



Polaris Slingshot Rear Big Brake Kit DDM-16-50



The DDMWorks Slingshot Rear Big Brake Kit matches our front big brake kit with a 14 inch rotor, Wilwood 6 piston main caliper, and a secondary Wilwood caliper for the cable actuated hand brake.

If you are pretty handy with tools the rear big brake kit can be installed in an hour, however we suggest that you schedule at least a few hours for the installation.

If you have any questions during the installation you can call or text (864) 907-6004 or email us at Tech@ddmworks.com.

TOOLS NEEDED
Jack and Jack Stands
Socket wrench
19mm wrench
14mm, 7/16 (12 point), socket

1. Disconnect the negative terminal from the battery.
2. Make sure that the car engine is cool to the touch and you are in a well ventilated area away from open flames.



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Rear Big Brake Kit — INSTALLATION

1. With your slingshot parked on a smooth level surface, use hand tools to just break your lug nuts loose on the rear wheel.
2. Use a jack to lift the rear of the slingshot up off of the ground high enough to place jack stands under the frame rails in the rear.
3. Carefully lower the slingshot down onto the jack stands so it is supported safely.



4. You can now finish removing the lug nuts we loosened earlier. And remove the rear wheel sitting it off to the side out of the way for now.



5. Using a 19mm wrench, to hold the slide pin, and a 14mm socket remove the two caliper bolts.



Rear Big Brake Kit — INSTALLATION

6. With both bolts removed you can slide the caliper off and rest it on the ground. Then remove the brake pads.



7. With a 17mm socket remove the two caliper mount bolts holding the caliper mount to the rear swing arm.

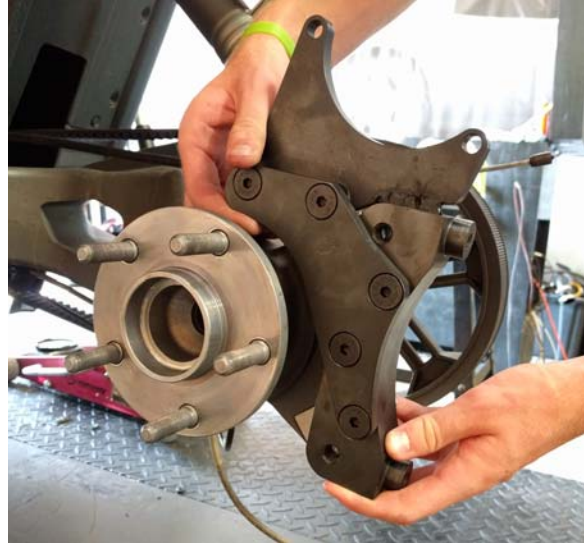


8. The stock brake rotor will now slide right off. Set the brake rotor off to the side, it will not be reused with the new setup.



Rear Big Brake Kit — INSTALLATION

9. Now it is time to start installing the new rear big brake kit new dual caliper bracket. Position the new bracket as shown in the photo.



10. Using the supplied hardware and some loctite, bolt the new dual caliper bracket to the swing arm. Tighten these bolts to 60 ft/lbs or torque.

