



**ROBINSON  
MANUFACTURING**  
COMPANY INCORPORATED

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**MANUFACTURING SINCE 1954**

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## **PRODUCT WARRANTY**

Robinson Manufacturing warrants products manufactured by Robinson Manufacturing to be free of defective material and workmanship for one year from the date of shipment by Robinson Manufacturing. The liability of Robinson Manufacturing for defective equipment during the warranty period shall be limited to the repair of such equipment or replacement thereof without charge for parts or labor provided by Robinson Manufacturing. Robinson Manufacturing shall be so liable only if Robinson Manufacturing is contacted in regard to such defect immediately after its discovery

Buyer should return the defective product under warranty to Robinson Manufacturing only after receipt of Robinson Manufacturing's specific permission to do so. This warranty does not extend to any Robinson Manufacturing product which has been subject to misuse, neglect, accident, modification or improper installation, or any product which has been repaired or altered by persons not expressly approved by Robinson Manufacturing. Robinson Manufacturing will not be liable for damages, loss or expense directly or indirectly arising from the use of the products or for any liability from their use either separately or in combination with other equipment or material or for any other cause.

## **MERCHANDISE RETURNS**

No goods should be returned to Robinson Manufacturing without specific authorization. All authorized returns for merchandise shipped by Robinson Manufacturing less than 6 months previously which are returned for any reason other than valid warranty claims will be charged a 15% restocking charge plus any expense necessary to place the merchandise in saleable condition. The restocking charge shall be 25% for goods shipped by Robinson Manufacturing more than 6 months but less than 1 year previously. No returns for credit will be accepted after 1 year from original Robinson Manufacturing shipment. Returns should be shipped freight prepaid.





**Model 820A** 4 place head  
**Model 821A** 2 place head

**T**he second generation of the Robinson ELECTRICALLY HEATED centrifuge that operates from the vehicle's 12-volt system.

**Centrifuge features include:**

1. A circular design offering a high-efficiency unit that meets or exceeds the RCF requirements of API and ASTM.
  2. A rheostat control with an "off" position for a slow, smooth start and speed control.
  3. Top-entry motor removal for replacement without removing the centrifuge from its mountings.
  4. A motor mount plate with a ball bearing provides stabilizing support for the motor shaft.
  5. One-inch thick mounting feet to reduce casting failures.
  6. Lid, spring supported to keep it open. Designed with a hole in the center so that the centrifuge RPM's can be checked with a hand held tachometer with the centrifuge lid closed.
  7. A pre-heater section located in the front of the centrifuge for easy access to the operator.
  8. Flip-up pre-heater covers, with positive mechanical tension to keep the covers closed. Easy-to-grasp design for easy opening.
9. Easy switch replacement with modular designed front control panel. The modular control panel can be removed simply by removing four screws and unplugging the switches. This feature allows the following:
    - A. Individual switches can be replaced in the modular control panel without removing the centrifuge from the vehicle.
    - B. The complete control panel can be replaced without removing the centrifuge from the vehicle. The old control panel can be serviced at a work bench.
  10. Easy heater assembly replacement in the pre-heater section. The heaters are connected to the switch with quick connect terminals. Remove two screws and lift the heater assembly out of the pre-heater pockets.
  11. New switches that are IP 68 rated. The rating signifies complete protection against dust and prolonged effect of moisture.
  12. Simplified method of testing the electrical components.
  13. Three independent electrical circuit design.
    - A. One circuit operates the motor that spins the samples.
    - B. A second circuit, controlled by an "on-off" switch and thermostat, heats the centrifuge bowl. When the sample is placed in the centrifuge at 140°F, the pre-set thermostat prevents the sample temperature from dropping below 125°F as specified by API and ASTM.
    - C. The third circuit is for the pre-heater section, which is comparable to a separate two-place electrical heater built into the centrifuge. It is operated by a "high-off-low" switch and controlled by the operator. Depending upon the oil sample's starting temperature, it raises the temperature of two samples to 140°F in minutes.
  14. Space-saver design because a separate heater is not required.
  15. A self-reset circuit breaker near the vehicle's battery protects the centrifuge's circuit, as well as the vehicle.
  16. When the vehicle is not running, an external contactor, wired to the ignition, prevents the heaters from drawing energy from the battery.

