

## PHASE I



### Phase I

#### ZOT Infrared Triggering

**#400150** .....\$440.58

**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 .....\$173.61

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

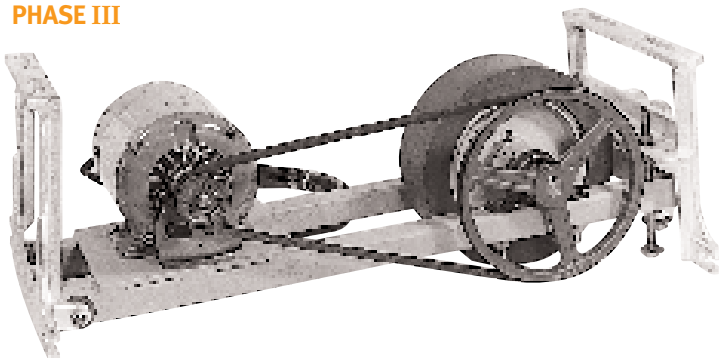
**#400144** Infrared Sensor 'add-on' Kit.....\$69.90

**#420001** Electronic Gearbox Trip Assembly....\$121.90

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

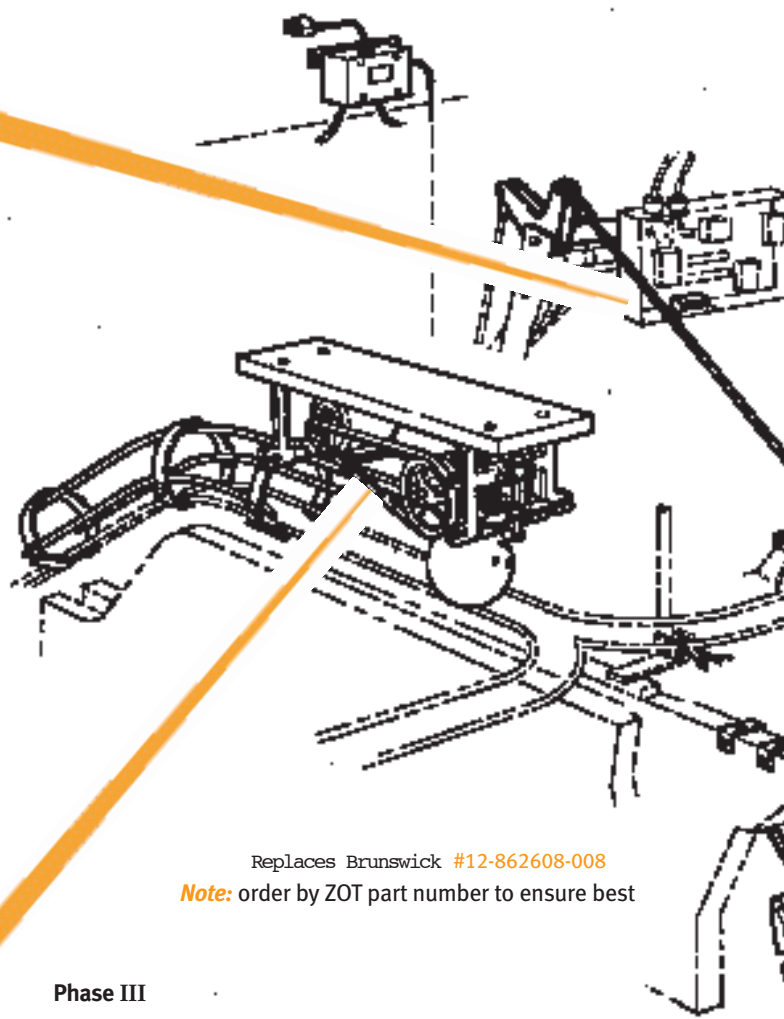
**Note:** For a more detailed description of ZOT triggering, see pages 22-27.

