

OWNERS MANUAL

MEDIUM CONCRETE SAWS



**C1316SS
C1320SS**

**MODELS:
C1316SM
C1320SM**

**C2016SS
C2020SS
C2024SS**

FORM C2020SS rev 5-11



WARRANTY

Norton warrants all products manufactured by it against defects in workmanship or materials for a period of one (1) year from the date of shipment to the customer.

The responsibility of Norton under this warranty is limited to replacement or repair of defective parts at Norton's Stephenville, Texas facility, or at a point designated by it, of such part as shall appear to us upon inspection at such point, to have been defective in material or workmanship, with expense for transportation borne by the customer.

In no event shall Norton be liable for consequential or incidental damages arising out of the failure of any product to operate properly.

Integral units such as **gasoline engines, electric motors, batteries, tires, transmissions, etc.**, are excluded from this warranty and are subject to the prime manufacturer's warranty.

This warranty is in lieu of all other warranties, expressed or implied, and all such other warranties are hereby disclaimed.

Important: Before placing equipment in operation, record the following information.

MODEL: _____ **SERIAL NO.** _____

PURCHASE FROM: _____

ADDRESS: _____

CITY _____ **STATE** _____ **ZIP** _____

TELEPHONE NO. _____

Before using this equipment, make sure that person using it read and understand the instructions in this owners manual.



The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm

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Read Owners Manual Before Use



Safety Alert Symbol: Information Following This Symbol Is Very Important.

I. PREPARATION

A. Safety Precautions

Important! The following safety precautions must always be observed.

Hazard Symbols



Fuel (gasoline) is extremely flammable and its vapors can explode if ignited. Store gasoline only in approved containers, in well ventilated, unoccupied areas approved, and away from sparks or flames. Don not fill the saw fuel tank while the engine is hot or running. Do not start the engine near spilled fuel. Never use the fuel as a cleaning agent



Engine components can get extremely hot from operation. To prevent burns, do not touch the engine or related parts while the engine is running or immediately after it is turned off. Never operate the engine with any heat shields or guards removed.



Keep all guard in place when operating any piece of equipment



Keep hands, feet, hair, and clothing away from all rotating parts



Lethal Exhaust Gas use only in well ventilated areas. Engine exhaust gases contain poisonous carbon monoxide which is orderless, colorless, and can cause death if inhaled. Avoid inhaling exhaust fumes, and never run the engine in a closed building or confined area



Never tamper with the governor components of settings to increase the maximum speed. Severe personal injury and damage to the engine or equipment or equipment can result if operated at speed above maximum. Always obey the maximum speed rating of blade.



DO NOT LIFT THE SAW BY THE HANDLE BARS

WARNING

Dust and Silica Warning

Grinding/cutting/drilling of masonry, concrete, metal and other materials can generate dust, mists and fumes containing chemicals known to cause serious or fatal injury or illness, such as respiratory disease, cancer, birth defects or other reproductive harm. If you are unfamiliar with the risks associated with the particular process and/or material being cut or the composition of the tool being used, review the material safety data sheet and/or consult your employer, the material manufacturer/supplier, governmental agencies such as OSHA and NIOSH and other sources on hazardous materials and make certain to comply with all product warnings and instructions for the safe and effective use of the material being cut. California and some other authorities, for instance, have published lists of substances known to cause cancer, reproductive toxicity, or other harmful effects.

Control dust, mist and fumes at the source where possible. In this regard use good work practices and follow the recommendations of the manufacturer/supplier, OSHA/NIOSH, and occupational and trade associations. Water should be used for dust suppression when wet cutting is feasible. When the hazards from inhalation of dust, mists and fumes cannot be eliminated through engineering controls such as vacuum and/or water mist, the operator and any bystanders should always wear a respirator approved by NIOSH/MSHA for the material being cut.

Use Approved:



Eye Protection



Hearing Protection



Respiratory Protection



Head Protection

1. Before mounting any blade on the saw, the blade should be inspected for any damage which might have occurred during shipment, handling or previous use.
2. The blade collars and arbors should be cleaned and examined for damage before mounting the blade.
3. The blade must be properly fitted over the arbor with the drive pin on the outside collar projecting through the drive pin hole on the blade and inside collar.
4. The blade shaft nut, which is a left hand thread nut, must be tightened securely against the outside blade shaft collar.
5. The blade must be operated within the specified maximum operating speed listed on the blade.
6. Turn water control valve to full to provide adequate coolant (5 to 8 gallons per minute) for diamond blades and wet cutting abrasive blades. Insufficient coolant could result in severe blade breakage or diamond segment separation.
7. The blade guard must be in place with the nose guard down and locked when the saw is running.
8. The operator should wear safety glasses and any other appropriate safety equipment.
9. When starting the saw, the operator should stand away and to the side of the blade.
10. If for any reason the saw should stall in the cut, raise the blade out of the cut. Check the outside blade shaft collar and nut for tightness. Inspect the blade for damage before restarting the saw. Use caution when resuming a cut. Be certain that the blade is in alignment with the previous cut.
11. During cutting operations, do not exert excess side pressure on the handles as a method of steering. Do not force the blade into the cut by lowering the blade too fast or by pushing the saw too fast.



You Are Responsible For Your Safety!!!

I. PREPARATION

B. Assembly

The self-propelled concrete saws are shipped completely assembled and ready for use except for diamond blade, gasoline, oil, and handle bar. Inspect the saw for shipping damage. If any damage is found, contact the shipper immediately and file a freight claim. The Norton Company is not responsible for any freight-related damages. Remove the saw from the pallet. Reverse the position of the handlebars so that the handle bar sticks out towards the operator. Adjust the handlebars to the desired height. Attach the handlebars to the saw with the supplied hardware. For electric start models fill and check the electrolyte level and charge the battery. Read and understand the remaining sections of this Owners Manual. NOTE: Do not install the blade until it is time to use the saw. ANSI regulations prohibit the transportation of any concrete saw with the blade installed.

C. C13xx/C20xx Concrete Saw Specifications

Dimensions/Weight	C1316SS C1320SS	C1316SM C1320SM	C2016SS C2020SS C2024SS
Length (Transport)	56 inch (1142 mm)	56 inch (1142 mm)	56 inch (1142 mm)
Width	26 inch (660 mm)	26 inch (600 mm)	26 inch (600 mm)
Height	40 inch (1016 mm)	40 inch (1016 mm)	40 inch (1016 mm)
Weights	385 lbs (175 kg)	405 lbs (175 kg)	428 lbs (195 kg)
Engine			
Engine Mfg.	Honda	Honda	Honda
Model	GX390	GX390	GX620
Spec No.	GX390K1QXC9	GX390UT1QAE2	GX620TXF2*
Engine Type	Single Cylinder 4 Cycle	Single Cylinder 4 Cycle	Two Cylinders 4 Cycle
Horse Power	13 hp (9.5kW) @ 3,600 rpm	13 hp (9.5kW) @ 3,600 rpm	20 hp (14.9kW) @ 3,600 rpm
Max Torque	19.5 ft-lbs (26.5 Nm, 2.7 kgf-m) @ 2,500 rpm	19.5 ft-lbs (26.5 Nm, 2.7 kgf-m) @ 2,500 rpm	32.5 ft-lbs (44.13 Nm, 4.50 kgf-m) @ 2,500 rpm
Cooling System	Air	Air	Air
Oil Capacity	1.1 liter (1.16 US qt)	1.1 liter (1.16 US qt)	1.8 liter (1.90 US qt)
Fuel Capacity	6.5 liter (1.79 US gal)	6.5 liter (1.79 US gal)	8.03 liter (2.12 us gal)
Fuel Type	Unleaded Gasoline (86 pump octane)	Unleaded Gasoline (86 pump octane)	Unleaded Gasoline (86 pump octane)
Low Oil Sensor	Yes	Yes	Yes
Air Filtration	Four Stage Honda Cyclone	Two Stage Honda	Four Stage Honda
Start Type	Manual	Electric	Electric
Characteristics			
Max Blade	20" (356 mm)	20" (356 mm)	24" (406 mm)
Depth of Cut 24" (406 mm)	-NA-	-NA-	9-1/2 inch (241 mm)
20" (356 mm)	7-1/2 inch (191 mm)	7-1/2 inch (191 mm)	7-1/2 inch (191 mm)
16" (305 mm)	5.50" (140 mm)	5.50" (140 mm)	5.50" (140 mm)
Arbor Bore	1 inch (25.4 mm)		
Blade Shaft Locking Device	Machined Into Flats Of Tight Collar		
Blade Shaft Speed	2600 rpm,		
Depth Control	Hand Wheel With Screw Feed		
Depth Lock	Standard		
Number Of V-Belts	4		
Blade Guard Type	Pivoting All Steel Construction		
Right or Left Side Cutting	Standard		
Lifting Bale	Built In		
Handle Bars	Adjustable		
Recessed Rear Wheels	Standard		
Front Wheel	Wheel 5 x 2 x 3/4 With Roller Bearing		
Rear Wheel	Wheel 6 x 2 x 3/4 With Roller Bearing		

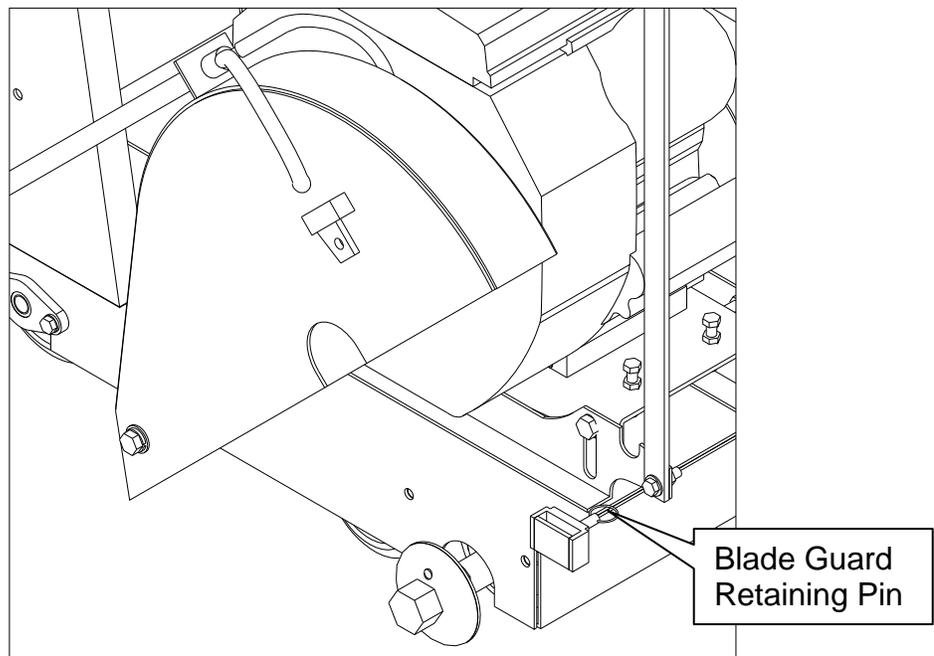
II. OPERATION



Read and understand this manual before running or using the machine!

A. Installing the Blade

1. Insure that the Ignition Power Key Switch is in the OFF position and then disconnect the spark plug.
2. Remove the blade shaft nut, (NOTE: Operator's Right side is a left hand thread and the Operator's Left side is right hand thread), and remove the outside collar. Rotate the Blade Guard to gain better access to the Blade Shaft Nut, Loose Collar, Blade, and Tight Collar. To Rotate the Blade Guard pull the Blade Guard Retaining Pin out away from the Blade Guard Frame Bayonet and the rotate the Blade Guard up and out of the way.



Blade Guard Retaining Pin with Guard Rotated for Access to Blade Shaft Nut and Collars

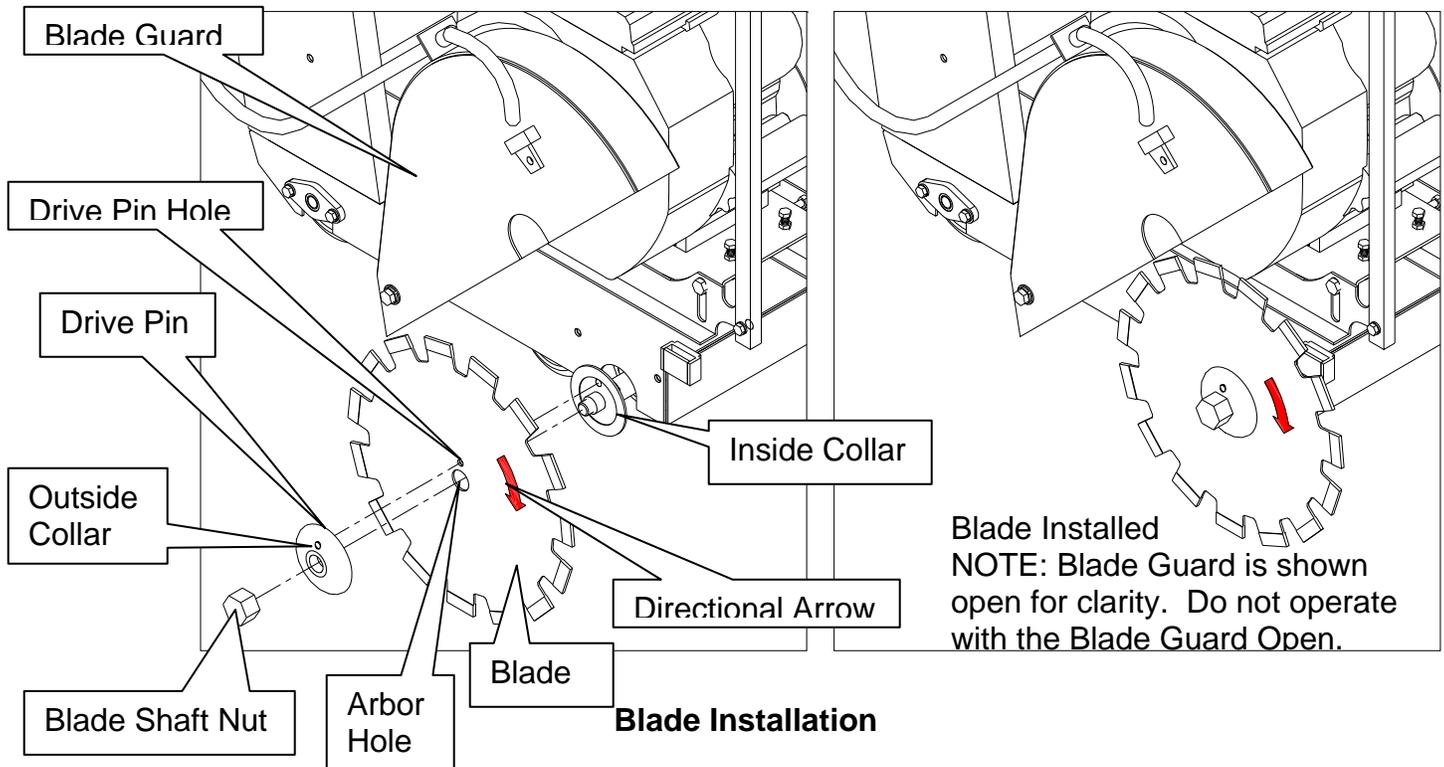
3. Clean off any foreign particles on the clamping surfaces of both collars and on the mounting surface of the blade and also inspect the drive pin for damage. Replace any damage collars or pins before using the machine.

