



**MANITOU NORTH AMERICA, INC.**

6401 IMPERIAL DRIVE  
Waco, TX 76712-6803

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**S402TC-D, S502TC-D,  
S602TC-D, S404TC-D,  
S504TC-D & S604TC-D**

**PARTS MANUAL**

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# SECTION 2

## BRAKE & ACCELERATOR ASSEMBLIES

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# SECTION 3

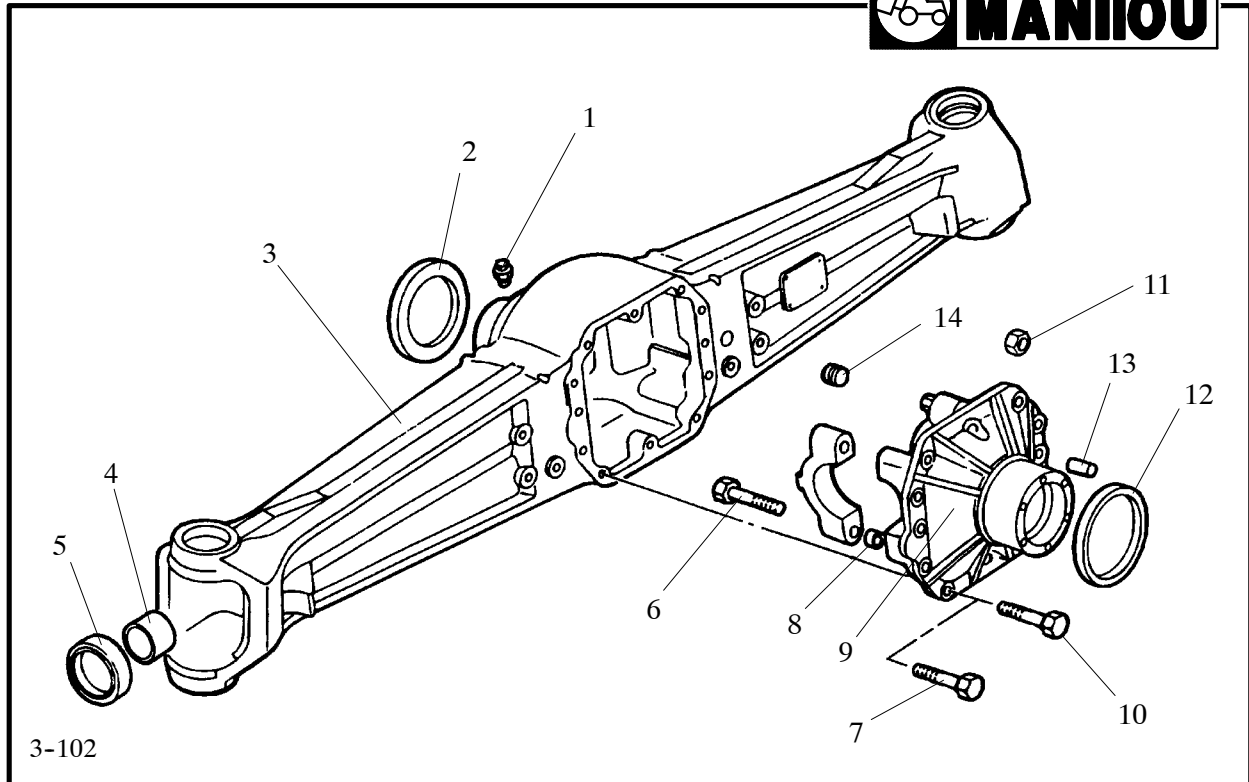
## STEERING

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ITEM	PART NUMBER	DESCRIPTION	QTY	MODEL
13	495411	Bolt, Pump	4	All
14*	- - - -	Seal	4	
15	492290	Valve Assembly	1	
16	495409	Spring	1	
17	492525	Shim	A/R	.010
17	492526	Shim	A/R	.015
18	495410	Seat	1	
19	495413	Head	1	
20	495412	Guide	1	
21	494781	Seal	1	
22*	- - - -	O-Ring	1	
23*	- - - -	O-Ring	1	
24	426351	Filter Assembly	1	
25	495452	Reservoir Assembly	1	
26	493592	Valve Assembly	1	
27	493624	Seal	1	
28	495417	Spring	1	
29	K97407	Ring	1	
30	424566	Cap, Filler	1	
31	426363	Ring	1	
32	495454	Bolt, Hex	1	
33	495186	Gear	1	
34	K74174	Key, Woodruff	1	
35	492287	Washer, Tab	1	
36	K34690	Nut, Lock	1	
37	K34807	Washer, Lock	2	
38	K380844	Bolt, Hex	2	
39*	- - - -	O-Ring	1	
40	492289	Seal	1	
41	495189	Elbow Assembly	1	
42	426350	Kit, Seal	1	

\* Denotes Items Included In Seal Kit Item 42.

