



FUEL
INJECTION
PUMP

(ROOSA MASTER)

parts catalog

Form 70685399 English

AVOID ACCIDENTS

Most accidents, whether they occur in industry, on the farm, at home or on the highway, are caused by the failure of some individual to follow simple and fundamental safety rules or precautions. For this reason **MOST ACCIDENTS CAN BE PREVENTED** by recognizing the real cause and doing something about it before the accident occurs.

Regardless of the care used in the design and construction of any type of equipment there are many conditions that cannot be completely safeguarded against without interfering with reasonable accessibility and efficient operation.

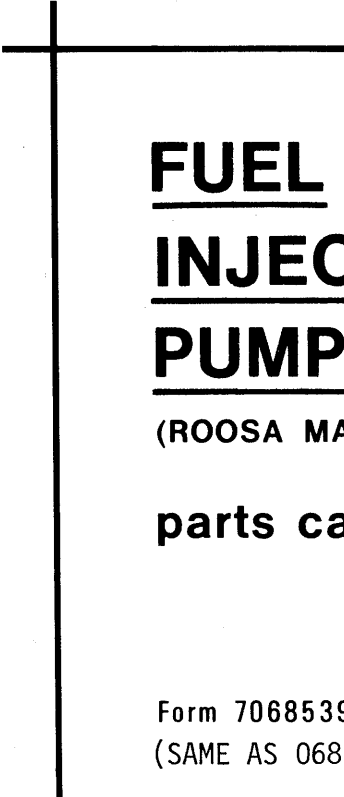
A careful operator is the best insurance against an accident.
The complete observance of one simple rule would prevent many thousand serious injuries each year.
That rule is:

Never attempt to clean, oil or adjust a machine while it is in motion.

NATIONAL SAFETY COUNCIL

WARNING

On machines having hydraulically, mechanically, and/or cable controlled equipment (such as shovels, loaders, dozers, scrapers, etc.) be certain the equipment is lowered to the ground before servicing, adjusting and/or repairing. If it is necessary to have the hydraulically, mechanically, and/or cable controlled equipment partially or fully raised to gain access to certain items, be sure the equipment is suitably supported by means other than the hydraulic lift cylinders, cable and/or mechanical devices used for controlling the equipment.



FUEL **INJECTION** **PUMP**

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Form 70685399 English
(SAME AS 0685399-8)

WARNING

DO NOT OPERATE THIS MACHINE
WITHOUT FIRST READING
THE OPERATOR MANUAL

English

IMPORTANT

This publication covers Roosa Master fuel injection pumps used on units manufactured by Fiat-Allis Construction Machinery, Inc. Due to the similarity of the various pumps, and to avoid repetition, "Typical" lists of parts have been established. The "Typical" list is followed by a listing of individual assemblies. The only parts that appear in the assembly listings are those that are different from the "Typical" list. In most cases, no part number will appear in the "Typical" list for those parts that usually vary from pump to pump. However, if a number for a particular part appears both in the assembly list and the "Typical" list, the number in the assembly list takes preference. Thus, to correctly order parts from this publication, find the listing of the assembly for which the parts are intended and substitute all parts listed therein for the corresponding parts in the "Typical" list.

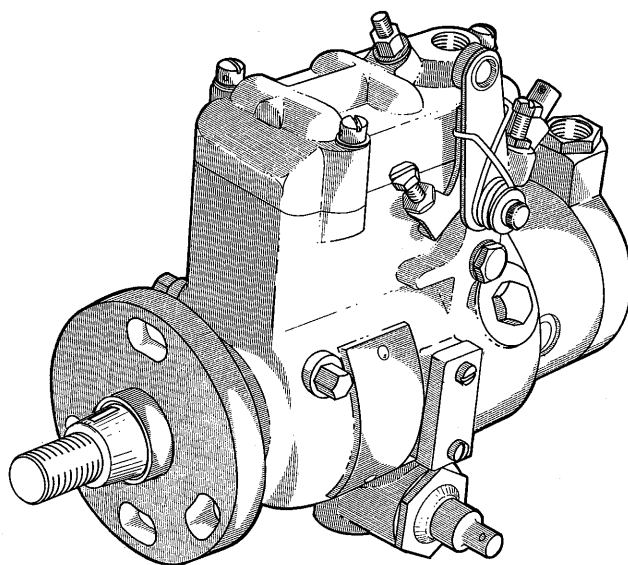
Illustrations preceding the text of each group or section are intentionally drawn to represent the typical design of the pumps listed. Some details may actually be different in appearance for the particular part being identified.

Common hardware such as nuts, bolts, cotter pins, etc., not identified with an item number, is indented immediately following the part it attaches.

Common attaching hardware listed under a part is not included with the part unless specified.

Parts indicated with a square (□) are also available in packaged sets. Refer to section titled "PACKAGED PARTS."

Any changes or corrections to this catalog will appear on the regular supplement form.



ROOSA MASTER FUEL INJECTION PUMP

T-70521

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PACKAGED PARTS

PACKAGE NO.

DESCRIPTION

74054433

GASKET KIT (Pump with bolt-on type advance)

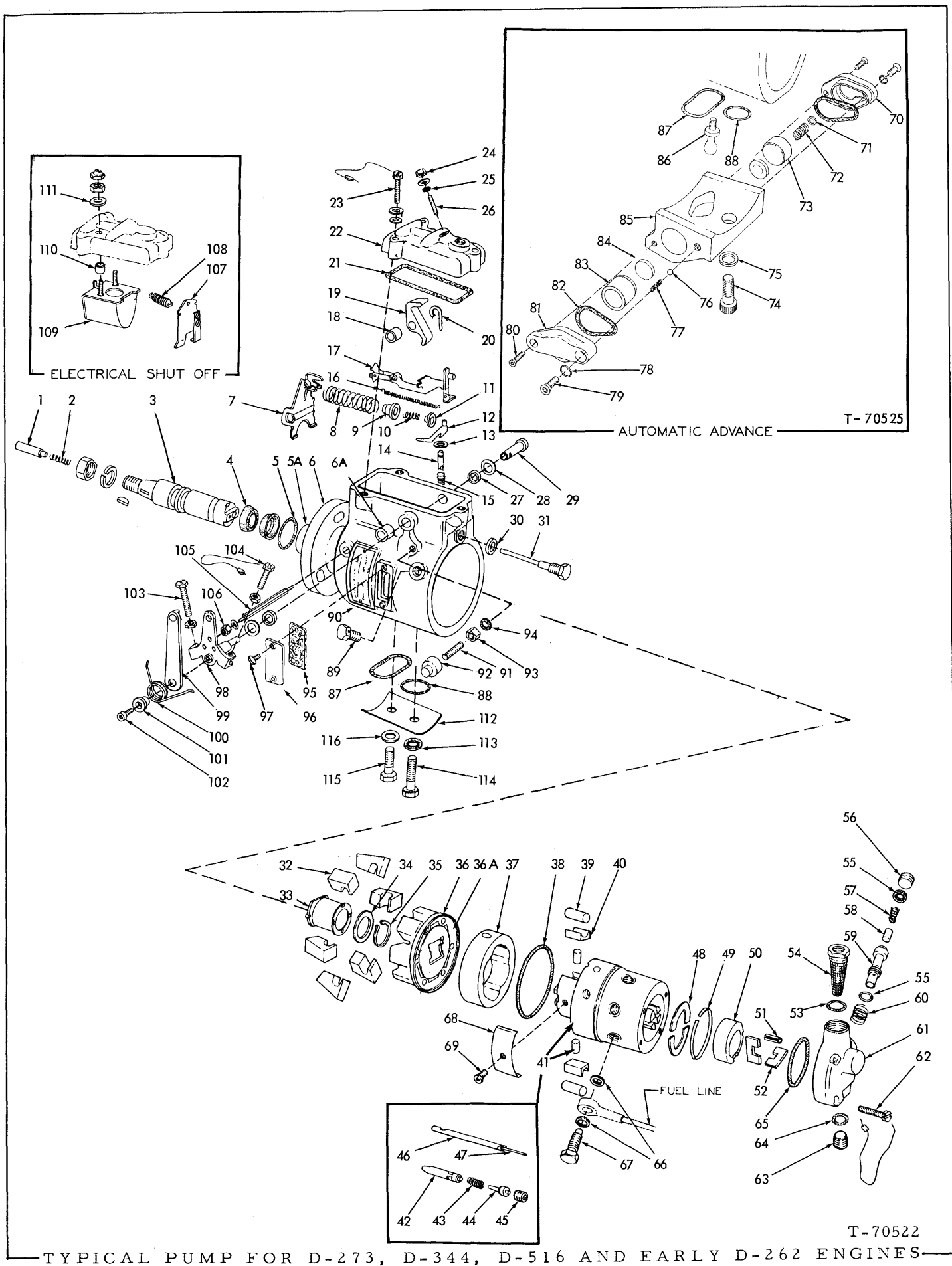
1	74048596	SEAL, pilot
1	74048602	SEAL, cam screw hole
2	74048604	GASKET, timing line cover
1	74048630	GASKET, governor cover
2	74048640	WASHER (discard)
1	74048649	SEAL, head locating screw
1	74048650	WASHER, guide stud
1	74050417	SEAL, transfer pump
2	74050910	WASHER, sealing, pivot shaft
1	74050914	SEAL (discard)
1	74051365	SEAL, idle screw
2	74051830	SEAL, advance housing end plate
2	74052540	SEAL, drive shaft
2	74053375	WASHER
1	74055966	PLUG, end plate
1	74056350	PLUG, end plate
1	74059575	RING, flexible
1	74369432	WASHER, torque screw hole plug
1	74369444	SEAL, head
3	74369595	SEAL, end plate sleeve
1	74369599	SEAL, filter
6	74369878	SEAL

74060745

GASKET KIT (all pumps except those with bolt-on type advance)

12	74027748	WASHER, fuel line
1	74048596	SEAL, pilot
2	74048604	GASKET, timing line cover
1	74048630	GASKET, governor cover
1	74048649	SEAL, head locating screw
1	74048650	WASHER, guide stud
1	74050417	SEAL, transfer pump
2	74050910	SEAL, pivot shaft
1	74050914	SEAL, head locating screw (discard)
1	74051365	SEAL, idle screw
2	74052540	SEAL, drive shaft
2	74053375	WASHER, shaft seal
1	74054585	SEAL, cam screw access plug
4	74054589	SEAL, piston hole plug
1	74055962	SEAL, element
1	74055966	PLUG, end plate
1	74056350	PLUG, end plate
1	74059064	SEAL, advance piston ring
1	74059134	SEAL, regulating piston
1	74059258	SEAL, head bypass hole plug (discard)
1	74059575	RING, flexible
2	74369432	WASHER, torque screw plug
1	74369444	SEAL, head
1	74369452	WASHER, cam locating screw
4	74369595	SEAL
2	74369599	SEAL
5	74369878	SEAL

NOTE: See inside of back cover for identification of seals (O-rings)



INJECTION PUMP PARTS

USAGE: Typical pump for D-273, D-344, D-516 and early D-262 engines. See assembly listings on following pages for specific usage and parts information.

ITEM	PART NO.	QTY.	DESCRIPTION
1	74054844	1	BUTTON, thrust
2	74048600	1	SPRING, thrust button
3	74053204	1	SHAFT, drive
	70910224	1	KEY, woodruff, 5/32" x 5/8"
	74048598	1	LOCKWASHER
	74048597	1	NUT
4	74052540	2	□SEAL, drive shaft
5	74048596	1	□SEAL, pilot
5A	74059239	1	TUBE, pilot (bronze)
6	74051493	1	HOUSING, pump (Includes item 5A)
6A	74055442	2	BUSHING, pump housing (For re-conditioning worn throttle and shut-off shaft bearing surfaces. Housing must be reamed for installation)
7	{ -----	1	ARM, governor (Used prior to pump #268020. Order ARM 74053589 and SLEEVE 74053590)
	74053589	1	ARM, governor (Effective with pump #268020)
8	74048628	1	SPRING, governor control
9	74048635	1	RETAINER, idling spring
10	74049533	1	SPRING, idling
11	74048627	1	GUIDE, idling spring
12	74053545	1	ARM, metering valve
13	74052915	1	WASHER, seating, metering valve spring
14	74051377	1	VALVE, metering
15	74051502	1	SPRING, metering valve
16	74048624	1	SPRING, governor linkage
17	74052156	1	HOOK ASSEMBLY, governor linkage (Includes adjusting screw)
18	74048643	1	SPACER, throttle shaft lever
19	74049532	1	LEVER, throttle shaft
20	74051559	1	CAM, shut-off
21	74048630	1	□GASKET, governor cover
22	{ -----	1	COVER, governor (First type. Has tapped hole for idle screw) (Order COVER 74051807)
	74051807	1	COVER, governor (Second type)

(Continued)

INJECTION PUMP PARTS (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
23	74053266	3	SCREW, governor cover
	70906957	3	LOCKWASHER, internal tooth, #10
	74053267	3	WASHER, plain
	74369430	1	WIRE, sealing
24	74051409	1	NUT, lock, idle screw
	74051364	1	WASHER
25	74051365	1	□ SEAL, idle screw
26	74051363	1	SCREW, adjusting, low idle
27	74369878	2	□ SEAL, throttle and shut-off shafts
28	74053375	2	□ WASHER, thrust
29	-----	1	SHAFT, shut-off
30	74048650	1	□ WASHER, guide stud
31	74051378	1	STUD, guide
	74369430	1	WIRE, sealing
32	74048621	6	WEIGHT, governor
33	-----	1	SLEEVE, governor (Used prior to pump # 268020. Order SLEEVE 74053590 and ARM 74053589)
	74053590	1	SLEEVE, governor (Effective with pump #268020)
34	74048620	1	WASHER, thrust
35	74253433	1	RING, governor weight retainer
36	74059596	1	RETAINER ASSEMBLY, governor weight (Includes item 36A)
36A	74059575	1	□ RING, retaining (flexible)(Effective with pump #730457)
37	74048593	1	RING, cam
38	74369444	1	□ SEAL, hydraulic head
39	74369436	2	ROLLER, cam
40	74048608	2	SHOE, cam roller
41	-----	1	HEAD ASSEMBLY, hydraulic
42	74051380	1	VALVE, delivery
43	74051379	1	SPRING, delivery valve
44	74056590	1	STOP, delivery valve
45	74052538	1	SCREW, retainer
46	74052541	1	RETAINER, wire
47	74051387	1	WIRE, vent
48	74051385	2	RETAINER, rotor

Used with First type
COVER on early units

(Continued)

INJECTION PUMP PARTS (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
49	74051386	1	RING, rotor retainer
50	74051376	1	LINER, transfer pump
51	74369592	1	PIN, locating, pump liner
52	74369447	2	BLADE, transfer pump
53	74369599	1	□ SEAL, filter
54	74369601	1	FILTER ASSEMBLY, fuel inlet
55	74369595	2	□ SEAL, end plate sleeve
56	74369598	Δ	PLUG, end plate (flush)
	74055626	Δ	PLUG, end plate (.010" step)
	74051948	Δ	PLUG, end plate (.020" step)
	74051949	Δ	PLUG, end plate (.030" step)
	74051950	Δ	PLUG, end plate (.040" step)
	74051951	Δ	PLUG, end plate (.050" step)
	74051952	Δ	PLUG, end plate (.060" step)
	74051953	Δ	PLUG, end plate (.070" step)
	74051954	Δ	PLUG, end plate (.080" step)
	74051955	Δ	PLUG, end plate (.090" step)
57	74369597	1	SPRING, regulating
58	74369596	1	PISTON, regulating
59	74048613	1	SLEEVE, end plate
60	74369593	1	SPRING, plunger return
61	74050406	1	PLATE, end
62	74050912	4	SCREW, end plate
	74369430	1	WIRE, sealing
63	74056350	1	□ PLUG, end plate (Not original equipment)
64	74053265	1	SEAL, end plate plug (Not used prior to pump #136489 or with PLUG 74056350)
65	74050417	1	□ SEAL, transfer pump
66	74027748	Δ	□ WASHER, fuel line (Not included with pump assembly)
67	74369451	Δ	SCREW, fuel line
68	74051372	1	SPRING, leaf
69	74053362	1	SCREW, adjusting, leaf spring (Nylok)

Δ Use as required

(Continued)

INJECTION PUMP PARTS (Continued)

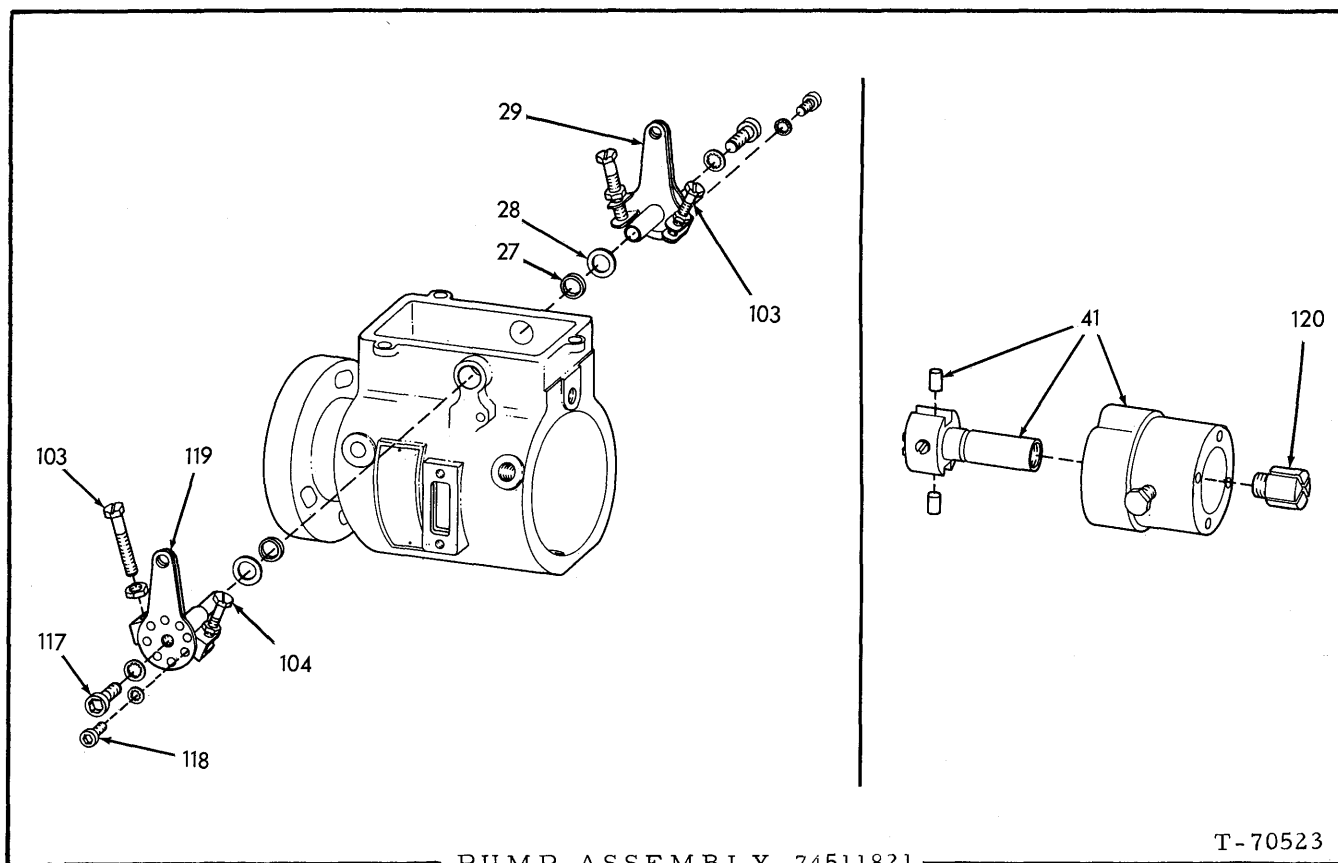
ITEM	PART NO.	QTY.	DESCRIPTION
70	74051822	1	PLATE, end, advance housing (Advance spring end)
71	74051826	Δ	SHIM, advance spring (.005" thick)
	74051827	Δ	SHIM, advance spring (.016" thick)
	74051828	Δ	SHIM, advance spring (.033" thick)
72	74051821	1	SPRING, advance
73	74051820	1	PISTON, advance spring
74	74052918	1	SCREW, attaching, advance housing (When making first replacement on early units also order 1 SEAL 74369595)
	74369430	1	WIRE, sealing
75	74369595	1	□ SEAL, advance housing screw (When making first replacement on early units also order 1 SCREW 74052918)
76	74051816	1	BALL, check
77	74051818	1	SPRING, check ball
78	74369878	2	□ SEAL, stop screw
79	74051829	2	SCREW, stop, end plate
80	74051825	2	CAPSCREW, attaching, end plate
81	74051823	1	PLATE, end, advance housing (power piston end)
82	74051830	2	□ SEAL, end plate
83	74051824	1	PISTON, power
84	74051815	2	WASHER, slide
85	74051813	1	HOUSING, automatic advance
86	74055687	1	SCREW, cam advance
87	74048602	1	□ SEAL, cam screw hole
88	74048649	1	□ SEAL, screw hole
89	74048610	2	SCREW, head locking
90	74369428	1	PLATE, name
	74369429	2	SCREW
91	74051833	1	PLUG, torque screw hole (Used prior to pump #155869)
	74369432	1	□ WASHER
	74048617	1	SCREW, torque (Effective with pump #155869)
92	74052917	1	CAP, torque screw
	74369430	1	WIRE, sealing
93	74048618	1	NUT, torque screw
94	74369878	1	□ SEAL, torque screw
Δ Use as required			

Effective with pump #155869

(Continued)

INJECTION PUMP PARTS (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
95	74048604	2	□ GASKET, timing line cover
96	74048603	2	COVER, timing line
97	74048605	4	SCREW, timing line cover
98	74051361	1	SHAFT ASSEMBLY, throttle (Includes welded lever)
99	74051410	1	ARM, throttle
100	74051413	1	SPRING, lever
101	74051412	1	RETAINER, spring
102	74051411	1	SCREW, retaining, throttle lever
103	74048632	1	SCREW, adjusting, low idle or shut-off stop
	74369507	1	NUT, jam
104	74048645	1	SCREW, adjusting, high idle
	74369507	1	NUT, jam
105	74048636	1	SHAFT, pivot, governor arm
106	74048642	2	NUT, cap, pivot shaft
	74050910	2	□ WASHER, sealing
107	74051504	1	ARM, shut-off
108	74369496	1	SPRING, shut-off arm
109	-----	1	COIL ASSEMBLY, shut-off (Consists of solenoid, which is not serviced separately and items 107, 108, 110, 111 and NUTS indented below)
	74049437	2	NUT, jam
	74053829	2	NUT, lock
110	74369502	2	TUBE, insulating (For first replacement on early units also order WASHER 74051383)
111	74051383	2	WASHER, insulating (For first replacement on early units also order TUBE 74369502)
112	74048601	1	PLATE, cam locating
113	74369595	1	□ SEAL, head locating screw (When making first replacement on early units also order 1 SCREW 74052742)
114	74052742	1	SCREW, head locating (When making first replacement on early units also order 1 SEAL 74369595)
115	74051374	1	SCREW, cam locating
	74369430	1	WIRE, sealing
116	74369452	1	□ WASHER, cam locating screw



USAGE: Model DD Motor Grader with D-262 engine. Used prior to grader serial No. 2573

ITEM	PART NO.	QTY.	DESCRIPTION
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NOTE: Parts are identical to those shown on pages 5 thru 9 with the following exceptions:

8	74051809	1	SPRING, governor control	
13	-----	1	WASHER, seating, metering valve spring (Omit this item)	
14	74048615	1	VALVE, metering	
15	-----	1	SPRING, metering valve (Omit this item)	
20	74048639	1	CAM, shut-off	
22	74051002	1	COVER, governor	
24	-----	1	NUT, lock, idle screw	} Omit these items
	-----	1	WASHER	
25	-----	1	SEAL, idle screw	
26	-----	1	SCREW, adjusting, low idle	
29	74049224	1	SHAFT ASSEMBLY, shut-off (Includes items 117 and 118)	
41	74048606	1	HEAD ASSEMBLY, hydraulic (Includes rotor and plunger)	

(Continued)

PUMP ASSEMBLY 74511821 (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION	
42	-----	1	VALVE, delivery	} Omit these items
43	-----	1	SPRING, delivery valve	
44	-----	1	STOP, delivery valve	
45	-----	1	SCREW, retainer	
46	-----	1	RETAINER, wire	
47	-----	1	WIRE, vent	
48	-----	2	RETAINER, rotor	
49	-----	1	RING, rotor retaining	
70 thru 86			Omit AUTOMATIC ADVANCE items 70 thru 86	
98	-----	1	SHAFT ASSEMBLY, throttle	} Omit these items
99	-----	1	ARM, throttle	
100	-----	1	SPRING, lever	
101	-----	1	RETAINER, spring	
102	-----	1	SCREW, retaining, throttle lever	
103	74048632	3	SCREW, adjusting, low idle or shut-off stop	
	74369507	3	NUT, jam	
104	74051799	1	SCREW, adjusting, high idle	
107 thru 111			Omit ELECTRICAL SHUT-OFF items 107 thru 111)	
117	74048647	2	SCREW, lever retaining	
	70906957	2	LOCKWASHER, internal teeth, #10	
118	74050913	2	SCREW, lever positioning	
	70912739	2	LOCKWASHER, internal teeth, #8	
119	74049225	1	SHAFT ASSEMBLY, throttle (Includes items 117 and 118)	
120	74048609	1	ROTOR, transfer pump	

PUMP ASSEMBLY 74508525

USAGE: TL11D Loader with D-273 engine effective loader serial No. 85
 TL12D Loader with D-273 engine effective loader serial No. 1416 thru No. 2002

ITEM	PART NO.	QTY.	DESCRIPTION
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NOTE: Parts are identical to those shown on pages 5 thru 9
 with the following exceptions:

18	-----	1	SPACER, throttle shaft lever (Omit this item)
29	74053315	1	SHAFT, shut-off
30	74369878	1	□SEAL, guide stud
31	74051817	1	STUD, guide
	74051831	1	NUT
41	74059576	1	HEAD ASSEMBLY, hydraulic (Includes Rotor, Plungers, items 46, 47 and SCREWS indented below)
	74056461	1	SCREW, head plugging
	74051388	2	SCREW, head plugging
68	74054037	1	SPRING, leaf
109	74059657	1	COIL ASSEMBLY, shut-off (12 volt)
112	-----	1	PLATE, cam locating
113	-----	1	SEAL, head locating screw
114	-----	1	SCREW, head locating
115	-----	1	SCREW, cam locating
	-----	1	WIRE, sealing
116	-----	1	WASHER, cam locating screw

Omit these items

PUMP ASSEMBLY 74511926

USAGE: TL14DA, TL14D Loader with D-273 engine prior to loader serial No. 902 excluding No. 857

ITEM	PART NO.	QTY.	DESCRIPTION
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NOTE: Parts are identical to those shown on pages 5 thru 9 with
with following exceptions;

18	-----	1	SPACER, throttle shaft lever (Omit this item)
29	74053315	1	SHAFT, shut-off
30	74369878	1	□SEAL, guide stud
31	74051817	1	STUD, guide
	74051831	1	NUT
41	74059576	1	HEAD ASSEMBLY, hydraulic (Includes Rotor, Plungers, items 46, 47 and SCREWS indented below)
	74056461	1	SCREW, head plugging
	74051388	2	SCREW, head plugging
68	74054037	1	SPRING, leaf
109	74059657	1	COIL ASSEMBLY, shut-off (12 volt)
112	-----	1	PLATE, cam locating
113	-----	1	SEAL, head locating screw
114	-----	1	SCREW, head locating
115	-----	1	SCREW, cam locating
	-----	1	WIRE, sealing
116	-----	1	WASHER, cam locating screw

} Omit these items

PUMP ASSEMBLY 74513324

USAGE: TL 14DA, TL14D Loader with D-273 engine effective with loader serial No. 902 including No. 857

ITEM	PART NO.	QTY.	DESCRIPTION
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NOTE: Parts are identical to those shown on pages 5 thru 9 with the following exceptions:

18	-----	1	SPACER, throttle shaft lever (Omit this item)
29	74053315	1	SHAFT, shut-off
30	74369878	1	□SEAL, guide stud
31	74051817	1	STUD, guide
	74051831	1	NUT
41	74059576	1	HEAD ASSEMBLY, hydraulic (Includes Rotor, Plungers, items 46, 47 and SCREWS indented below)
	74056461	1	SCREW, head plugging
	74051388	2	SCREW, head plugging
68	74054037	1	SPRING, leaf
109	74059656	1	COIL ASSEMBLY, shut-off (24 volt)
112	-----	1	PLATE, cam locating
113	-----	1	SEAL, head locating screw
114	-----	1	SCREW, head locating
115	-----	1	SCREW, cam locating
	-----	1	WIRE, sealing
116	-----	1	WASHER, cam locating

Omit these items

PUMP ASSEMBLY 74336064

USAGE: TL16DA Loader with D-344 engine effective loader serial No. 205 thru 554. TL20D Loader with D-344 engine effective loader serial No. 401 thru 535

ITEM	PART NO.	QTY.	DESCRIPTION
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NOTE: Parts are identical to those shown on pages 5 thru 9 with the following exceptions:

1	74051501	1	BUTTON, thrust
8	74051499	1	SPRING, governor control
14	74051498	1	VALVE, metering
18	-----	1	SPACER, throttle shaft lever (Omit this item)
29	74053315	1	SHAFT, shut-off
37	74051497	1	RING, cam
41	74059671	1	HEAD ASSEMBLY, hydraulic (Includes Rotor, Plungers, items 46, 47 and SCREWS indented below)
	74056461	1	SCREW, head plugging
	74051388	2	SCREW, head plugging
70 thru 86			Omit AUTOMATIC ADVANCE items 70 thru 86
109	74059656	1	COIL ASSEMBLY, shut-off (24 volt)

PUMP ASSEMBLY 74336377

USAGE: TL20D Loader with D-516 engine effective loader serial No. 536 thru 996

ITEM	PART NO.	QTY.	DESCRIPTION
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NOTE: Parts are identical to those shown on pages 5 thru 9
with the following exceptions:

1	74051501	1	BUTTON, thrust
8	74051809	1	SPRING, governor control
14	74051498	1	VALVE, metering
18	-----	1	SPACER, throttle shaft lever (Omit this item)
29	74053315	1	SHAFT, shut-off
41	74059576	1	HEAD ASSEMBLY, hydraulic (Includes Rotor, Plungers, items 46, 47 and SCREWS indented below)
	74056461	1	SCREW, head plugging
	74051388	2	SCREW, head plugging
59	74369594	1	SLEEVE, end plate
70 thru 86			Omit AUTOMATIC ADVANCE items 70 thru 86
109	74059656	1	COIL ASSEMBLY, shut-off (24 volt)

PUMP ASSEMBLY 74512663

USAGE: TL10D Loader with D-262 engine effective loader serial No. 2502 thru engine serial No. 117018 and TL12D Loader with D-262 engine effective loader serial No. 2003 thru engine serial No. 117018

ITEM	PART NO.	QTY.	DESCRIPTION
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NOTE: Parts are identical to those shown on pages 5 thru 9 with the following exceptions:

18	-----	1	SPACER, throttle shaft lever (Omit this item)
29	74053315	1	SHAFT, shut-off
30	74369878	1	□SEAL, guide stud
31	74051817	1	STUD, guide
	74051831	1	NUT
41	74059576	1	HEAD ASSEMBLY, hydraulic (Includes Rotor, Plungers, items 46, 47 and SCREWS indented below)
	74056461	1	SCREW, head plugging
	74051388	2	SCREW, head plugging
68	74054037	1	SPRING, leaf
109	74059657	1	COIL ASSEMBLY, shut-off (12 volt)
112	-----	1	PLATE, cam locating
113	-----	1	SEAL, head locating screw
114	-----	1	SCREW, head locating
115	-----	1	SCREW, cam locating
	-----	1	WIRE, sealing
116	-----	1	WASHER, cam locating screw

Omit these items

PUMP ASSEMBLY 74513645

USAGE: TL10D Loader with D-262 engine effective engine serial No. 117019 thru loader serial No. 2608 and TL12D Loader with D-262 engine effective engine serial No. 117019 thru loader serial No. 4470 excluding 4456.

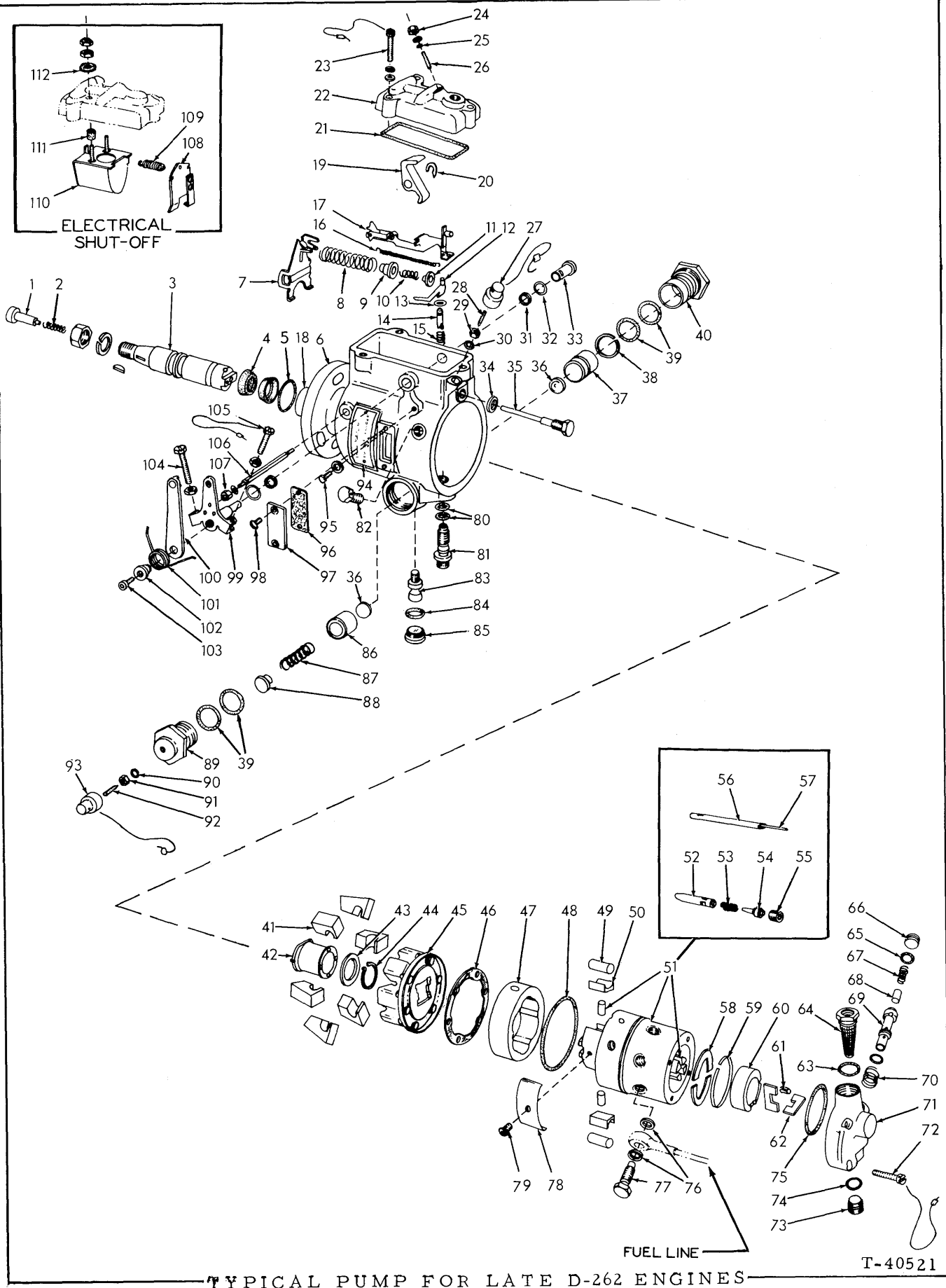
ITEM	PART NO.	QTY.	DESCRIPTION
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NOTE: Parts are identical to those shown on pages 5 thru 9 with the following exceptions:

18	-----	1	SPACER, throttle shaft lever (Omit this item)
29	74053315	1	SHAFT, shut-off
30	74369878	1	□SEAL, guide stud
31	74051817	1	STUD, guide
	74051831	1	NUT
41	74059576	1	HEAD ASSEMBLY, hydraulic (Includes Rotor, Plungers, items 46, 47 and SCREWS indented below)
	74056461	1	SCREW, head plugging
	74051388	2	SCREW, head plugging
68	74054037	1	SPRING, leaf
109	74059656	1	COIL ASSEMBLY, shut-off (24 volt)
112	-----	1	PLATE, cam locating
113	-----	1	SEAL, head locating screw
114	-----	1	SCREW, head locating
115	-----	1	SCREW, cam locating
	-----	1	WIRE, sealing
116	-----	1	WASHER, cam locating screw

} Omit these items

MEMO



INJECTION PUMP PARTS

USAGE: Typical pump for late D-262 engines. See assembly listings on following pages for specific usage and parts information.

ITEM	PART NO.	QTY.	DESCRIPTION
1	74054844	1	BUTTON, thrust
2	74048600	1	SPRING, thrust button
3	74053204	1	SHAFT, drive
	70910224	1	KEY, woodruff, 5/32" x 5/8"
	74048598	1	LOCKWASHER
	74048597	1	NUT
4	74052540	2	□ SEAL, drive shaft
5	74048596	1	□ SEAL, pilot
6	74054581	1	HOUSING, pump (Includes item 18)
7	74053589	1	ARM, governor
8	74055176	1	SPRING, governor control
9	74048635	1	RETAINER, idling spring
10	74049533	1	SPRING, idling
11	74048627	1	GUIDE, idling spring
12	74054579	1	ARM, metering valve
13	74052915	1	WASHER, seating, metering valve spring
14	74054596	1	VALVE, metering
15	74051502	1	SPRING, metering valve
16	74048624	1	SPRING, governor linkage
17	74052156	1	HOOK ASSEMBLY, governor linkage (Includes adjusting screw)
18	74059239	1	TUBE, pilot
19	74049532	1	LEVER, throttleshaft
20	74048639	1	CAM, shut-off
21	74048630	1	□ GASKET, governor cover
22	74054587	1	COVER, governor control
23	74053266	3	SCREW, governor cover
	70906957	3	LOCKWASHER, internal tooth, #10
	74053267	3	WASHER, plain
	74369430	1	WIRE, sealing
24	74051409	1	NUT, lock, idle screw
	74051364	1	WASHER
25	74051365	1	□ SEAL, idle screw

(Continued)

INJECTION PUMP PARTS (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
26	74051363	1	SCREW, adjusting, low idle
27	74052917	1	CAP, torque screw
	74369430	1	WIRE, sealing
28	74054582	1	SCREW, torque
29	74054583	1	NUT, torque screw
30	74369878	1	□ SEAL, torque screw
31	74369878	2	□ SEAL, throttle and shut-off shafts
32	74053375	2	□ WASHER, thrust
33	74053315	1	SHAFT, shut-off
34	74048650	1	□ WASHER, guide stud
35	74051378	1	STUD, guide
36	74051815	2	WASHER, slide
37	74056409	1	PISTON, power
38	74055386	1	RING, power piston
39	74054589	4	□ SEAL, plug
40	74054590	1	PLUG, piston hole
41	74053385	6	WEIGHT, governor
42	74053590	1	SLEEVE, governor thrust
43	74048620	1	WASHER, thrust
44	74253433	1	RING, governor weight retainer
45	74059596	1	RETAINER ASSEMBLY, governor weight (Includes item 46)
46	74059575	1	□ RING, retaining, flexible
47	74048593	1	RING, cam
48	74369444	1	□ SEAL, hydraulic head
49	74369436	2	ROLLER, cam
50	74048608	2	SHOE, cam roller
51	74056433	1	HEAD ASSEMBLY, hydraulic (Includes Rotor, Plungers, items 56 and 57 and SCREWS indented below)
	74056461	1	SCREW, head plugging
	74051388	2	SCREW, head plugging
52	74051380	1	VALVE, delivery
53	74051379	1	SPRING, delivery valve

(Continued)

INJECTION PUMP PARTS (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
54	74056590	1	STOP, delivery valve
55	74052538	1	SCREW, retainer
56	74052541	1	RETAINER, wire
57	74051387	1	WIRE, vent
58	74051385	2	RETAINER, rotor
59	74051386	1	RING, rotor retainer
60	74051376	1	LINER, transfer pump
61	74369592	1	PIN, locating, pump liner
62	74055383	2	BLADE, transfer pump
63	74369599	1	□ SEAL, filter
64	74369601	1	FILTER ASSEMBLY, fuel inlet
65	74369595	2	□ SEAL, end plate sleeve
66	74369598	Δ	PLUG, end plate (flush)
	74055626	Δ	PLUG, end plate (.010" step)
	74051948	Δ	PLUG, end plate (.020" step)
	74051949	Δ	PLUG, end plate (.030" step)
	74051950	Δ	PLUG, end plate (.040" step)
	74051951	Δ	PLUG, end plate (.050" step)
	74051952	Δ	PLUG, end plate (.060" step)
	74051953	Δ	PLUG, end plate (.070" step)
	74051954	Δ	PLUG, end plate (.080" step)
	74051955	Δ	PLUG, end plate (.090" step)
67	74040480	1	SPRING, regulating
68	74369596	1	PISTON, regulating
69	74053382	1	SLEEVE, end plate
70	74369593	1	SPRING, plunger return
71	74050406	1	PLATE, end
72	74050912	4	SCREW, end plate
	74369430	1	WIRE, sealing
73	74056350	1	PLUG, end plate
74	74053265	1	SEAL, end plate plug (Used prior to June 1964)

Δ Use as required

(Continued)

INJECTION PUMP PARTS (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
75	74050417	1	□ SEAL, transfer pump
76	74027748	Δ	□ WASHER, fuel line (Not included with pump assembly)
77	74369451	Δ	SCREW, fuel line
78	74054037	1	SPRING, leaf
79	74053362	1	SCREW, adjusting, leaf spring (Nylok)
80	74369595	2	□ SEAL, head locating screw
81	74055384	1	SCREW ASSEMBLY, head locating (Includes ball and spring)
82	74048610	2	SCREW, head locking
83	74055687	1	SCREW, cam advance
84	74054585	1	□ SEAL, cam screw access plug
85	74054586	1	PLUG, cam screw access
86	74055025	1	PISTON, spring
87	74054598	1	SPRING, advance
88	74054591	1	GUIDE, spring
89	74054592	1	PLUG, piston hole
90	74369878	1	□ SEAL, adjusting screw
91	74054583	1	NUT, jam
92	74054593	1	SCREW, adjusting, advance
93	74052917	1	CAP, adjusting screw
	74369430	1	WIRE, sealing
94	74369428	1	PLATE, name
	74369429	2	SCREW
95	74051833	1	PLUG, torque screw hole
	74369432	1	□ WASHER
96	74048604	2	□ GASKET, timing line cover
97	74048603	2	COVER, timing line
98	74048605	4	SCREW, timing line cover
99	74054580	1	SHAFT ASSEMBLY, throttle
100	74054594	1	LEVER, throttle
101	74051413	1	SPRING, lever
102	74051412	1	RETAINER, spring
103	74051411	1	SCREW, retaining, throttle lever

Δ Use as required

(Continued)

INJECTION PUMP PARTS (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
104	74048632	1	SCREW, adjusting, low idle or shut-off stop
	74369507	1	NUT, jam
105	74048645	1	SCREW, adjusting, high idle
	74369507	1	NUT, jam
	74369430	1	WIRE, sealing
106	74048636	1	SHAFT, pivot, governor arm
107	74048642	2	NUT, cap, pivot shaft
	74050910	2	□ WASHER, sealing
108	74051504	1	ARM, shut-off
109	74369496	1	SPRING, shut-off arm
110	74059656	1	COIL ASSEMBLY, shut-off (24 volt)(Consists of solenoid which is not serviced separately and items 108, 109, 111, 112 and NUTS indented below)
	74049437	2	NUT, jam
	74053829	2	NUT, lock
111	74369502	2	TUBE, insulating
112	74051383	2	WASHER, insulating

PUMP ASSEMBLY 74513505

USAGE: DD Motor Grader with D-262 engine effective grader serial No. 2573 thru engine serial No. D-04299. Order PUMP ASSEMBLY 74514891 when replacing complete pump.

