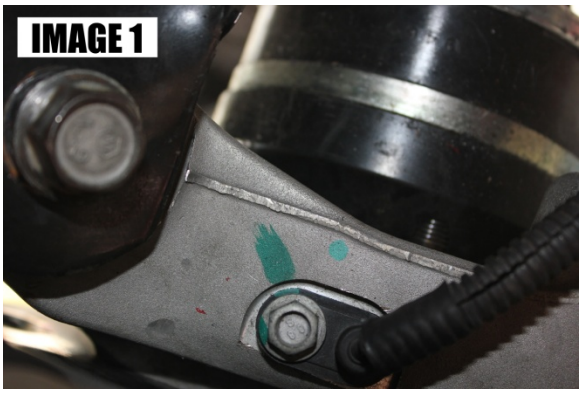
BRAKE CONVERSION PACKAGE FOR 15” WHEELS (BCP001)

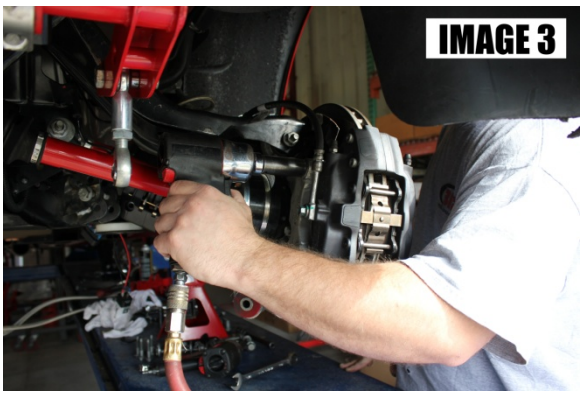
TOOLS REQUIRED:

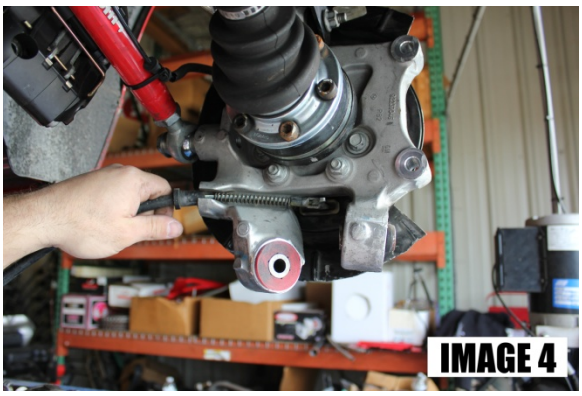
- Jack and Jack Stands
- Wrenches: 10mm, 13mm, 18mm, 7/16”, 9/16”, 11/16”
- 3/8” or ½” drive ratchet
- ½” impact gun
- Sockets: T25 Torx, 5/16” Allen, 9/16”, 10mm, 18mm, 21mm, 32mm

INSTALLATION:



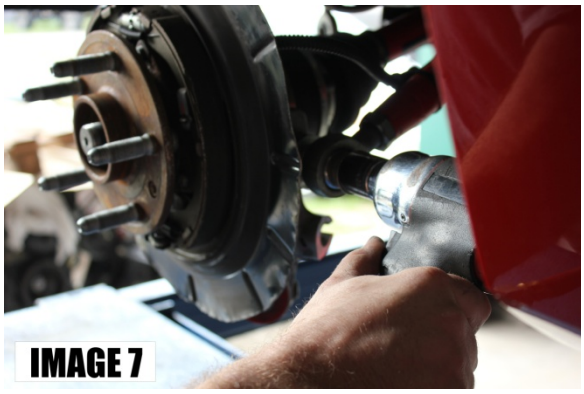
1. Lift vehicle and support with jack stands under the frame rails.
2. Remove the rear wheels/tires.
3. Using a 10mm wrench, remove the brake line retaining tab located on top of the upper A-arm.
4. Remove the ABS line using a 10mm socket. (**IMAGE 1**)
5. Using a 13mm wrench (line wrench if possible), undo the brake line at the frame position. Using a screwdriver or pry bar, remove the brake clip at the frame to allow the rubber brake line to come loose. (**IMAGE 2**)



