OPERATING MANUAL

Gilson 8in/12in Sieve Shakers
SS-14 & SS-14D



SS-14



SS-14D

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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 and for using common sense. Review and completely understand the operating and safety instructions before using this machine.

WARNING!

This machine operates on electric current. Improper operation could result in electric shock, electrocution, or an explosion!

1. **ALWAYS** make sure the motor and other electrical components are appropriate and properly configured for your intended use and available power source. The SS-14 and SS-14D 8in/12in Gilson Sieve Shaker comes with a 1/4hp motor wired for 115V/60Hz. It can also be ordered as SS-14F or SS-14DF to operate on 230V/50Hz electrical supplies. Motors are **NOT** explosion-proof.

2. **ALWAYS** check electrical wiring for loose connections and for pinched or frayed wiring.

3. **ALWAYS** use a properly-wired, three-pronged plug, or otherwise ground the machine. Connect the machine to a properly-wired, three-pronged receptacle. Make sure the cord is located where no one will trip or get tangled in it.

4. **ALWAYS** disconnect and lock out power supply before performing maintenance and repairs.

WARNING!

WARNING: **DO NOT** operate the machine without having all covers and case in place.

WARNING: **ALWAYS** level the machine prior to operation.

WARNING: Stop the machine immediately and re-level if excessive vibration or machine movement occurs.

WARNING: **DO NOT** operate the machine without making sure EZ-Clamps on the top platform are secure.

WARNING: Use caution to avoid pinching fingers when raising or lowering the sieve cover and when tightening the EZ-Clamps.

WARNING: The electric motor on this machine has internal thermal protection. If the motor shuts off from overload, the machine may restart by itself after cooling off, unless the machine is unplugged during cool-down.

WARNING: Keep all parts of your body away from moving parts of the machine while it is operating.

WARNING: **ALWAYS** unplug or disconnect machine from the power source when the unit is not in operation.

WARNING: **ALWAYS** wear safety glasses when operating, maintaining, or repairing this machine.

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1.0 UNPACKING & SET-UP:

CAUTION

DO NOT plug in or otherwise connect the SS-14 to a power source until this initial inspection is complete. The SS-14 comes assembled except for the four foot pads in a bag taped to the platform.

NOTE: Inspect the unit for visible damage. Damage claims should be noted on carrier's bill of lading before signing for acceptance. In all circumstances, damage claims must be filed by you with the shipping carrier within 10 days.

NOTE: The SS-14 weighs approximately 87 lbs. (39.5 Kg). Always use appropriate equipment and manpower to move and lift the sieve shaker. Wear safety glasses and work gloves when uncrating the unit.

1.1 After inspecting your SS-14, remove it from the pallet. Your machine is secured to the pallet with lag screws through all four foot pad holes. Remove the four lag screws, lift the SS-14 from the pallet and lay it on its back. Find the foot pads, supplied in a bag taped to the platform, and install them in holes in flanges of the case. Inspect internal components electrical configuration before setting the sieve shaker upright again.

1.2 The sieve platform, clamping rods, lid with E-Z clamp knobs and upper cross bar should all be assembled, ready for operation as pictured on cover. Confirm threaded connectors are tightened. Contact Gilson immediately if there are missing or damaged parts.

1.3 The four rubber feet on the bottom of unit may be removed to use the base holes for permanent mounting if desired. Use 5/16 in mounting screws and bolts to secure the unit to a sturdy bench or table. Permanently bolting the machine down may cause premature wear to internal parts.

2.0 OPERATING INSTRUCTIONS

2.1 Please read and understand all safety and operating instructions for the Gilson SS-14 8in/12 in. Sieve Shaker before placing it into service.

2.2 Rotate EZ-Clamp knobs so buttons face inward. While holding the knobs, push both buttons in firmly and slide the cover up to the desired position. When you release the buttons, the cover assembly will remain in position, allowing insertion of the sieve stack.

2.3 Load your sieve stack onto the sieve platform of the SS-14, insuring it is centered on the platform.

2.4 Turn the E-Z-Clamp knobs so buttons face inward, depress the buttons and slide the cover assembly down firmly on top of the sieve stack.

2.5 Tighten the knobs by turning them clockwise until the lid feels securely clamped. If the knobs "pop", they were turned too far. Simply retighten to again secure the cover assembly on the stack.

2.6 Plug in the SS-14 after confirming your power supply is configured correctly and grounded properly. Set the timer and turn on the machine.

2.6.1 If your Gilson 8in/12in Sieve Shaker comes with a spring-wound timer, it is a model SS-14, and the timer serves as the on/off switch as well as test timer. Explore the operation of the timer. The timer ring stop may be rotated and set to exactly repeat test times by tightening the slotted knurled clamp screw. The stop peg should be set for greater than five minutes.

NOTE: The main device that the timer controls may be restricted to operating on a more limited electrical supply range. Check the device carefully to insure compatibility with your electrical supply.

2.6.2 If your machine is equipped with a digital timer it is a model SS-14D

The current timer mode is indicted by the four red LED's on the timer face:

A=MMSS (99 min:59sec x 1 second)
B=HHMM (99 hr:59min x 1 minute)
C=SSSS (9999sec x 1 second)
D=MMMM (9999min x 1 minute)

(H = hours, M = minutes, and S = seconds.) To adjust the timer mode, press and hold both <UP> and <DOWN> keys at the same time until the display shows the mode. Once the mode letters are displayed, press <UP> or <DOWN> to change modes. Press <START/STOP> to accept new mode.

To set the run time, press either <UP> or <DOWN>. The first digit on the right hand will flash in half-second intervals. Press either arrow key to adjust to the desired value. To enter the displayed digit and move to the next, press <START/STOP>. Once the last digit on the left is entered, the timer is ready to start.

Press <START/STOP> to initiate the current run program. Once running, pressing <START/STOP> again will pause the timer with the current amount of time remaining on screen. When allowed to time-out, the timer beeps and displays DONE. Press any key to continue. Setting and Mode values are saved automatically.

3.0 MAINTENANCE:

NOTE: Before performing maintenance or repairs on the sieve shaker, ALWAYS read and understand the safety, operating, and maintenance instructions.

ALWAYS disconnect the SS-14 from its power before performing maintenance or repair. The SS-14's motor has internal thermal protection which may cause it to restart automatically.

Send back your unit's registration card. This card registers the serial number in Gilson's master file and assures supply of proper parts when service is required. Provide this serial number whenever ordering replacement parts.

3.1 Cleaning the Unit:

3.1.1 Unplug unit before cleaning.

3.1.2 To perform maintenance or repairs, or to inspect the internal parts of the SS-14, place the unit on its back.

3.1.3 Clean unit AT LEAST once a year, also clean beneath the unit. Dirt can affect operation and test results. An appropriate cleaning schedule for your unit depends on the frequency of use, exposure to dirt, and sample makeup. Take care not to introduce cleaning agents to the timer or to the motor. If a thorough cleaning is required, the motor and timer must first be removed. See below.

