

# G35 Engine

## Safety, Operation, Maintenance & Parts Manual

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<b>LT30 Super</b>	<b>rev. F7.00 - J2.00</b>
<b>LT40 Super</b>	<b>rev. F8.00 - J3.00</b>
<b>LT30HD Super</b>	<b>rev. G1.00 - J7.00</b>
<b>LT40HD Super</b>	<b>rev. G1.00 - J7.00</b>

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**Safety is our #1 concern!** Read and understand all safety information and instructions before operating, setting up or maintaining this machine.

*February 1998*

*Form #767*

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**I**

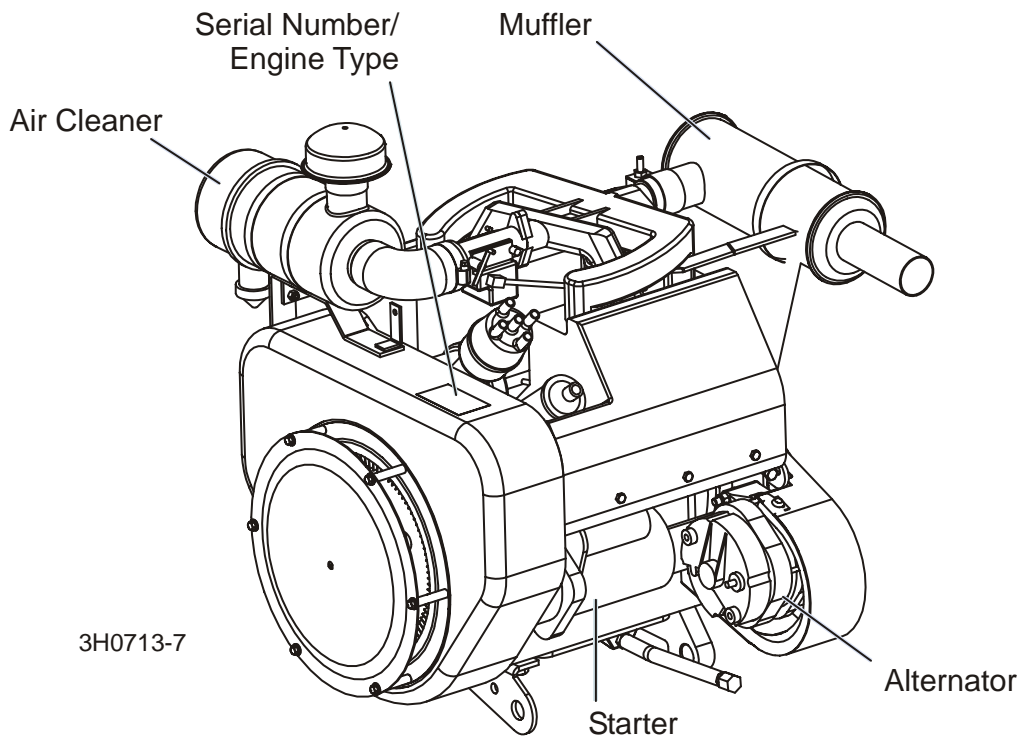
## ABOUT THIS MANUAL

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.



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
**ENGINE COMPONENTS**

## SECTION 1 OPERATION


### 1.1 Starting The Engine

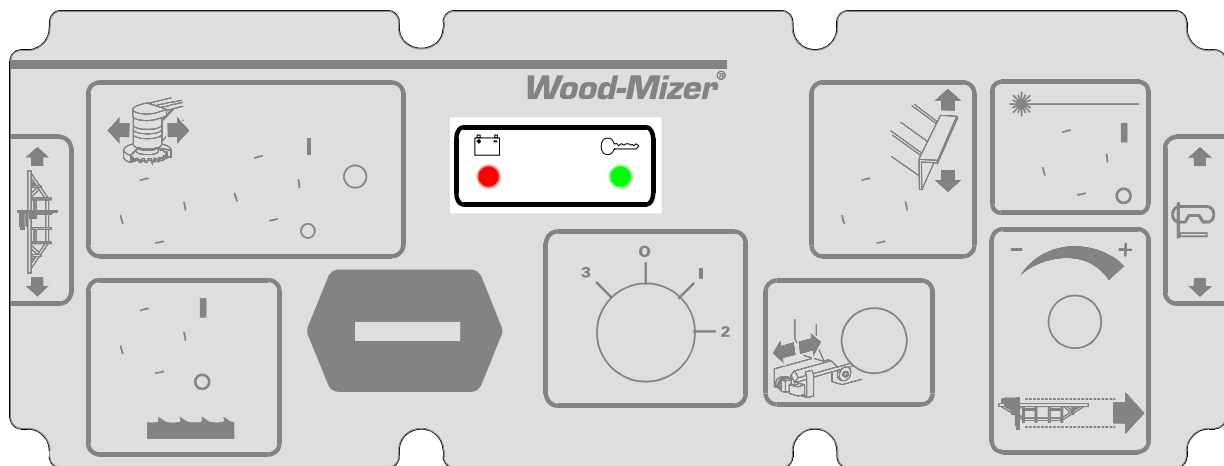
#### Engine Control Lights

See **Figure 1-1**. The following indicator lights are located on the sawmill control panel.

 *Alternator Charge Indicator*: Lights up if the alternator is not charging the battery.



 *Key Switch Indicator*: Lights up when the key is in either the on or accessory (#1 or #3) position.



**FIG. 1-1**

### Engine Start



**DANGER!** Always be sure the blade is disengaged and all persons are out of the path of the blade before starting the engine. Failure to do so will result in serious injury.

**DANGER!** Operate your engine/machine only in well ventilated areas. The exhaust gases of your engine can cause nausea, delirium and potentially death unless adequate ventilation is present.

**DANGER!** 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!** Be sure the power feed switch is in the neutral position before turning the key switch to the on (#1) or accessory (#3) position. This prevents accidental carriage movement, which may cause serious injury or death.

**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.

Turn the key switch to the start (#2) position and release.

If the engine needs choking to start, pull the choke cable out until the engine starts. Push the choke wire in after the engine starts.

For more information, see the engine manufacturer's operation manual.

*LT30 Super rev. F7.00 - F8.01*

*LT40 Super rev. F8.00 - F9.01*

*LT30HD Super rev. G1.00 - G2.01*

*LT40HD Super rev. G1.00 - G2.01*

If the fuel tank was recently filled or replaced, squeeze the primer bulb once or twice before trying to start the engine. **NOTE:** If pumping problems are experienced, make sure the out-flow end of the hose line is connected to the fuel filter. If pumping problems are still experienced, hold the primer bulb in a vertical position while squeezing. This allows the fuel check valve to operate properly.

## Engine Shutoff



**CAUTION!** A minimum 2 minute idle time is recommended to allow the battery charge to recover before the engine is shut off.

Turn the key switch to the off (#0) position.

## SECTION 2 MAINTENANCE

Refer to the manufacturer's manual for maintenance intervals and procedures unless otherwise instructed in this manual. Follow the manufacturer's recommendations for dusty conditions.



**IMPORTANT!** 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.

### 2.1 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 resulting in possible injury.

**DANGER!** Engine components can become very hot during operation. Avoid contact with any part of a hot engine. The exhaust components of your engine are especially hot during and following operation. Contact with hot engine components can cause serious burns. Therefore, never touch or perform service functions on a hot engine. Allow the engine to cool sufficiently before beginning any service function.



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

**WARNING!** Always wear proper and necessary safety equipment when performing service functions. Proper safety equipment includes eye protection, breathing protection, hand protection and foot protection.



**This symbol** identifies the interval (hours of operation) at which each maintenance procedure should be performed. "AR" signifies maintenance procedures which should be performed as required.



## 2.2 Air Cleaner

200

Replace the air cleaner cartridge every 200 hours of operation. Change the cartridge more often if operating the sawmill in dirty conditions or if engine performance indicates a new cartridge is necessary.



**WARNING!** Always wear proper and necessary safety equipment when performing service functions. Proper safety equipment includes eye protection, breathing protection, hand protection and foot protection.

## 2.3 Fuel Filter

100

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

## 2.4 Battery

50

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.<sup>1</sup>



**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.

## 2.5 Alternator Belt

LT30 Super Rev. G6.00+  
LT40 Super Rev. G7.00+  
LT30HD Super Rev. H1.00+  
LT40HD Super Rev. H1.00+



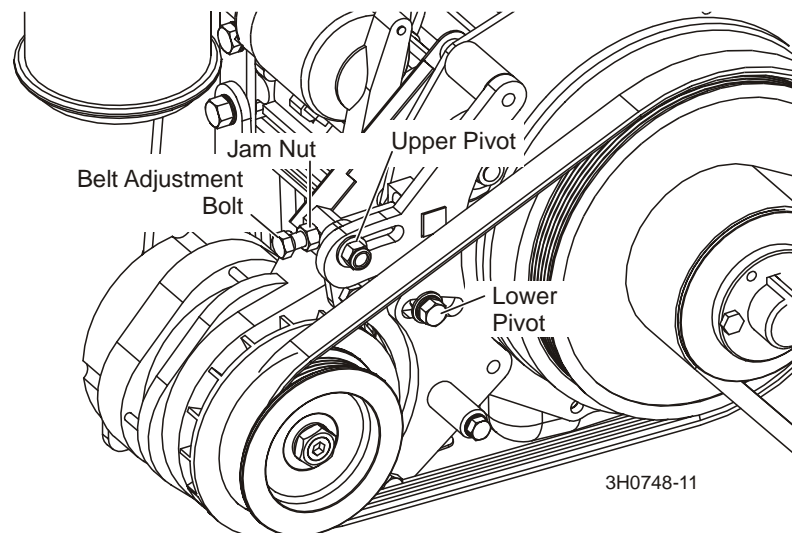
The belt tension should be checked after the first 100 hours of operation, when the battery is not charging properly or when the alternator belt is squealing. If the battery continues to not charge properly or the belt continues to squeal after the initial belt adjustment, replace the belt.



