

# **LT28 G25 Engine**

## **Safety, Operation, Maintenance & Parts Manual**

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**003295 Engine, LT28 Gas 25hp** **rev. D**

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***Safety is our #1 concern!***

*Form #1352*

***Used with the  
LT28G25***

**rev. A6.18**



**WARNING! Read and understand this  
manual before using this machine.**

**California**  
Proposition 65 Warning



**WARNING:** Breathing gas/diesel engine exhaust exposes you to chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Always start and operate the engine in a well-ventilated area.  
If in an enclosed area, vent the exhaust to the outside.  
Do not modify or tamper with the exhaust system.  
Do not idle the engine except as necessary.

For more information go to **[www.P65warnings.ca.gov](http://www.P65warnings.ca.gov)**.



**WARNING:** Drilling, sawing, sanding or machining wood products can expose you to wood dust, a substance known to the State of California to cause cancer. Avoid inhaling wood dust or use a dust mask or other safeguards for personal protection.

For more information go to **[www.P65Warnings.ca.gov/wood](http://www.P65Warnings.ca.gov/wood)**.

**Active Patents assigned to Wood-Mizer, LLC**

Wood-Mizer, LLC has received patents that protect our inventions which are a result of a dedication to research, innovation, development, and design. Learn more at: [woodmizer.com/patents](http://woodmizer.com/patents)

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**Indianapolis, Indiana 46214**

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YOUR WARRANTY RIGHTS AND OBLIGATIONS

The U.S. EPA, and Wood-Mizer, LLC (Wood-Mizer), are pleased to explain the emission control system's warranty on your 2025 model year small off-road equipment. Wood-Mizer must warrant the evaporative emission control system on your certified equipment model for the period listed below provided there has been no abuse, neglect or improper maintenance of your equipment leading to the failure of the evaporative emission control system.

Your evaporative emission control system may include parts such as: carburetors, fuel tanks, fuel lines (for liquid fuel and fuel vapors), fuel caps, valves, canisters, filters, clamps, connectors, and other associated components.

MANUFACTURER’S WARRANTY COVERAGE

This evaporative emission control system is warranted for two years for U.S. customers. If any evaporative emission-related part on your equipment is defective, the part will be repaired or replaced by Wood-Mizer.

OWNER’S WARRANTY RESPONSIBILITIES

As the certified equipment model owner, you are responsible for the performance of the required maintenance listed in your owner’s manual. Wood-Mizer recommends that you retain all receipts covering maintenance on your equipment, but Wood-Mizer cannot deny warranty coverage solely for the lack of receipts.

As the certified equipment model owner, you should be aware that Wood-Mizer may deny you warranty coverage if your equipment or a part has failed due to abuse, neglect, or improper maintenance or unapproved modifications.

You are responsible for presenting your certified equipment model to a Wood-Mizer location as soon as the problem exists. The approved warranty repairs shall be completed in a reasonable amount of time. If you have any questions regarding your warranty coverage, contact Wood-Mizer LLC by signing into your account on <https://woodmizer.com>, or call: 1-800-525-8100.

EMISSION WARRANTY PARTS LIST	
Fuel Tank	Vacuum Control Diaphragms*
Fuel Cap	Control Cables*
Fuel Lines (for liquid fuel and fuel vapors)	Control Linkages*
Fuel Line Fittings	Purge Valves*
Clamps*	Gaskets*
Pressure Relief Valves*	Liquid/Vapor Separator
Control Valves*	Carbon Canister
Control Solenoids*	Canister Mounting Brackets
Electronic Controls*	Carburetor Purge Port Connector

\*NOTE: As they relate to the evaporative emission control system.

## ABOUT THIS MANUAL

This manual is provided as a supplement to the equipment manufacturer's manuals. This manual provides information specific to the use of this equipment on the Wood-Mizer® sawmill. Refer to the sawmill operator's manual and manufacturer's manual before attempting to operate this equipment.



