ASSEMBLY INSTRUCTIONS

FOR

DPHA CALIPER FRONT UPGRADE BRAKE KIT WITH BRAKE PADS FOR 262MM (10.32”) DIAMETER ROTOR AND SPINDLES

NOTE: This kit will not work with vehicles equipped with OE 240mm rotors and spindles (even if upgraded to 262mm rotors) due to the lower height of the caliper mount points on these spindles. This kit will require a minimum of 15” diameter wheels and may not fit all OE or aftermarket 15” rims without spacers or special offset replacement wheels. Please verify your wheel clearance using Figure 2, on page 3 of this instruction sheet before attempting installation of this kit.

HONDA / ACURA

PART NUMBER GROUP

140-13029

DISC BRAKES SHOULD ONLY BE INSTALLED BY SOMEONE EXPERIENCED AND COMPETENT IN THE INSTALLATION AND MAINTENANCE OF DISC BRAKES

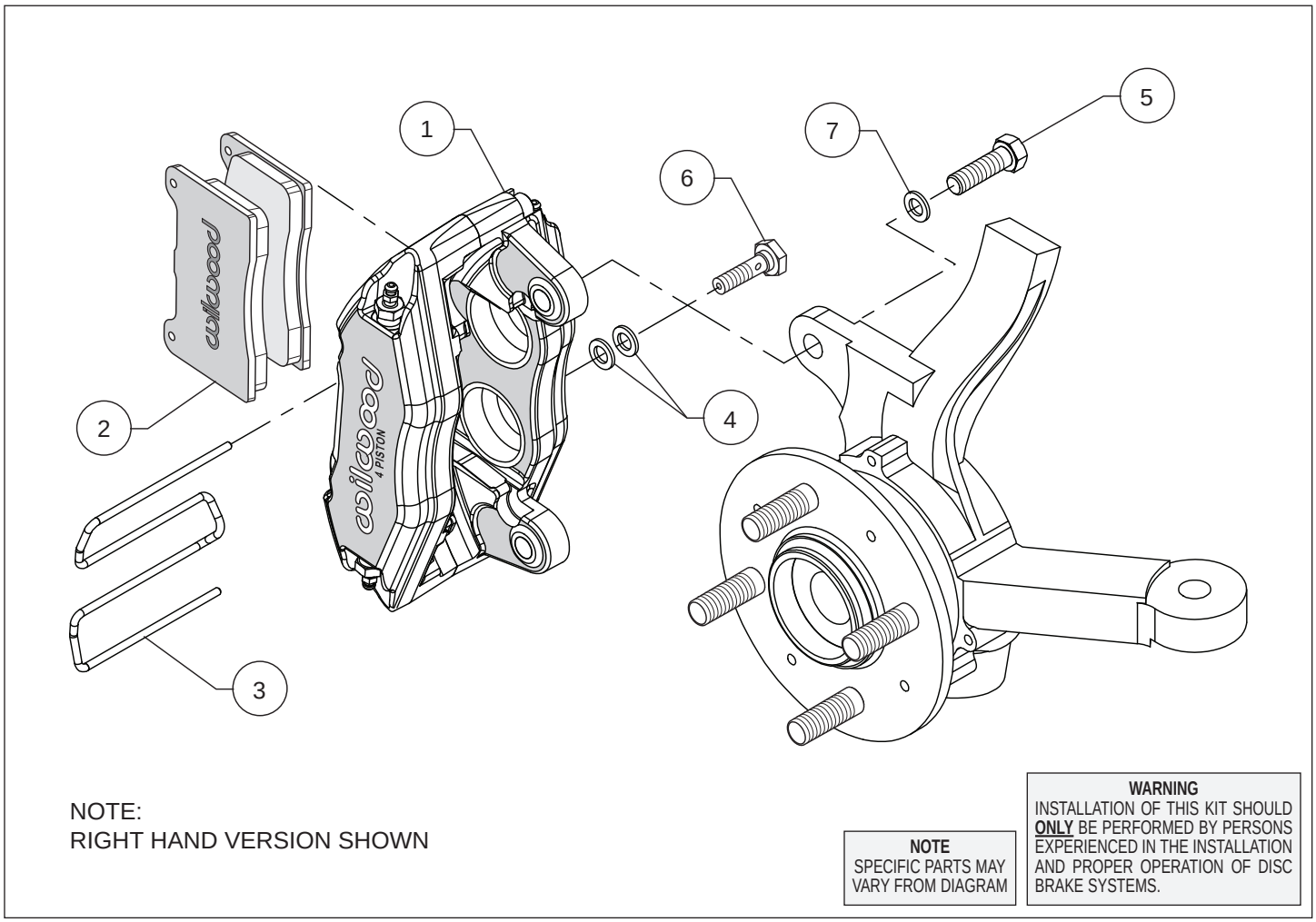
READ ALL WARNINGS

wilwood DISC BRAKES

Photographic Tip

Important and highly recommended: Take photos of brake system before disassembly and during the disassembly process. In the event, trouble-shooting photos can be life savers. Many vehicles have undocumented variations, photos will make it much simpler for Wilwood to assist you if you have a problem.

Exploded Assembly Diagram



NOTE:
RIGHT HAND VERSION SHOWN

NOTE
SPECIFIC PARTS MAY VARY FROM DIAGRAM

WARNING
INSTALLATION OF THIS KIT SHOULD **ONLY** BE PERFORMED BY PERSONS EXPERIENCED IN THE INSTALLATION AND PROPER OPERATION OF DISC BRAKE SYSTEMS.

Figure 1. Typical Installation Configuration

Parts List

ITEM NO.	PART NO.	DESCRIPTION	QTY
1	120-12949-BK	Caliper, DynaPro HA (DPHA), Black	2