**IMPORTANT!** Sawmills built prior to March 1999 were provided with a sight hole in the alternator bracket to gauge belt tension. To achieve proper belt tension, **do not use the sight hole**. Follow the procedure below to check the belt tension and adjust if necessary.

1. Release the blade tension and remove the blade from the sawmill if necessary. Turn the key switch to OFF (0) and remove the key.
2. Remove the drive belt cover and alternator cover.

See Figure 2-1.



**FIG. 2-1**

3. Use a belt tension gauge to measure the belt tension. Place the gauge on the belt at the midpoint between the two pulleys. If the belt tension is less than 3/16" with 9 lb. of deflec-

tion, tighten the belt as described below.

4. Loosen the upper pivot, lower pivot and the adjustment bolt jam nut.
5. Turn the belt tension adjustment bolt clockwise to tighten the belt, counterclockwise to loosen the belt. Adjust the bolt until the proper belt tension is achieved.



**CAUTION!** Do not overtighten the alternator belt. Damage to the alternator will occur.

6. After the alternator belt has been tensioned, tighten the adjustment bolt jam nut. Tighten the upper and lower pivots and replace the belt covers.

*LT30 Super Rev. F7.00 - G5.00*

*LT40 Super Rev. F8.00 - G6.00*

*LT30HD Super Rev. G1.00 - G9.00*

*LT40HD Super Rev. G1.00 - G9.00*

Replace the alternator belt every 1000 hours.

1000

Check the alternator belt tension every 500 hours. Also check the alternator belt for tension and wear when battery is not charging properly or when the alternator belt is squealing. Adjust as needed.

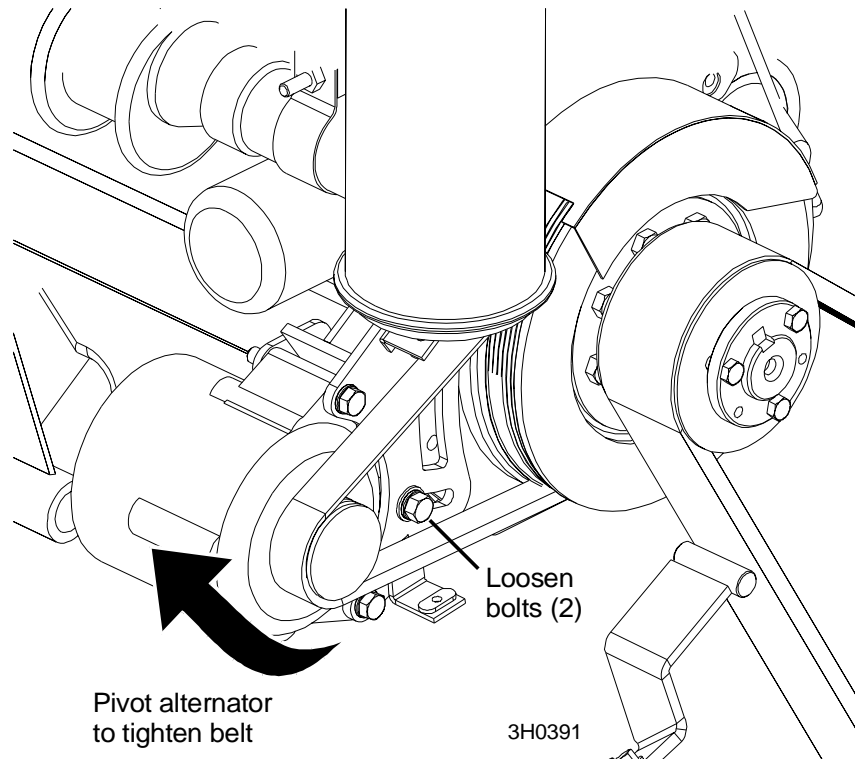
500

1. Remove the alternator belt guard.
2. Loosen the two bolts in the slotted alternator bracket holes (opposite holes in front and rear of bracket).

## **2** Maintenance

### *Alternator Belt*

See Figure 2-2.



**FIG. 2-2**

3. Pivot the alternator to tighten the belt. Retighten the adjustment bolts and replace the belt guard.

## 2.6 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 after the first 20 hours of operation and every 200 hours thereafter.

See Table 2-1.

Engine	High End RPM	Low End RPM
<b>G35</b>	3200	1500

*TABLE 2-1*

Before checking the RPM, make sure belt and brake strap tensions are correct (See Saw-mill Maintenance). Also check oil, fuel, and coolant levels.

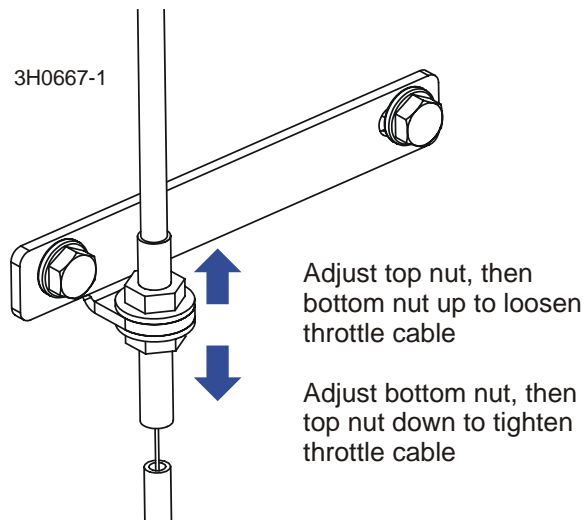
Make sure the throttle cable does not affect the engine RPM when the clutch handle is disengaged. Make sure the cable is not bent or kinked.

1. Use the bottom threaded cable mount to adjust the throttle cable. When the clutch handle is disengaged, the throttle cable should be taut but the spring not extended. When the clutch handle is engaged, the throttle spring should extend 1/8" to 1/4". Once the throttle cable is adjusted properly, use the adjustments provided on the engine to adjust the engine RPM (3200[+0, -100] high-end, 1500[±100] idle).



**CAUTION!** Do not extend the throttle spring over 1/4". Excessive tension may cause the throttle cable to fail prematurely.

See Figure 2-3.

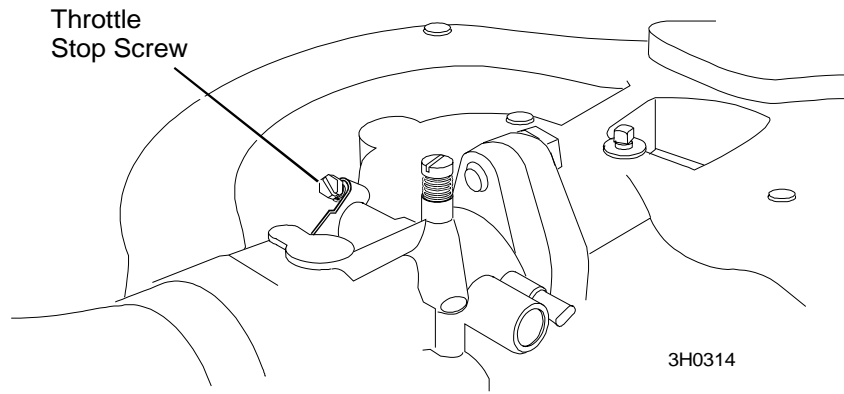


**FIG. 2-3**

2. The low-end RPM should be 1500. To adjust the low-end RPM, use the throttle stop screw. Turn the screw in or out until the engine idles at 1500 RPM.

See Figure 2-4.

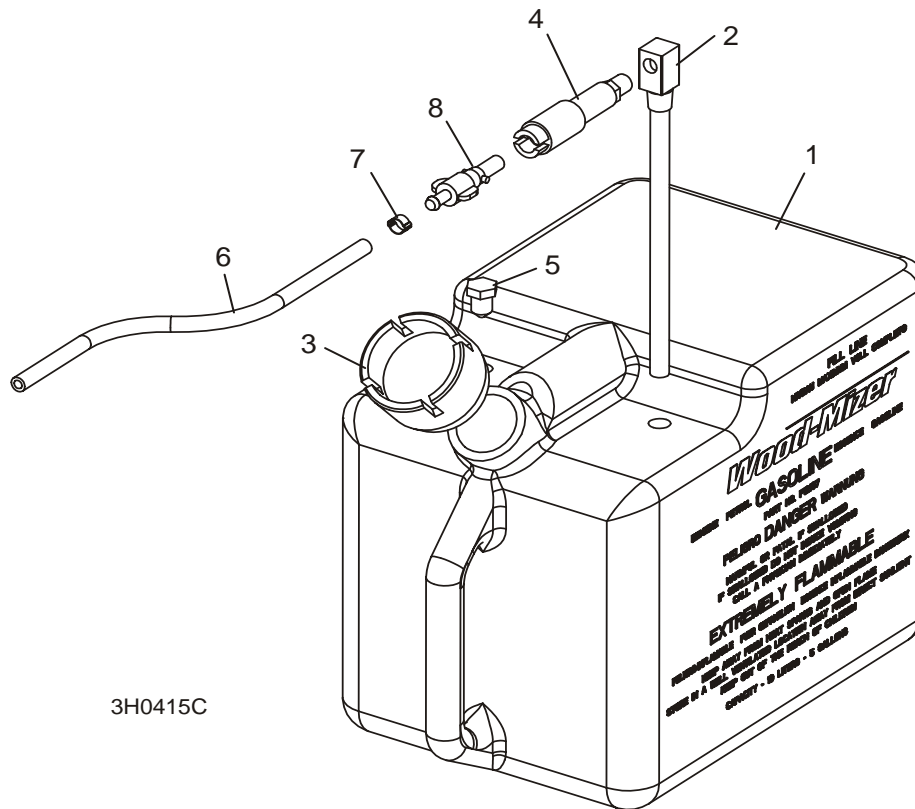
3. The high-end RPM is factory set at 3200 (3000 with load) and cannot be adjusted.



