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JULHO 1979

MICHIGAN

PARTS MANUAL

RUTHZIL TRATOR COMERCIAL DE PEÇAS LTDA 11 97083-6812 ROLANDO CITRANGULO

No. 3016

MODEL 45B Articulated TRACTOR SHOVEL

Information contained herein pertains to Machine Serial Numbers listed below:

PERKINS 4189C101 JAC & After

Record Your Machine Serial Number Here

_____

CLARK EQUIPMENT COMPANY

1M JULY 79

Printed in U.S.A.

MICHIGAN

WARRANTY

Clark Equipment Company (CLARK) has warranted to the Distributor (Seller) who, pursuant to agreement with CLARK, hereby, on its own behalf, warrants to the Buyer each new CLARK product to be free from defects in material and workmanship under normal use and maintenance as herein provided.

Distributor's sole obligation under this warranty shall be limited to repairing, replacing or allowing credit for, at Distributor's option, any part which under normal and proper use and maintenance proves defective in material or workmanship within six (6) months after delivery to or one thousand (1,000) hours of use by Buyer, whichever shall occur first; provided, however, that (i) the product is placed in use not later than one year after shipment from CLARK'S plant; (ii) that notice of any such defect and satisfactory proof thereof is promptly given by Buyer to Distributor, and (iii) such material shall have been returned to Distributor, with transportation charges prepaid and found by Distributor to have been defective.
This warranty does not apply in respect of damage to or defects in any product caused by overloading or other misuse, neglect or accident, nor does this warranty apply to any product which has been repaired or altered in any way which, in the sole judgment of Distributor, affects the performance, stability or general purpose for which it was manufactured.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES (EXCEPT OF TITLE), EXPRESSED OR IMPLIED, AND THERE ARE NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL DISTRIBUTOR BE LIABLE FOR CONSEQUENTIAL OR SPECIAL DAMAGES.

This warranty does not apply to parts or trade accessories not manufactured by CLARK, or attachments not manufactured or sold by CLARK. Buyer shall rely solely on the existing warranties, if any, of the respective manufacturers thereof.

IMPROVEMENTS

It is CLARK'S policy to constantly strive to improve its products. The right therefore is reserved to make changes in design and improvements whenever it is believed the efficiency of the product will be improved thereby, but without incurring any obligation to incorporate such improvements in any product which has been shipped or is in service.

Revised May 1, 1966

Information contained herein pertains to Machines: 45B Perkins 4189C101 JAC & After

RECORD YOUR MACHINE SERIAL NO._____

WHEN ORDERING REPAIR PARTS To assure the best results and to maintain the original quality built into the machine it is important that only Clark-Approved Parts be used when new parts are required.

IMPORTANT: Always furnish the distributor with the machine serial number when ordering parts. Order through your nearest Clark Distributor for THE MICHIGAN LINE.

Always give serial number of machine.

Furnish: Quantity, Part Number and Description.

WHEN PARTS ARE RECEIVED Check immediately for quantity, correctness and condition. Claims for damages, during shipment, should be made to the carrier immediately.

PARTS MANUAL ARRANGEMENT The various parts groups involved in this equipment are arranged in this manual in alphabetical order. Each alphabetical parts group is page numbered separately with the page numbers prefixed by the alphabetical letter designated for that group, i.e., A1, A2, B1, B2, etc. Following the alphabetical and page number designation, and separated therefrom by a hyphen (-), is the page version number, i.e., A1-1, A1-2, etc. This designation indicates the revision numbers assigned to incorporate design changes in the equipment covered by that page.

Parts Groups "A" thru "Y" include all items furnished as standard equipment at date of this publication. All optional and accessory items are listed under Group Z in the rear of this manual.

ABBREVIATIONS

adjusting ..... adj	**engine** ..... eng	**pressure** ..... press
assembly ..... assy	**emergency** ..... emgcy	**protective structure** ..... prot strctr
bearing ..... brg	**hydraulic** ..... hyd	**radiator** ..... rad
brake ..... brk	**includes** ..... inc.	**receptacle** ..... recept
carrier ..... crr	**inlet** ..... in	**retainer** ..... ret
cluster ..... clsr	**instrument** ..... inst	**right hand** ..... R.H.
connecting ..... connctg	**left hand** ..... L.H.	**ring** ..... rg
converter ..... conv	**mounting** ..... mtg	**section** ..... sectn
cylinder ..... cyl	**outlet** ..... out	**steering** ..... strg
differential ..... diff	**planetary** ..... planet	**temperature** ..... temp
	power ..... pwr	**windshield** ..... wndsh

SYMBOLS

†NOT ILLUSTRATED
§NOT SOLD SEPARATELY
‡AS REQUIRED
→thru
& →and after

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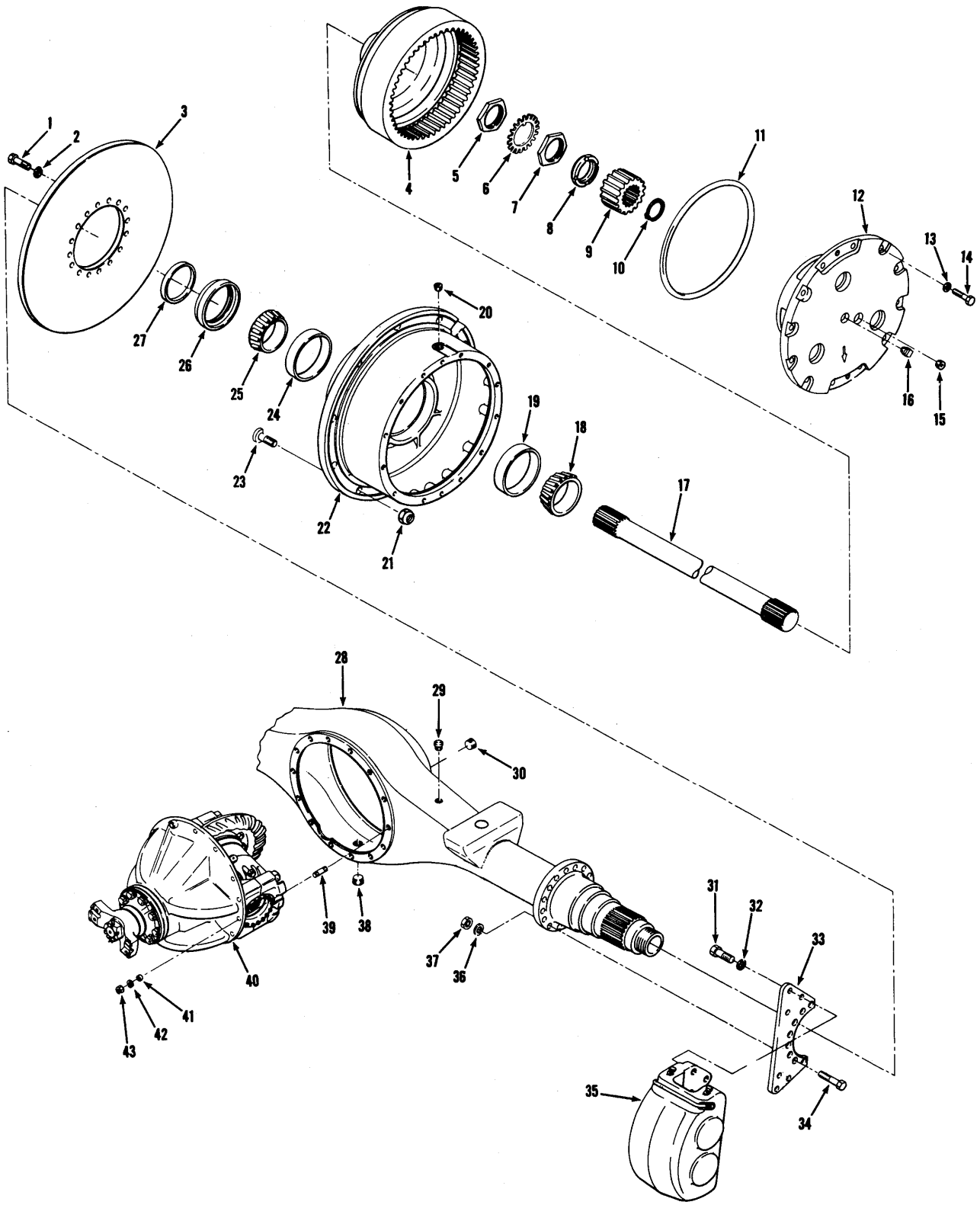
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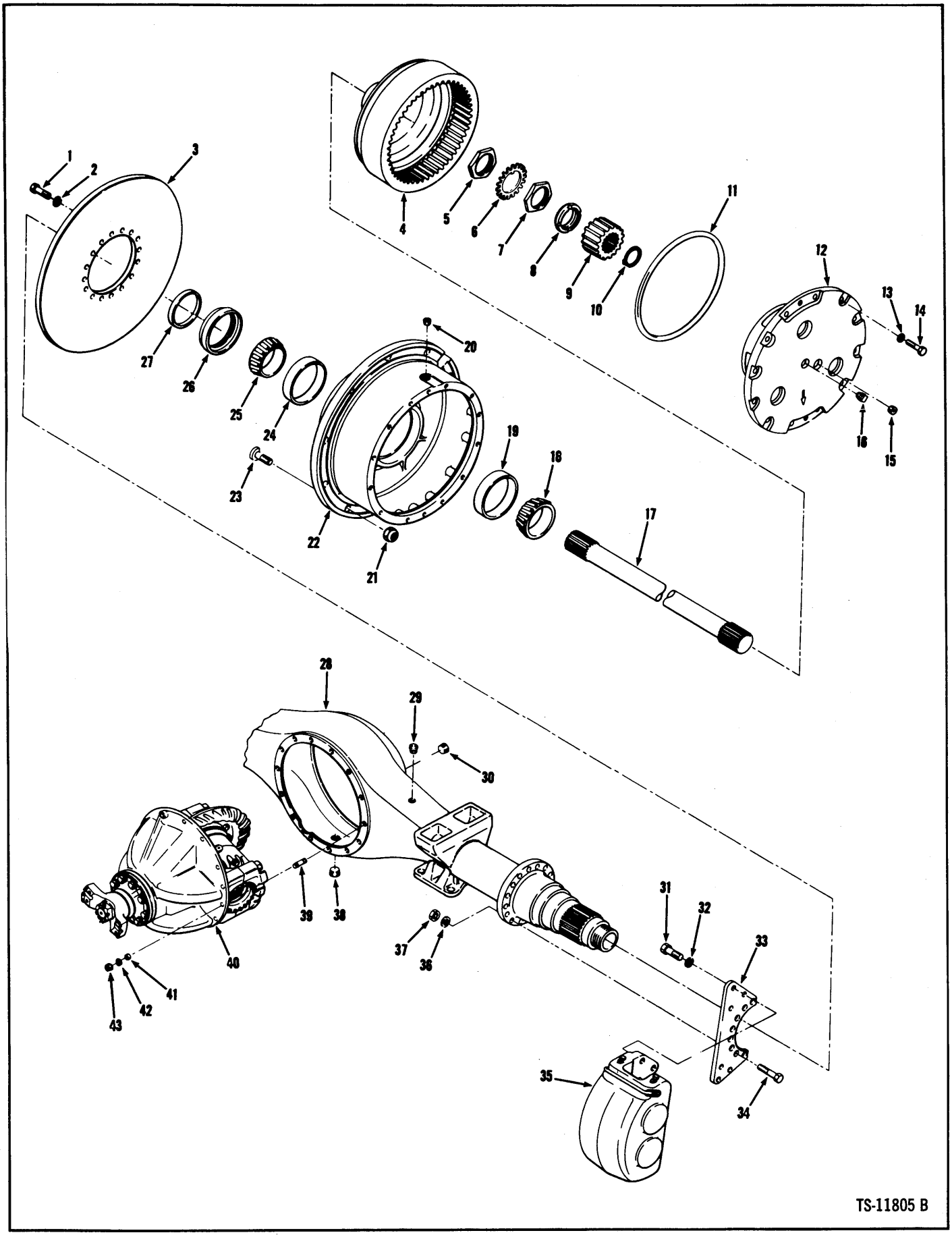
TS-11593 B

Axle Assembly, Front

MICHIGAN

No.	Part No.	Qty.	Description
A	[1]191640	1	Axle assy
1	124158	32	Bolt
2	104412	32	Washer
3	125435	2	Brake disc
4	123904	2	Gear
5	121013	2	Nut
6	121014	2	Lock
7	121013	2	Nut
8	121015	2	Sleeve
9	121804	2	Gear
10	224028	2	Ring
11	107348	2	O-ring
12	[2]124571	2	Planet carrier assy
13	106762	24	Washer
14	100970	24	Bolt
15	10F-02	2	Pipe plug
16	16F-04	2	Pipe plug
17	124260	2	Axle shaft
18	675261	2	Cone roller brg
19	668553	2	Cup roller brg
20	119469	2	Pipe plug
21	103522	24	Nut
22	[3]121785	2	Hub assy
23	121808	24	Stud
24	672004	2	Cup roller brg
25	672005	2	Cone roller brg
26	[4]124325	2	Seal
27	----	–	Omit
28	2105085	1	Housing axle
29	106656	1	Breather
30	16F-12	1	Pipe plug
31	17C-1232	12	Bolt
32	111656	12	Washer
33	122559	2	Brake adapter plate
34	18C-1036	16	Bolt
35	[2] ----	1	Brake head assy LH
35A	†[2] ----	1	Brake head assy RH
36	104412	16	Washer
37	64D-10	16	Nut
38	119469	1	Pipe plug
39	119270	14	Stud
40	[2]124884	1	Diff carrier assy
41	103216	3	Dowel
42	112278	14	Washer
43	64D-07	14	Nut

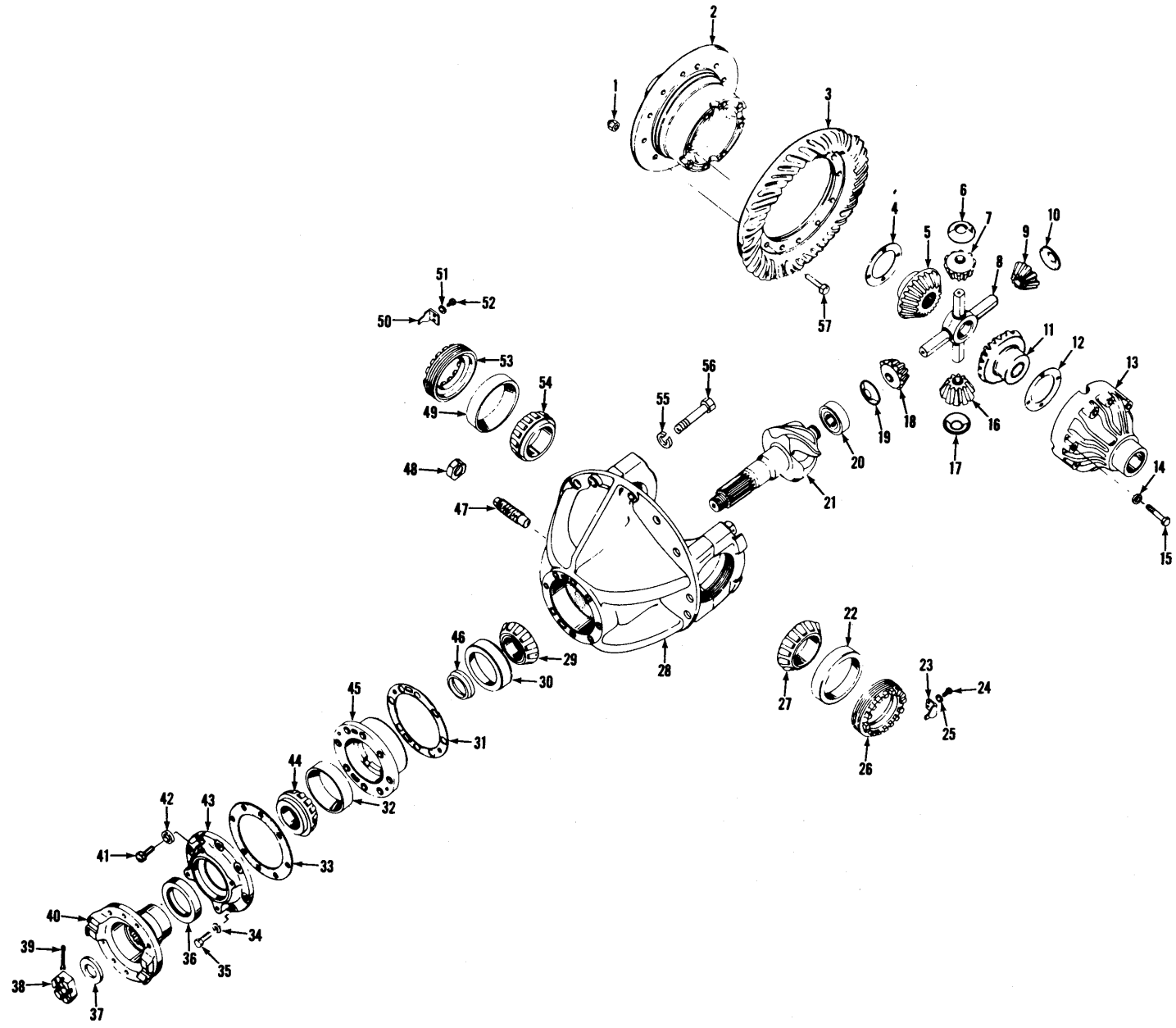
[1](D-17800) Inc. 1→20, 22→43
[2]See Index
[3]Inc. 19, 24
[4]Ref. S.G.-628


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TS-11805 B

MICHIGAN

No.	Part No.	Qty.	Description
A	[1]192406	1	Axle assy
1	124158	32	Bolt
2	104412	32	Washer
3	125435	2	Brake disc
4	123904	2	Gear
5	121013	2	Nut
6	121014	2	Lock
7	121013	2	Nut
8	121015	2	Sleeve
9	121804	2	Gear
10	224028	2	Ring
11	107348	2	O-Ring
12	[2]124571	2	Planet carrier assy
13	106762	24	Washer
14	100970	24	Bolt
15	10F-02	2	Pipe plug
16	16F-04	2	Pipe plug
17	124260	2	Axle shaft
18	675261	2	Cone roller brg
19	668553	2	Cup roller brg
20	119469	2	Pipe plug
21	103522	24	Nut
22	[3]121785	2	Hub assy
23	121808	24	Stud
24	672004	2	Cup roller brg
25	672005	2	Cone roller brg
26	[4]124325	2	Seal
27	----	–	Omit
28	2105120	1	Housing axle
29	106656	1	Breather
30	16F-12	1	Pipe plug
31	17C-1232	8	Bolt
32	111656	8	Washer
33	122559	2	Brake adapter plate
34	18C-1036	16	Bolt
35	[2]----	2	Brake head assy
36	104412	16	Washer
37	64D-10	16	Nut
38	119469	1	Pipe plug
39	119270	14	Stud
40	[2]124871	1	Diff carrier assy
41	103216	3	Dowel
42	112278	14	Washer
43	64D-07	14	Nut

[1](D-17800) Inc. 1→20, 22→43
[2]See Index
[3]Inc. 19, 24
[4]Ref. S.G.-628



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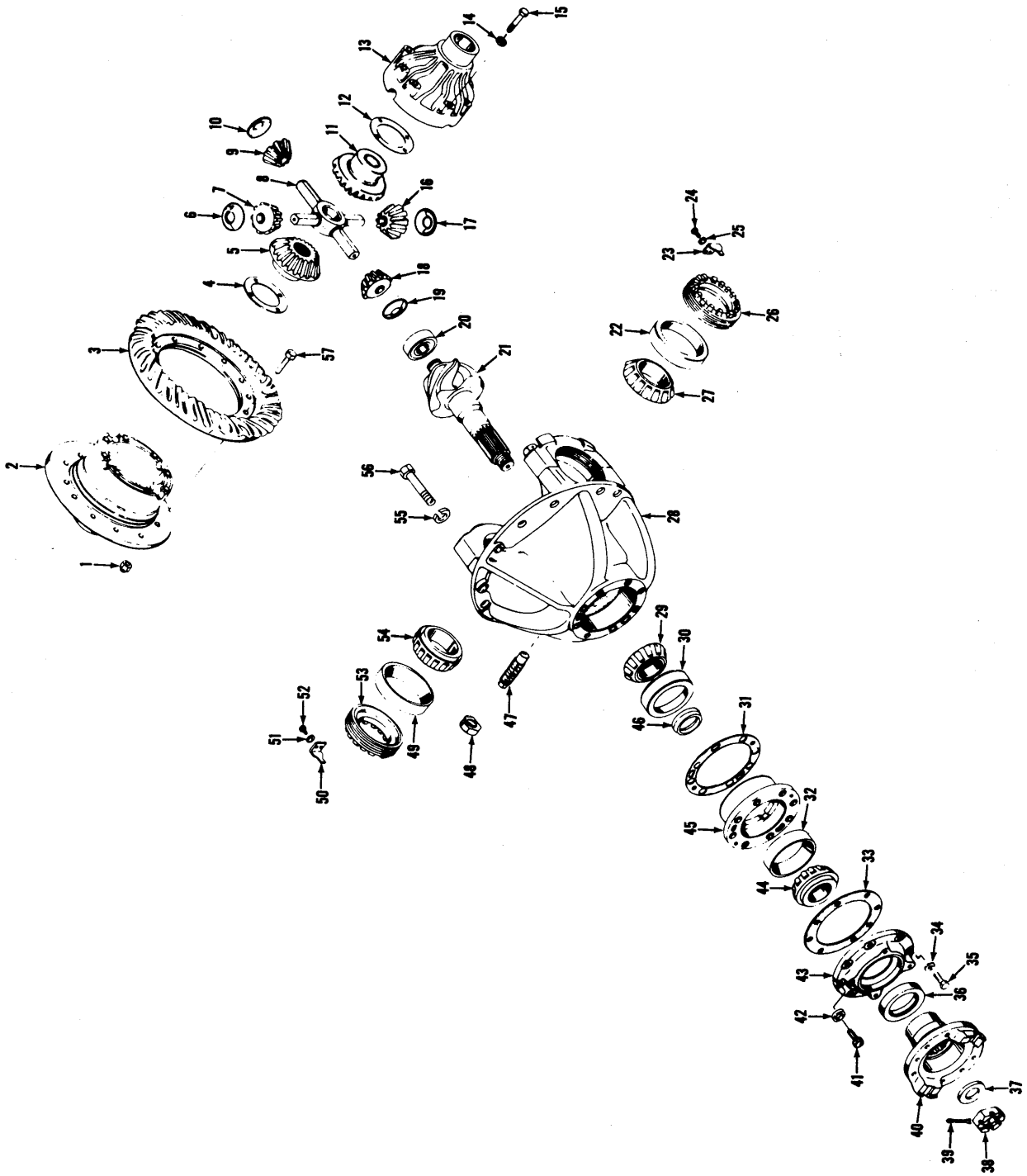
Axle Differential Carrier Assembly, Front

MICHIGAN

No.	Part No.	Qty.	Description
A	[2]124884	1	Differential assy
1	18D-08	12	Nut
2	§[3]———	1	Case
3	§[4]———	1	Gear
4	100173	1	Washer
5	100170	1	Gear
6	100172	1	Washer
7	§[5]———	1	Gear
8	100171	1	Spider
9	§[5]———	1	Gear
10	100172	1	Washer
11	100170	1	Gear
12	100173	1	Washer
13	§[3]———	1	Case
14	106762	12	Washer
15	17C-856	12	Bolt
16	§[5]———	1	Gear
17	100172	1	Washer
18	§[5]———	1	Gear
19	100172	1	Washer
20	675536	1	Bearing
21	§[4]———	1	Pinion
22	675249	1	Cup roller brg
23	126468	1	Lock
24	1C-614	1	Bolt
25	4E-06	1	Lockwasher
26	122765	1	Nut
27	675248	1	Cone roller brg
28	[6]815784	1	Carrier assy
29	667277	1	Cone roller brg
30	667278	1	Cup roller brg
31	‡[7]112354	—	Shim
31A	†‡[8]125576	—	Shim
31B	†‡[9]125577	—	Shim
32	675257	1	Cup roller brg
33	112353	1	Gasket
34	4E-08	1	Lockwasher
35	17C-828	1	Bolt
36	111720	1	Seal
37	119298	1	Washer
38	100950	1	Nut
39	1F-428	1	Pin cotter
40	106081	1	Flange
41	17C-928	5	Bolt
42	4E-09	5	Lockwasher
43	112352	1	Retainer
44	710288	1	Cone roller brg
45	[10]124041	1	Cage
46	124040	1	Spacer
47	123800	1	Screw
48	8D-14	1	Nut
49	675249	1	Cup roller brg
50	126468	1	Lock
51	4E-06	1	Lockwasher
52	1C-614	1	Bolt
53	122765	1	Nut
54	675248	1	Cone roller brg
55	26E-12	4	Lockwasher
56	123830	4	Bolt
57	100176	12	Bolt
58	†[11]124179	1	Differential assy
59	†[12]124444	1	Body assy
60	†[13]118150	1	Gear set
61	†[14]126894	1	Case kit
62	†[15]815745	1	Pinion kit

[2]Inc. 1➔57
[3]See 61
[4]See 60
[5]See 62
[6]Inc. 55, 56
[7].004 (0,10 mm)
[8].007 (0,18 mm)
[9].010 (0,25 mm)
[10]Inc. 32
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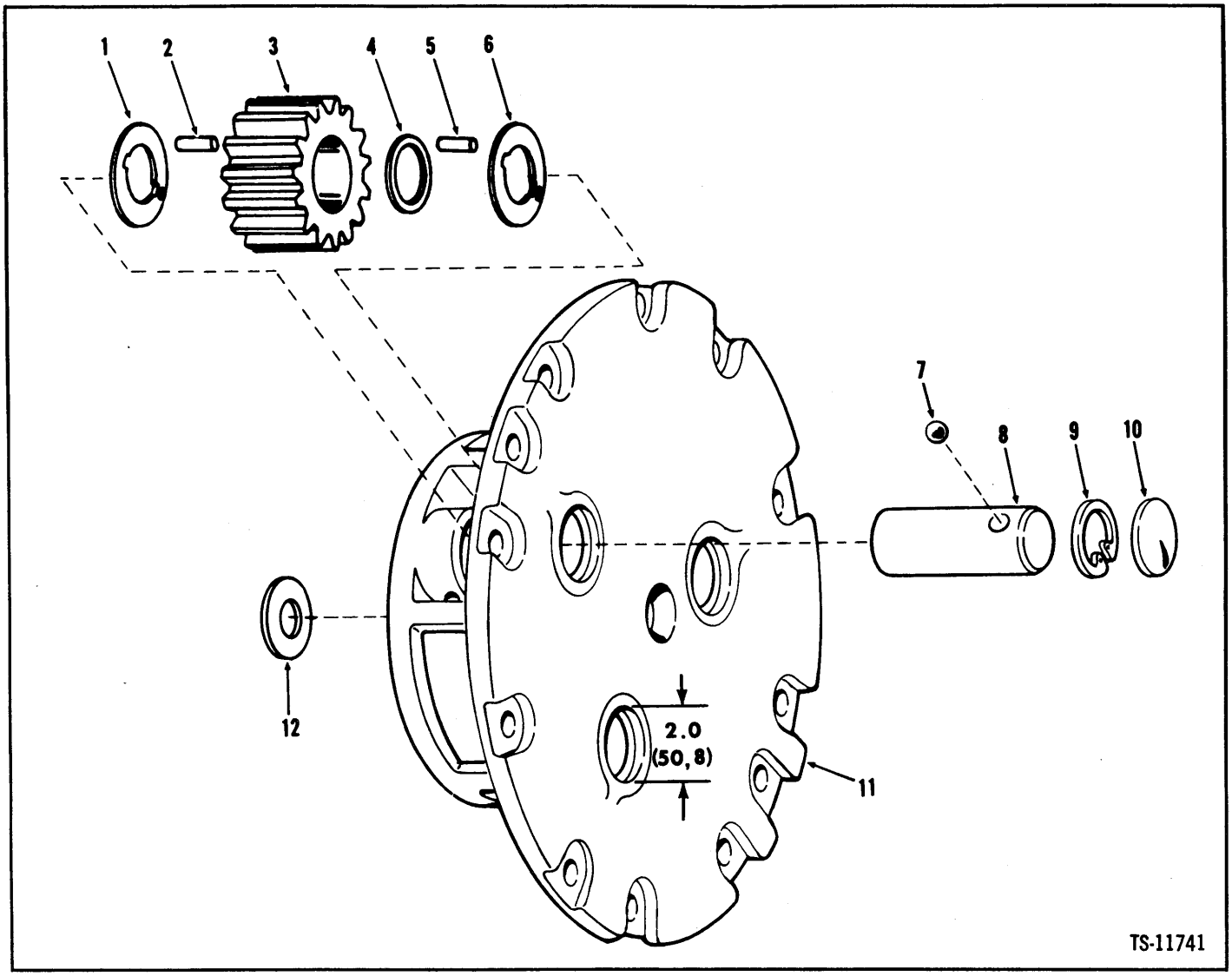
Axle Differential Carrier Assembly, Rear

MICHIGAN

No.	Part No.	Qty.	Description
A	[2,16]124871	1	Differential assy
1	18D-08	12	Nut
2	§[3]———	1	Case
3	§[4]———	1	Gear
4	100173	1	Washer
5	100170	1	Gear
6	100172	1	Washer
7	§[5]———	1	Gear
8	100171	1	Spider
9	§[5]———	1	Gear
10	100172	1	Washer
11	100170	1	Gear
12	100173	1	Washer
13	§[3]———	1	Case
14	106762	12	Washer
15	17C-856	12	Bolt
16	§[5]———	1	Gear
17	100172	1	Washer
18	§[5]———	1	Gear
19	100172	1	Washer
20	675536	1	Bearing
21	§[4]———	1	Pinion
22	675249	1	Cup roller brg
23	126468	1	Lock
24	1C-614	1	Bolt
25	4E-06	1	Lockwasher
26	122765	1	Nut
27	675248	1	Cone roller brg
28	[6]815784	1	Carrier assy
29	667277	1	Cone roller brg
30	667278	1	Cup roller brg
31	‡[7]112354	—	Shim
31A	†‡[8]125576	—	Shim
31B	†‡[9]125577	—	Shim
32	675257	1	Cup roller brg
33	112353	1	Gasket
34	4E-08	1	Lockwasher
35	17C-828	1	Bolt
36	111720	1	Seal
37	119298	1	Washer
38	100950	1	Nut
39	1F-428	1	Pin cotter
40	106081	1	Flange
41	17C-928	5	Bolt
42	4E-09	5	Lockwasher
43	112352	1	Retainer
44	710288	1	Cone roller brg
45	[10]124041	1	Cage
46	124040	1	Spacer
47	123800	1	Screw
48	8D-14	1	Nut
49	675249	1	Cup roller brg
50	126468	1	Lock
51	4E-06	1	Lockwasher
52	1C-614	1	Bolt
53	122765	1	Nut
54	675248	1	Cone roller brg
55	26E-12	4	Lockwasher
56	123830	4	Bolt
57	100176	12	Bolt
58	†[11]124870	1	Differential assy
59	†[12]124444	1	Body assy
60	†[13]110127	1	Gear set
61	†[14]126894	1	Case kit
62	†[15]815745	1	Pinion kit

[2]Inc. 1➔57
[3]See 61
[4]See 60
[5]See 62
[6]Inc. 55, 56
[7].004 (0,10 mm)
[8].007 (0,18 mm)
[9].010 (0,25 mm)
[10]Inc. 32
[11]Inc. 1➔19, 21, 57
[12]Inc. 2, 4➔19
[13]Inc. 3, 21
[14]Inc. 2, 13➔15
[15]Inc. 7, 9, 16, 18
[16]For No-Spin Differential see SG-720.

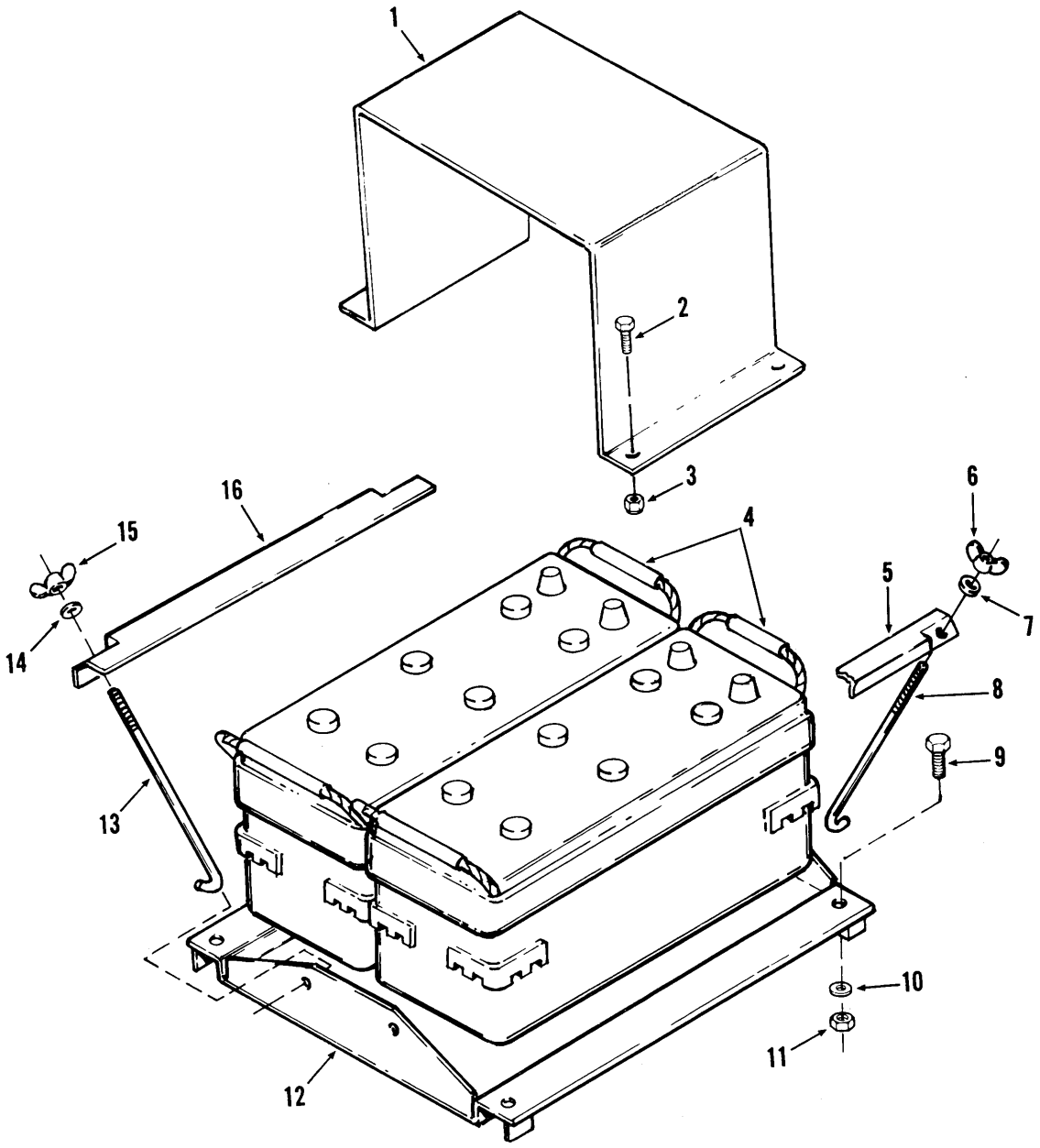
Axle Planet Carrier Assembly, Front & Rear



No.	Part No.	Qty.	Description
A	[1,2]124571	4	Carrier assy
1	124574	3	Washer
2	124576	87	Roller
3	124573	3	Gear
4	124577	3	Spacer
5	124576	87	Roller
6	124574	3	Washer
7	10J-12	3	Ball
8	124575	3	Gear shaft
9	672907	3	Ring snap
10	12F-200	3	Plug
11	124572	1	Carrier
12	121166	1	Washer

[1]Inc. 1→12
[2]Four (4) carriers used on machine. Quantities listed are for one (1) carrier.

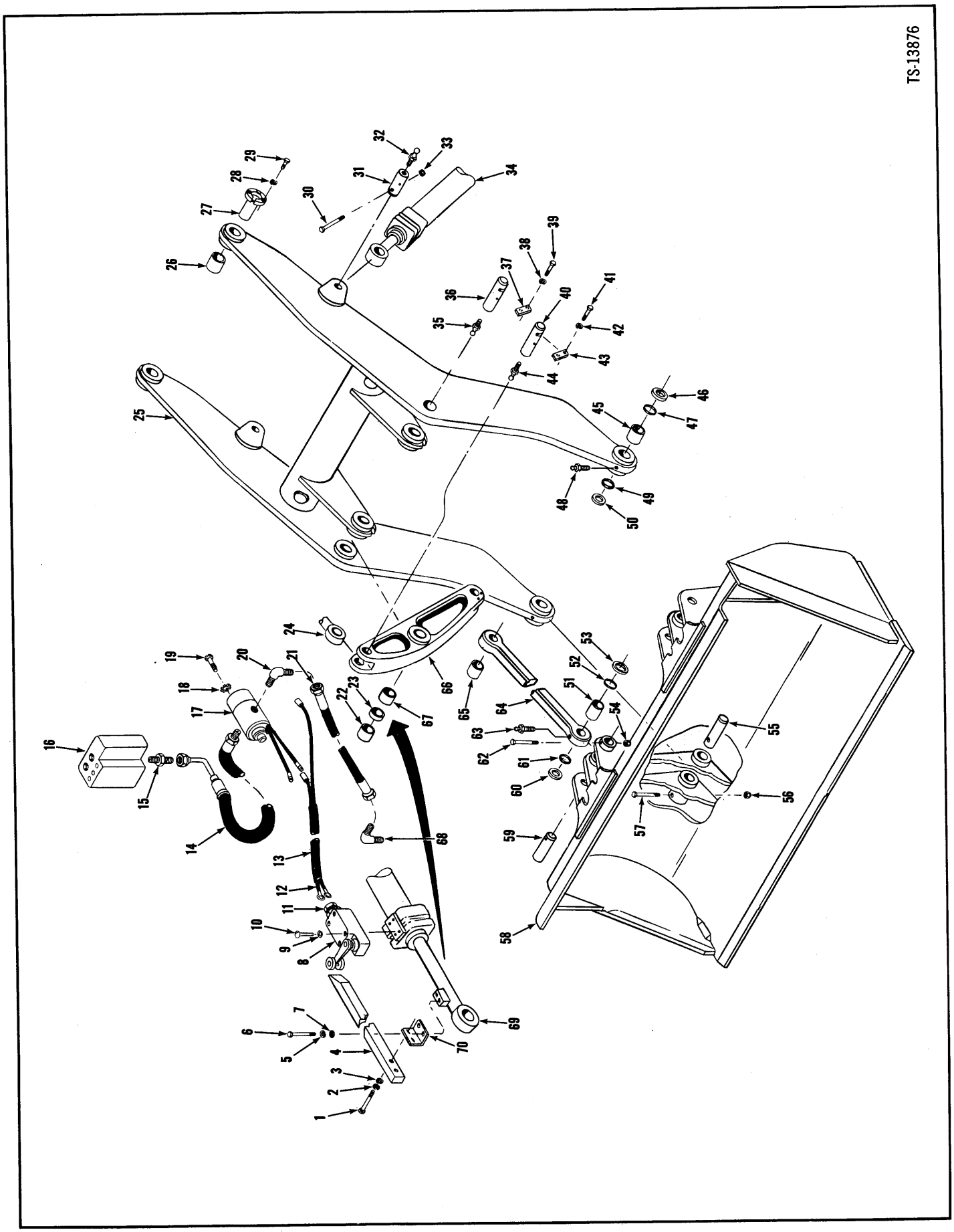
PM 3016
Printed in U.S.A.



TS-11976

No.	Part No.	Qty.	Description
1	3981171	1	Battery cover
2	24C-616	2	Bolt
3	18D-06	2	Nut
4	[2]3950272	2	Battery – Japan
5	3980896	1	Battery hold down
6	16D-05	2	Wing nut
7	25E-15	2	Washer
8	3980897	2	Stud
9	24C-632	4	Bolt
10	619021	4	Washer
11	18D-06	4	Nut
12	3980891	1	Base
13	3980897	2	Stud
14	25E-15	2	Washer
15	16D-05	2	Wing nut
16	3980896	1	Battery hold down

[2]For replacement in the U.S.A. use 1310121 Plus 1–2512414 Terminal & 1–2512415 Terminal.

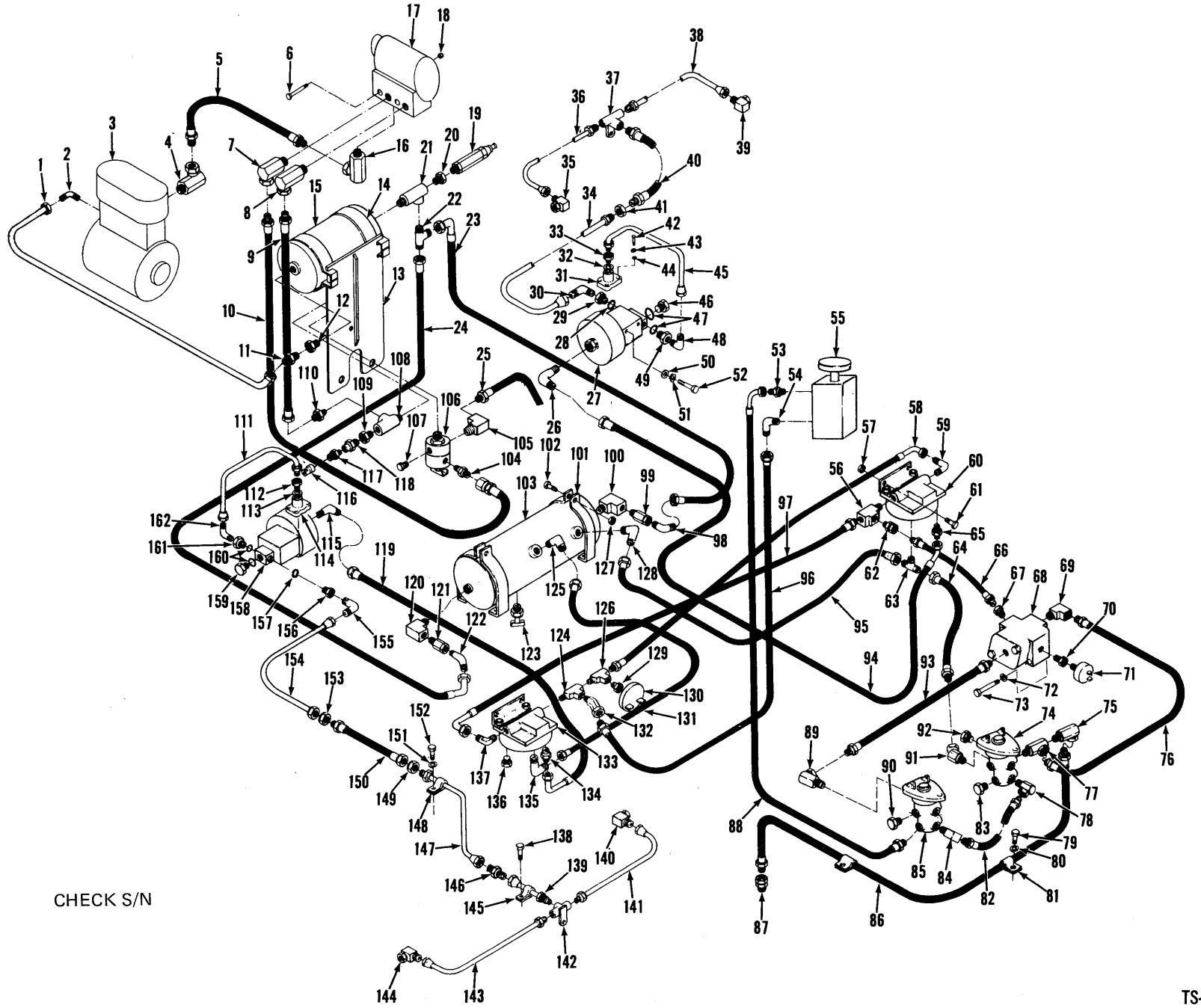

TS-13876

Boom, Bellcrank, Pushrod & Bucket Leveler

No.	Part No.	Qty.	Description
1	24C-620	2	Bolt
2	4E-06	2	Lockwasher
3	25E-18	2	Washer
4	3980905	1	Bar
5	4E-08	2	Lockwasher
6	24C-820	2	Bolt
7	25E-21	2	Washer
8	[11]1767898	1	Switch limit
8A	†990556	1	Arm
9	17E-10	4	Lockwasher
10	41G-1024	4	Screw
11	1549705	1	Connector
12	2501747	1	Harness
13	[2]743563	1	Hose
14	2500122	1	Hose
15	5204649	1	Connector
15A	†91F-7	1	O-ring
16	[1]----	1	Valve assy main
17	[3]2510008	1	Solenoid valve
17A	†950903	1	Seal kit
18	12E-10	2	Lockwasher
18A	†25E-10	2	Washer
19	86G-1008	2	Screw
20	42F-5	1	Elbow
21	2500123	1	Hose
22	3980060	2	Bushing
23	3980061	2	Spacer
25	[4]2508752	1	Boom standard
25A	†[4]2508416	1	Boom high lift
26	3980076	2	Bushing
27	3980204	2	Pin
28	4E-10	2	Lockwasher
29	23C-1022	2	Bolt
30	18C-660	2	Bolt
31	3980094	2	Pin
32	10H-25	2	Fitting grease
33	18D-06	2	Nut
34	[1]----	2	Cyl assy boom
35	10H-25	2	Fitting grease

No.	Part No.	Qty.	Description
36	2520417	2	Pin
37	3980071	2	Lockplate
38	4E-07	4	Lockwasher
39	24C-716	4	Bolt
40	3980064	4	Pin
41	23C-616	8	Bolt
42	4E-06	8	Lockwasher
43	3980065	4	Lockplate
44	10H-25	4	Fitting grease
45	2508889	2	Bushing
46	[5]2502842	2	Seal guard assy
47	1519195	2	Seal
48	10H-25	2	Fitting grease
49	1519195	2	Seal
50	[6]2502842	2	Seal guard assy
51	2508891	2	Bushing
52	2500234	2	Seal
53	[7]2508888	2	Seal guard assy
54	18D-08	2	Nut
55	549907	2	Pin
56	18D-08	2	Nut
57	18C-876	2	Bolt
58	[1]----	1	Bucket
59	532170	2	Pin
59A	†552146	2	Shim .0625
59B	†552147	2	Shim .125
60	[8]2508888	2	Seal guard assy
61	2500234	2	Seal
62	24C-872	2	Bolt
63	10H-25	2	Fitting grease
64	[9]2508748	2	Pushrod standard
64A	†[9]2508500	2	Pushrod high lift
65	3980068	2	Bushing
66	[10]3980058	1	Bellcrank assy RH
66A	†[10] 3980062	1	Bellcrank assy LH
67	3980060	2	Bushing
68	42F-5	1	Elbow
69	[1]----	1	Cyl assy bucket RH
70	3980904	1	Bracket

[1]See Index
[2]3 ft. (0,92 m)
[3]Inc. 17A
[4]Inc. 26, 45
[5]Inc. 47
[6]Inc. 49
[7]Inc. 52
[8]Inc. 61
[9]Inc. 51, 65
[10]Inc. 22, 23, 67
[11]For adjustment see SG-723.


CHECK S/N
TS-14023

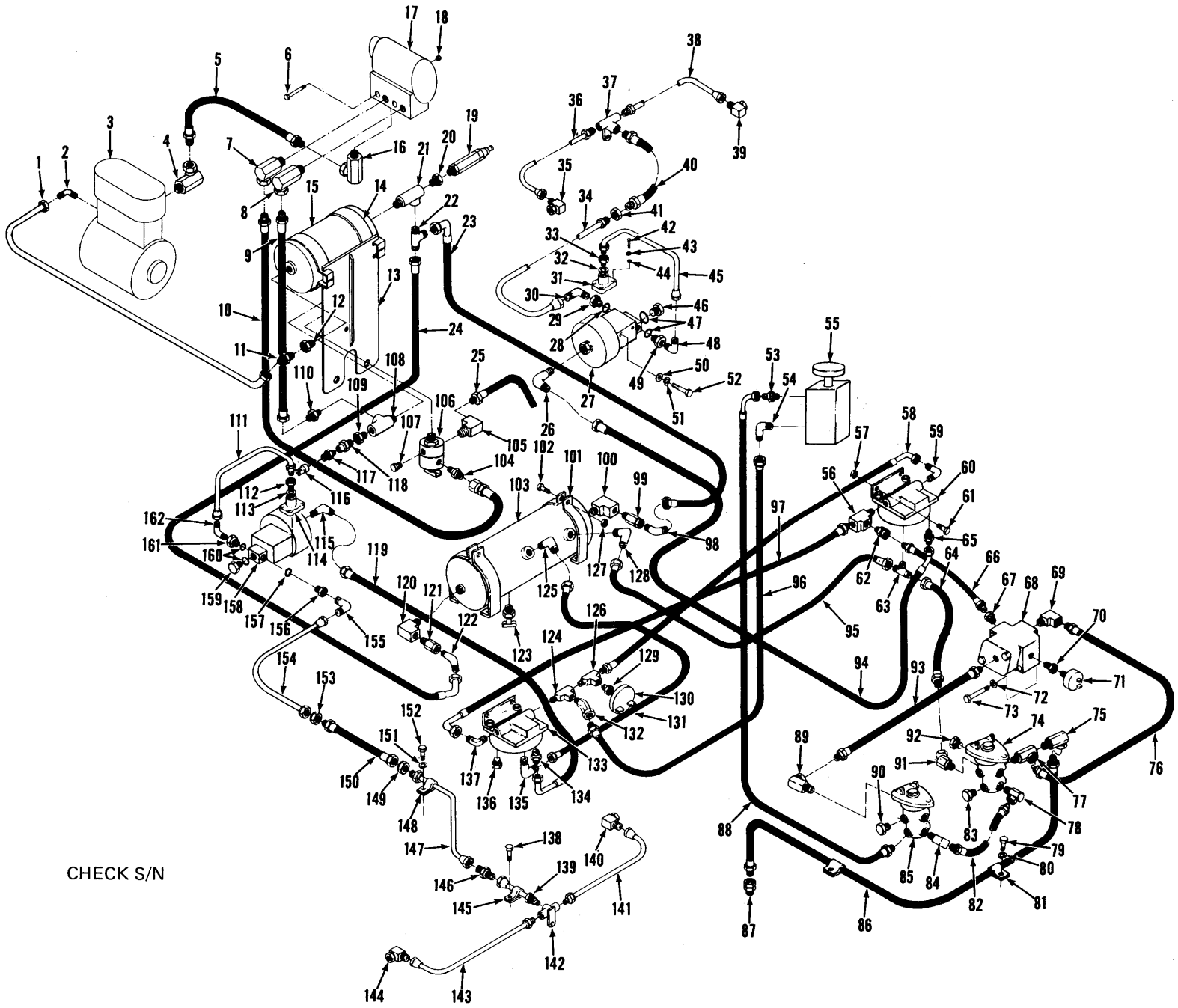
Brake Air Lines Front & Rear *

MICHIGAN

No.	Part No.	Qty.	Description
1	[4]2517385	1	Tube
2	42F-8	1	Elbow
3	[1]————	1	Compressor
4	31F-1	1	Adapter union
5	593650	1	Hose
6	24C-548	2	Bolt
7	31F-1	1	Adapter union
8	31F-1	1	Adapter union
9	574898	1	Hose
10	2509925	1	Hose
11	38F-9	1	Adapter
12	19F-6	1	Reducer
13	2509944	1	Bracket
14	[2]941214	2	Bracket
14A	†958653	2	Bolt
14B	†4E-06	2	Lockwasher
14C	†61D-06	2	Nut
15	3981021	1	Air tank
16	31F-1	1	Adapter union
17	3215964	1	Governor
18	18D-05	2	Nut
19	507815	1	Valve safety
20	19F-5	1	Reducer
21	30F-3	1	Tee
22	46F-9	1	Tee
23	2509927	1	Hose
24	2509924	1	Hose
25	2500147	1	Hose
25A	†538235	1	Clip
25B	†23C-812	1	Clip
25C	†4E-08	1	Lockwasher
26	42F-6	1	Elbow
27	[1]————	1	Pwr clsr assy brk
28	2511196	1	Gasket
29	699005	1	Adapter
30	42F-3	1	Elbow
31	[1]————	1	Compensator cylinder
32	2506979	1	Washer
33	1675961	1	Adapter
34	2509940	1	Tube
35	3980014	1	Fitting tube
36	2503361	1	Tube
37	114427	1	Tee
38	2503357	1	Tube
39	3980014	1	Fitting tube
40	533814	1	Hose
41	8D-10	1	Nut
42	24C-620	4	Bolt
43	————	—	Omit
44	18D-06	4	Nut
45	2520899	1	Hose
46	874007	1	Plug
47	2511196	2	Gasket
48	42F-3	1	Elbow
49	699005	1	Adapter
50	25E-20	6	Washer
51	4E-07	6	Lockwasher
52	24C-720	6	Bolt
53	38F-3	1	Adapter
54	42F-4	1	Elbow
55	1545790	1	Valve hand brake
56	30F-1	1	Tee
57	18D-06	4	Nut
58	1519975	1	Hose
59	940639	1	Elbow
60	[3,7]1545789	1	Valve quick release
60A	†949959	1	Repair kit
61	24C-616	4	Bolt
62	36F-2	1	Adapter
63	45F-8	1	Tee
64	2506266	1	Hose
65	38F-7	1	Connector
66	593495	1	Hose
67	19F-5	1	Bushing
68	1532592	1	Valve check
69	29F-3	1	Elbow
70	19F-4	1	Bushing
71	636260	1	Switch stop light
72	4E-06	1	Lockwasher
73	24C-640	1	Bolt
74	[1]————	1	Valve brake
75	31F-1	1	Adapter union
76	593483	1	Hose
77	356609	1	Adapter union
78	31F-4	1	Adapter union

*4189C101JAC → 4189D497JAC. Ref. S.G.-681.

[1]See Index
[2]Inc. 14A, 14B, 14C
[3]Inc. 60A
[4]Ref. S.G.-660.
[7]Ref. S.G.-708.


CHECK S/N
TS-14023

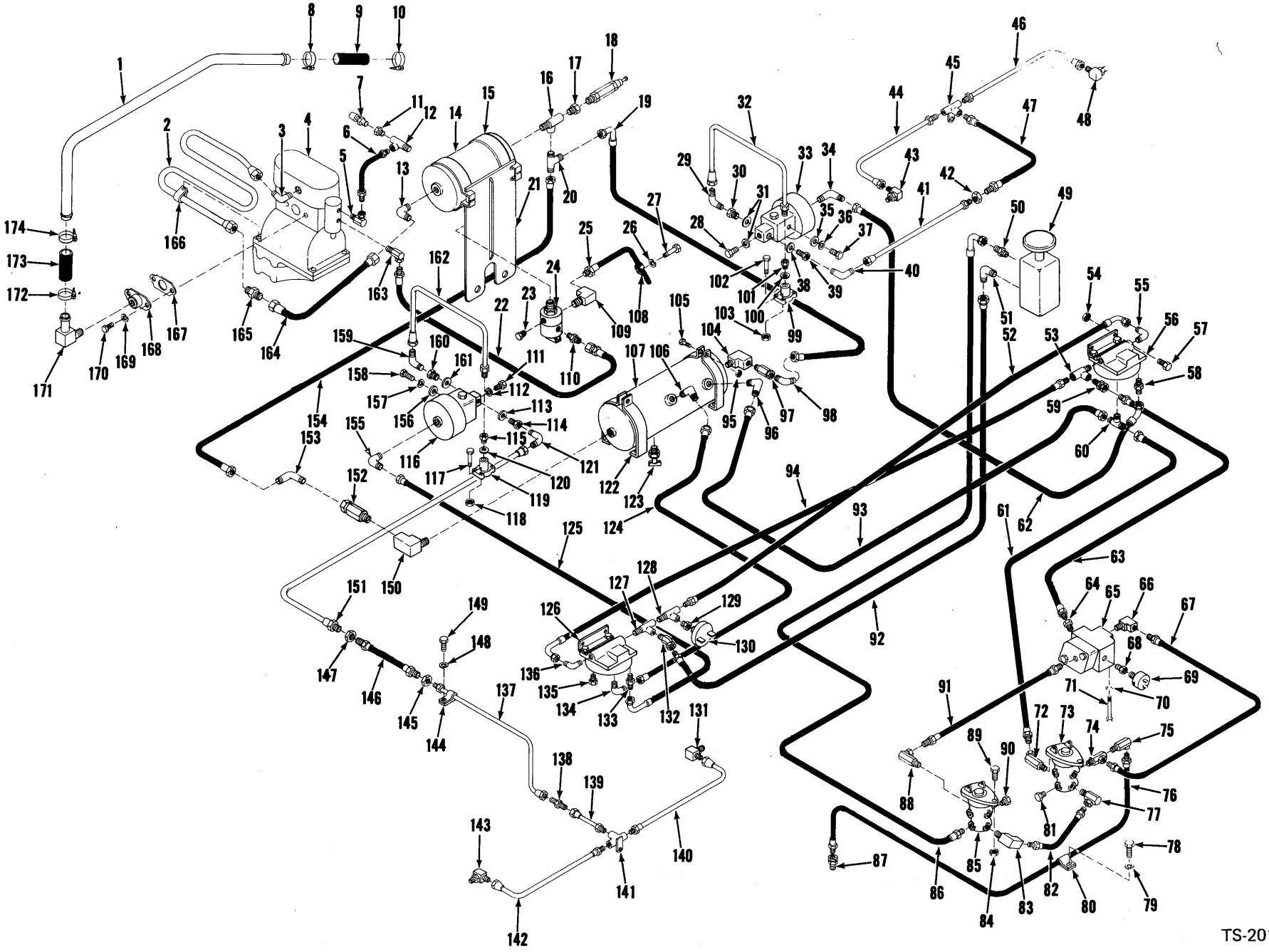
Brake Air Lines Front & Rear *

MICHIGAN

No.	Part No.	Qty.	Description
79	24C-616	2	Bolt
80	4E-06	2	Lockwasher
81	30H-38	2	Clip
82	593483	1	Hose
83	40K-04	3	Plug
84	29F-3	1	Elbow
85	[1]———	1	Valve brake
86	1519974	1	Hose
87	36F-1	1	Adapter union
88	2506313	1	Hose
89	31F-4	1	Adapter union
90	40K-08	4	Plug
91	33F-4	1	Adapter union
92	40K-08	3	Plug
93	593483	1	Hose
94	2509926	1	Hose
95	2506311	1	Hose
96	2506312	1	Hose
97	1519975	1	Hose
98	2506043	1	Elbow
99	593370	1	Valve check
100	29F-3	1	Elbow
101	[5]527685	2	Bracket assy
102	958653	2	Bolt
103	3981022	1	Air tank
104	38F-4	1	Adapter
105	29F-1	1	Elbow
106	1519191	1	Valve condensate
107	40K-04	1	Plug
108	30F-1	1	Tee
109	19F-1	1	Bushing
110	38F-4	1	Adapter
111	2520899	1	Hose
112	1675961	1	Adapter
113	2506979	1	Washer
114	[1]———	1	Compensate cylinder
115	42F-3	1	Elbow
116	————	–	Omit
117	————	–	Omit
118	2515022	1	Tank valve assy
119	2509926	1	Hose
120	29F-3	1	Elbow
121	593370	1	Valve check
122	2506043	1	Elbow
123	72F-2	2	Drain cock
124	30F-1	1	Tee
125	940636	1	Elbow
126	30F-1	1	Tee
127	61D-06	2	Nut
127A	†4E-06	2	Lockwasher
128	940636	1	Elbow
129	19F-1	1	Bushing
130	1537354	1	Switch low air
131	1519969	1	Hose
132	33F-2	1	Adapter union
133	[6,7]1545789	1	Valve quick release
133A	†949959	1	Repair kit
134	38F-7	1	Connector
135	42F-8	1	Elbow
136	40K-04	6	Plug
137	940639	1	Elbow
138	24C-632	1	Bolt
139	2502147	1	Tube
140	3980014	1	Fitting tube
141	3980607	1	Tube
142	550319	1	Tee
143	3980609	1	Tube
144	3980014	1	Fitting tube
145	30H-16	1	Clip
146	40F-3	1	Adapter
147	2502146	1	Tube
148	30H-16	1	Clip
149	8D-10	1	Nut
150	552374	1	Hose
151	4E-06	1	Lockwasher
152	24C-616	1	Bolt
153	8D-10	1	Nut
154	2509941	1	Tube
155	42F-3	1	Elbow
156	1543879	1	Adapter
157	2511196	1	Gasket
158	[1]———	1	Pwr clsr assy brk
159	874007	1	Plug
160	2511196	2	Gasket
161	1543879	1	Adapter
162	42F-6	1	Elbow

*4189C101JAC → 4189D497JAC. Ref. S.G.-681

[1]See Index
[5]Inc. 102, 127, 127A
[6]Inc. 133A
[7]Ref. SG-708



TS-20127

Brake Air Lines *

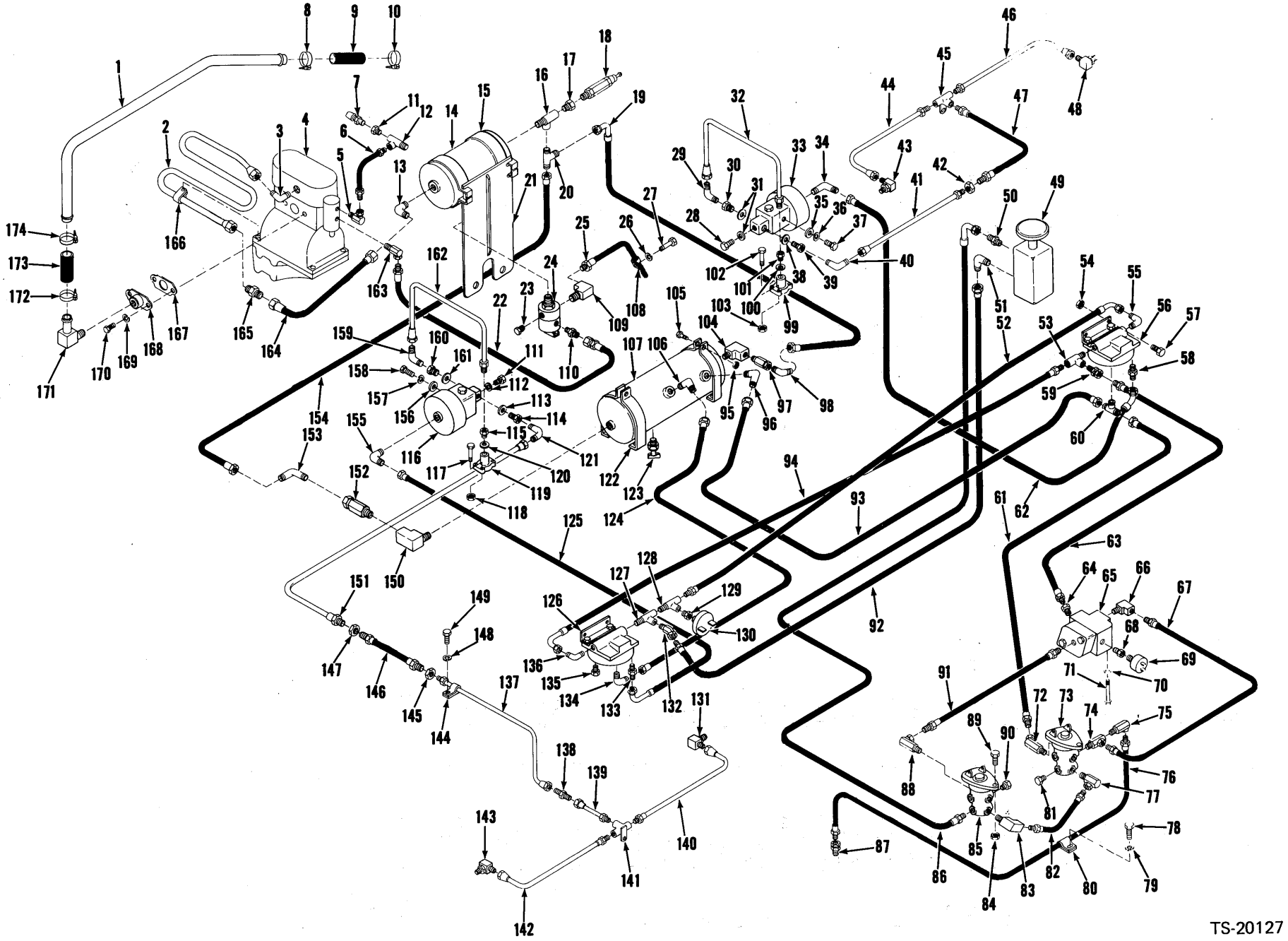
CLARK

No.	Part No.	Qty.	Description
1	2519048	1	Tube
2	2519085	1	Tube
3	2506043	1	Elbow
4	[1]----	1	Air compressor
5	31F-1	1	Adapter union
6	540915	1	Hose
7	2515022	1	Valve assy
8	1545186	1	Clamp
9	1M-8030	1	Hose
10	1545186	1	Clamp
11	19F-1	1	Bushing
12	30F-1	1	Tee
13	42F-9	1	Elbow
14	3981021	1	Air tank
15	[2]941214	2	Bracket
15A	†958653	2	Bolt
15B	†4E-6	2	Lockwasher
15C	†61D-6	2	Nut
16	30F-3	1	Tee
17	19F-5	1	Reducer
18	507815	1	Valve
19	2509927	1	Hose
20	46F-9	1	Tee
21	2509944	1	Bracket
22	2511515	1	Hose
23	40K-4	1	Plug
24	1519191	1	Valve condensate
25	2500147	1	Hose
26	4E-8	1	Lockwasher
27	17C-812	1	Bolt
28	874007	1	Plug
29	42F-3	1	Elbow
30	1543879	1	Adapter
31	613750	2	Gasket
32	2520899	1	Hose
33	[1]----	1	Pwr clsr assy brk
34	42F-6	1	Elbow
35	25E-20	3	Washer
36	4E-7	3	Lockwasher
37	18C-720	3	Bolt
38	513750	1	Gasket
39	1543879	1	Adapter
40	42F-3	1	Elbow
41	2509940	1	Tube
42	8D-10	1	Nut

No.	Part No.	Qty.	Description
43	3980014	1	Fitting
44	2503361	1	Tube
45	114427	1	Tee
46	2503357	1	Tube
47	533814	1	Hose
48	3980014	1	Fitting
49	1545790	1	Valve
50	38F-3	1	Adapter
51	42F-4	1	Elbow
52	1519975	1	Hose
53	30F-1	1	Tee
54	60D-6	4	Nut
55	940639	1	Elbow
56	[4]1545789	1	Valve quick release
56A	†949959	1	Repair kit
57	18C-616	4	Bolt
58	38F-7	1	Connector
59	36F-2	1	Adapter union
60	45F-8	1	Tee
61	2506266	1	Hose
62	2509926	1	Hose
63	593495	1	Hose
64	19F-5	1	Bushing
65	1532592	1	Valve check
66	29F-3	1	Elbow
67	593483	1	Hose
68	19F-4	1	Bushing
69	636260	1	Switch stop light
70	4E-6	1	Lockwasher
71	18C-640	1	Bolt
72	33F-4	1	Adapter union
73	[1]----	1	Valve brake
74	356609	1	Adapter union
75	31F-1	1	Adapter union
76	1519974	1	Hose
77	31F-4	1	Adapter union
78	18C-616	2	Bolt
79	4E-6	2	Lockwasher
80	30H-38	2	Clip
81	40K-4	3	Plug
82	593483	1	Hose
83	29F-3	1	Elbow
84	60D-5	6	Nut
85	[1]----	1	Valve Brake
86	2506313	1	Hose

***4189D498JAC & →. Ref. S.G.-681.**

[1]See Index
[4]Ref. SG-708.



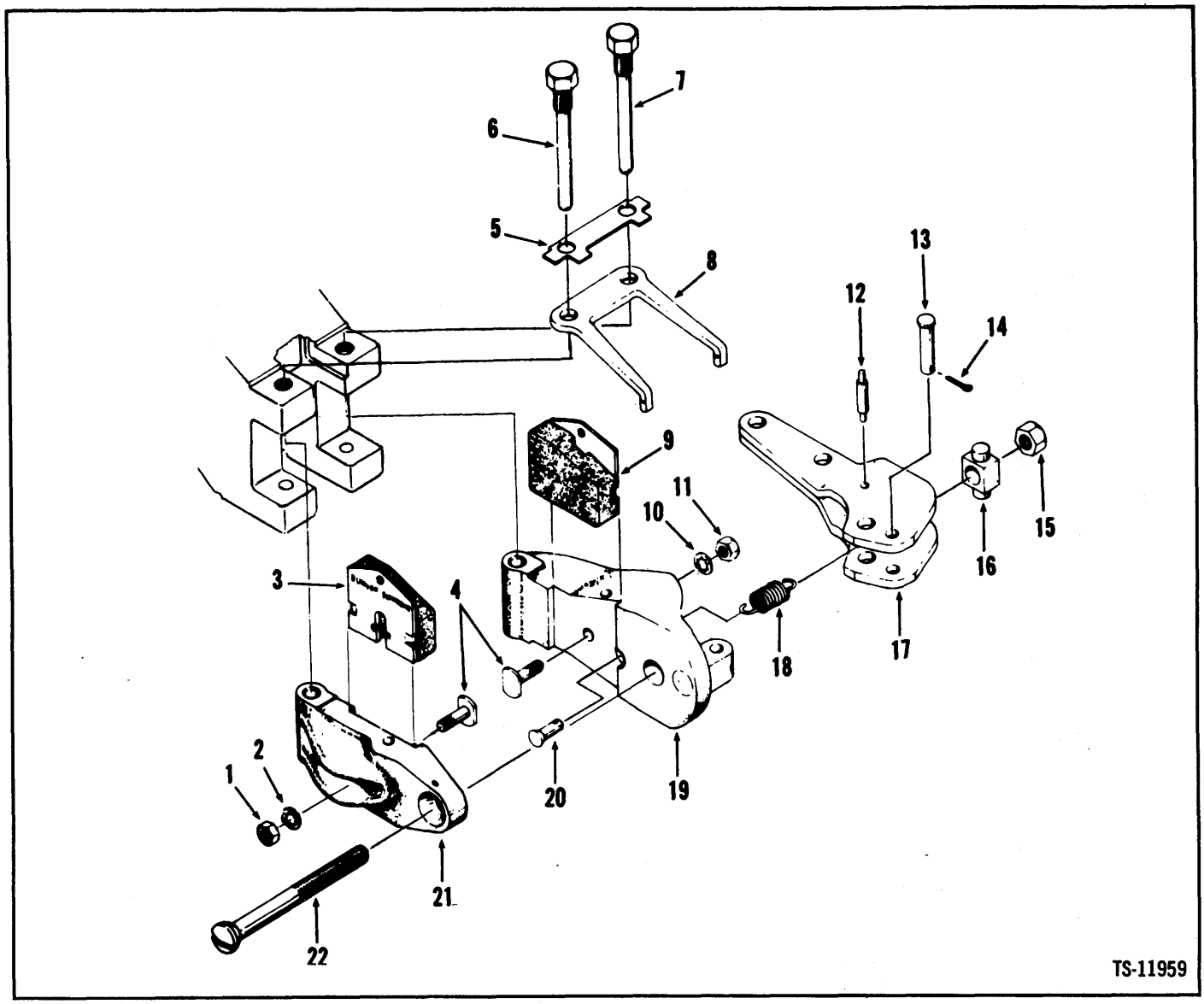
TS-20127

No.	Part No.	Qty.	Description
87	36F-1	1	Adapter union
88	31F-4	1	Adapter union
89	18C-520	6	Bolt
90	40K-8	7	Plug
91	593483	1	Hose
92	2506312	1	Hose
93	2506311	1	Hose
94	1519975	1	Hose
95	61D-6	2	Nut
95A	†4E-6	2	Lockwasher
96	940636	1	Elbow
97	593370	1	Valve check
98	2506043	1	Elbow
99	[1]----	1	Compensator cyl
100	2506979	1	Gasket
101	1675961	1	Adapter
102	18C-620	2	Bolt
103	60D-6	2	Nut
104	29F-3	1	Elbow
105	958653	2	Bolt
106	940636	1	Elbow
107	3981022	1	Air tank
108	538235	1	Clip
109	29F-1	1	Elbow
110	38F-4	1	Adapter
111	874007	1	Plug
112	613750	1	Gasket
113	513750	1	Gasket
114	1543879	1	Adapter
115	1675961	1	Adapter
116	[1]----	1	Pwr clsr assy brk
117	18C-620	2	Bolt
118	60D-6	2	Nut
119	[1]----	1	Compensator cyl
120	2506979	1	Gasket
121	42F-3	1	Elbow
122	[3]527685	2	Bracket
123	72F-2	2	Draincock
124	1519969	1	Hose
125	2509926	1	Hose
126	[4]1545789	1	Valve quick release
127	30F-1	1	Tee
128	30F-1	1	Tee
129	19F-1	1	Bushing
130	1537354	1	Switch low air
131	3980014	1	Fitting
132	33F-2	1	Adapter union
133	38F-7	1	Connector
134	42F-8	1	Elbow
135	40K-4	6	Plug
136	940639	1	Elbow
137	2502146	1	Tube
138	40F-3	1	Adapter
139	2502147	1	Tube
140	3980607	1	Tube
141	550319	1	Tee
142	3980609	1	Tube
143	3980014	1	Fitting
144	30H-16	2	Clip
145	8D-10	1	Nut
146	552374	1	Hose
147	8D-10	1	Nut
148	4E-6	1	Lockwasher
149	18C-616	1	Bolt
150	29F-3	1	Elbow
151	2509941	1	Tube
152	593370	1	Valve check
153	2506043	1	Elbow
154	2509924	1	Hose
155	42F-6	1	Elbow
156	25E-20	3	Washer
157	4E-7	3	Lockwasher
158	18C-720	3	Bolt
159	42F-3	1	Elbow
160	1543879	1	Adapter
161	613750	1	Gasket
162	2520899	1	Hose
163	31F-1	1	Adapter union
164	2519178	1	Hose
165	40F-8	1	Adapter
166	30H38	1	Clip
166A	†2521346	1	Flat
166B	†18C616	2	Bolt
166C	†60D6	2	Nut
167	875012	1	Gasket
168	2519047	1	Flange
169	4E-5	2	Lockwasher
170	17C-516	2	Bolt
171	666845	1	Nipple
172	1545186	1	Clamp
173	1M-8030	1	Hose
174	1545186	1	Clamp

*4189D498JAC & →. Ref. S.G.-681.

[1]See Index
[2]Inc. 15A, 15B, 15C
[3]Inc. 95, 95A, 105
[4]Ref. SG-708.

Brake Assembly, Parking



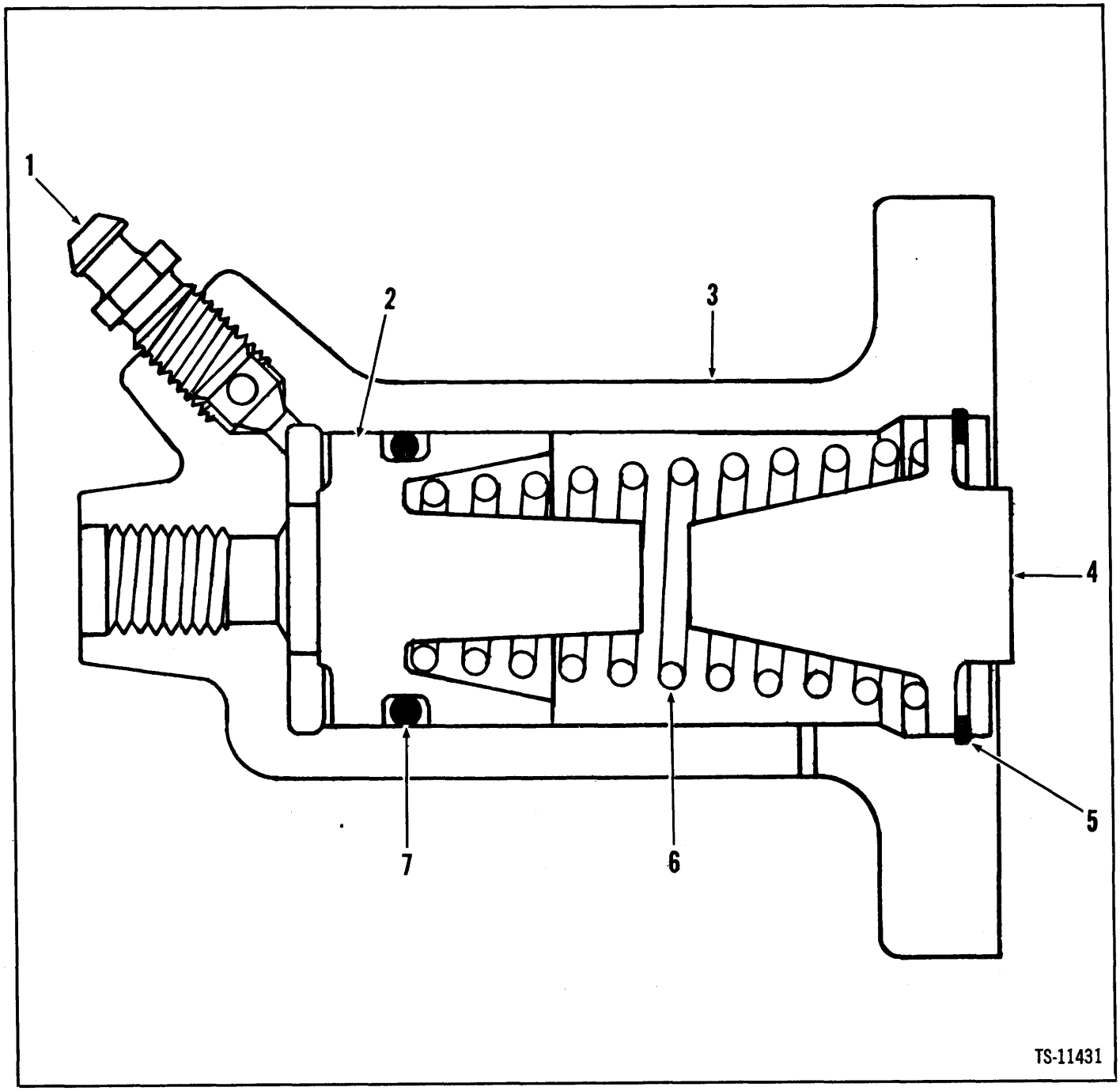
No.	Part No.	Qty.	Description
A	[1]3953108	1	Brake assy
B	[2]3908090	1	Pad kit
1	1DM5	1	Nut
2	11EM5	1	Washer
3	§[6]———	1	Pad assy
4	§[6]———	2	Bolt
5	§[6]———	1	Tab washer
6	3908097	1	Bolt
7	3908097	1	Bolt
8	§[6]———	1	Retract plate
9	§[6]———	1	Pad assy
10	11EM5	1	Washer

No.	Part No.	Qty.	Description
11	1DM5	1	Nut
12	§[3]———	1	Pin
13	3908100	1	Pin
14	13JM-16010	1	Pin cotter
15	1DM8	1	Nut
16	§[3]———	1	Trunnion
17	[4]3908094	1	Lever assy
18	3908095	1	Spring
19	§[5]———	1	Plate
20	———	1	Pin
21	§[5]———	1	Plate
22	3908098	1	Bolt

[1]Inc. 1→22
[2]Inc. 1→5, 8→11
[3]See 17
[4]Inc. 12, 16
[5]See A
[6]See B

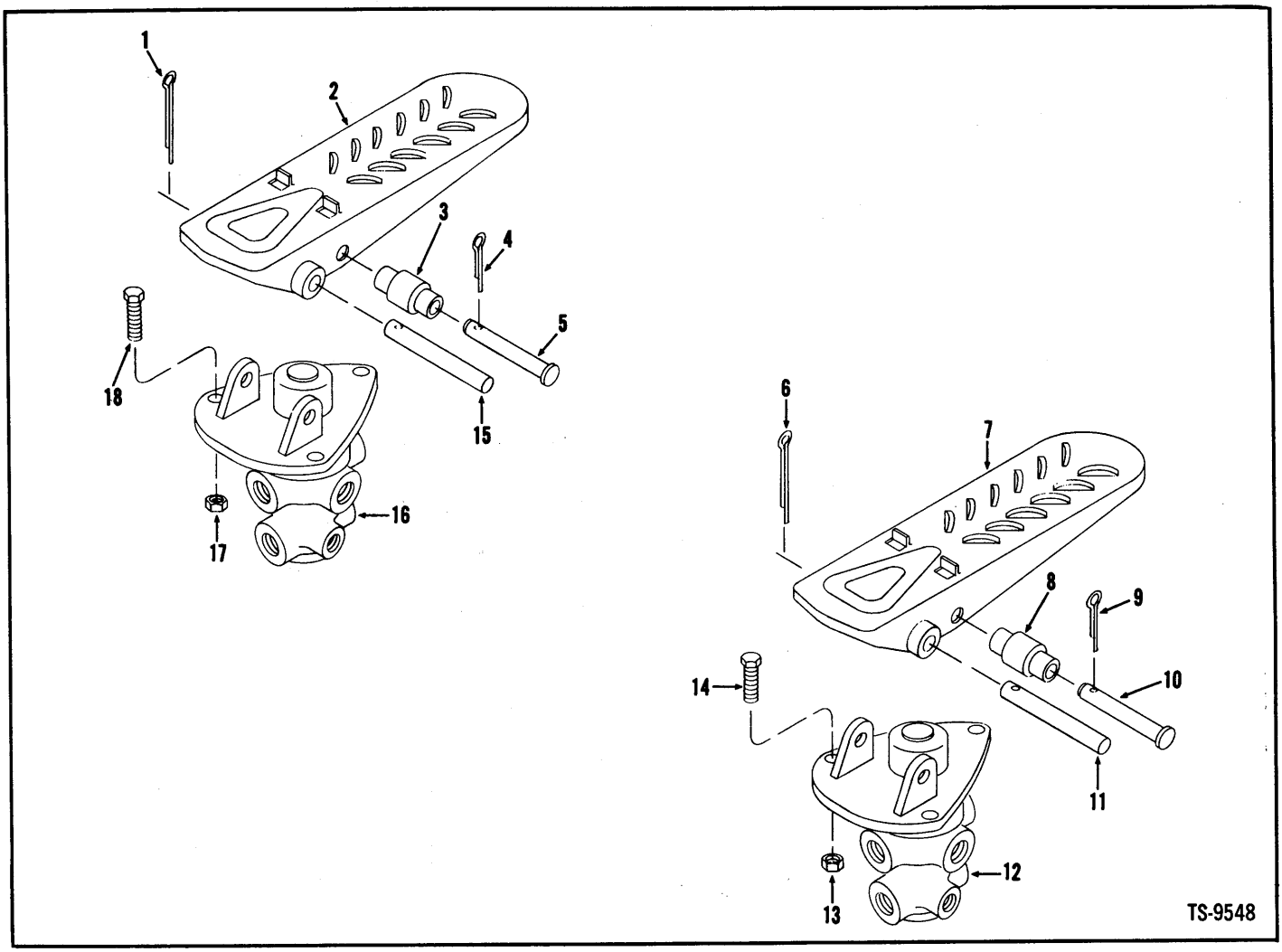
PM 3016
Printed in U.S.A.

