



ENGINE PERFORMANCE CURVE

RATING: RATED BRAKE POWER

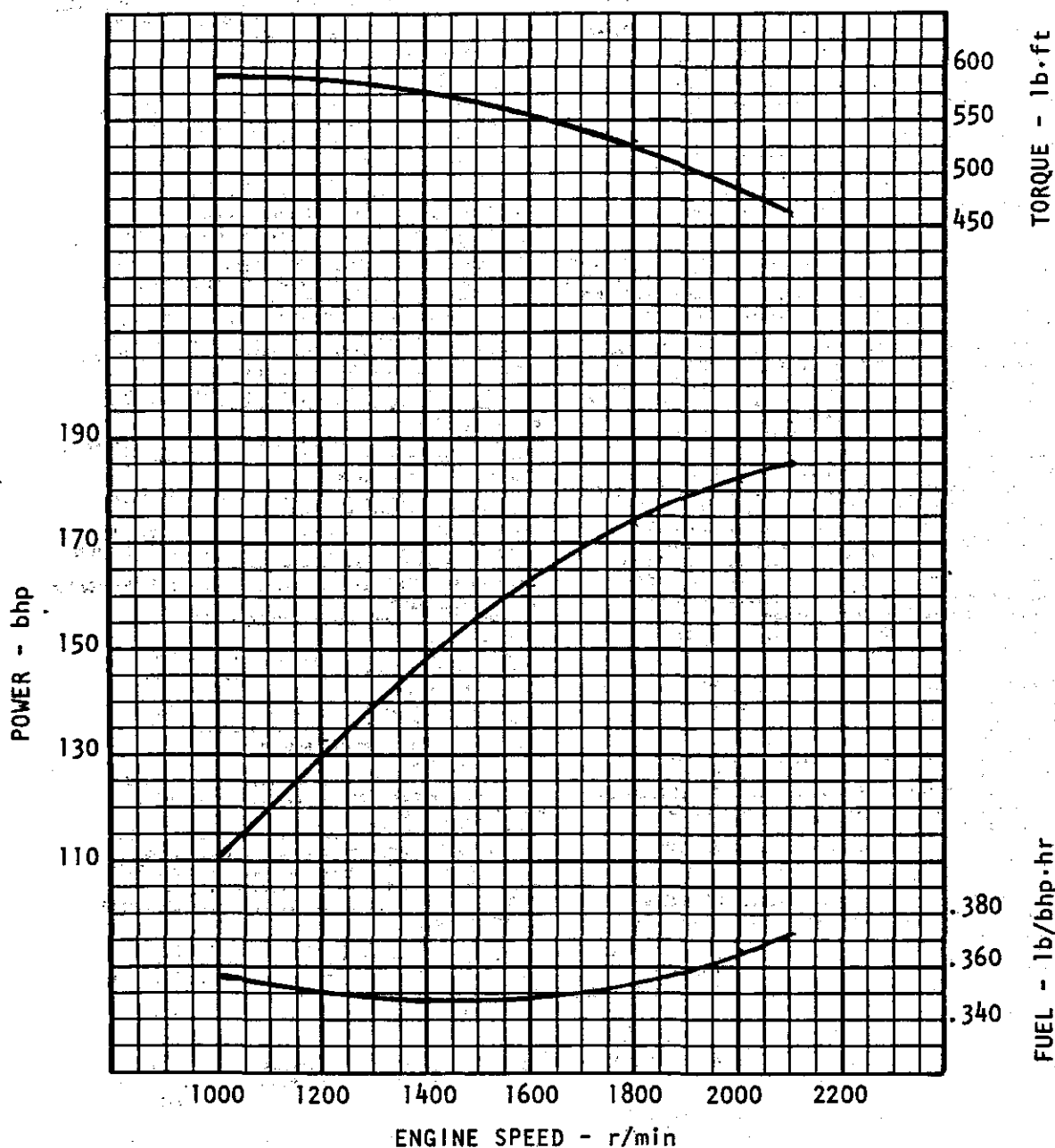
APPLICATION: AUTOMOTIVE - COACH
DIESEL FUEL NO. 1

CERTIFICATION: FEDERAL 1985

MODEL: 6V-71TA

185 bhp @ 2100 r/min

582 lb·ft @ 1000 r/min



AIR INTAKE RESTRICTION - in. H₂O (kPa) . . . 10 (2.5)

EXHAUST BACK PRESSURE - in. H₂O (kPa) . . . 15 (3.7)

- POWER OUTPUT GUARANTEED WITHIN 5% AT SAE J1349 CONDITIONS:
77°F (25°C) AIR INLET TEMPERATURE; 29.31 in. Hg (99kPa) DRY BAROMETER;
100°F (39°C) FUEL INLET TEMPERATURE (.816 SPECIFIC GRAVITY AT 60°F).
- CONVERSION FACTORS: POWER: kW = bhp × 0.746
FUEL: kg/kW·hr = lb/bhp·hr × 0.608
TORQUE: N·m = lb·ft × 1.356
- VALUES DERIVED ARE FROM CURRENTLY AVAILABLE DATA AND SUBJECT TO CHANGE WITHOUT NOTICE.

CERTIFIED BY:

P. J. [Signature]

STAFF ENGINEER

CURVE NO.

E4-7067-32-7

DATE: 8-7-84

REV./DATE: 1/9-11-84

SHT. 1 OF 2

ENGINE SPECIFICATION DATA

General Data

Model.....	6V-71TA COACH
Number of Cylinders.....	6
Bore and Stroke-in(mm).....	4.25x5.00(108x127)
Displacement-in ³ (L).....	426(6.9)
Compression Ratio.....	18.7:1
Piston Speed-ft/min(m/min).....	1750(533)
Valves Per Cylinder	
Intake.....	NOT APPLICABLE
Exhaust.....	4
Combustion System.....	DIRECT INJECTION
Engine Type.....	63.5° VEE - 2 CYCLE
Aspiration.....	TURBOCHARGED

Configuration

Turbocharger.....	TV7503(1.08 A/R)
Charge Air Cooling System.....	JWAC
Blower Type.....	BYPASS
Blower Drive Ratio.....	2.05:1
Low Idle Speed-r/min.....	550
High Idle Speed-r/min.....	2250
Thrust Bearing Load Limit	
Continuous-lbf(N).....	600(2670)
Intermittent-lbf(N).....	1800(8000)
Engine Crankcase Vent System.....	OPEN
Maximum Pressure-in H ₂ O(kPa).....	2.0(0.50)

Physical Data

Size	
Length-in(mm).....	VARIES WITH MODEL
Width-in(mm).....	VARIES WITH MODEL
Height-in(mm).....	VARIES WITH MODEL
Weight, dry-lb(kg).....	2080(943)
Center of Gravity Distance	
From R.F.O.B. (x axis)-in(mm).....	NOT AVAILABLE
Above Crankshaft (y axis)-in(mm).....	NOT AVAILABLE
Right of Crankshaft (z axis)-in(mm).....	NOT AVAILABLE
Installation Drawing.....	VARIES WITH MODEL
Maximum Allowable Static Bending Moment at Rear Face of FW Hsg-lbf ft(N m).....	600(814)

Fuel System

Fuel Injector/Timing.....	N55/1.474
Fuel Injection Pump/Timing.....	NOT APPLICABLE
Fuel Consumption-lb/hr(kg/hr).....	68.8(31.3)
Fuel Consumption-gal/hr(L/hr).....	9.8(37.2)
Fuel Spill Rate-lb/hr(kg/hr).....	503.3(228.3)
Fuel Spill Rate-gal/hr(L/hr).....	72.0(272.5)
Total Fuel Flow-lb/hr(kg/hr).....	571.8(259.9)
Total Fuel Flow-gal/hr(L/hr).....	81.8(309.6)
Maximum Allowable Fuel Pump Suction	
Clean System-in Hg(kPa).....	6(20)
Dirty System-in Hg(kPa).....	12(41)
Fuel Filter Micron Size	
Primary - Micron.....	30
Secondary - Micron.....	10

Lubrication System

Oil Pressure	
Rated Speed-lbf/in ² (kPa).....	60(414)
Low Idle-lbf/in ² (kPa).....	5(34)
In Pan Oil Temperature-°F(°C).....	200-250(93-121)
Oil Flow-gal/min(L/min).....	37(140)
Oil Pan Capacity	
High-qt(L).....	20.0(18.9)
Low-qt(L).....	16.0(15.1)
Total Engine Oil Capacity with filters-qt(L).....	22.0(20.8)
Bypass Oil Filter Orifice-in(mm).....	0.101(2.57)
Engine Angularity Limits	
Front up - degrees.....	VARIES WITH MODEL
Front down - degrees.....	VARIES WITH MODEL
Side tilt - degrees.....	VARIES WITH MODEL

Emission Data

CO-gm/hr.....	NOT AVAILABLE
HC-gm/hr.....	NOT AVAILABLE
NO _x -gm/hr.....	NOT AVAILABLE
SO ₂ -gm/hr.....	310
Smoke	
Rated Speed - Bosch Number.....	NOT AVAILABLE
Peak Torque Speed - Bosch Number.....	NOT AVAILABLE
Noise - dB(A) @ 1m.....	NOT AVAILABLE
Certification Approval.....	FEDERAL 1985

Cooling System

Engine Heat Rejection-Btu/min(kW).....	6000(105.6)
Engine Radiated Heat-Btu/min(kW).....	920(16)
Coolant Flow-gal/min(L/min).....	109(413)
Thermostat	
Start to Open-°F(°C).....	180(82.2)
Fully Open-°F(°C).....	197(91.7)
Maximum Water Pump Inlet	
Restriction-in Hg(kPa).....	0
Engine Coolant Capacity-qt(L).....	28(26.5)
Minimum Pressure Cap-lbf/in ² (kPa).....	9.0(62.1)
Maximum Coolant Pressure, (Exclusive of Pressure Cap)-lbf/in ² (kPa).....	NOT AVAILABLE
Maximum Top Tank Temperature-°F(°C).....	210(99)
Minimum Top Tank Temperature-°F(°C).....	160(71)
Minimum Coolant Fill Rate-gal/min(L/min).....	3.0(11.4)
Cooling Index	
Minimum Air to Boil-°F(°C).....	112(44.4)
Maximum Air to Water Diff.-°F(°C).....	100(55.6)
Ram Air Flow - Mile/hr(km/hr).....	15(24)
Deaeration-Air Injection	
Capacity-ft ³ /min(m ³ /min).....	0.6(0.017)
Drawdown - Minimum Requirement for 10% of Cooling System Capacity-Whichever is Larger)-qt(L).....	4.0(3.8)

Air System

Maximum Allowable Temperature Rise (Ambient Air to Engine Inlet)-°F(°C).....	30(16.7)
Air Intake Restriction Maximum Limit	
Dirty Air Cleaner-in H ₂ O(kPa).....	20(5.0)
Clean Air Cleaner-lq H ₂ O(kPa).....	12(3.0)
Engine Air Flow - ft ³ /min(m ³ /min).....	720(20.4)
Engine Air Box/Manifold Pressure-in Hg(kPa).....	32(107)
Recommended Intake Pipe Dia.-in(mm).....	6.0(152)

Exhaust System

Exhaust Flow-ft ³ /min(m ³ /min).....	1360(38.4)
Exhaust Temperature-°F(°C).....	550(288)
Maximum Allowable Back Pressure-in Hg(kPa).....	2.5(8.4)
Recommended Exhaust Pipe Dia.	
Single-in(mm).....	5.0(127)
Dual-in(mm).....	NOT APPLICABLE
Exhaust Brake Max. Allowable Back Pressure-in Hg(kPa).....	NOT APPLICABLE

Electrical System

Recommended Battery Capacity(CCA @ 0°F)	
12 Volt System	
Above 32°F(0°C)-A.....	950
Below 32°F(0°C)-A.....	1250
24 Volt System	
Above 32°F(0°C)-A.....	475
Below 32°F(0°C)-A.....	625
Maximum Allowable Resistance of Starting Circuit	
12 volt system - ohm.....	0.0012
24 volt system - ohm.....	0.002

Performance Data

Power Output-bhp(kW).....	185(138)
Full Load Speed-r/min.....	2100
Peak Torque-lb ft(N m).....	582(789)
Peak Torque Speed-r/min.....	1000
BMEP-lbf/in ² (kPa).....	82.0(565)
Friction Power	
Rated Speed-bhp(kW).....	57(43)
Peak Torque Speed-bhp(kW).....	17(13)
Altitude Capability-ft(m).....	16000(4880)
Torque Available at 800 r/min-lb ft (N m).....	525(712)

Engine

Speed r/min	Power bhp(kW)	Torque lb ft(N m)	BSEC lb/bhp hr (g/kW hr)
2100	185(138)	463(628)	.372(226)
2000	182(136)	478(648)	.366(223)
1800	174(130)	507(687)	.357(217)
1600	162(121)	532(721)	.351(213)
1400	148(110)	556(754)	.348(212)
1200	133 (99)	581(788)	.350(213)
1000	111 (83)	582(789)	.357(217)

Notes: Performance shown is with Diesel No. 1 fuel.

All values at rated speed and power and with standard engine hardware unless otherwise noted.

Curve No. E4-7067-32-7
Date: 8-7-84
Rev./Date: 1/9-11-84
Sht. 2 of 2



ENGINE PERFORMANCE CURVE

RATING: RATED BRAKE POWER

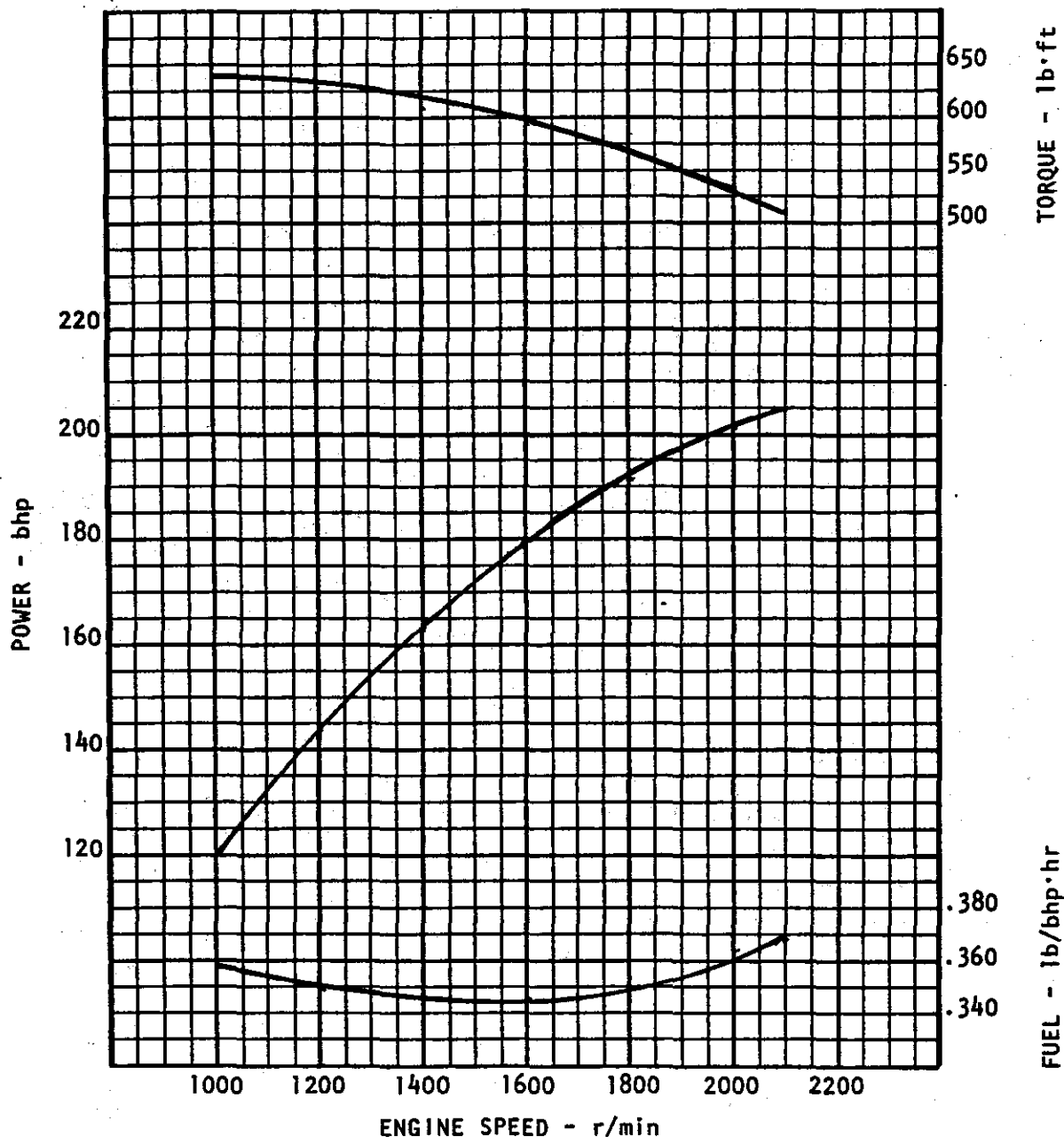
APPLICATION: AUTOMOTIVE - COACH
DIESEL FUEL NO. 1

CERTIFICATION: FEDERAL 1985

MODEL: 6V-71TA

205 bhp @ 2100 r/min

632 lb·ft @ 1000 r/min



AIR INTAKE RESTRICTION - in. H₂O (kPa) . . . 10 (2.5)

EXHAUST BACK PRESSURE - in. H₂O (kPa) . . . 15 (3.7)

- POWER OUTPUT GUARANTEED WITHIN 5% AT SAE J1349 CONDITIONS:
77°F (25°C) AIR INLET TEMPERATURE; 29.31 in. Hg (99kPa) DRY BAROMETER;
100°F (39°C) FUEL INLET TEMPERATURE (.816 SPECIFIC GRAVITY AT 60°F).
- CONVERSION FACTORS: POWER: kW = bhp × 0.746
FUEL: kg/kW-hr = lb/bhp-hr × 0.608
TORQUE: N·m = lb·ft × 1.356
- VALUES DERIVED ARE FROM CURRENTLY AVAILABLE DATA AND SUBJECT TO CHANGE WITHOUT NOTICE.

CERTIFIED BY:

Asst. Eng.

STAFF ENGINEER

CURVE NO.

E4-7067-32-6

DATE: 8-7-84

REV./DATE: 1/9-11-84

SHT. 1 OF 2

ENGINE SPECIFICATION DATA

General Data

Model.....	6V-71TA COACH
Number of Cylinders.....	6
Bore and Stroke-in(mm).....	4.25x5.00(108x127)
Displacement-in ³ (L).....	426(6.9)
Compression Ratio.....	18.7:1
Piston Speed-ft/min(m/min).....	1750(533)
Valves Per Cylinder.....	

Intake.....	NOT APPLICABLE
Exhaust.....	4
Combustion System.....	DIRECT INJECTION
Engine Type.....	63.5° VEE - 2 CYCLE
Aspiration.....	TURBOCHARGED

Configuration

Turbocharger.....	TY7503(1.08 A/R)
Charge Air Cooling System.....	JWAC
Blower Type.....	BYPASS
Blower Drive Ratio.....	2.05:1
Low Idle Speed-r/min.....	550
High Idle Speed-r/min.....	2250
Thrust Bearing Load Limit	
Continuous-lbf(N).....	600(2670)
Intermittent-lbf(N).....	1800(8000)
Engine Crankcase Vent System.....	OPEN
Maximum Pressure-in H ₂ O(kPa).....	2.0(0.50)

Physical Data

Size	
Length-in(mm).....	VARIABLES WITH MODEL
Width-in(mm).....	VARIABLES WITH MODEL
Height-in(mm).....	VARIABLES WITH MODEL
Weight, dry-lb(kg).....	2080(943)
Center of Gravity Distance	
From R.F.O.B. (x axis)-in(mm).....	NOT AVAILABLE
Above Crankshaft (y axis)-in(mm).....	NOT AVAILABLE
Right of Crankshaft (z axis)-in(mm).....	NOT AVAILABLE
Installation Drawing.....	VARIABLES WITH MODEL
Maximum Allowable Static Bending Moment at Rear Face of FW Hg-lbf ft(N m).....	600(814)

Fuel System

Fuel Injector/Timing.....	M50/1.474
Fuel Injection Pump/Timing.....	NOT APPLICABLE
Fuel Consumption-lb/hr(kg/hr).....	75.4(34.3)
Fuel Consumption-gal/hr(L/hr).....	10.8(40.8)
Fuel Spill Rate-lb/hr(kg/hr).....	503.3(228.3)
Fuel Spill Rate-gal/hr(L/hr).....	72.0(272.5)
Total Fuel Flow-lb/hr(kg/hr).....	578.7(262.6)
Total Fuel Flow-gal/hr(L/hr).....	82.8(313.3)
Maximum Allowable Fuel Pump Suction	
Clean System-in Hg(kPa).....	6(20)
Dirty System-in Hg(kPa).....	12(41)
Fuel Filter Micron Size	
Primary - Micron.....	30
Secondary - Micron.....	10

Lubrication System

Oil Pressure	
Rated Speed-lbf/in ² (kPa).....	60(414)
Low Idle-lbf/in ² (kPa).....	5(34)
In Pan Oil Temperature-°F(°C).....	200-250(93-121)
Oil Flow-gal/min(L/min).....	37(140)
Oil Pan Capacity	
High-qt(L).....	20.0(18.9)
Low-qt(L).....	16.0(15.1)
Total Engine Oil Capacity with filters-qt(L).....	22.0(20.8)
Bypass Oil Filter Orifice-in(mm).....	0.101(2.57)
Engine Angularity Limits	
Front up - degrees.....	VARIABLES WITH MODEL
Front down - degrees.....	VARIABLES WITH MODEL
Side tilt - degrees.....	VARIABLES WITH MODEL

Emission Data

CO-gm/hr.....	NOT AVAILABLE
HC-gm/hr.....	NOT AVAILABLE
NO _x -gm/hr.....	NOT AVAILABLE
SO ₂ -gm/hr.....	340
Smoke	
Rated Speed - Bosch Number.....	NOT AVAILABLE
Peak Torque Speed - Bosch Number.....	NOT AVAILABLE
Noise - dB(A) @ 1m.....	NOT AVAILABLE
Certification Approval.....	FEDERAL 1985

Cooling System

Engine Heat Rejection-Btu/min(kW).....	7000(123.2)
Engine Radiated Heat-Btu/min(kW).....	1000(17)
Coolant Flow-gal/min(L/min).....	109(413)
Thermostat	
Start to Open-°F(°C).....	180(182.2)
Fully Open-°F(°C).....	197(91.7)
Maximum Water Pump Inlet	
Restriction-in Hg(kPa).....	0
Engine Coolant Capacity-qt(L).....	28(26.5)
Minimum Pressure Cap-lbf/in ² (kPa).....	9.0(62.1)
Maximum Coolant Pressure (Exclusive of Pressure Cap)-lbf/in ² (kPa).....	NOT AVAILABLE
Maximum Top Tank Temperature-°F(°C).....	210(99)
Minimum Top Tank Temperature-°F(°C).....	160(71)
Minimum Coolant Fill Rate-gal/min(L/min).....	3.0(11.4)
Cooling Index	
Minimum Air to Boil-°F(°C).....	112(44.4)
Maximum Air to Water Diff.-°F(°C).....	100(59.6)
Ram Air Flow - Mile/hr(km/hr).....	15(24)
Deaeration-Air Injection	
Capacity-ft ³ /min(m ³ /min).....	0.6(0.017)
Drawdown - Minimum Requirement (or 10% of Cooling System Capacity-Whichever is Larger)-qt(L).....	4.0(3.8)

Air System

Maximum Allowable Temperature Rise (Ambient Air to Engine Inlet)-°F(°C).....	30(16.7)
Air Intake Restriction Maximum Limit	
Dirty Air Cleaner-in H ₂ O(kPa).....	20(5.0)
Clean Air Cleaner-in H ₂ O(kPa).....	12(3.0)
Engine Air Flow - ft ³ /min(m ³ /min).....	770(21.8)
Engine Air Box/Manifold Pressure-in Hg(kPa).....	35(118)
Recommended Intake Pipe Dia.-in(mm).....	6.0(152)

Exhaust System

Exhaust Flow-ft ³ /min(m ³ /min).....	1580(44.8)
Exhaust Temperature-°F(°C).....	570(300)
Maximum Allowable Back Pressure-in Hg(kPa).....	2.5(8.4)
Recommended Exhaust Pipe Dia.	
Single-in(mm).....	5.0(127)
Dual-in(mm).....	NOT APPLICABLE
Exhaust Brake Max. Allowable Back Pressure-in Hg(kPa).....	NOT APPLICABLE

Electrical System

Recommended Battery Capacity(CCA @ 0°F)	
12 Volt System	
Above 32°F(0°C)-A.....	950
Below 32°F(0°C)-A.....	1250
24 Volt System	
Above 32°F(0°C)-A.....	475
Below 32°F(0°C)-A.....	625
Maximum Allowable Resistance of Starting Circuit	
12 volt system - ohm.....	0.0012
24 volt system - ohm.....	0.002

Performance Data

Power Output-bhp(kW).....	205(153)
Full Load Speed-r/min.....	2100
Peak Torque-lb ft(N m).....	632(857)
Peak Torque Speed-r/min.....	1000
BMEP-lbf/in ² (kPa).....	90.9(627)
Friction Power	
Rated Speed-bhp(kW).....	57(43)
Peak Torque Speed-bhp(kW).....	17(13)
Altitude Capability-ft(m).....	16000(4880)
Torque Available at 800 r/min-lb ft (N m).....	575(780)

Engine

Speed r/min	Power bhp(kW)	Torque lb ft(N m)	BSEC lb/bhp hr (g/kW hr)
2100	205(153)	513(695)	368(223)
2000	201(150)	528(715)	363(221)
1800	192(143)	560(759)	353(215)
1600	180(134)	590(800)	347(211)
1400	163(122)	611(828)	346(210)
1200	143(107)	627(850)	349(212)
1000	120 (90)	632(857)	358(218)

Notes: Performance shown is with Diesel No. 1 fuel.

All values at rated speed and power and with standard engine hardware unless otherwise noted.

Curve No. E4-7067-32-6
Date: 8-7-84
Rev./Date: 1/9-11-84
Sht. 2 of 2



ENGINE PERFORMANCE CURVE

RATING: RATED BRAKE POWER

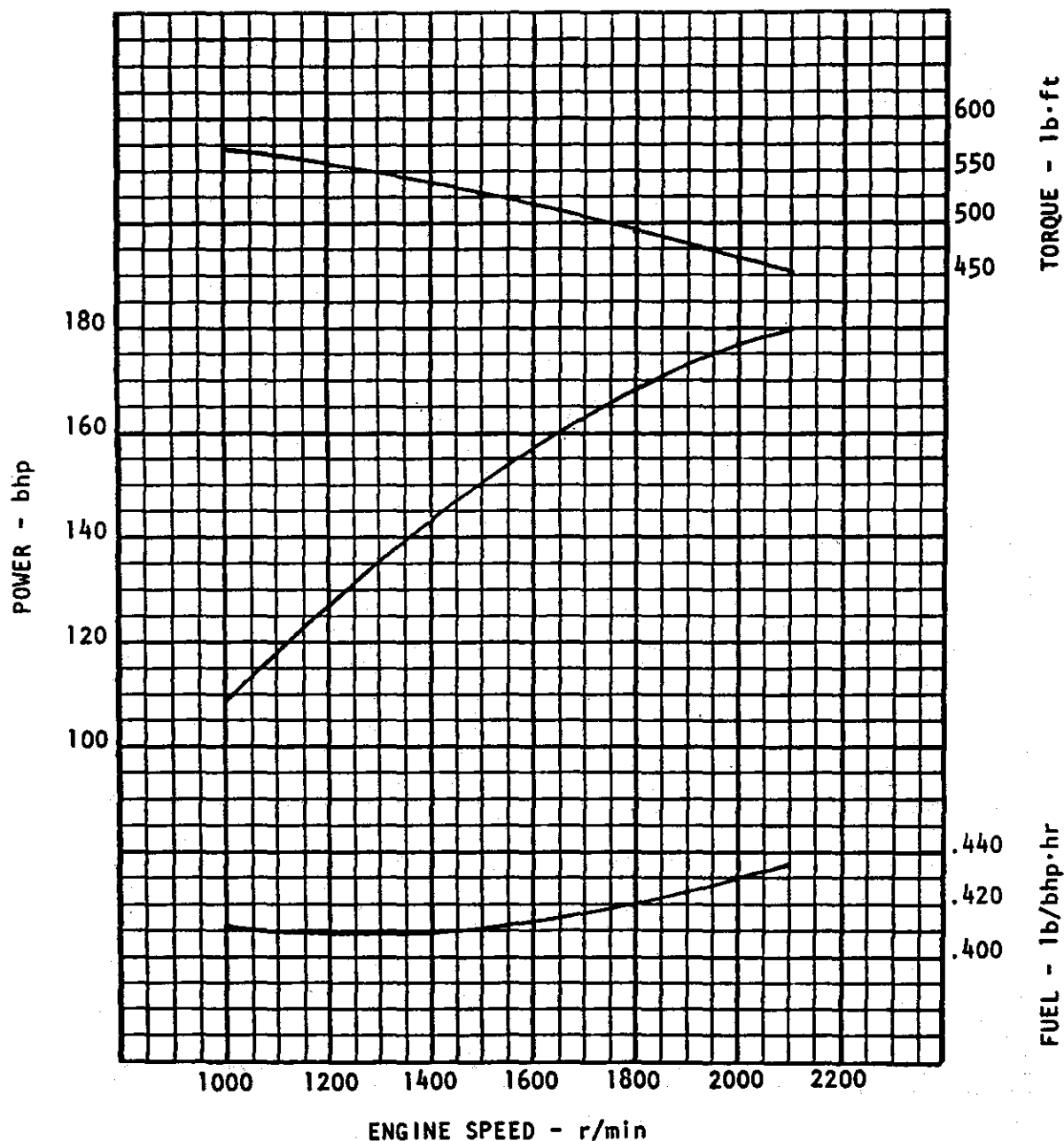
APPLICATION: AUTOMOTIVE - COACH
DIESEL FUEL NO. 1

CERTIFICATION: FEDERAL 1985

MODEL: 6V-71N (2V)

180 bhp @ 2100 r/min

572 lb·ft @ 1000 r/min



AIR INTAKE RESTRICTION - in. H₂O (kPa) . . . 10 (2.5)
EXHAUST BACK PRESSURE - in. H₂O (kPa) . . . 15 (3.7)

- POWER OUTPUT GUARANTEED WITHIN 5% AT SAE J1349 CONDITIONS:
77°F (25°C) AIR INLET TEMPERATURE; 29.31 in. Hg (99kPa) DRY BAROMETER;
100°F (39°C) FUEL INLET TEMPERATURE (.816 SPECIFIC GRAVITY AT 60°F).
- CONVERSION FACTORS: POWER: kW = bhp × 0.746
FUEL: kg/kW·hr = lb/bhp·hr × 0.608
TORQUE: N·m = lb·ft × 1.356
- VALUES DERIVED ARE FROM CURRENTLY AVAILABLE DATA AND SUBJECT TO CHANGE WITHOUT NOTICE.

CERTIFIED BY:

Peter J. Perdue
1-16-85
STAFF ENGINEER

CURVE NO.

E4-7067-51-2

DATE: 1-2-85

REV./DATE:

SHT. 1 OF 2

ENGINE SPECIFICATION DATA

General Data

Model.....	7067-7141
Number of Cylinders.....	6
Bore and Stroke-in(mm).....	4.25x5.00(108x127)
Displacement-in ³ (L).....	426(6.9)
Compression Ratio.....	18.7:1
Piston Speed-ft/min(m/min).....	1750(533)
Valves Per Cylinder	
Intake.....	NOT APPLICABLE
Exhaust.....	2
Combustion System.....	DIRECT INJECTION
Engine Type.....	63.5° YEE - 2 CYCLE
Aspiration.....	NATURAL

Configuration

Turbocharger.....	NOT APPLICABLE
Charge Air Cooling System.....	NONE
Blower Type.....	STANDARD
Blower Drive Ratio.....	2.05:1
Low Idle Speed-r/min.....	500
High Idle Speed-r/min.....	2225
Thrust Bearing Load Limit	
Continuous-lbf(N).....	600(2670)
Intermittent-lbf(N).....	1800(8000)
Engine Crankcase Vent System.....	OPEN
Maximum Pressure-in H ₂ O(kPa).....	3.0(0.75)

Physical Data

Size	
Length-in(mm).....	VARIABLE WITH MODEL
Width-in(mm).....	VARIABLE WITH MODEL
Height-in(mm).....	VARIABLE WITH MODEL
Weight-dry-lb(kg).....	1960(889)
Center of Gravity Distance	
From R.F.O.B. (x axis)-in(mm).....	VARIABLE WITH MODEL
Above Crankshaft (y axis)-in(mm).....	VARIABLE WITH MODEL
Right of Crankshaft (z axis)-in(mm).....	VARIABLE WITH MODEL
Installation Drawing.....	VARIABLE WITH MODEL
Maximum Allowable Static Bending Moment at Rear Face of FW Hsg-lbf ft(N m)....	600

Fuel System

Fuel Injector/Timing.....	7660/1.484
Fuel Injection Pump/Timing.....	NOT APPLICABLE
Fuel Consumption-lb/hr(kg/hr).....	78.3(35.5)
Fuel Consumption-gal/hr(L/hr).....	11.7(44.4)
Fuel Spill Rate-lb/hr(kg/hr).....	481.0(218.2)
Fuel Spill Rate-gal/hr(L/hr).....	72(272.5)
Total Fuel Flow-lb/hr(kg/hr).....	559.3(253.7)
Total Fuel Flow-gal/hr(L/hr).....	83.7(316.9)
Maximum Allowable Fuel Pump Suction	
Clean System-in Hg(kPa).....	6(20)
Dirty System-in Hg(kPa).....	12(41)
Fuel Filter Micron Size	
Primary - Micron.....	30
Secondary - Micron.....	10

Lubrication System

Oil Pressure	
Rated Speed-lbf/in ² (kPa).....	60(414)
Low Idle-lbf/in ² (kPa).....	5(34)
In Pan Oil Temperature-°F(°C).....	200-235(93-113)
Oil Flow-gal/min(L/min).....	39(148)
Oil Pan Capacity	
High-qt(L).....	20(18.9)
Low-qt(L).....	16(15.1)
Total Engine Oil Capacity with filters-qt(L).....	22(20.8)
Bypass Oil Filter Orifice-in(mm).....	0.101(2.57)
Engine Angularity Limits	
Front up - degrees.....	15
Front down - degrees.....	15
Side tilt - degrees.....	15

Emission Data

CO-gm/hr.....	NOT AVAILABLE
HC-gm/hr.....	NOT AVAILABLE
NO _x -gm/hr.....	NOT AVAILABLE
SO ₂ -gm/hr.....	360
Smoke	
Rated Speed - Bosch Number.....	NOT AVAILABLE
Peak Torque Speed - Bosch Number.....	NOT AVAILABLE
Noise - dB(A) @ 1m.....	101
Certification Approval.....	FEDERAL 1985

Cooling System

Engine Heat Rejection-Btu/min(kW).....	6100(107.3)
Engine Radiated Heat-Btu/min(kW).....	1160(20.4)
Coolant Flow-gal/min(L/min).....	75(276)
Thermostat	
Start to Open-°F(°C).....	180(82.2)
Fully Open-°F(°C).....	197(92)
Maximum Water Pump Inlet	
Restriction-in Hg(kPa).....	0
Engine Coolant Capacity-qt(L).....	28(26.5)
Minimum Pressure Cap-lbf/in ² (kPa).....	9.0(62.1)
Maximum Coolant Pressure, Exclusive of Pressure Cap-lbf/in ² (kPa).....	NOT AVAILABLE
Maximum Top Tank Temperature-°F(°C).....	210(99)
Minimum Top Tank Temperature-°F(°C).....	160(71)
Minimum Coolant Fill Rate-gal/min(L/min).....	3.0(11.4)
Cooling Index	
Minimum Air to Boil-°F(°C).....	112(44.4)
Maximum Air to Water Diff.-°F(°C).....	100(35.6)
Rem Air Flow - Mile/hr(km/hr).....	15(24)
Deaeration-Air Injection	
Capacity-ft ³ /min(m ³ /min).....	0.6(0.017)
Drawdown - Minimum Requirement (or 10% of Cooling System Capacity-Whichever is Larger)-qt(L).....	4.0(3.8)

Air System

Maximum Allowable Temperature Rise (Ambient Air to Engine Inlet)-°F(°C)....	30(16.7)
Air Intake Restriction Maximum Limit	
Dirty Air Cleaner-in H ₂ O(kPa).....	25.0(6.2)
Clean Air Cleaner-lg H ₂ O(kPa).....	15.9(4.0)
Engine Air Flow - ft ³ /min(m ³ /min).....	620(17.6)
Engine Air Box/Manifold Pressure-in Hg(kPa).....	14(47.3)
Recommended Intake Pipe Dia.-in(mm)....	5.5(140)

Exhaust System

Exhaust Flow-ft ³ /min(m ³ /min).....	1540(44)
Exhaust Temperature-°F(°C).....	870(466)
Maximum Allowable Back Pressure-in Hg(kPa).....	4.0(13.5)
Recommended Exhaust Pipe Dia.	
Single-in(mm).....	4.0(102)
Dual-in(mm).....	3.0(76.2)
Exhaust Brake Max. Allowable Back Pressure-in Hg(kPa).....	NOT APPLICABLE

Electrical System

Recommended Battery Capacity(CCA @ 0°F)	
12 Volt System	
Above 32°F(0°C)-A.....	950
Below 32°F(0°C)-A.....	1250
24 Volt System	
Above 32°F(0°C)-A.....	475
Below 32°F(0°C)-A.....	625
Maximum Allowable Resistance of Starting Circuit	
12 volt system - ohm.....	0.0012
24 volt system - ohm.....	0.002

Performance Data

Power Output-bhp(kW).....	180(134)
Full Load Speed-r/min.....	2100
Peak Torque-lb ft(N m).....	572(776)
Peak Torque Speed-r/min.....	1000
BMEP-lbf/in ² (kPa).....	79.7(350)
Friction Power	
Rated Speed-bhp(kW).....	65(48)
Peak Torque Speed-bhp(kW).....	19(14)
Altitude Capability-ft(m).....	12000(3660)
Torque Available at 800 r/min-lb ft (N m).....	505(685)

Engine

Speed r/min	Power bhp(kW)	Torque lb ft(N m)	BSFC lb/bhp hr (g/kW hr)
2100	180(134)	450(610)	.435(265)
2000	177(132)	463(630)	.429(261)
1800	168(125)	490(664)	.420(255)
1600	157(117)	515(698)	.413(251)
1400	145(107)	536(727)	.409(249)
1200	127 (95)	556(754)	.409(249)
1000	109 (81)	572(776)	.411(255)

Note: Performance shown is with Diesel No. 1 fuel.

All values at rated speed and power and with standard engine hardware unless otherwise noted.

Curve No. E4-7067-51-2

Date: 1-2-85

Rev./Date:

Sht. 2 of 2



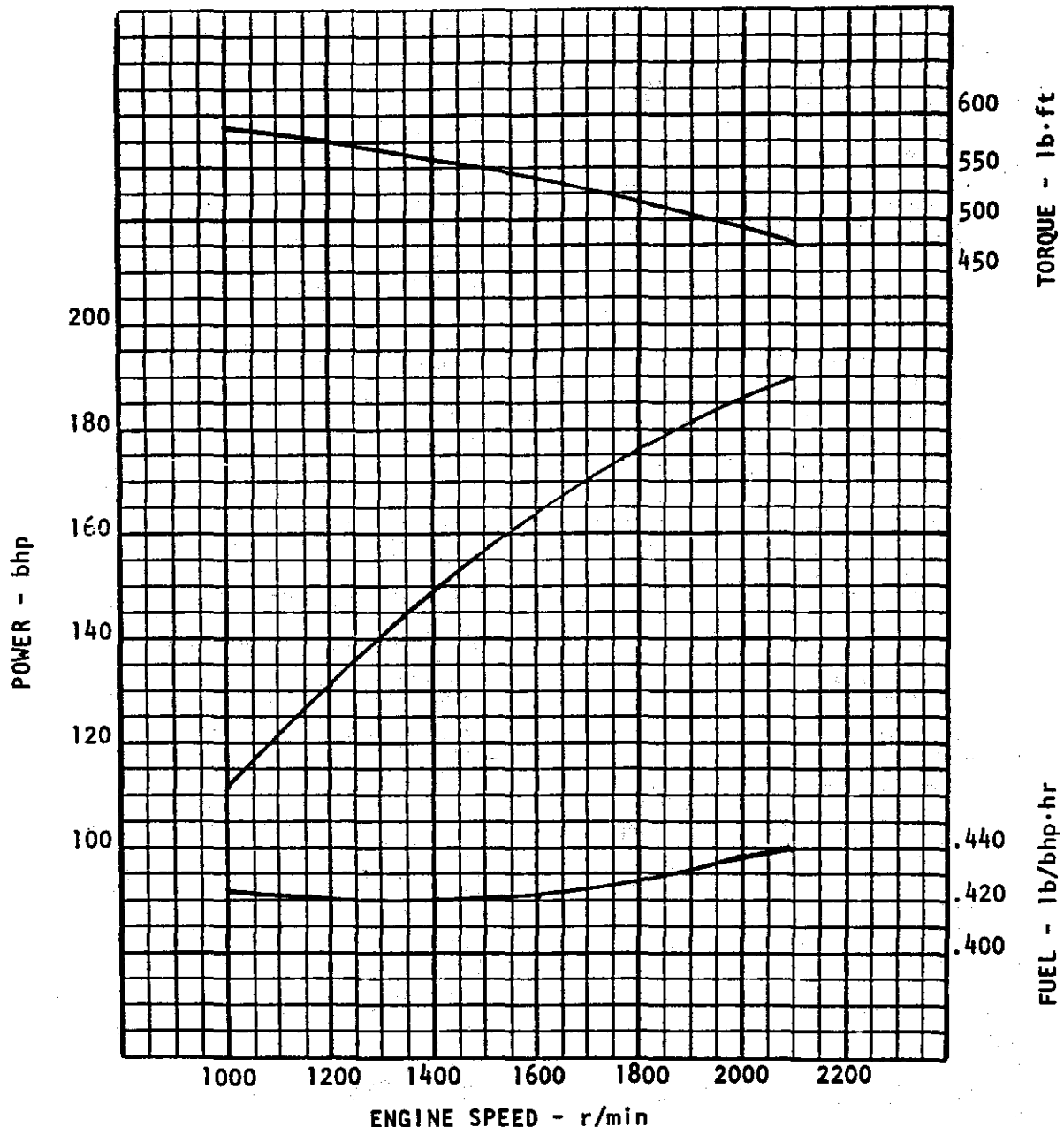
ENGINE PERFORMANCE CURVE

RATING: RATED BRAKE POWER

APPLICATION: AUTOMOTIVE - COACH
DIESEL FUEL NO. 2

CERTIFICATION: FEDERAL 1985

MODEL: 6V-71N (2V)
190 bhp @ 2100 r/min
588 lb·ft @ 1000 r/min



AIR INTAKE RESTRICTION - in. H₂O (kPa) . . . 10 (2.5)
EXHAUST BACK PRESSURE - in. H₂O (kPa) . . . 15 (3.7)

- POWER OUTPUT GUARANTEED WITHIN 5% AT SAE J1349 CONDITIONS:
77°F (25°C) AIR INLET TEMPERATURE; 29.31 in. Hg (99kPa) DRY BARMETER;
100°F (39°C) FUEL INLET TEMPERATURE (.853 SPECIFIC GRAVITY AT 60°F).
- CONVERSION FACTORS: POWER: kW = bhp × 0.746
FUEL: kg/kW·hr = lb/bhp·hr × 0.608
TORQUE: N·m = lb·ft × 1.356
- VALUES DERIVED ARE FROM CURRENTLY AVAILABLE DATA AND SUBJECT TO CHANGE WITHOUT NOTICE.

CERTIFIED BY:

Ates R. Pender
1-16-85
STAFF ENGINEER

CURVE NO.

E4-7067-51-1
DATE: 1-2-85
REV./DATE:
SHT. 1 OF 2

ENGINE SPECIFICATION DATA

General Data

Model.....	7067-7141
Number of Cylinders.....	6
Bore and Stroke-In(mm).....	4.25x5.00(108x127)
Displacement-In ³ (L).....	426(6.9)
Compression Ratio.....	18.7:1
Piston Speed-ft/min(m/min).....	1750(533)
Valves Per Cylinder	
Intake.....	NOT APPLICABLE
Exhaust.....	2
Combustion System.....	DIRECT INJECTION
Engine Type.....	83.5° VEE - 2 CYCLE
Aspiration.....	NATURAL

Configuration

Turbocharger.....	NOT APPLICABLE
Charge Air Cooling System.....	NONE
Blower Type.....	STANDARD
Blower Drive Ratio.....	2.05:1
Low Idle Speed-r/min.....	500
High Idle Speed-r/min.....	2225
Thrust Bearing Load Limit	
Continuous-lbf(N).....	600(2670)
Intermittent-lbf(N).....	1800(8000)
Engine Crankcase Vent System.....	OPEN
Maximum Pressure-In H ₂ O(kPa).....	3.0(0.75)

Physical Data

Size	
Length-In(mm).....	VARIES WITH MODEL
Width-In(mm).....	VARIES WITH MODEL
Height-In(mm).....	VARIES WITH MODEL
Weight, dry-lb(kg).....	1960(889)
Center of Gravity Distance	
From R.F.O.B. (x axis)-In(mm).....	VARIES WITH MODEL
Above Crankshaft (y axis)-In(mm).....	VARIES WITH MODEL
Right of Crankshaft (z axis)-In(mm).....	VARIES WITH MODEL
Installation Drawing.....	VARIES WITH MODEL
Maximum Allowable Static Bending Moment at Rear Face of FW Hsg-lbf ft(N m).....	600

Fuel System

Fuel Injector/Timing.....	7660/1.484
Fuel Injection Pump/Timing.....	NOT APPLICABLE
Fuel Consumption-lb/hr(kg/hr).....	83.6(37.9)
Fuel Consumption-gal/hr(L/hr).....	12.0(45.3)
Fuel Spill Rate-lb/hr(kg/hr).....	503.3(228.3)
Fuel Spill Rate-gal/hr(L/hr).....	72(272.5)
Total Fuel Flow-lb/hr(kg/hr).....	586.9(266.2)
Total Fuel Flow-gal/hr(L/hr).....	84.0(317.8)
Maximum Allowable Fuel Pump Suction	
Clean System-In Hg(kPa).....	6(20)
Dirty System-In Hg(kPa).....	12(41)
Fuel Filter Micron Size	
Primary - Micron.....	30
Secondary - Micron.....	10

Lubrication System

Oil Pressure	
Rated Speed-lbf/in ² (kPa).....	60(414)
Low Idle-lbf/in ² (kPa).....	5(34)
In Pan Oil Temperature-°F(°C).....	200-235(93-113)
Oil Flow-gal/min(L/min).....	39(148)
Oil Pan Capacity	
High-qt(L).....	20(18.9)
Low-qt(L).....	16(15.1)
Total Engine Oil Capacity with filters-qt(L).....	22(20.8)
Bypass Oil Filter Orifice-In(mm).....	0.101(2.57)
Engine Angularity Limits	
Front up - degrees.....	15
Front down - degrees.....	15
Side tilt - degrees.....	15

Emission Data

CO-gm/hr.....	380
HC-gm/hr.....	102
NO _x -gm/hr.....	4610
SO ₂ -gm/hr.....	380
Smoke	
Rated Speed - Bosch Number.....	0.3
Peak Torque Speed - Bosch Number.....	0.3
Noise - dB(A) @ 1m.....	101
Certification Approval.....	FEDERAL 1985

Cooling System

Engine Heat Rejection-Btu/min(kW).....	6320(111.1)
Engine Radiated Heat-Btu/min(kW).....	1230(21.6)
Coolant Flow-gal/min(L/min).....	73(276)
Thermostat	
Start to Open-°F(°C).....	180(82.2)
Fully Open-°F(°C).....	197(92)
Maximum Water Pump Inlet	
Restriction-In Hg(kPa).....	0
Engine Coolant Capacity-qt(L).....	28(26.5)
Minimum Pressure Cap-lbf/in ² (kPa).....	9.0(62.1)
Maximum Coolant Pressure (Exclusive of Pressure Cap)-lbf/in ² (kPa).....	NOT AVAILABLE
Maximum Top Tank Temperature-°F(°C).....	210(99)
Minimum Top Tank Temperature-°F(°C).....	160(71)
Minimum Coolant Fill Rate-gal/min(L/min).....	3.0(11.4)
Cooling Index	
Minimum Air to Boil-°F(°C).....	112(44.4)
Maximum Air to Water Diff.-°F(°C).....	100(35.6)
Ram Air Flow - Mile/hr(km/hr).....	15(24)
Deaeration-Air Injection	
Capacity-ft ³ /min(m ³ /min).....	0.6(0.017)
Drawdown - Minimum Requirement (or 10% of Cooling System Capacity-Whichever is Larger)-qt(L).....	4.0(3.8)

Air System

Maximum Allowable Temperature Rise (Ambient Air to Engine Inlet)-°F(°C).....	30(16.7)
Air Intake Restriction Maximum Limit	
Dirty Air Cleaner-In H ₂ O(kPa).....	25.0(6.2)
Clean Air Cleaner-In H ₂ O(kPa).....	15.9(4.0)
Engine Air Flow - ft ³ /min(m ³ /min).....	653(18.5)
Engine Air Box/Manifold Pressure-In Hg(kPa).....	14.0(47.3)
Recommended Intake Pipe Dia.-In(mm).....	5.5(140)

Exhaust System

Exhaust Flow-ft ³ /min(m ³ /min).....	1520(43.0)
Exhaust Temperature-°F(°C).....	785(418)
Maximum Allowable Back Pressure-In Hg(kPa).....	4.0(13.5)
Recommended Exhaust Pipe Dia.	
Single-In(mm).....	4.0(102)
Dual-In(mm).....	3.0(76.2)
Exhaust Brake Max. Allowable Back Pressure-In Hg(kPa).....	NOT APPLICABLE

Electrical System

Recommended Battery Capacity(CCA @ 0°F)	
12 Volt System	
Above 32°F(0°C)-A.....	930
Below 32°F(0°C)-A.....	1250
24 Volt System	
Above 32°F(0°C)-A.....	475
Below 32°F(0°C)-A.....	625
Maximum Allowable Resistance of Starting Circuit	
12 volt system - ohm.....	0.0012
24 volt system - ohm.....	0.002

Performance Data

Power Output-bhp(kW).....	190(142)
Full Load Speed-r/min.....	2100
Peak Torque-lb ft(N m).....	588(797)
Peak Torque Speed-r/min.....	1000
BMEP-lbf/in ² (kPa).....	84.2(580)
Friction Power	
Rated Speed-bhp(kW).....	65(48)
Peak Torque Speed-bhp(kW).....	19(14)
Altitude Capability-ft(m).....	12000(3660)
Torque Available at 800 r/min-lb ft (N m).....	515(698)

Engine

Speed r/min	Power bhp(kW)	Torque lb ft(N m)	BSPC lb/bhp hr (g/kW hr)
2100	190(142)	475(644)	.440(268)
2000	186(139)	488(662)	.436(263)
1800	177(132)	515(698)	.427(260)
1600	164(123)	539(731)	.421(256)
1400	149(111)	557(759)	.420(255)
1200	131(98)	575(780)	.420(255)
1000	112(84)	588(797)	.423(257)

Note: Performance shown is with Diesel No. 2 fuel.