**Specifications:** 100ml short cone, 12 VDC electrically heated, Weight 60 lbs., 22" x 20" x 11-1/2".



**T**he second generation of the Robinson ELECTRICALLY HEATED centrifuge that operates from the vehicle's 12-volt system.

**Centrifuge features include:**

1. A circular design offering a high-efficiency unit that meets or exceeds the RCF requirements of API and ASTM.
2. A rheostat control with an "off" position for a slow, smooth start and speed control.
3. Top-entry motor removal for replacement without removing the centrifuge from its mountings.
4. A motor mount plate with a ball bearing provides stabilizing support for the motor shaft.
5. One-inch thick mounting feet to reduce casting failures.
6. Slide open, two section lid, designed with a hole in the center so that the centrifuge RPM's can be checked with a hand held tachometer with the centrifuge lid closed. This feature is especially efficient where room above the centrifuge is limited. This feature also reduces heat loss because it does not require that the complete lid be open for the operator to insert and remove the samples from inside the centrifuge.
7. A pre-heater section located in the front of the centrifuge for easy access to the operator.
8. Flip-up pre-heater covers, with positive mechanical tension to keep the covers closed. Easy-to-grasp design for easy opening.
9. Easy switch replacement with modular designed front control panel. The modular control panel can be removed simply by removing four screws and unplugging the switches. This feature allows the following:
  - A. Individual switches can be replaced in the modular control panel without removing the centrifuge from the vehicle.
  - B. The complete control panel can be replaced without removing the centrifuge from the vehicle. The old control panel can be serviced at a work bench.
10. Easy heater assembly replacement in the pre-heater section. The heaters are connected to the switch with quick connect terminals. Remove two screws and lift the heater assembly out of the pre-heater pockets.
11. New switches that are IP 68 rated. The rating signifies complete protection against dust and prolonged effect of moisture.
12. Simplified method of testing the electrical components.
13. Three independent electrical circuit design.
  - A. One circuit operates the motor that spins the samples.
  - B. A second circuit, controlled by an "on-off" switch and thermostat, heats the centrifuge bowl. When the sample is placed in the centrifuge at 140°F, the pre-set thermostat prevents the sample temperature from dropping below 125°F as specified by API and ASTM.
  - C. The third circuit is for the pre-heater section, which is comparable to a separate two-place electrical heater built into the centrifuge. It is operated by a "high-off-low" switch and controlled by the operator. Depending upon the oil sample's starting temperature, it raises the temperature of two samples to 140°F in minutes.
14. Space-saver design because a separate heater is not required.
15. A self-reset circuit breaker near the vehicle's battery protects the centrifuge's circuit, as well as the vehicle.
16. When the vehicle is not running, an external contactor, wired to the ignition, prevents the heaters from drawing energy from the battery.