**FIG. 2-4**

## SECTION 3 REPLACEMENT PARTS

### 3.1 Fuel Tank



REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	<b>TANK ASSEMBLY, 5-GALLON RED GASOLINE</b>	A12285 <sup>1</sup>	1	
1	Tank, 5-Gallon Red Fuel	P12167	1	◆
2	Pickup, 9" Fuel	P12172	1	
3	Cap, 3 or 5-Gallon Fuel Tank	P09683	1	
4	Fitting, 1/4" NPT Plastic Female Disconnect	P12175	1	
5	Fitting, 3/8" NPT Hex Plug	P10367 <sup>2</sup>	1	
6	<b>HOSE, 1/4" ID FUEL</b>	P642 <sup>3</sup>	6.7 Ft	
7	<b>CLAMP, 7/32 - 1/2 HOSE</b>	P649 <sup>3</sup>	6	
8	<b>FITTING, 1/4" NPT PLASTIC MALE DISCONNECT</b>	P12176 <sup>4</sup>	1	

<sup>1</sup> 014497 primer bulb assembly removed from G35 sawhead assembly (LT30 Super rev. F8.02, LT40 Super rev. F9.02, LT30HD/40HD Super rev. G2.02).

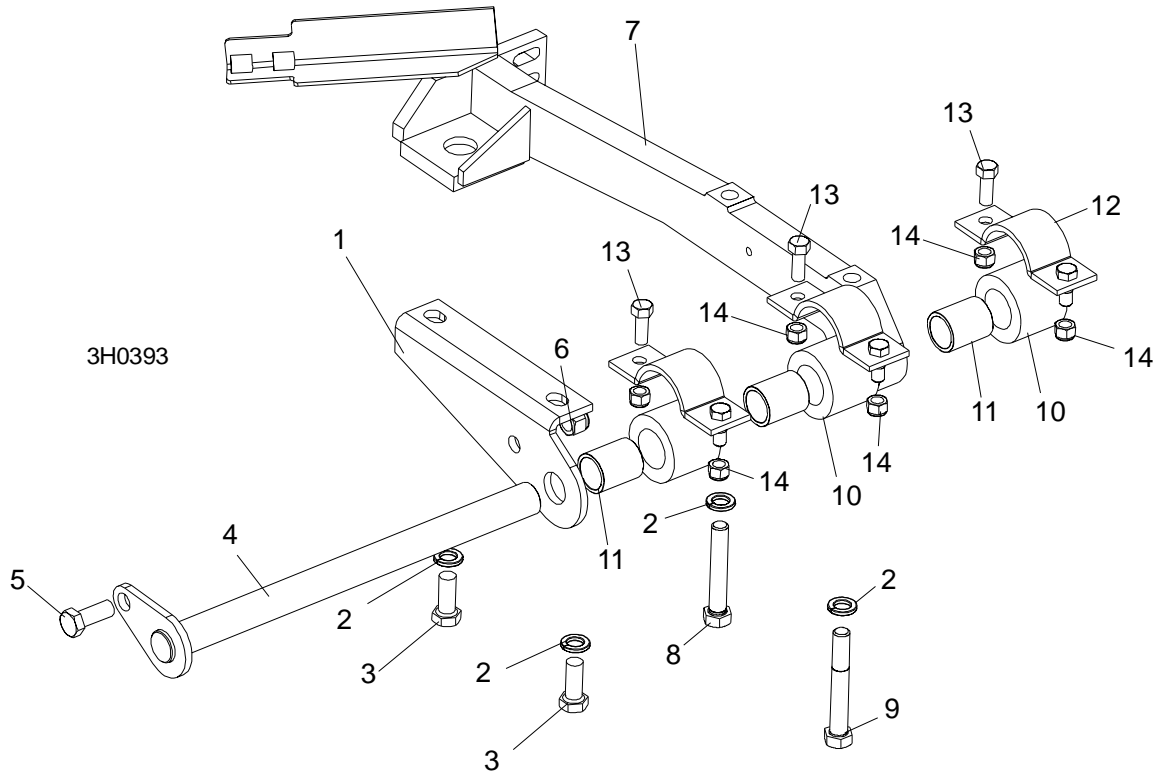
<sup>2</sup> Plug fitting P10367 added 11/03. Hole added to fuel tank to accommodate return line for fuel injected engines.

<sup>3</sup> P642 fuel hose replaces R01890-1 used prior to LT30 Super Rev. G3.02, LT40 Super Rev. G4.02, and LT30HD/40HD Super Rev. G7.02. Use clamp P649 with new hose (replaces 015584 and P12374 used with old fuel hose).

<sup>4</sup> Replacement requires qty. 1 hose clamp (P649).



### 3.2 Engine Mount Assembly



REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
1	MOUNT PLATE, WISCONSIN ENGINE	014276	1	
2	WASHER, 1/2" SPLIT LOCK	F05011-9	4	
3	BOLT, 1/2-13 X 1 1/4" HEX HEAD GRADE 5	F05008-37	2	
4	PIN WELDMENT, ENGINE MOUNT PIVOT	014154	1	
5	BOLT, 1/2-13 X 1 1/4" HEX HEAD GRADE 5	F05008-37	1	
6	NUT, 1/2-13 NYLON LOCK	F05010-8	1	
	MOUNT KIT, WISCONSIN ENGINE	016320 <sup>1</sup>	1	
7	Mount Weldment, Gas Engine	014305	1	◆
8	BOLT, 1/2-13 X 3" HEX HEAD GRADE 5	F05008-23	1	
9	BOLT, 1/2-13 X 3 1/2" HEX HEAD	F05008-15	1	
	BUSHING ASSEMBLY, MOTOR MOUNT	016380 <sup>2</sup>	3	
10	Bushing, 2" OD x 2"	016378	1	◆
11	Bearing, 1" x 1 1/4" x 2"	016379	1	◆
12	CLAMP WELDMENT, MOTOR MOUNT PIVOT BUSHING	014540	3	
13	BOLT, 3/8-16 X 1" HEX HEAD	F05007-7	3	
14	NUT, 3/8-16 HEX NYLON LOCK	F05010-10	6	

<sup>1</sup> Mount Kit 016320 includes new rubber clutch handle mount bushings and hardware standard on LT30 Super Rev. G9.00, LT40 Super Rev. H1.00 and LT30HD/40HD Super Rev. H4.00 (See Clutch Handle parts in Sawmill Parts Manual).

