

ASSEMBLY INSTRUCTIONS
FOR
**FRONT PROMATRIX OE UPGRADE PAD/ROTOR KIT, WITH
12.44" DIAMETER VENTED ROTOR**

2005 - 2010 MUSTANG GT WITH ABS

PART NUMBER GROUP

140-12148-D

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

READ ALL WARNINGS



WARNING

**DO NOT OPERATE ANY VEHICLE ON UNTESTED BRAKES!
SEE MINIMUM TEST PROCEDURE WITHIN**

ALWAYS UTILIZE SAFETY RESTRAINT SYSTEMS AND ALL OTHER AVAILABLE SAFETY EQUIPMENT WHILE OPERATING THE VEHICLE

IMPORTANT • READ THE DISCLAIMER OF WARRANTY INCLUDED IN THE KIT

NOTE: Some cleaners may stain or remove the finish on brake system components. Test the cleaner on a hidden portion of the component before general use.

Important Notice - Read This First

Before any tear-down or disassembly begins, review the following information:

- Due to OEM production differences and other variations from vehicle to vehicle, the fastener hardware and other components in this kit may not be suitable for a specific application or vehicle.
- It is the responsibility of the purchaser and installer of this kit to verify suitability / fitment of all components and ensure all fasteners and hardware achieve complete and proper engagement. Improper or inadequate engagement can lead to component failure.

Exploded Assembly Diagram and Parts List

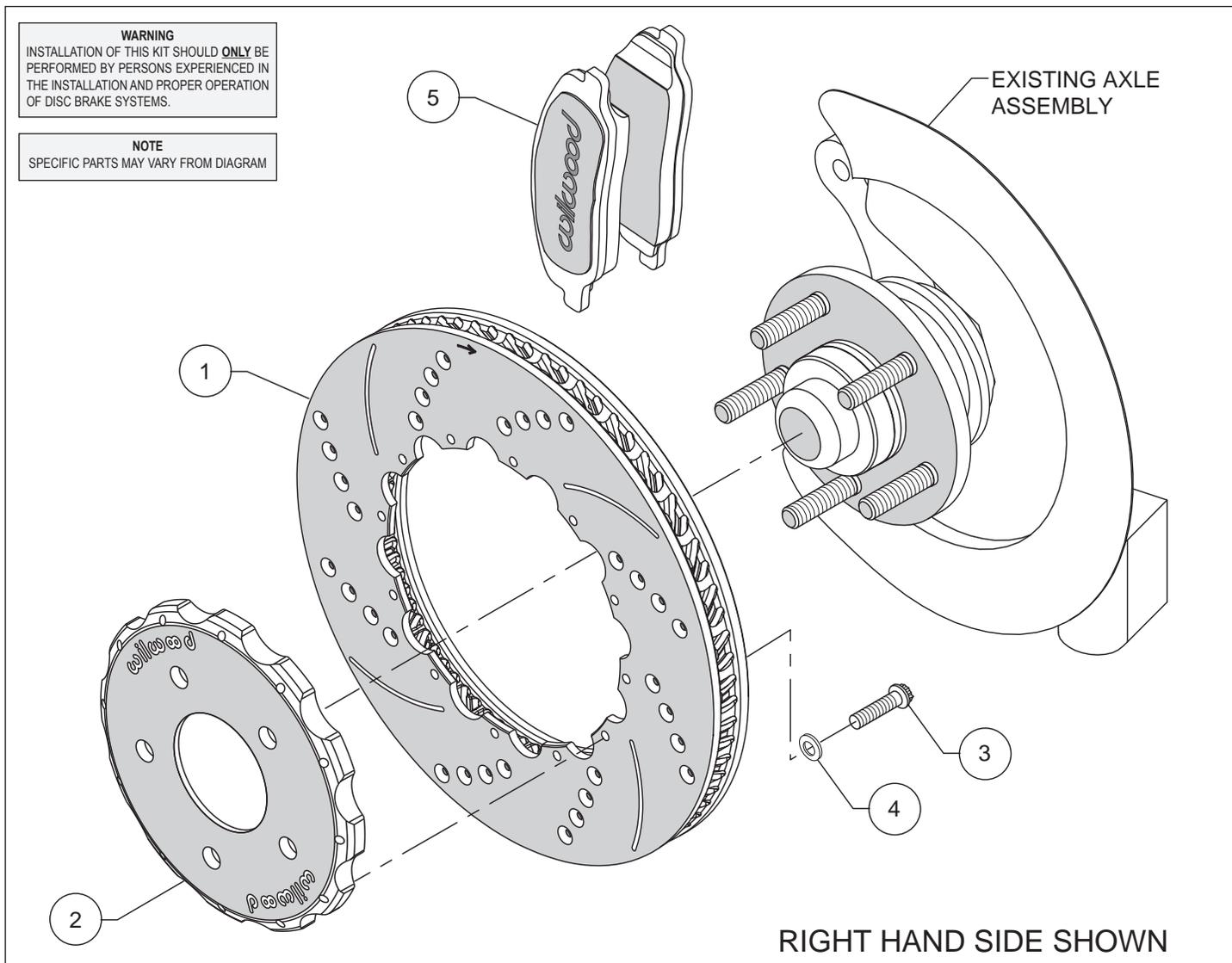


Figure 1. Typical Installation Configuration

| ITEM NO. | PART NO. | DESCRIPTION | QTY |
|----------|----------------|--|-----|
| 1 | 160-12157/58BK | Rotor, SRP ,1.19" x 12.44" Dia, 12 x 7.00" Bolt Circle, Right and Left | 2 |
| 2 | 170-12159 | Hat, 5 x 4.50", .405" Offset, 12 x 7.00" Bolt Circle | 2 |
| 3 | 230-6737 | Bolt, 1/4-20 x 1.00 Long, 12 Point | 24 |
| 4 | 240-11240 | Washer, .265 I.D. x .500 O.D. x .063 Thick | 24 |
| 5 | 150-D1081K | Pad, ProMatrix Compound, Axle Set | 1 |
| 6 | 220-12336 | Flexline Kit, Stainless Steel Braided (not shown) | 1 |

