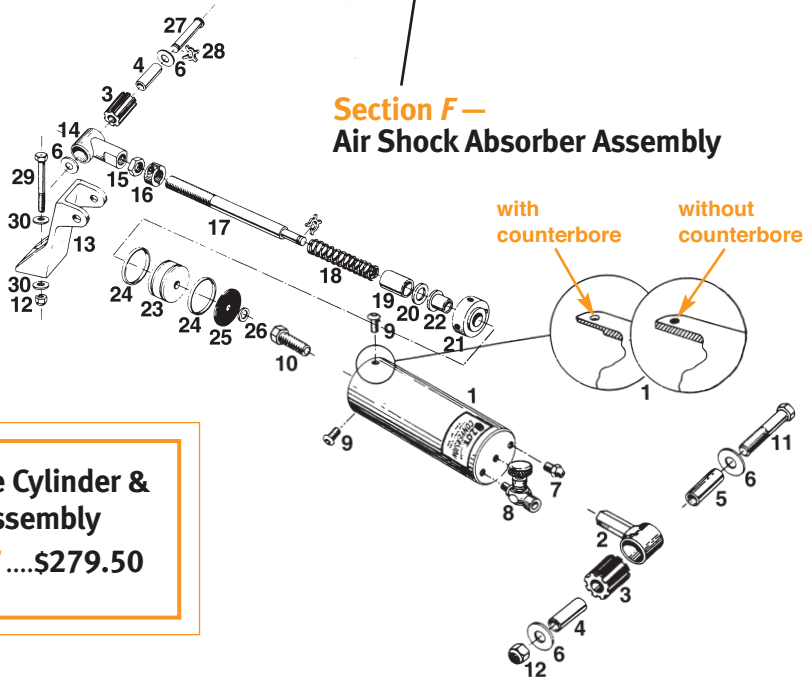


**11** Pinsetter Conversion

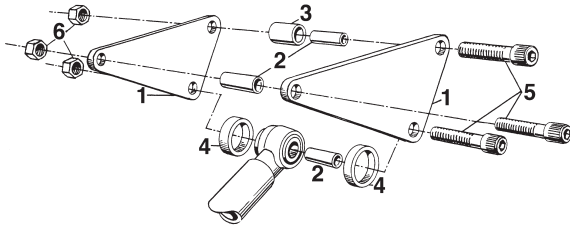
**Section E –  
Suspension Bolt Assembly**



**Section F –  
Air Shock Absorber Assembly**



**Complete Cylinder & Piston Assembly**  
#420127 ....\$279.50



**Section B – Tri-Plate Assembly**

**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 A – Miscellaneous           |                                  |              |            |
|-------------------------------------|----------------------------------|--------------|------------|
| Item                                | Part Description                 | Order Number | Old Number |
| 1                                   | Cushion Mounting Plate Assy.     | 420139       | 10311-0-0  |
| 2                                   | Curtain Hanger Casting           | 650009       | 10105-01   |
| 3                                   | Grommet (Hour Glass Shape)       | 810005       | 10202-02   |
| 4                                   | Pit Cushion Arm 10-pin side Assy | 420093       | 10202-0    |
| 5                                   | Pit Cushion Arm 7-pin side Assy  | 420094       | 10203-0    |
| 6                                   | Spring Bar 10-pin side Assy      | 420101       | ALL        |
| 7                                   | Spring Bar 7-pin side Assy       | 420104       | ALL        |
| Section B – Tri-Plate Assembly      |                                  |              |            |
| 1                                   | Tri-Plate                        | 620019       | 10101-01   |
| 2                                   | Steel Space Bushing              | 520009       | 10101-02   |
| 3                                   | Bronze Bushing                   | 810007       | 10101-03   |
| 4                                   | Nylatron Washer                  | 420211       | 10101-04   |
| 5                                   | 3/8" – 16 x 2 1/2" S.H.C.S.      | 420212       | 10101-05   |
| 6                                   | 3/8" – 16 Lock Nut               | 420213       | 10101-06   |
| Section C – Lift Spring Assembly    |                                  |              |            |
| 1                                   | Lift Spring                      | 850008       | 10210-02   |
| 2                                   | Spring Plug                      | 650011       | 10110-03   |
| 3                                   | Female Uni-ball                  | 810045       | 10110-04   |
| 4                                   | 5/16" – 24 x 4" Stud             | 420231       | 10110-05   |
| 5                                   | 5/16" – 24 Hex Nuts              | 420232       | 10110-06   |
| 6                                   | 5/16" – Flat Washers             | 420233       | 10110-07   |
| 7                                   | 5/16" – 18 x 1 1/2 H.H.M.S       | 420234       | 10110-08   |
| 8                                   | 5/16" 18 Lock ut                 | 420235       | 10110-09   |
| 9                                   | Male Uni-Ball                    | 810034       | 10111-02   |
| Section D – Stabilizer Arm Assembly |                                  |              |            |
| 1                                   | Turnbuckle Body                  | 650008       | 10204-01   |
| 2                                   | End Mount (Mach. End)            | 640046       | 10204-02   |
| 3                                   | End Mount (Arm End)              | 640047       | 10204-03   |
| 4                                   | Fiber Washers Arm End (Thin)     | 420223       | 10204-04   |
| 5                                   | Fiber Washers Mach. End          | 420215       | 10104-05   |
| 6                                   | Urethane Grommet Mach. End       | 810004       | 10204-06   |
| 7                                   | Bronze Bushing Mach. End         | 810032       | 10104-07   |
| 8                                   | Urethane Grommet Arm End         | 810033       | 10204-08   |
| 9                                   | Bronze Bushing Arm End           | 810007       | 10104-09   |
| 10                                  | "X" Washer Pin                   | 520049       | 10104-10   |
| 11                                  | "X" Washer                       | 420218       | 10104-11   |
| 12                                  | 5/8" – 11 R.H. Ex. Heavy Nut     | 420219       | 10104-12   |
| 13                                  | 5/8" – 11 L.H. Ex. Heavy Nut     | 420220       | 10104-13   |
| 14                                  | 5/8" – Lock Washer               | 420221       | 10104-14   |
| 15                                  | Tab Lock Washer                  | 740129       | 10104-15   |

