

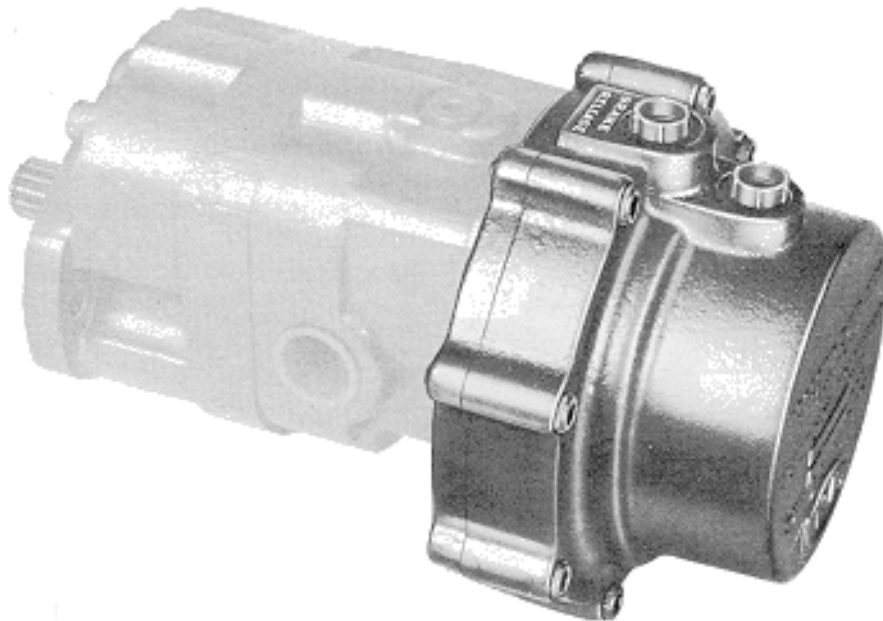
**VON
RUDEN**

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ROL-SEAL® BRAKE

REAR-MOUNTED, MULTI-DISC
TYPE FOR RSA, RSB AND
RSC MOTORS

MAINTENANCE AND PARTS MANUAL



NOTE

ONLY FACTORY OR QUALIFIED DISTRIBUTORS ARE AUTHORIZED TO OVERHAUL AND REPAIR VON RUDEN EQUIPMENT. ALL FACTORY WARRANTY IS CANCELLED UPON DISASSEMBLY BY UNAUTHORIZED PERSONNEL.

INSTRUCTION MANUAL

INTRODUCTION

This Wet Disc Type Brake was designed to fit on the Von Ruden ROL-SEAL® Motor to provide static holding torque during system shut-down. The brake is spring applied or "normally on", requiring hydraulic pressure to release. A number of disc brake sets are used to provide for the various motor displacement torques.

PREVENTIVE MAINTENANCE

Maintain cleanliness in your hydraulic system. Be careful when adding to the reservoir that clean oil is added and the container being used is clean. Proper filtration does not guarantee a contaminate-free system if the filters aren't serviced at regular intervals. Caution should be used when connecting the brake release pressure port to the brake housing inasmuch as the drain port is adjacent to the pressure port.

CASE DRAIN

These brakes are provided with a case drain connection. A line must be provided to return case drain flow to the reservoir at no more than 250 PSI surge pressure.

OTHER BRAKE SPECIFICATION

Wt of brake.....	2.6 lb. in. ²
Volume of oil to release brake.....	0.6 in. ³
capacity... <u>2 in.³</u>	<u>940 lb.in.</u>
<u>3 in.³</u>	<u>1410 lb.in.</u>
<u>4 in.³</u>	<u>1880 lb.in.</u>

