

# Power Balance – Manual Method

Meets NATEF Task: (A8-A-6) Perform cylinder balance test; determine necessary action.  
(P-1)

Name \_\_\_\_\_ Date \_\_\_\_\_ Time on Task \_\_\_\_\_

Make/Model/Year \_\_\_\_\_ VIN \_\_\_\_\_ Evaluation: 4 3 2 1

- \_\_\_\_\_ 1. Check service information for the recommended method and procedures to follow for performing a power balance test without the use of a scan tool.
- \_\_\_\_\_ 2. One method uses a 2" long vacuum hose between the distributor cap (or coils) and the spark plug wires.
- \_\_\_\_\_ 3. Connect the tachometer to the engine and record idle RPM = \_\_\_\_\_.
- \_\_\_\_\_ 4. Using a test light, ground out one cylinder at a time by touching the tip of the grounded test light to the section of rubber hose, and record the RPM drop:

#1 _____	#5 _____
#2 _____	#6 _____
#3 _____	#7 _____
#4 _____	#8 _____



**NOTE:** 50 RPM is the maximum variation between cylinders. The cylinder that drops the most RPM is the *strongest* cylinder. The cylinder that drops RPM the least is the *weakest* cylinder.

- \_\_\_\_\_ 5. Results:
  - RPM difference between the strongest and weakest cylinder \_\_\_\_\_.
  - Which cylinder is the strongest? \_\_\_\_\_.
  - Which cylinder is the weakest? \_\_\_\_\_.

- \_\_\_\_\_ 6. Based on the test results, what is the necessary action? \_\_\_\_\_