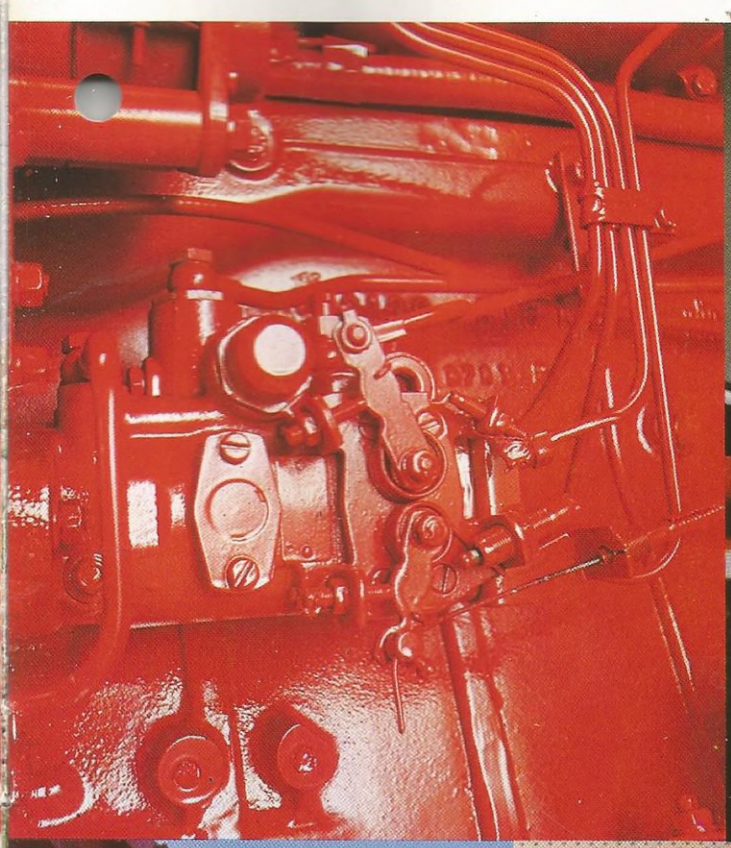
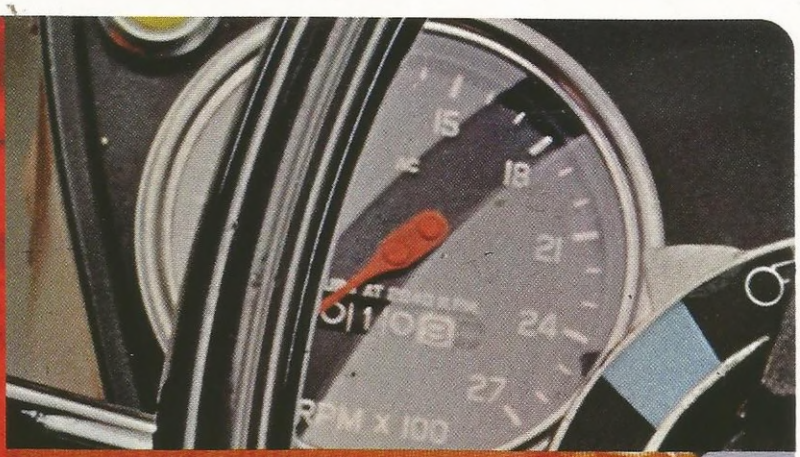
International 574

The 62 HP Diesel Tractor with today's most advanced tractor transmissions

FULLY SYNCHROMESH GEARS • TORQUE AMPLIFIER • HYDROSTATIC DRIVE

The 574 – planned for action down to the last detail

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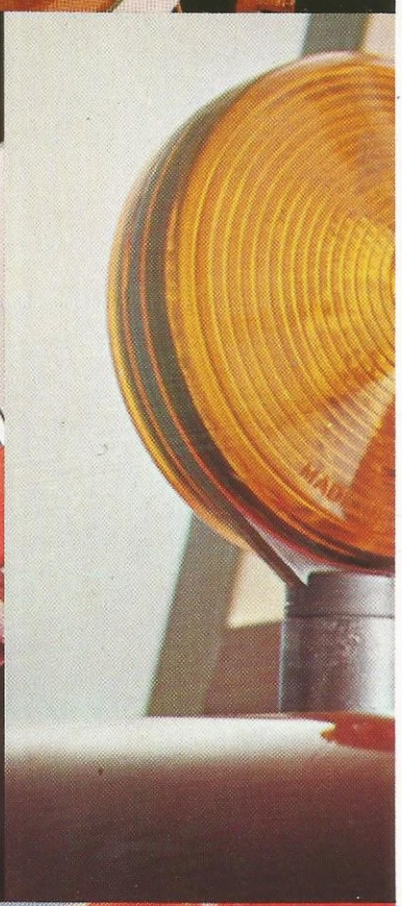
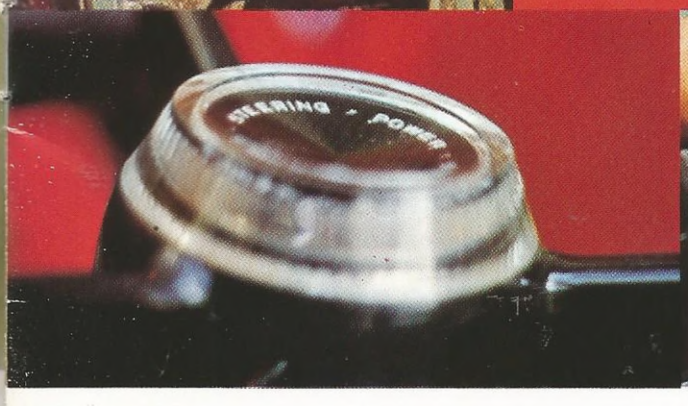
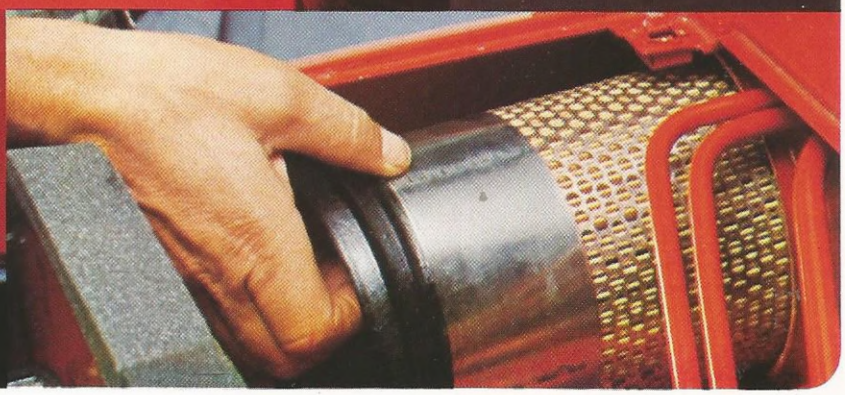
RPM x 100

