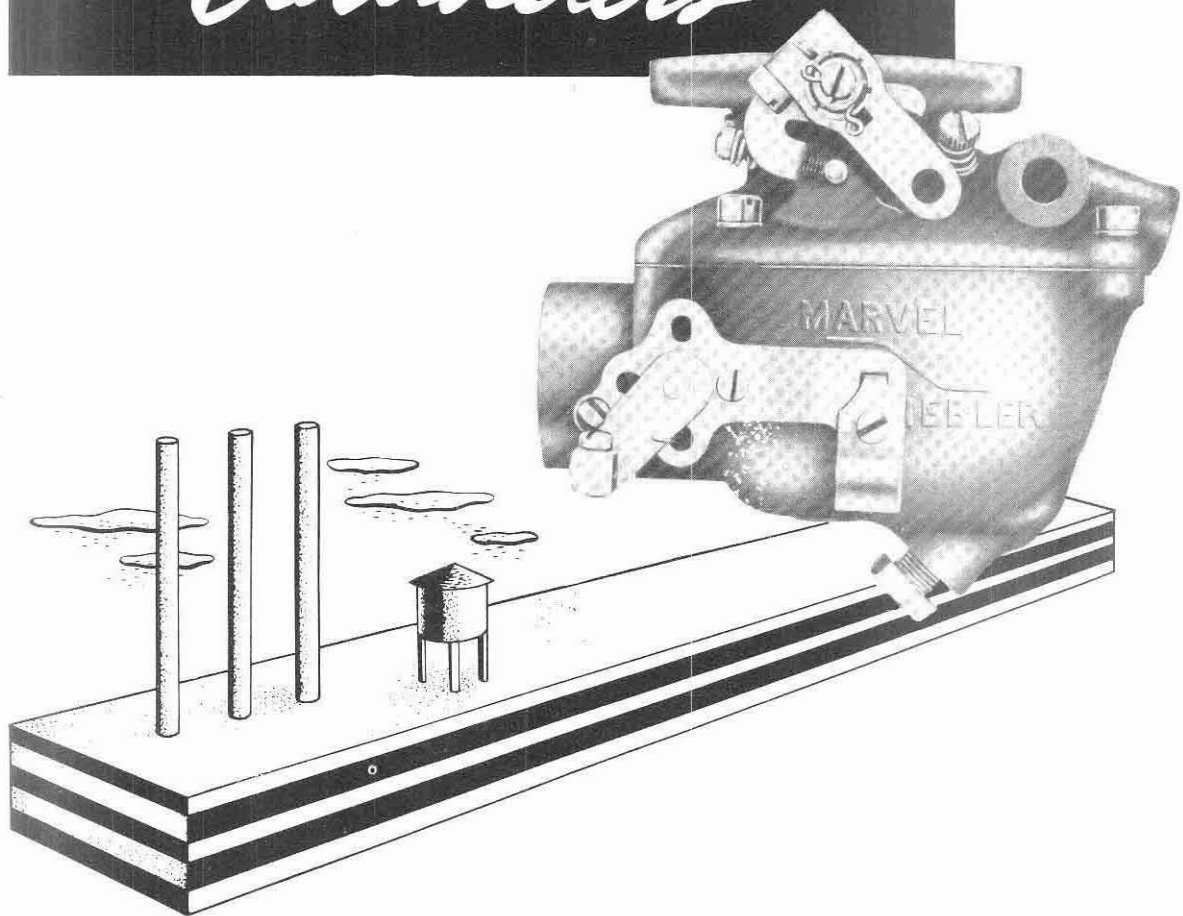


SECTION II  
**NOVO ENGINES**  
TSX SERIES

# INDUSTRIAL

## *Carburetors*



**MARVEL-SCHEBLER PRODUCTS DIVISION,**  
**BORG-WARNER CORPORATION**

# 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.

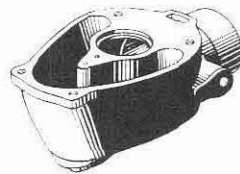
**NOVO — INDUSTRIAL CARBURETERS**

ISSUED JULY 1952

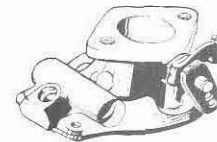
| Year | Model Application | Engine                 | Carburetor Number | Carburetor Part No. | Fuel       | Superseded by | Customer Part No. | Repair Kit No. | Gasket Kit No. | Float Valve & Seat Assy |
|------|-------------------|------------------------|-------------------|---------------------|------------|---------------|-------------------|----------------|----------------|-------------------------|
|      |                   | CWR-47 & CWR-66        | TSX-254           | 10-2936             | Gasoline   |               | 14CW-10           | 286-794        | 16-613         | 233-536                 |
|      |                   | CWR-133                | TSX-260           | 10-3030             | Gasoline   |               | 16CW-10           | 286-781        | 16-613         | 233-536                 |
|      |                   | CWR & CW-95            | TSX-274           | 10-3033             | Gasoline   |               | 15CW-10           | 286-778        | 16-613         | 233-536                 |
