

Technical Information Leaflet

TIL: 021



LM2700 & GM2800 Brake Servicing

Caution: When working on brakes makes sure that you use suitable personal protection equipment.

Block the rear wheels so that the machine cannot roll backwards or forwards.

Jack up under the front axle beam as shown and support with a suitable axle stand.

Remove the front wheels.

Release the parking brake.

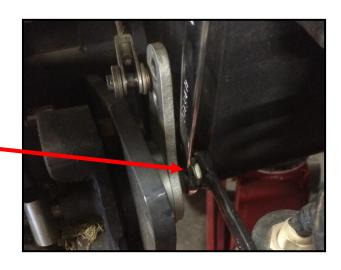


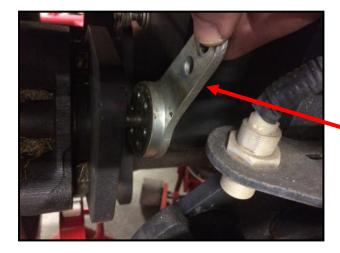


Remove the split pin, clevis pin and the associated washer that connect the brake lever to the brake cable as shown.

Remove the two nuts that hold the brake lever to the calliper. These two nuts are locked together and so the outer one will need to be undone whilst the inner one is held as shown.

Remove the associated washers and remember their order for reassembly.





Remove the brake lever.

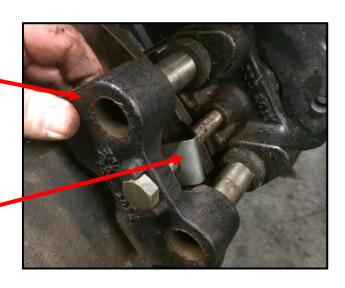
Remember its position for reassembly.

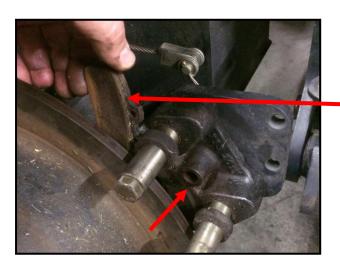
When doing so be careful that the cam activating ball bearings do not fall out and get lost.

Remove the outer part of the calliper by pulling it towards you.

Be aware that the calliper could be seized onto the sliding bushes due to corrosion.

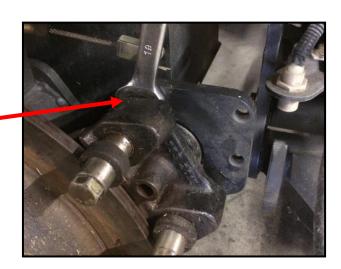
At this point remove the brake pad return spring.





Remove the inner brake pad by pushing the inner half of the calliper away from the disc.

Slacken the sliding pin/bush locking nuts as shown.



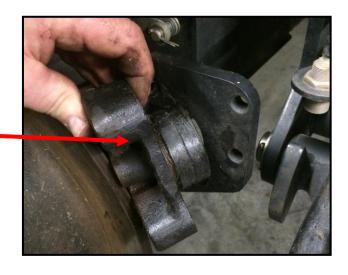


Undo and remove the two sliding bush bolts as shown.

Remove the inner section of the brake calliper.

You will need to twist this item in order to find the angle at which it slides out easily past the brake disc.

You do not need to remove the brake disc to carry out this task.





Clean the calliper mounting plate ready for re-assembly.

Dismantle the brake activation assembly ready for cleaning.

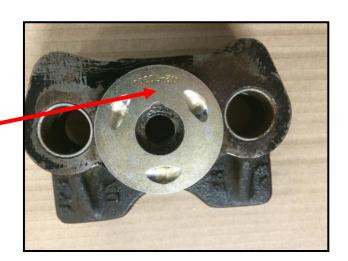




Clean all components, removing any old contaminated grease.

Refit the base cam plate into the calliper.

Make sure that it is fitted in the correct orientation with the stamped letters and notch facing in the direction shown.





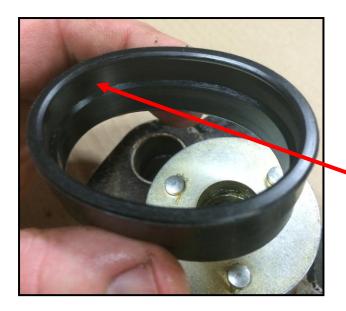
Reassemble the ball bearing activation assembly and apply new clean high temperature grease.

If the old assembly is worn, consider fitting a new cam and ball assembly which is available as a kit (see the end of the leaflet for information)

Refit the brake activation cam over the top of the ball bearing assembly as shown.

Make sure the orientation is correct with the notch facing in the direction shown, and lining up with the notch of the previously installed base cam plate.



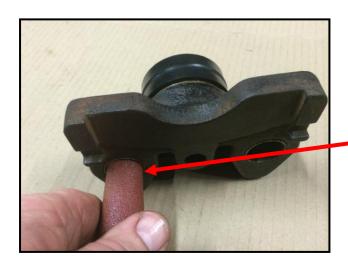


Fit the rubber dust cover over the brake activation assembly.

Make sure that the deepest groove inside of the dust cover is facing away from the calliper as shown.

Insert the rubber inner dust seal as shown.



