## INSTALLATION GUIDE

## Chōssisworks

## 8324-134

## g-Street 13" 4-Piston Front Disc Brake for Chassisworks Sculpted Spindles



Description: g-Street front disc-brake for Chassisworks sculpted spindle. Minimum wheel diameter of 17 " is required for use. Not for use with positive offset wheels.

Includes: 4-piston calipers with pads, 13" vented rotors, billet-aluminum hat and hub, wheel studs and bearings, and necessary mounting hardware.

Applications: Chassisworks front suspension systems with sculpted spindles.



## PARTS LIST

8324-134 - g-Street 13" 4-Piston Disc Brake

| Qty | Part Number | Description |
| :---: | :--- | :--- |
| 1 | 3920 | Anodized hub kit with 2-1/4" wheel studs (pair) |
| 1 | 3925 | Adapter kit 12.88 x 1" rotor with 4-piston calipers (pair) |
| 2 | WW 120-7381 | Caliper, Dynapro 4-piston radial mount, 1" wide, black finish |
| 1 | WW 15Q-7268K | Brake pads, Dynapro Premium Street PolyMatrix-Q (set of 4) |
| 1 | WW 160-13358-BK | Rotor SRP 12.88" $\times$ 1" passenger side, slotted \& drilled, black E-coated |
| 1 | WW 160-13359-BK | Rotor SRP 12.88" $\times$ 1" driver side, slotted \& drilled, black E-coated $^{2}$ |

## 3920 - Anodized Hub Kit

| 2 | 3353 | Inner bearing cone 1.3775 ID |
| :--- | :--- | :--- |
| 2 | 3355 | Outer bearing cone .8656 ID |
| 2 | 3631 | Grease seal $2.5 \times 1.94 \times .250$ |
| 2 | 3754 | Front hub assembly anodized with races and screw-on cap |
| 1 | 903920 | Hardware bag |

## 903920 - Hardware Bag

| 4 | $3103-038 \mathrm{C} 1.38 \mathrm{C}$ | Socket head $3 / 8-16 \times 1-3 / 8$ clear zinc plated |
| :---: | :--- | :--- |
| 4 | $3108-038 \mathrm{H}-\mathrm{S}$ | Lock washer $3 / 8$ high collar .377 $\times .550$ " OD |
| 10 | $3130-050 \mathrm{~F} 2.25 \mathrm{~B}$ | Bolt $12-$ point head $1 / 2-20 \times 2-1 / 4^{\prime \prime}$ long with integral washer |
| 4 | $3157-038 \mathrm{~S}-\mathrm{S}$ | Stainless $3 / 8$ washer $.406 \times .812^{\prime \prime}$ OD $\times 1 / 16^{\prime \prime}$ thick |

## 3925 - Adapter Kit

| 2 | 1331 | Hat $.988^{\prime \prime}$ offset, $12 \times 1 / 4-28 \times 8-7 / 8^{\prime \prime}$ bolt circle, with $5 \times 4.5^{"} \& 4.75^{\prime \prime}$ bolt circles |
| :--- | :--- | :--- |
| 2 | 1473 | Calper adapter Dynapro 4 -piston, $12.88 \times 1^{\prime \prime}$ rotor |
| 1 | 903925 | Hardware bag |

## 903925 - Hardware Bag

| 4 | $3103-038 \mathrm{C} 1.00 \mathrm{C}$ | Socket head $3 / 8-16 \times 1$ " cap screw, Grade 8, clear zinc plated |
| :---: | :--- | :--- |
| 4 | $3103-038 \mathrm{C} 1.75 \mathrm{C}$ | Socket head $3 / 8-16 \times 1-3 / 4^{\prime \prime}$ cap screw, Grade 8, clear zinc plated |
| 8 | $3108-038 \mathrm{H}-\mathrm{S}$ | High collar lock washer 3/8", $18-8$ stainless |
| 24 | $3109-025-\mathrm{S}-2-\mathrm{Y}$ | Aircraft washer $1 / 4^{\prime \prime}$ small OD |
| 24 | $3122-025 \mathrm{~F} 1.00 \mathrm{Y}$ | 12 point flange bolt $1 / 4-28 \times 1^{\prime \prime}$ |
| 24 | $3188-025-28 \mathrm{Y}$ | Flanged locknut $1 / 4-28,12$-point |

