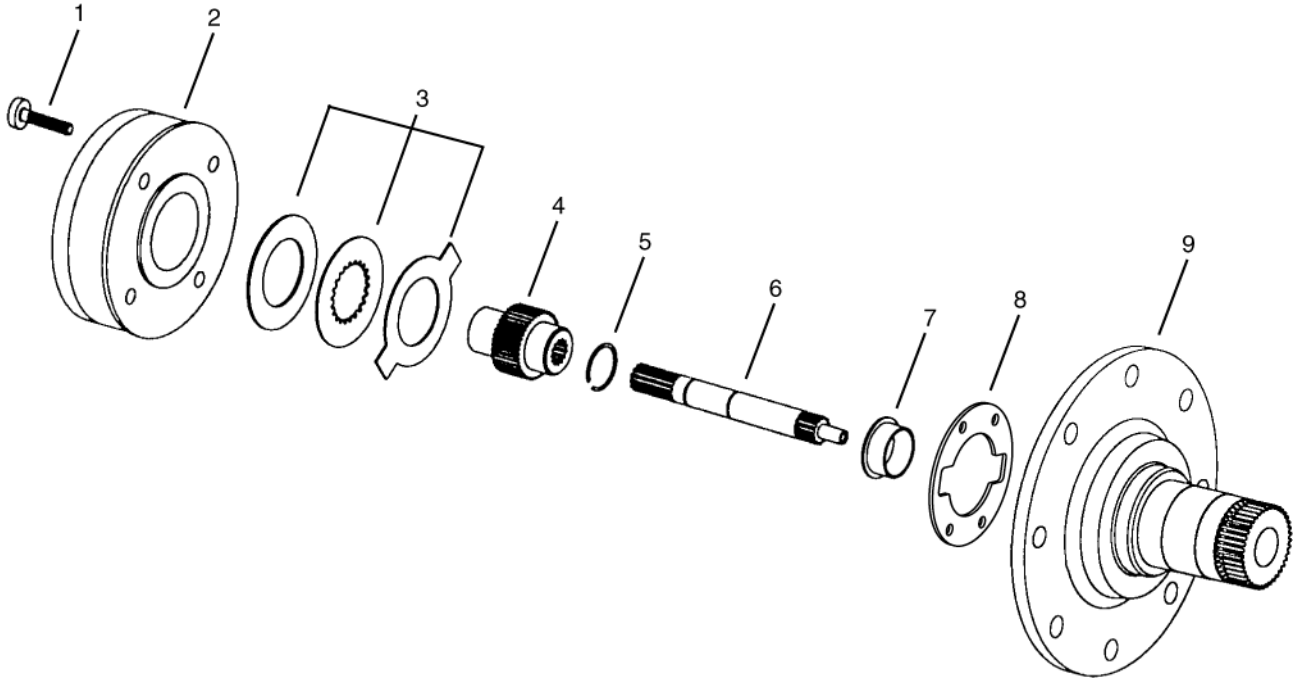
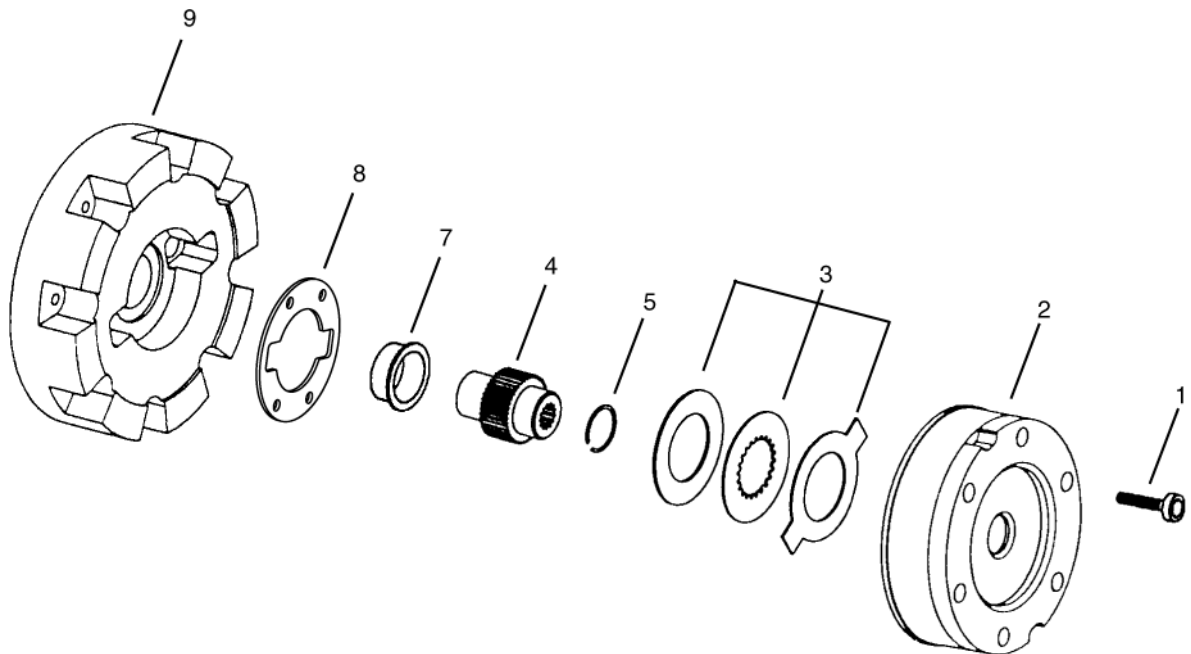


