

## How to use this manual

# A Few Words About Safety

## SERVICE INFORMATION

The service and repair information contained in this manual is intended for use by qualified, professional technicians. Attempting service or repairs without the proper training, tools, and equipment could cause injury to you and/or others. It could also damage this Honda product or create an unsafe condition.

This manual describes the proper methods and procedures for performing service, maintenance, and repairs. Some procedures require the use special tools. Any person who intends to use a replacement part, service procedure, or a tool that is not recommended by Honda must determine the risks to their personal safety and the safe operation of this product.

If you need to replace a part, use Honda Genuine parts with the correct part number or an equivalent part. We strongly recommend that you do not use replacement parts of inferior quality.

## For Your Customer's Safety

Proper service and maintenance are essential to the customer's safety and the reliability of this product. Any error or oversight while servicing this product can result in faulty operation, damage to the product, or injury to others.

### ⚠ WARNING

Improper service or repairs can create an unsafe condition that can cause your customer or others to be seriously hurt or killed.

Follow the procedures and precautions in this manual and other service materials carefully.

## For Your Safety

Because this manual is intended for the professional service technician, we do not provide warnings about many basic shop safety practices (e.g., Hot parts-wear gloves). If you have not received shop safety training or do not feel confident about your knowledge of safe servicing practices, we recommend that you do not attempt to perform the procedures described in this manual.

Some of the most important general service safety precautions are given below. However, we cannot warn you of every conceivable hazard that can arise in performing service and repair procedures. Only you can decide whether or not you should perform a given task.

### ⚠ WARNING

Failure to properly follow instructions and precautions can cause you to be seriously hurt or killed.

Follow the procedures and precautions in this manual carefully.

## Important Safety Precautions

Make sure you have a clear understanding of all basic shop safety practices and that you are wearing appropriate clothing and using safety equipment. When performing any service task, be especially careful of the following:

- Read all of the instructions before you begin, and make sure you have the tools, the replacement or repair parts, and the skills required to perform the tasks safely and completely.
- Protect your eyes by using proper safety glasses, goggles, or face shields anytime you hammer, drill, grind, or work around pressurized air, pressurized liquids, springs, or other stored-energy components. If there is any doubt, put on eye protection.
- Use other protective wear when necessary, for example gloves or safety shoes. Handling hot or sharp parts can cause severe burns or cuts. Before you grab something that looks like it can hurt you, stop and put on gloves.
- Protect yourself and others whenever you have equipment hoisted in the air. Anytime you lift this product with a hoist, make sure that the hoist hook is securely attached to the product.

Make sure the engine is off before you begin any servicing procedures, unless the instruction tells you to do otherwise. This will help eliminate several potential hazards:

- Carbon monoxide poisoning from engine exhaust. Be sure there is adequate ventilation whenever you run the engine.
- Burns from hot parts. Let the engine and exhaust system cool before working in those areas.
- Injury from moving parts. If the instruction tells you to run the engine, be sure your hands, fingers and clothing are out of the way.

Gasoline vapors and hydrogen gasses from batteries are explosive. To reduce the possibility of a fire or explosion, be careful when working around gasoline or batteries.

- Use only a nonflammable solvent, not gasoline, to clean parts.
- Never store gasoline in an open container.
- Keep all cigarettes, sparks, and flames away from the battery and all fuel-related parts.

## How to use this manual

## INTRODUCTION

This supplement covers the construction, function, and servicing procedures of the Honda GX120T2·GX160T2·GX200T2 Engines.

For service information that is not covered in this supplement, please refer to the GX120UT2·GX160UT2·GX200UT2 base shop manual (part number 62Z4H00) and supplements (part number 62Z4H00Z and 62Z4H00Y).

All information contained in this manual is based on the latest product information available at the time of printing. We reserve the right to make changes at anytime without notice.


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As you read this manual, you will find information that is preceded by a **NOTICE** symbol. The purpose of this message is to help prevent damage to this Honda product, other property, or the environment.

## SAFETY MESSAGES

Your safety and the safety of others are very important. To help you make informed decisions, we have provided safety messages and other safety information throughout this manual. Of course, it is not practical or possible to warn you about all the hazards associated with servicing these products. You must use your own good judgement.

You will find important safety information in a variety of forms, including:

- Safety Labels – on the product.
- Safety Messages – preceded by a safety alert symbol  and one of three signal words, DANGER, WARNING, or CAUTION.

These signal words mean:

**▲ DANGER** You WILL be KILLED or SERIOUSLY HURT if you don't follow instructions.

**▲ WARNING** You CAN be KILLED or SERIOUSLY HURT if you don't follow instructions.

**▲ CAUTION** You CAN be HURT if you don't follow instructions.

- Instructions – how to service these products correctly and safely.

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The marked sections contain no changes.  
They are not covered in this supplement.

How to use this manual

SYMBOLS

The symbols used throughout this manual show specific service procedures. If supplementary information is required pertaining to these symbols, it will be explained specifically in the text without the use of the symbols.

	Replace the part(s) with new one(s) before assembly.
	Use the recommended engine oil, unless otherwise specified.
	Use molybdenum oil solution (mixture of the engine oil and molybdenum grease in a ratio of 1:1).
	Use multi-purpose grease (lithium based multi-purpose grease NLGI #2 or equivalent).
	Use marine grease (water resistant urea based grease).
	Apply a locking agent. Use a medium strength locking agent unless otherwise specified.
	Apply sealant.
	Use automatic transmission fluid.
(O x O) (O)	Indicates the diameter, length, and quantity of metric bolts used.
page 1-1	Indicates the reference page.



# 1. SPECIFICATIONS

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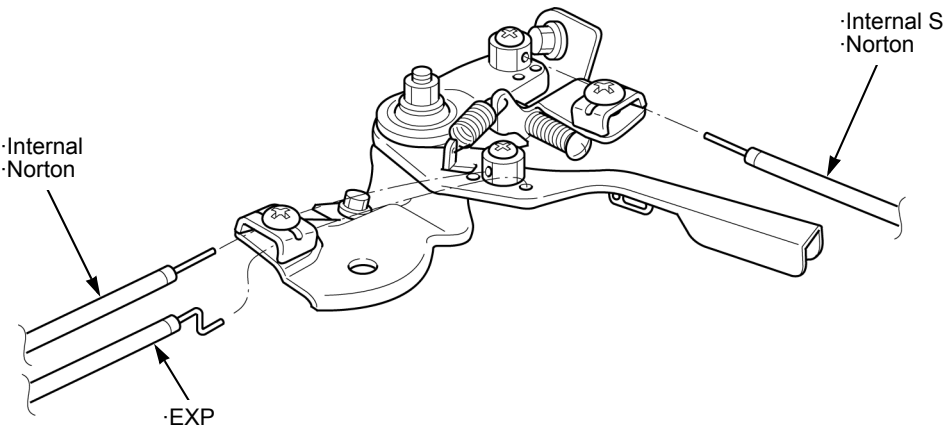
SPECIFICATIONS

