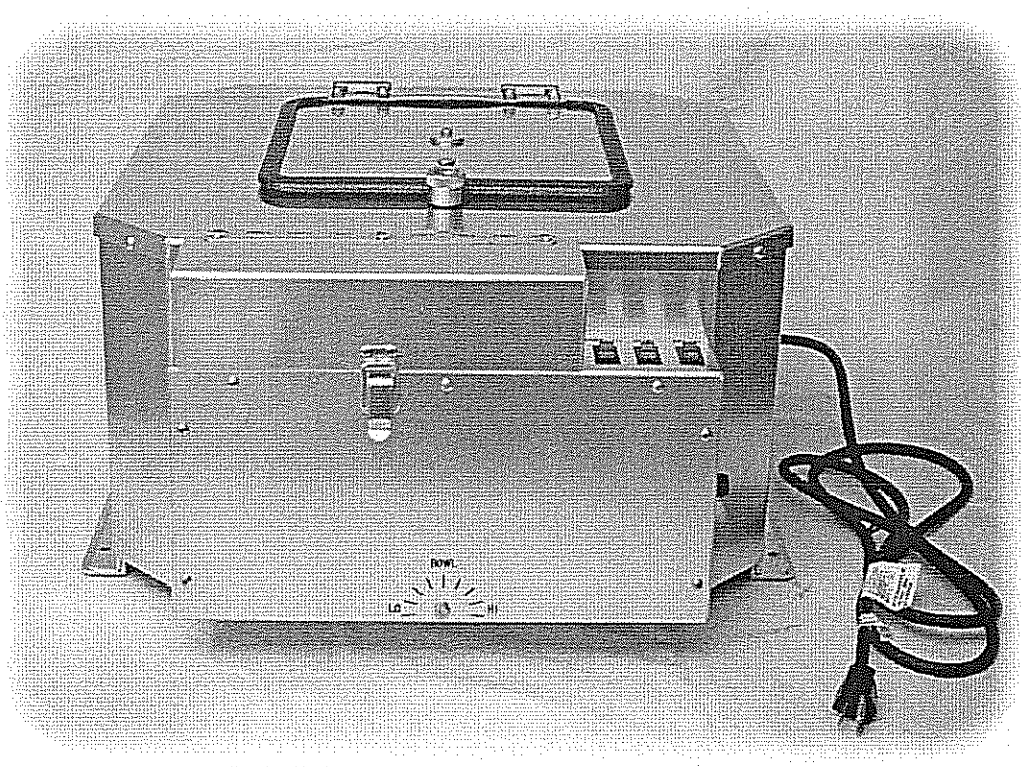


18784 & 18789 Centrifuge Manual (115 volt AC)

Installation, Parts and General Operating Information

March 27, 2007



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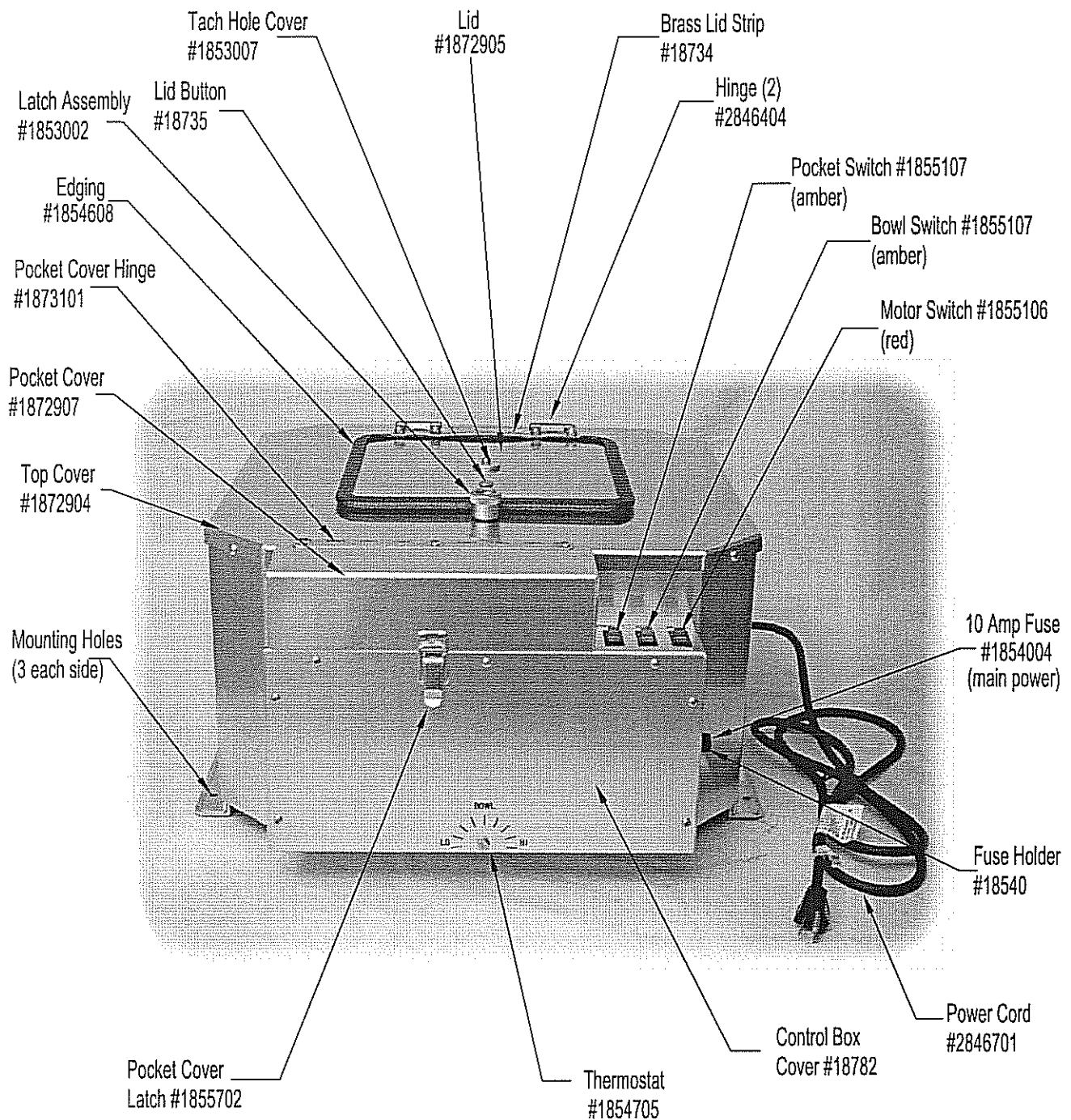
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Key Features of 18784 & 18789 Centrifuges (115 volt AC)



