

RO-TAP® TEST SIEVE SHAKERS

RX-29 and RX-30 Models

The industry standard in test sieve shakers, W.S. Tyler's Ro-Tap has a unique two-dimensional operation: a horizontal, circular motion and a vertical, tapping motion. This special action allows material particles to stratify and "seek" critical openings in the test media. This unit provides the most accurate and consistent particle analysis testing.

The **RX-29** model is designed for testing with 8" diameter test sieves; the **RX-30** model is designed for testing with 12" diameter test sieves.

- Testing applications — **RX-29**: 2" down through 635 mesh (20 micron); **RX-30**: 4" down through 500 mesh (25 micron)
- Requires minimal maintenance
- Heavy-duty use
- Features 99 minute digital timer/clock, tolerance, 0.1 second
- Each unit is test run and serialized prior to shipment

SPECIFICATIONS

- Oscillations per Minute: 278±10
- Oscillations Displacement: 1-1/8" x 7/16"
- Taps per Minute: 150±10

MODEL	NUMBER OF SIEVES	
	FULL HEIGHT	HALF HEIGHT
RX-29 (8" or 200mm Dia.)	6 Sieves w/FH Pan	13 Sieves w/HH Pan
RX-30 (12" or 300mm Dia.)	4 Sieves w/FH Pan 6 Sieves w/HH Pan*	8 Sieves w/HH Pan

AT 1725 RPM, 60 CYCLE CURRENT		
PART #	DESCRIPTION	
RX-29	115v (8" Test Sieves)	
RX-29-16	230v (8" Test Sieves)	
RX-30	115v (12" Test Sieves)	
RX-30-16	230v (12" Test Sieves)	

AT 1425 RPM, 50 CYCLE CURRENT		
PART #	DESCRIPTION	
RX-29-2	115v (8" Test Sieves)	
RX-29-10	230v (8" Test Sieves)	
RX-30-2	115v (12" Test Sieves)	
RX-30-10	230v (12" Test Sieves)	

All models are wired for single phase current.



Test Sieves sold separately.

Lab Kits consisting of Ro-Tap, sound enclosure and test stand are available at a discounted price. Call for details.

Dimensions — Unit: 28" wide x 21" deep x 25" high
(71cm x 54cm x 64cm)

Weight — Unit: 180 lbs. (82 kg)

RO-TAP® Conversion Kits

KIT PART NO.	DESCRIPTION	
RX-32	Ro-Tap 12" Diameter to 8" Diameter Test Sieve Kit	
R-30033-1	Ro-Tap 8" Diameter to 3" Diameter Test Sieve Kit	
R-40038	Ro-Tap Digital Timer Conversion Kit — 115 Volt	
R-40039	Ro-Tap Digital Timer Conversion Kit — 230 Volt	

To ensure lasting dependable service, **RO-TAP** Sieve Shakers must occasionally be upgraded with parts that are long-wearing, durable, and cost-effective. Maintenance kits are available for the replacement of parts due to normal wear and tear. **W.S. Tyler** – recommends the use of these kits as a means to minimize down-time due to minor repairs. The purchase of a minor maintenance kit is also recommended with each new **RO-TAP** Sieve Shaker.

PART NO.	DESCRIPTION	INCLUDES	
10121	RX-29, RX-30, & RX-94 RX-29, RX-30, & RX-94	2 Eccentric Discs (R-10034), 1 Flange Bushing (R-10061), 1 Bearing (R-10062), 1 Cork (R-10066A), and 2 Flange Bearings (R-10063)	
10122	RX-29 Major Maintenance Kit	1 Minor Maintenance Kit (10121), 1 Timing Belt (R-10058), 1 Upper Carrying Plate (R-30008), 1 Cam Gear (R-20039), and 1 Timing Belt Pulley (R-30015)	
10123	RX-94 Major Maintenance Kit	Kit Part No. 10122 except Upper Carrying Plate	



* Prices reflect discount versus purchasing the items separately.

RO-TAP® E SIEVE SHAKERS

The newly designed **Ro-Tap® E** and EML test sieve shakers make proven technology even better. With a smaller footprint and less noise than the traditional Ro-Tap, these shakers are electromagnetically driven to generate a three dimensional sieving motion with automatic amplitude.

