















MANNLAKE

CONVERSION INSTRUCTIONS

From HH-170 Hand Crank 18/9 Extractor to HH-215 Motorized 18/9 Extractor

HH-166 CONVERSION KIT PARTS LIST

Packer Check Off	Part Number	Quantity Included	Item Description	Photo
	81-733	1	18/9 Frame Motor and Speed Control with Mount and Bracket	
	81-833	1	Motor Mount/Coupler Guard	
	81-933	1	1/2" (1.27cm) Coupler	
	36-115	1	Retainer Hinge (aka Safety Stop)	
	HH-799	1	Reinforced Crossbar	
		1	1/8" (0.3175 cm) Key Way	
		2	8 mm Stainless Steel Bolts	
		2	8 mm Stainless Steel Flange Nuts	
		2	5/16" (.312cm) Washer	
		1 each size	1/8" 5/16" 3/8" (0.3175cm, 0.79375cm, 0.9525cm) Ball Bearing	
		4	10/32" x 5/8" Zinc Plate Bolts	
		4	#10 zinc star washers	

If you are missing any of the above parts, please contact Mann Lake via email or phone:
beekeeper@mannlakeltd.com or 800-880-7694

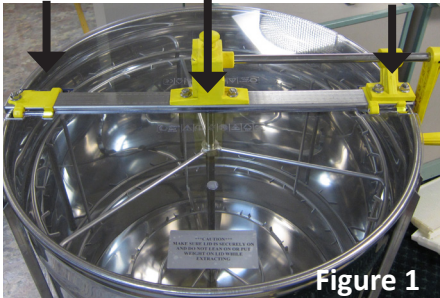


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TOOLS REQUIRED FOR ASSEMBLY (NOT SUPPLIED)

7/16" (1.111cm) Wrench
1/2" or 13 mm Wrench

Rubber Hammer
3 mm Allen Wrench



For the purpose of these instructions, the “front” of the extractor will be the side with the Honey Gate. The “right side” is the side with the crank handle.

1. Gently remove both halves of the lid by sliding each toward the outside of the extractor.

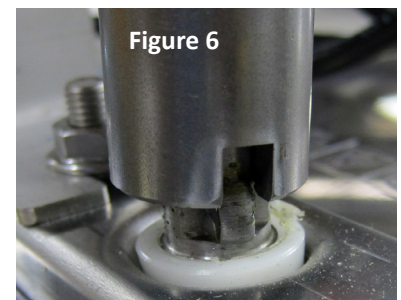
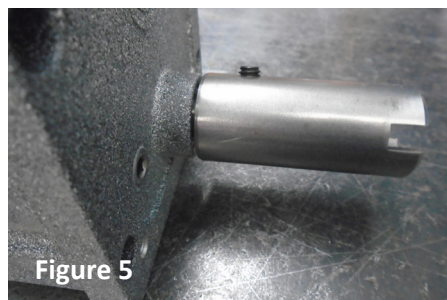
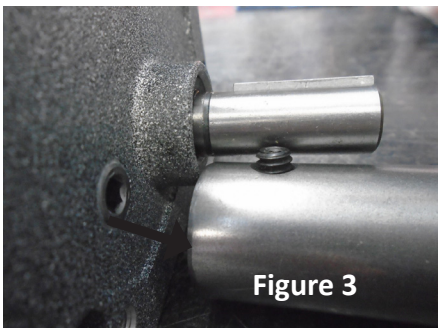
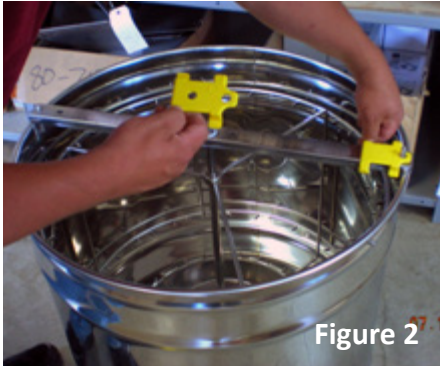
2. Use a 1/2" (1.27cm) wrench to remove the hand crank and gear box. (Figure 1)

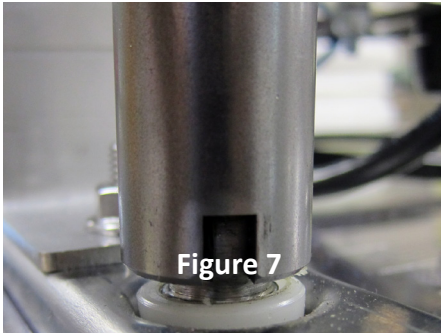
3. Remove the existing crossbar and replace with the provided crossbar. (Figure 2)

