

CSA Field Certified Centrifuge with optional Thermo Cycle Heater

The unique feature of the CVS Centrifuge is the design of the four convenient pre-heater pockets that accept both pear shaped and short cone tubes. The dual lid design also allows for easy access and cleaning. A hole in the center of the lids allows the operator to check speeds using a hand-held tachometer.

The **CVS 18000 Series Centrifuge** is designed to accommodate either four pear shaped tubes or short cone tubes by simply changing the head, tubes and shields, thus eliminating the need for two separate machines.

This centrifuge meets the requirements of the API Petroleum Measurement Standards Chapter 10 Section 4 Determination of Water and Sediment in Crude Oil by the centrifuge Method.

CVS 18000, 115 Volt Heated Centrifuge
Single Phase, 60 Hz, 1.1 Amp, 0.08 Hp,
1725 RPM, Class1, Div. 1. Group C, D.

Please specify either:

4 Place Pear, or 4 Place Short cone Head

DIMENSIONS: 18" length x 18" wide x 20" high. (23 1/4" length to include switch box) Lids open is 26 1/2" wide, 26" high.
Approximate Shipping weight 105 lbs

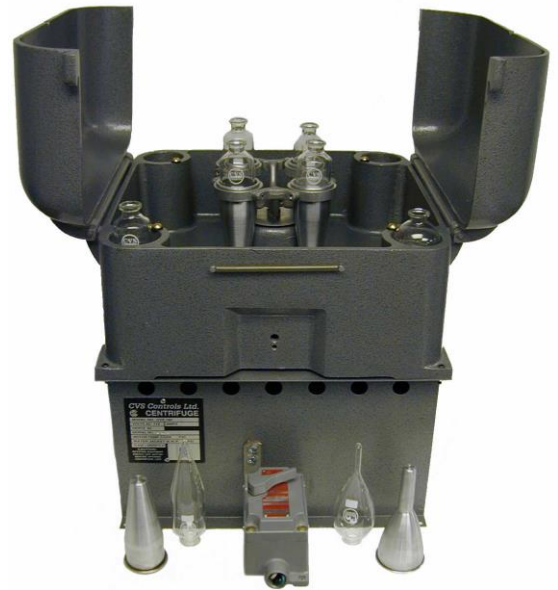
CVS 18094, 115 Volt Thermo Cycle Heater

The CVS Explosion Proof Thermo Cycle Heater is mounted to the CVS Explosion Proof Electric Centrifuge.

When connected to a CVS Centrifuge, the thermostatically controlled heater will by thermal cycle action, circulate hot water throughout the chamber inside the centrifuge. The aluminum casting absorbs the heat, allowing the centrifuge to reach operating temperature.

The integral electric level switch will safely shut down the heater in case of low water volume. The addition of this optional unit eliminates the need for a separate oil sample heater.

Single Phase, 60 Hz, 750 W, Class 1, Div. 1, Group C, D.
To heat above unit, a CVS 18094 Thermo Cycle Heater is required. It is sold separately.
Approximate shipping weight 50 lbs.



CVS 18000, 115 Volt Thermo Cycle Heated Centrifuge



CVS 18094, 115 Volt Thermo Cycle Heater

Both units are CSA Field Certified in our Manufacturing Facility.

Start Up and Operation

- **Note:** Any alterations to the CVS Centrifuge will VOID the CSA Field Certifications. Changes must be approved by the local electrical authority.

Prior to operation a certified electrician should connect the electrical assembly to ensure proper installation.

Before opening lids, assure that the switch is turned off and the rotating assembly is at a complete stop.

Once the centrifuge lids are open, check rotating assembly to ensure free rotation. Visually confirm there is nothing hindering the operation of the rotating assembly.

Thoroughly clean all glass tubes prior to use.

Any debris in the heating pockets should be cleaned out prior to use to minimize glass breakage.

Inspect that the felt liners are in good condition to support the glass tubes.

For Short Cone Style Only – Be sure the `Delrin Cushions` are cleaned and installed properly in each shield to maintain balance and minimize breakage.

Samples should be filled with equal amounts of up to 100ml (200%).

Insert either 2 or 4 sample tubes in opposing shields for each cycle.

