# Stand-On Compact Hydro Drive Commercial Mower
# 48"·52"

OWNER'S MANUAL & PARTS LIST


www.BradleyMowers.com

A HAVENER ENTERPRISES Inc. COMPANY

Sep. 10th 2023

## IMPORTANT MESSAGE

This machine comes with an Owner's Manual and List. The useful life and good service you receive from this machine depends to a large extent on how well you read and understand this manual . Treat your machine properly, lubricate and adjust it as instructed, and it will give you many years of reliable service.

Your safe use of this product is one of our prime objectives. Many safety features are built in，but we also rely on your good sense and care to achieve accident-free operation. For best protection, study the manual thoroughly. Learn the proper operation of all controls. Observe all safety precautions. Follow all instructions and warnings completely. Do not remove or defeat any safety features.

See a Havener Enterprises, Inc. dealer for any service or parts needed. Havener Enterprises, Inc. service ensures that you continue to receive the best results possible from Havener Enterprises, Inc. products. You can trust Havener Enterprises, Inc. replacement parts because they are manufactured with the same high precision and quality as the original parts.

Havener Enterprises, Inc. designs and builds its equipment to serve many years in a safe and productive manner. For longest life, use this machine only as directed in the manual, keep it in good repair and follow safety warnings and instructions.

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## NOTICE!!!

Unauthorized modifications may present extreme safety hazards to operators and bystanders and could also result in product damage.

Havener Enterprises, Inc. strongly warns against rejects and disclaims any modifications, add-on accessories or product alterations that are not designed, developed, tested and approved by Havener Enterprises, Inc.Engineering Departme-nt. Any Havener Enterprises, Inc.product that is altered, modified or changed in any manner not specifically authorized after original manufacture-including the addition of "after-market" accessori-es or component parts not specifically approved by Havener Enterprises, Inc.-will result in the Havener Enterprises, Inc.Warranty being voided.

Any and all liability for personal injury and/or property damage caused by any unauthorized modifications, add-on accessories or products not approved by Havener Enterprises, Inc.will be considered the responsibility of the individual(s) or company designing and/or making such changes Havener Enterprises, Inc.will vigorously pursue full indemnification and costs from any party responsible for such unauthorized post-manufacture modifications and/or accessories should personal injury and/or property damage result.

This Operator's Manual should be regarded as part of the machine.Suppliers of both new and second-hand machines must make sure that this manual is provided with the machine.

This symbol means:
**ATTENTION!**

Your safety and the safety of others is involved.

### Signal word definitions:

The signal words below are used to identify levels of hazard seriousness. These words appear in this manual and on the safety labels attached to Havener Enterprises, Inc.machines. For your safety and the safety of others, read and follow the information given with these signal words and/or the symbol shown above.

**DANGER**

**DANGER** indicates an imminently hazardous situation which, if not avoided, WILL result in death or serious injury.

**WARNING**

**WARNING** indicates a potentially hazardous situation which,if not avoided,COULD result in death or serious injury.

**CAUTION**

**CAUTION** indicates a potentially hazardous situation which. if not avoided. MAY result in minor or moderate injury. It may also be used to alert against unsafe practices or property damage.

**CAUTION**

**CAUTION** used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, MAY result in property damage.


**MODEL NUMBER:** Identified here as 48SC or 52SC

**SERIAL NUMBER:** This number appears only on your mower. It contains the model number followed consecutively by the serial number. Use this number when ordering parts or seeking warranty information. Located behind rider pad on frame of unit.

## SAFETY INFORMATION

Read This Manual Carefully and Thoroughly Before Operating Your Mower!

1. Carefully and thoroughly read the owner's manual. Allow adequate time to fully understand the controls and operation of the equipment. Never allow anyone to operate the mower that has not read and fully understood the owner's manual.
2. Never allow anyone to operate the mower who is not old enough, large enough, and strong enough to safely handle the machine.
3. Do not carry passengers. Avoid mowing while people, especially children, and pets, are nearby since rotating blades can throw rocks and other items with enough force to cause serious injury.

### BEFORE USING EQUIPMENT

#### OPERATOR

Wear protective clothing while mowing. Long trousers and safety glasses will help reduce the risk of injury from thrown objects. It is recommended that steel toe shoes with aggressive soles or some other type of substantial footwear be worn to help protect your feet and maintain traction on slopes or uneven ground.

#### MOWING AREA

Thoroughly inspect the area where the equipment is to be used. Look for items such as stones, sticks, bones, wire, and other foreign objects. When struck by the mower, these and other objects may become projectiles that could lead to serious injury and/or death.

#### MOWER

For your safety and the long life of your mower, always inspect the mower before each use. Before inspection, make sure the mower is on a flat and level surface, the blades are disengaged, the ignition switch off with the key removed, and the spark plug wire is off of the spark plug(s) and hidden so that accidental contact cannot be made.

#### GENERAL CONDITION

- Walk around the mower looking for any fluid spills or leaks on or underneath the mower. Remove any and all excessive debris, dirt, and/or fluids.
- Look for signs of damage or excessive wear. Check the tightness of all nuts, bolts, pins, and screws. Tighten any that may be loose and replace any that may have been lost during use.
- Be sure the safety interlock controls are operating properly so that the engine cannot be started unless the ground speed control lever is in neutral and the blades disengaged.
- Check the mower blades for any damage or abnormal wear and replace in sets so that they are balanced.
- Check the mower cutting height to assure a high quality and even cut.
- Check the tire pressure on all four (4) tires.
- Check all belts for proper wear and correct tension.
- Check engine oil and air filter as recommended in the engine manufacturer's operators manual.

## OPERATION OF EQUIPMENT

1. DANGER: Gasoline is highly flammable and explosive. Do not add fuel while engine is running or is hot. Keep open flames,sparks,and heat away from the fuel and store fuel in containers specifically designed for that purpose.Add fuel outdoors only and if the fuel is spilled, Do not start the engine. Manually push the mower away from the spill and immediately wipe up.
2. DANGER: Gases emitted by a charging battery are explosive.Keep heat,sparks and open flames away from a charging battery.
3. Do not operate the engine in a confined space where dangerous carbon monoxide fumes can collect. Carbon monoxide is odorless, tasteless, and can be fatal.
4. Mow only in daylight.
5. Make sure the mower is not in neutral and the blades are disengaged before attempting to start the engine.
6. Do not stop or start suddenly when going uphill. Never use riding attachments on slopes since there is an increased risk that they might roll over.
7. Avoid steep slopes and use extreme caution when changing directions or speed when operating on a slope.
8. Be extremely careful when operating on a slope or when the grass is damp or wet. Reduced traction could cause sliding. Never mow by pulling the mower back towards you as you might slip.
9. Watch for traffic when crossing surfaces other than grass (i.e. transporting), loading a trailer or vehicle, or when the mower is not in use.
10. Never operate the mower with defective guards, shields, or without the safety devices securely mounted in place.
11. Never direct discharge of material toward bystanders or allow anyone near the mower while in operation.
12. Do not change the engine governor settings or over-speed the engine.
13. Always stop the engine whenever you leave the mower, even for a moment.
14. To help reduce the risk of a fire hazard, keep the engine and the area around the engine free of grass, leaves, or any other type of foreign material.
15. Beware of cutting edges. Always wear gloves for safety when performing blade maintenance activities. Beware on multiple blade units since the rotation of one blade may cause the rotation of the other blades.
16. Keep body and hands away from pin holes or nozzles that eject hydraulic fluid since fluid escaping under pressure may have sufficient force to penetrate skin and cause serious injury. If foreign fluid is injected into the skin, it must be surgically removed within a few hours by a doctor familiar with this form of injury. Always use paper or cardboard and not hands to search for leaks.

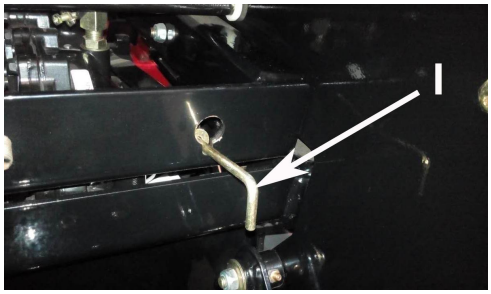
## OPERATING THE MOWER

It is recommended that before you operate the mower, you allow adequate time to fully understand the controls and operation of the equipment. When reading this manual, it is recommended that you do so with the equipment nearby for quick orientation, to reference the controls, and understand maintenance adjustments.

### OPERATING CONTROLS

Before continuing to read the manual, it is recommended that you take adequate time to identify the controls of the mower.






| | | | |
|---|---|---|---|
| A | Blade Control Lever | F | Choke Control |
| B | Safety Switch | G | Parking Brake Lever |
| C | Left Control Lever | H | Ignition/Key Switch |
| D | Right Control Lever | I | Neutral Lever |
| E | Throttle Control | | |

## STARTING THE ENGINE (Make Sure Battery Is Fully Charged)

**DANGER:** Do not operate the engine in a confined space where dangerous carbon monoxide fumes can collect .Carbon monoxide is odorless,tasteless,and can be fatal .

After going through the steps on pages 3 and 4, you are ready to start the engine.

**NOTE:** This unit was shipped without gas,Be sure to add fresh gas and double check the oil in the engine before attempting to start the mower.

1. Make sure the Parking Brake Lever is in the "ON" position.
2. Make sure the Neutral lever is disengaged.
3. Make sure the PTO switch is not engaged.
4. Slide the Throttle Control to position, "Choke" if the engine is cold.
5. For Electric Start engines, turn the key clockwise to the "Start" position. Once started, the key will return to the "Run" position. Note: Do not keep the key in the "Start" position more than a few seconds. If engine does not start, wait 15 seconds before trying again.
6. Once engine started, close the choking and adjust the throttle until the engine reach to the correct speed.

## MOVING THE MOWER FORWARD

**Caution:** Become completely familiar with the operation characteristics of the mower before attempting to use it.

1. Make sure the Left Control Lever is down out of the Neutral Lock position.
2. Gently push the controls forward. Push the Left and Right Control Levers away from you an equal amount to go straight. It is recommended you start slow and increase your speed as you increase your comfort with the controls.
3. Allowing the Left and Right Control Levers to return to a center neutral position allows the mower to stop moving. Note: if the operator lets go of the Left Control Lever while the blades are engaged And/or the mower is moving, the safety interlock system will stop the engine. To restart the mower, reset the Blade Control Lever to "Off "and the parking brake to the "On" position.

**NOTE:** Top speed is suggested only for transport.

## MOVING THE MOWER IN REVERSE

Slowly and evenly pull the Left and Right Control Levers toward you. The more the Control Levers are pulled toward you, the faster you will move. It is recommended to move in reverse slowly.

**NOTE:** When moving in reverse, be aware of your surroundings by looking down and behind.

## STOPPING THE MOWER

Gently let the Left and Right Control Levers return to their neutral, at rest position. If the operator is leaving the operator position for any reason, disengage the blades, shut off the engine, engage the parking brake, and remove the key.

**NOTE:** Park the mower on level ground. If it is not possible to do so, be sure to the block the wheels to prevent the mower from rolling away.

## TURNING THE MOWER

To turn the mower in the desired direction, gently pull the chosen direction's Control Lever toward you (i.e. to turn right, pull the Right Control Lever toward you). The more a particular Control Lever is pulled toward you, the sharper the turn the mower will make.

## MOWING

**DANGER:** Thoroughly inspect the area where the mower the mower is to be used.Look for items such as stones, sticks,wire,and other objects. When struck by the mower,these and other objects may become projectiles that could lead to serious injury and /or death.Clear area of all debris and keep people and pets away.

**DANGER:** Do not operate the mower with defective guards or shields. Do not operate the mower without the safety devices securely in place.

For the highest quality of cut and performance, mow with the engine at full throttle. Quality of cut may be determined by the ground speed and speed of the mower. Generally, the slower the mower travels across the terrain. the better the cut.

1. With the engine running and the mower placed at the beginning of the area to be mowed, make sure the left control lever is down and out of the neutral lock position.
2. Pull the PTO switch to engage the blades.
3. To disengage blades, come to a complete stop and pull the Blade Control Lever to the "Off " Position.

### MOVING THE MOWER WITH THE ENGINE OFF

1. Engage the Parking Brake Lever by moving it to the "On" position.
2. Engage the Neutral Lever by moving it in the direction of the arrow.
3. Disengage the Parking Brake Lever by moving it to the "Off " position.
4. Move the mower.
   **NOTE:** Be careful of the weight of the mower as you move it without using the engine.
5. Before starting the mower,mark sure the driving controls are in neutral with left control in "up" position,the parking brake is engaged and the neutral lever is disengaged.

## PARKING THE MOWER

Pull the Parking Break Lever to the "On" position.

**NOTE:** Gently engage the braking mechanism.Excessive force may cause damage.

**Caution:** If you are not familiar with the operation of the Hydro drive and zero turn feature,practice turning and maneuvering with the controls before engaging the blade.

## TOOLS REQUIRED FOR ASSEMBLY

- Ratchets: 16mm
- Sockets: 13mm,16mm
- Wrenches: 10mm,13mm,15mm,16mm，19mm
- wire cutters
- Tire pressure gauge
- Blocks (for deck leveling)

**NOTE:** All references below to the "right" or "left" are with respect to an operator at the controls.

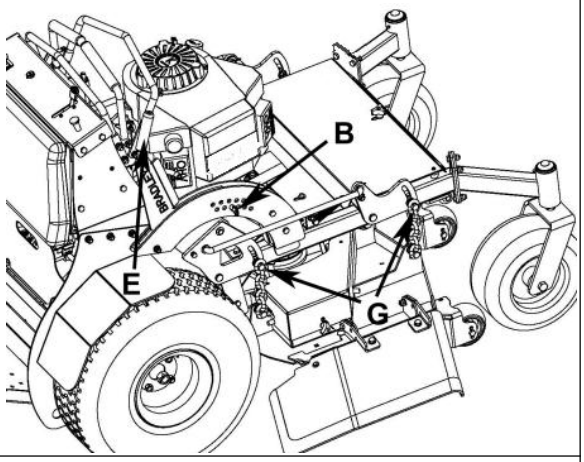
1. **UNCRATE UNIT**
   Discard packing materials. Remove and discard shipping brackets. Tighten caster wheel axle bolts against caster axle spanner bushings.
2. Set rear tire pressures to 20psi. Tires are overinflated for shipping. Front tires should be 40psi.

## DECK LEVELING

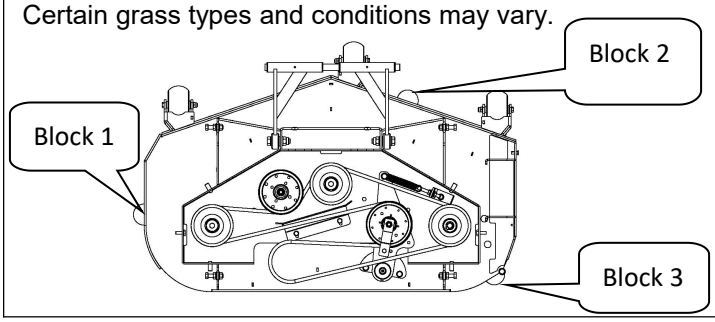
The deck roller needs to be installed at the top hole

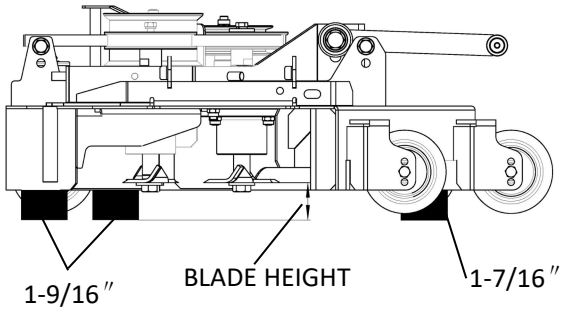
1. Park the machine on a smooth, level surface, pull the cut lever E to the highest slot.
2. Place a 1 " block under the rear deck and two 7/8 "blocks under the front deck .
3. Remove the pin B to the lowest cutting height, and then lower the deck onto the blocks.
So that the deck top is pitches forward 1/8 ".
4. Loosen nuts on bolts G. Move bolts in slot to remove slack in chain.
5. Tighten nuts on bolts G.

**NOTE:** The front and rear of the deck are at different heights.




A 1/8" forward pitched deck provides the best horsepower.
A level deck provides the best quality of cut.
A 1/8" rearward pitched deck provides the best striping.
Certain grass types and conditions may vary.



**5. FINAL PREPARATIONS**

- Check the engine and hydraulic oil levels. Top up with the correct oil if necessary. Use SAE 5W-30 motor oil for the engine. Use fresh, clean SAE 20W50 motor oil for the hydraulic system. After running for one hour, let hydraulic system oil cool. When cold, check levels.

**WARNING:** Battery acid is caustic and fumes are explosive and cause serious injury or death.

Use insulated tools, wear protective glasses or goggles and protective clothing when working with batteries. Read and obey the battery manufacturer's instructions.

Be certain the ignition switch is OFF and the key has been removed before servicing the battery.

a) Verify battery polarity before connecting or disconnecting the battery cables.

b) When installing the battery, always assemble the RED, positive (+) battery cable first and the ground, BLACK, negative (-) cable last.

c) Tighten cables securely to battery terminals and apply a light coat of silicone dielectric grease to terminals and cable ends to prevent corrosion. Keep terminal covers in place.

- Read Operation and Safety Manual before starting.
- Deck can be adjusted to allow for the best horsepower, best quality of cut, or best striping. See deck leveling procedure in the Adjustments Section in this manual to set as desired.
- Run engine at full RPM for 5 minutes before engaging blades to allow the engine to be fully lubricated before load is applied.
- Check the hydrostat neutral adjustment. Neutral is set at the factory but may require readjustment if air trapped during the initial oil fill has worked out of the system. See Adjustments Section later in this manual.
- Do not use the machine without an approved grass collector, the grass discharge chute or mulching plates correctly fitted.

| MAINTENANCE OPERATION | Maintenance is an ongoing job. These intervals are maximum times between maintenance operations. Perform more often under severe conditions. | | | | | | |
|---|---|---|---|---|---|---|---|
| | FIRST 5 HOURS | BEFORE EACH USE | EVERY 25 HOURS | EVERY 50 HOURS | EVERY 100 HOURS | EVERY 200 HOURS | YEARLY |
| **ENGINE** Consult the engine manual for additional information and instructions | | | | | | | |
| Check/Top Up Oil Level | | X | | | | | |
| Check For Leaks | | X | | | | | |
| Clean Air Intake Screen | | X | | | | | |
| Clean Air Cleaner Precleaner | | | X | | | | |
| Clean Air Cleaner Element | | | X | | | | |
| Clean Cooling Fans | | | | | X | | |
| Change Oil And Filter | X | See engine manufacturer's manual | | | | | |
| Check/Replace Spark Plugs | | | | | | X | |
| **TRANSAXLE** | | | | | | | |
| Check Oil Level | X | X | | | | | |
| Check For Leaks | X | X | | | | | |
| Change Oil And Filter | | | | | | X | |
| **MACHINE** | | | | | | | |
| Check Interlock Operation | | X | | | | | |
| Check Tire Pressures | | X | | | | | |
| Check/Top Up Battery | | | | | | | X |
| Lubricate All Points | | X | | | | | |

# NOTES

| GENERAL | DATE | HRS | DATE | HRS | DATE | HRS | DATE | HRS | DATE | HRS | DATE | HRS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Check Tire Pressures | | | | | | | | | | | | |
| Lubricate All Points | | | | | | | | | | | | |
| Check Nuts & Bolts | | | | | | | | | | | | |
| ENGINE | | | | | | | | | | | | |
| Check Oil Level | | | | | | | | | | | | |
| Change Oil | | | | | | | | | | | | |
| Clean Air Cleaner Element | | | | | | | | | | | | |
| Clean Cooling Fans | | | | | | | | | | | | |
| Replace Air Cleaner Element | | | | | | | | | | | | |
| Clean & Gap Spark Plugs | | | | | | | | | | | | |
| TRANSAXLE | | | | | | | | | | | | |
| Change Oil And Filter | | | | | | | | | | | | |
| NOTE: After first 5 hours of operation change engine oil and filter | | | | | | | | | | | | |

**CHECK DAILY**

**Operator Presence Interlock System — Start Operation**

For the engine to crank, the parking brake must be ON, the PTO (blades) OFF. Stand on the operator platform and check, one by one, if the engine will crank with the parking brake OFF or the PTO (Blades) ON.

