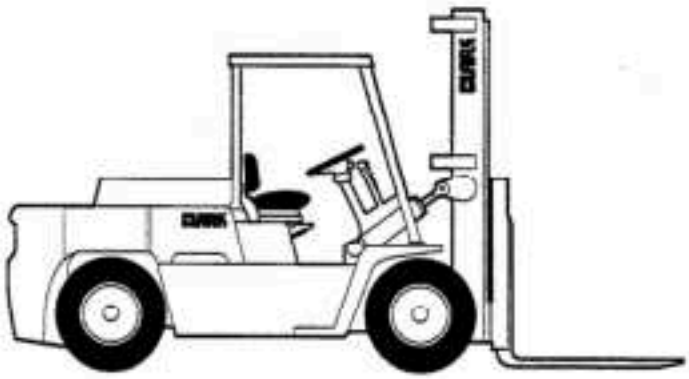
Service Manual

SM 591



GPH/DPH 50/60/70/75

CLARK
Technical Publications
Lexington, KY
40507-1640

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Planned Maintenance

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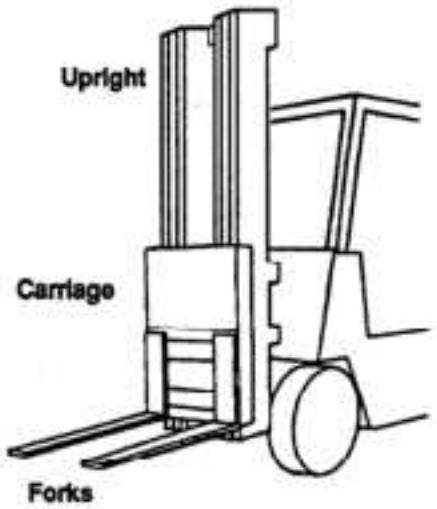
Introduction

This section includes a troubleshooting chart and procedures for a visual inspection.

- The troubleshooting chart describes a problem, points out a probable cause, and describes the correction.
- The visual inspection include points made during a driver's daily inspection, but also describes closer checks to make to the upright, carriage, and forks.

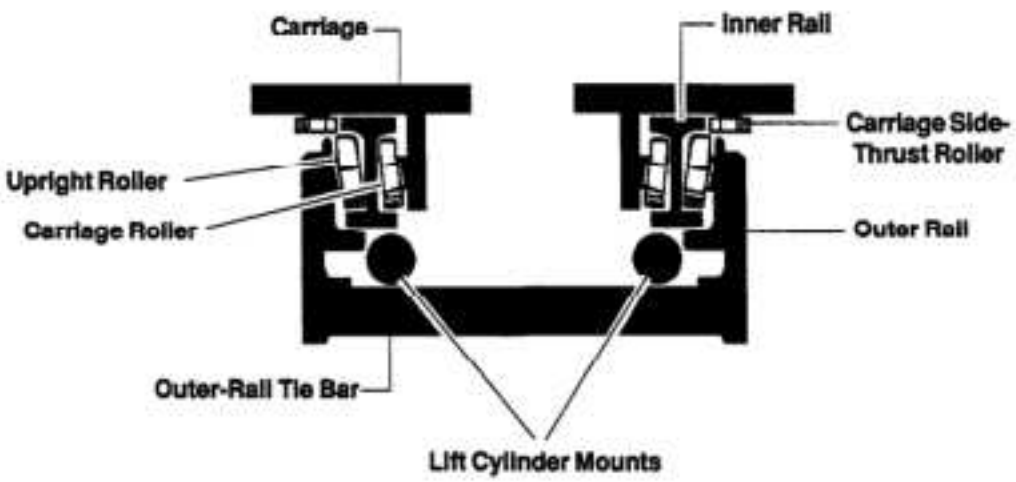
The visual check is designed to point out problems that can be serviced by using the procedures contained in the following sections. These sections include further checks and adjustments for carriages, uprights, hydraulic cylinders, and lift chains.

Hydraulics in general are covered in Groups 29 and 30. Tilt cylinders are covered in depth in Group 32. If the problem with an upright involves these other components, check these sections if you do not find a solution in the Sections included in this Group.



Group 34 Components

Use the operational checks included in Section 2 for regular tests of the components. These tests will help you avoid more serious problems. Then read the procedures presented in the following Group 34 sections for routine planned maintenance checks and detailed service procedures.



