

MULTI-MEASURE AND NOZZLE ASSEMBLY (REMOTE CONTROLLED)

Model 83658

Series B

SPECIFICATIONS

Air pressure required — 50 to 100 P.S.I.G.

Electrical source — 115 volt, 60 cycle.

Ratio — 2¾:1.

Maximum output — 34 cubic inches.

Minimum output — 2 cubic inches.

DESCRIPTION

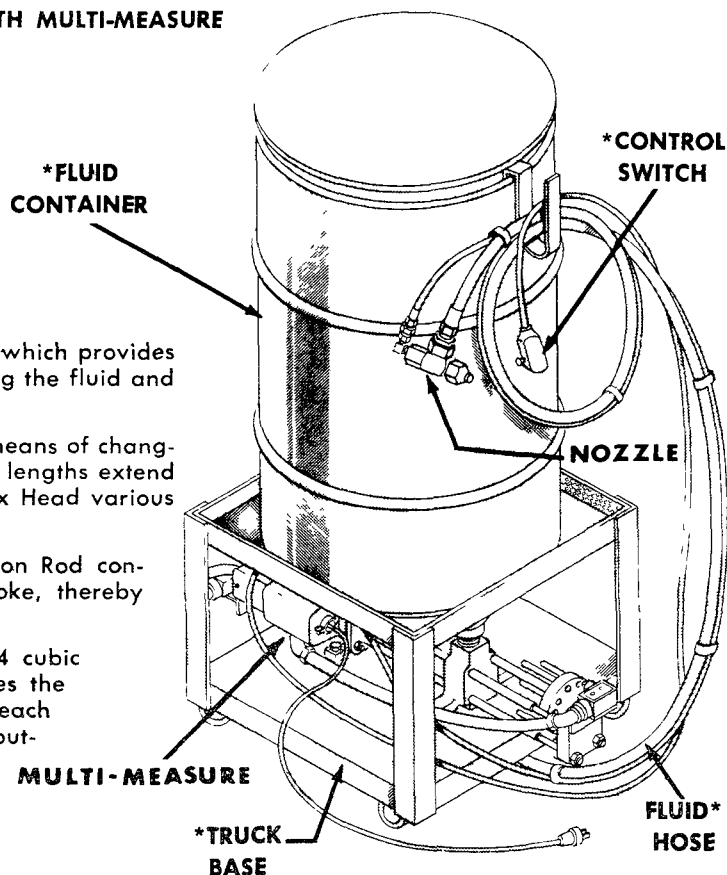
The Multi-Measure consists of an Air Cylinder which provides the motive force for discharging and recharging the fluid and a Measuring Chamber.

A rotating Index Head at one end provides a means of changing the amount of output. Ten rods of varying lengths extend out from the Index Head. By rotating the Index Head various settings can be obtained.

An extension of the Measuring Chamber Piston Rod contacts one of these rods on the discharge stroke, thereby limiting the amount of output.

If rod is not used the maximum output of 34 cubic inches is obtained. Using the longest rod gives the minimum output of 0 cubic inches. All ten rods each have an adjustment of ½ inch. Therefore the output can be varied from 34 to 2 cubic inches.

* NOT INCLUDED
WITH MULTI-MEASURE



TYPICAL INSTALLATION

OPERATION

1. Parts to be furnished by customer should be installed, and air and electrical connection made. Refer to chart on back page for setting of Index Head to obtain the desired amount of output. Selected rod should line up with the Measuring Chamber Piston extension.
2. Fluid is dispensed from the Nozzle by depressing the Control Switch which activates the Relay Coil. (Relay remains activated until completion of discharge cycle.) Relay in turn activates the 4-way Solenoid Valve which controls the air supply to the Air Cylinder. Air Cylinder Piston moves forward and fluid is discharged from the Measuring Chamber.
3. The Index Head has slight travel, and at the end of the discharge stroke it opens a normally closed momentary contact Micro-Switch. This causes the contacts in the Relay to open which activates the 4-way Solenoid Valve which in turn directs air to the return side of the Air Cylinder and vents air from the opposite side. Air Piston and Measuring Chamber Piston return to the recharge position and Measuring Chamber recharges by suction and gravity. This completes one cycle.
4. At the completion of each cycle the Air Cylinder Piston contacts a normally open momentary contact Micro-Switch. This prevents a short cycle because another cycle cannot begin until Air Cylinder Piston contacts this switch. The Control Switch can be depressed and released for a single cycle or held depressed for as many cycles as desired. If a number of same sized molds are to be filled the switch can be held depressed. Recharge time permits the operator to move from one cavity to another without releasing the Control Switch.