All values at rated speed and power and with standard engine hardware unless otherwise noted.

Curve No. E4-7067-51-1
Date: 1-2-83
Rev./Date:
Sht. 2 of 2



ENGINE PERFORMANCE CURVE

RATING: RATED BRAKE POWER

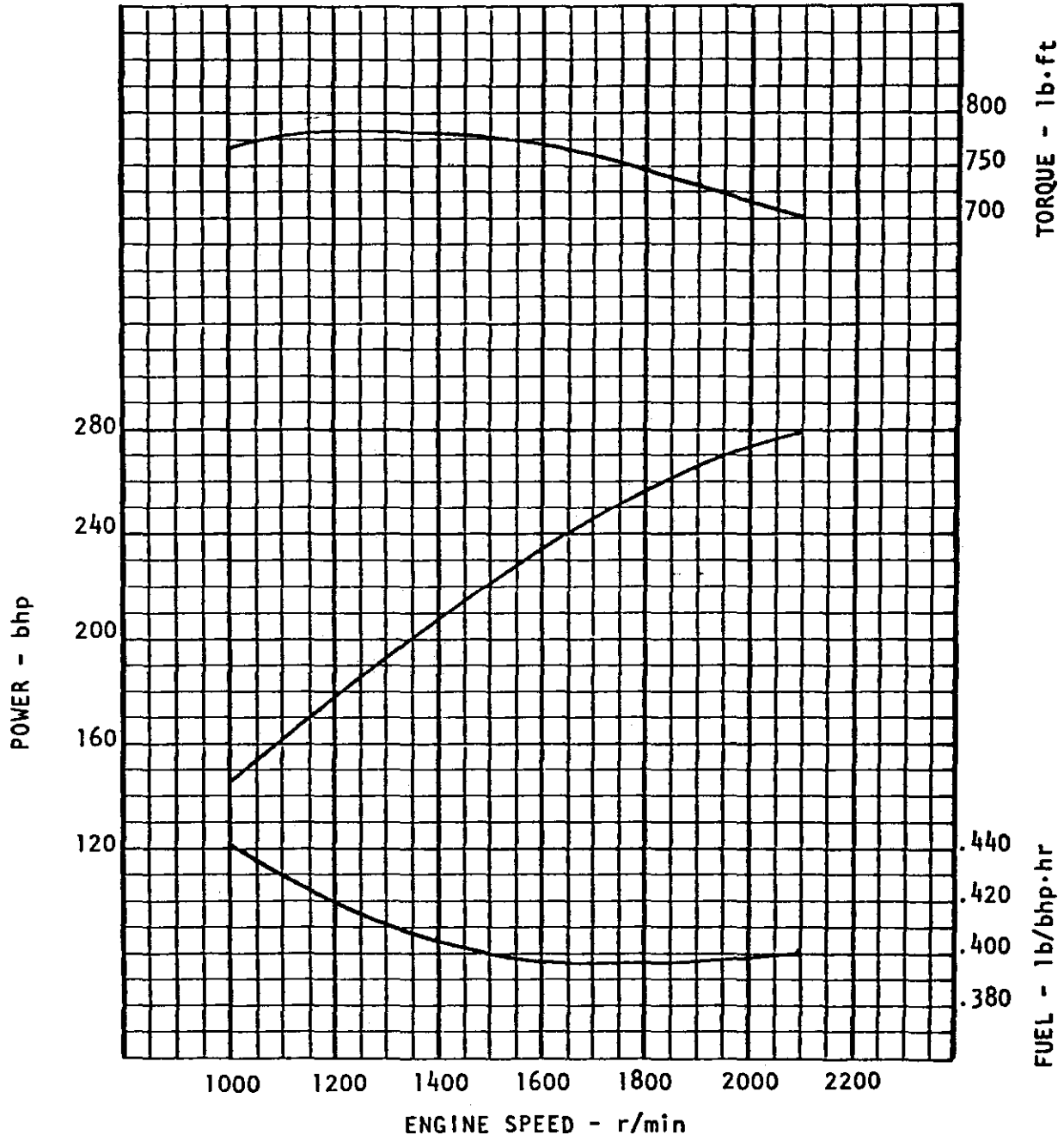
APPLICATION: AUTOMOTIVE

CERTIFICATION: FEDERAL 1979-85

MODEL: 8V-71N

280 bhp @ 2100 r/min

782 lb·ft @ 1200 r/min



AIR INTAKE RESTRICTION - in. H₂O (kPa) . . . 10 (2.5)

EXHAUST BACK PRESSURE - in. H₂O (kPa) . . . 15 (3.7)

- POWER OUTPUT GUARANTEED WITHIN 5% AT SAE J1349 CONDITIONS:
77°F (25°C) AIR INLET TEMPERATURE; 29.31 in. Hg (99kPa) DRY BAROMETER;
100°F (39°C) FUEL INLET TEMPERATURE (.853 SPECIFIC GRAVITY AT 60°F).
- CONVERSION FACTORS: POWER: kW = bhp × 0.746
FUEL: kg/kW·hr = lb/bhp·hr × 0.608
TORQUE: N·m = lb·ft × 1.356
- VALUES DERIVED ARE FROM CURRENTLY AVAILABLE DATA AND SUBJECT TO CHANGE WITHOUT NOTICE.

CERTIFIED BY:

Peter L. Pruden

STAFF ENGINEER

CURVE NO.

E4-7081-52-62

DATE: 3-22-78

REV./DATE: 5/10-24-84

SHT. 1 OF 2

ENGINE SPECIFICATION DATA

General Data

Model.....	7087-7040
Number of Cylinders.....	8
Bore and Stroke-In(mm).....	4.25x5.00(108x127)
Displacement-In ³ (L).....	568(9.3)
Compression Ratio.....	18.7:1
Piston Speed-ft/min(m/min).....	1750(533)
Valves Per Cylinder	
Intake.....	NOT APPLICABLE
Exhaust.....	4
Combustion System.....	DIRECT INJECTION
Engine Type.....	63.5° VEE - 2 CYCLE
Aspiration.....	NATURAL

Configuration

Turbocharger.....	NOT APPLICABLE
Charge Air Cooling System.....	NONE
Blower Type.....	STANDARD
Blower Drive Ratio.....	2.05:1
Low Idle Speed-r/min.....	500
High Idle Speed-r/min.....	2250
Thrust Bearing Load Limit	
Continuous-lbf(N).....	600(2670)
Intermittent-lbf(N).....	1800(8000)
Engine Crankcase Vent System.....	OPEN
Maximum Pressure-In H ₂ O(kPa).....	3.0(0.75)

Physical Data

Size	
Length-In(mm).....	47.0(1194)
Width-In(mm).....	38.0(965)
Height-In(mm).....	48.0(1219)
Weight, dry-lb(kg).....	2345(1064)
Center of Gravity Distance	
From R.F.O.B. (x axis)-In(mm).....	12.41(315)
Above Crankshaft (y axis)-In(mm).....	6.41(163)
Right of Crankshaft (z axis)-In(mm).....	1.47(37.3)
Installation Drawing.....	5123732
Maximum Allowable Static Bending Moment at Rear Face of FW Hsg-lbf ft(N m).....	600(814)

Fuel System

Fuel Injector/Timing.....	7E60/1.470
Fuel Injection Pump/Timing.....	NOT APPLICABLE
Fuel Consumption-lb/hr(kg/hr).....	111.9(50.8)
Fuel Consumption-gal/hr(L/hr).....	16.0(60.6)
Fuel Spill Rate-lb/hr(kg/hr).....	503.3(228.3)
Fuel Spill Rate-gal/hr(L/hr).....	72(272.5)
Total Fuel Flow-lb/hr(kg/hr).....	615.2(279.1)
Total Fuel Flow-gal/hr(L/hr).....	88.0(333.2)
Maximum Allowable Fuel Pump Suction	
Clean System-In Hg(kPa).....	6(20)
Dirty System-In Hg(kPa).....	12(41)
Fuel Filter Micron Size	
Primary - Micron.....	30
Secondary - Micron.....	10

Lubrication System

Oil Pressure	
Rated Speed-lbf/in ² (kPa).....	60(414)
Low Idle-lbf/in ² (kPa).....	5(34)
In Pan Oil Temperature-°F(°C).....	200-235(93-113)
Oil Flow-gal/min(L/min).....	37(140)
Oil Pan Capacity	
High-qt(L).....	23(21.8)
Low-qt(L).....	17.0(16.1)
Total Engine Oil Capacity with filters-qt(L).....	25(23.7)
Bypass Oil Filter Orifice-In(mm).....	0.101(2.57)
Engine Angularity Limits	
Front up - degrees.....	20
Front down - degrees.....	15
Side tilt - degrees.....	NOT AVAILABLE

Emission Data

CO-gm/hr.....	3800
HC-gm/hr.....	120
NO _x -gm/hr.....	2340
SO ₂ -gm/hr.....	510
Smoke	
Rated Speed - Bosch Number.....	1.5
Peak Torque Speed - Bosch Number.....	1.8
Noise - dB(A) @ 1m.....	98.5
Certification Approval.....	FEDERAL 1985

Cooling System

Engine Heat Rejection-Btu/min(kW).....	9050(159.1)
Engine Radiated Heat-Btu/min(kW).....	1650(29.0)
Coolant Flow-gal/min(L/min).....	130(492)
Thermostat	
Start to Open-°F(°C).....	180(82)
Fully Open-°F(°C).....	197(92)
Maximum Water Pump Inlet	
Restriction-In Hg(kPa).....	0.0(0.0)
Engine Coolant Capacity-qt(L).....	31(29.3)
Minimum Pressure Cap-lbf/in ² (kPa).....	9.0(62.1)
Maximum Coolant Pressure (Exclusive of Pressure Cap)-lbf/in ² (kPa).....	NOT AVAILABLE
Maximum Top Tank Temperature-°F(°C).....	210(99)
Minimum Top Tank Temperature-°F(°C).....	160(71)
Minimum Coolant Fill Rate-gal/min(L/min).....	3.0(11.4)
Cooling Index	
Minimum Air to Boil-°F(°C).....	112(44.4)
Maximum Air to Water Diff.-°F(°C).....	100(55.6)
Ram Air Flow - Mile/hr(km/hr).....	15(24)
Deaeration-Air Injection	
Capacity-ft ³ /min(m ³ /min).....	0.8(0.023)
Drawdown - Minimum Requirement (or 10% of Cooling System Capacity-Whichever Is Larger)-qt(L).....	4.0(3.8)

Air System

Maximum Allowable Temperature Rise (Ambient Air to Engine Inlet)-°F(°C).....	30(16.7)
Air Intake Restriction Maximum Limit	
Dirty Air Cleaner-In H ₂ O(kPa).....	25.0(6.2)
Clean Air Cleaner-lg H ₂ O(kPa).....	17.0(4.22)
Engine Air Flow - ft ³ /min(m ³ /min).....	910(25.8)
Engine Air Box/Manifold Pressure-In Hg(kPa).....	8.3(28.0)
Recommended Intake Pipe Dia.-In(mm).....	6.0(152)

Exhaust System

Exhaust Flow-ft ³ /min(m ³ /min).....	2190(62.0)
Exhaust Temperature-°F(°C).....	830(443)
Maximum Allowable Back Pressure-In Hg(kPa).....	4.0(13.5)
Recommended Exhaust Pipe Dia.	
Single-In(mm).....	5.0(127)
Dual-In(mm).....	3.5(89)
Exhaust Brake Max. Allowable Back Pressure-In Hg(kPa).....	NOT APPLICABLE

Electrical System

Recommended Battery Capacity(CCA @ 0°F)	
12 Volt System	
Above 32°F(0°C)-A.....	1900
Below 32°F(0°C)-A.....	2500
24 Volt System	
Above 32°F(0°C)-A.....	950
Below 32°F(0°C)-A.....	1250
Maximum Allowable Resistance of Starting Circuit	
12 volt system - ohm.....	0.0012
24 volt system - ohm.....	0.002

Performance Data

Power Output-bhp(kW).....	280(209)
Full Load Speed-r/min.....	2100
Peak Torque-lb ft(N m).....	782(1060)
Peak Torque Speed-r/min.....	1200
BMEP-lbf/in ² (kPa).....	93.0(641)
Friction Power	
Rated Speed-bhp(kW).....	77(57)
Peak Torque Speed-bhp(kW).....	32(24)
Altitude Capability-ft(m).....	12000(3660)
Torque Available at 800 r/min-lb ft (N m).....	690(936)

Engine

Speed r/min	Power bhp(kW)	Torque lb ft(N m)	BSEC lb/bhp hr (g/kW hr)
2100	280(209)	700 (949)	.400(243)
2000	273(204)	717 (972)	.398(242)
1800	256(191)	747(1013)	.396(241)
1600	235(175)	771(1045)	.397(241)
1400	208(155)	780(1058)	.406(247)
1200	179(134)	782(1060)	.418(254)
1000	146(109)	767(1090)	.441(268)

All values at rated speed and power and with standard engine hardware unless otherwise noted.

Curve No. E4-7081-52-62
Date: 3-22-78
Rev./Date: 5/10-24-84
Sht. 2 of 2



ENGINE PERFORMANCE CURVE

RATING: RATED BRAKE POWER

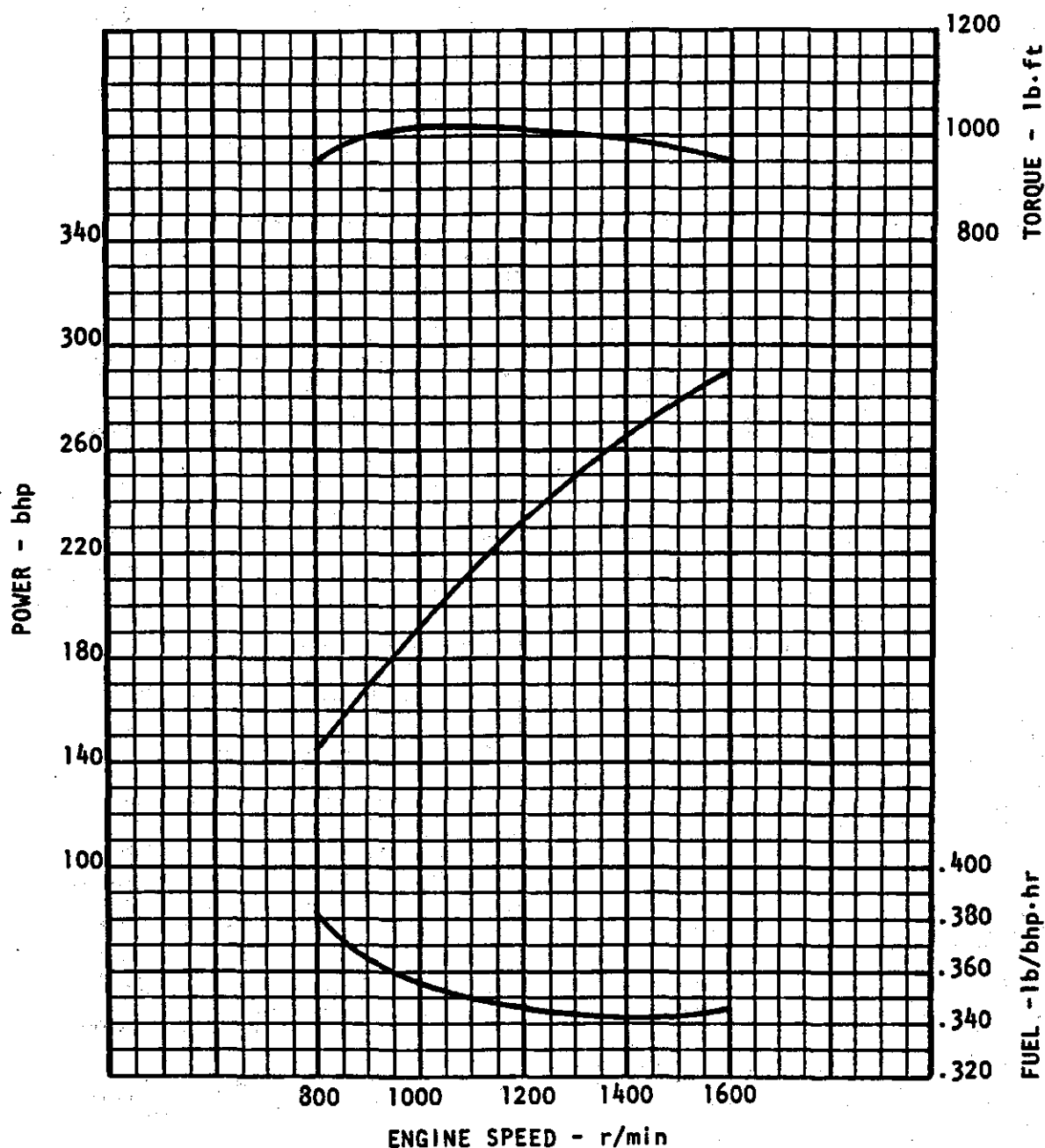
APPLICATION: AUTOMOTIVE

CERTIFICATION: FEDERAL 1985

MODEL: 6V-92TA

290 bhp @ 1600 r/min

1015 lb·ft @ 1000 r/min



AIR INTAKE RESTRICTION - in. H₂O (kPa) . . . 10 (2.5)
EXHAUST BACK PRESSURE - in. H₂O (kPa) . . . 15 (3.7)

- POWER OUTPUT GUARANTEED WITHIN 5% AT SAE J1349 CONDITIONS:
77°F (25°C) AIR INLET TEMPERATURE; 29.31 in. Hg (99kPa) DRY BAROMETER;
100°F (39°C) FUEL INLET TEMPERATURE (.853 SPECIFIC GRAVITY AT 60°F).
- CONVERSION FACTORS: POWER: kW = bhp × 0.746
FUEL: kg/kW·hr = lb/bhp·hr × 0.608
TORQUE: N·m = lb·ft × 1.356
- VALUES DERIVED ARE FROM CURRENTLY AVAILABLE DATA AND SUBJECT TO CHANGE WITHOUT NOTICE.

CERTIFIED BY:

B. S. Knecht

STAFF ENGINEER

CURVE NO.

E4-8067-32-42

DATE: 7-18-84

REV./DATE:

SHT. 1 OF 2

ENGINE SPECIFICATION DATA

General Data

Model.....	8067-7840
Number of Cylinders.....	6
Bore and Stroke-in(mm).....	4.84x5.00(123x127)
Displacement-in ³ (L).....	552(9.05)
Compression Ratio.....	17.0:1
Piston Speed-ft/min(m/min).....	1333(406)
Valves Per Cylinder	
Intake.....	NOT APPLICABLE
Exhaust.....	4
Combustion System.....	DIRECT INJECTION
Engine Type.....	63.5° VEE - 2 CYCLE
Aspiration.....	TURBOCHARGED

Configuration

Turbocharger.....	TV7511 (1.08 A/R)
Charge Air Cooling System.....	JWAC
Blower Type.....	BY-PASS
Blower Drive Ratio.....	2.05:1
Low Idle Speed-r/min.....	500
High Idle Speed-r/min.....	1750
Thrust Bearing Load Limit	
Continuous-lbf(N).....	600(2670)
Intermittent-lbf(N).....	1800(8000)
Engine Crankcase Vent System.....	OPEN
Maximum Pressure-in H ₂ O(kPa).....	1.8(0.45)

Physical Data

Size	
Length-in(mm).....	37.6(955)
Width-in(mm).....	37.6(955)
Height-in(mm).....	48.0(1220)
Weight, dry-lb(kg).....	2020(920)
Center of Gravity Distances	
From R.F.O.B. (x axis)-in(mm).....	9.4(239)
Above Crankshaft (y axis)-in(mm).....	10.2(259)
Right of Crankshaft (z axis)-in(mm).....	0.0(0.0)
Installation Drivings.....	5102916
Maximum Allowable Static Bending Moment at Rear Face of FW Hsg-lbf ft(N m)....	600(814)

Fuel System

Fuel Injector/Timing.....	9E85/1.480
Fuel Injection Pump/Timing.....	NOT APPLICABLE
Fuel Consumption-lb/hr(kg/hr).....	102.2(46.4)
Fuel Consumption-gal/hr(L/hr).....	14.6(55.3)
Fuel Spill Rate-lb/hr(kg/hr).....	450(204)
Fuel Spill Rate-gal/hr(L/hr).....	64.4(244)
Total Fuel Flow-lb/hr(kg/hr).....	552(250)
Total Fuel Flow-gal/hr(L/hr).....	79.0(299)
Maximum Allowable Fuel Pump Suction	
Clean System-in Hg(kPa).....	6(20)
Dirty System-in Hg(kPa).....	12(41)
Fuel Filter Micron Size	
Primary - Micron.....	30
Secondary - Micron.....	10

Lubrication System

Oil Pressure	
Rated Speed-lbf/in ² (kPa).....	44-65(303-448)
Low Idle-lbf/in ² (kPa).....	5(34)
In Pan Oil Temperature-°F(°C).....	200-250(93-121)
Oil Flow-gal/min(L/min).....	32(121)
Oil Pan Capacity	
High-qt(L).....	20(19)
Low-qt(L).....	16(15)
Total Engine Oil Capacity with filters-qt(L).....	22(21)
Bypass Oil Filter Orifice-in(mm).....	0.101(2.57)
Engine Angularity Limits	
Front up - degrees.....	20
Front down - degrees.....	30
Side tilt - degrees.....	NOT AVAILABLE

Emission Data

CO-gm/hr.....	NOT AVAILABLE
HC-gm/hr.....	NOT AVAILABLE
NO _x -gm/hr.....	NOT AVAILABLE
SO ₂ -gm/hr.....	464
Smoke	
Rated Speed - Bosch Number.....	0.3
Peak Torque Speed - Bosch Number.....	0.4
Noise - dB(A) @ 1m.....	NOT AVAILABLE
Certification Approval.....	FEDERAL 1985

Cooling System

Engine Heat Rejection-Btu/min(kW).....	8000(141)
Engine Radiated Heat-Btu/min(kW).....	1530(26.9)
Coolant Flow-gal/min(L/min).....	125(473)
Thermostat	
Start to Open-°F(°C).....	177(81)
Fully Open-°F(°C).....	197(92)
Maximum Water Pump Inlet	
Restriction-in Hg(kPa).....	3.0(10.1)
Engine Coolant Capacity-qt(L).....	24.5(23.2)
Minimum Pressure Cap-lbf/in ² (kPa).....	9.0(62.1)
Maximum Coolant Pressure (Exclusive of Pressure Cap)-lbf/in ² (kPa).....	NOT AVAILABLE
Maximum Top Tank Temperature-°F(°C)....	210(99)
Minimum Top Tank Temperature-°F(°C)....	160(71)
Minimum Coolant Fill Rate-gal/min(L/min).....	3.0(11.4)
Cooling Index	
Minimum Air to Boil-°F(°C).....	112(44.4)
Maximum Air to Water Diff.-°F(°C).....	100(55.6)
Ram Air Flow - Mile/hr(km/hr).....	15(24)
Deaeration-Air Injection	
Capacity-ft ³ /min(m ³ /min).....	0.6(0.017)
Drawdown - Minimum Requirement (or 10X of Cooling System Capacity-Whichever is Larger)-qt(L).....	4.0(3.6)

Air System

Maximum Allowable Temperature Rise (Ambient Air to Engine Inlet)-°F(°C)..	30(16.7)
Air Intake Restriction Maximum Limit	
Dirty Air Cleaner-in H ₂ O(kPa).....	20(5.0)
Clean Air Cleaner-in H ₂ O(kPa).....	12(3.0)
Engine Air Flow - ft ³ /min(m ³ /min).....	940(26.6)
Engine Air Box/Manifold Pressure-in Hg(kPa).....	39.5(133)
Recommended Intake Pipe Dia.-in(mm)....	6.0(152)

Exhaust System

Exhaust Flow-ft ³ /min(m ³ /min).....	1870(53.0)
Exhaust Temperature-°F(°C).....	610(321)
Maximum Allowable Back Pressure-in Hg(kPa).....	1.5(5.1)
Recommended Exhaust Pipe Dia.	
Single-in(mm).....	5.0(127)
Dual-in(mm).....	NOT APPLICABLE
Exhaust Brake Max. Allowable Back Pressure-in Hg(kPa).....	NOT AVAILABLE

Electrical System

Recommended Battery Capacity(CCA @ 0°F)	
12 Volt System	
Above 32°F(0°C)-A.....	1900
Below 32°F(0°C)-A.....	2500
24 Volt System	
Above 32°F(0°C)-A.....	950
Below 32°F(0°C)-A.....	1250
Maximum Allowable Resistance of Starting Circuit	
12 volt system - ohm.....	0.0012
24 volt system - ohm.....	0.002

Performance Data

Power Output-bhp(kW).....	290(216)
Full Load Speed-r/min.....	1600
Peak Torque-lb ft(N m).....	1015(1376)
Peak Torque Speed-r/min.....	1000
BMEP-lbf/in ² (kPa).....	130(896)
Friction Power	
Rated Speed-bhp(kW).....	49(37)
Peak Torque Speed-bhp(kW).....	25(19)
Altitude Capability-ft(m).....	10000
Torque Available at 800 r/min-lb ft (N m).....	590(800)

Engine

Speed r/min	Power bhp(kW)	Torque lb ft(N m)	BSPC lb/bhp hr (g/kW hr)
1600	290(216)	952(1291)	.345(210)
1400	266(198)	998(1353)	.342(208)
1200	231(172)	1011(1371)	.346(210)
1000	193(144)	1015(1376)	.354(215)
800	145(108)	952(1291)	.352(214)

All values at rated speed and power and with standard engine hardware unless otherwise noted.

Curve No. E4-8067-32-42
Date: 7-18-84
Rev./Date:
Sht. 2 of 2



ENGINE PERFORMANCE CURVE

RATING: RATED BRAKE POWER

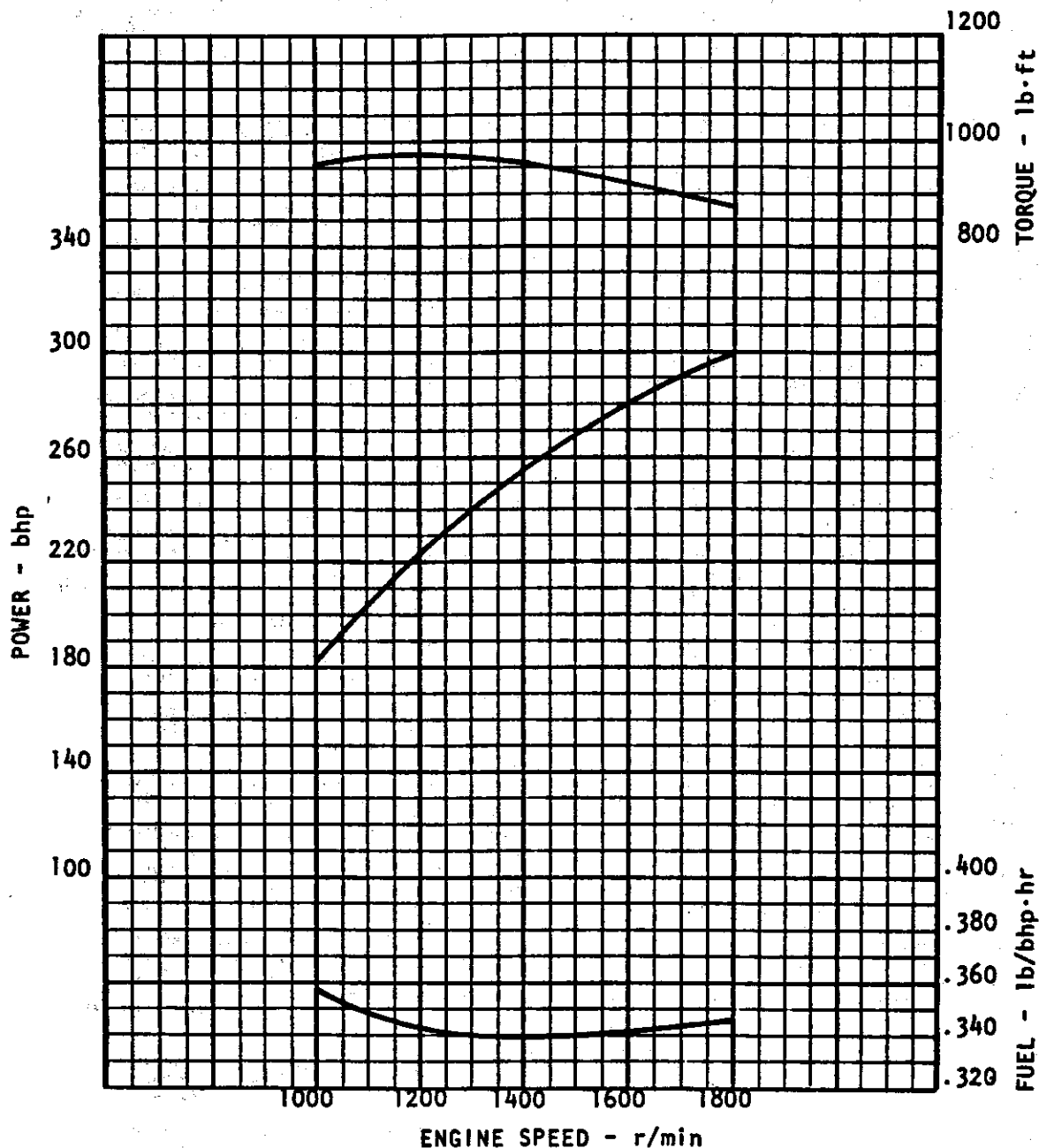
APPLICATION: AUTOMOTIVE

CERTIFICATION: FEDERAL 1985

MODEL: 6V-92TA

300 bhp @ 1800 r/min

975 lb·ft @ 1200 r/min



AIR INTAKE RESTRICTION - in. H₂O (mm H₂O) . . . 10(250)

EXHAUST RESTRICTION - in. H₂O (mm H₂O) 15(380)

• POWER OUTPUT GUARANTEED WITHIN 5% AT SAE J1349 CONDITIONS:
77°F (25°C) AIR INLET TEMPERATURE; 29.31 in. Hg (99kPa) DRY BAROMETER;
100°F (39°C) FUEL INLET TEMPERATURE (.853 SPECIFIC GRAVITY AT 60°F).

• CONVERSION FACTORS: POWER: kW = bhp × 0.746
FUEL: kg/kW·hr = lb/bhp·hr × 0.608
TORQUE: N·m = lb·ft × 1.356

• VALUES DERIVED ARE FROM CURRENTLY AVAILABLE DATA AND SUBJECT TO CHANGE WITHOUT NOTICE.

CERTIFIED BY:

B. S. Novak

STAFF ENGINEER

CURVE NO.

E4-8067-32-38

DATE: 5-16-84

REV./DATE: 1/7-2-84

SHT. 1 OF 2

ENGINE SPECIFICATION DATA

General Data

Model.....	8067-7840
Number of Cylinders.....	6
Bore and Stroke-in(mm).....	4.84x5.00(123x127)
Displacement-in ³ (L).....	552(9.05)
Compression Ratio.....	17.0:1
Piston Speed-ft/min(m/min).....	1500(457)
Valves Per Cylinder	
Intake.....	NOT APPLICABLE
Exhaust.....	4
Combustion System.....	DIRECT INJECTION
Engine Type.....	63.5° VEE - 2 CYCLE
Aspiration.....	TURBOCHARGED

Configuration

Turbocharger.....	TV7511(1.08 A/R)
Charge Air Cooling System.....	JWAC
Blower Type.....	BY-PASS
Blower Drive Ratio.....	2.05:1
Low Idle Speed-r/min.....	500
High Idle Speed-r/min.....	1925
Thrust Bearing Load Limit	
Continuous-lbf(N).....	600(2670)
Intermittent-lbf(N).....	1800(8000)
Engine Crankcase Vent System.....	OPEN
Maximum Pressure-in H ₂ O(kPa).....	2.6(0.65)

Physical Data

Size	
Length-in(mm).....	37.6(955)
Width-in(mm).....	37.6(955)
Height-in(mm).....	48.0(1220)
Weight, dry-lb(kg).....	2020(920)
Center of Gravity Distance	
From R.F.O.B. (x axis)-in(mm).....	9.4(239)
Above Crankshaft (y axis)-in(mm).....	10.2(259)
Right of Crankshaft (z axis)-in(mm).....	0.0(0.0)
Installation Drawing.....	5102916
Maximum Allowable Static Bending Moment at Rear Face of FW Hg-lbf ft(N m).....	600(814)

Fuel System

Fuel Injector/Timing.....	9C85/1.466
Fuel Injection Pump/Timing.....	NOT APPLICABLE
Fuel Consumption-lb/hr(kg/hr).....	106.4(48.3)
Fuel Consumption-gal/hr(L/hr).....	15.2(57.5)
Fuel Spill Rate-lb/hr(kg/hr).....	538(244)
Fuel Spill Rate-gal/hr(L/hr).....	77.0(291)
Total Fuel Flow-lb/hr(kg/hr).....	644(292)
Total Fuel Flow-gal/hr(L/hr).....	92.1(349)
Maximum Allowable Fuel Pump Suction	
Clean System-in Hg(kPa).....	6(20)
Dirty System-in Hg(kPa).....	12(41)
Fuel Filter Micron Size	
Primary - Micron.....	30
Secondary - Micron.....	10

Lubrication System

Oil Pressure	
Rated Speed-lbf/in ² (kPa).....	49-70(338-483)
Low Idle-lbf/in ² (kPa).....	5(34)
In Pan Oil Temperature-°F(°C).....	200-250(93-121)
Oil Flow-gal/min(L/min).....	34(121)
Oil Pan Capacity	
High-qt(L).....	20(19)
Low-qt(L).....	16(15)
Total Engine Oil Capacity with filters-qt(L).....	22(21)
Bypass Oil Filter Orifice-in(mm).....	0.101(2.57)
Engine Angularity Limits	
Front up - degrees.....	20
Front down - degrees.....	30
Side tilt - degrees.....	NOT AVAILABLE

Emission Data

CO-gm/hr.....	NOT AVAILABLE
HC-gm/hr.....	NOT AVAILABLE
NO _x -gm/hr.....	NOT AVAILABLE
SO ₂ -gm/hr.....	483
Smoke	
Rated Speed - Bosch Number.....	0.3
Peak Torque Speed - Bosch Number.....	0.2
Noise - dB(A) @ 1m.....	NOT AVAILABLE
Certification Approval.....	FEDERAL 1985

Cooling System

Engine Heat Rejection-Stu/min(kW).....	8750(153)
Engine Radiated Heat-Stu/min(kW).....	1470(25.8)
Coolant Flow-gal/min(L/min).....	140(530)
Thermostat	
Start to Open-°F(°C).....	177(81)
Fully Open-°F(°C).....	197(92)
Maximum Water Pump Inlet	
Restriction-in Hg(kPa).....	0.0(0.0)
Engine Coolant Capacity-qt(L).....	24.5(23.2)
Minimum Pressure Cap-lbf/in ² (kPa).....	9.0(62.1)
Maximum Coolant Pressure (Exclusive of Pressure Cap)-lbf/in ² (kPa).....	NOT AVAILABLE
Maximum Top Tank Temperature-°F(°C).....	210(99)
Minimum Top Tank Temperature-°F(°C).....	160(71)
Minimum Coolant Fill Rate-gal/min(L/min).....	3.0(11.4)
Cooling Index	
Minimum Air to Boil-°F(°C).....	112(44.4)
Maximum Air to Water Diff.-°F(°C).....	100(55.6)
Ram Air Flow - Mile/hr(km/hr).....	15(24)
Deaeration-Air Injection	
Capacity-ft ³ /min(m ³ /min).....	0.6(0.017)
Drawdown - Minimum Requirement (or 10% of Cooling System Capacity-Whichever is Larger)-qt(L).....	4.0(3.8)

Air System

Maximum Allowable Temperature Rise (Ambient Air to Engine Inlet)-°F(°C).....	30(16.7)
Air Intake Restriction Maximum Limit	
Dirty Air Cleaner-in H ₂ O(kPa).....	20(5.0)
Clean Air Cleaner-in H ₂ O(kPa).....	12(3.0)
Engine Air Flow - ft ³ /min(m ³ /min).....	990(28.0)
Engine Air Box/Manifold Pressure-in Hg(kPa).....	42.8(145)
Recommended Intake Pipe Dia.-in(mm).....	6.0(152)

Exhaust System

Exhaust Flow-Et ³ /min(m ³ /min).....	1980(56.1)
Exhaust Temperature-°F(°C).....	615(324)
Maximum Allowable Back	
Pressure-in Hg(kPa).....	2.0(6.8)
Recommended Exhaust Pipe Dia.	
Single-in(mm).....	5.0(127)
Dual-in(mm).....	NOT APPLICABLE
Exhaust Brake Max. Allowable Back	
Pressure-in Hg(kPa).....	NOT APPLICABLE

Electrical System

Recommended Battery Capacity(CCA @ 0°F)

12 Volt System	
Above 32°F(0°C)-A.....	1900
Below 32°F(0°C)-A.....	2500
24 Volt System	
Above 32°F(0°C)-A.....	950
Below 32°F(0°C)-A.....	1250
Maximum Allowable Resistance of Starting Circuit	
12 volt system - ohm.....	0.0012
24 volt system - ohm.....	0.002

Performance Data

Power Output-bhp(kW).....	300(224)
Full Load Speed-r/min.....	1800
Peak Torque-lb ft(N m).....	975(1322)
Peak Torque Speed-r/min.....	1200
BMEP-lbf/in ² (kPa).....	120(827)
Friction Power	
Rated Speed-bhp(kW).....	60(43)
Peak Torque Speed-bhp(kW).....	32(24)
Altitude Capability-ft(m).....	10000
Torque Available at 800 r/min-lb ft (N m).....	NOT AVAILABLE

Engine

Speed r/min	Power bhp(kW)	Torque lb ft(N m)	BSFC lb/bhp hr (g/kW hr)
1800	300(224)	875(1186)	.346(210)
1600	280(209)	919(1246)	.341(207)
1400	255(190)	957(1298)	.339(206)
1200	223(166)	975(1322)	.343(209)
1000	182(136)	956(1296)	.356(217)

All values at rated speed and power and with standard engine hardware unless otherwise noted.

Curve No. E4-8067-32-38
Date: 5-16-84
Rev./Date: 1/7-02-84
Sht. 2 of 2



ENGINE PERFORMANCE CURVE

RATING: RATED BRAKE POWER

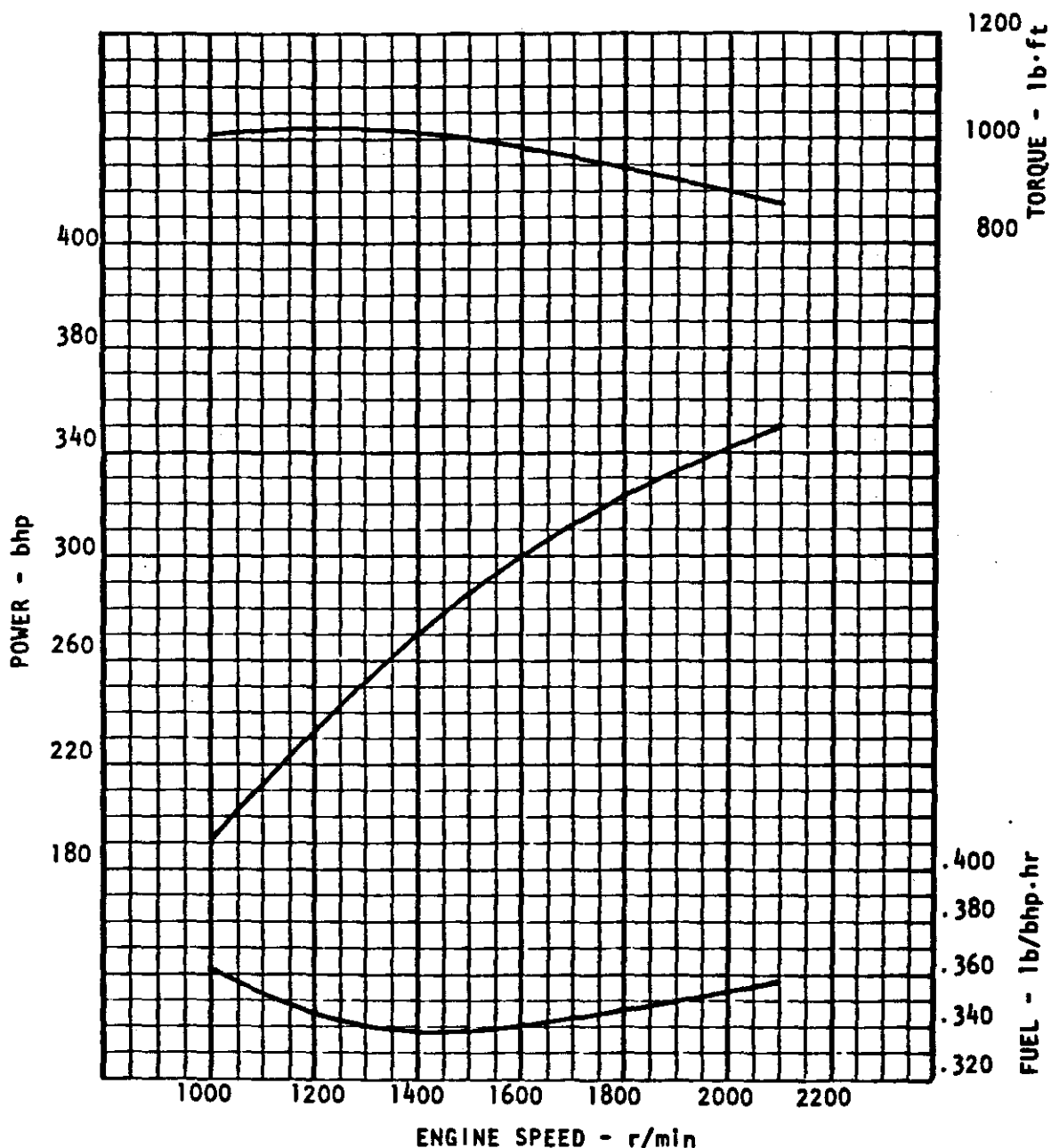
APPLICATION: AUTOMOTIVE

CERTIFICATION: FEDERAL 1985

MODEL: 6V-92TA

350 bhp @ 2100 r/min

1020 lb·ft @ 1200 r/min



AIR INTAKE RESTRICTION - in. H₂O (mm H₂O) . . . 10(250)
EXHAUST RESTRICTION - in. H₂O (mm H₂O) . . . 15(380)

- POWER OUTPUT GUARANTEED WITHIN 5% AT SAE J1349 CONDITIONS:
77°F (25°C) AIR INLET TEMPERATURE; 29.31 in. Hg (99kPa) DRY BAROMETER;
100°F (38°C) FUEL INLET TEMPERATURE (.853 SPECIFIC GRAVITY AT 60°F).
- CONVERSION FACTORS: POWER: kW = bhp × 0.746
FUEL: kg/kW·hr = lb/bhp·hr × 0.608
TORQUE: N·m = lb·ft × 1.356
- VALUES DERIVED ARE FROM CURRENTLY AVAILABLE DATA AND SUBJECT TO CHANGE WITHOUT NOTICE.

CERTIFIED BY:

B. J. Norrish

STAFF ENGINEER

CURVE NO.

