

# Connection of YDEG-04 gateway to Volvo gasoline engines equipped with Chaparral tachometer



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## I. Scope

### Volvo gasoline engines with Chaparral tachometer

It is known that Volvo MEFI4B+ gasoline engines wiring can be heavily customized by boat manufacturers, so-called OEM wiring.

One of the most common cases of non-Volvo engine instrumentation alternative is a Chaparral tachometer [ Fig. 1. ]



*Fig. 1. Chaparral generic J1939 tachometer and its adaptor cable wiring*

This tachometer has the same 6-pin Deutsch connector, but it has a different pinout in respect to YDEG-04 Y-harness wiring, as YDEG-04 is wired for Volvo MULTILINK bus and EVC tachometer.

You can connect YDEG-04 to Chaparral tachometer, but **YDEG-04 Y-harness needs to be rewired** to match the Chaparral tachometer pinout, according to the diagram below.

First, check if your Chaparral tachometer has a 6-pin adapter harness, wired like shown on [ Fig. 1. ] — all wires colours and positions should match. Then rewire both YDEG-04 Y-harness 6-pin Deutsch connectors like shown on [ Fig. 2. ].

## II. Rewiring diagram

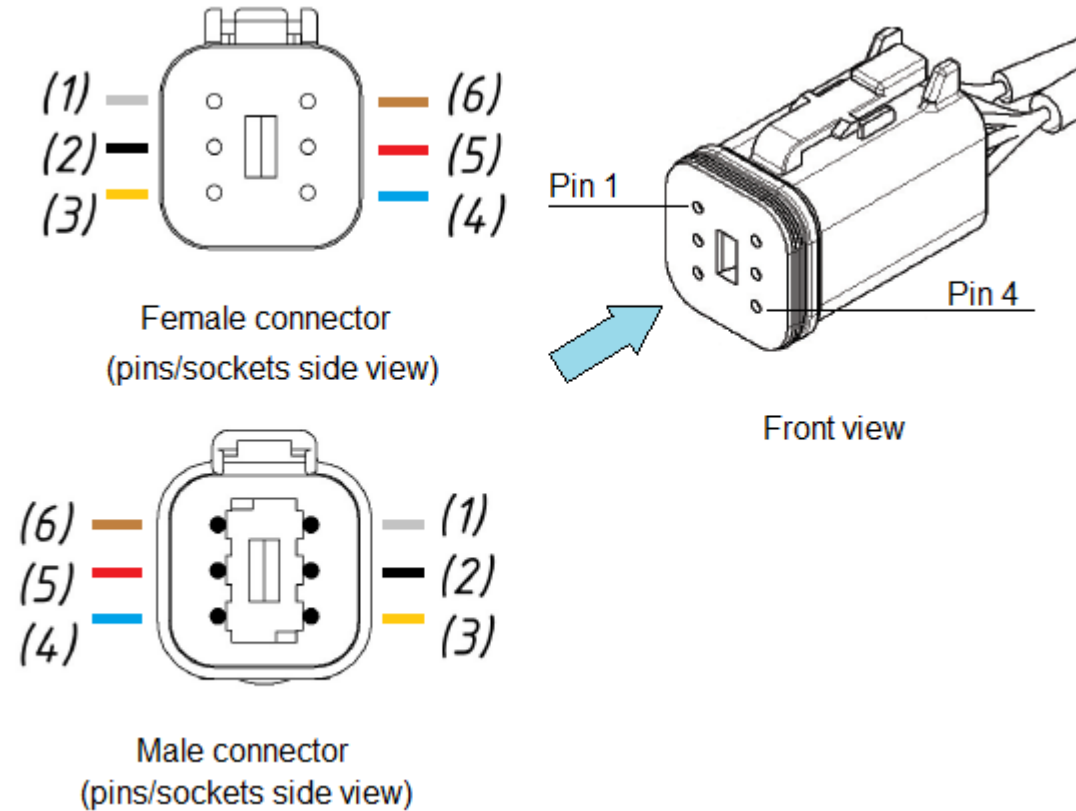


Fig. 2. Both YDEG-04 Y-harness 6-pin connectors needs to be rewired.

New pin position		YDEG-04 Wire Colour
V+ ( Ignition )	<b>5</b>	Red
GND	<b>2</b>	Black
CAN 1 High	<b>3</b>	Yellow
CAN 1 Low	<b>4</b>	Green or Blue
Pass-through ( n/c )	<b>6</b>	Brown *
Pass-through ( V+ )	<b>1</b>	White *

*\*) Not connected as YDEG-04 side*

**Note: when reassembling the connector make sure to push pins/sockets all the way forward until they “click” in place. Failure to do so will results in bad connectivity.**