|      |                   | CWR-66                 | TSX-306           | 10-3109             | Distillate |               | 17CW-10           | 286-981        | 16-592         | 233-536                 |
|      |                   | CA-33, DA-33 & CWR-133 | TSX-328           | 10-3191             | Distillate |               | 18CW-10           | 286-982        | 16-592         | 233-536                 |
|      |                   | CA-33, DA-33 & CW-33   | TSX-331           | 10-3186             | Gasoline   |               | 1CA-10            | 286-854        | 16-613         | 233-536                 |

◆ The repair kit includes the throttle shaft, float valve and seat assembly, and the gasket kit.

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

**BASIC SUBASSEMBLIES****CARBURETOR BODY ASSY**

| Carburetor Number | Part Number |
|-------------------|-------------|
| TSX-254           | 10-3024     |
| TSX-260           | 10-3031     |
| TSX-274           | 10-3034     |
| TSX-306           | 10-3131     |
| TSX-328           | 10-3192     |
| TSX-331           | 10-3187     |

**THROTTLE BODY & SHAFT ASSY**

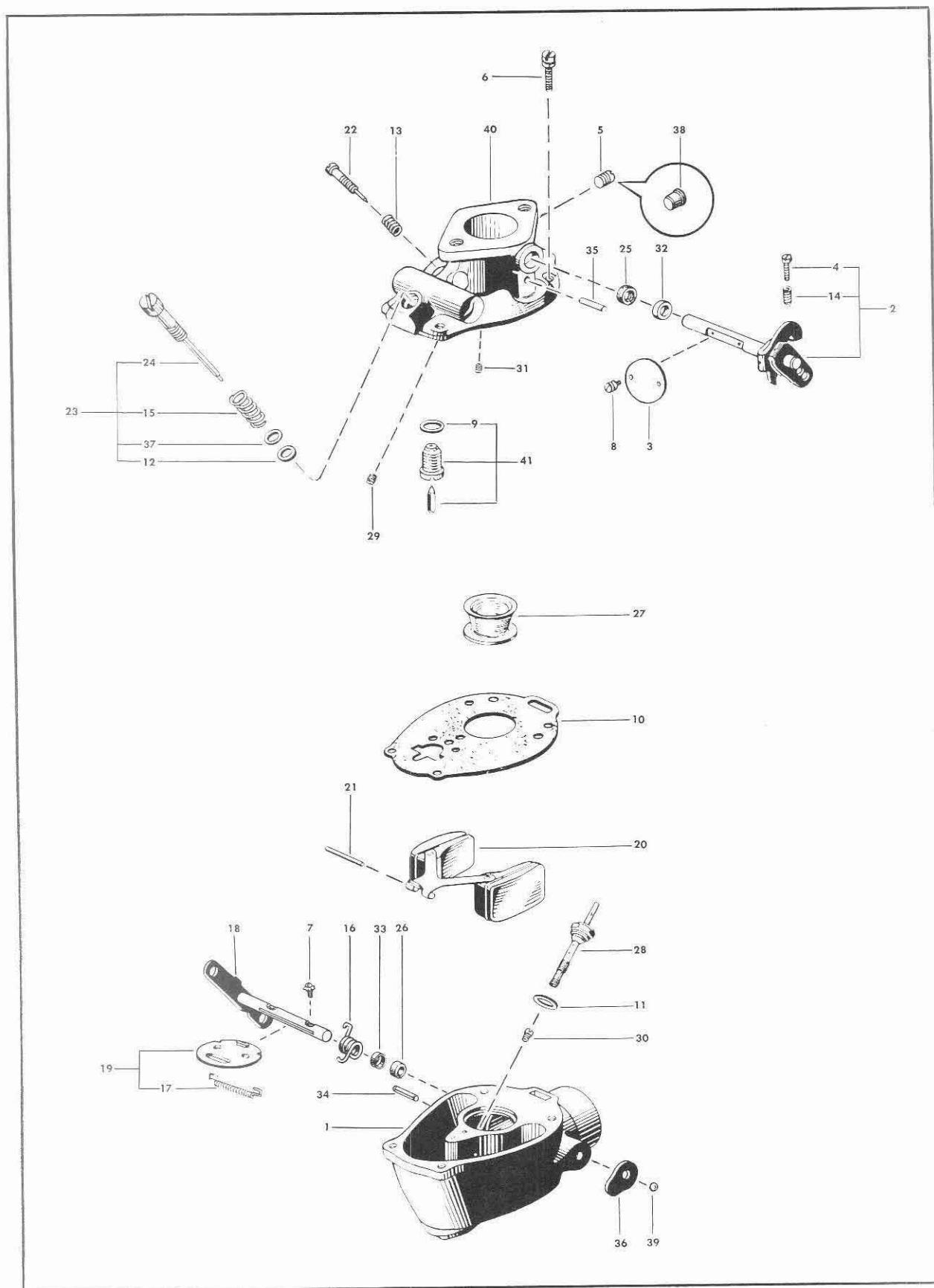
| Carburetor Number | Part Number |
|-------------------|-------------|
| TSX-254           | 227-1076    |
| TSX-260           | 227-1078    |
| TSX-274           | 227-1080    |
| TSX-306           | 227-1112    |
| TSX-328           | 227-1138    |
| TSX-331           | 227-1136    |