INTERNATIONAL

INTERNATIONAL




STEERING - POWER



Your first glance tells you a lot of fresh thinking has come to tractor design.

Low Profile.
Made possible because of new design approach and new driver's position.

Good Clearance.
Smooth under-side with no projections to snag crops.

Sharp Design.
Smarter overall shape with a tidy engine compartment.

New Driving Position.
Lower, in front of rear axle with fuel tank behind. Simpler to mount, a more comfortable ride.

Clear Deck.
No trips or traps when you get on or off.

Power Steering — Hydrostatic.
It even steers with the engine stopped. The absence of mechanical linkage gives a neater and tidier layout.

Clean Engine Design.
No jungle of pipes and wires.

Hip Level Controls.
Down by your sides, they come naturally to hand.

Safety Cab or Frame.
Both with exceptional all-round visibility, modern design, and officially approved.

574

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Swept-back Front Axle.
More manoeuvrability and better turning circles for all wheel settings.

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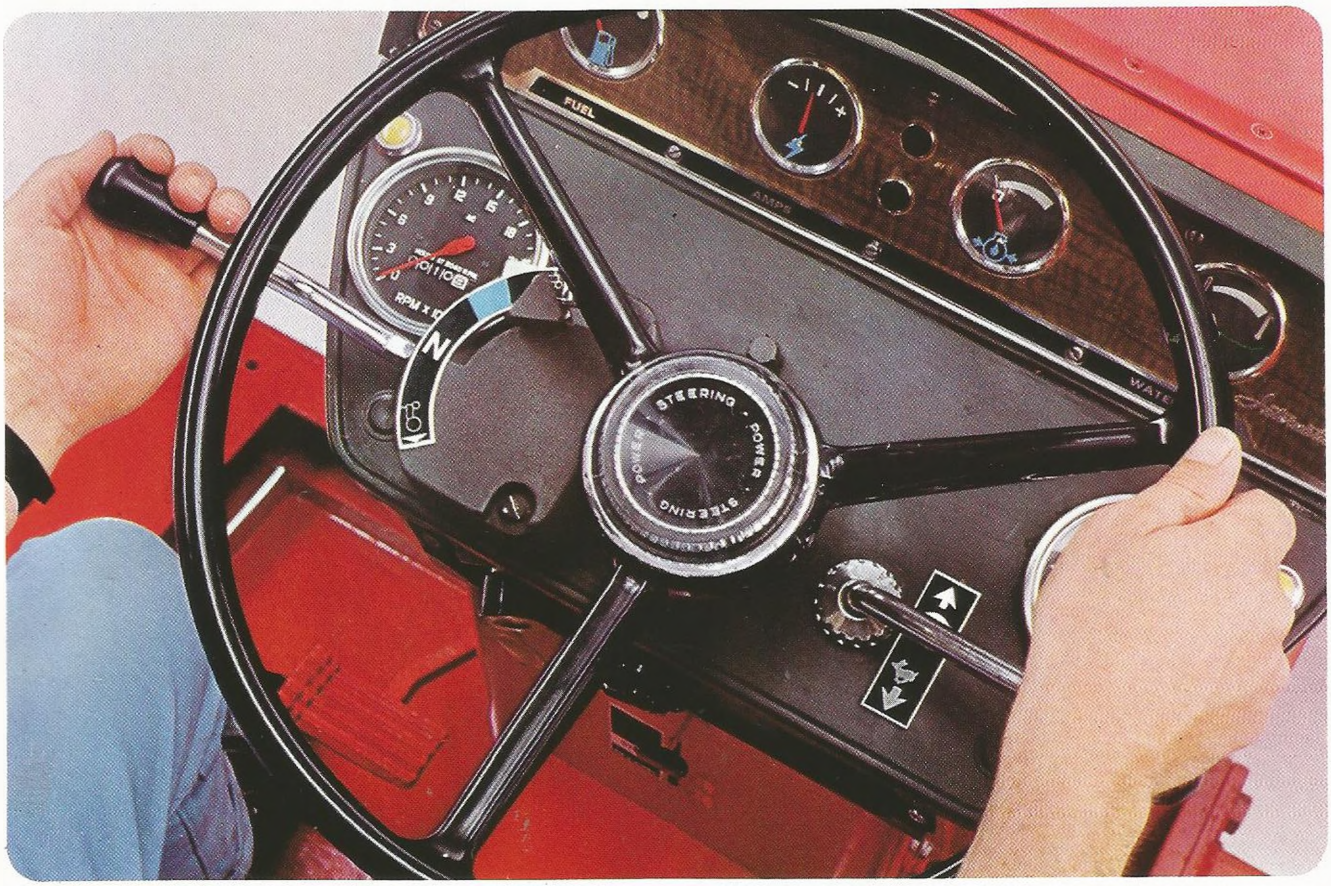
Clean Engine Design.
No jungle of pipes and wires.

Hip-Level Controls.
Down by your sides, they come naturally to hand.

Safety Cab or Frame.
Both with exceptional all-round visibility, modern design, Ministry approved.

You decide on a Tractor mainly for its individual advantages



Full Instrumentation

All the information you need is available from the tractometer, the ammeter, fuel, oil pressure and heat indicator gauges, displayed on the modern automotive instrument panel. The optional speedometer is supplied as standard on the hydrostatic drive model.

