

Parkgate Trailed and Mounted Ploughs

EXCLUSIVELY DESIGNED
FOR
FORESTRY,
LAND RECLAMATION,
AND
EROSION CONTROL.



William Clark & Son (Parkgate) Ltd.

MANUFACTURERS OF AGRICULTURAL AND FORESTRY
TOOLS AND IMPLEMENTS

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*FRONT COVER — Parkgate Trailed Deep Tine & Draining Plough Arched Beam Model
fitted with double throw (deep) tine mouldboard.*

THE PARKGATE TRAILED FORESTRY TINE & DRAINAGE PLOUGH

This implement was originally designed to meet the requirements of the Forestry Commission in Great Britain. It is now also extensively used by private woodland owners and contractors both in Britain and abroad who have found usual types of agricultural ploughs quite inadequate in coping with the severe conditions met in forestry operations. Cultivation of boulder strewn hillsides and felled woodland sites or drainage of wet peaty soils for forestry needs a plough of exceptional ruggedness and strength. Twenty five years of continual developments have shown the Parkgate Tine and Drainage ploughs to be capable of producing results demanded by foresters.

The Trailed Plough with a Double Throw Turfing Mouldboard.



The basic plough consists of a main beam and transport carriage which are fabricated from heavy walled box section. The adjustable drawbar is also constructed from box section and is fitted with a safety shear pin device incorporated in the draw coupling. The plough carriage includes ten stud roller bearing hubs fitted with large steel rims and 12.4/11 x 36 tyres. Where ploughing in excessively soft conditions is encountered twin wheels can be fitted to the transport carriage to increase floatation.

The depth of furrow produced by the plough is determined by a strong depth control screw fixed to the plough transport carriage. This method of controlling the depth of furrow is employed on all Parkgate Trailed Ploughs.

Both single and double tine mouldboards are available for use on this plough for ploughing down to depths of 45 cm. Also available are single and double draining and turving mouldboards for ploughing down to depths of 60 cm.

A crawler tractor of approx 70HP is desirable to handle this plough but on peat drainage work where lower drawbar pulls are encountered a smaller tractor can be used. To operate this plough the tractor must be fitted with a hydraulic pump and control valve to operate the single acting hydraulic ram fitted to the plough.





The Trailed Plough fitted with a single throw tine mouldboard

THE PARKGATE LAND RECLAMATION TRAILED PLOUGH

This plough is of similar construction to that of the Parkgate Forestry Tine and Draining Plough. In addition it is designed to plough level with one wheel running in the furrow and the other on the land. The drawbar is offset enabling the towing tractor to run on the land away from the previously ploughed furrow. The result being completely ploughed rough ground.

This plough uses a single tine mouldboard for ploughing down to depths of 45 cm. and a 50 cm. disc coulter carried on heavy spring loaded disc shears.

A crawler tractor of approx. 70 HP is desirable to pull this plough. To operate the plough the towing tractor must be fitted with a hydraulic pump and control valve to actuate the single acting hydraulic ram fitted to the plough.

THE PARKGATE TWIN FURROW TRAILED PLOUGH

This plough was designed specifically for complete ploughing in both forestry and land reclamation. It has an extra wide transport carriage which accommodates two main beams. The adjustable drawbar is attached to the outside main beam which enables the towing tractor to be kept on the land and away from a previously ploughed furrow.

The single tine mouldboards for ploughing down to depths of 45 cm. and two 50 cm. disc coulters carried on heavy spring loaded disc shears are standard equipment on this plough.

The depth of furrow produced by the plough is determined by two strong adjustable depth control screws fixed to the plough transport carriage.

A crawler tractor of approx. 140 HP is desirable to pull this plough. The tractor must be fitted with a hydraulic pump and control valve to actuate the two single acting hydraulic rams fitted to the plough.



Twin Furrow Trailed Plough in operation giving complete cultivation down to depths of 45 cm.



