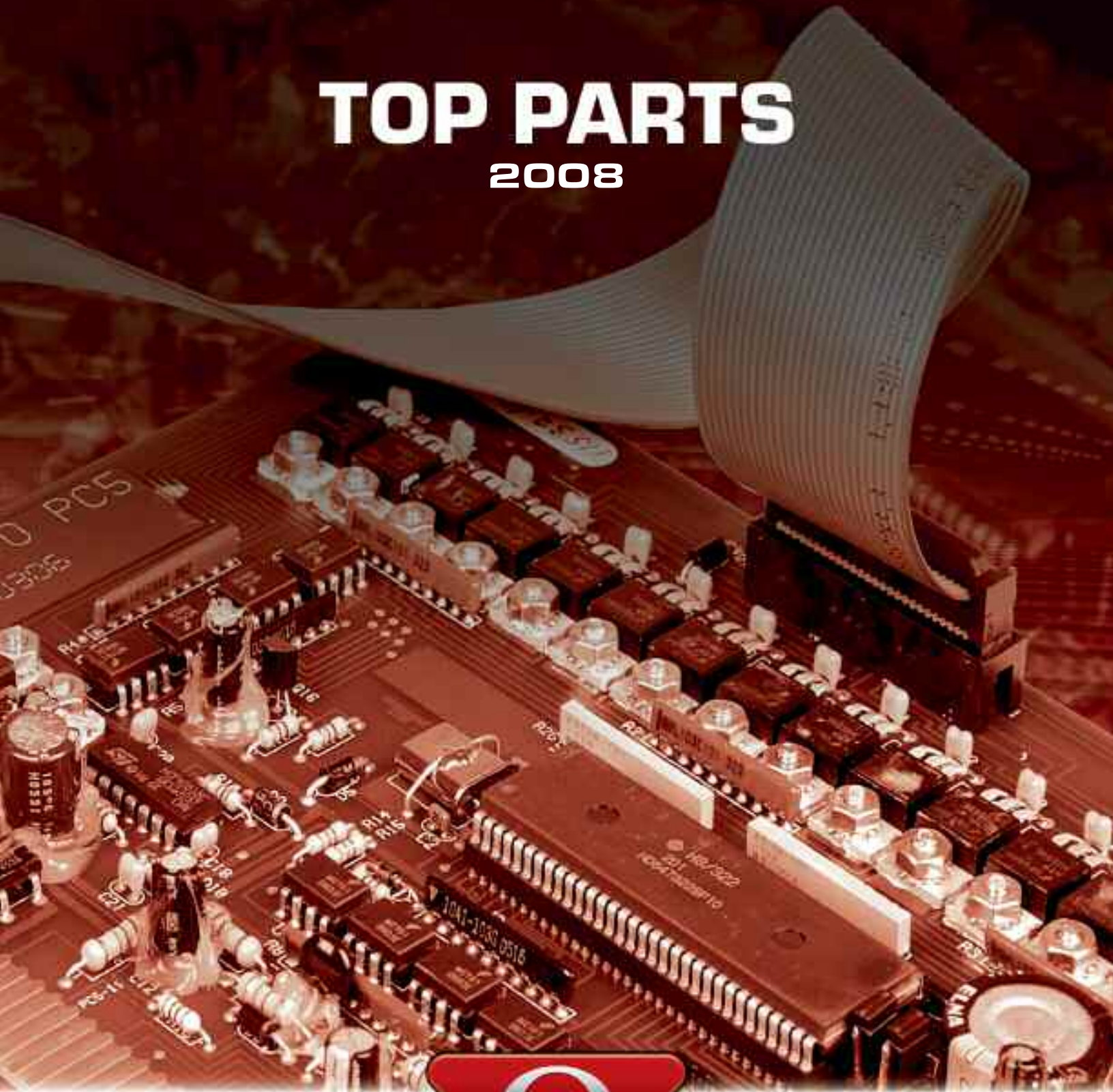


TOP PARTS

2008



Retail Value
\$5.00



CHOOSING THE O.E.M. BRAND... ...HAS ITS ADVANTAGES

You will find that several of the Top Parts in this catalog are completely new, and many more have recently been improved in design, material, and construction. QubicaAMF has a reputation for “firsts” in bowling equipment innovation, and we honor our vast legacy by continuing to improve and expand in every way we can. We’re proud of our past, we’re committed to serving your needs today, and we’re always working toward improving our shared business in the future.

As the Original Equipment Manufacturer, we’re flattered by the many companies that make imitation parts for QubicaAMF pinspotters. But, before you consider QubicaAMF as “just another parts source,” consider the following:

- QubicaAMF continues to combine highly skilled engineers, veteran mechanics, and the latest design and manufacturing technology to develop new part ideas and improve on existing parts for the bowling industry.
- The Genuine AMF Parts business consistently out delivers all other brands in unit volume and dollar volume, order turnaround time and order fulfillment, warranty claims and customer support.
- QubicaAMF stocks more parts for more generations of pinspotters than all other manufacturers combined. And that’s not counting any of the parts and supplies available for scoring systems, lanes, bumpers, ball returns, furniture, fouls, masks, lane chemicals, cleaners, shoes, socks, house balls, etc.
- We are the only company that builds new QubicaAMF Pinspotters - that means all of our products are the quality you’d expect to find in a brand-new machine.
- QubicaAMF is the largest American employer in the bowling equipment industry. Our main production facility in Richmond, Virginia, USA employs hundreds of Americans who take pride in their work and in their company’s past, present, and future.



DOES THIS CATALOG SHOW EVERY PART AVAILABLE FROM QUBICAAMF?

Not even close! These pages are filled only with our most popular items, as well as those things that you just won't find anywhere else. From small hardware pieces to complete upgrade kits, all of our most requested parts are here. Use the photos and descriptions to find exactly what you're looking for, without any confusion. QubicaAMF appreciates you and we value your business, whether you maintain AMF equipment that's one year old or fifty. We hope you find your Top Parts catalog useful, as well as interesting, and we thank you for choosing Genuine AMF Parts!

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SPRING - CAM LEVER

82/30, 82/70, 82/90, 82/90XL, 90XLi

000 024 657

Ea



Everywhere a finger lever operates a microswitch, this spring keeps it tensioned properly.

If faulty switch operation is causing machine problems, this spring might be missing or deformed.

SWITCH - MICRO

82/30, 82/70, 82/90, 82/90XL, 90XLi

000 026 042 (Small Button)

000 026 043 (Big Button)

Ea



Controls electric signal in many locations on all generations of pinspotters.

Knockoffs of this switch can be flaky. Stick with the original for reliable performance.

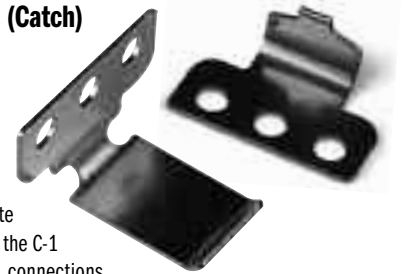
LOCKING SPRING CLIP & CATCH

82/70

000 029 013 (Clip)

000 029 014 (Catch)

Ea



- These Clips and Catches mate together to secure the C-1 and C-2A plug connections between the machine and chassis.
- Keep these tight to prevent them from falling into the wireway below and causing short circuits.
- Secure with the proper Guide Pin 000 028 442 and Socket 000 028 443 with nuts 843 140 002.

C-1 PLUG BLOCKS

82/70

000 025 068 (Chassis Side)

000 025 144 (Machine Side)

Ea



Makes the high voltage connections between the machine chassis and the pinspotter.

- Cracks, loose/missing hardware, and other damage to C-1 and C-2A blocks is dangerous and causes electrical problems.
- Replace all questionable blocks and missing clips and keep all hardware tight for good electrical performance.
- Always use correct block for proper terminal identification.

C-2A PLUG BLOCKS

82/70

000 028 410 (Chassis Side)

000 028 409 (Machine Side)

Ea



Makes the low voltage/signal connections between the machine chassis and the pinspotter.

SWEEP & TABLE CONTACTOR

82/30, 82/70

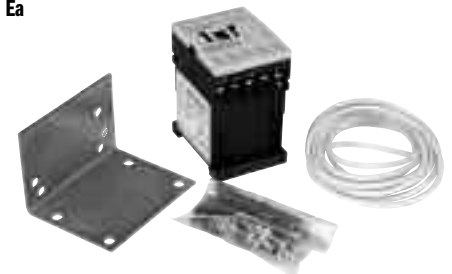
610 704 141 (70 Kit)

070 011 755 (70 Relay Only)

610 003 037 (30 Kit)

030 006 526 (30 Relay Only)

Ea



Enclosed relay that replaces the original sweep and table contactors.

Don't be fooled by modern replacement parts for original contactors. Stick with the safe, dependable, OEM choice.

SUPERSTAR AC CHASSIS

82/70

070 003 902

620 703 902 - Repair/Exchange

Ea

The latest, most advanced version of the computer that controls each pinspotter.

- All of the features of a original MP chassis, plus diagnostic LED's and programmable functions.
- Now improved with a cooling fan, more robust electronic components, and resettable breakers that protect all high-voltage circuits.
- To replace an older SS chassis, choose the MP Upgrade Kit 610 070 300.



CHASSIS RELAY - 24V COIL

82/70

070 005 515

Ea



The common "ice cube" relay in most chassis.

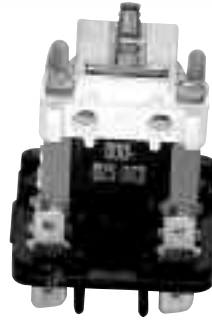
In the SS chassis, SP relay 070 005 883 looks very similar, but it has a 10 VCC coil and is not interchangeable.

BACK END RELAY

82/70

000 025 863

Ea



Mounted to the wall of the chassis, this relay controls voltage to the Back End Motor.

- SS and early MP chassis use this relay.
- The terminal numbers are no longer the same as the original. Use terminal location and internal connection for wire location when installing.
- This was replaced in later MP's with sealed type 755 504 048.

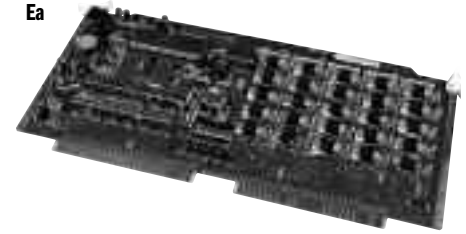
MP LOGIC BOARD WITH LED'S

82/70

070 009 860

520 709 860 - Repair/Exchange

Ea



This board puts the microprocessor in the MicroProcessor Chassis. Processes the inputs and determines the outputs to control a 82/70.

A direct replacement for all MP boards.

Has diagnostic LED's and programmable options.

- A direct replacement for all MP boards.
- Has diagnostic LED's and programmable options.

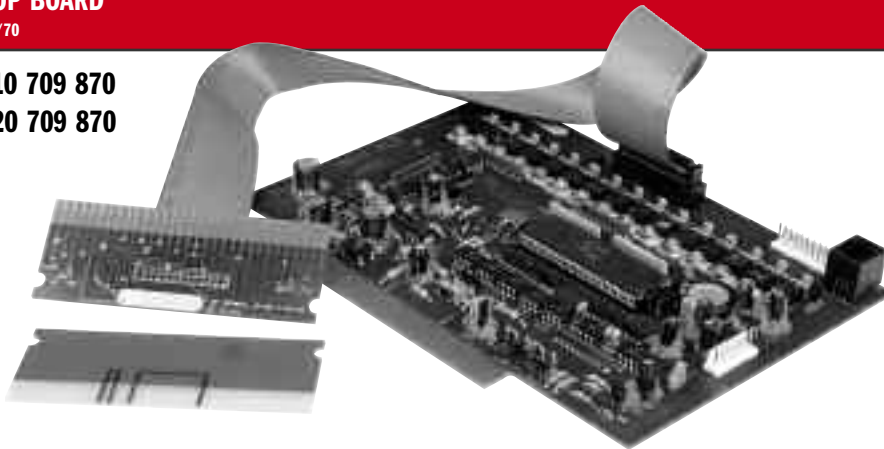
XOP BOARD

82/70

610 709 870

620 709 870

Ea



Replaces all five boards in a Solid State chassis.

- Installs in minutes.
- For short-cycle function with QubicaAMF scoring, add relay kit 070 009 872.

BALL DETECTOR CYCLE TRIGGER

82/30, 82/70, Brunswick A, Jetback, A-2

244 001 058

Ea



This system mounts just ahead of the machine and starts a machine cycle when a ball passes through it's infrared beam.

- Sturdy, dependable, easy to install and adjust as it has been for years.
- For best results, mount these to the underlane floor, independent of lane structure or machine vibration.

STRIKE/FOUL MASK BOARD

82/30, 82/70, Brunswick A, Jetback, A-2

612 362 068

Ea



This board indicates to the bowlers what ball the machine is ready for, as well as strike and foul cycles.

- A direct replacement for all boards in late 1970's through early 1990's AMF masking units.
- Bulb replacements are 751 001 031.

82/90XL PINSPOTTER CONTROL CHASSIS

82/90XL

090 005 700 (115 Volt)

620 905 700 (115 Volt) - Repair/Exchange

620 905 769 (220 Volt) - Repair/Exchange

Ea

Chassis type most common on 82/90XL.

Four round C-23 type plugs connect machine signals and power on this chassis.

Replaceable items inside this chassis include:

- Breaker 743 513 028
- Spot/Lamp relay 755 520 074
- S & T Motor Relay 755 520 062
- Face Keypad Overlay 090 006 810
- Motor Capacitor 090 003 748 for 110V or 743 000 307 for 220V

Be sure there is no existing warranty on a chassis before breaking its seal.



90XL PINSPOTTER CONTROL CHASSIS

82/90XL

090 008 965

620 908 965 - Repair/Exchange

Ea

Universal voltage and cycle "black chassis" for use with later model XL pinspotters.

All machine connections on this chassis are made with rectangular, white plugs.

Replaceable items inside this chassis include:

- Breaker 090 008 939
- Spot/Lamp relay 090 002 775
- S & T Motor Relay 755 520 062
- Motor Capacitor 743 000 307

Be sure there is no existing warranty on a chassis before breaking its seal.



MANAGER'S CONTROL UNIT

82/90XL

610 903 697

620 903 967 - Repair/Exchange

Ea

This unit acts as a connection point and signal converter between pinspotters' chassis and most scoring control systems.

Each new unit comes packaged with a ball deflector reflector assembly, as they are both single items required with a new installation.



AMP WIRE TERMINALS

82/70, 82/90, 82/90XL

760 019 201BG (Socket)

760 011 197BG (Pin)

20/Bag



Though used in all AMP plugs, these wire terminals are mainly associated with the chassis connections on 82/70's.

- Always unplug the main power first before disconnecting any AMP plugs. Check pins and sockets for corrosion, burns, and proper seating every time you handle a plug.

- If a socket is suspect, insert a loose pin to test. Sockets may look OK, but be too loose to make a good connection.

- Use Extractor Tool 030 004 031 to remove terminals from plug blocks.

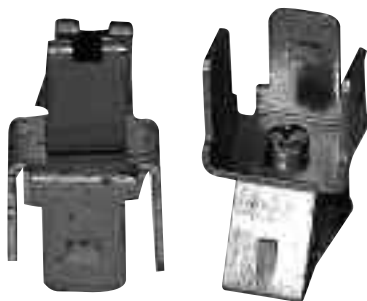
J-STRIP TERMINALS

82/30

760 002 061 (Brass)

760 002 063 (Silver)

Ea



These terminals seat into the J-strip and connect to the terminals on the machine chassis.

Match the color for proper fit and operation.

Silver terminals have locking tabs on both sides.

STRAIGHT TERMINALS

82/30, 82/70, 82/90, 82/90XL, 90XLi

760 017 044 (Small Gauge Wire)

760 017 036 (Large Gauge Wire)

Ea



These "faston" or "spade" terminals are used at most switch and other connections where quick disconnect is preferred.

- Strip about 1/8" insulation and crimp these and all terminals on the bare wire with the smaller set of tabs and on the insulation with the large set of tabs.

- Crimping tool 792 512 019 is made specifically for this purpose.

CHAIR TERMINAL

82/30, 82/70, 82/90, 82/90XL, 90XLi

760 001 070

Ea



Where two wires connect on the same terminal, this is typically used to accommodate them.

In tight locations such as the A&MC Box, bend terminals slightly if necessary so that there is room between neighboring terminals to prevent shorting.

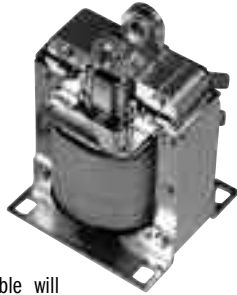


SOLENOID - 5/32" HOLE

82/30, 82/70

000 026 027 (110V)
000 027 873 (220V)

Ea



82/30 and early 82/70's use this solenoid to operate parts that determine if the table will pick up standing pins or spot new pins. 30's also use it for pinfeed toggles on their pin elevators.

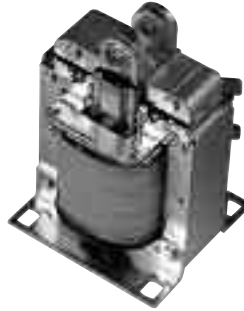
Our solenoids have recently been improved to be more efficient and improve fit and clearance issues.

SOLENOID - 1/4" HOLE

82/70, 82/90

070 006 726 (110V)
070 006 727 (220V)

Ea



Late 70's and early 82/90's without a white solenoid plug use this to engage pin spotting mechanisms.

UNIVERSAL SOLENOID

82/90XL, 90XLI

090 005 723

Ea



This dual voltage, dual cycle solenoid is used on late model machines, and can be fitted to earlier machines with Adapter Cable 090 003 739.

- Rubber washers cushion the shock of solenoid operation, as well as help you adjust so that the plunger and connected links are aligned properly.
- Replace crushed washers with 000 021 442BG on 82/70's, or 948 041 100 on 82/90 and later pinspotters.

LOWER LINK - SPRING

82/70, 82/90, 82/90XL, 90XLI

070 006 282

Ea



The middle link under the Spotting Solenoid, held by two 070 006 277 Spring Caps and an 070 006 276 Spring.

Be sure that the 070 006 280 Spring Clip at the bottom is adjusted to adequately stretch 070 006 283 Spring and disengage the spotting mechanism.

UPPER LINK - SPRING 1/4" HOLE

82/70, 82/90, 82/90XL, 90XLI

070 006 724

Ea



If you have early 82/70's, use the 5/32" hole version, 070 006 281 and Shoulder Screw 000 028 391.

Two of these are used in the spotting solenoid plunger linkage.

SPRING CAP WASHER

82/70, 82/90, 82/90XL, 90XLI

070 006 277

Ea



Two of these contain the spring in the spotting solenoid linkage.

LOWER SPRING - SPOTTING SOLENOID

82/70, 82/90, 82/90XL, 90XLI

070 006 283

Ea



Located at the very bottom of the spot solenoid linkage, this spring stretches between Lower Link 070 006 282 and Spring Tab 070 006 280.

TABLE DRIVE ASSEMBLY

82/70, 82/90

070 001 840

Ea

Mounted at the end of the table driveshaft, this controls whether the table lowers to respotting height or to spotting height.

- Keep a spare assembly for quick replacement and convenient repairs.
- For machines with steel tables, use 090 005 550 instead.



DRIVE SHAFT - TABLE

82/70, 82/90

070 001 700

Ea

This shaft operates the table through its spotting and respotting operations.

- Inspect regularly for cracks around shuttle cam and keep splines greased to increase part life.
- For 82/90XL and 90XLi, order 090 005 565.



BEARING - CLEVIS ROD END

82/70, 82/90, 82/90XL, 90XLI

000 021 881

Ea

Two of these bearings go in the rod end between the Clevis and the Table Drive Eccentric.

Often forgotten, these should be inspected regularly.



SPOT/RESPOT CAM

82/70, 82/90, 90XLI

070 001 910

Ea

Controls the operation of spotting cups and respot cells.

- Worn spot/respot cams are dangerous and inhibit good table adjustment.
- Also inspect cam followers 610 704 002.
- For 82/90XL machines with steel table, use 090 005 589.



SPRING - SPOT & RESPOT ARMS

82/70, 82/90, 82/90XL, 90XLI

070 001 707

Ea

These green springs hold the spot & respot arms tight against the spot/respot cam.

If the bracket for these on the machine frame breaks, use Repair Kit 070 007 761.



CAM FOLLOWER ASSY

82/70, 82/90, 82/90XL, 90XLI

610 704 002

Ea

These rollers follow the cam surfaces and determine how the spot and respot arms pivot and operate the table mechanisms.

Assemble to arm with a new Nut 844 047 002BG.



HANGER - SPRING

82/70, 82/90, 82/90XL, 90XLI

070 001 751

Ea

Attaches Spot & Respot "crableg" arms to the 070 001 707 Springs.

090 005 576 Hanger is a direct replacement and makes it unnecessary to remove Pin 070 001 587 when servicing.



PIN - SPRING HANGER

82/70, 82/90, 82/90XL, 90XLI

070 001 587

Ea

Holds the three "green springs" 070 001 707 on the Spot and Respot Arm Hangers 070 001 751.

Always use a new nut 839 665 002BG, and install using Spring Puller Tool 792 505 005.



CLAMP STUD - CAM

82/70, 82/90, 82/90XL, 90XLi

070 001 664

Ea



Secures the Sweep and Table cams onto their driveshafts.

Use jam nut 835 549 002BG and snug, but don't overtighten.

ROLLER - COUNTERBALANCE SPRING

82/70, 82/90, 82/90XL, 90XLi

070 001 668

Ea



The two 000 022 782 Counterbalance Springs hook around this roller at the top - front end.

If the pin for this roller needs to be replaced, order repair kit 610 704 103.

END FITTING - ADJ. TIE ROD

82/30, 82/70, 82/90, 82/90XL, 90XLi

000 025 004 (RH Thread)

000 025 005 (LH Thread)

Ea



Used in tie rod assemblies on the Sweep and Table so adjustments can be made by turning the tube.

Includes grease zerk for easy maintenance. Secure with Jam Nut RH 835 570 002BG or LH 835 670 002BG.

PILLOW BLOCK

82/30, 82/70

000 022 811

Ea



On 82/30's, it supports the table driveshaft, on 70's it supports the table torque tube and sweep rocker arm.

Don't forget to lubricate these per your service manual and inspect regularly for cracks. For the strap portion only, you can order 030 003 938.

GREASE ZERK

82/30, 82/70, 82/90, 82/90XL, 90XLi

710 501 009

Ea



A direct replacement for most locations where a grease zerk is used all over all models of pinspotters.

Common hardware items like this can be kept in quantity without being expensive or taking up too much space.



SPRING - SWEEP BRAKE

82/30, 82/70, 82/90, 82/90XL, 90XLi

000 022 168

Ea



82/30 Sweep Brakes, 82/70 & later Bin Switch Levers.

Springs make a big difference in pinspotter performance. Only your O.E.M. knows the right specifications.

X-WASHER - SWEEP & TABLE

82/30

030 001 358

Ea



This special washer is used in respot cells and on the sweep carriage assembly.

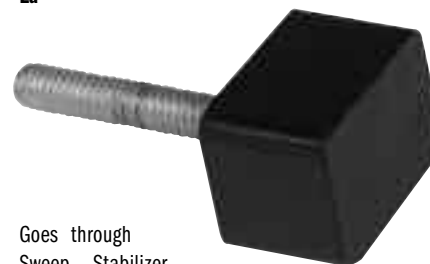
Just one example of the many 30-exclusive parts you can still expect from your O.E.M. More than any other manufacturer!

URETHANE BUMPER - SWEEP LINK

82/70, 82/90

000 023 279

Ea



Goes through Sweep Stabilizer (top) Link 070 003 238.

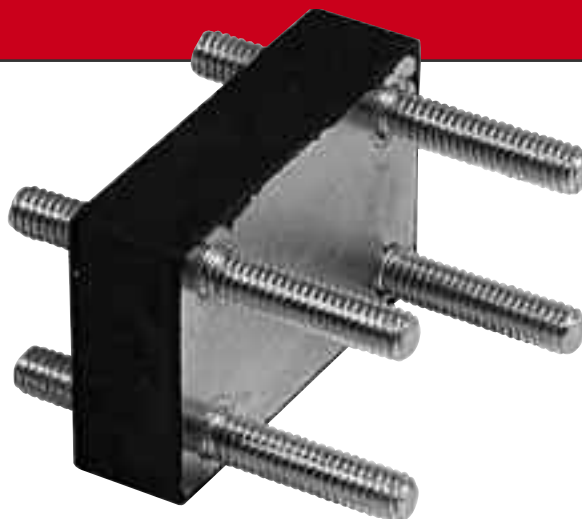
During regular inspection, or if your sweep "pops" when it starts down, make sure these are the correct thickness and not sticky. It is a direct replacement for obsolete rubber bumper 000 023 216.

SHOCK MOUNT - SWEEP

82/70, 82/90

070 003 195

Ea



Absorbs impact when a ball is delivered during a machine cycle.

- New, improved design locks studs in place with square holes, while enhanced rubber adhesion to plates makes it more resistant to tearing.
- Use with cast aluminum Sweep Link 070 003 184.
- Steel channel sweep links use Shock Mount 090 006 136 instead.

BUMPER - LINK ASSY

82/70, 82/90, 82/90XL, 90XLi

070 007 283

Ea



In the middle of the sweep telescoping links, this ring is essential to proper adjustment and operation of the sweep.

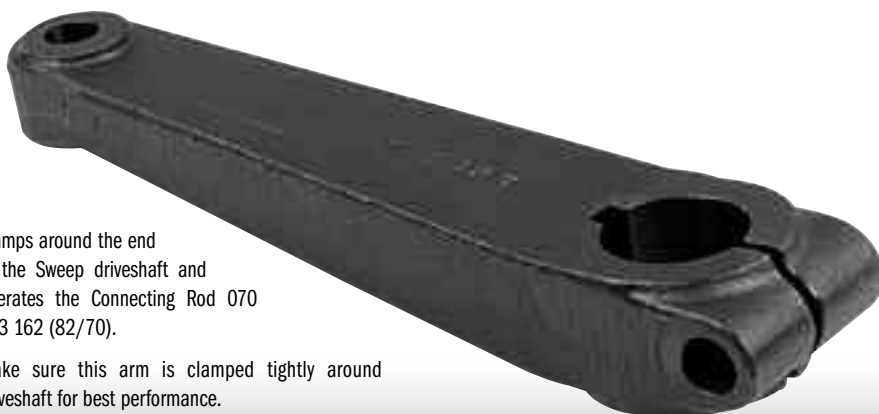
Keep a supply of these on hand and inspect regularly.

CRANK ARM

82/70, 82/90, 82/90XL, 90XLi

000 023 139 (82/70) or 090 005 255 (82/90-later)

Ea



Clamps around the end of the Sweep driveshaft and operates the Connecting Rod 070 003 162 (82/70).

Make sure this arm is clamped tightly around driveshaft for best performance.

SLIDE BAR - SWEEP

82/30, 82/70, 82/90

000 023 182

Ea



Allows the sweep bar to raise safely if it comes down on a fallen pin.

Use with sweep brackets 000 023 170 (10-side) and 000 023 171 (7-side).

THREADED LINK - SWEEP

82/70, 82/90

070 003 223

Ea



The "corn cob pipe" used to adjust sweep height at guard position.

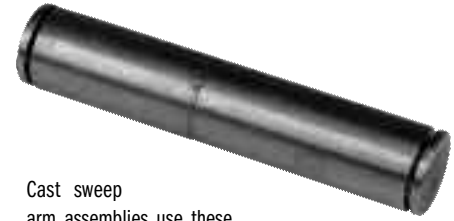
Always keep these links horizontal.

PIN BEARING - SWEEP LINK

82/70, 82/90

070 003 103

Ea



Cast sweep arm assemblies use these pins in the two "knuckles" where three links meet.

- Lubricate per your service manual.
- During maintenance, don't forget Retaining Rings 919 010 700BG.

SWEEP STABILIZER LINK ASSY

82/70, 82/90

070 003 238

Ea



The top link in the sweep arm assembly, complete with bushings and bumper.

- A direct replacement for 090 003 903.
- Machines with steel links use 090 006 139 instead.

DRIVE LINK - SWEEP

82/70, 82/90, 82/90XL, 90XLI

070 003 158

Ea



In the two sweep link assemblies on each machine, this is the link that is pushed & pulled to operate the sweep.

You can also choose Drive Link Assembly 090 006 140 which has Pin Bearing 070 003 221 installed.

SUPPORT LINK ASSEMBLY

82/70, 82/90

070 003 184

Ea



The bottom, front member of the sweep link assembly, supporting the Sweep Shock Mount 070 003 195.

A direct replacement for the nylon version 090 003 902.

LINK ASSEMBLY

82/70, 82/90

090 007 319

Ea



In machines that don't have steel channel sweep links, three of these connect to give the sweep links their pantograph action.

This aluminum link is a direct replacement for 070 003 242, 070 007 318, and 090 003 901.

SWEEP BAR & CAP ASSY

82/70, 82/90

300 000 182

Ea



This is the bar that bowlers see during each machine cycle. It sweeps away dead pins and protects other machine parts from balls thrown during a cycle.

Virtually indestructible, this unit comes complete with black light-glow decal and 300 000 175 gutter "eyebrows" to clear pins in the flat gutters.

SWEEP BRACKETS, SLIDE-FREE

82/70, 82/90

090 001 170 (10-side)

090 001 171 (7-side)

Ea



These brackets connect the sweep bar to the sweep shock mounts and don't use sliders like older versions did.

- Replaces sweep slide bars and all related LH-RH parts.
- Reduces pin-in-channel calls.
- Makes sweep height & timing adjustments easier.
- Only for machines with aluminum sweep arms and plastic sweep bars. 90XL and later machines with steel channel sweep links use 090 006 129 (7-side) and 090 006 130 (10-side).



SWEEP BAR DECALS

82/30, 82/70, 82/90, 82/90XL, 90XLi

300 000 166 (White-Blk Letters)

090 006 166 (Black-Wht Letters)

090 008 892 (8800 Gold)

088 001 089 (QubicaAMF)

Ea

Four different versions of the decal that goes on the sweep bar.

All except the original version with white background glow in blacklight.



SWEEP CONVERSION KIT (PAIR)

82/30, 82/70

610 700 150 (Sliders)

610 703 060 (Slide Free)

1 Kit per lane pair



Old style tube sweep assemblies can be replaced with this simple kit.

- Your bowlers may think you got new machines when they see these sweeps.
- Easy to install.
- Slide-free kit is for 82/70 and later only.



WASHER - SLOTTED

82/70, 82/90, 82/90XL, 90XLi

000 021 784

Ea



"Pac-Man" washers are used to adjust side-to-side level of tables with 1-piece supports.

Comes in handy wherever a shim is necessary, all over the center!

SPRING - COUNTER BALANCE

82/30, 82/70, 82/90, 82/90XL, 82/90XLi

000 022 782

Ea



Helps the table on it's way up after spotting or respotting pins.

This spring should be present on both sides of the table to avoid premature wear on the drivetrain.

GRIPPER PAD

82/30

030 008 542

Ea



Two of these grip each standing pin in an 82/30 respot cell.

Change these in pairs for proper respot cell operation.