4. Inspect the blade for any damage, cracks, burnt or blue areas, missing segments, and roundness of blade. Also inspect the arbor hole and drive pin hole to insure both are round. If any problems are found do not use the blade. In addition check that the blade is the correct specification for the application.



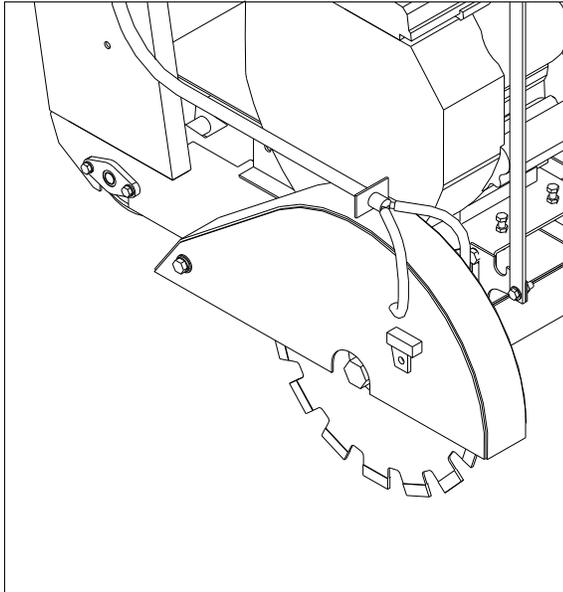
Use only Clipper Diamond Blades. This machine was not designed for the use with abrasive blades.

5. Place the blade on the blade shaft, lining up the drive pin hole in the blade with the drive pinhole in the inside collar. **NOTE:** Diamond blades are direction dependent so verify the direction of rotation of the blade. The machine will rotate the blade into the work surface (down cut). Place the blade guard in position and insert the blade guard retainer pin. Never operate the saw without the blade guard or blade guard retainer pin in position **See the following diagram *Blade Installation*.**



6. Slide the outside blade shaft collar onto the blade shaft. The drive pin on the outside collar must project through the drive pin hole in the blade and into the inside collar.
7. Tighten the blade shaft nut (counter-clockwise for the Operator's Right Hand side and clockwise for the Operator's Left hand side).

8. Insure that the Blade Guard is lowered and the Blade Guard Locking pin is secure. Close Blade Guard Nose. **See *Blade Installed* diagram below.**



Blade Installed

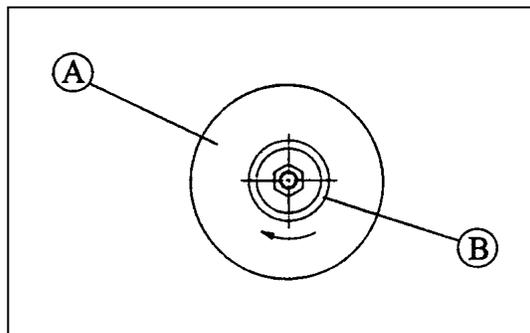
9. Reconnect the spark plug.



Observe rotation arrow on blade and do not exceed maximum RPM stamped on blade.



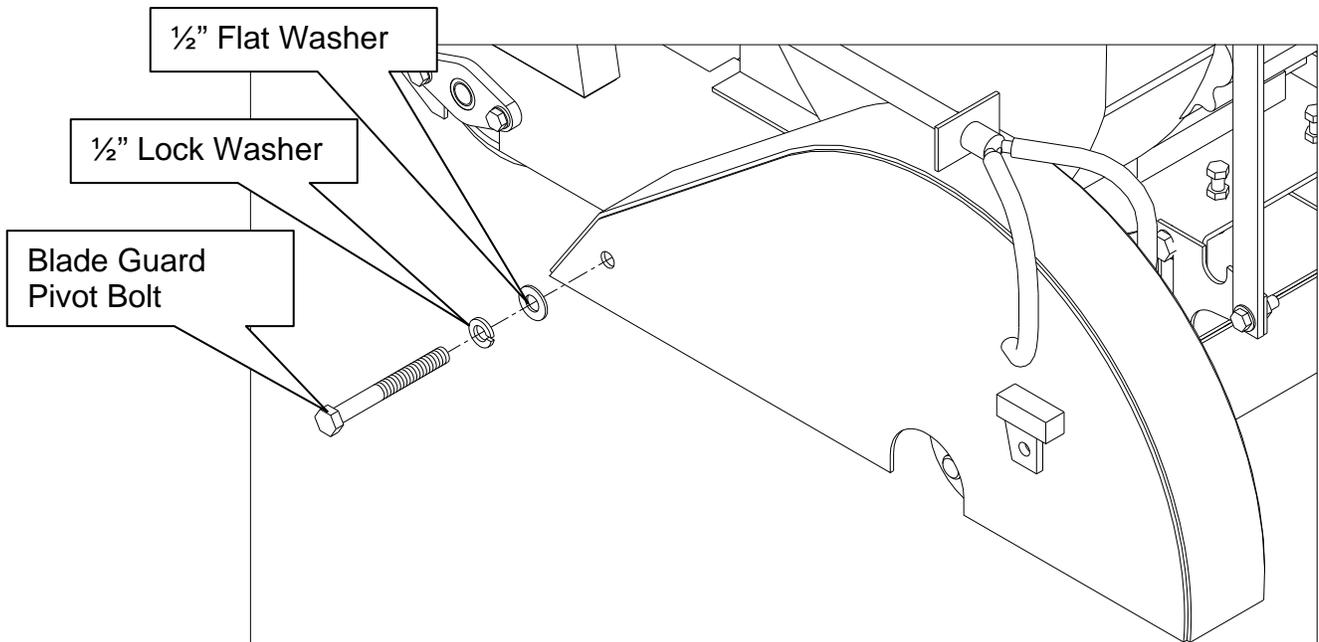
NOTE: Organic bonded blades (A) must have a blotter. The blotter (B) must extend past the blade collar contact area as shown.



Blades Use Only Norton Clipper Diamond Blades

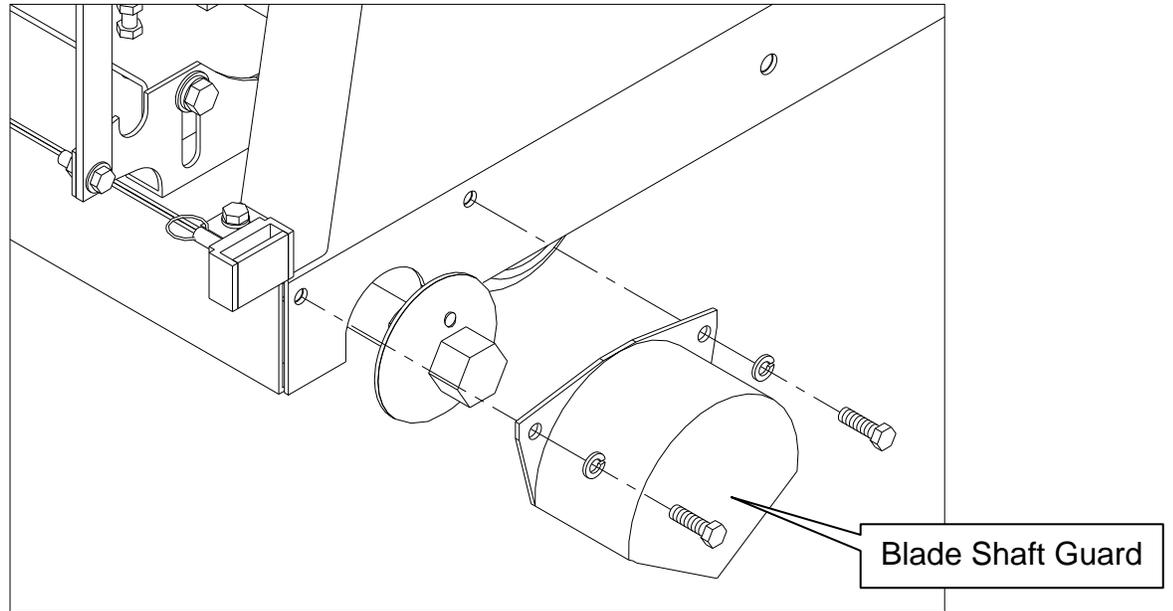
B. Changing the Blade Side:

1. Insure that the Ignition Power Key Switch is in the OFF position and then disconnect the spark plug.
2. Remove the blade shaft nut, (NOTE: Operator's Right side is a left hand thread and the Operator's Left side is right hand thread), and remove the outside collar.
3. Clean off any foreign particles on the clamping surfaces of both the outside and inside collars and on the mounting surface of the blade and inspect the both collars for any damage and also inspect the drive pin for damage. Reinstall the Blade Shaft Collars to the machine.
NOTE: Replace any damage collars or pins before using the machine.
4. Inspect the blade for any damage, cracks, burnt or blue areas, missing segments, and roundness of blade. Also inspect the arbor hole and drive pin hole to insure both are round. If any problems are found do not use the blade. In addition check that the blade is the correct specification for the application.
5. Remove the Blade Guard from the machine by unscrewing the Blade Guard Pivot Bolt from the rear of the Blade Guard. **NOTE:** Keep the $\frac{1}{2}$ " Flat Washer and $\frac{1}{2}$ " Lock Washer on the Bolt.



Blade Pivot Bolt Removal

6. Remove the Blade Shaft Guard by removing the Blade Shaft Guard retaining bolts. **See *Blade Shaft Guard Removal* diagram below.**



Blade Shaft Guard Removal

7. Place the blade on the blade shaft, lining up the drive pin hole in the blade with the drive pinhole in the inside collar. NOTE: Diamond blades are direction dependent so verify the direction of rotation of the blade. The machine will rotate the blade into the work surface (down cut).
7. Slide the outside blade shaft collar onto the blade shaft. The drive pin on the outside collar must project through the drive pin hole in the blade and into the inside collar.
8. Tighten the blade shaft nut (counter-clockwise for the Operator's Right Hand side and clockwise for the Operator's Left hand side).
9. Place the blade guard in position and insert and tighten the Blade Guard Pivot Bolt. Never operate the saw without the blade guard or blade guard retainer pin in position **See the diagram Blade Shaft Installation** on page 10 and **Blade Installed** on page 11.
10. Insure that the Blade Guard is lowered and the Blade Guard Locking pin is secure. Close Blade Guard Nose.
11. Attach the Blade Shaft Guard to the opposite side of the machine.
12. Remove the Pointer and reattach it to the Operators Left hand side of the machine. NOTE: Reverse the orientation of the Pointer
13. Reconnect the spark plug.

C. Engine Operation

Prior to attempting to operate the engine, read the information contained in the engine owner's manual. An engine owner's manual is supplied with every gasoline powered concrete saw.

1. **Check Oil:** Add oil if low. Refer to the engine owner's manual for the recommended SAE viscosity grades. Capacity of oil is 1.1 liters (1.16 US qt)
2. **Check Fuel:** Fill if low. Use only unleaded gasoline with a pump sticker octane rating of 86 or higher is recommended. **Never use an oil and gasoline mixture!**
3. **Air Cleaner:** Never run the engine without the air cleaner! Rapid engine wear will result from contaminants being drawn through the carburetor and into the engine.
4. **Engine Starting:** Refer to the engine owner's manual for proper engine starting procedure.
5. **Engine Speed:** Always run the engine and the proper speed for the blade being used. Never run the blade at a higher speed that it is rated for. See the Blade Speed chart located on the machine's console or located in the manual under the heading "Operating the Saw"

