

1150D/1155D Crawler

Parts Catalog

8-1621

Reprinted

CASE

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MANIFOLDS
504BD NATURAL ASPIRATED ENGINE
INTAKE

REF	PART NO	DESCRIPTION	REQ'D
1	A 154447	MANIFOLD ASSEMBLY - intake	1
3	L 10283	PLUG - heater hole	1
4	A 20916	GASKET - plug	1
5	221- 1849	PLUG - hex socket head, 1/8 inch PT	2
7	A 58662	GASKET - intake manifold	6
8	A 59077	STUD - intake manifold, 3/8 NC x 1-3/4 inch	12
9	195- 25	WASHER - 3/8 x 13/16 x 1/16 inch (10 x 21 x 2 mm)	12
10	92- 6	WASHER - lock, 3/8 inch	12
11	25- 166	NUT - hex, 3/8 inch NC	12

EXHAUST

15	A 58664	MANIFOLD - exhaust, rear	1
16	A 64966	MANIFOLD ASSEMBLY - exhaust, front	1
19	A 58666	GASKET - exhaust manifold (asbestos faced)	6
20	A 59077	STUD - exhaust manifold, 3/8 NC x 1-3/4 inch	12
21	92- 6	WASHER - 3/8 inch lock	12
22	131- 903	NUT - hex Seez-Pruf, 3/8 inch NC	12

**CAMSHAFT
504BD AND 504BDT DIESEL ENGINES**

REF	PART NO	DESCRIPTION	REQ'D
1	A 66743	CAMSHAFT - engine	1
3	A 21018	BUSHING - camshaft rear, 1/2 inch (13 mm) wide	1
4	A 21019	BUSHING - camshaft intermediate, 1-7/16 inch (37 mm) wide	3
5	A 23487	BUSHING - camshaft front, 1-5/8 inch (41 mm) wide	1
6	A 21017	WASHER - thrust	1
7	A 58592	GEAR - camshaft drive	1
8	A 58593	GEAR - idler drive	1
9	126- 227	KEY - camshaft gears	1
10	A 31038	WASHER - thrust	1
11	A 58595	NUT - camshaft gear retaining	1
12	A 27853	SPRING - thrust plunger	1
13	A 27852	PLUNGER - thrust	1

OIL PUMP
504BD AND 504BDT DIESEL ENGINES

REF	PART NO	DESCRIPTION	REQ'D
1	A 153805	PUMP ASSEMBLY - oil	1
2	132- 32	PIN - cotter, 3/32 x 1-1/2 inch	1
3	41- 1011	PLUG - relief valve, cup type, 11/16 inch (18 mm)	1
5	A 155980	SPRING - relief valve	1
6	A 65083	VALVE - oil pressure regulating	1
7	A 58915	SLEEVE - pump locating	1
8	A 64434	O-RING - pump to block	1
9	A 58859	SHIM - pump to bearing cap, 0 005 inch (0 127 mm)	UAR
10	A 142503	TUBE - oil suction	1
11	A 142004	CONNECTOR - suction tube	1

OIL PAN

18	A 157043	PAN ASSEMBLY - oil, engine	1
20	A 34826	PLUG - drain, oil pan	1
21	A 27968	GASKET - drain plug (copper)	1
22	REF	GASKET - oil pan (See Page 41)	1
23	A 65999	STRAP - pan reinforcement	1
24	193- 553	BOLT - hex with washer, 3/8 NC x 7/8 inch	34

**RADIATOR ASSEMBLIES
WITH COOLER TANK ON THE BOTTOM**

REF.	PART NO.	DESCRIPTION	REQ'D.
R	47150	RADIATOR ASSEMBLY - standard, General Thermodynamics No. 286-C, with copper core, assembly no longer available, for service order R50209 conversion kit which includes R48933 radiator assembly on page 51), see page 229 for kit	1
R	47151	RADIATOR ASSEMBLY - antisandblast, General Thermodynamics No. 286-D, with steel core, assembly no longer available, for service order R50209 conversion kit (which includes R48933 radiator assembly on page 51), see page 229 for kit	1
1	N 7892	TANK - top	1
2	N 7890	SIDE ASSEMBLY - radiator	2
3	N 8739	PLATE - reinforcement, core	4
4	N 7888	CORE - copper, R47150 standard radiator assembly	1
4A	N 7885	CORE - steel, R47151 antisandblast radiator assembly	1
5	N 7891	TANK - bottom	1
6	N 8458	SHROUD - radiator	1
7	NSS	CLIP - overflow tube	2
8	113- 103	BOLT - hex head, 5/16" - 18 NC x 1", plated	72
9	113- 102	BOLT - hex head, 5/16" - 18 NC x 3/4", plated	12
10	192- 20	WASHER - lock, 5/16", plated	84
11	129- 102	NUT - hex, 5/16" - 18 NC, plated	72
12	111- 108	BOLT - hex head, 1/4" - 20 NC x 3/4", plated	8
13	192- 19	WASHER - lock, 1/4", plated	8
14	N 6649	GASKET - cork, 36" (914 mm) long, cut to length	UAR
15	N 7887	INSULATOR - vibration	2

AIR CLEANER AND MUFFLER MOUNTING DOZER AND DRAWBAR MODELS WITH TURBOCHARGER

REF.	PART NO.	DESCRIPTION	REQ'D.
1	R 49746	BRACKET - air cleaner mounting	1
2	A 143235	SCREW - special, air cleaner bracket	2
3	129- 145	NUT - hex, jam, 1/2" - 13 NC, plated	2
4	131- 1116	NUT - hex, self-locking, 1/2" - 13 NC, plated	2
5	113- 207	BOLT - hex head, 3/8" - 16 NC x 1", plated	2
6	192- 21	WASHER - lock, 3/8", plated	2
7	195- 525	WASHER - flat, 3/8", plated	2
8	*R 48001	AIR CLEANER ASSEMBLY - parts list page 61	1
9	113- 206	BOLT - hex head, 3/8" - 16 NC x 3/4", plated	4
10	131- 1181	NUT - hex, self-locking, 3/8" - 16 NC, plated	4
11	214- 183	CLAMP - hose, at air cleaner	2
12	R 39057	HOSE - at air cleaner	1
13	R 46686	CHAMBER - air cleaner	1
14	D 36262	ELBOW - hose	1
15	214- 179	CLAMP - elbow hose at air chamber	1
16	214- 179	CLAMP - elbow hose at turbocharger	1
17	R 43075	MUFFLER - exhaust	1
18	A 17851	CLAMP - muffler, includes hardware	1
19	R 45478	CLAMP - exhaust pipe	1
20	113- 2272	BOLT - hex head, 3/8" - 16 NC x 3-1/4", Teflon coated	1
21	195- 525	WASHER - flat, 3/8", plated	2
22	192- 21	WASHER - lock, 3/8", plated	1
23	129- 770	NUT - hex, 3/8" - 16 NC, plated	1
24	R 43368	EXHAUST PIPE - muffler	1
25	A 19795	CAP - rain, exhaust pipe	1

NOTE: For turbocharger, see page 23.

***NOTE:** For air cleaner intake parts, see page 53.

FUEL LINES

REF.	PART NO.	DESCRIPTION	REQ'D.
1	217- 94	SHUTOFF VALVE - fuel	2
	222- 43	ELBOW - 90 degree, upper	1
2	NSS	BODY - elbow	1
3	222- 102	SLEEVE - elbow	1
4	222- 112	NUT - elbow	1
5	R 46233	TUBE - dozer and drawbar models, upper, fuel return	1
6	R 46234	TUBE - loader models, upper, fuel return	1
	222- 27	ADAPTER - lower	1
7	NSS	BODY - adapter	1
8	222- 104	SLEEVE - adapter	1
9	222- 114	NUT - adapter	1
10	R 53749	TUBE - lower, fuel supply	1
11	49851	CLAMP - tube, 1/4" (6 mm) ID	2
12	49852	CLAMP - tube, 3/8" (9 mm) ID	3
13	113- 101	BOLT - hex head, 5/16" - 18 NC x 1/2", plated	3
14	192- 20	WASHER- lock, 5/16", plated	3
	222- 3	ADAPTER - straight	1
15	NSS	BODY - adapter	1
16	222- 112	NUT - adapter	2
17	222- 102	SLEEVE - adapter	2
18	R 45850	TUBE - from fuel injectors	1
19	49851	CLAMP - tube, 1/4" (6 mm) ID, use flywheel housing inspection cover hardware	1
	222- 5	ADAPTER - straight	1
20	NSS	BODY - adapter	1
21	222- 114	NUT - adapter	2
22	222- 104	SLEEVE - adapter	2
23	R 42751	TUBE - fuel supply, dozer and drawbar models	1
24	R 27099	TUBE - fuel supply, loader models	1
25	49852	CLAMP - tube, 3/8" (9 mm) ID, use hydraulic circuit hardware	2
26	49852	CLAMP - tube, 3/8" (9 mm) ID, dozer and drawbar models only	1
27	113- 103	BOLT - hex head, 5/16" - 18 NC x 1", plated, used on dozer and drawbar models	1
28	192- 20	WASHER - lock, 5/16", plated, used on dozer and drawbar models	1
29	129- 102	NUT - hex, 5/16" - 18 NC, plated, used on dozer and drawbar models	1

**FUEL INJECTOR NOZZLE
504BD AND 504BDT DIESEL ENGINES
BLUE COLOR CODE IDENTIFICATION**

REF	PART NO	DESCRIPTION	REQ'D
	A 156323	NOZZLE ASSEMBLY - fuel injection	6
1	NSS	NOZZLE ASSEMBLY - fuel injection, American Bosch (See Note B) (Reference No A67465)	1
2	NSS	BODY - nozzle (Order A156323)	1
	A 44860	KIT - shim, nozzle opening pressure (One kit will repair six nozzles)	1
3	NSS	SHIM - 0 062 inch (1 57 mm) 6 in kit	UAR
3	NSS	SHIM - 0 002 inch (0 05 mm) 80 in kit	UAR
3	NSS	SHIM - 0 007 inch (0 18 mm) 50 in kit	UAR
3	NSS	SHIM - 0 010 inch (0 25 mm) 50 in kit	UAR
3	NSS	SHIM - 0 025 inch (0.64 mm) 20 in kit	UAR
6	A 44864	SPRING - nozzle pressure	1
7	A 44863	SEAT - nozzle pressure spring	1
8	A 44862	VALVE STOP - nozzle with pin (Includes dowel pins)	1
9	A 47343	TIP ASSEMBLY - nozzle injector	1
10	A 76640	GASKET - nozzle (See Note A)	1
11	A 44861	CAP NUT - nozzle end	1

NOTE A WHEN NOZZLE IS REMOVED FROM HEAD, A76640 GASKET MUST BE REPLACED BEFORE NOZZLE IS INSTALLED BACK IN HEAD

NOTE B INTERNAL PARTS BETWEEN THE AMERICAN BOSCH AND ROBERT BOSCH INJECTORS ARE NOT INTERCHANGEABLE. SEE ILLUSTRATION FOR IDENTIFICATION

REFERENCE NUMBERS IN DESCRIPTION ARE FOR **CARES** USE ONLY AND CAN NOT BE ORDERED SEPARATELY

CONTINUED ON PAGE 81.

