HOW TO

JEEP & OTHER VEHICLE's with FIXED ANCHOR BRAKE SYSTEM ADJUSTMENTS

By: John GIBBINS [artificer on G503] Updated Tuesday 17th March 2015 Email contact: artificer [at] engineer.com Jeep MB/GPW Foot Brake Major/Minor Adjustment Made Simple [Fig.2]:

Wheel bearings should be adjusted first.

Anchor & cam lock nuts should only be loosened enough to free the flats to move without binding.

Brake shoes must always be concentric with drums & both these with the hub not as in Fig. 1.

#1. Turn all cam adjusters to fully retract all brake shoes

#2. Turn all bottom anchor adjusters so dots [or arrows] face one another

#3. Turn anchor in direction of arrow/s until the shoe heel/s just drag on the drum

#4. Turn top cam/s in the direction of the arrow/s to bring the shoe into contact with the drum. This will cause the shoe/s heel/s to lose contact with the drum

#5. Turn the anchors again in the direction of the arrows until the shoe heel/s just drag on the drum/s again

<mark>#6.</mark> Repeat step <mark>#4</mark>

#7. Repeat step **#3** & **#4** until cam adjustment no longer frees the shoe/s heel. Then tighten the anchor bolt nut/s then the top cam nuts

#8. Repeat procedure for all shoes if you have not already done so

#9. Make sure no shoes are dragging & wheels feel the same when turned by hand



Fig. 1.

New linings will be non concentric with worn or machined/skimmed brake drums resulting in very poor braking [Fig. 1.].

Drums must only be machined within manufacturer's limits & in pairs or preferably all four.



The TM method, when there are no feeler slots in the brake drums, is out the window. TM results are never as good as the fore going description, as some have already found.

Some methods are very easy when the brake drum is off as when doing a re-line. One could use the correct tool from the era shown in Fig. 3. if found @ a garage, jumble sale or swap meet

Fig 4. is a homemade variant using a hub nut.

Fig. 5 & Fig. 6 could be fabricated quite easily using similar ingenuity.



THINGS to REMEMBER:

1. When in place & applied the brake shoe external diameter, inside drum diameters must be the same, concentric with one another & the hub.

2. Even with brand new drums fitted the very lightest of drum skims may be needed if the drum is not quite concentric with the hub. You won't get a perfect brake if this is not done/checked

3. Brake shoe toe is @ the top, heel is the bottom.

4. When adjusting these type brakes the shoes need to be adjusted both up & down & in & out so as to achieve the outcome in 1/2.

5. In the TM method there is slightly more clearance @ the toe than @ the heel. This allows the heel to move down a little & the toe to move out a little more to achieve the perfect circle when the brake is applied.

6. Adjustment methods need to take this into consideration & most can be considerably more accurate than the TM method.

7. Always check & adjust pedal free travel & don't be confused by mechanical wear that should be made good.

WOBBLY CLUTCH AND BRAKE PEDALS?

'Jeep' vehicles which have been subjected to hard off the road use, or those which are aging provide an excellent opportunity to make quick sales of Pedal Slack Adjuster Kits

sales of Pedal Slack Adjuster Kits and installation labor. When a 'Jeep' vehicle comes into your service department for any reason, take a few seconds to check the clutch and brake pedals for side move-ment (wobble). If side movement is detected, bring the condition to the owner's attention and tell him that it can be remedied quickly and inex-pensively with the installation of a Pedal Slack Adjuster Kit. The slack adjuster is so designed that it will provide further adjustment as addi-tional wear occurs.

tional wear occurs. The pedal slack adjusters are easily installed as explained and illustrated in the installation instruc-tions furnished with each kit. The ease of installation, plus the saving ease of installation, plus the saving in parts cost of new pedals and shaft, will provide you with the opportunity of building customer good will. Part No. 921936 Pedal Slack Adjuster Kit is designated for use on 'Jeep' Universals - The list price is \$2.00.



Part No. 921937 Pedal Slack Adjuster Kit is designated for use on 'Jeep' Utility Vehicles (except For-ward Control models); the list price is \$1.80.

If you are not presently mer-

chandising this desirable item, place your order for several of each of the kits now and place your Parts and Service Departments in a position to make a quick and easy profit from parts and labor.

FEBRUARY, 1961

8. There should be approximately 0.025" between the end of the master cylinder push rod & before it contacts the piston [about a hacksaw blade thickness].



Dust seal removed clearance is 0.025" or about 1mm

Also see on JeepDraw

Brake bleeding methods & fluids

http://jeepdraw.com/images/HOW%20to%20BUILD%20a%20BRAKE%20PRESSURE% 20BLEEDER.pdf

Replacing brake drums

http://jeepdraw.com/images/HOW-TO-BRAKE-STUDS.pdf

Shortly how to adjust internal & external Jeep type handbrakes

Hope this assists you in getting the best possible brakes on your Jeep/s.

JG 4 JR