



Operations Manual

Bowling Center Operating Procedures

September 2005 / 53-900194-000

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Bowling Center Operating Procedures Manual

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Notice: If available, updates to this manual can be found on-line at www.brunswickbowling.com.

All information contained in this document is subject to change without notice.

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Contents

Administrative	4
TYPICAL MECHANIC'S CLIPBOARD SYSTEM FOR BCOP PROCEDURES	4
Mechanic's Training Program	4
Mechanic's Training Program Form	5
Service Bulletins	7
Pinsetters	10
GS SERIES PREVENTIVE MAINTENANCE PROGRAM	10
Instructions for GS Pinsetters Preventive Maintenance Work Schedule	11
GS Pinsetters Preventive Maintenance Work Schedule Form	18
GS Pinsetters Pending Items Form	20
GS Pinsetters Parts Usage Log Form	21
GS PINSETTERS DAILY STOP RECORDS	22
GS Series Stop Sheet Form	23
GS Series Pinsetter Error Codes Form	24
GS SERIES PINSETTER WEEKLY FRAMES PER STOP RECORDS	25
GS Series Pinsetter Weekly Stop Report Form	26
GS SERIES PINSETTER MONTHLY FRAMES PER STOP RECORDS	27
Universal Monthly Frames Per Stop Record Form	28
CONTROL COUNTER MALFUNCTION REPORT	29
Control Counter Malfunction Report Form	30
Automatic Scorers	31
AUTOMATIC SCORER PREVENTIVE MAINTENANCE SCHEDULE	31
Automatic Scorer Preventive Maintenance Schedule Form	32
Lanes	33
LANE PREVENTIVE MAINTENANCE SCHEDULE	33
General Lane Maintenance Schedule	34
Lane Preventive Maintenance Schedule Form	35
Bowling Equipment - Product Trouble Report and Warranty Policy	36
BRUNSWICK PRODUCT TROUBLE REPORT	36
Product Trouble Report Form	38
Universal Date Codes Form	39
Error Codes Form	40
Warranty Schedule	41
Bowling Center Maintenance	45
KEY AREAS TO NOTE:	45
Climate Control	45
Cleanliness	45
BOWLING CENTER MAINTENANCE SCHEDULE	46
Bowling Center Maintenance Schedule Form	47
Bowling Center Safety	51
General Safety Tips	51
Customer Safety	51
Prevent Slips and Falls	52
Center Manager's Monthly Inspection Report Form	53
Monthly Safety Check List Form	54

Administrative

TYPICAL MECHANIC'S CLIPBOARD SYSTEM FOR BCOP PROCEDURES

GS Pinsetter Weekly Stop Report	Universal Pinsetter Monthly Frames per Stop Recap	Counter Control Malfunction Report	Automatic Scorer Preventive Maintenance Schedule	Lane Preventive Maintenance Schedule	Bowling Center Maintenance Schedule
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Mechanic's Training Program

Training on safety, customer relations, commitment, communication and organization are key for successful preventive maintenance programs and customer service.

All bowling center lane maintenance mechanics, pinsetter technicians, assistant mechanics and chief mechanics will be trained through the mechanics' training program. The focus is to train every chief mechanic. They will start the training procedures at each bowling facility for other mechanical positions. Once a mechanic has been trained, they are then eligible to train other mechanics for the same procedure.

Select the training item for the position of the mechanic.

Enter the mechanic's name and the date they were hired for that position.

Each item has certain duties pertaining to the maintenance position. To be fully trained in each level, all job duties must be dated and signed. It is recommended that each item, from a newly hired person, be completed first, before proceeding to the next item(s). If a mechanic was initially trained as a Lane Maintenance Mechanic and is being promoted to a Pinsetter Technician, only the items that are new will require training, dating and signature when completed.

Mechanics Training Program

	Mechanics Name -	Date Hired -		
	Pinsetters	Items	Date	Trainer Signature
1	Pinsetter Safety , GS Series			
2	Pinsetter Stops, GS Series			
3	Pinsetter Cleaning, GS Series			
4	Basic Pinsetter Part Replacement, GS Series			
5	Preventive Maintenance Program, GS Series			
	Automatic Scorers			
1	Scorer Safety, Frameworkx / Classic / Vector			
2	Scorer Basic Operations , Frameworkx / Classic / Vector			
3	Cleaning Scorer Consoles and Overheads			
4	Trouble Shooting , Frameworkx / Classic / Vector			
5	Basic PCB Replacement, Frameworkx / Classic / Vector			
6	Preventive Maintenance, Frameworkx / Classic / Vector			
7	Advanced Scorer Operation, Frameworkx / Classic / Vector			
	Control Counter			
1	Basic Command Network / Classic / Centermaster / Vector/ Vector Plus			
2	Equipment Switches, Location and Operation			
3	Basic Control Desk Operations			
4	Basic Office Computer			
5	Advanced Computer Operations			
	Bowling Equipment			
1	Ball Hoods and Rack Safety / Ball Lift Safety Switch			
2	Masking Unit Safety			
3	Bowlers Seating Safety			
4	Cleaning Hoods and Racks			
5	Vacuuming Ball Lifts			
6	Vacuum Hand Dryers			
7	Basic Ball Lift and Rack Trouble Shooting			
8	Basic Ball Lift and Rack Part Replacement			
9	Basic Telefoul Cleaning and Adjustment			
10	Basic Masking Unit Repair and Adjustment			
11	Return and Division Capping / Gutter Replacement			
12	Ball Lift Replacement and Adjustment			
13	Telefoul Replacement and Adjustment			
14	Bankshot / Pinball Wizard Repair and Adjustment			
15	Lightworx Repair and Adjustment			
	Lanes			
1	Lane and Approach Safety Precautions			
2	Gutter and Approach Mops Operations / Safety			
3	Lane Duster Operation / Safety			
4	Lane Cleaner and Conditioner Safety			
5	Cleaning and Conditioning Lanes			
6	Cleaning Pin Decks			
7	Cleaning Flat Gutters			
8	Cleaning Kickbacks			

Mechanics Training Program

[illegible]

Service Bulletins

All bowling center mechanics will be responsible for maintaining a 3-ring binder to collect all service bulletins.

Each bowling facility is required to have a 3-ring notebook binder. The binder will consist of a table of contents and service bulletins. The outside of the binder will be marked “Service Bulletins” for identification purposes.

Chief Mechanics should review each service bulletin for the maintenance tip(s) or procedure change. They should adjust their daily, weekly or monthly preventive maintenance programs to incorporate the new changes.



NOTE:

Copies of Service Bulletins are available for downloading at website www.brunswickbowling.com on the Customer Service and Support pages.

Brunswick®

SERVICE BULLETIN

Subject: GS-Series Pinsetter - New Ball Cushion Frame Assembly

Date: 8/23/04

Distribution: GS Pinsetter Customers

Bulletin No. SB04-5

We are pleased to announce the following information regarding a GS-Series Pinsetter component part improvement.

Based on feedback from our customers and distributors, we have thickened the material on our ball cushion frames. We have also added a new mounting bracket for the cushion shock. The previous version of mounting bracket was a welded assembly. This resulted in some issues with weld stress areas in the cushion material. The new cushion shock bracket is bolted to the cushion frame. Refer to Figure 1.

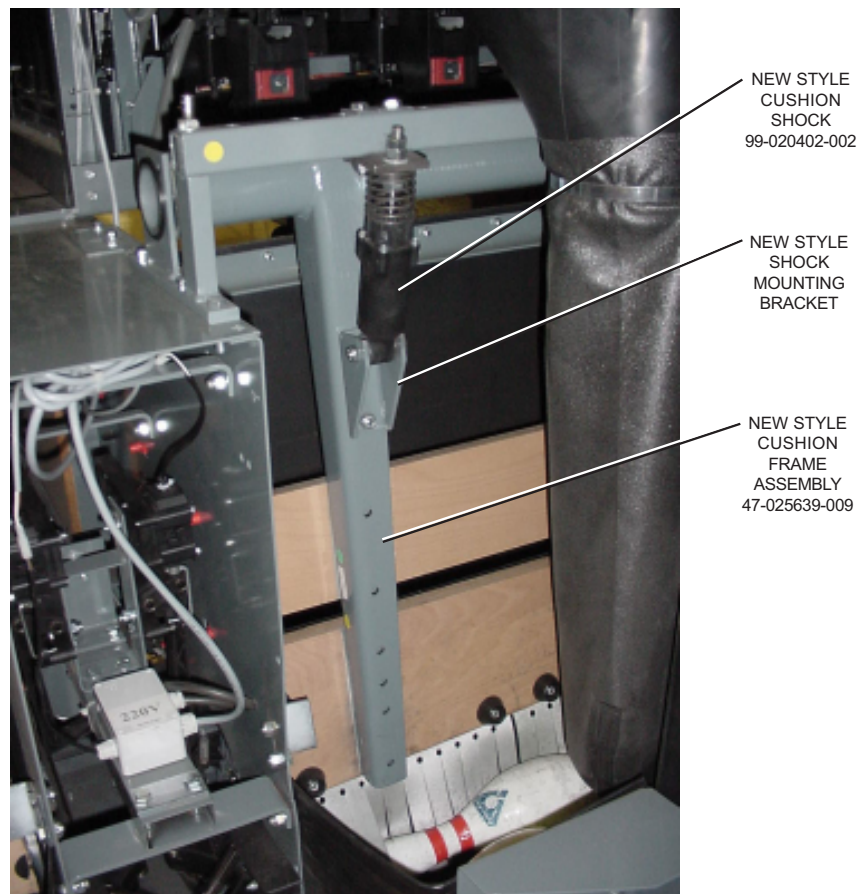


FIGURE 1

The new style of heavy duty ball cushion frame went into production pinsetters starting with series 512 machines.

The part number for the new heavy duty ball cushion frame, which includes the shock mounting bracket, is 47-025639-009.

***Note:** When ordering this new ball cushion frame assembly, you must make sure that the cushion shock you are using is the new style shock, refer to Figure 1, without the shock fluid reservoir. The older type shock will not fit into the new cushion frame shock bracket. Part number of the new shock is 99-020402-002.*

This new ball cushion frame assembly is usable in all models of GS-Series pinsetters.

If you have any questions about this Service Bulletin, call the Customer Support Line at 1-800-323-8141 (USA). For assistance in international bowling centers, contact your local Brunswick area office.