**Operator Presence Interlock System — Run Operation**

In order for the engine to run, the operator must either be standing on the platform, or walking behind the unit with the platform up, the parking brake in the OFF position and the LH control handle held down out of the neutral position.
The engine may also run if the parking brake is in the ON position, the LH control handle is in the NEUTRAL position rotated up, and the PTO (blades) are OFF.
To check:

1. Start the engine and run at 1/2 throttle.
2. With the LH control handle in the NEUTRAL position rotated up, move the parking brake lever to OFF and turn the PTO (Blades) ON. Each check should kill the engine after 1/2 second delay. (A 1/2 second delay is built into the system to prevent engine cut-out when traversing rough terrain.)

Repair machine before using if the Operator Presence Interlock System does not operate correctly in start or run. Contact your authorized Bradley dealer.

**Hardware**

Tighten any nuts and bolts found loose. Replace any broken or missing cotter pins. Repair any other problems before operating.

**Tire pressure**

Rear Tires should be kept inflated at 20 p.s.i. Improper tire inflation can cause rapid tire wear and poor traction. Uneven inflation can cause uneven cutting. Front tires should be 40p.s.i.

**BATTERY**

**WARNING**: Battery acid is caustic and fumes are explosive and can cause serious injury or death. Use insulated tools, wear protective glasses or goggles and protective clothing when working with batteries. Read and obey the battery manufacturer' s instructions.

Be certain the ignition switch is OFF and the key has been removed before servicing the battery.

1. Verify battery polarity before connecting or disconnecting the battery cables.
2. When installing the battery, always assemble the RED, positive(+)battery cable first and the ground, BLACK, negative(-)cable last.
3. When removing the battery, always remove the ground, negative(-) cable first and the red, positive(+)cable last.
4. Clean the cable ends and battery posts with steel wool. Use a solution of baking soda and water to clean the battery. Do not allow the solution to enter into the battery cells.
5. Tighten cables securely to battery terminals and apply a light coat of silicone dielectric grease to terminals and cable ends to prevent corrosion. Keep terminal covers in place.

# LUBRICATION

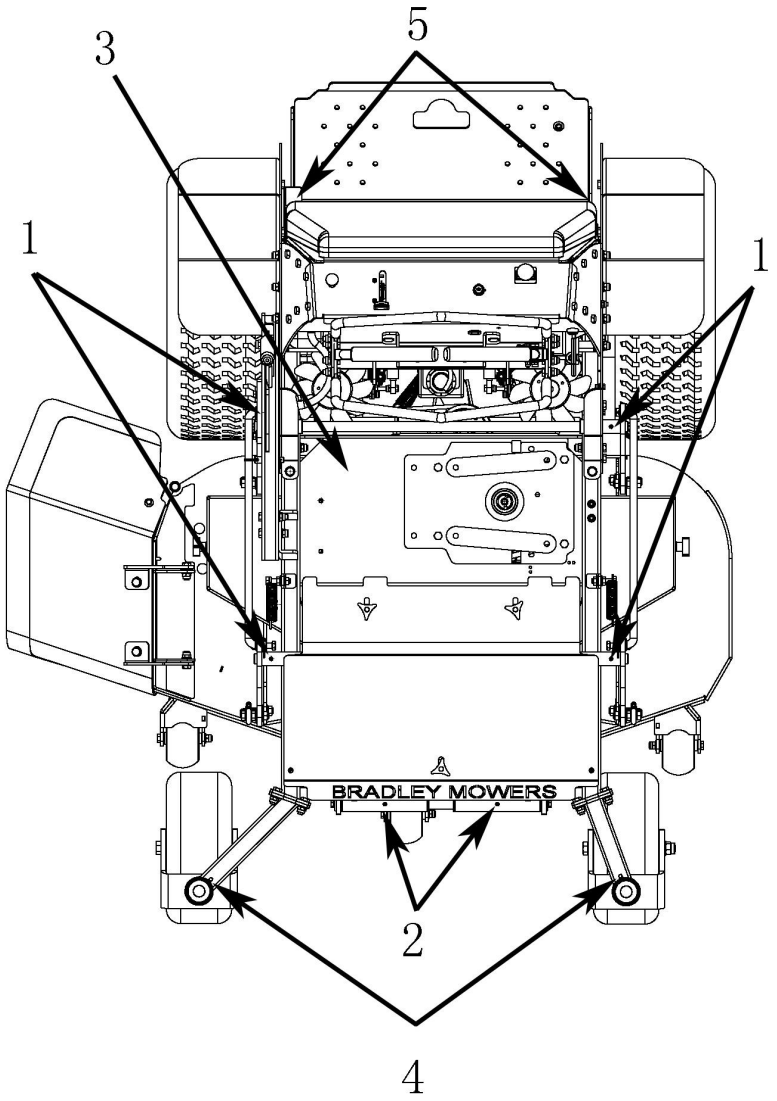
Every 50 hours of operation, lubricate the following points (1-4) with grease:

1. Deck lift pivots (4 points)
2. Pull arm pivots (4 points)
3. Deck idler pivot (1 point)
4. Caster wheel pivots (2 points)

Every 500 hours or once a year:

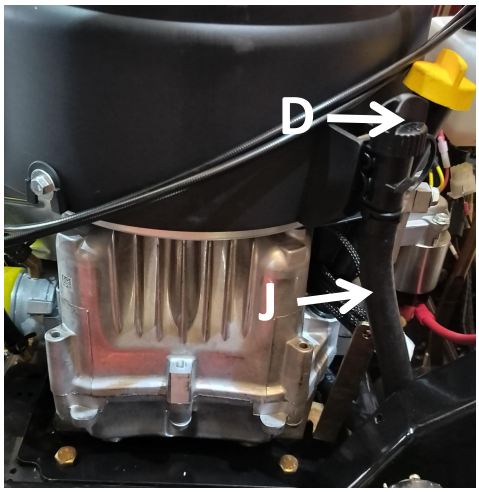
5. The pedal pivots (2 points)

**NOTE ON BLADE SPINDLES** — The blade spindles on these machines use a superior sealed bearing that does not require re-lubrication



## ENGINE OIL

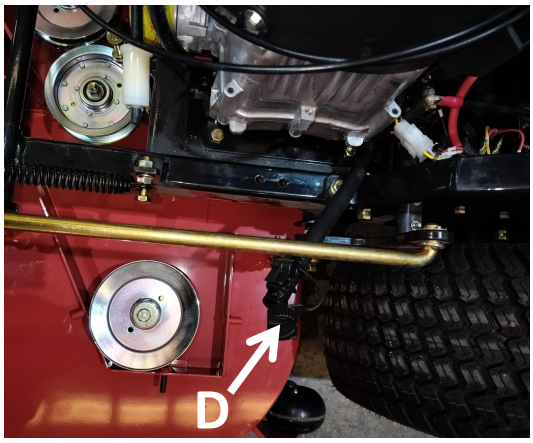
Do not perform engine maintenance without the engine off, spark plug wires disconnected and PTO disengaged.




### AFTER FIRST FIVE (5) HOURS

While the engine is warm:

1. Release the oil drain hose assembly from the engine clip **J**. Lay hose assembly over the frame edge.
2. Remove the screwed plug **D** from the tip of the hose assembly to allow oil to drain from the engine. Dispose of used oil in accordance with loal requirements.
3. Clean plug connector and screwed plug **D**. Replace screwed plug back into plug connector. Replace hose assembly back into engine clip.
4. Change oil filter.
5. Fill the crankcase with fresh oil to the full mark. Do not overfill. See engine manual for oil specifications.




### DAILY

1. Check oil level with the dipstick.
2. If oil is needed, add fresh oil of proper viscosity and grade. See engine manual for oil specifications. Do not overfill.
3. Replace dipstick before starting engine.

### PERIODIC OIL CHANGES

1. See engine manual for oil and filter change intervals after the break-in period .
2. Follow instructions for first oil change, above.

## SPARK PLUGS

Remove each plug and check condition.

- Good operating conditions are indicated if the plug has a light coating of grey or tan deposit.
- A white blistered coating indicates overheating. A black coating indicates an "over rich" fuel mixture. Both may be caused by a clogged air cleaner or improper carburetor adjustment.
- Do not sandblast, wire brush or otherwise attempt to repair a plug in poor condition. Best results are obtained with a new plug.
- Set plug gap as specified in engine manual.

## FUEL FILTER

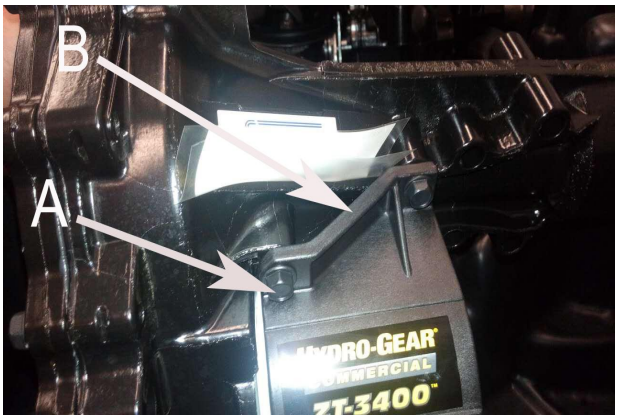
An in line fuel filter is located in the fuel supply line. Inspect at every oil change to make sure it is clean and unobstructed. Replace if dirty.

## TRANSAXLES

## WARNING

Inattention to proper safety, operation, or maintenance procedures could result in personal injury, or damage to the equipment.

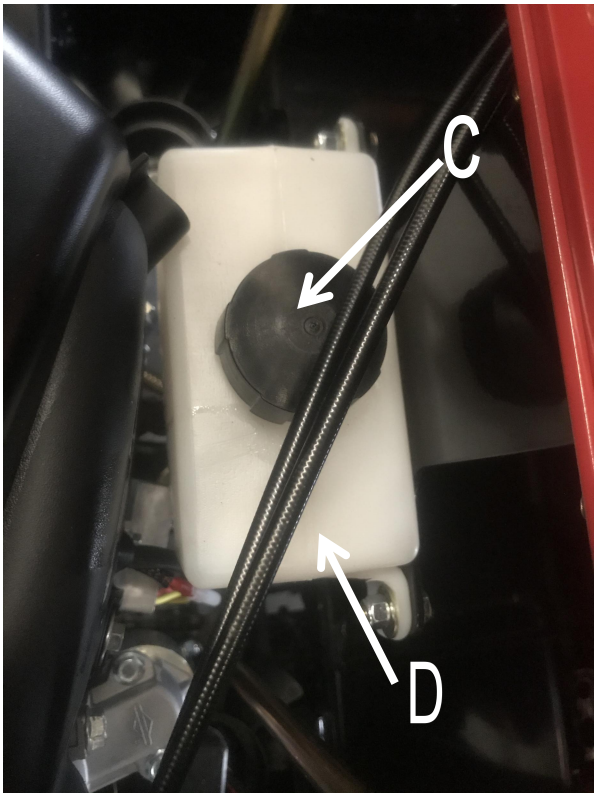
Perform transaxle maintenance with the engine off, spark plug wires disconnected and PTO disengaged .




## TRANSAXLE FLUID CHANGE

Change the transaxle fluid every 200 hours of operation. It is essential that the exterior of the transaxle be free of debris, prior to fluid maintenance.

1. Remove the three 1/4" filter guard screws and filter guard **A**. Remove the oil filter **B** from the transaxle and discard. Dispose of used oil in accordance with local requirements.
2. Wipe the filter base surface off and apply a film of new oil to the gasket of the new replacement filter. Install the new filter by hand, turn 3/4 to one full turn after the filter gasket contacts the filter base surface.
3. Re-install the filter guard and torque the three screws to 65 in. lbs. each.
4. Remove cap **C**, fill the transaxles through the expansion tank **D** with approximately 2 quarts of SAE 20W-50 engine oil PER TRANSAXLE .




## CAUTION

Do not overfill! If you overfill the transaxle while the unit is "cold", it may overflow as it reaches normal operating temperatures. The oil level should not be above the manufacturer's suggestions. The oil level should be filled to the full cold line on the overflow tank. This will allow the space needed for the oil to expand as it warms up.

5. After starting engine, check the fluid level and continue to add oil to overflow tank **D** to fill line on tank.
6. Purge the transaxles, following the purging procedures.

## PURGING TRANSAXLES

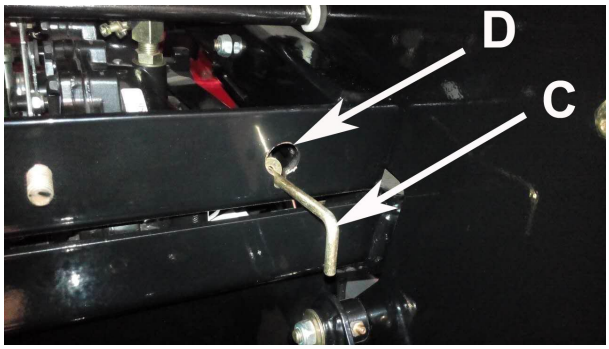
Due to the effects air has on efficiency in hydrostatic drive applications, it is critical that it be purged from the system.

These purge procedures should be implemented any time a hydrostatic system has been opened to facilitate maintenance or any additional fluid has been added to the system.

Purging may be required if the unit shows any of the following symptoms:

- Noisy operation.
- Lack of power or drive after short term use.
- High operation temperature, excessive oil expansion.

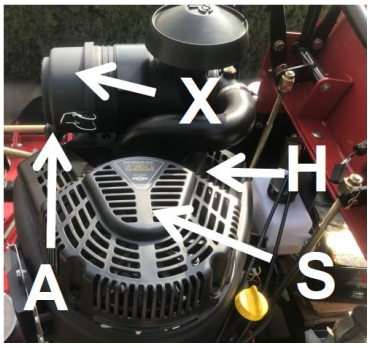
1. Check the transaxle fluid, fill to proper level, if required. Should be to the Full Cold Line.
2. Raise the drive wheels off the ground. Support unit with Jack stands or other suitable means.
3. Open bypass valves. To open the bypass valves, move the parking brake to any OFF position, then lift and pull bypass control rod **C** through the large opening **D**, until the control rod stop is past the opening. Drop rod **C** into the small opening to lock in place. Repeat for the other bypass control rod. Start engine, slowly move the control levers in both forward and reverse directions 5 to 6 times. As air is purged from the unit, the oil level will drop.
4. With the bypass valve closed, and the engine running, slowly move the control levers in both forward and reverse directions 5 to 6 times
5. Stop engine. Check the transaxle fluid level, add fluid as required.
6. It may be necessary to repeat steps 3-5 until all the air is completely purged from the system. When the transaxle moves forward and reverse at normal speed, purging is complete.




## ENGINE COOLING

Continued operation with a clogged cooling system will cause severe overheating and can result in engine damage.

- Daily: Clean air intake screen **S** on air cooled engines.
- Every 100 hours: Clean cooling fins beneath blower housing **H** with reference to information in the engine manufacturer's manual.




## HEAVY DUTY DONALDSON AIR CLEANER

Clean and replace the air cleaner element as specified in the service chart. Uneven running, lack of power or black exhaust fumes may indicate a dirty air cleaner.

**To replace air cleaner elements:**

1. Unclamp end cover **X** and remove existing cleaner elements.
2. Insert new elements **Y** and replace cover. Ensure the breathing port **A** is pointing down and towards the front of the tractor.

## SPECIFIC TORQUES

| | |
|---|---|
| **BLADE BOLTS** | **110 FT- LBS(150 Nm)** |
| **WHEEL LUG NUTS** | **75-100 FT- LBS(102-136 Nm)** |
| **CLUTCH MOUNTING BOLT** | **50 FT- LBS(68 Nm)** |
| **TRANSAXLE PULLY BOLT** | **28- 42 FT- LBS(38-56 Nm)** |
| **TRANSAXLE DRAIN PLUG** | **15-20 FT- LBS (20-27 Nm)** |
| **TRANSAXLE FILTER** | **100-150 IN- LBS(15-17 Nm)** |

## CLEANING MACHINE

Clean the machine after use. Compressed air is recommended. Do not use a pressure washer. The machine will run cooler and last longer if kept free of clippings and other debris. A clean machine also reduces the risk of fire due to accumulation of combustible debris and chaff.

Brush or blow clippings and debris off the cutter-deck and engine deck. Clippings and debris should be kept from accumulating around the exhaust system and under the exhaust guards. This can be done by using compressed air. DO NOT use a pressure washer.

## WASHING MACHINE

CAUTION: Improperly washing a machine can cause water to enter bearings and other components. This can greatly reduce component life

- Do not use a pressure washer. Do not direct water at bearings or seals. High pressure water can blow past seals and enter sealed bearings.
- Allow the machine to cool down before washing. Water on a warm machine can be sucked into sealed bearings as they cool.
- Avoid getting electrical connections wet. Water can cause electrical faults and corrosion of electrical components.

## BLADE REMOVAL

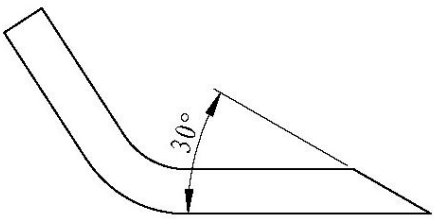
Follow these instructions to prevent injury during blade removal :

1. Loosen with box wrench or socket and long breaker bar. To gain additional leverage, slip long pipe or thick-walled tube over breaker bar or wrench.
2. Clamping the spindle with a wrench as shown, to prevent blade from turning when loosening.
3. Wear thickly padded gloves. Keep hands clear of blade path. Blades may rotate when bolt releases.

### SHARPENING

Blades may be sharpened by filing or grinding.

- Inspect blades before sharpening.
- Replace bent or cracked blades.
- Replace blades when the lift portion has worn thin.
- Maintain cut angle at 30°.
- Do not overheat blades when sharpening.
- Always use Bradley blades. Use of another manufacturer's blades may be dangerous.




## BLADE BALANCE

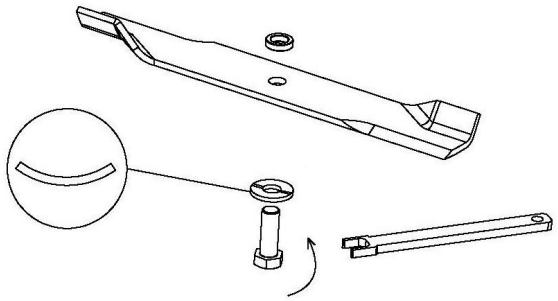
Blade balance must be maintained at 5/8 oz-in (1 9.4 g-cm) or less. Failure to keep blades balanced causes excess vibration, wear, and shortened life of most components of the machine.

**To balance a blade:**

1. Sharpen blade first.
2. Balance the blade at the center.
3. Attach a 1/8 oz (3.9 g) weight at a distance 5" (127 mm) from center on the light end. This should make the light end the heavy end :
   - If it does, the blade is balanced .
   - If does not, file or grind the heavy end until the addition of the weight makes the light end the heavy end.