ITEM	PART NO.	QTY.	DESCRIPTION
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NOTE: Parts are identical to those shown on pages 21 thru 25 with the following exceptions:

108	-----	1	ARM, shut-off	}	Omit these items
109	-----	1	SPRING, shut-off arm		
110	-----	1	COIL ASSEMBLY, shut-off		
	-----	2	NUT, jam		
	-----	2	NUT, lock		
111	-----	2	TUBE, insulating		
112	-----	2	WASHER, insulating		

PUMP ASSEMBLY 74514891

USAGE: DD Motor Grader with D-262 engine effective engine serial No. D-04300

NOTE: Parts are identical to those shown on pages 21 thru 25 with the following exceptions:

47	74050184	1	RING, cam	}	Omit these items
108	-----	1	ARM, shut-off		
109	-----	1	SPRING, shut-off arm		
110	-----	1	COIL ASSEMBLY, shut-off		
	-----	2	NUT, jam		
	-----	2	NUT, lock		
111	-----	2	TUBE, insulating		
112	-----	2	WASHER, insulating		

PUMP ASSEMBLY 74513503

USAGE: TL10D Loader with D-262 engine effective loader serial No. 2609 and TL12D Loader with D-262 engine effective loader serial No. 4471, including No. 4456. Later discontinued with engine serial No. D-06744. Order PUMP ASSEMBLY 74514940 when replacing complete pump.

ITEM	PART NO.	QTY.	DESCRIPTION
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NOTE: Parts are identical to those shown on pages 21 thru 25 with the following exceptions:

8	74051499	1	SPRING, governor control	
20	74051559	1	CAM, shut-off	
22	74051807	1	COVER, governor control	
24	-----	1	NUT, lock, idle screw	} Omit these items
	-----	1	WASHER	
25	-----	1	SEAL, idle screw	
26	-----	1	SCREW, adjusting, low idle	
99	74051361	1	SHAFT ASSEMBLY, throttle	
100	74051410	1	ARM, throttle	

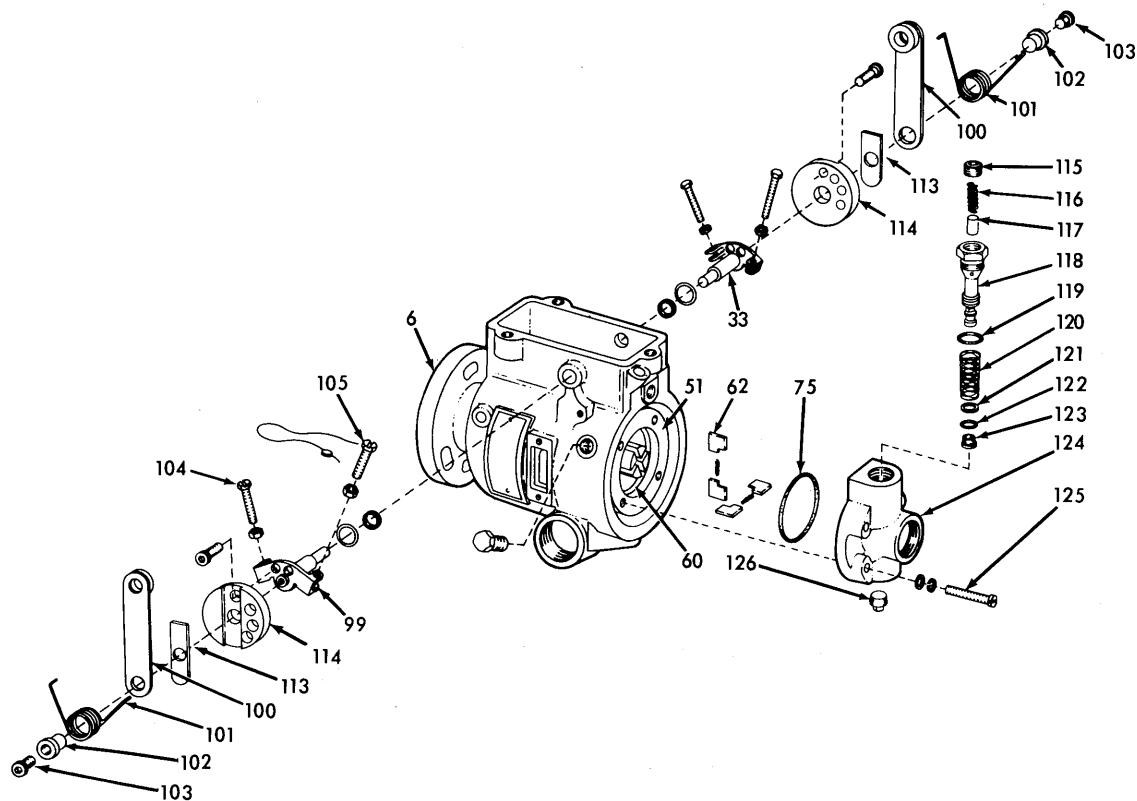
PUMP ASSEMBLY 74514940

USAGE: TL10D, TL12D Loader with D-262 engine effective engine serial No. D-06744

ITEM	PART NO.	QTY.	DESCRIPTION
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NOTE: Parts are identical to those shown on pages 21 thru 25 with the following exceptions:

8	74051499	1	SPRING, governor control	
20	74051559	1	CAM, shut-off	
22	74051807	1	COVER, governor control	
24	-----	1	NUT, lock, idle screw	} Omit these items
	-----	1	WASHER	
25	-----	1	SEAL, idle screw	
26	-----	1	SCREW, adjusting, low idle	
47	74050184	1	RING, cam	
99	74051361	1	SHAFT ASSEMBLY, throttle	
100	74051410	1	ARM, throttle	



PUMP ASSEMBLY 74516526

T-77403

USAGE: M-65 Motor Grader with D-262 engine

ITEM	PART NO.	QTY.	DESCRIPTION
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NOTE: Parts are indential to those shown on pages 20 thru 25 with the following exceptions.

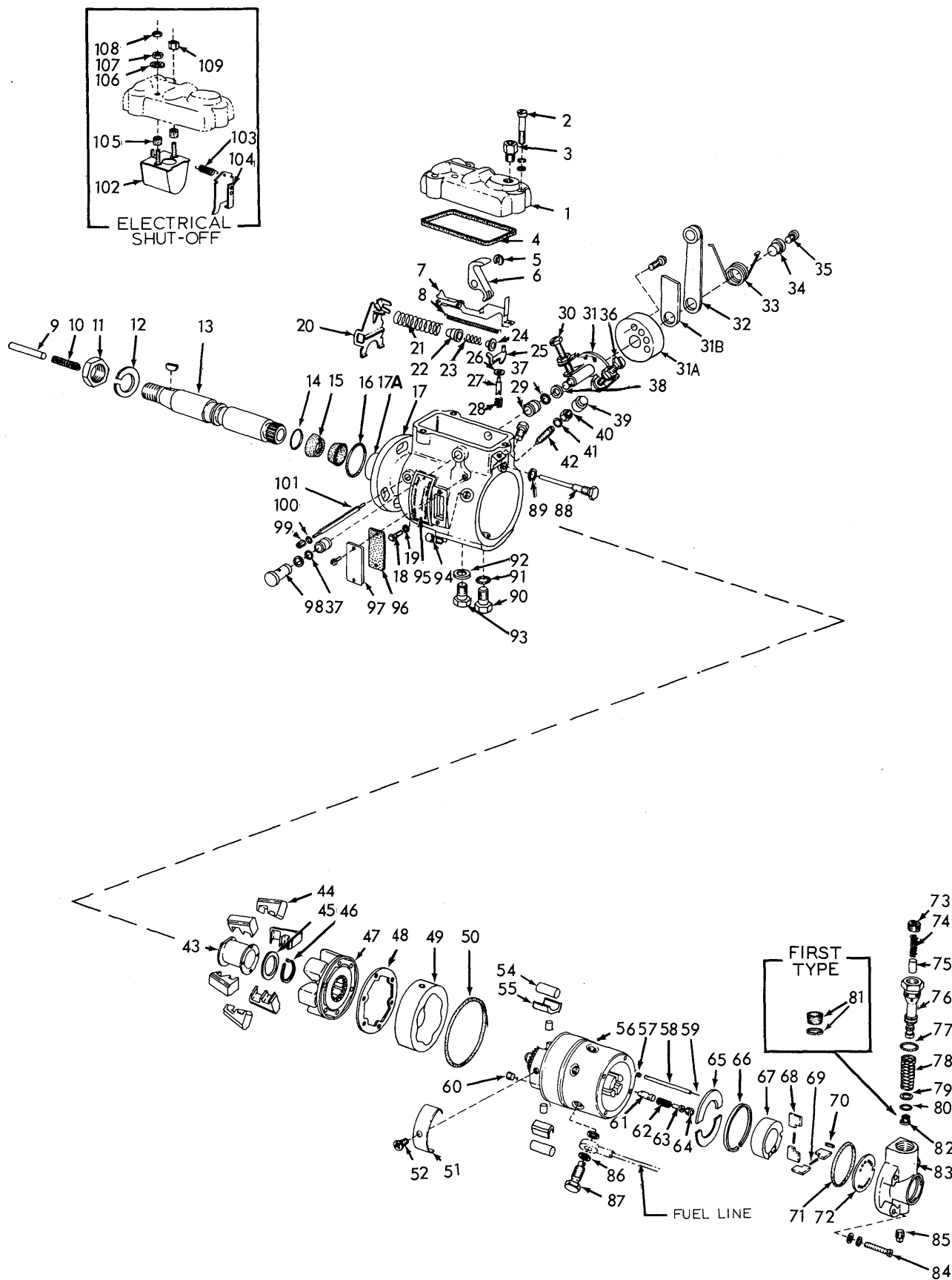
22	74051002	1	COVER, governor control
24	-----	1	NUT, lock, idle screw
	-----	1	WASHER
25	-----	1	SEAL, idle screw
26	-----	1	SCREW, adjusting, low idle
33	74056490	1	SHAFT, shut-off
	74048632	2	SCREW, stop
	74369507	2	NUT, jam
47	74050184	1	RING, cam
62	74059733	4	BLADE, transfer pump
	74055958	2	SPRING, pump blades
63 thru 74			omit these items
81	74060190	1	SCREW ASSEMBLY, head locating (includes ball and spring)
99	74056488	1	SHAFT, throttle

Omit these items

(Continued)

PUMP ASSEMBLY 74516526 (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
103	74055625	2	SCREW, retaining
105	74048645	1	SCREW, adjusting, high idle
	74051409	1	NUT, jam
	74369430	1	WIRE, sealing
108 thru 112			Omit these items
113	74056486	2	ARM, lever
114	74056484	2	SPACER, lever arm
	74056485	2	SCREW
115	74055960	1	PLUG, pressure regulating
116	74055892	1	SPRING, regulating
117	74369596	1	PISTON, regulating
118	74059221	1	SLEEVE, end plate
119	74369599	1	□SEAL, end plate sleeve
120	74055961	1	ELEMENT, filter
121	74055962	1	□SEAL, element
122	74369595	1	□RING, sealing, end plate sleeve
123	74059134	1	□SEAL, regulating piston
124	74055965	1	PLATE, end
125	74050912	4	SCREW, end plate
	70906957	4	LOCKWASHER, internal tooth #10
	74053267	4	WASHER, plain
	74369430	1	WIRE, sealing
126	74055966	1	□PLUG, end plate



T-71870

TYPICAL MODEL DB PUMP FOR 2900, 10000, 11000 ENGINES

INJECTION PUMP PARTS

USAGE: Typical Model DB pump for 2900, 10000 and 11000 engines. See assembly listings on following pages for specific usage and parts information.

ITEM	PART NO.	QTY.	DESCRIPTION
1	-----	1	COVER, governor control
2	74053266	3	SCREW, control cover
	70906957	3	LOCKWASHER, internal tooth, #10
	74053267	3	WASHER, plain
3	74055293	1	CONNECTOR ASSEMBLY, return line
4	74048630	1	□GASKET, control cover
5	-----	1	CAM, shut-off
6	74049532	1	LEVER, throttle
7	74052156	1	HOOK ASSEMBLY, governor linkage
8	74048624	1	SPRING, governor linkage
9	74055984	1	BUTTON, thrust
10	74048600	1	SPRING, thrust button
11	74048597	1	NUT, drive shaft
12	74048598	1	LOCKWASHER, drive shaft
13	74058965	1	SHAFT, drive (splined)
	910224	1	KEY, woodruff, 5/32" x 5/8"
14	74369599	1	□SEAL, end, drive shaft
15	74052540	2	□SEAL, drive shaft
16	74048596	1	□SEAL, pilot
17	74059144	1	HOUSING ASSEMBLY (Includes items 17A and 29)
17A	74059161	1	TUBE, pilot (steel)
18	74051833	1	PLUG, torque screw hole
19	74369432	1	□WASHER, torque screw hole
20	74053589	1	ARM, governor
21	-----	1	SPRING, governor control
22	74048635	1	RETAINER, spring
23	74049533	1	SPRING, idling
24	74048627	1	GUIDE, idling spring
25	74054579	1	ARM ASSEMBLY, metering valve
26	74052915	1	SHIM, metering valve
27	74051498	1	VALVE, metering

(Continued)

INJECTION PUMP PARTS (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
28	74051502	1	SPRING, metering valve
29	74055442	2	BUSHING, throttle shaft
30	74048645	1	SCREW, low idle
	74369507	1	NUT, jam (1/8" thick)
31	74056488	1	SHAFT, throttle
31A	74056484	1	SPACER, throttle lever
	74050913	1	SCREW
31B	74056486	1	ARM, throttle
32	74054594	1	LEVER ASSEMBLY, throttle
33	74051413	1	SPRING, throttle lever
34	74051412	1	RETAINER, throttle lever spring
35	74055625	1	SCREW, retaining, throttle spring
36	74048645	1	SCREW, high idle
	74369507	1	NUT, jam (1/8" thick)
37	74369878	2	□SEAL, throttle and shut-off shafts
38	74053375	2	□WASHER, throttle and shut-off shafts .
39	74052917	1	CAP, torque screw
40	74054583	1	NUT, torque screw
41	74369878	1	□SEAL, torque screw
42	74054582	1	SCREW, torque
43	74053590	1	SLEEVE, governor thrust
44	74053385	6	WEIGHT, governor
45	74048620	1	WASHER, thrust
46	74055647	1	RING, governor weight retainer
47	74059577	1	RETAINER ASSEMBLY, governor weight (Includes item 48)
48	74059575	1	□RING, flexible
49	-----	1	RING, cam
50	74369444	1	□SEAL, hydraulic head
51	-----	1	SPRING, leaf
52	74053362	1	SCREW, adjusting, leaf spring
54	74369436	2	ROLLER, cam
55	-----	2	SHOE, cam roller
56	74056349	1	HEAD ASSEMBLY, hydraulic (Includes rotor, plungers and items 57 thru 60)
57	74056461	1	SCREW, vent wire
58	74052541	1	RETAINER, vent wire

(Continued)

INJECTION PUMP PARTS (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
59	74051387	1	WIRE, vent
60	74051388	2	SCREW, head plugging
61	-----	1	VALVE, delivery
62	74051379	1	SPRING, delivery valve
63	74056590	1	STOP, delivery valve
64	74052538	1	SCREW, retaining
65	74051385	2	RETAINER, rotor
66	74051386	1	RING, rotor retainer
67	74051376	1	LINER, transfer pump
68	74059733	4	BLADE, transfer pump
69	74055958	2	SPRING, transfer pump blade
70	74369592	1	PIN, roll, locating
71	74050417	1	□SEAL, transfer pump
72	74055959	1	PLATE, thrust
73	74055960	1	PLUG, pressure regulating
74	74055892	1	SPRING, regulating
75	74369596	1	PISTON, regulating
76	74059221	1	SLEEVE, end plate
77	74369599	1	□SEAL, end plate sleeve
78	74055961	1	ELEMENT, filter
79	74055962	1	□SEAL, element
80	74369595	1	□RING, sealing, end plate sleeve
81	{ -----	1	SEAL, regulating piston
	{ -----	1	RING, retaining, piston seal
} Used prior to November 1965. Order item 82			
82	74059134	1	□SEAL, regulating piston (Effective November 1965)
83	74055965	1	PLATE, end
84	74050912	4	SCREW, end plate
	70906957	4	LOCKWASHER, internal tooth, #10
	74053267	4	WASHER, plain
85	74055966	1	□PLUG, end plate (hex-hd., 1/8"NPT)
86	74027748	Δ	□WASHER, fuel line (Not included with pump assembly)
87	74369451	Δ	SCREW, fuel line connection
88	74051378	1	STUD, guide

ΔUse as required
(Continued)

INJECTION PUMP PARTS (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
89	74048650	1	□WASHER, stud guide
90	74052742	1	SCREW, head locating
91	74369595	1	□RING, sealing, head locating screw
92	74369452	1	□WASHER, cam locating screw
93	74051374	1	SCREW, cam locating
94	74048610	2	SCREW, head locking
95	74369428	1	PLATE, name
	74369429	2	SCREW
96	74048604	2	□GASKET, timing line cover
97	74048603	2	COVER, timing line
	74048605	4	SCREW
98	-----	1	SHAFT, shut-off
99	74048642	2	NUT, pivot shaft
100	74050910	2	□WASHER, sealing, pivot shaft
101	74048636	1	SHAFT, governor arm pivot
102	-----	1	COIL ASSY., shut-off (Consists of solenoid which is serviced separately and items 103 thru 109)
103	-----	1	SPRING, shut-off arm
104	-----	1	ARM, shut-off
105	74369502	2	TUBE, insulating, terminal
106	74051383	2	WASHER, insulating
107	74049437	2	NUT, terminal contact
108	74053829	2	NUT, lock, terminal contact
109	74059685	1	NUT, grounding (For machines without integral ground wire. Replaces 1 each of items 106, 107 and 108)

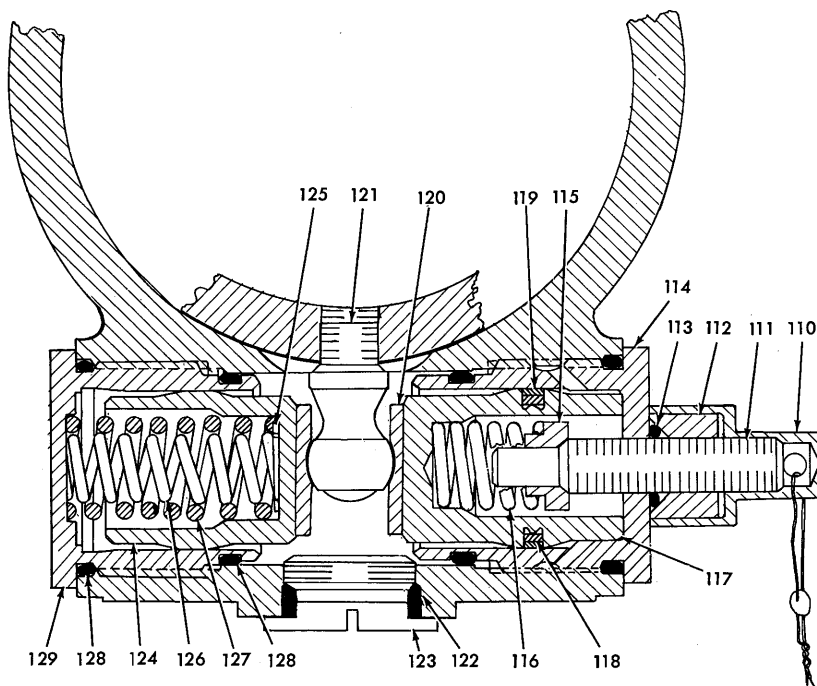
PUMP ASSEMBLY 74020827

USAGE: 545 wheel loader with 2900 engine prior to engine No. 2D-07956

ITEM	PART NO.	QTY.	DESCRIPTION
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NOTE: Parts are identical to those shown on pages 30 thru 34 with
with the following exceptions:

1	74051807	1	COVER, governor control
5	74051559	1	CAM, shut-off
13	74056489	1	SHAFT, drive
	70910224	1	KEY, woodruff, 5/32" x 5/8"
14	-----	1	SEAL (Omit this item)
17	74055015	1	HOUSING ASSEMBLY
17A	74059239	1	TUBE, pilot (bronze)
21	74051499	1	SPRING, governor control
30	74048632	1	SCREW, low idle
	74051409	1	NUT
35	74056487	1	SCREW, retaining, throttle spring
36	74058950	1	SCREW, high idle
	74058951	1	NUT
46	74253433	1	RING, governor weight retainer
47	74059596	1	RETAINER, ASSEMBLY, governor weight (Includes item 48)
49	74050184	1	RING, cam
51	74054037	1	SPRING, leaf
55	74048608	2	SHOE, cam roller
56	74056299	1	HEAD ASSEMBLY, hydraulic (Includes rotor, plungers and items 57 thru 60)
61	74051380	1	VALVE, delivery
98	74053315	1	SHAFT, shut-off
102	74059657	1	COIL ASSEMBLY, shut-off (12V. ETR)
103	74369496	1	SPRING, shut-off arm
104	74051504	1	ARM, shut-off



PUMP ASSEMBLY 74021215

T-72500

USAGE: 545 wheel loader with 2900 engine effective engine serial No. 2D-07956 thru Oct. 1966.

ITEM PART NO. QTY. DESCRIPTION

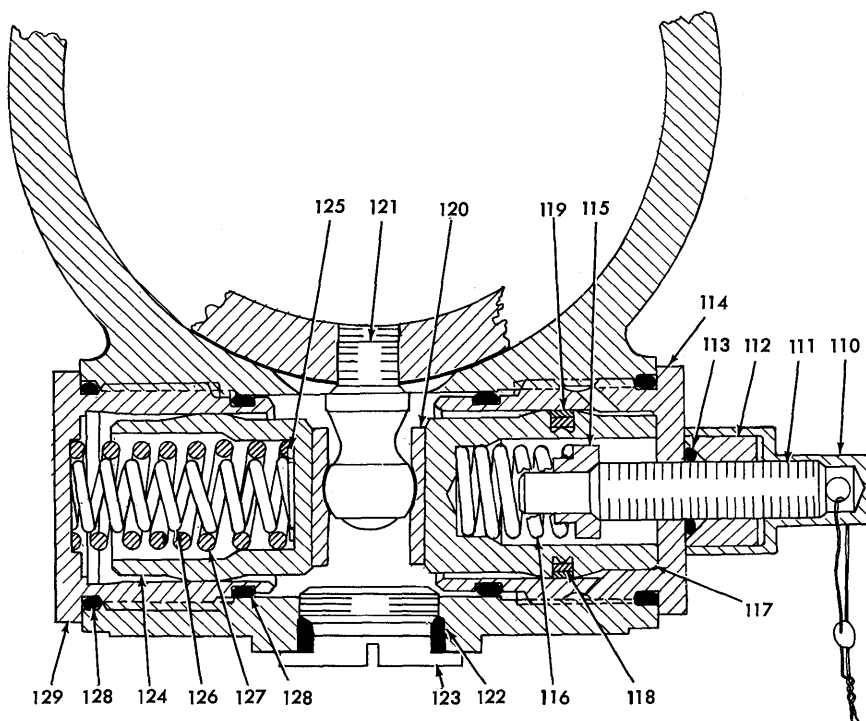
NOTE: Parts are identical to those shown on pages 30 thru 34 with the following exceptions:

1	74051807	1	COVER, governor control
5	74051559	1	CAM, shut-off
13	74056489	1	SHAFT, drive
	70910224	1	KEY, woodruff, 5/32" x 5/8"
14	-----	1	SEAL (Omit this item)
17	74054581	1	HOUSING ASSEMBLY
17A	74059239	1	TUBE, pilot (bronze)
21	74051499	1	SPRING, governor control
27	74054596	1	VALVE, metering
30	74048632	1	SCREW, low idle
	74051409	1	NUT
35	74056487	1	SCREW, retaining, throttle spring
36	74058950	1	SCREW, high idle
	74058951	1	NUT
46	74253433	1	RING, governor weight retainer
47	74059596	1	RETAINER ASSEMBLY, governor weight (Includes item 48)

(Continued)

PUMP ASSEMBLY 74021215 (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
49	74050184	1	RING, cam
51	74054037	1	SPRING, leaf
55	74048608	2	SHOE, cam roller
56	74056299	1	HEAD ASSEMBLY, hydraulic (Includes rotor, plungers and items 57 thru 60)
61	74051380	1	VALVE, delivery
90	74055384	1	SCREW ASSEMBLY, head locating (Includes ball and spring)
91	74369595	2	□RING, sealing, head locating screw
92	-----	1	WASHER
93	-----	1	SCREW
} Omit these items			
98	74053315	1	SHAFT, shut-off
102	74059657	1	COIL ASSEMBLY, shut-off (12V. E. T. R.)
103	74369496	1	SPRING, shut-off arm
104	74051504	1	ARM, shut-off
110	74052917	1	CAP, adjusting screw
	74369430	1	WIRE, sealing
111	74054593	1	SCREW, advance adjusting
112	74054583	1	NUT, jam, adjusting screw
113	74369878	1	□SEAL, adjusting screw
114	74055688	1	PLUG, piston hole (power side)
115	74055690	1	GUIDE, advance adjusting spring
116	74059063	1	SPRING, advance adjusting
117	74059077	1	PISTON, power
118	74059064	1	□SEAL, power piston ring
119	74055386	1	RING, power piston
120	74051815	2	WASHER, slide
121	74055687	1	SCREW, cam
122	74054585	1	□SEAL, cam screw access plug
123	74054586	1	PLUG, cam screw access
124	74059078	1	PISTON, spring
125	{ 74051826 74051827 74051828	{ Δ Δ Δ	{ SHIM, advance spring SHIM, advance spring SHIM, advance spring
} Use as required			
126	74055686	1	SPRING, advance, inner
127	74055685	1	SPRING, advance, outer
128	74054589	4	□SEAL, piston hole plug
129	74055689	1	PLUG, piston hole (spring side)



PUMP ASSEMBLY 74021721

T-72500

USAGE: 545 wheel loader with 2900 engine. Used in place of PUMP ASSEMBLY 74021215 on some units

ITEM	PART NO.	QTY.	DESCRIPTION
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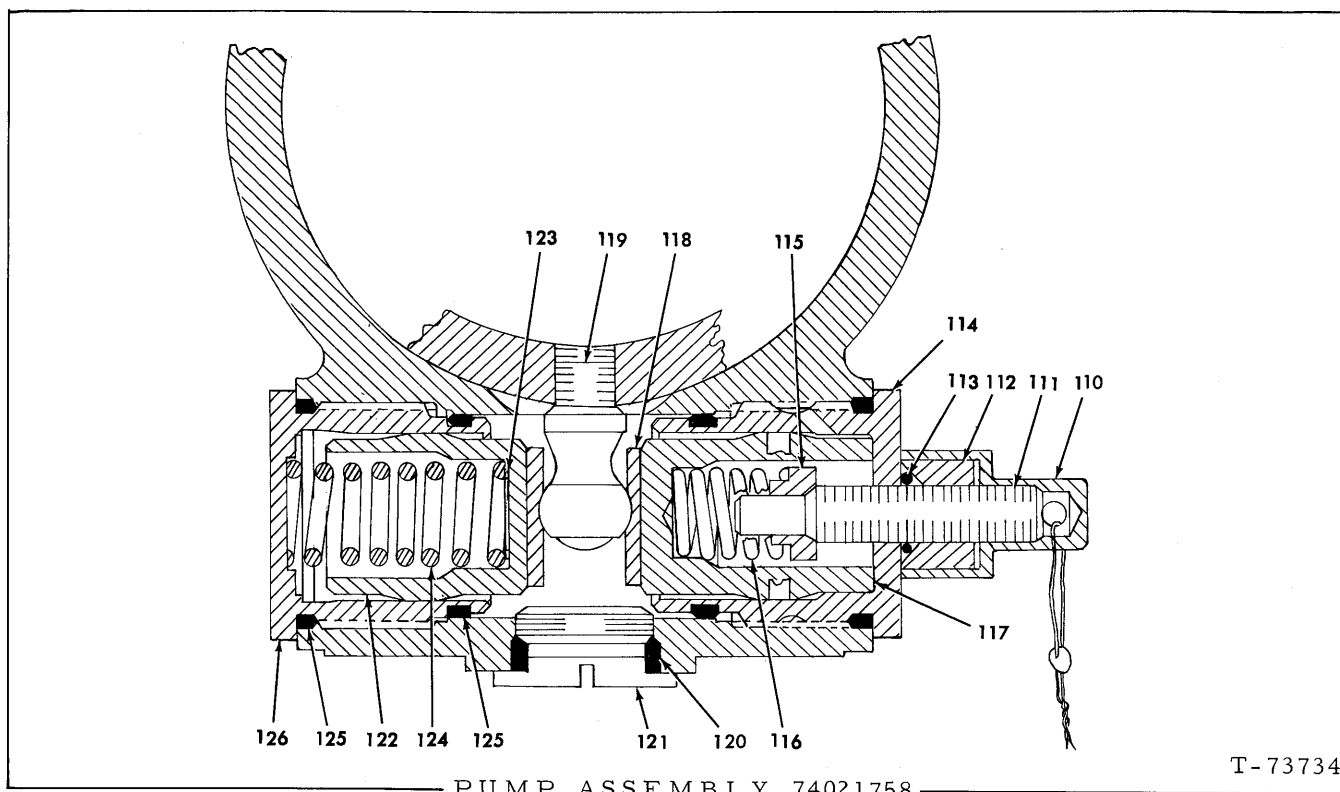
NOTE: Parts are identical to those shown on pages 30 thru 34 with the following exceptions:

1	74051807	1	COVER, governor control
5	74051559	1	CAM, shut-off
13	74056489	1	SHAFT, drive
	70910224	1	KEY, woodruff, 5/32" x 5/8"
14	-----	1	SEAL (Omit this item)
17	74054581	1	HOUSING ASSEMBLY
17A	74059239	1	TUBE, pilot (bronze)
21	74051499	1	SPRING, governor control
27	74054596	1	VALVE, metering
30	74048632	1	SCREW, low idle
	74051409	1	NUT
35	74056487	1	SCREW, retaining, throttle spring
36	74058950	1	SCREW, high idle
	74058951	1	NUT
46	74253433	1	RING, governor weight retainer
47	74059596	1	RETAINER ASSEMBLY, governor weight (Includes item 48)

(Continued)

PUMP ASSEMBLY 74021721 (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
49	74050184	1	RING, cam
51	74054037	1	SPRING, leaf
55	74048608	2	SHOE, cam roller
56	74056299	1	HEAD ASSEMBLY, hydraulic (Includes rotor, plungers and items 57 thru 60)
61	74051380	1	VALVE, delivery
74	74056188	1	SPRING, regulating
90	74054584	1	SCREW ASSEMBLY, head locating (Includes ball and spring)
91	74369595	2	□RING, sealing, head locating screw
92	-----	1	WASHER
93	-----	1	SCREW
			} Omit these items
98	74053315	1	SHAFT, shut-off
102	74059657	1	COIL ASSEMBLY, shut-off (12V. E. T. R.)
103	74369496	1	SPRING, shut-off arm
104	74051504	1	ARM, shut-off
110	74052917	1	CAP, adjusting screw
	74369430	1	WIRE, sealing
111	74054593	1	SCREW, advance adjusting
112	74054583	1	NUT, jam, adjusting screw
113	74369878	1	□SEAL, adjusting screw
114	74055688	1	PLUG, piston hole (power side)
115	74055690	1	GUIDE, advance adjusting spring
116	74059063	1	SPRING, advance adjusting
117	74059077	1	PISTON, power
118	74059064	1	□SEAL, power piston ring
119	74055386	1	RING, power piston
120	74051815	2	WASHER, slide
121	74055687	1	SCREW, cam
122	74054585	1	□SEAL, cam screw access plug
123	74054586	1	PLUG, cam screw access
124	74059078	1	PISTON, spring
125	{ 74051826 74051827 74051828	{ Δ Δ Δ	{ SHIM, advance spring SHIM, advance spring SHIM, advance spring
			} Use as required
126	74055686	1	SPRING, advance, inner
127	74055685	1	SPRING, advance, outer
128	74054589	4	□SEAL, piston hole plug
129	74055689	1	PLUG, piston hole (spring side)



USAGE: 545 wheel loader with 2900 engine effective November 1966 thru engine serial ,
Number 2D-15427

ITEM	PART NO.	QTY.	DESCRIPTION
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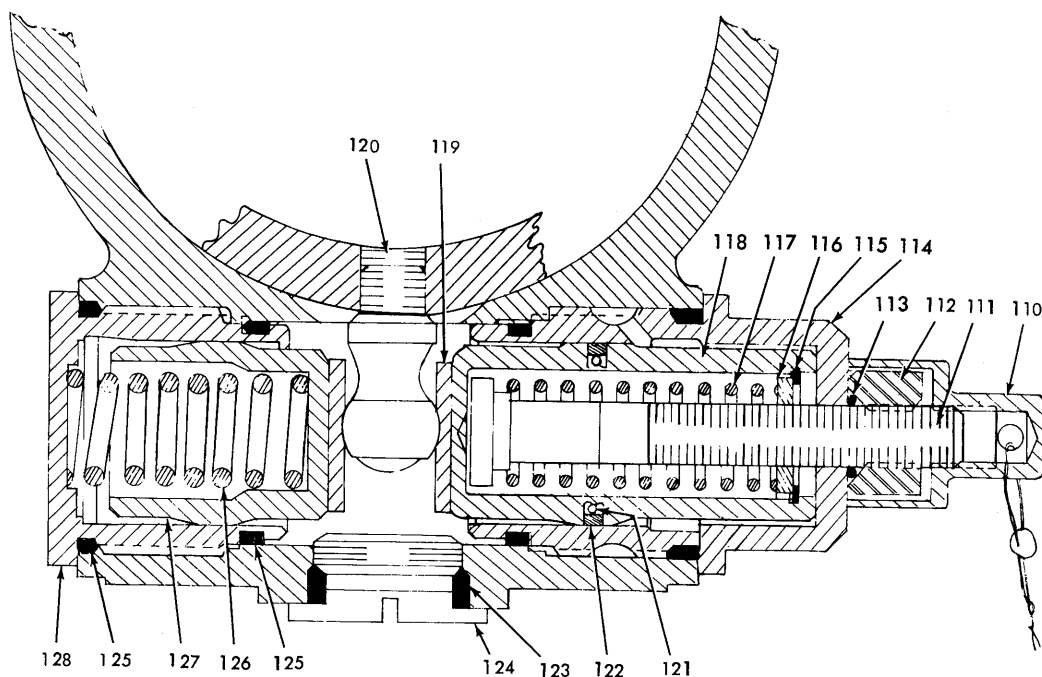
NOTE: Parts are identical to those shown on pages 30 thru 34
with the following exceptions:

1	74051807	1	COVER, governor control
5	74051559	1	CAM, shut-off
13	74056489	1	SHAFT, drive
	70910224	1	KEY, woodruff, 5/32" x 5/8"
14	-----	1	SEAL (Omit this item)
17	74054581	1	HOUSING ASSEMBLY
17A	74059239	1	TUBE, pilot (bronze)
21	74051499	1	SPRING, governor control
27	74054596	1	VALVE, metering
30	74048632	1	SCREW, low idle
	74051409	1	NUT
35	74056487	1	SCREW, retaining, throttle spring
36	74058950	1	SCREW, high idle
	74058951	1	NUT
46	74253433	1	RING, governor weight retainer
47	74059596	1	RETAINER ASSEMBLY, governor weight (Includes item 48)

(Continued)

PUMP ASSEMBLY 74021758 (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
49	74050184	1	RING, cam
51	74054037	1	SPRING, leaf
55	74048608	2	SHOE, cam roller
56	74056299	1	HEAD ASSEMBLY, hydraulic (Includes rotor, plungers and items 57 thru 60)
61	74051380	1	VALVE, delivery
74	74056188	1	SPRING, regulating
90	74054584	1	SCREW ASSEMBLY, head locating (Includes ball and spring)
91	74369595	2	□ RING, sealing, head locating screw
92	-----	1	WASHER
93	-----	1	SCREW
} Omit these items			
98	74053315	1	SHAFT, shut-off
102	74059657	1	COIL ASSEMBLY, shut-off (12V. E.T.R.)
103	74369496	1	SPRING, shut-off arm
104	74051504	1	ARM, shut-off
110	74052917	1	CAP, adjusting screw
	74369430	1	WIRE, sealing
111	74054593	1	SCREW, advance adjusting
112	74054583	1	NUT, jam, adjusting screw
113	74369878	1	□ SEAL, adjusting screw
114	74055688	1	PLUG, piston hole (power side)
115	74055690	1	GUIDE, advance adjusting spring
116	74059063	1	SPRING, advance adjusting
117	74059077	1	PISTON, power
118	74051815	2	WASHER, slide
119	74055687	1	SCREW, cam
120	74054585	1	□ SEAL, cam screw access plug
121	74054586	1	PLUG, cam screw access
122	74059078	1	PISTON, spring
123	{ 74051826 74051827 74051828	{ Δ Δ Δ	{ SHIM, advance spring SHIM, advance spring SHIM, advance spring
} Use as required			
124	74055685	1	SPRING, advance
125	74054589	4	□ SEAL, piston hole plug
126	74055689	1	PLUG, piston hole (spring side)



PUMP ASSEMBLY 74021517

T-73822

USAGE: 545 wheel loader with 2900 engine effective engine serial No. 2D-15428 thru 2D-20710

ITEM PART NO. QTY. DESCRIPTION

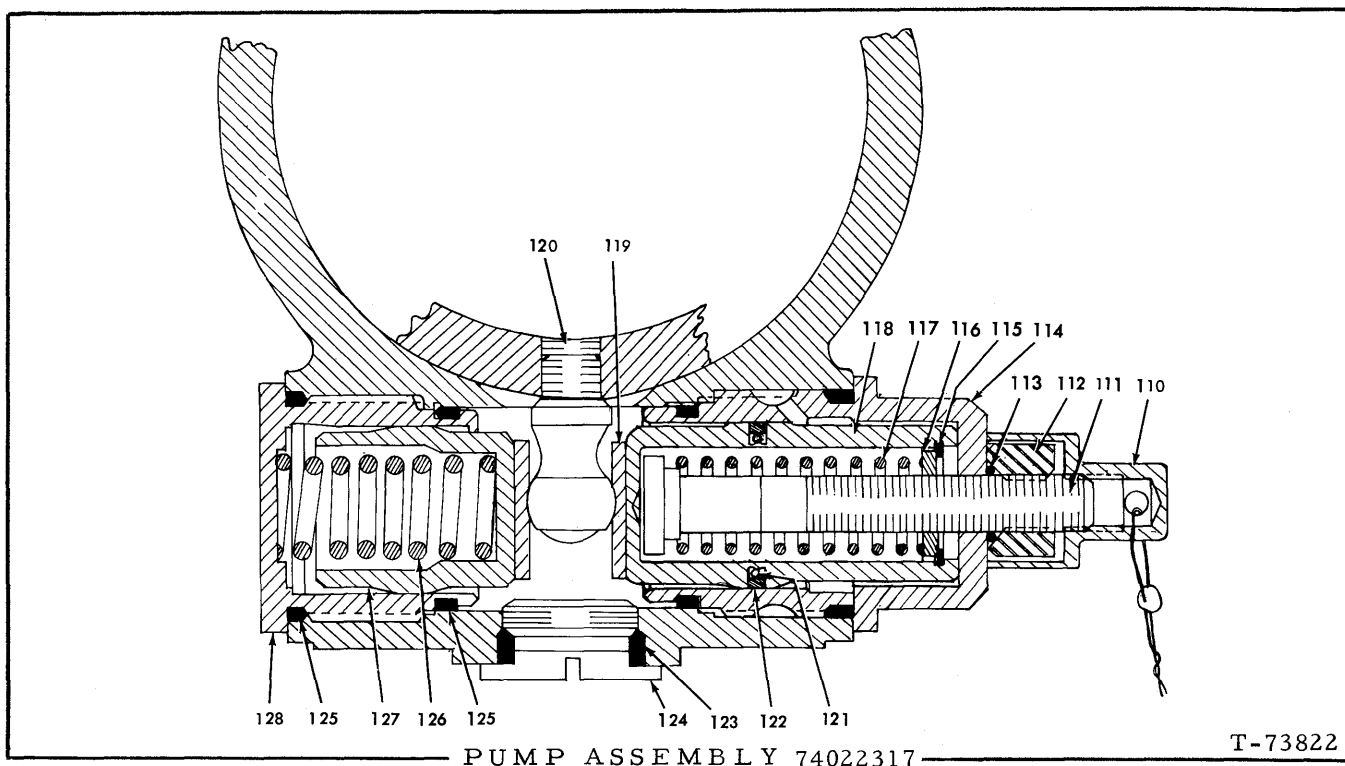
NOTE: Parts are identical to those shown on pages 30 thru 34 with the following exceptions:

1	74051807	1	COVER, governor control
5	74051559	1	CAM, shut-off
13	74056489	1	SHAFT, drive
	70910224	1	KEY, woodruff, 5/32" x 5/8"
14	-----	1	SEAL (Omit this item)
17	74054581	1	HOUSING ASSEMBLY
17A	74059239	1	TUBE, pilot (bronze)
21	74051499	1	SPRING, governor control
27	74054596	1	VALVE, metering
30	74051799	1	SCREW, low idle
	74051409	1	NUT (1/4" thick)
35	74056487	1	SCREW, retaining, throttle spring
36	74058950	1	SCREW, high idle
	74058951	1	NUT
46	74253433	1	RING, governor weight retainer
47	74059596	1	RETAINER ASSEMBLY, governor weight (Includes item 48)

(Continued)

PUMP ASSEMBLY 74021517 (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
49	74050184	1	RING, cam
51	74054037	1	SPRING, leaf
55	74048608	2	SHOE, cam roller
56	74059508	4	HEAD ASST., hydraulic (Includes rotor, plunger, items 57 thru 60 and accumulator parts indented below)
	74059390	2	PISTON, accumulator
	74059391	2	SCREW, accumulator piston retaining
	74059392	2	SPRING, accumulator piston
61	74051380	1	VALVE, delivery
74	74055892	1	SPRING, regulating
90	74059341	1	SCREW ASSEMBLY, head locating (Includes ball and spring)
91	74369595	2	ORING, sealing, head locating screw
92	-----	1	WASHER
93	-----	1	SCREW
98	74053315	1	SHAFT, shut-off
102	74059657	1	COIL ASSEMBLY, shut-off (12V. E.T.R.)
103	74369496	1	SPRING, shut-off arm
104	74051504	1	ARM, shut-off
110	74052917	1	CAP, adjusting screw
	74369430	1	WIRE, sealing
111	74059395	1	SCREW, advance adjusting
112	74054583	1	NUT, jam, adjusting screw
113	74369878	1	SEAL, adjusting screw
114	74059510	1	PLUG, piston hole (power side)
115	74059397	1	RING, retaining, adjusting spring
116	74059396	1	WASHER, adjusting spring
117	74059511	1	SPRING, advance adjusting
118	74059398	1	PISTON, power
119	74051815	2	WASHER, slide
120	74055687	1	SCREW, cam
121	74059064	1	SEAL, power piston ring
122	74055386	1	RING, power piston
123	74054585	1	SEAL, cam screw access plug
124	74054586	1	PLUG, cam screw access
125	74054589	4	SEAL, piston hole plug
126	74059509	1	SPRING, advance
127	74059078	1	PISTON, spring
128	74055689	1	PLUG, piston hole (spring side)



USAGE: 545 wheel loader with 2900 engine effective engine serial No. 2D-20711 thru 2D-36145

ITEM	PART NO.	QTY.	DESCRIPTION
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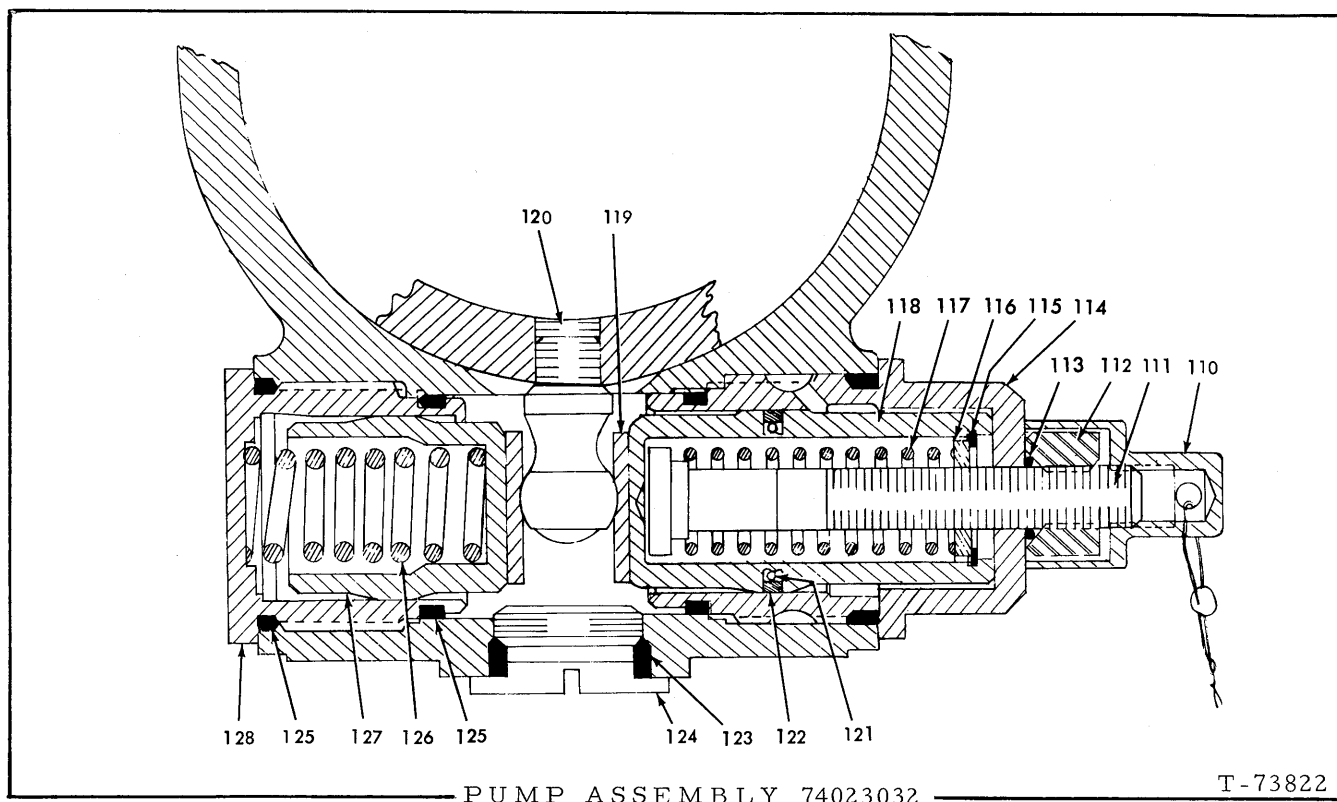
NOTE: Parts are identical to those shown on pages 30 thru 34 with the following exceptions:

1	74051807	1	COVER, governor control
3	74059237	1	CONNECTOR ASSEMBLY, return line
5	74051559	1	CAM, shut-off
9	74059241	1	BUTTON, thrust
13	74053204	1	SHAFT, drive
	70910224	1	KEY, woodruff, 5/32" x 5/8"
14	-----	1	SEAL (Omit this item)
17	74054581	1	HOUSING ASSY.
17A	74059239	1	TUBE, pilot (bronze)
21	74051809	1	SPRING, governor control
27	74054596	1	VALVE, metering
30	74051799	1	SCREW, low idle
	74051409	1	NUT
35	74056487	1	SCREW, retaining, throttle spring
36	74058950	1	SCREW, high idle
	74058951	1	NUT
46	74253433	1	RING, governor weight retainer
47	74059596	1	RETAINER ASSEMBLY, governor weight (Includes item 48)

(Continued)

PUMP ASSEMBLY 74022317 (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
49	74050184	1	RING, cam
51	74054037	1	SPRING, leaf
55	74048608	2	SHOE, cam roller
56	74059508	1	HEAD ASSEMBLY, hydraulic (Includes rotor, plungers, items 57 thru 60 and accumulator parts indented below)
	74059390	2	PISTON, accumulator
	74059391	2	SCREW, accumulator piston retaining
	74059392	2	SPRING, accumulator piston
61	74051380	1	VALVE, delivery
90	74059341	1	SCREW ASSEMBLY, head locating (Includes ball and spring)
91	74369595	2	□RING, sealing, head locating screw
92	-----	1	WASHER
93	-----	1	SCREW
			} Omit these items
98	74053315	1	SHAFT, shut-off
102	74059657	1	COIL ASSEMBLY, shut-off (12V. E.T.R.)
103	74369496	1	SPRING, shut-off arm
104	74051504	1	ARM, shut-off
110	74052917	1	CAP, adjusting screw
	74369430	1	WIRE, sealing
111	74059395	1	SCREW, advance adjusting
112	74054583	1	NUT, jam, adjusting screw
113	74369878	1	□SEAL, adjusting screw
114	74059510	1	PLUG, piston hole (power side)
115	74059397	1	RING, retaining, adjusting spring
116	74059396	1	WASHER, adjusting spring
117	74059511	1	SPRING, advance adjusting
118	74059398	1	PISTON, power
119	74051815	2	WASHER, slide
120	74055687	1	SCREW, cam
121	74059064	1	□SEAL, power piston ring
122	74055386	1	RING, power piston
123	74054585	1	□SEAL, cam screw access plug
124	74054586	1	PLUG, cam screw access
125	74054589	4	□SEAL, piston hole plug
126	74059509	1	SPRING, advance
127	74059078	1	PISTON, spring
128	74055689	1	PLUG, piston hole (spring side)



USAGE: 545 wheel loader with 2900 engine effective engine serial No. 2D-36146

ITEM	PART NO.	QTY.	DESCRIPTION
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NOTE: Parts are identical to those shown on pages 30 thru 34 with the following exceptions:

1	74054587	1	COVER, governor control
	74051363	1	SCREW, adjusting, low idle
	74051364	1	WASHER, idle screw
	74051409	1	NUT, jam, idle screw
3	74059237	1	CONNECTOR ASSY., return line
5	74048639	1	CAM, shut-off
9	74059241	1	BUTTON, thrust
13	74053204	1	SHAFT, drive
	70910224	1	KEY, woodruff, 5/32" x 5/8"
14	-----	1	SEAL (Omit this item)
17	74054581	1	HOUSING ASSY.
17A	74059239	1	TUBE, pilot (bronze)
21	74051809	1	SPRING, governor control
	74060206	1	SPACER, governor control spring
27	74054596	1	VALVE, metering
30	-----	1	SCREW, low idle
	-----	1	NUT
			} Omit these items
35	74056487	1	SCREW, retaining, throttle spring

(Continued)

PUMP ASSEMBLY 74023032(Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
36	74058950	1	SCREW, high idle
	74058951	1	NUT
46	74253433	1	RING, governor weight retainer
47	74059596	1	RETAINER ASSY., governor weight (Includes item 48)
49	74050184	1	RING, cam
51	74054037	1	SPRING, leaf
55	74048608	2	SHOE, cam roller
56	74059508	1	HEAD ASSY., hydraulic (Includes rotor, plungers, items 57 thru 60 and accumulator parts indented below)
	74059390	2	PISTON, accumulator
	74059391	2	SCREW, accumulator piston retaining
	74059392	2	SPRING, accumulator piston
61	74051380	1	VALVE, delivery
90	74059341	1	SCREW ASSY., head locating (Includes ball and spring)
91	74369595	2	☐ RING, sealing, head locating screw
92	-----	1	WASHER
93	-----	1	SCREW
98	74053315	1	SHAFT, shut-off
102 thru 109			Omit these items
110	74052917	1	CAP, adjusting screw
	74369430	1	WIRE, sealing
111	74059395	1	SCREW, advance adjusting
112	74054583	1	NUT, jam, adjusting screw
113	74369878	1	☐ SEAL, adjusting screw
114	74059510	1	PLUG, piston hole (power side)
115	74059397	1	RING, retaining, adjusting spring
116	74059396	1	WASHER, adjusting spring
117	74059511	1	SPRING, advance adjusting
118	74059398	1	PISTON, power
119	74051815	2	WASHER, slide
120	74055687	1	SCREW, cam
121	74059064	1	☐ SEAL, power piston ring
122	74055386	1	RING, power piston
123	74054585	1	☐ SEAL, cam screw access plug
124	74054586	1	PLUG, cam screw access
125	74054589	4	☐ SEAL, piston hole plug
126	74059509	1	SPRING, advance
127	74059078	1	PISTON, spring
128	74055689	1	PLUG, piston hole (spring side)

PUMP ASSEMBLY 74354373

USAGE: HD11E crawler tractor with 10000 engine

ITEM	PART NO.	QTY.	DESCRIPTION
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NOTE: Parts are identical to those shown on pages 30 thru 34 with the following exceptions:

1	74054587	1	COVER, governor control
	74051363	1	SCREW, adjusting, low idle
	74051365	1	SEAL, idle screw
	74051364	1	WASHER, idle screw
	74051409	1	NUT, idle screw
5	74048639	1	CAM, shut-off
21	74052136	1	SPRING, governor control
30	74048632	1	SCREW, shut-off stop
	74369507	1	NUT, jam
35	74056487	1	SCREW, retaining, throttle spring
49	74050184	1	RING, cam
51	74051372	1	SPRING, leaf
55	74048608	2	SHOE, cam roller
61	74051380	1	VALVE, delivery
98	74053315	1	SHAFT, shut-off
102 thru 109			Omit these items

PUMP ASSEMBLY 74354378

USAGE: HD-11E Crawler Tractor with 11000 engine prior to engine serial No. 11-17106.
See DC pump section for late units.

ITEM	PART NO.	QTY.	DESCRIPTION
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NOTE: Parts are identical to those shown on pages 30 thru 34
with the following exceptions:

1	74054587	1	COVER, governor control
	74051363	1	SCREW, adjusting, low idle
	74051365	1	SEAL, idle screw
	74051364	1	WASHER, idle screw
	74051409	1	NUT, idle screw
5	74048639	1	CAM, shut-off
17	74055015	1	HOUSING ASSY. (Includes items 17A and 29)
	74059283	1	STOP, high idle screw (Clips on housing to prevent wear at idle screw contact point)(Early units)
	74059635	1	STOP, high idle screw (Nylon cap for end of screw to prevent wear at idle screw contact point)(Late units)
17A	74059239	1	TUBE, pilot (bronze)
21	74055176	1	SPRING, governor control
30	74048645	1	SCREW, low idle (Not used after September 1967)
35	74056487	1	SCREW, retaining, throttle spring
49	74050184	1	RING, cam
51	74051372	1	SPRING, leaf
55	74048608	2	SHOE, cam roller
61	74051380	1	VALVE, delivery
98	74053315	1	SHAFT, shut-off
102 thru 109			Omit these items

PUMP ASSEMBLY 74354377

USAGE: HD11EP crawler tractor with 11000 engine prior to engine serial No. 11-17106. See DC pump section for later units.

ITEM	PART NO.	QTY.	DESCRIPTION
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NOTE: Parts are identical to those shown on pages 30 thru 34 with the following exceptions:

1	74054587-3	1	COVER, governor control
	74051363-2	1	SCREW, adjusting, low idle
	74051365-7	1	SEAL, idle screw
	74051364-0	1	WASHER, idle screw
	74051409-3	1	NUT, idle screw
5	74048639-0	1	CAM, shut-off
17	74055015-4	1	HOUSING ASSEMBLY (Includes item 17A and 29)
	74059283-4	1	STOP, high idle screw (Clips on housing to prevent wear at idle screw contact point) (Early units)
	74059635-5	1	STOP, high idle (Nylon cap for end of screw to prevent wear at idle screw contact point) (Late units)
17A	74059239-4	1	TUBE, pilot (bronze)
21	74052136-1	1	SPRING, governor control
30	74048645-8	1	SCREW, low idle (Not used after September 1967)
35	74056487-4	1	SCREW, retaining, throttle spring
49	74050184-3	1	RING, cam
51	74051495-2	1	SPRING, leaf
55	74048608-6	2	SHOE, cam roller
61	74051380-6	1	VALVE, delivery
98	74053315-0	1	SHAFT, shut-off

102 thru 109

Omit these items

PUMP ASSEMBLY 74354372

USAGE: M100 series B Motor Grader with 10000 engine. See DC pump section for later units.

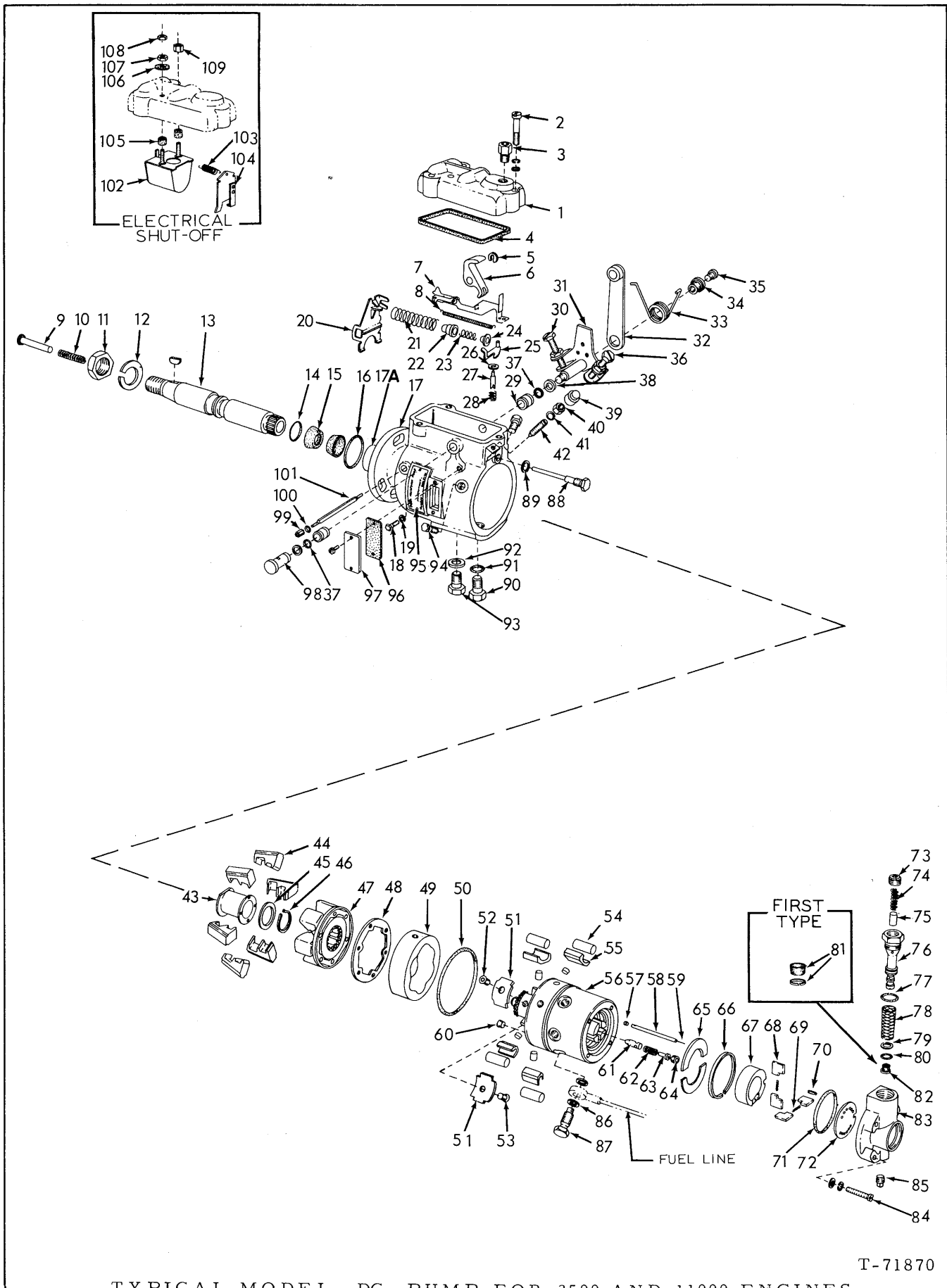
ITEM PART NO. QTY. DESCRIPTION

NOTE: Parts are identical to those shown on pages 30 thru 34 with the following exceptions:

1	74051002	1	COVER, governor control
5	74048639	1	CAM, shut-off
17	74059144	1	HOUSING ASSEMBLY (Includes item 17A and 29)
	74059283	1	STOP, high idle screw (Clips on housing to prevent wear at idle screw contact point)
21	74052136	1	SPRING, governor control
49	74050184	1	RING, cam
51	74051372	1	SPRING, leaf
55	74048608	2	SHOE, cam roller
61	74051380	1	VALVE, delivery
98	74056490	1	SHAFT, shut-off
	74048632	2	SCREW, stop
	74369507	2	NUT, jam
	74056484	1	SPACER, shut-off lever
	74050913	1	SCREW
	74056486	1	ARM, shut-off
	74054594	1	LEVER, shut-off
	74051413	1	SPRING, shut-off lever
	74051412	1	RETAINER, shut-off lever spring
	74055625	1	SCREW, retaining, shut-off spring

102 thru 109

Omit these items



TYPICAL MODEL DC PUMP FOR 3500 AND 11000 ENGINES

INJECTION PUMP PARTS

USAGE: Typical Model DC pump for 3500 and 11000 engines. See assembly listings on following pages for specific usage and parts information.

ITEM	PART NO.	QTY.	DESCRIPTION
1	-----	1	COVER, governor control
2	7 4053266	3	SCREW, control cover
	70906957	3	LOCKWASHER, internal tooth, #10
	74053267	3	WASHER, plain
3	74055293	1	CONNECTOR ASSY., return line
4	74048630	1	□GASKET, control cover
5	7-----	1	CAM, shut off
6	74049532	1	LEVER, throttle
7	74052156	1	HOOK ASSY., governor linkage
8	74048624	1	SPRING, governor linkage
9	74055984	1	BUTTON, thrust
10	74048600	1	SPRING, thrust button
11	74048597	1	NUT, drive shaft
12	74048598	1	LOCKWASHER, drive shaft
13	74055692	1	SHAFT, drive
	70910224	1	KEY, woodruff, 5/32" x 5/8"
14	74369599	1	□SEAL, drive shaft end
15	74052540	2	□SEAL, drive shaft
16	74048596	1	□SEAL, pilot
17	74059144	1	HOUSING ASSY. (Includes items 17A and 29)
17A	74059161	1	TUBE, pilot (steel)
18	74051833	1	PLUG, torque screw hole
19	74369432	1	□WASHER, torque screw hole
20	74053589	1	ARM, governor
21	-----	1	SPRING, governor control
22	74048635	1	RETAINER, spring
23	74049533	1	SPRING, idling
24	74048627	1	GUIDE, idling spring
25	74054579	1	ARM ASSY., metering valve
26	74052915	1	SHIM, metering valve
27	74051498	1	VALVE, metering

(Continued)

INJECTION PUMP PARTS (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
28	74051502	1	SPRING, metering valve
29	74055442	2	BUSHING, throttle shaft
30	74048645	1	SCREW, low idle
	74369507	1	NUT, jam (1/8" thick)
31	74054580	1	SHAFT ASSY., throttle
32	74054594	1	LEVER ASSY., throttle
33	74051413	1	SPRING, throttle lever
34	74051412	1	RETAINER, throttle lever spring
35	74055625	1	SCREW, retaining, throttle spring
36	74048645	1	SCREW, high idle (1-3/8" long)
	74369507	1	NUT, jam (1/8" thick)
37	74369878	2	□SEAL, throttle and shut-off shafts
38	74053375	2	□WASHER, throttle and shut-off shafts
39	74052917	1	CAP, torque screw
40	74054583	1	NUT, torque screw
41	74369878	1	□SEAL, torque screw
42	74054582	1	SCREW, torque
43	74053590	1	SLEEVE, governor thrust
44	74053385	6	WEIGHT, governor
45	74048620	1	WASHER, thrust
46	74055647	1	RING, governor weight retainer
47	74059577	1	RETAINER ASSY., governor weight (Includes item 48)
48	74059575	1	□RING, flexible
49	-----	1	RING, cam
50	74369444	1	□SEAL, hydraulic head
51	74055890	2	SPRING, leaf
52	74055970	1	SCREW, adjusting (polished)
53	74055969	1	SCREW, adjusting
54	74369436	4	ROLLER, cam
55	-----	4	SHOE, cam roller
56	74056126	1	HEAD ASSY., hydraulic (Includes rotor, plungers and items 57 thru 60)
57	74056461	1	SCREW, vent wire
58	74052541	1	RETAINER, vent wire

(Continued)

INJECTION PUMP PARTS (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
59	74051387	1	WIRE, vent
60	74051388	2	SCREW, head plugging
61	-----	1	VALVE, delivery
62	74056589	1	SPRING, delivery valve
63	74056590	1	STOP, delivery valve
64	74052538	1	SCREW, retaining
65	74051385	2	RETAINER, rotor
66	74051386	1	RING, rotor retainer
67	74051376	1	LINER, transfer pump
68	74059733	4	BLADE, transfer pump
69	74055958	2	SPRING, transfer pump blade
70	74369592	1	PIN, roll, locating
71	74050417	1	□SEAL, transfer pump
72	74055959	1	PLATE, thrust
73	74055960	1	PLUG, pressure regulating
74	74055892	1	SPRING, regulating
75	74369596	1	PISTON, regulating
76	74059221	1	SLEEVE, end plate
77	74369599	1	□SEAL, end plate sleeve
78	74055961	1	ELEMENT, filter
79	74055962	1	□SEAL, element
80	74369595	1	□RING, sealing, end plate sleeve
81	{ -----	1	SEAL, regulating piston
	{ -----	1	RING, retaining, piston seal
} Used prior to November 1965. Order item 82			
82	74059134	1	□SEAL, regulating piston (Effective November 1965)
83	74055965	1	PLATE, end
84	74050912	4	SCREW, end plate
	70906957	4	LOCKWASHER, internal tooth, #10
	74053267	4	WASHER, plain
85	74055966	1	□PLUG, end plate (1/8"NPT)
86	74027748	△	□WASHER, fuel line (not included with pump assembly)
87	74369451	△	SCREW, fuel line connection
88	74051378	1	STUD, guide
			△ Use as required

(Continued)

INJECTION PUMP PARTS (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
89	74048650	1	□WASHER, stud guide
90	74052742	1	SCREW, head locating
91	74369595	1	□RING, sealing, head locating screw
92	74369452	1	□WASHER, cam locating screw
93	74051374	1	SCREW, cam locating
94	74048610	2	SCREW, head locking
95	74369428	1	PLATE, name
	74369429	2	SCREW
96	74048604	2	□GASKET, timing line cover
97	74048603	2	COVER, timing line
	74048605	4	SCREW
98	74053315	1	SHAFT, shut-off
99	74048642	2	NUT, pivot shaft
100	74050910	2	□WASHER, sealing, pivot shaft
101	74048636	1	SHAFT, governor arm pivot
102	-----	1	COIL ASSY., shut-off (Consists of solenoid which is not serviced separately and items 103 thru 109)
103	-----	1	SPRING, shut-off arm
104	-----	1	ARM, shut-off
105	74369502	2	TUBE, insulating, terminal
106	74051383	2	WASHER, insulating
107	74049437	2	NUT, terminal contact
108	74053829	2	NUT, lock, terminal contact
109	74059685	1	NUT, grounding (For machines without integral ground wire. Replaces 1 each of items 106, 107 and 108)

PUMP ASSEMBLY 74025496

USAGE: T16D Tractor with 3500 engine

ITEM	PART NO.	QTY.	DESCRIPTION
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NOTE: Parts are identical to those shown on pages 52 thru 56 with the following exceptions:

1	74051807	1	COVER, governor control
5	74051559	1	CAM, shut-off
21	74050179	1	SPRING, governor control
49	74050184	1	RING, cam
55	74058825	4	SHOE, cam roller
61	74056127	1	VALVE, delivery
102	74059658	1	COIL ASSY., shut-off (24V. ETSO)
103	74053332	1	SPRING, shut-off arm
104	74053331	1	ARM, shut-off

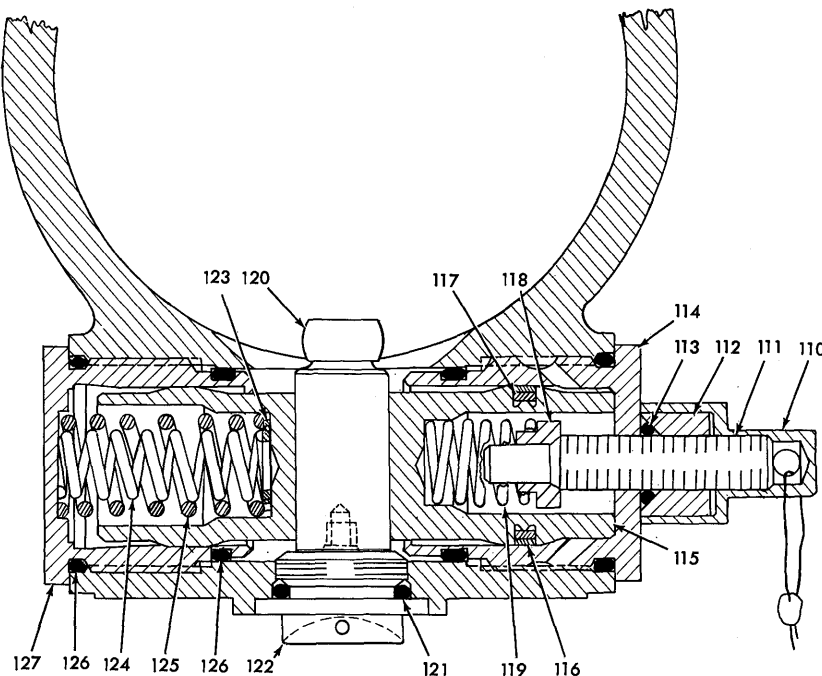
PUMP ASSEMBLY 74025952

USAGE: 645 wheel loader with 3500 engine prior to engine serial No. 3D-03660. Order PUMP ASSEMBLY 74026926 when replacing complete pump.

ITEM	PART NO.	QTY.	DESCRIPTION
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NOTE: Parts are identical to those shown on pages 52 thru 56 with the following exceptions:

1	74051807	1	COVER, governor control
5	74051559	1	CAM, shut-off
21	74050179	1	SPRING, governor control
49	74050184	1	RING, cam
55	74056187	4	SHOE, cam roller
61	74056127	1	VALVE, delivery
102	74059656	1	COIL ASSY., shut-off (24V. E.T.R.)
103	74369496	1	SPRING, shut-off arm
104	74051504	1	ARM, shut-off



T-72499

PUMP ASSEMBLY 74026476

USAGE: 645 wheel loader with 3500 engine effective engine serial No. 3D-03660 thru approx. 3D-04349

ITEM	PART NO.	QTY.	DESCRIPTION
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NOTE: Parts are identical to those shown on pages 52 thru 56 with the following exceptions:

1	74051807	1	COVER, governor control
5	74051559	1	CAM, shut-off
17	74059059	1	HOUSING, pump
21	74050179	1	SPRING, governor control
27	74054596	1	VALVE, metering
49	74059068	1	RING, cam
55	74056187	4	SHOE, cam roller
61	74056127	1	VALVE, delivery
90	74059065	1	SCREW ASSEMBLY, head locating (Includes ball and spring)
91	74369595	2	O-RING, sealing, head locating screw
92	-----	1	WASHER
93	-----	1	SCREW

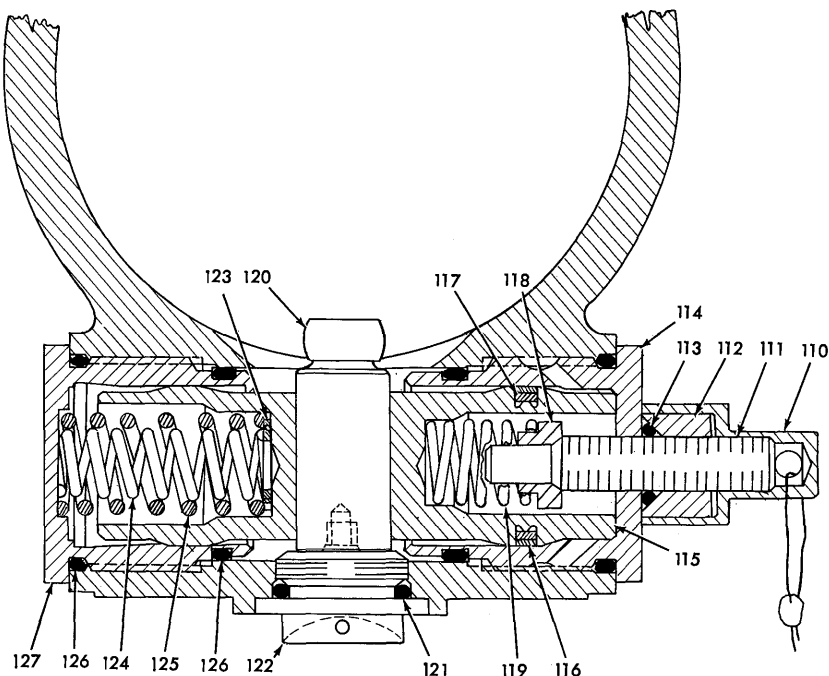
} Omit these items

(Continued)

PUMP ASSEMBLY 74026476 (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
102	74059656	1	COIL ASSEMBLY, shut-off (24V. E. T. R.)
103	74369496	1	SPRING, shut-off arm
104	74051504	1	ARM, shut-off
110	74052917	1	CAP, advance adjusting screw
	74369430	1	WIRE, sealing
111	74054593	1	SCREW, advance adjusting
112	74054583	1	NUT, jam, advance adjusting screw
113	74369878	1	□SEAL, adjusting screw
114	74059062	1	PLUG, piston hole (power side)
115	74059060	1	PISTON
116	74055386	1	RING, piston
117	74059064	1	□SEAL, piston ring
118	74055690	1	GUIDE, adjusting screw spring
119	74059063	1	SPRING, adjusting screw
120	74059066	1	PIN, cam advance
121	74054585	1	□SEAL, cam pin access plug
122	74059067	1	PLUG, cam pin access
123	{ 74051826	△	SHIM, advance spring
	{ 74051827	△	SHIM, advance spring
	{ 74051828	△	SHIM, advance spring
124	74055089	1	SPRING, advance, inner
125	74055087	1	SPRING, advance, outer
126	74054589	4	□SEAL, piston hole plugs
127	74059061	1	PLUG, piston hole (spring side)

△ Use as required



PUMP ASSEMBLY 74026926

T-72499

USAGE: 645 wheel loader with 3500 engine effective approximate engine serial No. 3D-04350 thru 3D-06961

ITEM	PART NO.	QTY.	DESCRIPTION
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NOTE: Parts are identical to those shown on pages 52 thru 56 with the following exceptions:

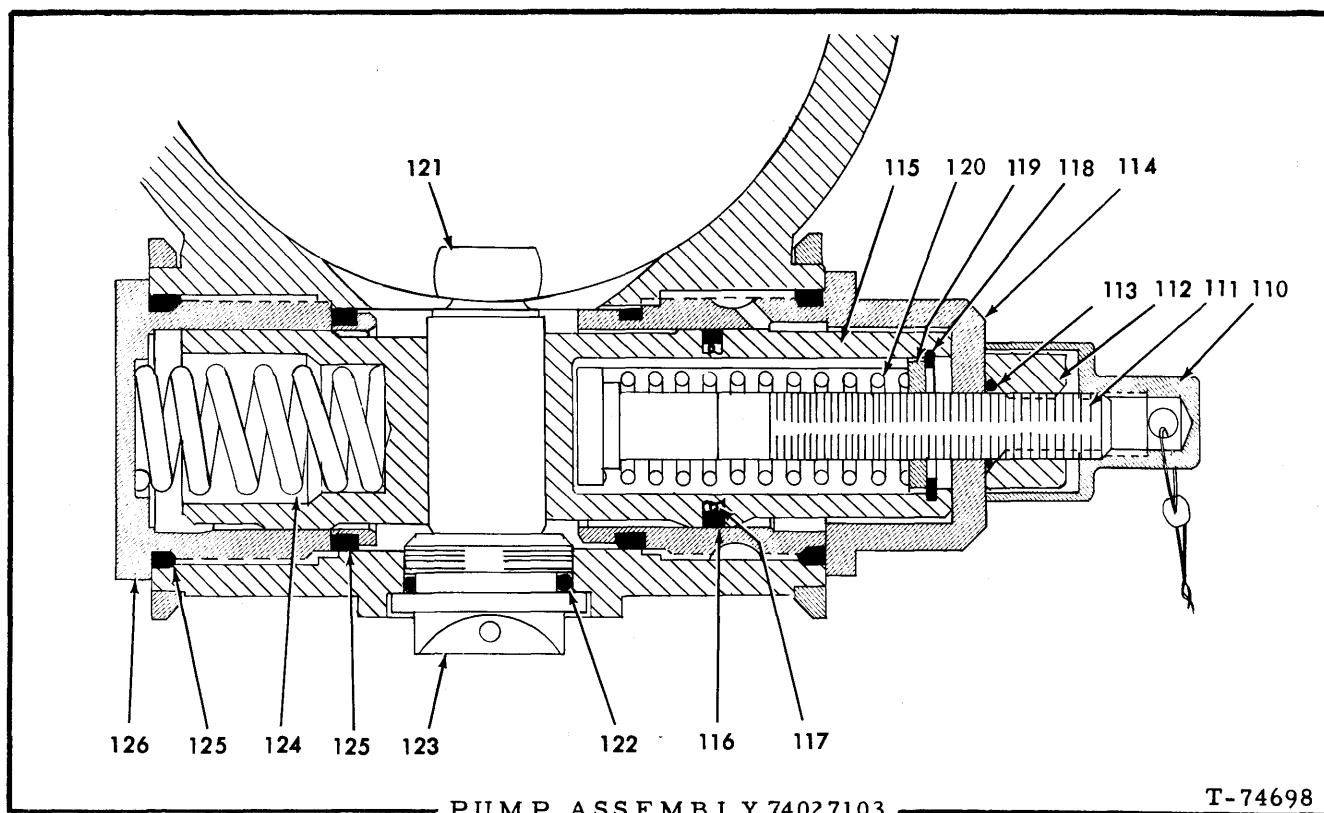
1	74051807	1	COVER, governor control
5	74051559	1	CAM, shut-off
17	74059059	1	HOUSING, pump
21	74050179	1	SPRING, governor control
27	74054596	1	VALVE, metering
49	74059068	1	RING, cam
55	74056187	4	SHOE, cam roller
61	74056127	1	VALVE, delivery
90	74059341	1	SCREW ASSEMBLY, head locating (Includes ball and spring)
91	74369595	2	O-RING, sealing, head locating screw
92	-----	1	WASHER
93	-----	1	SCREW

} Omit these items

(Continued)

PUMP ASSEMBLY 74026926 (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
102	74059656	1	COIL ASSEMBLY, shut-off (24V. E. T. R.)
103	74369496	1	SPRING, shut-off arm
104	74051504	1	ARM, shut-off
110	74052917	1	CAP, advance adjusting screw
	74369430	1	WIRE, sealing
111	74054593	1	SCREW, advance adjusting
112	74054583	1	NUT, jam, advance adjusting screw
113	74369878	1	□ SEAL, adjusting screw
114	74059062	1	PLUG, piston hole (power side)
115	74059060	1	PISTON
116	74055386	1	RING, piston
117	74059064	1	□ SEAL, piston ring
118	74055690	1	GUIDE, adjusting screw spring
119	74059063	1	SPRING, adjusting screw
120	74059066	1	PIN, cam advance
121	74054585	1	□ SEAL, cam pin access plug
122	74059067	1	PLUG, cam pin access
123	74051826 74051827 74051828	Δ Δ Δ	SHIM, advance spring SHIM, advance spring SHIM, advance spring } Use as required
124	74055089	1	SPRING, advance, inner
125	74055087	1	SPRING, advance, outer
126	74054589	4	□ SEAL, piston hole plugs
127	74059061	1	PLUG, piston hole (spring side)



USAGE: 645 wheel loader with 3500 engine effective engine serial No. 3D-06962 thru 3D-10183

