



# PARTS LIST AND Operating Instructions

## Novo Rollr Engines

*Single Cylinder U Model*

Radiator and Hopper Cooled Types

SU - 3" x 4" 600 R.P.M.

KU - 3" x 4" 1200 R.P.M.

GU - 3 $\frac{3}{8}$ " x 4" 600 R.P.M.

TU - 3 $\frac{3}{8}$ " x 4" 1200 R.P.M.



FIG. 1542. RADIATOR COOLED

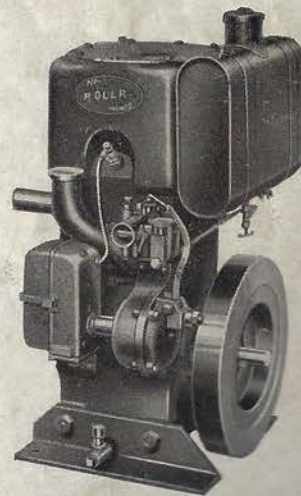


FIG. 1327. HOPPER COOLED

# NOVO ENGINE CO.

LANSING ~ MICHIGAN

New York

U. S. A.

Chicago

NIAGARA SPRAYER AND CHEMICAL CO., INC.

Parts List 11-17  
U Single Cylinder Engine

P. O. BOX 1709

# Operating Instructions

**OILING.** Use a good grade of gas engine oil. For summer operation, a medium heavy S.A.E. viscosity No. 30; for winter, a light, S.A.E. No. 20. Capacity—One quart.

Pull out breather tube cap and pour oil into crankcase. To check oil level: Unscrew pipe cap from upright nipple in tee fitting at bottom of crankcase. This extends from oil pan through side channel iron. One quart of oil will bring level to overflow. Check oil daily to maintain this level. Refer page 4, fig. D128.

**SPEED REDUCTION.** The lubrication of the speed reduction is entirely separate from the engine crankcase and a different grade of oil is required. An oil of S.A.E. No. 40 is recommended. Pour oil into housing through hand hole plate opening or pipe plug hole at top of case provided for the purpose. Capacity: Three-quarters of a pint (eight to one reductions, same amount in each case). Refer page 14, fig. B1100.

Fill radiator or hopper with clear water, soft is preferable.

**FILL FUEL TANK.** Capacity: hopper cooled type,  $1\frac{1}{2}$  U.S. gallons. Radiator cooled type,  $2\frac{3}{4}$  U.S. gallons. Container used for filling should be clean and free from foreign particles.

All models are equipped with a combination fuel filler and shut-off valve, located directly underneath the fuel tank. Be sure to open valve before starting engine. Filter bowl and screen should be removed and cleaned periodically.

**CARBURETOR** is gravity, float feed type. It is adjusted for most efficient operation and should

require no further adjustment. Pamphlet of carburetor instructions is furnished separate.

**SPARK PLUG.** Before screwing spark plug into cylinder head, check the gap between the points. It should not be more than  $\frac{1}{32}$ ", the thickness of a thin dime.

**MAGNETO.** Attach cable to spark plug. The magneto is equipped with impulse coupling which automatically retards the spark for starting, producing a hot spark at slow engine speeds. The spark is automatically advanced as engine gets up to speed, the impulse cutting out at approximately 150 R.P.M. The impulse requires no adjustment. To clean impulse, flush with kerosene, wipe dry and oil parts with light oil. Pamphlet of magneto instructions furnished separate.

**TO START ENGINE.** Place starting crank in position on crankshaft. Close choke valve in carburetor, lever is located on top of carburetor intake. Crank engine shaft to right. Immediately after engine starts, release choke valve lever and engine will pick up to governor speed. In cold climates, during winter operation, it is necessary after engine starts, to hold carburetor choke valve partially closed until engine is thoroughly heated and will operate on regular open intake.

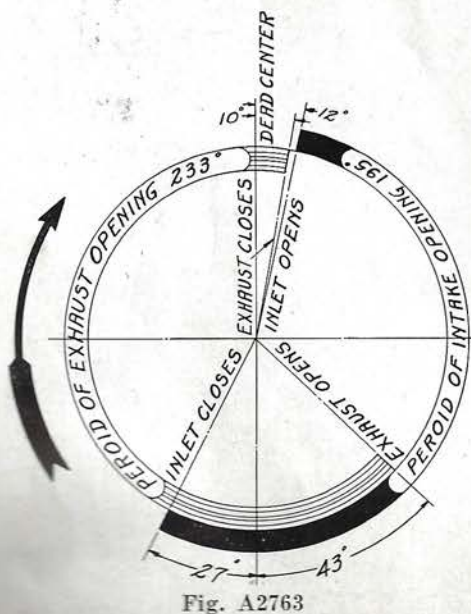
**TO STOP ENGINE.** Push shorting button on side of magneto and hold until engine is stopped.

## LUBRICATION

An engine, to operate satisfactorily, must be kept properly lubricated. The manufacturer can provide the proper instructions and the means whereby it is possible to correctly lubricate the engine, but the operator must provide the correct oil and care necessary to keep the engine correctly lubricated. Proper care is what lengthens the life of any machine.

For the correct grade of oil to use, refer to first paragraph under "Oiling." There are several good makes of lubricating oil on the market. We suggest you consult your local distributor.

**CRANKCASE.** Periodic draining of the crankcase is one of the most important factors in reducing wear and maintaining maximum efficiency of the engine. On a new engine the oil should be drained after the first fifteen hours of service and every twenty-five working hours thereafter. The proper time to drain the oil is after the engine has been run and is warmed up. When used intermittently in cold weather a certain amount of water condensation or "sweating" will occur in the crankcase. With dirty oil this water will form





a soft, gummy emulsion. To insure proper lubrication in cold weather, remove the oil pan and clean out with kerosene every two weeks.

**FAN.** The grease in the fan shaft bearing should be renewed once a month. For winter operation an S.A.E. No. 40, and for summer 600W is recommended, but any good grade of grease will be satisfactory.

**POWER GEARS.** Refer to paragraph three under "Oiling." Inspect oil level daily and drain and renew every sixty working days.

## CLUTCH

**ENGINE WITH CLUTCH ONLY.** Oil clutch shifter collar twice daily thru oiler on clutch housing cover. Oil outer ball bearing thru oiler daily. Refer page 13, fig. B1625.

**ENGINE WITH CLUTCH AND GEAR REDUCTION:** Oil clutch shifter collar twice daily thru oiler on clutch housing cover. The shaft bearing (outer) receives oil from gear reduction and does not require attention. The pilot bearing (inner) is packed with a special grease and does not require renewing except at overhaul periods. When overhauling, the pilot bearing and felt should be repacked with a grease similar to Superla 2X grease. Never allow clutch to slip. To adjust or take up wear remove clutch cover, pull out adjusting ring lock pin and turn to the right. After making adjustments, be sure that lock pin is in the nearest hole in clutch pressure plate. Disengage clutch when making adjustments.

## COOLING

**HOPPER TYPE.** Single cylinder capacity—Four gallons.

Keep water level about three inches from top of hopper at all times and under no circumstances permit the water to get as low as top of cylinder head. Boiling is typical of a hopper cooling system, therefore the water must be replenished as it boils away. Steaming and boiling is not an indication of overheating. **During freezing weather drain cylinder and hopper when engine is not in use.**

**RADIATOR TYPE.** Single cylinder capacity—Two gallons.

The radiator must at all times be kept full of water to insure proper circulation. Soft water is most desirable. If soft water is not obtainable

we recommend that the system be drained every two weeks and flushed with clean water.

During cold and freezing weather keep radiator partially covered. Either drain, or use non-freezing solution corresponding to the following temperatures:

Water	Alcohol	Temperatures
90%	10%	18 degrees above zero.
85%	15%	11 degrees above zero.
80%	20%	5 degrees above zero.
75%	25%	2 degrees above zero.
70%	30%	9 degrees below zero.
65%	35%	15 degrees below zero.
60%	40%	20 degrees below zero.

## VALVES

The valves and seats must always be kept in good condition to prevent the engine from losing compression. Should the engine turn too easily while being cranked, it is evident that compression is being lost past the valves. A clearance of .015" between valve stems and tappets must be maintained on inlet and exhaust valves. After a new engine has been run for some time and the valves and seats are properly worn in, they should be readjusted, with engine cold, to this clearance.

To check valve timing, refer to figure A2763. Adjust tappet clearance before setting valve. Set exhaust valve to close as indicated in diagram.

## GOVERNOR

The governor is set for a standard speed of 1200 R.P.M. crankshaft speed unless otherwise specified. The maximum is 1800 R.P.M. The speed can be raised by increasing the tension on governor rod spring, or lowered by decreasing the spring tension. The tension on governor rod spring is varied by means of adjusting screw and nut. Refer page 7, fig. B1530.

## BEARINGS

The crankshaft and power gear shafts are equipped with tapered roller bearings, which require very little adjustment. However, adjustment is required from time to time and is made evident by end play in the shaft. To take up end play in engine crankshaft, remove the bearing housings at each end of shaft and take off one or more paper shims until excessive end play is eliminated. In the case of power gear shafts, these shims are between the reduction gear housing and the cover.

The engine operator should make it a point to check all bearings weekly.