**NOVO**

| Ref. No. | Part Name                                                          | Part No.            | TSX-254 | TSX-260 | TSX-274 | TSX-306 | TSX-328 | TSX-331 |
|----------|--------------------------------------------------------------------|---------------------|---------|---------|---------|---------|---------|---------|
| 1        | Body Assy — Carburetor                                             | (See Basic Subassy) | 1       | 1       | 1       | 1       | 1       | 1       |
| 2        | Shaft, Stop & Lever Assy — Throttle                                | 13-937              | 1       | 1       | 1       | 1       | 1       | —       |
|          |                                                                    | 13-1000             | —       | —       | —       | —       | —       | 1       |
| 3        | Valve — Throttle (20°)                                             | 14-169              | —       | —       | —       | —       | —       | 1       |
|          | (15°)                                                              | 14-175              | 1       | 1       | 1       | 1       | 1       | —       |
| 4        | Screw — Throttle Stop (No. 8-32 x 3/4)                             | 15-42               | —       | —       | —       | —       | —       | 1       |
|          | (No. 8-32 x 5/8)                                                   | 15-118              | 1       | 1       | 1       | 1       | 1       | —       |
| 5        | Screw — Idle Drilling (Headless, 1/4-28)                           | 15-223              | 1       | 1       | —       | 1       | 1       | —       |
| 6        | Screw & Lock Washer Assy — Throttle Body to Bowl (No. 12-24 x 5/8) | 15-A82              | 4       | 4       | 4       | 4       | 4       | 4       |
| 7        | Screw & Lock Washer Assy — Choke Valve (No. 4-40 x 1/4)            | 15-A91              | 2       | 2       | 2       | 2       | 2       | 2       |
| 8        | Screw & Lock Washer Assy — Throttle Valve (No. 4-40 x 1/4)         | 15-A91              | 2       | 2       | 2       | 2       | 2       | 2       |
| 9        | Gasket — Float Valve Seat                                          | 16-4                | 1       | 1       | 1       | 1       | 1       | 1       |