**IMPORTANT!** Read the sawmill operator's manual and engine manufacturer's manual for instructions and safety precautions before operating this equipment.

The information and instructions given in this manual do not amend or extend the limited warranties for the equipment given at the time of purchase.

## SECTION 1 OPERATION

### 1.1 Starting The Engine



**DANGER!** Always be sure the blade is disengaged and clear the path of the blade before starting the engine. Failure to do so will result in serious injury or death.

Operate your engine/machine only in well ventilated areas. Exhaust gases can cause nausea, delirium and potentially death unless adequate ventilation is present.

Never operate an engine with a fuel or oil leak. The leaking fuel or oil could potentially come in contact with hot surfaces and ignite into flames.



**WARNING!** Do not operate engine without proper and operational spark arrester/muffler. Sparks emitted from the engine exhaust could ignite surrounding materials, causing serious injury or death.



**CAUTION!** EPA Compliant Gas Tanks Only: Always relieve all fuel pressure inside the tank prior to filling or connecting fuel fittings. Failure to do so may result in fuel spillage.

EPA Compliant Gas Tanks Only: Disconnect the fuel tank when not in use, or engine flooding or fuel spillage may result.

1. Close the engine choke by moving the choke lever to the start position.
2. Turn the key switch to the START position and release. Release the key switch to the RUN position after the engine starts.
3. When the engine starts, slowly open the choke all the way by moving the choke lever to the off position.

### ENGINE SHUTOFF

1. Disengage the clutch handle to stop the blade if necessary.
2. Run the engine for 15 seconds with no load, then turn the key switch to the OFF position.

## SECTION 2 MAINTENANCE

### 2.1 Maintenance

**NOTICE** This manual only provides information about additional procedures or procedures to be performed at different time intervals than found in the manufacturer's manuals. Refer to the manufacturer's manual for complete maintenance instructions.

### 2.2 Safety

Use caution when performing maintenance or service to the engine.



**DANGER!** Always be aware of and take proper protective measures against rotating shafts, pulleys, fans, etc.

Always stay a safe distance from rotating members and make sure that loose clothing or long hair does not engage rotating members.

Never touch or perform service functions on a hot engine.



**WARNING!** Remove the blade before performing any engine service. Failure to do so may result in serious injury.

Wear proper (eye, breathing, hand, and foot) safety equipment when performing service functions.

Clean sawdust from all guards, vents, control boxes, or any area where sawdust may gather **after every shift**. Failure to do so may result in fire, causing death or serious injury.



### 2.3 Cooling System

Wash the engine or brush off sawdust and debris **every 50 hours** of operation.

Clean any screens, cooling fins, and all external surfaces.

Remove any dust, dirt, or oil.

See engine manual for further instructions.

### 2.4 Air Filter & Pre-Cleaner

Service the pre-cleaner **every four hours** of operation by gently shaking excess sawdust and debris from the foam piece.

Clean the air filter (air cleaner element) and pre-cleaner (element wrapper) **every eight hours** of operation.

Replace the air filter (cleaner) **every 200 hours** of operation.

Replace the pre-cleaner (element wrapper) **every 2000 hours** of operation.

See the engine manual for further instructions.

### 2.5 Fuel Filter

Replace the fuel filter **every 100 hours** of operation or as required for engine performance.

### 2.6 Battery

Check the battery electrolyte level **every 50 hours** of operation. See manufacturer's manual for instructions.



**DANGER!** Batteries expel explosive gases. Keep sparks, flames, burning cigarettes, or other ignition sources away at all times. Always wear safety goggles and a face shield when working near batteries. Failure to do so will cause serious injury.



**WARNING!** Battery posts, terminals and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and reproductive harm. Wash hands after handling.

## 2.7 RPM Adjustments



**WARNING!** Remove the blade before performing any engine service. Failure to do so may result in serious injury.

Check the RPM with a tachometer every 200 hours of operation.