Glenn Josey
Worldwide Installation Training/Audit Manager



David E. Rice
Director of Worldwide Service

Pinsetters

GS SERIES PREVENTIVE MAINTENANCE PROGRAM

All chief mechanics and their mechanical staff should be responsible for the inspection and completion of the Pinsetter Preventive Maintenance Program. Each Pinsetter should be inspected every 6 months, this inspection program does not take the place of normal inspection, adjustments and troubleshooting of the Pinsetter, but is an added, intensive program.

1. The chief mechanic and his mechanical staff, on a regular schedule, will inspect each Pinsetter following the instructions set forth in this procedure.
2. Each center is required to have a 2 or 3-ring notebook binder. The binder will consist of one GS Pinsetter Preventive Maintenance Work Schedule, one GS Parts Pending Items, and one GS Parts Usage Log) for each Pinsetter. The outside of the 2 or 3-ring binder will be marked as GS Pinsetter Maintenance program for identification purposes.
3. The GS Pinsetter Maintenance program binder will also include one copy of the preventive maintenance work schedule instruction.
4. Check off the appropriate box with an "X" when that portion of the Pinsetter has been inspected, adjusted or corrected per the preventive maintenance work schedule.
5. If pending or part replacement is needed, and an inspection has been completed, then mark the box with a half of an "X", after replacement and adjustment of the pending item(s) are completed, finish marking the box.
6. All parts that are used to complete the GS Pinsetter Maintenance program inspection must be written on the parts usage form for future ordering.
7. All parts that are needed to complete the GS Pinsetter inspection must be written on the parts pending form.

Instructions for GS Pinsetters Preventive Maintenance Work Schedule

Elevator Assembly

1. Inspect condition of the frames welds. Check for loose or missing hardware inspect all metal for stress cracks.
2. Inspect all shafts, bearings, sprockets, chains and pulleys for condition and adjustment. Check all pin shovels and shovel hardware. Inspect all shovel pivot levers, inspect centering guide condition and tighten all hardware.
3. Inspect condition and mounting of guards and verify guard identification labels are in place.
4. (Series 42 and below) Inspect condition, location and adjustment of rubber knockout cords and pin ejecting flap.
5. (Series 42 and below) Inspect condition, adjustment and hardware on the pin turn wires.
6. (Series 12 and below) Inspect welds, hardware and adjustments of single feed pin chute assembly. (Series 13 through 42) Check the adjustment, mounting hardware and welds and condition of the dual feed pin chute. Inspect the “Y” switch, flipper stoppers, deflector shoes and rubber cords for proper adjustment and condition.
7. Inspect the mounting and adjustment of the elevator control switch. Check the mounting and function of the mechanic’s rear control box and trouble light. Verify that all elevator cables are intact, routed correctly and secured.
8. (Series 43 and above) Inspect the mounting hardware, condition and adjustments of the shark assembly and pin guide wedges. Check the shovel cam for adjustment and condition. Check the alignment and mesh of the drive and drive spur gears. Inspect the condition and operation of the fin switch. Inspect the tensioning and condition of the transfer belts. Inspect the mounting hardware and condition of the deflector shoe. Inspect the spring for the fin switch.
9. (Smart shark) Inspect the condition, alignment, adjustment and operation of the pin count switch. Check that all switch and switch mounting bracket hardware is tight. Check for correct cable routing.
10. (Smart Shark) Check the smart shark solenoid and solenoid linkage. Check for proper operation of the smart shark. Check all mounting hardware and fasteners.

Transport Assembly

11. Inspect the condition of the welds and feet on the long pit transport frame. Inspect the condition of the welds and mounting hardware on the short pit side frames.
12. Inspect the mounting hardware and condition of the transport band boards. Check the condition and tracking of the transport band carpet. Inspect the front and rear rollers for bearing and shaft condition, correct tensioning and alignment in mounting slots. Inspect the condition and operation of the centering guide rollers. Tighten end caps on the front roller and oil bearing. Inspect the bearing blocks on the rear roller and oil bearings.

13. Inspect the condition and tensioning of the transport band drive belts. Inspect the mounting hardware on the idler and tensioner assemblies. Check the condition of the idler pulleys.
14. Inspect the condition and mounting hardware on the pin feed deflectors and mounting brackets. Check the adjustment on the pin feed deflectors and tighten the hardware.

Ball Cushion and Pit Curtain

15. Inspect the condition and mounting hardware on the ball cushion board and the impact strips. Check the attachment of the rubber cushion to the board and the facing to the rubber cushion. Inspect the cushion frame welds, and check the mounting hardware. Inspect the nylon cushion bearings for wear and check the location and hardware on the stop collars. Inspect the cushion assembly for proper adjustment and stress cracks.
16. Inspect the mounting, adjustment and fluid level in the ball cushion shock absorber. Inspect the mounting and location of the shock absorber.
17. Inspect the mounting and rubber overflow pad on the single feed overflow chute. Inspect the condition and mounting of the dual feed overflow chute. Inspect the condition of the chute felt and check the bond to the metal on units so equipped. Check the condition of the pin wipers. Inspect the condition and adjustment of the overflow socks. Check chutes for metal or plastic stress cracks. Check all plastic overflow chute mounting bumpers and mounting brackets.
18. Inspect the condition of the pit curtain and check the mounting hardware.

Ball Accelerator Assembly

19. Inspect the condition of the frame welds. Check that foot guards are in place. Inspect the condition and location of the ladder.
20. Inspect the condition and mounting hardware on the ball door protector plates. Inspect condition and mounting hardware on the ball door wedges. Inspect the condition and mounting hardware on the kickback phenolic plates.
21. Inspect the accelerator motor and motor bearings for smooth operation. Check the motor power cord. Inspect the alignment of the motor. Check for excessive noise or vibration.
22. Inspect the condition of the flat belt. Inspect the flat belt guard for proper adjustment. Inspect the driving drum condition and check for smooth operation. Verify that all driving drum hardware is in place. Driving drums should be pulled out and bearings oiled. Inspect accelerator tracks for worn covers.
23. Inspect the ball door locking mechanism for proper adjustment. Check the condition of the ball door, all door button and door locking bolt. Inspect the ball door solenoid for correct operation and check the routing of the solenoid cable. Verify that ball door shafts and collars rotate freely.

Sweep Wagon Assembly

24. Inspect the condition of the sweep wagon frame and frame welds. Check the roller mounting and adjustment. Inspect the condition of the leaf springs if so equipped. Check the condition of the pusher rods and pusher rod bushings. Inspect the conditions of the protector blocks and block mounting hardware. Check all sweep wagon hardware.
25. Inspect the condition of the sweep board and adapters. Check the adjustment of the sweep board and adapters.
26. Inspect the condition of all sweep release mechanism components. Check all sweep release mounting hardware. Inspect for missing springs or worn linkage and pivot bushings. Check the condition of the chain and clevis. Check the operation of the solenoid. Inspect the solenoid cable routing. The cable should be secured on both sides of the solenoid plug.
27. Inspect the sweep attenuator and sweep shock absorber for loose or missing hardware. Check the sweep shock absorber fluid level. Check the attenuator and G-Switch cable for proper adjustment. Inspect all pivot points for wear. Inspect the G-Switch cable routing.

Setting Table Assembly

28. Inspect the setting table frame for wear or broken welds. Check for loose or missing hardware. Check the vertical swing shaft stop bolts for proper adjustment. Inspect the condition of the vertical helper springs (for units so equipped). Check the metal around swing shaft supports for stress cracks.
29. Check for loose or missing spotting tong and geared rack hardware. Inspect the S.T. Switch mounting and check the adjustment. Inspect the condition of the tongs, gears, and toothed racks. Check the operation of the tongs. Inspect the tong dampers for wear and tighten spotting tong hardware.
30. Inspect all cable channels and conduits for wear. Check that all Channels and conduits are secured to the frame. Inspect the condition of the table harness plug and its mounting bracket and hardware.
31. Inspect all welds on the swing shafts and connection rods. Check for loose or missing connecting rod hardware. Check the adjustment of the stop collars. Inspect the swing shaft bearings for wear. Inspect the condition of the table spring. Inspect the condition and mounting of the table jam roller. Check the adjustment of the horizontal stop bolt. Verify that all pin holders are secured to the square shafts. For older round shaft pinholder mounting, check the ground screws.
32. Inspect the TS-1 Jam Switch mounting and adjustment. Check the actuator arm and cam for free operation. Check for loose or missing hardware and springs. Inspect the TS-2 jam switch mounting and adjustment.

33. Inspect all pin holders and pin holder solenoids for correct mounting. Check the switch fingers for correct pivoting. Inspect all pin holder switches for tight mounting. Check all pin holder connectors and wiring for routing and connection. Inspect the adjustment on the pin detector plates. Check the adjustment on the switch actuator springs in units so equipped.
34. Inspect the mounting of the table racks to the table. Check the adjustment and condition of the small and large roller support assemblies on tower up pinsetters. Inspect the condition of the toothed racks and or chain drives. Check the condition of the T-Stop. Check the mounting of the O.O.R. Actuator cam. Inspect the condition of the chain, clevis, pivot bearing, and master chain link.

Drive Frame Assembly

35. Inspect the welds and condition of the sweep shaft. Check the sweep shaft supports for secure mounting. Inspect the sweep shaft bearings for signs of wear. Inspect the connecting rods and verify all hardware is in place and secure.
36. Inspect the condition and welds on the L.H. and R.H. drive assemblies. Check for loose or missing hardware. Inspect all cable channels and cables for condition and routing. Check for any worn shaft bearings. Check the chain tensioners for condition and adjustment. Inspect the frame counter for correct operation.
37. Inspect the spotting tong drive for loose or missing hardware. Check for loose or worn gears. Check the spotting tong solenoids for proper operation. Check the spotting tong clutch for correct operation and check the condition of the clutch shaft. Inspect the mesh between the square shaft drive and the spur gear. Check the condition of the square shaft drive gear.
38. Inspect the motors for correct mounting and alignment. Check the condition of all V-Belts. Inspect the motor cables for correct routing. Check the condition of the motor tensioning springs. Check all motor mounting plate bushings. Check for excessive Vibration in the motor and belt operation. Wipe all motor belts down by removing the belts. Wrap a rag around the belts and clean thoroughly. Blow dust out of the motor fan covers as needed.
39. Inspect the stroke limiter for a bent or cracked plate and loose or missing hardware. Check the mounting and fluid level in the stroke limiter shock absorber. Check the condition of the rubber bumper. Check the solenoid for proper operation. Inspect the square shaft, the linkage and the square shaft latch for correct adjustment. Be sure the stroke limiter plate is not rubbing on the tower rack.
40. Inspect the condition of the double V-Belts. Check for loose or missing tensioner mounting hardware. Check the tensioner shaft and bearings for loose or noisy operation and clean belts. Remove the tensioner assembly from the machine. Clean and oil the bearings.
41. Inspect the condition of the setting table and sweep motor drive assemblies. Check for worn or damaged chains. Inspect the pinion shafts and gears for adjustment and condition. Check for loose or missing bearing plate hardware. Inspect the condition of bearing plate bearings and drive sprocket shafts. Inspect the master links on the chains.