E4-8067-32-37

DATE: 5-16-84

REV./DATE:

SHT. 1 OF 2

ENGINE SPECIFICATION DATA

General Data

Model.....	8067-7840
Number of Cylinders.....	6
Bore and Stroke-in(mm).....	4.84x5.00(123x127)
Displacement-in ³ (L).....	552(9.05)
Compression Ratio.....	17.0:1
Piston Speed-ft/min(m/min).....	1750(533)
Valves Per Cylinder	
Intake.....	NOT APPLICABLE
Exhaust.....	4
Combustion System.....	DIRECT INJECTION
Engine Type.....	63.5° VEE - 2 CYCLE
Aspiration.....	TURBOCHARGED

Configuration

Turbocharger.....	TV7511(1.08A/R)
Charge Air Cooling System.....	JMAC
Blower Type.....	BY-PASS
Blower Drive Ratio.....	2.05:1
Low Idle Speed-r/min.....	500
High Idle Speed-r/min.....	2250
Thrust Bearing Load Limit	
Continuous-lbf(N).....	600(2670)
Intermittent-lbf(N).....	1800(8000)
Engine Crankcase Vent System.....	OPEN
Maximum Pressure-in H ₂ O(kPa).....	3.0(0.75)

Physical Data

Size	
Length-in(mm).....	37.6(955)
Width-in(mm).....	37.6(955)
Height-in(mm).....	48.0(1220)
Weight-dry-lb(kg).....	2020(920)
Center of Gravity Distance	
From R.P.O.B. (x axis)-in(mm).....	9.4(239)
Above Crankshaft (y axis)-in(mm).....	10.2(259)
Right of Crankshaft (z axis)-in(mm).....	0.0(0.0)
Installation Drawing.....	5102916
Maximum Allowable Static Bending Moment at Rear Face of FW Hsg-lbf ft(N m).....	600(814)

Fuel System

Fuel Injector/Timing.....	9C90/1.466
Fuel Injection Pump/Timing.....	NOT APPLICABLE
Fuel Consumption-lb/hr(kg/hr).....	126.4(57.3)
Fuel Consumption-gal/hr(L/hr).....	18.1(68.5)
Fuel Spill Rate-lb/hr(kg/hr).....	545(247)
Fuel Spill Rate-gal/hr(L/hr).....	78.0(295)
Total Fuel Flow-lb/hr(kg/hr).....	671(304)
Total Fuel Flow-gal/hr(L/hr).....	96.0(363)
Maximum Allowable Fuel Pump Suction	
Clean System-in Hg(kPa).....	6(20)
Dirty System-in Hg(kPa).....	12(41)
Fuel Filter Micron Size	
Primary - Micron.....	30
Secondary - Micron.....	10

Lubrication System

Oil Pressure	
Rated Speed-lbf/in ² (kPa).....	49-70(338-483)
Low Idle-lbf/in ² (kPa).....	3(34)
In Pan Oil Temperature-°F(°C).....	200-250(93-121)
Oil Flow-gal/min(L/min).....	37(140)
Oil Pan Capacity	
High-qt(L).....	20(19)
Low-qt(L).....	16(15)
Total Engine Oil Capacity with filters-qt(L).....	22(21)
Bypass Oil Filter Orifice-in(mm).....	0.101(2.57)
Engine Angularity Limits	
Front up - degrees.....	20
Front down - degrees.....	30
Side tilt - degrees.....	NOT AVAILABLE

Emission Data

CO-gm/hr.....	NOT AVAILABLE
HC-gm/hr.....	NOT AVAILABLE
NO _x -gm/hr.....	NOT AVAILABLE
SO ₂ -gm/hr.....	373
Smoke	
Rated Speed - Bosch Number.....	0.6
Peak Torque Speed - Bosch Number.....	0.4
Noise - dB(A) @ 1m.....	NOT AVAILABLE
Certification Approval.....	FEDERAL 1985

Cooling System

Engine Heat Rejection-Btu/min(kW).....	11000(193)
Engine Radiated Heat-Btu/min(kW).....	1700(29.9)
Coolant Flow-gal/min(L/min).....	160(606)
Thermostat	
Start to Open-°F(°C).....	177(81)
Fully Open-°F(°C).....	197(92)
Maximum Water Pump Inlet	
Restriction-in Hg(kPa).....	0.0(0.0)
Engine Coolant Capacity-qt(L).....	24.5(23.2)
Minimum Pressure Cap-lbf/in ² (kPa).....	9.0(62.1)
Maximum Coolant Pressure (Exclusive of Pressure Cap)-lbf/in ² (kPa).....	NOT AVAILABLE
Maximum Top Tank Temperature-°F(°C).....	210(99)
Minimum Top Tank Temperature-°F(°C).....	160(71)
Minimum Coolant Fill Rate-gal/min(L/min).....	3.0(11.4)
Cooling Index	
Minimum Air to Boil-°F(°C).....	112(44.4)
Maximum Air to Water Diff.-°F(°C).....	100(55.6)
Ram Air Flow - Mile/hr(km/hr).....	15(24)
Deaeration-Air Injection	
Capacity-ft ³ /min(m ³ /min).....	0.6(0.017)
Drawdown - Minimum Requirement (or 10% of Cooling System Capacity-Whichever is Larger)-qt(L).....	4.0(3.8)

Air System

Maximum Allowable Temperature Rise (Ambient Air to Engine Inlet)-°F(°C).....	30(16.7)
Air Intake Restriction Maximum Limit	
Dirty Air Cleaner-in H ₂ O(kPa).....	20(5.0)
Clean Air Cleaner-in H ₂ O(kPa).....	12(3.0)
Engine Air Flow - ft ³ /min(m ³ /min).....	1070(30.3)
Engine Air Box/Manifold Pressure-in Hg(kPa).....	52.0(176)
Recommended Intake Pipe Dia.-in(mm).....	6.0(152)

Exhaust System

Exhaust Flow-ft ³ /min(m ³ /min).....	2230(63.2)
Exhaust Temperature-°F(°C).....	660(349)
Maximum Allowable Back Pressure-in Hg(kPa).....	2.5(8.4)
Recommended Exhaust Pipe Dia.	
Single-in(mm).....	5.0(127)
Dual-in(mm).....	NOT APPLICABLE
Exhaust Brake Max. Allowable Back Pressure-in Hg(kPa).....	NOT APPLICABLE

Electrical System

Recommended Battery Capacity(CCA @ 0°F)	
12 Volt System	
Above 32°F(0°C)-A.....	1900
Below 32°F(0°C)-A.....	2500
24 Volt System	
Above 32°F(0°C)-A.....	950
Below 32°F(0°C)-A.....	1250
Maximum Allowable Resistance of Starting Circuit	
12 volt system - ohm.....	0.0012
24 volt system - ohm.....	0.002

Performance Data

Power Output-bhp(kW).....	350(261)
Full Load Speed-r/min.....	2100
Peak Torque-lb ft(N m).....	1020(1383)
Peak Torque Speed-r/min.....	1200
BMEP-lbf/in ² (kPa).....	120(827)
Friction Power	
Rated Speed-bhp(kW).....	79(59)
Peak Torque Speed-bhp(kW).....	32(24)
Altitude Capability-ft(m).....	10000
Torque Available at 800 r/min-lb ft (N m).....	710(963)

Engine

Speed r/min	Power bhp(kW)	Torque lb ft(N m)	BSFC lb/bhp hr (g/kW hr)
2100	350(261)	875(1186)	.357(217)
1950	338(252)	910(1234)	.351(214)
1800	323(241)	942(1277)	.347(211)
1600	300(224)	985(1335)	.340(207)
1400	270(201)	1013(1373)	.338(206)
1200	233(174)	1020(1383)	.346(210)
1000	192(143)	1008(1367)	.361(220)



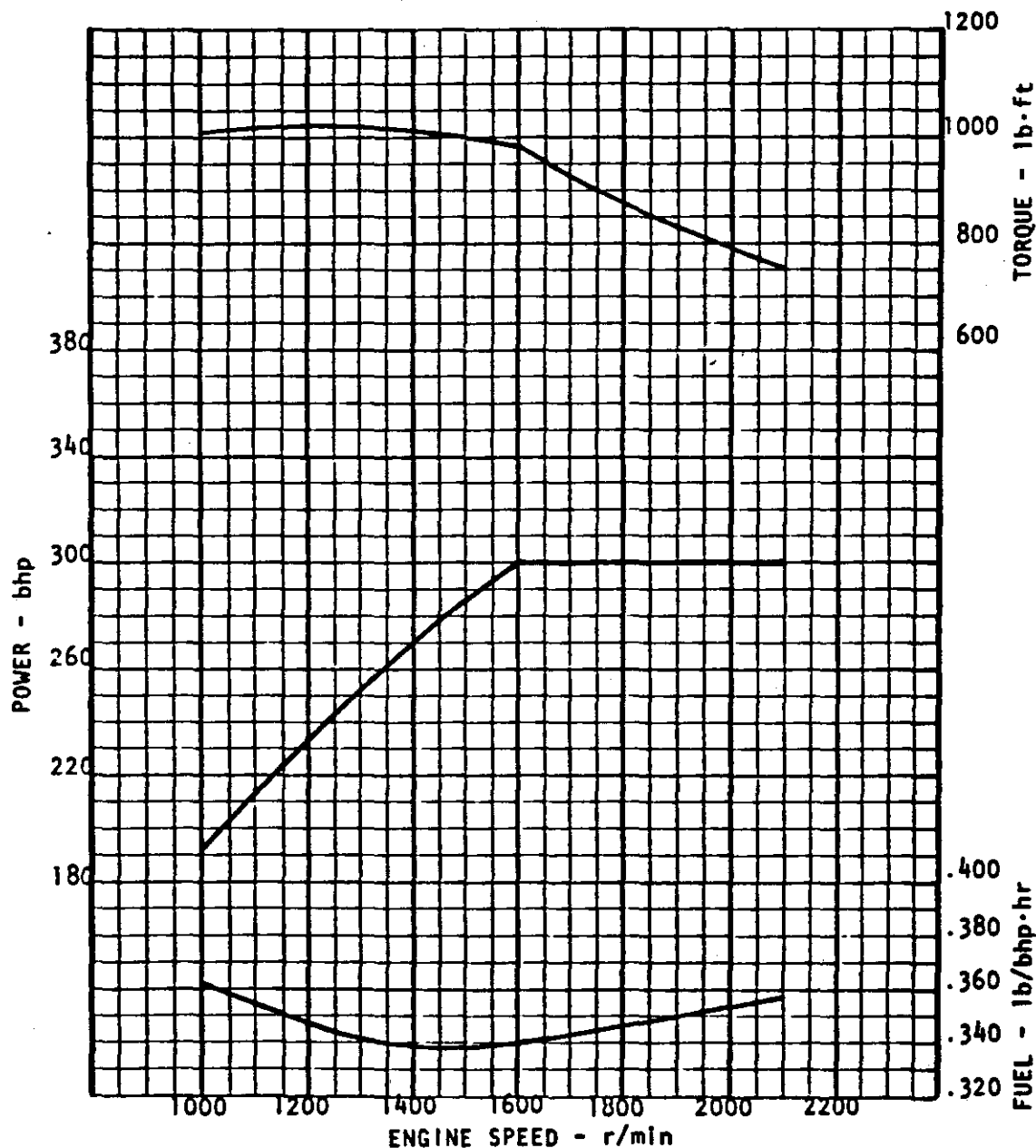
ENGINE PERFORMANCE CURVE

RATING: RATED BRAKE POWER

APPLICATION: AUTOMOTIVE

CERTIFICATION: FEDERAL 1985

MODEL: 6V-92TTA
300 bhp @ 2100 r/min
1020 lb·ft @ 1200 r/min



AIR INTAKE RESTRICTION - in. H₂O (mm H₂O) . . . 10 (250)
EXHAUST RESTRICTION - in. H₂O (mm H₂O) . . . 15 (380)

- POWER OUTPUT GUARANTEED WITHIN 5% AT SAE J1349 CONDITIONS:
77°F (25°C) AIR INLET TEMPERATURE; 29.31 in. Hg (99kPa) DRY BAROMETER;
100°F (39°C) FUEL INLET TEMPERATURE (.853 SPECIFIC GRAVITY AT 60°F).
- CONVERSION FACTORS: POWER: kW = bhp × 0.746
FUEL: kg/kW·hr = lb/bhp·hr × 0.608
TORQUE: N·m = lb·ft × 1.356
- VALUES DERIVED ARE FROM CURRENTLY AVAILABLE DATA AND SUBJECT TO CHANGE WITHOUT NOTICE.

CERTIFIED BY:

B. S. Henshaw

STAFF ENGINEER

CURVE NO.

E4-8067-32-39

DATE: 5-17-84

REV./DATE:

SHT. 1 OF 2

ENGINE SPECIFICATION DATA

General Data

Model.....	8067-7840
Number of Cylinders.....	6
Bore and Stroke-in(mm).....	4.84x3.00(123x127)
Displacement-in ³ (L).....	552(9.05)
Compression Ratio.....	17.0:1
Piston Speed-ft/min(m/min).....	1750(533)
Valves Per Cylinder.....	NOT APPLICABLE
Intake.....	4
Exhaust.....	4
Combustion System.....	DIRECT INJECTION
Engine Type.....	63.5° VEE - 2 CYCLE
Aspiration.....	TURBOCHARGED

Configuration

Turbocharger.....	TV7511(1.06 A/R)
Charge Air Cooling System.....	JWAC
Blower Type.....	BY-PASS
Blower Drive Ratio.....	2.05:1
Low Idle Speed-r/min.....	500
High Idle Speed-r/min.....	2250
Thrust Bearing Load Limit.....	
Continuous-lbf(N).....	600(2670)
Intermittent-lbf(N).....	1800(8000)
Engine Crankcase Vent System.....	OPEN
Maximum Pressure-in H ₂ O(kPa).....	3.0(0.75)

Physical Data

Size.....	
Length-in(mm).....	37.6(955)
Width-in(mm).....	37.6(955)
Height-in(mm).....	48.0(1220)
Weight-dry-lb(kg).....	2020(920)
Center of Gravity Distance.....	
From R.F.O.B. (x axis)-in(mm).....	9.4(239)
Above Crankshaft (y axis)-in(mm).....	10.2(259)
Right of Crankshaft (z axis)-in(mm).....	0.0(0.0)
Installation Drawing.....	5102916
Maximum Allowable Static Bending Moment at Rear Face of FW Hg-lbf ft(N m)....	600(814)

Fuel System

Fuel Injector/Timing.....	9C90/1.466
Fuel Injection Pump/Timing.....	NOT APPLICABLE
Fuel Consumption-lb/hr(kg/hr).....	107.2(48.6)
Fuel Consumption-gal/hr(L/hr).....	15.3(57.9)
Fuel Spill Rate-lb/hr(kg/hr).....	549(249)
Fuel Spill Rate-gal/hr(L/hr).....	78.6(298)
Total Fuel Flow-lb/hr(kg/hr).....	656(298)
Total Fuel Flow-gal/hr(L/hr).....	93.8(355)
Maximum Allowable Fuel Pump Suction.....	
Clean System-in Hg(kPa).....	6(20)
Dirty System-in Hg(kPa).....	12(41)
Fuel Filter Micron Size.....	
Primary - Micron.....	30
Secondary - Micron.....	10

Lubrication System

Oil Pressure.....	
Rated Speed-lbf/in ² (kPa).....	49-70(338-483)
Low Idle-lbf/in ² (kPa).....	5(34)
In Pan Oil Temperature-°F(°C).....	200-250(93-121)
Oil Flow-gal/min(L/min).....	37(140)
Oil Pan Capacity.....	
High-qt(L).....	20(19)
Low-qt(L).....	16(15)
Total Engine Oil Capacity with filters-qt(L).....	22(21)
Bypass Oil Filter Orifice-in(mm).....	0.101(2.57)
Engine Angularity Limits.....	
Front up - degrees.....	20
Front down - degrees.....	30
Side tilt - degrees.....	NOT AVAILABLE

Emission Data

CO-gm/hr.....	NOT AVAILABLE
HC-gm/hr.....	NOT AVAILABLE
NO _x -gm/hr.....	NOT AVAILABLE
SO ₂ -gm/hr.....	486
Smoke.....	
Rated Speed - Bosch Number.....	0.5
Peak Torque Speed - Bosch Number.....	0.4
Noise - dB(A) @ 1m.....	NOT AVAILABLE
Certification Approval.....	FEDERAL 1985

Cooling System

Engine Heat Rejection-Btu/min(kW).....	9420(166)
Engine Radiated Heat-Btu/min(kW).....	1440(25.3)
Coolant Flow-gal/min(L/min).....	160(606)
Thermostat.....	
Start to Open-°F(°C).....	177(81)
Fully Open-°F(°C).....	197(92)
Maximum Water Pump Inlet.....	
Restriction-in Hg(kPa).....	0.0(0.0)
Engine Coolant Capacity-qt(L).....	24.5(23.2)
Minimum Pressure Cap-lbf/in ² (kPa).....	9.0(62.1)
Maximum Coolant Pressure (Exclusive of Pressure Cap)-lbf/in ² (kPa).....	NOT AVAILABLE
Maximum Top Tank Temperature-°F(°C).....	210(99)
Minimum Top Tank Temperature-°F(°C).....	160(71)
Minimum Coolant Fill Rate-gal/min(L/min).....	3.0(11.4)
Cooling Index.....	
Minimum Air to Boil-°F(°C).....	112(44.4)
Maximum Air to Water Diff.-°F(°C).....	100(55.6)
Ram Air Flow - Mile/hr(km/hr).....	13(24)
Deaeration-Air Injection Capacity-ft ³ /min(m ³ /min).....	0.6(0.017)
Drawdown - Minimum Requirement (or 10% of Cooling System Capacity-Whichever is Larger)-qt(L).....	4.0(3.6)

Air System

Maximum Allowable Temperature Rise (Ambient Air to Engine Inlet)-°F(°C).....	30(16.7)
Air Intake Restriction Maximum Limit.....	
Dirty Air Cleaner-in H ₂ O(kPa).....	20(5.0)
Clean Air Cleaner-in H ₂ O(kPa).....	12(3.0)
Engine Air Flow - ft ³ /min(m ³ /min).....	980(27.8)
Engine Air Box/Manifold Pressure-in Hg(kPa).....	44.5(150)
Recommended Intake Pipe Dia.-in(mm).....	6.0(152)

Exhaust System

Exhaust Flow-ft ³ /min(m ³ /min).....	1950(55.2)
Exhaust Temperature-°F(°C).....	610(321)
Maximum Allowable Back Pressure-in Hg(kPa).....	2.5(8.4)
Recommended Exhaust Pipe Dia. Single-in(mm).....	5.0(127)
Dual-in(mm).....	NOT APPLICABLE
Exhaust Brake Max. Allowable Back Pressure-in Hg(kPa).....	NOT APPLICABLE

Electrical System

Recommended Battery Capacity(CCA @ 0°F).....	
12 Volt System.....	
Above 32°F(0°C)-A.....	1900
Below 32°F(0°C)-A.....	2500
24 Volt System.....	
Above 32°F(0°C)-A.....	950
Below 32°F(0°C)-A.....	1250
Maximum Allowable Resistance of Starting Circuit.....	
12 volt system - ohm.....	0.0012
24 volt system - ohm.....	0.002

Performance Data

Power Output-bhp(kW).....	300(224)
Full Load Speed-r/min.....	2100
Peak Torque-lb ft(N m).....	1020(1383)
Peak Torque Speed-r/min.....	1200
MMEP-lbf/in ² (kPa).....	102(703)
Friction Power.....	
Rated Speed-bhp(kW).....	79(59)
Peak Torque Speed-bhp(kW).....	32(24)
Altitude Capability-ft(m).....	10000
Torque Available at 800 r/min-1b ft (N m).....	710(963)

Engine

Speed r/min	Power bhp(kW)	Torque lb ft(N m)	BSPC lb/bhp hr (g/kW hr)
2100	300(224)	750(1017)	.357(217)
1950	300(224)	808(1093)	.352(214)
1800	300(224)	875(1186)	.346(210)
1600	300(224)	985(1335)	.339(206)
1400	270(201)	1013(1373)	.338(206)
1200	233(174)	1020(1383)	.346(210)
1000	192(143)	1008(1367)	.361(220)



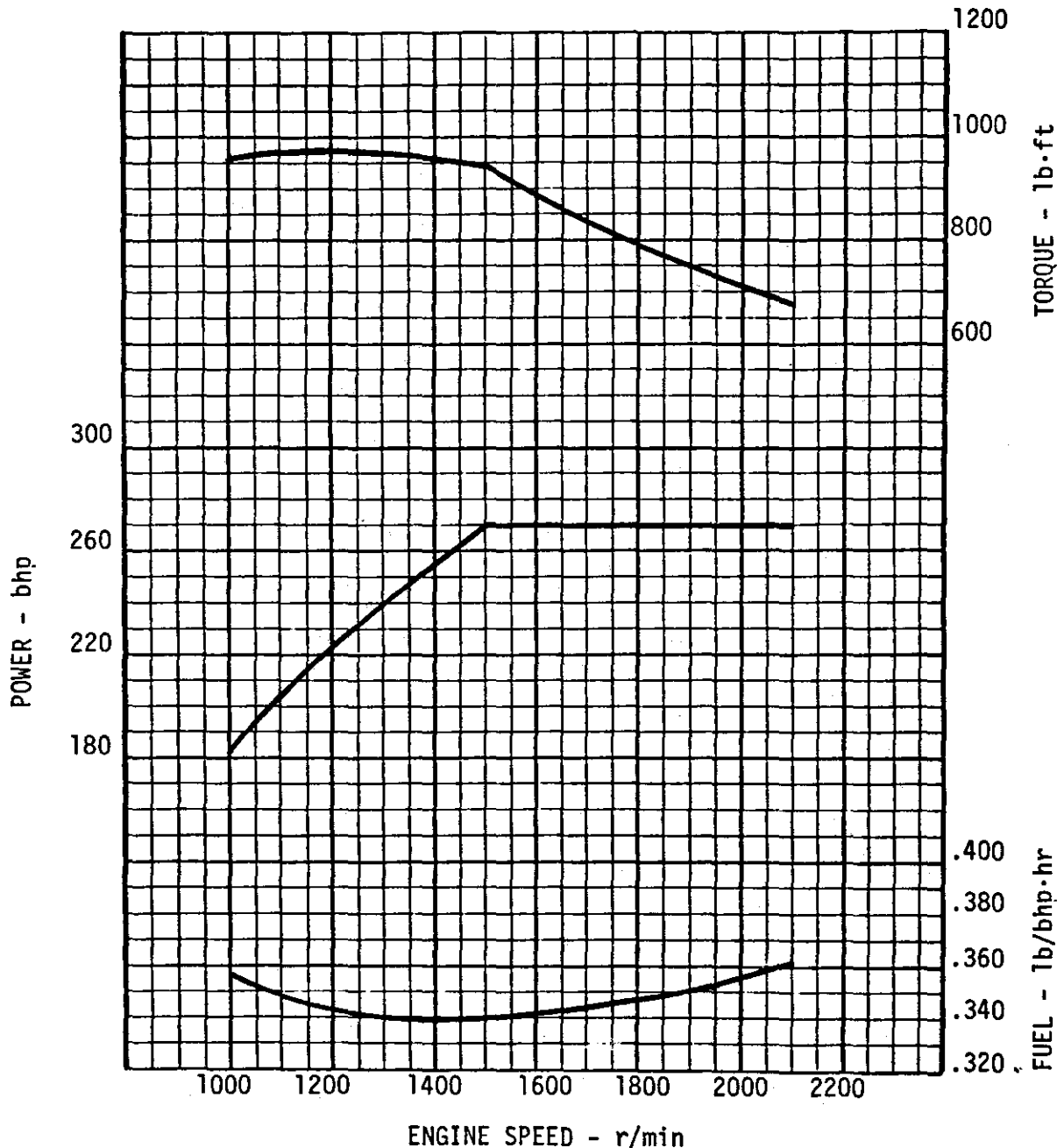
ENGINE PERFORMANCE CURVE

RATING: RATED BRAKE POWER

APPLICATION: AUTOMOTIVE

CERTIFICATION: FEDERAL 1985

MODEL: 6V-92TTA
270 bhp @ 2100 r/min
975 lb·ft @ 1200 r/min



AIR INTAKE RESTRICTION - in. H₂O (kPa) . . . 10 (2.5)
EXHAUST BACK PRESSURE - in. H₂O (kPa) . . . 15 (3.7)

- POWER OUTPUT GUARANTEED WITHIN 5% AT SAE J1349 CONDITIONS:
77°F (25°C) AIR INLET TEMPERATURE; 29.31 in. Hg (99kPa) DRY BAROMETER;
100°F (39°C) FUEL INLET TEMPERATURE (.853 SPECIFIC GRAVITY AT 60°F).
- CONVERSION FACTORS: POWER: kW = bhp x 0.746
FUEL: kg/kW·hr = lb/bhp·hr x 0.608
TORQUE: N·m = lb·ft x 1.356
- VALUES DERIVED ARE FROM CURRENTLY AVAILABLE DATA AND SUBJECT TO CHANGE WITHOUT NOTICE.

CERTIFIED BY:

STAFF ENGINEER

CURVE NO.

E4-8067-32-66

DATE: 1-25-85

REV./DATE:

SHT. 1 OF 2

ENGINE SPECIFICATION DATA

General Data

Model.....	8067-7840
Number of Cylinders.....	6
Bore and Stroke-in(mm).....	4.84x3.00(123x127)
Displacement-in ³ (L).....	552(9.05)
Compression Ratio.....	17.0:1
Piston Speed-ft/min(m/min).....	1750(533)
Valves Per Cylinder	
Intake.....	NOT APPLICABLE
Exhaust.....	4
Combustion System.....	DIRECT INJECTION
Engine Type.....	63.5° VEE - 2 CYCLE
Aspiration.....	TURBOCHARGED

Configuration

Turbocharger.....	TV7511(1.0BA/R)
Charge Air Cooling System.....	JWAC
Blower Type.....	BY-PASS
Blower Drive Ratio.....	2.05:1
Low Idle Speed-r/min.....	500
High Idle Speed-r/min.....	2250
Thrust Bearing Load Limit	
Continuous-lbf(N).....	600(2670)
Intermittent-lbf(N).....	1800(8000)
Engine Crankcase Vent System.....	OPEN
Maximum Pressure-in H ₂ O(kPa).....	3.0(0.75)

Physical Data

Size	
Length-in(mm).....	37.6(955)
Width-in(mm).....	37.6(955)
Height-in(mm).....	48.0(1220)
Weight, dry-lb(kg).....	2020(920)
Center of Gravity Distance	
From R.F.O.B. (x axis)-in(mm).....	9.4(239)
Above Crankshaft (y axis)-in(mm).....	10.2(259)
Right of Crankshaft (z axis)-in(mm).....	0.0(0.0)
Installation Drawing.....	5102916
Maximum Allowable Static Bending Moment at Rear Face of FW Hsg-lbf ft(N m).....	600(814)

Fuel System

Fuel Injector/Timing.....	9G85/1.466
Fuel Injection Pump/Timing.....	NOT APPLICABLE
Fuel Consumption-lb/hr(kg/hr).....	97.4(44.2)
Fuel Consumption-gal/hr(L/hr).....	13.9(52.6)
Fuel Spill Rate-lb/hr(kg/hr).....	551(250)
Fuel Spill Rate-gal/hr(L/hr).....	78.8(298)
Total Fuel Flow-lb/hr(kg/hr).....	648(294)
Total Fuel Flow-gal/hr(L/hr).....	92.7(351)
Maximum Allowable Fuel Pump Suction	
Clean System-in Hg(kPa).....	6(20)
Dirty System-in Hg(kPa).....	12(41)
Fuel Filter Micron Size	
Primary - Micron.....	30
Secondary - Micron.....	10

Lubrication System

Oil Pressure	
Rated Speed-lbf/in ² (kPa).....	49-70(336-483)
Low Idle-lbf/in ² (kPa).....	5(34)
In Pan Oil Temperature-°F(°C).....	200-250(93-121)
Oil Flow-gal/min(L/min).....	37(140)
Oil Pan Capacity	
High-qt(L).....	20(19)
Low-qt(L).....	16(15)
Total Engine Oil Capacity with filters-qt(L).....	22(21)
Bypass Oil Filter Orifice-in(mm).....	0.101(2.57)
Engine Angularity Limits	
Front up - degrees.....	20
Front down - degrees.....	30
Side tilt - degrees.....	NOT AVAILABLE

Emission Data

CO-gm/hr.....	NOT AVAILABLE
HC-gm/hr.....	NOT AVAILABLE
NO _x -gm/hr.....	NOT AVAILABLE
SO ₂ -gm/hr.....	442
Smoke	
Rated Speed - Bosch Number.....	0.4
Peak Torque Speed - Bosch Number.....	0.2
Noise - dB(A) @ 1m.....	NOT AVAILABLE
Certification Approval.....	FEDERAL 1985

Cooling System

Engine Heat Rejection-Btu/min(kW).....	8900(156)
Engine Radiated Heat-Btu/min(kW).....	1310(23.0)
Coolant Flow-gal/min(L/min).....	160(606)
Thermostat	
Start to Open-°F(°C).....	177(81)
Fully Open-°F(°C).....	197(92)
Maximum Water Pump Inlet	
Restriction-in Hg(kPa).....	0.0(0.0)
Engine Coolant Capacity-qt(L).....	24.5(23.2)
Minimum Pressure Cap-lbf/in ² (kPa).....	9.0(62.1)
Maximum Coolant Pressure (Exclusive of Pressure Cap)-lbf/in ² (kPa).....	NOT AVAILABLE
Maximum Top Tank Temperature-°F(°C).....	210(99)
Minimum Top Tank Temperature-°F(°C).....	160(71)
Minimum Coolant Fill Rate-gal/min(L/min).....	3.0(11.4)
Cooling Index	
Minimum Air to Boil-°F(°C).....	112(44.4)
Maximum Air to Water Diff.-°F(°C).....	100(55.6)
Ram Air Flow - Mile/hr(km/hr).....	15(24)
Deaeration-Air Injection	
Capacity-ft ³ /min(m ³ /min).....	0.6(0.017)
Drawdown - Minimum Requirement (or 10% of Cooling System Capacity-Whichever is Larger)-qt(L).....	4.0(3.8)

Air System

Maximum Allowable Temperature Rise (Ambient Air to Engine Inlet)-°F(°C).....	30(16.7)
Air Intake Restriction Maximum Limit	
Dirty Air Cleaner-in H ₂ O(kPa).....	20(5.0)
Clean Air Cleaner-lb H ₂ O(kPa).....	12(3.0)
Engine Air Flow - ft ³ /min(m ³ /min).....	930(26.3)
Engine Air Box/Manifold Pressure-in Hg(kPa).....	40.4(136)
Recommended Intake Pipe Dia.-in(mm).....	6.0(152)

Exhaust System

Exhaust Flow-ft ³ /min(m ³ /min).....	1810(51.3)
Exhaust Temperature-°F(°C).....	585(307)
Maximum Allowable Back	
Pressure-in Hg(kPa).....	2.5(8.4)
Recommended Exhaust Pipe Dia.	
Single-in(mm).....	5.0(127)
Dual-in(mm).....	NOT APPLICABLE
Exhaust Brake Max. Allowable Back	
Pressure-in Hg(kPa).....	NOT APPLICABLE

Electrical System

Recommended Battery Capacity(CCA @ 0°F)	
12 Volt System	
Above 32°F(0°C)-A.....	1900
Below 32°F(0°C)-A.....	2500
24 Volt System	
Above 32°F(0°C)-A.....	950
Below 32°F(0°C)-A.....	1250
Maximum Allowable Resistance of Starting Circuit	
12 volt system - ohm.....	0.0012
24 volt system - ohm.....	0.002

Performance Data

Power Output-bhp(kW).....	270(201)
Full Load Speed-r/min.....	2100
Peak Torque-lb ft(N m).....	975(1322)
Peak Torque Speed-r/min.....	1200
BMEP-lbf/in ² (kPa).....	92(634)
Friction Power	
Rated Speed-bhp(kW).....	79(59)
Peak Torque Speed-bhp(kW).....	32(24)
Altitude Capability-ft(m).....	10000
Torque Available at 800 r/min-lb ft(N m).....	425(576)

Engine

Speed r/min	Power bhp(kW)	Torque lb ft(N m)	BSEC lb/bhp hr (g/kW hr)
2100	270(201)	675 (915)	.361(220)
1950	270(201)	746(1011)	.352(214)
1800	270(201)	788(1068)	.347(211)
1600	270(201)	886(1201)	.341(207)
1400	255(190)	937(1298)	.339(206)
1200	223(166)	975(1322)	.343(209)
1000	182(136)	936(1296)	.336(217)

All values at rated speed and power and with standard engine hardware unless otherwise noted.

Curve No. E4-8067-32-66
Date: 1-25-85
Rev./Date:
Sht. 2 of 2



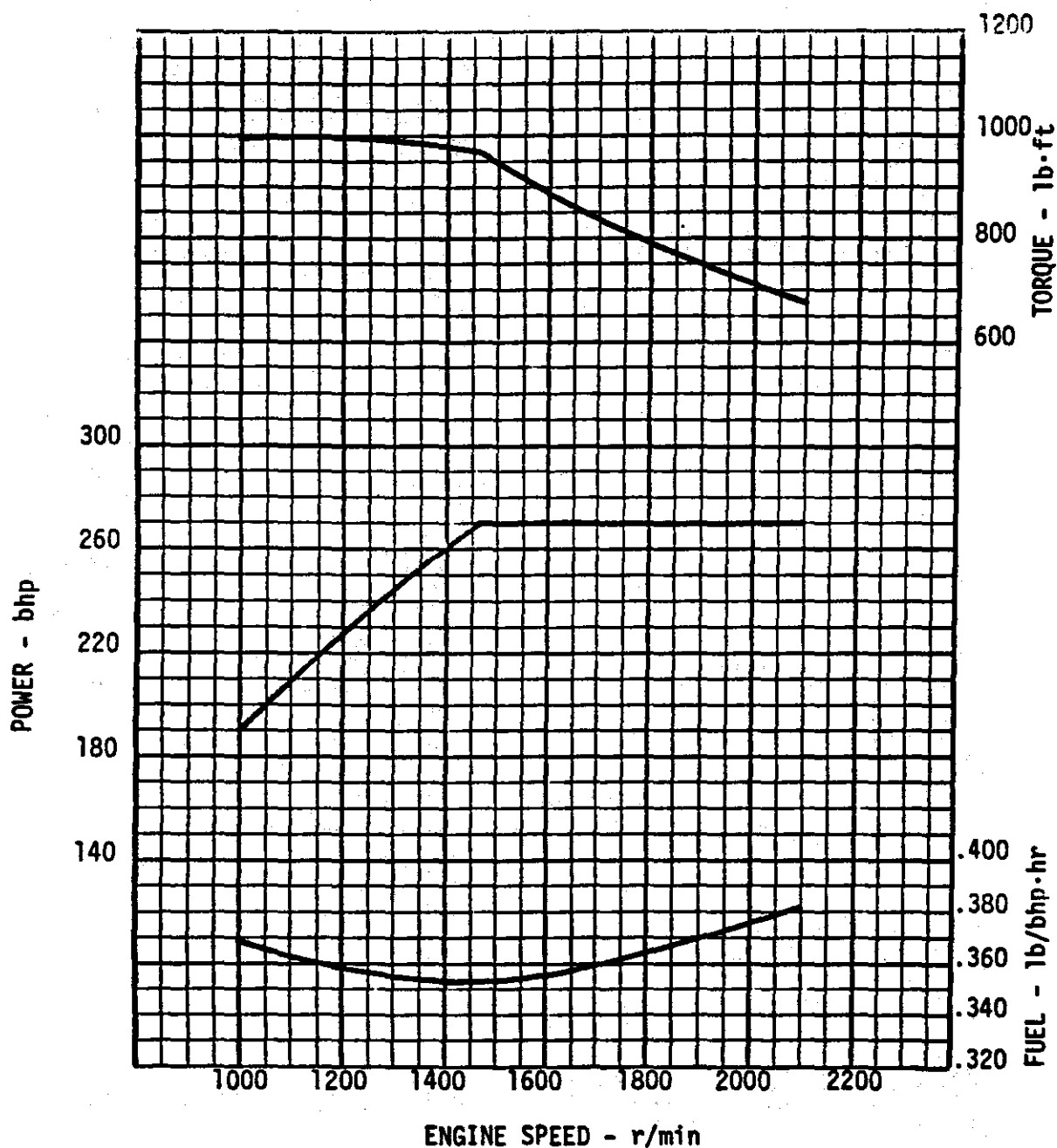
ENGINE PERFORMANCE CURVE

RATING: RATED BRAKE POWER

APPLICATION: AUTOMOTIVE

CERTIFICATION: CALIFORNIA 1985

MODEL: 6V-92TTAC
270 bhp @ 2100 r/min
1000 lb·ft @ 1200 r/min



AIR INTAKE RESTRICTION - in. H₂O (kPa) . . . 10 (2.5)
EXHAUST BACK PRESSURE - in. H₂O (kPa) . . . 15 (3.7)

- POWER OUTPUT GUARANTEED WITHIN 5% AT SAE J1949 CONDITIONS:
77°F (25°C) AIR INLET TEMPERATURE; 29.51 in. Hg (99kPa) DRY BAROMETER;
100°F (38°C) FUEL INLET TEMPERATURE (.853 SPECIFIC GRAVITY AT 60°F).
- CONVERSION FACTORS: POWER: kW = bhp × 0.746
FUEL: kg/kW·hr = lb/bhp·hr × 0.600
TORQUE: N·m = lb·ft × 1.356
- VALUES DERIVED ARE FROM CURRENTLY AVAILABLE DATA AND SUBJECT TO CHANGE WITHOUT NOTICE.

CERTIFIED BY:
STAFF ENGINEER

CURVE NO.
E4-8067-32-67
DATE: 1-25-85
REV./DATE:
SHT. 1 OF 2

ENGINE SPECIFICATION DATA

General Data

Model.....	8067-7840
Number of Cylinders.....	6
Bore and Stroke-in(mm).....	4.84x5.00(123x127)
Displacement-in ³ (L).....	952(9.05)
Compression Ratio.....	17.0:1
Piston Speed-ft/min(m/min).....	1750(533)
Valves Per Cylinder	
Intake.....	NOT APPLICABLE
Exhaust.....	4
Combustion System.....	DIRECT INJECTION
Engine Type.....	63.5° VEE - 2 CYCLE
Aspiration.....	TURBOCHARGED

Configuration

Turbocharger.....	TV7511(1.23 A/R)
Charge Air Cooling System.....	JWAC
Blower Type.....	BY-PASS
Blower Drive Ratio.....	2.05:1
Low Idle Speed-r/min.....	500
High Idle Speed-r/min.....	2250
Thrust Bearing Load Limit	
Continuous-lbf(N).....	600(2670)
Intermittent-lbf(N).....	1800(8000)
Engine Crankcase Vent System.....	OPEN
Maximum Pressure-in H ₂ O(kPa).....	3.0(0.75)

Physical Data

Size	
Length-in(mm).....	37.6(955)
Width-in(mm).....	37.6(955)
Height-in(mm).....	48.0(1220)
Weight, dry-lb(kg).....	2020(920)
Center of Gravity Distance	
From R.F.O.B. (x axis)-in(mm).....	9.4(239)
Above Crankshaft (y axis)-in(mm).....	10.2(259)
Right of Crankshaft (z axis)-in(mm).....	0.0(0.0)
Installation Drawing.....	5102916
Maximum Allowable Static Bending Moment at Rear Face of PW Hg-lbf ft(N m).....	600(814)

Fuel System

Fuel Injector/Timing.....	9F90/1.520
Fuel Injection Pump/Timing.....	NOT APPLICABLE
Fuel Consumption-lb/hr(kg/hr).....	102.8(46.6)
Fuel Consumption-gal/hr(L/hr).....	14.7(55.6)
Fuel Spill Rate-lb/hr(kg/hr).....	549(249)
Fuel Spill Rate-gal/hr(L/hr).....	78.6(298)
Total Fuel Flow-lb/hr(kg/hr).....	652(297)
Total Fuel Flow-gal/hr(L/hr).....	93.3(353)
Maximum Allowable Fuel Pump Section	
Clean System-in Hg(kPa).....	6(20)
Dirty System-in Hg(kPa).....	12(41)
Fuel Filter Micron Size	
Primary - Micron.....	30
Secondary - Micron.....	10

Lubrication System

Oil Pressure	
Rated Speed-lbf/in ² (kPa).....	49-70(338-483)
Low Idle-lbf/in ² (kPa).....	5(34)
In Pan Oil Temperature-°F(°C).....	200-250(93-121)
Oil Flow-gal/min(L/min).....	37(140)
Oil Pan Capacity	
High-qt(L).....	20(19)
Low-qt(L).....	16(15)
Total Engine Oil Capacity with filters-qt(L).....	22(21)
Bypass Oil Filter Orifice-in(mm).....	0.101(2.57)
Engine Angularity Limits	
Front up - degrees.....	20
Front down - degrees.....	30
Side tilt - degrees.....	NOT AVAILABLE

Emission Data

CO-ga/hr.....	NOT AVAILABLE
HC-ga/hr.....	NOT AVAILABLE
NO _x -ga/hr.....	NOT AVAILABLE
SO _x -ga/hr.....	466
Smoke	
Rated Speed - Bosch Number.....	0.4
Peak Torque Speed - Bosch Number.....	0.6
Noise - dB(A) @ 1m.....	NOT AVAILABLE
Certification Approval.....	CALIFORNIA 1985

Cooling System

Engine Heat Rejection-Btu/min(kW).....	9210(162)
Engine Radiated Heat-Btu/min(kW).....	1380(24.3)
Coolant Flow-gal/min(L/min).....	160(606)
Thermostat	
Start to Open-°F(°C).....	177(81)
Fully Open-°F(°C).....	197(92)
Maximum Water Pump Inlet	
Restriction-in Hg(kPa).....	0.0(0.0)
Engine Coolant Capacity-qt(L).....	24.5(23.2)
Minimum Pressure Cap-lbf/in ² (kPa).....	9.0(62.1)
Maximum Coolant Pressure, (Exclusive of Pressure Cap)-lbf/in ² (kPa).....	NOT AVAILABLE
Maximum Top Tank Temperature-°F(°C).....	210(99)
Minimum Top Tank Temperature-°F(°C).....	160(71)
Minimum Coolant Fill Rate-gal/min(L/min).....	3.0(11.4)
Cooling Index	
Minimum Air to Boil-°F(°C).....	112(44.4)
Maximum Air to Water Diff.-°F(°C).....	100(55.6)
Ram Air Flow - Mils/hr(km/hr).....	15(24)
Deseration-Air Injection	
Capacity-ft ³ /min(m ³ /min).....	0.6(0.017)
Drawdown - Minimum Requirement (or 10% of Cooling System Capacity-Whichever is Larger)-qt(L).....	4.0(3.8)

Air System

Maximum Allowable Temperature Rise (Ambient Air to Engine Inlet)-°F(°C).....	30(16.7)
Air Intake Restriction Maximum Limit	
Dirty Air Cleaner-in H ₂ O(kPa).....	20(5.0)
Clean Air Cleaner-lb H ₂ O(kPa).....	12(3.0)
Engine Air Flow - ft ³ /min(m ³ /min).....	980(27.8)
Engine Air Box/Manifold Pressure-in Hg(kPa).....	40.8(136)
Recommended Intake Pipe Dia.-in(mm).....	6.0(152)

Exhaust System

Exhaust Flow-ft ³ /min(m ³ /min).....	2020(57.2)
Exhaust Temperature-°F(°C).....	645(341)
Maximum Allowable Back Pressure-in Hg(kPa).....	2.5(8.4)
Recommended Exhaust Pipe Dia.	
Single-in(mm).....	5.0(127)
Dual-in(mm).....	NOT APPLICABLE
Exhaust Brake Max. Allowable Back Pressure-in Hg(kPa).....	NOT APPLICABLE

Electrical System

Recommended Battery Capacity(CCA @ 0°F)	
12 Volt System	
Above 32°F(0°C)-A.....	1900
Below 32°F(0°C)-A.....	2500
24 Volt System	
Above 32°F(0°C)-A.....	950
Below 32°F(0°C)-A.....	1250
Maximum Allowable Resistance of Starting Circuit	
12 volt system - ohm.....	0.0012
24 volt system - ohm.....	0.002

Performance Data

Power Output-bhp(kW).....	270(201)
Full Load Speed-r/min.....	2100
Peak Torque-lb ft(N m).....	1000(1356)
Peak Torque Speed-r/min.....	1200
BMEP-lbf/in ² (kPa).....	92(634)
Friction Power	
Rated Speed-bhp(kW).....	79(59)
Peak Torque Speed-bhp(kW).....	32(24)
Altitude Capability-ft(m).....	10000
Torque Available at 800 r/min-lb ft (N m).....	419(563)

Engines

Speed r/min	Power bhp(kW)	Torque lb ft(N m)	BSEC lb/bhp hr (g/kW hr)
2100	270(201)	675 (915)	.381(232)
1950	270(201)	746(1011)	.373(227)
1800	270(201)	788(1068)	.364(221)
1600	270(201)	886(1201)	.354(215)
1400	261(195)	979(1327)	.353(215)
1200	228(170)	1000(1356)	.358(218)
1000	190(142)	998(1353)	.368(224)



ENGINE PERFORMANCE CURVE

RATING: RATED BRAKE POWER

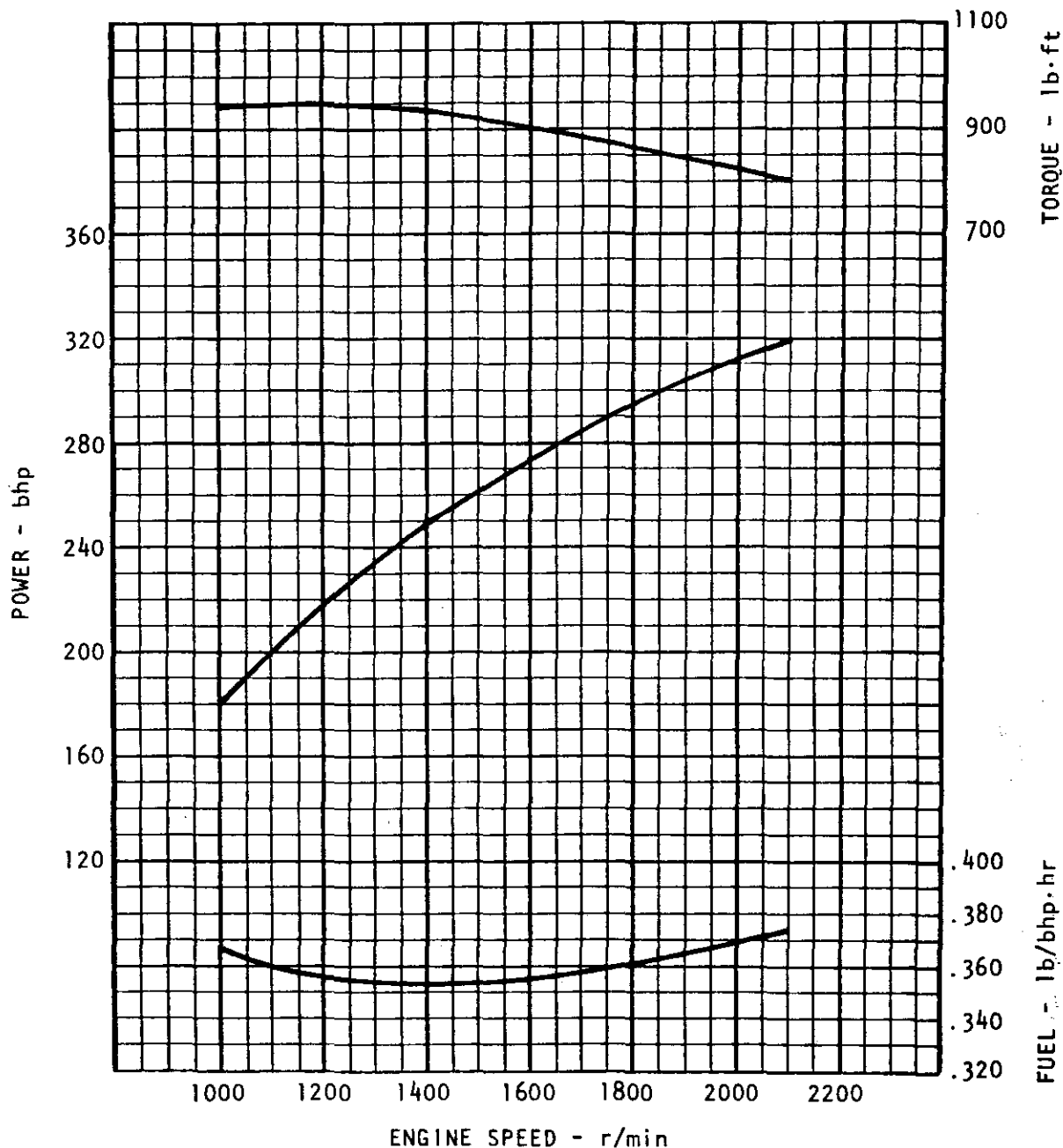
APPLICATION: AUTOMOTIVE

CERTIFICATION: CALIFORNIA 1985

MODEL: 6V-92TAC

320 bhp @ 2100 r/min

950 lb·ft @ 1200 r/min



AIR INTAKE RESTRICTION - in. H₂O (kPa) . . . 10 (2.5)

EXHAUST BACK PRESSURE - in. H₂O (kPa) . . . 15 (3.7)

- POWER OUTPUT GUARANTEED WITHIN 5% AT SAE J1349 CONDITIONS:
77°F (25°C) AIR INLET TEMPERATURE; 29.31 in. Hg (99kPa) DRY BAROMETER;
100°F (39°C) FUEL INLET TEMPERATURE (.853 SPECIFIC GRAVITY AT 60°F).
- CONVERSION FACTORS: POWER: kW = bhp × 0.746
FUEL: kg/kW·hr = lb/bhp·hr × 0.608
TORQUE: N·m = lb·ft × 1.356

• VALUES DERIVED ARE FROM CURRENTLY AVAILABLE DATA AND SUBJECT TO CHANGE WITHOUT NOTICE.

