Instruction Manual - Milky Butter Churns
Coburn part numbers 13210 & 13221

GENERAL SAFETY RECOMMENDATIONS
Before installation please read this manual carefully.

Disconnect churn from electrical outlet before cleaning.

Protect the churn against water and humidity.

To ensure proper function and operation, the instructions in this manual must be followed exactly. Failure to follow these procedures could cause malfunction and damage to the unit for which the manufacturer is not liable.

In case of malfunction, contact an authorized distributor for service. Do not attempt to do any repairs yourself.

Make sure that the rubber cork is on the outlet.

Thank you for purchasing this Butter Churn. We assure your complete satisfaction providing the instructions in this manual for use, care and cleaning are followed carefully.

TECHNICAL DATA

<table>
<thead>
<tr>
<th>Model</th>
<th>FJ-15 (13210)</th>
<th>FJ-30 (13221)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operation Voltage</td>
<td>115VAC/60HZ</td>
<td>115VAC/60HZ</td>
</tr>
<tr>
<td>Motor Power</td>
<td>450W</td>
<td>450W</td>
</tr>
<tr>
<td>Rotation speed CPM</td>
<td>90, 150, 280</td>
<td>90, 150, 280</td>
</tr>
<tr>
<td>Working Capacity</td>
<td>1-6 liter (1.05-6.3 qt.)</td>
<td>2-14 liter (2.1-14.8 qts.)</td>
</tr>
<tr>
<td>Net weight</td>
<td>11 kg (24.2 lbs.)</td>
<td>12 kg (26.4 lbs.)</td>
</tr>
<tr>
<td>Protection type</td>
<td>IP 23</td>
<td>IP 23</td>
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UNPACKING
Open the cardboard box and carefully remove the motor, the bowl and all accessories.

Place the motor on a table or other stable surface in a clean dry working area.
Put the bowl on top of the motor.

Set the mixing device into the bowl.

Put the cover on the bowl and connect the cover to the bowl with the fixing devices so that contact is made with the motor.

Check to make sure the cork is on the outlet.

PLEASE NOTE!
A properly grounded electrical outlet is required to operate this churn.

THE MILK
The milk should have a high fat content in order to produce butter efficiently and economically. The fat should be high quality as well.

The quality of the fat depends on the quality of the feedstuffs, the cow’s health and how many years she has been milking. Good silage is an optimal feed especially when it is added to the hay. This results in butter with better aroma, consistency and color.

The butter will taste bitter when cows are fed on bitter feeds such as fern, young clover, raw potatoes, etc.

Until ready for churning, the milk should be stored in clean non-reactive containers, preferably of stainless steel, aluminum or enameled steel.

CREAM
The preparation of the cream for churning is important as it can affect the taste, aroma and quality of the butter. Remove a quantity of skim milk so that the fat content of the remaining liquid is 35 to 45% fat for sweet cream and 25 to 35% fat for sour cream.

Pasteurize the cream at temperatures of 95 to 100 C (203 to 212 F.)
Cool and ripen the cream by storing it for 3 days at 5 to 8 C (41 to 46 F) in the summer or 8 to 10 C (46 to 50 F) in winter.

PRODUCTION OF BUTTER
The bowl must be cleaned carefully and rinsed with cold water before filling with cream. This cools the bowl and creates a water film on the bowl which helps prevent the butter from sticking.

The bowl should be filled approximately 10 to 40% of its volume. The temperature of the cream should be between 15 and 18 C (59 and 64 F). At the lower end, the cream produces better quality butter but takes a little longer to process.
<table>
<thead>
<tr>
<th>Amount of Cream</th>
<th>FJ-15</th>
<th>FJ-30</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum</td>
<td>6 liter (6.3 qts.)</td>
<td>14 liter (14.8 qts.)</td>
</tr>
<tr>
<td>Minimum</td>
<td>1 liter (1.05 qts.)</td>
<td>2 liter (2.1 qts.)</td>
</tr>
<tr>
<td>Ideal</td>
<td>4 liter (4.2 qts.)</td>
<td>8 liter (8.4 qts.)</td>
</tr>
</tbody>
</table>

Install the mixing device. Fasten the cover with the fixing devices and make sure there is contact with the motor. Then switch on the butter churn by choosing the desired speed of mixing. If the cream has a lower fat content, increase the speed. Normally the production of butter takes about 20 minutes but can take a little longer or shorter due to the variables in the amount of cream, fat content, temperature, etc.

Butter production should take no longer than 20 minutes, but also should not be rushed with a higher speed because the quality of the butter could be reduced. If the butter production takes longer than 20 minutes, it could mean that the cream has not been prepared carefully.

**REASONS FOR TOO LONG BUTTER PRODUCTION**

Too much cream in the bowl.

The temperature of the cream is too low for butter production. Generally higher fat should be at a lower temperature, and lower fat should be at the higher end of the recommended temperature range.

The preparation, storage, or ripening of the cream was not done correctly.

The cream was too old.

The fat content was too low. Sour cream should be 25 – 35% fat, sweet cream 35 – 45% fat.

The speed selected was wrong, too high or too low. The acidity (PH) of the cream was too high.

**FINISHING THE BUTTER CHURNING PROCESS**

After a maximum of 20 minutes, the butter should be finished. Pour out the buttermilk, then rinse the butter using the following procedure: Add cold water (approx. 60°C /43°F) and start the machine again at a lower speed than the churning speed. Empty out this water and repeat the procedure until the water poured out is clear. The last rinse water should be approximately 10 to 12°C (50 to 54°F). Important: Use a lower speed than the churning speed for the rinsing process.

All water must be removed from the butter by kneading.

Add to the butter 2 – 3% of dry table salt. Scatter the salt over the butter after all water has been removed and knead it in.
Alternately, wet salting may be done. Prepare a solution of 5 parts salt to 2 parts water, boil the solution, let cool, then knead in.

Pack the butter immediately after salting into waxed paper or parchment paper and store at 10 C /50 F.

To store the butter for a longer time, keep in a freezer at -16 to -20 C (-5 to 2 F) at 65% relative humidity.

CLEANING THE BUTTER CHURN
Remove the bowl and mixing device from the motor. Remove the rubber washer from the edge of the bowl. Wash the bowl, mixing device and rubber washer in hot water (60 C/140 F) and detergent. For the last rinse, use hot clear water. Dry the parts, then reassemble.

Clean cover with hot water (60 C/ 140 F) and detergent. Rinse with hot clear water, dry, then replace the rubber washer in the groove of the cover.

Cleaning the Motor
Clean the motor body with a damp cloth and dry with a clean towel. Important: Take care that no water or other liquid enters the motor.

SPARE PARTS
Specify Model number and Serial number when ordering spare parts. The serial number may be found on a name plate on the back of the body.

WARRANTY
In case of trouble consult an authorized distributor for service.

Equipment is guaranteed to be free from defects in material, components, assembly and workmanship for a period of 12 months. Our obligation under this warranty is limited to the repair or replacement of the churn or part thereof, providing the unit is returned for inspection within 12 months of the date of purchase. Invoice or warranty card constitutes proof of warranty rights.

Damage to the churn or injuries resulting from improper assembly, use, electrical connection or maintenance are not covered by the Warranty.

The warranty does not cover
   Motor or parts destroyed by water or milk inflow
   The power cord

The given technical specifications are only valid when all conditions in this instruction manual are fulfilled
Any other claims not mentioned above including personal injury shall not be covered.

THANK YOU!
Thank you for your purchase of a MILKY Butter Churn. We are confident that you will be completely satisfied.