



Electronic box for ROTAX 912 A and 912 UL

FOR INFORMATION ONLY.
WITHOUT COMMITMENT TO ADVISE MODIFICATIONS.

1) Subject:

Substitute for electronic box 965 320.

2) Engines affected:

All engines of Type 912 UL up to engine no. 4,005.299 and
Type 912 A up to engine no. 4,076.061.

3) Reasons:

Since introduction of the SMD Ignition unit, the electronic box, part no. 965 320, used up to now, can't be supplied any longer. This electronic box was installed in the AL-screening box on all engines Type 912 since the start of serial production.

4) Spare parts supply:

As the new electronic module used is furnished with different plug connections, appropriate new adaptor cables are necessary for the primary and pick-up lines from engine to electronic module.

Conversion kit used:

- 1x 965 356 Electronic module
- 2x 966 355 Primary line adaptor
- 1x 966 350 Pick up line adaptor
- 1x 897 695 Service Information 1 UL 94-E.

5) Procedure:

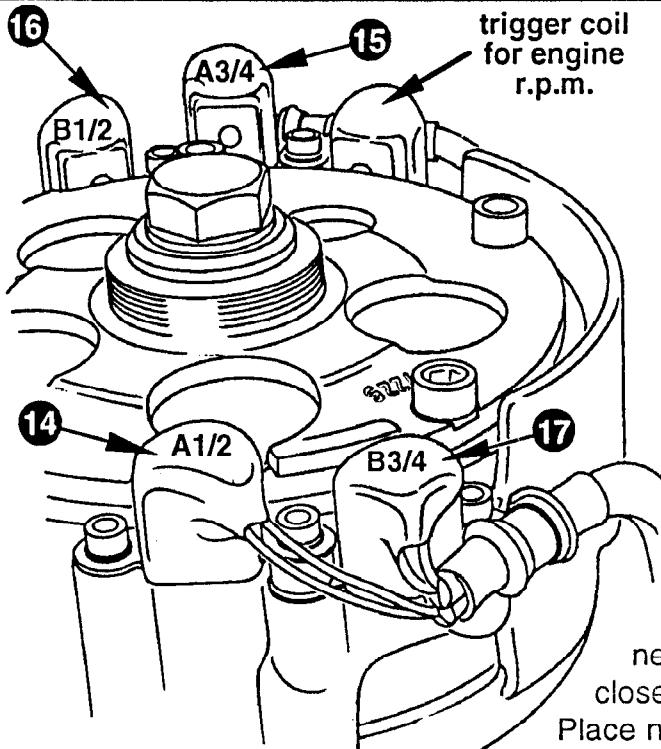
Replace faulty electronic box by installing the a bit smaller electronic module ① in the screening box. The larger free space remaining now can be stuffed with additional filling material. To ease the routing of the adaptor cables, it is advisable to shorten the end of the insulating hose ② of the 3-strand and 6-strand cable assemblies to c. 1 cm (3/8").

The electronic module comes with 2 cable assemblies, one with 3 cables and one with 6 cables. These cables have to be connected by means of the cable adaptors ③, ④ and ⑤ to the existing wiring.

The black cable ⑥ with the M6 cable shoe has to be grounded together with attachment of ignition coils. Connect the white cable ⑦ with plug socket via primary line adaptor 966 355 ③ with the respective ignition coil A3/4 or B3/4. The yellow cable ⑧ has to be connected via a primary line adaptor 966 355 ④ with the respective ignition coil A1/2 or B1/2. The brown cable ⑨ from the 6-strand cable assembly has to be connected with the white cable of the capacitor.

All the connections within the screening box are now established.

Connect the pink cable with plug ⑩ to the red charging line of the respective ignition circuit. Connect the 4-pole plug ⑪ with the pick-up line adaptor ⑤ 966 350, followed by connecting the 2-pole plug of adaptor ⑫ with the existing 2-pole plug ⑬ of the pick-up line.