Model Options shown below

Part Number	Model Name	Amplitude	Diameter Sieves	Wet Testing
RX-29-E	PURE	Fine & Coarse	8", 200mm	N
550099	EML Premium	Adjustable up to 3mm	8", 200mm	N
550100	EML Premium Remote	Adjustable up to 3mm	8", 200mm	Y
550051	EML 315	Adjustable up to 3mm	12", 300mm	Optional

Test Sieves Sold Separately



TEST SIEVE SHAKERS



Test Sieves sold separately.

RO-TAP® RX-94 Model

RO-TAP® RX-94 Test Sieve Shaker utilizes the same traditional design as the RX-29 and RX-30 models. In addition, the unit features a cavity that allows for two “stacks” of 8" diameter test sieves. This allows for twice the processing capacity in nominally the same time required to complete one test.

- Designed for use with 8" diameter test sieves only.
- Testing application: 2" down through 635 mesh (20 micron).
- Newly designed easy lock clamping system.

SPECIFICATIONS

- Oscillations per Minute: 278±10
- Oscillation Displacement: 1-1/8" x 7/16"
- Taps per Minute: 150±10 • Hammer Weight: 5 lbs., 6 oz.

Recommendations regarding the maximum number of test sieves that can be used with **Ro-Tap** Test Sieve Shakers:

MODEL	NUMBER OF SIEVES	
	FULL HEIGHT	HALF HEIGHT
RX-94 (8" or 200mm Dia.)	2 Stacks of 6 Sieves w/FH Pan	2 Stacks of 13 Sieves w/HH Pan

A top cover is required for testing.

PART #	DESCRIPTION	
RX-94	115v. 60 Hz Current	
RX-94-1	230v. 60 Hz Current	
RX-94-2	115v. 50 Hz Current	
RX-94-3	230v. 50 Hz Current	

Prices do not include test sieves.

All models are wired for single phase current only.

Dimensions — Unit: 30" wide x 27" deep x 26" high (75cm x 68cm x 56cm)
Shipping: 31" wide x 31" deep x 30" high (77cm x 78cm x 75cm)

Weight — Unit: 220 lbs. (100 kg)
Shipping: 242 lbs. (110 kg)



Test Sieves sold separately.

RX-812 Coarse Sieve Shaker Model

Designed to be used in coarse testing applications, the affordable RX-812 Coarse Sieve Shaker has the unique capability of using both 8" diameter and 12" diameter test sieves, simply by using the quick-change adapters provided. The RX-812 has a quiet operation and utilizes an effective action that gives consistent, accurate results.

- Designed for use with 8" and 12" diameter test sieves.
- Not recommended for analysis with particles 150 micron (100 mesh and finer) and smaller.

SPECIFICATIONS

- Oscillations per Minute: 280 (60Hz); 231 (50Hz).

Recommendations regarding the maximum number of test sieves that can be used with **Ro-Tap** Test Sieve Shakers:

MODEL	NUMBER OF SIEVES	
	FULL HEIGHT	HALF HEIGHT
RX-812 (8" or 200mm Dia.)	6 Sieves w/FH Pan	13 Sieves w/HH Pan
RX-812 (12" or 300mm Dia.)	4 Sieves w/FH Pan	6 Sieves w/HH Pan* or 8 Sieves w/HH Pan

A top cover is required for testing.

* Intermediate height.

PART #	DESCRIPTION	
RX-812	115v. 60 Hz Current	
RX-812-1	230v. 60 Hz Current	
RX-812-2	115v. 50 Hz Current	
RX-812-3	230v. 50 Hz Current	

Prices do not include test sieves.

All models are wired for single phase current only.

Dimensions — Unit: 23" wide x 15" deep x 31.5" high (59cm x 38cm x 80cm)
Shipping: 25" wide x 19" deep x 15" high (64cm x 49cm x 38cm)

Weight — Unit: 55 lbs. (25 kg)
Shipping: 95 lbs. (28 kg)

RO-TAP® SOUND ENCLOSURE CABINET & TEST STAND

Designed to be used exclusively with **Ro-Tap** Sieve Shakers, operating noise levels are reduced from approximately 85 dB to 78 dB. The cabinets are fabricated with 18 gauge steel and a 1" metal faced, acoustic foam inner liner.

Specifically designed for RX-29 and RX-30 **Ro-Tap** Sieve and RX-812 Coarse Sieve Shaker, the **Ro-Tap** Test Stand can be used with or without the Sound Enclosure Cabinet.

- Allows for relatively fast, simple installation and set-up of the **Ro-Tap** Sieve Shaker.
- Attractive, sturdy steel construction, with anchor brackets for fastening to floor or foundation.
- Allows for optimal use of available laboratory space dedicated to test sieving.