P.T.O. TYPE VARIATION

GX120T2

P.T.O. type			KR	L						Q			
Type			ARH	L1C1	LH	LH2	LHL	LJ	LTK1	QD	QH	QHB 1	QMP 4
Air cleaner	Dual				○	○					○		
	Dual silent												
	Cyclone												
	Low profile												
	Oil bath						○		○			○	○
	Semi dry			○				○		○			
Muffler	Rammer		○										
	Standard			○	○	○	○			○	○	○	○
	Standard (With lower protector)							○	○				
	Silent												
	Low profile												
	Low profile (With protector)												
Rammer			○										
Spark arrester													
Fuel gauge													
Remote choke lever													
Control base	Manual			○									
	Remote*	Internal	○					○	○				○
		Internal S											
		EXP			○	○	○			○	○		
		Norton											
Fixed throttle operation													
Charge coil	1 A												
	3 A												
	7 A												
Lamp coil	12 V - 15 W												
	12 V - 25 W												
	12 V - 50 W												
Combination switch													
Starter motor													
Oil level switch													
Engine stop switch			○	○	○	○	○	○	○	○	○		
Oil alert unit													
Circuit protector													
Auto throttle													
Reduction	Gear (1/6)												
	Chain (1/2)	Without clutch		○	○	○	○	○	○				
		With clutch											
		Camshaft P.T.O.											
Chain (1/1)			○										

\*: Remote type



SPECIFICATIONS

P.T.O. type			Q		S								
Type			QTN	QX	S1P4	SAJ	SD	SD2	SJ	SK	SM11	SMJ	SYA
Air cleaner	Dual			○								○	
	Dual silent										○		
	Cyclone												
	Low profile												
	Oil bath		○										
	Semi dry				○	○	○	○	○	○			○
	Rammer												
Muffler	Standard		○	○	○		○	○		○	○		
	Standard (With lower protector)					○			○			○	
	Silent												
	Low profile												
	Low profile (With protector)												
	Rammer												
Spark arrester													
Fuel gauge												○	
Remote choke lever													
Control base	Manual												
	Remote	Internal			○	○			○			○	○
		Internal S											
		EXP	○	○			○	○		○			
		Norton									○		
Fixed throttle operation													
Charge coil	1 A												
	3 A												
	7 A												
Lamp coil	12 V - 15 W												○
	12 V - 25 W												
	12 V - 50 W				○								
Combination switch													
Starter motor													
Oil level switch				○								○	
Engine stop switch			○	○	○	○	○	○	○	○	○	○	
Oil alert unit				○								○	
Circuit protector													
Auto throttle													
Reduction	Gear (1/6)												
	Chain (1/2)	Without clutch											
		With clutch											
		Camshaft P.T.O.											
	Chain (1/1)												

SPECIFICATIONS

P.T.O. type			T		V				W		WB
Type			TH	TX	VSP	VSX	VSX1	VT	W1A 3	WMK	WBT
Air cleaner	Dual		○	○		○	○				
	Dual silent										
	Cyclone										
	Low profile										
	Oil bath										
	Semi dry				○			○	○	○	○
	Rammer										
Muffler	Standard		○	○		○	○	○	○	○	○
	Standard (With lower protector)										
	Silent										
	Low profile										
	Low profile (With protector)										
	Rammer										
Spark arrester											
Fuel gauge											
Remote choke lever											
Control base	Manual		○	○				○	○	○	
	Remote	Internal									○
		Internal S									
		EXP									
		Norton									
	Fixed throttle operation				○	○	○				
Charge coil	1 A										
	3 A										
	7 A										
Lamp coil	12 V - 15 W										
	12 V - 25 W										
	12 V - 50 W										
Combination switch											
Starter motor											
Oil level switch				○		○	○				
Engine stop switch			○	○	○	○	○	○	○	○	○
Oil alert unit				○		○	○				
Circuit protector											
Auto throttle											
Reduction	Gear (1/6)										
	Chain (1/2)	Without clutch									
		With clutch									
		Camshaft P.T.O.									
	Chain (1/1)										

SPECIFICATIONS

GX160T2

P.T.O. type			L				N	Q					
Type			LDW	LHB 3	LJG	LSK	NJG	QHB 1	QHP 1	QM	QMP B	QTB	QTD
Air cleaner	Dual			○					○				
	Dual silent												
	Cyclone												
	Low profile												
	Oil bath							○			○	○	○
	Semi dry		○		○	○	○			○			
Muffler	Rammer												
	Standard		○	○				○	○	○	○	○	
	Standard (With lower protector)				○	○	○						
	Silent												
	Low profile												
	Low profile (With protector)												
Rammer													
Spark arrester													
Fuel gauge					○	○	○						
Remote choke lever													
Control base	Manual												
	Remote	Internal			○	○	○	○			○		○
		Internal S											
		EXP	○	○					○	○		○	
		Norton											
Fixed throttle operation													
Charge coil	1 A												
	3 A												
	7 A												
Lamp coil	12 V - 15 W												
	12 V - 25 W												
	12 V - 50 W												
Combination switch													
Starter motor													
Oil level switch													
Engine stop switch			○	○	○	○	○		○	○	○	○	○
Oil alert unit													
Circuit protector													
Auto throttle													
Reduction	Gear (1/6)												
	Chain (1/2)	Without clutch	○	○	○	○							
		With clutch											
		Camshaft P.T.O.											
Chain (1/1)													

SPECIFICATIONS

P.T.O. type			Q		R			S					
Type			QTN	QX	R1P0	R1U0	RMD	SJG	SJH	SM11	SMJ	SMJ 1	SNX
Air cleaner	Dual			○							○	○	○
	Dual silent									○			
	Cyclone												
	Low profile												
	Oil bath		○										
	Semi dry				○	○	○	○	○				
	Rammer												
Muffler	Standard		○	○			○						
	Standard (With lower protector)				○	○		○	○	○		○	○
	Silent												
	Low profile										○		
	Low profile (With protector)												
	Rammer												
Spark arrester													
Fuel gauge							○				○	○	○
Remote choke lever													
Control base	Manual												
	Remote	Internal			○	○		○	○		○	○	○
		Internal S					○						
		EXP	○	○									
		Norton								○			
	Fixed throttle operation												
Charge coil	1 A					○							
	3 A												
	7 A												
Lamp coil	12 V - 15 W												
	12 V - 25 W												
	12 V - 50 W					○			○				
Combination switch													
Starter motor						○							
Oil level switch				○							○	○	○
Engine stop switch			○	○	○		○	○	○	○	○	○	
Oil alert unit				○							○	○	○
Circuit protector													
Auto throttle													
Reduction	Gear (1/6)												
	Chain (1/2)	Without clutch											
		With clutch			○	○	○						
		Camshaft P.T.O.											
	Chain (1/1)												