CERTIFIED BY

STAFF ENGINEER

CURVE NO.

E4-8067-32-69

DATE: 2-25-85

REV./DATE:

SHT. 1 OF 2

ENGINE SPECIFICATION DATA

General Data

Model.....	8067-7840
Number of Cylinders.....	6
Bore and Stroke-In(mm).....	4.84x5.00(123x127)
Displacement-In ³ (L).....	552(9.05)
Compression Ratio.....	17.0:1
Piston Speed- $\frac{ft}{min}$ ($\frac{m}{min}$).....	1750(533)
Valves Per Cylinder	
Intake.....	NOT APPLICABLE
Exhaust.....	4
Combustion System.....	DIRECT INJECTION
Engine Type.....	63.5° VEE - 2 CYCLE
Aspiration.....	TURBOCHARGED

Configuration

Turbocharger.....	TV7511(1.23 A/R)
Charge Air Cooling System.....	JWAC
Blower Type.....	8Y-PASS
Blower Drive Ratio.....	2.05:1
Low Idle Speed-r/min.....	500
High Idle Speed-r/min.....	2250
Thrust Bearing Load Limit	
Continuous-lbf(N).....	600(2670)
Intermittent-lbf(N).....	1800(8000)
Engine Crankcase Vent System.....	OPEN
Maximum Pressure-In H ₂ O(kPa).....	3.0(0.75)

Physical Data

Size	
Length-In(mm).....	37.6(955)
Width-In(mm).....	37.6(955)
Height-In(mm).....	48.0(1220)
Weight, dry-lb(kg).....	2020(920)
Center of Gravity Distance	
From R.F.O.B. (x axis)-In(mm).....	9.4(239)
Above Crankshaft (y axis)-In(mm).....	10.2(259)
Right of Crankshaft (z axis)-In(mm).....	0.0(0.0)
Installation Drawing.....	5102916
Maximum Allowable Static Bending Moment	
at Rear Face of FW Hsg-lbf ft(N m)....	600(814)

Fuel System

Fuel Injector/Timing.....	9F85/1.520
Fuel Injection Pump/Timing.....	NOT APPLICABLE
Fuel Consumption-lb/hr(kg/hr).....	123.2(55.9)
Fuel Consumption-gal/hr(L/hr).....	17.6(66.6)
Fuel Split Rate-lb/hr(kg/hr).....	545(247)
Fuel Split Rate-gal/hr(L/hr).....	78.0(295)
Total Fuel Flow-lb/hr(kg/hr).....	668(303)
Total Fuel Flow-gal/hr(L/hr).....	95.6(362)
Maximum Allowable Fuel Pump Suction	
Clean System-In Hg(kPa).....	6(20)
Dirty System-In Hg(kPa).....	12(41)
Fuel Filter Micron Size	
Primary - Micron.....	30
Secondary - Micron.....	10

Lubrication System

Oil Pressure	
Rated Speed-lbf/in ² (kPa).....	49-70(338-483)
Low Idle-lbf/in ² (kPa).....	5(34)
In Pan Oil Temperature-°F(°C).....	200-250(93-121)
Oil Flow-gal/min(L/min).....	37(140)
Oil Pan Capacity	
High-qt(L).....	20(19)
Low-qt(L).....	16(15)
Total Engine Oil Capacity with	
filters-qt(L).....	22(21)
Bypass Oil Filter Orifice-In(mm).....	0.101(2.57)
Engine Angularity Limits	
Front up - degrees.....	20
Front down - degrees.....	30
Side tilt - degrees.....	NOT AVAILABLE

Emission Data

CO-gm/hr.....	NOT AVAILABLE
HC-gm/hr.....	NOT AVAILABLE
NO _x -gm/hr.....	NOT AVAILABLE
SO ₂ -gm/hr.....	559
Smoke	
Rated Speed - Bosch Number.....	0.4
Peak Torque Speed - Bosch Number.....	0.5
Noise - dB(A) @ 1m.....	NOT AVAILABLE
Certification Approval.....	CALIFORNIA 1985

Cooling System

Engine Heat Rejection-Btu/min(kW).....	10170(179)
Engine Radiated Heat-Btu/min(kW).....	1660(29.2)
Coolant Flow-gal/min(L/min).....	160(606)
Thermostat	
Start to Open-°F(°C).....	177(81)
Fully Open-°F(°C).....	197(92)
Maximum Water Pump Inlet	
Restriction-In Hg(kPa).....	0.0(0.0)
Engine Coolant Capacity-qt(L).....	24.5(23.2)
Minimum Pressure Cap-lbf/in ² (kPa).....	9.0(62.1)
Maximum Coolant Pressure (Exclusive	
of Pressure Cap)-lbf/in ² (kPa).....	NOT AVAILABLE
Maximum Top Tank Temperature-°F(°C)....	210(99)
Minimum Top Tank Temperature-°F(°C)....	160(71)
Minimum Coolant Fill Rate-	
gal/min(L/min).....	3.0(11.4)
Cooling Index	
Minimum Air to Boil-°F(°C).....	112(44.4)
Maximum Air to Water Diff.-°F(°C)....	100(55.6)
Ram Air Flow - Mile/hr(km/hr).....	15(24)

Deaeration-Air Injection

Capacity-ft ³ /min(m ³ /min).....	0.6(0.017)
Drawdown - Minimum Requirement (or 10%	
of Cooling System Capacity-Whichever	
Is Larger)-qt(L).....	4.0(3.8)

Air System

Maximum Allowable Temperature Rise	
(Ambient Air to Engine Inlet)-°F(°C)....	30(16.7)
Air Intake Restriction Maximum Limit	
Dirty Air Cleaner-In H ₂ O(kPa).....	20(5.0)
Clean Air Cleaner-lb H ₂ O(kPa).....	12(3.0)
Engine Air Flow - ft ³ /min(m ³ /min).....	1065(30.2)
Engine Air Box/Manifold Pressure-	
In Hg(kPa).....	48.0(162)
Recommended Intake Pipe Dia.-In(mm)....	6.0(152)

Exhaust System

Exhaust Flow-ft ³ /min(m ³ /min).....	2280(64.6)
Exhaust Temperature-°F(°C).....	690(366)
Maximum Allowable Back	
Pressure-In Hg(kPa).....	2.5(8.4)
Recommended Exhaust Pipe Dia.	
Single-In(mm).....	5.0(127)
Dual-In(mm).....	NOT APPLICABLE
Exhaust Brake Max. Allowable Back	
Pressure-In Hg(kPa).....	NOT APPLICABLE

Electrical System

Recommended Battery Capacity(CCA @ 0°F)	
12 Volt System	
Above 32°F(0°C)-A.....	1900
Below 32°F(0°C)-A.....	2500
24 Volt System	
Above 32°F(0°C)-A.....	950
Below 32°F(0°C)-A.....	1250
Maximum Allowable Resistance of	
Starting Circuit	
12 volt system - ohm.....	0.0012
24 volt system - ohm.....	0.002

Performance Data

Power Output-bhp(kW).....	320(239)
Full Load Speed-r/min.....	2100
Peak Torque-lb ft(N m).....	950(1288)
Peak Torque Speed-r/min.....	1200
BMEP-lbf/in ² (kPa).....	109(752)
Friction Power	
Rated Speed-bhp(kW).....	79(59)
Peak Torque Speed-bhp(kW).....	32(24)
Altitude Capability-ft(m).....	10000(3050)
Torque Available at 800 r/min-	
lb ft (N m).....	300(407)

Engine

Speed	Power	Torque	BSFC
r/min	bhp(kW)	lb ft(N m)	lb/bhp hr
			(g/kW hr)
2100	320(239)	800(1085)	.373(227)
1950	308(230)	830(1125)	.367(223)
1800	294(219)	858(1163)	.362(220)
1600	274(204)	899(1219)	.354(215)
1400	250(187)	938(1272)	.353(215)
1200	217(162)	950(1288)	.356(217)
1000	180(134)	945(1281)	.366(223)

All values at rated speed and power and with standard engine hardware unless otherwise noted.

Curve No. E4-8067-32-69

Date: 2-25-85

Rev./Date:

Sht. 2 of 2



ENGINE PERFORMANCE CURVE

RATING: RATED BRAKE POWER

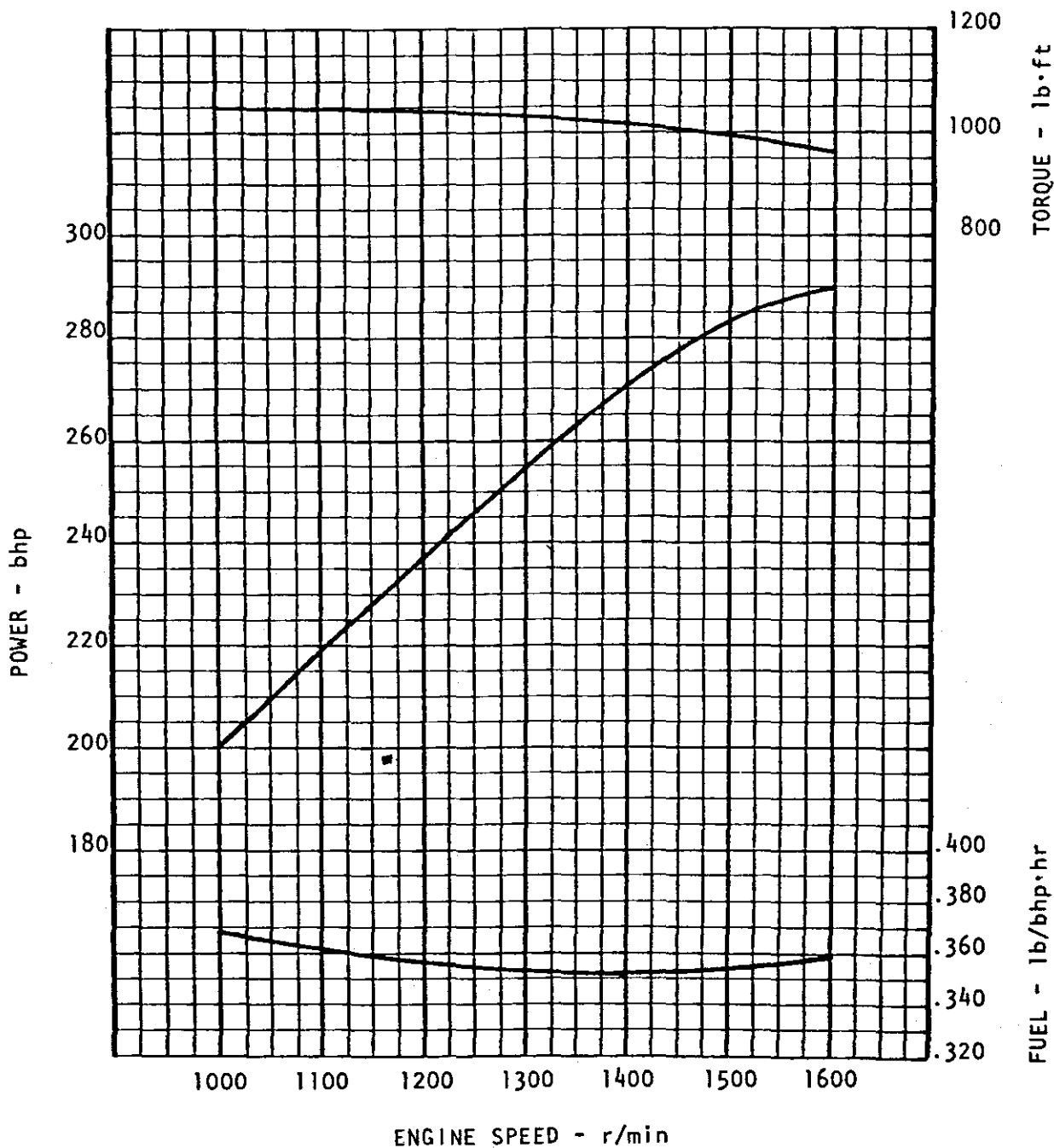
APPLICATION: AUTOMOTIVE

CERTIFICATION: FEDERAL 1985

MODEL: 6V-92T A/A

290 bhp @ 1600 r/min

1050 lb·ft @ 1000 r/min



• POWER OUTPUT GUARANTEED WITHIN 5% AT SAE J1349 CONDITIONS:
77°F (25°C) AIR INLET TEMPERATURE; 29.31 in. Hg (99kPa) DRY BARMETER;
100°F (39°C) FUEL INLET TEMPERATURE (.853 SPECIFIC GRAVITY AT 60°F);
10 in. H₂O (2.5kPa) AIR INLET RESTRICTION; 15 in. H₂O (3.7kPa) EXHAUST
BACK PRESSURE; 16 in. H₂O (4.0kPa) CHARGE AIR COOLER SYSTEM PRESSURE
DROP; 97°F (36.1°C) CHARGE AIR COOLER SYSTEM TEMPERATURE OUT.
• VALUES DERIVED ARE FROM CURRENTLY AVAILABLE DATA AND SUBJECT TO
CHANGE WITHOUT NOTICE.

CERTIFIED BY

STAFF ENGINEER

CURVE NO.

E4-8067-32-70

DATE: 4-4-85

REV./DATE:

SHT. 1 OF 2

ENGINE SPECIFICATION DATA

General Data

Model.....	8067-7361
Number of Cylinders.....	6
Bore and Stroke-In(mm).....	4.84x5.00(123x127)
Displacement-In ³ (L).....	552(9.05)
Compression Ratio.....	18.0:1
Piston Speed-ft/min(m/min).....	1333(406)
Valves Per Cylinder	
Intake.....	NOT APPLICABLE
Exhaust.....	4
Combustion System.....	DIRECT INJECTION
Engine Type.....	63.5° VEE - 2 CYCLE
Aspiration.....	TURBOCHARGED

Configuration

Turbocharger.....	TA7501(2.59 A/R)
Charge Air Cooling System.....	AIR/AIR
Blower Type.....	BY-PASS
Blower Drive Ratio.....	1.95:1
Low Idle Speed-r/min.....	500
High Idle Speed-r/min.....	1775
Thrust Bearing Load Limit	
Continuous-lbf(N).....	600(2670)
Intermittent-lbf(N).....	1800(8000)
Engine Crankcase Vent System.....	OPEN
Maximum Pressure-In H ₂ O(kPa).....	1.8(0.45)

Physical Data

Size	
Length-In(mm).....	37.6(955)
Width-In(mm).....	37.6(955)
Height-In(mm).....	48.0(1220)
Weight-dry-lb(kg).....	2020(920)
Center of Gravity Distance	
From R.F.O.B. (x axis)-In(mm).....	9.4(239)
Above Crankshaft (y axis)-In(mm).....	10.2(259)
Right of Crankshaft (z axis)-In(mm).....	0.0(0.0)
Installation Drawing.....	NOT AVAILABLE
Maximum Allowable Static Bending Moment at Rear Face of FW Hsg-lbf ft(N m)....	600(814)

Fuel System

Fuel Injector/Timing.....	9K85/1.475
Fuel Injection Pump/Timing.....	NOT APPLICABLE
Fuel Consumption-lb/hr(kg/hr).....	99.0(44.9)
Fuel Consumption-gal/hr(L/hr).....	14.2(53.7)
Fuel Spill Rate-lb/hr(kg/hr).....	446(202)
Fuel Spill Rate-gal/hr(L/hr).....	63.8(242)
Total Fuel Flow-lb/hr(kg/hr).....	545(247)
Total Fuel Flow-gal/hr(L/hr).....	78.0(295)
Maximum Allowable Fuel Pump Suction	
Clean System-In Hg(kPa).....	6(20)
Dirty System-In Hg(kPa).....	12(41)
Fuel Filter Micron Size	
Primary - Micron.....	30
Secondary - Micron.....	10

Lubrication System

Oil Pressure	
Rated Speed-lbf/in ² (kPa).....	44-65(303-448)
Low Idle-lbf/in ² (kPa).....	5(34)
In Pan Oil Temperature-°F(°C).....	200-250(93-121)
Oil Flow-gal/min(L/min).....	32(121)
Oil Pan Capacity	
High-qt(L).....	20(19)
Low-qt(L).....	16(15)
Total Engine Oil Capacity with filters-qt(L).....	22(21)
Bypass Oil Filter Orifice-In(mm).....	0.101(2.57)
Engine Angularity Limits	
Front up - degrees.....	20
Front down - degrees.....	30
Side tilt - degrees.....	NOT AVAILABLE

Emission Data

CO-gm/hr.....	NOT AVAILABLE
HC-gm/hr.....	NOT AVAILABLE
NO _x -gm/hr.....	NOT AVAILABLE
SO ₂ -gm/hr.....	449
Smoke	
Rated Speed - Bosch Number.....	0.2
Peak Torque Speed - Bosch Number.....	0.2
Noise - dB(A) @ 1m.....	NOT AVAILABLE
Certification Approval.....	FEDERAL 1985

Cooling System

Engine Heat Rejection-Btu/min(kW).....	5850(103)
Charge Air Cooler Heat Rejection-Btu/min(kW).....	2550(45)
Engine Radiated Heat-Btu/min(kW).....	1485(26.1)
Coolant Flow-gal/min(L/min).....	125(473)
Thermostat	
Start to Open-°F(°C).....	177(81)
Fully Open-°F(°C).....	197(92)
Maximum Water Pump Inlet Restriction-In Hg(kPa).....	0.0(0.0)
Engine Coolant Capacity-qt(L).....	24.5(23.2)
Minimum Pressure Cap-lbf/in ² (kPa).....	9.0(62.1)
Maximum Coolant Pressure (Exclusive of Pressure Cap)-lbf/in ² (kPa).....	20(138)
Maximum Top Tank Temperature-°F(°C).....	210(99)
Minimum Top Tank Temperature-°F(°C).....	167(75)
Minimum Coolant Fill Rate-gal/min(L/min).....	3.0(11.4)
Cooling Index	
Minimum Air to Boil-°F(°C).....	112(44.4)
Maximum Air to Water Diff.-°F(°C).....	100(55.6)
Ram Air Flow - Mile/hr(km/hr).....	15(24)
Deaeration-Air Injection Capacity-ft ³ /min(m ³ /min).....	0.6(0.017)
Drawdown - Minimum Requirement (or 10% of Cooling System Capacity-Whichever is Larger)-qt(L).....	4.0(3.8)

Air System

Maximum Allowable Temperature Rise (Ambient Air to Engine Inlet)-°F(°C).....	30(16.7)
Air Intake Restriction Maximum Limit	
Dirty Air Cleaner-In H ₂ O(kPa).....	20(5.0)
Clean Air Cleaner-In H ₂ O(kPa).....	12(3.0)
Engine Air Flow - ft ³ /min(m ³ /min).....	830(23.5)
Engine Air Box/Manifold Pressure-In Hg(kPa).....	34.8(118)
Recommended Intake Pipe Dia.-In(mm)....	6.0(152)
Maximum Allowable Charge Air Cooler System Pressure Drop-In H ₂ O(kPa).....	41(10.2)
Maximum Allowable Charge Air Cooler Out Temperature-°F(°C).....	110(43)

Exhaust System

Exhaust Flow-ft ³ /min(m ³ /min).....	1610(45.6)
Exhaust Temperature-°F(°C).....	580(304)
Maximum Allowable Back Pressure-In Hg(kPa).....	1.5(5.1)
Recommended Exhaust Pipe Dia.	
Single-In(mm).....	5.0(127)
Dual-In(mm).....	NOT APPLICABLE
Exhaust Brake Max. Allowable Back Pressure-In Hg(kPa).....	NOT APPLICABLE

Electrical System

Recommended Battery Capacity(CCA @ 0°F)	
12 Volt System	
Above 32°F(0°C)-A.....	1900
Below 32°F(0°C)-A.....	2500
24 Volt System	
Above 32°F(0°C)-A.....	950
Below 32°F(0°C)-A.....	1250
Maximum Allowable Resistance of Starting Circuit	
12 volt system - ohm.....	0.0012
24 volt system - ohm.....	0.002

Performance Data

Power Output-bhp(kW).....	290(216)
Full Load Speed-r/min.....	1600
Peak Torque-lb ft(N m).....	1050(1424)
Peak Torque Speed-r/min.....	1000
BMEP-lbf/in ² (kPa).....	131(903)
Friction Power	
Rated Speed-bhp(kW).....	49(37)
Peak Torque Speed-bhp(kW).....	25(19)
Altitude Capability-ft(m).....	10000(3050)
Torque Available at 800 r/min-lb ft (N m).....	445(603)

Engine Speed r/min	Power bhp(kW)	Torque lb ft(N m)	BSEC lb/bhp hr (g/kW hr)
1600	290(216)	958(1299)	.339(206)
1400	271(202)	1017(1379)	.331(201)
1200	237(177)	1037(1406)	.336(204)
1000	200(149)	1050(1424)	.348(212)

All values at rated speed and power and with standard engine hardware unless otherwise noted.

Curve No. E4-8067-32-70
Date: 4-4-85
Rev./Date:
Sht. 2 of 2



ENGINE PERFORMANCE CURVE

RATING: RATED BRAKE POWER

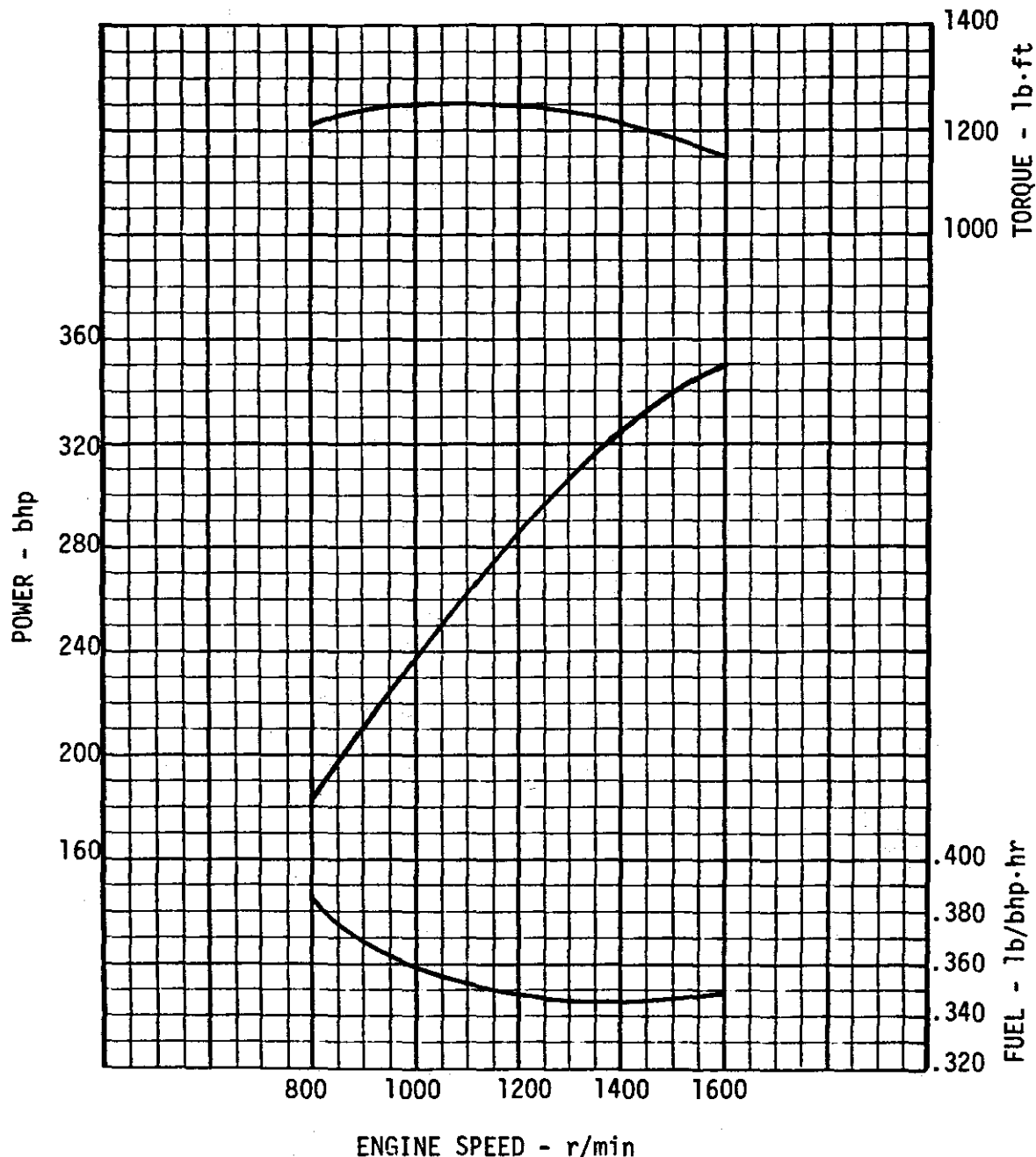
APPLICATION: AUTOMOTIVE

CERTIFICATION: FEDERAL 1985

MODEL: 8V-92TA

350 bhp @ 1600 r/min

1250 lb·ft @ 1000 r/min



AIR INTAKE RESTRICTION - in. H₂O (kPa) 10(2.5)

EXHAUST BACK PRESSURE - in. H₂O (kPa) 15(3.7)

- POWER OUTPUT GUARANTEED WITHIN 5% AT SAE J1349 CONDITIONS:
77°F (25°C) AIR INLET TEMPERATURE; 29.31 in. Hg (99kPa) DRY BARMETER;
100°F (39°C) FUEL INLET TEMPERATURE (.853 SPECIFIC GRAVITY AT 60°F).
- CONVERSION FACTORS: POWER: kW = bhp × 0.746
FUEL: kg/kW·hr = lb/bhp·hr × 0.608
TORQUE: N·m = lb·ft × 1.356
- VALUES DERIVED ARE FROM CURRENTLY AVAILABLE DATA AND SUBJECT TO CHANGE WITHOUT NOTICE.

CERTIFIED BY:

B. S. Henaker

STAFF ENGINEER

CURVE NO.

E4-8087-32-48

DATE: 6-4-84

REV./DATE: 1/2-13-85

SHT. 1 OF 2

ENGINE SPECIFICATION DATA

General Data

Model.....	8087-7840
Number of Cylinders.....	8
Bore and Stroke-In(mm).....	4.84x5.00(123x127)
Displacement-In ³ (L).....	736(12.1)
Compression Ratio.....	17.0:1
Piston Speed-ft/min(m/min).....	1333(406)
Valves Per Cylinder.....	
Intake.....	NOT APPLICABLE
Exhaust.....	4
Combustion System.....	DIRECT INJECTION
Engine Type.....	63.5° VEE - 2 CYCLE
Aspiration.....	TURBOCHARGED
Configuration	
Turbocharger.....	TV8512(1.23 A/R)
Charge Air Cooling System.....	JWAC
Blower Type.....	BY-PASS
Blower Drive Ratio.....	1.95:1
Low Idle Speed-r/min.....	500
High Idle Speed-r/min.....	1750
Thrust Bearing Load Limit.....	
Continuous-lbf(N).....	600(2670)
Intermittent-lbf(N).....	1800(8000)
Engine Crankcase Vent System.....	OPEN
Maximum Pressure-In H ₂ O(kPa).....	2.8(0.70)

Physical Data

Size	
Length-In(mm).....	43.9(1115)
Width-In(mm).....	37.6(955)
Height-In(mm).....	49.5(1257)
Weight, dry-lb(kg).....	2420(1100)
Center of Gravity Distance	
From R.F.O.B. (x axis)-In(mm).....	13.3(338)
Above Crankshaft (y axis)-In(mm).....	11.4(290)
Right of Crankshaft (z axis)-In(mm).....	0.0(0.0)
Installation Drawing.....	5102974
Maximum Allowable Static Bending Moment at Rear Face of FW Hsg-lbf ft(N m).....	600(814)

Fuel System

Fuel Injector/Timing.....	9E80/1.470
Fuel Injection Pump/Timing.....	NOT APPLICABLE
Fuel Consumption-lb/hr(kg/hr).....	124.7(56.6)
Fuel Consumption-gal/hr(L/hr).....	17.8(67.4)
Fuel Spill Rate-lb/hr(kg/hr).....	453(205)
Fuel Spill Rate-gal/hr(L/hr).....	64.8(245)
Total Fuel Flow-lb/hr(kg/hr).....	578(262)
Total Fuel Flow-gal/hr(L/hr).....	82.7(313)
Maximum Allowable Fuel Pump Suction	
Clean System-In Hg(kPa).....	6(20)
Dirty System-In Hg(kPa).....	12(41)
Fuel Filter Micron Size	
Primary - Micron.....	30
Secondary - Micron.....	10

Lubrication System

Oil Pressure	
Rated Speed-lbf/in ² (kPa).....	44-65(303-448)
Low Idle-lbf/in ² (kPa).....	5(34)
In Pan Oil Temperature-°F(°C).....	200-250(93-121)
Oil Flow-gal/min(L/min).....	32(121)
Oil Pan Capacity	
High-qt(L).....	25(24)
Low-qt(L).....	19(18)
Total Engine Oil Capacity with filters-qt(L).....	27(26)
Bypass Oil Filter Orifice-In(mm).....	0.101(2.57)
Engine Angularity Limits	
Front up - degrees.....	20
Front down - degrees.....	30
Side tilt - degrees.....	NOT AVAILABLE

Emission Data

CO-gm/hr.....	NOT AVAILABLE
HC-gm/hr.....	NOT AVAILABLE
NO _x -gm/hr.....	NOT AVAILABLE
SO ₂ -gm/hr.....	566
Smoke	
Rated Speed - Bosch Number.....	0.4
Peak Torque Speed - Bosch Number.....	0.4
Noise - dB(A) @ 1m.....	NOT AVAILABLE
Certification Approval.....	FEDERAL 1985

Cooling System

Engine Heat Rejection-Btu/min(kW).....	10160(179)
Engine Radiated Heat-Btu/min(kW).....	1870(32.9)
Coolant Flow-gal/min(L/min).....	142(538)
Thermostat	
Start to Open-°F(°C).....	177(81)
Fully Open-°F(°C).....	197(92)
Maximum Water Pump Inlet	
Restriction-In Hg(kPa).....	0.0(0.0)
Engine Coolant Capacity-qt(L).....	29.0(27.4)
Minimum Pressure Cap-lbf/in ² (kPa).....	9.0(62.1)
Maximum Coolant Pressure (Exclusive of Pressure Cap)-lbf/in ² (kPa).....	NOT AVAILABLE
Maximum Top Tank Temperature-°F(°C).....	210(99)
Minimum Top Tank Temperature-°F(°C).....	160(71)
Minimum Coolant Fill Rate-gal/min(L/min).....	3.0(11.4)
Cooling Index	
Minimum Air to Boil-°F(°C).....	112(44.4)
Maximum Air to Water Diff.-°F(°C).....	100(55.6)
Ram Air Flow - Mile/hr(km/hr).....	15(24)
Deaeration-Air Injection	
Capacity-ft ³ /min(m ³ /min).....	0.8(0.023)
Drawdown - Minimum Requirement (or 10% of Cooling System Capacity-Whichever is Larger)-qt(L).....	4.0(3.8)

Air System

Maximum Allowable Temperature Rise (Ambient Air to Engine Inlet)-°F(°C).....		30(16.7)
Air Intake Restriction Maximum Limit		
Dirty Air Cleaner-In H ₂ O(kPa).....	20(5.0)	
Clean Air Cleaner-lb H ₂ O(kPa).....	12(3.0)	
Engine Air Flow - ft ³ /min(m ³ /min).....	1070(30.3)	
Engine Air Box/Manifold Pressure-In Hg(kPa).....		41.8(141)
Recommended Intake Pipe Dia.-in(mm).....		6.0(152)

Exhaust System

Exhaust Flow-ft ³ /min(m ³ /min).....	2110(59.8)
Exhaust Temperature-°F(°C).....	600(316)
Maximum Allowable Back Pressure-In Hg(kPa).....	1.5(5.1)
Recommended Exhaust Pipe Dia.	
Single-In(mm).....	6.0(152)
Dual-In(mm).....	NOT APPLICABLE
Exhaust Brake Max. Allowable Back Pressure-In Hg(kPa).....	NOT APPLICABLE

Electrical System

Recommended Battery Capacity(CCA @ 0°F)		
12 Volt System		
Above 32°F(0°C)-A.....	1900	
Below 32°F(0°C)-A.....	2300	
24 Volt System		
Above 32°F(0°C)-A.....	950	
Below 32°F(0°C)-A.....	1250	
Maximum Allowable Resistance of Starting Circuit		
12 volt system - ohm.....	0.0012	
24 volt system - ohm.....	0.002	

Performance Data

Power Output-bhp(kW).....	350(261)
Full Load Speed-r/min.....	1600
Peak Torque-lb ft(N.m).....	1250(1695)
Peak Torque Speed-r/min.....	1000
BMEP-lbf/in ² (kPa).....	118(814)
Friction Power	
Rated Speed-bhp(kW).....	63(47)
Peak Torque Speed-bhp(kW).....	30(22)
Altitude Capability-ft(m).....	10000
Torque Available at 800 r/min-lb ft (N.m).....	690(935)

Engine

Speed r/min	Power bhp(kW)	Torque lb ft(N m)	BSEC lb/bhp hr (g/kW hr)
1600	350(261)	1149(1558)	.349(212)
1400	325(242)	1219(1653)	.345(210)
1200	285(213)	1247(1691)	.348(212)
1000	238(178)	1250(1695)	.359(218)
800	184(137)	1208(1638)	.384(234)

All values at rated speed and power and with standard engine hardware unless otherwise noted.

Curve No. E4-8087-32-48
Date: 6-4-84
Rev./Date: 1/2-13-85
Sht. 2 of 2



ENGINE PERFORMANCE CURVE

RATING: RATED BRAKE POWER

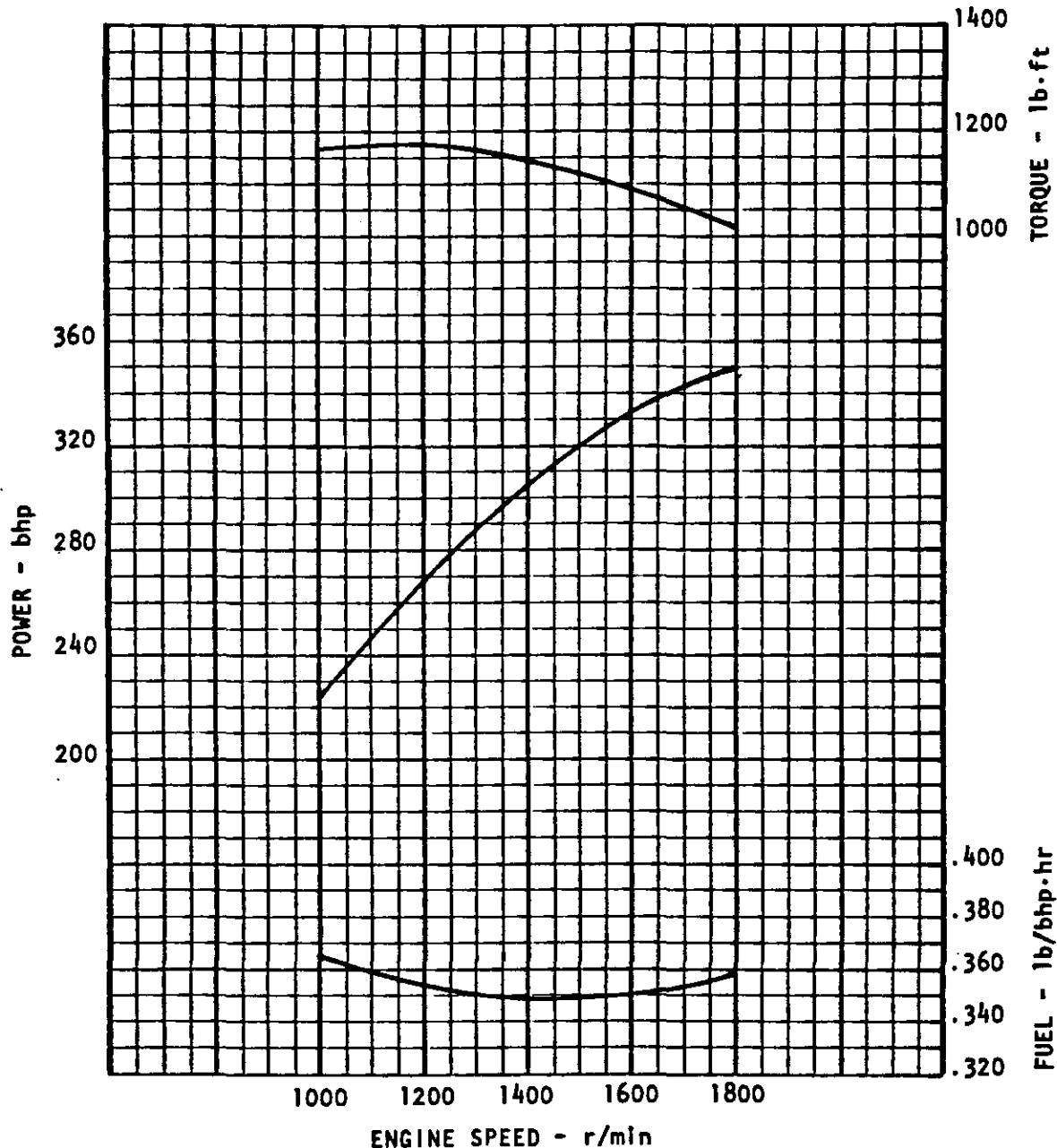
APPLICATION: AUTOMOTIVE

CERTIFICATION: FEDERAL 1985

MODEL: 8V-92TA

350 bhp @ 1800 r/min

1175 lb·ft @ 1200 r/min



AIR INTAKE RESTRICTION - in. H₂O (mm H₂O) . . . 10 (250)
EXHAUST RESTRICTION - in. H₂O (mm H₂O) . . . 15 (380)

- POWER OUTPUT GUARANTEED WITHIN 5% AT SAE J1349 CONDITIONS:
77°F (25°C) AIR INLET TEMPERATURE; 29.31 in. Hg (99kPa) DRY BAROMETER;
100°F (39°C) FUEL INLET TEMPERATURE (0.853 SPECIFIC GRAVITY AT 60°F).
- CONVERSION FACTORS: POWER: kW = bhp × 0.746
FUEL: kg/kW·hr = lb/bhp·hr × 0.608
TORQUE: N·m = lb·ft × 1.356
- VALUES DERIVED ARE FROM CURRENTLY AVAILABLE DATA AND SUBJECT TO CHANGE WITHOUT NOTICE.

CERTIFIED BY:

B. S. Penner

STAFF ENGINEER

CURVE NO.

E4-8087-32-49

DATE: 6-4-84

REV./DATE:

SHT. 1 OF 2

ENGINE SPECIFICATION DATA

General Data

Model.....	8087-7840
Number of Cylinders.....	8
Bore and Stroke-in(mm).....	4.84x5.00(123x127)
Displacement-in ³ (L).....	736(12.1)
Compression Ratio.....	17.0:1
Piston Speed-ft/min(m/min).....	1500(457)
Valves Per Cylinder	
Intake.....	NOT APPLICABLE
Exhaust.....	4
Combustion System.....	DIRECT INJECTION
Engine Type.....	63.5" VEE - 2 CYCLE
Aspiration.....	TURBOCHARGED

Configuration

Turbocharger.....	TV7511(1.23 A/R)
Charge Air Cooling System.....	JWAC
Blower Type.....	BY-PASS
Blower Drive Ratio.....	1.95:1
Low Idle Speed-r/min.....	500
High Idle Speed-r/min.....	1925
Thrust Bearing Load Limit	
Continuous-lbf(N).....	600(2670)
Intermittent-lbf(N).....	1800(8000)
Engine Crankcase Vent System.....	OPEN
Maximum Pressure-in H ₂ O(kPa).....	3.1(0.77)

Physical Data

Size	
Length-in(mm).....	43.9(1115)
Width-in(mm).....	37.6(955)
Height-in(mm).....	49.5(1257)
Weight, dry-lb(kg).....	2420(1100)
Center of Gravity Distance	
From R.F.O.B. (x axis)-in(mm).....	13.3(338)
Above Crankshaft (y axis)-in(mm).....	11.4(290)
Right of Crankshaft (z axis)-in(mm).....	0.0(0.0)
Installation Drawing.....	5102974
Maximum Allowable Static Bending Moment at Rear Face of FW Hsg-lbf ft(N m)....	600(814)

Fuel System

Fuel Injector/Timing.....	7G75/1.460
Fuel Injection Pump/Timing.....	NOT APPLICABLE
Fuel Consumption-lb/hr(kg/hr).....	128.5(58.3)
Fuel Consumption-gal/hr(L/hr).....	18.4(69.7)
Fuel Spill Rate-lb/hr(kg/hr).....	458(208)
Fuel Spill Rate-gal/hr(L/hr).....	65.5(248)
Total Fuel Flow-lb/hr(kg/hr).....	587(266)
Total Fuel Flow-gal/hr(L/hr).....	83.9(318)
Maximum Allowable Fuel Pump Suction	
Clean System-in Hg(kPa).....	6(20)
Dirty System-in Hg(kPa).....	12(41)
Fuel Filter Micron Size	
Primary - Micron.....	30
Secondary - Micron.....	10

Lubrication System

Oil Pressure	
Rated Speed-lbf/in ² (kPa).....	49-70(338-483)
Low Idle-lbf/in ² (kPa).....	5(34)
In Pan Oil Temperature-°F(°C).....	200-250(93-121)
Oil Flow-gal/min(L/min).....	34(129)
Oil Pan Capacity	
High-qt(L).....	25(24)
Low-qt(L).....	19(18)
Total Engine Oil Capacity with filters-qt(L).....	27(26)
Bypass Oil Filter Orifice-in(mm).....	0.101(2.57)
Engine Angularity Limits	
Front up - degrees.....	20
Front down - degrees.....	30
Side tilt - degrees.....	NOT AVAILABLE

Emission Data

CO-gm/hr.....	NOT AVAILABLE
HC-gm/hr.....	NOT AVAILABLE
NO _x -gm/hr.....	NOT AVAILABLE
SO ₂ -gm/hr.....	583
Smoke	
Rated Speed - Bosch Number.....	NOT AVAILABLE
Peak Torque Speed - Bosch Number.....	NOT AVAILABLE
Noise - dB(A) @ 1m.....	NOT AVAILABLE
Certification Approval.....	FEDERAL 1985

Cooling System

Engine Heat Rejection-Btu/min(kW).....	10850(191)
Engine Radiated Heat-Btu/min(kW).....	1810(31.8)
Coolant Flow-gal/min(L/min).....	160(606)
Thermostat	
Start to Open-°F(°C).....	177(81)
Fully Open-°F(°C).....	197(92)
Maximum Water Pump Inlet	
Restriction-in Hg(kPa).....	0.0(0.0)
Engine Coolant Capacity-qt(L).....	29.0(27.4)
Minimum Pressure Cap-lbf/in ² (kPa).....	9.0(62.1)
Maximum Coolant Pressure (Exclusive of Pressure Cap)-lbf/in ² (kPa).....	NOT AVAILABLE
Maximum Top Tank Temperature-°F(°C)....	210(99)
Minimum Top Tank Temperature-°F(°C)....	160(71)
Minimum Coolant Fill Rate-gal/min(L/min).....	3.0(11.4)
Cooling Index	
Minimum Air to Boil-°F(°C).....	112(44.4)
Maximum Air to Water Diff.-°F(°C).....	100(55.6)
Ram Air Flow - Mile/hr(km/hr).....	15(24)
Deaeration-Air Injection	
Capacity-ft ³ /min(m ³ /min).....	0.8(0.023)
Drawdown - Minimum Requirement (or 10% of Cooling System Capacity-Whichever is Larger)-qt(L).....	4.0(3.8)

Air System

Maximum Allowable Temperature Rise (Ambient Air to Engine Inlet)-°F(°C)....	30(16.7)
Air Intake Restriction Maximum Limit	
Dirty Air Cleaner-in H ₂ O(kPa).....	20(5.0)
Clean Air Cleaner-in H ₂ O(kPa).....	12(3.0)
Engine Air Flow - ft ³ /min(m ³ /min).....	1030
Engine Air Box/Manifold Pressure-in Hg(kPa).....	37.4
Recommended Intake Pipe Dia.-in(mm)....	6.0(152)

Exhaust System

Exhaust Flow-ft ³ /min(m ³ /min).....	2180
Exhaust Temperature-°F(°C).....	675
Maximum Allowable Back Pressure-in Hg(kPa).....	2.4(8.1)
Recommended Exhaust Pipe Dia.	
Single-in(mm).....	6.0(152)
Dual-in(mm).....	NOT APPLICABLE
Exhaust Brake Max. Allowable Back Pressure-in Hg(kPa).....	NOT APPLICABLE

Electrical System

Recommended Battery Capacity(CCA @ 0°F)	
12 Volt System	
Above 32°F(0°C)-A.....	1900
Below 32°F(0°C)-A.....	2500
24 Volt System	
Above 32°F(0°C)-A.....	950
Below 32°F(0°C)-A.....	1250
Maximum Allowable Resistance of Starting Circuit	
12 volt system - ohm.....	0.0012
24 volt system - ohm.....	0.002

Performance Data

Power Output-bhp(kW).....	350(261)
Full Load Speed-r/min.....	1800
Peak Torque-lb ft(N m).....	1175(1593)
Peak Torque Speed-r/min.....	1200
BMEP-lbf/in ² (kPa).....	105(724)
Friction Power	
Rated Speed-bhp(kW).....	79(59)
Peak Torque Speed-bhp(kW).....	39(29)
Altitude Capability-ft(m).....	10000
Torque Available at 800 r/min-lb ft (N m).....	505

Engine

Speed r/min	Power bhp(kW)	Torque lb ft(N m)	BSFC lb/bhp hr (g/kW hr)
1800	350(261)	1021(1384)	.358(218)
1600	333(248)	1093(1482)	.350(213)
1400	305(228)	1144(1551)	.348(212)
1200	268(200)	1175(1593)	.353(215)
1000	239(166)	1171(1588)	.364(221)

All values at rated speed and power and with standard engine hardware unless otherwise noted.