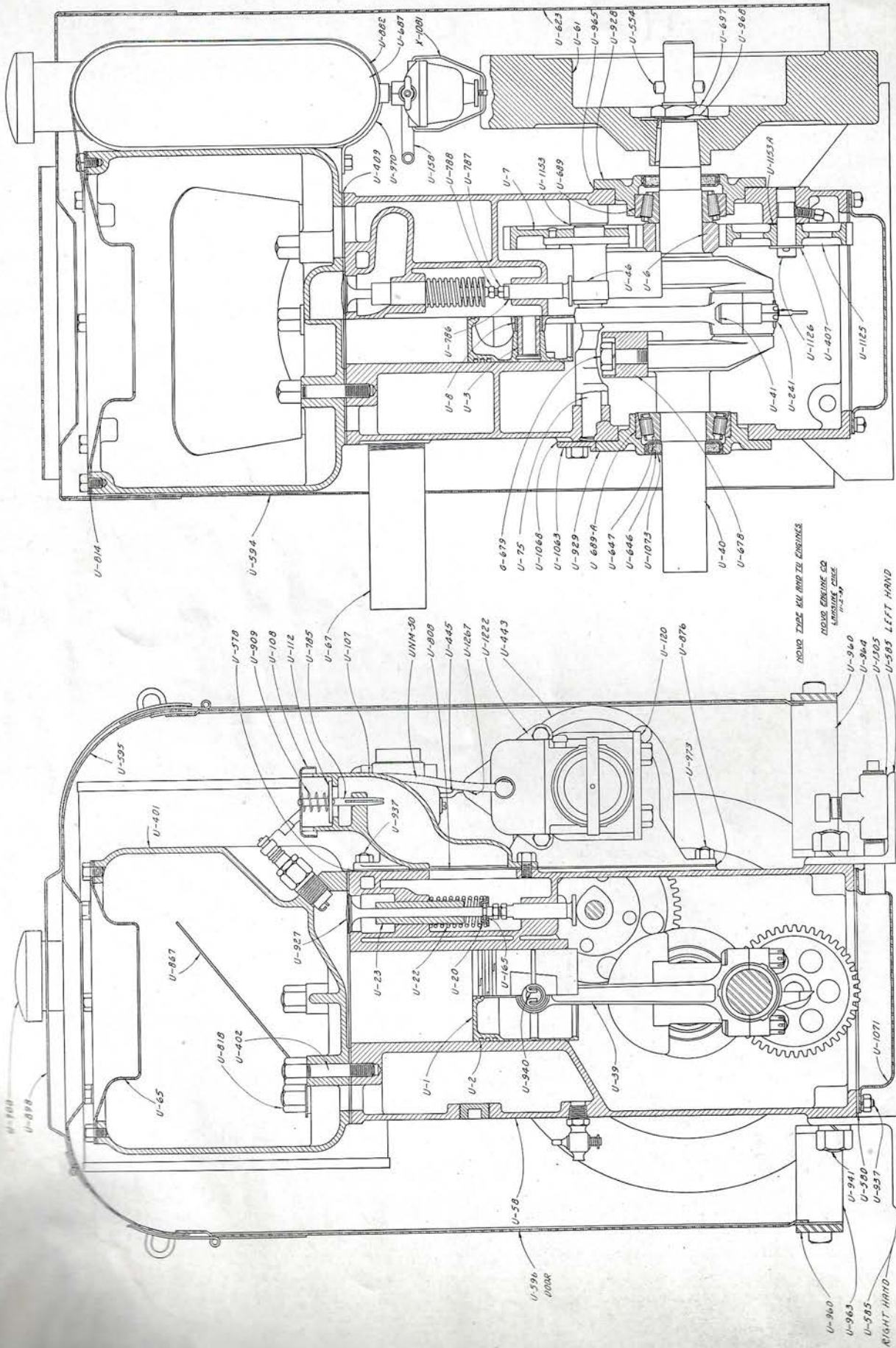


Fig. D128  
MODEL U SINGLE CYLINDER ENGINE

Always Give Model and Serial Number of Engine and Outfit When Ordering Repairs



# Instructions for Ordering Parts

*ALWAYS GIVE MODEL AND SERIAL NUMBER OF ENGINE  
WHEN ORDERING REPAIRS*

This parts catalog lists only standard engine parts. So many special items have been supplied to meet different customers' specifications, that it is impractical to list these special parts. However, any special parts originally furnished on engines can be supplied on request.

Accessories, such as magnetos, carburetors, air cleaners, etc., are not listed. These can be supplied, however, upon receipt of order giving model and serial number of engine. Price will be furnished upon application.

This parts list and prices shown hereon supersedes all other lists previously furnished.

Prices are subject to change without notice.

The end of the crankshaft where starting crank is applied is always considered the front of the engine.

Unless otherwise agreed, all parts shipments are f.o.b. Lansing.

Replacement of connecting rods will be handled on an exchange arrangement, provided old rod is returned in usable condition, transportation charges prepaid. Price on exchange will be furnished upon application.

Pistons and piston rings can be supplied from stock in the following sizes, standard, .005", .015", and .030" oversize. Orders for sizes above .030" will be handled as special orders only.

Piston pins will be furnished standard, .005" and .010" oversize only.

## RETURN OF PARTS

All claims must be made within three days after receipt of shipment. Give our order number against which return is being made and state full details of what is being returned and why.

Transportation charges on return shipments must be prepaid. Return shipments should be tagged showing shipper's name and address.

## WARRANTY

Novo Engine Company will guarantee their engines and parts thereof against defective material or workmanship for a period of six months from date of shipment, but not to exceed ninety days of service.

Transportation charges on parts returned, claimed defective, must be prepaid. If such parts are found defective, shall, at the Company's option, be repaired, replaced or credited. No claims will be allowed which, in the Company's opinion, result from engine or parts having been subjected to abuse or neglect or where failure has been caused by accident.

The warranty on accessories furnished with engines is limited to the warranty of the accessory manufacturer.

The Novo Engine Company reserves the right to improve its products thru changes in design or materials without being obligated to incorporate such changes in equipment previously manufactured.

When defective parts are repaired or replaced free of charge or credited, it is agreed the manufacturer is in no way liable for expenditures covering labor or otherwise that may be incurred in the adjustment of the claim covering defective parts.

