

GRAVELY *Technical* BULLETIN



BULLETIN NO. 1009

DATE: May 9, 1963

TO: ALL OUTLETS

SUBJECT: 1. New Parts For Attaching Super Hood
2. Results of Tests of Additional Orifices for Sprayer

1. NEW PARTS FOR ATTACHING SUPER HOOD

Because certain parts originally designed for attaching the Super Hood to the Tractor have proved unsatisfactory, replacement parts for these have been designed and are being shipped to the field. The added strength and rigidity of these new parts will eliminate the vibration-caused problem of Hoods becoming loose while the tractor is in use.

Following are the new parts:

<u>Part Number</u>	<u>Part Description</u>	<u>Number Required</u>	<u>List Price</u>	<u>Part Replaced</u>
ST-106-A	Battery Mount	1	\$4.50	-----
L-847	Hood Bumper	2	.10	L-846
L-848	Back-up Plate	2	.05	L-846
ST-134	Hinge	2	.15	ST-128
N-10-ST-10-C	Truss Head Machine Screw	12	.03	NT-10-ST-5
248-N	Conelok Nut	12	.06	207-N

To attach the Super Hood using the new parts:

A. Attach the Battery Mount to the Tractor. The new Battery Mount, shown in Figure 1, has a larger-diameter rod (1/4-inch) which is secured by welded gussets.

B. Two Hinge Assemblies are required. To complete each assembly, attach the Hinge, A in Figure 1, to the Pivot Plate, B in Figure 1, by the bolts and lock nuts provided. Be sure the slotted portion of the Pivot Plate faces outward. Slip the completed assemblies onto the rod as shown in Figure 1.

C. Position the Hood on the Tractor, tilting it forward to line up the holes in the Hood with the slots in the Pivot Plates. Attach the Hood to the Pivot Plates with the bolts and lock nuts provided.

D. Lower the Hood to its normal position. If adjustment is required for it to clear the Battery or Fuel Tank, this can be done by moving the Hood forward or backward as permitted by the slots in the Pivot Plates. Also, the holes in the lower ribs of the Battery Mount can be made into slots; this would permit additional adjustment, if required.

E. A rubber Hood Bumper is used on each side of the Hood. Position the Hood Bumper between the ribs of the handle bracket, being sure it fits snugly. Lower the Hood on the inside of the Hood Bumper to approximately 1/8 inch from the top of the upper rib of the Handle Bracket.

Use the holes in the Hood Bumper to mark drill locations in the Hood. Drill the required holes in the Hood and attach the Hood Bumper with the Back-up Plate, bolts, and lock nuts provided.

Figure 2 shows the Hood Bumper properly attached. Figure 3 shows how the Hood Bumper is attached by the Back-up Plate, bolts, and lock nuts.

F. Instructions issued in Bulletin 1001 (April 2, 1963) for attaching the Hood Catch and Hood Support Rod remain unchanged.

NOTES

A. Drilling the holes in the Super Hood for the Hood Bumpers is a field fix for Hoods already in stock. Later production Super Hoods will have the holes drilled in them.

B. The rubber Hood Bumpers are to be used also on the Custom Hood. For Custom Hoods already in the field, attach the Hood Bumpers as outlined in Paragraph E, above. Later production Custom Hoods will have the holes drilled in them.

For attaching the Hood Bumpers to the Custom Hood, the following parts are required:

2 Hood Bumper (L-847); 2 Back-up Plate (L-848); 4 Truss Head Machine Screw (N-10-ST-10-C); 4 Conelok Nut (248-N).

Dealer stocks of L-846, ST-128, NT-10-ST-5, and 207-N will be exchanged free of charge for like quantities of the new replacement parts. Bring the old parts to your station for exchange.

Dealer stocks of the Battery Mount with the smaller-diameter rod will not be exchanged for the Battery Mount with the larger-diameter rod.

In most cases, the Battery Mount with the 3/16-inch diameter rod will work satisfactorily. However, if desired, the 3/16-inch diameter rod can be chiseled off and a 1/4-inch diameter CRS rod welded on in its place.

2. RESULTS OF TESTS OF ADDITIONAL ORIFICES FOR SPRAYER

Engineering has just completed a series of tests on Orifices (Tips) manufactured by Spraying Systems Company which can be used in the Gun-Jet of the 20-gallon Sprayer. These tests were run to determine the best Orifice for use in fogging Christmas trees.

Engineering states that the DI-31 Tip is best for Christmas trees, followed by the TG-1 Tip. These are available at most lawn and garden centers, or in quantity from Spraying Systems Company, 3201 Randolph Street, Bellwood, Illinois.