D. Water Supply

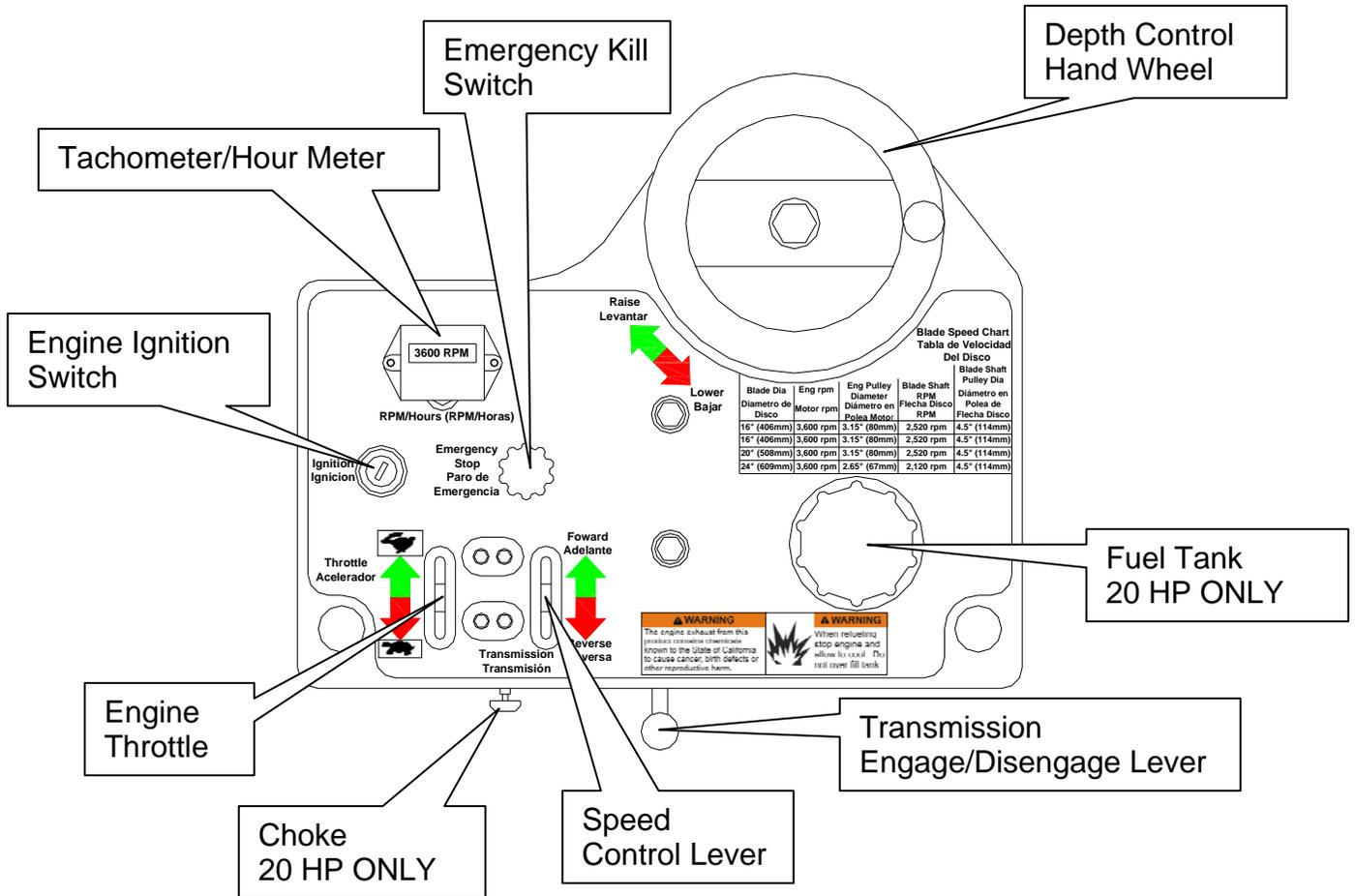
Pressurized source: Turn the water control to full "ON" when using wet cutting blades. The required flow rate is 4-6 gallons per minute.

Optional Water Tank on saw: This supply is designed for use with dry blades to keep the dust levels down. The tank will not supply the proper water flow rates when used with wet cut only blades. Do not drink the water from this tank. Fill the tank with water only. Close the water tank valve. Attach the saws water supply hose to the tank outlet. Fill the tank with water. The capacity of the tank is 5 US Gallons. When you are ready to cut, adjust the water supply rate until a fine mist or a slow trickle is made. The use of water greatly decreases the amount of dust produced during the cutting process, aids in the cooling of the blade, and provides additional stability.



- Use Only Water In The Water Tank
- Do Not Drink From The Tank

E. Controls



Depth Control Hand Wheel:

Controls the cutting depth of the blade. Rotate Clockwise to raise and counter clockwise to lower the depth of cut.

Fuel Tank (20 HP Only):

An internal all metal fuel tank is standard equipment for 20 HP models only (C2016, C2020, C2024, PC2016, PC2020, and PC2024). All 13 HP models have a fuel tank attached to the top of the engine. To fill the Fuel Tank remove the Fuel Cap slowly, fill tank to approximately 1-½" below the bottom of the Fuel Tank Neck and reattach the Fuel Cap. Do not over fill the tank. Avoid fuel spills and contact with fuel. Only re-fuel in well ventilated areas and way from sparks and open flames.



Transmission Engage/Disengage Lever:

Controls the Engagement and Disengagement of the Transmission. Push down to Engage and pull up to disengage the transmission. Only operate the Transmission Engage/Disengage Lever when the machine is NOT moving. Operation of the Transmission Engage/Disengage Lever while the machine is moving may damage the Rear Wheels. When the Transmission Engage/Disengage Lever is in the Disengage position the machine can be moved with out the engine running. **NOTE:** When parking the saw, it should always be left in the Engaged position, Speed Control Lever in the neutral position, the engine OFF, and perpendicular (right angle) to the grade (hill).

Speed Control Lever:

Controls the forward and reverse speed of the Transmission. To increase the forward speed push the lever forward with the engine running at full speed and the Transmission engaged. To reverse move the Speed Control Lever towards the rear of the machine. **NOTE:** The further forward or reverse the Speed Control Lever is moved the faster the machine will move in this direction. To place in a neutral speed condition place the Speed Control Lever in the center. **NOTE:** Over time the neutral position may change slightly due to cable stretch and mechanical component wear. Either re-adjust the Transmission Control Cable Linkage or move the Transmission Speed Control Lever to it's new position.

Choke 20 HP ONLY:

Units with a 20 HP Engine (C2016SS, C2020SS, and C2024SS) are equipped with a remote mounted Engine Choke Control. To operate the Choke pull the control lever out away from the machine and then follow the instructions for starting the engine found in the Engine manual. All 13 HP units are equipped with a Choke control attached to the Engine below the Air Cleaner on the Operator's Right Hand Side.

Engine Throttle:

The Engine Throttle Control allows the operator to adjust the Engine Speed while starting and operating the machine. To increase the Engine Speed push the Engine Throttle Control forward. To decrease the Engine Speed pull the Engine Throttle Control to the rear.

Engine Ignition Switch:

The Engine Ignition Switch allows the operator to start and stop the engine.

Tachometer/Hour Meter:

The Tachometer/Hour Meter shows the engine RPM only when the Engine is running. The total Engine operating hours (run time) are shown when the Engine is turned off.

Emergency Kill Switch:

The Emergency Kill Switch will stop the engine when depressed. The engine will not restart until the Emergency Kill Switch is pulled out. Use the Engine Ignition Switch for normal shut down of the Engine. Use the Emergency Kill Switch when a problem arises.

E. Operating the Saw

1. For the engine starting instructions see the Engine manual and follow the instructions located in section **II. Operation** sub heading **A. Installing the Blade on page 10.**
2. Check the Engine Oil level.
3. Disengage the Self-propelling unit by moving the Transmission Engage/Disengage lever fully up and place the Speed Control in the neutral position.
4. Raise the saw to the full upright position. Do not let the blade come in contact with the ground.
5. Maneuver the saw to the desired starting point.
6. If wet cutting connect the water supply to the saw.
7. Follow the instructions for starting the engine found in the Engine manual.
8. If wet cutting turn on the water supply at the source and then open the water valves on the saw. Make sure that there is a minimum of two gallons per minute of water flow!!
9. Be sure that the engine is running at full throttle!!! Check Engine Speed on the Tachometer to that listed on the Blade Speed Chart located on the Console is correct for the diameter of Blade being used.

Engine and Blade Speed Chart

Blade Diameter	Engine RPM	Engine Pulley Diameter	Blade Shaft RPM	Blade Shaft Pulley Diameter
14" (356mm)	3600 RPM	3.15" (80mm)	2520 RPM	4.5" (114mm)
16" (406mm)	3600 RPM	3.15" (80mm)	2520 RPM	4.5" (114mm)
20" (508mm)	3600 RPM	3.15" (80mm)	2520 RPM	4.5" (114mm)
24" (609mm)	3600 RPM	2.65" (67mm)	2120 RPM	4.5" (114mm)

10. Slowly lower the blade by rotating the hand wheel clockwise until the desired depth of cut is reached. Use a reasonable rate of feed. A reasonable rate of feed will depend on depth of cut, material, and blade. Normal cutting speeds should be between 2 ft/min in very hard material and up to 10 ft/min in softer materials. Do not force the blade in to the cut! If the engine begins to stall or the saw raises out of the cut slow the forward speed down!
11. For Self-propelled models move the Transmission Engage/Disengage lever fully to the engage position and then slowly push the Speed Control forward until the desired speed is reached. If the engine begins to stall or the saw raises out of the cut slow the forward speed down! The further the lever is pushed the fast the saw will move.
12. When the end of the cut is reached, slowly raise the blade out of the cut by rotating the Hand Wheel Clockwise until the blade is at least one (1) inch above the ground.
13. To place the machine in reverse: move the Speed Control lever towards the back of the machine. Only move the saw in reverse with the blade in the raise position. Always place the speed control back in the neutral position after moving the saw.
14. When moving the saw to a new location be sure that the blade is not touching the ground and always pay close attention to where you are moving and where the blade is at all times.
15. To disengage the transmission, place the Speed Control in the Neutral position and then slide the Transmission Engage/Disengage lever fully to the "Disengage" position.



Caution: Do Not Engage Or Disengage The Transmission While The Machine Is In The Forward Or Reverse Positions!

G. Cutting Technique

Lower the blade into the concrete to the required depth by turning the hand wheel clockwise. Ease the handle slowly forward. Retard the forward pressure if the saw begins to stall.

Note: For deeper cuts (4 inches or more), several cuts should be made in incremental steps of 1-1/2 to 2 inches until the desired depth of cut is reached.

Push the saw steadily forward using the front pointer as a guide. Exert enough forward pressure so that the engine begins to labor, but does not slow down. If the saw begins to stall, retard the forward movement until full rpm is restored to the blade. If the saw stalls, raise the blade out of the cut before restarting. Avoid excessive side pressure or twisting of the blade in the cut.

Additional Guide Lines For Sawing:

- Understand and follow all of the instruction in this owner's manual.
- If wet cutting, turn on the water supply so that there is a minimum of two gallons per minute of water flow!
- In critically hard aggregate more than a single pass may be needed to cut the desired depth.
- Only move the Engage/Disengage lever while the transmission speed control is in the neutral position.
- Move the transmission speed control slowly.
- If the saw stalls in the cut, immediately stop the forward speed and raise the blade out of the cut. If this is not done the belts can fail or the blade may be damaged.
- Go slowly with a new blade until it opens up, that is, until the diamonds can be seen and felt.
- If the saw leads off excessively check the contact between the drive rollers and the rear wheels. Small steering corrections may be made by applying slight pressure to the right or left side of the handle bar. The drive rollers will need to be cleaned from time to time.

G. Lead-Off Adjustment

If the saw tends to pull to one side (lead off), it may be steered by applying slight pressure to the left or right hand handles.

III. MAINTENANCE

A. Engine Maintenance

Follow the below schedule for engine maintenance. NOTE: Check the Honda Engine manual that came with the engine for any changes to the maintenance schedule. If the charts have any differences, follow the chart in the Honda Engine Manual.

The Norton Company does not warranty the engine. If any warranty or service of the engine is required contact your nearest Honda service center, or from the Internet: <http://www.honda-engines.com/home.htm>

Honda Power Equipment Group
 4900 Marconi Dr.
 Alpharetta, GA 30005-8847
 Tel: (800) 426-7701 | Fax: (678) 339-2670

Honda engine (refer to owner's manual for complete maintenance.)

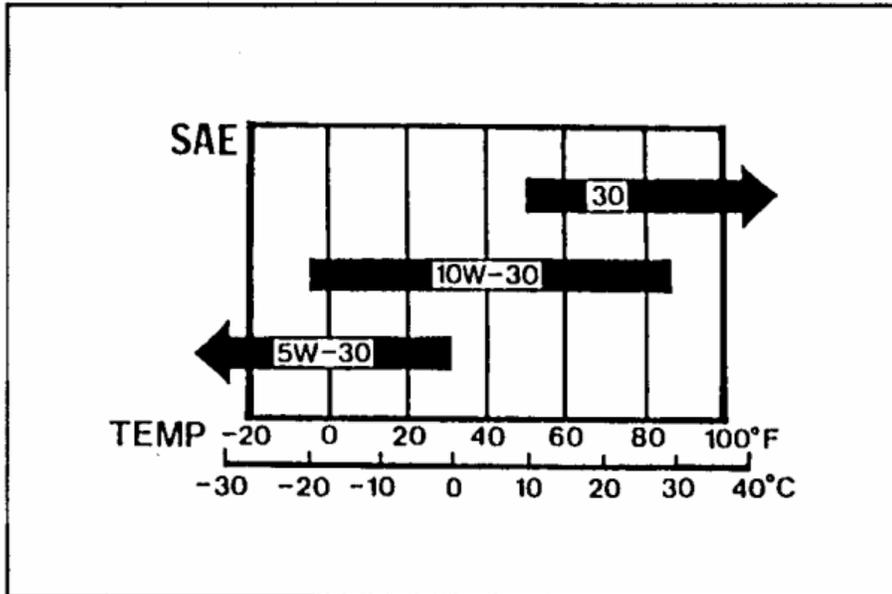
MAINTENANCE SCHEDULE

REGULAR SERVICE PERIOD Perform at every indicated operating hour interval.		EACH USE	FIRST 20HRS	EVERY 50HRS	EVERY 100HRS	EVERY 300HRS	Refer to page	
Engine oil	Check level	○					3-2	
	Change		○		○			
Reduction gear oil	Check level	○					3-2	
	Change		○			○		
Air cleaner	Check	○					3-3	
	Clean			○ (1)				
Fuel strainer cup	Clean				○		3-7	
Spark plug	Check-Clean				○		3-6	
Valve clearance	Check-Adjust					○	3-5	
Combustion chamber and valves	Clean-Lap					○	9-3,4	
Fuel line	Check (Replace if necessary)	Every 2 years						3-8

NOTE: (1) Service more frequently when used in dusty areas.

Check the engine oil level before each use when the engine is cool and the engine is level. Add oil if the level is low. The oil level should be within the operating range (see the engine owner's manual for details).

Only use a high-detergent, premium quality motor oil certified to meet or exceed U.S. automobile manufacturer's requirements for Service Classification SG, SF/CC, CD. Motor oils will show the classification on the container. A SAE viscosity of 10W-30 is recommend by Honda for general, all temperature use. Please consult the below chart or contact your local Honda service center for the proper viscosity for your temperature range.



Always refer to the engine manual for more detailed information on checking the oil, changing oil, and oil capacity, air filter changes, and fuel type to use. Use only Honda air filters. Do not clean the air filter with gasoline or other flammable solvents. A fire or explosion could result. To clean, follow the instructions found in the Honda engine manual.

