



Section:- Chassis.

Car Publication No. 503

Subject:- Hand Brake Adjustment.
Hand Brake Ratchet Pawls.

Service Bulletin No. 29

Effective on:- Types 400, 401, 402.

No. of Sheets 2 Sheet No. 1

Adjustment of fly-off Type Handbrake with
Spring Box cable pull off arrangement.

Type 400 Cars.

1. Place Rear of Car on Chassis stands and allow Back Axle to rest in snubber straps.
2. Remove Brake Rods from operating lever.
3. Set Handbrake to "off" position and adjust cable length so that the spring retaining collar of the Spring Box Inner Tube is 0.1" inside Spring Box.
4. Adjust Brake Shoes so that drums are just free to rotate. Attach brake cable to operating lever and adjust brake rods so that the fork ends can be assembled to operating lever with the compensating swing arm parallel to the centre line of chassis. Care must be taken to ensure that the backlash in the mechanism is taken up without forcing the shoes on to the drums.
5. Re-pin and tighten brake rod fork ends and lubricate. Remove Chassis stands. With car standing on the ground this adjustment should enable the Handbrake to be applied 6 - 8 teeth on the ratchet from the "off" position to the "on".

IMPORTANT NOTE.

All future adjustment must be made at the brake shoe MICRAM adjusters ONLY. Under no circumstances must adjustments be made at cable to compensate for lining wear.

Adjustment of Fly-off Type Handbrake
and Controls.

Type 400 and 401 Cars.

1. Place rear of car on Chassis stands.
2. Disconnect brake rods from operating lever.
3. Adjust brake shoes to grip drums.

4. Set compensating swing arm parallel to centre line of chassis and operating lever, so that centre of cable fork pin hole is approximately, 4.9" from face of bracket on axle casing.

NOTE: Ensure that operating lever is clear of luggage Boot on Type 400 Bristol Cars.

5. Refit brake rods and adjust rods as necessary to satisfy setting at 3.
6. Set Hand Brake to the off position and adjust hand brake cable so that pin will just pass through Cable fork and operating lever hole. This will ensure that all backlash is taken up in compensating lever and brake rod assembly. Only light finger pressure must be applied to operating lever to take up backlash.
7. Slack off brakes shoes so that drums are free (Approx. 1 notch on adjusting micram). This setting should enable handbrake pawl to engage from 4 - 6 teeth on ratchet from the "off" position to the "on".
8. Finally split pin and lock all pins and nuts and lubricate.

IMPORTANT NOTE:-

All future adjustment must be made at the brake shoe MICRAM Adjusters ONLY. Under no circumstances must adjustments be made at cable to compensate for lining wear

Adjustment of Button Release Handbrake
and Controls.
Type 401 Cars.

NOTE: The handbrake and control adjustment given below should not be confused with the "Fly-off" type handbrake fitted on some 401 models, and described earlier in this bulletin.

1. Set Handbrake lever fully down.
2. Adjust cable at handbrake end to give 4.9" dimension between face of bracket (welded to axle) and centre of pin in the axle lever.
3. Adjust brake shoes to grip drums.
4. Adjust the two brake rods with all slack taken out of the shoe operating lever, (but no pressure transferred to shoe). Compensating lever must lie dead fore and aft.
5. Slack off brake shoes at snail cam to required amount (normally 1 notch on snail).

IMPORTANT NOTE:-

All future adjustment must be made at the brake shoe MICRAM adjusters

Handbrake and ratchet pawls.

(Fly-off type handbrake only).

It is most important that the handbrake ratchet pawl of the double tooth type is fitted with the correct handbrake ratchet.

It can be generally assumed that the single type pawl was used on the Type 400, and the double tooth pawl on the Type 401. A sketch has been included in order to clarify the two combinations. These units must be fitted in pairs as illustrated.

The procedure is therefore as follows:-

On replacing a single tooth pawl, refit a new ratchet.

When replacing a double tooth pawl obviously the correct ratchet is already in position.

Application for these parts should be made to the Spares Department, Car Division, The Bristol Aeroplane Company Limited.

