

# FRUTTETO II 60-75-85



# 1000 SERIES ENGINES: INNOVATION RECOGNISED.



## ENGINE.

- Wide choice, 3 power bands, 3 & 4 cylinder.
- Electronic engine regulator.
- New precise and easy accelerator control.
- Low engine rpm.
- High torque reserve.
- Reduced fuel consumption.
- Single cylinder fuel pumps.
- Low noise.
- Reduced harmful exhaust emission.
- Modular construction.

Easy starting, quick warm-up, economy and reliability are some of the important virtues of the SAME mixed air/oil cooled 1000 series engines. These long stroke, large capacity, high torque engines are a joy to use, showing great flexibility and ease of use.

A three cylinder 3-litre- engine powers the **60 HP** and a four cylinder 4-litre engine power the **75** and **85 HP**, the latter being turbocharged. All feature our unique individual camshaft driven injection pumps. **One pump to each cylinder**, with short equal length pipes allowing very accurate fuel delivery with the benefit of good combustion and **remarkable economy.**

## Electronic engine regulation.

Absolute accuracy in engine and P.T.O.

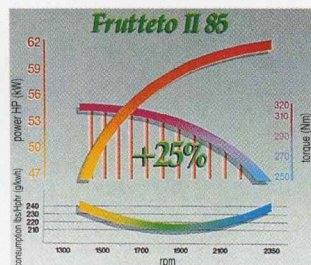
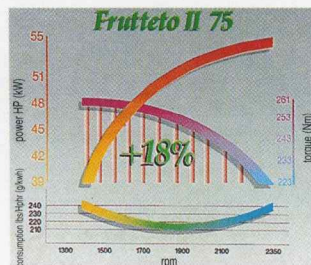
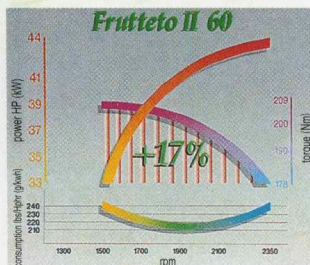


RPM and forward speed are essential for jobs such as spraying and therefore we offer our exclusive **electronic regulator** which completely replaces the usual mechanical governor and connecting rods. The accelerator pedal becomes a potentiometer; transferring its signals with electronic pulses via a microprocessor to a very simple electronic injection pump regulator. This allows smooth control for road transport and manoeuvring. For field work we lock the speed precisely with the **electronic hand accelerator.** **Functional and comfortable**, it is composed of a hand lever and touch button with which you can increase, decrease and memorise the engine revs. When selected and memorised the electronic regulator maintains this speed exactly, whatever load is applied. Power

is constant because the speed of the engine is monitored by electronics many times a second therefore there is precise engine rpm control. The benefits of this precise control are reflected in more power being available because of no dropback in rpm when load is applied; no rpm increase when load is reduced and greater accuracy in maintaining exact forward speed thus utilising each machine to produce uniform results with no over or under applications.

## Clean "Snag free" design.

The air filter intake is positioned at the front the bonnet with a large 8" diameter air cleaner fitted to the 75. The exhaust also is situated beneath the bonnet with the silencer protected from the elements for **longer life.**



# TRANSMISSION: "SYNCRO POWER" (OPTIONAL).

Easy gear shifting and a **large number of speeds** are on offer on all Frutteto II tractors, suiting all requirements and conditions. There are 3 **ranges (low, normal and high)** plus 4 **synchronised speeds and a synchronised "shuttle"** lever duplicating all for ward gears in reverse.

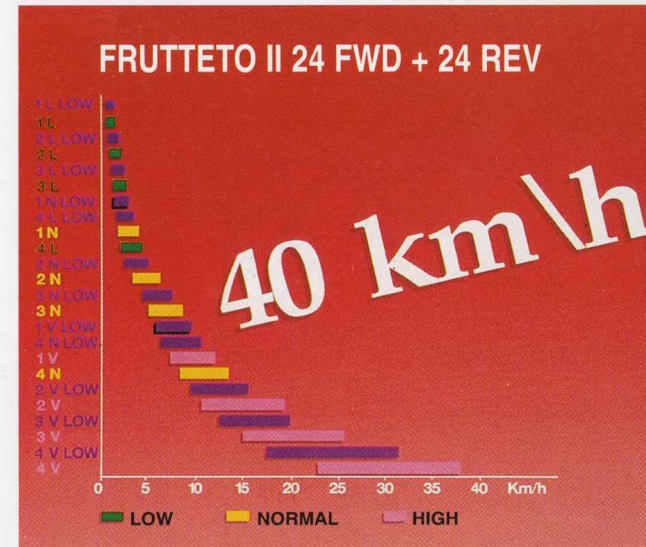
The availability of the **electro hydraulic "Syncro Power"** reduces each speed without using the clutch, thus increasing output and traction. A small 18% speed reduction increases engine

performance when under load, rocking the switch back smoothly increases the speed as the load reduces. The jerk-free "Syncro power" doubles the number of available **speeds from 12-24 in both directions** giving the operator the benefit of the ideal speed to match the prevailing conditions.