Dry Cutting Engine Maintenance

- When operating the engine in dry cutting or dusty environments the following is required:
- Engine oil changed more often.
- Every 50 hours (or more often if conditions require) clean all of the engine cooling fins.
- Every 25 hours (or more often if conditions require) clean the engine pre-cleaner.
- Every 100 hours (or more often if conditions require) replace the air filter. If the engine is equipped with a reusable air cleaner, clean and re-oil it.
- Check and clean the air filter after each use. Replace as needed.

TECHNICAL & CONSUMER INFORMATION

Warranty Service Information

Servicing dealership personnel are trained professionals. They should be able to answer any question you may have. If you encounter a problem that your dealer does not solve to your satisfaction, please discuss it with the dealership's management. The Service Manager or General Manager can help. Almost all problems are solved in this way.

If you are dissatisfied with the decision made by the dealership's management, contact the Honda Power Equipment Customer Relations Office. You can write:

American Honda Motor Co., Inc.
Power Equipment Division
Customer Relations Office
4475 River Green Parkway
Duluth, Georgia 30136-2565

Or telephone: (770) 497-6400

When you write or call, please give us this information:

- Model and serial numbers (see page 47)
- Name of the dealer who sold the engine to you
- Name and address of the dealer who services your engine
- Date of purchase
- Your name, address, and telephone number
- A detailed description of the problem

B. Bearings

Re lubrication type bearings must be relubricated **daily** to assure long life. The grease used should conform to the NLGI grade two consistencies and be free of any chemical impurities such as free acid or free alkali, dust rust, metal particles or abrasives.

For best results, bearings should be relubricated while in operation. **Note: *Due caution for personal safety must be observed when servicing rotating equipment.*** The grease should be pumped in slowly until a slight bead forms around the seals. This bead, in addition to acting as an indicator of adequate relubrication, provides additional protection against the entry of foreign matter. If necessary to relubricate while the bearing is idle refer to relubrication table for maximum grease capacity for the various size bearings.

Shaft Size	Maximum Grease Capacity of Bearing Chamber in Ounces
1/2" to 3/4"	1/8
7/8" to 1-3/16"	3/8
1-1/4" to 1-1/2"	5/8

C. V-Belts

Warning: Never make adjustments to belts or pulleys while engine is running!

1. The best tension for a belt drive is the lowest tension at which the belts will not slip under full load.
2. Simply take up the drive until the belts are snug in the grooves. Run the drive for about 15 minutes to "seat" the belts. Then impose the peak load. If the belts slips tighten them until they no longer slip at peak load.

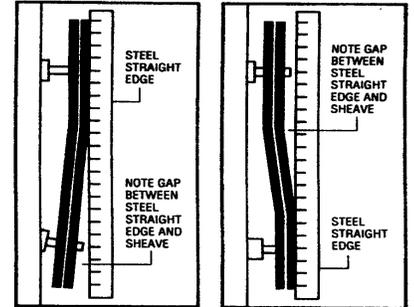


FIGURE 1

FIGURE 2

3. **Remember too much tension shortens belt and bearing life!**
4. Check the belt tension frequently during the first day of operation. Check the belt tension periodically thereafter and make any necessary adjustments.
5. The two most common causes of misalignment are shown in the drawing.
 - a). The engine drive shaft and the blade shaft are not parallel.
See FIGURE ONE
 - b). The pulleys are not located properly on the shafts.
See FIGURE TWO
6. To check alignment, all you need is a steel straight edge.
7. Line up the straight edge along the outside face of both pulleys as shown in the drawing.
8. Misalignment will show up as a gap between the pulley face and the straight edge.
9. Make sure that the width of the outside land is equal on both pulleys.

D. Depth Control

The depth control (raising screw) consists of a threaded rod which feeds into a brass nut. In order to keep the two parts working smoothly it is necessary to keep the rod free from dirt and sludge as much as possible. Cleaning the threaded rod with a rag after each use will prevent sludge from collecting in the tube assembly and protect the threads. It is a good practice to keep the raising screw threads lubricated, as the slurry generated during cutting will cause premature thread wear.

The bearing used to support the raising screw should be checked after each use to make sure it is turning freely and lubricated. If the bearing requires re lubrication lithium base grease is recommended.

E. Transmission

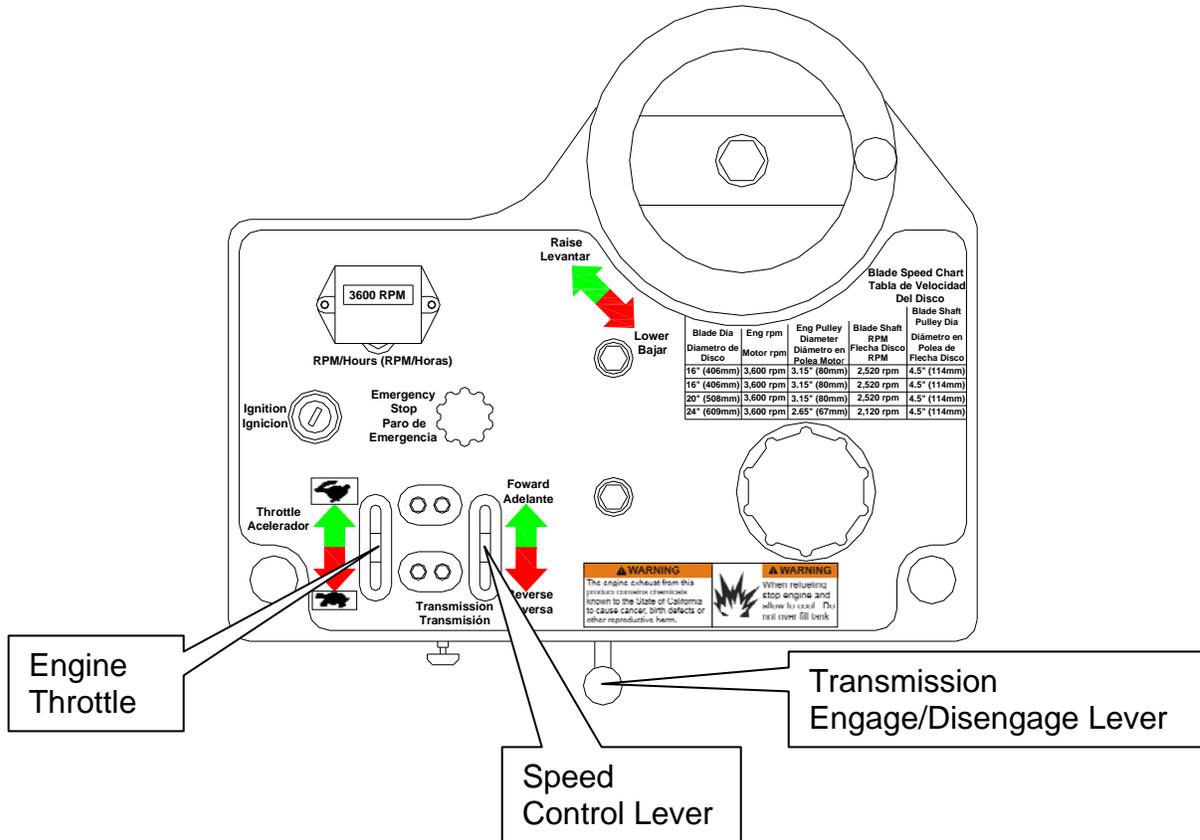
Eaton Model 6 Hydrostatic Transmission:

1. Accurate fluid level readings can only be made when the fluid is cold.
2. If the natural color of the fluid has become black or milky, the transmission has over heated or water containment has occurred. Drain and replace the fluid, check the fan and accessory belts, clean the cooling fins, and also check for any fluid leakage. Do not pressure wash the transmission.
3. Use only the proper viscosity and type of fluid. At normal operating temperatures, the optimum viscosity range is between 80-180 SUS (16-40 CS) and it should never fall below 60 SUS (10 CS).
4. The fluid should be chemically stable, incorporating rust and oxidation inhibitors.

Recommended Fluids For Eaton Model 6 Transmissions	
1.	Mobil Fluid 300
2.	Texaco TL 2209
3.	Dextron B (General Motors)
4.	M2C-33F And M2B-41A (Ford Motor)
5.	Hy-Tran (International Harvester)
6.	10W Straight Viscosity SE, CC, or CD Rated Engine Oil
* 7.	20W Straight Viscosity SE, CC, or CD Rated Engine Oil
8.	30W Straight Viscosity SE, CC, or CD Rated Engine Oil

* Factory Supplied Transmission Fluid

F. Self-Propelling System



Speed Control Lever:

The operator's right hand lever is the speed control lever. Pushing the lever slowly forward will increase the forward speed of the saw. Pulling it to the center will place the saw in neutral. Pulling the saw to the rear of the console (from the neutral) will increase the reverse speed.

The Speed Control Cable may need adjustment over time due to cable stretch. To adjust place the Speed Control:

1. With the machine running and the Transmission Engaged move the Speed Control Lever until the Neutral Position is found.
2. Turn the engine off and disconnect the number one cylinder's spark plug.
3. Loosen the set screw that attaches the Speed Control Cable to the Transmission Control Lever. For the location of the Transmission Control Lever see item #20 in the exploded parts diagrams **C13xx**, and **C20xx Transmission** on page 37. **Do not move the transmission control lever.**
4. Reposition the Speed Control Lever so that the Speed Control Lever is in the center of the slot. **Do not move the transmission control lever.**
5. Tighten the set screw the Speed Control Cable to the Transmission Control Lever. **Do not move the transmission control lever.**
6. Replace the number one cylinder spark plug.

7. Start and test the machine.
8. If any problems are found repeat steps 1 to 7.

Transmission Engage/Disengage Lever:

Transmission Engage/Disengage lever has two (2) positions onto which it can be moved: Engaged position (Down) allows the transmission to operate the rear drive wheels by the means of rear wheel friction rollers, the Disengage position (Up) release the rear wheel friction rollers from the rear drive wheel (the saw can be "Free Wheeled" or moved when repositioning the saw or moving it without running the engine. **NOTE: When parking the saw, it should always be left in the Engaged position, Speed Control Lever in the neutral position, the engine OFF, and perpendicular (right angle) to the grade (hill).**

Drive Wheel Adjustment:

Keep the chain clean and properly adjusted. To change the engagement pressure of the friction rollers, disengage the transmission and reposition loosen the fasteners that mount this lever to the transmission and readjust the friction rollers so that there is a 1/4" clearance (move the transmission platform up or down) between the friction rollers and the rear wheels.

Retighten the mounting hardware.

Clean the rear friction rollers wheels, slurry will build up on the friction rollers and cause the friction rollers to slip. Normally spraying the friction rollers and rear wheels with water will clean out the slurry. Failure to clean the slurry from the Friction Rollers can cause excessive wear to the rear Drive Wheels and is not covered under warranty.