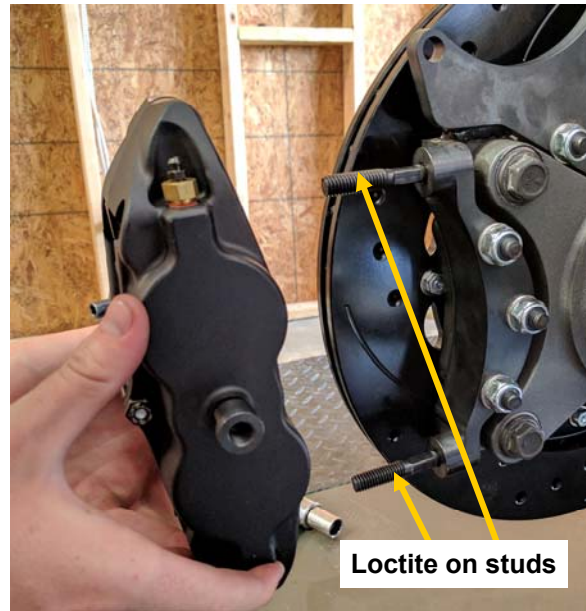


11. Slide the new Big Brake Rotor onto the hub and hold it in place using one lug nut (finger tight).

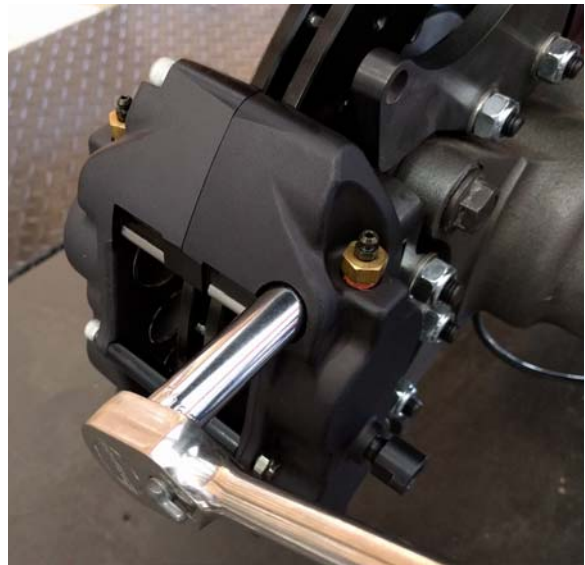


Rear Big Brake Kit — INSTALLATION

12. With the rotor in place you can now install the Wilwood 6 piston caliper onto the two studs sticking out of the back of the new caliper bracket. It is best to put some loctite on the studs before installing the caliper.



13. Install the two 12 point nuts, one onto each stud, then using a 12 point 7/16 socket tighten them down to 40 ft/lbs of torque.



14. Next we will remove the brake pad retaining bolt using a 3/16 allen and a 7/16" wrench. Remove the nut from the bolt then remove the bolt, holding onto the spacer in the middle of the caliper.

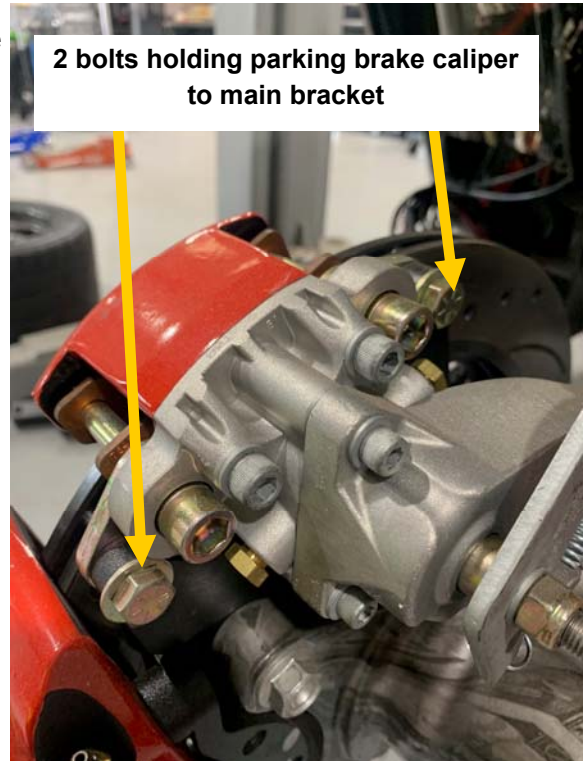


Rear Big Brake Kit — INSTALLATION

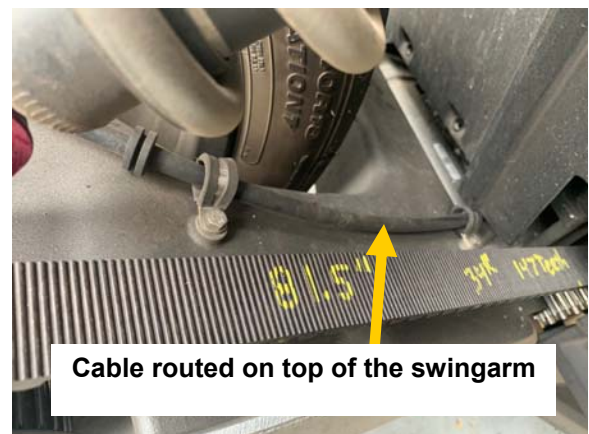
15. With the brake pad retaining bolt removed you can now install the brake pads one at a time with the brake pad material facing the rotor and the metal backing plate facing out toward the caliper. A light tap with your hand is all it takes to get the pads to slide into the caliper. Once both pads are installed correctly you can reinstall the retaining bolt, spacer, and nut then tighten down to 6 ft lbs.



16. With the main rear caliper mounted and brake pads installed, it is time to mount the rear parking brake caliper. The rear caliper is held to the main bracket by 2 bolts with 9/16" heads found in the kit. The parking brake caliper should fit right over the brake rotor, if it does not slide over top of the caliper, you may need to push in the piston on the parking brake caliper. To retract the piston, find the 13mm nut on the back of caliper that is on the threaded rod. Loosen the 13mm nut and then turn the threaded rod out with a 6mm wrench. Doing this will retract the piston and allow more room to install the parking brake caliper over the rotor. Once the parking brake caliper is in place, secure the caliper with the 2—9/16" head bolts.



