## STARTER MOTOR 4 BRUSH CONVERSION

## PC16 CONTENTS

- 1. BRUSH (SHORT LEAD)
- 1. BRUSH (LONG LEAD)
- 1. TERMINAL POST WITH 1 LONG & 1 SHORT LEAD WITH BRUSHES.
- 1. FOUR STATION BRUSH PLATE.
- 4. BRUSH SPRINGS.
- 4. NYLON CABLE TIES.



Note that the position of the Brush holder plate is critical and the recess in the brush holder plate that exactly fits over the terminal post on the starter motor body and lines up with a brush is the correct one to use.

## **INSTRUCTIONS**

- 1. Disconnect and remove starter motor.
- 2. Remove starter motor through bolts.
- 3. Remove end cap and brush plate.
- 4. Remove armature with end plate.
- 5. Clean starter motor armature, end plate, end cap, and field coils. (Use soft brush and cloth only)
- 6. Remove connector terminal and brush.
- 7. Cut of single brush from the field coil tab terminal and clean up terminal prior to soldering. Solder the two loose brushes to the field coil tab terminal,
- 8. Place the terminal post with its two brushes into the starter motor body recess.

9. Place brush plate into starter motor body, carefully positioning the brush leads to avoid the rotating armature. Fit springs and brushes, note that the brushes must be positioned as in the diagram above. The four cable ties supplied can be used to hold the brushes back to allow insertion of the armature.

10. Position armature, remove cable ties around brushes if used, fit through bolts and end cap, fit starter, connect and test.

## PLEASE NOTE: That the field coil terminal must be spotlessly clean prior to soldering the brushes to it. A high-powered soldering iron with the appropriate flux will be required.