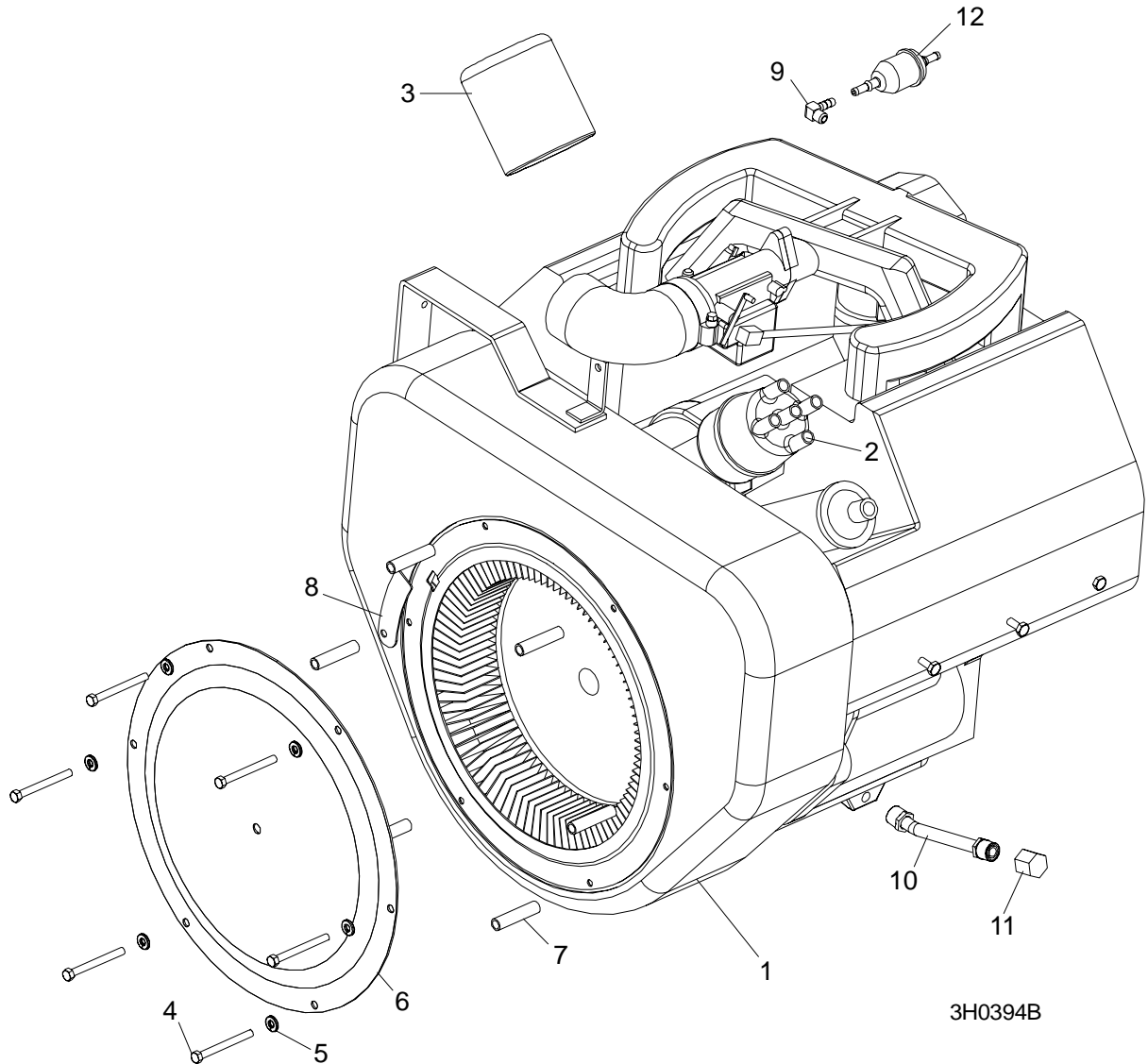
## **3** Replacement Parts

### *Engine Mount Assembly*

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<sup>2</sup> New assembly 016380 replaces original rubber pivot bushing P12164 and bronze bushing P05041 supplied prior to LT30 Super Rev. H1.00, LT40 Super Rev. H2.00 and LT30HD/40HD Super Rev. H5.00. NOTE: When replacing original components with new assembly, it is best to replace all three assemblies at the same time.

### 3.3 Engine Assembly



3H0394B

REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
1	<b>ENGINE, 35HP WISCONSIN MODEL W4-1770</b>	014222	1	◆
	Rotor, Wisconsin W4-1770 Distributor #20121006	014380	1	
2	Cap, Wisconsin W4-1770 Distributor #20121003	014379	1	
	Module, Wisconsin W4-1770 Distributor #20120005	014378	1	
	Plug, Wisconsin W4-1770 Spark #YD6	014377	4	
3	Filter, Wisconsin W4-1770 Oil #RV52	014376	1	
	Gasket Kit, Wisconsin W4-1770 #Q12L	014375	1	
	Gasket Kit, Wisconsin Valve Cover	016080	1	

# 3

## Replacement Parts

### Engine Assembly

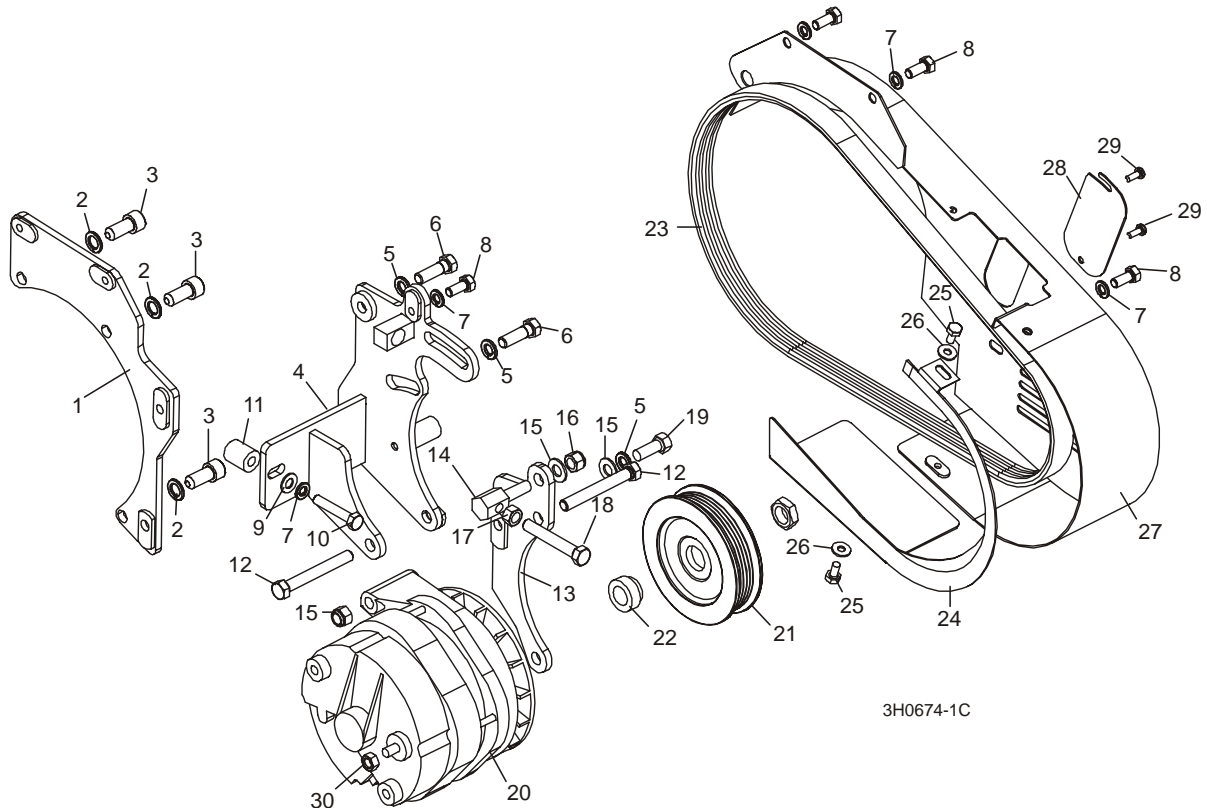
	Gasket, Wisconsin Valve Cover #QD612A	016081	4	
	Gasket, Wisconsin Gear Cover to Spacer #QD851	014546	1	
	Seal, Wisconsin Third Bearing Housing O-Ring #JK72	014545	1	
	Carburetor, Wisconsin W4-1770 #57MS1	014374	1	
	Carburetor Kit, Wisconsin W4-1770 #LQ57	014373	1	
	Pump, Wisconsin W4-1770 Fuel #LP38ES1	014372	1	
4	<b>BOLT, 1/4-20 X 2 1/2" HEX HEAD</b>	F05005-7 <sup>1</sup>	6	
5	<b>WASHER, 1/4" SPLIT LOCK</b>	F05011-14	6	
6	<b>COVER, WISCONSIN ENGINE SOUND</b>	014423	1	
7	<b>SPACER, ENGINE SOUND COVER</b>	014424	6	
8	<b>COVER, TIMING HOLE</b>	014422	1	
9	<b>FITTING, 1/8" NPT TO 1/4" TUBE ELBOW</b>	P12206	1	
10	<b>DRAIN WELDMENT, OIL</b>	015881 <sup>2</sup>	1	
11	<b>CAP, 3/8" PIPE</b>	P04332	1	
12	<b>FILTER, IN-LINE FUEL</b>	P07570	1	

<sup>1</sup> Sound Cover and hardware removed LT30 Super Rev. G8.00, LT40 Super Rev. G9.00 and LT30HD/40HD Rev. H3.00. Cover found to be ineffective in reducing engine noise.

<sup>2</sup> Steel drain weldment 015881 replaces rubber hose P10082 starting with LT30 Super Rev. F9.02, LT40 Super Rev. G1.02, LT30HD Super and LT40HD Super Rev. G3.03.

