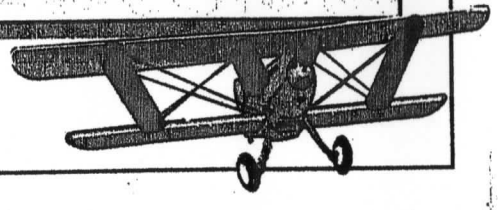
The well known Bodell Brake System, by Mickey Bodell, was originally designed for use with the Firestone wheel.

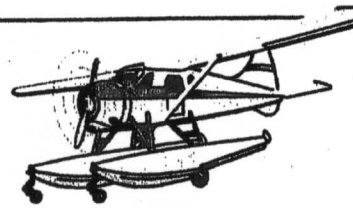
Redesigned in 1975, the new Bodell 2000 Assembly now includes wheels and bearings which exceed the FAA requirements for confidence and trouble free operations.

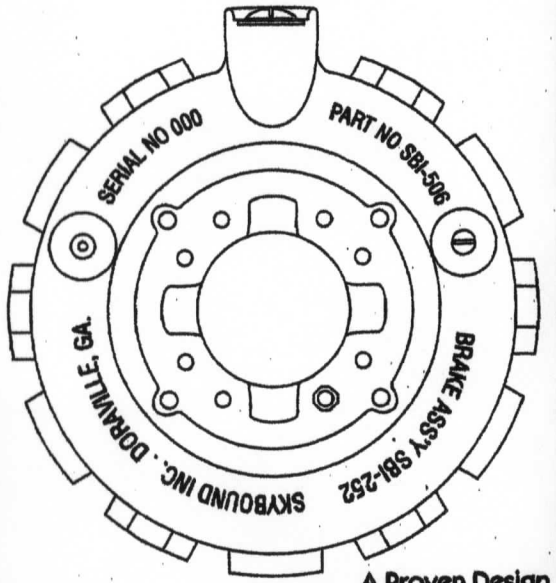
Skybound, Inc. has acquired full rights to the Bodell patented design and manufacturing techniques.

Skybound, Inc. is located in Doraville, Georgia, a suburb Northeast of Atlanta. Skybound is ready and able to fulfill your requirements for parts and full assemblies of this well proven and warranted break assembly.

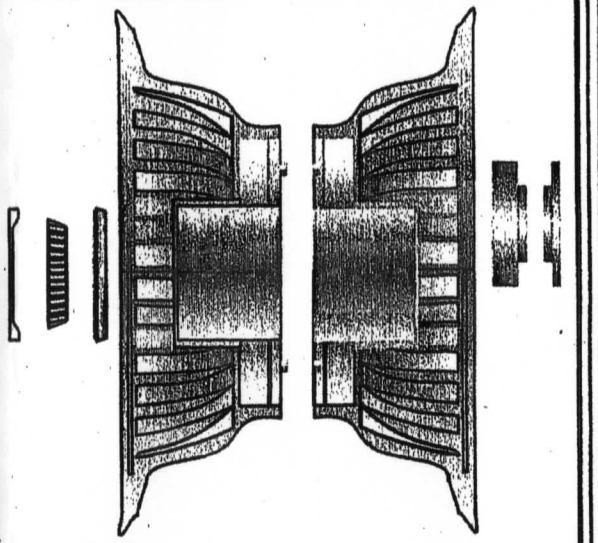


A PROVEN BRAKE ASSEMBLY THAT MEETS AND EXCEEDS SPECIFICATIONS...





A Proven Design In Use Since 1975.



The Specifications

- Estimated wt. of brake assembly..... 2.9 lbs.
- Hydraulic area..... 6.6 sq. in.
- Total friction surface..... 23.666 sq. in.
- Kinetic energy rating.....130,000 ft. lbs.
- Maximum hydraulic displacement..... .63 cu. in.
- Lining clearance- new after break-in..... .005 to .032
- Maximum wt. per wheel DGA-2000..... 2000 lbs.
- Normal operating pressure @2000 lbs./ Brake & 10 ft./ Sec2 deceleration..... 275 p.s.i.
- Hydraulic pressure at release condition not to exceed..... 3 p.s.i.