Power Steering is Standard

Not only does the power steering take a lot of the effort out of driving, it makes the tractor respond faster to your commands taking all the hard work out of steering on the field or road. You can even steer with the engine stopped.

Hip level controls

See how much more logical is the layout of the 574. All the controls are now within easy reach, coming naturally to hand, making their operation more efficient and their reaction more critical.

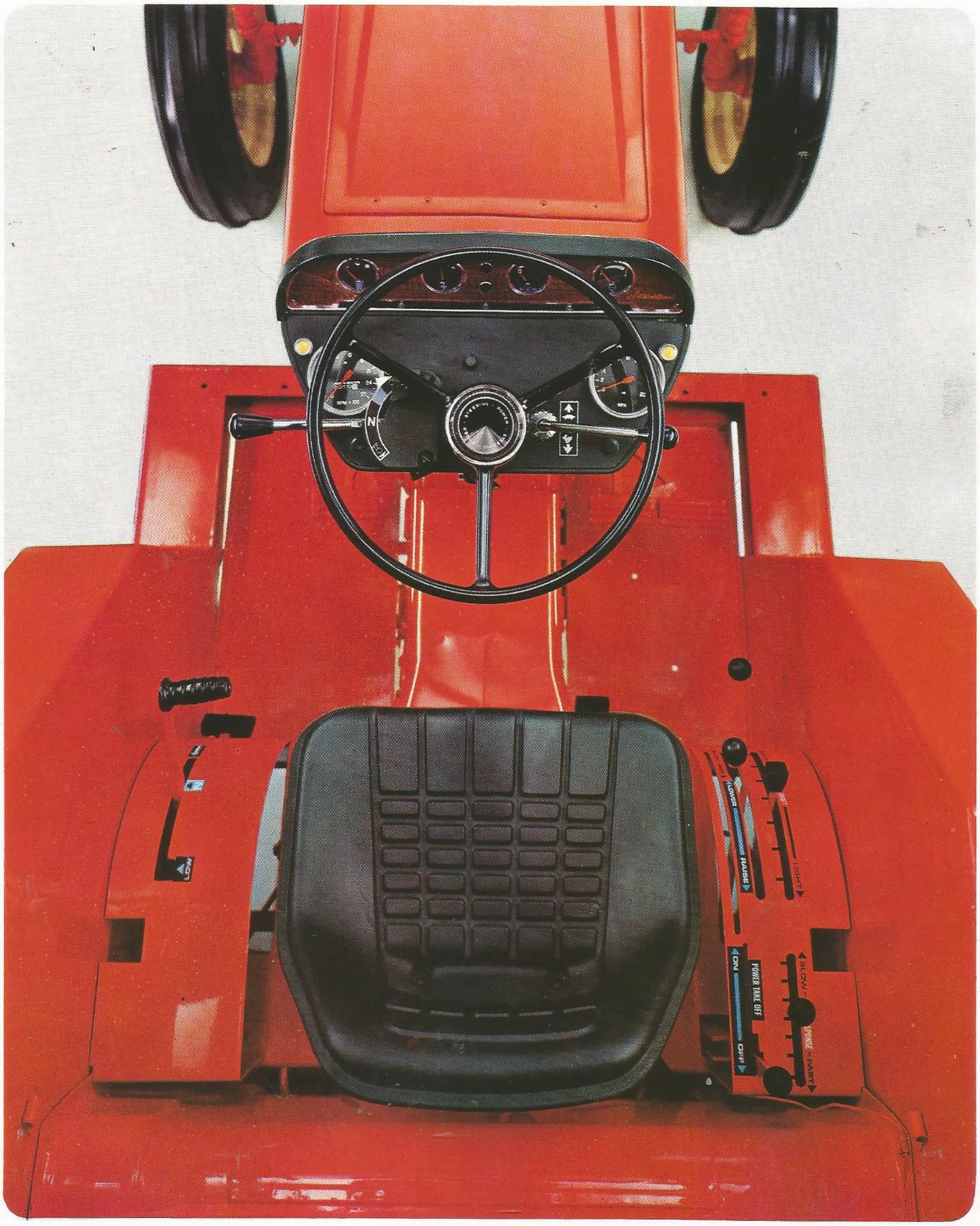
Clear-way deck for easy mounting

The complete operator's compartment has been designed on the new tractor, to make it the easiest to get on and off. The gear levers and fuel tank have been moved, and the extremely comfortable, fully adjustable seat is placed low down and forward of the rear axle. The diff-lock pedal folds away and pendant brake and clutch pedals simplify access.

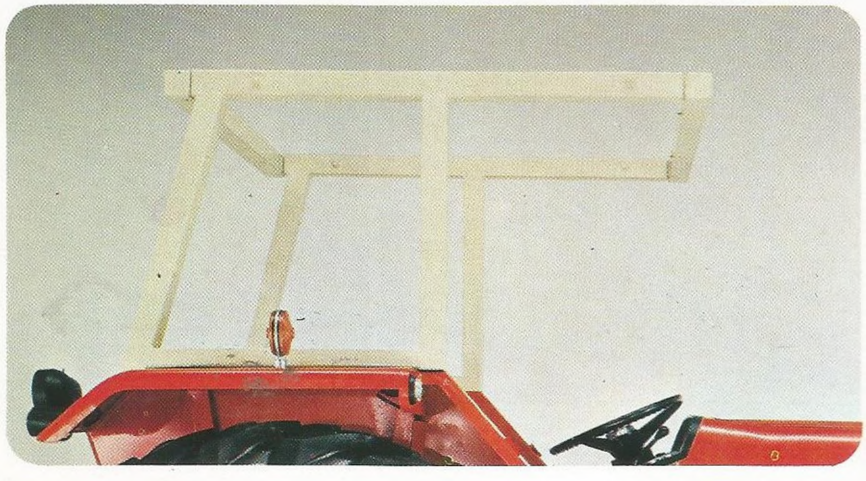
'Dyna Life' Clutch

The material on the 574 clutch plate was originally developed for the exacting needs of the aerospace industry. It is cerametallic, and gives you reliable performance under all conditions and provides a far longer clutch life. An electrically operated safety switch ensures that the engine cannot be started unless the clutch pedal is depressed.