3.2 Drive Belt Inspection and Adjustment:

3.2.1 Unplug shaker.

3.2.2 Periodically check drive belt for wear, tension, and alignment. A worn, loose, tight, or misaligned drive belt can affect the operation of your SS-14. The belt should be snug: neither too tight nor too loose. A snug fit assures longer life, less bearing wear, and quieter operation than a belt which is too tight. A loose belt may cause the unit to run too slowly or to slip. The drive belt should deflect 1/64 of the value of the space of the pulleys. The pulleys should be aligned to avoid excessive edge wear on the belt.

3.2.3 To adjust or replace the belt, lay the unit on its back, making sure not to pinch the electrical cord. Loosen the four Motor Mounting Bolts (#26) on the top of the outer case (see Parts Diagram). Move the motor up or down to adjust tension in the drive belt. Use a straight edge to maintain pulley alignment. If you must adjust the belt past the end of the slots to get proper snugness, replace the belt. NEVER force or pry the belt over the pulley flanges.

3.3 Motor Maintenance and Inspection

3.3.1 Unplug shaker.

3.3.2 Apply a few drops of oil to the motor and bearing at least once a year.

3.3.3 To remove motor, lay the unit on its back so that it will fall away from other internal parts when mounting bolts are removed. Remove the four motor mounting bolts on top of the outer case. As the motor loosens remove the drive belt. Remove the motor terminal cover plate which is held with two screws located where the power and timer cords enter the motor.

3.3.4 Disconnect the power and timer wire terminals, noting where each is attached, loosen the cord and remove the wires from the motor terminal box. The motor is now completely free. Remove motor belt pulley by loosening the set screw.

3.3.5 Have the motor cleaned or overhauled by a trained electric motor repair person. Replacement motors are available from Gilson. To install the motor, reverse the steps of the procedure described previously. Make sure that both pulleys are aligned and that the belt is properly tensioned.

3.4a Spring Wound Timer (SS-14):

3.4a.1 Unplug shaker.

3.4a.2 To remove the Timer, loosen both Timer terminals, and pull off the leads. Remove both screws from the retaining bracket on the back of the timer. This should free the timer unit.

3.4b Digital Timer (SS-14D):

3.4b.1 Unplug shaker

3.4b.2 To remove the digital timer, disconnect power from unit by unplugging machine from power source. Then disconnect wiring harness connection from motor and power supply by pulling connection apart, being careful not to disconnect sections (or wires) so they remain properly oriented to easily reconnect.

3.4b.3 Loosen and remove nuts from back of plastic box, this will now allow you to remove the timer out the front of the machine and the box to inside of machine.

3.5 Main Shaft:

3.5.1 Unplug shaker

NOTE: It can be helpful to take pictures before disassembling.

3.5.2 To remove the Main Shaft (#1) and attached sub units, lay the unit on its back and loosen the drive belt following the instructions in Section 3.2., and remove it. Loosen the four set screws touching the Main Shaft: Main Shaft Pulley (#11), Counterweight (#10), Eccentric (#9), and Main Shaft Collar (#3). Remove the Yoke Bushing Shoulder Bolts (#8). This frees the Main Shaft to be pushed to the right toward the front of the unit creating enough space to remove the Main Shaft Pulley (#11), Counterweight (#10), Eccentric (#9), Eccentric Bearing (#5), Yoke Bearing Collar (#6), and Main Shaft Collar (#4) respectively.

3.5.3 The Main shaft can be moved to the left (to the rear of the outer case) if only a few components on the right side are being serviced. Notice the spacing as each piece is removed. Inspect each disassembled piece for wear, especially the Main Shaft Bushing (#2), and the Eccentric (#9). Any signs of wear or egg-shaping warrant the part's replacement. Order replacement parts from Gilson by name and key number.

3.5.4 To reassemble the unit, follow the described sequence in reverse, taking caution to reestablish drive belt alignment and spacing of components. Use the SS-14 Parts Diagram as a guide.

4.0 TROUBLESHOOTING:

4.1 Unit Fails to Operate:

First establish that power is being delivered. The wall outlet should be tested with a meter or other device for evaluating current.

Check the Timer to make sure it is functioning properly. If the Timer is not functioning, order a new one from Gilson.

Unplug shaker.

Next, loosen the Motor Mounting Bolts and remove the Drive Belt.

Plug shaker in.

If the motor does not run on its own, continue with the Motor removal procedure described in the Maintenance Section. To gain access to the motor terminal cover plate, remove the plate and test for power cord continuity. If the power cord is not at fault, then repair or replace the motor.

4.2 Drive Shaft Binding is Evident:

Remove and inspect the bearings, bushings, and other components attached to the Main Shaft. To disassemble the drive shaft components, see the procedure outlined in the Maintenance Section. Note belt alignment and component spacing for reassembly.

4.3 Unit Operates but is Excessively Noisy:

Excessive noise may come from loose sieve retainer clamps, bolts, nuts, egg-shaped wear of bushings, or worn bearings. Always check for loose nuts, bolts and clamps before disassembling the SS-14's components. Replace the frame guide bushing (#21) when the bushing makes a flopping sound.

5.0 SIEVING ACCURACY:

Accurate sieving is achieved by the proper combination of well-maintained quality sieve shakers, quality ASTM or ISO testing sieves, and industry standard sieving techniques.

The following suggestions will improve test results:

5.1 Determine suitable test times for each type of sample. One method is to shake each sieve singly with a pan by hand for an additional minute following a test. If a significant percentage, say 1-2%, of the retained materials passes with the added sieving time, test time should be increased.