### 3.4 Alternator Assembly

LT30 Super Rev. G6.00+  
 LT40 Super Rev. G7.00+  
 LT30HD Super Rev. H1.00+  
 LT40HD Super Rev. H1.00+



3H0674-1C

REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.
	<b>WIRE ASSEMBLY, 61/140 AMP ALTERNATOR PLUG</b>	015969 <sup>1</sup>	1
	<b>ALTERNATOR KIT, G35 140A</b>	023804 <sup>1</sup>	1
	Belt Guard Parts ( <a href="#">See Section 3.12</a> )		
1	Bracket Weldment, G35 Alternator Base Mount	023784	1
2	Washer, 7/16" Split Lock	F05011-48	3
3	Bolt, 7/16-14 x 1" Socket Head	F05007-121	3
4	Bracket Weldment, G35 Alternator Mount	023767 <sup>2</sup>	1
5	Washer, 3/8" Split Lock	F05011-4	3
6	Bolt, 3/8-16 x 1" Hex Head Grade 5	F05007-87 <sup>3</sup>	2
7	Washer, 5/16" Split Lock	F05011-13	5
8	Bolt, 5/16-18 x 3/4" Hex Head	F05006-5	4
9	Washer, 5/16" SAE Flat	F05011-17	1
10	Bolt, 5/16-18 x 1 3/4" Hex Head Full Thread	F05006-17	1
11	Bushing, .75OD x .34ID x .81LG	015553	1

# 3

## Replacement Parts

### Alternator Assembly

12	Bolt, 3/8-16 x 3" Hex Head Full Thread	F05007-1	2	
13	Plate Weldment, Alternator Mount	015875 <sup>4</sup>	1	
14	Stud, Alternator Belt Tension Adjustment	023764	1	
15	Washer, 3/8" SAE Flat	F05011-3	2	
16	Nut, 3/8-16 Nylon Lock	F05010-10	2	
17	Nut, 3/8-16 Hex	F05010-1	1	
18	Bolt, 3/8-16 x 2 1/2" Hex Head Grade 2 Full Thread	F05007-157	1	
19	Bolt, 3/8-16 x 1" Hex Head	F05007-87 <sup>3</sup>	1	
	Alternator Assembly, 140 Amp	023730	1	◆
20	Alternator, 140 Amp	023695	1	
	Pulley Assembly, 140 Amp Alternator	036572 <sup>5</sup>	1	
21	Pulley, 140 Amp Alternator	023694	1	◆
22	Spacer, Alternator Pulley	036571	1	
23	Belt, 6PK425 Fiberglass	023709	1	
24	Guard, 140 Amp Alternator Belt Rear	023786	1	
25	Washer, 1/4" SAE Flat	F05011-11	2	
26	Bolt, 1/4-20 x 1/2" Hex Head	F05005-15	2	
27	Guard Weldment, 140 Amp Alternator Belt	023783 <sup>2</sup>	1	
28	Plate, Alternator Belt Access	023794	1	
29	Bolt, #10-24 x 1/2" Pan Head	F05015-17	2	
30	<b>NUT, M8 X 1.25 HEX JAM</b>	F05010-76	1	

<sup>1</sup> 140 amp alternator supplied on LT30 Super Rev. G6.00, LT40 Super Rev. G7.00 and LT30HD/LT40HD Super Rev. H1.00. [See Section 3.5](#) for 105 amp alternator parts. Previous revisions can retrofit to 140A alternator. Alternator Retrofit Kit 016239 includes alternator kit 023804, retrofit plug wire assembly, and installation instructions.

<sup>2</sup> Mount bracket and belt cover modified 2/99 to provide more belt tension adjustment.

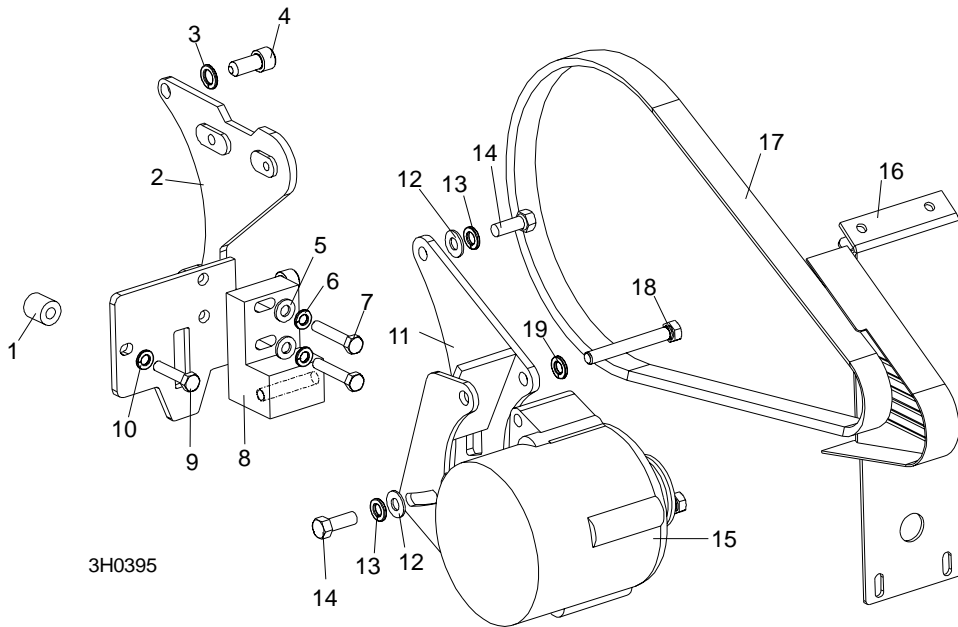
<sup>3</sup> Replaces two F05007-2 3/8-16 x 1 1/4" bolts and one F05007-7 3/8-16 x 1" bolt previously supplied. The 1 1/4" bolts were too long, causing misalignment of the bracket with the alternator belt. The 1" bolt was also replaced so all three bolts remain consistent.

<sup>4</sup> 015875 replaces 023765 originally supplied before 12/99 (similar parts).

<sup>5</sup> Pulley Assembly 036572 replaces Pulley 023694 and Spacer 016279 supplied prior to 7/04. Pulley Assembly with pressed Spacer 036571 provides improved positioning relative to drive pulley.

### 3.5 Alternator Assembly

*LT30 Super*                      *Rev. F7.00 - G5.00*  
*LT40 Super*                      *Rev. F8.00 - G6.00*  
*LT30HD Super*                 *Rev. G1.00 - G9.00*  
*LT40HD Super*                 *Rev. G1.00 - G9.00*



REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
1	BOSS, .75 X .34 X .81	015553	1	
2	SPACER WELDMENT, G35 ALTERNATOR BRACKET	015558	1	
3	WASHER, 7/16" SPLIT LOCK	F05011-48	2	
4	SCREW, 7/16-14 X 1" SOCKET HEAD CAP BLACK OXIDE	F05007-121	2	
5	WASHER, 5/16" SAE FLAT	F05011-17	2	
6	WASHER, 5/16" SPLIT LOCK	F05011-13	2	
7	BOLT, 5/16-18 X 1 3/4" FULL THREAD HEX HEAD TAP	F05006-17	2	
8	BLOCK, G35 ALTERNATOR MOUNT	015552	1	
9	BOLT, 5/16-18 X 1 1/2" FULL THREAD HEX HEAD TAP	F05006-2	1	
10	WASHER, 5/16" SPLIT LOCK	F05011-13	1	
11	MOUNT WELDMENT, G35/E25 ALTERNATOR	015556	1	
12	WASHER, 3/8" FLAT	F05011-3	3	
13	WASHER, 3/8" SPLIT	F05011-4	3	
14	SCREW, 3/8-16 X 1" HEX HEAD CAP	F05007-7	3	
15	ALTERNATOR, 105 AMP	015473 <sup>1</sup>	1	
	WIRE ASSEMBLY, ALTERNATOR PLUG 105 AMP	015932 <sup>2</sup>	1	
16	GUARD WELDMENT, G35 ALTERNATOR 97	015494	1	
17	BELT, 6PK1015 ALTERNATOR	015474	1	

## **3** Replacement Parts

### *Alternator Assembly*

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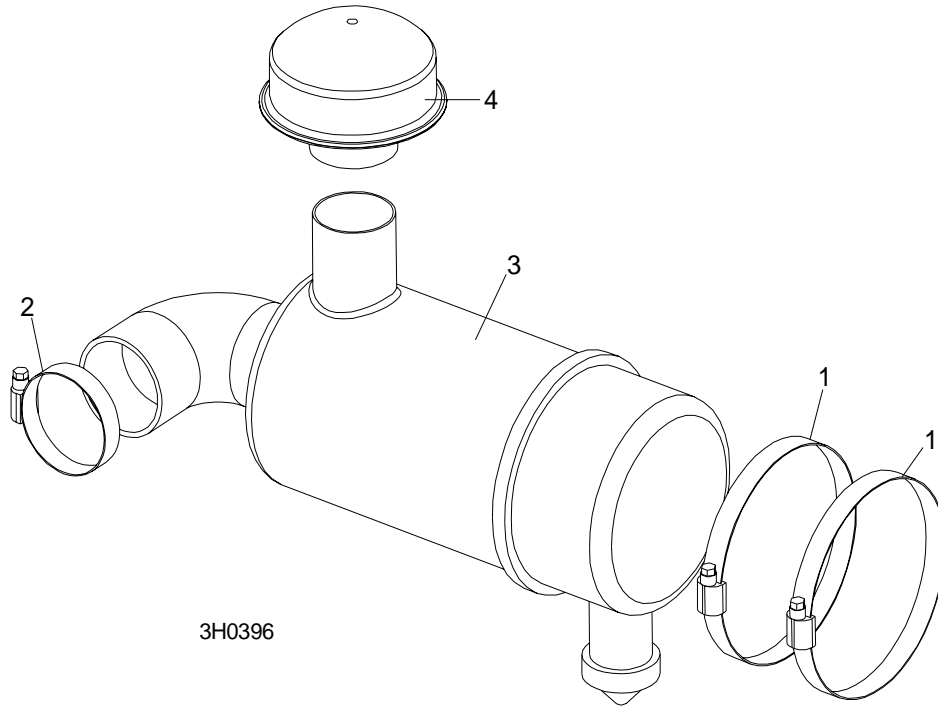
<b>18</b>	<b>BOLT, 3/8-16 X 3" FULL THREAD HEX HEAD</b>	F05007-1	2	
<b>19</b>	<b>WASHER, 3/8" SPLIT</b>	F05011-4	2	

<sup>1</sup> 140A Alternator Retrofit 016239 available ([See Section 3.4](#)).