## PHASE III



## ZOT 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

### Phase III

#### ZOT Ball Accelerator

**#420301** (Maximum Acceleration) .....\$1,008.37

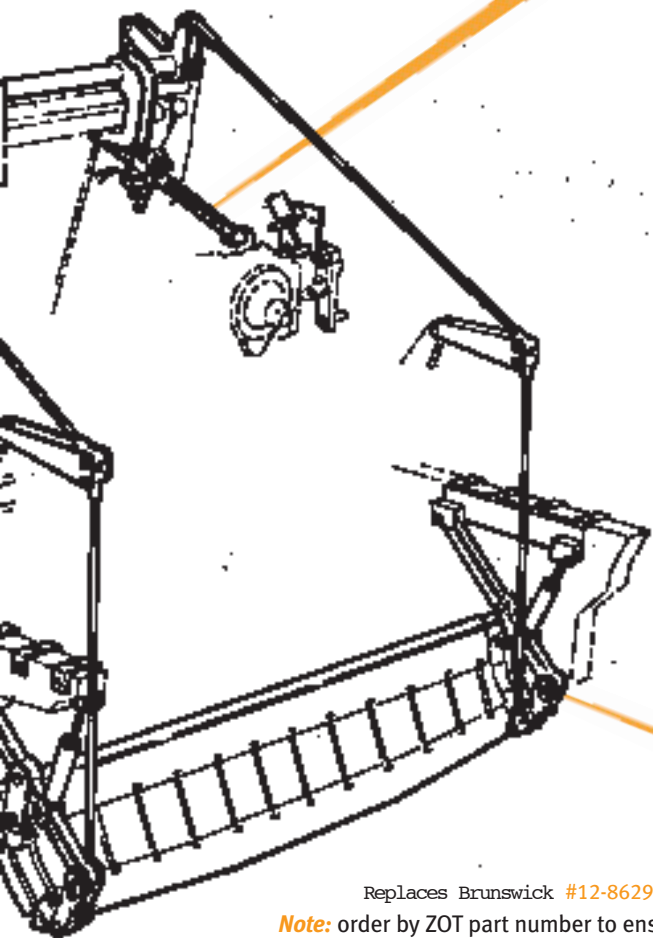
**#420130** (Standard Acceleration) .....\$1,008.37

**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

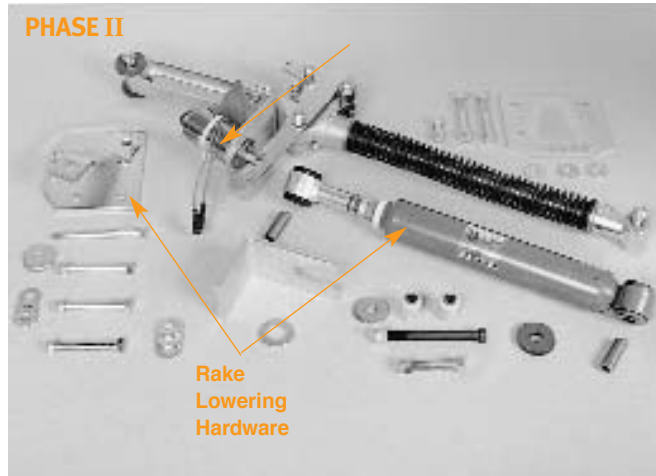
**Note:** order by ZOT part number to ensure best price