DISASSEMBLY

ROL-SEAL® BRAKE

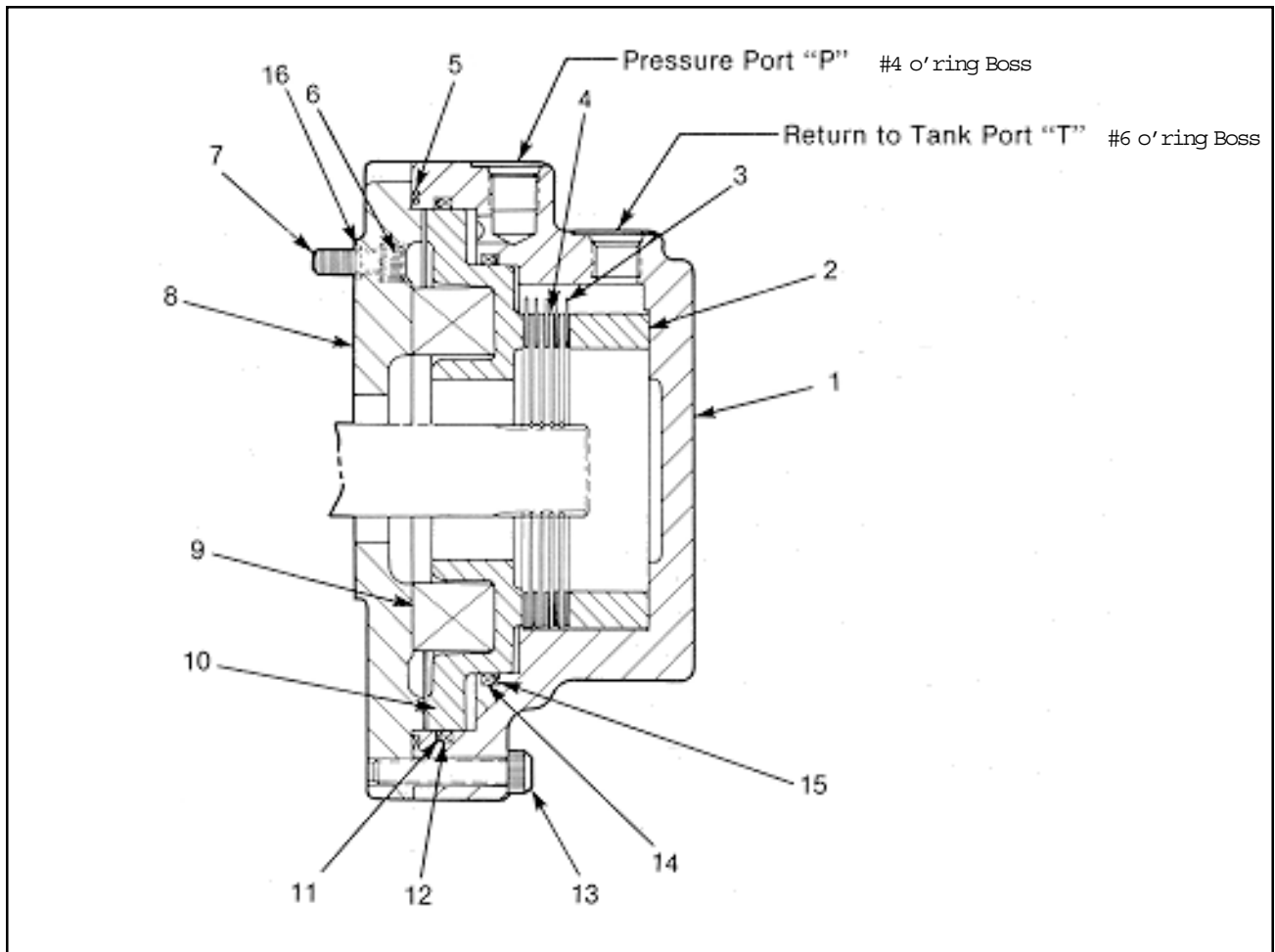


FIGURE 1. SECTIONAL VIEW, ROL-SEAL® BRAKE

REAR MOUNTED BRAKE ASSEMBLY

TOOLS REQUIRED: $\frac{1}{4}$ allen wrench.

Note: If it is necessary to remove adapter plate (8) a $\frac{3}{16}$ allen wrench and centering fixture (available from factory) will be required.

DISASSEMBLY (Figure 1)

1. Thoroughly clean the exterior of the assembly and hydraulic lines before attempting removal.
2. Disconnect hydraulic lines and cap them to prevent loss and contamination of fluid.
3. Remove the eight cap screws (13), and separate the brake housing (1), from the adapter plate (8). Discard O-ring (5).
4. Remove remaining brake components.

(To remove brake piston (10), it may be necessary to inject shop air (80 PSI max.) into pressure port "P". PLEASE NOTE: If air is used, precautions must be taken to retain piston so as to terminate the possibility of injury!)

5. Remove the back-up rings (11, 15), and O-rings (12, 14) from the housing (1).
6. If it's necessary to remove the adapter plate (8) from the motor, remove the seven cap screws (7).
7. Clean all components in solvent and dry.
8. Inspect all components for wear and damage. Replace components unfit for service. Note quantities of friction discs (3) and drive plates (4) in parts lists on following pages.

