

*“Superior Products are the User’s Advantage.”*

**SERVICE MANUAL FOR CIRCLE DYNAMICS INC.  
DBR – BAR 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 application. Any other application may result in serious injury.

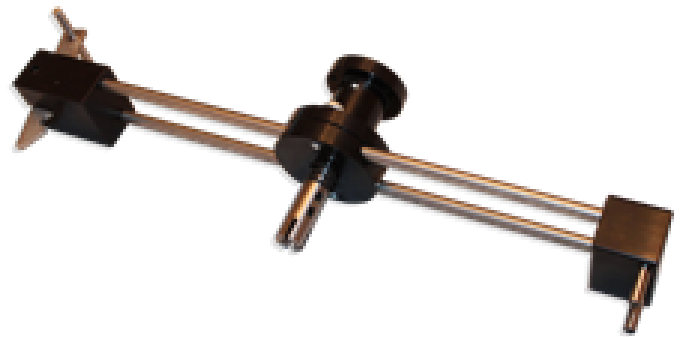


Fig 1.

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

- Remove set screw (8). Add Loctite 242 (loctite blue) to the set screw and re-install.
- Align setscrew (8) in drive shaft with flat on air motor driveshaft.
- Slide drive shaft of DBR mount on to air motor shaft and finger tighten setscrew (8).
- Rotate the drive *housing* (7) until the three mounting holes line up with the threaded air motor holes.
- Install three hex head screws (23) and washers (22) and tighten securely.
- Loosen connecting setscrew ¼ of one turn to relieve axial load and re-tighten securely.
- Pull clamp lever back (21) align coupling (15) with the prop shaft of the tank and set drive unit to top of tank. Release clamp lever (21) to secure the DBR mount to the tank.

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

## REBUILD INSTRUCTIONS FOR CIRCLE DYNAMICS DBG DRIVE UNIT

### DISASSEMBLY

- 1) Disconnect any energy source and remove motor and drive unit from barrel by pulling back on the clamp lever (21) and pulling up on the motor/bar mount assembly.
- 2) Remove *setscrew* (8) from *drive shaft* (1).
- 3) Remove *mounting bolts* (22) and *washers* (23) from air motor and remove air motor.
- 4) Remove *hex bolt* (5) and *washer* (6) and remove the motor mount assembly away from the bar assembly.
- 5) Press *shaft* (1) out of *housing* (7).
- 6) Press *roll pin* (16) out from *coupling* (15) and remove coupling (15) and spring (14).
- 7) Remove *snap ring* (4) form *drive shaft* (1)
- 8) Press *bearings* (2) and *bearing spacer* (3) from *drive shaft* (1).
- 9) Clean and dry components (1), (3), (4), (8), and (7) and prepare for re-assembly.