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

| Section E – Suspension Bolt Assembly    |                                    |              |            |
|---|------------------------------------|--------------|------------|
| Item                                    | Part Description                   | Order Number | Old Number |
| 1                                       | Suspension Bolt Assembly           | 420105       | 10113-01   |
| 2                                       | Urethane Grommet                   | 810033       | 10213-02   |
| 3                                       | Bronze Bushing                     | 810007       | 10113-03   |
| 4                                       | Fiber Washer (Thin)                | 420223       | 10113-04   |
| 5                                       | Square Head "X" Washer Pin         | 520058       | 10213-05   |
| 6                                       | "X" Washer                         | 420218       | 10113-06   |
| 7                                       | 5/8" – 18 Hex Nut                  | 420244       | 10113-07   |
| 8                                       | 5/8" – Lock Washer                 | 420221       | 10113-08   |
| 9                                       | 5/8" – Flat Washer                 | 420245       | 10113-09   |
| Section F – Air Shock Absorber Assembly |                                    |              |            |
| 1                                       | Air Cylinder w/counterbore         | 640052       | 10218-01   |
|   | Air cylinder w/o counterbore       | 640051       | 10181-01   |
| 2                                       | End Mount Assembly                 | 420147       | 10218-02   |
| 3                                       | Urethane Grommet                   | 810033       | 10281-03   |
| 4                                       | Bronze Bushing                     | 810006       | 10118-04   |
| 5                                       | Steel Spacer Bushing               | 520009       | 10118-05   |
| 6                                       | Fiber Washers                      | 420223       | 10118-06   |
| 7                                       | Air Intake Valve                   | 420161       | 10118-07   |
| 8                                       | Adjustable Air Outlet Valve        | 420162       | 10218-08   |
| 9                                       | 1/4" – 20 x 1/2" B.H.S.            | 420255       | 10118-09   |
| 10                                      | 3/8" – 16 x 1 1/4" H.H.M.S.        | 710131       | 10318-10   |
| 11                                      | 3/8" – 16 x 2 1/4" H.H.M.S.        | 710141       | 10218-11   |
| 12                                      | 3/8" – 16 Hex Lock Nut             | 420213       | 10218-12   |
| 13                                      | Mount Bracket                      | 650018       | 10117-01   |
| 14                                      | Piston Rod End Mount               | 420143       | 10217-02   |
| 15                                      | 3/4" 16-Bulk Head Nut              | 420247       | 10117-05   |
| 16                                      | 3/4" Split Collar (Threaded)       | 800020       | 10317-06   |
|   | 3/4" Split Collar (No Threads)     | 800022       | 10217-06   |
| 17                                      | Piston Rod (With Flat)             | 520053       | 10217-07   |
|   | Piston Rod (No Flat)               | 520050       | 10417-07   |
| 18                                      | Piston Rod Spring                  | 420248       | 10117-08   |
| 19                                      | Spring Sleeve                      | 420249       | 10117-09   |
| 20                                      | Washer (special)                   | 420250       | 10117-10   |
| 21                                      | Cyl. End Cap (Inc. Flange Bushing) | 520051       | 10217-11   |
| 22                                      | Flange Bushing                     | 810036       | 10117-12   |
| 23                                      | Aluminum Piston                    | 520052       | 10217-13   |
| 24                                      | Teflon Ring                        | 420253       | 10217-14   |
| 25                                      | Gasket                             | 420251       | 10117-15   |
| 26                                      | Flat Machinery Shim                | 420254       | 10217-16   |
| 27                                      | "X" Washer Pin                     | 520049       | 10117-18   |
| 28                                      | "X" Washer                         | 420218       | 10117-19   |
| 29                                      | 3/8" – 16 x 3 1/4" Gr. 2 MS        | 420252       | 10117-20   |
| 30                                      | 3/8" Flat Washer                   | 420241       | 10117-22   |

See Page 69 for Pricing

See Page 69 for Pricing

**11**  
Pinsetter Conversion



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