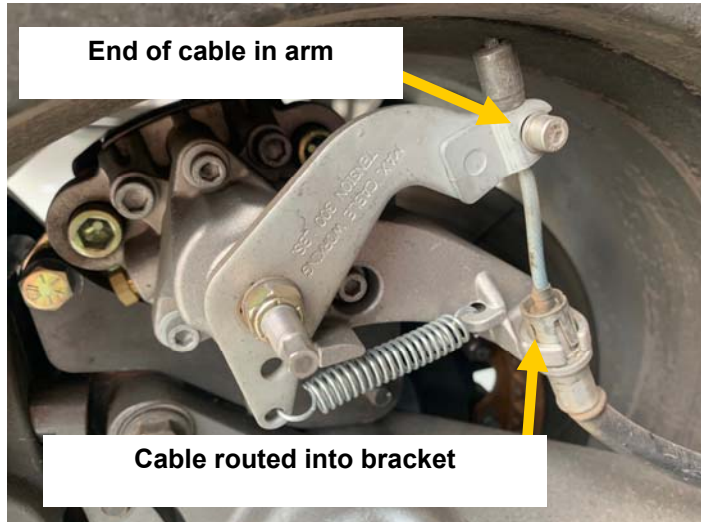
17. With the parking brake caliper secure, it is time to run the parking brake cable to the new caliper. Remove the parking brake cable from the old caliper. With the cable removed from the caliper, you will need to remove the cable from the brackets holding it under the swingarm. Once the cable is removed from the 2 brackets under the swingarm, there is a bracket under the rear angle drive that the cable needs to be removed from. Once the cable is free from those brackets, loop the cable up over top of the angle drive so that the cable will now route on top of the swingarm.



Use the supplied clamps with rubber cushions to secure the cable in place to the swingarm.

Rear Big Brake Kit — INSTALLATION

18. Once the cable is routed above the swingarm, the end of the cable will push into the arm on the parking brake caliper as shown to the right. Then pull the arm down slightly and slip the cable into the arm as shown to the right also. Once the cable is in the arm, there is a small bolt that will secure the cable in place.

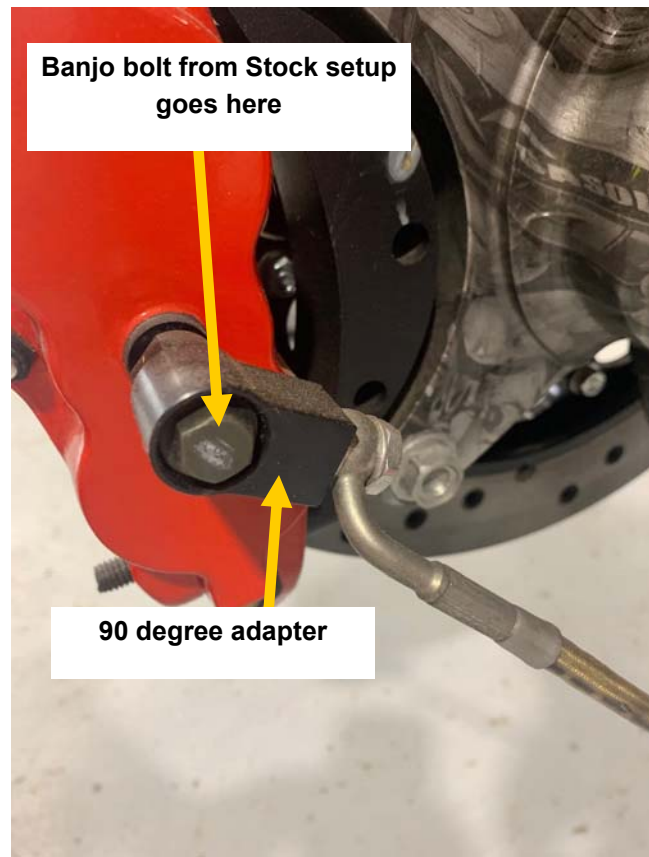


19. Next step is to adjust the parking brake tension. Make sure the parking brake handle is all the way down in the cockpit. Then make sure the 13mm head nut on the back of the caliper is loose. Next tighten the 6mm head threaded rod until it gets firm. Doing this will push the piston in until the pads make contact with the rotor. Once you turn the rod and it gets firm, try to rotate the rotor, you should not be able to turn it easily. Now, back the rod off 1/4 turn, the rotor should be able to be rotated by hand at this point. If it is still a little hard, back off the rod a little more until the rotor can be turned by hand. At this point, go pull the brake handle in the cockpit and make sure it feels firm also and when the handle is pulled make sure you can not rotate the rear rotor by hand. Once you are happy with the adjustment, secure the location of the threaded rod by tightening the 13mm head nut. When tightening the 13mm head nut, make sure the threaded rod does not rotate by holding it in position with a wrench.