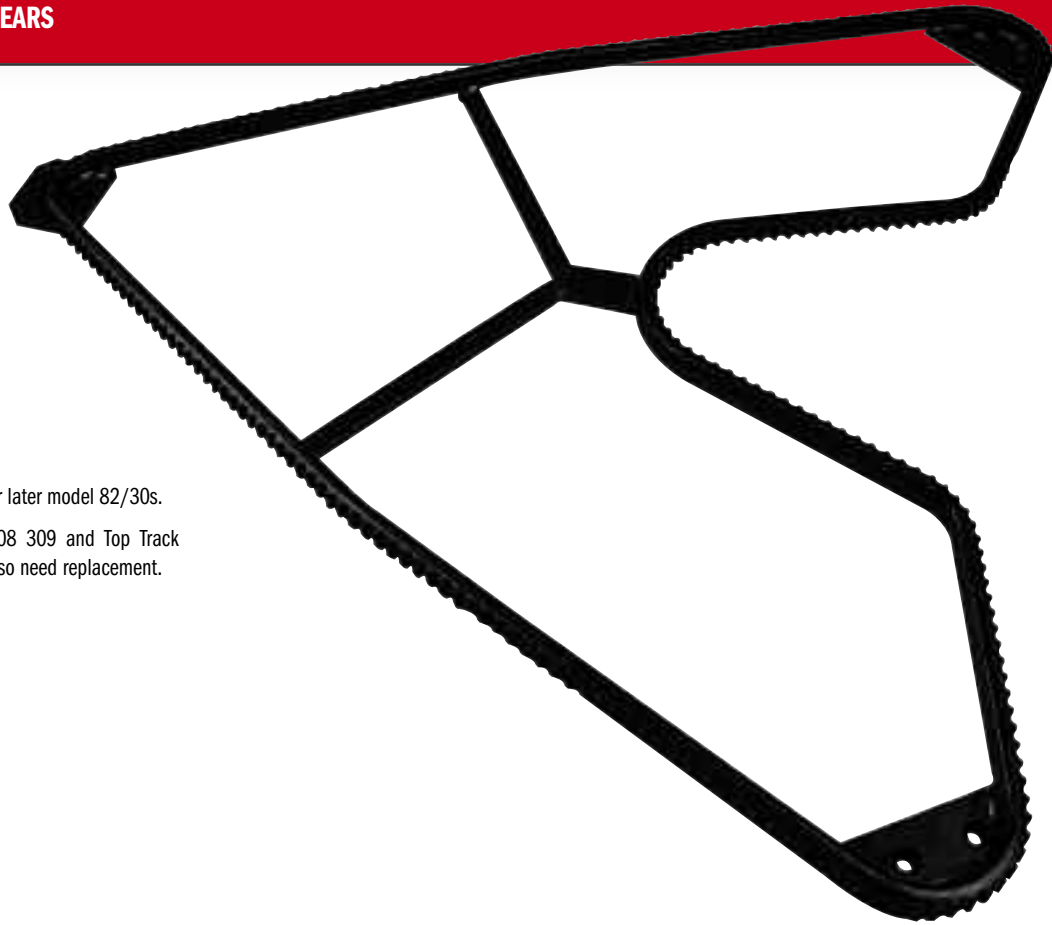


DISTRIBUTOR TRACK W/O EARS

82/30

030 008 310

Ea



Fabricated steel replacement track for later model 82/30s.

Track Support Bracket Short 030 008 309 and Top Track Support Bracket 030 008 089 may also need replacement.

SPOTTING CUP HALVES RH & LH

82/30

030 002 864 (10-Side)

030 002 865 (7-Side)

Ea



Located in the Table assembly, these hold and spot new pins.

Don't forget the Spacers, 000 022 868.

SPOTTING CUP LINERS

82/30

030 007 634 (10-Side)

030 007 635 (7-Side)

Ea



Provides a smooth surface for better pin transfer and reduced wear.

Attach to cup halves with Long Clip 030 007 849 and Short Clip 030 008 235.

LEG ASSY FRONT LH (7 SIDE)

82/70, 82/90, 82/90XL

070 002 664

Ea



On aluminum tables, this pivots and allows the cups to rotate when spotting pins.

The big 070 002 596 spring stretches between this part and the table casting.

SPHERICAL BEARING

82/70, 82/90, 82/90XL

070 002 698

Ea



On aluminum tables, this replaces the bearing in the bottom of all 4 yoke legs

Steel tables use different legs, 090 005 545 in front and 090 005 548 in back.

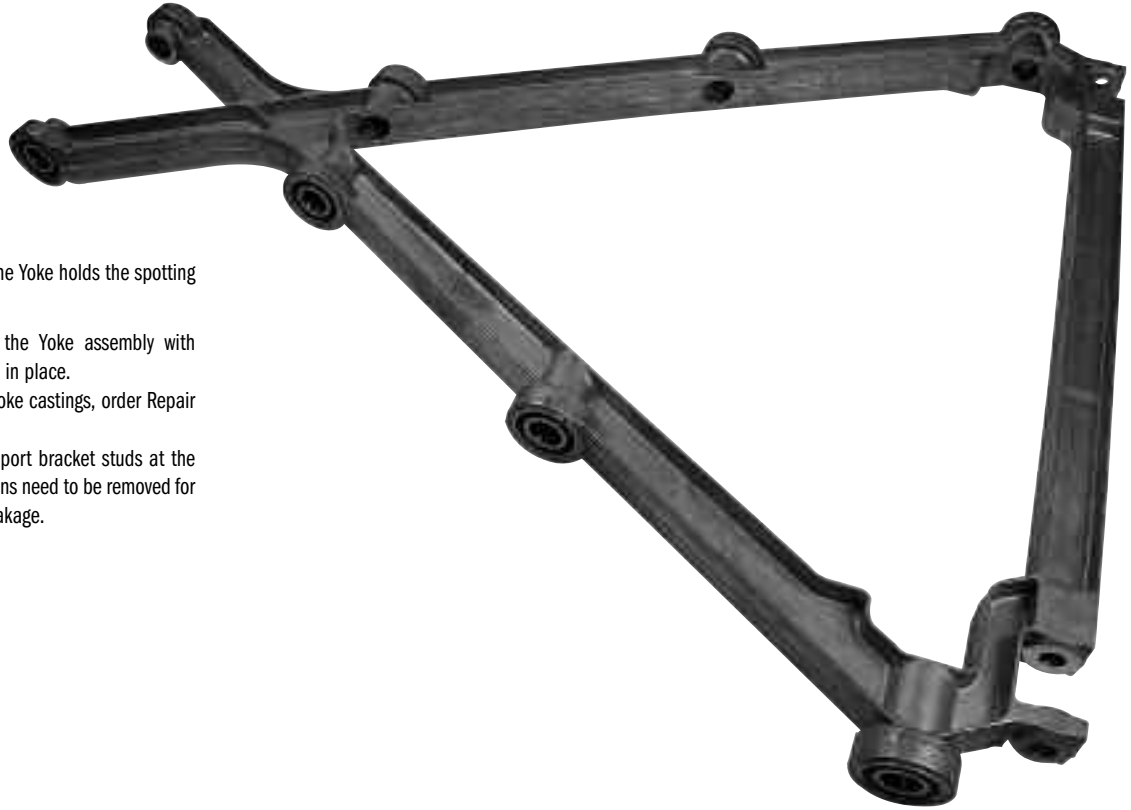
YOKE & BEARING ASSY

82/70, 82/90, 82/90XL, 90XLi

070 002 623 (Assembly)

070 002 683 (Yoke only)

Ea



Sometimes called the "X-Frame," the Yoke holds the spotting mechanisms on the Table assembly.

- Order just the Yoke casting or the Yoke assembly with bearings factory aligned and staked in place.
- For quick repair of most broken Yoke castings, order Repair Kit 610 704 011.
- there are pins in the two bin support bracket studs at the front for shipping purposes. These pins need to be removed for safety and to help prevent yoke breakage.

AMF 82-70 / 90 DAILY PREVENTIVE MAINTENANCE

CENTER: _____

MONTH: _____

YEAR: _____

Day of the month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Check the call sheets for the previous day, transfer calls to stop summary																															
Cycle / check machines, pinspotting, sweeps, foul lights, related equipment																															
Investigate / correct machines that have developed a malfunction pattern.																															
Clean Balllift belts, Pin elevator, Pin guide, Orienter pan																															
Keep work area, workbench, service aisle clean and orderly																															
Empty trash cans																															
Assign and record completed PM on the PM charts																															

SPRING - LATERAL DRIVE

82/70, 82/90, 82/90XL, 90XLi

000 026 032

Ea



Steel tables use two of these springs to pull the yoke forward.

If the spring stud has pulled through the table casting on an aluminum table, it can be replaced by two of these springs and related parts as shown in any steel table parts manual.

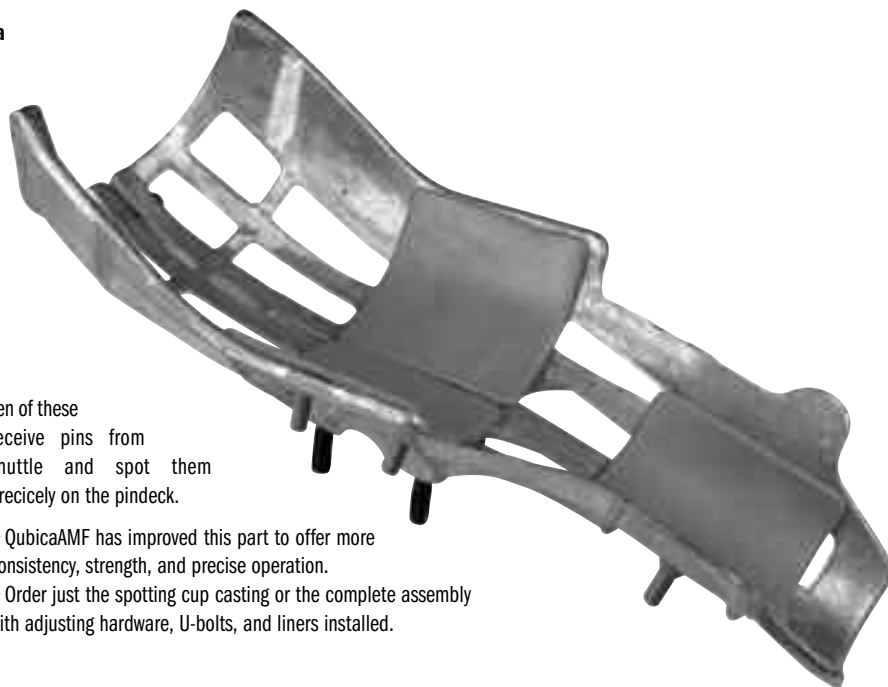
SPOTTING CUP

82/70, 82/90, 82/90XL, 90XLi

070 002 808 (Complete Assembly)

070 002 809 (Cup Only)

Ea



Ten of these receive pins from shuttle and spot them precisely on the pindeck.

- QubicaAMF has improved this part to offer more consistency, strength, and precise operation.
- Order just the spotting cup casting or the complete assembly with adjusting hardware, U-bolts, and liners installed.

LINER - SPOTTING CUP

82/70, 82/90, 82/90XL, 90XLi

070 002 784

Ea



Three liners mount in each spotting cup to improve pin shuttling and spotting.

- Different from the PBL Lift Arm Liner, this material has been specialized to eliminate pin sticking and gumming.
- If it's difficult to install, try warming up the pull tabs first.

CAP - SPOTTING CUP

82/70, 82/90, 82/90XL, 90XLi

070 002 788

Ea



Mates with shaft and U-Bolts 070 002 787BG to position spotting cups.

Unsurpassed QubicaAMF engineering and manufacturing control make this the best cap on the market.

FRAME - RESPOT WELDMENT

82/70, 82/90, 82/90XL

070 002 792

Ea



The original and still the best frame for aluminum table respot cells.

- Includes threaded weldnuts for mounting.
- If the center stud is the only problem, try a Replacement Stud 070 002 650 and Nut 840 049 002BG.

BUMPER - RESPOT CELL

82/70, 82/90, 82/90XL

070 002 752BG

Bag of 2



These bumpers should be glued onto the tabs on each respot cell frame.

- For respot cells on aluminum tables.
- Packaged in pairs.

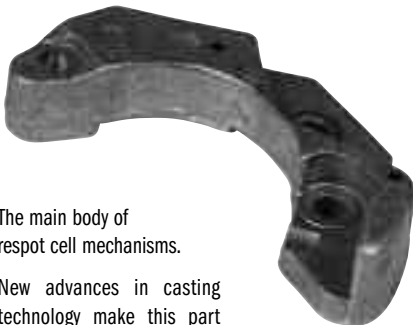
YOKE ASSY - RESPOT CELL

82/70, 82/90, 82/90XL, 90XLI

070 002 629 (Aluminum Table)

090 004 118 (Steel Table)

Ea



The main body of respot cell mechanisms.

New advances in casting technology make this part more precise than ever.

TOP PLATE ASSY - RS YOKE

82/70, 82/90, 82/90XL, 90XLI

070 002 644

Ea



The best item to top off a great respot cell.

A direct replacement for 070 002 695.

ARM - RESPOT YOKE ASSEMBLY

070 002 646

Ea



Aluminum Table Respot Cells depend on this assembly for adjustment and proper fit.

Often imitated, only the Genuine AMF Parts Yoke Assembly can be trusted for years of trouble-free service.

ARM - RESPOT YOKE ASSEMBLY

82/90XL, 90XLI

090 004 113

Ea



The arm for use in respot cells on steel tables.

Another example of continuing QubicaAMF innovation, this part is now stronger and more exact than ever before.

SCREW ADJUST - RESPOT CELL

82/70, 82/90

070 002 632BG

Bag 10



Essential for making the maximum closed adjustment, this screw should have a snug fit with Insert 070 002 570.

Adjust with 1/4" thin wrench 793 509 036.

SHAFT - RESPOT LEVER

82/70, 82/90, 82/90XL, 90XLI

070 002 645

Ea



The knurled edge on this shaft seats into the aluminum on respot levers & arms.

Respot cell operation trouble can often be traced to this part being loose.

LEVER RESPOT ASSY

82/70, 82/90, 82/90XL

070 002 633 (1/4" hole)
070 007 618 (5/16" hole)

Ea



This lever is what is driven by the "carb link" to open the respot cell on cast aluminum tables.

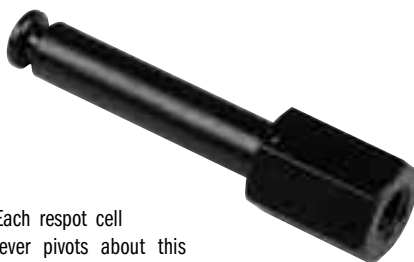
- 070 002 633 is the respot cell lever for use with 1/4" pivot studs 070 002 654BG.
- Select 070 007 618 for use with common 5/16" Pivot Studs 070 007 617BG.

RESPOT PIVOT

82/90XL, 90XLi

090 005 504

Ea



Each respot cell lever pivots about this stud on stamped steel tables.

Secure with carriage bolt 801 149 100.

RESPOT FINGER

82/70, 82/90, 82/90XL, 90XLi

090 004 123

Ea



Two of these lock onto the neck of each standing pin and pick it up.

- With square holes at the end, this is a direct replacement for the old version, 070 007 261.
- Kit 610 903 709 is for rebuilding and updating old respot cells.

COMPLETE RESPOT CELL ASSY

82/70, 82/90

070 007 200

Ea



The complete assembly that picks up each standing pin while fallen pins are swept away. Used for pins #1-6 and 8-10.

The #7 cell is different from the rest, and there are two different versions of the #7 cell. Early 82/70's with long carb link use #7 Cell 070 007 199. Most have a bolt connection at the #7 cell and use the 070 006 674.

FINGER GLIDE INSERT

82/70, 82/90, 82/90XL, 90XLi

792 506 033 (Aluminum Table)
090 005 617 (Steel Table)

Ea



This allows the tips of the fingers to slide smoothly at the edge of the cell opening.

Our original 82/70 roll pin type glides are still available, order 070 007 197BG.

RESPOT LEVER

82/70, 82/90, 82/90XL, 90XLI

070 007 623 (1/4 pivot hole)
070 002 678 (5/16 pivot hole)

Ea



This lever operates each row of respot cells via each wireway/link.

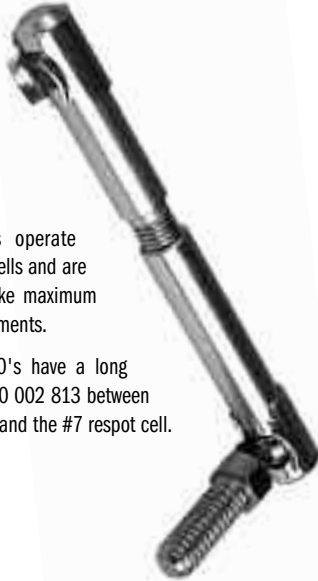
- Early model 82/70's use 1/4" Pivot Pins 070 002 681BG.
- Later aluminum tables use 5/16" Pivot Pins 070 007 616BG.
- All steel tables use Pivot Pin 090 005 503.

LINK ASSY - RESPOT CELL

82/70, 82/90, 82/90XL, 90XLI

070 002 814

Ea



These links operate the respot cells and are used to make maximum open adjustments.

Older 82/70's have a long carb link 070 002 813 between the wireway and the #7 respot cell.

CLIP - BALL JOINT

82/70, 82/90, 82/90XL, 90XLI

730 036 025 (Silver)
730 035 025 (Brass)

Ea



Yes, end clips are available separately!
 Match color with rod assembly for the proper fit.

These clips snap onto ball studs in carburetor link-type connections including respot cells, Spotting Latch Link 070 006 493, and Distributor Trip Cable 070 011 170.

SCREW - CAM LINK

82/70, 82/90, 82/90XLI

070 002 733

Ea



This is a special screw that goes through the 070 002 583 Actuating Link "Bellcrank."

Spring 070 002 732 hooks into this screw and stretches to Bracket 070 002 734.

RESPOT FINGER SPRING

82/70, 82/90, 82/90XL, 90XLI

070 001 807

Ea



This spring points the "finger link" or "pawl" out and helps it shift during respotting.

Screws onto Pivot Weldment 070 001 804 on aluminum tables, or 090 005 631 on steel tables.



BUMPER - BIN ASSY

82/30, 82/70, 82/90, 82/90XL, 90XLI

000 021 992BG

Bag of 10



Most commonly used for protecting pins in the Bin assembly, this bumper is also for the start switch lever, and for closed pinwheels on early 82/30's.

Made of 100% neoprene rubber for best performance. File off any sharp metal edges around mounting holes prior to installing. Twist them as you press them into place. Some mechanics use a drop of liquid dishsoap on the round surface to help ease installation.

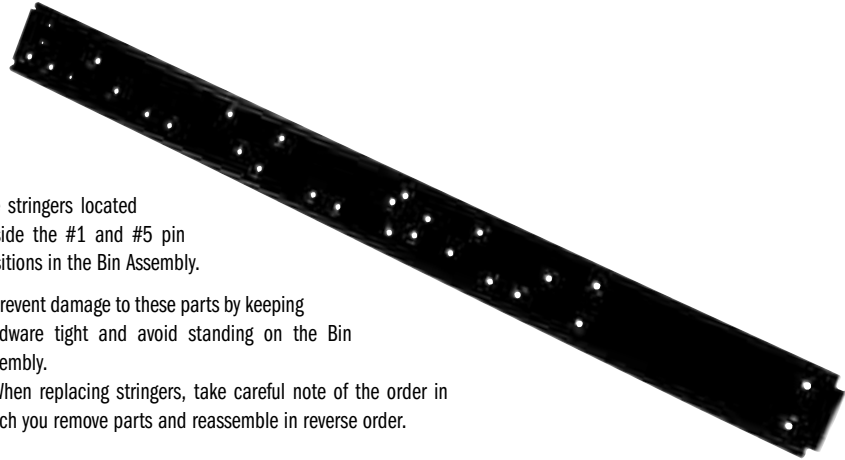
STRINGER - CENTER RH & LH

82/70, 82/90, 82/90XL, 90XLI

070 006 372 (10 Side)

070 006 373 (7 Side)

Ea



The stringers located beside the #1 and #5 pin positions in the Bin Assembly.

- Prevent damage to these parts by keeping hardware tight and avoid standing on the Bin Assembly.
- When replacing stringers, take careful note of the order in which you remove parts and reassemble in reverse order.

PIN EAR GUIDE

82/70, 82/90, 82/90XL, 90XLI

070 006 380 (7 Side)

070 006 381 (10 Side)

Ea



As the name suggests, this part helps pins find their places in the Bin Assembly.

Double-stacked pins might sometimes end up laying across the top of the stringers. A popular trick to prevent this problem is to mount these guides with their points pointing upward, between the stringer and the Pin Guide 070 006 353.

PIN BUTT GUIDE & PIN HEAD GUIDE

82/70, 82/90, 82/90XL, 90XLI

070 006 364 (Butt Guide)

070 006 366 (Head Guide)

Ea



These are located throughout the Bin Assembly and locate each pin as it falls in from the Distributor.

When replacing, hold the mounting face of Shock Mount 070 006 354BG tight against the butt guide as you tighten the screws. This helps prevent twisting during installation and premature failure.

PIN GUIDE

82/70, 82/90, 82/90XL, 90XLI

070 006 353

Ea



Two of these in each pin location help keep the pins centered in their bins.

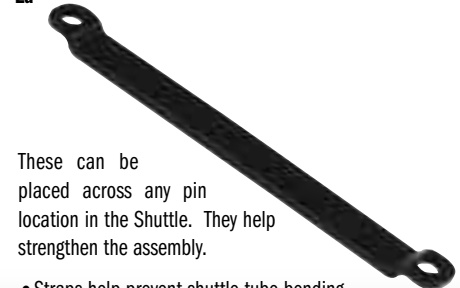
In the #9 position, this part is supposed to get bent as it is installed, to accommodate Spacer 070 006 390.

STRAP - SHUTTLE ASSEMBLY

82/70, 82/90, 82/90XL, 90XLI

070 006 268

Ea



These can be placed across any pin location in the Shuttle. They help strengthen the assembly.

- Straps help prevent shuttle tube bending.
- Easy to install in any pin location.

SUPER PIN HOLDER

82/70, 82/90, 82/90XL, 90XLi

088 001 211

Ea



Two of these hold each pin in the bin, until the shuttle operates and then they allow only one pin to fall into each cup.

A direct replacement for the original Pin Holder 070 006 265, this new pin holder helps prevent double-shuttles, wears like iron, and will never change shape or get gummy.

SHUTTLE OPERATOR ROD ASSY.

82/70, 82/90, 82/90XL, 90XLi

090 005 263

Ea



This sprung tube and rod assembly operates the Shuttle, adjusts it's position, and helps it operate smoothly.

- A direct replacement for 070 006 293.
- Rod 070 006 304 has a hole through the end which lines up with the holes in Tube 070 006 299 for easier servicing.
- If shuttle operation is jerky, the interior parts might be frozen together and require lubrication.

AMF 82-70 / 90 WEEKLY PREVENTIVE MAINTENANCE

CENTER: _____

MONTH: _____

YEAR: _____

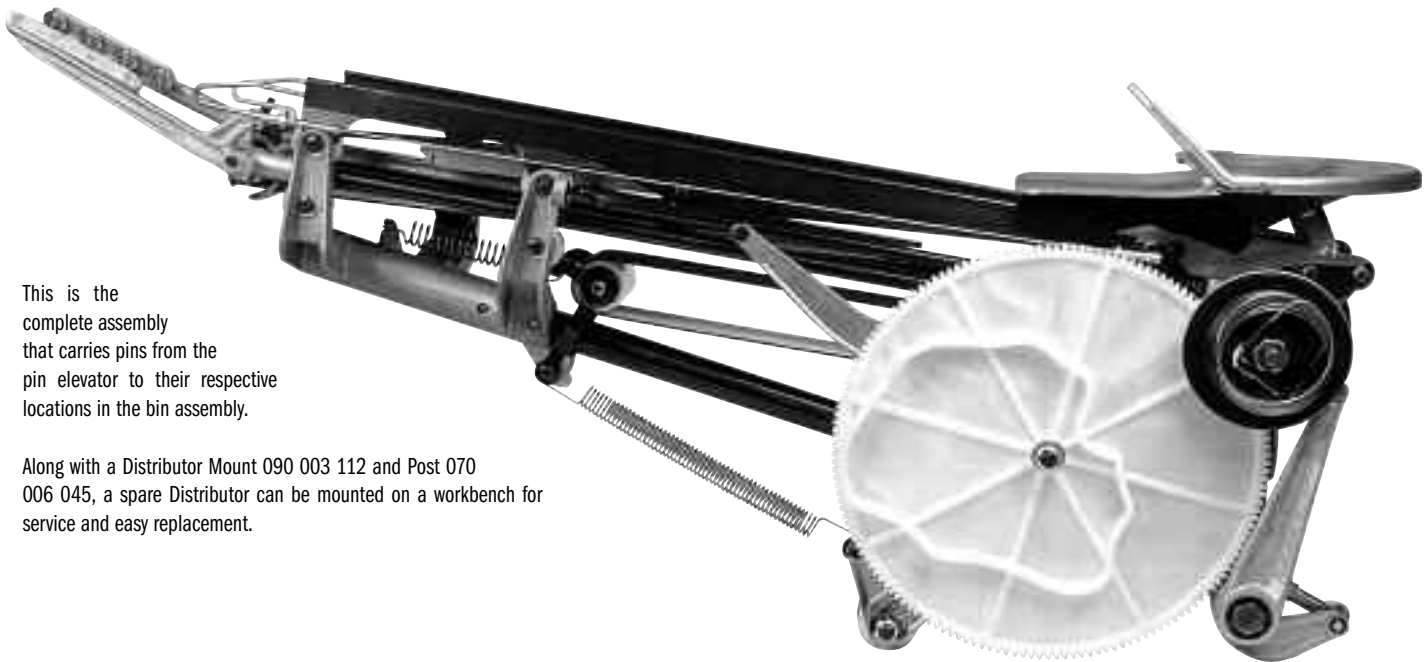
Week of the month	1	2	3	4	5
Service Machines					
Clean shuttle and bin					
Check ball door exit, door rings, segments, fillers, paddle, LBS operator, repair as needed					
Clean pit carpet belt, clean under the machine					
Clean pin curtain, pit cushion and tube weldment					
Tighten plows, check for cracks, replace as needed					
Change ball wipes, do not turn them inside out					
Inspect distributor, observe for proper operation, correct as needed					

DISTRIBUTOR ASSEMBLY

82/70, 82/90, 82/90XL, 90XLI

610 704 032

Ea



This is the complete assembly that carries pins from the pin elevator to their respective locations in the bin assembly.

Along with a Distributor Mount 090 003 112 and Post 070 006 045, a spare Distributor can be mounted on a workbench for service and easy replacement.

POLY-V DISTRIBUTOR BELT

82/30, 82/70, 82/90, 82/90XL, 90XLI

070 011 909 (82/70-Later)**030 006 789 (82/30)**

Ea

This constantly-moving belt carries pins from the Orientor Pan at the back of the Distributor to the Trip Arms at the front.

- The most successful distributor belt in history, now available for 82/30's too!
- Manages dirt and oil automatically.
- New, improved Unibar® lacing included.
- Belt is extra long so you can find just the right length for your distributor.

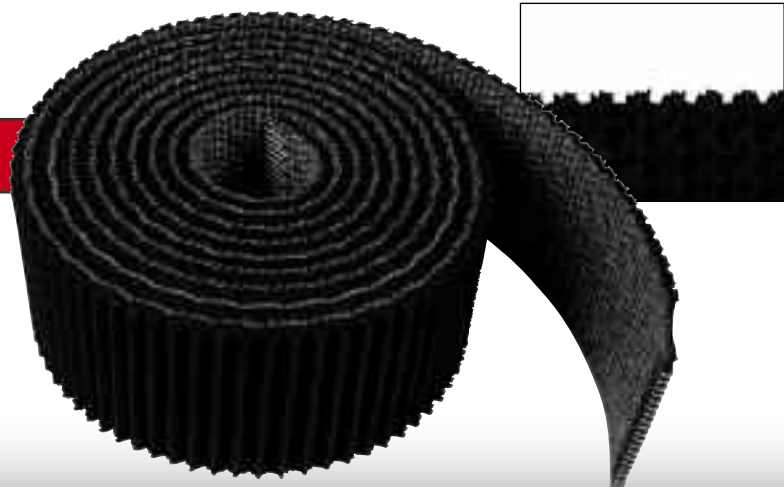
**ROUGH TOP DISTRIBUTOR BELT**

82/70, 82/90, 82/90XL, 90XLI

070 006 757 (Individual)**610 709 811 (3-Pack w/Laces)**

Ea

The original thick, textured belt.



GREY GRIPPER DISTRIBUTOR BELT

82/30, 82/70, 82/90, 82/90XL, 90XLI

070 011 905 (82/70-Later)

030 005 677 (82/30)

Ea

A radically textured surface and special PVC formulation make this thick belt very popular.



TRACKING BRACKET - DISTRIBUTOR

82/70, 82/90, 82/90XL, 90XLI

070 006 106

Ea



At the bottom of the Distributor Belt's "S" curve, this bracket tensions the belt and helps it track properly.

Keep your brackets aligned and seated properly around Tube Assembly 070 006 105.

WHITE NITRILE DISTRIBUTOR BELT

82/30, 82/70, 82/90, 82/90XL, 90XLI

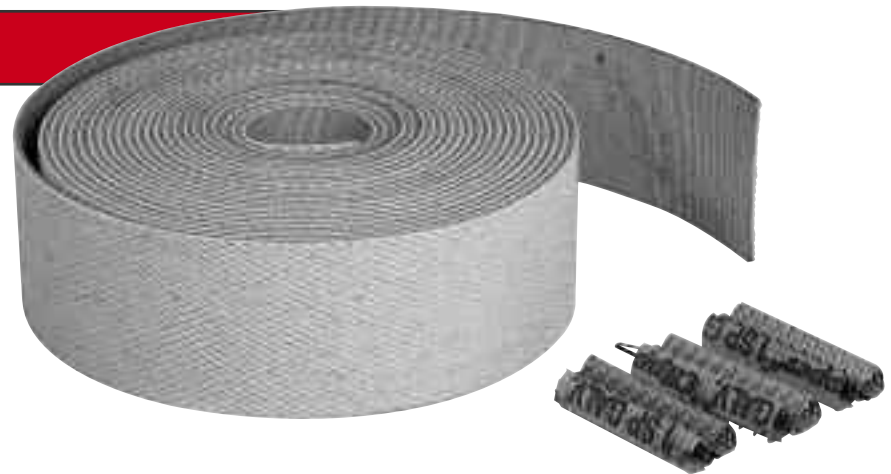
070 006 152 (Individual 82/70-Later)

610 709 812 (3-Pack 82/70-Later)

610 309 070 (3-Pack 82/30)

Ea

The old original distributor belt, still a favorite of many mechanics.



LINK - ROLLER ASSEMBLY - DIST

82/70, 82/90, 82/90XL, 90XLI

070 006 109

Ea



On both sides of the Tracking Bracket, these links pivot to ensure proper belt operation.