CABINET MODEL #	DESCRIPTION	
R-30050	RX-29 & RX-30	
RX-99 (Not Pictured)	RX-94	

PARTS #	DESCRIPTION	
R-40041 (See Picture)	Test Stand	
R-10099-30 (RX-99 only)	Cover Springs w/Ball Stud	

ROTARY SIFTER RX-20



- RX-20 Rotary Sifter offers classic design and efficient operation in an economical package. A proven sieving method preferred by many DOTs, based on a popular design developed many years ago. The Rotary Sifter offers a faster conversion from 8-12 inch or 200-300mm diameter sieves. The sieve stack capacity ranges from six 12 inch diameter full height sieves with pan or up to twenty 8 inch diameter half-height sieves with pan.
- The totally enclosed cabinet allows safe, dust-free operation. Individual tapping hammers assist passage of near-size particles. The digital timer has an LED display which precisely times operation up to 99 minutes at +/- 1 second. The system is driven by a 1/3hp continuous-duty motor.

- * Accurate results
- * Simple and efficient
- * Dimensions: 19x24x58in
- * Estimated ship weight: 215lb

PART #	DESCRIPTION	
RX - 20	ROTARY SIFTER	

SIEVING ACCESSORIES



ULTRASONIC TEST SIEVE CLEANER

Produces ultrasonic vibrations in a cleaning fluid bath, which causes contaminants to become dislodged from both sieve frame and media.

- 8" or 200mm diameter test sieves only
- Compact and portable
- Stainless steel oscillation tank
- Built-in timer
- Unit weight: 12 lbs.
- Solution not included (mild detergent recommended)

PART #	
P-1405	

Dimensions — 9 1/2" diameter x 10" high (24cm x 25cm)



WET TEST SIEVING KIT

Allows for testing in wet environment when material is not soluble in water. (Kit does not include **RO-TAP**® shaker)

- For use with W.S. Tyler **Ro-Tap** RX-29 and RX-94 Sieve Shakers.
- Kit weight: 27 lbs.

MODEL	PART #	
RX-29	LA11112	
RX-94	LA11194	

* Test Sieving Kit includes: Cover, Pan, Hoses, Clamps.

COVER WITH SPOUT	
PART # 8498	

PAN WITH SPOUT	
PART # 8495	

SAMPLING DEVICES

SAMPLING SPLITTERS

Reduces or halves material samples for making sieve tests. The Splitters maintain representative particle size distribution while reducing the original sample size.

Dimensions —

SS-50: Unit: 12" wide x 14" deep x 12" high (30cm x 36cm x 30cm)
Shipping: 14" wide x 16" deep x 16" high (36cm x 41cm x 41cm)

SS-100: Unit: 22" wide x 16" deep x 16" high (56cm x 41cm x 41cm)
Shipping: 24" wide x 26" deep x 16" high (61cm x 66cm x 41cm)

Weight —

SS-50: Unit: 10 lbs. (5 kg) SS-100: Unit: 25 lbs. (10 kg)
Shipping: 16 lbs. (7 kg) Shipping: 35 lbs. (12 kg)

PART #	DESCRIPTION	MAX. PARTICLE SIZE	
SS-50	Sample Splitter w/14 1/2" Discharge Chutes	1/8"	
SS-100	Sample Splitter w/16 1/2" Discharge Chutes	1/4"	



SPINNING RIFFLER

The RX-230 Spinning Riffler uses a vibratory feeder to provide a constant flow of material from the stainless steel hopper. The vibrating feeder then feeds the sampling tubes from 1 to 16 individual samples. Each sample can then be capped and stored immediately, with minimal handling and little chance for outside contamination.

Spin riffling is the method of choice for sampling accuracy and reliability for dry, free flowing particles. This unit will virtually eliminate operator error and bias associated with other types of sampling devices.

