The major reason for a Brown Jr. engine overheating and running hot is that the ignition timing is too far advanced. It's almost impossible to set it correctly every time by listening to it because of the conservative port timing of the engine, so use a tach if you have one. When you reach peak RPM on the tach, STOP advancing the timer arm. Advancing it any further will not gain any more RPMs but will only serve to overheat the engine as well as beat the hell out of your con rods and bearings. I've used a 3-1 gas/oil mixture in my Browns for years with no problems whatsoever.