Engine	High End RPM	Low End RPM
G25	3600	1800

Before checking the RPM, make sure belt and brake strap tensions are correct. (See Sawmill Maintenance.)

Check oil, fuel, and coolant levels.

Check that the cable spring, cable guide, cable, and throttle brackets are aligned.

**NOTE:** It is important that the above components are aligned. Proper alignment allows any slack in the cable (when engine is idling) to slide down into the cable spring. This maintains free operation of the cable and prevents the cable from kinking. Make sure the shoulder bolt does not rub against the crankcase vent tube

1. Start the engine to measure the low-end RPM.
2. Refer to the engine manual to adjust the low-end RPM.
3. Engage the clutch handle to throttle the engine and measure the high-end RPM.

The high-end RPM is factory-set at 3600. Readjust the throttle cable if necessary to increase or reduce the high-end engine speed.

The throttle cable should be tensioned just enough so that the engine revs as soon as the clutch/brake handle is engaged.

**NOTE:** A properly adjusted throttle will extend the cable spring 1/4" to 3/8" (6.4 - 9.5 mm) when running and have a slight amount of slack in the cable when idling.

## 2.8 Miscellaneous Maintenance

Clean and inspect the spark arresters every 50 hours of operation. Replace if damaged.



**CAUTION!** Do not remove the plug wire to check for electrical spark. Damage to the ignition circuit will result.

Inspect the spark plugs every 100 hours of operation.

Remove any deposits and adjust gap if necessary.

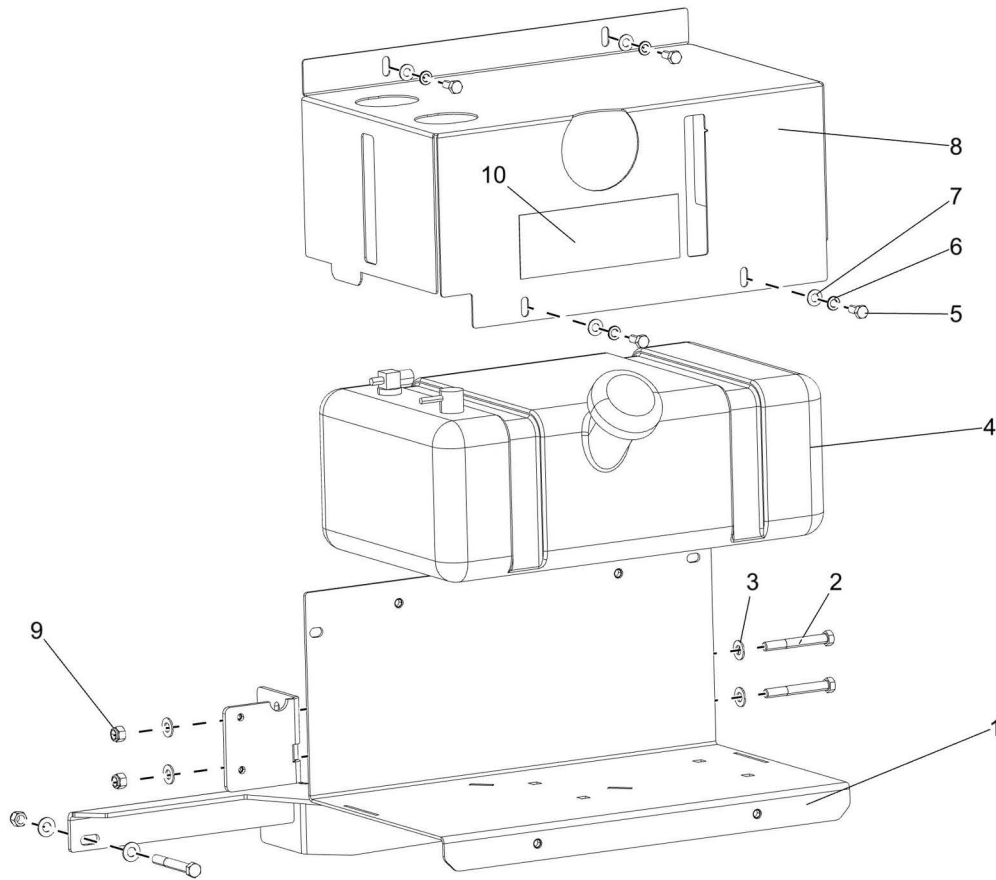
Review the manufacturer's engine manual for maintenance intervals.

