

# VERSATILE<sup>®</sup> DESIGNATION 6 TRACTORS





# THE TRACTOR YOU'VE BEEN WAITING FOR...



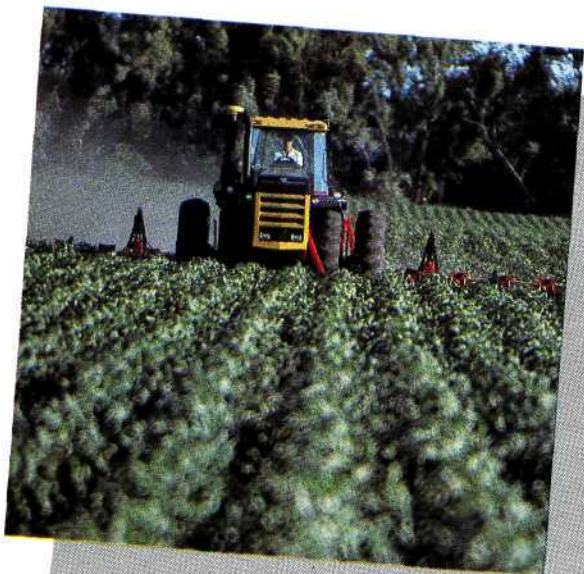
**T**he new generation of VERSATILE tractors has arrived! DESIGNATION 6: Six bold, brawny new machines to help you squeeze more out of your operation. Select the model that makes sense for you from 210 to 360 horsepower (157 to 268 kW). Match it with the options you need and start taking advantage of the big efficiencies of four wheel drive. These new tractors give you the perfect balance between power and fuel efficiency. So they'll save you time, money and effort every time you put them to work. And that means a better bottom line.

A better bottom line! That's quite a promise. But that's the benefit of true four wheel drive power. And who can live up to that promise better than the leader in big power four wheel drive tractors—VERSATILE—we've got a name to live up to!

# THE NEW DESIGNATION 6 LINE

## 4WD Efficiency sized right for your operation.

At Versatile, we believe your tractor should fit the way you farm. That's why our new DESIGNATION 6 tractors are available in six models, from 210 to 360 engine horsepower (157 to 268 kW). That's why we provide two engine, three transmission and two axle choices in addition to a range of productive new options. Choose the tractor and options that suit your needs right down to the ground.



You can count on VERSATILE for all the power, productivity, reliability, flexibility, quality and comfort you expect in your next four wheel drive tractor. Read on, and find out how Versatile has designed and built all these advantages into every tractor in the new DESIGNATION 6 line!


MODEL	ENGINE	HORSE-POWER	TRANSMISSION OPTIONS	PTO	AXLE OPTIONS
836	10 L	210 (157 kW)	12 speed	N/A	OUTBOARD, ROW CROP
			Three-by-Five	STD	OUTBOARD, ROW CROP
			Powershift	STD	OUTBOARD, ROW CROP
856	10 L	240 (179 kW)	12 speed	N/A	OUTBOARD, ROW CROP
			Powershift	STD	OUTBOARD, ROW CROP
876	10 L	280 (209 kW)	12 speed	N/A	OUTBOARD
			Powershift	OPT	OUTBOARD
936	14 L	310 (231 kW)	12 speed	N/A	OUTBOARD
			Powershift	N/A	OUTBOARD
956	14 L	335 (250 kW)	12 speed	N/A	OUTBOARD
			Powershift	N/A	OUTBOARD
976	14 L	360 (268 kW)	12 speed	N/A	OUTBOARD
			Powershift	N/A	OUTBOARD

## POWER

### Cummins high torque rise diesels mean more power when the going gets tough.

All six DESIGNATION 6 tractors are powered by Cummins Constant Power diesel engines. We chose Cummins because it's the best known most, trusted name in diesel power for agriculture today. It's a fact Versatile knows from

experience, because there are VERSATILE tractors in the field right now that have logged more than 20,000 hours without serious down time problems. And we stayed with Constant Power because it maintains rated horsepower over a wide range of operating speeds. Cummins Constant Power engines feature 30% torque rise. This allows you to power through tough spots without ever breaking stride.



**New VERSATILE LOAD SENSOR™  
hydraulics mean more pulling  
power at the drawbar.**

Our new closed centre, load sensing hydraulic system virtually eliminates parasitic power loss. The system provides pressure and flow to meet the demand of each implement only when needed. The resulting horsepower savings are available at the drawbar where they're needed.

**And the new VERSATILE 12 speed  
Powershift means you can change  
speeds on-the-go to power through  
tough conditions and up hills.**

The new VERSATILE 12 speed Powershift gives you five ideally spaced gear selections in the 4-8 mph (6.4-12.8 km/h) range. Full Powershift capability means you can adjust on-the-go to changing conditions. Power through tough conditions, soil changes and hills without stopping the tractor. A single lever allows almost effortless control of forward, reverse, neutral and all gear selections. You can shift from 1st through 12th without stopping the tractor. The VERSATILE time-proven 12-speed mechanical transmission is also available on all models, for those who don't need Powershift capabilities. Our new Three-by-Five synchro mechanical transmission is available only on the 836, with PTO a standard feature.



## PRODUCTIVITY

**DESIGNATION 6 tractors are designed to help you produce more — spend less.**

Building productivity means building profit. That's why these new DESIGNATION 6 tractors offer you six models, from 210 to 360 engine horsepower (157 to 268 kW). That's why you can choose from three transmissions, two engine and two axle alternatives. And that's why we offer productive PTO option and LOAD SENSOR hydraulics. With all this freedom of choice, you can select a new VERSATILE tractor custom matched to your requirements.

DESIGNATION 6 tractors are built for the way you farm today. Versatile has designed and built in the strength, endurance and quality you expect from your big 4WD, but kept these tractors as light as possible. The ½" (12.7 mm) cold rolled steel frame we use, for example, is more expensive than the plate steel the others use.

But it's stronger and lighter, so these tractors can get the job done as efficiently as possible. You can work light for improved efficiency most of the time, and ballast up for the really heavy pulls when you need to.

