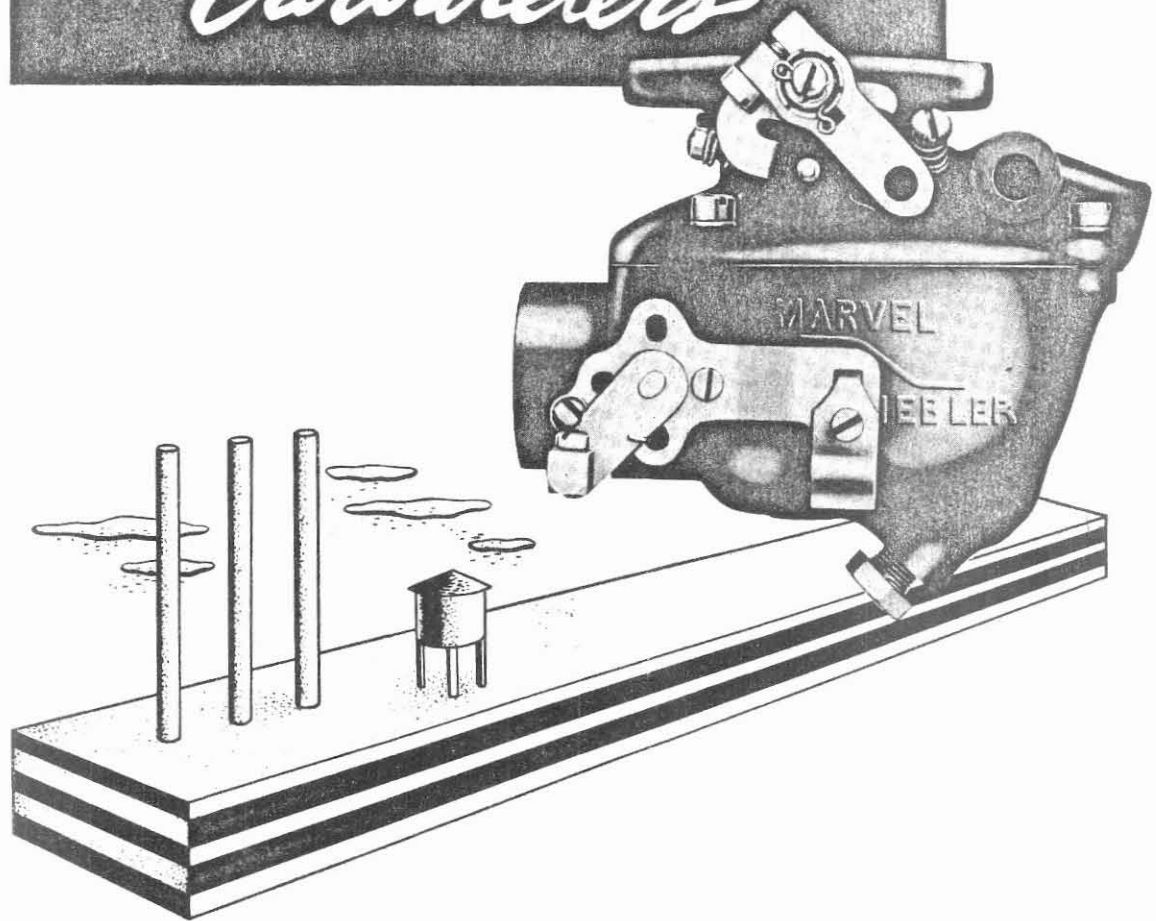


INDUSTRIAL

Carbureters



MARVEL-SCHEBLER PRODUCTS DIVISION,

BORG-WARNER CORPORATION

DECATUR, ILLINOIS, U. S. A.

Warranty

Marvel-Schebler Products Division, Borg-Warner Corporation, warrant its carbureters against defects in material and workmanship for a period of ninety days. Defective merchandise will be replaced without charge but labor charges incurred in the removal, disassembly or reinstallation of such products will not be allowed. No merchandise can be returned without written permission from the factory, transportation charges must be prepaid. The factory shall be the sole judge of defects in products returned.