LINCOLN

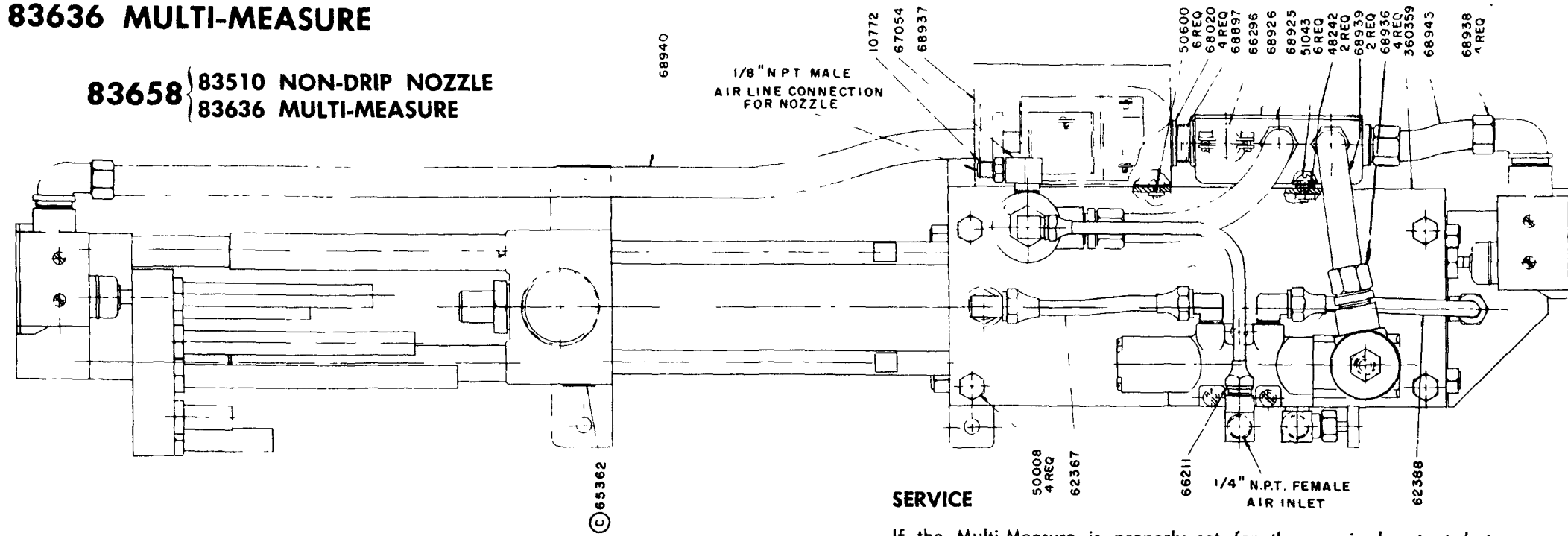
LINCOLN, One Lincoln Way
St. Louis, Missouri 63120-1578
(314) 679-4200 Customer Service, (314) 679-4300