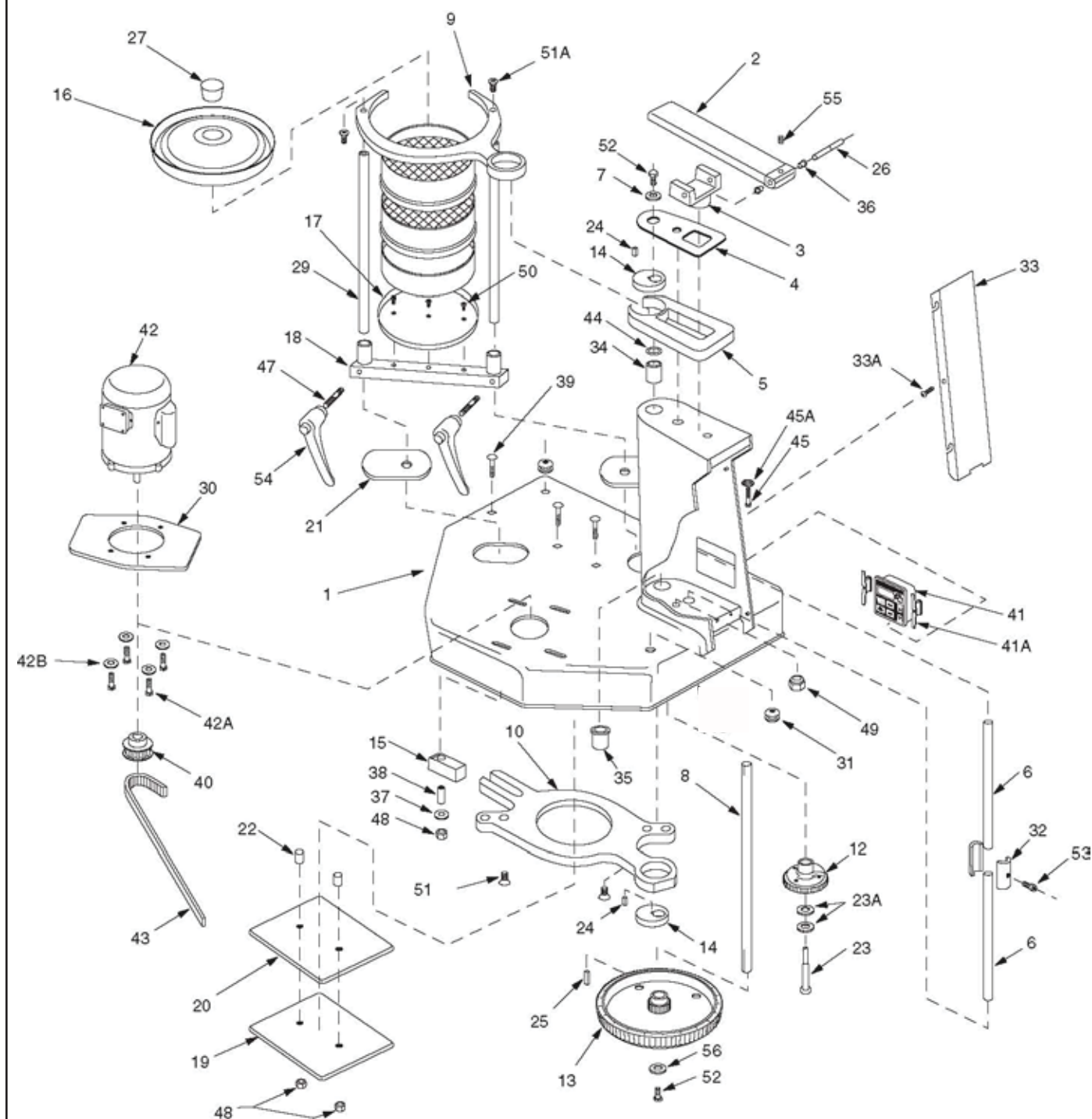
The RX-230 Spinning Riffler includes a sixteen-port dividing head, a set of sixteen standard tube sample vessels, a sample drum to contain the vessels and a hopper plate for positioning the vessels in the drum. All of these parts are available as replacement parts.

Dimensions — 13" wide x 20 1/2" deep x 23" high
Weight — 25 lbs.



