

OPERATING MANUAL

Durability Index Apparatus SS-18 and SS-18F

ASTM D 3744; AASHTO T 210; CALIF. 227, 229

SAFETY INSTRUCTIONS

Whether you are the owner, employer, operator, or maintenance person for this machine, safety is your responsibility. You are responsible for operating and maintaining this equipment in compliance with these instructions. You should always review and completely understand these safety and operating instructions before using this machine.

Installation and use of the SS-18 Durability Index Apparatus must conform to all OSHA requirements, the national electrical code (NEC), and all local codes.

WARNING!

- 1. **DANGER!** This machine operates on electrical current. Improper use could result in electric shock, electrocution, injury by explosion, or even death.
- 2. Voltage and moving parts around motors and motordriven equipment can cause serious or fatal injuries. **ALWAYS** disconnect power source before working on motor or its connected load.
- 3. Motor **MUST** be securely and adequately grounded by a method approved by the NEC and by local codes.
- 4. **DO NOT** use this equipment in a hazardous location as defined by Article 500 of the National Electrical Code (NEC).

INSTALLATION

- 1. Carefully unpack and inspect the unit for shipping damage.
- 2. Bolt the SS-18 to the floor or to a sturdy, rigid table.
- 3. Connect the power cord to a properly grounded power supply, rated for correct voltage and amperage output.
- 4. Store unit in a clean, dry, indoor location when not in use.



SS-18 shown with SSA-22

MAINTENANCE

Read and completely understand all safety instructions before performing maintenance on the SS-18.

Disconnect power and allow motor to come to a complete stop before performing maintenance or inspection.

- A. Periodically inspect the apparatus, checking for the following:
 - 1. Dirt accumulation.
 - Unusual noises or vibration.
 - 3. Overheating.

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Rev: 01/2019

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- 4. Worn or loose couplings, sheaves, and belts.
- 5. High motor current.
- 6. Overheated electrical connections.
- 7. Loose mounting bolts.
- 8. If any of these conditions are present, repair the SS-18 before operation.

NOTE: The stroke of the SS-18 is determined by mechanical parts installed at the factory and cannot be changed. Please contact Gilson if you have questions.

- B. Even though the materials of construction are chosen to be maintenance-free, periodic cleaning and lubrication will prolong the life of this unit.
 - 1. Grease Nylatron shuffle bearing block and guide rails.
 - a. Use a high-quality, light grease, such as a silicon-based or polyethylene-based lubricant, that will not dry out.
 - b. Grease fittings are provided on either side of the unit, just below the washing vessel platform.
 - c. An alternative to the grease is to remove the grease fittings and use the holes to apply oil (Tri-Flow or Phil Wood Tenacious Oil) to reduce drag on the bearing slide.
 - 2. Apply same oil to the two brass bearings in the base after you have wiped them off with a clean rag.
 - 3. Check belt for wear and proper tension.
 - 4. Do not use solvents to clean the unit. Some solvents may attack motor insulation, finish, or bearing lubricants. Some are highly flammable.
- C. Recommended maintenance of motor:
 - Remove dirt accumulation in and around vent openings by vacuuming. Accumulated dirt can cause motor overheating and a resultant fire hazard.
 - 2. Perform periodic re-oiling of the sleeve bearings.
 - a. Use 30—35 drops of SAE non-detergent or electric motor oil. **DO NOT** over lubricate.
 - b. Re-oil intermittent duty units every two years.
 - c. Re-oil occasional duty units every five years.

This motor has no thermal protection, so automatic restart is not a hazard.

ADDITIONAL ACCESSORIES AND REPAIR PARTS

- SSA-22 Washing Vessel
- TSA-169R, TSA-169RF Digital Lab Timer
- RPSS-18-4 V-Belt
- RPSS-18-2 Clamp Knob
- RPSS-18-3 Cover Assembly
- RPSS-18-8 Rubber Rim for Platform
- RPSS-18-9 Set of Washers and Bushings for Top Clamp Bar