

JABSCO[®]

Model 16420-SERIES



DRUM PUMPS

FEATURES

Motor

Characteristics: for 16420-0115
115 Vac, 5.8 amps, 60 Hz, 600 Watts,
10,600 rpm, 0.91 power factor.
for 16420-0220
220 Vac, 2.7 amps, 50 Hz, 540 Watts,
10,600 rpm, 0.91 power factor.

Enclosure:

Weather protected, fan cooled,
polyurethane coated aluminum
housing with glass filled nylon cover
and handle.

Switch:

Oversized On-Off rocker switch.

Overload**Protection:**

Integral circuit breaker overload switch
with manual reset.

Cord:

16 feet (4,9 m) of oil resistant cord,
three prong plug on 115 Vac model only.

Weight:

7.5 lbs. (3,4 kgs.)

Model 16420-SERIES

VARIATIONS AVAILABLE

| MODEL NO. | DESCRIPTION |
|------------|---------------------------|
| 16420-0115 | 115 Vac, 60 Hz, 600 Watts |
| 16420-0220 | 220 Vac, 50 Hz, 540 Watts |

WARNING

MOTOR CAN SPARK.
EXPLOSION & DEATH
CAN OCCUR.

DO NOT USE WHERE
FLAMMABLE VAPORS
ARE PRESENT.

43003-0758

APPLICATIONS

Specifically designed to fit the JABSCO 16400-series and 16410-series drum pumps. All pumps and motors are interchangeable. **WARNING: THIS MOTOR IS NOT SUITABLE FOR AREAS WHERE FLAMMABLE VAPORS ARE PRESENT. DO NOT PUMP SOLVENTS, THINNERS OR GASOLINE.**

OPERATING INSTRUCTIONS

- General** – When operating the JABSCO drum pump protective clothing, gloves, and safety glasses should be worn. All standard safety practices should be followed.
- Installation** – Place threaded motor flange on drum pump mounting ring. Tighten mounting ring. Drive coupling is self-aligning. Motor and pump combination are ready for operation.
- Connection** – Check that the voltage and frequency available corresponds to the data on the motor label. Before connecting the motor to the electrical outlet make sure the motor switch is in the OFF position. Periodically inspect complete length of cord for cracks or abrasions. Replace if necessary. The 16420-0220 motor is shipped without a plug on the cord. A plug must be installed by a competent electrician prior to connection to a power source.
- Enclosure** – JABSCO 16420-series motors are not explosion-proof. **WARNING: MOTOR CAN SPARK. EXPLOSION AND DEATH CAN OCCUR. DO NOT USE WHERE FLAMMABLE VAPORS ARE PRESENT.** Motors have weather protected enclosures and should not be used in wet environment or submerged in liquid. **ELECTRICAL SHOCK HAZARD MAY RESULT.** Should corrosive liquid come in contact with motor housing, wipe off with a neutralizing solution.
- Overload Protection** – A manual reset circuit breaker switch has been built into the 16420-series drum pump motor. Should the motor stop during operation due to an overload condition, turn ON-OFF switch to the OFF position. After a cooling period depress the mechanical reset located on the motor handle. The motor will not restart unless the manual reset switch is depressed.
- Temperature Range** – Motors are designed to operate in an ambient 40° - 120°F (4° - 53°C) temperature environment. Pumpage temperatures are maximum at 200°F (93°C). Motors are intended for intermittent duty cycle. Running longer than 30 minutes at high temperature ambient may reduce motor life. For higher temperatures consult factory.
- Performance Limits** – A maximum specific gravity of 1.8 or viscosity of 3500 ssu (750 cp) is the recommended limits for normal use. Contact factory for further information.
- Spare Parts** – Use JABSCO service parts for replacement and repair. Motor brushes should be checked periodically for excessive wear and replaced if necessary.

SERVICE INSTRUCTIONS

WARNING: HAZARDOUS VOLTAGE. PRIOR TO ANY DISASSEMBLY OR ASSEMBLY OF THE JABSCO DRUM PUMP MOTOR MAKE CERTAIN THAT ALL ELECTRICAL POWER TO THE MOTOR IS DISCONNECTED AND PREVENTED FROM ACCIDENTALLY BEING CONNECTED. FAILURE TO DO SO MAY CAUSE DEATH OR INJURY.

NOTICE: All electrical repair and wiring should be completed by a competent electrician and in accordance with applicable codes.