4. Place the 1/8" Key Way into the groove of the Motor Shaft. (Figure 3)

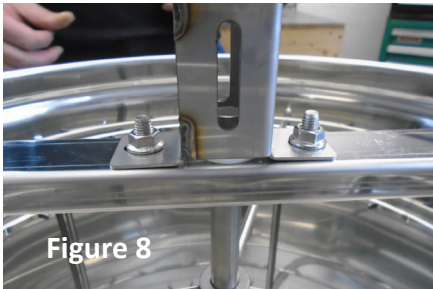
5. Place the 1/2" Coupler (flat end goes on the Shaft first) over the Shaft and Key Way. (Figure 4) Gently tap the Coupler with a rubber hammer if necessary.

6. Before tightening the coupler, you need to set the height of the coupler, so apply the Motor to the Extractor by placing the Shaft of the Extractor into the Coupler on the Motor. The ear of the Shaft will fit into the notch in the Coupler. (Figure 6)

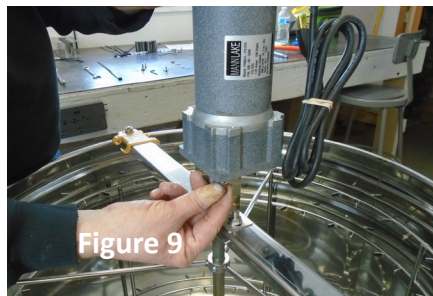




7. The ear of the Shaft should sit gently within the notch of the Coupler. Do not force the coupler to seat completely (figure 7). Use the 3 mm allen wrench to tighten the set screw on the Coupler. This will hold the Coupler in place. Use a threadlocker for secure fit.



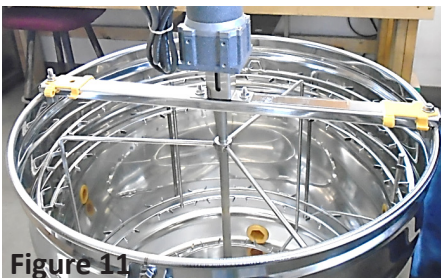
8. Remove the Motor and Coupler from the Shaft and set aside.



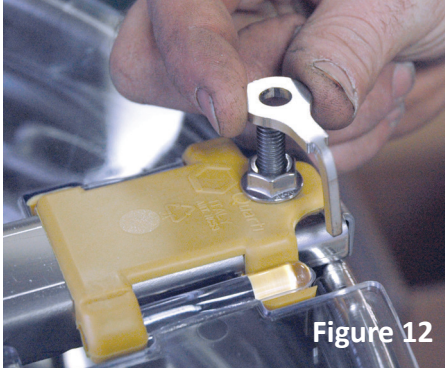
9. Center the Coupler Guard/Motor Mount on the Shaft and line up the pre-drilled holes. Use 2 - 8 mm Stainless Steel Bolts, 2 - 5/16" Washers (placed in the bolt underneath the crossbar), and 2 - 8 mm Flange Nuts to secure. (Figure 8)



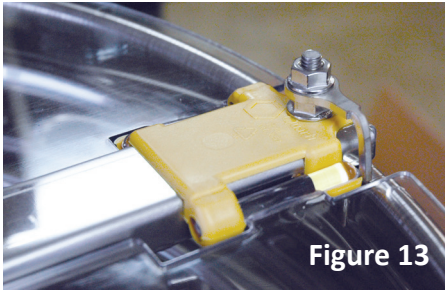
10. Place the Motor back on the extractor with the Coupler going inside the Coupler Guard, where it will once again gently sit on the ear of the Shaft and the Motor will sit on the Motor Mount Bracket. (Figure 9)



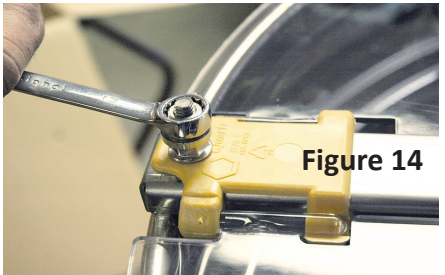
11. Use the 4 - 10/32" x 5/8" Zinc Plate Bolts and 4 - #10 Zinc Star Washers to fasten the Motor to the Mount, placing one Washer on the Bolt and insert the Bolt from the bottom of the Motor Mount. Tighten. (Figure 10)
12. Place the lid guide bars into the hinges on both sides. (Figure 11)



13. Place Safety Retainer hinge on the right lid hinge (two holes).
(Figure 12)



14. Place a 13mm nut over safety hinge. (Figure 13)



15. Tighten down with 13mm socket wrench. (Figure 14)