ITEM	PART NO.	QTY.	DESCRIPTION
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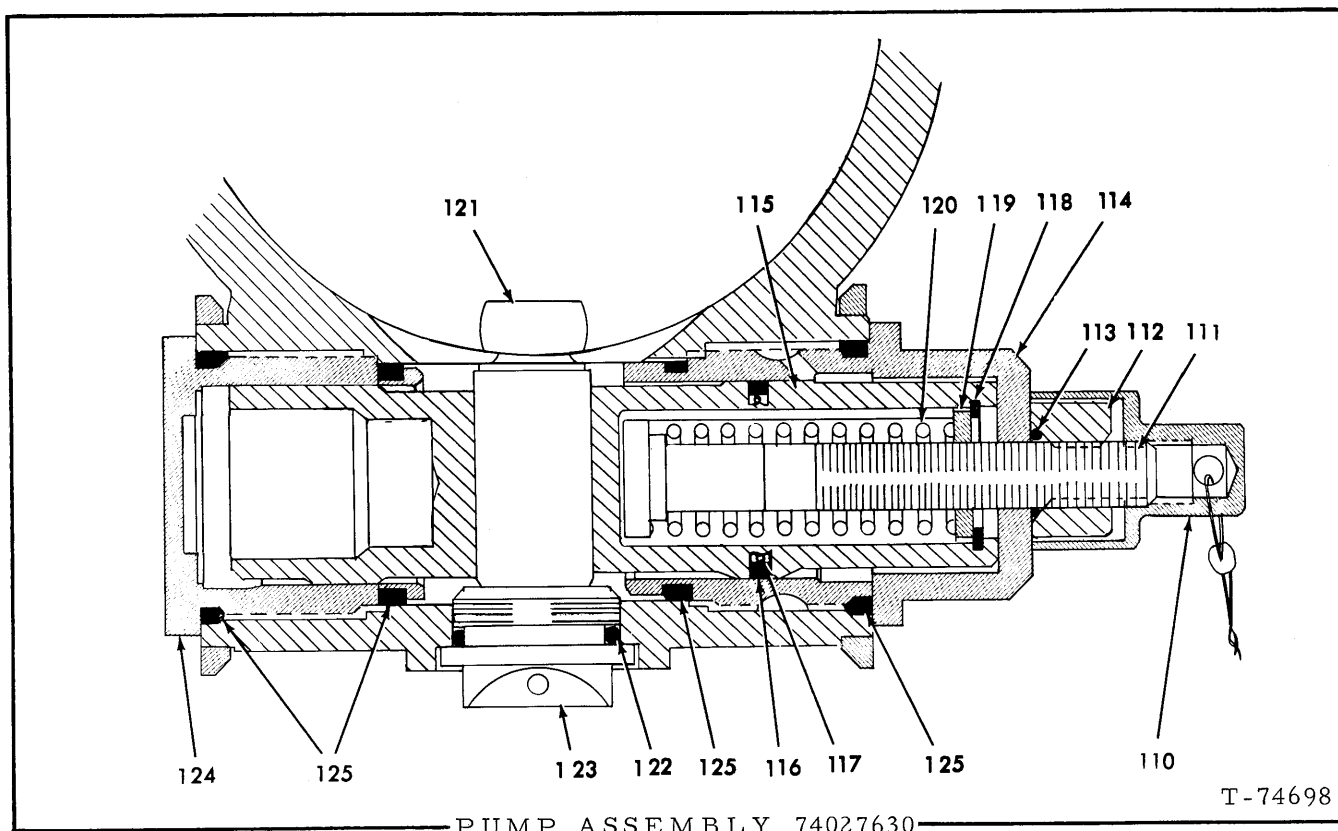
NOTE: Parts are identical to those shown on pages 52 thru 56 with the following exceptions:

1	74051807	1	COVER, governor control
5	74051559	1	CAM, shut-off
17	74059059	1	HOUSING, pump
21	74050179	1	SPRING, governor control
27	74054596	1	VALVE, metering
49	74059068	1	RING, cam
55	74056187	4	SHOE, cam roller
56	74059399	1	HEAD ASSEMBLY, hydraulic (Includes rotor, plungers, items 57 thru 60 and accumulator parts indented below)
	74059390	2	PISTON, accumulator
	74059392	2	SPRING, accumulator piston
	74059391	2	SCREW, accumulator piston retaining
61	74056127	1	VALVE, delivery
90	74060065	1	SCREW ASSEMBLY, head locating (Includes ball and spring)
91	74369595	2	ORING, sealing, head locating screw

(Continued)

PUMP ASSEMBLY 74027103 (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
92	-----	1	WASHER
93	-----	1	SCREW
			} Omit these items
102	74059656	1	COIL ASSEMBLY, shut-off (24V. E. T. R.)
103	74369496	1	SPRING, shut-off arm
104	74051504	1	ARM, shut-off
110	74052917	1	CAP, advance adjusting screw
	74369430	1	WIRE, sealing
111	74059395	1	SCREW, advance adjusting
112	74054583	1	NUT, jam, advance adjusting screw
113	74369878	1	□SEAL, adjusting screw
114	74059394	1	PLUG, piston hole (power side)
115	74059393	1	PISTON
116	74055386	1	RING, piston
117	74059064	1	□SEAL, piston ring
118	74059397	1	RING, retaining, adjusting spring
119	74059396	1	WASHER, adjusting spring
120	74054598	1	SPRING, advance adjusting
121	74059066	1	PIN, cam advance
122	74054585	1	□SEAL, cam pin access plug
123	74059067	1	PLUG, cam pin access
124	74059388	1	SPRING, advance
125	74054589	4	□SEAL, piston hole plugs
126	74059061	1	PLUG, piston hole (spring side)



USAGE: 645 wheel loader with 3500 engine effective engine serial No. 3D-10184 thru 3D-12161

ITEM	PART NO.	QTY.	DESCRIPTION
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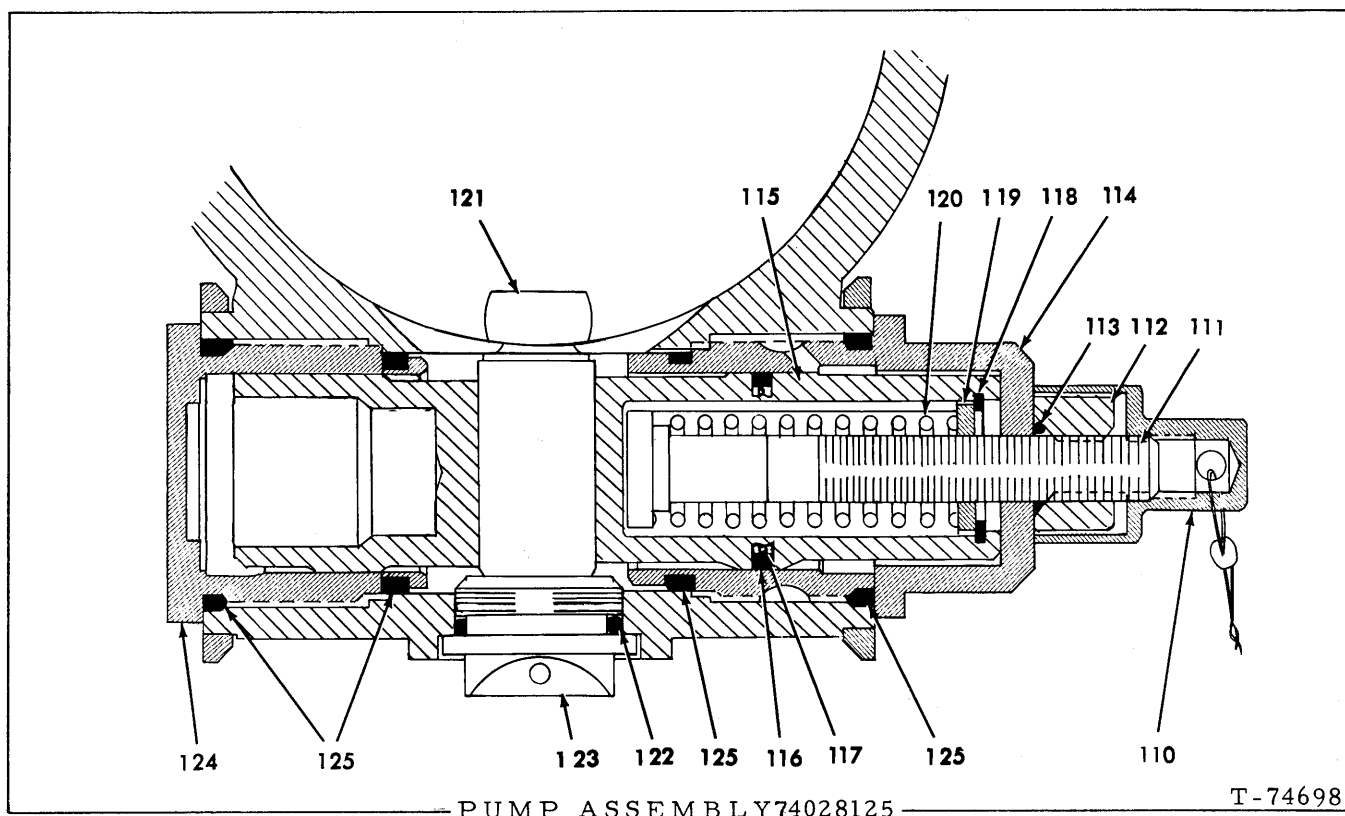
NOTE: Parts are identical to those shown on pages 52 thru 56 with the following exceptions:

1	74051807	1	COVER, governor control
5	74051559	1	CAM, shut-off
17	74059059	1	HOUSING, pump
21	74050179	1	SPRING, governor control
27	74054596	1	VALVE, metering
49	74059540	1	RING, cam
55	74058825	4	SHOE, cam roller
56	74059539	1	HEAD ASSEMBLY, hydraulic (Includes rotor, plungers, items 57 thru 60 and accumulator parts indented below)
	74059390	2	PISTON, accumulator
	74059392	2	SPRING, accumulator piston
	74059391	2	SCREW, accumulator piston retaining
61	74059269	1	VALVE, delivery
90	74059341	1	SCREW ASSEMBLY, head locating (Includes ball and spring)
91	74369595	2	O-RING, sealing, head locating screw

(Continued)

PUMP ASSEMBLY 74027630 (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
92	-----	1	WASHER
93	-----	1	SCREW
			} Omit these items
102	74059656	1	COIL ASSEMBLY, shut-off (24V. E. T. R.)
103	74369496	1	SPRING, shut-off arm
104	74051504	1	ARM, shut-off
110	74052917	1	CAP, advance adjusting screw
	74369430	1	WIRE, sealing
111	74059395	1	SCREW, advance adjusting
112	74054583	1	NUT, jam, advance adjusting screw
113	74369878	1	□ SEAL, adjusting screw
114	74059394	1	PLUG, piston hole (power side)
115	74059541	1	PISTON, advance
116	74055386	1	RING, piston
117	74059064	1	□ SEAL, piston ring
118	74059397	1	RING, retaining, adjusting spring
119	74059396	1	WASHER, adjusting spring
120	74059511	1	SPRING, advance adjsting
121	74059066	1	PIN, cam advance
122	74054585	1	□ SEAL, cam pin access plug
123	74059067	1	PLUG, cam pin access
124	74059061	1	PLUG, piston hole (spring side)
125	74054589	4	□ SEAL, piston hole plugs



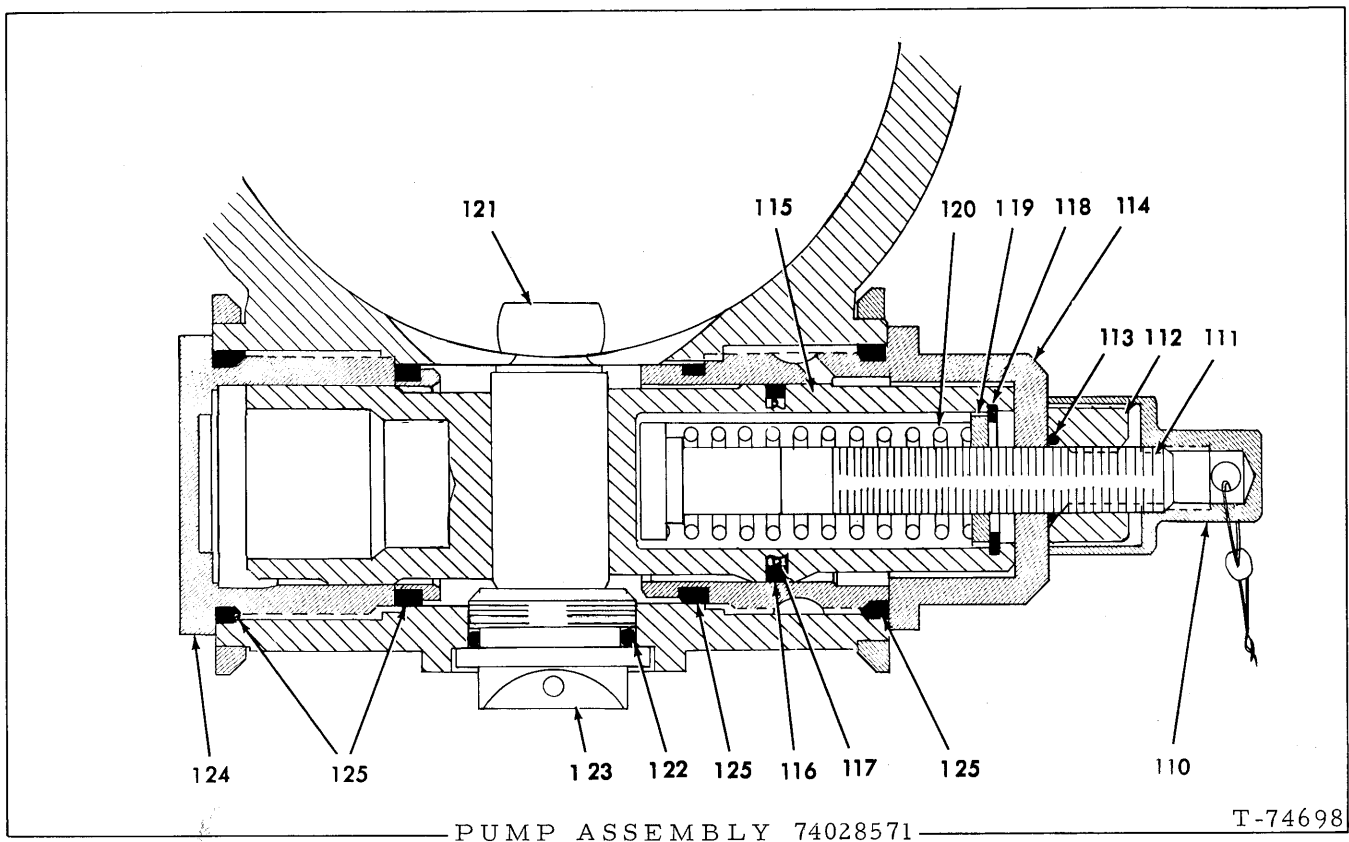
USAGE: 645 wheel loader with 3500 engine effective engine serial No. 3D-12162 thru 3D-12981

ITEM	PART NO.	QTY.	DESCRIPTION
NOTE: Parts are identical to those shown on pages 52 thru 56 with the following exceptions:			
1	74054587	1	COVER, governor control
	74051363	1	SCREW, adjusting, low idle
	74051365	1	SEAL, idle screw
	74051364	1	WASHER, idle screw
	74051409	1	NUT, idle screw
5	74048639	1	CAM, shut-off
17	74059059	1	HOUSING, pump
21	74050179	1	SPRING, governor control
	74060206	1	SPACER, governor control spring
27	74054596	1	VALVE, metering
49	74059540	1	RING, cam
55	74058825	4	SHOE, cam roller
56	74059539	1	HEAD ASSY., hydraulic (Includes rotor, plungers, items 57 thru 60 and accumulator parts indented below)
	74059390	2	PISTON, accumulator
	74059392	2	SPRING, accumulator piston
	74059391	2	SCREW, accumulator piston retaining
61	74059269	1	VALVE, delivery

(Continued)

PUMP ASSEMBLY 74028125 (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
90	74060065	1	SCREW ASSY., head locating (Includes ball and spring)
91	74369595	2	RING, sealing, head locating screw
92	-----	1	WASHER
93	-----	1	SCREW
102 thru 109			Omit these items
110	74052917	1	CAP, advance adjusting screw
	74369430	1	WIRE, sealing
111	74059395	1	SCREW, advance adjusting
112	74054583	1	NUT, jam, advance adjusting screw
113	74369878	1	□SEAL, adjusting screw
114	74059394	1	PLUG, piston hole (power side)
115	74059541	1	PISTON, advance
116	74055386	1	RING, piston
117	74059064	1	□SEAL, piston ring
118	74059397	1	RING, retaining, adjusting spring
119	74059396	1	WASHER, adjusting spring
120	74059511	1	SPRING, advance adjusting
121	74059066	1	PIN, cam advance
122	74054585	1	□SEAL, cam pin access plug
123	74059067	1	PLUG, cam pin access
124	74059061	1	PLUG, piston hole (spring side)
125	74054589	4	□SEAL, piston hole plugs



USAGE: 645 wheel loader with 3500 engine effective engine serial No. 3D-12982

ITEM PART NO. QTY. DESCRIPTION

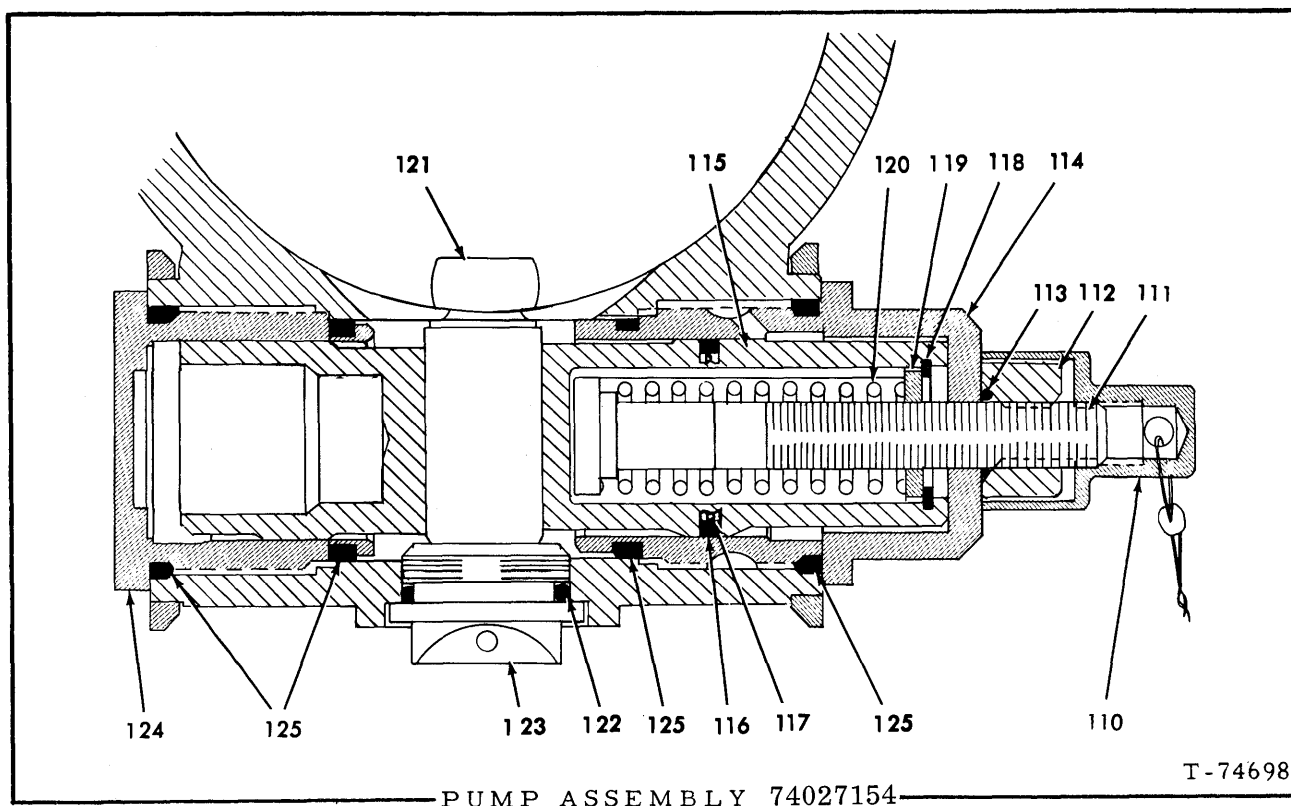
NOTE: Parts are identical to those shown on pages 52 thru 56 with the following exceptions:

1	74054587	1	COVER, governor control
	74051363	1	SCREW, adjusting, low idle
	74051365	1	□SEAL, idle screw
	74051364	1	WASHER, idle screw
	74051409	1	NUT, idle screw
5	74048639	1	CAM, shut-off
17	74059059	1	HOUSING, pump
21	74050179	1	SPRING, governor control
	74060206	1	SPACER, governor control spring
27	74054596	1	VALVE, metering
31	74056488	1	SHAFT ASSY., throttle
	74056484	1	SPACER, throttle shaft arm
	74050913	1	SCREW
	74056486	1	ARM, throttle shaft
35	74056487	1	SCREW, retaining, throttle lever spring

(Continued)

PUMP ASSEMBLY 74028571 (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
49	74059540	1	RING, cam
55	74058825	4	SHOE, cam roller
56	74059539	1	HEAD ASSY., hydraulic (Includes rotor, plungers, items 57 thru 60 and accumulator parts indented below)
	74059390	2	PISTON, accumulator
	74059392	2	SPRING, accumulator piston
	74059391	2	SCREW, accumulator piston retaining
61	74059269	1	VALVE, delivery
90	74060065	1	SCREW ASSY., head locating (Includes ball and spring)
91	74369595	2	□RING, sealing, head locating screw
92	-----	1	WASHER
93	-----	1	SCREW
			} Omit these items
102 thru 109			Omit these items
110	74052917	1	CAP, advance adjusting screw
	74369430	1	WIRE, sealing
111	74059395	1	SCREW, advance adjusting
112	74054583	1	NUT, jam, advance adjusting screw
113	74369878	1	□SEAL, adjusting screw
114	74059394	1	PLUG, piston hole (power side)
115	74059541	1	PISTON, advance
116	74055386	1	RING, piston
117	74059064	1	SEAL, piston ring
118	74059397	1	RING, retaining, adjusting spring
119	74059396	1	WASHER, adjusting spring
120	74059511	1	SPRING, advance adjusting
121	74059066	1	PIN, cam advance
122	74054585	1	SEAL, cam pin access plug
123	74059067	1	PLUG, cam pin access
124	74059061	1	PLUG, piston hole (spring side)
125	74054589	4	SEAL, piston hole plugs



USAGE: 645M wheel loader with 3500 engine

ITEM	PART NO.	QTY.	DESCRIPTION
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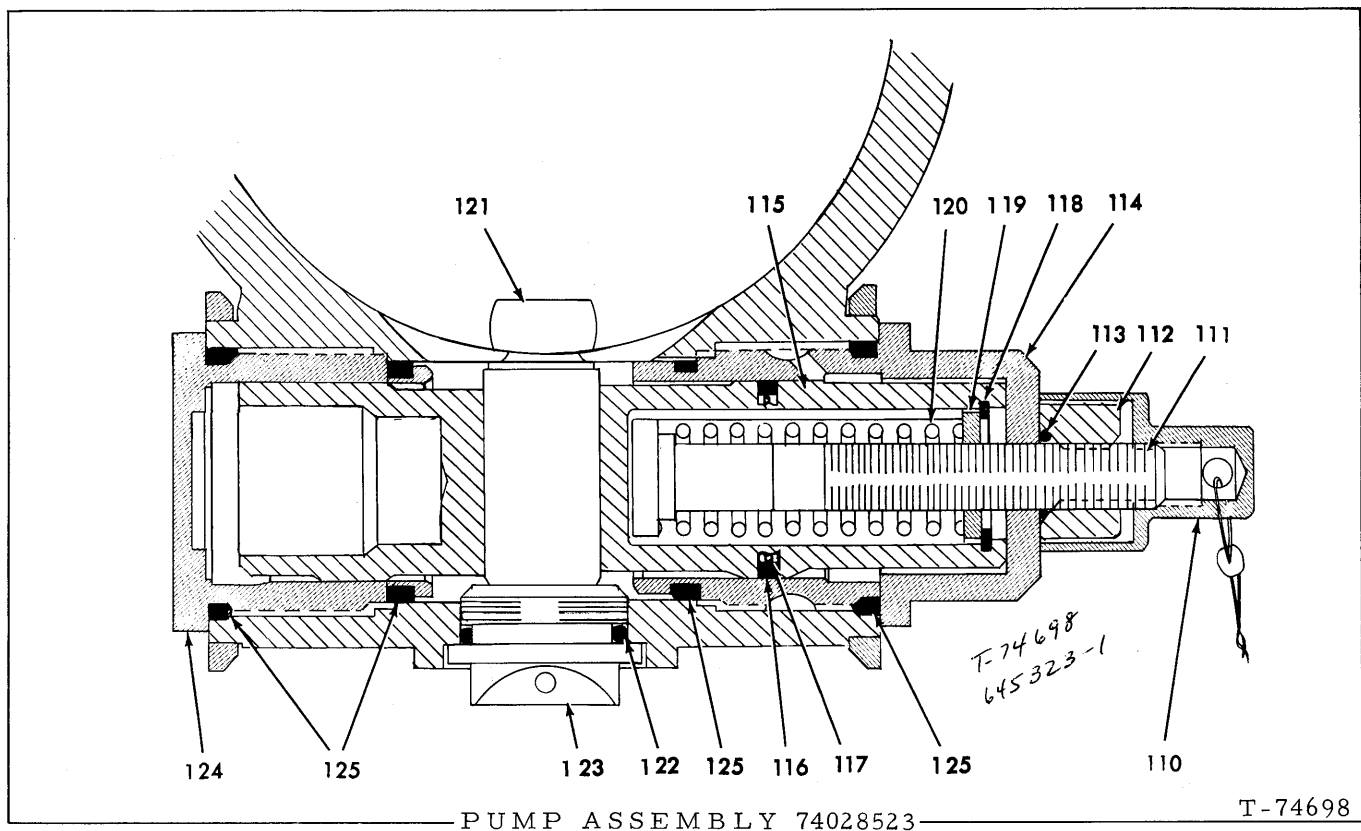
NOTE: Parts are identical to those shown on pages 52 thru 56 with the following exceptions:

1	74051807	1	COVER, governor control
5	74051559	1	CAM, shut-off
17	74059059	1	HOUSING, pump
21	74050179	1	SPRING, governor control
27	74054596	1	VALVE, metering
49	74059540	1	RING, cam
55	74058825	4	SHOE, cam roller
56	74059539	1	HEAD ASSEMBLY, hydraulic (Includes rotor, plungers, items 57 thru 60 and accumulator parts indented below)
	74059390	2	PISTON, accumulator
	74059392	2	SPRING, accumulator piston
	74059391	2	SCREW, accumulator piston retaining
61	74056127	1	VALVE, delivery
90	74060065	1	SCREW ASSEMBLY, head locating (Includes ball and spring)
91	74369595	2	ORING, sealing, head locating screw

(Continued)

PUMP ASSEMBLY 74027154 (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
92	-----	1	WASHER
93	-----	1	SCREW
			} Omit these items
102	74059656	1	COIL ASSEMBLY, shut-off (24V. E. T. R.)
103	74369496	1	SPRING, shut-off arm
104	74051504	1	ARM, shut-off
110	74052917	1	CAP, advance adjusting screw
	74369430	1	WIRE, sealing
111	74059395	1	SCREW, advance adjusting
112	74054583	1	NUT, jam, advance adjusting screw
113	74369878	1	□ SEAL, adjusting screw
114	74059394	1	PLUG, piston hole (power side)
115	74059541	1	PISTON, advance
116	74055386	1	RING, piston
117	74059064	1	□ SEAL, piston ring
118	74059397	1	RING, retaining, adjusting spring
119	74059396	1	WASHER, adjusting spring
120	74059511	1	SPRING, advance adjsting
121	74059066	1	PIN, cam advance
122	74054585	1	□ SEAL, cam pin access plug
123	74059067	1	PLUG, cam pin access
124	74059061	1	PLUG, piston hole (spring side)
125	74054589	4	□ SEAL, piston hole plugs



USAGE: 645 military wheel loader

ITEM PART NO. QTY. DESCRIPTION

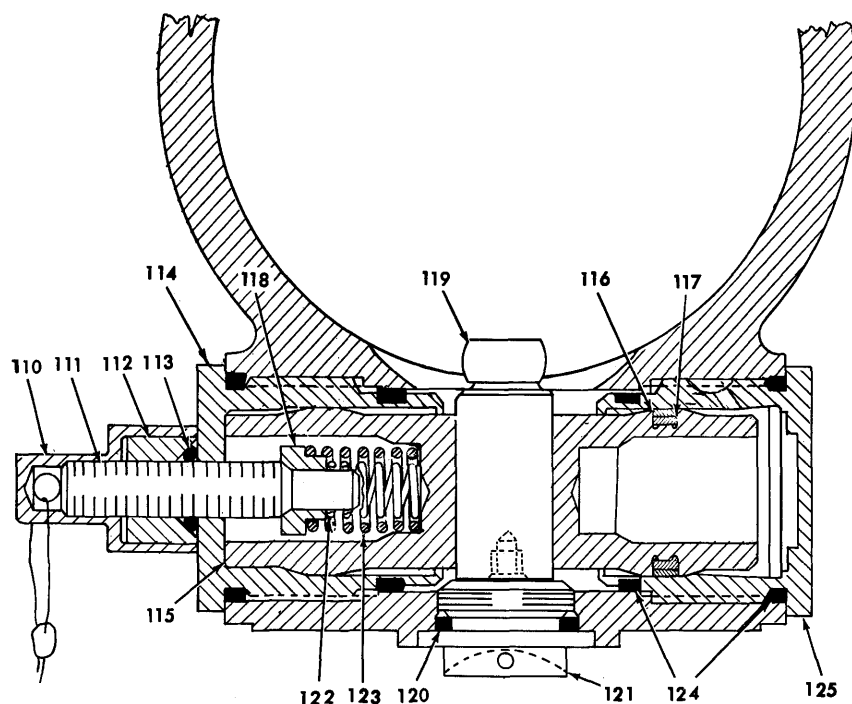
NOTE: Parts are identical to those shown on pages 52 thru 56 with the following exceptions:

1	74054587	1	COVER, governor control
	74051363	1	SCREW, adjusting, low idle
	74051365	1	SEAL, idle screw
	74051364	1	WASHER, idle screw
	74051409	1	NUT, idle screw
5	74048639	1	CAM, shut-off
17	74059059	1	HOUSING, pump
21	74050179	1	SPRING, governor control
	74060206	1	SPACER, governor control spring
27	74054596	1	VALVE, metering
49	74059540	1	RING, cam
55	74058825	4	SHOE, cam roller
56	74059539	1	HEAD ASSY., hydraulic (Includes rotor, plungers, items 57 thru 60 and accumulator parts indented below)
	74059390	2	PISTON, accumulator
	74059392	2	SPRING, accumulator piston
	74059391	2	SCREW, accumulator piston retaining
61	74059269	1	VALVE, delivery

(Continued)

PUMP ASSEMBLY 74028523 (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
90	74060065	1	SCREW ASSY., head locating (Includes ball and spring)
91	74369595	2	RING, sealing, head locating screw
92	-----	1	WASHER
93	-----	1	SCREW
			} Omit these items
102 thru 109			Omit these items
110	74052917	1	CAP, advance adjusting screw
	74369430	1	WIRE, sealing
111	74059395	1	SCREW, advance adjusting
112	74054583	1	NUT, jam, advance adjusting screw
113	74369878	1	□SEAL, adjusting screw
114	74059394	1	PLUG, piston hole (power side)
115	74059541	1	PISTON, advance
116	74055386	1	RING, piston
117	74059064	1	□SEAL, piston ring
118	74059397	1	RING, retaining, adjusting spring
119	74059396	1	WASHER, adjusting spring
120	74059504	1	SPRING, advance adjusting
121	74059066	1	PIN, cam advance
122	74054585	1	□SEAL, cam pin access plug
123	74059067	1	PLUG, cam pin access
124	74059061	1	PLUG, piston hole (spring side)
125	74054589	4	□SEAL, piston hole plugs



PUMP ASSEMBLY 74357415

T-73659

USAGE: 745 wheel loader with 11000 engine prior to engine serial No. 11-16367

ITEM	PART NO.	QTY.	DESCRIPTION
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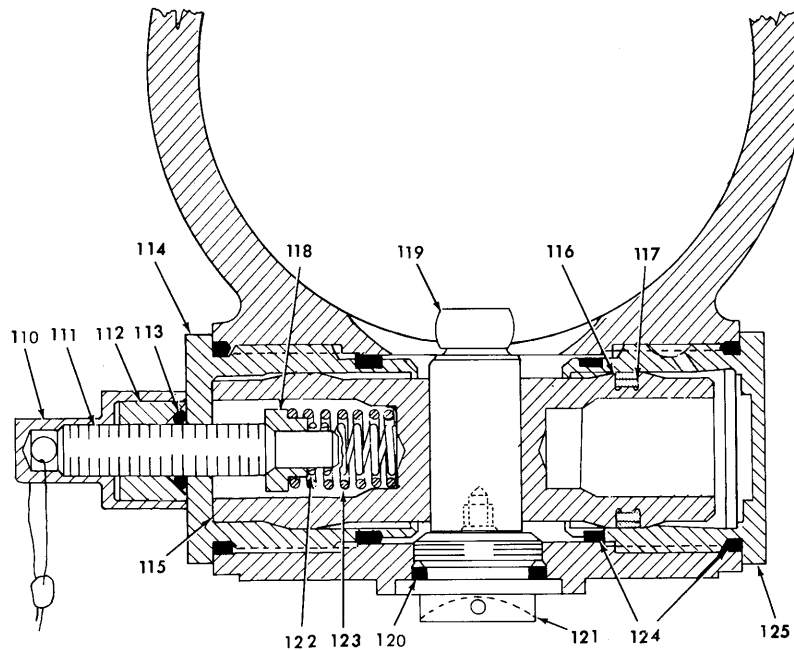
NOTE: Parts are identical to those shown on pages 52 thru 56 with the following exceptions:

1	74051807	1	COVER, governor control
5	74051559	1	CAM, shut-off
13	74058965	1	SHAFT, drive
	70910224	1	KEY, woodruff, 5/32" x 5/8"
17	74059267	1	HOUSING, pump
	74059283	1	STOP, high idle screw (Clips on housing to prevent wear at idle screw contact point)
17A	-----	1	TUBE, pilot (Omit this item)
21	74052136	1	SPRING, governor control
27	74054596	1	VALVE, metering
	74056488	1	SHAFT ASSEMBLY, throttle
31	74056484	1	SPACER, throttle shaft arm
	74050913	1	SCREW
	74056486	1	ARM, throttle shaft
35	74056487	1	SCREW, retaining, throttle lever spring
36	74059955	1	SCREW, high idle
49	74059068	1	RING, cam

(Continued)

PUMP ASSEMBLY 74357415 (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
55	74059180	4	SHOE, cam roller
61	74059269	1	VALVE, delivery
90	74060065	1	SCREW ASSEMBLY, head locating (Includes ball and spring)
91	74369595	2	□RING, sealing, head locating screw
92	-----	1	WASHER
93	-----	1	SCREW
			} Omit these items
102	74059656	1	COIL ASSEMBLY, shut-off (24V. E. T. R.)
103	74369496	1	SPRING, shut-off arm
104	74051504	1	ARM, shut-off
110	74052917	1	CAP, advance adjusting screw
	74369430	1	WIRE, sealing
111	74054593	1	SCREW, advance adjusting
112	74054583	1	NUT, jam, advance adjusting screw
113	74369878	1	□SEAL, adjusting screw
114	74059271	1	PLUG, piston hole (spring side)
115	74059060	1	PISTON
116	74055386	1	RING, piston
117	74059064	1	□SEAL, piston ring
118	74055690	1	GUIDE, spring
119	74059066	1	PIN, cam advance
120	74054585	1	□SEAL, cam pin access plug
121	74059067	1	PLUG, cam pin access
122	74055686	1	SPRING, advance, inner
123	74055685	1	SPRING, advance, outer
124	74054589	4	□SEAL, piston hole plugs
125	74059268	1	PLUG, piston hole (power side)



T-73659

PUMP ASSEMBLY 74359238

USAGE: 745 wheel loader with 11000 engine effective engine serial No. 11-16367 ;also 745H

ITEM	PART NO.	QTY.	DESCRIPTION
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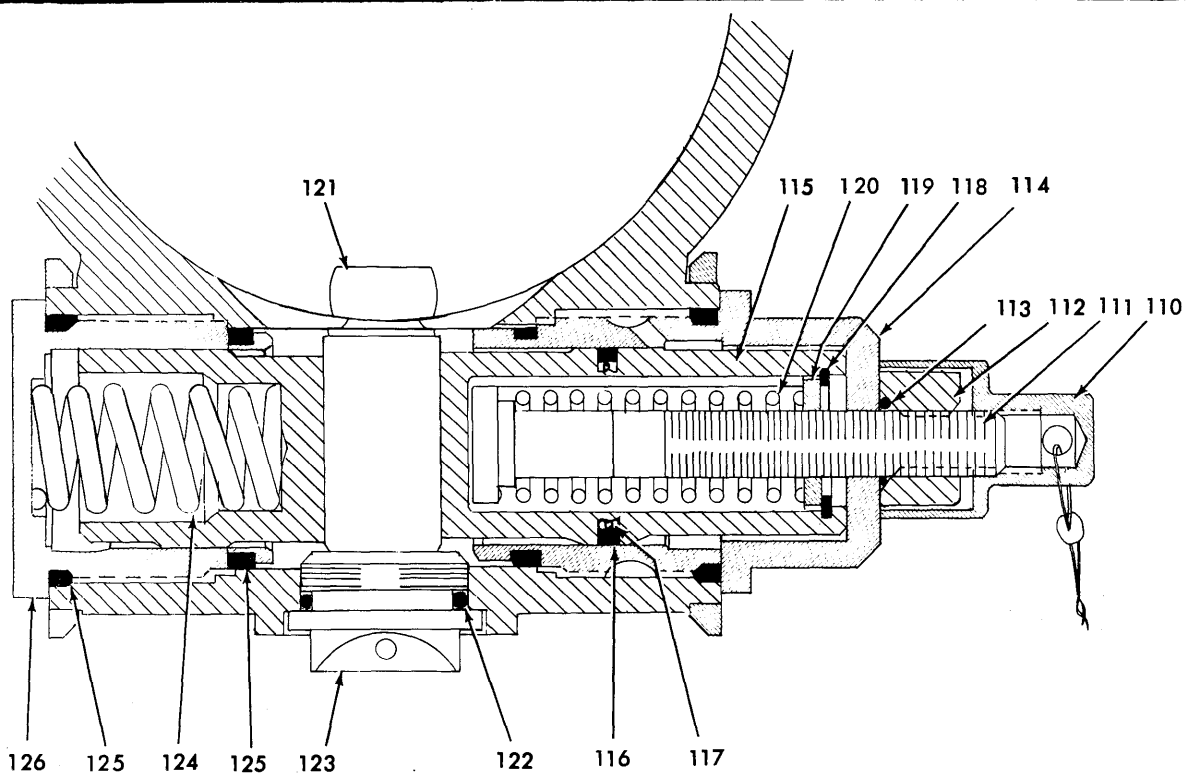
NOTE: Parts are identical to those shown on pages 52 thru 56 with the following exceptions:

1	74051002	1	COVER, governor control
5	74048639	1	CAM, shut-off
13	74058965	1	SHAFT, drive
	70910224	1	KEY, woodruff, 5/32" x 5/8"
17	74059267	1	HOUSING, pump
	74059283	1	STOP, high idle screw (Clips on housing to prevent wear at idle screw contact point)
17A	-----	1	TUBE, pilot (Omit this item)
21	74052136	1	SPRING, governor control
27	74054596	1	VALVE, metering
31	74056488	1	SHAFT ASSEMBLY, throttle
	74056484	1	SPACER, throttle shaft arm
	74050913	1	SCREW
	74056486	1	ARM, throttle shaft
35	74056487	1	SCREW, retaining, throttle lever spring
36	74059955	1	SCREW, high idle
	74369507	1	NUT, jam
49	74059068	1	RING, cam

(Continued)

PUMP ASSEMBLY 74359238 (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
55	74059180	4	SHOE, cam roller
61	74059269	1	VALVE, delivery
90	74060065	1	SCREW ASSY., head locating (Includes ball and spring)
91	74369595	2	□ RING, sealing, head locating screw
92	-----	1	WASHER
93	-----	1	SCREW
98	74056490	1	SHAFT, shut-off
	74058632	2	SCREW, stop, shut-off shaft
	74051409	2	NUT, jam
	74056484	1	SPACER, shut-off shaft arm
	74050913	1	SCREW
	74056486	1	ARM, shut-off shaft
	74054594	1	LEVER, shut-off shaft
	74051413	1	SPRING, shut-off arm
	74051412	1	RETAINER, shut-off arm spring
	74056487	1	SCREW
102 thru 109			Omit these items
110	74052917	1	CAP, advance adjusting screw
	74369430	1	WIRE, sealing
111	74054593	1	SCREW, advance adjusting
112	74054583	1	NUT, jam, advance adjusting screw
113	74369878	1	□ SEAL, adjusting screw
114	74059271	1	PLUG, piston hole (spring side)
115	74059060	1	PISTON
116	74055386	1	RING, piston
117	74059064	1	□ SEAL, piston ring
118	74055690	1	GUIDE, spring
119	74059066	1	PIN, cam advance
120	74054585	1	□ SEAL, cam pin access plug
121	74059067	1	PLUG, cam pin access
122	74055686	1	SPRING, advance, inner
123	74055685	1	SPRING, advance, outer
124	74054589	4	□ SEAL, piston hole plugs
125	74059268	1	PLUG, piston hole (power side)



PUMP ASSEMBLY 74027300

T-74698

USAGE: 7G series B crawler loader with 3500 engine prior to loader serial No. 27201