Curve No. E4-8087-32-49
Sht. 2 of 2



ENGINE PERFORMANCE CURVE

RATING: RATED BRAKE POWER

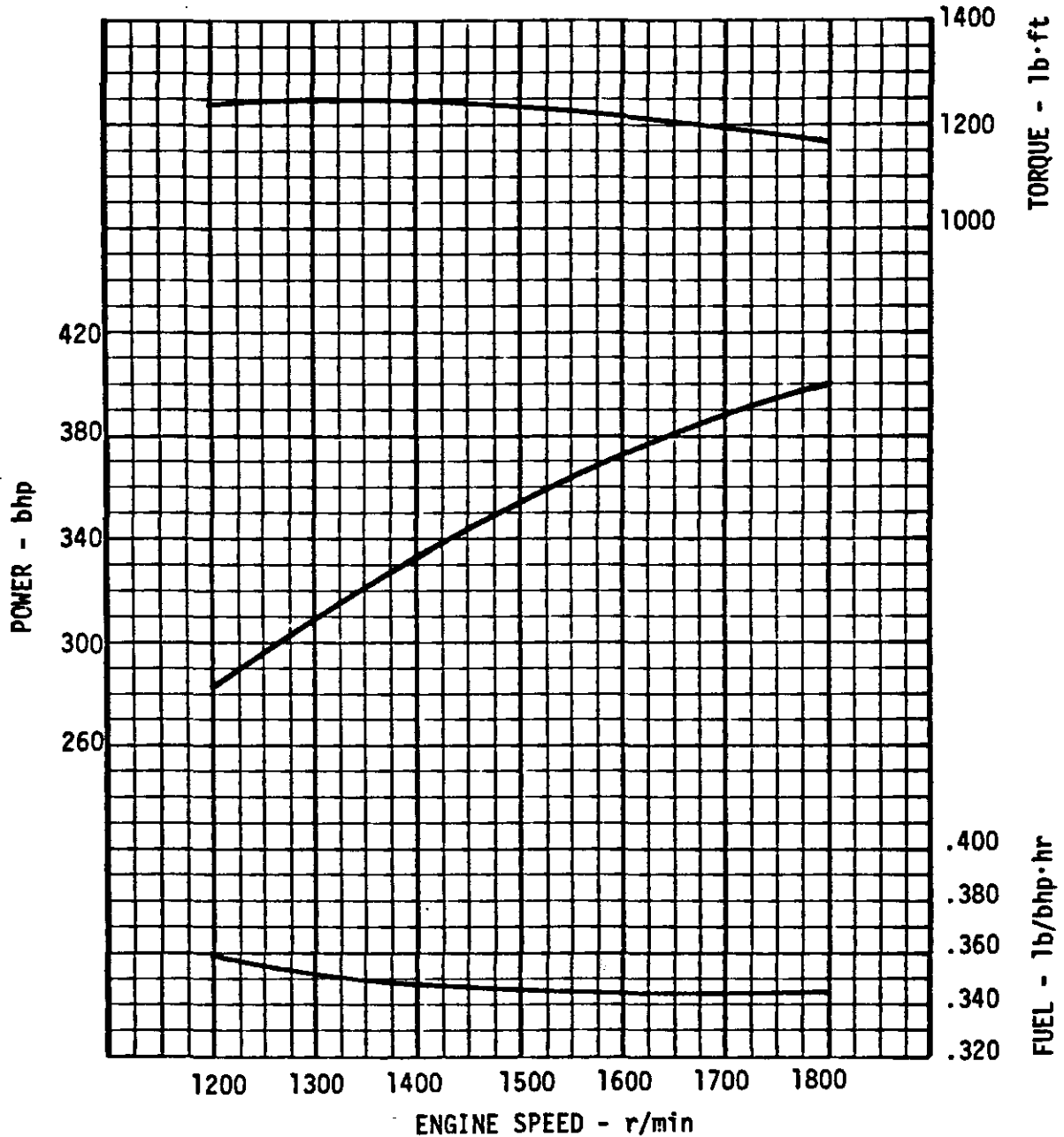
APPLICATION: AUTOMOTIVE

CERTIFICATION: FEDERAL 1985

MODEL: 8V-92TA

400 bhp @ 1800 r/min

1250 lb·ft @ 1300 r/min



AIR INTAKE RESTRICTION - in. H₂O (kPa) 10(2.5)
EXHAUST BACK PRESSURE - in. H₂O (kPa) 15(3.7)

- POWER OUTPUT GUARANTEED WITHIN 5% AT SAE J1349 CONDITIONS:
77°F (25°C) AIR INLET TEMPERATURE; 29.31 in. Hg (99kPa) DRY BARMETER;
100°F (39°C) FUEL INLET TEMPERATURE (.853 SPECIFIC GRAVITY AT 60°F).
- CONVERSION FACTORS: POWER: kW = bhp × 0.746
FUEL: kg/kW·hr = lb/bhp·hr × 0.608
TORQUE: N·m = lb·ft × 1.356
- VALUES DERIVED ARE FROM CURRENTLY AVAILABLE DATA AND SUBJECT TO CHANGE WITHOUT NOTICE.

CERTIFIED BY:

B. S. Harker

STAFF ENGINEER

CURVE NO.

E4-8087-32-47

DATE: 7-2-84

REV./DATE:

SHT. 1 OF 2

ENGINE SPECIFICATION DATA

General Data

Model.....	8087-7840
Number of Cylinders.....	8
Bore and Stroke-in(mm).....	4.84x5.00(123x127)
Displacement-in ³ (L).....	736(12.1)
Compression Ratio.....	17.0:1
Piston Speed-ft/min(m/min).....	1500(457)
Valves Per Cylinder.....	NOT APPLICABLE
Intake.....	4
Exhaust.....	4
Combustion System.....	DIRECT INJECTION
Engine Type.....	63.5° VEE - 2 CYCLE
Aspiration.....	TURBOCHARGED

Configuration

Turbocharger.....	TVB511(1.39 A/R)
Charge Air Cooling System.....	JWAC
Blower Type.....	BY-PASS
Blower Drive Ratio.....	1.95:1
Low Idle Speed-r/min.....	500
High Idle Speed-r/min.....	1925
Thrust Bearing Load Limit.....	
Continuous-lbf(N).....	600(2670)
Intermittent-lbf(N).....	1800(8000)
Engine Crankcase Vent System.....	OPEN
Maximum Pressure-in H ₂ O(kPa).....	3.1(0.77)

Physical Data

Size.....	
Length-in(mm).....	43.9(1115)
Width-in(mm).....	37.6(955)
Height-in(mm).....	49.5(1257)
Weight, dry-lb(kg).....	2420(1100)
Center of Gravity Distance.....	
From R.F.O.B. (x axis)-in(mm).....	13.3(338)
Above Crankshaft (y axis)-in(mm).....	11.4(290)
Right of Crankshaft (z axis)-in(mm).....	0.0(0.0)
Installation Drawing.....	5102974
Maximum Allowable Static Bending Moment at Rear Face of FW Hsg-lbf ft(N m)....	600(814)

Fuel System

Fuel Injector/Timing.....	9G85/1.458
Fuel Injection Pump/Timing.....	NOT APPLICABLE
Fuel Consumption-lb/hr(kg/hr).....	143.2(65.0)
Fuel Consumption-gal/hr(L/hr).....	20.5(77.6)
Fuel Spill Rate-lb/hr(kg/hr).....	473(215)
Fuel Spill Rate-gal/hr(L/hr).....	67.7(256)
Total Fuel Flow-lb/hr(kg/hr).....	616(279)
Total Fuel Flow-gal/hr(L/hr).....	88.1(333)
Maximum Allowable Fuel Pump Suction.....	
Clean System-in Hg(kPa).....	6(20)
Dirty System-in Hg(kPa).....	12(41)
Fuel Filter Micron Size.....	
Primary - Micron.....	30
Secondary - Micron.....	10

Lubrication System

Oil Pressure.....	
Rated Speed-lbf/in ² (kPa).....	49-70(338-483)
Low Idle-lbf/in ² (kPa).....	5(34)
Im Pan Oil Temperature-°F(°C).....	200-250(93-121)
Oil Flow-gal/min(L/min).....	34(129)
Oil Pan Capacity.....	
High-qt(L).....	25(24)
Low-qt(L).....	19(18)
Total Engine Oil Capacity with filters-qt(L).....	27(26)
Bypass Oil Filter Orifice-in(mm).....	0.101(2.57)
Engine Angularity Limits.....	
Front up - degrees.....	20
Front down - degrees.....	30
Side tilt - degrees.....	NOT AVAILABLE

Emission Data

CO-gm/hr.....	NOT AVAILABLE
HC-gm/hr.....	NOT AVAILABLE
NO _x -gm/hr.....	NOT AVAILABLE
SO ₂ -gm/hr.....	650
Smoke.....	
Rated Speed - Bosch Number.....	0.3
Peak Torque Speed - Bosch Number.....	0.2
Noise - dB(A) @ 1m.....	NOT AVAILABLE
Certification Approval.....	FEDERAL 1985

Cooling System

Engine Heat Rejection-Btu/min(kW).....	11670(205)
Engine Radiated Heat-Btu/min(kW).....	1980(34.8)
Coolant Flow-gal/min(L/min).....	160(606)
Thermostat.....	
Start to Open-°F(°C).....	177(81)
Fully Open-°F(°C).....	197(92)
Maximum Water Pump Inlet.....	
Restriction-in Hg(kPa).....	0.0(0.0)
Engine Coolant Capacity-qt(L).....	29.0(27.4)
Minimum Pressure Cap-lbf/in ² (kPa).....	9.0(62.1)
Maximum Coolant Pressure (Exclusive of Pressure Cap)-lbf/in ² (kPa).....	NOT AVAILABLE
Maximum Top Tank Temperature-°F(°C)....	210(99)
Minimum Top Tank Temperature-°F(°C)....	160(71)
Minimum Coolant Fill Rate-gal/min(L/min).....	3.0(11.4)
Cooling Index.....	
Minimum Air to Boil-°F(°C).....	112(44.4)
Maximum Air to Water Diff.-°F(°C).....	100(55.6)
Ram Air Flow - Mile/hr(km/hr).....	15(24)
Deaeration-Air Injection Capacity-ft ³ /min(m ³ /min).....	0.8(0.023)
Drawdown - Minimum Requirement (or 10% of Cooling System Capacity-Whichever is Larger)-qt(L).....	4.0(3.8)

Air System

Maximum Allowable Temperature Rise (Ambient Air to Engine Inlet)-°F(°C)...	30(16.7)
Air Intake Restriction Maximum Limit.....	
Dirty Air Cleaner-in H ₂ O(kPa).....	20(5.0)
Clean Air Cleaner-in H ₂ O(kPa).....	12(3.0)
Engine Air Flow - ft ³ /min(m ³ /min).....	1250(35.4)
Engine Air Box/Manifold Pressure-in Hg(kPa).....	37.5(127)
Recommended Intake Pipe Dia.-in(mm)....	6.0(152)

Exhaust System

Exhaust Flow-ft ³ /min(m ³ /min).....	2610(73.9)
Exhaust Temperature-°F(°C).....	660(349)
Maximum Allowable Back Pressure-in Hg(kPa).....	2.4(8.1)
Recommended Exhaust Pipe Dia. Single-in(mm).....	6.0(152)
Dual-in(mm).....	NOT APPLICABLE
Exhaust Brake Max. Allowable Back Pressure-in Hg(kPa).....	NOT APPLICABLE

Electrical System

Recommended Battery Capacity(CCA @ 0°F)	
12 Volt System.....	
Above 32°F(0°C)-A.....	1900
Below 32°F(0°C)-A.....	2500
24 Volt System.....	
Above 32°F(0°C)-A.....	950
Below 32°F(0°C)-A.....	1250
Maximum Allowable Resistance of Starting Circuit.....	
12 volt system - ohm.....	0.0012
24 volt system - ohm.....	0.002

Performance Data

Power Output-bhp(kW).....	400(298)
Full Load Speed-r/min.....	1800
Peak Torque-lb ft(N m).....	1250(1693)
Peak Torque Speed-r/min.....	1300
BMEP-lbf/in ² (kPa).....	120(827)
Friction Power.....	
Rated Speed-bhp(kW).....	79(59)
Peak Torque Speed-bhp(kW).....	44(33)
Altitude Capability-ft(m).....	10000
Torque Available at 800 r/min-lb ft (N m).....	620(841)

Engine

Speed r/min	Power bhp(kW)	Torque lb ft(N m)	BSPC lb/bhp hr (g/kW hr)
1800	400(298)	1167(1582)	.345(210)
1600	372(278)	1221(1655)	.344(209)
1400	333(248)	1249(1693)	.347(211)
1300	309(231)	1250(1693)	.351(213)
1200	283(211)	1239(1680)	.360(219)

All values at rated speed and power and with standard engine hardware unless otherwise noted.

Curve No. E4-8087-32-47
Date: 7-2-84
Rev./Date:
Sht. 2 of 2



ENGINE PERFORMANCE CURVE

RATING: RATED BRAKE POWER

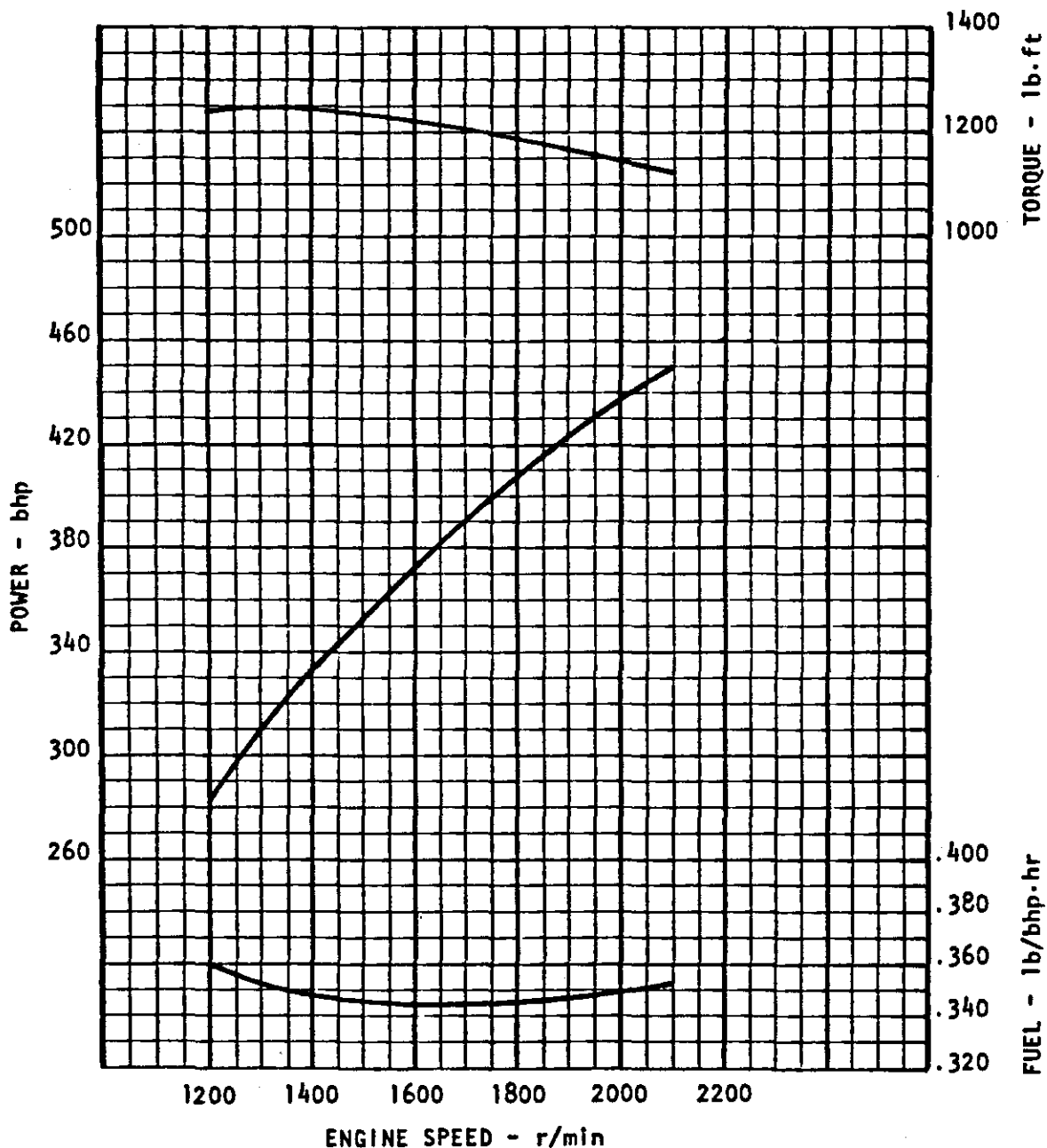
APPLICATION: AUTOMOTIVE

CERTIFICATION: FEDERAL 1985

MODEL: 8V-92TA

450 bhp @ 2100 r/min

1250 lb·ft @ 1300 r/min



AIR INTAKE RESTRICTION - In. H₂O (mm H₂O) . . . 10 (250)

EXHAUST RESTRICTION - In. H₂O (mm H₂O) . . . 15 (380)

- POWER OUTPUT GUARANTEED WITHIN 5% AT SAE J1349 CONDITIONS:
77°F (25°C) AIR INLET TEMPERATURE; 29.31 in. Hg (99kPa) DRY BARMETER;
100°F (39°C) FUEL INLET TEMPERATURE (.853 SPECIFIC GRAVITY AT 60°F).
- CONVERSION FACTORS: POWER: kW = bhp × 0.746
FUEL: kg/kW-hr = lb/bhp-hr × 0.608
TORQUE: N·m = lb·ft × 1.356
- VALUES DERIVED ARE FROM CURRENTLY AVAILABLE DATA AND SUBJECT TO CHANGE WITHOUT NOTICE.

CERTIFIED BY:

B. B. Penick

STAFF ENGINEER

CURVE NO.

E4-8087-32-46

DATE: 7-2-84

REV./DATE:

SHT. 1 OF 2

ENGINE SPECIFICATION DATA

General Data

Model.....	8087-7840
Number of Cylinders.....	8
Bore and Stroke-in(mm).....	4.84x5.00(123x127)
Displacement-in ³ (L).....	736(12.1)
Compression Ratio.....	17.0:1
Piston Speed-ft/min(m/min).....	1750(533)
Valves Per Cylinder	
Intake.....	NOT APPLICABLE
Exhaust.....	4
Combustion System.....	DIRECT INJECTION
Engine Type.....	63.5° VEE - 2 CYCLE
Aspiration.....	TURBOCHARGED

Configuration

Turbocharger.....	TV8511(1.39 A/R)
Charge Air Cooling System.....	JWAC
Blower Type.....	BY-PASS
Blower Drive Ratio.....	1.95:1
Low Idle Speed-r/min.....	500
High Idle Speed-r/min.....	2250
Thrust Bearing Load Limit	
Continuous-lbf(N).....	600(2670)
Intermittent-lbf(N).....	1800(8000)
Engine Crankcase Vent System.....	OPEN
Maximum Pressure-in H ₂ O(kPa).....	3.5(0.87)

Physical Data

Size	
Length-in(mm).....	43.9(1115)
Width-in(mm).....	37.6(955)
Height-in(mm).....	49.5(1257)
Weight, dry-lb(kg).....	2420(1100)
Center of Gravity Distance	
From R.F.O.B. (x axis)-in(mm).....	13.3(338)
Above Crankshaft (y axis)-in(mm).....	11.4(290)
Right of Crankshaft (z axis)-in(mm).....	0.0(0.0)
Installation Drawing.....	5102974
Maximum Allowable Static Bending Moment at Rear Face of FW Hdg-lbf ft(N m)....	600(814)

Fuel System

Fuel Injector/Timing.....	9C85/1.458
Fuel Injection Pump/Timing.....	NOT APPLICABLE
Fuel Consumption-lb/hr(kg/hr).....	161.8(73.4)
Fuel Consumption-gal/hr(L/hr).....	23.1(87.4)
Fuel Spill Rate-lb/hr(kg/hr).....	464(210)
Fuel Spill Rate-gal/hr(L/hr).....	66.4(251)
Total Fuel Flow-lb/hr(kg/hr).....	626(284)
Total Fuel Flow-gal/hr(L/hr).....	89.6(339)
Maximum Allowable Fuel Pump Suction	
Clean System-in Hg(kPa).....	6(20)
Dirty System-in Hg(kPa).....	12(41)
Fuel Filter Micron Size	
Primary - Micron.....	30
Secondary - Micron.....	10

Lubrication System

Oil Pressure	
Rated Speed-lbf/in ² (kPa).....	49-70(338-483)
Low Idle-lbf/in ² (kPa).....	5(34)
In Pan Oil Temperature-°F(°C).....	200-250(93-121)
Oil Flow-gal/min(L/min).....	37(140)
Oil Pan Capacity	
High-qt(L).....	25(24)
Low-qt(L).....	19(18)
Total Engine Oil Capacity with filters-qt(L).....	27(26)
Bypass Oil Filter Orifice-in(mm).....	0.101(2.57)
Engine Angularity Limits	
Front up - degrees.....	20
Front down - degrees.....	30
Side tilt - degrees.....	NOT AVAILABLE

Emission Data

CO-gm/hr.....	NOT AVAILABLE
HC-gm/hr.....	NOT AVAILABLE
NO _x -gm/hr.....	NOT AVAILABLE
SO ₂ -gm/hr.....	734
Smoke	
Rated Speed - Bosch Number.....	0.3
Peak Torque Speed - Bosch Number.....	0.2
Noise - dB(A) @ 1m.....	NOT AVAILABLE
Certification Approval.....	FEDERAL 1985

Cooling System

Engine Heat Rejection-Btu/min(kW).....	12700(223)
Engine Radiated Heat-Btu/min(kW).....	2140(37.6)
Coolant Flow-gal/min(L/min).....	187(708)
Thermostat	
Start to Open-°F(°C).....	177(81)
Fully Open-°F(°C).....	197(92)
Maximum Water Pump Inlet	
Restriction-in Hg(kPa).....	0.0(0.0)
Engine Coolant Capacity-qt(l).....	29.0(27.4)
Minimum Pressure Cap-lbf/in ² (kPa).....	9.0(62.1)
Maximum Coolant Pressure (Exclusive of Pressure Cap)-lbf/in ² (kPa).....	NOT AVAILABLE
Maximum Top Tank Temperature-°F(°C).....	210(99)
Minimum Top Tank Temperature-°F(°C).....	160(71)
Minimum Coolant Fill Rate-gal/min(L/min).....	3.0(11.4)
Cooling Index	
Minimum Air to Boil-°F(°C).....	112(44.4)
Maximum Air to Water Diff.-°F(°C).....	100(35.6)
Ram Air Flow - Mile/hr(km/hr).....	15(24)
Deaeration-Air Injection	
Capacity-ft ³ /min(m ³ /min).....	0.8(0.023)
Drawdown - Minimum Requirement (or 10% of Cooling System Capacity-Whichever is Larger)-qt(L).....	4.0(3.8)

Air System

Maximum Allowable Temperature Rise (Ambient Air to Engine Inlet)-°F(°C)...	30(16.7)
Air Intake Restriction Maximum Limit	
Dirty Air Cleaner-in H ₂ O(kPa).....	20(5.0)
Clean Air Cleaner-in H ₂ O(kPa).....	12(3.0)
Engine Air Flow - ft ³ /min(m ³ /min).....	1375(38.9)
Engine Air Box/Manifold Pressure-in Hg(kPa).....	44.3(150)
Recommended Intake Pipe Dia.-in(mm)....	6.0(152)

Exhaust System

Exhaust Flow-ft ³ /min(m ³ /min).....	2870(81.3)
Exhaust Temperature-°F(°C).....	660(349)
Maximum Allowable Back Pressure-in Hg(kPa).....	3.0(10.1)
Recommended Exhaust Pipe Dia.	
Single-in(mm).....	6.0(152)
Dual-in(mm).....	NOT APPLICABLE
Exhaust Brake Max. Allowable Back Pressure-in Hg(kPa).....	NOT APPLICABLE

Electrical System

Recommended Battery Capacity(CCA @ 0°F)	
12 Volt System	
Above 32°F(0°C)-A.....	1900
Below 32°F(0°C)-A.....	2500
24 Volt System	
Above 32°F(0°C)-A.....	950
Below 32°F(0°C)-A.....	1250
Maximum Allowable Resistance of Starting Circuit	
12 volt system - ohm.....	0.0012
24 volt system - ohm.....	0.002

Performance Data

Power Output-bhp(kW).....	450(336)
Full Load Speed-r/min.....	2100
Peak Torque-lb ft(N m).....	1250(1695)
Peak Torque Speed-r/min.....	1300
MEP-lbf/in ² (kPa).....	115(793)
Friction Power	
Rated Speed-bhp(kW).....	106(79)
Peak Torque Speed-bhp(kW).....	44(33)
Altitude Capability-ft(m).....	10000
Torque Available at 800 r/min-1b ft (N m).....	750(1017)

Engine

Speed r/min	Power bhp(kW)	Torque lb ft(N m)	BSFC lb/bhp hr (g/kW hr)
2100	450(336)	1125(1525)	.352(214)
1950	430(321)	1158(1570)	.347(211)
1800	407(304)	1188(1611)	.345(210)
1600	372(276)	1221(1655)	.344(209)
1400	333(248)	1249(1693)	.347(211)
1300	309(231)	1250(1695)	.351(214)
1200	283(211)	1239(1680)	.360(219)

All values at rated speed and power and with standard engine hardware unless otherwise noted.

Curve No. 24-8087-32-46
Date: 7-2-84
Rev./Date:
Sht. 2 of 2



ENGINE PERFORMANCE CURVE

RATING: RATED BRAKE POWER

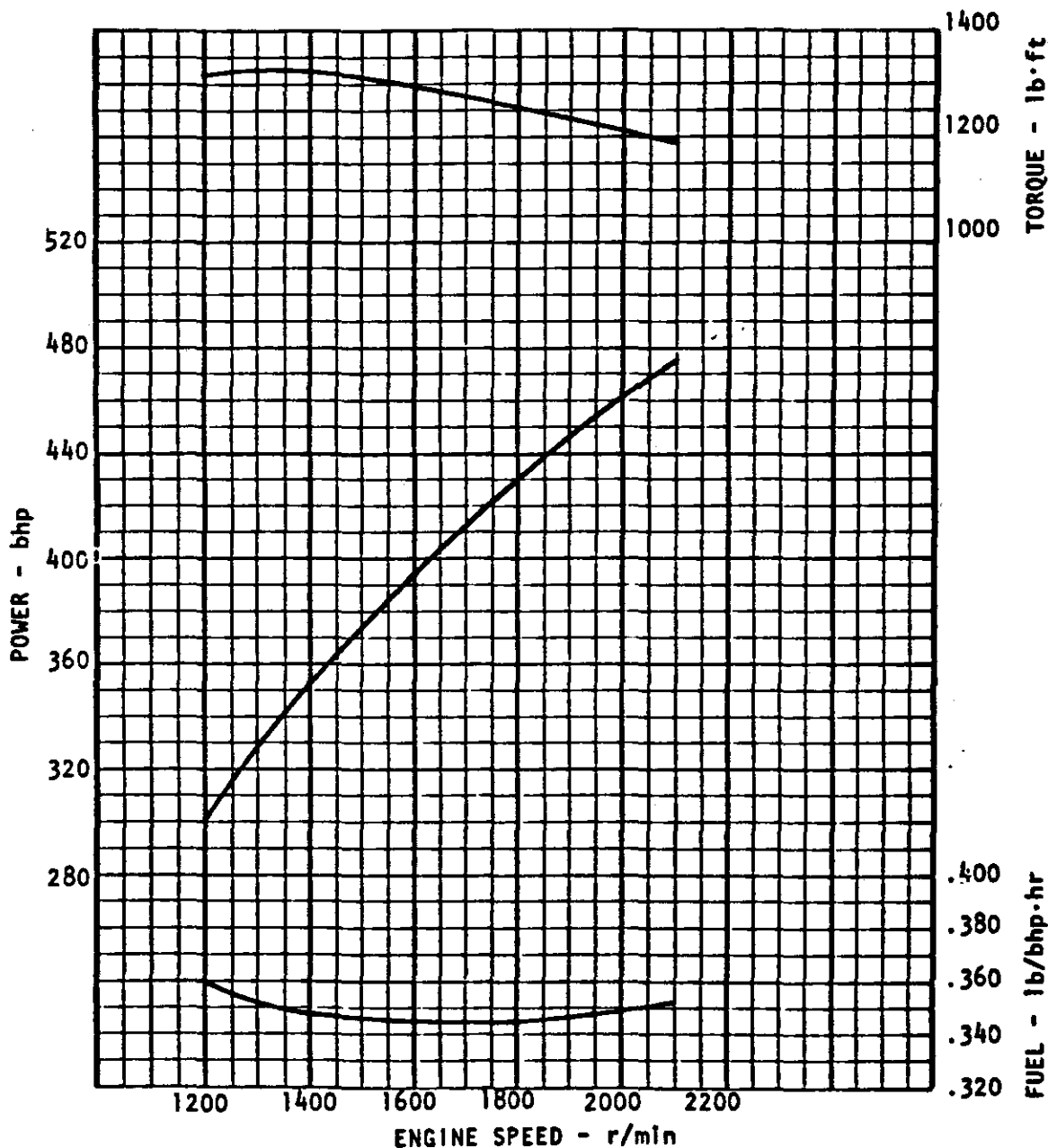
APPLICATION: AUTOMOTIVE

CERTIFICATION: FEDERAL 1985

MODEL: 8V-92TA

475 bhp @ 2100 r/min

1330 lb·ft @ 1300 r/min



AIR INTAKE RESTRICTION - In. H₂O (mm H₂O) . . . 10(250)

EXHAUST RESTRICTION - In. H₂O (mm H₂O) . . . 15(380)

- POWER OUTPUT GUARANTEED WITHIN 5% AT SAE J1349 CONDITIONS:
77°F (25°C) AIR INLET TEMPERATURE; 29.31 in. Hg (99kPa) DRY BANDMETER;
100°F (38°C) FUEL INLET TEMPERATURE (.853 SPECIFIC GRAVITY AT 60°F).
- CONVERSION FACTORS: POWER: kW = bhp × 0.746
FUEL: kg/kW·hr = lb/bhp·hr × 0.608
TORQUE: N·m = lb·ft × 1.356
- VALUES DERIVED ARE FROM CURRENTLY AVAILABLE DATA AND SUBJECT TO CHANGE WITHOUT NOTICE.

CERTIFIED BY:

B. S. Picurik

STAFF ENGINEER

CURVE NO.

E4-8087-32-44

DATE: 5-17-84

REV./DATE:

SHT. 1 OF 2

ENGINE SPECIFICATION DATA

General Data

Model.....	8087-7840
Number of Cylinders.....	8
Bore and Stroke-in(mm).....	4.84x5.00(123x127)
Displacement-in ³ (L).....	736(12.1)
Compression Ratio.....	17.0:1
Piston Speed-ft/min(m/min).....	1750(533)
Valves Per Cylinder	
Intake.....	NOT APPLICABLE
Exhaust.....	4
Combustion System.....	DIRECT INJECTION
Engine Type.....	63.5° VEE - 2 CYCLE
Aspiration.....	TURBOCHARGED

Configuration

Turbocharger.....	TV8511(1.39 A/R)
Charge Air Cooling System.....	JMAC
Blower Type.....	BY-PASS
Blower Drive Ratio.....	1.95:1
Low Idle Speed-r/min.....	500
High Idle Speed-r/min.....	2250
Thrust Bearing Load Limit	
Continuous-lbf(N).....	600(2670)
Intermittent-lbf(N).....	1800(8000)
Engine Crankcase Vent System.....	OPEN
Maximum Pressure-in H ₂ O(kPa).....	3.5(0.87)

Physical Data

Size	
Length-in(mm).....	43.9(1115)
Width-in(mm).....	37.6(955)
Height-in(mm).....	49.5(1257)
Weight-dry-lb(kg).....	2420(1100)
Center of Gravity Distance	
From R.P.O.B. (x axis)-in(mm).....	13.3(338)
Above Crankshaft (y axis)-in(mm).....	11.4(290)
Right of Crankshaft (z axis)-in(mm).....	0.0(0.0)
Installation Drawing.....	5102974
Maximum Allowable Static Bending Moment at Rear Face of PW Hsg-lbf ft(N m).....	600(814)

Fuel System

Fuel Injector/Timing.....	9C90/1.458
Fuel Injection Pump/Timing.....	NOT APPLICABLE
Fuel Consumption-lb/hr(kg/hr).....	167.0(75.8)
Fuel Consumption-gal/hr(L/hr).....	23.9(90.5)
Fuel Spill Rate-lb/hr(kg/hr).....	463(210)
Fuel Spill Rate-gal/hr(L/hr).....	66.3(251)
Total Fuel Flow-lb/hr(kg/hr).....	630(286)
Total Fuel Flow-gal/hr(L/hr).....	90.1(341)
Maximum Allowable Fuel Pump Suction	
Clean System-in Hg(kPa).....	6(20)
Dirty System-in Hg(kPa).....	12(41)
Fuel Filter Micron Size	
Primary - Micron.....	30
Secondary - Micron.....	10

Lubrication System

Oil Pressure	
Rated Speed-lbf/in ² (kPa).....	49-70(338-483)
Low Idle-lbf/in ² (kPa).....	5(34)
In Pan Oil Temperature-°F(°C).....	200-250(93-121)
Oil Flow-gal/min(L/min).....	37(140)
Oil Pan Capacity	
High-qt(L).....	25(24)
Low-qt(L).....	19(18)
Total Engine Oil Capacity with filters-qt(L).....	27(26)
Bypass Oil Filter Orifice-in(mm).....	0.101(2.57)
Engine Angularity Limits	
Front up - degrees.....	20
Front down - degrees.....	30
Side tilt - degrees.....	NOT AVAILABLE

Emission Data

CO-gm/hr.....	NOT AVAILABLE
HC-gm/hr.....	NOT AVAILABLE
NO _x -gm/hr.....	NOT AVAILABLE
SO ₂ -gm/hr.....	758
Smoke	
Rated Speed - Bosch Number.....	0.4
Peak Torque Speed - Bosch Number.....	0.2
Noise - dB(A) @ 1m.....	NOT AVAILABLE
Certification Approval.....	FEDERAL 1985

Cooling System

Engine Heat Rejection-Btu/min(kW).....	13400(236)
Engine Radiated Heat-Btu/min(kW).....	2250(39.6)
Coolant Flow-gal/min(L/min).....	187(708)
Thermostat	
Start to Open-°F(°C).....	177(81)
Fully Open-°F(°C).....	197(92)
Maximum Water Pump Inlet	
Restriction-in Hg(kPa).....	0.0(0.0)
Engine Coolant Capacity-qt(L).....	29.0(27.4)
Minimum Pressure Cap-lbf/in ² (kPa).....	9.0(62.1)
Maximum Coolant Pressure (Exclusive of Pressure Cap)-lbf/in ² (kPa).....	NOT AVAILABLE
Maximum Top Tank Temperature-°F(°C).....	210(99)
Minimum Top Tank Temperature-°F(°C).....	160(71)
Minimum Coolant Fill Rate-gal/min(L/min).....	3.0(11.4)
Cooling Index	
Minimum Air to Boil-°F(°C).....	112(44.4)
Maximum Air to Water Diff.-°F(°C).....	100(55.6)
Ram Air Flow - Mile/hr(km/hr).....	15(24)
Deaeration-Air Injection	
Capacity-ft ³ /min(m ³ /min).....	0.8(0.023)
Drawdown - Minimum Requirement (or 10% of Cooling System Capacity-Whichever is Larger)-qt(L).....	4.0(3.8)

Air System

Maximum Allowable Temperature Rise (Ambient Air to Engine Inlet)-°F(°C).....	30(16.7)
Air Intake Restriction Maximum Limit	
Dirty Air Cleaner-in H ₂ O(kPa).....	20(3.0)
Clean Air Cleaner-in H ₂ O(kPa).....	12(3.0)
Engine Air Flow - ft ³ /min(m ³ /min).....	1400(39.6)
Engine Air Box/Manifold Pressure-in Hg(kPa).....	45.3(154)
Recommended Intake Pipe Dia.-in(mm).....	6.0(152)

Exhaust System

Exhaust Flow-ft ³ /min(m ³ /min).....	2950(83.5)
Exhaust Temperature-°F(°C).....	670(354)
Maximum Allowable Back Pressure-in Hg(kPa).....	3.0(10.1)
Recommended Exhaust Pipe Dia.	
Single-in(mm).....	6.0(152)
Dual-in(mm).....	NOT APPLICABLE
Exhaust Brake Man. Allowable Back Pressure-in Hg(kPa).....	NOT APPLICABLE

Electrical System

Recommended Battery Capacity(CCA @ 0°F)	
12 Volt System	
Above 32°F(0°C)-A.....	1900
Below 32°F(0°C)-A.....	2500
24 Volt System	
Above 32°F(0°C)-A.....	950
Below 32°F(0°C)-A.....	1250
Maximum Allowable Resistance of Starting Circuit	
12 volt system - ohm.....	0.0012
24 volt system - ohm.....	0.002

Performance Data

Power Output-bhp(kW).....	475(354)
Full Load Speed-r/min.....	2100
Peak Torque-lb ft(N m).....	1330(1003)
Peak Torque Speed-r/min.....	1300
BMEP-lbf/in ² (kPa).....	122(841)
Friction Power	
Rated Speed-bhp(kW).....	106(79)
Peak Torque Speed-bhp(kW).....	44(33)
Altitude Capability-ft(m).....	10000
Torque Available at 800 r/min-lb ft (N m).....	790(1071)

Engine

Speed r/min	Power bhp(kW)	Torque lb ft(N m)	BEP lb/bhp hr (g/kW hr)
2100	475(354)	1188(1611)	.352(214)
1950	453(338)	1220(1654)	.348(212)
1800	430(321)	1255(1702)	.344(209)
1600	393(293)	1290(1749)	.345(210)
1400	353(263)	1324(1795)	.347(211)
1300	329(245)	1330(1803)	.351(214)
1200	301(225)	1317(1786)	.346(219)

All values at rated speed and power and with standard engine hardware unless otherwise noted.

Curve No. 24-8087-32-44
Sht. 2 of 2



ENGINE PERFORMANCE CURVE

RATING: RATED BRAKE POWER

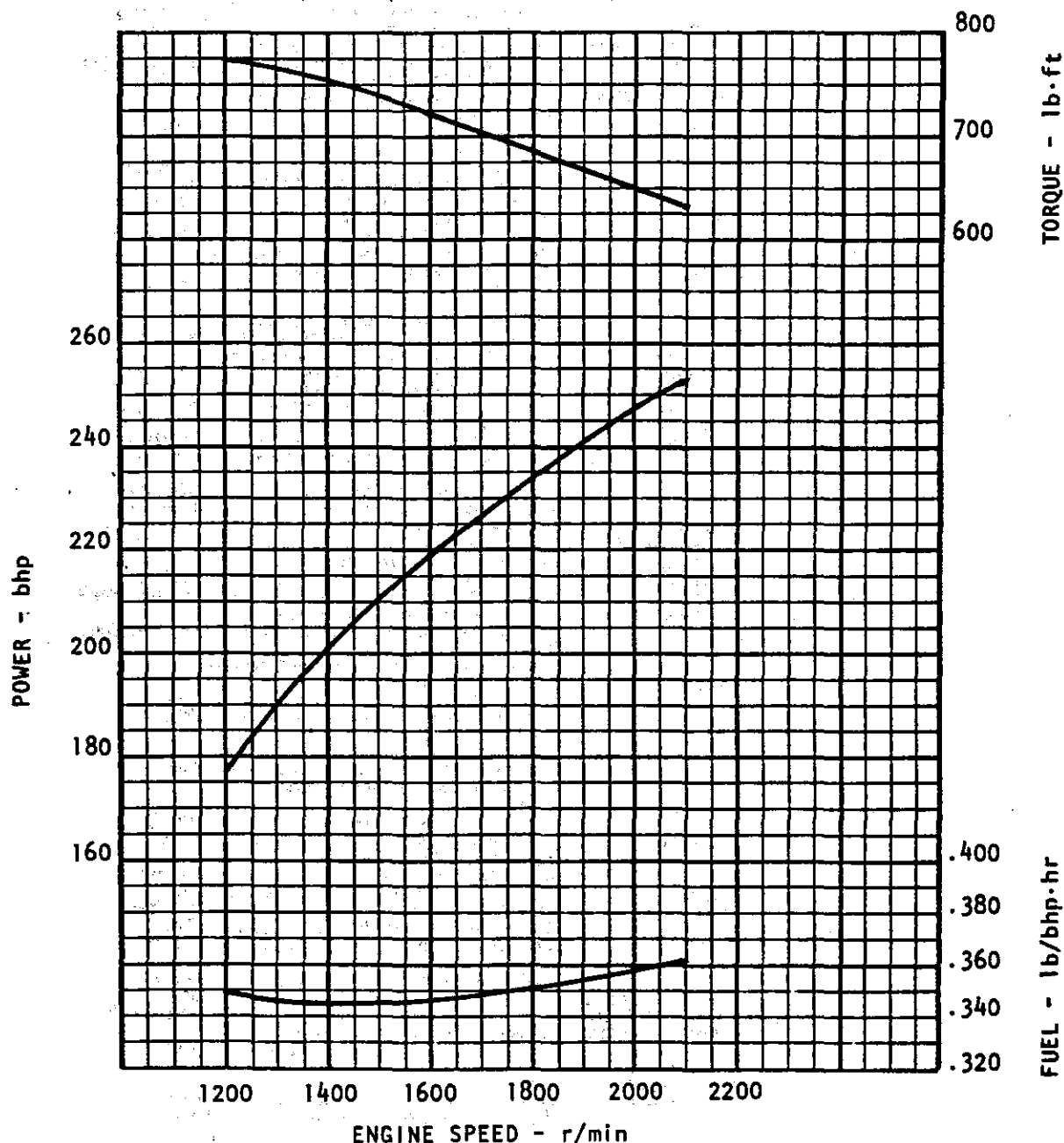
APPLICATION: AUTOMOTIVE - COACH
DIESEL FUEL - NO. 2

CERTIFICATION: FEDERAL 1985

MODEL: 6V-92TA

253 bhp @ 2100 r/min

775 lb·ft @ 1200 r/min

AIR INTAKE RESTRICTION - in. H₂O (kPa) . . . 10 (2.5)EXHAUST BACK PRESSURE - in. H₂O (kPa) . . . 15 (3.7)

- POWER OUTPUT GUARANTEED WITHIN 5% AT SAE J1349 CONDITIONS:
77°F (25°C) AIR INLET TEMPERATURE; 29.31 in. Hg (99kPa) DRY BAROMETER;
100°F (39°C) FUEL INLET TEMPERATURE (.853 SPECIFIC GRAVITY AT 60°F).
- CONVERSION FACTORS: POWER: kW = bhp × 0.746
FUEL: kg/kW·hr = lb/bhp·hr × 0.608
TORQUE: N·m = lb·ft × 1.356
- VALUES DERIVED ARE FROM CURRENTLY AVAILABLE DATA AND SUBJECT TO CHANGE WITHOUT NOTICE.

CERTIFIED BY:

STAFF ENGINEER

CURVE NO.

E4-8067-32-41

DATE: 6-28-84

REV./DATE: 2/8-22-84

SHT. 1 OF 2

ENGINE SPECIFICATION DATA

General Data

Model.....	6V-92TA COACH
Number of Cylinders.....	6
Bore and Stroke-in(mm).....	4.84x5.00(123x127)
Displacement-in ³ (L).....	352(9.09)
Compression Ratio.....	17.0:1
Piston Speed-ft/min(m/min).....	1750(533)
Valves Per Cylinder.....	
Intake.....	NOT APPLICABLE
Exhaust.....	4
Combustion System.....	DIRECT INJECTION
Engine Type.....	63.5° VEE - 2 CYCLE
Aspiration.....	TURBOCHARGED

Configuration

Turbocharger.....	TV7511(0.96A/R)
Charge Air Cooling System.....	JWAC
Blower Type.....	BY-PASS
Blower Drive Ratio.....	2.05:1
Low Idle Speed-r/min.....	500
High Idle Speed-r/min.....	2250
Thrust Bearing Load Limit.....	
Continuous-lbf(N).....	600(2670)
Intermittent-lbf(N).....	1800(8000)
Engine Crankcase Vent System.....	OPEN
Maximum Pressure-in H ₂ O(kPa).....	3.0(0.75)

Physical Data

Size.....	
Length-in(mm).....	37.6(955)
Width-in(mm).....	37.6(955)
Height-in(mm).....	48.0(1220)
Weight, dry-lb(kg).....	2020(920)
Center of Gravity Distance.....	
From R.F.O.B. (x axis)-in(mm).....	9.4(239)
Above Crankshaft (y axis)-in(mm).....	10.2(259)
Right of Crankshaft (z axis)-in(mm).....	0.0(0.0)
Installation Drawing.....	VARIES WITH MODEL
Maximum Allowable Static Bending Moment at Rear Face of FW Hsg-lbf ft(N m).....	600(814)

Fuel System

Fuel Injector/Timing.....	9F70/1.460
Fuel Injection Pump/Timing.....	NOT APPLICABLE
Fuel Consumption-lb/hr(kg/hr).....	94.3(42.8)
Fuel Consumption-gal/hr(L/hr).....	13.5(51.1)
Fuel Spill Rate-lb/hr(kg/hr).....	484(220)
Fuel Spill Rate-gal/hr(L/hr).....	69.2(262)
Total Fuel Flow-lb/hr(kg/hr).....	578(262)
Total Fuel Flow-gal/hr(L/hr).....	82.7(313)
Maximum Allowable Fuel Pump Suction.....	
Clean System-in Hg(kPa).....	6(20)
Dirty System-in Hg(kPa).....	12(41)
Fuel Filter Micron Size.....	
Primary - Micron.....	30
Secondary - Micron.....	10

Lubrication System

Oil Pressure.....	
Rated Speed-lbf/in ² (kPa).....	49-70(336-483)
Low Idle-lbf/in ² (kPa).....	5(34)
In Pan Oil Temperature-°F(°C).....	200-250(93-121)
Oil Flow-gal/min(L/min).....	37(140)
Oil Pan Capacity.....	
High-qt(L).....	20(19)
Low-qt(L).....	16(15)
Total Engine Oil Capacity with filters-qt(L).....	22(21)
Bypass Oil Filter Orifice-in(mm).....	0.101(2.57)
Engine Angularity Limits.....	
Front up - degrees.....	VARIES WITH MODEL
Front down - degrees.....	VARIES WITH MODEL
Side tilt - degrees.....	VARIES WITH MODEL

Emission Data

CO-gm/hr.....	NOT AVAILABLE
HC-gm/hr.....	NOT AVAILABLE
NO _x -gm/hr.....	NOT AVAILABLE
SO ₂ -gm/hr.....	428
Smoke.....	
Rated Speed - Bosch Number.....	0.2
Peak Torque Speed - Bosch Number.....	0.1
Noise - dB(A) @ 1m.....	NOT AVAILABLE
Certification Approval.....	FEDERAL 1985

Cooling System

Engine Heat Rejection-Btu/min(kW).....	7750(136)
Engine Radiated Heat-Btu/min(kW).....	1270(22.3)
Coolant Flow-gal/min(L/min).....	160(606)
Thermostat.....	
Start to Open-°F(°C).....	177(81)
Fully Open-°F(°C).....	197(92)
Maximum Water Pump Inlet.....	
Restriction-in Hg(kPa).....	0.0(0.0)
Engine Coolant Capacity-qt(L).....	24.5(23.2)
Minimum Pressure Cap-lbf/in ² (kPa).....	9.0(62.1)
Maximum Coolant Pressure, (Exclusive of Pressure Cap)-lbf/in ² (kPa).....	NOT AVAILABLE
Maximum Top Tank Temperature-°F(°C).....	210(99)
Minimum Top Tank Temperature-°F(°C).....	160(71)
Minimum Coolant Fill Rate-gal/min(L/min).....	3.0(11.4)
Cooling Index.....	
Minimum Air to Boil-°F(°C).....	112(44.4)
Maximum Air to Water Diff.-°F(°C).....	100(35.6)
Ram Air Flow - Mile/hr(km/hr).....	15(24)
Deaeration-Air Injection.....	
Capacity-ft ³ /min(m ³ /min).....	0.6(0.017)
Drawdown - Minimum Requirement (or 10% of Cooling System Capacity-whichever is Larger)-qt(L).....	4.0(3.8)

Air System

Maximum Allowable Temperature Rise (Ambient Air to Engine Inlet)-°F(°C).....	30(16.7)
Air Intake Restriction Maximum Limit.....	
Dirty Air Cleaner-in H ₂ O(kPa).....	20(5.0)
Clean Air Cleaner-ig H ₂ O(kPa).....	12(3.0)
Engine Air Flow - ft ³ /min(m ³ /min).....	865(24.5)
Engine Air Box/Manifold Pressure-in Hg(kPa).....	38.7(131)
Recommended Intake Pipe Dia.-in(mm).....	6.0(152)

Exhaust System

Exhaust Flow-ft ³ /min(m ³ /min).....	1690(47.9)
Exhaust Temperature-°F(°C).....	590(310)
Maximum Allowable Back Pressure-in Hg(kPa).....	2.5(8.4)
Recommended Exhaust Pipe Dia. Single-in(mm).....	5.0(127)
Dual-in(mm).....	NOT APPLICABLE
Exhaust Brake Max. Allowable Back Pressure-in Hg(kPa).....	NOT APPLICABLE

Electrical System

Recommended Battery Capacity(CCA @ 0°F).....	
12 Volt System.....	
Above 32°F(0°C)-A.....	1900
Below 32°F(0°C)-A.....	2500
24 Volt System.....	
Above 32°F(0°C)-A.....	950
Below 32°F(0°C)-A.....	1250
Maximum Allowable Resistance of Starting Circuit.....	
12 volt system - ohm.....	0.0012
24 volt system - ohm.....	0.002

Performance Data

Power Output-bhp(kW).....	253(189)
Full Load Speed-r/min.....	2100
Peak Torque-lb ft(N m).....	775(1051)
Peak Torque Speed-r/min.....	1200
BMEP-lbf/in ² (kPa).....	86(593)
Friction Power.....	
Rated Speed-bhp(kW).....	79(59)
Peak Torque Speed-bhp(kW).....	32(24)
Altitude Capability-ft(m).....	10000(3050)
Torque Available at 800 r/min-lb ft (N m).....	490(664)

Engines

Speed r/min	Power bhp(kW)	Torque lb ft(N m)	BSEC lb/bhp hr (g/kW hr)
2100	253(189)	633(858)	.361(220)
1950	244(182)	657(891)	.355(216)
1800	234(175)	683(926)	.351(214)
1600	219(163)	719(975)	.346(210)
1400	201(150)	754(1022)	.344(209)
1200	177(132)	775(1051)	.349(212)

Note: Performance shown is with Diesel No. 2 fuel.