## SPECIFICATIONS

P.T.O. type			S		V							
Type			ST	SYA	VH	VHB	VPM 6	VSW 3	VSW 5	VSX	VSX1	VX
Air cleaner	Dual									○	○	○
	Dual silent											
	Cyclone											
	Low profile						○	○	○			
	Oil bath					○						
	Semi dry		○	○	○							
Rammer												
Muffler	Standard				○	○						○
	Standard (With lower protector)		○									
	Silent											
	Low profile											
	Low profile (With protector)							○	○			
	Rammer											
Spark arrester							○					
Fuel gauge								○	○			
Remote choke lever												
Control base	Manual				○	○						○
	Remote	Internal	○	○								
		Internal S										
		EXP										
		Norton										
	Fixed throttle operation						○	○	○	○	○	
Charge coil	1 A		○									
	3 A											
	7 A											
Lamp coil	12 V - 15 W			○								
	12 V - 25 W											
	12 V - 50 W											
Combination switch												
Starter motor			○									
Oil level switch							○	○	○	○	○	○
Engine stop switch					○	○	○			○	○	○
Oil alert unit							○	○	○	○	○	○
Circuit protector												
Auto throttle												
Reduction	Gear (1/6)											
	Chain (1/2)	Without clutch										
		With clutch										
		Camshaft P.T.O.										
Chain (1/1)												

SPECIFICATIONS

P.T.O. type			VE		W		WB
Type			VED	VED 3	W1B 0	WMK	WB1
Air cleaner	Dual						
	Dual silent						
	Cyclone						
	Low profile			○			
	Oil bath						
	Semi dry		○		○	○	○
Rammer							
Muffler	Standard		○		○	○	○
	Standard (With lower protector)						
	Silent						
	Low profile						
	Low profile (With protector)			○			
	Rammer						
Spark arrester				○			
Fuel gauge							
Remote choke lever							
Control base	Manual				○	○	
	Remote	Internal					○
		Internal S					
		EXP					
		Norton					
	Fixed throttle operation		○	○			
Charge coil	1 A						
	3 A						
	7 A						
Lamp coil	12 V - 15 W						
	12 V - 25 W						
	12 V - 50 W						
Combination switch							
Starter motor							
Oil level switch				○			
Engine stop switch			○		○	○	○
Oil alert unit				○			
Circuit protector							
Auto throttle							
Reduction	Gear (1/6)						
	Chain (1/2)	Without clutch					
		With clutch					
		Camshaft P.T.O.					
	Chain (1/1)						

SPECIFICATIONS

GX200T2

P.T.O. type			L			N		Q					
Type			LHB 2	LJG	LSK	NJG	NW	QAP W	QHB 1	QHP 1	QM	QMP 4	QTB
Air cleaner	Dual												
	Dual silent		○					○		○			
	Cyclone												
	Low profile												
	Oil bath						○		○			○	○
	Semi dry			○	○	○					○		
Muffler	Rammer												
	Standard		○	○	○	○	○	○	○	○	○	○	○
	Standard (With lower protector)												
	Silent												
	Low profile												
	Low profile (With protector)												
Rammer													
Spark arrester					○								
Fuel gauge				○	○	○							
Remote choke lever													
Control base	Manual												
	Remote	Internal		○	○	○	○						
		Internal S							○			○	
		EXP	○					○		○	○		○
		Norton											
	Fixed throttle operation												
Charge coil	1 A												
	3 A												
	7 A												
Lamp coil	12 V - 15 W												
	12 V - 25 W												
	12 V - 50 W												
Combination switch													
Starter motor													
Oil level switch								○					
Engine stop switch			○	○	○	○	○	○		○	○		○
Oil alert unit								○					
Circuit protector													
Auto throttle													
Reduction	Gear (1/6)												
	Chain (1/2)	Without clutch	○	○	○								
		With clutch											
		Camshaft P.T.O.											
Chain (1/1)													

SPECIFICATIONS

P.T.O. type			Q			S				V			
Type			QTD	QTN	QX	SJG	SM11	SMG 1	SMG 2	VHB	VSP	VSW	VX
Air cleaner	Dual												
	Dual silent				○		○	○			○		○
	Cyclone												
	Low profile											○	
	Oil bath		○	○						○			
	Semi dry					○			○				
	Rammer												
Muffler	Standard			○	○	○	○	○	○	○	○		○
	Standard (With lower protector)												
	Silent												
	Low profile												
	Low profile (With protector)											○	
	Rammer												
Spark arrester													
Fuel gauge						○						○	
Remote choke lever													
Control base	Manual									○			○
	Remote	Internal	○			○		○	○				
		Internal S											
		EXP		○	○								
		Norton					○						
	Fixed throttle operation										○	○	
Charge coil	1 A							○	○				
	3 A												
	7 A												
Lamp coil	12 V - 15 W												
	12 V - 25 W												
	12 V - 50 W												
Combination switch													
Starter motor								○	○				
Oil level switch					○			○			○	○	○
Engine stop switch			○	○	○	○	○			○	○		○
Oil alert unit					○						○	○	○
Circuit protector													
Auto throttle													
Reduction	Gear (1/6)												
	Chain (1/2)	Without clutch											
		With clutch											
		Camshaft P.T.O.											
	Chain (1/1)												

SPECIFICATIONS

P.T.O. type			VE		
Type			VEN	VES	VES1
Air cleaner	Dual				
	Dual silent				○
	Cyclone				
	Low profile		○	○	
	Oil bath				
	Semi dry				
	Rammer				
Muffler	Standard				○
	Standard (With lower protector)				
	Silent				
	Low profile				
	Low profile (With protector)		○	○	
	Rammer				
Spark arrester					
Fuel gauge					
Remote choke lever					
Control base	Manual				○
	Remote	Internal			
		Internal S			
		EXP			
		Norton			
	Fixed throttle operation		○	○	
Charge coil	1 A		○		
	3 A				
	7 A				
Lamp coil	12 V - 15 W				
	12 V - 25 W			○	○
	12 V - 50 W				
Combination switch					
Starter motor					
Oil level switch			○	○	○
Engine stop switch			○	○	○
Oil alert unit			○	○	○
Circuit protector					
Auto throttle			○	○	
Reduction	Gear (1/6)				
	Chain (1/2)	Without clutch			
		With clutch			
		Camshaft P.T.O.			
	Chain (1/1)				

