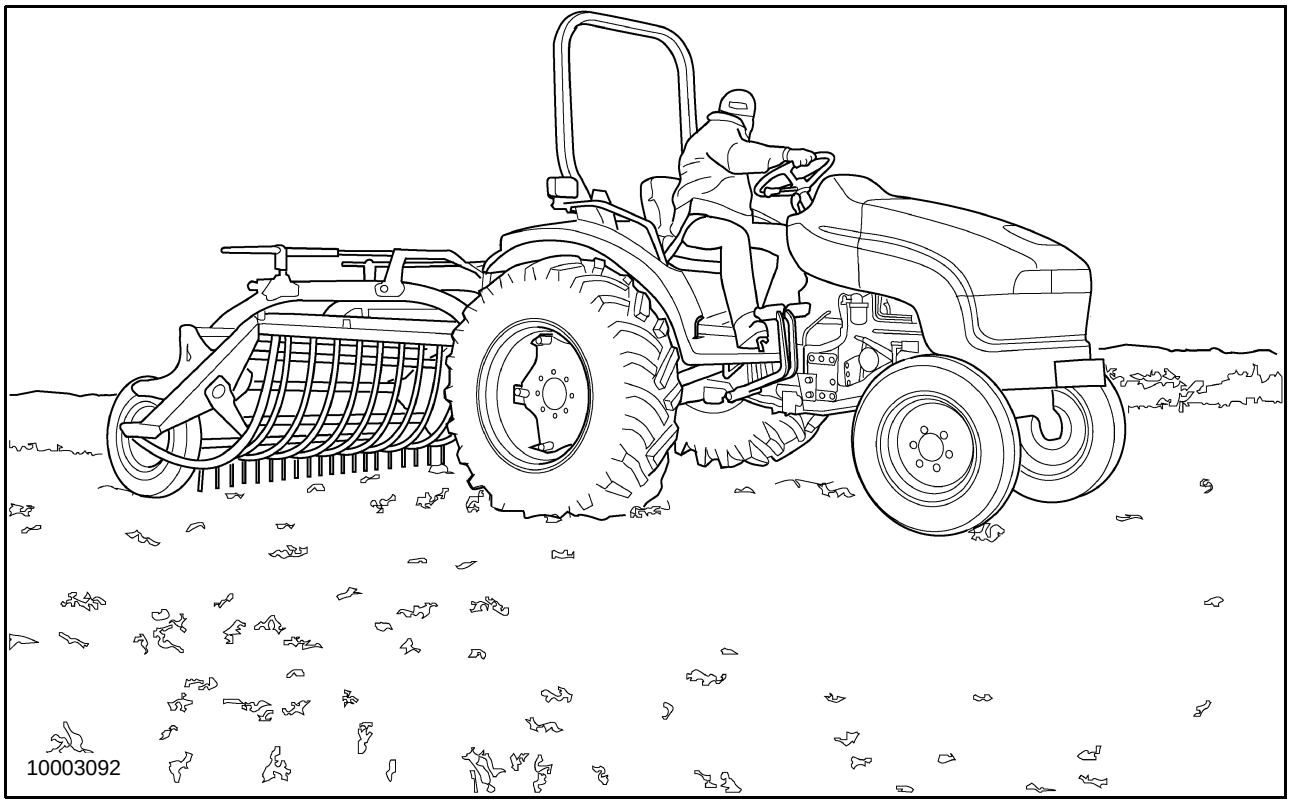
D35, D40, D45 Tractors

Product Manual

86618779

CASE IH

D35 - D40 - D45
COMPACT TRACTORS



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PRODUCT STORY

D35, D40, D45

Who Says You Can Get Too Much of a Good Thing?
Case IH engineers didn't think so. They've expanded the very successful Family of Case IH compact tractors by adding six new models, the D35, DX35, D40, DX40, D45 and DX45.They asked Case IH and competitive customers. After all, from the beginning, Case IH has represented the best in customer driven design. List in hand the team set out to satisfy those "customer wants". The result, 6 new value packed models designed to offer customers even more productivity, ease of operation and dependability.