### BLADE INSTALLATION

1. Wear thickly padded gloves to prevent cuts from the sharp blade.
2. Insert the blade bolt, in order, through the spring washer (cup side toward the blade, as shown), the blade, and the blade spacer.
3. Install assembly on the blade spindle.
4. Torque the blade bolt to 110 ft-lbs.

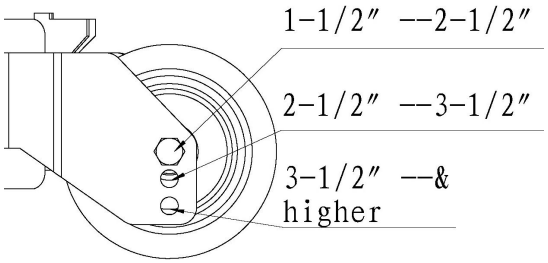


## BELTS

All belts are tensioned by spring loaded idlers. No adjustment is required.

## DECK ROLLERS

The rear outside deck rollers are adjustable up and down to provide improved deck flotation and scalping protection at various heights of cut. They are not intended to ride continuously on the ground. Adjust no closer than 3/8" (10mm) to the ground.

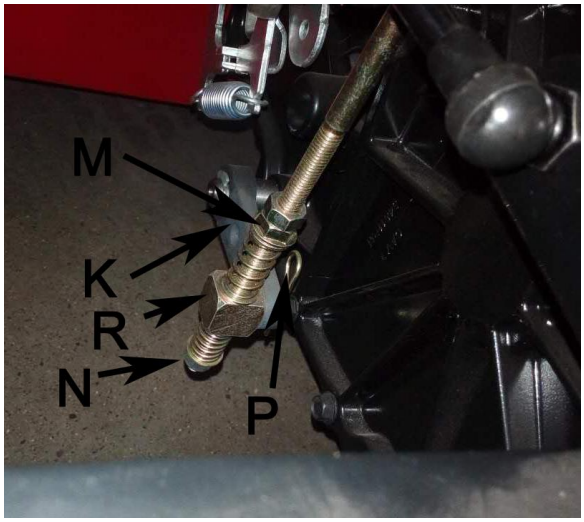



**Cutting height ranges for roller adjustment**

## PARKING BRAKE

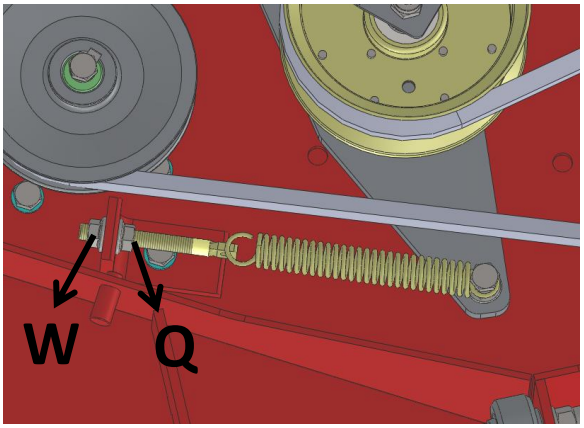
**NOTE:** There are 2 brakes, 1 on each transaxle. The parking brake should keep the machine from Moving . To check the parking brake, park the machine on a level surface, open the bypass valves (See purging transaxles section for instruction) and set the parking brake to ON. Attempt to move the machine forward and backward by pushing it. If the machine moves, adjust the parking brake linkage as follows:

1. Move the machine to a flat horizontal surface.
2. Move the parking brake handle to the OFF position.
3. Insure that the brake links **K** are rotated toward the front of the machine. If not, remove cotter pin **P** from each brake link **K** and brake rod **R**. Slide brake rod **R** out of each brake link **K**. Reinsert rod **R** into each link **K** and secure with cotter pin **P**.
4. Loosen nut **M** and tighten brake nut **N** as needed. Then tighten nut **M**.
5. Retest to insure the machine does not move.



## CUTTERDECK BELT

1. Remove center, left and right belt guards.
2. Set the cutterdeck in a middle height-of-cut position.
3. Loosen bolt on belt guide so belt guide can be moved to remove the belt.
4. Loosen nut **W** and nut **Q** to back tensioning idler off to remove belt from idler. Remove belt from cutterdeck pulleys.
5. Remove belt from clutch pulley.
6. Install the new belt by performing these steps in reverse order.
7. Cutterdeck spring will require tension adjustment after belt installation. Adjust nut W and nut Q to gain the appropri.

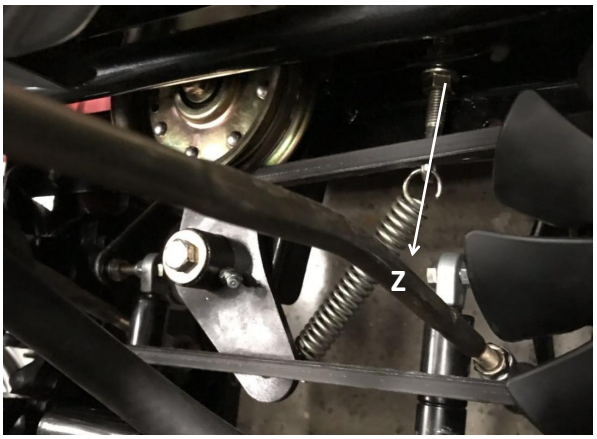



## TRANSAXLE DRIVE BELT

1. Remove engine-cutterdeck belt. (See cutterdeck belt above)
2. Loosen nut **Z** to remove the transaxle drive belt.
3. Install a new transaxle drive belt by performing these steps in reverse order.

**NOTE:** Inspect the fans. Replace if worn or damaged.

4. Reinstall cutterdeck belt and guards.




**Note:** Use belts designed for commercial mowers.

# POWER UNITS

**ENGINES:**

**Construction:** Aluminum block with cast-in cast iron sleeves. Aluminum head.
**Configuration:** 4-stroke, vertical shaft, V-twin cylinder, overhead valve, air-cooled

**DRIVE SYSTEM:**

**Transaxles:** Dual HydroGear ZT3400 Commercial Duty Hydrostatic transaxles (12cc Pumps)
**Turn Radius:** True Zero

**OPERATOR PRESENCE INTERLOCK SYSTEM:**

**Start Operation**

For the engine to crank, the parking brake must be ON, the PTO (blades) OFF. Stand on the operator platform and check, one by one, if the engine will crank with the parking brake OFF or the PTO (Blades) ON.

**Run Operation**

In order for the engine to run, the operator must either be standing on the platform, or walking behind the unit with the platform up, the parking brake in the OFF position and the LH control handle held down out of the neutral position. The engine may also run if the parking brake is in the ON position, the LH control handle is in the NEUTRAL position rotated up, and the PTO (blades) are OFF.

To check:

1. Start the engine and run at 1/2 throttle
2. With the LH control handle in the NEUTRAL position rotated up, move the parking brake lever to OFF and turn the PTO (Blades) ON. Each check should kill the engine after 1/2 second delay. (A 1/2 second delay is built into the system to prevent engine cut-out when traversing rough terrain.)

Repair machine before using if the Operator Presence Interlock System does not operate correctly in start or run.Contact your authorized Bradley dealer.

**NET WEIGHT:**

48SC: 923 lbs (420 kg)
52SC: 945 lbs (430 kg)

**TOTAL WEIGHT:**

48SC: 1077 lbs (490 kg)
52SC: 1132 lbs (515 kg)

**CONTROLS:**

Throttle; choke; power takeoff (PTO) clutch switch; control lever; parking brake lever; lift lever

**FUEL SYSTEM:**

One tank in the control tower with total capacity 5 gallons (19 liters). Replaceable fuel Filter

**MAXIMUM GROUND SPEEDS:**

Forward: ≈10 mph (16 km/h)
Reverse: ≈6 mph (10 km/h)

**WHEELS&TIRES:**

**Drive wheels:**
**48SC & 52SC** : 23 X 8.5-12 4-Ply Turf Turf Tires
**Casters:**
**48SC & 52SC:** 13 X 5.0-6 tires
**Pressure:** Rear tires 20 p.s.i
Front tires 40 p.s.i.

| ENGINES | | | | |
|---|---|---|---|---|
| MODEL NUMBER | 48SC | 52SC | 48SC | 52SC |
| MANUFACTURER | HONDA (discontinued) | HONDA (discontinued) | BRIGGS & STRATTON | BRIGGS & STRATTON |
| MODEL | GXV690 | GXV690 | 24HP/25HP/26HP | 26HP/27HP |
| CYLINDERS | 2 | 2 | 2 | 2 |
| COOLING | Air | Air | Air | Air |
| BORE/STROKE | 3.07×2.83 " (78×72 mm) | 3.07×2.83 " (78×72 mm) | 3.30×2.89 " (83.8×73.4mm) | 3.30×2.89 " (83.8×73.4mm) |
| DISPLACEMENT | 41.97 cu.in. (688 cc) | 41.97 cu.in. (688 cc) | 44.18 cu.in (724 cc) | 49.43 cu.in (810 cc) |
| OUTPUT TORQUE | 35.6 ft-lb (48.2J) @2500 rpm | 35.6 ft-lb (48.2J) @2500 rpm | 39.84 ft-lb (54J) @2400rpm | 42.3 ft-lb (57.4J) @2800rpm |
| LUBRICATION | FULL PRESSURE | FULL PRESSURE | FULL PRESSURE | FULL PRESSURE |
| GOVERNOR | Mechanical | Mechanical | Mechanical | Mechanical |
| AIR FILTER | Donaldson | Donaldson | Donaldson/Cyclonic | Donaldson/ Cyclonic |
| IGNITION SYSTEM | Electronic | Electronic | Electronic | Electronic |
| CHARGING SYSTEM | 15 amp,regulator | 15 amp,regulator | 16 amp,regulator | 16 amp,regulator |
| BATTERY | BCI group U1 | BCI group U1 | BCI group U1 | BCI group U1 |
| FUSES | Two,20 amp blade | Two,20 amp blade | Two,20 amp blade | Two,20 amp blade |

| CUTTERDECKS | | |
|---|---|---|
| MODEL NUMBER | 48SC | 52SC |
| TYPE | Side Discharge | Side Discharge |
| CUTTING WIDTH | 48 " (122 cm) | 52 " (132cm) |
| WIDTH(CHUTE UP) | 48-3/8 " (123 cm) | 53-7/8 " (137 cm) |
| WIDTH | 60-7/8 " (155 cm) | 66-3/8 " (169 cm) |
| BLADE | High lift | High lift |
| NUMBER OF BLADES | 3 | 3 |
| BLADE LENGTH | 16-1/4 " (41cm) | 18 " (46 cm) |
| BLADE THICKNESS | 13/64 " (5 mm) | 13/64 " (5 mm) |
| BLADE MOUNTING HOLE DIMENSION | 5/8 " | 5/8 " |
| TIP SPEED | 18490ft/min 5635m/min @3800 Engine RPM | 18495 ft/min 5637m/min @3800 Engine RPM |
| ANTI-SCALP ROLLERS | 4 | 4 |

**CONSTRUCTION:**

Fabricated and welded 7-gauge,double-layer steel top with 4-gauge side skirts.Full floating design.

**CUTTERDECK DRIVE SYSTEM:**

Electric clutch/brake drives belt directly from engine to cutterdeck. No twists in drive belt.

Torque information located on page 16.

**SPINDLES:**

Top mounted and maintenance free,with1 " shaft in precision machined,steel housing

**CUTTING HEIGHT ＆ PRODUCTION:**

Height: Lever allows easy setting of cut heights from 1-1/2 " to 4-1/2 " in 1/4 " increments.

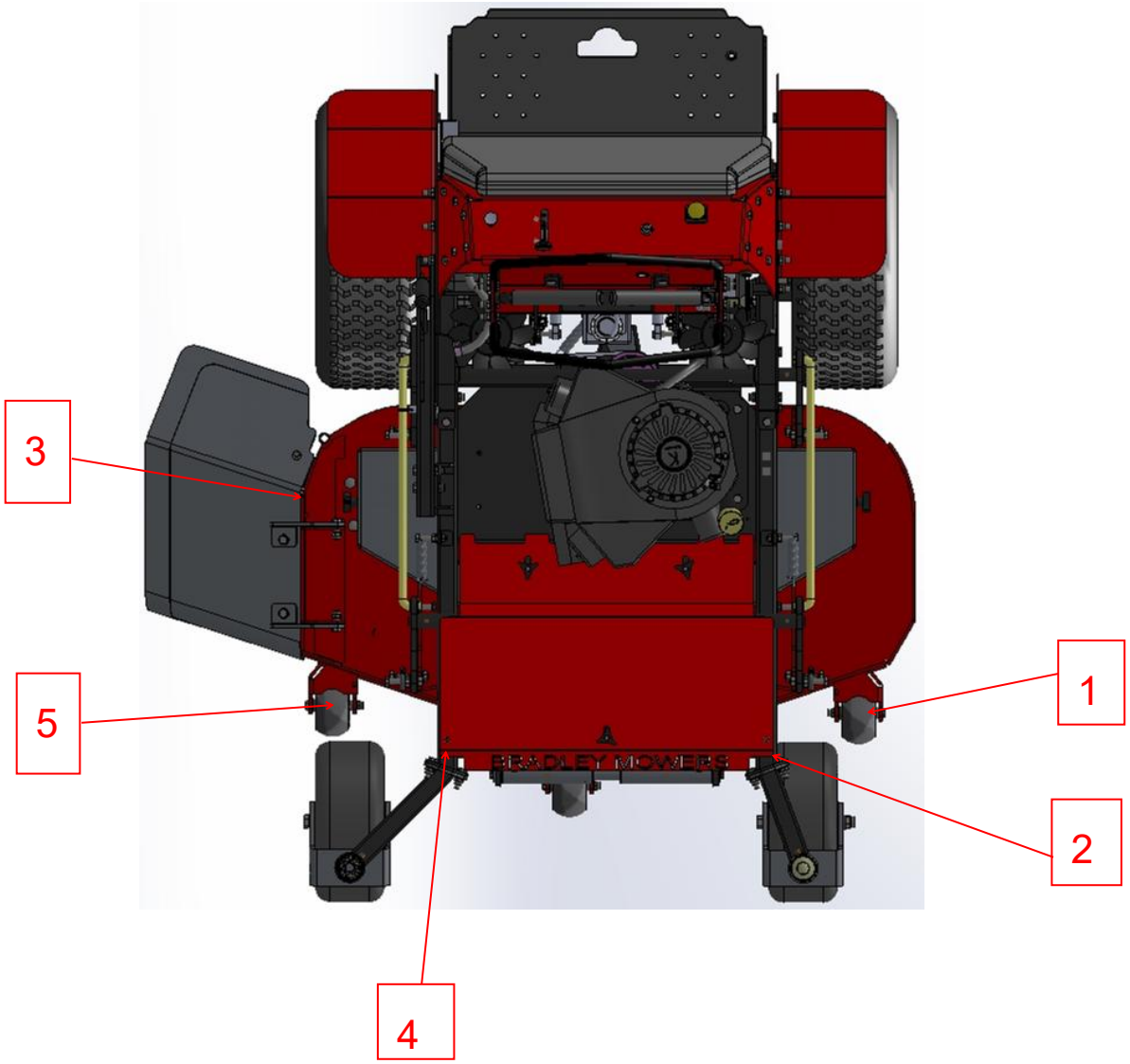
# Unpacking instructions

1.Wrench: use two 16mm wrenches, remove the packing rack.

2. Remove the mower from its plastic wrap.

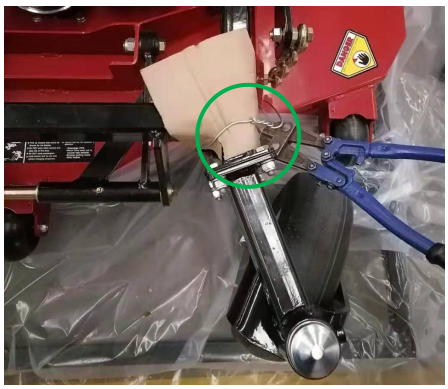
3. Remove belt cover from the mower.


4. Cut off the following five fixed wires.



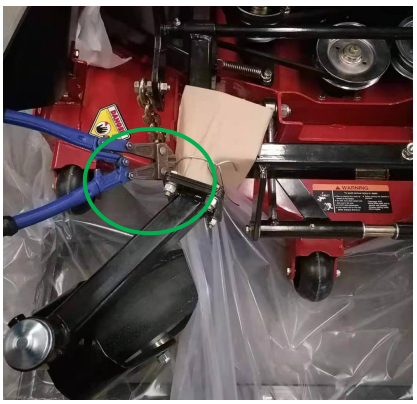
1.

2.



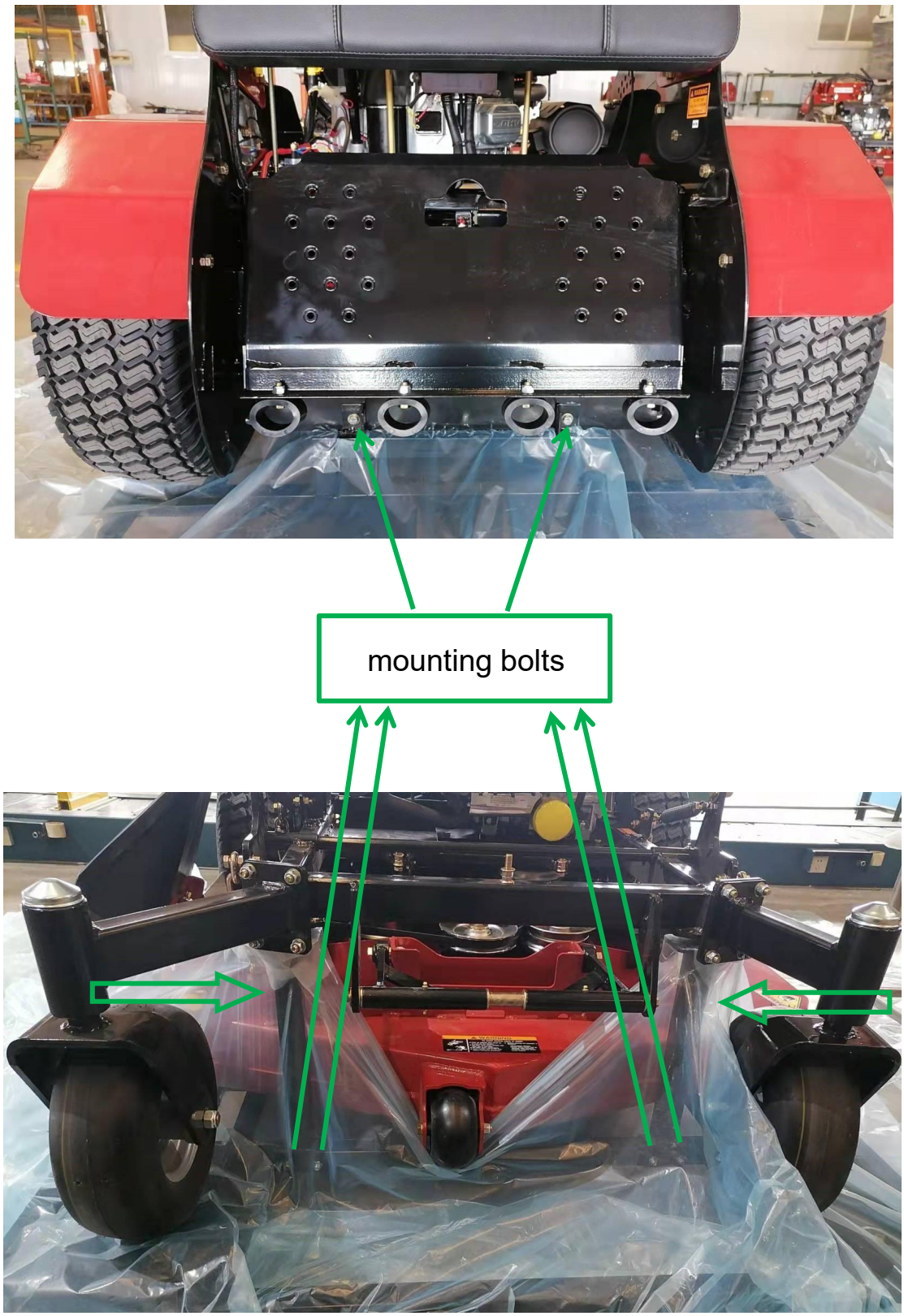
3.