PART #	DESCRIPTION	
RX-230	Spinning Riffler/Dual Voltage	

RO-TAP® RX-29 AND RX-30 PARTS DIAGRAM



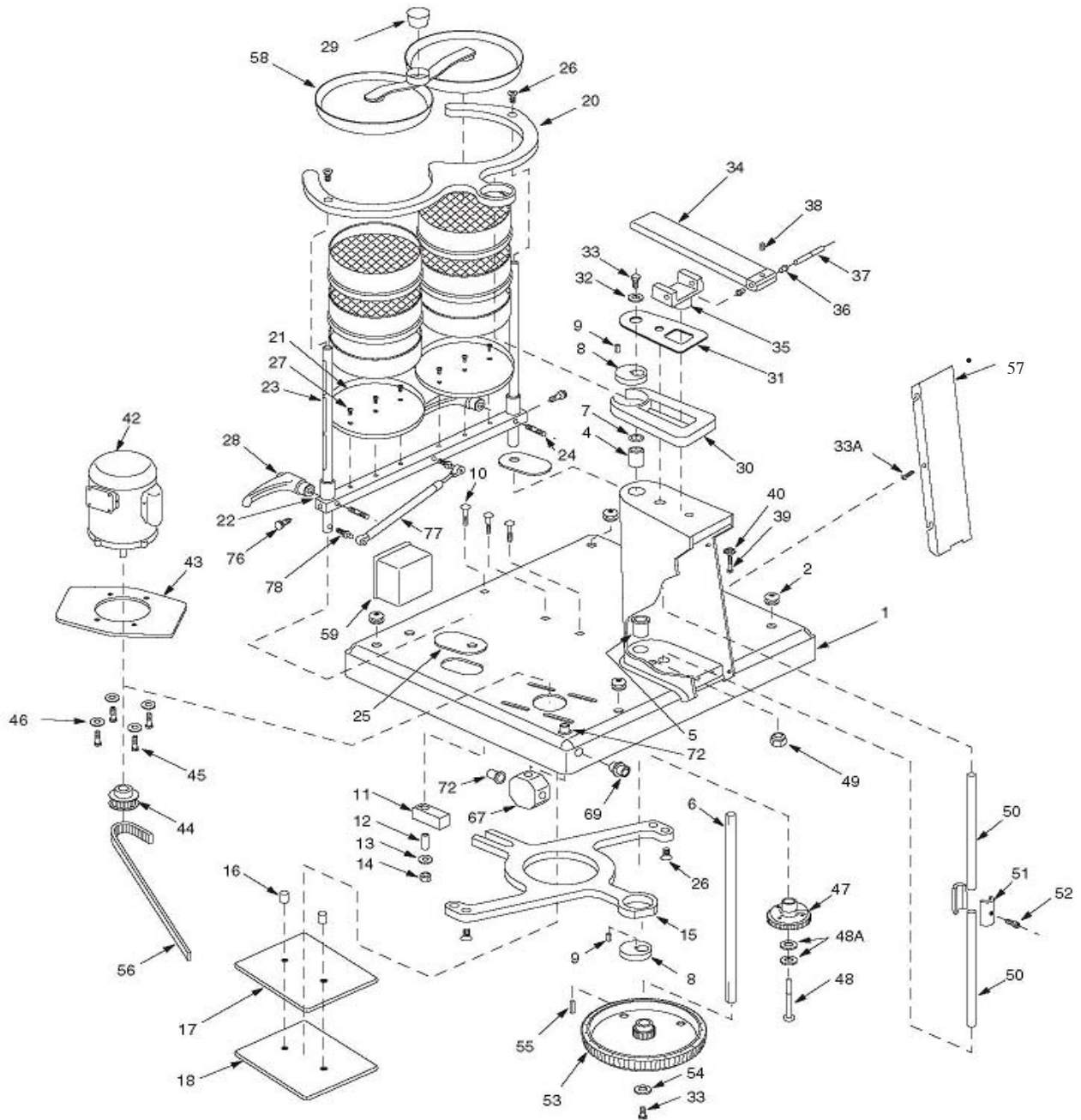
See Page 15 for Recommended Service Parts Kits