The Two Faces of Value
Value, it means different things to different customers. To some, *value* represents getting the most horsepower for their dollar, to others; features designed to make their operating experience more productive and enjoyable. The models D35, D40 and D45 are the perfect choice for those "no frills, bang-for-their-buck customers". These value filled models are economically priced while still offering those features customers have come to expect; modern styling, powerful engines, superior operator comfort, proven reliability, and best in class serviceability. These tractors allow customers to do more work. Whether mowing, loading, hauling, snowblowing or any of dozens of other jobs.

Tested Tough
Extensive testing was conducted to ensure that the D35, D40 and D45 would live up to customer expectations for durability and reliability. Testing sights throughout the United States put D Series through varying climates and conditions. Cold, heat, dry, wet, you name it, the D Series encountered it.

D35-D40-D45
The new Class III model lineup is:

MODEL	CYLINDERS	CU. IN.	GROSS HP	P.T.O. HP
D35	3	101.1	35.0	29.6
D40	4	121.7	40.0	35.0
D45	4	135.2	45.0	39.6

MAIN FEATURES

- **21ST CENTURY STYLING**

  With their sloping hoods and comfortable, convenient operator station, there is no doubt the D35, D40 and D45 are part of Case IH's innovative line of tractors.

- **LARGE DISPLACEMENT ENGINES**

  Are powerful and economical. Refinements to the indirect fuel injection system have resulted in quieter operation; greater fuel efficiency and improved torque backup, all without sacrificing the reliability.

- **LARGEST FUEL TANK IN ITS CLASS**

  You want to be driving - not filling it up!

- **VERSATILE TRANSMISSION**

  The 12x12 Synchronized Shuttle Shift transmission offers clash-free forward/reverse shuttling in a wide selection of working speeds. For the economy minded customer, this transmission provides high productivity and reliability.

- **INDEPENDENT PTO**

  Dependable 540 RPM, independent rear PTO is standard on all three models for added convenience.

- **RUGGED AXLES**

  All models are available with 2WD or traction enhancing FWD axles. Both axles feature high load ratings and time tested design for dependable service.

- **HYDROSTATIC POWER STEERING**

  Is standard on the models D35, D40 and D45. A dedicated 5.1 GPM pump provides ample flow for precise, low effort steering.

- **DIFFERENTIAL LOCK**

  Is standard on all three models. It allows the operator to lock both rear axles together for superior traction in slippery conditions.

- **POWERFUL BRAKES**

  All three models are equipped with internal wet disc brakes for sure stopping, improved durability and long life.

- **OPERATOR'S STATION IS OUTSTANDING**

  With controls for RANGES, PTO, FWD and 3-PT conveniently located. These tractors also provide Best-In-Class forward and side visibility, an important feature for loader work.

- **CONTOURED, HIGH BACK, COMFORT SEAT**

  With spring suspension is standard on these models. Generous fore/aft adjustment on an inclined, sliding track helps keep the operator in proper relationship to the tractors controls, for comfortable, safe operation.

- **CAT. I 3-PT HITCH**

  Has easy to adjust telescoping stabilizers and over 2000 lb. lift capacity to handle a wide variety of attachments. A Deluxe 3-PT package with flexible link ends and crank-type leveling box is available as a factory or dealer installed option.

- **PRODUCTIVE HYDRAULICS**

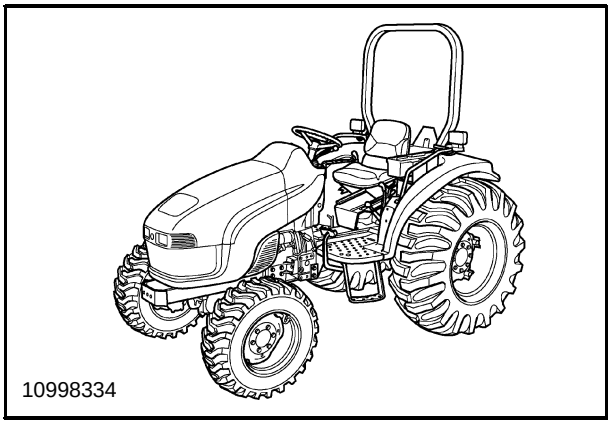
  Externally mounted, 9.8 GPM, gear-type hydraulic pump provides plenty of flow to power up attachments quickly.

