DNA Knowledge Base

Bow 3 motor from Goodwinch

You want power - then look no further the BOW 3 has it.
The nominal speed is 4,000 rpm, similar to a Bow ‘1’ but with a huge amount of torque and rated at an amazing 9HP [note nominal speed of other motors are 5000 RPM]. However in use these are much faster than both the Bow 1 and 2.

Huge 5” diameter x 10” long (125 x 252mm) housing complete with adaptor helps the motor to run cooler and houses the massive armature and copper welded commutator.

8 big brushes, each with twin insulated flexible copper wires located in solid brass brush holders mounted in a cast aluminium frame to take away some of the heat and provide a bearing block at the back end.

4 large field coils surround the armature all connected with heavy copper bus bars.

These motors will fit straight onto any GP80 series winch, or any GP Twin Motor Top Housing and, with a small amount of modification to the adaptor, will easily fit to a standard Warn 8274 (instructions supplied) but we would recommend that a uprated mainshaft is fitted.
To get the best out of these motors you will need a very good battery setup, ideally 3 big 12 volt batteries in parallel driven by a big alternator.

After discussion with many people using these, it is recommended that it is best not to use too higher geared twin Gigglepin winch or twin top. Use either a standard Gigglepin ratio, i.e. ‘Plus 13%’ or a ‘Plus 25%’. This allows the Bow ‘3’ armature to revolve at a good speed, not using too many amps as it could do with higher ratios.

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