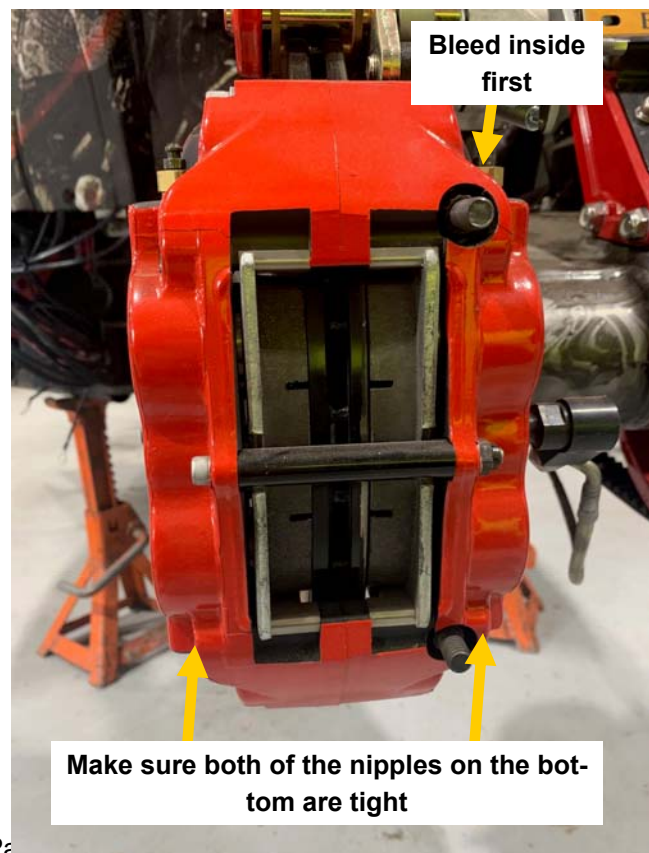


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20. The last step is hooking up the brake fluid line to the new caliper. Start by removing the brake line from the old caliper. Then remove the banjo bolt from the brake line, make sure to keep the crush washer on each side of the brake line. Feed the banjo bolt you remove from the stock brake line through the 90 degree adapter included in the kit. A crush washer goes under the head of the bolt and also between the 90 degree adapter and the adapter on the back of the new brake caliper. Next use the new banjo bolt included in the kit to attach the brake line to the 90 degree fitting. There should be a crush washer under the banjo bolt head and between the brake line and the 90 degree adapter.



21. Once the brake line is attached and both banjo bolts are tight, it is time to bleed the brake calipers. Start by making sure the bleed nipples on the bottom of the calipers are tight. Then start bleeding the caliper by bleeding the inside nipple first, then the outside nipple and then the inside one more time. Typically you will need to bleed the calipers another time after bedding the brakes, as there is a lot of air in the calipers and after the first heat cycle the air moves in the caliper to a nipple so you can bleed it out.



Rear Big Brake Kit — INSTALLATION

22. Brake Bedding Procedure#

When bedding the brake pads, you are basically trying to bring the pad temperature up to operating temperature slowly and gradually without spiking the temperature. This is done by doing slow stops first to build up some heat, then a little faster and so on until you get them to the point that they are beyond working temperature. A lot of times this will be when you actually start to see them smoking or the pedal starts to fade. It is very important to bring them up to this temperature gradually so you do not glaze the pads.

To start, go out and get up to 30mph and then apply about 75% braking force until you slow to a walking pace, then accelerate back up to 30mph and do it again. You want to do 4 of these runs from 30 mph total. This will start to build heat in the pads and allow that heat to sufficiently start to soak into the thicker parts of the brake pads. Then you want to start doing the same thing from 40 mph, once again 4 times. This will start to put more heat into the pads and start to get them into the lower part of their operating range. Then the next is 50 mph, once again 4 times, then lastly 60mph once again 4 times. After doing the 4 stops from 60, head back to your house or shop, using your brakes as little as possible, and turn the Slingshot off and let it cool completely down (about 1 hour) until the rotor is cool enough to touch comfortably. This procedure will bed the pads to the rotors very well. You can then go out and drive it again and check for vibration.

Congratulations! You have finished the install. All of us here at DDMWorks thank you for your purchase and hope you enjoy your new Big Brake Kit!

If you have any questions feel free to give us a call or text us at 864-907-6004. You can also email us at Tech@ddmworks.com.



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