A ten per cent handling charge will be made for all merchandise returned that is not defective. All prices are subject to change without notice, and we reserve the right to limit quantities and to make partial shipments unless specifically instructed otherwise. The obligation of the company under this warranty is limited to replacing at the factory, any complete units or parts thereof which shall be returned and which our examination shall disclose to have been defective.

Introduction...

This section of the master manual is an individual parts catalog of all service parts for Marvel-Schebler carbureters listed on the identification charts. The catalog is broken down into groups of fifteen carbureters; each group containing an identification chart, an exploded drawing of a composite carbureter, and a parts list. Each part in the illustration bears a reference number which keys together the illustration and parts list.

NOTE: The illustration does not represent any specific carbureter within a series, but is typical of all of them. All parts that look different are shown adjacent to the part of the basic carbureter that they replace.

TO USE THE CATALOG

- (1) Locate the group which contains the carbureter in question by referring to the identification charts.
- (2) Visually locate the part desired in the exploded drawing and note its reference number.
- (3) Turn to the parts list opposite the reference number of the part for its complete part name and part number.

LINCOLN ELECTRIC			TSX-173	TSX-185	TSX-239	TSX-239-1
Ref. No.	Part Name	Part No.				
12	Screw & Lock Washer Assy — Choke Valve					
	(No. 6-32 x 1/4)	15-483	—	2	—	—
	(No. 4-40 x 1/4)	15-A91	2	—	2	2
13	Screw — Clevis Clamp (No. 10-24 x 5/8)	15-A55	—	—	1	1
14	Screw & Lock Washer Assy — Governor Lever					
	Clamp (No. 12-24 x 5/8)	15-A82	1	1	1	1
15	Screw & Lock Washer Assy — Throttle Body to					
	Bowl (No. 12-24 x 5/8)	15-A82	4	—	4	4
	(No. 12-24 x 3/4)	15-A85	—	4	—	—
16	Screw & Lock Washer Assy — Choke Bracket to					
	Body (No. 8-32 x 3/8)	15-A93	1	1	1	1
17	Screw & Lock Washer Assy — Choke Bracket					
	(No. 8-32 x 5/16)	15-A99	1	1	1	1
18	Gasket — Float Valve Seat	16-4	1	1	1	1
19	Gasket — Throttle Body to Bowl	16-80	1	—	1	1
		16-A12	—	1	—	—
20	Gasket — Main Nozzle	16-449	1	—	1	1
		16-492	—	1	—	—
21	Spring — Choke Return	24-213	—	1	—	—
		24-247	1	—	1	1
22	Spring — Throttle Stop Screw	24-262	1	1	1	1
23	Spring — Governor Lever Tension	24-281	1	—	1	1
		24-A37	—	1	—	—
24	Spring — Choke Valve Flapper	24-292	—	1	—	—
		24-425	1	—	1	1
25	Spring — Idle Needle	24-340	1	1	1	1
26	Lever & Shaft Assy — Choke	26-610	—	1	—	—
		26-659	1	—	1	1
27	Valve Assy — Choke	27-539	1	—	1	1
		27-548	—	1	—	—
28	Swivel — Choke Lever	28-49	1	1	1	1
29	Clip — Choke Bracket	29-81	1	1	1	1
30	Bracket — Choke	29-95	—	1	—	—
		29-104	1	—	1	1
31	Bracket Assy — Choke	29-521	—	1	—	—
		29-528	1	—	1	1
32	Float & Lever Assy	30-600	1	—	1	1
		30-621	—	1	—	—
33	Shaft — Float Lever	32-16	—	1	—	—
		32-27	1	—	1	1
34	Needle — Idle Adjusting	43-33	1	—	1	1
		43-58	—	1	—	—
35	Packing — Throttle Shaft	44-35	—	1	—	—
		*44-38	—	—	1	—
		44-63	1	—	—	1
36	Packing — Choke Shaft	*44-38	—	1	—	—
		†44-39	1	—	1	1
37	Venturi (29/32" Diameter Throat)	46-438	—	1	—	—
	(25/32" Diameter Throat)	46-457	1	—	1	1
38	Nozzle — Main	47-180	—	—	1	1
		47-218	—	1	—	—
	Nozzle Assy — Main	47-648	1	—	—	—

* 44-38 replaced by 44-63. No retainer is required when new packing is used.