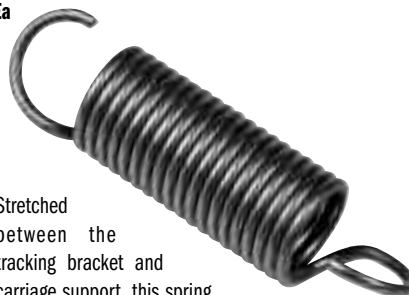
- Loose belt lacings can wear these links down to be paper-thin and eventually break. Trim off loose hooks at the edges of the belt and ensure it tracks on center.
- When replacing a distributor belt, don't bother removing the spring - just slide the Carl Klauck Distributor Tool 000 200 000 between this link and the casting.

SPRING - DISTRIBUTOR BELT TENSION

82/70, 82/90, 82/90XL, 90XLI

000 026 031

Ea



Stretched between the tracking bracket and carriage support, this spring keeps the distributor belt tight and helps it track properly.

Many mechanics have a large flat blade screwdriver with a notch carved in the side to help install this spring.

BEARING - 1 3/8 O.D. X 5/8 I.D.

82/30, 82/70, 82/90, 82/90XL, 90XLI

000 024 679

Ea



Very common bearing used in the Distributor, Kicker Shaft, and PBL Ratchet Drive Crank.

A good item to have several of on hand.

SPRING - LATERAL DRIVE

82/70, 82/90, 82/90XL, 90XLi

000 026 032

Ea



On the back of the distributor, this spring helps the system operate smoothly as it moves side-to-side.

Springs weaken over time - inspect this for proper hook shape and coil tension.

SPRING - SAFETY LINK - DIST

82/70, 82/90, 82/90XL, 90XLi

070 006 030

Ea



Parallel to the Safety Link, this heavy spring helps balance and control the distributor as it indexes around the bin.

- Check the Spring Tab 070 006 068. If it is bent, the spring can't do it's job.
- Springs get weaker over time and may need to be replaced even when they look acceptable.

ROD - SAFETY LINK - DISTRIBUTOR

82/70, 82/90, 82/90XL, 90XLi

070 006 067

Ea



On the side of the distributor, the Safety Link prevents damage should the Distributor be jarred out of position, and works with the balancing system to aim and maintain smooth operation of the Distributor.

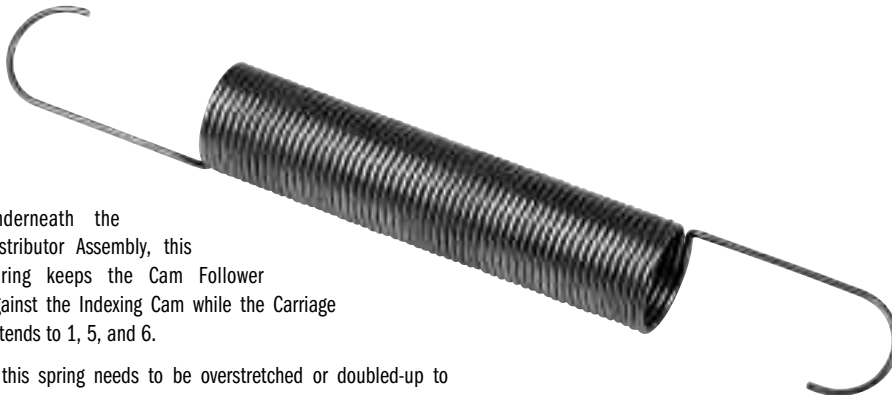
- Erratic indexing can be caused by bent or sloppy rod ends.
- Inspect regularly and keep this area greased per your service manual.

LINEAR SPRING - DISTRIBUTOR

82/70, 82/90, 82/90XL, 90XLI

070 006 034

Ea



Underneath the Distributor Assembly, this spring keeps the Cam Follower against the Indexing Cam while the Carriage extends to 1, 5, and 6.

If this spring needs to be overstretched or doubled-up to extend the Carriage, try shortening the belt or cleaning and repacking bearings in the 070 006 011 belt rollers.

STUD CLAMP - CARRIAGE

82/70, 82/90, 82/90XL, 90XLI

070 006 116

Ea



This 1/4-20 Stud Clamp is used extensively in the Carriage Assembly and in the Spotting Linkage Assembly on the front end.

Like all Stud Clamps, the nut on this should be snug but never overtightened.

BUMPER

82/70, 82/90, 82/90XL, 90XLI

070 006 142BG

Bag 10



Used to cushion moving parts all over the Distributor, this small bumper can also be found in the PBL Ratchet Crank, behind the Bin Switch Lever, and under the Spotting Solenoid on 82/70's.

Washer 948 767 132BG can be sandwiched under the bumper head to adjust the stopping position of moving parts if necessary.

CARRIAGE TUBE - DISTRIBUTOR

82/70, 82/90, 82/90XL, 90XLI

070 006 004

Ea



Two of these tubes support and guide the front carriage of the distributor assembly.

- It's essential to keep these tubes clean, straight, and free of grooves and divots.
- If they are divoted but not bent, you can swap them side-for-side to double their service life.

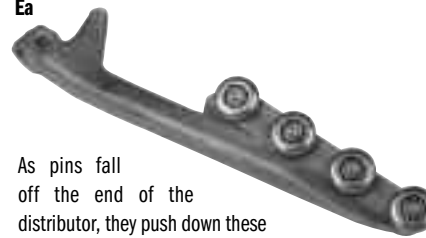
TRIP ARM ASSY

82/70, 82/90, 82/90XL, 90XLI

070 006 015 (7 Side)

070 006 016 (10 Side)

Ea



As pins fall off the end of the distributor, they push down these arms and advance the distributor to its next position.

Bearings that are missing or that don't spin freely should be replaced with Bearing 000 026 251BG, Screw 813 540 082BG, and Lockwasher 957 100 002BG.

ECCENTRIC AND CONCENTRIC ROLLERS - CARRIAGE TUBE

82/70, 82/90, 82/90XL, 90XLI

070 006 117 (Concentric)

070 006 118 (Eccentric)

Ea



These are used to make Distributor parallel adjustments and let the Carriage move smoothly forward and back.

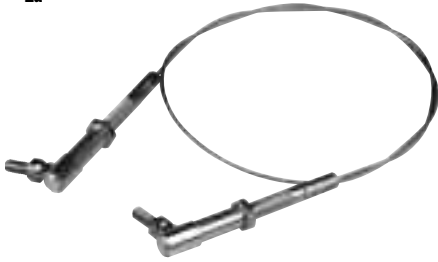
- O.E.M. bearings are the best available, sealed to prevent contamination and eliminate slop.
- Check regularly for smooth operation, looseness around internal balls, and excessive Carriage side-to-side play.

TRIP CABLE

82/70, 82/90, 82/90XL, 90XLi

070 011 170

Ea



As pins push down the trip arms when they're leaving the distributor, this cable trips the rocker arm and begins the index to the next location.

A direct replacement for the old trip rod 070 007 305.

SLEEVE - PIVOT TRIP ASSY

82/70, 82/90, 82/90XL, 90XLi

070 006 685

Ea



Where the trip casting pivots to index the distributor to its next position, this sleeve belongs between the screw and bushing.

- Binds during indexing can happen in this area if it is not lubricated properly or if the Bushing is not seated firmly in the casting 090 006 665.
- Very early 82/70's used a longer sleeve, 070 006 087.

STOP BLADES

82/70, 82/90, 82/90XL, 90XLi

070 006 691

Ea



Bolted to the Trip Casting, this part engages the clutch to index the distributor when tripped.

If these are binding, the contact surfaces may need to be greased, or may have changed shape from wear.

TRIP ROD & CASTING ASSEMBLY

82/70, 82/90, 82/90XL, 90XLi

090 006 668

Ea



Rocker arm rollers push the rod in this assembly up and down, which operates the stop blades and starts an index.

- Key and bolt system locks the rod and casting together.
- Solid, heavy design makes cable length and clutch pressure adjustment easier.
- Comes with bushing installed.
- The key components in this assembly are 090 006 663 Rod and 090 006 665 Casting.

SPRING - DISTRIBUTOR CARRIAGE

82/70, 82/90, 82/90XL, 90XLi

070 006 035

Ea



On the 7-pin side of the distributor, this spring is essential to proper indexing as pins fall off the end of the distributor and the trip mechanism operates.

Keep the spring, collar, and shaft in place with 919 006 800BG Internal Tooth Washer.

BUSHING - TRIP CASTING

82/70, 82/90, 82/90XL, 90XLi

701 710 098 (Nylon)

701 712 097 (Brass)

Ea



This bushing is pressed into the Trip Casting and is key to proper operation of the trip components on the Distributor.

Keep this bushing pressed squarely into bolt-type Casting 090 006 665 or old roll pin type Casting 070 006 667.

PINION & SLEEVE ASSEMBLY

82/70, 82/90, 82/90XL, 90XLi

610 704 005

Ea



Replaces the most common wear items in the clutch assembly.

To replace all clutch wear items, order Complete Clutch Rebuild Kit 610 700 001.

SUPPORT GUIDE LH & RH

82/70, 82/90, 82/90XL, 90XLi

070 006 103 (7-Side)

070 006 104 (10-Side)

Ea



On each side of the Distributor, these guides keep the pins on track as they travel past while helping stabilize the assembly.

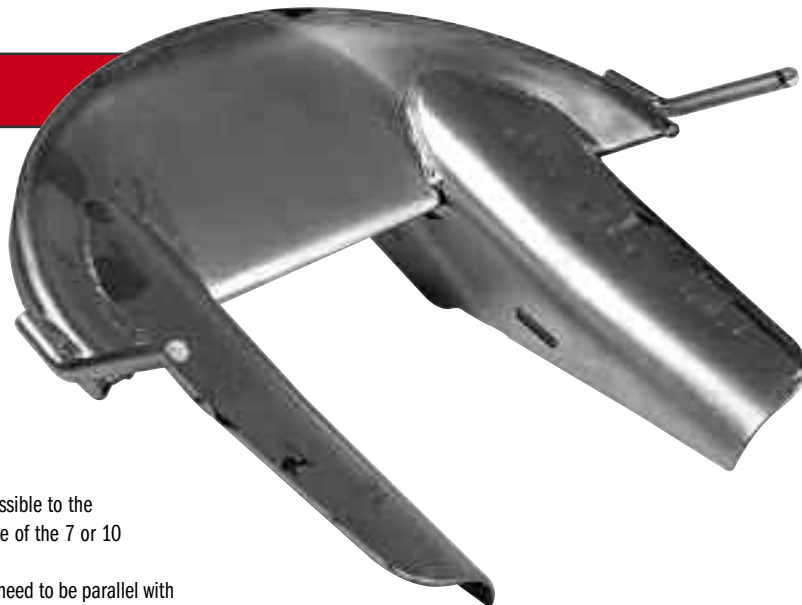
Prevent damage to related parts - don't wait to replace cracked or bent Support Guides.

ORIENTOR PAN

82/70, 82/90, 82/90XL, 90XLi

090 003 077

Ea



Often referred to as the "O-Pan" or "Turn Pan," this adjustable pan accepts pins from the elevator and positions them butt-first onto the distributor belt.

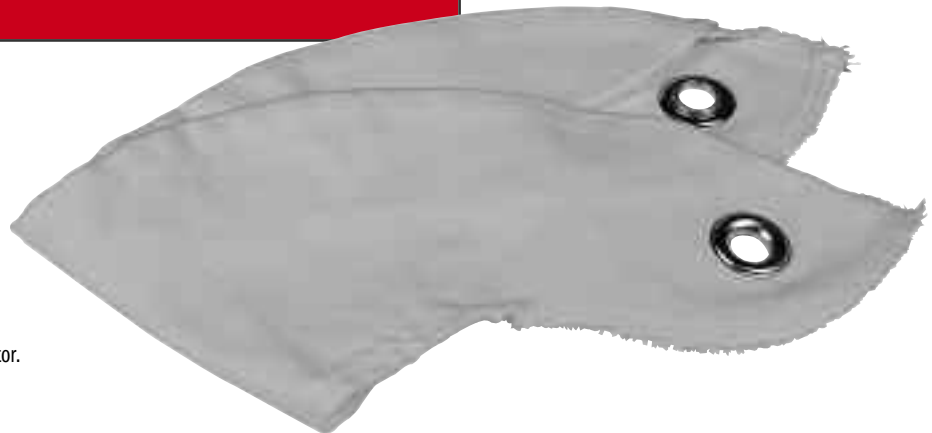
- A direct replacement for 070 006 144.
- The back edge of the pan should be as close as possible to the elevator wheel, but not touch it unless pushed outside of the 7 or 10 positions.
- The front flanges will spread apart over time. These need to be parallel with and flush against the support guides.

ORIENTOR PAN WIPE

82/30, 82/70, 82/90, 82/90XL, 90XLi

070 011 910

Ea



An add-on to the Orientor Pan devised to remove lane oil from pins.

- Removes dirt and oil from pins as they pass onto distributor.
- Slows pin transfer to prevent pins falling off side.
- Machine washable, change in seconds.

SLEEVE & BUSHING - PINION

82/70, 82/90, 82/90XL, 90XLI

070 006 676 (Sleeve)
070 006 679 (Bushing)

Ea



These items fit between the Pinion Gear and the Drive Shaft, allowing the clutch to stay stationary while the drive shaft rotates.

- Replace only these critical wear items when other distributor drive components are OK.
- Unmatched precision in part consistency and proper dimensions.
- For best results, coat bushing, sleeve, shaft, and mating washer with a light film of Pinion Lubricant 715 010 205.

KIT - CLUTCH PLATE ASSY.

82/70, 82/90, 82/90XL, 90XLI

610 704 006

Ea



When stop blade wear or clutch plate - pinion slop is causing pin pileups, eliminate the problem with this kit.

Clutch plate includes the pin separator ring, essential to preventing pins from leaving the distributor between bin positions. If the stop blades are dragging on this ring, your carriage tubes may be bent.

FRICTION DISC

82/70, 82/90, 82/90XL, 90XLI

070 006 126

Ea



At the center of the Clutch assembly, the Friction Disc transfers rotation to the pinion gear to index between pin positions.

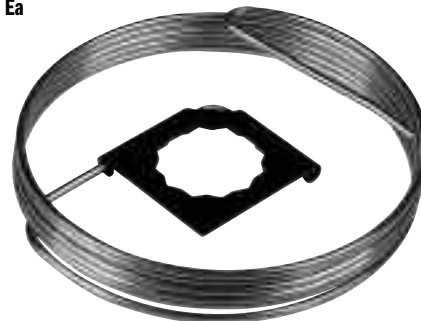
New forming process guarantees consistent, smooth friction faces, free of mold marks and flashings.

SPRING ASSY - DIST. DRIVE

82/70, 82/90, 82/90XL, 90XLI

070 006 128

Ea



The spring hooks into the Clutch Plate, locks onto the nut, and provides proper tension to the Clutch assembly.

Nut 835 582 002 should only be tightened using this spring as a hand tool. Overtightening the nut can cause clutch deformation and poor performance.

CLUTCH PLATE

82/70, 82/90, 82/90XL, 90XLI

070 006 130

Ea



This is the constantly rotating part of the Clutch. Adjusting spring rotation determines its pressure against the friction disc.

To ensure proper operation, the friction surface on this plate must be completely flat, and the opening must screw neatly onto the worm. You can check these by looking for air gaps when you set the plate on a flat surface and when you stack it with another plate.

INDEXING CAM - DISTRIBUTOR

82/70, 82/90, 82/90XL, 90XLI

070 006 149

Ea



Rollers follow the cams on this wheel, moving the Distributor around the Bin to each pin location.

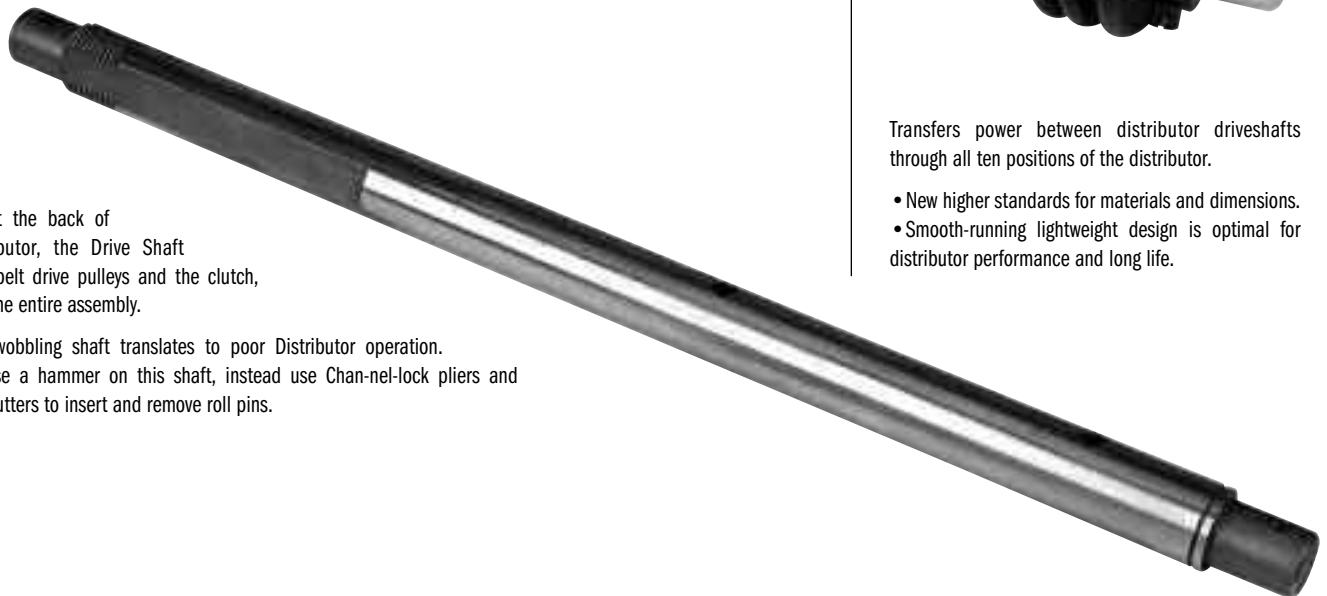
With most Distributor problems, the first item to check is timing mark alignment between the Indexing Cam and Pinion Gear at the #1 position.

DRIVE SHAFT - DISTRIBUTOR

82/70, 82/90, 82/90XL, 90XLI

070 006 077

Ea



Located at the back of the Distributor, the Drive Shaft turns the belt drive pulleys and the clutch, powering the entire assembly.

- A bent/wobbling shaft translates to poor Distributor operation.
- Never use a hammer on this shaft, instead use Chan-nel-lock pliers and diagonal cutters to insert and remove roll pins.

UNIVERSAL JOINT - PLASTIC

82/30, 82/70, 82/90, 82/90XL, 90XLI

070 008 004

Ea



- The original low-cost universal joint.
- High-grade materials for longer life than all imitations.

UNIVERSAL JOINT - STEEL

82/30, 82/70, 82/90, 82/90XL, 90XLI

070 007 586

Ea



Transfers power between distributor driveshafts through all ten positions of the distributor.

- New higher standards for materials and dimensions.
- Smooth-running lightweight design is optimal for distributor performance and long life.

SIMPLIFIED CLUTCH ASSEMBLY

82/70, 82/90, 82/90XL, 90XLi

070 009 890

Ea

A different approach to the clutch, this system uses a compression coil spring for pressure and a nyloc nut for adjustment.

Unlike competitors, this clutch plate has a pin separator ring to prevent misfeeds.



WORM - DISTRIBUTOR CLUTCH

82/70, 82/90, 82/90XL, 90XLi

070 006 126

Ea



The worm properly spaces clutch components and supports the Clutch Plate.

It is easy to assemble a clutch with missing or incorrectly positioned parts. Use the illustrations in your service manual to ensure proper assembly.

BALL - DISTRIBUTOR SHAFT

82/30, 82/70, 82/90, 82/90XL, 90XLi

000 026 461BG (82/30-82/70)

090 002 019 (82/90-Later)

Bag of 2



Helps keep distributor operation smooth as it indexes to each position.

Worn balls will cause other parts to wear and cause pin pileups.

- Replace in pairs.
- Use with Pin 000 022 717 on 82/30 and 82/70, or with Pin 908 048 480 on 82/90 and later pinspotters.

DISTRIBUTOR DRIVE HOUSING

82/30, 82/70, 82/90

000 027 390

Ea



Part of the system that allows the distributor driveshaft to reach the distributor in all ten of it's positions.

- Distributor indexing problems can be caused by twisting, spreading, or grooves worn in this part.
- Keep it lubricated with plenty of clean grease.
- For the wide version on 82/90 and later machines, choose 090 001 130.

GENUINE AMF GEARBOX OIL

82/30, 82/70, 82/90, 82/90XL, 90XLi

715 021 716 (1 Qt)

715 021 706 (12 Qt Case)

Quart bottle / Case of 12 Quart bottles



Lubricates, cleans, cools, and seals gearboxes on AMF pinspotters.

- Use no substitutes! Other oils can slowly deteriorate expensive internal gearbox parts - you won't know until it's too late. This is the oil that our gearboxes are intended to run with.

- Depending on machine type, use about 1 bottle for every 2 gearboxes.

- Change oil every 5 years or less, depending on lineage.

COMBO MOTOR CAPACITOR

82/30, 82/70

743 000 020

Ea



Used in the circuit to start and stop the sweep and table circuit.

- Original dimensions and screw terminals.
- New construction method makes it the strongest combo capacitor yet.
- Always install capacitors with the vent hole as high as possible.

5-POSITION RUSSELL-STOLL PLUG

82/70

000 027 655 (Motor Side-Male)

000 027 660 (Cable Side-Female)

Ea



Makes the electrical connection between the sweep and table motors and the pinspotter.

- Check the wire connections in these plugs if you have motor heating, coasting, or starting trouble.

- Complete cable assemblies are available too: 070 005 542 for Sweep or 070 007 751 for Table.

CARBON BRUSH - NATIONAL COMBO

82/70

785 502 020

Ea



Four of these drag on a disc in National combination motors to add resistance for braking.

- Make sure the disk is smooth and clean for peak performance.
- If a motor needs a little extra braking, try replacing the outer two brush springs with Spring 070 001 845.

KLIXON THERMAL PROTECTOR

82/30, 82/70, 82/90, 82/90XL, 90XLi

Motor Type

Klixon

30 GE Combo

785 501 392

30 GE BE 60Hz

785 501 389

30 GE BE 50Hz

785 501 388

70 GE Combo 60Hz

785 501 392

70 GE BE 60Hz

785 501 389

70 GE Combo 50Hz

785 501 540

70 GE BE 50Hz

785 501 508

70 WH Combo

785 501 393

70 WH BE 60Hz

785 501 394

70 WH BE 50Hz

785 501 564

70 National Combo

785 502 005

70 National BE

785 502 080

90 Franklin Combo

090 003 630

90 Franklin BE 60Hz

090 003 630

90 Franklin BE 50Hz

090 003 665

Ea



This "red button" in motors protects the motor from damage if it isn't able to run properly.

Is the metal guard around your BE Klixon smashed or missing? Order Guard Replacement Kit 785 501 469.



COMBO MOTOR & GEARBOX ASSY - WESTINGHOUSE

82/70

610 704 052 (60Hz)

620 704 052 (60Hz Repair/Exchange)

070 006 219 (50Hz)

Ea

Both the Sweep and the Table are driven by these interchangeable assemblies, mounted on the front end of the machine.

- The only OEM replacement for 82/70 motors & gearboxes.
- Built and tested at the QubicaAMF plant from all new parts.
- Complete and ready to use.



BE MOTOR & GEARBOX ASSY - WESTINGHOUSE

82/70

610 704 042 (Even Ln - 60Hz)

610 704 043 (Odd Ln - 60Hz)

620 704 042 (Repair/Exchange Even Ln - 60Hz)

620 704 043 (Repair/Exchange Odd Ln - 60Hz)

070 006 211 (Odd Ln - 50Hz)

070 006 212 (Even Ln - 50Hz)

Ea

Positioned in the back corner of the machine, this assembly drives the Distributor, Carpet, Pin Elevator, and Ball Lift.

- The only OEM replacement for 82/70 motors & gearboxes.
- Built and tested at the QubicaAMF plant from all new parts.
- Complete and ready to use.



STATOR - WH COMBO 115V

82/70

785 501 075

Ea

The correct replacement for 115V/60Hz Westinghouse Sweep and Table "Combination" Motor Stators.

Comes complete with end bell, switches, klixon, and through bolts. When installing, be sure you have a Belleville Washer 785 501 350.



STATOR - WH BE 115V

82/70

785 501 663 (show with 785 501 666L & R below)

Ea

The correct replacement for 115V/60Hz Westinghouse Back-End motor stators.

- Comes complete with end bell, switch, klixon, capacitor, and through bolts.
- Works with motor model 325P201.
- Make sure motor has a Belleville Washer 785 501 402 in place.



ROTOR - WH BE 115V

82/70

785 501 666R

785 501 666L

Ea

The correct replacement for 115V/60Hz Westinghouse rotor shaft & worm.

Check the Westinghouse motor label for compatibility - motor code 314P079 is the old style, 325P201 is current. Choose L for even lane gearbox, R for odd lane.



NATIONAL COMBO MOTOR REPLACEMENT

82/70

785 502 261 (110 Volt)

785 502 260 (220 Volt)

Ea

Runs National (Matsushita) combination gearboxes on the front end of the pinspotter.

- Direct replacement for all National sweep & table motors.
- All internal parts are available.



NATIONAL BACK END MOTOR REPLACEMENT

82/70

785 502 259 (110 Volt)

785 502 258 (220 Volt)

Ea



Runs National (Matsushita) back-end gearboxes on both odd and even lanes.

- Direct replacement for all National BE motors.
- Same motor as used on our newest 90XLi machines, adapted for your National BE gearbox.
- All internal parts are available.
- Reversible rotation.

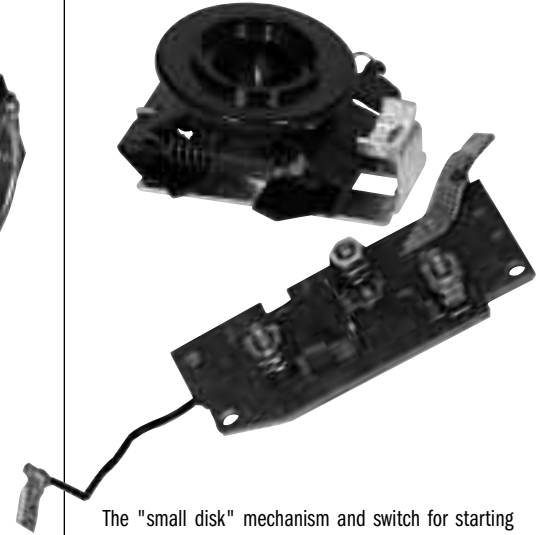
STARTING SWITCH & CENTRIFUGAL MECHANISM - WH BE MOTOR

82/70

785 501 664 (Switch)

785 501 665 (Centrifugal Mech.)

Ea



The "small disk" mechanism and switch for starting early model Westinghouse BE motors.

If the rotor shaft has worn and no longer supports the mechanism, we recommend replacing it with the 610 309 046 Solid State Switch.

STARTING SWITCH & CENTRIFUGAL MECHANISM - WH BE MOTOR

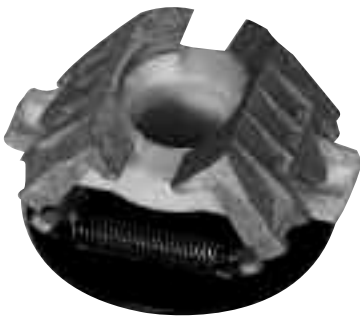
82/70

785 502 300 (Centrifugal Mechanism)

785 501 384 (60Hz Switch)

785 501 520 (50Hz Switch)

Ea



The "wide disk" mechanism and switch for starting late model Westinghouse and A.O. Smith BE motors.

This type of centrifugal mechanism is held in place on the rotor shaft with clips on top and bottom. Match your rotor shaft to the appropriate mechanism type before ordering.

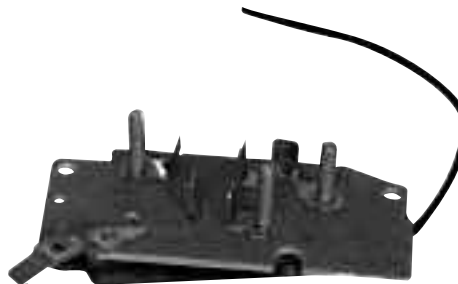
TERMINAL BOARD SWITCHES - WESTINGHOUSE COMBO

82/70

785 501 386 (Main)

785 501 372 (Aux)

Ea



These two switches inside the top of Westinghouse Sweep & Table motors work together to engage the start windings of the motor.

These are operated by Centrifugal Mechanism 785 501 568 (60 Hz) or 785 501 569 (50 Hz).

SOLID STATE SWITCH - BE MOTOR

82/30, 82/70

610 309 046

Ea



If the original centrifugal switch or mechanism can't be replaced, this unit eliminates them both and adds extra protection to the circuit.

- Current-sensing technology always switches start winding circuit at just the right moment.
- Replaces all switches and centrifugal mechanisms on all BE and ball return motors.
- Internal fuse for added circuit protection.

SOLID STATE SWITCH - COMBO MOTOR

82/30, 82/70

610 309 044

Ea



- Integral braking circuit for improved stopping ability.
- Current-sensing technology always switches start winding circuit at just the right moment.
- Replaces all switches and centrifugal mechanisms on all sweep & table motors.

ADJUSTABLE SOLID STATE SWITCH

82/30, 82/70

610 309 042 (110 Volt)

610 309 043 (220 Volt)

Ea



The length of time that the start winding is engaged can be adjusted with this type of solid state start switch.

Often known as the "Lewus" switch, this is not recommended for combination motors.

BE GEARBOX SEALS

82/70

716 501 009 (Worm Input)

716 503 023 (Pin Elev & Pit Drive)

716 503 022 (Dist Output)

Ea



These seals prevent leakage around the four gearbox shafts.

When installing, prevent seal damage by wrapping sharp edges on shafts with teflon tape and coating shafts with gearbox oil.

RING GEAR - WESTINGHOUSE COMBO

82/70

785 501 179

Ea



This one-piece ring gear & flange is the part of the gearbox that is mounted to the machine frame.

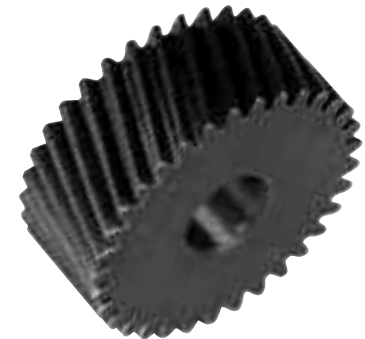
The three planet gears stop in the same location every time. Extend the lifespan of these parts by cranking the motor to a new stopping position every time the gearbox is off of the machine.

PLANET GEAR - WESTINGHOUSE COMBO

82/70

785 501 134

Ea



Alternately called "helical gear," it is part of the system that reduces output shaft speed and increases operating torque.

When there is breakage or excessive wear, it is best to replace these in sets of three, along with the Ring Gear 785 501 179 and Wheel Shaft 785 501 291.

OB ROTOR / ENDBELL BEARINGS

82/30, 82/70, 82/90, 82/90XL, 90XLi

Motor Type	Klixon
30 GE Combo	701 021 010
30 GE BE	701 021 010
70 GE Combo	701 021 010
70 GE BE	701 019 007
70 WH Combo	701 021 010
70 WH BE	701 020 091
70 National Combo	701 021 010
70 National BE	785 502 088
90 Franklin Combo	785 502 087
90 Franklin BE	785 502 087

Ea



The rotor shaft inside every motor is supported at the end by one of these bearings.