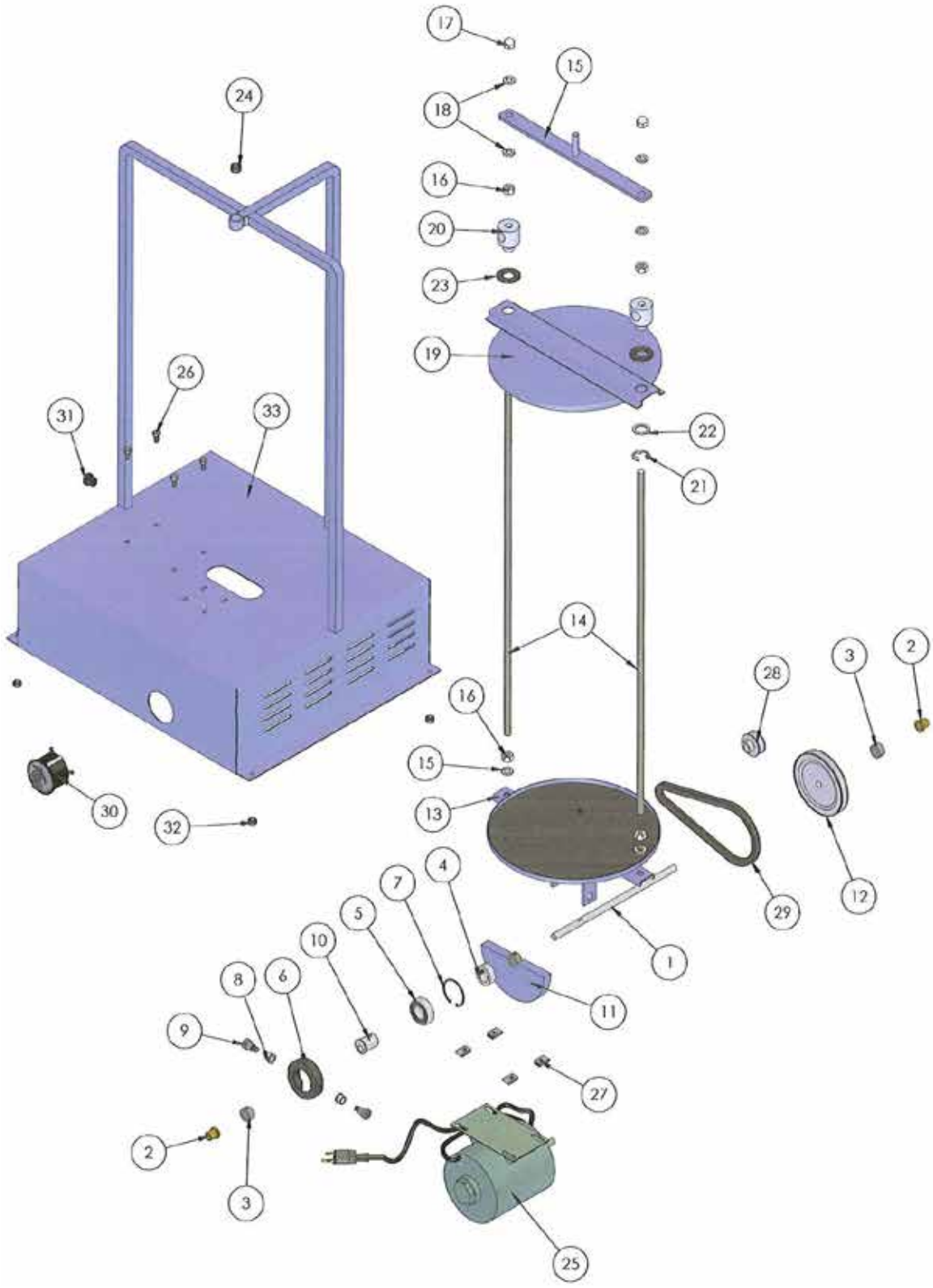
5.2 Make sure sample materials are within the design range of the test apparatus. The SS-14 has an approximate design range of No. 4 – No. 50 sieve sizes, but acceptable results may be possible over a wider range depending on sample characteristics.

5.3 **DO NOT** overload sieves. Consult ASTM, ISO or other applicable standards for acceptable loads for sieves of different diameters or for different applications. If the sample volume is too high, either reduce the starting sample size or insert extra intermediate sieves to reduce loading on the critical sieves.

5.4 Check sieves periodically to ensure that the wire cloth is still in compliance with ASTM or ISO standards. Perform frequent visual inspections of the sieve cloth and remove flawed or damaged sieves from service. Contact the experts at Gilson for advice on Sieve Verification or Reverification performed on NIST traceable equipment. Standard Reference Materials are also available for determination of effective sieve openings.

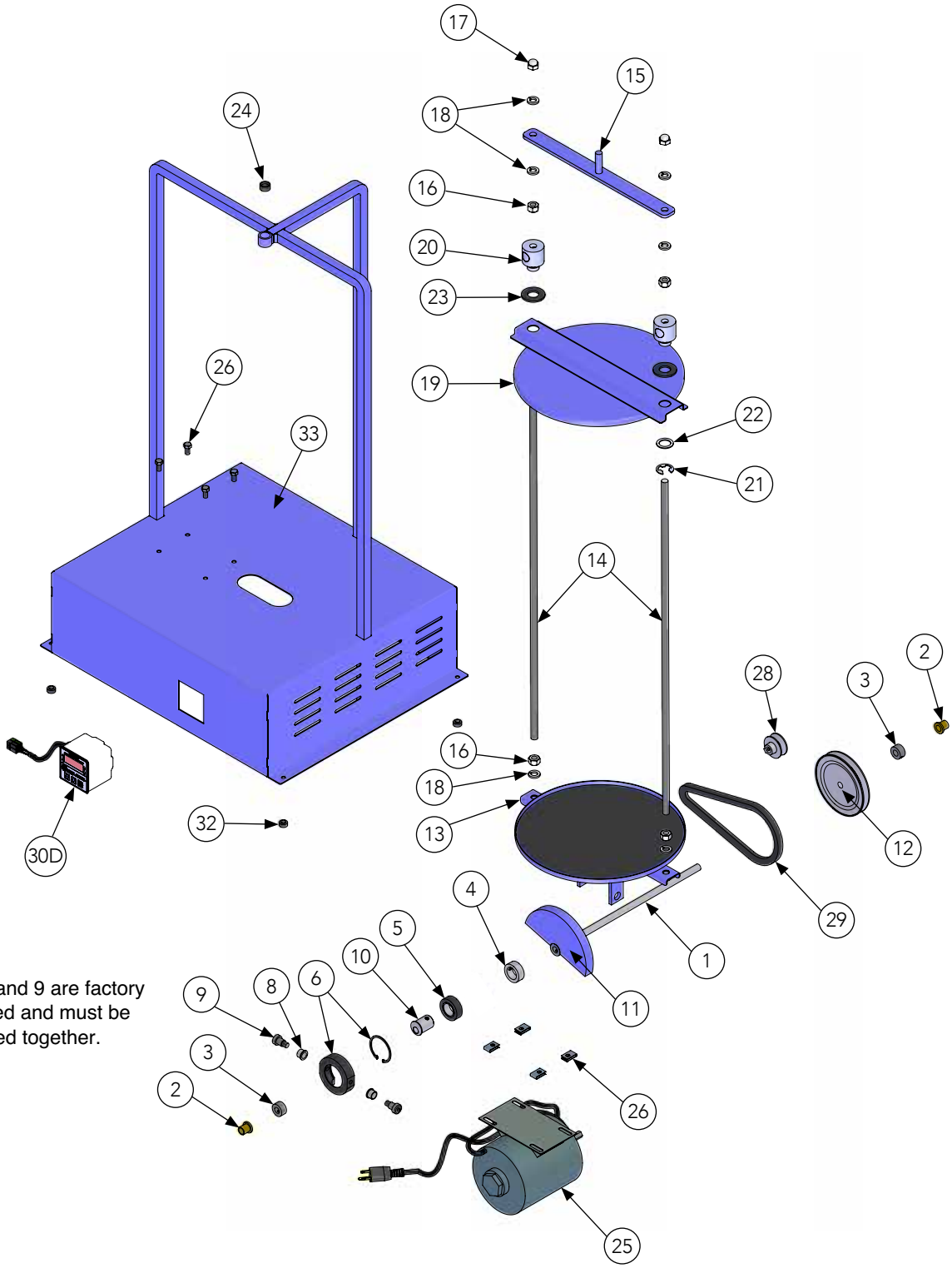
6.0 PARTS DIAGRAM:

6.1 SS-14



SS-14 Parts Diagram

6.2 SS-14D



Parts 5, 6 and 9 are factory assembled and must be ordered together.