Specifications

Notice: All specifications, drawing details and misc. information are subject to change without notice. Contact W. L. Walker Co. Inc. for the latest information before ordering parts or making any repairs.

Power Requirements:

Voltage: 115 Volts AC 60 Hertz

Amp draw: 6.9 total amps (momentary higher on motor startup)

Breakdown of amp draw by machine components:

—Motor: 1.9 running (momentary higher on startup)

—Bowl Heat: 4.4

—Pocket Heat: .61

Note: detail of amp draw is typical and can vary depending on actual line voltage along with the load and balance of head.

RPM: 1625

RCF: (Relative Centrifugal Force) @ 1625 RPM = 534 (approx)

Weight: 35 lbs. (16 kg)

Footprint: 20" (508 mm) Wide
22.5" (571 mm) Front to back

Height: 10.75" (273 mm) With lid closed
22.75" (578 mm) With lid open

API Criterion: Meets or exceeds the requirements of the API MPMS Chapter 10.4
"Determination of Water and Sediment in Crude Oil by the Centrifuge Method".
(Field Procedure)

Contact Information:

W.L. Walker Co. Inc. 1009 S. Main St. Tulsa, Okla. 74119

Phone: (918) 583-3109 Fax (918) 583-9255

Web: www.wlwalker.com

Power Requirements and Connections

The 115 volt AC electric heated centrifuges require a standard 115 volt grounded outlet.

The power cord should be inspected regularly for any sign of damage or wear and replaced as needed.

A 10 amp fuse is incorporated into the centrifuge control box and is located on the right hand side.

The 18784 and 18789 centrifuges are designed for indoor use in areas protected from rain, snow and any other sources of water that could cause an electrical short.

The 18784 and 18789 centrifuges are NOT designed for use in hazardous locations.

No modifications should be made to the power supply cord or any internal wiring.

Installation Instructions for the 18784 and 18789 Centrifuges

Install and secure the centrifuge onto a table or workbench that is capable of supporting the units weight along with any other materials or tools that will be used in conjunction with the machine.

Vibration to centrifuge can be reduced by mounting the unit on a shock absorbing material such as W. L. Walker part #18549 'Shock Mount Cushions'. Note that one cushion is required under each of the 6 mounting holes located on each side of the centrifuge unit. (3 on each side)

All fasteners used to secure the unit should be of the 'locking' type and or a 'locking' compound should be applied to prevent and fastener 'back off' due to vibration.

Note that some vibration of the machine is considered normal under typical operating conditions although care should be taken to keep vibration to a minimum so as to extend to life of the motor and related components.

Note: see page 5 'Basic Operation' for more information on reducing vibration.

Basic Operation

Check the shields in the centrifuge head to make sure that all the plastic plugs are in place at the bottom of each shield and that any felt liners are in place.

Fill evenly and place samples into preheater pockets located at the front of the centrifuge assembly. After heating, remove samples from the preheater pockets and place them into the shields of the centrifuge head. If running more than one set of samples at a time, note should be made of the number on the arm of the head by each shield.

Note: On the 18784 and 18789 centrifuge, only the 2 center preheater pockets are actively heated by a heat pad. The outer pockets will usually get warm but may not be capable of quickly heating a sample in colder environments.

Close and latch the lid for safety purposes and to retain heat. The closed and latched lid will also allow the motor to operate more efficiently. Turn the motor on and run for the necessary length of time. Turn the motor off and allow the head to come to a complete stop. Unlatch the lid and remove samples for inspection.

