

Owner's Manual



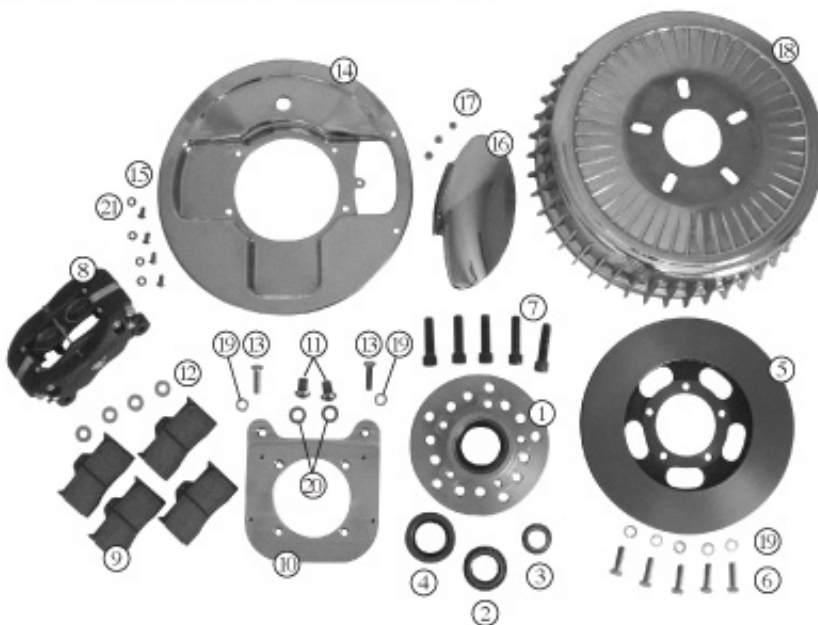
The SO-CAL Speed Shop® Hot Rod Front Brake

Congratulations on your purchase of the New Traditionalist™ SO-CAL Speed Shop disc brake assembly. Modern manufacturing technologies used in parts such as the die cast finned aluminum brake cover, stamped and polished stainless steel backing plates, investment cast stainless steel air inlet cooling scoops and low pressure cast alloy hubs are combined to deliver the period perfect hot rod front brake assembly. There is nothing that compares to the look of finned aluminum drums and polished backing plates. It was the look then and is the look now!



Tools, parts and supplies needed for installation: Allen wrenches; $5/32"$, $5/16"$ and $3/8"$ standard, 100# torque wrench fitted with a $3/8"$ Allen socket head adapter, measurement calipers, 15" crescent wrench, $9/16"$ -12 point socket, $1/4"$ -6 point box wrench, $1/2"$ box brake line wrench, $3/4"$ open end wrench, duckbill pliers, side cutter pliers, 1 pair of spindle nuts and washers, $1/8" \times 2$ cotter pins (2), **1 pair of -3AN front brake line hoses and $1/8"$ -27 NPT hose adapters**, Teflon sealing tape, blue Loctite, anti-seize, waterproof hi-temp disc brake wheel bearing grease and some type of brake bleeding device.

Note: Images below reflect only half a set of the brake assembly.



Items Included

Items Included	Quantity
1. Hub-wheel, A356 Alloy	2
2. Bearing-wheel, outer	2
3. Bearing-wheel, inner	2
4. Seal-bearing	2
5. Rotor-brake, vented	2
6. Bolt-hex, $3/8"$ -16 x $1 1/4"$, (rotor)	10
7. Bolt-Allen, $1/2"$ -20 x 2", (hub wheel studs)	10
8. Caliper-4 piston	2
9. Pads-caliper	4
10. Bracket-caliper	2
11. Bolt-button head, $1/2"$ -13 x $3/4"$ (caliper brkt)	4
12. Shim-caliper $3/8"$	8
13. Bolt-hex, $3/8"$ -24 x $1 1/4"$ (caliper)	4
14. Backing Plate-stamped S/S	2
15. Bolt-button head, $1/4"$ -20 x $1/2"$ (backing plate)	8
16. Scoops-air inlet cooling	2
17. Nut-lock, 10-24 (scoops)	6
18. Cover-brake, finned aluminum	2
19. Washer-spring lock, $3/8"$	14
20. Washer-AN, $1/2"$	4
21. Washer-AN, $1/4"$	8

Step 1. IMPORTANT! Familiarize yourself with the brake kit by reading the owner's manual. Before installation, layout the individual components to ensure you have all the parts according to the list shown above.

INFORMATION HOT LINE 909.469.6171

Step 2.

Start with bare 1937- 41 Ford round styled reproduction spindles (stock spindles work, as well) mounted to the front axle as shown in photo #1. Check the spindles and make sure they are free from defects, pre-fit the bearings and check the spindle shaft thread.

Step 3.

There is a driver and passenger side backing plate. Photo #2 shows the passenger side backing plate. Note the position of the port for the air inlet cooling scoop. The ports always face the front of the car. While carefully placing the backing plate over the spindle as shown in photos #3 and #4, allow for adequate maneuverability that will be needed later during the assembly process. (especially at the king pin tops and lower spindle bosses.)

Step 4.