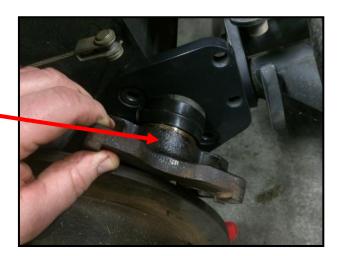


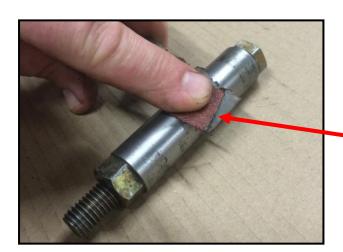
Clean the sliding bushes using an abrasive paper so that they are clean and free running.

Apply a very thin smear of high temperature grease.

Refit the inner part of the calliper into its mounting plate.

You will need to angle the calliper so that it goes in past the brake disc.



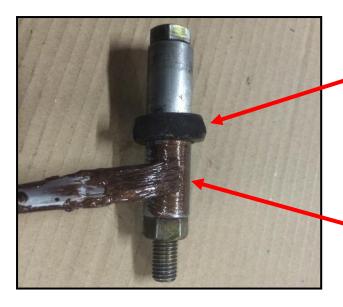


Clean the sliding pin bush using abrasive paper.

Make sure all corrosion is removed from this pin/bush so that the calliper will slide freely on it.

Make sure that the outer bush is locked tightly in place by tightening the bolt and retaining nut as shown.





Refit the foam rubber buffer washer as shown.

If this foam washer is worn, consider fitting a new seal kit (details at the end of this leaflet)

Apply a very thin smear of high temperature grease or copper slip to the sliding bushes as shown.

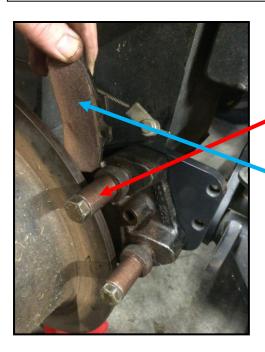
Clean the brake pads using chemical brake cleaner and a wire brush.

If the brakes have not been working for a while you might need to clean the surface of the friction material using abrasive paper on a flat plate.

Apply a *very thin layer* of high temperature copper clip or grease to the back of the pad as shown.

Replace the pads if they are worn thin.



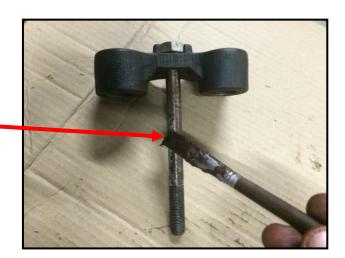


Refit the sliding pin assemblies through the inner calliper and locking them against the mounting plate.

Slide the inner calliper away from the brake disc and insert a brake pad as shown.

If required, consider cleaning the brake disc with abrasive paper before this stage.

Remove any corrosion from the calliper connecting bolt and apply a very thin smear of high temperature copper slip or grease.

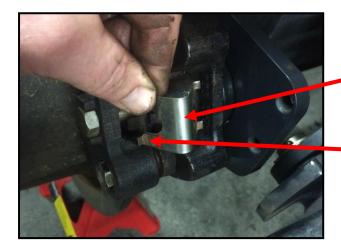




Slide the outer calliper half over the sliding pin/bushes as shown.

Slide the outer brake pad into the outer calliper half as shown



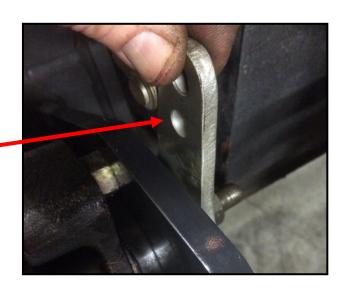


Insert the brake pad return spring as shown.

Make sure that the four lugs on the spring locate into corresponding holes in the brake pads.

Refit the brake activation lever as shown.

Make sure it is fitted at the same angle as originally fitted and that the brake cable clevis pin will line up with the top lever hole.



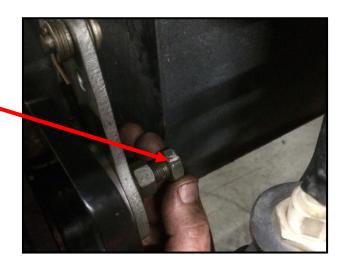


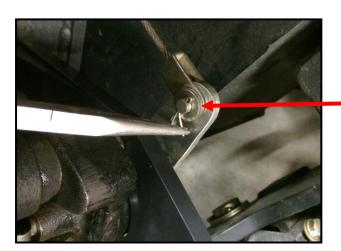
Fit the associated washers and retaining nut in the order that they were removed.

Screw the nut in until the brakes grip the disc and then slacken the nut off a little until the disc rotates freely.

Fit the setting locking nut to the calliper bolt and tighten against the inner nut to lock the position.

Recheck that the brake disc will still rotate freely.





Connect the brake cable to the brake activation lever as shown.

Adjust the length of the cable if necessary in order to make the holes line up.

Make sure that the brake activation lever can be moved backwards and forwards a little. If it cannot then there is not free play in the system and the brake could be binding.



Refit the wheel and tighten the retaining bolts to 67-85 Nm.



Brake Pad Kit with spring.

Part number: KUK 017



Cam Kit.

Part number: KUK 018



Overhaul Kit.

Part number: KUK019