42. Inspect the condition of the guide tower assembly. Check the mounting and adjustment on the TS- 2 and O.O.R. Switch. Check for correct switch and cable mounting. Check for loose or missing guide tower hardware. Inspect the condition of the lift chain sprocket. Check the condition of the table jam lever and spring.
43. Inspect the sweep and table drive shaft assemblies. Check for shaft wear. Check for chain wear and proper tensioning. Inspect the crank arms and verify they are secure on the shafts. Check the sprockets for wear. Inspect the pinion shaft assembly on pinsetters so equipped. Check the shaft and bearings for wear. Inspect pinion gears for wear on pinsetters so equipped. Check the adjustment of the pinion gears to the tower racks on pinsetters so equipped. Inspect pinion gears for cracks.
44. Inspect the switch cluster. Check the switch cluster housing to make sure it is secure. Check the adjustment on the A, B, C, and D Switch. Check the adjustment on the switch cam. Check all scorer switches on pinsetters so equipped.

Main Frame Assembly

45. Inspect the main frame. Check for wear points or broken welds. Check for loose or missing hardware. Check the main support braces and verify they are secure.
46. Inspect the pinlight fixture. Check and verify that the fixture is securely mounted. Check the lamps and lamp sockets. Check the power cord routing.
47. Inspect the guards. Check for wear points or broken welds. Check for loose or missing hardware. Check for any missing guards. Check the work platform and the work platform braces and hardware.
48. Inspect the electrical box mounting. Check and verify that the mounting plate and rubber bumpers are secure. Check and verify that all electrical box mounting receptacles and hardware are in place and secure. Make sure the grounding straps are connected.

Distributor Assembly

49. Inspect the distributor frame assembly. Check for worn or damaged frame components and welds. Check for loose or missing hardware. Check and verify that the dust pan is secure. Check the distributor rails and extensions for wear or cracks. Check the distributor stations for wear or cracks. Inspect the lower pin guides for bent or missing parts. Check the corner turn rails and corner pin turn devices for loose or missing hardware and for correct adjustment.
50. Inspect the distributor shafts, pulleys and belting. Check for worn or damaged shafts or bearings. Check for worn or cracked pulleys. Inspect the condition of the distributor belting. Check the condition of distributor gears and verify proper gear mesh. Check the alignment of all shafts, pulleys and belting. Check for any missing shaft, bearing or pulley hardware.
51. On series 12 and below, inspect the pin separators and pin centering devices. Check the condition, mounting and adjustment on the pin separators. Check the condition, mounting and adjustment on the pin centering devices.

52. Inspect the distributor pin stations. Verify all pin stops are in place. Check the pin sliders for free operation. Check the pin slider for cracks or breaks. Check for loose or missing pin station hardware. Check the ejector flaps for wear or cracking. Check the retaining bows for wear or cracking. Check for worn, cracked or misadjusted pin release levers. Verify that all pin station springs are in place. Inspect the top and bottom housing for cracks or wear.

Electrical

53. Inspect the electrical boxes and box mounting hardware. Check the ground straps and verify that they are in place and secure. Verify that all cables are routed correctly. Inspect all box covers to verify they are in place and secure. Check the pin light bypass switch for operation on units so equipped. Are all box switch guards in place? Check all cables and box connectors for correct seating. Check the 5-VOLT power supply adjustment on silver box, universal silver box, and consolidated electronics.
54. Inspect the ball detector and reflector. Check and verify all mounting hardware is secure. Check the ball detector assembly for proper adjustment.
55. On stand-alone units, inspect the player control station. Verify that the player control station is mounted securely, the cable is routed correctly and that the unit is operating properly.
56. Inspect the ball rack reset button. Check for correct operation and check the cable routing and connection.
57. On units so equipped, inspect the manager's control box. Check on/off switches for proper operation. Are both indicator lamps working? Verify that both frame counters work.

Power Ball Lift - Even Lane

58. Check the condition and mounting of the ball lift tires. Check the condition of the lift tire shafts and bearings. Check the condition and operation of the ball lift clutch.
59. Check the ball lift motor for correct operation and mounting. Check the motor pulley for proper alignment. Check the drive belt condition and alignment. Check the top idler pulley.
60. Check the ball lift tracks for correct mounting. Check the condition of the lift rubber track and leather tracks and verify that they are secure. Check for loose or worn rubber and leather tracks.

Administration And Organization

61. Is a spare parts and inventory control system in place? Are adequate parts on hand and are these parts on inventory and accessible? Are all spare motors labeled for status? Are all spare electronics boards labeled for status?
62. Verify that the correct hand tools are in place. Are the hand tools organized for ready access?
63. Verify that the correct cleaning and lubrication products and supplier are on hand. Check and verify the supplies are adequate and that the correct approved materials are in use.

64. Verify that you have current product operation manuals and product service part manuals. Are Service Bulletins in the center?
65. Verify that the center is using Preventive Maintenance forms and these forms have been appropriately checked and that the parts pending and parts usage reports are up to date.

Cleaning And Lubrication

66. Verify that the Preventive Maintenance Pinsetter Cleaning schedule is being used and that all technicians and mechanics responsible are properly cleaning the pinsetters and recording this work on the schedule.
67. Check the GS Pinsetter Operation and Service Manual for proper lubrication and maintenance schedules. Please refer to Section 7, starting at Page 7-3 in the GS Series Pinsetter Operations and Service Manual. Do not over lubricate any areas of the automatic pinsetter.
68. Verify that safety training has taken place with all technical personnel working on the pinsetters and other bowling equipment.

GS SERIES PINSETTERS PREVENTIVE MAINTENANCE WORK SCHEDULE
INSPECT – CORRECT – CLEAN – LUBRICATE

	ELEVATOR ASSEMBLY	ADJUST	1	2	3	4	5	6	7	8
1	FRAME AND WELDED ASSEMBLIES									
2	DRIVE TRAIN AND SHOVELS									
3	PINSETTER GUARDS									
4	RUBBER CORDS AND EJECTING FLAPS									
5	PIN TURN WIRES									
6	PIN CHUTE ASSEMBLY FOR SINGLE AND DUAL FEED									
7	ELEVATOR ELECTRICAL COMPONENTS									
8	SHARK SWITCH AND PIN TURN ASSEMBLIES									
9	PIN COUNT SWITCH (SMART SHARK)									
10	SMART SHARK SOLENOID AND LINKAGE									
TRANSPORT BAND ASSEMBLY										
11	MAIN FRAME, FEET AND SIDE FRAMES									
12	TRANSPORT BAND BOARD, CARPET AND ROLLERS									
13	TRANSPORT BAND DRIVE BELTS AND PULLEYS									
14	PIN FEED DEFLECTORS									
BALL CUSHION AND PIT CURTAIN										
15	CUSHION BOARD, FRAME, FACING AND BEARINGS									
16	SHOCK ABSORBERS AND PULLEYS									
17	SINGLE AND DUAL FEED OVERFLOW CHUTES									
18	PIT CURTAIN									
BALL ACCELERATOR ASSEMBLY										
19	FRAME AND WELDED ASSEMBLIES									
20	BALL DOOR PROTECTOR, FIBER PLATES, RINGS									
21	MOTORS AND DRIVE BELT									
22	FLAT BELT AND DRIVING DRUM									
23	BALL DOOR AND LOCKING ASSEMBLIES									
SWEEP WAGON ASSEMBLY										
24	SWEEP WAGON FRAME									
25	SWEEP BOARD AND ADAPTERS									
26	SWEEP RELEASE MECHANISM									
27	SWEEP ATTENUATOR AND HYDRAULIC									
SETTING TABLE ASSEMBLY										
28	FRAME AND WELDED ASSEMBLIES									
29	SPOTTING TONGS AND GEARED RACKS									
30	TABLE HARNESS AND CABLE CHANNELS									
31	SWING SHAFTS AND CONNECTING RODS									
32	TABLE JAM SWITCH									
33	PIN HOLDERS AND PIN SWITCHES									
34	SETTING TABLE ROLLERS AND ROLLER SUPPORTS									
DRIVE FRAME ASSEMBLY										
35	SWEEP SHAFT AND DRIVE									
36	RIGHT AND LEFT DRIVE FRAME ASSEMBLY									
37	SPOTTING TONG DRIVE ASSEMBLY									
38	MOTORS, BELTS AND MOTOR MOUNTINGS									
39	STROKE LIMITER ASSEMBLY									
40	FRONT PULLEY AND V BELT TENSIONER									
41	SETTING TABLE AND SWEEP MOTOR DRIVES									
42	GUIDE TOWER ASSEMBLY									
43	SWEEP, TABLE AND DRIVE SHAFT ASSEMBLIES									
44	SWITCH CLUSTER AND SCORER SWITCHES									

		ADJUST	1	2	3	4	5	6	7	8
	MAIN FRAME ASSEMBLY									
45	SWITCH CLUSTER / SWITCHES									
46	PINLIGHT FIXTURE									
47	GUARDS AND WORK PLATFORM									
48	ELECTRICAL BOXES AND MOUNTING HARDWARE									
	DISTRIBUTOR ASSEMBLY									
49	FRAME AND WELDED ASSEMBLIES									
50	SHAFTS, PULLEYS AND BELTING									
51	PIN TURN, PIN CENTERING DEVICES									
52	PIN STATIONS AND SLIDERS									
	ELECTRICAL COMPONENTS									
53	BOXES AND MOUNTING HARDWARE									
54	BALL DETECTOR AND REFLECTORS									
55	PLAYER CONTROL STATION IF SO EQUIPPED									
56	BALL RACK RESET BUTTON									
57	MANGERS CONTROL BOX									
	POWER BALL LIFT (EVEN LANES)									
58	BALL LIFT TIRES									
59	MOTOR AND DRIVE BELTS									
60	BALL LIFT TRACKS / RUBBERS / LEATHERS									
	ADMINISTRATION AND ORGANIZATION									
61	INVENTORY CONTROL									
62	HAND AND POWER TOOLS									
63	CLEANING AND LUBRICATION SUPPLIES									
64	OPERATING MANUALS									
65	PARTS PENDING AND PARTS USAGE									
	CLEANING AND LUBRICATION									
66	PINSETTER CLEANING SCHEDULE									
67	PINSETTER LUBRICATION SCHEDULE									
68	PINSETTER SAFETY TRAINING									
	DATE PERFORMED									

[illegible]

GS Series Pinsetters

Pinsetter Parts Usage Log

[illegible]

GS PINSETTERS DAILY STOP RECORDS

All chief mechanics and their mechanical staff will be responsible for the timely recording of all pinsetter malfunctions on the GS Series pinsetter daily stop records.