Perfect gear overlapping always ensures the ideal **speed and with a maximum close to 40 km/hr** transport times are greatly reduced.

## Braking system: predictable safety.

Our Frutteto II tractor incorporate 4 **oil immersed disc brakes**, even on the 2WD **we have oil immersed brakes in the front wheel hubs**. For tight independent brake turning front and rear inside wheels can be locked allowing a "slew turn". When required the front brakes can be released by means of a brake separator valve, however with the pedals locked together all 4 wheel brakes still operate together - such is the emphasis on safety.



## TRANSMISSION.

- Synchronised gear and "shuttle" shifting.
- Electro-hydraulic Syncro Power.
- Quick and easy gear selection.
- Side mounted gear levers.
- High resistance helical-cut gears.
- 4 oil-immersed disc brakes on 4 wheels.
- 4 wheel braking also on 40 km/hr 2WD.
- Brake separator valve.
- Electro-hydraulic engagement/disengagement of 4WD diff locks.

## Traction and ease of use.

Traction has been improved still further on the Frutteto II tractors simply by making things easier for the driver.

**Electro-hydraulic push button engagement of difflocks** and 4 wheel drive make their use simplicity itself.



# FRUTTETO II. ORCHARD TRACTORS.

We introduce three **series II Frutteto** tractors specifically developed for the fruit and vegetable producers but also eminently suitable for users with width restricted working areas. Length and height have also been reduced in this modern concept to facilitate work under low branches and increase manoeuvrability in confined areas. Excellent weight distribution and optimal weight/power ratio gives superb traction with low ground pressure resulting in minimal soil structure damage.

## Champions in profitability.

Modern technology allows the Frutteto II tractors to optimise and rationalise performance capabilities. **Practical benefits** are derived from technical innovation. SAME has always projected advanced solutions, able to resolve practical problems and increase the profitability level of the tractor. The Frutteto II tractors are an example of the most recent practical application of SAME philosophy.

## The electronic generation.

Improvements in all over **performance and productivity** are the fruits of the practical use of modern electronics.

We utilise electronics to improve the tractor function; allowing it to adapt more easily to special requirements.

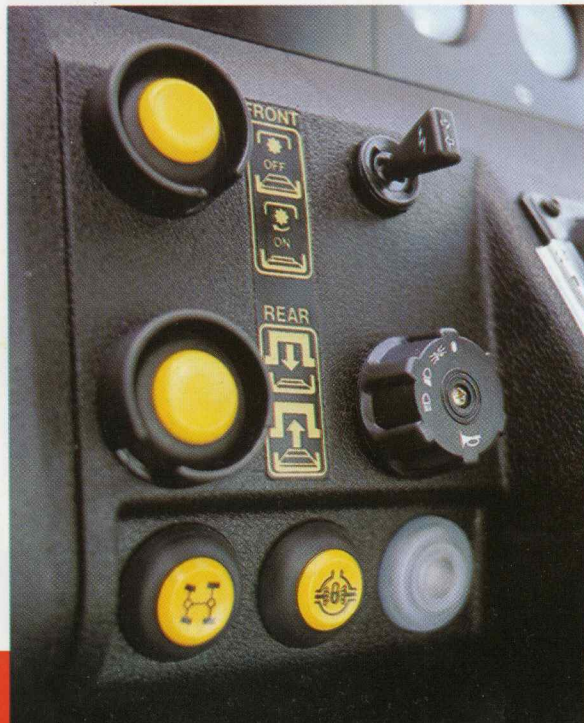
The main innovations concern the **electronic engine regulation, the "Syncro Power" transmission, the front linkage & P.T.O., with electronic** position control, the rear **hydraulic stabilisers, the reverse drive** capability and better **cab ergonomics**.