# STEERING AXLE, 4WD



ITEM	PART NUMBER	DESCRIPTION	QTY	MODEL
1	495111	Pipe, Breather	1	4WD
2	426564	Washer, Thrust	1	
3	494652	Housing, Axle	1	
4	108902	Bushing	3	
5	108965	Seal, Oil	2	
6	494441	Nut, Lock	4	
7	495613	Bolt, Stud	4	
8	495614	Bush, Center	4	
9	491867	Support, Differential	1	
10	495615	Bolt, Stud	10	
11	495616	Nut, Lock	10	
12	494783	Washer, Thrust	1	
13	495617	Pin	2	
14	495618	Plug, Oil Drain	1	
14	495619	Plug, Oil Case	1	

ITEM	PART NUMBER	DESCRIPTION	QTY	MODEL
11	493282	Spacer, .1 mm	1	4WD
11	495126	Spacer, .3 mm	1	
11	493279	Spacer, .5 mm	1	
11	493280	Spacer, 1 mm	1	
12	493281	Cover	1	
13	492515	Seal, Oil	1	
14	495629	Plate	1	
15	495627	Bolt	4	
15	495675	Bolt	4	
16	495669	Washer	6	
17	426566	Gasket	1	
18	493277	Bearing	1	
19	494736	Gear	1	
20	495676	Bushing	2	
21	494737	O-Ring	1	
22	K304898	Bolt	4	
23	495677	Plug	1	
24	495678	Bolt, Retainer	1	
25	494733	Bushing, Inner	1	

ITEM	PART NUMBER	DESCRIPTION	QTY	MODEL
44	133969	Adapter	1	Powertrain Model 445/545
45	494812	Spring	1	
46	134248	Coupling	1	
47	133971	Washer	1	
48	134724	Ring	1	
49	493608	Bearing Assembly	1	
50	134044	Ring, Lock	1	
51	477269	Cone Assembly (Front)	1	
52	134613	Cone Assembly (Rear)	1	
53	494818	Retainer Assembly 2WD (Includes Items 54 & 55)	1	
54	133953	Cup (Front)	1	
55	134251	Cup (Rear)	1	
56	K34810	Washer	5	
57	134434	Bolt	5	
58	134341	Washer	1	
59	494752	Nut, Hex	1	
61	477272	Coupling	1	
62	1803369	Block	1	
63	K34808	Washer	1	
64	K304686	Bolt	2	

ITEM	PART NUMBER	DESCRIPTION	QTY	MODEL
1	495461	Housing Assembly (Includes Items 1A-1E)	1	Powertrain Model 655
1A	134310	Pin	1	
1B	495420	Plug	1	
1C	133999	Bushing	2	
1D	495708	Plug	1	
1E	134608	Bushing	1	
2	K57461	Screw	1	
3	426363	Seal	1	
4	K383705	Nut	1	
5	426157	O-Ring	2	
6	495444	Gasket	1	
7	495443	Cover	1	
8	134460	Gasket, Drain Plug	1	
9	134459	Drain Plug	1	
10	134434	Bolt	8	
11	K34793	Washer	8	
12	426145	Gasket	1	
13	495196	Cover	1	
14	134429	Bolt	3	
15	495195	Plate	1	
16	134429	Bolt	3	
17	134434	Bolt	3	
17A	K304890	Bolt	2	
18	K34793	Washer	5	
19	421121	Seal Assembly	1	
20	495419	Cover	1	
21	134007	Gasket	1	
22	425295	Gasket	1	
23	K87837	Plug	1	
24	134427	Bolt	1	
25	134276	Seal	1	
26	133983	Plug	1	
27	133984	Plug	1	
28	492308	Gasket	1	
29	492560	Cover Assembly	1	
30	134353	Screw, Breather	2	

