

"Superior Products are the User's Advantage."

## SERVICE MANUAL FOR CIRCLE DYNAMICS INC. 4" DSY - SANITARY MOUNT MIXER DRIVE

### **WARNING**

This product is intended for use in an industrial mix room environment. It is the user's responsibility to ensure that all forms of external energy are removed from the product prior to servicing to eliminate the risk of being injured by rotating parts during service.

## **FAILURE MODES**

This product is only to be used in accordance with Circle Dynamics instructions for use and applications. Any other application may result in serious injury.



## **INSTALLATION** (Refer to Fig. 1)

Fig. 1

- Install *key* (14) onto Doyle air motor. Add Loctite 242 (loctite blue) to the *set screw* (8). Install *set screw* into *key* (14) and secure tightly.
- Slide 4DSY mount onto the bottom of the air motor. Rotate until the *key* (14) slides into the *coupling* (13).
- Rotate the drive *housing* (1) until the three mounting holes line up with the three threaded holes on the air motor.
- Install three *hex head bolt* (9) and *washers* (10) and tighten securely.
- Attach drive unit to top of tank using a 4 inch sanitary clamp and tighten securely.

Connect air supply to appropriate port and adjust flow control to set speed.

### REBUILD INSTRUCTIONS FOR CIRCLE DYNAMICS DSY DRIVE UNIT

## **DISASSEMBLY**

- 1) Disconnect any energy source and remove motor and drive unit from tank by removing 4 inch sanitary clamp.
- 2) Remove mounting bolts (9) and washers (10) from air motor.
- 3) Pull 4DSY mount away from Doyle air Motor.
- 4) Press shaft (7) from housing (1).
- 5) Remove *set screw* (8) from *coupling* (13) and remove *coupling* from driveshaft (7).
- 6) Remove snap ring (4) from drive shaft (7).
- 7) Press *bearings* (5) and *bearing spacer* (6) from *drive shaft* (7). Discard *bearings* (5).



Fig. 2

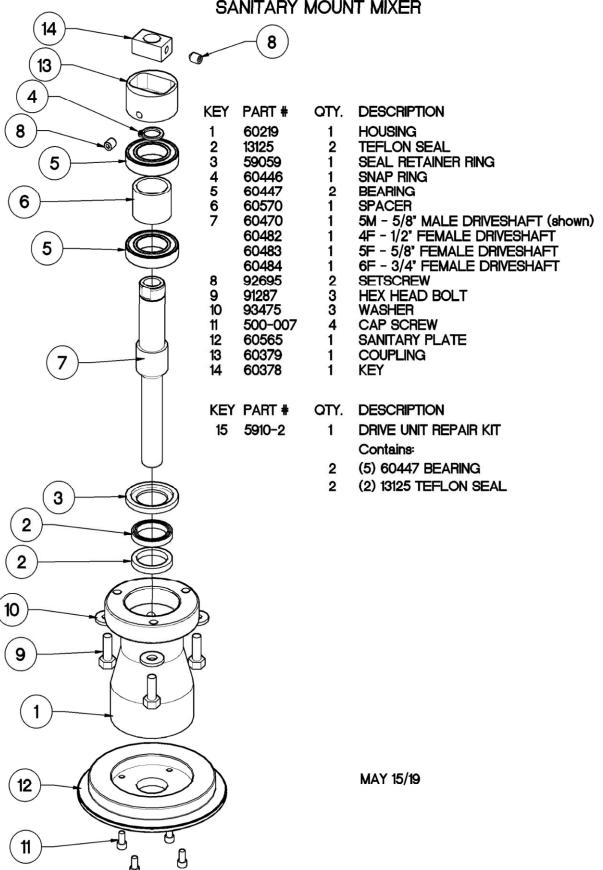
- 8) Remove seal retainer plate (3) from housing (1).
- 9) Remove seals (2) from housing (1) and discard.
- 10) Clean and dry components (1), (3), (4), (6), and (7) and prepare for re-assembly.

### **ASSEMBLY**

Rebuild kit 5910-2 contains parts (2) and (5).

- 1) Press bearings (5) and bearing spacer (6) on to drive shaft (7).
- 2) Install *snap ring* (4) on drive *shaft* (7).
- 3) Install one *seal* (2) in *housing* (1) with lip facing down.
- 4) Install second seal (2) in housing (1) with lip facing up.
- 5) Install *seal retainer plate* (3) with recess facing up.
- 6) Press assembled drive shaft unit (7) all the way into housing (1).
- 7) Install coupling (13) onto driveshaft (7). Install set screw (8) into coupling (13).

# 4" DSY SANITARY MOUNT MIXER



## TECHNICAL DATA

Maximum Speed: 1100 RPM

Seals: Teflon

Housing: Anodized Aluminum

Bearings: Sealed Ball

Shaft: 440C SS

#### THE CIRCLE DYNAMICS INC. WARRANTY AND DISCLAMERS

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Patent Pending
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Circle Dynamics Inc.
171 A Rink Street, Suite 150
Peterborough, Ontario, Canada K9J 2J6 Tel:
1-705-768-3338 Fax: 1-705-740-1975
Email:jdoyle@circledynamicsinc.com
Web:www.circledynamicsinc.com