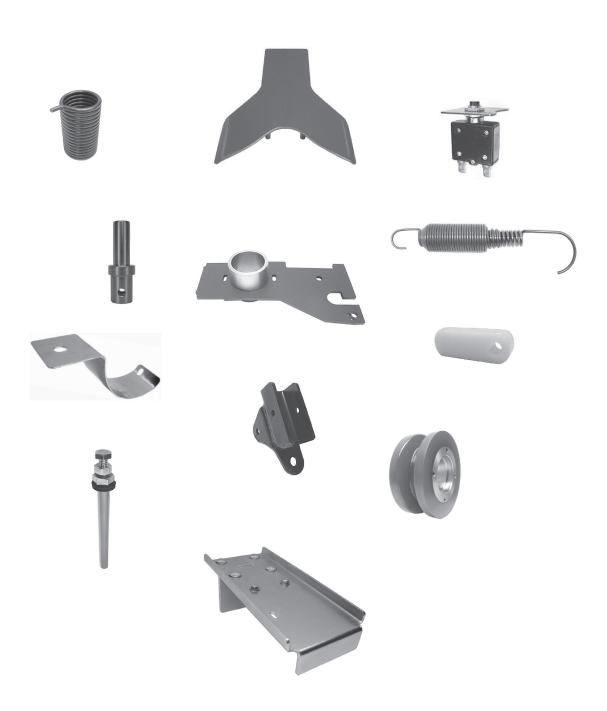
Alternatives



pinsetterpartsplus.com



2016-2017 CatalogFor Brunswick equipped centers

New Products	2
Gear Box	3
Detector	3-4
Turret	4-6
Deck	6-7
Pit Cushion	7-8
Pit Conveyor	8
Rake	9
Elevator	9-12
Cross Conveyor	13
Ball Return	13-14
Electrical	14
Pit End	14-15
Miscellaneous	15

Look for <u>Great Price Reductions!</u> on selected items throughout this years catalog.

Due to manufacturing price increases beyond our control,

PPP-PC1K, PPP-RRA and PPP-HUB are no longer economically practical and will not be available once present inventory is depleted.

PPP-PC1K-UP and PPP-RRA-NM are unaffected and will be available with no price increase.

We apologize for any inconvenience.

For 14 years it has been a privilege to enjoy the reception to our product line. We as owners, advancing in years, need to consider for the continued product innovation needed in bowling center tech environments.

Pinsetter Parts Plus offers an interesting opportunity to acquire our unique specialty parts company.

Full company disclosure will be available to qualified buyers. For confidential inquiries, please email us - info@pinsetterpartsplus.com

Cross Conveyor Micro Switch Bumper Part No. PPP-CCSB – pkg of 2 \$7.25

Bolt-on bumpers won't fall off like stick-on ones do. (replaces 12-450055)





NEW

Economical - Wheel Guard Broken Mounting Bracket Repair

Thanks To Brandon Jagerson - Marshfield, WI



Align broken bracket edges between notches (see arrows - image right) in Mounting Plate then weld outline on inside of angle.

Drill and tap 3/8" hole in pinsetter frame stub remains.



Notch Alignment

Wheel Guard Mounting Plate Part No. PPP-WGMP – pkg of 1 - \$7.50

Image below – Mounting Plate - weld to existing original broken bracket.



Wheel Guard Replacement Bracket Part No. PPP-WGRB – pkg of 1 - \$7.75

Image below - For missing broken OEM brackets - arrange for your own welding to Mounting Plate.



Wheel Guard Mount Assembly Part No. PPP-WGMA – pkg of 1 - \$19.75

Image below – Mounting Plate welded to Bracket Replacement – just drill and tap 3/8" mounting hole.



Gear Box Detector

GBX Cluth Yoke Repair Part No. PPP-289 - pkg of 2 \$23.50





Economical repair for worn clutch yokes.

Use Yoke Repair Drill Template (*PPP-290*) to accurately drill 2 holes In yoke then simply tap new clip into place. No fasteners required.

GBX Yoke Repair Drill Template Part No. PPP-290 - pkg of 1 \$20.45





Place template onto worn casting to accurately drill holes for yoke repair clip. Steel template will last through years of replacements.

Gear Box Oil Level Dip StickPart No. PPP-DIP - pkg of 1 \$7.95

Push Dip Stick into oil fill hole, at an angular position of about 11:25, until rod hits bottom of gearbox.

Sight glass is often a cloudy unreliable indicator. Add oil when below bottom line.





Clutch Yoke - Nylon Spring Guides
Part No. PPP-NSG (OEM –1/4" hole)
self lubricating Nylon 6/6 - pkg of 1 guide & washer
\$11.50

ZOT - 5/16" hole Part No. **PPP-NSGZ** pkg of 1 guide & washer \$11.50

Nylon Spring Guides greatly extend the life of clutch yoke cams and repair plates.



Japanese Gear Box Worm Shaft Tool Part No. PPP-JWST - pkg of 1 tool

Рап No. РРР-ЈWST - ркд от 1 too \$33.55

4 pound slide hammer with 4 inch slide action quickly removes stubborn worm shafts without risk of damage to gears from striking 4 to 1 lever and eases re-installing worm shaft.



Gear Box - Clutch Cone Saver

Part No. **PPP-CCS** - pkg of 5 \$13.00

Durable Nylon 3/16" spacers prevent galling of the clutch cone end and flanged nut by absorbing the vibration between metal parts.





Reset Lever Repair Arm with Installation strap-fixture Part No. PPP-RLRA-F - pkg of 1 \$12.65

Great Price Reduction!

PPP-RLRA-F comes with strap fixture to accurately position (without measuring) repair arm for drilling mounting holes. Fast and Easy!

Permanent repair for both single and double armed cracked or broken reset levers in less than 5 minutes and without welding.

Repair Arm fashioned from 3/16" plate steel and has no vertical stress producing bends for separation cracks to occur.

Reset Lever Repair Arm Part No. PPP-RLRA pkg of 1 \$9.20

Great Price Reduction!

Order *PPP-RLRA* if you already have an installation strap.

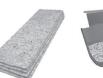


Dashpot Chain Link Replacement

Part No. PPP-DCLR pkg of 1 \$17.65

By Dave Van Haelst Savanna. Illinois For Converted Model A's







1/4" thick pads will keep oil pans free of heavy grime build-up for many years. Use scissors to cut slit in one end for bracket clearance for wall to wall absorption.

