 CONTENTS

Electrical

Motor Brushes

Type of motor brushes, fig. 1. The motor brush contacting the armature completes the electric circuit of your motor, therefore, the better the connection, the better the motor performance. Make sure you match your brush to the proper application.

There are motor brushes designed specifically for on road or off road applications—brushes that fit large commutators and others for small commutators.

Serrated brushes help seat the brushes to the armature more quickly, getting you up to performance more quickly.

Silver content brushes transfer power more efficiently, but wear your armature more quickly.

Remove the brushes from the holders every 3 to 5 runs and inspect them for wear and burning. Clean the comm with a Comm Stick. Replace the brushes if you notice wear or burning. Failure to do this will harm your armature. If replacing brushes, it's best to true or cut the comm so there is a fresh surface for the brush to run on. See below for more on cutting the comm.

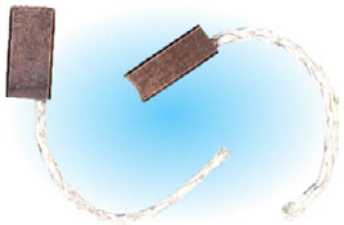

fig. 1 *Motor brushes must be matched to the correct type of armature. For best performance, replace your brushes when worn.*

On setup sheet

You note which brushes you used.

Cutting the commutator

Cutting the commutator (at arrow in fig. 2) is accomplished with a comm lathe. The commutator is the area in contact with the brushes. Fine scratches form on the comm when the commutator rotates past the brushes, producing less than optimal connection. A comm lathe will trim this area so it is smooth again for optimum performance.

fig. 2 *The arrow points to the commutator portion of the armature.*