



# EXPLORER II 70 · 80 · 90 · Lurba

### THE SUPREME RANGE WITH ADVANCED DESIGN AND TOP PERFORMANCE

- lowest recorded fuel consumption
- · highest recorded power to weight ratio
  - patented front linkage and P.T.O.
  - patented hydraulic front weight unit with quick-release attachment
- patented hydraulic speed reduction Syncro Power
  - patented reversible driving position
  - patented independent front braking system









# THE NEW "1000 SERIES" ENGINES"

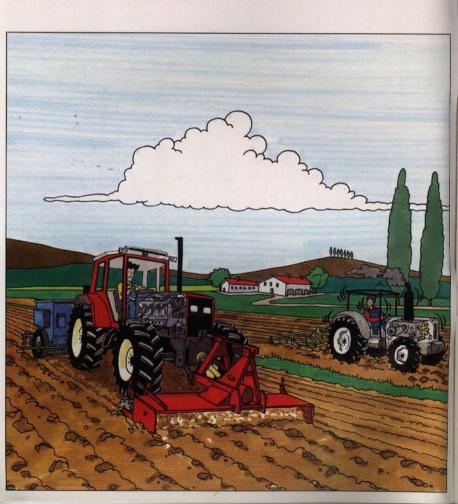
The EXPLORER models are equipped with the new "1000 Series" engine, now a world leader, the most modern and advanced in SAME's long tradition of designing and producing tractor engines which best satisfy the specific requirements of agriculture.

SAME engines are designed together with the complete tractor, for which they constitute a harmonious source of power and, at the same time, an important part of the structure. SAME engines are, in fact, totally self-supporting and their robustness allows the attachment of front linkage or any other front-mounted attachments.

Their general construction, characterized by completely modular designs, results in a drastic reduction in maintenance time.

The original SAME design offers, besides excellent performance: high power at all speeds, high engine torque, great operational resilience and extremely low consumption permitting optimum productivity and economic working.

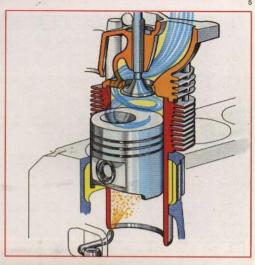
Such performance figures, allied to the traditional reliability of SAME products, are the fruits; of the formost technical solutions.



by oil circulation in suitable cavities in the cylinder block for cooling the lower part of the cylinders:

by pressurized oil iet beneath the pistons.

This gives great reliability even during the most severe operation.





The "spiral" induction ports, in the cylinder heads, set up a swirling motion in the air drawn into the cylinders which enables optimum mixing with the fuel, giving the advantage of lower consumption and less smoke emission.

The injection system is extremely advanced, using individual pumps immersed in the cylinder block, directly controlled by the cam shaft, and with very short injection pipes, all of equal length. The efficiency and uniformity of injection, as well as the quality of combustion, are thus optimized.

The whole system therefore reaches a very high degree of efficiency, with the advantages of very lively performance and extremely low consumption.

The use of individual pumps, all identical and independent, further increases reliability and simplifies maintenance work.





Turbocharging (EXPLORER 90 II) enables the desired power to be generated, whilst containing the overall size of the engine and, hence, the tractor, which is thus more compact, more manoeuvrable and benefits from a very high power-to-weight ratio, with the advantage to less ground compaction and greater responsiveness for power take-off work.

The integral lubrication system allows the oil to flow under pressure through the galleries in the cylinder block and in the rocker arm rods. This reduces the number of component parts of the engine and eliminates the possibility of oil loss. An engine oil cooler integral in the cirquit guarantees reliability in prolonged severe usage.

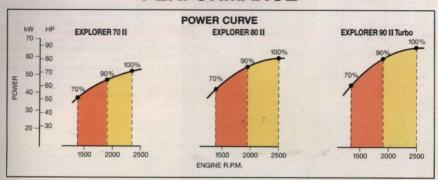


SYNCROPOWER

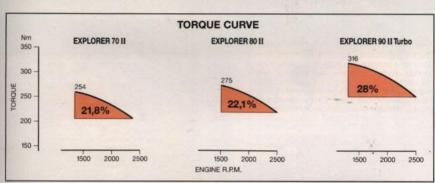
Modularity is exploited to the maximum: independent heads, individual pumps with identical injection pipes, and a split bodied governor make servicing easier, quicker and cheaper.

The robustness, due to the very deep cylinder block and the cast iron sump, means that our engines are all self-supporting and fulfill their structural tasks without requiring cumbersome side members which would reduce the manoeuvrability of the tractor.

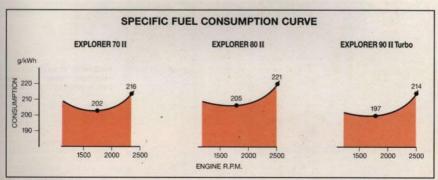
### **PERFORMANCE**



High power availability at all engine speeds; even at 1350-1400 rpm, the "1000" series engine generates 70% of maximum power and in order to obtain 90% it is sufficient for it to "turn over" at only 1900-2000 rpm (depending on the model).



High maximum torque figures with great resilience in order to easily overcome even the heaviest overloads, without changing gear: excellent torque reserves (from 22 to 28%) and a wide field of stable operation (from 1100-1500 to 2350-2500 rpm).



Recorded specific consumption figures (214-221 g/kWh at maximum power rating) allow a saving of thousands of litres of fuel a year.

# THE NEW "SYNCRO POWER" TRANSMISSION

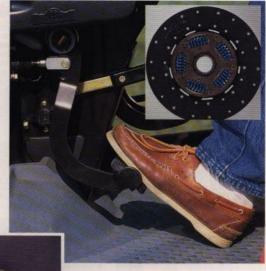
Our transmission system fully satisfies the demands of the farmer, who requires:

- versatility, you will be able to do all work envisaged on the farm, from the very heaviest to the lightest, with the availability of a range of speeds that will guarantee maximum productivity for every use;
- simplicity, enables you to choose the most suitable speed easily and quickly;
- reliability, you can count on complete working certainty and a long working life.



