

Repair kit for BUUS iceflakers type C, D, E & F.

This kit will add an extra refrigerant seal and extra bearing surface to the iceflaker.


This instruction shows the repair of a land based machine. Do not forget to mount the water stabilizers if it is a marine version.

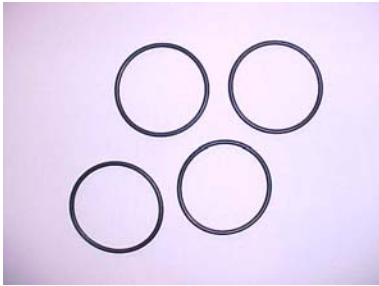
Important! This repair is comprehensive and should not be performed unless you have good knowledge to BUUS iceflakers. If you are uncertain or if you have questions please contact Buus Refrigeration.

If the repair is not performed according to this instruction the iceflaker may be damaged and/or leak refrigerant.

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Spare part kit no. 140000004704 contains following parts:

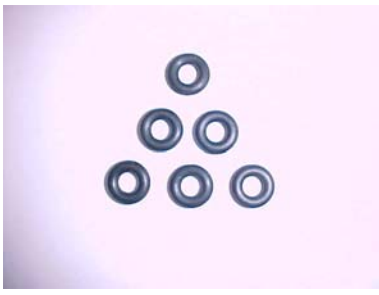
	Spare part no.	Description	
	130042003904	ENDGABLE INLET C/D/E/F	1 PC.
	130043003904	END COVER, OUTLET C/D/E/F	1 PC.
	0035.4204	GEAR BOX FOR C/D/E/F Ø56	1 PC.
	200125003904	END COVER FOR FREEZING DRUM	2 PC.
	203159	O-RING 247,33X2,62 NBR70	2 PC.



159055030 O-RING 55X3mm. 4 PC.



170150 ZINC ANODE 98/73-54 6 PC.



202748 O-RING 5,94X3,53 6 PC.



130151003904 BEARING FOR OUTLET – BY GABLE 1 PC.



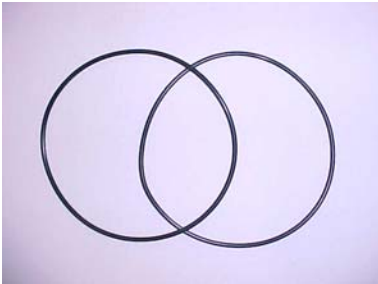
130151023904 BEARING FOR OUTLET – BY FLANGE 1 PC.



130151013904 BEARING for INLET – BY GABLE 1 PC.



130151033904 BEARING FOR INLET – BY FLANGE 1 PC.



159012530 O-RING 125,00X3,0MM. NBR70 2 PC.



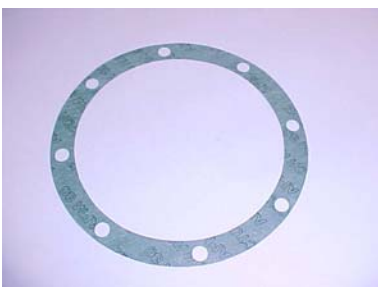
2.233.06.020 STAINLESS M6x20MM. A2 DIN912 8 PC.



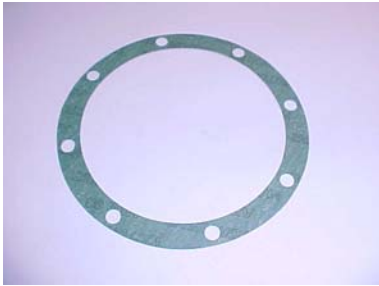
130152003904 STAINLESS STEEL RING 2 PC.



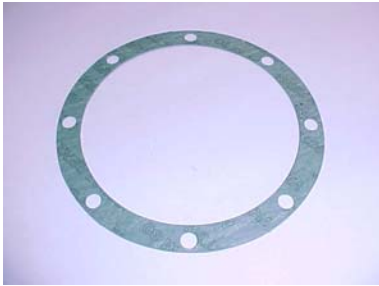
2.463.05.020 STAINLESS M5X20MM. A2 DIN912 8 PC.



