

December 7, 1962

ENGINEERING MEMORANDUM #29

TO: J. Stout, R. Fuller, J. Coleman, S. Hori, E. Horrigan,
K. Luke, F. Leamy (3), R. McCulfor, R. Smith, C. Cornwell,
E. Nelson, J. Copeland, T. Bedard, J. Temple (4), K. Bothe,
L. Hilsky (4), A. Radke (3), D. Markin, B. Herrington, S. Wilson,
W. Asselin, D. Bach, F. Baldwin, A. Goedhart, S. Megyesi.

FROM: Peter Visser

SUBJECT: MOTOROLA ALTERNATORS

Motorola Alternator to be used in the future will come in two versions - a standard unit to be used on passenger cars without air conditioning, and a heavy duty unit to be used on everything else.

Right now we have received a rush order No. 2851, for 19 cabs with L-head engines for Boston, which have to be equipped with Motorola Alternators. This installation is covered by page No. 61-A of the Bill of Material, Group No. C-44.2.

Installation drawing SK-2453 is self-explanatory; but writer requests the line foremen to contact Engineering as soon as the first unit comes up to make sure that the alternator installation will be executed in proper fashion.

All parts are in stock except the two make parts; namely, 97493, Bracket, and 96115, Adjusting Link. The adjusting link will be used on Motorola alternator from here on in; but the bracket drawing shows a temporary welded construction which in the near future will be replaced by a single piece casting.

To overcome the waiting period for the acquisition of the castings, writer requests 150 welded construction brackets, 97493, to be made up.

It is unnecessary to mention that these two items, Bracket and Adjusting Link, require the greatest expediency to comply with the above mentioned order.

Writer wants to point out that the Cable Assembly - Alternator to Regulator, Part No. 97494, and the Leads - Alternator to Ballast Resistors, Part No. 98472, will be purchased from Motorola on a temporary basis until the engine compartment wiring harness will be revised in such a way that the aforementioned cable assembly and leads will be included.

Before too long, and after discussion with Purchasing, Production Control, and others, writer hopes to be able to release the rest of the Motorola alternator installations on a permanent basis.

TO: J. Stout, R. Fuller, J. Coleman, S. Hori, E. Horrigan, K. Luke,
F. Leamy (3), R. McCulfor, R. Smith, C. Cornwell, E. Nelson (2),
J. Copeland, T. Bedard, J. Temple (4), K. Bothe, L. Hilsky (4),
A. Radke (3), D. Markin, B. Herrington, (8), W. Asselin, S. Wilson
D. Bach, F. Baldwin, A. Goedhart, S. Megyesi.

FROM: P. Visser

SUBJECT: GENERATORS AND ALTERNATORS

Order number 2851, 19 cabs with L-head engines for Miami, Florida, has been completed by using modified wiring harnesses. From here on in, all future Motorola installations will be executed in conjunction with the revised engine compartment wiring system exclusively, as described in Engineering Memorandum #31.

This affects even the Cincinnati orders starting with Production Order #2868 to Production Order #2877 inclusive, with the exception that for these orders consisting of 54 units, the welded up mounting bracket, part number 97493 will be used instead of the cast bracket 98456.

The new engine compartment wiring can only be used with Motorola alternators since the wiring required for hooking up Motorola alternators is incorporated in the engine compartment wiring.

The only part affected from Body Department is 634863, Panel - Radiator Support, which will be revised to show the new mounting holes for the Motorola regulator.

The generating units existing today, that is Autolite generators and alternators, have to be used in conjunction with the present wiring on orders not specifying Motorola alternators until all Autolite equipment and their related parts, after balancing out current stock, have been used up.

Attached hereto are six pages which show the affected parts compiled from the Bills of Material.

NEW PARTS

97495 ALTERNATOR ASSEM. (STD. MOTOROLA)
97488 ALTERNATOR ASSEM. (H.D. MOTOROLA)
97487 REGULATOR ASSEM. (MOTOROLA)
98455 BRACKET - MOTOROLA ALT. MTG.-CASTING (ALL MODELS)
98487 BRACKET - MOTOROLA ALT. MTG.-CASTING (AIR COND.)
98456 BRACKET - MOTOROLA ALT. MTG.MACHINED (L.HD.ENG.)(97493 TEMP.)
98460 BRACKET - MOTOROLA ALT. MTG.MACHINED (O.H.V.ENG.)(W/O AIR COND.)
98488 BRACKET - MOTOROLA ALT. MTG.MACHINED (O.H.V.ENG.W/A.C.)
96115 LINK - ALT. ADJUST.
98470 LINK - ALT. ADJUST. W/A.C.
97491 RESISTOR ASSEM. - ALT. FIELD
97476 WIRING HARNESS - MAIN CHASSIS
~~97494~~ ~~CABLE ASSEM. ALT. TO REG. (TEMPORARY - 19 CARS ONLY)~~
~~98472~~ ~~LEAD ALT. TO BALLAST RESISTOR (TEMPORARY-19 CARS ONLY)~~