**Specifications:** 100ml short cone, 12 VDC electrically heated, Weight 60 lbs., 22" x 20" x 11-1/2".



**Model 820B** 4 place head  
**Model 821B** 2 place head





**Model 870AT**

**T**he Robinson 120 Volt ELECTRICALLY HEATED centrifuge with pre-heater section.

**Centrifuge features include:**

1. A circular design offering a high-efficiency unit that meets or exceeds the RCF requirements of API and ASTM.
2. A rheostat control with an "off" position for a slow, smooth start and speed control.
3. A pre-heater section located in the front of the centrifuge. Space saving design because a separate heater is not required.
4. Lid designed with hole in the center so that the centrifuge RPM's can be checked with a hand held tachometer with the centrifuge lid closed.
5. Three independent electrical circuit design.
  - A. One circuit operates the motor that spins the samples.
  - B. A second circuit, controlled by an "on-off" switch and thermostat, heats the centrifuge bowl. When the sample is placed in the centrifuge at 140°F, the preset thermostat prevents the sample temperature from dropping below 135°F as specified by API and ASTM.
  - C. The third circuit is for the pre-heater section, which is like a separate two-place electrical heater built into the centrifuge. It is operated by a high-off-low"switch and controlled by the operator. Depending upon the oil sample's starting temperature, it raises the temperature of two samples to 140°F in minutes.

**Specifications:** All 870 series, 120 VAC, 60 Hz, 1 phase. Weight 65 lbs., 22" x 20" x 11-1/2".

- Model 870A** 100ml short cone, 4 place head - 2 heated pre-heater pockets.
- Model 870A4** Same as 870A except with 4 heated pre-heater pockets.
- Model 870AT** Same as 870A except with a 15 minute timer.
- Model 870AT4** Same as 870A4 except with a 15 minute timer.
- Model 872A** Same as the 870A but 230 VAC, single phase.
- Model 872AT** Same as the 872A except with a 15 minute timer.
- Model 874A4** 100ml pear shape, 4 place head - 4 heated pre-heater pockets.
- Model 874AT4** Same as the 874A4 except with a 15 minute timer.



**T**he Robinson 120 Volt Centrifuge.

**Centrifuge features include:**

1. A circular design offering a high-efficiency unit that meets or exceeds the RCF requirements of API and ASTM.
2. A rheostat control with an "off" position for a slow, smooth start and speed control.
3. Lid designed with a hole in the center so that the centrifuge RPM's can be checked with a hand held tachometer with the centrifuge lid closed.

**Specifications:** 120 VAC, 60 Hz, 1 phase.  
Weight 40 lbs., 20" diameter x 11-1/2".

- Model 850** 100ml short cone, 4 place head, non-heated
- Model 860** 100ml pear shape, 4 place head, non-heated
- Model 875** 100ml short cone, 4 place head, heated
- Model 880** 100ml pear shape, 4 place head, heated



**T**he Robinson AIR DRIVEN centrifuge. Centrifuge features include:

1. A circular design offering a high-efficiency unit that meets or exceeds the RCF requirements of API and ASTM.
2. A pressure regulator control with an "off" position for a slow, smooth start and speed control.
3. Lid designed with a hole in the center so that the centrifuge RPM's can be checked with a hand held tachometer with the centrifuge lid closed.
4. Non-lubricated air motor. Requires no lubricator, eliminating the need for oil, service and maintenance.

**Specifications:** 100ml short cone, air driven motor. Inlet pressure max 100 psi, operating pressure 65 to 75 psi, air consumption 6 to 7 CFM. Weight 40 lbs., 20" diameter x 11-1/2".

- Model 890** 4 place head Short Cone  
**Model 891** 2 place head Short Cone  
**Model 898** 4 place head Pear Shape  
**Model 899** 2 place head Pear Shape

**T**he Robinson ELECTRICALLY HEATED-AIR DRIVEN centrifuge. Designed for use in Class 1, Division 2, Group D hazardous areas.

**Centrifuge features include:**

1. A circular design offering a high-efficiency unit that meets or exceeds the RCF requirements of API and ASTM.
2. A pressure regulator control with an "off" position for slow, smooth start and speed control.
3. Lid designed with a hole in the center so that the centrifuge RPM's can be checked with a hand held tachometer with the centrifuge lid closed.
4. Non-lubricated air motor. Requires no lubricator, eliminating the need for oil, service and maintenance.
5. A pre-heater section located in the front of the centrifuge for easy access to the operator.
6. Two independent electrical circuit design.
  - A. One circuit, controlled by an on-off switch and thermostat, heats the centrifuge bowl. When the sample is placed in the centrifuge at 140°F, the pre-set thermostat prevents the sample temperature from dropping below 135°F as specified by API and ASTM.
  - B. The second circuit is for the pre-heater section and is also controlled by an on-off switch and thermostat. Depending upon the oil sample's starting temperature, it will raise the temperature of two samples to 140°F in a few minutes.