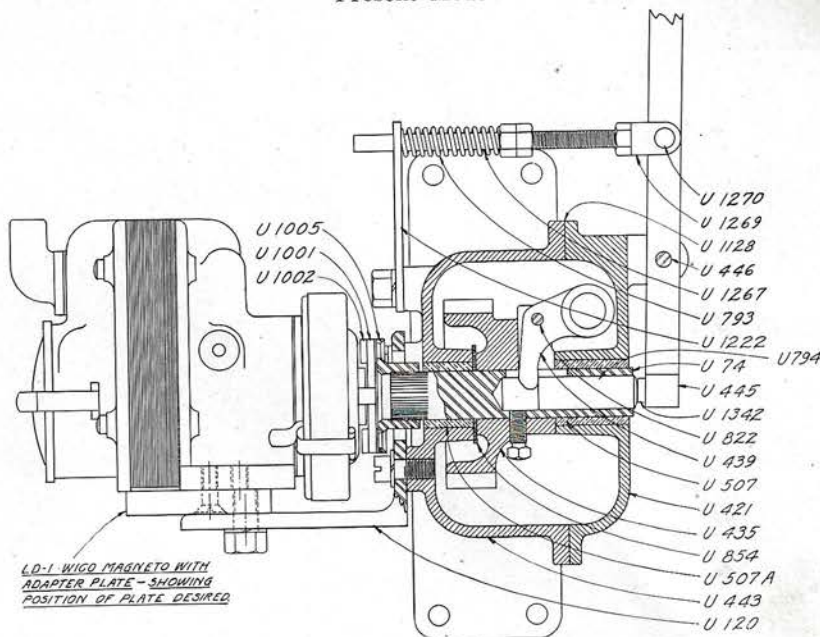


ENGINE PARTS LIST

Part No.	NAME OF PART	No. Used	KU-TU	SU-GU	Price
U1	3" Diameter piston, KU-SU	1	UF1	UF1	\$2.25
*U1	3 1/16" Diameter piston, GU-TU. Used previous to No. 17413, obsolete	1	HU1	HU1	2.50
U1	3 3/16" Diameter piston, GU-TU. Used from Engine No. 17413 to No. 26262, obsolete	1	GU1	GU1	2.50
U1A	3 3/16" Diameter piston, GU-TU. Used after Engine No. 26262	1	HU1A	HU1A	2.50
*U1A	Piston, 3 3/16" diameter, used previous to Engine No. 17414, assembled with parts 1-2-3-940, obsolete	1	100HU	100HU	4.25
U1A	Piston, 3 3/16" diameter, GU-TU, used after Engine No. 17413, assembled with parts, 1-2-3-940, obsolete	1	100GU	100GU	4.30
U1A	Piston, 3" diameter, assembled with parts 1-2-3-940, used on KU-SU engines	1	100FU	100FU	3.90
U1A	Piston, 3 3/16" diameter, assembled with parts 1-2-3-940, used on engines after No. 26262	1	100HUA	100HUA	4.30
U2	Piston ring, 3" diameter, for KU-SU	2	UF2	UF2	.25
*U2	Piston ring, 3 3/16" diameter, for GU-TU, used on engines previous to No. 17414	2	HU2	HU2	.30
U2	Piston ring, 3 3/16" diameter, for GU-TU, used on engines after No. 17413.	2	RRU2	RRU2	.30
U2D	Piston ring, 3" diameter, oil regulating, used on SU-KU	1	UF2D	UF2D	.30
*U2D	Piston ring, 3 3/16" diameter, oil regulating, used on engines previous to No. 17414, obsolete	1	HU2D	HU2D	.35
U2D	*Not illustrated. Piston ring, 3 3/16" diameter, oil regulating, used on TU-GU engines after No. 17413	1	RRU2D	RRU2D	.35
U3	Piston pin for KU-SU	1	UF3	UF3	.50
U3	Piston pin for GU-TU, used on engines previous to No. 17414	1	UF3	UF3	.50
U3	Piston pin for GU-TU, used on engines after No. 17413	1	GU3	GU3	.50
U6	Cam pinion	1	UF6	UF6	2.00
U7	Cam gear	1	UF7	UF7	2.25
U7A	Cam gear and sleeve assembled with parts, 7-46-X681	1	T3437	T3437	7.50
U8	Connecting rod bushing	1	UF8	UF8	.15
U20	Valve stem collar	2	UF20	UF20	.05
U22	Valve spring, inlet or exhaust	2	UF22	UF22	.05
U23	Valve stem guides	2	UF23	UF23	.35
U39	Connecting rod assembled with parts, 8-41-241-X262	1	T3227	T3227	6.80
U40	Crankshaft for crankshaft drive with parts U6-678-679-680-995A-995B-X358	1	T3434	T3434	20.00
*U40A	Crankshaft for gear reduction with parts, U6-678-679-680-995A-995B-X358	1	T3434A	T3434A	20.00
*U40B	Crankshaft for clutch with parts, U6-678-679-680-995A-995B-X358	1	T3434B	T3434B	20.00
U41	Connecting rod bolt	2	UF41	UF41	.25
U46	Cam sleeve	1	SU46B	SU46B	4.40
UNM50B	Magneto cable, 16"	1	1 1/2 NM50D	1 1/2 NM50D	.35
U58	Cylinder with part U23, on engines SU-KU, previous to No. 17702, and GU-TU No. 17414, obsolete. State whether for hopper or radiator cooled engine.				
	SU-KU	1	101SU	101SU	27.00
	GU-TU	1	101GU	101GU	30.00
U58A	Cylinder assembled with parts U1A-20-22-23-165 and U927, used on engines SU-KU previous to No. 17702, and GU-TU No. 17414, obsolete. State whether hopper or radiator cooled.				
	SU-KU	1	101SUA	101SUA	32.00
	GU-TU	1	101GUA	101GUA	35.00
U58B	Cylinder assembled with parts U1A-20-22-23-165 and U927. Used on engines SU-KU after No. 17701, and GU-TU No. 17413.				
	SU-KU Hopper cooled	1	101SUD	101SUD	32.00
	GU-TU Hopper cooled	1	101GUD	101GUD	35.00
	SU-KU Radiator cooled	1	101SUE	101SUE	32.00
	GU-TU Radiator cooled	1	101GUE	101GUE	35.00
U58C	Cylinder with part U23, only used on engines SU-KU after No. 17701, and GU-TU No. 17413.				
	SU-KU Hopper cooled	1	101SUB	101SUB	27.00
	GU-TU Hopper cooled	1	101GUB	101GUB	30.00
	SU-KU Radiator cooled	1	101SUC	101SUC	27.00
	GU-TU Radiator cooled	1	101GUC	101GUC	30.00
U61C	Flywheel for hopper or radiator cooled. Interchangeable with flywheels used previously	1	SU61C	SU61C	8.50
UNM63	Return spring used on E. K. Wico magneto bracket assembly, obsolete	1		1 1/2 NM63	.25
U65	Steel hopper cover. Interchangeable with cast iron cover	1	UF65F	UF65F	.75
*U67	Muffler, 1" pipe, used on engines previous to SU-KU No. 17702 and GU-TU No. 17414, obsolete	1	T3867	T3867	1.00
*U67A	Muffler equipped with air heater	1	T3301	T3301	1.25
U67B	Muffler with 1 1/4" pipe thread, used on engines numbered after No. 17701	1	T4070	T4070	.60
*U71	Starting crank, complete	1	T3244	T3244	2.15

Always Give Model and Serial Number of Engine and Outfit When Ordering Repairs

**GOVERNOR ASSEMBLY**  
Present Model



**Fig. B1530**  
Used on Engines After Serial No. 26197

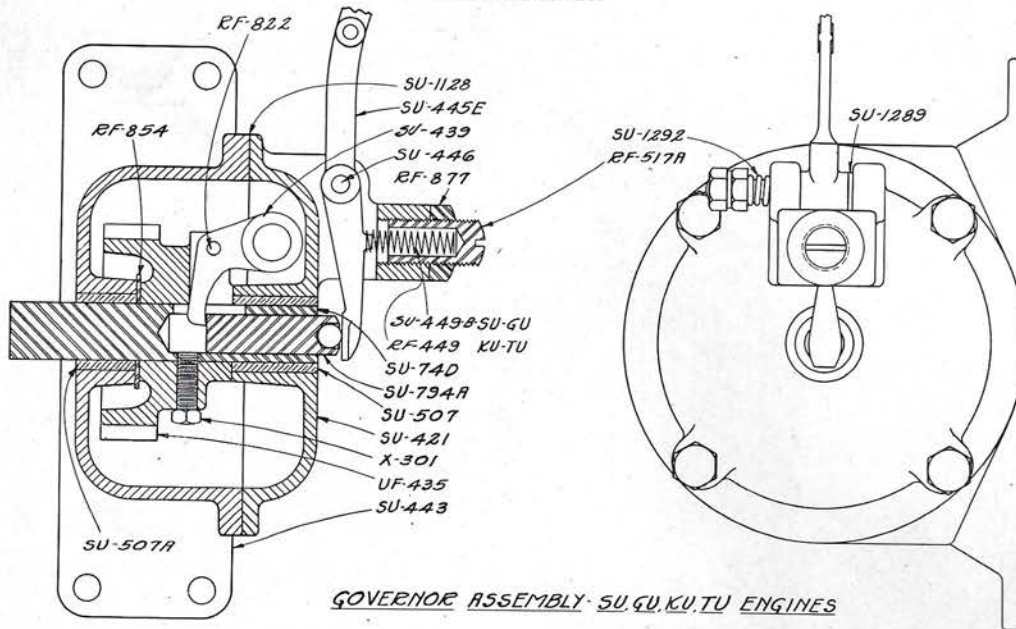
Part No.	NAME OF PART	No. Used	KU-TU	SU-GU	Price
U74B	Governor shaft, used on engines previous to No. 17413, obsolete, Fig. A1989	1	SU74B	SU74B	2.00
*U74C	Governor shaft, used on engines after No. 17412 to No. 19763, obsolete..	1	SU74C	SU74C	1.90
U74	Governor shaft, used on engines numbered after No. 19763, Fig. B1530..	1	SU74E	SU74E	1.70
U75	Cam shaft	1	SU75	SU75	.45
U107	Breather tube and valve cover	1	SU107	SU107	1.50
U108	Breather tube cover assembled with parts 112-909, X267, and X401.....	1	T3114	T3114	.85
U112	Breather valve	1	RF112	RF112	.05
U120H	Magneto bracket for B1 Wico magneto, used on engines previous to No. 20393, obsolete, Fig. B1145	1	SU120H		1.15
U120J	Magneto bracket with part U1298 for EK Wico magneto, used on engines previous to No. 19103, Fig. B1087.....	1		SU120J	2.10
*U120K	Magneto bracket for attaching to cylinder block for Bosch magneto, used on engines No. 20393 to No. 22640.....	1		SU120K	2.55
U120M	Magneto bracket, used on engines from No. 23042 to No. 26917, Fig. C585	1	SU120M	SU120M	1.05
U120	Magneto bracket, used on engines after No. 26917, Fig. B1530.....	1	SU120P	SU120P	.60
U158C	Fuel line, 7/16"x20", interchangeable with fuel lines previously used	1	SU158C	SU158C	.45
U165	U washer for valve stem collar	2	UF165	UF165	.05
U179	Washer for adjusting rod, used previous to engine No. 20736, obsolete...	3		SU179	.05
U241	Nut for connecting rod bolt	2	UF241	UF241	.05
U401	Cylinder head for hopper cooled engines, used previous to engine SU-KU No. 17702 and GU-TU No. 17414.	1	SU401	SU401	10.15
	SU-KU	1	GU401	GU401	7.20
*U401A	Cylinder head for radiator cooled engines used previous to engine SU-KU No. 17702 and GU-TU No. 17414.	1	SU401B	SU401B	13.85
	SU-KU	1	GU401B	GU401B	16.25
U401B	Cylinder head for hopper cooled engines used after engine SU-KU No. 17701 and GU-TU No. 17413.	1	SU401D	SU401D	13.85
	SU-KU	1	GU401C	GU401C	16.25
*U401C	Cylinder head for radiator cooled engines, used after engine SU-KU No. 17701 and GU-TU No. 17413.	1	SU401C	SU401C	11.10
	SU-KU	1	GU401E	GU401E	11.50
	GU-TU	1	TU401		11.10
U401D	Cylinder head, TU	7	NNU402	NNU402	.10
U402A	Cylinder head capscrews	7	RF402	RF402	.10
U402A	Cylinder head studs, 7/16"x2 1/16", used on hopper cooled engines	7	UF402	UF402	.15
U402B	Cylinder head studs, 7/16"x3 1/2", used on radiator cooled engines	7	AF407	AF407	.85
U407	Washer for oil gear shaft	1	SU408	SU408	.35
U409	Cylinder head gasket	1			

\*Not illustrated.

