

Complete Freedom



The Nybro Quick Release Left Foot Accelerator



“The best quick release solution I’ve found !”



Nybro Left Foot Accelerator

The Nybro Left Foot Accelerator is an adaptive control designed for the use of people with amputations of the right leg or reduced mobility and strength in the right leg.

It allows the driver to safely operate vehicles with an automatic transmission using a supplementary accelerator and the original brake pedal. A cover plate prevents the accidental operation of the original pedal.

The control can be quickly and easily installed or removed, so the vehicle can also be operated by an able bodied person. The unique design of the locking mechanism requires minimal effort to operate, and is not inhibited by the carpet, therefore allowing easy removal of the device for other drivers.



Left Foot Accelerator locked in position ready for operation.

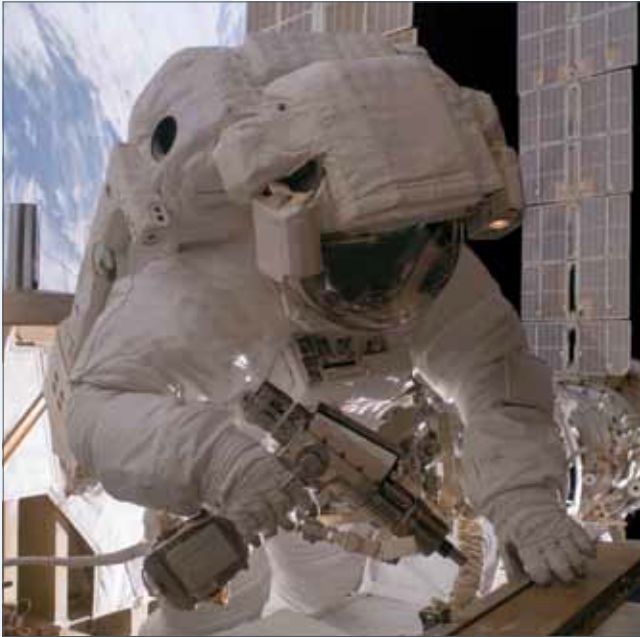


Easy Access from outside of the vehicle to remove the control.

The controls are attractively finished and suit a wide variety of vehicles. Installation requires minimal impact on the vehicle, unlike other alternatives. The high strength design allows the cover plate to be used as a foot rest if required.

In addition to this Quick Release Left Foot Accelerator Nybro can provide two other specialized solutions for a variety of medical knee or leg conditions. These are either a custom made electronic Accelerator or a custom made mechanical Accelerator.

Would you require to use either of these solutions if your knee cannot bend and require more room to have your leg or prosthesis's in a fairly straight position.



The highest grade material and technologies are used to build the Left Foot Accelerator.

High Strength Aluminium & Stainless steel construction

The Left Foot Accelerator is manufactured on precision machinery and CNC machines. This ensures that fits and tolerances are accurate.

Materials and technology used in the space industry have been utilised, such as PTFE (Teflon) coated bushes which require no lubrication.

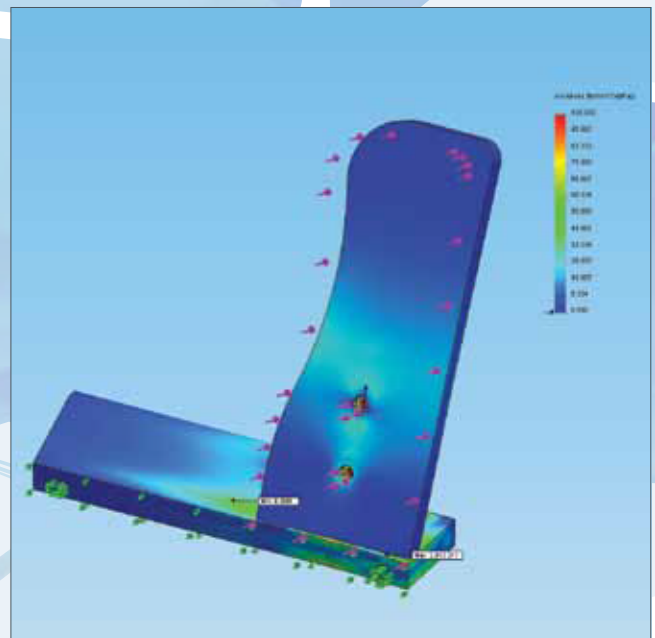
The materials used in the device are 5083 H321-116 DNV certified Grade Aluminium, AISI 316L Grade Stainless Steel, AS3679-300 Grade Structural Steel and High-density polyethylene (HDPE).

