

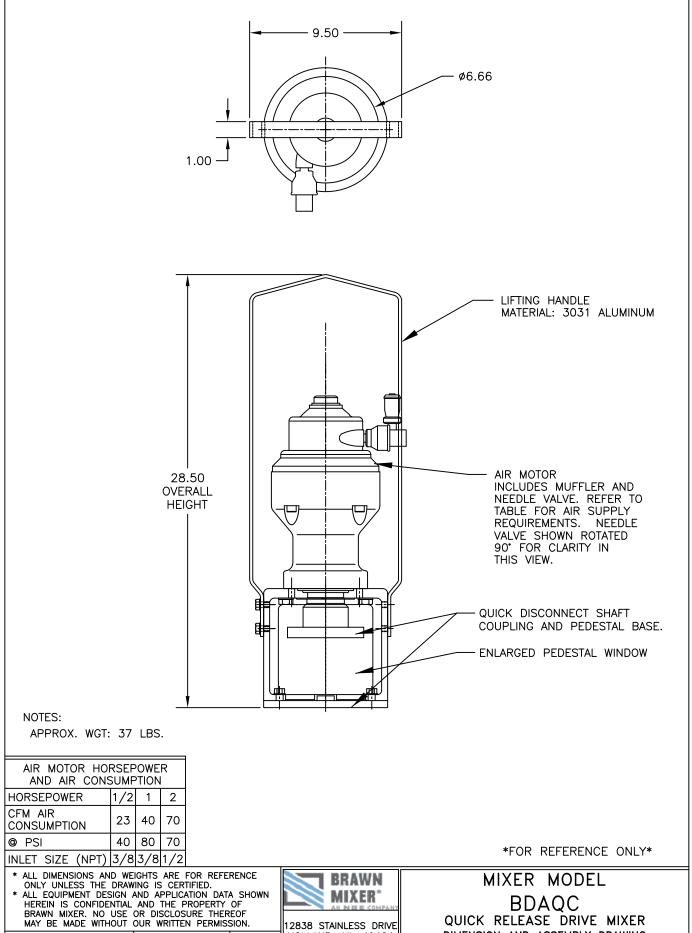
# OPERATION AND

# **MAINTENANCE**

# **MANUAL**

# **SERIAL NUMBER**

CUSTOMER:	
SALES REP.:	



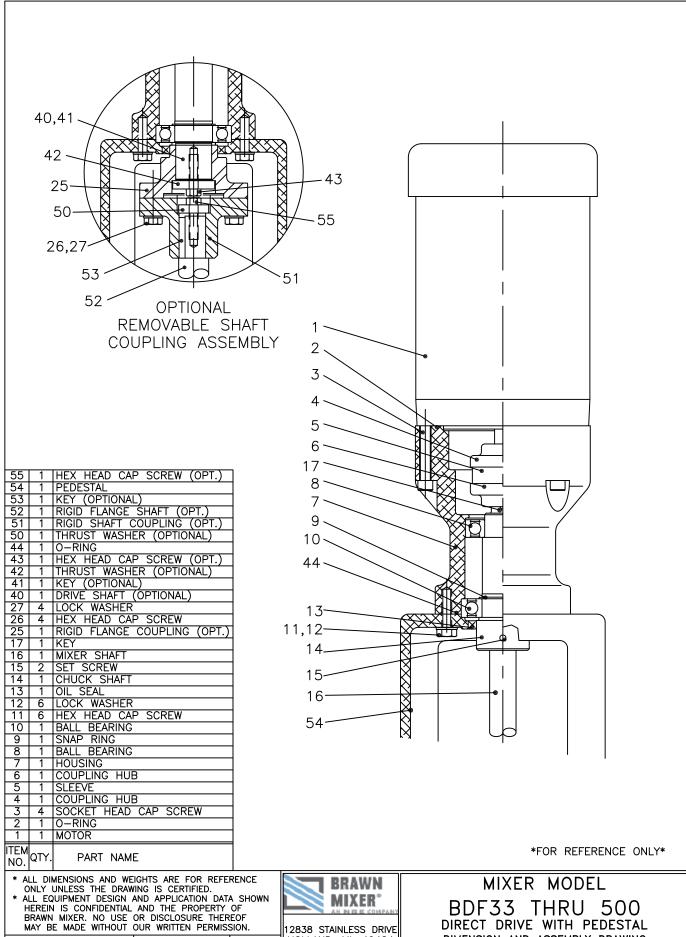
DRAWN BY: ZKM DATE: 6/17/08 © 2018 APPROVED BY: DATE:

12838 STAINLESS DRIVE HOLLAND, MI. 49424 PH. 616-399-5600 **DWG.** FAX 616-399-3084

**BDAQC** QUICK RELEASE DRIVE MIXER DIMENSION AND ASSEMBLY DRAWING

TK0151

REV.