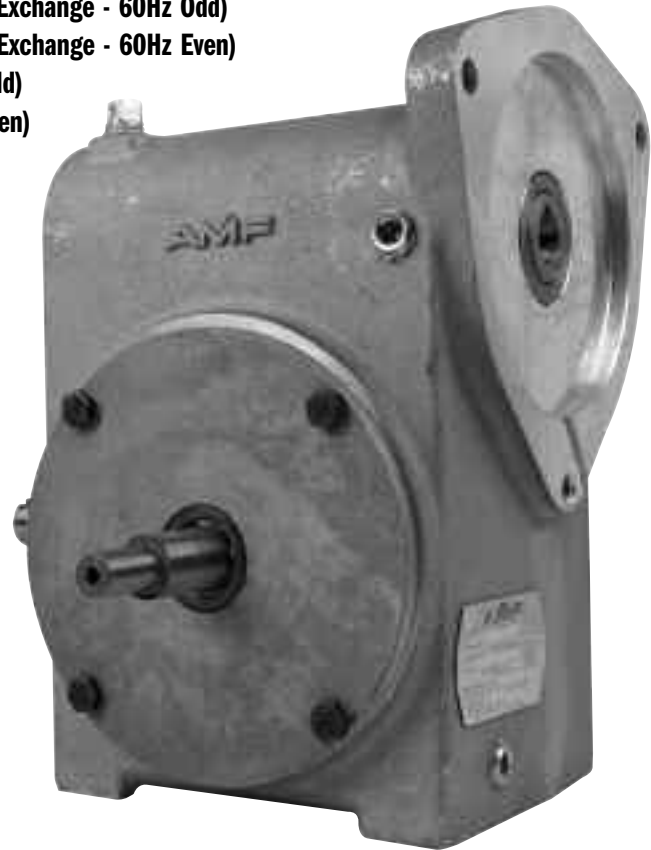
Don't let a questionable bearing ruin good endbells and rotor shafts. Bearings that don't feel smooth or turn with even resistance should be replaced.

BE GEARBOX

82/90, 82/90XL, 90XLi

- 090 004 501 (60Hz Odd)
- 090 004 502 (60Hz Even)
- 620 904 501 (Repair/Exchange - 60Hz Odd)
- 620 904 502 (Repair/Exchange - 60Hz Even)
- 090 004 506 (50Hz Odd)
- 090 004 507 (50Hz Even)

Ea



This gearbox design, used on 82/90 and later pinspotters, points the motor forward underneath the wireway.

When ordering motor and gearbox items, be sure to select the proper Hertz (cycle) rating for your location.

BE MOTOR

82/90, 82/90XL, 90XLi

- 090 003 766 (60Hz)
- 090 007 310 (50Hz)

Ea

This motor adapts to the BE gearbox and drives the back end components of the pinspotter.

Coat the shaft with anti-seize compound use a new Shaft Key 907 202 500. The Switch in this motor is 090 004 560 (60Hz) or 090 004 558 (50Hz).



BE MOTOR & GEARBOX ASSEMBLY

82/90, 82/90XL, 90XLI

090 003 514 (60Hz Odd)

090 003 515 (60Hz Even)

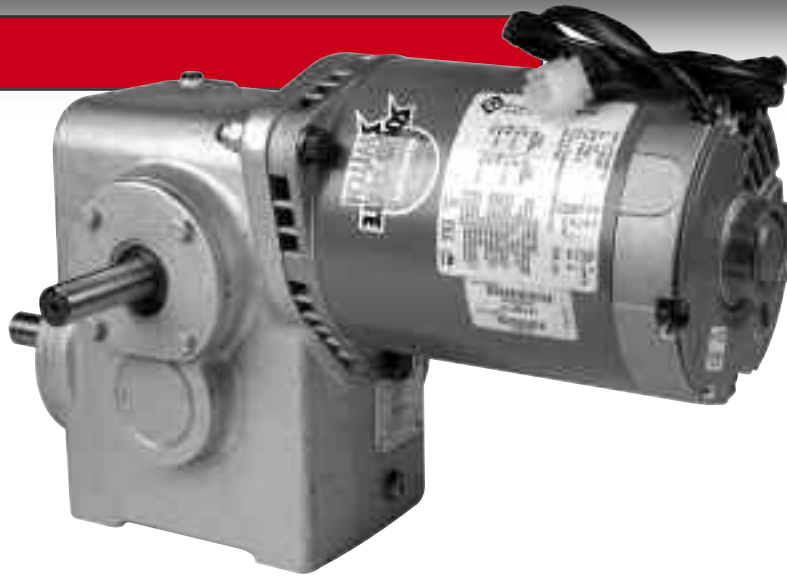
090 003 512 (50Hz Odd)

090 003 513 (50Hz Even)

Ea

A complete, ready to install back end drive unit assembly.

Early 82/90's used a round plug - this cable assembly is available, order 250 001 115.



COMBINATION GEARBOX - 3-BOLT FLANGE

82/90, 82/90XL

090 004 504 (60Hz)

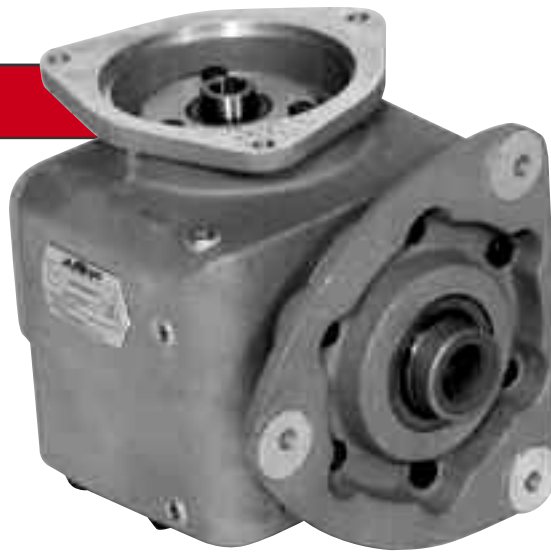
620 904 504 (Repair/Exchange - 60Hz)

090 004 509 (50Hz)

Ea

Two of these gearboxes mount to the front end of the machine to run the sweep and the table.

Clean output splines while gearbox is off of pinspotter and apply grease prior to installation. The splines will wear longer and it will be easier to remove the gearbox in the future.



COMBINATION MOTOR - SMALL PLUG

82/90XL

090 004 547 (60Hz)

090 004 548 (50Hz)

Ea

This motor has a 7/8" dia. receptacle, a 3-bolt interface to the gearbox, and accepts a drop-in drag brake.

- Combine with 60Hz Gearbox 090 004 504 or 50Hz Gearbox 090 004 509, using Key 907 202 500.
- Coat shaft interface surfaces with Anti-Sieze Compound 715 011 803.



COMBINATION MOTOR - LARGE PLUG

82/90, 82/90XL

090 003 532

Ea

This motor has a 1.5" dia. receptacle, a 3-bolt interface to the gearbox, and uses a drop-in brake.

Common internal replacement items include Capacitor 090 003 634, Klixon 090 003 630, and Switch 090 004 560 (60Hz) or 090 004 550 (50Hz).



COMBINATION GEARBOX

82/90XL, 90XLI

090 004 500 (60Hz)

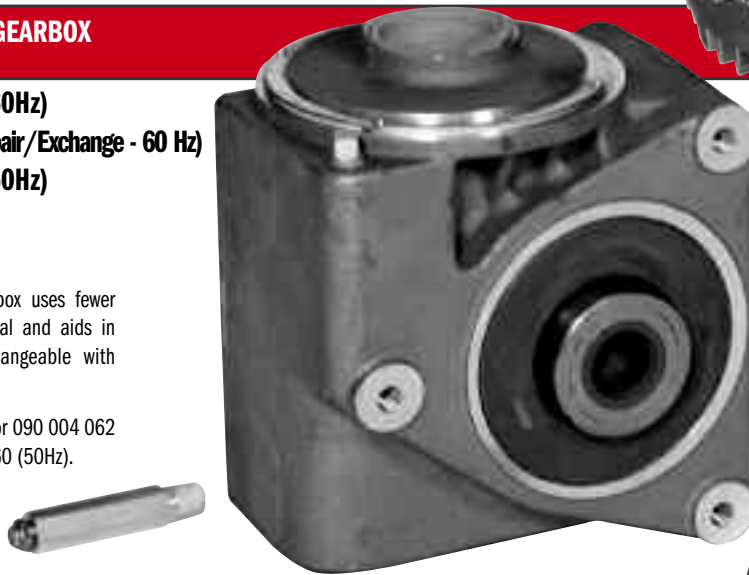
620 904 500 (Repair/Exchange - 60 Hz)

090 004 499 (50Hz)

Ea

This lightweight gearbox uses fewer parts than the original and aids in braking. Not interchangeable with other types.

For use only with motor 090 004 062 (60Hz) or 090 004 060 (50Hz).



COMBINATION MOTOR - SPLINED SHAFT

82/90XL

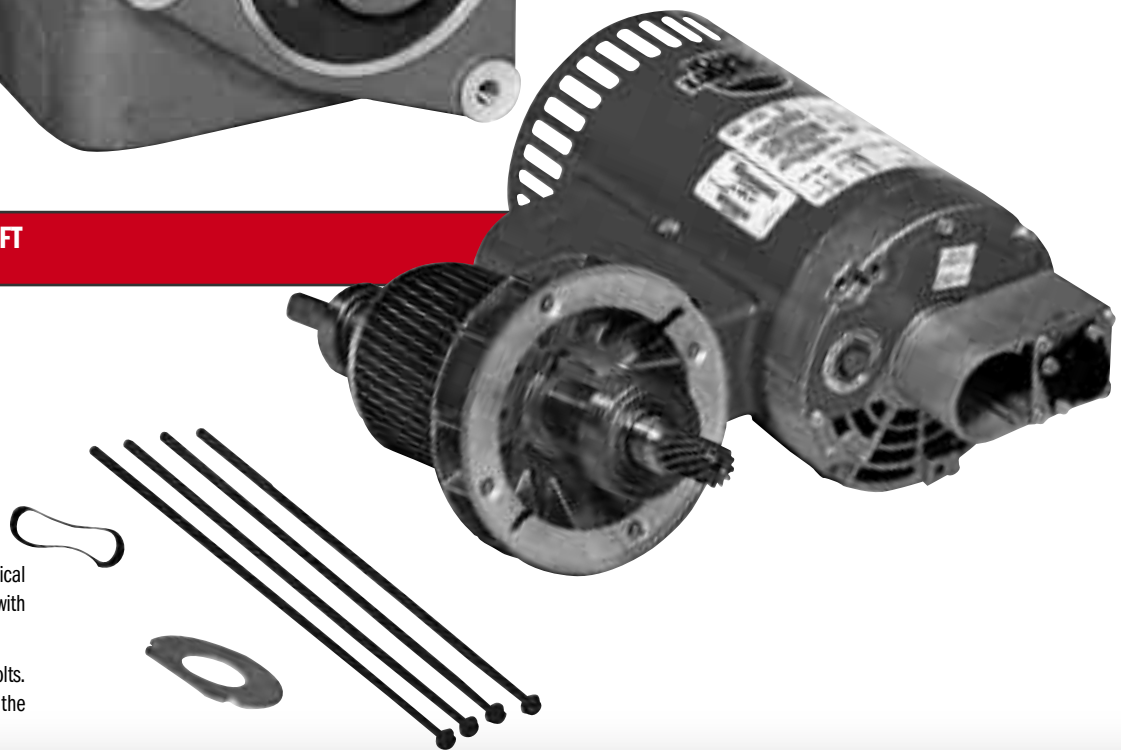
090 004 062 (60Hz)

090 004 060 (50Hz)

Ea

The output end of this motor's rotor shaft has a helical spline rather than a keyway. It is made to interface only with Gearbox 090 004 500 (60Hz) or 090 004 499 (50Hz).

- The 60Hz motor now operates at 110, 208, or 230 Volts.
- Use the diagram on the motor label to determine the proper wiring for your voltage service.



DRAG BRAKE - DROP IN

82/90, 82/90XL

090 004 516

Ea



F i t s
between the Franklin combo motor endbell and rotor shaft to help stop the motor.

A direct replacement for the brake on most Franklin combo motors.

DRAG BRAKE W/ HEAT SHIELD

82/90,

090 003 550

Ea



Seats against the plug housing on early Franklin motors to help stop rotor shaft rotation.

This brake is also used on our 82/70 National Combo Motor replacements, 785 502 261 (60Hz) and 785 502 260 (50Hz). Order part number 090 003 554 for a replacement spring, and 919 007 500 for the retaining ring.

OIL SEAL - BE PIN ELEVATOR OUTPUT

82/90, 82/90XL, 90XLI

785 503 071

Ea



S h a f t
seals are pressed into gearbox and cap openings to prevent leakage.

Prevent future leaks during gearbox rebuilding by dressing off burrs and sharp edges on and around mating surfaces.

VITON OIL SEAL - WORM INPUT

82/90, 82/90XL

785 503 104

Ea



- Made of a new material, this seal helps prevent oil leakage around the worm shaft.
- A direct replacement for 785 503 074.
- Correct for both Combination (Front End) and Back-End gearboxes.

OIL SEAL - BE DIST DRIVE & PIT DRIVE OUTPUT

82/90, 82/90XL

785 503 072

Ea



When mating seals with shafts, wrap shafts in teflon tape and lubricate with gear oil before installing.

OIL SEAL - COMBINATION OUTPUT SHAFT

82/90, 82/90XL

785 503 073

Ea



If a groove is worn in an output shaft from the old seal, a new seal can usually be seated slightly further in than the old one to contact a new area on the shaft and prevent leakage.

COMBO GEARBOX REBUILD KIT

82/90, 82/90XL

610 900 064 (60Hz)

610 900 063 (50Hz)

Ea



All complete gear assemblies required for use in gearboxes with a 3-bolt flange motor interface.

Rebuilds are a good time to replace seals - 785 503 104 for Worm and 785 503 073 for Output Shaft.

BACK END GEARBOX PACKAGING KIT

82/90, 82/90XL

610 900 051

Ea

All seals, shims, gaskets, oil and hardware required to completely renew a back end gearbox.

When rebuilding a gearbox, always have plenty of room, a good cleaning solution, and the proper tools - including safety glasses, gloves, and face mask.



BACK END SEAL KIT

82/90, 82/90XL

610 900 116R

Ea

The necessary items to repair a leaky back end gearbox. Comes with instructions.

The correct oil is essential to proper seal service life and function.



FRONT FILLER ASSEMBLY

82/30, 82/70

000 024 678

Ea

As the ball transitions from the pit area to the ball lift, it gets kicked up the ramp on this assembly.

- New improved Casting 000 024 621 and Rubber Pad 000 024 628.
- Installs easier and wears longer than other versions.
- New design prevents halfway ball spin.



KICKER SPRING

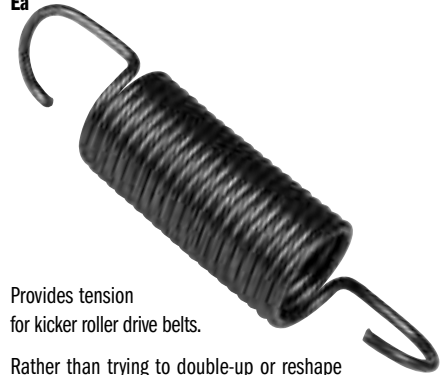
82/30, 82/70

000 029 601

Ea

Provides tension for kicker roller drive belts.

Rather than trying to double-up or reshape old springs, it's best to replace with new.



KICKER DRIVE BELT

82/30, 82/70

000 028 864 (82/30)

000 028 865 (82/70)

Ea



This is the belt that turns the kicker rollers.

The 82/30 belt is slightly longer than the 82/70 version.

V-BELT - RUDDER DRIVE FOR KICKER

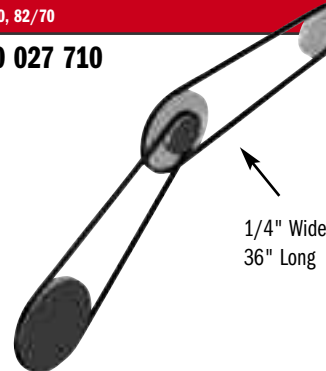
82/30, 82/70

000 027 710

Ea

In Kicker ball exits and PBL Plus "mini PBL" exits, this belt runs between the ball lift and the belt tensioner "mousetrap" pulley.

Works with our adjustable speed rudder drive sheave, 000 024 599.



RUDDER DRIVE BELT

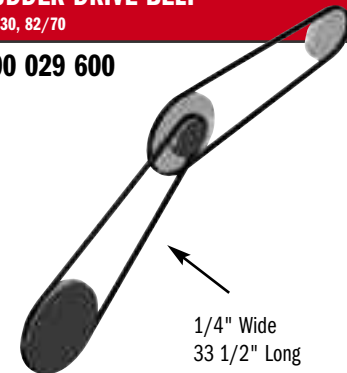
82/30, 82/70

000 029 600

Ea

This belt runs between the belt tensioner "mousetrap" pulley and the rudder drive sheave.

Measures approximately 33.5" outside.



RUDDER DRIVE LINK

82/30, 82/70

000 029 671

Ea

The original gas shock rudder drive link for Kicker ball exits. Automatically pushes pins out of the ball exit while allowing balls to enter.

Tried and true design, now with bearings staked in place to prevent pullout.



ADJUSTABLE RUDDER DRIVE LINK

82/30, 82/70

000 028 540

Ea

Replaces gas shock link on Kicker exits and the Light Ball Sensor on PBL's.

- Allows adjustment of rudder stroke and force.
- All internal components are available separately.



BEARING - 1 3/8 O.D. X 5/8 I.D.

82/30, 82/70, 82/90, 82/90XL, 90XLi

000 024 679

Ea



Very common bearing used in the Distributor, Kicker Shaft, and PBL Ratchet Drive Crank.

A good item to have several of on hand.

BALL WIPER CLOTH

82/30, 82/70, 82/90, 82/90XL, 90XLi

070 004 669

Ea



Removes oil and dirt from the ball as it passes out of the machine.

For the adjacent Dust Trap cloth, order 070 004 670.

For 82/30 pinspotters with upright lifts order colth number 030 003 739.

DOWNSWEEP REPLACEMENT KIT

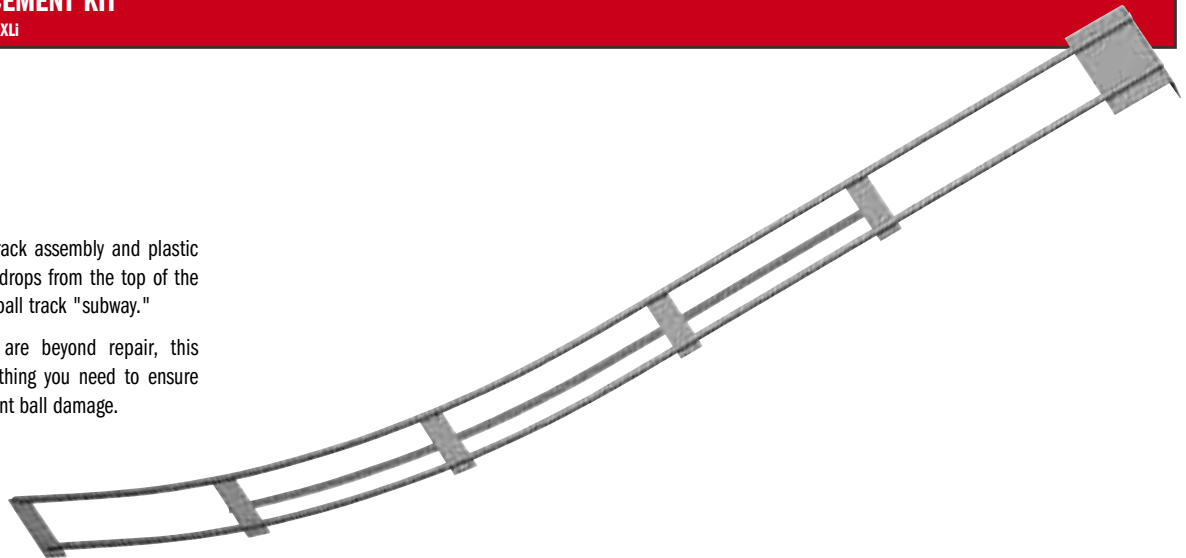
82/30, 82/70, 82/90, 82/90XL, 90XLi

610 496 591

Ea

This kit includes the metal track assembly and plastic track runners where the ball drops from the top of the machines into the underlane ball track "subway."

When existing downsweeps are beyond repair, this adjustable kit includes everything you need to ensure proper ball transfer and prevent ball damage.



BELT - PIT DRIVE

82/70

000 022 099

Ea



The correct belt to run 82/70 carpets and ball lifts.

82/30's with kickers or PBL's use 030 008 671. 82/90 and later uses 090 004 520.



CLUTCH PULLEY ASSEMBLY

82/30, 82/70, 82/90, 82/90XL, 90XLi

000 024 811 (closest to even machine)

000 024 812 (closest to odd machine)

Ea

This 5" pulley assembly allows one lane to run the ball lift while the other lane is off.

To replace the Clutch Bearing only, order 070 007 291. Faster 4 1/4" pulleys are available too - order 000 028 772 (even) or 000 028 773 (odd).



CLUTCH BEARING - BALL LIFT

82/30, 82/70, 82/90, 82/90XL, 90XLi, C-80, C-90, Options, Profile

070 007 291

Ea



The key to either machine on a pair being able to run the shared ball lift, this clutch bearing locks when turned one direction, and freewheels in the other.

This is the same bearing used on the lower shaft of AMF-type front ball returns including C-90, Options and Profile.

SPRING - DISTRIBUTOR

82/30, 82/70, 82/90, 82/90XL, 90XLi

000 024 673

Ea



Originally used on the 82/30 distributor, this spring is more often associated with ball lift parts.

When using this spring to tension the ratchet drive belt, one hook needs to be opened up a little wider than the original size.

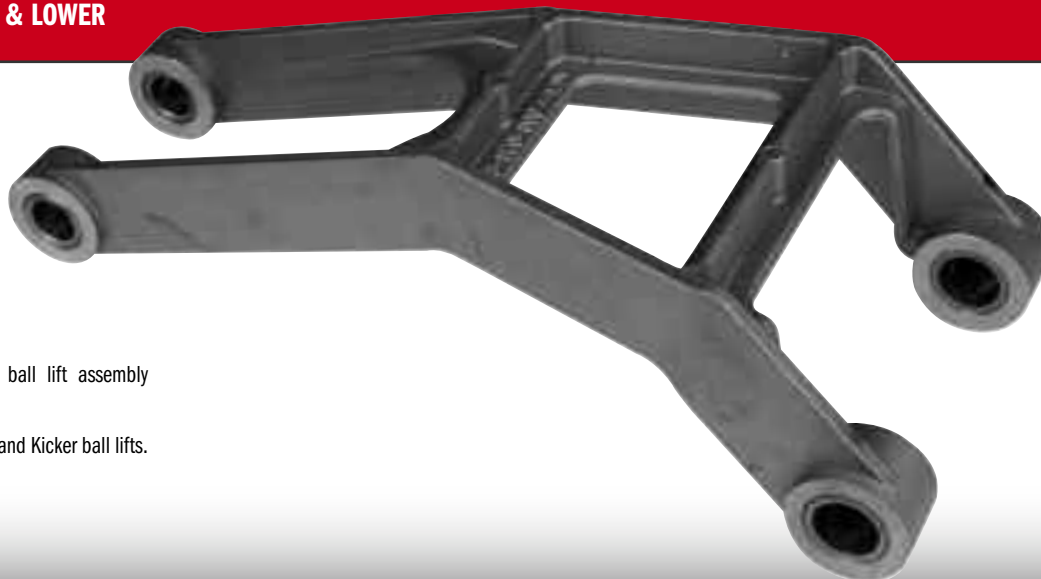
LINK ASSY - BALL LIFT - UPPER & LOWER

82/30, 82/70, 82/90, 82/90XL, 90XLi

000 024 651 (Lower)

000 024 720 (Upper)

Ea



These castings support and position the ball lift assembly between the pinspotters.

Complete with bushings, works on both PBL and Kicker ball lifts.

CLAMP STUD - BALL LIFT

82/30, 82/70, 82/90, 82/90XL, 90XLi

000 024 610

Ea



This secures the Ball lift shafts in the "U" brackets on the kickbacks.

Install with Nut 835 565 002 on back side of bracket for easiest access next time maintenance is required.

BUMPER - BALL LIFT ADJUST

82/30, 82/70, 82/90, 82/90XL, 90XLi

000 024 641

Ea



At the top of the kickbacks, this adjusts ball lift height.

Also used in our Signature and Curvature series masking units. Lock adjustment with Jam Nut 835 558 002BG.

CUSHION RUBBER - SHOCK ABSORBER

82/30, 82/70,

000 027 996

Ea



Two of these are sandwiched between retainers above and below the shock absorber bracket on PBL and Kicker ball lifts.

An essential part to proper ball lift operation, these should be resilient and compressed neatly on the shock absorber stud.

HANGER ARM ASSEMBLY

82/30, 82/70, 82/90, 82/90XL, 90XLi

000 029 659

Ea



2 of these go into the belt tensioner "mousetrap" assembly on kicker and PBL systems.

Complete with bushings 900 110 081BG.

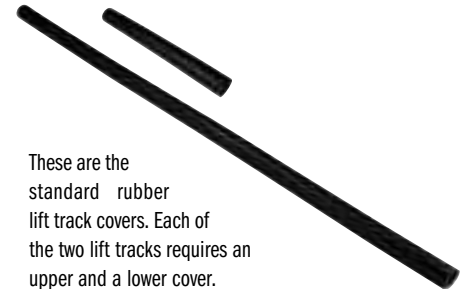
TRACK COVER - LOWER

82/30, 82/70, 82/90, 82/90XL, 90XLi

070 011 440 (Lower)

000 024 663 (Upper)

Ea



These are the standard rubber lift track covers. Each of the two lift tracks requires an upper and a lower cover.

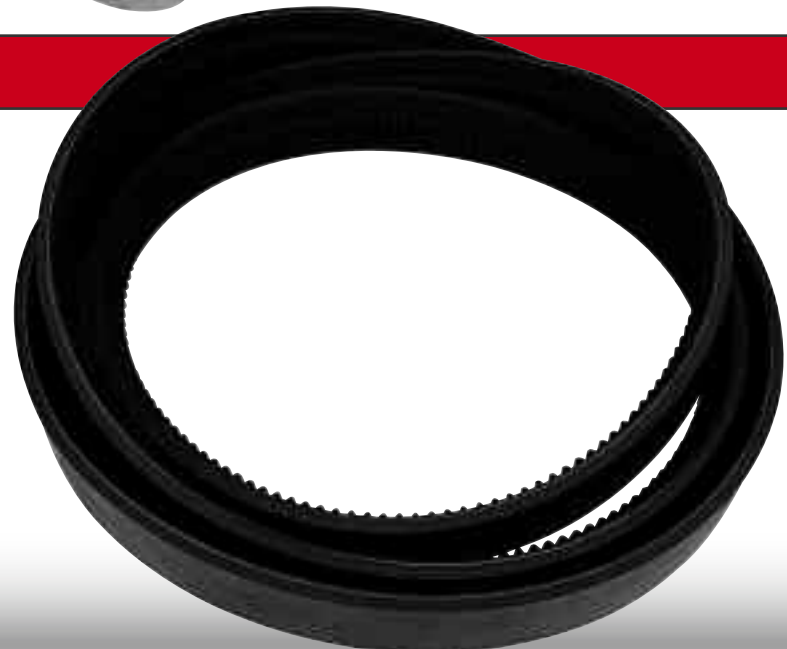
To prevent "yo-yo" balls, these covers should be cleaned and rotated on a regular basis.

BALL LIFT BELT - WIDE/DEEP GROOVE

82/30, 82/70

070 011 280

Ea



- The belt for pulleys with a wide/deep groove.
- Similar construction to our famous "Gripper" belt.

BALL LIFT BELT-GRIPPER

82/30, 82/70, 82/90, 82/90XL, 90XLi

088 001 233

Ea



This belt is stretched around the two ball lift pulleys and raises balls from the pit level up to the top of the machines.

- Highest quality ball lift belt available.
- Trusted Gates® construction.
- Easy to adjust and keep adjusted.

LOWER D-BORE SHAFT KIT

82/70, 82/90, 82/90XL, 90XLi

610 704 151

Ea



Everything needed to replace an old straight-bore lower shaft or renew an existing D-Bore shaft on Kicker or PBL ball lifts.

This arrangement is not recommended for 82/30's or machines with extremely narrow exit areas.

SPACER - BALL LIFT SHAFT

82/30, 82/70, 82/90, 82/90XL, 90XLi

070 006 748

Ea



Essential to proper alignment and fit of ball lift shafts, these "tophat" spacers are available individually.

Replace these at the first sign of wear to extend the life of related parts that are more expensive.

CLUTCH RACE - BALL LIFT

82/30, 82/70, 82/90, 82/90XL, 90XLi

090 003 401

Ea



This race mates all lower ball lift shafts to the clutch pulleys on Kicker and PBL lifts. Two are required per shaft.

A direct replacement for 070 006 749.

STRAIGHT BORE BEARING & SPACER KIT

82/30, 82/70, 82/90, 82/90XL, 90XLi

610 905 704

Ea



- The correct bearing and nylon spacer for use with all straight bore shafts.
- Two required per shaft / 4 per ball lift.

Include the spacer in your assembly to ensure tight fit and proper alignment.

D-BORE BALL LIFT SHAFTS & BEARING

82/30, 82/70, 82/90, 82/90XL, 90XLi

070 011 795 (Upper Shaft)

070 011 796 (Lower Shaft)

070 011 797 (Bearing)

Ea



A different spin on the original round style, this system locks the shaft and inner bearing race together.

- D-Bore system prevents shaft from spinning free of bearing.
- New tighter tolerances for longer wear.
- Lower shaft not recommended for 82/30's or extremely narrow exits.

PULLEY - BALL LIFT BELT

82/30, 82/70, 82/90, 82/90XL, 90XLi

000 024 661

Ea

The "Narrow/Shallow" pulley for use with most common ball lift belts.

Use with ball lift belt 088 001 233 and make sure the two pulleys are aligned before installing lift in machine.