Always Give Model and Serial Number of Engine and Outfit When Ordering Repairs



**GOVERNOR ASSEMBLY**  
Obsolete Model



NOVO ENGINE CO  
LANSING MICH

Fig. B1233  
Used on Engines Serial No. 23043 to No. 26197

Part No.	NAME OF PART	No. Used	KU-TU	SU-GU	Price
*U417	Fan complete with pulley, flat type belt. Used previous to engine No. 27952	1	UF417D	UF417D	5.25
*U417G	Fan complete with pulley, V-belt type. Used after engine No. 27952	1	UF417G	UF417G	5.25
U421	Bearing for governor shaft with bushing, U507, used on engines previous to No. 23042, obsolete, Fig. B1233	1	114SU	114SU	2.00
*U421	Bearing for governor shaft with bushing U507, used on engines from No. 23041 to No. 26197	1	114AG	114AG	2.00
U421	Bearing for governor shaft with bushing U507, used on engines after No. 26197, Fig. B1530	1	114AGA	114AGA	2.00
*U434	Fan drive pulley, V-belt type. Used after engine No. 27952	1	NNU434	NNU434	1.00
U435	Governor pinion, drilled and tapped for set screw	1	UF435	UF435	2.25
U439	Governor weights, used on engines after No. 17412	2	SU439	SU439	.50
U439A	Governor weights, used on engines previous to No. 17413	2	RF439	RF439	.50
U443	Governor housing with bushing U507A	1	115SU	115SU	3.50
U445	Governor lever, used after engine No. 26197	1	T4551	T4551	.50
U445C	Governor lever, used previous to engine No. 17412	1	SU445C	SU445C	1.00
U445E	Governor lever, used on engines after No. 17412 to No. 23043	1	SU445E	SU445E	1.20
*U445F	Governor lever, used after engine No. 23042 to No. 26197	1	SU445F	SU445F	1.00
U446F	Governor lever pin, used on engines previous to No. 17412	1	RF446	RF446	.10
U446A	Governor lever pin, used on engines from No. 17412 to No. 26197	1	SU446	SU446	.10
U446	Stud for governor lever, used on engines after No. 26197	1	AG446	AG446	.10
*U447A	Governor rod for Tillotson carburetor, obsolete	1	SU447A	SU447A	.25
*U447B	Governor rod for Zenith carburetor, used on engines previous to No. 17217, obsolete	1	SU447B	SU447B	.25
*U447F	Governor rod for Zenith carburetor, model HF3½N, used on engines from No. 17216 to No. 23043, obsolete	1	SU447F	SU447F	.25
*U447G	Governor rod for Zenith carburetor, model HF3½N, interchangeable with U447F when SU715 is furnished	1	SU447G	SU447G	.45
*U447H	Governor rod, used on engines from No. 23042 to No. 26085	1	SU447H	SU447H	.30
U447K	Governor rod, used on Engines after No. 26085 with TU3½YH Zenith carburetor	1	KU447	KU447	.30
U449	Governor adjusting spring, for engines numbered previous to No. 17413, obsolete. For present model refer part No. U793	1	SU449A	SU449A	.10
U449A	Governor adjusting spring, for engines previous to No. 17413	1	SU449B	SU449B	.10
U449B	Governor adjusting spring, used on engines from No. 17412 to No. 23043. For present model refer part No. U793	1	RF449	RF449	.10
*U450	Washer for fan bracket	2	RF450	RF450	.05
*U464	Carburetor adapter for HR20L Zenith carburetor, used previous to engine No. 17217, obsolete	1	SU464A	SU464A	.75
1A	Carburetor adapter for Tillotson carburetor, obsolete	1	SU464	SU464	2.25

Always Give Model and Serial Number of Engine and Outfit When Ordering Repairs



GOVERNOR ASSEMBLY

Obsolete Model

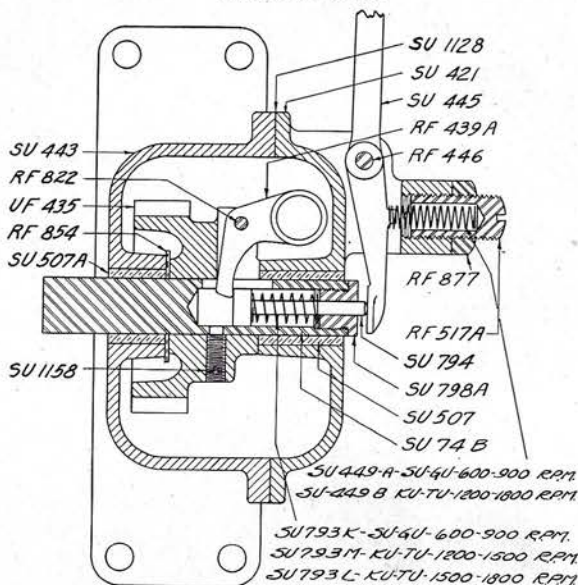


Fig. A1989

Used on Engines Previous to Serial No. 17413

Part No.	NAME OF PART	No. Used	KU-TU	SU-GU	Price
*U464B	Carburetor adapter for HF3½N Zenith carburetor, used on engines numbered from No. 17216 to No. 17413	1	SU464B	SU464B	1.50
*U491	1¼"x6¾" Lower radiator hose	1	SU491	SU491	.25
*U492	1¼"x6" Upper radiator hose	1	SU492	SU492	.20
*U493	Fan belt for flat type pulley, used previous to engine No. 27952	1	UF493	UF493	1.00
*U493A	Fan belt for V type pulley, used after engine No. 27952	1	NNU493	NNU493	1.00
U507	Bushing for governor shaft, long	1	SU507	SU507	.40
U507A	Bushing for governor shaft, short	1	SU507A	SU507A	.35
U517	Governor spring adjusting screw	1	RF517A	RF517A	.30
*U552	Radiator with cap U564. Top hose connection in center of radiator, obsolete	1	UF552	UF552	25.00
*U552A	Radiator with cap U564. Top hose connection offset from center, interchangeable with UF552D	1	UF552C	UF552C	25.00
*U552B	Radiator with cap U564, top hose connection offset from center	1	UF552D	UF552D	25.00
U554	Starting crank pin	1	LF554	LF554	.05
*U564	Radiator cap, 2⅝" thread	1	UF564	UF564	.75
*U564A	Radiator cap, 2⅝" thread	1	UF564A	UF564A	.50
*U564B	Radiator cap, easy on	1	UF564B	UF564B	.50
U578	Gasket for carburetor	2	RRU578	RRU578	.05
*U578A	Gasket for carburetor adapter, used on engines previous to No. 17217	1	SU578	SU578	.05
*U578B	Carburetor adapter gasket, used on engines previous to No. 17217	1	SU578A	SU578A	.05
	Carburetor gasket, used on engines after No. 17216, interchangeable with RRU578	1	NF578	NF578	.05
*U580A	Gasket for oil pan, 6 holes, used on engines previous to No. 12532, obsolete	1	UF580	UF580	.10
U580	Gasket for oil pan, 8 holes, used on engines after No. 12531	1	UF580A	UF580A	.10
U646	Felt washer for main bearing housing	2	LF646B	LF646B	.10
U647	Inner felt washer retainer for main bearing housing	2	LF647B	LF647B	.05
U678	Counterweight for crankshaft	2	UF678	UF678	.50
U679	½"x2⅝" Stud for counterweight	2	UF679	UF679	.15
*U680	⅜"x1⅞" Pin for counterweight stud	2	UF680	UF680	.02
U687	Fuel tank, dimensions 10" high, 3½" wide, 11" long, filler connection 4" high, for radiator cooled engine	1	SU687B	SU687B	7.90
U687A	Fuel tank, dimensions 10" high, 3½" wide, 14" long, filler connection 1¼" high, for hopper cooled engine	1	UF687D	UF687D	6.40
U687B	Fuel tank, dimensions 8" high, 5⅞" wide, 16⅞" long, filler connection 1" high, for radiator cooled engine	1	SU687E	SU687E	8.50
†	Give height and width of fuel tank and location of inlet and outlet flange.				
U689	Front roller bearing with parts U994A—No. 2720, and U995A—No. 2786	1	SU689	SU689	5.20
U689A	Rear roller bearing with parts U994B—No. 333, and U995B—No. 337	1	SU689A	SU689A	5.69
U697	Crankshaft nut, for flywheel and power gear	1	UF697	UF697	.45
U697A	Crankshaft nut for clutch	1	SU697	SU697	.35
U700	Filler cap for fuel tank	1	UF700A	UF700A	.25
*U715A	Governor lever pin, obsolete	1	RF715	RF715	.25
U715	Governor rod pin used with SU447G	1	SU715	SU715	.25

†This information necessary to fill order.