Simulation Study

To ensure the most efficient use of material, and to guarantee the strength of material and fasteners, Nybro has utilized state of the art 3D Computer Aided Design software to analyse the stresses in the mechanism.

A method called finite element analysis or FEA, was used. This software allows for analyzing many different scenarios and provides results on stress, strain, deformation, vibration and minimum factor of safety.

The distribution of stress can be seen clearly in the graphic, showing the maximum is far below the strength of the material.

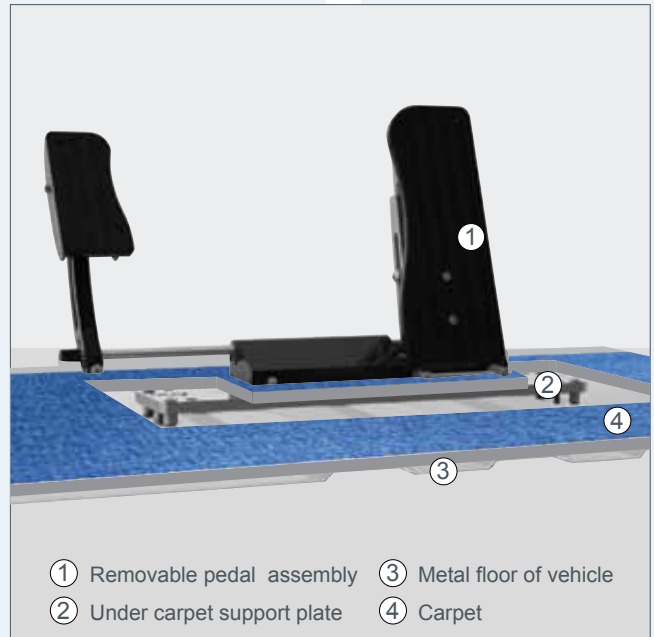


Stress and safety analysis using the latest engineering technology.

Base Plate

The patented design of the Nybro base plate allows for simple installation in many different vehicles without the need for custom fabrication of the supports and mounts. The unique jacking screws allow the plate to be accurately positioned and levelled. The numerous holes allow for fixing the plate in many different ways to avoid installation problems, such as ridges and valleys in the vehicle floor, avoiding chassis rails, fuel lines, electrical lines etc.

The plate is simple to adjust, requiring only an Allen key to set it level and in position. The plate only requires two fasteners to hold it securely to the floor of the vehicle. These are spaced widely apart, distributing the load into the vehicle body, eliminating any flexing or movement during the operation of the pedals. This solution for securely installing the Left Foot Accelerator is not only unique, but the most effective available.



Left Foot Accelerator in-car installation guide.



Quick release mechanism for easy removal of the LFA

Lever Mechanism

The design of the quick release mechanism on the Nybro Left Foot Accelerator allows for the easy installation and removal of the pedal actuator assembly. To release the pedal simply rotate the lever 90 degrees to the up position, then lift up the actuator and unhook it from the base plate. To lock the accelerator in position, hook the left side onto the base plate, lower the actuator down, and rotate the lever from the vertical 90 degrees to the right to securely lock it in position.

It requires very little force to operate, but will lock the actuator securely in place. Other designs rely on heavy springs which are too difficult for persons with reduced strength to operate and overtime these mechanisms may wear and lose their effectiveness. The Nybro design incorporates an adjustment that allows for the easy compensation of any wear.

Notes: