

ASSEMBLY INSTRUCTIONS
FOR
WILWOOD
PULL TYPE CLUTCH SLAVE CYLINDER

PART NUMBER GROUP

260-1333

**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

Wilwood's slave cylinder is universal in nature and not intended for any specific vehicle application. It is the responsibility of the person performing the installation to determine the suitability of the part, proper mounting location and technique, perform required modifications, and correctly route fluid lines.

Photographic Tip

We suggest you take digital photos of the brake system setup before and during the disassembly procedure. This will aid in the event that something is not compatible with the new brake components and be a valuable tool to assist in the trouble-shooting process.

General Information

Specifications:

Description:	Wilwood Slave Cylinder
Part Number:	260-1333
Type:	Pull
Bore:	.875 inch
Stroke (travel):	1.38 inch
Recommended Master Cylinder Size:	.75 inch
Recommended Brake Fluid:	Wilwood Hi-Temp ^o 570 (DOT 3) or Wilwood EXP 600 (DOT 4)
Fluid Inlet:	3/8-24 IF or 1/8-27 NPT
Maximum Input Pressure:	1,200 PSI

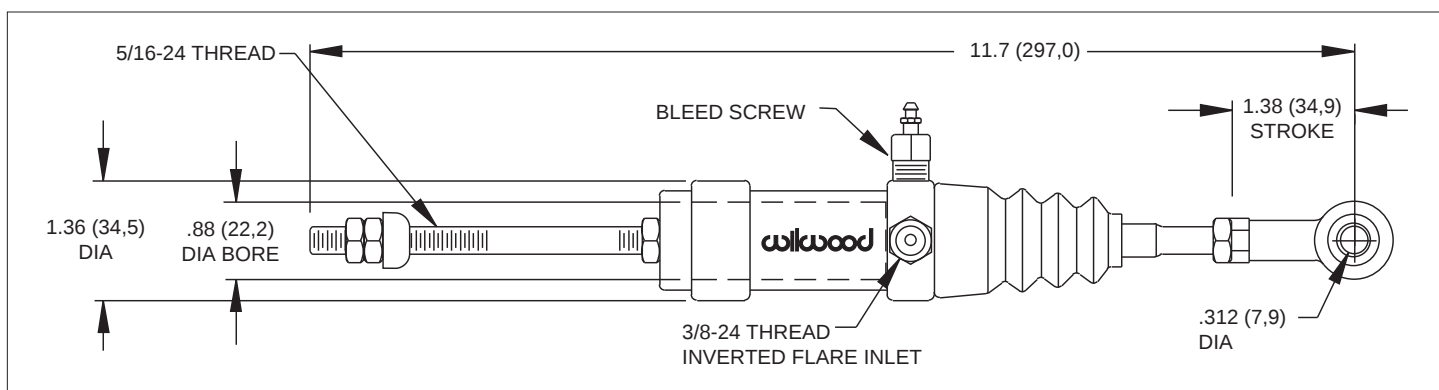


Figure 1. Slave Cylinder Physical Characteristics

Clutch Fork Modifications

Carefully determine by measuring, the correct location on the clutch fork to drill for threaded rod mount attachment, see Figure 2. This hole may not be in the same location as the original mechanical linkage contact point. However, this hole must be located in such a position to allow full engagement and disengagement of the clutch within the limits of travel of the cylinder (maximum stroke is 1.38 inches), see Figure 3.

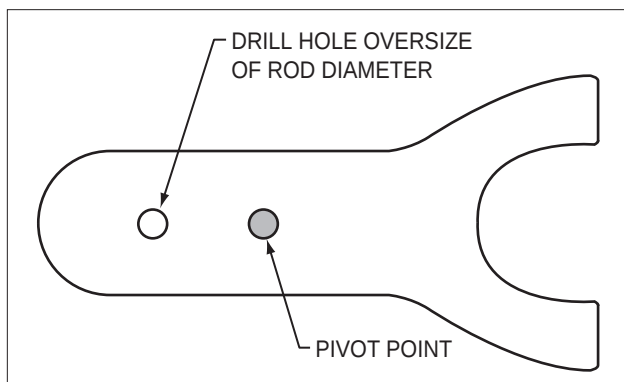


Figure 2. Clutch Fork Modification

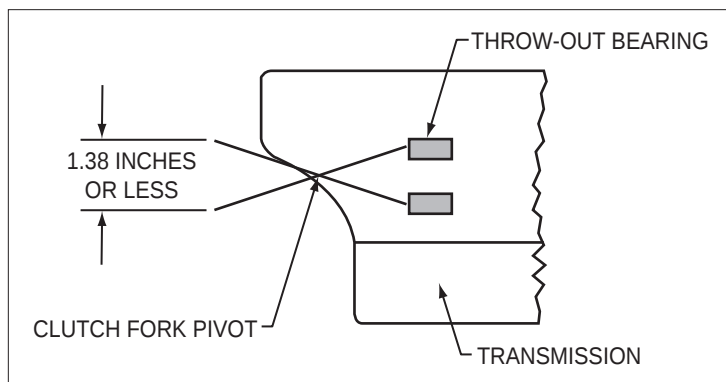


Figure 3. Limits of Travel

Clutch Fork Modifications (Continued)