Always Give Model and Serial Number of Engine and Outfit When Ordering Repairs



MAGNETO ASSEMBLY  
SU-GU Models Only

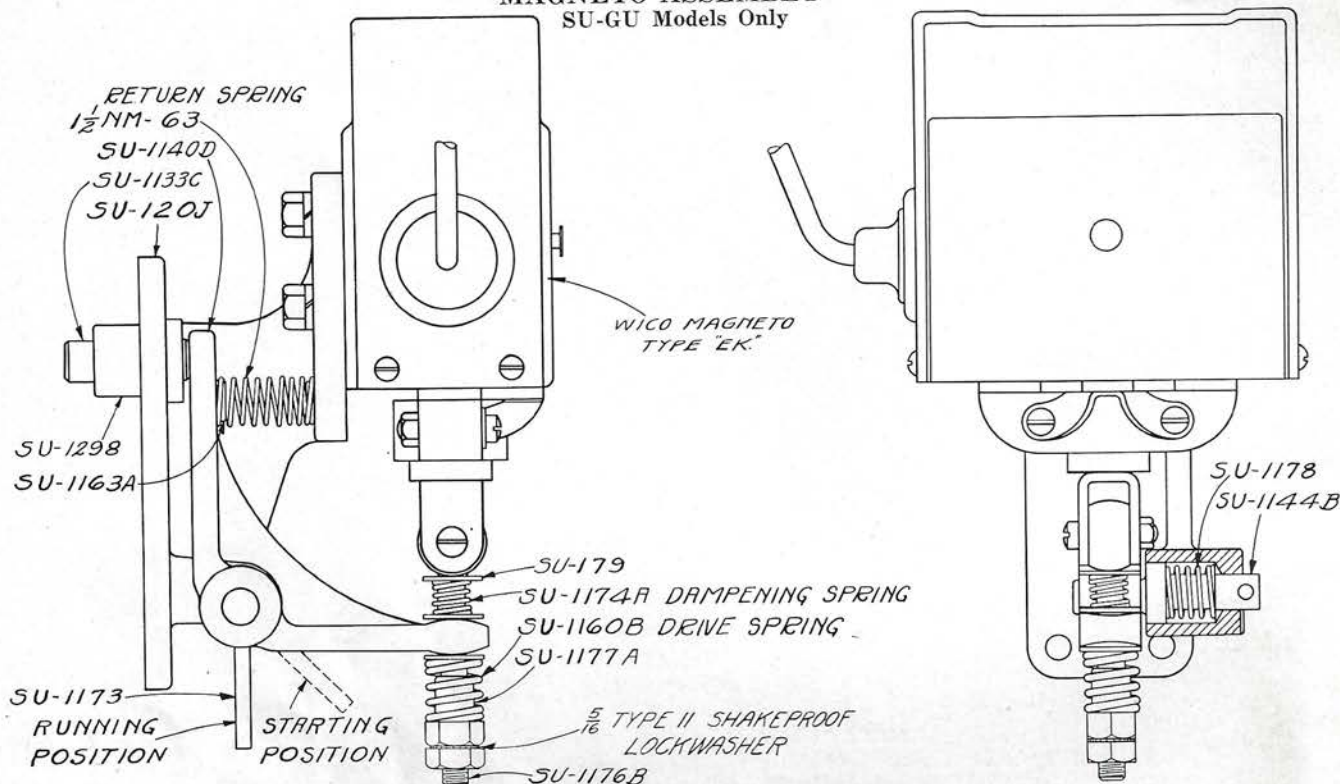


Fig. B1087 Used on Engines Previous to Serial No. 20736

Part No.	NAME OF PART	No. Used	KU-TU	SU-GU	Price
*U737	Magneto hub assembled with part U1002B, used on engines previous to engine No. 15269, obsolete	1	T3519	T3519	1.20
U737B	Magneto drive hub, used on engines from SU-GU No. 20735, KU-TU No. 15268 to No. 23042, Fig. B1145	1	SU737B	SU737B	1.25
U737C	Magneto shaft hub, used on engines after No. 23042 to No. 26197, Fig. C585	1	SU737C	SU737C	.90
U786	Valve tappet	2	SU786	SU786	.55
U787	Nut for valve tappet adjusting screw	2	UF787	UF787	.05
U788	Valve tappet adjusting screw	2	UF788	UF788	.05
U793	Governor spring, used on engines after No. 23042	1	RU793	UF793A	.10
U793B	Governor spring, used on engines previous to No. 23042	1	SU793M	SU793K	.10
U793C	Governor spring, used on engines after No. 23042, with speed of 1600 to 1800 R.P.M.	1	RU793C		.35
U794S	Governor plunger, used on engines previous to No. 17413, obsolete, Fig. A1989	1	SU794	SU794	.50
U794A	Governor plunger, used on engines after No. 17412 to No. 26197, Fig. B1233	1	SU794A	SU794A	.30
U794	Governor plunger, used after No. 26197, Fig. B1530	1	AG794A		.25
U798A	Governor shaft screw, used on engines previous to No. 17413	1	SU798A	SU798A	.35
U808	Gasket for breather tube and valve cover	1	SU808	SU808	.05
U814	Gasket for hopper cover	1	UF814	UF814	.10
U818	Cylinder head stud nut, 7/16" hex head brass	7	RF818	RF818	.10
U822	Governor finger pin	2	RF822	RF822	.05
U854	Fiber washer for governor shaft	1	RF854	RF854	.05
U860	5/16"x1" Stud for magneto bracket	4	FFU937	FFU937	.05
U867	Baffle plate for hopper	1	SU867	SU867	.40
U876	Gasket for governor bracket, thick	2	SU876	SU876	.05
U876A	Gasket for main bearing housing, thin	1	SU876A	SU876A	.05
U877	Lock nut for governor adjusting screw	1	RF877	RF877	.15
U882	Fuel tank strap, 16 15/16" long, for hopper cooled engine	2	SU882C	SU882C	.30
U882A	Fuel tank strap, 15 3/8" long, for hopper cooled engine, obsolete	2	SU882	SU882	.20
U882B	Fuel tank strap, 17 11/16" long, for radiator cooled engine, obsolete	2	SU882A	SU882A	.20
U882C	Fuel tank strap, 8 3/8" long, for radiator cooled engine	4	AF806G	AF806G	.35
*U878	Magneto cover for B1 Wico magneto	1	SU878A	SU878A	2.15
U909	Breather valve spring	1	RF909	RF909	.05
U927	Valve, inlet or exhaust	2	UF927C	UF927C	.50
U927D	Silermome valve, exhaust, used on engines with speed above 1500 R.P.M.	1	UF927D	UF927D	1.00
U928	Front main bearing housing with part U994A	1	SU928	SU928	2.55
U929	Rear main bearing housing with part U994B	1	SU929	SU929	3.50
*U937	5/16"x1" Stud for carburetor to cylinder	4	FFU937	FFU937	.05