Test data follow:

<u>Spraying Systems Tip Number</u>	<u>Sprayer Pressure (in PSI)</u>	<u>Approximate Throw (in Inches)</u>	<u>Approximate Spread (in Inches)</u>	<u>Remarks</u>
6502	50	24	Less than 18	Droplets
	100	24	18	Droplets
	150	28	18	Fog
	200	32	18	Good Fog
	250	32	18	Good Fog
	300	36	18	Good Fog
	350	36	18	Good Fog
TG-1	50	12	Cone 7	Droplets
	100	12	Cone 12	Droplets
	150	18	Cone 18	Droplets
	200	18	Cone 18	Fog
	250	24	Cone 18	Good Fog
	300	24	Cone 18	Good Fog
	350	24	Cone 18	Good Fog

Test data (continued):

<u>Spraying Systems Tip Number</u>	<u>Sprayer Pressure (in PSI)</u>	<u>Approximate Throw (in Inches)</u>	<u>Approximate Spread (In Inches)</u>	<u>Remarks</u>
TG-3	50	18	Cone 14-16	Droplets
	100	18	Cone 14-16	Droplets
	150	24	Cone 18	Droplets
	200	26-30	Cone 18	Fog*
	250	30	Cone 18	Fog*
	300	36	Cone 18	Fog*
	350	36	Cone 18	Fog*
DI -31	50	18	6- 7	**
	100	18-20	12-14	**
	150	24	18	**
	200	36	18	**
	250	36	18	**
	300	36-40	18	**
	350	36-40	18	**

* Heavy Application rate.

**Very good fog throughout pressure range--light application rate.

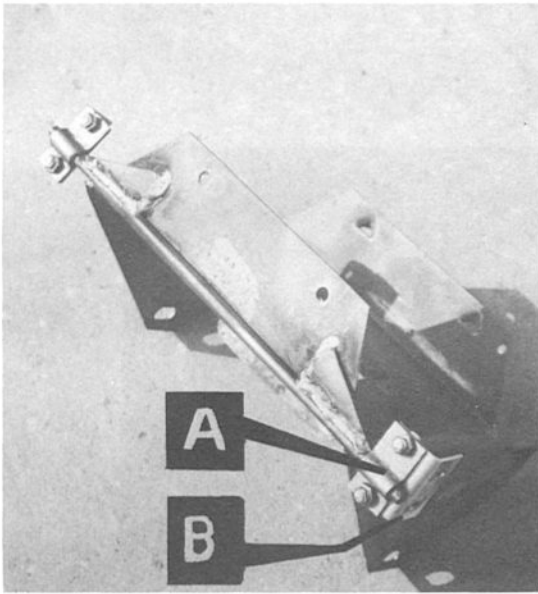


Figure 1

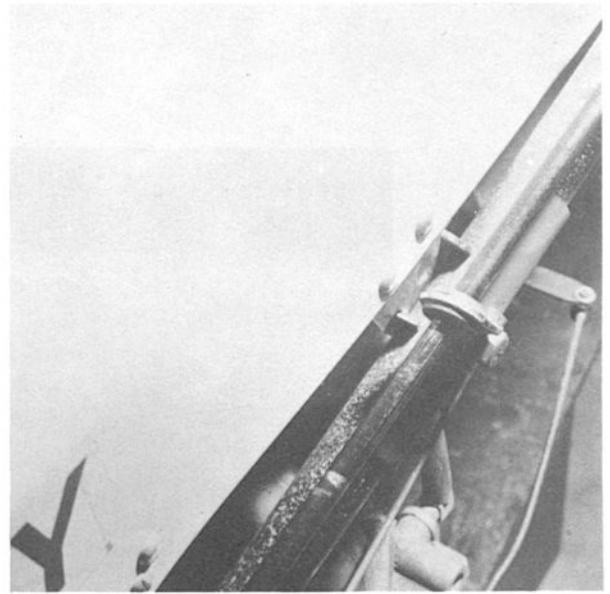


Figure 2

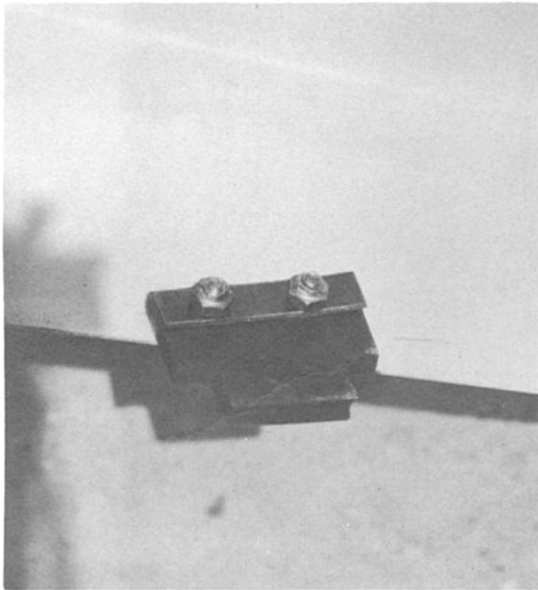


Figure 3