DATE: 5-8-97 © 2018 DRAWN BY: BSB APPROVED BY: DATE:



12838 STAINLESS DRIVE HOLLAND, MI. 49424 PH. 616-399-5600 DWG. FAX 616-399-3084

BDF33 THRU 500 DIRECT DRIVE WITH PEDESTAL DIMENSION AND ASSEMBLY DRAWING

TK0033

REV. Α



# BDAQC-SERIES OPERATION & MAINTENANCE MANUAL

12838 Stainless Drive, Holland, MI 49424

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## **SAFETY**

The precautions mentioned in this manual are not intended to cover all hazards that may exist in a plant or on this equipment. Using safety mechanisms require the constant attention of everyone in the vicinity of this (or any) equipment.

A plant and the related equipment are only as safe as the personnel are safety-minded. Proper equipment maintenance and the use of personal safety devices will contribute as much toward safety as will any number of mechanical safety devices.



# WARNING



- To assure maximum safety, optimum performance, and to gain knowledge of the product, it is essential that you or any other operator of this equipment read and understand the contents of this manual before the mixer is operated.
- Installation, operation and maintenance must be performed only by qualified personnel.
- Do not operate this equipment unless all safety devices are installed and working properly. Check all devices prior to starting the equipment.
- Do not touch rotating parts (keep all guards and safety devices installed while operating).
- Develop a safety checklist for this equipment and perform regular maintenance to ensure continued and proper operation.
- Do not make any field changes or modifications without reviewing the change with your BRAWN Sales Representative or the BRAWN Customer Service Department.

# **CUSTOMER SERVICE**

Phone: 616/399-5600 Fax 616/399-3084

Mix	er Model #	BDAQC-SERIES
Coı	ntact:	
$\triangleright$	Customer Service	616/399-5600
$\triangleright$	E-Mail	sales@brawnmixer.com

You have received a quality engineered and manufactured BRAWN mixer. We value your business, and we will strive to provide you with the proper service and equipment to meet your needs.

The information contained in this BRAWN Mixer Operator's Manual is designed to assist you in putting your BRAWN mixer into operation without further delay. Please read the entire manual before attempting to start your mixer. If you have any further questions or if, by some chance, there are some missing components, contact your BRAWN Mixer Representative or the factory immediately.

We welcome your comments and suggestions concerning any BRAWN Mixer product. Please direct these comments in writing to the National Sales Manager at BRAWN Mixer located in Holland, Michigan. To expedite troubleshooting service, please make your initial contact through your BRAWN Mixer Representative. If, for whatever reason, your representative cannot be reached and you have an emergency condition, please call us directly at 616/399-5600 and ask for the Customer Service Department.

Remember, you are backed by your BRAWN Mixer Technical Representative and the factory support team. We are here to assist you; let us know how we can be of help.



# BDAQC-SERIES OPERATION & MAINTENANCE MANUAL

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#### Phone: 616/399-5600 Fax 616/399-3084

### START UP

#### Before operating the mixer, jog the motor and observe mixer shaft rotation. Proper rotation is clockwise, as viewed from the top, unless otherwise noted.

 Check all bolts and fasteners for tightness. It is good maintenance practice to recheck all bolts after two weeks of operation and periodically thereafter. Refer to TABLE 1 for recommended torque values.

**TABLE 1: RECOMMENDED TORQUE VALUES** 

	TORQUE VALUES (FOOT POUNDS)	
HARDWARE SIZE	STANDARD GRADE 2 & 300 SERIES STAINLESS	HIGH STRENGTH GRADES 5 & 8
5/16	9	13
3/8-16	17	27
1/2-13	40	65
5/8-11	85	125

#### BOLT-TIGHTENING RECOMMENDATIONS:

Inadequately or improperly tightened hardware can loosen due to vibration during mixer operation. This can result in reduced mixer life or damage to equipment. Recommended torque values for tightening all in-tank and mounting hardware are listed in **TABLE 1**. These average torque values should be considered only as a guide and not as absolute values.