Convert chain link plunger to A2 type adjustable dashpot.

Keep these on hand and eliminate the headache of replacing the chain link during repairs in this area. Remove model A plunger and drop in this assembly and adjust like an A2.

Automatic Out-of-Range Hook Replacement Part No. PPP-HR - pkg of 1

7/8" gap allows for use of the commonly used 8" bench grinder at a width of ¾" to easily adjust ID of hook-end for proper spacer clearance needed in some pinsetters. Lower image OEM.



Cam Follower Shaft
Part No. PPP-MDCFS - pkg of 1
\$23.75

Reversible Moving Deck

Snap ring grooves and bolt threads on both ends allow quick turn around times.



Detector Turret

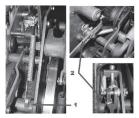
Automatic Out-of-Range Assistant Spring

Part No. PPP-AORAS pkg of 2 springs \$10.25

Use this spring for consistent automatic out-of-range adjustments.

Spring keeps consistent detector bell crank tension against the automatic out-of-range adjustment bolt throughout the entire machine cycle allowing, at all times, precise hook pivoting over (and away from) the post on the selector arm assembly.

Spring will not interfere with other detector functions.



- 2 Detector Out-of-Range Bellcrank Lever

PPP-FBRK - Mast Only Part No. PPP-FBRMA pkg of 1 \$7.25

Eliminates micro switch readjustments due to over-extending holding hook.

If the complete First Ball Return Kit is not for you, mount this handy lever to the ball light micro switch actuator to eliminate using deck holding hook to bring machine to first ball state.

Mast can be reached at any point, while on machine. Its added 7 inch length provides leverage to easily maneuver actuator into first ball state.



First Ball Return Kit Part No. **PPP-FBRK** pkg of 1 \$46.95

Hook can be quickly removed without tools when machine needs servicing.

Returns pinsetter to first ball cycle without climbing up onto machine.



Easy retrieval of ball in front of pit cushion, pinsetter on second ball. Just pull the First Ball Return Hook and hit the reset button.

Slide Plate and Bearing Housing Assembly Part No. PPP-SPA pkg of 1 \$64.95



Slide Plate Only Part No. PPP-SPO - pkg of 1 \$24.95



Save money by reusing bearing housing from worn slide plate. Drill rivets out in old assembly then weld to replacement slide plate.

Modified Slide Plate

Front plate notches with reduced gaps in rear plate grooved post entry port, allows easy positioning of slide plate into grooved posts with all slide plate components fully in place and visibility of grooved posts obscured.

Ends disassembly of clutch plates when slide plate accidentally slides off grooved slide posts. Allows installing slide plate and assembled clutch plate parts into turret when using tool at right - PPP-BFH.

Slotted spring guide roll pin ports eliminate unnecessary need for precision, during spring compression, when installing clutch plate parts.

The additional torsion latch spring post roll pin hole (when used increases spring tension) allows extended use of worn time delay gear and torsion latches.

Hanger allows complete slide plate clutch assembly into turret Our Modified Slide Plates can also be installed in the conventional manner.

Blocking Fingers Hanger Part No. **PPP-BFH** - pkg of 1 \$8.50

Blocking fingers hanger allows the removal and replacement of slide plate by removing only the time delay gear and torsion latch but without taking clutch plate assembly apart when using our Modified Slide Plate.





Turret Clutch Performance Race

Part No. PPP-CPR pkg of 1 \$11.50

Installs on top of spring retainer.



The added 1/16" height to can extend the life of sagging springs. Material hardness and reduced area scalloped design helps scour gummy residue from bearing surface.



The primary reason of clutch failure-to-index is gummy residue on bearing surface. Once the torsion latch is tripped the turret has a brief moment to begin turning - race provides minimal turning resistance.

Pozi Drive Turret Clutch Lining Part No. PPP-PDCL - 3 lining strips and rivets \$15.10

These linings have over 50% more surface to surface contact than OEM - provides more driving power for extended life and better performance.



Adjustable Levers - One Wrench Bolt Part No. PPP-ALB - pkg of 2 \$12.25

Modified flanged-head bolt with roll pin needs only 1 wrench to secure for positive adjustments.

Thanks To Doug Schmidt Little Falls, MN



Turret Turret

Adjustable Torsion Latch Bumper Part No. PPP-ATLB - pkg of 2

\$14.50



Quickly adjust torsion latch alignment with time delay gear stop.



Self-aligning urethane bumper has 4 sides with 1/16" increments from mounting post for finetuning torsion latch depth under time delay gear.

Broken Interlock Shaft Repair Part No. PPP-BISR - pkg of 1

\$16.50

Simply place long hook onto blocking finger and other into bracket and pull onto forward cross conveyor mount bracket





Pinsetter pictured above, worked with this repair for over 19 years. Keep one on hand for an emergency.





Quick return service - no tools to install. Leave repair in place indefinitely.

5 Chute Weld Plate Part No. PPP-5CWP - pkg of 1

\$6.55

Great Price Reduction!

Weld plate to top of 5 chute to prevent hairline cracks from spreading. Made of 10 gauge steel formed to 5 chute curvature for uniform appearance and ease of application.



Probe Mount Replacement Part No. PPP-PMR

Weld mount and Standard Probe Mount \$30.50





When you're tired of welding probe mounts, try this weldon 9 gauge bracket with a bolt-on replaceable mount.

Probe Weld Mount

Part No. **PPP-PWM** - weld mount only \$18.15

A Standard Probe Mount must be available for probe-alignment prior to welding.



Adjustable Probe Mount

Part No. **PPP-APM**

pkg of 1 \$16.35

Adjustable probe height.

Standard



Standard Probe Mount

Part No. PPP-SPM

pkg of 1 \$16.25

probe height.



Turret Release Spring Bracket Part No. PPP-TRSB - pkg of 1

\$23.25

Easy solution for worn spring hole.





Simply place spring through bracket and OEM mounting for original positioning or secure middle hole with bolt and place spring in either neighboring hole for slightly more or less tension.