1. Each facility should have one daily stop record sheet for each pinsetter. This sheet will be kept on a clipboard located on the back of each pinsetter and every month a new stop sheet will be posted with a new date.
2. The chief mechanic and mechanical staff upon the correction of any pinsetter malfunction, will record the lane number, the frame count (off the frame counter on the pinsetter), the error code of the problem, the corrective action taken to prevent this stop again and the initials of the mechanic who cleared and repaired the stop. A list of GS Series error codes must be used to correctly identify the problem.
3. At the beginning of each day, the chief mechanic will be responsible for transferring the previous daily stops onto the weekly frames per stop records.
4. The GS Series pinsetter daily stop records should be used as a tool for preventive maintenance programs. It becomes apparent when reoccurring problems exist on particular pinsetters.
5. We suggest that all daily completed stop records should be kept on file for a period of one year.

GS Series Pinsetter Error Codes

Std. Code	Extend Code*	
I—I	**	Power Up in Progress
-II-	**	No Errors
None		The Lane Initialized
A0	**	PCS Not Communicating
A1	**	PCS Not Sending Correct Response
F0	**	External RAM Testing Failure
F1	**	Prom Check Sum Failure
80	**	Battery Back-up RAM Failure
P0	Pin OOR	Out-of-Range
01	Pin 1 Ld	Pin Loading Time Out Pin 1
02	Pin 2 Ld	Pin Loading Time Out Pin 2
03	Pin 3 Ld	Pin Loading Time Out Pin 3
04	Pin 4 Ld	Pin Loading Time Out Pin 4
05	Pin 5 Ld	Pin Loading Time Out Pin 5
06	Pin 6 Ld	Pin Loading Time Out Pin 6
07	Pin 7 Ld	Pin Loading Time Out Pin 7
08	Pin 8 Ld	Pin Loading Time Out Pin 8
09	Pin 9 Ld	Pin Loading Time Out Pin 9
10	Pin 10 Ld	Pin Loading Time Out Pin 10
50	Detect 10	#10 Pin Not Detected in Diagnostics
51	Detect 1	#1 Pin Not Detected in Diagnostics
52	Detect 2	#2 Pin Not Detected in Diagnostics
53	Detect 3	#3 Pin Not Detected in Diagnostics
54	Detect 4	#4 Pin Not Detected in Diagnostics
55	Detect 5	#5 Pin Not Detected in Diagnostics
56	Detect 6	#6 Pin Not Detected in Diagnostics
57	Detect 7	#7 Pin Not Detected in Diagnostics
58	Detect 8	#8 Pin Not Detected in Diagnostics
59	Detect 9	#9 Pin Not Detected in Diagnostics

Std. Code	Extend Code*	
60	A Found	Switch A is Not Expected But Found
61	B Found	Switch B is Not Expected But Found
62	C Found	Switch C is Not Expected But Found
63	D Found	Switch D is Not Expected But Found
64	SM Found	Switch SM is Not Expected But Found
65	G Found	Switch G is Not Expected But Found
66	ST Found	Switch ST is Not Expected But Found
67	OOR Found	Switch OOR is Not Expected But Found
70	A Ntfnd	Switch A Expected But Not Found
71	B Ntfnd	Switch B Expected But Not Found
72	C Ntfnd	Switch C Expected But Not Found
73	D Ntfnd	Switch D Expected But Not Found
74	SM Ntfnd	Switch SM Expected But Not Found
75	G Ntfnd	Switch G Expected But Not Found
76	ST Ntfnd	Switch ST Expected But Not Found
90	Invld 0	Invalid Machine State 0
91	Invld 1	Invalid Machine State 1
92	Invld 2	Invalid Machine State 2
93	Invld 3	Invalid Machine State 3
94	Invld 4	Invalid Machine State 4
95	Invld 5	Invalid Machine State 5
EJ	Elev Jam	Elevator Jam
EL	Pin Cnt	Pin Count Switch Shorted for 5 seconds
J1	TS1 Jam	Jam Switch TS1
J2	TS2 Jam	Jam Switch TS2 (Tower)
*	BA	Accelerator Motor (overload)
CPU Lost	CPU Lost	Nexgen CPU Malfunction

NOTE: NextGen Electronics displays either Standard Code or Extended Code where as Consolidated displays Standard Code.

** = Nexgen Electronics only*

*** = Consolidated Electronics only*

GS SERIES PINSETTER WEEKLY FRAMES PER STOP RECORDS

All chief mechanics will be responsible for the timely recording of all games or frames and the recap of all daily stops, from the GS Series daily stop records.

1. At the beginning of each month, a new Weekly Frames per Stop record sheet will be used. Include the day, and date for reference.
2. Each facility will have one Weekly Frames per Stop sheet for all pinsetters. The form that is in use will be kept posted on a clipboard located in the mechanics' shop.
3. At the beginning of each day, the chief mechanic will be responsible for transferring the previous daily stops onto the weekly frames per stop sheet and obtaining the number of games bowled or total frames. The frames or games number will be obtained from the manager's console, or command network system, or pinsetter meter readings. Pinsetter meter readings require a daily meter reading, and if done, should only be done on a weekly basis.
4. Each style of stops should be recorded, out of range (oor), respots (rs), ball returns (br) and others.
5. Total each day the number of stops.
6. If you are using total number of games for record keeping from management, you will need to convert these games to frames. Multiply the number of games times 11. This is your total frames.
7. Divide the number of frames by the number of stops. This is your frames per stop (fps).
8. At the end of each week and month, recap and cross check all frames per stop and pinsetter stops.
9. The GS Series Weekly Frames per Stop records should be used as a tool for preventive maintenance programs. The goal is to have the highest pinsetter frames per stops.
10. We suggest that you keep all weekly frames per stop records on file for a period of 2 years.

GS-Series Pinsetter Weekly Stop Report

Center Name		Week Ending							
Daily Frame Totals									
Daily Stop Totals									
Error Code	Description	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Total
1	Pin 1 – Time Out of Jam								
2	Pin 2 – Time Out of Jam								
3	Pin 3 – Time Out of Jam								
4	Pin 4 – Time Out of Jam								
5	Pin 5 – Time Out of Jam								
6	Pin 6 – Time Out of Jam								
7	Pin 7 – Time Out of Jam								
8	Pin 8 – Time Out of Jam								
9	Pin 9 – Time Out of Jam								
10	Pin 10 – Time Out of Jam								
*11	Pin Jam – Left-Hand Corner								
*12	Pin Jam – Right-Hand Corner								
*13	Pin Jam – Left Distributor Lane 1								
*14	Pin Jam – Left Center Distrib. Lane 2								
*15	Pin Jam – Right Center Distrib. Lane 3								
*16	Pin Jam – Right Distributor Lane 4								
*17	Pin Jam – Shark Switch								
*18	Pin Jam – Pin Guide Wedges								
*19	Pin Jam – Pin Head First								
*20	Pin Stuck In Elevator								
*21	Pin Under Pin Feed Deflector								
*22	Pin in Ball Accelerator								
*23	Ball Stuck in Pit								
*24	Ball Stuck In Ball Lift								
*25	Pin Blocking Ball Door								
*26	Pin Jammed in Setting Table								
*27	Spotting Tongs Jammed								
*28	Sweep Roller Not in Slot								
*29	Belt Broken								
*30	Belt Loose								
*31	Overflow Chute/Sock Jam #7 Pin Side								
*32	Overflow Chute/Sock Jam #10 Pin								
*50	Pin Holder Switch Malfunction								
60	Switch A Not Expected but Found								
61	Switch B Not Expected but Found								
62	Switch C Not Expected but Found								
63	Switch D Not Expected but Found								
64	Switch SM Not Expected but Found								
65	Switch G Not Expected but Found								
66	Switch ST Not Expected but Found								
67	Switch OOR Not Expected but Found								
70	Switch A Expected but Not Found								
71	Switch B Expected but Not Found								
72	Switch C Expected but Not Found								
73	Switch D Expected but Not Found								
74	Switch SM Expected but Not Found								
75	Switch G Expected but Not Found								
76	Switch ST Expected but Not Found								
90	Invalid Machine State 0								
91	Invalid Machine State 1								
92	Invalid Machine State 2								
93	Invalid Machine State 3								
94	Invalid Machine State 4								
95	Invalid Machine State 5								
98	Electronic Box Failure								
99	Part Broken/Other (Explain on Back)								
EJ	Elevator Jam								
EL	Pin Count Switch Failure								
J1	Jam Switch TS1								
J2	Jam Switch TS2 (Tower)								
PO	Out-of-Range								

* These code numbers are not displayed by the Pinsetter CPU LED display. Explain problems or irregularities on the back of this report

GS SERIES PINSETTER MONTHLY FRAMES PER STOP RECORDS

All chief mechanics will be responsible for the timely recording of the FPS from the Pinsetter Weekly Frames Per Stop Records. This form will be used for GS Series Pinsetters.

1. At the beginning of each month, the chief mechanic should total the fps from the pinsetter weekly frames per stop records.
2. Record the total fps from the universal pinsetter monthly frames per stop records sheet.
3. Compare previous months of fps to determine if the pinsetters are operating better or worse.
4. Try to determine the best approach for obtaining consistent monthly frames per stop on the pinsetters.
5. All universal pinsetter monthly frames per stop records will be kept until the form expires. The expired form should be filed in the mechanics' shop for record keeping.
6. The current form should be kept on a clipboard in the mechanics' shop.