† 44-39 replaced by 44-66. No retainer is required when new packing is used.

LINCOLN ELECTRIC — INDUSTRIAL

TSX-173 to TSX-239-1

LINCOLN ELECTRIC			TSX-173	TSX-185	TSX-239	TSX-239-1
Ref. No.	Part Name	Part No.				
39	Jet — Idle	49-101-L	—	—	—	—
		49-165	—	—	—	—
		49-203	—	—	—	—
40	Jet — Economizer	49-145	—	—	—	—
		49-163	—	—	—	—
		49-262	—	—	—	—
41	Jet — Power	49-188	—	—	—	—
		49-260	—	—	—	—
		49-269	—	—	—	—
42	Cup — Throttle Shaft	55-214	—	—	—	—
		55-230	—	—	—	—
43	Retainer — Throttle Shaft Packing	55-216	—	—	—	—
		55-231	—	—	—	—
44	Retainer — Choke Shaft Packing	55-243	—	—	—	—
45	Bushing — Governor Lever	60-257	—	—	—	—
		60-370	—	—	—	—
46	Bushing — Throttle Shaft	60-260	—	2	—	—
47	Pin — Throttle Stop	62-167	—	—	—	—
48	Plate — Numbering	(Specify TSX Number)	—	—	—	—
49	Fitting & Strainer Assy — Fuel Inlet	67-515	—	—	—	—
50	Plug — Idle Drilling	80-171	—	—	—	—
51	Nut — Clevis Clamp (No. 10-24)	81-1	—	—	—	—
52	Pin — Cotter (Governor Spring Tension)	82-1	—	—	—	—
		82-14	—	—	—	—
53	Cotter — Hairpin (Choke Swivel)	82-16	—	—	—	—
54	Strainer — Fuel Drain	95-40	—	—	—	—
55	Strainer — Fuel Drain	95-78	—	—	—	—
56	Plug — Bowl Drain	99-7	—	—	—	—
57	Clevis Assy	121-504	—	—	—	—
58	Bracket — Float	136-54	—	—	—	—
59	Lever Assy — Governor	155-565	—	—	—	—
		155-588	—	—	—	—
		155-590	—	—	—	—
60	Plug — Expansion Fuel Drain	179-35	—	—	—	—
61	Ball — Numbering Plate	206-36	—	—	—	—
62	Throttle Body & Shaft Assy	(See Basic Subassy)	—	—	—	—
63	Valve & Seat Assy — Float	233-536	—	—	—	—
		233-543	—	—	—	—

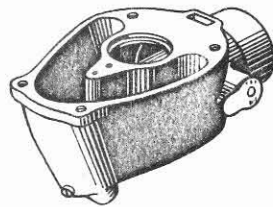
‡ Production previous to July, 1947 used part number 95-40 with part number 179-35. These parts are not replaced with part number 95-78 but are still supplied for service.

LINCOLN ELECTRIC — INDUSTRIAL CARBURETERS

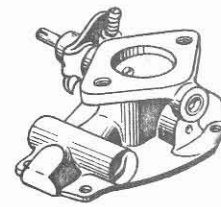
ISSUED FEBRUARY 1952

Year	Model Application	Engine	Carburetor Number	Carburetor Part No.	Fuel	Superseded by	Customer Part No.	Repair Kit No.	*Gasket Kit No.	Float Valve & Seat Assy
1944	Lincoln Electric 200 amp Welder, SA-200	Cont. F-162	TSX-173	10-2803	Gasoline	TSX-239-1		286-716	16-613	233-536
...	Lincoln Electric 300 amp Welder, S-7061	Cont. M-330	TSX-185	10-2752	Gasoline			286-689	16-594	233-543
1943	Lincoln Electric 200 amp Welder, SA-200	Cont. F-162	TSX-239	10-2899	Gasoline	TSX-239-1		286-762	16-613	233-536
1943	Lincoln Electric 200 amp Welder, SA-200	Cont. F-162	TSX-239-1	10-3179	Gasoline		S-9239	286-856	16-613	233-536

* The flange gasket can be supplied separately. Specify the carburetor number when ordering.