Turret Release Lever Pivot Pin Clamp Part No. PPP-PPC pkg of 1 \$25.95





Clamp forces pin against unworn part of turret frame holes eliminates further wear by forcing lever to turn on pin instead of pin turning in aluminum turret frame holes.

Blocking Fingers Adjustment Tool

Part No. PPP-BFT - pkg of 1 \$11.25





Hanger with 2 bolt adjusters allows ideal height adjustment in first attempt

Remove long turret belt, time delay gear and torsion latch.

With gear box at 0 degrees, adjust all applicable adjustable levers.

Heavy Duty Probe Spring Part No. PPP-HDPS - pkg of 2

Ensures spoons lock after pins release. Shortening springs can give unexpected results and tying off coils may lead to failure.

50% stronger than OEM springs.

replaces 12-150096

5 Chute Mount Reinforcement Part No. PPP-5CMR

pkg of 2 straps & mounting screws \$16.00

Repair broken 5-chute clamp plate corners with these heavy duty 10 gauge Reinforcement Straps. Install Reinforcement Strap to prevent clamp plate corner breakage from occurring.



Turret Wire Fastener System Part No. PPP-TWFS - pkg of 10

\$13.95

Top mounted riser and lock washer allows full bolt head contact with socket or wrench.



Fastener can withstand the firmest securing without deforming.



No tools needed underneath.

Turret Deck

Bell Crank Stud Hole Repair Part No. PPP-BCSHR

pkg for 2 hole repairs* \$17.75

*Bell Crank Stud shown for point-ofreference and is not included.

Thanks to Jim Seay - Lawrenceburg, TN







Quickly restore precise bell crank stud position in elongated turret frame mounting hole. Large diameter washer fits perfectly into milled recess of turret frame to center stud in its original position.

Place small diameter washer onto stud. Insert stud in turret frame and place large diameter washer on stud and secure with included lock nut.

Heavy Duty Blocking Finger Spring

Part No. PPP-HDBFS (replaces 12-150213) pkg of 1 \$5.90

Thanks to Jamie Cecil Plymouth, MI

Urethane Gripper Pad Part No. PPP-GP pkg of 2 \$16.25

Slip on grippers can take up to 30 minutes per pair to install. Nylon tie wrap these into place in 2 minutes or less.



OEM ribs quickly wear away. Pad features smooth face - more surface contact is better for holding power.

Moving Deck Cable Spring Master Part No. **PPP-CSM**

Slotted tube and 2 pac-man spacers \$19.15 Spring prevents cable slack at rear most position of deck

during pin spotting. Over time, cable adjustments affect spring ability to stay on the lower spring keeper.

Shown at right, 1/4" spacers allow to determine proper height so spring stays centered on keeper. Properly spaced spring stays on keeper.

Pac-Man Spacers Part No. PPP-PMS pkg of 2 spacers \$8.95





Scissors Mod Part No. PPP-SM



75% stronger than OEM - eliminates the need for multiple springs on restricted drop blocking finger.

Wobbly pins have a chance to settle down reducing the chance of being pushed over when released.

Slip-on fingers gently lift pins from pin deck.

Must be installed in pairs but will work along with remaining gripper pad scissors. Entire machine can be changed in 10 minutes.

Easily install in pinsetter – no fasteners required. 1.Remove gripper - 2.Slide on insert - 3.Bend tabs

Deck Shield Slide Bracket Part No. PPP-DSSB - pkg of 1 \$20.60





Repair for sheared front mounting bolts.

Bracket with plastic base allows front of shield to glide freely on deck and reduces chance of rear shield brackets breaking.

Front shield support is important in keeping shield from sagging and allowing contact with pit light.

Deck Performance Gauge Part No. PPP-DPG - pkg of 1 \$39.95







Precise height is mechanically unimportant. The goal is for smooth pin delivery

Gauge area measuring 15/16" is for deck leveling and height adjustments. The non-parallel feature of gauge can be inserted between the sets of spotting fingers to find an irregular width that may cause pin wobble or need mechanical attention.

#10 Scissors Blocking Post Part No. PPP-SBP - pkg of 10 \$5.75

Fastener (1/4 X 20) is almost an inch tall and will keep the #10 scissors from jumping over the stop bumper.





Deck Roller Shoulder Bolt Part No. PPP-DRSB - pkg of 2 \$4.45

O-rings provide tension to shoulder bolt preventing hole wear from turning - cost less to replace than x washer and pins.



7 & 10 Deck Roller Spacers Part No. PPP-DRS - pkg of 2 \$17.75

Occasional unexplained pin jam in the 7 or 10 bucket?

Install Spacer to eliminate the possibility of pin bottom being caught momentarily on the side of deck roller causing delayed pinsetting leading to no-power conditions.





Install urethane spacer to the kickback side of the 7 and 10 deck roller positions.

Deck Pit Cushion

Deck Jam Switch Tool Part No. PPP-DJST - pkg of 1 \$13.50

Great Price Reduction!

Improved tool-end angle and round handle allows comfortable control while checking jam switch function without running into belts and pulleys.



Thanks to Rich Shiner Des Moines, IA

Pit Cushion Service Fixture

Part No. PPP-PCSF pkg of 1 \$78.50

Slim design, fixture supports pit cushion weight allowing easier servicing of links or Cam and Rollers.

Slotted pedestal holes adjusts to any cushion height.

Plenty of work-around room - both 7 and 10





Used as a bench mount - holds cushion at a nice working angle for welding.

Cushion Mount Spacer Part No. PPP-CMSC - pkg of 1

For cast mount - 15/16" length - image at left

Cushion Mount Spacer Part No. PPP-CMSP - pkg of 1 \$11.05

For plate mount - 7/8" length - image far right

PPP-CMSC and PPP-CMSP replaces bronze bearing and our spacer to eliminate or reduce hardware loosening.



Install with bearing press or bench vise after removing mount from cushion.

The spacer provided in our PPP-PC1K and PPP-PC1K-UpGrade fits into existing bronze bearing for easy assembly with cushion in pinsetter. Excessive bronze bearing wear can allow wobble to loosen hardware.

Pit Cushion Unibal - Maintenance Free

Part No. PPP-UNI-NM pkg of 1 \$5.65

Chrome-moly steel - nylon inner race

Great Price Reduction!

Pit cushion unibal must rotate freely when using our Pit Cushion Cam and Roller Kit to guard against possible seizure causing improper rake board heights during pinsetter operation.