# NOVO — INDUSTRIAL

TSX-254 to TSX-331



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

| NOVO     |                                                |                           | TSX-254 | TSX-260 | TSX-274 | TSX-306 | TSX-328 | TSX-331 |
|----------|------------------------------------------------|---------------------------|---------|---------|---------|---------|---------|---------|
| Ref. No. | Part Name                                      | Part No.                  |         |         |         |         |         |         |
| 10       | Gasket — Throttle Body to Bowl .....           | 16-80 .....               | 1       | 1       | 1       | 1       | 1       | 1       |
| 11       | Gasket — Main Nozzle .....                     | 16-449 .....              | 1       | 1       | 1       | 1       | 1       | 1       |
| 12       | Gasket — Power Adjusting Needle .....          | 16-491 .....              | —       | —       | —       | 1       | 1       | —       |
| 13       | Spring — Idle Needle .....                     | 24-340 .....              | 1       | 1       | 1       | 1       | 1       | 1       |
| 14       | Spring — Throttle Stop Screw .....             | 24-485 .....              | 1       | 1       | 1       | 1       | 1       | 1       |
| 15       | Spring — Power Adjusting Needle .....          | 24-A1 .....               | —       | —       | —       | 1       | 1       | —       |
| 16       | Spring — Choke Return .....                    | 24-A40 .....              | 1       | 1       | 1       | 1       | 1       | 1       |
| 17       | Spring — Choke Valve Flapper .....             | 24-A43 .....              | 1       | 1       | 1       | 1       | 1       | 1       |
| 18       | Shaft & Lever Assy — Choke .....               | 26-718 .....              | 1       | 1       | 1       | 1       | 1       | 1       |
| 19       | Valve Assy — Choke .....                       | 27-550 .....              | 1       | 1       | 1       | 1       | 1       | 1       |
| 20       | Float & Lever Assy .....                       | 30-600 .....              | 1       | 1       | 1       | 1       | 1       | 1       |
| 21       | Shaft — Float Lever .....                      | 32-27 .....               | 1       | 1       | 1       | 1       | 1       | 1       |
| 22       | Needle — Idle Adjusting .....                  | 43-33 .....               | 1       | 1       | 1       | 1       | 1       | 1       |
| 23       | Needle Assy — Power Adjusting (complete) ..... | 43-619 .....              | —       | —       | —       | 1       | 1       | —       |
| 24       | Needle Assy — Power Adjusting .....            | 43-627 .....              | —       | —       | —       | 1       | 1       | —       |
| 25       | Packing — Throttle Shaft .....                 | † 44-38 .....             | 2       | 2       | 2       | 2       | 2       | 2       |
| 26       | Packing — Choke Shaft .....                    | ‡ 44-39 .....             | 1       | 1       | 1       | 1       | 1       | 1       |
| 27       | Venturi (25/32" Diameter Throat) .....         | 46-457 .....              | —       | 1       | —       | —       | —       | 1       |
|          | (11/16" Diameter Throat) .....                 | 46-467 .....              | —       | —       | —       | —       | 1       | —       |
|          | (21/32" Diameter Throat) .....                 | 46-473 .....              | —       | —       | 1       | 1       | —       | —       |
|          | (23/32" Diameter Throat) .....                 | 46-476 .....              | 1       | —       | —       | —       | —       | —       |
| 28       | Nozzle — Main .....                            | 47-277 .....              | —       | 1       | —       | —       | —       | —       |
|          | Nozzle Assy — Main .....                       | 47-594 .....              | —       | —       | —       | 1       | —       | —       |
|          |                                                | 47-633 .....              | 1       | —       | —       | —       | —       | —       |
|          |                                                | 47-634 .....              | —       | —       | —       | —       | 1       | —       |
|          |                                                | 47-685 .....              | —       | —       | 1       | —       | —       | 1       |
| 29       | Jet — Idle .....                               | 49-101-L .....            | 1       | 1       | 1       | 1       | 1       | 1       |
| 30       | Jet — Power .....                              | 49-158 .....              | —       | 1       | —       | —       | —       | —       |
|          |                                                | 49-169 .....              | 1       | —       | —       | —       | —       | —       |
|          |                                                | 49-171 .....              | —       | —       | —       | —       | —       | 1       |
|          |                                                | 49-176 .....              | —       | —       | —       | 1       | 1       | —       |
|          |                                                | 49-191 .....              | —       | —       | 1       | —       | —       | —       |
| 31       | Jet — Economizer .....                         | 49-265 .....              | —       | 1       | —       | —       | —       | —       |
| 32       | Retainer — Throttle Shaft Packing .....        | 55-231 .....              | 2       | 2       | 2       | 2       | 2       | 2       |
| 33       | Retainer — Choke Shaft Packing .....           | 55-243 .....              | 1       | 1       | 1       | 1       | 1       | 1       |
| 34       | Pin — Choke Stop .....                         | 62-167 .....              | 1       | 1       | 1       | 1       | 1       | 1       |
| 35       | Pin — Throttle Stop .....                      | 62-167 .....              | 1       | 1       | 1       | 1       | 1       | 1       |
| 36       | Plate — Numbering .....                        | (Specify TSX Number) ..   | 1       | 1       | 1       | 1       | 1       | 1       |
| 37       | Washer — Flat, Power Adjusting Needle .....    | 78-299 .....              | —       | —       | —       | 1       | 1       | —       |
| 38       | Plug — Idle Drilling .....                     | 80-171 .....              | —       | —       | 1       | —       | —       | 1       |
| 39       | Ball — Numbering Plate .....                   | 206-36 .....              | 1       | 1       | 1       | 1       | 1       | 1       |
| 40       | Throttle Body & Shaft Assy .....               | (See Basic Subassy) ..... | 1       | 1       | 1       | 1       | 1       | 1       |
| 41       | Valve & Seat Assy — Float .....                | 233-536 .....             | 1       | 1       | 1       | 1       | 1       | 1       |

† Replaced by 44-63. Retainer not required with new packing.

‡ Replaced by 44-66. Retainer not required with new packing.

