

Bowling Equipment.us, LLC

In Association With



Standard Refurbishing Brunswick A-2 Pinsetter Program



The following is a brief description of the refurbishing program that we follow on A-2 pinsetters. There is much more to the job than what is written here. It is a labor and parts intensive procedure. You are welcome to visit the factory to see the process and final results. And, any specific item(s) can be added per request.

Dismantling and Cleaning:

The major components of the machine are taken off the frame to allow easier access to clean and make repairs. This includes the gearbox, turret, and deck assembly, motor and mount, electrical box and cross conveyor.

The frame and all other components are power washed with soap and hot water. After drying, the main frame assembly is inspected for broken and worn parts which are replaced or repaired. Common parts in this area needing work are rake shafts, rake lift shafts, rake shocks, cushion linkage and deck lift shaft.

Gearbox and Detector:

After cleaning we drain the gearbox oil and inspect all components for wear and breakage. The common issues are worn clutch parts, broken 1 to 1 cover castings, bad keyways in the 1 to 1 shafts, leaking seals and gaskets, worn worm shafts and worn 4 to 1 gears. Any questionable parts are replaced. Detectors are cleaned, inspected and lubricated.

Turret

Turret wire baskets are removed from the turret rings to allow thorough cleaning and inspection. The 5 pin chute is checked and repaired as necessary. Typical problems include broken arms and base plates. Broken and worn turret wires are replaced. Turret clutches are cleaned and inspected. Linings are replaced, top pulleys are checked for wear, and slide plates are checked for wear and replaced as required. Indexing rollers are replaced. All components are checked for wear and operation. The turret assembly can be the most troublesome area of the machine if it is not operating correctly.



Deck:

Deck shields are removed and the deck assembly is cleaned and inspected. Typical problems are broken deck chutes, worn deck pads, missing scissor pads, worn deck cables, worn scissor parts, broken deck rollers and spotting fingers. All broken parts are replaced. Moving decks are checked for straightness and movement on the deck rollers.

Electrical Box:

After removing from the frame the electrical boxes are cleaned. Broken or bent wire channels are replaced. The wiring is checked and made as original. Time delay modules are checked, safety micro switches are tested and boots checked for cracks. Switches on the wire channels are checked for breakage and operation.

Motor:

Bearings and start switches are checked for wear and replaced as required. Motors are cleaned and test run. Capacitors are checked for proper operation.

Cross Conveyor:

Belts are inspected and replaced if they are cracked or worn out. Snubber, pulleys, latches are inspected.

After dismantling and cleaning the frame, all pulleys and guide rollers are removed and inspected. Many are replaced entirely; flanges and bearings are commonly replaced. Pin wheels and ball wheels cleaned and repaired as necessary. Pin wheels are replaced if they are cracked. Lift rod cover is replaced on all elevators. All components are thoroughly inspected and replaced as necessary. V-belts are all replaced. After reassembly the elevator is tested for correct operation. Special attention is paid to the magnetic clutch to make sure it is good. The C track, straight track and Y track is cleaned and repaired as necessary. The preference system is also checked.



Pit Conveyor:

Pit board is inspected for cracks and replaced if found. Carpet is power washed if in good condition or replaced if worn or torn. Broken pit mounts are replaced. Vibrator shaft and bearings are checked for wear. Frames are welded and repaired or replaced if not fixable. Pit clamps are replaced if the hooks are worn. The unit is reassembled and tested prior to packing.

Cushion Assembly:

All cushion covers are replaced with new ones. Pit curtains are cleaned, torn curtains are replaced. Cushions are repaired as necessary. All worn parts in linkage are replaced. Typically this includes the follower links, rod ends and bushings. Shocks are checked and replaced if worn out.

Accelerator, Y-track Assembly and Drop Sweep:

The accelerators are disassembled and cleaned. The pulleys are checked for wear and their bearings are replaced. The control box is inspected especially the wiring and relays. The boxes are rewired as necessary to make them original. The belts are replaced in all units. The motors are cleaned and the bearings and start switches are inspected and replaced necessary.

Testing:

The machines are thoroughly tested in the factory. They are put on a stand with an elevator and pit and run with bowling pins. They must run continuously and stop free for at least two hours. This procedure will bring out most any problems with any parts that need to be replaced.

Packing:

The machines are crated in factory style crates for safe shipping. All of the installation and assembly hardware is included. Standard nuts, bolts and washers are all new.

Warranty

One Year on all major components.