All values at rated speed and power and with standard engine hardware unless otherwise noted.

Curve No. E4-8067-32-41
Date: 6-28-84
Rev./Date: 2/8-22-84
Sht. 2 of 2



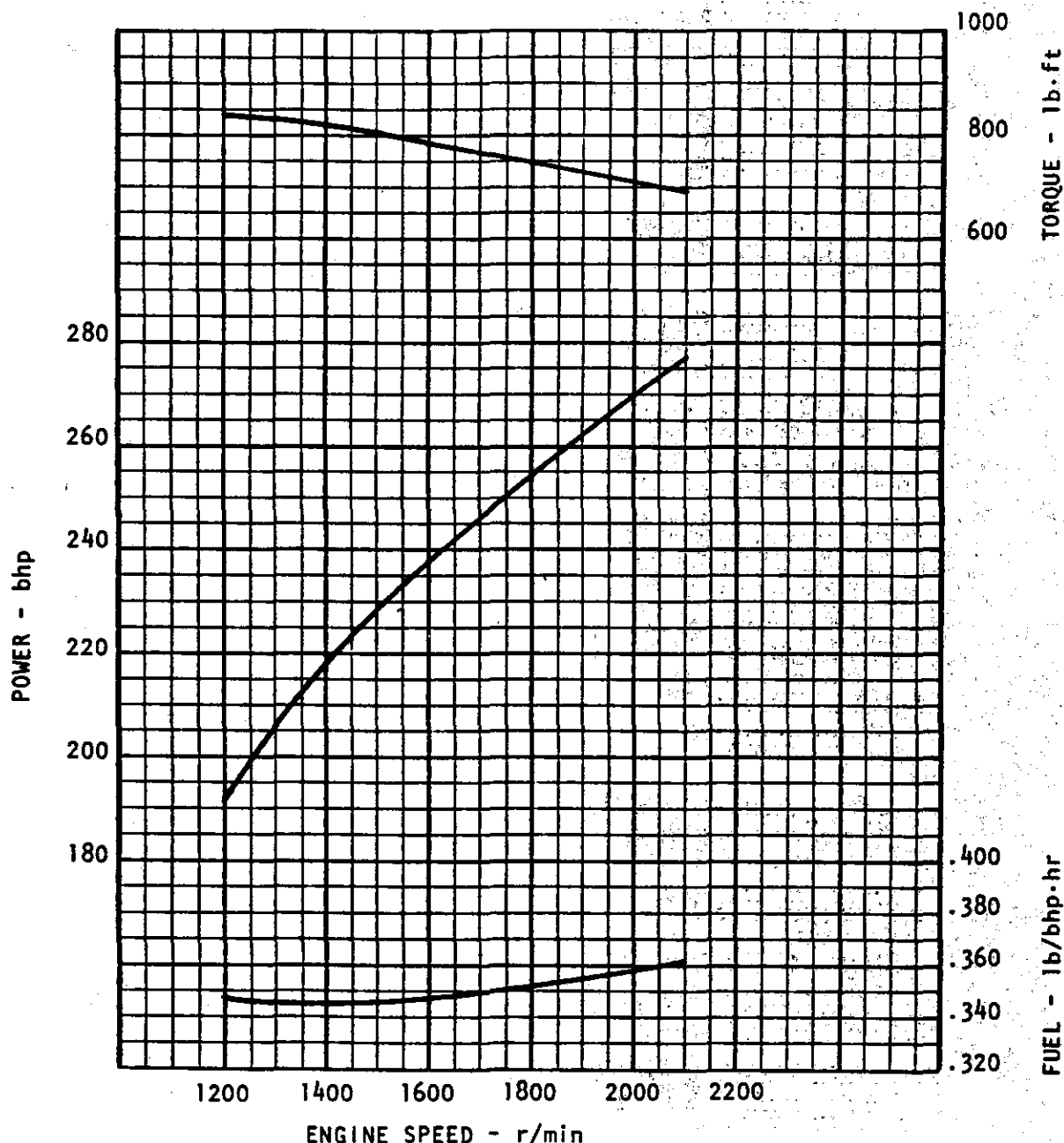
ENGINE PERFORMANCE CURVE

RATING: RATED BRAKE POWER

MODEL: 6V-92TA
277 bhp @ 2100 r/min
840 lb·ft @ 1200 r/min

APPLICATION: AUTOMOTIVE - COACH
DIESEL FUEL - NO. 2

CERTIFICATION: FEDERAL 1985



AIR INTAKE RESTRICTION - in. H₂O (kPa) . . . 10 (2.5)
EXHAUST BACK PRESSURE - in. H₂O (kPa) . . . 15 (3.7)

- POWER OUTPUT GUARANTEED WITHIN 5% AT SAE J1349 CONDITIONS:
77°F (25°C) AIR INLET TEMPERATURE; 29.31 in. Hg (99kPa) DRY BAROMETER;
100°F (39°C) FUEL INLET TEMPERATURE (.853 SPECIFIC GRAVITY AT 60°F).
- CONVERSION FACTORS: POWER: kW = bhp × 0.746
FUEL: kg/kW·hr = lb/bhp·hr × 0.608
TORQUE: N·m = lb·ft × 1.356
- VALUES DERIVED ARE FROM CURRENTLY AVAILABLE DATA AND SUBJECT TO CHANGE WITHOUT NOTICE.

CERTIFIED BY:

Brian S. Harker

STAFF ENGINEER

CURVE NO.
E4-8067-32-40

DATE: 6-28-84

REV./DATE: 2/8-22-84

SHT. 1 OF 2

ENGINE SPECIFICATION DATA

General Data

Model.....	6V-92TA COACH
Number of Cylinders.....	6
Bore and Stroke-In(mm).....	4.84x5.00(123x127)
Displacement-In ³ (L).....	552(9.05)
Compression Ratio.....	17.0:1
Piston Speed-ft/min(m/min).....	1750(533)
Valves Per Cylinder	
Intake.....	NOT APPLICABLE
Exhaust.....	4
Combustion System.....	DIRECT INJECTION
Engine Type.....	63.5° VEE - 2 CYCLE
Aspiration.....	TURBOCHARGED

Configuration

Turbocharger.....	TV7511(0.96A/R)
Charge Air Cooling System.....	JWAC
Blower Type.....	BY-PASS
Blower Drive Ratio.....	2.05:1
Low Idle Speed-r/min.....	500
High Idle Speed-r/min.....	2250
Thrust Bearing Load Limit	
Continuous-lbf(N).....	600(2670)
Intermittent-lbf(N).....	1800(8000)
Engine Crankcase Vent System.....	OPEN
Maximum Pressure-In H ₂ O(kPa).....	3.0(0.75)

Physical Data

Size	
Length-In(mm).....	37.6(955)
Width-In(mm).....	37.6(955)
Height-In(mm).....	48.0(1220)
Weight, dry-lb(kg).....	2020(920)
Center of Gravity Distance	
From R.F.O.B. (x axis)-In(mm).....	9.4(239)
Above Crankshaft (y axis)-In(mm).....	10.2(259)
Right of Crankshaft (z axis)-In(mm).....	0.0(0.0)
Installation Drawing.....	VARIES WITH MODEL
Maximum Allowable Static Bending Moment at Rear Face of FM Hsg-lbf ft(N m).....	600(814)

Fuel System

Fuel Injector/Timing.....	9G75/1.450
Fuel Injection Pump/Timing.....	NOT APPLICABLE
Fuel Consumption-lb/hr(kg/hr).....	99.9(45.3)
Fuel Consumption-gal/hr(L/hr).....	14.3(54.1)
Fuel Spill Rate-lb/hr(kg/hr).....	480(218)
Fuel Spill Rate-gal/hr(L/hr).....	68.6(260)
Total Fuel Flow-lb/hr(kg/hr).....	580(263)
Total Fuel Flow-gal/hr(L/hr).....	83.0(314)
Maximum Allowable Fuel Pump Suction	
Clean System-In Hg(kPa).....	6(20)
Dirty System-In Hg(kPa).....	12(41)
Fuel Filter Micron Size	
Primary - Micron.....	30
Secondary - Micron.....	10

Lubrication System

Oil Pressure	
Rated Speed-lbf/in ² (kPa).....	49-70(338-483)
Low Idle-lbf/in ² (kPa).....	5(34)
In Pan Oil Temperature-°F(°C).....	200-250(93-121)
Oil Flow-gal/min(L/min).....	37(140)
Oil Pan Capacity	
High-qt(L).....	20(19)
Low-qt(L).....	16(15)
Total Engine Oil Capacity with filters-qt(L).....	22(21)
Bypass Oil Filter Orifice-In(mm).....	0.101(2.57)
Engine Angularity Limits	
Front up - degrees.....	VARIES WITH MODEL
Front down - degrees.....	VARIES WITH MODEL
Side tilt - degrees.....	VARIES WITH MODEL

Emission Data

CO-gm/hr.....	NOT AVAILABLE
HC-gm/hr.....	NOT AVAILABLE
NO _x -gm/hr.....	NOT AVAILABLE
SO _x -gm/hr.....	453
Smoke	
Rated Speed - Bosch Number.....	0.2
Peak Torque Speed - Bosch Number.....	0.2
Noise - dB(A) @ 1m.....	NOT AVAILABLE
Certification Approval.....	FEDERAL 1985

Cooling System

Engine Heat Rejection-Btu/min(kW).....	8350(147)
Engine Radiated Heat-Btu/min(kW).....	1350(23.7)
Coolant Flow-gal/min(L/min).....	160(606)
Thermostat	
Start to Open-°F(°C).....	177(81)
Fully Open-°F(°C).....	197(92)
Maximum Water Pump Inlet	
Restriction-In Hg(kPa).....	0.0(0.0)
Engine Coolant Capacity-qt(L).....	24.5(23.2)
Minimum Pressure Cap-lbf/in ² (kPa).....	9.0(62.1)
Maximum Coolant Pressure, (Exclusive of Pressure Cap)-lbf/in ² (kPa).....	NOT AVAILABLE
Maximum Top Tank Temperature-°F(°C).....	210(99)
Minimum Top Tank Temperature-°F(°C).....	160(71)
Minimum Coolant Fill Rate-gal/min(L/min).....	3.0(11.4)
Cooling Index	
Minimum Air to Boli-°F(°C).....	112(44.4)
Maximum Air to Water Diff.-°F(°C).....	100(55.6)
Ram Air Flow - Mile/hr(km/hr).....	15(24)
Deseration-Air Injection	
Capacity-ft ³ /min(m ³ /min).....	0.6(0.017)
Drawdown - Minimum Requirement (or 10% of Cooling System Capacity-Whichever is Larger)-qt(L).....	4.0(3.8)

Air System

Maximum Allowable Temperature Rise (Ambient Air to Engine Inlet)-°F(°C).....	30(16.7)
Air Intake Restriction Maximum Limit	
Dirty Air Cleaner-In H ₂ O(kPa).....	20(5.0)
Clean Air Cleaner-lg H ₂ O(kPa).....	12(3.0)
Engine Air Flow - ft ³ /min(m ³ /min).....	890(25.2)
Engine Air Box/Manifold Pressure-In Hg(kPa).....	41.0(138)
Recommended Intake Pipe Dia.-In(mm).....	6.0(152)

Exhaust System

Exhaust Flow-ft ³ /min(m ³ /min).....	1760(49.8)
Exhaust Temperature-°F(°C).....	600(315)
Maximum Allowable Back Pressure-In Hg(kPa).....	2.5(8.4)
Recommended Exhaust Pipe Dia.	
Single-In(mm).....	5.0(127)
Dual-In(mm).....	NOT APPLICABLE
Exhaust Brake Max. Allowable Back Pressure-In Hg(kPa).....	NOT APPLICABLE

Electrical System

Recommended Battery Capacity(CCA @ 0°F)	
12 Volt System	
Above 32°F(0°C)-A.....	1900
Below 32°F(0°C)-A.....	2500
24 Volt System	
Above 32°F(0°C)-A.....	950
Below 32°F(0°C)-A.....	1250
Maximum Allowable Resistance of Starting Circuit	
12 volt system - ohm.....	0.0012
24 volt system - ohm.....	0.002

Performance Data

Power Output-bhp(kW).....	277(207)
Full Load Speed-r/min.....	2100
Peak Torque-lb ft(N m).....	840(1139)
Peak Torque Speed-r/min.....	1200
BMEP-lbf/in ² (kPa).....	95(655)
Friction Power	
Rated Speed-bhp(kW).....	79(59)
Peak Torque Speed-bhp(kW).....	32(24)
Altitude Capability-ft(m).....	10000(3050)
Torque Available at 800 r/min-lb ft (N m).....	505(685)

Engine

Speed r/min	Power bhp(kW)	Torque lb ft(N m)	BSEC lb/bhp hr (g/kW hr)
2100	277(207)	693(940)	.361(220)
1950	266(198)	716(971)	.356(217)
1800	254(189)	741(1004)	.352(214)
1600	238(178)	781(1059)	.347(211)
1400	218(163)	818(1109)	.344(209)
1200	192(143)	840(1139)	.347(211)

Note: Performance shown is with Diesel No. 2 fuel.

All values at rated speed and power and with standard engine hardware unless otherwise noted.

Curve No. E4-8067-32-40
Date: 6-28-84
Rev./Date: 2/8-22-84
Sht. 2 of 2



ENGINE PERFORMANCE CURVE

RATING: RATED BRAKE POWER

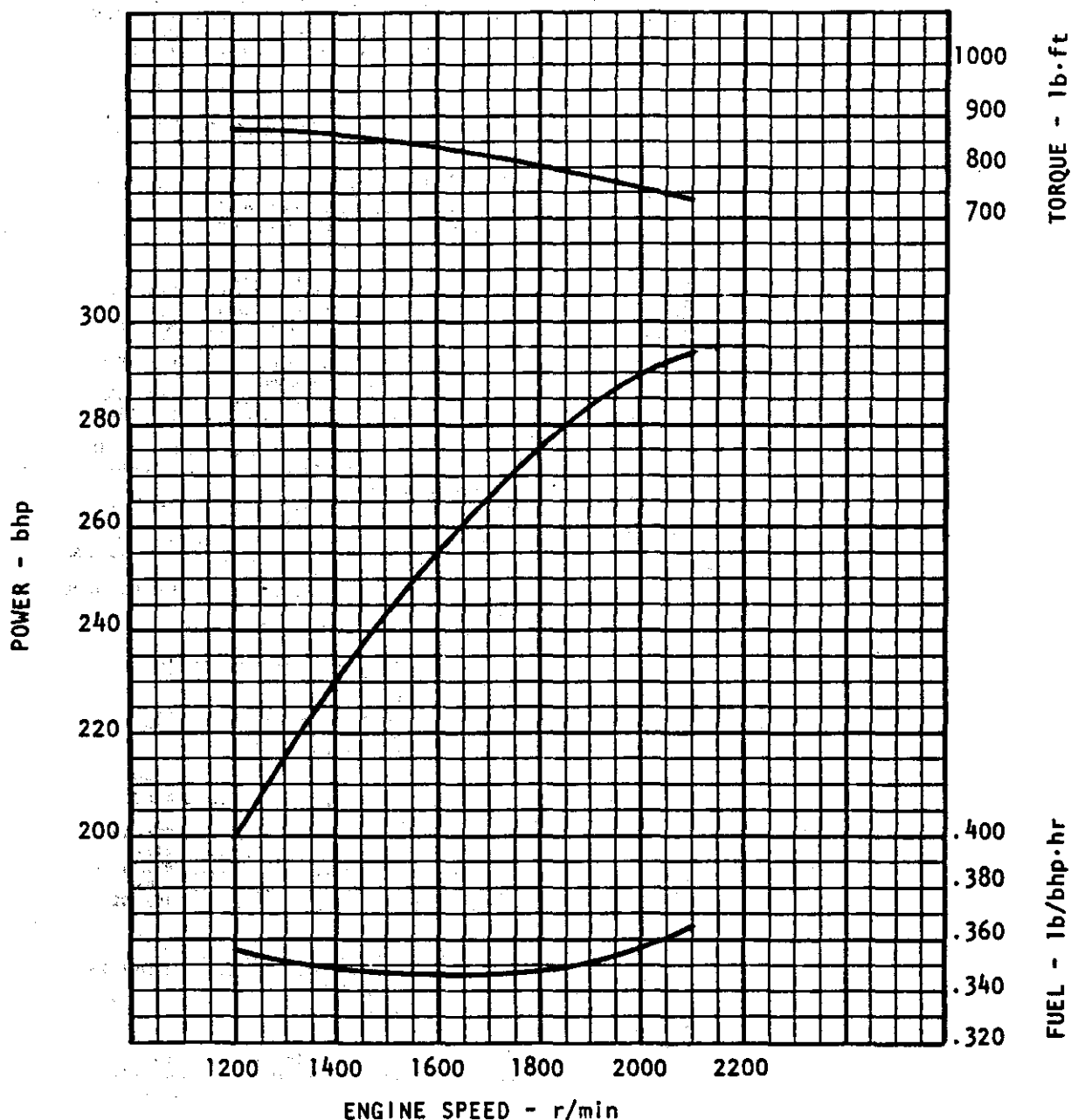
APPLICATION: AUTOMOTIVE - COACH
DIESEL FUEL - NO. 2

CERTIFICATION: FEDERAL 1985

MODEL: 6V-92TA

294 bhp @ 2100 r/min

875 lb·ft @ 1200 r/min

AIR INTAKE RESTRICTION - in. H₂O (kPa) . . . 10 (2.5)EXHAUST BACK PRESSURE - in. H₂O (kPa) . . . 15 (3.7)

- POWER OUTPUT GUARANTEED WITHIN 5% AT SAE J1349 CONDITIONS:
77°F (25°C) AIR INLET TEMPERATURE; 29.31 in. Hg (99kPa) DRY BARMETER;
100°F (39°C) FUEL INLET TEMPERATURE (.853 SPECIFIC GRAVITY AT 60°F).

- CONVERSION FACTORS: POWER: kW = bhp x 0.746
FUEL: kg/kW·hr = lb/bhp·hr x 0.608
TORQUE: N·m = lb·ft x 1.356

- VALUES DERIVED ARE FROM CURRENTLY AVAILABLE DATA AND SUBJECT TO CHANGE WITHOUT NOTICE.

CERTIFIED BY:

STAFF ENGINEER

CURVE NO.

E4-8067-32-48

DATE: 8-7-84

REV./DATE: 1/8-17-84

SHT. 1 OF 2

ENGINE SPECIFICATION DATA

General Data

Model.....	6V-92TA COACH
Number of Cylinders.....	6
Bore and Stroke-In(mm).....	4.84x5.00(123x127)
Displacement-In ³ (L).....	552(9.05)
Compression Ratio.....	17.0:1
Piston Speed-ft/min(m/min).....	1750(533)
Valves Per Cylinder	
Intake.....	NOT APPLICABLE
Exhaust.....	4
Combustion System.....	DIRECT INJECTION
Engine Type.....	63.5° VEE - 2 CYCLE
Aspiration.....	TURBOCHARGED

Configuration

Turbocharger.....	TV7511(1.08A/R)
Charge Air Cooling System.....	JWAC
Blower Type.....	BY-PASS
Blower Drive Ratio.....	1.95:1
Low Idle Speed-r/min.....	500
High Idle Speed-r/min.....	2250
Thrust Bearing Load Limit	
Continuous-lbf(N).....	600(2670)
Intermittent-lbf(N).....	1800(8000)
Engine Crankcase Vent System.....	OPEN
Maximum Pressure-In H ₂ O(kPa).....	3.0(0.75)

Physical Data

Size	
Length-In(mm).....	37.6(955)
Width-In(mm).....	37.6(955)
Height-In(mm).....	48.0(1220)
Weight, dry-lb(kg).....	2020(920)
Center of Gravity Distance	
From R.F.O.B. (x axis)-In(mm).....	9.4(239)
Above Crankshaft (y axis)-In(mm).....	10.2(259)
Right of Crankshaft (z axis)-In(mm).....	0.0(0.0)
Installation Drawing.....	VARIES WITH MODEL
Maximum Allowable Static Bending Moment at Rear Face of FW Hsg-lbf ft(N m).....	600(814)

Fuel System

Fuel Injector/Timing.....	9F80/1.460
Fuel Injection Pump/Timing.....	NOT APPLICABLE
Fuel Consumption-lb/hr(kg/hr).....	108.1(49.0)
Fuel Consumption-gal/hr(L/hr).....	15.5(58.7)
Fuel Spill Rate-lb/hr(kg/hr).....	554(251)
Fuel Spill Rate-gal/hr(L/hr).....	79.2(300)
Total Fuel Flow-lb/hr(kg/hr).....	622(282)
Total Fuel Flow-gal/hr(L/hr).....	94.7(359)
Maximum Allowable Fuel Pump Suction	
Clean System-In Hg(kPa).....	6(20)
Dirty System-In Hg(kPa).....	12(41)
Fuel Filter Micron Size	
Primary - Micron.....	30
Secondary - Micron.....	10

Lubrication System

Oil Pressure	
Rated Speed-lbf/In ² (kPa).....	49-70(338-483)
Low Idle-lbf/In ² (kPa).....	5(34)
In Pan Oil Temperature-°F(°C).....	200-250(93-121)
Oil Flow-gal/min(L/min).....	37(140)
Oil Pan Capacity	
High-qt(L).....	20(19)
Low-qt(L).....	16(15)
Total Engine Oil Capacity with filters-qt(L).....	22(21)
Bypass Oil Filter Orifice-In(mm).....	0.101(2.57)
Engine Angularity Limits	
Front up - degrees.....	VARIES WITH MODEL
Front down - degrees.....	VARIES WITH MODEL
Side tilt - degrees.....	VARIES WITH MODEL

Emission Data

CO-gm/hr.....	NOT AVAILABLE
HC-gm/hr.....	NOT AVAILABLE
NO _x -gm/hr.....	NOT AVAILABLE
SO ₂ -gm/hr.....	490
Smoke	
Rated Speed - Bosch Number.....	0.2
Peak Torque Speed - Bosch Number.....	0.4
Noise - dB(A) @ 1m.....	NOT AVAILABLE
Certification Approval.....	FEDERAL 1985

Cooling System

Engine Heat Rejection-Btu/min(kW).....	8850(156)
Engine Radiated Heat-Btu/min(kW).....	1460(25.6)
Coolant Flow-gal/min(L/min).....	160(606)
Thermostat	
Start to Open-°F(°C).....	177(81)
Fully Open-°F(°C).....	197(92)
Maximum Water Pump Inlet	
Restriction-In Hg(kPa).....	0.0(0.0)
Engine Coolant Capacity-qt(L).....	24.5(23.2)
Minimum Pressure Cap-lbf/In ² (kPa).....	9.0(62.1)
Maximum Coolant Pressure (Exclusive of Pressure Cap)-lbf/In ² (kPa).....	NOT AVAILABLE
Maximum Top Tank Temperature-°F(°C).....	210(99)
Minimum Top Tank Temperature-°F(°C).....	160(71)
Minimum Coolant Fill Rate-gal/min(L/min).....	3.0(11.4)
Cooling Index	
Minimum Air to Boil-°F(°C).....	112(44.4)
Maximum Air to Water Diff.-°F(°C).....	100(55.6)
Ram Air Flow - Mile/hr(km/hr).....	13(24)
Deaeration-Air Injection	
Capacity-ft ³ /min(m ³ /min).....	0.6(0.017)
Drawdown - Minimum Requirement (or 10% of Cooling System Capacity-Whichever is Larger)-qt(L).....	4.0(3.8)

Air System

Maximum Allowable Temperature Rise (Ambient Air to Engine Inlet)-°F(°C).....	30(16.7)
Air Intake Restriction Maximum Limit	
Dirty Air Cleaner-In H ₂ O(kPa).....	20(5.0)
Clean Air Cleaner-lb H ₂ O(kPa).....	12(3.0)
Engine Air Flow - ft ³ /min(m ³ /min).....	1030(29.2)
Engine Air Box/Manifold Pressure-In Hg(kPa).....	44.5(150)
Recommended Intake Pipe Dia.-In(mm).....	6.0(152)

Exhaust System

Exhaust Flow-ft ³ /min(m ³ /min).....	2040(57.8)
Exhaust Temperature-°F(°C).....	605(318)
Maximum Allowable Back Pressure-In Hg(kPa).....	2.5(8.4)
Recommended Exhaust Pipe Dia.	
Single-In(mm).....	5.0(127)
Dual-In(mm).....	NOT APPLICABLE
Exhaust Brake Max. Allowable Back Pressure-In Hg(kPa).....	NOT APPLICABLE

Electrical System

Recommended Battery Capacity(CCA @ 0°F)	
12 Volt System	
Above 32°F(0°C)-A.....	1900
Below 32°F(0°C)-A.....	2500
24 Volt System	
Above 32°F(0°C)-A.....	950
Below 32°F(0°C)-A.....	1250
Maximum Allowable Resistance of Starting Circuit	
12 volt system - ohm.....	0.0012
24 volt system - ohm.....	0.002

Performance Data

Power Output-bhp(kW).....	294(219)
Full Load Speed-r/min.....	2100
Peak Torque-lb ft(N m).....	875(1186)
Peak Torque Speed-r/min.....	1200
BMEP-lbf/In ² (kPa).....	100(692)
Friction Power	
Rated Speed-bhp(kW).....	79(59)
Peak Torque Speed-bhp(kW).....	32(24)
Altitude Capability-ft(m).....	10000(3050)
Torque Available at 800 r/min-lb ft (N m).....	635(861)

Engine

Speed r/min	Power bhp(kW)	Torque lb ft(N m)	BSEC lb/bhp hr (g/kW hr)
2100	294(219)	735 (997)	.365(222)
1950	287(214)	773(1048)	.354(215)
1800	275(205)	802(1087)	.347(211)
1600	255(190)	837(1135)	.346(210)
1400	230(172)	863(1170)	.348(212)
1200	200(149)	875(1186)	.355(216)

Note: Performance shown is with Diesel No. 2 fuel.

All values at rated speed and power and with standard engine hardware unless otherwise noted.

Curve No. E4-8067-32-48
Date: 8-7-84
Rev./Date: 1/8-17-84
Sht. 2 of 2



ENGINE PERFORMANCE CURVE

RATING: RATED BRAKE POWER

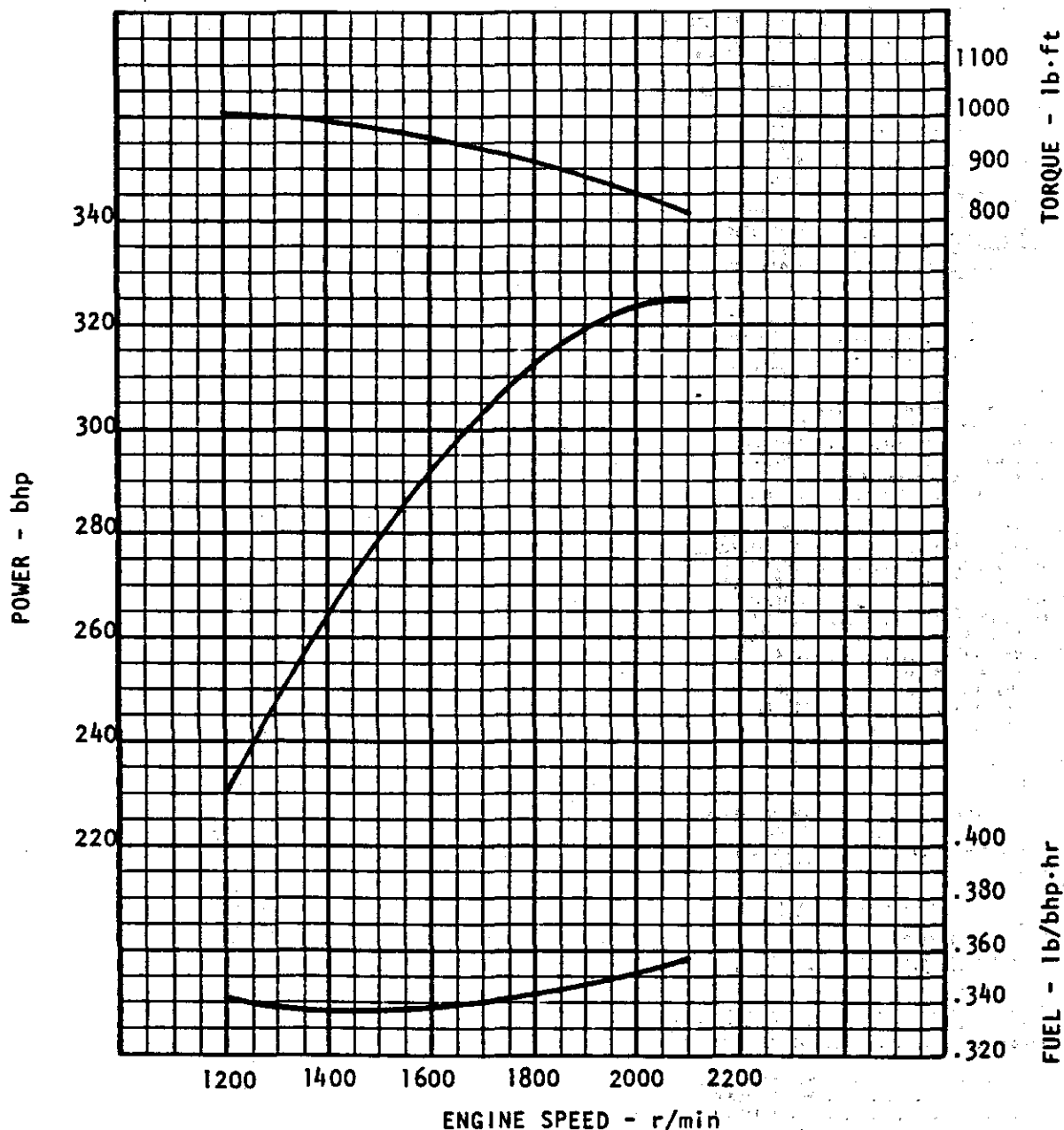
APPLICATION: AUTOMOTIVE - COACH
DIESEL FUEL - NO. 2

CERTIFICATION: FEDERAL 1985

MODEL: 6V-92TA

325 bhp @ 2100 r/min

1007 lb·ft @ 1200 r/min



AIR INTAKE RESTRICTION - in. H₂O (kPa) . . . 10 (2.5)

EXHAUST BACK PRESSURE - in. H₂O (kPa) . . . 15 (3.7)

POWER OUTPUT GUARANTEED WITHIN 5% AT SAE J1349 CONDITIONS:
77°F (25°C) AIR INLET TEMPERATURE; 29.91 in. Hg (99kPa) DRY BAROMETER;
100°F (38°C) FUEL INLET TEMPERATURE (.853 SPECIFIC GRAVITY AT 60°F).

• CONVERSION FACTORS: POWER: kW = bhp × 0.746
FUEL: kg/kW·hr = lb/bhp·hr × 0.608
TORQUE: N·m = lb·ft × 1.356

• VALUES DERIVED ARE FROM CURRENTLY AVAILABLE DATA AND SUBJECT TO CHANGE WITHOUT NOTICE.

CERTIFIED BY:

Brian Horvath
STAFF ENGINEER

CURVE NO.

E4-8067-32-49

DATE: 8-8-84

REV./DATE: 1/8-17-84

SHT. 1 OF 2

ENGINE SPECIFICATION DATA

General Data

Model.....	6V-92TA COACH
Number of Cylinders.....	6
Bore and Stroke-In(mm).....	4.84x5.00(123x127)
Displacement-In ³ (L).....	552(9.05)
Compression Ratio.....	17.0:1
Piston Speed-ft/min(m/min).....	1750(533)
Valves Per Cylinder	
Intake.....	NOT APPLICABLE
Exhaust.....	4
Combustion System.....	DIRECT INJECTION
Engine Type.....	63.5° VEE - 2 CYCLE
Aspiration.....	TURBOCHARGED

Configuration

Turbocharger.....	TV7511(1.08A/R)
Charge Air Cooling System.....	JWAC
Blower Type.....	BY-PASS
Blower Drive Ratio.....	2.05:1
Low Idle Speed-r/min.....	500
High Idle Speed-r/min.....	2250
Thrust Bearing Load Limit	
Continuous-lbf(N).....	600(2670)
Intermittent-lbf(N).....	1800(8000)
Engine Crankcase Vent System.....	OPEN
Maximum Pressure-In H ₂ O(kPa).....	3.0(0.75)

Physical Data

Size	
Length-In(mm).....	37.6(955)
Width-In(mm).....	37.6(955)
Height-In(mm).....	48.0(1220)
Weight, dry-lb(kg).....	2020(920)
Center of Gravity Distance	
From R.F.O.B. (x axis)-In(mm).....	9.4(239)
Above Crankshaft (y axis)-In(mm).....	10.2(259)
Right of Crankshaft (z axis)-In(mm).....	0.0(0.0)
Installation Drawing.....	VARIES WITH MODEL
Maximum Allowable Static Bending Moment at Rear Face of FW Hsg-lbf ft(N m)....	600(814)

Fuel System

Fuel Injector/Timing.....	9H85/1.460
Fuel Injection Pump/Timing.....	NOT APPLICABLE
Fuel Consumption-lb/hr(kg/hr).....	120.4(54.6)
Fuel Consumption-gal/hr(L/hr).....	17.2(65.2)
Fuel Spill Rate-lb/hr(kg/hr).....	554(251)
Fuel Spill Rate-gal/hr(L/hr).....	79.2(300)
Total Fuel Flow-lb/hr(kg/hr).....	674(306)
Total Fuel Flow-gal/hr(L/hr).....	96.4(365)
Maximum Allowable Fuel Pump Suction	
Clean System-In Hg(kPa).....	6(20)
Dirty System-In Hg(kPa).....	12(41)
Fuel Filter Micron Size	
Primary - Micron.....	30
Secondary - Micron.....	10

Lubrication System

Oil Pressure	
Rated Speed-lbf/In ² (kPa).....	49-70(338-483)
Low Idle-lbf/In ² (kPa).....	5(34)
In Pan Oil Temperature-°F(°C).....	200-250(93-121)
Oil Flow-gal/min(L/min).....	37(140)
Oil Pan Capacity	
High-qt(L).....	20(19)
Low-qt(L).....	16(15)
Total Engine Oil Capacity with filters-qt(L).....	22(21)
Bypass Oil Filter Orifice-In(mm).....	0.101(2.57)
Engine Angularity Limits	
Front up - degrees.....	VARIES WITH MODEL
Front down - degrees.....	VARIES WITH MODEL
Side tilt - degrees.....	VARIES WITH MODEL

Emission Data

CO-gm/hr.....	NOT AVAILABLE
HC-gm/hr.....	NOT AVAILABLE
NO _x -gm/hr.....	NOT AVAILABLE
SO ₂ -gm/hr.....	546
Smoke	
Rated Speed - Bosch Number.....	0.2
Peak Torque Speed - Bosch Number.....	0.4
Noise - dB(A) @ 1m.....	NOT AVAILABLE
Certification Approval.....	FEDERAL 1985

Cooling System

Engine Heat Rejection-Btu/min(kW).....	9750(171)
Engine Radiated Heat-Btu/min(kW).....	1620(28.5)
Coolant Flow-gal/min(L/min).....	160(606)
Thermostat	
Start to Open-°F(°C).....	177(81)
Fully Open-°F(°C).....	197(92)
Maximum Water Pump Inlet	
Restriction-In Hg(kPa).....	0.0(0.0)
Engine Coolant Capacity-qt(L).....	24.5(23.2)
Minimum Pressure Cap-lbf/In ² (kPa).....	9.0(62.1)
Maximum Coolant Pressure (Exclusive of Pressure Cap)-lbf/In ² (kPa).....	NOT AVAILABLE
Maximum Top Tank Temperature-°F(°C)....	210(99)
Minimum Top Tank Temperature-°F(°C)....	160(71)
Minimum Coolant Fill Rate-gal/min(L/min).....	3.0(11.4)
Cooling Index	
Minimum Air to Boil-°F(°C).....	112(44.4)
Maximum Air to Water Diff.-°F(°C).....	100(55.6)
Ram Air Flow - Mile/hr(km/hr).....	15(24)
Deaeration-Air Injection	
Capacity-ft ³ /min(m ³ /min).....	0.6(0.017)
Drawdown - Minimum Requirement (or 10% of Cooling System Capacity-Whichever is Larger)-qt(L).....	4.0(3.8)

Air System

Maximum Allowable Temperature Rise (Ambient Air to Engine Inlet)-°F(°C)....	30(16.7)
Air Intake Restriction Maximum Limit	
Dirty Air Cleaner-In H ₂ O(kPa).....	20(5.0)
Clean Air Cleaner-In H ₂ O(kPa).....	12(3.0)
Engine Air Flow - ft ³ /min(m ³ /min).....	1120(31.7)
Engine Air Box/Manifold Pressure-In Hg(kPa).....	50.0(169)
Recommended Intake Pipe Dia.-In(mm)....	6.0(152)

Exhaust System

Exhaust Flow-ft ³ /min(m ³ /min).....	2250(63.7)
Exhaust Temperature-°F(°C).....	620(327)
Maximum Allowable Back Pressure-In Hg(kPa).....	2.5(8.4)
Recommended Exhaust Pipe Dia.	
Single-In(mm).....	5.0(127)
Dual-In(mm).....	NOT APPLICABLE
Exhaust Brake Max. Allowable Back Pressure-In Hg(kPa).....	NOT APPLICABLE

Electrical System

Recommended Battery Capacity(CCA @ 0°F)	
12 Volt System	
Above 32°F(0°C)-A.....	1900
Below 32°F(0°C)-A.....	2500
24 Volt System	
Above 32°F(0°C)-A.....	950
Below 32°F(0°C)-A.....	1250
Maximum Allowable Resistance of Starting Circuit	
12 volt system - ohm.....	0.0012
24 volt system - ohm.....	0.002

Performance Data

Power Output-bhp(kW).....	325(242)
Full Load Speed-r/min.....	2100
Peak Torque-lb ft(N m).....	1007(1365)
Peak Torque Speed-r/min.....	1200
BMEP-lbf/In ² (kPa).....	111(766)
Friction Power	
Rated Speed-bhp(kW).....	79(59)
Peak Torque Speed-bhp(kW).....	32(24)
Altitude Capability-ft(m).....	10000(3050)
Torque Available at 800 r/min-lb ft (N m).....	635(861)

Engine

Speed r/min	Power bhp(kW)	Torque lb ft(N m)	BSEC lb/bhp hr (g/kW hr)
2100	325(242)	813(1102)	.357(217)
1950	322(240)	867(1175)	.349(212)
1800	313(233)	913(1238)	.344(209)
1600	292(218)	958(1299)	.338(206)
1400	264(197)	990(1342)	.337(205)
1200	230(172)	1007(1365)	.341(207)

Note: Performance shown is with Diesel No. 2 fuel.

All values at rated speed and power and with standard engine hardware unless otherwise noted.

Curve No. E4-8067-32-49
Date: 8-8-84
Rev./Data: 1/8-17-84
Sht. 2 of 2



ENGINE PERFORMANCE CURVE

RATING: RATED BRAKE POWER

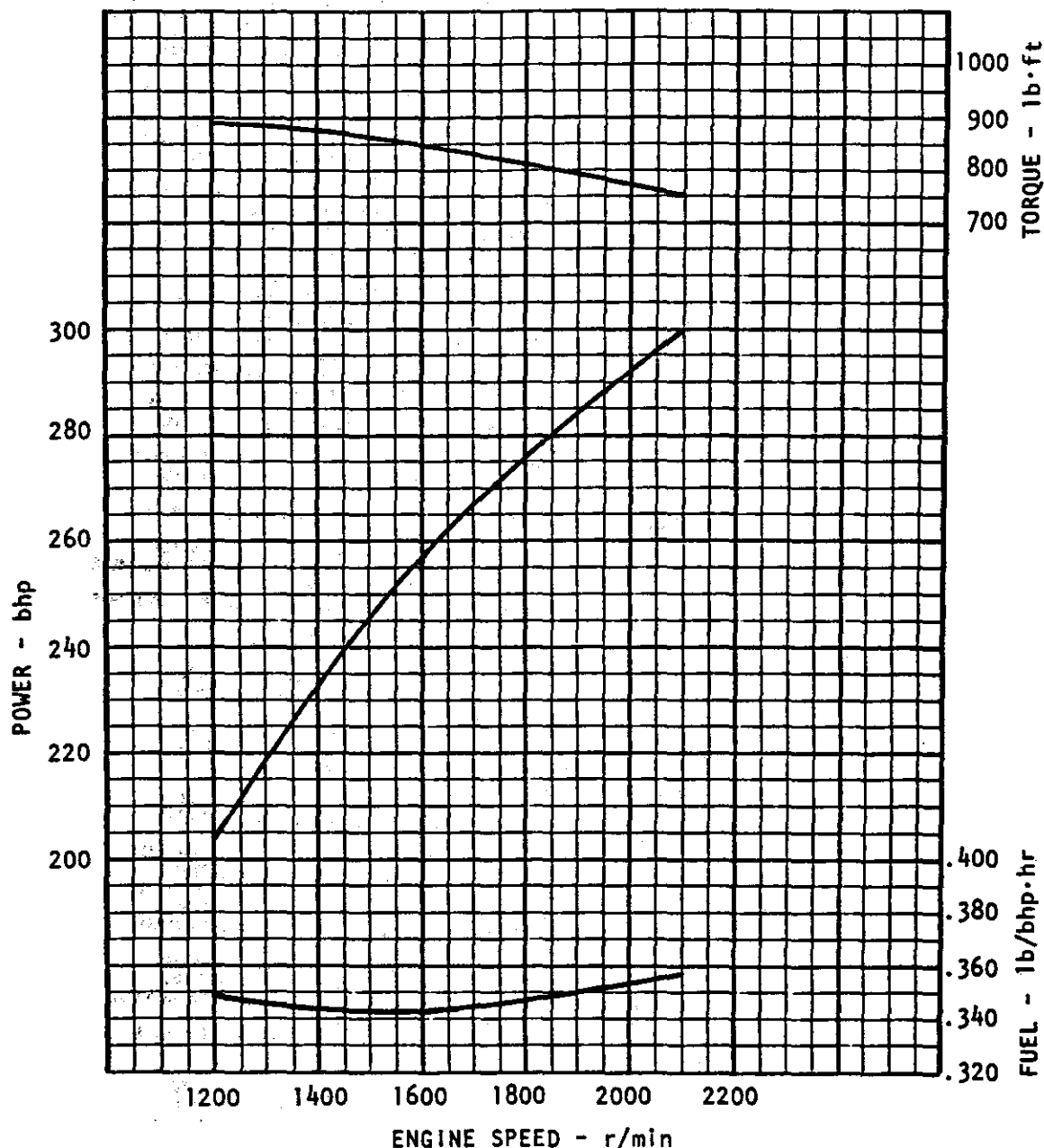
APPLICATION: AUTOMOTIVE - PARLOR COACH
DIESEL FUEL - NO. 2

CERTIFICATION: FEDERAL 1985

MODEL: 6V-92TA

300 bhp @ 2100 r/min

893 lb·ft @ 1200 r/min



AIR INTAKE RESTRICTION - in. H₂O (kPa) . . . 10 (2.5)
EXHAUST BACK PRESSURE - in. H₂O (kPa) . . . 15 (3.7)

• POWER OUTPUT GUARANTEED WITHIN 5% AT SAE J1349 CONDITIONS:
77°F (25°C) AIR INLET TEMPERATURE; 29.31 in. Hg (99kPa) DRY BAROMETER;
100°F (39°C) FUEL INLET TEMPERATURE (.853 SPECIFIC GRAVITY AT 60°F).
• CONVERSION FACTORS: POWER: kW = bhp × 0.746
FUEL: kg/kW·hr = lb/bhp·hr × 0.608
TORQUE: N·m = lb·ft × 1.356
• VALUES DERIVED ARE FROM CURRENTLY AVAILABLE DATA AND SUBJECT TO
CHANGE WITHOUT NOTICE.

CERTIFIED BY:

Brian Henderson

STAFF ENGINEER

CURVE NO.