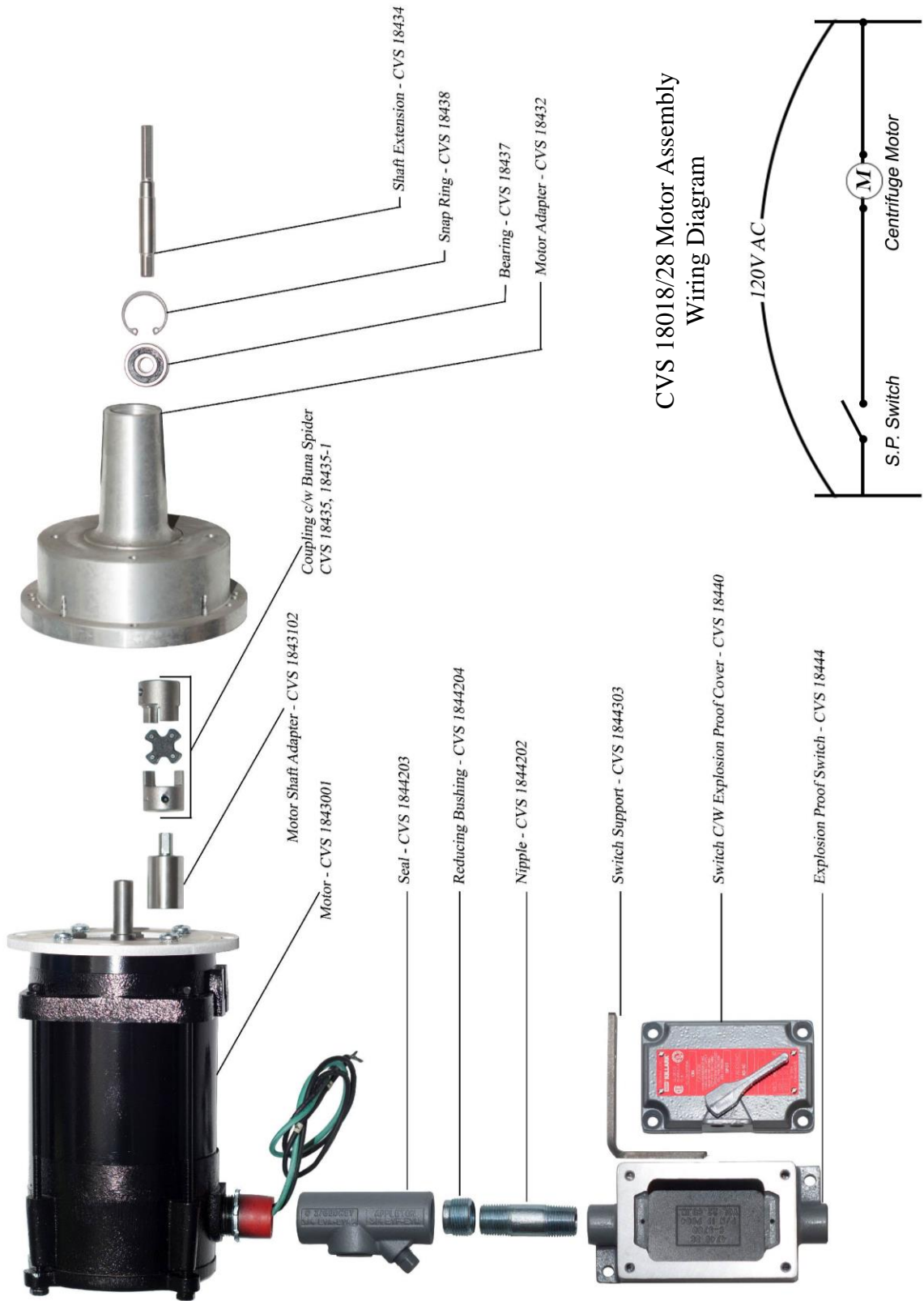
*1 or 3 sample tubes will cause an UNBALANCED condition and may result in damage.

Once samples are in place, close the lids and secure them with the latch spring.