BALL LIFT YOKE - UPPER & LOWER

82/30, 82/70, 82/90, 82/90XL, 90XLi

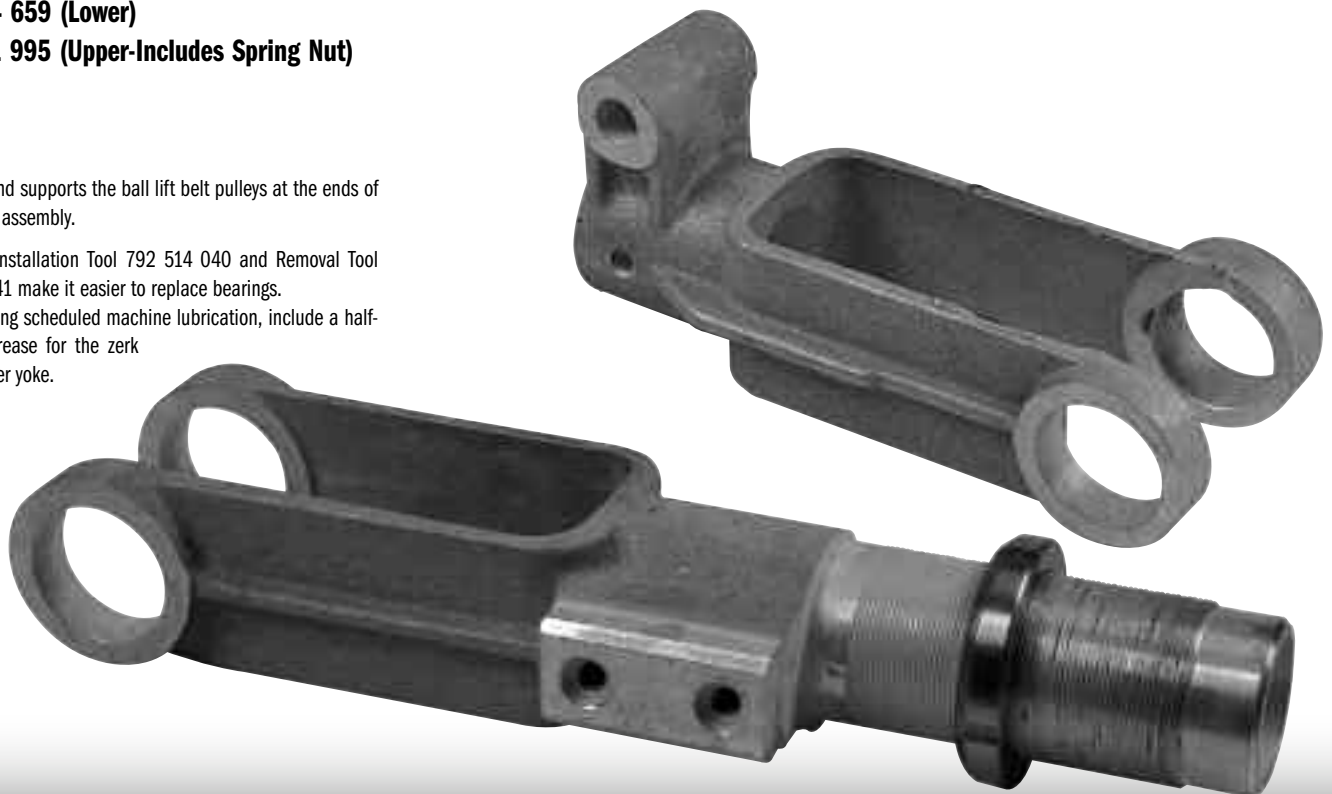
000 024 659 (Lower)

070 001 995 (Upper-Includes Spring Nut)

Ea

Positions and supports the ball lift belt pulleys at the ends of the ball lift assembly.

- Bearing Installation Tool 792 514 040 and Removal Tool 792 514 041 make it easier to replace bearings.
- When doing scheduled machine lubrication, include a half-pump of grease for the zerk on the upper yoke.



RATCHET ASSEMBLY - PBL

82/30, 82/70, 82/90, 82/90XL, 90XLi

070 011 039

Ea

Mounted to the metal kickback on the even machine, this assembly includes a rotating pulley and an inner crank that rotates to lift the ball into contact with the belt.

Proper alignment of these parts is critical. Use the chart in the PBL installation manual or machine service manual for the correct dimensions.

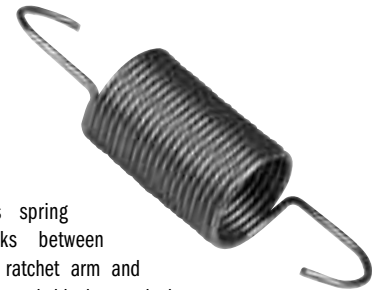


SPRING - RATCHET DRIVE

82/30, 82/70, 82/90, 82/90XL, 90XLi

070 011 032

Ea



This spring hooks between the ratchet arm and the crank block to unlock the lift arm once the ball has left the exit area.

Changes through the years have made this critical spring the best version available.

RATCHET ARM WELDMENT

82/30, 82/70, 82/90, 82/90XL, 90XLi

070 011 217

Ea

This arm is part of the PBL ratchet wheel assembly, and facilitates the lift arm operation when a ball is ready to be lifted.

Be sure all pins & studs are perpendicular to plate, and that the coarse thread stud has a good thread locking material on it's threads before assembling.



CAM SENSOR ASSEMBLY

82/30, 82/70, 82/90, 82/90XL, 90XLi

070 011 110

Ea



This is the base about which the parts of the Light Ball Sensor (LBS) operate in a full PBL system.

Assembly includes the Cam Sensor Weldment 070 011 100 and Bushings 900 208 091BG.

FLANGE BUSHING

82/30, 82/70, 82/90, 82/90XL, 90XLi

900 208 091BG

Bag of 5



The heart of the LBS, this bushing is used extensively in the mechanism to ensure reliable operation.

The Light Ball Sensor is intended to run perfectly clean and dry. No lubrication should be added to any parts in this assembly.

V-BELT

82/30, 82/70, 82/90, 82/90XL, 90XLi

070 011 064

Ea



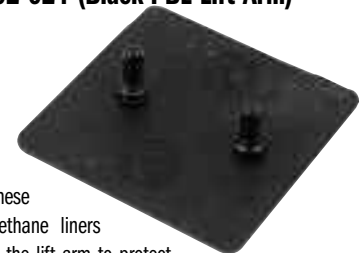
This belt runs the ratchet wheel in a PBL system.

LINERS - CRADLE

82/30, 82/70, 82/90, 82/90XL, 90XLi

090 002 024 (Black-PBL Lift Arm)

Ea



Four of these black urethane liners mount in the lift arm to protect the ball and help it transfer to the track rails.

- Though originally the same part as the Spotting Cup Liner, materials have been specialized for these two applications.
- If it's necessary to install these with the lift arm in the machine, some mechanics prefer to hit the flat side with a ball peen hammer to knock the pull tabs into their holes.

PADDLE - PBL

82/30, 82/70, 82/90, 82/90XL, 90XLI

070 011 146

Ea

Bolted to the rudder arm, this urethane part moves back and forth to clear pins from the ball exit.

- Unique shape accommodates both wide and narrow exits.
- Strong enough to push pins out of exit, while gentle on bowling balls.
- Resists bending and cracking.



BALL DOOR WELDMENT - PBL

82/30, 82/70, 82/90, 82/90XL, 90XLI

070 011 005 (Even Lane)

070 011 006 (Odd Lane)

Ea

This is the ramp that PBL exits use to deliver balls from the pit area to the lift arm.

Often imitated, never duplicated. Expect only the best quality from your O.E.M.



URETHANE BALL DOOR RING

82/30, 82/70, 82/90, 82/90XL, 90XLI

070 011 641 (Even Lane)

070 011 642 (Odd Lane)

Ea

An alternative to the steel version, this urethane part guides balls from the ball exit to the lift arm in PBL systems.

- Protects balls from coming in contact with metal ball exit parts.
- New improved urethane formula and molding process to improve strength and fit consistency.
- Molded-in nuts for easy installation.



V-BELT - PBL

82/30, 82/70, 82/90, 82/90XL, 90XLi

070 011 148

Ea



In complete PBL systems, this belt runs between the ball lift and the belt tensioner "mousetrap" pulley. This wider belt is made to work with the 070 011 131 Pulley.

PBL "PLUS" CONVERSION KIT

82/30, 82/70

610 704 097

Ea

A kit that includes only the vital parts required to update a pair of machines from the old "kicker" ball exit system.

- Everything you need to convert kicker ball exits to the Positive Ball Lift.
- Features our adjustable rudder drive link, adjustable speed sheave, and new urethane ball door rings.
- Don't forget a reusable Template & Drill Bits Kit 610 704 098.



BALL LIFT ASSEMBLY - PBL

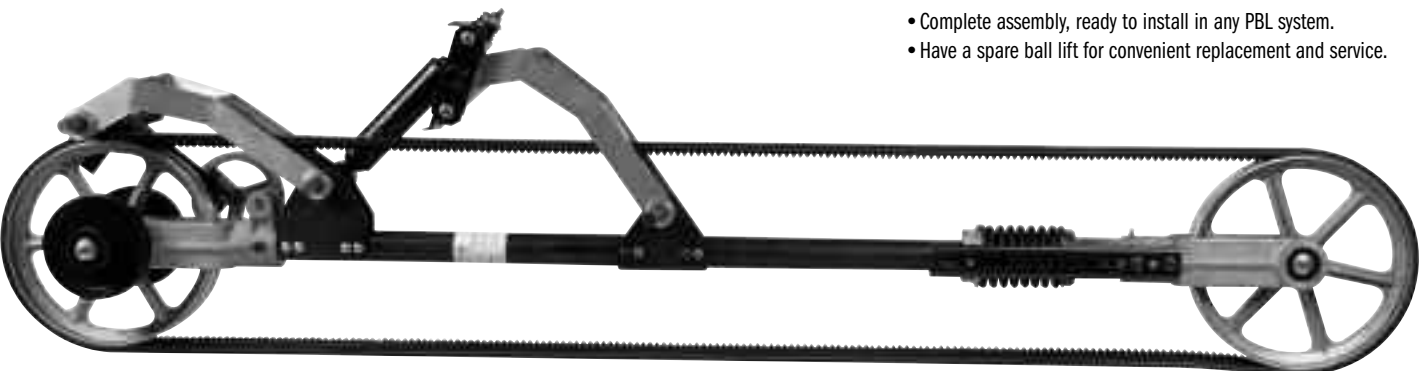
82/30, 82/70, 82/90, 82/90XL, 90XLi

070 011 052

Ea

This is the complete assembly that carries balls up the lift rods from the pit to the top of the machines.

- Complete assembly, ready to install in any PBL system.
- Have a spare ball lift for convenient replacement and service.



COMPLETE PBL CONVERSION KIT

82/30, 82/70

610 704 106

Ea

The original full Positive Ball Lift system, which lets the ball roll down into the exit and then lifts it up into contact with the belt.

- The original PBL kit including the Light Ball Sensor assembly.
- Features all new rail covers, belts, pulleys, and adjustable ball lift bracket.
- Don't forget a reusable Template and Drill Bits Kit 610 704 098.



GRIPPER PBL KIT

82/30, 82/70, 82/90, 82/90XL, 90XLi

610 049 510

Ea



- Put all lane oil, lightweight ball, and finicky adjustment problems in the past with our exclusive Gripper kit for PBL's.
- Specially engineered ball lift belt, rod covers, "thimbles," and adjustable support bracket team up to provide superior ball lift performance.
- Everything you need to quickly & easily convert any PBL to the Gripper system.

To convert a Kicker ball lift to the Gripper PBL, order 610 088 002.

THIMBLE

82/30, 82/70, 82/90, 82/90XL, 90XLi

088 001 230

Ea



PBL systems make great use of this part as a direct replacement for 070 011 018 Ball Guide.

- Helps center balls and transition them from lift arm to rails.
- Protects balls from metal-related damage.
- Must use these if installing Clear Rail Covers 088 001 231.

RAIL COVER - LOWER CLEAR

82/30, 82/70, 82/90, 82/90XL, 90XLi

088 001 231

Ea



Though this is a part of the Gripper ball lift kit, it can be used separately to cure problems with PBL ball lift traction.

- The best rail cover available for eliminating "yo-yo" ball slip.
- Exclusive urethane formula specifically formulated for this product.
- Do not install without Thimbles 088 001 230.

AMF 82-70 / 90 QUARTERLY PREVENTIVE MAINTENANCE

CENTER: _____ FROM: _____ TO: _____ YEAR: _____

Lane #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41								
Clean the machine framework, drip pans																																																	
Complete Quarterly lube chart items																																																	
Tighten front and rear jackscrews, balltrack bolts																																																	
Tighten pit cushion and hanger box bolts																																																	
Remove the distributor clutch assembly. Clean the pinion and sleeve, friction disks metal and plastic, use a fine emory cloth to smooth all surfaces, reassemble and lubricate pinion sleeve.																																																	
Check: bin bumpers, stock mounts, 1 pin track, butt plates, stringers, pin holders brackets, shuttle stops, shuttle operator rod. Repair as needed Tighten: Bin and shuttle bolts																																																	

AMF 82-70 / 90 ANNUAL PREVENTIVE MAINTENANCE

CENTER: _____ FROM: _____ TO: _____ YEAR: _____

Lane #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41							
Check the following for worn or broken parts, repair or replace as needed:																																																
Table and sweep arms, shaft bushings, keyways and pillow blocks																																																
Complete Annual lube chart items																																																
Check / correct gearbox oil leaks																																																
Rebuild table drive assembly																																																
Rebuild carpet roller and pit assembly																																																
Rebuild distributor assembly																																																
Rebuild ball lift assembly, light ball sensor																																																
Clean underground return tracks, tighten dropswep track																																																

ROLLER ASSEMBLY - FRONT

82/30, 82/70, 82/90, 82/90XL, 90XLi

000 024 576

Ea



Balances and stretches the carpet belt as it carries pins & balls.

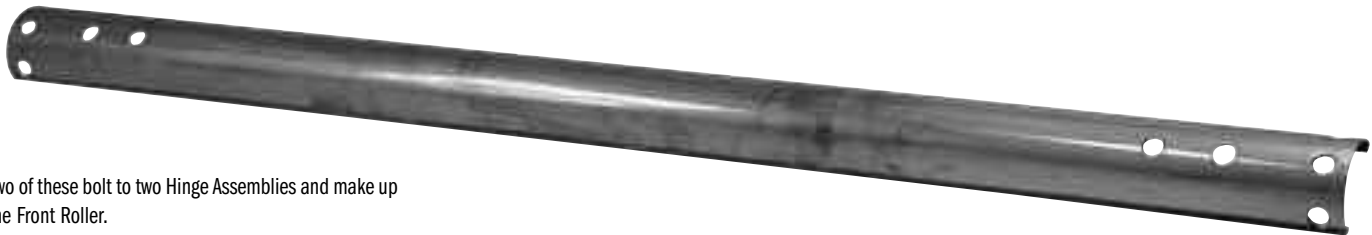
Regular inspection and lubrication prevents premature wear in this critical area.

ROLLER BODY HALF

82/30, 82/70, 82/90, 82/90XL, 90XLi

000 024 578

Ea



Two of these bolt to two Hinge Assemblies and make up the Front Roller.

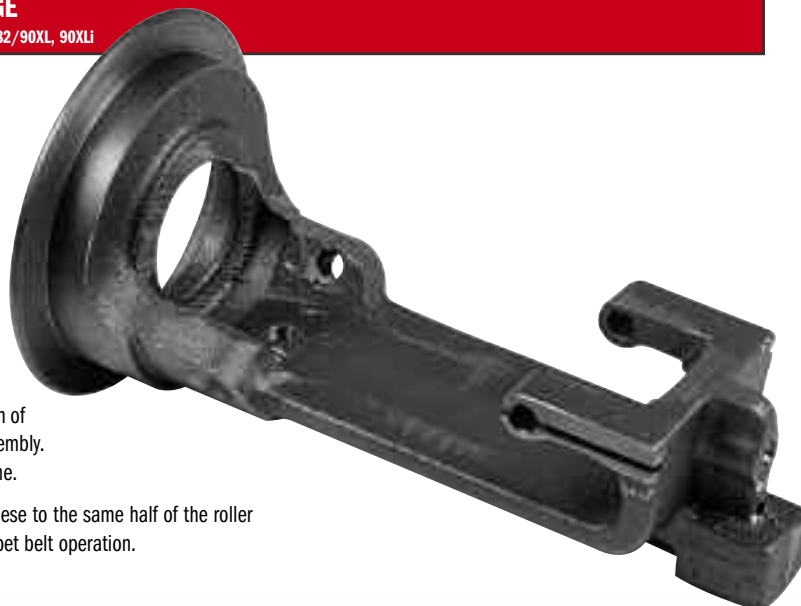
Use 16 Nyloc Screws 000 025 662BG and grind screw head edges flush before installing inside in pit.

ROLLER - HINGE

82/30, 82/70, 82/90, 82/90XL, 90XLi

000 024 579

Ea



The "flange" portion of the Front Roller assembly. Two required per lane.

Assemble both of these to the same half of the roller body for proper carpet belt operation.

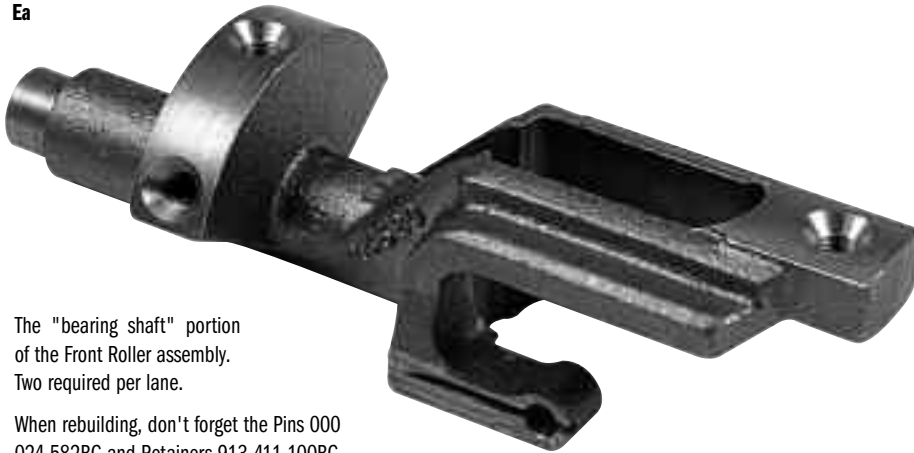


SHAFT - HINGE

82/30, 82/70, 82/90, 82/90XL, 90XLI

000 024 580

Ea



The "bearing shaft" portion of the Front Roller assembly. Two required per lane.

When rebuilding, don't forget the Pins 000 024 582BG and Retainers 913 411 100BG.

LINK - FRONT ROLLER - BRONZE

82/30, 82/70, 82/90, 82/90XL, 90XLI

000 024 597

Ea



This is what pivots between the two halves of the Front Roller assembly.

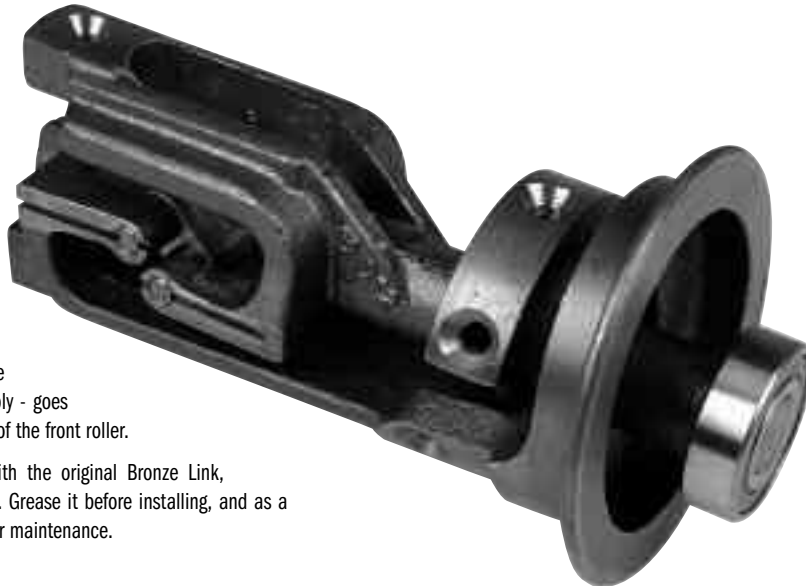
When assembling, make sure grease zerk points toward the hole in roller body. Interested in trying the lube-free plastic version? If so, order 000 024 760. Always replace these in pairs.

HINGE ASSEMBLY - FRONT ROLLER

82/30, 82/70, 82/90, 82/90XL, 90XLI

000 024 592

Ea



The complete hinge assembly - goes in both ends of the front roller.

Assembled with the original Bronze Link, 000 024 597. Grease it before installing, and as a part of regular maintenance.

BEARING - F & R ROLLER

82/30, 82/70, 82/90, 82/90XL, 90XLI

000 024 590

Ea



There are four of these per machine, one at each end of each carpet roller assembly.

These can be cleaned and repacked as a part of regular pit maintenance.

ROLLER ASSY - REAR

82/30, 82/70, 82/90, 82/90XL, 90XLI

070 002 034 (82/70-Later)

030 005 648 (82/30)

Ea



At the back of the pit, this roller drives the carpet belt.

If the pulley is frozen on the shaft, loosen setscrews and start/stop BE Motor until pulley spins free.

CARPET BELTS

82/30, 82/70, 82/90, 82/90XL, 90XLI

000 026 756 (Green)

090 006 124 (Pumpkin)

070 011 900 (Platinum)

Ea



Transports pins and balls back so that they can exit the pit area.

000 026 756 (Green):

- Tried and true 2-ply carpet design.
- Economy priced.
- One year warranty.

090 006 124 (Pumpkin):

- Industry Standard.
- New improved structure to improve ball movement into exit.
- Two year warranty.

070 011 900 (Platinum):

- Strongest, longest lasting carpet available.
- New manufacturing process prevents stretching and fraying.
- Three year warranty.

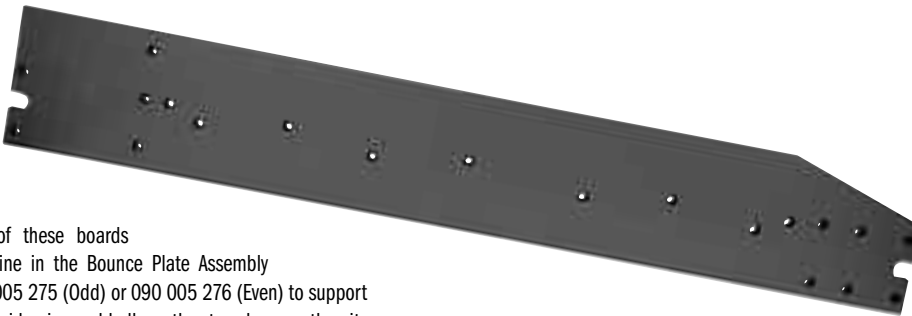
PHENOLIC BOUNCE BOARD - FRONT

82/30, 82/70, 82/90, 82/90XL, 90XLI

090 005 270 (Odd)

090 005 271 (Even)

Ea



Two of these boards combine in the Bounce Plate Assembly 090 005 275 (Odd) or 090 005 276 (Even) to support and guide pins and balls as they travel across the pit area.

A direct replacement for 000 029 899 (Odd) or 000 029 925 (Even).

PHENOLIC BOUNCE BOARD - REAR

82/30, 82/70, 82/90, 82/90XL, 90XLI

090 005 272 (Odd)

090 005 273 (Even)

Ea



A direct replacement for 000 029 924 (Odd) or 000 029 926 (Even).

CHANNEL - BOUNCE BOARD

82/30, 82/70, 82/90, 82/90XL, 90XLi

000 021 914

Ea



There are two of these channels at the ball exit side of each bounce plate assembly.

When assembling bounce plates, be careful not to overtighten hardware. Trust the O.E.M. for correct fit, strength, and quality.

VIBRATION DAMPENER

82/30, 82/70, 82/90, 82/90XL, 90XLi

000 021 224

Ea



Inside the carpet belt, the Bounce Plate Assembly is supported by four of these.

- Compression-type imitations of this part do not allow the pit system to work properly.
- Use the original, time-tested design to avoid pit area damage & premature wear.
- When it's necessary to enter the pit, use caution and never "hop" down in from above.

PIT SUPPORT BRACKETS

82/30, 82/70, 82/90

070 001 450 (Ball Exit Side)

070 001 451 (Common Side)

Ea



Replaces all old brackets that were odd/even lane-specific.

- Two 070 006 639 C-Washers can be placed between the bracket and the kickback plate to fine-tune fit of pit parts.
- 82/90XL and 90XLi pinspotters use Pit Support Bracket 090 004 131 on both sides of the pit.

BONDING STRAP

82/30, 82/70, 82/90, 82/90XL, 90XLi

000 025 622

Ea



This discharges static electricity that would otherwise build up in the bounce plate assembly.

If your scoring system freezes or locks up, inspect to make sure this strap is present, intact, and connected properly.

FE-BE BRACKET REPAIR KIT

82/70, 82/90, 82/90XL, 90XLi

610 902 026

Ea



If the back end of a machine migrates away from the front end, it can crack the brackets where the two machine halves meet. Use this kit to repair the damage, and make sure that Floor Bracket 000 026 464 is mounted firmly at both rear corners of the machine.

LARGE PLOW & MAT ASSEMBLY

82/30, 82/70, 82/90, 82/90XL, 90XLi

000 027 368 (Even)

000 027 372 (Odd)

Ea

Transitions the pins from the carpet belt to the pin elevator.

- If you are seeing damage on your pins or carpet belt, check this area for cracks and loose hardware.
- Not for use on early 82/30's.



PLOW & MAT ASSY - SMALL RH & LH

82/70, 82/90, 82/90XL, 90XLi

070 001 412 (Odd)

070 002 169 (Even)

Ea

This is the plow that goes on the ball exit side of the pit.

For late model 82/30's, the equivalent is RH plow 030 008 397 (Odd) or LH plow 030 008 398 (Even).



KICKBACK PANEL - BALL DOOR SIDE

82/30, 82/70, 82/90, 82/90XL, 90XLi

030 008 660

Ea

This is the fibre panel for the steel kickback plate on the ball exit side. It is secured with Rivets 937 000 000BG. To install, hold the new rivets in place with duct tape.

- A direct replacement for panel 000 029 640.
- For the common (opposite) side, order 030 006 495 for 82/30's or 070 002 027 for all other models.



RETAINER SUPPORT

82/30, 82/70, 82/90, 82/90XL, 90XLi

000 022 926

Ea



Direct replacement if the Rear Roller Bearing Support breaks on the ball door side.

Remove old part, drill holes if necessary and secure with 810 258 100BG screws and 844 058 002BG nuts.

PIVOT STUD

82/30, 82/70, 82/90, 82/90XL, 90XLi

000 029 015

Ea



If a front roller pivot stud is worn out, break it out of the kickback plate with a large wrench and replace it with this.

File/grind/chisel old weld as necessary to position new stud perpendicular to plate, then secure tightly with 844 074 002BG Nut and 941072200BG washer.

THRUST BEARING

82/30, 82/70, 82/90, 82/90XL, 90XLi

000 027 641

Ea



The necessary part between the kickback and the front roller bearing support brackets.

During pit service, clean all parts in this area and apply a light film of grease to both sides of this part.

SPRING - BEARING SUPPORT

82/30, 82/70, 82/90, 82/90XL, 90XLi

000 021 204

Ea



One on each side of the pit, these springs keep the carpet belt tight.

Check for separation between coils, especially at ends where the hooks bend out from the coil and always replace these springs in pairs. Some mechanics find it easier to stretch the spring into place on the back post using a 2' length of 1/2" dia. conduit as a lever.

GREASE ZERK

82/30, 82/70, 82/90, 82/90XL, 90XLi

710 501 009

Ea



A direct replacement for most grease fittings on various parts of all pinspotters.

Self-locking and aligning drivable zerk for 3/16" dia. holes.

BEARING SUPPORT BRACKETS FRONT ROLLER

82/30, 82/70, 82/90, 82/90XL, 90XLi

000 022 249 (7-side Even)

000 029 672 (10-side Odd)

000 027 645 (7-side Odd)

000 027 646 (10-side Even)

Ea



Pivots to keep carpet belt tight and tracking properly. These are sometimes referred to as "hatchets," "Pork Chops," "flanges," or "hinges."

Comes complete with rubber "half moon" 000 022 924BG, Bushing 900 112 203BG, and grease zerk 710 501 009.

SOLENOID - 5/32" HOLE

82/30 & 82/70

000 026 027 (110 Volt)

000 027 873 (220 Volt)

Ea

Machines made before 1970 use this solenoid to actuate various mechanisms including pinfeed.

This solenoid has been revised to make it more compact and eliminate dimensional issues it had with certain 82/70's.



CAM FOLLOWER

82/30

030 006 662

Ea



Goes in the Toggle Assembly on open-pinwheel 82/30's.

Expect our bearings to operate smoothly, wear well, and be the right size.

TOGGLE TIP ASSEMBLY

82/30

030 007 152 (Original Round Rubber)

030 008 739 (Hex Head Urethane)

Ea



Open pinwheel 82/30's use this to cushion finger operation.

Keep these parts in good order to ensure proper operation and prevent wear on related parts.

FLANGE BUSHING - TOGGLE HOUSING

82/30

030 007 879

Ea



On an open pinwheel 82/30, two of these are pressed into each toggle housing 030 006 631.

Another QubicaAMF exclusive part.

PIVOT PIN - TOGGLE FINGER

82/30

030 008 308

Ea



The toggle finger pivots about this pin on open pinwheel 82/30's.

Servicing this area also requires X-Washer 963 200 002BG.

BRACKET - PIN HOLDER

82/30, 82/70

000 025 330 (Even)

000 025 331 (Odd)

Ea



Seven required per pinspotter to hold pins in the pin elevator.

If pins are sticking in the wheel and going past the distributor, clean the wheel surface and check these for wear.

RUBBER MOUNT - PIN ELEVATOR

82/70, 82/90, 82/90XL, 90XLI

000 029 068

Ea



Two of these support the pin rail "kidney", and one is used on the pin seating rod.

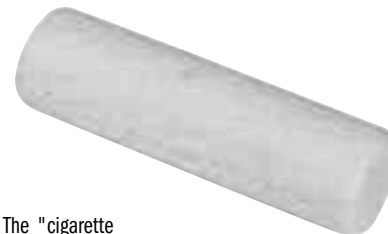
- Recently improved to improve strength and longevity.
- Hold the edge of the rubber with pliers while tightening nut to prevent twisting and extend service life.

WICK PIN

82/70

000 029 203

Ea



The "cigarette butt" that lubricates the ring tube weldment.

- Screw through Spring 000 029 202 to adjust height.
- For best performance, split the top end to form a "Y" and fit it around the ring tube.