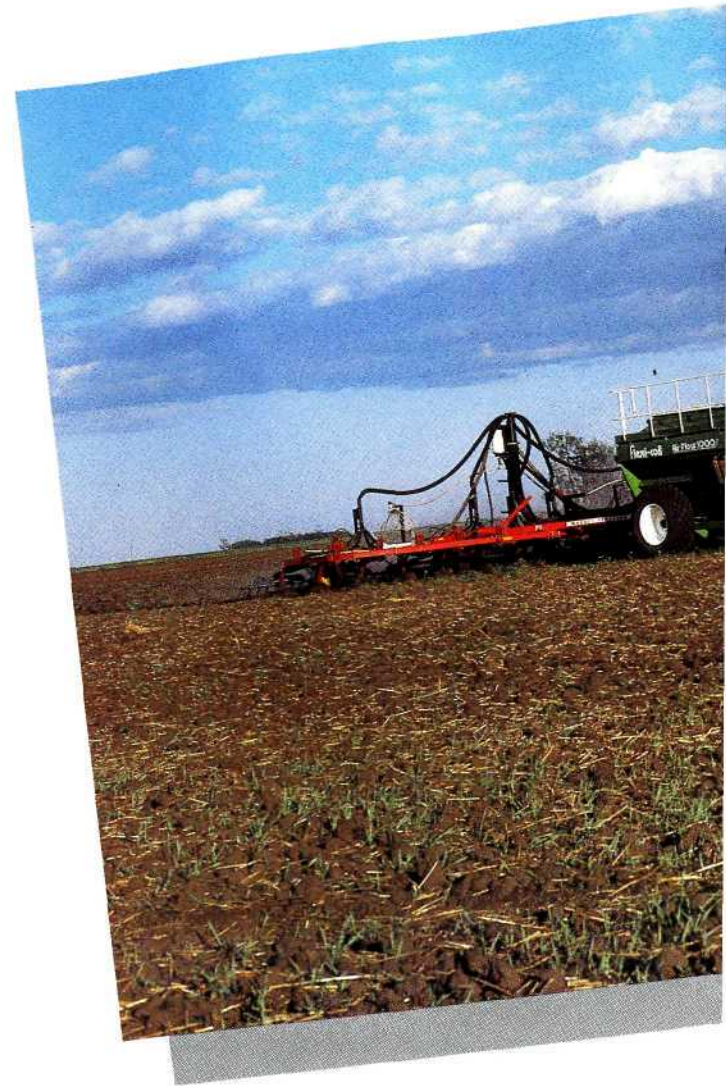


## RELIABILITY

**VERSATILE 4WD tractors have logged millions of trouble-free acres over the last twenty years.**

Over the years, VERSATILE 4WD tractors have built a reputation for reliability that is second to none. Simple design, rugged construction and field-proven components combine to keep them producing acre after acre, season after season.

Our straightforward, no-nonsense 12 speed mechanical transmission and large outboard planetary axles provide a simple, direct, dependable power delivery system. Available new row crop inboard planetary axles, 12 speed Powershift transmission, and Three-by-Five synchro mechanical transmission on the 836 are designed in the same tradition. Years of rugged field testing have proven they measure up to the reliability standard farmers have come to expect from Versatile.





## FLEXIBILITY

**Practical options mean you use the hard working power of these new VERSATILE tractors on more operations than ever before.**

The new VERSATILE 12 speed Powershift transmission available on all six DESIGNATION 6 models lets you shift on-the-go without clutching. It allows you to match tractor speed to ground and load conditions, to maintain operating efficiency through varied terrain.

An optional fifth hydraulic outlet available on all models gives you the hydraulic capability you need to run the biggest air seeder. A Category IV N 3 point hitch with optional quick-hitch attachment is also available on all models. It allows you to handle a full range of tool bar, mounted and semi-mounted implements. The 1,000 RPM live, independent PTO available on all three 800 models means you can pull the biggest pull type combine. And VERSATILE 4WD power means you still have the tractive ability you need to maintain peak productivity through changing field conditions.



## COMFORT

**All new cab design means more productivity from the most important part of your tractor operation — you!**

VERSATILE DESIGNATION 6 tractors are designed to increase both productivity and efficiency. Improving your working conditions is an important step in achieving these goals. DESIGNATION 6 cabs are wrapped in 49 sq. ft. (5 m<sup>2</sup>) of tinted safety glass for 180° of unrestricted visibility. A fact you'll appreciate in row crop work, when operating a pull type combine, or turning a 60 foot chisel plow at the end of the field. All controls are conveniently positioned and easy to reach. Time-proven gauges give you the information you need at a glance. Cab noise has been deadened down to a whisper. And the seat is as comfortable as anything you've got at home.

# THE 800 SERIES

836-210 HP

856-240 HP

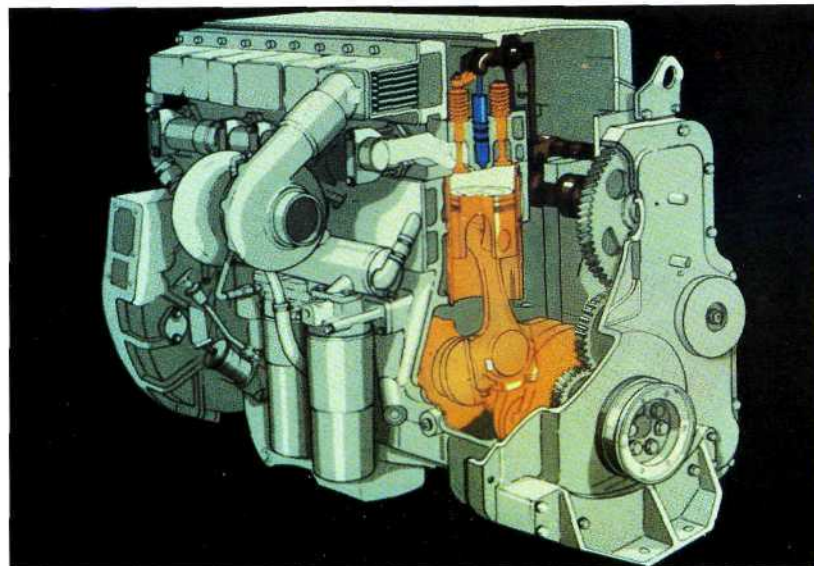
876-280 HP



Equipped with large outboard planetary axles and the reliable VERSATILE 12 speed mechanical transmission, these 800 tractors offer outstanding value compared to competitive FWA tractors. They cost you less to buy, less to operate. Whether you want to pull a field cultivator, chisel plow or tandem offset disc—you can enjoy the benefits of 4WD. Add the Powershift and PTO options, and you've got the control you need for accurate seed drill work; the PTO power you need to pull the biggest pull type combine.

## 10% Fuel efficiency improvement

The heart of these new 800 series tractors is efficiency. And the soul of that efficiency is the all-new Cummins L10 6 cylinder Constant Power in-line 10 litre diesel engine. The latest developments in diesel design and technology have gone into this heavy duty engine. Cummins' engineers improved its fuel efficiency 10% over previous engines of the same power rating.