R37343 STARTER

REF	PART NO	DESCRIPTION	REQ'D
1	R 37343	STARTER ASSEMBLY - (Prestolite No. MES64066)	1
2	A 45647	HEAD ASSEMBLY - commutator end	1
	A 45659	PACKAGE - bearing and wick	1
3	NSS	BEARING - armature shaft	1
4	NSS	WICK - oil	1
5	A 45640	GASKET - head (Package of 5)	1
7	A 45650	PLATE ASSEMBLY - brush holder	1
8	A 45637	SPRING SET - brush (Set of 8)	1
9	A 45652	BRUSH SET - starter	1
10	A 45648	COIL ASSEMBLY - field	1
11	NSS	SCREW - pole shoes	8
	NSS	GASKET - pole shoe screws (not used this application)	8
13	NSS	SHOE - pole	4
14	A 45654	ARMATURE - starter	1
15	A 45655	HOUSING ASSEMBLY - intermediate	1
16	A 25672	BEARING - 7/8 x 1 x 1 inch (22 x 25 x 25 mm)	1
17	A 45649	SEAL - oil, 1-1/4 inch (32 mm)	1
18	A 45084	YOKE - shifter	1
	A 45661	PACKAGE - yoke attaching parts	1
19	NSS	PIN - yoke pivot	1
20	NSS	PLUG - yoke pin	2
21	NSS	NUT - yoke stop, hex, 5/16 inch-24	1
22	NSS	PLUG - housing	1
23	A 45639	GASKET - plug (Package of 10)	1
24	A 45636	DRIVE ASSEMBLY	1
25	A 45651	HOUSING ASSEMBLY - drive end	1
	A 45658	PACKAGE - bearing and wick	1
27	NSS	BEARING - armature shaft	1
28	NSS	WICK - oil	1
29	A 48338	SOLENOID ASSEMBLY - starter	1

CONTINUED ON PAGE 91.

INSTRUMENT PANEL

REF.	PART NO.	DESCRIPTION	REQ'D.
27	218- 441	ADAPTER - straight, male	1
28	R 40333	HOSE - 50" (1270 mm) long, engine oil pressure	1
29	R 12586	GUARD - hose	1
30	R 14668	CLAMP - engine oil pressure hose and fuel shutoff cable, uses intake manifold hardware	1
31	218- 481	ELBOW - male, 90 degree	1
32	R 27126	TACHOMETER - engine rpm	1
33	R 27130	CABLE - tachometer	1
34	49859	CLAMP - tachometer cable, uses intake manifold hardware	1
35	R 53929	GAUGE - transmission oil pressure	1
36	218- 461	ADAPTER - straight	1
37	R 43230	HOSE - 90" (2286 mm) long, transmission oil pressure	1
38	S 86530	CLAMP - transmission oil pressure hose at brake frame	1
39	113- 206	BOLT - hex head, 3/8" - 16 NC x 3/4", plated	1
40	192- 21	WASHER - lock, 3/8", plated	1
41	R 38645	GAUGE - torque converter temperature	1
42	49838	CLAMP - transmission oil pressure hose and torque converter temperature cable	2
43	113- 207	BOLT - hex head, 3/8" - 16 NC x 1", plated	1
44	192- 21	WASHER - lock, 3/8", plated	1
45	129- 103	NUT - hex, 3/8" - 16 NC, plated	1
46	49853	CLAMP - torque converter temperature cable, uses torque converter mounting hardware	1
47	R 42035	CONTROL - fuel shutoff	1
48	49859	CLAMP - fuel shutoff cable	2
49	113- 206	BOLT - hex head, 3/8" - 16 NC x 3/4", plated	1
50	192- 21	WASHER - lock, 3/8", plated	1
51	353- 703	GROMMET - wiring harness, used on cab models only	1
52	* 195- 21	WASHER - flat, 5/16", non-plated, if used	1

NOTE: For instrument panel lamps, lamp switch, and engine oil pressure switch, see page 101. For air restriction indicator, see page 61. For instrument panel cover and lockup parts, see page 405.

***NOTE:** If tachometer cable (item 33) does not seat down tightly into its adapter on the engine, insert one item 52 flat washer into the adapter first.

**REAR ELECTRICAL WIRING
MAIN HARNESS TO INSTRUMENT PANEL, STARTER, AND
REAR OF TRACTOR**

REF.	PART NO.	DESCRIPTION	REQ'D.
27	R 27209	WIRE - starter switch	1
28	D 34924	SWITCH - starter, push button	1
29	49838	CLAMP - starter switch wire	1
30	113- 102	BOLT - hex head, 5/16" - 18 NC x 3/4", plated	1
31	192- 20	WASHER - lock, 5/16", plated	1
32	129- 103	NUT - hex, 5/16" - 18 NC, plated	1
33	R 14668	CLAMP - harness, below key switch, used to route rear harness and positive battery cable together through the same clamp, no longer used, replace with item 34 clamp for harness	1
34	49859	CLAMP - harness, below key switch, use to route rear harness alone through its own clamp (double-clamp with positive battery cable clamp on loader models, or with battery ground cable clamp on dozer models)	1
35	113- 209	BOLT - hex head, 3/8" - 16 NC x 1-1/2", plated	1
36	192- 21	WASHER - lock, 3/8", plated	1
37	129- 103	NUT - hex, 3/8" - 16 NC, plated	1
38	R 14668	CLAMP - harness wire to backup alarm with positive battery cable	1
39	113- 206	BOLT - hex head, 3/8" - 16 NC x 3/4", plated	1
40	192- 21	WASHER - lock, 3/8", plated	1

PARTS USED WITH HORIZONTALLY-MOUNTED TRANSMISSION FILTER, IF USED

41	49859	CLAMP - harness wire, uses transmission filter bracket hardware, see page 231	1
42	R 43543	WIRE - ground, transmission filter, eyelet bolts to transmission filter mounting bracket	1
43	R 43544	WIRE - at filter indicator connection	1
44	R 47180	FILTER - transmission, horizontally-mounted, if used, parts list page 233, mounting parts on page 231	1

PARTS USED WITH VERTICALLY-MOUNTED TRANSMISSION FILTER, IF USED

45	49859	CLAMP - harness wire, on dozer models bolt to tube clamp bracket at control valve (see page 275), on loader models bolt to hydraulic reservoir using items 46-48	1
46	113- 207	BOLT - 3/8" - 16 NC x 1", plated, loader models only	1
47	192- 21	WASHER - 3/8", plated, loader models only	1
48	129- 103	NUT - hex, 3/8" - 16 NC, plated, loader models only	1
49	49859	CLAMP - harness wire at filter	1
50	113- 205	BOLT - hex head, 3/8" - 16 NC x 5/8", plated	1
51	192- 21	WASHER - lock, 3/8", plated	1
52	R 52649	WIRE - at filter indicator connection	1
53	R 49464	FILTER - transmission, vertically-mounted, if used, parts list page 233B, mounting parts on page 231	1

LAMPS AND WIRING MODELS WITH CAB

REF.	PART NO.	DESCRIPTION	REQ'D.
1	R 47446	HARNESS - circuit breaker to main cab harness	1
2	R 45475	CIRCUIT BREAKER - 40 amp, for circuit breaker mounting, see page 107 . . .	1
3	S 86530	CLAMP - harness, above circuit breaker	1
4	113- 102	BOLT - hex head, 5/16" - 18 NC x 3/4", plated	1
5	192- 20	WASHER - lock, 5/16", plated	1
6	R 14668	CLAMP - use intake manifold hardware	1
7	L 18337	TIE STRAP - harness	1
8	49838	CLAMP - harness, below instrument panel	1
9	113- 207	BOLT - hex head, 3/8" - 16 NC x 1", plated	1
10	192- 21	WASHER - lock, 3/8", plated	1
11	129- 103	NUT - hex, 3/8" - 16 NC, plated	1
12	353- 703	GROMMET - harness, at instrument panel	1
13	49852	CLAMP - harness, above instrument panel, loader models only	1
14	113- 118	BOLT - hex head, 5/16" - 18 NC x 5/8", plated, loader models only	1
15	192- 20	WASHER - lock, 5/16", plated, loader models only	1
16	129- 102	NUT - hex, 5/16" - 18 NC, plated, loader models only	1
17	* R 47447	HARNESS - main wiring, cab	1
18	R 47448	WIRE - cab lamps	1
19	NSS	TAPE - wire retaining, vinyl covered, buy locally	UAR
20	R 47401	BRACKET - front lamp mounting	2
21	R 47405	CLAMP - bracket retaining, front lamps	2
22	113- 207	BOLT - hex head, 3/8" - 16 NC x 1", plated	4
23	192- 21	WASHER - lock, 3/8", plated	4
24	R 51415	LAMP ASSEMBLY - flood, parts list page 121	4
25	353- 700	GROMMET - lamp wire at cab frame, 3/8" hole size	4
26	R 47403	BRACKET - rear lamp mounting, left-hand	1
27	R 47404	BRACKET - rear lamp mounting, right-hand	1
28	113- 102	BOLT - hex head, 5/16" - 18 NC x 3/4", plated	2
29	195- 103	WASHER - flat, 5/16", plated	2
30	192- 20	WASHER - lock, 5/16", plated	2
31	129- 102	NUT - hex, 5/16" - 18 NC, plated	2
32	111- 110	CARRIAGE BOLT - 1/4" - 20 NC x 7/8", plated	2
33	195- 102	WASHER - flat, 1/4", plated	2
34	131- 71	NUT - hex, self-locking, 1/4" - 20 NC, plated	2

***NOTE:** For additional main cab harness connections, see page 123.

HORN

REF.	PART NO.	DESCRIPTION	REQ'D.
1	R 49617	WIRE - to horns	1
2	49853	CLAMP - wire, at water pump	1
3	113- 206	BOLT - hex head, 3/8" - 16 NC x 3/4", plated	1
4	192- 21	WASHER - lock, 3/8", plated	1
5	L 18337	TIE STRAP - wires	UAR
6	D 77650	HORN - left-hand, includes an item 8 nut and a bracket that is not used on this tractor	1
7	R 45461	HORN - right-hand, includes an item 8 nut and a bracket that is not used on this tractor	1
8	L 30866	NUT - special	2
9	R 39064	BRACKET - horn mounting	2
10	R 36131	WIRE - ground	2
11	182- 516	MACHINE SCREW - pan head slotted, No. 10 - 24 NC x 1/2", plated	2
12	192- 18	WASHER - lock, No. 10, plated	2
13	129- 17	NUT - hex, No. 10 - 24 NC, plated	2
14	113- 709	BOLT - hex head, 3/4" - 10 NC x 1-1/2", plated, use without ROPS canopy brush guards	2
14	113- 708	BOLT - hex head, 3/4" - 10 NC x 2", plated, use with ROPS canopy brush guards	2
15	D 34666	WASHER - hardened, use with ROPS canopy brush guards	2
6	129- 108	NUT - hex, 3/4" - 10 NC, plated	2

NOTE: For horn switch and connecting wires, see instrument panel wiring on page 101.