- **FLIP-UP HOOD**

  Gives Case IH compacts Best-In-Class serviceability.

STANDARD EQUIPMENT

D35



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DIESEL ENGINE
35.0 Gross hp @ 2600 rpm
33.5 Net hp @ 2600 rpm
29.6 PTO hp @ 2600 rpm
101.1 CID (1.66L) Displacement
3 Cylinders
Under Hood Muffler
Dual Element Air Cleaner
Full-flow, Spin-on Oil Filter
13.0 Gallon (54.5 L) Fuel Tank
Single Fuel Filter w/ Separator
Pressurized Cooling System with Thermostat and Antifreeze
Glow Plug Starting Aid

INSTRUMENTS
Tachometer w/ Hour Meter
Fuel Gauge
Engine Oil Pressure Light
Alternator Warning Light
Glow Plug Indicator Light
Temperature Light

HYDRAULIC SYSTEM
9.8 GPM (37.1L) Hydraulic Pump
Live Hydraulics with Hydraulic Position Control
Mid-mounted Hydraulic Ports
Cat.I 3-pt. Hitch
Lift Capacity @ 24 in. 2025 lb.
Telescoping Stabilizers
Turnbuckle Type Leveling Mech.
3-pt. Hitch Drop Control

ROPS
2-Post Fixed w/Seat Belt

ELECTRICAL
Battery, 12-volt, 600 cca
Safety Starter System
Key Start/ Fuel Shutoff
Alternator, 40 amps
Voltage Regulator
Operator Presence System

LIGHTS
Two Headlights
Two Taillights
Two Flashing Safety Lights
Turn Signals

TRANSMISSION
12x12 Synchro Shuttle Shift

PTO (REAR)
540 rpm (Independent)
Flip Up Safety Shield
Screw-on Cap

DRAWBAR
Swing/Extendible

FOOT THROTTLE

DIFFERENTIAL LOCK

CUSHION SEAT
Sliding-Fore/Aft Adjustment
Height Adjustment via Incline Track
Spring Suspension

ENGINE SHIELDING
Flip-Up Hood

STEERING
Hydrostatic Power Steering
Dedicated 5.1 GPM (19.4 LPM) Pump
Fixed Steering Column

BRAKES
Wet Disc

2WD FRONT AXLE
Adjustable Axle
43.1-63.3 inch Tread W/ Small Ag Tires

FWD FRONT AXLE
Fixed Front Wheel Drive Axle
46.4 inch Tread W/ Small Ag Tires

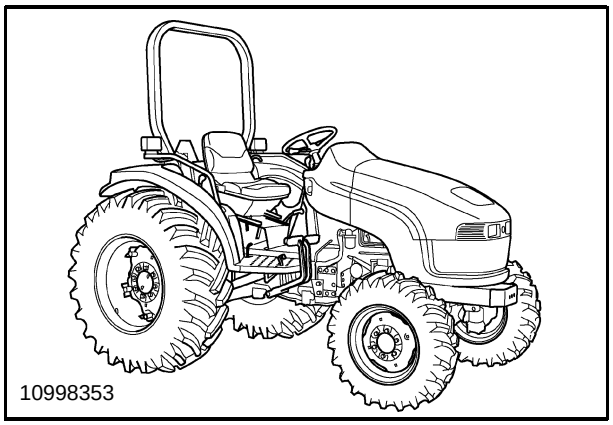
REAR WHEELS
Manual Adjustable
47.1 to 67.4 inch Tread w/ Small Ag Tires

SMV EMBLEM

WARRANTY
Case IH Standard Warranty

STANDARD EQUIPMENT

D40



3

DIESEL ENGINE
40.0 Gross hp @ 2600 rpm
38.5 Net hp @ 2600 rpm
35.0 PTO hp @ 2600 rpm
121.7 CID (2.0 L) Displacement
4 Cylinders
Under Hood Muffler
Dual Element Air Cleaner
Full-flow, Spin-on Oil Filter
13.0 Gallon (54.5 L) Fuel Tank
Glow Plug Starting Aid
Single Fuel Filter w/ Separator
Pressurized Cooling System with Thermostat and Antifreeze

INSTRUMENTS
Tachometer w/ Hour Meter
Fuel Gauge
Engine Oil Pressure Light
Alternator Warning Light
Glow Plug Indicator Light
Temperature Light

HYDRAULIC SYSTEM
9.8 GPM (37.1L) Hydraulic Pump
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Mid-mounted Hydraulic Ports
Cat.I 3-pt. Hitch
Lift Capacity @ 24 in. 2330 lb.
Telescoping Stabilizers
Turnbuckle Type Leveling Mech.
3-pt. Hitch Drop Control

ROPS
2-Post Fixed w/Seat Belt

ELECTRICAL
Battery, 12-volt, 600 cca
Safety Starter System
Key Start/ Fuel Shutoff
Alternator, 40 amps
Voltage Regulator
Operator Presence System

LIGHTS
Two Headlights
Two Taillights
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Turn Signals

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12x12 Synchro Shuttle Shift

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540 rpm (Independent)
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REAR WHEELS
Manual Adjustable
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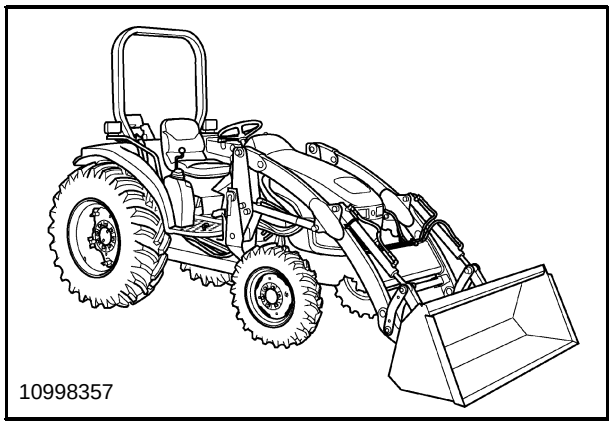
Case IH Standard Warranty

STANDARD EQUIPMENT

D45



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DIESEL ENGINE
45.0 Gross hp @ 2600 rpm
43.5 Net hp @ 2600 rpm
39.6 PTO hp @ 2600 rpm
135.2 CID (2.2 L) Displacement
4 Cylinders
Under Hood Muffler
Dual Element Air Cleaner
Full-flow, Spin-on Oil Filter
13.0 Gallon (54.5 L) Fuel Tank
Single Fuel Filter w/ Separator
Pressurized Cooling System with Thermostat and Antifreeze
Glow Plug Starting Aid

INSTRUMENTS
Tachometer w/ Hour Meter
Fuel Gauge
Engine Oil Pressure Light
Alternator Warning Light
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ROPS
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ELECTRICAL
Battery, 12-volt, 600 cca
Safety Starter System
Key Start/ Fuel Shutoff
Alternator, 40 amps
Voltage Regulator
Operator Presence System

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Two Headlights
Two Taillights
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Turn Signals

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12x12 Synchro Shuttle Shift

PTO (REAR)
540 rpm (Independent)
Flip Up Safety Shield
Screw-on Cap

DRAWBAR
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Manual Adjustable
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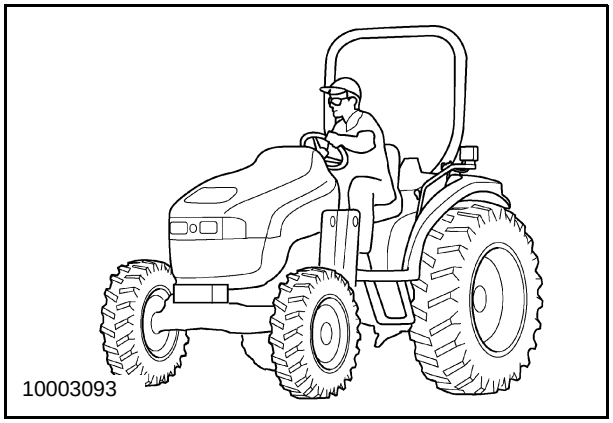
Case IH Standard Warranty

STYLING - GREAT FOR TODAY & TOMORROW

Style and Comfort that Works. Let's face it, not every customer needs, wants or can afford a Rolls Royce. That is not to say they do not need a car, they just do not need a fancy one. The same can be said of compact tractors. To some, a compact tractor is simply a powered tool that is used to complete a task. If you are going to buy a tool, why not get the ultimate power tool. One that proves simplicity and durability does not have to equal discomfort and bland styling. It has uncompromising reliability and durability in an attractive, comfort-enhancing package.