And they've done it without sacrificing Constant Power, a design feature that allows Cummins engines to maintain their rated horsepower over a wide range of operating speeds. Cummins' 30% torque rise gives you the lugging power to get through tough spots without shifting.

After more than a hundred-thousand hours of testing, the field-proven L10 engine has earned its Cummins reputation for reliability. Although the L10 is compact in design, key contributors to engine durability like the crankshaft, bearings, push rods and connecting rods are proportionately larger than on previous engines. The L10 is turbocharged and after-cooled for maximum efficiency. And it's a Cummins, so you know it's designed for long life and easy service.

## Versatile makes it easy to move up to the productivity of 4WD.

The 210 HP 836, 240 HP 856 and 280 HP 876 (157 kW, 179 kW and 209 kW) are ideally sized to help you make the move into 4WD. You can pull your existing implements faster. Or move up to larger implements. Either way, you cover more acres per day. You get your tillage and harvesting jobs done in the limited time available. Some people call it 4WD crop insurance.

Superior 4WD flotation protects your fields against the yield-robbing compaction problems 2WD and FWA can create. Equal weight and power distribution decreases rolling resistance, improving fuel efficiency. And 4WD traction means continuous productivity through wet, tough field conditions.





# THE 800 SERIES

## ROW CROP TRACTORS

836-210 HP  
856-240 HP



### Two new row crop tractors with VERSATILE features that make them productive 365 days a year.

If you've been waiting for the productivity of VERSATILE 4WD in your row crop work, you can have it now. The 836 and 856 models are available with a special package of row crop features that will help a lot of farmers enjoy the benefits of 4WD for the first time. And there's plenty of power to take on your field work as well.

The new VERSATILE row crop axles are easy to adjust, and let you work comfortably in 30-inch rows. Available 42" tires mean better clearance and more rubber on the ground for better traction. An unrestricted 180° view means you can see right down the rows. And 4WD

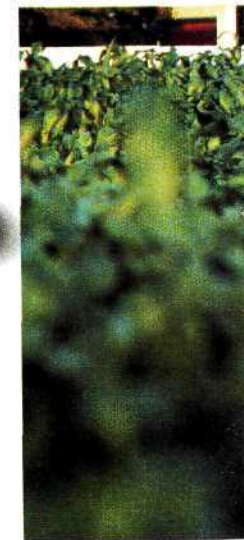
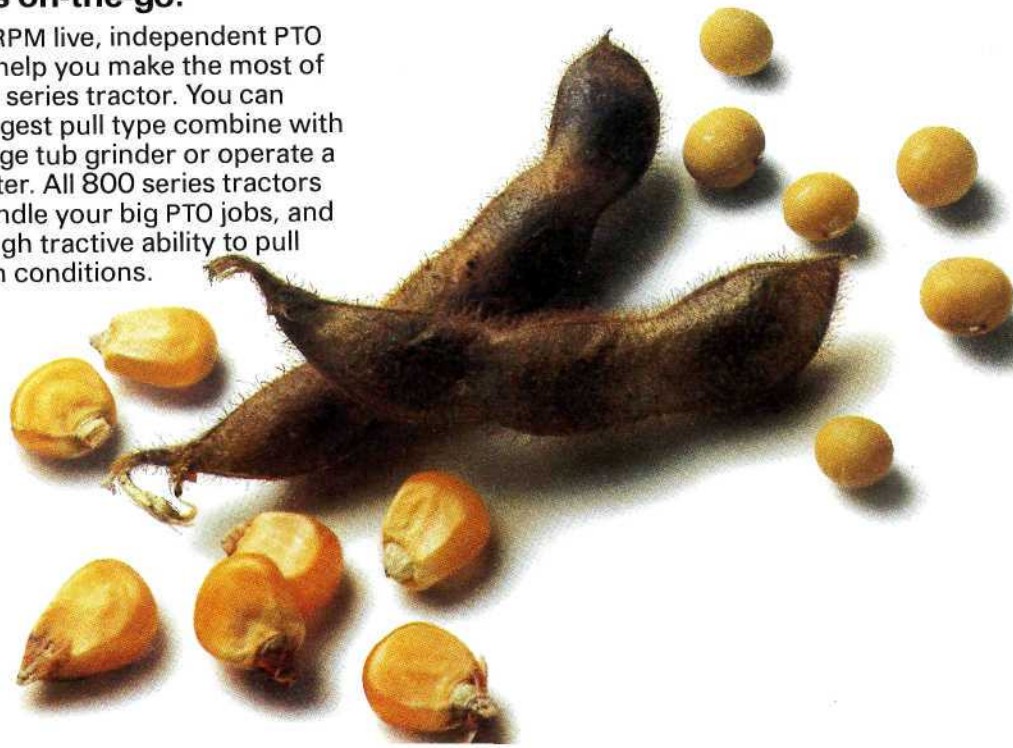
productivity lets you work easily with the widest tool bars available.

Another big row crop advantage is the VERSATILE 12 speed Powershift transmission. It gives you the precise field speed control you need to ensure accuracy during planting and harvesting. And it allows you to adjust to varying field and crop conditions during inter-row cultivation, spraying, fertilizing or any operation where ground speed is an important factor.



### 1000 RPM live, independent PTO handles the biggest implements on-the-go.

A 1,000 RPM live, independent PTO is available to help you make the most of your new 800 series tractor. You can handle the biggest pull type combine with ease, run a large tub grinder or operate a forage harvester. All 800 series tractors are built to handle your big PTO jobs, and still have enough tractive ability to pull through tough conditions.







936-300 HP

956-335 HP

976-360 HP

# THE 900 SERIES

## Top of the line power, productivity, and fuel efficiency.

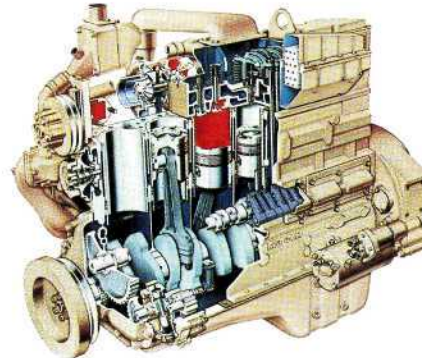
We've poured almost twenty years of 4WD experience into making the new VERSATILE 900 tractors the most productive and efficient ever. With three big engine horsepower ratings to choose from—310, 335 and 360 HP (231, 250 and 268 kW), you can match one of these high productivity tractors to the exact requirements of your operation.

All three 900's are designed and built for the realities of farming in the 80's. New LOAD SENSOR hydraulics provide pressure and flow only when needed, so more horsepower is available at the drawbar where it's needed most. Go with the proven reliability of our standard 12 speed mechanical transmission or choose the optional 12 speed Powershift transmission available on all models. It lets you adjust to changing field conditions on-the-go, for consistent engine RPMs and better fuel efficiency.

