Wheel Units-General

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WHEEL UNITS

MAINTENANCE

Preventive Maintenance

Regular preventive maintenance is essential to ensure the continued efficiency of the brakes. Lining inspection holes which are sealed by rubber grommets are provided in each backplate to allow for easy examination of lining wear. Always refit the grommets securely after inspection.

Occasionally the brake drums should be removed for a more thorough examination of the linings and other components.

Renew shoes if contaminated by oil or grease. If contamination is evident locate the cause and carry out remedial work before fitting the new shoes. Always fit new shoes in axle sets and renew the shoe return springs also.

Never allow linings to wear down to the rivets or if bonded linings have been fitted, below 1,5 mm (1/16 inch) from metal shoe.

Whilst drums are removed clean down the backplate with Girling Cleaning Fluid and lubricate the tips of the shoes and the shoe platforms on the backplate with Girling Brake Grease i.e. metal to metal contact areas. Do not allow grease to contact linings or hydraulic parts.

Note Do not use petrol or paraffin for cleaning components as this can cause rapid deterioration of rubber parts.

WARNING

It is dangerous to inhale asbestos dust from brake linings. Do not use an air line for cleaning; whenever possible use a vacuum brush.

Overhaul

The procedures for dismantling and overhauling brake assemblies will be found in the following pages.

Always ensure that the vehicle is suitably secure when working on brake assemblies. Chocks must be placed in front of and behind the front wheels when working on the rear brakes and the handbrake should be applied whilst working on the front brakes.

BRAKE DRUMS

Front - To Remove

Chock the rear wheels, apply the handbrake and loosen, the appropriate front wheel nuts.

Jack up the vehicle under the front axle and support on stand(s).

Remove wheel nuts and lift off wheel.

Remove the hub and drum as an assembly and separate on the bench.

Note: It may be necessary to de-adjust the brake shoes at each wheel cylinder in order to ease drum removal, de-adjust the shoes fully if new shoes are to be fitted.

Shoe de-adjustment (All models except RB 75)

To avoid damage to the wheel cylinder dust cover during this operation use a blunt screwdriver as follows:

Remove the adjuster hole grommet and insert the screwdriver through the backplate locating its end in the notches of the adjuster wheel.

Applying a lever action rotate the adjuster wheel to screw the piston back into its housing. IMPORTANT. To avoid locking the auto adjust mechanism in the fully de-adjusted position, wind back each cylinder one complete turn.

Shoe de-adjustment (RB 75 model)

Remove the two rubber grommets in the backplate, using a small screwdriver press each lever outwards.

To Refit

Refit the hub (Section K).

Vacuum clean and refit the drum(s).

If previously de-adjusted:

The following procedure applies when the brake shoes have not been renewed. See sub-section M 111 and 112 for new shoe adjustment procedure.

Align the drum by nipping it to the hub using two wheel nuts. Check that the drum is free to rotate.

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All models except RB 75

Manually adjust the shoe to drum clearance to less than 1,8 mm (0.070 in) using a feeler gauge through the inspection windows to check the measurement.

DO NOT LOCK THE SHOES INTO THE DRUM USING THE MANUAL ADJUSTER.

Apply the foot pedal several times to make final automatic adjustment.

Confirm visually through the inspection holes in each backplate that shoe to drum clearances are about equal at each shoe. Refit grommets.

RB 75 model

Manually adjust the mechanisms so that the drum will just go on. Refit the drum.

Apply the foot pedal hard several times to allow the auto adjusters to set the correct brake shoe running clearance.

All models

Refit the road wheel(s), lower the vehicle, and fully tighten the road wheel nuts to the specified torque figure. Check operation of brakes.

Rear - To Remove

Place chocks at front and rear of each front wheel and release the handbrake.

Release the appropriate wheel nuts and jack up the vehicle under the rear axle. Support on stands.

Remove the road wheel nuts and using the special wheel lifting fixture, remove both rear wheels as a pair.

Recover six collars from the wheel studs.

Chalk mark the position of the drum and withdraw it from the wheel studs.

Note: Difficulty may be experienced in the drum removal if the brake shoes are badly worn and the drums scored. In this case the brake must be deadiusted manually.

To do this the adjuster pawl has to be disengaged from the toothed adjuster wheel using two screw-drivers or similar tools.

Remove the adjuster blanking plug from behind the adjuster.

Insert the blade of the first screwdriver below the adjuster rod and above the spring to engage with the pawl plate. Push gently (1/8 in. approx).

Engage the end of the second screwdriver in the notches of the adjuster wheel and applying a lever action turn the adjuster wheel thus allowing the brake shoes to contract.

If after de-adjustment the drums are still dificult to remove, the hub and drum can be withdrawn as an assembly and separated on the bench.

To Refit

Vacuum clean and refit the drum(s).

If previously de-adjusted:-

Align the drum by nipping it into position using two wheel nuts.

Refit the road wheel(s).

To adjust the shoe clearance, with both rear wheels off the ground and the handbrake released, start the engine and engage reverse gear. Engage the clutch and with the wheels rotating, apply the foot or hand brake 15 to 20 times. Clearance should now be correct, i.e. 0,63 mm (0.025 in) at each shoe. If necessary make further applications to obtain this clearance.

Refit grommets, lower the vehicle, and tighten all wheel nuts to the correct torque.

Check operation of brakes.