



Trans Atlantic Diesels, Inc.
5906 Fairfield Lane Hayes, VA 23072
(804) 642-9296
info@tadinc.com

**CONVERSION OF LUCAS M45G ISOLATED GROUND STARTER PER PERKINS 4.107 / 4.108
REPLACING WITH DELCO STYLE STARTER KIT CONVERTED TO ISOLATED GROUND**



DISCONNECT/ ISOLATE BATTERY POWER TO STARTER MOTOR BEFORE COMMENCING REPLACEMENT

Installation: Shown above Lucas M45G Isolated ground 13 Tooth drive starter as fitted to Perkins 4.108/7 Marine Engines. As pictured above, the engine sometimes has an optional sculptured out bell housing back plate, to compensate, a 3/8" thick spacer is fitted. When fitting our Delco style Starter Kit, you will retain the 3/8" spacer in place and add our 3/4" spacer. We supply longer studs to accommodate the additional thickness. Removing old and replacing new studs: With the old starter removed, A good method is to run a nut down the thread of the stud leaving enough room for a second nut to act as a lock/jam nut. Tighten them against each other and use the lower nut to remove the stud and the upper nut to install the new. You will require 2 x 9/16" wrenches for this process. Once the three studs are installed, fit the second spacer 3/4" then the starter. They should all register tightly together with no gaps between spacers and the new starter. The correct spacers are critical, incorrect spacing will allow the starter to remain engaged to the flywheel causing severe damage. Contact us if you have any questions about installation procedure. info@tadinc.com



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Electrical Connections: The Negative Ground connections are both located on the rear housings of both starters **Term 2**. All ground wires connected to the Old Lucas starter should be moved and connected to the New Delco Style starter. Important. Always use a second wrench to hold the terminal lock nut in place when tightening, the terminal must not be allowed to rotate or it will damage the internal connections.

Connect the main battery Positive cable and the additional cables that were also attached to positive terminal on the old starter over to the large vacant terminal on the new starter **Term 1**. As above, use a second wrench to secure the locknut when tightening. Lastly the Yellow with red striped wire will connect to the terminal marked "S" **Term 3** this normally comes from the key switch to engage the starter we supply a ring terminal adaptor enabling the original spade terminal used on the old starter.

If your additional Aux. Positive cables have Female spade terminals, you can always move the Male Terminals to the new starter or replace with ring terminals.



Lucas M45G Isolated Ground

Delco Style Converted to Isolated Ground - requires additional 3/4" Spacer



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Kit contains the above items:

1 x New Delco style starter, converted to isolated ground

1 x 3/4" Spacer

3 x 3/8 course thread with washers and nuts