See engine manual for further information.

## SECTION 3 REPLACEMENT PARTS

### 3.1 Fuel Tank

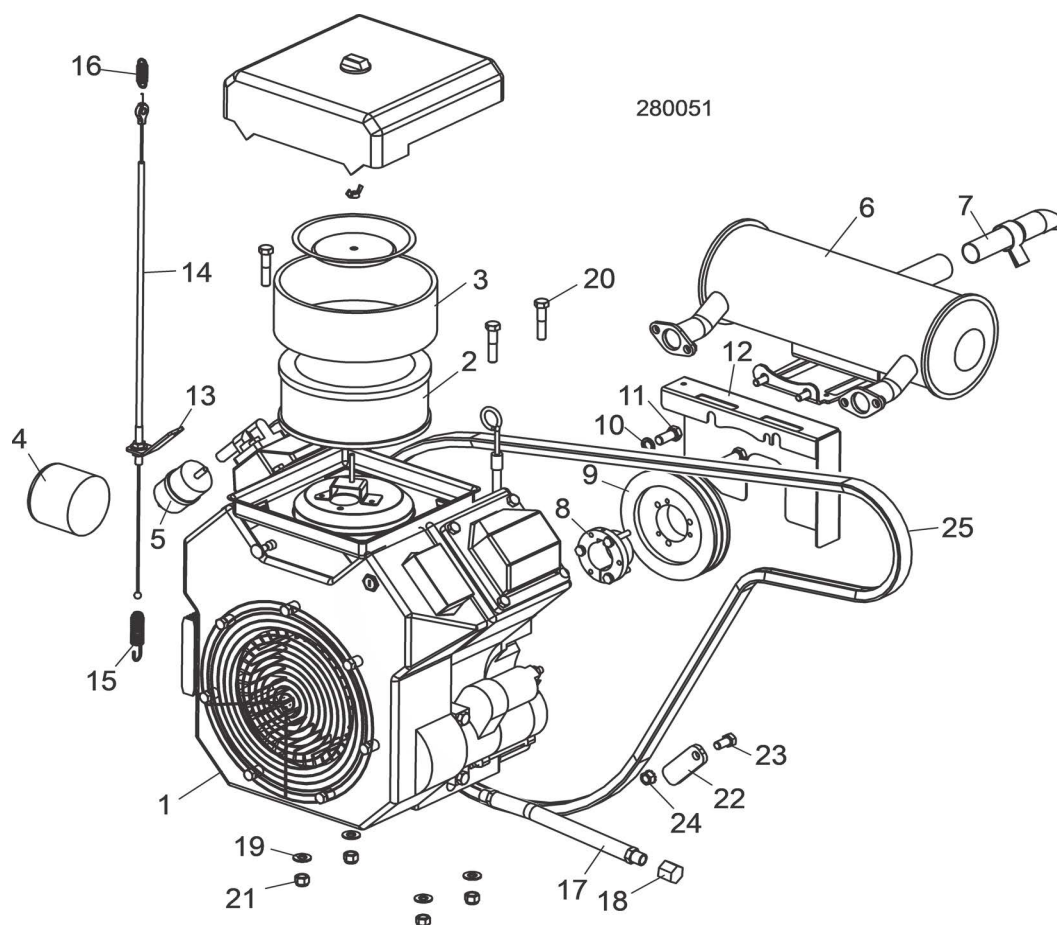
TD103816  
TD103816\_1



REF	PART #	DESCRIPTION	COMMENTS	QTY.
	103816	<b>Assy, Fuel Tank Tray</b>		1
<b>1</b>	103810	Weldment, Fuel Tank Tray		1
<b>2</b>	F05007-73	Bolt, 3/8-16x3 HH Gr5		3
<b>3</b>	F05011-3	Washer, 3/8 Flat SAE		6
<b>4</b>	103878	Can, Gas 5 Gallon		1
<b>5</b>	F05006-102	Bolt, 5/16-18x3/4 HH Gr5 Zinc		4
<b>6</b>	F05011-13	Washer, 5/16 Split Lock		4
<b>7</b>	F05011-17	Washer, 5/16 SAE Flat		4
<b>8</b>	103867	Cover, Fuel Tank		1
<b>9</b>	F05010-10	Nut, 3/8-16 Hex Nyl Lock		3
<b>10</b>	133825	Decal, Fuel Warning		1
	R02423-1	Hose, Fuel 3/16" EPA 15G CARB		5.333 Ft
	R02423-2	Hose, Fuel 1/4" EPA 15G CARB		4.833 Ft