3. Do not attempt to start mixer with impellers buried in solids or solidified liquids.



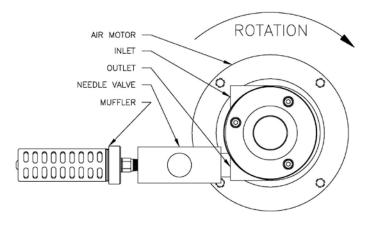
# CAUTION

Do not operate mixer with the tank empty or the lowest impeller submerged with less than ½ of the impeller diameter of liquid above it. Damage to the mixer and/or mounting structure may result.

### **AIR MOTORS**

Since your mixer was supplied with an air motor, certain precautions must be taken as follows:

- The mixer was shipped with a needle valve installed on the motor outlet port. A muffler is provided for installation at the needle valve (See Air Motor Diagram). The function of the needle valve is to control the motor speed.
- The air supply must be adequately sized to provide the proper pressure and volume of clean, filtered, dry air. A pressure regulator is required prior to connection to the needle valve. An air line filter should be capable of 25 microns or better.
- 3. Blow out the air supply line before connecting to the motor to remove any dirt or debris in the air line.



AIR MOTOR ROTATIONAL DIRECTION DIAGRAM



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## **STORAGE**

Units shipped from Brawn Mixer are intended to be used within 30 days after receipt and presumed to be stored indoors in a heated building. Store mixers as packaged by the factory. If you intend on storing units under adverse conditions or for a long period of time, special storage precautions will be necessary.

- Store in a sheltered area away from chemical vapors or steam.
- 2. Cover.
- 3. Do not store in sunlight or near high heat.
- 4. Rotate output shaft 360° every 3-4 weeks.
- 5. Mixers should not be stored near vibrating machinery to avoid damage to the bearings.

#### WARRANTY

WARRANTY: All equipment or parts covered by this manual are guaranteed free from defective material and workmanship for a period of twelve (12) months from date of shipment, under normal use and service. This warranty does not cover failure of normal wear parts unless the failure of such part has resulted from defective material and workmanship. BRAWN Mixer will repair or replace, at its option, any equipment which has been found to be defective and is within the warranty period, provided that the equipment is shipped, with previous factory authorization, freight prepaid, to BRAWN's plant in Holland, Michigan, USA.

All return shipments are made FOB BRAWN's factory. BRAWN is not responsible for removal, installation, or any other incidental expenses incurred in shipping the equipment to or from BRAWN. In the case of components purchased by BRAWN Mixer and incorporated in the equipment, the component manufacturer's guarantee shall apply.

NOTE: Any modifications or corrective work done to the equipment which were not specifically authorized in writing by BRAWN Mixer shall void this limited warranty, and BRAWN Mixer shall accept no liability for any of the corrective work or expenditures which were conducted without their prior, written authorization. BRAWN Mixer shall not be held liable for any further cost, expense, or labor to replace equipment or replaceable parts, or indirect or consequential damages.

With the exceptions of the limited warranty set out above, there are no other understandings, agreements, representations, or warranties implied (including any regarding the merchantability or fitness for a particular purpose), not specified herein, respecting this agreement or equipment, hereunder. This contract states the entire obligation of BRAWN Mixer in connection with this transaction.

#### SHOULD WE MAKE A MISTAKE...

# BRAWN Mixer's Direct Returns Policy

To ensure proper handling of your return, please take a moment to read the following:

- ALL returns require a RETURN GOODS AUTHORIZATION (RGA) NUMBER. We are unable to process your return or issue proper credit without an approved RGA number.
- ALL returns must be COMPLETE, including all original warranties, manuals, documentation, and packaging.
- ALL product must be received within 14 days of issuing an RGA number.