Regular inspection of shields and removal of any spilled liquids, dirt and debris that become trapped inside can help to balance and extend life of motor and head.

For complete details as to proper methods of testing, we suggest the use of the following "American Petroleum Institute" publications.

- API MPMS Ch. 10.3
- API MPMS Ch. 10.4
- API MPMS Ch. 10.6

These and other publications are available from

"American Petroleum Institute"
1220 L. Street, Northwest
Washington, D.C. 20005-4070

202-682-8000

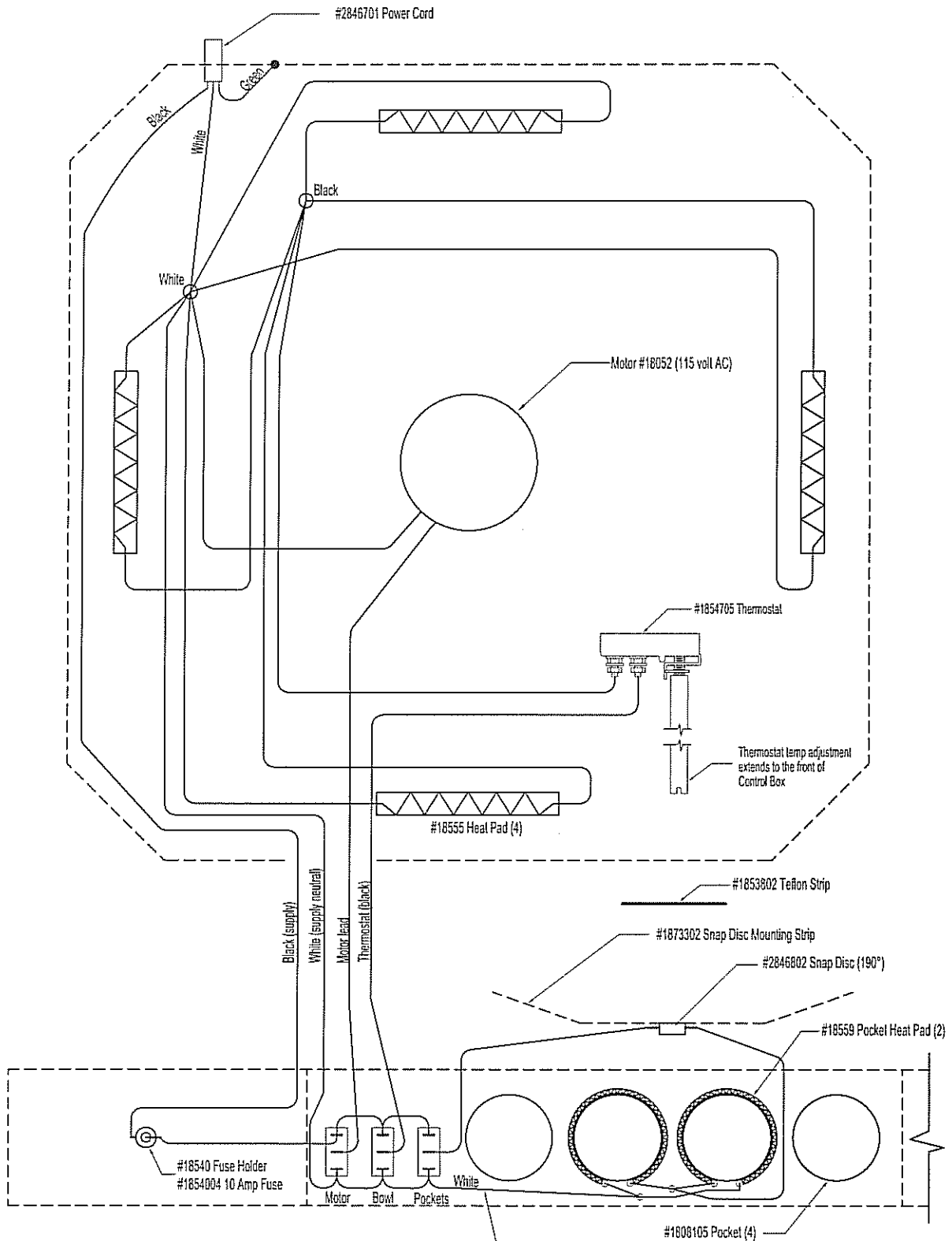
www.api.org

Wiring for 18784 & 18789 115 volt AC Centrifuge

Notes on wiring:

- A) This wiring is for machines mfg after Oct. 23, 2002 which use lighted rocker switches for the Motor, Pockets and Bowl
- B) For machines mfg before Oct., 2002 which use a non-lighted style toggle switch with an indicator light, please contact W. L. Walker Co. for info on wiring.
- C) A sheet metal part or boundary is represented by this dashed line - - - - -
- D) All wires in the Preheater / Control Box should be replaced with a high temperature / chemical resistant type wire if any work is performed inside the unit.

Note: this is a bottom view of wiring with the Control Box laid flat



Note: on machines mfg before mid 2007, this wire may run back to the common neutral inside body vs being connected as pictured here.