ITEM	PART NUMBER	DESCRIPTION	QTY	MODEL
3	B6140	Side Shift Cylinder Assembly	1	All
4	B5175	Sub Plate Assembly, Valve	1	
5	K34806	Washer, Lock	10	
6	K45521	Bolt, Hex	4	
7	K20310	Bolt, Hex	4	
8	B7251	Shaft, Valve Handle	1	
9	K72044	Pin, Cotter	1	
10	B5180	Handle, Valve	3	
11	M100A1	Knob	3	
12	B7865	Handle Assembly, Valve	1	
13	B7852	Knob, Valve Handle	1	
14	B7853	Switch, Push Button	1	
15	B7854	Ring, Retaining	1	
16	B7942	Boot, Switch Cover	1	
17	K66-6	Fitting	12	
18	K908	O-Ring	12	
19	B760-835	Hose Assembly	2	
20	B7565	Tube Assembly	1	
21	K11-6	Fitting	2	
22	B760-861	Hose Assembly	4	
23	B5405	Tube Assembly	1	
24	K62-12-10	Fitting	1	
25	K71-12	Fitting	1	
26	421511	Tube Assembly	1	
27	424257	Pin, Tilt Cylinder	2	
28	K20326	Bolt, Hex	2	
29	B6215	Pin, Pivot	2	
30	K34807	Washer, Lock	4	
31	K20348	Bolt, Hex	4	
32	B5425	Pin, Pivot	2	
33	B7822	Disconnect, Male	1	
34	B7821	Fitting, "T"	1	
35A	R23263-2	Cap (used w/out Accumulator)	1	
35	K71-12	Fitting	1	
36	B760-1138	Hose Assembly	1	
37	K71-8	Fitting	1	
38a	495303	Fitting (use with Item 39a)	1	
38b	165688	Fitting (use with Item 39b)	1	
39a	204220	Accumulator (cast iron, painted)	1	utilizes Item 38a
39b	5373	Accumulator (polished stainless)	1	utilizes Item 38b
40	K301514	Screw, Set	2	

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*NOTE: Determine the Engine Model (192 CI, 201 CI, etc.) on your Lift Truck before ordering parts.  
See page II for ENGINE NO. location and explanation.*

## **SECTION 6**

### **ENGINE AND EXHAUST SYSTEM**

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*NOTE: Determine the Engine Model (192 CI, 201 CI, etc.) on your Lift Truck before ordering parts.  
See page II for ENGINE NO. location and explanation.*