RO-TAP® RX-29 AND RX-30 PARTS

ITEM NO.	PART NO.	DESCRIPTION	REQ'D.
1	107770	Base	1
2	R-20029	Hammer	1
3	R-20023	Hammer Block	1
4	R-30019	Sheet Guard	1
5	R-30010	Rotating Guard	1
6	R-10036	Lift Rod	2
7	R-10038	Upper Main Shaft Washer	1
8	R-20027	Main Shaft	1
9	R-30008	Upper Carrying Plate – RX29 – plastic	1
9A	R-30008-1	Upper Carrying Plate – RX-29 – Heavy-Duty Cast Aluminum	1
9B *	R-30027	Upper Carrying Plate –RX-30–steel	1
10	R-30009	Lower Carrying Plate	1
12	R-20039	Cam Gear	1
13	R-30015	Timing Belt Pulley	1
14	R-10034	Eccentric Disc.	2
15	R-10032	Block	1
16	R-30007	Sieve Cover– RX-29	1
16	R-30011	Sieve Cover – RX-30	1
17	R-30006	Sieve Support Plate – RX-29	1
17	R-30013	Sieve Support Plate – RX-30	1
18	R-30023	Sieve Support Clamp Bar – RX-29	1
18	R-30022	Sieve Support Clamp Bar – RX-30	1
19	R-20019	Backup Plate	1
20	R-20020	Bearing Plate	1
21	R-20033	Shield	2
22	R-10028	Tube Spacer	2
23	R-10029	Cam Shoulder Screw	1
23A	106582	1/2" I.D. Shim	2
24	R-10042	Main Shaft Key to Eccentric	2
25	R-10039	Main Shaft Key – Lower	1
26	R-10035	Hammer Pin	1
27	R-10066-A	Cork Plug (10 cork plugs per pack)	1 pk.
29	R-10033	Tie Rod	2
30	R-30018	Motor Adapter	1
31	ZA11167	Grommet	2
32	R-10030	Lift Rod Coupling (2.50" long)	1
33	R-40011	Pedestal Cover	1
34	R-10061	Flange Bearing	1
35	R-10062	Bearing	1
36	R-10063	Flange Bearing	2
37	ZF10168	Thrust Washer	1
38	R-10065	Steel Bushing	1
39	ZF10174	3/8 - 16 NC x 2.25" Carriage Bolt	3
40	R-10070	Sprocket – 14 teeth (1800 RPM) w/ Set Screw	1
	R-10048	Sprocket – 17 teeth (1500 RPM) w/ Set Screw	1
41	R-40029	Electronic Timer (115V)	1
41	R-40037	Electronic Timer (230V)	1
42	P-1500-23	Motor – 1/4 H.P. 115/230V 60/50Hz 1 Phase	1
42A	ZF10183	3/8-16 x 1.00" Long Hex Head Screw	4
42B	ZF10168	3/8 I.D. Flat Washer	4
43	R-10058	Timing Belt	1
44	R-10055	Shim	1
45	ZZ10068	1/2 - 13 x 2.50" long Hex Hd. Bolt	1
45A	ZZ10323	1/2 I.D. Lock Washer	1
47	R-10079	Clamp Screw	2
48	ZF10221	3/8" Lock Nut	3
49	ZF10222	1/2" Lock Nut	1
50	ZF10231	10 - 32 x .50" Long Flat Head Socket Cap Scr.	3
51	ZF10241	3/8 - 16 x .75" Long Flat Head Socket Cap Scr.	2
51A	ZF10240	3/8 - 16 x .75" Long Hex Head Screw	2
52	114162	3/8 - 16 x .62" long Hex Hd. Screw	2
53	ZF10251	5/16 - 24 x 1.25" Long Socket Head Cap Scr.	1
54	R-20082	Adjustable Handles (pair)	1
55	ZA10148	#10-24 x .25" Socket Hd. Set Screw	1
56	ZF10271	3/8 I.D. x 1.50" O.D. Fender Washer	1
60 *	R-10017	Timer Cord w/ Plug – 110v	1
60A	R-10017-220	Timer Cord w/ Plug	1

