

Brakes

- 1 Late TR3B and early TR4 use the same Girling caliper so parts listed for them will work with ours. Outside this range the Triumph front brakes are different.
- 2 Our normal suppliers are sometimes out of the bits we need. Moss Motors lists the following.
 - 583-800 anti squeal shims
 - 582-020 pad retaining pin
 - 582-890 clip for pad pin
 - 583-808 brake fitting kit, contains all the above, enough for complete front end.
 - 583-820 seal between caliper halves
 - 582-000 piston
 - 583-001 seal kit
- 3 I haven't used Moss' pistons or seal kit so I can't 100% say they're the same but since the caliper is they should work.
- 4 I've never had a problem separating caliper halves. If you're careful with the mating surfaces not to scratch or gouge them they should reseal fine.
- 5 Removing the old pistons can be the hardest part. I find it easiest to twist the piston while removing. Heat may also be necessary and I've yet to find a set that was completely unsalvageable. Even a set that a brake shop handed back to that they couldn't get apart.
- 6 What I do.
 - 1 First unbolt the halves and just in case, save the seal. You'll need heat to get the bolts out.
 - 2 Once the halves are apart you can see if the pistons will come out without requiring serious persuasion. I clamp the half in a vise, grab the piston with vise grips then twist while swatting the vise grips with a large hammer.
 - 3 If you cannot get the piston out, then you need to move to heat. Before you do however, use an exacto knife or razor blade and cut off the remainder of the dust seal. This avoids setting it on fire with the heat. With the caliper half in the vise apply heat to the piston, 6 or 8 minutes moving it around the inside of the piston is enough to give it another try with the vise grips and hammer. If that doesn't work, on to the next step.
 - 4 Get a bucket of water, we're going to use a thermal shock to break it free. Place the bucket close by and grab your torch. We're going to get the piston and caliper body good and hot. Depending on what you're using this could take up to 20 minutes to do, the hotter the source the quicker. You'll know it's hot enough when the remaining brake fluid starts to boil out the holes. Once it's good and hot, remove it from the vise, and drop it into the bucket. Do not have your hand over top as you could get scalded from the steam. Let the caliper half cool in the water. Then try

the removal again. Repeat as needed. I've never had one require more than 2 cycles. But be aware, once you do this you're committed to getting it out during this working session since as it cools water will be drawn into caliper. And unless it's cleaned out fairly quickly you'll start the insides rusting. This should also allow the removal of the bleeder screw if it still in place.

- 5 Assuming the pistons are removed, use air, rags, pipe cleaners, whatever to dry the caliper half. Once dry they can have the dirt and exterior rust removed by your favorite method. I use a wire wheel on my bench motor for everything except the small corners and such it won't reach. For those, the hand brushes. Next comes the dust seal groove and the bit above the pressure seal.
- 6 I use a Dremol tool with a cutoff wheel to clean the dust seal groove. Generally it's easy to tell by feel when it's gotten all the rust and dirt and is now hitting clean steel. For the pressure seal groove I use a round stone with the Dremol, it usually doesn't require much work. For the surfaces of the piston bore above the pressure seal, a drum sander with the Dremol. Be careful not to go below the pressure seal as you don't want to damage the lower bore. And that should finish the cleanup.
- 7 You can now paint the 2 halves any high temperature color you want. Tape over the mating surfaces, bleeder and hose holes and the piston bores. I also hand paint a bit of epoxy prime on the piston bore above the pressure seal and in the dust seal groove to avoid or slow down rust between the piston and body.
- 8 And it's time to start reassembly. You'll want some brake grease to ease things a bit. Start by placing the pressure seal in the bore, make sure it's completely in and that only a small lip protrudes beyond the groove. Put a light wipe of brake grease on it. Put the dust sea in it's groove. Take the piston and pull the dust seal over the bottom and about 1/2 way up as you ease the piston into the bore. Push the piston straight in, do not allow it to cock to one side as it will not fit. The piston should go in with just the pressure of your hands. As you work the piston in, pull the end of the dust seal up until it pops into the groove at the top of the piston. Repeat for the other half.
- 9 Now bolt the 2 halves back together with the square o-ring in place. If you have both calipers apart on the bench don't worry, the 4 halves cannot be reassembled wrong. You cannot attach one half from the left with on half from the right, the bolt holes will not line up. Make sure that the bolts have been cleaned, either by wire brush or one of those vibrating or chemical cleaners, you want good clean threads for torquing them down. I use about 45 lbs on them.

So now you're done and they should be able to go back on the car.