SECTION - F40

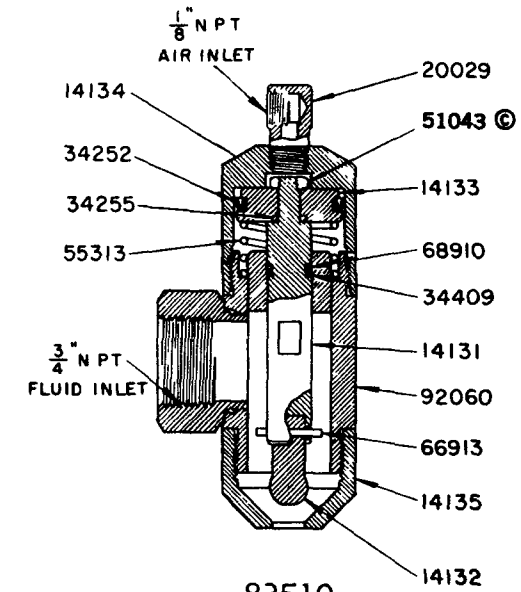
PAGE - 20A

83636 MULTI-MEASURE

83658 } 83510 NON-DRIP NOZZLE
83636 MULTI-MEASURE



© INDICATES CHANGE



83510 NON-DRIP NOZZLE ASSEMBLY

* NOT INCLUDED WITH MULTI-MEASURE

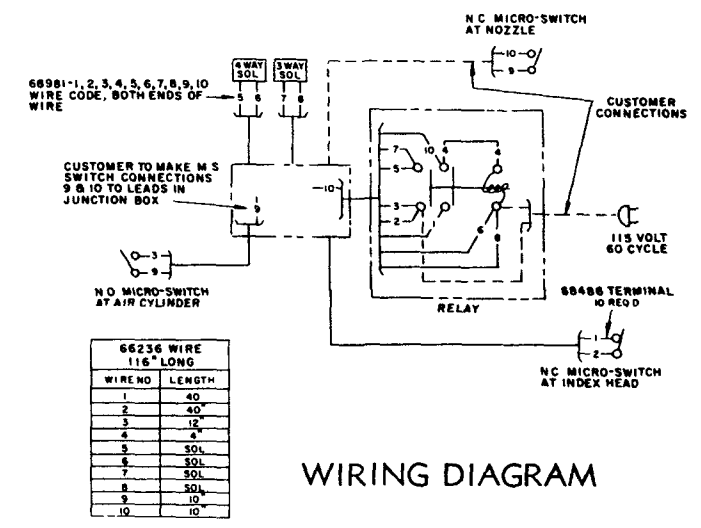
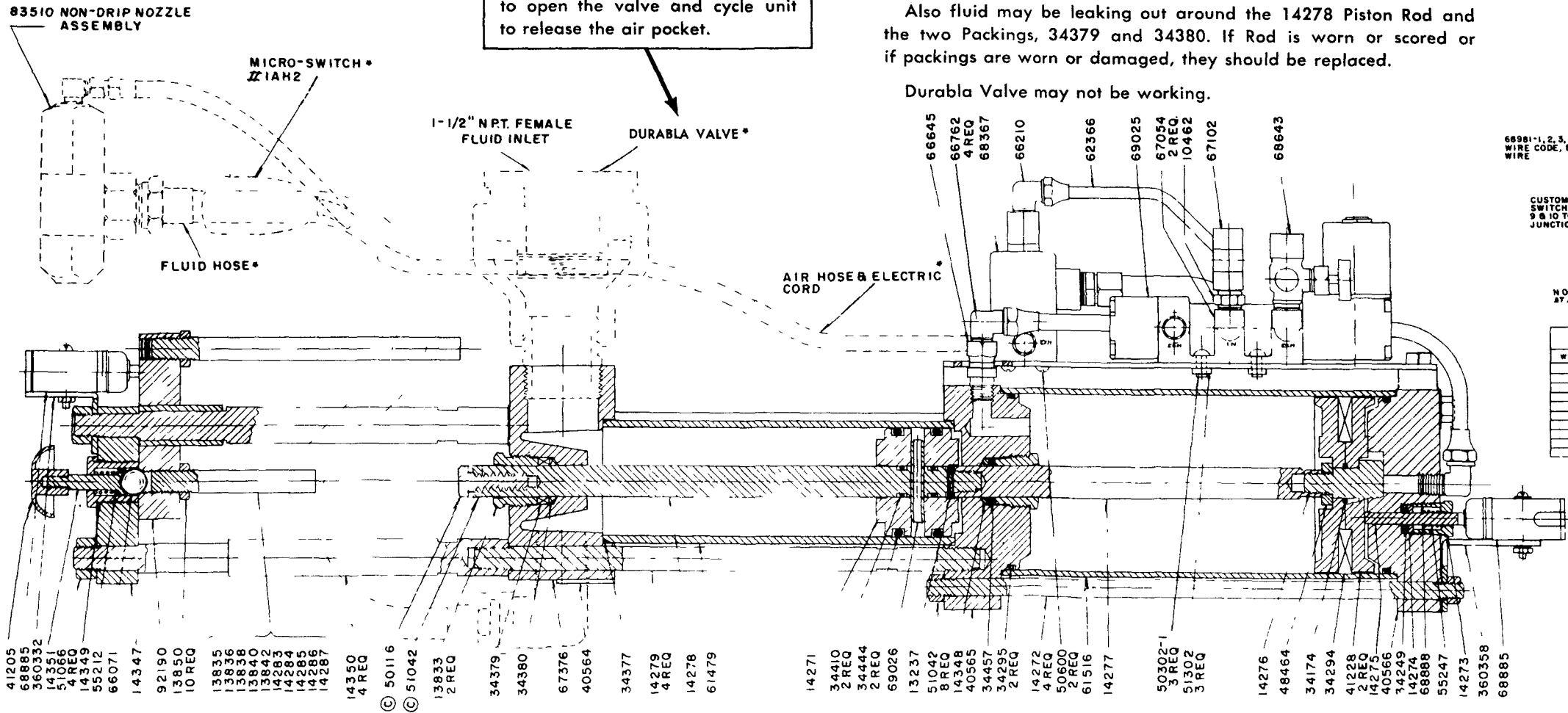
NOTE:
Air pocket in the Valve will affect the accuracy of output. Use a probe to open the valve and cycle unit to release the air pocket.

