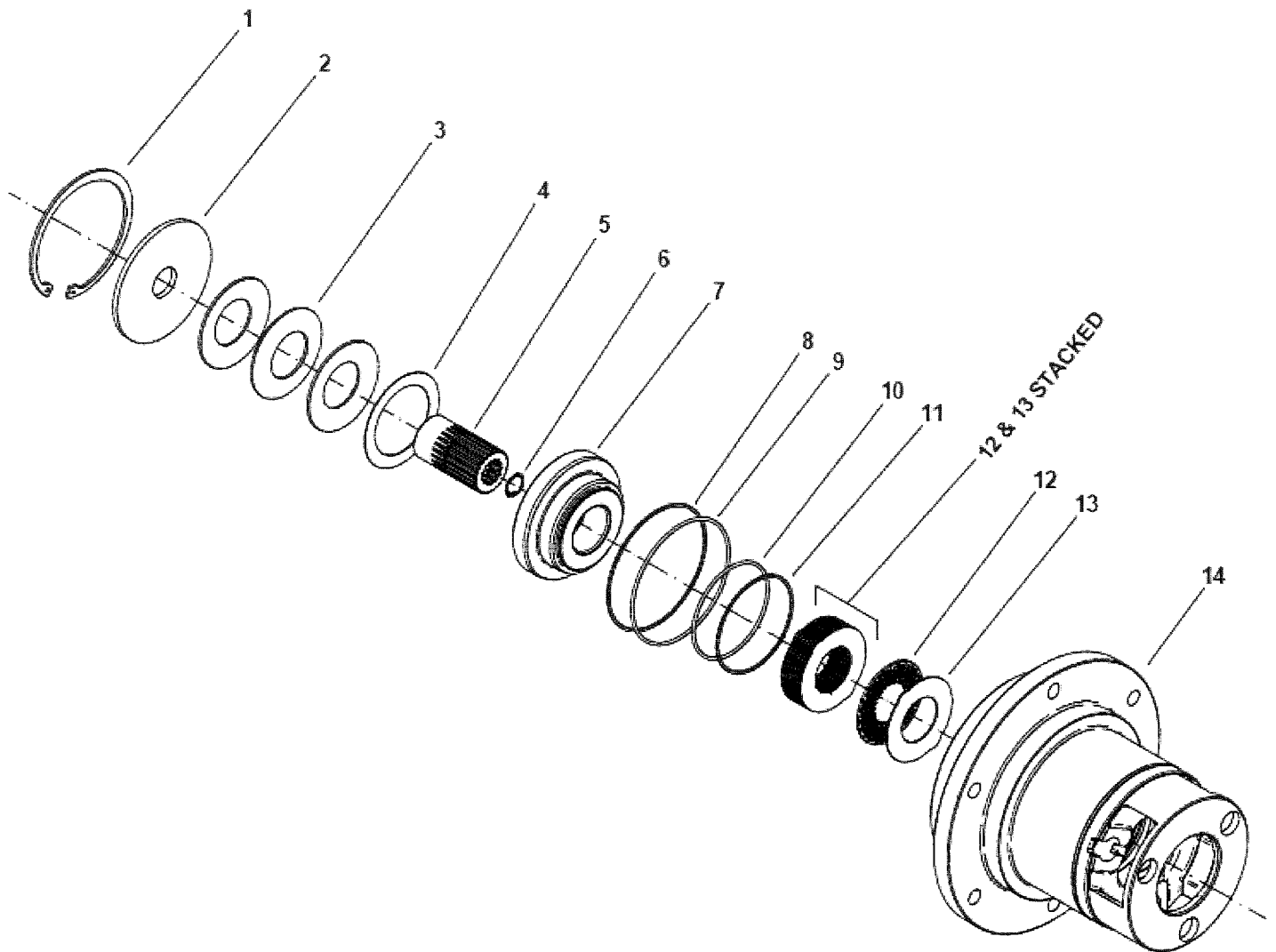


Power Wheel® Service Manual
Model 70CD
Park Brake
Wheel Drives



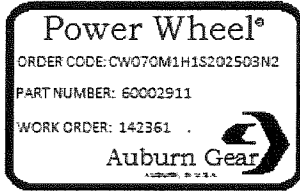
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IDENTIFICATION

IMPORTANT: All Power Wheel units and kits are shipped with a label that includes the Auburn Gear part number, order code and work order.

Example:



In addition to the label, Power Wheel drives are stamped with the last four digits of the part number and date code, which appears on the cover or hub flange as shown.

Example: 2911 12335

When ordering parts, the information included on the label or the stamped part number is necessary to accurately identify the drive and obtain the correct replacement parts. Once this information has been obtained, contact Auburn Gear for the appropriate parts list.

Note: Spindle assembly does not need to be removed from wheel drive to service the park brake.