Brake Compensator Cylinder Assembly



No.	Part No.	Qty.	Description
A	[2]2518491	1	Cylinder assy
1	851806	1	Bleed screw
2	960520	1	Piston
3	§[3]———	1	Housing
4	§[3]———	1	Plug
5	1310605	1	Ring retainer
6	898702	1	Spring
7	961026	1	O-ring

[2]Inc. 1→7
[3]See A

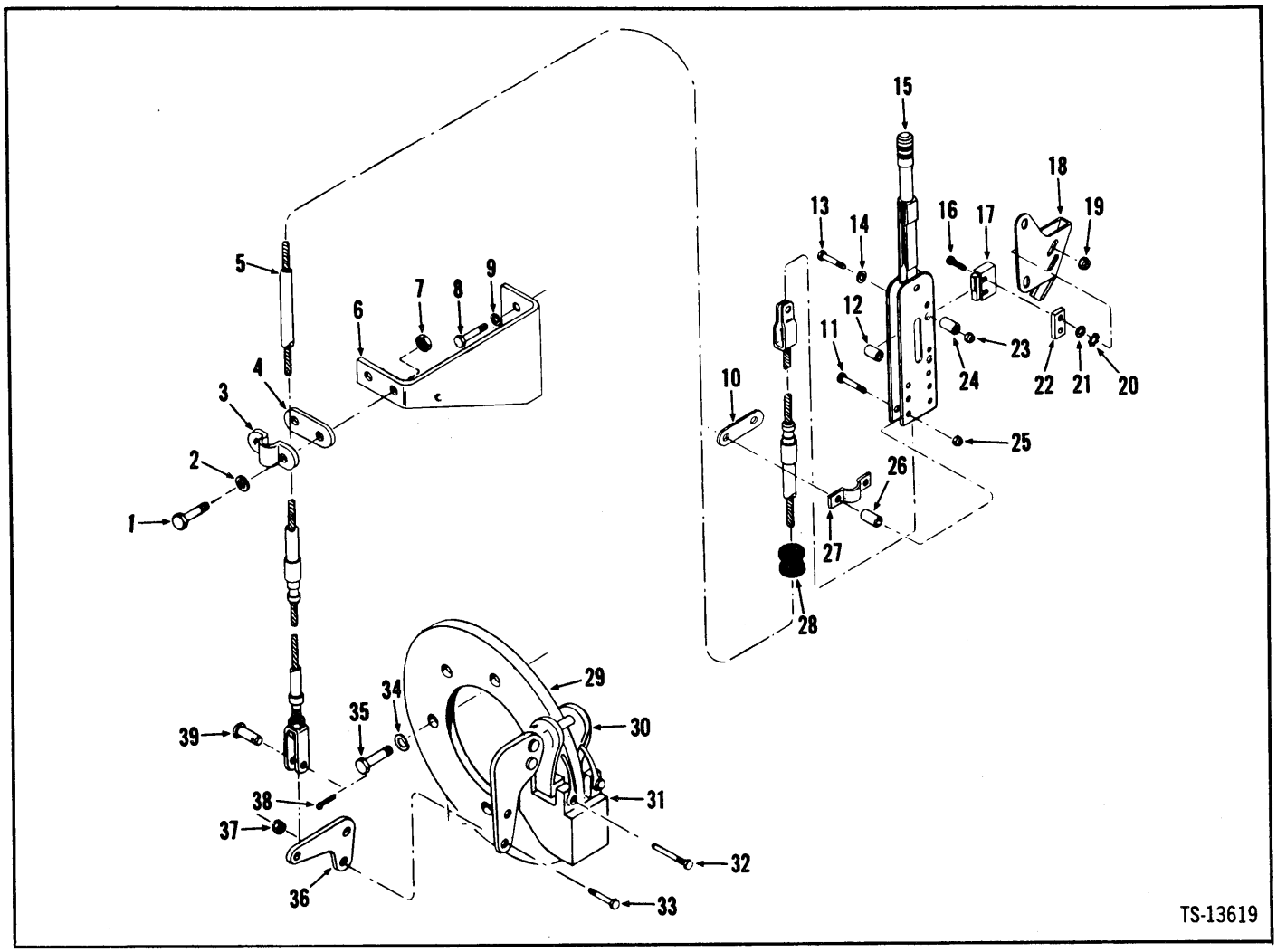


No.	Part No.	Qty.	Description
1	1F-320	1	Pin cotter
2	513930	1	Pedal brake
3	518259	1	Roller
4	1F-312	1	Pin cotter
5	875766	1	Pin
6	1F-320	1	Pin cotter
7	513930	1	Pedal brake
8	518259	1	Roller
9	1F-312	1	Pin cotter
10	875766	1	Pin
11	875767	1	Pin mounting
12	[1]———	1	Valve brake
13	18D-05	3	Nut
14	24C-520	3	Bolt
15	875767	1	Pin mounting
16	[1]———	1	Valve brake
17	18D-05	3	Nut
18	24C-520	3	Bolt

[1]See Index

Brake Controls, Parking

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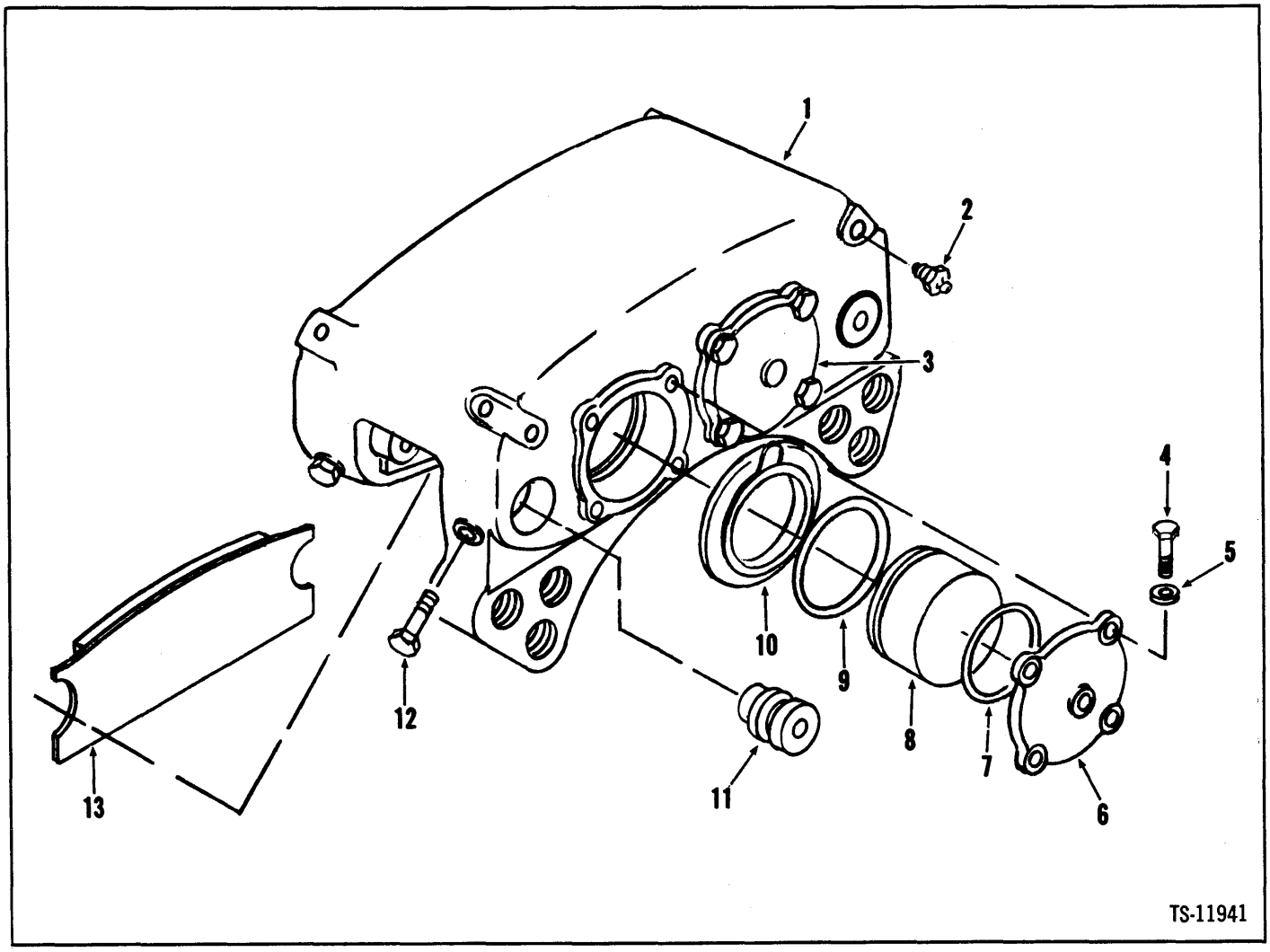


No.	Part No.	Qty.	Description
1	24C-516	2	Bolt
2	25E-15	2	Washer
3	544512	1	Clamp
4	645092	1	Spacer
5	2502768	1	Cable assy
6	2505913	1	Bracket
7	18D-05	2	Nut
8	23C-1220	2	Bolt
9	4E-12	2	Lockwasher
10	645092	1	Spacer
11	24C-528	2	Bolt
12	545005	2	Spacer
13	24C-644	2	Bolt
14	25E-17	2	Washer
15	3951954	1	Lever assy
16	86G-620	4	Screw
17	3951644	1	Switch
18	3968090	1	Bracket
19	14D-6	2	Nut
20	14E-6	2	Lockwasher

No.	Part No.	Qty.	Description
21	3980961	4	Washer
22	3968085	1	Spacer
23	18D-06	2	Nut
24	3950692	2	Spacer
25	18D-05	2	Nut
26	3950692	2	Spacer
27	544512	1	Clamp
28	3980532	1	Grommet
28A	†[2]2501804	1	Grommet
29	3953017	1	Disc
30	[1]3953108	1	Brake assy
31	2500170	1	Carrier
32	2500167	2	Bolt
33	24C-520	2	Bolt
34	4E-06	6	Lockwasher
35	18C-616	6	Bolt
36	2500142	1	Bellcrank
37	18D-05	2	Nut
38	1F-312	1	Pin cotter
39	4F-06106	1	Pin

[1]See Index
[2]Optional

Brake Head Assembly – Front

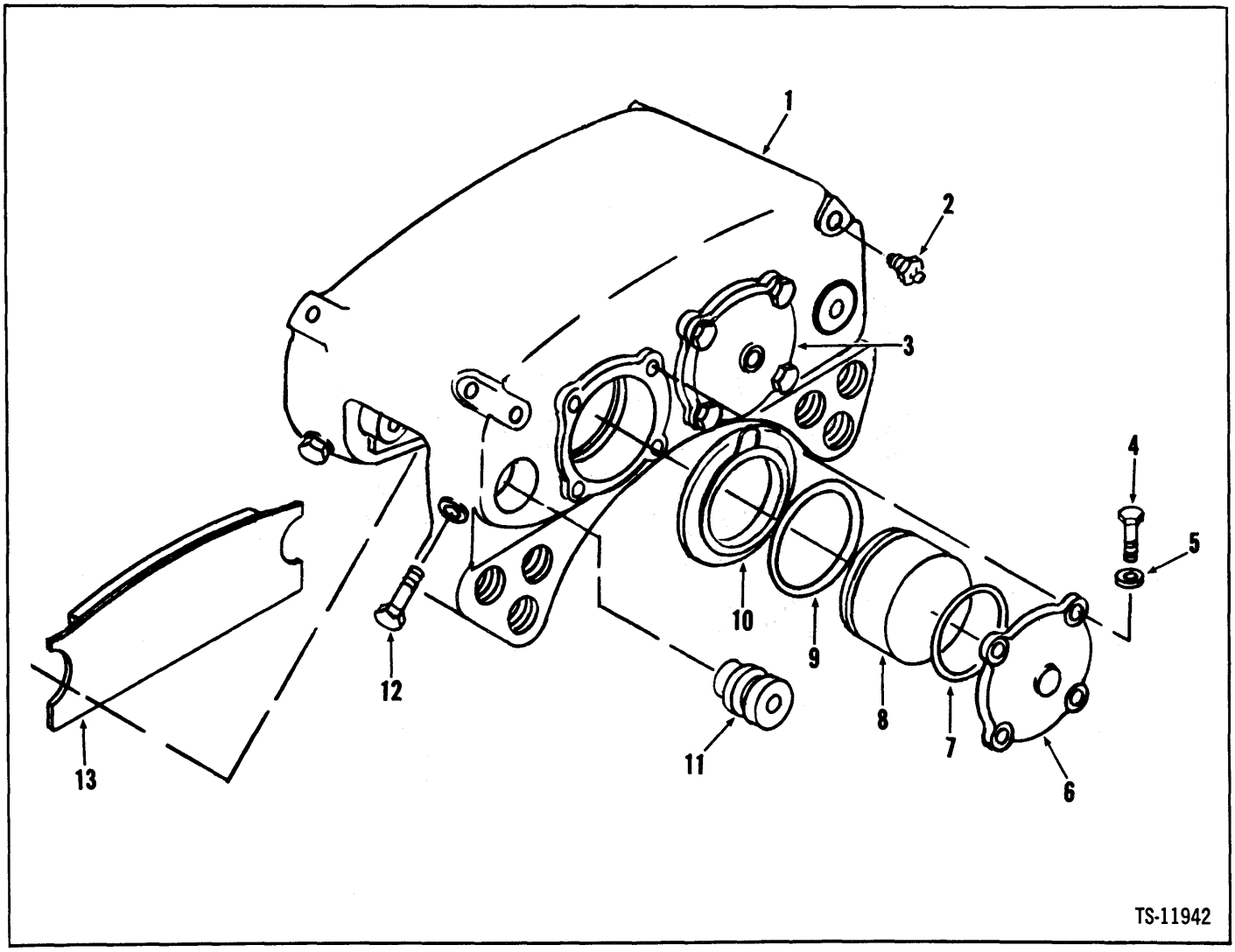


No.	Part No.	Qty.	Description
A	[1]127104	1	Brake head assy L.H.
B	[2]840535	1	Kit
1	§[4]———	1	Plate
2	960837	1	Bleeder valve
3	947934	1	Cap
4	1C-620	8	Bolt
5	25E-17	8	Washer
6	947933	1	Cap
7	§[3]———	2	Packing
8	947935	4	Piston
9	§[3]———	4	Packing
10	§[3]———	4	Boot
11	947931	4	Pin
12	961901	4	Bolt
13	947932	2	Lining brake

[1]Inc. 1 → 13. Ref. S.G.-681.
[2]Inc. 7, 9, 10
[3]See B
[4]See A

Brake Head Assembly – Front

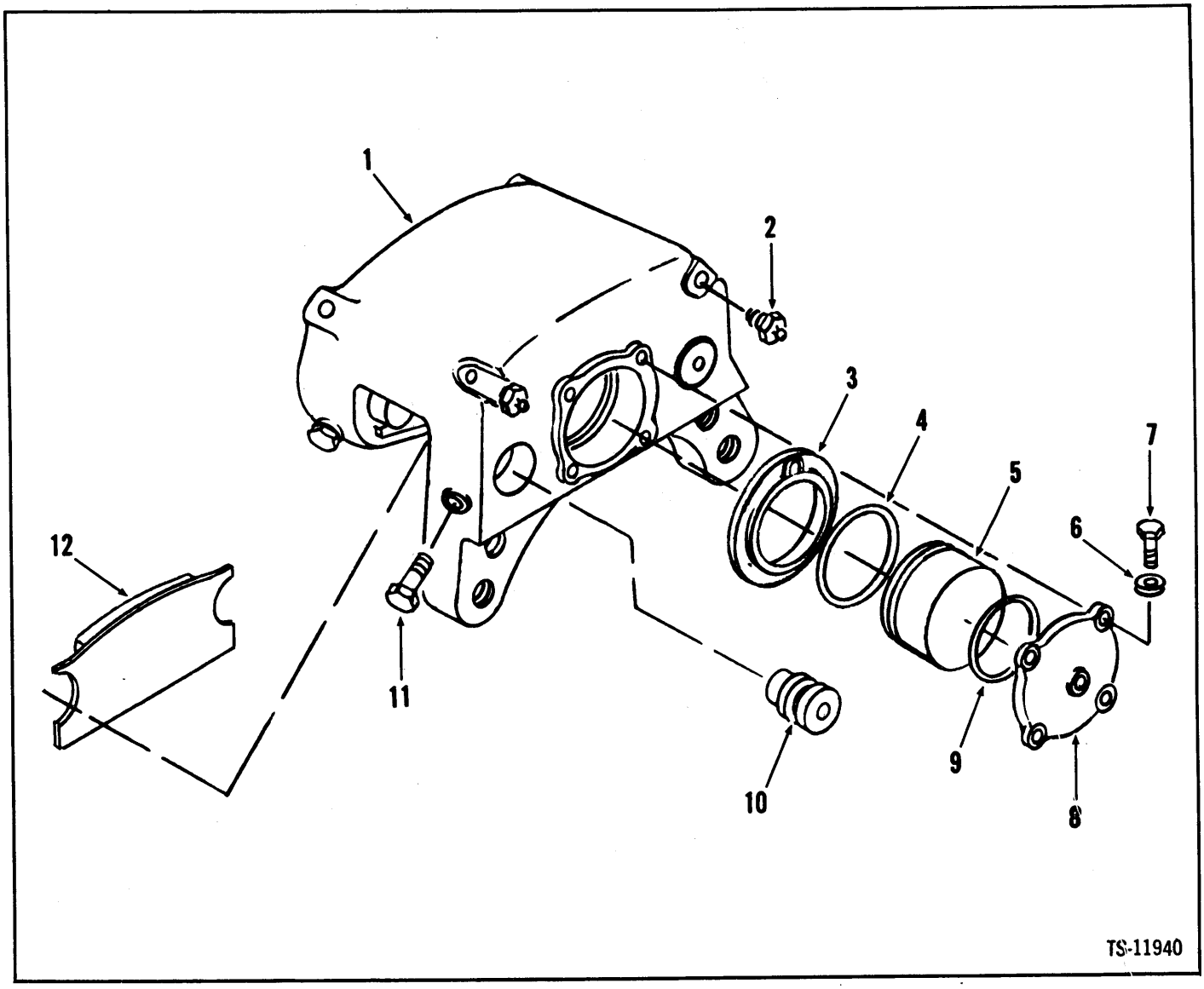
MICHIGAN



No.	Part No.	Qty.	Description
A	[1]128852	1	Brake head assy R.H.
B	[2]840535	1	Kit
1	§[4]———	1	Plate
2	960837	1	Bleeder valve
3	947933	1	Cap
4	1C-620	8	Bolt
5	25E-17	8	Washer
6	947934	1	Cap
7	§[3]———	2	Packing
8	947935	4	Piston
9	§[3]———	4	Packing
10	§[3]———	4	Boot
11	947931	4	Pin
12	961901	4	Bolt
13	947932	2	Lining brake

[1]Inc. 1 → 13. Ref. S.G.-681.
[2]Inc. 7, 9, 10
[3]See B
[4]See A

Brake Head Assembly — Rear



No.	Part No.	Qty.	Description
A	[1,5]125101	2	Brake head assy
B	[2]840539	1	Kit
1	§[4]———	1	Plate
2	960837	2	Bleeder valve
3	§[3]———	2	Boot
4	§[3]———	2	Packing
5	947935	2	Piston
6	25E-17	4	Washer
7	1C-620	4	Bolt
8	947933	1	Cap
9	§[3]———	1	Packing
10	947931	4	Pin
11	961901	4	Bolt
12	840472	2	Lining brake

Inc. 1 → 12. Ref. S.G.-681

[2]Inc. 3, 4, 9

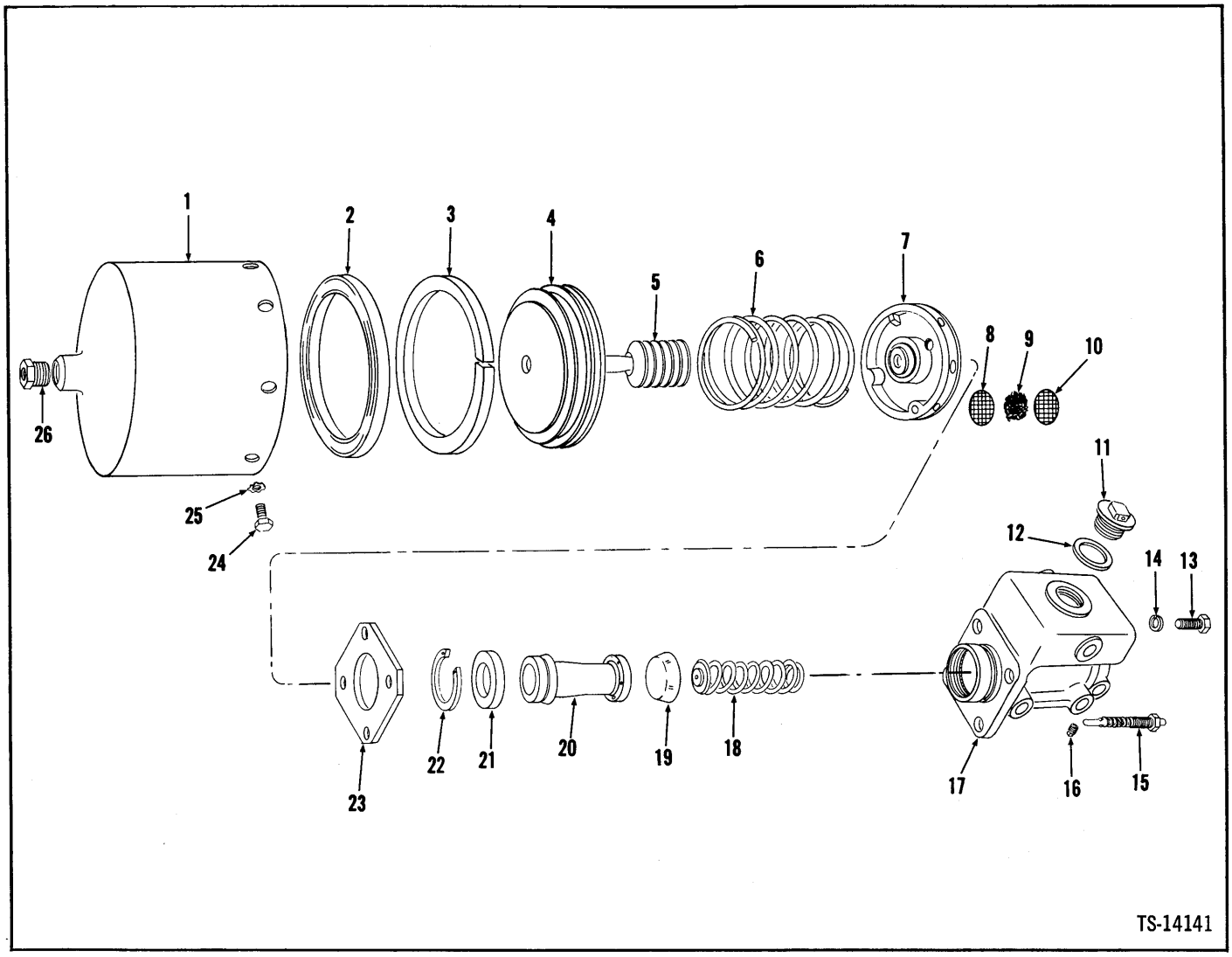
[3]See B

[4]See A

[5]Quantities listed are for one (1) assembly.

Brake Power Cluster Assembly

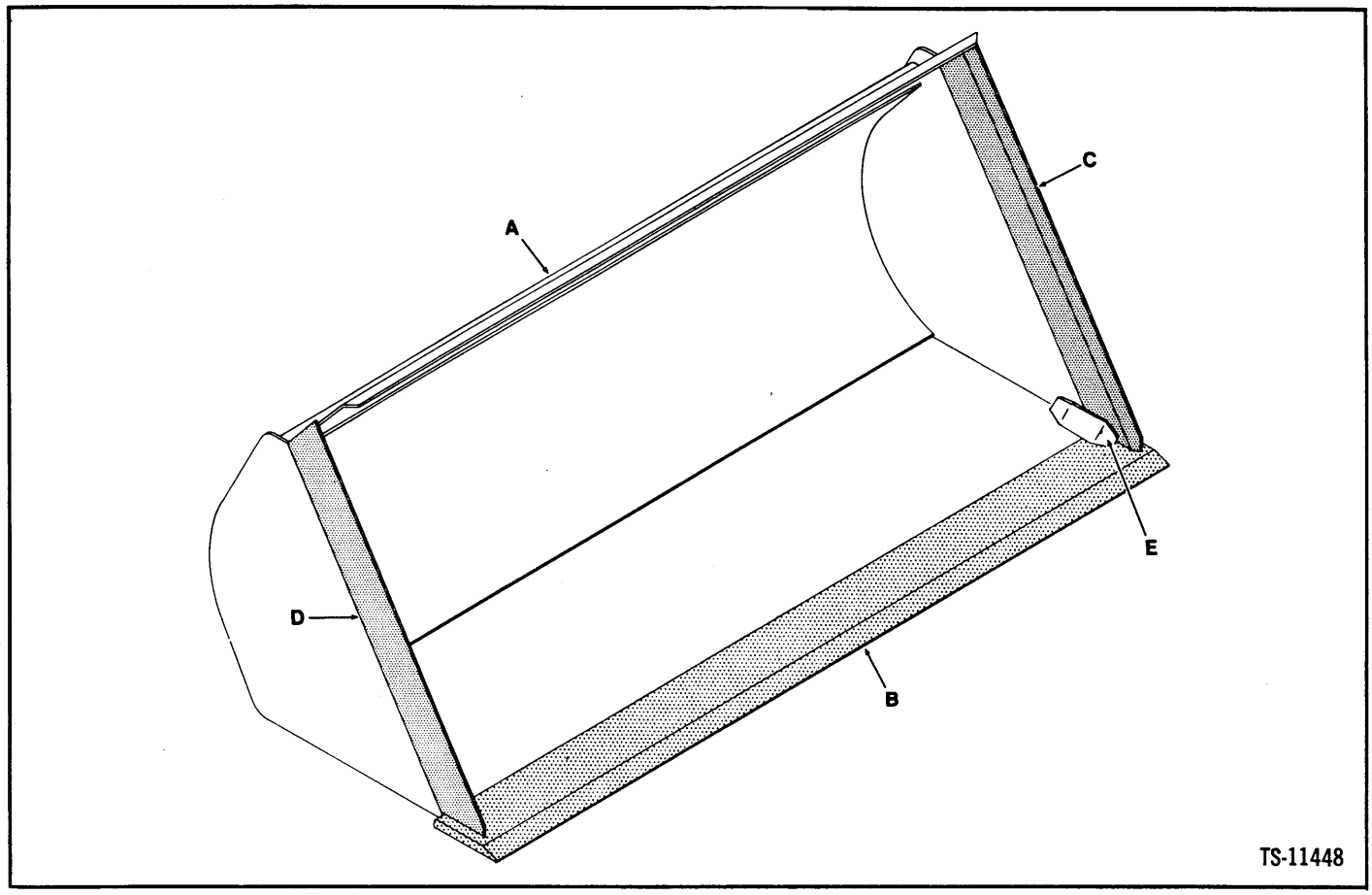
MICHIGAN



No.	Part No.	Qty.	Description
A	[2]2502136	2	Pwr clsr assy brk
B	[3]961122	1	Repair kit
1	945034	1	Shell
2	§[4]———	1	Cup
3	§[4]———	1	Wiper
4	945035	1	Piston
5	§[4]———	1	Boot
6	945036	1	Spring
7	[5]945037	1	Piston head assy
8	945029	1	Screen
9	992163	1	Filter fiber mat
10	992164	1	Retainer
11	892287	1	Cap
12	857933	1	Gasket
13	1C-714	3	Bolt
14	4E-06	4	Lockwasher
15	945038	1	Indicator
16	40K-02	1	Plug
17	[6]961123	1	Cylinder assembly
18	955321	1	Spring
19	§[4]———	1	Cup
20	§[4]———	1	Piston
21	955326	1	Plate
22	955323	1	Ring
23	945040	1	Spacer
24	[7]5C-510	8	Bolt
25	§[8]———	8	Lockwasher
26	97F-3	1	Bushing

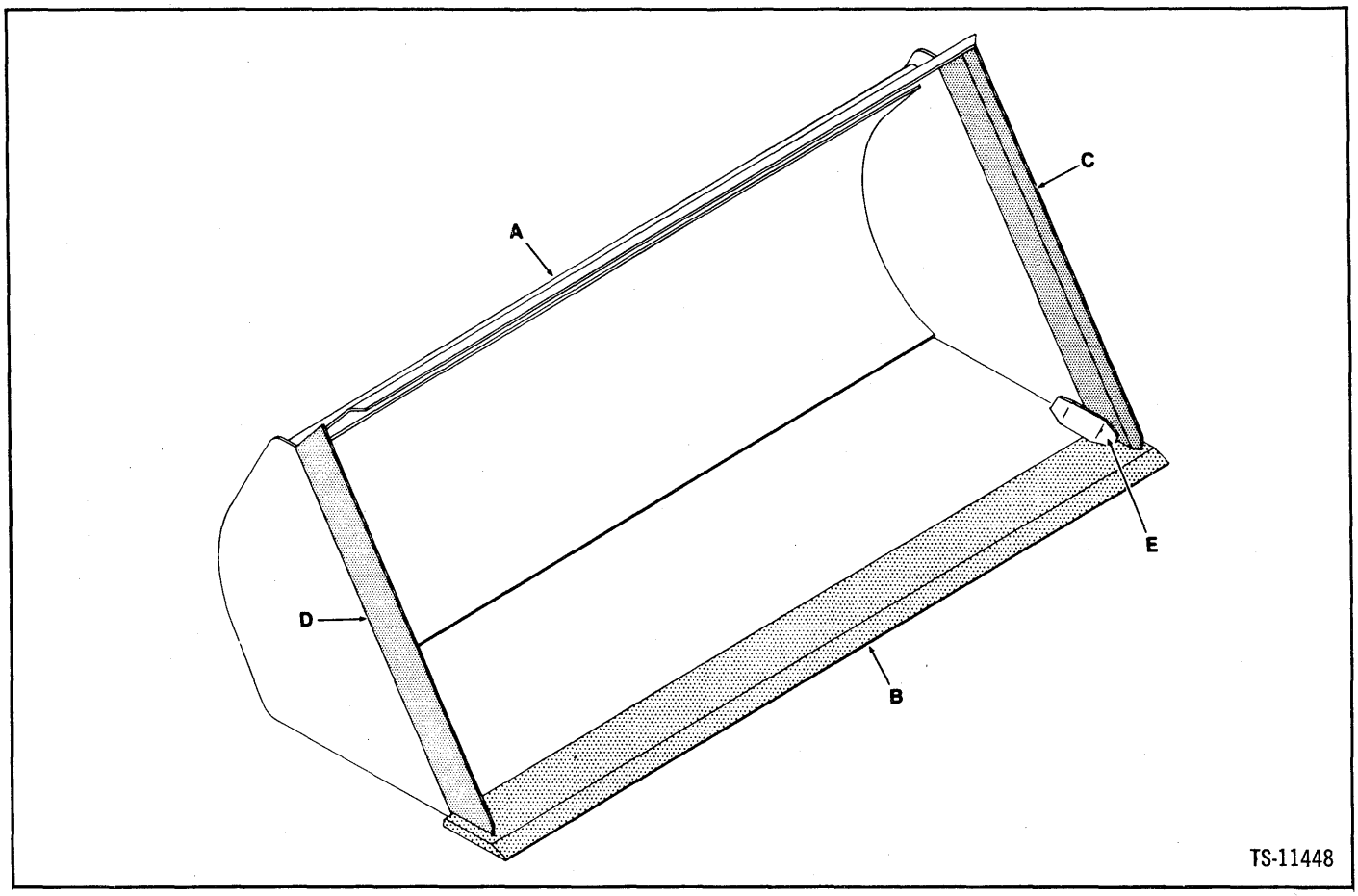
[2]Inc. 1→26 Two (2) Power Clusters used per machine. Quantities listed are for one (1) Power Cluster.
[3]Inc. 2, 3, 5, 19, 20, 22
[4]See B
[5]Inc. 8, 9, 10
[6]Inc. 11, 12, 16→22
[7]Inc. 25
[8]See 24

Bucket Assembly Data (Standard Boom)



	BUCKET			MAIN CUTTING EDGE		SIDE CUTTING EDGES			GUSSET
Item	SAE Heaped Capacity M3	Width	A Part No.	B Part No.	Size	C Part L.H.	D Part R.H.	Size	E Part No.
1	1 0,8	87.40 2179	[2]2509442	3980399	1 x 9 x 87.40 25 x 229 x 2179	————	————	————	[1]3980384
2	1.308 0,9	87.40 2179	[2]2509443	3980399	1 x 9 x 87.40 25 x 229 x 2179	3980406	3980402	¾ x 6 x 36.89 19 x 130 x 807	[1]3980384
3	1.504 1,2	92.83 2306	2509441	3980373	1 x 9 x 92.83 25 x 229 x 2306	3980376	3980378	¾ x 6 x 39.37 19 x 130 x 978	[1]3980384
4	1.750 1,4	92.83 2306	2509439	3980373	1 x 9 x 92.83 25 x 229 x 2306	3980421	3980419	¾ x 6 x 41.61 19 x 130 x 1027	[1]3980384
5	2 1,5	99 2425	2509440	551765	1 x 9 x 97 25 x 229 x 2425	1508729	1508730	¾ x 6 x 40⅜ 19 x 130 x 1011	[1]1536140

[1]2 required
[2]Not for U.S. Build

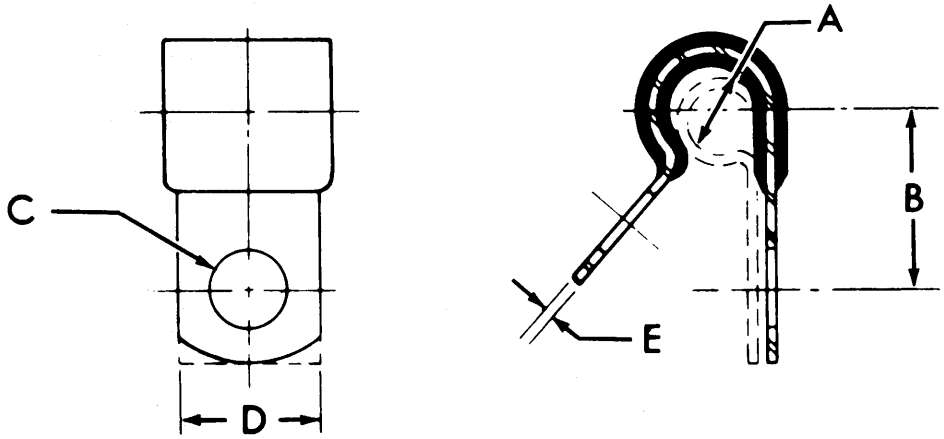


No.	Part No.	Qty.	Description
1	†2518304	2	Rollback stop
2	†18C-524	4	Bolt
3	†2519262	8	Shim
4	†4E-5	4	Lockwasher

	BUCKET			MAIN CUTTING EDGE		SIDE CUTTING EDGES			GUSSET
Item	SAE Heaped Capacity M3	Width	A Part No.	B Part No.	Size	C Part L.H.	D Part R.H.	Size	E Part No.
1	2 1,5	99 2425	2506700	551765	1 x 9 x 97 25 x 229 x 2425	1508729	1508730	¾ x 6 x 40⅜ 19 x 130 x 1011	[1]1536140

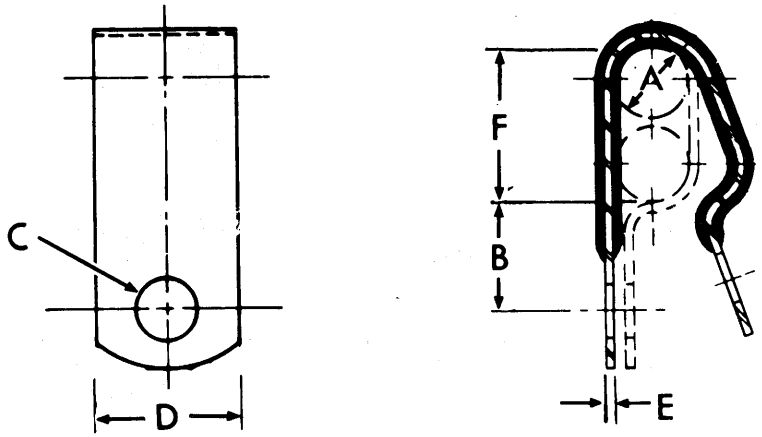
[1]2 required

Insulated Clip



TS-5008

No.	Part No.	A		B		C		D		E	
1	30H-8	1/8	3.2	17/32	13.5	11/32	8.7	5/8	15.7	.025	.6
2	30H-13	1/4	6.4	1/2	12.7	7/32	5.5	7/16	11.2	.032	.8
3	30H-16	1/4	6.4	21/32	15.7	13/32	10.3	3/4	19.1	.032	.8
4	30H-20	5/16	7.9	11/16	17.5	13/32	10.3	3/4	19.1	.032	.8
5	30H-23	3/8	9.5	23/32	18.2	13/32	10.3	3/4	19.1	.032	.8
6	30H-24	3/8	9.5	25/32	20.6	15/32	11.9	7/8	22.2	.032	.8
7	30H-27	7/16	11.2	3/4	19.1	13/32	10.3	3/4	19.1	.048	1.2
8	30H-28	7/16	11.2	13/16	20.6	15/32	11.9	7/8	22.2	.048	1.2
9	30H-31	1/2	12.7	25/32	20.6	13/32	10.3	3/4	19.1	.048	1.2
10	30H-38	5/8	15.7	27/32	21.4	13/32	10.3	3/4	19.1	.048	1.2
11	30H-46	13/16	20.6	15/16	23.8	13/32	10.3	3/4	19.1	.048	1.2
12	30H-50	5/16	7.9	1	25.4	13/32	10.3	3/4	19.1	.048	1.2
13	30H-60	1 1/16	36.5	1 1/4	31.8	13/32	10.3	3/4	19.1	.048	1.2

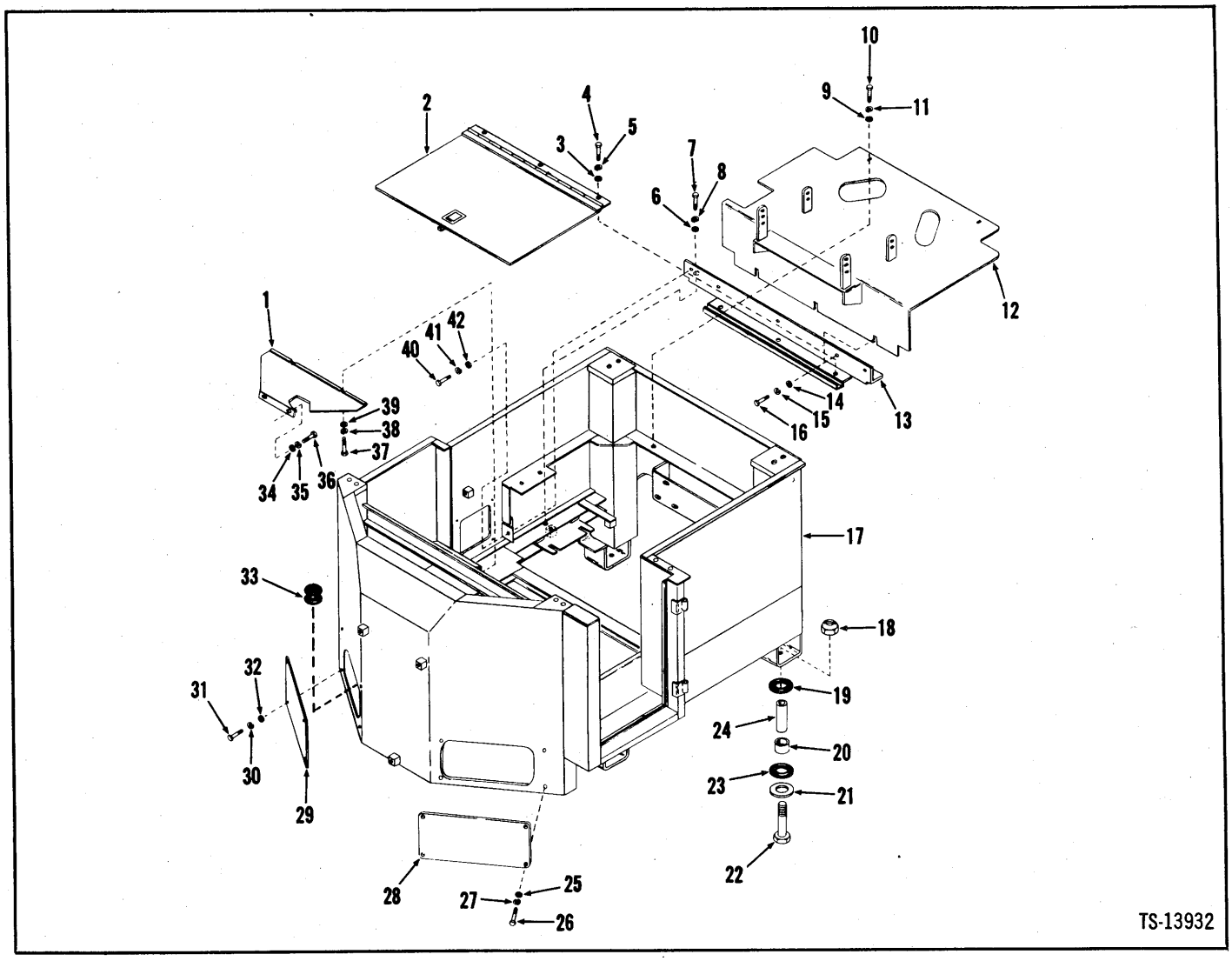


TS-6372

No.	Part No.	A		B		C		D		E	
1	31H-12	1/4	6.4	21/32	15.7	13/32	10.3	3/4	19.1	.050	1.3
2	31H-19	3/8	9.5	23/32	18.2	13/32	10.3	3/4	19.1	.050	1.3
3	31H-31	9/16	14.3	13/16	20.6	13/32	10.3	3/4	19.1	.050	1.3
4	31H-34	5/8	15.8	27/32	21.4	13/32	10.3	3/4	19.1	.050	1.3
5	31H-38	11/16	17.5	7/8	22.2	13/32	10.3	3/4	19.1	.050	1.3
6	31H-46	15/16	23.8	1	25.4	13/32	10.3	3/4	19.1	.050	1.3

Cockpit Assembly

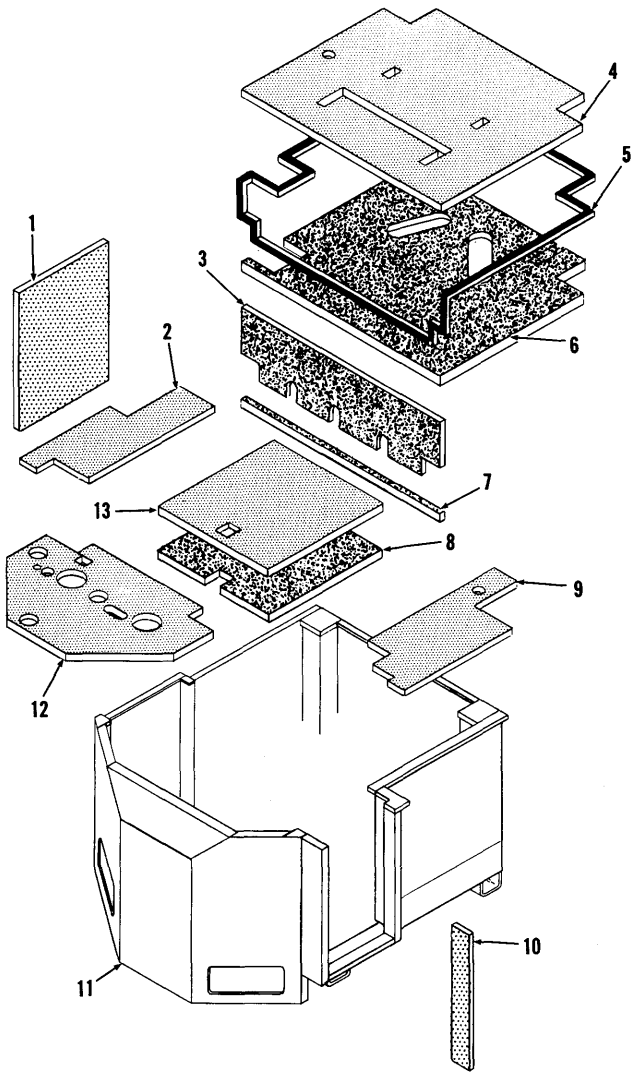
MICHIGAN



No.	Part No.	Qty.	Description
1	2509687	1	Cover
2	2506330	1	Door assy
3	25E-18	3	Washer
4	24C-620	3	Bolt
5	23E-06	3	Lockwasher
6	25E-18	2	Washer
7	24C-620	2	Bolt
8	23E-06	2	Lockwasher
9	25E-18	2	Washer
10	24C-620	2	Bolt
11	23E-06	2	Lockwasher
12	2506331	1	Plate
13	2506329	1	Angle
14	25E-18	3	Washer
15	23E-06	3	Lockwasher
16	24C-620	3	Bolt
17	2504139	1	Cockpit assy
18	18D-12	4	Nut
19	2509583	4	Mount
20	2509582	4	Sleeve
21	2509591	4	Plate

No.	Part No.	Qty.	Description
22	24C-1256	4	Bolt
23	2509583	4	Mount
24	2509584	4	Sleeve
25	25E-18	4	Washer
26	24C-620	4	Bolt
27	23E-06	4	Lockwasher
28	2509595	1	Plate
29	2509595	1	Plate
30	23E-06	4	Lockwasher
31	24C-620	4	Bolt
32	25E-18	4	Washer
33	2501805	2	Grommet
34	25E-18	2	Washer
35	23E-06	2	Lockwasher
36	24C-610	2	Bolt
37	90G-412	2	Screw
38	8E-04	2	Lockwasher
39	25E-14	2	Washer
40	24C-620	2	Bolt
41	23E-06	2	Lockwasher
42	25E-18	2	Washer

Cockpit Sound Proofing

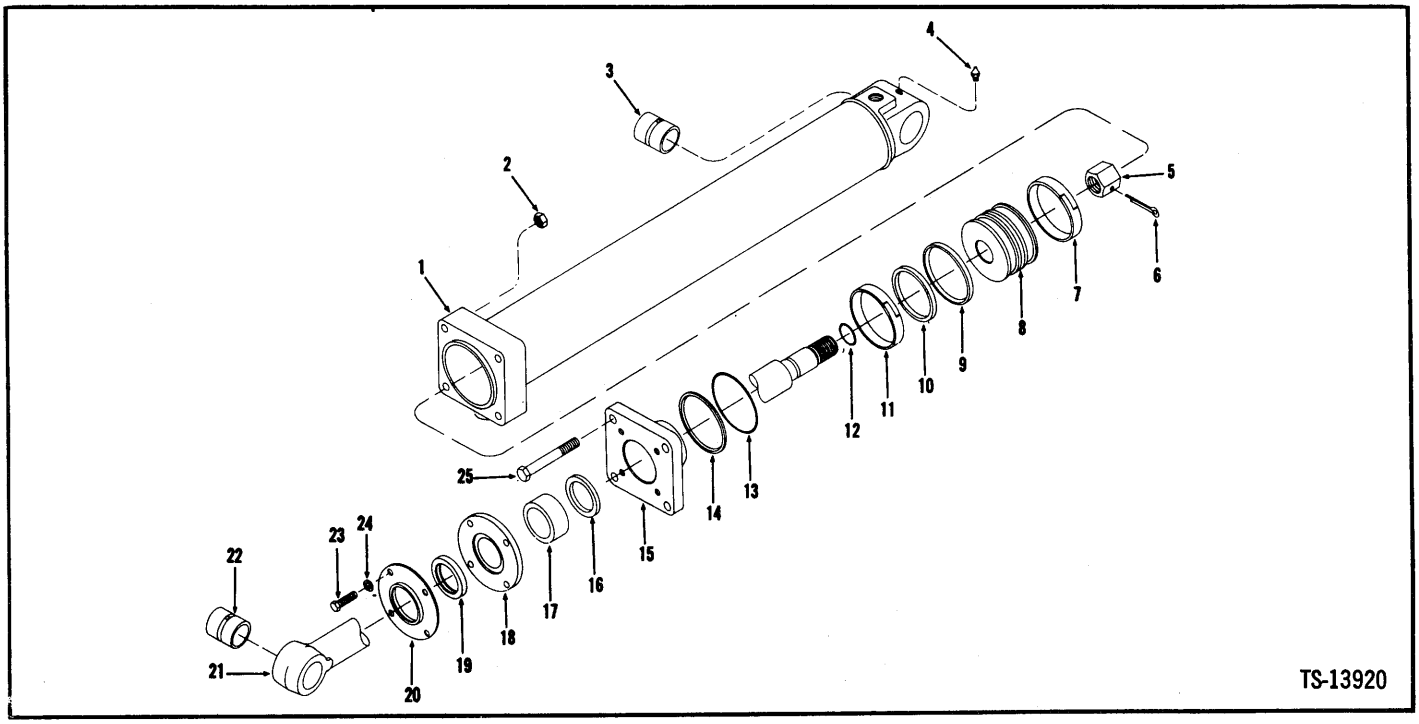


TS-14288

No.	Part No.	Qty.	Description
1	2509621	1	Foam insulation
2	2510569	1	Floormat
3	2510568	1	Insulation
4	2510572	1	Floormat
5	[2]949635	1	Gasket
6	2510574	1	Insulation
7	[3]949801	1	Gasket
8	2510567	1	Insulation
9	2510570	1	Floormat
10	2509590	1	Foam insulation
11	[1]----	1	Cockpit
12	2510573	1	Floormat
13	2510571	1	Floormat

[1]See Index
[2]11 Ft. (3,3 cm)
[3]2 Ft. (0,62 m)

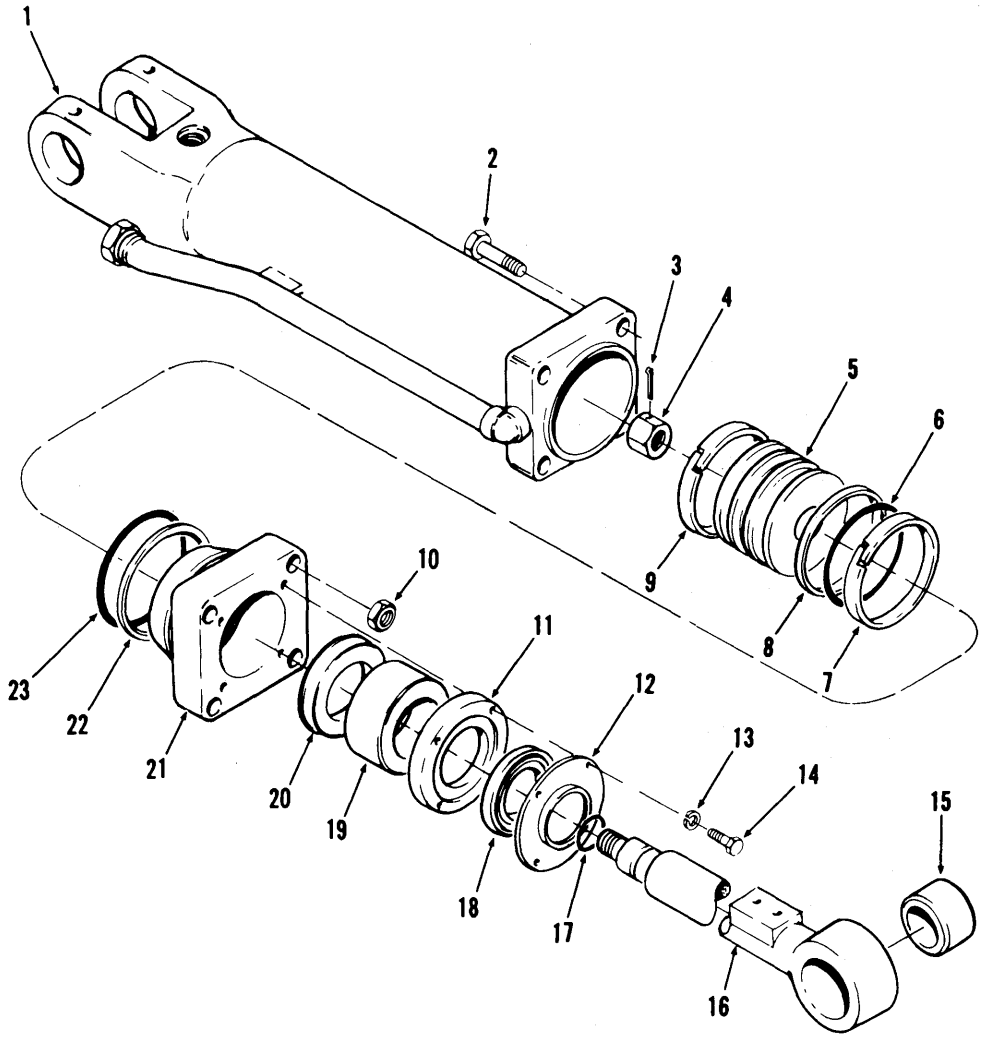
Cylinder Assembly, Boom – 4.5" (114,3 mm)



No.	Part No.	Qty.	Description
A	[1,2]3980095	2	Cylinder assy
B	[7,5]2516271	1	Kit
1	3980096	1	Cylinder
2	18D-08	4	Nut
3	3980101	1	Bushing
4	10H-25	1	Fitting grease
5	1519948	1	Nut
6	1F-844	1	Pin cotter
7	§[6]----	1	Wear ring
8	1503026	1	Piston
9	§[6]----	1	Outer ring
10	§[6]----	1	Inner ring
11	§[6]----	1	Wear ring
12	§[6]----	1	O-ring
13	§[6]----	1	O-ring
14	§[6]----	1	Ring back-up
15	3980104	1	Cap
16	3980105	1	Seal
17	3980106	1	Sleeve
18	3980107	1	Gland
19	2516952	1	Wiper seal
20	550089	1	Retainer
21	[4]2500614	1	Rod assy
22	1519949	1	Bushing
23	18C-620	4	Bolt
24	4E-06	4	Lockwasher
25	18C-856	4	Bolt

[1]Inc. 1 → 3, 5 → 25
[2]2 used per machine. Quantities listed are for 1.
[4]Inc. 22
[5]Inc. 6, 7, 9 → 14, 16, 19
[6]See B
[7]For reference see Service Gram SG-597.

Cylinder Assembly, Bucket – 3.5″ (88,9 mm)



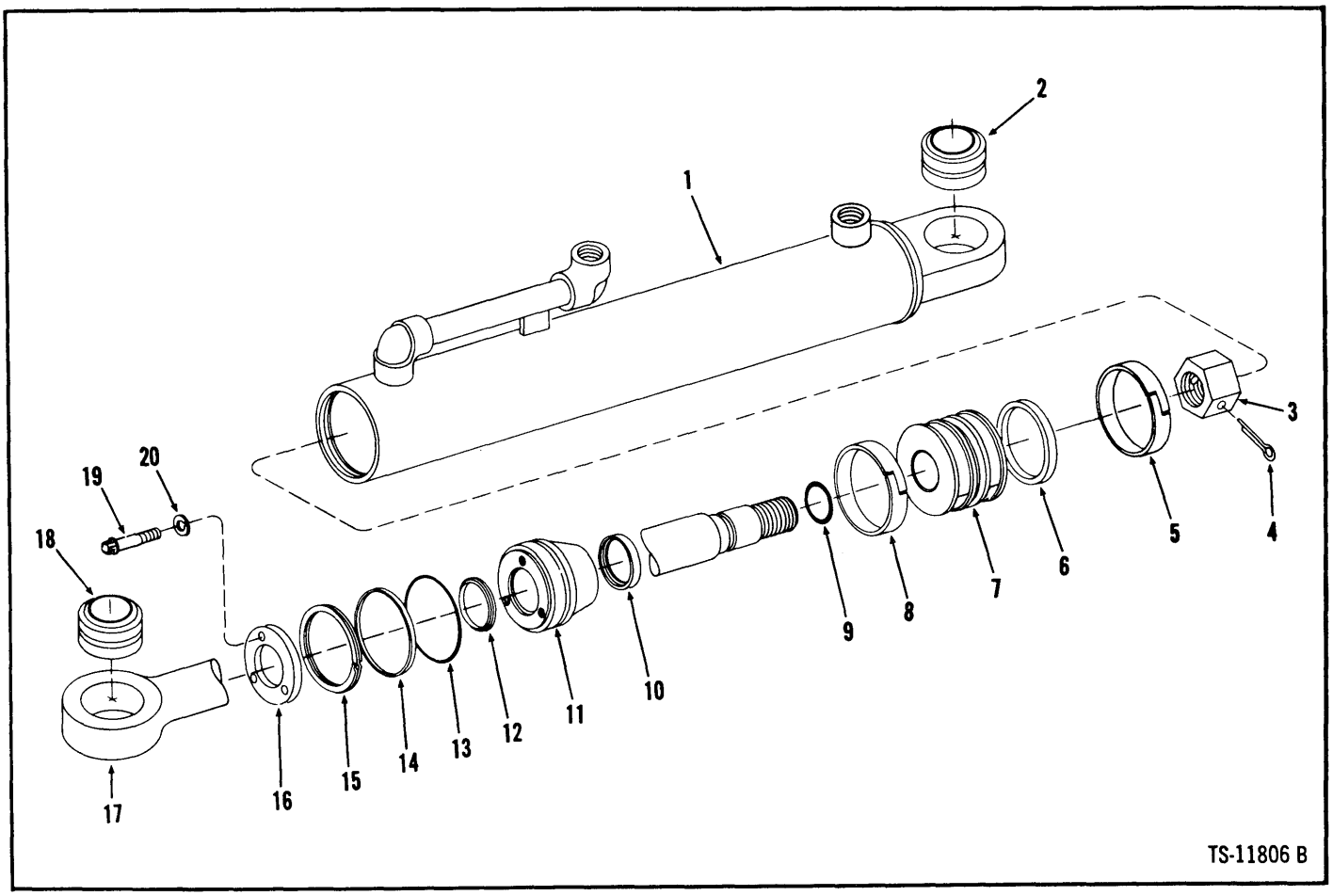
TS-11869 D

No.	Part No.	Qty.	Description
A	[1]3980108	1	Cylinder assy RH
B	[2]3980125	1	Cylinder assy LH
C	[6,4]2516270	1	Kit
1	3980109	1	Cylinder RH
1A	3980126	1	Cylinder LH
2	24C-868	4	Bolt
3	18C-436	1	Bolt
3A	†64D-04	1	Nut
4	1535960	1	Nut
5	1503639	1	Piston
6	§[5]----	1	Inner ring
7	§[5]----	1	Wear ring
8	§[5]----	1	Outer ring
9	§[5]----	1	Wear ring
10	68D-08	4	Nut

No.	Part No.	Qty.	Description
11	3980123	1	Retainer
12	3980124	1	Retainer
13	4E-06	4	Lockwasher
14	18C-616	4	Bolt
15	3980068	1	Bushing
16	[3]2500738	1	Rod assy RH
16A	[3]2500737	1	Rod assy LH
17	§[5]----	1	O-ring
18	2513504	1	Seal
19	3980122	1	Gland
20	3980121	1	Seal
21	3980120	1	Cap
22	§[5]----	1	Ring back-up
23	§[5]----	1	O-ring

[1]Inc. 1, 2 → 16, 17 → 23
[2]Inc. 1A, 2 → 15, 16A → 23
[3]Inc. 15
[4]Inc. 6 → 9, 17, 18, 20, 22, 23
[5]See C
[6]For reference see Service Gram SG-597

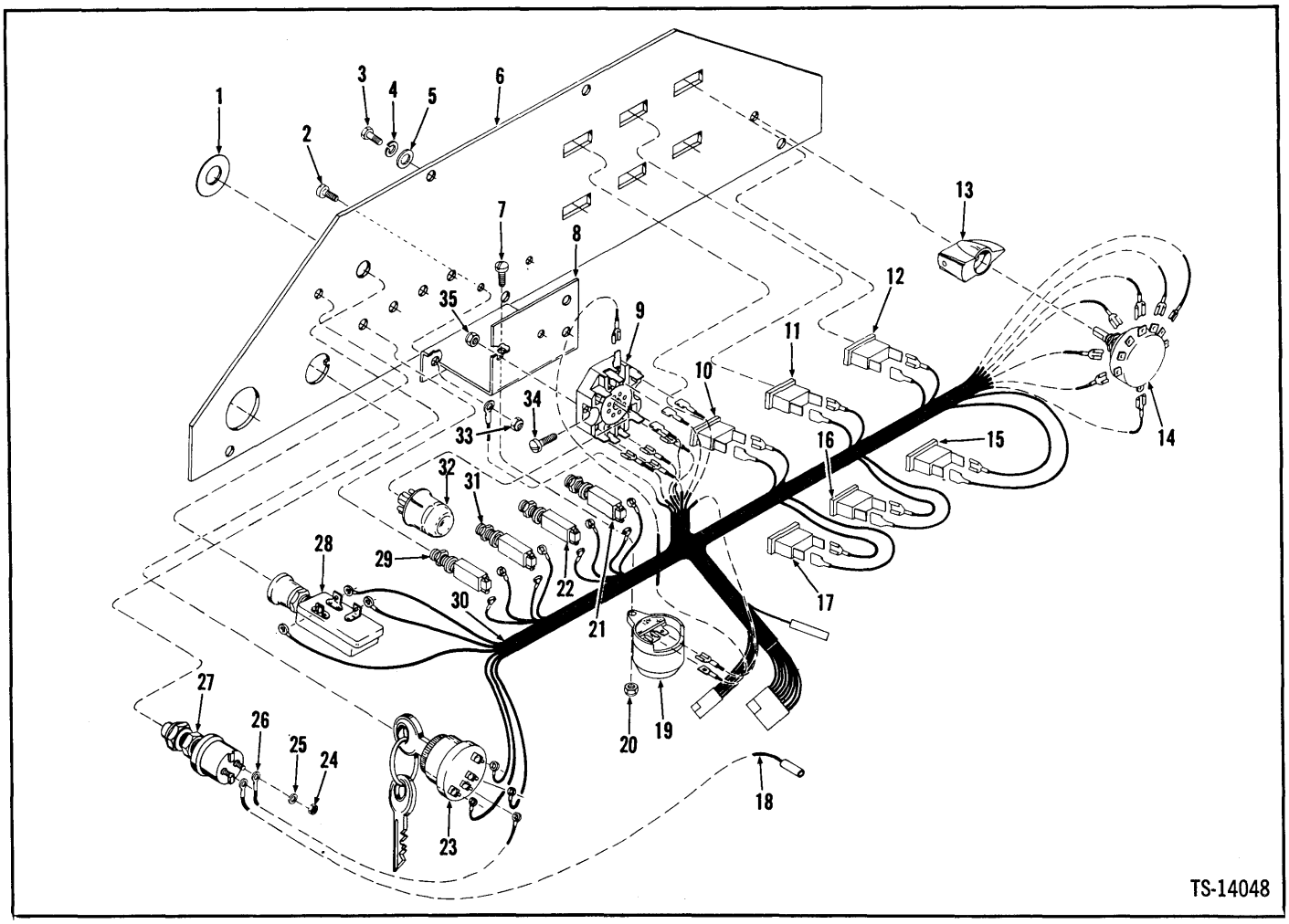
Cylinder Assembly, Steering – 2.5″ (63.5 mm)



No.	Part No.	Qty.	Description
A	[1,2]3980906	2	Cylinder assembly
B	[5,3]2516272	1	Kit
1	3980908	1	Cylinder
2	669928	1	Bushing
3	2500079	1	Nut
4	1F-628	1	Pin cotter
5	§[4] ----	1	Wear ring
6	§[4] ----	1	Seal
7	3980913	1	Piston
8	§[4] ----	1	Wear ring
9	§[4] ----	1	O-ring
10	§[4] ----	1	T-ring
11	3980911	1	Cap
12	3980839	1	Wiper seal
13	58K-228	1	O-ring
14	532948	1	Ring back-up
15	2506408	1	Ring snap
16	3980916	1	Retainer
17	3980907	1	Rod
18	669928	1	Bushing
19	93G-512	3	Bolt
20	4E-05	3	Lockwasher

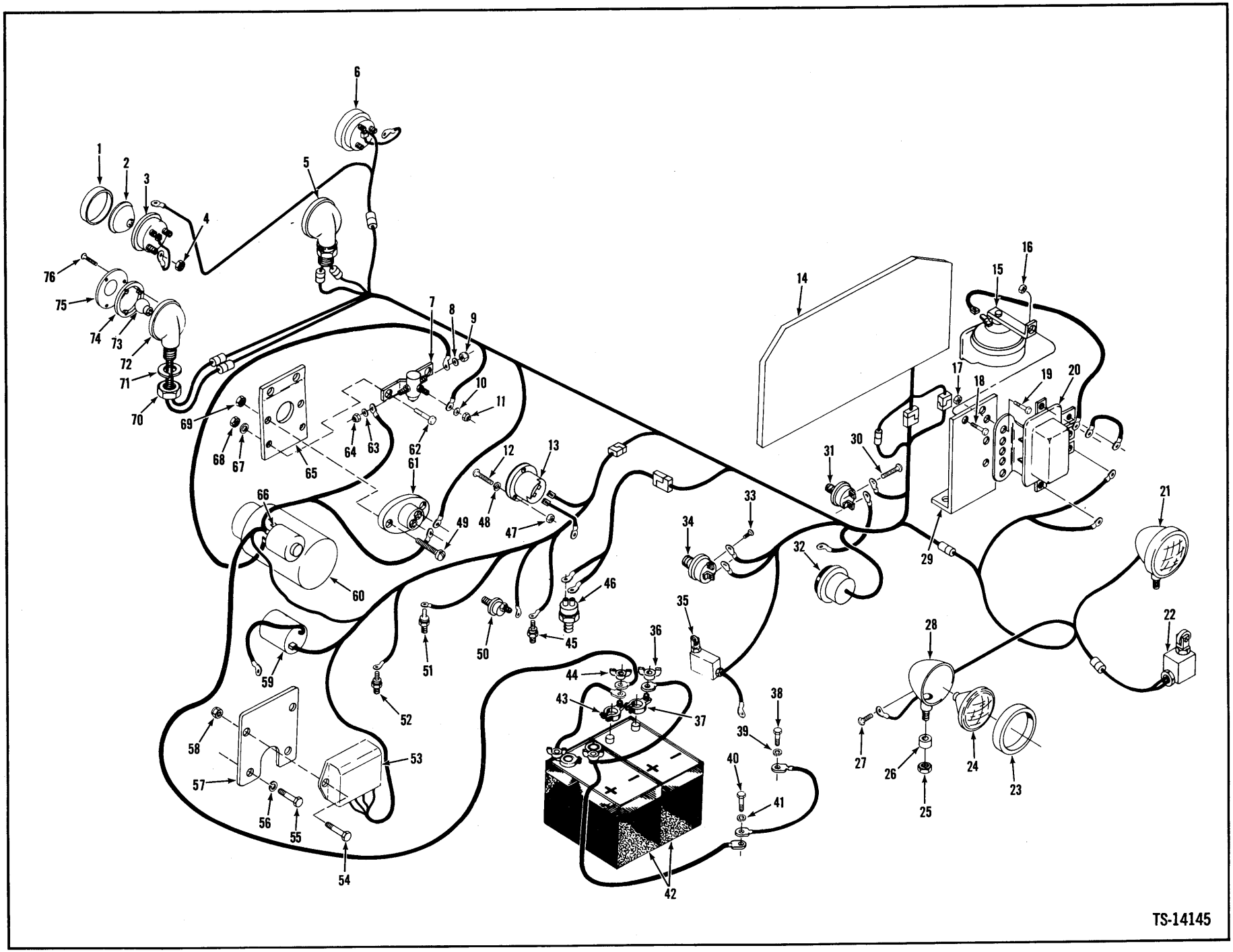
[1] Inc. 1 → 20
[2] 2 used per machine. Quantities listed are for 1.
[3] Inc. 4 → 6, 8 → 10, 12 → 15
[4] See B
[5] For reference see Service Gram SG-597

MICHIGAN



No.	Part No.	Qty.	Description
1	1516487	1	Disc
2	89G-410	2	Screw
3	23C-408	5	Bolt
4	4E-04	5	Lockwasher
5	25E-14	5	Washer
6	2505667	1	Inst panel
7	86G-612	1	Screw
8	2506688	1	Bracket
9	2506492	1	Diode base
10	2505349	1	Light generator
11	2505349	1	Light air press
12	2505349	1	Light eng oil press
13	2505401	1	Knob
14	2505402	1	Switch
15	2505349	1	Light park brake
16	2505349	1	Light eng temp
17	2505349	1	Light conv temp
18	3907250	1	Wire
19	2511944	1	Buzzer
19A	†2511945	1	Bracket
20	51D-6	1	Nut
21	[2]2503216	1	Circ brkr lights
22	[3]1516648	1	Circuit breaker horn
23	2513385	1	Switch starter
23A	961751	1	Key
24	§[4]————	2	Nut
25	§[4]————	2	Washer
26	2510303	1	Wire
27	[5]600259	1	Switch
27A	†857420	1	Boot
28	2514253	1	Switch light
29	[6]1513546	1	Circ brkr buck level
30	3907520	1	Harness
31	[6]1513546	1	Circ brkr warn light
32	2506494	7	Diode module
33	17D-1	2	Nut
34	86G-1010	2	Screw
35	51D-10	2	Nut

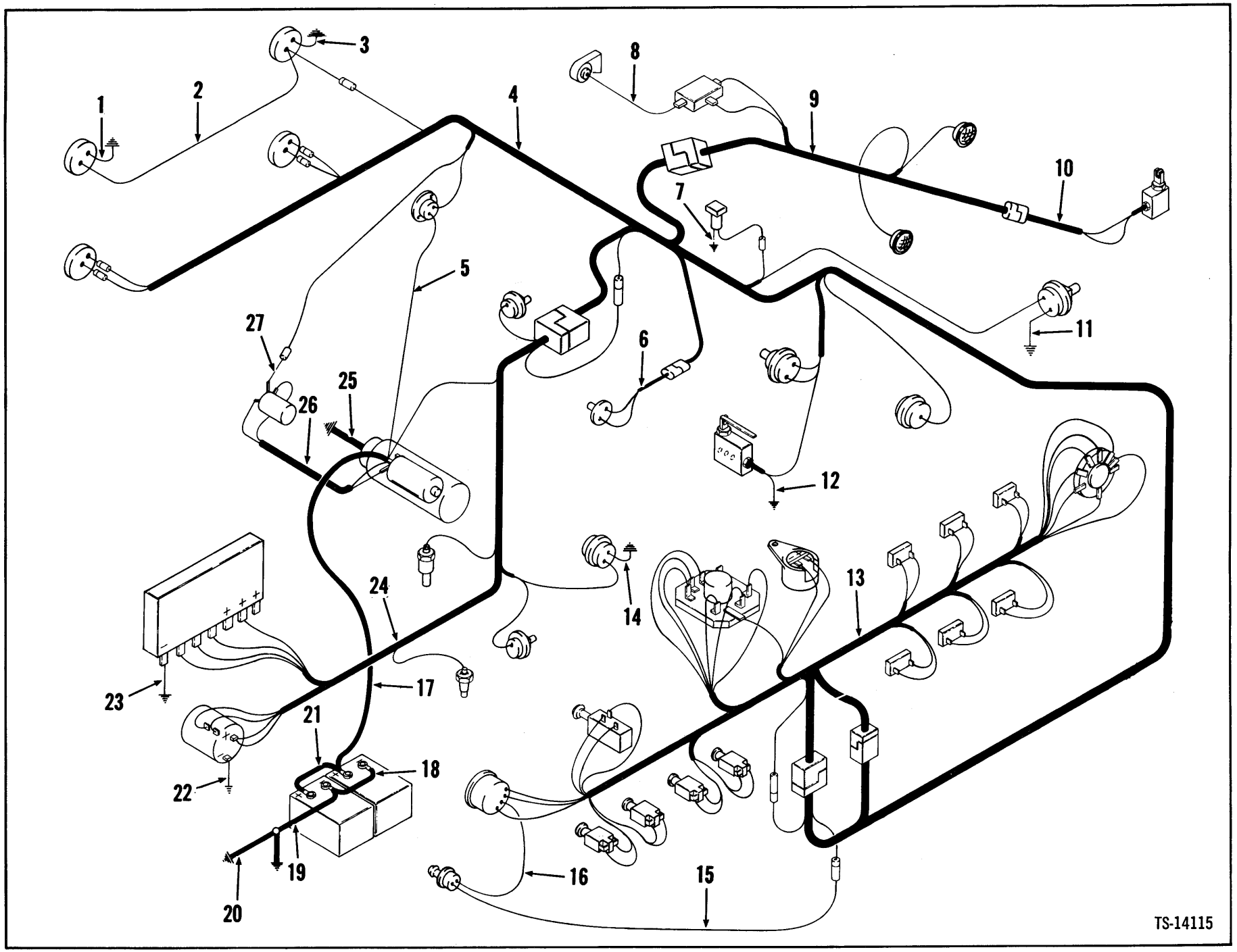
[2]35 Amp.
[3]5 Amp.
[4]See 27
[5]Inc. 24, 25, 27A
[6]1 Amp.


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TS-14145

No.	Part No.	Qty.	Description
1	[2]946389	2	Retnr back-up light
1A	[3]949357	2	Retnr back-up light
2	944907	2	Sealed unit
3	§[4]———	2	Housing
3A	†953310	2	Screw
4	50D-10	6	Nut
5	†[5,6]3984781	2	Light stop & tail
6	[7]546921	2	Light back-up
7	[8]551530	1	Switch
8	23E-05	2	Lockwasher
9	62D-05	2	Nut
10	17E-8	1	Lockwasher
11	12D-8	2	Nut
12	85G-610	3	Screw
13	1743825	1	Hourmeter
14	[1]———	1	Inst panel
15	885083	1	Horn
16	18D-05	4	Nut
17	50D-10	3	Nut
18	24C-516	4	Bolt
19	85G-1008	3	Screw
20	647310	1	Horn relay
21	[9]547529	2	Headlight assy
22	1767868	1	Switch limit
22A	990556	1	Arm
23	[2]946389	2	Retainer headlight
23A	[3]949357	2	Retainer headlight
24	944907	2	Sealed unit
25	17D-06	2	Nut
26	652448	2	Spacer
27	953310	2	Screw
28	§[10]———	2	Housing
29	3950689	1	Bracket
30	85G-804	2	Screw
31	[11]1537354	1	Switch low air
32	5200219	1	Horn button kit
33	85G-1004	2	Screw
34	636260	1	Switch stop light
35	3951644	1	Switch park brk light
36	§[12]———	2	Nut
37	[13]2512414	2	Terminal
38	24C-610	1	Bolt
39	5E-06	1	Lockwasher

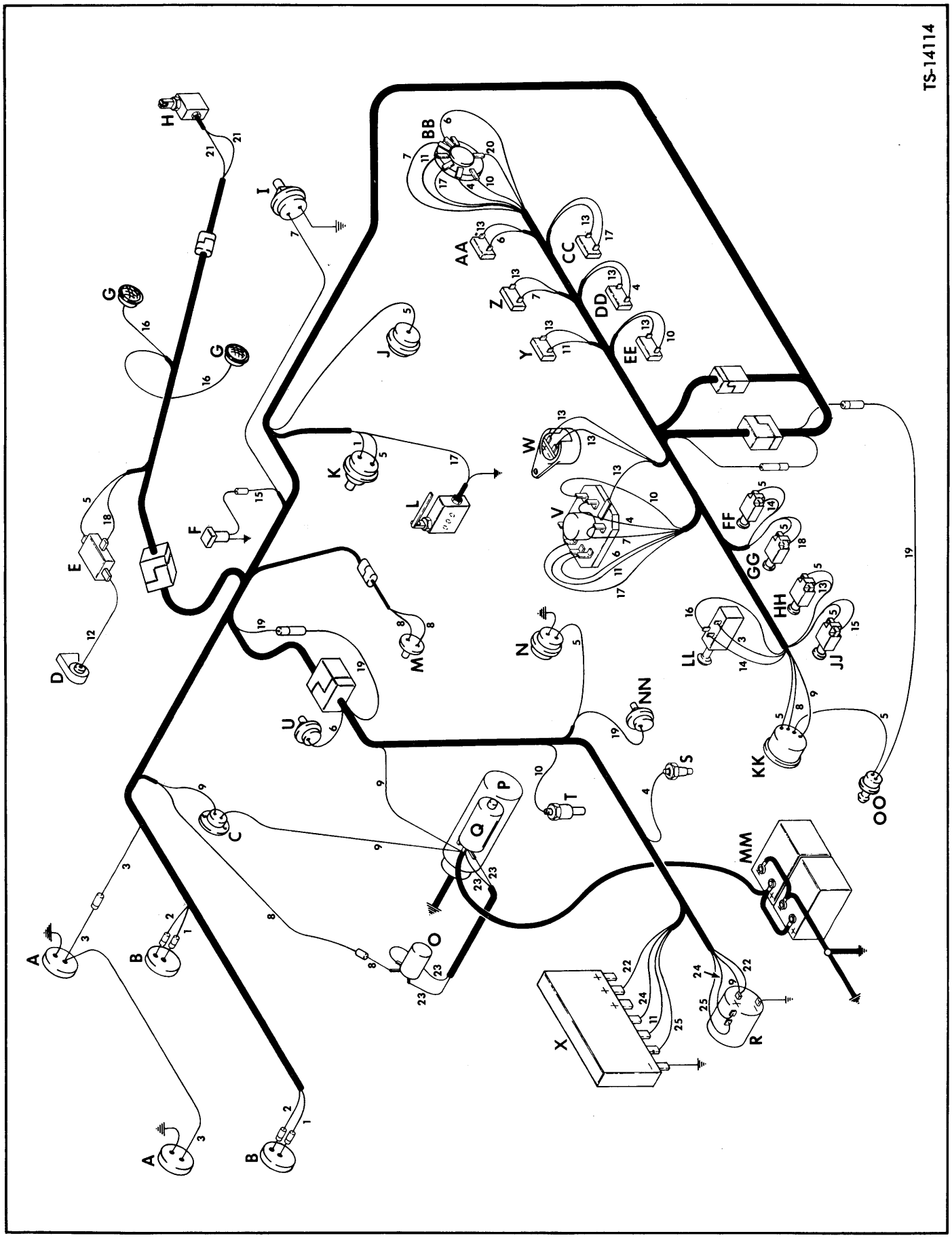
No.	Part No.	Qty.	Description
40	24C-610	1	Bolt
41	5E-06	1	Lockwasher
42	[14]3950272	2	Battery - Japan
43	[16]2512415	2	Terminal
44	§[17]———	2	Nut
45	[18]———	1	Switch thermo start
46	236395	1	Switch neutral start
47	50D-6	3	Nut
48	12E-6	3	Lockwasher
49	85G-1218	2	Bolt
50	1513841	1	Switch eng oil press
51	1513839	1	Switch conv temp
52	1767969	1	Switch eng temp
53	[1]———	1	Regulator
54	46G-1010	2	Bolt
55	24C-712	2	Bolt
56	4E-07	2	Lockwasher
57	2509953	1	Bracket
58	51D-10	2	Nut
59	[1]———	1	Generator
60	[1]———	1	Starter
61	[19]6001501	1	Circuit breaker
62	24C-412	2	Bolt
63	23E-05	2	Lockwasher
64	62D-05	2	Nut
65	2509935	1	Bracket
66	[20]———	1	Solenoid
67	25E-13	2	Washer
68	18D-04	2	Nut
69	50D-12	2	Nut
70	[22]18D-08	2	Nut
70A	[24]2DM-14	2	Nut
71	[22]4E-08	2	Lockwasher
71A	[24]6EM-140	2	Lockwasher
72	§[21]———	2	Housing
73	942746	2	Bulb
73A	†3902714	2	Bulb
74	†[22]———	2	Gasket
75	[22,23]990774	2	Lens kit
75A	†[24]3902716	2	Lens
76	[22]85G-610	6	Screw
76A	†[24]3902715	8	Screw

[1] See Index
[2] For "John W. Hobbs"
[3] For "Guide Lamp"
[4] See 6
[5] For replacement use 1545134 in U.S.A. Inc. 70, 71, 72, 73, 74, 75, 76
[6] Inc. 70A, 71A, 72, 73A, 75A, 76A - Japan
[7] Inc. 1, 2, 3
[8] Inc. 8 → 11, 63, 64
[9] Inc. 23, 24, 27, 28
[10] See 21
[11] Inc. 30
[12] See 37
[13] Inc. 36 For use with 1310121 Batteries
[14] For replacement use 1310121 Battery plus 1—2512415 Terminal & 1—2512414 Terminal in U.S.A.
[16] Inc. 44 For use with 1310121 Batteries
[17] See 43
[18] See Engine Parts Manual
[19] 70 Amp.
[20] See Starter
[21] See 5 or 5A
[22] For 1545134 Light only
[23] Inc. 74, 76
[24] For 3984781 Light only


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TS-14115

No.	Part No.	Qty.	Description
1	1515900	1	Wire
2	3907513	1	Wire
3	1515900	1	Wire
4	3907516	1	Harness
5	3902790	1	Wire
6	3907514	1	Wire
7	3907506	1	Wire
8	557438	1	Wire
9	3907517	1	Harness
10	3907518	1	Harness
11	1549382	1	Wire
12	1515900	1	Wire
12A	†3907522	1	Wire
13	3907520	1	Harness
14	558960	1	Wire
15	3907511	1	Wire
16	2510303	1	Wire
17	[2]3955149	1	Cable
18	[2]3950961	1	Cable
19	[2]532549	1	Cable
20	532549	1	Cable
21	[2]3950961	1	Cable
22	2502238	1	Wire
23	558960	1	Wire
24	3907521	1	Harness
25	2510332	1	Wire
26	3902791	1	Harness
27	3907505	1	Wire
28	†[2,3]2510367	1	Cable
29	†[2,4]2501773	1	Cable
30	[5]2511888	1	Wire

[2]When batteries with round posts are in machine one (1) 2510367 Cable will replace one (1) each of 3955149 & 3950961 Cables, one (1) 2501773 Cable will replace one (1) each of 3950961 & 532549 Cables.
[3]Batteries to Starter
[4]Batteries to Frame
[5]Hood Ground


TS-14114

Ref. No.	Color	Color Code
1.	Yellow & Red	Stop Lights to Stop Light Switch
2.	Yellow	Tail Lights to Instrument Panel Plug (Joins White & Red)
3.	Lavender	Rear Floodlamps to Light Switch
4.	Brown	Engine Temp. Sender to Engine Temp. Warning Light, Diode Block & Test Switch
5.	Red & White	Ignition Switch to Circuit Breakers, Hourmeter, Switches & Horn Relay
6.	Green	Engine Oil Press. Sender to Engine Oil Press. Warning Light, Diode Block & Test Switch
7.	Light Green	Air Press. Sender to Air Press. Warning Light, Diode Block & Test Switch
8.	White	Ignition Switch to Neutral Start Switch to Starter Relay
9.	Red #10	Generator to Starter Solenoid to 70 Amp. Circuit Breaker to Ignition Switch
10.	White & Black	Converter Temp. Sender to Converter Temp. Warning Light, Diode Block & Test Switch
11.	Green & White	Voltage Regulator to Generator Warning Light, Diode Block & Test Switch
12.	Black	Horn Relay to Horn
13.	Red & Green	1 Amp. Circuit Breaker to Warning Lights, Buzzer, Diode Block & Test Switch
14.	Red & Lavender	35 Amp. Circuit Breaker to Light Switch
15.	Red & Black	1 Amp. Circuit Breaker to Bucket Leveler Plug to Bucket Leveler Solenoid (Joins Optional at Plug)
16.	White & Red	Light Switch to Headlamps
17.	Black & White	Parking Brake Switch to Parking Brake Warning Light, Diode Block & Test Switch
18.	White & Lavender	5 Amp. Circuit Breaker to Horn Relay
19.	Black & Red	Cold Start Button to Thermo Start Switch
20.	Black	Test Switch to Ground
21.	Optional	Bucket Leveler Limit Switch to Bucket Leveler Plug (Joins Red & Black)
22.	Red	Generator + Terminal to Voltage Regulator + Terminal
23.	Black	Starter Relay to Starter Solenoid
24.	White & Yellow	Voltage Regulator F Terminal to Generator F Terminal
25.	Black & Yellow	Generator A Terminal to Voltage Regulator A Terminal

45B Perkins

A – Omit
B – Omit
C – 70 Amp. Circuit Breaker
D – Horn
E – Horn Relay
F – Bucket Leveler Solenoid
G – Omit
H – Bucket Leveler Limit Switch
I – Air Press. Sender
J – Horn Switch
K – Stop Light Switch
L – Parking Brake Switch
M – Neutral Start Switch
N – Hourmeter
O – Starter Relay
P – Starter
Q – Starter Solenoid
R – Generator
S – Engine Temp. Sender
T – Converter Temp. Sender
U – Engine Oil Press. Sender
V – Diode Block
W – Buzzer
X – Voltage Regulator
Y – Generator Warning Light
Z – Air Press. Warning Light
AA – Engine Oil Press. Warning Light
BB – Test Switch
CC – Parking Brake Warning Light
DD – Engine Temp. Warning Light
EE – Converter Temp. Warning Light
FF – 35 Amp. Circuit Breaker
GG – 5 Amp. Circuit Breaker
HH – 1 Amp. Circuit Breaker
JJ – 1 Amp. Circuit Breaker
KK – Ignition Switch
LL – Light Switch
MM – Batteries
NN – Thermo Start
OO – Cold Start Button

All orders for engine assembly or components thereof should be placed with the nearest Perkins or Lucas Distributor. To obtain proper items, it is necessary to provide your engine model, serial number and necessary group type number for the equipment required. This data is stamped on the options and accessories plate on the rocker cover of engine.