RING TUBE WELDMENT

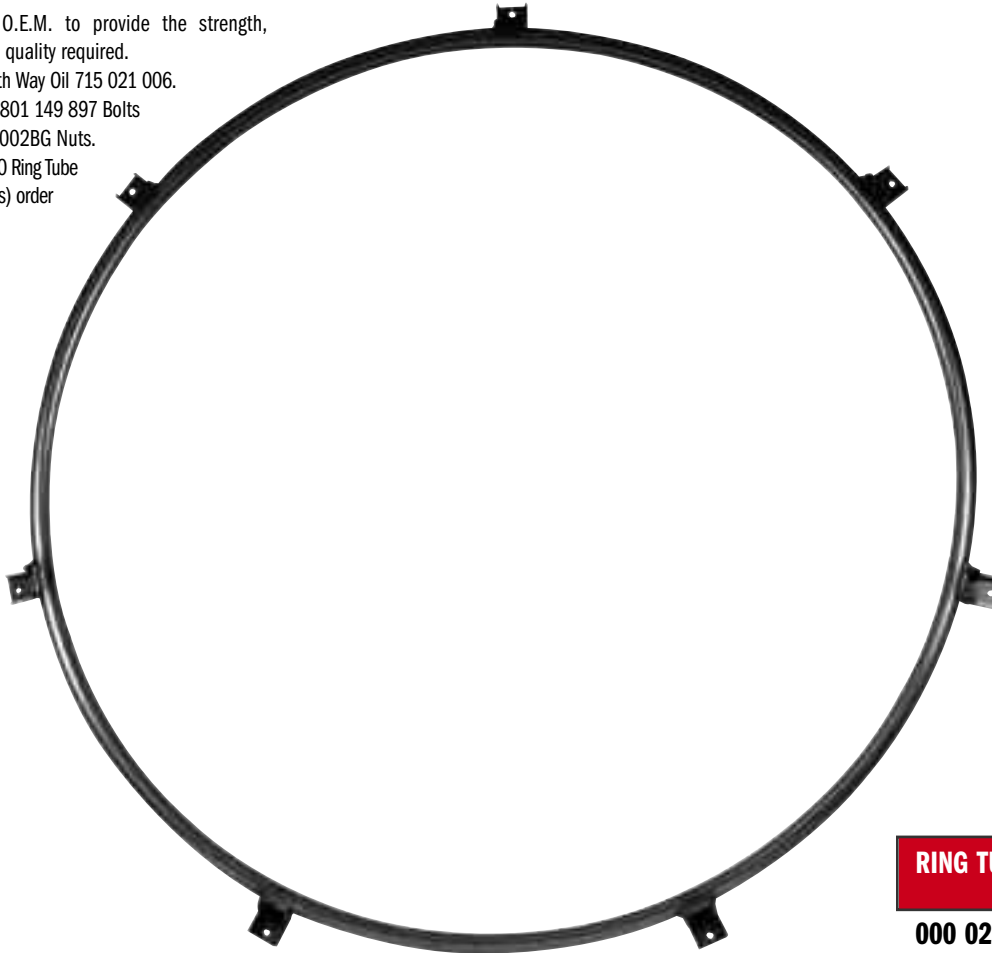
82/70

000 020 855

Ea

The pin elevator wheel is supported by the Ring Tube Weldment.

- Trust your O.E.M. to provide the strength, precision, and quality required.
- Lubricate with Way Oil 715 021 006.
- Secure with 801 149 897 Bolts and 844 049 002BG Nuts.
- For the 82/30 Ring Tube (without mounts) order 030 006 622.



RING TUBE GUIDE ROLLER

000 021 211

Ea



Four of these support and guide the Ring Tube Weldment.

- Worn rollers can result in pin pileups and expensive repairs.
- Quickly check by rocking elevator wheel forward & back - 1/2" slop or more indicates trouble.
- For the 82/30 ring tube roller, order 030 006 663.

PIN ELEVATOR DRIVE BELT

82/70

070 002 005

Ea



The correct pin elevator drive belt for all 82/70 pinspotters.

- If using a smaller drive pulley, try the Adjustable Belt 000 025 731, Fastener 702 600 002, and Nails 716 003 000.
- 82/90 and later machines use belt 090 002 065 instead.

REAR STEP

82/70, 82/90, 82/90XL, 90XLi

088 000 114

Ea



This bolt-on step is simple to add to the back of a pair of pinspotters and makes it easier to climb up and down.

Using the step as a template, simply locate and drill 4 holes in the Pin Elevator Guard (82/70) or Hoop Weldment (82/90-Later).

PIN ELEVATOR ROLLER

82/90, 82/90XL, 90XLi

090 007 327

Ea



Three of these support and guide the pin elevator wheel on late model pinspotters.

It is easy to install these without all the required parts or with the parts assembled in the wrong order. Use your service manual as a guide to ensure proper assembly.

PIN ELEVATOR GUARD ASSEMBLY

82/70

000 022 219

Ea



The "Half Moon" guard fits into the red pin elevator guard on the back of 82/70's and prevents pins from bouncing out of the elevator opening.

Replacement bracket pins are available separately. Order 000 022 222.

PIN WHEEL STRIP REPLACEMENT KIT

82/90, 82/90XL, 90XLi

090 004 043

Ea



Late model machines use this plastic strip on the inner lip of the pin elevator wheel.

- Contains Pin Wheel Strip 090 005 108 and Rivets 938 523 050
- Install so there is a 1/16" gap between the ends of the strip.
- Be sure Static Brush 090 005 144 is in place to prevent scoring system damage.

AMF 82-70 / 90 MONTHLY LUBRICATION

CENTER: _____ **FROM:** _____ **TO:** _____ **YEAR:** _____

Lane #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41											
Grease fittings for respot and spot cam follower bearings																																																				
Respot / spot cams, shuttle cam surfaces																																																				
Crile bearings and roller arm in the table drive latch mechanism																																																				
Crile bearings in respot and spot levers, tension spring plates																																																				
Crile bearings in spot, scleroid linkage																																																				
Distributor pinion and stop blade																																																				
Check ring tube oiler, refill as needed with AMF way oil																																																				
Sweep pantograph link bushings																																																				

AMF 82-70 / 90 QUARTERLY LUBRICATION

CENTER: _____ **FROM:** _____ **TO:** _____ **YEAR:** _____

Lane #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41													
Table and sweep cam level rollers, and cam level pivots																																																						
Table torque tube pillow blocks, connecting tie rod ends, bushings, table spring roller bearings																																																						
Respot cells and distribution link pivot points, yoke leg bushings and spherical bearings																																																						
Spot, respot arm grease fittings																																																						
Sweep torque tube pillow blocks, telescoping links, connecting rod ends																																																						
Respot shifter mechanism, Segar link																																																						
Distributor assembly, reference service manual																																																						
Ball elevator, rudder drive, start switch pivots, pin ejector, track rail assembly																																																						
Ball tensioner assembly																																																						

SPRING - START SWITCH

82/30, 82/70

000 021 431

Ea



In machines that don't use electronic triggering, this spring holds the lever against the start switch at the top of the cushion shock.

Our new improved design prevents end hooks from breaking. Early 82/30's use longer spring 000 021 334.

EAR - CUSHION HANGER

82/30, 82/70, 82/90, 82/90XL, 90XLI

000 024 534

Ea



This bracket bolts to the cushion hanger weldment and attaches it to the bottom ring of the shock absorber.

Keep these bolts tight and make sure the hole for Pin 000 022 821 is round and keeps a snug fit.

CUSHION SHOCK ASSEMBLY

82/30, 82/70, 82/90, 82/90XL, 90XLI

000 022 824

Ea

Keeps the cushion assembly in the proper position while absorbing ball impact energy.

- Contains Shock Absorber 000 022 823, Sleeve 000 022 822, and Rubber Bushing 721 502 005.
- Install with spring at the top for proper performance.



HANGER WELDMENT RH & LH

82/30, 82/70, 82/90, 82/90XL, 90XLI

070 002 050 (Odd)

070 002 252 (Even)

Ea



This weldment mounts between the cushion blocks and supports the Cushion Assembly.

- The strongest, most precisely-built cushion weldments on the market.
- For 82/30's, order 030 002 792 RH (odd) and 030 002 793 LH (even).
- For 8800's, order 090 007 032 RH (odd) and 090 007 030 LH (even).

CUSHION PLANK RH & LH

82/30, 82/70, 82/90, 82/90XL, 90XLi

000 024 795 (even)

000 024 796 (odd)

Ea

The most substantial part of the cushion assembly on all AMF pinspotters.

New wood sources and production methods have now made this critical part more dependable.



CUSHION RUBBER

82/30, 82/70, 82/90, 82/90XL, 90XLi

000 024 807 (odd)

000 024 808 (even)

Ea

Ahead of the pin curtain in the cushion assembly, this absorbs the majority of ball impact energy.

Trust the original for best performance, longest life, and best fit.



SPONGE RUBBER PAD - CUSHION ASSY

82/30, 82/70, 82/90, 82/90XL, 90XLI

000 022 770

Ea

As an important component of the cushion assembly, the sponge pad absorbs ball impact energy.

Knockoff versions of this part wear out prematurely or transfer ball energy to other parts.

**PIN CURTAIN - REVERSIBLE**

82/30, 82/70, 82/90, 82/90XL, 90XLI

000 026 450

Ea



The pin curtain hangs behind the pins and is part of the Cushion Assembly.

Rugged material, stitched and riveted construction, down-to-earth price, and genuine O.E.M. fit.

CUSHION FACING

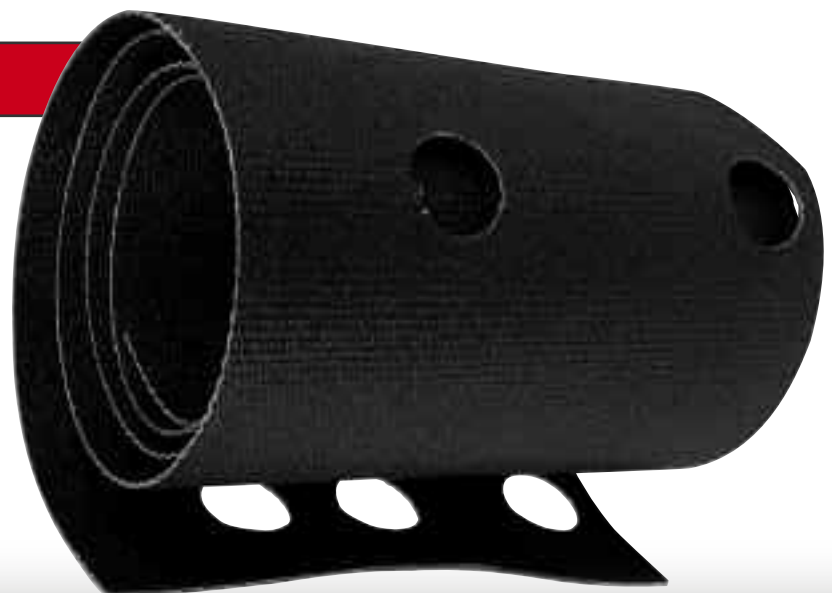
82/30, 82/70, 82/90, 82/90XL, 90XLI

090 005 230

Ea

As the front layer of a standard cushion assembly, this durable material protects balls and pins from scuffs and scrapes.

A direct replacement for 070 006 761 and all other cushion facings.



AMF 82-70 / 90 SEMI ANNUAL LUBRICATION

CENTER: _____ **FROM:** _____ **TO:** _____ **YEAR:** _____

Lane #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41											
Table support leg special bearings																																																				
Table drive cam ball																																																				
Apply a light film of grease to the inside of the clevis																																																				
Bin switch lever pivots																																																				
Off spst overtravel lever																																																				
Shuttle support rod ends																																																				
Front roller links, bearings and front roller supports																																																				

AMF 82-70 / 90 ANNUAL LUBRICATION

CENTER: _____ **FROM:** _____ **TO:** _____ **YEAR:** _____

Lane #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41													
Sweep motor / gearbox service, grease motor bearings, drain and refill gearbox oil, pull gearbox clean splines apply anti seize compound to the shaft splines, crank gearbox 10 times prior to installing																																																						
Table motor / gearbox service, grease motor bearings, drain and refill gearbox oil, pull gearbox clean splines apply anti seize compound to the shaft splines, crank gearbox 10 times prior to installing																																																						
Backend motor service, grease motor bearings, drain and refill gearbox oil																																																						
Table drive assembly																																																						
Shuttle operating rod																																																						
Ring tube oil, remove spring and wick, clean out reservoir, install new wick and AMF way oil																																																						

VELCRO CUSHION COVER

82/30, 82/70, 82/90, 82/90XL, 90XLI

- 070 011 840 (Cover)**
 - 070 011 841 (Odd Backing)**
 - 070 011 842 (Even Backing)**
- Ea



An add-on item to cover the surface that takes the impact every time a ball is thrown.

- Easy way to protect rivet heads and cushion facing from wear.
- Can be added to any cushion in minutes, no disassembly necessary.
- Covers and backs are reusable.

CUSHION RIVETS - RUBBER & URETHANE "PLUS"

82/30, 82/70, 82/90, 82/90ZL, 90XLI

- 000 028 519 (Black Rubber)**
 - 000 028 529 (Blue Urethane)**
- Ea



16 of these hold the cushion assembly together.

Some mechanics install heavy-duty blue rivets in the high-wear positions and standard black in the others.

CURTAIN PROTECTION PAD

82/30, 82/70, 82/90, 82/90XL, 90XLI

- 070 001 432 (Pad)**
 - 070 001 422 (U-Bolt)**
 - 070 001 421 (Strap)**
 - 844 057 002BG (Nuts)**
- Ea



Aptly named, this pad keeps flying balls and pins from hitting the cushion hanger weldment and tearing the pin curtain on the ball exit side.

The bottom edge of this pad seats tightly on top of the cushion plank between the curtain and the metal hanger arm.

BOX - CUSHION SUPPORT

82/30, 82/70, 82/90, 82/90XL, 90XLi

000 022 788

Ea



This box is bolted to the metal kickbacks and contains the blocks that hold the cushion.

Only remove the common-side box when absolutely necessary to avoid the possibility of breaking off hard-to-reach weldnuts.

BLOCK - CUSHION SUPPORT

82/30, 82/70, 82/90, 82/90XL, 90XLi

000 022 794 (10-Side)

000 022 795 (7-Side)

Ea



Supports the cushion assembly and helps absorb ball impact energy.

Don't forget the Shield, 000 022 300. For the harder urethane block, order 000 022 796 (10-Side) or 000 022 797 (7-Side)



CURTAIN LINK

82/70, 82/90, 82/90XL, 90XLi

070 005 610

Ea



Often referred to as the "Figure 8," this part holds up the curtain rod on the common side of the machine (opposite from ball exit).

- A 945 091 242 washer on both sides of this part is critical to proper performance and service life.
- At the other end of the curtain rod, use bushing 070 011 286.

BUSHING - CURTAIN ROD

82/70, 82/90, 82/90XL, 90XLi

070 011 286

Ea



On the ball exit side of the curtain rod, this bushing prevents damage to the kickplate and curtain rod.

- Often overlooked, this part prevents a lot of machine stops and premature wear.
- A direct replacement for Grommet 070 002 171.

UNDERLANE RETURN BALL STOP KIT

All AMF underlane ball track systems

611 353 105

Ea



Ball stop flips up to allow balls to return to bowlers, but stops any balls that travel backwards.

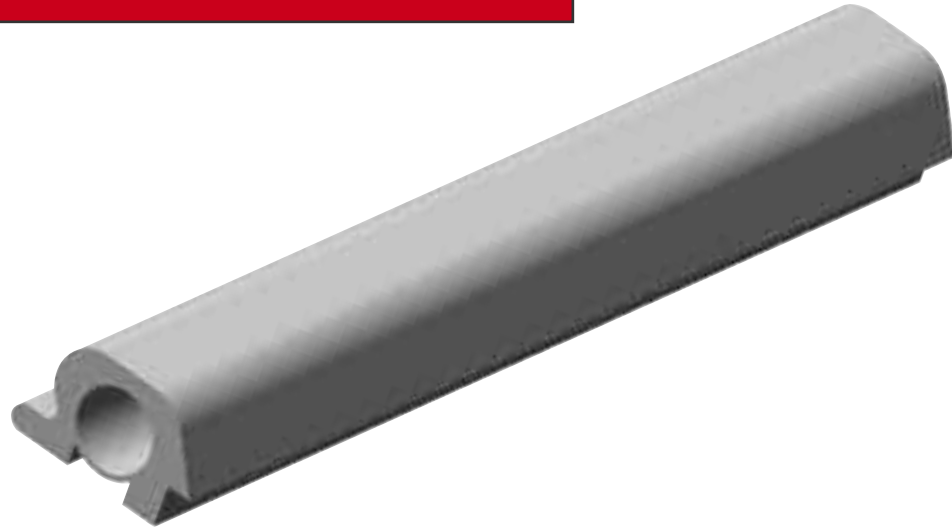
Urethane Stop 135 001 002 and Tube 135 001 004 are the most common replacement items in this kit.

PLASTIC RUNNER - UNDERGROUND TRACK

Older AMF underlane systems

167 003 122

Ea



This 67' nylon track protects balls on the entire length of most older sheet metal-type AMF underlane tracks. 2 are required per track.

Don't forget the Clips 167 002 014, available individually.

PLASTIC RUNNER - RAIL TRACK

Modern AMF underlane systems

049 006 360

Ea



This 150' C-shaped nylon extrusion snaps onto the rails on current "railroad" underlane tracks.

Runner can be cut to length for any patch, including our rail-type downsweeps.

FRONT BALL LIFTS

BALL LIFT BELTS FOR OLDER AMF BALL RETURNS

Sure-Pik & Spectrum

190 001 305 (Sure-Pik)

234 001 147 (Spectrum)

Ea

These belts carry the balls from the underlane track to the ball return tray on older front ball returns.

Time-tested replacement belts from Gates Rubber.



MOTOR 110V/60HZ - SURE-PIK & SPECTRUM

Sure-Pik & Spectrum

000 022 068

Ea

Replaces the original GE drive motors on older AMF front ball returns.

When replacing a Spectrum motor, also order a 234 001 243 adaptor bracket.



POWERLIFT TIRES

C-80, C-90, Smartpath, Profile, Brunswick Powerlift

250 001 051 (Red Urethane)

B53 520060 000 ("Go-Kart" Tire)

B12 420360 000 (Black Rubber)

Ea

Powered wheels that lift bowling balls from the underlane to the storage tray in common "S" type front-end lifts.

- With three choices, QubicaAMF has the right wheel to suit any location.
- Our taller "Options" lift uses 250 001 236 wheels instead.

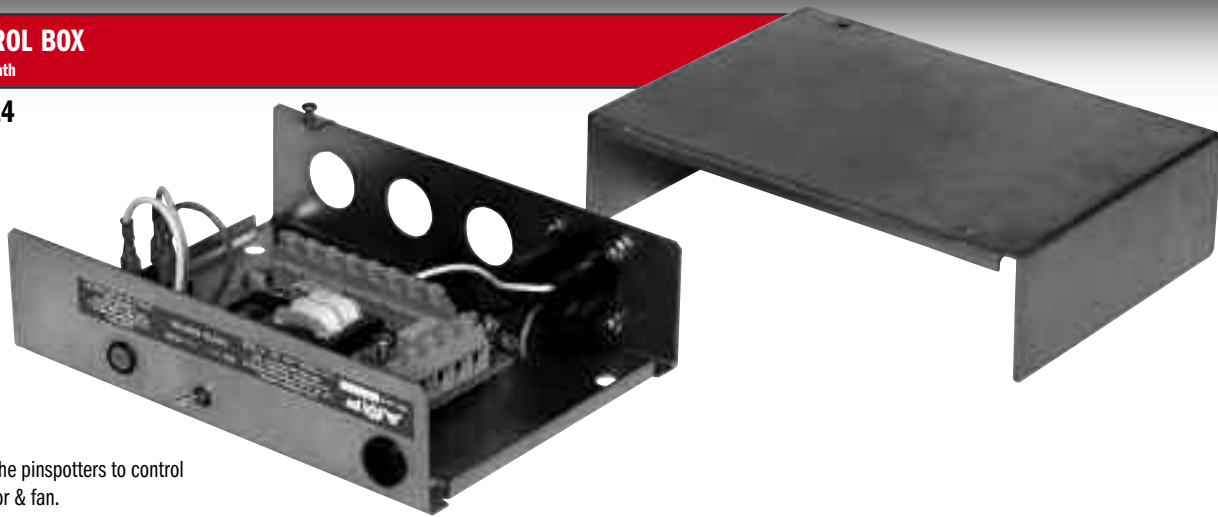


C-90 CONTROL BOX

C-80, C-90, Smartpath

250 001 014

Ea



Interfaces with the pinspotters to control the ball lift motor & fan.

Contains P.C. Board 250 001 215 and Triac 250 001 217.

C-TRACKS UPPER & LOWER

C-80, C-90, Smartpath, Profile

250 001 012 (Upper)

250 001 013 (Lower)

Ea



The ball rides these rails as it travels from the underlane track to the ball rack on the approach.

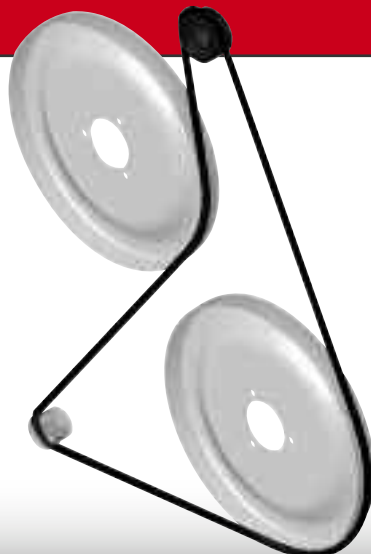
We've made sure our ball lift tracks are the correct shape, size, and material for premium performance.

BALL LIFT DRIVE BELT

C-80, C-90, Smartpath, Options, Profile

250 001 037

Ea



This AA-90 type belt drives all AMF "S" path ball lifts made before 2007.

Make sure all pulleys, including the drive pulley on the motor shaft, are in perfect alignment for quiet operation and long life.



FRONT BALL LIFTS

HAND DRYER FAN - BOMAX TYPE

Smartpath ball rack

612 820 016 (Retrofit Kit)

250 001 122 (Fan Only)

Ea



A universal replacement for the "muffin fan" type hand dryer in Smartpath front ball return ball racks.

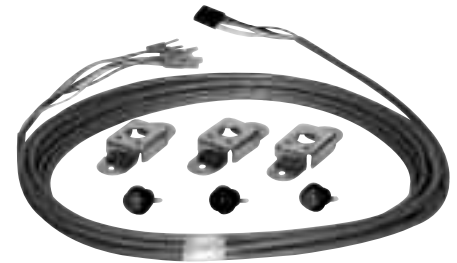
Fan cage wire has been improved to resist breaking.

SWITCH KIT - BALL RETURN

Options and Profile ball racks

612 520 086

Ea



A direct replacement for Mylar Switch 252 001 034, this is everything you need to convert the 10th Frame Switches to a mechanical type.

- Eliminate switch failure with simple, reliable buttons.
- Kit includes wiring and instructions.
- Includes differently-colored mechanic call button.

HAND DRYER FAN - SQUIRREL CAGE TYPE

Options and Profile ball racks

252 001 066 (Fan Assembly)

252 001 068 (Cage Only)

Ea



Plug-in replacement for fans in current-generation ball racks.

The hub on the "squirrel cage" is now thicker and stronger than ever.

BALL RETURN HOOD REPAIR KIT

All Fiberglass Ball Return Hoods

250 003 100

Ea



- Use this kit to repair most brands and vintages of ball return hoods and settee area equipment.
- Includes all the materials you need to safely and easily fix cracks, cuts, and breaks in molded housings, covers, and furniture.
- For a fraction of the price of new, you can return your existing equipment to like-new condition.
- Comes with an adjustable texture spray to match most original surfaces.
- AMF-original color spraypaint cans for C-80, C-90, Options and Profile are sold separately, order Silver Mink 250 003 101, or Cool Gray 250 003 102.

BUMPER VALVE CONTROL ASSEMBLY

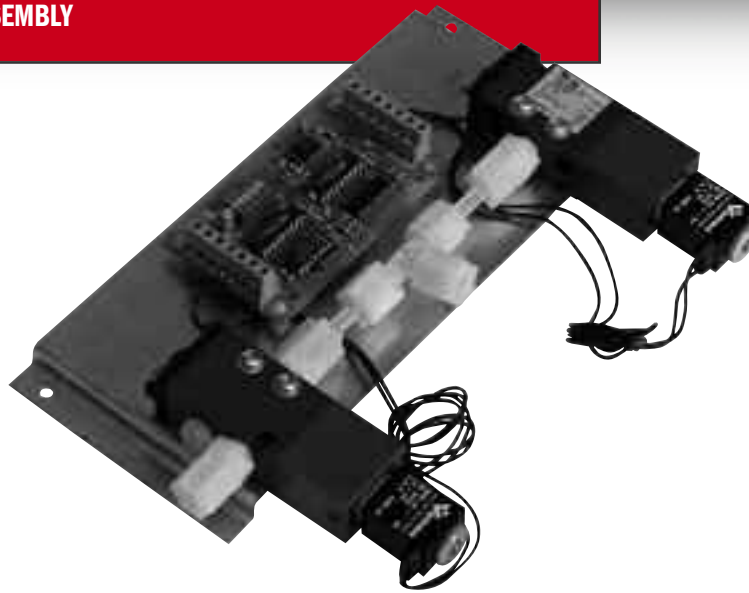
Durabowl Automatic Bumpers

049 007 175

Ea

Mounted on the curtain wall, this controls the bumpers on a pair of lanes. For use with scoring system control or front desk switch box.

Contains P.C. Board 049 007 145 and Valves 725 004 210.

**8' 3" RAIL RH & LH**

Durabowl Bumpers

049 007 091-X (10-side)**049 007 092-X (7-side)**

Ea

The first section of bumper rail on automatic and manual Durabowl systems.

When ordering, indicate your color selection by replacing the 'X' in the part numbers shown with one of the following color codes: C = Clear, B = Blue, G = Gray, N = Brown

**ACTIVATOR ARM**

Durabowl Automatic Bumpers

049 007 183

Ea

Pivots between the air cylinder and the upright bracket to raise the bumper.

If these arms are breaking, check entire length of bumper rail for damage or hardware catching the lane or gutter edges.



10' BUMPER RAIL PREDRILLED LH/RH

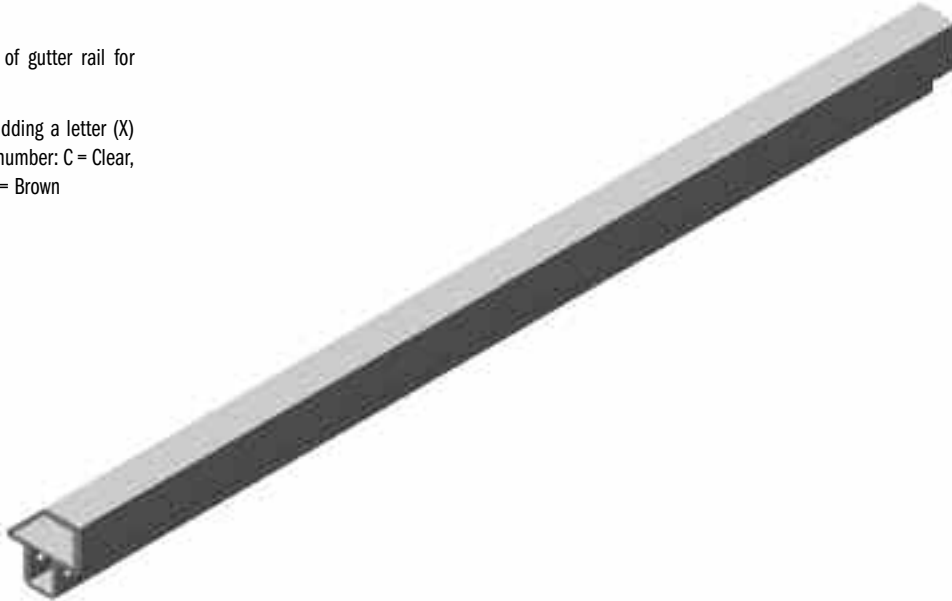
Durabowl Bumpers

049 007 075-X

Ea

The common section of gutter rail for both sides of lane.

Select your color by adding a letter (X) to the end of the part number: C = Clear, B = Blue, G = Gray, N = Brown



H-BRACKET UPGRADE KIT

Durabowl Bumpers

049 007 093

Ea



This set of two brackets adds strength and durability to your industry leading Durabowl bumpers. Installs easily above the front two uprights on the bumper rail. Brackets are also available individually as 049 007 076.

GUTTER COUPLING KIT

Durabowl Gutters

- 610 494 640-x** 1.5" Kit for use without bumpers
- 610 494 971-x** Top
- 610 494 972** Bottom
- 610 494 639-x** 1.5" Kit for use with bumpers
- 610 494 968-x** Top
- 610 494 967-x** Bottom
- 610 494 329-x** 1" Kit for use without bumpers
- 610 494 733-x** Top
- 610 494 813** Bottom
- 614 286 072-x** 1" Kit for use with bumpers
- 049 007 044-x** Top
- 049 007 045** Bottom

Ea



All kits include parts for one complete run of gutter.
All couplings use screw 820 726 122-x

Replace 'x' in above part numbers for color choice:
G = Grey, R = Red, B = Blue, N = Brown

1/2" DIA. HPL GLOW PLUGS

HPL Lanes

049 009 536

100/Bag



1/8" thick plugs used to cover screw heads and ensure a consistent lane surface.

These plugs are for glow lane surface. For the non-glow surface, order 049 009 534. For HPL Pindeck plugs, order 049 006 772.

DURABOWL KICKBACK PLATE

All wooden kickbacks under AMF Pinspotters.

049 001 723

Ea



This plate supports good pin action while protecting valuable kickbacks from damage.

- The "Durabowl" kickback plate is plastic. For the fibre version, order 049 001 721.
- Plates require about 1/4 lb. Kickback Nails 716 014 011, sold by the pound.
- Dimension: 15" x 33"

RADARAY+ FOUL UNIT KIT

Most centers that do not have overlane ball return systems.

612 460 036

620 460 036 (Repair/Exchange)

Ea



- This kit includes a new foul unit, cover, reflector unit, instructions, and all necessary hardware to replace older AMF foul units.
- Order an extra reflector unit 612 460 007 for each bank of lanes (columns, walkways, lane splits, etc.).

Components are available separately:

- 612 460 039 Foul unit chassis assembly
- 246 001 005 Reflector Disc
- 246 001 017 Lens
- 246 001 015 Cover with LED openings
- 246 001 020 LED Assembly.



FACILITIES MONTHLY PREVENTIVE MAINTENANCE

CENTER: _____

MONTH: _____

YEAR: _____

Maintenance item	Date	By	Maintenance item	Date	By	Maintenance item	Date	By
HVAC - Replace filters in all units; write the date on the filter when installed			EXTERIOR LIGHTING - Parking Lot, Building, signs, all working, time clocks adjusted for current timing			ALL DOORS - inspect / correct panic hardware, door closers, hinges, door pulls		
HVAC - check fan motor belts for wear, grease motor bearings			PARKING LOT - inspect for potholes, striping and fire zone curb paint, arrange for repairs			INTERIOR LIGHTING - all interior and EMERGENCY EXIT lights are operational		
HVAC - check / clear condensation drains, clean return air grills			KITCHEN VENT HOOD SYSTEMS - check vent hood fire systems, arrange for service, exhaust vents cleaned quarterly			FURNITURE - inspect / correct, bent chair legs, loose tables, etc.		
ROOF MAINTENANCE - clean / clear drains, gutters, down spouts are securely fastened, notify RFM of any roof leaks			REFRIGERATION EQUIPMENT - clean the condenser coils, coolers, coke machine, freezers, etc...			CARPETING - inspect correct carpet for trip hazards, loose moldings, step off into bowlers area, etc.		
DUMPSTER AREA - clean, check / correct dumpster fence, or arrange for repairs			SPRINKLER SYSTEM - certification must be current, clean dust off of the sprinkler heads			RESTROOMS - inspect / correct stall doors, toilet paper, soap, and hand towel dispensers		
EXTERIOR BUILDING WALLS - check for graffiti, arrange for repairs			FIRE EXTINGUISHERS - inspect all service tag must be current			RESTROOMS - inspect all toilet flush valves, toilet seat fastenings, arrange for repairs		
CANOPY OR AWNING - inspect / correct problems, or arrange for repairs			WARNING DECALS - ensure that all applicable decals are in place and readable, replace as needed			ADA - check all ADA compliance issues, building access, signs, etc.		