The 574 – designed with you in mind



Built-in safety



Choice of Safety Cab or Frame

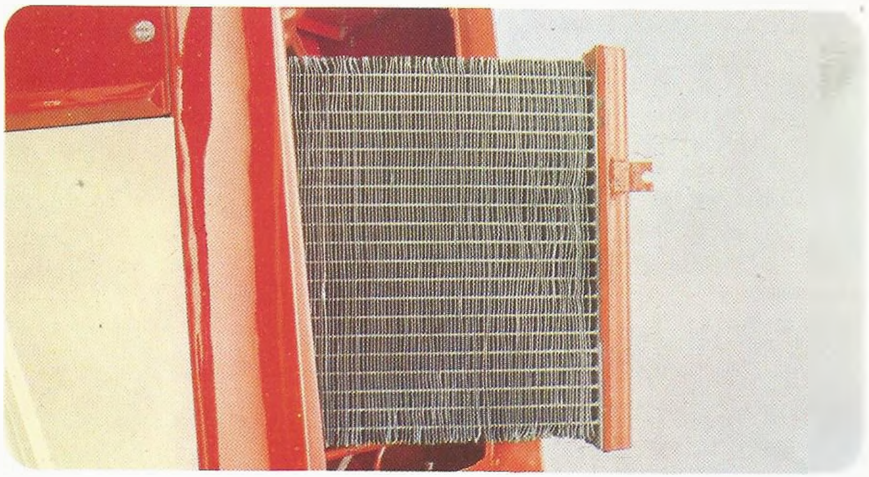
The 574 is available with either Safety Cab or Safety Frame. Both bear the Ministry of Agriculture Approval. A feature of the Safety Cab is the exceptional all-round vision. It has two doors, hinged rear window for access to implements, windscreen wiper, trafficators, and a sound absorbing roof. Not only is the Safety Cab a completely enclosed, draught proofed cabin for the driver but, in fine weather, the cab can be easily and quickly stripped to leave only the safety frame.

(Safety Cab is optional extra).

The 574 has the best combination of important advantages in its power class

Dry Air Cleaner – 98% Efficiency

The 574 has an air cleaner with exceptionally high efficiency level – 98% – thanks to a micronic filter element and its own automatic dirt unloader.

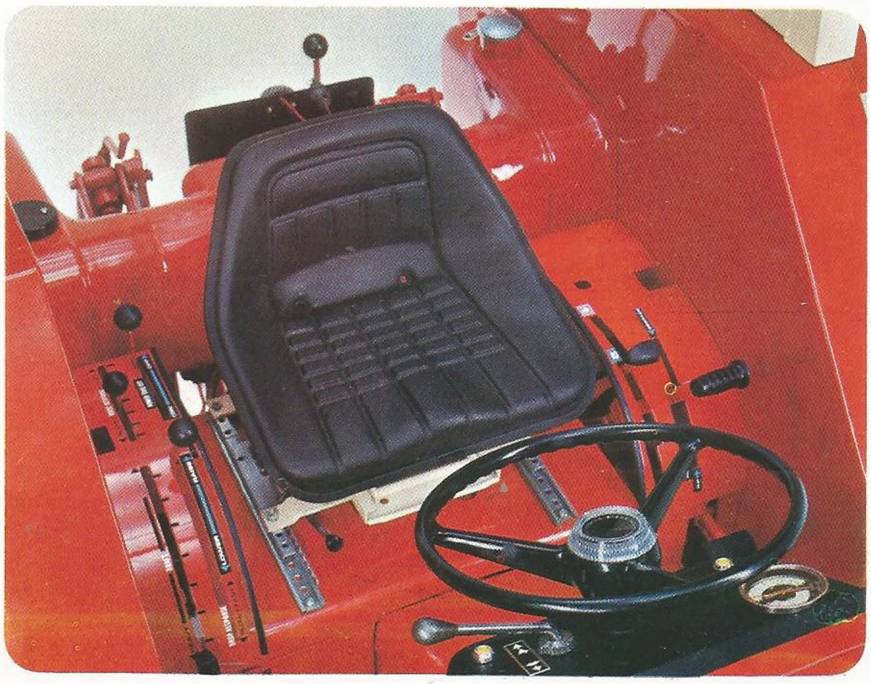


Swing-out Oil Cooler

The 574 has many hydraulically operated devices to make the driver's life easier. For this reason the 574 has its own oil cooler to keep constant oil viscosity for optimum efficiency under varying climatic conditions. The swing-out oil cooler and radiator behind are easily serviced and cleaned after removal of the grill.

Fuel tank – 17 gallons

The fuel tank, placed behind the driver's seat, is easy to get at and helps to make an enclosed driver's compartment. One filling of this 17 gallon tank is sufficient for a good day's work.