Power Wheel® Service Manual
"Q" and "P" Series™
Integral Parking Brakes
SAE "A", "B" and "C" Mounting



WHEEL DRIVE



SHAFT / SPINDLE OUTPUT & SWING DRIVE

DISASSEMBLY OF "Q" AND "P" SERIES™ PARKING BRAKES - SAE "A","B" and "C" MOUNT

STEP 1

SAE A MOUNT BRAKES - Remove motor from planetary drive.
SAE B AND C MOUNT BRAKES - Remove motor from planetary drive.
Install two 1/2-13 x 1.25" screws into motor mounting holes and finger tighten.

STEP 2

SAE A MOUNT BRAKES - Remove the six socket head cap screws retaining the brake to the drive. NOTE: The brake engagement springs will force the cover plate away from the brake body as the last of these bolts are loosened. Loosen the two bolts in line with the motor mount holes to release the spring pressure but do not remove them entirely until the brake assembly is laid, cover up, on a horizontal surface. This will prevent the springs from falling out of the spring cavity.
SAE B AND C MOUNT BRAKES - Remove the four T-50 Torx head screws retaining the brake to the drive. (Some models may be equipped with socket head cap screws.)

STEP 3

Remove parking brake assembly and place on clean flat surface. It may be necessary to lightly strike the assembly with a rubber mallet to loosen from spindle or cover. Inspect the interface between the brake and spindle or cover to determine if the sealing media is a gasket or RTV compound.

STEP 4

Remove disk pack from drive only if necessary. Be careful to maintain disks in order.

STEP 5

SAE A MOUNT BRAKES - Slowly back out two screws in line with motor mounting holes until springs are at full extension, then remove screws.
SAE B AND C MOUNT BRAKES - Slowly back out two 1/2-13 screws installed in step 1 until springs are at full extension, then remove screws.

STEP 6

Remove brake cover. It may be necessary to lightly strike the cover with a rubber mallet to loosen from brake cylinder. Remove and discard gasket. NOTE: Springs are not retained and will fall out if brake assembly is not placed on horizontal surface.

STEP 7

Turn brake assembly over so that large end of brake piston is down.

STEP 8

Place brake on spacer(s) to provide clearance for piston to be removed. Remove piston by pressing down with fingers on small end of piston. If necessary, piston may be tapped out of cylinder bore with rubber mallet.