SQUEEGEE BLADES

All Century stripping and combination machines

SV21 (Orange)

SV72 (Blue)

Ea



Two of these are used to collect cleaner residue, emulsified lane oil, and dirt from the lane, leaving a squeaky-clean surface ready for conditioner to be applied.

Blades can often be swapped front-to-back to extend their service life.

- Use the orange SV21 blades for Summit, Magnum, Silver Bullet and Gemini. Use blue SV72 blades for Express, VLS+, and AVLS.

110V SOLENOIDS - LANE MACHINES

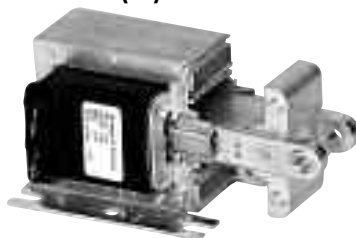
All Century lane machines

294 002 031 (Oil)

294 002 032 (RH)

294 002 033 (LH)

Ea



These solenoids engage various assemblies in the machine to clean, apply oil, and transfer oil as specified in the machine's programming.

These solenoids have been redesigned to increase service life over previous versions.

- Direct replacements for 02-002, 02-074, and SA-3039
- Identify RH and LH solenoids by which side the terminals are on when the solenoid is horizontal, facing the plunger.

DRIVE WHEEL

All self-propelled Century lane machines

294 115 404

Ea



Two of these wheels protrude from the bottom of the lane machine to move it up and down the lane with minimal effect on the lane conditioning pattern.

Replacing old A0994 and A0995 wheels, these are bidirectional and handle heavy oil conditions better than older versions.

BUFFER BRUSH

All Century lane conditioning & combination machines that do not use mohair buffer tubes

SA1182

Ea



Specially designed green fibres collect oil from the transfer roller inside the machine and deposit it smoothly on the lane surface.

- Bristles wear down over time. Depending on lineage and surface, the brush should be replaced about once a year for proper oil application.
- The metal drive coupling is available separately, order A0420.

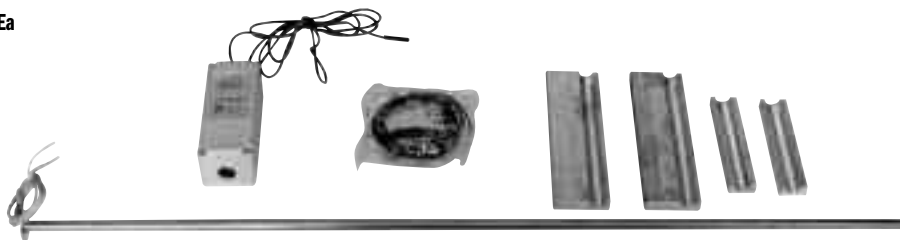
TANK HEATER KIT

Summit, Magnum, Silver Bullet, Gemini

294 300 001 (Summit)

294 300 002 (Magnum and older)

Ea



An add-on device to increase oil flow and improve consistency from lane to lane.

This kit also allows wick machines to use super-high viscosity lane conditioners such as Utopia 294 006 091

FOAM WICKS

All Century conditioning and combination machines

294 115 481 (Super Low Output)

294 115 482 (Low Output Tan)

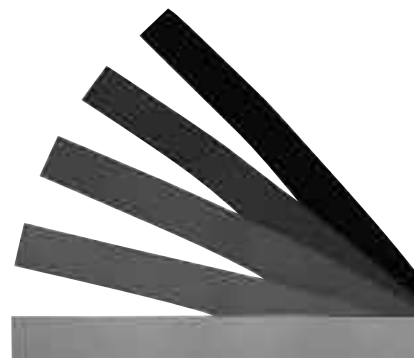
294 115 483 (Med-Low Output Orange)

294 115 485 (Medium Output Red)

294 115 487 (High Output Blue)

294 115 489 (Super High Output Black)

Ea



Advanced foam technology wicks oil out of the tanks and transfers it to the roller more consistently than ever.

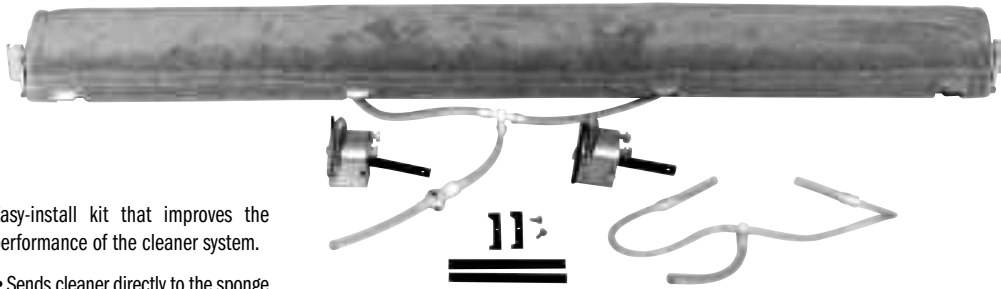
Comes in 47" length and can be cut to any tank configuration. If you have a multiple-tank machine, make wick cutting easier with the Wick Template 294 080 200.

CLEANER PAD UPGRADE KIT

Summit, Magnum, Silver Bullet

294 005 100

Ea



Easy-install kit that improves the performance of the cleaner system.

- Sends cleaner directly to the sponge and lane surface, eliminating the drip system.
- Allows more adjustment of cleaner pad height.
- For optimal performance, use Formula ACC Cleaner 294 006 081.
- Not for use in Summit "S".

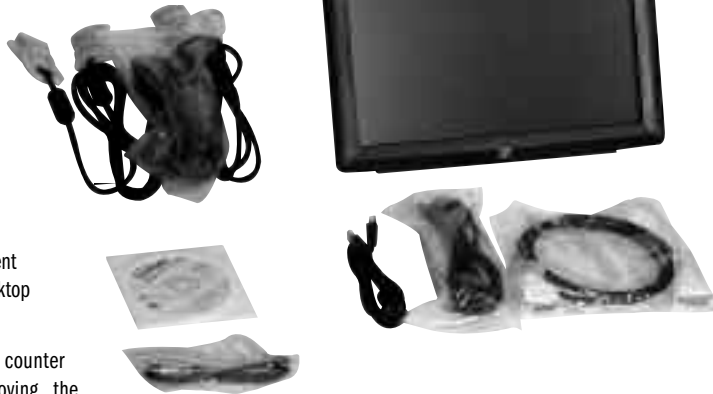
NOTES

15" TOUCH SCREEN MONITOR

All PC-based back office and POS terminals

288 600 002

Ea



A direct replacement for any modern desktop computer monitor.

Free up valuable counter space while improving the appearance of your customer service areas.



BALL TRIGGER KIT W/SPEED CABLE

BOSS with 82/30, 82/70, or Brunswick A

612 460 038

620 460 038 (Repair/Exchange)

Ea



Informs scoring system of ball delivery to cycle the machine and mark score.

For best results, isolate ball detector units from vibration. Mount on a solid surface, directly to the subfloor if possible.

PINSENSING KIT

AccuScore+ with 8800 or 82/90XL

612 440 020

Ea



Use for interfacing AccuScore+ scoring with 90XL pinspotter chassis.

One kit required per pair.

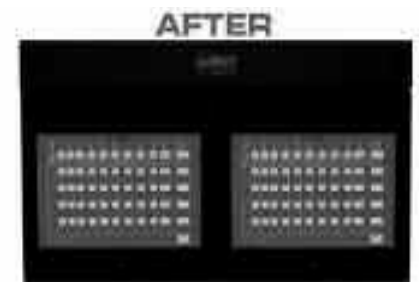
LCD MONITOR REPLACEMENT PROGRAM

All older scoring systems

Let your QubicaAMF representative customize a package for you!

Replace aging CRT technology with the latest flat-screen LCD monitors without the cost of a complete scoring system!

- LCD technology specifically engineered for the bowling industry.
- Adapts to any scoring system from the oldest to the newest.
- No more difficult, dangerous monitor and monitor board service or replacement.
- Every monitor is always bright, sharp, and easy to read.
- Optional ability to show different TV channels on each screen.
- Upgradable at any time to QubicaAMF scoring.



CURTAIN WALL CHASSIS - ACCUSCORE

AccuScore II, 500, Plus

- 522 327 500R Model 7500 CWC Red - SN 50000-99999
- 522 327 500B Model 7500 CWC Black - SN 00000-49999
- 522 327 150 Model 7150 CWC
- 522 327 350 Model 7350 CWC

Ea *Repair/Exchange Only



The primary computing unit of the scoring system, mounted on the curtain wall above each pair of lanes.

- 7500R and 7500B Will not work properly unless at Eprom version 4.18 or higher.
- CWC's can be intermixed in front to back order: 7500R - 7500B - 7150 - 7350.

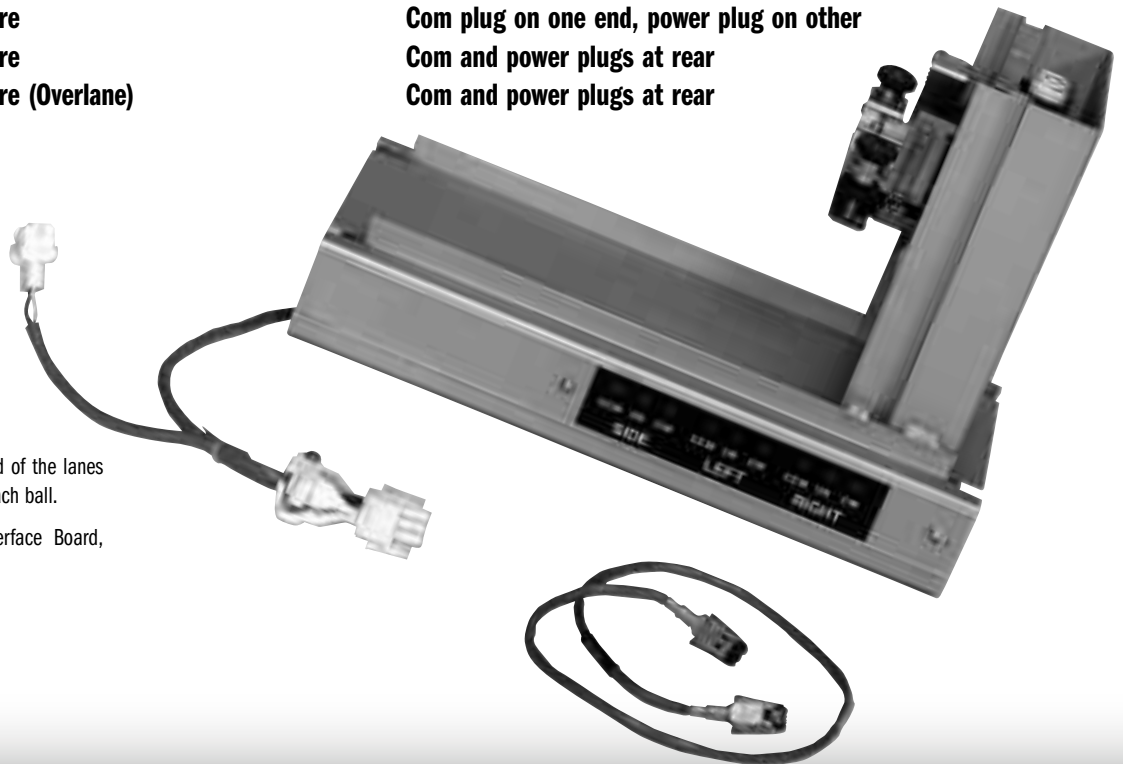
SCORING CAMERA

AccuScore and Boss systems

- | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> 522 329 510-01 522 441 165 522 441 170 522 441 140 522 441 145 522 441 125 522 441 130 522 441 135 | <ul style="list-style-type: none"> BOSS DIGITAL XL/BOSS with Automatic Bmpr XL/BOSS with Automatic Bumpers (Overlane) XL/BOSS Camera XL/BOSS Camera (Overlane) AccuScore AccuScore AccuScore (Overlane) |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

- Signature Camera AccuCam - 3000**
 Just like the 1140 with a plug underneath
 Just like the 1145 with a plug underneath
 Has black box under lens with four plugs in front
 Has black box under lens with four plugs in front
 Com plug on one end, power plug on other
 Com and power plugs at rear
 Com and power plugs at rear

Ea *Repair/Exchange Only



The camera sits on the wide coverboard ahead of the lanes and detects what pins are left standing after each ball.

For the 1140/1145/1165/1170 Camera Interface Board, order 286-001-060.

CAMERA PC BOARD

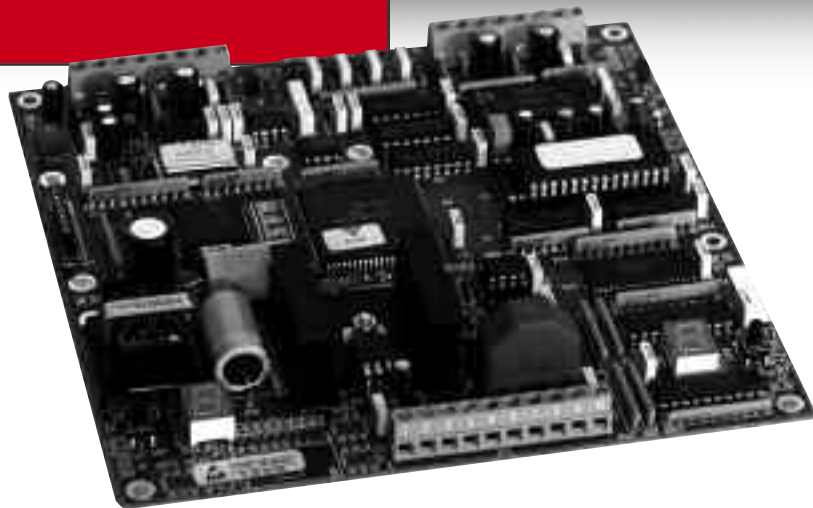
Qubica Scoring

INTBOATVISION98

INTBOATVISION98 - R (Repair/Exchange)

Ea

The main circuit board on the camera assembly.



T-VISION CAMERA

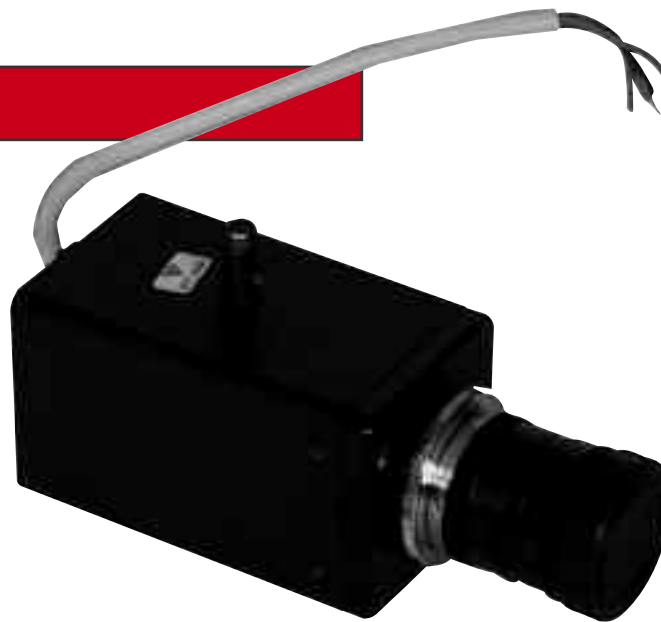
Qubica Scoring

CAMANAST900

CAMANAST900 - R (Repair/Exchange)

Ea

Direct replacement camera for most Qubica scoring systems.



6-BOX CIRCUIT BOARD

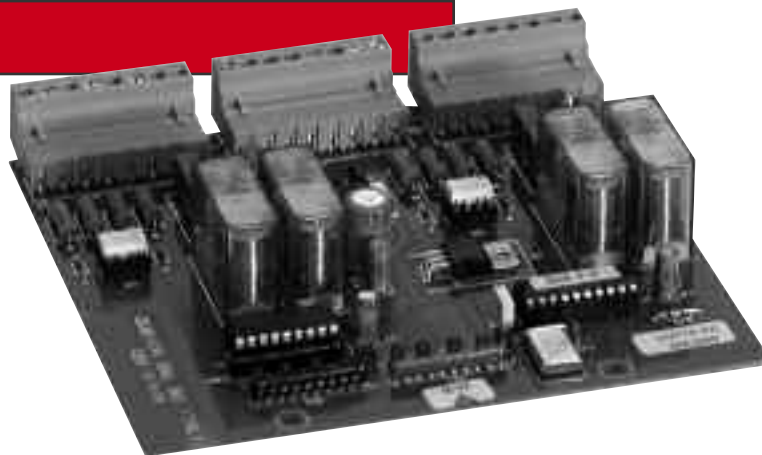
Qubica Scoring

INTBOASIXB

INTBOASIXB - R (Repair/Exchange)

Ea

One per pair of lanes, this board interfaces all of the scoring components with the machines.

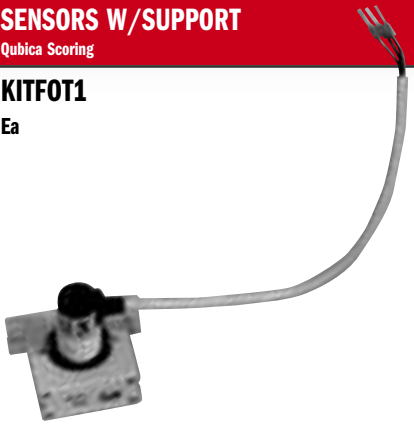


SENSORS W/SUPPORT

Qubica Scoring

KITFOT1

Ea



A photocell device that detects when a ball has been delivered.

BUMPER INTERFACE

Qubica Scoring and automatic bumper systems

BUMBOXBCU

Ea



This box enables Qubica scoring systems to raise and lower automatic bumper systems automatically.

AMF LOGIC INTERFACE BOARD

Qubica scoring systems and "smart" AMF Pinspotters

INTKITXLMFPBOXP (F-Box)

INTKITXLMPSIX (Six Box)

Ea



This board produces command signal for AMF pinspotters, which speeds up bowling and reduces wear on machine parts.

Not for use with machines that do not have MP Chassis or MP-emulating function and necessary wiring and hardware.

L-COM TESTER KIT

Most Qubica scoring systems

TOOKITTESLCOMP

Ea



For use with systems Version 2.07.05 and higher, this can be a very handy diagnostic tool.



Page Number	Part Number	Description	Page Number	Part Number	Description
66	000 020 855	Ring Tube Weldment 70	13	000 023 139	Crank Arm - Sweep
64	000 021 204	Spring - Bearing Support	16	000 023 170	Sweep Bracket - 10 Side
66	000 021 211	Roller - Pin Elevator Ring Tube 70	16	000 023 171	Sweep Bracket - 7 Side
62	000 021 224	Vibration Dampener	13	000 023 182	Slide Bar - Sweep
69	000 021 334	Spring - Start Switch - Early 30	13	000 023 216	Rubber Bumper (obs. - use 000 023 279)
61	000 021 420	Bnc Plt Asy RH (obs. - use 090 005 275)	13	000 023 279	Urethane Bumper - Sweep Link
69	000 021 431	Spring - Start Switch - Common 30-70	69	000 024 534	Ear - Cushion Hanger
9	000 021 442BG	Rubber Washer - Solenoid 70	59	000 024 576	Roller Assembly - Front
47	000 021 621	Front Filler Casting	59	000 024 578	Roller Body Half
17	000 021 784	Washer - Slotted	59	000 024 579	Roller Hinge
11	000 021 881	Bearing - Clevis Rod End	60	000 024 580	Shaft Hinge
62	000 021 914	Channel - Bounce Board	60	000 024 582BG	Pins - Front Roller Link
25	000 021 992BG	Bin Bumpers	60	000 024 590	Bearing - F & R Roller
76	000 022 068	Sure-Pik / Spectrum Motor 110V	60	000 024 592	Hinge Assy - Front Roller
62	000 022 069	Pit Supt Weld (obsolete-use 070 001 450)	47, 55	000 024 597	Link - Front Roller - Bronze
48	000 022 099	Belt - Pit Drive - 70	50	000 024 599	Adjustable Speed Rudder Drive Sheave
13	000 022 168	Spring - Sweep Brake	50	000 024 610	Clamp Stud - Ball Lift
67	000 022 219	Pin Elev. Guard Assy	47	000 024 628	Rubber Pad - Front Filler
67	000 022 222	Pin Brackets - Pin Elev. Guard Assy	50	000 024 641	Bumper - Ball Lift Adjust
64	000 022 249	Bearing Support Assy - LH-LH	49	000 024 651	Link Assy Lower
74	000 022 300	Shield - Cushion Block	5	000 024 657	Spring - Cam Lever
35	000 022 717	Pin - Dist Shaft Balls - 30-70	52	000 024 659	Ball Lift Yoke - Lower
71	000 022 770	Sponge Rubber Pad - Cushion	52	000 024 661	Pulley - Ball Lift Belt
17	000 022 782	Spring - Counter Balance	57	000 024 663	Track Cover - Upper
74	000 022 788	Box - Cushion Support	49	000 024 673	Spring - Distributor 30 - Ball Lift
74	000 022 794	Block - Cushion Support - RH-10 Side	47	000 024 678	Front Filler Assy - Kicker Exit
74	000 022 795	Block - Cushion Support - LH-7 Side	28, 48	000 024 679	Bearing - Common 5/8 ID
74	000 022 796	Urethane Cushion Block RH-10 Side	49	000 024 720	Link Assy Upper
74	000 022 797	Urethane Cushion Block LH-7 Side	60	000 024 760	Link - Front Roller - Plastic
12	000 022 811	Pillow Block	70	000 024 795	Cushion Plank - LH-Even
69	000 022 821	Pin - Cushion-Shock Absorber	70	000 024 796	Cushion Plank - RH-Odd
69	000 022 822	Sleeve	70	000 024 807	Cushion Rubber RH-Odd
69	000 022 823	Shock Absorber Only	70	000 024 808	Cushion Rubber LH-Even
69	000 022 824	Cushion Shock Assembly	49	000 024 811	Clutch Pulley Assy 5" RH-Even Side
18	000 022 868	Spacer - Spotting Cup 30	49	000 024 812	Clutch Pulley Assy 5" LH-Odd Side
64	000 022 924BG	Bearing Support Rubber	36	000 024 892	Ball Brg Retainer - 30-70
64	000 022 926	Retainer Support	12	000 025 004	End Fitting RH - Adj. Tie Rod
			12	000 025 005	End Fitting LH - Adj. Tie Rod

Page Number	Part Number	Description	Page Number	Part Number	Description
5	000 025 068	C-1 Plug Block - Chassis Side	49	000 028 772	Clutch Pulley Assy 4 1/2" RH-Even
5	000 025 144	C-1 Plug Block - Machine Side	49	000 028 773	Clutch Pulley Assy 4 1/2" LH-Odd
65	000 025 330	Bracket - Pin Holder LH-Even	47	000 028 864	Kicker Drive Belt 30
65	000 025 331	Bracket - Pin Holder RH-Odd	47	000 028 865	Kicker Drive Belt 70
62	000 025 622	Bonding Strap	5	000 029 013	Locking Clip - C-1 & C-2A Plugs
59	000 025 662BG	Nyloc Screws - Front Roller Assy	5	000 029 014	Locking Catch - C-1 & C-2A Plugs
67	000 025 731	Adjustable Pin Elev. Belt	64	000 029 015	Pivot Stud
6	000 025 863	Back End Relay - Open Type	65	000 029 068	Rubber Mount - Pin Elevator
9, 65	000 026 027	Solenoid 110V - 5/32" Hole	65	000 029 202	Spring - Wick Pin
28	000 026 031	Spring - Dist Belt Tension	65	000 029 203	Wick Pin
21, 29	000 026 032	Spring - Lateral Drive	47	000 029 600	Rudder Drive Belt
5	000 026 042	Microswitch - Small Button	47	000 029 601	Kicker Spring
5	000 026 043	Microswitch - Big Button	62	000 029 627	Pit Supt Weld (obsolete-use 070 001 450)
30	000 026 251BG	Bearing - Trip Arm - Dist	63	000 029 640	Kickback Panel - Ball Exit Side
71	000 026 445	Pin Curtain	61	000 029 656	Bnc Plt Asy LH (obs. - use 090 005 276)
71	000 026 450	Pin Curtain - Reversible	50	000 029 659	Hanger Arm Assembly
35	000 026 461BG	Balls - Dist Shaft - 30-70	47	000 029 671	Rudder Drive Link - Shock Type
61	000 026 753	Carpet (obsolete-use 000 026 756)	64	000 029 672	Bearing Support Assy - RH-RH
61	000 026 756	Greenback Carpet Belt - 1Yr Wty.	61	000 029 899	Bnce Bd F-RH (obsolete-use 090 005 270)
36	000 026 880	Spring - Dist. Indexing	61	000 029 924	Bnce Bd R-RH (obsolete-use 090 005 272)
63	000 027 368	Large Plow & Mat Assy LH-Even	61	000 029 925	Bnce Bd F-LH (obsolete-use 090 005 271)
63	000 027 372	Large Plow & Mat Assy RH-Odd	61	000 029 926	Bnce Bd R-LH (obsolete-use 090 005 273)
35	000 027 390	Housing - Dist Drive - 30-70	28	000 200 000	Carl Klauck Distributor Tool
64	000 027 641	Thrust Bearing	83	02-002	Solenoid (obsolete - use 294 002 033)
64	000 027 645	Bearing Support Assy - LH-RH	83	02-074	Solenoid (obsolete - use 294 002 032)
64	000 027 646	Bearing Support Assy - RH-LH	83	02-125	Solenoid (obsolete - use 294 002 031)
37	000 027 655	Five-Position Russell-Stoll Plug Male	13	030 001 358	X-Washer - Sweep & Table 30
37	000 027 660	Five-Position Russell-Stoll Plug Female	69	030 002 792	Hanger Weldment - RH-Odd 30
47	000 027 710	V-Belt - Rudder Drive for Kickers	69	030 002 793	Hanger Weldment - LH-Even 30
9, 65	000 027 873	Solenoid 220V - 5/32" Hole	18	030 002 864	Spotting Cup Half RH-10 Side 30
69	000 027 996	Cushion Rubber - Shock Absorber	18	030 002 865	Spotting Cup Half LH-7 Side 30
9	000 028 391	Shoulder Screw - 5/32" Dia	48	030 003 739	Ball Wiper Cloth - 30 Upright Ball Lift
5	000 028 409	C-2A Plug Block - Machine Side	12	030 003 938	Strap Only - Pillow Block
5	000 028 410	C-2A Plug Block - Chassis Side	8	030 004 031	AMP Extractor Tool
8	000 028 441BG	Guide Socket - C-1 & C-2A Plugs			
8	000 028 442BG	Guide Pin - C-1 & C-2A Plugs			
73	000 028 519	Rivet - Cushion - Rubber			
73	000 028 529	Rivet - Cushion - Urethane			
47, 55	000 028 540	Adjustable Rudder Drive Link			

Page Number	Part Number	Description	Page Number	Part Number	Description
60	030 005 648	Rear Roller Assembly 30	63	070 001 412	Sm Plow & Mat Assy - RH-Odd 70-Ltr
28	030 005 677	Gripper Distributor Belt - 30	73	070 001 421	Strap - Curtain Protection Pad
63	030 006 495	Kickback Panel - Common Side 30	73	070 001 422	U-Bolt - Curtain Protection Pad
5	030 006 526	82/30 CR-1 & CR-2 Relay Only	73	070 001 432	Curtain Protection Pad
66	030 006 622	Ring Tube Weldment 30	62	070 001 450	Univ. Pit Sup't Brkt. Ball Exit Side
65	030 006 631	Toggle Housing	62	070 001 451	Univ. Pit Sup't Brkt. Common Side
65	030 006 662	Cam Follower - Toggle Assy 30	11	070 001 587	Pin - Spring Hanger
66	030 006 663	Roller - Pin Elevator Ring Tube 30	12	070 001 664	Clamp Stud - Cam
27	030 006 789	Poly-V Distributor Belt 30	12	070 001 668	Roller - Counterbalance Spring
65	030 007 152	Toggle Tip Assy	10	070 001 700	Drive Shaft - Table - 70
19	030 007 634	Spotting Cup Liner RH - 10 Side 30	11	070 001 707	Spring - Spot/Respot Arms
19	030 007 635	Spotting Cup Liner LH-7 Side 30	11	070 001 751	Spring Hanger
19	030 007 849	Long Clip - Spotting Cup Liner 30	24	070 001 804	Pivot Weldment - Aluminum Table
65	030 007 879	Flange Bushing - Toggle Housing	24	070 001 807	Respot Finger (Pawl) Spring
19	030 008 235	Short Clip - Spotting Cup Liner 30	10	070 001 840	Table Drive Assy - Alum. Table
65	030 008 308	Pivot Pin - Toggle Finger	37	070 001 845	Spring - Old Style Table Drive
18	030 008 310	Distributor Track w/o Ears	11	070 001 910	Spot/Respot Cam
63	030 008 397	Sm Plow & Mat Assy - RH-Odd 30	52	070 001 995	Ball Lift Yoke - Upper
63	030 008 398	Sm Plow & Mat Assy - LH-Even 30	67	070 002 005	Pin Elev Belt 70
17	030 008 542	Gripper Pad	63	070 002 027	Kickback Panel - Common Side 70-Ltr
63	030 008 660	Kickback Panel - Ball Exit Side	60	070 002 034	Rear Roller Assembly 70-Later
48	030 008 671	Belt - Pit Drive - 30	69	070 002 050	Hanger Weldment - RH-Odd 70-90-XL
65	030 008 739	Toggle Tip - Hex Head Urethane	63	070 002 169	Sm Plow & Mat Assy - LH-Evn 70-Ltr
81	049 001 721	Kickback Plate - Fibre	74	070 002 171	Grommet
81	049 001 723	Kickback Plate - Durabowl			(obsolete-use 070 011 286)
75	049 006 360	Plastic Runner - Rail track	69	070 002 252	Hanger Weldment - LH-Even 70-90-XL
81	049 006 772	HPL Pindeck Plugs	22	070 002 570BG	Insert - RS Arm 70
81	049 007 044-X	Top Coupling - Gutter	24	070 002 583	Actuating Link
81	049 007 045	Bottom Coupling - Gutter	19	070 002 596	Spring - Aluminum Table - Spotting
80	049 007 075-X	10' Bumper Rail Predrilled LH/RH	20	070 002 623	Yoke & Bearing Assembly
80	049 007 076	H-Bracket - Durabowl Bumpers	22	070 002 629	Yoke Assy - RS Cell - Alum Table
79	049 007 091-X	8'3" Rail RH-10 Side (X = Color)	22	070 002 632BG	Screw Adjust - Respot Cell
79	049 007 092-X	8'3" Rail LH-7 Side (X = Color)	23	070 002 633	Lever Respot Assy 1/4"
80	049 007 093	H-Bracket Upgrade Kit - Durabowl Bump.	22	070 002 644	Top Plate Assy - RS Yoke
			22	070 002 645	Shaft - Respot Lever
79	049 007 145	PC Board - Bumper Valve Control Assy	22	070 002 646	Arm Assy - RS Cell 70
79	049 007 175	Bumper Valve Control Assembly	22	070 002 650	Respot Cell Stud Replacement
79	049 007 183	Activator Arm	23	070 002 654BG	Pivot Stud 1/4"
81	049 009 534	1/2" Dia. Non-Glow Plugs - HPL	19	070 002 664	Leg Assy Front LH (7 Side)
81	049 009 536	1/2" Dia. Glow Plugs - HPL	24	070 002 678	Respot Lever 5/16"

