

Iowa FFA Agricultural Mechanics Career Development Event
2000

State of Iowa
DEPARTMENT OF EDUCATION
Career Education Division
Grimes State Office Building
Des Moines, IA 50319

CONTESTANT NAME _____

CONTESTANT SCHOOL _____
(print clearly)

ENERGY SYSTEMS
Problem Solving/Skills
Small Gasoline Engines (15 minutes)

I. Identification

A. Engine Identification

1. Engine model number _____ 2. Engine displacement _____

B. Parts identification: Match the correct part name with its corresponding letter.

- | | |
|-------------------------|------------------------|
| 1. Crankshaft _____ | 6. Intake Valve _____ |
| 2. Carburetor _____ | 7. Exhaust Valve _____ |
| 3. Flywheel _____ | 8. Valve Spring _____ |
| 4. Armature _____ | 9. Piston _____ |
| 5. Connecting Rod _____ | 10. Camshaft _____ |

II. Parts Specifications: Use the manual to look up the engine reject sizes and specifications: record below:

A. Crankshaft reject size

1. PTO Journal _____ " 2. Crankpin _____ " 3. Magneto journal _____

B. Breaker point gap _____ "

C. Spark plug gap _____ "

III. Use the engine and tools provided to complete these jobs:

1. Measure the crankpin journal and determine if it's acceptable _____ " Yes/No

2. Measure the breaker point gap and determine if it's acceptable _____ " No/Yes

Evaluation Score Sheet

	<u>Items</u>	<u>Possible</u>	<u>Points</u> <u>Earned</u>
1.	Engine Identification	5	_____
2.	Parts Identification	5	_____
3.	Parts Specifications	5	_____
4.	Measurements	8	_____
5.	Safety and procedures	2	_____
Total		25	

Iowa FFA Agricultural Mechanics Career Development Event
2000

State of Iowa
DEPARTMENT OF EDUCATION
Career Education Division
Grimes State Office Building
Des Moines, IA 50319

CONTESTANT NAME Key
CONTESTANT SCHOOL _____
(print clearly)

ENERGY SYSTEMS
Problem Solving/Skills
Small Gasoline Engines (15 minutes)

I. Identification

A. Engine Identification

first digit of model number

1. Engine model number 80302 or 80102
(on shroud)

2. Engine displacement 8 in³
127cc

B. Parts identification: Match the correct part name with its corresponding letter.

1. Crankshaft B
2. Carburetor D
3. Flywheel J
4. Armature C
5. Connecting Rod E

6. Intake Valve A
7. Exhaust Valve F
8. Valve Spring I
9. Piston H
10. Camshaft G

II. Parts Specifications: Use the manual to look up the engine reject sizes and specifications: record below:

A. Crankshaft reject size

1. PTO Journal .873 " 2. Crankpin .996 " 3. Magneto journal .873

B. Breaker point gap .020 "

Call on "check chart" near front of manual, pg. 2+3

C. Spark plug gap .030 "

III. Use the engine and tools provided to complete these jobs:

1. Measure the crankpin journal and determine if it's acceptable .991-1.000 Yes No

2. Measure the breaker point gap and determine if it's acceptable .025-.028 No Yes

Evaluation Score Sheet

Items	Points	
	Possible	Earned
1. Engine Identification	5	_____
2. Parts Identification	5	_____
3. Parts Specifications	5	_____
4. Measurements	8	_____
5. Safety and procedures	2	_____
Total	25	<div style="border: 1px solid black; width: 50px; height: 50px; display: inline-block;"></div>