Engine Accessories

No.	Part No.	Qty.	Description
1	*[2]3551819	1	Generator
2	*[3,17]3551918	1	Starter
3	*[4]2411280	1	Fuel injection pump
4	*[5]961101	6	Nozzle and injector
5	*[6,7,17]3575788	1	Fan
6	*[8,9,17]2514462	1	Fan
7	*[10,14]3411279	1	Air compressor
7.	*[15,16]----	1	Air compressor
8	*[11,17]3968001	1	Regulator
9	*[7,12]961102	1	Filter assy fuel
10	*[9,13]961154	1	Filter assy fuel

Engine Belts

No.	Part No.	Qty.	Description
11	*[7]3981921	2	Belt fan match set
12	*[9]961046	1	Belt fan
13	*[9]3725272	1	Belt generator

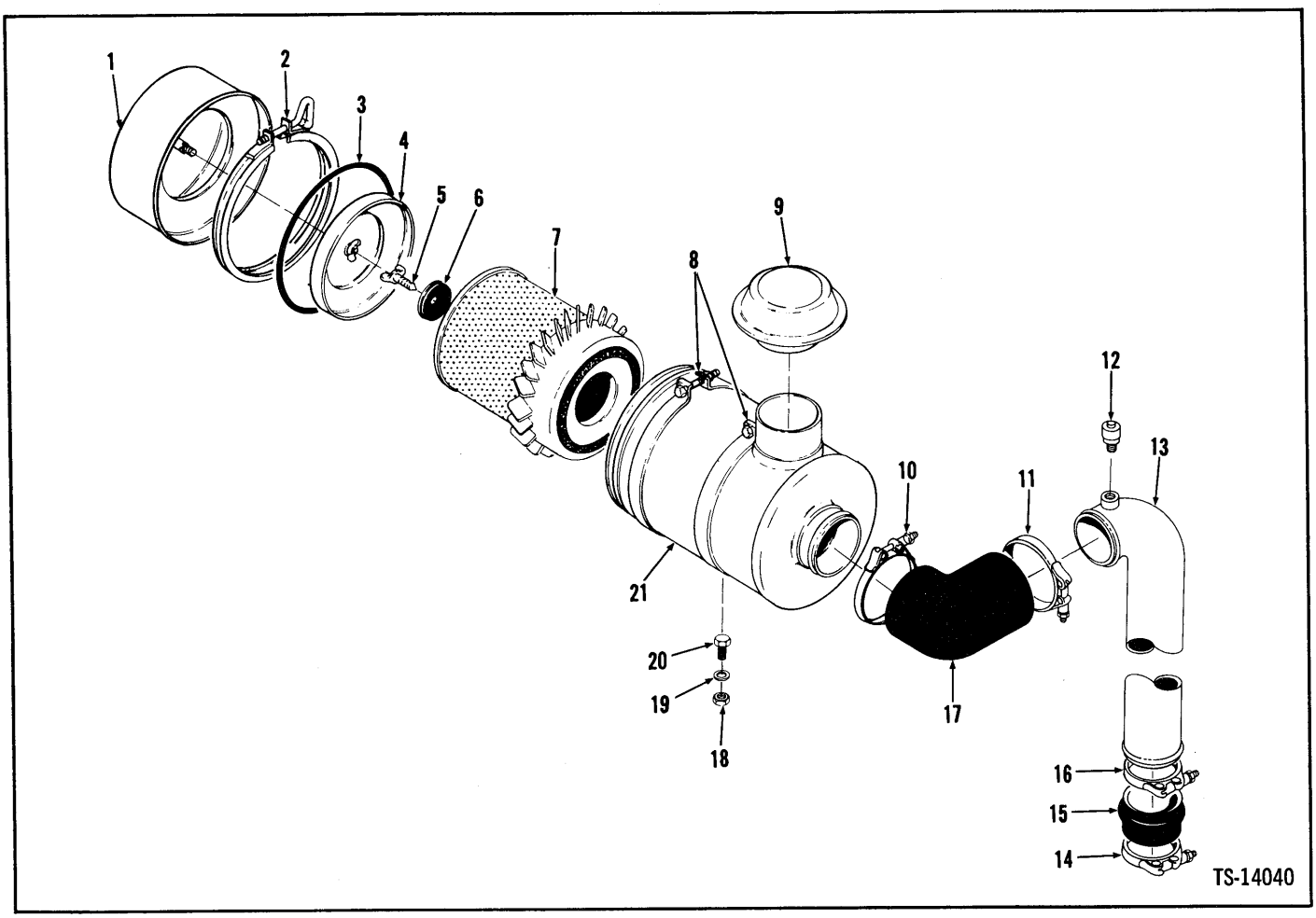
Engine & Hydraulic System – Filter Replacement Elements

No.	Part No.	Qty.	Description
14	944954	1	Element air cleaner
15	[18]1530600	1	Element resvr press
16	*960698	1	Element lube oil
17	*[7]3981922	1	Element fuel
18	*[9]961048	2	Element fuel

[2]Lucas #E1260 A 030 – Model AC5A 12-3
[3]Lucas #26358A – Model M50
[4]Lucas #MR 72-750/3/2460 – Model 3262 F 888
[5]Lucas #5281607
[6]Perkins #31258155
[7]For 4189C101JAC→4189C999JAC only
[8]Perkins #31258146
[9]For 4189D101JAC & → only
[10]Perkins #2488664
[11]Lucas #1697A220 – Model 440A – 12-2
[12]Lucas #5386B250
[13]Lucas #2FASL5863A040
[14]For 4189C101JAC → 4189D497JAC
[15]Perkins #2488608
[16]For 4189D498JAC & →
[17]For Delco Remy parts see SG-709.
[18]Ref. SG-721.

*NOTE: The above listed accessory items are furnished by the engine manufacturer. Specifications on these items are subject to change without notice. It is, therefore, recommended that complete model, specifications and serial number of the engine be provided to your Perkins Engine or Lucas Distributor when ordering these parts.

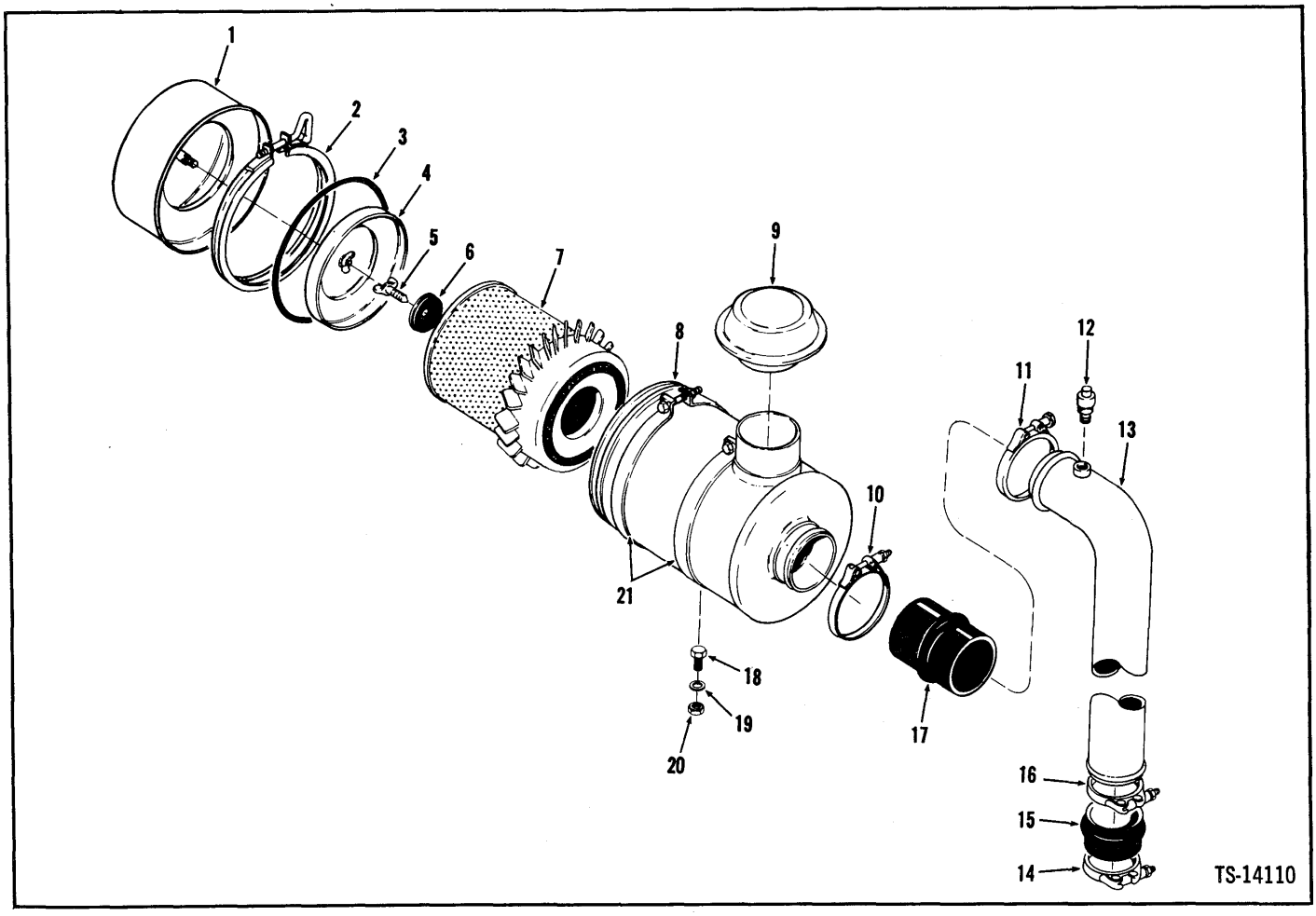
Engine Air Cleaner & Connections*



No.	Part No.	Qty.	Description
A	[2]1632441	1	Air cleaner assy
1	894652	1	Cup
2	947242	1	Clamp
3	886288	1	Gasket
4	894653	1	Baffle
5	886285	1	Bolt
6	886287	1	Washer
7	944954	1	Element
8	420945	2	Band
9	568391	1	Cap
10	539042	1	Clamp
11	539042	1	Clamp
12	1721628	1	Service indicator
13	2511094	1	Tube
14	545153	1	Clamp
15	1522450	1	Adapter
16	539042	1	Clamp
17	515425	1	Hose
18	18D-06	4	Nut
17	25E-18	4	Washer
20	24C-616	4	Bolt
21	§[3]————	1	Body

*4189C101JAC→4189C999JAC
[2]Inc. 1→7, 21
[3]See A

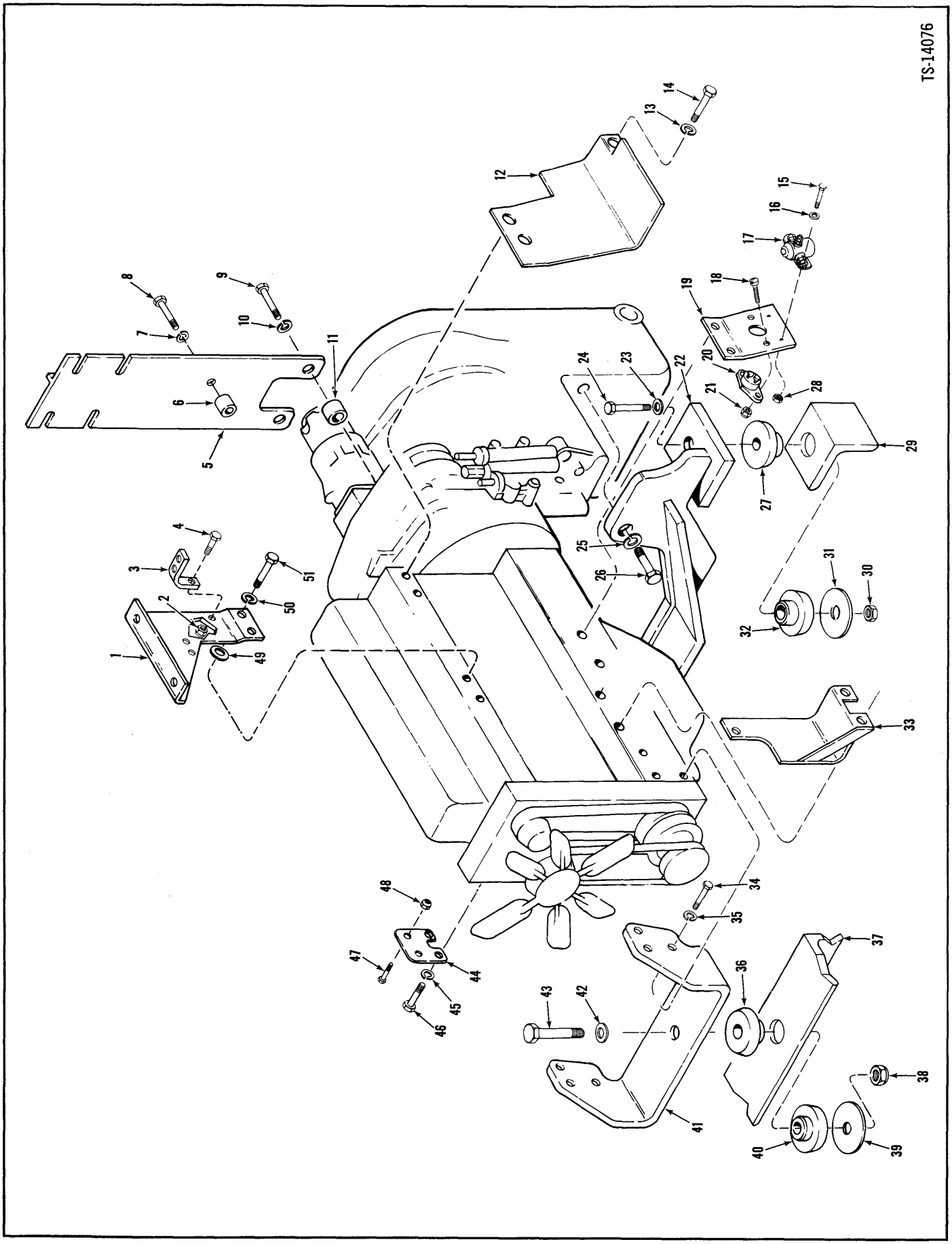
Engine Air Cleaner & Connections*



No.	Part No.	Qty.	Description
A	[2]1632441	1	Air cleaner assy
1	894652	1	Cup
2	947242	1	Clamp
3	886288	1	Gasket
4	894653	1	Baffle
5	886285	1	Bolt
6	886287	1	Washer
7	944954	1	Element
8	§[3]----	1	Body
9	568391	1	Cap
10	539042	1	Clamp
11	539042	1	Clamp
12	1721628	1	Service indicator
13	[4]2511094	1	Tube
13A	†[5]2519049	1	Tube
14	545153	1	Clamp
15	1522450	1	Adapter
16	539042	1	Clamp
17	515424	1	Hose
18	24C-612	4	Bolt
19	25E-18	4	Washer
20	18D-06	4	Nut
21	420945	1	Bank

*4189D101JAC & →

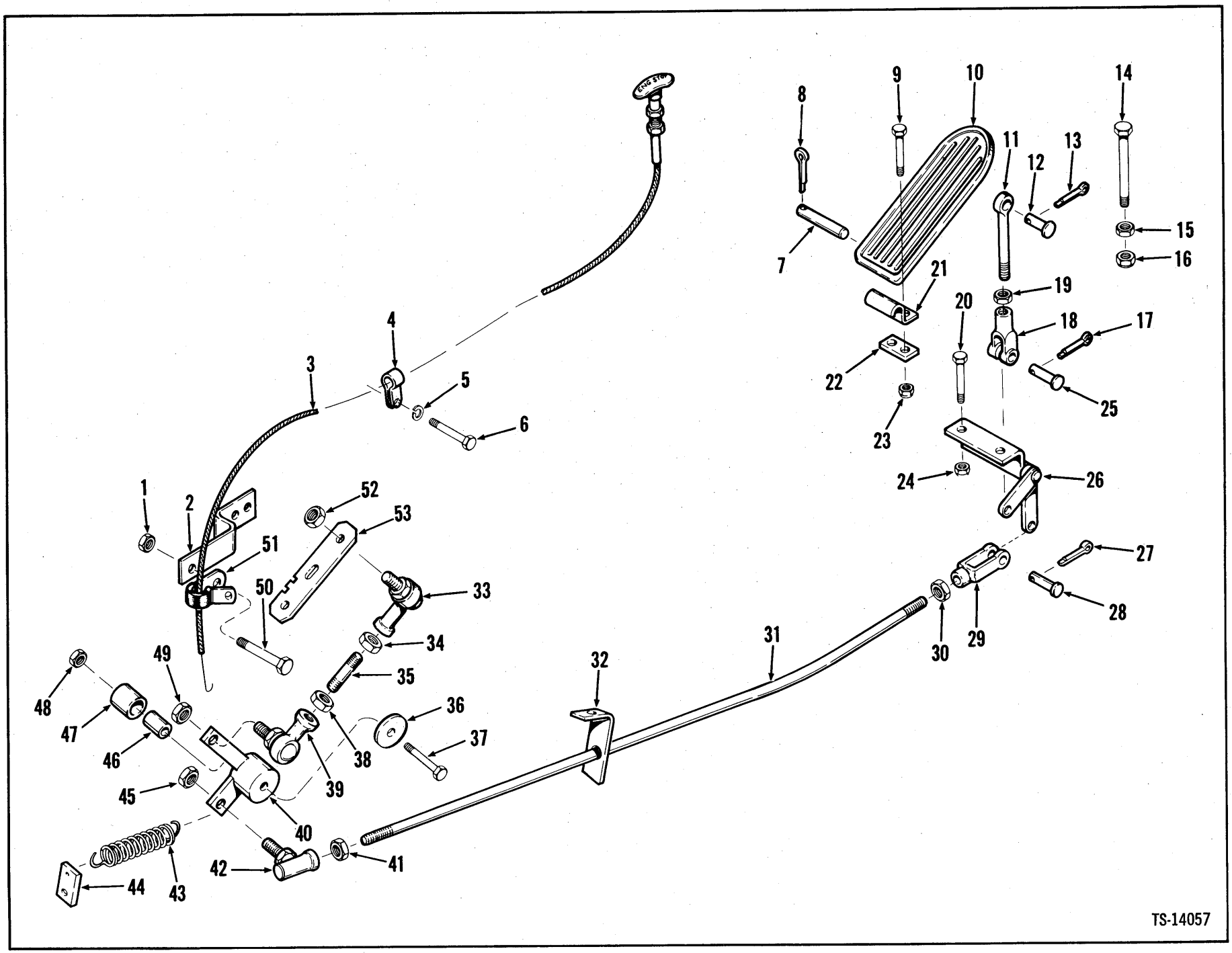
[2]Inc. 1→8
[3]See A
[4]For 4189D101JAC → 497JAC
[5]For 4189D498JAC & →


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Engine & Transmission Mountings

No.	Part No.	Qty.	Description
1	2509943	1	Bracket
2	[2]18D-04	1	Nut
3	[2]2509933	1	Bracket
4	[2]24C-414	1	Bolt
5	2509944	1	Bracket
6	652484	1	Spacer
7	4E-05	1	Lockwasher
8	24C-528	1	Bolt
9	23C-728	2	Bolt
10	4E-07	2	Lockwasher
11	572337	2	Spacer
12	2509936	1	Shield
13	4E-08	1	Lockwasher
14	23C-812	1	Bolt
15	24C-412	2	Bolt
16	25E-13	2	Washer
17	551530	1	Switch
18	85G-1020	2	Bolt
19	2509935	1	Bracket
20	[3]6001501	1	Circuit breaker
21	50D-10	2	Nut
22	2503512	1	Mount transm
23	25E-27	2	Washer
24	24C-1272	2	Bolt
25	4E-12	4	Lockwasher
26	23C-1232	4	Bolt
27	1529027	2	Dampener
28	18D-04	2	Nut
29	[1]———	1	Frame rear
30	18D-12	2	Nut
31	2503001	2	Washer
32	1529027	2	Dampener
33	[4]2511119	1	Cover
33A	†[2]2509945	1	Cover
34	[5]24C-724	6	Bolt
34A	†[6]23C-1024	6	Bolt
35	[5]4E-07	6	Lockwasher
35A	†[6]4E-10	6	Lockwasher
36	1529027	1	Dampener
37	[1]———	1	Frame rear
38	18D-12	1	Nut
39	2503001	1	Washer
40	1529027	1	Dampener
41	[5]2508619	1	Mount engine
41A	†[6]2515582	1	Mount engine
42	25E-27	1	Washer
43	24C-1272	1	Bolt
44	2509953	1	Bracket
45	4E-07	2	Lockwasher
46	24C-712	2	Bolt
47	85G-1010	2	Bolt
48	50D-10	2	Nut
49	25E-17	1	Washer
50	4E-06	2	Lockwasher
51	24C-616	2	Bolt

[1]See Index
[2]4189D101JAC & ➔ only
[3]70 Amp.
[4]4189C101JAC➔4189C999JAC only
[5]4189C101JAC → 4189D205JAC, 232JAC, 233JAC, 236JAC, 240JAC
[6]4189D206JAC → 231JAC, 234JAC, 235JAC, 237JAC → 239JAC, 241JAC & →

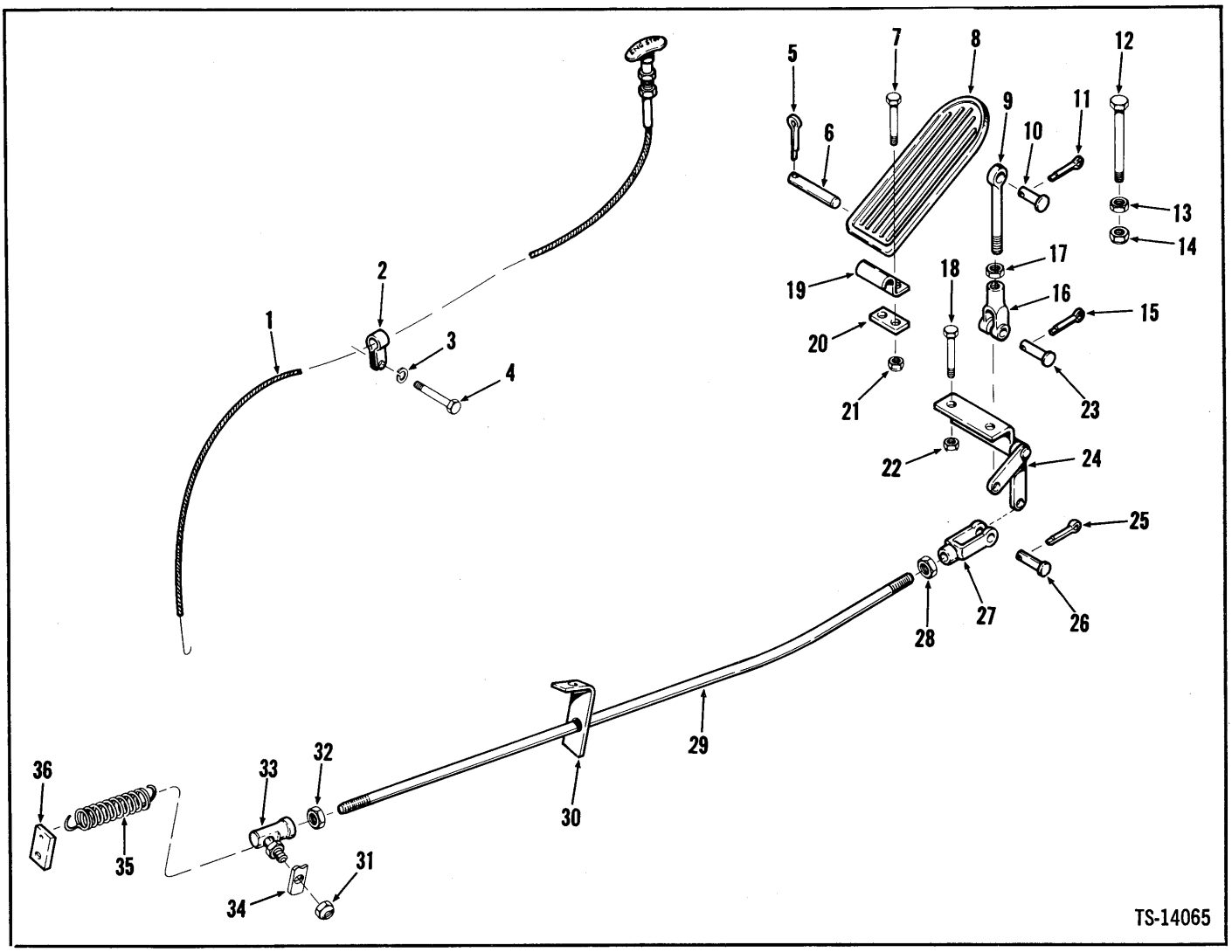

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TS-14057

Engine Controls*

MICHIGAN

No.	Part No.	Qty.	Description
1	18D-04	1	Nut
2	2511116	1	Bracket
3	1520193	1	Eng stop cable
4	30H-16	1	Clip
5	4E-06	1	Lockwasher
6	24C-612	1	Bolt
7	623762	1	Pin
8	1F-316	1	Pin cotter
9	24C-416	2	Bolt
10	623829	1	Pedal accelerator
11	550619	1	Rod
12	4F-04051	1	Pin
13	1F-207	1	Pin cotter
14	24C-432	1	Bolt
15	8D-04	1	Nut
16	18D-04	1	Nut
17	1F-207	1	Pin cotter
18	2J-4200	1	Clevis
19	8D-04	1	Nut
20	24C-412	2	Bolt
21	1544695	1	Bracket
22	572556	1	Spacer
23	18D-04	2	Nut
24	18D-04	2	Nut
25	4F-04051	1	Pin
26	3980430	1	Bellcrank assy
27	1F-207	1	Pin cotter
28	4F-04051	1	Pin
29	2J-4200	1	Clevis
30	8D-04	1	Nut
31	[2]2509938	1	Rod assy
32	2509937	1	Bracket
33	1321366	1	Ball joint
34	8D-04	1	Nut
35	2511122	1	Rod
36	25E-17	1	Washer
37	24C-632	1	Bolt
38	8D-04	1	Nut
39	1321366	1	Ball joint
40	2511118	1	Relay
41	8D-04	1	Nut
42	1306167	1	Ball joint
43	551014	1	Spring
44	2510390	1	Spring clip
45	66D-04	1	Nut
46	3981602	1	Sleeve
47	3200076	1	Bushing
48	18D-06	1	Nut
49	18D-04	1	Nut
50	24C-412	1	Bolt
51	30H-14	1	Clip
52	18D-04	1	Nut
53	2511117	1	Lever

*4189C101JAC→4189C999JAC
[2]Inc. 29, 30, 41, 42

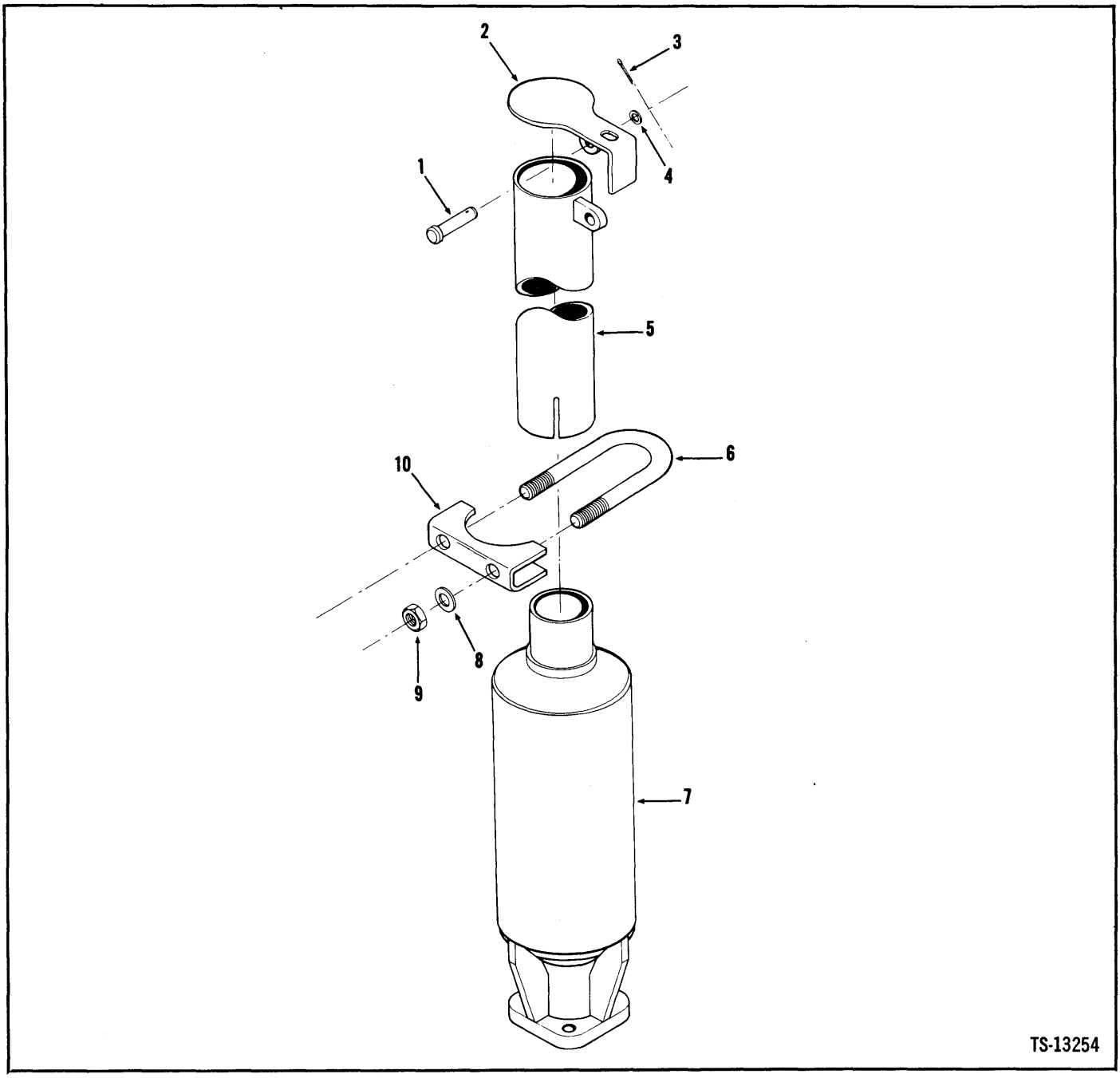


No.	Part No.	Qty.	Description
1	1520193	1	Eng stop cable
1A	†565073	1	Grommet
2	30H-16	1	Clip
3	4E-06	1	Lockwasher
4	24C-612	1	Bolt
5	1F-316	1	Pin cotter
6	623762	1	Pin
7	24C-416	2	Bolt
8	523829	1	Pedal accelerator
9	550619	1	Rod
10	4F-04051	1	Pin
11	1F-207	1	Pin cotter
12	24C-432	1	Bolt
13	8D-04	1	Nut
14	18D-04	1	Nut
15	1F-207	1	Pin cotter
16	2J-4200	1	Clevis
17	8D-04	1	Nut
18	24C-412	2	Bolt
19	1544695	1	Bracket
20	572556	1	Spacer
21	18D-04	2	Nut
22	18D-04	2	Nut
23	4F-04051	1	Pin
24	3980430	1	Bellcrank assy
25	1F-207	1	Pin cotter
26	4F-04051	1	Pin
27	2J-4200	1	Clevis
28	8D-04	1	Nut
29	[2]2509938	1	Rod assy
30	2509937	1	Bracket
31	66D-04	1	Nut
32	8D-04	1	Nut
33	1306167	1	Ball joint
34	[3]———	1	Engine
35	551014	1	Spring
36	2510390	1	Spring clip

*4189D101JAC & →

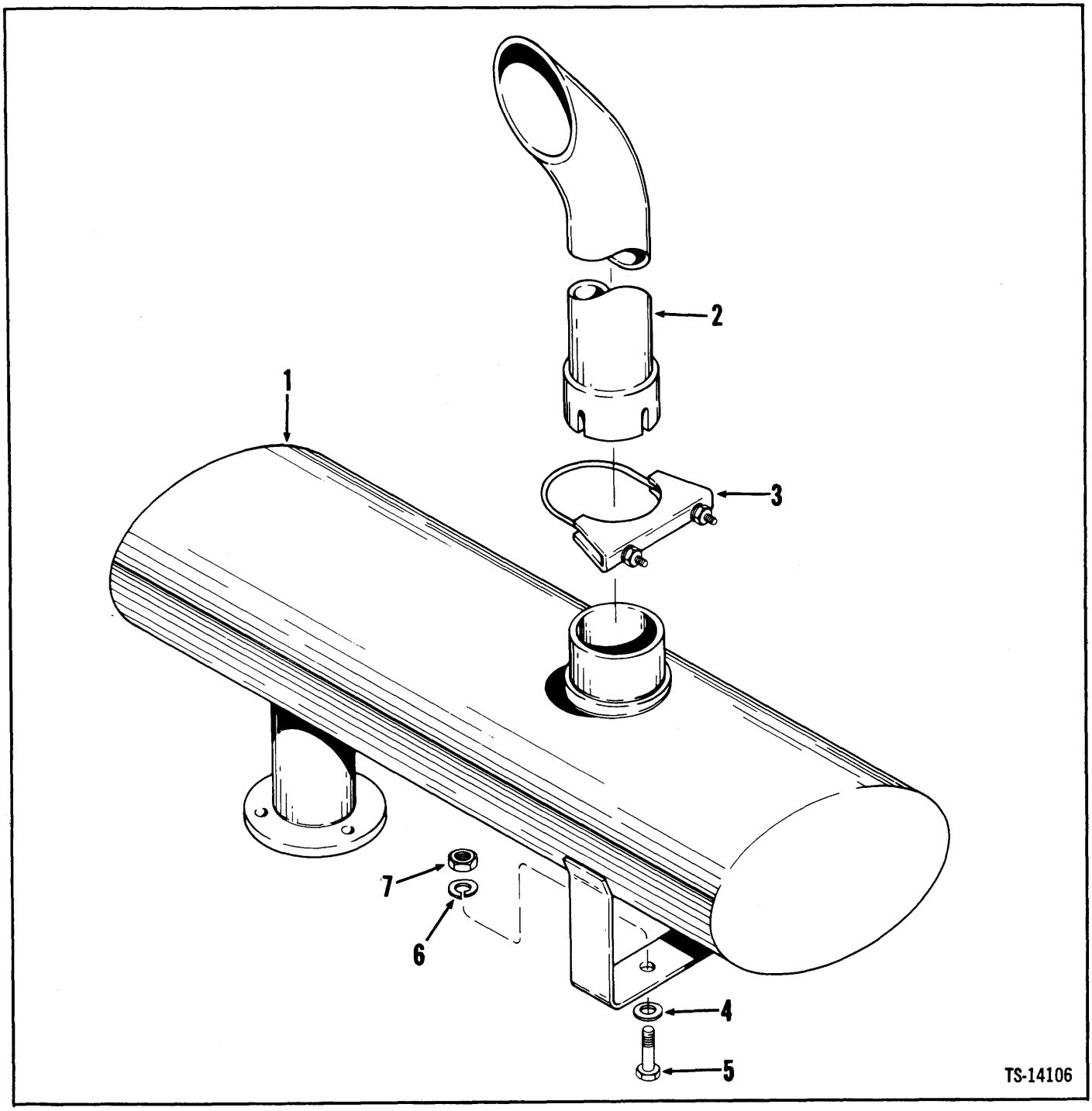
[2]Inc. 27, 28, 32, 33
[3]See Engine Manual

Engine Exhaust System*



No.	Part No.	Qty.	Description
1	2F-04051	1	Pin
2	3981134	1	Cap
3	1F-208	1	Pin cotter
4	25E-13	1	Washer
5	3981135	1	Tailpipe
6	3950598	1	U-bolt
7	3951458	1	Muffler
8	25E-16	2	Washer
9	15D-05	4	Nut
10	3950394	1	Clamp

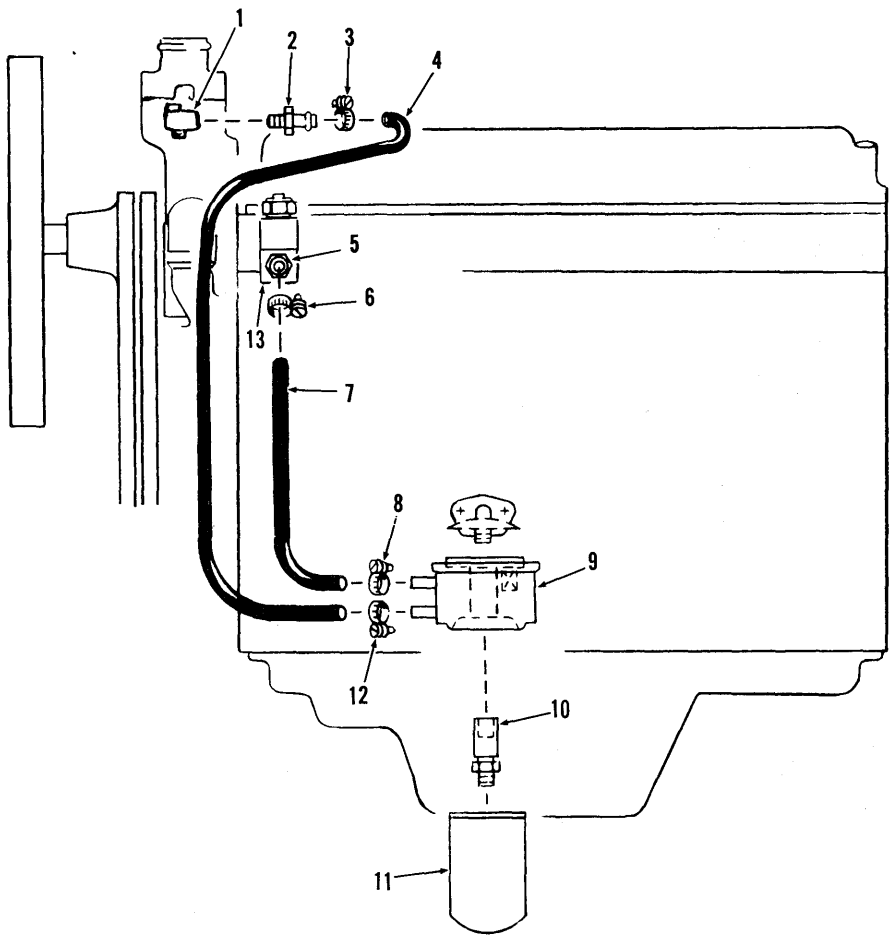
*4189C101JAC → 4189C999JAC. Ref. SG-711.



No.	Part No.	Qty.	Description
1	2508598	1	Muffler
2	2505933	1	Tail pipe
3	556289	1	Clamp
4	25E-16	2	Washer
5	24C-520	2	Bolt
6	4E-05	2	Lockwasher
7	62D-05	2	Nut

*4189D101JAC & →. Ref. SG-711.

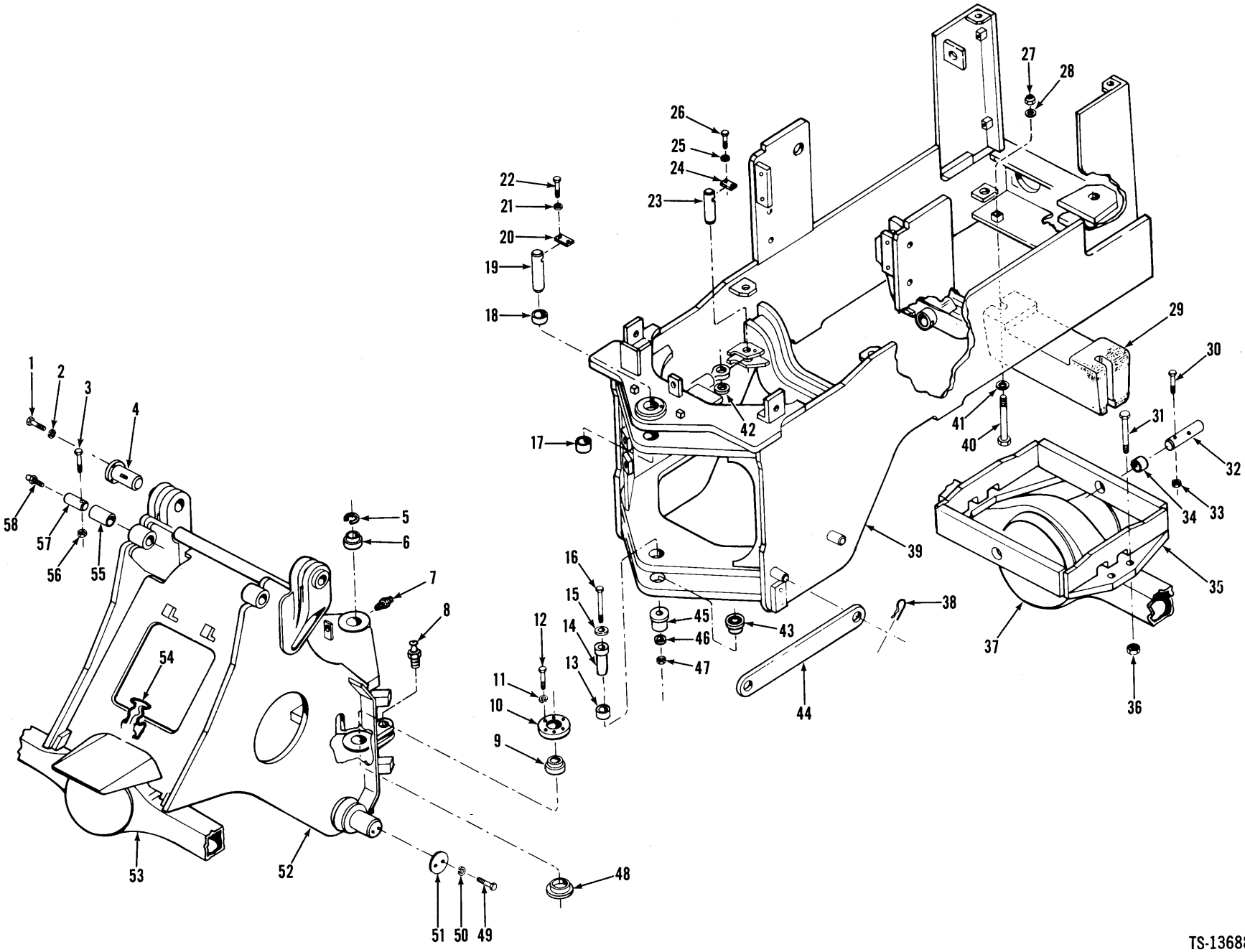
Engine Oil Cooler *



TS-14969

No.	Part No.	Qty.	Description
1	**29F-3**	1	**Elbow**
2	**666867**	1	**Nipple**
3	**521874**	1	**Clamp**
4	**‡1529688**	–	**Hose**
5	**666867**	1	**Nipple**
6	**521874**	1	**Clamp**
7	**‡1529688**	–	**Hose**
8	**521874**	1	**Clamp**
9	**[2]2342092**	1	**Oil cooler**
9A	**†962263**	1	**Gasket**
10	**2342091**	1	**Connector**
11	**960698**	1	**Element lube oil**
12	**521874**	1	**Clamp**
13	**30F-3**	1	**Tee**

***4189D401JAC & →. Ref. S.G.-594.**
[2]Inc. 9A

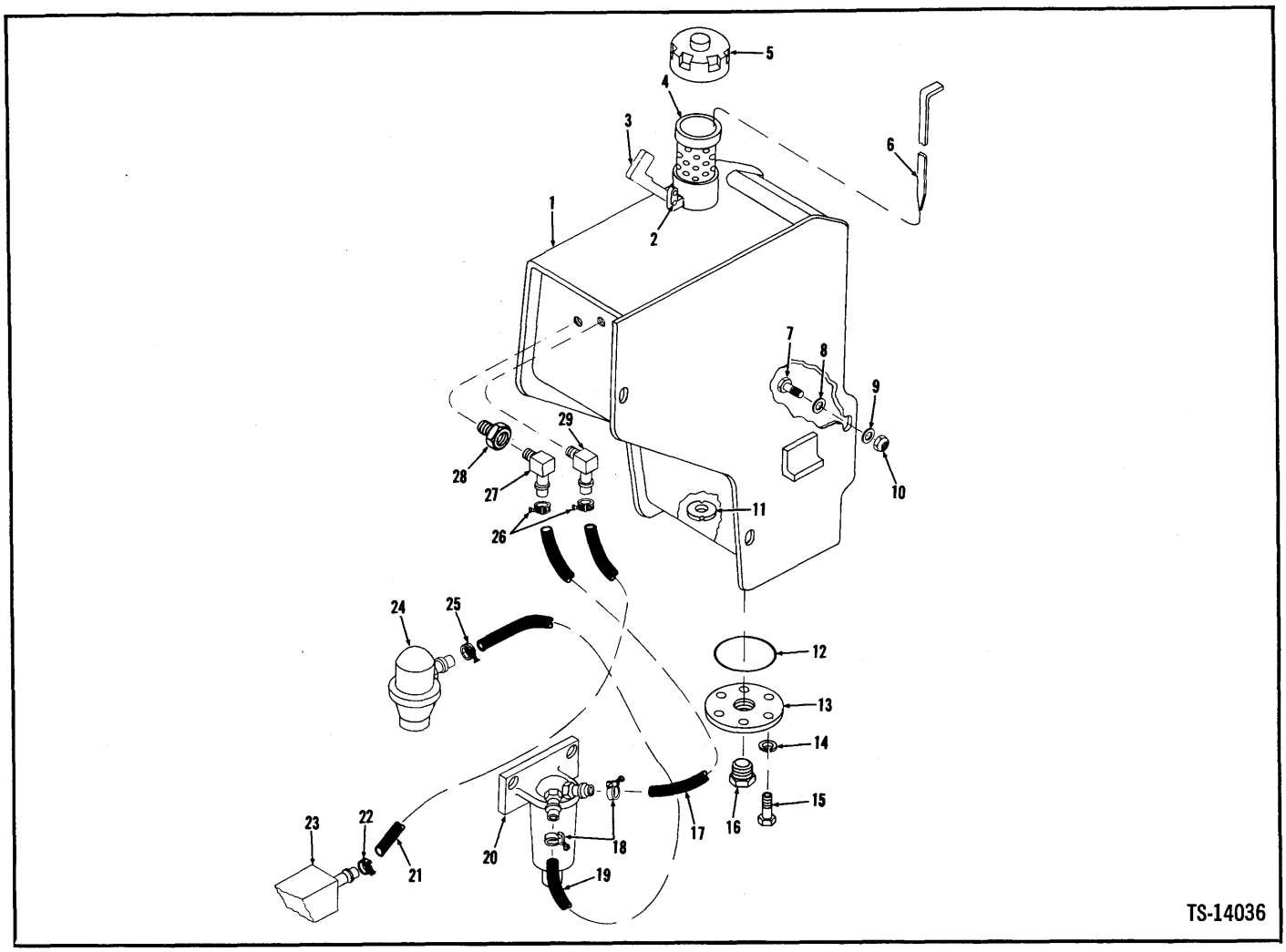

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TS-13688

Frame, Front & Rear

MICHIGAN

No.	Part No.	Qty.	Description
1	23C-1022	2	Bolt
2	4E-10	2	Lockwasher
3	18C-872	2	Bolt
4	3980204	2	Pin
5	663724	1	Ring
6	1574466	1	Bushing
7	11H-15	2	Fitting grease
8	12H-15	2	Fitting grease
9	1574466	1	Bushing
10	3980218	1	Cap
11	4E-06	6	Lockwasher
12	18C-620	6	Bolt
13	3980771	1	Bushing
14	2506495	1	Pin
15	3980216	1	Washer
16	18C-12120	1	Bolt
17	3980766	1	Bushing
18	3980766	1	Bushing
19	3980208	1	Pin
20	3980211	1	Lockplate
21	4E-08	2	Lockwasher
22	24C-816	2	Bolt
23	3980219	4	Pin
24	3980221	4	Lockplate
25	4E-06	8	Lockwasher
26	18C-614	8	Bolt
27	68D-12	2	Nut
28	25E-27	2	Washer
29	3981138	1	Counterweight
30	24C-856	2	Bolt
31	18C-12144	8	Bolt
32	3980823	2	Pin
33	18D-08	2	Nut
34	3980792	2	Bushing
35	[2]3980818	1	Cradle assy axle
36	68D-12	8	Nut
37	[1]———	1	Axle assy — rear
38	3960829	2	Pin set
39	[3]2504271	1	Frame — rear
40	24C-12136	2	Bolt
41	25E-27	2	Washer
42	3980220	4	Spacer
43	3980772	1	Bushing
44	3980223	1	Link
45	3980213	1	Plate
46	3980216	1	Washer
47	68D-12	1	Nut
48	2506481	1	Spacer
49	23C-820	4	Bolt
50	4E-08	4	Lockwasher
51	3980207	2	Plate
52	[4]2506165	1	Frame — front
53	[1]———	1	Axle assy — front
54	1545622	1	Latch assy
55	3980103	2	Bushing
56	18D-08	2	Nut
57	3980222	2	Pin
58	10H-25	2	Fitting grease

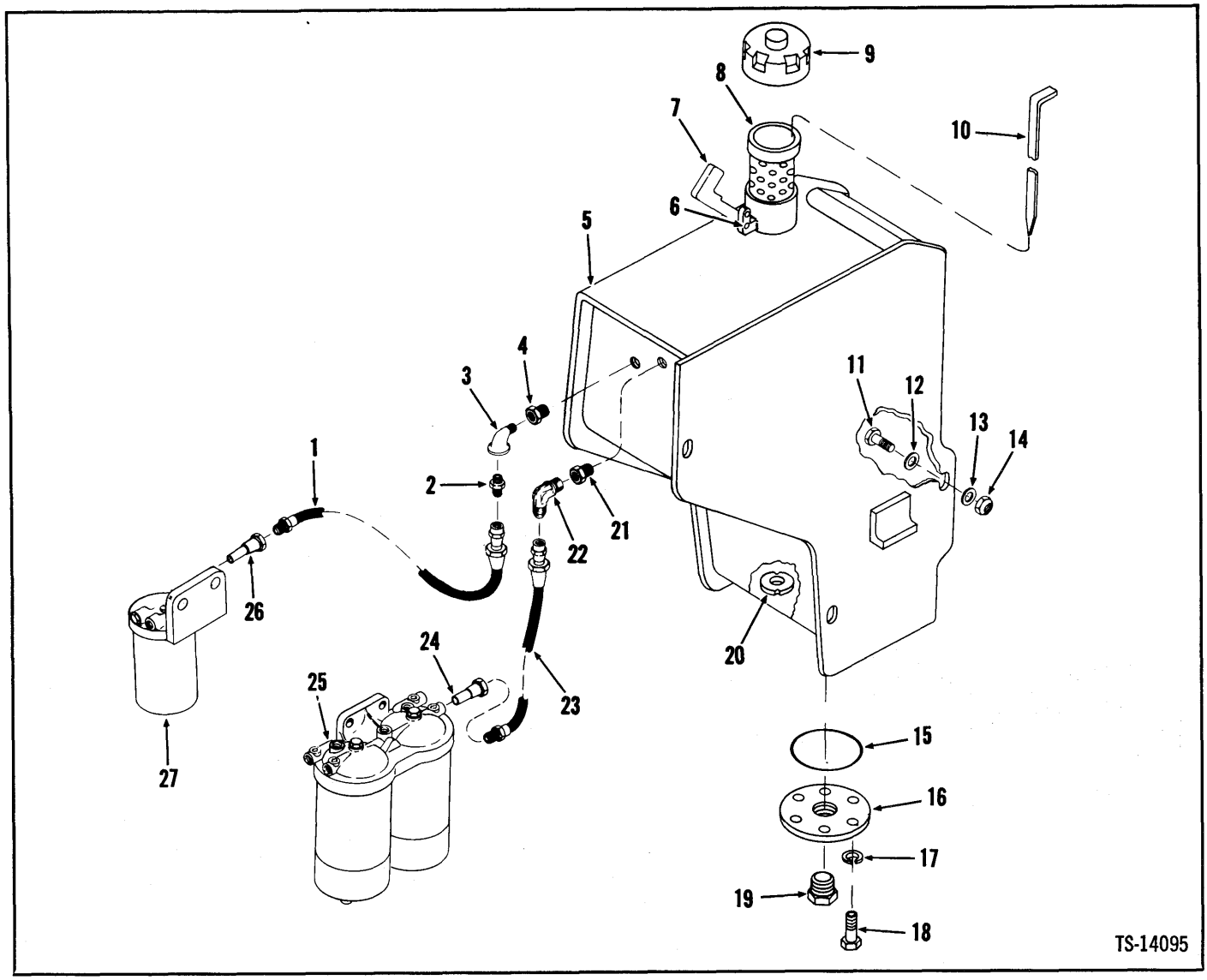
[1]See Index
[2]Inc. 34
[3]Inc. 13, 17, 18, 43
[4]When replacing Front Frame, 2 — 3980178 Plate, 2 — 1519211 Gusset, & 2 — 1519210 Gusset are required.



No.	Part No.	Qty.	Description
1	[2]2504915	1	Fuel tank
2	1H-414	1	Rivet
3	1509025	1	Latch
4	943957	1	Screen
5	[3]1558644	1	Cap
5A	†946953	1	Gasket
5B	†946954	1	Plate
6	3980303	1	Dipstick
7	24C-836	3	Bolt
8	25E-22	3	Washer
9	25E-22	2	Washer
10	18D-08	3	Nut
11	----	–	Omit
12	25K-40428	1	O-ring
13	587613	1	Cover
14	4E-06	6	Lockwasher
15	24C-612	6	Bolt
16	565295	1	Plug
17	[4]743563	1	Hose
18	521874	2	Clamp
19	[5]656247	1	Hose
20	[6]————	1	Water trap
21	[7]656247	1	Hose
22	521874	1	Clamp
23	[6]————	1	Engine
24	[6]————	1	Fuel pump
25	521874	1	Clamp
26	521874	2	Clamp
27	666840	1	Elbow
28	19F-6	1	Bushing
29	666839	1	Elbow

*4189C101JAC➔4189C999JAC
[2]Inc. 2, 3
[3]Inc. 5A, 5B
[4]4 ft. (1,22 m)
[5]3 ft. (0,92 m)
[6]See Engine Parts Manual
[7]7 ft. (2,13 m)

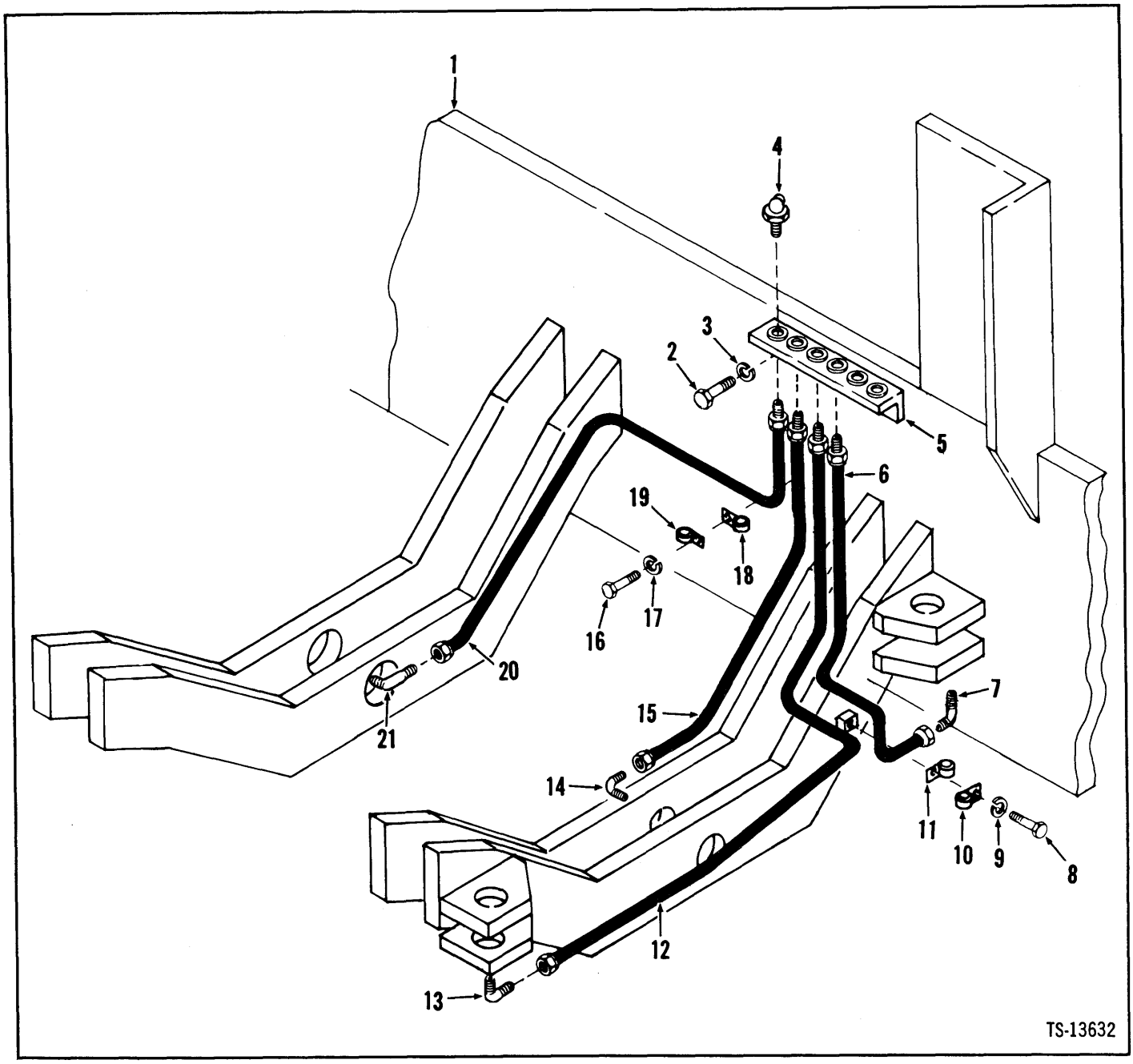
Fuel Tank & Lines*



No.	Part No.	Qty.	Description
1	2509928	1	Hose
2	89F-4	1	Adapter
3	26F-4	1	Elbow
4	19F-4	1	Bushing
5	[2]2504915	1	Fuel tank
6	1H-414	1	Rivet
7	1509025	1	Latch
8	943957	1	Screen
9	[3]1558644	1	Cap
9A	†946953	1	Gasket
9B	†946954	1	Plate
10	3980303	1	Dipstick
11	24C-836	3	Bolt
12	25E-22	3	Washer
13	25E-22	2	Washer

No.	Part No.	Qty.	Description
14	18D-08	3	Nut
15	25K-40428	1	O-ring
16	587613	1	Cover
17	4E-06	6	Lockwasher
18	24C-612	6	Bolt
19	40K-16	1	Plug
20	525293	1	Magnet
21	19F-1	1	Bushing
22	83F-3	1	Elbow
23	2509929	1	Hose
24	2509922	1	Tube
25	[4]———	1	Filter assy
26	2509921	1	Tube
27	[4]———	1	Water trap

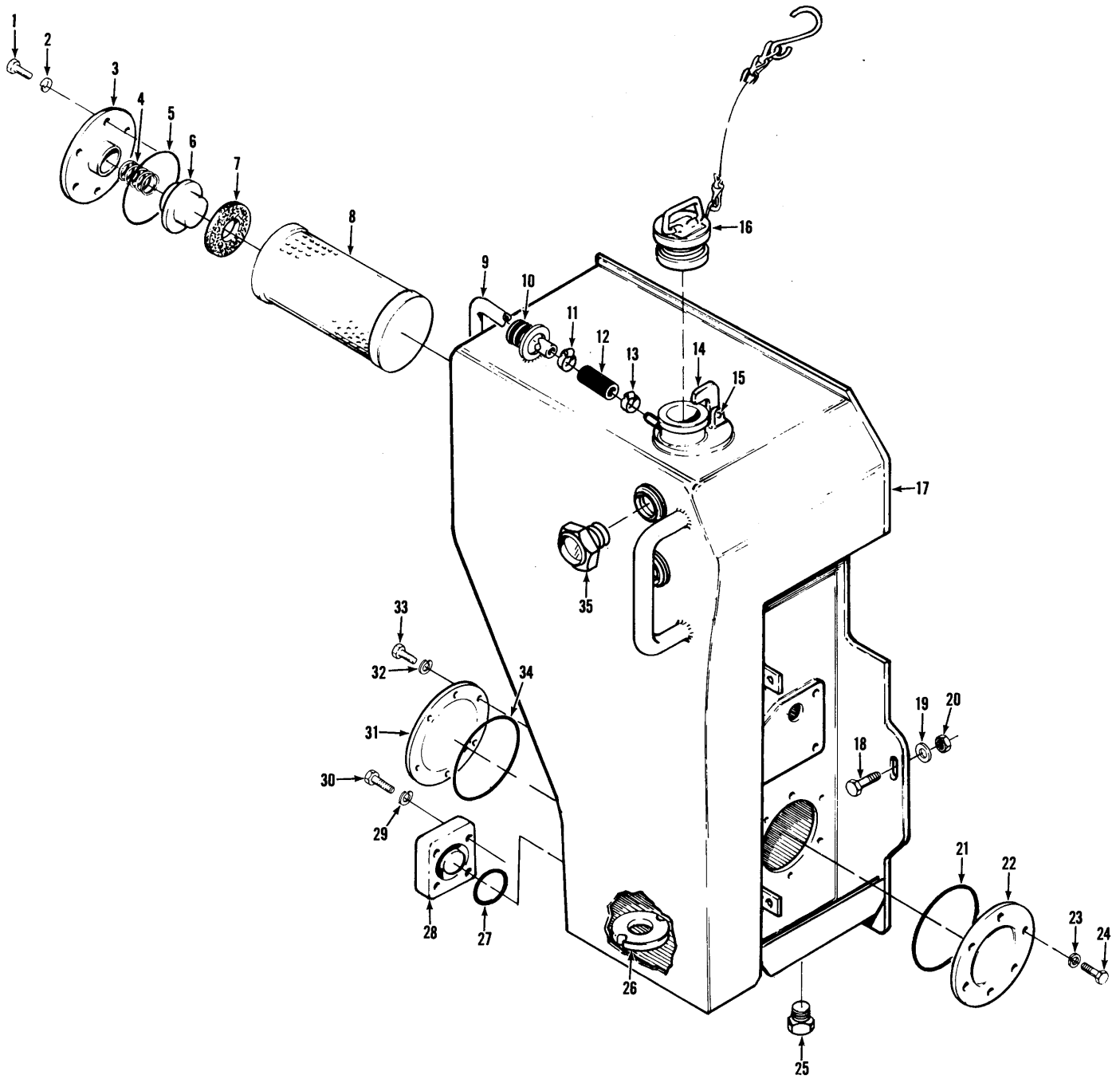
*4189D101JAC & →
[2]Inc. 6, 7
[3]Inc. 9A, 9B
[4]See Engine Parts Manual



No.	Part No.	Qty.	Description
1	[1]———	1	Frame — Rear
2	24C-616	2	Bolt
3	4E-06	2	Lockwasher
4	11H-15	4	Fitting grease
5	2506031	1	Bracket
6	2506228	1	Hose
7	83F-3	1	Elbow
8	24C-616	1	Bolt
9	4E-06	1	Lockwasher
10	30H-38	1	Clip
11	30H-38	1	Clip

No.	Part No.	Qty.	Description
12	2506229	1	Hose
13	83F-3	1	Elbow
14	83F-3	1	Elbow
15	2506227	1	Hose
16	24C-616	1	Bolt
17	4E-06	1	Lockwasher
18	30H-38	1	Clip
19	30H-38	1	Clip
20	1545592	1	Hose
21	83F-3	1	Elbow

[1]See Index

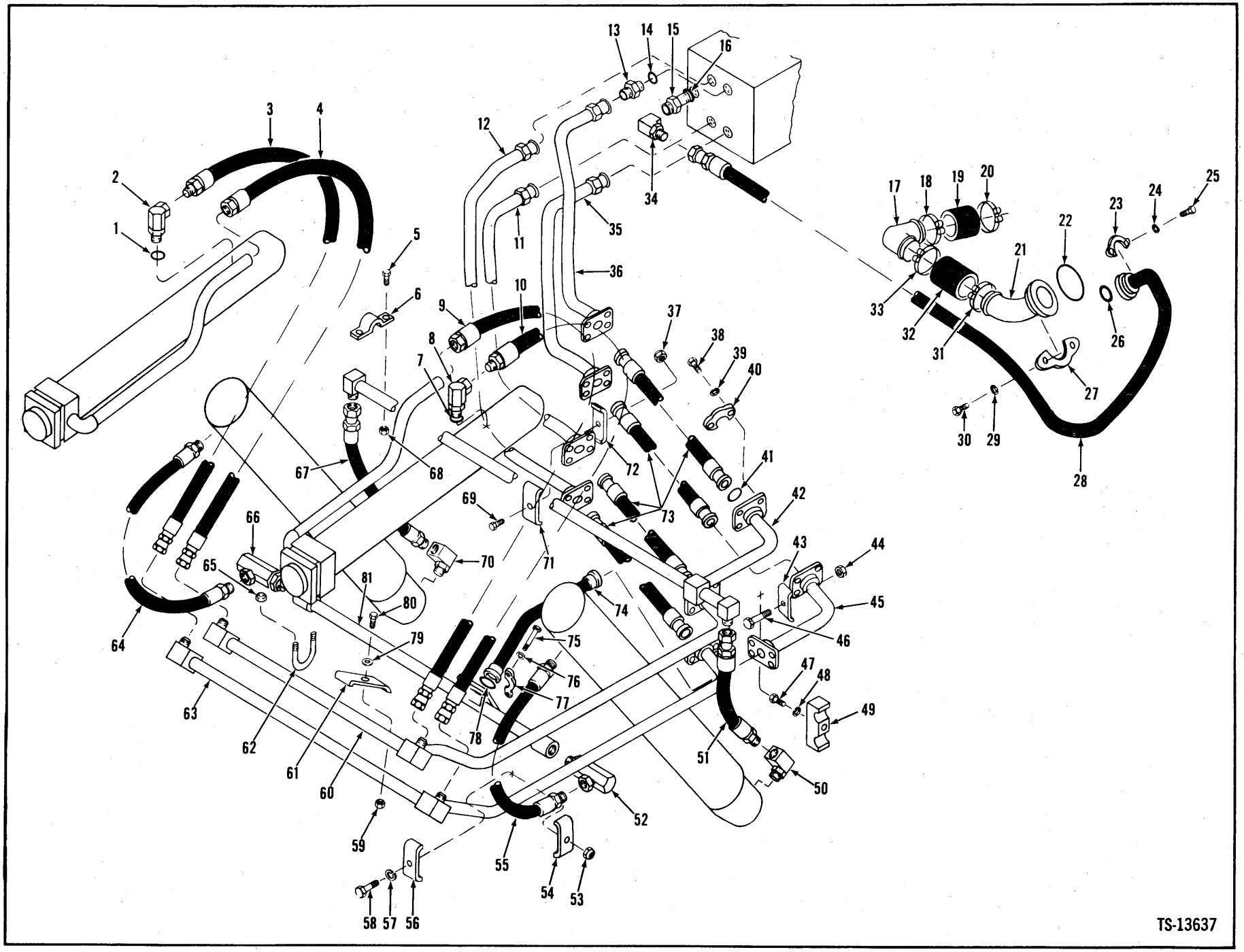

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TS-13648

Hydraulic Oil Reservoir

MICHIGAN

No.	Part No.	Qty.	Description
1	24C-612	6	Bolt
2	4E-06	6	Lockwasher
3	1535143	1	Plate
4	732923	1	Spring
5	25K-40624	1	O-ring
6	1535139	1	Retainer
7	1535778	1	Gasket
8	[4]2515079	1	Filter
9	2506551	1	Tube
10	560640	1	Grommet
11	521874	1	Clamp
12	[3]743563	1	Hose
13	521874	1	Clamp
14	1543512	1	Latch
15	1H-414	1	Rivet
16	554843	1	Cap
17	[2]2506187	1	Reservoir
18	24C-832	3	Bolt
19	25E-22	5	Washer
20	18D-08	3	Nut
21	25K-40428	1	O-ring
22	591381	1	Cover
23	4E-06	6	Lockwasher
24	24C-612	6	Bolt
25	40K-12	2	Plug
26	525293	2	Magnet
27	58K-219	1	O-ring
28	3980880	1	Cap
29	4E-06	4	Lockwasher
30	24C-616	4	Bolt
31	591381	1	Cover
32	4E-06	6	Lockwasher
33	24C-612	6	Bolt
34	25K-40428	1	O-ring
35	2506432	2	Gauge

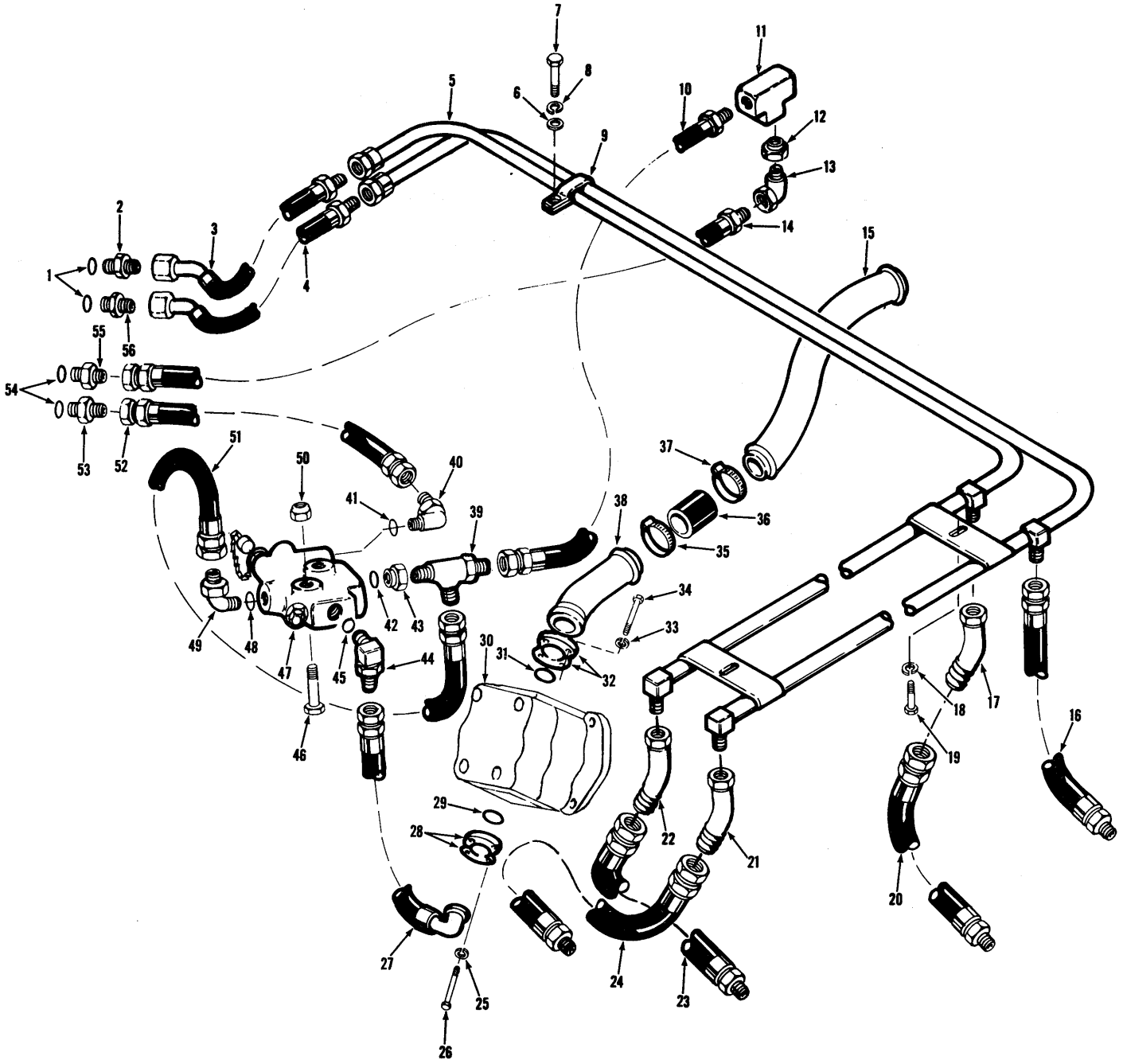
[2]Inc. 14, 15
[3]1 ft. (0,31 m)
[4]Ref. SG-721.


