

SHORT BLOCK

| | | | | | |
|----------------|----------|---------|----------|-------------|----------|
| Short Block: | Ford 302 | | | | |
| No. Cylinders: | 8 | Bore: | 4.002 in | Rod Length: | 4.908 in |
| Total Volume: | 301.9 ci | Stroke: | 3.000 in | Rod Ratio: | 1.636 |

CYLINDER HEADS

Cylinder Heads: Boss 302 exch data

Valve Specifications:

| | | | |
|---------------------|----------|----------------------|----------|
| Intake Valves/Port: | 1 | Exhaust Valves/Port: | 1 |
| Intake Valve Dia: | 2.190 in | Exhaust Valve Dia: | 1.730 in |

COMPRESSION

| | | | |
|--------------------|----------|------------------|-----------|
| Compression Ratio: | 10.00 | | |
| Combustion Space: | 68.71 cc | Cylinder Volume: | 618.40 cc |

INDUCTION

| | | | | | |
|-----------------|----------------------|--------------------|-------------|------------|----------|
| Induction Flow: | 750.0 cfm | @ | 1.50 inHg | Fuel Type: | Gasoline |
| Manifold Type: | Dual-Plane High-Flow | Nitrous Injection: | 0.0 lbs/min | | |

Forced Induction Specifications:

| | | | | | |
|------------------|---------|--------------|---------|-----------------|-------|
| Blower Type: | None | | | | |
| Island Flow: | *** cfm | Surge Flow: | *** cfm | Pressure Ratio: | *** |
| Impeller Speed: | *** rpm | Belt Ratio: | *** | Internal Ratio: | *** |
| Peak Efficiency: | *** % | Boost Limit: | *** psi | Intercooler: | *** % |

EXHAUST

Exhaust System: Small-Tube Headers With Mufflers

CAMSHAFT

Cam Name: Dual Purpose Street

| | | | |
|------------------------|----------|---------------------------|-------|
| Intake Lift At Valve: | 0.536 in | Lifter Type: | Solid |
| Exhaust Lift At Valve: | 0.536 in | Lifter Acceleration Rate: | 3.00 |

Valve Opening/Closing Based On: Seat-To-Seat

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|--------------------------------|-----------|-----------|-----------|-----------|
| Primary Timing (Seat-to-Seat): | IVO: 32.0 | IVC: 68.0 | EVO: 72.0 | EVC: 28.0 |
| Secondary Timing (0.050-inch): | IVO: *** | IVC: *** | EVO: *** | EVC: *** |

Cam Installed Advanced(+)/Retarded(-): 4.0

| | | | | | | | |
|-----------|------|-----------|-------|-----------|------|-----------|-------|
| True IVO: | 36.0 | True EVO: | 76.0 | | | | |
| True IVC: | 64.0 | True ICA: | 104.0 | True EVC: | 24.0 | True ECA: | 116.0 |

Cam Timing Summary:

| | | | |
|--------------------------|-------|---------------------------|-------|
| Intake Duration: | 280.0 | Exhaust Duration: | 280.0 |
| Intake Centerline Angle: | 108.0 | Exhaust Centerline Angle: | 112.0 |
| Lobe Centerline Angle: | 110.0 | Valve Overlap: | 60.0 |

NOTES

CYLINDER HEAD AIRFLOW DATA

Description: Boss 302 exch data

Intake Valve

Test Diameter: 2.190 in
 Pressure Drop: 28.0 inH2O
 Valves Per Port: 1

| <u>Lift: in</u> | <u>Flow: cfm</u> |
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|-----------------|------------------|

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|-------|------|
| 0.100 | 73.5 |
|-------|------|

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|-------|-------|
| 0.200 | 146.7 |
|-------|-------|

| | |
|-------|-------|
| 0.300 | 203.5 |
|-------|-------|

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|-------|-------|
| 0.400 | 244.6 |
|-------|-------|

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|-------|-------|
| 0.500 | 270.1 |
|-------|-------|

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|-------|-------|
| 0.600 | 279.5 |
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| *** | *** |
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Exhaust Valve

Test Diameter: 1.730 in
 Pressure Drop: 28.0 inH2O
 Valves Per Port: 1

| <u>Lift: in</u> | <u>Flow: cfm</u> |
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|-----------------|------------------|

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|-------|------|
| 0.100 | 47.2 |
|-------|------|

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|-------|------|
| 0.200 | 80.0 |
|-------|------|

| | |
|-------|-------|
| 0.300 | 117.0 |
|-------|-------|

| | |
|-------|-------|
| 0.400 | 149.1 |
|-------|-------|

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|-------|-------|
| 0.500 | 173.4 |
|-------|-------|

| | |
|-------|-------|
| 0.600 | 186.5 |
|-------|-------|

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CALCULATED POWER AND ENGINE PRESSURES

| Engine RPM | Power (Fly) | Torque (Fly) | Int Man Pressure | Vol Eff % | BMEP Pressure |
|------------|-------------|--------------|------------------|-----------|---------------|
| 1500 | 63 | 219 | 14.69 | 58.3 | 109.5 |
| 2000 | 108 | 283 | 14.69 | 70.3 | 141.3 |
| 2500 | 147 | 310 | 14.67 | 75.9 | 154.8 |
| 3000 | 183 | 320 | 14.65 | 78.8 | 159.8 |
| 3500 | 231 | 347 | 14.62 | 84.9 | 173.5 |
| 4000 | 280 | 368 | 14.58 | 90.6 | 183.6 |
| 4500 | 319 | 373 | 14.53 | 93.5 | 186.1 |
| 5000 | 351 | 369 | 14.48 | 95.4 | 184.3 |
| 5500 | 374 | 357 | 14.42 | 95.2 | 178.5 |
| 6000 | 384 | 336 | 14.36 | 93.0 | 168.0 |
| 6500 | 383 | 309 | 14.32 | 90.3 | 154.5 |
| 7000 | 370 | 278 | 14.29 | 86.6 | 138.6 |
| 7500 | 353 | 247 | 14.27 | 82.8 | 123.5 |
| 8000 | 308 | 202 | 14.25 | 78.5 | 101.1 |
| 8500 | 269 | 166 | 14.24 | 73.9 | 83.0 |
| 9000 | 229 | 134 | 14.25 | 70.1 | 66.9 |
| 9500 | 184 | 102 | 14.24 | 66.0 | 50.9 |
| 10000 | 142 | 74 | 14.25 | 62.0 | 37.2 |
| 10500 | 81 | 41 | 14.26 | 57.4 | 20.3 |
| 11000 | 29 | 14 | 14.29 | 53.6 | 6.8 |
| 11500 | 0 | 0 | 14.31 | 49.9 | 0.0 |