The engine-gearbox clutch is hydrostatically controlled: the traditional method of rods lever actuation is now done hydraulically, which allows smooth, gradual engagement and disengagement, thus reducing driver effort, and because it is self adjusting it does not require periodic attention.

The clutch disc is made of asbestos-free organic material, according to the most advanced requirements in terms of reducing atmospheric, pollution, at the same time guaranteeing optimum resistance to wear and overheating.



The synchronized, **5-speed gearbox** is super-compact, designed with only three, very short shafts, thus subject to greatly reduced flexural stresses and hence reducing wear on the gearing. To this end we use, amongst other things, case-hardened, tempered steel with a tough centre and very hard surface.

The **helical** gearing allows a gradual and progressive meshing of the teeth and thereby reduces power dissipation: the result is a very high transmission efficiency.

**Forced lubrication** of the gearbox ensures the presence of that necessary film of oil between shafts and gearing.

The gearbox cooler, moreover, prevents any overheating and maintanins unaltered the physical and chemical properties of the oil for optimum lubrication under all working conditions.





Invertor lever knob

All the forward gear speeds are also available in reverse, thanks to the **synchronized inverter**. Besides making unladen return runs and manoeuvring much quicker (synchronized engagement), it is possible to work effectively in either direction (Dual-trac System).



Hanlage and produce movement takes up to 20% of the total hours worked by a tractor. Hence this weight heavills on own costings both in terms of labour and in fuel consumption. With un effective speed of 40 km/h we obtain a 25% time saving, with a reduction in fuel consumption from our already economical engines of between 25-40% depending on model and existing conditions.

For power-take-off work which requires very slow speeds (0.4-1.5 km/hour) at high engine speeds, we can offer the most suitable speed for the job with the super reduction gear.

#### Below speed chart.



#### THE "SYNCRO POWER" AT 40 KM/HR

The Syncro Power (patented by SAME) is the new speed reducer on our new Explorer range, which can be engaged under power, without depressing the clutch pedal, and is operated electro-hydraulically by means of a rocker button. By selecting the reduced ratio, we obtain a 17% speed reduction in whatever gear happens to be engaged. Thus an intermediate speed is introduced between any two adjacent speeds. You therefore have at your disposal an extremely wide choice of combinations: speed of advance, engine speed and drive torque, so as to optimize productivity and operating costs.

There are two possible gearboxes:

the "40 km/hr" gearbox with 40 forward and 40 reverse speeds;
 the "30 km/hr" gearbox with 30 forward and 30 reverse speeds.

the "30 km/hr" gearbox with 30 forward and 30 reverse speeds.
 Down line from the gearbox is fitted the reduction gear assembly with electro-hydraulically operated clutch (Syncro Power), which consists of two small epicyclical gears which can be engaged or not (in the latter case speeds are reduced by 17%) by operating under power the oil-cooled multidisc clutch

The passage from one speed to the reduced speed and vice versa, thanks to a system of a valves and accumulator, can be done quickly and very smoothly without jerking.

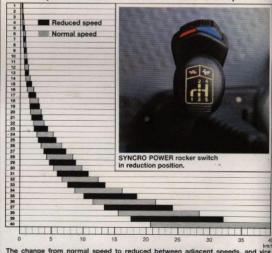
#### **ECONOMIC BENEFIT**

It is reasonable to estimate that the SYNCRO POWER allows a time saving of 10% to be achieved which, on an annual usage basis of only 500 hours represents some 50 hours which can be translated into:

- a fuel saving (from the 90 HP models)

750 litres × 13 p/litre	2.	97.50
<ul> <li>a saving of labour costs on 50 hours x €. 5.00/hour</li> </ul>	£.	250.00
Total	£.	347.50

#### SYNCRO POWER GEARBOX (40 FORWARD + 40 REVERSE SPEEDS)



The change from normal speed to reduced between adjacent speeds, and vice versa in obtained under load, without operating the clutch pedal, simply by rocking the electro-hydraulic switch.

#### **OPERATIONAL BENEFITS OF SYNCRO POWER**

The following benifits are achieved:

- · doubling the number of speeds available;
- changing from normal speeds to the reduced speed and vice versa whilst under power, without depressing the clutch pedal.

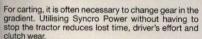




During ploughing, variations in the compactness or the slope of the ground require changes of speed. By just depressing the clutch pedal, the tractor will come to a stop. This could mean being forced to carry out the whole pass at a low speed. This can be avoided instead by changing speed under load with the Syncro Power unit.

When working between rows, entry into the row can be done at low speed then, once the tractor is on course, normal speed can be engaged, under power.







In order to overcome any possible clogging or overloading during mowing or baling, the reduction can be inserted, under power, without reducing the power output or any risk of bringing the tractor to a stop.



When loading cereals, the Syncro Power enables the tractor to adapt, under power, to the speed of the combine harvester.

# THE P.T.O.

Versatility is one of the reasons for the high productivity of the Explorer and it is also versatile in power take-off work. In fact its generous power enables the most de-

manding work to be done, whilst the availability of an "economy speed" power take-off also makes it ideal for the lightest jobs.

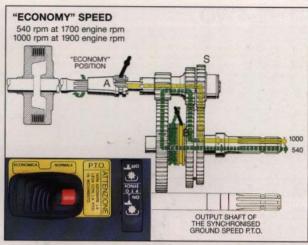


A great number of implements require high rotational speeds with modest power absorption. This is the case, for example, with side-delivery hay rakes, mowers, hay tedders (manure spreaders and water pumps).

Therefore, in order to place less stress on the engine and to reduce consumption it is beneficial to be able to use the tractor engine at intermediate speeds. For this reason, the power take-off on our new (medium range) tractors has been given an economy speed.

By the addition of a P.T.O. "overdrive" ratio, which enables the two standard speeds of 540 and 1000 rpm to be achieved at engine speeds reduced by 25%, it is now possible to obtain 540 rpm at the power take-off not only with the engine running at 2200 rpm but also at 1700 rpm, whilst 1000 rpm can be obtained either at an engine speed of 2450 rpm or at 1900 rpm.

The engine is therefore subject to much less stress (it runs in fact at a speed some 25% slower), consumption is reduced by a further 15% and the lower noise level guarantees greater comfort.