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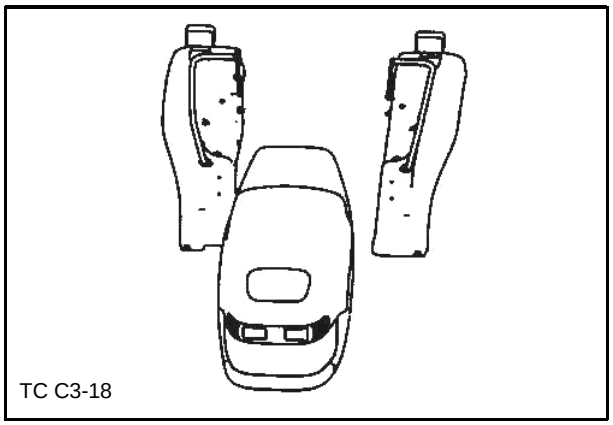
Lasting Beauty. Contoured hood, deck and fenders are molded from fiberglass-reinforced plastic (FRP) that can't rust or corrode. In addition, the fiberglass reinforcement makes the body parts as tough as nails, allowing them to stand up to farm or work site hazards like falling debris (loader work) or the occasional misdirected bale of hay. The bottom line is that it will look just as good down the road as when it rolled out of the assembly plant.



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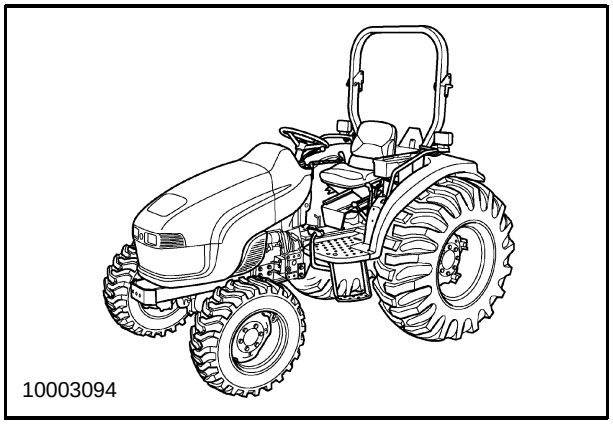
Fit and Finished. By using molded body parts, Case IH engineers were able to raise the fit and finish standards to new levels. Gone are the exposed edges and unsightly seams of old, replaced with smooth flowing lines. A clean appearance is only part of the story. The solid feel of the entry grab handles and lack of platform flex during entry speaks volumes about the quality construction.



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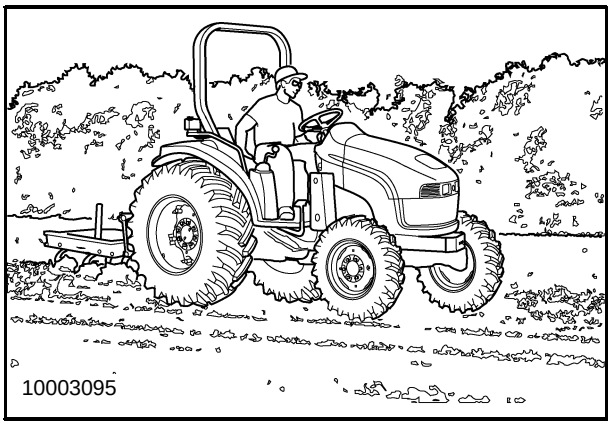
Visibly Better. Sloping contoured hood and industry leading Operator's Station are an unbeatable combination! The operator has been moved forward several inches versus conventional tractor design which affords the operator outstanding forward and side visibility. Better visibility equates to safer operation, an important consideration for both experienced and novice operators.