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TS-13637

MICHIGAN

No.	Part No.	Qty.	Description
1	[2]91F-8	1	O-ring
2	[3]526676	1	Elbow
3	2500155	1	Hose
4	2500155	1	Hose
5	24C-620	2	Bolt
5A	†656672	2	Washer
6	3980520	1	Clamp
7	[4]91F-8	1	O-ring
8	[5]526676	1	Elbow
9	2500155	1	Hose
10	2500155	1	Hose
11	3980632	1	Tube
12	3980630	1	Tube
13	[6]15K-10	4	Adapter
14	[7]91F-10	4	O-ring
15	[8]15K-10	1	Adapter
16	[9]91F-10	1	O-ring
17	2504000	1	Tube
18	540128	1	Clamp
19	1517153	1	Hose
20	540128	1	Clamp
21	2504001	1	Stem
22	58K-225	1	O-ring
23	19J-20	2	Flange
24	4E-07	4	Lockwasher
25	23C-724	4	Bolt
26	58K-222	1	O-ring
27	19J-24	2	Flange
28	1533256	1	Hose
29	4E-08	4	Lockwasher
30	23C-824	4	Bolt
31	540128	1	Clamp
32	1517153	1	Hose
33	540128	1	Clamp
34	11K-10	1	Elbow
35	3980628	1	Tube
36	3980625	1	Tube
37	18D-06	2	Nut
38	23C-620	32	Bolt
39	4E-06	32	Lockwasher
40	19J-12	16	Flange
41	58K-214	8	O-ring
42	3980506	1	Tube
43	3980519	2	Clamp
44	18D-06	2	Nut
45	2500087	1	Tube
46	24C-636	2	Bolt
47	24C-616	1	Bolt
48	4E-06	1	Lockwasher
49	2505961	1	Clamp
50	536224	1	Elbow
51	532621	1	Hose
52	1509752	1	Swivel
53	————	—	Omit
54	3980519	1	Clamp
55	574442	1	Hose
56	3980519	1	Clamp
57	4E-06	1	Lockwasher
58	24C-636	1	Bolt
59	18D-06	2	Nut
60	3980526	1	Tube
61	3980529	2	Clamp
62	2500085	2	U-bolt
63	3980521	1	Tube
64	574442	1	Hose
65	18D-06	4	Nut
66	1509752	1	Swivel
67	532621	1	Hose
68	18D-06	2	Nut
69	24C-648	2	Bolt
69A	†619021	2	Washer
70	536224	1	Elbow
71	3980519	2	Clamp
72	3980519	2	Clamp
73	2500156	4	Hose
74	1519964	1	Hose
75	23C-620	8	Bolt
76	4E-06	8	Lockwasher
77	19J-12	4	Flange
78	58K-214	2	O-ring
79	25E-17	2	Washer
80	24C-632	2	Bolt
81	2500084	1	Tube

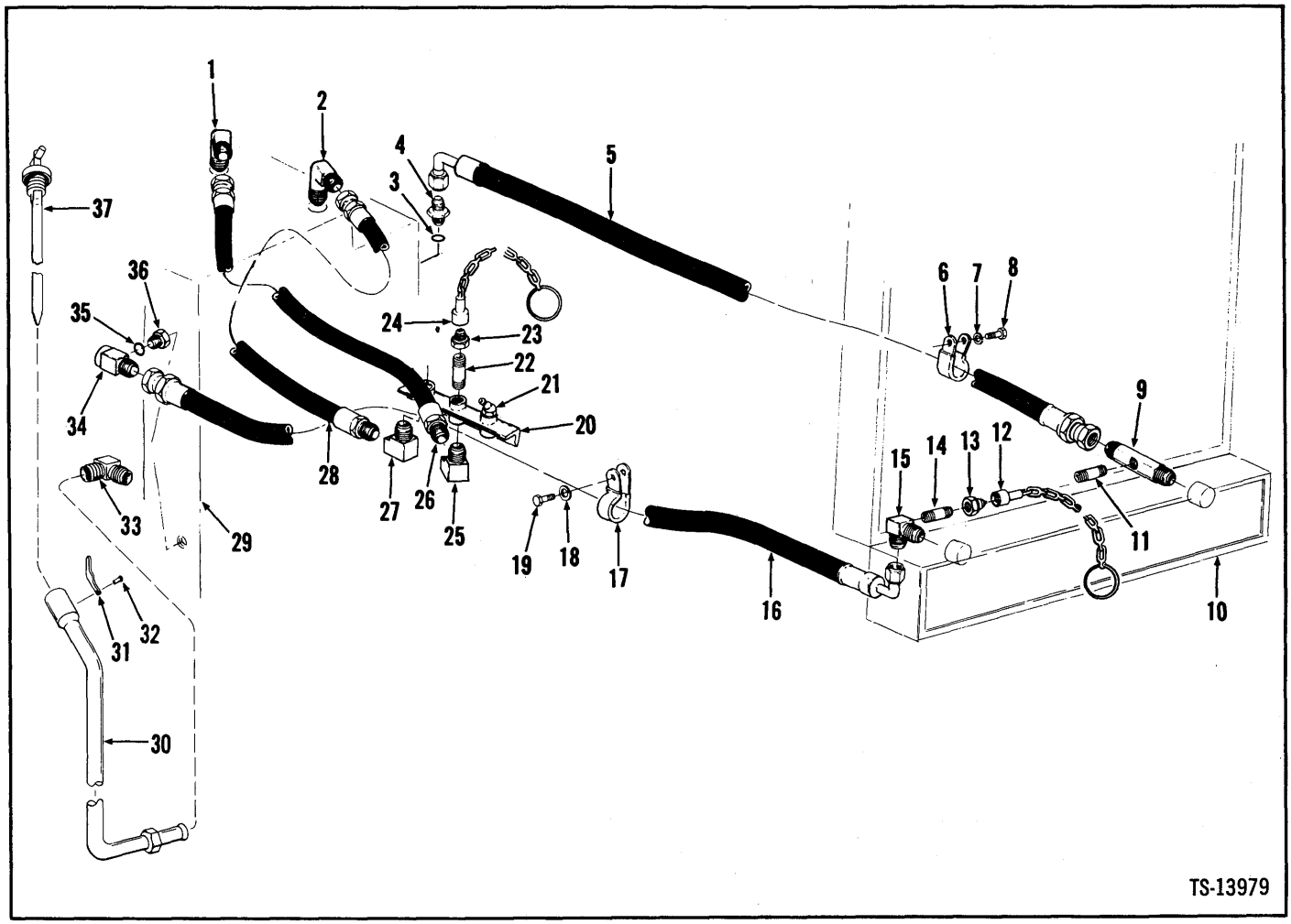
[2]See 2
[3]Inc. 1
[4]See 8
[5]Inc. 7
[6]Inc. 14
[7]See 13
[8]Inc. 16
[9]See 15


TS-13679

No.	Part No.	Qty.	Description
1	91F-6	2	O-ring
2	[2]731793	1	Adapter
3	1519963	1	Hose
4	1519963	1	Hose
5	2506545	1	Tube assy
6	656672	1	Washer
7	24C-616	1	Bolt
8	4E-06	1	Lockwasher
9	31H-38	1	Clip
10	2511884	1	Hose
11	28F-5	1	Tee
12	19F-11	1	Bushing
13	33F-4	1	Elbow
14	2506729	1	Hose
15	2506735	1	Tube
16	657653	1	Hose
17	12K-7	1	Elbow
18	4E-06	2	Lockwasher
19	24C-616	2	Bolt
20	657653	1	Hose
21	12K-7	1	Elbow
22	12K-7	1	Elbow
23	657653	1	Hose
24	657653	1	Hose
25	4E-06	4	Lockwasher
26	23C-620	4	Bolt
27	2506728	1	Hose
28	19J-16	2	Flange half
29	58K-219	1	O-ring
30	[1]———	1	Pump Steering
31	58K-222	1	O-ring
32	19J-20	2	Flange half
33	4E-07	4	Lockwasher
34	23C-724	4	Bolt
35	1545004	2	Clamp
36	585883	2	Hose
37	1545004	2	Clamp
38	2506733	1	Tube
39	21K-8	1	Tee
40	[3]17K-7	1	Elbow
41	91F-7	1	O-ring
42	91F-11	1	O-ring
43	[4]6003027	1	Adapter
44	[7]588820	1	Elbow
45	91F-11	1	O-ring
46	24C-656	2	Bolt
47	[1]———	1	Valve flow divider
48	91F-7	1	O-ring
49	[5]17K-7	1	Elbow
50	18D-06	2	Nut
51	2506731	1	Hose
52	2506732	1	Hose
53	[6]731793	1	Adapter
54	91F-6	2	O-ring
55	[6]731793	1	Adapter
56	[2]731793	1	Adapter

[1]See Index
[2]Inc. 1
[3]Inc. 41
[4]Inc. 42
[5]Inc. 48
[6]Inc. 54
[7]Inc. 45

Hydraulic System, Transmission & Torque Converter

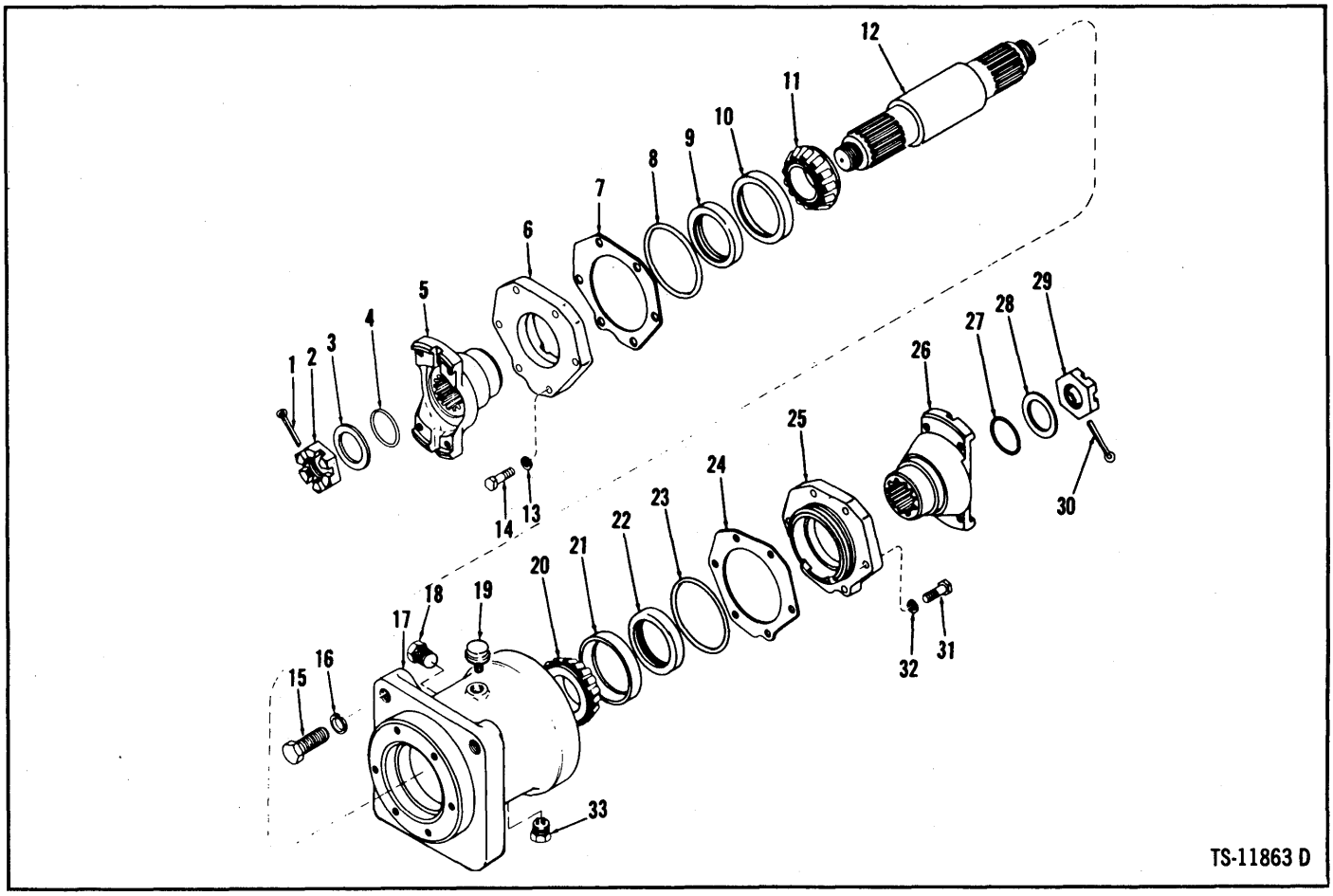


No.	Part No.	Qty.	Description
1	731745	1	Elbow
2	731745	1	Elbow
3	91F-8	1	O-ring
4	[2]15K-8	1	Connector
5	2506532	1	Hose
6	30H-60	1	Clip
7	4E-06	1	Lockwasher
8	23C-616	1	Bolt
9	2506081	1	Adapter
10	[1]———	1	Radiator
11	5K-207	1	Nipple
12	6000689	2	Cap
13	1306142	2	Adapter
14	5K-207	1	Nipple
15	1307221	1	Elbow
16	2506532	1	Hose
17	30H-60	1	Clip
18	4E-06	1	Lockwasher
19	23C-616	1	Bolt

No.	Part No.	Qty.	Description
20	[3]———	1	Bracket
21	[3]———	4	Grease fitting
22	5K-207	2	Nipple
23	1306142	2	Adapter
24	6000689	2	Cap
25	29F-1	1	Elbow
26	2506533	1	Hose
27	29F-1	1	Elbow
28	1513125	1	Hose
29	[1]———	1	Transmission
30	[4]2505959	1	Tube
31	1509025	1	Latch
32	1H-414	1	Rivet
33	675469	1	Elbow
34	1520154	1	Tee
35	91F-8	1	O-ring
36	[5]945417	1	Connector
37	2505958	1	Dipstick

[1]See Index
[2]Inc. 3
[3]See Grease Piping
[4]Inc. 31, 32
[5]Inc. 35

Mid-Mount Bearing Assembly



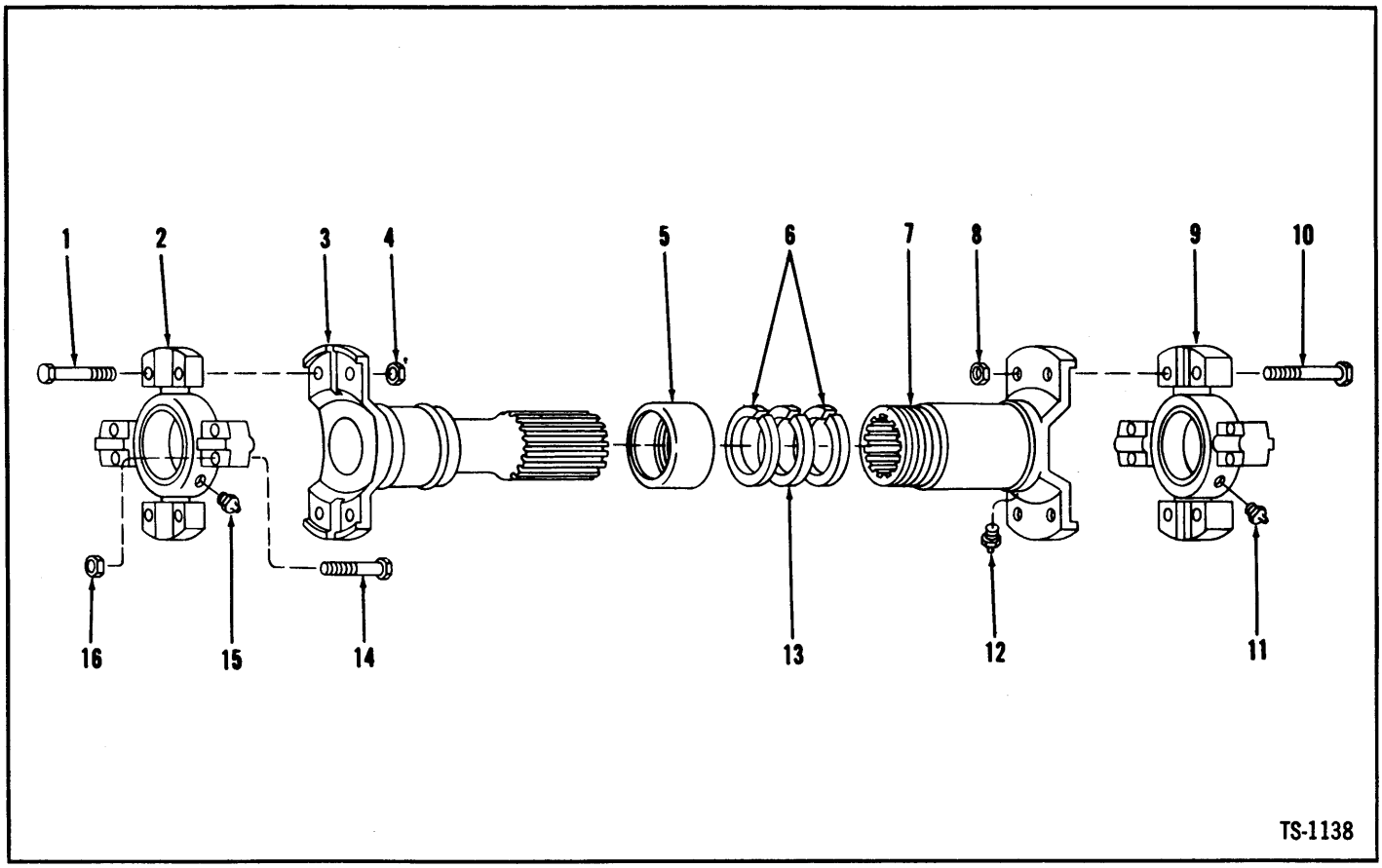
No.	Part No.	Qty.	Description
A	[1]231967	1	Bearing assy
1	1F-436	1	Pin cotter
2	205928	1	Nut
3	222179	1	Washer
4	25K-60116	1	O-ring
5	222029	1	Flange
6	230690	1	Cap
7	‡[2]217566	—	Shim
7A	‡[3]217567	—	Shim
7B	‡[4]217568	—	Shim
8	25K-40308	1	O-ring
9	225823	1	Seal
10	856250	1	Cup roller brg
11	654141	1	Cone roller brg
12	233007	1	Shaft
13	4E-07	4	Lockwasher
14	1C-722	4	Bolt
15	23C-1024	4	Bolt
16	4E-10	4	Lockwasher
16A	†942139	4	Washer

No.	Part No.	Qty.	Description
17	230529	1	Housing
18	13F-12	1	Plug
19	211433	1	Breather
20	654141	1	Cone roller brg
21	856250	1	Cup roller brg
22	225823	1	Seal
23	25K-40308	1	O-ring
24	‡[2]217566	—	Shim
24A	‡[3]217567	—	Shim
24B	‡[4]217568	—	Shim
25	230690	1	Cap
26	222029	1	Flange
27	25K-60116	1	O-ring
28	222179	1	Washer
29	205928	1	Nut
30	1F-436	1	Pin cotter
31	1C-722	4	Bolt
32	4E-07	4	Lockwasher
33	215757	1	Plug

[1]Inc. 1➔14, 17➔33
[2].004 (0,10 mm)
[3].007 (0,18 mm)
[4].010 (0,25 mm)

No.	Part No.	Qty.	Description
1	1512006	1	Decal patent
2	1510525	1	Decal lubrication
3	1523338	1	Decal eng oil change
4	538256	1	Decal trans drain
5	2501186	1	Decal trans filter
6	1513887	1	Tag steering warn
7	1511711	3	Decal warning
8	1548364	2	Decal brake warning
9	1549006	1	Decal emcy hand valv
10	1505581	1	Decal safety wiring
11	1515482	1	Decal valv lev inst
12	----	–	Omit
13	2513351	2	Decal Clark
14	----	–	Omit
15	1512863	1	Decal safety
16	564011	1	Nameplate Michigan
17	7G-418	4	Screw
18	2E-04	4	Lockwasher
19	2506366	1	Decal oil dipstick location
20	2513633	2	Decal model
21	2501183	1	Decal precaution
22	2506351	1	Decal test panel
23	2506664	1	Decal oil level
24	----	–	Omit
25	----	–	Omit
26	2513351	1	Decal Clark
27	2513736	1	Decal Clark
28	2513633	1	Decal model
29	2513630	2	Decal Michigan
30	2511546	1	Nameplate Clark
31	2516995	4	Screw

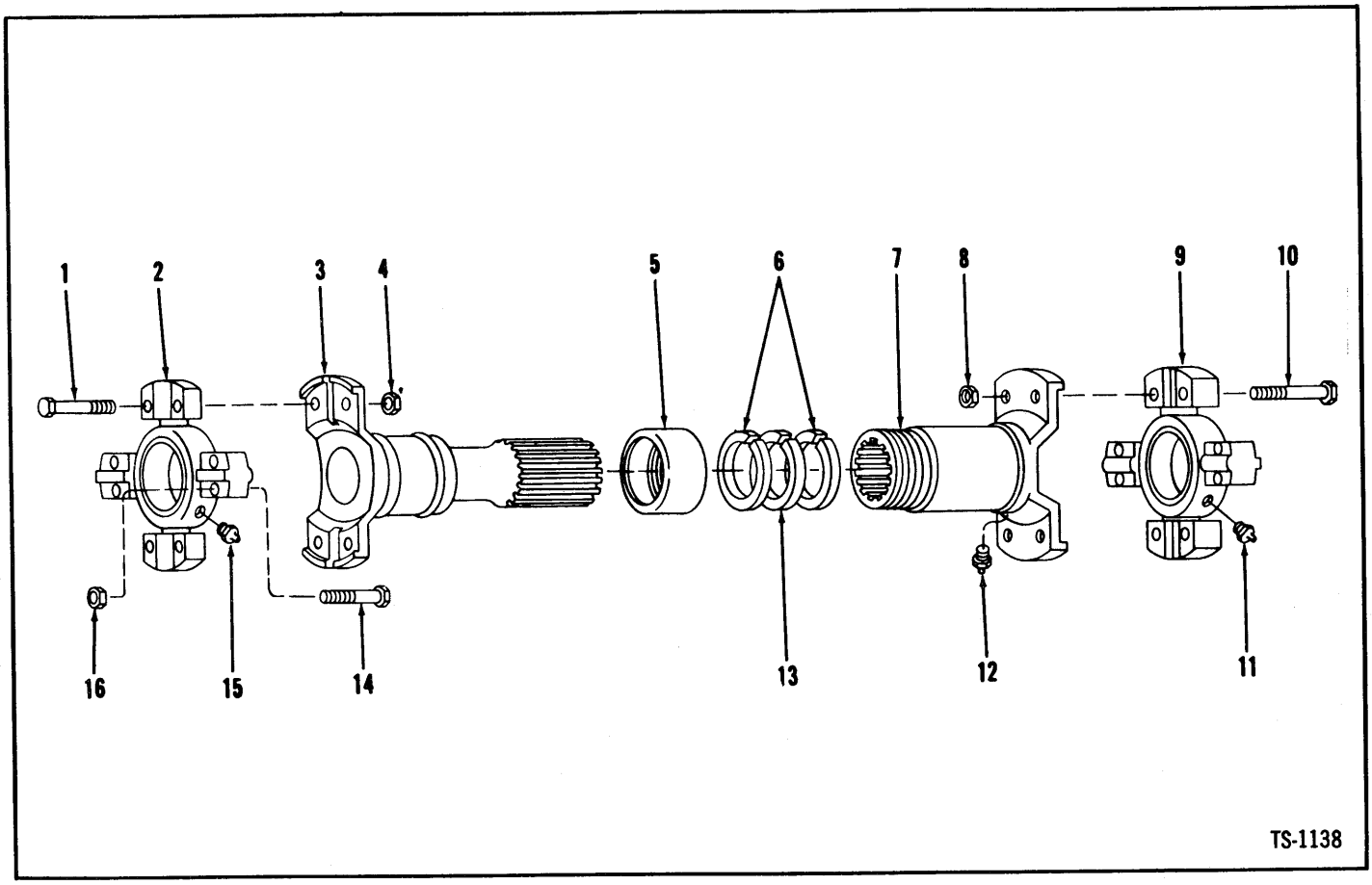
Propeller Shaft Assembly – Mid-mount Bearing/ Transmission/Front Axle



No.	Part No.	Qty.	Description
A	*[1]550580	2	Propeller shaft
1	18C-632	4	Bolt
2	944862	1	Spider u-joint
3	940084	1	Yoke tube
4	8D-06	4	Nut
5	940090	1	Retainer
6	940091	2	Washer
7	[2]940224	1	Slip yoke
8	8D-06	4	Nut
9	944862	1	Spider u-joint
10	18C-632	4	Bolt
11	10H-35	1	Fitting grease
12	10H-25	1	Fitting grease
13	940092	1	Washer
14	18C-632	8	Bolt
15	10H-35	1	Fitting grease
16	8D-06	8	Nut

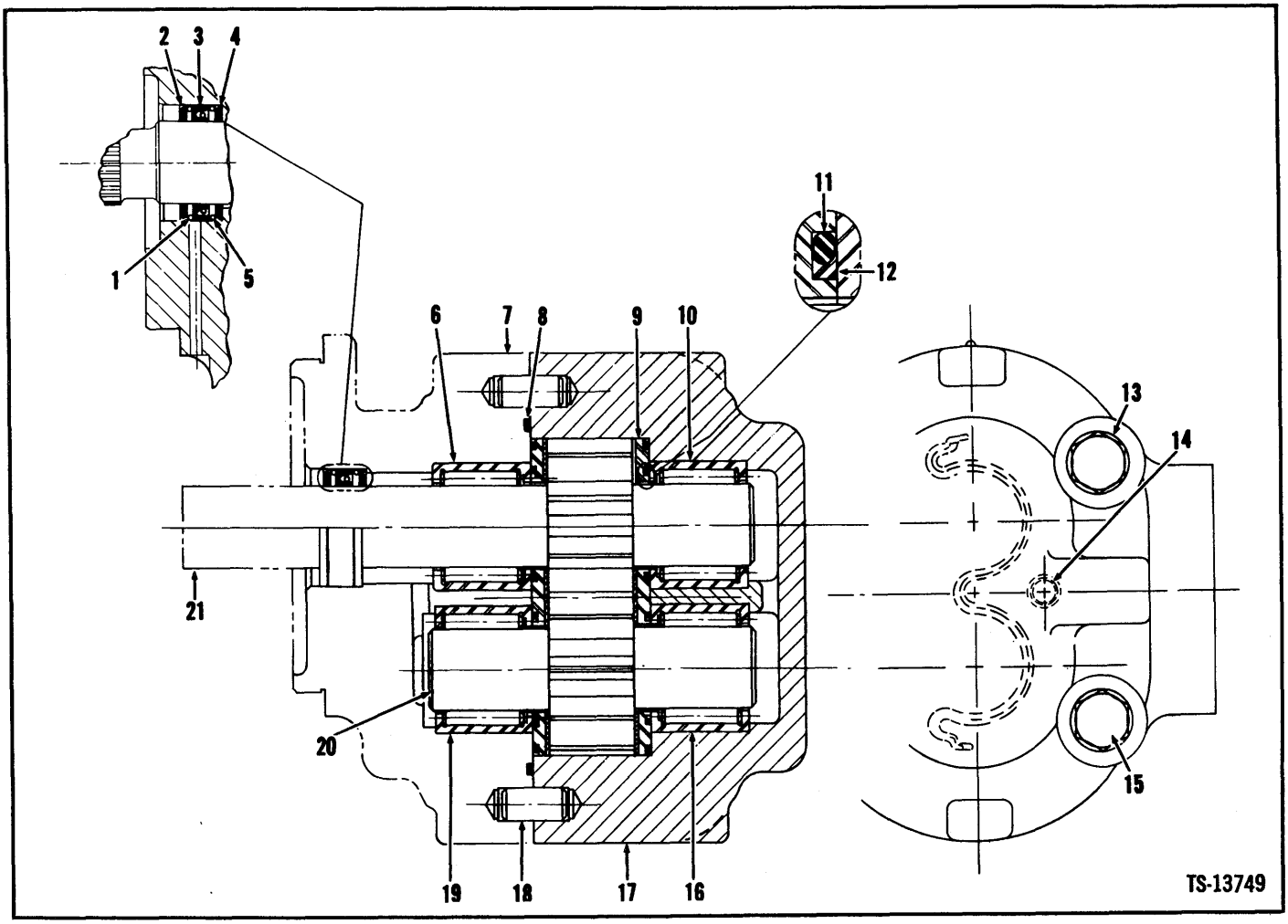
[1]Inc. 1→16
[2]Inc. 12
*2 used per machine. Quantities listed are for 1.

Propeller Shaft Assembly – Rear Axle/Transmission



No.	Part No.	Qty.	Description
A	[1]521000	1	Propeller shaft
1	18C-632	4	Bolt
2	944862	1	Spider u-joint
3	888281	1	Yoke tube
4	8D-06	4	Nut
5	940090	1	Retainer
6	940091	2	Washer
7	[2]940224	1	Slip yoke
8	8D-06	4	Nut
9	944862	1	Spider u-joint
10	18C-632	4	Bolt
11	10H-35	1	Fitting grease
12	10H-25	1	Fitting grease
13	940092	1	Washer
14	18C-632	8	Bolt
15	10H-35	1	Fitting grease
16	8D-06	8	Nut

[1]Inc. 1→16
[2]Inc. 12

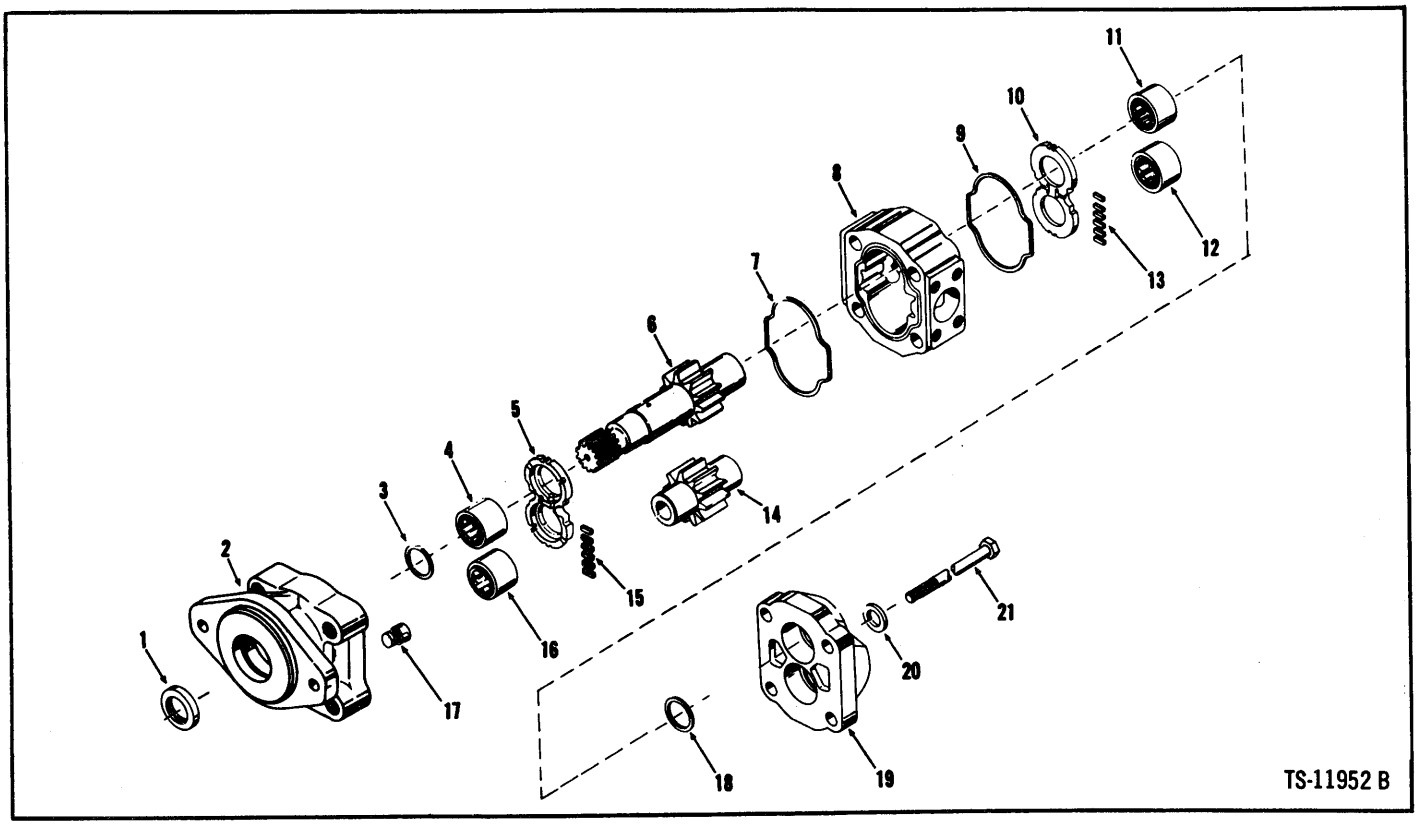


No.	Part No.	Qty.	Description
A	[2]3953109	1	Pump assy
1	960686	1	Spacer
2	949859	1	Wiper
3	949316	1	Seal
4	960587	1	Deflector
5	960686	1	Spacer
6	949858	1	Bearing
7	949853	1	Adapter
8	58K-250	1	Ring
9	949857	2	Wear plate
10	949858	1	Bearing
11	949861	2	Seal
12	949862	2	Seal
13	4E-10	4	Lockwasher
14	16F-02	1	Plug
15	1C-576	4	Bolt
16	949858	1	Bearing
17	949854	1	Housing
18	743835	2	Dowel
19	949858	1	Bearing
20	949855	1	Shaft
21	949856	1	Shaft

[2]Inc. 1➔21

Pump Assembly – Steering

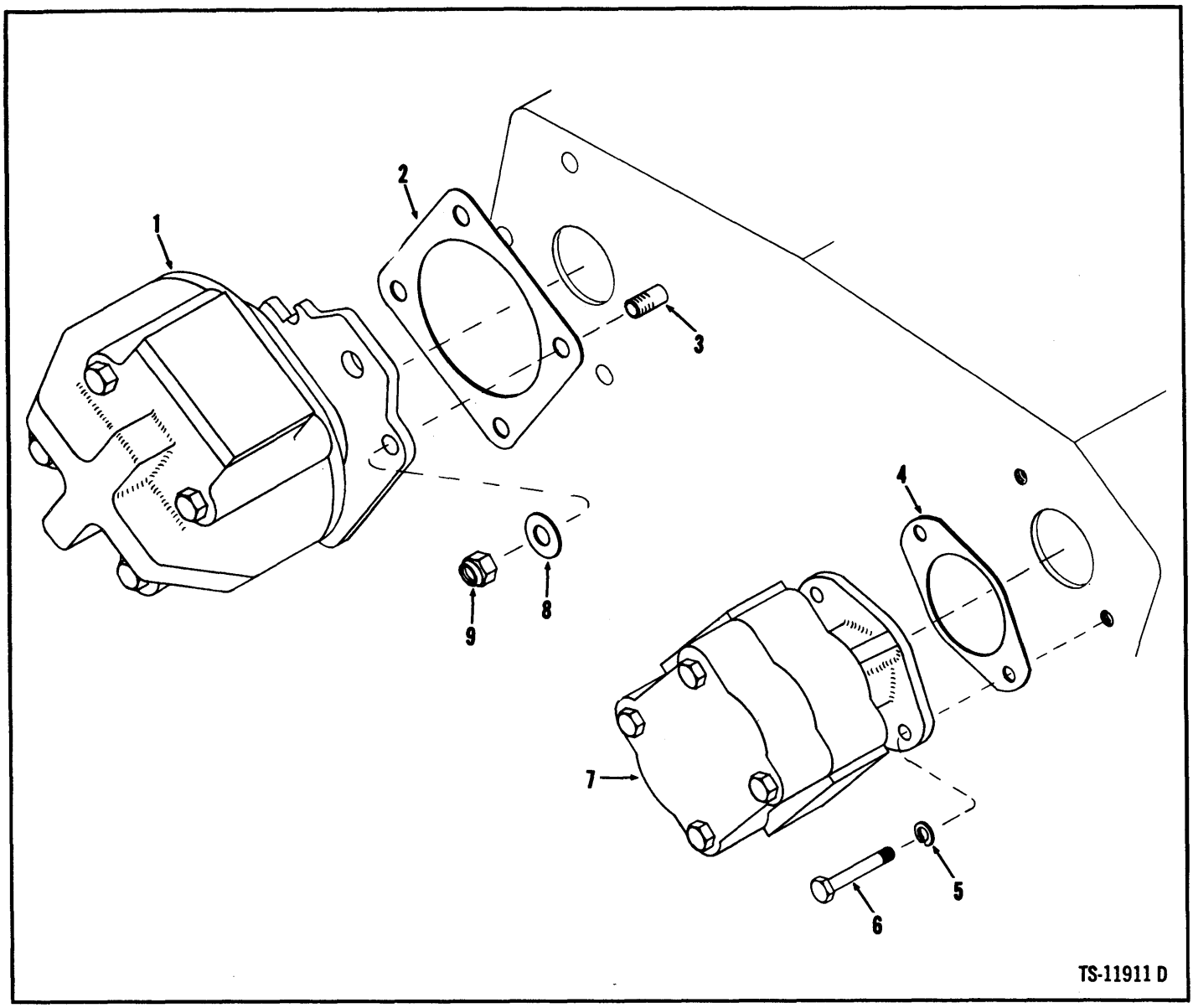
MICHIGAN



No.	Part No.	Qty.	Description
A	[1]3953110	1	Pump assy
B	[2]960000	1	Repair kit
C	[3]960001	1	Seal kit
1	946397	1	Seal
2	5209589	1	Cover
3	1566986	1	Seal
4	1566983	1	Bearing
5	1566985	1	Plate
6	[4]949964	1	Gear set
7	1566982	1	Seal
8	1566702	1	Housing
9	1566982	1	Seal
10	1566985	1	Plate
11	1566983	1	Bearing
12	1566983	1	Bearing
13	‡[5]1566984	–	Seal
14	§[6]-----	1	Gear
15	‡[7]-----	–	Seal
16	1566983	1	Bearing
17	1566881	1	Plug
18	1566986	1	Seal
19	946400	1	Cover
20	946401	4	Washer
21	1C-1076	4	Bolt

[1] 1 ➔ 21
[2] Inc. 1, 3, 5, 7, 9, 10, 13, 15, 18
[3] Inc. 1, 7, 9, 13, 15
[4] Inc. 14
[5] 12 Pocket Seal pieces to be cut from this strip
[6] See 6
[7] See 13

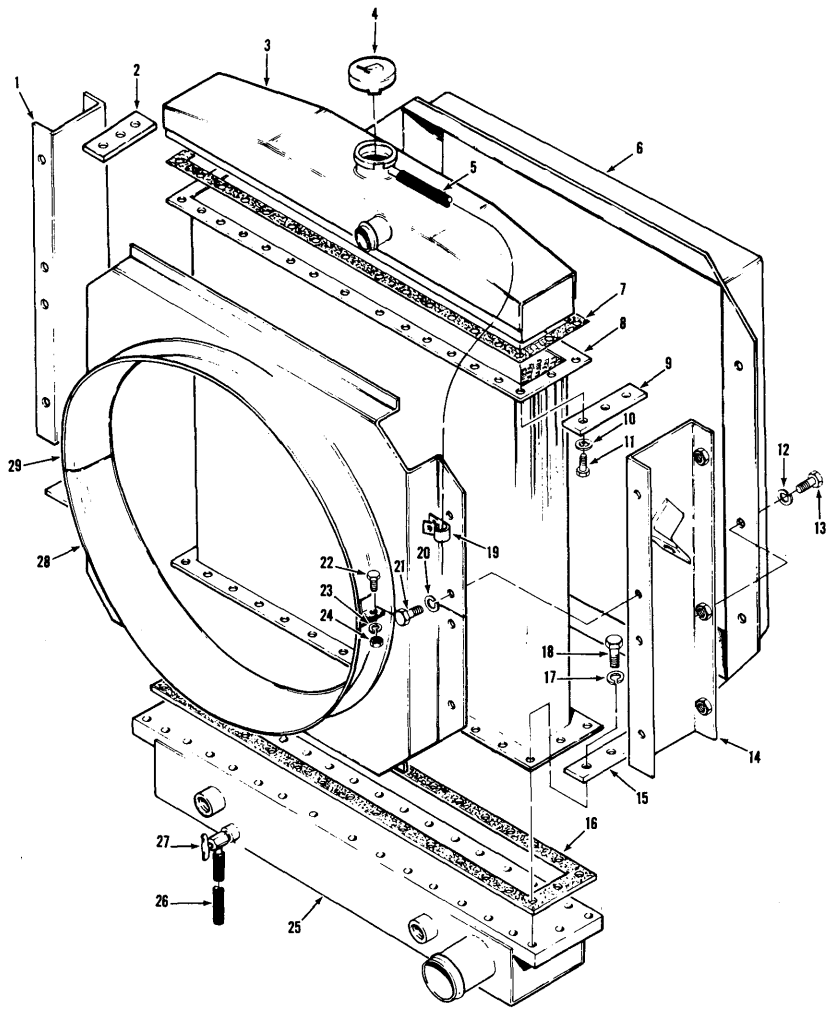
Pump Attaching Parts



No.	Part No.	Qty.	Description
1	[1]———	1	Pump main
2	552161	1	Gasket
3	108014	4	Stud
4	3953053	1	Gasket
5	4E-06	2	Lockwasher
6	23C-620	2	Bolt
7	[1]———	1	Pump steering
8	25E-21	4	Washer
9	18D-08	4	Locknut

[1]See Index

Radiator Assembly*

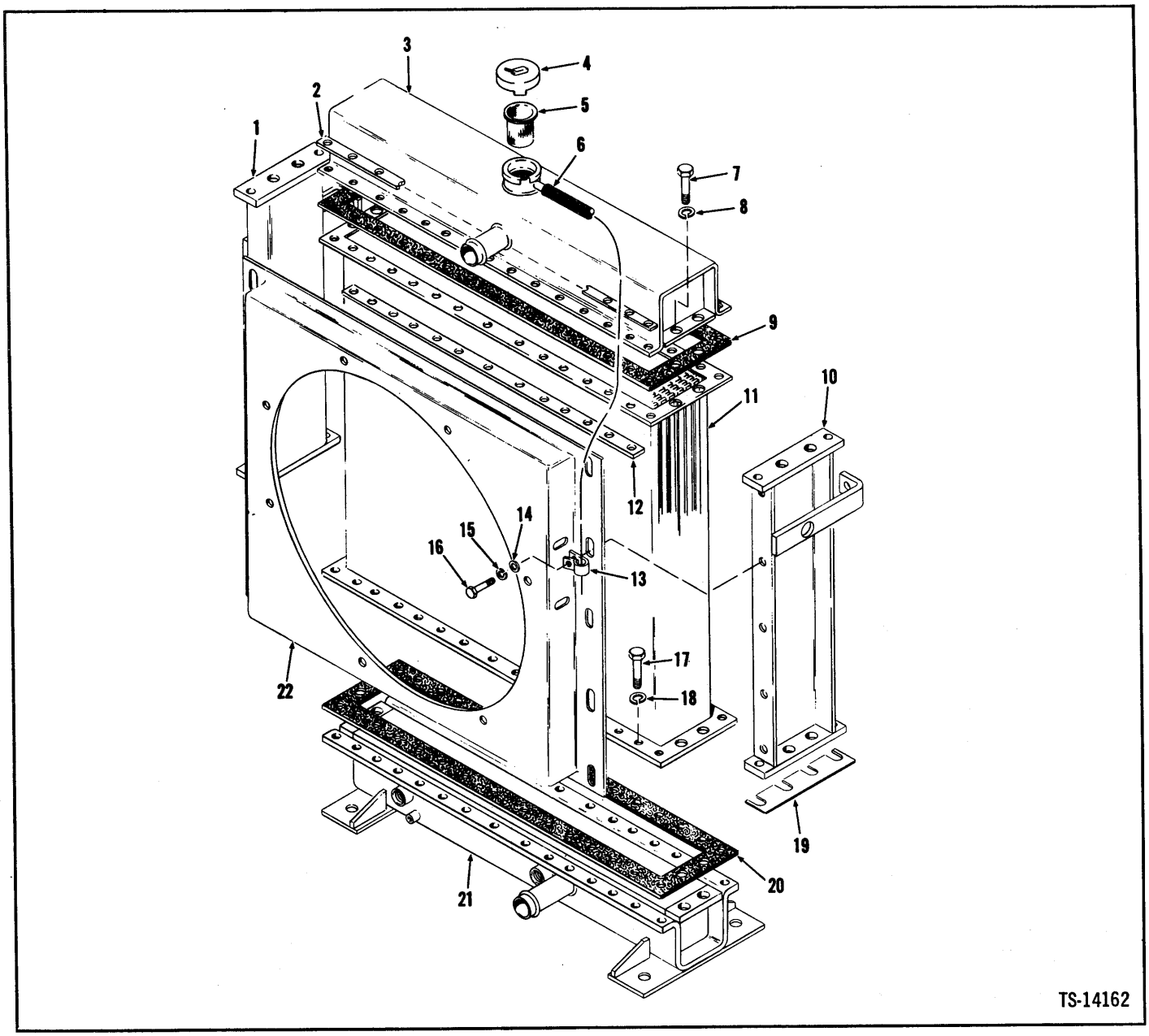


No.	Part No.	Qty.	Description
A	[1]3981568	1	Radiator assy
1	3981908	1	Support – RH
2	3981910	2	Plate
3	3981904	1	Tank – upper
4	3981915	1	Cap
4A	†3981916	1	Strainer
5	3981917	1	Hose
6	2511092	1	Shroud
7	3981906	2	Packing
8	3981903	1	Core
9	3981910	1	Plate
10	6EM100	48	Lockwasher
11	1CM1025	48	Bolt
12	6EM100	6	Lockwasher
13	2CM1016	6	Bolt
14	3981907	1	Support – LH

No.	Part No.	Qty.	Description
15	3981910	1	Plate
16	‡3981909	–	Shim
17	6EM120	12	Lockwasher
18	1CM1235	12	Bolt
19	3981913	2	Clip
20	6EM100	8	Lockwasher
21	2CM1016	8	Bolt
22	2CM1016	2	Bolt
23	6EM100	2	Lockwasher
24	2DM10	2	Nut
25	3981924	1	Tank – lower & cooler
26	3981920	1	Hose
27	3984409	1	Drain cock
28	[2]3981912	1	Fan shroud
29	[3]3981911	1	Fan shroud

*For 4189C101JAC→4189C999JAC
[1]Inc. 1→5, 7→29
[2]Lower
[3]Upper

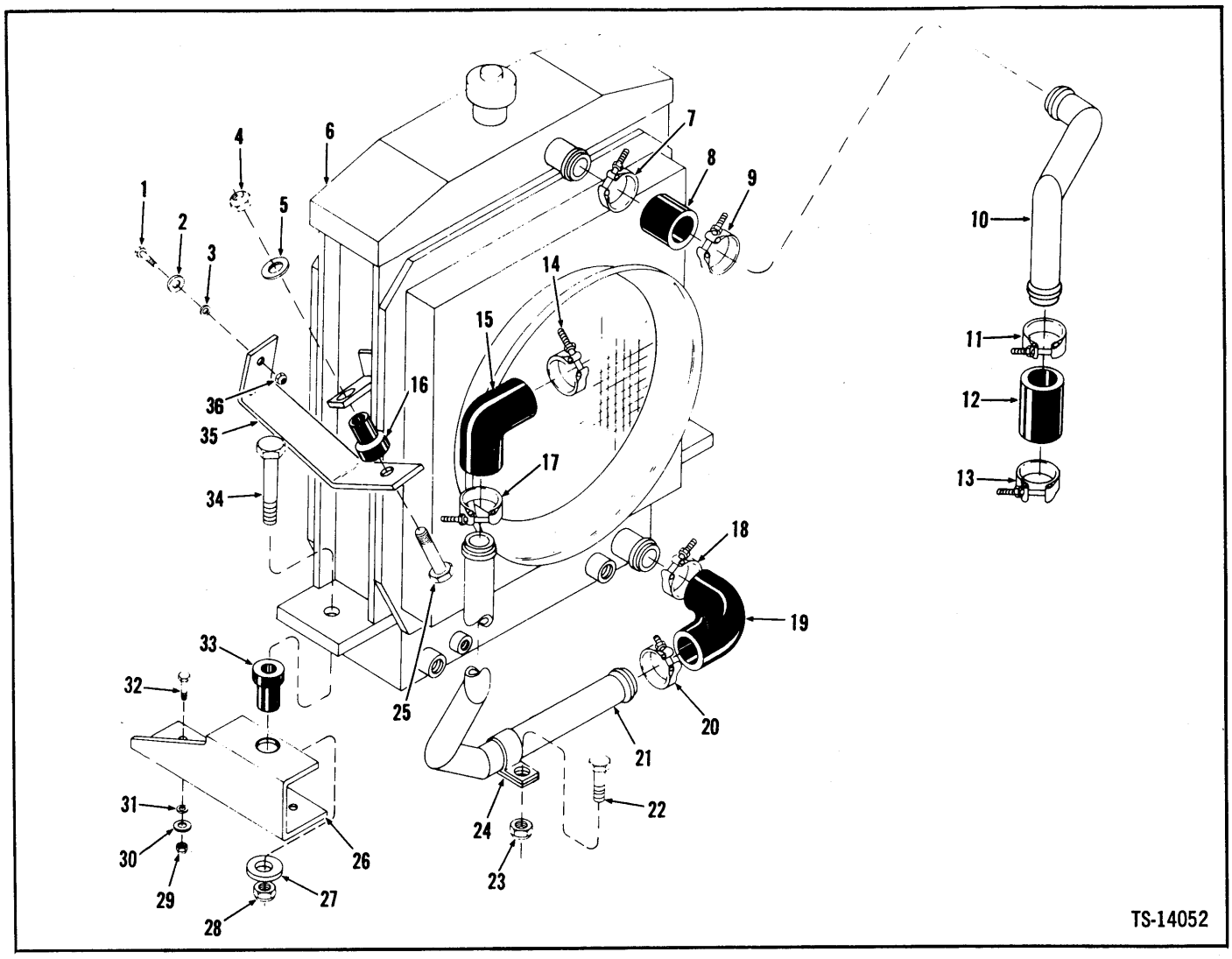
Radiator Assembly*



No.	Part No.	Qty.	Description
A	[2]3902785	1	Radiator assy
1	961112	1	Support
2	961120	4	Plate
3	3902282	1	Upper tank
4	3981915	1	Cap
5	3981916	1	Strainer
6	961117	1	Pipe
7	23C-820	8	Bolt
8	4E-08	8	Lockwasher
9	961111	1	Packing
10	961113	1	Support
11	961109	1	Core
12	961119	4	Plate
13	3981913	3	Clip
14	25E-15	10	Washer
15	4E-05	10	Lockwasher
16	23C-610	10	Bolt
17	23C-620	60	Bolt
18	4E-06	60	Lockwasher
19	‡961121	—	Shim
20	961111	1	Packing
21	961110	1	Lower tank
22	961114	1	Shroud

*For 4189D101JAC & →
[2]Inc. 1→22

Radiator Connections*



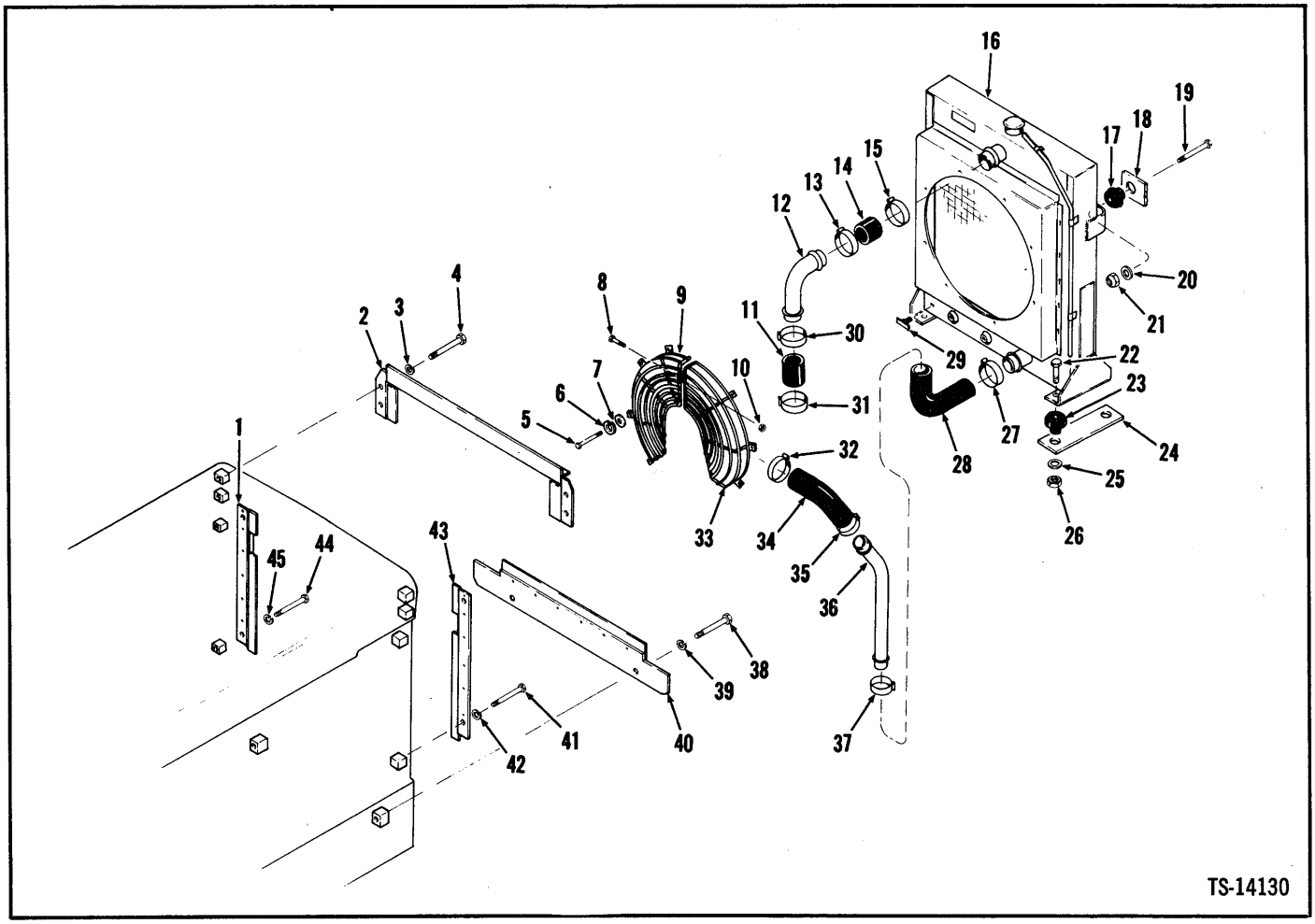
No.	Part No.	Qty.	Description
1	24C-620	2	Bolt
2	616786	2	Washer
3	2511093	2	Washer
4	18D-08	2	Nut
5	584502	2	Washer
6	[1]3981568	1	Radiator
7	3957624	1	Clamp
8	1M-16046	1	Hose
9	3957624	1	Clamp
10	3981569	1	Tube
11	3957624	1	Clamp
12	1M-16046	1	Hose
13	3957624	1	Clamp
14	3957624	1	Clamp
15	3981192	1	Hose
16	584501	2	Dampener
17	3957624	1	Clamp
18	3957624	1	Clamp
19	3981192	1	Hose

No.	Part No.	Qty.	Description
20	3957624	1	Clamp
21	3981570	1	Tube
22	24C-612	1	Bolt
23	18D-06	1	Nut
24	3981571	1	Clip
25	24C-836	2	Bolt
26	2511102	1	Bracket RH
26A	†2511103	1	Bracket LH
27	584502	2	Washer
28	18D-08	2	Nut
29	18D-06	4	Nut
30	616786	4	Washer
31	2511093	4	Washer
32	24C-624	4	Bolt
33	584501	2	Dampener
34	24C-842	2	Bolt
35	2511101	1	Bracket RH
35A	†2511100	1	Bracket LH
36	18D-06	2	Nut

*For 4189C101JAC➔4189C999JAC
[1]See Index

PM 3016
Printed in U.S.A.

Radiator Connections*



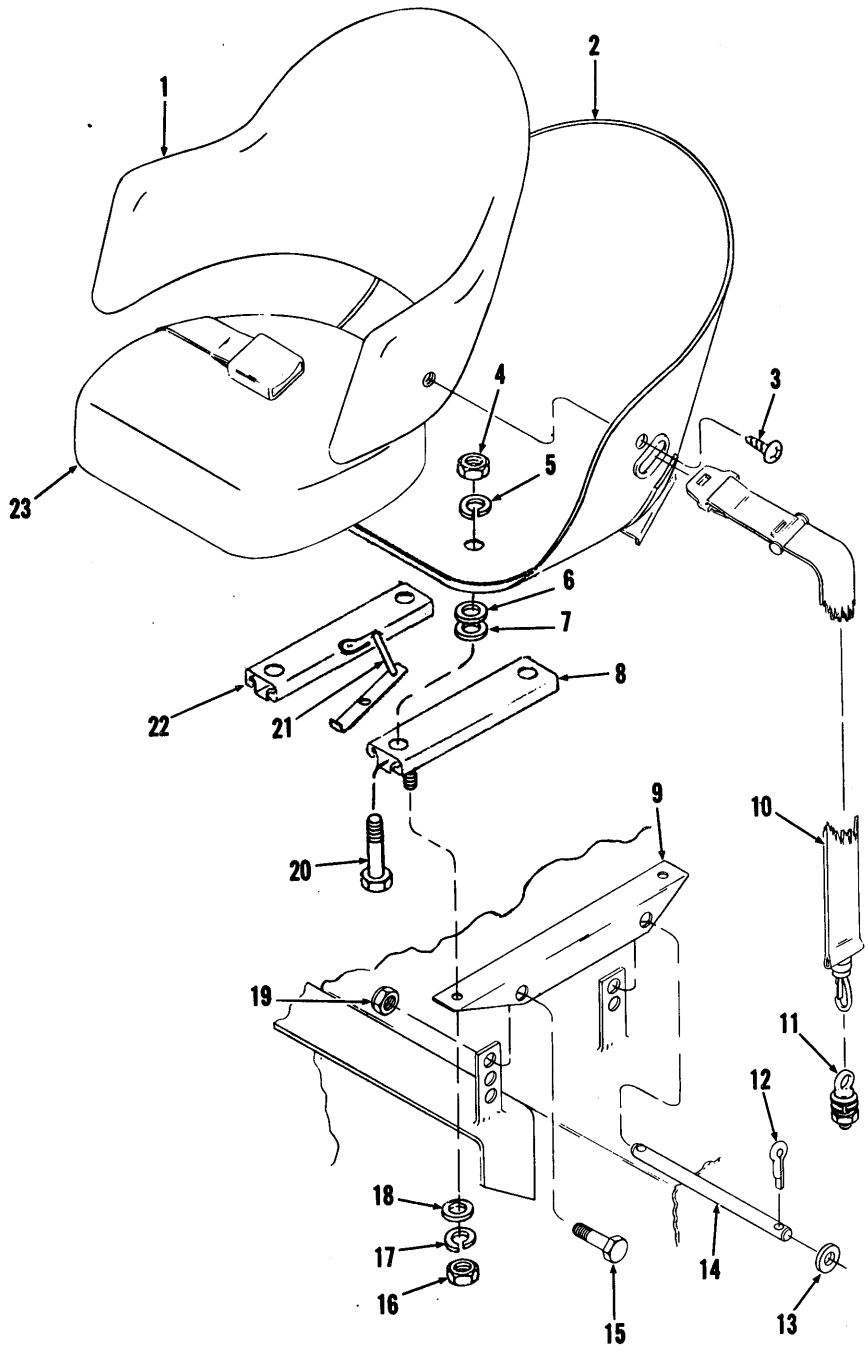
No.	Part No.	Qty.	Description
1	2510356	1	Angle RH
2	2510363	1	Filler strip
3	4E-06	4	Lockwasher
4	24C-612	4	Bolt
5	24C-616	7	Bolt
6	4E-06	7	Lockwasher
7	25E-18	7	Washer
8	24C-616	2	Bolt
9	2510392	1	Fan guard RH
10	18D-06	2	Nut
11	1M16040	1	Hose
12	2508599	1	Tube
13	879717	1	Clamp
14	1M16040	1	Hose
15	879717	1	Clamp
16	[1]3902785	1	Radiator
17	568361	2	Dampener
18	[1]———	1	Frame rear
19	24C-836	2	Bolt
20	584502	2	Washer
21	18D-08	2	Nut
22	24C-836	4	Bolt
23	568361	4	Dampener

No.	Part No.	Qty.	Description
24	[1]———	1	Frame rear
25	584502	4	Washer
26	18D-08	4	Nut
27	879717	1	Clamp
28	1316506	1	Hose
29	72F-2	1	Draincock
30	879717	1	Clamp
31	879717	1	Clamp
32	879717	1	Clamp
33	2510391	1	Fan guard LH
34	2510263	1	Hose
35	879717	1	Clamp
36	[2]2508600	1	Tube
37	879717	1	Clamp
38	24C-612	2	Bolt
39	4E-06	2	Lockwasher
40	2510352	1	Filler strip
41	24C-612	2	Bolt
42	4E-06	2	Lockwasher
43	2510357	1	Angle LH
44	24C-612	2	Bolt
45	4E-06	2	Lockwasher

*For 4189D101JAC & →

[1]See Index

[2]For replacement use 1—2519504 Tube plus 1—40K8.

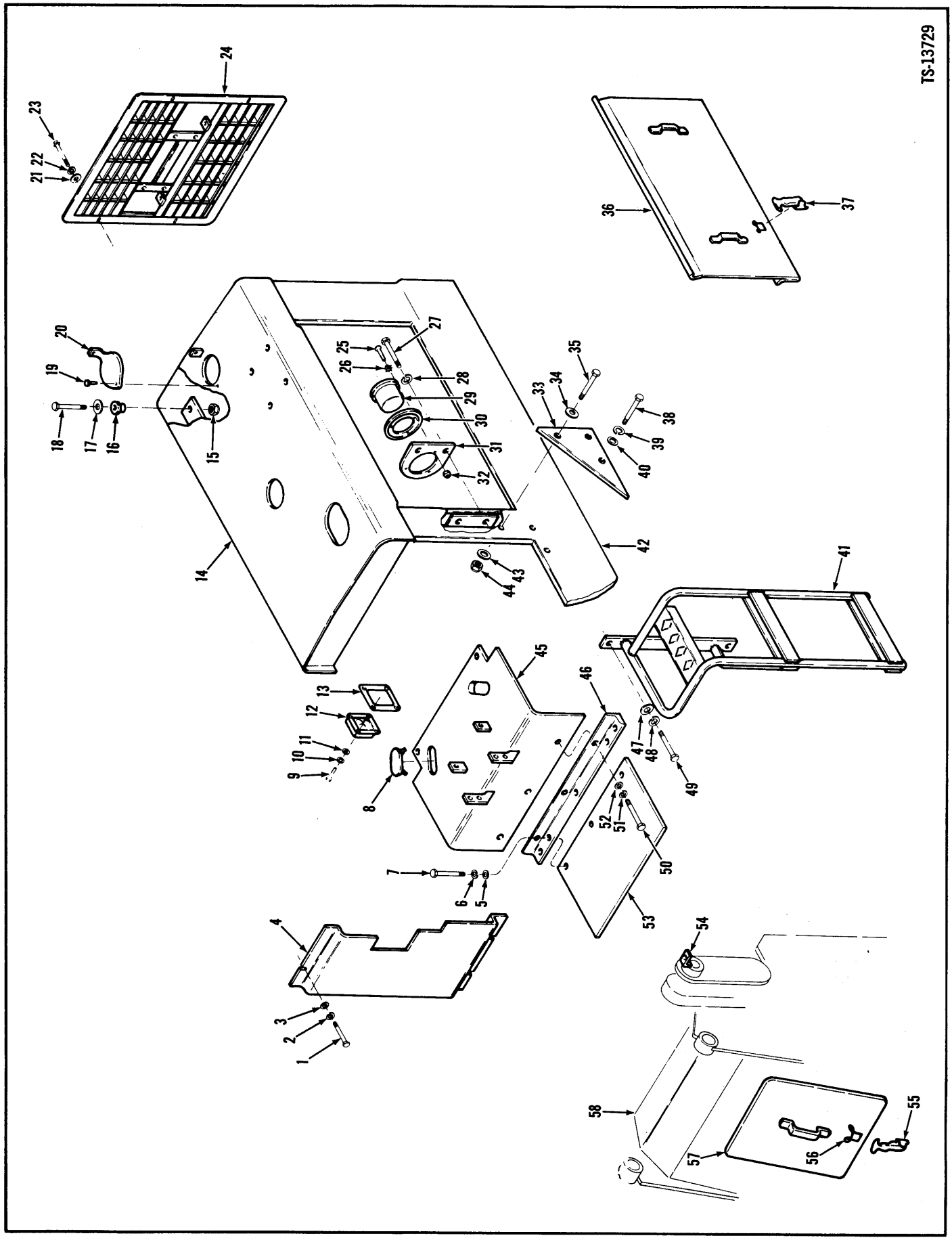


TS-14808

No.	Part No.	Qty.	Description
A	[2]3985011	1	Seat assy
1	3980143	1	Cushion
2	§[3]----	1	Seat pan
3	3980137	12	Screw
3A	†2EM5	12	Washer
4	26DM8	4	Nut
5	6EM80	4	Lockwasher
6	3980139	4	Spacer
7	3980139	4	Spacer
8	3980142	1	Slide LH
9	2504527	2	Angle
10	2522107	1	Seat belt assy
11	2522745	2	Eye bolt
11A	†2522744	2	Washer

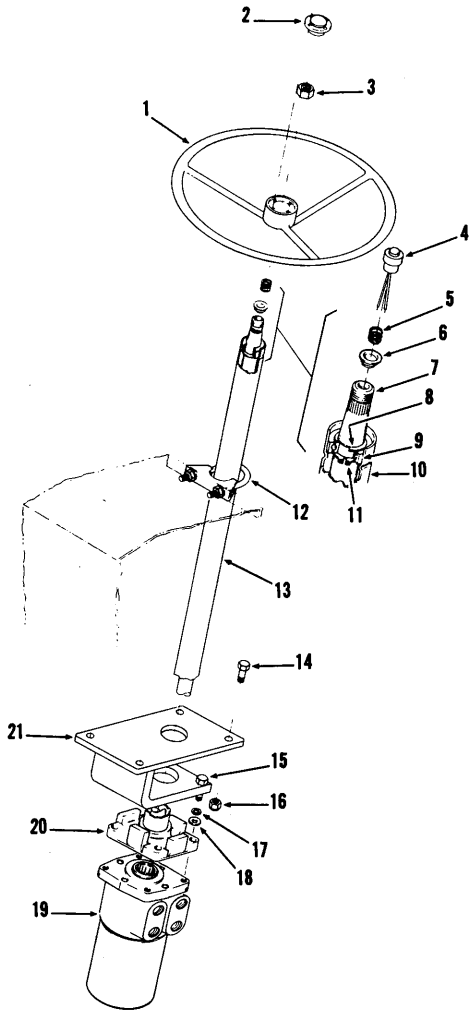
No.	Part No.	Qty.	Description
11B	†60D7	2	Nut
12	1F-420	2	Pin cotter
13	25E-22	2	Washer
14	2504589	1	Bar
15	18C 824	2	Bolt
16	26DM8	4	Nut
17	6EM80	4	Lockwasher
18	2EM8	4	Washer
19	60D-08	4	Nut
20	3980621	4	Screw
21	28H16100	1	Wire
22	3980140	1	Slide RH
23	3980144	1	Cushion

[2]Inc. 1 → 8, 16 → 18, 20, 22, 23
[3]See A


TS-13729
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No.	Part No.	Qty.	Description
1	23C-612	3	Bolt
2	4E-06	3	Lockwasher
3	25E-17	3	Washer
4	2506811	1	Cover
5	25E-18	6	Washer
6	23E-06	6	Lockwasher
7	24C-620	6	Bolt
8	2506815	2	Cover
9	59G-1016	4	Bolt
10	17E-10	4	Lockwasher
11	25E-10	4	Washer
12	2506424	1	Boot
13	2506414	1	Retainer
14	[2,5]2511047	1	Hood
14A	†[2,6]2508602	1	Hood
15	18D-06	4	Nut
16	568276	4	Dampener vibration
17	619021	4	Washer
18	24C-632	4	Bolt
19	1H-508	1	Rivet
20	1544448	1	Cover
21	619029	4	Washer
22	4E-08	4	Lockwasher
23	24C-824	4	Bolt
24	[7]2504277	1	Grille
24A	†[8]2513800	1	Grille
25	85G-610	6	Bolt
26	12E-6	6	Lockwasher
27	24C-616	2	Bolt
28	4E-06	2	Lockwasher
29	1743825	1	Hourmeter
30	551251	1	Dampener vibration
31	2506225	1	Bracket
32	50D-6	6	Nut
33	3980488	2	Cover
34	656672	4	Washer
35	24C-628	4	Bolt
36	[3]2507291	2	Side panel
36A	†1545623	4	Keeper
36B	†1H-306	8	Rivet
37	1545622	4	Latch assy
38	24C-616	2	Bolt
39	4E-06	2	Lockwasher
40	656672	2	Washer
41	2506215	1	Step
42	[1]———	1	Frame rear
43	656672	4	Washer
44	18D-06	4	Nut
45	2506331	1	Plate
46	2506329	1	Angle
47	25E-22	2	Washer
48	4E-08	2	Lockwasher
49	24C-820	2	Bolt
50	24C-620	6	Bolt
51	23E-06	6	Lockwasher
52	25E-18	6	Washer
53	2506330	1	Plate
54	569233	2	Bracket
55	1545622	1	Latch assy
56	1545623	1	Keeper
57	[4]3980449	1	Cover
58	[1]———	1	Frame front

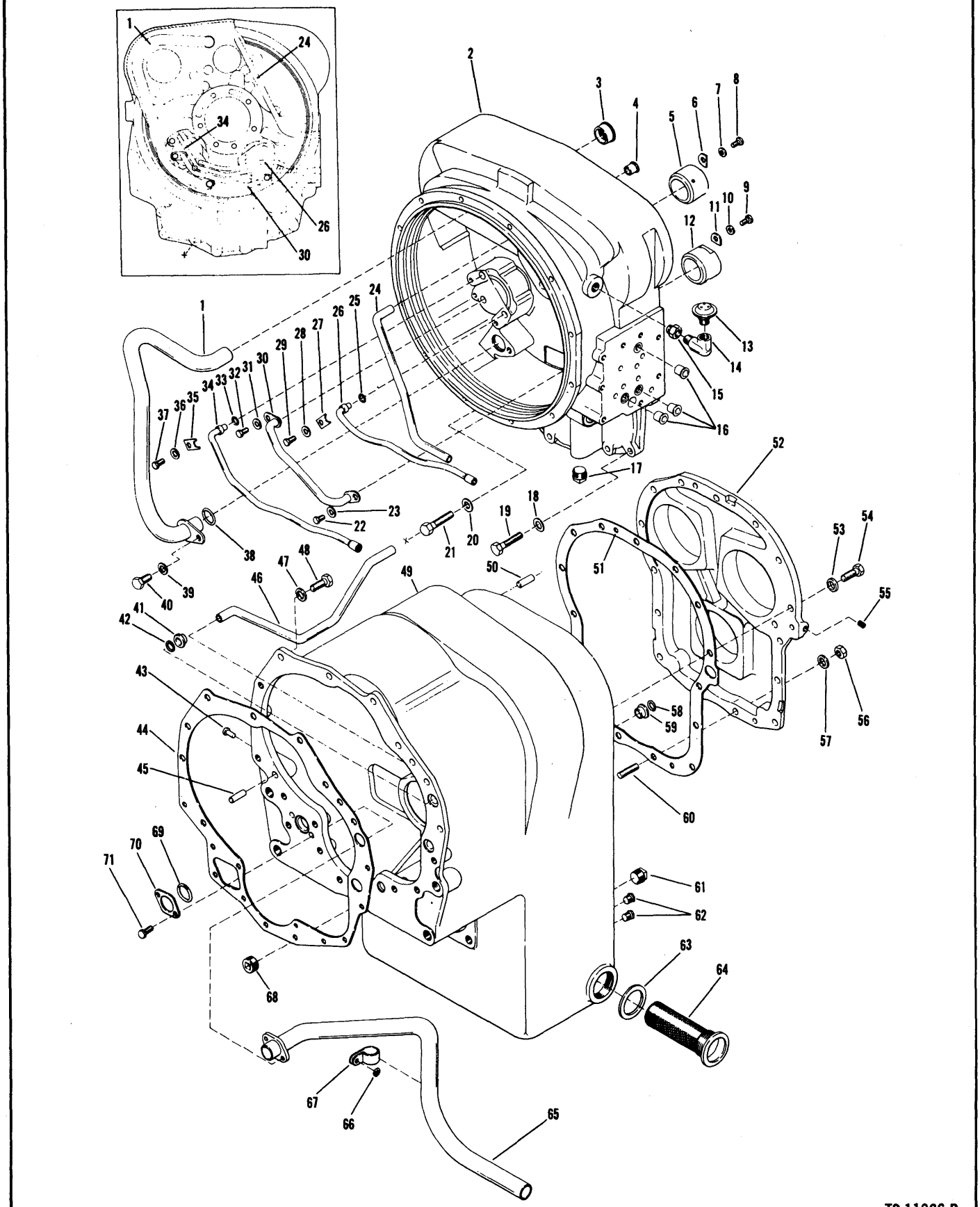
[1]See Index
[2]Inc. 19, 20
[3]Inc. 36A, 36B
[4]Inc. 56
[5]4189C101JAC → 4189C999JAC
[6]4189D101JAC & →
[7]With Michigan Nameplate
[8]Without Michigan Nameplate



TS-13103

No.	Part No.	Qty.	Description
1	1519254	1	Steering wheel white
2	5200219	1	Horn button kit
3	852333	1	Nut
4	991694	1	Insulator
5	991695	1	Spring
6	991696	1	Washer
7	5209582	1	Shaft
8	991689	1	Ring
9	1567088	1	Bearing
10	5200238	1	Housing
11	991700	2	Ring snap
12	2500021	1	Clamp
12A	†25E-15	2	Washer
13	[2]1519253	1	Steering column
14	24C-620	4	Bolt
15	23C-624	4	Bolt
16	18D-06	4	Nut
17	4E-06	4	Lockwasher
18	25E-17	4	Washer
19	[1]1519252	1	Valve assy
20	§[3]———	—	Steering column
21	1519991	1	Bracket

[1]See Index
[2]Inc. 4 → 11, 20
[3]See 13

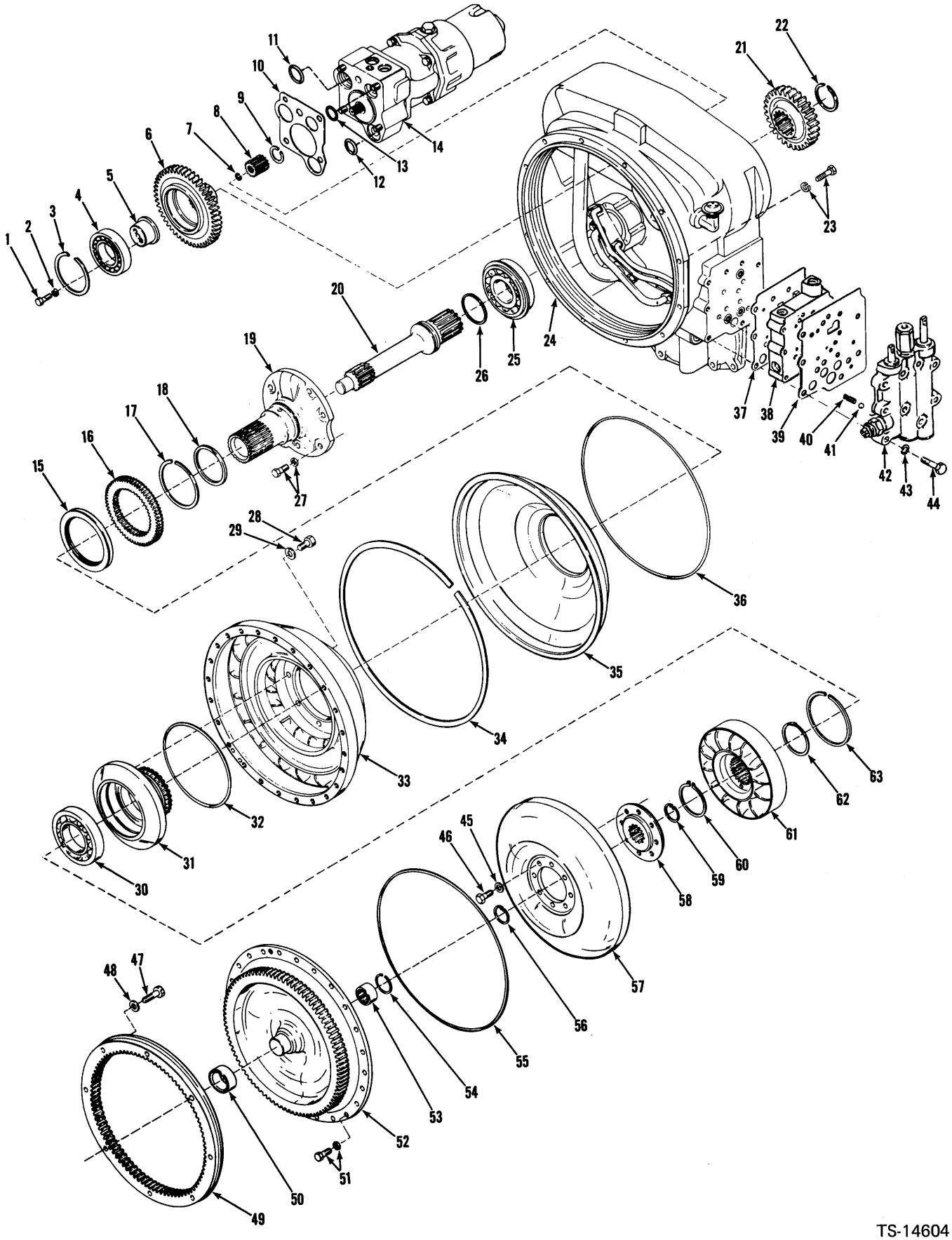

TS-11826 B

Transmission & Converter Assembly

MICHIGAN

No.	Part No.	Qty.	Description
A	[1]284579	1	Trans & conv assy
1	232136	1	Tube
1A	235987	1	Spacer
2	[2]231614	1	Housing assy
3	230854	1	Sleeve
4	222067	1	Sleeve
5	237576	1	Sleeve
6	230851	1	Lock
7	4E-05	1	Lockwasher
8	1C-510	1	Bolt
9	1C-510	1	Bolt
10	4E-05	1	Lockwasher
11	230851	1	Lock
12	237576	1	Sleeve
13	211433	1	Breather
14	26F-3	1	Elbow
15	19F-8	1	Bushing
16	222067	3	Sleeve
17	[6]40K-12	1	Plug
17A	†[5]91F-6	1	O-ring
17B	†[5]3903493	1	Plug
18	4E-07	4	Lockwasher
19	1C-728	4	Bolt
20	4E-07	4	Lockwasher
21	1C-744	4	Bolt
22	1C-510	1	Bolt
23	4E-05	1	Lockwasher
24	231166	1	Tube
25	25K-30012	1	O-ring
26	231095	1	Tube
27	231048	1	Clip
28	4E-05	1	Lockwasher
29	1C-510	1	Bolt
30	231093	1	Tube
31	4E-05	1	Lockwasher
32	1C-510	1	Bolt
33	25K-30012	1	O-ring
34	231094	1	Tube
35	231048	1	Clip
36	4E-05	1	Lockwasher
37	1C-510	1	Bolt
38	25K-40030	1	O-ring
39	4E-06	1	Lockwasher
40	[4]5C-612	1	Bolt
41	222067	1	Sleeve
42	25K-40026	1	O-ring
43	1H-418	1	Rivet
44	231606	1	Gasket
45	214295	2	Dowel
46	230900	1	Tube
47	4E-07	10	Lockwasher
48	1C-720	10	Bolt
49	[3]231611	1	Trans case assy
50	214118	2	Dowel
51	231781	1	Gasket
52	233954	1	Cover
53	4E-07	13	Lockwasher
54	1C-720	13	Bolt
55	16F-02	1	Plug
56	62D-07	2	Nut
57	4E-07	2	Lockwasher
58	25K-40026	1	O-ring
59	222067	1	Sleeve
60	200991	2	Stud
61	215757	1	Plug
62	40K-04	2	Plug
63	219373	1	Gasket
64	231390	1	Screen
65	234836	1	Tube
66	25E-13	1	Washer
67	6H-36	1	Clip
68	16F-16	2	Plug
69	25K-40104	1	O-ring
70	230921	1	Washer
71	4C-514	2	Bolt

[1](12HR28322-500) Inc. 1→71 and Pages T5→T17
[2]Inc. 1→12, 16, 22→40
[3]Inc. 41, 43, 46, 49, 59, 65, 66, 67, 69, 70, 71
[4]Inc. 39
[5]4189C101JAC → 348JAC
[6]4189C349JAC & →


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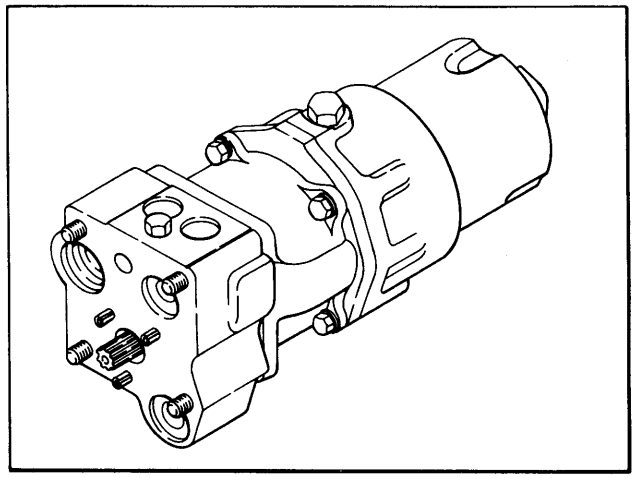
TS-14604

Transmission Converter Assembly

CLARK

No.	Part No.	Qty.	Description
1	2C-720	6	Bolt
2	4E-07	6	Lockwasher
3	223925	3	Ring
4	225601	3	Bearing
5	230811	3	Support
6	230812	3	Gear
7	659041	1	Ring
8	[2]236292	1	Sleeve conv pump
8A	[3]233250	1	Sleeve steer pump
9	224039	2	Ring
10	231080	1	Gasket
11	60K-40106	1	O-ring
12	60K-40100	1	O-ring
13	60K-40026	1	O-ring
14	[1]————	1	Valve pump & filter
15	214941	1	Seal
16	230805	1	Gear
17	224009	1	Ring
18	221653	1	Ring
19	237237	1	Support
20	214933	1	Shaft
21	233705	1	Gear
22	224026	1	Ring
23	24C-624	12	Bolt
23A	4E-06	12	Lockwasher
24	231614	1	Housing & tube assy
25	225597	1	Bearing
26	222079	1	Ring
27	1C-820	6	Bolt
27A	7E-08	6	Lockwasher
28	4C-714	8	Bolt
29	25E-19	8	Washer
30	214596	1	Bearing
31	214923	1	Hub
32	60K-40616	1	O-ring
33	214920	1	Impeller assembly
34	230855	1	Ring
35	[4]232461	1	Baffle
36	231458	1	Ring
37	235677	1	Gasket
38	[1]————	1	Valve modulated
39	234663	1	Gasket
40	232147	2	Spring
41	10J-12	2	Ball
42	[1]————	1	Valve transm control
43	4E-06	9	Lockwasher
44	1C-664	9	Bolt
45	619023	8	Washer
46	209313	8	Bolt
47	236288	16	Bolt
48	215909	16	Washer
49	233089	1	Ring gear
50	§[6]————	1	Sleeve
51	233128	24	Bolt assy
52	[5]801524	1	Cover
53	214988	1	Bearing
54	666542	1	Ring
55	232535	1	O-ring
56	659065	1	Ring
57	222684	1	Turbine
58	214924	1	Hub
59	659065	1	Ring
60	743035	1	Ring
61	229565	1	Reaction member conv
62	229566	1	Spacer
63	214953	1	Ring

[1]See Index
[2]Inc. 9
[3]Inc. 7, 9
[4]Inc. 15
[5]Inc. 50
[6]See 52



PRESSURE
REGULATOR SIDE
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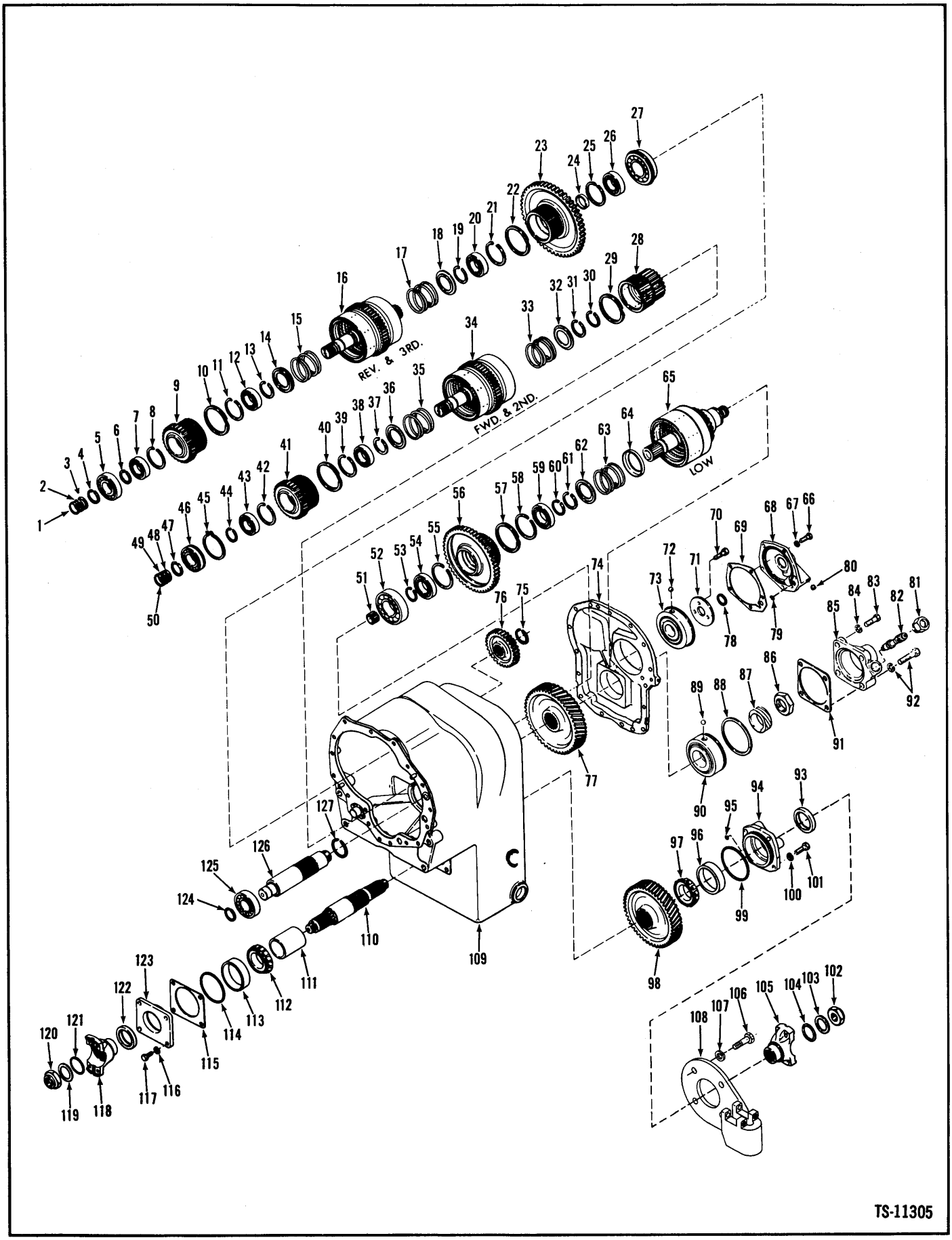
TS-14603

Transmission Converter Pressure Regulator Valve, Charging Pump & Oil Filter Assembly

CLARK

No.	Part No.	Qty.	Description
1	40K-04	1	Plug
2	233278	1	Seat
3	233279	1	Spacer
4	222318	1	Plunger
5	222312	1	Spring
6	25K-30022	1	O-ring
7	229296	1	Stop
8	763795	1	Pin
9	763795	1	Pin
10	220983	1	Stop
11	25K-30018	1	O-ring
12	231077	1	Piston
13	224368	1	Spring
14	235676	1	Spring
15	231083	4	Stud
16	231081	1	Gasket
17	4E-07	4	Lockwasher
18	62D-07	4	Nut
19	[2,3]234639	1	Pump & filter assy
20	234640	2	Spring
21	234643	2	Seal
22	4E-07	4	Lockwasher
23	1C-724	4	Bolt
24	456294	1	Seal
25	[4]231075	1	Valve assy
26	233280	3	Pin
27	231199	1	Gasket
28	§[5]———	1	Adapter
29	40K-04	1	Plug
30	230959	1	Spring
31	230960	1	Disc
32	230961	1	Seat
33	230965	1	Ring
34	25K-40404	1	O-ring
35	[6]230962	1	Element
36	230963	1	Spring
37	230964	1	Housing
38	40K-01	1	Plug

[2]Replace. Do not rebuild
[3]Inc. 19→23, 27→38
[4]Inc. 1→14, 24, 26
[5]See 19
[6]Inc. 34