The cab on these 900 series tractors is the best in the industry. Better visibility, convenient controls and increased comfort all help get better mileage out of the most important farm input of all—you! You can cover more acres per day, squeeze more productivity out of each gallon of fuel, and keep doing it for more trouble-free seasons with a new 900-series tractor.

## Cummins Constant Power diesels provide reliability and performance that live up to the VERSATILE name.

The 900 series tractors are powered by one of the best ideas Cummins ever had—the Cummins Constant Power 14 litre in-line six cylinder diesel engine. The Constant Power design feature means you can maintain drawbar pull over a wide range of engine speeds. It provides a hefty 30% torque rise that lets you work through tough spots without shifting gears or lifting the implement. This field-proven engine helps you cover more acres, work more consistently, and burn less fuel doing it.



**Turbocharger**—The angle of the compressor wheel blade has been modified to increase the air flow and efficiency of this Cummins turbocharger. This produces better engine performance at low speeds, reduces smoke and ensures more efficient combustion.



**3 Pass Aftercooler:** The coolant in the Cummins 14 litre engine makes three passes through the aftercooler core. This means lower intake air temperature for denser air resulting in more complete combustion and longer engine life.

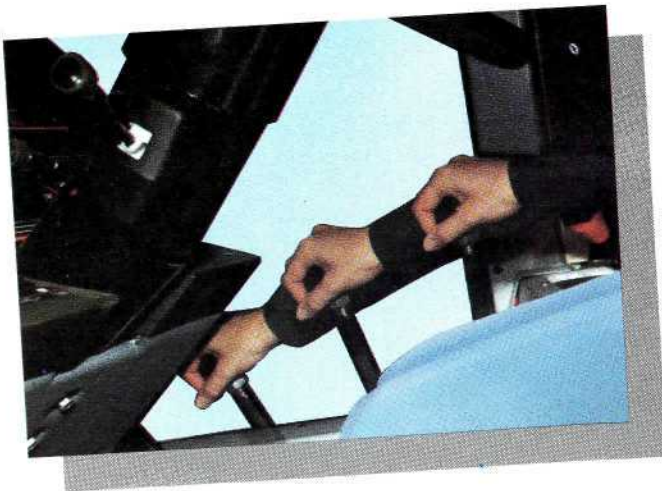
## Long life and easy service

All Cummins engine parts and components are made of high strength, long life, corrosion-resistant materials. Years of testing ensure that every part delivers the reliable service it was designed to give. And when it comes time to service a Cummins engine, VERSATILE modular design makes removal, maintenance and replacement of most engine parts a minor task, reducing costly down time.

# THE DESIGNATION 6 DRIVETRAIN

## Built VERSATILE tough to keep your tractor in the field.

The DESIGNATION 6 drivetrain is built in the Versatile tradition of simplicity of design, dependability of operation and quality. Engineered to convert more engine horsepower to productive pulling power, so you get more out of every gallon of fuel. Built to keep service time to a minimum. Modular design drivetrain means you don't have to split a DESIGNATION 6 tractor to service the drivetrain.



## 3 Transmissions to choose from:

- 12 speed mechanical transmission— 12 forward, 4 reverse gears
- Three-by-Five mechanical transmission— 15 forward, 5 reverse gears (model 836 only)
- 12 speed full Powershift transmission— 12 forward, 3 reverse gears

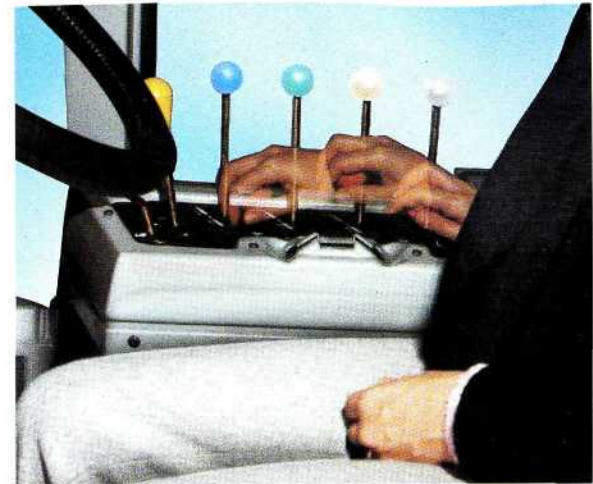
## Field-Proven 12 speed

This 12 speed mechanical transmission is specifically designed and built by Versatile for our high horsepower 4WD tractors. Gear and range speeds are in one unit, minimizing power loss. Helical cut, constant mesh gears mean more tooth contact for more reliable power transfer. This design also reduces transmission noise and adds to gear life. You get five field speed choices between 4 and 8 mph (6.44 and 12.8 km/h), the optimal speed range for today's big acreage farming.

The dry, mechanical two plate 15½" (394 mm) clutch used with the VERSATILE transmission provides high torque carrying abilities needed for 4WD, and has excellent wear characteristics.

## Three-by-Five synchro transmission

The VERSATILE 836 is available with a new Three-by-Five synchro transmission specially designed for precise speed selection in row crop work and PTO applications. Select from 5 tillage speeds in the critical 4 to 8 mph (6.44 to 12.8 km/h) range, and for PTO work, speeds start at 1.8 mph (2.9 km/h).



## 12 Speed Powershift available on all six models

The new VERSATILE 12 speed Powershift transmission lets you shift gears under full load without clutching. For ease of operation, a single lever controls forward, neutral, reverse and gear selections. You can shift from 1st through 12th without stopping the tractor. An easy-to-read digital display indicates your gear selection.

Closely spaced gear ratios allow you to match tractor speed to ground and load conditions precisely, so you can maintain operating efficiency through varied terrain. Choose from 5 ideally spaced gears in the 4-8 mph (6.44 to 12.8 km/h) tillage range.

A pedal operated master clutch provides inching capability in first forward and first reverse, for easier implement hook-up, and smooth tractor start-up under full drawbar load.

Hydraulically operated and electrically controlled, our transmission features simple countershaft design. Constant mesh gears and hydraulically operated clutches are applied in various combinations in response to signals from the electronic shift indicator. The VERSATILE Powershift transmission needs no torque converter; this means up to 25% more power at the drawbar.

## Rugged outboard planetaries

VERSATILE designed and built outboard final drives provide the final speed reduction and increase torque to the drive wheels. Floating ring gear design within the planetary system allows equal load sharing among all three planet gears. It's a simple, serviceable system with a rugged design for long, dependable life.



