

ASSEMBLY INSTRUCTIONS

FOR

FRONT MOTORCYCLE ROTOR/CALIPER “STEALTH”

**1984 AND UP 41MM WIDE GLIDE HARLEY-DAVIDSON®
V-TWIN FRONT ENDS**

PART NUMBER GROUP

140-10107

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

READ ALL WARNINGS

WARNING

IT IS THE RESPONSIBILITY OF THE PERSON INSTALLING ANY BRAKE COMPONENT OR KIT TO DETERMINE THE SUITABILITY OF THE COMPONENT OR KIT FOR THAT PARTICULAR APPLICATION. IF YOU ARE NOT SURE HOW TO SAFELY USE THIS BRAKE COMPONENT OR KIT, YOU SHOULD NOT INSTALL OR USE IT. DO NOT ASSUME ANYTHING. IMPROPERLY INSTALLED OR MAINTAINED BRAKES ARE DANGEROUS. IF YOU ARE NOT SURE, GET HELP OR RETURN THE PRODUCT. YOU MAY OBTAIN ADDITIONAL INFORMATION AND TECHNICAL SUPPORT BY CALLING WILWOOD AT (805) 388-1188, OR VISIT OUR WEB SITE AT WWW.WILWOOD.COM. USE OF WILWOOD TECHNICAL SUPPORT DOES NOT GUARANTEE PROPER INSTALLATION. YOU, OR THE PERSON WHO DOES THE INSTALLATION MUST KNOW HOW TO PROPERLY USE THIS PRODUCT. IT IS NOT POSSIBLE OVER THE PHONE TO UNDERSTAND OR FORESEE ALL THE ISSUES THAT MIGHT ARISE IN YOUR INSTALLATION.

RACING EQUIPMENT AND BRAKES MUST BE MAINTAINED AND SHOULD BE CHECKED REGULARLY FOR FATIGUE, DAMAGE, AND WEAR.



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 motorcycle to motorcycle, the fastener hardware and other components in this kit may not be suitable for a specific application or motorcycle.
- 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.

Parts List

ITEM NO.	PART NO.	DESCRIPTION	QTY
1	120-10104-P	Caliper, Stealth Front with Pads	1
2	160-10106	Rotor, Segment	12
3	230-10148	Bolt, 10-24 x .375 Long, FHCS	36

