If you are interested in Drilled and Slotted Rotors for your car please give us a call. We have these upgrades available for exchange of non-installed components. We cannot exchange components that have been previously installed. Shipping charges will apply. Upgraded rotor pictured.

**DISCLAIMER:**

The Right Stuff values your safety above all things. For this reason, we recommend all brake systems and components be installed by professionals. The installer of the brake parts is responsible for ensuring fitment and suitability of the parts for the vehicle it is being installed on. Brakes should be tested in a controlled open area with success before driving on the road. If you are unsure or uncomfortable with any part of your kit, please call for further instructions from our tech staff before driving.

**TOOLS YOU MAY NEED**

Your new disc brake conversion kit can be bolted up with standard hand tools. The only tools you may not find in your toolbox are listed below.

1. Ball joint fork or *pickle fork (Only needed if changing spindles)
2. Spring Compressor (Only needed if changing spindles) *recommended
3. Drum brake tool (Optional)

**Attention:** Before modifying, painting, or powder coating any part of this kit, please trial fit all components and check rim clearance. Modified, Painted, and Powder Coated parts are not returnable!
KIT CONTENTS

□ ROTORS
Pair of Rotors
Part Number: BR14C for Plain Rotors
Part Number: BR14ZDC for Drilled and Slotted Rotors

□ CALIPERS
Pair of Calipers
Part Number: BC72N
Part Number: BC73N

□ CALIPER BRACKETS
Pair of Brackets + Hardware
Part Number: CMB14

□ WHEEL BEARING KIT
Hardware
Part Number: WBK14C

□ FLEX HOSES
Pair of Flex Hoses
Part Number: FHK03 for Regular
Part Number: FHK03S for Braided Stainless

□ STEERING ARM BOLTS
4 Bolts
Part Number: SPH01
1. PREPARE THE CAR

Make sure you have the car on a flat even surface with plenty of room to work. Next, set the parking brake and chock the rear wheels so the car will not roll. Now raise the front end of the car off the ground approximately 12”, and secure it with heavy-duty jack stands placed under the frame. You can now remove the front wheels to gain access to the brake system.

2. REMOVING THE BRAKE DRUM/HUB ASSEMBLY

Remove the dust cap from the center of the hub. Next remove the cotter pin that locks the large castle nut, now remove the castle nut and washer. You can now slide the Brake Drum/Hub assembly off of the spindle, allowing you access to the brake shoes.

3. REMOVING BRAKE SHOES AND BRAKE BACKING PLATE

Remove the brake shoes and hardware to allow access to the steering arm bolts. Once they are out of the way you can now loosen the two steering arm bolts and remove them. Save the steering arm for re-assembly. Early Novas with 4 lug hubs require later model 5 lug steering arms, DBSA02. Next remove the large anchor pin at the top of the backing plate and then remove the entire backing plate assembly from the spindle.

4. INSTALLING THE CALIPER BRACKETS

Install the appropriate caliper bracket onto the spindle with the caliper opening of the bracket towards the rear of the car. Be sure the machined surface faces the spindle. Using the special bolt provided, apply loctite to the threads and insert it into the top of the spindle.

Note: Some spindles have a ½” bolt, others used a 5/8” bolt, both sizes are provided with the kit. Remember to apply Loctite to these bolts.
First inspect the rotor inner cavity and bearing race surfaces for any machining debris and clean/remove as necessary. Now apply a generous amount of high temp wheel bearing grease to the bearing race found inside the hub area on the front and back of the rotor. Next you will need to pack the new wheel bearings with the high temp grease as well. To do this you can use a tool that is available at most auto parts stores for about $10 along with a grease gun, and really gets the bearing packed nice and is a lot cleaner on your hands!

The other, old fashioned way, filling the palm of your hand with wheel bearing grease and then forcing it “into” the bearing a little bit at a time can be done, but you must get the grease “COMPLETELY” inside the cage and on all surfaces of the rollers. It is NOT good enough to just smear grease on the outer part of the wheel bearings, they must be PACKED! Failure to do so could result in pre-mature wheel bearing failure.

**Disc Brake Spindles**

Same as the drum brake spindle installation except you must use the spacer provided on the top caliper bracket mounting bolt.

Attach the bottom of the caliper bracket thru the rear steering arm bolt hole, with the new 1/2” bolts provided. Now put the steering arm back onto the spindle, then torque these two bolts to 85 ft. lbs., then loctite and tighten the top bolt to 120 ft. lbs.

**Note:** Some pre ’67 cars used 7/16” bolts. You will need to drill the spindle and steering arm holes out to 1/2” for the new hardware.