UNIVERSAL MONTHLY FRAMES PER STOP RECORD

	2004	2005	2006	2007	2008	2009
JANUARY						
FEBRUARY						
MARCH						
APRIL						
MAY						
JUNE						
JULY						
AUGUST						
SEPTEMBER						
OCTOBER						
NOVEMBER						
DECEMBER						

	2010	2011	2012	2013	2014	2015
JANUARY						
FEBRUARY						
MARCH						
APRIL						
MAY						
JUNE						
JULY						
AUGUST						
SEPTEMBER						
OCTOBER						
NOVEMBER						
DECEMBER						

CONTROL COUNTER MALFUNCTION REPORT

All counter control and management personnel, while on duty at the control counter, are responsible for recording Pinsetter and equipment malfunctions on the Control Counter Malfunction Report sheet.

1. At the start of each day, the control counter malfunction report should be dated and signed in the appropriate areas on the form. During any shift change, the new counter control personnel should also sign the form.
2. As Pinsetter and equipment malfunctions occur, either reported or observed by the counter control personnel, the malfunction should immediately be recorded on the Control Counter Malfunction Report sheet.
3. The control counter malfunction report is not limited to the recording of just the problems listed on the form. Any problems concerning safety, lighting, heating, air conditioning, bowling equipment or anything our customers or employees report as a problem, should be noted in the comments section.
4. It is the responsibility of the chief mechanic, on a daily basis, to check this report. This will allow the mechanics to have the input of customers and employees. Cross checking of maintenance information is a vital source of preventive maintenance.
5. The counter control malfunction report should be kept on a clipboard at the control counter and old reports kept on file in the manager's office for a period of 1 year.

Control Counter Malfunction Report

Lane Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Ball Return																				
Blackout																				
Pin Respot																				
Failed to Cycle																				
Out of Range																				
Foul Light																				
Multiple Cycles																				
Ball Hit Sweep																				
P.C.S. Lights																				
Scorer Console																				
Scorer Overhead																				
Score Correction																				
Scorer Lockup																				
Comments	_____																			

Lane Number	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Ball Return																				
Blackout																				
Pin Respot																				
Failed to Cycle																				
Out of Range																				
Foul Light																				
Multiple Cycles																				
Ball Hit Sweep																				
P.C.S. Lights																				
Scorer Console																				
Scorer Overhead																				
Score Correction																				
Scorer Lockup																				
Comments	_____																			

DATE: _____

SIGNATURE: _____

Automatic Scorers

AUTOMATIC SCORER PREVENTIVE MAINTENANCE SCHEDULE

All chief mechanics will be responsible for completion and documentation of the items listed on the Automatic Scorer Preventive Maintenance Work Schedule.

1. The chief mechanic and mechanical staff on a daily, weekly and monthly routine will complete all the work assignments listed on the Automatic Scorer Preventive Maintenance Schedule.
2. For daily service, check off the appropriate box with an “X” in the schedule when the work is completed in each area. The Automatic Scorer Preventive Maintenance Schedule contains maintenance instructions that cover all current versions of Brunswick scorers.
3. For monthly services, place the mechanics’ initial in the shaded box that pertains to the work needed. Again, the Automatic Scorer Preventive Maintenance Schedule contains maintenance for all scorers.
4. If pending work or parts replacement exists, do not check off that area of the work schedule until all work has been completed.
5. The work schedules that are in use should be posted on a clipboard in the mechanics’ shop area. All completed forms should be kept on file in the mechanics’ shop for a period of 2 years.

AUTOMATIC SCORER PREVENTIVE MAINTENANCE SCHEDULE

DAY OF THE MONTH	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 Error Log																																
Check Console Keypad																																
Check Managers Keypad																																
Check Activity Report																																
Check Foul Unit Operation																																
Check Ball Detects																																
MONTH FOR SERVICE		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.																			
Clean Lower Console Monitors																																
Clean Upper Overhead Monitors																																
Clean Lower Console, L.G.P. or Scoring Computer																																
Circuit Board Connectors																																
Clean Scorer Keypads and Consoles																																
Clean Ball Detects and Reflectors																																
Check Service Light Operation																																
Check Intercom Operation																																
Check Auto Foul Signal Function																																
Check Console/ Keypad Condition / Mounting																																
Inspect Cables and Connectors																																
Adjust Overhead Monitors																																
Adjust Lower Console Monitors																																
Verify Scoring is Correct																																
Check Console Power Supply																																
Check Incoming L.G.P. / Scoring Computer / Power Voltage																																
Check L.G.P. / Console / Keypad / Scoring Computer Mounting																																
Check 1st and 2nd Ball Light Operation																																
Check Table Switches on GS Series Pinsetters																																
Run GS Pinsetters in Machine Diagnostics																																
Check all Diagnostic Indicator LED's																																
Check Pinsetter to Scorer Cable Routing																																

Lanes

LANE PREVENTIVE MAINTENANCE SCHEDULE

All chief mechanics will be responsible for the verification and compliance to this maintenance schedule by the Lane Maintenance Staff.

1. Enter the month the Lane Preventive Maintenance Schedule starts.
2. A designated person(s) will be assigned to complete the items listed on the Lane Maintenance Schedule. This person is typically called the Lane Person.
3. Upon completion of each task, the Lane Person will place an “X” in the appropriate shaded block.
4. The form that is in use will be kept posted on a clipboard in the mechanics’ shop. All completed forms should be kept on file in the mechanics’ shop for a period of 1 year.

General Lane Maintenance Schedule

There are many items related to lanes that require routine scheduled maintenance. To serve as a reminder of the maintenance that must be performed, a list of the routine maintenance items and a schedule of lane responsibilities follow.

Daily Maintenance

1. Dust caps and gutters
2. Dust lanes
3. Dust approaches
4. Dust ball hood and rack
5. Clean lane and pin deck
6. Condition lanes
7. Clean lane machine
8. Spot clean approaches
9. Inspect approaches
10. Wash soiled laundry
11. Clean and polish house balls, as required
12. Clean hoods and racks

Weekly Maintenance

1. Clean bowler seating
2. Buff synthetic approaches
3. Change carpet covers
4. Change pin dusters
5. Change ball wipes
6. Clean bowler seating

(A) 25% of all the equipment to schedule

Monthly Maintenance

1. Dust masking units
2. Clean upper overheads
3. Clean lower consoles
4. Vacuum hand dryers
5. Clean flat gutters
6. Clean kickbacks
7. Vacuum ball lifts
8. Inspect lanes
9. Inspect pit ends, screws plugs, and joints
10. Clean caps and gutter

(A) 25% of all the equipment per week

LANE PREVENTIVE MAINTENANCE SCHEDULE

DAILY, WEEKLY, AND MONTHLY

Month _____

Day of the Month	Code	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
Dust Masking Units	AS																															
Dust Caps and Gutters																																
Clean Caps and Gutters	AS																															
Dust Lanes																																
Dust Approaches																																
Dust Ball Hoods/Racks																																
Clean Upper Overheads	A																															
Clean Lower Consoles	A																															
Clean lane/Pindecks																																
Condition lanes																																
Clean Lane Machine																																
Spot Clean Approaches																																
Vacuum Hand Dryers	A																															
Clean Hoods and Racks																																
Clean Bowler Seating	A																															
Buff Synthetic Approach																																
Clean Flat Gutters	A																															
Clean Kickbacks	A																															
Change Carpet Covers	A																															
Change Pin Dusters	A																															
Change Ball Wipes	A																															
Vacuum Ball Lifts	A																															
Inspect Approaches																																
Inspect Lanes																																
Inspect Pit Ends	A																															
Wash Soiled Laundry																																
Clean/Polish House Balls	AS																															

KEY CODES: (A) 25% Of All Equipment
(AS) As Needed

Bowling Equipment Product Trouble Report and Warranty Policy

BRUNSWICK PRODUCT TROUBLE REPORT

All center personnel have the responsibility to reduce cost and product liability. All Brunswick parts carry a limited warranty period and can be replaced or credited to the center.

1. Enter date of preparation.
2. Enter the original order number from the original invoice or contact your local sales office.
3. Enter the original order date.
4. Enter the contract number, which is obtained from the original invoice or contact your local sales office.
5. Enter the installation date or the date the product was received. All new products should be placed into service as soon as possible and dated.
6. Check the box "Replace Discrepant Parts with New". The only item you should check the box "issue credit" is when you have already filled the warranty part with another vendor's part.
7. Enter the region or territory number located on the original invoice.
8. Enter your Brunswick customer number located on your original invoice.
9. Enter your center name and address.
10. Check "hold bags and shoes for Muskegon disposition" for bowling bags and shoes or check "return parts to Muskegon/Antigo" for all other parts. Do not ship defective parts unless Brunswick warranty department advises.
11. Enter the number of failed parts for each item.
12. Enter the complete Brunswick part number for each part.
13. Enter the complete Brunswick part name for each part.
14. Enter the defect code found on the back of the first page of the PTR.
15. Enter the date code of the defective part if it has one.

16. Enter any comments that might help the warranty department in processing the claim or describe the failure(s).
17. Take pictures of failed warranty items.
18. Sign the product trouble report in the originator box.
19. Forward the product trouble report originals to your local service manager or distributor sales office for processing and keep the customer copy, packing slip, originator and shipping labels.
20. The local sales office should sign in the other approvals box and follow up with a status report for each bowling facility.
21. All new PTR's written must have a different PTR number.