The Benefits

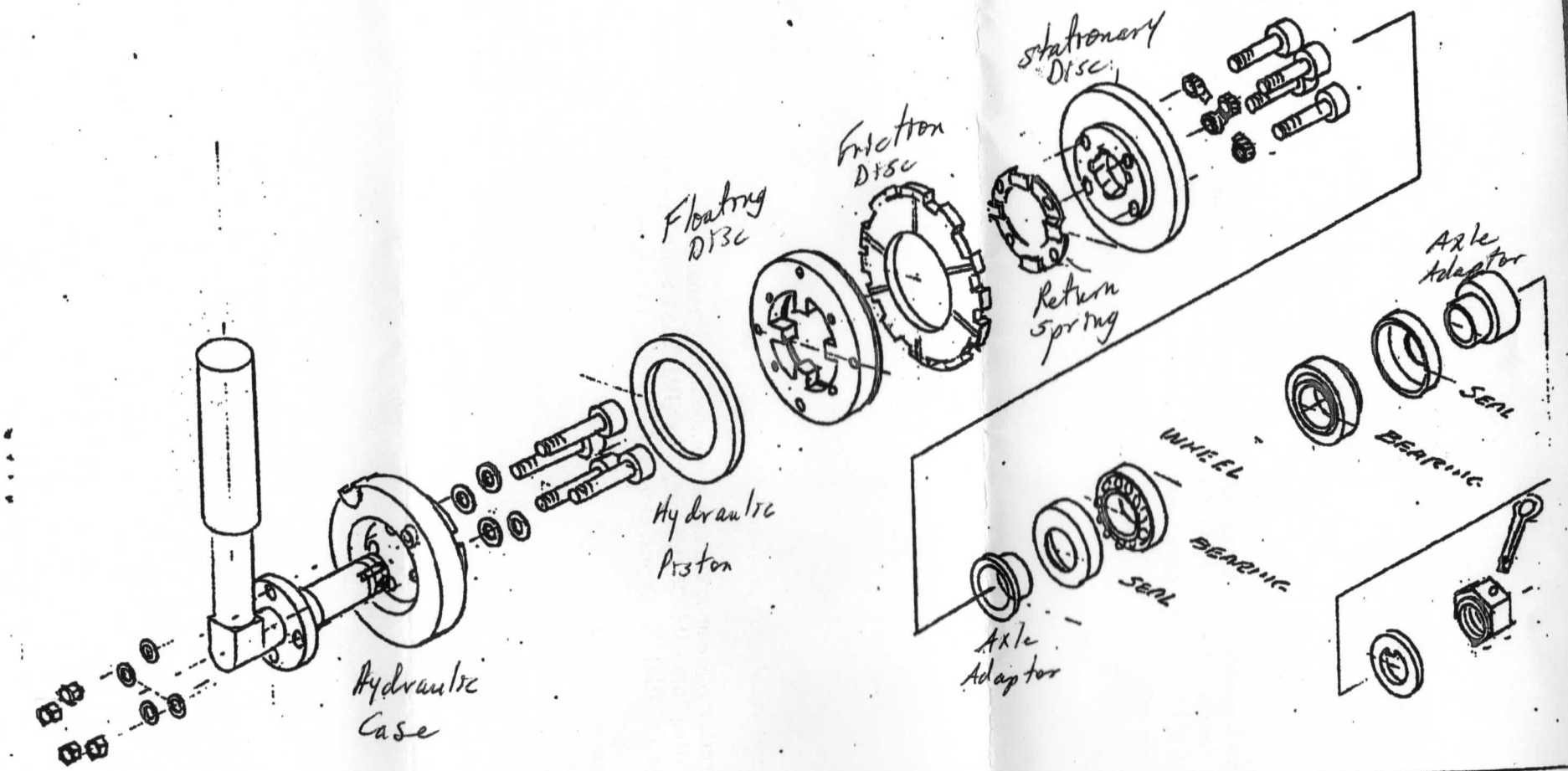
- Brake is fully enclosed in the wheel for lower drag.
- No exposed brake disc to rust.
- There are no clips to fall out to cause brake lock.
- Allows for less brake assembly weight.
- The friction disc life normally exceeds 1,000 hours.
- Smoothest brake operation in the market.
- All this at a lower comparable price.

Call or Fax Today!

Phone:770-446-6797

Fax:770-242-6263

(Regular Office Hours Are Mon-Fri 8am to 5pm Eastern Time)



BODELL AIR CRAFT BRAKE ASS'LY

DRAWN A. PATMAN 10/26/98

SCALE NTS

DRWG No BMI-252-2

BODELL MANUFACTURING, INC.
P.O. Box 421
Harbor City, California 90710

INSTRUCTION SHEET No. 13 April 5, 1976

INSTALLATION PROCEDURE

ADAMS DGA2000 WHEEL & BODELL BM1252 BRAKE ASSEMBLY ON STINSON 108 SERIES (UNIVAIR)

MODEL STINSON 108, 108-1, 108-2, 108-3, 108-5 SERIES (TC A767)

Installation of Bodell Mfg., Inc. Kit No. 13 on Stinson Aircraft is accomplished in approximately two hours and will result in a long life, trouble free, quiet brake. Suggested procedure is outlined below:

1. Use customary precaution and jack-up one side at a time of ship so that wheel, brake and axle may be removed.

2. Remove wheel, brake assembly and discard.

3. Clean and inspect axle.

4. Remove from the kit one of the brake units. Disassemble the stationary disc, rotating disc, spring and floating disc from unit by removing four ¼x20 screws. Do not remove piston from gland.