4.



5.

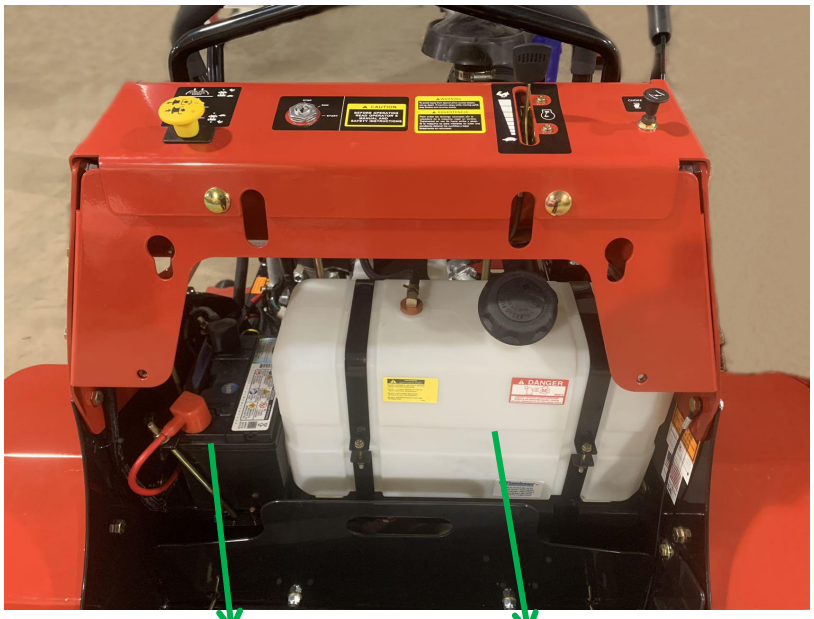
5. Remove the mounting bolts.

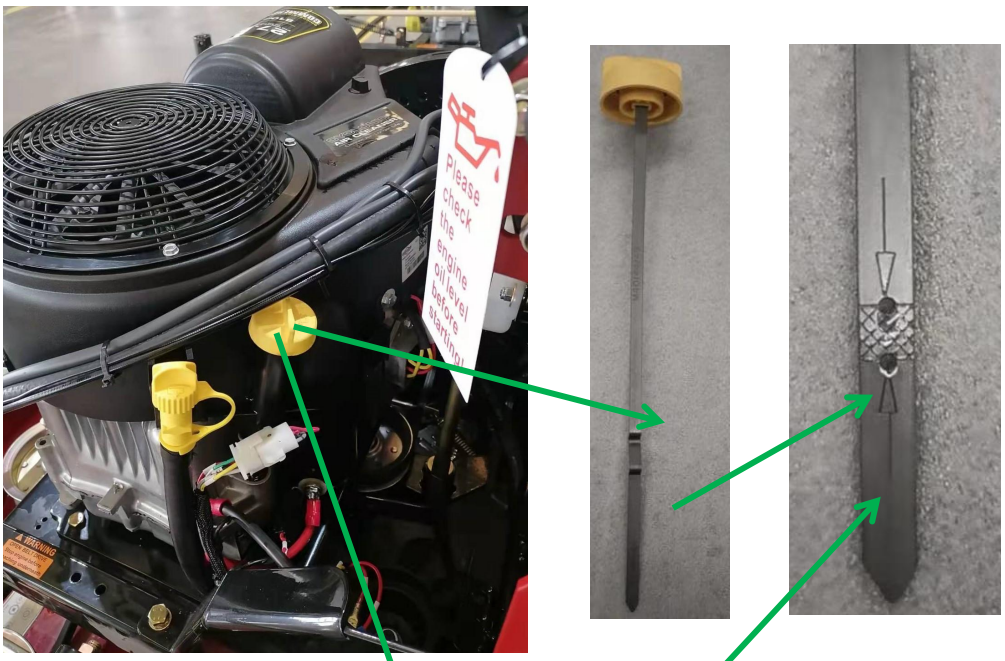


6. Remove the attached package on the rear panel. Note: The package includes the following parts: fuel tank straps, instruction manual, fuel tank pad, battery pad.

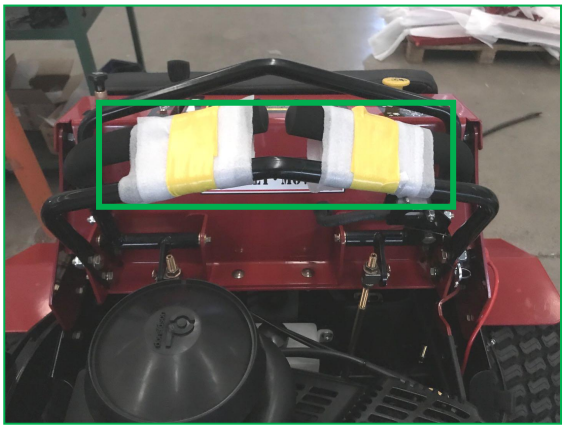
7.Hook up battery cables.

Add engine oil and gasoline under engine instruction.

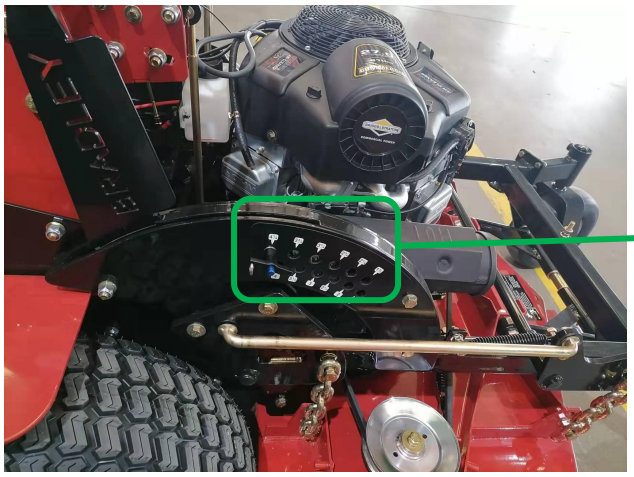


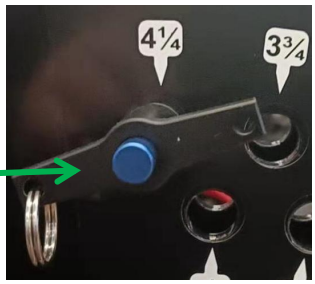



8.Remove the handle fixing strap



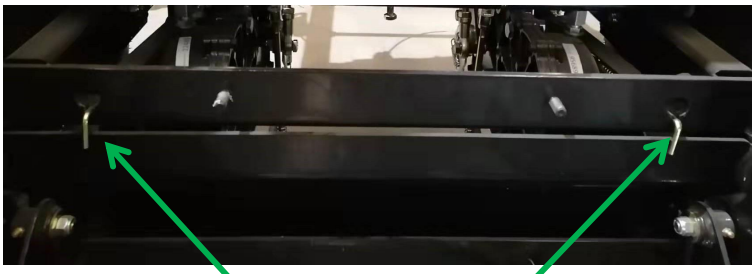
9. Put the four vertical posts in front of the front tire and then lift the mower up to the highest cutting position, push the mower until the back mower fully contact with the crate



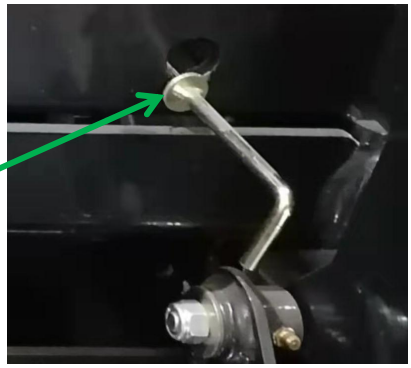



Put the four vertical posts in front of the front tire as the ram, as shown in the pic.

10.Check the mower make sure it is not in neutral and then start the mower, release the parking lever, drive the mower slowly from the crate.

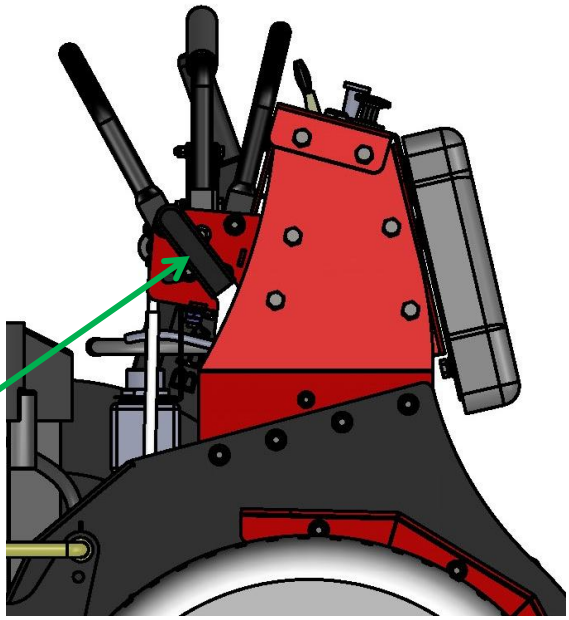


Not in neutral



Neutral

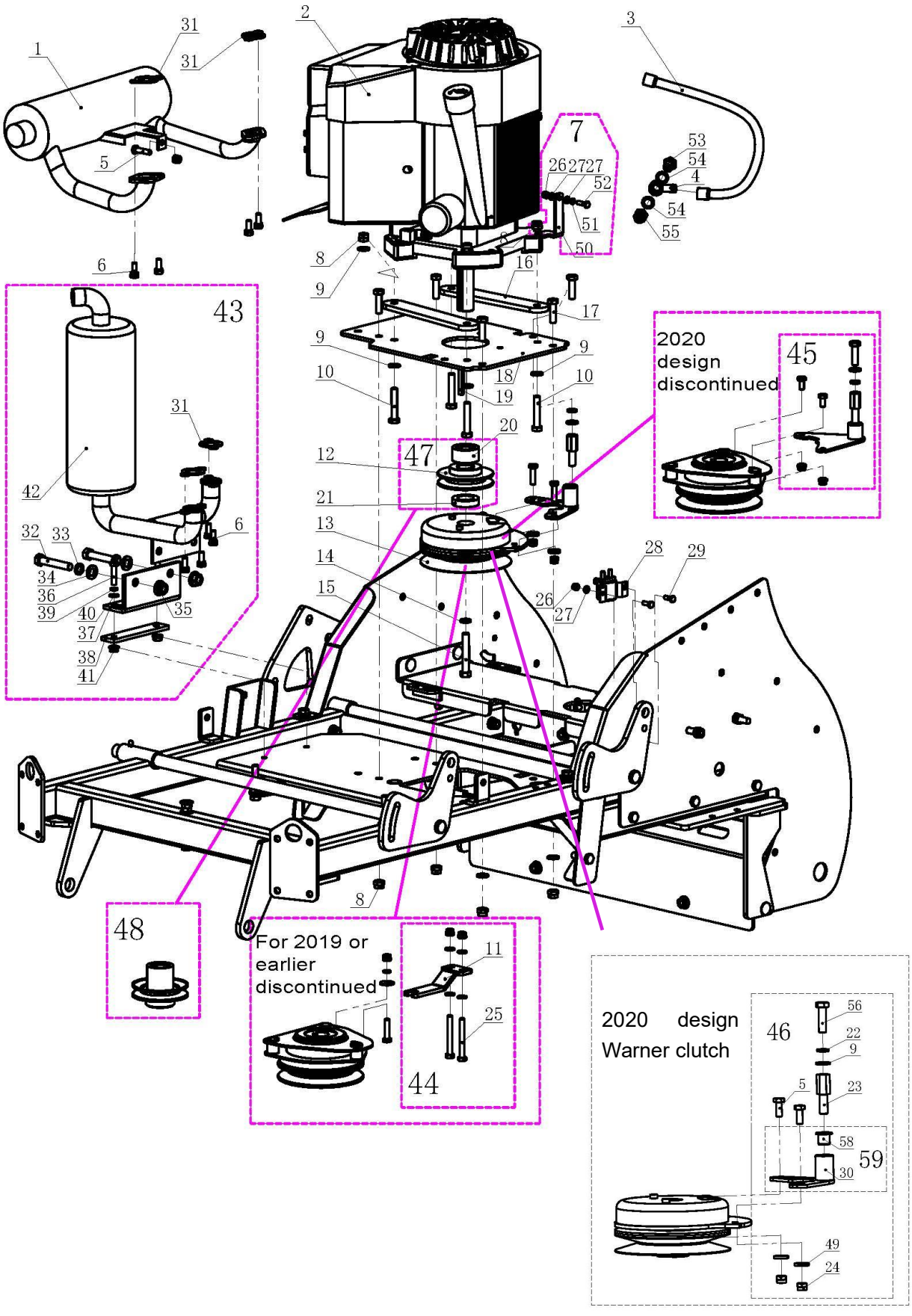
Parking lever



When driving the mower off, notice the base of the crate to avoid trip over

# PARTS SECTION

# BRIGGS & STRATTON ENGINE ASSEMBLY

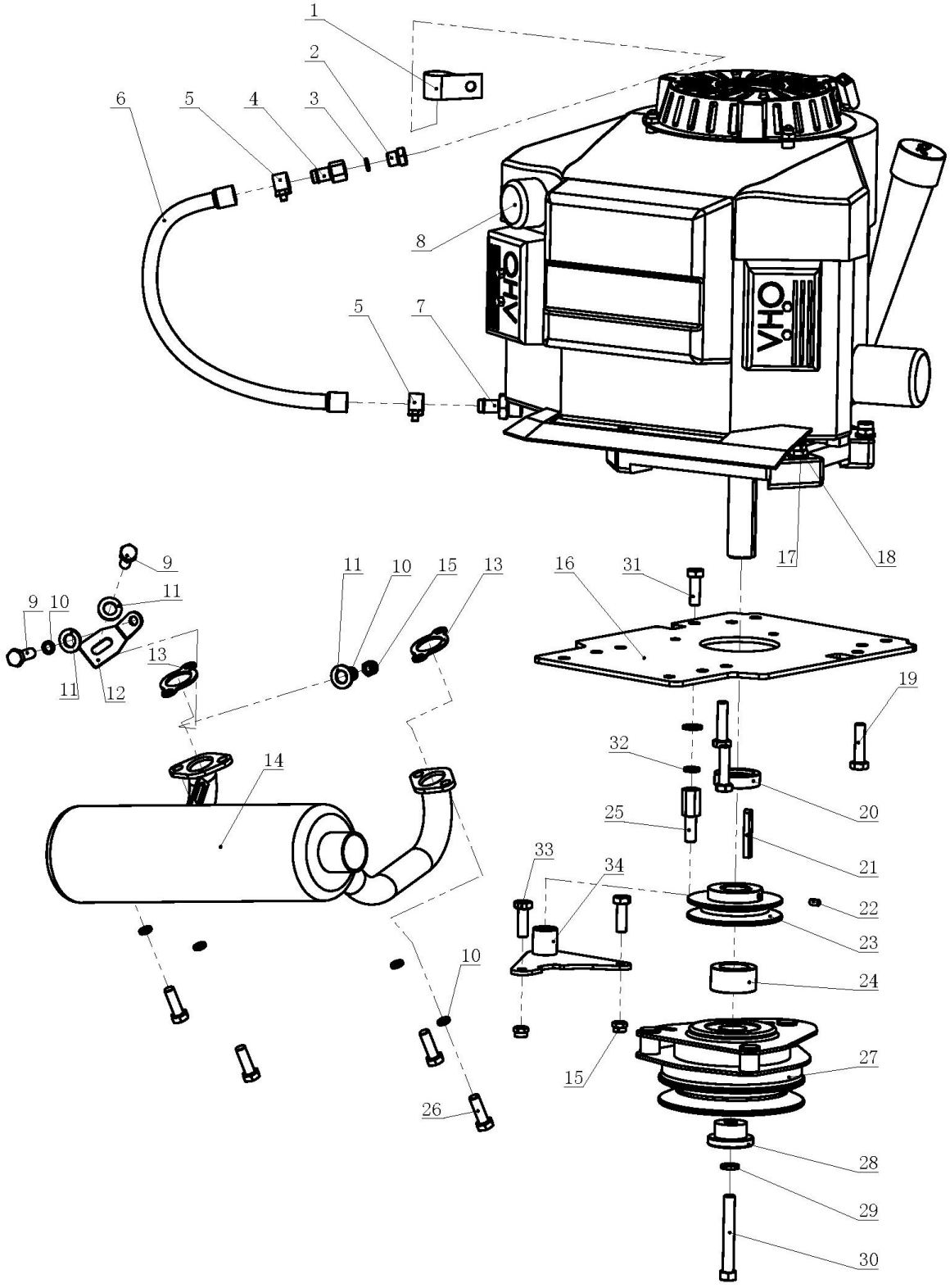


# BRIGGS & STRATTON ENGINE ASSEMBLY

| ITEM | PART NO. | DESCRIPTION | QTY |
|---|---|---|---|
| 1 | 601-001 | Muffler | 1 |
| 2 | 601-298 | Briggs & Stratton Engine-CT 25HP（48SC） | 1 |
| | 602-006 | Briggs & Stratton Engine-CT 27HP（52SC） | 1 |
| | 601-299 | Briggs & Stratton Engine-V 24HP（48SC） | 1 |
| | 602-007 | Briggs & Stratton Engine-V 26HP（48SC） | 1 |
| | 602-007 | Briggs & Stratton Engine-V 26HP（52SC） | 1 |
| 3 | 601-006 | Oil Drain Tube Assembly | 1 |
| 4 | 601-009 | Tubing Connector Weldment | 1 |
| 5 | 600-002-0820 | Hexagon Bolt M8-1.25x20 GB5783 | 2 |
| 6 | 200-037 | Hexagon Bolt 5/16-18 | 4 |
| 7 | 601-302 | Negative line mounting plate assembly | 1 |
| 8 | 600-201-0010 | Nylon Nut M10 GB889.1 | 8 |
| 9 | 600-301-0010 | Plain Washer 10 GB95 | 8 |
| 10 | 600-001-1050 | Hexagon Bolt M10-1.5x50 GB5782 | 4 |
| 11 | 601-022 | Clutch limiting fork | 1 |
| 12 | 601-011 | Engine Pulley | 1 |
| 13 | 601-012 | Electromagnetic Clutch（Ogura clutch） | 1 |
| | 604-029 | Electromagnetic Clutch（Warner clutch） | 1 |
| 14 | 600-904-0011 | Lock Washer 7/16 | 1 |
| 15 | 601-013 | Fastening bolt | 1 |
| 16 | 601-014 | Engine Plate | 2 |
| 17 | 600-002-1030 | Hexagon Bolt M10-1.5x30 GB5783 | 4 |
| 18 | 601-015 | Engine Mounting Plate | 1 |
| 19 | 601-016A | Flat Key 6.35x6.35x55 | 1 |
| 20 | 601-019A | Pulley Spacer Ⅱ | 1 |
| 21 | 601-018A | Pulley Spacer Ⅰ | 1 |
| 22 | 600-305-0010 | Lock Washer 10 GB93 | 3 |
| 23 | 601-251 | Stopper（Ogura clutch） | 1 |
| | 601-272 | Stopper（Warner clutch） | 1 |
| 24 | 600-205-0008 | Nylon Nut M8 DIN985 | 2 |
| 25 | 600-002-0890 | Hexagon Bolt M8-1.25x90 GB5783 | 2 |
| 26 | 600-201-0006 | Nylon Nut M6 GB889.1 | 3 |