Cushion Shock Mount Pin Deflector Part No. PPP-CSPD - pkg of 1

\$32.25

Prevents head of pin being caught between ball wheel and shock mount.

1 1/2" minimum distance between ball wheel and cushion shock mount edge required. Pins do not get caught when elevator assy installation is closer.



Deck Cable Spring Mount Repair Part No. PPP-CSMR - pkg of 1 \$18.95

Quickly restore worn away deck cable spring mountings. Unscrew allen fastener far enough to slip on repair bracket.



Heavy Duty Curtain Rod Holder Part No. PPP-HDCRH - 1 RH-LH pair \$72.95

Secured wrap around design ensures against loosening, bending, and breaking.





Curtain Rod Holder Insert Part No. PPP-CRHI - pkg of 1 \$13.95

Urethane insert fits our Heavy Duty Curtain Rod Holder - Part No. PPP-HDCRH



Eliminates rubber rod ends.

PC1K UPGRADE + mounting hardware

Part No. PPP-PC1K-UP pkg of 1 kit \$59.95

Impact resistant maintenance-free roller hub. No lubrication needed. Energy Absorbing Roller and Delrin® Cam





Patent No. 7,115,040





Replacement Inner Roller Sleeve Part No. PPP-RIRS pkg of 2 \$6.40

Installs directly over roller mounting bolt.



Cushion Mount Bolt Stabilizer Bracket Part No. PPP-CMBSB-LH (7 Side) Part No. PPP-CMBSB-RH (10 Side)

pkg of 1 \$23.40

This steel bracket will keep the ½" cam bolt from wobbling even if bolt loosens allowing time for correction during normal machine maintenance.





Mounting example above. Designed for our Pit Cushion Cam & Roller Kit

Nylon Cushion Link Part No. PPP-NCL- pkg of 1

replaces 12-252069

High strength, wear resistant, low friction self-lubricating Nylon 6/6.



Pit Cushion Pit Conveyor

Smooth-Faced PVC Pit Cushion Cover Part No. PPP-CCA2 pkg of 1 \$83.75



*Please note: replacement pit cushions may not have the additional ledge holes beyond curtain rod holder.

Covers have installation *holes for easy accurate centering alignment. Easy pull back corners for access to front of cushion mount bolts and ample rear cushion mount working room without having to remove nylon cable ties.



Access Corners

Comfortable cushion mount work-around-room without removing cable ties - front cover corners easily pull away for easy tool access to mounting bolts.

For A2



Fully secured cushion cover close-seams for a neatly secured appearance.



Close joining seams reduce area for pins to land on and use shorter much less expensive cable ties.

Close seams greatly reduce ball impact twist-effect and allow leaving old facing in place for additional cushion rubber protection.

Cushion Weld Plates

Part No. PPP-CWP 1 RH-LH pair \$31.75

1/4" steel plates.

Thanks to Jamie Cecil Plymouth, MI



Convenient central 1/2" holes allow welding access to inner area for added strength. Longer mounting hardware included.

Upper Shaker Frame Weld Plate

Part No. PPP-SFWP - pkg of 1 \$13.50

Prevent breakage commonly seen in quick-release upper shaker frames with this reinforcement weld plate. Use to repair ones already cracked or broken.



Thanks to Jamie Cecil - Plymouth, MI



Center Mount Pit Board Bumpers

Part No. PPP-PBB Height from top of tube 1-1/4' pkg of 1 \$16.65



Part No. PPP-PBB-S Height from top of tube 3/4" pkg of 1 \$14.30

Center mounting reduces chance of bumper shaking off.



Pit Board Shim Part No. PPP-PBS



Place shim between front pit board edge and upper frame clamp. Keeps pit boards firmly in place.

57" long by 1-3/8" deep and 1/4" thick. Rugged recycled tire rubber resists deforming and with anti-skid properties keeps pit boards in place.

Quick Release Frames - cut into 4 inch strips and place one on each end between board and release clamps.

Pit Conveyor Frame Weld Plates

Part No. PPP-PCFWP - set of 4 plates - 1 ea #1 and 2 plates - 2 #3 Plates \$26.75





Plate 1 - Top View

Plate 1 - wedges between center post and radial tubes.





Plate 2 - Top View

Plate 2 - cradles center post providing additional strength.

10 gauge weld plates span beyond fatigued metal and original welding.



Plate 3 - unique shape allows welding onto frame area not affected by fatigue.

Slik Pit Part No. **PPP-TSP** pkg of 1 \$113.95



With Slik Pit, pins race to pin elevator. Keep one on hand for emergencies. Recommended for short-term use. Fix shaker problems at your convenience.



Broken or warped pit board - clumped carpeting - Install Slik Pit in less than a minute. No fasteners required. To prolong the life of the product, adhere short nap closed loop carpet Slik Pit. Use without carpet may cause minor scuffing to glow coat bowling pins.

Jogger Mount Repair Plate Part No. PPP-JMRP - pkg of 2 \$9.75

10 gauge weld plate spans missing pieces and fatigued metal.

Welding fatigued pieces back together usually results in a short repair life.



Pit Conveyor Frame Threaded Hole Repair Part No. PPP-PCTHR

pkg of 1 \$33.75 Repair can easily

be done in back room or take to welding service.





Threaded Hole Repair is machined 4130 hard steel and will further harden during welding for long wear and thread life.

Rake **Elevator / Ball Wheel**

Heavy Duty Rabbit Ears Wire Way Part No. PPP-HDWW

pkg of 1 \$30.85

Exact OEM dimensions made of R-45 hardened steel. Will not bend or break in normal back room work conditions.



Eliminates bending and breaking shown above.



Rake Stop Cushion

Part No. PPP-RSC - pkg of RH-LH pair

Rubber cushion absorbs rake-stop impacts reducing vibration that can lead to rake tube breakage.

Made of recycled tires, 1/4" rubber pads eliminate metal-to-metal contact for quiet





Mounts behind spring spacer.

\$17.35

Great Price Reduction!

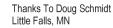
operation and reduced rake arm breakage.

Rake Return Pivot Repair

Part No. PPP-RRPR - pkg of 1 \$45.75 Easy to install pivot repair allows adequate room for spring tube operation without binding.