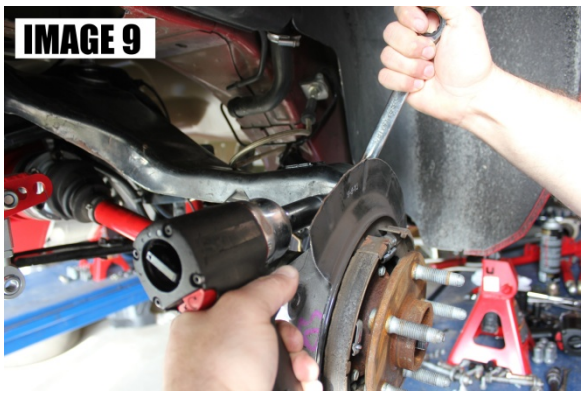


6. Using an 18mm socket, remove the two caliper mounting bolts then set the caliper aside. (**IMAGE 3**)
7. Use a T25 Torx socket to remove the recessed screw that retains the brake rotor to the hub. Remove the rotor.
8. On the back side of the spindle, pry the emergency brake cable off the backing plate. (**IMAGE 4**) The emergency brake cables can be completely removed at this time by disconnecting the other end located above the driveshaft. **NOTE:** in order to access this connection and completely remove the cables, the fuel tank must be lowered and the driveshaft tunnel heat shielding removed.

9. Using a 32mm socket with an impact gun, remove the large CV nut in the center of the hub. (**IMAGE 6**)
10. Remove the outer Toe Rod bolt at the spindle using a 21mm socket. (**IMAGE 7**)



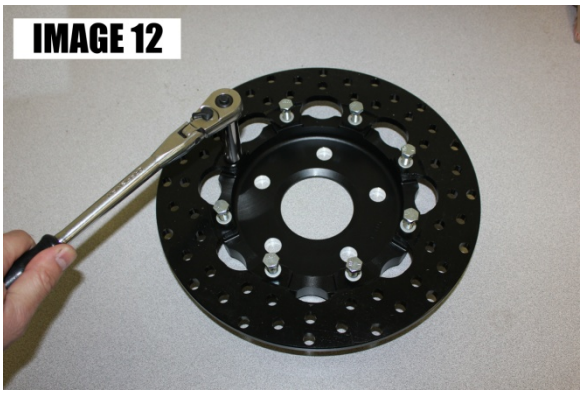
11. Using an 18mm socket and 18mm wrench, un-bolt the outer Trailing Arm bolt. (**IMAGE 8**)
12. Remove the Lower Control Arm bolt using an 18mm wrench and socket.

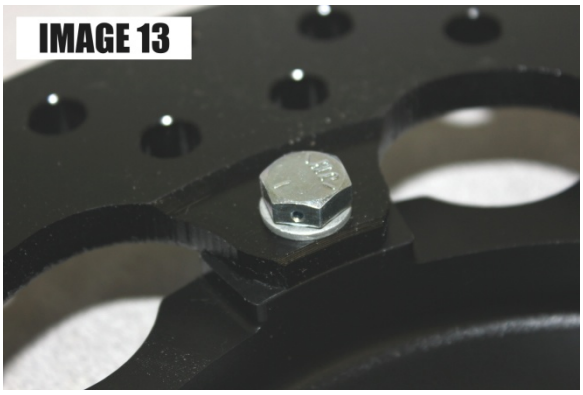


13. Remove the Upper Control Arm bolt using an 18mm wrench and socket. (**IMAGE 9**)
14. With the spindle sitting on a work bench, use a 13mm socket to remove the three bolts for the hub as shown in **IMAGE 10** below.

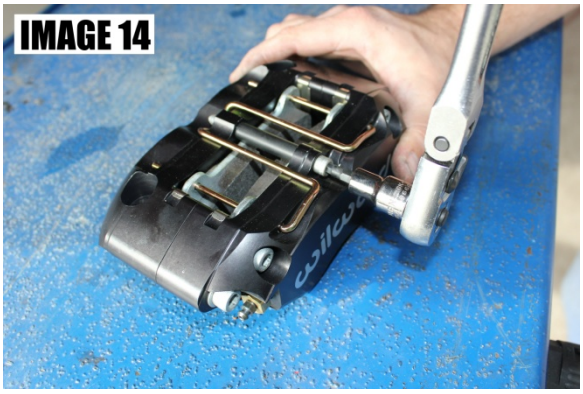
15. Re-assemble the hub onto the new BMR spindle using the OE bolts. Torque to 85 ft/lbs.
16. Attach the BMR aluminum brake bracket as shown using the supplied 3/8” x 1.5” Allen bolts, washers and nuts. Use a 5/16” Allen wrench (or socket) and a 9/16” wrench to tighten the bolts. (**IMAGE 11**)
17. Install the BMR spindle and tighten the CV nut.

