NISSAN
FORKLIFT

SERVICE MANUAL

MODELS

P01 / P02

PUBLICATION

SM6E-P012G0

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P01 / P02

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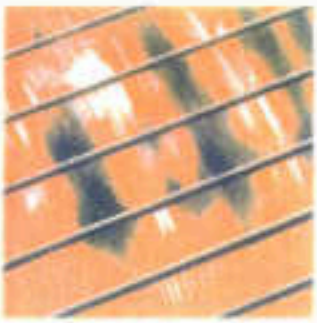
COMMUTATOR CHECK CHART

FOR COMPARING COMMUTATOR SURFACE MARKINGS

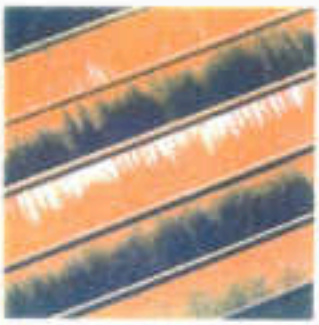
SATISFACTORY COMMUTATOR SURFACES



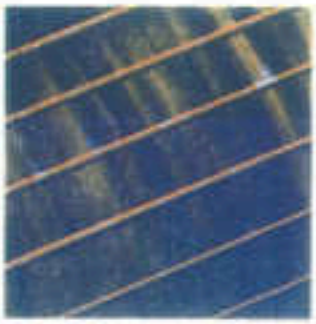
LIGHT TAN FILM over entire commutator surface is one of many normal conditions often seen on a well-functioning machine.



MOTTLED SURFACE with random film pattern is probably most frequently observed condition of commutators in industry.

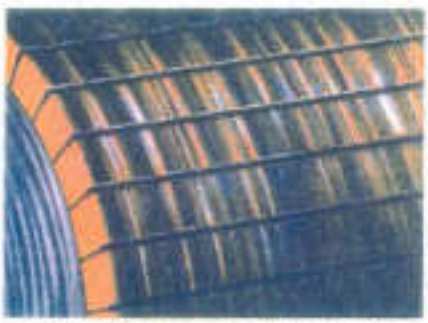


SLOT BAR-MARKING, a slightly darker film, appears on bars in a definite pattern related to number of conductors per slot.

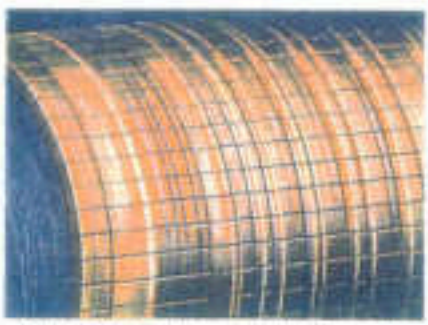


HEAVY FILM can appear over entire area of efficient and normal commutator and, if uniform, is quite acceptable.

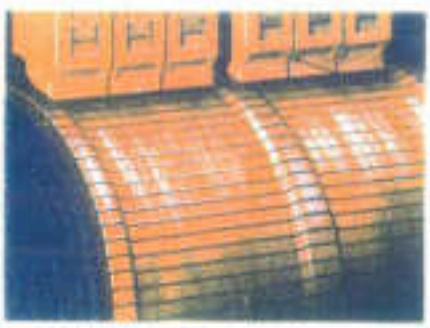
WATCH FOR THESE DANGER SIGNS



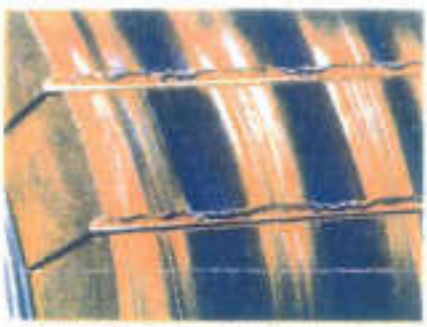
STREAKING on the commutator surface signals the beginning of serious metal transfer to the carbon brush. Check the chart below for possible causes.



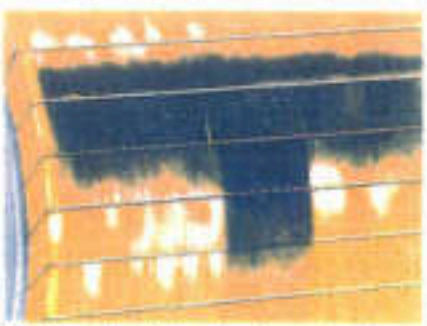
THREADING of commutator with fine lines results when excessive metal transfer occurs. It usually leads to roughening of commutator and rapid brush wear.