1032255 Gasket Ø160x130x0,25mm. 1 PC.



1032256 Gasket Ø160x130x0,5mm. 1 PC.



1032400 Gasket Ø160x130x1,0mm. 1 PC.





FLO-M005500 DYNAMIC SEAL FLO 55mm. 2 PC.



FLO-M008000 DYNAMIC SEAL FLO 80mm. 2 PC.



011103 SHAFTSEAL, COMPLETE 2 PC.

<p>1: Dismantle the iceflaker.</p>	
<p>2: Leave the shafts on the ice drum.</p>	
<p>3: Place the ice drum on the floor. Be careful not to damage the surface of the drum.</p>	 A close-up photograph showing a vertical stainless steel shaft protruding from the center of a circular metal base. The base has several small screws around its perimeter. The shaft is surrounded by a dark, possibly rubber or plastic, ring.
<p>4: Mount O-RING 247,33X2,62 NBR70 on END COVER FOR FREEZING DRUM and gently mount the end cover on the shaft.</p>	 A photograph showing a white, circular end cover being slid onto the stainless steel shaft. The cover has a thin metal rim. The shaft is still attached to the base seen in the previous image.

<p>5:</p> <p>Do not press.</p>	
<p>6:</p> <p>Mount the ZINK ANODES 98/73-54. Put O-RINGS 5,94X3,53 between the zinc and the end cover.</p>	
<p>7:</p> <p>One bolt is used to hold both the zinc and the end cover. The short bolt is used to hold the zinc to the end cover.</p>	

8:

Add silicone to one of the two yellow plastic plugs and mount it in the end cover.



9:

Pressure test the end cover with 0,5 bar.



10:

Test for leaks with soap water



10: Test for leaks with soap water






10: Test for leaks with soap water



10: Test for leaks with soap water



<p>11:</p> <p>Add silicone to the other yellow plug and mount it.</p>	
<p>12:</p> <p>Turn the drum 180° and repeat point 3 to 11 for the other end of the drum.</p>	
<p>13:</p> <p>Assemble BEARING FOR OUTLET – BY GABLE, STAINLESS STEEL RING, O-RING 125,00X3,0 MM., DYNAMIC SEAL FLO 80mm. Gasket – to be determined later - 160x130x0,5mm. with STAINLESS M5X20MM.</p>	

<p>14:</p> <p>Assemble BEARING FOR INLET – BY GABLE, STAINLESS STEEL RING, O-RING 125,00X3,0 MM., DYNAMIC SEAL FLO 80mm. Gasket \varnothing160x130x<u>0,5mm</u>. STAINLESS M5X20MM.</p>	
<p>15:</p> <p>Mount the bearing etc. from point 14 with ENDGABLE INLET C/D/E/F. Use bolts STAINLESS M6x20MM.</p>	
<p>16:</p> <p>Use bolts STAINLESS M6x20MM.</p>	

17:

Add silicone to the side of the knife support bridge that points towards the inlet side.






18:




Add silicone in the groove for the knife support bridge in the inlet end gable.



19:



<p>20:</p> <p>Mount the tension disk and the bolts.</p>	
<p>21:</p> <p>Tighten the bolts with 34 N/m.</p>	
<p>22:</p> <p>Mount the zinc rods. Remember the O-rings.</p>	

<p>23:</p>	
<p>24:</p> <p>Mount sensor pockets on the inside of the outlet end gable.</p>	
<p>25:</p> <p>Add silicone and gently press the sensor pockets into place.</p>	

26:

The inlet end gable with bearing, zinc rods and knife support bridge.






27:

Carefully mount the drum. The longest shaft shall point downwards.






<p>28:</p> <p>Mounting the water tank:</p> <p>Add silicone to the groove in the end gable...</p>	
<p>.. the groove in the knife support bridge...</p>	
<p>... and on the end of the knife support bridge.</p>	

<p>29:</p> <p>Place the water tank in the grooves. Be careful that all parts of the water tank is inside the groove.</p>	
<p>30:</p> <p>Add silicone to the groove in the last end gable.</p>	
<p>31:</p> <p>Place the end gable.</p>	

<p>32:</p> <p>Prepare the stay bolts with flexible washers.</p>	 A photograph showing three long, silver-colored metal stay bolts standing vertically. Each bolt has a red flexible washer attached to its top end. They are positioned against a dark, textured background, possibly a wall or ceiling.
<p>33:</p> <p>Insert the stay bolts.</p>	 A close-up photograph of a person's hand in a blue sleeve inserting a long metal stay bolt into a hole in a white, rectangular panel. A brass-colored fitting is already mounted on the panel's surface.
<p>33:</p>	 A close-up photograph of a person's hand adjusting a long metal stay bolt that has been inserted into a hole in a white panel. The hand is turning the bolt to ensure it is properly seated.