BASIC SUBASSEMBLIES**CARBURETOR BODY ASSY**

Carburetor Number	Part Number
TSX-173	10-2804
TSX-185	10-2753
TSX-239	10-2900
TSX-239-1	10-3180

**THROTTLE BODY & SHAFT ASSY**

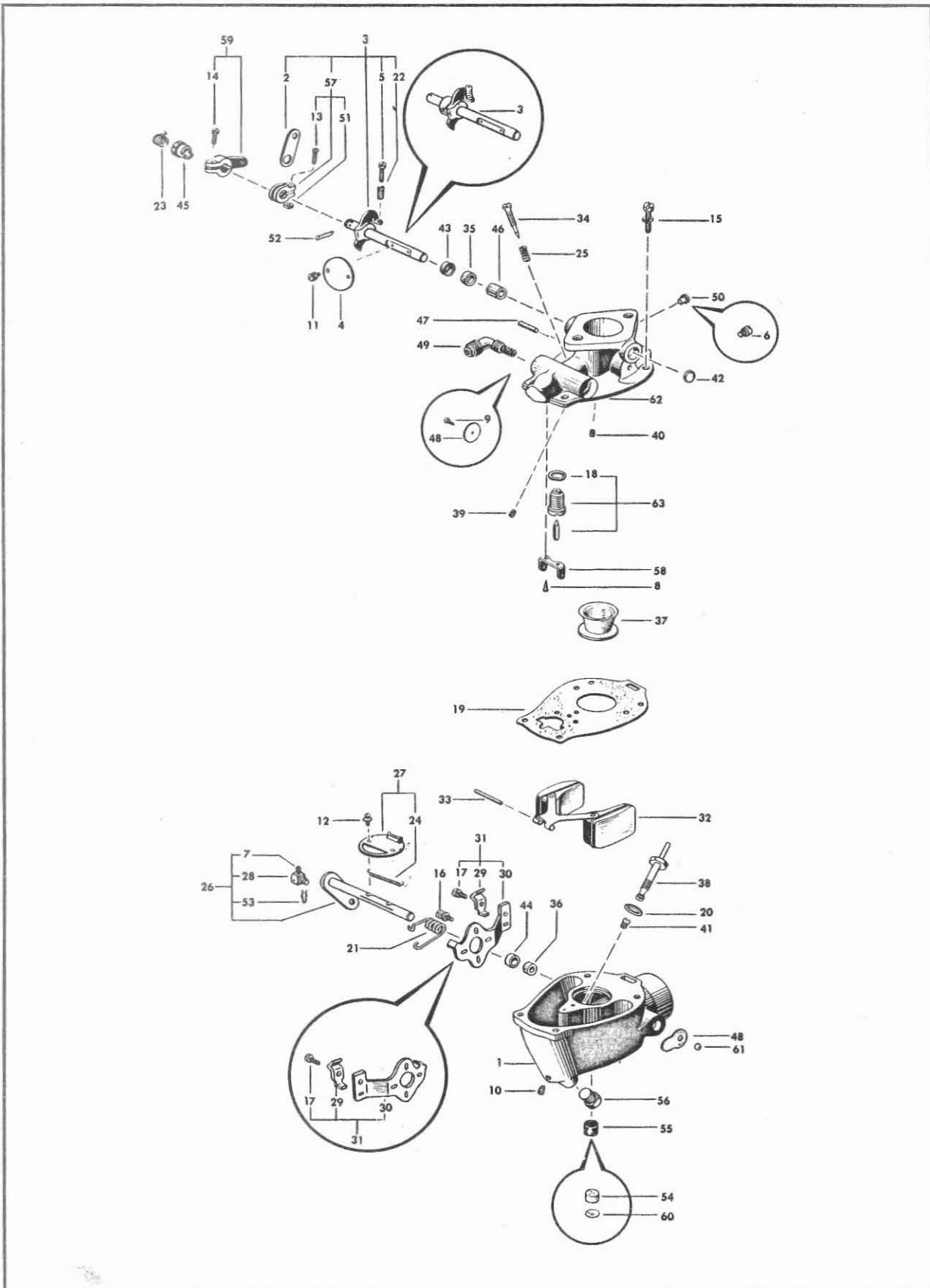
Carburetor Number	Part Number
TSX-173	227-1004
TSX-185	227-970
TSX-239	227-1044
TSX-239-1	227-1130