REASSEMBLY

ROL-SEAL® BRAKE

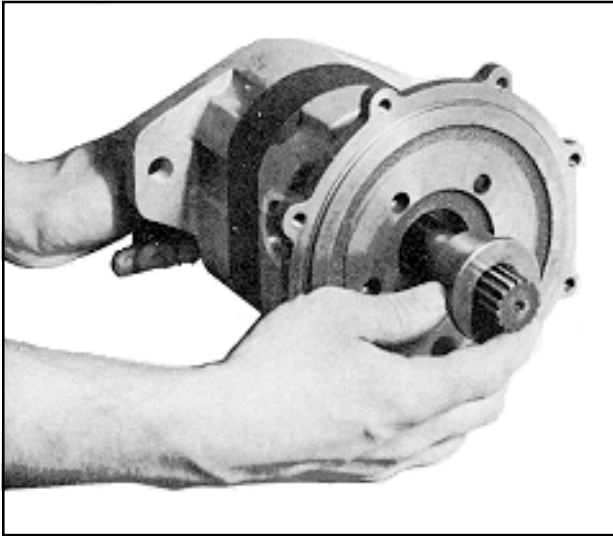


FIGURE 2. CENTERING FIXTURE

1. If adapter plate (8) is removed, reassemble on the motor using a centering fixture available from factory. Install capscrews (7) with washers (6) including O-rings (16) for RSC brake and torque to 150 in. lb.

2. Install new O-ring (12, 14) and back-up rings (11, 15) in the housing (1). Make sure the ends of the back-up rings are flush and not overlapped.

NOTE: Back-up rings (11, 15) must be in position as shown in sectional view.

3. Lubricate all components with clean hydraulic fluid.

4. Position the spacer rings (2) in the housing (1).

5. Locate friction disc (3) in the housing; then a driver plate (4); then another friction disc (3); and so on depending on model, making sure driver plate splines are aligned.

6. Carefully install the pressure plate (10) in the housing so as not to damage the O-rings (12, 14). Place the eight die springs (9) in the pressure plate.

7. Position a new O-ring (5) in the housing using a little grease to hold it in place.

8. To assemble motor to brake, carefully drop shaft while engaging the plate drivers (4) with the splined motor shaft.

9. Secure the housing to the adapter plate with the eight cap screws (13). Tighten and torque the cap screws to 600 in. lbs.

10. Connect the hydraulic lines.

11. Test the brake for operation and leaks.

PARTS LIST

ROL-SEAL® BRAKE

ROL-SEAL® BRAKE

REPLACEMENT PARTS LIST - REAR MOUNTED BRAKE ASSEMBLY MODELS RSA, RSB, RSC BRAKE

NOTE

When ordering replacement parts, give model number, serial number, item number, part number, description and quantity.

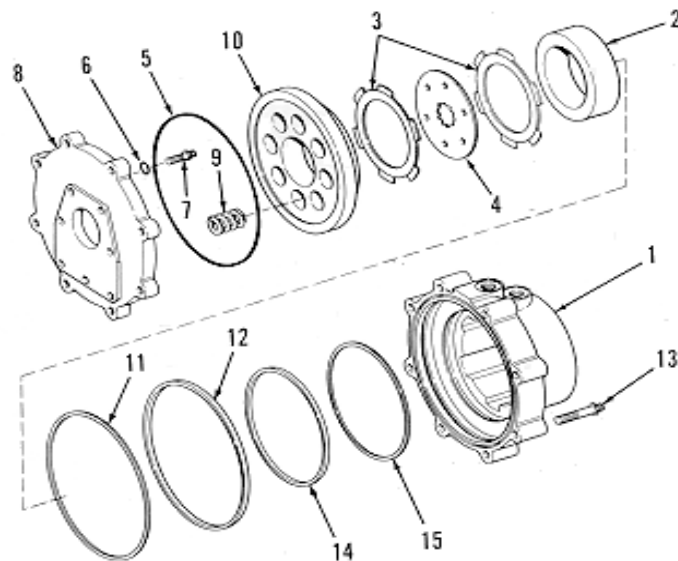


FIGURE 3. EXPLODED VIEW RSA, RSB AND RSC SERIES BRAKE

Item	Description	Quantity
1	Housing	1
2	Spacer Ring	1
3	Friction Disc	*
4	Plate Driver	*
5	O-Ring	1
6	Brass Washer	7
7	Cap Screw - Socket Head	7
8	Adapter Plate	1
9	Die Spring	8
10	Pressure Plate	1
11	Back-Up Ring	1
12	O-Ring	1
13	Cap Screw - Socket Head	8
14	O-Ring	1
15	Back-Up Ring	1

* Item quantity is dependant on model coding.