

NO. 19D DATE Feb. 1, 1981 SALES SERVICE

SUBJECT: ALTRONIC II S/N 2400-

Commencing with S/N 2400 Altronic II units and back covers are of a totally solid state design. This is made possible by the use of a Hall-effect magnetically operated solid state switch in the system distribution section. The switching element is a Hall sensor with a trigger and amplifier integrated on a silicon chip. The presence of a magnetic field creates a small voltage across the Hall element conductor. This signal is then amplified to trigger on the power SCR which discharges the ignition system energy storage capacitor into the ignition coil primary.

BACK COVER EXCHANGE FOR REED SWITCH COVERS (S/N 200-1399)

There is a back cover exchange program for the original reed switch style back covers. A new distributor shaft assembly must also be ordered with the new back cover:

1:1 gear ratio	280 601-1
2:1 gear ratio	280 601-2
2½:1 gear ratio	280 601-5
3:1 gear ratio	280 601-3

The reed switch cover to be exchanged must be returned to the factory prepaid. The replacement cover will be the same model as that returned. The Altronic II model no. and serial no. should be provided so that the distributor shaft assembly can be furnished with the red timing mark.

BACK COVER UPDATE FOR MERCURY CELL COVERS (S/N 1400-2399)

The mercury cell type back cover may be updated to the solid state type by returning it to the factory prepaid. A new distributor board is installed and the circuit board modified accordingly. The distributor shaft assembly is unchanged from the mercury cell type.

Updating mercury cell covers can also be done at the distributor's service facility by ordering:

- 1) Distributor board assembly - substitute prefix 272 for 281 in the back cover part no. - see next page.
- 2) Circuit board assembly 272 703 (single) or 272 704 (dual) - DO NOT USE ANY OTHER TYPE CIRCUIT BOARD WITH THE SOLID STATE COVER.

**CIRCUIT BOARD EXCHANGE - 271 601, 271 602 (mercury cell or reed switch covers)
272 701, 272 702 (solid state covers)
272 703, 272 704 (solid state covers)**

The above type circuit boards may be returned prepaid to the factory for repair and exchange. The exchange circuit boards are designated by the suffix "R" after the part number:

271 601R, 271 602R (mercury cell or reed switch covers)
272 701R, 272 702R (solid state covers)
272 703R, 272 704R (solid state covers)

BE SURE THE CIRCUIT BOARD BEING USED IS CORRECT FOR THE TYPE OF BACK COVER (reed switch, mercury cell or solid state) AS NOTED ABOVE. USE OF THE WRONG BOARD WILL RESULT IN IMPROPER OPERATION AND POSSIBLE ENGINE DAMAGE.

NOTE: 272 701, 272 702 boards returned for repair will be exchanged for the new style 272 703, 272 704 boards respectively.

BACK COVER ASSEMBLY - CROSS REFERENCE

SINGLE CIRCUIT			DUAL CIRCUIT		
<u>REED SWITCH COVER NO.</u>	<u>MERCURY CELL COVER NO.</u>	<u>SOLID STATE COVER NO.</u>	<u>REED SWITCH COVER NO.</u>	<u>MERCURY CELL COVER NO.</u>	<u>SOLID STATE COVER NO.</u>
	281 103-1	281 303-1		281 206-23A	281 406-23A
4A-2	281 104-1	281 304-1	8C-2-D	281 208-3	281 408-3
4B-2	281 104-2	281 304-2	8E-2-D	281 208-5	281 408-5
4S-2	281 104-19	281 304-19	8G-2-D	281 208-7	281 408-7
			8K-2-D	281 208-10	281 408-10
5A-2	281 105-1	281 305-1	8N-2-D	281 208-14	281 408-14
				281 208-18	281 408-18
6A-2	281 106-1	281 306-1		281 208-23A	281 408-23A
6B-2	281 106-2	281 306-2			
6D-2	281 106-3	281 306-3	10A-2-D	281 210-1	281 410-1
6E-2	281 106-5	281 306-5	10B-2-D	281 210-2	281 410-2
				281 210-20	281 410-20
7A-2	281 107-1	281 307-1			
			12D-2-D	281 212-3	281 412-3
8A-2	281 108-1B	281 308-1	12T-2-D	281 212-20	281 412-20
8B-2	281 108-2B	281 308-2		281 212-23A	281 412-23A
8D-2	281 108-4B	281 308-4			
			16A-2-D	281 216-1	281 416-1
10A-2	281 110-1B	281 310-1		281 216-8	281 416-8
12A-2	281 112-1	281 312-1		281 222-16A	281 422-16A

STATOR WINDING

All Altronic II stators now use a revised core stamping allowing for more turns in the winding. As a result, a 30-40% improvement in cranking speed output is obtained. See the Altronic II Service Manual for stator part number.

<u>TYPE - COLOR</u>	<u>ORIGINAL STATOR NO.</u>	<u>NEW STATOR NO.</u>
1-phase black	271 110	271 110-2
1-phase black	271 117	271 117-2
1-phase black	271 235	271 117-2
2-phase red	271 603	271 603-2
2-phase red	271 606	271 606-2

NOTE: 2-phase (red) stators cannot be used with reed switch type back covers.

PICK-UP ARM ASSEMBLY (S/N 200-1399 ONLY)

For certain dual circuit units, it is recommended that the pick-up arm assembly be replaced at the time the back cover is exchanged in order to maintain the correct firing angle between engine banks.

<u>UNIT PART NO.</u>	<u>PICK-UP ARM ASSEMBLY</u>
8C221-EL, 8C241-E	261 414
8C222-E, 8E212-EL	261 413
8F232-EL	261 422
8G222-EL	261 415
10B531-EL	261 411
10D522-EL	261 404 plus 270 037 trigger disc
10E522-EL	261 412
10F532-EL, 10F542-EL	261 420