STEP 9

Remove old seals from piston and compare with new seals to ensure that correct parts are on hand. NOTE: Seals of different styles are not interchangeable. If styles match, discard old seals.

INSTALLATION OF NEW SEALS

STEP 1

Inspect piston and brake cylinder carefully for sharp edges, nicks, scratches or other damage. The seal grooves on the piston and the cylinder bores are especially important - any damage in these locations requires replacement of the part. Sharp edges may be smoothed with emery cloth.

STEP 2

Clean parts and place on clean surface. Apply coating of hydraulic fluid to seals and install into piston grooves. DO NOT USE TOOLS WITH SHARP EDGES TO INSTALL SEALS. See Fig. 1 for correct placement of seals.

STEP 3

Apply coating of hydraulic fluid to cylinder bores. Place cylinder, large bore up, on surface and place piston/seal assembly, large end up, on cylinder. Make sure piston is not cocked in the bores and that seals are fully seated in their grooves before pressing. Press piston fully into cylinder with hand or by placing wood block over piston and gently tapping with rubber mallet.

STEP 4

Inspect cylinder for seal material to ensure that seal was not damaged or pinched during Step 3. If none seen, proceed to reassemble brake.

ASSEMBLY OF "Q" AND "P" SERIES™ PARKING BRAKES - SAE "A","B" and "C" MOUNT

STEP 1

Install coil springs on seat surface of piston. If piston has machined spring pockets, place springs in pockets, spacing springs evenly around piston. If seat surface in piston is smooth, place springs on surface, spacing them evenly around piston. Place cover gasket into position on cylinder.

STEP 2

SAE A MOUNT BRAKES - Align holes in cover with cylinder holes and place cover on springs, taking care to keep springs in correct positions. Install the two screws in line with the motor mounting holes and tighten carefully to compress springs. Do not torque. Inspect springs through center hole to ensure they are in correct position.
SAE B AND C MOUNT BRAKES - Align holes in cover with cylinder holes and place cover on springs, taking care to keep springs in correct positions. Install the two 1/2-13 screws into motor mounting holes and tighten carefully to compress springs. Do not torque. Inspect springs through center hole to ensure they are in correct position.

STEP 3

If there was originally a gasket between the brake and spindle or cover, clean spindle or cover surface and place spindle/cover gasket into position, taking care to properly align disk cut out in gasket with brake disk tangs.

STEP 4

If a gasket was used go to step 6, if not perform step 5.

STEP 5

Clean seal surface of the drive and brake assembly of any old sealant and wipe any oil from seal surface of spindle or cover. Apply a continuous 1/32" bead of silicone sealant to surface on inside of the bolt hole circle. See Fig. 2. NOTE: Do not use excessive amount of sealant as this can interfere with proper operation of brake.

STEP 6

SAE A MOUNT BRAKE - Align brake holes with holes in spindle or cover. Apply Loctite 262 to four socket head cap screws and install screws to attach brake to drive. Torque to 110-125 ft.-lbs.
SAE B AND C MOUNT BRAKES - Align brake holes with holes in spindle or cover. Apply Loctite 262 to four Torx or socket head cap screws and install screws to attach brake to drive. Torque screws to 80-94 ft.-lbs.

STEP 7

SAE B AND C MOUNTS ONLY: Remove 1/2-13 screws in mounting motor holes.

STEP 8

Before using the brake it is recommended that a pressure release check be performed. Using a suit-able hydraulic source, bleed the air from the brake and pressurize the brake to the specified release pressure. The brake plates, and therefore the drive, should now turn freely. If the hydraulic source will provide at least 1000 PSI, apply 1000 PSI and check to make sure that the pressure does not decay more than approximately 30 PSI in one minute.

