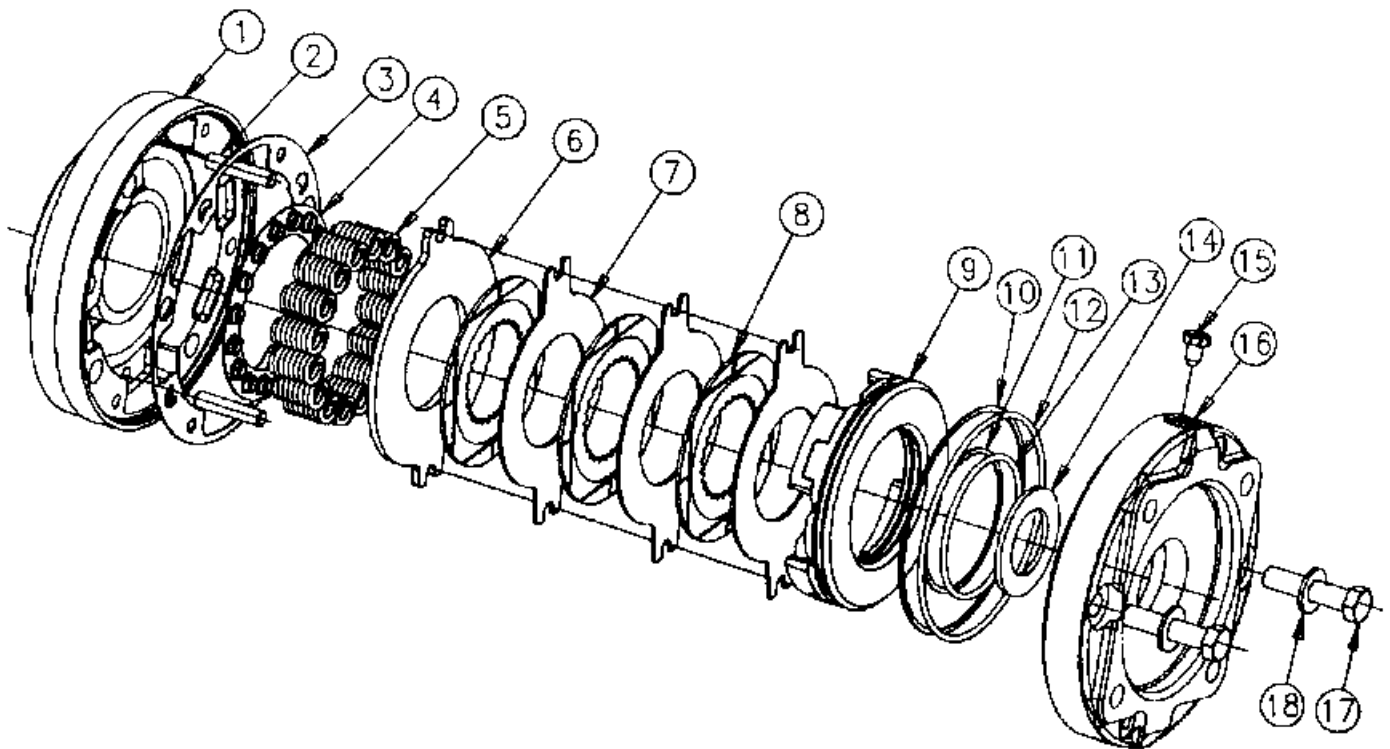


Power Wheel® Service Manual
A2 Series™ Parking Brakes
SAE "C" Mounting



NOTE: Common mounting surfaces of the brake, motor, and gear drive are machined to close tolerances and should be protected during installation and removal.

DISASSEMBLY OF A2 SERIES™ PARKING BRAKES - SAE "C" MOUNT

STEP 1

Remove motor from brake and planetary drive (4) ½" bolts - square pattern.

STEP 2

Remove brake from planetary drive (2) ¼" bolts, 618350 (not shown).

STEP 3

With the brake in the horizontal position, unscrew the pipe plug (15) and drain the brake. Reinsert pipe plug.

STEP 4

With the brake in the vertical position, disassemble the brake in the following order:

A. Bolts (17)

Carefully remove a half turn at a time. SAE 'C' 2 Grade 8 bolts. An arbor press maybe used to speed up disassembly.

B. Washers (18).

STEP 4 Continued:

C. Power Plate (16)

With thrust washer (14) and piston assembly (9, 10, 11, 12, 13).

D. Gasket (3).

E. Stationary Disc (7) and Rotating discs (8)

3 discs (each): C-24-135. C-36-185, C-42-210.

F. Primary Disc (6).

G. Torque Pins (2).

H. Springs (5).

I. Spring Retainer (4).

J. Piston Assembly

In order to remove the piston (9) from the power plate (16), introduce low air pressure (15 psi) into the hydraulic inlet. Make sure the piston is directed away from the operator. Back-up rings will be damaged by removal and should not be removed if replacement is not planned. Remove the back-up rings (10 & 11) and o-rings (12 & 13) from the I.D and O.D. grooves of the piston.