* Items not shown

RO-TAP® RX-94 PARTS DIAGRAM



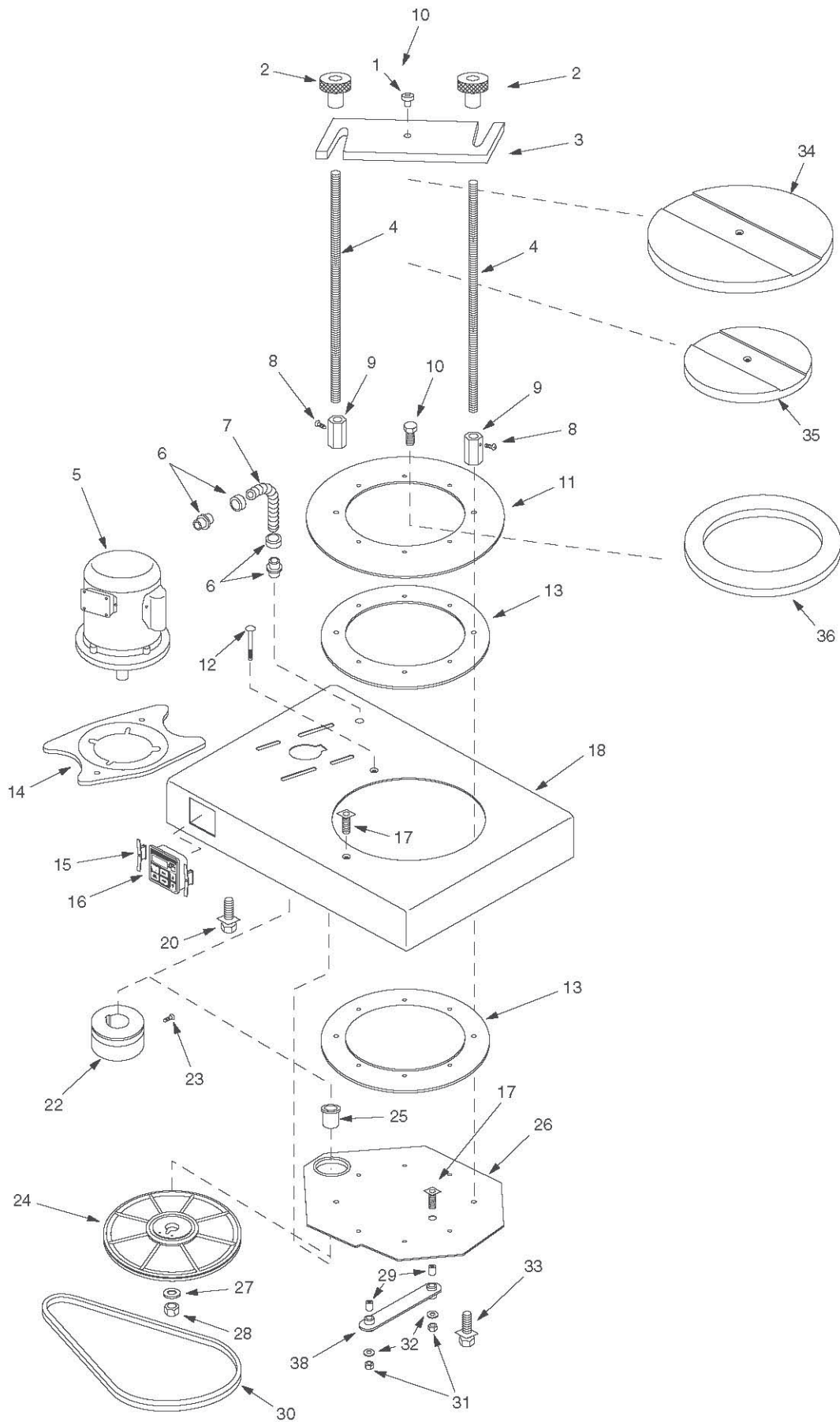
See Page 15 for Recommended Service Parts Kits