NOTE: Part Number 230-4572 Rotor Bolt Kit, includes part numbers 230-6737 and 240-11240

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 front 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 OE replacement for 2005 through 2010 model year Ford Mustang GT with ABS.
- Verify the hat lug pattern in this kit matches the lug pattern of the vehicle's axle hub.
- Inspect the package contents against the parts list to ensure that all components are included.

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 wheel, caliper, and rotor.
 - Remove all nicks or burrs on the hub/axle flange face or registration diameter that may interfere with the installation of the new hat/rotor.
 - Clean and de-grease the axle hub.

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

- Orient the rotor (1) and the hat (2) as shown in Figure 1. Attach rotor to hat using bolts (3) and washers (4). Using an alternating sequence, apply red *Loctite*[®] 271 to the threads, and torque to 155 **in-lbs**. Safety wire bolts using standard 0.032 inch diameter stainless steel safety wire as shown in Figure 2.
- Slide the hat/rotor assembly onto the axle hub. **NOTE:** *The hat must fit flush against the axle hub flange or excessive rotor run out may result.* Install three lug nuts (finger tight) to keep the hat/rotor assembly in place while continuing with the installation.
- Remove the OE pads from the caliper and insert the Wilwood brake pads (5) into the caliper, with the friction material facing the rotor.
- Reinstall the caliper in its original location and torque the mounting bolts to manufacturer's specification.
- Temporarily install the wheel and torque the lug nuts to the manufacturer's specification. Ensure that the wheel rotates freely without any interference.
- Remove the OE rubber brake hose from the caliper to the hard line, being careful to keep fluid spillage to a minimum. Install Wilwood's stainless steel braided flexline hose kit, P/N 220-12336 included with this kit. **Carefully route hoses to prevent contact with moving suspension, brake or wheel components.**
- **NOTE:** *Specified brake hose kits may not work with all Years, Makes and Models of vehicle that this brake kit is applicable to, due to possible OEM manufacturing changes during a production vehicle's life.* 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.

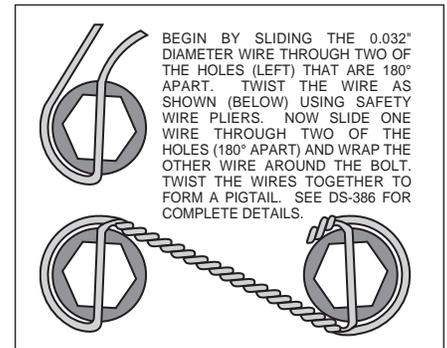


Figure 2. Safety Wire Diagram

Assembly Instructions (Continued)

- 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 manufacturer's specifications.

Additional Information and Recommendations

- Fill and bleed the new system with Wilwood Hi-Temp^o 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 and Pad Bedding

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 BEDDING PROCEDURE:

• Pump brakes at low speed to assure proper operation. On the race track, or other safe location, make a series of hard stops until some brake fade is experienced. Allow brakes to cool while driving at moderate speed to avoid use of the brakes. This process will properly burnish the brake pads, offering maximum performance.

Associated Components

| <u>PART NO.</u> | <u>DESCRIPTION</u> |
|------------------------|--|
| 260-1874 | Wilwood Residual Pressure Valve (2 lb for disc brakes) |
| 260-1876 | Wilwood Residual Pressure Valve (10 lb for drum brakes) |
| 260-8419 | Wilwood Proportioning Valve |
| 290-0632 | Wilwood Racing Brake Fluid (Hi-Temp° 570) (12 oz) |
| 290-6209 | Wilwood Racing Brake Fluid (EXP 600 Plus) (16.9 oz) |
| 340-1285 | Wilwood Floor Mount Brake Pedal (with balance bar) |
| 340-1287 | Wilwood Swing Mount Brake Pedal (with balance bar) |
| 260-6764 | Wilwood 3/4 inch High Volume Aluminum Master Cylinder |
| 260-6765 | Wilwood 7/8 inch High Volume Aluminum Master Cylinder |
| 260-6766 | Wilwood 1 inch High Volume Aluminum Master Cylinder |
| 260-4893 | 1-1/16 inch Tandem Master Cylinder (aluminum housing) |
| 250-2406 | Mounting Bracket Kit (tandem master cylinder) |
| 260-8555 | Wilwood 1 inch Aluminum Tandem Chamber Master Cylinder |
| 260-8556 | Wilwood 1-1/8 inch Aluminum Tandem Chamber Master Cylinder |
| 350-2038 | 1971 - 1973 Pinto Rack and Pinion (new, not rebuilt) |
| 270-2016 | Quick Release Steering Hub (3/4 inch shaft) |
| 270-2017 | Quick Release Steering Hub (5/8 inch shaft) |
| 220-12336 | Flexline Hose Kit, 2005-2010 GT Mustang |