# THE ALL-NEW DESIGNATION 6 CAB



## The best control/comfort package in the industry.

DESIGNATION 6 tractors feature the best operator environment in the industry. The cab is wrapped in 49 square feet (5 m<sup>2</sup>) of tinted safety glass. Front posts have been eliminated altogether. You have an unrestricted field of vision so you can see exactly what's going on around you.

The cab door opens to your right, and there are convenient hand holds, for easier cab entry. Cab steps have been widened and angled for the same reason. Inside the cab, thick acoustical foam ceiling panels and inserts absorb more sound. The molded black natural rubber floor mat has an easy-to-clean surface, and also has excellent noise-absorbing qualities.

Special attention has been paid to sealing the console controls and floorboard openings. To avoid any solid connection which might transmit noise into the cab, controls are connected by flexible cables or electric control switches. The net effect of all these measures is that we've been able to reduce cab noise to a whisper-quiet level.

A tilt, telescopic steering wheel, and automatic weight compensating 9 adjustment air cushioned seat allow you to set up your new DESIGNATION 6 tractor so it's just right for you. You'll be just as comfortable at the end of a 10 hour day as when you started.

Cab air conditioner, pressurizer and heater are grouped in a modular unit built into the roof. The fresh air panel filter on the outside rear of the cab self-cleans when the cab door is slammed shut. And seven adjustable air louvres let you aim the air flow right where you want it.

The control panel is clean, functional and easy-to-read. Time-proven conventional gauges let you see engine RPM, fuel level, engine oil pressure and engine temperature at a glance.



All tractor functions are monitored, and 14 telltale warning lights alert you should any important tractor function fail.

The throttle, hydraulic, PTO and 3 point hitch controls are conveniently positioned on the operator-oriented console, to the right of the seat. Extensive testing has gone into designing this cab with your comfort and convenience in mind. You'll be spending long, demanding days here, so we've designed it to give you the best working conditions possible.

Overhead panel features easy to reach controls for heater, air conditioner, blower and front wiper. AM/FM radio and stereo cassette deck are also located overhead. Floor controls include a decelerator pedal, wide clutch and brake pedals, electric push button switch for front and rear differential locks, and gear shift lever.



# MAKING THE MOST OF YOUR 4WD

## LOAD SENSOR hydraulics

The VERSATILE state-of-the-art closed centre load sensing hydraulic system virtually eliminates parasitic power loss. Precise pressure and flow are provided to each hydraulic valve when needed. When no hydraulic power is needed, the variable displacement pump goes into low pressure standby mode, freeing engine horsepower to become pulling power.

DESIGNATION 6 tractors feature four standard and a fifth optional hydraulic outlet. LOAD SENSOR design helps you make the most of all five outlets. Precise matching of pressure and flow to the requirements of each hydraulic valve makes your hydraulic system more efficient. In orbital motor applications like running the fan on an air seeder or the pick-up on a pull-type combine, you've still got the hydraulic power you need to lift the implement for end of field turns. Oil flow in the 800 series hydraulic system is provided by a 25.2 US GPM (1.63 L/s) pump; the 900 series by a 24.5 US GPM (1.55 L/s) pump.

The implement control valve has been moved to the rear frame for improved accessibility. Lever actuated couplers on the implement spool accept all standard ASAE, SAE and ISO tips, and are mechanically operated for easy connect and disconnect of pressurized lines. This system eliminates oil spray and minimizes spillage.



## Easy steering under all conditions

Flow for the DESIGNATION 6 steering system is provided by a separate hydraulic pump, so that steering is never affected by hydraulic implement load. With this time-proven open centre steering system, oil flow is provided by a 25.9 US GPM (1.63 L/s) pump in the 800 series, and a 26.1 US GPM (1.64 L/s) pump in the 900 tractors. Overall improvements in the steering system have reduced steering effort by one third.

### 3 Point hitch

A Category IV N (convertible to Category III W) 3 point hitch is available on all DESIGNATION 6 tractors, so you can handle a full range of tool bar, mounted and semi-mounted implements. With the VERSATILE quick-hitch attachment, you simply back up, place the hooks under the implement, raise the hitch—and go!

Electric raise, lower and float positions give you precise implement control. And in tough conditions, this 3 point hitch has a position inching capability. This means you can ease up slightly through tough spots, and the hitch will automatically return the implement to the pre-set position when you're through.



### Differential locks ensure 4WD traction

Versatile provides two differential lock options to help maintain 4WD tractive ability and productivity in wet and hilly operations. An optional No-Spin differential is available for the front axle. It provides positive engagement of both wheels eliminating spin-out under the toughest conditions.

For more flexibility, driver controlled traction differentials (CTD) are also available on both axles. Floor mounted electric controls allow you to lock up one, or both axles. A friction plate assembly transfers torque from the slipping wheel to the wheel with traction, powering you through tough field conditions.





# VERSATILE SIMPLICITY OF DESIGN

## Means less down time and quicker, easier service.

DESIGNATION 6 tractors are designed in the VERSATILE tradition. Simple, modular design means everything is easy to get at and easy to understand. Fewer moving parts means there's less to break down, and less down time as a result.



## Hinged engine hood for easy access

The hinged engine hood gives you convenient access for checking hydraulic and engine fluid levels. This also permits complete engine servicing without engine removal.

## Conveniently located filters

The engine air intake and heater/air conditioner filters are easy to get at. As an added feature, the heater/air conditioner filter self-cleans every time you slam the air-tight door on your DESIGNATION 6 cab.

## Servicing decals

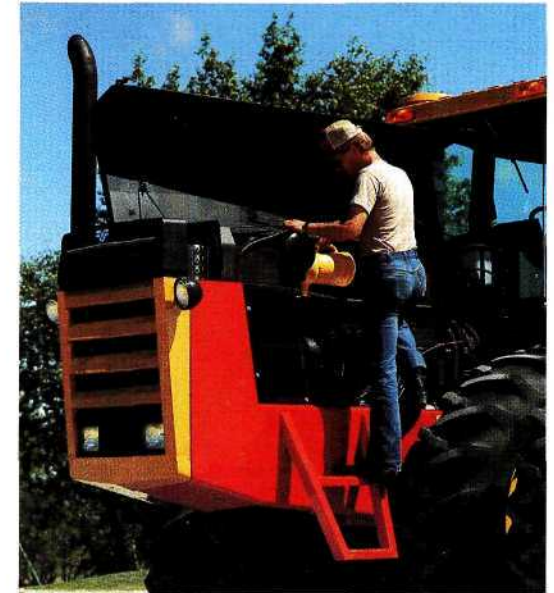
Conveniently located decals provide you with instant servicing information to assist you with tractor maintenance.