Always Give Model and Serial Number of Engine and Outfit When Ordering Repairs



MAGNETO ASSEMBLY

All Models

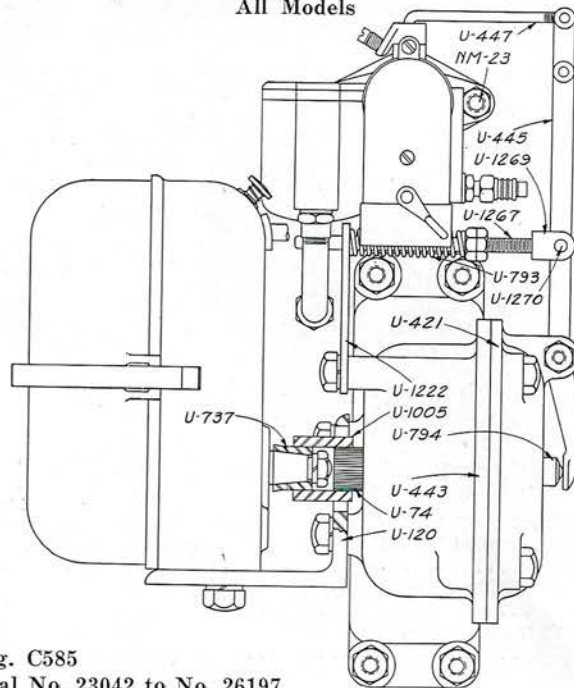


Fig. C585

Used on Engines Serial No. 23042 to No. 26197

Part No.	NAME OF PART	No. Used	KU-TU	SU-GU	Price
*U937A	3/8"x1 1/16" Stud for 6 hole oil pan, obsolete	6	UF937	UF937	.05
U937	1/4"x3/4" Stud for 8 hole oil pan	8	UF937B	UF937B	.05
U940	Snap ring for piston	2	UF940	UF940	.05
U941	Stud for base angles, 5/8"x2 1/8"	4	UF941	UF941	.10
U965	Gasket for main bearing housing, thin	4	UF965	UF965	.05
U965A	Gasket for main bearing housing, thick	1	UF965A	UF965A	.05
U968	Washer for crankshaft nut	1	UF968	UF968	.10
*U969	3/8" Hex head plug	4	RU969A	RU969A	.15
*U969B	5/16" Headless brass plug	4	UF969B	UF969B	.10
U970	Bracket for fuel tank, hopper cooled	2	UF970	UF970	.10
U970A	Bracket for fuel tank, hopper cooled	2	SU970B	SU970B	.05
*U975	1 3/16" Diameter expansion plug for camshaft in cylinder block	2	SU975	SU975	.05
*U975A	1 1/2" Welch plug for cylinder	1	SU975A	SU975A	.05
*U991	Pipe nipple for radiator	1	UF991	UF991	.20
*U994A	Cup for front roller bearing, No. 2720	1	SU994A	SU994A	1.95
*U994B	Cup for rear roller bearing, No. 333	1	UF994	UF994	2.11
*U995A	Front cone and roller for roller bearing No. 2786	1	SU995A	SU995A	3.25
*U995B	Cone and rollers for rear bearing, No. 337	1	SU995B	SU995B	3.58
X1000	Spark plug	1	X1000	X1000	.75
U1001	Center plate, used after engine No. 26197, Fig. B1530	1	SU1001A	SU1001A	.15
*U1001A	Drive plate with parts 1001-1002-1010, used previous to No. 15269, obs.	1	T3318		1.40
*U1002A	Pin for drive plate U1001, obsolete. Used previous to No. 15269	2	UF1002A	UF1002A	.05
*U1002B	Pin for magneto hub, U737, obsolete. Used previous to No. 17269	2	UF1002B		.15
*U1003A	Magneto coupling nut for Bosch magneto, obsolete	1	A2691	A2691	.15
*U1005E	Magneto drive coupling, used previous to No. 15268, obsolete	1	F1005A		.30
U1005D	Magneto drive coupling, used on engines from No. 15268 to No. 19764, obsolete, Fig. B1145	1	SU1005		1.16
*U1005A	Magneto drive coupling, used on engines after No. 19763 to No. 20393, obsolete	1	SU1005A		1.28
*U1005B	Magneto drive coupling, used from engine No. 20393 to No. 23042, for Bosch magneto, obsolete	1	SU1005B	SU1005B	1.40
U1005C	Magneto drive coupling, used on engines from No. 23042 to No. 26197, obsolete, Fig. C585	1	SU1005C	SU1005C	1.00
U1005	Drive hub with part U1002, used on engines after No. 26197, Fig. B1530	1	T4542	T4542	1.30
*U1007	Fiber disc, used previous to No. 15268, obsolete	1	UF1007		1.00
*U1010	Pin with 5/16" S.A.E. thread, for drive plate U1001A, obsolete	1	UF1010		.16
*U1014	Washer for drive plate pin, obsolete	2	UF1014		.05
U1063	Crank hole cover for crankshaft drive engines only	1	SU1063B	SU1063B	.10
U1068	Gasket for crank hole cover for crankshaft drive engines only	1	SU1068B	SU1068B	.05
*U1071A	Oil pan, 6 holes, used previous to No. 12531, obsolete	1	T3629	T3629	1.75
U1071	Oil pan, 8 holes, used on engines after No. 12530	1	T3801	T3801	1.50
U1073	Felt washer retainer for main bearing housing	2	UF1073	UF1073	.20
U1125	Oil gear	1	SU1125	SU1125	1.60
U1126	Shaft for oil gear	1	SU1126B	SU1126B	.50
U1128	Gasket for governor shaft bearing	3	SU1128	SU1128	.05

\*Not illustrated.

Always Give Model and Serial Number of Engine and Outfit When Ordering Repairs

# MAGNETO ASSEMBLY

Obsolete

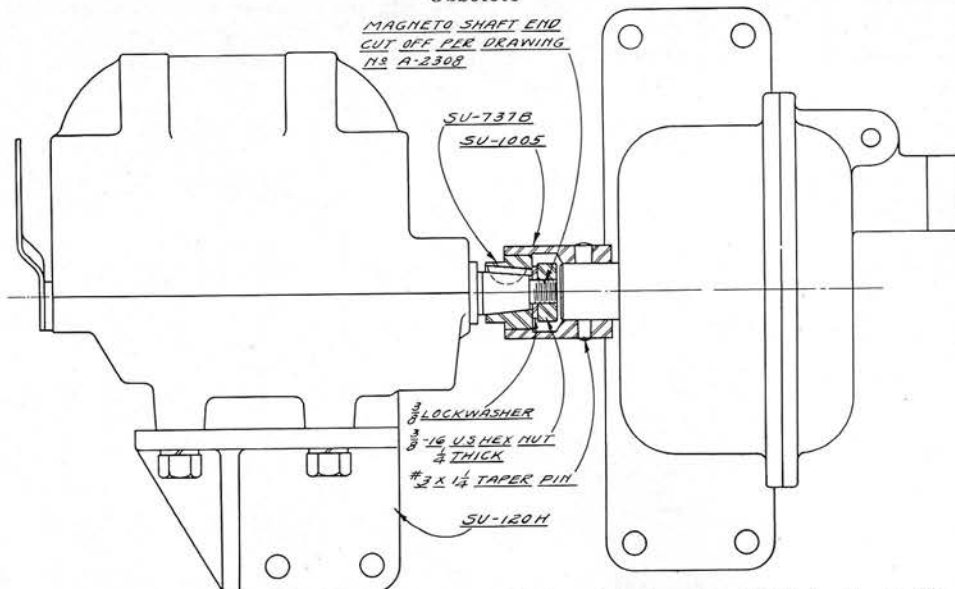


Fig. B1145 Used on KU-TU Models Only from Engine No. 15268 to No. 23042

Part No.	NAME OF PART	No. Used	KU-TU	SU-GU	Price
U1133C	Plunger for magneto trip, used on engines previous to No. 20736, obsolete, Fig. B1087	1		SU1133C	.20
*U1135A	Gasket for magneto bracket, used on engines previous to SU-GU No. 20736, KU-TU No. 20393	1	SU1135	SU1135	.05
U1135	Paper gasket for magneto bracket, used on engines after SU-GU No. 20735, KU-TU No. 20392	1	SU1135A	SU1135A	.05
U1140D	Trip lever with part U1163, used on engines previous to No. 20736, obsolete, Fig. B1087	1		SU1140D	.50
U1144B	Eccentric shaft, used on engines previous to No. 20736, obsolete, Fig. B1087	1		SU1144B	.85
U1153	Fiber washer for camshaft	1	SU1153	SU1153	.10
*U1153A	Steel washer for camshaft	1	SU1153A	SU1153A	.05
U1158	Set screw for governor pinion	1	X301	X301	.10
U1160B	Trip Spring, used on engines previous to No. 20736, obsolete, Fig. B1087	1		SU1160B	.30
U1163A	Pilot for return spring, used on engines previous to No. 20736, obsolete, Fig. B1087	1		SU1163A	.10
U1173	Eccentric shaft lever, used on engines previous to No. 20736, obsolete, Fig. B1087	1		SU1173	.10
U1174A	Dampering Spring, B1087	1		SU1174A	.10
U1176B	Adjusting rod for trip spring requiring one washer above spring, Fig. B1087	1		SU1176B	1.25
U1177A	Sleeve for trip spring and adjusting rod, used on engines previous to No. 20736, obsolete, Fig. B1087	1		SU1177A	.25
U1178	Spring for eccentric shaft, used on engines previous to No. 20736, obsolete, Fig. B1087	1		SU1178	.05
*U1216	Cap for fan bracket	1	SU1216	SU1216	.25
U1222	Bracket for governor spring rod, after engine No. 26197	1	SU1222	SU1222	.10
U1267	Rod for governor spring, used on engines after No. 26197	1	T4264	T4264	.35
U1269	Yoke for governor lever, used on engines after No. 23042, Fig. B1530	1	SU1269	SU1269	.10
U1270	Pin for governor spring rod yoke, used on engines after No. 26197	1	SU1270	SU1270	.10
*U1279	Spark plug wrench and handle	1	UF1279	UF1279	.30
U1289	Fiber washer for governor lever pin, used on engines after No. 17413 to No. 26197	1	SU1289	SU1289	.10
U1292	Spring for governor lever stud, used on engines after No. 23042	1	SU1292	SU1292	.05
U1298	Bushing for magneto bracket, used on engines previous to No. 20736, obs.	1		SU1298	.60
U1305	Tee for oil drain, 3/8" x 3/8" x 3/8"	1	SU1305	SU1305	.25
U1318	Washer for cylinder head capscrews	7	NNU1318	NNU1318	.01
U1342	Plug for lever	1	AG1342	AG1342	.20
*U1347	Washer for governor lever pin	2	AG1347	AG1347	.01
U1396	3/8" x 3 1/2" Felt for crank hole cover	1	UF1396	UF1396	.05
	Governor assembly complete with parts, U74, 421, 435, 439, 443, 507, 507A, 794, 798, 822, 854, 1128, X301, X434, and X969, used on engines previous to No. 17413, obsolete, Fig. A1989	1	T3440	T3440	16.00
*	Governor assembly complete with parts, U74D, 421, 435, 439, 443, 445B, 446, 507, 507A, 794A, 822, 854, 1128, 1289, 1292, X301, X365, X412, X434, X969, and X1109, used on engines numbered No. 17413 to No. 23043	1	T4190	T4190	16.00
	Governor assembly complete with parts, U74E, 421, 435, 439, 443, 445F, 446, 507, 507A, 794A, 822, 854, 1128, 1289, 1292, X301, X365, X412, X434, X969, and X1109, used on engines numbered No. 23043 to No. 26197, obsolete, Fig. B1233	1	T4266	T4266	16.00
	Governor assembly complete with parts, U74E, 421A, 435, 439, 443, 446, 507, 507A, 793, 822, 854, 794A, 120P, 1128, 1222, 1270, 1292, 4264, and 4551, used on engines numbered after No. 26197, Fig. B1530	1	T4549	T4549	16.00

Not illustrated.

