TECH TIPS

Dixie Part Numbers:

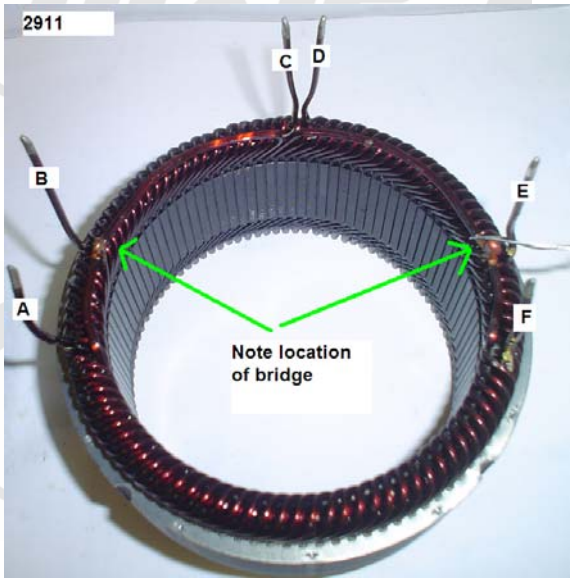
A-8904	A-8922	A-8955	A-8960	A-8966
A-8971	A-8975	A-8999	A-80006	A-80007
A-80008	A-80013	A-80014	A-80015	A-80016
A-80024	A-80032	A-80036	A-80037	A-80039
A-80042	A-80101	A-80188	A-80189	A-80190
A-80192	A-80195	A-80196	A-80198	A-80199
A-80200	A-80277	A-80278	A-80283	A-80284
A-80285	A-80286	A-80287	A-80290	A-80292
A-80306	A-80317	A-80319	A-80327	A-80336
A-80342	A-80358	A-80359	A-80428	2746-2911
2746-2912	3146-2901	3146-2902	3146-2903	3146-2911
3146-2912	3146-2913	3146-2916	3146-2918	**+TBA**

Applications: Various applications with Denso hairpin type alternators

Conditions: The rebuilder may find that when checking the stators that there is no continuity between what appear to be the 3 phases of the stators. Additionally when testing the alternator, the frequency output is incorrect, if applicable and or the amperage is not measuring correctly.

Cause: A potential cause of the above conditions is that there are 2 types of rectifier and 2 types of stators used that can not be interchanged with one another. The one has 3 windings but is neither WYE nor DELTA until connected to the rectifier. The other has 2 WYE windings on the same stator stack.

Correction: Proper part separation and identification is critical! On the picture labelled as 2911, shown on the right, there are 2 bridges that join the stator windings together. If these are closely examined they are the center (N) of the WYE winding so in reality this would be 2 WYE stators wound onto one stator stack. When testing the phase balance on this type of stator the checks would be: A-B, B-C, C-A and then D-E, E-F, and F-D. If the stator being tested is this type it is for the 160A alternator and requires the 12 diode rectifier to function. When programming this into a D&V type tester be careful of the 3 versus 6 phases!



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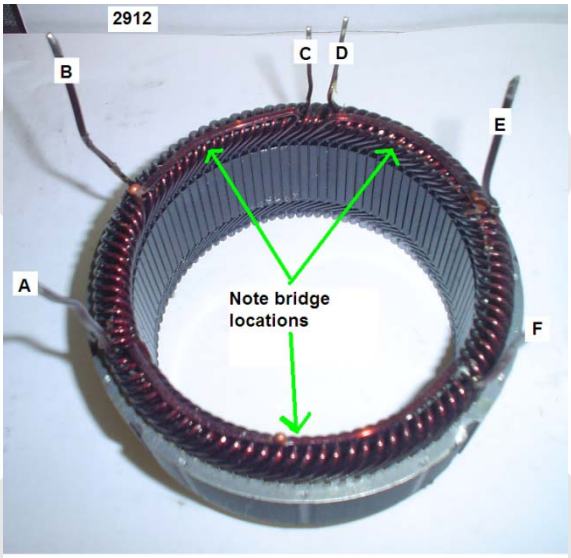

The stator shown on the left, labelled as 2912 has 3 bridges joining the stator windings and the individual phases are not connected making the stator neither WYE nor DELTA. To checking the phase balance on this configuration the connections would be B-C, D-E and F-A. This type is for the 105A alternator and requires the 6 diode rectifier.