Drill the hole in the clutch fork a little larger than the rod diameter to allow movement or change of angle without binding. Dependent on fork construction material, peen hole slightly or counter sink to allow wider bearing area for pivot bushing, see Figure 4.

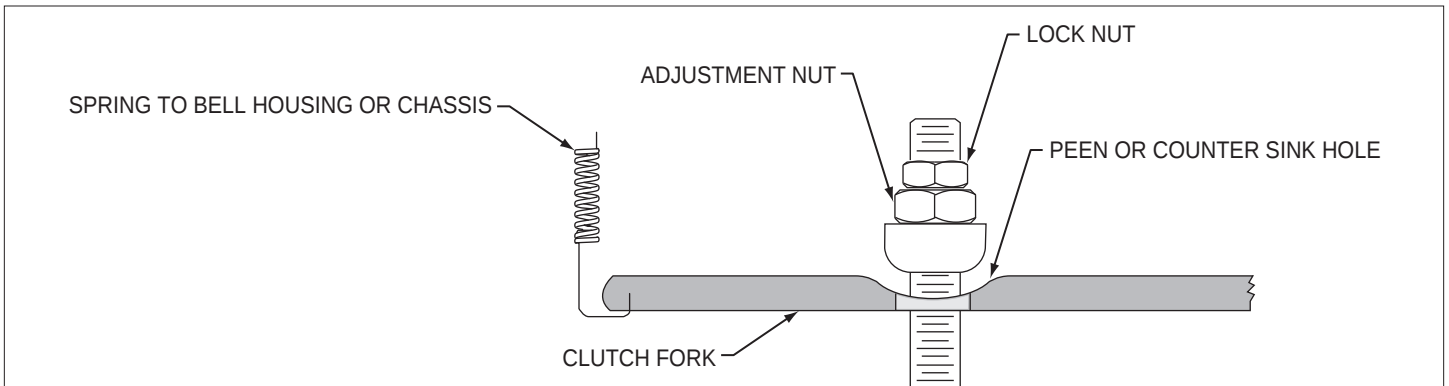


Figure 4. Clutch Fork Hole, Peen or Counter Sink

Slave Cylinder Mounting

Dependent on application, a clutch fork can either disengage the clutch by pulling toward the front of the vehicle, or by pulling towards the rear of the vehicle. The following instructions are to be utilized for a clutch fork that disengages by rearward motion (towards the rear of the vehicle).

Insert threaded rod through clutch fork mounting hole. Install pivot bushing and one adjustment nut. Hold cylinder along side of transmission. Determine if there are existing bosses or studs available to use as a mounting location for rod end (within limits of adjustment travel). If not, it may require a platform or bracket to be fabricated to hold the cylinder at the correct distance and angle. Cylinder angle must be 90 degrees from clutch fork at the apex of travel and parallel with clutch swing movement, see Figure 5. Off axis (angle) installation will cause premature wear or failure due to side loading. Do not mount slave cylinder to chassis, as engine torque movement can cause changes in engagement and binding in the cylinder.