LINCOLN ELECTRIC

Ref. No.	Part Name	Part No.	TSX-173	TSX-185	TSX-239	TSX-239-1
1	Body Assy — Carburetor	(See Basic Subassy)	1	1	1	1
2	Lever — Throttle, Loose	12-A38	-	-	1	1
3	Shaft, Stop, & Lever Assy — Throttle	13-930	-	-	1	1
		13-819	-	1	-	-
	Shaft, Stop, & Collar Assy — Throttle	13-818	1	-	-	-
4	Valve — Throttle (22°)	14-163	-	1	-	-
	(20°)	14-169	1	-	1	-
	(20°)	14-227	-	-	-	1
5	Screw — Throttle Stop (No. 8-32 x 3/4)	15-42	1	1	1	1
6	Screw — Idle Drilling (Headless, 1/4-28)	15-223	-	-	1	-
	(Headless, 5/16-24)	15-274	-	1	-	-
7	Screw — Choke Swivel (No. 8-32 x 5/16)	15-285	1	1	1	1
8	Screw — Drive, Float Bracket (No. 2 x 1/4)	15-343	2	2	2	2
9	Screw — Drive, Name Plate (No. 2 x 1/4)	15-343	-	1	-	-
10	Screw — Drill Plug, Nozzle Hole (No. 8-32)	15-409	1	-	-	1
11	Screw & Lock Washer Assy — Throttle Valve					
	(No. 6-32 x 1/4)	15-483	-	2	-	-
	(No. 4-40 x 1/4)	15-A91	2	-	2	2