Wheel Diagram

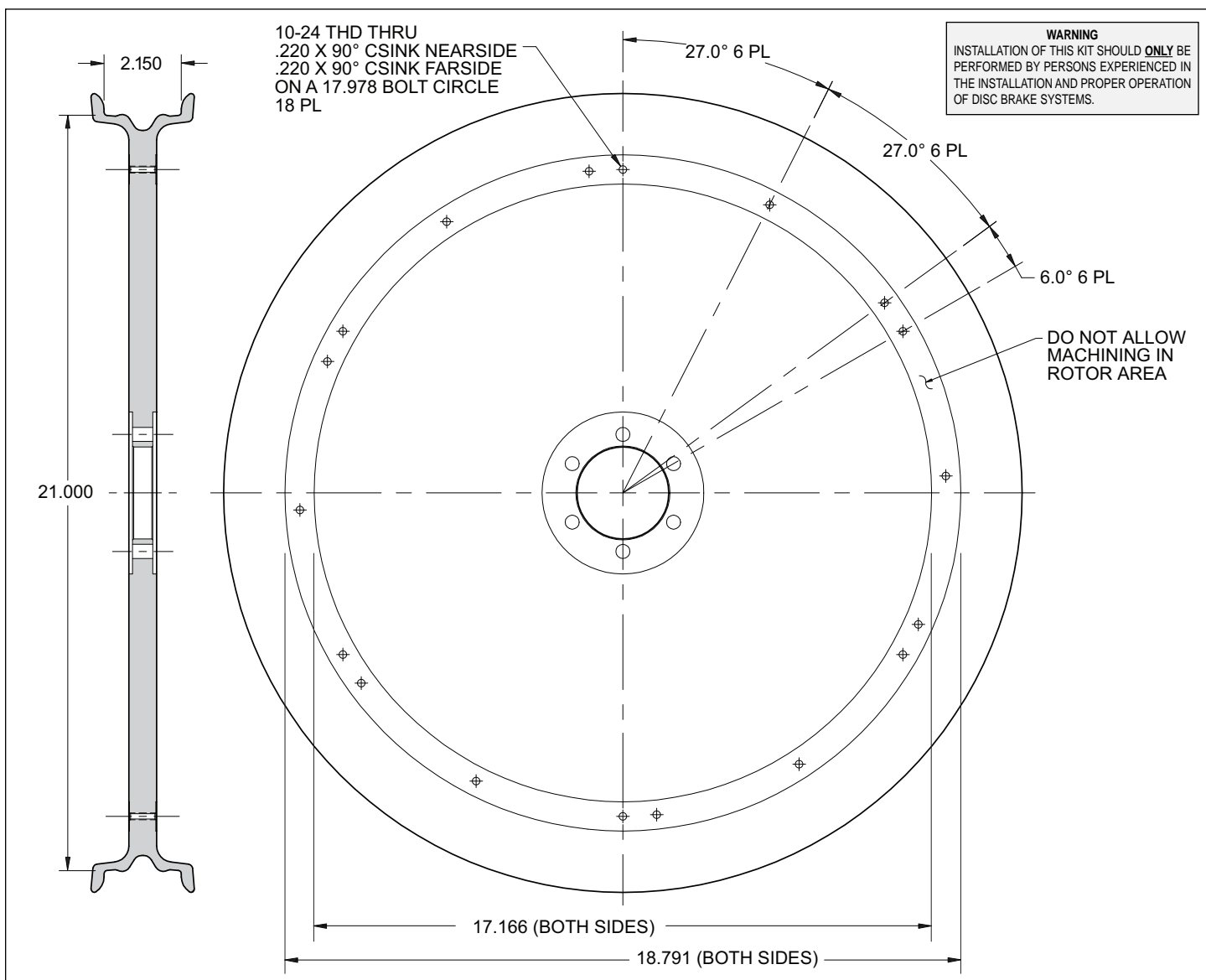


Figure 1. Rotor Segment Drilling Pattern

General Information

Installation of this kit should **ONLY** be performed by a trained mechanic/machinist experienced in the installation and proper operation of motorcycle disc brake systems. Read these instructions carefully before beginning work to be sure that the procedures are thoroughly understood. Before machining and assembly of the Wilwood Stealth front caliper disc brake kit, double check the following items to ensure a trouble-free installation.

- Make sure this is the correct kit to match the exact year and model Harley-Davidson® for which installation is intended.
- Inspect the package contents against the parts list to ensure that all components and hardware are included.
- This kit contains rotor segments that need to be applied to a **customer supplied machined wheel**. This machining needs to be performed by a qualified machine shop.

INSTRUCTIONS:

• The dimensions as outlined in figure 1 are for the installation of Wilwood rotor segments (2). These segments are specifically designed for use with a 21.00" by 2.15" machined wheel. After you have machined your wheel per figure 2, being careful not to allow machining in the rotor area other than for the 10-24 threaded holes. Also, remembering to drill for your valve stem. Figure 2 valve stem detail is for reference only. Actual dimensions may vary depending on your valve stem requirements. Wilwood does not supply a valve stem. Valve stem must be oriented on the wheel centerline as shown. Maximum through hole allowable is .453".

• A typical fully machined wheel is shown for reference in figure 3.

• Proceed to prepare the wheel for the installation of the rotor segments. First drill 18 10-24 threaded through holes on both sides of the wheel per the dimensional characteristics of figure 1.

• Check rotor mounting surfaces for distortion after drilling valve stem hole. No distortion of rotor mounting surfaces is allowable.

• Install the rotor segments (2) to the machined wheel using bolts (3). Before installation, apply red *Loctite*® 271 to the bolt threads and torque bolts to 40-50 **in-lbs.** being sure bolt heads are completely flush or below rotor segment surface.