ITEM	PART NO.	QTY.	DESCRIPTION
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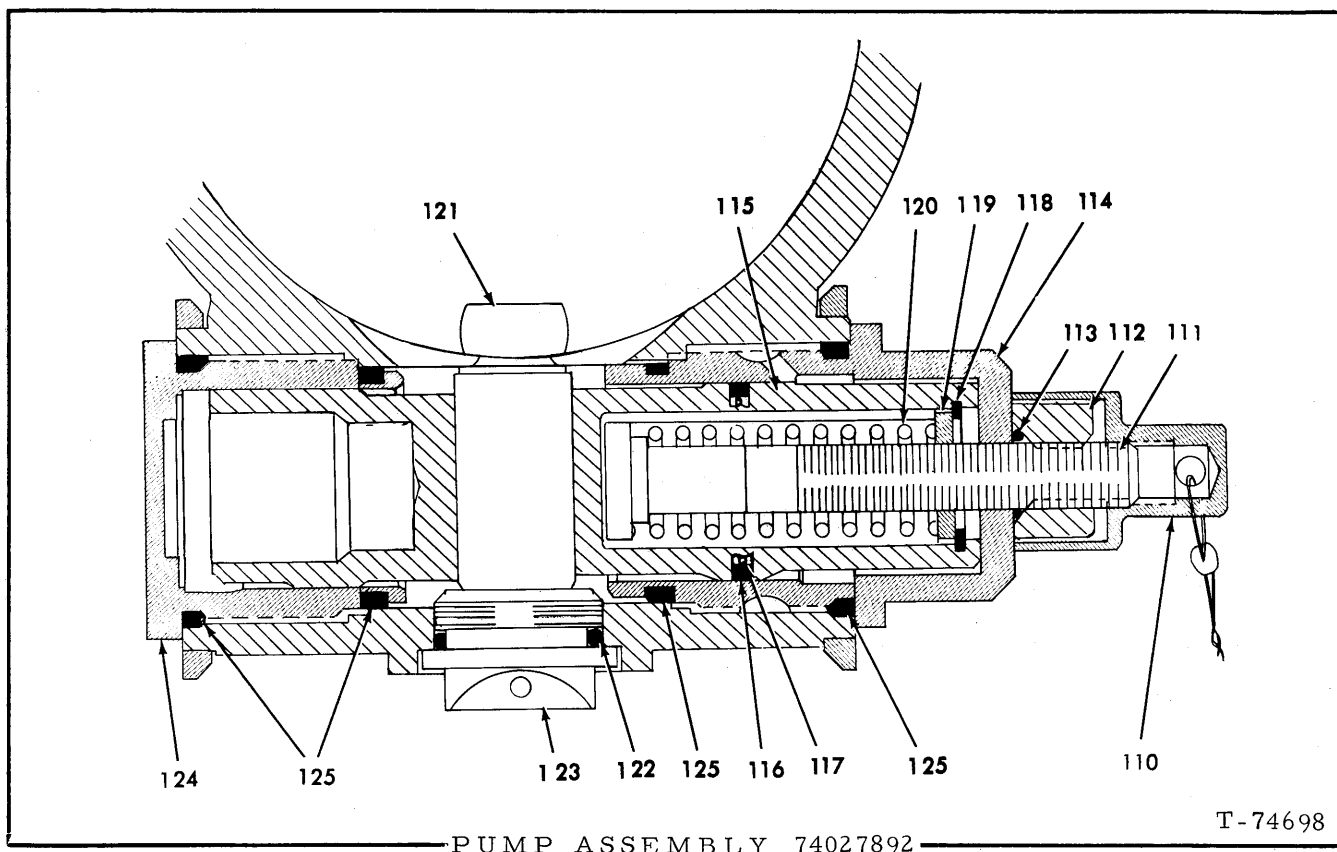
NOTE: Parts are identical to those shown on pages 52 thru 56 with the following exceptions:

1	74051807	1	COVER, governor control
5	74051559	1	CAM, shut-off
17	74059059	1	HOUSING, pump
21	74050179	1	SPRING, governor control
27	74054596	1	VALVE, metering
49	74059068	1	RING, cam
55	74058825	4	SHOE, cam roller
56	74059399	1	HEAD ASSEMBLY, hydraulic (Includes rotor, plungers, items 57 thru 60 and accumulator parts indented below)
	74059390	2	PISTON, accumulator
	74059392	2	SPRING, accumulator piston
	74059391	2	SCREW, accumulator piston retaining
61	74056127	1	VALVE, delivery
90	74059341	1	SCREW ASSEMBLY, head locating (Includes ball and spring)
91	74369595	2	O-RING, sealing, head locating screw

(Continued)

PUMP ASSEMBLY 74027300 (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
92	-----	1	WASHER
93	-----	1	SCREW
			} Omit these items
102	74059656	1	COIL ASSEMBLY, shut-off (24V. E.T.R.)
103	74369496	1	SPRING, shut-off arm
104	74051504	1	ARM, shut-off
110	74052917	1	CAP, advance adjusting screw
	74369430	1	WIRE, sealing
111	74059395	1	SCREW, advance adjusting
112	74054583	1	NUT, jam, advance adjusting screw
113	74369878	1	□SEAL, adjusting screw
114	74059394	1	PLUG, piston hole (power side)
115	74059393	1	PISTON
116	74055386	1	RING, piston
117	74059064	1	□SEAL, piston ring
118	74059397	1	RING, retaining, adjusting spring
119	74059396	1	WASHER, adjusting spring
120	74054598	1	SPRING, advance adjusting
121	74059066	1	PIN, cam advance
122	74054585	1	□SEAL, cam pin access plug
123	74059067	1	PLUG, cam pin access
124	74059388	1	SPRING, advance
125	74054589	4	□SEAL, piston hole plugs
126	74059061	1	PLUG, piston hole (spring side)



USAGE: 7G series B crawler loader with 3500 engine effective loader serial No. 27201

ITEM	PART NO.	QTY.	DESCRIPTION
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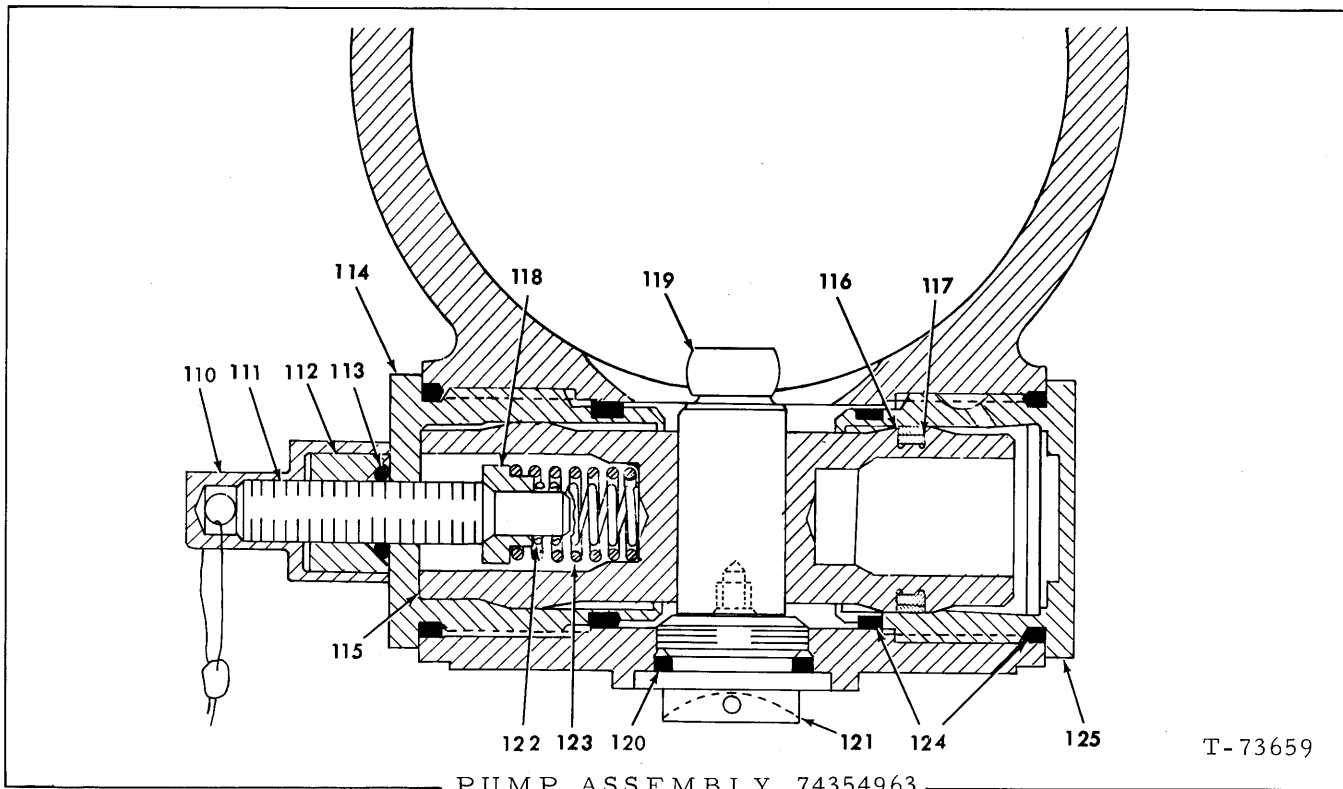
NOTE: Parts are identical to those shown on page 52 thru 56 with the following exceptions:

1	74054587	1	COVER, governor control
	74051363	1	SCREW, adjusting, low idle
	74051364	1	WASHER, idle screw
	74051409	1	NUT, jam, idle screw
5	74048639	1	CAM, shut-off
17	74059059	1	HOUSING, pump
21	74052136	1	SPRING, governor control
	74060374	1	SPRING, governor control spring
27	74054596	1	VALVE, metering
36	74058950	1	SCREW, high idle
49	74059540	1	RING, cam
55	74055889	4	SHOE, cam roller
56	74059539	1	HEAD ASSEMBLY, hydraulic (Includes rotor, plungers, items 57 thru 60 and accumulator parts indented below)
	74059390	2	PISTON, accumulator
	74059392	2	SPRING, accumulator
	74059391	2	SCREW, accumulator piston retaining

(Continued)

PUMP ASSEMBLY 74027892 (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
61	74059269	1	VALVE, delivery
90	74059065	1	SCREW ASSY., head locating (Includes ball and spring)
91	74369595	2	□ RING, sealing, head locating screw
92	-----	1	WASHER
93	-----	1	SCREW
			} Omit these items
102 thru 109			Omit these items
110	74052917	1	CAP, advance adjusting screw
	74369430	1	WIRE, sealing
111	74059395	1	SCREW, advance adjusting
112	74054583	1	NUT, jam, advance adjusting screw
113	74369878	1	□ SEAL, adjusting screw
114	74059394	1	PLUG, piston hole (power side)
115	74059541	1	PISTON, advance
116	74055386	1	RING, piston
117	74059064	1	□ SEAL, piston ring
118	74059397	1	RING, retaining, adjusting spring
119	74059396	1	WASHER, adjusting spring
120	74059667	1	SPRING, advance adjusting
121	74059066	1	PIN, cam advance
122	74054585	1	□ SEAL, cam pin access plug
123	74059067	1	PLUG, cam pin access
124	74059061	1	PLUG, piston hole (spring side)
125	74054589	4	□ SEAL, piston hole plugs



USAGE: 12G crawler loader with 11000 engine prior to engine serial No. 11-17330.

ITEM	PART NO.	QTY.	DESCRIPTION
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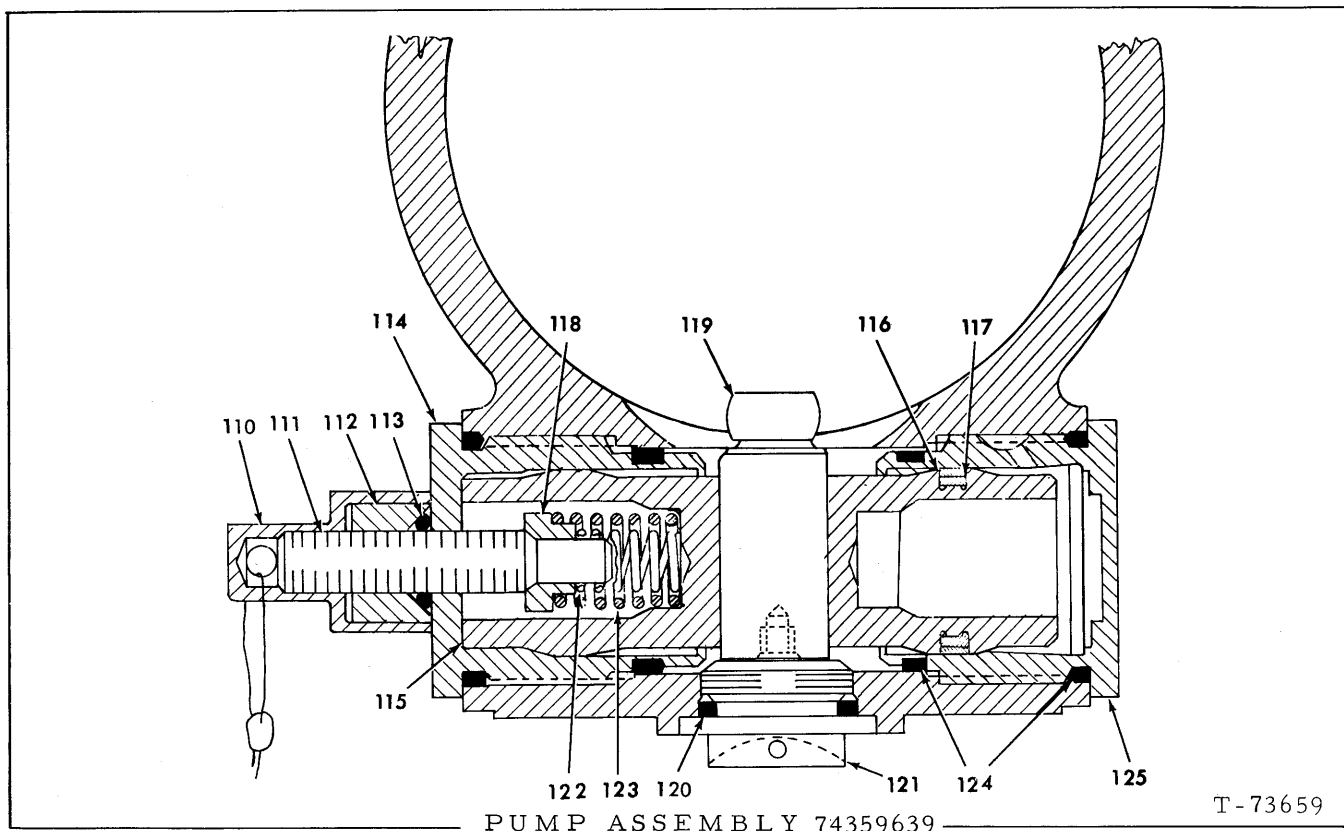
NOTE: Parts are identical to those shown on pages 52 thru 56 with the following exceptions:

1	74054587	1	COVER, governor control
	74051363	1	SCREW, adjusting, low idle
	74051365	1	SEAL, idle screw
	74051364	1	WASHER, idle screw
	74051409	1	NUT, jam, idle screw
5	74048639	1	CAM, shut-off
13	74058965	1	SHAFT, drive
	70910224	1	KEY, woodruff, 5/32" x 5/8"
17	74059267	1	HOUSING, pump
	74059283	1	STOP, high idle screw (Clips on housing to prevent wear at idle screw contact point)
17A	-----	1	TUBE, pilot (Omit this item)
21	74055176	1	SPRING, governor control
27	74054596	1	VALVE, metering
31	74056488	1	SHAFT ASSEMBLY, throttle
	74056484	1	SPACER, throttle shaft arm
	74050913	1	SCREW
	74056486	1	ARM, throttle shaft
35	74056487	1	SCREW, retaining, throttle lever spring

(Continued)

PUMP ASSEMBLY 74354963 (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
49	74059068	1	RING, cam
55	74059180	4	SHOE, cam roller
61	74059269	1	VALVE, delivery
90	74060065	1	SCREW ASSEMBLY, head locating (Includes ball and spring)
91	74369595	2	□RING, sealing, head locating screw
92	-----	1	WASHER
93	-----	1	SCREW
			} Omit these items
102 thru 109			Omit these items
110	74052917	1	CAP, advance adjusting screw
	74369430	1	WIRE, sealing
111	74054593	1	SCREW, advance adjusting
112	74054583	1	NUT, jam, advance adjusting screw
113	74369878	1	□SEAL, adjusting screw
114	74059271	1	PLUG, piston hole (spring side)
115	74059060	1	PISTON
116	74055386	1	RING, piston
117	74059064	1	□SEAL, piston ring
118	74055690	1	GUIDE, spring
119	74059066	1	PIN, cam advance
120	74054585	1	□SEAL, cam pin access plug
121	74059067	1	PLUG, cam pin access
122	74055686	1	SPRING, advance, inner
123	74055685	1	SPRING, advance, outer
124	74054589	4	□SEAL, piston hole plugs
125	74059268	1	PLUG, piston hole (power side)



USAGE: 12G Crawler Loader with 11000 engine effective engine serial No. 11-17330

ITEM	PART NO.	QTY.	DESCRIPTION
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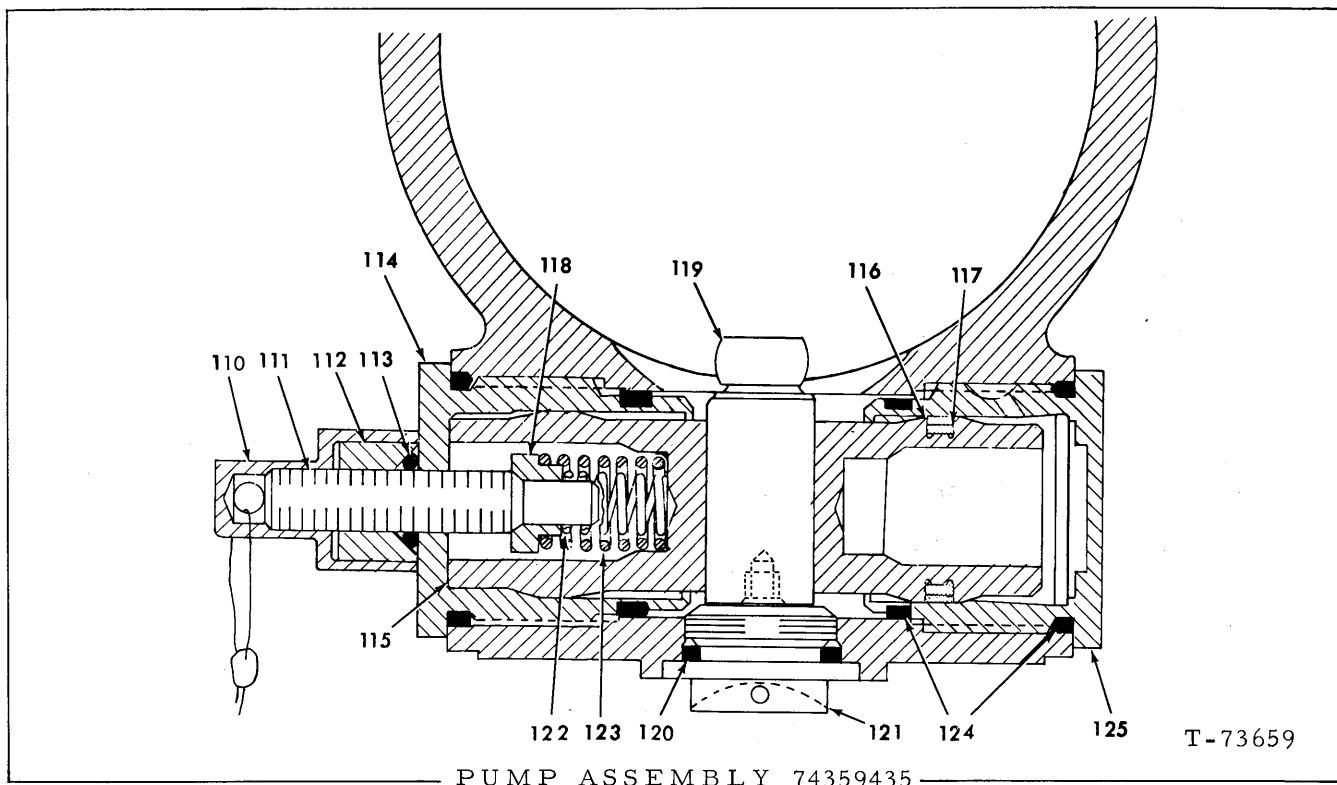
NOTE: Parts are identical to those shown on pages 52 thru 56 with the following exceptions:

1	74054587	1	COVER, governor control
	74051363	1	SCREW, adjusting, low idle
	74051365	1	SEAL, idle screw
	74051364	1	WASHER, idle screw
	74051409	1	NUT, jam, idle screw
5	74048639	1	CAM, shut-off
13	74058965	1	SHAFT, drive
	70910224	1	KEY, woodruff, 5/32" x 5/8"
17	74059267	1	HOUSING, pump
	74059283	1	STOP, high idle screw (Clips on housing to prevent wear at idle screw contact point)
17A	-----	1	TUBE, pilot (Omit this item)
21	74055176	1	SPRING, governor control
	74060374	1	SPACER, governor control spring
27	74054596	1	VALVE, metering
31	74056488	1	SHAFT ASSY., throttle
	74056484	1	SPACER, throttle shaft arm
	74050913	1	SCREW
	74056486	1	ARM, throttle shaft

(Continued)

PUMP ASSEMBLY 74359639 (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
35	74056487	1	SCREW, retaining, throttle lever spring
49	74059068	1	RING, cam
55	74059180	4	SHOE, cam roller
61	74059269	1	VALVE, delivery
90	74060065	1	SCREW ASSY., head locating (Includes ball and spring)
91	74369595	2	□RING, sealing, head locating screw
92	-----	1	WASHER
93	-----	1	SCREW
			} Omit these items
102 thru 109			Omit these items
110	74052917	1	CAP, advance adjusting screw
	74369430	1	WIRE, sealing
111	74054593	1	SCREW, advance adjusting
112	74054583	1	NUT, jam, advance adjusting screw
113	74369878	1	□SEAL, adjusting screw
114	74059271	1	PLUG, piston hole (spring side)
115	74059060	1	PISTON
116	74055386	1	RING, piston
117	74059064	1	□SEAL, piston ring
118	74055690	1	GUIDE, spring
119	74059066	1	PIN, cam advance
120	74054585	1	□SEAL, cam pin access plug
121	74059067	1	PLUG, cam pin access
122	74055686	1	SPRING, advance, inner
123	74055685	1	SPRING, advance, outer
124	74054589	4	□SEAL, piston hole plugs
125	74059268	1	PLUG, piston hole (power side)



USAGE: M100 Series B grader with 11000 engine effective grader S/N 67S05001 thru 67S05189, excluding 67S05130 thru 67S05157.

ITEM	PART NO.	QTY.	DESCRIPTION
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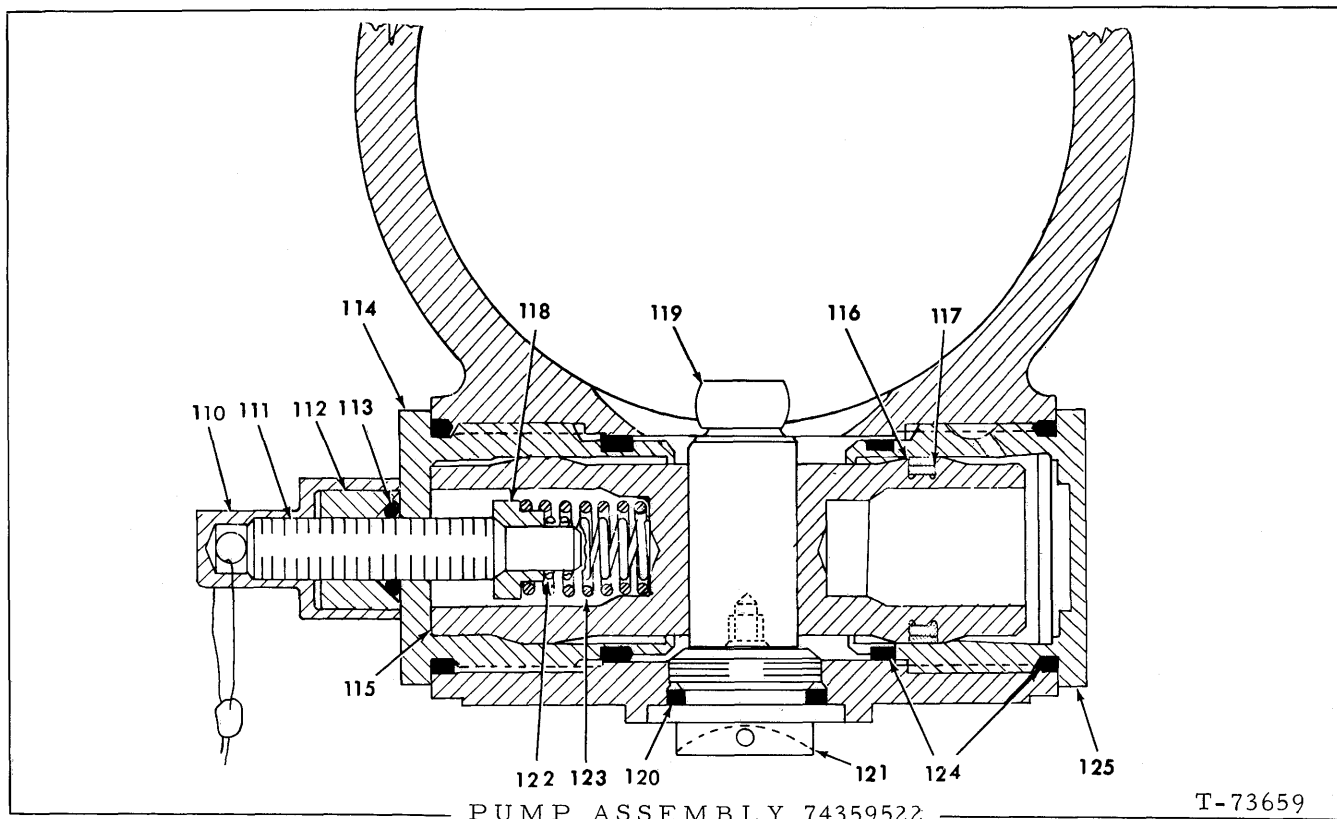
NOTE: Parts are identical to those shown on pages 52 thru 56 with the following exceptions:

1	74051002	1	COVER, governor control
5	74048639	1	CAM, shut-off
13	74058965	1	SHAFT, drive
	70910224	1	KEY, woodruff, 5/32" x 5/8"
17	74059267	1	HOUSING, pump
	74059283	1	STOP, high idle screw (Clips on housing to prevent wear at idle screw contact point)
17A	-----	1	TUBE, pilot (Omit this item)
21	74050179	1	SPRING, governor control
27	74054596	1	VALVE, metering
31	74056488	1	SHAFT ASSEMBLY, throttle
	74056484	1	SPACER, throttle shaft arm
	74050913	1	SCREW
	74056486	1	ARM, throttle shaft
35	74056487	1	SCREW, retaining, throttle lever spring
49	74059068	1	RING, cam
55	74058825	4	SHOE, cam roller
61	74059269	1	VALVE, delivery
90	74060190	1	SCREW ASSY., head locating (Includes ball and spring)
91	74369595	2	O-RING, sealing, head locating screw

(Continued)

PUMP ASSEMBLY 74359435 (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
92	-----	1	WASHER
93	-----	1	SCREW
			} Omit these items
98	74056490	1	SHAFT, shut-off
	74048632	2	SCREW, stop, shut-off shaft
	74051409	2	NUT, jam
	74056484	1	SPACER, shut-off shaft arm
	74050913	1	SCREW
	74056486	1	ARM, shut-off shaft
	74054594	1	LEVER, shut-off shaft
	74051413	1	SPRING, shut-off arm
	74051412	1	RETAINER, shut-off arm spring
	74056487	1	SCREW
102 thru 109			Omit these items
110	74052917	1	CAP, advance adjusting screw
	74369430	1	WIRE, sealing
111	74054593	1	SCREW, advance adjusting
112	74054583	1	NUT, jam, advance adjusting screw
113	74369878	1	□SEAL, adjusting screw
114	74059271	1	PLUG, piston hole (spring side)
115	74059060	1	PISTON
116	74055386	1	RING, piston
117	74059064	1	□SEAL, piston ring
118	74055690	1	GUIDE, spring
119	74059066	1	PIN, cam advance
120	74054585	1	□SEAL, cam pin access plug
121	74059067	1	PLUG, cam pin access
122	74055686	1	SPRING, advance, inner
123	74055685	1	SPRING, advance, outer
124	74054589	4	□SEAL, piston hole plugs
125	74059268	1	PLUG, piston hole (power side)

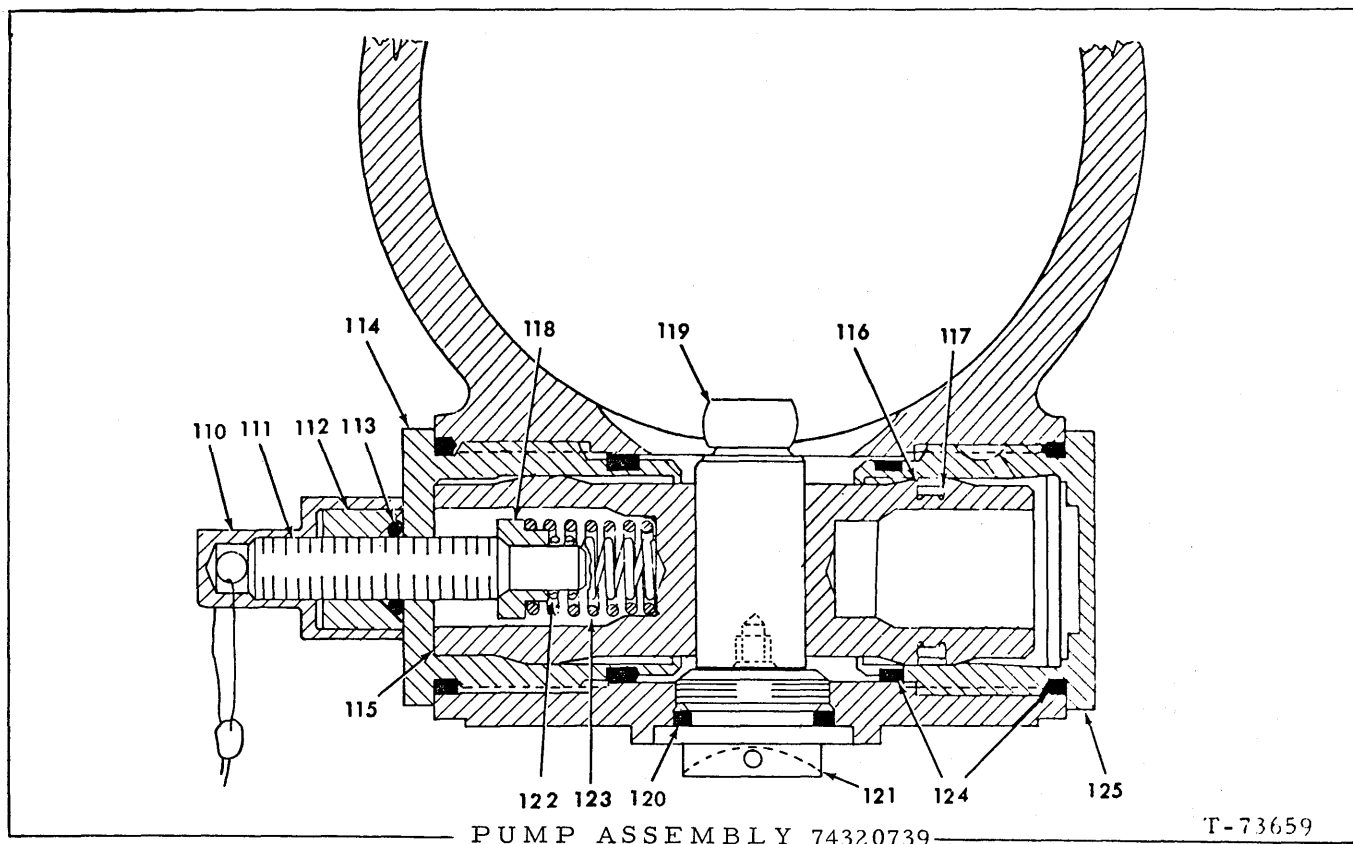


USAGE: M100 Series B grader with 11000 engine effective grader S/N 67S05190, including 67S05130 thru 67S05157.

ITEM	PART NO.	QTY.	DESCRIPTION
NOTE: Parts are identical to those shown on pages 52 thru 56 with the following exceptions:			
1	74051002	1	COVER, governor control
5	74048639	1	CAM, shut-off
13	74058965	1	SHAFT, drive
	70910224	1	KEY, woodruff, 5/32" x 5/8"
17	74059267	1	HOUSING, pump
	74059283	1	STOP, high idle screw (Clips on housing to prevent wear at idle screw contact point)
17A	-----	1	TUBE, pilot (Omit this item)
21	74052136	1	SPRING, governor control
27	74054596	1	VALVE, metering
31	74056488	1	SHAFT ASSY., throttle
	74056484	1	SPACER, throttle shaft arm
	74050913	1	SCREW
	74056486	1	ARM, throttle shaft
35	74056487	1	SCREW, retaining, throttle lever spring
36	74059955	1	SCREW, high idle
	74051409	1	NUT, jam
(Continued)			

PUMP ASSEMBLY 74359522 (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
49	74059540	1	RING, cam
55	74055889	4	SHOE, cam roller
56	74059539	1	HEAD ASSY., hydraulic (Includes rotor, plunger, items 57 thru 60 and accumulator parts indented below)
	74059390	2	PISTON, accumulator
	74059392	2	SPRING, accumulator piston
	74059391	2	SCREW, accumulator piston retaining
61	74053451	1	VALVE, delivery
90	74060065	1	SCREW ASSY., head locating (Includes ball and spring)
91	74369595	2	□RING, sealing, head locating screw
92	-----	1	WASHER
93	-----	1	SCREW
			} Omit these items
98	74056490	1	SHAFT, shut-off
	74048632	2	SCREW, stop, shut-off shaft
	74051409	2	NUT, jam
	74056484	1	SPACER, shut-off shaft arm
	74050913	1	SCREW
	74056486	1	ARM, shut-off shaft
	74054594	1	LEVER, shut-off shaft
	74051413	1	SPRING, shut-off arm
	74051412	1	RETAINER, shut-off arm spring
	74056487	1	SCREW
102 thru 109			Omit these items
110	74052917	1	CAP, advance adjusting screw
	74369430	1	WIRE, sealing
111	74054593	1	SCREW, advance adjusting
112	74054583	1	NUT, jam, advance adjusting screw
113	74369878	1	□SEAL, adjusting screw
114	74059271	1	PLUG, piston hole (spring side)
115	74060219	1	PISTON
116	74055386	1	RING, piston
117	74059064	1	□SEAL, piston ring
118	74055690	1	GUIDE, spring
119	74059066	1	PIN, cam advance
120	74054585	1	□SEAL, cam pin access plug
121	74059067	1	PLUG, cam pin access
122	74055686	1	SPRING, advance, inner
123	74055685	1	SPRING, advance, outer
124	74054589	4	□SEAL, piston hole plugs
125	74059268	1	PLUG, piston hole (power side)



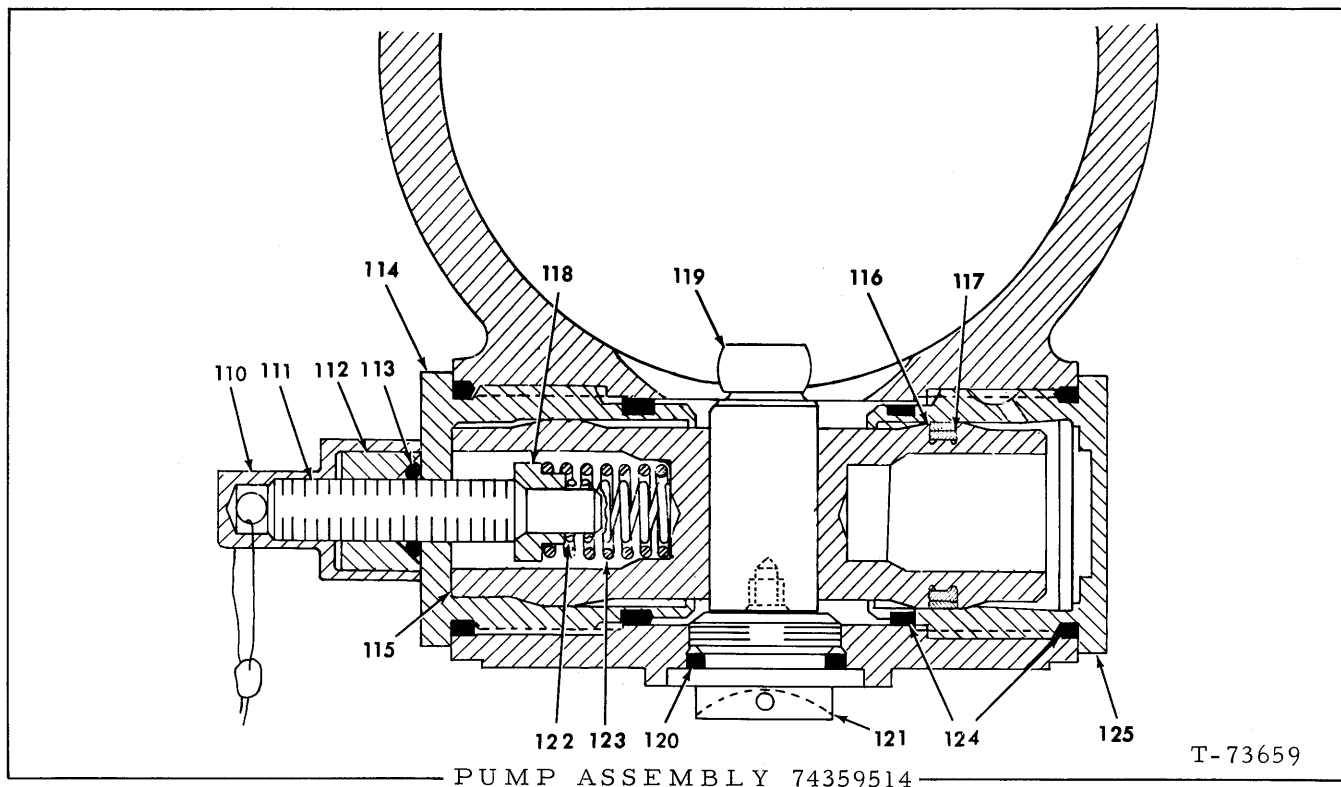
USAGE: M100 Series B grader with 11000 engine . Service replacement for pump 74359522.

ITEM	PART NO.	QTY.	DESCRIPTION
NOTE: Parts are identical to those shown on pages 52 thru 56 with the following exceptions:			
1	74051002	1	COVER, governor control
5	74048639	1	CAM, shut-off
13	74060981	1	SHAFT, drive (Includes dowel pin for locking drive gear)
17	74059267	1	HOUSING, pump
	74059283	1	STOP, high idle screw (Clips on housing to prevent wear at idle screw contact point)
17A	-----	1	TUBE, pilot (Omit this item)
21	74052136	1	SPRING, governor control
27	74054596	1	VALVE, metering
31	74056488	1	SHAFT ASSY., throttle
	74056484	1	SPACER, throttle shaft arm
	74050913	1	SCREW
	74056486	1	ARM, throttle shaft
35	74056487	1	SCREW, retaining, throttle lever spring
36	74059955	1	SCREW, high idle
	74051409	1	NUT, jam

(Continued)

PUMP ASSEMBLY 74320739 (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
49	74059540	.1	RING, cam
55	74055889	4	SHOE, cam roller
56	74059539	1	HEAD ASSY., hydraulic (Includes rotor, plunger, items 57 thru 60 and accumulator parts indented below)
	74059390	2	PISTON, accumulator
	74059392	2	SPRING, accumulator piston
	74059391	2	SCREW, accumulator piston retaining
61	74053451	1	VALVE, delivery
90	74060065	1	SCREW ASSY., head locating (Includes ball and spring)
91	74369595	2	□RING, sealing, head locating screw
92	-----	1	WASHER
93	-----	1	SCREW
			} Omit these items
98	74056490	1	SHAFT, shut-off
	74048632	2	SCREW, stop, shut-off shaft
	74051409	2	NUT, jam
	74056484	1	SPACER, shut-off shaft arm
	74050913	1	SCREW
	74056486	1	ARM, shut-off shaft
	74054594	1	LEVER, shut-off shaft
	74051413	1	SPRING, shut-off arm
	74051412	1	RETAINER, shut-off arm spring
	74056487	1	SCREW
102 thru 109			Omit these items
110	74052917	1	CAP, advance adjusting screw
	74369430	1	WIRE, sealing
111	74054593	1	SCREW, advance adjusting
112	74054583	1	NUT, jam, advance adjusting screw
113	74369878	1	□SEAL, adjusting screw
114	74059271	1	PLUG, piston hole (spring side)
115	74060219	1	PISTON
116	74055386	1	RING, piston
117	74059064	1	□SEAL, piston ring
118	74055690	1	GUIDE, spring
119	74059066	1	PIN, cam advance
120	74054585	1	□SEAL, cam pin access plug
121	74059067	1	PLUG, cam pin access
122	74055686	1	SPRING, advance, inner
123	74055685	1	SPRING, advance, outer
124	74054589	4	□SEAL, piston hole plugs
125	74059268	1	PLUG, piston hole (power side)



USAGE: M100 Series B grader with service replacement engine.