SS-14D Parts Diagram

7.0 PARTS LIST:

7.1 SS-14 / SS-14D Parts List

Item No.	Part No.	Description	No. Req'd
MAIN SHAFT PARTS			
1	RPSS-15KEY1	Main Shaft	1
2	RPSS-15KEY2	Main Shaft Bushing	2
3	RPSS-15KEY3	Main Shaft Collar	1
4	RPSS-15KEY4	Eccentric Locking Collar	1
5	RPSS-15KEY5	Eccentric Bearing	1
6	RPSS-15KEY6	Yoke Bearing Collar with Snap Ring	1
8	RPSS-15KEY7	Yoke Bushing	2
9	RPSS-15KEY8	Yoke Bushing Shoulder Bolt	2
10	RPSS-15KEY9	Eccentric	1
11	RPSS-15KEY10	Counterweight	1
12	RPSS-15KEY11-5	Main Shaft Pulley for 60Hz	1
12	RPSS-15KEY11-6	Main Shaft Pulley for 50Hz (SS-14F)	1
SIEVE CLAMPING & HOLDING PARTS			
13	RPSS-14KEY13	Sieve Platform with Yoke	1
14	RPSS-14KEY14	Sieve Retaining Rods	2
15	RPSS-14KEY15	Sieve Retaining Frame	1
16	RPSS-14KEY16	Sieve Retaining Frame Hex Nuts	4
17	RPSS-14KEY17	Sieve Retaining Frame Acorn Nuts	2
18	RPSS-14KEY18	Sieve Retaining Frame Washers	6
19	RPSS-14KEY19	Sieve Cover Clamping Assy.	1
20	RPSS-14KEY20	Gilson Quick Clamps	2
21	RPPS-14KEY21,22,23	Quick Clamp Retaining Ring	2
22	RPPS-14KEY21,22,23	Quick Clamp Plastic Washer	2
23	RPPS-14KEY21,22,23	Quick Clamp Rubber Washer	2
24	RPSS-15KEY24	Sieve Retainer Frame Guide Bushing	1
ELECTRIC & MOVING PARTS			
25	RPSS-15KEY23	Motor for 115V/60Hz	1
25	RPSS-15KEY23-1	Motor for 220V/50Hz	4
26	RPSS-15KEY26	Motor Mounting Bolts w/Clip Nut	1
28	RPSS-15KEY24	Motor Pulley for 115V/60Hz	1
28	RPSS-15KEY24.5	Motor Pulley for 220V/50Hz	1
29	RPSS-15KEY25-6	Drive Belt for 115V/60Hz	1
29	RPSS-15KEY25-5	Drive Belt for 220V/50Hz	1
32	RPSS-15KEY27	Rubber Feet	2
28	RPSS-15KEY28	Spring Wound Timer for SS-14	1
28D	RP-TIMER-ART	Digital Timer for SS-14D	1
MAIN CASE PARTS			
33	RPSS-14KEY33	Outer Case with Stabilizer Bar	1
33	RPSS-14KEY33D	Outer Case with Stabilizer Bar-Digital Timer	1

8.0 ADDITIONAL INFORMATION:

8.1 Gilson Test Sieves

Gilson stocks the widest range and largest quantity of sieves of any major supplier. Immediate shipment is available for all popular sizes. Custom sieves with special diameters and stacking heights are also available.

ASTM Sieves meet the requirements of ASTM E 11. ISO Sieves meet ISO 565 specifications with tolerances to ISO 3310-1. All are serial numbered and supplied with a certificate of manufacturing conformance.

ASTM and ISO Test Sieves are categorized in three different classes.

- **Compliance Test Sieves** are supplied with a basic certificate of manufacturing conformance. All Gilson Test Sieves meet Compliance grade requirements.
- **Inspection Test Sieves** have a specified number of openings measured and reported for each sieve.
- **Calibration Test Sieves** have two to three times as many openings measured on each sieve, and are supplied with more detailed documentation.

Mesh Opening
Opening Sizes are listed using standard millimeter (mm) or micrometer (µm) descriptions, as well as traditional inch and number designations where appropriate. Gilson offers all mesh sizes, but not all sizes are available in every frame diameter. Common coarse sizes are also listed. Normally, every second or fourth size is used, although precision testing may require consecutive sizes. Additional sieves are often inserted into the sequence to avoid overloading of individual sieves or to better define a particular size range.

ISO Sieve Cloth can be mounted in 8in (203mm) frames when special-ordered. These items are nonreturnable when supplied as ordered.

Frame Diameter
Frames should accommodate the entire sample volume with enough surface area to avoid overloading individual sieves. The diameter selected must also fit the sieve shaker being used. Gilson stocks most common sizes. Inquire for custom sizes.

Frame Height
Sieve frames are designated as Full-Height or Half-Height. Intermediate-Height sieves are also available for 3in and 12in diameters. Half or Intermediate-Height frames allow a greater number of sieves to be used when stack height is limited. Full-Height frames allow free movement of larger particles during agitation for more efficient separation. ISO Test Sieves are fitted with black rubber O-Rings.

Frame and Cloth Material
- Stainless Steel Frame with Stainless Steel Cloth assures a sieve with the longest possible service life. This is the

SIEVE FRAME HEIGHTS & PARTICLE TOPSIZE LIMITS

Sieve		Frame Height		Particle Topsize	
Diameter	Frame Designation	Stacked	Overall	Recommended	Limit
3in (75mm)	FH IH HH	1-1/8 1 5/8	1-3/4 1-1/2 1-1/4	No.8 No.8 No.8	3/8in 3/8in 1/4in
6in (152mm)	FH HH	1-7/8 1-1/8	2-5/8 1-7/8	No.4 No.4	1/2in 3/8in
8in (203mm)	FH HH	2-1/8 1-1/8	2-5/8 1-5/8	No.4 No.4	1/2in 3/8in
200mm	FH HH	2-1/8 1-1/8	2-5/8 1-5/8	No.4 No.4	1/2in 3/8in
10in (254mm)	FH	3-1/8	4	3/8in	3/4in
12in (305mm)	FH IH HH	3-3/8 2-1/8 1-3/4	4-1/4 3 2-5/8	1/2in 1/2in 1/2in	1in 3/4in 1/2in
300mm	FH HH	2-1/2 1-1/2	3 2	1/2in 1/2in	3/4in 1/2in
18in (457mm)	FH	4-1/4	5-1/2	1-1/2in	2in

best choice where contamination, sanitation or extreme wear is an issue.

- Brass Frame with Stainless Steel Cloth is a popular choice that offers extended service and cost-effectiveness.

- Brass Frame with Brass Cloth is economical for light-duty applications. Coarse-series sieves are not available with brass cloth.