**Phase IV**  
ZOT Cushion Suspension

**#420414** .....\$2,238.19

**‘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

# Pinsetter Conversion Kits

## ZOT I Conversion Service Manual

#160082.....\$44.70

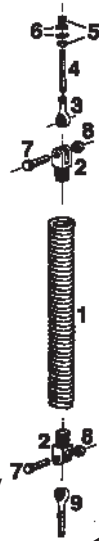
**Includes:**

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

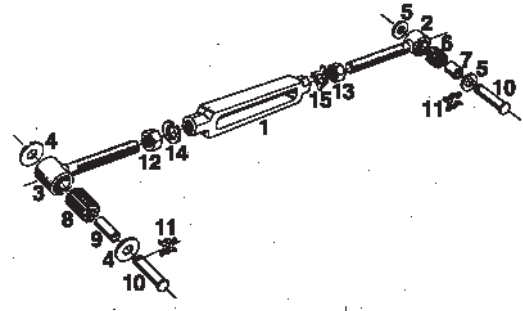


## ZOT I Conversion Suspension Package (includes exchange cushion)

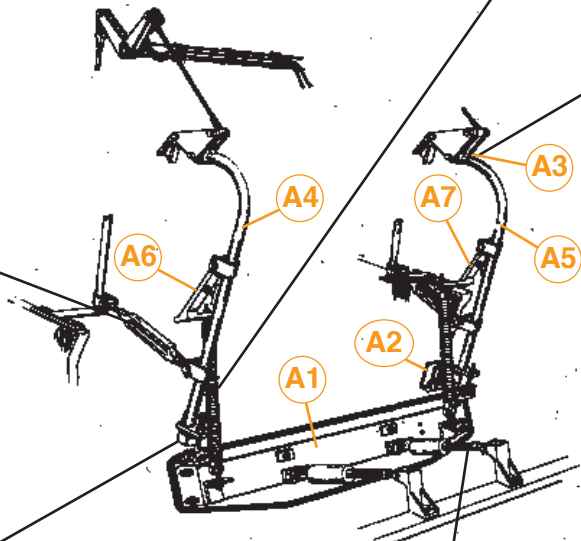
#420166 .....\$1,848.85



**Section C –  
Lift Spring Assembly**

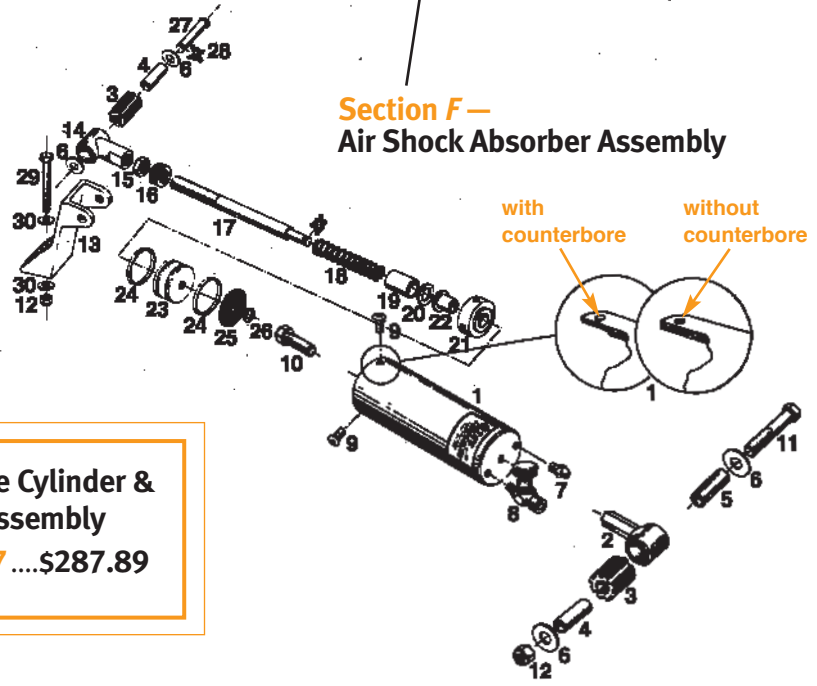
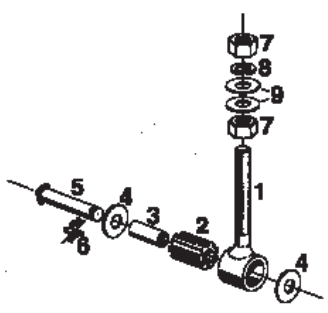


**Section D –  
Stabilizer Arm Assembly**

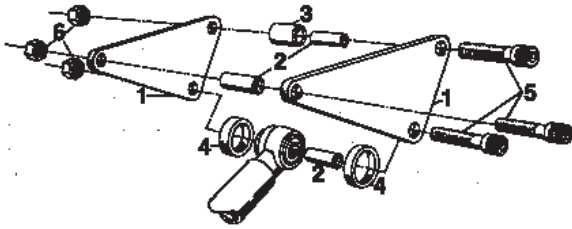


**Section F –  
Air Shock Absorber Assembly**

**Section E –  
Suspension Bolt Assembly**



**Complete Cylinder &  
Piston Assembly**  
#420127 .....\$287.89



**Air Shock Seal Kits**

**#420146.....\$14.41**

**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			
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			
Item	Part Description	Order Number	Old Number
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			
Item	Part Description	Order Number	Old Number
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			
Item	Part Description	Order Number	Old Number
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			
Item	Part Description	Order Number	Old Number
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