

DEHAVILLAND DHC-1B-2-S3 Model Guide

The DEHAVILLAND DHC-1B-2-S3 is a single-engine piston aircraft, a variant of the de Havilland DHC-1 Chipmunk family. The inputs hold no variant-specific specs or performance. The only document is a Cleveland wheel and brake conversion kit parts list, so this guide is mostly about that upgrade.

KEY TAKEAWAYS

- Family-level figures only: the DHC-1 family is listed with up to 2 passengers and up to 240 nm range.
- Family-level maximums: up to 108 kt cruise, up to 17000 ft service ceiling, up to 900 kg MTOW.
- Kit 199-79 converts one DHC-1B-2-S3 or -S5 to Cleveland wheels and brakes under an STC.
- Aircraft Wheel & Brake bolt torque and brake lining conditioning have specific procedures; check the records.

CLEVELAND BRAKE CONVERSION (KIT 199-79)

The Parker Hannifin kit lists the DHC-1B-2-S3 and -S5 among the Chipmunk models it fits. It includes 2 brake assemblies, 2 wheel assemblies, 2 axle spacers and 12 each of bolts, washers and nuts. It is for MIL-H-5606 (red) fluid. Ask whether a given aircraft has this kit fitted.

PAPERWORK TO ASK FOR

The kit's publication package lists an installation drawing (50-49 Rev. B) and two Supplemental Type Certificates, SA1011SO and SA2748SO. A letter of authorization is used to install the STC kit. If a seller says the conversion is fitted, ask to see these documents and the installation records.

BRAKE LINING AND WHEEL BOLTS

The non-asbestos organic lining must be conditioned: taxi 1500 ft at 1700 rpm at 5-10 mph, cool 10-15 minutes, then check that a high-throttle static run-up can be held. Repeat if it cannot. Light brake use can wear off the glaze. Wheel bolt torque follows the Cleveland CMM or PRM64.

PERFORMANCE

Max Range Nm	240
Max Cruise Speed Kt	108
Max Service Ceiling Ft	17000

WEIGHT & BALANCE

Max Takeoff Weight Kg	900
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SAFETY NOTES

- Proper wheel bolt torque is imperative to prevent premature bolt or mating component failure; add free-running torque to the stated value.
- If a static run-up cannot be held on the brakes after conditioning, repeat the conditioning procedure.
- Use only MIL-H-5606 (red) fluid with this brake kit.