

AUTOMATIC SLACK ADJUSTER (ASA)



ASH Style



ASC Style

Prior to Installation

- 1. Park on level ground. Chock the wheels. Use wheel blocks to prevent the vehicle from rolling.
- 2. Check the operating condition of all the brake components. Drums, shoes, linings, s-cams, s-cam bushes, rollers, return spring etc and replace or repair as necessary.
- 3. Brake must be off with the push rod fully retracted. Min 6 bar in the parking chamber.
- 4. If fitting a new booster and the booster rod has to be cut 1st, use Bulletin **KPM-001-1016** for the booster rod cutting instructions. (Check KPM-008-0410 for more general brake information.)
- 5. When replacing an existing ASA:

Remove the existing brake adjuster and clevis. Do not remove the push rod nut. Scrap the old clevis. Install the new clevis on to the push rod.

Note: Do not yet tighten the push rod nut.

6. When installing a new ASA:

Make sure the push rod nut is on the push rod, before installing the clevis.

Note: Do not yet tighten the push rod nut.



ASH

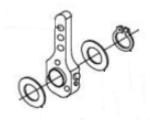
Installation

The push rod has been cut to the correct length as per the bulletin: KPM-001-1016

1. If the slack adjust bracket is not already fitted, fit it to the lower 2 bolts of the s-cam bracket and retorque the nuts to 25Nm.



2. Clean the s-cam spline and apply some lube on to the spline before installing the inner washer then the ASH.









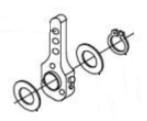
3. With a 12mm socket or ring spanner (**do NOT use an impact gun**) rotate the manual adjuster clockwise until the clevis hole line up with the holes on the ASH. Insert the ½" pin and secure it with the split pin, also lock the nut against the clevis (50ft/lb).







4. Install the outer washer and snap ring and allow the ASH a minimum of approx. 0.5mm to 2.0mm lateral movement on the spline.





5. Make sure that the control arm is pushed down.



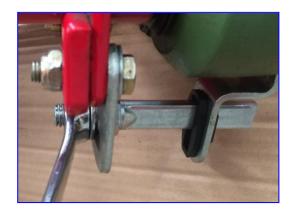




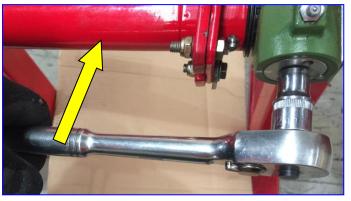


6. Insert the fixing bolt in to the slot of the control arm and key it in to the slack adjuster bracket at approx. the middle of the slot, then fasten the flanged nut (40-50ft/lb).

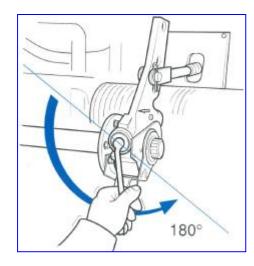




7. With the 12mm socket (spanner), rotate the manual adjuster clockwise until the brake shoes contact the brake drum.



- 8. For the final adjustment turn the manual adjuster with the 12mm socket (spanner) 1/2 turn anti-clockwise.
- 9. Apply the brakes about 5 times.
- 10. After completing the installation, make sure the ASH is properly lubricated (see page 5 for details)





Removal of the ASH

- 1. Turn the adjusting hexagon anti-clockwise with a 12mm ring spanner (do not use an impact gun!) until the push rod starts to move.
- 2. Remove the split pin and the clevis pin.
- 3. Remove the snap ring and the washer from the s-cam spline.
- 4. Undo the fixing bolt nut.
- 5. Lift the push rod and clevis up and now the ASH can be removed from the s-cam spline.

Note:

The ASA (as well as a manual SA) should be in a 90° angle to the push rod when the brake is applied.

In the brake-off position the Auto Slack is at approximately 105° to the push rod.

Maintenance

As outlined in the "Axle Maintenance" bulletin KPM-004-0310, lubricated the ASH at the same intervals as lubricating the other grease nipples on the axle.

(PD, 1st service, every 25'000km)

This type of ASH is a semi-sealed design and therefore only a small amount of lube needs to be applied.

Check the clevis pin, split pin and reaction rod connector are in good order.

Check that the ASH is free on the s-cam spline.

Lube: Castrol Ultratak (NLGI 2) or equivalent



ASC

Installation

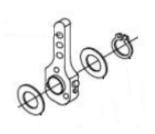
1. Place the installation template onto the s-cam spline. Select the correct hole for the appropriate slack adjuster arm length (5" to 7"). Now insert first the ½" clevis pin.





- 2. Screw the clevis in or out until the ½" clevis pin can be installed without force (with the ½" pin still installed).
- 3. Make sure that the push rod is properly screwed in to the clevis.
 - a. If the push rod extends through the clevis by more than 1/16", remove the clevis and cut the push rod to suit.
 - b. The push rod needs to be a minimum of ½" inside the clevis. If that is not the case the booster needs to be replaced.
- 4. Now tighten the push rod nut against the properly located clevis (Torque to 50ft/lb). The clevis is now locked in to position.
- 5. Clean the s-cam spline and apply some lube on to the spline before installing the inner washer then the ASC.

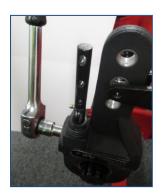








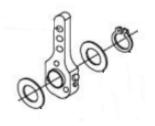
6. With 7/16" socket or ring spanner (**do NOT use an impact gun**) rotate the manual adjuster clockwise until the clevis holes line up with the holes on the ASC. Insert the ½" and the ¼" clevis pins (without using any force) and secure them with the split pins.







7. Install the outer washer and snap ring allowing the ASC a minimum of approx. 0.5mm to 2.0mm lateral movement on the spline.





- 8. For the final adjustment turn the manual adjuster with the 7/16" socket clockwise until all the slack is been taken up (without excessive force) and then do a ½ turn anticlockwise.

 Note: The anticlockwise turn is harder than the clockwise turn.
- 9. Apply the brake pedal 5 times.
- 10. After completing the installation, make sure the ASC is properly lubricated (fill the grease cavity until it purges). See below for the ASC maintenance details.



Removal of the ASC

- 1. Turn the adjusting hexagon anti-clockwise with a 7/16" spanner until the push rod starts to move, then turn the spanner a small amount clockwise.
- 2. Remove the split pins and the two clevis pins.
- 3. Remove the snap ring and the washer from the s-cam spline.
- 4. Lift the push rod and the clevis and now the ASC can be taken off the s-cam spline.

Maintenance

As outlined in the "Axle Maintenance" bulletin KPM-004-0310, lubricated the ASC at the same intervals as lubricating the other grease nipples on the axle. (PD, 1st service, every 25'000km)

Check that the grease nipple is taking the grease and keep pumping until the "old" grease is starting to purge out.

Check the rubber boot for any damage.

Check the clevis pins and split pins to be in good order.

Check that the ASC is free on the s-cam spline.

Lube: Castrol Ultratak (NLGI 2) or equivalent.

Keep pumping grease until it purges out on to the spline.