

Ferguson TE20 Tractor

By Richard Maxted

Introduction

This manual covers the Ferguson TE20 pack. You will find them under Vehicles and People type things as:

RMAX_(vehicle type)_(colour)

I don't know if you can use them as Moving Traffic on roads, but they work just fine as static objects. The cars have no glowing headlights - as static objects this would look odd.

This pack is probably the first version of a growing range of Ferguson TE20 products. It is ready for release for my LMVLR route but I intend to substantially expand it to include a diesel version of the tractor as well as various weathered and different paint versions. I also want to expand the range of implements that are available. However, it is time consuming work and so this will do for now...

Version Control

Release	Description	Date
v1	Basic "unweathered" TE20 tractor with and without tow hook attachment. 3 ton trailer, two share plough and carry box attachments.	September 2024

Conditions & Licence – PLEASE READ THIS

For freeware that you develop for yourself or for release as freeware on any website or system, you have an absolute and total right of ownership. This package contains only assets made by me – it does not need any other downloads. It does use unmodified generic Railworks wagon sounds and a driver. You may use it, clone it, modify it, rebadge and rebrand it.

It may not be used where payment is sought or other commercial activities. I reserve absolutely the right to determine what is commercial. Charityware is commercial but is likely to be granted access.

If you release this stock modified then please do keep in mind that others will be using it in an original form. Please **DO NOT USE** the RMAX_ prefix to the files you make but add your own. This is to ensure the originals stay the same and to allow me room to expand the collection.

The Ferguson TE20 Tractor.

This pack includes a basic version of the petrol Ferguson TE20. It contains a range of TE20 tractors coupled to a plough, a trailer and to a transporter box. At present the model is only lightly weathered but I aim to release further versions in different states of wear and dirt as well as with different engine hood colours. The plan is also to add implements. However, this is a complex model

and making implements is time consuming so this version is the current (2024) release suitable for use on my LMVLR route.

A Bit of History – The basic model

The TE20 model is short for Tractor England of 20 horsepower. It was produced between 1946 and 1956 but is still in use today. The “Little Grey Fergie” was both revolutionary and also part of a longer development process.



The TE20 followed on from 30 years of design and innovation by Harry Ferguson following the First World War. Between the late 1920's and the end of the Second World War Ferguson had a somewhat on-off relationship with the Ford company. That enabled him to get production of his pre-war tractor and launch a world wide business based around the innovative design of the tractor.

The innovation that made the Ferguson tractors unique and impressive was the 3 point hitch. With a hydraulic system located under the drivers seat it was possible to plough all sorts of soils because the system prevented the plough jamming in and then springing out if it encountered resistance. This led to a regular furrow depth and greater control. Basically agricultural productivity and yields improved because of it.

Just before the Second World War the relationship with Ford broke down so he joined up with the Standard Motor Company in Coventry. Despite a pause during the war years in 1946 the TE20 went into production. Over half a million TE20's and their variants were produced selling world wide.

What made Ferguson so successful was the way in which it was a complete system. By 1950 there were over 60 official implements that could be integrated into the system without having to do much more than change the rear linkage cross bars; a simple and quick manual job. The TE20 could operate implements using its PTO, a separate hydraulic line offtake, and a remotely operated towing hitch. There was even a training school set up Stoneleigh Abbey close to the works where safe and efficient working practice was taught. Fergusons were also masters of publicity and product placement – in a time when this was still largely unrecognised.

My basic model – illustrated above – is a TE20 with the basic rear hitch raised. It is based on drawings I have obtained and a lot of research in parts catalogues for dimensions. It is probably pretty close to accurate so far as sizing and components. It is also surprising that the seat and driving position happen to fit the default KUJU / Rail Sim sitting people , so you can get a farmer driving it ! Every version of the tractor that is attached to an implement is the same but the hitch positions and configurations are correct for each implement. Each implement carrying tractor carries an individual registration number so that you can place several in close proximity without appearing to have clones.