<p>33:</p>	
<p>34: Mount the tension disk and the bolts.</p>	
<p>35: Tighten the bolts with 34 N/m.</p>	

<p>36:</p> <p>Check that there is no electrical connection between the water tank and knife support bridge.</p>	
<p>37:</p> <p>Measure the distance from the end gable to the shoulder of the shaft.</p>	
<p>38:</p> <p>Here the distance is 38 mm.</p> <p>Make a note of the distance you have measured:</p> <hr/>	

39:

The measure in point 38 determines the thickness of the gasket(s) to be put under the bearing.




Measure (mm)	Gasket(s) (mm)
37 – 37,25	1,75
37,25 – 37,5	1,5
37,5 – 37,75	1,25
37,75 – 38	1
38 – 38,25	0,75
38,25 – 38,50	0,50
38,50 – 38,75	0,25
38,75 – 39	none









40:


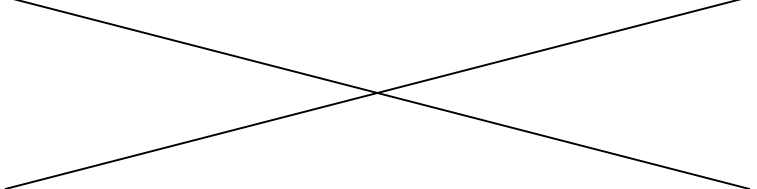

Add silicone to the water tap and mount it.






<p>41:</p> <p>Heating element(s)</p> <p>Remember to use the o-rings.</p>	
<p>42:</p>	
<p>43:</p> <p>Mount the flat bar-iron under the end gables.</p>	

<p>44:</p>	
<p>45: Mounting of the water valve.</p>	
<p>46:</p>	

47:	
48:	
49:	

<p>50: Outlet end completed.</p>	
<p>51: Place the iceflaker on the flat-bar irons.</p>	
<p>52: Key for the big gearwheel.</p>	

<p>53:</p> <p>Insert the key into the shaft.</p>	
<p>54:</p> <p>Mount the gear wheel on the shaft.</p>	
<p>55:</p> <p>Fasten the bolt in the key</p>	

<p>56:</p> <p>Mount DYNAMIC SEAL FLO 55mm. and BEARING FOR INLET – BY FLANGE.</p> <p>! Be careful: The pressure on the seal must be equal on all of the surface.</p>	
<p>57:</p> <p>Mount BEARING FOR INLET – BY FLANGE on GEAR BOX FOR C/D/E/F Ø56.</p>	
<p>58:</p> <p>Use anti seize grease on the bolts.</p>	

59:

Gently tighten the bolts. –
Remember that the threads are
made of aluminium.



60:

Close the four holes on the bearings
with the bolts.






61:

Mount the GEAR BOX on the end
gable.



<p>62:</p> <p>Make sure that the pin is inserted correctly into the gear box.</p>	
<p>63:</p> <p>Fasten the gear box.</p>	
<p>64:</p> <p>Mount DYNAMIC SEAL FLO 55mm. and BEARING FOR OUTLET – BY FLANGE.</p> <p>! Be careful: The pressure on the seal must be equal on all of the surface.</p>	

<p>65:</p> <p>Mount the bearing</p>	
<p>66:</p>	
<p>67:</p> <p>The hole at "A" has a thread and is only for dismantling the bearing.</p>	

- The drum of the iceflaker must now be able to rotate free but without sideward
- slack.
- Adjust the water level to 263 mm. for land based models and

Please refer to service bulletin “Mounting instructions for shaft seals type 011103” regarding adjustments of shaft seals type 011103.