GROOVING is a mechanical condition caused by abrasive material in the brush or atmosphere. If grooves form, start corrective action.



COPPER DRAG, an abnormal build-up of commutator material, forms most often at trailing edge of bar. Condition is rare but can cause flashover if not checked.



PITCH BAR-MARKING produces low or burned spots on the commutator surface. The number of these markings equals half or all the number of poles on the motor.



HEAVY SLOT BAR-MARKING can involve etching of trailing edge of commutator bar. Pattern is related to number of conductors per slot.

CAUSES OF POOR COMMUTATOR CONDITION

Frequent visual inspection of commutator surfaces can warn you when any of the above conditions are developing so that you can take early corrective action. The chart below may be...

How to Get the Most Value from This Chart

The purpose of the Commutator Check Chart is to help you spot undesirable commutator conditions or those develop so you can take corrective action before the condition becomes serious. This chart will also serve as an aid in recognizing satisfactory surfaces.

The first chart at the left indicates the importance of selecting the correct brush and having the right operating conditions for optimum brush life and commutator wear. General Electric offers a complete line of carbon brushes designed to meet all operating conditions and requirements of integral horsepower machines.

For additional information to help with carbon brush application or commutation problems, contact your nearest General Electric Sales Office or Distributor.

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COMMUTATOR CHECK CHART

FOR COMPARING COMMUTATOR SURFACE MARKINGS

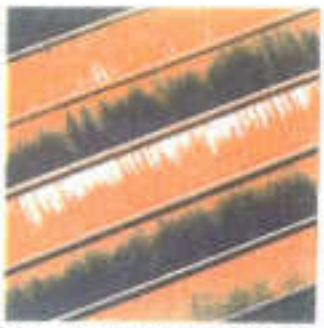
SATISFACTORY COMMUTATOR SURFACES



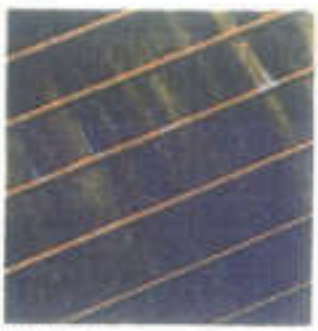
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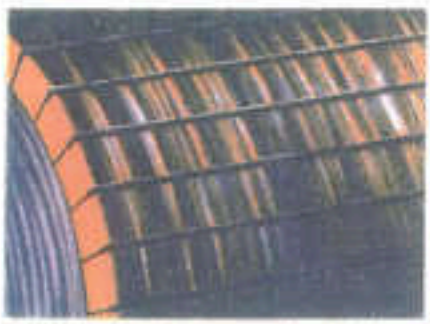


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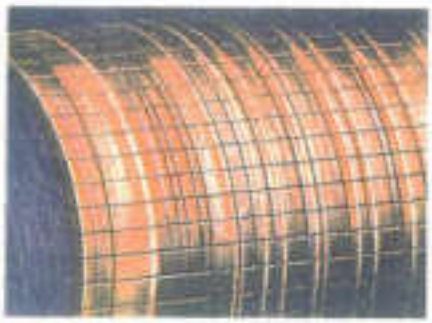


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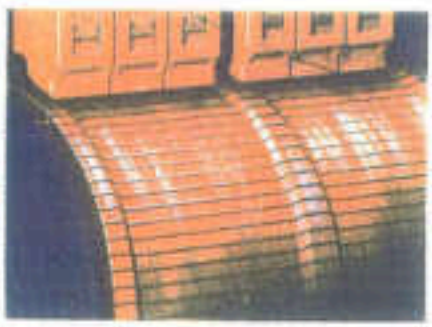
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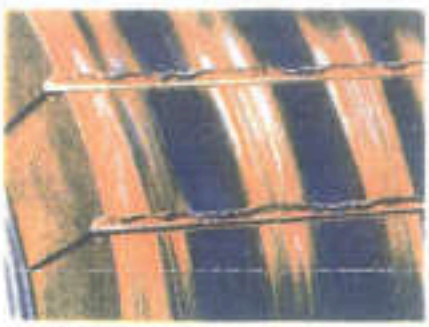
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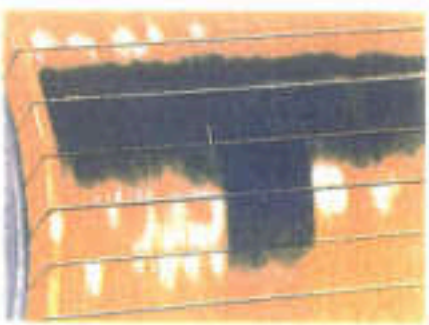
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CAUSES OF POOR COMMUTATOR CONDITION

Frequent visual inspection of commutator surface can warn you when any of the above conditions are developing so that you can take early corrective action. The chart below may indicate some possible causes of these conditions, suggesting the proper preventive maintenance.

