# Series 200 \& 300 Alternators 

Voltage Regulator Upgrade
C.E. Niehoff \& Co.
notice This symbol is used to indicate special instructions on installation, operation or maintenance that are important but not related to personal injury hazards.
300 Series - A1-300, A1-301, A1-302, A1-303, A1-305■, A1-306, A1-307

N1101, N1102, N1103, N1108, N1111, N1112, N1114■, N1115, N1117, N1118, N1119, N1120, N1121, N1122, N3017, N3018, N3037, N3038

1. No modification to cover assembly is needed.
2. New voltage regulator circuit board fits in place of old one as shown in Figure 1.
3. Wire as shown in Figure 2.

A1-305 and N1114 may have an additional brown lead (see Figure 1) not required for new regulator. Trim lead and tape exposed end to insulate from contact with other components.


Figure 1 - Series 300 Circuit Board

| Voltage Select Switch Position |  |  |
| :---: | :---: | :---: |
| A2-431 Reg. | A2-432 Reg. | A2-433 Reg. |
| Position 1-13.8 V | Position 1-27.6 V | Position 1-27.6 V |
| Position 2-14.2 V | Position 2-28.0 V | Position 2-28.5 V |
| Position 3-14.6 V | Position 3-28.5 V | Position 3-37.2 V |
| Position 4—14.6 V | Position 4-29.0 V | Position 4—38.3 V |

Field Lead
(white wire with ring terminal)
 field lead with flag terminal.

Figure 2 - Series 300 Wiring

N1025, N1026, N1031, N1036, N1037, N1077, N1079, N1080, N1085, N3036, N7024, N7031, N7040

1. Remove end housing assembly, voltage adjustment cover, screw, and voltage adjustor insulator.
2. Using the third hole as the pilot hole, drill a 9/16" hole.
3. Deburr new hole to prevent damaging new switch on new circuit board.
4. Install new circuit board and wire per Figure 4.

| Voltage Select Switch Position |  |
| :---: | :---: |
| A2-434 Reg. | A2-435 Reg. |
| Position 1—13.8 V | Position 1—27.6 V |
| Position 2-14.2 V | Position 2—28.0 V |
| Position 3—14.6 V | Position 3—28.5 V |
| Position 4—14.6 V | Position 4—29.0 V |



Figure 3 - Series 200 Cover Assembly


Figure 4 - Series 200 Wiring