**Bearings / Installing the Bearings & Grease Seal into the Rotors**

First inspect the rotor inner cavity and bearing race surfaces for any machining debris and clean/remove as necessary. Now apply a generous amount of high temp wheel bearing grease to the bearing race found inside the hub area on the front and back of the rotor. Next you will need to pack the new wheel bearings with the high temp grease as well. To do this you can use a tool that is available at most auto parts stores for about $10 along with a grease gun, and really gets the bearing packed nice and is a lot cleaner on your hands!

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**Tech Support • 800.405.2000**
Once you have the wheel bearings packed, insert the larger of the two bearings into the backside of the rotor, and then install the new grease seal provided, by tapping it into place with a small hammer, taking care to not damage the inner rubber part of the seal.

*Using a small block of wood between the hammer and seal works well to avoid damaging it during installation.

Now slide the rotor onto the spindle, and then slide the smaller bearing on, followed by the keyed washer and castle nut. Make certain that the keyed washer is flush up against the outer bearing.

6. ADJUSTING THE FRONT WHEEL BEARINGS

While rotating the rotor, tighten the spindle castle nut to 12 ft. lbs. *Basically just tight enough to “seat” the bearings

Now back off the spindle castle nut one flat and insert the cotter pin. If slot in the castle nut and the pin hole in the spindle do not line up, back off the castle nut an additional ½ flat or less as required to insert the cotter pin.

*A flat refers to one of the flat sides of the castle nut

Note: Bearings should have ZERO preload and .001” to .008” end movement when properly adjusted. You can check this by grabbing the rotor on either side and move it back and forth laterally. There should be no lateral movement in the rotor.
INSTALLATION INSTRUCTIONS

Spin the rotor to check that it rolls freely and then lock the castle nut in place by spreading the end of the cotter pin apart and bending it over. Next install the new dust cap. You can do this with a large socket placed over top of the cap so that the edges of the socket are catching the edge of the dust cap, and then use a large mallet to drive it into the rotor snout. A small hammer and flat punch can also be used to install it, going from one side to the other a little at a time.

Note: Spin the Rotor to check that it rolls freely.

7. MOUNTING THE CALIPERS

Note: There is a left and right caliper, when installed correctly the bleeder screws will be at the top. If the bleeder screws are at the bottom, you will not get the system to bleed properly.

Your new calipers come fully loaded with pads, bolts, and copper washers. Start by removing the caliper bolts and position the caliper in the bracket with the bleeder screw at approximately the 12 o'clock position. Insert the caliper pins/bolts and torque/ti to 30 ft. lbs.

If the caliper won’t install in the brackets with the bleeder pointed up, you probably have the opposite side caliper.

Note: Bend the ends of the cotter pin.
8. MOUNTING THE FLEX HOSES

Next remove the banjo bolt and copper washers from the caliper. Place one copper washer on the banjo bolt and insert it thru the flex hose, then put the other copper washer over the banjo bolt on the other side of the flex hose. Now bolt the flex hose onto the caliper and torque/tighten the banjo bolt to 45-65+ ft. lbs.

*If you find that fluid is seeping around the copper washers, do not be afraid to put a little more torque on the banjo bolts to seat them! Do not go over 80 ft. lbs though.

Insert the other end of the flex hose into your original frame bracket and insert the new retaining clip supplied in your kit. In some cases, you may need to file the opening in the original bracket on the frame to accommodate the new flex hose. The flex hose might seem a little tight when you turn the wheels lock to lock. This is normal in most cases, as the suspension is flexed to the absolute limits of its travel. If after hooking up the flex hose, you feel that it is under too much tension, change the position and or direction that the hose is routed to alleviate some of the tension on the hose.

At this time you can hook up your hard line to the brake hose and this will complete the installation of the 14-inch wheel disc brake conversion assembly.

9. A FEW RECOMMENDATIONS AFTER INSTALLATION

1. Go over these instructions carefully and double check that you have followed them correctly and that everything is tightened and adjusted properly.

2. It may be necessary to have your alignment checked after the installation. It is possible for the tie rod adjusting sleeve to come out of adjustment.

3. Once you have bled the brake system be sure to check for leaks.

4. Before operating the vehicle on a public roadway, confirm that you have a working emergency brake and that you have a firm operating brake pedal.
1. CHOOSING BRAKE FLUID

You should only use new un-opened brake fluid with your new brake system. Our brake systems are compatible with conventional DOT 3/4 brake fluid and synthetic DOT 5 brake fluid. Generally both will work the same, it is the opinion of some that DOT 3 will give you a firmer pedal over the DOT 5 synthetic. The biggest advantage of using synthetic fluid, is that it will not harm painted surfaces. The Right Stuff is not liable for damage caused by system fluids.

