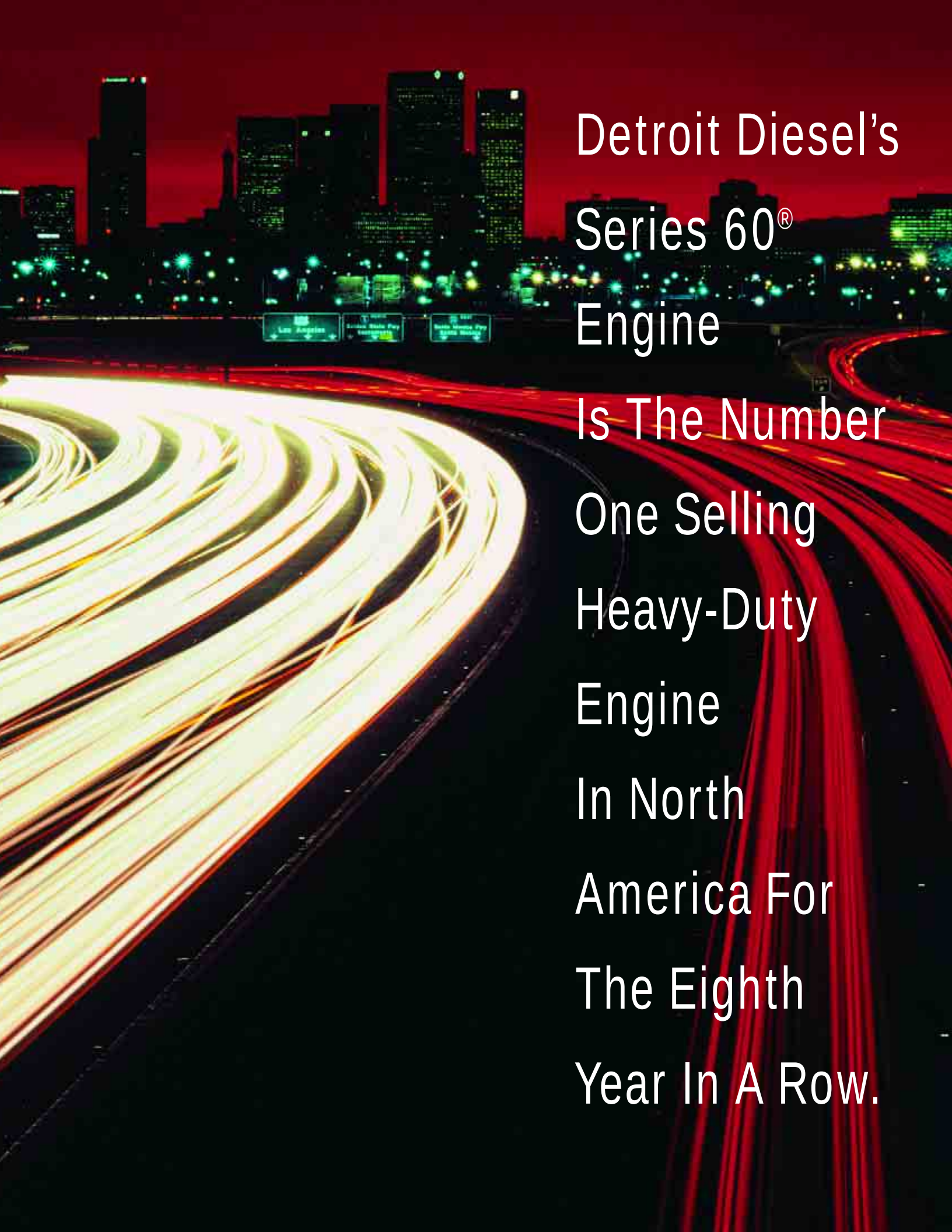
DETROIT DIESEL

SERIES 60

The Most Popular Heavy-Duty Motor Coach Engine In North America



Detroit Diesel's Series 60® Engine Is The Number One Selling Heavy-Duty Engine In North America For The Eighth Year In A Row.

Why?