REV. & 3RD.
FWD. & 2ND.
LOW
TS-11305

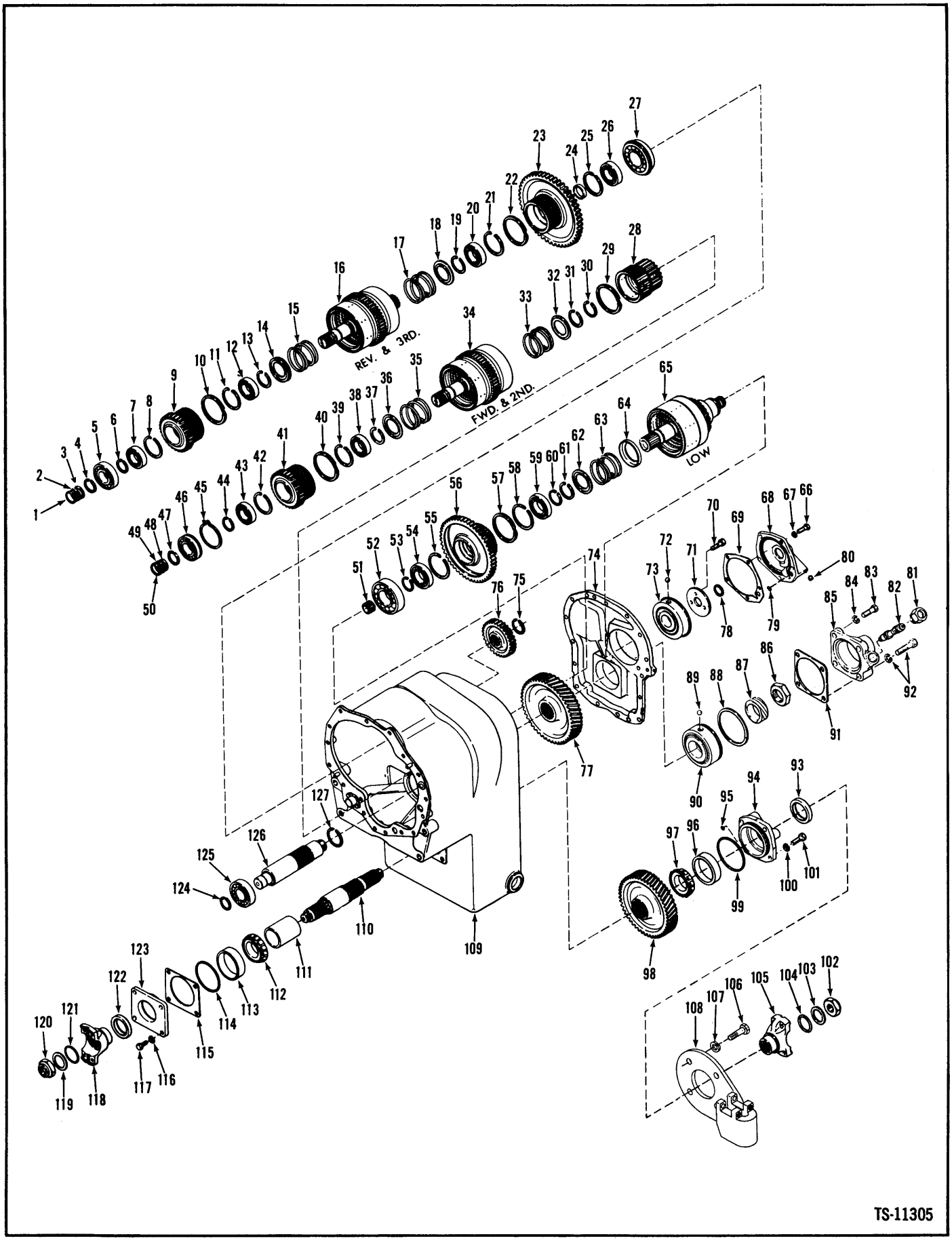
Transmission Gear & Shaft Group

MICHIGAN

No.	Part No.	Qty.	Description
1	215183	1	Ring
2	215183	1	Ring
3	215183	1	Ring
4	224083	1	Ring
5	225603	1	Bearing
6	224083	1	Ring
7	233389	1	Bearing
8	223877	1	Ring
9	235043	1	Gear
10	731160	1	Ring
11	223877	1	Ring
12	230829	1	Bearing
13	654613	1	Ring
14	232089	1	Retainer
14A	†232088	1	Retainer
15	230822	1	Spring
16	[1]———	1	Clutch assy
17	230822	1	Spring
18	232089	1	Retainer
18A	†232088	1	Retainer
19	654613	1	Ring
20	230860	1	Bearing
21	223874	1	Ring
22	731160	1	Ring
23	231098	1	Gear
24	230906	1	Spacer
25	223874	1	Ring
26	233390	1	Bearing
27	658038	1	Bearing
28	231198	1	Gear
29	731160	1	Ring
30	654613	1	Ring
31	654613	1	Ring
32	232089	1	Retainer
32A	†232088	1	Retainer

[1]See Index

No.	Part No.	Qty.	Description
33	230822	1	Spring
34	[1]———	1	Clutch assy
35	230822	1	Spring
36	232089	1	Retainer
36A	†232088	1	Retainer
37	654613	1	Ring
38	230829	1	Bearing
39	223877	1	Ring
40	731160	1	Ring
41	235043	1	Gear
42	223877	1	Ring
43	233389	1	Bearing
44	224083	1	Ring
45	230889	1	Ring
46	223349	1	Bearing
47	224083	1	Ring
48	215183	1	Ring
49	215183	1	Ring
50	215183	1	Ring
51	230886	1	Bearing
52	231554	1	Bearing
53	230888	1	Ring
54	230885	1	Bearing
55	223964	1	Ring
56	231229	1	Gear
57	731160	1	Ring
58	223964	1	Ring
59	230885	1	Bearing
60	230888	1	Ring
61	654613	1	Ring
62	232089	1	Retainer
63	230822	1	Spring
64	232088	1	Retainer
65	[1]———	1	Clutch assy
66	1C-618	5	Bolt


REV. & 3RD.
FWD. & 2ND.
LOW
TS-11305

Transmission Gear & Shaft Group

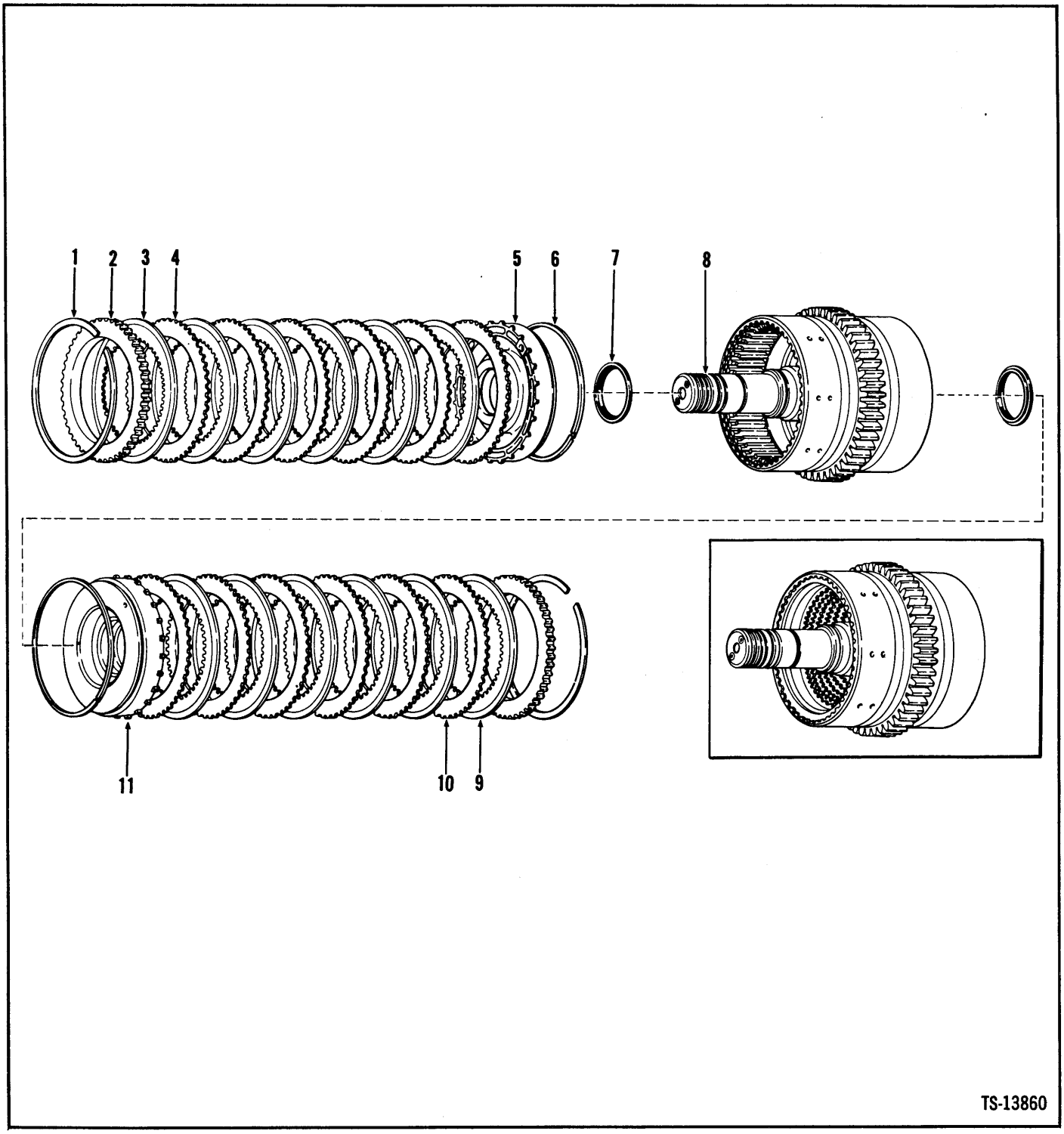
MICHIGAN

No.	Part No.	Qty.	Description
67	4E-06	5	Lockwasher
68	233955	1	Cap
69	231193	1	Gasket
70	9C-614	3	Bolt
71	237003	1	Plate
72	10J-15	1	Ball
73	233968	1	Bearing
73A	234649	1	Ring
74	233954	1	Cover
75	224106	1	Ring
76	230871	1	Gear
77	235511	1	Gear
78	208768	1	Ring
79	25K-30016	1	O-ring
80	16F-02	1	Plug
81	202459	1	Nut
81A	†229607	1	Cap
81B	†25K-30022	1	O-ring
82	229187	1	Gear
83	1C-922	3	Bolt
84	4E-09	3	Lockwasher
85	231065	1	Cap
86	231639	1	Nut
87	231066	1	Gear
88	230952	1	Ring
89	10J-15	1	Ball
90	231646	1	Bearing
91	232484	1	Gasket
92	1C-940	1	Bolt
92A	4E-09	1	Lockwasher
93	225823	1	Seal
94	231817	1	Cap
95	25K-30026	1	O-ring
96	742240	1	Cup

No.	Part No.	Qty.	Description
97	1315447	1	Cone
98	234541	1	Gear
99	25K-40412	1	O-ring
100	4E-09	4	Lockwasher
101	1C-928	4	Bolt
102	222960	1	Nut
103	222179	1	Washer
104	25K-60116	1	O-ring
105	230864	1	Flange
106	17C-922	4	Bolt
107	4E-09	4	Lockwasher
108	2500170	1	Brake carrier
109	231611	1	Case
110	233964	1	Shaft
111	233965	1	Spacer
112	1315447	1	Cone
113	1303281	1	Cup
114	25K-40400	1	O-ring
115	‡[2]231848	—	Shim
115A	‡[3]231849	—	Shim
115B	‡[4]231850	—	Shim
115C	‡[5]231851	—	Shim
116	4E-09	4	Lockwasher
117	1C-920	4	Bolt
118	231136	1	Flange
119	222179	1	Washer
120	222960	1	Nut
121	25K-60116	1	O-ring
122	230954	1	Seal
123	231818	1	Cap
124	224083	1	Ring
125	743439	1	Bearing
126	235504	1	Shaft
127	224065	1	Ring

[2].004 (0,10 mm)
[3].007 (0,17 mm)
[4].010 (0,25 mm)
[5].020 (0,50 mm)

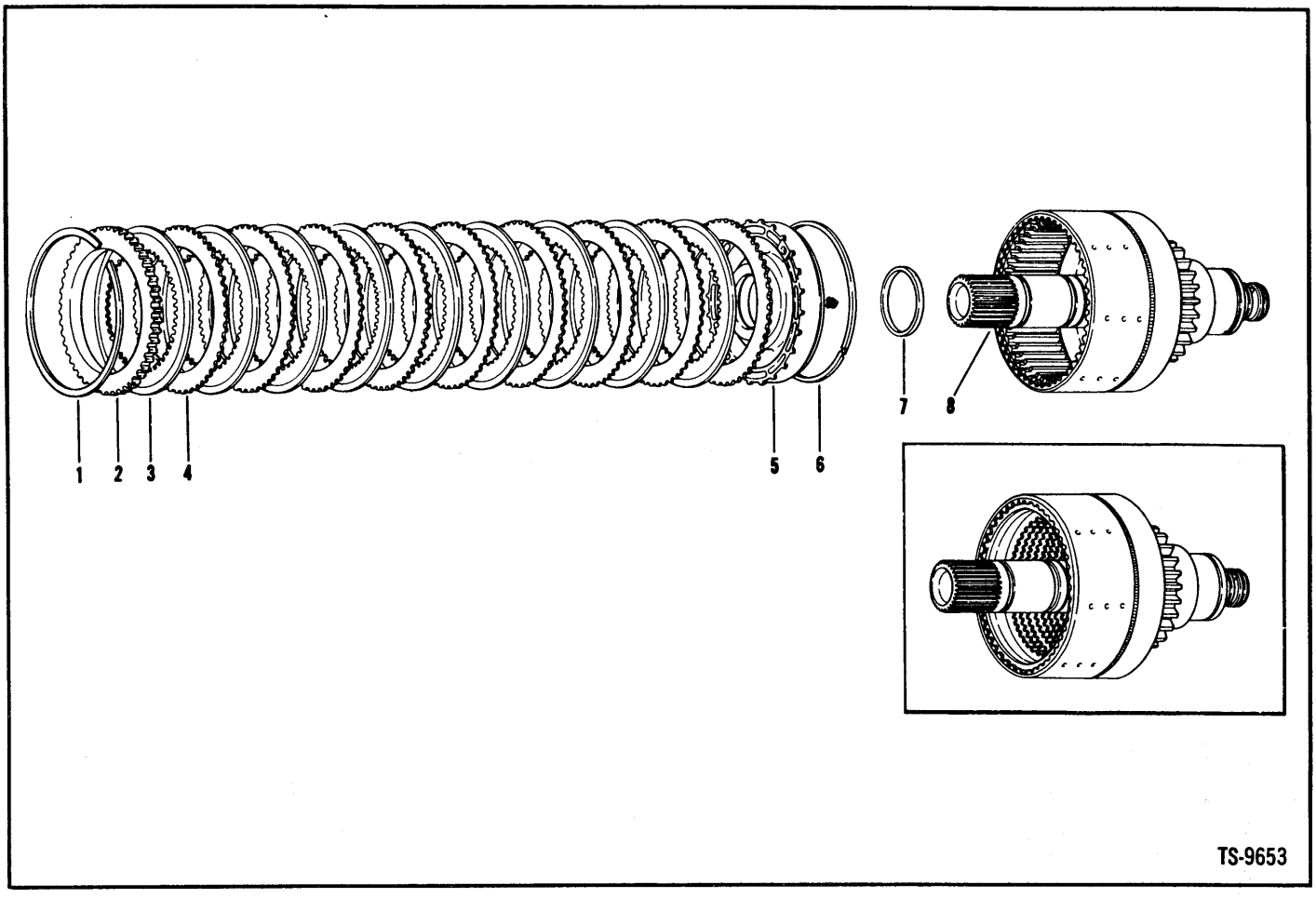
Transmission Clutch Group — First & Second



No.	Part No.	Qty.	Description
1	215190	2	Ring
2	224774	2	Plate
3	236989	6	Disc inner
4	224772	6	Disc outer
5	235604	1	Piston
6	224771	2	Ring

No.	Part No.	Qty.	Description
7	230857	2	Seal
8	235038	1	Drum shaft assy
9	233166	6	Disc inner
10	224772	6	Disc outer
11	230850	1	Piston

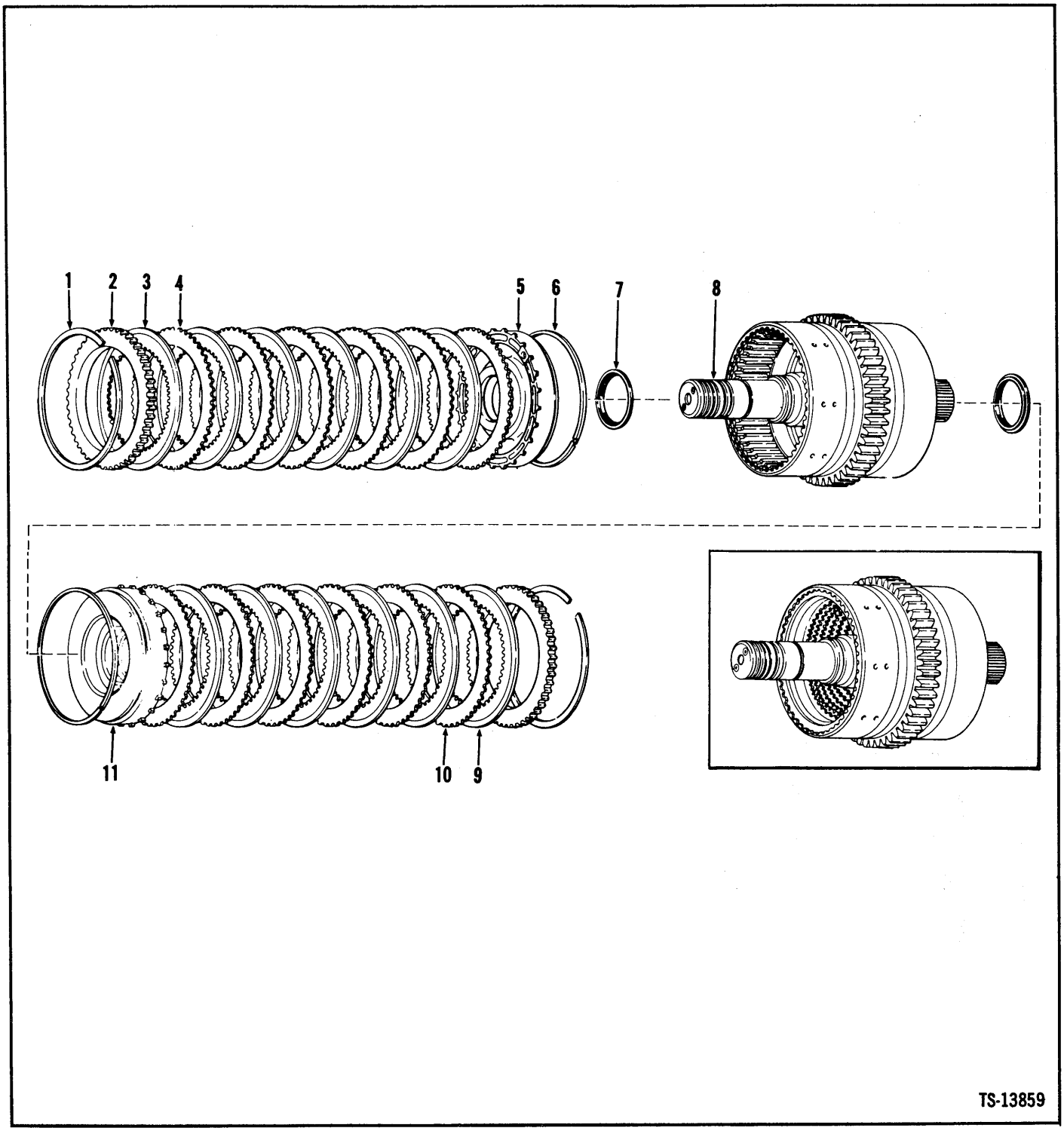
Transmission Clutch Group – Forward *



No.	Part No.	Qty.	Description
1	215190	1	Ring
2	224774	1	Plate
3	230911	9	Disc inner
4	224772	9	Disc outer
5	230850	1	Piston
6	224771	1	Ring
7	230857	1	Seal
8	234539	1	Drum shaft assy

*Ref. S.G.-654

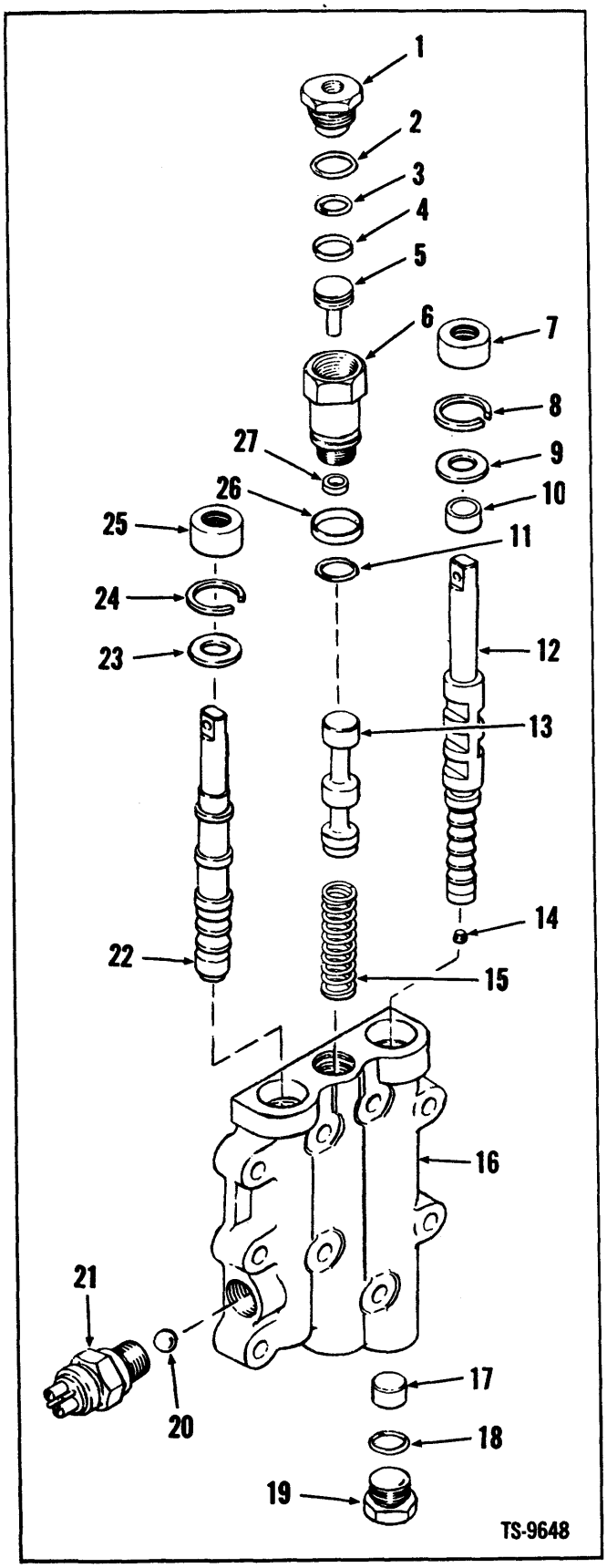
Transmission Clutch Group – Reverse & Third *



No.	Part No.	Qty.	Description
1	215190	2	Ring
2	224774	2	Plate
3	236989	6	Disc inner
4	224772	6	Disc outer
5	235604	1	Piston
6	224771	2	Ring
7	230857	2	Seal
8	235034	1	Drum shaft assy
9	233166	6	Disc inner
10	224772	6	Disc outer
11	230850	1	Piston

*Ref. S.G.-654

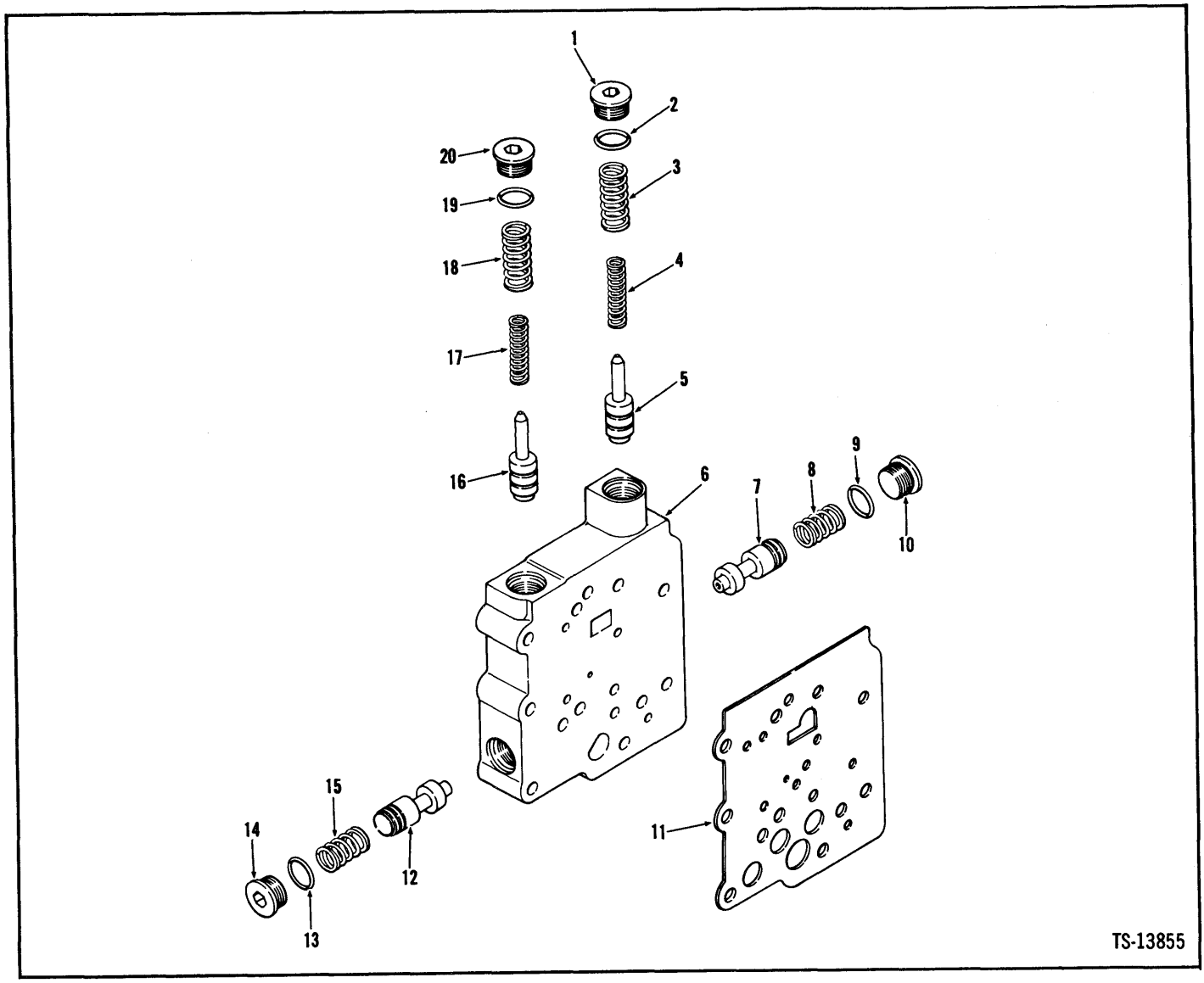
Transmission Control Valve



No.	Part No.	Qty.	Description
A	[1]235166	1	Valve transm control
1	235095	1	Plug valve
2	91F-10	1	O-ring
3	25K-30030	1	O-ring
4	235138	1	Ring
5	235094	1	Piston
6	[2]235093	1	Valve de-clutch
7	234651	1	Seal
8	664140	1	Ring
9	217657	1	Washer
10	231840	1	Spacer
11	25K-30022	1	O-ring
12	§[3]———	—	Spool
13	§[3]———	—	Spool
14	16F-01	1	Plug pipe
15	231164	1	Spring
16	§[3]———	—	Valve body
17	231839	1	Spacer
18	91F-7	1	O-ring
19	[4]24K-7	1	Plug pipe
20	10J-12	1	Ball
21	236395	1	Switch neutral start
22	§[3]———	—	Spool
23	217657	1	Washer
24	664140	1	Ring
25	234651	1	Seal
26	228931	1	Seal
27	229131	1	Seal

[1]Inc. 1➔27
[2]Inc. 1➔5, 11, 26, 27
[3]See "A"
[4]Inc. 18

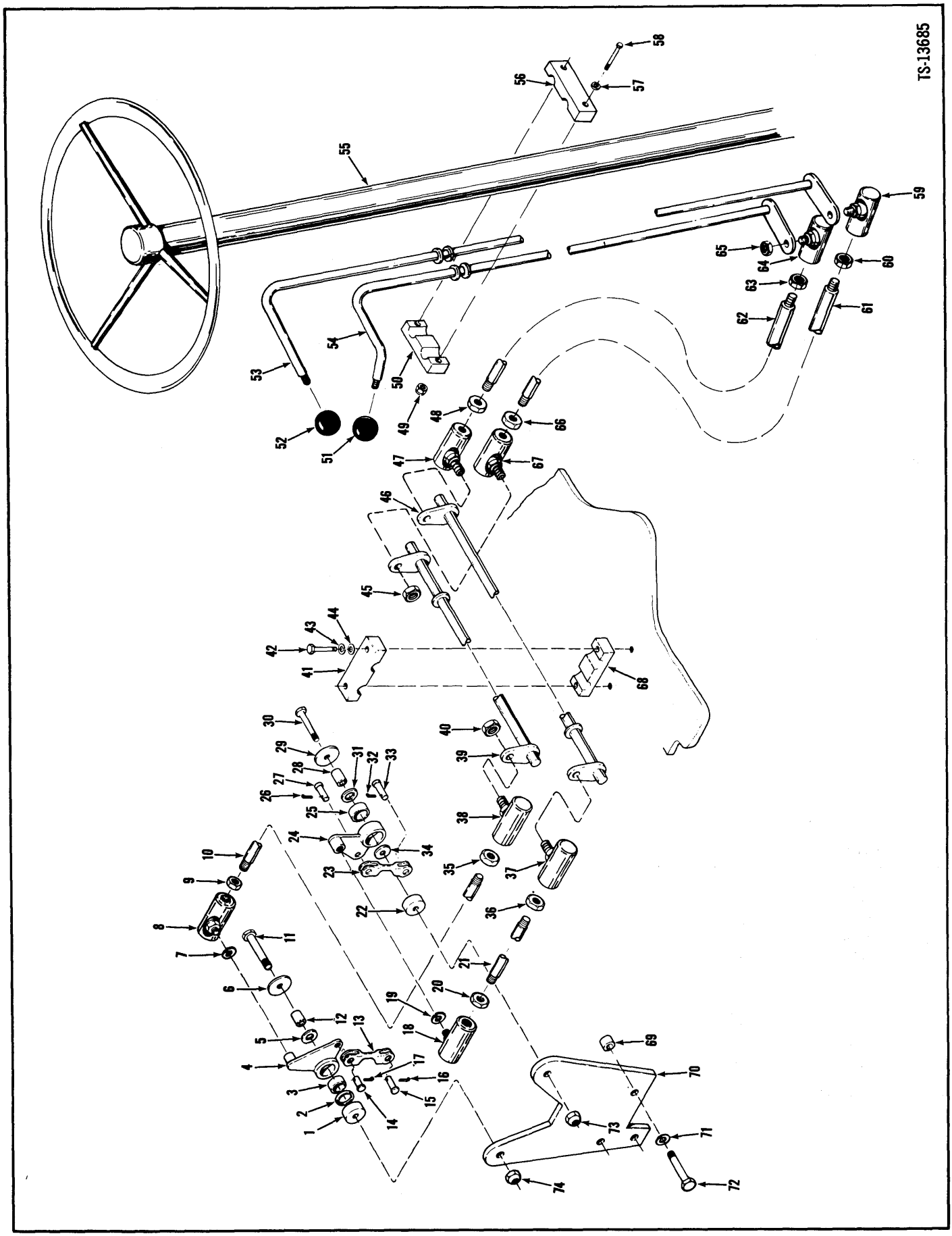
Transmission Modulated Valve Assembly



No.	Part No.	Qty.	Description
A	[2]235931	1	Valve assy
1	[3]47K-7	1	Plug
2	91F-7	1	O-ring
3	[4]234668	1	Spring
4	[5]234669	1	Spring
5	[6]§----	1	Valve accumulator
6	[6]§----	1	Body
7	[6]§----	1	Spool
8	234665	1	Spring
9	91F-7	1	O-ring
10	[7]47K-7	1	Plug

No.	Part No.	Qty.	Description
11	[10]----	1	Gasket
12	[6]§----	1	Spool
13	91F-7	1	O-ring
14	[8]47K-7	1	Plug
15	234665	1	Spring
16	[6]§----	1	Valve accumulator
17	[5]234669	1	Spring
18	[4]234668	1	Spring
19	91F-7	1	O-ring
20	[9]47K-7	1	Plug

[2]Inc. 1→10, 12→20
[3]Inc. 2
[4]Outer
[5]Inner
[6]See A
[7]Inc. 9
[8]Inc. 13
[9]Inc. 19
[10]See page T5.


TS-13685

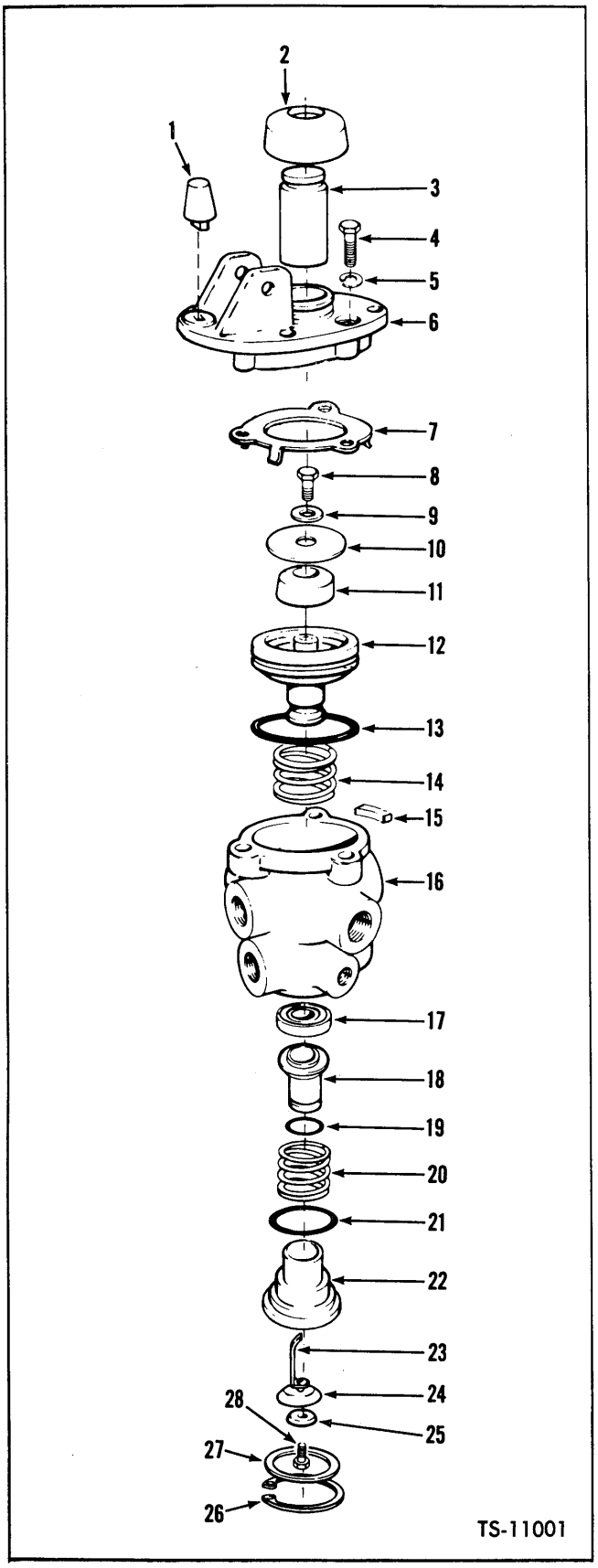
Transmission Control Levers & Linkage

MICHIGAN

No.	Part No.	Qty.	Description
1	675889	1	Spacer
2	1522535	1	Seal
3	675227	1	Bearing
4	[2]2504034	1	Bellcrank
5	1522535	1	Seal
6	561912	1	Washer
7	4E-05	1	Lockwasher
8	1301361	1	Ball joint
9	8D-05	1	Nut
10	[3]2504025	1	Rod assy
11	24C-844	1	Bolt
12	1503251	1	Sleeve
13	2505201	1	Rod
14	4F-05062	1	Pin
15	4F-05062	1	Pin
16	1F-308	1	Pin cotter
17	1F-308	1	Pin cotter
18	1301361	1	Ball joint
19	4E-05	1	Lockwasher
20	8D-05	1	Nut
21	[4]2504023	1	Rod assy
22	675889	1	Spacer
23	2505200	1	Rod
24	[5]2504034	1	Bellcrank
25	675227	1	Bearing
26	1F-308	1	Pin cotter
27	4F-05062	1	Pin
28	1503251	1	Sleeve
29	561912	1	Washer
30	24C-844	1	Bolt
31	1522535	1	Seal
32	1F-308	1	Pin cotter
33	4F-05062	1	Pin
34	1522535	1	Seal
35	8D-05	1	Nut
36	8D-05	1	Nut
37	1301361	1	Ball joint
38	1301361	1	Ball joint
39	2504039	1	Bellcrank
40	66D-05	2	Nut
41	2501574	2	Support
42	24C-544	4	Bolt
43	4E-05	4	Lockwasher
44	25E-15	4	Washer
45	66D-05	2	Nut
46	2504038	1	Bellcrank
47	1301361	1	Ball joint
48	8D-05	1	Nut
49	66D-05	4	Nut
50	2501574	2	Support
51	509772	1	Knob
52	509772	1	Knob
53	2504036	1	Rod assy
54	2504037	1	Rod assy
55	[1]———	1	Steering column
56	2501574	2	Support
57	25E-15	4	Washer
58	24C-548	4	Bolt
59	1301361	1	Ball joint
60	8D-05	1	Nut
61	[6]2504027	1	Rod assy
62	[7]2504024	1	Rod assy
63	8D-05	1	Nut
64	1301361	1	Ball joint
65	66D-05	2	Nut
66	8D-05	1	Nut
67	1301361	1	Ball joint
68	2501574	2	Support
69	2506703	3	Spacer
70	2504040	1	Plate
71	4E-06	3	Lockwasher
72	23C-668	3	Bolt
73	18D-08	1	Nut
74	18D-08	1	Nut

[1]See Index
[2]Inc. 3
[3]Inc. 8, 9, 35, 38
[4]Inc. 18, 20, 36, 37
[5]Inc. 25
[6]Inc. 59, 60, 66, 67
[7]Inc. 47, 48, 63, 64

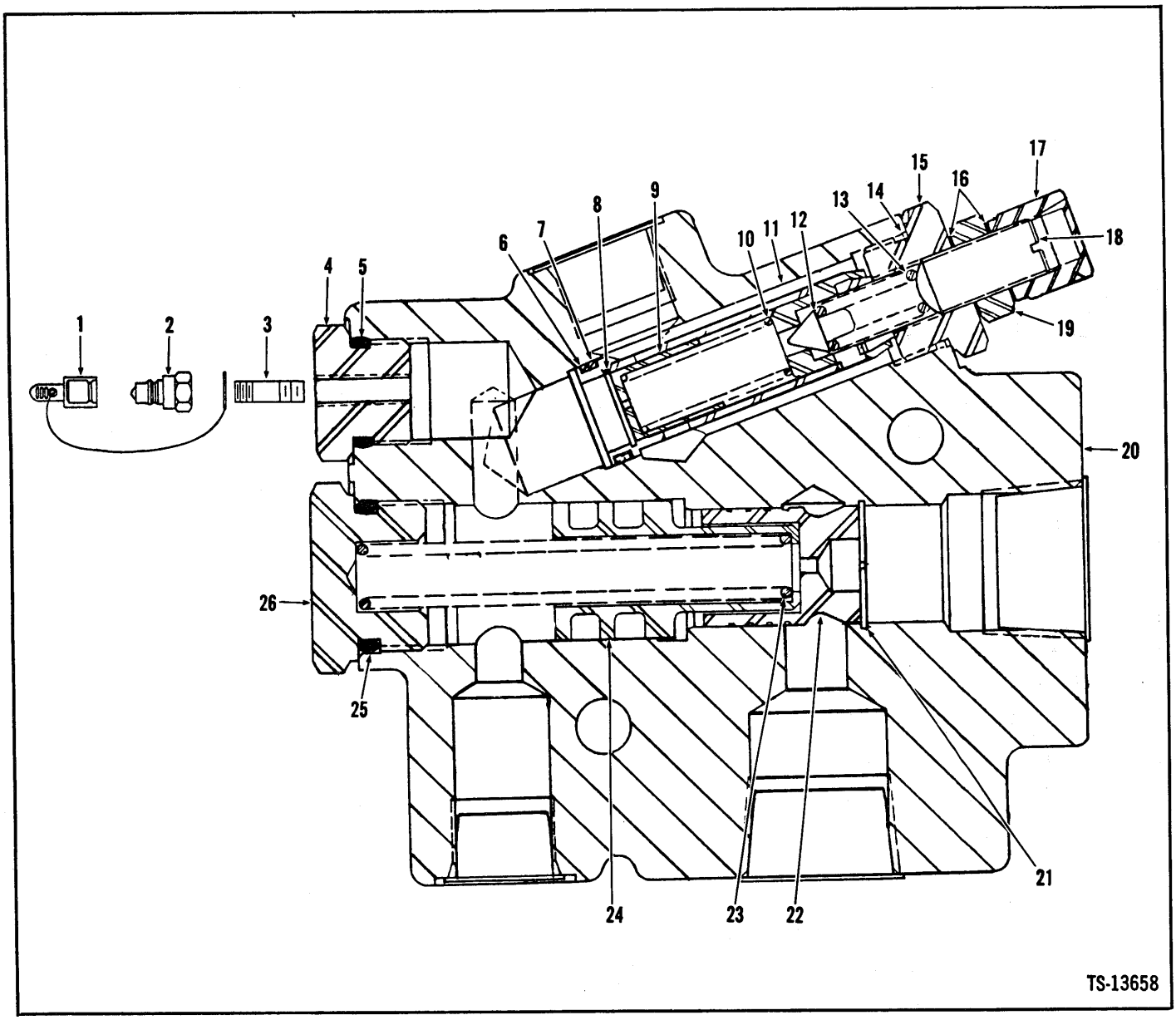
Valve Air Brake



No.	Part No.	Qty.	Description
A	*[1]945996	2	Valve kit
B	[2]3290125	1	Repair kit
C	[3]3290124	1	Repair kit
D	[4]3290099	1	Repair kit
E	[5]3290106	1	Repair kit
1	513932	1	Stop rubber
2	875762	1	Boot
3	3290122	1	Plunger
4	1C-520	3	Bolt
5	4E-05	3	Lockwasher
6	949260	1	Plate
7	894543	1	Retainer
8	21C-410	1	Bolt
9	894542	1	Washer
10	894541	1	Valve seat
11	894540	1	Spring
12	894539	1	Piston
13	25K-40204	1	O-ring
14	875754	1	Spring
15	949261	1	Filter
16	3290105	1	Body
17	894537	1	Retainer
18	894538	1	Valve
19	25K-20020	1	O-ring
20	894536	1	Spring
21	25K-30112	1	O-ring
22	894535	1	Valve seat
23	894534	1	Spring
24	894533	1	Diaphragm
25	894532	1	Washer
26	661415	1	Ring
27	949264	1	Washer
28	87G-806	1	Screw

[1]Inc. 1→28
[2]Inc. 1, 2, 11, 13→15, 18→21, 23, 24
[3]Inc. 1, 2, 18, 19, 21, 24
[4]Inc. 8→12
[5]Inc. 17→25, 28
*2 used per machine. Quantities listed are for 1.

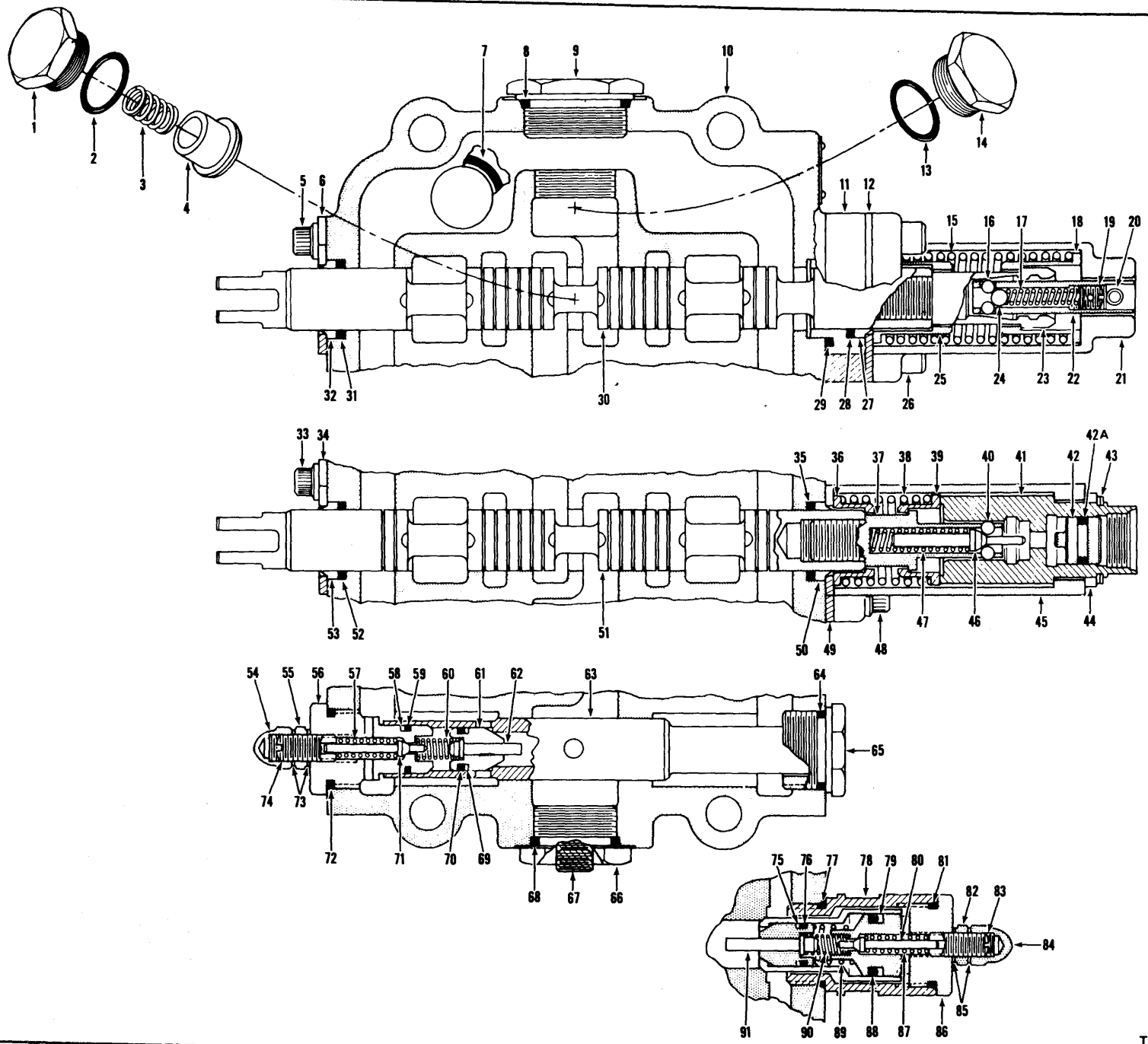
Valve Assembly Flow Divider



No.	Part No.	Qty.	Description
A	[2]3953111	1	Valve assy
1	6000689	1	Cap
2	1306142	1	Coupling
3	5K-207	1	Nipple
4	960133	1	Plug
5	91F-7	1	O-ring
6	58K-018	1	O-ring
7	73K-018	1	Ring back-up
8	659041	1	Ring retaining
9	949899	1	Piston
10	949898	1	Spring
11	§[3]----	—	Piston
12	5202527	1	Poppet
13	5202528	1	Spring

No.	Part No.	Qty.	Description
14	949905	1	Gasket
15	899079	1	Sleeve
16	886020	2	Gasket
17	885105	1	Cap
18	949903	1	Adjusting screw
19	949900	1	Nut
20	§[3]----	—	Housing
21	662770	1	Ring retaining
22	949894	1	Piston
23	949896	1	Spring
24	949895	1	Piston
25	58K-214	1	O-ring
26	949902	1	Plug

[2]Inc. ◆➔26
[3]See A


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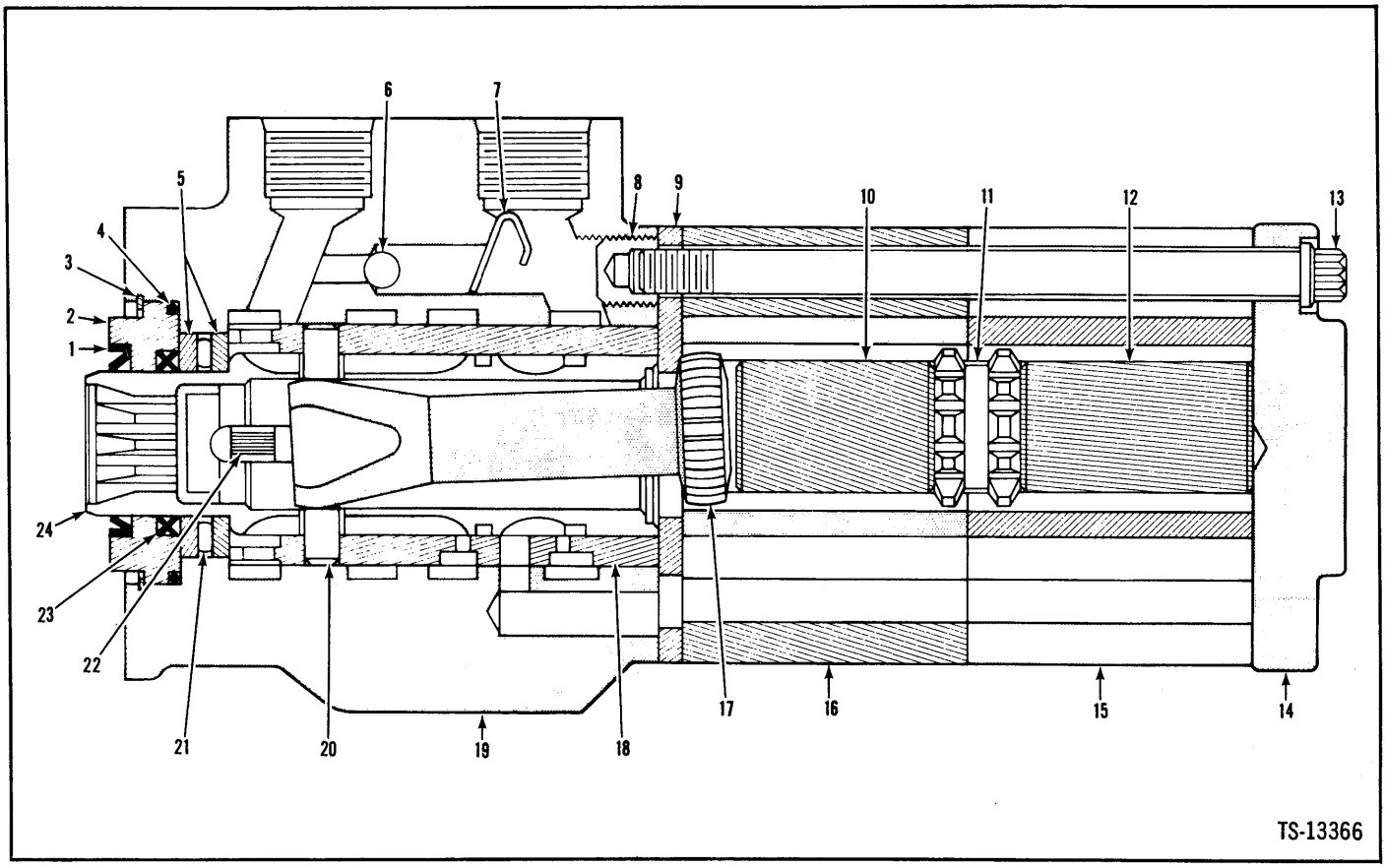
Valve Assembly – Main

MICHIGAN

No.	Part No.	Qty.	Description
A	[1]3980667	1	Valve assy
1	5208957	2	Plug
2	58K-214	2	O-ring
3	947045	2	Spring
4	947046	2	Poppet
5	71G-610	2	Screw
6	947044	1	Plate
7	25K-40108	1	O-ring
8	949948	1	O-ring
9	949945	1	Plug
10	§[2]———	–	Housing
11	949952	1	Spacer
12	947044	1	Plate
13	91F-10	1	O-ring
14	949947	1	Plug
15	949873	1	Spring
16	877420	3	Ball
17	949874	1	Spring
18	949871	1	Seat
19	949984	1	Setscrew
20	5201521	1	Pin
21	949872	1	Cover
22	949883	1	Pin
23	949875	1	Sleeve
24	949946	1	Ball
25	949871	1	Seat
26	11G-628	1	Screw
27	947048	1	Wiper
28	58K-214	1	O-ring
29	25K-40108	1	O-ring
30	§[2]———	–	Plunger
31	58K-214	1	O-ring
32	947048	1	Wiper
33	71G-610	2	Screw
34	947044	1	Plate
35	58K-214	1	O-ring
36	947098	1	Seat
37	949881	1	Pin
38	949882	1	Spring
39	947098	1	Seat
40	877420	3	Ball
41	949880	1	Sleeve
42	949963	1	Piston
42A	76K-113	1	O-ring
43	949950	1	Ring snap
44	949949	1	Spacer
45	949877	1	Cover
46	949878	1	Cam
47	949879	1	Spring
48	71G-616	2	Screw
49	947044	1	Plate
50	947048	1	Wiper
51	§[2]———	–	Plunger
52	58K-214	1	O-ring
53	947048	1	Wiper
54	47D-06	1	Nut
55	8D-06	1	Nut
56	949892	1	Cap
57	948825	1	Spring
58	948849	1	Ring back-up
59	76K-113	1	O-ring
60	948129	1	Spring
61	§[2]———	–	Seat relief
62	949893	1	Piston
63	§[2]———	–	Sleeve
64	58K-214	1	O-ring
65	5206975	1	Plug
66	949944	1	Plug
67	16F-04	1	Plug
68	91F-10	1	O-ring
69	949954	1	Ring back-up
70	949953	1	O-ring
71	949891	1	Poppet
72	76K-214	1	O-ring
73	948043	2	Washer
74	948044	1	Adjusting screw
75	949954	1	Ring back-up
76	949953	1	O-ring
77	91F-10	1	O-ring
78	949886	1	Housing
79	949956	1	Ring back-up
80	949891	1	Poppet
81	91F-10	1	O-ring
82	8D-06	1	Nut
83	948044	1	Adjusting screw
84	47D-06	1	Nut
85	948043	2	Washer
86	949890	1	Cap
87	948825	1	Spring
88	949955	1	O-ring
89	949889	1	Spring
90	949887	1	Spring
91	949888	1	Piston

[1]Inc. 1→91
[2]See A

Valve Assembly, Steering

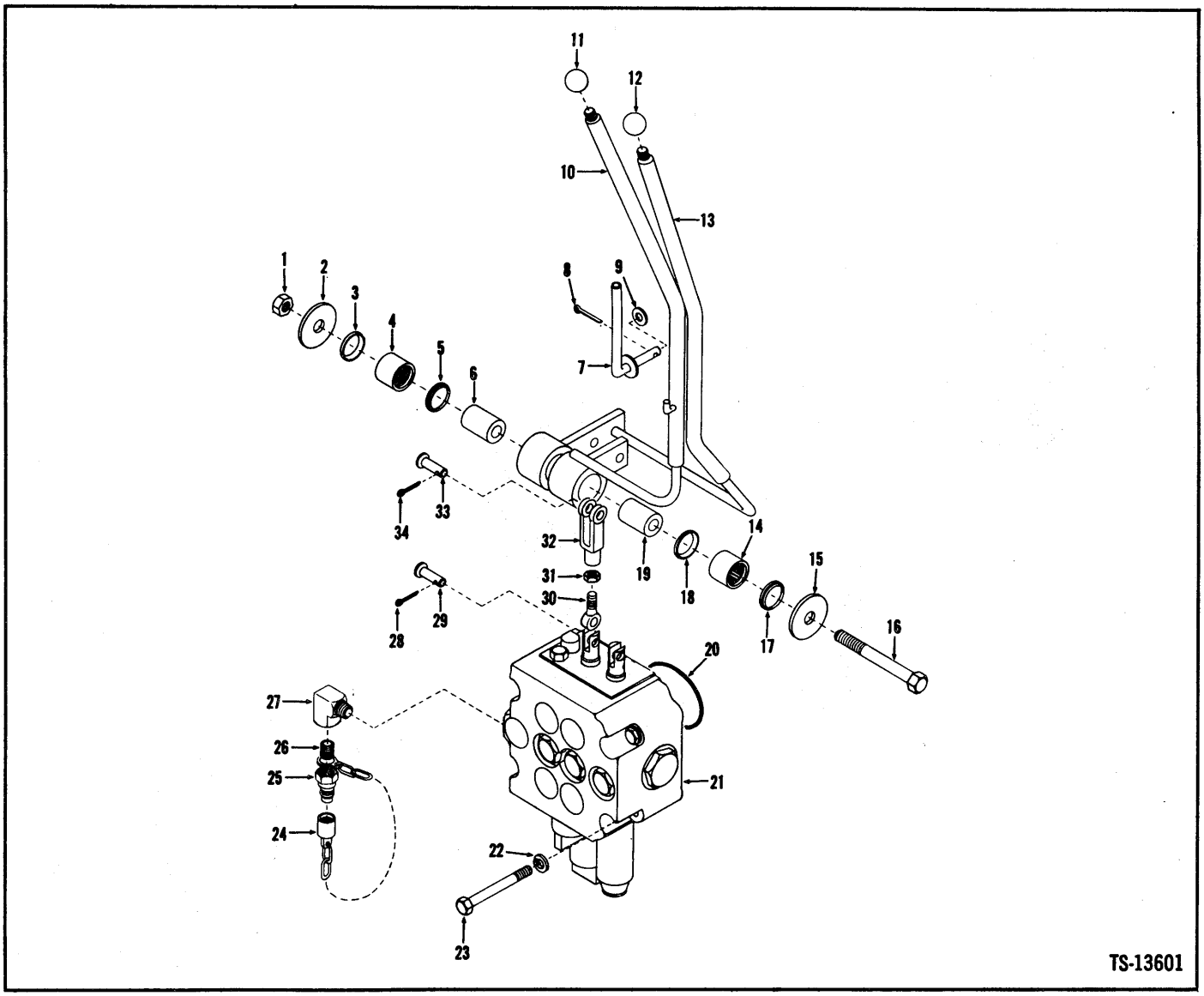


No.	Part No.	Qty.	Description
A	[1]2504089	1	Valve assy
1	6517944	1	Seal
2	994005	1	Bushing
3	960189	1	Ring
4	58K-225	1	Seal
5	994025	2	Bearing race
6	10J-08	1	Ball
7	994027	1	Spring
8	960191	1	Insert
9	994006	1	Plate
10	1567077	1	Spacer
11	1567079	1	Spline
12	5200205	1	Spacer
13	94G-564	7	Bolt
14	994003	1	Cap
15	949958	1	Gear set
16	949958	1	Gear set
17	1567085	1	Shaft
18	§[2]———	—	Sleeve
19	§[2]———	—	Housing
20	896544	1	Pin
21	3292657	1	Bearing
22	896497	6	Spring
23	6517945	1	Seal
24	§[2]———	—	Spool

[1]Inc. 1→24
[2]See A

Valve Control Levers & Linkage (Two Spool)

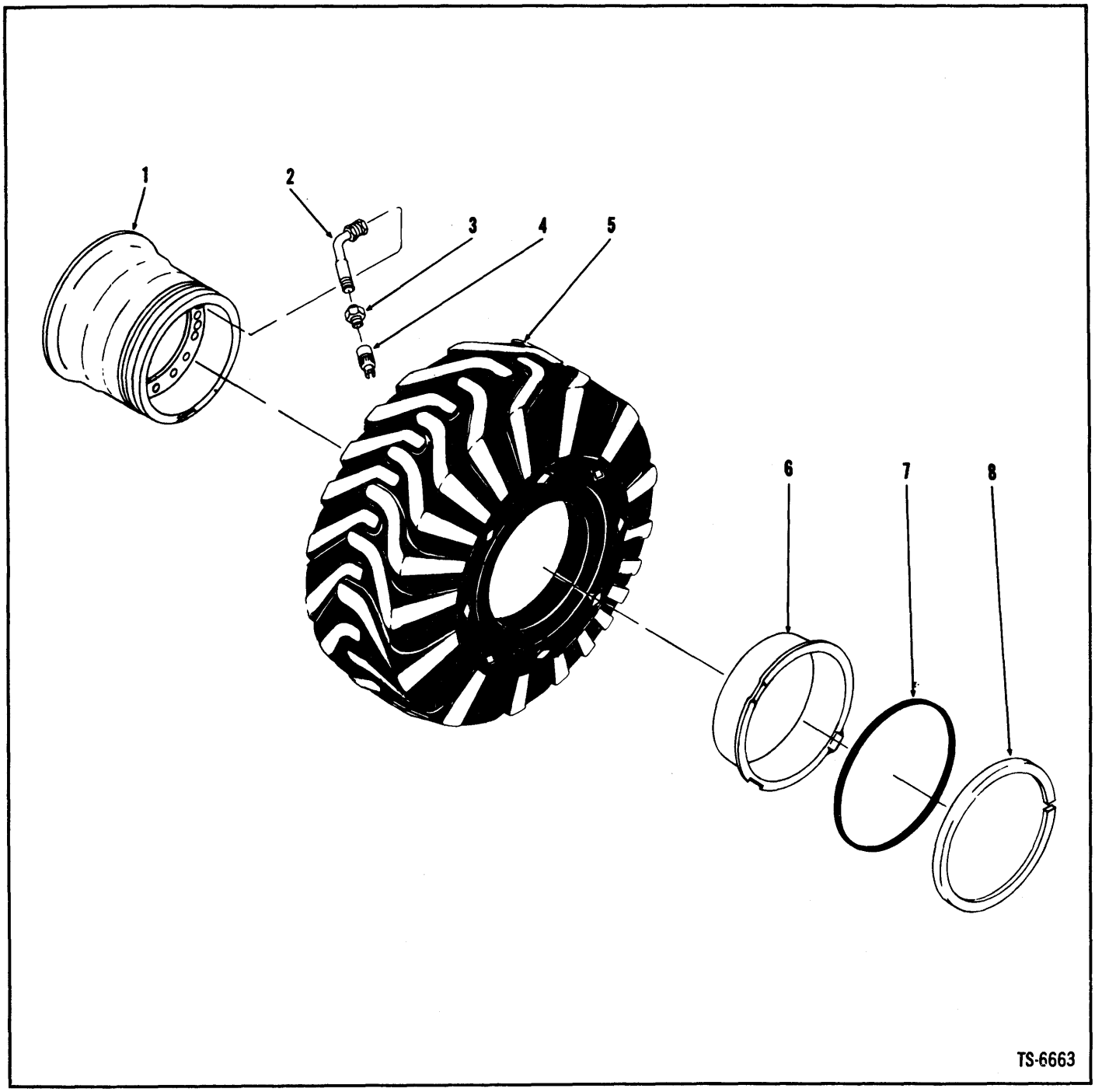
MICHIGAN



No.	Part No.	Qty.	Description
1	18D-08	1	Nut
2	569909	1	Washer
3	1522535	1	Ring
4	675227	1	Bearing
5	1522535	1	Ring
6	1503251	1	Sleeve
7	3980708	1	Lever stop assy
8	1F-516	1	Pin cotter
9	25E-21	1	Washer
10	2506208	1	Lever
11	509772	1	Knob
12	509772	1	Knob
13	2506209	1	Lever
14	675227	1	Bearing
15	569909	1	Washer
16	24C-872	1	Bolt
17	1522535	1	Ring

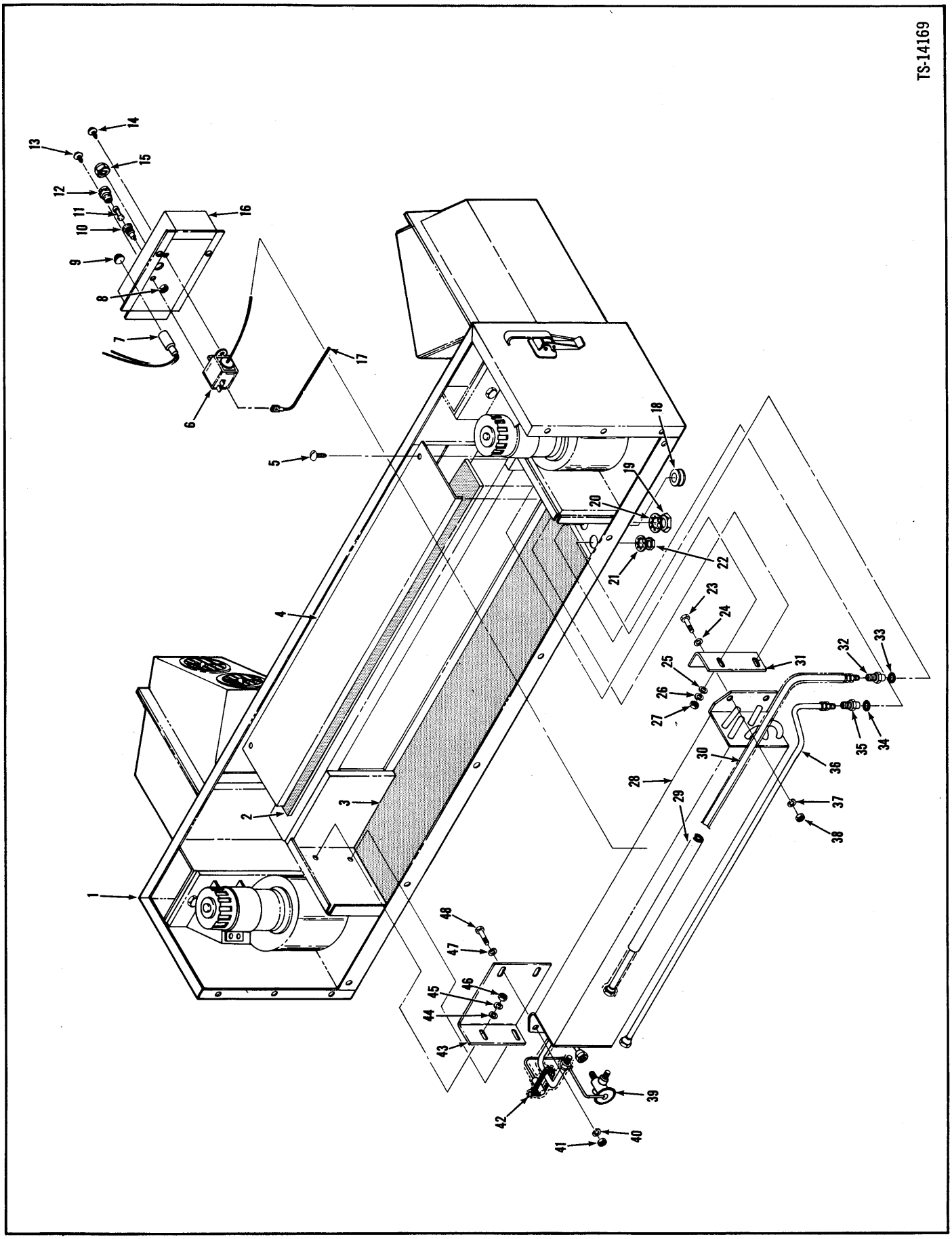
No.	Part No.	Qty.	Description
18	1522535	1	Ring
19	1503251	1	Sleeve
20	25K-40108	1	O-ring
21	[1]3980667	1	Valve
22	4E-08	3	Lockwasher
23	24C-856	3	Bolt
24	6000689	1	Cap
25	1306142	1	Coupling
26	5K-207	1	Nipple
27	29F-1	1	Elbow
28	1F-310	2	Pin cotter
29	4F-06106	2	Pin
30	2500416	2	Rod end
31	8D-06	2	Nut
32	2J-6208	2	Clevis
33	4F-06106	2	Pin
34	1F-310	2	Pin cotter

[1]See Index



No.	13.0 x 24 & 14.0 x 24	15.5 x 25	17.5 x 25	Description	Qty.
1	1540366	1519829	1508626	Wheel	4
2	[1]517963	[1]509445	[1]509445	Stem	4
3	551684	551684	551684	Adapter	4
4	109247	551685	551685	Cap	4
5	————	————	————	§Tire	4
6	941326	589401	589401	Flange	4
7	941329	112462	112462	O-ring	4
8	941325	112460	112460	Lockring	4

[1]Inc. 3, 4

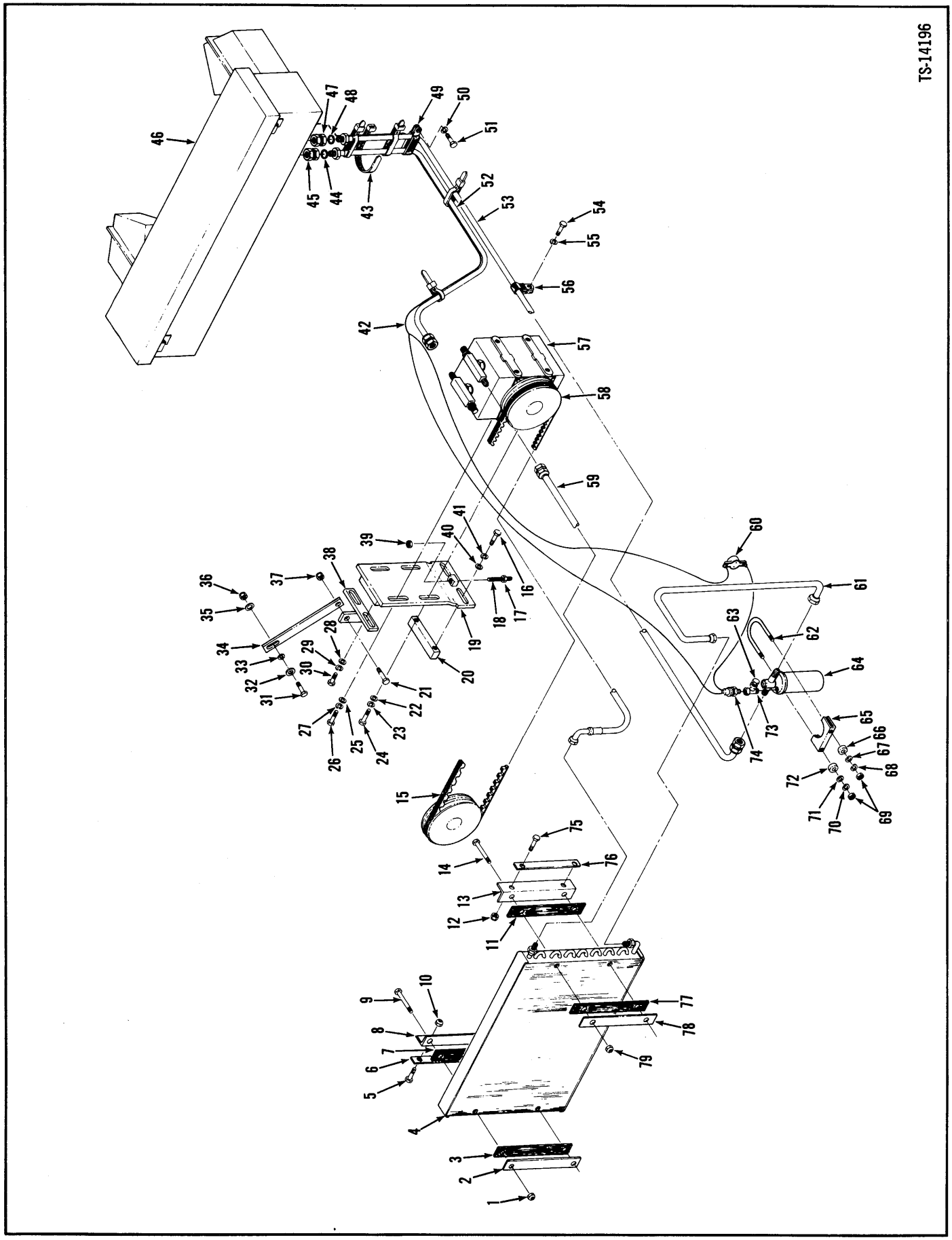

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Air Conditioner Assembly

MICHIGAN

No.	Part No.	Qty.	Description
1	[2]————	1	Heater Assy
2	2511310	1	Insulation
3	2511311	1	Insulation
4	2511318	1	Cover
5	2511573	3	Screw
6	949620	1	Thermostat
7	[3]2511172	1	Light
8	§[4]————	1	Nut
9	§[5]————	1	Lens
10	[6]2511248	1	Fuse holder
11	[7]2511491	1	Fuse
12	§[4]————	1	Cap
13	85G-808	1	Screw
14	85G-808	1	Screw
15	949639	1	Knob
16	[2]————	1	Control box
17	2511492	1	Wire
18	949638	1	Grommet
19	731495	1	Nut
20	9E-16	1	Lockwasher
21	960668	1	Lockwasher
22	1310411	1	Nut
23	24C-410	4	Bolt
24	25E-14	2	Washer
25	25E-14	2	Washer
26	23E-04	2	Lockwasher
27	61D-04	2	Nut
28	949601	1	Core
29	[8]949608	1	Tape
30	[9]2511314	1	Tube assy
31	2511319	1	Angle RH
32	960667	1	Coupling half
33	960666	1	O-ring
34	949700	1	O-ring
35	960673	1	Coupling half
36	[10]2511313	1	Tube assy
37	23E-04	2	Lockwasher
38	61D-04	2	Nut
39	949600	1	Valve expansion
40	23E-04	2	Lockwasher
41	61D-04	2	Nut
42	949603	1	Clamp
43	2511320	1	Angle LH
44	25E-14	2	Washer
45	23E-04	2	Lockwasher
46	61D-04	2	Nut
47	25E-14	2	Washer
48	24C-410	4	Bolt

[2]See 2511400 Heater Kit
[3]Part of 2511173 Harness
[4]See 10
[5]See 7
[6]Inc. 8, 12
[7]6 Amp.
[8]5 ft. (1,53 m)
[9]Inc. 32, 33
[10]Inc. 34, 35


TS-14196

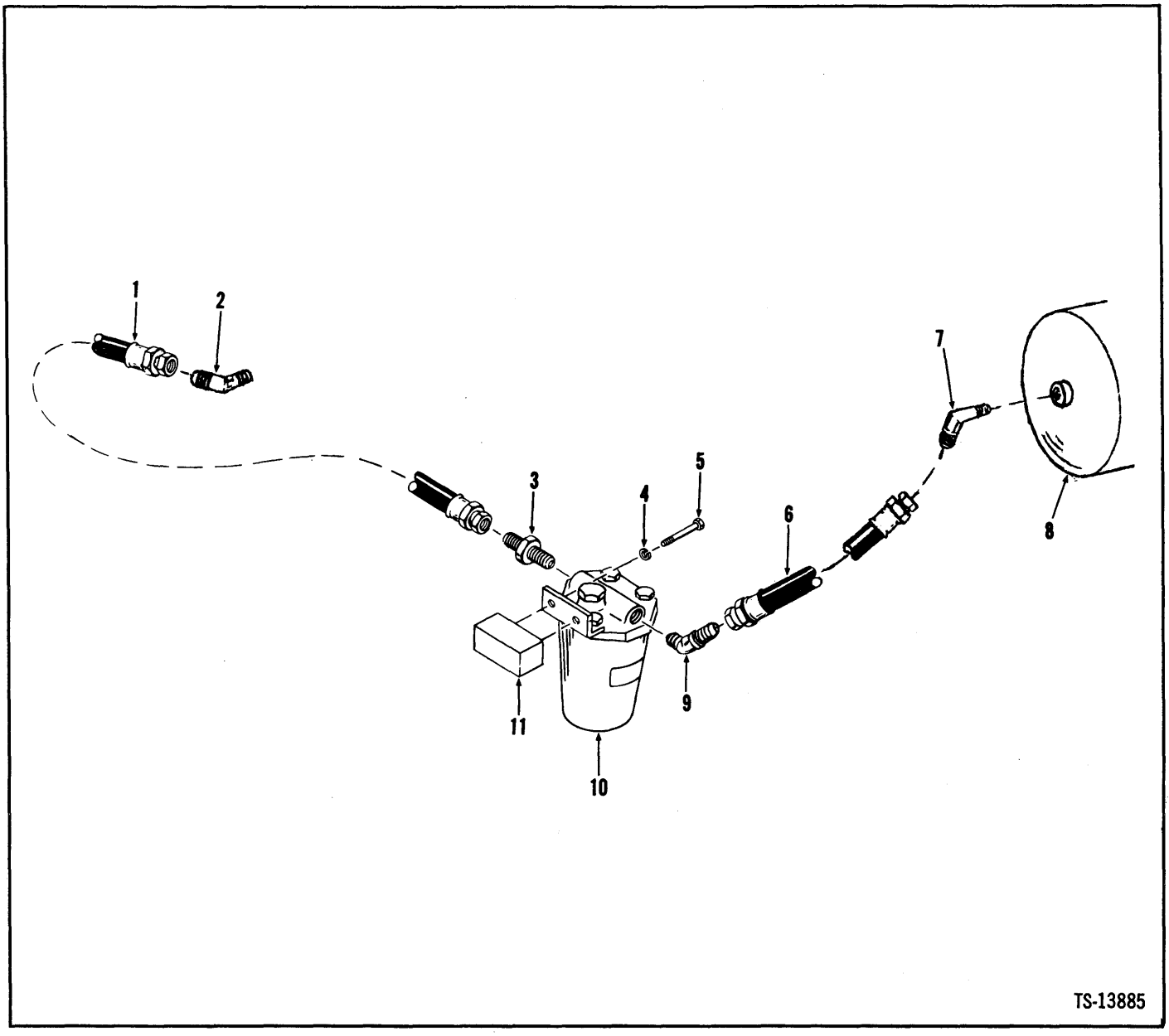
Air Conditioner Installation

MICHIGAN

No.	Part No.	Qty.	Description
A	[2]2511685	1	Air cond kit
1	18D-04	2	Nut
2	2511183	1	Flat
3	2511185	1	Strip
4	2511177	1	Condenser core
5	24C-416	2	Bolt
6	2511184	1	Strap
7	2511185	1	Strip
8	2511179	1	Bracket
9	24C-436	2	Bolt
10	18D-04	2	Nut
11	2511185	1	Strip
12	18D-04	2	Nut
13	2511179	1	Bracket
14	24C-436	2	Bolt
15	567314	1	Belt
16	24C-824	2	Bolt
17	§[4]----	1	Nut
18	[3]2511178	1	Rod Assy
19	2510655	1	Bracket
20	2510676	1	Mount
21	24C-616	1	Bolt
22	25E-17	2	Washer
23	4E-06	2	Lockwasher
24	23C-620	2	Bolt
25	25E-17	2	Washer
26	23C-620	2	Bolt
27	4E-06	2	Lockwasher
28	25E-17	2	Washer
29	4E-06	2	Lockwasher
30	24C-614	2	Bolt
31	24C-620	1	Bolt
32	25E-17	1	Washer
33	616783	1	Washer
34	2510652	1	Bracket
35	672196	1	Washer
36	18D-06	1	Nut
37	18D-06	1	Nut
38	2510653	1	Bracket
39	8D-06	1	Nut
40	25E-21	1	Washer
41	4E-08	1	Lockwasher
42	2511173	1	Harness
43	1539058	5	Cable tie
44	2504912	1	O-ring
45	2504910	1	Coupling half
46	[5]----	1	Heater assy
47	2504911	1	Coupling half
48	949700	1	O-ring
49	31H-46	1	Clip
50	4E-06	1	Lockwasher
51	24C-612	1	Bolt
52	[6]2511396	1	Hose
53	[7]2511397	1	Hose
54	24C-612	1	Bolt
55	4E-06	1	Lockwasher
56	30H-46	1	Clip
57	1519401	1	Compressor
58	1515383	1	Clutch
59	2511395	1	Hose
60	949605	1	Thermostat switch
61	2510637	1	Tube
62	§[8]----	1	Clamp
63	960304	1	Fuse plug
64	[9]2511176	1	Dryer
65	[10]359756	1	Clamp
66	2511182	1	Spacer
67	§[8]----	1	Washer
68	§[8]----	1	Lockwasher
69	§[8]----	2	Nut
70	§[8]----	1	Lockwasher
71	§[8]----	1	Washer
72	2511182	1	Spacer
73	2517078	1	Tee
74	949623	1	Switch pressure
75	24C-416	2	Bolt
76	2511184	1	Strap
77	2511185	1	Strip
78	2511183	1	Flat
79	18D-04	2	Nut

[2]Inc. 1➔45, 47➔79 & Page Z3
[3]Inc. 18
[4]See 17
[5]See 2511400 Heater Kit
[6]Inc. 44, 45
[7]Inc. 47, 48
[8]See 65
[9]Inc. 63
[10]Inc. 62, 67➔71

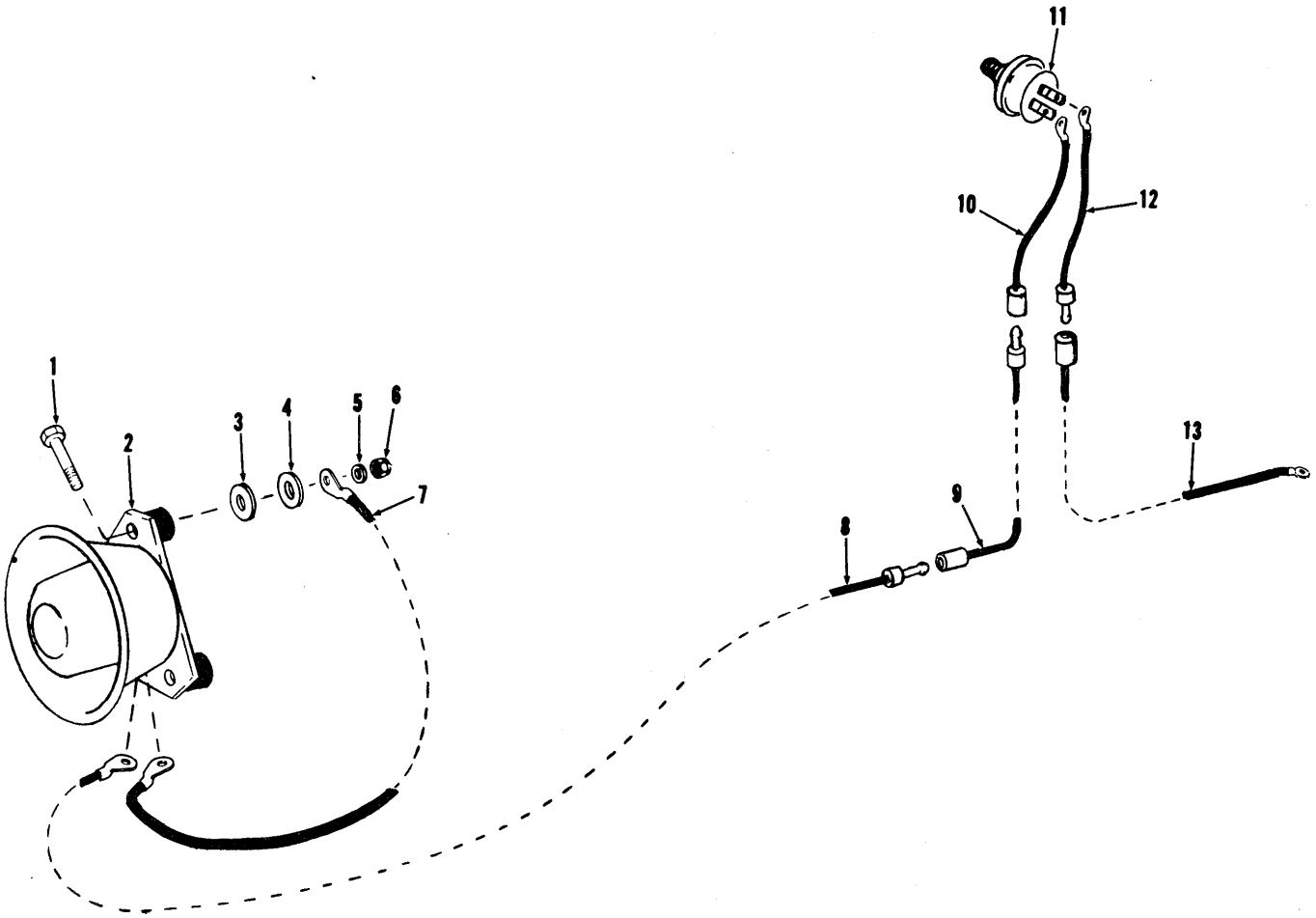
Alcohol Injector



No.	Part No.	Qty.	Description
1	2504481	1	Hose
2	662462	1	Elbow
3	89F-7	1	Adapter
4	4E-06	2	Lockwasher
5	24C-612	2	Bolt
6	2504481	1	Hose
7	83F-7	1	Elbow
8	[1]———	1	Air tank
9	84F-7	1	Elbow
10	[2]1545296	1	Alcohol injector
10A	†993212	1	Seal body
10B	†993139	1	Seal plug
11	2503133	1	Tapped block