Upright and Carriage - Overhead View

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Ford Gasoline/LPG Engine Specifications

Model	CSG-649
Weight (dry)	575 lbs. (261.3 Kg)
Bore/Stroke	4.00 in / 3.98 in (101.59 mm / 101.08 mm)
Rated Output @ maximum 2120 rpm	88.7 HP (66.2 kW)
Displacement	300 cu in (4.9 L)
Firing Order	1-5-3-6-2-4
Rotation (Viewed at Fan End):	Clockwise
Compression Ratio	8:1
Crankcase Capacity w/filter	7.0 qt (7.4 L)
Crankcase Capacity w/o filter	6.0 qt (6.3 L)
Crankcase Ventilation system	Cleanable
Oil Pressure	35-60 psi (241.5-413.6 kPa) @ 2000 rpm with oil at operating temperature
Oil Filter type	Paper spin on.
Air Cleaner Type	Oil-bath type; replaceable element
Restriction Indicator	No air-restriction indicator on Ford Gas/LPG-engine trucks.

Perkins Diesel Engine Specifications

Model no.	4.248.2
Weight (dry)	700 lb. (324 Kg)
Bore/Stroke	3.975 in / 5 in (100.96 mm / 127 mm)
Rated Output @ maximum 2500 rpm	78.0 HP (58.2 kW)
Displacement	248 cu in (4.06 L)
Firing Order	1-3-4-2
Rotation (Viewed at Fan End):	Clockwise
Compression Ratio	18:1
Crankcase Capacity w/filter	9.3 qt (8.8 L)
Crankcase Capacity w/o filter	7.5 qt (7.10 L)
Crankcase Ventilation system	Cleanable
Oil Pressure	30-60 psi (207-214 kPa) with oil at operating temperature
Oil Filter type	Paper spin on
Air Cleaner Type	Replaceable element
Restriction Indicator	Air-restriction indicator on seat deck to left of driver's seat

GM "Detroit" Diesel Engine Specifications

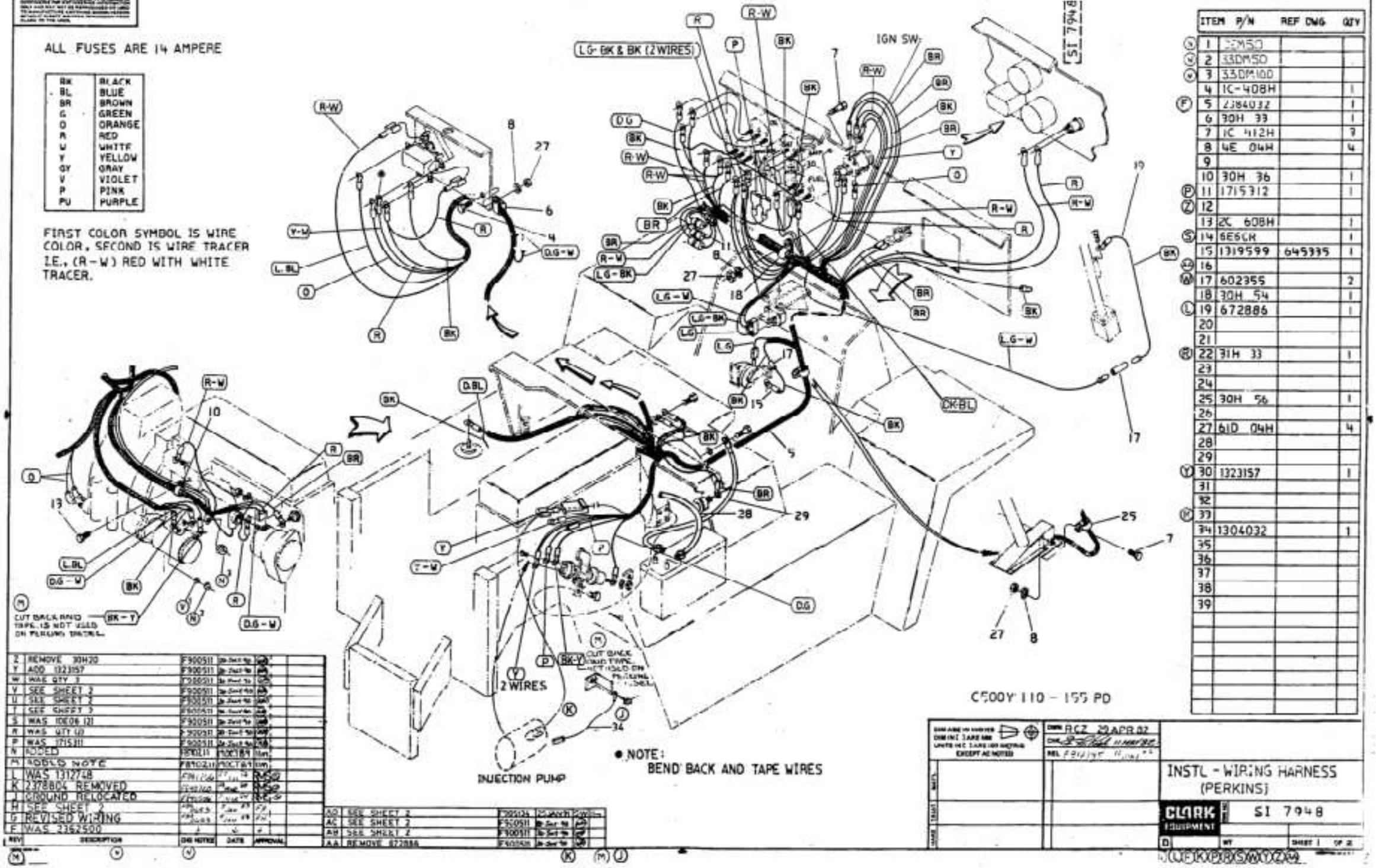
Model no.	3-53N
Weight (dry)	965 lb. (458 Kg)
Bore/Stroke	3.875 in / 4.5 in (98.3 mm / 114.3 mm)
Rated Output @ maximum 2380 rpm	84 HP (62.6 kW)
Displacement	159.2 cu in (2.60 L)
Firing Order	1-2-3
Rotation (Viewed at Fan End):	Clockwise
Compression Ratio	21:1
Crankcase Capacity w/filter	12.5 qt (11.1 L)
Crankcase Capacity w/o filter	10.5 qt (9.3 L)
Crankcase Ventilation system	Cleanable
Oil Pressure	5 psi (34 kPa) @ low idle; 40 psi (276 kPa) @ rated speed
Oil Filter type	Full-flow on
Air Cleaner Type	Replaceable element
Restriction Indicator	Air-restriction indicator on seat deck to left of driver's seat