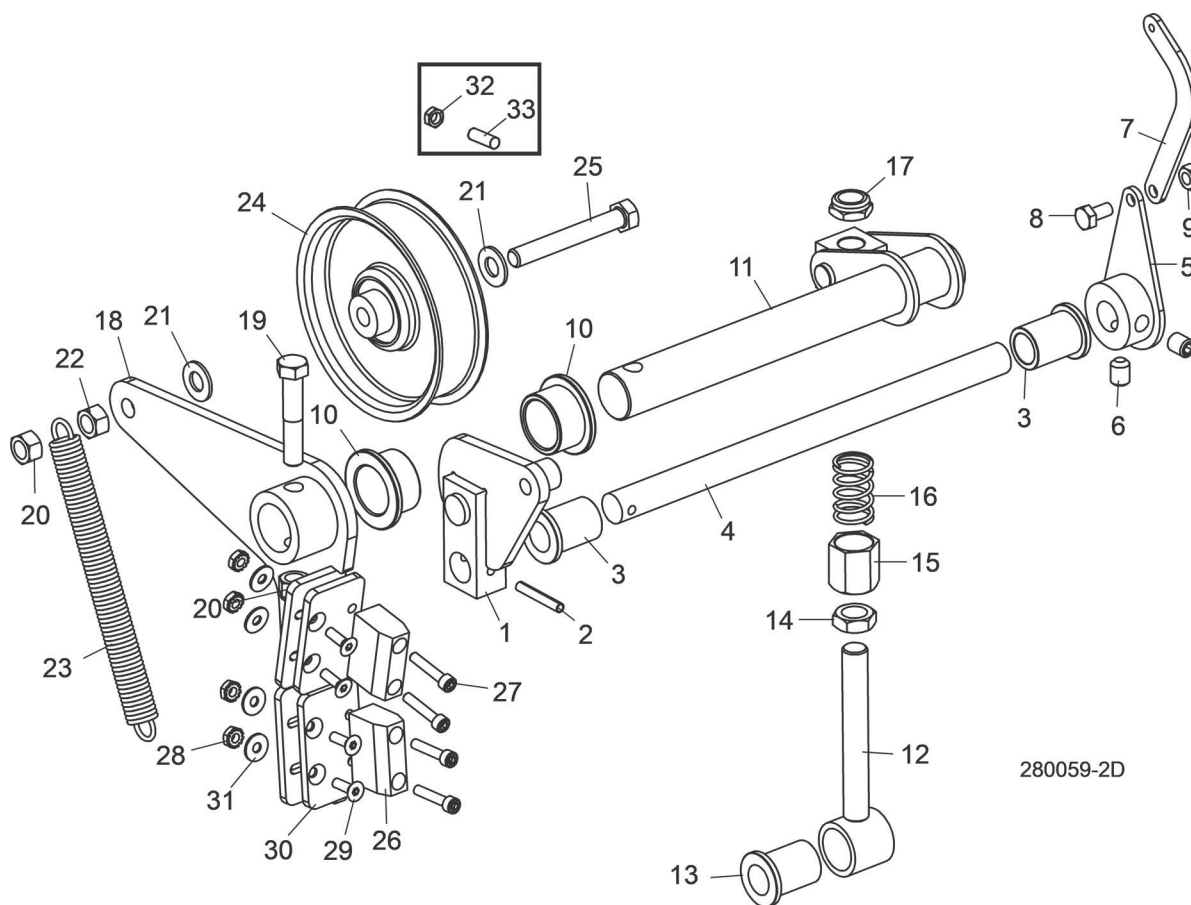
## 3.2 Engine Assembly



REF	PART #	DESCRIPTION	COMMENTS	QTY.
	015993	MANUAL, KOHLER CH25 OWNER'S		1
	015994	MANUAL, KOHLER CH25 SERVICE		1
	P12393	COVER, ENGINE		1
	003295	ENGINE ASSEMBLY, LT28 G25		1
1	074351A	Engine, 25HP Kohler Gas CH740 w/Key		1
	046943	Regulator, Overvolt Kohler		1
	016290	Gasket Kit, Kohler CH25 Head #24-757-31		1
	P12734	Filter Kit, Kohler Air/Pre #24-883-03-S1		1
2	P12736	Filter, Kohler Air #24-083-03	Available in assemblies only.	1
3	P12737	Pre Cleaner, Kohler #24-083-05	Available in assemblies only.	1
	061371	Starter, Kohler Engine KH# 25 098 21S		1
	P12757	Plug, RC12YC Kohler Spark #12-132-02		2
	016079	Module Kit, Kohler Ignition #25-584-14-S		2
4	014717	Filter, Kohler Oil #52-050-02		1
5	P12758	Filter, Kohler Fuel #24-050-13		1
	061157	Kit, Valve Cover w/ Lift Pump 24 559 10S		1
	061150	Switch, Ignition G18/25	Not shown	1
6	003294	Muffler Assembly, Kohler #24-786-10S		1
7	036684	Arrestor, Kohler Spark #24-18901-S		1
8	016535	Bushing, 1 7/16" SH		1

REF	PART #	DESCRIPTION	COMMENTS	QTY.