"Q" SERIES AND "P" SERIES BRAKE - SERVICE PARTS

MODEL 6 WHEEL DRIVES, MODEL 5, 6, 6B AND 7 SHAFT/SPINDLE OUTPUT DRIVES - SAE "A"

Order Code	Q Series P/N	P Series P/N	Piston Kit P/N	Disc Pack P/N	Q Seal Kit P/N	P Seal Kit P/N
B1	Q6A-10-110		941017	941011	941048	
B2	Q6A-14-160		941018	941011	941048	
B3	Q6A-17-110	P6A-17-110	941017	941012	941048	941051
B4	Q6A-24-160	P6A-24-160	941018	941012	941048	941051
B5	Q6A-36-250	P6A-36-250	941019	941012	941048	941051
B6	Q6A-42-350	P6A-42-350	941020	941012	941048	941051
B7	Q6A-52-350	P6A-52-350	941046	941012	941048	941051
V1	QV6A-9-120		941017	941033	941048	
V2	QV6A-12-190	PV6A-12-190	941018	941033	941048	941051
V3	QV6A-15-220	PV6A-15-220	941023	941033	941048	941051
V4	QV6A-18-260		941024	941033	941048	
V5	QV6A-21-300		941019	941033	941048	
V6	QV6A-24-425		941020	941033	941048	

MODEL 6 WHEEL DRIVES, MODEL 5, 6, 6B AND 7 SHAFT/SPINDLE OUTPUT DRIVES - SAE "B"

Order Code	Q Series P/N	P Series P/N	Piston Kit P/N	Disc Pack P/N	Q Seal Kit P/N	P Seal Kit P/N
B1	Q6B-10-110	P6B-10-110	941003	941011	941048	941051
B2	Q6B-14-160	P6B-14-160	941004	941011	941048	941051
B3	Q6B-17-110	P6B-17-110	941003	941012	941048	941051
B4	Q6B-24-160	P6B-24-160	941004	941012	941048	941051
B5	Q6B-36-250	P6B-36-250	941005	941012	941048	941051
B6	Q6B-42-350	P6B-42-350	941006	941012	941048	941051
V1	QV6B-9-120		941003	941033	941048	
V2	QV6B-12-190		941004	941033	941048	
V3	QV6B-15-220		941027	941033	941048	
V4	QV6B-18-260		941028	941033	941048	
V5	QV6B-21-300		941005	941033	941048	
V6	QV6B-24-425		941006	941033	941048	

MODEL 7, 8, 8B AND 9 WHEEL DRIVES, MODEL 8, 8B AND 9 SHAFT/SPINDLE OUTPUT DRIVES - SAE "B"

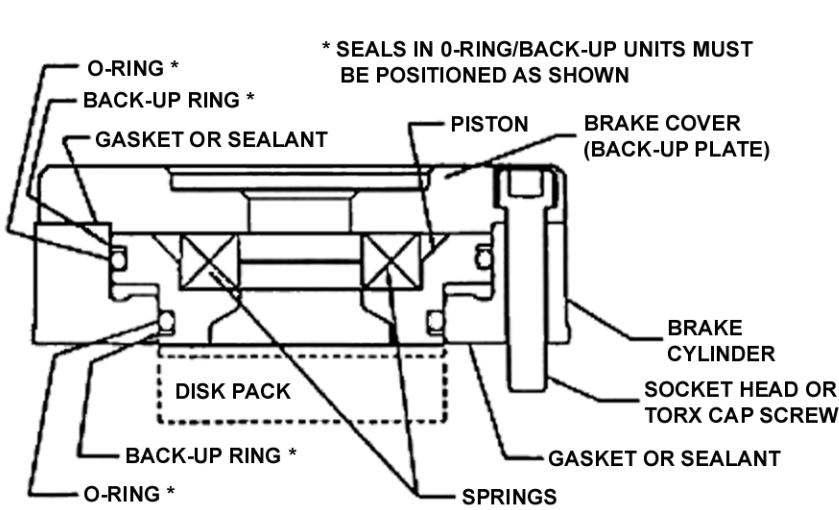
Order Code	Q Series P/N	P Series P/N	Piston Kit P/N	Disc Pack P/N	Q Seal Kit P/N	P Seal Kit P/N
B1	Q8B-10-110		941007	941011	941049	
B2	Q8B-14-160		941008	941011	941049	
B3	Q8B-17-110		941007	941012	941049	
B4	Q8B-24-160	P8B-24-160	941008	941012	941049	941052
B5	Q8B-36-250	P8B-36-250	941009	941012	941049	941052
B6	Q8B-42-350	P8B-42-350	941010	941012	941049	941052
V1	QV8B-9-120		941007	941033	941049	
V2	QV8B-12-190		941008	941033	941049	
V3	QV8B-15-220		941029	941033	941049	
V4	QV8B-18-260		941030	941033	941049	
V5	QV8B-21-300	PV8B-21-300	941009	941033	941049	941052
V6	QV8B-24-425		941010	941033	941049	