1A	120-12949-RD	Caliper, DynaPro HA (DPHA), Red	2
2	150-9136K	Pad, BP-10, Axle Set	1
3	300-9635	Retainer, Pad Clip	2
4	240-5227	Washer, .406 I.D. x .625 O.D. x .063 Thick	4
5	230-13073	Bolt, M12-1.50 x 25mm, Hex Head	4
6	240-12094	Bolt, M10-1.50 x 24mm, Banjo, Hex Head	2
7	240-0476	Washer, .477 I.D. x .922 O.D. x .063 Thick	4

NOTES: Part Numbers 230-12094 and 240-5227 are included with the calipers.
Part Number 230-13074, Caliper Mounting Bolt Kit, includes part numbers 230-13073 and 240-0476
Item 1A is an optional item and included in the (R) red caliper kits. Add -R to end of part number when ordering.

General Information, Disassembly, and Assembly Instructions

• *Installation of this kit should **ONLY** be performed by persons experienced in the installation and proper operation of disc brake systems. Before assembling this Wilwood disc brake kit, double check the following to ensure a trouble free installation.*

•Make sure this is the correct kit to fit the exact make and model year. This kit is specifically designed as a direct bolt-on Original Equipment (OE) replacement for Honda / Acura vehicles with 262mm (10.32") diameter rotors.

•Verify your wheel clearance using Figure 2.

•Inspect the package contents against the parts list to ensure that all components are included.

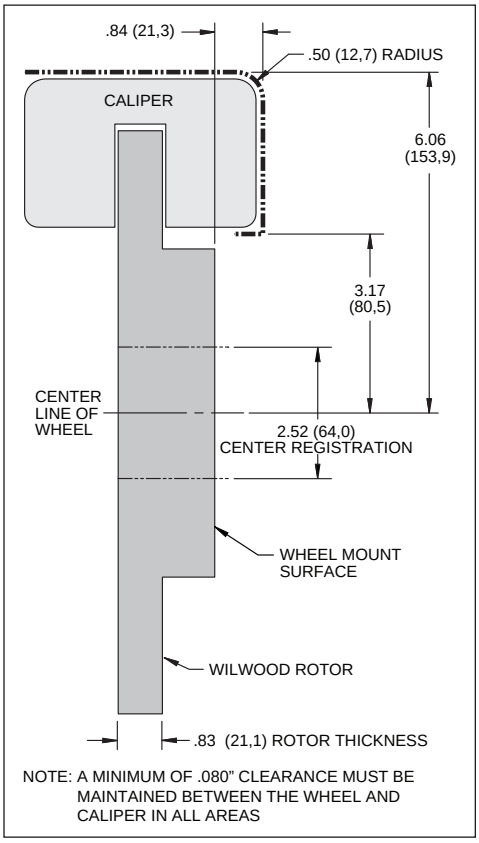


Figure 2. Wheel Clearance Diagram

Disassembly Instructions

•Disassemble the original equipment front brakes:

Raise the front wheels off the ground and support the suspension according to the vehicle manufacturer's instructions.