THE PARKGATE DEEP TINE & DRAINING PLOUGH (STRAIGHT BEAM MODEL)

This plough is of the same construction as the Parkgate Forestry Tine and Draining Plough, but is a much larger and heavier version. The transport carriage which supports the main beam of the plough is much higher than that of other Parkgate Trailed Ploughs. This allows much larger mouldboards to be used.

Both single and double (deep) tine mouldboards are available for ploughing down to depths of 60 cm.

Also available are single and double draining mouldboards for ploughing down to depths of 90 cm.

The Parkgate Deep Tine & Draining Plough Straight Beam Model, shown with a double throw tine mouldboard.





Parkgate Trailed Deep Tine & Draining Plough Arched Beam Model, shown with a single throw draining mouldboard.

THE PARKGATE TRAILED DEEP TINE & DRAINING PLOUGH (ARCHED BEAM MODEL)

This plough uses the same mouldboards as the Straight Beam Model but has an arch in the main beam in front of the mouldboard, which allows a larger turf to be lifted clear of the drain cut. Another advantage is that it allows passage to tree stumps and boulders which would otherwise foul the beam.

Twin wheels can be used on both of these models to increase floatation when ploughing in soft ground conditions.

These ploughs often require two towing tractors in tandem to give best results.

TINE PLOUGHS

The Parkgate Tine Ploughs were originally developed for the Forestry Commission of the U.K. for afforestation in the rugged mountain areas of Scotland and have been tested and proved over many years as the most effective implement for cultivating shallow soils while simultaneously rupturing the rocky sub-soils.

PLANTATION SITE PREPARATION

When site preparation is required to encourage deep rooting either to increase available soil moisture during dry summer months or to encourage stability, the PARKGATE MOUNTED TINE PLOUGHS are the best implements to give the required cultivation. Their main attribute is that they cultivate the top soil while at the same time rupturing deep into the sub-soil so that in one pass all that is needed for soil improvement has been done.

LAND RECLAMATION

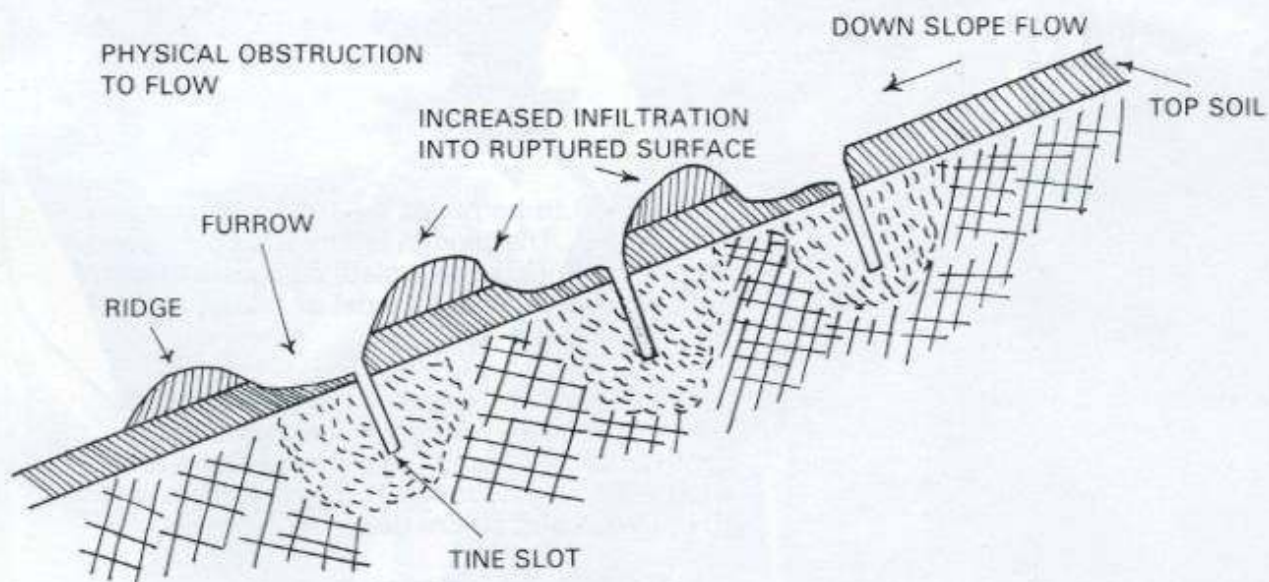
All models of the Parkgate Mounted Tine Ploughs can be used for overall complete ploughing and are, therefore, ideal implements for reclamation of scrubland and woodland.