Ignition circuit "A": The yellow-blue pick-up lines are for trigger coil A1/2 14 and the white-green pick-up lines for trigger coil A3/4 15.
Ignition circuit "B": The yellow-blue pick-up lines are for trigger coil B1/2 16 and the white-green pick-up lines for trigger coil B3/4 17.

Pay attention that on ignition circuit "B" the ends of the pick-up lines in cable assembly from engine are marked with red sleeves 18.

◆ **NOTE:** The trigger coils of ignition circuit "A" are positioned higher in the ignition cover and the two for ignition circuit "B" are fitted in lower position, without distance sleeves.

Finally check all cable connections, according to enclosed wiring diagram.

Place now the 3 ca-

ble assemblies in position and secure with clip plate on screening box.

Carefully route all cables inside the screening box and fit screening box cover.

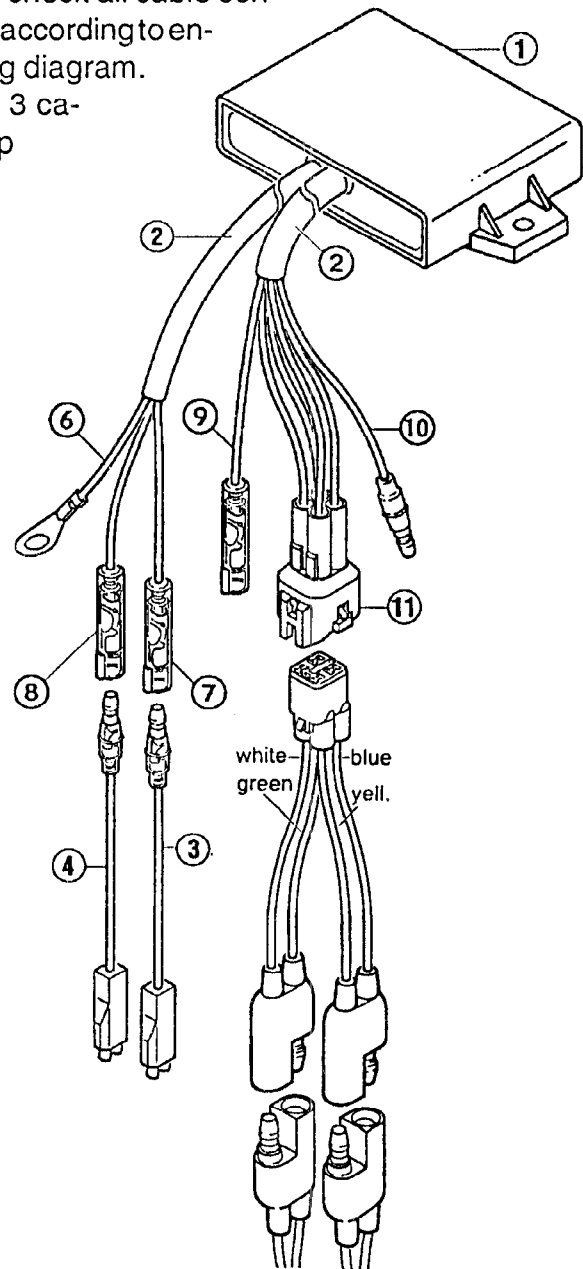
6) Ignition test:

Start, and warm up engine. Alternately switch off ignition circuit "A" and "B" and observe engine speed.

At an engine speed of 3850 r.p.m., the speed drop with one ignition circuit only must not exceed 300 r.p.m.; 115 r.p.m. max. permissible difference of speed by use of either circuit A or B.

◆ **NOTE:** The ignition circuit "A" serves the top spark plugs of cylinder 1 and 2 as well as the lower spark plugs of cylinder 3 and 4. The ignition circuit "B" serves the top spark plugs of cylinder 3 and 4 and the lower spark plugs of cylinder 1 and 2.

Finally check ignition timing by stroboscopic light. The transition from start ignition timing of 6° BTDC to 26° BTDC at operation takes place between 600 and 900 r.p.m. engine speed.





7) Wiring diagram:

