Hydraulic Booster Assembly
Dust Excluder Replacement

NOTE: This instruction describes the dust excluder replacement procedures for the Carlisle Hydraulic Booster Assemblies. Information contained in this publication is subject to change without notice or liability.

WARNING: For optimum results and safety, Carlisle recommends that all work should be carried out by a suitably trained fitter/mechanic. If it is decided to replace used components or assemblies, always use genuine Carlisle replacement parts. If in doubt seek professional help.

WARNING: Do not attempt to dismantle the hydraulic booster assembly. The Internal components are not serviceable. Any defective booster assembly must be replaced with a new genuine Carlisle assembly. Any attempt to remove internal components will void all warranty terms.

WARNING: This unit contains special synthetic rubber components. Use only Mineral Brake Oil recommended by the vehicle manufacturer. Failure to use the correct brake oil can lead to premature failure of components.

CAUTION: Always ensure appropriate safety glasses and gloves are worn when carrying out the procedures detailed below.

Typical Assemblies
Park the vehicle on hard ground and chock the wheels. Follow the vehicle manufacturers recommendations to gain access to the hydraulic booster. Ensure the parking brake is applied and no hydraulic pressure is held in the system.

**Cleaning and Inspection**

Clean any dirt or debris from the booster assembly paying particular attention to the areas around the dust excluders (1).

Peel back the dust excluder (1) from the location (3) on the booster. If the internal surfaces of the dust excluder contains brake oil that has emulsified into a grease consistency, this is a normal condition and acceptable.

**NOTE**: If, when the dust excluder is detached from the booster assembly, brake oil runs from the excluder this may indicate the failure of the booster's internal sealing arrangement and the booster assembly must be replaced using a new genuine Carlisle assembly.

**Dust Excluder Removal**

Disconnect the push rod (2) from the foot pedal linkage.

Remove the dust excluder (1) from its location on the hydraulic booster body (2). Slide the dust excluder off the push rod (3) and discard.

**NOTE**: For twin hydraulic boosters repeat the procedure for the second excluder.

**CAUTION**: Ensure any residue brake oil from the disconnected hydraulic pipes or booster assembly is caught in a suitable container and/or wiped clean with a suitable cloth. Dispose of any residue brake oil or contaminated cloth in accordance with local environmental regulations.

**Dust Excluder Fitmet**

Smear the internal sealing areas of the new dust excluder (1) with rubber grease.

**CAUTION**: Use only the grease recommended by the vehicle manufacturer. The use of any other grease could lead to contamination of the dust excluder and may lead to insufficient sealing and premature failure of components.

Carefully slide the new dust excluder (1) over the push rod (2) and fit the large diameter of the excluder correctly into the location groove (3) on the cylinder body.

Ensure the dust excluder is securely located on the cylinder body.

**NOTE**: The brake pedal must be in the at rest position, held against the pedal backstop by the pedal return spring during pushrod connection/adjustment.

Connect the push rod (2) to the brake pedal linkage.

**NOTE**: For twin hydraulic boosters repeat the procedure for the second excluder.

**Pushrod adjustment**

Adjust the push rod/s at the pedal linkage/s until the push rod head just contacts the internal backstop in the booster assembly. This will automatically set the correct push rod head clearance and enable effective functioning of the booster assembly. Tighten the pushrod fixing to a torque value of 22 – 27 Nm.

**NOTE**: Ensure the brake pedal remains held against the pedal backstop when pushrod adjustment has been completed.

Where applicable, refit the road wheels, remove the axle stands and lower the vehicle to the ground.