SERVICE

If the Multi-Measure is properly set for the required output but delivery is inaccurate, this indicates that the fluid is by-passing the two 34444 "O" Rings in the Measuring Chamber Piston. The "O" Rings may be worn or damaged and should be replaced. Or, the Measuring Chamber Tube may be worn or scored.

Also fluid may be leaking out around the 14278 Piston Rod and the two Packings, 34379 and 34380. If Rod is worn or scored or if packings are worn or damaged, they should be replaced.

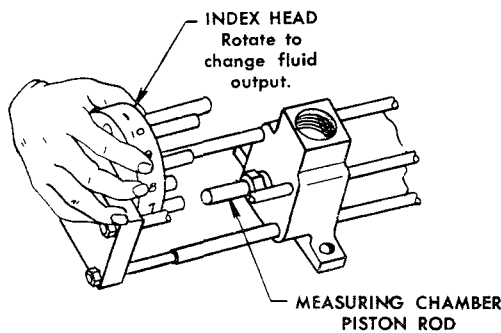
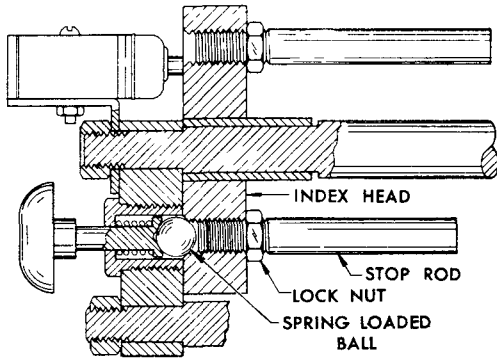
Durabla Valve may not be working.



WIRING DIAGRAM

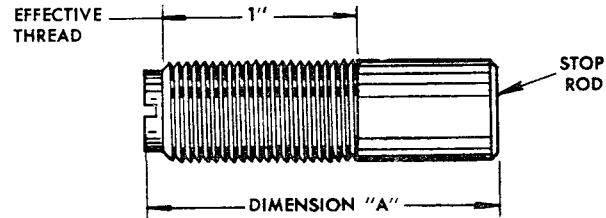
SELECTING STOP ROD SETTING

Stop Rods, as shown in chart below, are of various lengths. Capacity and output listed in chart is the minimum and maximum for each Stop Rod, depending upon how far the rod is screwed into the Index Head. Rods are adjusted and fluid output should be measured until desired amount of output is obtained from each Rod. After each Stop Rod is adjusted, it is secured in position by tightening the Lock Nut. The Index Head is numbered from one to ten for easy identification of the Stop Rods. Output quantities can easily and rapidly be changed by rotating the Index Head so that the Stop Rod of the desired output aligns with the Measuring Chamber Piston Rod. A spring loaded Ball in the End Plate engages with the Index Head to hold it in place.