[1]See Index
[2]Inc. 10A, 10B

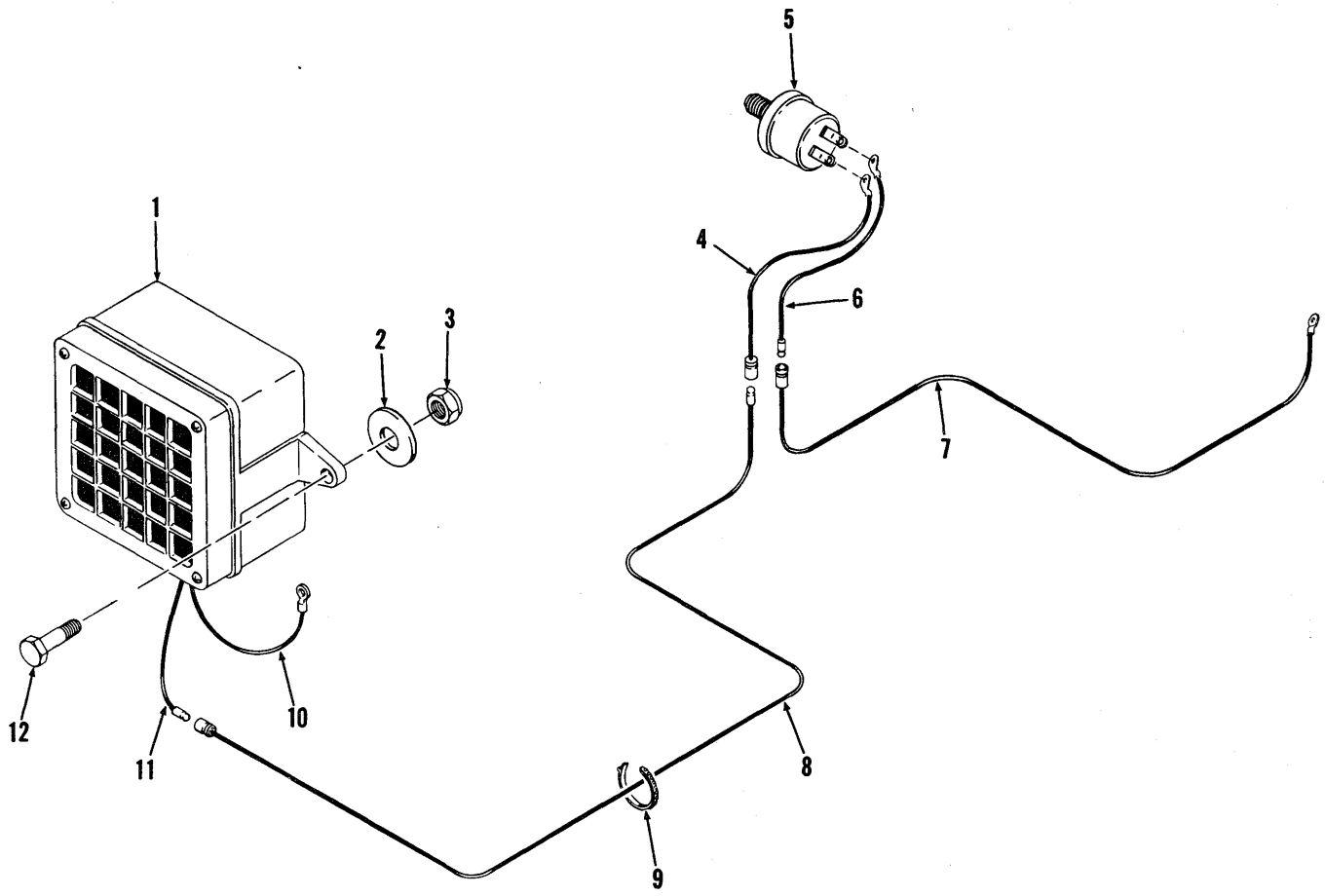
Back-Up Alarm Kit



TS-14510

No.	Part No.	Qty.	Description
A	[2]2512428	1	Back-up alarm kit
1	24C-556	3	Bolt
2	[3]1542966	1	Back-up alarm
3	1508152	3	Washer
4	1508152	3	Washer
5	25E-15	3	Washer
6	18D-05	3	Nut
7	1543539	1	Wire
8	2512425	1	Wire
9	2512427	1	Wire
10	2516227	1	Wire
11	2516008	1	Switch
11A	†614142	2	Sleeve
11B	†2516092	2	Terminal
12	2516226	1	Wire
13	2512460	1	Wire
14	†1539058	8	Cable tie

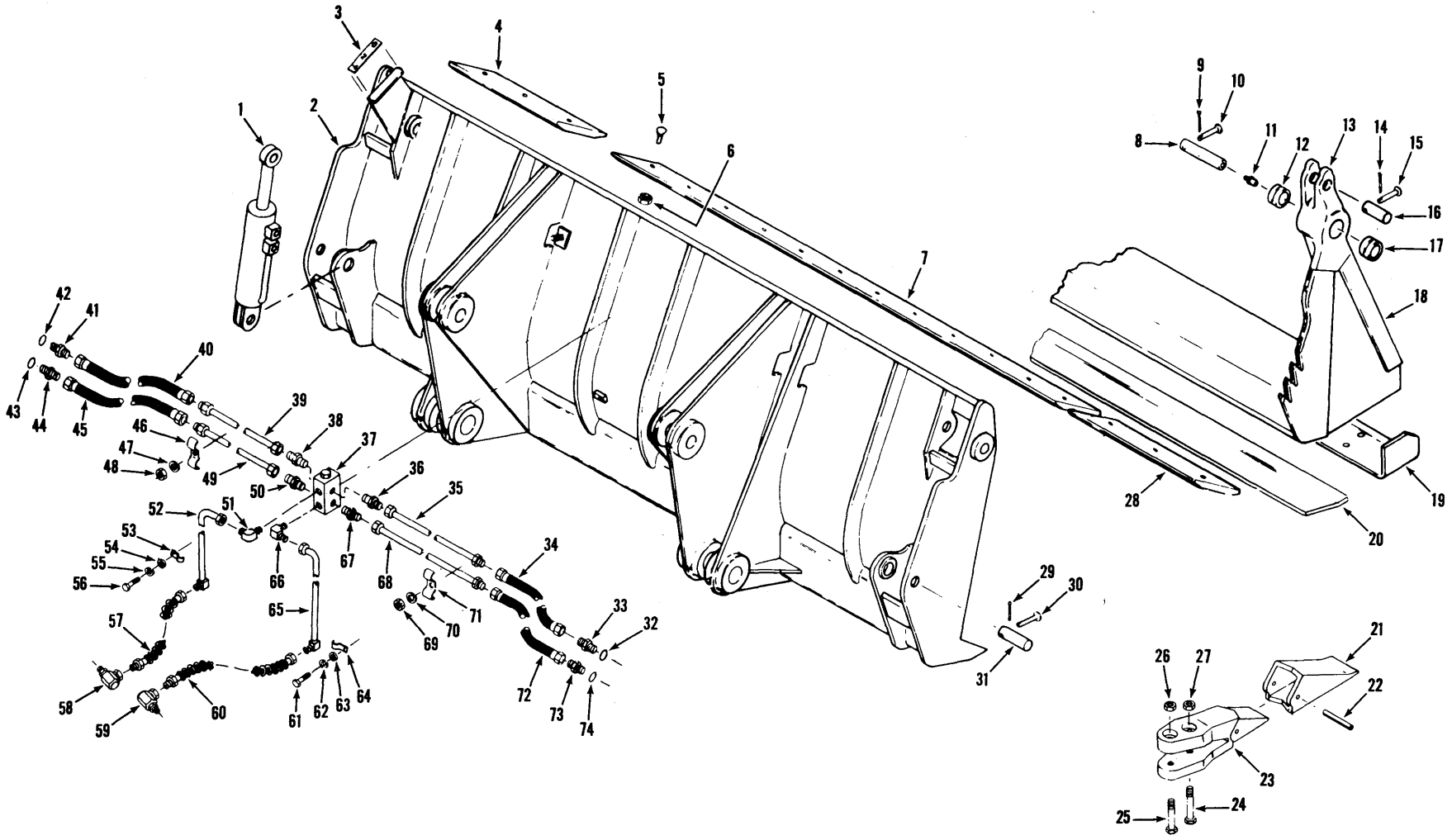
[2]Inc. 1 → 11, 12 → 14
[3]Inc. 1, 5, 6,



TS-14934

No.	Part No.	Qty.	Description
A	[2]2519354	1	Back-up alarm kit
1	2519313	1	Back-up alarm
2	1526286	4	Washer
3	60D-4	2	Nut
4	2516227	1	Wire
5	2516008	1	Switch
6	2516226	1	Wire
7	2512460	1	Wire
8	2512427	1	Wire
9	1539058	8	Cable tie
10	2519546	1	Wire
11	2519545	1	Wire
12	18C-428	2	Bolt

[2]Inc. 1 → 12


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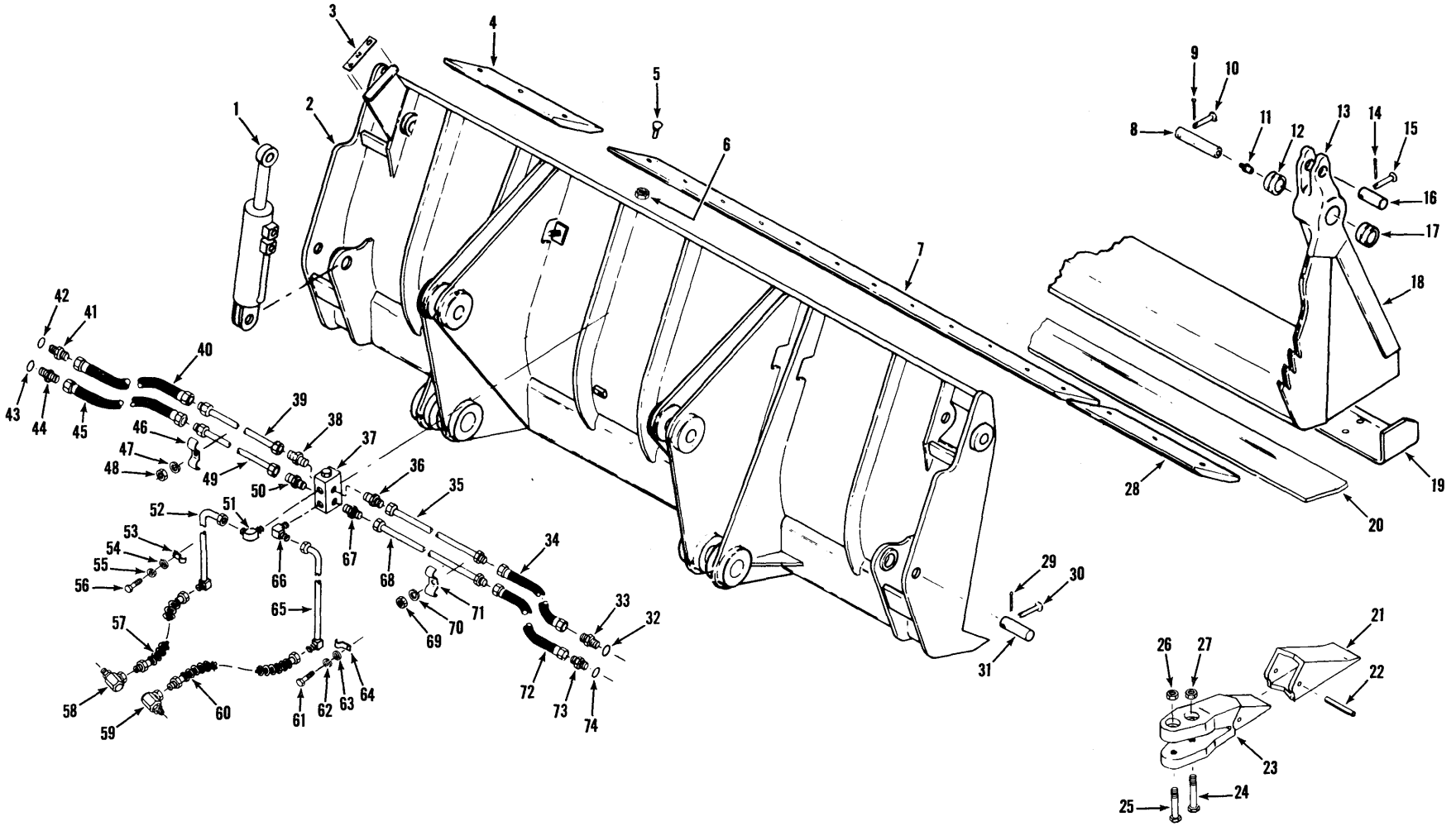
TS-13372

Bucket Attachment, Drott (4 in 1)

MICHIGAN

No.	Part No.	Qty.	Description
A	[1]2511041	1	Bucket attachment
B	[2]2511013	1	Bucket assy
C	[3]1533389	9	Bucket tooth kit
1	[4]————	2	Cylinder assembly
2	[5]2504104	1	Bucket back assy
3	2504098	1	Decal clam opening
4	1533344	1	Corner bit
5	[6]513603	18	Bolt assy
6	61D-12	18	Nut
7	1533367	1	Cutting edge back
8	3677351	2	Pin
9	1F-416	2	Pin cotter
10	1534323	2	Pin
11	10H-25	2	Fitting grease
12	1533356	2	Bushing
13	1533378	2	Hinge ear
14	1F-416	2	Pin cotter
15	1534323	2	Pin
16	1533352	2	Pin
17	1533356	2	Bushing
18	[7]2504102	1	Bucket front assy
19	1533366	1	Cutting edge F
20	1533346	1	Cutting edge R
21	1533336	9	Tip
22	730131	9	Pin
23	[8]1533335	9	Bucket tooth assy
24	1C-1048	9	Bolt
25	1C-1052	9	Bolt
26	61D-10	9	Nut
27	61D-10	9	Nut
28	1533344	1	Corner bit
29	1F-416	2	Pin cotter
30	1534322	2	Pin
31	1533343	2	Pin
32	91F-6	1	O-ring
33	[9]15K-6	1	Connector
34	1533555	1	Hose
35	1533368	1	Tube
36	89F-7	1	Connector
37	1533373	1	Relief valve
38	89F-7	1	Connector
39	1533368	1	Tube
40	1533555	1	Hose
41	[10]15K-6	1	Connector
42	91F-6	1	O-ring
43	91F-6	1	O-ring
44	[11]15K-6	1	Connector
45	1533555	1	Hose
46	1533350	1	Clamp
47	4E-06	1	Lockwasher
48	61D-06	1	Nut
49	1533368	1	Tube
50	89F-7	1	Connector
51	730149	1	Elbow
52	2504100	1	Tube
53	1533347	1	Clamp
54	25E-16	1	Washer
55	4E-06	1	Lockwasher
56	23C-616	1	Bolt
57	569086	1	Hose
58	1509752	1	Swivel joint
59	1509752	1	Swivel joint
60	569086	1	Hose
61	23C-616	1	Bolt
62	4E-06	1	Lockwasher
63	25E-16	1	Washer
64	1533347	1	Clamp
65	2504099	1	Tube
66	730149	1	Elbow
67	89F-7	1	Connector
68	1533368	1	Tube
69	61D-06	1	Nut
70	4E-06	1	Lockwasher
71	1533350	1	Clamp
72	1533555	1	Hose
73	[12]15K-6	1	Connector
74	91F-6	1	O-ring
75	†1533342	2	Decal clean
76	†2504101	1	Decal tilt cylinder
77	†2503927	1	Indicator assy
78	†2503926	1	Cam lever

[1]Inc. B, C, 1➔78
[2]Inc. C, 1➔56, 61➔76
[3]Inc. 21➔27
[4]See Index
[5]Inc. 4➔7, 28
[6]Inc. 6
[7]Inc. 12, 13, 17, 19, 20
[8]For replacement use 961917 Adapter plus 1550028 Point, 1504272 Pin, & 1504271 Lock.
[9]Inc. 32
[10]Inc. 42
[11]Inc. 43
[12]Inc. 74


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TS-13372

Bucket Attachment, Drott (4 in 1)

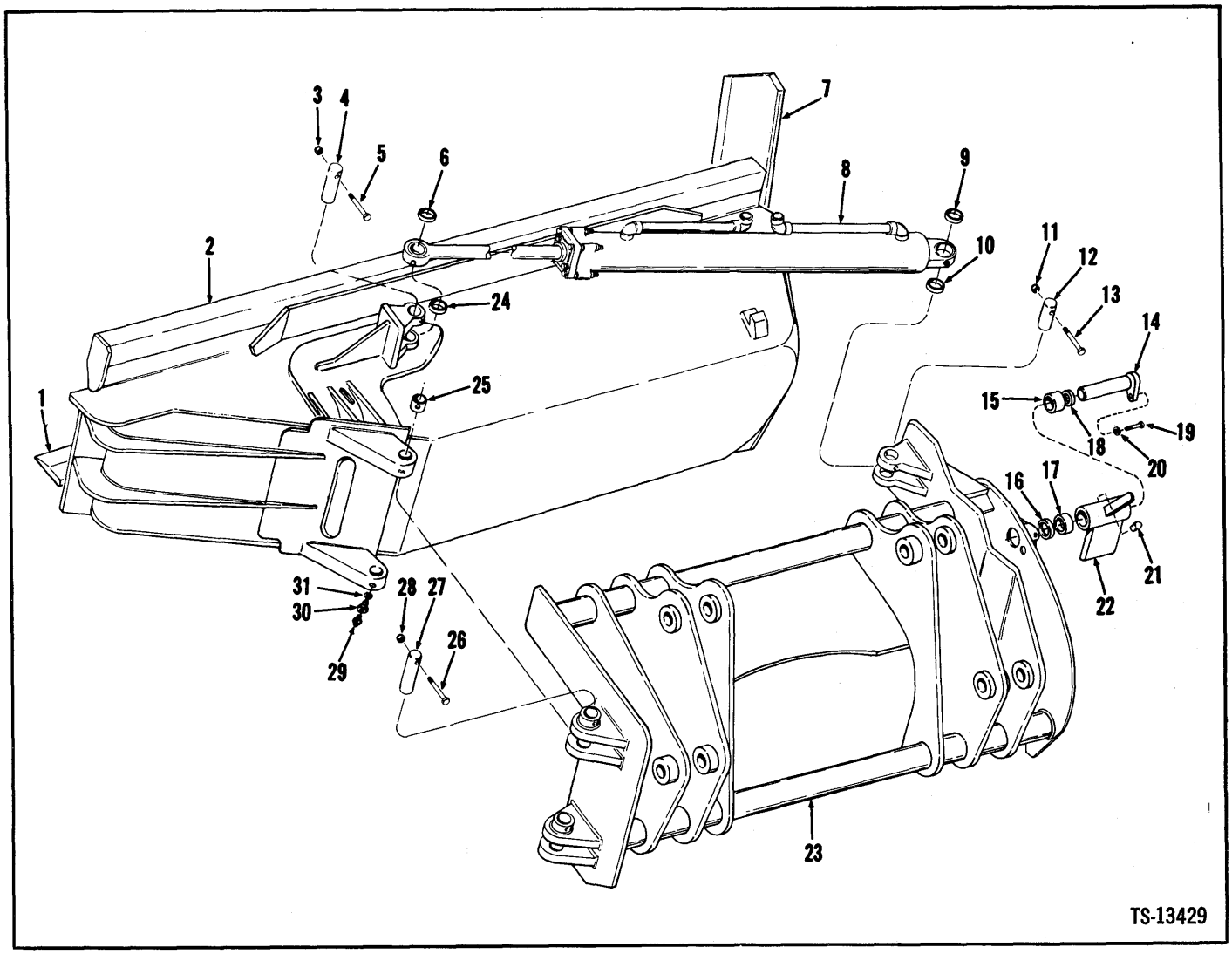
MICHIGAN

No.	Part No.	Qty.	Description
A	[1]2520887	1	Bucket attachment
B	[2]2520885	1	Bucket assy
C	[3]1533389	9	Bucket tooth kit
1	[4]————	2	Cylinder assembly
2	[5]2521725	1	Bucket back assy
3	2504098	1	Decal clam opening
4	1533344	1	Corner bit
5	[6]513603	18	Bolt assy
6	61D-12	18	Nut
7	1533367	1	Cutting edge back
8	3677351	2	Pin
9	1F-416	2	Pin cotter
10	1534323	2	Pin
11	10H-25	2	Fitting grease
12	1533356	2	Bushing
13	1533378	2	Hinge ear
14	1F-416	2	Pin cotter
15	1534323	2	Pin
16	1533352	2	Pin
17	1533356	2	Bushing
18	[7]2504102	1	Bucket front assy
19	1533366	1	Cutting edge F
20	1533346	1	Cutting edge R
21	1533336	9	Tip
22	730131	9	Pin
23	[8]1533335	9	Bucket tooth assy
24	1C-1048	9	Bolt
25	1C-1052	9	Bolt
26	61D-10	9	Nut
27	61D-10	9	Nut
28	1533344	1	Corner bit
29	1F-416	2	Pin cotter
30	1534322	2	Pin
31	1533343	2	Pin
32	91F-6	1	O-ring
33	[9]15K-6	1	Connector
34	1533555	1	Hose
35	1533368	1	Tube
36	89F-7	1	Connector
37	1533373	1	Relief valve
38	89F-7	1	Connector

No.	Part No.	Qty.	Description
39	1533368	1	Tube
40	1533555	1	Hose
41	[10]15K-6	1	Connector
42	91F-6	1	O-ring
43	91F-6	1	O-ring
44	[11]15K-6	1	Connector
45	1533555	1	Hose
46	1533350	1	Clamp
47	4E-06	1	Lockwasher
48	61D-06	1	Nut
49	1533368	1	Tube
50	89F-7	1	Connector
51	730149	1	Elbow
52	2504100	1	Tube
53	1533347	1	Clamp
54	25E-16	1	Washer
55	4E-06	1	Lockwasher
56	23C-616	1	Bolt
57	569086	1	Hose
58	1509752	1	Swivel joint
59	1509752	1	Swivel joint
60	569086	1	Hose
61	23C-616	1	Bolt
62	4E-06	1	Lockwasher
63	25E-16	1	Washer
64	1533347	1	Clamp
65	2504099	1	Tube
66	730149	1	Elbow
67	89F-7	1	Connector
68	1533368	1	Tube
69	61D-06	1	Nut
70	4E-06	1	Lockwasher
71	1533350	1	Clamp
72	1533555	1	Hose
73	[12]15K-6	1	Connector
74	91F-6	1	O-ring
75	†1533342	2	Decal clean
76	†2504101	1	Decal tilt cylinder
77	†2503927	1	Indicator assy
78	†2503926	1	Cam lever

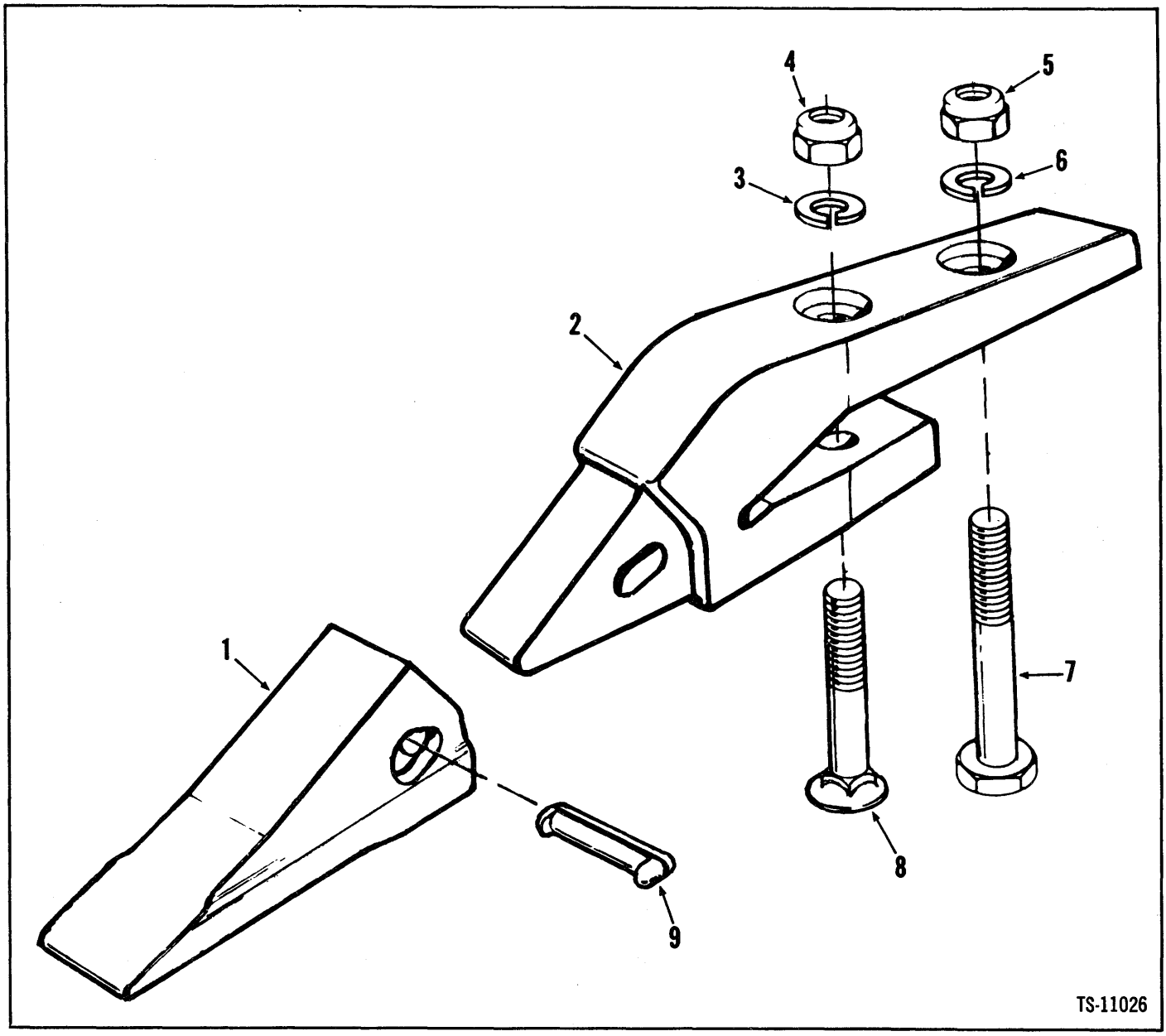
[1]Inc. 1 → 78
[2]Inc. 1 → 56, 61 → 76
[3]Inc. 21 → 27
[4]See Index
[5]Inc. 4 → 7, 28
[6]Inc. 6
[7]Inc. 12, 13, 17, 19, 20
[8]For replacement use 961917 Adapter plus 1550028 Point, 1504272 Pin, & 1504271 Lock.
[9]Inc. 32
[10]Inc. 42
[11]Inc. 43
[12]Inc. 74

Bucket, Carrier & Cylinder Assembly – Side Dump



No.	Part No.	Qty.	Description
A	[1]2510561	1	Bucket carrier & cyl
1	2503135	1	Cutting edge
2	[2]2503215	1	Bucket assy
3	18D-06	1	Bolt
4	588823	1	Pin
5	24C-660	1	Bolt
6	568303	1	Sleeve
7	2503142	1	Cutting edge
8	[3]----	1	Cylinder assembly
9	568303	1	Sleeve
10	568303	1	Sleeve
11	18D-06	1	Nut
12	588823	1	Pin
13	24C-660	1	Bolt
14	1523655	1	Pin
15	553085	1	Bushing
16	532888	1	Seal
17	553085	1	Bushing
18	532888	1	Seal
19	24C-612	1	Bolt
20	4E-06	1	Lockwasher
21	1523632	1	Cup
22	[4]2510545	1	Pendulum assy
23	2510558	1	Carrier assy
24	568303	1	Sleeve
25	532369	2	Bushing
26	24C-660	2	Bolt
27	519268	2	Pin
28	18D-06	2	Nut
29	10H-35	2	Fitting grease
30	532118	2	Bolt
31	7E-08	2	Lockwasher
32	†2504366	1	Bar

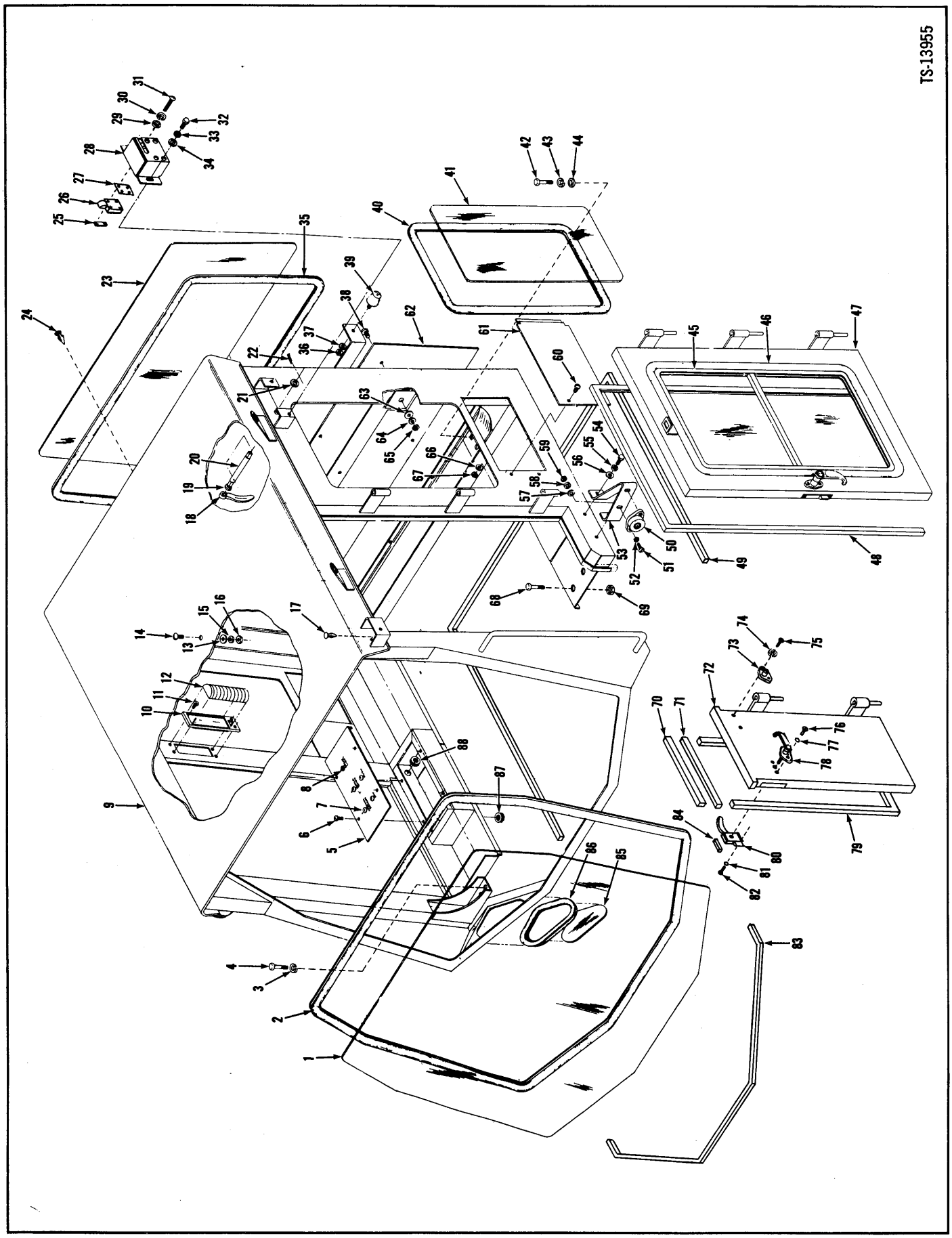
[1]Inc. 1➔32
[2]Inc. 1, 7, 25, 30, 31
[3]See Index
[4]Inc. 15➔18, 21



No.	Part No.	Qty.	Description
A	[1]2511481	—	Tooth assy
1	2511478	1	Tip
2	2511476	1	Shank
3	4E-10	1	Lockwasher
4	62D-10	1	Nut
5	62D-10	1	Nut
6	4E-10	1	Lockwasher
7	18C-1040	1	Bolt
8	[2]562742	1	Bolt assy
9	1572890	1	Pin

[1]Inc. 1, 2, 9
[2]Inc. 4

Note: Number of teeth per bucket can vary. Therefore quantities listed are for one tooth.


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Cab Assembly

MICHIGAN

No.	Part No.	Qty.	Description
A	[2]2504141	1	Cab assy
1	[3]———	1	Glass pattern
2	[4]949721	1	Moulding
3	23E-08	4	Lockwasher
3A	†635682	4	Washer
4	23C-824	4	Bolt
5	2509843	1	Panel assy
6	87G-1010	4	Screw
7	743200	4	Plug
8	[5]1546280	1	Circuit breaker
9	[6]———	1	Cab
10	[7]2509846	1	Dome light
10A	†960855	1	Bulb
10B	†[19]3918153	1	Dome light
10C	†[19]3918154	1	Bulb
11	2502439	4	Screw
12	§[8]———	1	Lens
13	25E-17	1	Washer
14	89G-612	1	Screw
15	23E-06	1	Lockwasher
16	61D-06	1	Nut
17	2509824	2	Plug
18	2510238	2	Handle
19	25E-17	2	Washer
20	2509951	2	Shaft
21	25E-22	2	Washer
22	1F-312	2	Pin cotter
23	2509829	1	Glass back
24	653903	1	Plug
25	2510239	4	Nut
26	2510290	1	Latch LH
26A	2510291	1	Latch RH
27	2504601	2	Shim
28	2510281	1	Panel LH
28A	2510277	1	Panel RH
29	25E-10	8	Washer
30	17E-10	8	Lockwasher
31	86G-1008	8	Screw
32	23C-514	4	Bolt
33	23E-05	4	Lockwasher
34	25E-15	4	Washer
35	[9]949721	1	Moulding
36	64D-05	2	Nut
37	23E-05	2	Lockwasher
38	89G-410	8	Screw
39	2510132	2	Bumper
40	[10]949721	2	Moulding
41	2509828	2	Glass side
42	23C-1248	4	Bolt
43	23E-12	4	Lockwasher
44	25E-27	4	Washer
45	2509755	2	Window assembly

Note: Length of mouldings, weatherstrips and gaskets are listed for each piece.

[2]Inc. 1→90 Page Z17, Z18, Z43

[3]See 89

[4]12 ft. (3,66 m)

[5]75 Amp.

[6]See A

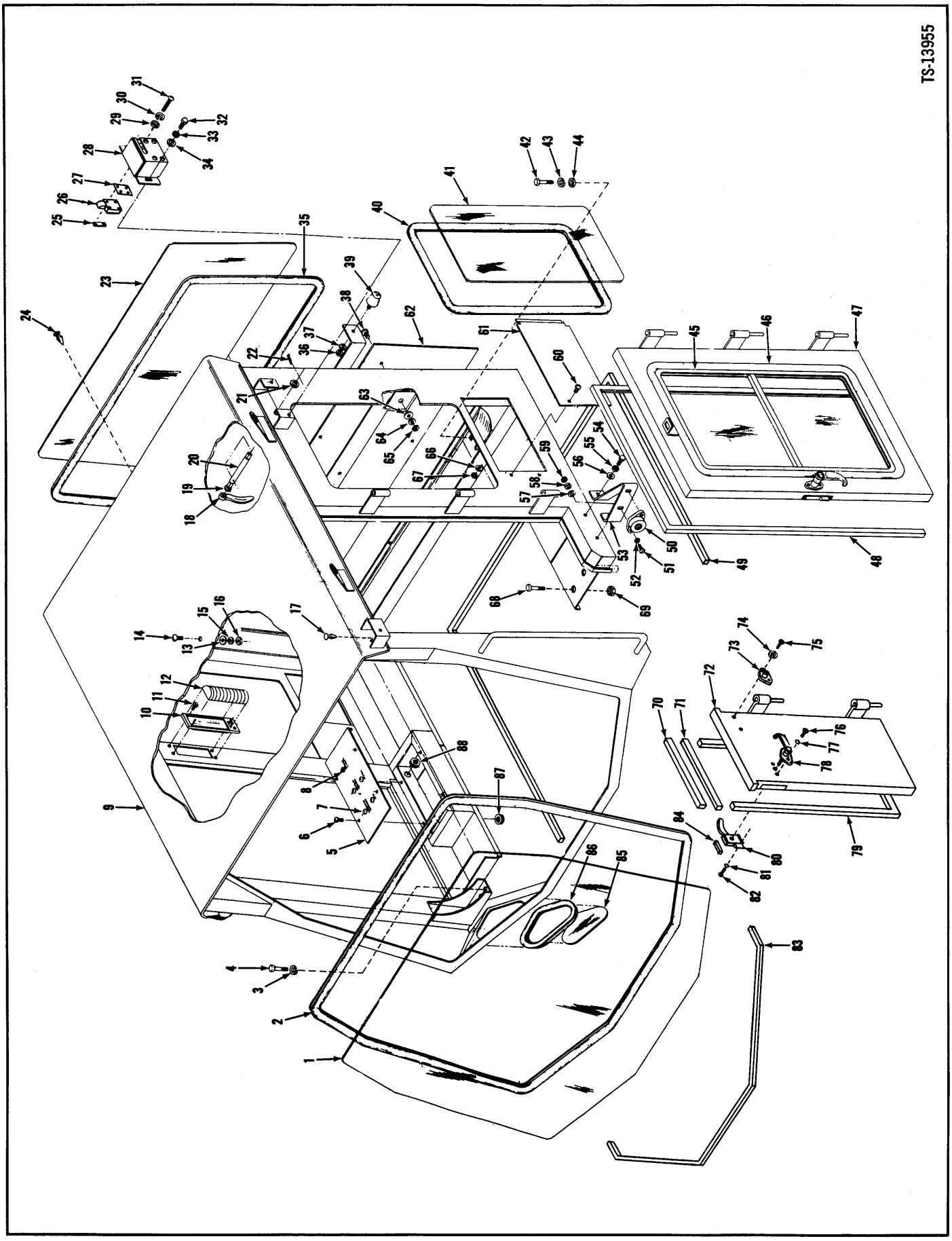
[7]Inc. 10A, 12

[8]See 10

[9]9 ft. (2,75 m)

[10]6 ft. (1,83 m)

[19]For Japan built cabs.


TS-13955

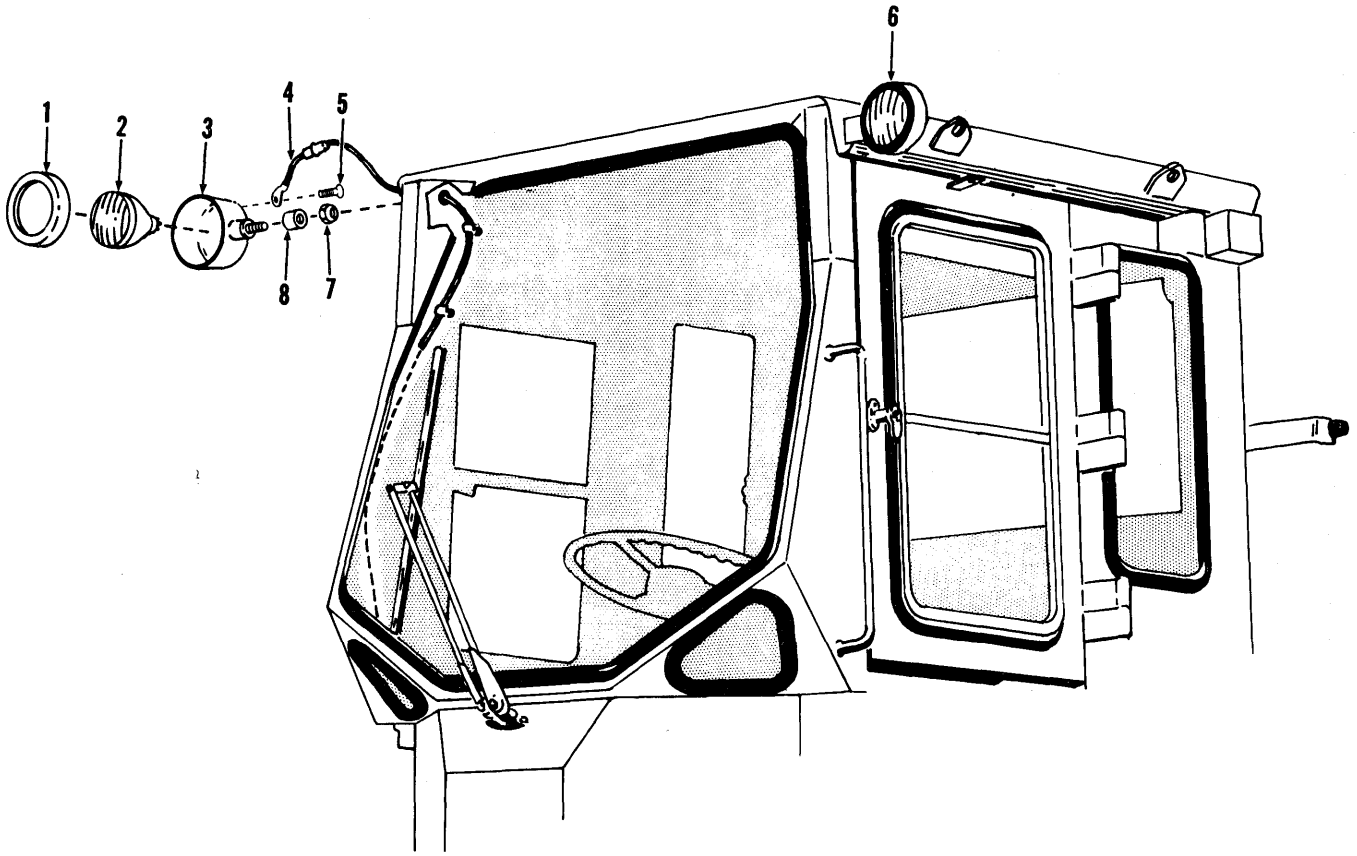
Cab Assembly

MICHIGAN

No.	Part No.	Qty.	Description
46	[11]949721	2	Moulding
47	2509694	1	Door LH
47A	2509692	1	Door RH
48	[12]949802	2	Weatherstrip
49	[12]949801	1	Gasket
50	2510237	1	Socket
51	7G-412	2	Screw
52	8E-04	2	Lockwasher
53	2509763	1	Strap
54	23C-512	2	Bolt
55	23E-05	2	Lockwasher
56	25E-15	2	Washer
57	25E-14	2	Washer
58	23E-04	2	Lockwasher
59	61D-04	2	Nut
60	89G-410	4	Screw
61	2509749	2	Plate
62	2509752	1	Plate
63	25E-15	2	Washer
64	23E-04	8	Lockwasher
65	61D-04	8	Nut
66	23E-05	4	Lockwasher
67	61D-04	4	Nut
68	24C-616	2	Bolt
69	18D-06	2	Nut
70	[13]949802	1	Weatherstrip
71	[13]2510276	1	Gasket
72	2509762	1	Door lower
73	2510236	1	Plunger
74	8E-04	2	Lockwasher
75	7G-412	2	Screw
75A	†61D-04	2	Nut
76	2509097	6	Screw
77	18E-10	6	Lockwasher
78	949720	3	Handle
79	[14]949802	1	Weatherstrip
80	942874	2	Lock door LH
80A	†138249	1	Lock door RH
80B	†[19,20]3918122	2	Lock door LH
80C	†[19,20]3918128	1	Lock door RH
81	17E-10	12	Lockwasher
82	45G-1008	12	Screw
83	[15]949801	1	Gasket
84	[16]949722	3	Gasket
85	2509826	2	Glass lower front
86	[17]2508901	2	Moulding
87	511426	1	Grommet
88	511426	1	Grommet
89	†[18]960608	1	Glass pattern

Note: Length of mouldings, weatherstrips and gaskets are listed for each piece.

[11]8 ft. (2,44 m)
[12]10 ft. (3,05 m)
[13]2 ft. (0,62 m)
[14]4 ft. (1,22 m)
[15]5 ft. (1,53 m)
[16]1 ft. (0,31 m)
[17]3 ft. (0,92 m)
[18]Inc. 1
[19]For Japan built cabs
[20]Inc. 78

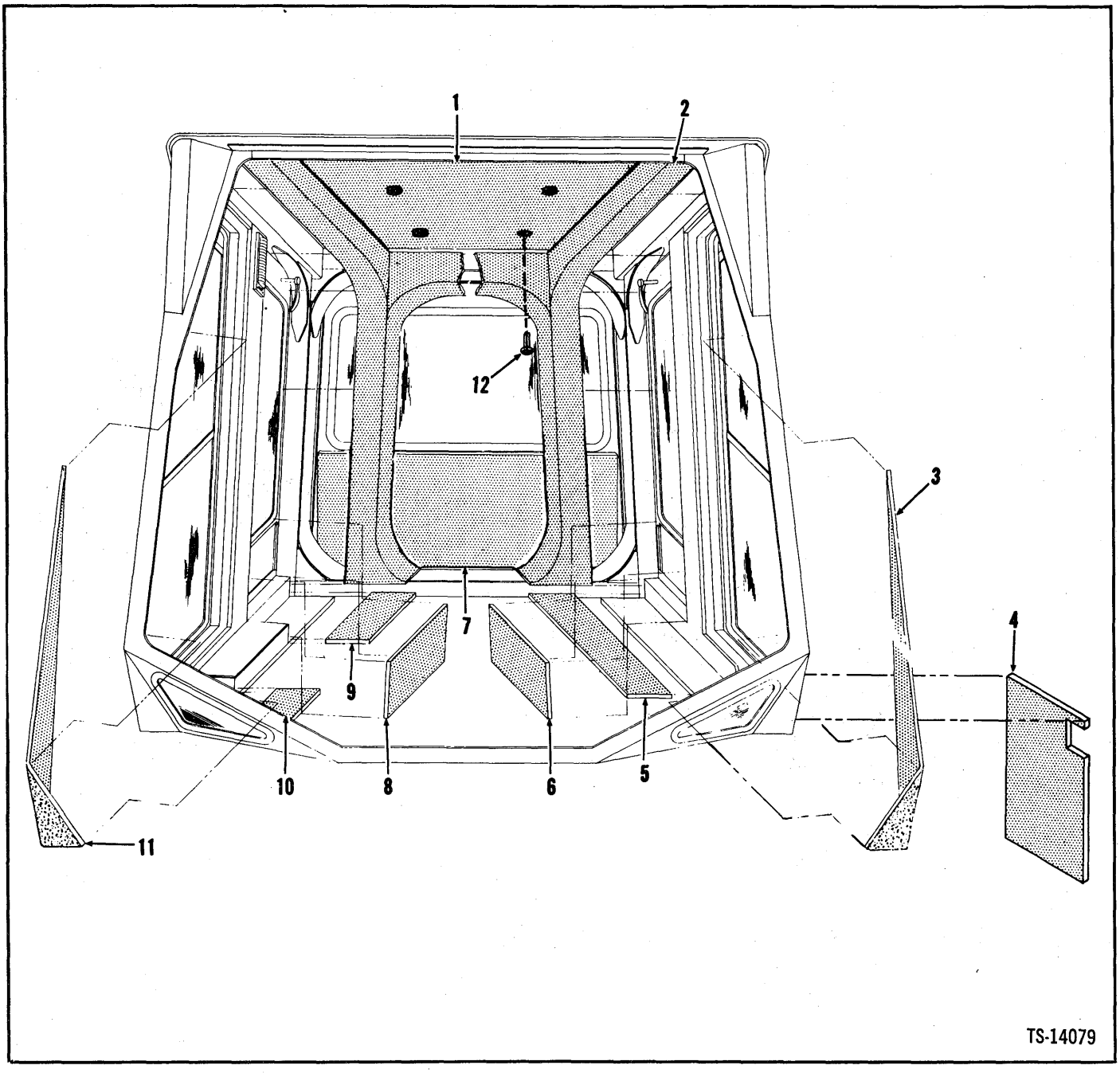


TS-14006

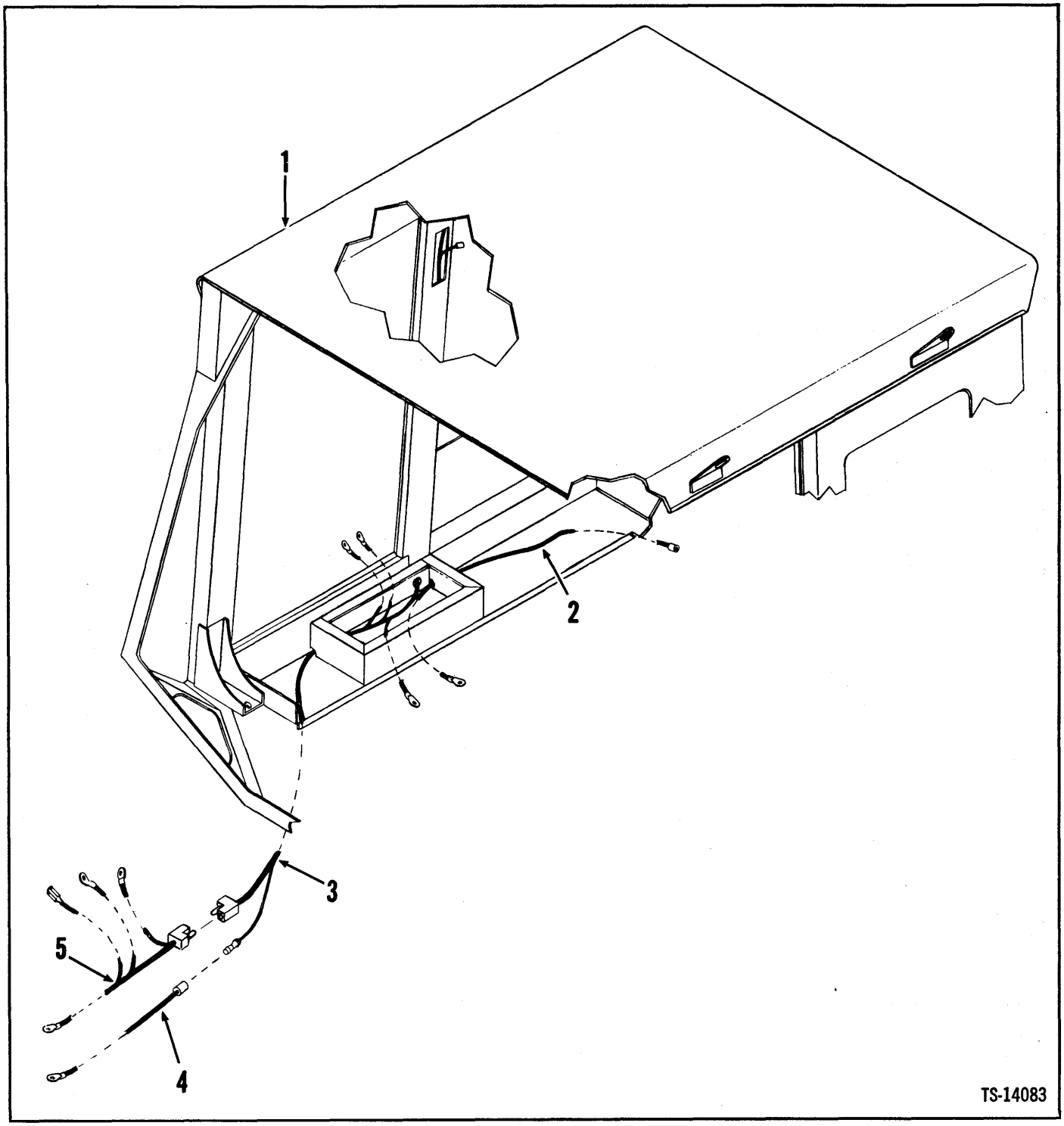
No.	Part No.	Qty.	Description
1	[2]946389	1	Retainer headlight
1A	[3]949357	1	Retainer headlight
2	944907	1	Sealed unit
3	§[4]———	1	Housing
4	2502409	2	Wire
5	953310	1	Screw
6	[5]547529	2	Headlight assy
7	17D-6	2	Nut
8	652448	2	Spacer

[2]For "John W. Hobbs"
[3]For "Guide Lamp"
[4]See 6
[5]Inc. 1, 2, 3

Cab Soundproofing

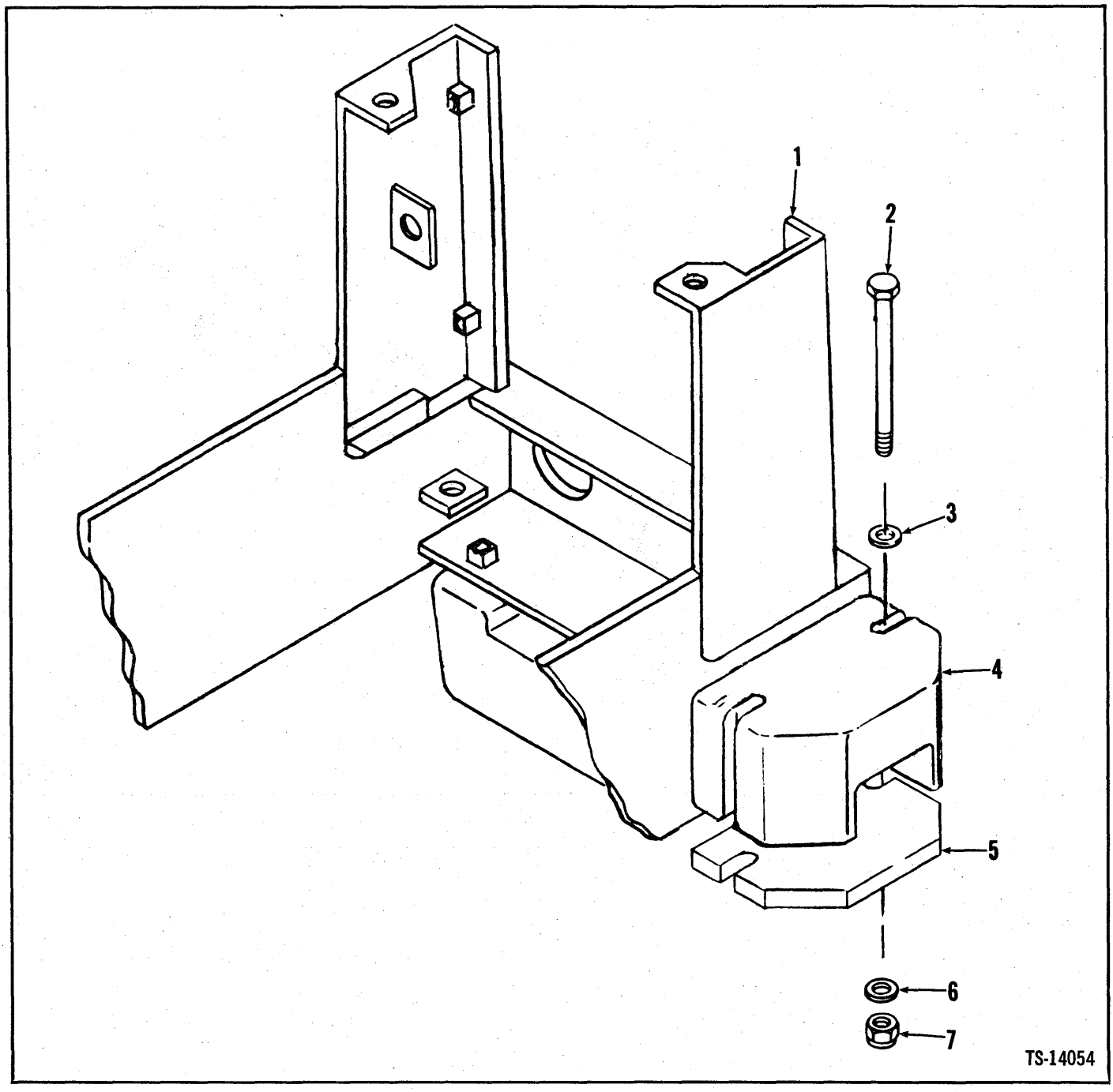


No.	Part No.	Qty.	Description
1	2509832	1	Foam insulation
2	2509693	1	Foam insulation
3	2509751	1	Foam insulation
4	2509831	1	Foam insulation
5	2509972	1	Foam insulation
6	2509830	1	Foam insulation
7	2509973	1	Foam insulation
8	2509830	1	Foam insulation
9	2509971	1	Foam insulation
10	2509971	1	Foam insulation
11	2509750	1	Foam insulation
12	2511368	4	Button



No.	Part No.	Qty.	Description
1	[1]----	1	Cab
2	2510103	1	Wire
3	2509764	1	Harness
4	2510646	1	Wire
5	2510934	1	Harness

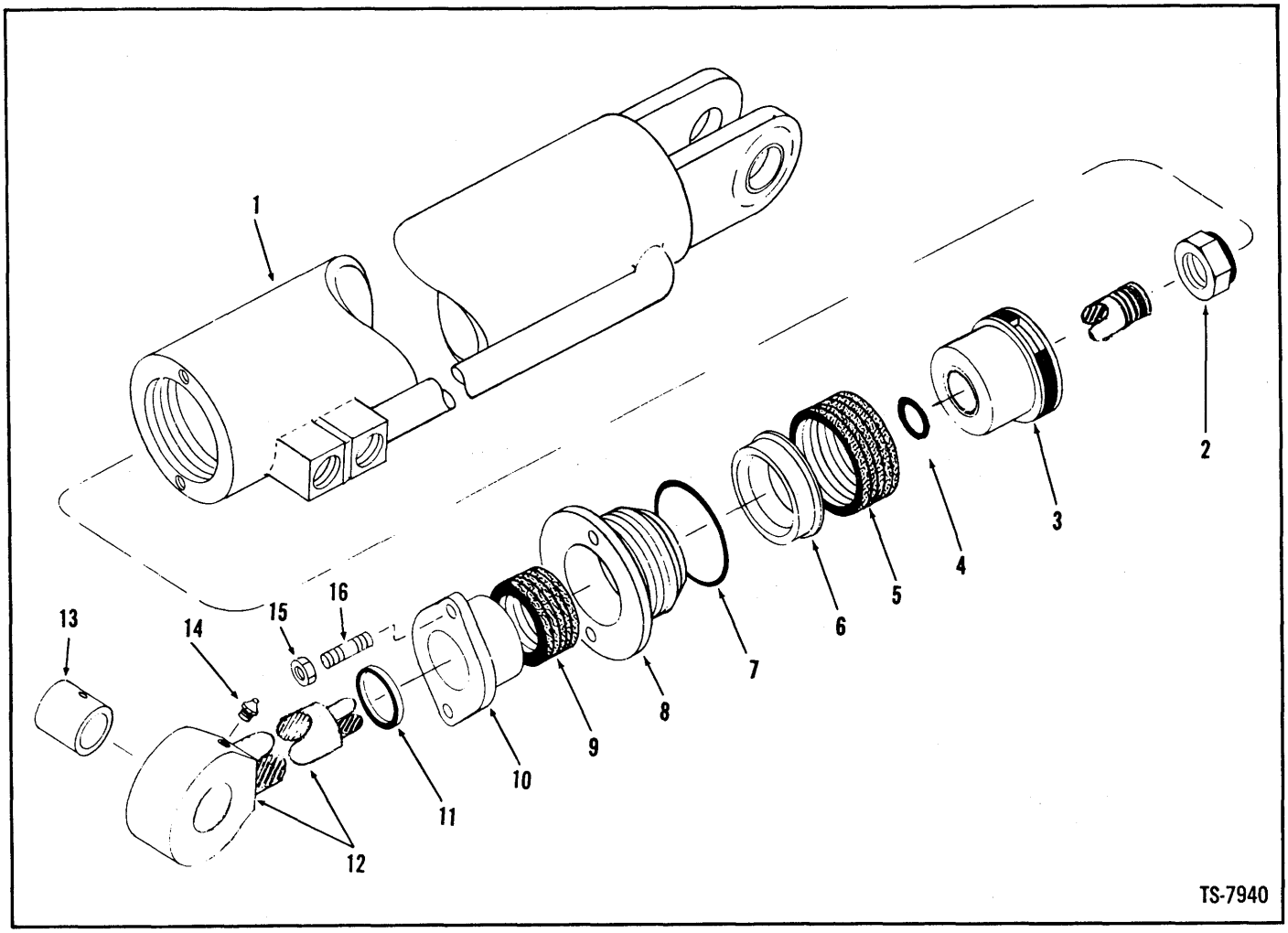
[1]See Index



No.	Part No.	Qty.	Description
A	*2501179	1	Counterweight kit
1	[1]———	1	Frame rear
2	24C-12160	4	Bolt
3	25E-28	4	Washer
4	2501156	2	Counterweight
5	2501057	2	Step plate
6	25E-28	4	Washer
7	18D-12	4	Nut

*In lieu of Hydro (550 lbs. 250 kg Inc. 2→7)
[1]See Index

Cylinder Assembly — Drott 4 in 1 Bucket

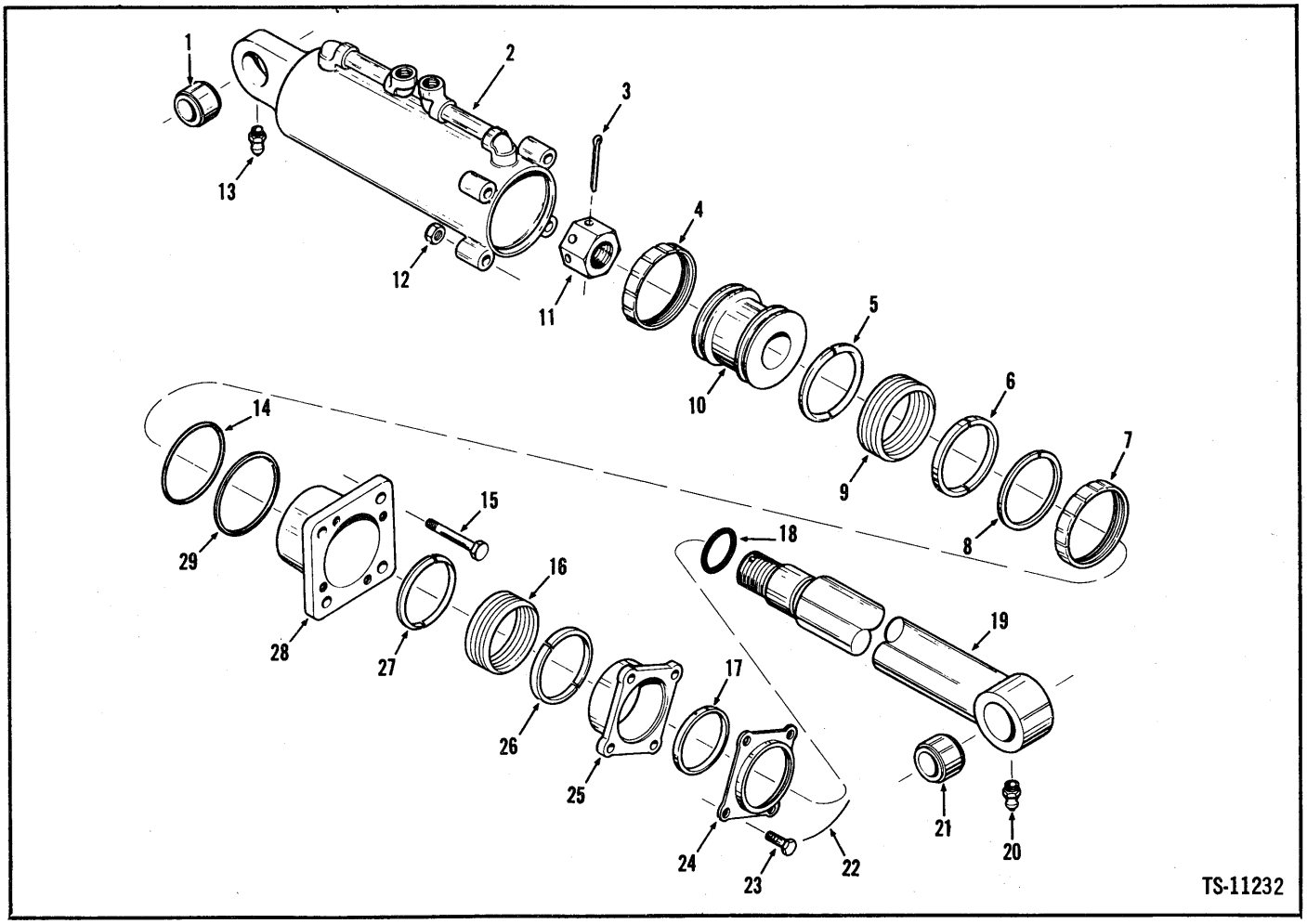


No.	Part No.	Qty.	Description
A	[1]1533374	1	Cyl assy R.H.
B	[2]1533375	1	Cyl assy L.H.
1	1533359	1	Cyl R.H.
1A	[1]1533360	1	Cyl L.H.
2	67D-20	1	Nut
3	1533363	1	Piston
3A	1533354	1	Wear ring
4	25K-40108	1	O-ring
5	1533357	1	Packing
6	1533364	1	Piston
7	25K-40400	1	O-ring
8	1533362	1	Cap
9	1533361	1	Packing
10	1533365	1	Flange
11	1533340	1	Wiper
12	[3]1533358	1	Rod
13	1533355	1	Bushing
14	10H-25	1	Fitting grease
15	66D-06	2	Nut
16	1533339	2	Stud

[1]Inc. 1, 2→16
[2]Inc. 1A→16
[3]Inc. 13

Cylinder Assembly, Side Dump Bucket

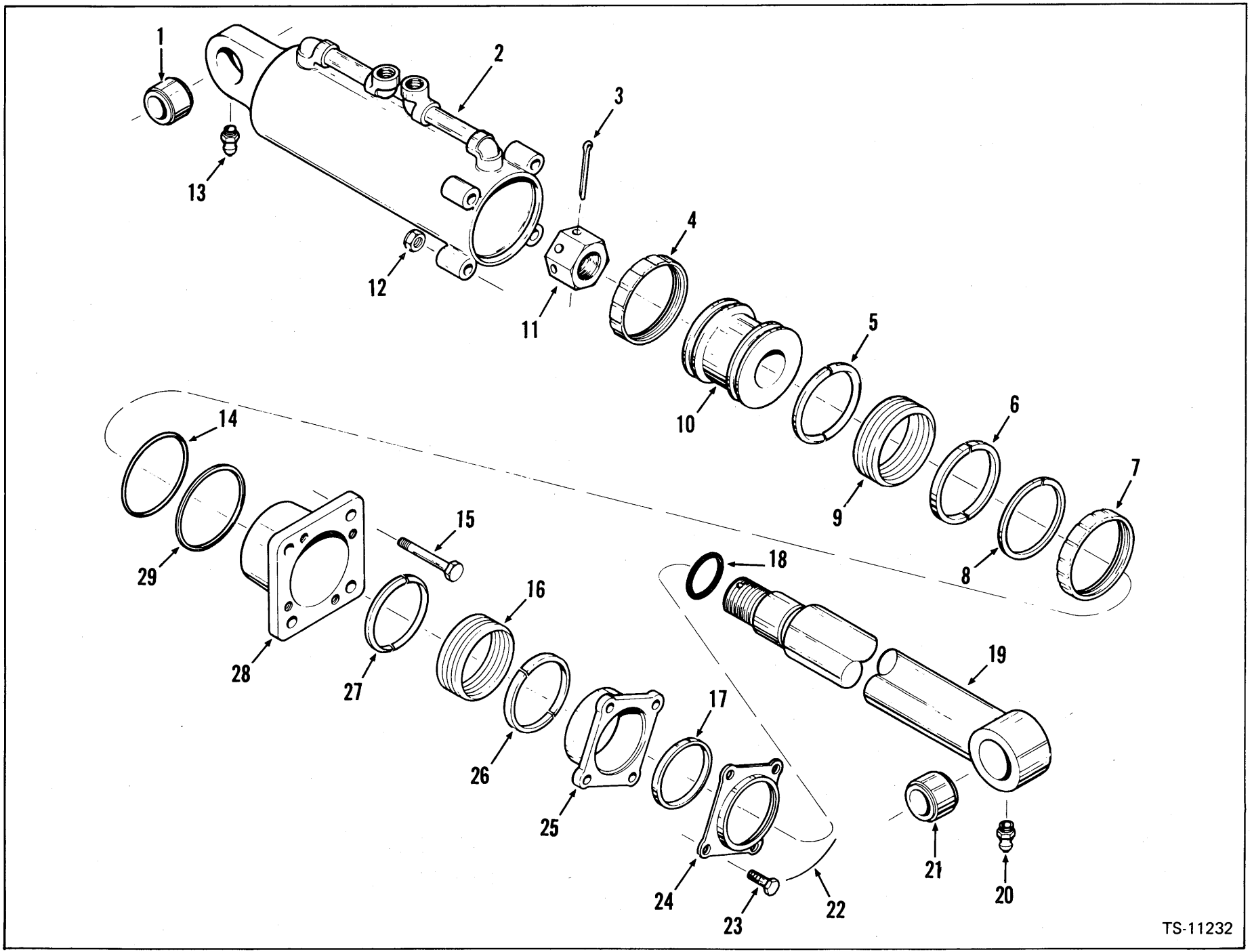
MICHIGAN



No.	Part No.	Qty.	Description
A	[9,1]567904	1	Cylinder assembly
B	[4,10]2523425	1	Kit
1	669928	1	Bushing
2	[2]567905	1	Cylinder
3	1F-540	1	Pin cotter
4	§[3]----	1	Ring
5	§[3]----	—	Adapter
6	§[3]----	—	Adapter
7	§[3]----	1	Ring
8	§[3]----	—	Shim
9	§[3]----	1	Packing
10	*512789	1	Piston
11	517298	1	Nut
12	68D-07	4	Nut
13	10H-25	1	Fitting grease

No.	Part No.	Qty.	Description
14	§[3]----	1	Ring
15	18C-752	4	Bolt
16	[5]2501107	1	Packing
17	2516952	1	Seal
18	§[3]----	1	O-ring
19	[6]567911	1	Rod assy
20	10H-25	1	Fitting grease
21	669928	1	Bushing
22	[7]----	1	Lockwire
23	4C-620	4	Bolt
24	544890	1	Retainer
25	544889	1	Gland
26	§[8]----	—	Adapter
27	§[8]----	—	Adapter
28	945953	1	Cap
29	§[3]----	1	O-ring

[1]Inc. 1 → 29
[2]Inc. 1
[3]See B
[4]Inc. 3, 4 → 9, 14, 16 → 18, 26, 27 & 29
[5]Inc. 26, 27
[6]Inc. 21
[7]16 ga. 13 lg.
[8]See 16
[9]For replacement use 2514142.
[10]For referance see Service Gram SG-597.
*NOTE: When replacement is required for item 10 part number 512789, use 1—1503639 Piston plus 1—2516071 Kit.

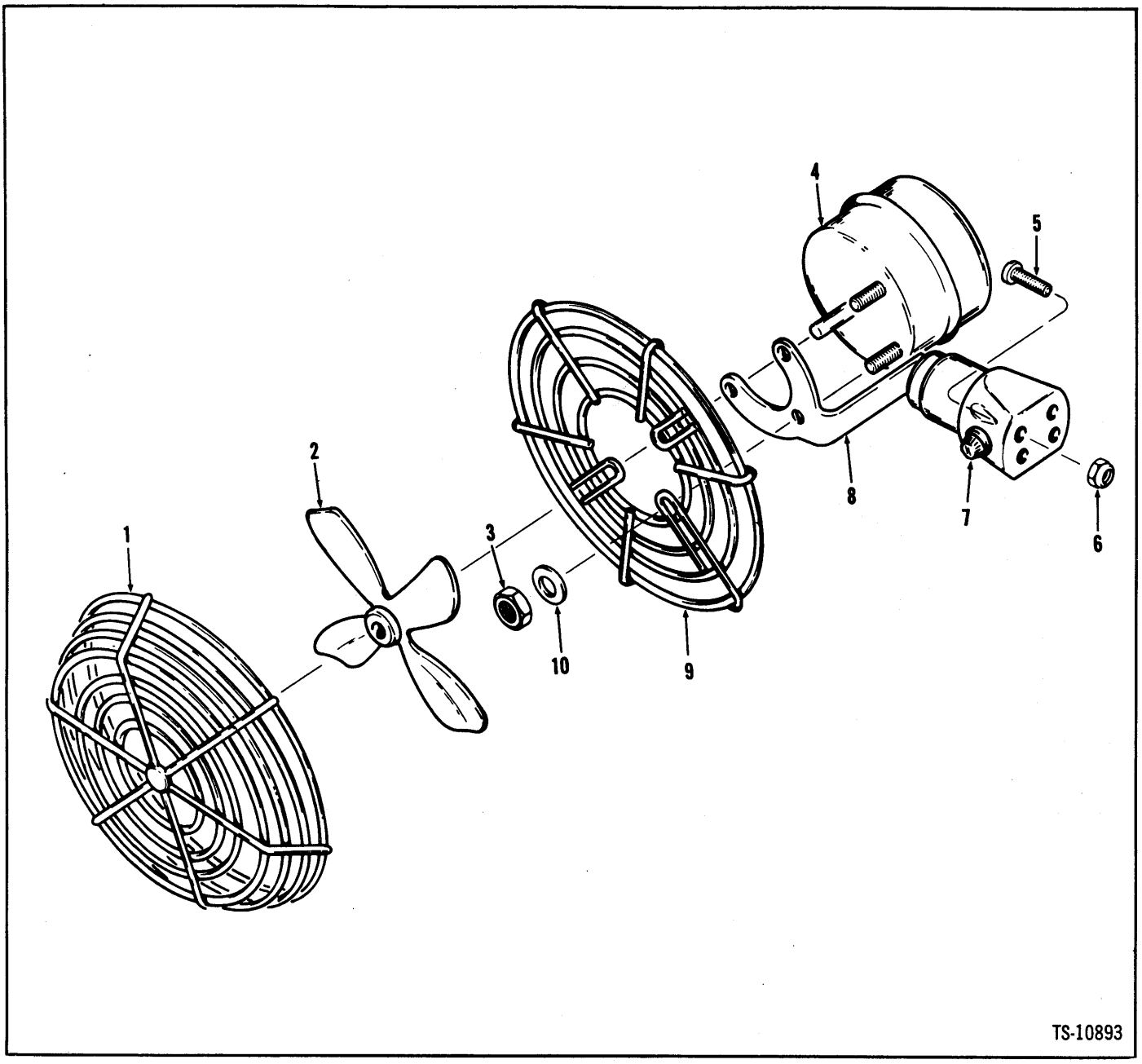

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TS-11232

MICHIGAN

No.	Part No.	Qty.	Description
A	[2]2514142	1	Cylinder assembly
1	669928	1	Bushing
2	[3]567905	1	Cylinder
3	1F-540	1	Pin cotter
4	552767	1	Ring
5	527496	2	Adapter
6	527497	2	Adapter
7	552767	1	Ring
8	‡520405	—	Shim
9	531606	1	Packing
10	[6]512789	1	Piston
11	517298	1	Nut
12	68D-07	4	Nut
13	10H-25	1	Fitting grease
14	73K-236	1	Ring
15	24C-752	4	Bolt
16	544891	1	Packing
17	2516952	1	Seal
18	25K-40104	1	O-ring
19	[4]567911	1	Rod assy
20	10H-25	1	Fitting grease
21	669928	1	Bushing
22	[5]———	1	Lockwire
23	22C-620	4	Bolt
24	544890	1	Retainer
25	544889	1	Gland
26	544893	2	Adapter
27	544892	2	Adapter
28	945953	1	Cap
29	25K-40308	1	O-ring

[2]Inc. 1→29
[3]Inc. 1
[4]Inc. 21
[5]16 gauge X 13 in. (330,2 mm) long
[6]For replacement, use (1) 1503639 piston, (2) 1530264 wear rings, (1) 1503631 outer seal ring & (1) 1503629 inner seal ring. Once conversion has been made, individual replacement can be made.