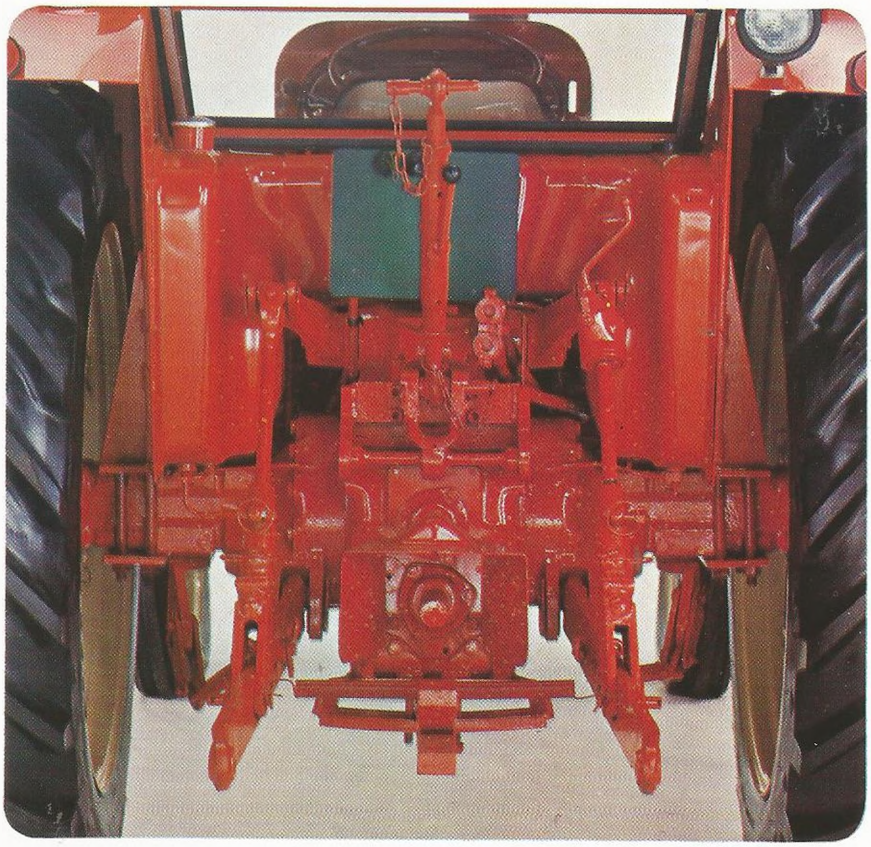
Self-Adjusting Hydraulic Disc Brakes

Don't worry about one set of brake linings wearing down through ploughing or similar work. These brakes have independent master cylinders which adjust to the wear and thickness of the linings. When latched together for road travel or similar work, a balancer valve ensures equal braking on both rear wheels.

Telescopic Front Axle

The Adjustable front axle is telescopic with a tapered, welded box-section axle assembly giving great strength. Wheel widths adjust from 48" to 80" in 4" total increments.

With the 574 horsepower means workpower



Fully Live Hydraulics

The extra big capacity pump (10 gallons a minute) enables the implement hydraulics to work at an impressive speed. On front-end loading, for example, this is two or three times faster than most tractors. The 3 point linkage torsion-bar top link sensing gives extremely accurate control. Category 1 and 2 linkage is standard.

Differential Lock

The final drive is a planetary design with a differential lock as standard equipment. INTERNATIONAL, you may remember, was first to introduce differential lock back in 1956.

Choice of Drawbars

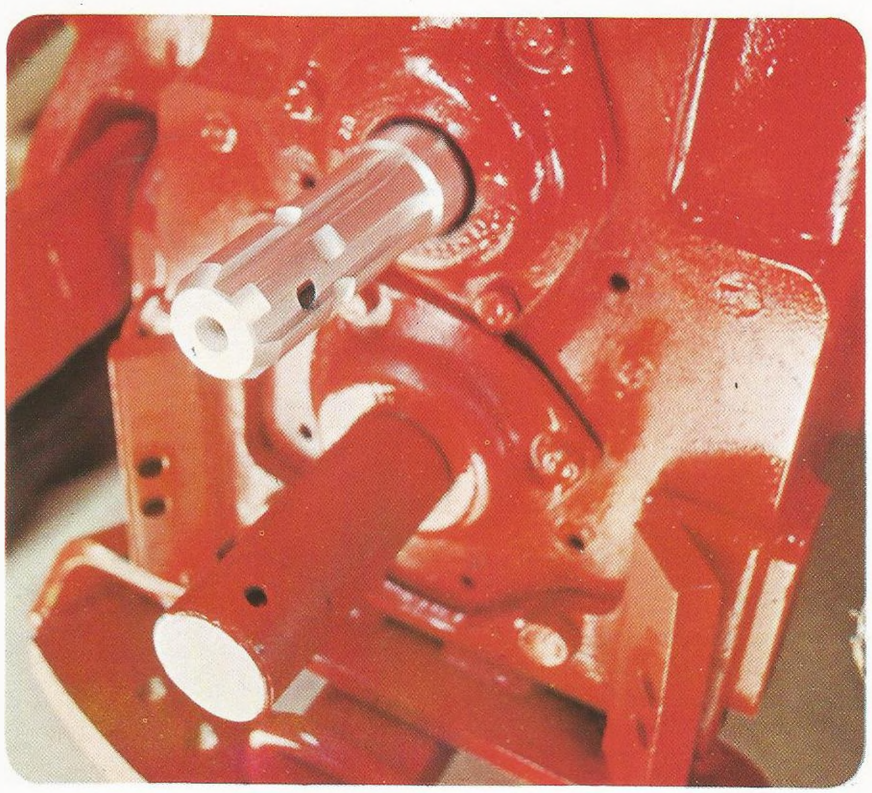
The 574 offers a choice of two drawbars, both with adjustable height clevis and conforming to SAE and BS dimensions. These are a three positioned drawbar incorporating a pick up hook, designed for use with the automatic hitch ; or a swinging drawbar.

Independent PTO—52hp

The Independent pto delivers 52 hp at 2200 rpm (2400 rpm hydrostatic) and incorporates a 5 inch hydraulically operated Multiplate wet clutch. The control is conveniently positioned for the driver's right hand. Dual speed pto is standard on the 574.