Rake Return Pivot Repair Drill Guide

Part No. **PPP-PRDG** - pkg of 1 \$10.00

Easily drill holes for Rake Return Pivot Repair mounting

After removal OEM pivot bearing holder, clamp into position with vice grips and drill two 5/16" holes in flange image far right.



Rake Board Stress Relief Kit Part No. PPP-RSRK - pkg of 2 \$21.95

Steel reinforcements prevent fiberglass hole blowout. Put badly damaged boards back into service.



Slotted Pivot Glide Part No. PPP-SPG pkg of 2 \$18.95

Excellent triggering properties. Eliminates the need to block the C bracket to prevent trip rod lever from inverting. Do both pivot slots or just the trip rod side. Replaces urethane pivot roller.



Rake Shaft Hanger

Part No. PPP-RSH - pkg of 1 pair \$29.95

Hangers supported by rake lift tube conveniently holds rake shaft during rake shaft removal and replacement.





Fast & Easy - Rake Shaft Repair Part No. PPP-RSR (for all rake shafts) pkg of 1 repair kit \$55.40

No holes to drill - Return to service in 5 minutes - Reusable.





Non Beveled Edge - Ball Wheel Roller Flanges. Made of high strength Delrin® low friction-wear resistant-reduced flexing.

Straight edged flanges Reduced ball wheel wobble. Extended wear before replacement.

Example right PPP-NBBWF replaces 12-402107



Heavy Duty Lower Ball Wheel Roller Flange - upper left Part No. PPP-HDLRF - replaces lower roller flange 2-400257 pkg of 1 \$23.95

PPP-HDLRF is 1/4" larger diameter than OEM

No Bevel Upper Ball Wheel Roller Flange - far right Part No. PPP-NBGRF - replaces small roller flange 12-400269 pkg of 2 \$27.95

PPP-NBGRF is 3/8" larger diameter than OEM

No Bevel Upper Ball Wheel Roller Flange - middle Part No. PPP-NBBWF - replaces upper HD roller flange 12-402107 pkg of 2 \$32.75 PPP-NBBWF is the same diameter as OEM

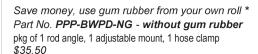
Serrated Flange Screw Part No. PPP-SFS pkg of 10 \$6.75



Positive securing of ball wheel roller flanges not using counter sunk holes. Elevator / Ball Wheel Elevator / Ball Wheel

Ball Wheel Pin Deflector

Part No. PPP-BWPD-WG - with gum rubber pkg of 1 rod angle, 1 adjustable mount, 1 hose clamp, 1 11 ½" gum rubber tube \$47.75





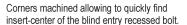
Thanks to Dave Van Haelst Savanna, Illinois

Greatly reduces or eliminates pins in upper ball track and on floor behind pinsetter. Can be placed in an infinite number of positions to suit individual preferences. Mount in existing hole (enlarge hole size to 7/16") in rear pin guard below and to the right of lift rods mounting shaft.

*For best results, use Brunswick gum rubber. Other gum rubber generally may be less rigid and require additional effort in obtaining good results.



Lower Ball Wheel Roller Stud Wrench Part No. PPP-LRSW - pkg of 1 \$16.35





8 inch handle easily loosens and tightens without additional leverage tools. When Button Head is felt slipping into bolt entry point, rotate tool to engage wrench corners.

The Original - Pozi-Grip Pozi-Guard Part No. PPP-PG1

pkg of 2 \$30.25

Recommended for high conditioner carry down conditions such as in Guardian surfaced centers.

Only one Pozi-Grip recommended per machine to reduce ball return stops.



Pozi-Grip II - Lower Profile than PPP-PG1

Part No. **PPP-PG2** pkg of 2 \$25.25

Recommended for synthetic lane surfaces.

Lower profile where less surface contact with traction material is needed to carry balls up lift rods.

Only one Pozi-Grip II recommended per machine to reduce ball return stops.



Premium Pozi-Guard Replacements

Part No. **PPP-PPGN** pkg of 4 \$20.50

Replacements for PPP-PG1 and PPP-PG2

Pozi-Guard protects Pozi-Grip by preventing damage to materials leading edge and prolongs life span.



Rubber Lower Ball Wheel Grooved Roller

Part No. **PPP-HUB-G** – pkg of 1 \$69.95 (replaces 90-400260-000)

Softer composition rubber roller reacts to steel ball wheel diameter variations and absorbs bowling ball under lift rods contact for smooth quiet performance.

Rubber ages better than urethane (resists fragmenting) and reduces stress on aging ball wheel joint welds.



Upper Ball Wheel Roller Drill Guide Part No. PPP-UDG – pkg of 1 \$19.95

Lower Ball Wheel Roller Drill Guide Part No. **PPP-LDG** – pkg of 1 \$19.95

New-hole patterns for roller flange broken bolts.

Handy ¼" drill guide plates lock into place over existing hole pattern then drill 4 new holes and tap ¼--20 holes.

Thanks To Rich Shiner Des Moines, IA

Spacing between original holes allows for two hole-pattern repairs.





Adjustable Ball Wheel Idler Spring Part No. PPP-ABWS - pkg of 1

Part No. **PPP-ABWS** - pkg of 1 \$18.70

OEM spring over-strain ball wheel belt - little tension is needed (with no slippage) to turn the ball wheel.



Extend belt life by greatly reducing spine strain and V-body separation cracks.

3" variable adjustment at 1/8" increments per ½ turn for individual ball wheel tension.

Ball Wheel Belt Guard Part No. PPP-BWBG pkg of 1 \$10.95

Guard prevents belt displacement from ball wheel





for A and A2



For low frame mounting extensions on even numbered lanes - belts can be inadvertently nudged from ball wheel.

Adhesive Backed Roll Stock

Part No. PPP-RS - 10' roll \$54.10

High-quality roll stock ideal for ball wheel conditions requiring the use of traction materials. Long term economy - less material needed to achieve satisfactory results.



Economical Cork **Ball Wheel Traction Material**Part No. **PPP-CTM** – 25 ft Roll \$33.65

Another option in our specialized line of ball wheel traction materials.



Elevator / Pin Wheel Elevator / Lift Rods

Pin Wheel Pin Wiper **Cushioned Spring Support** Part No. PPP-PWS - pkg of 1

\$29.75

Choose position for more or less support and height for best results to reduce turn pan jams.