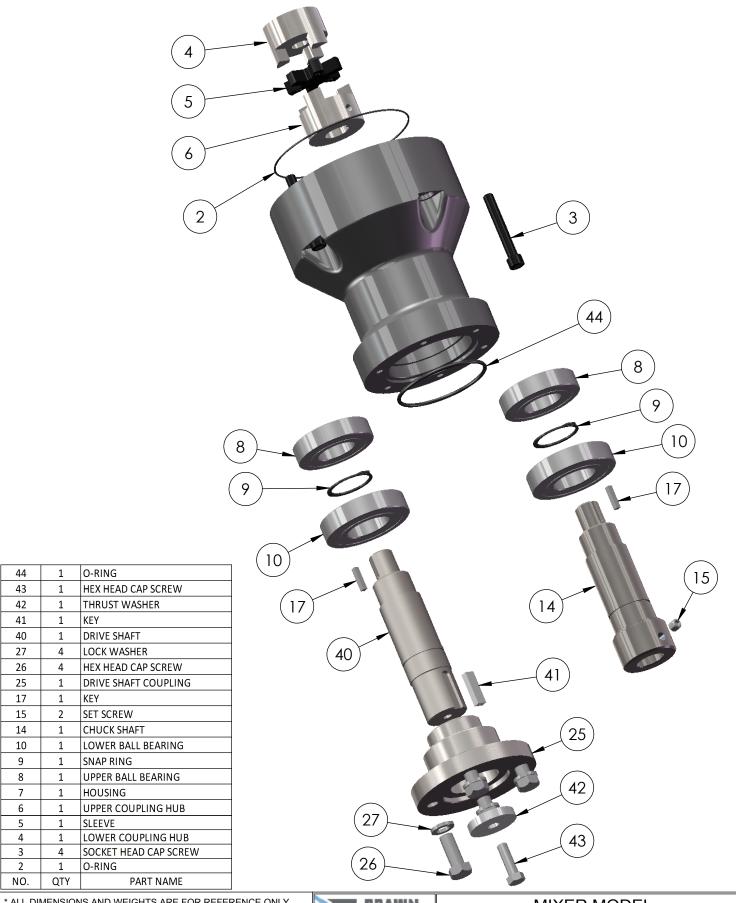
#### **How to Return Product**

You must have a **RGA** number before you return any product to BRAWN Mixer To obtain this number, call **616/399-5600** and ask for Customer Service. Be sure to have available the following information:

- ✓ your order number
- ✓ the BRAWN product serial number
- ✓ the part number and description of the product
- ✓ the reason for the return

#### ◆ IMPORTANT ◆

The RGA number must be written clearly on all boxes being returned. C.O.D. shipments will not be accepted.



 $^{\star}$  ALL DIMENSIONS AND WEIGHTS ARE FOR REFERENCE ONLY UNLESS THE DRAWING IS CERTIFIED.

\* ALL EQUIPMENT DESIGN AND APPLICATION DATA SHOWN HEREIN IS CONFIDENTIAL AND THE PROPERTY OF BRAWN MIXER. NO USE OR DISCLOSURE THEREOF MAY BE MADE WITHOUT OUR WRITTEN PERMISSION.

 DRAWN BY:BSB
 DATE: 9/6/2018
 © 2018

 APPROVED BY:
 DATE:



12838 Stainless Drive Holland, MI 49424

PH: 616-399-5600 FAX: 616-399-3084

# MIXER MODEL BD/BGM HOUSING EXPLODED VIEW

DIMENSION AND ASSEMBLY DRAWING

DWG. A- TK0162

REV.



3389 128th Avenue Holland, MI 49424 USA **PARTS PRICING: BGM SERIES** 

Phone: 616/399-5600 Fax: 616/399-3084

Item # on Drawing # TK0162 OR TK0163	Description	Part Number
2	O-Ring	10028601
4	Coupling hub	<sup>(1)</sup> CF
5	Sleeve	<sup>(1)</sup> CF
6	Coupling hub	<sup>(1)</sup> CF
	Housing (painted) - shell only	100025
7	Housing (with internals) - chuck coupling	5000802
	Housing (with internals) - rigid coupling	5000803
8	Ball bearing	10008602
9	Snap ring	10008501
10	Ball bearing	10008603
13	Oil Seal	10008801
14	Chuck shaft 1" (1)CF	<sup>(1)</sup> CF
	Chuck shaft 3/4" (1)CF	<sup>(1)</sup> CF
18	Ball mount	500074
23	Shoe	100695
19-24	Clamp assembly	500086
25-28, and 40-43	Rigid flange coupling assembly	500079
19-23, 29	Cup plate	500088
32	Gearbox	10033006
35 [BGM(F)]	Plate mount w/shock absorbers	500075
38 [BD(F)]	Angle riser	500121
44	O-ring	10028602

### NOTES

# SPARE PARTS KIT

Shaded items = Recommended Spare Parts Kit

<sup>(1)</sup> **Consult Factory**: provide serial number with request for quotation.