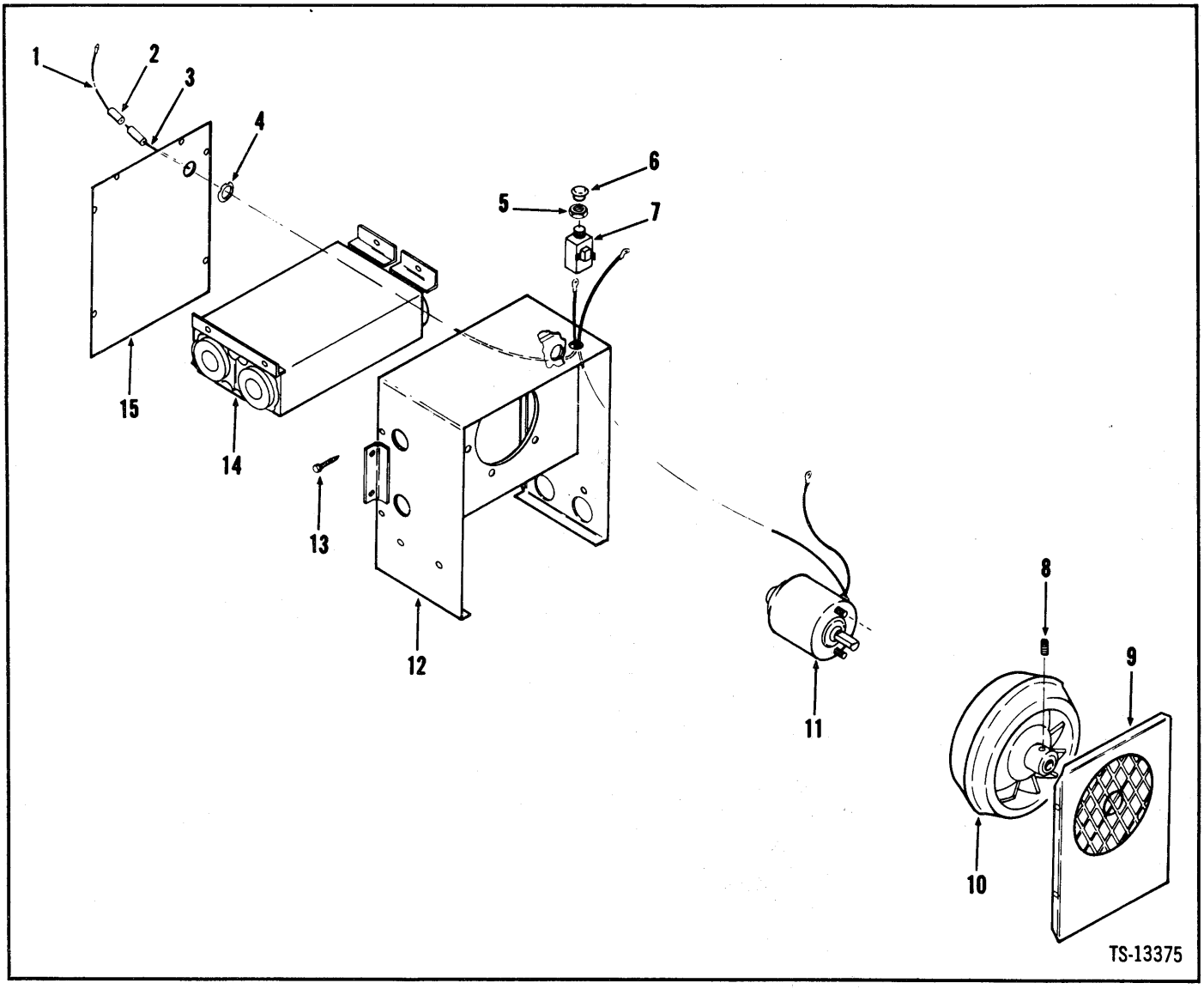
Defroster Fan Assembly



No.	Part No.	Qty.	Description
A	[1]517846	1	Fan assy
1	949036	1	Guard
2	949037	1	Fan
3	949054	2	Nut
4	949191	1	Motor
5	85G-1012	4	Screw
6	50D-10	4	Nut
7	949192	1	Switch
8	961265	1	Base
9	949039	1	Guard
10	25E-10	2	Washer
11	†2510821	1	Wire

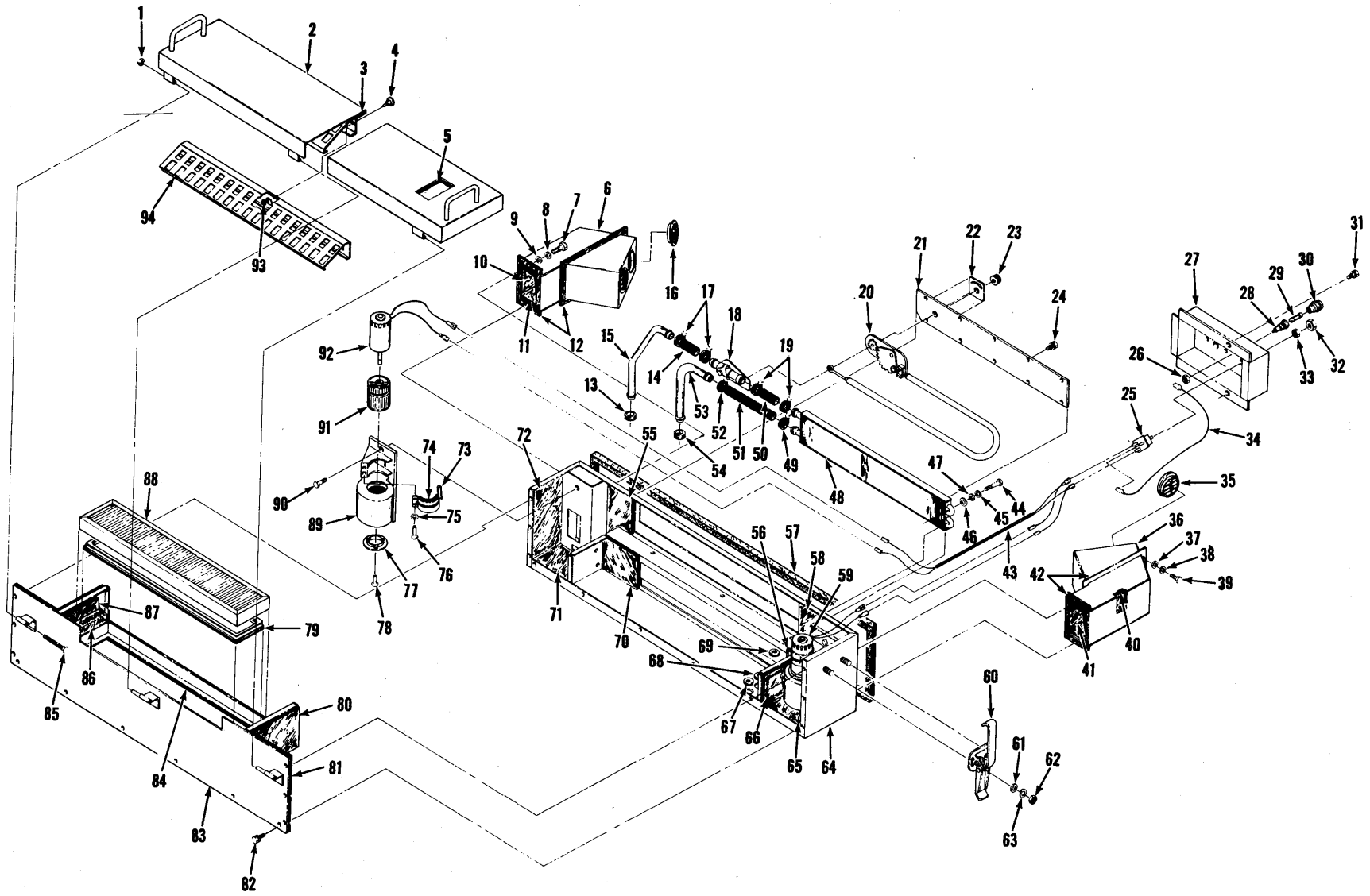
[1]Inc. 1→4, 7→10

Heater Assembly



No.	Part No.	Qty.	Description
A	[1]2502084	1	Heater assy
1	960126	1	Wire
2	635583	1	Fuse
3	960125	1	Wire
4	960127	2	Grommet
5	892929	2	Nut
6	892928	1	Knob
7	958245	1	Switch
8	960131	1	Screw fan
9	960124	1	Cover
10	960070	1	Fan
11	960068	1	Motor
12	960129	1	Housing
13	960132	19	Screw
14	960069	1	Core
15	960130	1	Panel
16	†945187	1	Decal data

[1]Inc. 1→16


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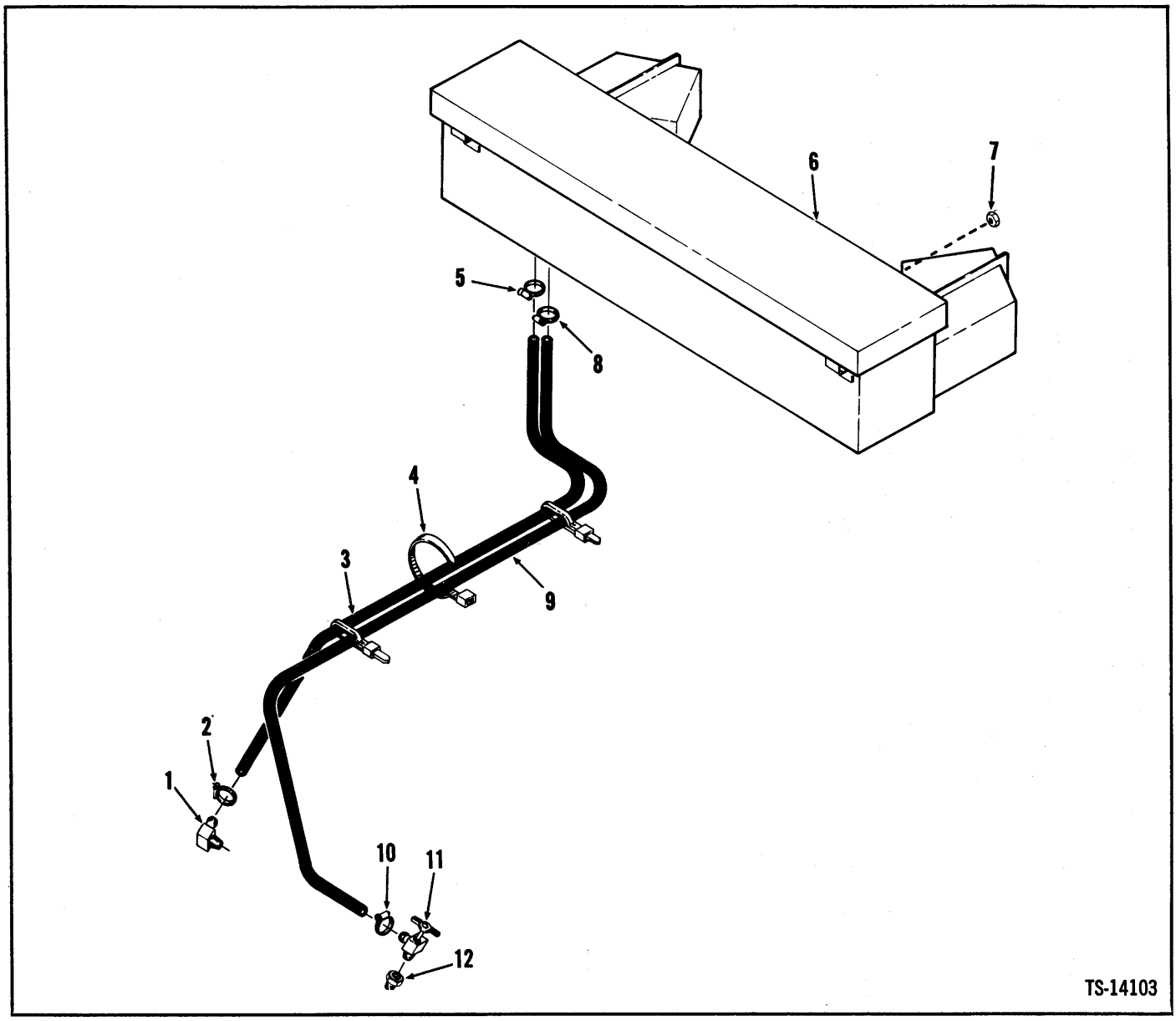
Heater Assembly

MICHIGAN

No.	Part No.	Qty.	Description
A	[2]2509098	1	Heater assy
1	17D-1	1	Nut
2	2511297	1	Cover assy
3	2511272	1	Seal
4	949774	1	Knob
5	2511259	2	Insulation
6	2511293	1	Duct assy LH
7	23C-510	4	Bolt
8	23E-05	4	Lockwasher
9	25E-16	4	Washer
10	2511263	2	Insulation
11	2511264	2	Insulation
12	[3]2511271	1	Gasket
13	949638	1	Grommet
14	[4]1529688	1	Hose
15	2511273	1	Tube
16	2511254	2	Louver
17	949603	2	Clamp
18	1580350	1	Valve control
19	949603	2	Clamp
20	949754	1	Cable assy
21	[5]2511294	1	Cover assy
22	949767	1	Decal
23	960595	1	Knob
34	5C-410	10	Bolt
25	960562	1	Switch
26	§[6]———	1	Nut
27	2511295	1	Control box
28	[7]2511248	1	Fuse holder
29	[8]608869	1	Fuse
30	§[6]———	1	Fuse holder
31	5C-410	2	Bolt
32	949639	1	Knob
33	949741	1	Nut
34	949806	1	Wire
35	2511254	2	Louver
36	2511292	1	Duct assy RH
37	25E-16	4	Washer
38	23E-05	4	Lockwasher
39	23C-510	4	Bolt
40	2511264	2	Insulation
41	2511262	2	Insulation
42	[3]2511271	1	Gasket
43	2511247	1	Wire assy
44	23C-428	3	Bolt
45	23E-04	3	Lockwasher
46	25E-21	3	Washer
47	25E-14	3	Washer
48	949773	1	Heater core
49	949603	1	Clamp

No.	Part No.	Qty.	Description
50	[4]1529688	1	Hose
51	[4]1529688	1	Hose
52	949603	1	Clamp
53	2511274	1	Tube
54	949638	1	Grommet
55	2511255	1	Insulation
56	2511269	1	Insulation
57	[9]949722	1	Gasket
58	2511255	1	Insulation
59	[10]2511290	1	Blower assy RH
59A	†[11]2511291	1	Blower assy LH
60	2511253	2	Clamp
61	25E-14	4	Washer
62	61D-04	4	Nut
63	23E-04	4	Lockwasher
64	2511299	1	Box assy
65	2511258	1	Insulation
66	2511257	2	Insulation
67	2511251	1	Plug
68	742710	1	Plug
69	2511250	1	Plug
70	2511270	1	Insulation
71	2511265	1	Insulation
72	2511256	2	Insulation
73	949736	2	Strap
74	[4]949602	2	Gasket
75	15E-10	4	Lockwasher
76	65G-1008	4	Screw
77	949737	2	Ring
78	2501949	6	Screw
79	[12]949803	1	Gasket
80	2511261	2	Insulation
81	2511260	2	Insulation
82	5C-410	12	Bolt
83	2511298	1	Plate F
84	2511266	1	Insulation
85	23C-472	1	Bolt
86	2511267	2	Insulation
87	2511268	2	Insulation
88	949758	1	Filter
89	949733	1	Housing LH
89A	†2502260	1	Housing RH
90	23C-514	2	Bolt
91	949734	1	Wheel LH
91A	†949738	1	Wheel RH
92	2511233	1	Motor LH
92A	†2511234	1	Motor RH
93	233783	1	Ring snap
94	2511240	1	Damper

[2]Inc. 1➔94
[3]6 ft. (1,83 m)
[4]1 ft. (0,31 m)
[5]Inc. 22
[6]See 28
[7]Inc. 26, 30
[8]30 Amp.
[9]12 ft. (3,66 m)
[10]Inc. 73➔78, 89A, 91A, 92A
[11]Inc. 73➔78, 89, 91, 92
[12]7 ft. (2,14 m)

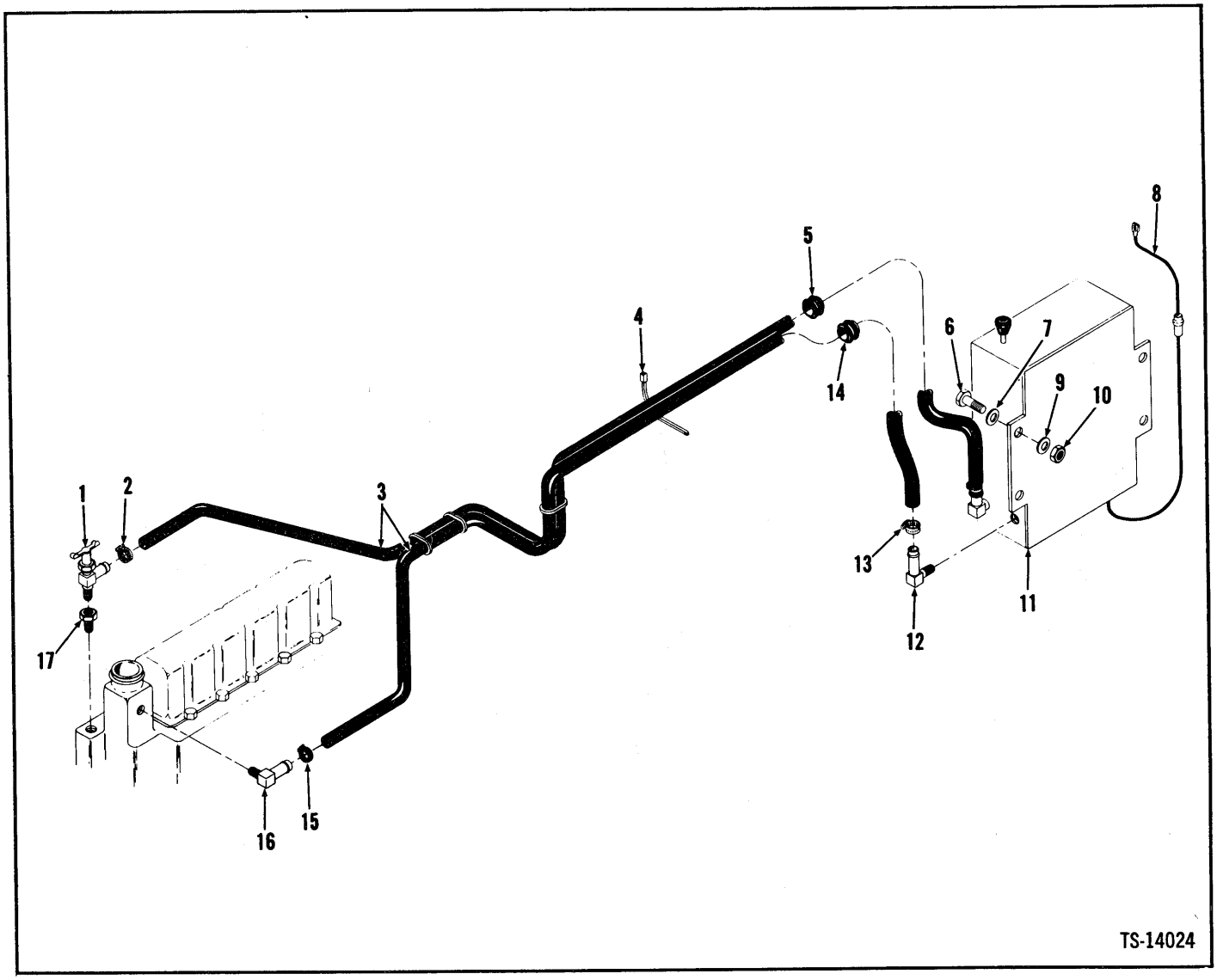


No.	Part No.	Qty.	Description
A	[2]2511400	1	Heater kit
1	[4]666842	1	Elbow
1A	†[5]666867	1	Nipple
1B	†[5]29F-3	1	Elbow
2	521874	1	Clamp
3	[3]1529688	1	Hose
4	1539058	4	Cable tie

No.	Part No.	Qty.	Description
5	521874	1	Clamp
6	[1]2509098	1	Heater assy
7	17D-08	2	Nut
8	521874	1	Clamp
9	[3]1529688	1	Hose
10	521874	1	Clamp
11	552433	1	Valve
12	19F-6	1	Bushing

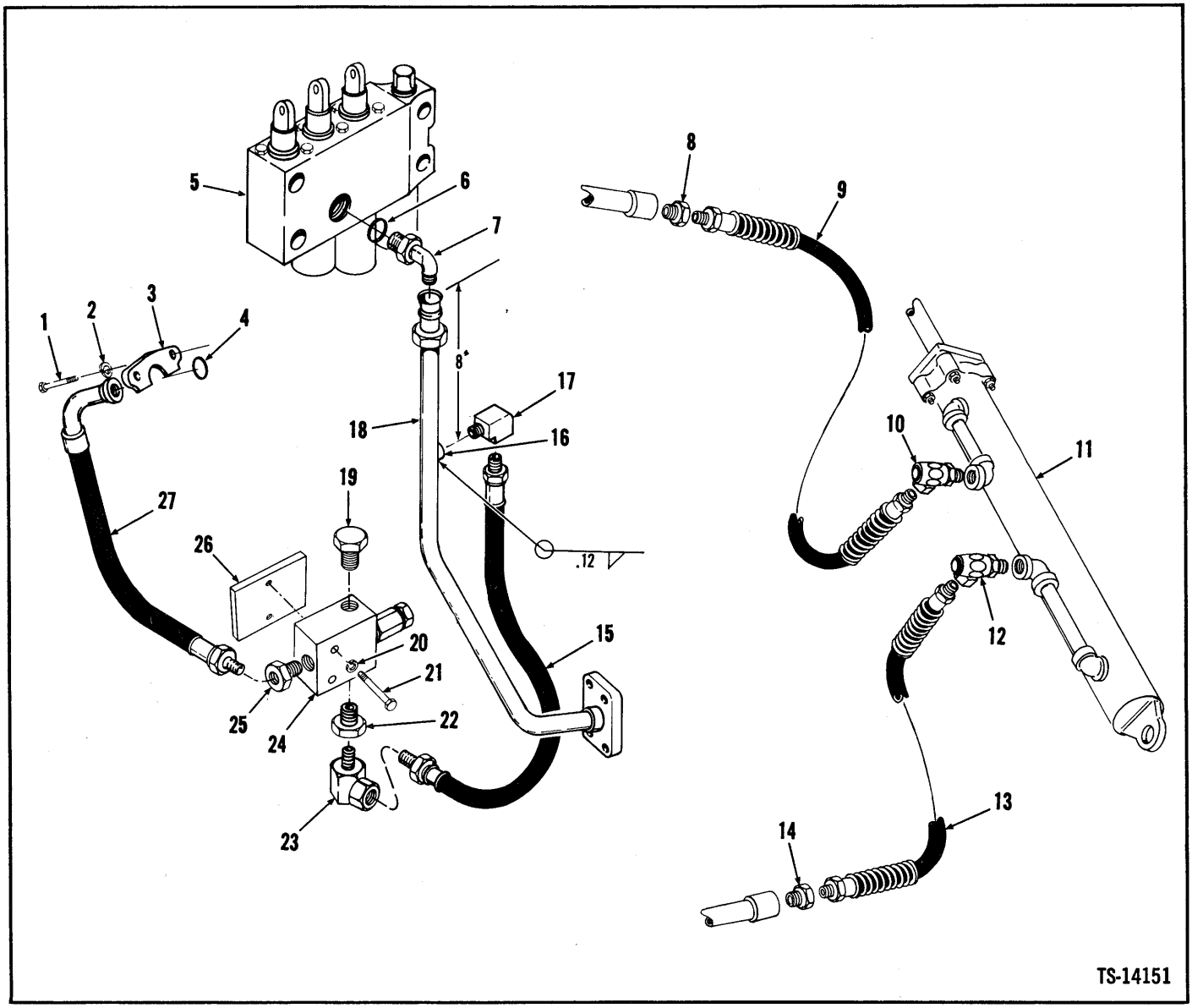
[1]See Index
[2]Inc. 1 → 12
[3]6 ft. (1,83 m)
[4]4189C101JAC → 999JAC
[5]4189D101JAC & →

Heater Piping



No.	Part No.	Qty.	Description
1	552433	1	Valve
2	521874	1	Clamp
3	[2]1529688	2	Hose
4	1539058	4	Cable tie
5	552438	1	Grommet
6	24C-516	4	Bolt
7	25E-15	4	Washer
8	2510843	1	Wire
9	25E-15	4	Washer
10	18D-05	4	Nut
11	[1]2502084	1	Heater assy
12	666841	2	Elbow
13	521874	2	Clamp
14	552438	1	Grommet
15	521874	1	Clamp
16	666842	1	Elbow
17	19F-6	1	Bushing

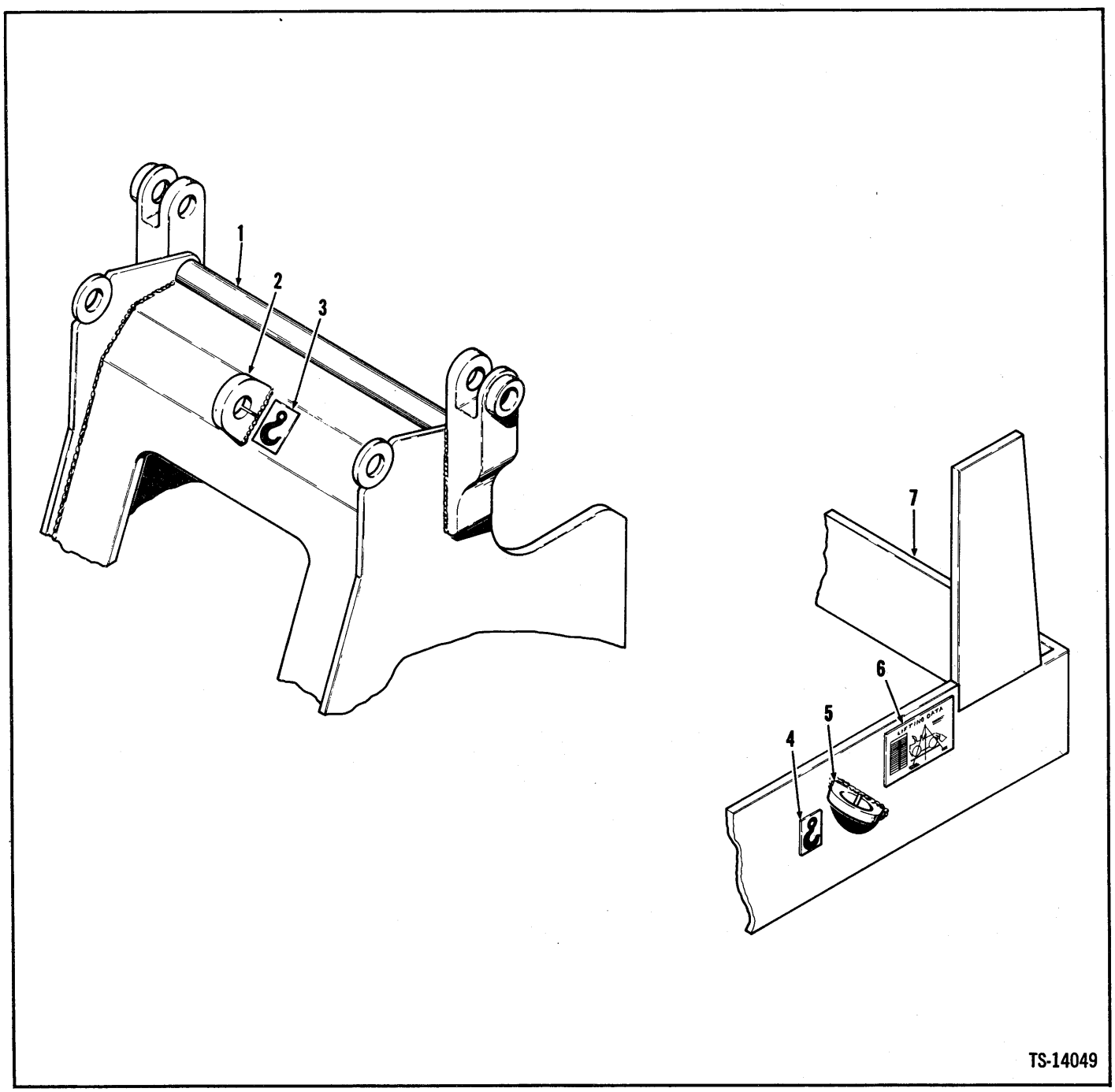
[1]See, Index
[2]10 ft. (3,05 m)



No.	Part No.	Qty.	Description
1	24C-620	4	Bolt
2	4E-06	4	Lockwasher
3	19J-16	2	Flange
4	58K-219	1	O-ring
5	[1]3916077	1	Valve assy main
6	91F-10	1	O-ring
7	[2]17K-10	1	Elbow
8	356617	1	Bushing
9	1524998	1	Hose
10	1509752	1	Swivel joint
11	[1]----	1	Cylinder assembly
12	1509752	1	Swivel joint
13	1524998	1	Hose
14	356617	1	Bushing
15	661558	1	Hose
16	[3]553019	1	Coupling
17	29F-3	1	Elbow
18	2503833	1	Tube
19	40K-12	1	Plug
20	4E-06	2	Lockwasher
21	24C-640	2	Bolt
22	356617	1	Bushing
23	31F-4	1	Adapter
24	[1]2510755	1	Valve assy relief
25	36F-5	1	Adapter
26	2510762	1	Bracket
27	2504348	1	Hose

[1]See Index
[2]Inc. 6
[3]Weld into tube

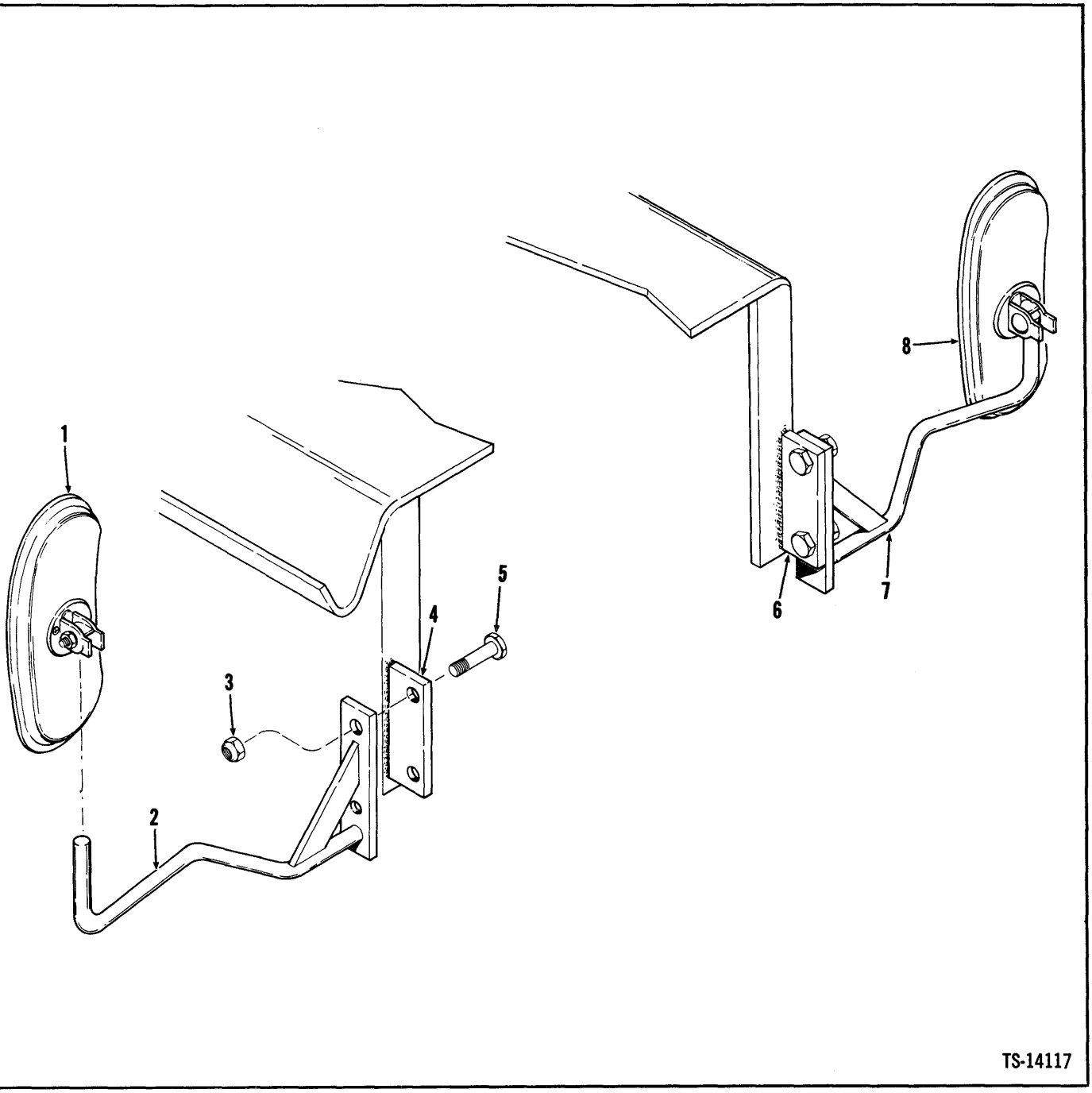
Lifting Lugs Kit



No.	Part No.	Qty.	Description
A	[2]2510829	1	Lifting lugs kit
1	[1]————	1	Frame front
2	3981073	1	Lug
3	1511709	1	Decal lift
4	1511709	2	Decal lift
5	3981073	2	Lug
6	1547653	1	Decal lifting data
7	[1]————	1	Frame rear

[1]See Index
[2]Inc. 2→6

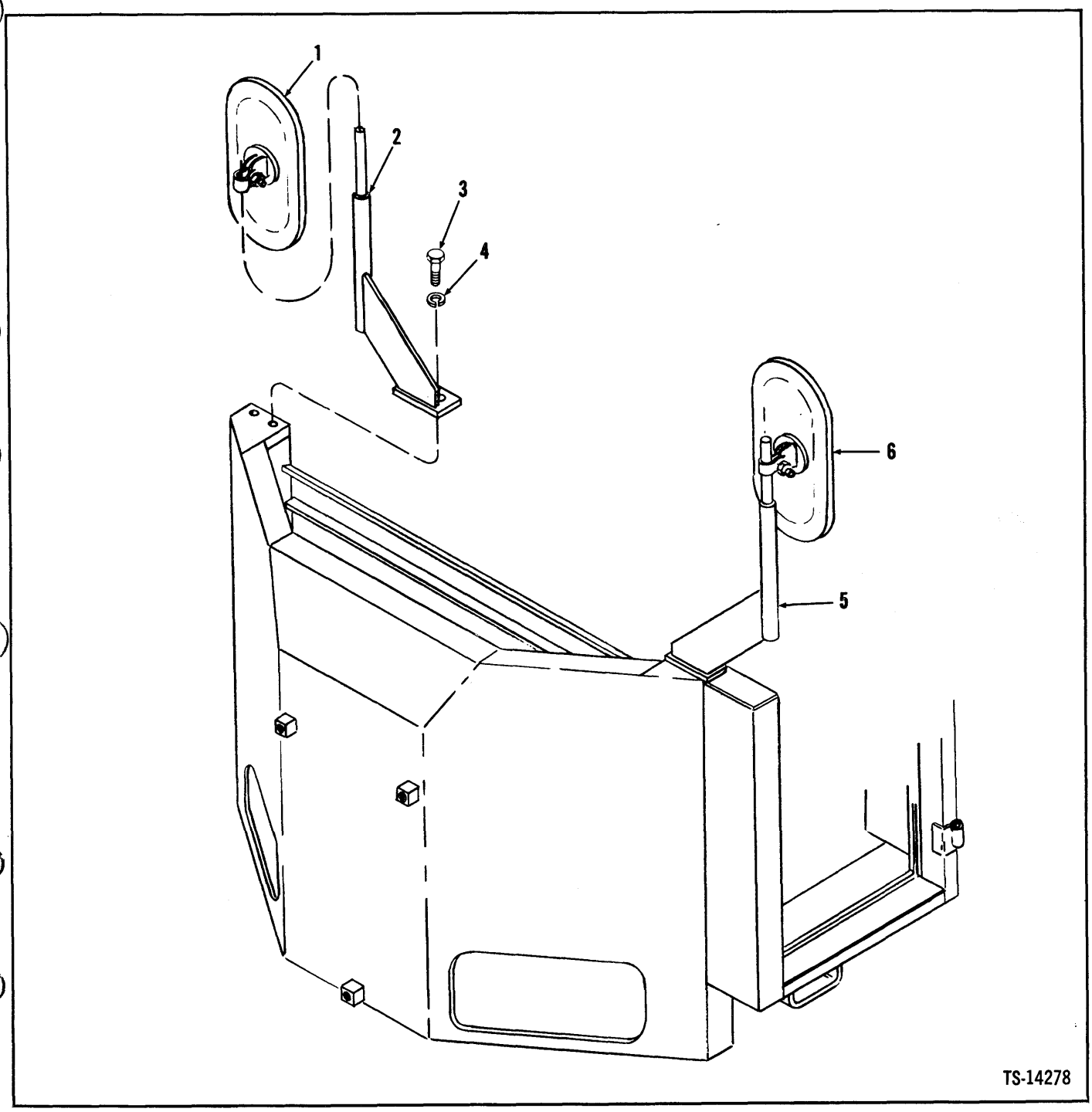
Mirror Kit



No.	Part No.	Part No.	Qty.	Description
A	[2]2514336	[2]2511435	1	Mirror kit
1	2511780	3968121	1	Mirror
2	2514341	2511420	1	Bracket RH
3	18D-06	18D-06	4	Nut
4	2514337	2511510	1	Flat
5	24C-624	24C-624	4	Bolt
6	2514337	2511510	1	Flat
7	2514342	2511422	1	Bracket LH
8	2511780	3968121	1	Mirror

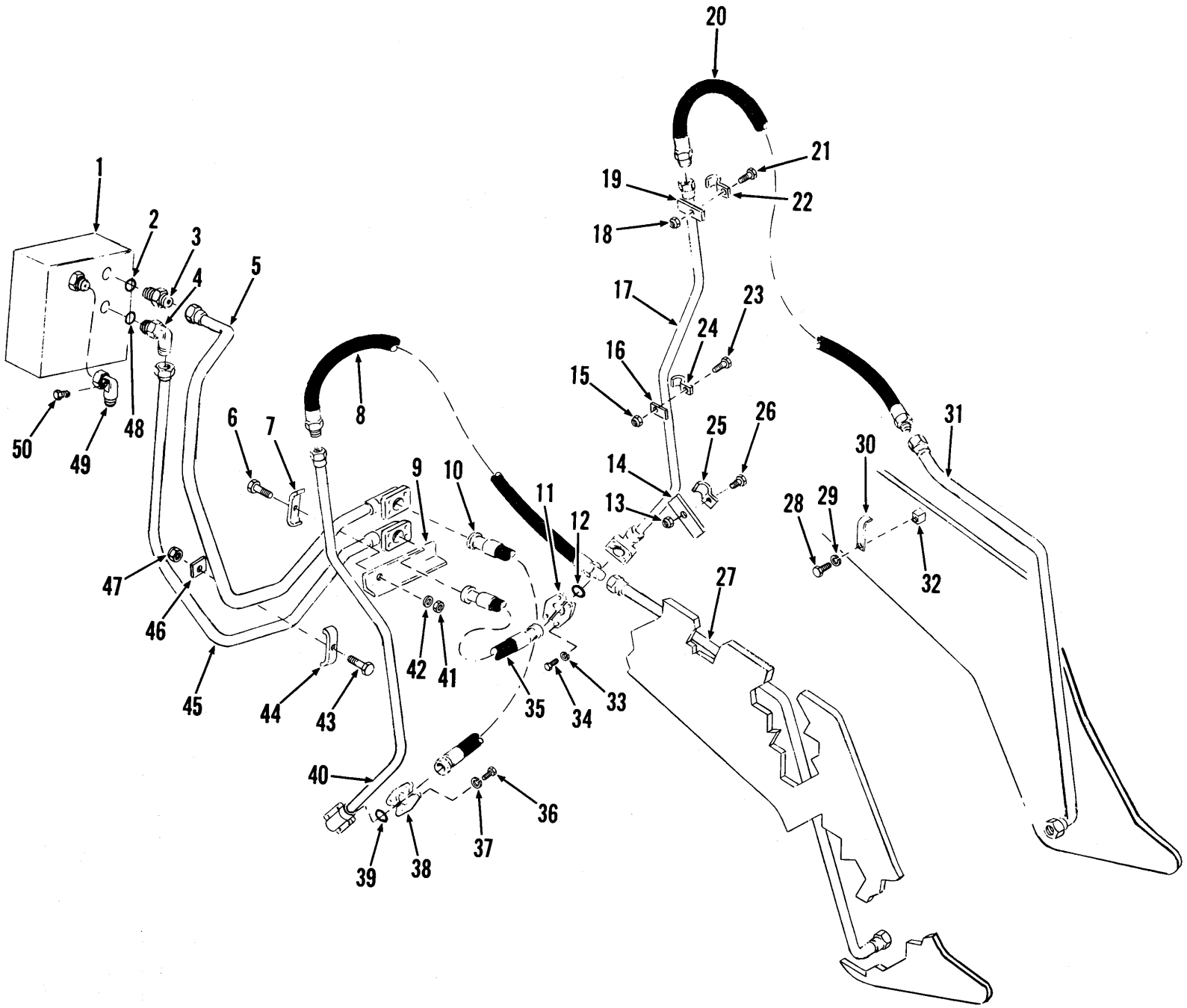
[2]Inc. 1→8

Mirror Kit



No.	Part No.	Qty.	Description
A	[2]2512191	1	Mirror kit
1	3968121	1	Mirror
2	2512188	1	Bracket RH
3	23C-820	4	Bolt
4	4E-08	4	Lockwasher
5	2512189	1	Bracket LH
6	3968121	1	Mirror

[2]Inc. 1→6



TS-14979

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Piping Installation & Parts (Three Spool)

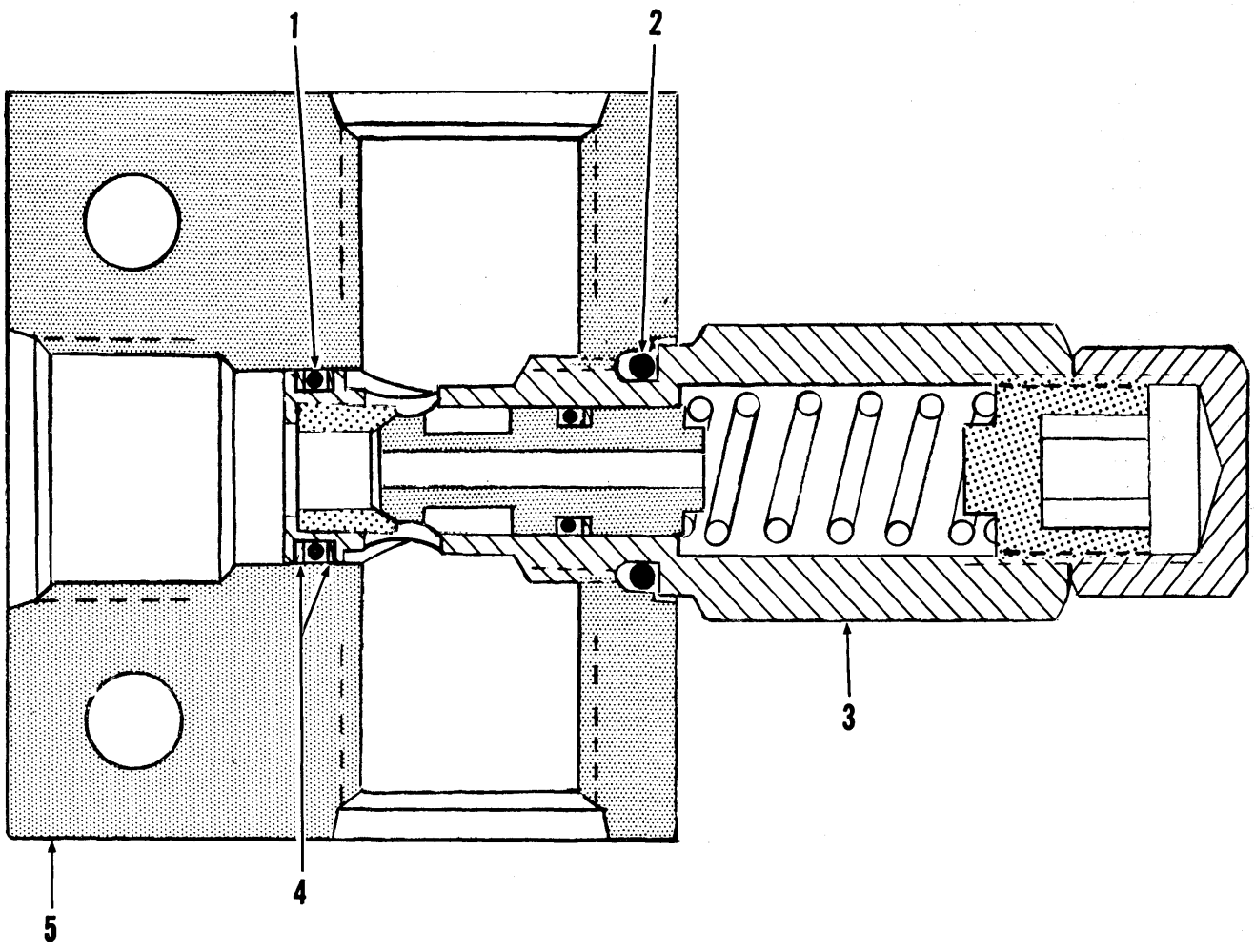
CLARK

No.	Part No.	Qty.	Description
1	[1]----	1	Valve assy
2	91F-10	1	O-ring
3	[2]15K-10	1	Adapter
4	[3]17K-10	1	Elbow
5	2503832	1	Tube
6	18C-636	1	Bolt
7	1509657	1	Clip
8	[4]2501325	1	Hose
8A	3988232	1	Hose
9	2503839	1	Angle
10	[4]2500156	1	Hose
10A	[4]3980505	1	Hose
11	19J-12	4	Flange half
12	58K-214	2	O-ring
13	60D-6	1	Nut
14	2503842	2	Flat
15	60D-6	2	Nut
16	2503841	2	Flat
17	2510673	1	Tube
18	60D-8	2	Nut
19	3978057	2	Lug
20	2501325	1	Hose
20A	3988232	1	Hose
21	18C-824	2	Bolt
22	3978058	2	Clip
23	18C-624	2	Bolt
24	3978058	2	Clip

[1]See Index
[2]Inc. 2
[3]Inc. 48
[4]Optional

No.	Part No.	Qty.	Description
25	3978058	2	Clip
26	18C-624	2	Bolt
27	2515225	1	Tube
28	18C-816	4	Bolt
29	4E-8	4	Lockwasher
30	1536657	4	Clip
31	2515224	1	Tube
32	590384	4	Tapped block
33	4E-6	8	Lockwasher
34	17C-620	8	Bolt
35	[4]2500156	1	Hose
35A	[4]3980505	1	Hose
36	17C-620	8	Bolt
37	4E-6	8	Lockwasher
38	19J-12	4	Flange half
39	58K-214	2	O-ring
40	2510675	1	Tube
41	60D-6	1	Nut
42	25E-18	1	Washer
43	18C-636	1	Bolt
44	3980519	1	Clip
45	2503833	1	Tube
46	2503840	1	Flat
47	60D-6	1	Nut
48	91F-10	1	O-ring
49	2506290	1	Elbow
50	40K-4	1	Plug

Relief Valve Assembly, Side Dump Bucket

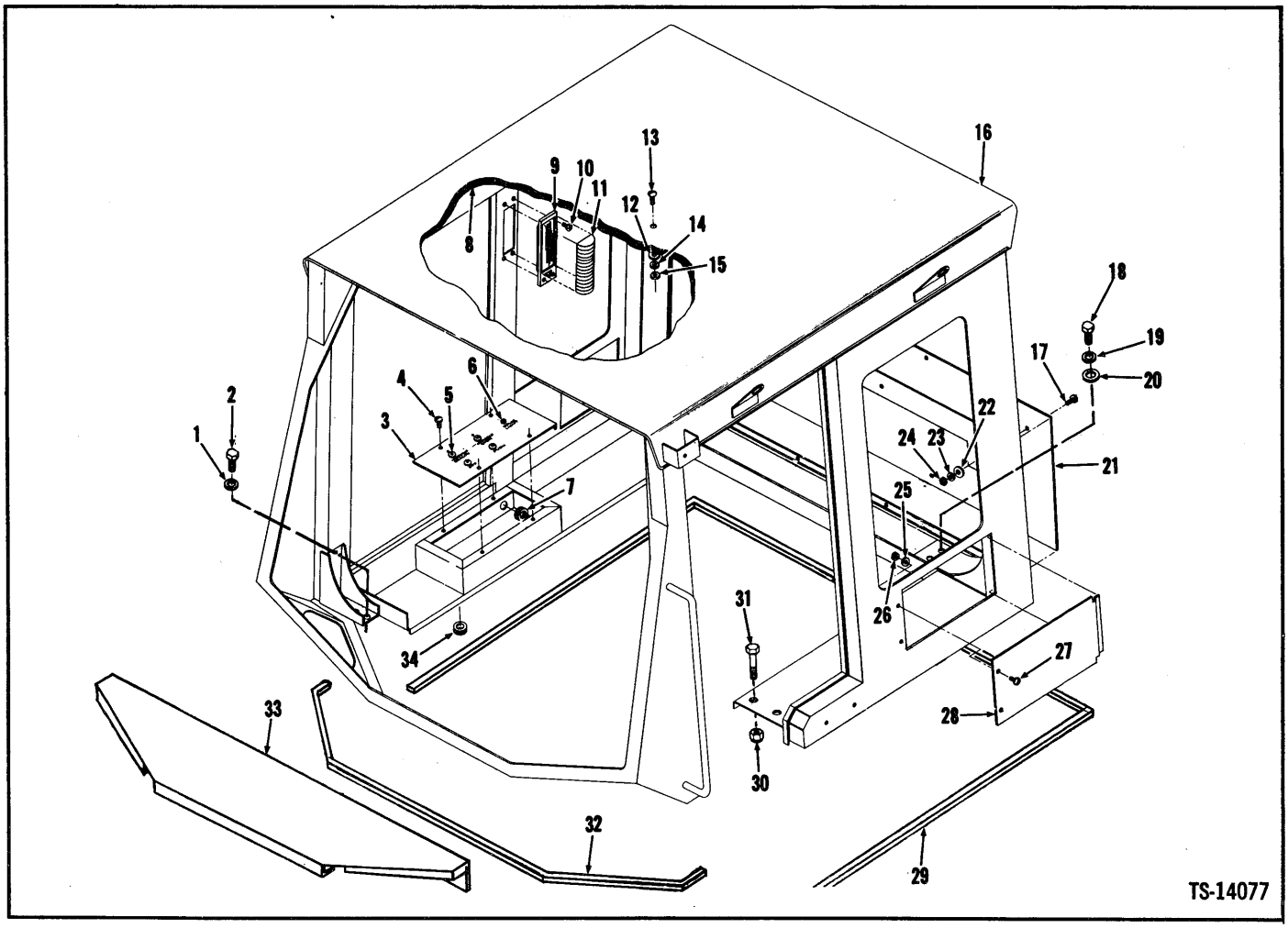


TS-14071

No.	Part No.	Qty.	Description
A	[2]2510755	1	Valve assy relief
1	58K-016	1	O-ring
2	58K-115	1	O-ring
3	[3]960998	1	Relief vlv cartr kit
4	960997	2	Ring back-up
5	§[4]————	1	Housing

[2]Inc. 1➔5
[3]Inc. 1, 2, 4
[4]See A

Roll-Over Protective Structure (ROPS)



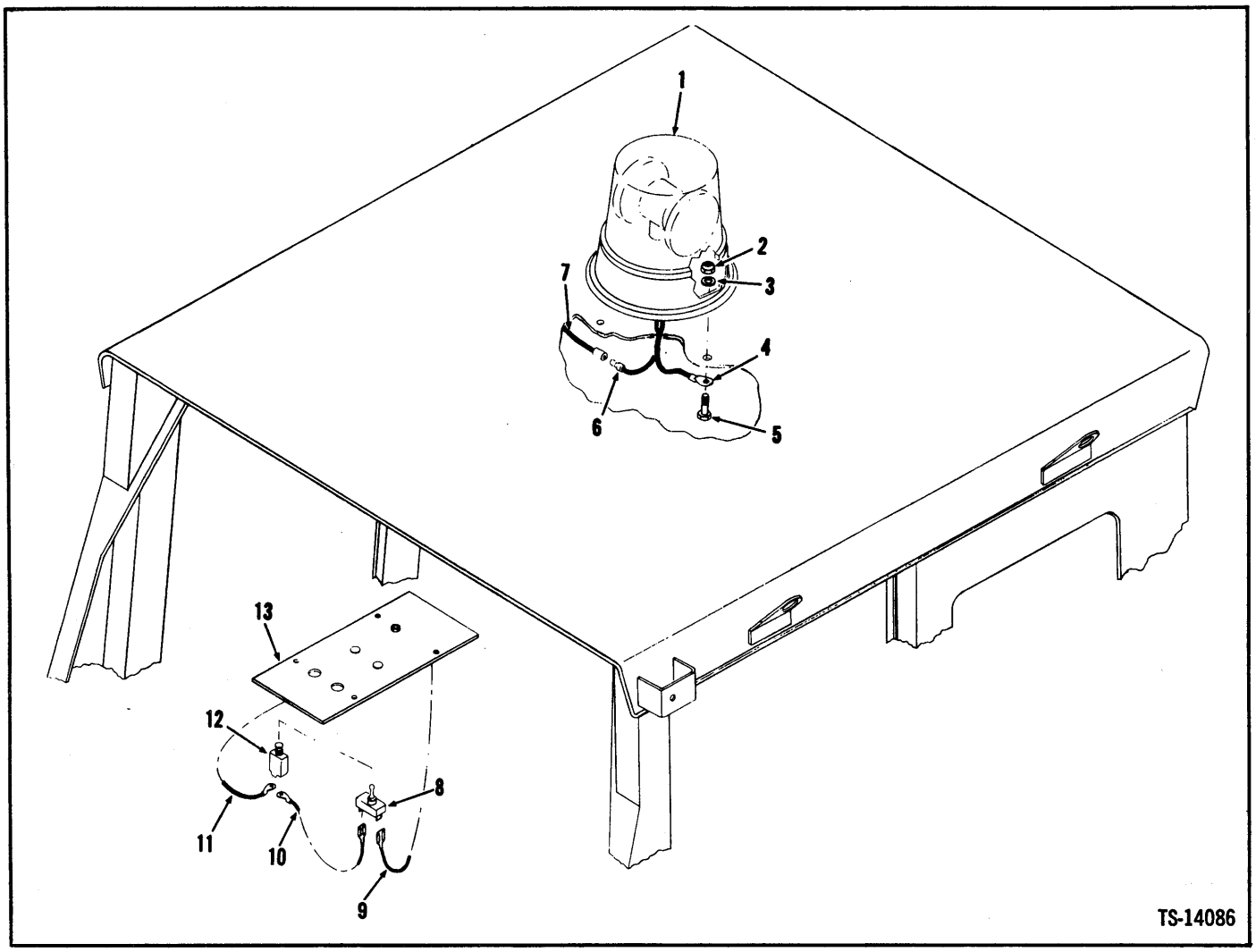
No.	Part No.	Qty.	Description
A	[2]2509194	1	Roll-over prot strctr
1	23E-08	4	Lockwasher
1A	†635682	4	Washer
2	23C-824	4	Bolt
3	2509843	1	Panel assy
4	87G-1010	4	Screw
5	743200	4	Plug
6	[3]1546280	1	Circuit breaker
7	511426	1	Grommet
8	2509832	1	Foam insulation
9	[4]2509846	1	Dome light
9A	†960855	1	Bulb
10	2502439	4	Screw
11	§[5]———	1	Lens
12	25E-17	1	Washer
13	89G-612	1	Screw
14	23E-06	1	Lockwasher
15	61D-06	1	Nut
16	2510293	1	Canopy

No.	Part No.	Qty.	Description
17	89G-410	8	Screw
18	23C-1248	4	Bolt
19	23E-12	4	Lockwasher
20	25E-27	4	Washer
21	2509752	1	Plate
22	25E-15	2	Washer
23	23E-04	8	Lockwasher
24	61D-04	8	Nut
25	23E-04	4	Lockwasher
26	61D-04	4	Nut
27	89G-410	4	Screw
28	2509749	2	Plate
29	[6]949801	1	Gasket
30	18D-06	2	Nut
31	24C-616	2	Bolt
32	[7]949801	1	Gasket
33	2510270	1	Cover
34	511426	1	Grommet

[2]Inc. 1 → 34 Page Z18 Cab Wiring. Ref. S.G.-670, S.G.-713.
[3].75 Amp.
[4]Inc. 9A, 11
[5]See 9
[6]10 ft. (3,05 m)
[7]5 ft. (1,53 m)

PM 3016
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Rotating Beacon Light

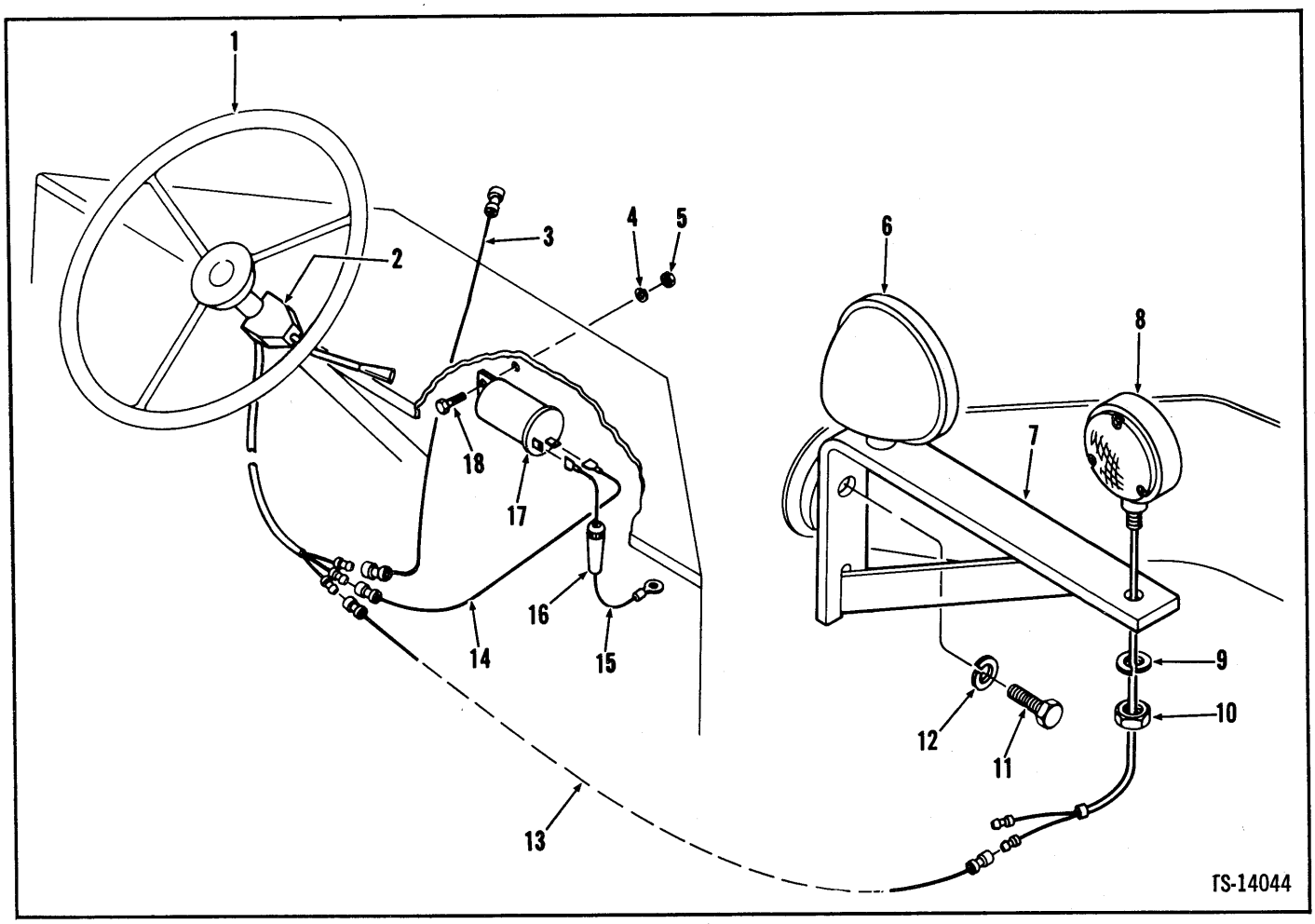


No.	Part No.	Qty.	Description
A	[2]2511574	1	Rotating light kit
1	[3]1548069	1	Light
1A	894300	2	Sealed unit
1B	960962	1	Lens
2	18D-04	3	Nut
3	25E-13	3	Washer
4	614139	1	Terminal
5	24C-464	3	Bolt
6	1513577	1	Terminal
7	[4]———	1	Wire harness
8	1516649	1	Switch
9	[4]———	1	Wire harness
10	1516651	1	Wire
11	2511622	1	Wire
12	[5]1513548	1	Circuit breaker
13	[6]———	1	Panel
14	†1510906	1	Adhesive

[2]Inc. 1→14
[3]Inc. 1A, 1B
[4]See Cab Wiring
[5]10 Amp.
[6]See Cab Assembly

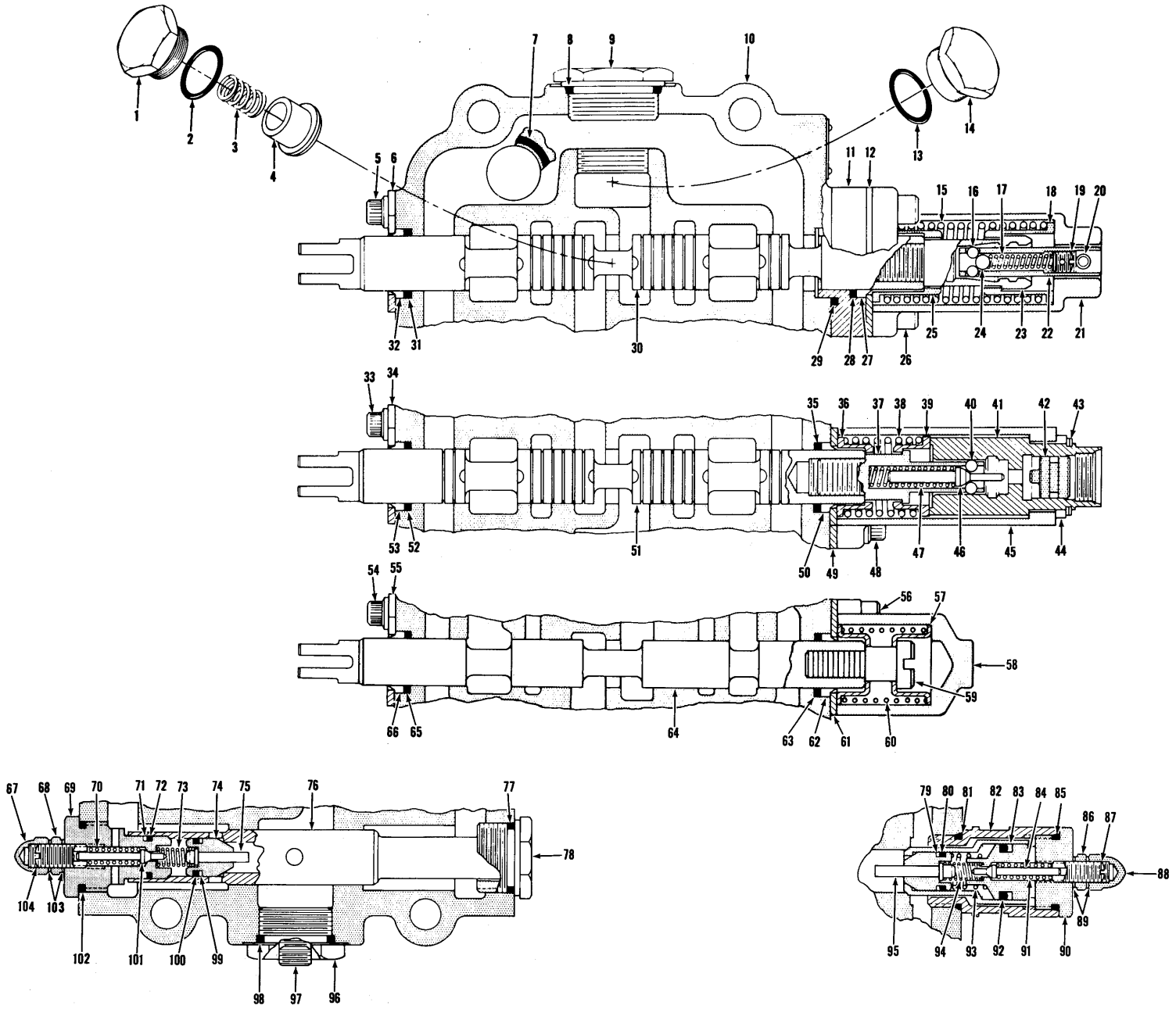
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Turn Signal Installation



No.	Part No.	Qty.	Description
1	[1]————	—	Steering wheel
2	3900535	1	Turn sig switch assy
3	3901404	1	Wire
4	21E-12	1	Lockwasher
5	12D-12	1	Nut
6	[1]————	—	Headlight assy
7	2510930	2	Bracket
8	[2]3950971	2	Turn signal lamp
8A	†3901363	4	Lens
8B	†3901362	2	Bulb
9	§[3]————	2	Lockwasher
10	§[3]————	2	Nut
11	23C-716	2	Bolt
12	4E-07	2	Lockwasher
13	3901404	1	Wire
14	3901405	1	Wire
15	[4]3901406	1	Wire
16	[5]3981052	1	Fuse
17	3901455	1	Flasher
18	85G-1212	1	Screw

[1]See Index
[2]Inc. 8A→10
[3]See 8
[4]Inc. 16
[5]5 Amp.

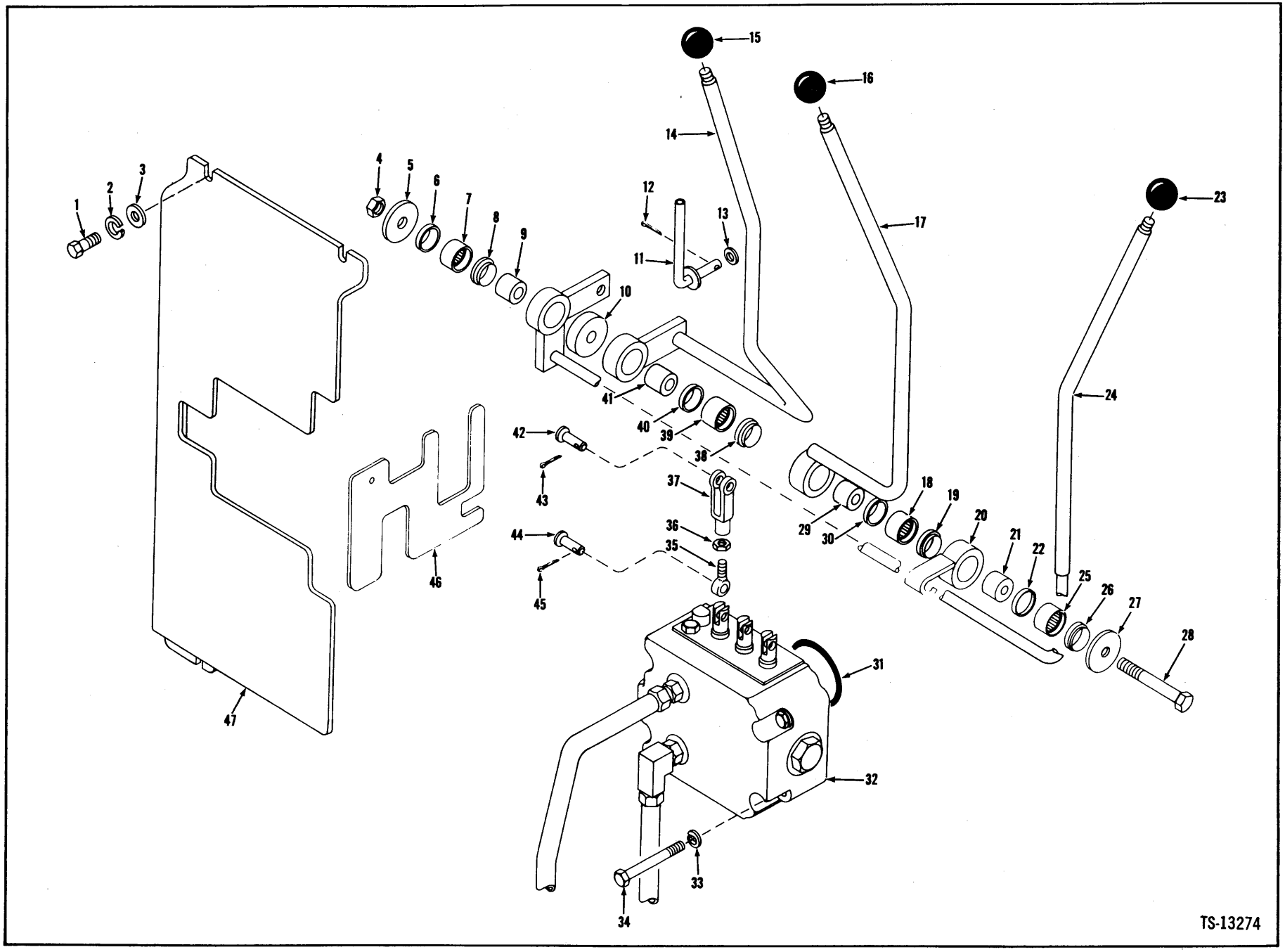

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TS-13150

Valve Assembly, Main (Three Spool)

MICHIGAN

No.	Part No.	Qty.	Description
A	[1]3916077	1	Valve assy main
1	5208957	3	Plug
2	58K-214	3	O-ring
3	947045	3	Spring
4	947046	3	Poppet
5	71G-610	3	Screw
6	947044	2	Plate
7	25K-40108	1	O-ring
8	949948	1	O-ring
9	949945	1	Plug
10	§[2]———	—	Housing
11	949952	1	Spacer
12	947044	2	Plate
13	91F-10	1	O-ring
14	949947	1	Plug
15	949873	1	Spring
16	877420	3	Ball
17	949874	1	Spring
18	949871	1	Seat
19	949984	1	Set screw
20	5201521	1	Pin
21	949872	1	Cover
22	949883	1	Pin
23	949875	1	Sleeve
24	949946	1	Ball
25	949871	1	Seat
26	11G-628	1	Screw
27	947048	1	Wiper
28	58K-214	1	O-ring
29	25K-40108	1	O-ring
30	§[2]———	—	Plunger
31	58K-214	1	O-ring
32	947048	1	Wiper
33	71G-610	3	Screw
34	947044	2	Plate
35	58K-214	1	O-ring
36	947098	2	Seat
37	949881	1	Pin
38	949882	1	Spring
39	947098	2	Seat
40	877420	3	Ball
41	949880	1	Sleeve
42	949963	1	Piston
42A	†76K-113	1	O-ring
43	949950	1	Ring snap
44	949949	1	Spacer
45	949877	1	Cover
46	949878	1	Cam
47	949879	1	Spring
48	71G-616	2	Screw
49	947044	2	Plate
50	947048	2	Wiper
51	§[2]———	—	Plunger
52	58K-214	1	O-ring
53	947048	1	Wiper
54	71G-616	2	Screw
55	947044	2	Plate
56	11G-628	1	Bolt
57	947098	1	Seat
58	947100	1	Cap
59	5208953	1	Bolt
60	949991	1	Spring
61	947098	1	Seat
62	947048	1	Wiper
63	58K-214	1	O-ring
64	§[2]———	—	Plunger
65	58K-214	1	O-ring
66	947048	1	Wiper
67	47D-06	1	Nut
68	8D-06	1	Nut
69	949892	1	Plug
70	948825	1	Spring
71	948849	1	Ring back-up
72	76K-113	1	O-ring
73	948129	1	Spring
74	§———	—	Seat relief
75	949893	1	Piston
76	§[2]———	—	Sleeve
77	58K-214	1	O-ring
78	5206975	1	Plug
79	949954	1	Ring back-up
80	949953	1	O-ring
81	91F-10	1	O-ring
82	949886	1	Housing
83	949956	1	O-ring
84	949891	1	Poppet
85	91F-10	1	O-ring
86	8D-06	1	Nut
87	948044	1	Adjusting screw
88	47D-06	1	Nut
89	948043	2	Washer
90	949890	1	Cap
91	948825	1	Spring
92	949955	1	O-ring
93	949889	1	Spring
94	949887	1	Spring
95	949888	1	Piston
96	949944	1	Plug
97	16F-04	1	Plug
98	91F-10	1	O-ring
99	949954	1	Ring back-up
100	949953	1	O-ring
101	949891	1	Poppet
102	76K-214	1	O-ring
103	948043	2	Washer
104	948044	1	Adjusting screw

[1]Inc. 1➔104
[2]See A


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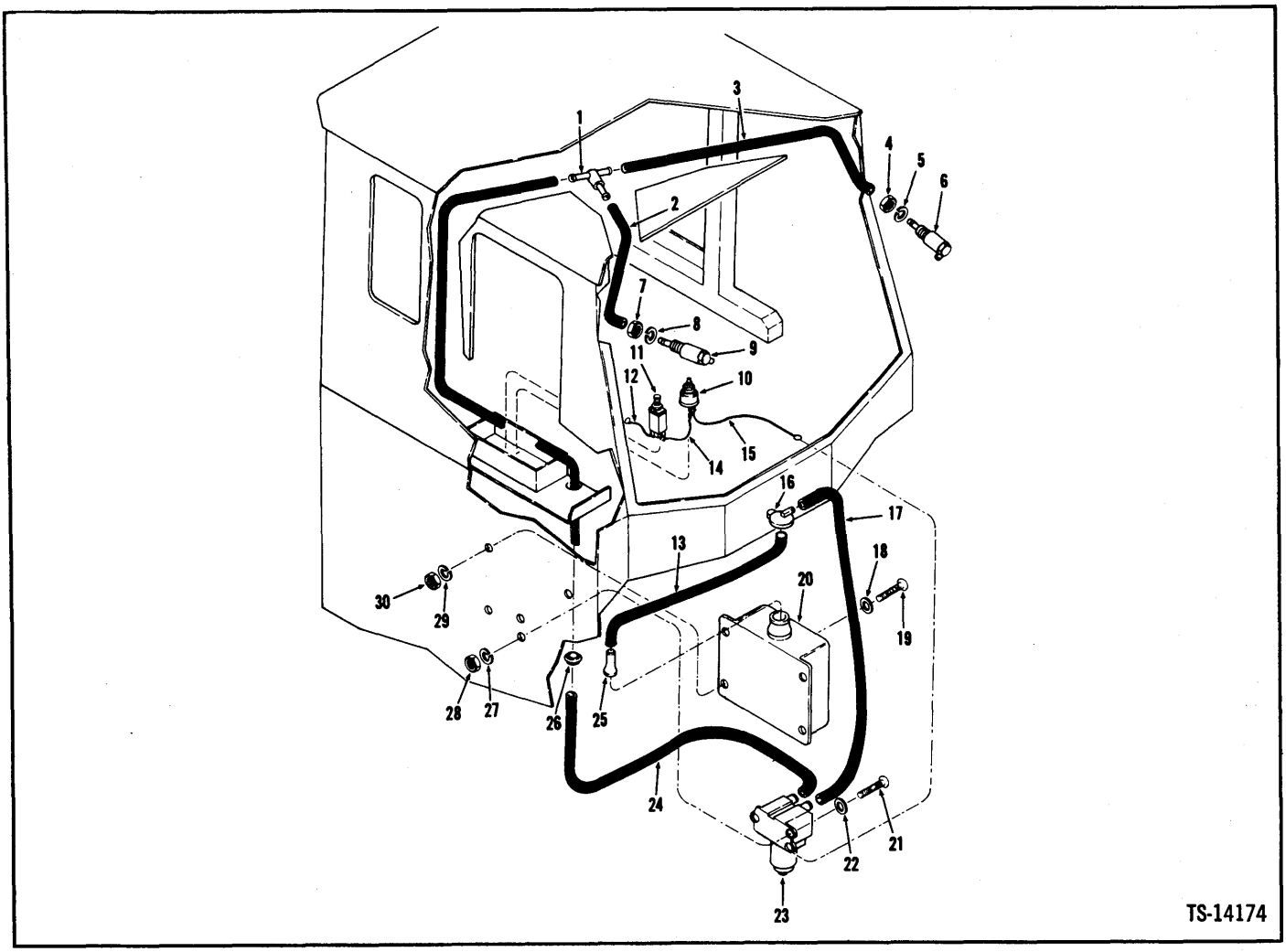
Valve Control Levers & Linkage (Three Spool)

MICHIGAN

No.	Part No.	Qty.	Description
1	23C-612	6	Bolt
2	4E-06	6	Lockwasher
3	25E-17	6	Washer
4	18D-08	1	Nut
5	3978070	1	Washer
6	1522535	1	Seal
7	675227	1	Bearing
8	1522535	1	Seal
9	1503251	1	Sleeve
10	3978061	1	Spacer
11	3978050	1	Lever
12	1F-516	1	Pin cotter
13	25E-21	1	Washer
14	2518811	1	Lever
15	509772	1	Knob
16	509772	1	Knob
17	2518809	1	Lever
18	675227	1	Bearing
19	1522535	1	Seal
20	2503660	1	Boss assy
21	1503251	1	Sleeve
22	1522535	1	Seal
23	509772	1	Knob
24	2518810	1	Lever
25	675227	1	Bearing
26	1522535	1	Seal
27	2503698	1	Washer
28	24C-8128	1	Bolt
29	1503251	1	Sleeve
30	1522535	1	Seal
31	25K-40108	1	O-ring
32	[1]3916077	1	Valve assy main
33	4E-08	3	Lockwasher
34	24C-856	3	Bolt
35	2500416	1	Rod end
36	8D-06	1	Nut
37	2J-6208	1	Clevis
38	1522535	1	Seal
39	675227	1	Bearing
40	1522535	1	Seal
41	1503251	1	Sleeve
42	4F-06106	1	Pin
43	1F-310	1	Pin cotter
44	4F-06106	1	Pin
45	1F-310	1	Pin cotter
46	2503829	1	Cover
47	2506811	1	Cover

[1]See Index

Windshield Washer Kit

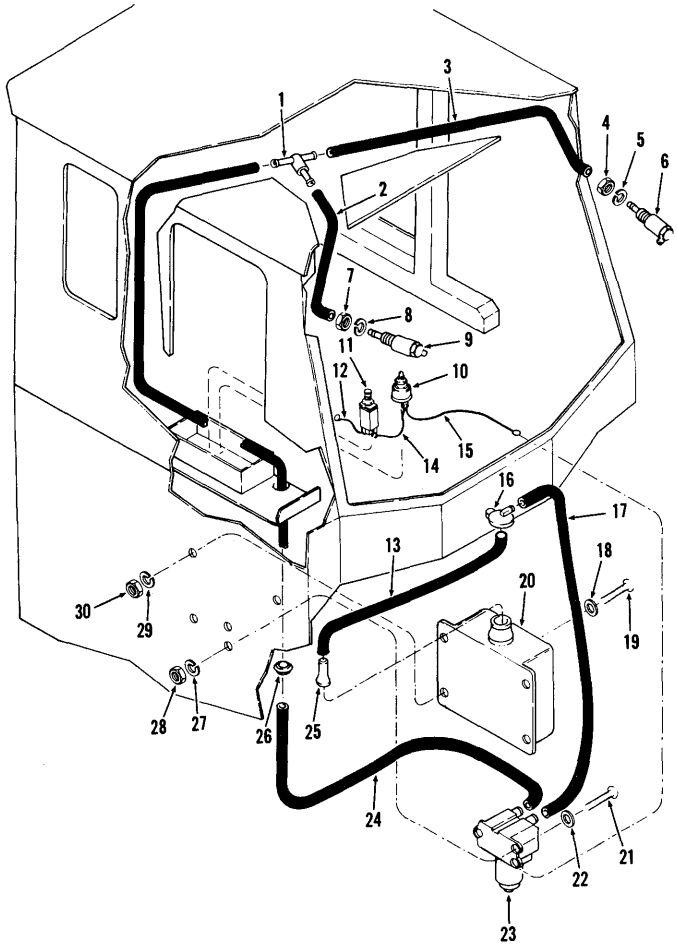


No.	Part No.	Qty.	Description
A	[2]2512203	1	Windshield washer kit
1	949793	1	Tee
2	[3]949791	1	Hose
3	[4]949791	1	Hose
4	64D-06	1	Nut
5	4E-06	1	Lockwasher
6	949762	1	Nozzle
7	64D-06	1	Nut
8	4E-06	1	Lockwasher
9	949762	1	Nozzle
10	2512840	1	Switch
11	[5]949743	1	Circuit breaker
12	2511788	1	Wire
13	[6]949747	1	Hose
14	2501548	1	Wire
15	2511787	1	Wire

No.	Part No.	Qty.	Description
16	949745	1	Cap
17	[3]949792	1	Hose
18	25E-10	4	Washer
19	85G-1010	4	Screw
20	[7]960565	1	Washer tank
21	85G-1010	3	Screw
22	25E-10	3	Washer
23	2511789	1	Pump assembly
24	[8]949747	1	Hose
25	949746	1	Filter
26	742876	1	Grommet
27	17E-10	3	Lockwasher
28	12D-10	3	Nut
29	17E-10	3	Lockwasher
30	12D-10	3	Nut

[2]Inc. 1→30
[3]2 ft. (0,61 m)
[4]4 ft. (1,22 m)
[5]3 Amp.
[6]1 ft. (0,31 m)
[7]Inc. 13, 16, 25
[8]8 Ft. (2,44 m)

Windshield Washer Kit

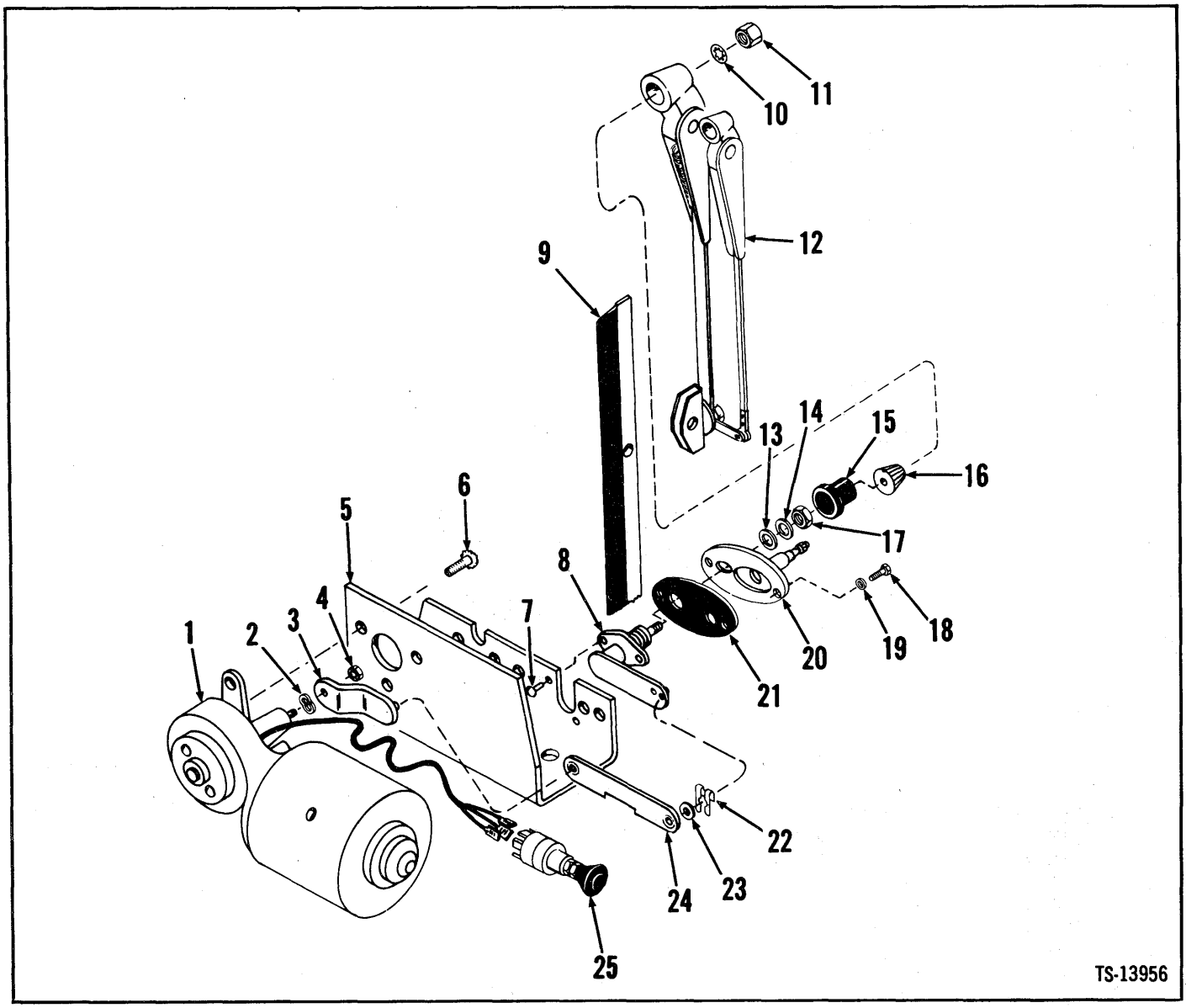


TS-14174

No.	Part No.	Qty.	Description
A	[2]2521055	1	Windshield washer kit
1	949793	1	Tee
2	[3]949791	1	Hose
3	[4]949791	1	Hose
4	64D-06	1	Nut
5	4E-06	1	Lockwasher
6	949762	1	Nozzle
7	64D-06	1	Nut
8	4E-06	1	Lockwasher
9	949762	1	Nozzle
10	2512840	1	Switch
11	[5]949743	1	Circuit breaker
12	2511788	1	Wire
13	[6]949747	1	Hose
14	2501548	1	Wire
15	2511787	1	Wire

No.	Part No.	Qty.	Description
16	949745	1	Cap
17	[3]949747	1	Hose
18	25E-10	4	Washer
19	85G-1010	4	Screw
20	[7]960565	1	Washer tank
21	85G-1010	2	Screw
22	25E-10	2	Washer
23	2517272	1	Pump assembly
23A	†558960	1	Wire
24	[8]949747	1	Hose
25	949746	1	Filter
26	742876	1	Grommet
27	12E-10	2	Lockwasher
28	12D-10	2	Nut
29	12E-10	2	Lockwasher
30	12D-10	2	Nut

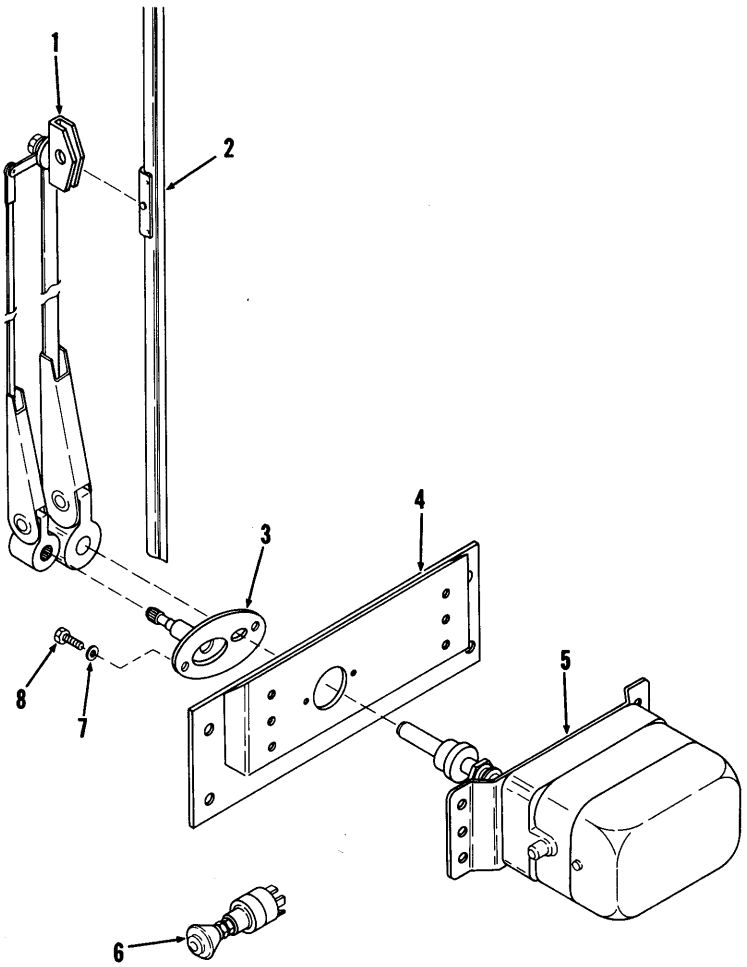
[2]Inc. 1→30
[3]2 ft. (0,61 m)
[4]4 ft. (1,22 m)
[5]3 Amp.
[6]1 ft. (0,31 m)
[7]Inc. 13, 16, 25
[8]8 Ft. (2,44 m)



No.	Part No.	Qty.	Description
A	[2]2512578	1	Wndshld wpr motor kit
1	960096	1	Motor
2	993183	1	Washer
3	992891	1	Drive arm
4	949144	1	Nut
5	992892	1	Bracket
6	992896	3	Screw
7	949143	2	Screw
8	[3]994569	1	Shaft assy
9	949786	1	Wndshld wpr blade
10	9E-05	1	Lockwasher
11	522028	1	Nut
12	[6]2510280	1	Wndshld wiper arm
13	949180	1	Washer
14	949181	1	Washer
15	949183	1	Cap
16	949184	1	Driver
17	949182	1	Nut
18	24C-428	2	Bolt
19	25E-13	2	Washer
20	[4]560164	1	Adapter kit
21	[5]———	1	Gasket
22	890374	2	Clip
23	890375	2	Washer
24	890373	1	Link
25	2501082	1	Switch

[2]Inc. 2, 3, 4 → 7, 22 → 24
[3]Inc. 10, 11, 13 → 17
[4]Inc. 21
[5]See 20
[6]For adjustment see SG-728.