SPECIFICATIONS

DIMENSIONS AND WEIGHTS SPECIFICATIONS

	P.T.O. type	GX120T2	GX160T2	GX200T2
Overall length	KR*	313 mm (12.3 in)	—	—
	L*	332 mm (13.1 in)	343 mm (13.5 in)	352 mm (13.9 in)
	N*	—	288.8 mm (11.37 in)	312 mm (12.3 in)
	Q*	305.5 mm (12.03 in)	312.5 mm (12.30 in)	321.5 mm (12.66 in)
	R*	—	391 mm (15.4 in)	—
	S*	297 mm (11.7 in)	304 mm (12.0 in)	313 mm (12.3 in)
	T*	305.5 mm (12.03 in)	—	—
	V*	315.5 mm (12.42 in)	322.5 mm (12.70 in)	331.5 mm (13.05 in)
	VE*	—	—	290.1 mm (11.42 in)
	W*	317.5 mm (12.50 in)	329.5 mm (12.97 in)	—
	WB*	284.5 mm (11.20 in)	291.5 mm (11.48 in)	—
Overall width	KR*	331 mm (13.0 in)	—	—
	L*	346 mm (13.6 in)	362 mm (14.3 in)	376 mm (14.8 in)
	N*	—	362 mm (14.3 in)	376 mm (14.8 in)
	Q*	346 mm (13.6 in)	362 mm (14.3 in)	376 mm (14.8 in)
	R*	—	362 mm (14.3 in)	—
	S*	346 mm (13.6 in)	362 mm (14.3 in)	376 mm (14.8 in)
	T*	346 mm (13.6 in)	—	—
	V*	346 mm (13.6 in)	362 mm (14.3 in)	376 mm (14.8 in)
	VE*	—	—	376 mm (14.8 in)
	W*	346 mm (13.6 in)	362 mm (14.3 in)	—
	WB*	346 mm (13.6 in)	362 mm (14.3 in)	—
Overall height	KR*	321 mm (12.6 in)	—	—
	L*	318 mm (12.5 in)	335 mm (13.2 in)	335 mm (13.2 in)
	N*	—	335 mm (13.2 in)	335 mm (13.2 in)
	Q*	318 mm (12.5 in)	335 mm (13.2 in)	335 mm (13.2 in)
	R*	—	335 mm (13.2 in)	—
	S*	318 mm (12.5 in)	335 mm (13.2 in)	335 mm (13.2 in)
	T*	318 mm (12.5 in)	—	—
	V*	318 mm (12.5 in)	335 mm (13.2 in)	335 mm (13.2 in)
	VE*	—	—	335 mm (13.2 in)
	W*	318 mm (12.5 in)	335 mm (13.2 in)	—
	WB*	318 mm (12.5 in)	335 mm (13.2 in)	—
Dry weight	KR*	16.5 kg (36.4 lbs)	—	—
	L*	14.0 kg (30.9 lbs)	16.1 kg (35.5 lbs)	17.1 kg (37.7 lbs)
	N*	—	15.1 kg (33.3 lbs)	16.1 kg (35.5 lbs)
	Q*	13.0 kg (28.7 lbs)	15.1 kg (33.3 lbs)	16.1 kg (35.5 lbs)
	R*	—	20.0 kg (44.1 lbs)	—
	S*	13.0 kg (28.7 lbs)	15.1 kg (33.3 lbs)	16.1 kg (35.5 lbs)
	T*	13.0 kg (28.7 lbs)	—	—
	V*	13.0 kg (28.7 lbs)	15.1 kg (33.3 lbs)	16.1 kg (35.5 lbs)
	VE*	—	—	16.1 kg (35.5 lbs)
	W*	13.0 kg (28.7 lbs)	15.1 kg (33.3 lbs)	—
	WB*	13.0 kg (28.7 lbs)	15.1 kg (33.3 lbs)	—
Operating weight	KR*	16.9 kg (37.3 lbs)	—	—
	L*	16.5 kg (36.4 lbs)	19.6 kg (43.2 lbs)	20.6 kg (45.4 lbs)
	N*	—	18.6 kg (41.0 lbs)	19.6 kg (43.2 lbs)
	Q*	15.5 kg (34.2 lbs)	18.6 kg (41.0 lbs)	19.6 kg (43.2 lbs)
	R*	—	24.0 kg (52.9 lbs)	—
	S*	15.5 kg (34.2 lbs)	18.6 kg (41.0 lbs)	19.6 kg (43.2 lbs)
	T*	15.5 kg (34.2 lbs)	—	—
	V*	15.5 kg (34.2 lbs)	18.6 kg (41.0 lbs)	19.6 kg (43.2 lbs)
	VE*	—	—	19.6 kg (43.2 lbs)
	W*	15.5 kg (34.2 lbs)	18.6 kg (41.0 lbs)	—
	WB*	15.5 kg (34.2 lbs)	18.6 kg (41.0 lbs)	—

\*: P. T. O. type (page 1-2).