5. Assemble gland to axle using correct size bolts provided.

6. Bolt axle and brake glad to strut by using 4 NAS144 bolts and AN365 nuts provided and torque to 75-100 inch pounds. Use AN960-4 washers as necessary.

7. Assemble brake in proper order. Make sure spring action is against floating disc. Torque the four ¼x20 screws to 40-50 in pounds and safety by bending one lug of special washer into slot of screws. Large lug on washer must be bent over edge of casting. (BMI 564)

8. Deflate tire and remove from old wheel. Install same on new wheel. Torque bolts on wheel (before inflating) to 100 to 140 in pounds.

9. Install wheel on axle with milled lugs engaged in rotating disc of brake.

10. Install original axle nut and cotter key in usual manner.

11. Check wheel and brake for rotation.

12. Connect hydraulic line. Some reforming of tube may be necessary.

13. Fill master cylinder with MIL-H5606A (red) hydraulic fluid or its equivalent and bleed brakes. Generally, the brake will gravity bleed if the bleeder screw is removed and the master cylinder reservoir is kept filled during the process. Brake should be exercised several times and bled the second time to remove all trapped air. Pressure bleeding from the bottom up is not usually effective as it traps a chamber of air in the upper section of the brake assembly.

14. Check operation of brake by depressing pedal. Spongy or no pressure is indication of air in system. Once proper pedal is evident, check brake for proper operation by rotating wheel. Although all brake units are adjusted and tested at factory, some re-adjustments may be necessary at installation. Clearance in friction surface of brake is adjusted by bending return spring slightly. Clearance between the friction surface of brake is adjusted by bending return spring slightly. Clearance between the friction discs is adjusted by increasing or decreasing the action of the Retract Spring (BMI-359). To increase clearance, bend the spring tabs outward to increase action. Bend them inward, (flatter), to decrease action and close the clearance. Clearance should be .002" to .007". However, when installing new discs it is advisable to adjust to zero clearance, (so that drag is felt when rotating the Lining Disc by hand). This will provide the right clearance after the brakes have been used a couple of times to flatten and burnish the copper linings. Always replace the Retract Spring when installing new discs.

    It is not usually necessary to re-adjust the brakes in service as the Retract Spring is not completely elastic and is designed to give away to some extent in service, thus maintaining good adjustment.

15. Repeat installation procedure for opposite side.

16. Normal replacement of friction components: remove the four Assembly Screws and replace Floating Disc (BMI-254), Lining Disc (BMI-223), Stationary Disc (BMI-253), and Retract Spring (BMI-359). Adjust clearance according to Paragraph 14, above.

17. Replacement of Piston Seal "O" Rings: Remove the four assembly screws and remove all Friction Discs and Pusher Ring (BMI-341). Carefully apply brake pedal pressure while manually restricting movement of the Piston Seal Assembly (BMI-527-1) to prevent the Piston from emerging unevenly. Clean the groove in the Ring Gland Assembly (BMI-506) and smooth the surfaces with fine wet-or-dry sandpaper or crocus cloth. Install new "O" rings (BMI-6230-18 & BMI-6230-23) in the Piston. Lubricate with hydraulic fluid and press evenly into the Gland. Reinstall Pusher Ring and Friction Discs and bleed the brake. Adjust clearance according to Paragraph 14, if necessary.

18. Approval Number SA799WE.

Parts and service information available through Bodell Manufacturing, Inc., P.O. Box 421, Harbor City, California 90710.

SKYBOUND

BODELL BRAKES

PART NUMBER	DESCRIPTION	PRICE (EACH)
BMI223	Friction Disc	$ 42.00
BMI359	Retractor Spring	13.50
BMI540	Copper Heat Dissipator	19.50
BMI6230-18	"O" Ring	5.15
BMI6230-23	"O" Ring	5.25
BMI506	Hydraulic Gland - Case	172.00
BMI527	Hydraulic Gland - Piston	61.00
BMI341	Fiber Heat Insulator	24.75
BMI254	Floating Disc	86.25
BMI253	Stationary Disc	87.85
BMI503-416-18	Brake Assembly Bolts	2.99
BMI204	Wheel - Inner Half	150.00
BMI205	Wheel - Outer Half	150.00

KITS:

Minor - Friction Discs and Retractor Springs (2 each)
$111.00

Major - Friction Discs, Retractor Springs, Copper Heat dissipators (with rivets) "O" Rings
$185.00

SKYBOUND MANUFACTURING, INC.
SUPPLIERS OF BODELL BRAKES FOR GENERAL AVIATION
6910-A Buford Highway • Doraville, Georgia 30340
Telephone 770-446-6797 • Fax 770-242-6263