How to Get the Most Value from This Chart

The purpose of the Commutator Check Chart is to help you spot undesirable commutator conditions as they develop so you can take corrective action before the condition becomes serious. This chart will also serve as an aid in recognizing satisfactory surfaces.

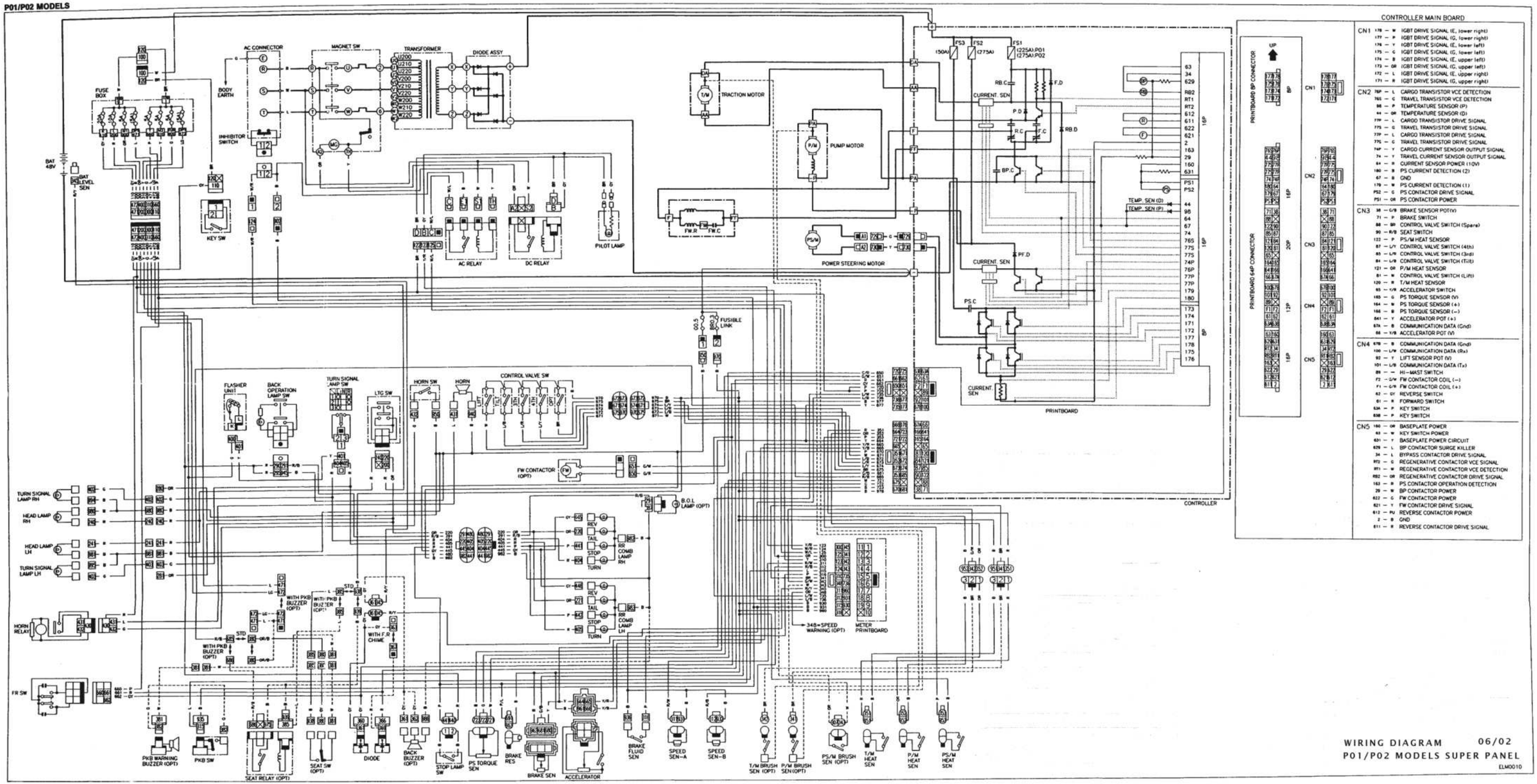
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WIRING DIAGRAM

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