#### THE ECONOMIC BENEFITS

Working at "economy speed" brings a 15% fuel saving, equal to almost £. 190.00 per annum.



The selection of the "normal" and "economy" speeds is done by a sliding coupling, operated by a lever located to the driver's left.

The multi-disc clutch, oil-cooled and thus free from wear and overheating, is engaged and disengaged by means of an **electro-hydraulic control**, operated by a rotary switch located on the control panel to the right of the driver.

Electro-hydraulic engagement does not require any effort on the part of the driver but it does increase his operating speed.

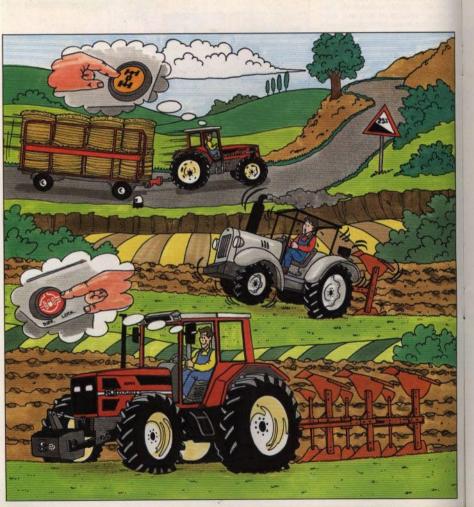
We have adopted the original solution of having two independant output shafts one for the 540/ 1000 rpm power take-off and the other for the synchronised ground-speed P.T.O.

This solution enables the two shafts to be used simultaneously: one to operate the working machinery and the other to operate a driven axle.



### THE 4WD

Integral drive is now essential for high productivity and working with a great degree of safety, these objectives cannot be achieved by mere technical improvisation, but only by way of careful design which harmonizes often greatly contrasting technical features and requirements, for this reason the SAME design views the 4 wheel drive tractor in its entirety, by integrating to the best advantage all its systems and components.



The first objective to which SAME gives the most satisfactory response is that of traction, which is extremely high due to the ideal weight distribution (some 40% being over the front axle) and the use of wheels of large diameter and section.

The second objective is high transmission efficiency to which we respond with a joint-free direct shaft without any universal joint to dissipate the power. As the tractor is designed as a 4WD, the drive shaft housing is placed centrally at the highest point where it is well protected.



This results too in very high ground clearance, to which the compact, smaller front differential also contributes.



The much more positive speed reduction is entrusted to robust epicyclic final reduction gears, which will withstand the greatest torque transmitted. By distributing the load over three sets of gears they quarantee a greater strength.

The half-shafts up-line of the final reduction gears can therefore rotate at high speed and hence require only a slight reduction ratio at the bevel gear, with the advantage of less stress and a very much smaller differential.

In order to reduce ground compaction to the minimum and to increase iraction, we have fitted large size front wheels on ont 4 WD tractors but still offer a turning angle of 50° and record minimum turning radil, comparable to those of a 2 wheel drive tractor.

Besides greater manoeuvrability, there are benefits also for steering which is easier and more comfortable.





The search for safety and reliability always gets maximum attention.

For this we use hydrostatically operated oil-cooled disc brakes giving positive andpowerful braking action, free from wear and overheating. Being self adjusting periodic attention is illiminated. However, above all, the brakes are independent on all four wheels. Besides greater safety (for purposes of retardation the load on the front axle is beneficial as it increases the braking power by 25-40%) there is a marked increase in terms of manoeuvrability, since by braking the wheels on one side only, the same turning radii can be obtained as for a 2-wheel drive tractor.



Any wheel spin reduces the speed of work.

Therefore the Explorer models also have differential locking on the front axle, which can be engaged under power simultaneously with the rear differential.

Locking of the differentials, just like the engagement and disengagement of the front drive, is electro-hydraulic, by means of a push button, so as to eliminate any driver effort and increase speed of application.



In some circumstances, however, to avoid soil structure damage when it is soft, only the rear wheel is locked. This is done by isolating the front

brake. Isolating the front brakes is done via a two-position adjustable valve.

for maximum safety, this cut-out does not operate when both pedals are depressed.

The brakes are applied on all four wheels when braking to slow down or stop.

#### THE 2WD

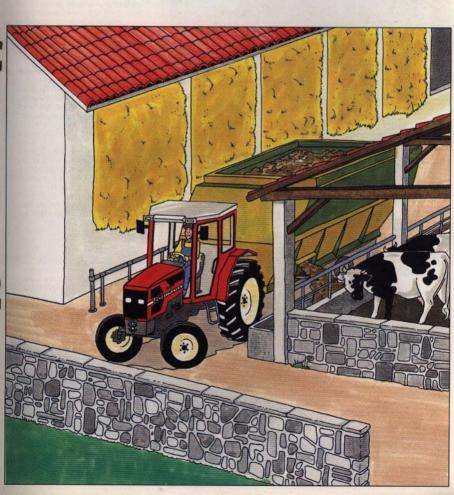
The greater robustness required of 4 WD tractors, whose structure has to support the tractive strains transmitted to the front drive axle, is also found – as far as our tractors are concerned – in the 2 WD versions.

In fact, all our tractors are designed as 4WD tractors. Subsequently, some of them are transformed into single drive tractors simply by replacing the heavy front drive axle with a normal robust axle.

The manoeuvrability demanded of two-wheel drive tractors is extremely high. Therefore we have produced 2 WD front axles with a steering angle of **72**°.

The turning radii are between: 3.5 m. without brakes and 2.8-2.95 m. with brakes.

Manoeuvring is therefore easy and quick even where space is restricted.



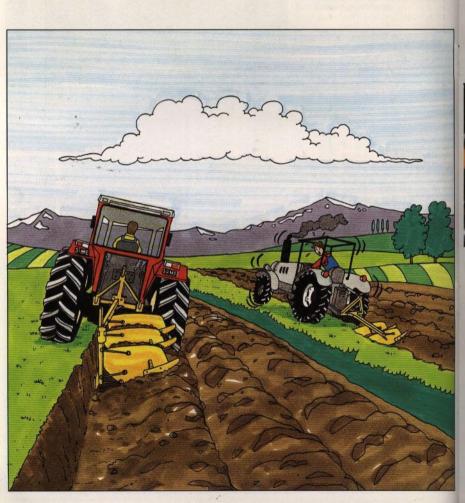
### THE AUTOMATIC CONTROL UNIT

The original SAME system for translating stress on the lower arms and the remarkable capacity of the hydraulic circuit enable the position of the implement to be automatically adjusted, instantaneously and with great precision, depending on the tractive force.