# FLEXIBLE AND PRODUCTIVE P.T.O.

The standard P.T.O. allows efficient and highly productive operation of either low or high power machines because we have **540** and **750** rpm available. Using 750 rpm in the economy mode gives us 540 rpm with a 28% reduction in engine rpm allowing us to perform the lighter tasks with a **considerable fuel saving** and with a quieter and more restful working environment.

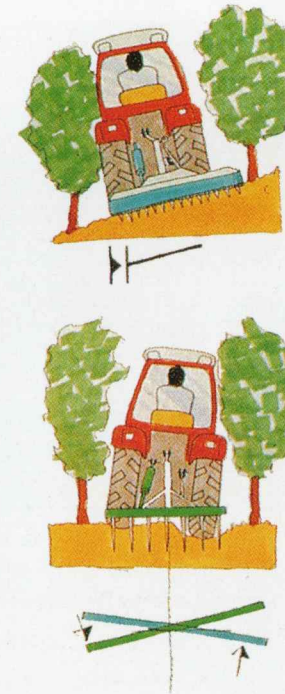
A **front** P.T.O. and three point linkage is optionally available. The standard speed is 1000 rpm and allows combined operations such as spraying and mowing to be carried out simultaneously thus saving time expense and ground compaction. **Both P.T.O.s** are engaged electro hydraulically. To facilitate front P.T.O. work 2 double acting spool valves can be fitted for front use.



## P.T.O.

- 3 speed rear P.T.O.
- "Economic" P.T.O. for maximum economy.
- Front P.T.O. for combined operations.
- Front P.T.O. of 1000 rpm.
- Front P.T.O. with direct drive to oil cooled gearbox from engine crankshaft pulley.
- Electro-hydraulic P.T.O. engagement.
- Engagement under load.
- Low power absorption.





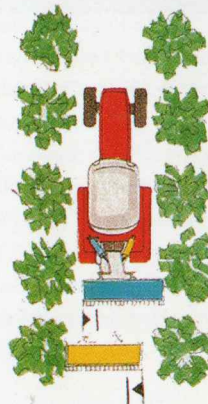
operated from the driving seat by using an electro-hydraulic control. Perfect operation in hilly areas can sometimes be a problem with the possibility of one side of the implement digging into the ground. Not so with the optional hydraulic linkage levelling control - perfect levelling, always at your fingertips.

## COMBINED WORKING.

### Rear hydraulic lift.

Orchard requirements regularly demand a certain finesse not always necessary in agricultural operations, this has led us to develop two important options.

**Hydraulic side shift adjustment and hydraulic levelling.** The side shift allows us to instantly adjust the machine laterally to allow close to edge working when needed. This control is simply

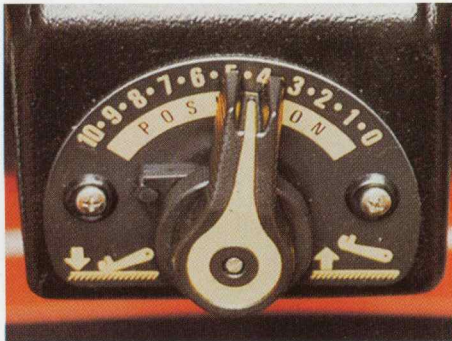


### REAR HYDRAULIC LIFT.

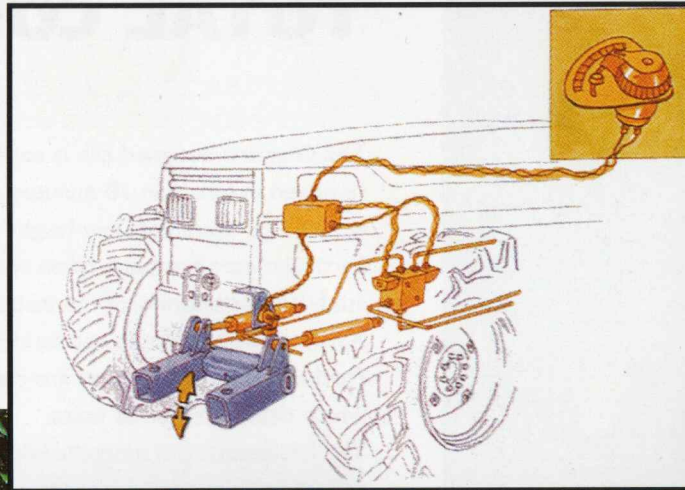
- Good lifting capacity (3000 kg).
- Automatic control system.
- Ergonomic positioning of hydraulic levers.
- Electro-hydraulic side shift.
- Good external hydraulic services.
- Up to 3 double acting rear distributors (6 way).
- Up to 3 double acting front distributors (6 way).