| | | | |
|---|---|---|---|
| 27 | 600-301-0006 | Plain Washer 6 GB95 | 4 |
| 28 | 601-021 | Solenoid | 1 |
| 29 | 600-002-0616 | Hexagon Bolt M6-1x16 GB5783 | 2 |
| 30 | 601-022A | Electromagnetic Clutch Stop（Ogura clutch） | 1 |
| | 604-031 | Electromagnetic Clutch Stop（Warner clutch） | 1 |
| | 604-036 | Electromagnetic Clutch Stop ugrade design（Warner clutch） | 1 |
| 31 | 601-208 | Gasket | 2 |
| 32 | 600-002-1235 | Hexagon Bolt M12-1.75x35 GB5783 | 2 |
| 33 | 600-305-0012 | Lock Washer 12 GB93 | 2 |
| 34 | 600-301-0012 | Plain Washer 12 GB95 | 2 |
| 35 | 600-202-0012 | Nut Flange M12 QC864 | 2 |
| 36 | 600-002-0830 | Hexagon Bolt M8-1.25x30 GB5783 | 2 |
| 37 | 601-252 | Muffler connecting plate | 1 |
| 38 | 601-253 | Rubber gasket | 1 |
| 39 | 600-305-0008 | Lock Washer 8 GB93 | 2 |
| 40 | 600-302-0008 | Plain Washer 8 GB95 | 2 |
| 41 | 600-202-0008 | Nut Flange M8 QC864 | 2 |
| 42 | 601-254 | Vertical muffler | 1 |
| 43 | 601-257 | Vertical muffler for Vanguard engine | 1 |
| 44 | 601-255 | Clutch stop assembley for 2019 or earlier | 1 |
| 45 | 601-256 | Clutch stop assembly upgrade design（Ogura clutch） | 1 |
| 46 | 601-265 | Clutch stop assembly upgrade design（Warner clutch） | 1 |
| 47 | 601-268 | Engine pulley and washer assembly (Discontinued) | 1 |
| 48 | 601-269 | One piece engine pulley | 1 |
| 49 | 336-239 | Plain Washer | 2 |
| 50 | 601-295 | Negative line mounting plate | 1 |
| 51 | 600-305-0006 | Spring Washer 6 GB93 | 1 |
| 52 | 600-002-0620 | Hexagon Bolt M6*20 GB5783 | 1 |
| 53 | 601-008 | Drain Bolt | 1 |
| 54 | 601-007 | Composite Gasket | 2 |
| 55 | 601-010 | Fuel Drain Connection | 1 |
| 56 | 600-002-1025 | Hexagon Bolt M10-1.5x25 GB5783 | 1 |
| 57 | 600-002-0816 | Hexagon Bolt M8-1.25x16 GB5783 | 1 |
| 58 | 604-044 | Nylon Sleeve | 1 |
| 59 | 601-314 | Electromagnetic Clutch Stop（Warner clutch） | 1 |

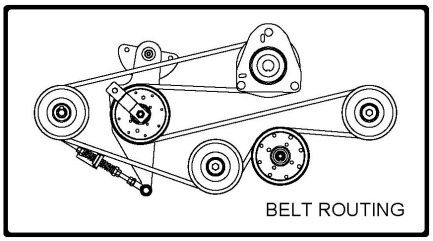
# HONDA ENGINE ASSEMBLY（Discontinued）



# HONDA ENGINE ASSEMBLY（Discontinued）

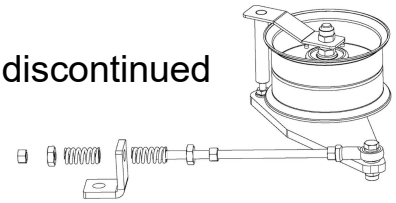
| ITEM | PART NO. | DESCRIPTION | QTY |
|---|---|---|---|
| 1 | 601-200 | Clamp | 1 |
| 2 | 601-201 | Plug | 1 |
| 3 | 601-202 | Nylon Cushion | 1 |
| 4 | 601-203 | Plug Connector | 1 |
| 5 | 601-204 | Oil Drain Clip | 2 |
| 6 | 601-205 | Drain Tube | 1 |
| 7 | 601-206 | Oil Drain Fitting | 1 |
| 8 | 601-004 | HONDA Engine | 1 |
| 9 | 600-002-0820 | Hexagon Bolt M8-1.25x20 GB5783 | 2 |
| 10 | 600-305-0008 | Lock Washer 8 GB93 | 6 |
| 11 | 600-301-0008 | Plain Washer 8 GB95 | 3 |
| 12 | 601-207 | Bracket | 1 |
| 13 | 601-208 | Gasket | 2 |
| 14 | 601-002 | Muffler-Engine | 1 |
| 15 | 600-201-0008 | Nylon Nut M8 GB889.1 | 3 |
| 16 | 601-015 | Engine Mounting Plate | 1 |
| 17 | 600-201-0010 | Nylon Nut M10 GB889.1 | 4 |
| 18 | 600-301-0010 | Plain Washer 10 GB95 | 4 |
| 19 | 600-001-1050 | Hexagon Bolt M10-1.5x50 GB5782 | 4 |
| 20 | 601-209 | Adjusting Sleeve Ⅰ | 1 |
| 21 | 601-016A | Flat Key | 1 |
| 22 | 600-103-0610 | Screw M6-1x10 GB77 | 1 |
| 23 | 601-011 | Engine Pulley | 1 |
| 24 | 601-019A | Pulley Spacer Ⅱ | 1 |
| 25 | 601-251 | Stopper | 1 |
| 26 | 200-037 | Hexagon Bolt 5/16-18 | 4 |
| 27 | 601-012 | Electromagnetic Clutch | 1 |
| 28 | 601-020 | Guide Bushing | 1 |
| 29 | 600-904-0011 | Lock Washer 7/16 | 1 |
| 30 | 601-013 | Set Screw | 1 |
| 31 | 600-002-1020 | Hexagon Bolt M10-1.5x20 GB5783 | 1 |
| 32 | 600-305-0010 | Lock Washer 10 GB93 | 1 |
| 33 | 600-002-0816 | Hexagon Bolt M8-1.25x40 GB5783 | 2 |
| 34 | 601-022A | Electromagnetic Clutch Stop | 1 |

# MOWER DECK ASSEMBLY

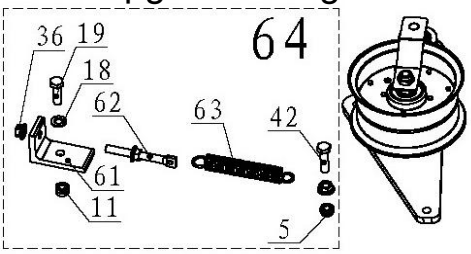


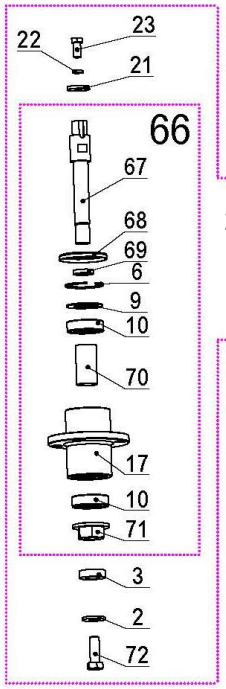

For 2018 or earlier

discontinued



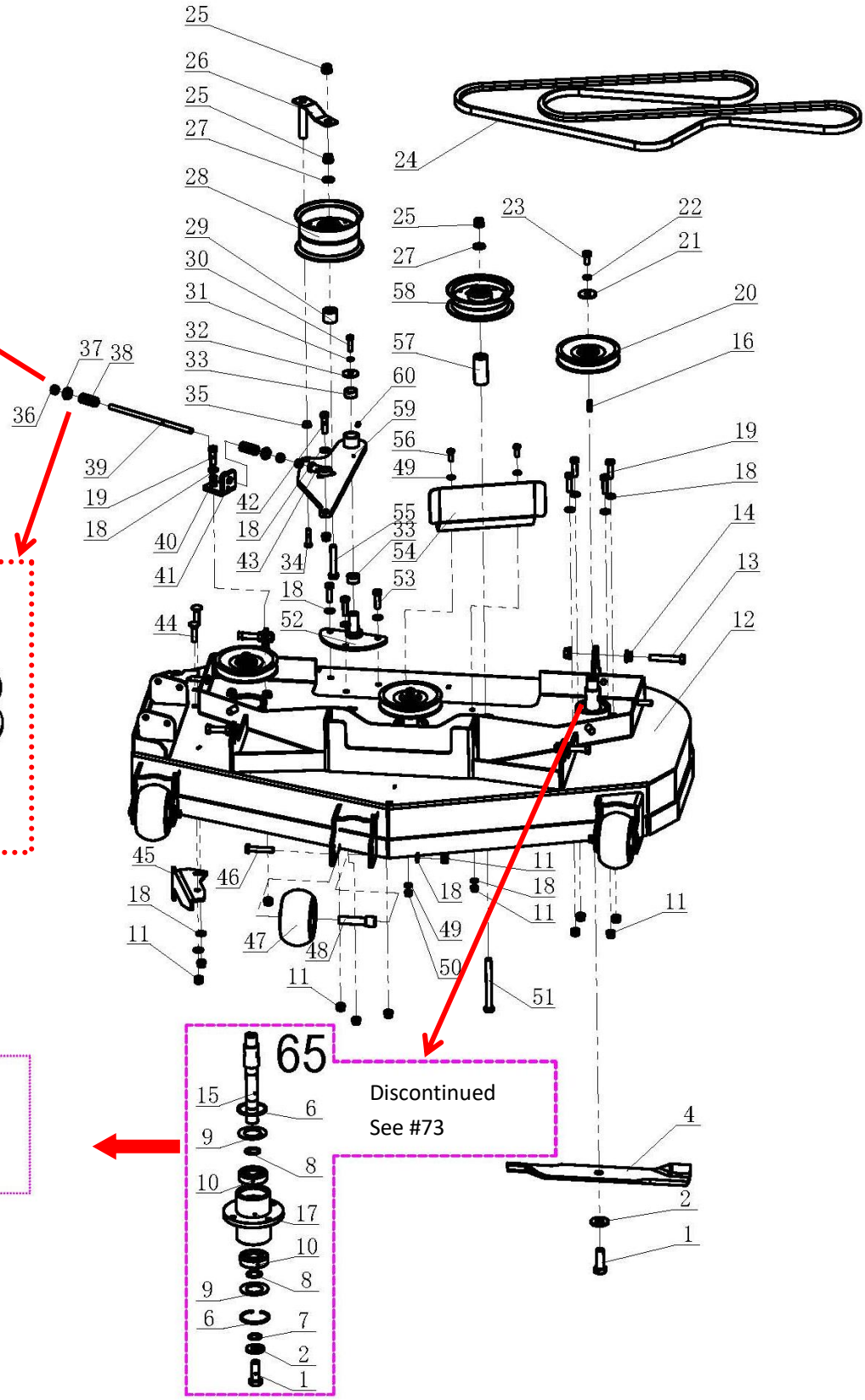
2019 upgrade design




2022 upgrade design

73

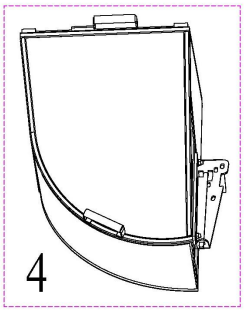


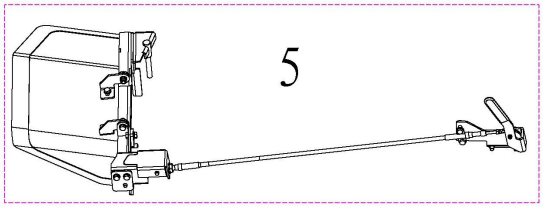
# MOWER DECK ASSEMBLY

| ITEM | PART NO. | DESCRIPTION | QTY |
|---|---|---|---|
| 1 | 601-023 | Blade Bolt M16-1.5x45 | 3 |
| 2 | 600-902-0016 | Spring Washer 16 DIN6796 | 3 |
| 3 | 601-281 | Plain Washer | 3 |
| 4 | 601-025 | Blade 48 " | 3 |
| | 602-001 | Blade 52 " | 3 |
| 5 | 600-205-0010 | Thin Nylon Nut M10 DIN985 | 1 |
| 6 | 600-306-0062 | Snap Ring 62 GB893.1 | 6 |
| 7 | 600-307-0025 | Snap Ring 25 GB894.1 | 3 |
| 8 | 601-027 | Plain Washer | 6 |
| 9 | 601-028 | Plain Washer | 6 |
| 10 | 600-501-6305 | Deep Groove Ball Bearings 6305-2RS GB276 | 6 |
| 11 | 600-201-0010 | Nylon Nut M10 GB889.1 | 21 |
| 12 | 601-029 | Deck 48 " | 1 |
| | 602-002 | Deck 52 " | 1 |
| 13 | 600-002-1255 | Bolt M12-1.75x50 GB5783 | 4 |
| 14 | 600-202-0012 | Nut Flange M12 QC/T864 | 8 |
| 15 | 601-030 | Spindle Shaft | 3 |
| 16 | 600-401-0830 | Flat Key 8*7*30 | 3 |
| 17 | 601-031 | Spindle | 3 |
| 18 | 600-301-0010 | Plain Washer 10 GB95 | 21 |
| 19 | 600-002-1035 | Bolt M10-1.5x35 GB5783 | 13 |
| 20 | 601-032a | Pulley Spindle （48SC） | 3 |
| | 602-005 | Pulley Spindle （52SC） | 3 |
| 21 | 601-033 | Plain Washer | 3 |
| | 601-313 | Plain Washer（New Design Spindle Assembly） | 3 |
| 22 | 600-305-0010 | Lock Washer 10 GB93 | 3 |
| | 600-305-0012 | Lock Washer 12 GB93（New Design Spindle Assembly） | 3 |
| 23 | 600-002-1020 | Bolt M10-1.5x20 GB5783 | 3 |
| | 600-002-1230 | Bolt M12-1.75x30 GB5783（New Design Spindle Assembly） | 3 |
| 24 | 601-034 | SC48 Deck Belt LB123 | 1 |
| | 602-004 | SC52 Deck Belt LB132 | 1 |
| 25 | 600-201-0012 | Nylon Nut M12 GB889.1 | 3 |
| 26 | 601-035 | Idler Arm | 1 |
| 27 | 600-301-0012 | Plain Washer 12 GB95 | 2 |
| 28 | 601-036 | Idler Pulley | 1 |
| 29 | 601-037 | Straight Pivot | 1 |
| 30 | 600-002-0820 | Bolt M8-1.25x20 GB5783 | 1 |
| 31 | 600-305-0008 | Lock Washer 8 GB93 | 1 |

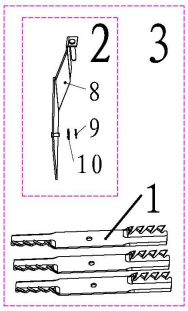
| | | | |
|---|---|---|---|
| 32 | 601-038 | Plain Washer 8 GB95 | 1 |
| 33 | 601-039 | Bushing,Flange Pivot | 2 |
| 34 | 600-002-0840 | Hexagon Bolt M8-1.25x45 GB5783 | 1 |
| 35 | 600-202-0008 | Nut Flange M8 QC/T864 | 1 |
| 36 | 600-202-0010 | Nut Flange M10 QC/T864 | 3 |
| 37 | 601-040 | Nut | 2 |
| 38 | 601-041 | Compression Spring | 2 |
| 39 | 601-197 | Arm pull rod | 1 |
| 40 | 601-198 | Link Bushing | 1 |
| 41 | 601-199 | Mount Bracket | 1 |
| 42 | 600-002-1040 | Hexagon Bolt M10-1.5x40 GB5783 | 1 |
| 43 | 600-903-0010 | Rod End RH10 | 1 |
| 44 | 600-003-1025 | Hexagon Bolt M10-1.5x25 GB801 | 2 |
| 45 | 601-042 | Safety Flap | 1 |
| 46 | 600-001-10110 | Hexagon Bolt M10*1.5*110 GB5782 | 4 |
| 47 | 601-043 | Anti-Scalp Wheel | 4 |
| 48 | 601-044 | Bushing | 4 |
| 49 | 600-301-0008 | Plain Washer 8 GB95 | 4 |
| 50 | 600-201-0008 | Nylon Nut M8 GB889.1 | 2 |
| 51 | 600-001-12140 | Hexagon Bolt M12-1.75x140 GB5783 | 1 |
| 52 | 601-068a | Mounting Plate Weldment | 1 |
| 53 | 600-002-1025 | Hexagon Bolt M10-1.5x25 GB5783 | 3 |
| 54 | 601-046 | Belt Guide | 1 |
| 55 | 600-001-12120 | Hexagon Bolt M12-1.75x120 GB5782 | 2 |
| 56 | 600-002-0825 | Hexagon Bolt M8-1.25x25 GB5783 | 2 |
| 57 | 601-047 | Straight Pivot | 1 |
| 58 | 601-048 | Idler Pulley | 1 |
| 59 | 601-210 | Idler Arm | 1 |
| 60 | 600-901-0006 | Grease fitting M6*1 GB1152 | 1 |
| 61 | 601-249 | Tension spring bracket | 1 |
| 62 | 601-273 | Rod Thread | 1 |
| 63 | 604-039 | Diamond bracket tension spring | 1 |
| 64 | 601-250 | Idler linkage upgrade kit | 1 |
| 65 | 601-214 | Spindle Assembly（ discontinued ） | 3 |
| 66 | 601-311 | Spindle （For 2022 new structure spindle） | 3 |
| 67 | 601-277 | Spindle Shaft | 3 |
| 68 | 100c-017 | Bearing cap | 3 |
| 69 | 601-278 | Bearing cover block | 3 |
| 70 | 601-279 | Bearing bushing | 3 |
| 71 | 601-280 | Nut | 3 |
| 72 | 601-274 | Blade Bolt M16-1.5x60 | 3 |
| 73 | 601-275 | Spindle Assembly（For 2022 new structure spindle） | 3 |