9	047742	Pulley, 3V5.6 x 2" SH		1
10	F05011-48	Washer, 7/16" Split Lock		2
11	F05007-145	Bolt, 7/16-14 x 1" Hex Head Grade 5		2
12	016493	Plate, Engine Guard		1
13	047750	Plate, Throttle Cable Mount		1
14	047749	Cable, LT15 G25 Throttle		1
15	016033	Spring, Throttle		1
16	015952	Spring, Throttle Extension		1
17	P10082	Hose, 3/8" NPT Oil Drain		1
18	P04332	Cap, Oil Drain Hose		1
	061072	Switch, G18/G25 Ignition Plastic		1
NO EXTERNAL ALTERNATOR. ENGINE USES INTERNAL CHARGING SYSTEM.				
	016023	<b>CARBURETOR KIT, 25HP KOHLER ANTI-ICING #25-755-65-S</b>		1
	061303	<b>SOLENOID, FUEL SHUT OFF 24-757-01-S</b>		1
	024718	<b>HARNESS, BATTERY TO ENGINE</b>		1
19	F05011-3	<b>WASHER, 3/8" SAE FLAT</b>		4
20	F05007-119	<b>BOLT, 3/8-16 X 1 3/4" HEX HEAD GRADE 5</b>		4
21	F05010-10	<b>NUT, 3/8-16 HEX NYLON LOCK</b>		4
22	048237	<b>SUPPORT WELDMENT, DRIVE BELT</b>		1
23	F05007-118	<b>BOLT, 3/8-16 X 3/4" HEX HEAD GRADE 5</b>		1
24	F05010-19	<b>NUT, 3/8-16 SELF-LOCKING HEX</b>		1
25	047751	<b>BELT, 2/3VFL900 DRIVE</b>		1
	016023	<b>CARB KIT, 25HP KOHLER DE-ICING 2475565S</b>		1