The deep-digging tine penetrates beneath the roots left in the ground, pushing these out of the soil and on to the surface while the mouldboard turns over the soil. Burying the surface trash and aerating the top-soil.

EROSION CONTROL

All models of the Parkgate Mounted Tine Ploughs can be suitable for erosion control when operated parallel to the contour in a series of runs. The ploughs will create a number of physical barriers to water flow, while the ruptured sub-soil enables surface run-off to penetrate into the sub-soil where it may be stored.

In this way the use of the Tine Plough not only helps to prevent erosion, but it also creates a reserve of water in the sub-soil which becomes available to plants in the dry season.



THE BENEFITS OF TINE PLOUGHS IN EROSION CONTROL

TINE PLOUGHS

THE PARKGATE MOUNTED TINE PLOUGH (HEAVY DUTY)

Designed to be pulled by a crawler tractor of 180-200 HP. The plough is mounted by means of a king pin on a back plate designed to suit the particular make or model of tractor to which it is to be fitted.

The plough body consists of a replaceable tine or sub-soiler which can penetrate to a depth of 90 cm and a mouldboard share and wing which simultaneously lifts and turns soil 60 cm wide and 60 cm deep.

A Disc Coulter is optional.

This plough was specifically designed for space furrow ploughing on indurated or compacted soils.



The Mounted Plough in the raised position fitted with a Single Throw (Deep) Tine Mouldboard



The Mounted Plough fitted with a Double Throw (Deep) Tine Mouldboard.

THE PARKGATE MOUNTED TINE PLOUGH (MEDIUM DUTY)

This plough is similar in design and construction to the Heavy Duty Mounted Tine Plough but is lighter. It is intended for sites where less depth of penetration into sub-soils is required. It is designed for use with crawler tractors of approx 80 flywheel HP. The beam is mounted on a special back-plate appropriate to the type of tractor by means of a pivot head incorporating the king-pin, stabilisers and a double acting ram.

The replaceable tine sock will penetrate soils down to 60 cms. while the mouldboard share inverts a ribbon of soil 45 cms. wide and 45 cms. deep.

This plough was originally developed to plough stony heathland soils with compacted materials or pans within 60 cms. of the surface.

The Plough in the Raised Position.





The Plough Turning a Ribbon of Soil 45 cm. wide, 45 cm. deep



The Mounted Plough in use with a Double Throw Tine Mouldboard

THE PARKGATE LAND RECLAMATION PLOUGH

Designed to be mounted on a standard agricultural three point linkage, this plough is intended to be pulled by large four-wheel drive tractors of approx. 70 flywheel H.P. The tine penetrates to a depth of 60 cm. while the mouldboard turns over a ribbon 40 cm. wide and 30 cm. deep.

The plough was developed for agricultural land reclamation work, where small individual areas were involved with much inter-site movement

It is particularly effective where cultivation is required to a depth of only 30 cm. or less — over a Rocky Sub-soil or pan.

Also available for this plough is a depth control land wheel which is fixed to the plough beam. This gives better control of the ploughing depth.

The Plough Turning a Ribbon of Soil 40 cm. wide 30 cm. deep.





The Parkgate Land Reclamation Plough



The Plough in the Raised Position.