Page Number	Part Number	Description	Page Number	Part Number	Description
24	070 002 681BG	Pivot Pins 1/4"	27	070 006 045	Post - Dist Mount 70-90-XL-XLi
20	070 002 683	Yoke Only	29	070 006 067	Rod - Safety Link
22	070 002 695	Top Plate (obsolete - use 070 002 644)	29	070 006 068	Tab - Safety Link Spring
19	070 002 698	Spherical Bearing - Table Legs	34	070 006 077	Drive Shaft - Dist
24	070 002 732	Spring - Actuating	31	070 006 087	Long Sleeve - Pivot Trip Assy
24	070 002 733	Screw - Cam Link	32	070 006 103	Support Guide LH-7 Side
24	070 002 734	Bracket - Actuating Spring	32	070 006 104	Support Guide RH-10 Side
22	070 002 752BG	Bumper - Respot Cell Frame	28	070 006 105	Tube Assy - Belt Pulley - Dist
21	070 002 784	Liner - Spotting Cup	28	070 006 106	Tracking Bracket - Dist
21	070 002 787BG	U-Bolts - Spotting Cup	28	070 006 109	Link - Roller Assy - Dist
21	070 002 788	Cap - Spotting Cup	30	070 006 116	Stud Clamp - Carriage
22	070 002 792	Frame - Respot Cell	30	070 006 117	Concentric Roller - Grooved - Dist
21	070 002 808	Spotting Cup Assembly Complete	30	070 006 118	Eccentric Roller - Grooved - Dist
21	070 002 809	Spotting Cup - Aluminum	35	070 006 125	Worm - Dist. Clutch
24	070 002 813	Link Assy Long - #7 Cell	33	070 006 126	Friction Disc
24	070 002 814	Link Assy - Respot Cell	33	070 006 128	Spring Assy - Dist Drive
14	070 003 103	Pin Bearing - Sweep Link	33	070 006 130	Clutch Plate
14	070 003 158	Drive Link - Sweep	30	070 006 142	Bumpers - Dist
13	070 003 162	Sweep Connecting Rod 70	32	070 006 144	Orienter Pan (obsolete - use 090 003 077)
13, 15	070 003 184	Sweep Link - Cast Aluminum	34	070 006 149	Indexing Cam
13	070 003 195	Shock Mount - Sweep - Cast Links	28	070 006 152	White Nitrile Dist Belt Complete 70
14	070 003 221	Special Screw - Sweep Link	38	070 006 211	WH BE Motor-GB 50Hz RH-Odd Ln
14	070 003 223	Threaded Link - Sweep	38	070 006 212	WH BE Motor-GB 50Hz LH-Even Ln
14	070 003 238	Sweep Stabilizer Link Assy Alum	26	070 006 265	Pin Holder - Original
15	070 003 242	Link Assembly - Sweep - Cast	25	070 006 268	Strap - Shuttle
5	070 003 902	Superstar AC Chassis	9	070 006 276	Spring
48	070 004 669	Ball Wiper Cloth	9	070 006 277	Spring Cap
48	070 004 670	Dust Trap Cloth	9	070 006 280	Spring Clip
6	070 005 515	Chassis Relay - 24V Coil	9	070 006 281	Upper Link - Spring 5/32" Hole
37	070 005 542	Sweep Motor Cable Assy 70	9	070 006 282	Lower Link - Spring
74	070 005 610	Curtain Link	9	070 006 283	Spring - Solenoid Disengage
6	070 005 883	Chassis Relay - 10VDC Coil	26	070 006 293	Shuttle Rod Assy (obs.-use 090 005 263)
30	070 006 004	Carriage Tube - Dist	26	070 006 299	Tube - Shuttle Operator
30	070 006 011	Belt Roller - Dist	26	070 006 304	Rod - Shuttle Operator
30	070 006 015	Trip Arm Assy LH-7 Side	25	070 006 353	Pin Guide
30	070 006 016	Trip Arm Assy RH-10 Side	25	070 006 354BG	Bin Shock Mounts
29	070 006 030	Spring - Safety Link - Dist	25	070 006 364	Butt Guide
30	070 006 034	Linear Spring - Dist	25	070 006 366	Head Guide
31	070 006 035	Spring - Distributor Carriage			

Page Number	Part Number	Description	Page Number	Part Number	Description
25	070 006 372	Stringer - Center RH-10 Side	34	070 007 586	Universal Joint - Steel
25	070 006 373	Stringer - Center LH-7 Side	24	070 007 616BG	Pivot Pins 5/16"
25	070 006 380	Pin Ear Guide LH-7 Side	23	070 007 617BG	Pivot Stud 5/16"
25	070 006 381	Pin Ear Guide RH-10 Side	23	070 007 618	Lever Respot Assy 5/16"
25	070 006 390	Spacer - 9 Pin Bin	24	070 007 623	Respot Lever 1/4"
24	070 006 493	Spotting Latch Link	37	070 007 751	Table Motor Cable Assy 70
62	070 006 639	C-Washer	11	070 007 761	Spring Bracket Repair Kit
31	070 006 667	Trip Casting - Roll Pin Type	34	070 008 004	Universal Joint - Plastic
23	070 006 674	RS Cell #7 - Bolt Connection	6	070 009 860	MP Logic Board with LED's
33	070 006 676	Bushing - Dist Pinion	6	070 009 872	XOP Relay & Cable Assembly
33	070 006 679	Sleeve - Dist Pinion	35	070 009 890	Simplified Clutch Assy
31	070 006 685	Sleeve - Pivot Trip Assy	54, 56	070 011 005	Ball Door Weldment LH-Even
31, 33	070 006 691	Stop Blades	54, 56	070 011 006	Ball Door Weldment RH-Odd
9	070 006 724	Upper Link - Spring 1/4" Hole	55,56,57	070 011 018	Ball Guide
9	070 006 726	Solenoid 110V - 1/4" Hole	53	070 011 032	Spring - Ratchet Drive
9	070 006 727	Solenoid 220V - 1/4" Hole	53	070 011 039	Ratchet Assembly - PBL
51	070 006 748	Spacer - Ball Lift Shaft	55	070 011 052	Ball Lift Assembly - PBL
51	070 006 749	Clutch Race (obsolete-use 090 003 401)	53	070 011 064	V-Belt - Ratchet Drive
27	070 006 757	Rough Top Distributor Belt - Complete	53	070 011 100	Cam Sensor Weldment
71	070 006 761	Cush. Facing (obsolete-use 090 005 230)	53	070 011 110	Cam Sensor Assembly
23	070 007 197BG	Glide Insert - RS Finger - Orig Roll Pin	55	070 011 131	Pulley - PBL
24	070 007 199	RS Cell #7 - Long Carb Link	54	070 011 146	Paddle - PBL
23	070 007 200	Respot Cell Assembly - Complete	55	070 011 148	V-Belt - PBL
23	070 007 261	Respot Finger (obsolete-use 090 004 123)	31	070 011 170	Trip Cable - Distributor
13	070 007 283	Bumper - Telescoping Link Assy	53	070 011 217	Ratchet Arm Weldment
49	070 007 291	Clutch Bearing - Ball Lifts	50	070 011 280	Ball Lift Belt - Wide/Deep Groove
31	070 007 305	Trip Rod (obsolete-use 070 011 170)	74	070 011 286	Bushing - Curtain Rod
15	070 007 318	Link Assembly (obsolete-use 090007319)	50	070 011 440	Track Cover - Lower
62	070 007 372	Pit Supt Weld (obsolete-use 070 001 450)	54, 55	070 011 641	Urethane Ball Door LH-Even
62	070 007 373	Pit Supt Weld (obsolete-use 070 001 451)	54, 55	070 011 642	Urethane Ball Door RH-Odd
62	070 007 374	Pit Supt Weld (obsolete-use 070 001 450)	5	070 011 755	82/70 S & T Relay Only
62	070 007 375	Pit Supt Weld (obsolete-use 070 001 451)	51	070 011 795	Upper Shaft - D-Bore
			51	070 011 796	Lower Shaft - D-Bore
			51	070 011 797	D-Bore Bearing
			73	070 011 840	Velcro Cushion Cover
			73	070 011 841	Backing - Velcro Cush. Cover Odd-RH
			73	070 011 842	Backing - Velcro Cush. Cover Even-LH
			61	070 011 900	Platinum Grey Carpet Belt - 3 Yr Wty.
			28	070 011 905	Gripper Distributor Belt - 70-90-XL-XLi
			27	070 011 909	Poly-V Distributor Belt 70-90

Page Number	Part Number	Description	Page Number	Part Number	Description
32	070 011 910	Orienter Pan Wipe	22	090 004 118	Yoke Assy - RS Cell - Steel Table
67	088 000 114	Rear Step	23	090 004 123	Respot Finger
16	088 001 089	Decal - Sweep - QubicaAMF	62	090 004 131	Pit Support Bracket 90XL-90XLi-8800
26	088 001 211	Super Pin Holder	44	090 004 499	Combo Gearbox-Lightwt 50Hz XL-XLi
57	088 001 230	Thimble	44	090 004 500	Combo Gearbox-Lightwt 60Hz XL-XLi
57	088 001 231	Rail Cover - Lower Clear	42	090 004 501	BE Gearbox 60Hz RH-Odd 90-XL
55,56,57	088 001 233	Gripper Ball Lift Belt	42	090 004 502	BE Gearbox 60Hz LH-Even 90-XL
35	090 001 130	Housing - Dist Drive - 90 Wide	43	090 004 504	Combo Gearbox 3-Bolt 90-XL 60Hz
15	090 001 170	Sweep Bracket Solid RH-10 Side	42	090 004 506	BE Gearbox 50Hz RH-Odd 90-XL
15	090 001 171	Sweep Bracket Solid LH-7 Side	42	090 004 507	BE Gearbox 50Hz LH-Even 90-XL
35	090 002 019	Balls - Dist Shaft - 90-Later	43	090 004 509	Combo Gearbox 3-Bolt 90-XL 50Hz
53	090 002 024	Cradle Liner - PBL Lift Arm	45	090 004 516	Drag Brake - Drop In - XL
36	090 002 034	Ball Brg Retainer - 90-Later	48	090 004 520	Belt - Pit Drive - 90
67	090 002 065	Pin Elev Belt 90-XL-XLi-8800	43	090 004 547	Combo Motor - Sm Plug 3-Bolt 60Hz
32	090 003 077	Orienter Pan	43	090 004 548	Combo Motor - Sm Plug 3-Bolt 50Hz
27	090 003 112	Mount - Dist - 90XL-XLi	44	090 004 558	Switch - 50Hz - BE Motor 90-XL-XLi
51	090 003 401	Clutch Race - Ball Lift	44	090 004 560	Switch - 60Hz - BE Motor 90-XL-XLi
43	090 003 512	BE Motor-GB Assy 90-XL 50Hz RH-Odd	67	090 005 108	Pin Wheel Strip
43	090 003 513	BE Motor-GB Assy 90-XL 50Hz LH-Evn	67	090 005 144	Static Brush
43	090 003 514	BE Motor-GB Assy 90-XL 60Hz RH-Odd	71	090 005 230	Cushion Facing
43	090 003 515	BE Motor-GB Assy 90-XL 60Hz LH-Evn	13	090 005 255	Sweep Connecting Rod 90
44	090 003 532	Combo Motor - Lg Plug 90-XL	26	090 005 263	Shuttle Operator Rod Assy
45	090 003 550	Drag Brake w/Heat Shield	61	090 005 270	Phenolic Bounce Board Front RH-Odd
37	090 003 630	Klixon Thermal Protector 90 Combo	61	090 005 271	Phenolic Bounce Board Front LH-Evn
37	090 003 630	Klixon Thermal Protector 90 BE 60hz	61	090 005 272	Phenolic Bounce Plate Rear RH-Odd
44	090 003 634	Capacitor - 90 Combo stator-mount	61	090 005 273	Phenolic Bounce Plate Rear LH-Even
37	090 003 665	Klixon Thermal Protector 90 BE 50hz	61	090 005 275	Bounce Plate Assembly RH-Odd
9	090 003 739	Adapter Cable - Universal Solenoid	61	090 005 276	Bounce Plate Assembly LH-Even
42	090 003 766	BE Motor 60Hz 90-XL-XLi	23	090 005 504	Respot Pivot
15	090 003 901	Link Assembly - Sweep - Nylon	19	090 005 545	Table Leg Assy - Front - Steel Table
15	090 003 902	Support Link Assy - Nylon	19	090 005 548	Table Leg Assy - Back - Steel Table
14	090 003 903	Sweep Stabilizer Link Assy Nylon	10	090 005 550	Table Drive Assy - Steel Table
67	090 004 043	Pin Wheel Strip Replacement Kit	10	090 005 565	Drive Shaft - Table - 90-Later
44	090 004 060	Combo Motor - Splined Shaft 50Hz	11	090 005 576	Spring Hanger
44	090 004 061	Combo Mtr (obsolete-use 090 004 062)	11	090 005 589	Spot/Respot Cam 90XL
44	090 004 062	Combo Motor - Splined Shaft 60Hz	23	090 005 617	Glide Insert - RS Finger - Steel Table
22	090 004 113	Arm Assy - RS Cell 90	24	090 005 631	Pivot Weldment - Steel Table
			7	090 005 700	XL Pinspotter Chassis 110V
			9	090 005 723	Solenoid Universal
			61	090 006 124	Pumpkin Tan Carpet Belt - 2 Yr Wty.

Page Number	Part Number	Description	Page Number	Part Number	Description
15	090 006 129	Sweep Bracket Late LH-7 Side	78	250 003 100	Ball Return Hood Repair Kit
15	090 006 130	Sweep Bracket Late RH-10 Side	78	250 003 101	Silver Mink Touch-Up Paint
13	090 006 136	Shock Mount - Sweep - Steel	78	250 003 102	Cool Gray Touch-Up Paint
14	090 006 139	Sweep Stabilizer Link 90	78	252 001 034	10th Fr Sw (obsolete-use 612 520 086)
14	090 006 140	Drive Link w/Pin Bearing Assy			
16	090 006 166	Decal - Sweep - Blk Bkgrd Glow	78	252 001 066	Fan Assembly - Hand Dryer
31	090 006 663	Trip Rod	78	252 001 068	Cage - Hand Dryer Fan 5/16 Hub
31	090 006 665	Trip Casting	85	288 600 002	15" Touchscreen Monitor - POS
31	090 006 668	Trip Rod & Casting Assy	83	294 002 031	Oil Solenoid
69	090 007 030	Hanger Weldment - LH-Even 8800	83	294 002 032	RH Solenoid
69	090 007 032	Hanger Weldment - RH-Odd 8800	83	294 002 033	LH Solenoid
42	090 007 310	BE Motor 50Hz 90-XL-XLi	84	294 005 100	Cleaner Pad Upgrade Kit
15	090 007 319	Link Assembly - Sweep - Forged	84	294 006 081	Formula ACC Cleaner 2.5 Gal.
67	090 007 327	Pin Elevator Roller	83	294 080 200	Wick Cutting Template Tool
16	090 008 892	Decal - Sweep - 8800 Gold	83	294 115 404	Drive Wheel
7	090 008 965	XL Chassis Late/Black	83	294 115 481	Super Low Ouptput Wick 47" Green
75	135 001 002	Urethane Stop - Underlane	83	294 115 482	Low Output Wick 47" Tan
75	135 001 004	Tube - Underlane Ball Stop	83	294 115 483	Med-Low Output Wick 47" Orange
75	167 002 014	Clips - Underlane Track Runner	83	294 115 485	Medium Output Wick 47" Red
75	167 003 122	Plastic Runner - Underlane Track	83	294 115 487	High Output Wick 47" Blue
76	190 001 305	Sure-Pik Ball Lift Belt	83	294 115 489	Super High Output 47" Black
76	234 001 147	Spectrum Ball Lift Belt	83	294 300 001	Tank Heater Kit - Summit
76	234 001 243	Adaptor Bracket for 22068 Motor	83	294 300 002	Tank Heater Kit - Magnum/SB/Gemini
6	244 001 058	Ball Detector Cycle Trigger	16	300 000 166	Decal - Sweep - White Background
86	244 001 170	Cam XL/BOSS with Auto Bmprs Overln	15	300 000 175	Cap - Sweep Bar
			15	300 000 182	Sweep Bar & Cap Assy
81	246 001 005	Reflector Disc - Radaray +	6	520 709 860	MP Logic Board - Repair/Exchange
81	246 001 015	Cover with LED Openings - Radaray +	86	522 327 150	Model 7150 CWC
81	246 001 015	LED Indicator Assy - Radaray +	86	522 327 350	Model 7350 CWC
81	246 001 017	Lens - Radaray +	86	522 327 500B	7500 CWC Black - SN 00000-49999
77	250 001 012	C-Track - Upper - C-90/Profile	86	522 327 500R	7500 CWC Red - SN 50000-99999
77	250 001 013	C-Track - Lower - C-90/Profile	86	522 329 510-01	Camera - BOSS Digital
77	250 001 014	C-90 Control Box	86	522 441 125	Camera - AccuScore
77	250 001 037	Ball Lift Drive Belt - AA90	86	522 441 130	Camera - AccuScore 2 Plugs at rear
76	250 001 051	V-Wheel - Red Urethane - C-90/Bruns	86	522 441 135	Camera - AccuScore Overlane
43	250 001 115	3-Pos AMP Plug& Cable - C-90 & BE	86	522 441 140	Camera - XL/BOSS Camera
78	250 001 122	Fan Only - Smartpath Hand Dryer	86	522 441 145	XL/BOSS Camera Overlane
77	250 001 215	PC Board - C-90 Control Box	86	522 441 165	Camera - XL/BOSS with Auto Bmpr
77	250 001 217	Triac - C-90 Control Box	86	522 441 170	Cam XL/BOSS with Auto Bmprs Overln
76	250 001 236	V-Wheel - Options Lift			

Page Number	Part Number	Description	Page Number	Part Number	Description
5	610 003 037	82/30 CR-1 & CR-2 Conversion Kit	28	610 709 812	White Nitrile Dist Belt 3PK 70
57	610 049 510	Gripper Kit for existing PBL	6	610 709 870	XOP Board
5	610 070 300	MP Chassis Upgrade Kit	46	610 900 051	BE GB Packaging Kit 90-XL
57	610 088 002	Kicker to Gripper PBL Kit	45	610 900 063	Combo GB Rebuild Kit 50Hz
41	610 309 042	Adjustable Solid-State Switch 110V	45	610 900 064	Combo GB Rebuild Kit 60Hz
41	610 309 043	Adjustable Solid-State Switch 220V	46	610 900 116R	BE GB Seal Kit
41	610 309 044	Solid-State Switch - Combo	7	610 903 697	Manager's Control Unit
40	610 309 046	Solid-State Switch - BE & Ball Lift	23	610 903 709	Respot Cell Repair Kit
28	610 309 070	White Nitrile Dist Belt 3PK 30	51	610 905 704	Straight Bore Bearing & Spacer Kit
81	610 494 329-x	1" Coupling Kit without bumpers	75	611 353 105	Underlane Return Ball Stop Kit
81	610 494 639-x	1.5" Coupling Kit with bumpers	6	612 362 068	Strike/Foul Mask Board
81	610 494 640-X	1.5" Gutter Coupling Kit without bumpers	85	612 440 020	Pinsensing Kit - AccuScore-90XL
81	610 494 733-x	Top Coupling 1" without bumpers	81	612 460 007	Radaray Reflector Unit (Narrow Div.)
81	610 494 813	Bottom Coupling 1" without bumpers	81	612 460 036	Radaray + Foul Unit
81	610 494 967-x	Bottom Coupling 1.5" with bumpers	85	612 460 038	Ball Trigger Kit w/Speed Cable
81	610 494 968-x	Top Coupling 1.5" with bumpers	81	612 460 039	Radaray + Chassis
81	610 494 971-X	Top Coupling 1.5" without bumpers	78	612 520 086	Switch Kit - Ball Return
81	610 494 972	Bottom Coupling 1.5" without bumpers	16	612 703 060	Plastic Sweep Conv. Kit Slide-Free
48	610 496 591	Downsweep Replacement Kit	78	612 820 016	Retrofit Kit - Smartpath Hand Dryer
31	610 700 001	Complete Clutch Rebuild Kit	81	614 286 072-x	1" Coupling Kit with bumpers
16	610 700 150	Plastic Sweep Conv. Kit - Pair 30-70	81	620 460 036	Radaray + Chassis Repair/Exchange
16	610 703 060	Slide-Free Sweep Conversion Kit - Pair	85	620 460 038	Ball Trigger w/Speed Repair/Exchange
11	610 704 002	Cam Follower - Spot/Respot Arms	38	620 704 042	WH BE Mtr-GB 60Hz LH Repair/Exch
31	610 704 005	Pinion & Sleeve Assy	38	620 704 043	WH BE Mtr-GB 60Hz RH Repair/Exch
33	610 704 006	Kit - Clutch Plate Assy	38	620 704 052	WH Combo Motor-GB Repair/Exchange
20	610 704 011	Yoke Repair Kit	6	620 709 870	XOP Board - Repair/Exchange
27	610 704 032	Distributor Assembly	7	620 903 697	MCU - Repair/Exchange
38	610 704 042	WH BE Motor-GB 60Hz LH-Even Ln	44	620 904 500	Combo GB 60Hz Repair/Exchange
38	610 704 043	WH BE Motor-GB 60Hz RH-Odd Ln	42	620 904 501	BE GB 60Hz RH-Odd Repair/Exchange
38	610 704 052	WH Combo Motor & GB Assy 60Hz	42	620 904 502	BE GB 60Hz LH-Even Repr/Exchange
38	070 006 219	WH Combo Motor & GB Assy 50Hz	43	620 904 504	Combo GB 90-XL 60Hz Repr/Exchge
55	610 704 097	PBL "Plus" Conversion Kit	7	620 905 700	XL Chassis 110V - Repair/Exchange
55, 56	610 704 098	PBL Template & Drill Bits Kit	7	620 905 769	XL Chassis 220V - Repair/Exchange
12	610 704 103	Repair Kit - Counterbal. Spring Pin	7	620 908 965	XL Chassis Late - Repair/Exchange
56	610 704 106	Complete PBL Conversion Kit	42	701 019 007	OB Rotor/Endbell Bearing 70 GE BE
5	610 704 141	82/70 S & T Relay Conversion Kit	42	701 020 091	OB Rotor/Endbell Bearing 70 WH BE
51	610 704 151	Lower D-Bore Shaft Kit	42	701 021 010	OB Rotor/Endbell Bearing Common
27	610 709 811	Rough Top Dist Belt - 3 PK w/Laces			

Page Number	Part Number	Description	Page Number	Part Number	Description
31	701 710 098	Bushing - Trip Casting - Nylon	39	785 501 402	Belleville Washer - WH BE Motor
31	701 712 097	Bushing - Trip Casting - Brass	37	785 501 508	Klixon Therm. Prot. 70 GE BE 50hz
67	702 600 002	Fastener - Adjustable Pin Elev. Belt	40	785 501 520	WH BE Cent. Switch - Sm Disk 50Hz
12, 64	710 501 009	Grease Zerk	37	785 501 540	Klixon Therm. Prot. 70 GE Combo 50
33	715 010 205	Lubricant - Pinion & Sleeve	37	785 501 564	Klixon Thermal Prot. 70 WH BE 50hz
43	715 011 803	Anti-Seize Compound	40	785 501 568	WH Combo Cent. Mech. 60Hz
66	715 021 006	Way Oil - Ring Tube Lube	40	785 501 569	WH Combo Cent. Mech. 50Hz
37	715 021 706	Genuine AMF Gearbox Oil - 12 Qts.	39	785 501 663	WH BE Stator Assy 60Hz 110V
37	715 021 716	Genuine AMF Gearbox Oil - 1 Qt.	40	785 501 664	WH BE Centrifugal Switch - Sm Disk
67	716 003 000	Nails - Adjustable Pin Elev. Belt	40	785 501 665	WH BE Centrifugal Mech - Sm Disk
81	716 014 011	Kickback Nails - 1 lb.	39	785 501 666L	WH BE Rotor & Worm 60Hz LH-Even
41	716 501 009	Seal - Worm Input WH & GE 70	39	785 501 666R	WH BE Rotor & Worm 60Hz RH-Odd
41	716 503 022	Seal - Dist Output WH & GE 70	40	785 502 005	Klixon Thermal Protector Nat Combo
41	716 503 023	Seal - Pin Elev & Pit Drive WH & GE	37	785 502 020	Carbon Brush - National Combo
69	721 502 005	Rubber Bushing - Cushion Shock	40	785 502 080	Klixon Thermal Protector Nat BE
79	725 004 210	Valve - Bumper Valve Control Assy	42	785 502 087	OB Rotor/Endbell Bearing 90 Combo
24	730 035 025	Clip - Ball Joint - Brass	42	785 502 087	OB Rotor/Endbell Bearing 90 BE
24	730 036 025	Clip - Ball Joint - Silver	42	785 502 088	OB Rotor/Endbell Bearing Natl BE
6	751 001 031	Indicator Lamp Bulb - Mask Board	40	785 502 258	National BE Motor Replacement 50Hz
6	755 504 048	Back End Relay - Sealed Type	40	785 502 259	National BE Motor Replacement 60Hz
8	760 001 070	Chair Terminal	39	785 502 260	National Combo Motor Rplmt. 50Hz
8	760 002 061	J-Strip Terminal - Brass	39	785 502 261	National Combo Motor Rplmt. 60Hz
8	760 002 063	J-Strip Terminal - Silver	40	785 502 300	WH BE Centrifugal Mech - Wide Disk
8	760 011 197BG	AMP Pin	45	785 503 071	Oil Seal - BE Pin Elev. Output 90-XLi
8	760 017 036	Straight Terminal - Large Gauge Wire	45	785 503 072	Oil Seal - Dist Drive & Pit Drive BE 90
8	760 017 044	Straight Terminal - Small Gauge Wire	45	785 503 073	Oil Seal - Combo Output Shaft 90-XL
8	760 019 201BG	AMP Socket	45	785 503 074	Oil Seal GB
37	785 051 389	Klixon Thermal Protector GE BE 60hz			(obsolete-use 785 503 104)
38	785 501 075	WH Combo Motor Stator 60Hz 110V	45	785 503 104	Oil Seal - Worm Input GB 90-XLi
41	785 501 179	Ring Gear - Westinghouse Combo	11	792 505 005	Spring Puller Tool
41	785 501 134	Planet Gear - Westinghouse Combo	23	792 506 033	Glide Insert - RS Finger - Alum Table
41	785 501 291	Wheel Shaft - Westinghouse Combo	8	792 512 019	AMP Crimping Tool
38	785 501 350	Belleville Washer - WH Combo Motor	52	792 514 040	Bearing Installation Tool - Ball Lift Yoke
40	785 501 372	WH Combo Switch - Aux. Board			
40	785 501 384	WH BE Cent. Switch - Sm Disk 60Hz	52	792 514 041	Bearing Removal Tool - Ball Lift Yoke
40	785 501 386	WH Combo Switch - Main Board	22	793 509 036	Thin 1/4" Wrench - 70 RS Cell
37	785 501 388	Klixon Thermal Protector 30BE 50hz	23	801 149 100	Carriage Bolt - Steel Table
37	785 501 392	Klixon Thermal Protector GE Combo	66	801 149 897	Carriage Bolt 1/4-20x3/4 - Pin Elev 70
37	785 501 393	Klixon Thermal Prot. 70 WH Combo			
37	785 501 394	Klixon Thermal Prot. 70 WH BE 60hz	64	810 258 100BG	Socket Hd Cap Screw 5/16-24 x 5/8

Page Number	Part Number	Description	Page Number	Part Number	Description
30	813 540 082BG	Screw 10-32x1/2 PH	87	INTBOASIXB-R	6-Box Circuit Board Repair/Exchange
81	820 726 122-X	Screws - Gutter Coupling (X = Color)	87	INTBOATVISION98	Camera PC Board
12	835 549 002BG	Hex Jam Nut 1/4-20	87	INTBOATVISION98-R	Camera PC Board Rebuilt
50	835 558 002BG	Hex Jam Nut 5/16-24	88	INTKITXLMPSIX	AMF Logic Interface Board
50	835 565 002	Hex Jam Nut 3/8-16	88	KITFOT1	Sensors w/Support
12	835 570 002BG	Hex Jam Nut 7/16-20	83	SA1182	Buffer Brush
33	835 582 002	Hex Jam Nut 5/8-18	83	SV21	Squeegee - Orange - SB/Mag/Summit
12	835 670 002BG	Hex Jam Nut LH Thread 7/16-20	83	SV72	Squeegee - Blue - Express/VLS
11	839 665 002BG	Flexloc Nut 3/8-16	88	TOOKITTESLCOMPL	Com Tester Kit
22	840 049 002BG	Flexloc Nut 1/4-20			
5	843 140 002BG	KEPS Nut 10-32			
66	844 049 002BG	Stover Nut 1/4-20			
73	844 057 002BG	Stover Nut 5/16-18			
64	844 058 002BG	Stover Nut 5/16-24			
64	844 074 002BG	Stover Nut 1/2-20			
50	900 110 081BG	Sleeve Bushing 5/8 ID			
64	900 112 203BG	Bushing - Bearing Support			
53	900 208 091BG	Bushing - Cam Sensor Assy			
42, 43	907 202 500	Shaft Key - BE Motor-GB 90-XL-XLi			
35	908 048 480	Pin - Dist Shaft Balls - 90-Later			
60	913 411 100BG	Retainers - Front Roller Link			
31	919 006 800BG	Internal Tooth Washer			
14	919 010 700BG	Retaining Ring - Sweep Link Pin			
63	937 000 000BG	Rivets - Kickback Panel			
67	938 523 050	Pop Rivet - Pin Wheel Strip			
64	941 072 200BG	Flat Washer 1/2" ID			
74	945 091 242	Washer - Curtain Rod			
9	948 041 100	Rubber Washer - Solenoid 90			
30	948 767 132BG	Flat Washer 5/16 ID			
30	957 100 002BG	Lockwasher #10			
65	963 200 002BG	X-Washer - Toggle Assy			
83	A0420	Drive Coupling - Buffer Brush			
83	A0994	Drive Wheel (obsolete-use 294 115 404)			
83	A0995	Drive Wheel (obsolete-use 294 115 404)			
76	B12 420360 000	V-Wheel - Blk Rubber - C-90/Bruns			
76	B53 520060 000	Lift Tire - Bruns/C-90/Profile			
88	BUMBOXBCU	Bumper Interface			
87	CAMANAST900	T-Vision Camera			
87	CAMANAST900-RT	Vision Camera Rebuilt			
87	INTBOASIXB	6-Box Circuit Board			

SERVICE SCHEDULE CHARTS:

20	Daily Preventive Maintenance
26	Weekly Preventive Maintenance
36	Monthly Preventive Maintenance
58	Quarterly Preventive Maintenance
58	Annual Preventive Maintenance
68	Monthly Lubrication
68	Quarterly Lubrication
72	Semi Annual Lubrication
72	Annual Lubrication
82	Facilities Monthly Preventive Maintenance

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