ITEM	PART NO.	QTY.	DESCRIPTION
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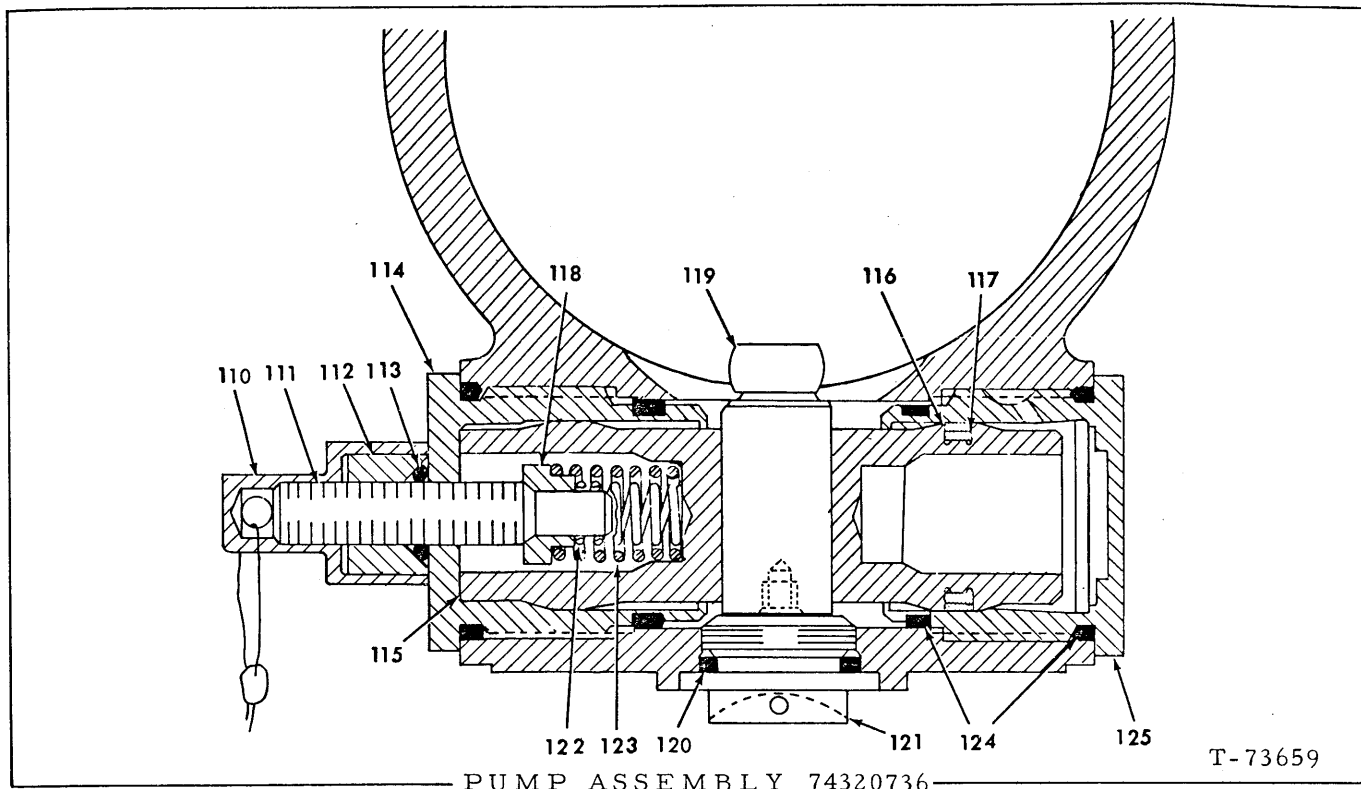
NOTE: Parts are identical to those shown on pages 52 thru 56 with the following exceptions:

1	74051002	1	COVER, governor control
5	74048639	1	CAM, shut-off
13	74058965	1	SHAFT, drive
	70910224	1	KEY, woodruff, 5/32" x 5/8"
17	74059267	1	HOUSING, pump
17A	-----	1	TUBE, pilot (Omit this item)
21	74052136	1	SPRING, governor control
27	74054596	1	VALVE, metering
31	74056488	1	SHAFT ASSY., throttle
	74056484	1	SPACER, throttle shaft arm
	74050913	1	SCREW
	74056486	1	ARM, throttle shaft
35	74056487	1	SCREW, retaining, throttle lever spring
36	74059955	1	SCREW, high idle
	74051409	1	NUT, jam
	74059283	1	STOP, high idle screw (Clips on housing to prevent housing wear at screw contact point)

(Continued)

PUMP ASSEMBLY 74359514 (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
49	74059540	1	RING, cam
55	74059925	4	SHOE, cam roller
56	74059539	1	HEAD ASSY., hydraulic (Includes rotor, plunger, items 57 thru 60 and accumulator parts indented below)
	74059390	2	PISTON, accumulator
	74059392	2	SPRING, accumulator piston
	74059391	2	SCREW, accumulator piston retaining
61	74053451	1	VALVE, delivery
90	74060065	1	SCREW ASSY., head locating (Includes ball and spring)
91	74369595	2	□RING, sealing, head locating screw
92	-----	1	WASHER
93	-----	1	SCREW
			} Omit these items
98	74056490	1	SHAFT, shut-off
	74048632	2	SCREW, stop, shut-off shaft
	74051409	2	NUT, jam
	74056484	1	SPACER, shut-off shaft arm
	74050913	1	SCREW
	74056486	1	ARM, shut-off shaft
	74054594	1	LEVER, shut-off shaft
	74051413	1	SPRING, shut-off arm
	74051412	1	RETAINER, shut-off arm spring
	74056487	1	SCREW
102 thru 109			Omit these items
110	74052917	1	CAP, advance adjusting screw
	74369430	1	WIRE, sealing
111	74054593	1	SCREW, advance adjusting
112	74054583	1	NUT, jam, advance adjusting screw
113	74369878	1	□SEAL, adjusting screw
114	74059271	1	PLUG, piston hole (spring side)
115	74060219	1	PISTON
116	74055386	1	RING, piston
117	74059064	1	□SEAL, piston ring
118	74055690	1	GUIDE, spring
119	74059066	1	PIN, cam advance
120	74054585	1	□SEAL, cam pin access plug
121	74059067	1	PLUG, cam pin access
122	74055686	1	SPRING, advance, inner
123	74055685	1	SPRING, advance, outer
124	74054589	4	□SEAL, piston hole plugs
125	74059268	1	PLUG, piston hole (power side)



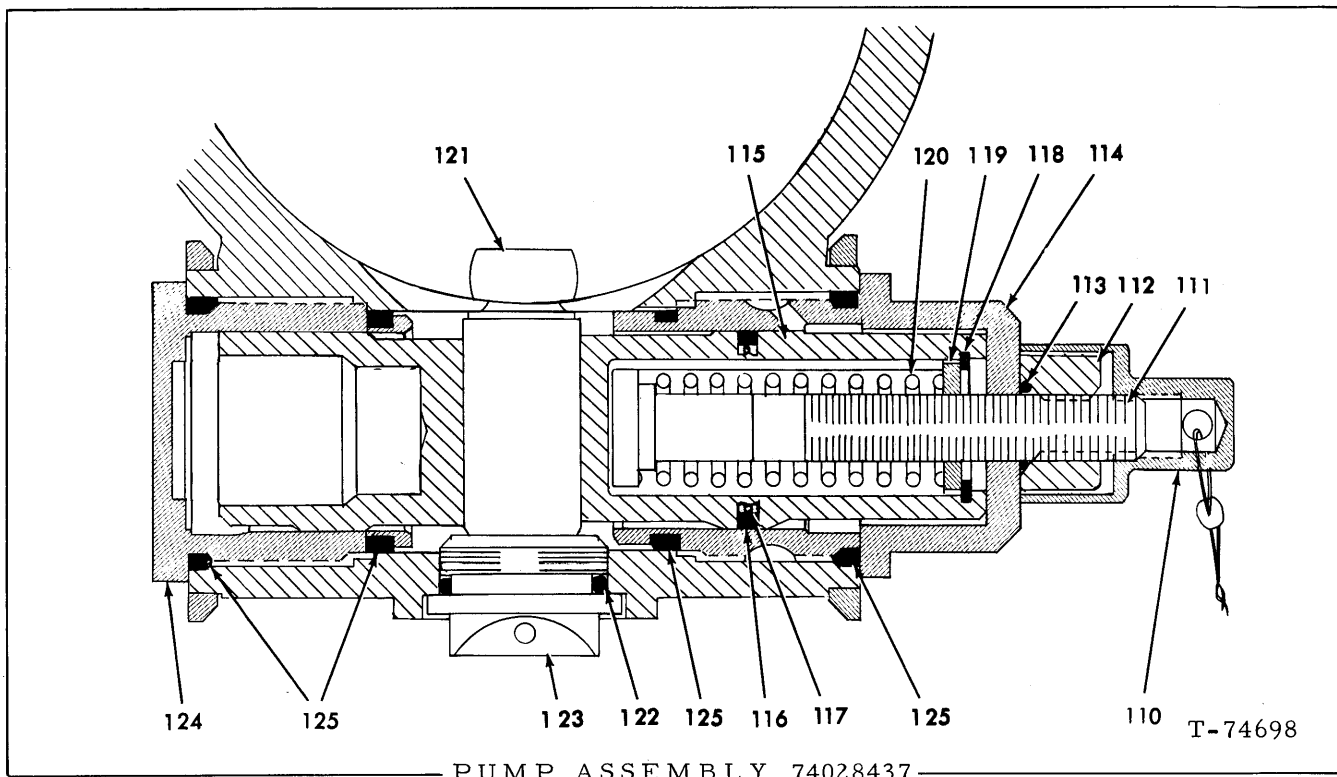
USAGE: M100 Series B grader . Service replacement for pump 74359514.

ITEM	PART NO.	QTY.	DESCRIPTION
NOTE: Parts are identical to those shown on pages 52 thru 56 with the following exceptions:			
1	74051002-6	1	COVER, governor control
5	74048639-1	1	CAM, shut-off
13	74060981-0	1	SHAFT, drive (Includes dowel pin for locking drive gear)
17	74059267-7	1	HOUSING, pump
17A	-----	1	TUBE, pilot (Omit this item)
21	74052136-1	1	SPRING, governor control
27	74054596-4	1	VALVE, metering
31	74056488-2	1	SHAFT ASSY., throttle
	74056484-1	1	SPACER, throttle shaft arm
	74050913-5	1	SCREW
	74056486-6	1	ARM, throttle shaft
35	74056487-5	1	SCREW, retaining, throttle lever spring
36	74059955-7	1	SCREW, high idle
	74051409-7	1	NUT, jam
	74059283-4	1	STOP, high idle screw (Clips on housing to prevent housing wear at screw contact point)

(Continued)

PUMP ASSEMBLY 74320736 (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
49	74059540	1	RING, cam
55	74055889	4	SHOE, cam roller
56	74059539	1	HEAD ASSY., hydraulic (Includes rotor, plunger, items 57 thru 60 and accumulator parts indented below)
	74059390	2	PISTON, accumulator
	74059392	2	SPRING, accumulator piston
	74059391	2	SCREW, accumulator piston retaining
61	4053451	1	VALVE, delivery
90	74060065	1	SCREW ASSY., head locating (Includes ball and spring)
91	74369595	2	□RING, sealing, head locating screw
92	-----	1	WASHER
93	-----	1	SCREW
			} Omit these items
98	74056490	1	SHAFT, shut-off
	74048632	2	SCREW, stop, shut-off shaft
	74051409	2	NUT, jam
	74056484	1	SPACER, shut-off shaft arm
	74050913	1	SCREW
	74056486	1	ARM, shut-off shaft
	74054594	1	LEVER, shut-off shaft
	74051413	1	SPRING, shut-off arm
	74051412	1	RETAINER, shut-off arm spring
	74056487	1	SCREW
102 thru 109			Omit these items
110	74052917	1	CAP, advance adjusting screw
	74369430	1	WIRE, sealing
111	74054593	1	SCREW, advance adjusting
112	74054583	1	NUT, jam, advance adjusting screw
113	74369878	1	□SEAL, adjusting screw
114	74059271	1	PLUG, piston hole (spring side)
115	74060219	1	PISTON
116	74055386	1	RING, piston
117	74059064	1	□SEAL, piston ring
118	74055690	1	GUIDE, spring
119	74059066	1	PIN, cam advance
120	74054585	1	□SEAL, cam pin access plug
121	74059067	1	PLUG, cam pin access
122	74055686	1	SPRING, advance, inner
123	74055685	1	SPRING, advance, outer
124	74054589	4	□SEAL, piston hole plugs
125	74059268	1	PLUG, piston hole (power side)



USAGE: M100 military grader

ITEM	PART NO.	QTY.	DESCRIPTION
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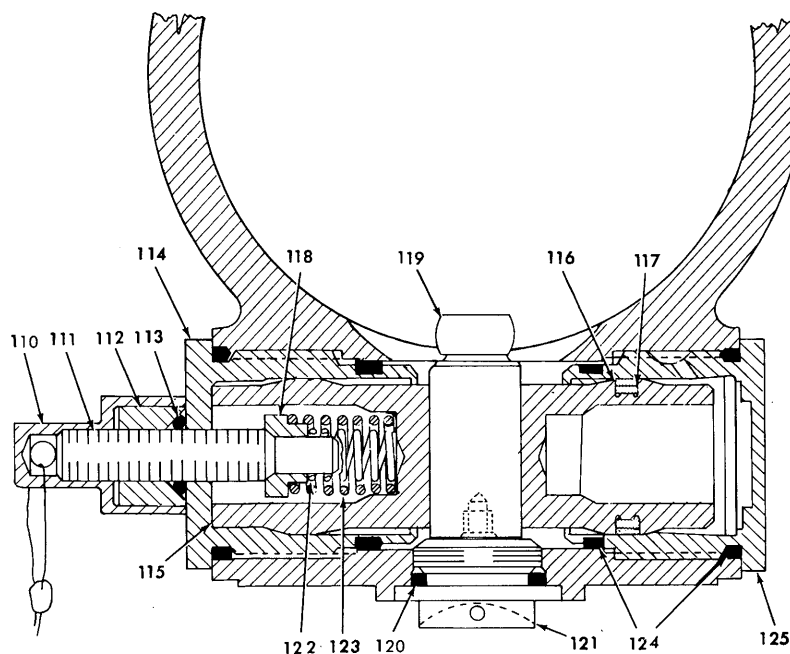
NOTE: Parts are identical to those shown on pages 52 thru 56 with the following exceptions:

1	74051002	1	COVER, governor control
5	74048639	1	CAM, shut-off
17	74059059	1	HOUSING, pump
21	74052136	1	SPRING, governor control
	74060374	1	SPACER, governor control spring
27	74054596	1	VALVE, metering
30	74056799	1	SCREW, low idle
36	74058950	1	SCREW, high idle
	74058951	1	NUT, jam
49	74059540	1	RING, cam
55	74058825	4	SHOE, cam roller
56	74059539	1	HEAD ASSY., hydraulic (Includes rotor, plungers, items 57 thru 60 and accumulator parts indented below)
	74059390	2	PISTON, accumulator
	74059392	2	SPRING, accumulator piston
	74059391	2	SCREW, accumulator piston retaining
61	74059269	1	VALVE, delivery

(Continued)

PUMP ASSEMBLY 74028437 (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
90	74060065.	1	SCREW ASSY., head locating (Includes ball and spring)
91	74369595	2	RING, sealing, head locating screw
92	-----	1	WASHER
93	-----	1	SCREW
98	74054845	1	SHAFT, shut-off
	74054594	1	LEVER, shut-off shaft
	74051413	1	SPRING, shut-off lever
	74051412	1	RETAINER, shut-off lever spring
	74055625	1	SCREW, spring retainer
	74048645	2	SCREW, adjusting, shut-off
	74369507	2	NUT, jam
102 thru 109			Omit these items
110	74052917	1	CAP, advance adjusting screw
	74369430	1	WIRE, sealing
111	74059395	1	SCREW, advance adjusting
112	74054583	1	NUT, jam, advance adjusting screw
113	74369878	1	□SEAL, adjusting screw
114	74059394	1	PLUG, piston hole (power side)
115	74059541	1	PISTON, advance
116	74055386	1	RING, piston
117	74059064	1	□SEAL, piston ring
118	74059397.	1	RING, retaining, adjusting spring
119	74059396 .	1	WASHER, adjusting spring
120	74059667	1	SPRING, advance adjusting
121	74059066	1	PIN, cam advance
122	74054585	1	□SEAL, cam pin access plug
123	74059067	1	PLUG, cam pin access
124	74059061	1	PLUG, piston hole (spring side)
125	74054589	4	□SEAL, piston hole plugs



PUMP ASSEMBLY 74359518

T-73659

USAGE: HD-11E Crawler Tractor with 11000 engine effective engine serial No. 11-17106

ITEM	PART NO.	QTY.	DESCRIPTION
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NOTE: Parts are identical to those shown on pages 52 thru 56 with the following exceptions:

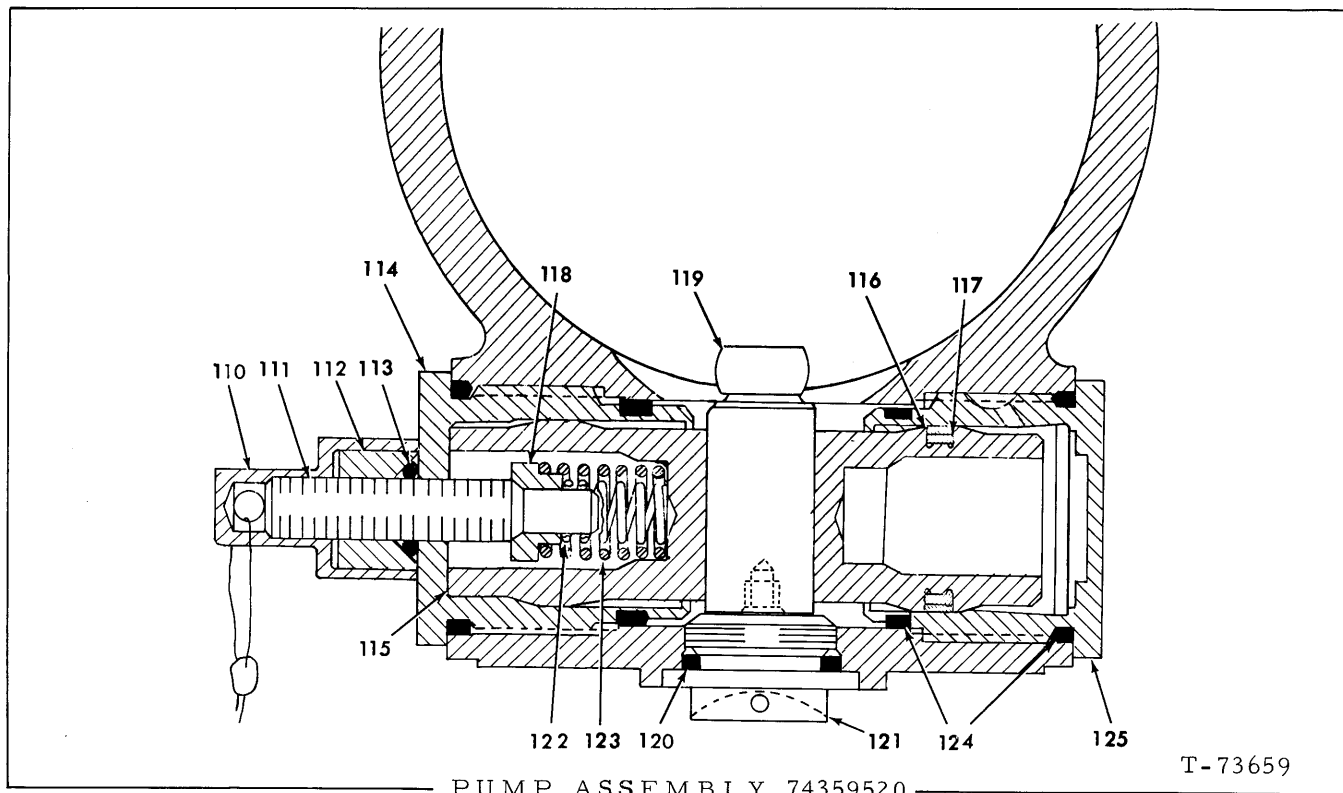
1	74054587	1	COVER, governor control
	74051363	1	SCREW, adjusting, low idle
	74051365	1	SEAL, idle screw
	74051364	1	WASHER, idle screw
	74051409	1	NUT, jam, idle screw
5	74048639	1	CAM, shut-off
13	74058965	1	SHAFT, drive
	70910224	1	KEY, woodruff, 5/32" x 5/8"
17	74059267	1	HOUSING, pump
	74059283	1	STOP, high idle screw (Clips on housing to prevent wear at idle screw contact point)
17A	-----	1	TUBE, pilot (omit this item)
21	74055176	1	SPRING, governor control
27	74054596	1	VALVE, metering
31	74056488	1	SHAFT ASSY., throttle
	74056484	1	SPACER, throttle shaft arm
	74050913	1	SCREW
	74056486	1	ARM, throttle shaft

(Continued)

PUMP ASSEMBLY 74359518 (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
35	74056487	1	SCREW, retaining, throttle lever spring
36	74059955	1	SCREW, high idle
49	74059540	1	RING, cam
55	74055889	4	SHOE, cam roller
56	74059539	1	HEAD ASSY., hydraulic (Includes rotor, plungers, items 57 thru 60 and accumulator parts indented below)
	74059390	2	PISTON, accumulator
	74059392	2	SPRING, accumulator piston
	74059391	2	SCREW, accumulator piston retaining
61	74053451	1	VALVE, delivery
90	74060065	1	SCREW ASSY., head locating (Includes ball and spring)
91	74369595	2	☐ RING, sealing, head locating screw
92	-----	1	WASHER
93	-----	1	SCREW
			} Omit these items
102 thru 109			Omit these items
110	74052917	1	CAP, advance adjusting screw
	74369430	1	WIRE, sealing
111	74054593	1	SCREW, advance adjusting
112	74054583	1	NUT, jam, advance adjusting screw
113	74369878	1	☐ SEAL, adjusting screw
114	74059271	1	PLUG, piston hole (spring side)
115	74060219	1	PISTON
116	74055386	1	RING, piston
117	74059064	1	☐ SEAL, piston ring
118	74055690	1	GUIDE, spring
119	74059066	1	PIN, cam advance
120	74054585	1	☐ SEAL, cam pin access plug
121	74059067	1	PLUG, cam pin access
122	74055686	1	SPRING, advance, inner
123	74055685	1	SPRING, advance, outer
124	74054589	4	☐ SEAL, piston hole plugs
125	74059268	1	PLUG, piston hole (power side)

(Revised May 1975)



USAGE: HD11EP crawler tractor with 11000 engine effective engine serial No. 11-17106

ITEM	PART NO.	QTY.	DESCRIPTION
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NOTE: Parts are identical to those shown on pages 52 thru 56
with the following exceptions:

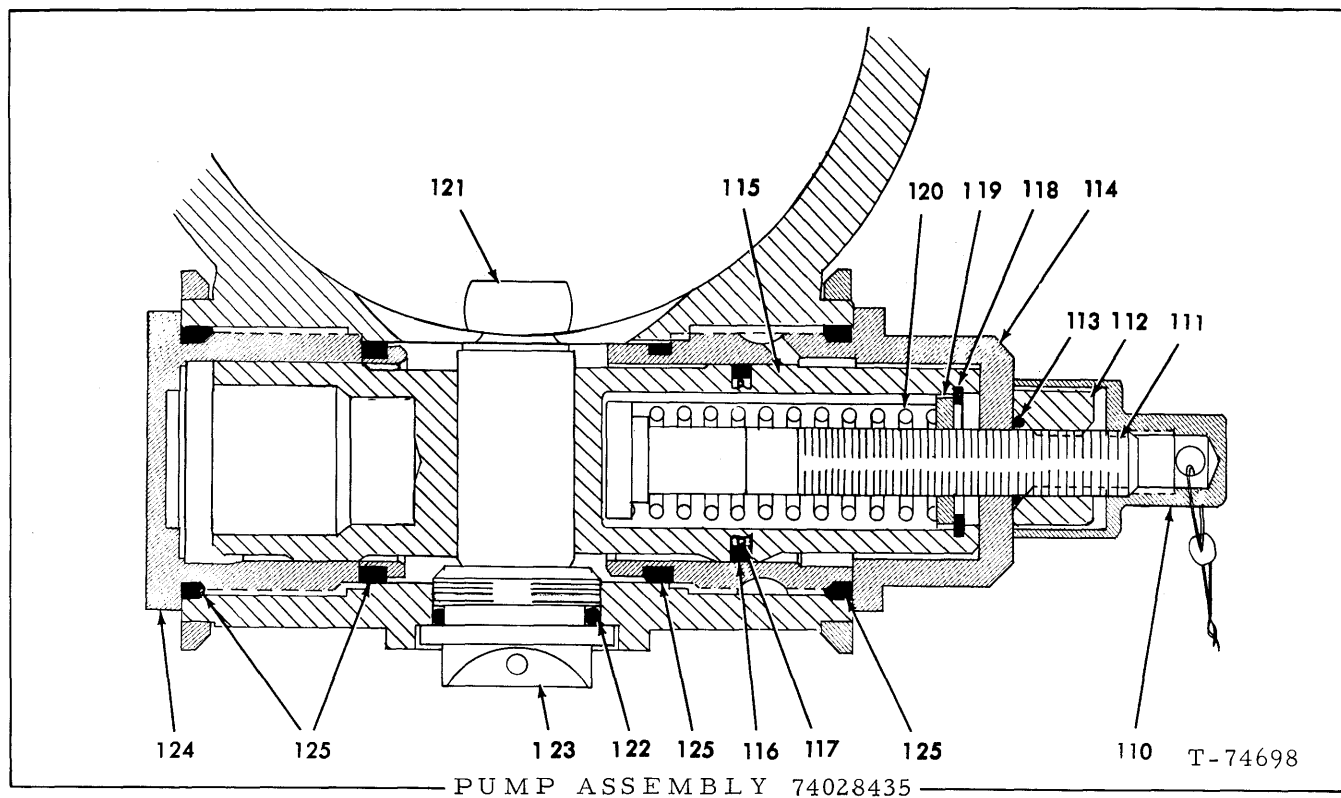
1	74054587	1	COVER, governor control
	74051363	1	SCREW, adjusting, low idle
	74051365	1	SEAL, idle screw
	74051364	1	WASHER, idle screw
	74051409	1	NUT, jam, idle screw
5	74048639	1	CAM, shut-off
13	74058965	1	SHAFT, drive
	70910224	1	KEY, woodruff, 5/32" x 5/8"
17	74059267	1	HOUSING, pump
	74059283	1	STOP, high idle screw (Clips on housing to prevent wear at idle screw contact point)
17A	-----	1	TUBE, pilot (omit this item)
21	74052136	1	SPRING, governor control
27	74054596	1	VALVE, metering
31	74056488	1	SHAFT ASSY., throttle
	74056484	1	SPACER, throttle shaft arm
	74050913	1	SCREW
	74056486	1	ARM, throttle shaft

(Continued)

PUMP ASSEMBLY 74359520 (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
35	74056487	1	SCREW, retaining, throttle lever spring
36	74059955	1	SCREW, high idle
49	74059540	1	RING, cam
55	74055889	4	SHOE, cam roller
56	74059539	1	HEAD ASSY., hydraulic (Includes rotor, plungers, items 57 thru 60 and accumulator parts indented below)
	74059390	2	PISTON, accumulator
	74059392	2	SPRING, accumulator piston
	74059391	2	SCREW, accumulator piston retaining
61	74053451	1	VALVE, delivery
90	74060065	1	SCREW ASSY., head locating (Includes ball and spring)
91	74369595	2	☐ RING, sealing, head locating screw
92	-----	1	WASHER
93	-----	1	SCREW
102 thru 109			Omit these items
110	74052917	1	CAP, advance adjusting screw
	74369430	1	WIRE, sealing
111	74054593	1	SCREW, advance adjusting
112	74054583	1	NUT, jam, advance adjusting screw
113	74369878	1	☐ SEAL, adjusting screw
114	74059271	1	PLUG, piston hole (spring side)
115	74060219	1	PISTON
116	74055386	1	RING, piston
117	74059064	1	☐ SEAL, piston ring
118	74055690	1	GUIDE, spring
119	74059066	1	PIN, cam advance
120	74054585	1	☐ SEAL, cam pin access plug
121	74059067	1	PLUG, cam pin access
122	74055686	1	SPRING, advance, inner
123	74055685	1	SPRING, advance, outer
124	74054589	4	☐ SEAL, piston hole plugs
125	74059268	1	PLUG, piston hole (power side)

(Revised May 1975)



USAGE: HD-11EP military tractor

ITEM	PART NO.	QTY.	DESCRIPTION
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NOTE: Parts are identical to those shown on pages 52 thru 56 with the following exceptions:

1	74054587	1	COVER, governor control
	74051363	1	SCREW, adjusting, low idle
	74051365	1	SEAL, idle screw
	74051364	1	WASHER, idle screw
	74051409	1	NUT, idle screw
5	74048639	1	CAM, shut-off
17	74059059	1	HOUSING, pump
21	74052136	1	SPRING, governor control
	74060206	1	SPACER, governor control spring
27	74054596	1	VALVE, metering
36	74058950	1	SCREW, high idle
49	74059540	1	RING, cam
55	74058825	4	SHOE, cam roller
56	74059539	1	HEAD ASSY., hydraulic (Includes rotor, plungers, items 57 thru 60 and accumulator parts indented below)
	74059390	2	PISTON, accumulator
	74059392	2	SPRING, accumulator piston
	74059391	2	SCREW, accumulator piston retaining
61	74059269	1	VALVE, delivery

(Continued)

PUMP ASSEMBLY 74028435 (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
90	74060065	1	SCREW ASSY., head locating (Includes ball and spring)
91	74369595	2	RING, sealing, head locating screw
92	-----	1	WASHER
93	-----	1	SCREW
			} Omit these items
102 thru 109			Omit these items
110	74052917	1	CAP, advance adjusting screw
	74369430	1	WIRE, sealing
111	74059395	1	SCREW, advance adjusting
112	74054583	1	NUT, jam, advance adjusting screw
113	74369878	1	□ SEAL, adjusting screw
114	74059394	1	PLUG, piston hole (power side)
115	74059541	1	PISTON, advance
116	74055386	1	RING, piston
117	74059064	1	□ SEAL, piston ring
118	74059397	1	RING, retaining, adjusting spring
119	74059396	1	WASHER, adjusting spring
120	74059667	1	SPRING, advance adjusting
121	74059066	1	PIN, cam advance
122	74054585	1	□ SEAL, cam pin access plug
123	74059067	1	PLUG, cam pin access
124	74059061	1	PLUG, piston hole (spring side)
125	74054589	4	□ SEAL, piston hole plugs

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SUPPLEMENT NO. 2

(Includes Supplement No. 1)

PARTS CATALOG FORM 70685399

FUEL INJECTION PUMP (Roosa Master)

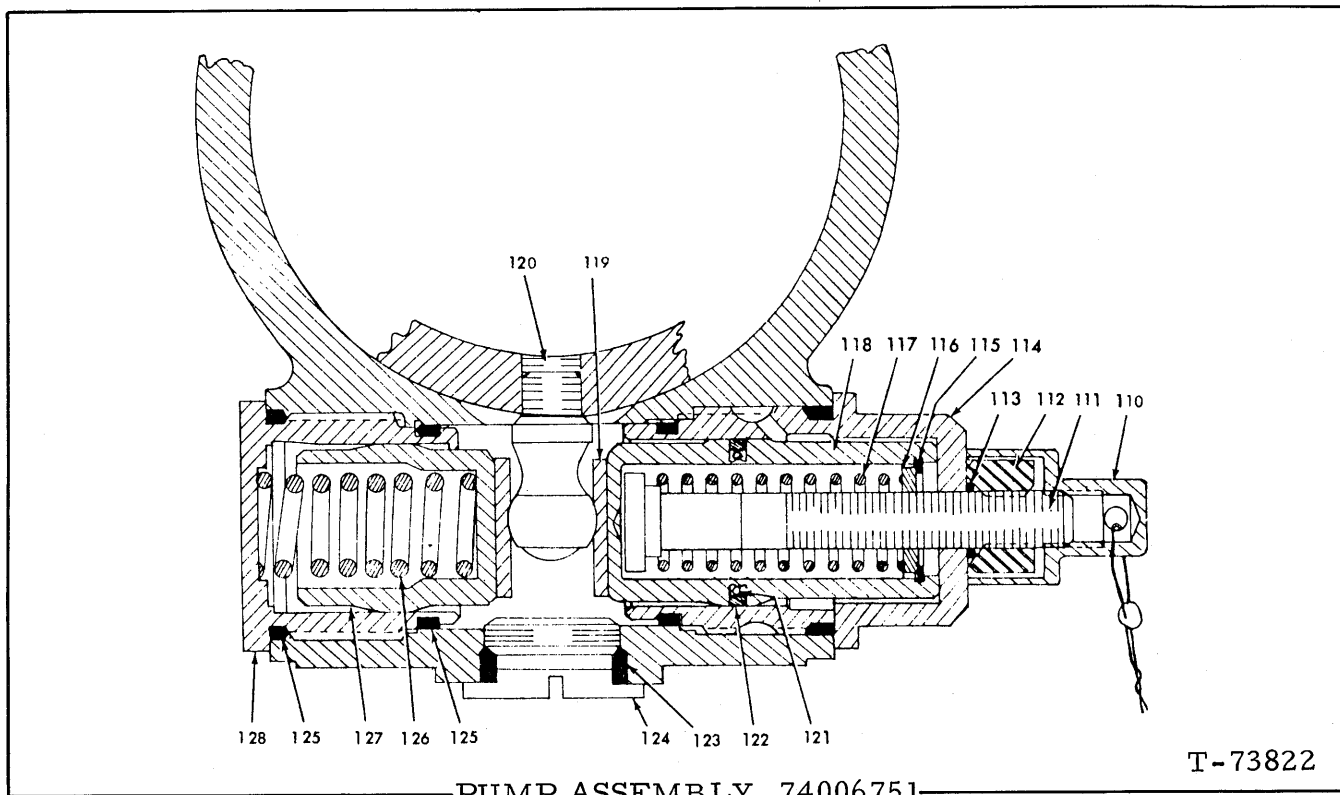
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PUMP ASSEMBLY 74006751

T-73822

USAGE: 345-B Wheel Loader with 2800 MARK I engine

ITEM PART NO. QTY. DESCRIPTION

NOTE: Parts are identical to those shown on pages 30 thru 34 with the following exceptions:

1	74051807	1	COVER, governor control
3	74059237	1	CONNECTOR ASSY., return line
5	74051559	1	CAM, shut-off
9	74059241	1	BUTTON, thrust
13	74053204	1	SHAFT, drive
	70910224	1	KEY, woodruff, 5/32" x 5/8"
14	-----	1	SEAL (Omit this item)
17	74054581	1	HOUSING ASSY.
17A	74059239	1	TUBE, pilot (bronze)
21	74051809	1	SPRING, governor control
27	74054596	1	VALVE, metering
30	74051799	1	SCREW, low idle
	74051409	1	NUT
35	74056487	1	SCREW, retaining, throttle spring
36	74058950	1	SCREW, high idle
	74058951	1	NUT
46	74253433	1	RING, governor weight retainer
47	74059596	1	RETAINER ASSY., governor weight (Includes item 48)
49	74050184	1	RING, cam
51	74054037	1	SPRING, leaf
55	74048608	2	SHOE, cam roller

(Continued)

(Added December 1976)

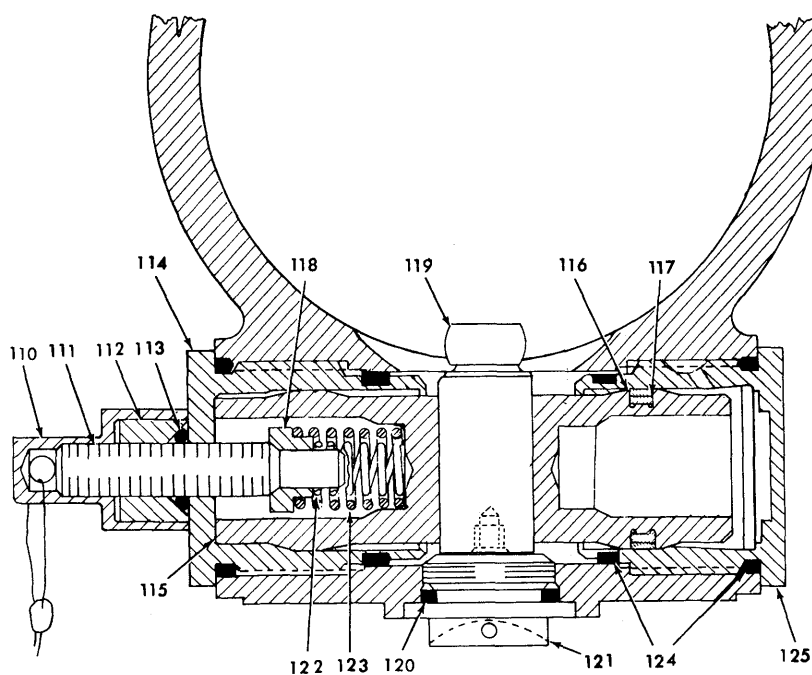
PUMP ASSEMBLY 74022317 (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
56	74061711	1	HEAD ASSY., hydraulic (Includes rotor, plungers, items 57 thru 60)
59	74061942	1	WIRE, vent
61	74053451	1	VALVE, delivery
90	74059341	1	SCREW ASSY., head locating (Includes ball and spring)
91	74369595	2	RING, sealing, head locating screw
92	-----	1	WASHER
93	-----	1	SCREW
98	74053315	1	SHAFT, shut-off
102	74059657	1	COIL ASSY., shut-off (12V. E.T.R.)
103	74369496	1	SPRING, shut-off arm
104	74051504	1	ARM, shut-off
109	74060058	1	WIRE ASSY., terminal grounding
110	74052917	1	CAP, adjusting screw
	74369430	1	WIRE, sealing
111	74059395	1	SCREW, advance adjusting
112	74054583	1	NUT, jam, adjusting screw
113	74369878	1	SEAL, adjusting screw
114	74059510	1	PLUG, piston hole (power side)
115	74059397	1	RING, retaining, adjusting spring
116	74059396	1	WASHER, adjusting spring
117	74055087	1	SPRING, advance adjusting
118	74061566	1	PISTON, power
119	74051815	2	WASHER, slide
120	74055687	1	SCREW, cam
121	74059064	1	SEAL, power piston ring
122	74055386	1	RING, power piston
123	74054585	1	SEAL, cam screw access plug
124	74054586	1	PLUG, cam screw access
125	74054589	4	SEAL, piston hole plug
126	74059509	1	SPRING, advance
127	74061374	1	PISTON, spring
128	74055689	1	PLUG, piston hole (spring side)

(Added December 1976)

PUMP ASSEMBLY 74359238 (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
55	74059180	4	SHOE, cam roller
61	74059269	1	VALVE, delivery
90	74060065	1	SCREW ASSY., head locating (Includes ball and spring)
91	74369595	2	□ RING, sealing, head locating screw
92	-----	1	WASHER
93	-----	1	SCREW
98	74056490	1	SHAFT, shut-off
	74048632	2	SCREW, stop, shut-off shaft
	74051409	2	NUT, jam
	74056484	1	SPACER, shut-off shaft arm
	74050913	1	SCREW
	74056486	1	ARM, shut-off shaft
	74054594	1	LEVER, shut-off shaft
	74051413	1	SPRING, shut-off arm
	74051412	1	RETAINER, shut-off arm spring
	74056487	1	SCREW
102 thru 109			Omit these items
110	74052917	1	CAP, advance adjusting screw
	74369430	1	WIRE, sealing
111	74054593	1	SCREW, advance adjusting
112	74054583	1	NUT, jam, advance adjusting screw
113	74369878	1	□ SEAL, adjusting screw
114	74059271	1	PLUG, piston hole (spring side)
115	74059060	1	PISTON
116	74055386	1	RING, piston
117	74059064	1	□ SEAL, piston ring
118	74055690	1	GUIDE, spring
119	74059066	1	PIN, cam advance
120	74054585	1	□ SEAL, cam pin access plug
121	74059067	1	PLUG, cam pin access
122	74055686	1	SPRING, advance, inner
123	74055685	1	SPRING, advance, outer
124	74054589	4	□ SEAL, piston hole plugs
125	74059268	1	PLUG, piston hole (power side)



T-73659

PUMP ASSEMBLY 74321204

USAGE: 745B, HB wheel loader with 11000 engine effective engine serial No. 11-24213 thru 11-24806.