TRACK FRAME, SPROCKET, AND ROLLERS
***74" GAUGE WIDE TRACK AND LGP DOZER MODELS**

REF.	PART NO.	DESCRIPTION	REQ'D.
1	R 45420	TRACK FRAME - left-hand, wide track dozer models, not shown (same as 62" gauge standard dozer models, page 137)	1
1	R 45422	TRACK FRAME - right-hand, wide track dozer models, not shown (same as 62" gauge standard dozer models, page 137)	1
2	R 45405	TRACK FRAME - left-hand, LGP dozer models, not shown	1
2	R 45406	TRACK FRAME - right-hand, LGP dozer models	1
3	113- 412	BOLT - hex head, 1/2" - 13 NC x 1-3/4", plated	10
4	192- 23	WASHER - lock, 1/2", plated	10
5	R 46782	COVER ASSEMBLY - pivot shaft	2
6	221- 841	PLUG - hex socket head, 1/4" NPT	1
7	R 27377	GASKET - pivot shaft cover	UAR
8	R 36949	PLATE - end, pivot shaft	2
9	R 27540	SHIM - pivot shaft end plate	UAR
10	28- 1028	BOLT - hex head, 5/8" - 18 NF x 1-3/4", grade 8	6
11	R 41714	SEAL - pivot shaft	2
12	R 41713	GUARD - seal, pivot shaft	2
13	214- 180	CLAMP - worm screw type, pivot shaft	2
14	R 45917	SPROCKET - use with standard sealed track chain only (with 2-3/16" diameter bushings), see page 159	2
14A	R 47743	SPROCKET - identify by "I" on sprocket surface, may be used with either sealed track chain (see page 159 or 161) or Case Lubricated Track chain (see page 163)	2
15	R 31277	BOLT - hex head, 3/4" - 10 NC x 4", grade 8	24
16	D 34666	WASHER - flat, hardened, 3/4"	24
17	R 27241	SHIM - sprocket	UAR
18	R 36703	GUARD - final drive shaft, if used	4
19	131- 1152	NUT - hex, self-locking, 3/4" - 10 NC, plated	24
20	REF	TRACK ROLLER - single flange, for correct assembly and components see pages 153 and 155	8
21	REF	TRACK ROLLER - double flange, for correct assembly and components see pages 153 and 155, wide track models use four, LGP models use six (LGP positioning shown on page 138)	4-6
22	113- 716	BOLT - hex head, 3/4" - 10 NC x 3", plated, use with Loctite	48-56
23	REF	CARRIER ROLLER - for correct assembly and components see page 151, wide track models use two, LGP models use four	2-4

***PARTS USED ON LGP DOZER MODELS ONLY**

24	R 45454	BRACKET - carrier roller and equalizer beam mounting	2
25	113- 708	BOLT - hex head, 3/4" - 10 NC x 2", plated	8
26	D 34666	WASHER - flat, hardened, 3/4"	8
27	26- 1076	BOLT - hex head, 5/8" - 11 NC x 4-3/4", grade 8	8
28	192- 25	WASHER - lock, 5/8", plated	8
29	129- 107	NUT - hex, 5/8" - 11 NC, plated	8
30	221- 841	PLUG - hex socket head, 1/4" NPT	2

***NOTE:** The carrier roller bracket, equalizer beam mounting bracket, and positioning of track rollers used on wide track dozer models (not LGP) are the same as for 62" gauge dozer models. See page 137.

IDLER ASSEMBLY - SHAFT RETAINED BY ROLL PINS, IF USED

REF.	PART NO.	DESCRIPTION	REQ'D.
	R 52666	IDLER ASSEMBLY - shaft retained by roll pins (items 8 and 9)	1
1	R 52667	HUB - idler	1
2	S 105797	BUSHING - idler hub	2
3	R 33557	PLUG - idler assembly	1
4	S 116825	FACE SEAL ASSEMBLY - idler, includes two metal rings and two rubber seals	2
5	R 52676	BRACKET - idler assembly	2
6	R 52675	SHAFT - idler assembly	1
7	T 13224	O-RING - shaft	2
8	R 52707	ROLL PIN - inner, shaft retaining	2
9	S 106023	ROLL PIN - outer, shaft retaining	2

STANDARD SEALED TRACK CHAIN
***WITH 2-3/16" (56 mm) OD BUSHINGS, IF USED**

REF.	PART NO.	DESCRIPTION	REQ'D.
* R	27668	CHAIN ASSEMBLY - 40 unit, all models except LGP dozer models, one per each side of tractor, may be used with any sprocket option except LGP sprocket	2
* R	45546	CHAIN ASSEMBLY - 43 unit, LGP dozer models only, one per each side of tractor, may be used with any LGP sprocket option	2
1	R 25687	LINK - track, right-hand	40-43
2	R 25686	LINK - track, left-hand	40-43
3	R 25703	BUSHING - track, standard, long	39-42
4	R 25697	PIN - track, standard	39-42
4	R 25698	PIN - track, 0.003" (0.076 mm) oversize, service option	39-42
5	R 25702	BUSHING - track, master	1
6	R 25699	PIN - track, master	1
6	R 25700	PIN - track, master, 0.003" (0.076 mm) oversize, service option	1
7	R 25704	SPACER - master bushing	2
8	R 25705	BELLEVILLE SPRING - pin	160-172
9	R 27166	BOLT - special, used with all track shoes except LGP self-cleaning track shoe	320-344
9	R 42738	BOLT - special, LGP self-cleaning track shoe only	320-344
10	R 25688	NUT - square, special	320-344
11	REF	TRACK SHOE - see pages 165 and 167 for options	80-86

TRACK CHAIN UNIT KIT

	R 27708	KIT - track chain unit, includes instruction sheet	UAR
12	R 25687	LINK - track, right-hand	1
13	R 25686	LINK - track, left-hand	1
14	R 25697	PIN - track, standard	2
15	R 25704	SPACER - bushing	2
16	R 25702	BUSHING - master, short	1
17	R 25705	BELLEVILLE SPRING - pin	8

MASTER CHAIN UNIT KIT

	R 27710	KIT - master chain unit, includes instruction sheet	1
18	R 25687	LINK - track, right-hand	1
19	R 25686	LINK - track, left-hand	1
20	R 25697	PIN - track, standard	1
21	R 25704	SPACER - bushing	2
22	R 25702	BUSHING - master, short	1
23	R 25699	PIN - track, master	1
24	R 25705	BELLEVILLE SPRING - pin	8

Continued on next page

***NOTE:** See track frame pages 135-139 for correct sprocket usage.

TRACK SHOES

REF.	PART NO.	DESCRIPTION	REQ'D.
DOUBLE GROUSER - CLOSED LOADER MODELS ONLY			
1	R 40973	TRACK SHOE - 16" (406 mm)	80
SINGLE GROUSER - SELF-CLEANING 74" (1880 mm) GAUGE LGP DOZER MODELS ONLY			
2	R 42736	TRACK SHOE - self-cleaning, 34" (864 mm)	86
3	R 42738	BOLT - special	344
*RUBBER PADS FOR TRACK SHOES			
4	R 43447	PAD - rubber, with studs	80
6	T 53567	WASHER - hardened	160
7	129- 107	NUT - hex, 5/8" - 11 NC, plated	160

NOTE: For additional track shoes, see page 165.

***NOTE:** The rubber pads listed here may only be ordered to replace factory installed pads currently on your machine. If your tractor does not have rubber pads and you wish to order them, they must be ordered as a special feature from the factory.

R42732 DRIVE SHAFT - DOZER AND DRAWBAR MODELS
R42733 DRIVE SHAFT - LOADER MODELS

REF.	PART NO.	DESCRIPTION	REQ'D.
	R 42732	DRIVE SHAFT ASSEMBLY - dozer and drawbar models	1
	R 42733	DRIVE SHAFT ASSEMBLY - loader models	1
	A 47519	YOKE ASSEMBLY - drive shaft	1
1	NSS	YOKE - drive shaft	1
2	A 18388	CAP - yoke	1
3	A 47521	WASHER - felt retaining	2
4	A 18390	WASHER - felt	1
5	219- 20	GREASE FITTING - straight, 1/4" - 28 NF	1
6	N 6169	SHAFT - R42732 drive shaft only	1
7	N 6162	SHAFT - R42733 drive shaft only	1
	A 45595	UNIVERSAL JOINT ASSEMBLY - drive shaft	2
8	NSS	UNIVERSAL JOINT - drive shaft	1
9	A 17298	BOLT - special	8
10	219- 417	GREASE FITTING - straight, 1/4" - 28 NF taper	1

TRANSMISSION LEFT-HAND AND RIGHT-HAND CLUTCH SHAFTS

REF.	PART NO.	DESCRIPTION	REQ'D.
1	G 104202	SHAFT - clutch	2
2	* A 50389	RING - seal	8
3	G 102377	CLUTCH ASSEMBLY - parts list page 189	8
4	B 18215	BALL BEARING - clutch, front	2
5	A 51142	DRIVE GEAR - high clutch, 29 and 35 teeth	2
6	A 50665	SPACER - ball bearing, high clutch gear	2
7	H 756080	BALL BEARING - high clutch gear	2
	G 101318	DRIVE GEAR ASSEMBLY - low clutch	2
8	NSS	GEAR - low clutch	1
9	NSS	SPACER - wide, inner	1
10	A 51468	NEEDLE BEARING - gear assembly	1
11		RESERVED	
12	A 27414	SNAP RING - needle bearing	1
13	A 51757	RACE - needle bearing, low drive gear	2
14	A 27579	SNAP RING - low clutch gear	2
15	G 10418	BALL BEARING - gear	10
16	A 51842	SPACER - clutch shaft	4
17	G 102300	GEAR - driven, 29 and 51 teeth, left-hand and right-hand clutch, front	2
18	G 102300	GEAR - driven, 29 and 51 teeth, right-hand clutch, rear	1
19	G 102301	GEAR - reverse, 29 and 51 teeth, left-hand clutch, rear	1
20	A 50664	SPACER - gear, left-hand clutch, 1/4" (6 mm) wide	1
21	A 50663	SPACER - gear, right-hand clutch, 1-1/16" (27 mm) wide	1
22	T 25088	BALL BEARING - gears	4
23	* A 50668	SHIM - rear spacer	UAR
24	A 50667	SPACER - rear	2
25	40035	BALL BEARING - rear	2
	* G 101829	KIT - transmission seal, includes all items with an asterisk, for complete kit see page 207	1

TRANSMISSION CONTROL VALVE

REF.	PART NO.	DESCRIPTION	REQ'D.
COVER AND BASE			
1	A 50729	COVER - control valve	1
2	* G 107845	GASKET - cover to body	1
3	NSS	BODY - valve	1
4	113- 209	BOLT - hex head, 3/8" - 16 NC x 1-1/2", plated	15
5	192- 21	WASHER - lock, 3/8", plated	15
6	113- 257	BOLT - hex head, 3/8" - 16 NC x 2-1/2", plated	1
7	* N 8539	O-RING - bolt seal	1
8	A 50820	WASHER - hardened	1
9	221- 1849	PLUG - hex socket head, 1/8" NPT	1
9A	221- 849	PLUG - hex socket head, 1/8" NPT, valve cover	1

HIGH-LOW AND FORWARD-REVERSE SPOOLS

10	A 140775	SPOOL - forward and reverse	2
11	A 50737	SPOOL - high-low, track	2
12	A 140955	SPOOL - high-low, range	1
13	* G 105118	SEAL - spool, double lip	5
14	218- 5157	PLUG - hex head, 7/8" - 14 NF	5
15	* 218- 5007	O-RING - plug	1
16	A 50821	PIN - detent, long	1
17	A 50822	PIN - detent, short	4
18	** G 100767	SPRING - detent	5
19	138- 90	ROLL PIN - 3/16" x 5/8"	5
20	176- 396	SET SCREW - slotted, 1/2" - 20 NF x 1-1/4", oval point	5
21	* A 50733	SEAL - detent adjusting screw	5
22	195- 533	WASHER - flat, 1/2", plated	5
23	129- 165	NUT - hex, jam, 1/2" - 13 NF, plated	5

PRESSURE REGULATOR SPOOL

24	A 51136	SPOOL - pressure regulator	1
25	** A 50755	SPRING - pressure regulator	1
26	A 51138	RETAINER - spring	1
27	A 50752	PLATE - cover	1
28	* A 50753	GASKET - cover plate	1
29	192- 20	WASHER - lock, 5/16", plated	3
30	113- 113	BOLT - hex head, 5/16" - 18 NC x 7/8", plated	3
	* G 101835	KIT - control valve seal, includes all items with one asterisk, for complete kit see page 213	1
	** G 101836	KIT - control valve overhaul, includes all items with two asterisks plus G101835 kit, for complete kit see page 213	1