Remove the front wheels, calipers, and brake hoses (if installing replacements). ***NOTE:** It is recommended that the brake hoses be replaced for all applications with braided steel hoses.*

Remove all nicks or burrs on the caliper mounting bosses on the upright that may interfere with the installation of the new components.

Clean and de-grease the caliper mount, and saved components.

•Inspect existing OE rotors for proper service condition. If necessary, replace with new ULHP or SRP Wilwood rotors.

Part number	160-12959	.83" thick x 10.32" (262mm) diameter ULHP plain face rotor
Part number	160-12838/39-BK	.83" thick x 10.32" (262mm) diameter SRP drilled and slotted rotor (right and left)

Assembly Instructions (numbers in parenthesis refer to the parts list and Figure 1 on the preceding page):

•Mount the new Wilwood caliper (1) onto the axle hub caliper mounting bosses using bolts (5) and washers (7) as shown in Figure 1 and Photo 1. Apply red *Loctite*® 271 to the bolt threads and torque to 60 ft-lbs.

•Install the disc brake pads (2) into the caliper, with the friction material facing the rotor, and secure in place using pad clip retainer (3), Figure 1 and Photo 2.

• Temporarily install the wheel and torque the lug nuts to the manufacturer's specification. Ensure that the wheel rotates freely without any interference.

Assembly Instructions (Continued)

•Connect the OE rubber hose to the Wilwood caliper (1) using new crush washers (4) and banjo bolts (6). Torque bolts to 17 ft-lb. The preferred method is to use steel adapter fittings at the caliper, either straight, 45 or 90 degree and enough steel braided line to allow for full suspension travel and turning radius, lock to lock. **Carefully route hoses to prevent contact with moving suspension, brake or wheel components.** It is the installer's responsibility to ensure that all fittings and hoses are the correct size and length, to ensure proper sealing and that they will not be subject to crimping, strain and abrasion from vibration or interference with suspension components, brake rotor or wheel.

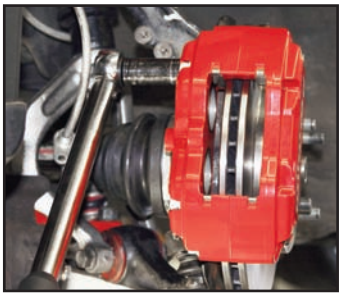


Photo 1

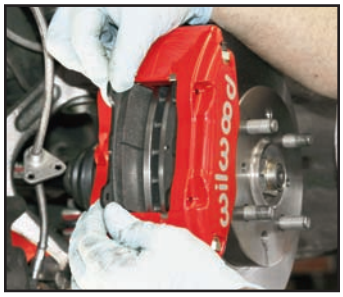


Photo 2

•In absence of specific instructions for brake line routing, the installer must use his best professional judgment on correct routing and retention of lines to ensure safe operation. Test vehicle brake system per the 'minimum test' procedure stated within this document before driving. After road testing, inspect for leaks and interference. Initially after install and testing, perform frequent checks of the vehicle brake system and lines before driving, to confirm that there is no undue wear or interference not apparent from the initial test. Afterwards, perform periodic inspections for function, leaks and wear in a interval relative to the usage of vehicle.

• Bleed the brake system, referring to the additional information and recommendations below for proper bleeding instructions. Check system for leaks after bleeding.

• Install the wheel and torque the lug nuts to the manufacturer's specification.

Additional Information and Recommendations

•Fill and bleed the new system with Wilwood Hi-Temp° 570 grade fluid or higher. For severe braking or sustained high heat operation, use Wilwood EXP 600 Plus Racing Brake Fluid. Used fluid must be completely flushed from the system to prevent contamination. ***NOTE:*** *Silicone DOT 5 brake fluid is* ***NOT*** *recommended for racing or performance driving*.

•Properly bleed the brake system according to the vehicle manufacturer's instructions, generally beginning with the caliper farthest from the master cylinder. ***NOTE:*** *When using a new master cylinder, it is important to bench bleed the master cylinder first.*

•Test the brake pedal. It should be firm, not spongy and stop at least 1 inch from the floor under heavy load.
If the brake pedal is spongy, bleed the system again.

If the brake pedal is initially firm, but then sinks to the floor, check the system for fluid leaks. Correct the leaks (if applicable) and then bleed the system again.