Always Give Model and Serial Number of Engine and Outfit When Ordering Repairs

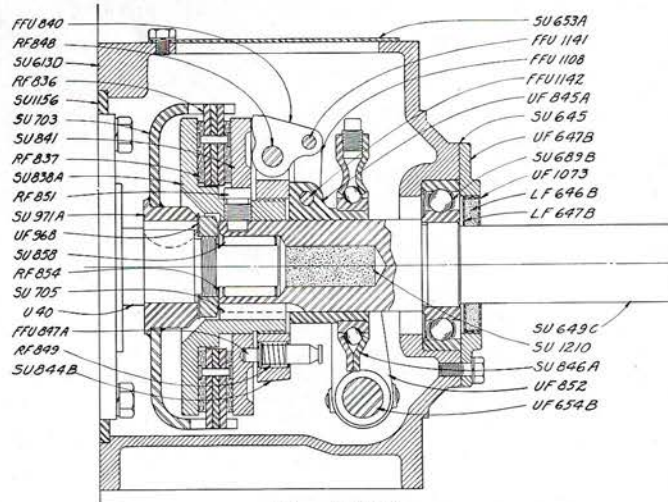


Fig. B1625

CLUTCH PARTS

Part No.	NAME OF PART	No. Used	KU-TU	SU-GU	Price
*U613A	Clutch housing for crankshaft drive, used previous to engine No. 26689, obsolete	1	SU613A	SU613A	8.00
*U613B	Clutch housing for gear reduction, used previous to engine No. 26689, obsolete	1	SU613B	SU613B	7.00
U613C	Clutch housing for crankshaft drive. Used after engine No. 26688	1	SU613C	SU613C	8.50
*U613D	Clutch housing for gear reduction, used after engine No. 26688	1	SU613D	SU613D	7.00
*U635	Shaft for clutch, crankshaft drive, for U613A	1	SU635	SU635	5.00
*U643	Housing for clutch bearing, obsolete	1	SU643	SU643	5.50
*U645A	Gasket for outer retainer part U647, obsolete	1	RF645	RF645	.05
U645	Gasket for outer retainer part U1050A	1	SU645	SU645	.05
U646	Felt washer, 1 3/8" diameter inside, for U647 and U647B	1	LF646B	LF646B	.10
*U646A	Felt washer, 1 1/16" inside diameter, for part U643	1	FFU646	FFU646	.10
*U647	Cast iron outer retainer for housing U613A, obsolete	1	UF647	UF647	1.15
U647A	Cast iron outer retainer for housing U613C	1	UF647B	UF647B	1.00
U647B	Inner felt washer retainer, 1 3/16" inside diameter, for parts U647 and U647B	1	LF647B	LF647B	.05
*U647C	Inner felt washer retainer, 1 3/16" inside diameter, for part U643	1	FFU647B	FFU647B	.10
*U648	Gasket for clutch housing cover, obsolete	1	RF648	RF648	.05
*U649	Shaft for clutch for 2, 3 and 8 to 1 gear reduction	1	SU649	SU649	4.00
*U649A	Shaft for clutch, for 4 to 1 gear reduction	1	SU649A	SU649A	13.00
U649C	Shaft for clutch for crankshaft drive for U613C, less gear reduction	1	SU649C	SU649C	4.50
*U653	Clutch housing cover with oiler for brass shifter yoke, obsolete, used previous to engine No. 26689	1	T3474	T3474	.60
U653A	Clutch housing cover for ball bearing shifter yoke, used after engine No. 26688	1	SU653	SU653	.20
*U654	Clutch shifter shaft for brass shifter yoke, used previous to engine No. 26689	1	SU654	SU654	.25
U654B	Clutch shifter shaft for ball bearing shifter yoke, used after engine No. 26688	1	UF654B	UF654B	.35
*U654A	Clutch shifter shaft assembled with parts 654-852-559, for brass shifter yoke, used previous to engine No. 26689	1	T3528	T3528	2.50
U654C	Clutch with shifter shaft assembled with parts 654-852-559, for ball bearing shifter yoke, used after engine No. 26688	1	T3880	T3880	2.50
U689	ND No. 7208 Ball bearing for clutch shaft	1	SU689B	SU689B	5.40
U697	Nut for crankshaft	1	UF697	UF697	.45
*U703	Clutch driver and hub assembled, used previous to engine No. 26689, obs.	1	T3529	T3529	3.45
U703A	Clutch driver and hub assembled, used after engine No. 26688	1	T4598	T4598	3.45
U705	5/16" x 5/16" x 1 3/16" straight key for clutch hub	1	SU705	SU705	.10
U836	Steel clutch disc	1	RF836	RF836	.50
*U836A	Clutch disc assembled with 1 disc. Interchangeable with 105RF, used previous to engine No. 26689	1	105RU	105RU	2.40
*U836B	Clutch disc assembled with 2 discs, used previous to engine No. 26689	1	105RF	105RF	2.75
U836C	Clutch disc assembled with 3 discs, used on engines after No. 26688	1	105RFA	105RFA	3.45
U837	Facing for clutch disc	2	RF837	RF837	.60
*U838	Clutch hub, used previous to engine No. 26689	1	SU838	SU838	3.80
U838A	Clutch hub, used after engine No. 26688	1	SU838A	SU838A	3.25
U840	Clutch fingers	2	FFU840	FFU840	.75
U841	Clutch pressure plate	1	SU841	SU841	1.75
U844	Adjusting ring	1	SU844B	SU844B	1.50
*U845	Sleeve for clutch with brass clutch shifter collar, used previous to engine No. 26689	1	SU845	SU845	2.50
U845A	Sleeve for clutch, used after engine No. 26688	1	UF845A	UF845A	.35

\*Not illustrated.

Always Give Model and Serial Number of Engine and Outfit When Ordering Repairs



CLUTCH PARTS—(Cont'd)

Part No.	NAME OF PART	No. Used	KU-TU	SU-GU	Price
*U846	Brass clutch shifter yoke	1	SU846	SU846	2.70
U846A	Ball bearing clutch shifter yoke and sleeve assembled, parts U845A and U846A, used after engine No. 26688	1	T4176	T4176	4.50
U847	Lock pin for adjusting ring	1	FFU847A	FFU847A	.25
U848	Clutch finger pin	2	RF848	RF848	.15
U849	Spring for lock pin	1	RF849	RF849	.05
U851	Special set screw for clutch hub	1	RF851	RF851	.15
U852A	Yoke lever for brass shifter yoke, obsolete, used previous to engine No. 26689	2	SU852	SU852	.85
U852	Yoke lever for ball bearing shifter yoke, used after engine No. 26688	2	UF852	UF852	1.10
U854	Fiber thrust washer	1	RF854	RF854	.05
U858	No. RA133 Hyatt roller pilot bearing, used after engine No. 26688	1	SU858	SU858	.60
*U961A	Gasket for clutch housing to gear reduction housing	1	UF961A	UF961A	.05
U968	Lock washer for nut on crankshaft	1	UF968	UF968	.10
*U1050	Bearing retainer for clutch with gear reduction, obsolete, used previous to engine No. 26689	1	RU1050	RU1050	.50
*U1050A	Bearing retainer for clutch with gear reduction, used after engine No. 26688	1	SU1050	SU1050	.10
U1073	Outer felt washer retainer, 1 1/16" inside diameter, for part U647, and U647B	1	UF1073	UF1073	.05
*U1073A	Outer felt washer retainer, 1 3/16" inside diameter, for part U643	1	FFU1073	FFU1073	.05
U1086	Clutch shifter lever	1	T3527	T3527	2.60
U1107	Gasket for clutch housing to cylinder	1	UF1107	UF1107	.05
U1108	Link for clutch finger	4	FFU1108	FFU1108	.10
U1141	Pin for clutch finger link, short	2	FFU1141	FFU1141	.10
U1142	Pin for clutch finger link, long	2	FFU1142	FFU1142	.10
*U1148	Spacer for clutch shaft	1	UF1148A	UF1148A	.30
*U1148A	Spacer for power take-off shaft	1	SU1148A	SU1148A	.40
U1156	Centering ring for clutch	1	SU1156	SU1156	3.60
U1210	3/4" Diameter, 1 5/8" long, oil wick for pilot bearing	1	SU1210	SU1210	.05
*U1391	Key for clutch driver	1	SU1391	SU1391	.15

POWER TAKE-OFF PARTS

Part No.	NAME OF PART	No. Used	KU-TU	SU-GU	Price
U108B	Oiler for gear reduction housing, for 3 to 1, 4 to 1, and 8 to 1 reduction	1	UF108B	UF108B	.35
U175	Gasket for hand hole cover	1	FFU175	FFU175	.05
S182	Washer for power shaft parts, U635N and U635Y	1	12S182	12S182	.05
U632	15T power pinion for 3 to 1 reduction, left hand rotation	1	SU632	SU632	4.40
U632A	15T Harden power pinion for 3 to 1 reduction, left hand rotation	1	SU1046	SU1046	9.50
U632B	45T power gear for 3 to 1 reduction, left hand rotation	1	SU632A	SU632A	15.00
U632C	45T Harden power gear for 3 to 1 reduction, left hand rotation	1	SU1046A	SU1046A	17.00
U632P	16T power pinion for reduction, 2 to 1 left hand, and 8 to 1 right hand rotation	1	UF632P	UF632P	3.75
U632D	16T Harden power pinion for 2 to 1 reduction, left hand rotation	1	UF1046D	UF1046D	8.50