G. ELECTRICAL DIAGRAM C1316SS & C1320SS: 13HP Manual Start Models Only

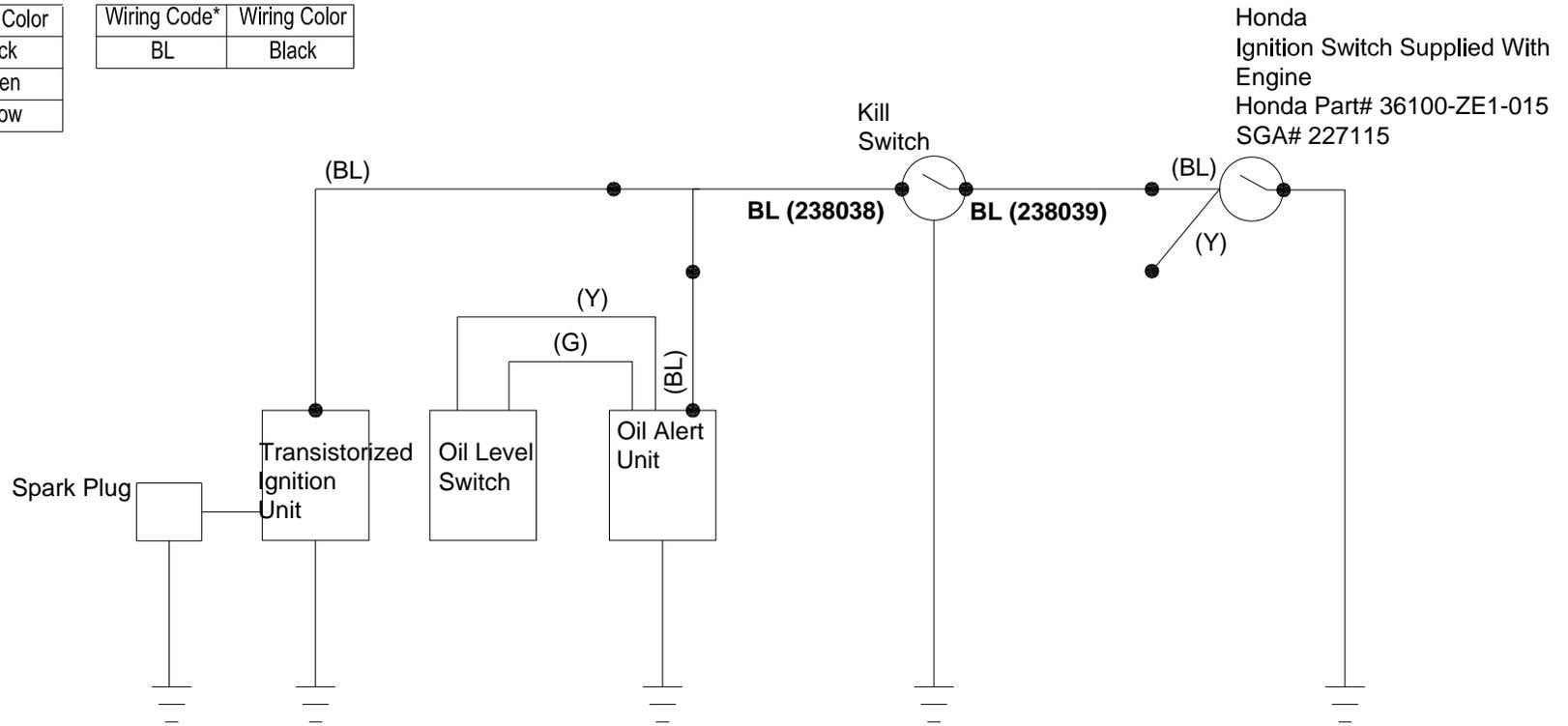
Color Chart

Honda Supplied Wiring

Honda Code	Honda Color
(BL)	Black
(G)	Green
(Y)	Yellow

Wiring Harness

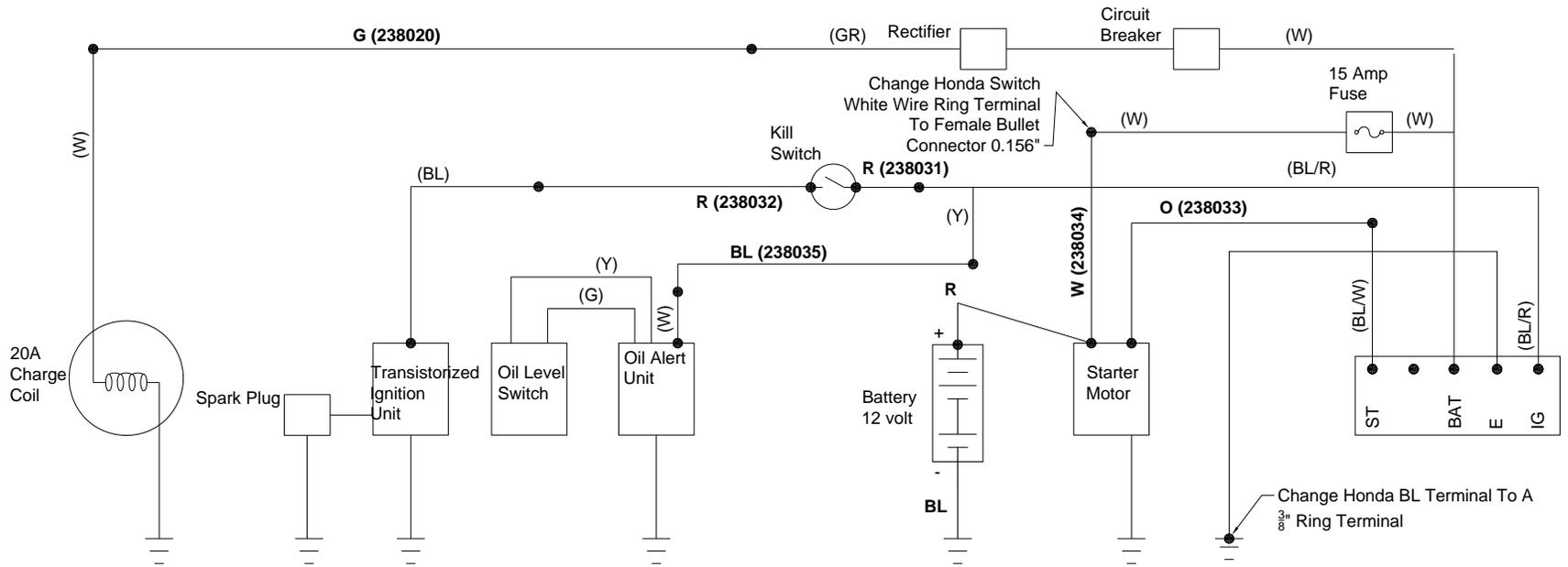
Wiring Code*	Wiring Color
BL	Black



G. ELECTRICAL DIAGRAM C1316SM & C1320SM: 13HP Electric Start Models Only

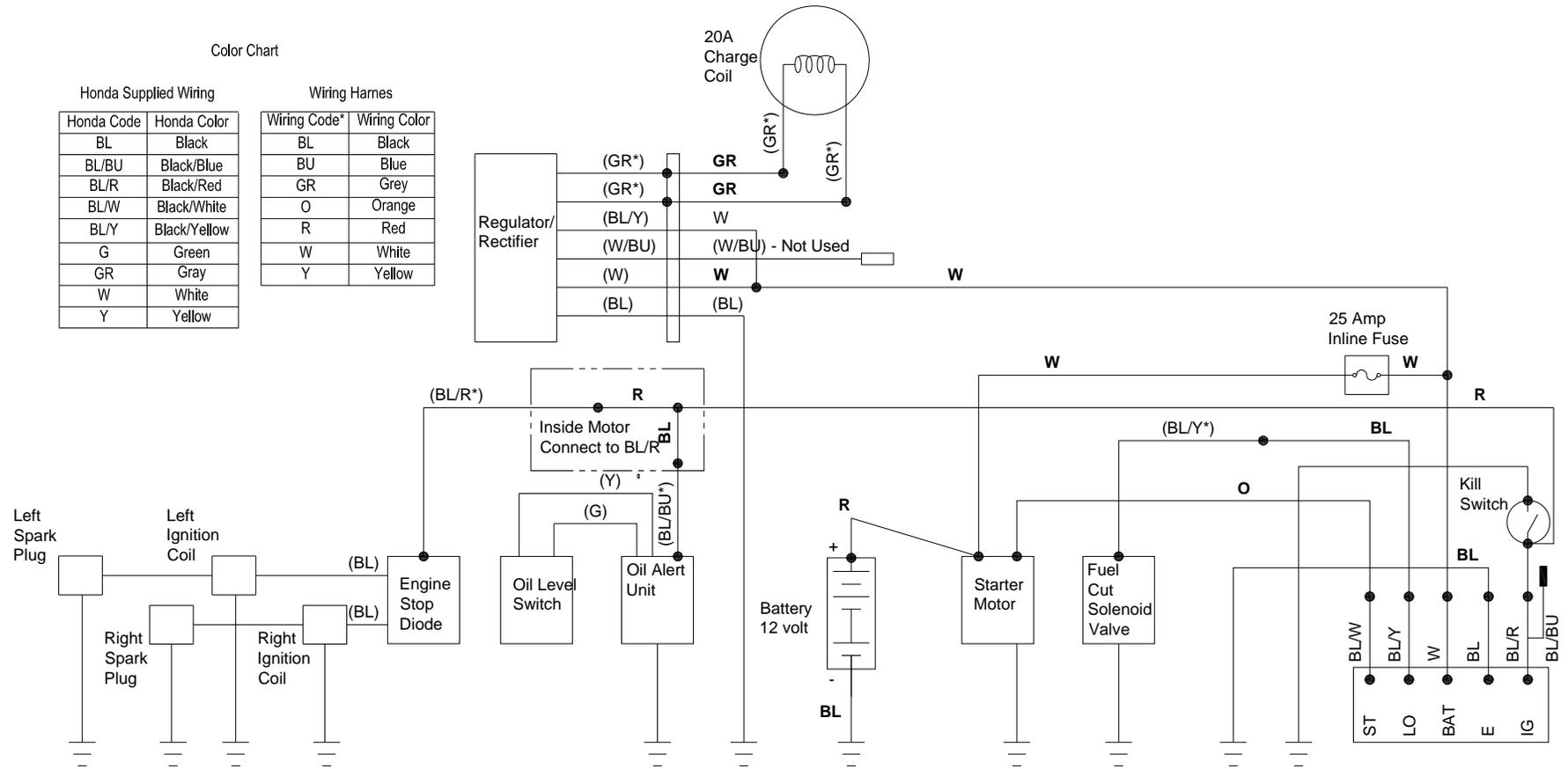
Color Chart

Honda Supplied Wiring		Wiring Harness	
Honda Code	Honda Color	Wiring Code*	Wiring Color
(BL)	Black	BL	Black
(BL/R)	Black/Red	BR	Brown
(BL/W)	Black/White	O	Orange
(G)	Green	R	Red
(Y)	Yellow	W	White
		Y	Yellow



G. ELECTRICAL DIAGRAM C2016SS, C2020SS, C2024SS:

20HP Electric Start Models With Honda GX620TXF2 Machine Serial Numbers 07051033 and Higher



IV. PARTS LIST SECTION

A. Ordering Information

1. List model number and serial number of machine.
2. List part number and serial number of part not the item number.
3. Wherever alternate parts are shown due to product improvement, inspect the part you have and provide additional description as necessary.
4. Specify mode of shipping desired, such as, parcel post, truck, U.P.S., best way, etc.

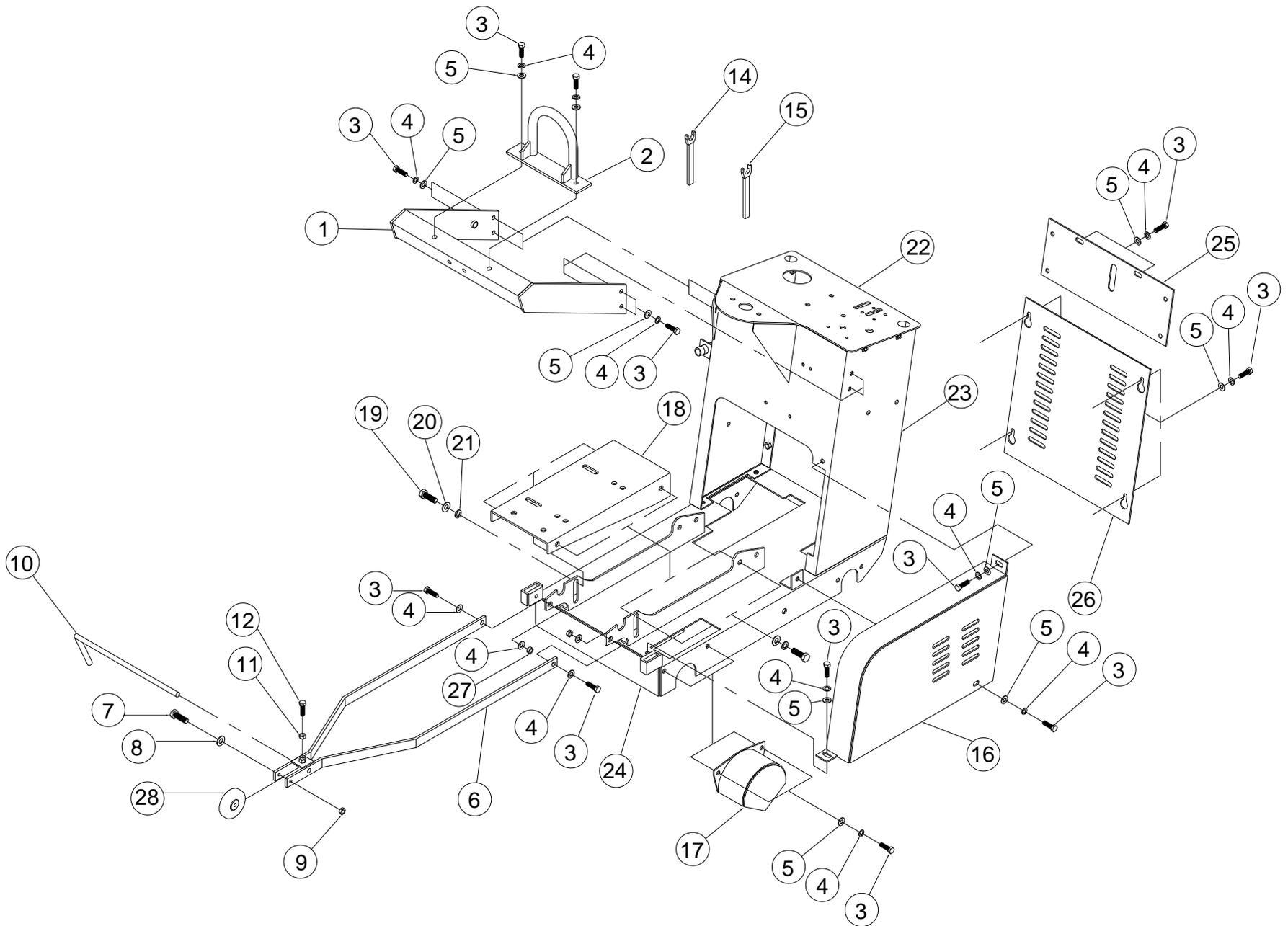
For the nearest Clipper distributor call 254-918-2310

Common Replacement Parts

Description	Part Number
BELT 3VX355 (4) (SET OF 4)	238207
BLADE SHAFT NUT RIGHT SIDE (LEFT HAND THREADS)	227156
BLADE SHAFT NUT LEFT SIDE (RIGHT HAND THREADS)	227191
TIGHT COLLAR RIGHT SIDE (LEFT HAND THREADS)	227159
TIGHT COLLAR LEFT SIDE (RIGHT HAND THREADS)	227190
LOOSE COLLAR OUTER FLANGE (INCLUDES DRIVE PIN)	227247
PIN DRIVE (GROOVED) 3/8X1	227154
BEARING PIL BLK 1-1/4 2-B (BLADE SHAFT BEARING SOLD EACH)	106218
WHEEL 6 X 2 X 3/4 W/ROLLER BEARING (REAR WHEEL SOLD EACH)	238005
WHEEL 5 X 2 X 3/4 W/ROLLER BEARING (FRONT WHEEL SOLD EACH)	238004
ROLLER (1) (ROLLER SOLD EACH)	238150
WRENCH OPEN END 1-1/4	238212
WRENCH OPEN END 1-1/2	238213

NOTE: All Parts Are Sold As Individual (each) Unless Noted Otherwise By A (x) In The Description Where x= The Quantity Included. For example 232087 BELT 3VX355 (4) four (4) Belts are included.