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ALL FUSES ARE 14 AMPERE

BK	BLACK
BL	BLUE
BR	BROWN
G	GREEN
O	ORANGE
R	RED
W	WHITE
Y	YELLOW
GY	GRAY
V	VIOLET
P	PINK
PU	PURPLE

FIRST COLOR SYMBOL IS WIRE COLOR, SECOND IS WIRE TRACER I.E., (R-W) RED WITH WHITE TRACER.



ITEM	P/N	REF DWG	QTY
1	33DM50		
2	33DM50		
3	33DM100		
4	1C-408H		1
5	2384032		1
6	30H 33		1
7	1C 412H		7
8	4E 04H		4
9			
10	30H 36		1
11	1715312		1
12			
13	2C 608H		1
14	6E6CR		1
15	1319599	645335	1
16			
17	602355		2
18	30H 54		1
19	672886		1
20			
21			
22	31H 33		1
23			
24			
25	30H 56		1
26			
27	61D 04H		4
28			
29			
30	1323157		1
31			
32			
33			
34	1304032		1
35			
36			
37			
38			
39			

REV	DESCRIPTION	DIS NOTES	DATE	APPROVAL
Z	REMOVE 30H20	F900511		
Y	ADD 1323157	F900511		
W	WAS QTY 3	F900511		
V	SEE SHEET 2	F900511		
U	SEE SHEET 2	F900511		
T	SEE SHEET 2	F900511		
S	WAS 10E06 121	F900511		
R	WAS QTY 10	F900511		
P	WAS 1715311	F900511		
N	ADDED	F900511	10CT89	
M	ADDED NOTE	F900511	10CT89	
L	WAS 1312748	F900511		
K	2378804 REMOVED	F900511		
J	GROUND RELOCATED	F900511		
H	SEE SHEET 2	F900511		
G	REVISED WIRING	F900511		
F	WAS 2362500	F900511		

AD	SEE SHEET 2	F900511		
AC	SEE SHEET 2	F900511		
AB	SEE SHEET 2	F900511		
AA	REMOVE 672886	F900511		

DRN RCZ 20APR82

INSTL - WIRING HARNESS (PERKINS)

CLARK EQUIPMENT

SI 7948

SHEET 1 OF 2

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