PRODUCT TROUBLE REPORT

PTR NO. _____
DATE: _____

Original Order Number _____	(Check One)
Order Date _____	_____ Issue Credit Memo Against This
Contract Number _____	Replacement Order # _____
Installation Date _____	_____ Replace Discrepant Parts With New

Region _____	Customer No. _____	(Check One)
Center _____		_____ Hold Bags and Shoes For Muskegon Disp.
Address _____		
_____		Return Parts To Muskegon/ Antigo
City _____		_____ Within 30 Days Or Claim Will Be Denied
Country _____		
State _____	ZIP _____	_____ Int'l Do Not Return Parts Unless Requested
Contact Name/ Phone # _____		

DISCREPANT PARTS

[illegible]

Invoice Amount/Repair charge	Exchange Rate	US\$	0.00
Freight Charge/ Packing		US\$	0.00
Handling Charges		US\$	0.00
DM TOTAL	0.00	TOTAL US\$	0.00

COMMENTS		WARRANTY DISPOSITION _____ APPROVED _____ DENIED DATE _____ SIGNED _____
ORIGINATOR	APPROVALS (OTHER)	

Brunswick Universal Date Codes

For All Bowling Products

Month (1ST Letter)

January	A	July	G
February	B	August	H
March	C	September	I
April	D	October	J
May	E	November	K
June	F	December	L

Year (2nd Letter)

1995	I	2001	O	2007	Z
1996	J	2002	P	2008	A
1997	K	2003	R	2009	B
1998	L	2004	S	2010	C
1999	M	2005	T	2011	D
2000	N	2006	Y	2012	E

DEFECT CODES

PINS

701 NECK CHECK
702 SPLIT BASE
703 GLUE - CHEEK
704 GLUE - POST
705 INTERNAL FAILURE
706 POOR INK
707 BOTTOM WOOD
708 PLASTIC PEELING
709 PLASTIC CRACKED
710 DISCOLORATION
711 PATTERN NOT COMPLETE
712 POST PROTRUSION
713 OUT OF RANGE
714 INSERT FAILURE
715 OTHER - PINS

BALLS

716 CRACKED COVER
717 CRACKED CORE
718 CHIPPED
719 FOREIGN STOCK
720 GOUGE
721 HOLES
722 OV/TOP HEAVY
723 UN/TOP HEAVY
724 HARDNESS
725 ENGRAVED WRONG
726 RIPPLES
727 FINGER HOLES
728 NOT ROUND
729 OFF AIR FLOAT
730 WELTS
731
732
733 OTHER- BALLS

ELECTRONICS

734 STICKING
735 OPEN
736 MISWIRED
737 SHORTED
738 TEMPERATURE SENSITIVE
739 INTERMITTENT OPERATION
740
741
742 OTHER - ELECTRONICS

LANES/ANVILANE

743 DELAMINATION
744 CORE SEPARATION
745 APPROACHES
746 CROWN/DEPRESSION/STEP
747
748
749
750 OTHER - LANES

BAGS

751 CRACKED CUPS
752 ZIPPER
753 HANDLE
754 SNAPS
755 STITCHING
756 STRAP
757 POCKETS
758 FOOT MISSING
759 CLASP
760 OTHER - BAGS

PINSETTERS/METAL/MODERN.

761 BENT
762 WELD FAILURE
763 BURRED
764 ALIGNMENT
765 NOT THREADED
766 INCORRECT DIMENSION
767 WARPED
768 GLUE FAILURE
769 OIL LEAKS
770 BEARING FAILURE
771
772
773
774
775
776 OTHER - METALS

GENERIC DEFECTS

777 MACHINE DAMAGE
778 OVER/UNDER WEIGHT
779 OBSOLETE
780 VOID IN MATERIAL
781 INSTALLATION DAMAGE
782 CRACKED
783 MISFORMED
784 TORN/FRAYED
785
786
787
788 OTHER

SHOES

789 STITCHING
790 GLUE
791 2 LEFT/RIGHT SHOES
792 SOLES
793 HEELS
794 EYELETS
795 SLIDE/NO SLIDE
796 DIFFERENT SIZES
797 INSOLE
798
799
800 OTHER - SHOES

FINISHES

801 DELAMINATION
802 BALL MARKING
803 FLOW PROBLEM
804 GASSING/BUBBLING
805 APPLICATION PROBLEM
806 MIXING PROBLEM
807 LANE PREPARATION
808
809
810 OTHER - FINISHES

LANE COVERING SYSTEMS

811 SCRATCHES
812 CUTTING/BALLMARKS
813 TUNNELING
814 BUBBLES
815 LANE PREPARATION
816 FOUL LINE PREPARATION
817 APPLICATION PROBLEM
818 ADHESIVE BUNCHES/VOIDS
819 PRINT IMPERFECTION
820 PIN DECK FILM DELAMINATION
821
822
823 OTHER - LANE COVERINGS

SUPPLIES

824 OFF COLOR
825 VISCOSITY
826 BUCKLING
827 BROKEN EDGEBOARDS
828
829
830 OTHER - SUPPLIES

GOLF BAGS

831 HANDLE
832 SLING
833 SLING SUSPENSION
834 TOP CUFF
835 BOTTOM
836 ZIPPERS
837 BALL POCKETS
838 CLOTHING POCKET
839 SHELL
840 POLY TUBE
841 STAY RODS
842 DIVIDER
843 MOLDED TOP
844 STAND
845 BOTTOM ASSIST HANDLE
846 HOOD
847
848
849
850 OTHER - GOLF BAGS

WARRANTY SCHEDULE

PRODUCT AND INSTALLATION WARRANTY

A. WHO THIS WARRANTY COVERS.

1. Original Buyer. This warranty is made to the original Buyer only and is not transferable without Brunswick's prior written consent, except that a Buyer of new equipment who is a general residential contractor may transfer this warranty to the owner of the residence where the products are installed.

2. Contingent on Payment and Training. Brunswick's warranty obligations are contingent on Buyer's payment in full in accordance with the applicable payment schedule and, if applicable, signing the Completion Certificate when presented by Brunswick or a Brunswick-certified installer. Brunswick's warranty obligations for pinsetters, automatic scoring equipment, and electronic center network systems are contingent on Buyer's fulfillment of the training requirements set forth in Section 11 of the Sales Contract.

B. WHAT THIS WARRANTY COVERS.

Unless otherwise indicated below, Brunswick warrants new products to be free from defects in materials and workmanship for the periods set forth below. Brunswick provides no warranty for GS Pinsetters, ProLane, Anvilane®, and lane systems components, center network systems, and software that are not installed by Brunswick or a Brunswick-certified installer.

1. GS Pinsetters installed by Brunswick or a Brunswick-certified installer.

- (a) Electrical Components - high voltage and low voltage sections of the electronics boxes, motors, solenoids, switches, and cables only - 1 year after installation.
- (b) Wear Components - belts (including the transport band and accelerator belts), elevator chain guides, elevator pan shovel guides, socks, and overflow chute liners only - 1 year after installation.
- (c) Other Components - 2 years after installation.
- (d) Noise & Vibration - Brunswick makes no warranty regarding noise or vibration.

2. Lanes.

- (a) American Bowling Conference Specifications - Brunswick warrants lanes will meet ABC specifications for 30 days after installation.
- (b) Breaks, Cracks and Wear - Brunswick warrants lanes against breaks and cracks on the top surface only and wear deeper than the printed layer of laminate for 5 years after installation.
- (c) Delamination (separation of the lane such that one or more of its layers returns to its original state as individual sheets of material).
 - ProLane lanes - Brunswick warrants ProLane lanes against delamination for as long as Buyer owns them.
 - Anvilane® lanes - Brunswick warrants Anvilane lanes against delamination for 5 years after installation.
- (d) Lane Components - foundations, pindecks and ball return tracks only - 1 year after installation.

(e) Noise & Vibration - Brunswick makes no warranty regarding noise or vibration.

3. Center Network Systems, and Software installed by Brunswick or a Brunswick-certified installer.

(a) Scoring Systems and Center Network Systems (including peripherals and associated electronics). - 1 year after installation, except for items listed in 3(b) below.

(b) Computers, terminals, and third party software. - Brunswick passes through original manufacturer's warranty only and does not separately warrant computers, terminals, or third party software. See product documentation for details.

(c) Brunswick Software. Brunswick warrants that software will perform in accordance with functional specifications at delivery. This warranty does not apply to center network systems with modified computer hardware, additional computers, terminals, or peripherals that have been added to the center network system, or if software other than that provided by Brunswick is installed on or used with center network systems without Brunswick's written approval.

The following software is approved for center network systems without Brunswick's written approval but is not supported by Brunswick:

- CenterMaster: Windows NT 4.0, Service Pack 5; Microsoft Access; Crystal Reports, version 8.0; Microsoft Office 97 (and components thereof); McAfee VirusScan 5.0; Microsoft Internet Explorer 5.0; and CDE BLS.
- Vector Plus: Windows 2000; Microsoft Access; Crystal Reports, version 8.0; Microsoft Office 2000 (and components thereof); McAfee VirusScan 5.0; Microsoft Internet Explorer 6.0; Quickbooks; and CDE BLS.
- Vector Windows 2000; CDE BLS and Tournament software.

During support of the center network system, an image of the original Brunswick software may be reloaded onto the customer's center network system to restore operation. Brunswick is not responsible for reinstalling or supporting non-Brunswick software.

4. Furniture and Center Enhancements. Modernization Products, consisting of seating/tables, masking units, mod-wall systems, house ball storage racks, kickbacks, pindecks, ball return systems, power ball lifts, ball hoods and racks, capping and gutters, Pinball Wizard bumpers, Bank Shot bumpers, Cosmic lighting, Lightworx®, Cosmic® sound systems, Cosmic® video systems, and Tel-E-Foul® units, are warranted as follows:

(a) Installed by Brunswick or a Brunswick-certified installer - 1 year after installation.

(b) Not Installed by Brunswick or a Brunswick-certified installer - 1 year after delivery.

5. Small Goods.

(a) Pins - Limited 1 year after delivery or 3,000 lines, whichever occurs first.

(b) Finishes, Supplies, Service Parts - 90 days after delivery.

(c) Maintenance Machines for Lanes and Accessories - as specified in the applicable product manual.

(d) Polyester house balls - 90 days after delivery.

(e) Urethane house balls - two years after delivery.

(f) Rental shoes - 90 days after delivery.

6. Installation. Brunswick warrants labor associated with installation by Brunswick employed installers of New Products (excluding Small Goods) as follows:

(a) Lanes and Components - 1 year after installation is completed.

(b) Other New Products (excluding Small Goods) - 90 days after installation is completed.

This installation warranty does not cover required adjustments or maintenance. Buyer is responsible for the cost of service calls made during the installation warranty period if the call results from Buyer's failure or inability to perform such adjustments or maintenance.

This installation warranty does not cover installation of New Products that are installed by third party installers.

7. Used Products. Used equipment and software are provided "as is," "with all faults," and without warranty unless specifically stated otherwise in writing.