TRANSMISSION SEAL KITS HOUSING, COVERS, AND BRAKES

REF.	PART NO.	DESCRIPTION	REQ'D.
	G 101829	KIT - seal, transmission, contains one O-ring not used in this transmission assembly	1
1	G 102141	GASKET - drain plug, transmission housing	1
2	A 50420	OIL SEAL - input shaft	1
3	G 35210	GASKET - front cover, transmission housing	1
4	G 35211	GASKET - rear cover, transmission housing	1
5	A 51732	GASKET - oil suction tube	1
6	R 11428	GASKET - front cap, upper shaft	2
7	G 102757	SHIM - rear cap, input shaft, .005" (0.127 mm) thick	6
7	G 102758	SHIM - rear cap, input shaft, .007" (0.1778 mm) thick	6
8	22038	SHIM - rear cap, clutch shafts, .007" (0.1778 mm) thick	5
8	72223	SHIM - rear cap, clutch shafts, .002" (0.0508 mm) thick	5
9	D 32117	WASHER - copper	24
10	A 54107	OIL SEAL - PTO shaft	1
11	A 51841	RING - seal, PTO shaft	3
12	A 50651	SEAL - rubber, housing, low range clutch	2
13	A 50389	RING - seal, clutch shafts	8
14	A 50668	SHIM - clutch, rear spacer, .031" (0.787 mm) thick	8
15	A 50687	SHIM - brake housing, .007" (0.178 mm) thick	6
15	A 50688	SHIM - brake housing, .005" (0.127 mm) thick	6
16	131- 468	NUT - hex, self-locking, 1-1/2" - 12 NF	2
17	A 50608	WASHER - input shaft	1
17A	S 5871	O-RING - housing to final drive, if used	2
	G 101830	KIT - brake seal	1
18	A 50698	GASKET - brake cover	2
19	D 32117	WASHER - copper, brake cover, use with bolts, use as required	20
20	A 50694	WASHER - with rubber insert, brake cover, use with studs, use as required	20
21	195- 525	WASHER - flat, 3/8", plated, brake cover, use with studs, use as required	20
22	A 54107	SEAL - brake cover	2
23	A 50707	SEAL - Teflon, large, inner	2
24	A 50708	WIRE - inner seal	2
25	A 50709	SEAL - Teflon, small, outer	2
26	A 50710	WIRE - outer seal	2
27	A 50692	SPRING - brake piston return	20

**TRANSMISSION HYDRAULIC CIRCUIT
TORQUE CONVERTER TO TRANSMISSION
MODELS WITH HORIZONTALLY-MOUNTED FILTER, IF USED**

REF.	PART NO.	DESCRIPTION	REQ'D.
1	218- 483	ELBOW - 90 degree, male	1
2	A 51456	HOSE - 28" (711 mm) long, dozer and drawbar models, torque converter vent to transmission	1
3	G 35438	HOSE - 20" (508 mm) long, loader models, torque converter vent to transmission	1
4	218- 5057	ADAPTER - male, straight, no longer used, replace with elbow (items 34 and 35)	1
5	218- 5005	O-RING - adapter	1
6	217- 393	BARB FITTING - 1-5/16" - 12 NF	2
7	218- 5010	O-RING - barb fitting	1
8	R 20804	HOSE - 3/4" (19 mm) ID x 3" (76 mm) long, cut from bulk hose, see Parts Substitution List for bulk hose options	2
9	214- 255	CLAMP - adjustable	4
10	R 27106	TUBE - dozer and drawbar models, converter drain to transmission	1
11	R 26071	TUBE - loader models, converter drain to transmission	1
12	R 25586	PUMP - transmission charging, parts list page 237, mounting parts on page 45	1
13	218- 5065	ADAPTER - straight, male	1
14	218- 5007	O-RING - adapter	1
15	R 46433	HOSE - 78" (1981 mm) long, transmission charging pump to filter	1
16	218- 5144	ELBOW - male, 45 degree	1
17	218- 5010	O-RING - elbow	1
18	R 47180	FILTER - transmission, parts list page 233, mounting parts on page 231	1
19	218- 5118	ELBOW - male, 90 degree	1
20	218- 5010	O-RING - elbow	1
21	R 46434	HOSE - filter to transmission control valve	1
22	R 45553	TEE - at transmission control valve	1
23	218- 5007	O-RING - tee	1
24	218- 5231	ELBOW - swivel, 90 degree	1
25	R 45551	HOSE - filter to torque converter pressure regulator valve	1
26	R 34049	CLAMP - hoses	2
27	113- 206	BOLT - hex head, 3/8" - 16 NC x 3/4", plated	2
28	192- 21	WASHER - lock, 3/8", plated	2
29	218- 5107	ELBOW - adjustable, 90 degree	1
30	218- 5007	O-RING - elbow	1
31	218- 484	ELBOW - male, 90 degree	1
32	A 75624	HOSE - 20" (508 mm) long, transmission filter drain	1
33	218- 775	PLUG - hex head, 3/4" - 16 NF, drain hose	1
34	218- 5135	ELBOW - adjustable, 45 degree	1
35	218- 5005	O-RING - elbow	1

**TRANSMISSION HYDRAULIC CIRCUIT
COOLING SYSTEM
USED ON MODELS WITH RADIATOR COOLER TANK ON THE SIDE
(SEE PAGE 51 FOR IDENTIFICATION)**

REF.	PART NO.	DESCRIPTION	REQ'D.
40	R 49517	TUBE - crossover, loader models, uses two clamps in upper position, no longer used, order item 41 tube and reduce number of clamps as shown	1
41	R 50165	TUBE - crossover, loader models, uses one clamp in upper position	1
42	R 49528	TUBE - crossover, dozer and drawbar models, uses two clamps in upper position, no longer used, order item 43 tube and reduce number of clamps as shown	1
43	R 50163	TUBE - crossover, dozer and drawbar models, uses one clamp in upper position	1
44	49858	CLAMP - crossover tube	2-3
45	113- 207	BOLT - hex head, 3/8" - 16 NC x 1", plated	1
46	192- 21	WASHER - lock, 3/8", plated	2-3
47	129- 103	NUT - hex, 3/8" - 16 NC, plated	1
48	113- 204	BOLT - hex head, 3/8" - 16 NC x 1/2", plated	1-2

R36416 TRANSMISSION OIL FILTER - SUCTION LINE

REF.	PART NO.	DESCRIPTION	REQ'D.
	R 36416	FILTER ASSEMBLY - suction line	1
	D 73719	HEAD ASSEMBLY - filter	1
1	NSS	HEAD - filter	1
2	D 49376	RELIEF VALVE - filter	1
3	R 30103	ELEMENT - filter	1
4	A 27994	O-RING - filter	1
5	D 61948	HOUSING - filter	1

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POWER BRAKES - PEDALS AND RODS LOADER MODELS ONLY

REF.	PART NO.	DESCRIPTION	REQ'D.
1	R 43554	FRAME - brake mounting	1
2	R 29752	BUSHING - frame, pedal shaft	2
3	R 27466	BUSHING - frame, follower cam shaft	2
4	113- 600	BOLT - hex head, 5/8" - 11 NC x 1-3/4", plated	5
5	192- 25	WASHER - lock, 5/8", plated	5
6	195- 541	WASHER - flat, 5/8", plated	5
7	R 37371	BRACKET - brake pedal stop	1
8	113- 410	BOLT - hex head, 1/2" - 13 NC x 1-1/2", plated	2
9	192- 23	WASHER - lock, 1/2", plated	2
10	195- 533	WASHER - flat, 1/2", plated	2
11	R 27495	SHAFT - brake pedals	1
12	138- 137	ROLL PIN - 1/4" x 1-3/8"	2
13	R 49048	PEDAL - brake, left-hand	1
14	R 29752	BUSHING - pedal	2
15	R 49059	PEDAL - modulator	1
16	R 49047	PEDAL - brake, right-hand	1
17	R 29752	BUSHING - pedal	2
18	219- 31	GREASE FITTING - 30 degree, special short, 1/8" NPT	2
19	113- 104	BOLT - hex head, 5/16" - 18 NC x 1-1/4", plated	2
20	129- 102	NUT - hex, 5/16" - 18 NC, plated	4
21	A 35789	SPRING - pedal return	2
22	141- 53	CLEVIS PIN - 5/16", plated	4
23	132- 320	COTTER PIN - 3/32" x 3/4", plated, at pedals	2
24	H 44198	CLEVIS - rod end, 5/16" - 24 NF, plated, replaces fiberglass clevis used in production on some models	4
25	129- 122	NUT - hex, 5/16" - 24 NF, plated	4
26	R 46619	ROD - brake control	2
27	132- 330	COTTER PIN - 3/32" x 1/2", plated, at control valve	2
28	D 35268	SHIM - 1/32" (0.76 mm) thick	UAR
29	R 27491	CAM - modulator	1
30	113- 412	BOLT - hex head, 1/2" - 13 NC x 1-3/4", plated	1
31	129- 145	JAM NUT - hex, 1/2" - 13 NC, plated	1
32	R 33694	BRACKET - cam follower	1
33	132- 320	COTTER PIN - 3/32" x 3/4", plated	2
34	195- 525	WASHER - flat, 3/8", plated	UAR
35	R 27497	BOSS - cam	1
36	R 27466	BUSHING - boss	1
37	141- 52	CLEVIS PIN - 1/4", plated	2
38	132- 328	COTTER PIN - 1/16" x 1/2", plated	2
39	213- 2	CLEVIS - modulator rod end, 1/4" - 28 NF, replaces fiberglass clevis used in production on some models	2
40	129- 121	NUT - hex, 1/4" - 28 NF, plated	2
41	R 46618	ROD - modulator control	1

HYDRAULIC RESERVOIR COVERS AND OPERATORS MANUAL BOX

REF.	PART NO.	DESCRIPTION	REQ'D.
1	REF	HYDRAULIC RESERVOIR - includes decals and operators manual box, see page 251 or 253 for correct reservoir and related parts	1
2	R 46464	BOX - operators manual	1
3	NSS	LATCH - manual box	1
4	151- 522	POP RIVET - 3/16", used on models without a noise reduction pad, see items 20 and 21	3
5	D 126821	CORD - manual retaining	1
6	L 18337	TIE STRAP - manual box	1
7	R 29648	COVER - side, outer	1
8	R 43215	COVER - top, one-piece, includes decals, used on models without a cab or winch, if used	1
8	R 43217	COVER - top, one-piece, includes decals, used on winch models without a cab, not shown, see Hyster Winch Parts Catalog D1251 for related parts, if used	1
9	121- 234	BOLT - hex flange head, 3/8" - 16 NC x 1", Teflon coated	14
10	* REF	TRIM - used on one-piece top cover (item 8) at the cutout for heater hoses, cab models only, 3" (76 mm) long, cut from F42827, see below	1
11	* REF	TRIM - used on reservoir frame with one-piece top cover (item 8), cab models only, 2" (51 mm) long, cut from F42827, see below	1
12	R 47892	PLATE - adapter, control lever boot, used on cab models	1
13	R 47916	PLATE - cover, used on cab models with no secondary control levers	1-2
14	187- 1088	SCREW - hex washer head, slotted, self-tapping, No. 10 x 1/2", plated	6-14
15	R 30357	COVER - hydraulic reservoir frame, inner, control valve access, if used	1
16	113- 233	BOLT - hex head, 3/8" - 16 NC x 1-3/4", plated	2
17	195- 525	WASHER - flat, 3/8", plated	2
18	192- 21	WASHER - lock, 3/8", plated	2
19	R 30355	RETAINER - cover	2
20	182- 562	MACHINE SCREW - pan head slotted, No. 10 - 24 NC x 7/8", plated, used on models with a noise reduction pad, see item 4	3
21	131- 67	NUT - hex, self-locking, No. 10 - 24 NC, plated, used on models with a noise reduction pad, see item 4	3