## New open frame concept

DESIGNATION 6 tractors feature a new open frame design that puts all the parts you need to reach for frequent servicing in plain view. Universal joints and rear drivelines are easy to reach for greasing. All DESIGNATION 6 implement valves have been moved to the rear frame for easier access.

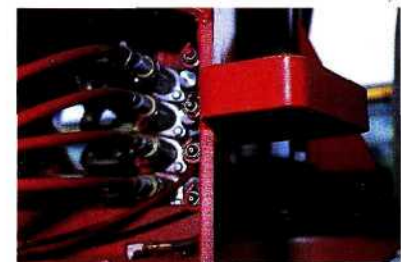
## MODULAR SERVICE drivetrain

Our MODULAR SERVICE drivetrain is one of the innovative design features that have helped make VERSATILE number one in four wheel drive. This feature allows you to service, remove and replace drivetrain parts without disturbing other components. When a drivetrain problem occurs on almost any other tractor, you know you'll have to split the tractor. You also know you may be facing



two or three days of down time. On those rare occasions where drivetrain problems crop up in a VERSATILE tractor, you can fix the problem and be back in the field in just half a day.

VERSATILE simplicity, quality and dependability mean you spend less time getting ready and more time producing every day. And that's how it should be, because productivity is what these new DESIGNATION 6 tractors are all about.



# DESIGNATION 6 SPECIFICATIONS

## 800 SERIES TRACTORS

### ENGINE:

Cummins 10 L (611 cu. in.) inline six cylinder diesel. Turbo-charged and intercooled (856/876). Constant Power-30% torque rise. Full load governed speed 2100 RPM. Oil pan capacity 7 U.S. gallons (26 L). Full flow oil filter with bypass oil conditioner filter and oil-to-water cooler.

TRACTOR MODEL	HP (kw) @ RPM	PEAK TORQUE (N•m) @ RPM
836	210 (157) @ 2100	683 lb-ft ( 926) @ 1300
856	240 (170) @ 2100	780 lb-ft (1058) @ 1300
876	280 (209) @ 2100	895 lb-ft (1213) @ 1300

### CLUTCH:

#### • WITH 12 SPEED MECHANICAL TRANSMISSION

Two plate, dry type. 2-14" (356 mm)—836/856/876. Built-in wear compensating device. Safety start switch built into clutch pedal. Ceramic button lined discs. Greaseable shaft bearing with slinger and greaseable release bearing. Integral disc type torque limited transmission brake.

#### • WITH THREE-BY-FIVE SYNCHRO MECHANICAL TRANSMISSION

Hydraulic 10 plate multiple disc. 7.75" (197 mm) disc diameter. Hydraulic clutch integral with the transmission. Hydraulic actuation with mechanical linkage.

#### • WITH FULL 12 SPEED POWERSHIFT TRANSMISSION

Multiple wet disc located in transmission. Also two plate torsional damper used as coupling device between engine and transmission.

### TRANSMISSION:

#### • 12 SPEED MECHANICAL

Versatile designed and built 12 speeds forward and 4 reverse speeds. Four shaft, vertically stacked arrangement. Constant mesh with sliding collar shifting. Independent lubrication system with pump, filter and cooler. Oil capacity 21.5 U.S. qt. (20.3 L).

#### • WITH THREE-BY-FIVE SYNCHRO MECHANICAL

Versatile designed and built 15 speeds forward and 5 reverse speeds. Arranged in 5 gear selections and 3 ranges. Synchronizers on the 1-5 gear selections. Hydraulic actuated transmission brake. Independent lubrication system with pump, filter and cooler. Oil capacity 25 U.S. qt. (24.6 L).

#### • 12 SPEED POWERSHIFT

12 forward speeds—3 reverse speeds. Full Powershift in all forward and reverse speeds. Constant mesh; four shafts vertically arranged with planetary on output shaft. Modulated master clutch for inching capability and to start tractor motion. Electronic shift control; single lever. Independent lubrication system. Oil capacity 18 U.S. qt. (17 L).

### AXLES:

#### OUTBOARD AXLE ASSEMBLY

Spiral bevel differential with VERSATILE designed outboard planetary, floating ring/sun gear final drive.

Differential ratio	4.88:1
Planetary ratio	5.625:1
Total ratio	27.45:1
Oil capacity	41.0 U.S. qt. (38.8L)

#### INBOARD AXLE ASSEMBLY

Spiral bevel differential with inboard planetaries. Adjustable wheel mounting; tapered wedge lock hub design 4" (105 mm) diameter axle shafts.

Differential ratio	3.53:1 (836)	2.95:1 (856)
Planetary ratio	7.80:1 (836)	9.36:1 (856)
Total ratio	27.53:1 (836)	27.61:1 (856)

### DRIVELINES:

Heavy duty drivelines with strap type bearings and glide-cote slipjoints.

### BRAKES:

Twin piston, floating caliper hydraulically actuated by foot pedal. Single disc mounted on transmission output shaft. 17" (432 mm) disc on mechanical transmission. 18" (457 mm) disc on Powershift transmission. Park brake integral with road brake, actuated by overcenter lever.

### FRAME:

Articulated frame 42° each side. 30° total oscillation. Front frame  $\frac{3}{8}$ " (10 mm) formed and welded side plates. Axle is bolted rigidly to 35.4" (900 mm) wide front frame. Rear frame  $\frac{1}{2}$ " (12 mm) formed and welded side plates with  $\frac{5}{8}$ " (16 mm) rear plate. Axle is bolted rigidly to frame.

### CAB:

Independent modular type with rollover protective structure. Isolate on rubber mounts.

### HYDRAULICS:

Open center steering circuit with closed center load sensing implement circuit. 100 mesh suction filter and 10 micron return filter. Common oil cooler and 15.3 U.S. gallon (58 L) oil reservoir.

- Implement circuit—piston pump. 25.2 U.S. GPM (1.63 L/s) flow at 2100 RPM. Low pressure standby 300 psi (2.06 MPa). High pressure standby 2400-2500 psi (16.5-17.2 MPa). Four spool (5th optional) implement valve. Each spool 4 way acting with float and 2250 psi (15.5 MPa) detents. Separate flow control. Lever type quick couplers.
- Steering circuit: gear pump. 25.9 US GPM (1.63 L/s) flow at 2100 RPM. Pilot operated relief valve 2300 psi (15.9 MPa). Steering valve 45 in<sup>3</sup>/rev (783 cm<sup>3</sup>/rev) 4.5 turns to lock.