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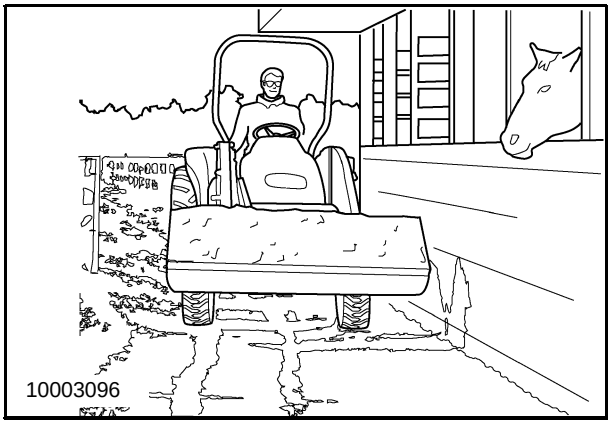
Fits In. This tractor is at home on the farm or job site. Beneath its sculpted body lies the simplicity and reliability of the ultimate power tool. Seasoned operators will appreciate the tried and true 12x12 transmission. They know that gear units provide the highest levels of efficiency, providing more power for their dollar. Whether mowing a pasture, grading a driveway or cleaning out a barn, it is as reliable as the four seasons in a stylish package that won't frighten the livestock.



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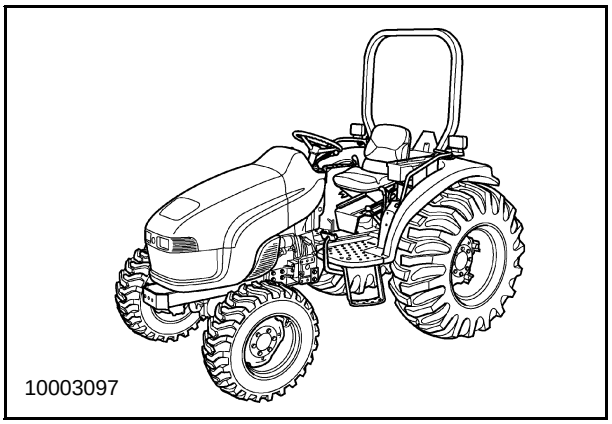
Age Defying Beauty. The sculpted appearance looks modern today and will for years to come. It bucks the trend of boxy "70's" tractor styling in favor of contemporary 21st century beauty. Its modern appearance will give it an edge when it comes to resale value *(in the unlikely event an owner would ever wish to part with it)*.



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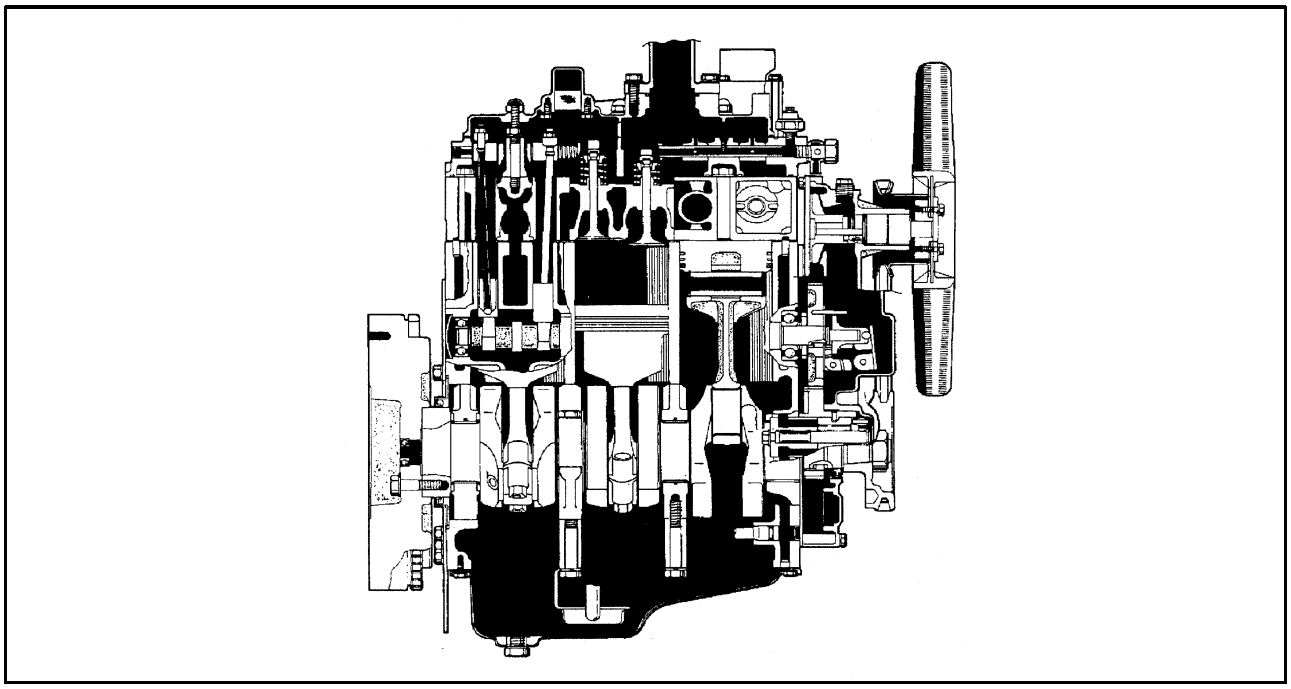
ENGINES