TWO-PIECE TOP COVERS - CAB MODELS ONLY

22	N 9111	COVER - top	1
23	N 9112	PLATE - filler	1
24	* REF	TRIM - filler plate, 4-1/4" (108 mm) long, cut from F42827, see below	1
25	R 49865	PLATE - guide, cab models with heating system only, if used	1
26	R 49866	PLATE - guide, cab models with heating and air conditioning, if used	1
27	113- 221	BOLT - hex head, 3/8" - 16 NC x 7/8", plated	2
28	95- 6	WASHER - flat, 3/8"	2
29	192- 21	WASHER - lock, 3/8", plated	2
30	129- 103	NUT - hex, 3/8" - 16 NC, plated	2
	* F 42827	TRIM - edge, 116" (2946 mm) long	UAR

LOADER BUCKET HYDRAULIC CIRCUIT

REF.	PART NO.	DESCRIPTION	REQ'D.
1	REF	CONTROL VALVE - equipment, for correct assembly and components see page 325, 327, or 331	1
2	218- 5069	ADAPTER - straight, male	2
3	218- 5010	O-RING - adapter	1
4	R 41241	TUBE - at control valve, upper, A port	1
5	R 41240	TUBE - at control valve, lower, B port	1
6	R 45637	TUBE - crossover connection, A port	1
7	R 45639	TUBE - crossover connection, B port	1
8	R 45646	HOSE - 73" (1854 mm) long, left-hand	2
9	113- 233	BOLT - hex head, 3/8" - 16 NC x 1-3/4", plated	1
10	192- 21	WASHER - lock, 3/8", plated	1
11	R 34049	CLAMP - tube	1
12	D 76210	SPACER - clamp	1
13	R 45647	HOSE - 85" (2159 mm) long, right-hand	2
14	113- 241	BOLT - hex head, 3/8" - 16 NC x 3", plated	4
15	192- 21	WASHER - lock, 3/8", plated	4
16	R 45649	CLAMP - hoses	2
17	218- 1256	NUT - hex, bulkhead, 1-1/16" - 12 NF	8
18	R 52731	TUBE - to rod end of cylinder	2
19	218- 5064	ADAPTER - straight, male	2
20	218- 5008	O-RING - adapter	1
21	G 104587	CYLINDER - bucket, parts list page 297	2
22	R 45641	TUBE - to closed end of bucket cylinder	2
23	218- 5108	ELBOW - 90 degree	2
24	218- 5010	O-RING - elbow	1

TILT HYDRAULIC CIRCUIT - TILT DOZER MODELS CONTROL VALVE TO GRILLE

REF.	PART NO.	DESCRIPTION	REQ'D.
1	REF	CONTROL VALVE - equipment, for correct assembly and components see page 325 or 329	1
2	218- 5071	ADAPTER - male, straight	2
3	218- 5010	O-RING - adapter	1
4	R 32145	TUBE - at control valve, upper port	1
5	R 32147	TUBE - at control valve, lower port	1
6	R 32194	TUBE - to control valve, lower port	1
7	R 32192	TUBE - to control valve, upper port	1
8	R 27748	BRACKET - tube mounting	1
9	113- 208	BOLT - hex head, 3/8" - 16 NC x 1-1/4", plated	1
9A	113- 209	BOLT - hex head, 3/8" - 16 NC x 1-1/2", plated	1
10	192- 21	WASHER - lock, 3/8", plated	2
11	129- 103	NUT - hex, 3/8" - 16 NC, plated	2
12	R 27517	BLOCK - tapped	1
13	113- 208	BOLT - hex head, 3/8" - 16 NC x 1-1/4", plated	2
14	192- 21	WASHER - lock, 3/8", plated	2
15	D 40236	CLAMP - tube	2
16	C 18330	SPACER - clamp	2
17	R 30543	TUBE - to control valve, lower port	1
18	R 29930	TUBE - to control valve, upper port	1
19	R 27428	TUBE - to control valve, upper port	1
20	R 30541	TUBE - to control valve, lower port	1
21	113- 233	BOLT - hex head, 3/8" - 16 NC x 1-3/4", plated	1
21A	113- 209	BOLT - hex head, 3/8" - 16 NC x 1-1/2", plated	2
22	D 40236	CLAMP - tubes	3
23	C 18330	SPACER - tubes	3
24	192- 21	WASHER - lock, 3/8", plated	3
25	129- 103	NUT - hex, 3/8" - 16 NC, plated	3
26	R 37973	TUBE - to control valve, upper port	1
27	R 30759	TUBE - to control valve, lower port	1
28	218- 1255	NUT - hex, bulkhead, 3/4" - 16 NF	4
29	R 33311	ELBOW - 90 degree, special	2
30	R 35905	SUPPORT - tubes	1
31	113- 208	BOLT - hex head, 3/8" - 16 NC x 1-1/4", plated	2
32	192- 21	WASHER - lock, 3/8", plated	2
33	95- 6	WASHER - flat, 3/8"	2
34	R 35909	CLAMP - tube	1
35	113- 209	BOLT - hex head, 3/8" - 16 NC x 1-1/2", plated	1
36	192- 21	WASHER - lock, 3/8", plated	1
37	C 18330	SPACER - clamp	1
38	R 42737	BRACKET - clamp, tubes, at control valve	1
39	113- 208	BOLT - hex head, 3/8" - 16 NC x 1-1/4", plated	2
40	192- 21	WASHER - lock, 3/8", plated	3
41	129- 103	NUT - hex, 3/8" - 16 NC, plated	3
42	D 40236	CLAMP - tubes, at control valve	1
43	C 18330	SPACER - clamp	1
44	113- 233	BOLT - hex head, 3/8" - 16 NC x 1-3/4", plated	1
45	95- 6	WASHER - flat, 3/8"	4

**DOZER AND TILT AND PITCH HYDRAULIC CIRCUIT
ANGLE TILT PITCH DOZER MODELS
GRILLE TO CYLINDERS**

REF.	PART NO.	DESCRIPTION	REQ'D.
24	R 41555	GUARD - at grille	1
25	113- 410	BOLT - hex head, 1/2" - 13 NC x 1-1/2", plated	4
26	192- 23	WASHER - lock, 1/2", plated	4
27	R 45028	GUARD - back of blade, upper	1
28	R 45031	GUARD - back of blade, lower	1
29	113- 424	BOLT - hex head, 1/2" - 13 NC x 1", plated	4
30	192- 23	WASHER - lock, 1/2", plated	4
31	195- 533	WASHER - flat, 1/2", plated	4
32	121- 428	BOLT - hex flange head, 1/2" - 13 NC x 1", grade 8, Teflon coated	2
33	129- 105	NUT - hex, 1/2" - 13 NC, plated	2
34	R 45033	GUARD - tubes, back of blade, 62" (1575 mm) gauge dozer models	2
35	R 45230	GUARD - tubes, back of blade, 74" (1880 mm) gauge dozer models	2
36	D 76208	SPACER - tubes	6
37	R 25528	CLAMP - tubes	6
38	R 49736	STUD - clamp mounting	6
39	195- 525	WASHER - flat, 3/8", plated	24
40	129- 103	NUT - hex, 3/8" - 16 NC, plated	24
41	R 45050	GUARD - tilt cylinder, left-hand, not shown	1
42	R 45051	GUARD - tilt cylinder, right-hand	1
43	121- 428	BOLT - hex flange head, 1/2" - 13 NC x 1", grade 8, Teflon coated	6
44	121- 429	BOLT - hex flange head, 1/2" - 13 NC x 1-1/4, grade 8, Teflon coated	2
45	R 49827	ROD - cylinder guard	2
46	129- 105	NUT - hex, 1/2" - 13 NC, plated	2
47	195- 533	WASHER - flat, 1/2", plated	4

G34836 AND G34837 LOADER LIFT CYLINDERS

REF.	PART NO.	DESCRIPTION	REQ'D.
	G 34836	CYLINDER ASSEMBLY - lift, right-hand, 5" (127 mm) ID x 31-7/16" (799 mm) stroke	1
	G 34837	CYLINDER ASSEMBLY - lift, left-hand, 5" (127 mm) ID x 31-7/16" (799 mm) stroke	1
1	G 34838	TUBE - G34836 cylinder, right-hand	1
1	G 34839	TUBE - G34837 cylinder, left-hand, not shown	1
2	D 52579	BUSHING - tube	2
	G 104336	GLAND ASSEMBLY - cylinder	1
3	NSS	GLAND - cylinder	1
4	G 102569	PLUG - nylon, thread-locking, gland, if used	1
5	*D 95145	WIPER - piston rod	1
6	*G 102426	BUSHING - center	1
7	*G 107924	U-CUP SEAL - piston rod, wide, with O-ring	1
7	G 100779	U-CUP SEAL - piston rod, service option - severe heat or cold	1
8	*G 109086	SEAL - piston rod, narrow	1
9	* 39738	O-RING - gland	1
10	*G 107970	BACKUP RING - gland O-ring	1
10A	187- 1524	SCREW - self-tapping, hex slotted head, No. 8 - 32 NC x 3/8", plated, if used	1
11	G 34098	ROD - piston, 2-1/4" (57 mm) diameter	1
12	D 33024	BUSHING - piston rod	2
13	D 46426	PISTON - split, rod end	1
14	D 48562	PISTON - split, bolt end	1
15	*D 47206	PACKING - piston	2
16	D 47211	RING - center, packing	1
17	28- 2052	BOLT - hex head, 1-1/4" - 12 NF x 3-1/4", grade 8	1
18	G 32351	WASHER - hardened	1
19	219- 1	GREASE FITTING - straight, 1/8" NPT	1
	*G 109501	KIT - seal, includes all items with an asterisk	1

NOTE: The cylinder assembly part number is stamped on some cylinder glands or tubes.

**G107405 DOZER TILT CYLINDER
TILT DOZER MODELS**

REF.	PART NO.	DESCRIPTION	REQ'D.
	G 107405	CYLINDER ASSEMBLY - tilt, 4-1/2" (114 mm) ID x 5-1/4" (134 mm) stroke	1
1	G 107406	TUBE - cylinder	1
2	D 33047	BUSHING - tube	2
	G 104950	GLAND ASSEMBLY - cylinder	1
3	NSS	GLAND - cylinder	1
4	G 102569	PLUG - nylon, thread-locking, gland, if used	1
5	*D 95145	WIPER - piston rod	1
6	*G 102426	BUSHING - center	1
7	*G 107924	U-CUP SEAL - piston rod, wide, with O-ring	1
7	G 100779	U-CUP SEAL - piston rod, service option - severe heat or cold	1
8	*G 109086	SEAL - piston rod, narrow	1
9	*A 23316	O-RING - gland	1
10	*G 32284	BACKUP RING - gland O-ring	1
10A	187- 1524	SCREW - self-tapping, hex slotted head, No. 8 - 32 NC x 3/8", plated, if used	1
11	G 107410	ROD - piston, 2-1/4" (57 mm) diameter	1
12	D 33047	BUSHING - piston rod	2
13	D 46425	PISTON - split, rod end	1
14	D 46931	PISTON - split, bolt end	1
15	*D 47205	PACKING - piston	2
16	D 47210	RING - packing	1
17	28- 2052	BOLT - hex head, 1-1/4" - 12 NF x 3-1/4", grade 8	1
18	G 105980	WASHER - hardened	1
19	219- 1	GREASE FITTING - straight, 1/8" NPT	1
20	219- 55	GREASE FITTING - 90 degree, 1/8" NPT	1
	*G 105520	KIT - seal, includes all items with an asterisk	1

NOTE: The cylinder assembly part number is stamped on some cylinder glands or tubes.