## SPECIFICATIONS

## ENGINE SPECIFICATIONS

Model		GX120T2	GX160T2	GX200T2
Description code		GCBNT	GCBST	GCBUT
Type		4 stroke, overhead valve, single cylinder, inclined by 25°		
Displacement		118 cm <sup>3</sup> (7.2 cu-in)	163 cm <sup>3</sup> (9.9 cu-in)	196 cm <sup>3</sup> (12.0 cu-in)
Bore x stroke		60.0 x 42.0 mm (2.36 x 1.65 in)	68.0 x 45.0 mm (2.68 x 1.77 in)	68.0 x 54.0 mm (2.68 x 2.13 in)
Net power (SAE J1349) *1		2.6 kW (3.5 HP)/ 3,600 min <sup>-1</sup> (rpm)	3.6 kW (4.8 HP)/ 3,600 min <sup>-1</sup> (rpm)	4.1 kW (5.5 HP)/ 3,600 min <sup>-1</sup> (rpm)
Continuous rated power		2.1 kW (2.8 HP)/ 3,600 min <sup>-1</sup> (rpm)	2.9 kW (3.9 HP)/ 3,600 min <sup>-1</sup> (rpm)	3.7 kW (5.0 HP)/ 3,600 min <sup>-1</sup> (rpm)
Maximum net torque (SAE J1349) *1		7.3 N·m (0.7 kgf·m, 5.4 lbf·ft)/2,500 min <sup>-1</sup> (rpm)	10.3 N·m (1.1 kgf·m, 7.6 lbf·ft)/2,500 min <sup>-1</sup> (rpm)	12.4 N·m (1.3 kgf·m, 9 lbf·ft)/2,500 min <sup>-1</sup> (rpm)
Compression ratio		8.5 : 1	9.0 : 1	8.5 : 1
Fuel consumption (at continuous rated power)		1.0 Liter (0.26 US gal, 0.22 Imp gal)/h	1.4 Liters (0.37 US gal, 0.31 Imp gal)/h	1.7 Liters (0.45 US gal, 0.37 Imp gal)/h
Ignition system		C.D.I. (Capacitor Discharge Ignition) type magneto ignition		
Ignition timing		B.T.D.C. 20°/ 1,400 min <sup>-1</sup> (rpm)	B.T.D.C. 18°/ 1,400 min <sup>-1</sup> (rpm)	B.T.D.C. 20°/ 1,400 min <sup>-1</sup> (rpm)
Recommended spark plug	Except rammer type	BPR6ES (NGK)/W20EPR-U (DENSO)		
	Rammer type	BPR4ES (NGK)/ W14EPR-U (DENSO)	—	—
Lubrication system		Forced splash		
Oil capacity	Except rammer type	0.56 Liter (0.59 US qt, 0.49 Imp qt)	0.58 Liter (0.61 US qt, 0.51 Imp qt)	0.60 Liter (0.63 US qt, 0.53 Imp qt)
	Rammer type	0.40 Liter (0.42 US qt, 0.35 Imp qt) *2	—	—
Recommended oil		SAE 10W-30 API service classification SJ or higher		
Cooling system		Forced air		
Starting system		Recoil Starter	Recoil, Recoil and Starter motor	
Stopping system		Ignition exciter coil circuit open		
Carburetor (Rammer type)		Horizontal type, butterfly valve (float valve)	Horizontal type, butterfly valve	
Air cleaner (Rammer type)		Dual type, Dual silent type, Low profile type, Semi dry type, Oil bath type, (Rammer type)	Dual type, Dual silent type, Low profile type, Semi dry type, Oil bath type	Dual silent type, Low profile type, Semi dry type, Oil bath type
Governor		Mechanical centrifugal		
Breather system		Reed valve type		
Fuel used		Unleaded gasoline with a pump octane rating 86 or higher		
Fuel tank capacity		2.0 Liters (0.53 US gal, 0.44 Imp gal)	3.1 Liters (0.82 US gal, 0.68 Imp gal)	
Reduction case oil capacity	Chain type (Without clutch)	Shared with engine oil		
	Chain type (With clutch)	—	0.50 Liter (0.53 US qt, 0.44 Imp qt)	—
	Camshaft P.T.O.	—	Shared with engine oil	
Clutch	Type	—	Centrifugal	—
	Engagement start	—	1,800 min <sup>-1</sup> (rpm)	—
	Lock	—	2,200 min <sup>-1</sup> (rpm)	—

\*1: The power rating of the engine indicated in this document is the net power output tested on a production engine for the engine model and measured in accordance with SAE J1349 at 3,600 rpm (net power) and at 2,500 rpm (max net torque). Mass production engines may vary from this value. Actual power output for the engine installed in the final machine will vary depending on numerous factors, including the operating speed of the engine in application, environmental conditions, maintenance, and other variables.

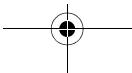
\*2: When tilted at 14°





## 2. SERVICE INFORMATION

MAINTENANCE STANDARDS .....2-2



SERVICE INFORMATION

MAINTENANCE STANDARDS

GX120T2

Part	Item		Standard	Service limit
Carburetor	Main jet	BE60N A	#62	—
		BE60W A	#62	—
		BE60Y A	#62	—
		BE60Z A	#60	—
		BE61L A	#62	—
		BE61M A	#62	—
		BE61N A	#60	—
		BE62J A	#62	—
		BE99A A	#60	—
		BE99D A	#62	—
	Pilot screw opening	BE60N A	2-1/8 turns out	—
		BE60W A	2-1/8 turns out	—
		BE60Y A	2-1/8 turns out	—
		BE60Z A	1-5/8 turns out	—
		BE61L A	2-1/8 turns out	—
		BE61M A	2-1/8 turns out	—
		BE61N A	1-5/8 turns out	—
		BE62J A	1-1/2 turns out	—
		BE99A A	1-5/8 turns out	—
		BE99D A	2-1/8 turns out	—
	Float height	BE60N A	13.7 mm (0.54 in)	—
		BE60W A	13.7 mm (0.54 in)	—
		BE60Y A	13.7 mm (0.54 in)	—
		BE60Z A	13.7 mm (0.54 in)	—
		BE61L A	13.7 mm (0.54 in)	—
		BE61M A	13.7 mm (0.54 in)	—
		BE61N A	13.7 mm (0.54 in)	—
		BE62J A	18.7 mm (0.74 in)	—
		BE99A A	13.7 mm (0.54 in)	—
		BE99D A	13.7 mm (0.54 in)	—

GX160T2

Part	Item		Standard	Service limit
Carburetor	Main jet	BE54D A	#68	—
		BE54G A	#70	—
		BE54H A	#68	—
		BE54J A	#68	—
		BE54K A	#68	—
		BE54M A	#70	—
		BE54P A	#70	—
		BE54Q A	#70	—
		BE66U A	#68	—
		BE66V A	#68	—
		BE67V A	#75	—
	Pilot screw opening	BE54D A	1-7/8 turns out	—
		BE54G A	2 turns out	—
		BE54H A	1-7/8 turns out	—
		BE54J A	1-7/8 turns out	—
		BE54K A	1-7/8 turns out	—
		BE54M A	2-1/2 turns out	—
		BE54P A	2-1/2 turns out	—
		BE54Q A	2-1/2 turns out	—
		BE66U A	1-7/8 turns out	—
		BE66V A	1-7/8 turns out	—
		BE67V A	2-7/8 turns out	—
	Float height		13.7 mm (0.54 in)	—

SERVICE INFORMATION

GX200T2

Part	Item		Standard	Service limit
Carburetor	Main jet	BE59L A	#75	—
		BE59M A	#75	—
		BE59N A	#75	—
		BE59Q A	#75	—
		BE59S A	#75	—
		BE59U A	#75	—
		BE59V A	#75	—
		BE59W A	#75	—
		BE69D A	#75	—
		BE74W A	#78	—
		BE74Y A	#78	—
	Pilot screw opening	BE59L A	1-7/8 turns out	—
		BE59M A	1-7/8 turns out	—
		BE59N A	1-7/8 turns out	—
		BE59Q A	1-7/8 turns out	—
		BE59S A	2-1/4 turns out	—
		BE59U A	2-1/4 turns out	—
		BE59V A	2-1/4 turns out	—
		BE59W A	2-1/4 turns out	—
		BE69D A	2-1/4 turns out	—
		BE74W A	2-3/4 turns out	—
		BE74Y A	2-3/4 turns out	—
	Float height		13.7 mm (0.54 in)	—



# MEMO





## 6. FUEL SYSTEM

6

### FUEL TANK REMOVAL/INSTALLATION ....6-2



6-1



## FUEL SYSTEM

### FUEL TANK REMOVAL/INSTALLATION

(\*) Refer to page of base shop manual (GX120UT2/160UT2/200UT2, P/N 62Z4H00).

