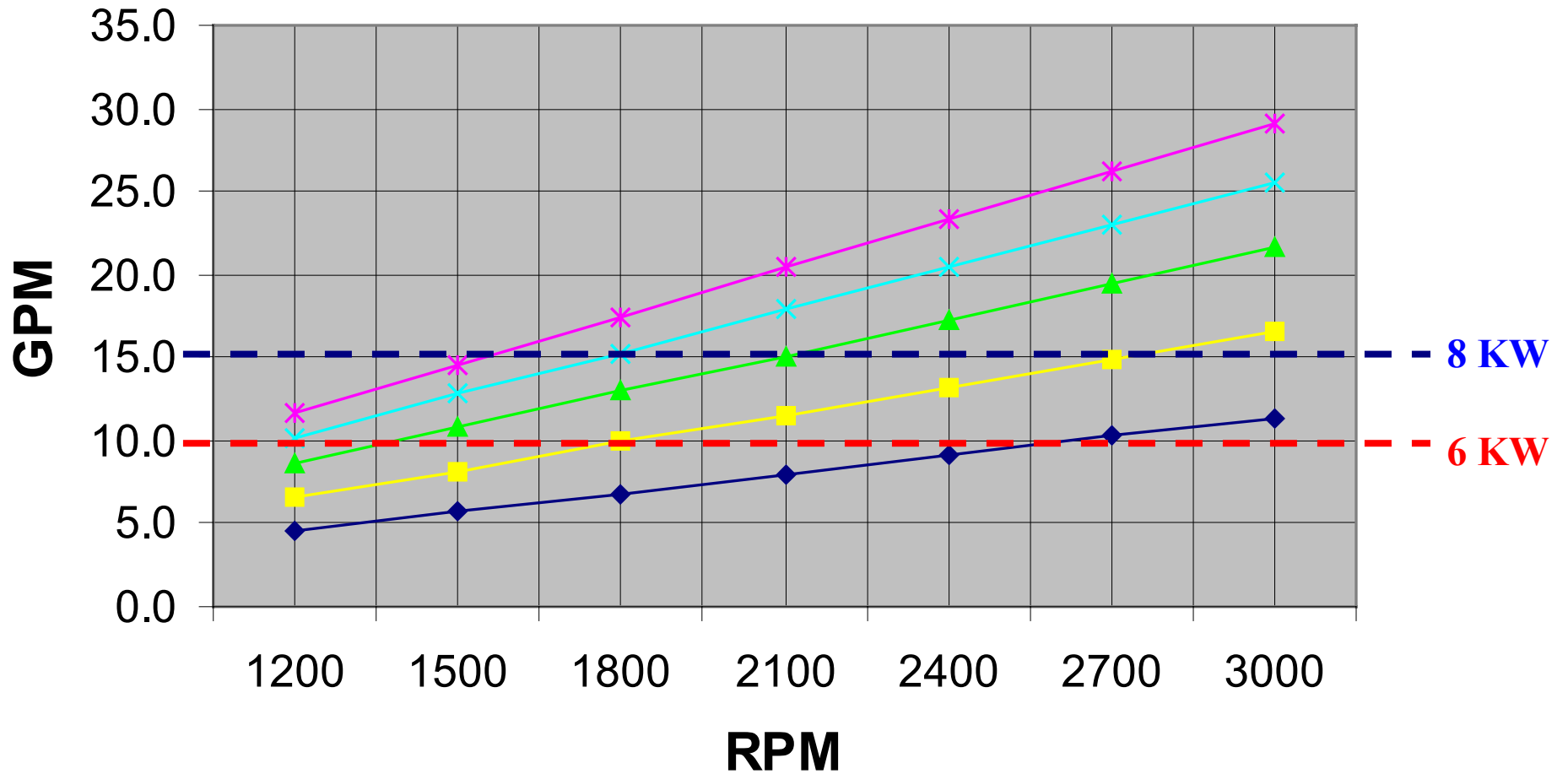
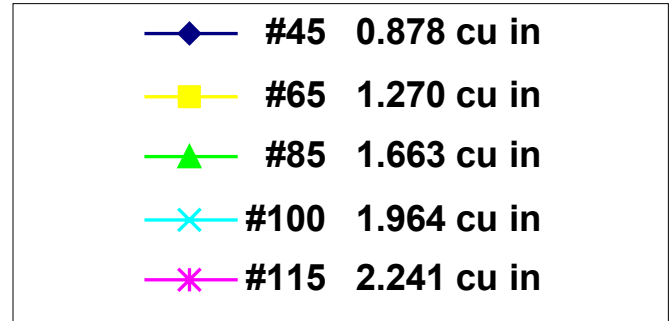


Chelsea & Muncie Flows

Ford 4 x 4



Pump Selection



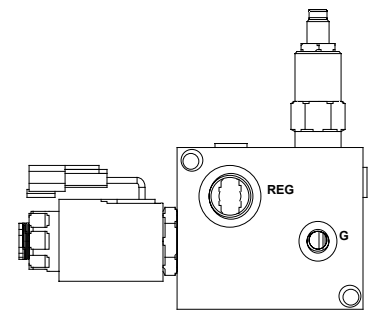
Hart-A-Gen 6 KWs require 8.0 – 9.0 GPM and 8 KWs require 10.5 – 12.0 GPM. The **Hart-A-Gen Intel-A-Gen™** electronic controller works best when it is supplied with 2.0 – 3.0 GPM more than what is required by the motor. Therefore, the **PUMP** should produce no more than 10.0 – 12.0 GPM for a 6 KW system and no more than 12.5 – 15.00 GPM for 8 KW systems.

Pump flows larger than listed above will produce excessive heat!

Referring to the pump flows chart you will note a red dashed line at 10.0 GPM flow. This line intersects four possible pump choices. If the engine speed is 1200 RPM, **PUMP** speed is **1800 RPM**, and the best pump choice is the 1.270 cu in pump, which is the yellow line.

For an 8 KW consider the blue dashed line at 15 GPM (12.5-15 GPM is the range). This line also intersects four possible pump choices. If the engine speed is 1200 RPM, **PUMP** speed is **1800 RPM**, and the best choice is the 1.964 cu in pump, which is the light blue line. If the engine speed is 1400 RPM, **PUMP** speed is **2100 RPM**, and the best choice in this case is the 1.663 cu in pump (green line)

The generator electronic card will control the proportional valve's flow such that it will supply the proper GPM to maintain a constant 60.0 Hz (± 0.3 Hz). The proportional valve takes the flow from the pump and sends the required motor GPM to the motor and dumps the excess pump flow back to the reservoir. If this **excess flow** is greater than **3-5 GPM**, the valve will develop excess heat. Excess flow is caused by (1) incorrect pump choice, or (2) speeding the engine up, thereby developing greater pump flow.



DO NOT DEVELOP MORE THAN 3-5 GPM OVER AMOUNT REQUIRED BY MOTOR.