Thus any risk of wheal-slip is prevented and, by guaranteeing the continuous, correct transfer of the dynamic

load from the implement to the tractor, traction is substantially increased.

The high hydraulic capacity, the generous proportions of the lift unit and the robust structure of the cat. Il 3-point hitch give rise to a lifting capacity which is more than 50% above the minimum values recommended by international standards.



The SAME Automatic Control Unit controls the position and draft, of the implement, as well as the mixed control of position-draft, which allows for the best combination of implement depth with a good output and high quality of work.

An original pressure-modulating system, which incorporates a "load sensing" valve, means that any hydraulic capacity surplus to needs is released not at the maximum calibrated circuit pressure but at the operating pressure (generally much lower), thus reducing the power necessary to operate the hydraulic circuit with the benefit of greater operating economy.





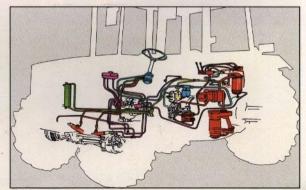
Break-away couplings for external hydraulic control.

The open-centre circuit of the SAME Automatic Control Unit, allows the use of large capacity pumps, making the Explorer a real hydraulic power generator capable of satisfying, by means of 3 or 5 way hydraulic distributors, the requirements of all hydraulically operated or controlled agricultural equipment.

The open-centre hydraulic circuit, even when the lift unit is not being used, keeps the oil circulating at a very low pressure, thus absorbing very little power. When the lift unit starts operating the pressure rises instantly up to the level required by the load conditions. Thanks to this system, the ACU only requires power when it needs it.

A hydraulic shock absorber maintains the drop of the implement constant irrespective of its weight and ensures that starting and stopping is done progressively, thus avoiding any jerking or strain.



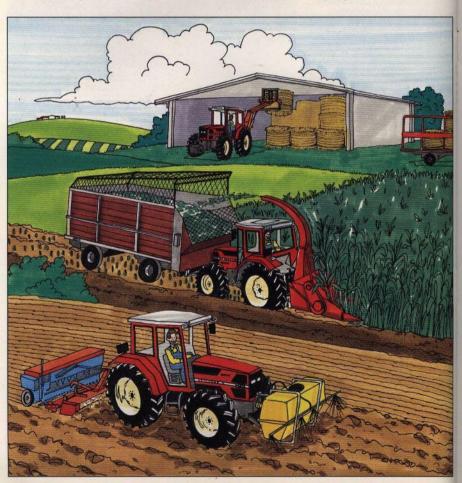


### FRONT POWER TAKE-OFF AND LINKAGE AND REVERSIBLE DRIVING POSITION

The tractor, equipped with front power take-off and linkage and reversible driving position, acquires a new dimension, that of a really multi-functional unit which enables work to be done in a completely new way, not just agricultural but also industrial work.

In agriculture, combined ploughing with front and rearmounted implements offer relevant benefits, both economic and agronomic. The reversible driving position enables tilling, for example, to be done in the best conditions of visibility, with the advantage of a better quality of work and less stress for the driver.

Furthermore, in reverse running, the greater stability allows for climbing gradients which were previously unsurmountable (even 1 in 2 [50%]).



Our proposal for a front power take-off and lifting unit definitely opens up the market, by demonstrating the full validity of combined working.

This unit, an original design by SAME, is completely integrated into the tractor's structure.



With the exception of the lifting arms, all the elements of the front power take-off and lift unit are located under the bonnet. This, besides the other obvious benefits of an aesthetic nature, brings the advantages of containing the overall size of the tractor: in fact the lifting arms can be dismantled in not more than 20 seconds.

The front power take-off rotates at 1000 rpm at 90% of the maximum engine output rating and is engaged by means of an oil-cooled multi-disc clutch, operated electro-hydraulically via a rotary switch.



The use of front and rear mounted implements by reducing the number of passes, provides important agronomic benefits, such as:

- drastic reduction in soil compaction;
- better weight distribution over the two axles and, therefore, improving traction.

Equally important are the economic benefits which represent a true return on the investment:

- reduction in the number of passes necessary;
- less time spent, hence, savings in fuel and labour.

During irrigation, the use of two reels, one mounted at the front and one at the rear, enables the working range to be practically doubled.





When mowing grass, the use of a front mower coupled up with a rear one or with a self-loading wagon, besides reducing the working time, enables the tractor to go straight into the field without having to mow round the edges first.

Even the reverse driving position can be used successfully for mowing. In fact, the mower on an axis with the tractor adapts better to the unevenness of the ground.

Furthermore, the manoeuvrability of the tractor is much higher and driver visibility is much better.

Versatility and savings are both enhanced in operational terms and in investment value.

In order to exploit to the full the potential of the Dual Trac System and to respond adequately to the tasks of moving equipment and products on the farm, we have patented a rear-loader with quick and easily interchangeable attachment such as buckets for grain or soil, a manure fork and a fork-lift tippler.

The attachments are fitted on to a hydraulically operated arm whichis mounted onto the tractor's rear 3-point hitch just like any other agricultural implement.





Besides being used for the front mounted implements, the new front lift unit can also be used for quick and easy ballasting of the tractor.

In fact we have patented a modular ballast package (with variable weights from 140 to 420 kg) for quick

mounting from the driving seat onto the front 3-point hitch. Attention from the ground is only required for connecting up the top link and the whole operation can be done without any effort on the part of the driver in just 30-40 seconds.