#### ⚠ WARNING

Gasoline is highly flammable and explosive. You can be burned or seriously injured when handling fuel.

- Keep heat, sparks, and flame away.
- Handle fuel only outdoors.
- Wipe up spills immediately.

Remove the fan cover (page 5-2\*).

*Starter motor type:* Remove the starter motor (page 10-7\*).

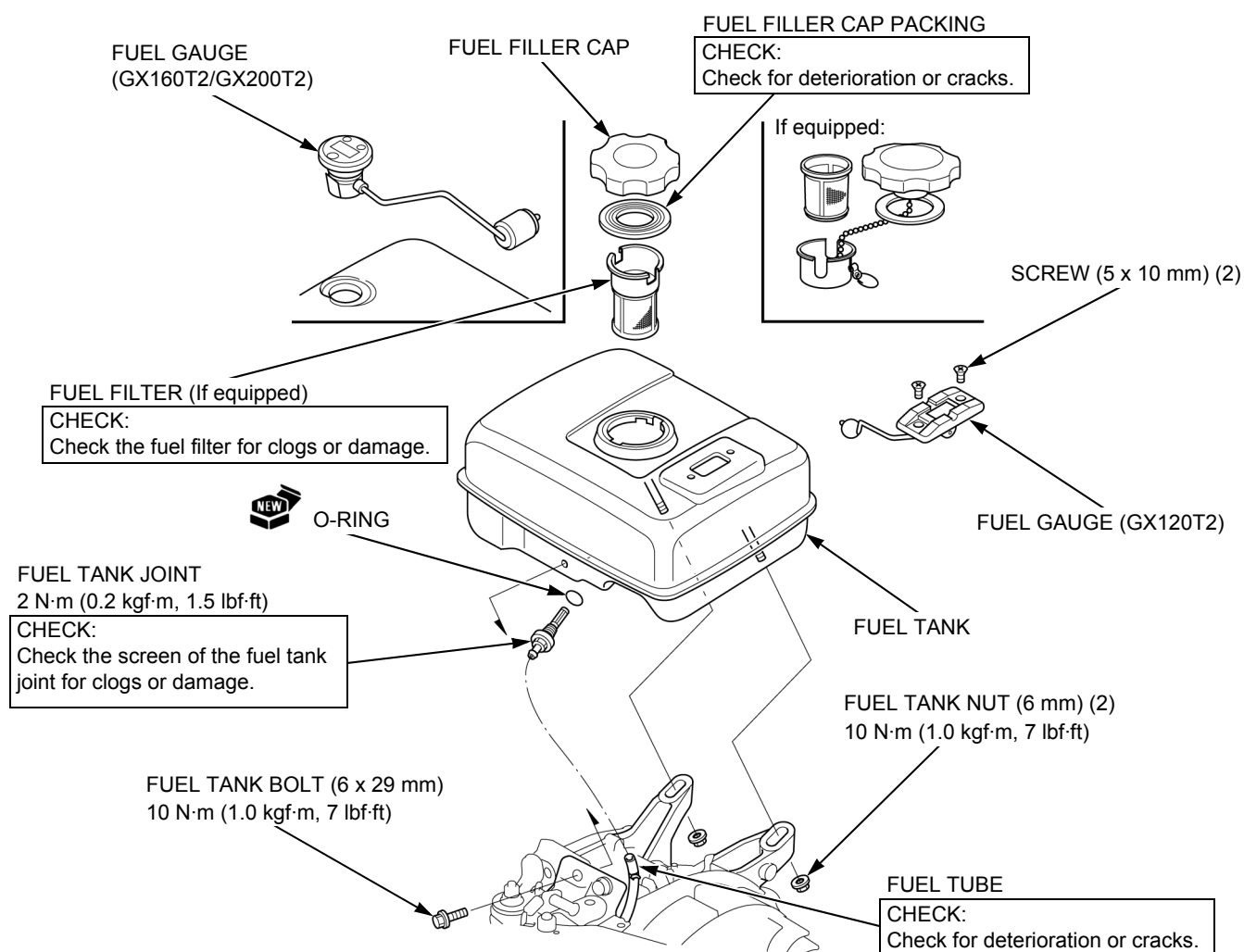
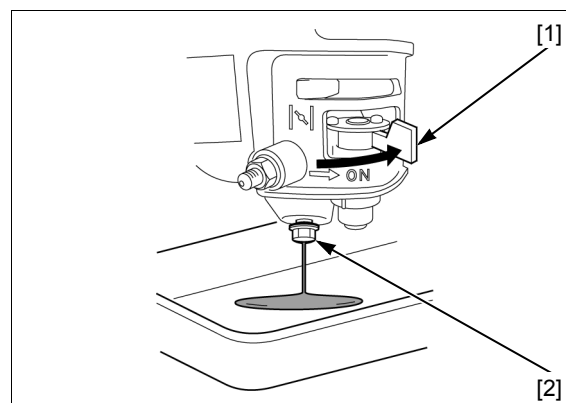
Place a suitable container under the carburetor.

Turn the fuel valve lever [1] to the ON position.

Loosen the drain screw [2] and drain the fuel.

NOTE:

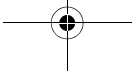
- Route the fuel tube properly (page 2-11\*).