**Specifications:** 100ml short cone, 120 VAC electrical heated, air driven motor. Inlet pressure max 100 PSI. Operating pressure 65 to 75 PSI, Air Consumption 6 to 7 CFM. Weight 76 lbs., 24" x 28" x 11-1/2".



- Model 894A** 4 place head Short Cone  
**Model 895A** 2 place head Short Cone  
**Model 896A** 4 place head Pear Shape  
**Model 897A** 2 place head Pear Shape

## HEATED

Model	Volts	No. of Tubes	Tube Size ml	Heating Method	Pre-Heater	Dimensions			Wg. lbs.
						Lg.	Wd.	Hg.	
<b>600</b>	12 DC	4	12.5	Water	yes	18"	14"	9"	31
<b>610</b>	12 DC	4	12.5	Electric	yes	18"	14"	9"	31
<b>620</b>	115 AC	4	12.5	Electric	yes	18"	14"	9"	32
<b>621</b>	230 AC	4	12.5	Electric	yes	18"	14"	9"	32
<b>720</b>	115 AC	8	12.5	Electric	no	20"	16"	10"	33
<b>721</b>	230 AC	8	12.5	Electric	no	20"	16"	10"	33
<b>820A/B</b>	12 DC	4	100 SC	Electric	yes	23-1/2"	20"	11-1/2"	60
<b>821A/B</b>	12 DC	2	100 SC	Electric	yes	23-1/2"	20"	11-1/2"	60
<b>822</b>	12 DC	4	100 SC	Electric	no	21-1/2"	20"	11-1/2"	36
<b>823</b>	12 DC	2	100 SC	Electric	no	21-1/2"	20"	11-1/2"	36
<b>824</b>	12 DC	4	100 PS	Electric	no	21-1/2"	20"	11-1/2"	36
<b>825</b>	12 DC	2	100 PS	Electric	no	21-1/2"	20"	11-1/2"	36
<b>844</b>	12 DC	4	100 PS	Electric	yes	23-1/2"	20"	11-1/2"	60
<b>845</b>	12 DC	2	100 PS	Electric	yes	23-1/2"	20"	11-1/2"	60
<b>870A</b>	115 AC	4	100 SC	Electric	yes	23-1/2"	20"	11-1/2"	65
<b>872A</b>	230 AC	4	100 SC	Electric	yes	23-1/2"	20"	11-1/2"	65
<b>874A</b>	115 AC	4	100 PS	Electric	yes	23-1/2"	20"	11-1/2"	65
<b>875</b>	115 AC	4	100 SC	Electric	no	21-1/2"	20"	11-1/2"	40
<b>880</b>	115 AC	4	100 PS	Electric	no	21-1/2"	20"	11-1/2"	40
<b>892*</b>	Air	4	100 SC	Electric	no	22"	28"	11-1/2"	48
<b>893*</b>	Air	2	100 SC	Electric	no	22"	28"	11-1/2"	48
<b>894A</b>	Air	4	100 SC	Electric	yes	24"	28"	11-1/2"	76
<b>895A</b>	Air	2	100 SC	Electric	yes	24"	28"	11-1/2"	76
<b>896A</b>	Air	4	100 PS	Electric	yes	23-1/2"	20"	11-1/2"	76
<b>897A</b>	Air	2	100 PS	Electric	yes	23-1/2"	20"	11-1/2"	76

