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INSTALLATION INSTRUCTIONS

1961-1964 FORD THUNDERBIRD FRONT DISC BRAKE INSTALL

<u>IMPORTANT NOTICE</u> – READ ALL INSTRUCTIONS PRIOR TO STARTING THE DISC BRAKE INSTALL

Before getting started...this install should only be attempted by a qualified installer with <u>extensive</u> knowledge of disc brake systems! You WILL need to make minor modifications to your vehicle including some cutting and grinding to install this brake kit.

This kit will require that you use 14" disc brake wheels or 15" or larger wheels.

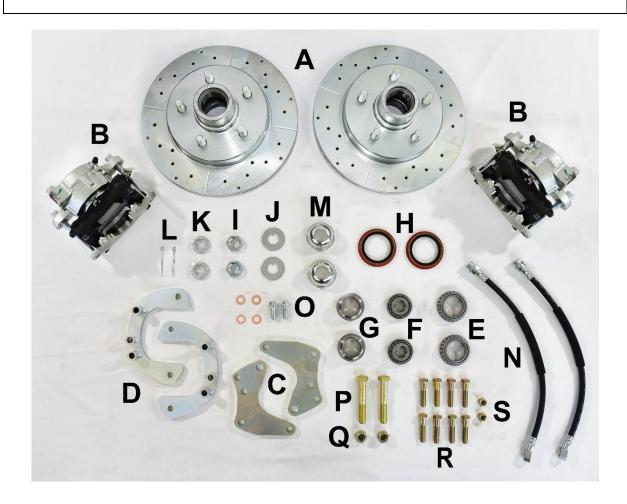
When complete use DOT3 brake fluid in the brake system. If you have brake fluid in your brake system other that DOT3, fully flush the system and refill with DOT3.

If you plan to paint or plate any of the parts in this kit you must first test fit everything to ensure proper fit. The kit cannot be returned for credit once any part is painted, plated or brake fluid run through.

THE KIT INCLUDES

- A. 2) Rotors (5419) (5 on 4 1/2)
- B. 2) Loaded Calipers (GM Metric w/puck)
- C. 2) Primary Spindle Brackets (6164T same left and right)
- D. 2) Caliper Mounting Brackets (6164T-2 left and right are different)
- E. 2) 11949 Outer Wheel Bearings
- F. 2) 68149 Inner Wheel Bearings
- G. 2) Inner Bearing Adapters
- H. 2) 6815 Grease Seals
- I. 2) Spindle Nuts
- J. 2) Spindle Nut Washers
- K. 2) Spindle Nut Caps
- L. 2) Cotter Pins
- M. 2) Dust Caps
- N. 2) Rubber Brake Hoses (5564FD)
- O. 2) 10mm Banjo Bolts and Copper Washers
- P. 2) 1/2x3-24 Grade 8 Bolts
- Q. 2) 1/2x24 Nyloc Nuts
- R. 8) 3/8x1 3/4-24 Grade 8 Bolts
- S. 2) 3/8-24 Nyloc Nuts

(no additional hardware is included)



DRUM BRAKE DISASSEMBLY/DISC BRAKE ASSEMBLY

Start with either side

- 1. Stabilize the vehicle using wheel chocks.
- 2. Jack up the front of car and place safely on jack stands.
- 3. Remove the front wheels.
- 4. Remove the brake drum assembly.
 - You may want to place a pan under the brake line when you disconnect the brake lines.

Once you have removed all of the original drum assembly you are ready to begin your brake install.

You must cut your steering stops to clear the calipers of your new disc brake kit.

5. Measure 1 1/8" down from the front of the steering stop and 1 5/8" from the back of the steering stop and mark a line as shown in the pictures below. Use this line as a guide to cut your steering stop to clear the caliper.





Note: This cut is just an estimate and you can clear more or less as needed to clear the caliper.

6. It is very important to file all edges on the steering stop smooth. Your rubber flex hose may come into contact with the steering stop and you do not want any rough edges to catch on.