96251	BRKT.-ALT. BELT ADJ. LINK	INCR.
94917	BELT - PWR. STRG. PUMP & ALT.(MOTOROLA)	INCR.
80556	CLIP - CLOSED TYPE - 9/32 BOLT HOLE	INCR.
122007	BOLT - 5/16-18 x 3/4 HEX. HD.	INCR.
120221	SCREW - #10-24 x 1/2 RD. HD. SLOTT. MACH.	INCR.
186425	LOCKWASHER - 1/2 MED. SPR.	INCR.
178378	LOCKWASHER - INT. & EXT. TOOTH - #10	INCR.
120396	WASHER - PLAIN 17/32 I.D. x 1-1/16 O.D.	INCR.
120393	WASHER - PLAIN 11/32 I.D. x 11/16 O.D.	INCR.
120361	NUT - 10-24 HEX. MACH. SCREW	INCR.
120628	SCREW - 1/4-20 x 1/2 RD. HD. SLOTT. MACH.	DECR.
187987	SCREW & L/W ASSEM.-#12-24 x 1/2 RH CR MACH	DECR.
120394	WASHER - PLAIN 13/32 I.D. x 13/16 O.D.	DECR.
120395	WASHER - PLAIN 15/32 I.D. x 59/64 O.D.	DECR.
120380	LOCKWASHER - 1/4 MED. SPR.	DECR.
121743	NUT - #12-24 HEX. MACH. SCREW	DECR.
120375	NUT - 1/4-20 HEX.	DECR.
80327	NUT - 5/16-24 HEX. GRIPCO	DECR.
80732	NUT - 7/16-20 HEX. GRIPCO	DECR.
273513	SCREW & L/W ASSEM.-#10-32 x 3/8	DECR.
180079	BOLT - 5/16-18 x 1 HEX. HD.	DECR.
446363	WASHER - 3/8 I.D. x 7/8 O.D. PLAIN	DECR.
180122	BOLT - 3/8-16 x 1 HEX. HD.	DECR.
120214	LOCKWASHER - 5/16 MED. SPR.	INCR.
180146	BOLT - 7/16-14 x 1-1/8 HEX. HD.	DECR.
120369	NUT - 3/8-24 HEX.	DECR.
122279	BOLT - 7/16-14 x 1-1/2 HEX. HD.	DECR.
120368	NUT - 5/16-24 HEX.	INCR.
123567	BOLT - 7/16-20 x 1 HEX. HD.	DECR.

96235 BRACKET - ALT. BELT. ADJUST. W/AC
96263 SPACER - LINK TO WATER PUMP
180144 BOLT - 7/16-14 x 7/8 HEX. HD.
122145 BOLT - 3/8-16 x 1-1/4 HEX. HD.

180147	BOLT 7/16-14 x 1-1/4 HEX. HD.	INCR.
96262	LINK - WATER PUMP TO COMPR.	DECR.
122119	BOLT - 3/8-16 x 3/4 HEX. HD.	INCR.
181707	BOLT - 1/2-20 x 2-1/4 HEX. HD.	INCR.
122104	BOLT - 3/8-16 x 5/8 HEX. HD.	INCR.
120382	LOCKWASHER - 3/8 MED. SPR.	DECR.
120383	LOCKWASHER - 7/16 MED. SPR.	DECR.
446212	WASHER - 7/16 I.D. x 7/8 O.D.	DECR. ?
181608	BOLT - 5/16-24 x 1 HEX. HD.	INCR.