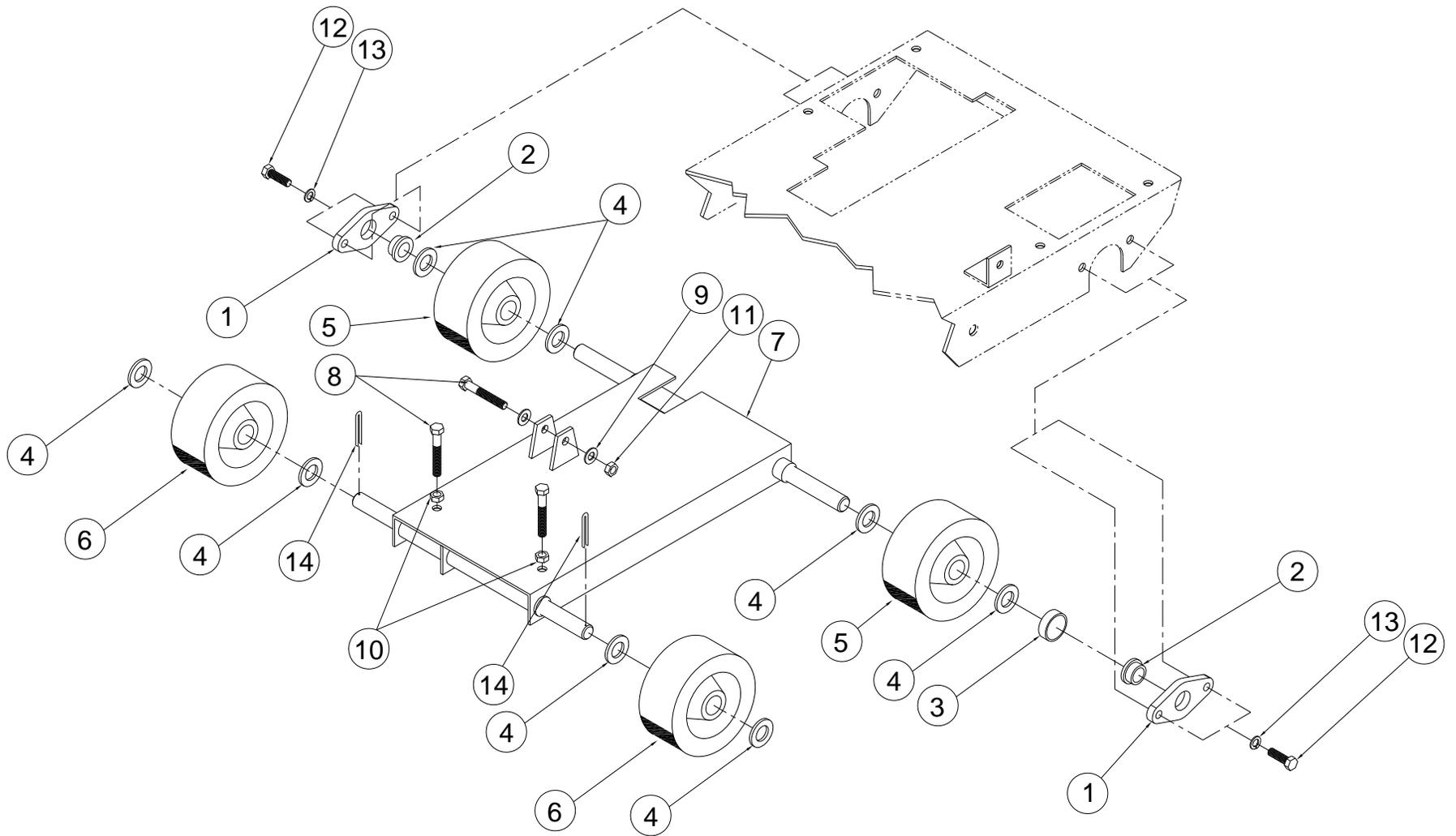
Blades Use Only Clipper Diamond Blades. Contact your local Clipper Distributor or Clipper at 254-918-2310 for the best blade for the application.



C13xx and C20xx Frame Common

C13xxx and C20xx Frame Common

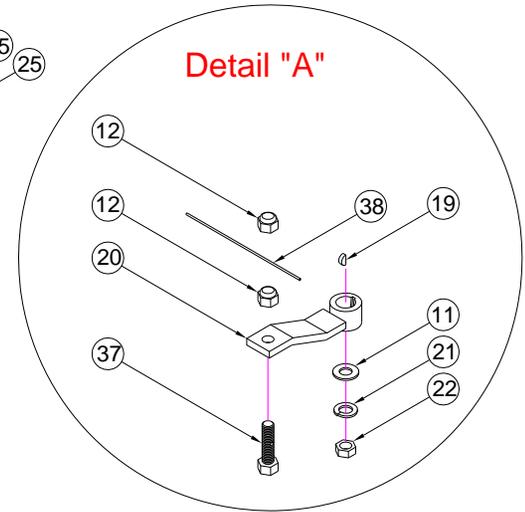
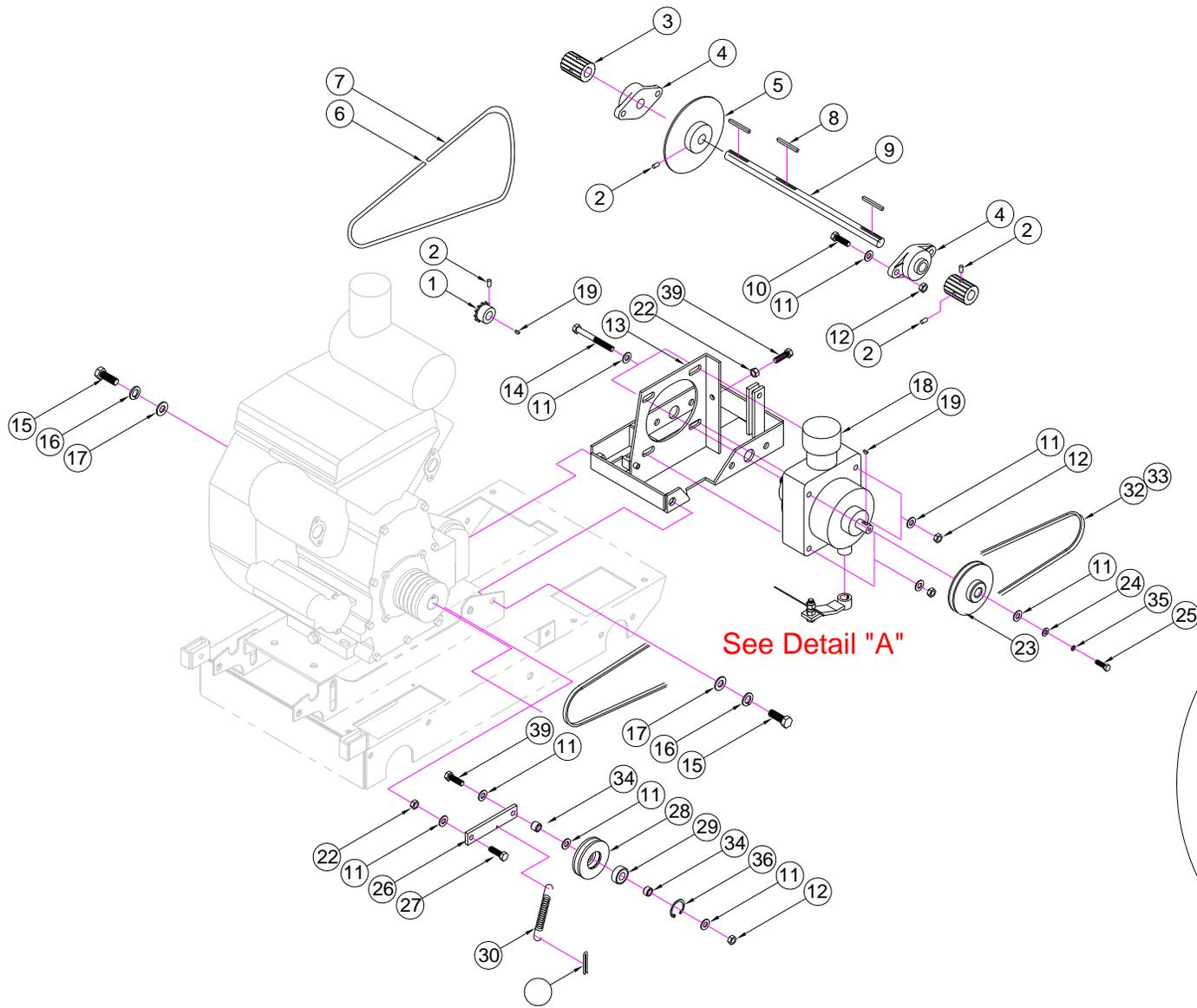
Item	Description	Req	Part No.
1	LIFT FRAME	1	238171
2	LIFT FRAME HOOK	1	238175
3	SCR 3/8-16 X 1 1/4 HEX HD CAP	23	8041051
4	WASHER 3/8 SPRING LOCK	23	8177012
5	WASHER 3/8 SAE	23	8172009
6	FRONT POINTER FRAME	1	238177
7	SCR 5/16-18 X 2 ½	1	8041034
8	WASHER 5/16 SAE	1	8172008
9	NUT 5/16-18 HEX LOCK	1	8160002
10	POINTER ROD	1	238168
11	NUT 3/8-16 HEX	1	8142003
12	SCR 3/8-16 X 1 1/2 HEX HD CAP	1	8041052
-NA-	ROPE ¼"ODX16'-3/8"	1	238211
14	WRENCH OPEN END 1-1/4	1	238212
15	WRENCH OPEN END 1-1/2	1	238213
16	GUARD BELT	1	238135
17	SHAFT GUARD	1	238136
18	ENGINE BASE	1	238119
19	SCR 1/2-13 X 1 1/2 HEX HD CAP	4	8041096
20	WASHER 1/2 SPRING LOCK	4	8177014
21	WASHER 1/2 SAE	4	8172011
22	CONSOLE TOP WELD	1	238115
23	CONSOLE WELDMENT	1	238114
24	FRAME C20xx/C13xx/PC20xx	1	238101
25	CONSOLE TOP REAR COVER	1	238140
26	CONSOLE REAR COVER	1	238141
27	NUT 3/8-16 HEX LOCK	2	8162003
28	WHEEL 3" X 1" X 5/16"	1	238215



C13xxx and C20xx Raise Axle

C13xx and C20xx Raise Axle

ITEM	DESCRIPTION	Req	PART No.
1	RAISE AXLE MOUNT	1	238134
2	REAR AXLE BUSHING	1	238129
3	REAR WHEEL SPACER	2	238124
4	WASHER 3/4 SAE	8	8172015
5	WHEEL 6 X 2 X 3/4 W/ROLLER BEARING (REAR WHEEL SOLD EACH)	2	238005
6	WHEEL 5 X 2 X 3/4 W/ROLLER BEARING (FRONT WHEEL SOLD EACH)	2	238004
7	RAISE AXLE WELDMENT	1	238126
8	SCR 3/8-16 X 2 1/2 HEX HD CAP	3	8041056
9	WASHER 3/8 SAE	1	8172009
10	NUT 3/8-16 HEX	12	8142003
11	NUT 3/8-16 HEX LOCK	1	8162003
12	SCR 3/8-16 X 1 1/4 HEX HD CAP	4	8041051
13	WASHER 3/8 SPRING LOCK	4	8177012