Permanent Automatic Hitch

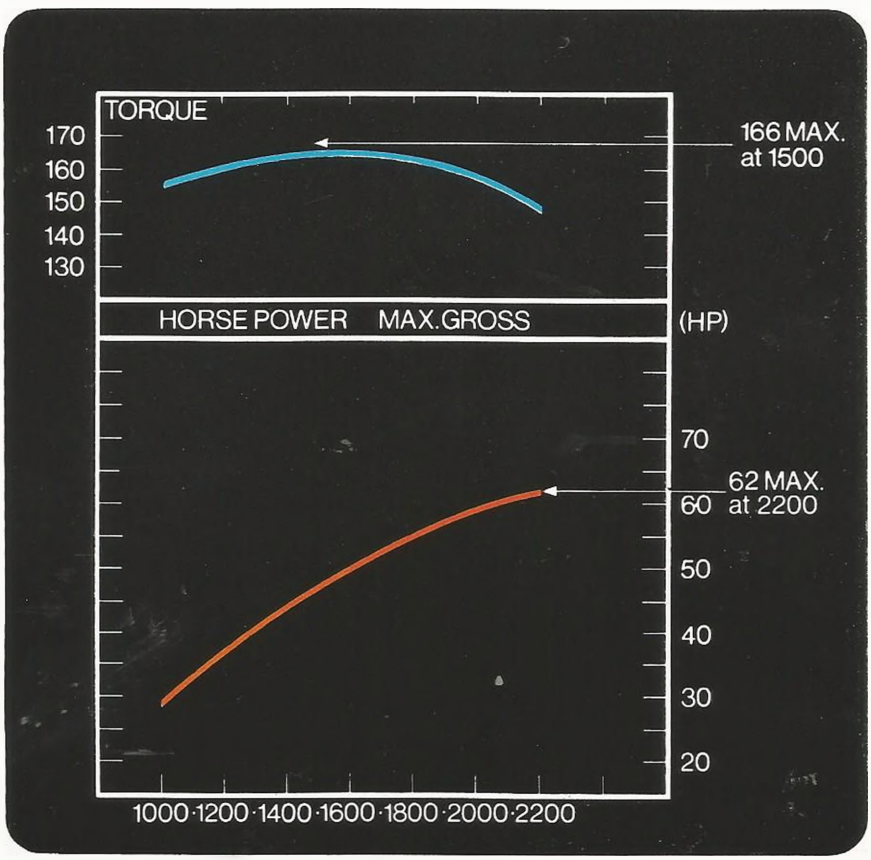
There is no time wasted removing the draw bar when you attach the automatic hitch. The 574 lets you keep both on together.
(Automatic Hitch is optional extra).



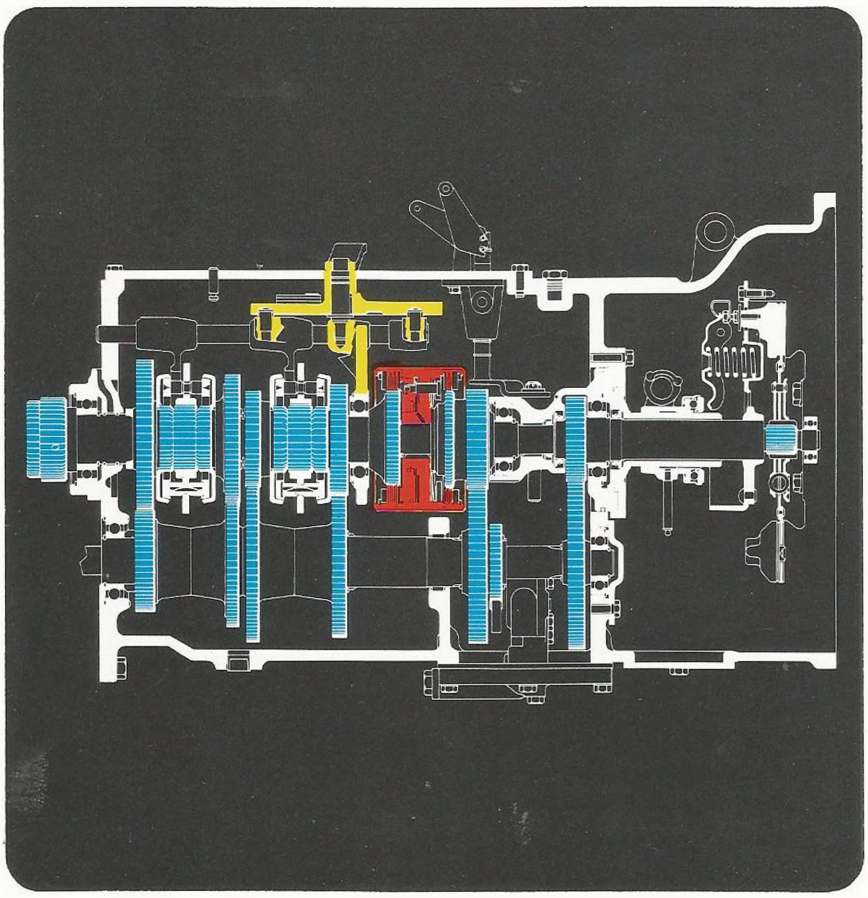
Powerful - 62 HP - long stroke, high torque, easy starting engine

The International four cylinder water cooled diesel engine delivers 62 hp max gross at 2200 rpm with a maximum torque of 166 lbs/foot. This is a high performance modern power unit, smooth running with economical fuel consumption. The high thermal efficiency of this direct injection engine gives instantaneous easy starting. Notice the clean design and ease of servicing ; electrical equipment on the one side, oil and fuel services on the other.

This long stroke, high torque engine is fitted with a self-lubricated rotary injection pump, a replaceable micronic fuel filter element and hydraulic governers for fast responsive control and simplified maintenance. The cylinder head includes rotary valves for long life, helicoidal intake manifold for complete air-fuel mixture giving optimum combustion and a large exhaust manifold for faster out-let of exhaust gases. The spherical oval ground pistons, made of aluminium silicon alloy for trouble free efficient operation, run in replaceable wet cylinder sleeves for increased cooling efficiency. The drop-forged, chrome-molybdenum steel crank shaft is both dynamically and statically balanced to give smooth, vibration-free operation at all engine speeds. Lubrication of this engine, built by International Harvester to exacting engineering specifications, is effected by a pressure feed system. Oil is filtered by a main full-flow filter with throw away cartridge ; the cartridge includes a by-pass valve safety feature, ensuring oil reaches the bearings even when the filter element is clogged. This results in minimum wear, smooth performance for a long powerful life.



The 574 gives you a choice of synchromesh transmissions with Torque Amplifier option



The fully synchromesh International transmission gives you an automotive type of gear change. It provides 8 forward speeds and 4 reverse. The 574 offers you a choice of four fully synchromesh transmissions.

For extra ease of speed change when under load or on the move, the optional IH Torque Amplifier is available. With a touch of the T/A lever, each basic gear speed is reduced by 17%, with full engine braking in all gears. This gives you 16 forward and 8 reverse synchromesh gears.