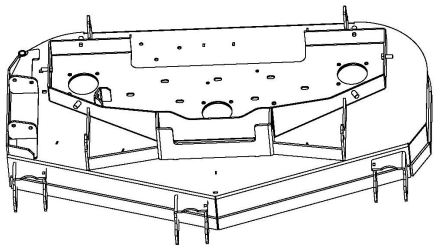
# OPTIONAL PARTS

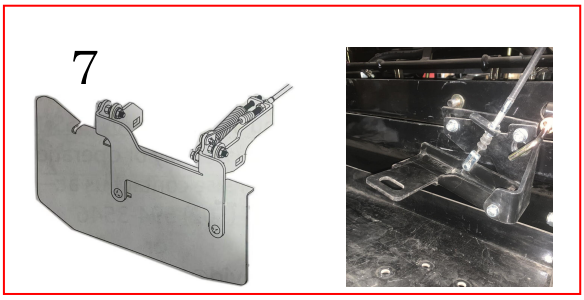




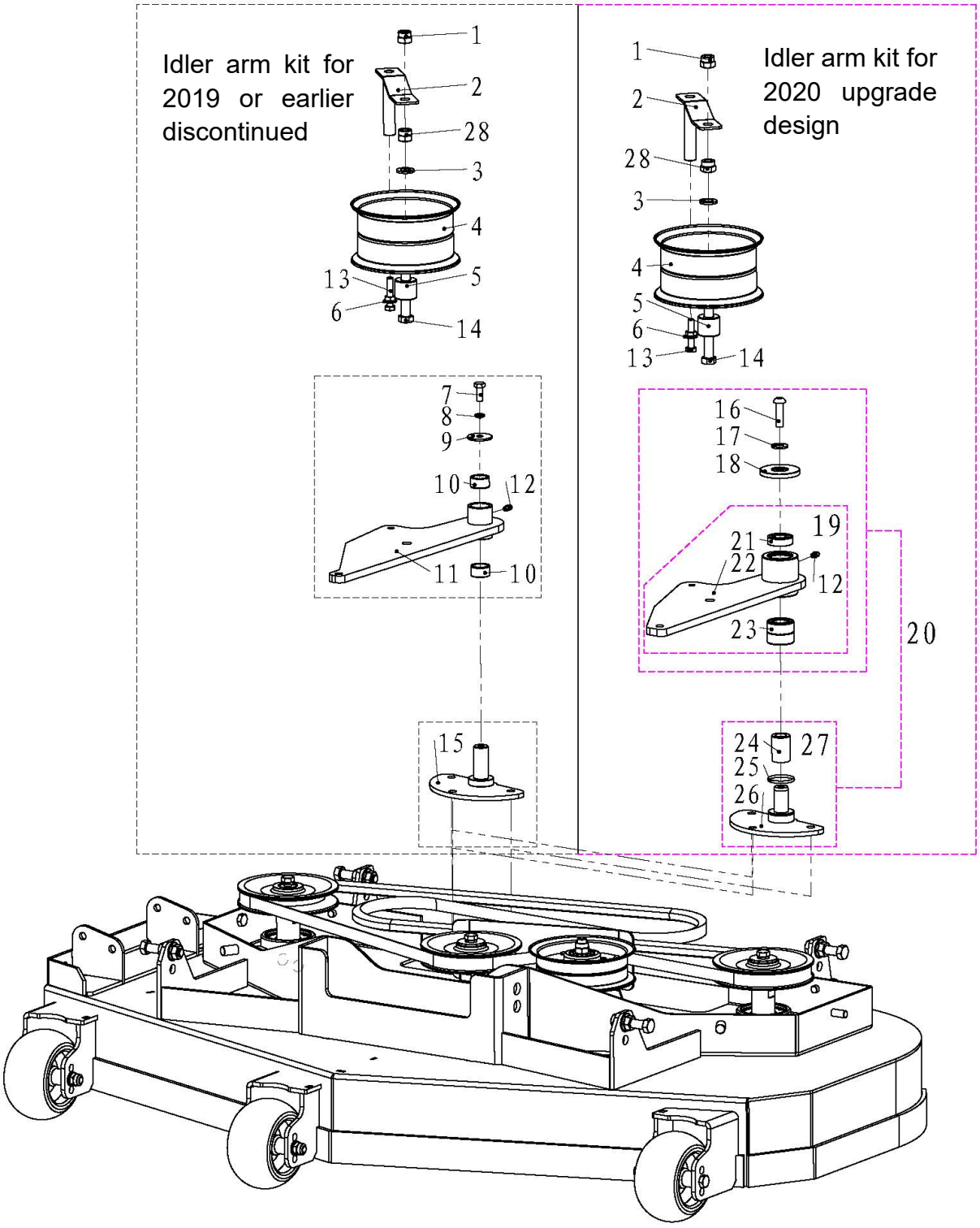





| optional | | | |
|---|---|---|---|
| **IEM** | **PART NO.** | **DESCRIPTION** | **QTY** |
| 1 | 500-203 | Mulching blade for 52″ | 1 |
| | 500-204 | Mulching blade for 48″ | 1 |
| 2 | 601-241 | Mulch Plate Assembly for 48″ | 1 |
| | 601-242 | Mulch Plate Assembly for 52″ | 1 |
| 3 | 601-243 | Mulch kit for 48″ | 1 |
| | 601-244 | Mulch kit for 52″ | 1 |
| 4 | GC2400 | Grass catcher | 1 |
| 5 | 48-OCDC | OCDC kit for 48SC | 1 |
| | 52-OCDC | OCDC kit for 52SC | 1 |
| 6 | GF-48/52OCDC-HC | Handle Control Grass Flap OCDC For 48/52SC | 1 |
| 7 | GF-48/52OCDC-FC | Grass Flap Foot Pedal Control OCDC For 48/52SC | 1 |
| 8 | 601-310 | Mulch plate weldment | 1 |
| 9 | 601-124 | Hair Pin Cotter | 1 |
| 10 | 600-302-0010 | Plain Washer 10 | 1 |

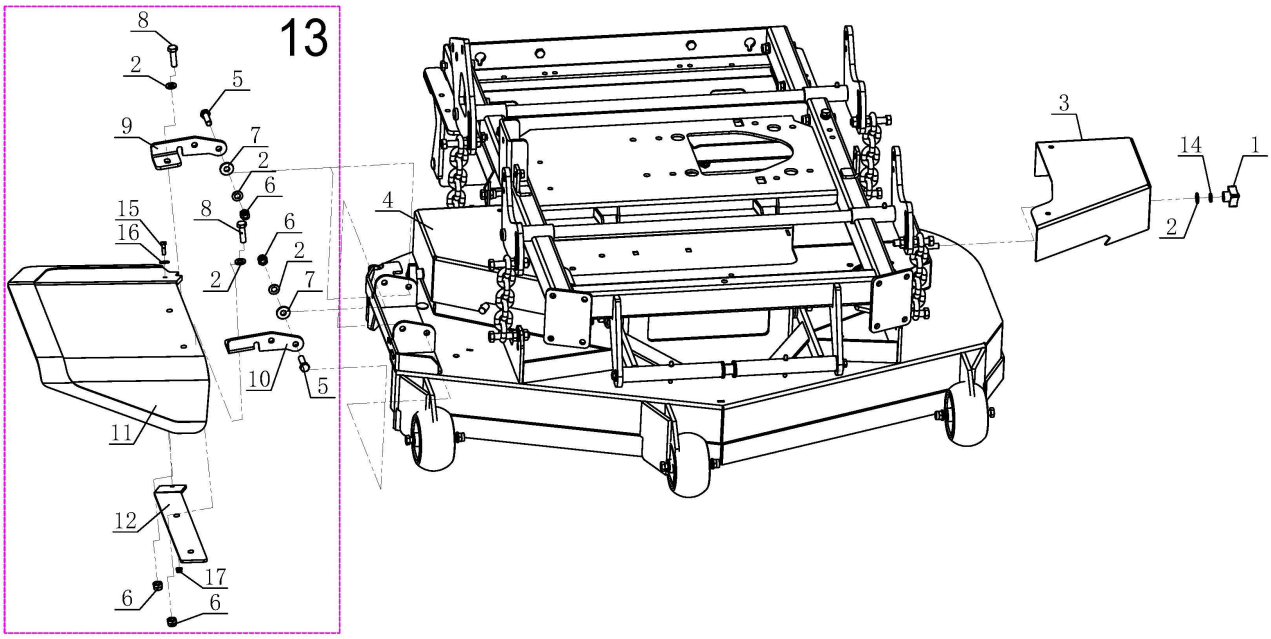
# IDLER ARM STRUCTURE COMPARISON



# IDLER ARM STRUCTURE COMPARISON

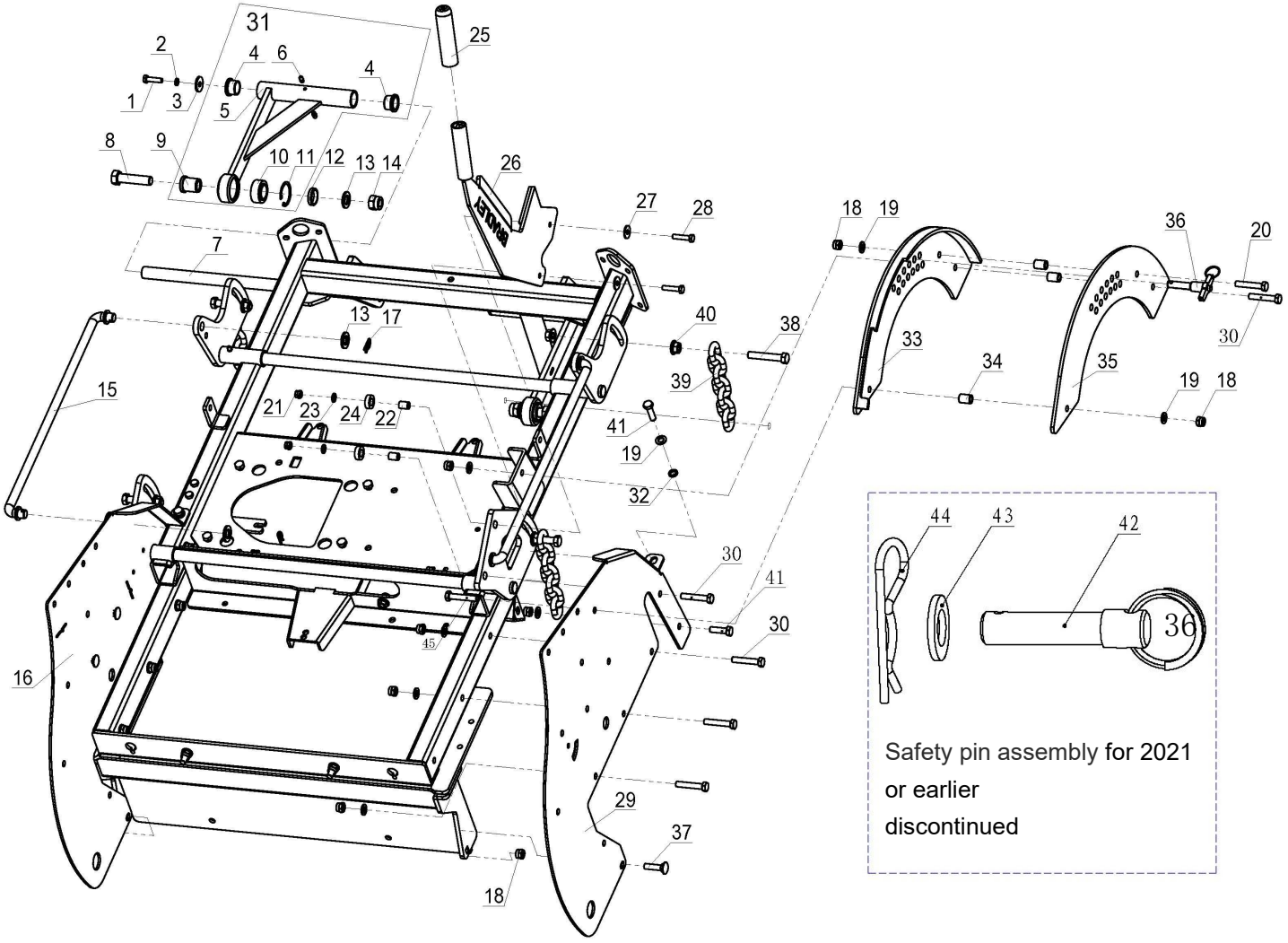
| IEM | PART NO. | DESCRIPTION | QTY |
|---|---|---|---|
| 1 | 600-205-0012 | Nylon Nut M12 DIN985 | 1 |
| 2 | 601-035 | Idler Arm | 1 |
| 3 | 600-301-0012 | Plain Washer 12 GB95 | 1 |
| 4 | 601-036 | Idler Pulley | 1 |
| 5 | 601-037a | Straight Pivot | 1 |
| 6 | 600-202-0008 | Nut Flange M8 QC/T864 | 1 |
| 7 | 600-002-0820 | Bolt M8-1.25x20 GB5783 | 1 |
| 8 | 600-305-0008 | Lock Washer 8 GB93 | 1 |
| 9 | 601-038 | Plain Washer 8 GB95 | 1 |
| 10 | 601-039 | Bushing,Flange Pivot | 2 |
| 11 | 601-210 | Idler Arm | 1 |
| 12 | 600-901-0006 | Grease fitting M6*1 45° GB1152 | 1 |
| 13 | 600-002-0845 | Hexagon Bolt M8-1.25x45 GB5783 | 1 |
| 14 | 600-001-12120 | Hexagon Bolt M12-1.75x120 GB5782 | 1 |
| 15 | 601-045 | Mounting Plate Weldment | 1 |
| 16 | 600-004-1035 | Bolt M10-1.5x35 GB70.2 | 1 |
| 17 | 600-902-0010 | Butterfly Washer 10 DIN6796 | 1 |
| 18 | 604-025 | Dustproof cap of bearing | 1 |
| 19 | 604-022A | Idler Arm assembly | 1 |
| 20 | 604-034 | Idler arm kit | 1 |
| 21 | 600-501-6300 | Deep Groove Ball Bearings 6300 | 1 |
| 22 | 604-022 | Idler Arm | 1 |
| 23 | 600-504-6904 | Needle bearing RNA6904 | 1 |
| 24 | 604-026 | Linging of needle bearing RNA6904 | 1 |
| 25 | 600-601-3003 | Rubber sealing ring | 1 |
| 26 | 604-023 | Mounting Plate Weldment | 1 |
| 27 | 601-045a | Mounting Plate assembly | 1 |
| 28 | 600-201-0012 | Nylon Nut M12 GB889.1 | 1 |

# CHUTE AND BELT GUARD ASSEMBLY




| ITEM | PART NO. | DESCRIPTION | QTY |
|---|---|---|---|
| 1 | 601-080 | Knob | 2 |
| 2 | 600-301-0010 | Plain Washer 10 GB95 | 6 |
| 3 | 601-131 | Left Belt Guard | 1 |
| 4 | 601-132 | Right Belt Guard | 1 |
| 5 | 600-002-1030 | Hexagon Bolt M10-1.5x30 GB5783 | 2 |
| 6 | 600-201-0010 | Nylon Nut M10 GB889.1 | 4 |
| 7 | 601-133 | Nylon Washer | 2 |
| 8 | 600-002-1035 | Bolt M10-1.5x35 GB5783 | 2 |
| 9 | 601-134 | Left Chute Pivot | 1 |
| 10 | 601-135 | Right Chute Pivot | 1 |
| 11 | 601-136 | Chute Deflector | 1 |
| 12 | 336-250 | Backing Plate | 1 |
| 13 | 601-229 | Rubber Chute Assembly | 1 |
| 14 | 600-305-0010 | Lock washer 10 GB93 | 2 |
| 15 | 600-002-0625 | Bolt M6X25 | 1 |
| 16 | 600-301-006 | Plain Washer 6 | 1 |
| 17 | 600-201-0006 | Nylon Nut M6 | 1 |

# DECK LIFT ASSEMBLY



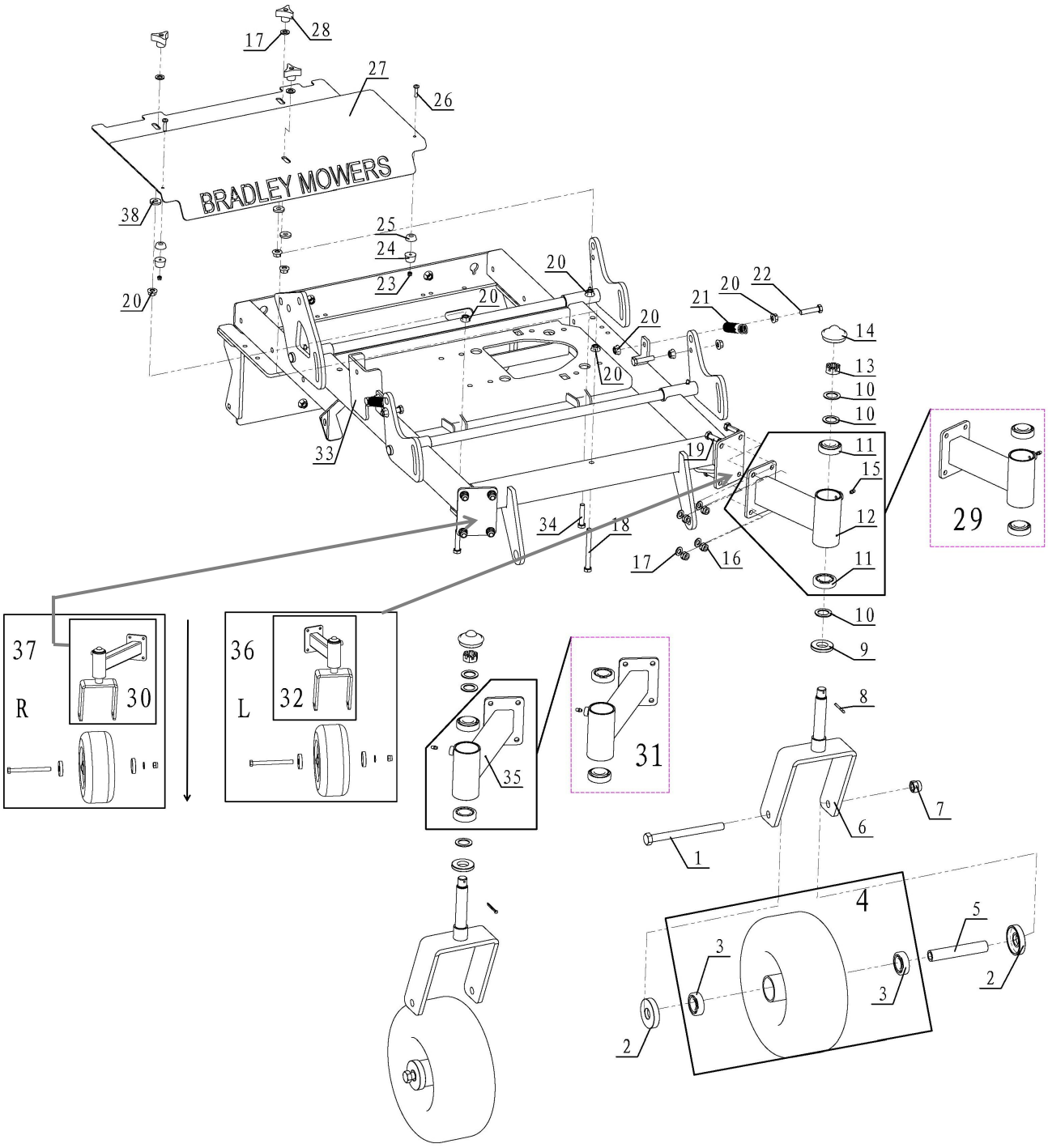
# DECK LIFT ASSEMBLY

| ITEM | PART NO. | DESCRIPTION | QTY |
|---|---|---|---|
| 1 | 600-002-0820 | Hexagon Bolt M8-1.25x20 GB5783 | 2 |
| 2 | 600-305-0008 | Lock Washer 8 GB93 | 2 |
| 3 | 600-304-0008 | Plain Washer 8 GB5287 | 2 |
| 4 | 601-049 | Link Bushing | 4 |
| 5 | 601-050 | Link Idler Arm | 2 |
| 6 | 600-901-0006 | Grease Fitting M6*1 GB1152 | 8 |
| 7 | 601-051 | Pivot Shaft | 1 |
| 8 | 600-002-1660 | Hexagon Bolt M16-2x60 GB5783 | 2 |
| 9 | 601-052 | Rod End Bushing | 2 |
| 10 | 600-903-0025 | Rod End GE25ES | 2 |
| 11 | 600-306-0042 | Snap Ring 42 | 2 |
| 12 | 601-053 | Rod End Washer | 2 |
| 13 | 600-301-0016 | Plain Washer 16 GB95 | 6 |
| 14 | 600-201-0016 | Nylon Nut M16 GB889.1 | 2 |
| 15 | 601-054 | Lift Lever | 2 |
| 16 | 601-055 | Left Riser | 1 |
| 17 | 600-403-0332 | Cotter Pin 3*32 | 4 |
| 18 | 600-201-0010 | Nylon nut M10 GB889.1 | 12 |
| 19 | 600-301-0010 | Plain Washer 10 GB95 | 12 |
| 20 | 600-002-1050 | Hexagon Bolt M10-1.5x50 GB5783 | 1 |
| 21 | 600-201-0008 | Nylon Nut M8 GB889.1 | 2 |
| 22 | 601-056 | Lift Handle Bushing | 2 |
| 23 | 600-301-0008 | Plain Washer 8 GB95 | 2 |
| 24 | 601-057 | Rubber Handle Sleeve | 2 |
| 25 | 601-058 | Handle Sleeve | 1 |
| 26 | 601-059 | Handle Weldment | 1 |
| 27 | 600-302-0008 | Plain Washer 8 GB96.1 | 2 |
| 28 | 600-002-0840 | Hexagon Bolt M8-1.25x40 GB5783 | 2 |
| 29 | 601-060 | Right Riser | 1 |
| 30 | 600-001-1060 | Hexagon Bolt M10-1.5x60 GB5782 | 8 |
| 31 | 601-270 | Idler arm assembly | 1 |
| 32 | 600-305-0010 | Lock Washer 10 GB93 | 2 |
| 33 | 601-062a | Dial Weldment | 1 |
| 34 | 601-063 | Lift Bushing | 3 |
| 35 | 601-064a | Foreplate | 1 |
| 36 | 601-271 | Safety Pin ugrade design | 1 |
| | 601-282 | Safety pin assembly for 2021 or earlier discontinued | 1 |
| 37 | 600-003-1025 | Hexagon Bolt M10-1.5x25 GB801 | 2 |
| 38 | 600-002-1250 | Hexagon Bolt M12-1.5x50 GB5783 | 4 |
| 39 | 601-066 | Chain | 4 |
| 40 | 600-202-0012 | Nut Flange M12 QC/T864 | 8 |