#### THE ECONOMIC BENEFITS

It is possible to estimate realistically a time saving of 20% due to the Dual Trac System. On the basis of 1,000 hours per year, 20% corresponds to a good 200 hours, which translates into a saving of:

Labour	200 hours × £. 5.00/hour										£.	1.000,000
Fuel (90 hp model)	2500 litres × 13 p/litre .										30	325,00
Tyres	200 hours × 50 p/hour	4	-		10				150		30	100,00

To these economic benefits can be added also that resulting from the reduction in depreciation costs, due to the possibility of using the tractor for non-agricultural uses as well, such as excavating and earth moving, scrub clearance of roadside verges, pest-control of tree-lined streets and snow shifting.





# COMFORT, ERGONOMIC DESIGN AND STYLE

Driving a tractor can be very exacting, tiring and stressfull work if the tractor does not have adequate technical and operational features.

Fatigue and stress, besides damaging the driver's health, also reduce his productive capacity and can even compromise the quality of work.

For these reasons SAME has made a conscious choice

in favour of comfort and supreme ergonomic design, in step with the most advanced trends in modern agriculture.

In fact, attention to driver comfort, is of no less importance than those of the performance of the engine, the transmission or the hydraulic system.



Our cabs are designed to form a harmonious unit with the tractor.

They are approved safety cabs and satisfy the strictest international standards.

They are suspended on 4 robust silent-block rubber shock absorbers which reduce vibrations to the minimum.

They offer panoramic vision thanks to the extensive glazing on all sides.

They are sound-proofed to meet the most demanding international requirements.

They are completely convertible.

Two full-length angled doors with a wide opening angle provide easy access from either side.



The spacious platform, completely flat with suspended pedals and control levers located on the right side within hand's reach, offers the driver the greatest freedom of movement.

Available in various configurations, on models with cab the driving seat is covered in a strong, luxury fabric and has a 4-way adjustment:

- suspension adjustment to driver's weight;
- longitudinal and height adjustment;
- · seat back rake adjustment.





In order to ensure the best driving position, the steering wheel is telescopic and adjusts for inclination.

For easy, precise steering, particularly for road work, our hydrostatic steering is of the reactive type in order to eliminate the tiresome effect of drift.

Many mechanical controls have been made electro-hydraulic. This is the case with the clutch engagement on the front and rear power take-off. The engagement of the 4 wheel drive and the front and rear differential locks are now operated by depressing two pushbuttons located on the dashboard to the right of the driver.

Thanks to the smoothness of the controls, driver effort has been eliminated but above all the electro-hydraulic controls increase speed of engagement. this is even more valuable when reasons of safety demand prompt locking of the differentials or immediate engagement of the 4 wheel drive.



#### TOTAL CONTROL OVER THE WORK





So as to offer still greater forward visibility, the engine air intake pipe and the exhaust silencer have been located under the bonnet and there is all-round front glazing.

A comprehensive **check panel** enables all the operational parameters of the tractor to be monitored.



Behind the driving seat, a wide glazed area gives maximum rear visibility facilitating the coupling and control of implements.

All these points contribute towards giving the driver not only more relaxed driving but also lighten his tasks so that he can devote greater attention to more precise working.

# ELIMINATES CORROSION FOR GOOD...

...by a combination of various technological factors, amongst which the most important are

• the choice of the most suitable materials • optimum painting cycles • effective protection of finished components.



The bonnet is made from **zinc-coated sheet**. Thus an effective barrier against corrosion is obtained even in those a reas where it is difficult to apply anti-corrosion treatment once the part has been formed or in the event of scratches or dents.

The external **screws** and **bolts** on the bodywork and those for retaining the wheels have been subjected to **DACROMET** anticorrosion treatment using zinc and chrome.

Before being painted the sheeting is subjected to **phosphatisation** to give better paint adhesion.

The anti-rust treatment is applied by **cataphoresis**, an immersion electroplating process which guarantees that even the most difficult points to reach are protected by the paint.

Two coats of enamel are then sprayed on by a robotized system; after each application the parts are oven-dried.





After the phosphatisation and cataphoresis treatment, the rims, which are continually exposed to knocks from stones, scratches or friction from frequent mounting and dismounting, are electrostatically sprayed with powder paint.

After oven drying, the paint on the rims will resist any knocks or friction, thus completely protecting the underlying metal sheet.

The effectiveness of the anti-corrosion treatment is increased by a series of protective measures for the whole of the area exposed to corrosive agents.

There is a thick layer of vinyl under the mudguards, giving effective, uniform protection against stones and grit. All the joints between the body panels have been sealed with polyurethane to prevent the accumulation of water which is a possible source of localized corrosion. Finally, all the drill holes, even those going right through, have been sealed with rubber plugs.

Thanks to such effective and innovative action, which maintains the tractor's value over the long term, we are able to offer the farmer a secure investment.