C. WHAT THIS WARRANTY DOES NOT COVER.

THIS WARRANTY DOES NOT COVER DAMAGE OR DEFECTS CAUSED BY:

1. Repairs, replacements, or modifications made by anyone other than Brunswick or a Brunswick-certified installer.
2. Abuse, misuse, tampering, or neglect.
3. Buyer's failure to maintain products in accordance with applicable product manual and service bulletins published from time to time.
4. Buyer's failure to meet specified electrical requirements, including proper installation by a qualified electrician of surge suppressors supplied by Brunswick.
5. Water, atmospheric conditions, moisture, storms, lightning, movement of the building, lane foundations (i.e., joists, stringers, underlayment, and underlying wood lane if lane is installed over a wood lane), panels, or other surfaces, or from other causes over which Brunswick has no control.
6. Lane cleaning, conditioning or maintenance machines.
7. Removal or reinstallation of lanes or shrinking, swelling, sticking, or slipping of lane foundations (i.e., joists, stringers, underlayment and underlying wood lane if lane is installed over a wood lane), panels, or surfaces due to temperature or humidity conditions outside limits specified in applicable product manual.
8. Improper Product installation by a third-party installer.

D. WHAT BRUNSWICK WILL DO.

Unless otherwise specifically stated in this warranty, Brunswick may repair or replace the defective part (or correct installation), refund Buyer's purchase price, or credit the cost of a replacement part, as determined by Brunswick. Buyer has no other remedies under this warranty.

E. HOW AND WHEN TO MAKE WARRANTY CLAIMS/OBTAIN SERVICE.

Warranty claims must be made as described below within 30 days of learning of a defect. Additionally, all claims must be made no more than 10 days after the expiration of the warranty period.

1. Lanes and Components.

Within 30 days of learning of a defect, Buyer must notify Brunswick in writing, describing the defect. Notices should be sent to:

Brunswick Bowling & Billiards Corporation

525 West Laketon Avenue

Muskegon, Michigan 49441

Attention: Director of Service

2. Scoring System, System Electronic Assemblies and Software.

If troubleshooting procedures described in the applicable service manual do not resolve the issue, return the assembly to the nearest Brunswick Rapid Exchange Center or Automatic Scorer Exchange Depot (listed in the applicable service manual), freight prepaid, with an Electronic Assembly Repair Traveler. Brunswick will send an exchange assembly, freight prepaid, within a reasonable time, but at least two business days after receipt of Buyer's assembly.

3. Parts (Other Than Scoring System Electronic Assemblies and Software).

Purchase a replacement Brunswick part and return the original part, freight prepaid, along with a description of the defect and the invoice for the replacement part to:

Brunswick Bowling & Billiards Corporation

525 West Laketon Avenue

Muskegon, Michigan 49441

Attention: C&R Department

If Brunswick determines that the returned part is defective, Brunswick will credit Buyer's account for the purchase price of the replacement part.

F. TIME LIMIT FOR BRINGING SUIT.

No action arising out of any claimed breach of warranty may be brought more than 1 year after the cause of action has accrued.

G. DISCLAIMER OF WARRANTY.

Brunswick makes no warranty, express or implied (including any implied warranty of merchantability or fitness for a particular purpose) other than those expressly set out in this Schedule. Oral or written statements made by Brunswick dealers, distributors, agents, or sales representatives that are inconsistent with this warranty are not authorized by Brunswick and have no force or effect.

Bowling Center Maintenance

Bowling center operators are continuously faced with presenting their customers with a clean and well-run facility. In order to be of assistance, Brunswick has developed an extensive list of basic maintenance tasks that must be a part of every bowling center's normal mode of operation. These tasks should be done on a scheduled basis in order to ensure that the bowling center continues to operate trouble free and that your bowling customers enjoy a pleasurable experience while in the bowling center.

These basic maintenance procedures will be very useful tools both for someone opening a new bowling center and for the proprietor working to upgrade a center that has deteriorated to a point where customer satisfaction has become an issue.

We have found that the bowling experience is enhanced when the entire entertainment complex is clean and the atmosphere is controlled so that temperature and humidity are kept at a comfortable level that is consistent with Brunswick equipment requirements.

KEY AREAS TO NOTE:

Climate Control

Brunswick has designed its equipment to conform to acceptable bowler comfort levels. Operating Brunswick equipment outside of these levels can result in permanent problems with the equipment that may not be covered by warranty.

1. Humidity levels must be maintained at a constant level and as close as possible to 40%. A minimum of 35% is possible and a maximum of 50% is permissible if temperature within the bowling center is maintained within the recommended temperature range. Failure to maintain proper humidity levels can result in problems with your equipment that may not be covered by warranty.
2. Temperature settings should be maintained at a constant temperature of $72^{\circ}\text{F} \pm 4^{\circ}$ or $22^{\circ}\text{C} \pm 2^{\circ}\text{C}$. Failure to may will not be covered by warranty.
3. Air conditioning and heating systems need to be designed to ensure air quality and to adequately control humidity and temperature. Systems should be designed to automatically handle the arrival of active bowlers that will increase temperatures and raise humidity levels. If automatic controls are not available, the center should anticipate bowlers arriving and take steps to ensure bowler comfort and viable operating conditions. In addition, heating, cooling and ventilation systems need to be maintained on a scheduled basis.

Cleanliness

In addition to cleaning and maintaining the bowling equipment, i.e. lanes, approaches, pinsetters, it is important to maintain many areas inside and outside of the bowling center that can affect proper operation and customer enjoyment. Below are some key issues that need to be addressed to maintain a consistent environment throughout the building. Operating Brunswick equipment in bowling centers that are not kept clean can result in permanent problems with the equipment that may not be covered by warranty.

1. Parking lot and access doorways to the center must have measures taken to eliminate grit, sand and dirt from entering the center. Parking lots should be paved with concrete or blacktop surfaces and undergo regular cleaning and sealing.
2. Carpeting in the bowler's concourse area and entryway rugs are excellent ways to trap outside dirt and keep it away from the bowler playing areas. Brunswick strongly recommends carpet in

these two areas. Brunswick specifically recommends against the use of carpet in the bowler's seating area adjacent to the approach. All carpeted areas need to be vacuumed daily at a minimum to help control the dirt and spills. Attention to the types of cleaning solutions used to clean the carpet must be made as the maintenance process must not leave a solution residue on the carpet.

3. Where tile flooring is used, the tile needs to be cleaned daily and spills cleaned up as they occur. While a flooring surface that does not require waxing is preferred, some centers have surfaces requiring wax as a part of regular maintenance. If a surface coating is used, it must be a hard surface coating (such as an acrylic floor finish) that will not transfer onto bowling shoes or the lanes.
4. Seasonal issues with periods of rain or snow can result in excess moisture, salt and dirt being carried into the center. A higher level of cleaning vigilance must be undertaken at this time.
5. Bowling shoes – the rental shoes, shoe storage trays (if used) and the storage shelving must be cleaned on a regular basis to control the dirt, grit and sand that are tracked in by street shoes. It is preferable to keep street shoes away from the normal storage locations of rental shoes as this dirt, etc. can be tracked into the bowlers' area and on to the lane surfaces.

Using the above guidelines and the attached *“Bowling Center Maintenance Schedule”* will go a long way in keeping your bowling center clean, looking good and providing a positive environment for the customers you want enjoying your center for many years to come.

BOWLING CENTER MAINTENANCE SCHEDULE

All chief mechanics and janitorial staffs will be responsible for the completion, documentations and compliance with the items listed on the bowling center maintenance schedule. The chief mechanic, manager and staff should collaborate on the cleanliness of the facility and address areas where attention is needed.

1. The local janitorial staff, either contracted or facility employed, under the supervision of the chief mechanic and manager, should complete all the work assignments listed on the bowling center maintenance schedule.
2. Items not listed on the bowling center maintenance report can be added on a separate form. The bowling center maintenance schedule is only a recommended list of duties necessary for daily, monthly and quarterly cleaning. Certain items such as carpet cleaning, floor care and glass may need to be done more frequently.
3. At the end of each janitorial work shift, the work assignments from the schedule that are completed should be checked off. The chief mechanic and/or manager should check areas of the facility for satisfactory completion of the work items on a daily basis.
4. The completed bowling center maintenance schedules should be kept on file in the mechanics' shop. The forms that are being used should be posted on a clipboard in the janitorial storage area.
5. Failure by the responsible staff persons to complete this schedule on a thorough and timely basis can result in damage to bowling equipment, lanes and furniture in the bowling center.

BOWLING CENTER MAINTENANCE SCHEDULE

CENTER NAME _____ MAINTENANCE SIGNATURE _____

MONTH/YEAR _____ MECHANIC SIGNATURE _____

X - COMPLETED ITEMS

DAILY ITEMS

DAY OF 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	
AREA / ITEM																																
ENTRY WAY																																
SWEEP/MOP/FLOOR																																
CLEAN ANY FURNITURE																																
EMPTY TRASH AND ASHTRAYS																																
DUST AND CLEAN WALLS																																
DUST AND CLEAN SIGNS																																
WASH ENTRY WAY DOORS																																
CONTROL COUNTER																																
SWEEP/MOP/VACUUM FLOOR																																
CLEAN COUNTER TOP/SIDES																																
EMPTY TRASH AND ASHTRAYS																																
CLEAN ANY FURNITURE																																
MANAGERS OFFICE AREA																																
SWEEP/MOP/FLOOR																																
EMPTY TRASH AND ASHTRAYS																																
DUST AND CLEAN WALLS																																
CLEAN OFFICE FURNITURE																																
CONCOURSE																																
SWEEP/MOP/VACUUM FLOOR																																
EMPTY TRASH AND ASHTRAYS																																
DUST / CLEAN WALLS																																
CLEAN TABLES AND CHAIRS																																
CLEAN COUNTER TOP/SIDES																																
SPOT CLEAN CARPET																																
WIPE OFF LOCKER DOORS																																
CLEAN SIGNS AND DISPLAYS																																