E4-8067-32-44

DATE: 7-27-84

REV./DATE: 2/10-23-84

SHT. 1 OF 2

ENGINE SPECIFICATION DATA

General Data

Model.....	6V-92TA PARLOR COACH
Number of Cylinders.....	6
Bore and Stroke-in(mm).....	4.84x5.00(123x127)
Displacement-in ³ (L).....	552(9.05)
Compression Ratio.....	17.0:1
Piston Speed-ft/min(m/min).....	1750(533)
Valves Per Cylinder	

Intake.....	NOT APPLICABLE
Exhaust.....	4
Combustion System.....	DIRECT INJECTION
Engine Type.....	63.5° VEE - 2 CYCLE
Aspiration.....	TURBOCHARGED

Configuration

Turbocharger.....	TV7511(0.96A/R)
Charge Air Cooling System.....	JMAC
Blower Type.....	BY-PASS
Blower Drive Ratio.....	2.05:1
Low Idle Speed-r/min.....	500
High Idle Speed-r/min.....	2250
Thrust Bearing Load Limit	
Continuous-lbf(N).....	600(2670)
Intermittent-lbf(N).....	1800(8000)
Engine Crankcase Vent System.....	OPEN
Maximum Pressure-in H ₂ O(kPa).....	3.0(0.75)

Physical Data

Size	
Length-in(mm).....	37.6(955)
Width-in(mm).....	37.6(955)
Height-in(mm).....	48.0(1220)
Weight, dry-lb(kg).....	2020(920)
Center of Gravity Distance	
From R.F.O.B. (x axis)-in(mm).....	9.4(239)
Above Crankshaft (y axis)-in(mm).....	10.2(259)
Right of Crankshaft (z axis)-in(mm).....	0.0(0.0)
Installation Drawing.....	VARIES WITH MODEL
Maximum Allowable Static Bending Moment at Rear Face of FW Hsg-lbf ft(N m).....	600(814)

Fuel System

Fuel Injector/Timing.....	9F80/1.460
Fuel Injection Pump/Timing.....	NOT APPLICABLE
Fuel Consumption-lb/hr(kg/hr).....	105.7(47.9)
Fuel Consumption-gal/hr(L/hr).....	15.1(57.2)
Fuel Spill Rate-lb/hr(kg/hr).....	554(251)
Fuel Spill Rate-gal/hr(L/hr).....	79.2(300)
Total Fuel Flow-lb/hr(kg/hr).....	660(299)
Total Fuel Flow-gal/hr(L/hr).....	94.4(357)
Maximum Allowable Fuel Pump Section	
Clean System-in Hg(kPa).....	6(20)
Dirty System-in Hg(kPa).....	12(41)
Fuel Filter Micron Size	
Primary - Micron.....	30
Secondary - Micron.....	10

Lubrication System

Oil Pressure	
Rated Speed-lbf/in ² (kPa).....	49-70(338-483)
Low Idle-lbf/in ² (kPa).....	5(34)
In Pan Oil Temperature-°F(°C).....	200-250(93-121)
Oil Flow-gal/min(L/min).....	37(140)
Oil Pan Capacity	
High-qt(L).....	20(19)
Low-qt(L).....	16(15)
Total Engine Oil Capacity with filters-qt(L).....	22(21)
Bypass Oil Filter Orifice-in(mm).....	0.101(2.57)
Engine Angularity Limits	
Right up - degrees.....	VARIES WITH MODEL
Front down - degrees.....	VARIES WITH MODEL
Side tilt - degrees.....	VARIES WITH MODEL

Emission Data

CO-gm/hr.....	NOT AVAILABLE
HC-gm/hr.....	NOT AVAILABLE
NO _x -gm/hr.....	NOT AVAILABLE
SO ₂ -gm/hr.....	479
Smoke	
Rated Speed - Bosch Number.....	0.2
Peak Torque Speed - Bosch Number.....	0.4
Noise - dB(A) @ 1m.....	NOT AVAILABLE
Certification Approval.....	FEDERAL 1985

Cooling System

Engine Heat Rejection-Btu/min(kW).....	9000(158)
Engine Radiated Heat-Btu/min(kW).....	1420(25.0)
Coolant Flow-gal/min(L/min).....	160(606)
Thermostat	
Start to Open-°F(°C).....	177(81)
Fully Open-°F(°C).....	197(92)
Maximum Water Pump Inlet	
Restriction-in Hg(kPa).....	0.0(0.0)
Engine Coolant Capacity-qt(L).....	24.5(23.2)
Minimum Pressure Cap-lbf/in ² (kPa).....	9.0(62.1)
Maximum Coolant Pressure (Exclusive of Pressure Cap)-lbf/in ² (kPa).....	NOT AVAILABLE
Maximum Top Tank Temperature-°F(°C).....	210(99)
Minimum Top Tank Temperature-°F(°C).....	160(71)
Minimum Coolant Fill Rate-gal/min(L/min).....	3.0(11.4)
Cooling Index	
Minimum Air to Boil-°F(°C).....	112(44.4)
Maximum Air to Water Diff.-°F(°C).....	100(55.6)
Ram Air Flow - Miles/hr(km/hr).....	15(24)
Deaeration-Air Injection	
Capacity-ft ³ /min(m ³ /min).....	0.6(0.017)
Drawdown - Minimum Requirement (or 10% of Cooling System Capacity-Whichever is Larger)-qt(L).....	4.0(3.8)

Air System

Maximum Allowable Temperature Rise (Ambient Air to Engine Inlet)-°F(°C).....	30(16.7)
Air Intake Restriction Maximum Limit	
Dirty Air Cleaner-in H ₂ O(kPa).....	20(5.0)
Clean Air Cleaner-lb H ₂ O(kPa).....	12(3.0)
Engine Air Flow - ft ³ /min(m ³ /min).....	975(27.6)
Engine Air Box/Manifold Pressure-in Hg(kPa).....	46.1(156)
Recommended Intake Pipe Dia.-in(mm).....	6.0(152)

Exhaust System

Exhaust Flow-ft ³ /min(m ³ /min).....	1950(55.2)
Exhaust Temperature-°F(°C).....	615(324)
Maximum Allowable Back Pressure-in Hg(kPa).....	2.5(8.4)
Recommended Exhaust Pipe Dia.	
Single-in(mm).....	5.0(127)
Dual-in(mm).....	NOT APPLICABLE
Exhaust Brake Max. Allowable Back Pressure-in Hg(kPa).....	NOT APPLICABLE

Electrical System

Recommended Battery Capacity(CCA @ 0°F)	
12 Volt System	
Above 32°F(0°C)-A.....	1900
Below 32°F(0°C)-A.....	2500
24 Volt System	
Above 32°F(0°C)-A.....	950
Below 32°F(0°C)-A.....	1250
Maximum Allowable Resistance of Starting Circuit	
12 volt system - ohm.....	0.0012
24 volt system - ohm.....	0.002

Performance Data

Power Output-bhp(kW).....	300(224)
Full Load Speed-r/min.....	2100
Peak Torque-lb ft(N m).....	893(1211)
Peak Torque Speed-r/min.....	1200
BMEP-lbf/in ² (kPa).....	102(703)
Friction Power	
Rated Speed-bhp(kW).....	79(59)
Peak Torque Speed-bhp(kW).....	32(24)
Altitude Capability-ft(m).....	10000(3050)
Torque Available at 800 r/min-lb ft (N m).....	635(861)

Engine

Speed r/min	Power bhp(kW)	Torque lb ft(N m)	BSEC lb/bhp hr (g/kW hr)
2100	300(224)	750(1017)	.357(217)
1950	288(215)	776(1052)	.351(214)
1800	276(206)	805(1091)	.347(211)
1600	257(192)	844(1144)	.342(208)
1400	235(174)	874(1185)	.343(209)
1200	204(152)	893(1211)	.348(212)

Note: Performance shown is with Diesel No. 2 fuel.

All values at rated speed and power and with standard engine hardware unless otherwise noted.

Curve No. E4-8067-32-44
Date: 7-27-84
Rev./Date: 2/10-23-84
Sht. 2 of 2



ENGINE PERFORMANCE CURVE

RATING: RATED BRAKE POWER

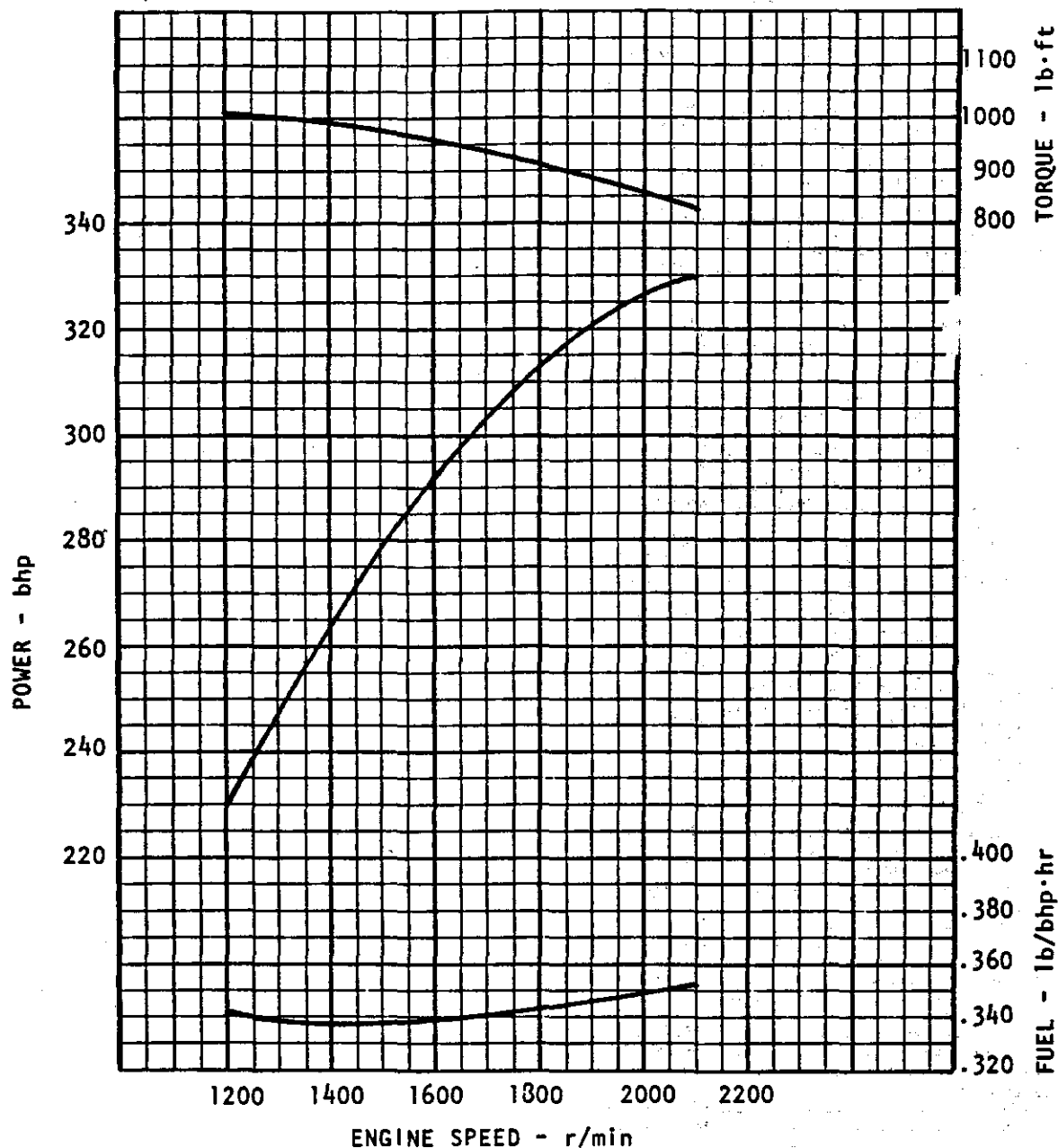
APPLICATION: AUTOMOTIVE - PARLOR COACH
DIESEL FUEL - NO. 2

CERTIFICATION: FEDERAL 1985

MODEL: 6V-92TA

330 bhp @ 2100 r/min

1007 lb·ft @ 1200 r/min



AIR INTAKE RESTRICTION - in. H₂O (kPa) . . . 10 (2.5)
EXHAUST BACK PRESSURE - in. H₂O (kPa) . . . 15 (3.7)

• POWER OUTPUT GUARANTEED WITHIN 5% AT SAE J1349 CONDITIONS:
77°F (25°C) AIR INLET TEMPERATURE; 29.31 in. Hg (99kPa) DRY BAROMETER;
100°F (39°C) FUEL INLET TEMPERATURE (.853 SPECIFIC GRAVITY AT 60°F).
• CONVERSION FACTORS: POWER: kW = bhp x 0.746
FUEL: kg/kW·hr = lb/bhp·hr x 0.608
TORQUE: N·m = lb·ft x 1.356
• VALUES DERIVED ARE FROM CURRENTLY AVAILABLE DATA AND SUBJECT TO
CHANGE WITHOUT NOTICE.

CERTIFIED BY:

Bruce Henderson

STAFF ENGINEER

CURVE NO.

E4-8067-32-50

DATE: 8-9-84

REV./DATE: 2/10-23-84

SHT. 1 OF 2

ENGINE SPECIFICATION DATA

General Data

Model.....	6V-92TA PARLOR COACH
Number of Cylinders.....	6
Bore and Stroke-in(mm).....	4.84x5.00(123x127)
Displacement-in ³ (L).....	552(9.05)
Compression Ratio.....	17.0:1
Piston Speed-ft/min(m/min).....	1750(533)
Valves Per Cylinder	
Intake.....	NOT APPLICABLE
Exhaust.....	4
Combustion System.....	DIRECT INJECTION
Engine Type.....	63.5° VEE - 2 CYCLE
Aspiration.....	TURBOCHARGED

Configuration

Turbocharger.....	TV7511(1.08A/R)
Charge Air Cooling System.....	JWAC
Blower Type.....	BY-PASS
Blower Drive Ratio.....	2.05:1
Low Idle Speed-r/min.....	500
High Idle Speed-r/min.....	2250
Thrust Bearing Load Limit	
Continuous-lbf(N).....	600(2670)
Intermittent-lbf(N).....	1800(8000)
Engine Crankcase Vent System.....	OPEN
Maximum Pressure-In H ₂ O(kPa).....	3.0(0.75)

Physical Data

Size	
Length-in(mm).....	37.6(955)
Width-in(mm).....	37.6(955)
Height-in(mm).....	48.0(1220)
Weight-dry-lb(kg).....	2020(920)
Center of Gravity Distance	
From R.F.O.B. (x axis)-in(mm).....	9.4(239)
Above Crankshaft (y axis)-in(mm).....	10.2(259)
Right of Crankshaft (z axis)-in(mm).....	0.0(0.0)
Installation Drawing.....	VARIES WITH MODEL
Maximum Allowable Static Bending Moment at Rear Face of FW Hsg-lbf ft(N m).....	600(814)

Fuel System

Fuel Injector/Timing.....	9H85/1.460
Fuel Injection Pump/Timing.....	NOT APPLICABLE
Fuel Consumption-lb/hr(kg/hr).....	120.4(54.6)
Fuel Consumption-gal/hr(L/hr).....	17.2(65.2)
Fuel Spill Rate-lb/hr(kg/hr).....	554(251)
Fuel Spill Rate-gal/hr(L/hr).....	79.2(300)
Total Fuel Flow-lb/hr(kg/hr).....	674(306)
Total Fuel Flow-gal/hr(L/hr).....	96.4(365)
Maximum Allowable Fuel Pump Suction	
Clean System-In Hg(kPa).....	6(20)
Dirty System-In Hg(kPa).....	12(41)
Fuel Filter Micron Size	
Primary - Micron.....	30
Secondary - Micron.....	10

Lubrication System

Oil Pressure	
Rated Speed-lbf/in ² (kPa).....	49-70(338-483)
Low Idle-lbf/in ² (kPa).....	5(34)
In Pan Oil Temperature-°F(°C).....	200-250(93-121)
Oil Flow-gal/min(L/min).....	37(140)
Oil Pan Capacity	
High-qt(L).....	20(19)
Low-qt(L).....	16(15)
Total Engine Oil Capacity with filters-qt(L).....	22(21)
Bypass Oil Filter Orifice-in(mm).....	0.101(2.57)
Engine Angularity Limits	
Front up - degrees.....	VARIES WITH MODEL
Front down - degrees.....	VARIES WITH MODEL
Side tilt - degrees.....	VARIES WITH MODEL

Emission Data

CO-gm/hr.....	NOT AVAILABLE
HC-gm/hr.....	NOT AVAILABLE
NO _x -gm/hr.....	NOT AVAILABLE
SO ₂ -gm/hr.....	546
Smoke	
Rated Speed - Bosch Number.....	0.2
Peak Torque Speed - Bosch Number.....	0.4
Noise - dBA @ 1m.....	NOT AVAILABLE
Certification Approval.....	FEDERAL 1985

Cooling System

Engine Heat Rejection-Btu/min(kW).....	9900(174)
Engine Radiated Heat-Btu/min(kW).....	1620(28.5)
Coolant Flow-gal/min(L/min).....	160(606)
Thermostat	
Start to Open-°F(°C).....	177(81)
Fully Open-°F(°C).....	197(92)
Maximum Water Pump Inlet	
Restriction-In Hg(kPa).....	0.0(0.0)
Engine Coolant Capacity-qt(L).....	24.5(23.2)
Minimum Pressure Cap-lbf/in ² (kPa).....	9.0(62.1)
Maximum Coolant Pressure (Exclusive of Pressure Cap)-lbf/in ² (kPa).....	NOT AVAILABLE
Maximum Top Tank Temperature-°F(°C).....	210(99)
Minimum Top Tank Temperature-°F(°C).....	160(71)
Minimum Coolant Fill Rate-gal/min(L/min).....	3.0(11.4)
Cooling Index	
Minimum Air to Boil-°F(°C).....	112(44.4)
Maximum Air to Water Diff.-°F(°C).....	100(55.6)
Ram Air Flow - Mile/hr(km/hr).....	15(24)
Deaeration-Air Injection	
Capacity-ft ³ /min(m ³ /min).....	0.6(0.017)
Drawdown - Minimum Requirement (or 10% of Cooling System Capacity-Whichever is Larger)-qt(L).....	4.0(3.8)

Air System

Maximum Allowable Temperature Rise (Ambient Air to Engine Inlet)-°F(°C).....	30(16.7)
Air Intake Restriction Maximum Limit	
Dirty Air Cleaner-In H ₂ O(kPa).....	20(5.0)
Clean Air Cleaner-In H ₂ O(kPa).....	12(3.0)
Engine Air Flow - ft ³ /min(m ³ /min).....	1020(28.9)
Engine Air Box/Manifold Pressure-In Hg(kPa).....	44.5(150)
Recommended Intake Pipe Dia.-in(mm).....	6.0(152)

Exhaust System

Exhaust Flow-ft ³ /min(m ³ /min).....	2165(61.3)
Exhaust Temperature-°F(°C).....	680(360)
Maximum Allowable Back Pressure-In Hg(kPa).....	2.5(8.4)
Recommended Exhaust Pipe Dia.	
Single-In(mm).....	5.0(127)
Dual-In(mm).....	NOT APPLICABLE
Exhaust Brake Max. Allowable Back Pressure-In Hg(kPa).....	NOT APPLICABLE

Electrical System

Recommended Battery Capacity(CCA @ 0°F)	
12 Volt System	
Above 32°F(0°C)-A.....	1900
Below 32°F(0°C)-A.....	2500
24 Volt System	
Above 32°F(0°C)-A.....	950
Below 32°F(0°C)-A.....	1250
Maximum Allowable Resistance of Starting Circuit	
12 volt system - ohm.....	0.0012
24 volt system - ohm.....	0.002

Performance Data

Power Output-bhp(kW).....	330(246)
Full Load Speed-r/min.....	2100
Peak Torque-lb ft(N m).....	1007(1365)
Peak Torque Speed-r/min.....	1200
BMEP-lbf/in ² (kPa).....	113(777)
Friction Power	
Rated Speed-bhp(kW).....	79(59)
Peak Torque Speed-bhp(kW).....	32(24)
Altitude Capability-ft(m).....	10000(3050)
Torque Available at 800 r/min-lb ft (N m).....	635(861)

Engine

Speed r/min	Power bhp(kW)	Torque lb ft(N m)	BSEC lb/bhp hr (g/kW hr)
2100	330(246)	825(1121)	.352(214)
1950	324(242)	873(1186)	.347(211)
1800	313(233)	913(1241)	.344(209)
1600	292(218)	958(1299)	.338(206)
1400	264(197)	990(1342)	.337(205)
1200	230(172)	1007(1365)	.341(207)

Note: Performance shown is with Diesel No. 2 fuel.

All values at rated speed and power and with standard engine hardware unless otherwise noted.

Curve No. E4-8067-32-50
Date: 8-9-84
Rev./Date: 2/10-23-84
Sht. 2 of 2



ENGINE PERFORMANCE CURVE

RATING: RATED BRAKE POWER

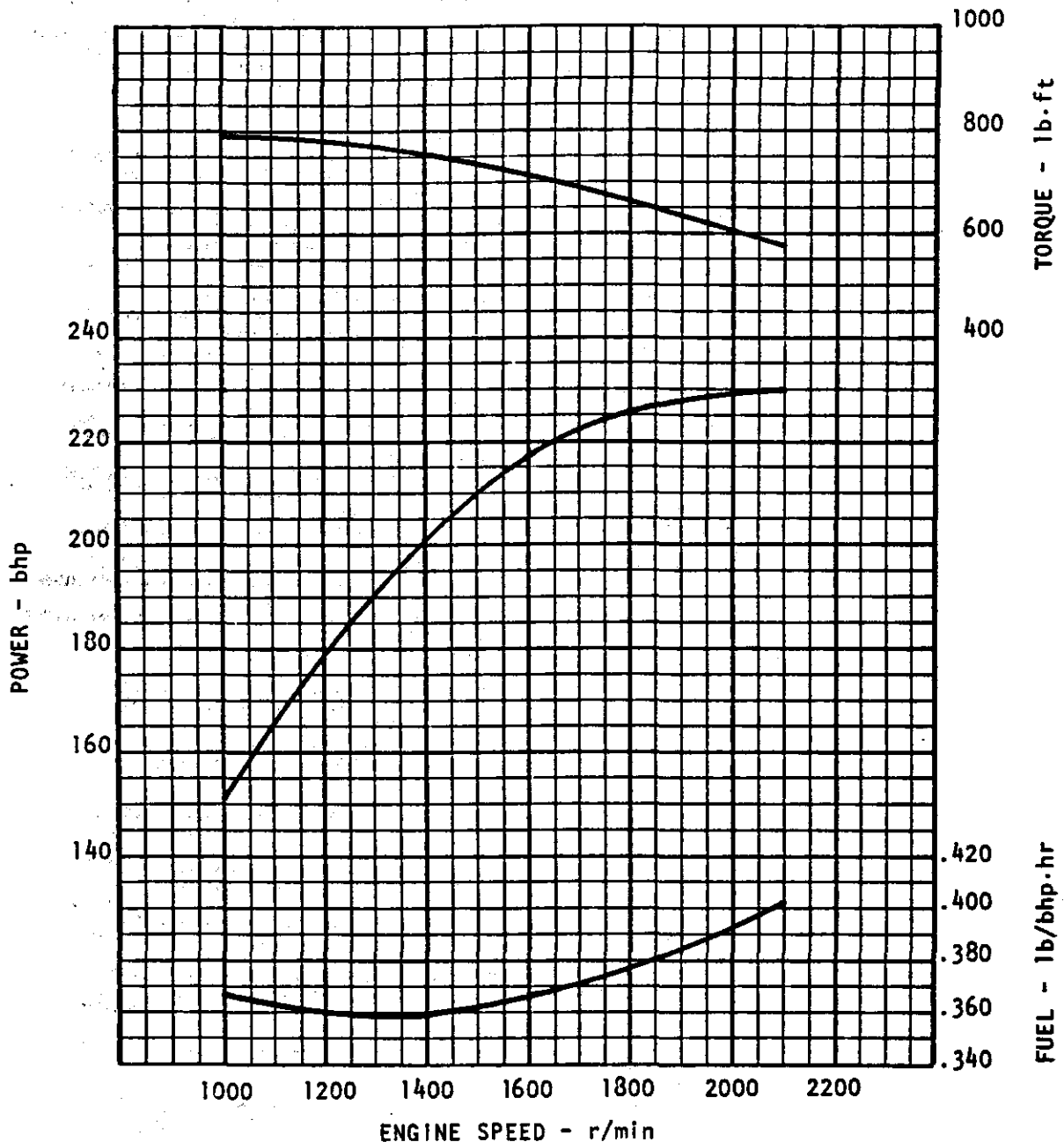
APPLICATION: AUTOMOTIVE - COACH
DIESEL FUEL - NO. 1

CERTIFICATION: CALIFORNIA 1985

MODEL: 6V-92TAC

230 bhp @ 2100 r/min

793 lb.-ft @ 1000 r/min



AIR INTAKE RESTRICTION - in. H₂O (kPa) . . . 10 (2.5)
EXHAUST BACK PRESSURE - in. H₂O (kPa) . . . 15 (3.7)

- POWER OUTPUT GUARANTEED WITHIN 5% AT SAE J1349 CONDITIONS:
77°F (25°C) AIR INLET TEMPERATURE; 29.31 in. Hg (99kPa) DRY BAROMETER;
100°F (39°C) FUEL INLET TEMPERATURE (.853 SPECIFIC GRAVITY AT 60°F).
- CONVERSION FACTORS: POWER: kW = bhp x 0.746
FUEL: kg/kW-hr = lb/bhp-hr x 0.608
TORQUE: N-m = lb-ft x 1.356
- VALUES DERIVED ARE FROM CURRENTLY AVAILABLE DATA AND SUBJECT TO
CHANGE WITHOUT NOTICE.

CERTIFIED BY:

[Signature]
STAFF ENGINEER

CURVE NO.

E4-8067-32-61
DATE: 10-12-84
REV./DATE:
SHT. 1 OF 2

ENGINE SPECIFICATION DATA

General Data

Model.....	6V-92TA COACH
Number of Cylinders.....	6
Bore and Stroke-in(mm).....	4.84x5.00(123x127)
Displacement-in ³ (L).....	552(9.05)
Compression Ratio.....	17.0:1
Piston Speed-ft/min(m/min).....	1750(533)
Valves Per Cylinder.....	
Intake.....	NOT APPLICABLE
Exhaust.....	4
Combustion System.....	DIRECT INJECTION
Engine Type.....	63.5° VEE - 2 CYCLE
Aspiration.....	TURBOCHARGED

Configuration

Turbocharger.....	TV7511(1.08A/R)
Charge Air Cooling System.....	JWAC
Blower Type.....	BY-PASS
Blower Drive Ratio.....	2.05:1
Low Idle Speed-r/min.....	500
High Idle Speed-r/min.....	2250
Thrust Bearing Load Limit.....	
Continuous-lbf(N).....	600(2670)
Intermittent-lbf(N).....	1800(8000)
Engine Crankcase Vent System.....	OPEN
Maximum Pressure-in H ₂ O(kPa).....	3.0(0.75)

Physical Data

Size.....	
Length-in(mm).....	37.6(955)
Width-in(mm).....	37.6(955)
Height-in(mm).....	48.0(1220)
Weight-dry-lb(kg).....	2020(920)
Center of Gravity Distance.....	
From R.F.O.B. (x axis)-in(mm).....	9.4(239)
Above Crankshaft (y axis)-in(mm).....	10.2(259)
Right of Crankshaft (z axis)-in(mm).....	0.0(0.0)
Installation Drawing.....	VARIES WITH MODEL
Maximum Allowable Static Bending Moment at Rear Face of FW Hsg-lbf ft(N m).....	600(814)

Fuel System

Fuel Injector/Timing.....	9E65/1.470
Fuel Injection Pump/Timing.....	NOT APPLICABLE
Fuel Consumption-lb/hr(kg/hr).....	94.5(42.9)
Fuel Consumption-gal/hr(L/hr).....	14.1(53.4)
Fuel Spill Rate-lb/hr(kg/hr).....	468(212)
Fuel Spill Rate-gal/hr(L/hr).....	70.0(265)
Total Fuel Flow-lb/hr(kg/hr).....	563(255)
Total Fuel Flow-gal/hr(L/hr).....	84.1(318)
Maximum Allowable Fuel Pump Suction.....	
Clean System-in Hg(kPa).....	6(20)
Dirty System-in Hg(kPa).....	12(41)
Fuel Filter Micron Size.....	
Primary - Micron.....	30
Secondary - Micron.....	10

Lubrication System

Oil Pressure.....	
Rated Speed-lbf/in ² (kPa).....	49-70(338-483)
Low Idle-lbf/in ² (kPa).....	5(34)
In Pan Oil Temperature-°F(°C).....	200-250(93-121)
Oil Flow-gal/min(L/min).....	37(140)
Oil Pan Capacity.....	
High-qt(L).....	20(19)
Low-qt(L).....	16(15)
Total Engine Oil Capacity with filters-qt(L).....	22(21)
Bypass Oil Filter Orifice-in(mm).....	0.101(2.57)
Engine Angularity Limits.....	
Unit up - degrees.....	VARIES WITH MODEL
Front down - degrees.....	VARIES WITH MODEL
Side tilt - degrees.....	VARIES WITH MODEL

Emission Data

CO-gm/hr.....	NOT AVAILABLE
HC-gm/hr.....	NOT AVAILABLE
NO _x -gm/hr.....	NOT AVAILABLE
SO ₂ -gm/hr.....	429
Smoke.....	
Rated Speed - Bosch Number.....	0.2
Peak Torque Speed - Bosch Number.....	0.7
Noise - dB(A) @ 1m.....	NOT AVAILABLE
Certification Approval.....	CALIFORNIA 1985

Cooling System

Engine Heat Rejection-Btu/min(kW).....	7850(138)
Engine Radiated Heat-Btu/min(kW).....	1290(22.7)
Coolant Flow-gal/min(L/min).....	160(606)
Thermostat.....	
Start to Open-°F(°C).....	177(81)
Fully Open-°F(°C).....	197(92)
Maximum Water Pump Inlet.....	
Restriction-in Hg(kPa).....	0.0(0.0)
Engine Coolant Capacity-qt(L).....	24.5(23.2)
Minimum Pressure Cap-lbf/in ² (kPa).....	9.0(62.1)
Maximum Coolant Pressure (Exclusive of Pressure Cap)-lbf/in ² (kPa).....	NOT AVAILABLE
Maximum Top Tank Temperature-°F(°C).....	210(99)
Minimum Top Tank Temperature-°F(°C).....	160(71)
Minimum Coolant Fill Rate-gal/min(L/min).....	3.0(11.4)
Cooling Index.....	
Minimum Air to Boil-°F(°C).....	112(44.4)
Maximum Air to Water Diff.-°F(°C).....	100(55.6)
Ram Air Flow - Mile/hr(km/hr).....	15(24)
Deaeration-Air Injection.....	
Capacity-ft ³ /min(m ³ /min).....	0.6(0.017)
Drawdown - Minimum Requirement (or 10% of Cooling System Capacity-Whichever is Larger)-qt(L).....	4.0(3.8)

Air System

Maximum Allowable Temperature Rise (Ambient Air to Engine Inlet)-°F(°C).....	30(16.7)
Air Intake Restriction Maximum Limit.....	
Dirty Air Cleaner-in H ₂ O(kPa).....	20(5.0)
Clean Air Cleaner-lb H ₂ O(kPa).....	12(3.0)
Engine Air Flow - ft ³ /min(m ³ /min).....	1090(30.9)
Engine Air Box/Manifold Pressure-in Hg(kPa).....	47.5(160)
Recommended Intake Pipe Dia.-in(mm).....	6.0(152)

Exhaust System

Exhaust Flow-ft ³ /min(m ³ /min).....	2100(59.5)
Exhaust Temperature-°F(°C).....	575(302)
Maximum Allowable Back Pressure-in Hg(kPa).....	2.5(8.4)
Recommended Exhaust Pipe Dia. Single-in(mm).....	5.0(127)
Dual-in(mm).....	NOT APPLICABLE
Exhaust Brake Max. Allowable Back Pressure-in Hg(kPa).....	NOT APPLICABLE

Electrical System

Recommended Battery Capacity(CCA @ 0°F).....	
12 Volt System.....	
Above 32°F(0°C)-A.....	1900
Below 32°F(0°C)-A.....	2300
24 Volt System.....	
Above 32°F(0°C)-A.....	950
Below 32°F(0°C)-A.....	1250
Maximum Allowable Resistance of Starting Circuit.....	
12 volt system - ohm.....	0.0012
24 volt system - ohm.....	0.002

Performance Data

Power Output-bhp(kW).....	230(172)
Full Load Speed-r/min.....	2100
Peak Torque-lb ft(N m).....	793(1075)
Peak Torque Speed-r/min.....	1000
BMEP-lbf/in ² (kPa).....	79(545)
Friction Power.....	
Rated Speed-bhp(kW).....	79(59)
Peak Torque Speed-bhp(kW).....	32(24)
Altitude Capability-ft(m).....	10000(3050)
Torque Available at 800 r/min-lb ft (N m).....	530(719)

Engine

Speed r/min	Power bhp (kW)	Torque lb ft (N m)	BSEC lb/bhp hr (g/kW hr)
2100	230(172)	575 (780)	.402(245)
1950	229(171)	617 (837)	.388(236)
1800	226(169)	659 (893)	.377(229)
1600	217(162)	712 (965)	.366(223)
1400	201(150)	754(1022)	.359(218)
1200	178(133)	779(1056)	.360(219)
1000	151(113)	793(1075)	.366(223)

Note: Performance shown is with Diesel No. 1 fuel.

All values at rated speed and power and with standard engine hardware unless otherwise noted.

Curve No. E4-8067-32-61
Date: 10-12-84
Rev./Date:
Sht. 2 of 2



ENGINE PERFORMANCE CURVE

RATING: RATED BRAKE POWER

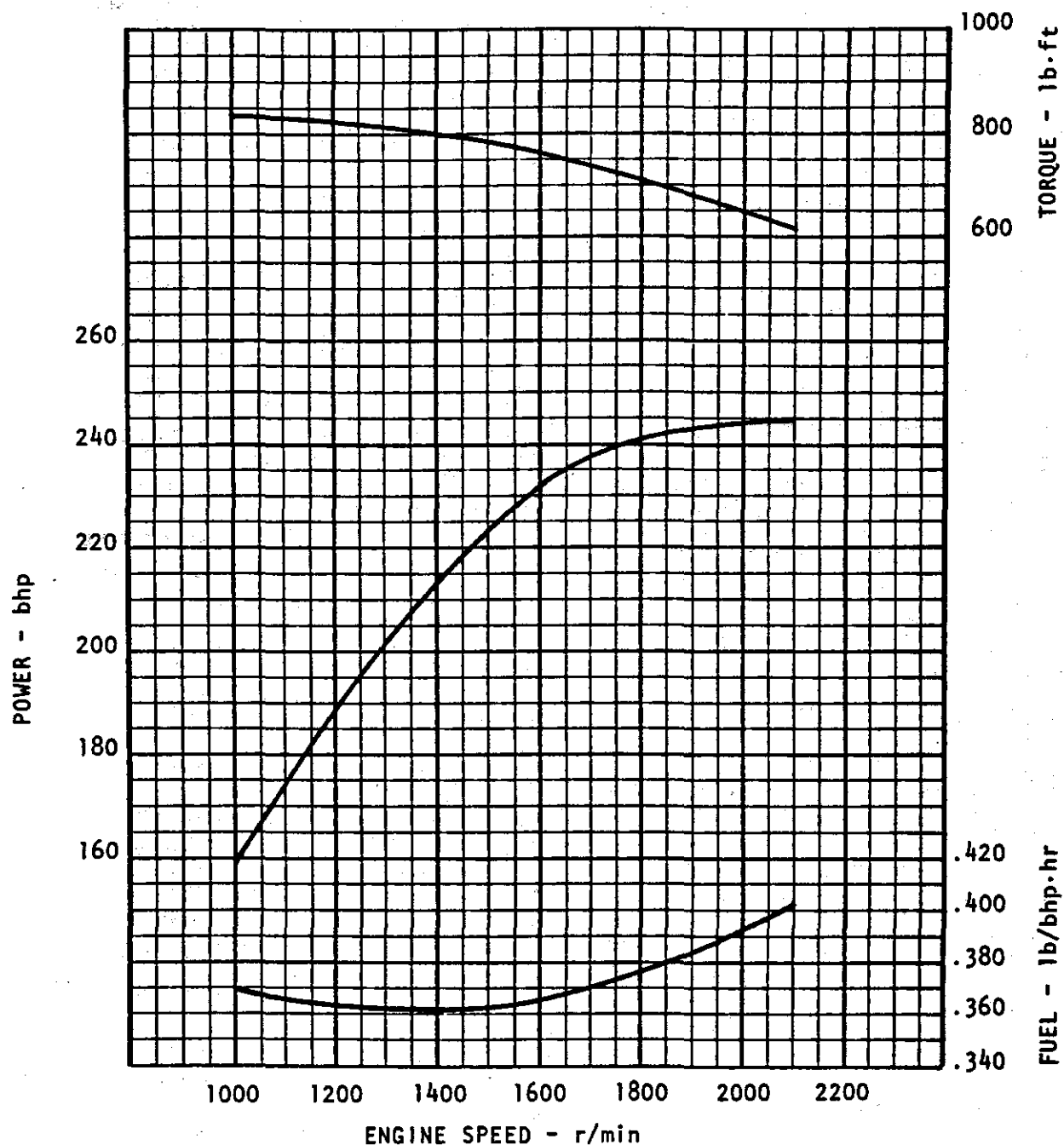
APPLICATION: AUTOMOTIVE - COACH
DIESEL FUEL - NO. 1

CERTIFICATION: CALIFORNIA 1985

MODEL: 6V-92TAC

245 bhp @ 2100 r/min

835 lb-ft @ 1000 r/min



AIR INTAKE RESTRICTION - in. H₂O (kPa) . . . 10 (2.5)
EXHAUST BACK PRESSURE - in. H₂O (kPa) . . . 15 (3.7)

• POWER OUTPUT GUARANTEED WITHIN 5% AT SAE J1349 CONDITIONS:
77°F (25°C) AIR INLET TEMPERATURE; 29.31 in. Hg (99kPa) DRY BAROMETER;
100°F (39°C) FUEL INLET TEMPERATURE (.853 SPECIFIC GRAVITY AT 60°F).
• CONVERSION FACTORS: POWER: kW = bhp x 0.746
FUEL: kg/kW-hr = lb/bhp-hr x 0.608
TORQUE: N-m = lb-ft x 1.356
• VALUES DERIVED ARE FROM CURRENTLY AVAILABLE DATA AND SUBJECT TO
CHANGE WITHOUT NOTICE.

CERTIFIED BY:

STAFF ENGINEER

CURVE NO.
E4-8067-32-62
DATE: 10-12-84
REV./DATE:
SHT. 1 OF 2

ENGINE SPECIFICATION DATA

General Data

Model.....	6V-92TA COACH
Number of Cylinders.....	6
Bore and Stroke-in(mm).....	4.84x5.00(123x127)
Displacement-in ³ (L).....	552(9.05)
Compression Ratio.....	17.0:1
Piston Speed-ft/min(m/min).....	1750(533)
Valves Per Cylinder	
Intake.....	NOT APPLICABLE
Exhaust.....	4
Combustion System.....	DIRECT INJECTION
Engine Type.....	63.5° VEE - 2 CYCLE
Aspiration.....	TURBOCHARGED

Configuration

Turbocharger.....	TV7511(1.08A/R)
Charge Air Cooling System.....	JWAC
Blower Type.....	BY-PASS
Blower Drive Ratio.....	2.05:1
Low Idle Speed-r/min.....	500
High Idle Speed-r/min.....	2250
Thrust Bearing Load Limit	
Continuous-lbf(N).....	600(2670)
Intermittent-lbf(N).....	1800(8000)
Engine Crankcase Vent System.....	OPEN
Maximum Pressure-in H ₂ O(kPa).....	3.0(0.75)

Physical Data

Size	
Length-in(mm).....	37.6(955)
Width-in(mm).....	37.6(955)
Height-in(mm).....	48.0(1220)
Weight, dry-lb(kg).....	2020(920)
Center of Gravity Distance	
From R.F.O.B. (x axis)-in(mm).....	9.4(239)
Above Crankshaft (y axis)-in(mm).....	10.2(259)
Right of Crankshaft (z axis)-in(mm).....	0.0(0.0)
Installation Drawing.....	VARIES WITH MODEL
Maximum Allowable Static Bending Moment at Rear Face of FW Hdg-lbf ft(N m).....	600(814)

Fuel System

Fuel Injector/Timing.....	9E70/1.470
Fuel Injection Pump/Timing.....	NOT APPLICABLE
Fuel Consumption-lb/hr(kg/hr).....	101.6(46.1)
Fuel Consumption-gal/hr(L/hr).....	15.2(57.3)
Fuel Spill Rate-lb/hr(kg/hr).....	462(210)
Fuel Spill Rate-gal/hr(L/hr).....	69.2(262)
Total Fuel Flow-lb/hr(kg/hr).....	564(256)
Total Fuel Flow-gal/hr(L/hr).....	84.4(319)
Maximum Allowable Fuel Pump Suction	
Clean System-in Hg(kPa).....	6(20)
Dirty System-in Hg(kPa).....	12(41)
Fuel Filter Micron Size	
Primary - Micron.....	30
Secondary - Micron.....	10

Lubrication System

Oil Pressure	
Rated Speed-lbf/in ² (kPa).....	49-70(338-483)
Low Idle-lbf/in ² (kPa).....	5(34)
In Pan Oil Temperature-°F(°C).....	200-250(93-121)
Oil Flow-gal/min(L/min).....	37(140)
Oil Pan Capacity	
High-qt(L).....	20(19)
Low-qt(L).....	16(15)
Total Engine Oil Capacity with filters-qt(L).....	22(21)
Bypass Oil Filter Orifice-in(mm).....	0.101(2.57)
Engine Angularity Limits	
Count up - degrees.....	VARIES WITH MODEL
Front down - degrees.....	VARIES WITH MODEL
Side tilt - degrees.....	VARIES WITH MODEL

Emission Data

CO-gm/hr.....	NOT AVAILABLE
HC-gm/hr.....	NOT AVAILABLE
NO _x -gm/hr.....	NOT AVAILABLE
SO ₂ -gm/hr.....	461
Smoke	
Rated Speed - Bosch Number.....	0.3
Peak Torque Speed - Bosch Number.....	1.3
Noise - dB(A) @ 1m.....	NOT AVAILABLE
Certification Approval.....	CALIFORNIA 1985

Cooling System

Engine Heat Rejection-Btu/min(kW).....	8575(151)
Engine Radiated Heat-Btu/min(kW).....	1380(24.3)
Coolant Flow-gal/min(L/min).....	160(606)
Thermostat	
Start to Open-°F(°C).....	177(81)
Fully Open-°F(°C).....	197(92)
Maximum Water Pump Inlet	
Restriction-in Hg(kPa).....	0.0(0.0)
Engine Coolant Capacity-qt(L).....	24.5(23.2)
Minimum Pressure Cap-lbf/in ² (kPa).....	9.0(62.1)
Maximum Coolant Pressure (Exclusive of Pressure Cap)-lbf/in ² (kPa).....	NOT AVAILABLE
Maximum Top Tank Temperature-°F(°C).....	210(99)
Minimum Top Tank Temperature-°F(°C).....	160(71)
Minimum Coolant Fill Rate-gal/min(L/min).....	3.0(11.4)
Cooling Index	
Minimum Air to Boil-°F(°C).....	112(44.4)
Maximum Air to Water Diff.-°F(°C).....	100(55.6)
Ram Air Flow - Mile/hr(km/hr).....	15(24)
Desaeration-Air Injection	
Capacity-ft ³ /min(m ³ /min).....	0.6(0.017)
Drawdown - Minimum Requirement (or 10% of Cooling System Capacity-Whichever is Larger)-qt(L).....	4.0(3.8)

Air System

Maximum Allowable Temperature Rise (Ambient Air to Engine Inlet)-°F(°C).....	30(16.7)
Air Intake Restriction Maximum Limit	
Dirty Air Cleaner-in H ₂ O(kPa).....	20(5.0)
Clean Air Cleaner-lb H ₂ O(kPa).....	12(3.0)
Engine Air Flow - ft ³ /min(m ³ /min).....	1110(31.4)
Engine Air Box/Manifold Pressure-in Hg(kPa).....	30.3(170)
Recommended Intake Pipe Dia.-in(mm).....	6.0(152)

Exhaust System

Exhaust Flow-ft ³ /min(m ³ /min).....	2170(61.5)
Exhaust Temperature-°F(°C).....	590(310)
Maximum Allowable Back Pressure-in Hg(kPa).....	2.5(8.4)
Recommended Exhaust Pipe Dia.	
Single-in(mm).....	5.0(127)
Dual-in(mm).....	NOT APPLICABLE
Exhaust Brake Max. Allowable Back Pressure-in Hg(kPa).....	NOT APPLICABLE

Electrical System

Recommended Battery Capacity(CCA @ 0°F)	
12 Volt System	
Above 32°F(0°C)-A.....	1900
Below 32°F(0°C)-A.....	2500
24 Volt System	
Above 32°F(0°C)-A.....	950
Below 32°F(0°C)-A.....	1250
Maximum Allowable Resistance of Starting Circuit	
12 volt system - ohm.....	0.0012
24 volt system - ohm.....	0.002

Performance Data

Power Output-bhp(kW).....	245(183)
Full Load Speed-r/min.....	2100
Peak Torque-lb ft(N m).....	835(1132)
Peak Torque Speed-r/min.....	1000
BMEP-lbf/in ² (kPa).....	84(579)
Friction Power	
Rated Speed-bhp(kW).....	79(59)
Peak Torque Speed-bhp(kW).....	32(24)
Altitude Capability-ft(m).....	10000(3050)
Torque Available at 800 r/min-lb ft (N m).....	550(746)

Engine

Speed r/min	Power bhp(kW)	Torque lb ft(N m)	BSEC lb/bhp hr (g/kW hr)
2100	245(183)	613 (831)	.402(245)
1950	244(182)	657 (891)	.387(235)
1800	241(180)	703 (953)	.376(229)
1600	232(173)	762(1033)	.365(222)
1400	213(159)	799(1083)	.361(220)
1200	188(140)	823(1116)	.363(221)
1000	159(119)	835(1132)	.370(225)

Notes: Performance shown is with Diesel No. 1 fuel.

All values at rated speed and power and with standard engine hardware unless otherwise noted.

Curve No. E4-8067-32-62
Date: 10-12-84
Rev./Date:
Sht. 2 of 2



ENGINE PERFORMANCE CURVE

RATING: RATED BRAKE POWER

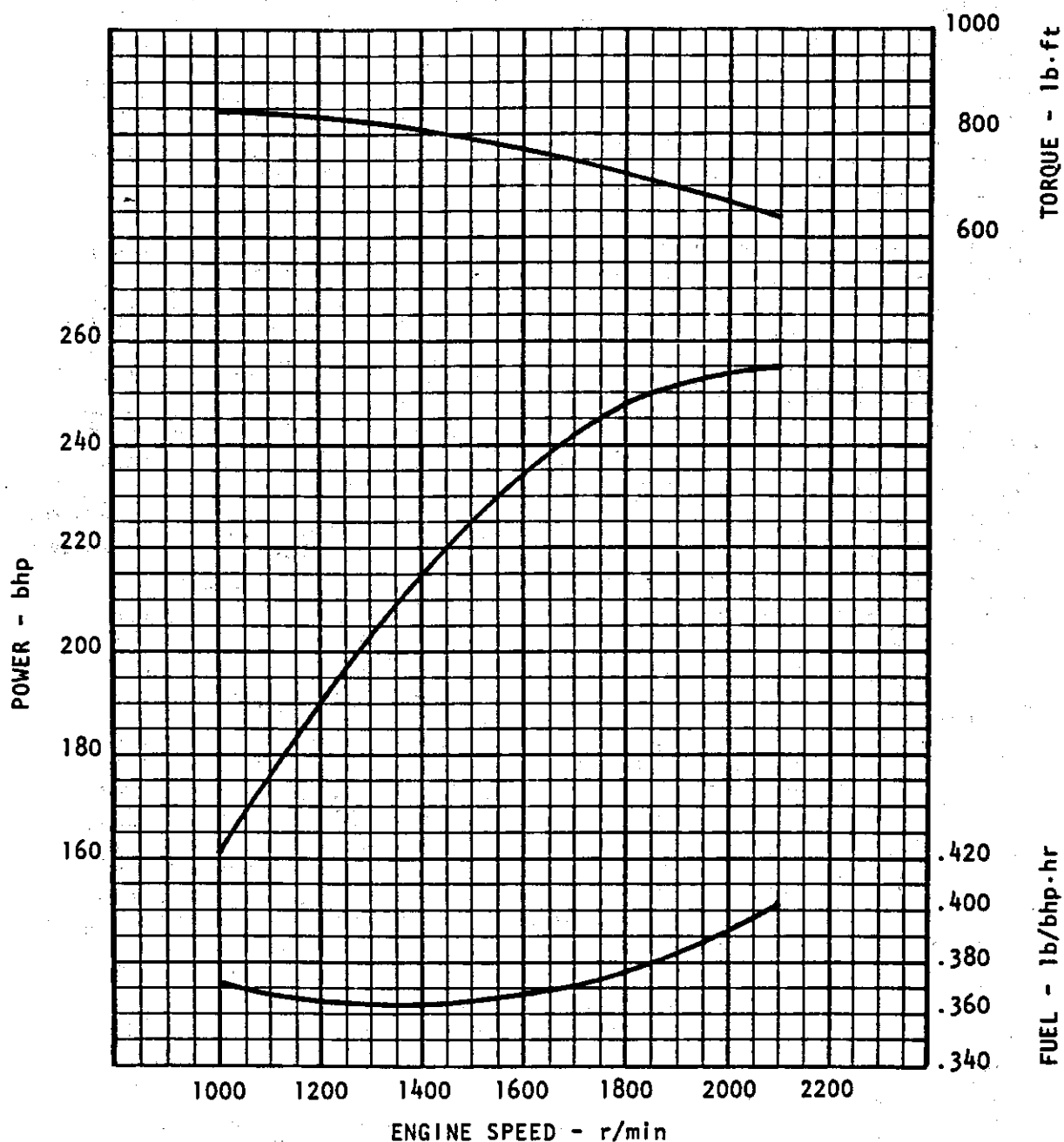
APPLICATION: AUTOMOTIVE - COACH
DIESEL FUEL - NO. 1

CERTIFICATION: CALIFORNIA 1985

MODEL: 6V-92TAC

255 bhp @ 2100 r/min

846 lb·ft @ 1000 r/min



AIR INTAKE RESTRICTION - in. H₂O (kPa) . . . 10 (2.5)

EXHAUST BACK PRESSURE - in. H₂O (kPa) . . . 15 (3.7)

- POWER OUTPUT GUARANTEED WITHIN 5% AT SAE J1349 CONDITIONS:
77°F (25°C) AIR INLET TEMPERATURE; 29.31 in. Hg (99kPa) DRY BAROMETER;
100°F (39°C) FUEL INLET TEMPERATURE (.853 SPECIFIC GRAVITY AT 60°F).
- CONVERSION FACTORS: POWER: kW = bhp x 0.746
FUEL: kg/kW·hr = lb/bhp·hr x 0.608
TORQUE: N·m = lb·ft x 1.356

• VALUES DERIVED ARE FROM CURRENTLY AVAILABLE DATA AND SUBJECT TO CHANGE WITHOUT NOTICE.