With differences in spindle castings there is a chance that you will need to grind just a small amount of spindle away to clear the caliper bracket bolt tubes.

Notice in this picture that one of the tubes comes into slight contact with the spindle as identified with the yellow arrow. With a little finagling most brackets can be mounted without grinding. But be prepared to do so.



Because of this you will want to complete steps 7-10 without fully tightening the hardware or applying Locktite as you test fit it. You will return to steps 7-10 and apply Locktite and tighten all the hardware after your initial test fit.

- 7. Locate the new primary spindle bracket as shown in this picture.
 - The bracket is marked 6164T and it is the same for left or right.



- 8. Install the primary spindle bracket as shown in this picture using the supplied hardware. (DO NOT TIGHTEN COMPLETELY ON THE TEST FIT)
 - The bracket should be installed so that the caliper is mounted to the rear of the vehicle.



- 9. Locate the new caliper mounting bracket as shown in this picture
 - This bracket is marked 6164T-2 and there is a left and right bracket.



10. Install the caliper bracket to the back side of the primary spindle using the supplied hardware. (DO NOT TIGHTEN COMPLETELY ON THE TEST FIT) The bracket mounts to the back side of the spindle as shown here. Move from bolt to bolt equally until you have the caliper bracket tight.







If the brackets clear the spindle you can continue to step 11. If it does not clear and allow the brackets to tighten up to the spindle use a grinder to clear away a little spindle material and reattempt steps 7-10 until you are satisfied.

11. Go back to steps 7-10 and complete them only this time apply Locktite to all the hardware and tighten to the torque specs below.

1/2" hardware – 75-80ft lbs torque

3/8" hardware – 45-50ft lbs torque

- 12. Slide the supplied bearing adapter onto the spindle and drive into place using a hammer and a piece of tubing or pipe. Drive it on until it firmly seats against the spindle inner bearing shoulder.
 - A 1 ½ pipe might work well.
 - DO NOT DAMAGE THE ADAPTER! Use something soft like a rag to protect the adapter from the pipe.
 DO NOT MAR THE SURFACE OF THE ADAPTER.

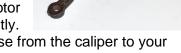


- 13. Assemble the rotor for installation with the bearing and seal pressed in place.
 - Notice the race is already installed in all our rotors.
 - Be sure to thoroughly grease the bearing with heavy wheel grease prior to install.
- 14. Place the rotor onto the spindle.
- 15. Thoroughly grease the outer bearing with heavy wheel grease and install onto the spindle.
- 16. Loosely install the supplied castle nut and washer onto the spindle to hold the rotor in place for the next steps.

Locate the caliper and notice that there is a "puck" in the caliper piston as shown here. This puck MUST remain in place. If you ever change your calipers this puck must also be placed in your new calipers. DO NOT MISPLACE THE PUCK.



- 17. Place the brake pads into the caliper and place the caliper over the rotor and bolt into place on the spindle bracket as shown here.
 - It is recommended that you smear a little caliper grease on the bolt where it slides through the caliper.
 - Be sure to install the caliper correctly with the bleeder valve at the top of the caliper.
- 18. Appropriately tighten the castle nut and install the supplied cotter pin.
 - A good rule of thumb is to tighten the nut until the rotor is difficult to spin and then back the nut off just slightly.
- 19. Finish your install by installing the dust cap and flex-hose from the caliper to your brake line.



COMPLETE THESE STEPS ON THE OTHER SIDE BEFORE PROCEEDING

FINAL STEPS

You will need to install the correct proportioning valve for a front disc/rear drum brake setup. Failure to do this will result in poor brake performance and very likely rear brake lockup.

After everything has been installed and properly tightened finish the install by thoroughly bleeding the brakes.

It is <u>EXTREMELY</u> important that the brake system be tested and that YOU confirm it is performing well before ever attempting to drive your vehicle after your disc brakes have been installed!!!