HIGHLIGHTS



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HIGHLIGHTS

- **Reduced Noise and Smoke Levels.** The customer has spoken! During clinics, customers told the engineering team members that the power was great but, that they would like to see improvements to sound quality and smoke levels. So, emphasis was placed on these areas during development. Not only are the D35, D40 and D45 quieter, they have lower smoke emissions, better torque backup and are more fuel-efficient.
- **Smoother Power in Lug-Down!** Thanks to improvements in the governor, torque rise comes in one continuous, smooth flow to eliminate flat spots and provide more mid-range power. These are gutty tractors whether you are loading, plowing, tilling, mowing, raking, or blowing snow. Try one and you will see why we say they are the Ultimate Power Tool!
- **Proven-Parent Bore Design.** The engines used in the D35, D40 and D45 are of Parent-Bore design, where the cylinders are cast as an integral part of the engine block. Known for its strength and rigidity, Parent-Bore design engines have proven their durability with decades of reliable service.

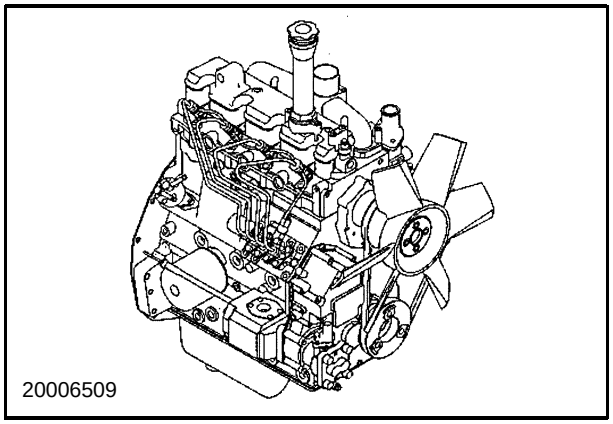
ENGINE & ELECTRICAL SPECIFICATIONS:

	D35	D40	D45
ENGINE	N843L	N844	N844L
Cylinders	3	4	4
Displacement CID (L)	101.1 (1.65)	121.7 (2.0)	135.2 (2.2)
Bore x Stroke in inches (mm)	3.31x3.94 (84x100)	3.31x3.54 (84x90)	3.31x3.94 (84x100)
Compression Ratio	22.5:1	22.5:1	22.5:1
Aspiration	Natural	Natural	Natural
Gross HP (kW)	35.0 (26.1)	40.0 (29.9)	45.0 (33.6)
Rated Speed (RPM)	2600	2600	2600
PTO HP (kW)	29.6 (22.1)	35.0 (26.1)	39.6 (29.6)
COOLING SYSTEM			
Capacity in qts. (L)	7.8 (7.4)	8.3 (7.9)	8.4 (8.0)
FUEL/AIR/OIL SYSTEM			
Fuel- Injection Type	Indirect	Indirect	Indirect
Injection Pump Type	Bosch-type/In-Line	Bosch-type/In-Line	Bosch-type/In-Line
Fuel Filter	Single Element	Single Element	Single Element
Fuel Capacity in Gallons (Liter)	13.0 (54.5)	13.0 (54.5)	13.0 (54.5)
Air Filter Type	Dry/ Dual Elements	Dry/ Dual Elements	Dry/ Dual Elements
Crankcase Capacity With Filter in qts. (L)	6.1 (5.8)	6.3 (6.0)	6.3 (6.0)
EXHAUST SYSTEM			
Muffler	Under Hood	Under Hood	Under Hood
ELECTRICAL			
System voltage	12	12	12
Alternator (amps)	40	40	40
Battery - CCA	600	600	600
Fuel Shut-Off	Key	Key	Key
Cold Start Aid	Glow Plug	Glow Plug	Glow Plug

ENGINES

THEY WORK!

Naturally Aspirated, Parent-Bore Design, Diesel Engines. The models D35, D40 and D45 are all powered by naturally aspirated, parent-bore design, diesel engines. The D35 utilizes the model N843L, a 101.1 cubic inch (1.65L), 3-cylinder powerhouse. The 4-cylinder model N844, displacing 121.7 cubic inches (2.0L) is used in the model D40; and the model N844L at 135.2 cubic inches (2.2L) is used in the D45. All engines are rated at 2600 RPM.



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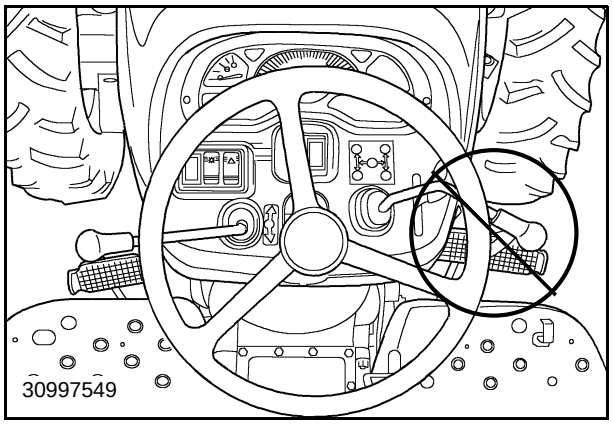
Talk About Gutty Engines. Torque is what provides the pulling power when a tractor gets into those "tough" conditions and these tractors have plenty of torque at lower engine speeds. Along with peak torque, torque rise is an important indicator of a tractor's "guts". Torque rise is the increase in torque from rated power to peak torque. With torque rise in the range of 22%-23.5%, these tractors have the "guts" to handle those heavy loads without the need to downshift providing more convenience and productivity.



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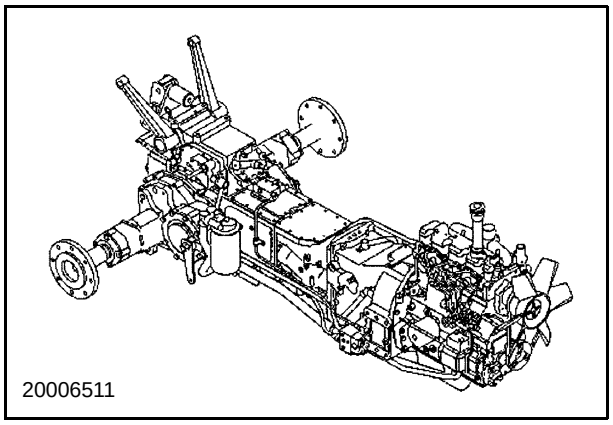
Buckle-Up Driveline. Underneath their appealing skin, the models D35, D40 and D45 are built to handle the toughest tasks. The engine, transmission and rear axle housings, all made of high strength cast-iron, bolt together, forming a rigid chassis. This design provides years of trouble free operation.



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