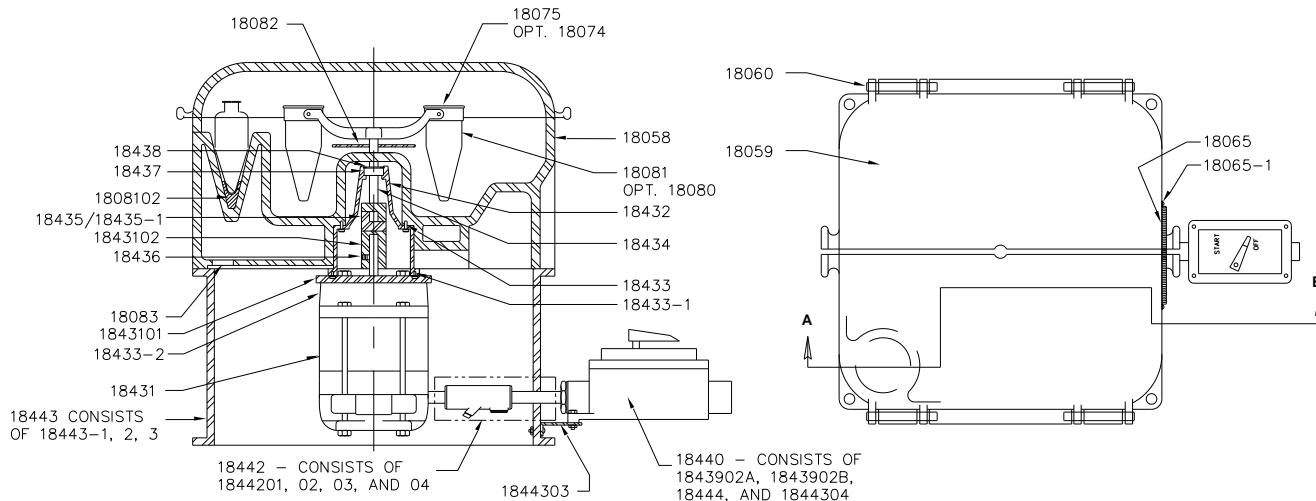
Turn switch on to spin samples.

NOTE: Instructions regarding Centrifuging can be found in the American Petroleum Institute (API) Standards, Chapter 10, Section 4 – Determination of water and sediment in crude oil by the centrifuge method.

CVS 18018/28 – Motor Assembly



CVS 18018/28 Motor Assembly
 Wiring Diagram



* Denotes not shown

Parts List

Item	Description	Weight (Lbs)
CVS-18058	Centrifuge Body	27
CVS-18059	Lids (2 Req'd)	5
CVS-18060	Hinge Pin, Lid (4 Req'd)	NIL
CVS-18065, 18065-1	Latch Spring, Latch Spring Pins	NIL
CVS-18074	4-Place Pear Head	3
CVS-18075	4 Place Short Cone Head	3
CVS-18080	Pear Tube Shield	1/4
CVS-18081	Short Cone Tube Shield	1/2
CVS-1808102 *	Cushion for CVS-18081 Shield	NIL
CVS-1808104 *	Felt Liner	NIL
CVS-18082	Oil Guard	1/2
CVS-18083	Plug, Aluminum Soft (4 Req'd)	NIL
CVS-18094 *	Thermo Cycle Heater, 115-Volt AC Explosion Proof	37
CVS-18096 *	Body, Thermo Cycle Heater	6 1/2
CVS-1809610 *	Housing, Ex-Proof Level Switch	NIL
CVS-18097 *	Air Bleeder Screw	NIL
CVS-1809701 *	Bleeder Screw Gasket	NIL
CVS-18099 *	Heater Element for CVS-18094, Ex-Proof	5 1/4
CVS-18431	Motor, Explosion Proof, 115-Volt AC	15
CVS-1843101	Interface Plate	4
CVS-1843102	Motor Shaft Adapter	1/2
CVS-18432	Motor Adapter	2
CVS-18433, -1, -2 *	Mounting Screw, Capscrew 1/4" x 20 x 3/4" Long (4 Req'd), 1/4" x 20 x 1 1/4" Long (4 Req'd)	NIL
CVS-18434	Shaft Extension	1/2
CVS-18435, -1	Shaft Coupling, Spider Set Screw	1/2
CVS-18437	Bearing	NIL
CVS-18438	Snap Ring	NIL
CVS-1843902A	Resistor (2 Req'd)	NIL
CVS-18440	Motor Starter, 115 Volt C/W Cover and Overload Protection	NIL
CVS-18442, 01, 02, 03, 04	Conduit Assembly Switch to Motor - Nipples (2 Req'd), 1/2" Seal, Red. Bushing	1
CVS-18443	Centrifuge Shroud	9
CVS-18443-1, 2, 3	Shroud Screws, Hex Nuts, Int. Tooth Lockwasher	NIL
CVS-18443-1, 2, 3	Shroud Screws, Hex Nuts, Int. Tooth Lockwasher	NIL
CVS-1844303	Support, Electrical Switch	3/8
CVS-1844304	Blank Cover	3/8
CVS-18444	Housing, Explosion Proof	22