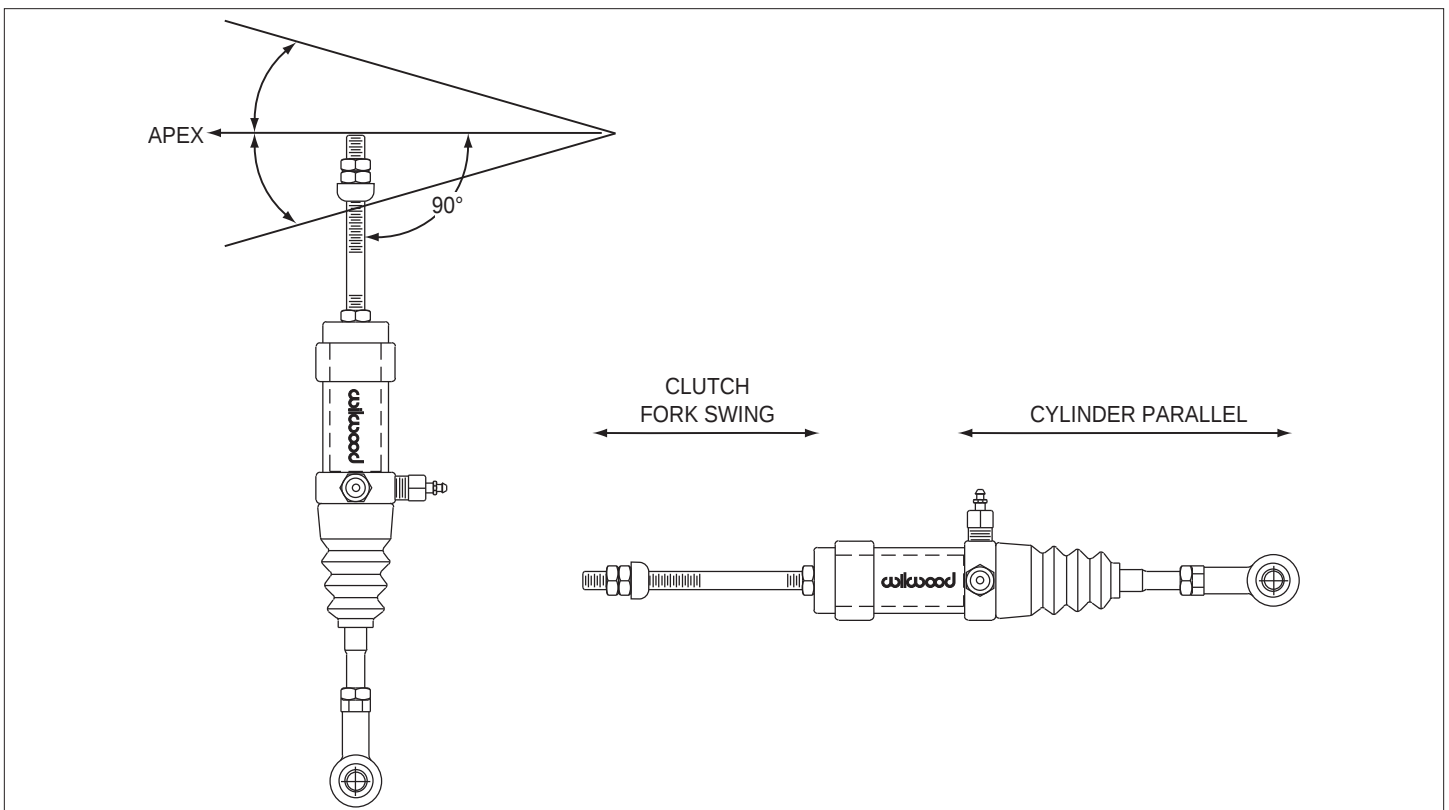


Figure 5. Slave Cylinder Mounting Requirements

Slave Cylinder Mounting (Continued)

After test fit installation, install pivot bushings and adjustment nuts. Cut excess threads on the rod mount to prevent interference, leaving enough for future adjustment purposes. Do not attempt to capture rod by mounting nuts on both sides of the fork as the rod must float. If you experience excessive movement or rattling, use a low tension spring positioned from the fork to the bell housing or chassis to help prevent movement, see Figure 4.

Mounting for a clutch fork that disengages pulling toward the front of the vehicle is similar to description outlined above, but the rod end or bracket will mount to the engine.

Install a stainless steel braided flex line (-3 is recommended size) from the slave cylinder to the chassis. 3/16" tubing is recommended for use from the chassis to the master cylinder. Carefully route lines to prevent interference with moving parts, linkage and exhaust.

Fill and bench bleed clutch master cylinder. Attach line and bleed slave cylinder. Slave cylinder will only bleed completely with bleed screw at the 12:00 o'clock position. Test to see if full travel is experienced on the slave cylinder with the full stroke of the clutch cylinder. If not, re-bleed the system.

Troubleshooting

Not enough travel on the slave cylinder:

- Trapped air in system, re-bleed the system.
- Not enough travel on the clutch pedal.
- Master cylinder sizing too small. Use .75" bore master cylinder.

Slave cylinder travel is the maximum amount (1.38"), but clutch will not fully engage or disengage within adjustment:

- Wrong location on clutch for rod mount attachment. Moving attachment point closer to clutch fork pivot point requires less slave cylinder movement, or stroke. Farther away from pivot point requires more slave cylinder movement.

Slave cylinder wears, or leaks in a short period of time:

- Check alignment of slave and clutch fork for off axis force or binding.
- Check fluid, use only Wilwood DOT 3 or DOT 4 rated brake fluids. **NOTE:** Silicone DOT 5 brake fluid is **NOT** recommended for racing or performance driving.

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 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 obtain speeds up to 65 MPH while also being able to rapidly decelerate.

- 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.
- 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.