Bumpers have 3 threaded mounting hole choices.

Rubber topped adjusters for a smooth and stable pin wiper performance.



Greatly improves pin wheel braking.

\$19.00

Newly installed belts do not always brake properly. Choice of holes allow for just the right tension on pin wheel belts.





Place spring into brake shoe corner-hole and pull bracket hooks onto tubular frame.

Adjustable Pin Wheel Roller Bracket Part No. PPP-APWRB - pkg of 1 \$9.95 **Great Price Reduction!**

Bracket frees the upper roller from U-bolt groove allowing ideal centering to keep pin wheel from dragging on the frame.



Pin Wheel Brake Lining Part No. PPP-PWBL

pkg of 1 \$12.65

Install without removing worn brake.

Slide new steel lining between belt and worn brake and secure.

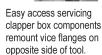
Lift Rods Bench Mount Part No. PPP-LRBM pkg of 1 \$127.95

Unobstructed work area for gum rubber



Thanks to Dennis Zink West Des Moines, IA.





Remove the height adjustment screw from clapper box and secure under tool with supplied bolt. Place mounting flanges into bench-vice.

'Tool made the easiest and quickest lift rods gum rubber replacement I've done in 30 years". Mike, Des Moines IA.

Lift Rods Spring Post Segmented Bumper

Part No. PPP-SPSB

pkg of 12 segments \$5.25

Place as many or few segments needed for best spring rod adjustment.



Six segments equal one-piece urethane bumper, shown at right, at half the cost.

Modular Pin Wheel Pocket Stabilizer Part No. PPP-MPWPS

7 re-enforcement ribs \$34.50

By Tom and Mark from Missouri



Steel ribs reduce pocket flexing that can trap pins leading to late turn pan delivery.

Stabilizer ribs increase plastic pin wheel diameter to nearly that of the steel pin wheel eliminating the need for pin wiper re-adjustments.

Pin Wheel Sound Dampener

Part No. PPP-PWSD pkg of 1 \$24.90

Held in place with a spring, easy to install 1/4 inch steel cable reduces pin wheel noise.

Spring and cable loops are tucked out of the way into pocket area.





Pin Wheel Pin Positioner Part No. PPP-PWPP

pkg of 1 \$18.25

For quieter operation, eliminates piggy-back and possible 2 pins-inwiper jams.

Easy mounting in rear plate existing hole. Improves plastic pin wheel performance.



Positioned below the rear plate mount (square tube) horizon, rubber mounted angle fully seats pins before ascending to wiper to assist pin wheels with worn or missing buttons.

Ball Lift Rods Stud Replacement Kit Part No. PPP-BLSRK

pkg of 1 \$18.50

After installation, it is no longer necessary to remove spring rod and collars to replace ball lift stud.





4 3/4" Ball Lift Rods Stud Part No. PPP-BLSRK-S

pkg of 1 \$18.00

Thanks to Mike Hennick Pleasant Hill, IA



One inch shorter stud greatly reduces or eliminates occasional ball sitting on top of lift rods. Decreases spreading of rails for increased upward ball speed to reduce chance of ball yo-yo. Improves overall lift rods performance.

Heavy Duty Lift Rods Spring Part No. PPP-HDLRS

Spring & 6 PPP-SPSB segments \$12.40

Economically add greater tension to help prevent ball Yo-Yo. Tune up lift rods with this Heavy Duty Spring and our Spring Post Segmented Bumper.



Elevator / Lift Rods Elevator / Misc.

Adjustable Lift Rods Torsion Spring

Part No. PPP-ALRTS - pkg of 1 \$23.00

Patterned after the long turret belt spring, allows for increased downward pressure to help elevate troublesome-starting bowling balls high enough for spring rod engagement to carry ball onto upper track.



For A2





Clapper Adjustment Screw Stabilizer Part No. PPP-CASS - pkg of 1* \$12.15

1¼" diameter base distributes lift rods weight more broadly across spacer. Stabilizes set screw - reduces bending and breakage due to small contact area on lift rods spacer.



*set screw not included

Thanks to David Ibanez - Hollywood, CA

Jack Shaft Bearing Installation Tool Part No. PPP-JSBT - pkg of 1 \$14.75 Great Price Reduction

Impact barrel made of 4140 steel for durability.
Seating face, made of mild steel to minimize stress to bearing.



Bevel Gear Turret Drive Conversion Part No. PPP-BGTDC - pkg of 1 kit \$124.95

Economically priced, this method of power transfer less costly and easier to maintain. Kit has everything needed to convert bevel gear turret drive to idler pulleys.

Pre-mounted glass-filled Nylon idler pulleys. Drive pulley, belt and mounting hardware.



By Jamie Cecil - Plymouth, MI

Economical - Non-Aligning Jack Shaft Bearing

Part No. **PPP-JSB** (replaces 10-43001-000) pkg of 2 \$10.00

Economical - Most jack shaft replacements only need one selfaligning bearing and in some cases, where bearing entry-port alignment is good, both bearings can be non self-aligning.

The non-aligning bearing is easier to seat due to not swiveling while driven into bearing entry-port. Get 2 jack shaft bearings for less than the price of 1 self-aligning bearing.

Bevel Gear Turret Drive Conversion – Bracket Only Part No. PPP-BGTDC-B – pkg of 1

Part No. **PPP-BGTDC-E** \$39.95

Bracket design allows converting bevel gear turret drive to idler pulleys using commonly found parts (of your choice) to complete the conversion.



Lift Rods Repair Shaft Part No. PPP-LRRS pkg of 1 \$99.50

Install without welding. Keep one on hand for emergencies.



Thanks to Brian Vogel Monroeville, PA



Tapered connection point diameter is greater than box beam openings and wedges repair shaft firmly in place. 5/8" draw bolt and Nord-Lock® locking system.

Non-Marring Shaft Collars fine tune adjustments without set screw indentation interference

Non-marring collars make shaft disassembly and re-assembly easier by eliminating shaft burrs due to set screw indentations.



Ball Wheel Idler Stop Collar

Part No. **PPP-SC58** pkg of 2 \$14.85

5/8" ID locking collars fit idler shaft to easily position pulley for V belt alignment on ball wheel.