TECHNICAL DATA	EXPLORER 70 II	EXPLORER 80 II	90 II	
ENGINE Type SAME Number of cylinders Bore Stroke Oubic capacity	1000.4 A 4 4.13 ins (105 mm) 4.54 ins (115.5 mm) 244.08 cu (ns (4000 cc)	1000.4 A1 4 4.13 ins (105 mm) 4.54 ins (115.5 mm) 244.08 cu ins (4000 cc)	1000.4 AT 4 Turbocharged 4.13 ins (105 mm) 4.54 ins (115.5 mm 244.08 cu ins (4000 cc)	
Maximum horsepower HP-DIN/kW Maximum power ratio Cooling system njection pump Silencer Air filter	70/51 2350 rpm mixed: air/oil single cylinder, immersed type beneath bonnet with vertical exaust dry with safety cartridge	80/59 2500 rpm mixed: air/oil single cylinder, immersed type beneath bonnet with vertical exaust dry with safety cartridge	88/65 2500 rpm mixed: air/oil single cylinder, immersed type beneath bonnet with vertical exaus dry with safety cartridge	
Fuel tank capacity	19.8 Imp gals (90 titres)	24.2 Imp gals (110 litres)	24.2 Imp gals (110 litres)	
SAME ORIGINAL TRANSMISSION		PART AND SE		
TRANSMISSION CLUTCH Single dry plate made of organic material, hydrostatic control	yes	yes	yes	
PTO CLUTCH Multiple disc hydraulic clutch with hydraulic servocontrol Electro-hydraulic push button engagement (on request)	yes yes	yes standard	yes standard	
GEARBOX Completely synchronized: 2WD: 24 FWD + 12 REV speeds and synchronized inverter (18 mph - 30 km/h) SYNCRO POWER 30 FWD + 30 REV speeds, reduction engaged electro-hydraulically under load and synchronized inverter (18 mph - 30 km/h) 4WD: 24 FWD + 12 REV speeds, super-reduction and synchronized	yes yes (on request)	yes yes (on request)	yes yes	
inverter (18 mph - 30 km/h)  SYNCRO POWER 40 PWD + 40 REV speeds, reduction engaged electro-hydraulically under load, super-reduction and synchronized inverter (25 mph - 40 km/h) Engine can only be started with invertor lever in neutral	yes (on request) yes	yes (on request)	yes yes	
Mechanically controlled Engaged by electro-hydraulic push button (on request)	yes yes	_ standard	_ standard	
SERVICE BRAKES Oil-cooled disc brakes, hydraulically operated with scavenging circuit Hydraulic trailer braking system Integral hydraulic braking system with independent oil immersed brakes on all 4 wheels with possibility to exclude front wheel brakes (4WD)	yes yes	yes yes	yes yes	
PARKING BRAKE Fully independent oil-bath disc brake	yes	yes	yes	
STEERING Hydrostatic reactive power steering	yes yes	yes	yes	
ZWD FRONT AXLE Telescopic with variable track 72° steering angle	yes yes	yes yes	yes yes	
4WD FRONT AXLE  With central differential and direct transmission shaft Engagement by electro-hydraulic push button 50° steering angle Epicycloidal final reduction gear Front differential lock Front differential lock engaged by electro-hydraulic push button Integral hydraulic braking system with independent oil immersed brakes on all 4 wheels with possibility to exclude front wheel brakes	yes yes (on request) yes yes yes yes yes yes yes yes yes	yes yes yes yes yes yes	yes yes yes yes yes yes yes	
POWER TAKE-OFF 540/1000 rpm PTO with additional economic speed: 540 rpm (normal) 540 rpm (economic) 1000 rpm (normal) 1000 rpm (normal) 1000 rpm (economic)	2083 engine/rpm 1743 engine/rpm 2286 engine/rpm 1913 engine/rpm	2199 engine/rpm 1717 engine/rpm 2450 engine/rpm 1913 engine/rpm	2199 engine/rpm 1717 engine/rpm 2450 engine/rpm 1913 engine/rpm	

TECHNICAL DATA	EXPLORER	EXPLORER	EXPLORER
	70 II	80 II	90 II
Speed selector lever with neutral position 13/8" 6 + 21 spline drive shaft Synchronized PTO with independent drive shaft (4WD only)	yes	yes	yes
	yes	yes	yes
	only with 40 km/h	only with 40 km/h	yes
AUTOMATIC «LOAD SENSING» CONTROL UNIT	A Transport		UP DECEMBER
SAME original hydraulic system with lower link sensing Position, draft, mixed (position-draft) and float control Maximum lifting capacity	yes yes 7452 lbs (3380 kg)	yes yes 7606 lbs (3450 kg)	yes yes 10494 lbs (4760 kg) with 2 assistor rams
Maximum pump capacity	7.7 Imp gals (35 litres/minute)	11 Imp gals (50 litres/minute) with additional hydraulic system	11 Imp gals (50 litres/minute) with additional hydraulic system
Calibrated circuit pressure  Category II 3-point hitch with telescopic stabilizers	2560 psi	2560 psi	2560 psi
	(180 kg/cm²)	(180 kg/cm²)	(180 kg/cm²)
5-way hydraulic distributor with quick coupling	yes	yes	yes
	3 way	yes	yes
STANDARD TYRES	front 9.00-16	front 10.00-16	front 10,00-16
2WD:	rear 16.9/14-30	rear 16.9/14-34	rear 16.9/14-34
4WD:	front 12.4/11-24	front 14.9/13-24	front 14.9/13-24
	rear 16.9/14-30	rear 16.9/14-34	rear 16.9/14-34
ELECTRICAL EQUIPMENT Voltage Alternator with built in regulator Maintenance-free battery Starter motor Roaduse electrical equipment with emergency flashers	12 Volt	12 Volt	12 Volt
	770 Watt	770 Watt	770 Watt
	100 Ah and 440 A	100 Ah and 440 A	100 Ah and 440 A
	quick discharge	quick discharge	quick discharge
	3.5 kW	3.5 kW	3.5 kW
	yes	yes	yes
TOWING UNIT Combined drawbar and pick-up hitch	yes	yes	yes
BODY Driving position suspended on 4 Silent-block shock absorbers Zinc coated bonnet Removable side panels Attachment points for front hydraulic linkage and PTO Fascia with check-panel Suspended pedals Steering wheel adjustable for height and angle Hydraulic lift and auxiliary hydraulic distributor control levers on panel to the right of the driver Super deluxe platform "Q" cab, 3-speed ventilation, heating, tinted glass, roofhatch, 2 front and rear working lights, radio, deluxe fully adjustable high back suspension seat with arm rests, digital clock, 2-speed electrical windscreen wipers, sun blind, external rear view mirrors, ashtray, document pocket Front mudgurds (4WD) Tool box and tool kit	yes yes yes yes opt. yes yes yes opt. yes	yes yes yes yes yes yes yes yes opt yes	yes yes yes yes yes yes yes yes opt. yes
OPTIONAL EXTRAS Gearbox (18 mph - 30 km/h) with SYNCRO POWER 30 FWD + 30 REV speeds, reduction engaged electro-hydraulically under load and synchronized inverter (2 WD only) Gearbox (25 mph - 40 km/h) with SYNCRO POWER 40 FWD + 40 REV speeds, reduction engaged electro-hydraulically under load, super-reduction and synchronized inverter (4 WD only) Reversible driving position Front hydraulic inkage and PTO with 1000 rpm engaged by electro-hydraulic push button Quick fit front weght kit and drawbar for front linkage 2 assistor rams Full air conditioning Front mudguards Front ballast support Front ballast	yes yes yes yes yes yes yes yes	yes yes yes yes yes yes yes yes yes	yes yes yes yes yes yes yes yes
OPTIONAL TYRES 2WD: 4WD:	front 9.00-16	front 10.00-16	front 10.00-16
	rear 13.6/12-36	rear 13.6/12-38	rear 13.6/12-38
	front 13.6/12-24	front 12.4/11-28	front 12.4/11-28
	rear 13.6/12-36	rear 13.6/12-38	rear 13.6/12-38