RO-TAP® RX-94 PARTS

ITEM NO.	PART NO.	DESCRIPTION	REQ'D.
1	R-40023	Painted Base Weldment	1
2	ZA11167	Grommet	4
4	R-10061	Flanged Bearing	1
5	R-10062	Bearing	1
6	R-20027	Mainshaft	1
7	R-10055	Shim 1.42 O.D. x .0155 Thick	1
8	R-10034	Eccentric Disc	2
9	R-10042	Main Shaft Key	2
10	ZF10174	3/8-16 x 2.25" Carriage Bolt	3
11	R-10032	Block	1
12	R-10065	Steel Bushing .62 O.D. x .385 I.D. x 1.25"	1
13	ZF10168	3/8" Flatwasher	1
14	ZF10221	3/8-16 Locknut	1
15	R-40017	Lower Carrying Plate	1
16	R-10028	Tube Spacer	2
17	R-20020	Bearing Plate	1
18	R-20019	Back-Up Plate	1
19	ZF10221	3/8-16 Locknut	2
20	R-40019	Upper Carrying Plate	1
21	R-30006	Support Plate	2
22	R-40018	Dual Sieve Support Clamp Bar	1
23	R-40021	Tie Rod	2
24	R-10079	Clamp Screw	2
25	R-20033	Shield	2
26	ZF10241	3/8-16 x .75" long Flat Head Screw	4
27	ZF10231	#10-32 x .50" long Flat Head Screw	6
28	R-20082	Adjustable Handles (pair)	1
29	R-10066-A	Cork Plug (10 cork plugs per pack)	1 pk.
30	R-30010	Rotating Guard Assembly	1
31	R-30019	Sheet Guard	1
32	R-10038	Upper Mainshaft Washer	1
33	114162	3/8-16 x .62" long Hex Head Cap Screw	2
34	R-20029	8" Hammer	1
35	R-20023	Hammer Block	1
36	R-10063	Flanged Bearing	2
37	R-10035	Hammer Pin	1
38	ZA10148	#10-24 x .25" long Flat Point Socket Hd. Cap Screw	1
39	ZZ10068	1/2-13 x 2.50" long Hex Head Bolt	1
40	ZZ10323	1/2 I.D. Lockwasher	1
41 *	R-10017	Standard Motor Cord w/Plug (<i>See page 21, for 2nd option</i>)	1
42	P-1500-23	Motor-1/4 HP115/230V60/50Hz1 phase	1
43	R-30018	Motor Adapter Plate	1
44	R-10070	Sprocket – 14 Teeth (1800 rpm) with Set Screw	1
45	ZF10183	3/8-16 x 1.00" long Hex Head Screw	4
46	ZF10168	3/8 I.D. Flat Washer	4
47	R-20039	Cam Gear	1
48	R-10029	Cam Shoulder Screw	1
48A	106582	1/2 I.D. Shim	2
49	ZF10222	1/2-13 Locknut	1
50	R-10036	Lift Rod	2
51	R-10030	Lift Rod Coupling	1
52	ZF10251	5/16-24 x 1.25" long Socket Head Cap Screw	1
53	R-30015	Timing Belt Pulley	1
54	ZF10271	3/8 I.D. x 1.50" O.D. Fender Washer	1
55	R-10039	Main Shaft Key (Lower)	1
56	R-10058	Timing Belt	1
57	R-40011	Pedestal Cover	1
58	R-40020	Dual Sieve Cover	1
59	R-40030	Timer Enclosure	1
60 *	R-40029	Electronic Timer (115v)	1
60A	R-40037	Electronic Timer (230v)	2
66	R-10118	3 1/4" Octagon Box (Appleton # 30)	1
77	R-10099-30	Gas Spring (Guden #CGS24-30)	1
78	114165	Spring Stud (Guden #BS101-02)	2

* Items not shown

RX-812 COARSE SIEVE SHAKER PARTS DIAGRAM



RX-812 COARSE SIEVE SHAKER PARTS

ITEM NO.	PART NO.	DESCRIPTION	REQ'D.
1	LC10016	Locating Pin	1
2	LC10017	Clamping Knobs	2
3	LC10008	Clamp Bar	1
4	LC10015	Clamping Rods	2
5	P-1500-23	Motor – 1/4 HP, 115/230V, 60/50Hz, 1 phase	1
6	R-10112	Flexible Conduit Connector	2
7	102542	Oilite Flexible Conduit – 8-1/2"	1
8	ZA10956	10-24 Cup Point Set Screw	4
9	LC10014	Coupling	2
10	LB10266	Rolok 10-24 Self Tap Screw	6
11	LC10007	Shield	1
12	LB10041	Special Carriage Bolt	1
13	LC10005	Bearing Ring	2
14	R-30018	Adapter	1
15	R-40040	Timer Mounting Clip	2
16	R-40029	Electronic Timer 115v	1
16	R-40037	Electronic Timer 230v	1
17	ZZ10792	1/4-28 x 1-3/4" Soc. Cap Scr.	2
18	LC10003	Base, Sieve Shaker	1
20	ZF10183	3/8"-16 x 1.00 Hex Hd. Bolt	3
22	LB10111	Drive Pulley – 1-1/2" O.D.	1
23	ZA10148	10-24 x 3/8" Cup Point Set Scr.	1
24	LB10051	Pulley/Eccentric Assembly	1
25	LB10191	Flanged Stand Off Bushing	1
26	LC10006	Carrying Plate	1
27	ZF10168	3/8" Hard Washer	1
28	ZF10221	3/8"-16 Lock Nut	1
29	LB10201	Stand Off Bushing	2
30	LB10211	Drive Belt – 2L310	1
31	ZZ10801	1/4"-28 Black Lock Nut	2
32	ZZ10301	1/4" Flat Washer	6
33	ZF10184	5/16"-18 Black Hex Hd. Bolt	2
34	LC10010	12" Cover Clamping Plate	1
35	LC10011	8" Cover Clamping Plate	1
36	LC10009	12" to 8" Conversion Plate	1
37*	R-10018	110V Cord Set	1
38	LC10012	Arm	1

* Items not shown

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