Great Price Reduction



Magnetic Clutch Stop Collar

Part No. **PPP-SC1** pkg of 2 \$17.50

1 inch ID locking collar fits the jack shaft for precise magnetic clutch spacing from drive pulley.



Lift Rods Stud Stop Collar

Part No. **PPP-SC34** pkg of 2 \$14.25

3/4" ID locking collars fit Lift rods stud for ease of centering over ball wheel.



Motor Mount Gussets Part No. PPP-MMG

pkg of 4 gussets \$4.70

Use these handy preformed gussets to re-enforce plates during weld repairs.



For pinsetters using heavy Toshiba motors.

Rear Plate Repair Kit Part No. PPP-RPRK pkg of 2 plates \$18.75

Shown mounted to rear plate, heavy 10 gauge steel plates absorb vibration of constant pin impacts.

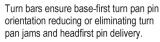
Permanent repair for damaged pin wheel roller mounting holes.



Cross Conveyor Ball Return

Turnbar 2 Part No. PPP-T2 pkg of 1 \$36.85

Made of heat-treated alloy steel, T2 will not bend or deform in any turn pan issue.







Easy Removal - Turn Pan Spring Part No. PPP-TPS - pkg of 2 \$11.35



OEM spring end curvature conforms to shaft groove.

Our spring end extends beyond shaft allowing use of closed-end wrench for controlled spring removal reducing chance of injury.



Micro Switch Extended Actuator

PPP-TPS

Part No. PPP-MSA pkg of 1 \$13.95

OEM

Extended Actuator disengages sooner and re-engages later than round roller. Replaces original roller. No readjustment needed.





Pins on cross conveyor get pushed around while waiting for turret. Occasional micro switch bumping can cause pin wheel to creep forward allowing unwanted pins onto cross conveyor.

Pin Gate & Latch Nut Plate Part No. PPP-PGL-NP

pkg of 1 \$32.95

Thanks to Mike Hennick - Pleasant Hill, IA





Repair elongated x-washer pin mounting holes. Ensure parts rotate on bolt rather than pins rotating in mounting holes. Easy access service with Allen wrench.

Shoulder bolts replace x-washers and pins for easy service access with Allen wrench on the gear box side of cross conveyor.

Special Accelerator Adjustment Tool Part No. PPP-SAAT - pkg of 1

\$11.95

Special Allen key allows full rotation, until proper belt tracking is achieved, of the hard-to-access alignment set screw in rear accelerator pulley.





Preference Rod Brake Part No. PPP-PRB - pkg of 2 \$15.75

Keep trip levers from popping back up. Rotate urethane brake onto preference rod. Position closer to unibal for more braking power or farther away for less. Secure position with clamp.



Snubber Tamer Part No. PPP-ST pkg of 1 \$32.75





Eliminates chance of pin caught in halo ring making it unnecessary to "fine tune" tops of turret wires and forces pin bottom more squarely onto index lever for improved triggering. Reduces pin bounce as pins drop into turret wires.

Reduces chance of pin getting pushed on top of turret wires as snubber is secured in rear-most position allowing pins to fall from cross conveyer sooner.

Cross Convever Pozi-Plate Part No. PPP-CCPP

pkg of 1 plate - 6 springs \$27.15

Lexon plate fastens to cross conveyor with tension springs. Applies downward pressure eliminating pin slippage.



Pozi-Plate Tension Springs Part No. PPP-PPTS pkg of 6 springs \$11.60

Fine tune Cross Conveyor Pozi-Plate pressure.



Cross Conveyor Belt Adjustment Tool Part No. PPP-CCAT - pkg of 1

\$62.95





Y-Switch Delta Plate Part No. PPP-DP - pkg of 1

\$46.50

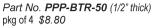
Smooth ball transition from track to accelerator. No X washers or other fasteners needed. Simply lift Delta Plate from y-switch spacers.



Part No. PPP-BTR

pkg of 2 each (1/4" & 1/2" thick) \$7.45

Part No. PPP-BTR-25 (1/4" thick) pkg of 4 \$6.15



Easily get ball track height advantage with these HDPE risers.

Ball Track Risers

From this



Ends washer stack falling into pit and the search to find same thickness washers for shims. Use ½" shims for majority height. ¼" are especially useful in allowing for clearance under cross conveyor belts on odd # side.



Y-Switch Spacer Part No. **PPP-YSS** pkg of 5 \$13.00



3/16" nylon spacers provide better pivoting surface than a handful of oversized washers.



Solenoid Plunger Part No. PPP-SP pkg of 1 \$12.95

PPP-SP (at right) has twice as much steel below the hole allowing more wear before replacement.

Undersized Solenoid Plunger

Part No. PPP-SP-U pkg of 1 \$13.25

Easily distinguished from other solenoids by stop-collar dot.

Fast remedy for tight fitting solenoids. Solenoid liner shrinkage can produce rake downs but no triggering.



Time Delay Tester Part No. PPP-TDT With American style plug \$49.95





When fail-to-trigger occurs, is the time delay at fault or solenoid failure? Use the PPP-TDT to greatly speed trouble shooting time.

Position tester to front (image above right) of pinsetter to check scorer triggering output time.

Neon glows for entire duration of signal when voltage is present from time delay. Some late model A2s are hard wired and have no plug receptacle for tester use. Adjustable Bolt-On Full-Contact Y-Switch Bumper

Part No. PPP-FCYSB - pkg of 3 \$12.00

Add or remove washers for accurate ball entrance into accelerator or booster. Place unused washers on other side of stop bar for nut backing and future adjustments.



Cycle Solenoid Enclosure Part No. PPP-SE - pkg of 1 Universal \$39.50

Permanently mounted enclosure ground wire and cable means you never have to remove the solenoid enclosure to service.

One screw removes cover to a roomy interior allowing for guick voltage checks and solenoid replacement.

3 Amp Circuit Breaker Part No. PPP-3ACB-A pkg of 1 \$15.65

May require modification to fit converted As.

Thanks to Jamie Cecil Plymouth, MI

Convert costly Fustats into resettable 3 amp circuit breakers for American A and A2.



3 Amp Circuit Breaker (Japanese mounting) Part No. PPP-3ACB-J pkg of 1 \$15.65



Phenolic (Brown) Kick Back Plates

Reduces trouble shooting time.