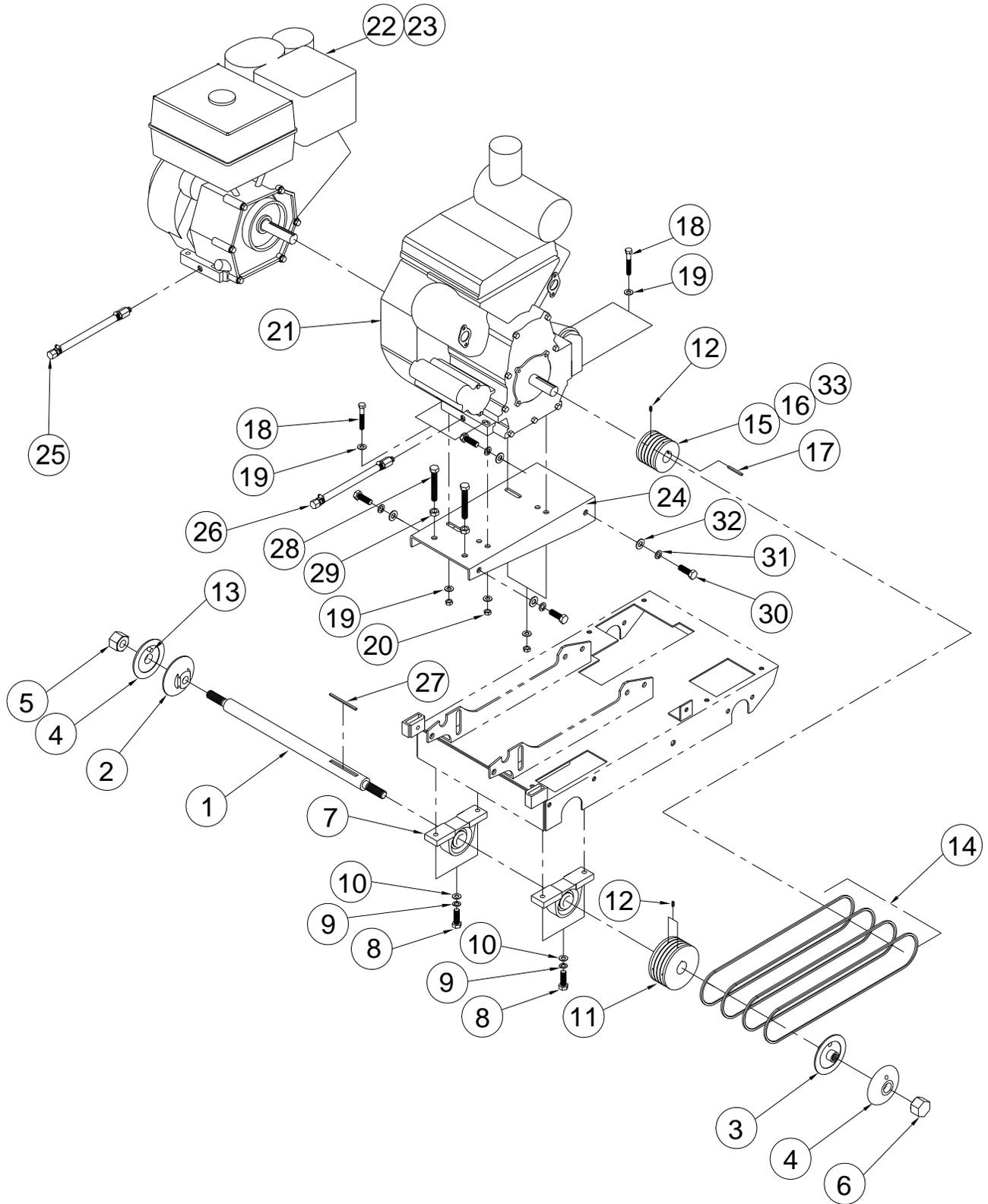


C13xxx and C20xx Transmission

C13xxx and C20xx Transmission

ITEM	DESCRIPTION	Req	PART No.
1	SPROCKET 35B12 X 17mm	1	229144
2	SCR 1/4-20 X 1/4 SET CUP	6	407035
3	ROLLER (1)	2	238150
4	BEARING FLANGE 3/4 B	2	210071
5	SPROCKET 35B48 X 34 B	1	238152
6	MASTER LINK	1	238145
7	CHAIN # 35	1	238146
8	KEY 3/16 X 2	3	9201086
9	TRANSMISSION JACKSHAFT	1	238155
10	SCR 3/8-16 X 1 1/4 HEX HD CAP	4	8041051
11	WASHER 3/8 SAE	18	8172009
12	NUT 3/8-16 HEX LOCK	11	8162003
13	TRANSMISSION MOUNT	1	238149
14	SCR 3/8-16 X 3 1/2 HEX HD CAP	4	8041060
15	SCR 1/2-13 X 1 1/2 HEX HD CAP	4	8041096
16	WASHER 1/2 SPRING LOCK	4	8176014
17	WASHER 1/2 SAE	4	8172011
18	TRANSMISSION M6	1	107744
19	# 3 WOODRUFF KEY	3	9203009
20	TRANSMISSION CONTROL LEVER	1	238154
21	WASHER 3/8 SPRING LOCK	1	8177012
22	NUT 3/8-16 HEX	3	8142003
23	PULLEY 4 O.D. X 17mm 1G 3VX	1	238151
24	WASHER 1/4 SAE	1	8172007
25	SCR 1/4-20 X 3/4 HEX HD CAP	1	8041007
26	IDLER ARM	1	238131
27	SCR 3/8-16 X 1 1/2 HEX HD CAP	1	8041052
28	PULLEY 3 O.D. X 7/8 1G 3VX	1	238006
29	BEARING 99R10	1	237408
30	SPRING 2 ½	1	238221
31	PIN 1/8 X 1 1/2 COTTER	1	8197063
32	BELT 3VX425(1) FOR 20 HP ONLY	1	109799
33	BELT 3VX450(1) FOR 13 HP ONLY	1	109769
34	BUSHING SPACER	2	238236

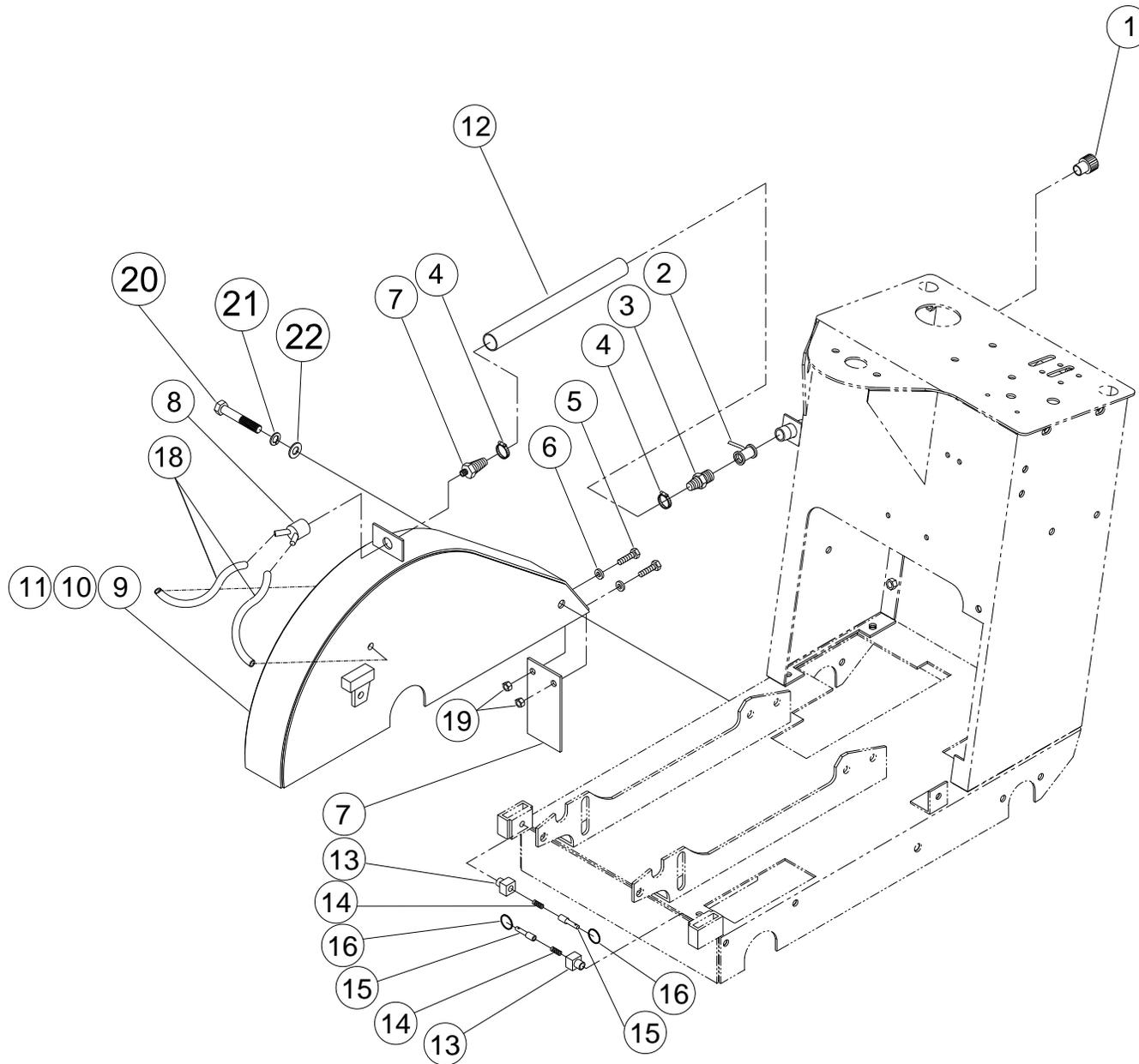
ITEM	DESCRIPTION	Req	PART No.
35	WASHER 1/4 SPRING LOCK	1	8177010
36	INTERNAL RETAINING RING 1 5/16"	1	237388
37	CONTROL LEVER PIN	1	238258
38	TRANSMISSION CONTROL	1	238226
39	SCR 3/8-16 X 2 HEX HD CAP	2	8041054



C13xxx and C20xx Blade Shaft & Engine Group

C13xxx and C20xx Blade Shaft & Engine Group

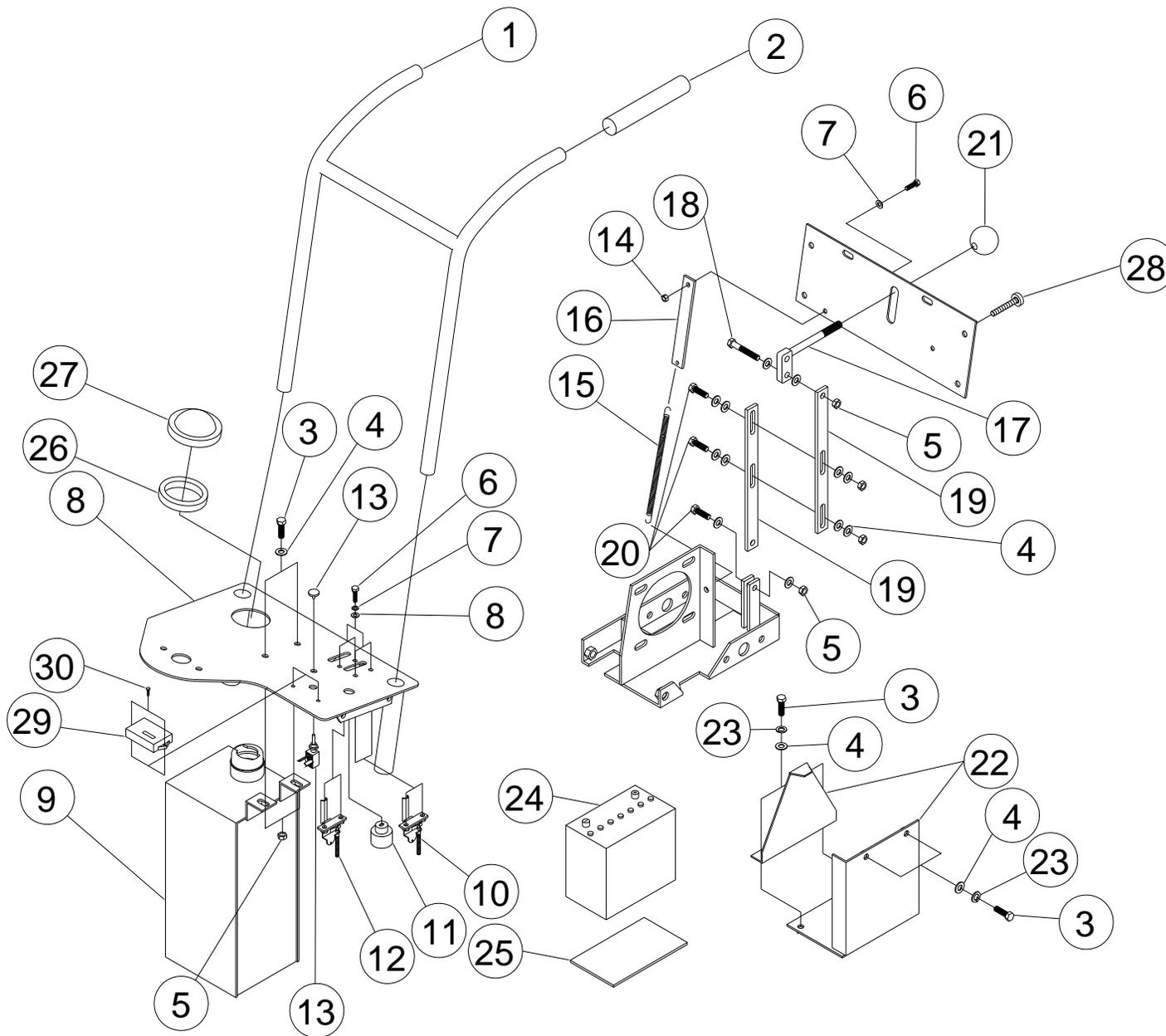
ITEM	DESCRIPTION	Req	PART No.
1	BLADE SHAFT	1	238179
2	TIGHT COLLAR RIGHT SIDE (LEFT HAND THREADS)	1	227159
3	TIGHT COLLAR LEFT SIDE (RIGHT HAND THREADS)	1	227190
4	LOOSE COLLAR OUTER FLANGE (INCLUDES DRIVE PIN)	2	227247
5	NUT BLADE SHAFT 3/4-16 LH x 1" LONG (OPERATOR'S RIGHT SIDE)	1	227156
6	NUT BLADE SHAFT 3/4-16 RH x 1" LONG (OPERATOR'S LEFT SIDE)	1	227191
7	BEARING PIL BLK 1-1/4 2-B	2	106218
8	SCR 1/2-13 X 1 1/4 HEX HD CAP	4	8041095
9	WASHER 1/2 SPRING LOCK	4	8176014
10	WASHER 1/2 SAE	4	8172011
11	PULLEY 4.5OD X 1.25B 4G 3VX	1	238015
12	1/4-20 X 3/8 SOCKET SET SCREW	4	407036
13	PIN DRIVE (GROOVED) 3/8X1	2	227154
14	BELT 3VX355 (4) (SET OF 4)	1	238207
15	Pulley 3.15 OD x 1.00 ID 5G 3VX (All 13HP and 20HP GX620QAF2 Saw Serial Numbers 07051016 to 07051032 Only)	1	238013
16	Pulley 3.15 OD x 1.125 ID 5G 3VX (20HP 16" & 20" GX620TXF2 Saw Serial Number 07051033 and Higher)	1	238011
33	Pulley 2.65 OD x 1.125 ID 5G 3VX (20HP 24" GX62TXF2 Only Saw Serial Number 07051033 and Higher)	1	238012
17	KEY 1/4 X 2 1/2	1	9201125
18	SCR 3/8-16 X 2 HEX HD CAP	4	8041054
19	WASHER 3/8 SAE	8	8172009
20	NUT 3/8-16 HEX LOCK	4	8162003
21	ENGINE 20 HP (GX620TXF2)	1	229182
22	ENGINE 13 HP ELECTRIC START (GX390UT1QAE2)	1	084044
23	ENGINE 13 HP MANUAL START (GX390K1QXC9)	1	123327
24	ENGINE BASE	1	238119
25	OIL DRAIN HOSE ASSY 13HP	1	238057
26	OIL DRAIN HOSE ASSY 20HP	1	238058
27	KEY 1/4 X 2-1/4	1	9201123
28	SCR 1/2-13 X 4 FULL THREAD HEX HEAD CAP	2	229133
29	NUT 1/2-13 JAM	2	8143005
30	SCR 1/2-13 x 1-1/2 HEX HEAD CAP	4	8041096
31	WASHER 1/2 SPRING LOCK	4	8176014
32	WASHER 1/2 SAE	4	8172011
-NA-	MUFFLER 20HP HONDA	1	229183