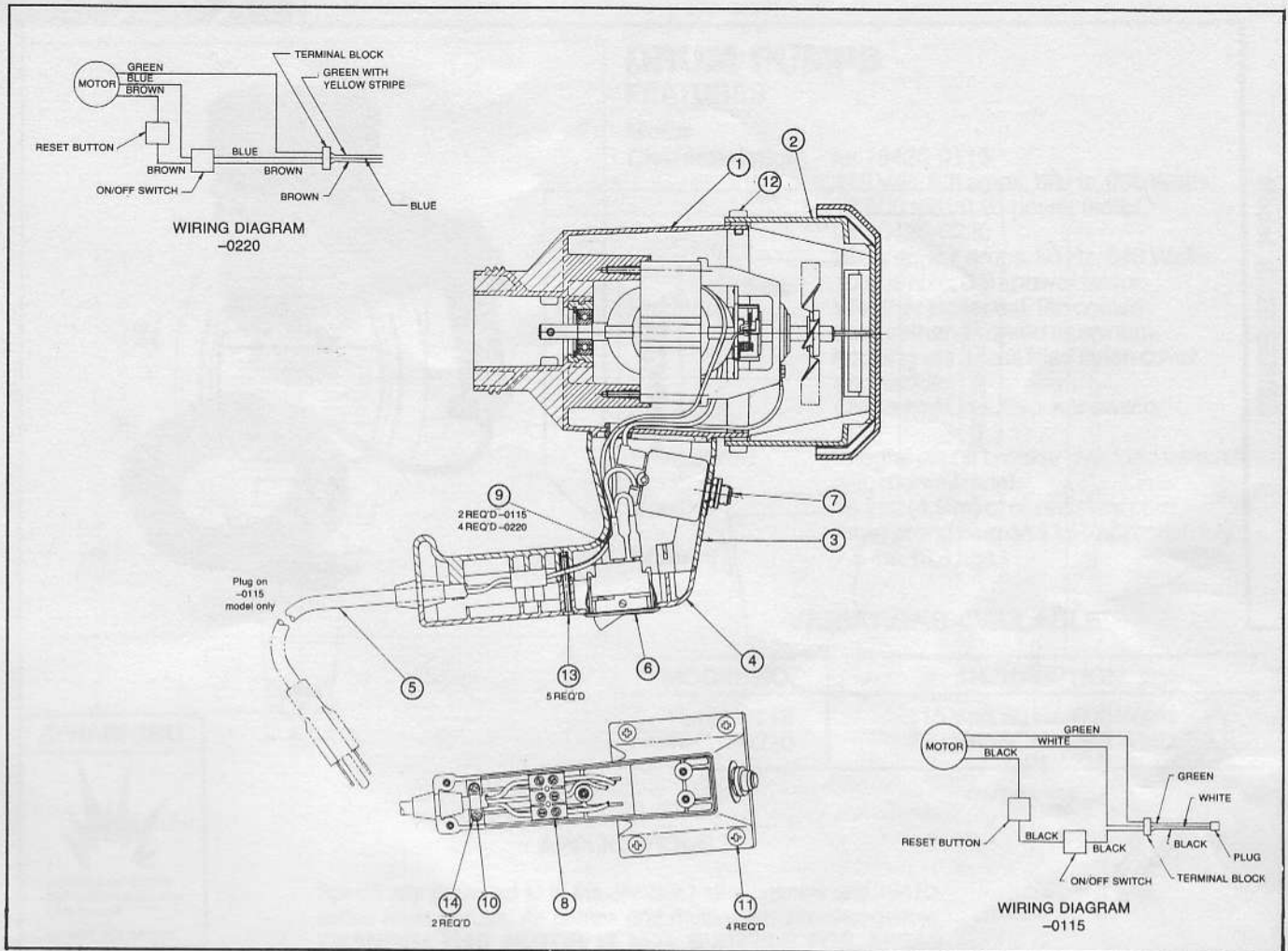
Disassembly

1. Remove the four #10-32 x $\frac{5}{8}$ long self tapping screws and the motor cover exposing the fan and motor sub-assembly.
2. To remove motor brushes for replacement, depress the clip which is a component of the brush wire spade connector. Slide spade connector toward motor base slowly. The brush spring and brush assembly will be exposed. Slide assembly out of holder.
3. Remove the five #4-40 x $1\frac{1}{4}$ long pan head screws retaining the handle cover and remove the cover.
4. Remove the two #4-40 x $\frac{3}{8}$ long pan head screws and the strain relief bar restraining the cord.
5. Unplug the three quick disconnect terminals from the terminal block and remove the cord.
6. For further disassembly and repair contact ITT JABSCO authorized service centers or the factory.

Assembly

1. Plug the three terminals on the cord into the terminal block.
2. Position the cord in place and install the strain relief bar and the two #4-40 x $\frac{3}{8}$ long pan head screws.
3. Replace handle cover and install the five #4-40 x $1\frac{1}{4}$ long pan head screws.
4. Insert new brush spring and brush assembly into holder. Compress spring and slide brush spade connector into place.
5. Position motor cover on motor sub-assembly and install the four #10-32 x $\frac{5}{8}$ long self tapping screws. Do not operate motor without motor cover securely attached.

