

339 022 001 (new version) and 339 022 001BS (old version)

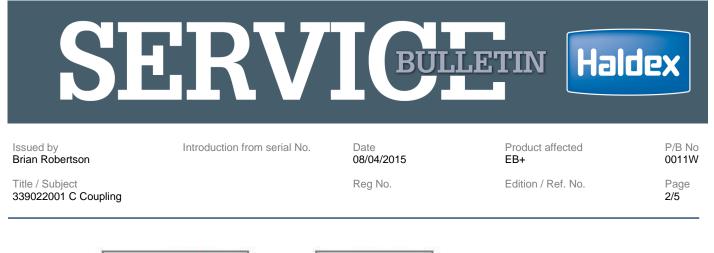


There was a change to the internal diameter to improve the wear characteristics on the truck mating part. We have had reports of cases where the new coupling cannot be coupled to some trucks which obviously is causing issues.

In order to understand the full picture then we should try to understand the C coupling story. There are two standards BS 138a 1980 and BS 138b 2000. On all new trucks and trailers you can only fit the BS 138b 2000 standard couplings.

******	Truck Fittings	Trailer Fittings
Emergency Line	Self Sealing ValveFemale 'C'	Male
Service Line	Self Sealing valveMale	Female 'C'Valve Lifter
BS 138a 1980)	

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	Truck Fittings	Trailer Fittings
Emergency Line	Female 'C' with Self Sealing Valve	Male
Service Line	Male 'C' with Self Sealing valve	Female 'C' with Valve Lifter

BS 138b 2000

There is no change in dimensions between the two standards the only change was the couplings are now single piece and cannot be split into the individual parts as per the previous standard. This was to prevent people forgetting to install the valve lifter in the trailer Female C which results in no air to the trailer service brakes. There were also issues where depending upon the thickness of the sealing washer used when assembling the individual parts could result in the couplings not opening fully.

How the coupling operates.

It can be seen more clearly when looking at the individual items.

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Emergency Line-	-Self Sealing ValveFemale 'C'	Male
Service Line	Self Sealing valve Male	Female 'C'Valve Lifter
BS 138a 1980		1

The trucks are fitted with self-sealing valves and the when the trailer parts are connected these pushes open the self-sealers and allow the air to flow.

The trailer red line coupling pushes open the truck side on the outside diameter. Nothing enters in the bore so although our new coupling has a reduced inside diameter then it does not affect coupling operation.

There are no issues when a truck is fitted with UK C /CA coupling of any BS standard connecting to our 339 022 001 new style coupling. So why do we receive reports of coupling issues?

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If we look at the UK to start with, it is not uncommon for a trailer to be sent on a ferry from Belgium / Holland to the UK. These trailers will be fitted with Palm couplings and the trucks in UK have C couplings. The driver will have a set of adaptors to allow him to couple both together.



These adaptors are made of is a set **of trailer** C coupling and a set of palm couplings. The Female C coupling is going to be connecting to the UK truck, so it requires the Valve lifter to open the air flow on the truck, the palm ends then connect to the European trailer fitted with palm couplings. This is still not an issue for our new design coupling.

If we look at Europe, you can have a European based truck fitted with palm couplings and coupling to a UK trailer fitted with C couplings. Again, the driver will need to use a set of adaptors as above. In this case the palm ends will connect to the truck and the C coupling to the trailer. Confusion now enters if they have used coloured covers on the palms as you would need to connect the red palm to the yellow one on the truck and the yellow palm to the red one on the truck to get the couplings correct at the trailer end which is fitted with C couplings. I would think that the covers are removed on many to avoid this confusion.

This is where the problem <u>could arise</u>, <u>European truck fitted with Palm couplings trying to connect to a UK</u> <u>trailer fitted with C couplings</u>.

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On the Female C coupling there can be two different designs of valve lifter.



Now with our new design coupling 339 022 001 with reduced internal diameter to 11mm it will not allow to be coupled to a Female C coupling with a 14.2mm wide style valve lifter. The trailer Female C was never designed to couple with a Trailer male C coupling. When you introduce the mix of palms and C couplings on truck and trailer then the 339 022 001BS old style allowed this to work but with the 339 022 001 with reduced internal diameter, if it is met with an old-style valve lifter it cannot couple.

There is also a company who sell a SALVO LOCK device to prevent trailers being driven off a loading bay. Their device is placed on the trailer red line coupling and their device will not couple to our 339 022 001 to the reduced internal diameter.

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Summary,

- There is no issue on trailers fitted with 339022001 C coupling if working with only trucks fitted with C couplings.
- There may a scenario where a truck equipped with Palm coupling tries to connect to a trailer fitted with C couplings, then due to the adaptors they are using will not allow connection.
- There are locking devices on the market such a Salvo lock that will not operate with our reduced internal diameter coupling.
- If using 339 022 001BS all scenarios are covered without any issues.

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