Or move up to the ultimate in simplified transmissions – Hydrostatic

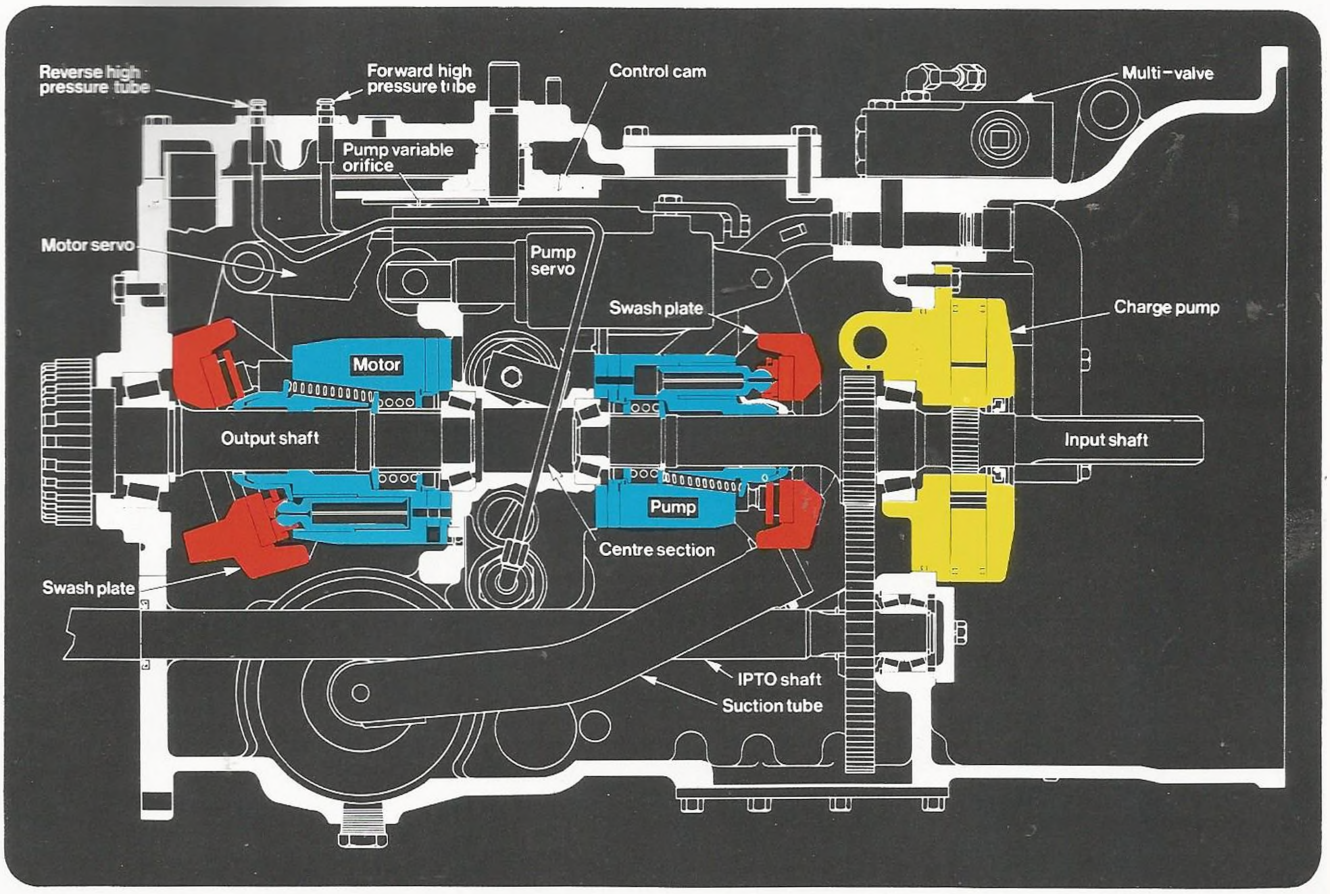
It gives you speeds from 20 mph above to 9 mph below and everything in between.

No gears.
No clutch.
No changing engine speeds.
Just a small lever.

This is the simplest form of transmission available today. It has already been used in many parts of the world, so you know it has been thoroughly tried and tested.
In engineering terms there is nothing new about the principle of Hydrostatic energy transfer; it is used in many aspects of industry today.
International Harvester were the first major tractor manufacturing company to successfully use Hydrostatic drive in the transmissions of production tractors of various sizes.

How IH Hydrostatic Drive Works

The tractor engine drives a variable output hydraulic pump which supplies oil to a variable speed hydraulic motor. This in turn is connected to the final drive and rear wheels. Variable output of pump and speed of motor are both jointly controlled by the speed control lever.
With IH Hydrostatic transmission you have an infinitely variable choice of speeds from 20 mph forward to 9 mph reverse with never a break in power.
A further refinement is the provision of a low range, giving increased torque for heavy tillage and work with heavy draft loads.
A 'Foot-'n-inch' pedal in the usual clutch position allows close manœuvering when attaching equipment.
There are no gears to shift. There is no clutch pedal. You can now do every job at exactly the right ground speed from 20 mph above to 9 mph below with immediate response from the hydraulics – all the time – at the most economical engine speed. This adds



up to peak performance – for example :

MAXIMUM USE OF HORSEPOWER AT ALL TIMES UNDER ANY CONDITIONS.

Hydrostatic drive enables you to utilize maximum horsepower at any speed. Maximum horsepower is rated at 2400 rpm. So in ploughing, for example, if the rpm decreases under heavy load, all you do is decrease ground speed until the rpm indicator reaches 2400. At this point you are utilizing maximum horsepower. For lighter loads, ground speed may be increased.

VARIABLE SPEEDS, ALL TIMES UNDER ALL CONDITIONS.

In planting, or close cultivation conditions, you match engine rpm to ground speed to get maximum efficiency. Just move the speed control forward and cut back the throttle until you can maintain the desired ground speed at the lowest rpm to provide the necessary power to do the job – at minimum fuel consumption.

MATCHING PTO LOADS WITH GROUND SPEEDS.

PTO work for a hydrostatic tractor is a 'natural'. Set your engine rpm to the required pto speed and move the speed control to the fastest practical ground speed. In heavy loads you reduce the ground speed ; with lighter loads you increase ground speed.

