

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: | 0.512 in | Lifter Type: | Solid |
| Exhaust Lift At Valve: | 0.536 in | Lifter Acceleration Rate: | 3.00 |

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

| | | | | |
|--------------------------------|-----------|-----------|-----------|-----------|
| Primary Timing (Seat-to-Seat): | IVO: 33.0 | IVC: 69.0 | EVO: 82.0 | EVC: 30.0 |
| Secondary Timing (0.050-inch): | IVO: *** | IVC: *** | EVO: *** | EVC: *** |

Cam Installed Advanced(+)/Retarded(-): 0.0

| | | | | | | | |
|-----------|------|-----------|-------|-----------|------|-----------|-------|
| True IVO: | 33.0 | True EVO: | 82.0 | | | | |
| True IVC: | 69.0 | True ICA: | 108.0 | True EVC: | 30.0 | True ECA: | 116.0 |

Cam Timing Summary:

| | | | |
|--------------------------|-------|---------------------------|-------|
| Intake Duration: | 282.0 | Exhaust Duration: | 292.0 |
| Intake Centerline Angle: | 108.0 | Exhaust Centerline Angle: | 116.0 |
| Lobe Centerline Angle: | 112.0 | Valve Overlap: | 63.0 |

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

Lift: in Flow: cfm

0.100 73.5

0.200 146.7

0.300 203.5

0.400 244.6

0.500 270.1

0.600 279.5

*** ***

*** ***

*** ***

*** ***

Exhaust Valve

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

Lift: in Flow: cfm

0.100 47.2

0.200 80.0

0.300 117.0

0.400 149.1

0.500 173.4

0.600 186.5

*** ***

*** ***

*** ***

*** ***

CALCULATED POWER AND ENGINE PRESSURES

| Engine RPM | Power (Fly) | Torque (Fly) | Int Man Pressure | Vol Eff % | BMEP Pressure |
|------------|-------------|--------------|------------------|-----------|---------------|
| 1500 | 59 | 205 | 14.69 | 57.7 | 102.4 |
| 2000 | 102 | 269 | 14.69 | 70.2 | 134.2 |
| 2500 | 142 | 298 | 14.67 | 76.6 | 149.0 |
| 3000 | 173 | 303 | 14.65 | 78.6 | 151.2 |
| 3500 | 219 | 329 | 14.62 | 84.8 | 164.5 |
| 4000 | 270 | 354 | 14.58 | 91.5 | 176.9 |
| 4500 | 313 | 365 | 14.53 | 95.5 | 182.3 |
| 5000 | 348 | 366 | 14.47 | 98.2 | 182.7 |
| 5500 | 374 | 357 | 14.40 | 99.0 | 178.5 |
| 6000 | 392 | 343 | 14.34 | 98.1 | 171.4 |
| 6500 | 396 | 320 | 14.28 | 95.9 | 159.6 |
| 7000 | 391 | 293 | 14.24 | 93.3 | 146.6 |
| 7500 | 382 | 268 | 14.20 | 90.2 | 133.8 |
| 8000 | 351 | 230 | 14.16 | 86.4 | 115.1 |
| 8500 | 315 | 195 | 14.15 | 81.5 | 97.2 |
| 9000 | 274 | 160 | 14.15 | 77.8 | 80.0 |
| 9500 | 233 | 129 | 14.14 | 74.1 | 64.4 |
| 10000 | 195 | 102 | 14.14 | 70.3 | 51.1 |
| 10500 | 134 | 67 | 14.14 | 65.4 | 33.4 |
| 11000 | 86 | 41 | 14.17 | 61.8 | 20.5 |
| 11500 | 26 | 12 | 14.18 | 58.0 | 6.0 |