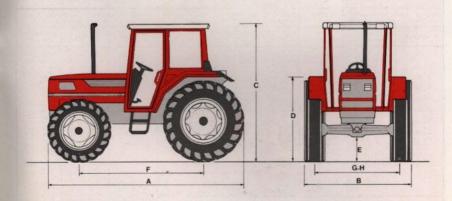
# DATA

- TECHNICAL EXPLORER 70 II Forward speeds in km/hour at 2350 rpm engine speed
  Forward speeds in km/hour at 2500 rpm engine speed
  Forward speeds in km/hour at 2500 rpm engine speed
  - EXPLORER 90 II T. Forward speeds in km/hour at 2500 rpm engine speed

#### DEODMANCE EIGHDES

EXF	PLORER 70	II	EXP	LORER 80	) II C	EXPLO	RER 90 II	Turbo
earbox (25 mpl	h - 40 km/h) with SY 40 FWD + 40 REV n 16.9/14-30 rear tyr	NCRO POWER		- 40 km/h) with SY 40 FWD + 40 REV 16.9/14-34 rear by		1 252 7 20 30 30 30 30 30 30 30 30 30 30 30 30 30	n - 40 km/h) with SY 40 FWD + 40 REV n 16.9/14-34 rear tyr	
Gearspeed	FWD mph (km/h)	REV mph (km/h)	Gearspeed	FWD mph (km/h)	REV mph (km/h)	Gearspeed	FWD mph (km/h)	REV mph (km/h)
1 SR LOW 1 SR LOW 2 SR LOW 2 SR LOW 1 S LOW 1 S LOW 1 S LOW 2 SR L	0.21 (0.38) 0.24 (0.38) 0.35 (0.56) 0.47 (0.54) 0.55 (0.56) 0.47 (0.54) 0.57 (0.92) 0.57 (0.92) 0.58 (1.01) 0.51 (1.01) 0.51 (1.01) 0.51 (1.01) 0.51 (1.01) 0.51 (1.01) 0.51 (1.01) 0.51 (1.01) 0.51 (1.01) 0.52 (0.99) 0.52 (0.99) 0.52 (0.99) 0.52 (0.99) 0.53 (1.01) 0.51	0.21 (0.34) 0.25 (0.46) 0.37 (0.50) 0.40 (0.57) 0.40 (0.57) 0.40 (0.57) 0.50 (0.56) 0.60 (0.96) 0.60 (1.117) 0.88 (1.42) 1.137 (0.80) 1.137 (0.80) 1.137 (0.80) 1.137 (0.80) 1.140 (0.80) 1.154 (2.46) 1.154 (2.46) 1.154 (2.46) 1.154 (2.46) 1.154 (2.46) 1.154 (2.46) 1.154 (2.46) 1.154 (2.46) 1.154 (2.46) 1.155 (2.17) 1.154 (2.46) 1.155 (2.17) 1.154 (2.46) 1.155 (2.17) 1.154 (2.46) 1.155 (2.17) 1.154 (2.46) 1.155 (2.17) 1.154 (2.46) 1.155 (2.17) 1.154 (2.46) 1.155 (2.17) 1.154 (2.17) 1.155 (2.17) 1.155 (2.17) 1.155 (2.17) 1.155 (2.17) 1.155 (2.17) 1.155 (2.17) 1.155 (2.17) 1.155 (2.17) 1.155 (2.17) 1.155 (2.17) 1.157 (2.17) 1.158 (2.17) 1.158 (2.17) 1.158 (2.17) 1.159 (2.17) 1	I SR LOW 1 SR LOW 2 SR LOW 4 SR LOW 5 SR LOW 1 S	0.21 (0.34) 0.25 (0.40) 0.32 (0.51) 0.47 (0.60) 0.47 (0.60) 0.47 (0.60) 0.49 (0.60) 0.60 (0.97) 1.10 (0.80) 0.60 (1.71) 1.10 (1.80) 0.80 (1.43) 0.80 (1.43) 1.15 (1.60) 1.15	0.22 (0.36) (0.42) (0.36) (0.42) (0.36) (0.42) (0.33) (0.53) (0.52) (0.53) (0.5	1 SR LOW 1 SR 2 SR LOW 2 SR LOW 4 SR LOW 4 SR LOW 4 SR LOW 5 SR LOW 5 SR LOW 6 SR LOW	0.21 (0.34) 0.25 (0.40) 0.32 (0.51) 0.34 (0.50) 0.32 (0.51) 0.32 (	022 (038) 026 (044) 033 (055) 034 (055) 039 (056) 051 (056) 055 (052) 063 (107) 063 (107) 063 (107) 063 (107) 077 (124) 077 (1
Gearbox (18 mp	on - 30 km/h) with S 24 FWD + 12 REV	YNCRO POWER	Gearbox (18 mpl	n - 30 km/h) with S 24 FWD + 12 REV	YNCRO POWER	Gearbox (18 mg	oh - 30 km/h) with S 30 FWD + 30 REV	YNCRO POWE
Gearspeed	FWD mph (km/h)	REV mph (km/h)	Gearspeed	PWD mph (km/h)	REV mph (km/h)	Gearspeed	FWD mph (km/h)	REV mph (km/r
1 L MR 1 L 2 L MR 2 L MR 2 L MR 4 L MR 4 L MR 4 L MR 4 L MR 4 L MR 4 L MR 2 N MR 3 N MR 4 N MR 1 V MR 1 V MR 1 V MR 4 V MR 4 V MR 4 V MR	0.65 (1.05) 0.77 (1.25) 0.87 (1.05) 1.08 (1.06) 1.08 (1.07) 1.08 (1.07) 1.76 (2.08) 1.80 (2.08) 2.08 (3.36) 2.08 (3.36) 2.08 (3.36) 2.78 (4.47) 3.28 (5.28) 3.40 (5.47) 4.01 (6.46) 4.56 (1.08) 4.56 (1.08) 5.36 (1.08) 5.37 (1.08) 5.37 (1.08) 5.38	0.80 (1.30) 1.07 (1.73) 1.31 (2.11) 1.87 (3.02) 2.56 (4.13) 3.41 (5.49) 4.18 (6.73) 5.98 (9.62) 7.77 (12.50) 10.34 (16.83) 12.66 (20.36) 15.11 (29.12)	1 L MR 1 L 2 L MRW 2 L MR 3 L 4 L MR 4 L 1 N MR 1 N MR 3 N 5 N MR 3 N 4 N MR 4 N 1 V MR 4 V MR	0.61 (1.08) 0.78 (1.27) 0.88 (1.27) 1.66 (1.75) 1.66 (1.75) 1.66 (2.51) 1.64 (2.96) 2.13 (3.43) 2.53 (4.65) 2.53 (4.65) 2.53 (5.59) 3.57 (5.59) 3.57 (5.59) 3.67 (5.60) 3.67 (6.60) 3.67 (1.60) 3.67	0.82 (1.33) 1.09 (1.76) 1.34 (2.16) 1.92 (3.09) 2.62 (4.22) 3.49 (5.62) 4.27 (6.87) 6.11 (9.83) 10.57 (17.00) 12.94 (20.61) 18.51 (29.77)	1 S LOW 1 S LOW 2 S LOW 2 S LOW 3 S LOW 4 S LOW 1 S LOW 1 N LOW 2 N LOW 3 N LOW 3 N LOW 4 N LOW 4 N LOW 4 N LOW 4 N LOW 4 N LOW 5 N LOW 5 N LOW 4 N LOW 4 N LOW 4 N LOW 4 N LOW 5 N LOW 5 N LOW 5 N LOW 5 N LOW 6 N LOW 6 N LOW 6 N LOW 6 N LOW 6 N LOW 7 N LOW 7 N LOW 8 N LOW 8 N LOW 8 N LOW 8 N LOW 9 N LOW 9 N LOW 1 N LOW 2 N LOW 4 N LOW 2 N LOW 4 N LOW 5 N LOW 5 N LOW 6 N LOW 7 N LOW 7 N LOW 8 N	0.44 (0.74) 0.45 (0.86) 0.45 (0.86) 0.47 (1.27) 0.99 (1.27) 0.99 (1.47) 1.05 (1.06) 1.15 (1.67) 1.5 (2.44) 1.5 (2.44) 1.70 (2.74) 1.84 (2.96) 1.170 (2.74) 1.84 (2.96) 1.97 (2.74) 1.98 (2.36) 1.99 (3.47) 2.22 (4.05) 1.99 (6.19) 4.42 (7.11) 4.42 (7.11) 4.42 (7.11) 5.03 (6.09) 5.04 (6.19) 4.44 (7.10) 4.42 (7.11) 1.5 (1.32) 6.6 (1.39) 1.01 (1.3	0.48 0.7 0.56 0.9 0.7 0.83 (1.5 0.9 1.7 0.9 1.7 0.9 1.7 0.9 1.7 1.5 2.2 2.4 1.5 2.2 2.5 3.6 2.2 3.6 2.2 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6