ITEM	PART NO.	QTY.	DESCRIPTION
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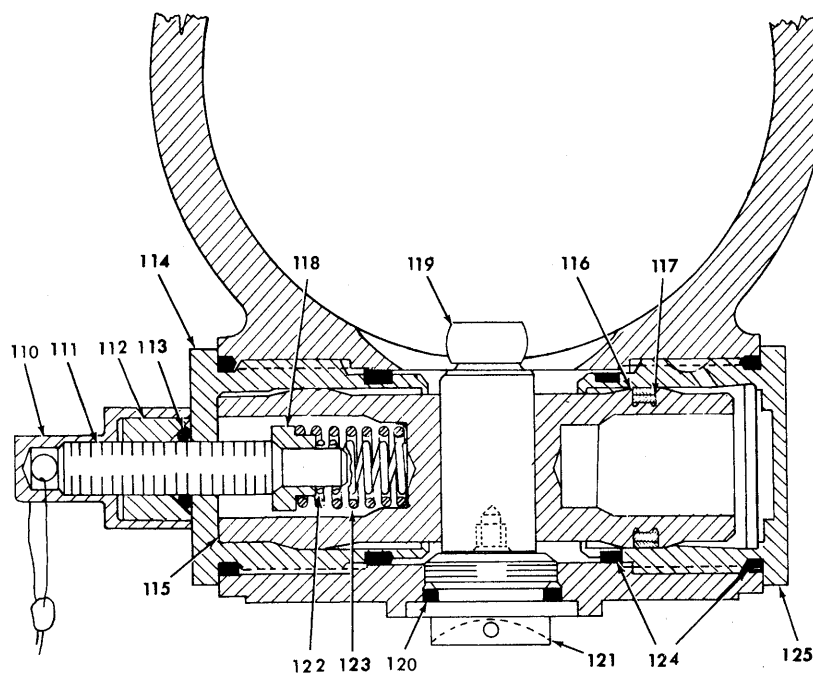
NOTE: Parts are identical to those shown on pages 52 thru 56 with the following exceptions:

1	74051002	1	COVER, governor control
5	74048639	1	CAM, shut-off
13	74061679	1	SHAFT, drive
	70910224	1	KEY, woodruff, 5/32" x 5/8"
17	74059267	1	HOUSING, pump
17A	74059239	1	TUBE, pilot (bronze)
21	74052136	1	SPRING, governor control
27	74060959	1	VALVE, metering
28	74061670	1	SPRING, metering valve
30	74048645	1	SCREW, low idle
	74051409	1	NUT, jam
31	74056488	1	SHAFT ASSY., throttle
	74056484	1	SPACER, throttle shaft arm
	74369478	1	SCREW
	74056486	1	ARM, throttle shaft
35	74056487	1	SCREW, retaining, throttle lever spring

(Continued)

PUMP ASSEMBLY 74321204 (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
36	74048645	1	SCREW, high idle
	74051409	1	NUT, jam
	74059283	1	STOP, high idle screw (Clips on housing to prevent housing wear at screw contact point)
47	74061610	1	RETAINER ASSY., governor weight (Includes item 48)
49	74059540	1	RING, cam
55	74061512	4	SHOE, cam roller
56	74059539	1	HEAD ASSY., hydraulic (Includes rotor, plunger, items 57 thru 60 and accumulator parts indented below)
	74059390	2	PISTON, accumulator
	74059392	2	SPRING, accumulator piston
	74059391	2	SCREW, accumulator piston retaining
61	74053451	1	VALVE, delivery
84	74061605	4	SCREW, end plate
90	74060065	1	SCREW ASSY., head locating (Includes ball and spring)
91	74369595	2	□RING, sealing, head locating screw
92	-----	1	WASHER
93	-----	1	SCREW
			} Omit these items
98	74056490	1	SHAFT, shut-off
	74048632	2	SCREW, stop, shut-off shaft
	74051409	2	NUT, jam
	74056484	1	SPACER, shut-off shaft arm
	74050913	1	SCREW
	74056486	1	ARM, shut-off shaft
	74054594	1	LEVER, shut-off shaft
	74051413	1	SPRING, shut-off arm
	74051412	1	RETAINER, shut-off arm spring
102 thru 109	74056487	1	SCREW
			Omit these items
110	74052917	1	CAP, advance adjusting screw
	74369430	1	WIRE, sealing
111	74054593	1	SCREW, advance adjusting
112	74054583	1	NUT, jam, advance adjusting screw
113	74369878	1	□SEAL, adjusting screw
114	74059271	1	PLUG, piston hole (spring side)
115	74060219	1	PISTON
116	74055386	1	RING, piston
117	74059064	1	□SEAL, piston ring
118	74055690	1	GUIDE, spring
119	74059066	1	PIN, cam advance
120	74054585	1	□SEAL, cam pin access plug
121	74059067	1	PLUG, cam pin access
122	74055686	1	SPRING, advance, inner
123	74055685	1	SPRING, advance, outer
124	74054589	4	□SEAL, piston hole plugs
125	74059268	1	PLUG, piston hole (power side)



T-73659

PUMP ASSEMBLY 74321338

USAGE: 745B, HB wheel loader with 11000 engine effective engine serial No. 11-24807 thru 11-25948.

ITEM	PART NO.	QTY.	DESCRIPTION
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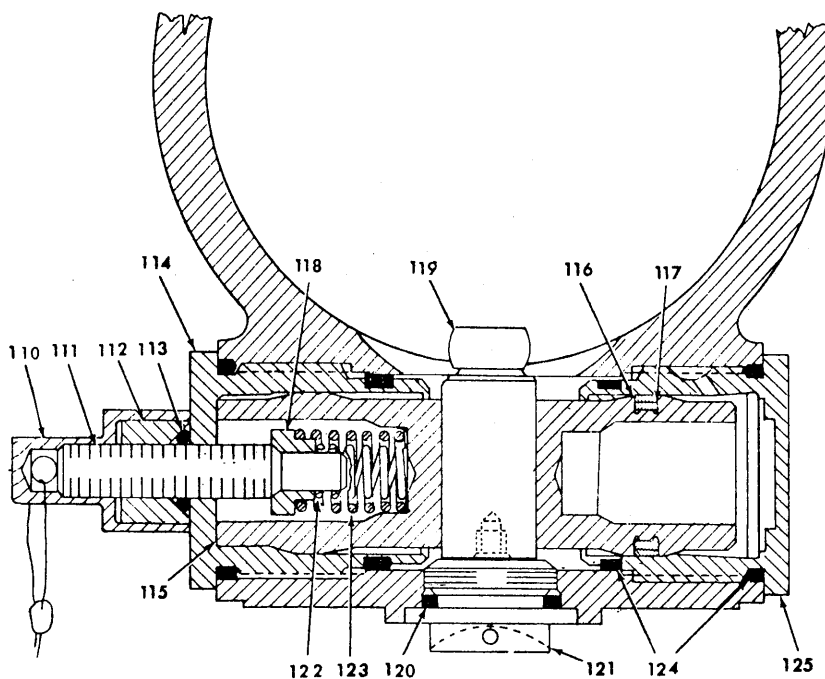
NOTE: Parts are identical to those shown on pages 52 thru 56 with the following exceptions:

1	74051002	1	COVER, governor control
5	74048639	1	CAM, shut-off
13	74061679	1	SHAFT, drive
	70910224	1	KEY, woodruff, 5/32" x 5/8"
17	74059267	1	HOUSING, pump
17A	74059239	1	TUBE, pilot (bronze)
21	74052136	1	SPRING, governor control
27	74060959	1	VALVE, metering
28	74061670	1	SPRING, metering valve
30	74048645	1	SCREW, low idle
	74051409	1	NUT, jam
31	74056488	1	SHAFT ASSY., throttle
	74056484	1	SPACER, throttle shaft arm
	74369478	1	SCREW
	74056486	1	ARM, throttle shaft
35	74061744	1	SCREW, retaining, throttle lever spring

(Continued)

PUMP ASSEMBLY 74321338 (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
36	74048645	1	SCREW, high idle
	74051409	1	NUT, jam
	74059283	1	STOP, high idle screw (Clips on housing to prevent housing wear at screw contact point)
47	74061610	1	RETAINER ASSY., governor weight (Includes item 48)
49	74059540	1	RING, cam
55	74061512	4	SHOE, cam roller
56	74059539	1	HEAD ASSY., hydraulic (Includes rotor, plunger, items 57 thru 60 and accumulator parts indented below)
	74059390	2	PISTON, accumulator
	74059392	2	SPRING, accumulator piston
	74059391	2	SCREW, accumulator piston retaining
61	74053451	1	VALVE, delivery
84	74061605	4	SCREW, end plate
90	74060065	1	SCREW ASSY., head locating (Includes ball and spring)
91	74369595	2	□RING, sealing, head locating screw
92	-----	1	WASHER
93	-----	1	SCREW
			} Omit these items
98	74056490	1	SHAFT, shut-off
	74048632	2	SCREW, stop, shut-off shaft
	74051409	2	NUT, jam
	74056484	1	SPACER, shut-off shaft arm
	74050913	1	SCREW
	74056486	1	ARM, shut-off shaft
	74054594	1	LEVER, shut-off shaft
	74051413	1	SPRING, shut-off arm
	74051412	1	RETAINER, shut-off arm spring
	74056487	1	SCREW
102 thru 109			Omit these items
110	74052917	1	CAP, advance adjusting screw
	74369430	1	WIRE, sealing
111	74054593	1	SCREW, advance adjusting
112	74054583	1	NUT, jam, advance adjusting screw
113	74369878	1	□SEAL, adjusting screw
114	74059271	1	PLUG, piston hole (spring side)
115	74061723	1	PISTON
116	74055386	1	RING, piston
117	74059064	1	□SEAL, piston ring
118	74054591	1	GUIDE, spring
119	74059066	1	PIN, cam advance
120	74054585	1	□SEAL, cam pin access plug
121	74059067	1	PLUG, cam pin access
122	74055686	1	SPRING, advance, inner
123	74055685	1	SPRING, advance, outer
124	74054589	4	□SEAL, piston hole plugs
125	74059268	1	PLUG, piston hole (power side)



PUMP ASSEMBLY 74321474

T-73659

USAGE: 745B, HB Wheel Loader with 11000 engine effective engine serial No. 11-25949 and up

ITEM PART NO. QTY. DESCRIPTION

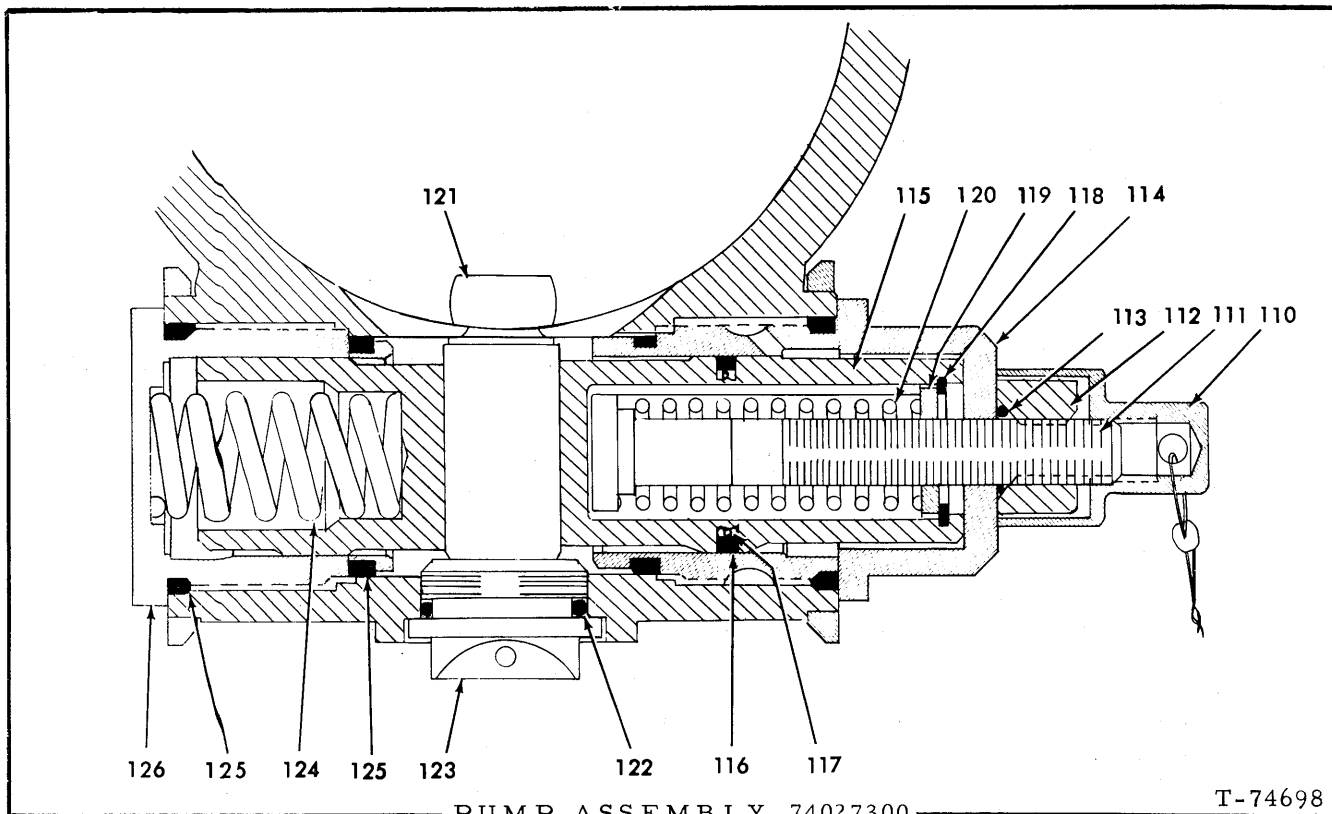
NOTE: Parts are identical to those shown on pages 52 thru 56 with the following exceptions:

1	74051102	1	COVER, governor control
5	74048639	1	CAM, shut-off
13	74061679	1	SHAFT, drive
	70910224	1	KEY, woodruff, 5/32" x 5/8"
17	74059267	1	HOUSING, pump
17A	74059239	1	TUBE, pilot (bronze)
21	74052136	1	SPRING, governor control
27	74060959	1	VALVE, metering
28	74061670	1	SPRING, metering valve
30	74048645	1	SCREW, low idle
	74051409	1	NUT, jam
31	74056488	1	SHAFT ASSY., throttle
	74056484	1	SPACER, throttle shaft arm
	74369478	1	SCREW
	74056486	1	ARM, throttle shaft

(Continued)

PUMP ASSEMBLY 74321474 (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
35	74061744	1	SCREW, retaining, throttle lever spring
36	74048645	1	SCREW, high idle
	74051409	1	NUT, jam
	74059283	1	STOP, high idle screw (Clips on housing to prevent housing wear at screw contact point)
47	74061610	1	RETAINER ASSY., governor weight (Includes item 48)
49	74061190	1	RING, cam
55	74061512	4	SHOE, cam roller
56	74059539	1	HEAD ASSY., hydraulic (Includes rotor, plunger, items 57 thru 60 and accumulator parts indented below)
	74059390	2	PISTON, accumulator
	74059392	2	SPRING, accumulator piston
	74059391	2	SCREW, accumulator piston retaining
61	74053451	1	VALVE, delivery
84	74061605	4	SCREW, end plate
90	74060065	1	SCREW ASSY., head locating (Includes ball and spring)
91	74369595	2	□RING, sealing, head locating screw
92	-----	1	WASHER } Omit these items
93	-----	1	SCREW }
98	74056490	1	SHAFT, shut-off
	74048632	2	SCREW, stop, shut-off shaft
	74051409	2	NUT, jam
	74056484	1	SPACER, shut-off shaft arm
	74050913	1	SCREW
	74056486	1	ARM, shut-off shaft
	74054594	1	LEVER, shut-off shaft
	74051413	1	SPRING, shut-off arm
	74051412	1	RETAINER, shut-off arm spring
	74056487	1	SCREW
102 thru 109		-	OMIT THESE ITEMS
110	74052917	1	CAP, advance adjusting screw
	74369430	1	WIRE, sealing
111	74054593	1	SCREW, advance adjusting
112	74054583	1	NUT, jam, advance adjusting screw
113	74369878	1	□SEAL, adjusting screw
114	74059271	1	PLUG, piston hole (spring side)
115	74061782	1	PISTON
116	74055386	1	RING, piston
117	74059064	1	□SEAL, piston ring
118	74054591	1	GUIDE, spring
119	74059066	1	PIN, cam advance
120	74059066	1	□SEAL, cam pin access plug
121	74059067	1	PLUG, cam pin access
122	74055686	1	SPRING, advance, inner
123	74055685	1	SPRING, advance, outer
124	74054589	4	□SEAL, piston hole plugs
125	74059268	1	PLUG, piston hole (power side)



USAGE: 7G series B crawler loader with 3500 engine prior to loader serial No. 27201

ITEM	PART NO.	QTY.	DESCRIPTION
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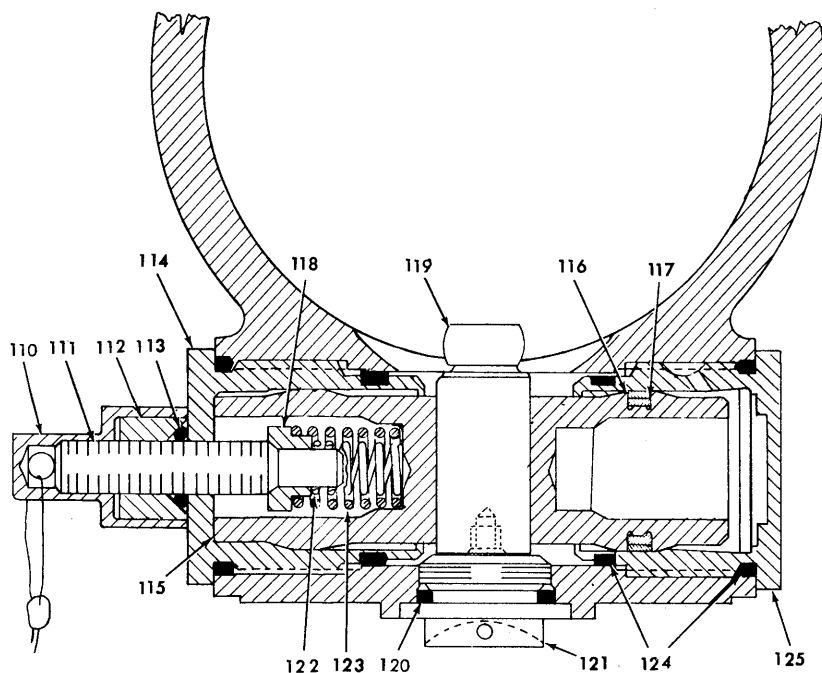
NOTE: Parts are identical to those shown on pages 52 thru 56 with the following exceptions:

1	74051807	1	COVER, governor control
5	74051559	1	CAM, shut-off
17	74059059	1	HOUSING, pump
21	74050179	1	SPRING, governor control
27	74054596	1	VALVE, metering
49	74059068	1	RING, cam
55	74058825	4	SHOE, cam roller
56	74059399	1	HEAD ASSEMBLY, hydraulic (Includes rotor, plungers, items 57 thru 60 and accumulator parts indented below)
	74059390	2	PISTON, accumulator
	74059392	2	SPRING, accumulator piston
	74059391	2	SCREW, accumulator piston retaining
61	74056127	1	VALVE, delivery
90	74059341	1	SCREW ASSEMBLY, head locating (Includes ball and spring)
91	74369595	2	ORING, sealing, head locating screw

(Continued)

PUMP ASSEMBLY 74359639(Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
35	74056487	1	SCREW, retaining, throttle lever spring
49	74059068	1	RING, cam
55	74059180	4	SHOE, cam roller
61	74059269	1	VALVE, delivery
90	74060065	1	SCREW ASSY., head locating (Includes ball and spring)
91	74369595	2	□RING, sealing, head locating screw
92	-----	1	WASHER
93	-----	1	SCREW
			} Omit these items
102 thru 109			Omit these items
110	74052917	1	CAP, advance adjusting screw
	74369430	1	WIRE, sealing
111	74054593	1	SCREW, advance adjusting
112	74054583	1	NUT, jam, advance adjusting screw
113	74369878	1	□SEAL, adjusting screw
114	74059271	1	PLUG, piston hole (spring side)
115	74059060	1	PISTON
116	74055386	1	RING, piston
117	74059064	1	□SEAL, piston ring
118	74055690	1	GUIDE, spring
119	74059066	1	PIN, cam advance
120	74054585	1	□SEAL, cam pin access plug
121	74059067	1	PLUG, cam pin access
122	74055686	1	SPRING, advance, inner
123	74055685	1	SPRING, advance, outer
124	74054589	4	□SEAL, piston hole plugs
125	74059268	1	PLUG, piston hole (power side)



PUMP ASSEMBLY 74321201

T-73659

USAGE: 12GB Crawler loader with 11000 engine effective engine serial No. 11-24059 thru 11-24806

ITEM	PART NO.	QTY.	DESCRIPTION
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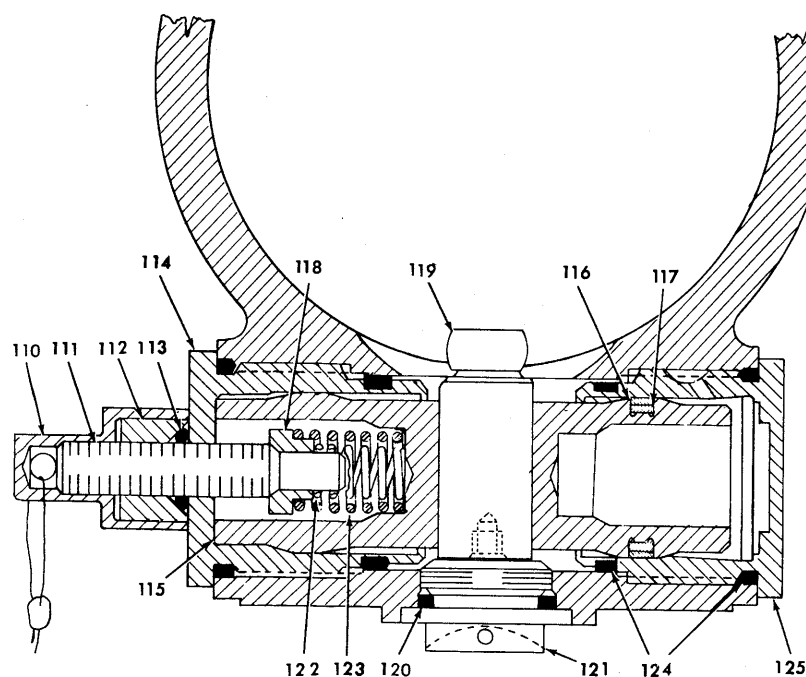
NOTE: Parts are identical to those shown on pages 52 thru 56 with the following exceptions:

1	74051002	1	COVER, governor control
5	74048639	1	CAM, shut-off
13	74061679	1	SHAFT, drive
	70910224	1	KEY, woodruff, 5/32" x 5/8"
17	74059267	1	HOUSING, pump
17A	-----	1	TUBE, pilot (Omit this item)
21	74055176	1	SPRING, governor control
27	74060959	1	VALVE, metering
28	74061670	1	SPRING, metering valve
30	74048645	1	SCREW, low idle
	74051409	1	NUT, jam
31	74056488	1	SHAFT ASSY., throttle
	74056484	1	SPACER, throttle shaft arm
	74369478	1	SCREW
	74056486	1	ARM, throttle shaft
35	74056487	1	SCREW, retaining, throttle lever spring

(Continued)

PUMP ASSEMBLY 74321201 (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
36	74048645	1	SCREW, high idle
	74051409	1	NUT, jam
	74059283	1	STOP, high idle screw (Clips on housing to prevent housing wear at screw contact point)
47	74061610	1	RETAINER ASSY., governor weight (Includes item 48)
49	74059540	1	RING, cam
55	74061509	4	SHOE, cam roller
56	74059539	1	HEAD ASSY., hydraulic (Includes rotor, plunger, items 57 thru 60 and accumulator parts indented below)
	74059390	2	PISTON, accumulator
	74059392	2	SPRING, accumulator piston
	74059391	2	SCREW, accumulator piston retaining
61	74053451	1	VALVE, delivery
84	74061605	4	SCREW, end plate
90	74060065	1	SCREW ASSY., head locating (Includes ball and spring)
91	74369595	2	□RING, sealing, head locating screw
92	-----	1	WASHER
93	-----	1	SCREW
			} Omit these items
98	74056490	1	SHAFT, shut-off
	74048632	2	SCREW, stop, shut-off shaft
	74051409	2	NUT, jam
	74056484	1	SPACER, shut-off shaft arm
	74050913	1	SCREW
	74056486	1	ARM, shut-off shaft
	74054594	1	LEVER, shut-off shaft
	74051413	1	SPRING, shut-off arm
	74051412	1	RETAINER, shut-off arm spring
	74056487	1	SCREW
102 thru 109			Omit these items
110	74052917	1	CAP, advance adjusting screw
	74369430	1	WIRE, sealing
111	74054593	1	SCREW, advance adjusting
112	74054583	1	NUT, jam, advance adjusting screw
113	74369878	1	□SEAL, adjusting screw
114	74059271	1	PLUG, piston hole (spring side)
115	74060219	1	PISTON
116	74055386	1	RING, piston
117	74059064	1	□SEAL, piston ring
118	74055690	1	GUIDE, spring
119	74059066	1	PIN, cam advance
120	74054585	1	□SEAL, cam pin access plug
121	74059067	1	PLUG, cam pin access
122	74055686	1	SPRING, advance, inner
123	74055685	1	SPRING, advance, outer
124	74054589	4	□SEAL, piston hole plugs
125	74059268	1	PLUG, piston hole (power side)



T-73659

PUMP ASSEMBLY 74321337

USAGE: 12GB Crawler loader with 11000 engine effective engine serial No. 11-24807 thru No. 11-25948.

ITEM	PART NO.	QTY.	DESCRIPTION
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NOTE: Parts are identical to those shown on pages 52 thru 56 with the following exceptions:

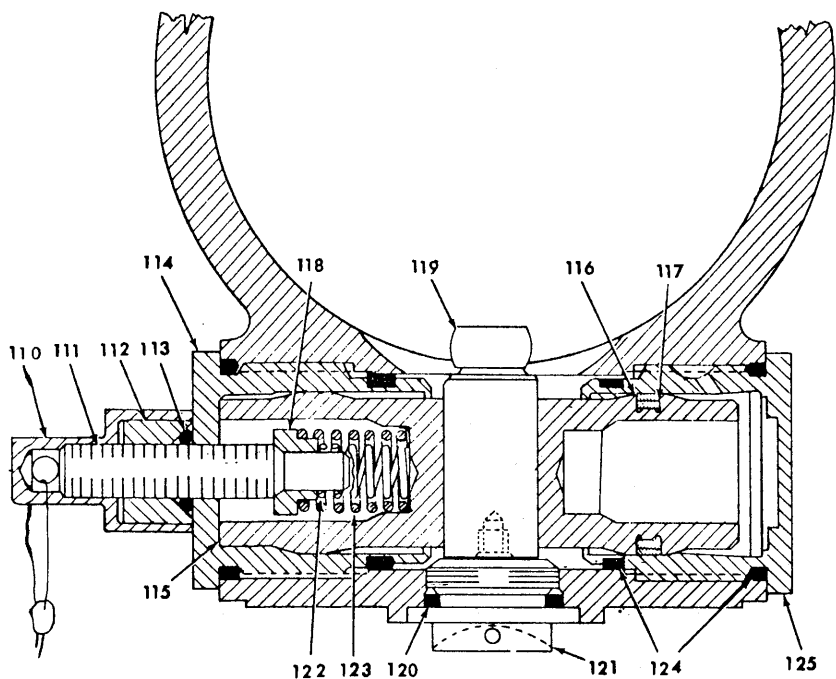
1	74051002	1	COVER, governor control
5	74048639	1	CAM, shut-off
13	74061679	1	SHAFT, drive
	70910224	1	KEY, woodruff, 5/32" x 5/8"
17	74059267	1	HOUSING, pump
17A	-----	1	TUBE, pilot (Omit this item)
21	74055176	1	SPRING, governor control
27	74060959	1	VALVE, metering
28	74061670	1	SPRING, metering valve
30	74048645	1	SCREW, low idle
	74051409	1	NUT, jam
	74056488	1	SHAFT ASSY., throttle
31	74056484	1	SPACER, throttle shaft arm
	74369478	1	SCREW
	74056486	1	ARM, throttle shaft
35	74061744	1	SCREW, retaining, throttle lever spring

(Continued)

(Revised December 1976)

PUMP ASSEMBLY 74321337 (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
36	74048645	1	SCREW, high idle
	74051409	1	NUT, jam
	74059283	1	STOP, high idle screw (Clips on housing to prevent housing wear at screw contact point)
47	74061610	1	RETAINER ASSY., governor weight (Includes item 48)
49	74059540	1	RING, cam
55	74061509	4	SHOE, cam roller
56	74059539	1	HEAD ASSY., hydraulic (Includes rotor, plunger, items 57 thru 60 and accumulator parts indented below)
	74059390	2	PISTON, accumulator
	74059392	2	SPRING, accumulator piston
	74059391	2	SCREW, accumulator piston retaining
61	74053451	1	VALVE, delivery
84	74061605	4	SCREW, end plate
90	74060065	1	SCREW ASSY., head locating (Includes ball and spring)
91	74369595	2	□RING, sealing, head locating screw
92	-----	1	WASHER
93	-----	1	SCREW
			} Omit these items
98	74056490	1	SHAFT, shut-off
	74048632	2	SCREW, stop, shut-off shaft
	74051409	2	NUT, jam
	74056484	1	SPACER, shut-off shaft arm
	74050913	1	SCREW
	74056486	1	ARM, shut-off shaft
	74054594	1	LEVER, shut-off shaft
	74051413	1	SPRING, shut-off arm
	74051412	1	RETAINER, shut-off arm spring
			SCREW
102 thru 109			Omit these items
110	74052917	1	CAP, advance adjusting screw
	74369430	1	WIRE, sealing
111	74054593	1	SCREW, advance adjusting
112	74054583	1	NUT, jam, advance adjusting screw
113	74369878	1	□SEAL, adjusting screw
114	74059271	1	PLUG, piston hole (spring side)
115	74061723	1	PISTON
116	74055386	1	RING, piston
117	74059064	1	□SEAL, piston ring
118	74054591	1	GUIDE, spring
119	74059066	1	PIN, cam advance
120	74054585	1	□SEAL, cam pin access plug
121	74059067	1	PLUG, cam pin access
122	74055686	1	SPRING, advance, inner
123	74055685	1	SPRING, advance, outer
124	74054589	4	□SEAL, piston hole plugs
125	74059268	1	PLUG, piston hole (power side)



PUMP ASSEMBLY 74321473

T-73659

USAGE: 12GB Crawler Loader with 11000 engine effective engine serial No. 11-25949 and up

ITEM PART NO. QTY. DESCRIPTION

NOTE: Parts are identical to those shown on pages 52 thru 56 with the following exceptions:

1	74051002	1	COVER, governor control
5	74048639	1	CAM, shut-off
13	74061679	1	SHAFT, drive
	70910224	1	KEY, woodruff, 5/32" x 5/8"
17	74059267	1	HOUSING, pump
17A	-----	1	TUBE, pilot (Omit this item)
21	74055176	1	SPRING, governor control
27	74060959	1	VALVE, metering
28	74061670	1	SPRING, metering valve
30	74048645	1	SCREW, low idle
	74051409	1	NUT, jam
31	74056488	1	SHAFT ASSY., throttle
	74056484	1	SPACER, throttle shaft arm
	74369478	1	SCREW
	74056486	1	ARM, throttle shaft

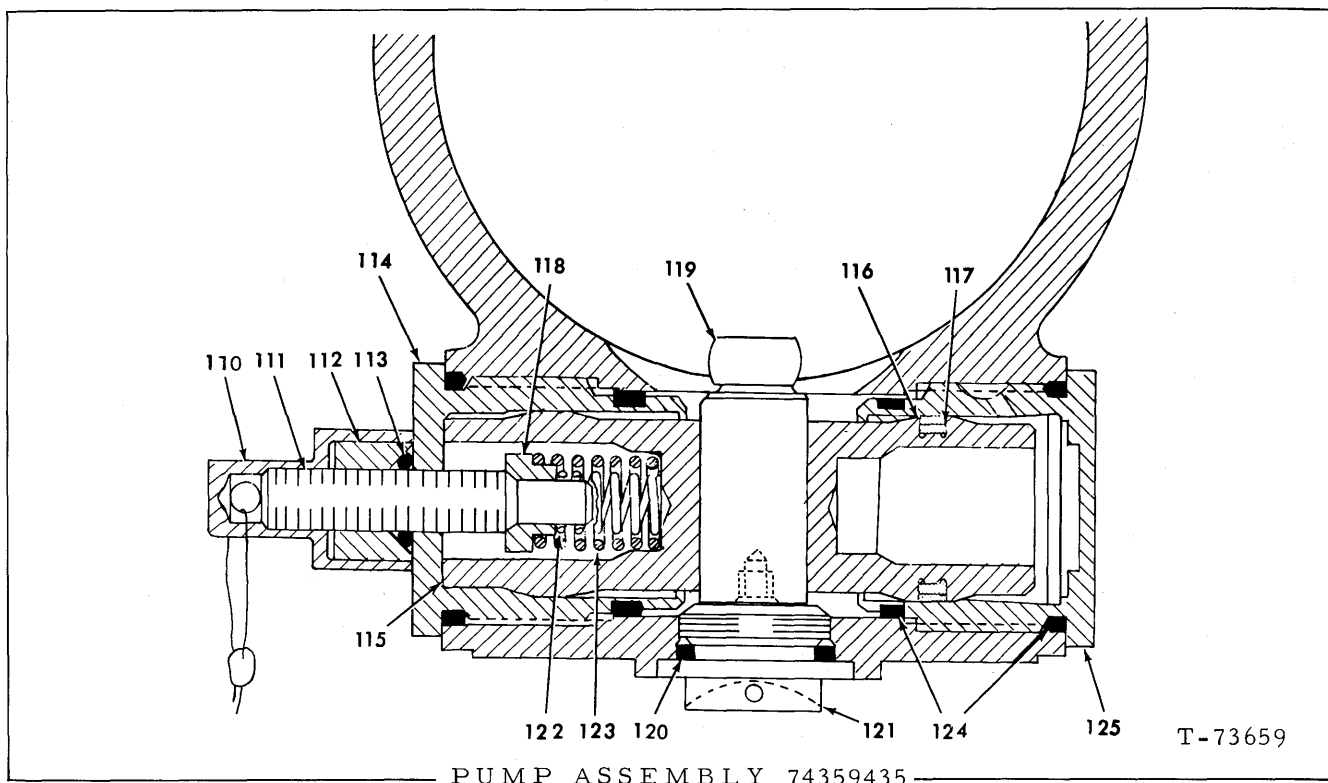
(Continued)

(Added December 1976)

PUMP ASSEMBLY 74321473 (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
35	74061744	1	SCREW, retaining, throttle lever spring
36	74048645	1	SCREW, high idle
	74051409	1	NUT, jam
	74059283	1	STOP, high idle screw (Clips on housing to prevent housing wear at screw contact point)
47	74061610	1	RETAINER ASSY., governor weight (Includes item 48)
49	74061190	1	RING, cam
55	74061509	4	SHOE, cam roller
56	74059539	1	HEAD ASSY., hydraulic (Includes rotor, plunger, items 57 thru 60 and accumulator parts indented below)
	74059390	2	PISTON, accumulator
	74059392	2	SPRING, accumulator piston
	74059391	2	SCREW, accumulator piston retaining
61	74053451	1	VALVE, delivery
84	74061605	4	SCREW, end plate
90	74060065	1	SCREW ASSY., head locating (Includes ball and spring)
91	74369595	2	□RING, sealing, head locating screw
92	-----	1	WASHER } Omit these items
93	-----	1	SCREW }
98	74056490	1	SHAFT, shut-off
	74048632	2	SCREW, stop, shut-off shaft
	74051409	2	NUT, jam
	74056484	1	SPACER, shut-off shaft arm
	74050913	1	SCREW
	74056486	1	ARM, shut-off shaft
	74054594	1	LEVER, shut-off shaft
	74051413	1	SPRING, shut-off arm
	74051412	1	RETAINER, shut-off arm spring
	74056487	1	SCREW
102 thru 109		-	OMIT THESE ITEMS
110	74052917	1	CAP, advance adjusting screw
	74369430	1	WIRE, sealing
111	74054593	1	SCREW, advance adjusting
112	74054583	1	NUT, jam, advance adjusting screw
113	74369878	1	□SEAL, adjusting screw
114	74059271	1	PLUG, piston hole (spring side)
115	74061782	1	PISTON
116	74055386	1	RING, piston
117	74059064	1	□SEAL, piston ring
118	74054591	1	GUIDE, spring
119	74059066	1	PIN, cam advance
120	74054585	1	□SEAL, cam pin access plug
121	74059067	1	PLUG, cam pin access
122	74055686	1	SPRING, advance, inner
123	74055685	1	SPRING, advance, outer
124	74054589	4	□SEAL, piston hole plugs
125	74059268	1	PLUG, piston hole (power side)

(Added December 1976)



USAGE: M100 Series B grader with 11000 engine effective grader S/N 67S05001 thru 67S05189, excluding 67S05130 thru 67S05157.

ITEM	PART NO.	QTY.	DESCRIPTION
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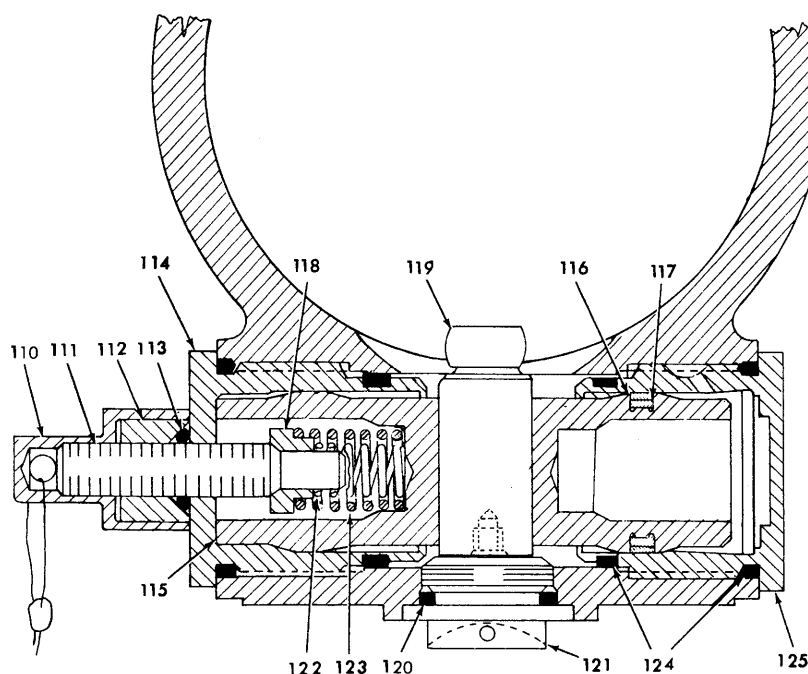
NOTE: Parts are identical to those shown on pages 52 thru 56 with the following exceptions:

1	74051002	1	COVER, governor control
5	74048639	1	CAM, shut-off
13	74058965	1	SHAFT, drive
	70910224	1	KEY, woodruff, 5/32" x 5/8"
17	74059267	1	HOUSING, pump
	74059283	1	STOP, high idle screw (Clips on housing to prevent wear at idle screw contact point)
17A	-----	1	TUBE, pilot (Omit this item)
21	74050179	1	SPRING, governor control
27	74054596	1	VALVE, metering
31	74056488	1	SHAFT ASSEMBLY, throttle
	74056484	1	SPACER, throttle shaft arm
	74050913	1	SCREW
	74056486	1	ARM, throttle shaft
35	74056487	1	SCREW, retaining, throttle lever spring
49	74059068	1	RING, cam
55	74058825	4	SHOE, cam roller
61	74059269	1	VALVE, delivery
90	74060190	1	SCREW ASSY., head locating (Includes ball and spring)
91	74369595	2	ORING, sealing, head locating screw

(Continued)

PUMP ASSEMBLY 74028437 (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
90	74060065	1	SCREW ASSY., head locating (Includes ball and spring)
91	74369595	2	RING, sealing, head locating screw
92	-----	1	WASHER
93	-----	1	SCREW
} Omit these items			
98	74054845	1	SHAFT, shut-off
	74054594	1	LEVER, shut-off shaft
	74051413	1	SPRING, shut-off lever
	74051412	1	RETAINER, shut-off lever spring
	74055625	1	SCREW, spring retainer
	74048645	2	SCREW, adjusting, shut-off
	74369507	2	NUT, jam
102 thru 109			Omit these items
110	74052917	1	CAP, advance adjusting screw
	74369430	1	WIRE, sealing
111	74059395	1	SCREW, advance adjusting
112	74054583	1	NUT, jam, advance adjusting screw
113	74369878	1	□SEAL, adjusting screw
114	74059394	1	PLUG, piston hole (power side)
115	74059541	1	PISTON, advance
116	74055386	1	RING, piston
117	74059064	1	□SEAL, piston ring
118	74059397	1	RING, retaining, adjusting spring
119	74059396	1	WASHER, adjusting spring
120	74059667	1	SPRING, advance adjusting
121	74059066	1	PIN, cam advance
122	74054585	1	□SEAL, cam pin access plug
123	74059067	1	PLUG, cam pin access
124	74059061	1	PLUG, piston hole (spring side)
125	74054589	4	□SEAL, piston hole plugs



T-73859

PUMP ASSEMBLY 74321205

USAGE: 100C Grader with 11000 engine, effective engine serial No. 11-24110 thru No. 11-26357; also 150C Grader effective engine serial No. 11-24131 thru No. 11-26357.
Not used on 150-C Graders serial No. 99C01453, 01454, 01455, 01456, 01457 and 01459.