18. Re-connect the lower control arm, toe rod, trailing arm, and upper control arm. Tighten the bolts to the following specs:
    - Control Arm: 30 ft/lbs. + 120 degrees
    - Trailing Arm: 30 ft/lbs. + 120 degrees
    - Toe Rod: 103 ft/lbs.
    - Upper A-arm: 44 ft/lbs. + 90 degrees
19. Re-connect the ABS line to the top of the spindle.
20. Assemble the Wilwood rotor and hat as shown in **IMAGE 12** with the supplied 5/16” x 1.5” Allen bolts and lock washers. **Note:** the hat will physically bolt to either side of the rotor but the proper orientation is shown in **IMAGE 13** to the right.



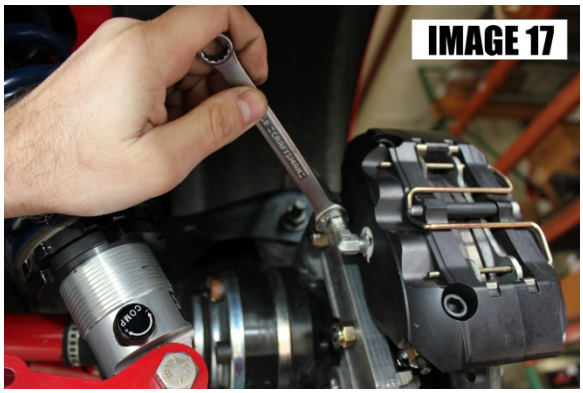


21. Load the brake pads into the Wilwood brake caliper as shown in **IMAGE 14** below. Use a 3/16” Allen wrench to remove the center spacer and wire pad retainer for installing the brake pads.
22. Mount the caliper to the BMR caliper brackets using the supplied 3/8” x 1.5” Allen bolts and finish washers. Tighten to 32 ft/lbs. (**IMAGE 15** below)



23. Open the Wilwood brake hose kit and locate the brake hose adapter. Install the adapter as shown in **IMAGE 16** and tighten the OE hose to it.

24. Coat the threads of the 90 degree fitting with Loctite then thread it into the back of the caliper. Tighten it until it is pointing in the direction of the caliper.
25. Connect the other end of the Wilwood brake hose to the fitting on the caliper and tighten. (**IMAGE 17**)



26. Using a cut-off wheel or hack saw, cut off the factory brake hose tab located on the top of the upper A-arm.
27. Install the supplied cable clamp using the supplied self-tapping sheet metal screw. Thread the clamp to the top of the A-arm as shown in **IMAGE 18**.
28. Bleed brakes making sure to bleed the air out of all 8 bleeder screws starting at the furthest screw.
29. Repeat steps 3-28 on the other side of the vehicle.
30. Install wheel/tires.

Pad Bedding

The bedding process is the final "heat cure" for the pads. This final bedding cure differs from an oven heat cure in such that the oven heat cure does not include the pressure, torque, and elevated surface temperatures that are necessary to properly condition the pad for service. As it is with the rotors, new pads must be gradually brought up to temperature and then slowly cooled. If the pads are put into hard service right from the start, damage from fractures or accelerated deterioration due to extreme temperature variations between the surface and the body of the pad can occur. Overall poor performance with the potential for rotor damage are often the results.

Bedding Steps:

Once the brake system has been tested and determined safe to operate the vehicle, follow these steps for bedding of all pad materials and rotors. This procedure should be performed on a race track or other safe location where you can safely and legally obtains speeds up to 65 MPH while also being able to rapidly decelerate.

1. Proceed with a series of 8-10 hard stops from 55-65 MPH down to 25 MPH allowing 20-30 seconds of cool down time between each stop.

2. Drive at a moderate cruising speed, with the least amount of brake contact possible, until most of the heat has dissipated from the brakes. Avoid sitting stopped with the brake pedal depressed to hold the car in place during this time. Park the vehicle and allow the brakes to cool to ambient air temperature.