Fleets Want An Engine That:

- Doesn’t use a lot of fuel
- Is reliable
- Doesn’t cost a lot to maintain
- Lives a long time
- Makes money
- Keeps drivers happy

The Most Complete Power Range In A Single Engine Package From 330 To 500 HP

2000 On-Highway Coach Ratings

Series 60 DDEC® IV

330 HP @ 2100 RPM . . . . . 1250 FT-LB @ 1200 RPM
350 HP @ 2100 RPM . . . . . 1250 FT-LB @ 1200 RPM
330/350 HP @ 2100 RPM . . 1250 FT-LB @ 1200 RPM
330 HP @ 2100 RPM . . . . . 1350 FT-LB @ 1200 RPM
350 HP @ 2100 RPM . . . . . 1350 FT-LB @ 1200 RPM
330/350 HP @ 2100 RPM . . 1350 FT-LB @ 1200 RPM

370 HP @ 2100 RPM . . . . . 1450 FT-LB @ 1200 RPM
370 HP @ 2100 RPM . . . . . 1550 FT-LB @ 1200 RPM
400 HP @ 2100 RPM . . . . . 1450 FT-LB @ 1200 RPM
400 HP @ 2100 RPM . . . . . 1550 FT-LB @ 1200 RPM
430 HP @ 2100 RPM . . . . . 1450 FT-LB @ 1200 RPM
430 HP @ 2100 RPM . . . . . 1550 FT-LB @ 1200 RPM
370/430 HP @ 2100 RPM . . 1450 FT-LB @ 1200 RPM
370/430 HP @ 2100 RPM . . 1550 FT-LB @ 1200 RPM
430/470 HP @ 2100 RPM . . 1550 FT-LB @ 1200 RPM

430 HP @ 2100 RPM . . . . . 1650 FT-LB @ 1200 RPM
470 HP @ 2100 RPM . . . . . 1550 FT-LB @ 1200 RPM
470 HP @ 2100 RPM . . . . . 1650 FT-LB @ 1200 RPM
500 HP @ 2100 RPM . . . . . 1550 FT-LB @ 1200 RPM
500 HP @ 2100 RPM . . . . . 1650 FT-LB @ 1200 RPM
470/500 HP @ 2100 RPM . . 1550 FT-LB @ 1200 RPM
430/500 HP @ 2100 RPM . . 1540 FT-LB @ 1200 RPM

Big Power With All The Other Benefits Of A Series 60 Engine

With more than 20 different power ratings to choose from, it's easy to match a Series 60 engine to your exact needs. But sometimes needs change. That's not a problem with the Series 60 engine! The power chart on the left shows the groups of engine ratings for the bus and coach market. The ratings are grouped into rating families.

The families contained in each of the color sections have identical hardware. The groups displayed in each family show the preprogrammed horsepower range in a single engine. A simple electronic tool is all that is required to change power within a group. Power changes from one group to another within the same family simply require reprogramming of the engine's electric control module.

It is also possible to change power from one group to another, (just make sure the bus cooling, air intake and exhaust systems and the driveline can handle the change). Upping the horsepower to the maximum limit at time of trade-in is an easy way to increase both the resale value and desirability of any coach.

What Makes The Series 60 Engine So Popular?

It Provides The Best Combination Of:

- Performance
- Economy
- Driver Satisfaction
- Reliability
- Durability
- Total Cost of Operation
- Residual Value.

One Of The Most Important Aspects Of The Series 60 Engine Is Its Great Residual Value. As The Chart Below Indicates, The Residual Value Of The Series 60 Is Substantially Better Than The Competition.

Series 60 Residual Value

Mileage	Series 60	Competition	Series 60 Advantage
21-50K	9,213.38	7,491.80	1,721.58
51-75K	8,189.69	5,240.08	2,949.61
76-100K	7,165.97	3,669.45	3,496.52
101-150K	6,142.27	2,557.50	3,584.77
151-200K	5,118.55	0.00	5,118.55
201-250K	4,092.61	-899.06	4,991.67
251-300K	3,072.22	-1,875.32	4,947.54
301-350K	2,046.31	-2,768.86	4,815.17
315K+	0.00	-3,530.02	3,530.02

Source - The Official Bus Book Market Report. "Blue Book" (January, 2000 Edition) Bus Book Publishing

What Else Makes The Series 60 Engine So Popular?

Fuel Economy

The Series 60 engine is the acknowledged industry fuel economy leader. Fuel economy is one of the main reasons operators specify Series 60 engines. Fleets track fuel economy down to the third decimal. They know what works and what does not. And they buy more Series 60 engines than any other engine.

Cost Per Mile

Cost per mile is based on more than fuel economy. It includes oil usage and oil changes, routine maintenance and on some competitive engines, required replacement of pumps, turbos or bearings according to a set schedule.