<sup>2</sup> New part available 11/97. Plug housing seals added to harness LT30 Super Rev. G4.00, LT40 Super Rev. G5.00, LT30HD Super and LT40HD Super Rev. G8.00.



### 3.6 Air Cleaner Assembly



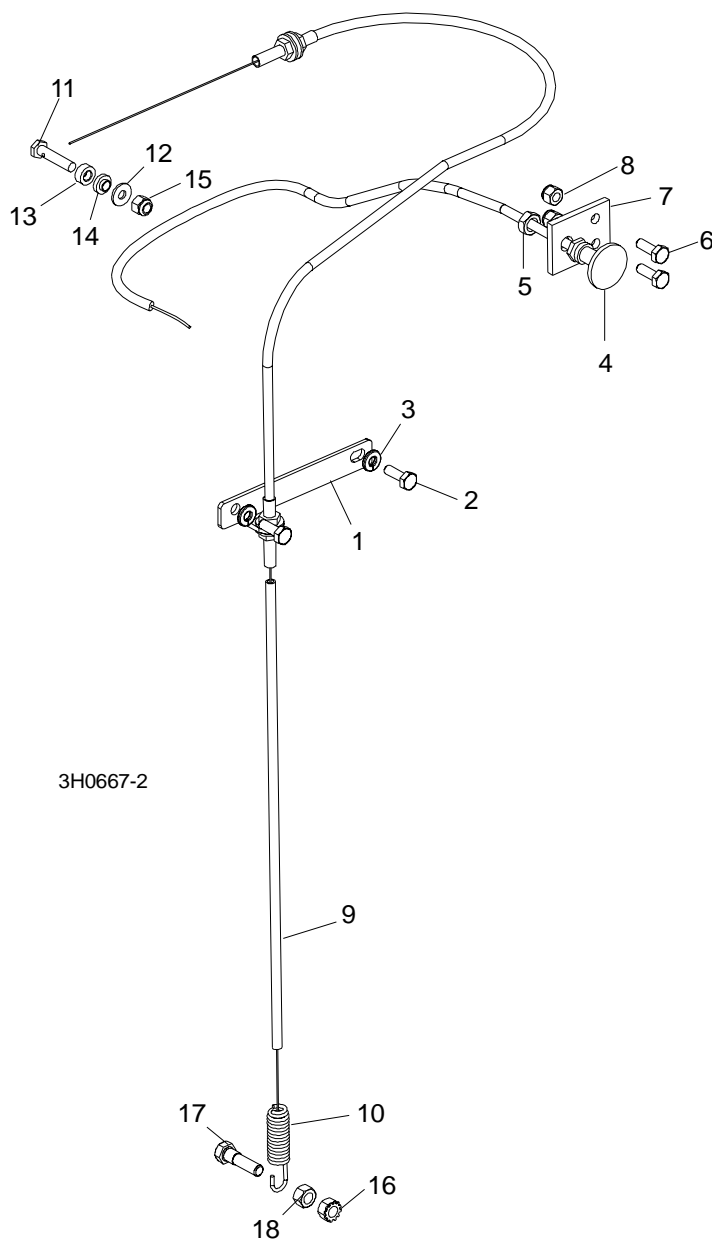
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
1	CLAMP, 5" WORM	014096	2	
2	CLAMP 2 1/2" WORM	P09895	1	
3	CLEANER, WISCONSIN AIR	014246	1	
	Filter, Air Cleaner Cartridge	014386	1	
4	COVER, WISCONSIN ENGINE	014247	1	

# 3 Replacement Parts

## Throttle/Choke Assembly

### 3.7 Throttle/Choke Assembly

*LT30 Super*                      *Rev. G5.00+*  
*LT40 Super*                        *Rev. G6.00+*  
*LT30HD Super*                    *Rev. G9.00+*  
*LT40HD Super*                    *Rev. G9.00+*



REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.
1	BRACKET, THROTTLE CABLE MOUNT	014306	1
2	BOLT, 1/4-20 X 3/4" FULL THREAD HEX HEAD	F05005-1	2
3	WASHER, 1/4" SPLIT LOCK	F05011-14	2

## Replacement Parts

### Throttle/Choke Assembly

3

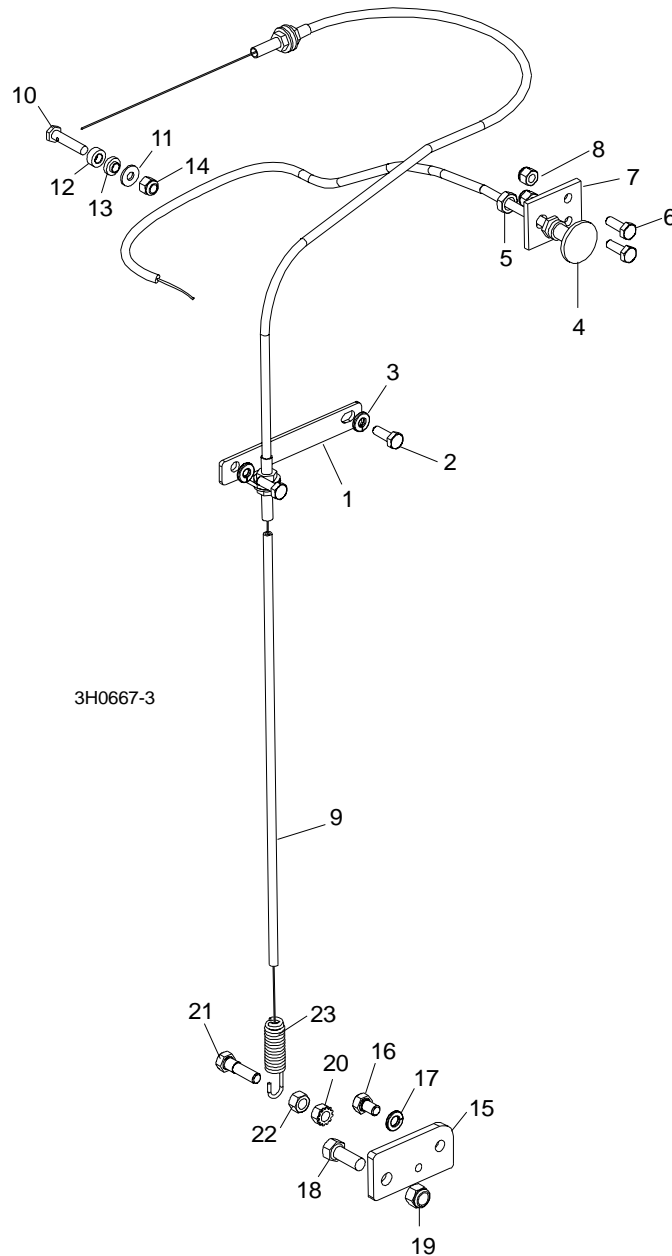
4	CABLE, ENGINE CHOKE	P12314	1	
5	NUT, 3/8-24 HEX JAM	F05010-22	1	
6	BOLT, 1/4-20 X 3/4" HEX HEAD FULL THREAD	F05005-1	2	
7	PLATE, CHOKE CABLE MOUNT	014253	1	
8	NUT, 1/4-20 NYLON LOCK	F05010-69	2	
9	CABLE ASSEMBLY, G35 THROTTLE	016127 <sup>1</sup>	1	
	Cable, G35 .078" Throttle	016126 <sup>1</sup>	1	
10	Spring, Throttle	016033	1	
11	BOLT, WISCONSIN 35HP THROTTLE CABLE	015985	1	
12	WASHER, .25ID X .62OD X .06THK, PLATED	016175	1	
13	WASHER, .266 X .50 X .28 AL-BRONZE	015986	1	
14	BOSS, 1/4 X 1/2 X 1/4" AL-BRONZE	015984	1	
15	NUT, 1/4-20 NYLON LOCK	F05010-69	1	
16	NUT, 5/16-18 SELF-LOCKING HEX	F05010-20	1	
17	BOLT, 5/16-18 X 1 1/4" HEX HEAD FULL THREAD	F05006-18	1	
18	NUT, 5/16-18 HEX LOCK	F05010-6	1	

<sup>1</sup> Use throttle cable retrofit kit 016016 for revisions prior to LT30 Rev. Super G5.00, LT40 Super Rev. G6.00, and LT30HD/40HD Super Rev. G9.00.