When using "blind hole" type spindle arms, you must first drill out both of the 1/2"-20" tapped holes at the bottom of the caliper bracket to 33/64" dia as shown by the arrows in photo #5. Temporarily secure the passenger side caliper mounting bracket with 2 of the button head Allen bolts as shown in photos #5 and #6. This pre-sets the caliper in the vertical position for the purpose of bleeding the front brakes. Repeat steps #3 through #5 on the driver's side. Note that the calipers will be rotated into their permanent position later in the installation.

Step 5.

Once you have decided upon a stud pattern (photo #7) apply a small amount of blue Loctite to the first 5 threads under the head of the 1/2"-20 x 2" Allen bolts and tighten them equally to 60 ft. lbs. of torque. This is easily accomplished by securing the wheel flange in a vice using aluminum soft jaws.

Warning: *If you are not familiar with the process of packing (greasing) wheel bearings, then by all means find someone you trust who can help you get the job done using waterproof hi-temp disc brake wheel bearing grease.* Install the wheel bearings and seals. Note the hubs come with the bearing races already fitted.

Step 6.

Assemble the rotor to the hub using the 3/8"-16 x 1 1/4" hex head bolts and lock washers as shown in photos #8 and #9. Apply a small amount of blue Loctite to the first 3 threads of the bolts and tighten equally using the diagonal method to 40 ft. lbs of torque.

Step 7.

Fit the hub and rotor assembly to the spindle. Pre-tighten spindle nut and washer but do not install the cotter pin at this time. Pre-fit the caliper (without pads) to the mounting bracket using 2 of the 3/8"-24 x 1 1/4" hex bolts (no lock washers at this time) as shown in photo #10. Using a pair of calipers; measure the distance between the rotor face and the caliper body as shown in photo #11. This distance should be as close as possible on each side. If there is a discrepancy simply space the caliper using the supplied shims as shown in photo #12. Shims must be the same thickness to each other top to bottom.

Step 8.

Prepare to bleed the brake system; install the caliper brake pads (steel plate to piston surface) with the cotter pin retaining holes facing out, insert the cotter pins through both pads as shown in photo #13 but do not secure at this time. Install the caliper hose adapters using Teflon tape. Feed the brake hoses through the large hole at the top of the backing plate and hand tighten (if the hose and fittings you're using do not fit through the hole, then clearance the opening as necessary). Pre-fit the backing plate to the spindles to make sure that the hose position you have selected does not interfere with the maneuverability of installing or removing the backing plate. Secure the hoses at each end and bleed the system accordingly.

Step 9.

Now that the system is bled it's time to move the caliper and bracket to the horizontal position as shown in photos #14 and #15. Simply remove the 2 button head Allen bolts and rotate the assembly 90°. Re-assemble and secure the bolts using blue Loctite.

Step 10.

Carefully maneuver the backing plate into position by bringing it up and over the king pin as shown in photo #16 following the hose as shown in photo #17. This part of the maneuver allows the backing plate the clearance needed to clear the bottom of the spindle. Mount the backing plate to the caliper bracket as shown in photo #18 using the 1/4"-20 x 1/2" button head Allen bolts, 1/4" AN washers and secure with blue Loctite.

Step 11. Note: There are 3 types of spindle arms. (A) stock Ford "integral" arms, (B) "through bolt" style arms and (C) "blind

hole" style arms.

(A) If you are using stock Ford spindles with "integral" arms simply bolt the caliper bracket in place with appropriate fasteners.

(B) Using the fasteners supplied with your "through bolt" spindle arms, carefully tighten them into the pre-tapped 1/2"-20 holes in the caliper bracket as shown in photo #19 using blue Loctite. To fasten the safety locking jam nuts onto the remaining thread protruding past the caliper mount; simply remove the brake pads and back off the spindle nut until there is enough room to slide in a 3/4" end wrench to tighten the nuts as shown in photo #20. **Caution:** Ensure there is adequate clearance between the rotor and the end of the bolt at final assembly.

(C) We recommend you use hex head bolts with your "blind hole" spindle arms. With this brake assembly it is imperative to have a minimum of 3/4" of thread engagement in the blind holes and at the same time not bottom out the bolts. Feed the bolts through one of the rotors lightening holes and carefully engage the thread of the spindle arm, checking the length for proper fit. Once the length is correct, add Loctite and tighten securely.

Step 12.

Do final assembly of the brake pads and cotter pins. Adjust the spindle nuts and washers by hand tightening until they are snug against the outer bearing. Using a 15" Crescent wrench, **gently** tighten the spindle nut 1/4 turn clockwise, then back off to the nearest slot. Insert the pin, spread and trim excess as not to interfere with the grease cap. Apply a small amount of **anti-seize to the threads** of the grease cap and carefully hand tighten until snug as shown in photo #21.

Step 13.

Attach the air inlet cooling scoops by inserting their pre-installed 10-24 studs through the locating holes in the backing plates as shown in photos #22 and #23. Secure the studs with the 10-24 lock nuts. Note: These S/S castings may need a minor file treatment to achieve a perfect fitment.

Step 14.

The finned aluminum brake covers are designed and engineered as a "multi-patterned hub centric" component. Simply locate the covers on the hub centers as shown in photo #24 and you are good to go.

