Avolites LTD Engineering Change Notice

ECN title	220R resistor mod for BGE encoders	
ECN Number	ECN-0215	
Related Product(s)	Titan Mobiles with BGE encoders SN from TM-5672	
Date / Author	22/09/2022	GK
Reasons for ECN	BGE encoder counting too fast	
Parts required	8200-0215 Titan Mobile ECN 215	
Tools required	T20 driver and hot glue gun	
Estimated time	10 minutes	

Important information

We have had a case of new type of Encoders – BGE - are counting too fast. We start using BGE Encoders from SN TM-5672 but there's still a possibility of finding Bourns Encoders in the unit. In the case of BGE Encoders are fitted on MMB board insert the 220R resistor on MMB board – BOOT2 and update the firmware for improving unit usage. In case Bourns Encoders are fitted DO NOT fit the resistor. Details below.
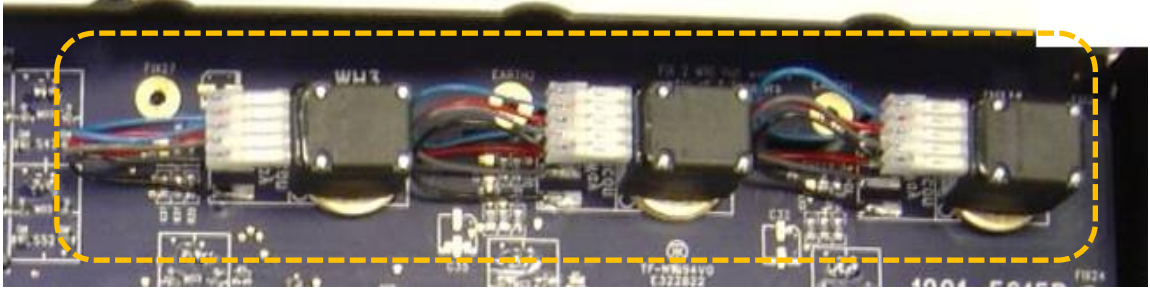
1.   Inspection steps

Open the Lid by removing the following 6x screws.

Locate the Encoders mounted to MMB board
Visually Check the Encoder manufacturer
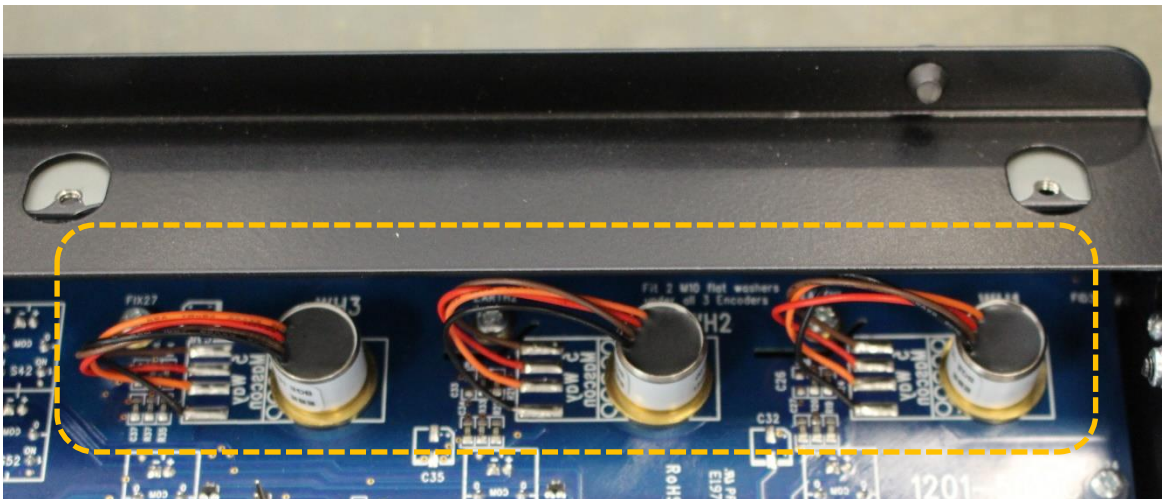