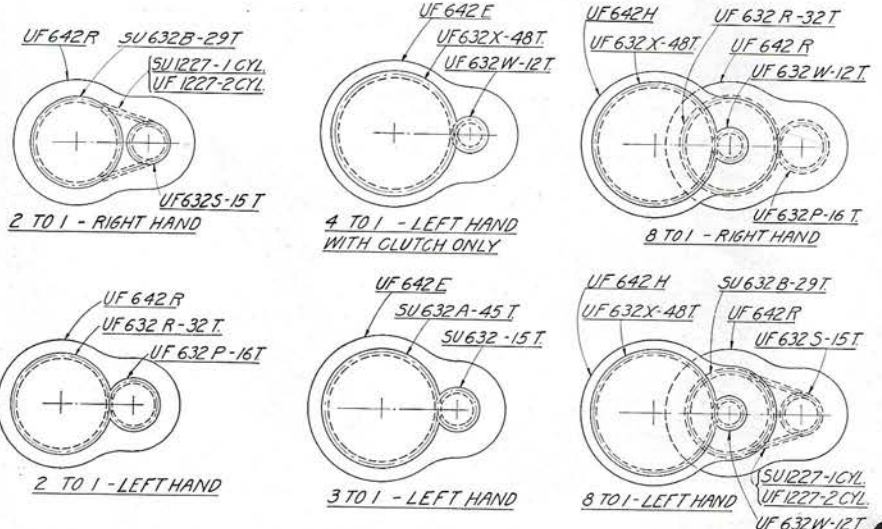
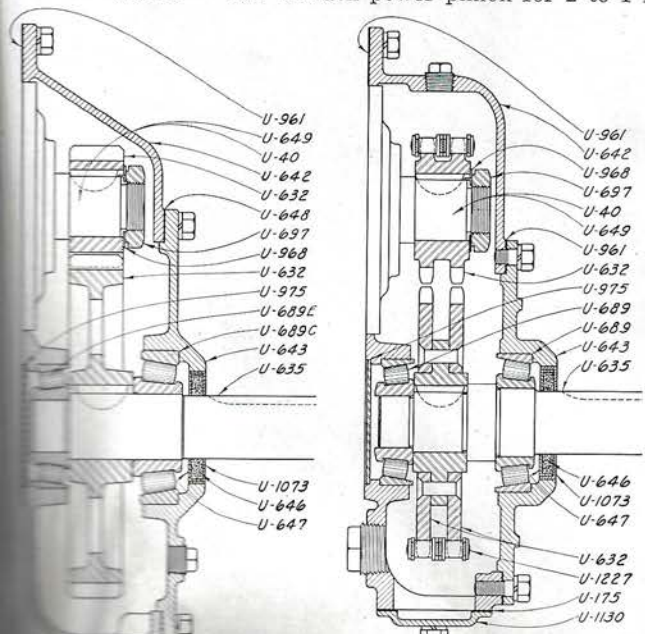


Fig. B1100—Reduction Diagram SPEED REDUCTIONS

\*Not illustrated.

Always Give Model and Serial Number of Engine and Outfit When Ordering Repairs



POWER TAKE-OFF PARTS—(Cont'd)

Part No.	NAME OF PART	No. Used	KU-TU	SU-GU	Price
U632R	32T power gear for reduction 2 to 1 left hand, and 8 to 1 right hand rotation	1	UF632R	UF632R	5.00
U632E	32T Harden power gear for 2 to 1 reduction, left hand rotation	1	UF1046E	UF1046E	12.00
U632S	15T power sprocket for reduction, 2 to 1 right hand, and 8 to 1 left hand rotation	1	UF632S	UF632S	2.50
U632T	29T power sprocket for reduction 2 to 1 right hand and 8 to 1 left hand rotation	1	UF632T	UF632T	3.75
U632W	12T power pionion for reduction, 4 to 1 left hand, and 8 to 1 right or left hand	1	UF632W	UF632W	4.50
U632X	48T power gear for reductions, 4 to 1 left hand, and 8 to 1 right or left hand	1	UF632X	UF632X	16.00
U632E	35T power shaft sprocket	1	HU632E	HU632E	5.25
U632F	11T engine sprocket	1	HU632F	HU632F	7.30
U635M	Power take-off shaft for reductions, 3 to 1, 4 to 1, and outer shaft for 8 to 1	1	UF635M	UF635M	6.25
U635N	Power take-off shaft for 8 to 1 reduction, obsolete—use parts, U635Y and U1148C	1	UF635N	UF635N	13.50
U635B	Power take-off shaft for 2 to 1 reduction, right hand or left hand rotation	1	HU635B	HU635B	3.65
U635P	Power take-off shaft for 2 to 1 reduction, right or left hand rotation, obsolete—use parts U635B and U1148B	1	UF635P	UF635P	5.00
U635Y	Inner power take-off shaft for 8 to 1 reduction, right or left hand rotation	1	UF635Y	UF635Y	12.00
U642E	Gear reduction housing for 4 to 1, and 3 to 1 reduction, left hand rotation, with parts U994 and U975	1	UF642E	UF642E	16.00
U642F	Gear reduction housing for 2 to 1, and inner housing for 8 to 1 reduction, with parts U994 and U975	1	UF642F	UF642F	12.00
U642R	Gear reduction housing for 2 to 1, and inner housing for 8 to 1 reduction, with parts U994 and U975	1	UF642R	UF642R	10.00
U642H	Outer gear reduction housing for 8 to 1 right hand and left hand rotation, with parts U994 and U975	1	UF642H	UF642H	12.00
U642T	Reduction housing with part U994	1	UF642T	UF642T	18.75
U643H	Cover for gear reduction housing, parts U642E and U642H with part U994	1	UF643H	UF643H	6.70
U643K	Cover for gear reduction housing for 2 to 1 reduction, and inner housing for 8 to 1 reduction, with part U994, obsolete	1	UF643K	UF643K	5.50
U643Q	Cover for gear reduction housing for 2 to 1 reduction, with part U994	1	UF643Q	UF643Q	4.85
U643R	Inner cover for gear reduction housing for 8 to 1 reduction, with part U994	1	UF643R	UF643R	8.25
U643T	Reduction housing cover with part U994	1	UF643T	UF643T	10.00
U646	Felt washer	1	LF646B	LF646B	.10
U646A	Felt washer for inner gear reduction housing cover, for 8 to 1 reduction only	1	FFU646A	FFU646A	.10
U647A	Inner felt washer retainer	1	LF647B	LF647B	.05
U647B	Inner felt washer retainer for inner gear reduction housing cover, for 8 to 1 reduction only	1	FFU647A	FFU647A	.15
U647B	Felt washer retainer	1	FFU647B	FFU647B	1.04
U648C	Gasket for gear reduction housing cover, part U643H used on 3 to 1 and 4 to 1 gear reduction with clutch	4	UF648C	UF648C	.10
U648F	Gasket for gear reduction housing cover, parts U643Q and U643R	4	UF648F	UF648F	.05
U648G	Gasket for gear reduction housing cover, used on 3 to 1 chain reduction	1	UF648G	UF648G	.05
U689A	No. 319-313, inner Timken roller bearing on power take-off shaft, one used on 2, 3, and 4 to 1, and two on 8 to 1 reduction	1	UF689E	UF689E	5.20
U689B	No. 344-333, outer Timken roller bearing on power take-off shaft for 2 to 1, and for inner housing for 8 to 1 reduction	1	UF689F	UF689F	5.69
U689C	No. 418-414, outer Timken roller bearing on power take-off shaft for 3 and 4 to 1, and for outer housing for 8 to 1 reduction	1	UF689C	UF689C	7.48
U697	Nut for gear or sprocket on crankshaft	1	UF697	UF697	.45
U968	Lock washer for power shaft nut	1	UF968	UF968	.10
U975	2 3/4" Diameter expansion plug for gear reduction housing	1	UF975	UF975	.15
U989	3/4" Pipe plug with vent for gear reduction housing, obsolete	1	UF989	UF989	.05
U994	No. 313 Cup for roller bearing	1	UF994A	UF994A	1.95
U994A	No. 333 Cup for roller bearing	1	UF994	UF994	2.11
U994B	No. 414 Cup for roller bearing	1	UF994B	UF994B	2.60
U995	No. 319 Cone and rollers	1	UF995A	UF995A	3.25
U995A	No. 344 Cone and rollers	1	UF995	UF995	3.58
U995B	No. 418 Cone and rollers	1	UF995B	UF995B	4.88
U1073	Outer felt washer retainer	1	UF1073	UF1073	.05
U1073A	Outer felt washer retainer for inner gear reduction housing cover for 8 to 1 gear reduction only	1	FFU1073A	FFU1073A	.20
U1107	Gasket for reduction housing to cylinder and cover for parts U643K, U642F, R, H, and E	4	UF1107	UF1107	.05
U1119	Nut for power shaft, part U635N, and U635Y	1	FFU1119	FFU1119	.15
U1130	Hand hole cover for gear reduction housing	1	UF1130	UF1130	.10
U1148B	Spacer for power take-off shaft, part U635B	1	UF1148B	UF1148B	.45
U1148C	Spacer for power take-off shaft, part U635Y	1	UF1148C	UF1148C	1.80
U1148D	Spacer for drive shaft	1	UF1148D	UF1148D	.05
U1148E	Spacer for shaft	1	UF1148E	UF1148E	.80
U1166	Hub for sprocket, part U632T	1	UF1166	UF1166	3.32
U1227	No. 149 Diamond single roll chain, 38 links, used on 2 to 1 reduction	1	SU1227	SU1227	3.25
U1227B	No. 433 Diamond single roll chain, 41 links, used on 3 to 1 reduction	1	SU1227B	SU1227B	4.00

\*Not illustrated.

Always Give Model and Serial Number of Engine and Outfit When Ordering Repairs

NOVO ENGINE COMPANY



LANSING, MICHIGAN U.S.A.

**NOVO**  
**PUMPS—ENGINES—HOISTS**  
**NOVO**

NIAGARA SPRAYER AND CHEMICAL CO., INC.

P. O. BOX 1709

JACKSONVILLE, FLORIDA