EQUIPMENT CONTROL VALVE AND LEVERS ONE LEVER - TWO SPOOL VALVE

REF.	PART NO.	DESCRIPTION	REQ'D.
	REF	CONTROL VALVE - for correct assembly and components see page 325, for mounting see page 313	1
1	R 48770	LINK - at control valve spool	2
2	195- 525	WASHER - flat, 3/8", plated	4
3	132- 320	COTTER PIN - 3/32" x 3/4", plated	4
4	111- 203	CARRIAGE BOLT - 5/16" - 18 NC x 1", plated	2
5	F 13360	FLANGE - ball bearing	2
6	R 36380	BALL BEARING - shaft	1
7	192- 20	WASHER - lock, 5/16", plated	2
8	129- 102	NUT - hex, 5/16" - 18 NC, plated	2
9	R 27331	BELLCRANK - rear	1
10	138- 304	ROLL PIN - 1/4" x 1-1/4", plated	1
	R 52145	BELLCRANK ASSEMBLY - with ball bearing, front	1
11	NSS	TUBE - bellcrank	1
12	R 52129	BUSHING - bronze	2
13	111- 317	CARRIAGE BOLT - 3/8" - 16 NC x 1", plated	2
14	NSS	FLANGE - ball bearing	2
15	NSS	BALL BEARING - bellcrank	1
16	192- 21	WASHER - lock, 3/8", plated	2
17	129- 103	NUT - hex, 3/8" - 16 NC, plated	2
18	219- 410	GREASE FITTING - straight, 3/16" drive type	1
19	R 52147	SHAFT - bellcrank	1
20	219- 55	GREASE FITTING - 90 degree, 1/8" NPT, if used	1
20A	219- 53	GREASE FITTING - 65 degree, 3/16" drive type, if used	1
20B	219- 46	GREASE FITTING - 65 degree, 5/16" drive type, if used	1
21	R 52130	BUSHING - bronze, 1" long, replaces 3/4" long bushing used on some models	2
22	D 81756	COLLAR ASSEMBLY - locking, includes 1/4" diameter set screw, no longer used, replace with R42435 collar assembly (items 23A and 23B)	1
23	178- 888	SET SCREW - hex socket headless, 1/4" - 20 NC x 1/4", cup point, if used	1
23A	R 42435	COLLAR ASSEMBLY - locking, includes 5/16" diameter set screw	1
23B	83- 54	SET SCREW - hex socket headless, 5/16" - 18 NC x 1/4", cup point	1
24	R 38652	CONTROL LEVER - lift	1
25	R 38655	BUSHING - knob, control lever	2
26	R 38654	KNOB - control lever	1
27	H 289652	BALL JOINT - female	2
28	R 47939	BALL JOINT - male	2
29	129- 122	NUT - hex, 5/16" - 24 NF, plated	2
30	R 52151	LEVER - ball joints	1
31	219- 53	GREASE FITTING - 65 degree, 3/16" drive type	1
32	R 52129	BUSHING - bronze, 3/4" long, replaces 1/2" long bushing used on some models	2
33	D 35268	SHIM - 3/4" ID x 1/32" thick	UAR
34	132- 310	COTTER PIN - 1/8" x 1", plated	1
35	131- 1231	NUT - hex, self-locking, 5/16" - 24 NF	4
36	R 47896	BOOT - control lever, if used	1
37	R 47893	RETAINER - control lever boot, if used	1
38	187- 1088	SCREW - hex washer head, slotted, self-tapping, No. 10 x 1/2", plated	4

**R45490 TWO SPOOL VALVE
LOADER MODELS**

REF.	PART NO.	DESCRIPTION	REQ'D.
	R 45490	CONTROL VALVE ASSEMBLY - two spool, loader models	1
1	D 87071	SECTION - inlet and outlet, identification No. 106, parts list page 333	1
2	D 87083	SECTION - bucket tilt, identification No. 409, parts list page 339	1
3	D 87084	SECTION - lift, identification No. 311, parts list page 337	1
4	D 87072	COVER - end	1
5	D 74373	BOLT - tie	3
6	192- 22	WASHER - lock, 7/16", plated	3
7	D 77566	SHIM - sections	9
	R 37003	KIT - seal	3
8	NSS	O-RING - 1-5/16" (32 mm) OD	2
9	NSS	O-RING - 1" (25 mm) OD	1
10	NSS	O-RING - 1-1/2" (37 mm) OD	1

NOTE: Identification numbers are between section ports.

**R45514 TWO SPOOL VALVE
DOZER MODELS**

	R 45514	CONTROL VALVE ASSEMBLY - two spool, dozer models	1
1	D 87071	SECTION - inlet and outlet, identification No. 106, parts list page 333	1
2	D 87073	SECTION - dozer tilt, identification No. 217, parts list page 343	1
3	D 87074	SECTION - dozer lift, identification No. 307, parts list page 341	1
4	D 87072	COVER - end	1
5	D 74373	BOLT - tie	3
6	192- 22	WASHER - lock, 7/16", plated	3
7	D 77566	SHIM - sections	9
	R 37003	KIT - seal	3
8	NSS	O-RING - 1-5/16" (32 mm) OD	2
9	NSS	O-RING - 1" (25 mm) OD	1
10	NSS	O-RING - 1-1/2" (37 mm) OD	1

NOTE: Identification numbers are between section ports.

**D87085 AND D87076 SECTIONS
RIPPER AND CLAM BUCKET**

REF.	PART NO.	DESCRIPTION	REQ'D.
	D 87085	SECTION - clam bucket or ripper, loader models, identification No. 218	1
	D 87076	SECTION - ripper, loader or dozer models, identification No. 216	1
1	NSS	BODY AND SPOOL - section	1
2	A 59956	O-RING - spool	2
3	R 30191	RETAINER - centering spring	2
4	R 30192	CENTERING SPRING - spool	1
5	N 7506	SPACER - spool	1
6	113- 64	BOLT - hex head, self-locking, 1/4" - 20 NC x 1", full thread	1
7	D 78454	HOUSING - centering spring	1
8	61- 432	BOLT - hex socket head, 1/4" - 20 NC x 2"	2
9	192- 19	WASHER - lock, 1/4", plated	2
	D 87080	SHUTTLE - primary	1
10	NSS	BODY - shuttle	1
	N 6632	KIT - seal	1
11	218- 5003	O-RING - outer, 3/8" (9 mm) ID	1
12	D 31411	O-RING - center, 1/4" (6 mm) ID	1
12A	A 47223	O-RING - inner, 7/32" (5 mm) ID	1
	A 47210	SHUTTLE - secondary	1
13	NSS	BODY - shuttle	1
	R 30185	KIT - seal	1
14	NSS	O-RING - large	1
15	NSS	O-RING - small	1
16	211- 255	BALL - 3/16", grade 50, chrome alloy steel	1
17	218- 5212	PLUG - hex socket head, 1-1/16" - 12 NF	1
18	218- 5008	O-RING - plug	1
19	R 30189	SPRING - load check	1
20	D 87082	POPPET - load check	1
21	*D 78442	CIRCUIT RELIEF VALVE - parts list page 345, D87076 section uses 2, D87085 section uses 1	1-2
22	D 75858	VALVE - anticavitation and circuit relief, parts list page 345, D87085 section only	1

***NOTE:** The pressure setting of this circuit relief valve is not preset for this application. Adjust the setting according to the instructions sent with the circuit relief valve or according to the service manual.

CIRCUIT RELIEF VALVES

REF.	PART NO.	DESCRIPTION	REQ'D.
CIRCUIT RELIEF AND ANTICAVITATION VALVES			
	D 78441	VALVE - circuit relief and anticavitation, loader bucket tilt section	1
	D 75858	VALVE - circuit relief and anticavitation, clam bucket and ripper sections	1
1	R 30182	PLUG - relief valve	1
2	R 30180	NUT - relief valve	1
3	R 30179	SCREW - poppet	1
4	D 78444	WASHER - relief valve	1
5	138- 91	ROLL PIN - 3/16" x 11/16"	1
6	R 30181	SPRING - inner	1
7	R 30196	SPRING - outer	1
7A	D 78443	POPPET - circuit relief valve	1
8	NSS	BODY - relief valve	1
9	D 78445	POPPET - anticavitation	1
	R 30184	KIT - seal	1
10	218- 5008	O-RING - plug	1
11	218- 5009	O-RING - large, body	1
12	NSS	BACKUP RING - body, small O-ring	1
13	NSS	O-RING - small, body	1
13A	NSS	BACKUP RING - poppet O-ring	1
13B	NSS	O-RING - poppet	1

CIRCUIT RELIEF VALVES

	* D 78442	CIRCUIT RELIEF VALVE - loader lift, loader bucket tilt, clam, and ripper sections	1
14	R 30182	PLUG - circuit relief valve	1
15	R 30180	NUT - hex, special	1
16	R 30179	ADJUSTING SCREW - circuit relief valve	1
17	138- 91	ROLL PIN - 3/16" x 11/16"	1
18	R 30181	SPRING - circuit relief valve	1
19	NSS	POPPET - circuit relief valve	1
20	NSS	BODY - circuit relief valve	1
	R 30184	KIT - seal	1
21	218- 5008	O-RING - plug	1
22	NSS	BACKUP RING - poppet O-ring	1
23	NSS	O-RING - poppet	1
24	218- 5009	O-RING - body, large	1
25	NSS	BACKUP RING - body, small O-ring	1
26	NSS	O-RING - body, small	1

***NOTE:** The pressure setting of this circuit relief valve is not preset for some of these applications. Adjust the setting according to the instructions sent with the repair valve or according to the service manual.