# DECK LIFT ASSEMBLY

| | | | |
|---|---|---|---|
| 41 | 600-002-1025 | Hexagon Bolt M10-1.5x25 GB5783 | 2 |
| 42 | 601-065 | Safety Pin | 1 |
| 43 | 600-301-0012 | Plain Washer 12 GB95 | 1 |
| 44 | 601-061 | Hair Pin Cotter φ3 | 1 |
| 45 | 600-002-1055 | Hexagon Bolt M10-1.5x55 GB5783 | 2 |

# CASTER & BELT COVER ASSEMBLY



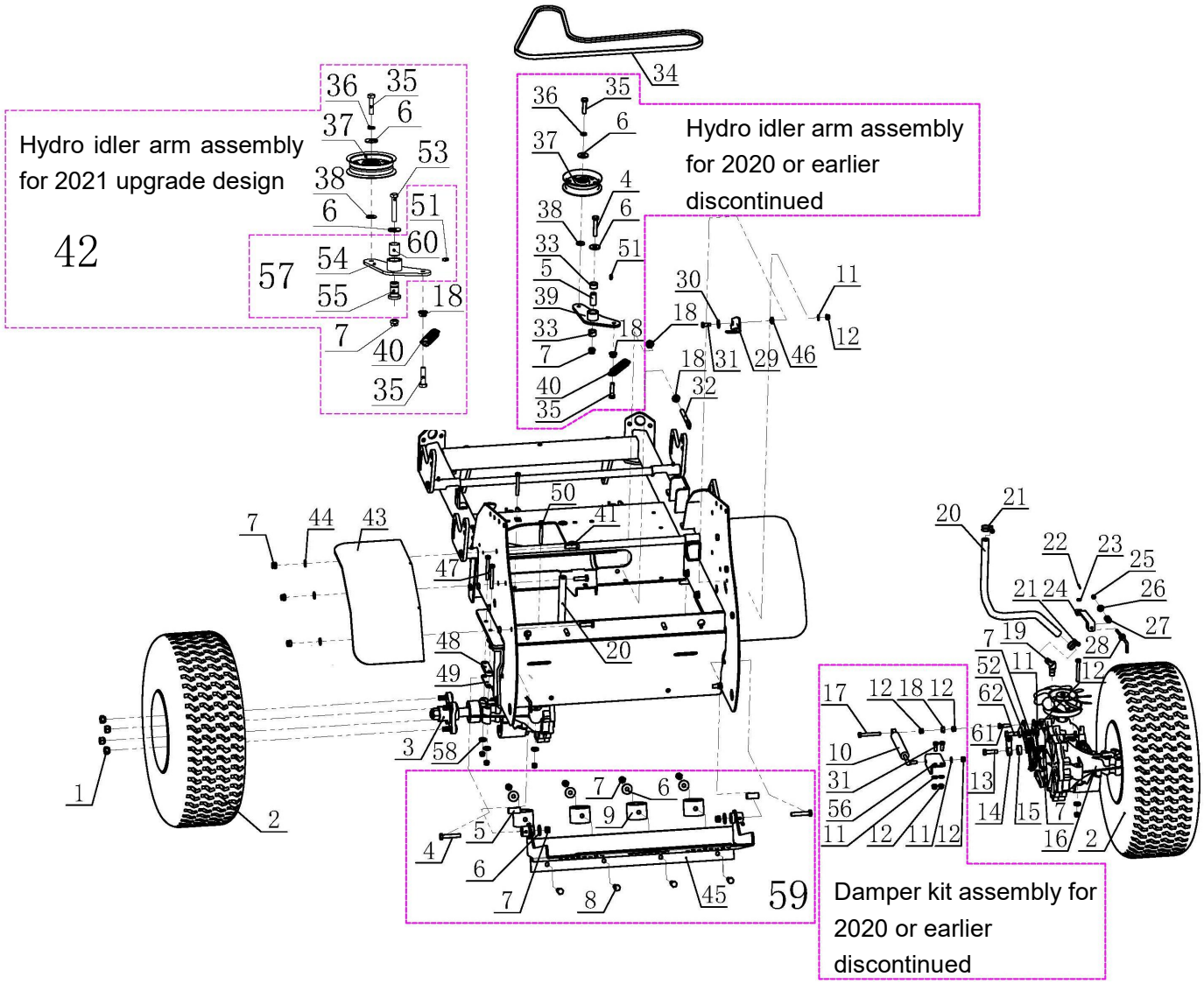
# CASTER & BELT COVER ASSEMBLY

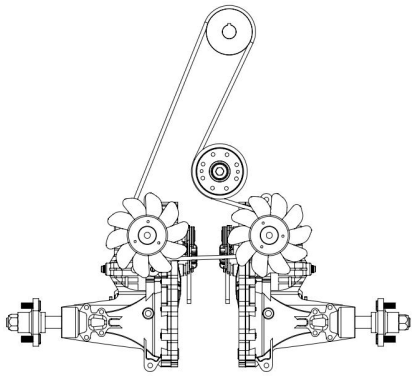
| ITEM | PART NO. | DESCRIPTION | QTY |
|---|---|---|---|
| 1 | 600-001-16180 | Hexagon Bolt M16-2x180 GB5782 | 2 |
| 2 | 601-067 | Bearing End Cover | 4 |
| 3 | 600-501-6205 | Bearing 6205-2RS | 4 |
| 4 | 601-215F | Flat free tire assembly | 2 |
| | 601-215 | Front tire assembly | 2 |
| 5 | 601-069 | Front Axle | 2 |
| 6 | 601-070 | Castor Yoke | 2 |
| 7 | 600-201-0016 | Nylon Nut M16 GB889.1 | 2 |
| 8 | 600-403-0436 | Cotter Pin 4*36 | 2 |
| 9 | 601-071 | Washer 7.5 | 2 |
| 10 | 601-072 | Washer | 6 |
| 11 | 600-502-30205 | Tapered Roller Bearing 30205 | 4 |
| 12 | 601-073 | Castor Support | 1 |
| 13 | 601-074 | Hexagon Slot Nut | 2 |
| 14 | 601-075 | Shaft Cover | 2 |
| 15 | 600-901-0006 | Grease Fitting M6*1 GB1152 | 2 |
| 16 | 600-201-0010 | Nylon Nut M10 GB889.1 | 8 |
| 17 | 600-301-0010 | Plain Washer 10 GB95 | 8 |
| 18 | 600-002-10100 | Hexagon Bolt M10-1.5x100 GB5783 | 1 |
| 19 | 600-002-1030 | Hexagon Bolt M10-1.5x30 GB5783 | 8 |
| 20 | 600-202-0010 | Nut Flange M10 QC/T864 | 14 |
| 21 | 601-076 | Traction Spring | 2 |
| 22 | 600-001-1045 | Hexagon Bolt M10-1.5x45 GB5782 | 4 |
| 23 | 600-201-0005 | Nylon Nut M5 GB889.1 | 2 |
| 24 | 601-077 | Rubber Seat Ⅰ | 2 |
| 25 | 601-078 | Rubber Bushing | 2 |
| 26 | 600-101-0525 | Screw M5-0.8x25 GB818 | 2 |
| 27 | 601-079 | Belt Cover | 1 |
| 28 | 601-080 | Knob | 3 |
| 29 | 601-247 | Left front arm assembly | 1 |
| 30 | 601-240 | The right front wheel fork components (Stand behind the mower) | 1 |
| 31 | 601-246 | Right front arm assembly | 1 |
| 32 | 601-239 | The left front wheel fork components (Stand behind the mower) | 1 |

# CASTER & BELT COVER ASSEMBLY

| | | | |
|---|---|---|---|
| 33 | 601-083 | Frame | 1 |
| 34 | 600-002-1050 | Hexagon Bolt M10-1.5x50 GB5783 | 2 |
| 35 | 601-084 | Castor Support | 1 |
| 36 | 601-237 | Left front wheel assembly | 2 |
| 37 | 601-238 | Right front wheel assembly | 2 |
| 38 | 348-106 | shock pad | 3 |

# WHEEL & TRANSAXLE ASSEMBLY



Hydro belt routing

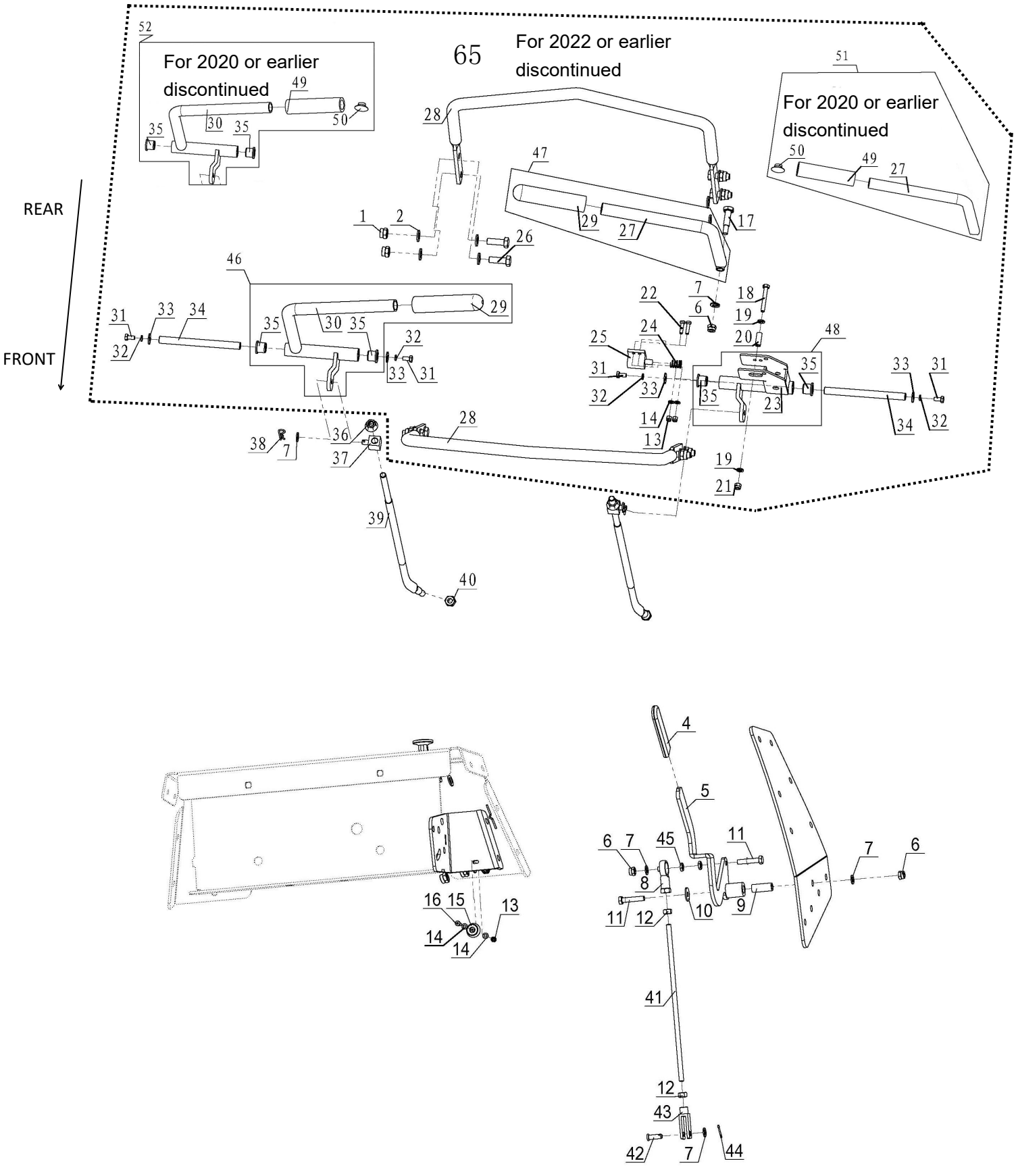
# WHEEL & TRANSAXLE ASSEMBLY

| ITEM | PART NO. | DESCRIPTION | QTY |
|---|---|---|---|
| 1 | 601-085 | Nut 1/2-20 | 8 |
| 2 | 601-086 | Tire And Wheel Assembly 23X8.5-12 | 2 |
| 3 | 601-087 | Left Hydraulic Motor | 1 |
| 4 | 600-001-1055 | Hexagon Bolt M10-1.5x55 GB5782 | 3 |
| 5 | 601-088 | Pivot Hub | 3 |
| 6 | 600-302-0010 | Plain Washer 10 GB96.1 | 6 |
| 7 | 600-201-0010 | Nylon Nut M10 GB889.1 | 17 |
| 8 | 600-002-1030 | Hexagon Bolt M10-1.5x30 GB5783 | 4 |
| 9 | 601-089 | Bumper | 4 |
| 10 | 601-090 | Damper | 2 |
| 11 | 600-301-0008 | Plain Washer 8 GB95 | 3 |
| 12 | 600-201-0008 | Nylon Nut M8 GB889.1 | 11 |
| 13 | 600-002-1040 | Hexagon Bolt M10-1.5x40 GB5783 | 2 |
| 14 | 600-903-0010 | Rod End RH10 | 2 |
| 15 | 603-123 | Spacer | 2 |
| 16 | 601-092 | Right Hydraulic Motor | 1 |
| 17 | 600-002-0860 | Hexagon Bolt M8-1.25x60 GB5783 | 2 |
| 18 | 600-202-0008 | Nut Flange M8 QC/T864 | 5 |
| 19 | 601-093 | Fitting | 2 |
| 20 | 601-094 | Hydraulic Tubing | 1 |
| 21 | 601-095 | Tubing Fitting | 4 |
| 22 | 600-403-0220 | Cotter Pin 2*20 | 2 |
| 23 | 600-301-0006 | Plain Washer 6 GB95 | 2 |
| 24 | 601-096 | Plate Weldment | 2 |
| 25 | 600-201-0006 | Nylon Nut M6 GB889.1 | 2 |
| 26 | 600-302-0006 | Plain Washer 6 GB96.1 | 2 |
| 27 | 601-097 | Parking Spring Ⅰ | 2 |
| 28 | 601-098 | Pull Rod | 2 |
| 29 | 601-099 | Clevis | 1 |
| 30 | 600-302-0008 | Plain Washer 8 GB96.1 | 1 |
| 31 | 600-002-0825 | Hexagon Bolt M8-1.25x25 GB5783 | 5 |
| 32 | 601-100 | Rod Thread | 1 |
| 33 | 601-102 | Bushing,Straight Pivot | 2 |
| 34 | 601-103 | Transmission Belt A61 | 1 |