### 3.8 Throttle/Choke Assembly

LT30 Super  
LT40 Super  
LT30HD Super  
LT40HD Super

Rev. F7.00 - G4.02  
Rev. F8.00 - G5.02  
Rev. G1.00 - G8.02  
Rev. G1.00 - G8.02



REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
1	BRACKET, THROTTLE CABLE MOUNT	014306	1	
2	BOLT, 1/4-20 X 3/4" FULL THREAD HEX HEAD	F05005-1	2	

3	WASHER, 1/4" SPLIT LOCK	F05011-14	2	
4	CABLE, ENGINE CHOKE	P12314	1	
5	NUT, 3/8-24 HEX JAM	F05010-22	1	
6	BOLT, 1/4-20 X 3/4" HEX HEAD FULL THREAD	F05005-1	2	
7	PLATE, CHOKE CABLE MOUNT	014253	1	
8	NUT, 1/4-20 NYLON LOCK	F05010-69	2	
9	CABLE KIT, WISCONSIN 35HP THROTTLE REPLACEMENT	016016 <sup>1</sup>	1	
	Cable, G35 .078" Throttle	016126 <sup>1</sup>	1	
10	Bolt, Wisconsin 35hp Throttle Cable	015985 <sup>2</sup>	1	
11	Washer, .25ID X .62OD X .06Thk, Plated	016175 <sup>2</sup>	1	
12	Washer, .266 x .50 x .28 al-bronze	015986 <sup>2</sup>	1	
13	Boss, 1/4 x 1/2 x 1/4" al-bronze	015984 <sup>2</sup>	1	
14	Nut, 1/4-20 Nylon Lock	F05010-69 <sup>2</sup>	1	
15	Plate, Throttle Cable Retrofit	016128	1	
16	Bolt, 5/16-18 x 1/2" Hex Head Grade 5	F05006-15	1	
17	Washer, 5/16" Split Lock	F05011-13	1	
18	Bolt, 3/8-16 x 1 Hex Head	F05007-7	1	
19	Nut, 3/8-16 Nylon Lock	F05010-10	1	
	Instruction Sheet, D30/D40/G35 Throttle Cable Retrofit Installation	016015-840	1	
20	Nut, 5/16-18 Self-Locking Hex	F05010-20	1	
21	Bolt, 5/16-18 x 1 1/4" Hex Head Full Thread	F05006-18	1	
22	Nut, 5/16-18 Hex Lock	F05010-6	1	
23	SPRING, THROTTLE	016033	1	

<sup>1</sup> Replaces cable kit originally supplied prior to LT30 Rev. Super G5.00, LT40 Super Rev. G6.00, and LT30HD/40HD Super Rev. G9.00. .078" dia. cable 016126 replaces .059" dia. cable 014252 to provide improved durability. Kit includes hardware required to retrofit previous revisions. [See Section 3.7](#) for replacement components if throttle cable has been retrofitted.

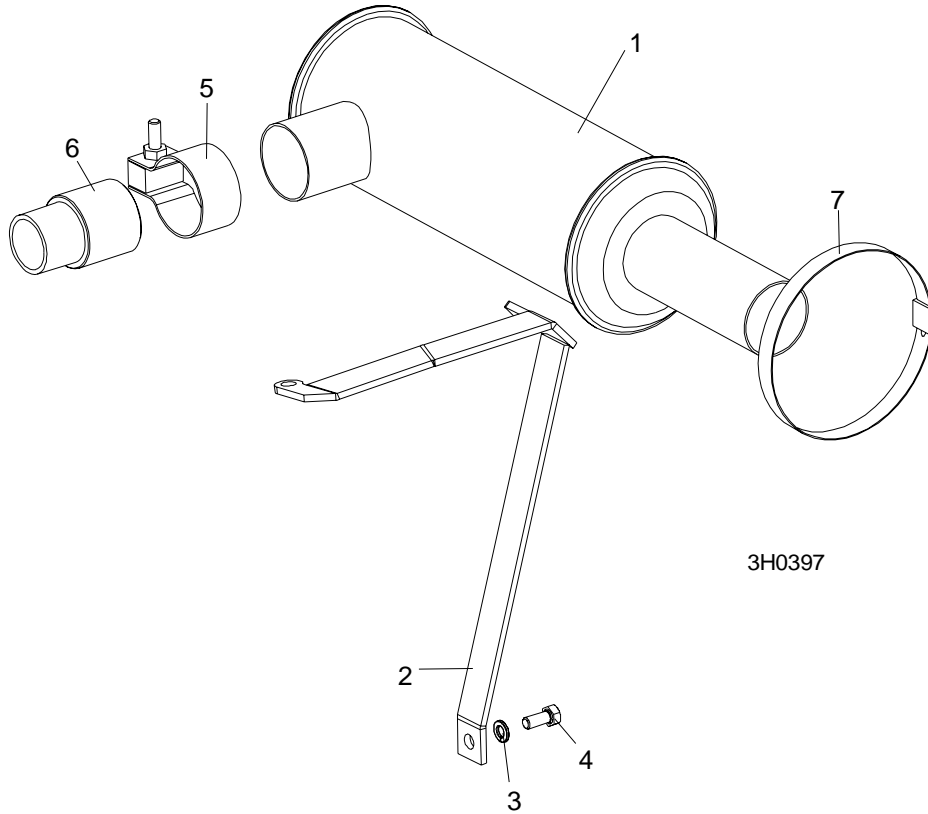
<sup>2</sup> Replaces cable clamp originally supplied with motor (no WM part# available) prior to LT30 Super Rev. G2.01, LT40 Super Rev. G3.01, LT30HD/40HD Super Rev. G6.01. Also replaces 015983 originally supplied prior to LT30 Super Rev. G5.00, LT40 Super Rev. G6.00, and LT30HD/40HD Super Rev. G9.00.

NOTE: 015983 bolt requires (1) F05011-11 washer, 015984 boss, 015986 washer, and F05010-69 lock nut.

# 3 Replacement Parts

## Muffler Assembly

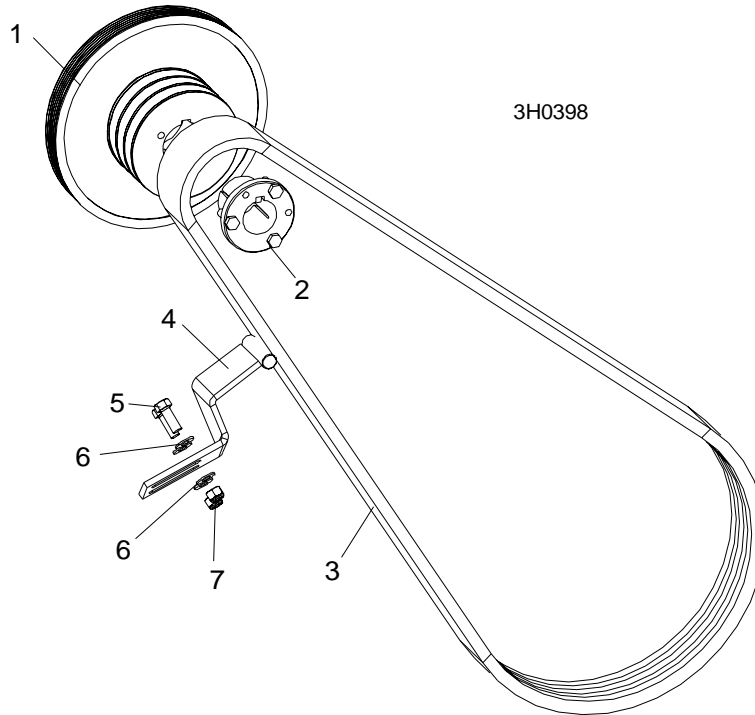
### 3.9 Muffler Assembly



REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
1	MUFFLER, WISCONSIN 35HP	014093	1	
2	BRACKET, MUFFLER MOUNT	014698	1	
3	WASHER, 1/2" SPLIT LOCK	F05011-13	1	
4	SCREW, 5/16-18 X 3/4" HEX HEAD CAP	F05006-5	1	
5	CLAMP, 2" MUFFLER	014205	1	
6	TUBE, MUFFLER ADAPTOR	014254	1	
7	CLAMP, 5" WORM	014096	1	

### 3.10 Drive Assembly

*LT30 Super*                      *Rev. H4.00+*  
*LT40 Super*                      *Rev. H5.00+*  
*LT30HD Super*                 *Rev. H8.00+*  
*LT40HD Super*                 *Rev. H8.00+*



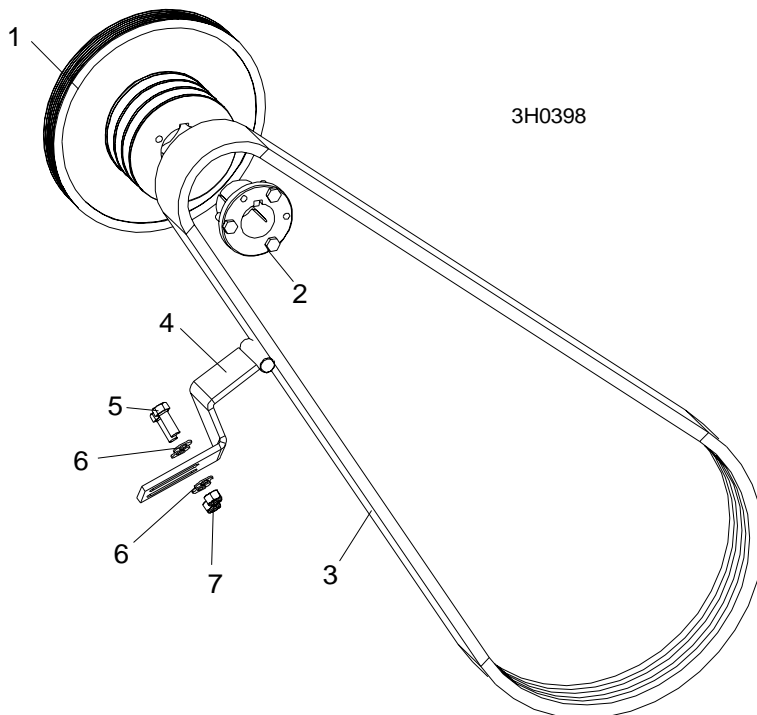
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
1	SHEAVE, 5V X 4.46" POLY V (GAS/DIESEL)	016533	1	
2	BUSHING, SH X 1 7/16"	016535	1	
3	BELT, 3/5VL760	016557	1	
4	BRACKET, DRIVE BELT SUPPORT	015058	1	
5	BOLT, 3/8-16 X1" HEX HEAD	F05007-7	2	
6	WASHER, 3/8" SAE FLAT	F05011-3	4	
7	NUT, 3/8-16 HEX NYLON LOCK	F05010-10	2	