## INSTRUCTIONS

## Brake Installation

1. NOTE: Wheel clearance with the 13 "-diameter rotor is critical. Most 17 "-diameter wheels will fit. You must check the wheel to be sure you have proper clearance. The caliper will extend .38 " toward the wheel from the hub surface and the minimum diameter at this position is 14.50 ". Check your wheel before trying them over the brake kit. Verify you have at least $1 / 4$ " of wheel clearance from all brake components. Scratched or damaged hubs, rotors, calipers or mounts are non-returnable for any reason.
2. The rotors are directional. There is an arrow on the flat side of the rotor indicates correct rotation direction.
3. Thread the twelve $1 / 4 \times 1$ " 12 -point bolts into the hat. Tighten to $8.5 \mathrm{lb}-\mathrm{ft}$ or $103 \mathrm{lb}-\mathrm{in}$ of torque. Set the driver side rotor on the bolts you just installed with the flanged side of the rotor toward the hat. Slide the $1 / 4$ " aircraft washers over the bolts and then the slide on the 12-point flanged locknuts. Tighten those to 14 lb - ft or 168 lb -in of torque. You must hold the bolts with a wrench while tightening the locknuts. Repeat this for the passenger side.
4. The billet-aluminum hubs have threaded-stud mounting holes for both $4-1 / 2^{\prime \prime}$ and $4-3 / 4$ " bolt circles. Choose the bolt circle that matches your wheels and chase the threads with a 1/2-20 tap. After chasing the threads, it is a good idea to blow them out with an air hose, making sure no debris remains in the holes.
5. Set the driver side hat and rotor assembly on the backside of the billet hub. Line up the bolt circles on the hub with those on the rotor. Up near the head of the $1 / 2-20 \times 21 / 4$ " 12 -point wheel studs add a drop of Loctite $^{\top \mathrm{M}}$ and then insert the studs through the proper series of holes. Insert all the wheel studs and tighten them from the backside of the assembly. Tighten to $40 \mathrm{lb}-\mathrm{ft}$ of torque. Three-inch studs can be purchased if you have thick wheels.
6. The bearing races are pressed in the billet hub from the factory. You must pack the wheel bearing before installing it. Use a wheel-bearing packer to do this. If you do not have one available, hand packing the bearing is okay. If you are unsure how to pack the bearing, refer to an auto repair manual for assistance.
7. After the bearing is packed, drop it into the bearing race. The inner wheel bearing seal is then positioned on the hub.
8. Place the hub on a wood surface before installing the seal. Using a hammer and seal installer, drive the seal into the hub making sure its fully seated.
9. With the inner bearing and seal in place, slide the hub and rotor assembly onto the correct spindle (remember, the slotted rotors are directional).
10. Pack the outer wheel bearing as you did the inner one. Slide the bearing into the race.
11. Slide the washer over the spindle shaft and install the castle nut.
12. To fully seat the bearings, tighten the castle nut to 12 lb -ft while turning the rotor assembly forward by hand. This will remove any grease that could cause excessive wheel bearing play. Back off the castle nut to the "just loose" position and then hand tighten. There will be .001 to .005 inches of endplay when the wheel bearings are properly adjusted.
13. After the wheel bearings are tight, insert the cotter pin through the castle nut and the hole in the end of the spindle shaft. Do not tighten the castle nut when aligning the cotter pin, only loosen it. Fold the cotter pin legs to secure the castle nut.
14. Apply anti-seize to the threads of the screw-on dust cap. Screw the dust cap onto the hub. It only needs to be hand tightened, the O-ring inside will keep it from coming loose.
15. Use the 3/8-16 x 1 " socket head Allens and high collar lockwashers provided in your brake kit to mount the caliper adapters to the spindle bosses. The high collar lockwasher goes against the head of the fastener. Tighten to 30 lb -ft of torque.
16. Install the Wilwood brake calipers and pads. Start by inserting the brake pads into the caliper, one on each side of the rotor slot with the metal backing toward the pistons.
17. Slide the $3 / 8$ " high collar lockwaskers over the $3 / 8$ "- $16 \times 1-3 / 4$ " caliper mounting bolts. Insert the bolts through the caliper into the caliper adapter. Use an Allen wrench to tighten until snug. Rotate the rotor assembly slowly to check for any clearance problems between the rotor and the caliper. Make sure the rotor does not drag on the brake pads. The caliper can be shimmed where it attaches to the caliper bracket to adjust the pad clearance in relation to the rotor. Once everything is checked, tighten to $30 \mathrm{lb}-\mathrm{ft}$ of torque.
18. Finally, bolt your wheel and tire on the hub and check again to be sure there is at least $1 / 4$ " clearance between the caliper and the wheel. There are differences in wheel manufacturer's tolerances. Make sure your wheel turns freely and does not rub on the caliper.

## WARRANTY NOTICE:

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