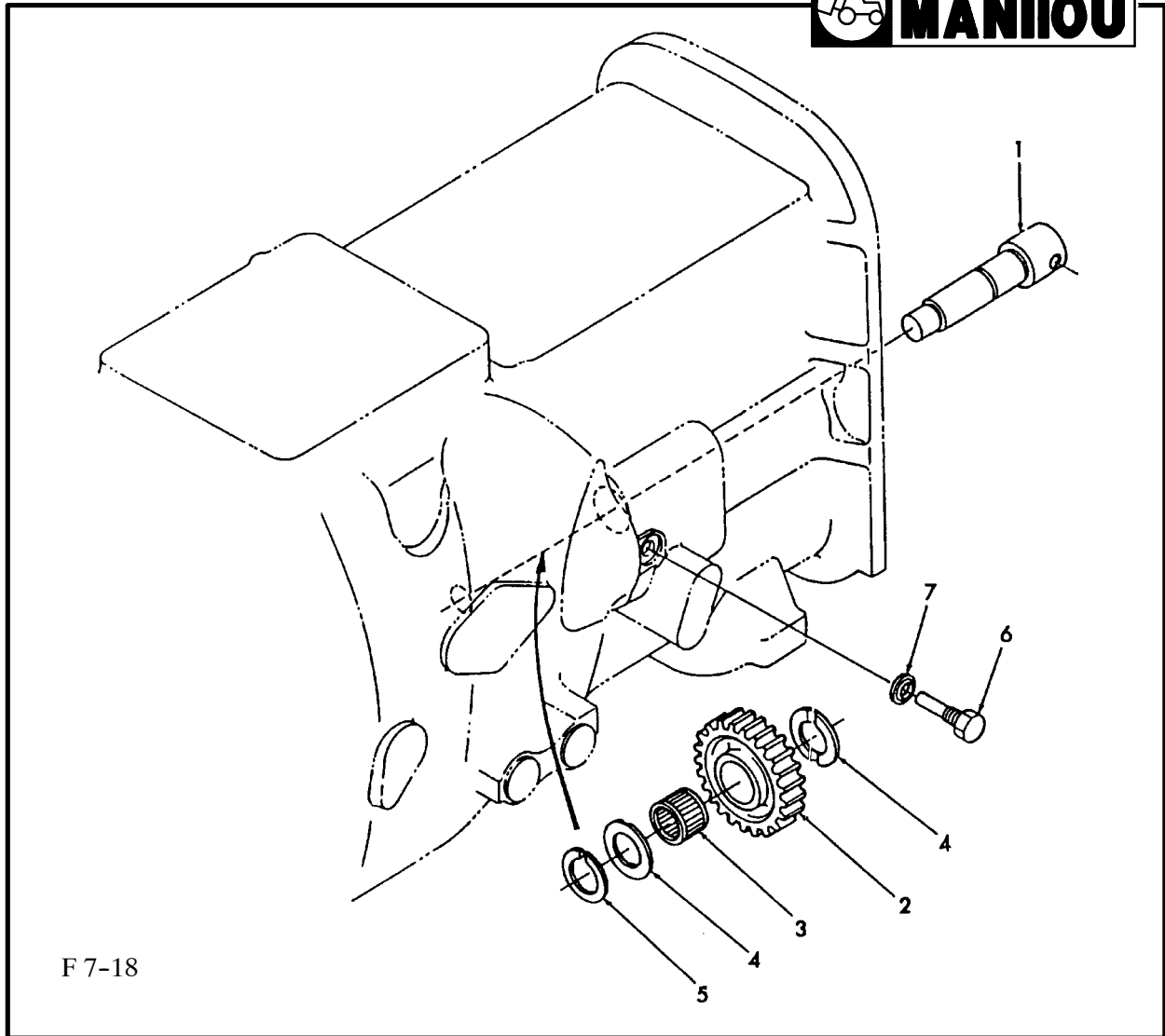
ITEM	PART NUMBER	DESCRIPTION	QTY	MODEL
24	495592	Gear Assembly	1	All
24A	495433	Bushing	1	
25	495494	Adapter	1	12-88/12-90
25	495803	Adapter	1	01-95/ -
26	495497	Bolt, Hex	1	
27	495446	Gear	1	
28	134058	Spacer	1	
29	495448	Plate	1	
30	K57644	Screw & Washer	2	
31	134673	Key	1	
32	491850	Bearing	4	
33	134345	Cover	1	
34	134073	Hose	1	
35	136329	Tube	1	
35	495457	Tube	1	
36	134145	Clamp	1	
37	136073	Washer	1	
38	K34808	Washer	1	
39	K56561	Bolt, Hex	1	
40	495593	Gear Assembly	1	
41	136274	Pin, Dowel	1	

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See page II for ENGINE NO. location and explanation.

ITEM	PART NUMBER	DESCRIPTION	QTY	MODEL
1	495872	Turbocharger Assembly	1	Turbo only
2	495873	Gasket, Turbo Intake	1	
3	495874	Nut	4	
4	495875	Stud	4	
5	495876	Manifold, Exhaust	1	
6	495877	Gasket, Exhaust	1	
7	495878	Bolt	6	
8	495879	Tube Assembly, Oil Supply	1	
9	495880	Bolt, Banjo	1	
10	495881	Washer	2	
11	K86004	Connector	1	
12	495882	Tube Assembly, Oil Return	1	
13	495883	Gasket	1	
14	495884	Bolt	2	
15	495885	Washer	2	
16	495886	Elbow	1	
17	B2236-12	Clamp	4	
18	426637	Hose	2	
19	495306	Tube	1	
20	495887	Intake Manifold	1	
21	495888	Pipe Assembly, Muffler Inlet	1	
22	495889	Bolt	2	
23	495890	Washer	2	
24	495891	Bolt	4	
33	495892	Gasket, Intake Manifold	1	
34	B7091-1	Clamp	2	
35	495315	Muffler Assembly	1	
36	B6054	Pipe	1	
37	K20428SS	Bolt	1	
38	491944	Bracket	1	
39	K34807SS	Washer	1	
40	K33797SS	Nut	1	