MONTH/YEAR	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	
DAY OF MONTH																																
AREA / ITEM																																
KITCHEN AND BACK BAR																																
SWEEP/MOP FLOOR																																
CLEAN COUNTER TOP/SIDES																																
EMPTY TRASH																																
DUST AND CLEAN WALLS																																
DUST AND CLEAN DISPLAYS																																
FLUSH EQUIPMENT DRAINS																																
CLEAN SINKS AND FAUCETS																																
CLEAN SODA DISPENSERS																																
CLEAN ANY FURNITURE																																
RESTAURANT AND BAR																																
SWEEP/MOP/VACUUM FLOOR																																
EMPTY TRASH AND ASHTRAYS																																
DUST AND CLEAN WALLS																																
CLEAN TABLES AND CHAIRS																																
CLEAN COUNTER TOP/SIDES																																
CLEAN BAR STOOLS																																
CLEAN GLASS AND MIRRORS																																
MEN/LADIES RESTROOM																																
SWEEP/MOP FLOOR																																
EMPTY TRASH AND ASHTRAYS																																
DUST AND CLEAN WALLS																																
CLEAN TOILETS AND URINALS																																
CLEAN AND FILL DISPENSERS																																
CLEAN MIRRORS																																
CLEAN PARTITIONS																																
CLEAN / WIPE HAND DRYERS																																
CLEAN SINKS AND COUNTERS																																
BILLIARD AND GAME ROOM																																
SWEEP / MOP FLOOR																																
CLEAN ANY FURNITURE																																
EMPTY TRASH AND ASHTRAYS																																
DUST / CLEAN WALLS																																
CLEAN VIDEO GAMES																																
CLEAN/DUST BILLIARD TABLES																																

MONTH/YEAR	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	
DAY OF MONTH																																
AREA / ITEM																																
EMPLOYEE BREAK/LOCKERS																																
SWEEP AND MOP FLOOR																																
EMPTY TRASH AND ASHTRAYS																																
DUST AND CLEAN WALLS																																
CLEAN TOILETS AND URINALS																																
CLEAN SINKS AND COUNTERS																																
CLEAN AND FILL DISPENSERS																																
BOWLERS AREA																																
SWEEP/MOP FLOOR																																
EMPTY TRASH AND ASHTRAYS																																
DUST AND CLEAN WALLS																																
CLEAN TABLES AND SEATING																																
CLEAN COUNTER TOP/SIDES																																
CLEAN SCORER CONSOLES																																
CLEAN BALL STORAGE AREA																																
CLEAN BALL HOODS/RACKS																																
CLEAN HOUSE BALLS																																
CLEAN GLASS AND MIRRORS																																
SWEEP/MOP SIDE AISLES																																
PRO SHOP																																
SWEEP/MOP/VACUUM FLOOR																																
EMPTY TRASH AND ASHTRAYS																																
CLEAN WALLS & DISPLAYS																																
OFFICES AND STOREROOMS																																
SWEEP/MOP/VACUUM FLOOR																																
EMPTY TRASH/ASHTRAYS																																
DUST AND CLEAN WALLS																																
DUST AND CLEAN SHELVING																																
JANITORIAL STORAGE ROOM																																
SWEEP/MOP FLOOR																																
CLEAN WALLS AND SHELVING																																
CLEAN MOPS AND EQUIPMENT																																
CLEAN BUFFER AND VACUUM																																
PROPER SUPPLIES IN STOCK																																
JANITOR SCHEDULE POSTED																																

MONTH/YEAR _____

MONTHLY ITEMS

X - COMPLETED ITEMS

ITEM	MONTH	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
DUST ALL LIGHTING FIXTURES													
DUST ALL AIR CONDITIONING GRILLS													
DUST/CLEAN CEILING FANS													
DUST / CLEAN EXHAUST VENTS													
CLEAN INSIDE ALL COOLERS													
CLEAN INSIDE ALL ICE MACHINES													
CLEAN GRILL AND FRYER HOODS													
CLEAN GRILL AND FRYER FILTERS													
CLEAN ALL FLOOR DRAINS													

QUARTERLY ITEMS

X - COMPLETED ITEMS

QUARTERLY PERIOD	JANUARY - MARCH	APRIL - JUNE	JULY - SEPTEMBER	OCTOBER - DECEMBER
ITEM				
STRIP BOWLERS AREA FLOOR				
CLEAN ALL CARPET				

Bowling Center Safety

All employees are responsible for safety and keeping the bowling facilities safe and secure.

It Is Your Responsibility To ...

1. Comply with all workplace safety, security, and housekeeping rules as outlined.
2. Know what acts and circumstances could cause unsafe conditions or incidents and how to prevent them.
3. Know what to do in case of an emergency.
4. Immediately notify your Supervisor or manager of any safety/security hazards or incidents that take place.
5. Be alert to safety hazards. Correct them if you can, or notify your Supervisor or Manager if you recognize a potential hazard you cannot correct.

General Safety Tips

1. Always follow safety procedures.
2. Report all customer, or employee incidents to your Supervisor or Manager. They are responsible for responding to injuries/incidents occurring in the bowling center.

Customer Safety

You play an important part in the safety of customers. Observe your surroundings for safety hazards as you perform your job. Promptly correct the hazards that you can. Report any hazards that you cannot eliminate, to the Supervisor or Manager.

Walkways

1. Walkways must be kept clear. Keep equipment, bowling balls, bags, shoes, etc. out of walkways. Politely move items out of walkways.
2. Wet floors/spills need to be immediately cleaned up! Use CAUTION signs over wet areas.
3. Spills can contaminate bowlers' shoes – make certain floors are kept clean.
4. Carpets and tiles should be in good condition. No ripples or torn seams in carpet. No chipped tiles.
5. Carpet runners and mats should be lying smooth with no curled edges.
6. Observe sidewalks and parking lots for cracks, potholes, or any uneven surface that could cause a trip hazard.

Rest Rooms

1. Check every half hour during peak hours of operation.
 - a. Floors dry; wet floors cleaned up promptly!
 - b. Mats in place, lying smoothly.
 - c. Equipment in good condition.
 - d. Hand dryer nozzles secured downward.
 - e. Supplies stocked.
 - f. Partitions secure; handrails and hardware secure, not broken or missing.

Prevent Slips and Falls

Slips and falls are one of the most common causes of incidents within the bowling center.

1. It is very important that all floors (carpet & tiles) are kept clean at all times.
2. Always be on the look out for spills and wet floors. Clean up all spills right away!
3. Place a CAUTION sign on all wet floors –
During mopping.
During wet weather – REQUIRED at Entrance/Exit area.
4. Always check the bowlers' area after birthday parties and between league play to make certain that the area is clean and the floors are dry – no spills!
5. Approaches need to be monitored frequently to make certain that there are no spills, sticky spots, powder or other contamination that may cause a slippery condition, or sticky condition, to exist. **Clean approaches as directed by your Supervisor or Manager.**
6. Bowling shoes are required while bowling. If a customer is seen bowling in socks or street shoes – advise them politely of the requirement. If they refuse to comply, notify the Supervisor on duty.
7. Carpet runners/mats used throughout the facility should be lying smooth, no curled edges, and secure in place. If edges curl or the carpet runner becomes saturated, remove and replace with new carpet runner.
8. **During winter weather, keep walks and parking areas free of ice and snow. The use of CAUTION signs is recommended.**

**CENTER MANAGERS
MONTHLY INSPECTION REPORT**

DATE: _____

CENTER NAME _____

	FINDINGS				COMMENTS
	E	G	F	U	
PINSETTER AREA					
Cleaning					
Lubrication					
P/M Schedule Followed					
Malfunction Records					
Parts Records					
Safety					
LANES					
Daily Sequence Followed					
Monthly Sequence Followed					
Pindecks					
Equipment & Supplies					
Lane Machine					
Automatic Scorer System					
Ball Returns					
A/C & HEATING					
Filters					
Cooling Tower / Condenser					
Equipment Room					
Air Handler					
Thermostat & Covers					
PM Schedule Posted / Followed					
Heating Equipment					
RESTROOMS					
Floors					
Toilets / Urinals					
Dispensers					
Basins					
Hand Dryers					
Waste Containers					
Partitions					
PUBLIC AREAS					
Control Counter					
Meeting Room					
Playroom					
Concourse / Carpet & Tile					
Billiards Area					
COCKTAIL LOUNGE / BAR					
Floor / Carpet & Tile					
Counters & Back Bar					
Coolers					
Furniture					
RESTAURANT					
Filters / Hood					
Refrigerators & Coolers					
Floor					
Walls					
BUILDING EXTERIOR					
Parking Lot					
Roof					
Building Structure					
Gutters & Downspouts					
Entrance Doors					

Center Mechanic: _____

Center Manager: _____

E - Excellent

G - Good

F - Fair

U - Unsatisfactory

Monthly Safety Check List

Month: _____

Center Name - _____

	Item	Date	Signed	Comments
1	Product Container Labeling			
2	Entry Decals			
3	Entry and Exit Hazards			
4	Doors Unlocked During Business			
5	Panic Hardware Equipped on Doors			
6	Exit Light Condition			
7	Loose Carpet Hazards			
8	Carpet Cleanliness			
9	Stairs / Steps / Ramps / Wet Floors			
10	Bowling Approach Hazards			
11	Bowler Area Seating			
12	Concourse Chairs and Tables			
13	Bar Stools and Tables			
14	Houseballs and Houseball Racks			
15	Poster and League Standing Frames			
16	Rental Shoe Condition / Cleanliness			
17	Wall Molding and Trim			
18	Soda Dispensers Clean			
19	Grills and Fryers - Clean			
20	Hoods and Filters - Clean			
21	Hoods and Ducts - Semi Annual Cleaning			
22	Water Heaters			
23	Auto Fire Extinguisher Systems			
24	Auto Fuel Shut Off Systems			
25	CO2 Tanks Chained Up			
26	Hand Fire Extinguisher - Type and ID			
27	Hand Fire Extinguisher - Annual Certification			
28	Hand Fire Extinguisher Required Amount / Type			
29	Concourse/Bowler Area Outlets/ Lights / Wiring			
30	Support Areas Outlets / Lights / Wiring			
31	Emergency Lighting Systems			
32	Pinsetter Area Outlets / Lights / Wiring			
33	No Smoking Signs in Pinsetter Aisle			
34	Combustible Cans - Rags and Waste			
35	Flammable Storage Cabinets			
36	Bench Grinder Safety Covers			
37	All Pinsetter Guards in Place			
38	Equipment Decals - Pinsetter Area			
39	Equipment Decals - Bowlers Area			
40	Electrical Panels - Clear / ID'd / Covered			
41	Employee First Aid Kits Stocked			
42	Auto Sprinkler Systems Certified			
43	Safe Ladders / Properly Stored			