The Trailer

Ferguson produced two tipping trailers. The 30CWT trailer had flared sides and was off all steel construction. I have produced a model of the alternative wooden sided 3 ton trailer.

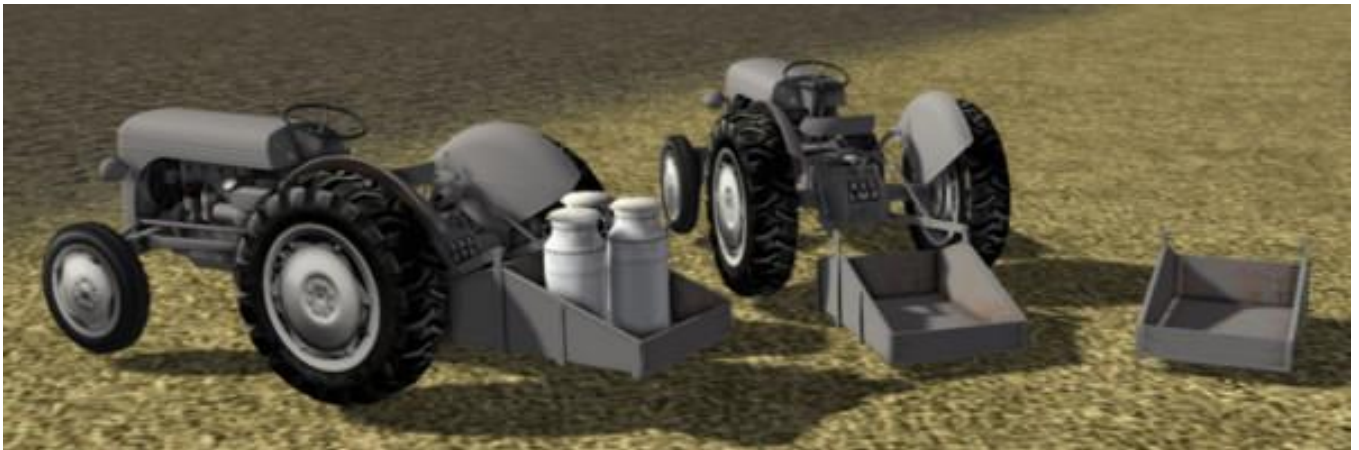


There are three models. The first is a simple combination with the trailer and tractor attached in a straight line, the trailer is raised and is suited and ready for being driven. The other models are the trailer as a stand alone and the tractor with the correct remote tow hitch attached. The purpose of this is two fold. Firstly it enables the trailer to be parked up waiting to be collected by a waiting tractor. Alternatively it allows the trailer to be attached to the rear of the tractor in various angles and slopes.



To enable this I have constructed the trailer so that it's pivot point is the hitch eye. This enables you to attach the trailer and then rotate it around the hitching point to enable it to go around corners or up and down slopes without trying to solve a complicated three dimensional headache. It also allows the trailer to be "parked" on its parking foot under the hitch.

Other Implements



Ferguson made a number of different transporter boxes that rapidly and easily attached to the “default” TE20 set-up I have built. I have modelled this as attached to the tractor in the loading position and as a separate item for just leaving about the farm yard. A separate model shows the box being transported in its carrying position with the 3 point hitch system raising the box to a level carry position. The box is big enough to carry a hay bale or two or some of my milk churns found in my “Clutter Assets” pack.



I have made a 10” double mould board plough. Not that it’s needed on my LMVLR route but I couldn’t not have a go. So far as I can tell it is correctly dimensioned and placed. Again the level carry position produced by the 3 point system is clear from the model of a TE20 with the plough in the raised position. In the modelled version in ploughing position I have deliberately placed the plough accurately at depth and needing the tractor to be tilted into the furrow to get a level plough. Its convincing enough from a distance but less so close up. I have also included the plough as a stand alone object for the farm yard or perhaps as a load for a truck.