DIMENIOLONIO			EXPLOR	ER 70 II	EXPLOR	ER 80 II	EXPLORER 90 II T.			
DIMENSI AND WEI	3-200			.9/14-30 tyres		9/14-34 tyres	With 16.	.9/14-34 tyres		
AITO TE	_		2WD	4WD	2WD	4WD	2WD	4WD		
Overall length (without linkage)	(A)	ins (mm)	143,31 (3640)	147,24 (3740)	144,49 (3670)	148,82 (3780)	144,49 (3670)	148,82 (3780)		
Width:	(B)		11333	ET NIE						
- minimum		ins (mm)	77,56 (1970)	77,56 (1970)	81,10 (2060)	81,10 (2060)	81,10 (2060)	81,10 (2060)		
- maximum		ins (mm)	97,24 (2570)	97,24 (2470)	104,72 (2660)	104,72 (2660)	104,72 (2660)	104,72 (2660)		
Owerall height with cab	(C)	ins (mm)	98,22 (2495)	98,22 (2495)	102,16 (2595)	102,16 (2595)	102,16 (2595)	102,16 (2595)		
Engine bonnet height	(D)	ins (mm)	61,06 (1565)	61,06 (1565)	63,98 (1625)	63,98 (1625)	63,98 (1625)	63,98 (1625)		
Ground clearance	(E)	ins (mm)	19,29 (490)	15,75 (400)	20.47 (520)	17,72 (450)	20,47 (520)	17,72 (450)		
Wheelbase	(F)	ins (mm)	92,91 (2360)	89,76 (2280)	94,88 (2410)	91,34 (2320)	94,88 (2410)	91,34 (2320)		
Front track:	(G)									
- minimum		ins (mm)	59,06 (1500)	59,06 (1500)	55,12 (1400)	63,78 (1620)	55,12 (1400)	63,78 (1620)		
- maximum		ins (mm)	78,74 (2000)	78,74 (2000)	78,74 (2000)	71,65 (1820)	78,74 (2000)	71,65 (1820)		
Rear track:	(H)				A SE					
- minimum		ins (mm)	59,06 (1500)	59,06 (1500)	59,06 (1500)	59,06 (1500)	59,06 (1500)	59,06 (1500)		
- maximum		ins (mm)	78,74 (2000)	78,74 (2000)	82,68 (2100)	82,68 (2100)	82,68 (2100)	82,68 (2100)		
Weight in running order with cab		ibs (kg)	6239 (2830)	6702 (3040)	6790 (3080)	7385 (3350)	6790 (3080)	7385 (3350)		
Minimum turning radius:					1303300	FRANCE		Bloom of		
- with brakes		ins (mm)	113,39 (2880)	113,39 (2880)	115,75 (2940)	115,75 (2940)	115,75 (2940)	115,75 (2940)		
- without brakes		ins (mm)	137,80 (3500)	167,32 (4250)	139,76 (3550)	194,88 (4950)	139,76 (3550)	194,88 (4950)		



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