REASSEMBLY OF A2 SERIES™ PARKING BRAKES - SAE "C" MOUNT

STEP 1

Obtain new gasket (3) and o-ring, 614103, (the sealing element between brake and spindle or cover) and any additional parts to be replaced.

STEP 2

Make sure all parts are thoroughly cleaned prior to reassembly.

STEP 3

Worn o-rings (12 & 13) and damaged or worn teflon back-up rings (10 & 11) must be replaced prior to reassembly.

STEP 4

The cylinder of the power plate (16), the piston (9) and o-rings (12 & 13) must be clean prior to reassembly and prelubed with hydraulic system fluid.

STEP 5

Assemble the piston (9) into the power plate (16) using a shop press, being careful not to damage the o-rings or teflon back-up rings. Visually align the center of the cutouts in the piston with the torque pin holes in the power plate. CAUTION: the depth the piston is installed into the power plate is critical. The surface of the piston at the cutouts must be flush to 0.120" below the surface of the power plate. DO NOT exceed the 0.120" depth or the piston will cock resulting in complete loss of braking.

STEP 6

Rotating discs (8) must be clean. The lining material and mating surfaces of the stationary discs (7) must be thoroughly clean. Worn or scored discs must be replaced.

STEP 7

Position the housing (1) on a workbench with the inside facing up.

STEP 8

Place the spring retainer (4) in the spring pocket of the housing.

STEP 9

Add springs (5). See figures 1-A through 1-C for proper spring orientation.

STEP 10

Install primary plate (6) - be sure to line up locating slots with the torque pin holes of the housing.

STEP 11

Add the torque pins (2).

STEP 12

Add a rotating disc (8), followed by a stationary disc (7). Repeat this until all discs are installed.

STEP 13

Install power plate/piston sub-assembly (16) to housing, being careful to align the torque pins with the torque pin holes in the power plate.

STEP 14

Bolting installation procedure: It is necessary to use a shop press for this step.

A. Install bolts (17) and washers (18) to power plate and thumb tighten.

B. Tighten bolts a quarter turn at a time.

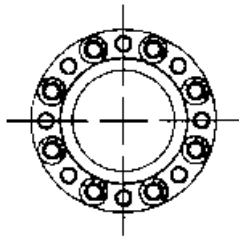
C. Bolt Torque: 80 lb-ft (lubricated)

STEP 15

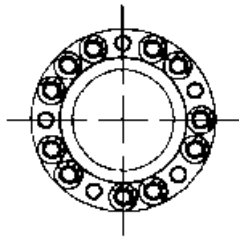
Slip o-ring, 614103, over brake to spindle cover pilot diameter.

STEP 16

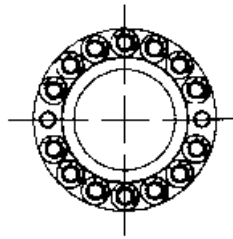
Bolt brake to planetary using (2) ¼" bolts, 618350; torque to 18-22 lb-ft.



**NESTED SPRING
ORIENTATION**
8 SPRINGS
FIG. 1-A
C-24-135



**NESTED SPRING
ORIENTATION**
11 SPRINGS
FIG. 1-B
C-36-185



**NESTED SPRING
ORIENTATION**
14 SPRINGS
FIG. 1-C
C-42-210

Description	P/N	Brake Model Serviced	Contents
O-ring/Gasket Kit	941065	All models	1-#3, 1-#10&11, 1-#12&13, 1-#614103
Disc Kit-3 Rotor	941062	C-24-135	2-#2, 8-#5, 1-#6, 3-#7, 3-#8
Disc Kit-3 Rotor	941063	C-36-180	2-#2, 11-#5, 1-#6, 3-#7, 3-#8
Disc Kit-3 Rotor	941064	C-42-210	2-#2, 14-#5, 1-#6, 3-#7, 3-#8

ITEM NO.	DESCRIPTION*	NO. USED IN ASS'Y.	ITEM NO.	DESCRIPTION*	NO. USED IN ASS'Y.
1	Housing	1	10	Back-up Ring	1
2	Torque Pin	2	11	Back-up Ring	1
3	Gasket	1	12	O-ring	1
4	Spring Retainer	1	13	O-ring	1
5	Springs	8-14	14	Thrustwasher	1
6	Primary Disc	1	15	Pipe Plug	1
7	Stationary Discs	3	16	Power Plate	1
8	Rotating Discs	3	17	Bolts	2
9	Piston	1	18	Washers	2

* Contact Auburn Gear with part number and order code of drive to obtain the appropriate parts list. Refer to parts list for the specific part numbers and quantities.