

LOWTHER TREE PLANTER MODIFIED FOR SILT AND CLAY SOILS

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The Lowther tree planting machine plants trees well in light sandy soils. In heavy soils, such as silts and clays, the wedge-shaped trencher of the Lowther compresses the soil laterally with a greater force than the packing wheels can exert to replace the soil around the roots of the planted tree. This results in an open slit with the roots of the trees dangling in a pocket of soil air.

Modification of the existing trencher and the addition of sideplates (fig. 1) relieves the lateral compressing action and allows the soil to be well packed around the tree roots. The action of the sideplates is to lift and fold the soil upward and outward; after the tree is placed in position and the trencher passes, the soil folds back into its original position. The packing wheels can exert enough pressure on this folded soil to assure good root-soil contact and the exclusion of drying air.

Sideplates on tree planting trenchers are not new, but we believe this modification will assure better results from the Lowther tree planter.

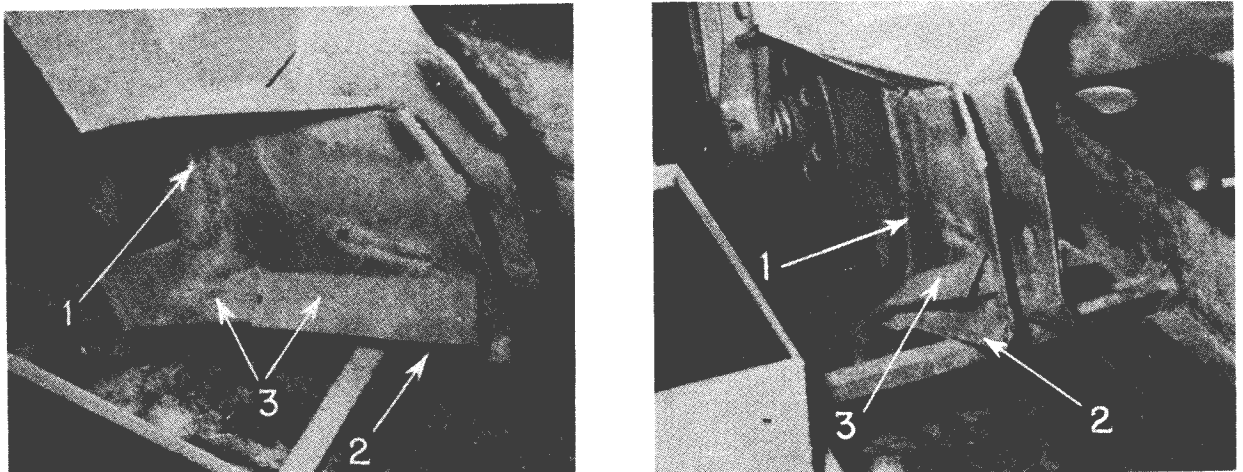


Figure 1. Trencher modification: (1) A Vee of metal added to make leading edge knife shaped and reduce wedging action; (2) flared bottom of original trencher cut to eliminate flare and hence the wedging action; (3) sideplates added, left part is -gelled permanently, rear part is bolted and adjustable.