MODEL 7, 8, 8B AND 9 WHEEL DRIVES, MODEL 8, 8B AND 9 SHAFT/SPINDLE OUTPUT DRIVES - SAE "C"

Order Code	Q Series P/N	P Series P/N	Piston Kit P/N	Disc Pack P/N	Q Seal Kit P/N	P Seal Kit P/N
B1	Q8C-10-110		941013	941011	941050	
B2	Q8C-14-160		941014	941011	941050	
B3	Q8C-17-110		941013	941012	941050	
B4	Q8C-24-160	P8C-24-160	941014	941012	941050	941053
B5	Q8C-36-250	P8C-36-250	941015	941012	941050	941053
B6	Q8C-42-350	P8C-42-350	941016	941012	941050	941053
V1	QV8C-9-120		941013	941033	941050	
V2	QV8C-12-190		941014	941033	941050	
V3	QV8C-15-220		941031	941033	941050	
V4	QV8C-18-260		941032	941033	941050	
V5	QV8C-21-300		941015	941033	941050	
V6	QV8C-24-425		941016	941033	941050	

ITEM NO.	DESCRIPTION*	NO. USED IN ASS'Y.	ITEM NO.	DESCRIPTION*	NO. USED IN ASS'Y.
1	Socket or Torx Head Screw	4	6	Input Shaft	1
2	Piston Assembly	1	7	Sleeve Bearing 612701	1
3	Disc Pack	1	8	Gasket	1
4	Coupling	1	9	Spindle / Cover	1
5	Retaining Ring 613915	1			

* 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.



NOTE: QUAD-LOBED SEAL UNITS HAVE NO BACK-UP RINGS

Figure 1: Seal Placement

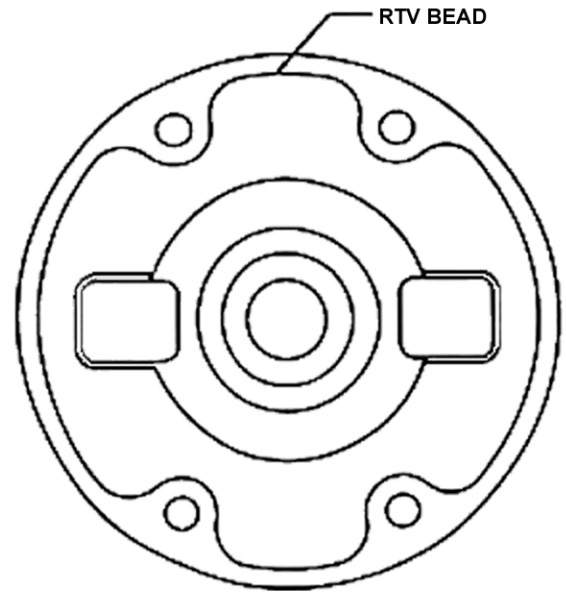


Figure 2: Silicone Sealant Bead

Table 1: Parts List - Example - 941051

Part No.	Description	Qty.
941051	Kit, O-Ring	1
914105	Piston Seal, O-Ring-Small	1
914106	Piston Seal, O-Ring-Large	1
914107	Back-up Ring-Small	1
914108	Back-up Ring-Large	1
904502	Gasket, Spindle	1
904505	Gasket, Back-up Plate	1