CIARK CARLOADER SERVICE MANUAL

SECOND EDITION



"Dammit! If I only had saved that CLARK SERVICE MANUAL!

CLARK TRUCTRACTOR

Div. of Clark Equipment Co.

Battle Creek,

Michigan, U. S. A.

PUBLISHED BY CLARK TRUCTRACTOR Div. of Clark Equipment Co.

SECOND EDITION

Foreword

A great deal of time and care has been devoted to the proper designing, manufacturing, and preparation of these machines for delivery into your hands.

For these reasons may we take the liberty of suggesting that a mechanism such as this will always respond best to considerate treatment and care.

There has long been a need, in the industrial truck field, for a service manual which is simple in explanation and yet complete enough to leave no doubt in the mind of the mechanic as to how a repair should be made.

This is a sincere effort on the part of Clark Tructractor to, not only lessen the time a machine is out of operation for repairs, but to assist the mechanic by showing him the easiest method of doing the job.

Its chief purpose is to acquaint you with the means of taking the best care of your Clark machine, so that you may derive from it the full measure of operating efficiency and long economical life built into it at the factory. Will you cooperate to the extent of reading this manual and keeping it handy for ready reference?

SERVICE MANAGER

C. T. Stauley

CLARK TRUCTRACTOR Div. Clark Equipment Co.

BATTLE CREEK, MICHIGAN

INDEX

NAME PA	GE I	NO.
AIR CLEANER		
BRAKES Bleeding	25	26
Adjustment of Hydraulic Brakes		26
Adjustment of Hand Brake		. 26
CARBURETER	9,	, 10
Disassembling	9	, 10
Cleaning Assembling	***	10
Adjusting		10
CLUTCH 17, 19, 2	0, 21,	. 22
Ramoval		. 19
Diamentling Assembling	20,	, 21
Installing		22
Adjusting		. 22
Release Bearing Assembly		. 17
Lubrication		. 17
CLEARANCES		5
Piston Rings		
Connecting Rod Bearings		5
Valves		5
Ignition Points Crankshaft End Play		
DRIVE AXLE	5 16	42
Removal	5, 16	17
Detail Photograph		. 17
ENGINE TROUBLES-Causes, Locations, Remedies		. 4
ELECTRICAL 6, 7, 1	1, 12	, 13
Advancing or Retarding Spark		7
Adjusting Distributor Points Adjusting Spark Plug Gap		:
Generator	12,	. 13
Regulating Charging Rate		. 12
Starter	11,	, 12
Removal Bendix Drive Adjustment		- 11
Bendix Starter Drive Cleaning	11,	. 12
Timing the Engine		6, 7
GASOLINE GAUGE		
GOVERNOR		. 10
Adjustment		. 10
Cleaning HYDRAULIC SYSTEM		
Oil Level		
Changing Tilt Cylinder Leathers	27	. 28
Changing Lift Cylinder Leathers 2	8, 29,	, 30
LUBRICATION		
Chart		
OIL FILTER		
OIL PRESSURE		
OPERATION OF MACHINE		
PLACING MACHINE IN SERVICE		
STEERING		
Removal of Steering Gear		
Adjustments		. 24
Centering of Steering Wheel		
Steering Axle		
SHIFTFORKS		
TRANSMISSION	6, 17,	, 18
Commoder	10, 10,	. ::

Instructions for Placing Your Clark Machine in Service

Before attempting to start the new machine, make sure first that the engine has sufficient oil. The oil gauge on the right-hand side of the engine should indicate full. If it does not, pour in oil through filler pipe also located on right-hand side of engine at hydraulic lift pump, until the correct level is reached on the gauge. Use good quality SAE 20 engine oil for the first 100 hours of operation. Then use only SAE 30.

We would suggest that the oil be changed every 50 to 60 operating hours. By so doing the life of the engine will be preserved.

Be sure that drain plug in radiator is in place, also that the drain plug on right-hand side of engine block is closed. Then fill radiator with clean water. The water is drained from radiator before the machine leaves the factory, and this must not be overlooked. NEVER RUN AN EN-GINE WITHOUT WATER IN THE COOLING SYSTEM.

The ground wire on the battery has been disconnected, and gas drained so the engine cannot be started while machine is in transit. Therefor it will be necessary to replace ground wire and fill gas tank.

In starting a new engine, it is a good practice to turn engine over a few times before turning on the ignition key, or using choke. This starts the oil circulating and puts an oil film over the cylinder walls and improves the compression of the engine. An engine which has stood a considerable time, as in shipping, will have most of the oil drained off the cylinder walls with the result that the compression will be poor and starting hard until oil film is again restored.

It is necessary to use the choke for starting a cold engine. Pull choke out until engine has started, then push it in about 34 of the way until engine has had a chance to warm up, at which time it should be pushed down as far as possible.

This machine operates like an automobile, with clutch and brake pedals, gear shift and automotive steering and foot accelerator. The driver will quickly become accustomed to the steering wheel located on the back of the machine.

Levers for lifting, lowering and tilting are located conveniently near driver's right hand. Pressure relief valve prevents overloading of machine and by passes at lifting and tilting limits.

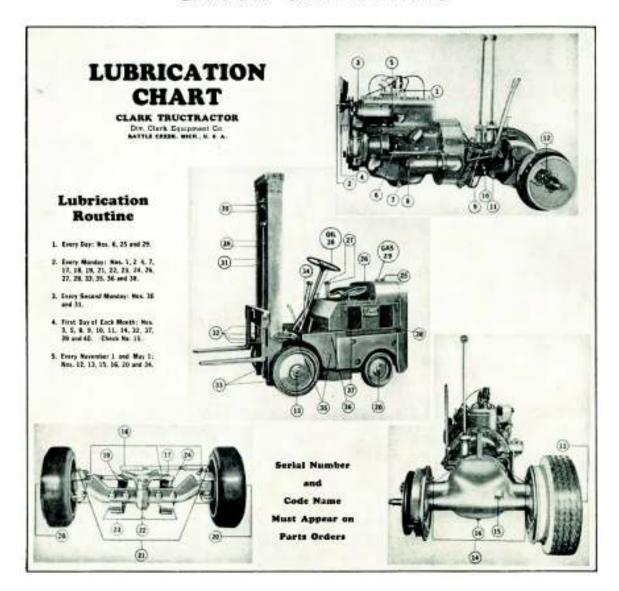
Levers must be held in position to actuate valves as they return to neutral position automatically and hold fingers or tilt at desired position until again manually operated.

To stop fingers at any point during upward, downward, forward or backward motion it is only necessary to allow control levers to return to neutral position.

WARNING

The warranty on the Clark machine will be voided by improper handling or abuse of the machine. DO NOT EXCEED THE MAXIMUM LOADING LIMIT as covered by the warranty plate on the machine. DO NOT DISCONNECT THE SPEED GOVERNOR, as it is set at the factory to give the machine a maximum safe speed in high gear. TO DISCONNECT THE GOVERNOR will void the guarantee on the Clark machine.

CLARK CARLOADER



See Opposite Page for Lubrication Routine