Backing Cloth
Back-up cloth prevents sagging or tearing of expensive fine stainless steel mesh. Unsatisfactory service life from a sieve would suggest replacement by a sieve built with backing cloth. To order, add the code "BU" to the model number of the sieve. These sieves are made-to-order, have longer delivery times and are non-returnable.

Pans and Covers
- Pans collect fines at the bottom of the sieve stack. Extended-Rim pans are also available to insert into the middle of a stack, allowing two samples to be tested at once.

- Covers are not necessary with most Gilson sieve shakers, but may be needed if using a different shaker or shaking by hand. The Cover-with-Ring has a wire finger loop in the center to facilitate removal.

Gilson Sieve Verification Services
Gilson Verification can be performed on any test sieve or Gilson screen tray, used or new. These services are ordered by specifying the appropriate model number given in our listing for Test Sieve and Screen Tray Verification and Services. An optical comparator with NIST traceable calibration measures opening sizes and wire diameters on each sieve, and a statistical analysis assures the standard deviations are within ASTM or ISO requirements for Inspection or Calibration grades. Sieves, trays, or wire cloth units are not included in the purchase price of the verification services. Because wire cloth stretches, sags, or tears, and abrasive materials can reduce wire diameters, a verification process should also be set up to regularly verify that working sieves still meet the specifications. These measurements can be taken directly using calipers or an optical comparator, by testing with Standard Reference Materials, or by returning to Gilson for Re-Verification. To verify used sieves, contact a Gilson customer service representative for shipping instructions.

Standard Reference Materials (SRM's)
Sieve Reference Materials are precision glass beads or powders for performance testing of sieves. They are traceable to the National Institute of Standards and Technology (NIST), or European Community Bureau of Reference (BCR). SRM's fit easily into internal quality programs following guidelines in ASTM E 2427, Sieve Acceptance by Performance Testing. User-Prepared Reference Materials can also be utilized under E 2427 in the same manner as SRM's. Because user materials are non-standard, they are not traceable and require much more handling. In addition, the user must determine acceptable tolerances for statistical analysis.

Sieve Shakers
The proper sieve shaker saves considerable time and effort, and yields superior accuracy, consistency, and repeatability compared to manual shaking methods for particle sizing. Effective agitation lifts all particles off the sieve cloth, reorients them, and allows them to be repeatedly "tried" to different openings at different angles. Careful review of shaker specifications allows optimal choices for different materials and applications. Greater sample volumes and large particle topsize may indicate selection of Gilson Test-Master®, Testing Screen or Porta-Screen® models for efficient processing.

8.2 Test Sieve & Screen Tray Verification & Services

There have been extensive revisions to the newest version of ASTM standard E 11, Specification for Wire Cloth and Sieves for Testing Purposes. Gilson is leading the way in educating our customers about the new specification and making these new products available. The new specification affects all test sieves, screen trays, and wire cloth, and changes the way the mesh openings are evaluated by looking at the statistical distribution of aperture sizes, rather than just the average opening sizes. In addition to a more accurate and reliable system of evaluation, the new system also allows compatibility with ISO 565 and 3310-1 requirements. There are now three grades, or classes of ASTM or ISO test sieves available; Compliance, Inspection and Calibration.

- **Compliance Test Sieves** are manufactured with wire cloth that has been inspected and measured in roll or sheet quantities prior to being cut and mounted in the individual sieve frames. Opening sizes are not measured in individual sieves. Each Compliance sieve is supplied with a certificate of manufacturing compliance, but no statistical documentation is given. Compliance sieves are designed for applications where a basic, reliable degree of accuracy and repeatability are sufficient.

- **Inspection Test Sieves** have a specified number of openings measured in each sieve after the cloth is mounted in the frame. There is a 99% confidence level that the standard deviation of these openings is within the maximum allowed by ASTM. Inspection Sieves are a good choice in applications where accuracy and repeatability are critical. Each Inspection Sieve consists of a Compliance Sieve with added Inspection Sieve Verification service.

- **Calibration Test Sieves** have about twice as many openings measured as Inspection Sieves. The higher number of openings measured on each sieve increases the confidence level to 99.73% that the standard deviation of these openings is within the maximum allowed by ASTM. Calibration Sieves should be used in applications where a very high degree of accuracy is required. Each Calibration Sieve consists of a compliance sieve with added Calibration Sieve Verification service.

New Gilson Test Sieves are guaranteed to meet the requirements of ASTM or ISO for Compliance, Inspection or Calibration grades as ordered, but for continued assurance of performance, procedures should be in place to regularly check working sieves as they age. Wire cloth stretches, sags, or even tears, and abrasive materials reduce wire diameter, causing an increase in opening size and loss of accuracy over time.

These same verification services are also available for screen trays used in Gilson Testing Screens, Test-Master®, Porta-Screen® and Gilso-Matic® machines.

Gilson Reverification Services can be performed on used ASTM or ISO Test Sieves or Screen Trays. An optical comparator with NIST traceable calibration measures opening and wire diameter sizes on each sieve. Certification reports are produced for the appropriate grade. These services are available for all ASTM and ISO sieve sizes and types, and are ordered by specifying model numbers for Inspection Sieve Verification, or Calibration Sieve Verification. Sieves are not included in the purchase price. When verifying used sieves, contact a Gilson customer service representative for shipping instructions.

Master-Matched Sieves are ASTM 8in diameter stainless woven-wire sieves from No.8 (2.36mm) to No.325 (45µm) that have been measured and shown to closely match a set of master sieves maintained by Gilson in a reference laboratory. Master-Matched Sieves from Gilson are always matched to the same master set, assuring that one sieve is very close to another. Master-Matched Sieves are also certified to meet ASTM E 11, so additional verification is not normally necessary. Master-Matching is done using special standard reference materials, sized for each sieve. Each sieve is performance tested to insure it yields ±2% by weight of the value of the master sieve.

Ordering

All Gilson test sieves meet ASTM or ISO requirements for Compliance Test Sieves. Ordering additional verification services for each individual sieve upgrades them to meet Inspection or Calibration specifications.



GV-65 Calibration Verification shown with Sieve



GV-66 Calibration Verification shown with Screen Tray


GILSON COMPANY, INC.
COMPLIANCE TEST SIEVE CERTIFICATION

Certificate of E 11 Compliance for all Sieves

TEST SIEVE & SCREEN TRAY VERIFICATION & SERVICES

Description	Model
Inspection Test Sieve Verification, ASTM E 11	GV-60
Calibration Test Sieve Verification, ASTM E 11	GV-65
Inspection Test Sieve Verification, ISO 565 and 3310-1	GV-62
Calibration Test Sieve Verification, ISO 565 and 3310-1	GV-63
Inspection Screen Tray Verification, ASTM E 11	GV-61
Calibration Screen Tray Verification, ASTM E 11	GV-66
Inspection Screen Tray Verification, ISO 565 and 3310-1	GV-64
Calibration Screen Tray Verification, ISO 565 and 3310-1	GV-67
Master-Matched Sieves	MM-70