ITEM	PART NUMBER	DESCRIPTION	QTY	MODEL
1	492275	Cover, Front	1	All
2	492274	Gasket	1	
3	495533	Bolt	6	
4	495537	Pin, Knock	2	
5	492265	Seal, Oil	1	
6	492276	Seal, Oil	1	
7	493604	Washer, Thrust	1	
8	492733	Pin, Knock	2	
9	494791	Gear	1	
10	494763	Bearing, Ball	1	
11	492277	Ring, Seal	1	
12	492269	Gear	1	
13	492270	Bearing, Rear	1	
14	492264	Pump	1	
15	495799	Bolt	4	
16	494768	Pin, Knock	2	
17	495572	Tube, Inlet	1	
18	492278	Gasket	1	
19	495516	Bolt, Hex	2	
20	495532	Bolt	2	
21	492271	Bearing, Front	1	

# REVERSE IDLER SHAFT & GEAR



ITEM	PART NUMBER	DESCRIPTION	QTY	MODEL
1	495575	Shaft, Back Idler	1	All
2	495120	Gear, Back Idler	1	
3	495119	Bearing, Needle	1	
4	495576	Collar, Thrust	2	
5	495118	Ring, Snap	1	
6	495577	Bolt, Stopper	1	
7	492527	Washer, Seal	1	

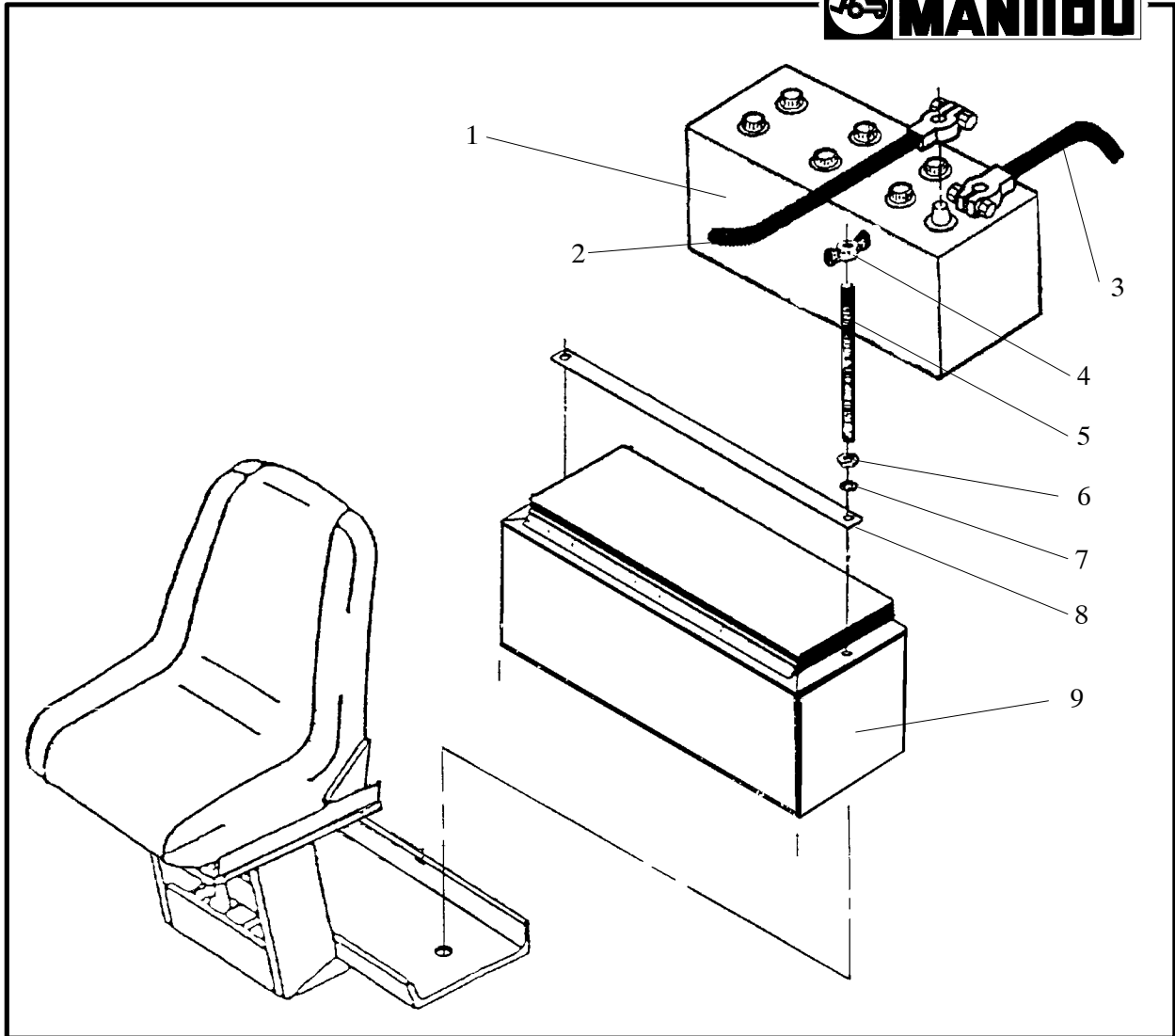
ITEM	PART NUMBER	DESCRIPTION	QTY	MODEL
1	492141	Cooler Assembly, Trans. Oil	1	All
2	492772	Hose Assembly	1	
3	425535	Hose Assembly	1	
4	495833	Tube Assembly, Trans. Oil Inlet	1	
5	477232	Oil Filter & Adapter Assembly Includes Item 6.	1	
6	425657	Filter Assembly	1	
7	495834	Bracket, Oil Filter Mounting	1	
8	K304686	Bolt	3	
9	K304684	Bolt	2	
10	K390828	Connector	1	
11	136366	O-Ring	1	
12	477236	O-Ring	8	
13	477237	Elbow	1	
14	136365	O-Ring	2	
15	K390938	Connector	1	
16	K390999	Elbow	1	
19	425283	Sender	1	
25	K20428SS	Bolt	2	
26	491773	Spacer	2	
27	K33799	Nut	2	
28	K34807	Washer	2	
29	K44728	Washer	2	
30	R19452	Fitting	2	
31	167269	O-Ring	2	
32	425064	Clamp	1	
33	425070	Cover	1	
34	K20520	Bolt	1	