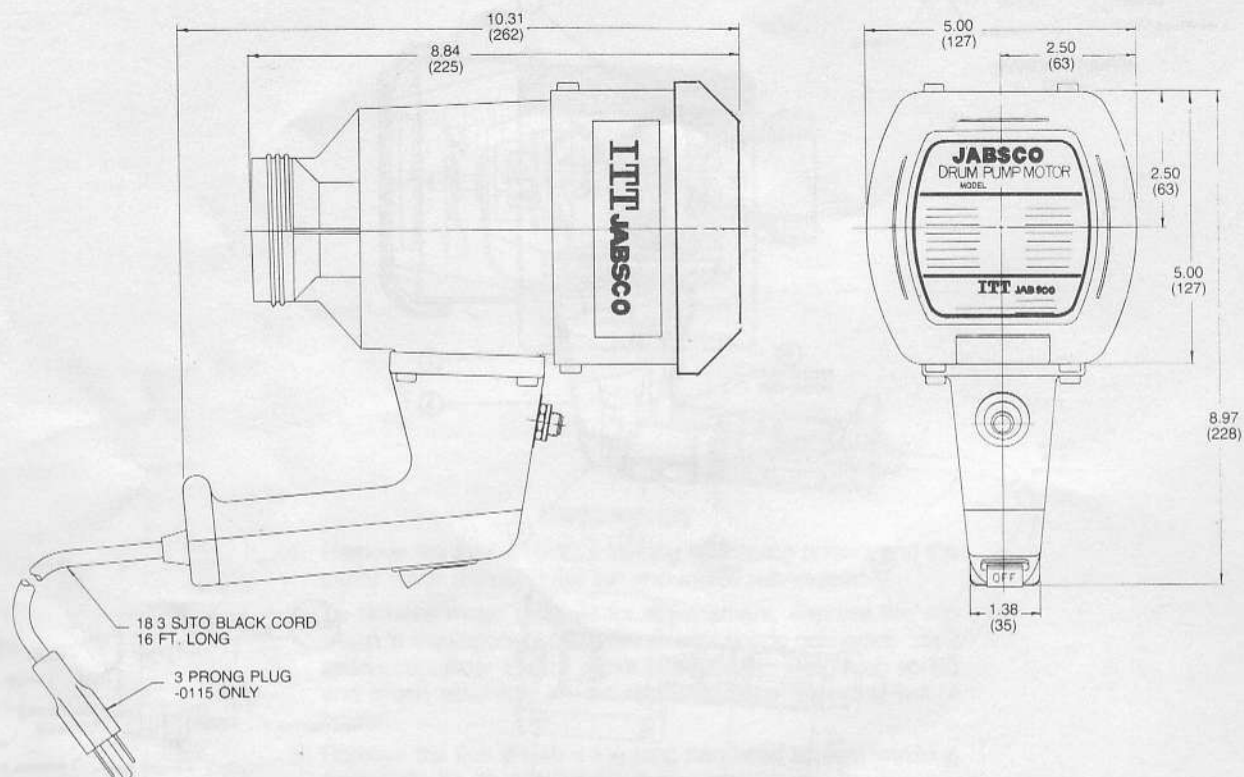
CROSS SECTION VIEW



PARTS LIST

| KEY | DESCRIPTION | QTY. REQ'D | MODEL 16420-0115 | MODEL 16420-0220 |
|-----|---------------------------------------|---------------|---------------------|---------------------|
| 1 | Motor Sub-Assembly | 1 | 16423-0000 | 16423-0001 |
| 2 | Cover | 1 | 16496-0000 | 16496-0000 |
| 3 | Handle | 1 | 16428-0000 | 16428-0000 |
| 4 | Handle Cover | 1 | 16429-0000 | 16429-0000 |
| 5 | Electric Cord | 1 | 93007-0541 | 93007-0543 |
| 6 | Switch | 1 | 96070-0644 | 96070-0650 |
| 7 | Circuit Breaker | 1 | 96070-0645 | 96070-0646 |
| 8 | Terminal Block | 1 | 98043-0492 | 98043-0492 |
| 9 | Quick Disconnect Terminal | 4 | 98043-0466 | 98043-0466 |
| 10 | Strain Relief Bar | 1 | 16435-0000 | 16435-0000 |
| 11 | Self Taping Screw, #10-32 x 5/8 Lg | 4 | 96050-0548 | 96050-0548 |
| 12 | Self Taping Screw, #10-32 x 3/8 Lg | 4 | 96050-0549 | 96050-0549 |
| 13 | Pan Head Screw, #4-40 x 1 1/4 Lg | 5 | 91045-0394 | 91045-0394 |
| 14 | Pan Head Screw, #4-40 x 3/8 Lg | 2 | 91045-0395 | 91045-0395 |
| 15 | Motor Brush Kit | 1 | 18753-0083 | 18753-0084 |

**DIMENSIONAL DRAWING
INCHES (MILLIMETRES)**



PERFORMANCE TABLES

Refer to 16400-series/16410-series JABSCO drum pump data sheet (form 43000-0467) for motor-pump performance charts.

THE PRODUCTS DESCRIBED HEREIN ARE SUBJECT TO THE JABSCO ONE YEAR LIMITED WARRANTY, WHICH IS AVAILABLE FOR YOUR INSPECTION UPON REQUEST.

ITT JABSCO

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