## Front hydraulic linkage.

**Working front and rear linkage in combination** is essential if we are to increase productivity, reduce costs (time and fuel) and reduce ground compaction by traversing the same track less times. SAME introduces, on its Frutteto tractors, front linkage with **electronic position control**, a system which was honoured at the 1991 Verona Show. With this control the implement can be set at a predetermined height above the ground and that height will be repeated and maintained irrespective of shock loads or variations in weight imposed. The electronic position control **automatically** takes the implement back to its **optimal** position.



A dial control lever situated beneath the steering wheel can be easily set by the driver to **automatically maintain this ground clearance**.



## FRONT HYDRAULIC LINKAGE.

- Facilitates combined working.
- Original SAME linkage.
- Integrated linkage with lift rams under bonnet.
- Mounts implement closer to tractor (better stability).
- Electronic position control.
- Practical graduated scale for position control.
- Adjustable linkage for CAT I and CAT II.





## CAB: TOTAL COMFORT.

The Giugiaro designed cab is easily removed in less than 10 minutes, giving access into extremely low height areas. Particular care has been taken with the study and positioning of the instruments. All windows and doors can be opened. Furthermore the windows are curved which deflects external noise.

The Frutteto cab is designed with noise reduction in mind and material with high noise absorption capacity has been used to create a protective barrier against - this external noise resulting in a tested noise in the low 80's.

**Accuracy of finishing and attention to detail** makes this a very pleasant cab to work in. The interior is smart with the fenders covered with an elegant washable fabric.

Externally, two **fenders made in impact resistant material** avoid possible wheel damage to **hanging fruit and branches**.

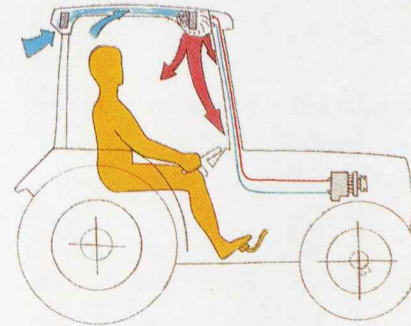
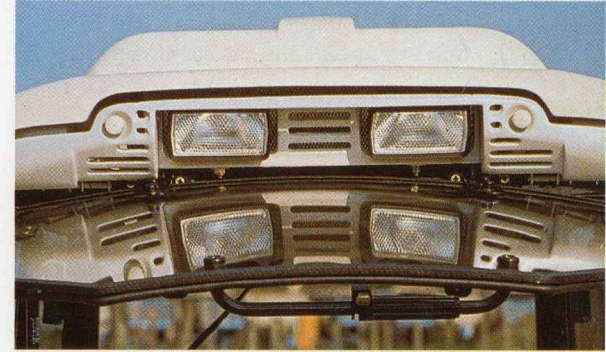
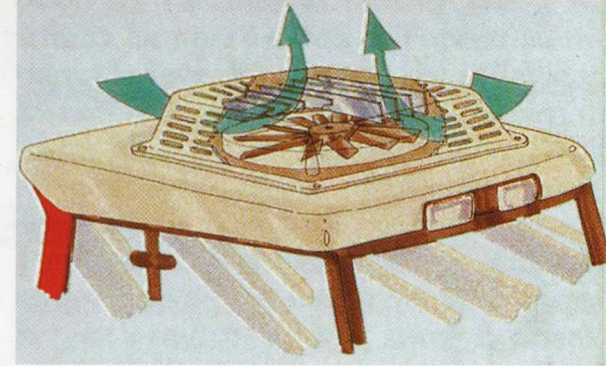
**The air filter housing** has also come under careful design consideration allowing rapid filter replacement,

important if changing from normal to active-carbon filters for special spraying work.

The cab is ventilated, maintaining light pressurisation resulting in a cleaner healthier working environment.



The heating system is regulated and controlled by a thermostat which automatically varies the air inlet thus achieving and maintaining the desired in-cab temperature.



#### **CAB.**

- Giugiaro design.
- Curved windows.
- Wide doors.
- Excellent visibility.
- Easily removed.
- Opening front and rear windshields.
- 4 working lights.
- Active carbon filter.
- Air conditioning (optional).
- Very low noise level.



# FUNCTIONAL AND COMFORTABLE DRIVING AREA.

At last, on a tractor designed for orchard work, we have a "**clean**" **driving area**. One that is designed to be functional, comfortable and also aesthetic. Remarkably wide for a tractor which is so narrow overall, with suspended pedals making the platform area large and lateral gear levers positioned in such a way as to make operation a joy and still allow easy entry and exit from the right hand door.