There is no requirement to routinely replace pumps, turbos or bearings on the Series 60 engine. The Series 60 engine doesn't require special lube oils or expensive filters.

The Fleets With The Lowest Cost Per Mile... Buy Series 60 Engines.

Reliability

In today's troublesome world, people look for something that they can rely on. Detroit Diesel created the Series 60 for just that purpose. Charter and Line Haul markets demand reliability, perhaps that's why the Series 60 has been chosen by today's top motor coach fleets.

Durability

The Series 60 engine just celebrated its twelfth birthday; nearly 90,000 Series 60 engines have gone over the million-mile mark!

Series 60 Total Production Engine Mileage

June 30, 1999
Total Engines In Service

Mileage Interval	Number of Engines	Mileage Interval	Number of Engines
0-100,000	69,334	800,000- 900,000	24,563
100,000-200,000	54,071	900,000-1,000,000	21,039
200,000-300,000	47,064	1,000,000-1,100,000	18,015
300,000-400,000	42,287	1,100,000-1,200,000	11,213
400,000-500,000	40,149	1,200,000-1,300,000	7,991
500,000-600,000	37,867	1,300,000-1,400,000	5,769
600,000-700,000	32,899	1,400,000-1,500,000	3,921
700,000-800,000	28,067	1,500,000-	7,308
		TOTAL	**451,557**

Want To Know More?

Take A Look At The Simple Design Of The Engine. The One-Piece Cylinder Head Contains The Overhead Camshaft. This Camshaft Arrangement Provides A Variety Of Benefits:

- Intake and exhaust passages are straight for easy entry and exit of air from the cylinder. The engine doesn't waste fuel "pumping" air in and out.
- Intake and exhaust passages are also short. Intake air is not overly heated as it passes through the head. The resulting cooler air in the cylinder improves economy. And the hot exhaust gases don't transfer too much heat into the head as they exit, preserving more energy to operate the turbo.
- The overhead cam allows for direct actuation of the fuel injectors without push rods or push tubes. The result is high fuel injection pressure and better fuel economy.
- The overhead cam also allows for the use of 38 head bolts, providing over 1,000,000 pounds of clamp load on the head gasket.

These Features Combine To Produce The Economy, Durability And Performance The Series 60 Engine Is Known For.

More Reasons The Series 60 Engine Is Number One.

Inside each cylinder liner is the DDC™ Iron Cross Head Piston.

This iron piston provides a hard surface for the rings to seal against, unlike aluminum, which requires a special cast insert.

The engines in the 500 hp family (shown in the red box on the previous page) all use the new two piece steel piston, another Series 60 engine durability enhancement.

Outside, the cylinder liner is cooled all the way to the top, using a patented DDC feature called top lining cooling. This reduces ring temperatures by 100 degrees F. Another reason Series 60 engines live so long.

Main and rod bearings are big. That's why the Series 60 engine has no requirement to roll out bearings - it's just not necessary.

The Series 60 engine block, with no camshaft, is a simple, trouble-free design.

The Series 60 has a smaller turbocharger for improved low speed performance and economy. At higher speeds, a wastegate bypasses unneeded turbo boost to keep cylinder pressures down and extend engine life further.