C13xxx and C20xx Blade Guard and Water System Group

C13xx and C20xx Blade Guard and Water System Group

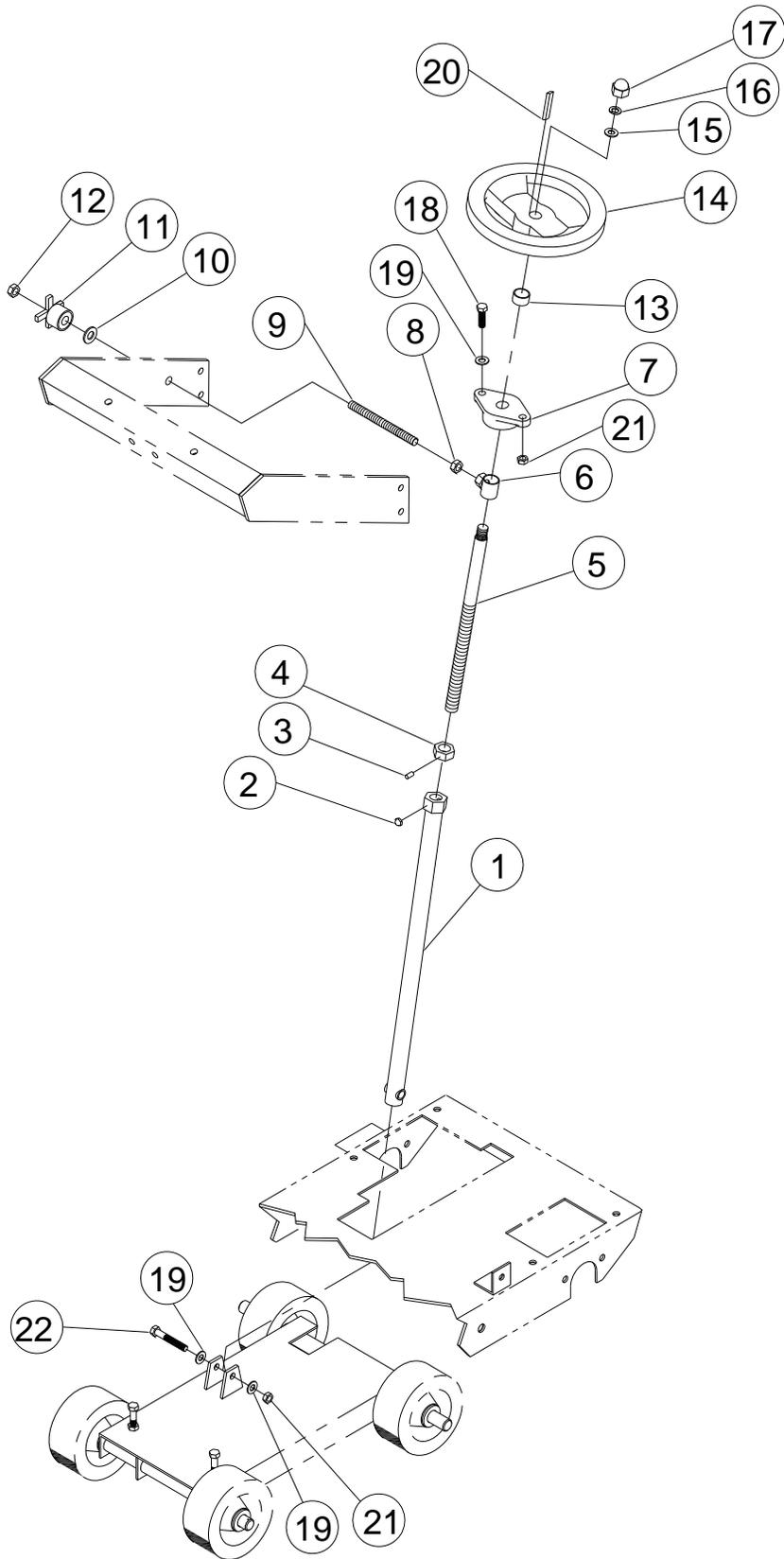
ITEM	DESCRIPTION	Req	PART No.
1	HOSE SWIVEL	1	N1D0082
2	WATER VALVE 1/2"	1	N1C0021
3	HOSE BARB 1/2" x 1/2"MPT	1	9602012
4	HOSE CLAMP	2	N1C0113
5	SCR 1/4-20 X 1 HEX HD CAP	2	8041006
6	WASHER 1/4 SAE	2	8172007
7	FIT BARB HOSE 1/4MPTX1/2	2	9600014
8	"Y" FITTING x 1/4FPT	1	72286
9	BLADE GUARD 16" (BLADE GUARD ONLY)	1	238144
10	BLADE GUARD 20" (BLADE GUARD ONLY)	1	238142
11	BLADE GUARD 24" (BLADE GUARD ONLY)	1	238143
12	TUBE 1/2ID X 3/4OD 48"LNG (USE 36")	1	0042521
13	GUARD LOCK	2	238225
14	SPRING GUARD LOCK	2	238224
15	PIN GUARD LOCK	2	238222
16	RING GUARD LOCK	2	238223
17	NUT 1/4-20 HEX LOCK	2	8160001
18	NOZZEL WATER (2) (Set of Two (2) Nozzles)	1	82998
19	SPLASH GUARD (FLAP OR MUD FLAP) ONLY	1	238137
20	SCR 1/2-13 UNC x 4-1/2 HEX HEAD CAP	1	8041107
21	WASHER 1/2 SPRING LOCK	2	8176014
22	WASHER 1/2 SAE	2	8172011



C13xxx and C20xx Controls and Console Group

C13xx and C20xx Controls and Console Group

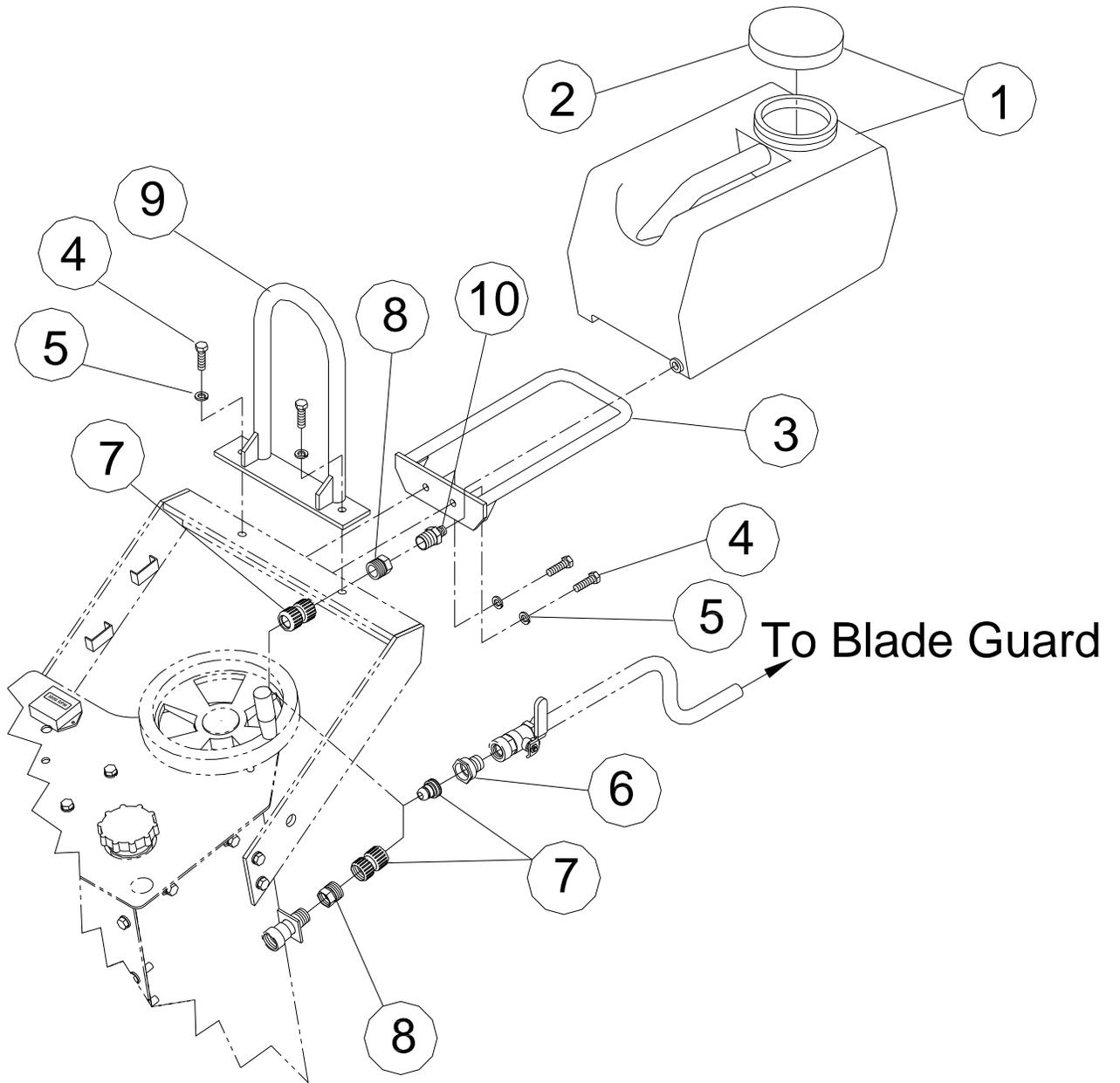
ITEM	DESCRIPTION	Req	PART No.
1	HANDLE BAR	1	238120
2	HANDLE BAR GRIP	2	N1C0004
3	SCR 3/8-16 X 1 1/4 HEX HD CAP	4	8041051
4	WASHER 3/8 SAE ZN PLT	4	8172009
5	NUT 3/8-16 HEX LOCK	6	8162003
6	SCR 1/4-20 X 1 HEX HD CAP	5	8041006
7	WASHER 1/4 SPRING LOCK	5	8177010
8	WASHER 1/4 SAE	5	8172007
9	FUEL TANK (20HP ONLY)	1	238130
10	THROTTLE CABLE (INCLUDES CABLE AND CONTROL)	1	238228
11	SWITCH IGNITION 20HP HONDA (20HP ONLY)	1	229196A
11	SWITCH IGNITION 13HP HONDA (13HP MANUAL START ONLY)	1	227115
11	SWITCH IGNITION 13HP ES HONDA (13HP ELECTRIC START ONLY)	1	229216A
12	TRANSMISSION CONTROL	1	238226
13	EMERGENCY KILL SWITCH	1	238229
14	NUT 1/4-20 HEX LOCK	1	8160001
15	SPRING 8"	1	238203
16	TRANSMISSION SPRING BAR	1	238204
17	ENGAGEMENT LEVER	1	238157
18	SCR 3/8-16 X 2 HEX HD CAP		8041054
19	TRANSMISSION ENGAGE LEVER	2	238156
20	SCR 3/8-16 X 1 1/2 HEX HD CAP	1	8041052
21	BALL KNOB	1	238202
22	BATTERY TRAY (ELECTRIC START ONLY)	1	238160
23	WASHER 3/8 SPRING LOCK	6	8177012
24	BATTERY CB-16 (SOURCE LOCALLY)	1	-NA-
25	BATTERY MOUNT PAD (ELECTRIC START ONLY)	1	238331
26	FUEL TANK GROMMET (20HP ONLY)	1	N1C0016
27	FUEL TANK CAP 20HP ONLY (WILL NOT FIT 13HP ENGINES)	1	238232
28	CHOKE CABLE (20HP ONLY)	1	238209
29	TACHOMETER	1	232080
30	SCR No. 10-24 X 1 SOCKET HD	2	8042007



C13xxx and C20xx Depth Adjustment Group

C13xxx and C20xx Depth Adjustment Group

ITEM	DESCRIPTION	Req	PART No.
1	DEPTH SCREW TUBE	1	238164
2	GREASE ZERK 1/8	1	238234
3	SCR 1/4-20 X 1/4 SET CUP	1	407035
4	NUT 3/4-10 HEX HEAD	1	238163
5	RAISE SCREW	1	238165
6	DEPTH STOP BUSHING	1	238166
7	BEARING FLANGE 3/4 B	1	210071
8	NUT 1/2-13 HEX HEAD	1	8143005
9	DEPTH STOP ROD 1/2-13 X 7"	1	238223
10	WASHER 1/2 SAE	1	8172011
11	DEPTH STOP HANDLE	1	N1C0078
12	NUT 1/2-13 HEX LOCK	1	8160005
13	HAND-WHEEL SPACER	1	238167
14	HAND-WHEEL	1	238169
15	WASHER 5/8 SAE	1	8172013
16	WASHER 5/8 SPRING LOCK	1	8177016
17	ACORN NUT 5/8-11	1	238235
18	SCR 3/8-16 X 1 1/2 HEX HD CAP	2	8041052
19	WASHER 3/8 SAE ZN PLT	4	8172009
20	KEY 3/16 X 1 1/4	1	9201080
21	WASHER 3/8 SPRING LOCK	4	8177012
22	SCR 3/8-16 X 2 1/2 HEX HD CAP	1	8041056



C13xxx and C20xx Optional Water Tank Group

C13xxx and C20xx Optional Water Tank Group

ITEM	DESCRIPTION	Req	PART No.
-NA-	WATER TANK KIT (INCLUDES: Items 1, and 3 to 10)	1	238001
1	WATER TANK W/CAP	1	83357
2	CAP FOR WATER TANK	1	82794
3	BRACKET FOR WATER TANK	1	238174
4	SCR 3/8-16 UNC x 1-1/4 HEX HEAD CAP	4	8041051
5	WASHER 3/8 SPRING LOCK	4	8177012
6	REDUCER FIT 3/4FGH x 1/2MPT	1	238065
7	COUPLER QUICK DETACH (INCLUDES MALE & FEMALE QD COUPLERS)	2	238066
8	REDUCER FIT 3/4MGH x 1/2FPT	2	238067
9	LIFTING HOOK FOR WATER TANK C13xx/C20xx	1	238173
10	REDUCING BUSHING 1/2MPT X 1/4MPT	1	83218

NOTE: 238001 Water Tank Kit Includes: 83357 (Water Tank with Cap), 238174 (Bracket for Water Tank), 238173 (Lifting Hook for Water Tank), 238065 (Reducer Fitting 3/7 FGH x 1/2MPT), 238066 (Coupler Quick Detach Male & Female Kit), 238067 (Reducer Fitting 3/4 MGH x 1/2 FPT), 83218 (Reducing Bushing 1/2 MPT x 1/4 MPT), 8041051 (x4) (Screw 3/8-16 x 1-1/4 Hex Head Cap), 8177012 (x4) (Washer 3/8 Spring Lock).

Saint-Gobain Abrasives

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WARNING

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead from lead-based paints,
- Crystalline silica from bricks and cement and other masonry products, and
- Arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.