ITEM	PART NUMBER	DESCRIPTION	QTY	MODEL
	491894	Fuel Sedimenter & Filter Assembly Includes Items 1 thru 21.	1	All
1	Not Serviced	Head Assembly	1	
2	492831	Washer	1	
3	134513	Plug, M10	1	
4	134555	Washer	3	
5	494072	Plug	3	
6	K44728	Washer	2	
7	K34807	Washer	2	
8	K304796	Bolt	2	
9	426384	Gasket	2	
10	492299	Element Assembly	1	
11	134402	Bowl	1	
12	426385	Gasket	3	
13	492429	Base & Stud Assembly	1	
14	426383	Washer	2	
15	134512	Plug	2	
16	134402	Bowl	1	
17	421206	Element Assembly	1	
18	134706	Seal	1	
19	424556	Seal	2	
20	134566	Washer	2	
21	494070	Bolt	2	
22	493901	Tube, Inlet Fuel Tank to Fuel Filter	1	
23	495842	Tube, Fuel to Fuel Filter1	1	
24	493548	Tube, Filter to Fuel Pump	1	
25	494038	Elbow	1	
26	493902	O-Ring	4	
27	107232	Connector	4	
28	493903	Spacer	4	
29*	425751	Solenoid, Fuel Shut-off	1	
30*	426162	Washer	2	
31*	426160	Fuel Connector	1	
32*	426161	Valve	1	
33**	493276	Fuel Injection Pump	1	All "C" Engines
33**	495490	Fuel Injection Pump	1	All "D" Engines
33**	495839	Fuel Injection Pump, Turbo	1	All "332T/JD" Engines
33**	495840	Fuel Injection Pump, Turbo	1	All "332T/JC" Engines

\* Included with Item 33.

\*\* See page II for ENGINE NO. location and explanation.

# BATTERY, COVER & CABLES



ITEM	PART NUMBER	DESCRIPTION	QTY	MODEL
1	B6114	Battery	1	All
2	B7934	Cable, Battery (Positive)	1	
3	B7933	Cable, Battery (Negative)	1	
4	K33897	Nut, Wing	2	
5	B6201	Stud	2	
6	K33799	Nut	2	
7	K34807	Washer, Lock	2	
8	B6202	Strap	1	
9	B6165	Cover, Battery	1	

ITEM	PART NUMBER	DESCRIPTION	QTY	MODEL
1	424093	Bar, Mast Support	2	All
2*	B5795	Cap Assembly	4	
3	B6119	Bolt	4	
4	491738	Bolt	8	
5	426432	Plate, Axle Mount	2	
6	K44744	Washer	8	
7	491739	Nut	16	
8	R106	Ring, Retaining	4	
9	R4584	Wiper	4	
10	R7638	Bearing	4	
11	K87901	Fitting, Grease	2	
12	R20152	Spacer	2	used w/o Mast Side-Shift

\* Includes Item 3 (Bolt).

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