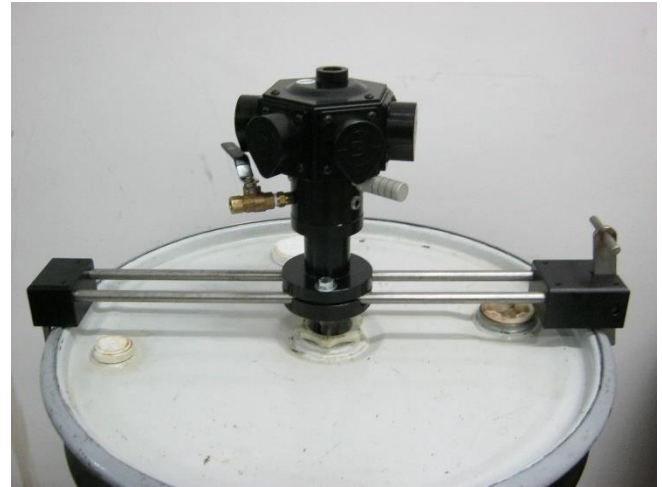


Fig. 2

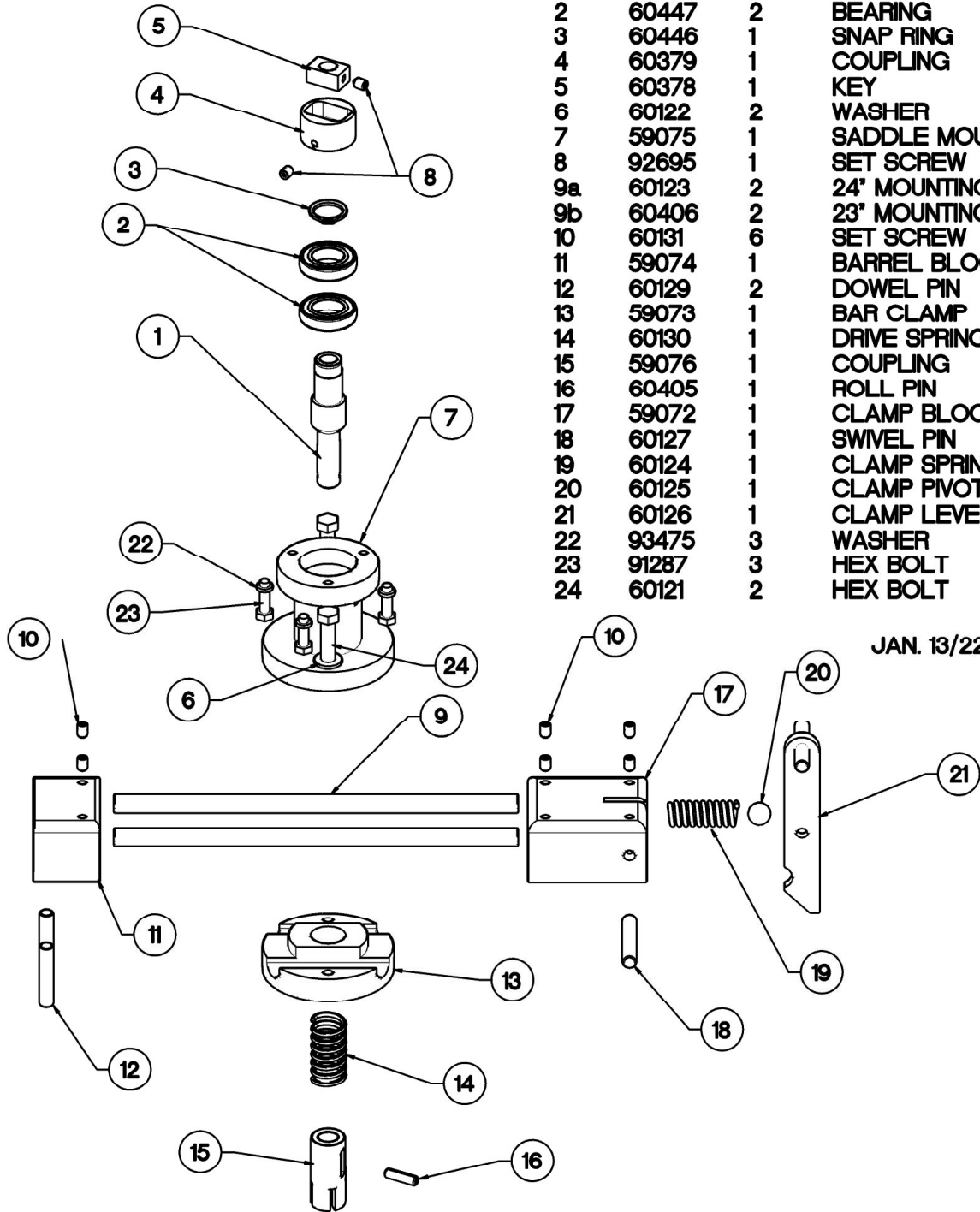
### ASSEMBLY

- 1) Press *bearings* (2) and *bearing spacer* (3) on to *drive shaft* (1).
- 2) Install *snap ring* (4) on *drive shaft* (1).
- 3) Press assembled *drive shaft unit* (1) all the way into *housing* (7).
- 4) Slide *spring* (12) and *coupling* (15) over end of *drive shaft* (1) press *roll pin* (16) through *coupling* (15) / *shaft* (1).
- 5) Sandwich *mounting bars* (9) between the *housing* (7) and *bar clamp* (13).
- 6) Install *hex bolt* (5) and *washer* (6) through *housing* (7) and into *bar clamp* (13). Tighten securely.
- 7) Refer to: *Installation* instructions on page 1 for assembly to a Doyle air motor.

Refer to installation instructions for assembly to Air Motor.

### DBR SADDLE MOUNT MIXER

KEY	PART #	QTY.	DESCRIPTION
1	60825	1	DRIVE SHAFT
2	60447	2	BEARING
3	60446	1	SNAP RING
4	60379	1	COUPLING
5	60378	1	KEY
6	60122	2	WASHER
7	59075	1	SADDLE MOUNT HOUSING
8	92695	1	SET SCREW
9a	60123	2	24" MOUNTING BAR
9b	60406	2	23" MOUNTING BAR
10	60131	6	SET SCREW
11	59074	1	BARREL BLOCK
12	60129	2	DOWEL PIN
13	59073	1	BAR CLAMP
14	60130	1	DRIVE SPRING
15	59076	1	COUPLING
16	60405	1	ROLL PIN
17	59072	1	CLAMP BLOCK
18	60127	1	SWIVEL PIN
19	60124	1	CLAMP SPRING
20	60125	1	CLAMP PIVOT
21	60126	1	CLAMP LEVER
22	93475	3	WASHER
23	91287	3	HEX BOLT
24	60121	2	HEX BOLT



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## TECHNICAL DATA

Maximum Speed: 1100 RPM


Housing: Anodized Aluminum

Bearings: Sealed Ball

Shaft: 440C SS

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