LOADER RETURN-TO-DIG
***WITH CAM-TYPE ACTUATOR SWITCH, IF USED**

REF.	PART NO.	DESCRIPTION	REQ'D.
1	R 45474	ROD - return-to-dig actuator	1
2	R 45484	TUBE - rod retaining	1
3	R 29760	U-BOLT - rod retaining	1
4	192- 21	WASHER - lock, 3/8", plated	2
5	129- 103	NUT - hex, 3/8" - 16 NC, plated	2
6	214- 185	CLAMP - tube to cylinder	1
7	R 46010	COVER - switch box	1
8	113- 14	BOLT - hex head, 1/4" - 20 NC x 2", plated	2
9	192- 19	WASHER - lock, 1/4", plated	2
10	169- 143	MACHINE SCREW - Fillister head, No. 6 - 32 NC x 1-1/2", plated	2
11	195- 507	WASHER - flat, No. 6, plated	UAR
12	193- 89	WASHER - internal-external tooth lock, No. 6	2
13	129- 15	NUT - hex, No. 6 - 32 NC, plated	2
14	R 33016	LEVER - switch	1
15	R 33015	SWITCH - return-to-dig, cam-type	1
16	129- 103	NUT - hex, 3/8" - 16 NC, plated	1
17	195- 525	WASHER - flat, 3/8", plated	1
18	192- 21	WASHER - lock, 3/8", plated	1
19	113- 241	BOLT - hex head, 3/8" - 16 NC x 3", plated	1
20	A 23870	GROMMET - harness	1
21	R 52050	HARNES - return-to-dig	1
22	49859	CLAMP - P-style, wiring harness at main frame upright	1
23	L 18337	TIE STRAP - harness, to bucket cylinder hose	UAR

***NOTE:** For the loader return-to-dig using an electrical sensing-type switch, see page 357.

LOADER CLAM BUCKET

REF.	PART NO.	DESCRIPTION	REQ'D.
	R 45539	BUCKET ASSEMBLY - clam, uses 5/8" tooth mounting hardware, no longer used, order R54190 clam bucket and bucket teeth and hardware on page 361B	1
	R 53275	BUCKET ASSEMBLY - clam, uses 3/4" tooth mounting hardware (replaces R49543 bucket assembly which also used 3/4" tooth hardware), no longer used, order R54190 clam bucket and bucket teeth and hardware on page 361B	1
	R 54190	BUCKET ASSEMBLY - clam, uses 1" hardware for tooth mounting, machinery item, see page 2 for ordering	1
1	R 45540	CLAM ASSEMBLY - bucket, uses 5/8 dia. tooth mounting hardware, no longer used, order R54192 clam assembly and bucket teeth and hardware on page 361B	1
1	R 53325	CLAM ASSEMBLY - bucket, uses 3/4" dia. tooth mounting hardware, no longer used, order R54192 clam assembly and bucket teeth and hardware on page 361B	1
1	R 54192	CLAM ASSEMBLY - bucket, uses 1" dia. tooth mounting hardware	1
2	R 45464	CUTTING EDGE - uses 5/8" dia. tooth mounting hardware, no longer used, order R54188 cutting edge and bucket teeth and hardware on page 361B	1
2	R 51168	CUTTING EDGE - uses 3/4" dia. tooth mounting hardware, no longer used, order R54188 cutting edge and bucket teeth and hardware on page 361B	1
2	R 54188	CUTTING EDGE - uses 1" dia. tooth mounting hardware	1
3	D 51545	BUSHING - clam pivot	4
4	D 37392	BUSHING - cylinder pivot	4
5	R 53343	BLADE ASSEMBLY - bucket	1
6	D 34506	BUSHING - upper	4
7	R 26958	BUSHING - lower	4
8	R 53319	CUTTING EDGE - blade, ends	2
9	D 50497	CUTTING EDGE - blade, center	1
10	118- 504	PLOW BOLT - 3/4" - 10 NC x 2-1/2", grade 8	15
11	192- 27	WASHER - lock, 3/4", plated	15
12	129- 138	NUT - hex, 3/4" - 10 NC, grade 8, plated	15
13	219- 55	GREASE FITTING - 90 degree, 1/8" NPT	2
14	D 50491	PIN - pivot, blade	2
15	113- 259	BOLT - hex head, 3/8" - 16 NC x 4-1/2", plated	2
16	131- 178	NUT - hex, self-locking, 3/8" - 16 NC, plated	2
17	D 38481	PIN - clam cylinder, rod end	2
18	95- 28	WASHER - flat, 1-7/8" (48 mm) ID	4
19	D 25280	SNAP RING - cylinder pin	4
20	D 50490	PIN - clam cylinder, closed end	2
21	113- 267	BOLT - hex head, 3/8" - 16 NC x 4", plated	2
22	131- 178	NUT - hex, self-locking, 3/8" - 16 NC, plated	2
23	R 29976	GUARD - cylinder, right-hand	1
24	R 29975	GUARD - cylinder, left-hand	1
25	113- 410	BOLT - hex head, 1/2" - 13 NC x 1-1/2", plated	8
26	192- 23	WASHER - lock, 1/2", plated	8
27	195- 533	WASHER - flat, 1/2", plated	8
28	321- 1706	DECAL - clam position indicator	1

NOTE: For bucket teeth see page 359, 361, or 361B.

ANGLE TILT PITCH DOZER MODELS DOZER BLADE AND STRUTS

REF.	PART NO.	DESCRIPTION	REQ'D.
1	R 52874	BLADE ASSEMBLY - 62" (1575 mm) gauge standard dozer models, if used . . .	1
1	R 52875	BLADE ASSEMBLY - 74" (1880 mm) gauge wide track dozer models, if used	1
2	70315	BRACKET - tilt cylinder and strut mounting	4
3	R 45247	PIN - bracket	4
3A	A 163363	WASHER - flat, shim	UAR
4	R 44885	CUTTING EDGE - 33" (840 mm) long, three used on 62" (1575 mm) gauge standard dozer models, one used in center position on 74" (1880 mm) gauge wide track dozer models	1-3
5	R 45446	CUTTING EDGE - used in outer positions on 74" (1880 mm) gauge wide track dozer models only	2
6	R 42470	CUTTING EDGE - end, standard, if used	2
7	R 41351	CUTTING EDGE - left-hand, heavy duty, if used, not shown	1
8	R 41352	CUTTING EDGE - right-hand, heavy duty, if used	1
9	118- 415	PLOW BOLT - 5/8" - 11 NC x 2-1/4", grade 8	28-30
10	192- 25	WASHER - lock, 5/8", plated	28-30
11	129- 183	NUT - hex, 5/8" - 11 NC, grade 8, plated	28-30
	R 45972	BRACKET ASSEMBLY - pivot	1
12	NSS	BRACKET - pivot	1
13	R 41800	BUSHING - self-aligning	1
14	R 32220	SNAP RING - bushing	1
15	219- 1	GREASE FITTING - straight, 1/8" NPT	1
16	26- 1240	BOLT - hex head, 3/4" - 10 NC x 2-1/2", grade 8	4
17	R 45099	PIN - pivot	1
18	R 45224	SPACER - pin mounting	2
19	R 45226	GASKET - pin mounting	2
20	R 26660	WASHER - flat	1
21	25- 1224	NUT - hex, slotted, 1-1/2" - 6 NC	1
22	132- 352	COTTER PIN - 1/4" x 2-1/2", plated	1

Continued on next page

COUNTERWEIGHTS

REF. PART NO. DESCRIPTION REQ'D.

**REAR COUNTERWEIGHT
LOADER MODELS WITH CLAM BUCKET AND WINCH**

28	R	46930	COUNTERWEIGHT - rear	1
29	113-	918	BOLT - hex head, 1" - 8 NC x 5", plated	2
30	D	36505	WASHER - flat, 1", hardened	2
31	129-	110	NUT - hex, 1" - 8 NC, plated	2

DRIVE SHAFT AND REAR TRANSMISSION GUARDS

REF.	PART NO.	DESCRIPTION	REQ'D.
	R 40404	KIT - driveshaft guard, dozer and drawbar models	1
1	A 51467	STUD - 3/8" - 16 NC x 4-3/8"	6
2	A 50694	WASHER - seal	6
3	195- 525	WASHER - flat, 3/8", plated	6
4	129- 103	NUT - hex, 3/8" x 16 NC, plated	6
5	113- 410	BOLT - hex head, 1/2" - 13 NC x 1-1/2", plated	2
6	192- 23	WASHER - lock, 1/2", plated	2
7	129- 105	NUT - hex, 1/2" - 13 NC, plated	2
8	R 43823	GUARD - drive shaft, left-hand	1
9	R 43824	GUARD - drive shaft, right-hand	1
10	R 46919	GUARD - transmission, rear, dozer and drawbar models	1
11	113- 920	BOLT - hex head, 1" - 8 NC x 1-1/2", plated	2
12	195- 553	WASHER - flat, 1", plated	2
13	121- 234	BOLT - hex flange head, 3/8" - 16 NC x 1", grade 8, Teflon coated	3

ONE-PIECE REAR TRANSMISSION GUARD - RIPPER MODELS, IF USED

14	R 46925	GUARD - rear, ripper models, one-piece, if used	1
15	113- 417	BOLT - hex head, 1/2" - 13 NC x 1-1/4", plated	2
16	192- 23	WASHER - lock, 1/2", plated	2
17	195- 533	WASHER - flat, 1/2", plated	2
18	113- 207	BOLT - hex head, 3/8" - 16 NC x 1", plated	2
19	192- 21	WASHER - lock, 3/8", plated	2
20	195- 525	WASHER - flat, 3/8", plated	2

THREE-PIECE REAR TRANSMISSION GUARD - RIPPER MODELS, IF USED

21	R 51367	GUARD - rear, lower, ripper models, if used	1
22	R 51366	GUARD - rear, upper, perforated, ripper models, if used	2
23	113- 417	BOLT - hex head, 1/2" - 13 NC x 1-1/4", plated	6
24	192- 23	WASHER - lock, 1/2", plated	6
25	195- 533	WASHER - flat, 1/2", plated	6
26	113- 207	BOLT - hex head, 3/8" - 16 NC x 1", plated	4
27	192- 21	WASHER - lock, 3/8", plated	4
28	195- 525	WASHER - flat, 3/8", plated	4
29	R 51363	GUARD - transmission, rear, lower, ripper models, if used	1
30	113- 626	BOLT - hex head, 5/8" - 11 NC x 2-1/2", plated	2
31	192- 25	WASHER - lock, 5/8", plated	2

NOTE: For guards that protect the underside of the transmission see page 389 or 391.

**RADIATOR SHROUD
LOADER MODELS**

REF.	PART NO.	DESCRIPTION	REQ'D.
1	R 47091	SHROUD - radiator, includes decals	1
1A	R 49983	PLATE - wear, upper, both sides, weld on	2
1B	R 52683	PLATE - guide, both sides, weld on	2
2	113- 708	BOLT - hex head, 3/4" - 10 NC x 2", plated	8
3	L 102515	FASTENER - radiator cap access	1
4	182- 516	MACHINE SCREW - No. 10 - 24 NC x 1/2", plated	2
5	192- 18	WASHER - lock, No. 10, plated	2
6	129- 17	NUT - hex, No. 10 - 24 NC, plated	2
7	D 93753	PADLOCK - radiator cap access, includes keys, if used	1
8	R 29555	KEY - for Master padlock only	2
8	D 93751	KEY - for Yale padlock only	2
9	353- 409	PLUG - 13/16" diameter, if used	8
10	R 40846	BRACE - X, shroud support	1
11	113- 424	BOLT - hex head, 1/2" - 13 NC x 1", plated	2
12	113- 410	BOLT - hex head, 1/2" - 13 NC x 1-1/2", plated	4
13	192- 23	WASHER - lock, 1/2", plated	6
14	195- 106	WASHER - flat, 1/2", plated	6
15	R 27147	BRACKET - grille mounting, left-hand	1
16	R 27148	BRACKET - grille mounting, right-hand	1
17	R 52095	PANEL - front, upper, includes pad, for pad see page 425	1
18	13- 810	BOLT - hex head, 1/2" - 13 NC x 5/8"	3
19	192- 23	WASHER - lock, 1/2", plated	3
20	R 27216	PANEL - lower, radiator support, used with radiators with bottom cooling tank, if used, includes pad, for pad see page 425	1
21	R 52086	PANEL - lower, radiator support, used with radiators with side cooling tank, if used, includes pad, for pad see page 425	1
22	121- 429	BOLT - flange head, 1/2" - 13 NC x 1-1/4", grade 8, Teflon coated	5
23	R 27212	BRACKET - lower panel mounting	2
24	113- 410	BOLT - hex head, 1/2" - 13 NC x 1-1/2", plated	5
25	113- 417	BOLT - hex head, 1/2" - 13 NC x 1-1/4", plated	2
26	192- 23	WASHER - lock, 1/2", plated	7
27	195- 106	WASHER - flat, 1/2", plated	7
28	129- 105	NUT - hex, 1/2" - 13 NC, plated	2

FLOOR PLATES AND FLOORMAT

REF.	PART NO.	DESCRIPTION	REQ'D.
1	R 46165	PLATE - step, right-hand, dozer and drawbar models	1
2	R 45774	PLATE - step, right-hand, loader models, includes hose guard, no longer used, replace with items 14 and 16	1
3	R 46164	PLATE - step, left-hand, dozer and drawbar models	1
4	R 45775	PLATE - step, left-hand, loader models, includes hose guard, no longer used, replace with items 15 and 16	1
5	R 46745	PLATE - floor, right-hand, front, accelerator pedal	1
6	R 45679	PLATE - floor, left-hand side, brake pedals	1
7	121- 428	BOLT - hex flange head, 1/2" - 13 NC x 1", grade 8, Teflon coated, 11 used on dozer and drawbar models, 13-15 used on loader models	11-15
8	121- 429	BOLT - hex flange head, 1/2" - 13 NC x 1-1/4", grade 8, Teflon coated	4
9	R 47918	PAD - step plate filler, right-hand, loader cab models only	1
10	R 47919	PAD - step plate filler, left-hand, loader cab models only	1
11	R 47920	PAD - step plate filler, dozer and drawbar cab models only	2
12	R 47410	FLOORMAT - loader cab models	1
13	R 47411	FLOORMAT - dozer and drawbar cab models	1
14	R 50143	PLATE - step, right-hand, loader models, use with item 16 guard	1
15	R 50141	PLATE - step, left-hand, loader models, use with item 16 guard	1
16	R 50139	GUARD - hose, bolts to loader step plates items 14 and 15	2
17	* REF	SEAL - 13" (330 mm) long, step plates (items 2 and 4) or hose guard (item 16) at main frame, used on loader models with a cab only, cut from F43086 bulk seal, see below	4
* F	43086	SEAL - rubber, 100 ft (3048 cm) long	UAR

NOTE: For noise reduction pads used under the floor plates, see page 423.