\* Available in Pear Shape



**SERIES 600**



**SERIES 700**



**SERIES 500/800**  
WITHOUT PRE-HEATER SECTION



**SERIES 800**  
WITH PRE-HEATER SECTION



## NON-HEATED



**572  
PORTABLE  
TYPE**



**574  
STATIONARY  
TYPE**

Model	No. of Volts	No. of Tubes	Tube Size ml	Dimensions			Wg. lbs.
				Lg.	Wd.	Hg.	
<b>500</b>	12 DC	4	12.5	14"	14"	9"	21
<b>510</b>	115 AC	4	12.5	14"	14"	9"	24
<b>550</b>	12/115	4	12.5	14"	14"	9"	24
<b>701</b>	12/115	8	12.5	20"	16"	10-1/2"	33
<b>702</b>	12/230	8	12.5	20"	16"	10-1/2"	33
<b>703</b>	115/230	8	12.5	20"	16"	10-1/2"	33
<b>710</b>	115 AC	8	12.5	20"	16"	10-1/2"	33
<b>830</b>	12 DC	4	100 SC	21-1/2"	20"	11-1/2"	36
<b>840</b>	12 DC	4	100 PS	21-1/2"	20"	11-1/2"	36
<b>850</b>	115 AC	4	100 SC	21-1/2"	20"	11-1/2"	40
<b>860</b>	115 AC	4	100 PS	21-1/2"	20"	11-1/2"	40
<b>890</b>	Air	4	100 SC	22"	28"	11-1/2"	40
<b>891</b>	Air	2	100 SC	22"	28"	11-1/2"	40
<b>898</b>	Air	4	100 PS	22"	28"	11-1/2"	40
<b>899</b>	Air	2	100 PS	22"	28"	11-1/2"	40

## OPEN CENTRIFUGES

Model	Volts	No. of Tubes	Size ml	Type	Dia. of Swing	Wg. lbs.
<b>570</b>	12 DC	2	12.5	Stationary	13-1/2"	5-1/4
<b>571</b>	12 DC	4	12.5	Stationary	13-1/2"	5-1/2
<b>572</b>	12 DC	2	12.5	Portable	13-1/2"	5-1/4
<b>573</b>	12 DC	4	12.5	Portable	13-1/2"	5-1/2
<b>574</b>	12 DC	2	100 SC	Stationary	16-1/4"	5-1/2
<b>575</b>	12 DC	2	100 SC	Portable	16-1/4"	5-1/2
<b>576</b>	12 DC	2	100 PS	Stationary	17-1/4"	5-1/2
<b>577</b>	12 DC	2	100 PS	Portable	17-1/4"	5-1/2



**100B028  
SAMPLE  
HEATER**



**560  
HAND  
CENTRIFUGE**

**100B029  
SAMPLE  
HEATER**

## HAND CENTRIFUGES

Die-cast aluminum body. Speed is attained through a 16 to 1 ratio of the pinion gear. Wide sweep crank has a spring clutch which assures effortless and safe start-up and stopping.

Model	No. of Tubes	Tube Size (ml)	Weight
<b>560</b>	2	12.5	6 lbs.
<b>561</b>	2	100 SC	7 lbs.
<b>562</b>	2	100 PS	7 lbs.
<b>563</b>	4	12.5	6-1/4 lbs.

## OIL SAMPLE HEATERS

Oil sample heaters for preheating diluent and heating crude oil sample-diluent mixture prior to centrifuging. Available in both 12 volt DC and 115 volt AC. The 100 ml short cone models are equipped with a high-low switch for rapid heating and operator control of the sample temperature.

Catalog Number	Description	Voltage
<b>100B028</b>	4-place 12.5ml	12 VDC
<b>100B029</b>	2-place 100ml SC	12 VDC
<b>100B030</b>	4-place 12.5ml	115 VAC
<b>100B031</b>	2-place 100ml SC	115 VAC
<b>100B032</b>	2-place 100ml PS	12 VDC
<b>100B033</b>	2-place 100ml PS	115 VAC