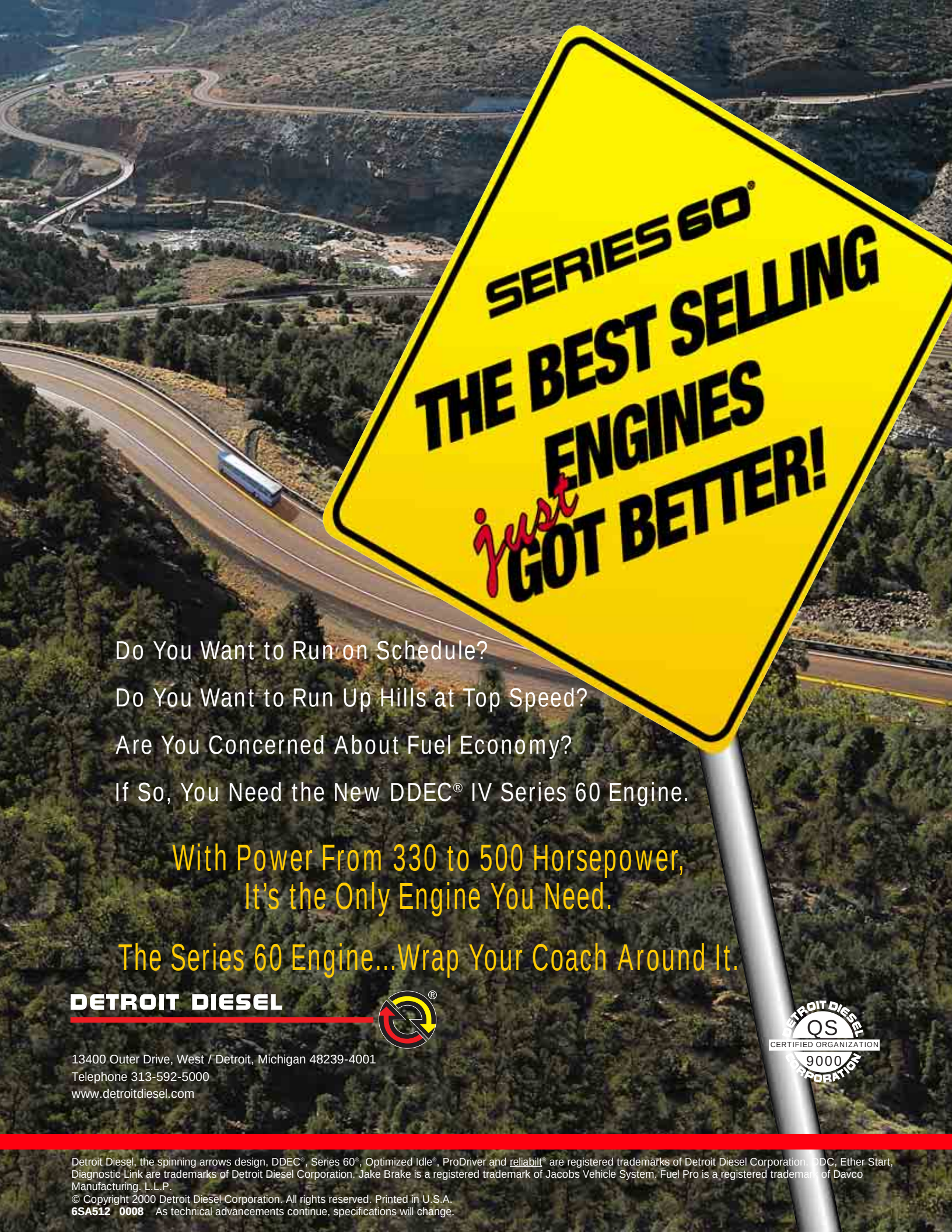
Add the gear train to drive the accessories and the camshaft, and you have a complete Series 60 engine.

- Simple
- Rugged
- Easy to work on
- Key components are right under the rocket cover
- Fewer parts

And More...

Every Series 60 engine is equipped with Detroit Diesel Electronic Controls (DDEC). DDEC is the most popular electronic control system available. DDEC IV, the fourth generation of DDEC, is now standard equipment on all Series 60 engines. In addition to precisely controlling fuel injection, DDEC offers all of the following:

- Three levels of engine protection
  - Warning only
  - Power ramp down
  - Automatic shut down
- Cruise control
- Auto resume cruise control
- Multiple hp ratings
- Three levels of engine braking
- Engine fan braking
- Vehicle speed limiting
- Starter lock out
- Remote PTO control
- Communication capability with electronically controlled transmissions
- Idle speed adjustment
- Droop adjustment
- Idle timer shutdown
- Air temperature shutdown
  - High or low
- Warnings for:
  - Low voltage
  - Low coolant
  - High oil temperature
  - Low oil pressure
- Self diagnosis
- Four levels of security
- Is the addition of more memory
- Built-in clock and calendar
- Built-in battery back-up.



Do You Want to Run on Schedule?

Do You Want to Run Up Hills at Top Speed?

Are You Concerned About Fuel Economy?

If So, You Need the New DDEC® IV Series 60 Engine.

With Power From 330 to 500 Horsepower,
It's the Only Engine You Need.

The Series 60 Engine...Wrap Your Coach Around It.

DETROIT DIESEL

13400 Outer Drive, West / Detroit, Michigan 48239-4001
Telephone 313-592-5000
www.detroitdiesel.com

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6SA512 0008 As technical advancements continue, specifications will change.