LINCOLN ELECTRIC — INDUSTRIAL

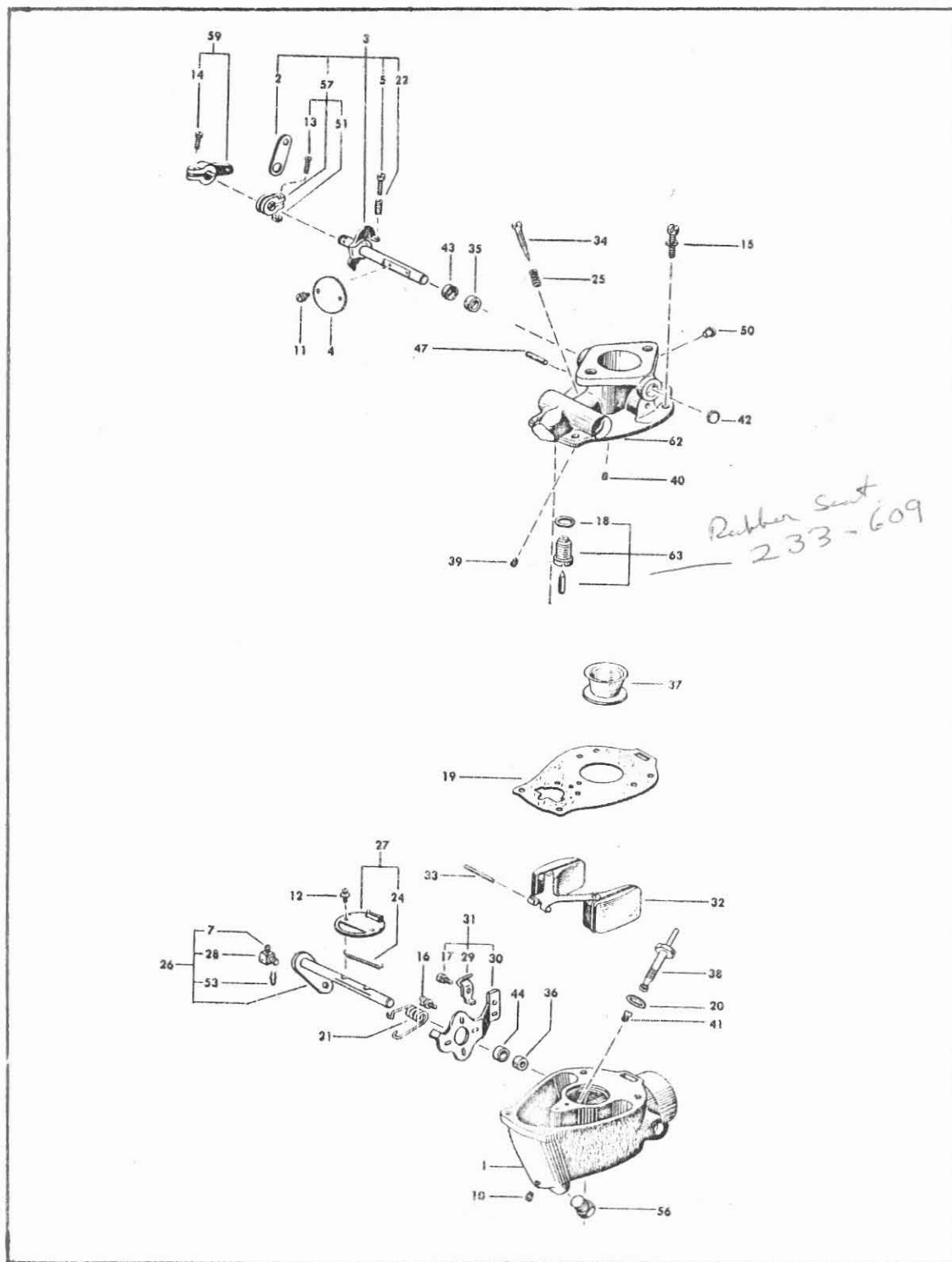
TSX-173 to TSX-239-1



Marvel-Schebler Products Division, Borg-Warner Corporation, Decatur, Illinois, U. S. A.

LINCOLN ELECTRIC CO. L-200 FJW WELDER
MARVEL-SCHEBLER NO. TSX-514
LINCOLN ELECTRIC NO. S-9790

LINCOLN ELECTRIC



TSX-514 EXPLODED VIEW
PARTS LIST ON REVERSE SIDE

<u>Part No.</u>	<u>Quan. Req'd.</u>	<u>Part Name</u>	<u>Symbol No.</u>
10-3594	1	Carbureter Assembly-Complete	
10-3912	1	Carbureter Body Assembly	1
12-A38	1	Lever-Throttle (Loose)	2
12-952	1	Throttle Lever Assembly	59
13-955	1	Throttle Shaft, Throttle Stop & Lever Assembly	3
14-227	1	Fly-Throttle (20°)	4
15-42	1	Screw (#8-32 x 3/4 Fill. Head) (Throttle Stop)	5
15-285	1	Screw (#8-32 x 5/16) (Choke Swivel-1)	7
15-409	1	Screw (#8-32 Drill Plug) Nozzle Hole	10
15-A55	1	Screw (10-24 x 5/8 Round Head) (Clevis Assembly)	13
15-A82	5	Screw (12/24 x 5/8 Fill. Head) (Throttle Lever Assembly-1) (Throttle Body to Bowl-4)	15
15-A91	2	Screw (#4-40 x 1/4 Bind. Head) (Throttle Fly) (Sems)	11
15-A91	2	Screw (#4-40 x 1/4 Bind. Head) (Choke Fly) Sems	12
15-A93	1	Screw (#8-32 x 3/8 Fill. Head) (Choke Bracket to Body)	16
15-A99	1	Screw (#8-32 x 5/16 Choke Bracket Clip)	17
16-4	1	Gasket (Float Valve Seat)	18
16-80	1	Gasket (Throttle Body to Bowl)	19
16-449	1	Gasket (Main Nozzle)	20
16-613	1	Gasket Assembly	
24-247	1	Spring (Choke Return)	21
24-262	1	Spring (Throttle Stop Screw)	22
24-340	1	Spring (Idle Needle)	25
26-659	1	Choke Shaft & Lever Assembly	26
27-539	1	Choke Fly Assembly	27
28-49	1	Swivel Choke Lever	28
29-81	1	Bracket Choke Tube Clip	29
29-104	1	Bracket Choke Tube	30
29-528	1	Choke Bracket Assembly	31
30-600	1	Float & Lever Assembly	32
32-27	1	Shaft - Float Lever	33
43-33	1	Needle - Idle Adjusting	34
44-39	1	Packing - Choke Shaft	36
44-63	1	Packing - Throttle Shaft	35
46-457	1	Venturi (25/32 Diameter Throat)	37
47-180	1	Nozzle	38
49-145	1	Jet - Economizer	40
49-188	1	Jet - Power	41
49-203	1	Jet - Idle	39
55-230	1	Cup - Throttle Shaft	42
55-231	1	Retainer - Throttle Shaft Packing	43
55-243	1	Retainer - Choke Shaft Packing	44
62-167	1	Pin - Throttle Stop	47
80-171	1	Drill Plug - Idle Drilling	50
81-1	1	Nut - 10-24 (Clevis Assembly)	51
82-16	1	Cotter - Choke Swivel	53
99-7	1	Plug - Bowl Drain	56
121-504	1	Clevis Assembly	57
227-1400	1	Throttle Body Assembly	62
233-536	1	Float Valve, Seat & Gasket Assembly (Matched)	63
286-1112		Repair Kit	