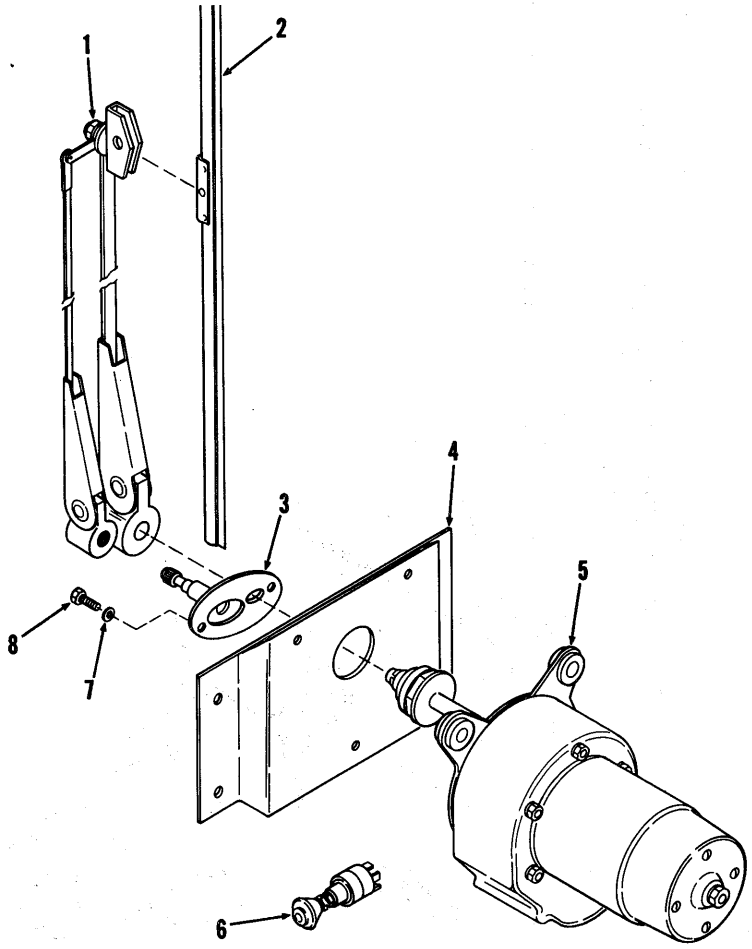
Windshield Wiper - Front



TS-20149

No.	Part No.	Qty.	Description
1	[2]3909802	1	Wndshld wiper arm
2	3909801	1	Wndshld wpr blade
3	560164	1	Adapter kit
4	3909783	1	Bracket
5	3909800	1	Motor
6	2501082	1	Switch
7	25E-13	2	Washer
8	18C-428	2	Bolt
9	3902815	1	Bracket Buzzer
10	†3908781	1	Wire

[2]For adjustment see SG-728.

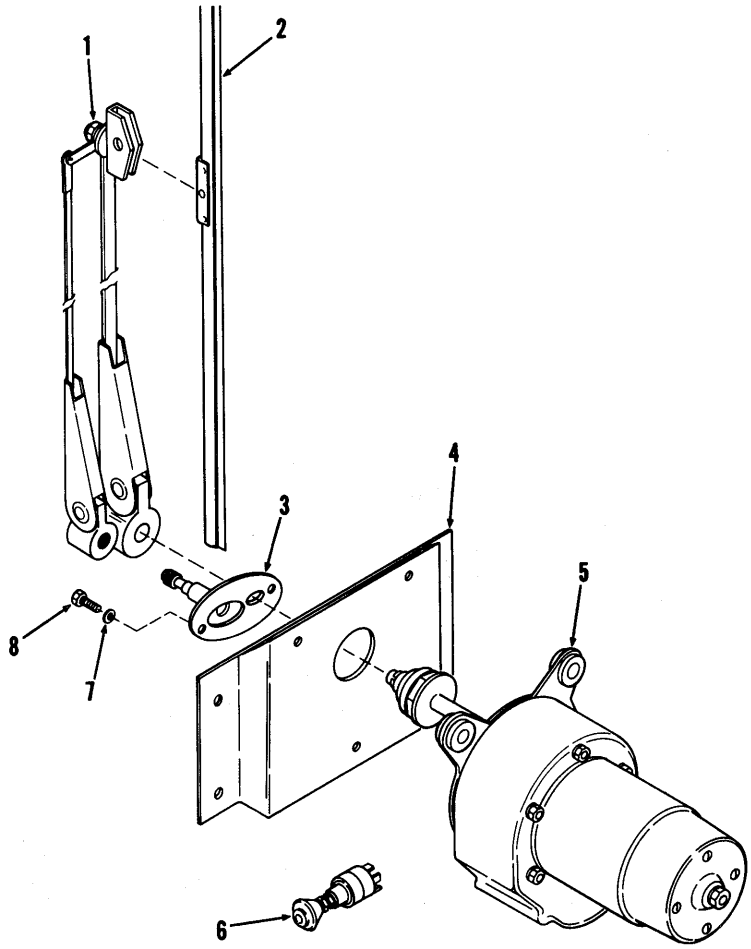


TS-20154

No.	Part No.	Qty.	Description
1	[2]3918151	1	Wndshld wiper arm
2	3918152	1	Wndshld wpr blade
3	560164	1	Adapter kit
4	3902812	1	Bracket
5	3918150	1	Motor
6	2501082	1	Switch
7	25E-13	2	Washer
8	18C-428	2	Bolt
9	†3902815	1	Bracket buzzer
10	†3908781	1	Wire

[2]For adjustment see SG-728.

Windshield Wiper - Front

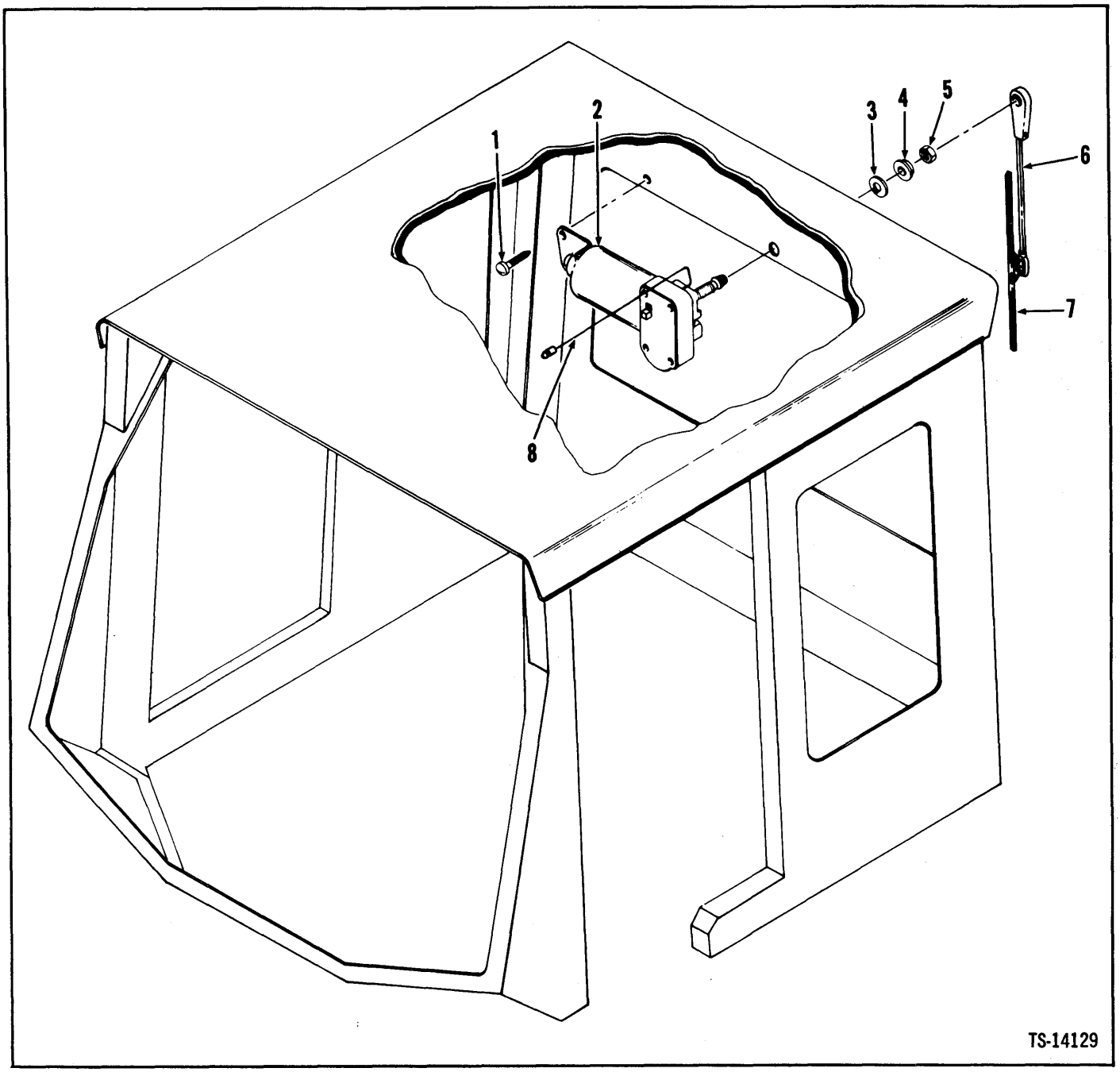


TS-20154

No.	Part No.	Qty.	Description
A	3588143	1	Wiper rework kit
1	[3]2510280	1	Wndshld wiper arm
2	949786	1	Wndshld wpr blade
3	560164	1	Adapter kit
4	3902812	1	Bracket
4A	†18C-428	1	Bolt
4B	†18D-4	1	Nut
5	3918150	1	Motor
5A	3588147	1	Spacer
6	2501082	1	Switch
7	25E-13	2	Washer
8	18C-428	2	Bolt
9	†3588145	1	Bracket Buzzer
10	†3588146	1	Wire ground
10A	†602297	1	Terminal
11	†3588180	1	Wire

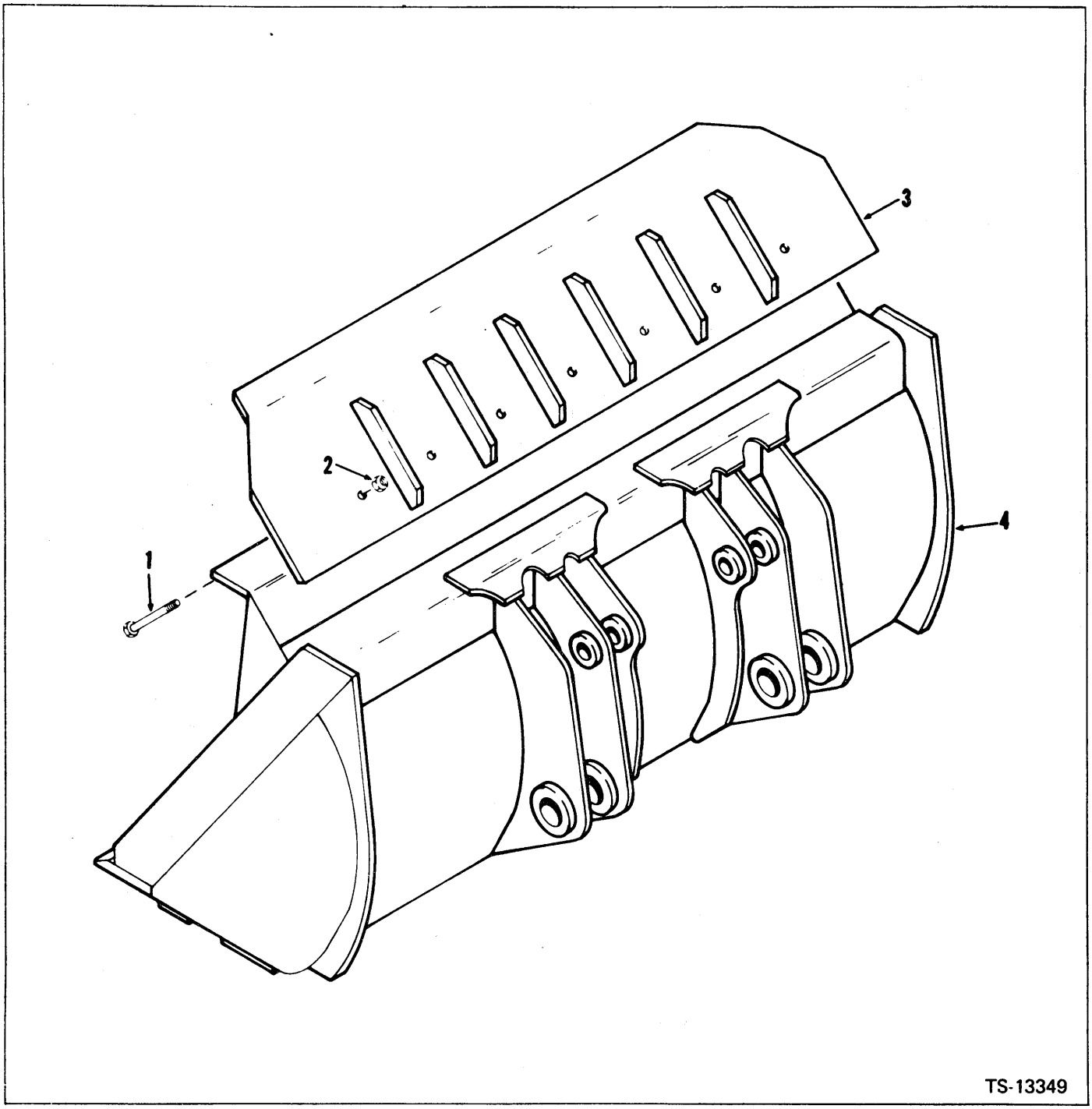
[2]Inc. 1 → 6
[3]For adjustment see SG-728.

Windshield Wiper Kit, Rear



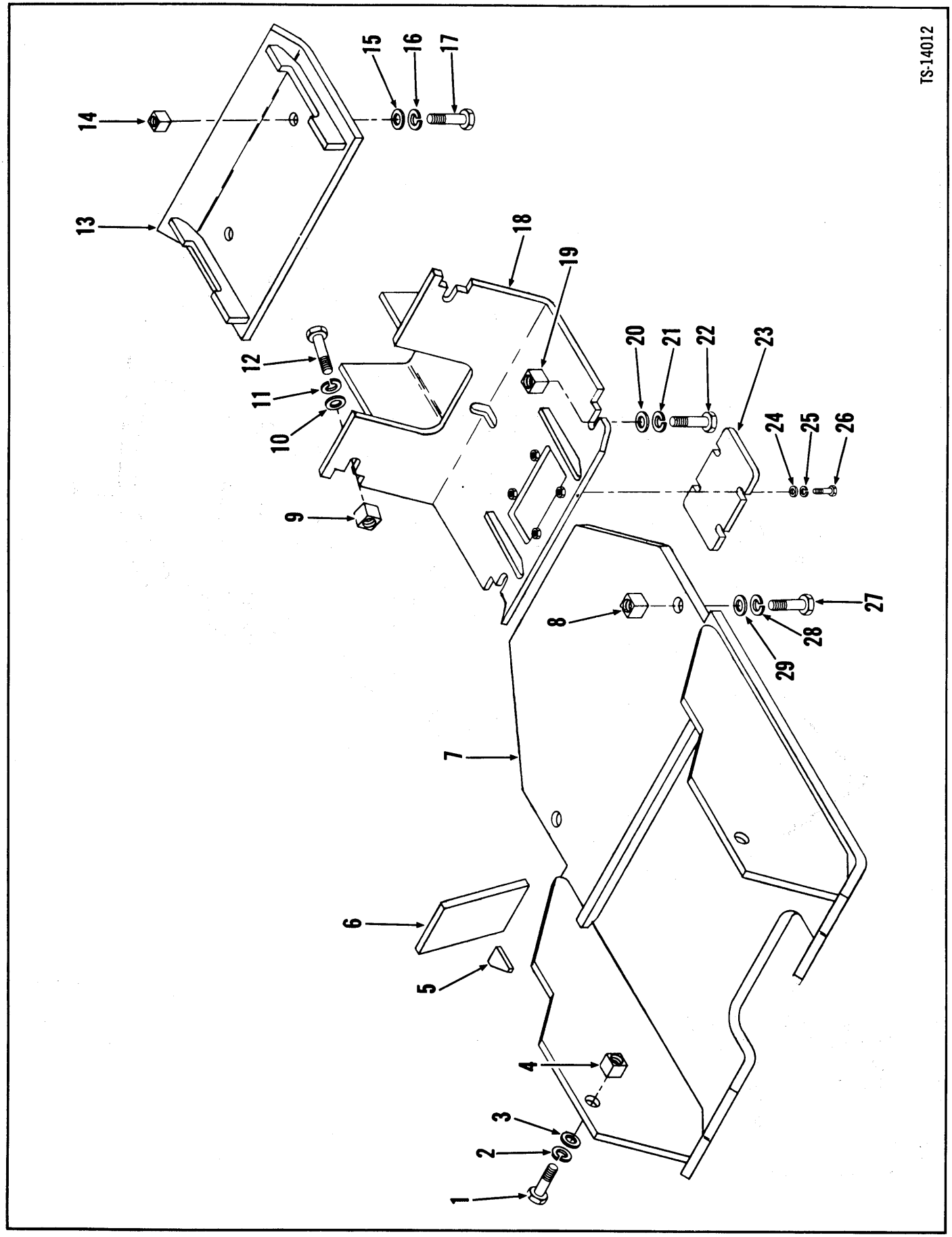
No.	Part No.	Qty.	Description
A	[2]2510954	1	Wndshld wpr kit R
1	18G-1008	1	Screw
2	[3]2336780	1	Wiper motor
3	892010	1	Gasket
4	892011	1	Spacer
5	892012	1	Nut
6	[4]892052	1	Wndshld wpr arm R
7	507049	1	Wndshld wpr blade R
8	2510951	1	Wire

[2]Inc. 1→8
[3]Inc. 3, 4, 5
[4]For adjustment see SG-728.



No.	Part No.	Qty.	Description
A	[2]3978312	1	Spill guard kit
1	24C-824	7	Bolt
2	18D-08	7	Nut
3	*3978316	1	Spill guard assy
4	[1]----	1	Bucket

[1]See Index
[2]Inc. 1 → 3
*For 1-750 cu. yd. (1-4 M^3) 1-504 cu. yd. (1-2 M^3)

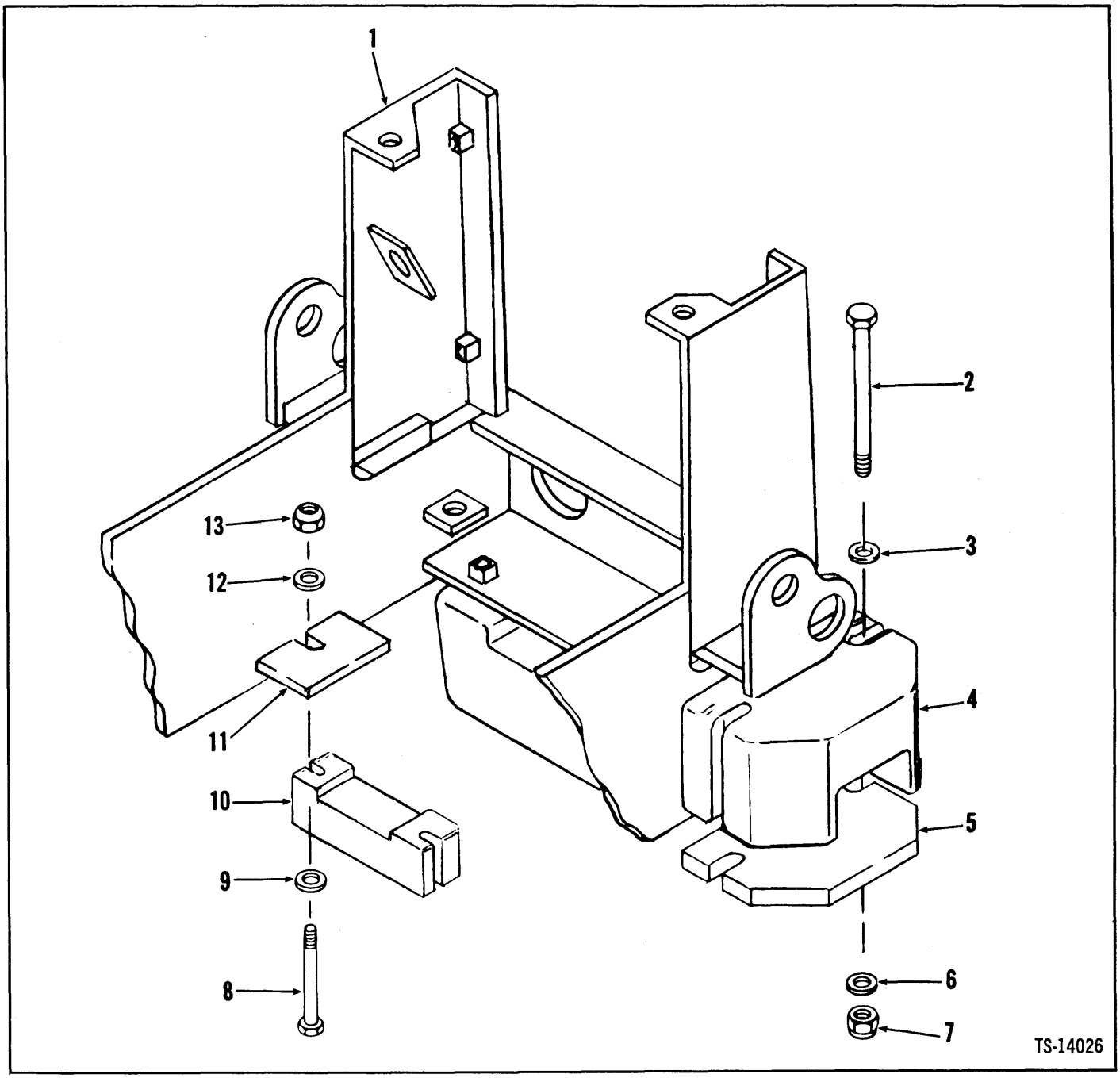

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Belly Guards – Front & Rear*

MICHIGAN

No.	Part No.	Qty.	Description
1	24C-1228	2	Bolt
2	4E-12	2	Lockwasher
3	25E-27	2	Washer
4	[3]566068	2	Tapped block
5	[3]642064	2	Gusset
6	[3]1656823	2	Rectangular flat
7	2503763	1	Belly guard assy F
8	[3]566068	2	Tapped block
9	[3]566068	2	Tapped block
10	25E-18	2	Washer
11	4E-12	2	Lockwasher
12	24C-1232	2	Bolt
13	2503934	1	Belly guard assy R
14	[3]1532712	2	Tapped block
15	25E-28	2	Washer
16	4E-12	2	Lockwasher
17	24C-1232	2	Bolt
18	2503936	1	Belly guard assy C
19	[3]730231	2	Tapped block
20	25E-18	2	Washer
21	4E-12	2	Lockwasher
22	24C-1232	2	Bolt
23	2503929	1	Plate
24	25E-18	4	Washer
25	4E-06	4	Lockwasher
26	23C-624	4	Bolt
27	24C-1228	2	Bolt
28	4E-12	2	Lockwasher
29	25E-27	2	Washer

*Standard for Ranger & Optional for Michigan Log Loader
[3]Welded to Frame

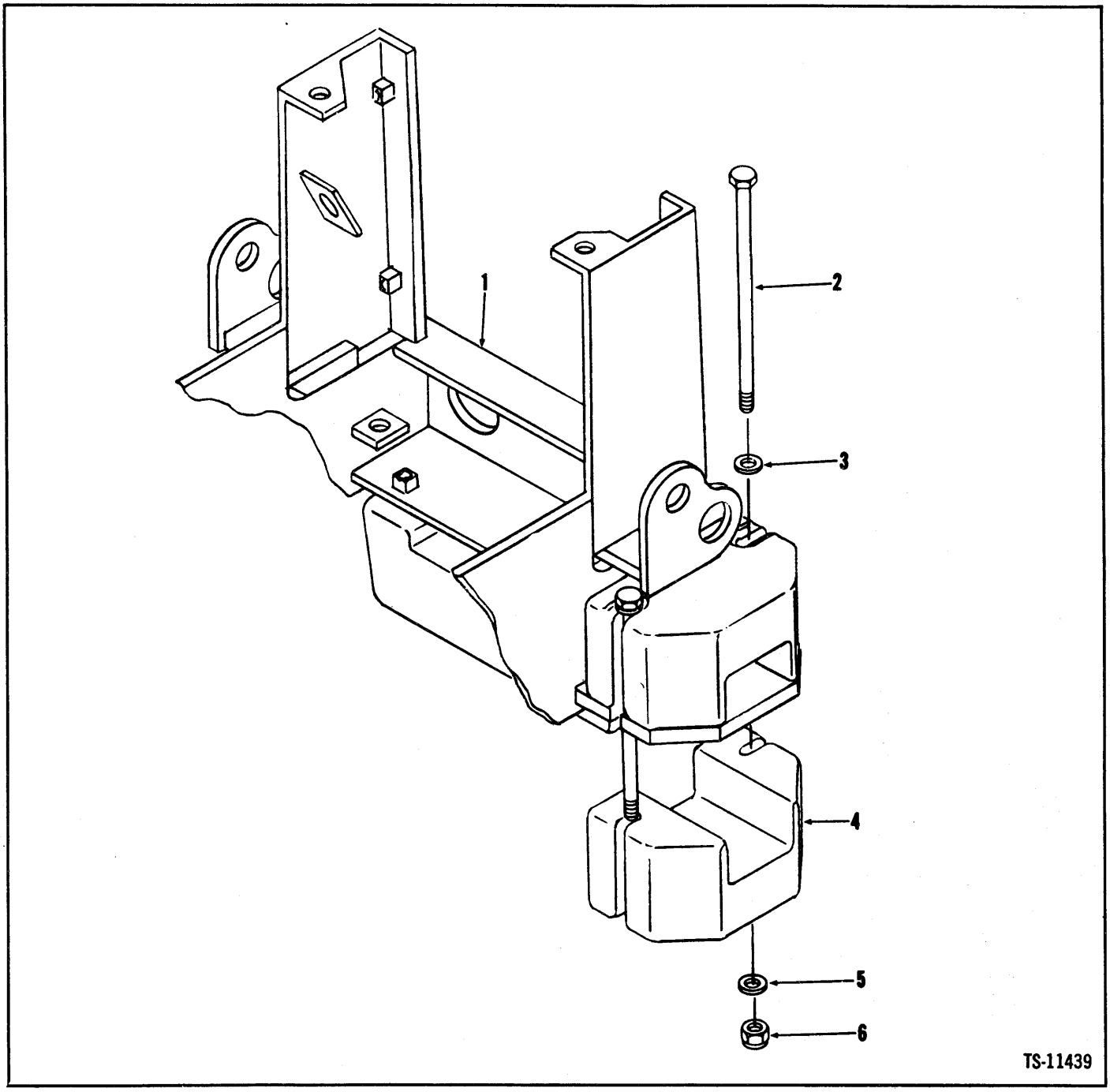


No.	Part No.	Qty.	Description
1	[2]————	—	Frame
2	24C-12160	4	Bolt
3	25E-18	4	Washer
4	[3]2501156	2	Counterweight
5	2501057	2	Plate
6	25E-18	4	Washer
7	18D-12	4	Nut
8	24C-12136	2	Bolt
9	25E-27	2	Washer
10	[4]3981138	1	Counterweight
11	2510850	2	Plate
12	25E-27	2	Washer
13	68D-12	2	Nut

*Standard — 990 lbs. (450 kg) Inc. 2 → 13. For Michigan & Ranger Log Loader.

[2]See Index
[3]230 lbs. each (105 kg)
[4]440 lbs. (200 kg)

Counterweight*

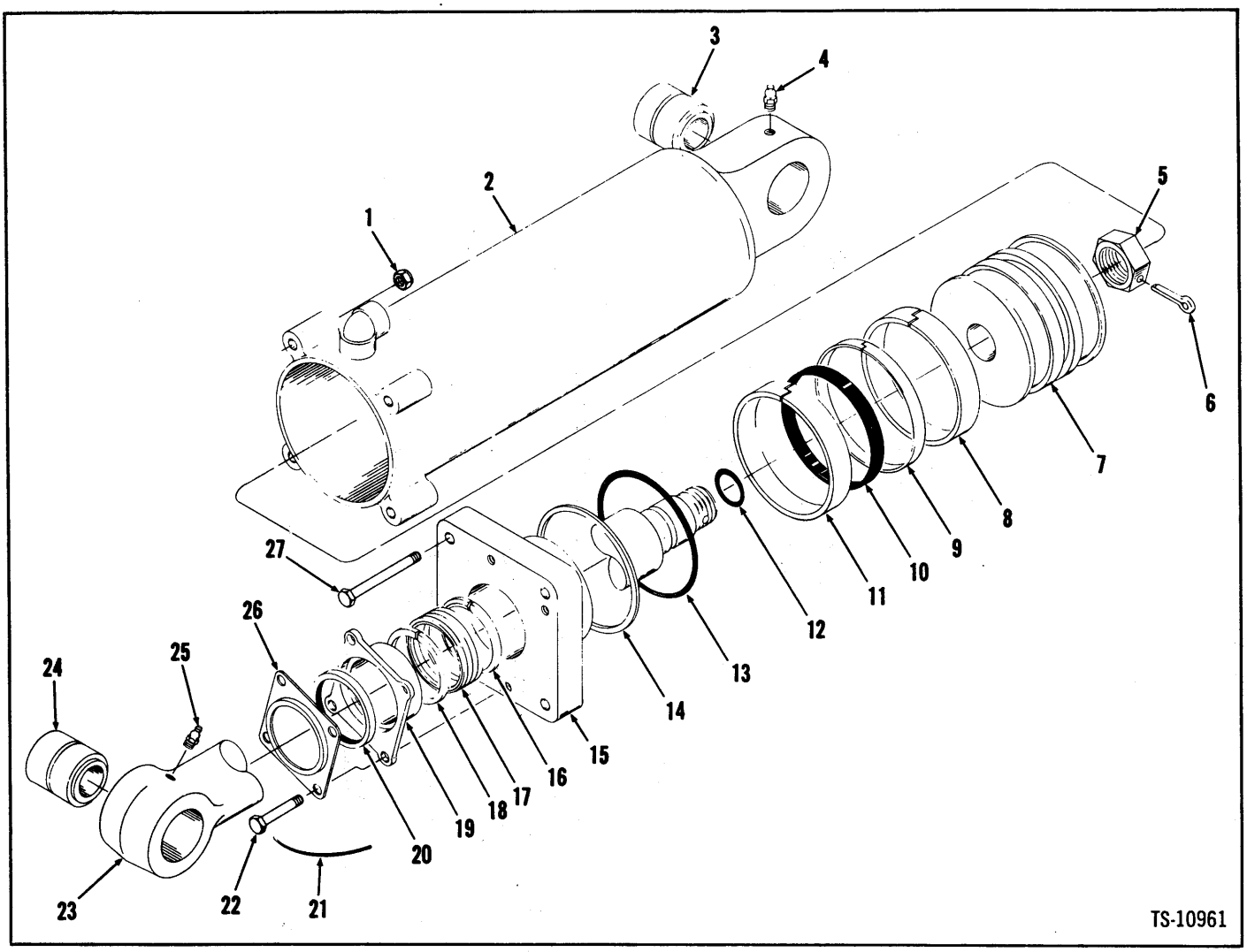


No.	Part No.	Qty.	Description
1	[2]———	—	Frame
2	643675	4	Bolt
3	[3,4]2501156	2	Counterweight
4	25E-28	4	Washer
5	18D-12	4	Nut

*Optional — 460 lbs. (209 kg). For Michigan & Ranger Log Loader.

[2]See Index
[3]230 lbs. each (105 kg)
[4]Optional in lieu of Hydro-inflation

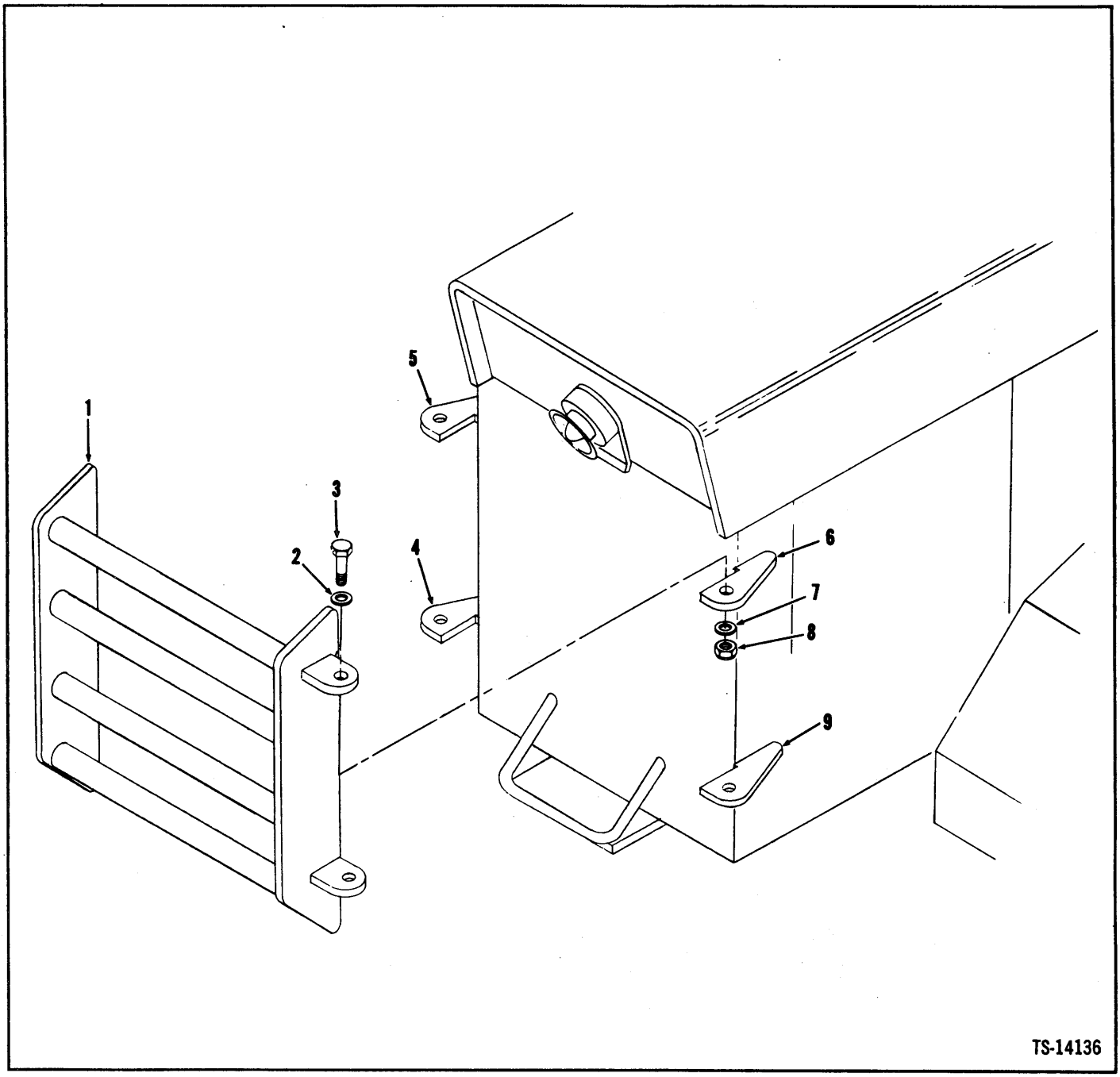
Cylinder Assembly, Clamp – 3.5 in. (88,9 mm)



No.	Part No.	Qty.	Description
A	[2,3]1539308	2	Cylinder assembly
B	[10,11]2516071	1	Kit
1	68D-07	4	Nut
2	[4]537205	1	Cylinder bucket
3	538604	1	Bushing
4	10H-35	1	Fitting grease
5	1514638	1	Nut
6	1F-640	1	Pin cotter
7	1503639	1	Piston
8	§[12]----	1	Ring
9	§[12]----	1	Ring
10	§[12]----	1	Ring
11	§[12]----	1	Ring
12	§[12]----	1	O-ring
13	§[12]----	1	O-ring
14	§[12]----	1	Ring back-up
15	[5]945112	1	Cap
16	§[6]----	2	Adapter
17	[7]2501106	1	Packing assy
18	§[6]----	2	Adapter
19	526451	1	Gland
20	941568	1	Seal
21	[8]----	2	Lockwire
22	4C-620	4	Bolt
23	[9]1539307	1	Rod
24	538604	1	Bushing
25	10H-35	1	Fitting grease
26	512797	1	Retainer
27	24C-752	4	Bolt

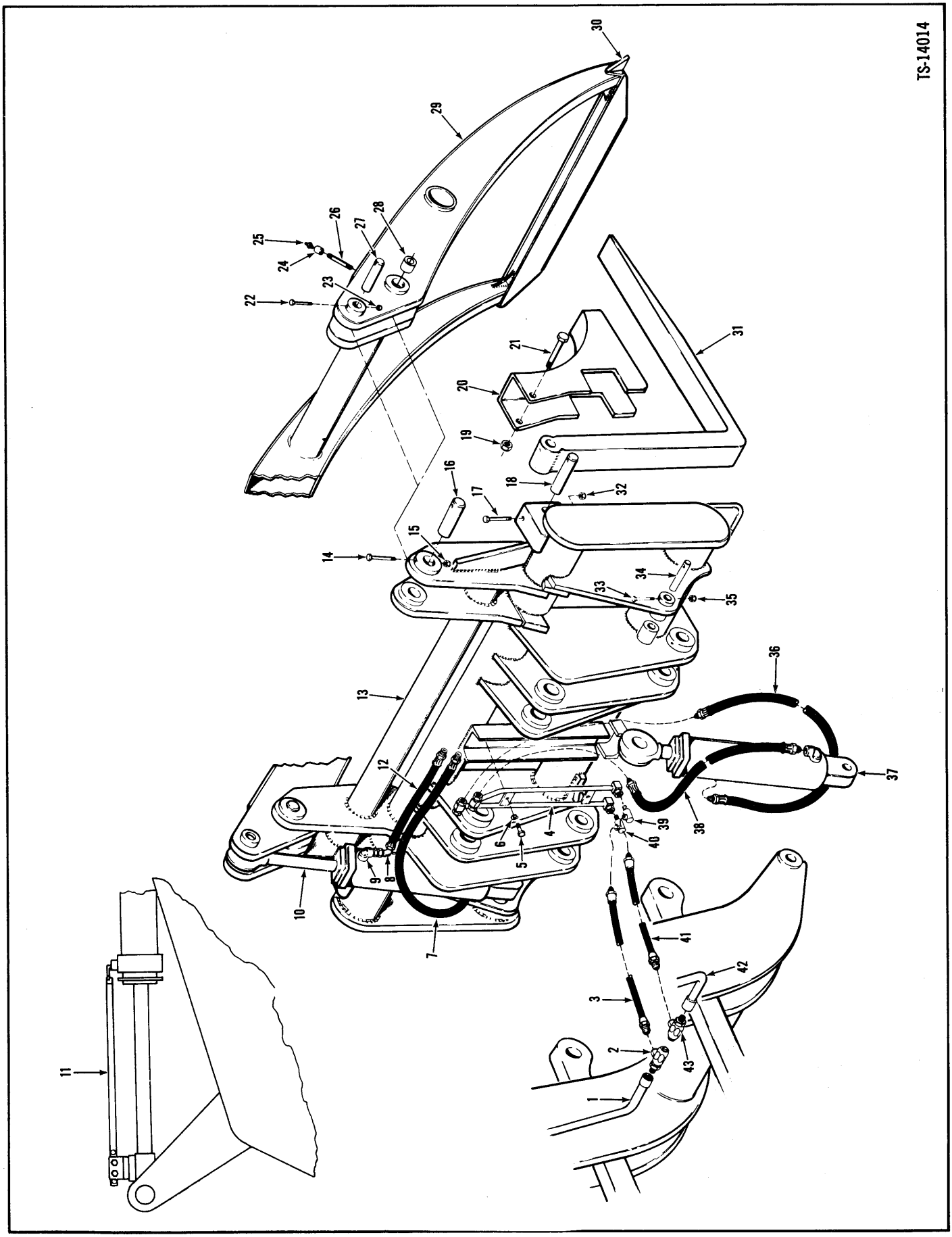
[2]Inc. 1 → 3, 5 → 24, 26, 27
[3]Quantities listed are for one (1). This machine uses two (2).
[4]Inc. 3
[5]Inc. 13, 14
[6]See 17
[7]Inc. 16, 18
[8]16 gauge x 20 in. (508 mm) long
[9]Inc. 24
[10]Inc. 6, 8 → 14, 16 → 18, 20
[11]For reference see Service Gram S.G.-597
[12]See B

Grille Guard Kit



No.	Part No.	Qty.	Description
A	[2]2510441	1	Grille guard kit
1	2510337	1	Guard assy
2	25E-27	4	Washer
3	24C-1236	4	Bolt
4	2510335	1	Plate
5	2510335	1	Plate
6	2510335	1	Plate
7	25E-27	4	Washer
8	18D-12	4	Nut
9	2510335	1	Plate

[2]Inc. 1→9

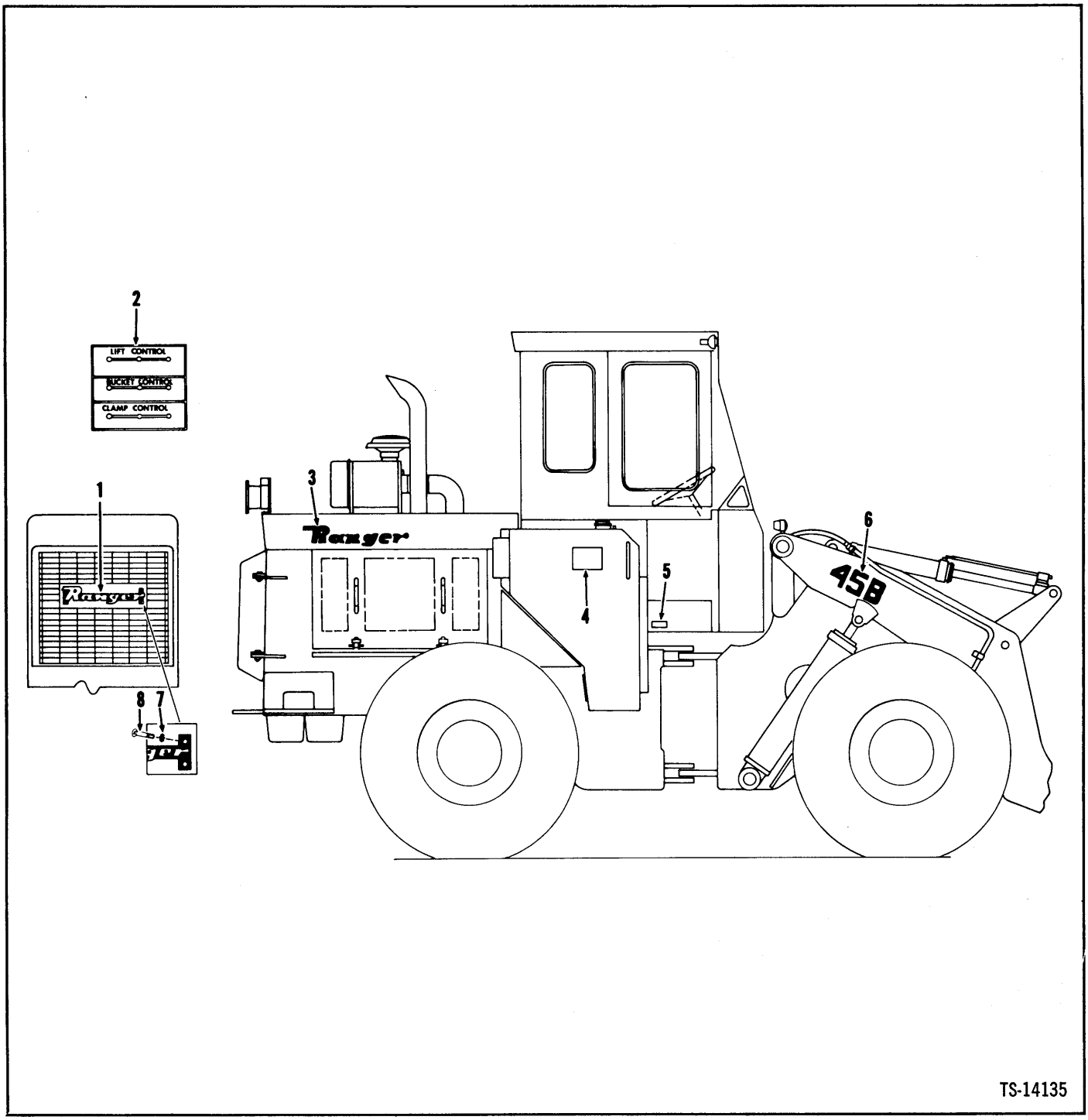

TS-14014
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Log Grapple Attachment

MICHIGAN

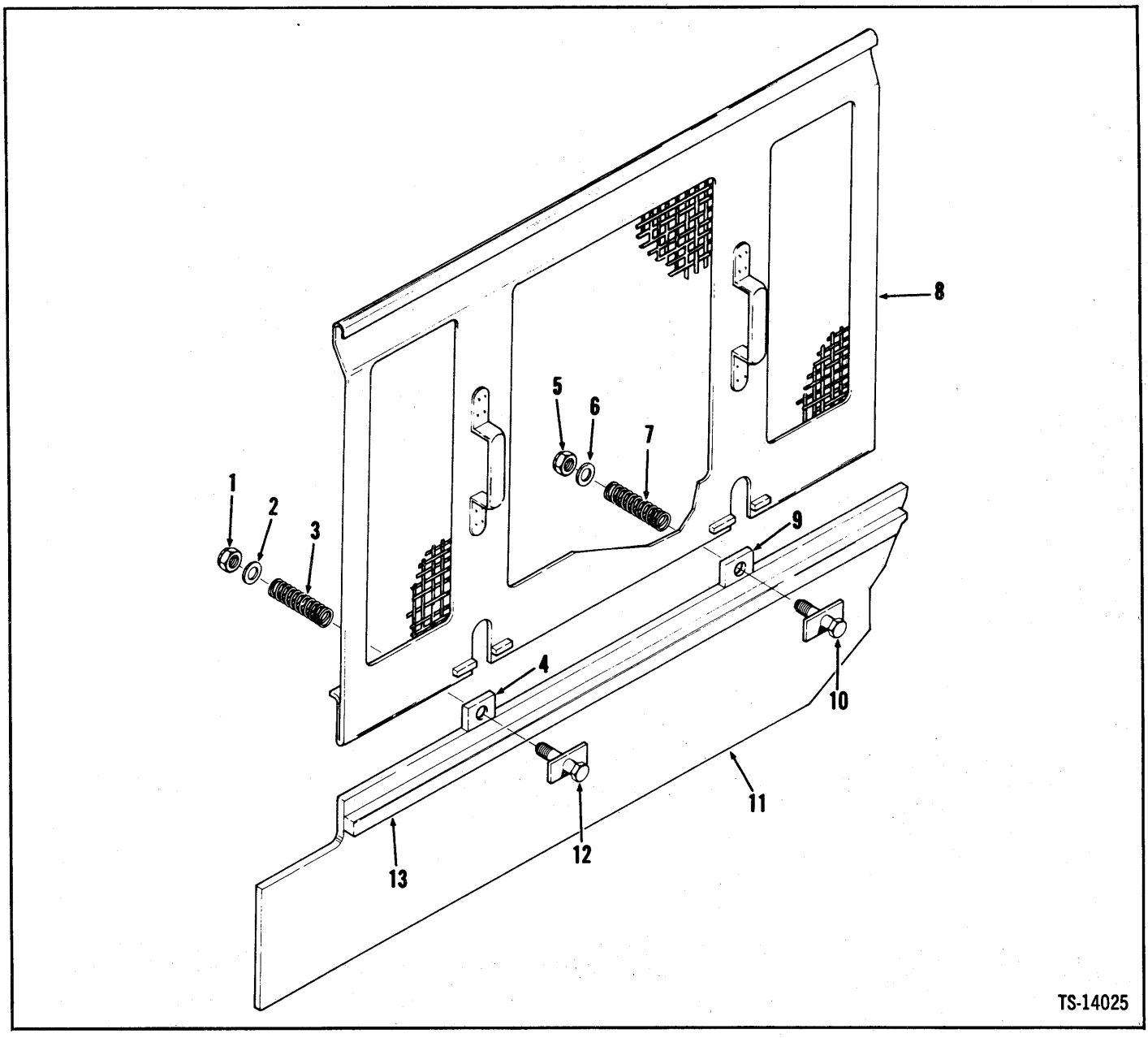
No.	Part No.	Qty.	Description
A	[3]2502312	1	Log grapple assy
1	2515224	1	Tube LH
2	1509752	1	Swivel joint
3	2503874	1	Hose
4	1545223	1	Tube assy
5	24C-616	2	Bolt
6	4E-06	2	Lockwasher
7	591896	1	Hose
8	11K-6	2	Fitting
9	656598	2	Connector
10	[1]1539308	1	Cylinder
11	2503738	1	Cam
12	1526135	1	Hose
13	2510028	1	Carrier assy
14	24C-668	2	Bolt
15	18D-06	2	Locknut
16	1523146	2	Pin
17	24C-696	2	Bolt
18	1512883	2	Pin
19	18D-10	2	Locknut
20	2510387	2	Deflector
21	24C-10128	2	Bolt
22	24C-648	2	Bolt
23	18D-06	2	Locknut
24	37K-302	2	Coupling
25	10H-25	2	Fitting grease
26	5K-126	2	Nipple
27	588823	2	Pin
28	1521804	4	Bushing
29	[4]1523136	1	Clamp assy
30	657871	2	Gusset
31	538401	2	Fork
32	18D-06	2	Locknut
33	24C-648	2	Bolt
34	1512883	2	Pin
35	18D-06	2	Locknut
36	1526135	1	Hose
37	[1]1539308	1	Cylinder
38	591896	1	Hose
39	31F-4	1	Adapter
40	31F-4	1	Adapter
41	2503874	1	Hose
42	3978047	1	Tube RH
43	1509752	1	Swivel joint

[1]See Index
[3]Inc. 2→41, 43
[4]Inc. 28



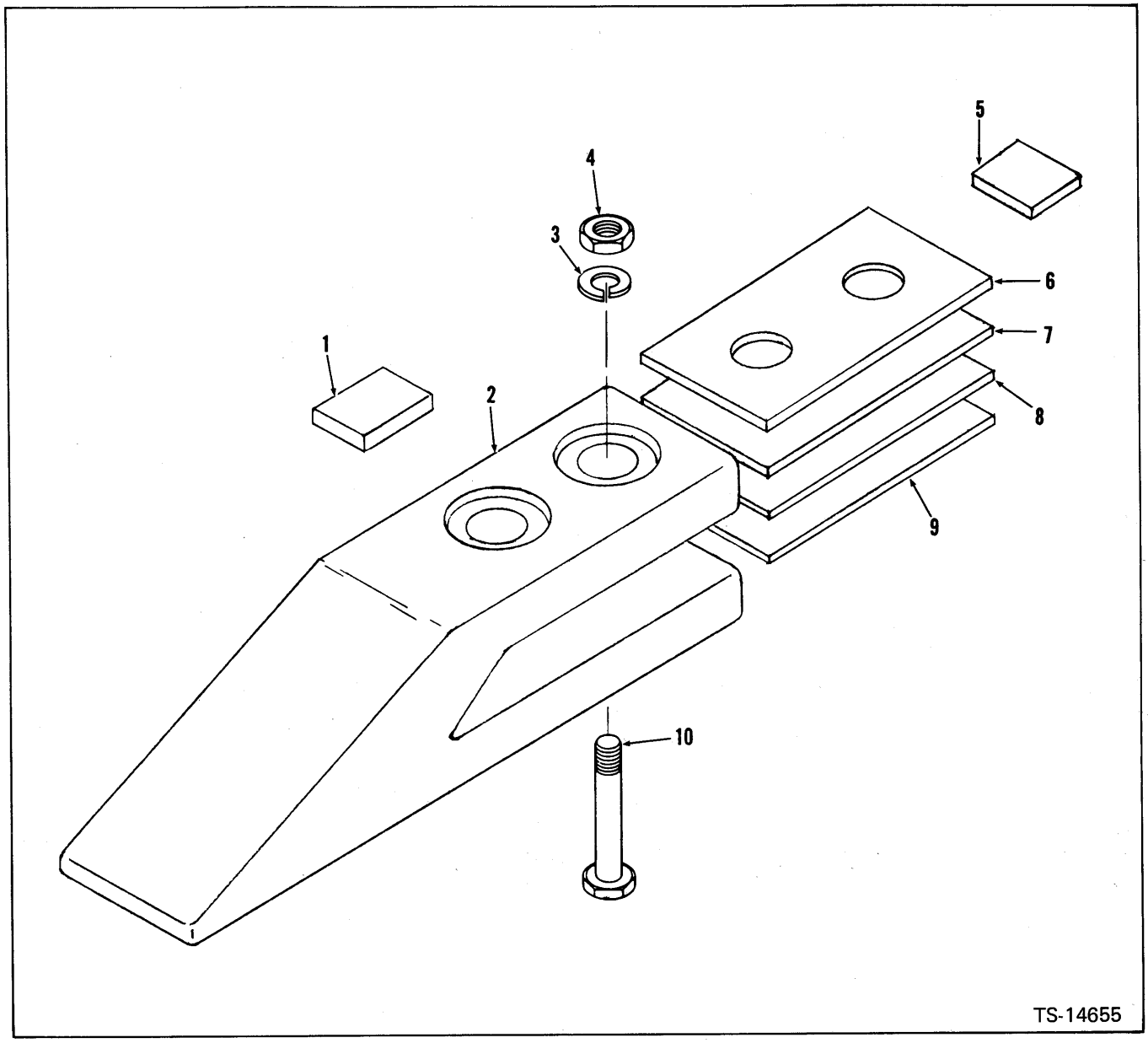
No.	Part No.	Qty.	Description
1	1515944	1	Nameplate
2	1516268	1	Decal valve levers
3	1909493	2	Decal ranger
4	----	–	Omit
5	1516973	1	Plate
6	2502971	2	Decal model
7	20E-04	4	Lockwasher
8	7G-418	4	Screw

Side Panels



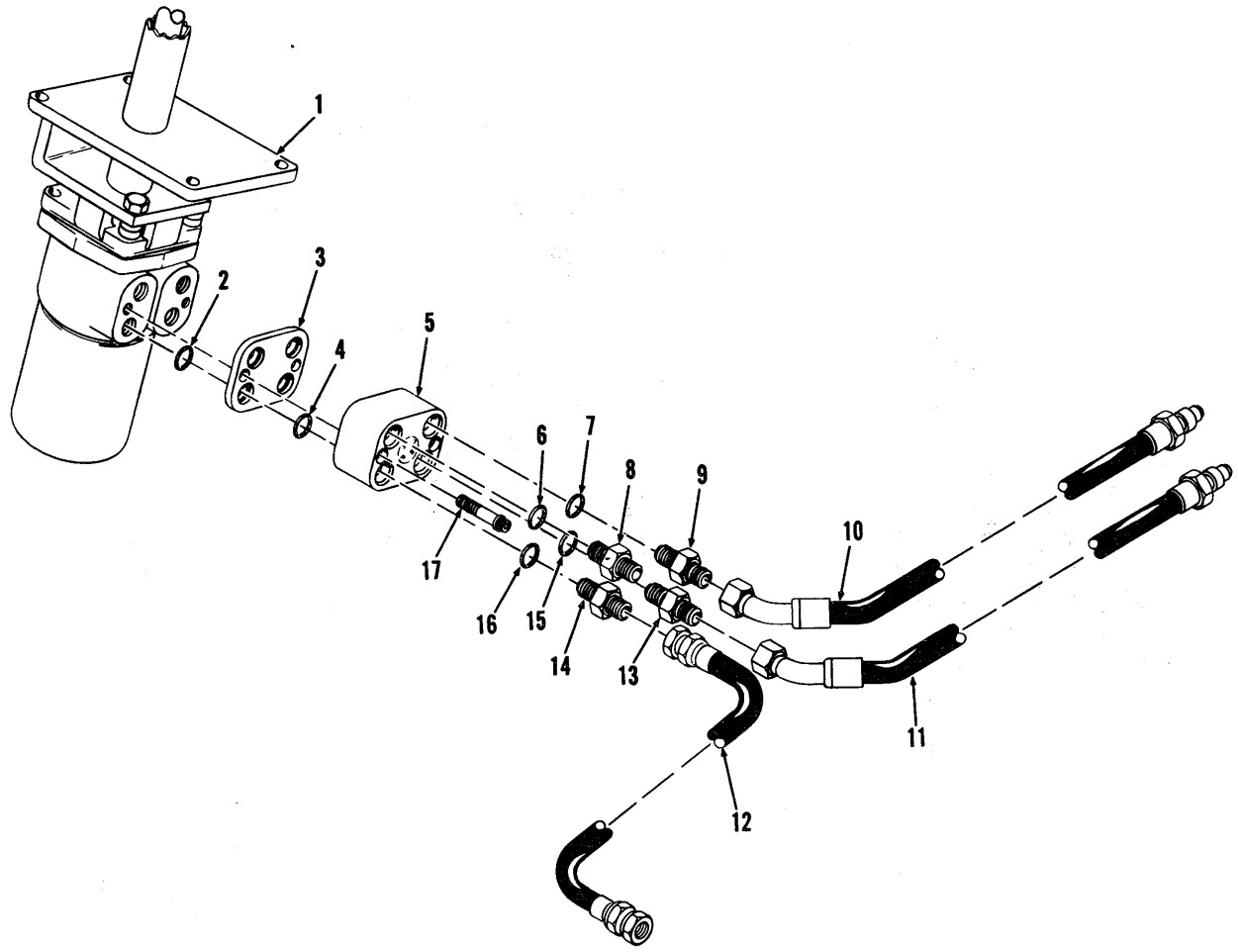
No.	Part No.	Qty.	Description
1	18D-06	2	Nut
2	25E-18	2	Washer
3	564584	2	Spring
4	2503303	2	Flat
5	18D-06	2	Nut
6	25E-18	2	Washer
7	564584	2	Spring
8	2510875	2	Side panel
9	2503303	2	Flat
10	1518093	2	Catch assy
11	[2]————	—	Frame
12	1518093	2	Catch assy
13	1518091	2	Flat

[2]See PM Index



No.	Part No.	Qty.	Description
A	[2,3]3983595	1	Bucket tooth kit
1	3989309	14	Stopper
2	3983313	7	Tooth
3	4E-12	14	Lockwasher
4	64D-12	14	Nut
5	3903963	7	Stopper
6	‡3983523	–	Shim 0.6 mm
7	‡3989306	–	Shim 0.8 mm
8	‡3989307	–	Shim 1.2 mm
9	‡3989308	–	Shim 1.6 mm
10	18C-1248	14	Bolt

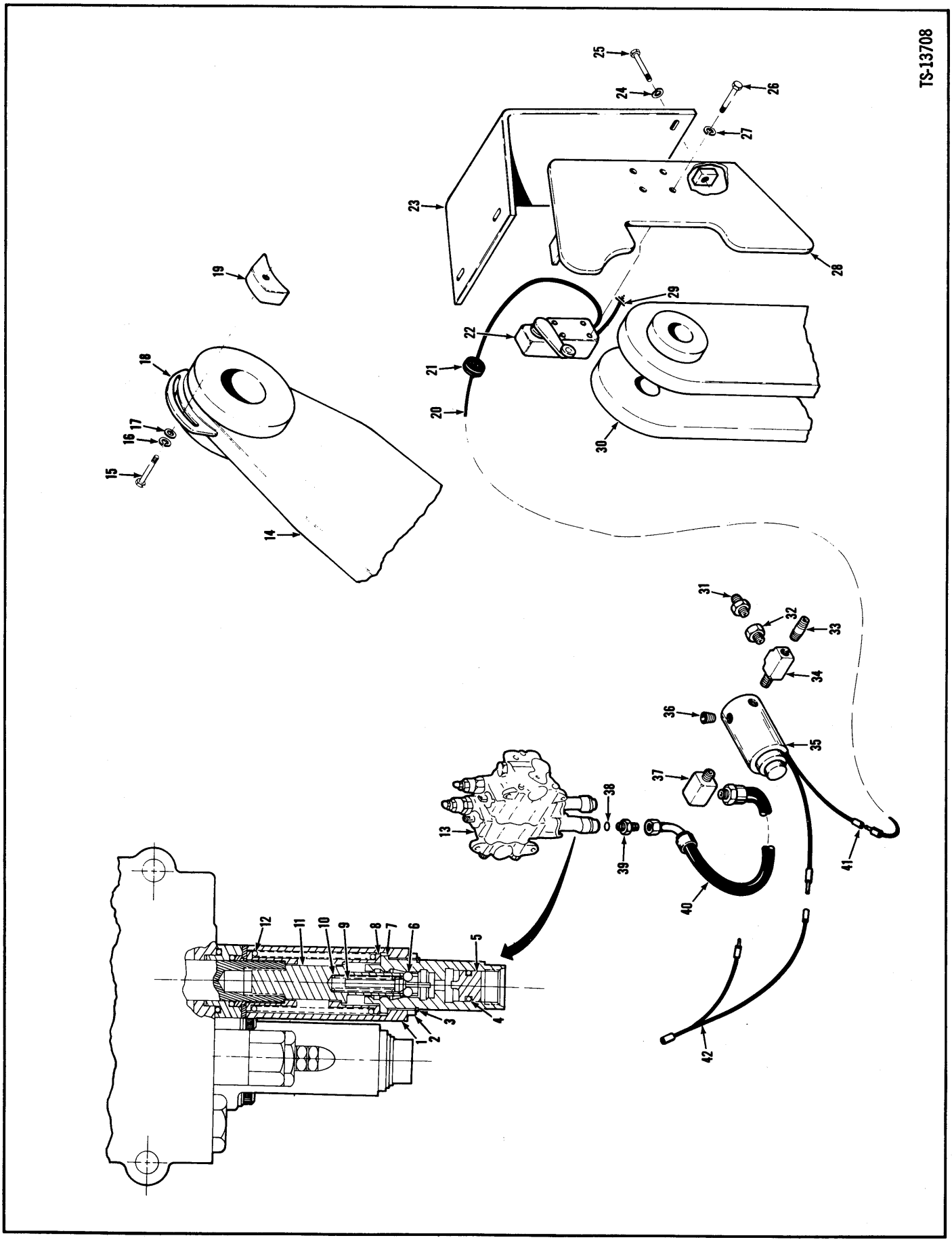
[2]Inc. 1 → 10
[3]Japan buckets only



TS-14490

Item	Part No.	Qty.	Description
A	[2]2514175	1	Valve block kit
1	[1]----	1	Steering controls
2	58K-119	4	O-ring
3	§[3]----	1	Plate
4	58K-119	4	O-ring
5	[4]2513988	1	Block assy
6	91F-6	1	O-ring
7	91F-6	1	O-ring
8	[5]731793	1	Connector
9	[6]731793	1	Connector
10	2513987	1	Hose
11	2513987	1	Hose
12	2513986	1	Hose
13	[7]731793	1	Connector
14	[8]731793	1	Connector
15	91F-6	1	O-ring
16	91F-6	1	O-ring
17	94G-632	2	Bolt

[1]See Index
[2]Inc. 2 → 5, 10 → 12, 17
[3]See 5
[4]Inc. 2 → 5, 17
[5]Inc. 6
[6]Inc. 7
[7]Inc. 15
[8]Inc. 16

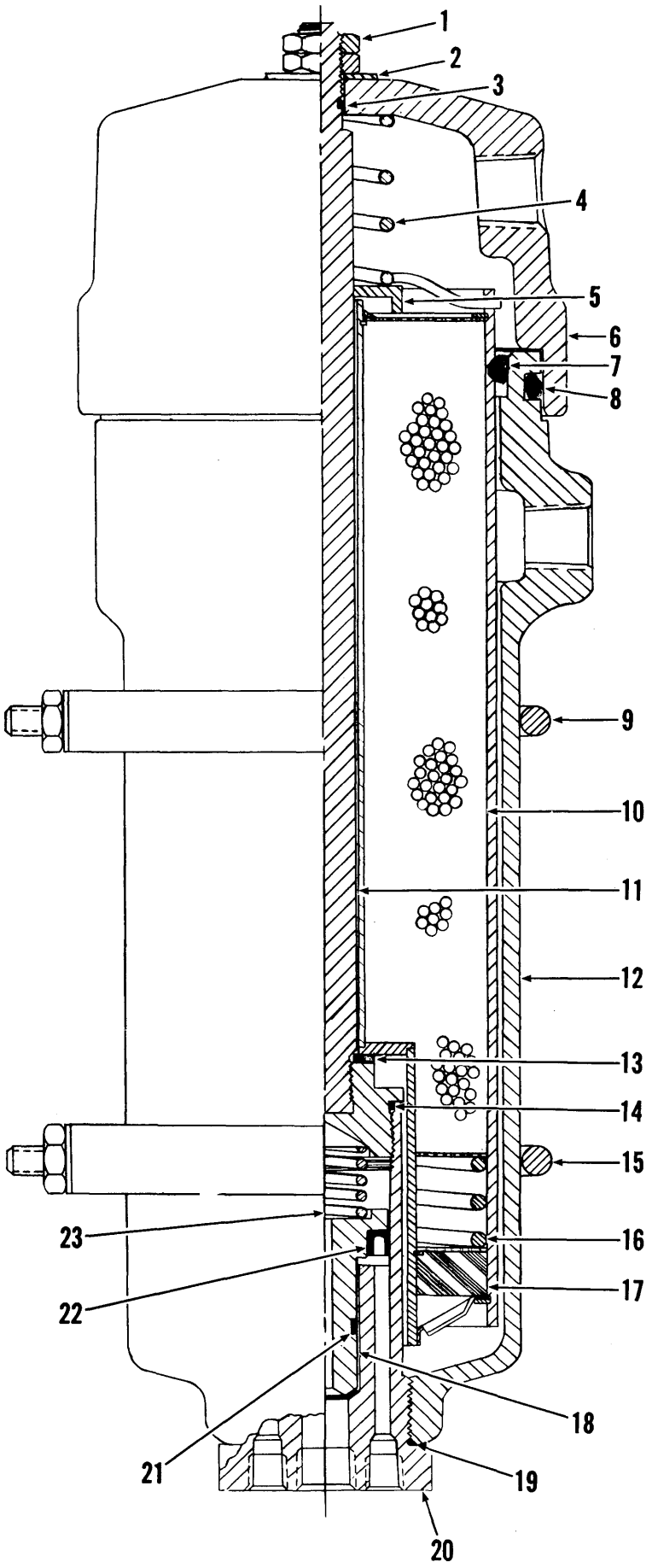

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Boom Kickout Kit

MICHIGAN

No.	Part No.	Qty.	Description
A	[2]2505853	1	Kit boom kickout
B	[3]2505905	1	Detent assy
1	949877	1	Cover
2	949949	1	Spacer
3	949950	1	Ring snap
4	76K-113	1	O-ring
5	949963	1	Piston
6	877420	3	Ball
7	960458	1	Sleeve
8	949871	2	Spring seat
9	875778	1	Cam
10	960456	1	Spring
11	960457	1	Detent pin
12	960459	1	Spring
13	[1]———	1	Valve assy main
14	[1]———	1	Boom
15	24C-416	1	Bolt
16	4E-04	1	Lockwasher
17	25E-13	1	Washer
18	[4]2505816	1	Bracket
19	2505815	1	Cam
20	1510088	1	Wire assy
21	1548626	1	Grommet
22	1767898	1	Switch limit
22A	†990556	1	Arm
23	2505817	1	Cover
24	4E-04	2	Lockwasher
25	24C-412	2	Bolt
26	23C-412	2	Bolt
27	4E-04	2	Lockwasher
28	[5]2505818	1	Bracket
29	1548627	1	Wire assy
30	[1]———	1	Frame
31	89F-4	1	Connector
32	19F-1	1	Bushing
33	5K-210	1	Nipple
34	30F-1	1	Tee
35	[6]2510008	1	Solenoid valve
35A	†960903	1	Seal kit
36	1310860	1	Plug
37	31F-2	1	Adapter union
38	91F-7	1	O-ring
39	5204649	1	Adapter
40	2506734	1	Hose
41	1513575	1	Receptacle
42	2506689	1	Harness

[1]See Index
[2]Inc. 1→42
[3]Inc. 1→12
[4]Weld to Boom
[5]Weld to Frame
[6]Inc. 35A



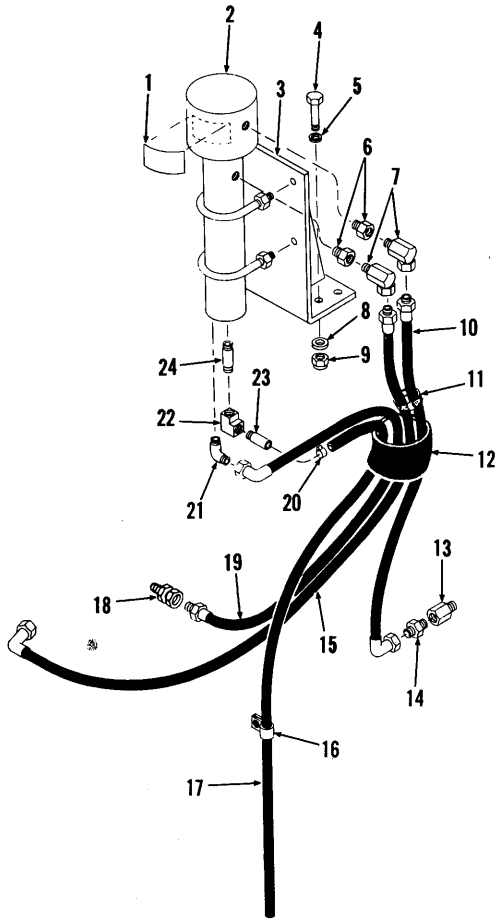
TS-14401

Brake Air Dryer

CLARK

No.	Part No.	Qty.	Description
A	[2]2505709	1	Air dryer
B	[3]2510803	1	Desiccant refill kit
C	[4]961419	1	Filter cartridge
1	8D-09	2	Nut
2	961486	1	Washer
3	§[5]———	1	O-ring
4	961420	1	Spring
5	961491	1	Brace
6	961421	1	Cap
7	§[5,6]———	1	O-ring
8	§[5]———	1	O-ring
9	961487	1	Clamp
10	§[6]———	1	Cartridge
10A	§[5,6]———	—	Desiccant
11	961422	1	Shaft assy
12	§[7]———	1	Housing
13	§[5]———	1	Gasket
14	25K-20112	1	O-ring
15	961487	1	Clamp
16	[6]———	1	Spring
17	[5,6]———	1	Filter
18	961423	1	Valve purge
19	961488	1	O-ring
20	961424	1	Valve body
21	25K-30018	1	O-ring
22	961489	1	U-cup
23	961425	1	Spring

[2]Inc. 1 → 23. Ref. S.G.-627
[3]Inc. 3, 7, 8, 10A, 13, 17
[4]Inc. 7, 10, 10A, 16, 17
[5]See B
[6]See C
[7]See A



TS-14770

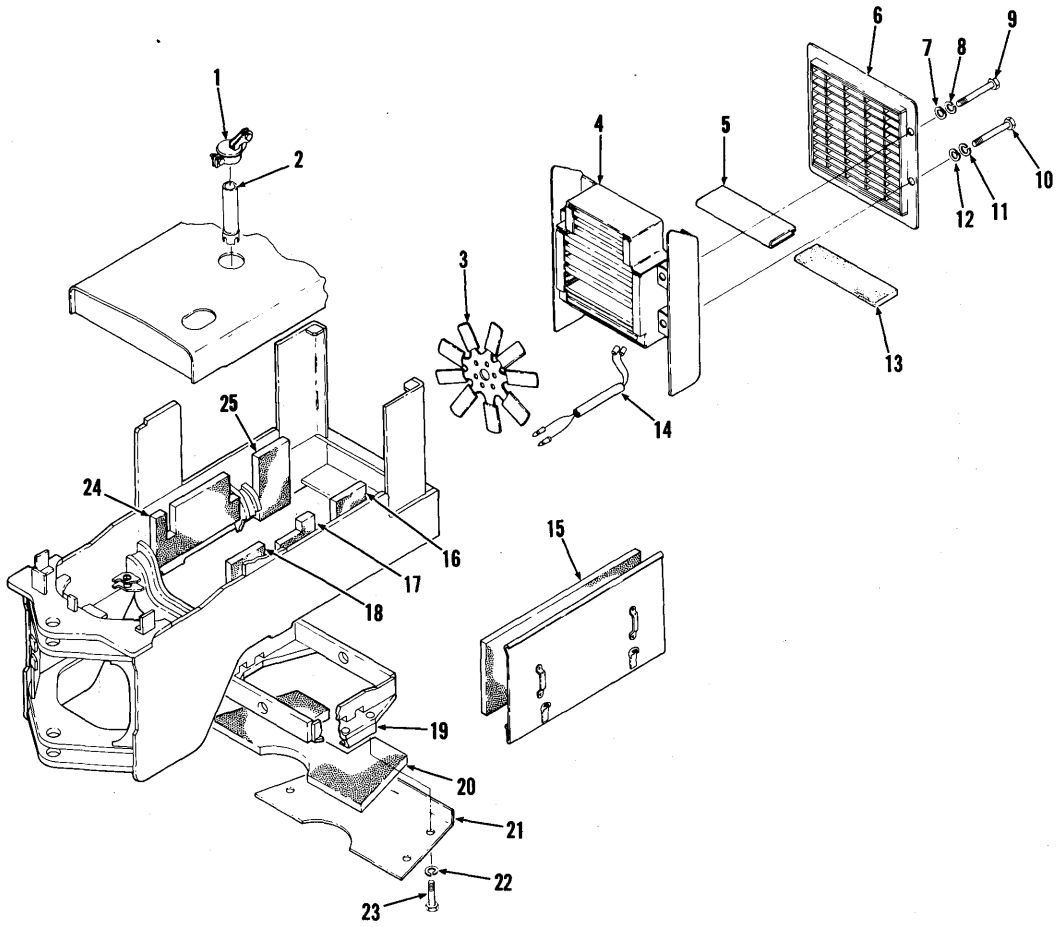
No.	Part No.	Qty.	Description
A	[2]2517417	1	Air dryer kit
1	2502069	1	Decal
2	[1]----	1	Air dryer
3	2516878	1	Bracket
4	18C-620	4	Bolt
5	25E-17	4	Washer
6	356617	2	Bushing
7	31F-4	2	Adapter union
8	619021	4	Washer
9	60D-06	4	Nut
10	2517414	1	Hose
11	1736910	3	Tie strap
12	1M-22030	1	Hose

No.	Part No.	Qty.	Description
13	593370	1	Valve check
14	38F-9	1	Adapter
15	2517415	1	Hose
16	30H-52	1	Clip
17	[3]743563	1	Hose
18	593297	1	Adapter union
19	2517649	1	Hose
20	521874	1	Clamp
21	42F-3	1	Elbow
22	27F-1	1	Elbow
23	2505705	1	Pipe
24	5K-212	1	Nipple
25	†40K-04	1	Plug

[1]See Index
[2]Inc. 1 ⟶ 13, 15 ⟶ 24. Ref. S.G.-627.
[3]5 ft. (1,53 m)

Sound Reduction Kit

CLARK



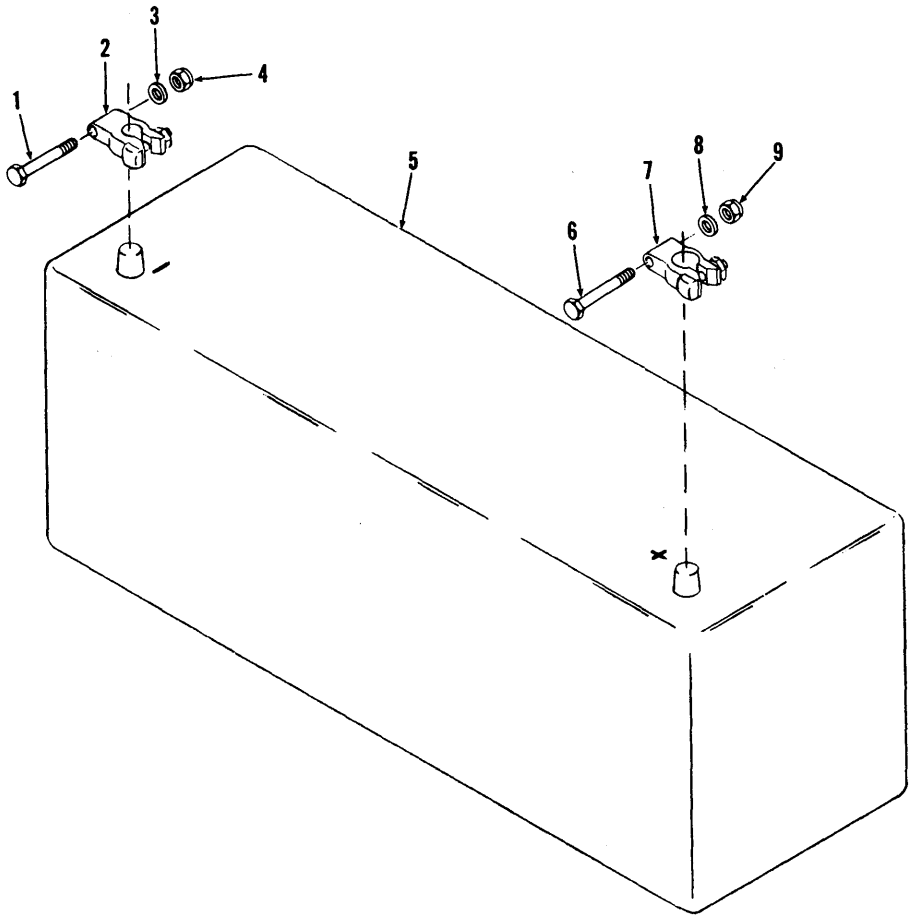
TS-20107

No.	Part No.	Qty.	Description
A	[2]3988032	1	Sound kit
1	3570474	1	Rain cap
2	3588030	1	Pipe
3	3570475	1	Fan
4	3588005	1	Sound trap
5	[3]3588000	4	Louver
5A	[4]3588001	1	Louver
5B	[5]3588002	1	Louver
6	[1]----	1	Grille
6A	†611906	2	Spacer
7	619029	2	Washer
8	4E-8	2	Lockwasher
9	18C-896	2	Bolt
10	18C-880	2	Bolt
11	4E-8	2	Lockwasher

No.	Part No.	Qty.	Description
12	619029	2	Washer
13	‡3570481	–	Insulation
14	3588018	2	Wire
15	3588028	2	Insulation
16	3588023	1	Insulation
17	3588026	1	Insulation
18	3588025	1	Insulation
19	3586827	2	Angle
19A	†62D-8	4	Nut
20	3588138	1	Insulation
21	3588140	1	Plate
22	4E-8	4	Lockwasher
23	17C-820	4	Bolt
24	3588022	1	Insulation
25	3588023	1	Insulation

[1]See Index
[2]Inc. 1 → 5, 7 → 25
[3]6.7" (170) x 28.9" (735)
[4]6.7" (170) x 23.8" (604)
[5]5.9" (150) x 28.9" (735)

Battery Replacement Kit - France

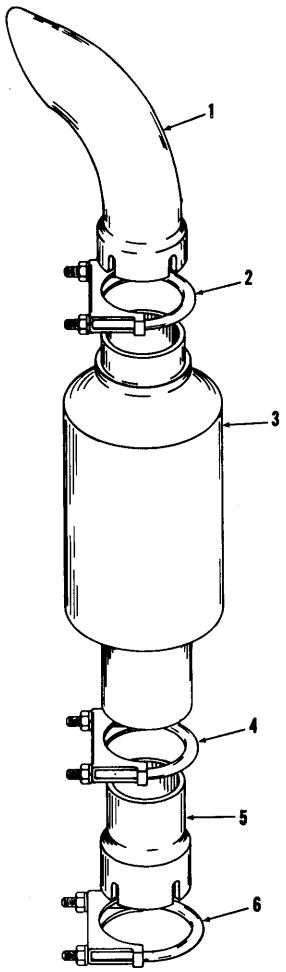


TS-10524

No.	Part No.	Qty.	Description
A	[2]3588183	1	Battery kit
1	18C-628	2	Bolt
2	3570477	2	Terminal
3	25E-17	2	Washer
4	18D-6	2	Nut
5	3570269	2	Battery
6	18C-628	2	Bolt
7	3570476	2	Terminal
8	25E-17	2	Washer
9	18D-6	2	Nut

[2]Inc. 1 → 9

Spark Arrestor Kit



TS-15039

No.	Part No.	Qty.	Description
A	[2]2520171	1	Spark arrestor kit
1	2520174	1	Tail pipe
2	556289	1	Clamp
3	1902490	1	Spark arrestor
4	580282	1	Clamp
5	2520169	1	Adapter
6	556289	1	Clamp

[2]Inc. 1 → 6

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