DISASSEMBLY OF PARK BRAKE

STEP 1

Position unit so that the backing plate (2) is accessible.

STEP 2

Use a suitable press to compress belleville springs (3) by pressing on backing plate (2). With belleville springs (3) compressed, remove retaining ring (1). Carefully remove unit from press.

STEP 3

Remove backing plate (2), belleville springs (3), and shim (4) if applicable.

STEP 4

Apply low pressure air (do not exceed 15 psi) to the brake pressure port in spindle (14) while supporting brake piston (7) for its removal. Inspect brake piston for damage. Replace if damaged or worn.

STEP 5

Remove coupling (5). Retaining ring (6) generally stays in coupling (5).

STEP 6

Remove disengage spring (refer to wheel drive service manual)

STEP 7

Remove brake plates (12 & 13).

STEP 8

Remove and inspect O rings and backup rings (8, 9, 10 & 11). Replace if damaged or worn.

STEP 9

Remove any debris from inside of spindle (14).

ASSEMBLY OF PARK BRAKE

STEP 1

Position unit so that the park brake cavity is accessible.

STEP 2

Lubricate and install backup ring (11) into bottom groove of spindle (14).

STEP 3

Lubricate and install O ring (10) into bottom groove of spindle (14) above backup ring (11).

STEP 4

Lubricate and install O ring (9) into middle groove of spindle (14).

STEP 5

Lubricate and install backup ring (8) into middle groove of spindle (14) above O ring (9).

STEP 6

Install stator plate (13) into spindle (14) by aligning the round tabs of the stator plate (13) with the round cut-outs of the spindle (14).

STEP 7

Install rotor plate (12) adjacent to the installed stator plate (13).

STEP 8

Install stator plate (13) adjacent to installed rotor plate (12). Align internal teeth with internal teeth of previously installed rotor plate (12).

STEP 9

Repeat steps 7 and 8 until all rotor plates (12) and stator plates (13) have been installed.

STEP 10

Place disengage spring into coupling (refer to wheel drive service manual). Install through the end of the coupling (5) with the external spline. Use petroleum based grease to hold disengage spring inside coupling (5).

STEP 11

Install coupling (5), with retaining ring (6) and disengage spring through the stator plates (13) and rotor plates (12) aligning the external splines of coupling (5) with the internal splines of rotor plates (12). Additionally, align the internal splines of coupling (5) with the external splines of the input shaft (refer to wheel drive service manual).

STEP 12

Lubricate the outside surfaces of brake piston (7) and install into spindle (14) being careful to maintain alignment during installation as misalignment can cause binding and may damage the sealing surfaces of the brake piston (7).

STEP 13

Install shim (4) if applicable into counter bore of brake piston (7).

STEP 14

Install belleville spring (3) so the outer diameter of the belleville spring contacts shim (4) where applicable.

STEP 15

Install the next belleville spring (3) so the inner diameter contacts the inner diameter of the belleville spring (3) installed in step 14.

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STEP 17

Continue to install the remaining belleville springs (3) in this alternating manner.

STEP 18

Install backing plate (2).

STEP 19

Place unit in a suitable press and compress belleville springs (3) by pressing on backing plate (2) until the retaining ring groove in spindle (14) is completely exposed.

STEP 20

Install retaining ring (1) and ensure that the retaining ring (1) is fully seated in the retaining ring groove in spindle (14).

STEP 21

Carefully remove unit from press.

NOTE: After servicing the parking brake, it is necessary to test the brake for proper function and leaks.

SPECIFICATIONS

<u>Brake Series</u>	<u>Brake Torque (lb-in), minimum</u>	<u>Release Pressure, psi</u>
N1	1,200 lb-in	160 psi
N2	2,400 lb-in	160 psi
N3	3,600 lb-in	250 psi

ITEM NO.	DESCRIPTION*	NO. USED IN ASS'Y.	ITEM NO.	DESCRIPTION*	NO. USED IN ASS'Y.
1	Retaining Ring	1	8	Backup Ring	1
2	Backing Plate	1	9	O Ring	1
3	Belleville Spring	varies	10	O Ring	1
4***	Shim	varies	11	Backup Ring	1
5	Coupling	1	12	Rotor Plate	varies
6	Retaining Ring	1	13	Stator Plate	varies
7	Brake Piston	1	14	Spindle	1

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

*** Not required in all assemblies

Model 70CD Power Wheel® Park Brake Service Kits

Part No.	Description	Included Items
641093	N1, N2 Friction Disc and Spring Kit	3 (qty 2), 12 (qty 6), 13 (qty 7)
641094	N3 Friction Disc and Spring Kit	3 (qty 3), 12 (qty 8), 13 (qty 9)
641095	Brake Piston Kit	7
641096	Seal Kit	8, 9, 10, 11
641097	Backing Plate Kit	1, 2

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