### COOLING SYSTEM:

55 us qt (52.1 L) capacity. Rubber mounted radiator with 859 in<sup>2</sup> (5540 cm<sup>2</sup>) frontal area. 9 fins per inch (3.5 fins per cm). Independent surge tank with 7 psi (48 kPa) pressure cap and coolant probe which activates warning lamp and audio at 212°F (100°C) coolant temperature, 28" (710 mm) diameter 6 blade sucker type fan.

### AIR CLEANER:

Dual element, dry type with safety element, exhaust aspirated precleaner. Elements removable from ground level. Restriction indicator on air cleaner, visible from inside cab.

### ELECTRICAL:

12 V negative ground. 90 amp alternator. Four maintenance free batteries. 625 cold cranking amps each. 2-roadlights-8 halogen worklights. Seven pin trailer connector.

### THREE POINT HITCH:

Category IV N convertible to Cat III W. Maximum load capability 24" (610 mm) behind lower pins 21700 lbs (9840 kg). Minimum hydraulic lift force capability 11960 lbs (5425 kg). Electronic position control with manual override. Cat IV N quick hitch available.

### FUEL TANKS:

246 us gallon (933 L) capacity. Two saddle type, low mount tanks with crossover tube and filler neck on both tanks.

### DIMENSIONS:

Wheelbase 130" (3300 mm). Overall length 260" (6600 mm). Overall height (to top of exhaust stack), 131" (3340 mm). Turning radius (42° turn) 170.7" (4333 mm) to center of tractor. Maximum operating weight 28000 lbs (12700 kg) 836/856. 29500 lbs (13380 kg) 876.

MODEL	ENGINE	HORSEPOWER
836	10 L	210 (157 kW)
856	10 L	240 (179 kW)
876	10 L	280 (209 kW)
936	14 L	310 (231 kW)
956	14 L	335 (250 kW)
976	14 L	360 (268 kW)

## 900 SERIES TRACTORS

### ENGINE:

Cummins Big Cam III NTA 855 inline six cylinder diesel. Turbocharged and intercooled. Constant Power-30% torque rise. 855 cu. in. (14 L) displacement. Full load governed speed 2100 RPM. Oil pan capacity 9.8 U.S. gallons (37 L). Full flow oil filter with bypass oil conditioner filter and oil-to-water cooler.

TRACTOR MODEL	HP (kw) @ RPM	PEAK TORQUE (N•m) @ RPM
936	310 (231) @ 2100	975 lb-ft (1322) @ 1400
956	335 (250) @ 2100	1075 lb-ft (1457) @ 1400
976	360 (268) @ 2100	1170 lb-ft (1586) @ 1400

### CLUTCH:

- **WITH 12 SPEED MECHANICAL TRANSMISSION**  
Two plate, dry type. 2-1½" (394 mm) diameter plates. Built-in wear compensating device. Safety start switch built into clutch pedal. Ceramic button lined discs. Greaseable shaft bearing with slinger and greaseable release bearing. Integral disc type torque limited transmission brake.
- **WITH 12 SPEED POWERSHIFT TRANSMISSION**  
Internal multiple wet disc. Also two plate torsional damper used as coupling device between engine and transmission.

### TRANSMISSIONS:

- **12 SPEED MECHANICAL**  
Versatile designed and built 12 speeds forward and 4 reverse speeds. Four shaft, vertically stacked arrangement. Constant mesh with sliding collar shifting. Independent lubrication system with pump, filter and cooler. Oil capacity 21.5 U.S. qt. (20.3 L).

### • 12 SPEED POWERSHIFT

12 forward speed—2 reverse speeds; full Powershift capability. Modulated master clutch for inching capability. Electronic shift control; single lever. Independent lubrication system. Five shaft vertically stacked arrangement, constant mesh. Oil capacity 50 U.S. qt. (47.3 L).

### AXLES:

Spiral bevel differential with Versatile designed outboard planetary, floating ring/sun gear final drive

Differential ratio	4.88:1
Planetary ratio	5.285:1
Total ratio	25.79:1
Oil capacity	41 U.S. qt. (38.8L)

### DRIVELINES:

Heavy duty with strap type bearings and glidecote slipjoints.

### BRAKES:

Twin piston, floating caliper hydraulically actuated by foot pedal. Single disc mounted on transmission output shaft. 17" (432 mm) disc on mechanical transmission. 20" (508 mm) disc on powershift transmission. Park brake integral with road brake, actuated by overcenter lever.

### FRAMES:

Articulated frame 42° each side. 30° total oscillation. 3½" (89 mm) diameter steering cylinders. Front frame ¾" (10 mm) formed and welded side plates. Axle is bolted rigidly to 39" (1000 mm) wide front frame. Rear frame ½" (12 mm) formed and welded side plates with ⅝" (16 mm) rear plates. Axle is bolted rigidly to frame.

### CAB:

Independent modular type with rollover protective structure. Isolate on rubber mounts.

### HYDRAULICS:

Open center steering circuit with closed center load sensing implement circuit. 100 mesh suction filter and 10 micron return filter. Common oil cooler and 14.5 U.S. gallon (55 L) oil reservoir.

- Implement circuit: piston pump  
24.5 U.S. GPM (1.55 L/s) flow at 2100 RPM. Low pressure standby 300 psi (2.06 MPa). High pressure standby 2400-2500 psi (16.5-17.2 MPa). Four spool (5th optional) implement valve. Each spool 4 way acting with float and 2250 psi (15.5 MPa) detents. Separate flow control. Lever type quick couplers.
- Steering circuit: gear pump  
26.1 US GPM (1.64 L/s) flow at 2100 RPM. Pilot operated relief valve 2300 psi (15.9 MPa). Steering valve 60 in<sup>3</sup>/rev (983 cm<sup>3</sup>/rev) 4.5 turns to lock.

### COOLING SYSTEM:

63.7 US qt (60.3 L) capacity. Rubber mounted radiator with 1213 in<sup>2</sup> (7825 cm<sup>2</sup>) frontal area. 9 fins per inch (3.5 fins per cm). Independent surge tank with 7 psi (48 kPa) pressure cap and coolant probe which activate warning lamp and audio at 212°F (100°C) coolant temperature, 32" (813 mm) diameter 8 blade sucker type fan.

### AIR CLEANER:

Dual element, dry type with safety element, exhaust aspirated precleaner. Elements removable from ground level. Restriction indicator on air cleaner, visible from inside cab.

### ELECTRICAL:

12 V negative ground. 90 amp alternator. Four maintenance free batteries. 625 cold cranking amps each. 2-road-lights-8 halogen worklights. Seven pin trailer connector.

### THREE POINT HITCH:

Category IV N convertible to Cat III W. Maximum load capability 24" (610 mm) behind lower pins 21700 lbs (9840 kg). Minimum hydraulic lift force capability 11960 lbs (5425 kg). Electronic position control with manual override. Cat IV N quick hitch available.