CERTIFIED BY

STAFF ENGINEER

CURVE NO.

E4-8067-32-63

DATE: 10-12-84

REV./DATE:

SHT. 1 OF 2

ENGINE SPECIFICATION DATA

General Data

Model.....	6V-92TA COACH
Number of Cylinders.....	6
Bore and Stroke-in(mm).....	4.84x5.00(123x127)
Displacement-in ³ (L).....	552(9.05)
Compression Ratio.....	17.0:1
Piston Speed-ft/min(m/min).....	1750(533)
Valves Per Cylinder	
Intake.....	NOT APPLICABLE
Exhaust.....	4
Combustion System.....	DIRECT INJECTION
Engine Type.....	63.5° VEE - 2 CYCLE
Aspiration.....	TURBOCHARGED
Configuration	
Turbocharger.....	TV7511(1.08A/R)
Charge Air Cooling System.....	JWAC
Blower Type.....	BY-PASS
Blower Drive Ratio.....	2.05:1
Low Idle Speed-r/min.....	500
High Idle Speed-r/min.....	2250
Thrust Bearing Load Limit	
Continuous-lbf(N).....	600(2670)
Intermittent-lbf(N).....	1800(8000)
Engine Crankcase Vent System.....	OPEN
Maximum Pressure-in H ₂ O(kPa).....	3.0(0.75)

Physical Data

Size	
Length-in(mm).....	37.6(955)
Width-in(mm).....	37.6(955)
Height-in(mm).....	48.0(1220)
Weight, dry-lb(kg).....	2020(920)
Center of Gravity Distance	
From R.F.O.B. (x axis)-in(mm).....	9.4(239)
Above Crankshaft (y axis)-in(mm).....	10.2(259)
Right of Crankshaft (z axis)-in(mm).....	0.0(0.0)
Installation Drawing.....	VARIES WITH MODEL
Maximum Allowable Static Bending Moment at Rear Face of FW Hsg-lbf ft(N m).....	600(814)

Fuel System

Fuel Injector/Timing.....	9F80/1.470
Fuel Injection Pump/Timing.....	NOT APPLICABLE
Fuel Consumption-lb/hr(kg/hr).....	104.0(47.2)
Fuel Consumption-gal/hr(L/hr).....	15.6(59.1)
Fuel Spill Rate-lb/hr(kg/hr).....	462(210)
Fuel Spill Rate-gal/hr(L/hr).....	69.2(262)
Total Fuel Flow-lb/hr(kg/hr).....	566(257)
Total Fuel Flow-gal/hr(L/hr).....	84.8(321)
Maximum Allowable Fuel Pump Suction	
Clean System-in Hg(kPa).....	6(20)
Dirty System-in Hg(kPa).....	12(41)
Fuel Filter Micron Size	
Primary - Micron.....	30
Secondary - Micron.....	10

Lubrication System

Oil Pressure	
Rated Speed-lbf/in ² (kPa).....	49-70(338-483)
Low Idle-lbf/in ² (kPa).....	5(34)
In Pan Oil Temperature-°F(°C).....	200-250(93-121)
Oil Flow-gal/min(L/min).....	37(140)
Oil Pan Capacity	
High-qt(L).....	20(19)
Low-qt(L).....	16(15)
Total Engine Oil Capacity with filters-qt(L).....	22(21)
Bypass Oil Filter Orifice-in(mm).....	0.101(2.57)
Engine Angularity Limits	
Front up - degrees.....	VARIES WITH MODEL
Front down - degrees.....	VARIES WITH MODEL
Side tilt - degrees.....	VARIES WITH MODEL

Emission Data

CO-gm/hr.....	NOT AVAILABLE
HC-gm/hr.....	NOT AVAILABLE
NO _x -gm/hr.....	NOT AVAILABLE
SO ₂ -gm/hr.....	472
Socks	
Rated Speed - Bosch Number.....	0.4
Peak Torque Speed - Bosch Number.....	2.1
Noise - dB(A) @ 1m.....	NOT AVAILABLE
Certification Approval.....	CALIFORNIA 1985

Cooling System

Engine Heat Rejection-Btu/min(kW).....	8800(155)
Engine Radiated Heat-Btu/min(kW).....	1420(25.0)
Coolant Flow-gal/min(L/min).....	160(606)
Thermostat	
Start to Open-°F(°C).....	177(81)
Fully Open-°F(°C).....	197(92)
Maximum Water Pump Inlet	
Restriction-in Hg(kPa).....	0.0(0.0)
Engine Coolant Capacity-qt(L).....	24.5(23.2)
Minimum Pressure Cap-lbf/in ² (kPa).....	9.0(62.1)
Maximum Coolant Pressure (Exclusive of Pressure Cap)-lbf/in ² (kPa).....	NOT AVAILABLE
Maximum Top Tank Temperature-°F(°C).....	210(99)
Minimum Top Tank Temperature-°F(°C).....	160(71)
Minimum Coolant Fill Rate-gal/min(L/min).....	3.0(11.4)
Cooling Index	
Minimum Air to Boil-°F(°C).....	112(44.4)
Maximum Air to Water Diff.-°F(°C).....	100(55.6)
Ram Air Flow - Mile/hr(km/hr).....	15(24)
Deaeration-Air Injection	
Capacity-ft ³ /min(m ³ /min).....	0.6(0.017)
Drawdown - Minimum Requirement (or 10% of Cooling System Capacity-Whichever is Larger)-qt(L).....	4.0(3.8)

Air System

Maximum Allowable Temperature Rise (Ambient Air to Engine Inlet)-°F(°C).....	30(16.7)
Air Intake Restriction Maximum Limit	
Dirty Air Cleaner-in H ₂ O(kPa).....	20(5.0)
Clean Air Cleaner-lg H ₂ O(kPa).....	12(3.0)
Engine Air Flow - ft ³ /min(m ³ /min).....	1120(31.7)
Engine Air Box/Manifold Pressure-in Hg(kPa).....	52.5(177)
Recommended Intake Pipe Dia.-in(mm).....	6.0(152)

Exhaust System

Exhaust Flow-ft ³ /min(m ³ /min).....	2210(62.6)
Exhaust Temperature-°F(°C).....	600(316)
Maximum Allowable Back Pressure-in Hg(kPa).....	2.5(8.4)
Recommended Exhaust Pipe Dia.	
Single-in(mm).....	5.0(127)
Dual-in(mm).....	NOT APPLICABLE
Exhaust Brake Max. Allowable Back Pressure-in Hg(kPa).....	NOT APPLICABLE

Electrical System

Recommended Battery Capacity(CCA @ 0°F)	
12 Volt System	
Above 32°F(0°C)-A.....	1900
Below 32°F(0°C)-A.....	2500
24 Volt System	
Above 32°F(0°C)-A.....	950
Below 32°F(0°C)-A.....	1250
Maximum Allowable Resistance of Starting Circuit	
12 volt system - ohm.....	0.0012
24 volt system - ohm.....	0.002

Performance Data

Power Output-bhp(kW).....	255(190)
Full Load Speed-r/min.....	2100
Peak Torque-lb ft(N m).....	846(1147)
Peak Torque Speed-r/min.....	1000
BMEP-lbf/in ² (kPa).....	87(600)
Friction Power	
Rated Speed-bhp(kW).....	79(59)
Peak Torque Speed-bhp(kW).....	32(24)
Altitude Capability-ft(m).....	10000(3050)
Torque Available at 800 r/min-lb ft (N m).....	560(759)

Engine

Speed r/min	Power bhp(kW)	Torque lb ft(N m)	BSEC lb/bhp hr (g/kW hr)
2100	255(190)	638 (865)	.402(245)
1950	253(189)	681 (923)	.387(235)
1800	248(185)	724 (982)	.375(228)
1600	234(175)	768(1041)	.367(223)
1400	215(160)	807(1094)	.363(221)
1200	190(142)	832(1128)	.365(222)
1000	161(120)	846(1147)	.371(226)

Note: Performance shown is with Diesel No. 1 fuel.

All values at rated speed and power and with standard engine hardware unless otherwise noted.

Curve No. E4-0067-32-63
Date: 10-12-84
Rev./Date:
Sht. 2 of 2

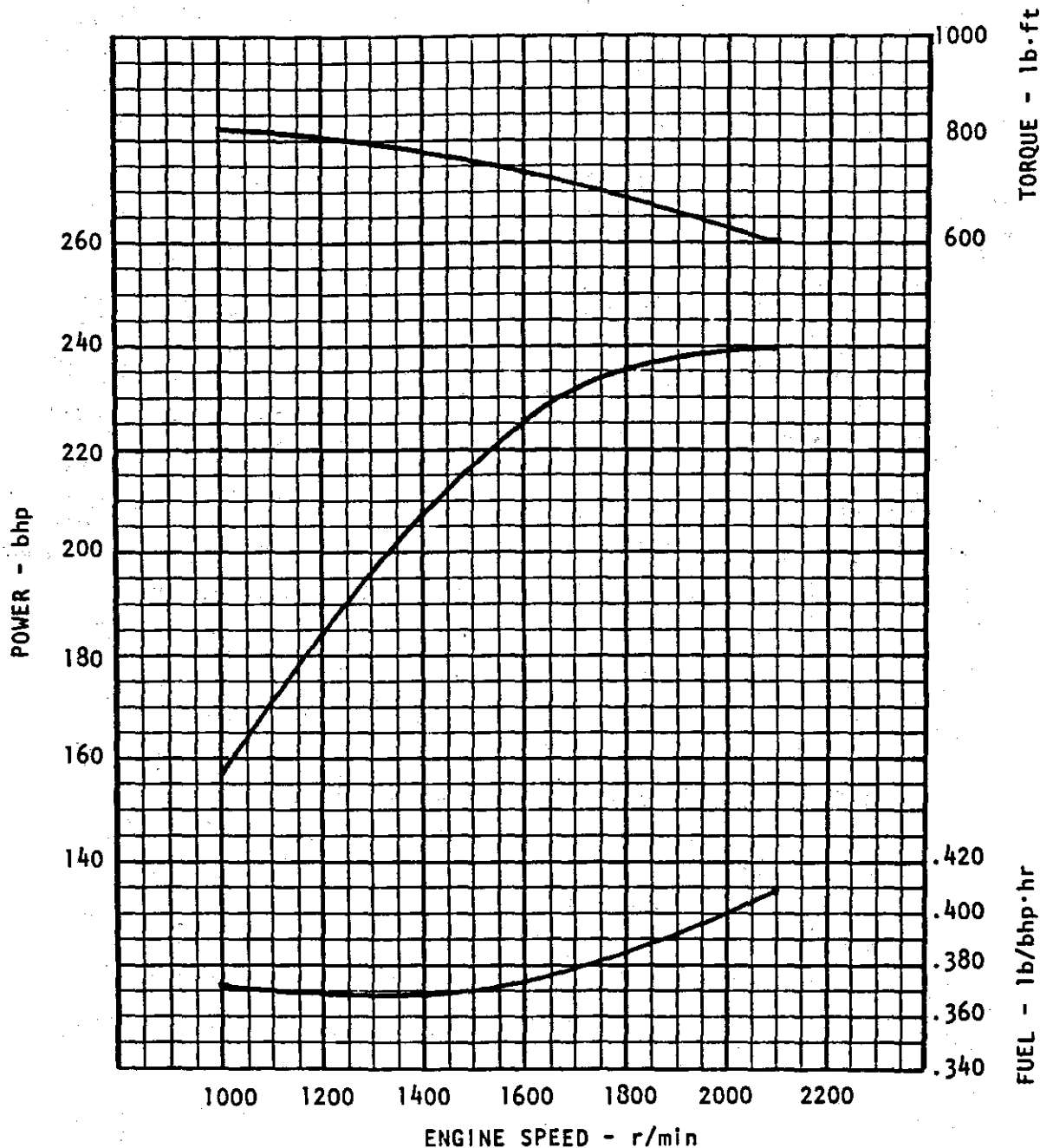


ENGINE PERFORMANCE CURVE

RATING: RATED BRAKE POWER

APPLICATION: AUTOMOTIVE - COACH
DIESEL FUEL - NO. 2
CERTIFICATION: CALIFORNIA 1985

MODEL: 6V-92TAC
240 bhp @ 2100 r/min
825 lb·ft @ 1000 r/min



AIR INTAKE RESTRICTION - in. H₂O (kPa) . . . 10 (2.5)
EXHAUST BACK PRESSURE - in. H₂O (kPa) . . . 15 (3.7)

• POWER OUTPUT GUARANTEED WITHIN 5% AT SAE J1349 CONDITIONS:
77°F (25°C) AIR INLET TEMPERATURE; 29.31 in. Hg (99kPa) DRY BAROMETER;
100°F (39°C) FUEL INLET TEMPERATURE (.853 SPECIFIC GRAVITY AT 60°F).

• CONVERSION FACTORS: POWER: kW = bhp × 0.746
FUEL: kg/kW·hr = lb/bhp·hr × 0.608
TORQUE: N·m = lb·ft × 1.356

• VALUES DERIVED ARE FROM CURRENTLY AVAILABLE DATA AND SUBJECT TO CHANGE WITHOUT NOTICE.

CERTIFIED BY:

B. L. Hennrich

STAFF ENGINEER

CURVE NO.

E4-8067-32-52

DATE: 8-27-84

REV./DATE: 1/10-23-84

SHT. 1 OF 2

ENGINE SPECIFICATION DATA

General Data

Model.....	6V-92TAC COACH
Number of Cylinders.....	6
Bore and Stroke-in(mm).....	4.84x5.00(123x127)
Displacement-in ³ (L).....	552(9.05)
Compression Ratio.....	17.0:1
Piston Speed-ft/min(m/min).....	1750(533)
Valves Per Cylinder	
Intake.....	NOT APPLICABLE
Exhaust.....	4
Combustion System.....	DIRECT INJECTION
Engine Type.....	63.5° VEE - 2 CYCLE
Aspiration.....	TURBOCHARGED

Configuration

Turbocharger.....	TY7511(1.08A/R)
Charge Air Cooling System.....	JWAC
Blower Type.....	BY-PASS
Blower Drive Ratio.....	2.05:1
Low Idle Speed-r/min.....	500
High Idle Speed-r/min.....	2250
Thrust Bearing Load Limit	
Continuous-lbf(N).....	600(2670)
Intermittent-lbf(N).....	1800(8000)
Engine Crankcase Vent System.....	OPEN
Maximum Pressure-in H ₂ O(kPa).....	3.0(0.75)

Physical Data

Size	
Length-in(mm).....	37.6(955)
Width-in(mm).....	37.6(955)
Height-in(mm).....	48.0(1220)
Weight, dry-lb(kg).....	2020(920)
Center of Gravity Distance	
From R.F.O.B. (x axis)-in(mm).....	9.4(239)
Above Crankshaft (y axis)-in(mm).....	10.2(259)
Right of Crankshaft (z axis)-in(mm).....	0.0(0.0)
Installation Drawing.....	VARIES WITH MODEL
Maximum Allowable Static Bending Moment at Rear Face of FH Hsg-lbf ft(N m).....	600(814)

Fuel System

Fuel Injector/Timing.....	9E65/1.470
Fuel Injection Pump/Timing.....	NOT APPLICABLE
Fuel Consumption-lb/hr(kg/hr).....	100.1(45.4)
Fuel Consumption-gal/hr(L/hr).....	14.3(54.1)
Fuel Spill Rate-lb/hr(kg/hr).....	484(220)
Fuel Spill Rate-gal/hr(L/hr).....	69.2(262)
Total Fuel Flow-lb/hr(kg/hr).....	584(265)
Total Fuel Flow-gal/hr(L/hr).....	83.5(316)
Maximum Allowable Fuel Pump Suction	
Clean System-in Hg(kPa).....	6(20)
Dirty System-in Hg(kPa).....	12(41)
Fuel Filter Micron Size	
Primary - Micron.....	30
Secondary - Micron.....	10

Lubrication System

Oil Pressure	
Rated Speed-lbf/in ² (kPa).....	49-70(338-483)
Low Idle-lbf/in ² (kPa).....	5(34)
In Pan Oil Temperature-°F(°C).....	200-250(93-121)
Oil Flow-gal/min(L/min).....	37(140)
Oil Pan Capacity	
High-qt(L).....	20(19)
Low-qt(L).....	16(15)
Total Engine Oil Capacity with filters-qt(L).....	22(21)
Bypass Oil Filter Orifice-in(mm).....	0.101(2.57)
Engine Angularity Limits	
Front up - degrees.....	VARIES WITH MODEL
Front down - degrees.....	VARIES WITH MODEL
Side tilt - degrees.....	VARIES WITH MODEL

Emission Data

CO-gm/hr.....	NOT AVAILABLE
HC-gm/hr.....	NOT AVAILABLE
NO _x -gm/hr.....	NOT AVAILABLE
SO ₂ -gm/hr.....	454
Secks	
Rated Speed - Bosch Number.....	0.2
Peak Torque Speed - Bosch Number.....	0.7
Noise - dB(A) @ 1m.....	NOT AVAILABLE
Certification Approval.....	CALIFORNIA 1985

Cooling System

Engine Heat Rejection-Btu/min(kW).....	8350(147)
Engine Radiated Heat-Btu/min(kW).....	1350(23.7)
Coolant Flow-gal/min(L/min).....	160(606)
Thermostat	
Start to Open-°F(°C).....	177(81)
Fully Open-°F(°C).....	197(92)
Maximum Water Pump Inlet	
Restriction-in Hg(kPa).....	0.0(0.0)
Engine Coolant Capacity-qt(L).....	24.5(23.2)
Minimum Pressure Cap-lbf/in ² (kPa).....	9.0(62.1)
Maximum Coolant Pressure (Exclusive of Pressure Cap)-lbf/in ² (kPa).....	NOT AVAILABLE
Maximum Top Tank Temperature-°F(°C).....	210(99)
Minimum Top Tank Temperature-°F(°C).....	160(71)
Minimum Coolant Fill Rate-gal/min(L/min).....	3.0(11.4)
Cooling Index	
Minimum Air to Boil-°F(°C).....	112(44.4)
Maximum Air to Water Diff.-°F(°C).....	100(55.6)
Ram Air Flow - Mile/hr(km/hr).....	15(24)
Deterioration-Air Injection	
Capacity-ft ³ /min(m ³ /min).....	0.6(0.017)
Drawdown - Minimum Requirement (or 10% of Cooling System Capacity-Whichever Is Larger)-qt(L).....	4.0(3.8)

Air System

Maximum Allowable Temperature Rise (Ambient Air to Engine Inlet)-°F(°C).....	30(16.7)
Air Intake Restriction Maximum Limit	
Dirty Air Cleaner-in H ₂ O(kPa).....	20(5.0)
Clean Air Cleaner-lq H ₂ O(kPa).....	12(3.0)
Engine Air Flow - ft ³ /min(m ³ /min).....	1090(30.9)
Engine Air Box/Manifold Pressure-in Hg(kPa).....	47.6(161)
Recommended Intake Pipe Dia.-in(mm).....	6.0(152)

Exhaust System

Exhaust Flow-ft ³ /min(m ³ /min).....	2140(60.6)
Exhaust Temperature-°F(°C).....	595(313)
Maximum Allowable Back Pressure-in Hg(kPa).....	2.5(8.4)
Recommended Exhaust Pipe Dia.	
Single-in(mm).....	5.0(127)
Dual-in(mm).....	NOT APPLICABLE
Exhaust Brake Max. Allowable Back Pressure-in Hg(kPa).....	NOT APPLICABLE

Electrical System

Recommended Battery Capacity(CCA @ 0°F)	
12 Volt System	
Above 32°F(0°C)-A.....	1900
Below 32°F(0°C)-A.....	2500
24 Volt System	
Above 32°F(0°C)-A.....	950
Below 32°F(0°C)-A.....	1250
Maximum Allowable Resistance of Starting Circuit	
12 volt system - ohm.....	0.0012
24 volt system - ohm.....	0.002

Performance Data

Power Output-bhp(kW).....	240(179)
Full Load Speed-r/min.....	2100
Peak Torque-lb ft(N m).....	825(1119)
Peak Torque Speed-r/min.....	1000
BMEP-lbf/in ² (kPa).....	86(593)
Friction Power	
Rated Speed-bhp(kW).....	79(59)
Peak Torque Speed-bhp(kW).....	32(24)
Altitude Capability-ft(m).....	10000(3050)
Torque Available at 800 r/min-lb ft (N m).....	550(566)

Engine

Speed r/min	Power bhp(kW)	Torque lb ft(N m)	BSEC lb/bhp hr (g/kW hr)
2100	240(179)	600(813)	.409(249)
1950	239(178)	644(873)	.396(241)
1800	236(176)	689(934)	.384(234)
1600	225(168)	739(1002)	.374(228)
1400	207(154)	777(1053)	.369(224)
1200	184(137)	805(1091)	.368(224)
1000	157(117)	825(1119)	.371(226)

Note: Performance shown is with Diesel No. 2 fuel.

All values at rated speed and power and with standard engine hardware unless otherwise noted.

Curve No. E4-8067-32-52
Date: 8-27-84
Rev./Date: 1/10-23-84
Sht. 2 of 2



ENGINE PERFORMANCE CURVE

RATING: RATED BRAKE POWER

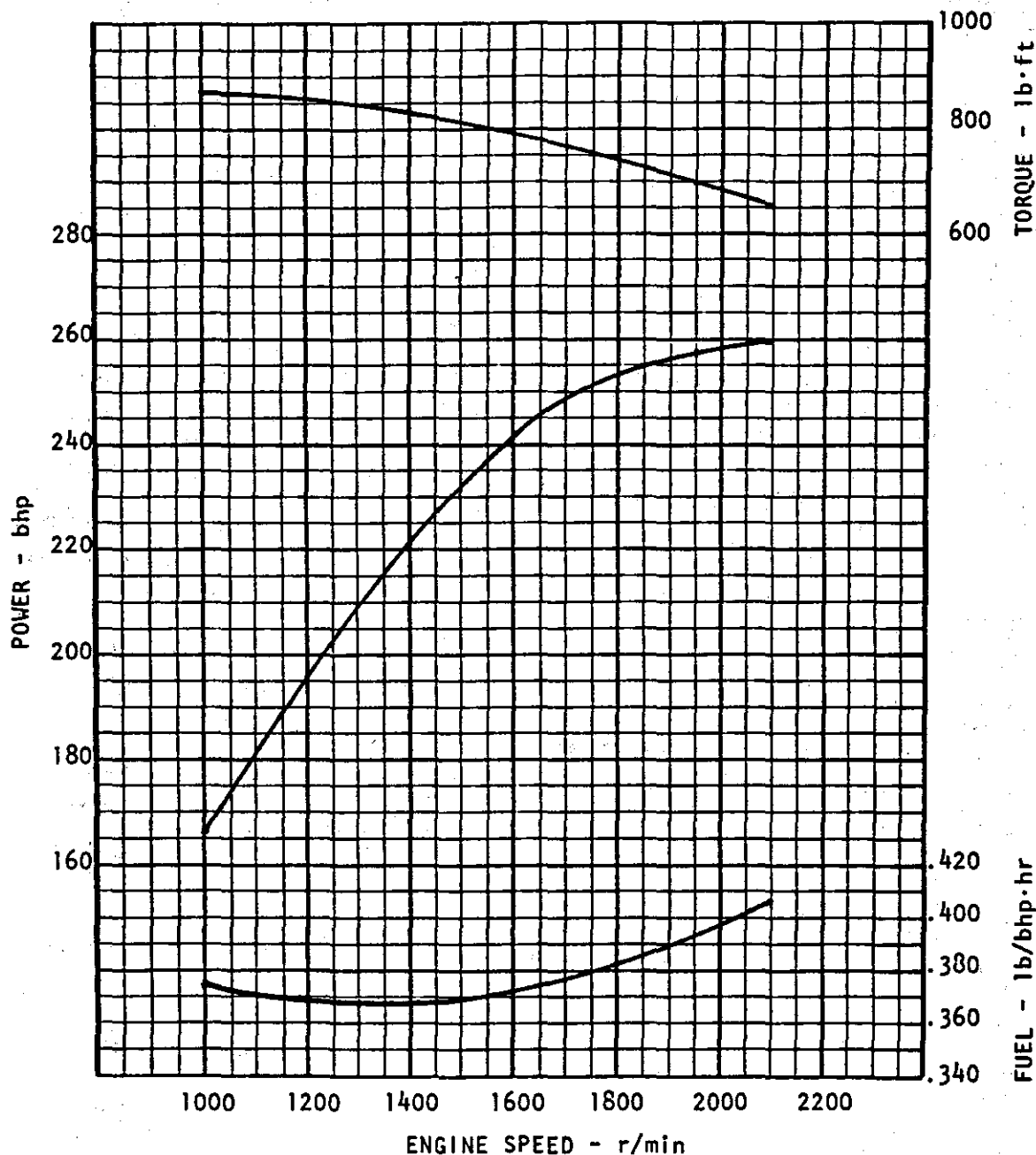
APPLICATION: AUTOMOTIVE - COACH
DIESEL FUEL - NO. 2

CERTIFICATION: CALIFORNIA 1985

MODEL: 6V-92TAC

260 bhp @ 2100 r/min

872 lb·ft @ 1000 r/min



AIR INTAKE RESTRICTION - in. H₂O (kPa) . . . 10 (2.5)

EXHAUST BACK PRESSURE - in. H₂O (kPa) . . . 15 (3.7)

- POWER OUTPUT GUARANTEED WITHIN 5% AT SAE J1349 CONDITIONS:
77°F (25°C) AIR INLET TEMPERATURE; 29.31 in. Hg (99kPa) DRY BAROMETER;
100°F (39°C) FUEL INLET TEMPERATURE (.853 SPECIFIC GRAVITY AT 60°F).
- CONVERSION FACTORS: POWER: kW = bhp × 0.746
FUEL: kg/kW·hr = lb/bhp·hr × 0.608
TORQUE: N·m = lb·ft × 1.356

• VALUES DERIVED ARE FROM CURRENTLY AVAILABLE DATA AND SUBJECT TO CHANGE WITHOUT NOTICE.

CERTIFIED BY:

B. B. H. H.

STAFF ENGINEER

CURVE NO.

E4-8067-32-53

DATE: 8-27-84

REV./DATE: 1/10-23-84

SHT. 1 OF 2

ENGINE SPECIFICATION DATA

General Data

Model.....	6V-92TAC COACH
Number of Cylinders.....	6
Bore and Stroke-in(mm).....	4.84x5.00(123x127)
Displacement-in ³ (L).....	552(9.05)
Compression Ratio.....	17.0:1
Piston Speed-ft/min(m/min).....	1750(533)
Valves Per Cylinder.....	4
Intake.....	NOT APPLICABLE
Exhaust.....	4
Combustion System.....	DIRECT INJECTION
Engine Type.....	65.5° VEE - 2 CYCLE
Aspiration.....	TURBOCHARGED

Configuration

Turbocharger.....	TV7511(1.08A/R)
Charge Air Cooling System.....	JWAC
Blower Type.....	BY-PASS
Blower Drive Ratio.....	2.05:1
Low Idle Speed-r/min.....	500
High Idle Speed-r/min.....	2250
Thrust Bearing Load Limit	
Continuous-lbf(N).....	600(2670)
Intermittent-lbf(N).....	1800(8000)
Engine Crankcase Vent System.....	OPEN
Maximum Pressure-in H ₂ O(kPa).....	3.0(0.75)

Physical Data

Size	
Length-in(mm).....	37.6(955)
Width-in(mm).....	37.6(955)
Height-in(mm).....	48.0(1220)
Weight, dry-lb(kg).....	2020(920)
Center of Gravity Distance	
From R.F.O.B. (x axis)-in(mm).....	9.4(239)
Above Crankshaft (y axis)-in(mm).....	10.2(259)
Right of Crankshaft (z axis)-in(mm).....	0.0(0.0)
Installation Drawing.....	VARIES WITH MODEL
Maximum Allowable Static Bending Moment at Rear Face of FW Hsg-lbf ft(N m).....	600(814)

Fuel System

Fuel Injector/Timing.....	9E70/1.470
Fuel Injection Pump/Timing.....	NOT APPLICABLE
Fuel Consumption-lb/hr(kg/hr).....	107.5(48.8)
Fuel Consumption-gal/hr(L/hr).....	15.4(58.3)
Fuel Spill Rate-lb/hr(kg/hr).....	480(218)
Fuel Spill Rate-gal/hr(L/hr).....	68.6(260)
Total Fuel Flow-lb/hr(kg/hr).....	588(267)
Total Fuel Flow-gal/hr(L/hr).....	84.1(318)
Maximum Allowable Fuel Pump Suction	
Clean System-in Hg(kPa).....	6(20)
Dirty System-in Hg(kPa).....	12(41)
Fuel Filter Micron Size	
Primary - Micron.....	30
Secondary - Micron.....	10

Lubrication System

Oil Pressure	
Rated Speed-lbf/in ² (kPa).....	49-70(338-483)
Low Idle-lbf/in ² (kPa).....	5(34)
In Pan Oil Temperature-°F(°C).....	200-250(93-121)
Oil Flow-gal/min(L/min).....	37(140)
Oil Pan Capacity	
High-qt(L).....	20(19)
Low-qt(L).....	16(15)
Total Engine Oil Capacity with filters-qt(L).....	22(21)
Bypass Oil Filter Orifice-in(mm).....	0.101(2.57)
Engine Angularity Limits	
Front up - degrees.....	VARIES WITH MODEL
Front down - degrees.....	VARIES WITH MODEL
Side tilt - degrees.....	VARIES WITH MODEL

Emission Data

CO-gm/hr.....	NOT AVAILABLE
HC-gm/hr.....	NOT AVAILABLE
NO _x -gm/hr.....	NOT AVAILABLE
SO ₂ -gm/hr.....	488
Smoke	
Rated Speed - Bosch Number.....	0.3
Peak Torque Speed - Bosch Number.....	1.3
Noise - dB(A) @ 1m.....	NOT AVAILABLE
Certification Approval.....	CALIFORNIA 1985

Cooling System

Engine Heat Rejection-Btu/min(kW).....	8950(157)
Engine Radiated Heat-Btu/min(kW).....	1450(25.5)
Coolant Flow-gal/min(L/min).....	160(606)
Thermostat	
Start to Open-°F(°C).....	177(81)
Fully Open-°F(°C).....	197(92)
Maximum Water Pump Inlet	
Restriction-in Hg(kPa).....	0.0(0.0)
Engine Coolant Capacity-qt(L).....	24.5(23.2)
Minimum Pressure Cap-lbf/in ² (kPa).....	9.0(62.1)
Maximum Coolant Pressure (Exclusive of Pressure Cap)-lbf/in ² (kPa).....	NOT AVAILABLE
Maximum Top Tank Temperature-°F(°C).....	210(99)
Minimum Top Tank Temperature-°F(°C).....	160(71)
Minimum Coolant Fill Rate-gal/min(L/min).....	3.0(11.4)
Cooling Index	
Minimum Air to Boil-°F(°C).....	112(44.4)
Maximum Air to Water Diff.-°F(°C).....	100(55.6)
Ram Air Flow - Mile/hr(km/hr).....	15(24)
Deaeration-Air Injection	
Capacity-ft ³ /min(m ³ /min).....	0.6(0.017)
Drawdown - Minimum Requirement (or 10% of Cooling System Capacity-Whichever is Larger)-qt(L).....	4.0(3.8)

Air System

Maximum Allowable Temperature Rise (Ambient Air to Engine Inlet)-°F(°C).....	30(16.7)
Air Intake Restriction Maximum Limit	
Dirty Air Cleaner-in H ₂ O(kPa).....	20(5.0)
Clean Air Cleaner-lg H ₂ O(kPa).....	12(3.0)
Engine Air Flow - ft ³ /min(m ³ /min).....	1110(31.4)
Engine Air Box/Manifold Pressure-in Hg(kPa).....	50.1(169)
Recommended Intake Pipe Dia.-in(mm).....	6.0(152)

Exhaust System

Exhaust Flow-ft ³ /min(m ³ /min).....	2220(62.9)
Exhaust Temperature-°F(°C).....	615(324)
Maximum Allowable Back	
Pressure-in Hg(kPa).....	2.5(8.4)
Recommended Exhaust Pipe Dia.	
Single-in(mm).....	5.0(127)
Dual-in(mm).....	NOT APPLICABLE
Exhaust Brake Max. Allowable Back	
Pressure-in Hg(kPa).....	NOT APPLICABLE

Electrical System

Recommended Battery Capacity(CCA @ 0°F)	
12 Volt System	
Above 32°F(0°C)-A.....	1900
Below 32°F(0°C)-A.....	2500
24 Volt System	
Above 32°F(0°C)-A.....	950
Below 32°F(0°C)-A.....	1250
Maximum Allowable Resistance of Starting Circuit	
12 volt system - ohm.....	0.0012
24 volt system - ohm.....	0.002

Performance Data

Power Output-bhp(kW).....	260(194)
Full Load Speed-r/min.....	2100
Peak Torque-lb ft(N m).....	872(1182)
Peak Torque Speed-r/min.....	1000
BMEP-lbf/in ² (kPa).....	89(614)
Friction Power	
Rated Speed-bhp(kW).....	79(59)
Peak Torque Speed-bhp(kW).....	32(24)
Altitude Capability-ft(m).....	10000(3050)
Torque Available at 800 r/min-lb ft (N m).....	580(786)

Engine

Speed r/min	Power bhp(kW)	Torque lb ft(N m)	BSEC lb/bhp hr (g/kW hr)
2100	260(194)	650(881)	.406(247)
1950	258(192)	695(942)	.393(239)
1800	253(189)	738(1001)	.382(232)
1600	241(180)	791(1072)	.371(226)
1400	221(165)	829(1124)	.367(223)
1200	196(146)	858(1163)	.368(224)
1000	166(124)	872(1182)	.374(228)

Notes: Performance shown is with Diesel No. 2 fuel.

All values at rated speed and power and with standard engine hardware unless otherwise noted.

Curve No. E4-8067-32-53
Date: 8-27-84
Rev./Date: 1/10-23-84
Sht. 2 of 2



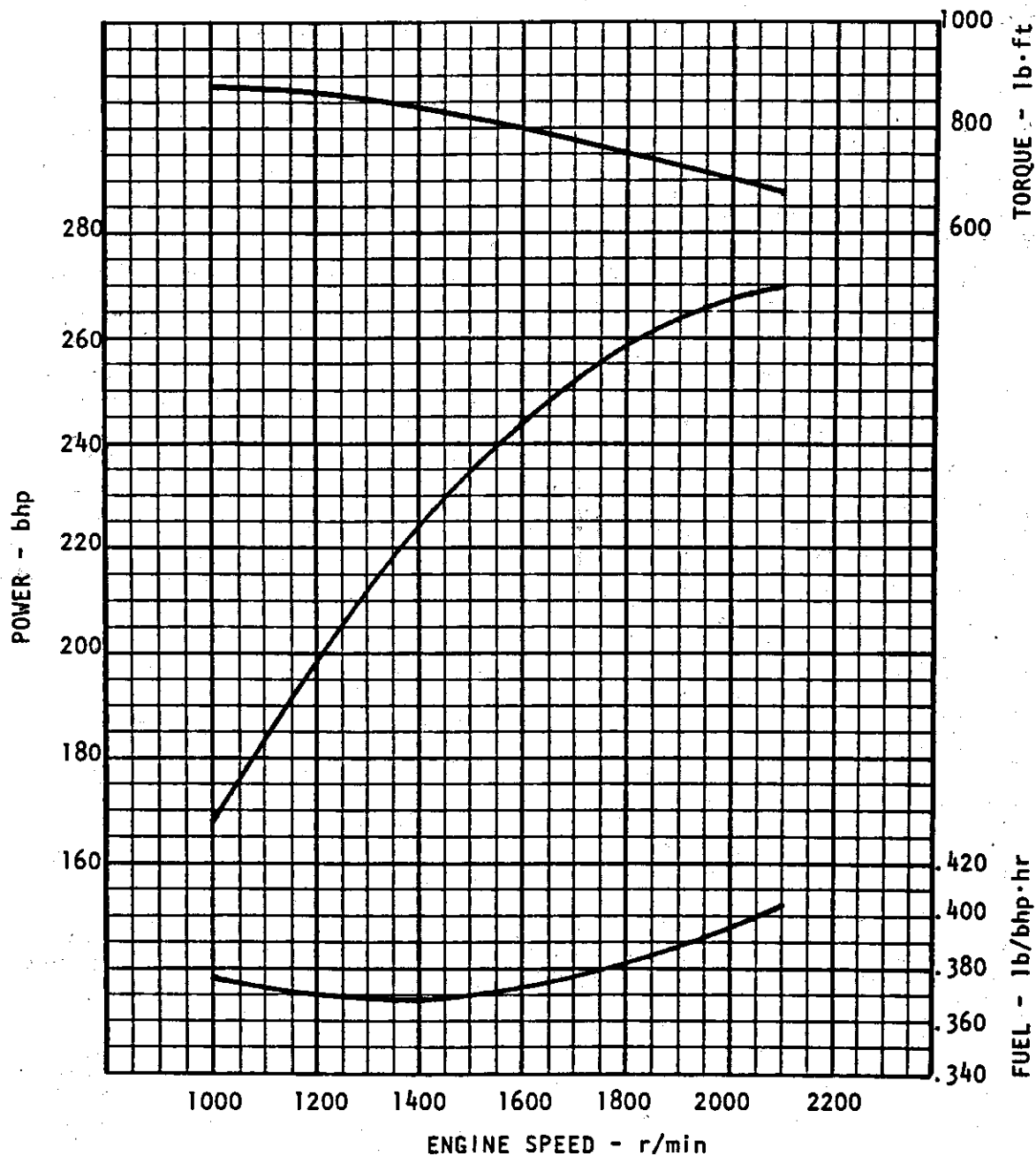
ENGINE PERFORMANCE CURVE

RATING: RATED BRAKE POWER

APPLICATION: AUTOMOTIVE - COACH
DIESEL FUEL - NO. 2

CERTIFICATION: CALIFORNIA 1985

MODEL: 6V-92TAC
270 bhp @ 2100 r/min
882 lb·ft @ 1000 r/min



AIR INTAKE RESTRICTION - in. H₂O (kPa) . . . 10 (2.5)
EXHAUST BACK PRESSURE - in. H₂O (kPa) . . . 15 (3.7)

- POWER OUTPUT GUARANTEED WITHIN 5% AT SAE J1349 CONDITIONS:
77°F (25°C) AIR INLET TEMPERATURE; 29.31 in. Hg (99kPa) DRY BARMETER;
100°F (39°C) FUEL INLET TEMPERATURE (.853 SPECIFIC GRAVITY AT 60°F).
- CONVERSION FACTORS: POWER: kW = bhp × 0.746
FUEL: kg/kW·hr = lb/bhp·hr × 0.608
TORQUE: N·m = lb·ft × 1.356
- VALUES DERIVED ARE FROM CURRENTLY AVAILABLE DATA AND SUBJECT TO CHANGE WITHOUT NOTICE.

CERTIFIED BY:

B. J. Conner

STAFF ENGINEER

CURVE NO.

E4-8067-32-54

DATE: 8-27-84

REV./DATE:

SHT. 1 OF 2

ENGINE SPECIFICATION DATA

General Data

Model.....	6V-92TA COACH
Number of Cylinders.....	6
Bore and Stroke-in(mm).....	4.84x5.00(123x127)
Displacement-in ³ (L).....	552(9.05)
Compression Ratio.....	17.0:1
Piston Speed-ft/min(m/min).....	1750(533)
Valves Per Cylinder.....	
Intake.....	NOT APPLICABLE
Exhaust.....	4
Combustion System.....	DIRECT INJECTION
Engine Type.....	63.5° VEE - 2 CYCLE
Aspiration.....	TURBOCHARGED

Configuration

Turbocharger.....	TV7511(1.08A/R)
Charge Air Cooling System.....	JWAC
Blower Type.....	BY-PASS
Blower Drive Ratio.....	1.95:1
Low Idle Speed-r/min.....	500
High Idle Speed-r/min.....	2250
Thrust Bearing Load Limit.....	
Continuous-lbf(N).....	600(2670)
Intermittent-lbf(N).....	1800(8000)
Engine Crankcase Vent System.....	OPEN
Maximum Pressure-in H ₂ O(kPa).....	3.0(0.75)

Physical Data

Size.....	
Length-in(mm).....	37.6(955)
Width-in(mm).....	37.6(955)
Height-in(mm).....	48.0(1220)
Weight, dry-lb(kg).....	2020(920)
Center of Gravity Distance.....	
From R.F.O.B. (x axis)-in(mm).....	9.4(239)
Above Crankshaft (y axis)-in(mm).....	10.2(259)
Right of Crankshaft (z axis)-in(mm).....	0.0(0.0)
Installation Drawing.....	VARIES WITH MODEL
Maximum Allowable Static Bending Moment at Rear Face of FW Hsg-lbf ft(N m).....	600(814)

Fuel System

Fuel Injector/Timing.....	9F80/1.470
Fuel Injection Pump/Timing.....	NOT APPLICABLE
Fuel Consumption-lb/hr(kg/hr).....	109.6(49.7)
Fuel Consumption-gal/hr(L/hr).....	15.7(59.4)
Fuel Spill Rate-lb/hr(kg/hr).....	480(218)
Fuel Spill Rate-gal/hr(L/hr).....	68.6(260)
Total Fuel Flow-lb/hr(kg/hr).....	590(268)
Total Fuel Flow-gal/hr(L/hr).....	84.4(319)
Maximum Allowable Fuel Pump Suction.....	
Clean System-in Hg(kPa).....	6(20)
Dirty System-in Hg(kPa).....	12(41)
Fuel Filter Micron Size.....	
Primary - Micron.....	30
Secondary - Micron.....	10

Lubrication System

Oil Pressure.....	
Rated Speed-lbf/in ² (kPa).....	49-70(338-483)
Low Idle-lbf/in ² (kPa).....	5(34)
In Pan Oil Temperature-°F(°C).....	200-250(93-121)
Oil Flow-gal/min(L/min).....	37(140)
Oil Pan Capacity.....	
High-qt(L).....	20(19)
Low-qt(L).....	16(15)
Total Engine Oil Capacity with filters-qt(L).....	22(21)
Bypass Oil Filter Orifice-in(mm).....	0.101(2.57)
Engine Angularity Limits.....	
Front up - degrees.....	VARIES WITH MODEL
Front down - degrees.....	VARIES WITH MODEL
Side tilt - degrees.....	VARIES WITH MODEL

Emission Data

CO-gm/hr.....	NOT AVAILABLE
HC-gm/hr.....	NOT AVAILABLE
NO _x -gm/hr.....	NOT AVAILABLE
SO _x -gm/hr.....	497
Smoke.....	
Rated Speed - Bosch Number.....	0.4
Peak Torque Speed - Bosch Number.....	2.1
Noise - dBA @ 1m.....	NOT AVAILABLE
Certification Approval.....	CALIFORNIA 1985

Cooling System

Engine Heat Rejection-Btu/min(kW).....	9100(160)
Engine Radiated Heat-Btu/min(kW).....	1480(26.0)
Coolant Flow-gal/min(L/min).....	160(606)
Thermostat.....	
Start to Open-°F(°C).....	177(81)
Fully Open-°F(°C).....	197(92)
Maximum Water Pump Inlet.....	
Restriction-in Hg(kPa).....	0.0(0.0)
Engine Coolant Capacity-qt(L).....	24.5(23.2)
Minimum Pressure Cap-lbf/in ² (kPa).....	9.0(62.1)
Maximum Coolant Pressure (Exclusive of Pressure Cap)-lbf/in ² (kPa).....	NOT AVAILABLE
Maximum Top Tank Temperature-°F(°C).....	210(99)
Minimum Top Tank Temperature-°F(°C).....	160(71)
Minimum Coolant Fill Rate-gal/min(L/min).....	3.0(11.4)
Cooling Index.....	
Minimum Air to Boil-°F(°C).....	112(44.4)
Maximum Air to Water Diff.-°F(°C).....	100(55.6)
Ram Air Flow - Mile/hr(km/hr).....	15(24)
Deaeration-Air Injection.....	
Capacity-ft ³ /min(m ³ /min).....	0.6(0.017)
Drawdown - Minimum Requirement (or 10% of Cooling System Capacity-Whichever is Larger)-qt(L).....	4.0(3.8)

Air System

Maximum Allowable Temperature Rise (Ambient Air to Engine Inlet)-°F(°C).....	30(16.7)
Air Intake Restriction Maximum Limit.....	
Dirty Air Cleaner-in H ₂ O(kPa).....	20(5.0)
Clean Air Cleaner-lg H ₂ O(kPa).....	12(3.0)
Engine Air Flow - ft ³ /min(m ³ /min).....	1130(32.0)
Engine Air Box/Manifold Pressure-in Hg(kPa).....	53.0(179)
Recommended Intake Pipe Dia.-in(mm).....	6.0(152)

Exhaust System

Exhaust Flow-ft ³ /min(m ³ /min).....	2270(64.3)
Exhaust Temperature-°F(°C).....	620(327)
Maximum Allowable Back Pressure-in Hg(kPa).....	2.5(8.4)
Recommended Exhaust Pipe Dia. Single-in(mm).....	5.0(127)
Dual-in(mm).....	NOT APPLICABLE
Exhaust Brake Max. Allowable Back Pressure-in Hg(kPa).....	NOT APPLICABLE

Electrical System

Recommended Battery Capacity(CCA @ 0°F).....	
12 Volt System.....	
Above 32°F(0°C)-A.....	1900
Below 32°F(0°C)-A.....	2500
24 Volt System.....	
Above 32°F(0°C)-A.....	950
Below 32°F(0°C)-A.....	1250
Maximum Allowable Resistance of Starting Circuit.....	
12 volt system - ohm.....	0.0012
24 volt system - ohm.....	0.002
Performance Data.....	
Power Output-bhp(kW).....	270(201)
Full Load Speed-r/min.....	2100
Peak Torque-lb ft(N m).....	882(1196)
Peak Torque Speed-r/min.....	1000
BMEP-lbf/in ² (kPa).....	92(634)
Friction Power.....	
Rated Speed-bhp(kW).....	79(59)
Peak Torque Speed-bhp(kW).....	32(24)
Altitude Capability-ft(m).....	10000(3050)
Torque Available at 800 r/min-lb ft (N m).....	585(793)

Engine

Speed r/min	Power bhp(kW)	Torque lb ft(N m)	BSEC lb/bhp hr (g/kW hr)
2100	270(201)	675 (915)	.404(246)
1950	266(198)	716 (971)	.392(238)
1800	258(192)	753(1021)	.382(232)
1600	244(182)	801(1086)	.373(227)
1400	224(167)	840(1139)	.368(224)
1200	198(148)	867(1175)	.370(225)
1000	168(123)	882(1196)	.376(229)

Note: Performance shown is with Diesel No. 2 fuel.

All values at rated speed and power and with standard engine hardware unless otherwise noted.

Curve No. E4-8067-32-54
Date: 8-27-84
Rev./Date:
Sht. 2 of 2