→ Rubber 233-609

TEMPORARY SERVICE PARTS LIST - INSERT IN THE PROPER SECTION OF YOUR MANUAL

Lincoln Electric #L-3879

TSX-846

PART NO.	QUAN.	PART NAME
10-4562	1	Carbureter Body Assembly
13-1317	1	Throttle Shaft, Stop & Lever Assembly
14-327	1	Throttle Fly (22°) 3/64 Offset
15-85	1	Screw (#8-32 x 7/8) Fill Head (Throttle Adjusting)
15-108	1	Screw (#8-32 x 5/16) Slotted Hex Head (Choke Swivel)
15-274	1	Screw (5/16 x 5/32 Headless Plug)
15-483	4	Screw (#6-32 x 1/4) Bind Hd. SEMS (Thr. Fly-2)(Choke Fly-2)
15-A85	4	Screw (#12-24 x 3/4) Fill Head (Throttle Body to Bowl)
15-A93	2	Screw (#8-32 x 3/8 Pan Head SEMS)(Choke Bracket)
15-A270	1	Screw (#8-32 x 5/16) Slotted Hex Hd. SEMS (Choke Bracket Clip)
15-A410	1	Screw (#10-24 x 3/4) Hex Hd. (Clevis)
16-4	1	Gasket - Float Valve Seat
16-492	1	Gasket - Nozzle
16-A12	1	Gasket - Throttle Body to Bowl
16-640	1	Gasket Assortment
24-213	1	Spring - Choke Return
24-262	1	Spring - Throttle Stop Screw
24-292	1	Spring - Choke Fly Flapper
24-340	1	Spring - Idle Needle
26-845	1	Choke Shaft & Lever Assembly
27-548	1	Choke Fly Assembly
28-49	1	Swivel - Choke Lever
29-552	1	Choke Bracket Assembly
30-621	1	Float & Lever Assembly
32-16	1	Shaft - Float
36-297	1	Seat - Main Adjusting Needle
43-58	1	Needle - Idle Adjusting
44-38	1	Packing - Choke Shaft
44-142	2	Packing - Throttle Shaft
46-490	1	Venturi (11/16 Throat)
47-A33	1	Nozzle - Main
49-165	1	Jet - Idle
49-273	1	Jet - Economizer
49-279	1	Jet - Power
55-255	2	Retainer - Throttle Shaft Packing
62-167	1	Pin - Throttle Stop
67-527	1	Strainer Assembly
78-4	1	Washer - Clevis
81-1	1	Nut - Clevis
82-16	1	Cotter - Choke Swivel
99-7	1	Plug - Drain
121-528	1	Clevis Assembly
155-454	1	Governor Lever
179-11	1	Welch Plug
227-1769	1	Throttle Body Assembly
233-543	1	Float Valve, Seat & Gasket Assembly - Matched
286-1388		Repair Kit