### 3.3 Throttle/Clutch Assembly



REF	PART #	DESCRIPTION	COMMENTS	QTY.
1	065574	BLOCK WELDMENT, LINKAGE CLUTCH/BRAKE		1
2	F05012-16	PIN, 3/16" X 1 1/4" ROLL		1
3	016486	BUSHING, 5/8" ID X 7/8" OD X 1 1/4" LONG FL BRONZE		2
4	049340	SHAFT, LT28 THROTTLE		1
5	034815	ACTUATOR WELDMENT, THROTTLE LT15D&G		1
6	F05007-68	SCREW, 3/8-16 X 3/8" SOCKET HEAD CUP PT SET		2
7	034818	LINKAGE, THROTTLE LT15D&G		1
8	F05005-15	BOLT, 1/4-20 X 1/2" HEX HEAD		1
9	F05010-21	NUT, 1/4-20 SWAGED		1
10	P737	BUSHING, 1" X 1 1/4" X 3/4" FLANGED BRONZE		2
11	034608	PIVOT WELDMENT, CLUTCH/BRAKE		1
	034605	LINKAGE ASSEMBLY, W/BEARING		1
12	034604	Boss Weldment, Clutch/Brake Linkage		1
13	016486	Bushing, 5/8" ID x 7/8" OD x 1 1/4" Long Flanged Bronze		1
	038778	NUT ASSEMBLY, 1/2-13 SPRING LOCKING		1
14	F05010-31	Nut, 1/2-13 Hex Jam		1
15	038777	Nut, 1/2-13 Spring Lock		1
16	046975	Spring, .72" OD x .576" ID x 1.25L Compression		1
17	F05010-127	Nut, 1/2-13 Half Nylon Lock		1

REF	PART #	DESCRIPTION	COMMENTS	QTY.
	065874	<b>BRAKE/CLUTCH ASSEMBLY</b>		1
<b>18</b>	065873	Arm Weldment, Clutch/Brake		1
<b>19</b>	F05007-124	Bolt, 3/8-16 x 2 Hex Head Grade 5		1
<b>20</b>	F05010-10	Nut, 3/8-16 Hex Nyl Lock		2
<b>21</b>	F05011-3	Washer, 3/8" Flat SAE		3
<b>22</b>	F05010-25	Nut, 3/8-16 Swaged		1
<b>23</b>	034810	Spring, Idler Arm LT15/D/E/G		1
<b>24</b>	034602	Idler, 4" O.D. x 3/8" Bore		1
<b>25</b>	F05007-125	Bolt, 3/8-16 x 2-1/2" Hex Head Grade 5		1
<b>26</b>	016488	Block, LT15 Brake		2
<b>27</b>	F05004-2	Bolt, #10-24 x 1" Socket Head Cup		4
<b>28</b>	F05010-14	Nut, #10-24 Keps		8
<b>29</b>	F05004-282	Screw, 10-24 x 5/8" FSHC		4
<b>30</b>	065872	Plate, Brake Adjustment		2
<b>31</b>	F05011-18	Washer, #10 SAE Flat		4
<b>32</b>	F05010-29	<b>NUT, 3/8-16 JAM</b>		1
<b>33</b>	F05007-18	<b>SCREW, 3/8-16 X 1 1/4 SHOP SET</b>		1