8.3 8in Diameter ASTM Test Sieves

8IN DIAMETER ASTM TEST SIEVES

	ASTM E11		Stainless Cloth Stainless Frame		Stainless Cloth Brass Frame		Brass Cloth Brass Frame	
	Alt.	Std.	Full Ht.	Half Ht.	Full Ht.	Half Ht.	Full Ht.	Half Ht.
COARSE SERIES	4in	100.0mm	V8SF 4"	—	V8CF 4"	V8CH 4"	—	—
	3-1/2in	90.0mm	V8SF 3-1/2"	—	V8CF 3-1/2"	V8CH 3-1/2"	—	—
	3in	75.0mm	V8SF 3"	—	V8CF 3"	V8CH 3"	—	—
	2-1/2in	63.0mm	V8SF 2-1/2"	—	V8CF 2-1/2"	V8CH 2-1/2"	—	—
	2.12in	53.0mm	V8SF 2.12"	—	V8CF 2.12"	V8CH 2.12"	—	—
	2in	50.0mm	V8SF 2"	—	V8CF 2"	V8CH 2"	—	—
	1-3/4in	45.0mm	V8SF 1-3/4"	—	V8CF 1-3/4"	V8CH 1-3/4"	—	—
	1-1/2in	37.5mm	V8SF 1-1/2"	—	V8CF 1-1/2"	V8CH 1-1/2"	—	—
	1-1/4in	31.5mm	V8SF 1-1/4"	—	V8CF 1-1/4"	V8CH 1-1/4"	—	—
	1.06in	26.5mm	V8SF 1.06"	—	V8CF 1.06"	V8CH 1.06"	—	—
	1in	25.0mm	V8SF 1"	V8SH 1"	V8CF 1"	V8CH 1"	—	—
	7/8in	22.4mm	V8SF 7/8"	V8SH 7/8"	V8CF 7/8"	V8CH 7/8"	—	—
	3/4in	19.0mm	V8SF 3/4"	V8SH 3/4"	V8CF 3/4"	V8CH 3/4"	—	—
	5/8in	16.0mm	V8SF 5/8"	V8SH 5/8"	V8CF 5/8"	V8CH 5/8"	—	—
	0.530in	13.2mm	V8SF .530"	V8SH .530"	V8CF .530"	V8CH .530"	—	—
	1/2in	12.5mm	V8SF 1/2"	V8SH 1/2"	V8CF 1/2"	V8CH 1/2"	—	—
	7/16in	11.2mm	V8SF 7/16"	V8SH 7/16"	V8CF 7/16"	V8CH 7/16"	—	—
	3/8in	9.5mm	V8SF 3/8"	V8SH 3/8"	V8CF 3/8"	V8CH 3/8"	—	—
	5/16in	8.0mm	V8SF 5/16"	V8SH 5/16"	V8CF 5/16"	V8CH 5/16"	—	—
	0.265in	6.7mm	V8SF .265"	V8SH .265"	V8CF .265"	V8CH .265"	—	—
	1/4in	6.3mm	V8SF 1/4"	V8SH 1/4"	V8CF 1/4"	V8CH 1/4"	—	—
	No.3-1/2	5.6mm	V8SF #3-1/2	V8SH #3-1/2	V8CF #3-1/2	V8CH #3-1/2	—	—
	No.4	4.75mm	V8SF #4	V8SH #4	V8CF #4	V8CH #4	—	—
FINE SERIES	No.5	4.0mm	V8SF #5	V8SH #5	V8CF #5	V8CH #5	—	—
	No.6	3.35mm	V8SF #6	V8SH #6	V8CF #6	V8CH #6	—	—
	1/8in[1]	3.18mm	V8SF 1/8"	V8SH 1/8"	V8CF 1/8"	V8CH 1/8"	—	—
	No.7	2.8mm	V8SF #7	V8SH #7	V8CF #7	V8CH #7	—	—
	No.8	2.36mm	V8SF #8	V8SH #8	V8CF #8	V8CH #8	V8BF #8	V8BH #8
	No.10	2.0mm	V8SF #10	V8SH #10	V8CF #10	V8CH #10	V8BF #10	V8BH #10
	No.12	1.7mm	V8SF #12	V8SH #12	V8CF #12	V8CH #12	V8BF #12	V8BH #12
	No.14	1.4mm	V8SF #14	V8SH #14	V8CF #14	V8CH #14	V8BF #14	V8BH #14
	No.16	1.18mm	V8SF #16	V8SH #16	V8CF #16	V8CH #16	V8BF #16	V8BH #16
	No.18	1.0mm	V8SF #18	V8SH #18	V8CF #18	V8CH #18	V8BF #18	V8BH #18
	No.20	850µm	V8SF #20	V8SH #20	V8CF #20	V8CH #20	V8BF #20	V8BH #20
	No.25	710µm	V8SF #25	V8SH #25	V8CF #25	V8CH #25	V8BF #25	V8BH #25
	No.30	600µm	V8SF #30	V8SH #30	V8CF #30	V8CH #30	V8BF #30	V8BH #30
	No.35	500µm	V8SF #35	V8SH #35	V8CF #35	V8CH #35	V8BF #35	V8BH #35
	No.40	425µm	V8SF #40	V8SH #40	V8CF #40	V8CH #40	V8BF #40	V8BH #40
	No.45	355µm	V8SF #45	V8SH #45	V8CF #45	V8CH #45	V8BF #45	V8BH #45
	No.50	300µm	V8SF #50	V8SH #50	V8CF #50	V8CH #50	V8BF #50	V8BH #50
	No.60	250µm	V8SF #60	V8SH #60	V8CF #60	V8CH #60	V8BF #60	V8BH #60
	No.70	212µm	V8SF #70	V8SH #70	V8CF #70	V8CH #70	V8BF #70	V8BH #70
	No.80	180µm	V8SF #80	V8SH #80	V8CF #80	V8CH #80	V8BF #80	V8BH #80
	No.100	150µm	V8SF #100	V8SH #100	V8CF #100	V8CH #100	V8BF #100	V8BH #100
	No.120	125µm	V8SF #120	V8SH #120	V8CF #120	V8CH #120	V8BF #120	V8BH #120
	No.140	106µm	V8SF #140	V8SH #140	V8CF #140	V8CH #140	V8BF #140	V8BH #140
	No.170	90µm	V8SF #170	V8SH #170	V8CF #170	V8CH #170	V8BF #170	V8BH #170
	No.200	75µm	V8SF #200	V8SH #200	V8CF #200	V8CH #200	V8BF #200	V8BH #200
	No.230	63µm	V8SF #230	V8SH #230	V8CF #230	V8CH #230	V8BF #230	V8BH #230
	No.270	53µm	V8SF #270	V8SH #270	V8CF #270	V8CH #270	V8BF #270	V8BH #270
	No.325	45µm	V8SF #325	V8SH #325	V8CF #325	V8CH #325	V8BF #325	V8BH #325
	No.400	38µm	V8SF #400	V8SH #400	V8CF #400	V8CH #400	—	—
	No.450	32µm	V8SF #450	V8SH #450	V8CF #450	V8CH #450	—	—
	No.500	25µm	V8SF #500	V8SH #500	V8CF #500	V8CH #500	—	—
	No.635	20µm	V8SF #635	V8SH #635	V8CF #635	V8CH #635	—	—
	Regular Pan		V8SFXPN	V8SHXPN	V8BFXPN	V8BHXPN	V8BFXPN	V8BHXPN
	Extended Rim Pan		V8SFXPE	V8SHXPE	V8BFXPE	V8BHXPE	V8BFXPE	V8BHXPE
	Regular Cover		V8SFXCV		V8BFXCV		V8BFXCV	
	Cover with Ring		V8SFXCR		V8BFXCR		V8BFXCR	

[1] Not a standard ASTM E 11 size.



