

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: | 0.606 in | Lifter Type: | Solid | | | | |
| Exhaust Lift At Valve: | 0.606 in | Lifter Acceleration Rate: | 3.00 | | | | |
| Valve Opening/Closing Based On: | Seat-To-Seat | | | | | | |
| Primary Timing (Seat-to-Seat): | IVO: 38.0 | IVC: 76.0 | EVO: 78.0 | EVC: 36.0 | | | |
| Secondary Timing (0.050-inch): | IVO: *** | IVC: *** | EVO: *** | EVC: *** | | | |
| Cam Installed Advanced(+)/Retarded(-): | 0.0 | | | | | | |
| True IVO: | 38.0 | True EVO: | 78.0 | | | | |
| True IVC: | 76.0 | True ICA: | 109.0 | True EVC: | 36.0 | True ECA: | 111.0 |

Cam Timing Summary:

| | | | |
|--------------------------|-------|---------------------------|-------|
| Intake Duration: | 294.0 | Exhaust Duration: | 294.0 |
| Intake Centerline Angle: | 109.0 | Exhaust Centerline Angle: | 111.0 |
| Lobe Centerline Angle: | 110.0 | Valve Overlap: | 74.0 |

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> |
|-----------------|------------------|
| 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

| <u>Lift: in</u> | <u>Flow: cfm</u> |
|-----------------|------------------|
| 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 | 47 | 163 | 14.70 | 47.9 | 81.5 |
| 2000 | 88 | 232 | 14.69 | 60.0 | 116.0 |
| 2500 | 127 | 266 | 14.68 | 67.1 | 133.1 |
| 3000 | 154 | 270 | 14.66 | 69.0 | 135.1 |
| 3500 | 196 | 294 | 14.64 | 74.9 | 147.0 |
| 4000 | 247 | 325 | 14.61 | 82.6 | 162.3 |
| 4500 | 294 | 343 | 14.56 | 87.8 | 171.1 |
| 5000 | 332 | 349 | 14.50 | 91.3 | 174.3 |
| 5500 | 361 | 345 | 14.44 | 93.1 | 172.3 |
| 6000 | 381 | 334 | 14.38 | 93.0 | 166.7 |
| 6500 | 395 | 319 | 14.32 | 92.8 | 159.3 |
| 7000 | 397 | 298 | 14.27 | 91.3 | 148.9 |
| 7500 | 398 | 279 | 14.22 | 89.5 | 139.3 |
| 8000 | 381 | 250 | 14.17 | 86.4 | 124.9 |
| 8500 | 358 | 221 | 14.15 | 82.8 | 110.5 |
| 9000 | 326 | 190 | 14.13 | 79.6 | 94.9 |
| 9500 | 293 | 162 | 14.11 | 76.7 | 80.9 |
| 10000 | 252 | 132 | 14.10 | 73.2 | 66.0 |
| 10500 | 197 | 99 | 14.09 | 69.4 | 49.3 |
| 11000 | 155 | 74 | 14.10 | 66.0 | 36.9 |
| 11500 | 106 | 48 | 14.11 | 63.4 | 24.2 |