# 12. MUFFLER

## MUFFLER REMOVAL/INSTALLATION.....12-2



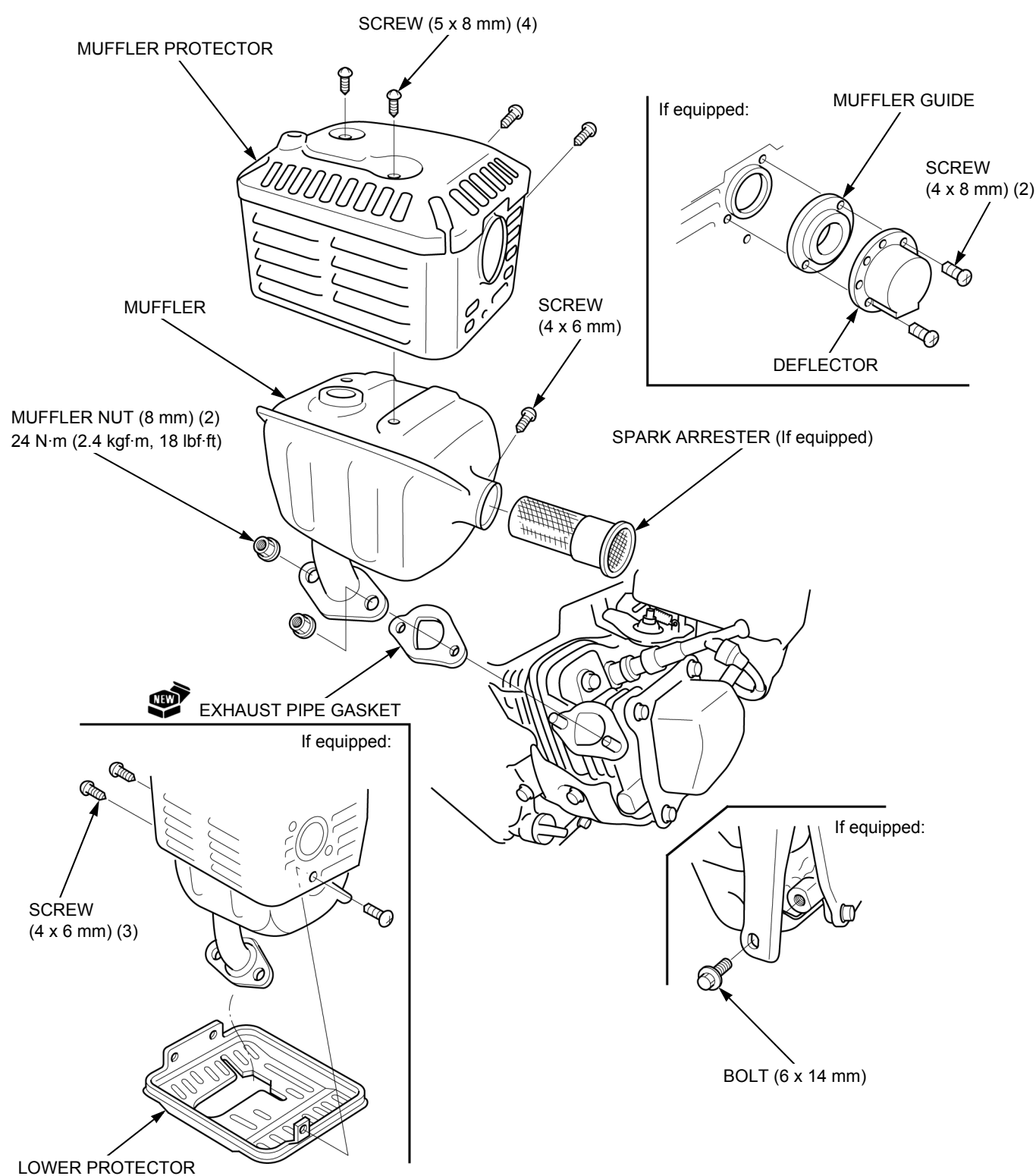
## MUFFLER

### MUFFLER REMOVAL/INSTALLATION

#### ⚠ CAUTION

The muffler becomes very hot during operation and remains hot for a while after stopping the engine. Be careful not to touch the muffler while it is hot. Allow it to cool before proceeding.

#### STANDARD, SILENT TYPE



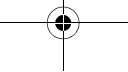


# 15. REDUCTION UNIT

REDUCTION UNIT DISASSEMBLY/  
ASSEMBLY .....15-2

REDUCTION UNIT BEARING/OIL SEAL  
REPLACEMENT ..... 15-3

REDUCTION UNIT INSPECTION .....15-3



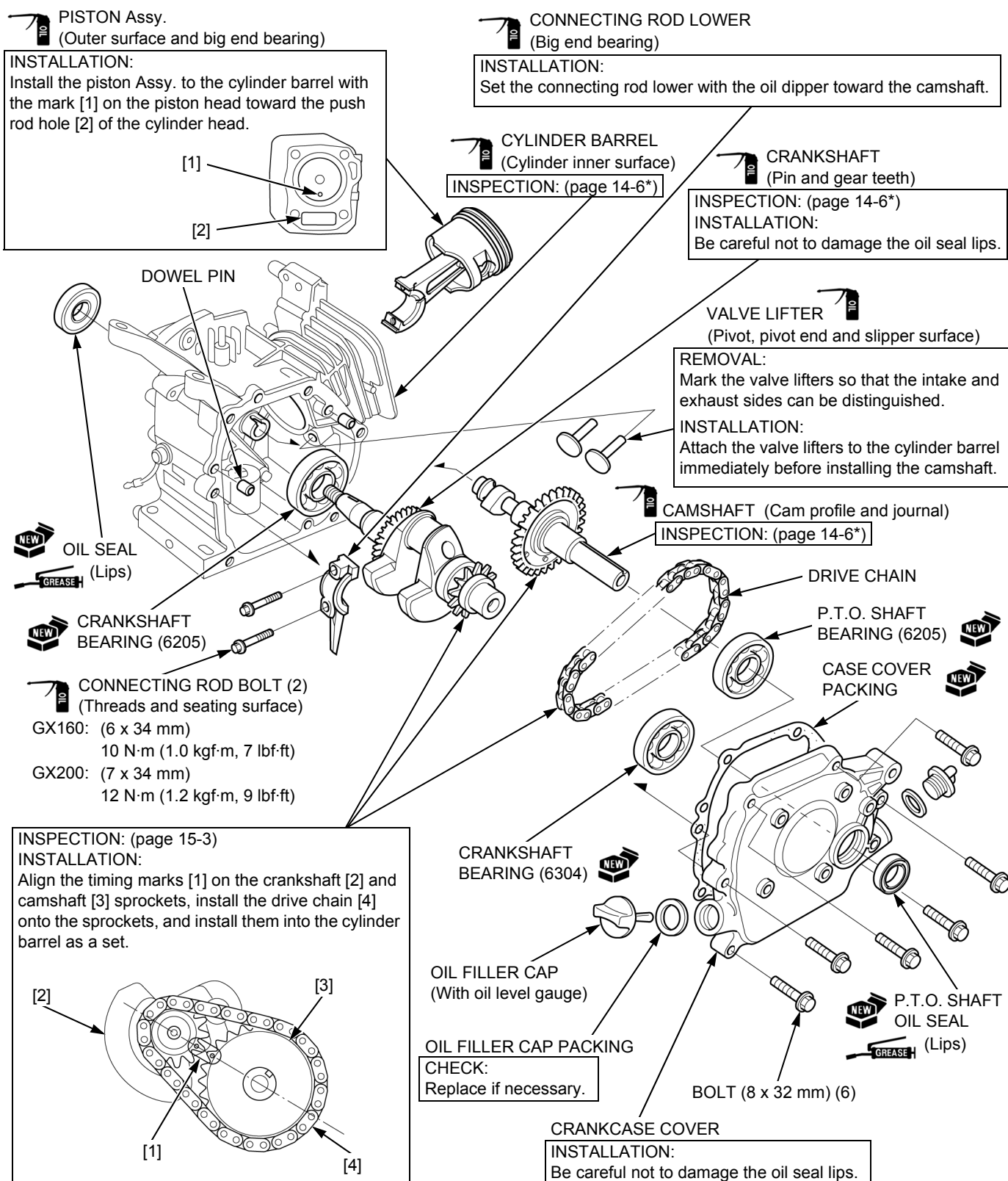
## REDUCTION UNIT

### REDUCTION UNIT DISASSEMBLY/ ASSEMBLY

#### CHAIN (1/2) CAMSHAFT P.T.O. TYPE

(\*) Refer to page of base shop manual (GX120UT2/  
160UT2/200UT2, P/N 62Z4H00).