CANOPY SIDE SCREENS AND EXTENSION

REF.	PART NO.	DESCRIPTION	REQ'D.
1	R 39249	SCREEN - left-hand side, used on all models	1
2	R 39248	SCREEN - right-hand side, used on all models	1
3	F 44446	SPACER - upper, side screens	4
4	113- 417	BOLT - hex head, 1/2" - 13 NC x 1-1/4", plated	8
5	192- 23	WASHER - lock, 1/2", plated	8
6	129- 105	NUT - hex, 1/2" - 13 NC, plated	8
7	R 39250	CANOPY EXTENSION - dozer and drawbar models only	1
8	113- 417	BOLT - hex head, 1/2" - 13 NC x 1-1/4", plated	6
9	195- 106	WASHER - flat, 1/2", plated	10
10	192- 23	WASHER - lock, 1/2", plated	10
11	129- 105	NUT - hex, 1/2" - 13 NC, plated	10
12	F 96631	SCREEN - front, lower, dozer and drawbar models only	2
13	113- 412	BOLT - hex head, 1/2" - 13 NC x 1-3/4", plated	4
14	R 39251	SPACER - front screen mounting, dozer and drawbar models only	4
15	F 43766	CLAMP - rear, upper	2
16	F 43767	CLAMP - rear, lower	2
17	113- 448	BOLT - hex head, 1/2" - 13 NC x 7", plated, upper clamp	2
18	113- 443	BOLT - hex head, 1/2" - 13 NC x 6-1/2", plated, lower clamp	2
19	129- 105	NUT - hex, 1/2" - 13 NC, plated	4
20	T 53868	SPACER - clamp	4
21	131- 1308	NUT - hex, jam, self-locking, 1/2" - 13 NC, plated	4
22	R 38089	INSULATOR - rubber, side screen	4

CAB DOOR WINDOW

REF.	PART NO.	DESCRIPTION	REQ'D.
1	N 8704	FRAME - door window, right-hand	1
2	N 8705	FRAME - door window, left-hand, not shown	1
3		RESERVED	
4	F 45073	STRIKER - on window frame, outside	2
5	195- 105	WASHER - flat, 7/16", plated	2
6	131- 595	NUT - hex, self-locking, 7/16" - 14 NC, plated, special	2
7	F 44925	LATCH - window, right-hand	1
8	F 45136	LATCH - window, left-hand, not shown	1
9	113- 17	BOLT - hex head, 1/4" - 20 NC x 1-1/4", plated	8
10	131- 71	NUT - hex, self-locking, 1/4" - 20 NC, plated	8
11	F 64341	KNOB - latch release, three-sided, replaces round knob used in production . . .	2
12	113- 4	BOLT - hex head, 1/4" - 20 NC x 1", plated	2
13	129- 101	NUT - hex, 1/4" - 20 NC, plated	2
14	113- 529	BOLT - hex head, 3/8" - 16 NC x 9-1/2", plated	4
15	195- 104	WASHER - flat, 3/8", plated	4
16	131- 52	NUT - hex, self-locking, 3/8" - 16 NC, plated	4

CAB BLOWER HOUSING AND AIR FLOW CONTROL

REF.	PART NO.	DESCRIPTION	REQ'D.
1	R 44079	HOUSING - blower	1
2	R 47838	PANEL - front	1
3	113- 233	BOLT - hex head, 3/8" - 16 NC x 1-3/4", plated	2
4	195- 137	WASHER - flat, 3/8"	2
5	R 44084	INSULATOR - rubber	4
6	131- 52	NUT - hex, self-locking, 3/8" - 16 NC, plated	2
7	R 44282	SEAL - front panel, top and bottom	2
8	R 44083	SEAL - blower housing, front	1
9	* REF	SEAL - rubber, housing, 8-1/4" (210 mm) long, cut from D80646, see below	2
10	R 44792	PANEL - blower, rear	1
11	113- 3	BOLT - hex head, 1/4" - 20 NC x 3/4", plated	5
12	192- 19	WASHER - lock, 1/4", plated	12
13	195- 518	WASHER - flat, 1/4", plated	5
14	131- 71	NUT - hex, self-locking, 1/4" - 20 NC, plated, replaces lock washer and regular hex nut used in production on some models	7
15	R 44799	BRACKET - adjustment lever, air flow control	1
16	R 44795	LEVER - adjustment, air flow control	1
17	F 64341	KNOB - adjustment lever	1
18	F 43349	CLIP - adjustment lever to rod	1
19	R 44798	ROD - air flow control	1
20	F 43350	CLIP - rod to bracket	1
21	R 44794	BRACKET - panel, air flow control	2
22	R 44793	PANEL - air flow control	1
23	F 64065	HINGE - panel	3
24	151- 546	POP RIVET - 1/8" diameter x 5/16"	16
25	F 62245	SPRING - adjustment lever	1
26	195- 518	WASHER - flat, 1/4", plated	1
27	131- 71	NUT - hex, self-locking, 1/4" - 20 NC, plated	1
28	** REF	SEAL - foam, air flow control panel, 23-5/8" (600 mm) long, cut from A42905 bulk, see below	2
29	353- 700	GROMMET - 3/8" diameter hole	1
30	353- 588	PLUG - button, 1-3/4" (44 mm) diameter	2
31	113- 102	BOLT - hex head, 5/16" - 18 NC x 3/4", plated	4
32	192- 20	WASHER - lock, 5/16", plated	4
33	129- 102	NUT - hex, 5/16" - 18 NC, plated	4
34	REF	DECAL - fresh air, recirc. air, see page 465, not shown	1
	* D 80646	SEAL - rubber, bulk roll, 50 ft (15.2 m) long	UAR
	** A 42905	SEAL - foam, bulk roll, 50 ft (15.2 m) long	UAR

AIR CONDITIONING SYSTEM - INSIDE CAB ROOF

REF.	PART NO.	DESCRIPTION	REQ'D.
1	R 48820	HOSE - supply, compressor to condenser, 15/16" (23 mm) OD	1
2	A 65795	CLAMP - hose	1
3	353- 482	GROMMET - supply hose, 15/16" ID	1
4	R 45088	TUBE - barb fitting, to condenser	1
5	R 48824	HOSE - return, evaporator core to compressor, 1-1/8" (28 mm) OD	1
6	A 65791	CLAMP - return hose	1
7	R 49688	TUBE - barb fitting, from evaporator core	1
8	F 44712	CORE - evaporator	1
9	F 64389	VALVE - expansion	1
10	214- 254	CLAMP - adjustable screw type, valve sensor to core, no longer used, replace with item 10A	1
10A	98156C1	CLAMP - formed, valve sensor to core	1
11	113- 1	BOLT - hex head, 1/4" - 20 NC x 1/2", plated	8
12	192- 19	WASHER - lock, 1/4", plated	8
13	R 45091	TUBE - barb fitting, to receiver-drier hose above cab roof	1
14	F 44731	PAN - condensation	1
15	R 44085	SUPPORT - condensation pan	2
16	* REF	HOSE - 50" (1270 mm) long on loader models, 40" (1016 mm) long on dozer models, drain, front, cut from F64508, see below	2
17	* REF	HOSE - 60" (1524 mm) long, drain, rear, cut from F64508, see below	2
18	214- 274	CLAMP - drain hose	4
19	F 44790	END - rear drain hose, rubber	2
20	REF	SWITCH - air conditioning, control, see page 123	1
21	F 63719	GUARD - control switch connector wire	1
22	R 48819	SWITCH - low pressure	1
23	R 49637	WIRE - evaporator to compressor, 17-1/2 ft (5.35 m) long, route above roof pad and with heater hoses	1
24	R 50416	WIRE - low pressure switch wire to circuit breaker and cab accessory wiring harness	1
25	L 104329	CIRCUIT BREAKER - 15 amp	1
26	129- 37	NUT - hex, self-locking, No. 10 - 32 NF, plated	2
27	182- 508	MACHINE SCREW - pan Phillips head, No. 8 - 32 NC x 3/8", plated	2
28	192- 16	WASHER - lock, No. 8, plated	2
29	129- 16	NUT - hex, No. 8 - 32 NC, plated	2
30	R 48838	WIRE - circuit breaker to condenser blower motors	1

Continued on next page

* F	64508	HOSE - drain, 100 ft (3048 cm) long	UAR
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NOTE: For completion of air conditioning hose circuit see page 455 or 457. For connections above cab roof see page 447.

AIR CONDITIONING COMPRESSOR ASSEMBLY

REF.	PART NO.	DESCRIPTION	REQ'D.
	R 44120	COMPRESSOR ASSEMBLY - air conditioning	1
1	NSS	NUT - clutch plate end	1
	N 9075	CLUTCH ASSEMBLY - compressor	1
2	NSS	PLATE - clutch	1
3	NSS	PULLEY - clutch assembly	1
4	N 9076	COIL - clutch assembly	1
5	NSS	SHIELD - dust	1
6	NSS	SNAP RING - shaft, small	1
7	NSS	SNAP RING - pulley	1
8	NSS	SNAP RING - coil	1
9	NSS	SHIM - clutch assembly	UAR
10	N 9073	SEAL KIT - shaft	1
11	NSS	KEY - shaft	1
12	NSS	BODY - cylinder assembly	1
13	N 9072	PLATE - valve, includes gaskets	1
14	N 9071	HEAD - cylinder, includes gasket	1
15	NSS	BOLT - cylinder head, special	5
16	N 9074	KIT - gaskets for cylinder head and valve plate	1

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R47919	411	10	R48770	315	1	R49456	231	12
R47920	411	11	R48770	317	1	R49464	109	53
R47939	315	28	R48770	321	1	R49464	219	18
R47939	317	29	R48771	317	2	R49464	233B	
R47939	321	29	R48771	321	2	R49517	227	40
R47942	67	1	R48816	455	18	R49525	385	3
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R47973	409	9	R48817	455	19	R49528	227	42
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R48001	59	8	R48820	455	22	R49618	107	1
R48001	61		R48820	457	22	R49637	451	23
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