# 3 Replacement Parts

## Drive Assembly

### 3.11 Drive Assembly

*LT30 Super*                      *Rev. F7.00 - H3.00*  
*LT40 Super*                        *Rev. F8.00 - H4.00*  
*LT30HD Super*                    *Rev. G1.00 - H7.00*  
*LT40HD Super*                    *Rev. G1.00 - H7.00*

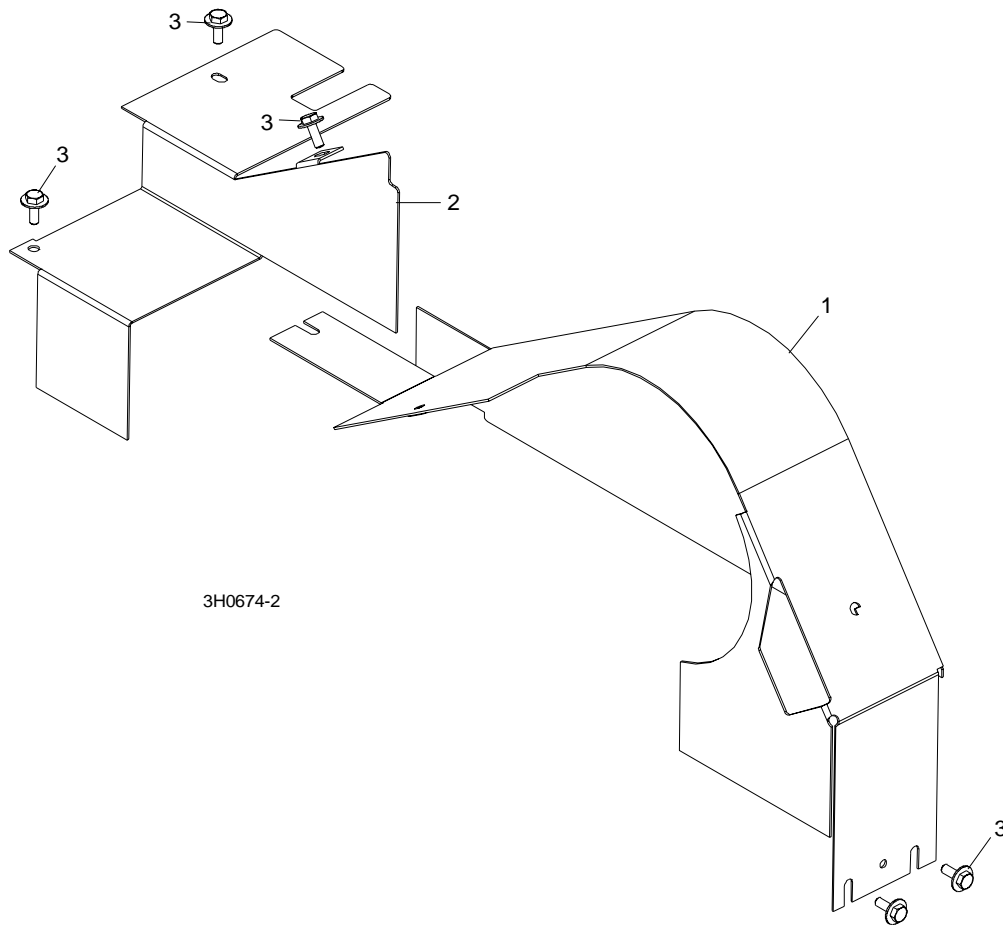


REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
1	PULLEY, G35 ENGINE POLY GROOVE	015349	1	
2	BUSHING, P1 1 7/16" W/KEY AND BOLTS	014460	1	
3	BELT, 3BX74 DRIVE	014249	1	
4	BRACKET, DRIVE BELT SUPPORT	015058	1	
5	BOLT, 3/8-16 X1" HEX HEAD	F05007-7	2	
6	WASHER, 3/8" SAE FLAT	F05011-3	4	
7	NUT, 3/8-16 HEX NYLON LOCK	F05010-10	2	



### 3.12 Engine Pulley Guards

*LT30 Super*                      *Rev. G6.00+*  
*LT40 Super*                      *Rev. G7.00+*  
*LT30HD Super*                  *Rev. H1.00+*  
*LT40HD Super*                  *Rev. H1.00+*



REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.
1	GUARD WELDMENT, G35 ENGINE PULLEY	023792 <sup>1</sup>	1
2	GUARD, G35 SIDE ENGINE PULLEY	023793 <sup>1</sup>	1
3	BOLT, 1/4-20 X 3/4" HEX HEAD WITH CONICAL WASHER	F05005-134	5

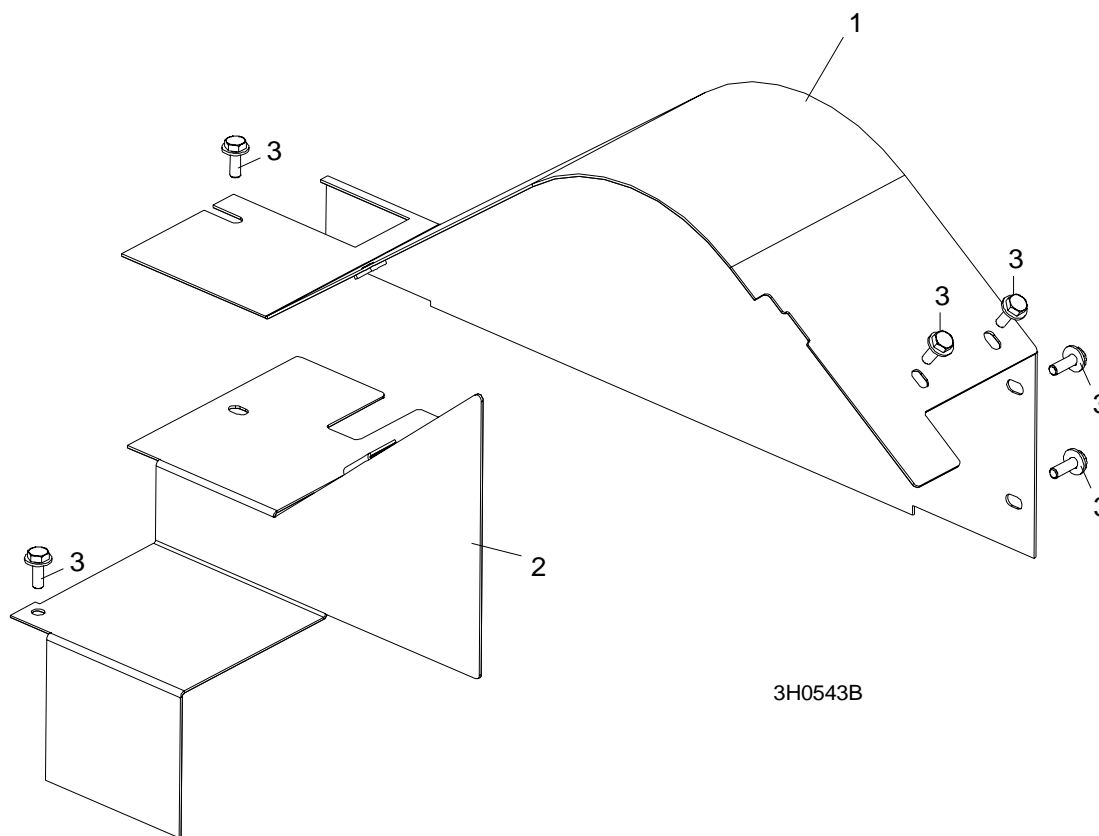
<sup>1</sup> Guards modified for 140 amp alternator supplied after LT30 Super Rev. G6.00+, LT40 Super Rev. G7.00+ and LT30HD/LT40HD Super Rev. H1.00+. [See Section 3.13](#) for covers used on previous revisions with 105 amp alternator.

# 3 Replacement Parts

## Engine Pulley Guards

### 3.13 Engine Pulley Guards

**LT30 Super**                      **Rev. F7.00 - G5.00**  
**LT40 Super**                      **Rev. F8.00 - G6.00**  
**LT30HD Super**                  **Rev. G1.00 - G9.00**  
**LT40HD Super**                  **Rev. G1.00 - G9.00**



REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
1	GUARD WELDMENT, G35 ENGINE PULLEY	015497	1	
2	GUARD, G35 SIDE ENGINE PULLEY	015498	1	
3	BOLT, 1/4-20 X 3/4" HEX HEAD WITH CONICAL WASHER	F05005-134 <sup>1</sup>	6	

<sup>1</sup> Replaces 1/4-20 x 3/4" hex head bolt (F05005-1) and 1/4" SAE flat washer (F05011-11) originally supplied prior to LT30 Super rev. G6.00, LT40 Super rev. G7.00 and LT30HD/40HD Super rev. H1.00.