8in Round Test Sieves



SS-8R Gilson Tapping Sieve Shaker shown with Sieves

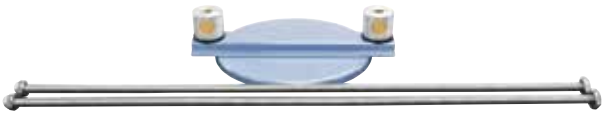
8.4 12in Diameter ASTM Test Sieves

12IN DIAMETER ASTM TEST SIEVES

	ASTM		Stainless Cloth Stainless Frame			Stainless Cloth Brass Frame			Brass Cloth Brass Frame		
	Alt.	Std.	Full Ht.	Inter. Ht.	Half Ht.	Full Ht.	Inter. Ht.	Half Ht.	Full Ht.	Inter. Ht.	Half Ht.
COARSE SERIES	4in	100.0mm	V12SF 4"	V12SI 4"	V12SH 4"	V12CF 4"	V12CI 4"	V12CH 4"	—	—	—
	3-1/2in	90.0mm	V12SF 3-1/2"	V12SI 3-1/2"	V12SH 3-1/2"	V12CF 3-1/2"	V12CI 3-1/2"	V12CH 3-1/2"	—	—	—
	3in	75.0mm	V12SF 3"	V12SI 3"	V12SH 3"	V12CF 3"	V12CI 3"	V12CH 3"	—	—	—
	2-1/2in	63.0mm	V12SF 2-1/2"	V12SI 2-1/2"	V12SH 2-1/2"	V12CF 2-1/2"	V12CI 2-1/2"	V12CH 2-1/2"	—	—	—
	2.12in	53.0mm	V12SF 2.12"	V12SI 2.12"	V12SH 2.12"	V12CF 2.12"	V12CI 2.12"	V12CH 2.12"	—	—	—
	2in	50.0mm	V12SF 2"	V12SI 2"	V12SH 2"	V12CF 2"	V12CI 2"	V12CH 2"	—	—	—
	1-3/4in	45.0mm	V12SF 1-3/4"	V12SI 1-3/4"	V12SH 1-3/4"	V12CF 1-3/4"	V12CI 1-3/4"	V12CH 1-3/4"	—	—	—
	1-1/2in	37.5mm	V12SF 1-1/2"	V12SI 1-1/2"	V12SH 1-1/2"	V12CF 1-1/2"	V12CI 1-1/2"	V12CH 1-1/2"	—	—	—
	1-1/4in	31.5mm	V12SF 1-1/4"	V12SI 1-1/4"	V12SH 1-1/4"	V12CF 1-1/4"	V12CI 1-1/4"	V12CH 1-1/4"	—	—	—
	1.06in	26.5mm	V12SF 1.06"	V12SI 1.06"	V12SH 1.06"	V12CF 1.06"	V12CI 1.06"	V12CH 1.06"	—	—	—
	1in	25.0mm	V12SF 1"	V12SI 1"	V12SH 1"	V12CF 1"	V12CI 1"	V12CH 1"	—	—	—
	7/8in	22.4mm	V12SF 7/8"	V12SI 7/8"	V12SH 7/8"	V12CF 7/8"	V12CI 7/8"	V12CH 7/8"	—	—	—
	3/4in	19.0mm	V12SF 3/4"	V12SI 3/4"	V12SH 3/4"	V12CF 3/4"	V12CI 3/4"	V12CH 3/4"	—	—	—
	5/8in	16.0mm	V12SF 5/8"	V12SI 5/8"	V12SH 5/8"	V12CF 5/8"	V12CI 5/8"	V12CH 5/8"	—	—	—
	0.530in	13.2mm	V12SF .530"	V12SI .530"	V12SH .530"	V12CF .530"	V12CI .530"	V12CH .530"	—	—	—
	1/2in	12.5mm	V12SF 1/2"	V12SI 1/2"	V12SH 1/2"	V12CF 1/2"	V12CI 1/2"	V12CH 1/2"	—	—	—
	7/16in	11.2mm	V12SF 7/16"	V12SI 7/16"	V12SH 7/16"	V12CF 7/16"	V12CI 7/16"	V12CH 7/16"	—	—	—
	3/8in	9.5mm	V12SF 3/8"	V12SI 3/8"	V12SH 3/8"	V12CF 3/8"	V12CI 3/8"	V12CH 3/8"	—	—	—
	5/16in	8.0mm	V12SF 5/16"	V12SI 5/16"	V12SH 5/16"	V12CF 5/16"	V12CI 5/16"	V12CH 5/16"	—	—	—
	0.265in	6.7mm	V12SF .265"	V12SI .265"	V12SH .265"	V12CF .265"	V12CI .265"	V12CH .265"	—	—	—
	1/4in	6.3mm	V12SF 1/4"	V12SI 1/4"	V12SH 1/4"	V12CF 1/4"	V12CI 1/4"	V12CH 1/4"	—	—	—
	No.3-1/2	5.6mm	V12SF #3-1/2	V12SI #3-1/2	V12SH #3-1/2	V12CF #3-1/2	V12CI #3-1/2	V12CH #3-1/2	—	—	—
	No.4	4.75mm	V12SF #4	V12SI #4	V12SH #4	V12CF #4	V12CI #4	V12CH #4	—	—	—
FINE SERIES	No.5	4.0mm	V12SF #5	V12SI #5	V12SH #5	V12CF #5	V12CI #5	V12CH #5	—	—	—
	No.6	3.35mm	V12SF #6	V12SI #6	V12SH #6	V12CF #6	V12CI #6	V12CH #6	—	—	—
	1/8in[1]	3.18mm	V12SF 1/8"	V12SI 1/8"	V12SH 1/8"	V12CF 1/8"	V12CI 1/8"	V12CH 1/8"	—	—	—
	No.7	2.8mm	V12SF #7	V12SI #7	V12SH #7	V12CF #7	V12CI #7	V12CH #7	—	—	—
	No.8	2.36mm	V12SF #8	V12SI #8	V12SH #8	V12CF #8	V12CI #8	V12CH #8	V12BF #8	V12BI #8	V12BH #8
	No.10	2.0mm	V12SF #10	V12SI #10	V12SH #10	V12CF #10	V12CI #10	V12CH #10	V12BF #10	V12BI #10	V12BH #10
	No.12	1.7mm	V12SF #12	V12SI #12	V12SH #12	V12CF #12	V12CI #12	V12CH #12	V12BF #12	V12BI #12	V12BH #12
	No.14	1.4mm	V12SF #14	V12SI #14	V12SH #14	V12CF #14	V12CI #14	V12CH #14	V12BF #14	V12BI #14	V12BH #14
	No.16	1.18mm	V12SF #16	V12SI #16	V12SH #16	V12CF #16	V12CI #16	V12CH #16	V12BF #16	V12BI #16	V12BH #16
	No.18	1.0mm	V12SF #18	V12SI #18	V12SH #18	V12CF #18	V12CI #18	V12CH #18	V12BF #18	V12BI #18	V12BH #18
	No.20	850µm	V12SF #20	V12SI #20	V12SH #20	V12CF #20	V12CI #20	V12CH #20	V12BF #20	V12BI #20	V12BH #20
	No.25	710µm	V12SF #25	V12SI #25	V12SH #25	V12CF #25	V12CI #25	V12CH #25	V12BF #25	V12BI #25	V12BH #25
	No.30	600µm	V12SF #30	V12SI #30	V12SH #30	V12CF #30	V12CI #30	V12CH #30	V12BF #30	V12BI #30	V12BH #30
	No.35	500µm	V12SF #35	V12SI #35	V12SH #35	V12CF #35	V12CI #35	V12CH #35	V12BF #35	V12BI #35	V12BH #35
	No.40	425µm	V12SF #40	V12SI #40	V12SH #40	V12CF #40	V12CI #40	V12CH #40	V12BF #40	V12BI #40	V12BH #40
	No.45	355µm	V12SF #45	V12SI #45	V12SH #45	V12CF #45	V12CI #45	V12CH #45	V12BF #45	V12BI #45	V12BH #45
	No.50	300µm	V12SF #50	V12SI #50	V12SH #50	V12CF #50	V12CI #50	V12CH #50	V12BF #50	V12BI #50	V12BH #50
	No.60	250µm	V12SF #60	V12SI #60	V12SH #60	V12CF #60	V12CI #60	V12CH #60	V12BF #60	V12BI #60	V12BH #60
	No.70	212µm	V12SF #70	V12SI #70	V12SH #70	V12CF #70	V12CI #70	V12CH #70	V12BF #70	V12BI #70	V12BH #70
	No.80	180µm	V12SF #80	V12SI #80	V12SH #80	V12CF #80	V12CI #80	V12CH #80	V12BF #80	V12BI #80	V12BH #80
	No.100	150µm	V12SF #100	V12SI #100	V12SH #100	V12CF #100	V12CI #100	V12CH #100	V12BF #100	V12BI #100	V12BH #100
	No.120	125µm	V12SF #120	V12SI #120	V12SH #120	V12CF #120	V12CI #120	V12CH #120	V12BF #120	V12BI #120	V12BH #120
	No.140	106µm	V12SF #140	V12SI #140	V12SH #140	V12CF #140	V12CI #140	V12CH #140	V12BF #140	V12BI #140	V12BH #140
	No.170	90µm	V12SF #170	V12SI #170	V12SH #170	V12CF #170	V12CI #170	V12CH #170	V12BF #170	V12BI #170	V12BH #170
	No.200	75µm	V12SF #200	V12SI #200	V12SH #200	V12CF #200	V12CI #200	V12CH #200	V12BF #200	V12BI #200	V12BH #200
	No.230	63µm	V12SF #230	V12SI #230	V12SH #230	V12CF #230	V12CI #230	V12CH #230	V12BF #230	V12BI #230	V12BH #230
	No.270	53µm	V12SF #270	V12SI #270	V12SH #270	V12CF #270	V12CI #270	V12CH #270	V12BF #270	V12BI #270	V12BH #270
	No.325	45µm	V12SF #325	V12SI #325	V12SH #325	V12CF #325	V12CI #325	V12CH #325	V12BF #325	V12BI #325	V12BH #325
	No.400	38µm	V12SF #400	V12SI #400	V12SH #400	V12CF #400	V12CI #400	V12CH #400	—	—	—
	No.450	32µm	V12SF #450	V12SI #450	V12SH #450	V12CF #450	V12CI #450	V12CH #450	—	—	—
	No.500	25µm	V12SF #500	V12SI #500	V12SH #500	V12CF #500	V12CI #500	V12CH #500	—	—	—
	No.635	20µm	V12SF #635	V12SI #635	V12SH #635	V12CF #635	V12CI #635	V12CH #635	—	—	—
	Regular Pan		V12SFXPN	—	V12SHXPN	V12BFXPN	V12BIXPN	V12BHXPN	V12BFXPN	V12BIXPN	V12BHXPN
	Extended Rim Pan		V12SFXPE	V12SIXPE	V12SHXPE	V12BFXPE	V12BIXPE	V12BHXPE	V12BFXPE	V12BIXPE	V12BHXPE
	Regular Cover			V12SFXCV			V12BFXCV			V12SFXCV	
	Cover with Ring			V12SFXCR			V12BFXCR			V12SFXCR	