• The caliper (1) mounts to the front leg support as shown in figure 4. The caliper mounting installation holes are tapped for 5/16-18 bolt threads. Customer supplies their own caliper mounting bolts. These bolts are then torqued to applicable specifications depending upon the grade bolt utilized. The use of blue *Loctite*® is solely at the discretion of the installer.

• **NOTE:** The Stealth caliper inlet fitting is a 3/8-24 thread. A banjo bolt fitting is used at the caliper with sealing (crush) washers. Banjo bolt thread engagement should not shorter than .375" or too long to cause it to bottom out at the end of the threads (see figure 4). Use enough steel braided line to allow for full suspension travel and turning radius, lock to lock. **Carefully route lines to prevent contact with moving suspension, brake or wheel components.** It is the installer's responsibility to properly route and ensure adequate clearance and retention for brake hose components..

• 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.

• 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 an interval relative to the usage of vehicle.

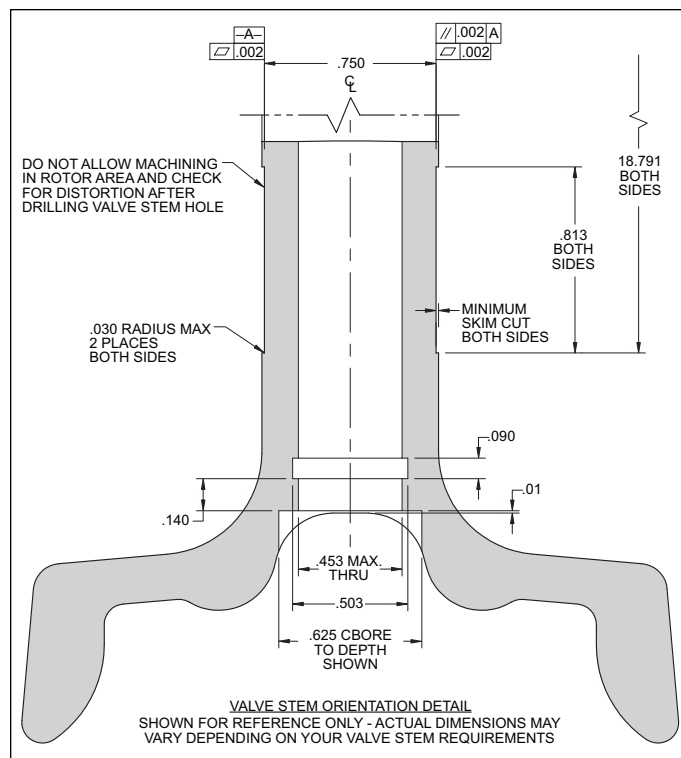


Figure 2. Wheel Machining / Valve Stem Detail

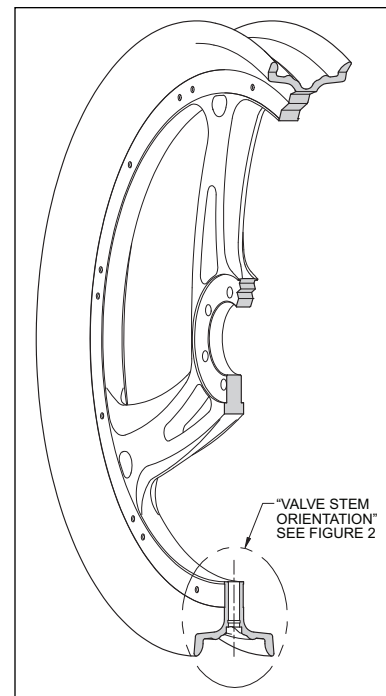


Figure 3. Fully Machined Wheel

Instructions (Continued)