IH Hydrostatics means—
No Gears
No Clutch
No change of engine speed
From 20 m.p.h. forward to 9 m.p.h. in reverse, and everything in between.

The New International 574– designed from the ground up to work harder and make your life easier

INTERNATIONAL 574

GENERAL SPECIFICATION

ENGINE

International	D.239 Diesel
No. of Cylinders	4
Type	Direct Injection
Piston Displacement	3915 cm^3 239 in^3
Horse Power – Max Gross	62
Rated Governed Speed	2,200 2,400 (Hydrostatic)
Max. Torque at 1500 rpm	166 lb/ft
Cylinders (type)	Replaceable Wet Liners
Air Cleaner	Dry

ENGINE CLUTCH

Type	Single Plate 'Dyna-Life'-
Diameter	280 mm 11 in

TRANSMISSIONS

1. Synchromesh	8 Fwd. 4 Rev. Four Alternatives (see below)
– Gear Box	Full Synchromesh
– Range Box	Constant Mesh
– Final Drive	Epicyclic
2. Synchromesh with Torque Amplifier	16 Fwd. 8 Rev.
3. Hydrostatic	Infinitely variable Speed – 20 mph forward to 9 mph reverse

PTO – INDEPENDENT

Rev/min at governed engine speed	
– Dual	614/1004 or 555/1004
Pto hp	52

STEERING

Type	Hydrostatic Power

BRAKES

Type	Hydraulic Wet Discs

ELECTRICAL

Battery	12v/95AH
Safety Starter	Key Start, Clutch Safety Switch

INSTRUMENTATION

Gauges – Fuel/Temperature/Oil Pressure
Ammeter/Generator Warning Light/Tractormeter
Parking Brake Warning Light/Transmission
Oil Pressure Warning Light/Electric Horn
Speedometer (optional)

LIGHTING

Head, Side & Rear Lights/Rear Working Light
Reflectors

HYDRAULICS & LINKAGE

Pump Output	45 ltr/min	10 gal/min
Pressure (Max)	175 kg/cm^2	2500 lb/in^2
3 Point Linkage	Category 1 & 2 Reversible	
Lift at Link Ends (approx)	1790 kg	3950 lb

CAPACITIES

Fuel	77 ltr	17 gal
Cooling System	12 ltr	2⅝ gal
Engine Oil	8 ltr	1⅝ gal
Transmission Case	34 ltr	7½ gal

WEIGHT

Approx. weight includes safety frame (standard)	2533 kg	5585 lb

DIMENSIONS

(on 12.4/11 x 36 rear, 6.00 x 16 front tyres)

Length	3430 mm	135 in
Wheelbase	2170 mm	85½ in
Width	1625 mm	64 in
Height to Frame Top	2260 mm	89 in
Ground Clearance	368 mm	14½ in
Turning Radius without Brakes	3350 mm	132 in
Turning Radius with Brakes	3010 mm	120 in
Front Wheel Tread	1220–2030 mm	48–80 in
Rear Wheel Tread	1320–1930 mm	52–76 in

TYRES

Alternatives – Rear	13x30, 14x30, 11x32, 12x36
– Front	5.50x16, 7.50x16

DRIVE TRAIN

SPEEDS ON 12.4/11x36 TYRES

GEAR		AR MPH	AR KPH	AS MPH	AS KPH	BR MPH	BR KPH	BS MPH	BS KPH
L1	TA	*1.40*	2.25	*1.75*	2.82	*1.50*	2.41	*1.82*	2.93
	DD	*1.69*	2.72	*2.11*	3.39	*1.81*	2.91	*2.20*	3.54
L2	TA	*1.93*	3.11	*2.40*	3.86	*2.45*	3.94	*2.96*	4.76
	DD	*2.33*	3.75	*2.90*	4.07	*2.95*	4.75	*3.57*	5.74
L3	TA	*2.77*	4.46	*3.46*	5.57	*3.30*	5.31	*4.00*	6.44
	DD	*3.34*	5.37	*4.17*	6.71	*3.98*	6.40	*4.83*	7.77
L4	TA	*3.75*	6.03	*4.67*	7.51	*4.24*	6.82	*5.15*	8.29
	DD	*4.52*	7.27	*5.63*	9.06	*5.12*	8.24	*6.21*	9.99
H1	TA	*4.56*	7.34	*5.70*	9.17	*5.53*	8.90	*6.71*	10.79
	DD	*5.50*	8.85	*6.87*	11.05	*6.67*	10.73	*8.09*	13.02
H2	TA	*6.26*	10.07	*7.82*	12.58	*8.99*	14.46	*10.89*	17.52
	DD	*7.55*	12.12	*9.43*	15.17	*10.84*	17.44	*13.14*	21.14
H3	TA	*8.99*	14.46	*11.22*	18.05	*12.15*	19.55	*14.73*	23.70
	DD	*10.84*	17.44	*13.53*	21.77	*14.65*	23.57	*17.77*	28.59
H4	TA	*12.15*	19.55	*15.17*	24.41	*15.63*	25.15	*18.94*	30.47
	DD	*14.65*	23.57	*18.30*	29.44	*18.85*	30.33	*22.85*	36.77
R1	TA	*2.11*	3.39	*2.63*	4.23	*1.88*	3.02	*2.28*	3.67
	DD	*2.54*	4.09	*3.17*	5.10	*2.27*	3.65	*2.75*	4.42
R2	TA	*2.89*	4.65	*3.61*	5.81	*3.05*	4.91	*3.70*	5.95
	DD	*3.49*	5.62	*4.36*	7.02	*3.68*	5.92	*4.46*	7.18
R3	TA	*4.15*	6.68	*5.19*	8.35	*4.18*	6.64	*5.00*	8.05
	DD	*5.01*	8.06	*6.26*	10.07	*4.98*	8.01	*6.03*	9.70
R4	TA	*5.61*	9.03	*7.01*	11.28	*5.31*	8.54	*6.43*	10.35
	DD	*6.77*	10.89	*8.46*	13.61	*6.40*	10.30	*7.76*	12.48

'The Company's policy is one of continuous improvement and development, therefore specifications are subject to change without notice. Illustrations may include optional equipment and accessories and may not include all standard equipment.'

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