[1] Not a standard ASTM E11 size.

8.5 Accessories



SSA-807



SSA-809 shown on SS-12R with Sieves



SSA-805R shown with SS-12R & Sieves

ACCESSORIES	
Description	**Model**
EZ-Clamp Upgrade Kit replaces the original clamping assemblies on older Gilson Tapping Sieve Shakers. Knurled knobs with push-button release, and slide freely up and down the clamp rods for smooth, easy clamping. Once in position, a quick twist tightly secures the sieve stack. When the test is complete, push the EZ-Clamp button and raise just enough to remove the stack. Upon release of the button, the clamps stay in place, ready for the next test. EZ-Clamp kits include free-sliding push-button knobs, an integral sieve cover and new clamp rods.	
EZ-Clamp Upgrade Kit for SS-8R	SSA-807
EZ-Clamp Upgrade Kit for SS-12R	SSA-809
Gilson Sound Enclosure controls noise and dust associated with SS-8R and SS-12R Sieve Shakers and other lab equipment. Sturdy painted steel case with full-width hinged doors is lined with 1in (25.4mm) of sound-attenuating foam. Product Dimensions: 31x19x46in (800x500x1,200mm), WxDxH.	SSA-805R
Clean-N-Stor accessories are time-saving devices for collection, cleaning, and weighing functions associated with sieving operations. Inverting an 8in or 200mm sieve on the stainless steel funnel allows quick emptying and cleaning of contents into a receiving scoop or pan. A sieve stack can also be stored on top of the funnel. A scoop and soft-bristle cleaning brush are included with all models. The SSA-801 attaches to the top of the SS-8R case. SSA-802 is a stand-alone model that can be positioned directly over an electronic balance, so sieve fractions can be weighed as the sieve is being cleaned. OBA-15R is an adjustable-height Clean-N-Stor version designed to fit over taller balances.	
Clean-N-Stor Attachment for SS-8R	SSA-801
Stand-Alone Clean-N-Stor	SSA-802
Adjustable-Height Clean-N-Stor	OBA-15R



SSA-801 shown with Sieves on SS-8R



SSA-802 shown with Sieve