OUTPUT CHART

STOP ROD NUMBER	DIMENSION "A"	OUTPUT CUBIC INCHES
13835	1 $\frac{1}{8}$ "	31-29
13836	1 $\frac{3}{8}$ "	29-27
13838	2 $\frac{3}{64}$ "	25-23
13840	3 $\frac{5}{32}$ "	21-19
13842	3 $\frac{15}{16}$ "	17-15
14283	4 $\frac{1}{2}$ "	15-13
14284	5 $\frac{1}{8}$ "	12-10
14285	5 $\frac{3}{4}$ "	8-6
14286	6 $\frac{3}{8}$ "	5-3
14287	7"	2



REPAIR PARTS LIST

Part No.	Description	Part No.	Description	Part No.	Description
10462	Nipple	34249	Block Vee Packing	66071	Steel Ball
10772	Nipple	34252	Block Vee Packing	66210	90° Tube Connector
13237	Pin	34255	"O" Ring	66211	Straight Tube Connector
13833	Packing Retainer	34294	Piston Packing	66236	Wire
13835	Stop Rod	34295	"O" Ring	66296	Cable Connector
13836	Stop Rod	34377	"O" Ring	66645	Union
13838	Stop Rod	34379	Packing	66762	90° Tube Connector
13840	Stop Rod	34380	Packing	66913	Drive Pin
13842	Stop Rod	34409	"O" Ring	66981	Wire Code
13850	Lock Nut	34410	"O" Ring	67054	Elbow
14131	Plunger	34444	"O" Ring	67102	Tee
14132	Check	34457	Packing	67376	Pipe Plug
14133	Piston	40564	Cylinder End	68020	Conduit Lock
14134	Cap	40565	Cylinder Casting	68367	Solenoid Valve
14135	Cap	40566	Cylinder Head Casting	68486	Terminal
14271	Piston	41205	Knob	68643	Needle Valve
14272	Tie Rod	41228	Piston Washer	68885	Micro-Switch
14273	Spring Housing	48242	Washer	68888	Tru-Arc Retaining Ring
14274	Packing Retainer	48464	Washer	68897	Close Nipple
14275	Pin	50008	Hex. Head Screw	68910	Spiral Back-Up Ring
14276	Bolt	50116	Screw	68925	Handy Box
14277	Piston Rod	50302-1	Screw	68926	Handy Box Cover
14278	Plunger	50600	Screw	68936	Connector
14279	Tie Rod	51042	Nut	68937	Control Relay
14283	Stop Rod	51043	Nut	68938	90° Connector
14284	Stop Rod	51066	Nut	68939	Flexible Conduit
14285	Stop Rod	51073	Nut	68940	Flexible Conduit
14286	Stop Rod	51302	Nut	68945	Flexible Conduit
14287	Stop Rod	55212	Spring	69025	Four-Way Solenoid Valve
14347	End Plate	55247	Spring	69026	Roll Pin
14348	Spacer	55313	Spring	83510	Non-Drip Nozzle Assembly
14349	Spring Housing	61479	Measuring Tube	92060	Nozzle Body
14350	Tie Rod	61516	Air Cylinder	92190	Index Head
14351	Plunger	62366	Tubing	360332	Bracket
20029	90° Angle Body	62367	Tubing	360358	Bracket
34174	"O" Ring	62388	Tubing	360359	Mounting Bracket
		65362	Name Plate		

RETAIN THIS INFORMATION FOR FUTURE REFERENCE

When ordering Replacement Parts, List Part Numbers, Descriptions, Model Number, & Series Letter.
LINCOLN ST LOUIS -- Provides a Distributor network that stocks equipment and replacement parts.

Repairs by Authorized Service Depts. List furnished upon request.