

SHORT BLOCK

| | | | | | |
|----------------|---------------|---------|----------|-------------|----------|
| Short Block: | Ford 302 Boss | | | | |
| No. Cylinders: | 8 | Bore: | 4.030 in | Rod Length: | 5.151 in |
| Total Volume: | 306.1 ci | Stroke: | 3.000 in | Rod Ratio: | 1.717 |

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: | 69.68 cc | Cylinder Volume: | 627.08 cc |

INDUCTION

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|-----------------|-----------------------|--------------------|-------------|
| 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: | 0.540 in | Lifter Type: | Solid | | | | |
| Exhaust Lift At Valve: | 0.540 in | Lifter Acceleration Rate: | 3.14 | (Auto) | | | |
| Valve Opening/Closing Based On: | Seat-To-Seat | | | | | | |
| Primary Timing (Seat-to-Seat): | IVO: 29.0 | IVC: 61.0 | EVO: 69.0 | EVC: 21.0 | | | |
| Secondary Timing (0.050-inch): | IVO: 6.0 | IVC: 38.0 | EVO: 46.0 | EVC: -2.0 | | | |
| Cam Installed Advanced(+)/Retarded(-): | 0.0 | | | | | | |
| True IVO: | 29.0 | True EVO: | 69.0 | | | | |
| True IVC: | 61.0 | True ICA: | 106.0 | True EVC: | 21.0 | True ECA: | 114.0 |
| Cam Timing Summary: | | | | | | | |
| Intake Duration: | 270.0 | Exhaust Duration: | 270.0 | | | | |
| Intake Centerline Angle: | 106.0 | Exhaust Centerline Angle: | 114.0 | | | | |
| Lobe Centerline Angle: | 110.0 | Valve Overlap: | 50.0 | | | | |

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 |
|-------|-------|

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|-------|-------|
| 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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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 |
|-------|------|

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

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

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

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|-------|-------|
| 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 | 71 | 249 | 14.69 | 61.9 | 122.7 |
| 2000 | 118 | 309 | 14.68 | 72.3 | 152.1 |
| 2500 | 160 | 337 | 14.67 | 77.6 | 165.8 |
| 3000 | 199 | 348 | 14.64 | 80.4 | 171.5 |
| 3500 | 247 | 371 | 14.62 | 85.3 | 182.6 |
| 4000 | 294 | 386 | 14.58 | 89.8 | 190.2 |
| 4500 | 332 | 387 | 14.53 | 92.0 | 190.7 |
| 5000 | 363 | 381 | 14.48 | 92.9 | 187.7 |
| 5500 | 382 | 365 | 14.42 | 92.0 | 179.6 |
| 6000 | 384 | 336 | 14.38 | 88.6 | 165.4 |
| 6500 | 378 | 305 | 14.35 | 85.1 | 150.4 |
| 7000 | 353 | 265 | 14.32 | 80.7 | 130.4 |
| 7500 | 325 | 228 | 14.31 | 76.2 | 112.1 |
| 8000 | 280 | 184 | 14.31 | 71.7 | 90.5 |
| 8500 | 240 | 148 | 14.31 | 67.3 | 73.1 |
| 9000 | 197 | 115 | 14.31 | 63.2 | 56.6 |
| 9500 | 152 | 84 | 14.32 | 59.0 | 41.4 |
| 10000 | 106 | 56 | 14.33 | 55.1 | 27.4 |
| 10500 | 49 | 25 | 14.35 | 51.0 | 12.1 |
| 11000 | 0 | 0 | 14.37 | 47.3 | 0.0 |
| 11500 | 0 | 0 | 14.39 | 43.7 | 0.0 |