Drain the engine oil (page 3-3\*).



## REDUCTION UNIT

## REDUCTION UNIT INSPECTION

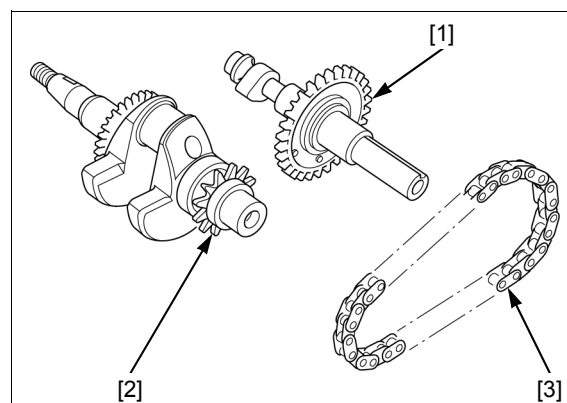
## CAMSHAFT, CRANKSHAFT, DRIVE CHAIN

Check the following for wear or damage:

- Camshaft (driven sprocket) [1]
- Crankshaft (drive sprocket) [2]
- Drive chain [3]

## NOTE:

- Replace the camshaft, crankshaft and drive chain as a set.



## REDUCTION UNIT BEARING/OIL SEAL REPLACEMENT

## CRANKCASE COVER SIDE BEARING

## CRANKSHAFT BEARING (6304)

Pull out the crankshaft bearing [1] using the special tools.

## TOOLS:

Bearing remover shaft set, 20 mm [2] 07936-3710600

Bearing remover shaft handle [3] 07936-3710100

Sliding hammer weight [4] 07741-0010201

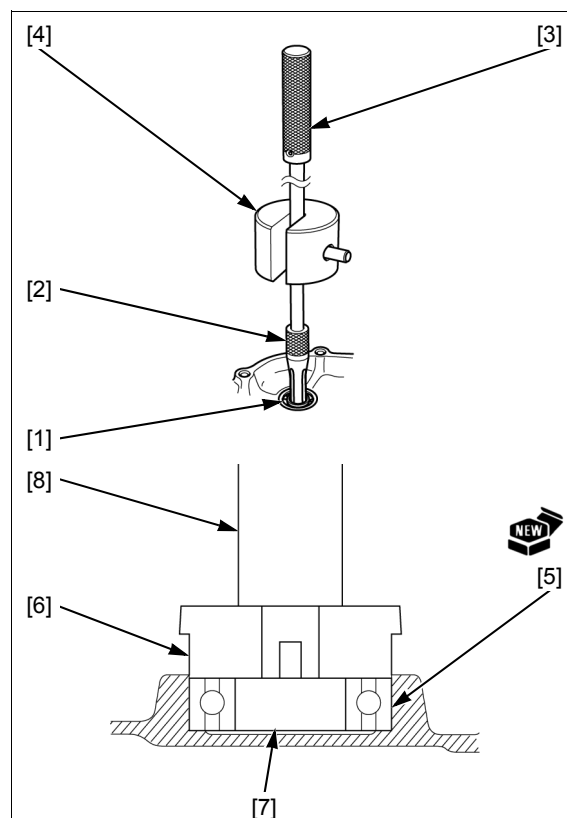
Drive a new crankshaft bearing [5] until it is fully seated on the end using the special tools.

## TOOLS:

Bearing driver attachment, 52 x 55 mm [6] 07746-0010400

Pilot, 20 mm [7] 07746-0040500

Driver handle [8] 07749-0010000



# REDUCTION UNIT

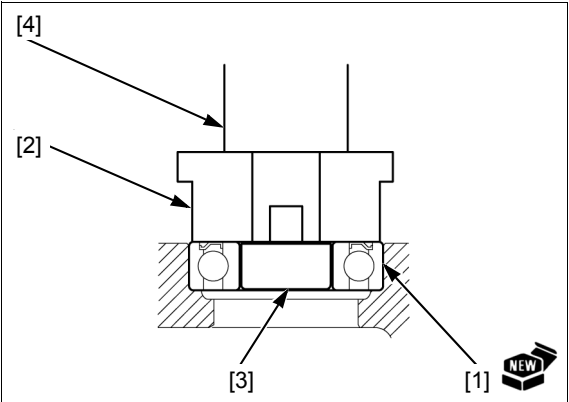
## P.T.O. shaft bearing (6205)

Remove the oil seal and drive out the P.T.O. shaft bearing.

Drive a new P.T.O. shaft bearing [1] until it is fully seated on the end using the special tools.

### TOOLS:

Bearing driver attachment, 52 x 55 mm [2]	07746-0010400
Pilot, 25 mm [3]	07746-0040600
Driver handle [4]	07749-0010000



## P.T.O. SHAFT OIL SEAL

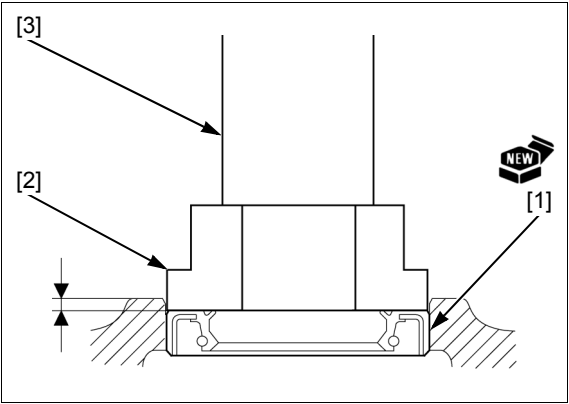
Remove the oil seal from the chain case cover.

Drive a new oil seal [1] in the position as shown using the special tools.

**INSTALLATION HEIGHT: 1.5 mm (0.06 in)**

### TOOLS:

Bearing driver attachment, 37 x 40 mm [2]	07746-0010200
Driver handle [3]	07749-0010000





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