•***NOTE:*** *With the installation of after market disc brakes, the wheel track may change depending on the application.* Check your wheel offset before final assembly.

•If after following the instructions, you still have difficulty in assembling or bleeding your Wilwood disc brakes, consult your local chassis builder, or retailer where the kit was purchased for further assistance.

Brake Testing

WARNING • DO NOT DRIVE ON UNTESTED BRAKES
BRAKES MUST BE TESTED AFTER INSTALLATION OR MAINTENANCE
MINIMUM TEST PROCEDURE

- Make sure pedal is firm: Hold firm pressure on pedal for several minutes, it should remain in position without sinking. If pedal sinks toward floor, check system for fluid leaks. DO NOT drive vehicle if pedal does not stay firm or can be pushed to the floor with normal pressure.
- At very low speed (2-5 mph) apply brakes hard several times while turning steering from full left to full right, repeat several times. Remove the wheels and check that components are not touching, rubbing, or leaking.
- Carefully examine all brake components, brake lines, and fittings for leaks and interference.
- Make sure there is no interference with wheels or suspension components.
- Drive vehicle at low speed (15-20 mph) making moderate and hard stops. Brakes should feel normal and positive. Again check for leaks and interference.
- Always test vehicle in a safe place where there is no danger to (or from) other people or vehicles.
- Always wear seat belts and make use of all safety equipment.

Pad and Rotor Bedding

BEDDING STEPS FOR NEW PADS AND ROTORS – ALL COMPOUNDS

Once the brake system has been tested and determined safe to operate the vehicle, follow these steps for the bedding of all new pad materials and rotors. These procedures should only 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.

- Begin with a series of light decelerations to gradually build some heat in the brakes. Use an on-and-off the pedal technique by applying the brakes for 3-5 seconds, and then allow them to fully release for a period roughly twice as long as the deceleration cycle. If you use a 5 count during the deceleration interval, use a 10 count during the release to allow the heat to sink into the pads and rotors.
- After several cycles of light stops to begin warming the brakes, proceed with a series of medium to firm deceleration stops to continue raising the temperature level in the brakes.
- Finish the bedding cycle with a series of 8-10 hard decelerations from 55-65 MPH down to 25 MPH while allowing a proportionate release and heat-sinking interval between each stop. The pads should now be providing positive and consistent response.
- If any amount of brake fade is observed during the bed-in cycle, immediately begin the cool down cycle.
- 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.

COMPETITION VEHICLES

- If your race car is equipped with brake cooling ducts, blocking them will allow the pads and rotors to warm up quicker and speed up the bedding process.
- Temperature indicating paint on the rotor and pad edges can provide valuable data regarding observed temperatures during the bedding process and subsequent on-track sessions. This information can be highly beneficial when evaluating pad compounds and cooling efficiencies.

Pad and Rotor Bedding (Continued)

POST-BEDDING INSPECTION – ALL VEHICLES

- After the bedding cycle, the rotors should exhibit a uniformly burnished finish across the entire contact face. Any surface irregularities that appear as smearing or splotching on the rotor faces can be an indication that the brakes were brought up to temperature too quickly during the bedding cycle. If the smear doesn't blend away after the next run-in cycle, or if chatter under braking results, sanding or resurfacing the rotors will be required to restore a uniform surface for pad contact.

PRE-RACE WARM UP

- Always make every effort to get heat into the brakes prior to each event. Use an on-and-off the pedal practice to warm the brakes during the trip to the staging zone, during parade laps before the flag drops, and every other opportunity in an effort to build heat in the pads and rotors. This will help to ensure best consistency, performance, and durability from your brakes.

DYNO BEDDED COMPETITION PADS AND ROTORS

- Getting track time for a proper pad and rotor bedding session can be difficult. Wilwood offers factory dyno-bedded pads and rotors on many of our popular competition pads and ***Spec 37*** GT series rotors. Dyno-bedded parts are ready to race on their first warm up cycle. This can save valuable time and effort when on-track time is either too valuable or not available at all, Dyno-bedding assures that your pads and rotors have been properly run-in and are ready to go. Contact your dealer or the factory for more information on Wilwood Dyno-Bedding services.

NOTE:

NEVER allow the contact surfaces of the pads or rotors to be contaminated with brake fluid. Always use a catch bottle with a hose to prevent fluid spill during all brake bleeding procedures.