Premium Gray Fiber and Phenolic Brown 15X33" plates both feature a 45 hole pattern (PPP-FKB-R and PPP-PKB-R - 42 hole-pattern) providing excellent span-tension, between fasteners, for optimum pin-bounce from kickback plates. Predrilled countersunk securing with 1" coarse-thread drywall screws. Install with power drill setting of 9 to 11 for effective securing.

Premium (Gray) Fiber Kick Back Plates



Part No. PPP-FKB 15X33" pkg of 1 \$131.95



Part No. PPP-FKB-R 19X24" pkg of 1 \$119.95



Coarse Thread 1" Drywall Screw Part No. PPP-CTDS box of 100 \$4.95







Part No. PPP-PKB 15X33" pkg of 1 \$107.95



Part No. **PPP-PKB-R** 19X24" pkg of 1 \$99.95



PPP-PKB-40 Features a 55 counter-sink hole pattern

Phenolic (Brown) - for Armor-Plate Kick Backs Part No. PPP-PKB-40 15X40" pkg of 1 \$131.95

Steel Rear Kick Back Plate Part No. **PPP-SRKP** (22X 19") pkg of 1 \$143.95

Steel rear plate is a quick fix for damaged wood kickbacks. Radius edges, recessed mounting screw holes and a durable gray powder-coat finish.



Pit End Miscellaneous

Rear Kick Back Exposed Wood Cover Part No. PPP-RKBC - pkg of 1 \$21.95

Cover gouged wood and holes to prevent further damage. Cover undamaged kickbacks to prevent damage. Mount behind rear plate and below upper shaker frame to span pin pass-by area.







Recycled 1/8" UHMW panel measures 10 X 19", generously sized to fit most applications. Can be easily cut and trimmed to suit individual kick back situations.

Part No. **PPP-CPH-2** (holds 2 pins) pkg of 1 \$11.65

Great Price Reduction!

Keeps floor clear of clutter and colored pins are near when you need them.





Colored Pins Holder

No-Slide Pin Spot Part No. PPP-NSPS pkg of 9 spots \$33.95

USBC APPROVED

Acceptable for use in USBC Certified Bowling Centers

Patent No. 7,704,152

No-Slide Pin Spot will not interfere with normal ball or pin action.

Won't break down under normal bowling lane maintenance.



Peel and apply the clear adhesive backed No-Slide Pin Spot according to instructions.

Gold Crown Ball Splitter Part No. PPP-GCS - pkg of 1 \$44.95

Urethane form patterned after obsolete 124-19-24

Replace worn-out splitter to eliminate ball damage and improve ball tray transition.

Suggested by Dave Schwallie SW Canton OH



Thanks to Stan Schiltz Des Moines. IA

Smoother lane machine transfers and less jarring of expensive machinery and adjustments.

Mount this 1/8 steel plate over starter block against beveled approach edge.









Replacement Reflectors Part No. PPP-RR1

pkg of 2 \$25.75

Replaces 57-860507



For all triggering systems using center mounting reflectors.

Center mounting reflector measures 3 1/4".

2000 Power Lift Hood Insert Part No. **PPP-HI** - pkg of 2 \$21.00

Replace cracked and broken hood inserts at a fraction of OEM cost.



Ball Booster to Light Bar Step Part No. PPP-LBS – pkg of 1 \$69.95

Thanks to Ken and Ron Scranton, PA





Frameworx Seating Lightweight Pivot Spring

Part No. **PPP-FXPS-RH** (replaces 53-400124) - pkg of 1 Part No. **PPP-FXPS-LH** (replaces 53-400125) - pkg of 1 \$8.85

60% spring-power reduction eliminates customer complaints. Seating parts and spring-life greatly increased by greatly reducing seat retraction impact.

Frameworx Seating Heavy Duty Swivel Bearing Part No. PPP-FXSB (replaces 53-861055)

pkg of 1 \$9.80

Made of Nylon 6/6, these bearings have twice the shoulder height as OEM (at right) to insure bearing stays seated in tube for longer bearing life.



Thanks to Mike Hennick - Pleasant Hill, IA



Frameworx Seating Tools

Seating Pin Removal Tool Part No. PPP-FXPRT - pkg of 1 \$130.95

Thanks to Mike Hopkins, Kearney NE

For spring replacement - easily unseat hard to access pins in Frameworx seating booths.



Seating Pin Extractor Tool Part No. **PPP-FXPET** - pkg of 1 \$27.45

Using vice grips results in shaft burring. Non-marring tool fully extracts remainder of pin from seating for spring replacement.



Ace Mitchell Akron, OH 800-321-0309 W. Babylon, NY 800-262-2695 acemitchell.com

Classic Products Fort Wayne, IN 800-444-0123 Garland, TX - Largo, FL classicproducts.com

Schemm Bowling Deerfield, WI 888-724-2695 schemm.com

Classic Products Kent, WA 800-426-8789 classicproducts.com Island Bowling Supply Lindenhurst, NY 888-791-2695 islandbowlingsupply.com

Bobs' Business Bensenville, IL-Red Wing, MN 800-328-9311 bobsbusiness.com

Gran Prix Bowling Supply Saint Louis, MO 800-992-2695 granprixbowling.com

Newell Bowling Supply Murrieta, CA 800-796-2200 newellsbowling.com EBN Services Bellmawr, NJ 888-435-6289 ebnservices.com

DiLaura Bro's Bowling Warren, MI 800-322-5091 dilaurabrothers.com

Jayhawk Bowling Supply Lawrence, KS 800-255-6436 jayhawkbowling.com

Murrey International Los Angeles, CA 800-421-1022 murreybowling.com

International Sales Bowling Factory Outlet Lakewood, CO 877-236-8505 bowlingfactoryoutlet.com Bowlers Supply York, PA 800-632-1830 bowlerssupply.com

Mitchell Sales Farmington Hills, MI 800-245-2397 ballcalleliminator.com

Tucker Bowling Tulia, TX 806-995-3635 bowlingpartsandequipment.com

Western Pacific Bowling Orange, CA 800-595-2695 wpbowling.com Ace Mitchell Nashville, TN 800-251-3522 acemitchell.com

Great Lakes Bowling Milwaukee, WI 800-545-5270 greatlakesbowling.com

Ace Mitchell Oviedo, FL 800-432-3482 acemitchell.com

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