95762 GENERATOR ASSEM. - 30 AMP.
95302 GENERATOR ASSEM. - 35. AMP.
95761 GENERATOR ASSEM. - 40 AMP.
95483 GENERATOR ASSEM. - 50 AMP.
94953 FAN - 50 AMP. GENERATOR
94954 PULLEY - 50 AMP. GENERATOR
97390 ALTERNATOR ASSEM. - 40 AMP.
97446 ALTERNATOR ASSEM. - 40 AMP. (2-1/2" DIA. PULLEY)
95618 ALTERNATOR ASSEM. - 12V. 60 AMP. E.A.
93223 REGULATOR ASSEM. - GEN. VOLTAGE (30 AMP.)
93336 REGULATOR ASSEM. - GEN. VOLTAGE (40 AMP.)
95282 REGULATOR ASSEM. - GEN. VOLTAGE.
95484 REGULATOR ASSEM. - GEN. VOLTAGE (50 AMP.)
95422 REGULATOR ASSEM. - ALTERNATOR
95619 REGULATOR ASSEM. - ALT. 12V. 60 AMP. E.A.
94029 BRACKET - GEN. MTG. (40 AMP.)
94936 BRACKET - GEN. REAR SUPPORT
94955 BRACKET - 50 AMP. GEN. - FRONT
94959 BRACKET - 50 AMP. GEN. - REAR
95583 BRACKET ASSEM. - ALT. MTG.
96073 BRACKET - GEN. & ALT. MTG.
96070 BRACKET - ALTERNATOR MTG.
95584 BRACKET ASSEM. - ALT. MTG.
94935 BRACKET - GEN. & ALT. FRT. SUPPORT
96069 BRACKET - ALTERNATOR MTG.
96086 BRACKET - 40 AMP. GEN. MTG. - FRT. - SPEC.
96087 BRACKET - 40 AMP. GEN. MTG. - REAR - SPEC.
95742 BRACKET ASSEM. - ALT. MTG. (60 AMP. E.A.)
96241 BRACKET - ALTERNATOR MTG.

96243 ADAPTER - ALT. MTG. BRACKET

95748 BRACKET ASSEM. - 40 AMP. ALT. MTG. W/A.C.

96282 BRACKET - ALT. MTG. (40 AMP. W/A.C.)

95764 BRACKET ASSEM. - ALT. MTG. (60 AMP.)

96278 ADAPTER - ALT. MTG. BRACKET (60 AMP.)

95765 BRACKET ASSEM. - ALT. MTG. (60 AMP. E.A.)

96276 ADAPTER - ALT. MTG. BRKT. (60 AMP. E.A.)

96061 BRACKET - GENERATOR MTG. - FRONT

96062 BRACKET - GENERATOR MTG. - REAR

96289 BRACKET - ALT. MTG. - ENG. TO LINK (60 AMP.)

94393 EXTENSION - GENERATOR MTG. BRKT. (35 AMP.)

94395 EXTENSION - GEN. MTG. BRKT. (40 AMP.)

96277 SPACER - ALT. MTG. BRKT.

94030 LINK - GEN. ADJ. (30 & 40 AMP.)

94805 LINK - GEN. & ALT. ADJUSTING

94961 LINK - GENERATOR ADJ.

* 96288 LINK - ALT. TO ENG. ADJ. (60 AMP. E.A.)

94153 BELT - FAN & GENERATOR

96280 BELT - FAN & GENERATOR

96291 INSULATOR - ALT. BATTERY TERMINAL

95438 WIRING HARNESS - GENERATOR

95608 WIRING HARNESS - DASH TO ALTERNATOR

95609 WIRING HARNESS - 40 AMP. ALT.

95460 WIRING HARNESS - MAIN CHASSIS

* 95741 WIRING HARNESS - MAIN CHASSIS (REAR MTD. BATTERY)

94507 STRAP - ADJUSTABLE CABLE

* 181610 BOLT - 5/16-24 x 1-1/4 HEX. HD.

* 1-16-63

180145 BOLT - 7/16-14 x 1 HEX. HD.
181668 BOLT - 7/16-20 x 1-1/4 HEX. HD.
181670 BOLT - 7/16-20 x 1-1/2 HEX. HD.
181671 BOLT - 7/16-20 x 1-5/8 HEX. HD.
273890 SCREW - 5/16-18 x 5/8 HEX. SER. W/HD. MACH.
437691 SCREW - 7/16-14 x 1 F.H. SLOT. MACH.
440404 SCREW & L/W ASSEM. - #12-24 x 7/16 HEX. HD.
* 98416 PULLEY - 40 AMP. ALT.-2-1/2" (FURN. IN 97446)
* 98425 NUT - ARMATURE SHAFT (FURN. IN 97446)