For use without cab (where laws allow) the low smooth bonnet - only 1140 mm

on 85 HP- fully adjustable seat and steering wheel do not obstruct the driver when working among very low branches and yet with the steering wheel and seat raised give a very comfortable general driving position. Other main controls such as hydraulic levers and electro hydraulic control buttons are also comfortably positioned to the right hand side.

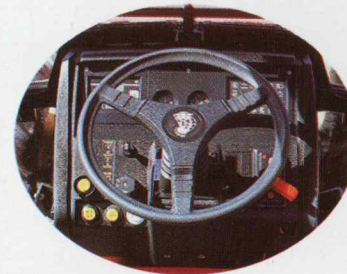
The **dashboard** is adequately equipped with such items as fuel gauge and the complete **check panel** giving a multi-

functional guide to the complete tractor operation. However, it also includes a **liquid crystal display** which clearly indicates forward speed and either engine or P.T.O. rpm - each available at the touch of a button **plus** the revolutionary manual **electronic accelerator**.



## **DRIVING AREA.**

- Anti vibration platform.
- Removable cab (and/or safety frame according to market).
- Gear levers and hydraulic controls to right of driver.
- Suspended pedals.
- Adjustable steering wheel.
- Hydrostatic steering.
- Dashboard with check panel and digital instrumentation.
- Zinc coated sheet steel panels.





There are some orchard jobs better suited to reverse drive, mulching prunings, grass cutting and fork lift work are examples. Now it is possible to obtain a SAME Frutteto II in a form that allows almost instant **changeover (30 seconds)** from normal forward to reverse driving mode.

All major controls are duplicated in the

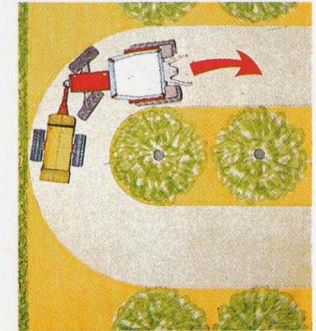
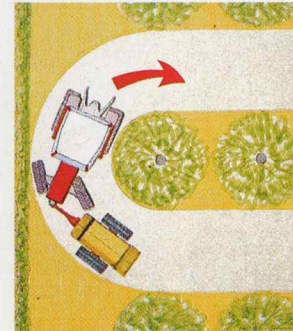
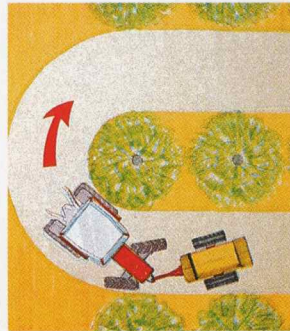
reverse driving position thanks to the increasing use of electronics.

**A further benefit of reverse drive** can be when towing a trailed sprayer (with a pushed mower on the linkage).

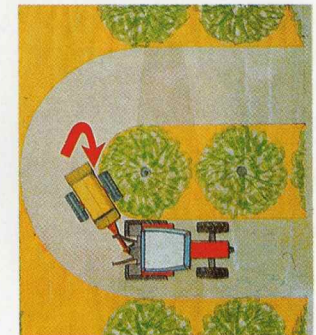
The trailed sprayer will follow the tractor track instead of running down growing plants when turning at the row end.

## REVERSE DRIVE.

**YES**



**NO**



*With reverse drive, turning with trailed equipment is much easier and requires less manoeuvres.*



# REVERSE DRIVE AND FRONT LINKAGE THE ADVANTAGES.

The advantages of reverse drive are enhanced when used together with front linkage and P.T.O. Thanks to this combination, operation times, the number of runs and fuel consumption are considerably reduced. Reverse drive not only increases the working capacity of the tractor, making the purchase of other equipment unnecessary, but it also reduces time and operation costs. Furthermore the reverse drive unit becomes a valid fork lift for the movement of pallets and boxes of fruit etc. reducing machine investment for you the grower.





#### **REVERSE DRIVE.**

- 30 second changeover.
- Good driving comfort.
- Maximum operational accuracy.
- Less overall dimension during trailed equipment turning.
- Hydraulic controls within easy reach in reverse mode.
- Ergonomic controls.
- Reduction in number of passes.
- Increase in annual tractor usage.
- Reduction in annual costs.
- Reduction of farm machine pool.