You cannot however, mix the two fluid types in your brake system. You must pick one or the other as they will not work together.

2. BLEEDING THE BRAKES

Brake fluid absorbs moisture in the system. That is why the container comes with a seal that must be broken before use. It is for that reason, you should always use fresh new brake fluid anytime you are bleeding the brakes, or adding new components to your vehicles brake system.

a. Whenever installing a new master you must first bench bleed it, to get the trapped air out of its internal passages.

b. To do this, put the master cylinder in a bench vise holding it by one of the “mounting ears”, then remove the lid and fill it ¾’s full with brake fluid. Attach the bleeding kit to the ports and put the hose’s over into the fluid reservoir making sure they stay below the fluid level. Then using a phillips style screw driver inserted into the rear pocket of the master cylinder, push in slowly, going in about 1 ¼ “ of travel for roughly 10 times or until you no longer see any air bubbles coming out of the hose’s. Once you are certain there are no more air bubbles, you can remove the hose’s and put the lid back on and install the master cylinder.

c. Now that you have the master cylinder back on the vehicle and all the lines hooked up and tight, remove the lid and fill it up with the appropriate fluid, then re-install the lid.

d. Working your way forward from the wheel farthest from the master cylinder will help insure a good bleed and a firm pedal. It is important to bleed the system in the following order:

   PASSENGER SIDE REAR • DRIVERS SIDE REAR • PASSENGER SIDE FRONT • DRIVERS SIDE FRONT

To bleed the brakes, have your helper pump the brake pedal 3 times and hold it down on the last pump while you open the bleeder screw. The pedal will go to the floor pushing out the air in the system. Close the bleeder screw and repeat the process again, until you have no sign of air coming out of the system.

Note: DO NOT let the master cylinder run dry during the bleeding process! We recommend that you check the fluid level in the master cylinder, after every other bleeding cycle for each location on the car. With a new “empty” system as well as what you lose thru the bleeding process, you will have to continually add fluid as you go to fill the entire brake system.

When you no longer have any air present at the bleeder locations, you should have a firm brake pedal. This completes the bleeding process.
1. Spindle, ball joints and tie rods are tight and secured with cotter pins installed.

2. Caliper mounting brackets and steering arms tightened to specifications.

3. Front bearings properly packed and grease seals installed.

4. Rotors installed with washer and castle nut secured by the cotter pin.

5. Front wheel bearings adjusted properly.

6. Calipers, with brake pads installed and tightened to specifications.

7. Spin the rotors and check for any signs of interference, they should turn with only a slight drag from the disc brake pads.

8. Turn front wheels side to side and check flex hose installation for any signs of interference.

9. Overall general visual inspection of all fasteners and components that were installed per the instructions.

10. Check for any leaks at the line connections.

11. Master cylinder bench bled properly.

12. Brake system bled properly.

13. Mount the wheel and tire and rotate, checking for any interference before driving.

14. **Before driving the vehicle on a public roadway, make certain that you have a functioning emergency brake and solid firm working brake pedal.**

15. We recommend that you have your front-end alignment checked after installation of any front suspension parts.
Once you have your new disc brake conversion installed, you will need to break them in to gain the full benefits of this upgrade.

To break in the new pads and rotors you will need to go thru a series of about six moderate braking events. The goal here is to bed-in the new rotors with material from the new pads. To do this, you will need to go thru a series of about six to eight moderate stops from 45 mph to about 10 mph, without completely coming to a full stop. These are not to be panic or extreme stops, just use about 70% of full on braking to slow the car down and do it in succession, without any cool down time in between. You should start to smell the brake material, then finish the bed-in procedure by driving at a steady speed for about 4-5 miles without braking to allow them to cool down. This completes one bedding cycle, after cooling them down, repeat the procedure one more time and that should do the job.

Please note this should be done away from a public roadway, in a controlled area so as to not endanger yourself or anyone else while performing these brake in procedures.

PV71
FIXED COMBINATION VALVE
SUPPLEMENT

This supplement is for customers who have chosen the “fixed” combination valve with the purchase of our disc brake conversion kits. This diagram shows where each port of the valve routes. If you have any further questions or concerns, please don't hesitate to call our toll free technical support line. Thank you again for your business.
We want your conversion project to go smoothly. Double check that you have followed these instructions correctly and those included with any upgrade components you may have purchased. If you need additional help getting your new disc brakes to function properly, we’re here for you. You can visit our website at www.getdiscbrakes.com for Tech Tips and Videos. If you cannot find the assistance you need from that source feel free to send us an email from the Tech support section of the website for priority service. or give us a call at (800) 405-2000.