ITEM	PART NO.	QTY.	DESCRIPTION
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NOTE: Parts are identical to those shown on page 52 thru 56 with the following exceptions:

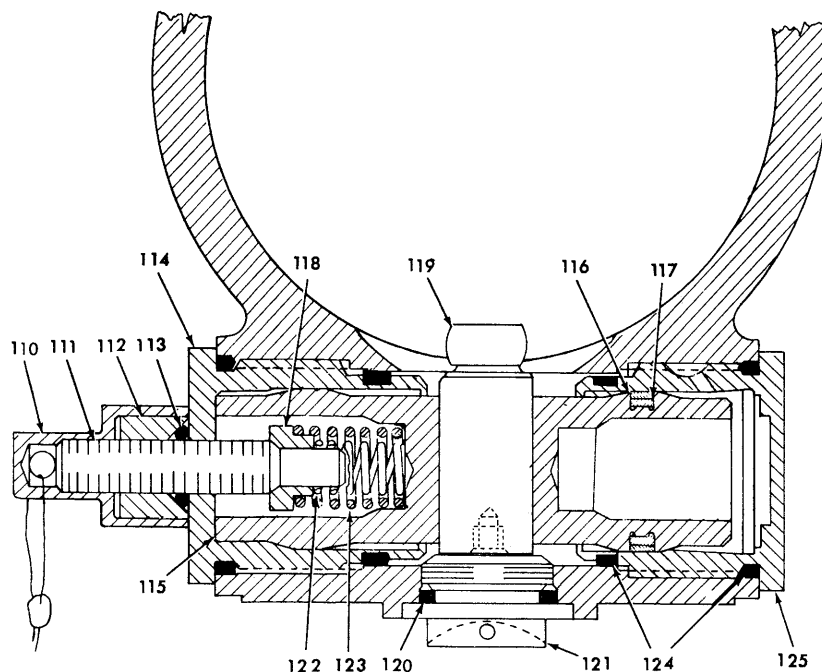
1	74051002	1	COVER, governor control
5	74048639	1	CAM, shut-off
13	74061679	1	SHAFT, drive
	70910224	1	KEY, woodruff, 5/32" x 5/8"
17	74059267	1	HOUSING, pump
17A	74059239	1	TUBE, pilot (bronze)
21	74061792	1	SPRING, governor control
27	74060959	1	VALVE, metering
28	74061670	1	SPRING, metering valve
30	74048645	1	SCREW, low idle
	74051409	1	NUT, jam
31	74056488	1	SHAFT ASSY., throttle
	74056484	1	SPACER, throttle shaft arm
	74369478	1	SCREW
	74056486	1	ARM, throttle shaft

(Continued)

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PUMP ASSEMBLY 74321205 (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
35	74056487	1	SCREW, retaining, throttle lever spring
36	74048645	1	SCREW, high idle
	74051409	1	NUT, jam
	74059283	1	STOP, high idle screw (Clips on housing to prevent housing wear at screw contact point)
47	74061610	1	RETAINER ASSY., governor weight (Includes item 48)
49	74059540	1	RING, cam
55	74061590	4	SHOE, cam roller
56	74059539	1	HEAD ASSY., hydraulic (Includes rotor, plunger, items 57 thru 60 and accumulator parts indented below)
	74059390	2	PISTON, accumulator
	74059392	2	SPRING, accumulator piston
	74059391	2	SCREW, accumulator piston retaining
61	74053451	1	VALVE, delivery
84	74061605	4	SCREW, end plate
90	74060065	1	SCREW ASSY., head locating (Includes ball and spring)
91	74369595	2	□RING, sealing, head locating screw
92	-----	1	WASHER
93	-----	1	SCREW
			} Omit these items
98	74056490	1	SHAFT, shut-off
	74048632	2	SCREW, stop, shut-off shaft
	74051409	2	NUT, jam
	74056484	1	SPACER, shut-off shaft arm
	74050913	1	SCREW
	74056486	1	ARM, shut-off shaft
	74054594	1	LEVER, shut-off shaft
	74051413	1	SPRING, shut-off arm
	74051412	1	RETAINER, shut-off arm spring
	74056487	1	SCREW
102 thru 109			Omit these items
110	74052917	1	CAP, advance adjusting screw
	74369430	1	WIRE, sealing
111	74054593	1	SCREW, advance adjusting
112	74054583	1	NUT, jam, advance adjusting screw
113	74369878	1	□SEAL, adjusting screw
114	74059271	1	PLUG, piston hole (spring side)
115	74060219	1	PISTON
116	74055386	1	RING, piston
117	74059064	1	□SEAL, piston ring
118	74054591	1	GUIDE, spring
119	74059066	1	PIN, cam advance
120	74054585	1	□SEAL, cam pin access plug
121	74059067	1	PLUG, cam pin access
122	74055686	1	SPRING, advance, inner
123	74055685	1	SPRING, advance, outer
124	74054589	4	□SEAL, piston hole plugs
125	74059268	1	PLUG, piston hole (power side)



T-73659

PUMP ASSEMBLY 74321206
 USAGE: 200C Grader with 11000 engine effective engine serial No. 11-24131 thru No. 11-25948

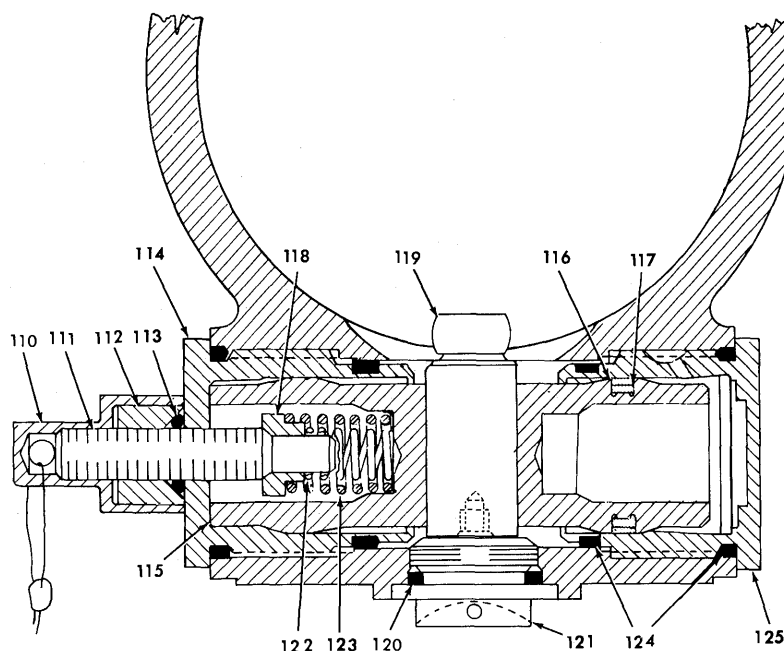
ITEM	PART NO.	QTY.	DESCRIPTION
NOTE: Parts are identical to those shown on pages 52 thru 56 with the following exceptions:			
1	74051002	1	COVER, governor control
5	74048639	1	CAM, shut-off
13	74061679	1	SHAFT, drive
	70910224	1	KEY, woodruff, 5/32" x 5/8"
17	74059267	1	HOUSING, pump
17A	74059239	1	TUBE, pilot (bronze)
21	74061792	1	SPRING, governor control
27	74060959	1	VALVE, metering
28	74061670	1	SPRING, metering valve
30	74048645	1	SCREW, low idle
	74051409	1	NUT, jam
31	74056488	1	SHAFT ASSY., throttle
	74056484	1	SPACER, throttle shaft arm
	74369478	1	SCREW
	74056486	1	ARM, throttle shaft
35	74056487	1	SCREW, retaining, throttle lever spring

(Continued)

(Revised December 1976)

PUMP ASSEMBLY 74321206 (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
36	74048645	1	SCREW, high idle
	74051409	1	NUT, jam
	74059283	1	STOP, high idle screw (Clips on housing to prevent housing wear at screw contact point)
47	74061610	1	RETAINER ASSY., governor weight (Includes item 48)
49	74059540	1	RING, cam
55	74061509	4	SHOE, cam roller
56	74059539	1	HEAD ASSY., hydraulic (Includes rotor, plunger, items 57 thru 60 and accumulator parts indented below)
	74059390	2	PISTON, accumulator
	74059392	2	SPRING, accumulator piston
	74059391	2	SCREW, accumulator piston retaining
61	74053451	1	VALVE, delivery
84	74061605	4	SCREW, end plate
90	74060065	1	SCREW ASSY., head locating (Includes ball and spring)
91	74369595	2	□RING, sealing, head locating screw
92	-----	1	WASHER
93	-----	1	SCREW
			} Omit these items
	74056490	1	SHAFT, shut-off
	74048632	2	SCREW, stop, shut-off shaft
	74051409	2	NUT, jam
	74056484	1	SPACER, shut-off shaft arm
	74050913	1	SCREW
98	74056486	1	ARM, shut-off shaft
	74054594	1	LEVER, shut-off shaft
	74051413	1	SPRING, shut-off arm
	74051412	1	RETAINER, shut-off arm spring
	74056487	1	SCREW
102 thru 109			Omit these items
110	74052917	1	CAP, advance adjusting screw
	74369430	1	WIRE, sealing
111	74054593	1	SCREW, advance adjusting
112	74054583	1	NUT, jam, advance adjusting screw
113	74369878	1	□SEAL, adjusting screw
114	74059271	1	PLUG, piston hole (spring side)
115	74060219	1	PISTON
116	74055386	1	RING, piston
117	74059064	1	□SEAL, piston ring
118	74055690	1	GUIDE, spring
119	74059066	1	PIN, cam advance
120	74054585	1	□SEAL, cam pin access plug
121	74059067	1	PLUG, cam pin access
122	74055686	1	SPRING, advance, inner
123	74055685	1	SPRING, advance, outer
124	74054589	4	□SEAL, piston hole plugs
125	74059268	1	PLUG, piston hole (power side)



PUMP ASSEMBLY 74359518

T-73659

USAGE: HD-11E Crawler Tractor with 11000 engine effective engine serial No. 11-17106

ITEM	PART NO.	QTY.	DESCRIPTION
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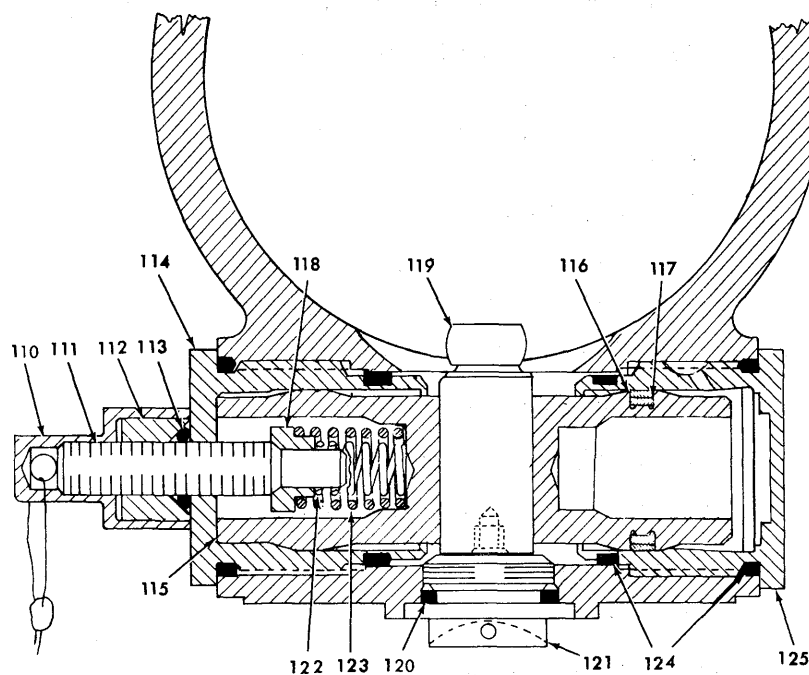
NOTE: Parts are identical to those shown on pages 52 thru 56 with the following exceptions:

1	74054587	1	COVER, governor control
	74051363	1	SCREW, adjusting, low idle
	74051365	1	SEAL, idle screw
	74051364	1	WASHER, idle screw
	74051409	1	NUT, jam, idle screw
5	74048639	1	CAM, shut-off
13	74058965	1	SHAFT, drive
	70910224	1	KEY, woodruff, 5/32" x 5/8"
17	74059267	1	HOUSING, pump
	74059283	1	STOP, high idle screw (Clips on housing to prevent wear at idle screw contact point)
17A	-----	1	TUBE, pilot (omit this item)
21	74055176	1	SPRING, governor control
27	74054596	1	VALVE, metering
31	74056488	1	SHAFT ASSY., throttle
	74056484	1	SPACER, throttle shaft arm
	74050913	1	SCREW
	74056486	1	ARM, throttle shaft

(Continued)

PUMP ASSEMBLY 74028435 (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
90	74060065	1	SCREW ASSY., head locating (Includes ball and spring)
91	74369595	2	RING, sealing, head locating screw
92	-----	1	WASHER
93	-----	1	SCREW
			} Omit these items
102 thru 109			Omit these items
110	74052917	1	CAP, advance adjusting screw
	74369430	1	WIRE, sealing
111	74059395	1	SCREW, advance adjusting
112	74054583	1	NUT, jam, advance adjusting screw
113	74369878	1	□ SEAL, adjusting screw
114	74059394	1	PLUG, piston hole (power side)
115	74059541	1	PISTON, advance
116	74055386	1	RING, piston
117	74059064	1	□ SEAL, piston ring
118	74059397	1	RING, retaining, adjusting spring
119	74059396	1	WASHER, adjusting spring
120	74059667	1	SPRING, advance adjusting
121	74059066	1	PIN, cam advance
122	74054585	1	□ SEAL, cam pin access plug
123	74059067	1	PLUG, cam pin access
124	74059061	1	PLUG, piston hole (spring side)
125	74054589	4	□ SEAL, piston hole plugs



T-73659

PUMP ASSEMBLY 74321202

USAGE: 11B (Direct Drive) with 11000 engines effective engine serial No. 11-24094. See page 99E for service replacement.

ITEM	PART NO.	QTY.	DESCRIPTION
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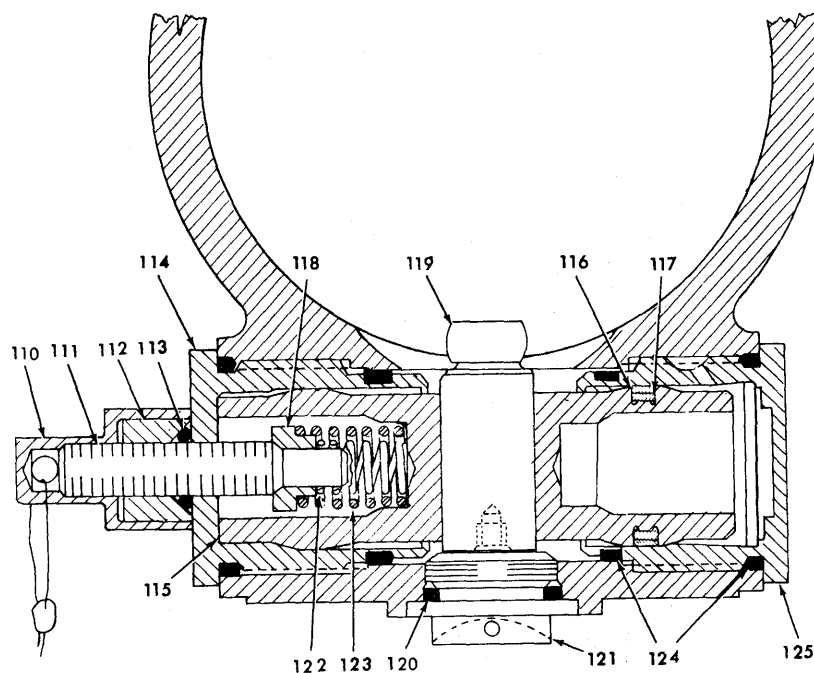
NOTE: Parts are identical to those shown on pages 52 thru 56 with the following exceptions:

1	74051002	1	COVER, governor control
5	74048639	1	CAM, shut-off
13	74061679	1	SHAFT, drive
	70910224	1	KEY, woodruff, 5/32" x 5/8"
17	74059267	1	HOUSING, pump
17A	74059239	1	TUBE, pilot (bronze)
21	74055176	1	SPRING, governor control
27	74060959	1	VALVE, metering
28	74061670	1	SPRING, metering valve
30	74048645	1	SCREW, low idle
	74051409	1	NUT, jam
31	74056488	1	SHAFT ASSY., throttle
	74056484	1	SPACER, throttle shaft arm
	74369478	1	SCREW
	74056486	1	ARM, throttle shaft
35	74056487	1	SCREW, retaining, throttle lever spring

(Continued)

PUMP ASSEMBLY 74321202 (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
36	74048645	1	SCREW, high idle
	74051409	1	NUT, jam
	74059283	1	STOP, high idle screw (Clips on housing to prevent housing wear at screw contact point)
47	74061610	1	RETAINER ASSY., governor weight (Includes item 48)
49	74059540	1	RING, cam
55	74061590	4	SHOE, cam roller
56	74059539	1	HEAD ASSY., hydraulic (Includes rotor, plunger, items 57 thru 60 and accumulator parts indented below)
	74059390	2	PISTON, accumulator
	74059392	2	SPRING, accumulator piston
	74059391	2	SCREW, accumulator piston retaining
61	74053451	1	VALVE, delivery
84	74061605	4	SCREW, end plate
90	74060065	1	SCREW ASSY., head locating (Includes ball and spring)
91	74369595	2	□RING, sealing, head locating screw
92	-----	1	WASHER
93	-----	1	SCREW
			} Omit these items
98	74056490	1	SHAFT, shut-off
	74048632	2	SCREW, stop, shut-off shaft
	74051409	2	NUT, jam
	74056484	1	SPACER, shut-off shaft arm
	74050913	1	SCREW
	74056486	1	ARM, shut-off shaft
	74054594	1	LEVER, shut-off shaft
	74051413	1	SPRING, shut-off arm
	74051412	1	RETAINER, shut-off arm spring
	74056487	1	SCREW
102 thru 109			Omit these items
110	74052917	1	CAP, advance adjusting screw
	74369430	1	WIRE, sealing
111	74054593	1	SCREW, advance adjusting
112	74054583	1	NUT, jam, advance adjusting screw
113	74369878	1	□SEAL, adjusting screw
114	74059271	1	PLUG, piston hole (spring side)
115	74060219	1	PISTON
116	74055386	1	RING, piston
117	74059064	1	□SEAL, piston ring
118	74054591	1	GUIDE, spring
119	74059066	1	PIN, cam advance
120	74054585	1	□SEAL, cam pin access plug
121	74059067	1	PLUG, cam pin access
122	74055686	1	SPRING, advance, inner
123	74055685	1	SPRING, advance, outer
124	74054589	4	□SEAL, piston hole plugs
125	74059268	1	PLUG, piston hole (power side)



T-73659

PUMP ASSEMBLY 74321203

USAGE: 11B (Power Shift) with 11000 engine effective engine serial No. 11-24069 thru No. 11-26333.

ITEM	PART NO.	QTY.	DESCRIPTION
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NOTE: Parts are identical to those shown on pages 52 thru 56 with the following exceptions:

1	74051002	1	COVER, governor control
5	74048639	1	CAM, shut-off
13	74061679	1	SHAFT, drive
	70910224	1	KEY, woodruff, 5 ⁷ / ₃₂ " x 5 ⁸ / ₈ "
17	74059267	1	HOUSING, pump
17A	74059239	1	TUBE, pilot (bronze)
21	74052136	1	SPRING, governor control
27	74060959	1	VALVE, metering
28	74061670	1	SPRING, metering valve
30	74048645	1	SCREW, low idle
	74051409	1	NUT, jam
31	74056488	1	SHAFT ASSY., throttle
	74056484	1	SPACER, throttle shaft arm
	74369478	1	SCREW
	74056486	1	ARM, throttle shaft
35	74056487	1	SCREW, retaining, throttle lever spring

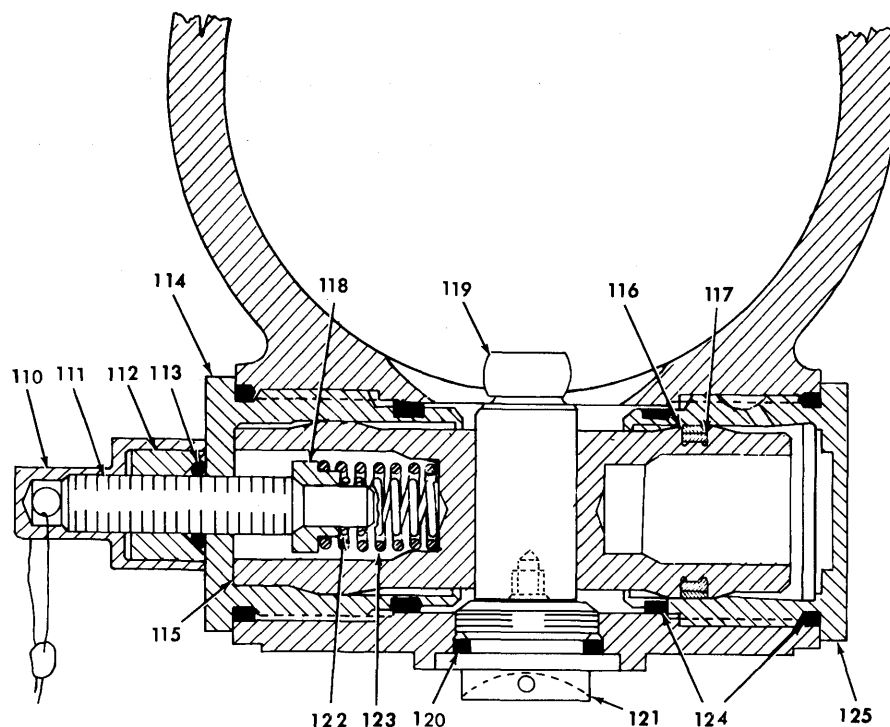
(Continued)

99C

(Revised December 1976)

PUMP ASSEMBLY 74321203 (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
36	74048645	1	SCREW, high idle
	74051409	1	NUT, jam
	74059283	1	STOP, high idle screw (Clips on housing to prevent housing wear at screw contact point)
47	74061610	1	RETAINER ASSY., governor weight (Includes item 48)
49	74059540	1	RING, cam
55	74061590	4	SHOE, cam roller
56	74059539	1	HEAD ASSY., hydraulic (Includes rotor, plunger, items 57 thru 60 and accumulator parts indented below)
	74059390	2	PISTON, accumulator
	74059392	2	SPRING, accumulator piston
	74059391	2	SCREW, accumulator piston retaining
61	74053451	1	VALVE, delivery
84	74061605	4	SCREW, end plate
90	74060065	1	SCREW ASSY., head locating (Includes ball and spring)
91	74369595	2	□RING, sealing, head locating screw
92	-----	1	WASHER
93	-----	1	SCREW
			} Omit these items
	74056490	1	SHAFT, shut-off
	74048632	2	SCREW, stop, shut-off shaft
	74051409	2	NUT, jam
	74056484	1	SPACER, shut-off shaft arm
98	74050913	1	SCREW
	74056486	1	ARM, shut-off shaft
	74054594	1	LEVER, shut-off shaft
	74051413	1	SPRING, shut-off arm
	74051412	1	RETAINER, shut-off arm spring
	74056487	1	SCREW
102 thru 109			Omit these items
110	74052917	1	CAP, advance adjusting screw
	74369430	1	WIRE, sealing
111	74054593	1	SCREW, advance adjusting
112	74054583	1	NUT, jam, advance adjusting screw
113	74369878	1	□SEAL, adjusting screw
114	74059271	1	PLUG, piston hole (spring side)
115	74060219	1	PISTON
116	74055386	1	RING, piston
117	74059064	1	□SEAL, piston ring
118	74054591	1	GUIDE, spring
119	74059066	1	PIN, cam advance
120	74054585	1	□SEAL, cam pin access plug
121	74059067	1	PLUG, cam pin access
122	74055686	1	SPRING, advance, inner
123	74055685	1	SPRING, advance, outer
124	74054589	4	□SEAL, piston hole plugs
125	74059268	1	PLUG, piston hole (power side)



T-73659

PUMP ASSEMBLY 74321476

USAGE: 11B (Direct Drive) with 11000 engine (Service replacement for PUMP ASSEMBLY 74321202)

ITEM	PART NO.	QTY.	DESCRIPTION
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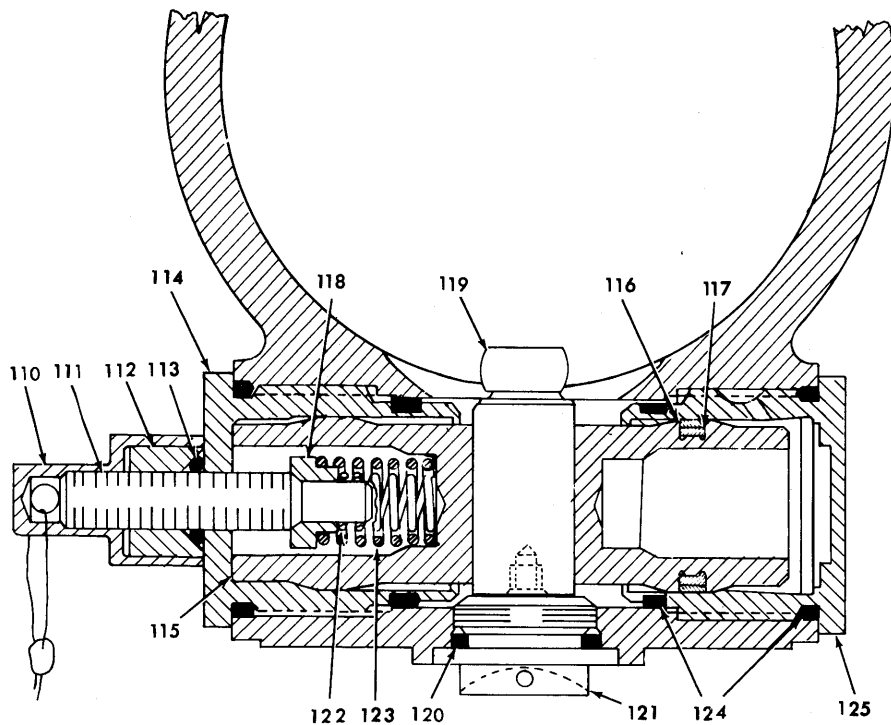
NOTE: Parts are identical to those shown on pages 52 thru 56 with the following exceptions:

1	74051002	1	COVER, governor control
5	74048639	1	CAM, shut-off
13	74061679	1	SHAFT, drive
	70910224	1	KEY, woodruff, 5/32" x 5/8"
17	74059267	1	HOUSING, pump
17A	74059239	1	TUBE, pilot (bronze)
21	74055176	1	SPRING, governor control
27	74060959	1	VALVE, metering
28	74061670	1	SPRING, metering valve
30	74048645	1	SCREW, low idle
	74051409	1	NUT, jam
31	74056488	1	SHAFT ASSY., throttle
	74056484	1	SPACER, throttle shaft arm
	74369478	1	SCREW
	74056486	1	ARM, throttle shaft
35	74056487	1	SCREW, retaining, throttle lever spring
36	74048645	1	SCREW, high idle
	74051409	1	NUT, jam
	74059283	1	STOP, high idle screw (Clips on housing to prevent housing wear at screw contact point)

(Continued)

PUMP ASSEMBLY 74321476 (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
47	74061610	1	RETAINER ASSY., governor weight (Includes item 48)
49	74061190	1	RING, cam
55	74061590	4	SHOE, cam roller
56	74059539	1	HEAD ASSY., hydraulic (Includes rotor, plunger, items 57 thru 60 and accumulator parts indented below)
	74059390	2	PISTON, accumulator
	74059392	2	SPRING, accumulator piston
	74059391	2	SCREW, accumulator piston retaining
61	74053451	1	VALVE, delivery
84	74061605	4	SCREW, end plate
90	74060065	1	SCREW ASSY., head locating (Includes ball and spring)
91	74369595	2	□RING, sealing, head locating screw
92	-----	1	WASHER } Omit these items
93	-----	1	SCREW }
98	74056490	1	SHAFT, shut-off
	74048632	2	SCREW, stop, shut-off shaft
	74051409	2	NUT, jam
	74056484	1	SPACER, shut-off shaft arm
	74050913	1	SCREW
	74056486	1	ARM, shut-off shaft
	74054594	1	LEVER, shut-off shaft
	74051413	1	SPRING, shut-off arm
	74051412	1	RETAINER, shut-off arm spring
	74056487	1	SCREW
102 thru 109			Omit these items
110	74052917	1	CAP, advance adjusting screw
	74369430	1	WIRE, sealing
111	74054593	1	SCREW, advance adjusting
112	74054583	1	NUT, jam, advance adjusting screw
113	74369878	1	□SEAL, adjusting screw
114	74059271	1	PLUG, piston hole (spring side)
115	74061782	1	PISTON
116	74055386	1	RING, piston
117	74059064	1	□SEAL, piston ring
118	74054591	1	GUIDE, spring
119	74059066	1	PIN, cam advance
120	74054585	1	□SEAL, cam pin access plug
121	74059067	1	PLUG, cam pin access
122	74055686	1	SPRING, advance, inner
123	74055685	1	SPRING, advance, outer
124	74054589	4	□SEAL, piston hole plugs
125	74059268	1	PLUG, piston hole (power side)



PUMP ASSEMBLY 74321477

T-73659

USAGE: 11B (Power Shift) with 11000 engine (Effective engine serial No. 11-26334 and up)

ITEM	PART NO.	QTY.	DESCRIPTION
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NOTE: Parts are identical to those shown on pages 52 thru 56 with the following exceptions:

1	74051002	1	COVER, governor control
5	74048639	1	CAM, shut-off
13	74061679	1	SHAFT, drive
	70910224	1	KEY, woodruff, 5/32" x 5/8"
17	74059267	1	HOUSING, pump
17A	74059239	1	TUBE, pilot (bronze)
21	74052136	1	SPRING, governor control
27	74060959	1	VALVE, metering
28	74061670	1	SPRING, metering valve
30	74048645	1	SCREW, low idle
	74051409	1	NUT, jam
31	74056488	1	SHAFT ASSY., throttle
	74056484	1	SPACER, throttle shaft arm
	74369478	1	SCREW
	74056486	1	ARM, throttle shaft
35	74056487	1	SCREW, retaining, throttle lever spring
36	74048645	1	SCREW, high idle
	74051409	1	NUT, jam
	74059283	1	STOP, high idle screw (Clips on housing to prevent housing wear at screw contact point)
47	74061610	1	RETAINER ASSY., governor weight (Includes item 48)

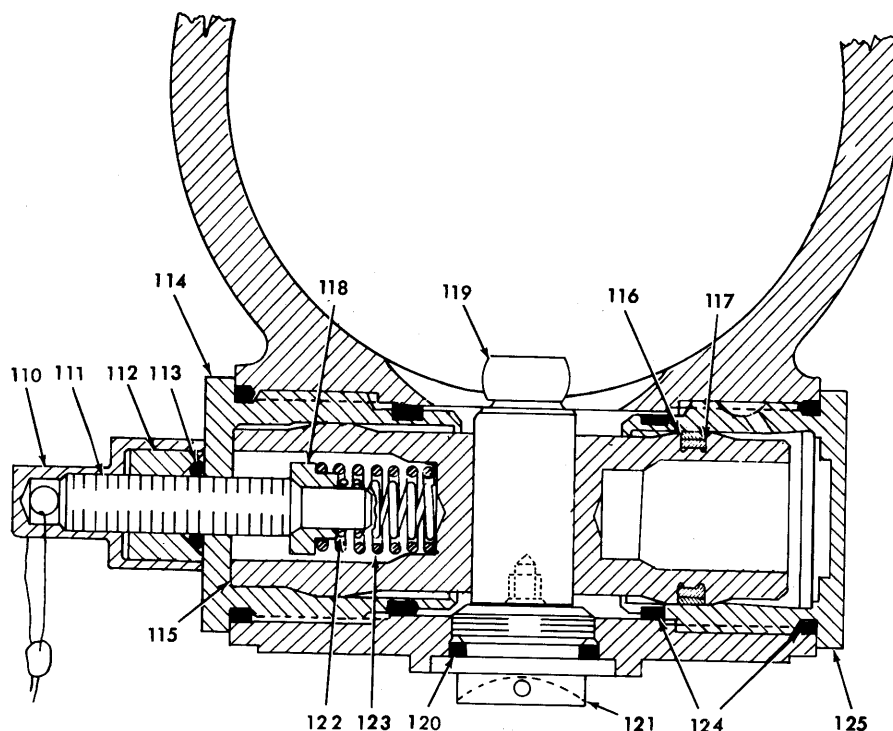
(Continued)

(Added December 1976)

PUMP ASSEMBLY 74321477 (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
49	74061190	1	RING, cam
55	74061590	4	SHOE, cam roller
56	74059539	1	HEAD ASSY., hydraulic (Includes rotor, plunger, items 57 thru 60 and accumulator parts indented below)
	74059390	2	PISTON, accumulator
	74059392	2	SPRING, accumulator piston
	74059391	2	SCREW, accumulator piston retaining
61	74053451	1	VALVE, delivery
84	74061605	4	SCREW, end plate
90	74060065	1	SCREW ASSY., head locating (Includes ball and spring)
91	74369595	2	ORING, sealing, head locating screw
92	-----	1	WASHER
93	-----	1	SCREW
98	74056490	1	SHAFT, shut-off
	74048632	2	SCREW, stop, shut-off shaft
	74051409	2	NUT, jam
	74056484	1	SPACER, shut-off shaft arm
	74050913	1	SCREW
	74056486	1	ARM, shut-off shaft
	74054594	1	LEVER, shut-off shaft
	74051413	1	SPRING, shut-off arm
	74051412	1	RETAINER, shut-off arm spring
	74056487	1	SCREW
102 thru 109			Omit these items
110	74052917	1	CAP, advance adjusting screw
	74369430	1	WIRE, sealing
111	74054593	1	SCREW, advance adjusting
112	74054583	1	NUT, jam, advance adjusting screw
113	74369878	1	SEAL, adjusting screw
114	74059271	1	PLUG, piston hole (spring side)
115	74061782	1	PISTON
116	74055386	1	RING, piston
117	74059064	1	SEAL, piston ring
118	74054591	1	GUIDE, spring
119	74059066	1	PIN, cam advance
120	74054585	1	SEAL, cam pin access plug
121	74059067	1	PLUG, cam pin access
122	74055686	1	SPRING, advance, inner
123	74055685	1	SPRING, advance, outer
124	74054589	4	SEAL, piston hole plugs
125	74059268	1	PLUG, piston hole (power side)

(Added December 1976)



PUMP ASSEMBLY 74321478

T-73659

USAGE: 100-C and 150C Graders with 11000 engine effective engine serial No. 11-26358 and up. Not used on 150-C Graders serial No. 99C01453, 01454, 01455, 01456, 01457 and 01459.

ITEM PART NO. QTY. DESCRIPTION

NOTE: Parts are identical to those shown on pages 52 thru 56 with the following exceptions:

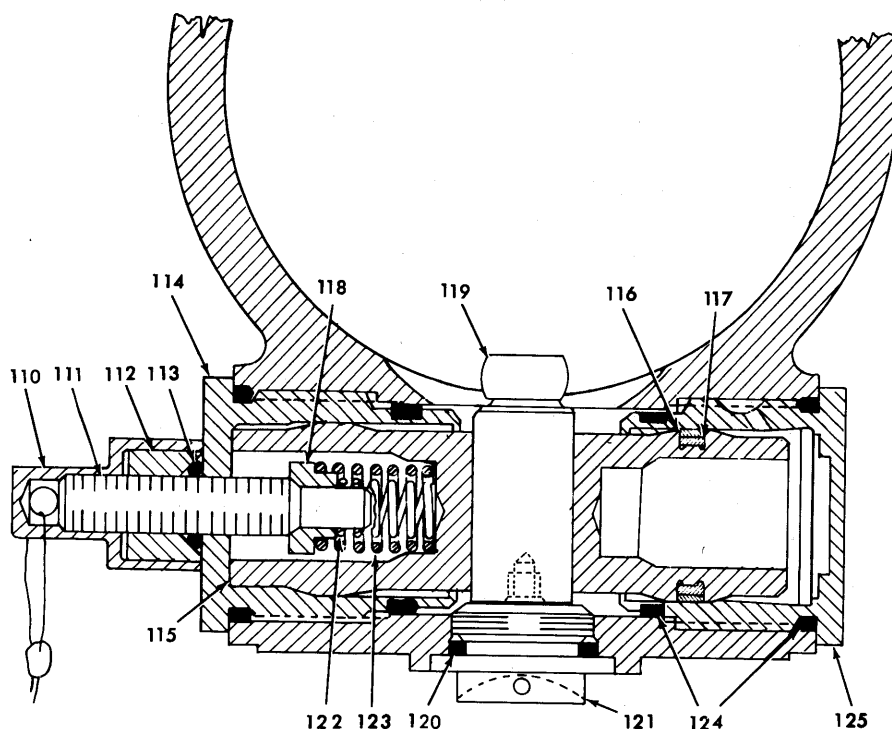
1	74051002	1	COVER, governor control
5	74048639	1	CAM, shut-off
13	74061679	1	SHAFT, drive
	70910224	1	KEY, woodruff, 5/32" x 5/8"
17	74059267	1	HOUSING, pump
17A	74059239	1	TUBE, pilot (bronze)
21	74061792	1	SPRING, governor control
27	74060959	1	VALVE, metering
28	74061670	1	SPRING, metering valve
30	74048645	1	SCREW, low idle
	74051409	1	NUT, jam
31	74056488	1	SHAFT ASSY., throttle
	74056484	1	SPACER, throttle shaft arm
	74369478	1	SCREW
	74056486	1	ARM, throttle shaft
35	74056487	1	SCREW, retaining, throttle lever spring
36	74048645	1	SCREW, high idle
	74051409	1	NUT, jam
	74059283	1	STOP, high idle screw (Clips on housing to prevent housing wear at screw contact point)

(Continued)

(Added December 1976)

PUMP ASSEMBLY 74321478 (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
47	74061610	1	RETAINER ASSY., governor weight (Includes item 48)
49	74061190	1	RING, cam
55	74061590	4	SHOE, cam roller
56	74059539	1	HEAD ASSY., hydraulic (Includes rotor, plunger, items 57 thru 60 and accumulator parts indented below)
	74059390	2	PISTON, accumulator
	74059392	2	SPRING, accumulator piston
	74059391	2	SCREW, accumulator piston retaining
61	74053451	1	VALVE, delivery
84	74061605	4	SCREW, end plate
90	74060065	1	SCREW ASSY., head locating (Includes ball and spring)
91	74369595	2	□RING, sealing, head locating screw
92	-----	1	WASHER
93	-----	1	SCREW
98	74056490	1	SHAFT, shut-off
	74048632	2	SCREW, stop, shut-off shaft
	74051409	2	NUT, jam
	74056484	1	SPACER, shut-off shaft arm
	74050913	1	SCREW
	74056486	1	ARM, shut-off shaft
	74054594	1	LEVER, shut-off shaft
	74051413	1	SPRING, shut-off arm
	74051412	1	RETAINER, shut-off arm spring
	74056487	1	SCREW
102 thru 109			Omit these items
110	74052917	1	CAP, advance adjusting screw
	74369430	1	WIRE, sealing
111	74054593	1	SCREW, advance adjusting
112	74054583	1	NUT, jam, advance adjusting screw
113	74369878	1	□SEAL, adjusting screw
114	74059271	1	PLUG, piston hole (spring side)
115	74061782	1	PISTON
116	74055386	1	RING, piston
117	74059064	1	□SEAL, piston ring
118	74054591	1	GUIDE, spring
119	74059066	1	PIN, cam advance
120	74054585	1	□SEAL, cam pin access plug
121	74059067	1	PLUG, cam pin access
122	74055686	1	SPRING, advance, inner
123	74055685	1	SPRING, advance, outer
124	74054589	4	□SEAL, piston hole plugs
125	74059268	1	PLUG, piston hole (power side)



T-73659

PUMP ASSEMBLY 74321479

USAGE: 200-C Graders with 11000 engine effective engine serial No. 11-25949 and up.

ITEM	PART NO.	QTY.	DESCRIPTION
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NOTE: Parts are identical to those shown on pages 52 thru 56 with the following exceptions:

1	74051002	1	COVER, governor control
5	74048639	1	CAM, shut-off
13	74061679	1	SHAFT, drive
	70910224	1	KEY, woodruff, 5/32" x 5/8"
17	74059267	1	HOUSING, pump
17A	74059239	1	TUBE, pilot (bronze)
21	74061792	1	SPRING, governor control
27	74060959	1	VALVE, metering
28	74061670	1	SPRING, metering valve
30	74048645	1	SCREW, low idle
	74051409	1	NUT, jam
31	74056488	1	SHAFT ASSY., throttle
	74056484	1	SPACER, throttle shaft arm
	74369478	1	SCREW
	74056486	1	ARM, throttle shaft
35	74056487	1	SCREW, retaining, throttle lever spring
36	74048645	1	SCREW, high idle
	74051409	1	NUT, jam
	74059283	1	STOP, high idle screw (Clips on housing to prevent housing wear at screw contact point)

(Continued)

PUMP ASSEMBLY 74321479 (Continued)

ITEM	PART NO.	QTY.	DESCRIPTION
47	74061610	1	RETAINER ASSY., governor weight (Includes item 48)
49	74061190	1	RING, cam
55	74061509	4	SHOE, cam roller
56	74059539	1	HEAD ASSY., hydraulic (Includes rotor, plunger, items 57 thru 60 and accumulator parts indented below)
	74059390	2	PISTON, accumulator
	74059392	2	SPRING, accumulator piston
	74059391	2	SCREW, accumulator piston retaining
61	74053451	1	VALVE, delivery
84	74061605	4	SCREW, end plate
90	74060065	1	SCREW ASSY., head locating (Includes ball and spring)
91	74369595	2	□RING, sealing, head locating screw
92	-----	1	WASHER
93	-----	1	SCREW
98	74056490	1	SHAFT, shut-off
	74048632	2	SCREW, stop, shut-off shaft
	74051409	2	NUT, jam
	74056484	1	SPACER, shut-off shaft arm
	74050913	1	SCREW
	74056486	1	ARM, shut-off shaft
	74054594	1	LEVER, shut-off shaft
	74051413	1	SPRING, shut-off arm
	74051412	1	RETAINER, shut-off arm spring
	74056487	1	SCREW
102 thru 109			Omit these items
110	74052917	1	CAP, advance adjusting screw
	74369430	1	WIRE, sealing
111	74054593	1	SCREW, advance adjusting
112	74054583	1	NUT, jam, advance adjusting screw
113	74369878	1	□SEAL, adjusting screw
114	74059271	1	PLUG, piston hole (spring side)
115	74061782	1	PISTON
116	74055386	1	RING, piston
117	74059064	1	□SEAL, piston ring
118	74055690	1	GUIDE, spring
119	74059066	1	PIN, cam advance
120	74054585	1	□SEAL, cam pin access plug
121	74059067	1	PLUG, cam pin access
122	74055686	1	SPRING, advance, inner
123	74055685	1	SPRING, advance, outer
124	74054589	4	□SEAL, piston hole plugs
125	74059268	1	PLUG, piston hole (power side)

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IDENTIFICATION OF SEALS (O-RINGS)

T NO.	I. D. (inches)	THICKNESS (inches)	COLOR CODE
596	1.046	.139	None
649	.424	.103	None
417	1.662	.150	None
910	.145	.070	None
914	.364	.070	None
365	.176	.070	None
830	.989	.070	None
585	.489	.070	None
589	.801	.070	Yellow Dot
444	2.572	.062	None
595	.301	.070	None
599	.551	.070	None
878	.239	.070	None