### FUEL TANKS:

286 US gallon (1085 L) capacity. Two saddle type, low mount tanks with crossover tube and filler neck on both tanks.

### DIMENSIONS:

Wheelbase 130" (3300 mm). Overall length 260" (6600 mm). Overall height (to top of exhaust stack). 139" (3530 mm). Turning radius (42° turn) 170.7" (4333 mm) to center of tractor. Maximum operating weight 32,500 lbs (145 15 kg) 936 36000 lbs (26329 kg) 956/976.

 **VERSATILE**  
We've got a name to live up to.

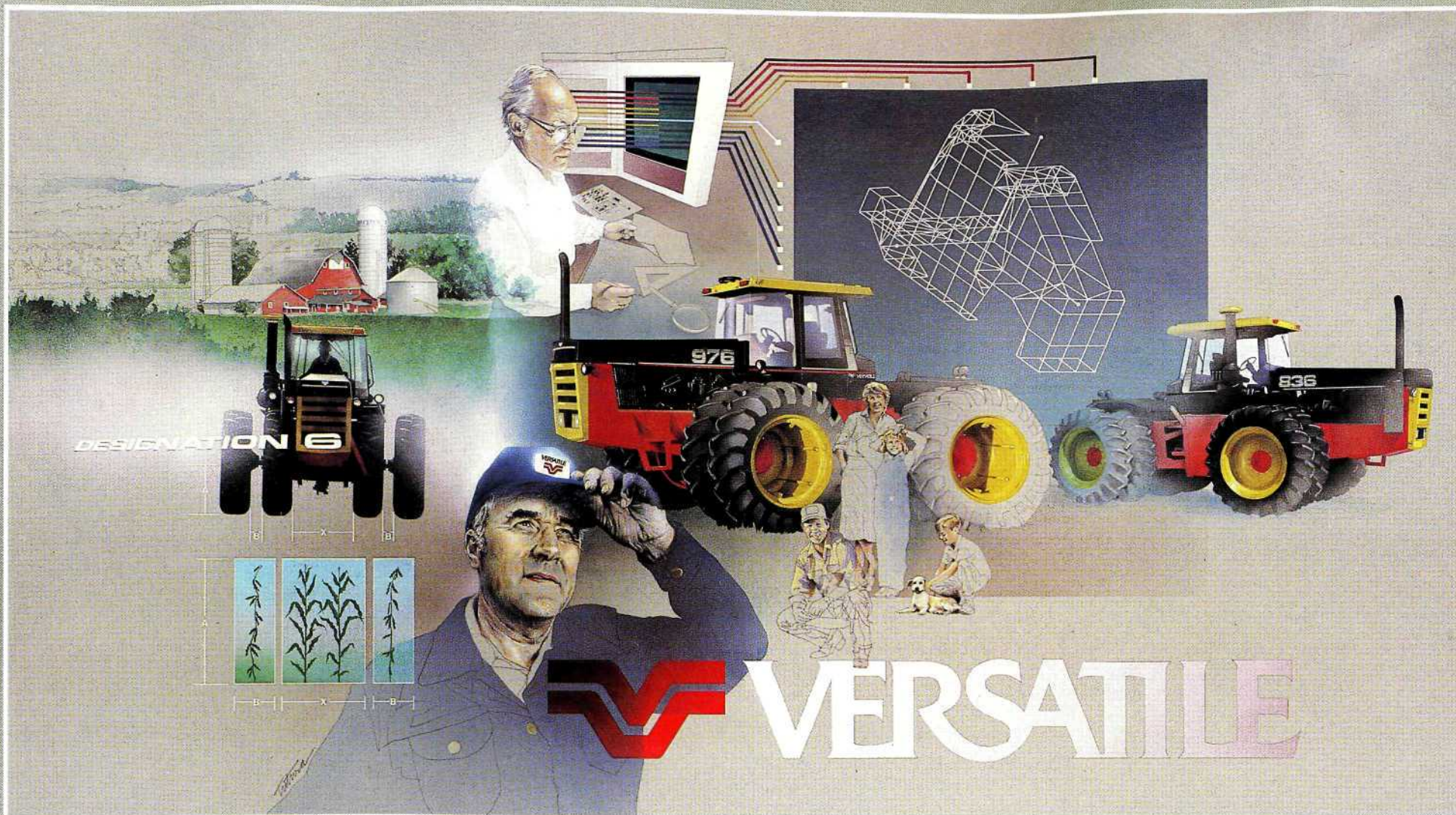
Versatile Farm Equipment Company  
A division of Versatile Corporation  
1260 Clarence Avenue, Box 7300  
Winnipeg, Manitoba, Canada R3C 4E8

Versatile Farm Equipment Company  
5900 Deramus Avenue  
Kansas City, Missouri, U.S.A. 64120

Versatile Farm Equipment Pty. Ltd.  
321 Douglas Mawson Road, East Dubbo  
P.M.B. 18, Dubbo, N.S.W. 2830 Australia

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TRANSMISSION OPTIONS	PTO	AXLE OPTIONS
12 speed	N/A	OUTBOARD, ROW CROP
Three-by-Five	STD	OUTBOARD, ROW CROP
Powershift	STD	OUTBOARD, ROW CROP
12 speed	N/A	OUTBOARD, ROW CROP
Powershift	STD	OUTBOARD, ROW CROP
12 speed	N/A	OUTBOARD
Powershift	OPT	OUTBOARD
12 speed	N/A	OUTBOARD
Powershift	N/A	OUTBOARD
12 speed	N/A	OUTBOARD
Powershift	N/A	OUTBOARD
12 speed	N/A	OUTBOARD
Powershift	N/A	OUTBOARD



### Expert Service

All six DESIGNATION 6 tractors are designed VERSATILE dependable, to cut costly down time. VERSATILE simple, so if there is a problem, most people find they can handle it themselves. When you need an expert, your Versatile Dealer and his staff are ready to help every way they can. Versatile mechanics are fully factory trained, so they know every bolt on these machines. And they've got a ready stock of parts, so they can get you back in the field in no time!

### Extended Warranty

The only feeling more secure than owning a VERSATILE tractor, is owning a VERSATILE tractor with an extended warranty! Be sure to ask your Versatile Dealer for all the details on the purchase of the special extended second and third year drive train parts warranty available on all DESIGNATION 6 tractors. It's the kind of extra effort farmers have come to expect from Versatile, and they get it every time. After all—we've got a name to live up to!

 **VERSATILE**<sup>®</sup>  
We've got a name to live up to.