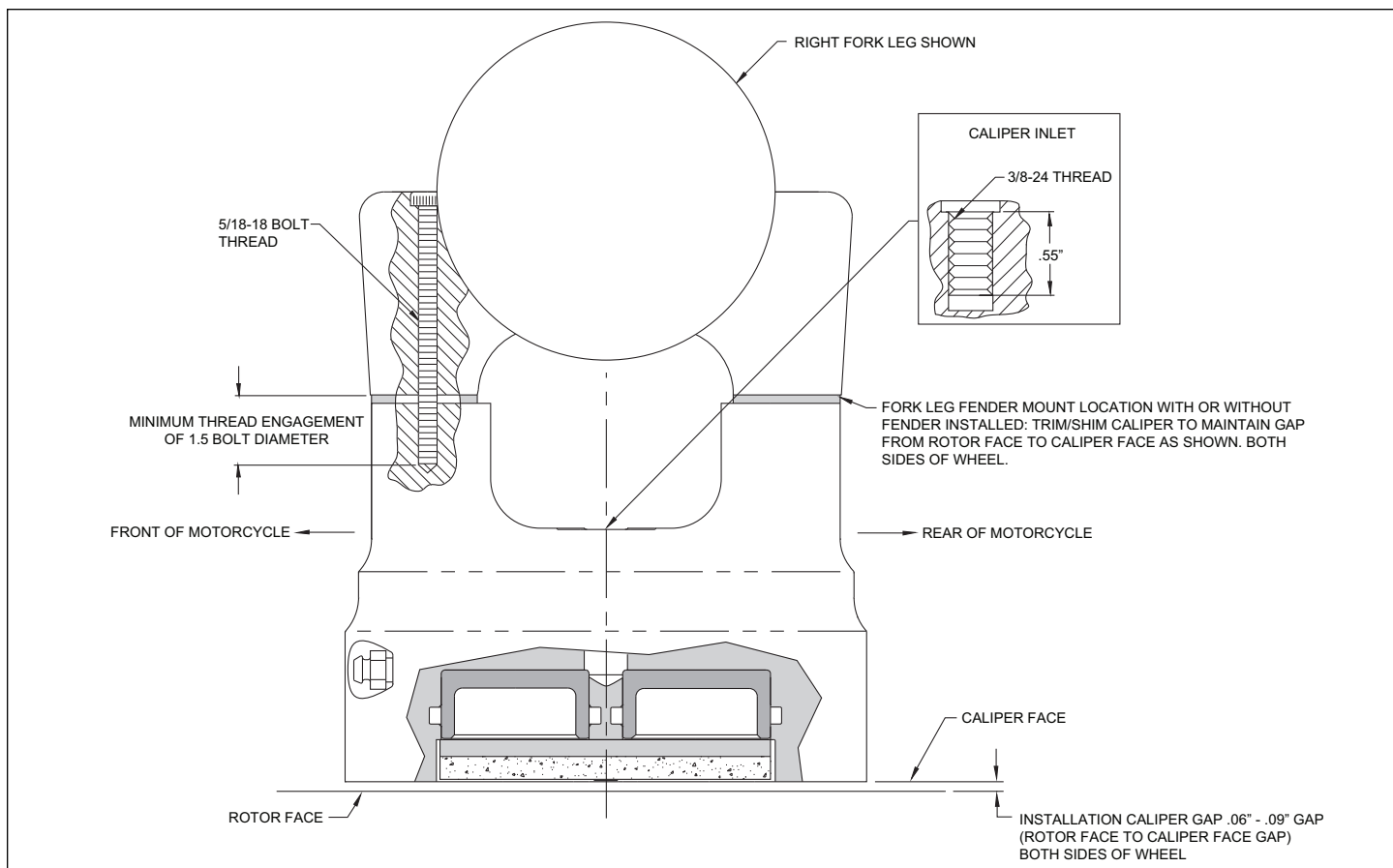


Figure 4. Caliper Installation

Brake Testing

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

- Make sure brake lever is firm: Hold firm pressure on lever for several minutes, it should remain in position without sinking. If level sinks toward handle bar, check system for fluid leaks. DO NOT drive vehicle if brake lever does not stay firm or can be pulled to the handle bar with normal pressure.
- At very low speed (2-5 mph) apply brakes hard several times. 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, vehicles or traffic.
- Always make use of all safety equipment when testing or driving vehicles.