    a.   The Bourns (old type) Encoders

        In case Bourns Encoders are fitted (photo below) the unit doesn't need any further action
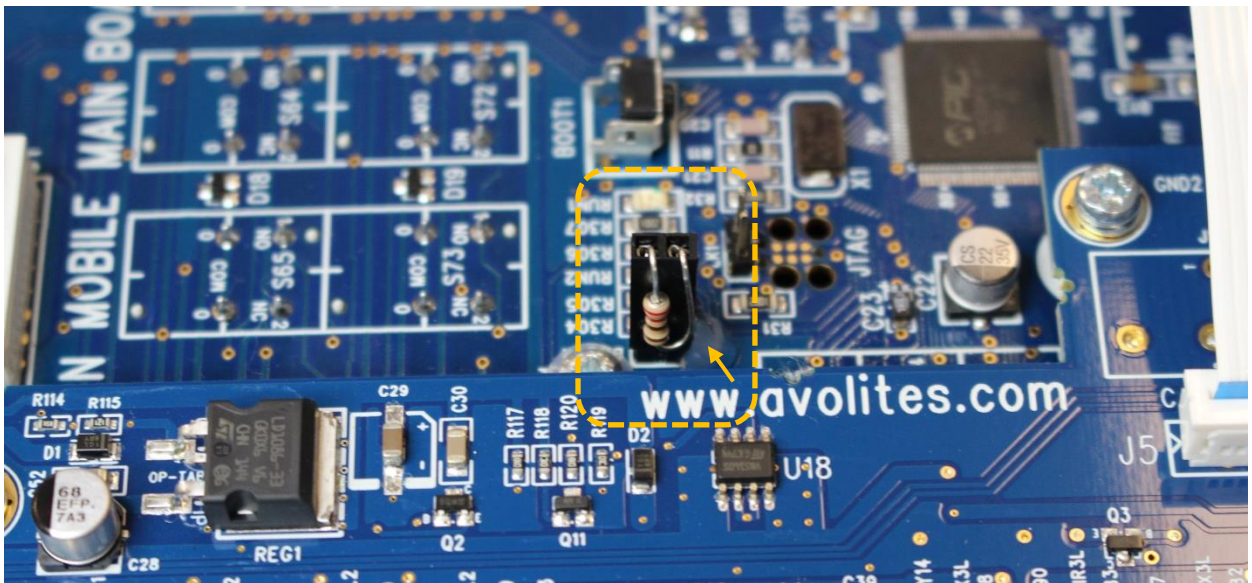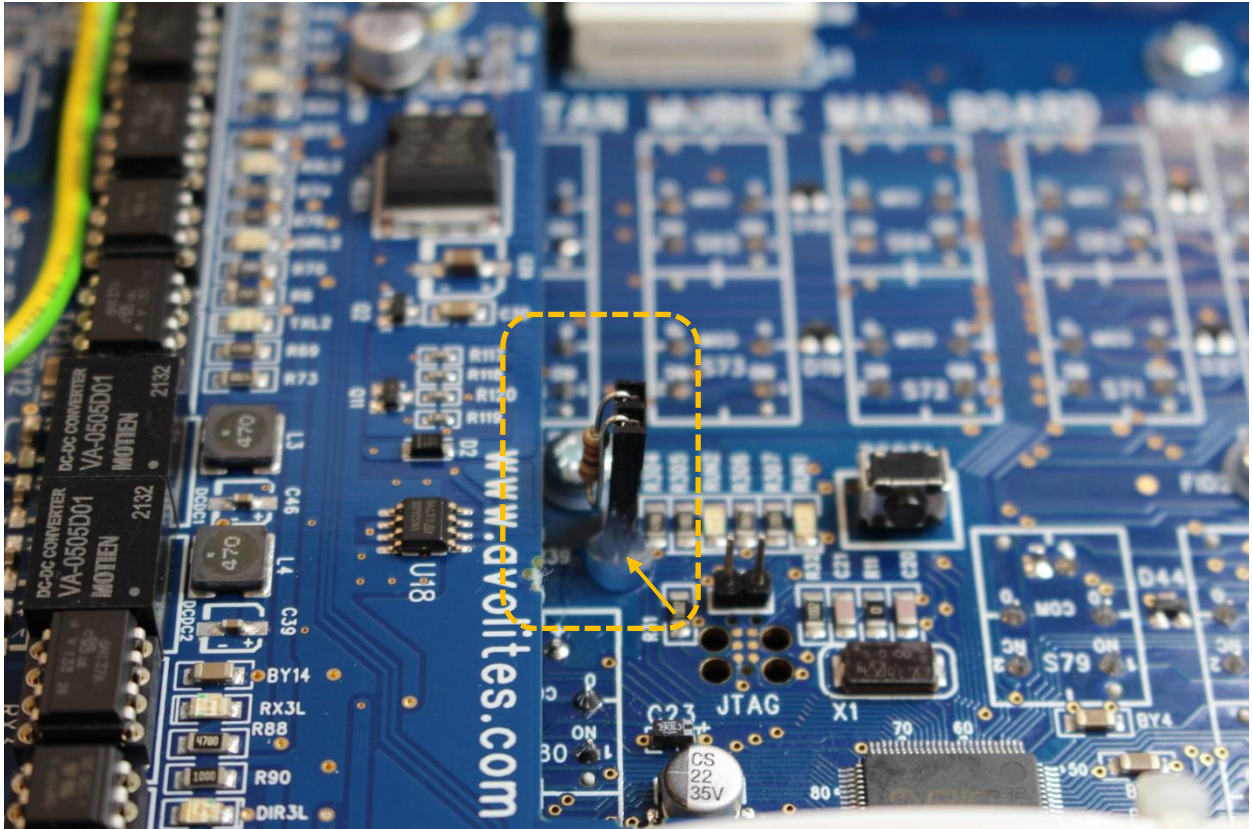   Discard the supplied 220R resistor and close the unit with the lid and retained 6x fixings

    b.   The BGE Encoders

        In case BGE Encoders are fitted (photo below) follow the instruction in subsection 2. Modification

2.   Modification

Fit the supplied 220R resistor onto **BOOT2** header on MMB board then secure it with hot glue (arrow)

Update the firmware to: **Aug 26 2022**

Close the unit with the lid and retained 6x fixings