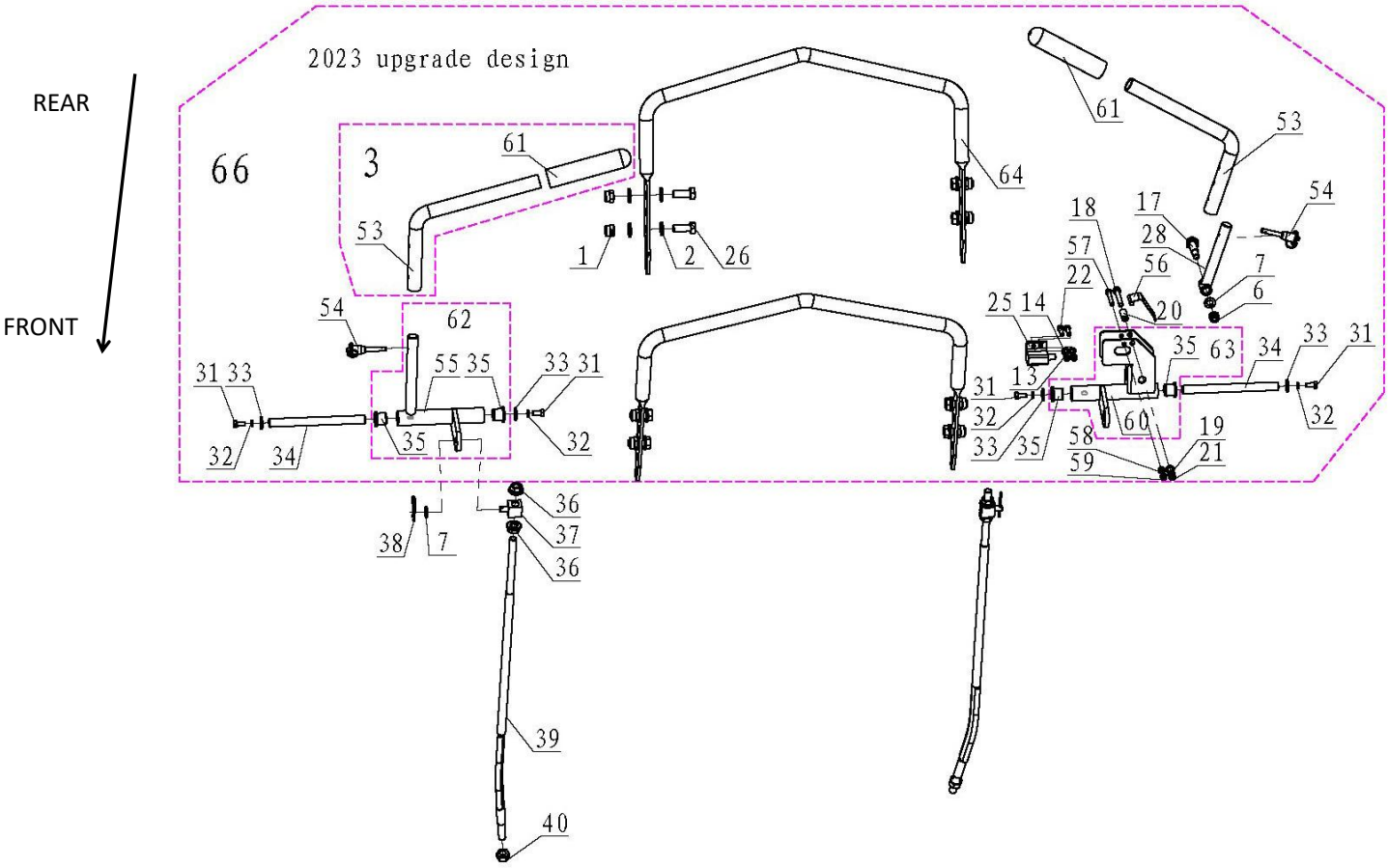
# WHEEL & TRANSAXLE ASSEMBLY

| ITEM | PART NO. | DESCRIPTION | QTY |
|---|---|---|---|
| 35 | 600-002-1040 | Hexagon Bolt M10-1.5x40 GB5783 | 2 |
| 36 | 600-305-0010 | Lock Washer 10 GB93 | 1 |
| 37 | 601-112 | Pulley | 1 |
| 38 | 601-104 | Pivot Arm Washer | 1 |
| 39 | 601-105 | Pivot Arm Weldment | 1 |
| 40 | 424A-061 | Traction Spring | 1 |
| 41 | 600-002-1025 | Hexagon Bolt M10-1.5x25 GB5783 | 6 |
| 42 | 601-307 | Hydro idler arm assembly | 1 |
| 43 | 601-107 | Fender | 2 |
| 44 | 600-301-0010 | Plain Washer 10 GB95 | 6 |
| 45 | 601-108 | Platform Weldment | 1 |
| 46 | 601-211 | Bushing | 1 |
| 47 | 600-001-0890 | Hexagon Bolt M8-1.25x90 GB5782 | 4 |
| 48 | 601-245 | Hydraulic motor plate | 2 |
| 49 | 336-223 | Adjustment plate | 2 |
| 50 | 600-001-0865 | Hexagon Bolt M8-1.25x65 GB5782 | 4 |
| 51 | 600-905-0006 | Grease fitting M6*1 45° GB1153 | 1 |
| 52 | 601-248 | Neutral connecting plate | 2 |
| 53 | 600-001-1060 | Hexagon Bolt M10-1.5x60 GB5782 | 1 |
| 54 | 601-259 | Hydro idler arm | 1 |
| 55 | 601-260 | Hydro idler arm pivot post | 1 |
| 56 | 601-081 | Left Damper Mounting Plate | 1 |
| | 601-082 | Right Damper Mounting Plate | 1 |
| 57 | 601-266 | Hydro idler arm assembly upgrade kit for 2021 upgrade design | 1 |
| 58 | 336-239 | Plain Washer | 8 |
| 59 | 601-284 | Stand platform assembly | 1 |
| 60 | 601-102 | Bushing,Straight Pivot | 1 |
| 61 | 600-002-0820 | Hexagon Bolt M8-1.25x20 GB5783 | 1 |
| 62 | 600-002-1020 | Hexagon Bolt M10-1.5x20 GB5783 | 1 |

# HANDLE CONTROLS ASSEMBLY



# HANDLE CONTROLS ASSEMBLY



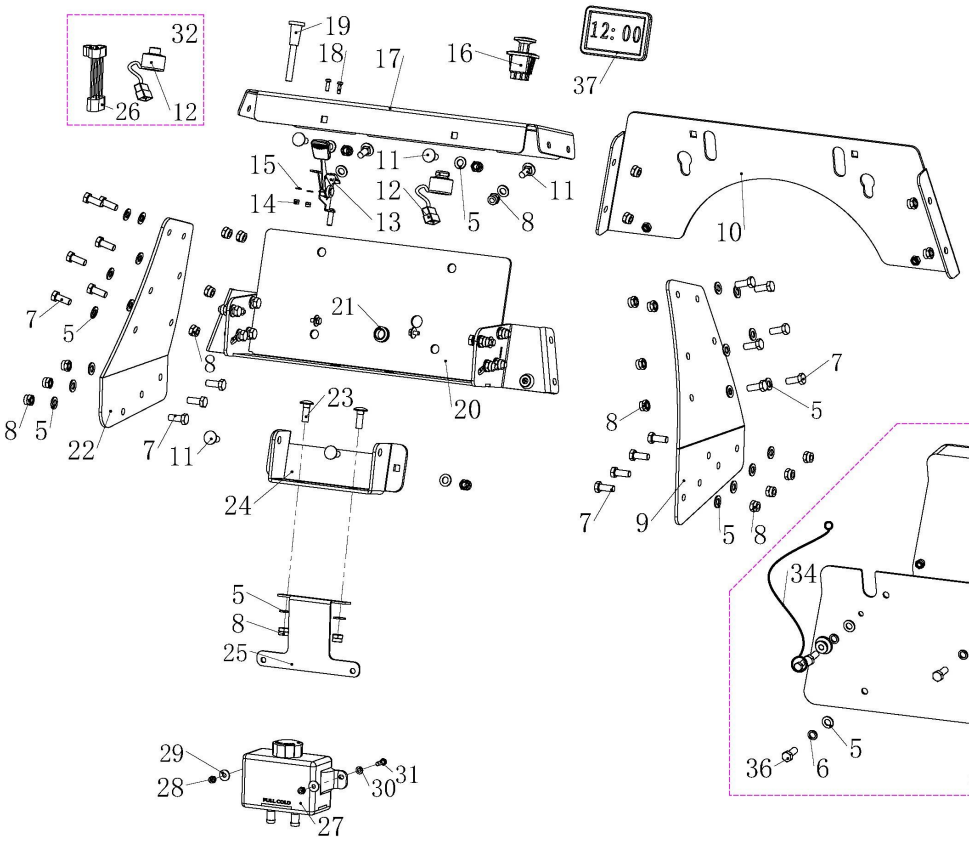
# HANDLE CONTROLS ASSEMBLY

| ITEM | PART NO. | DESCRIPTION | QTY |
|---|---|---|---|
| 1 | 600-201-0010 | Nylon Nut M10 GB889.1 | 16 |
| 2 | 600-301-0010 | Plain Washer 10 GB95 | 32 |
| 3 | 601-309 | Control Lever with grip | 1 |
| 4 | 601-138 | Rubber Grip | 1 |
| 5 | 601-139A | Brake Lever | 1 |
| 6 | 600-201-0008 | Nylon Nut M8 GB889.1 | 3 |
| 7 | 600-301-0008 | Plain Washer 8 GB95 | 7 |
| 8 | 600-903-0008 | Rod End RH8 | 1 |
| 9 | 601-140A | Bushing | 1 |
| 10 | 600-302-0008 | Plain Washer 8 GB95 | 1 |
| 11 | 600-001-0840 | Bolt M8-1.25x40 GB5782 | 2 |
| 12 | 600-203-0008 | Nut M8 GB6170 | 2 |
| 13 | 600-201-0005 | Nylon Nut M5 GB889.1 | 3 |
| 14 | 600-301-0005 | Plain Washer 5 GB95 | 4 |
| 15 | 601-078 | Rubber Bushing | 1 |
| 16 | 600-101-0516 | Screws M5-0.8x16 GB818 | 1 |
| 17 | 601-141 | Handle Shaft | 1 |
| 18 | 600-001-0645 | Bolt M6-1x45 GB5782 | 1 |
| 19 | 600-301-0006 | Plain Washer 6 GB95 | 2 |
| 20 | 601-142 | Bushing | 1 |
| 21 | 600-201-0006 | Nylon Nut M6 GB889.1 | 1 |
| 22 | 600-101-0520 | Screws M5-0.8x16 GB818 | 2 |
| 23 | 601-143 | Left Drive Control | 1 |
| 24 | 601-144 | Spring | 1 |
| 25 | 601-145 | Switch | 1 |
| 26 | 600-002-1030 | Hexagon Bolt M10-1.5x30 GB5783 | 8 |
| 27 | 601-146 | Left Handle Weldment | 1 |
| 28 | 601-147 | Handle | 2 |
| 29 | 601-262 | SC handle cover | 2 |
| 30 | 601-149 | Right Drive Control | 1 |
| 31 | 600-002-0612 | Bolt M6-1x12 GB5783 | 4 |
| 32 | 600-305-0006 | Lock Washer 6 GB93 | 4 |
| 33 | 600-302-0006 | Plain Washer 6 GB96 | 4 |
| 34 | 601-150 | Arm Shaft | 2 |
| 35 | 601-151 | Handrail Shaft Bushing | 4 |
| 36 | 600-202-0010 | Nut Flange M10 QC/T864 | 4 |

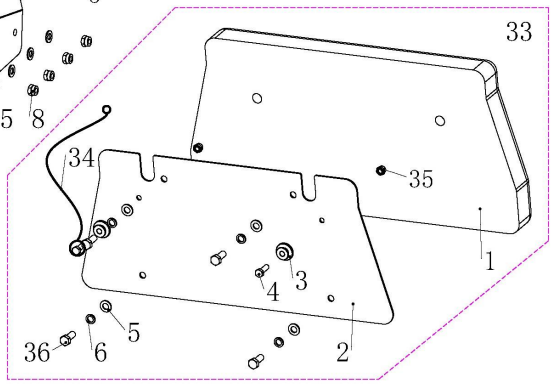
# HANDLE CONTROLS ASSEMBLY

| | | | |
|---|---|---|---|
| 37 | 601-130 | Joint | 2 |
| 38 | 601-124 | Hair Pin Cotter | 2 |
| 39 | 601-152 | Drive Linkage | 2 |
| 40 | 600-203-0010 | Nut M10 GB6170 | 2 |
| 41 | 601-153 | Brake Linkage | 1 |
| 42 | 600-405-0824 | Clevis Pin 8*24 | 1 |
| 43 | 601-127 | Yoke | 1 |
| 44 | 600-403-0220 | Cotter Pin 2*20 | 1 |
| 45 | 600-204-0008 | Nut M8 GB6172.1 | 2 |
| 46 | 601-234 | Right control lever assembly | 1 |
| 47 | 601-235 | Left handle part | 1 |
| 48 | 601-236 | Left control lever part | 1 |
| 49 | 601-148 | Grip | 2 |
| 50 | 336-231 | Rotary rubber plug | 2 |
| 51 | 601-263 | The right operating handle components | 1 |
| 52 | 601-264 | The left handle components | 1 |
| 53 | 601-286 | Handle Weldment | 1 |
| 54 | 601-287 | Safety Pin | 1 |
| 55 | 601-288 | Right Drive Control | 1 |
| 56 | 601-289 | plate spring | 1 |
| 57 | 600-101-0440 | Bolt M4-0.7x40 GB818 | 1 |
| 58 | 600-301-0004 | Plain Washer 4 GB95 | 1 |
| 59 | 600-201-0004 | Nylon Nut M4 GB889.1 | 1 |
| 60 | 601-290 | Left Drive Control | 1 |
| 61 | 601-291 | Grip | 2 |
| 62 | 601-292 | The right operating handle components | 1 |
| 63 | 601-293 | The left operating handle components | 1 |
| 64 | 601-294 | Handle | 2 |
| 65 | 601-301 | handle assembly | 1 |
| 66 | 601-300 | Adjustable handle assembly | 1 |

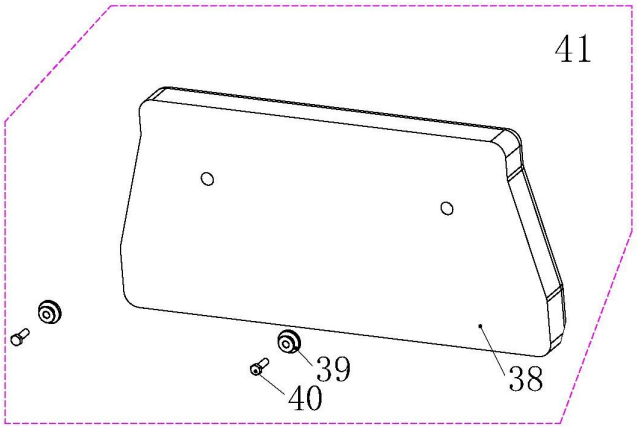
# DASHBOARD PLATE ASSEMBLY




For 2022 or earlier discontinued




2023 upgrade design



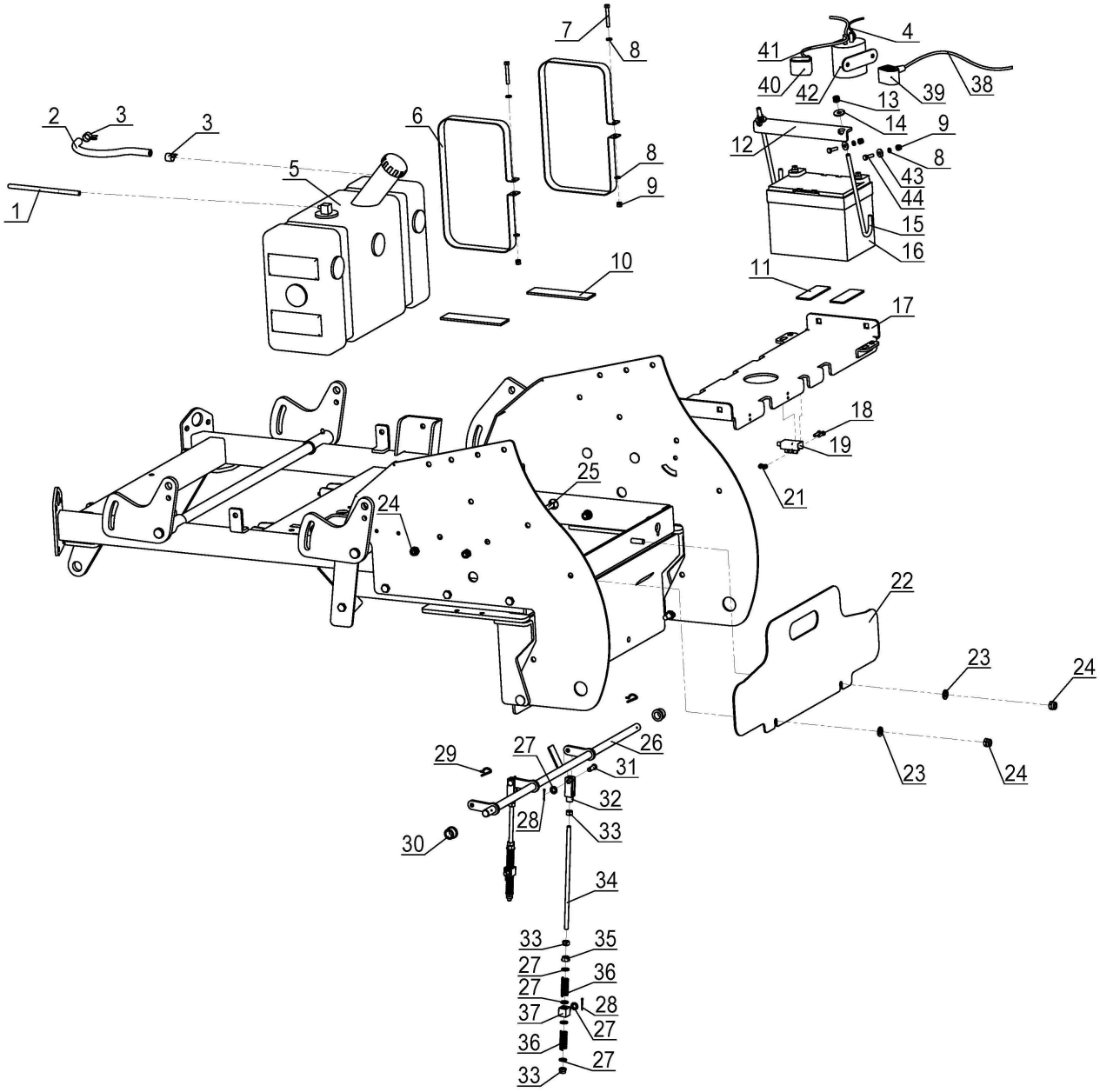
# DASHBOARD PLATE ASSEMBLY

| ITEM | PART NO. | DESCRIPTION | QTY |
|---|---|---|---|
| 1 | 601-154 | Foam Pad | 1 |
| 2 | 601-155 | Foam Pad Mounting Plate | 1 |
| 3 | 601-156 | Foam Pad Mounting Sleeve | 2 |
| 4 | 600-002-0825 | Hexagon Bolt M8-1.25x25 GB5783 | 2 |
| 5 | 600-301-0010 | Plain Washer 10 GB95 | 29 |
| 6 | 600-305-0010 | Lock Washer 10 GB93 | 4 |
| 7 | 600-002-1025 | Hexagon Bolt M10-1.5x25 GB5783 | 19 |
| 8 | 600-201-0010 | Nylon Nut M10 GB889.1 | 25 |
| 9 | 601-157 | Right Frame Plate | 1 |
| 10 | 601-158 | Leaning Pad Plate | 1 |
| 11 | 600-003-1025 | Bolt M10-1.5x25 GB801 | 6 |
| 12 | 700-137B | Key Switch & Key | 1 |
| 13 | 601-160A | Throttle cable for BS engine | 1 |
| | 601-160B | Throttle cable for HONDA engine | 1 |
| 14 | 600-201-0005 | Nylon Nut M5 GB889.1 | 2 |
| 15 | 600-301-0005 | Plain Washer 5 GB95 | 2 |
| 16 | 601-161 | PTO Switch | 1 |
| 17 | 601-162 | Dash Panel | 1 |
| 18 | 600-101-0516 | Screws M5-0.8x16 GB818 | 2 |
| 19 | 601-163 | Choke cable | 1 |
| 20 | 601-164 | Dash Panel Weldment | 1 |
| 21 | 601-165 | Rubber Ring | 1 |
| 22 | 601-166 | Left Frame Plate | 1 |
| 23 | 600-003-1030 | Bolt M10-1.5x30 GB801 | 2 |
| 24 | 601-167 | Mounting Plate | 1 |
| 25 | 601-170A | Hydro oil tank bracket | 1 |
| 27 | 601-170 | Hydro oil tank assembly | 1 |
| 28 | 600-201-0006 | Nylon Nut M6 GB889.1 | 2 |
| 29 | 600-302-0006 | Plain Washer 6 GB96.1 | 2 |
| 30 | 600-301-0006 | Plain Washer 6 GB95 | 2 |
| 31 | 600-002-0620 | Hexagon Bolt M6-1x20 GB5783 | 2 |
| 33 | 601-232 | Lean Pad assembly | 1 |
| 34 | 601-233 | Connection string | 1 |
| 35 | 600-201-0008 | Nylon nut M8 GB889.1 | 2 |

# DASHBOARD PLATE ASSEMBLY

| | | | |
|---|---|---|---|
| 36 | 600-002-1030 | Hexagon bolt M10-1.5x30 GB5783 | 2 |
| 37 | N110-0100-0071 | Hour meter | 1 |
| 38 | 601-283 | Foam Pad | 1 |
| 39 | 601-296 | Foam Pad Mounting Sleeve | 2 |
| 40 | 601-297 | Foam pad fix bolt | 2 |
| 41 | 601-285 | Lean Pad assembly | 1 |
| **optional** | | | |
| 26 | 601-228 | Ignition switch adaptor（For SC & BB mower only manufactured on 2017 or earlier） | 1 |
| 32 | 601-228A | Ignition switch kit (With adaptor, for SC & BB mower only manufactured on 2017 or earlier ) | 1 |

# FUEL TANK & BATTERY ASSEMBLY



# FUEL TANK & BATTERY ASSEMBLY

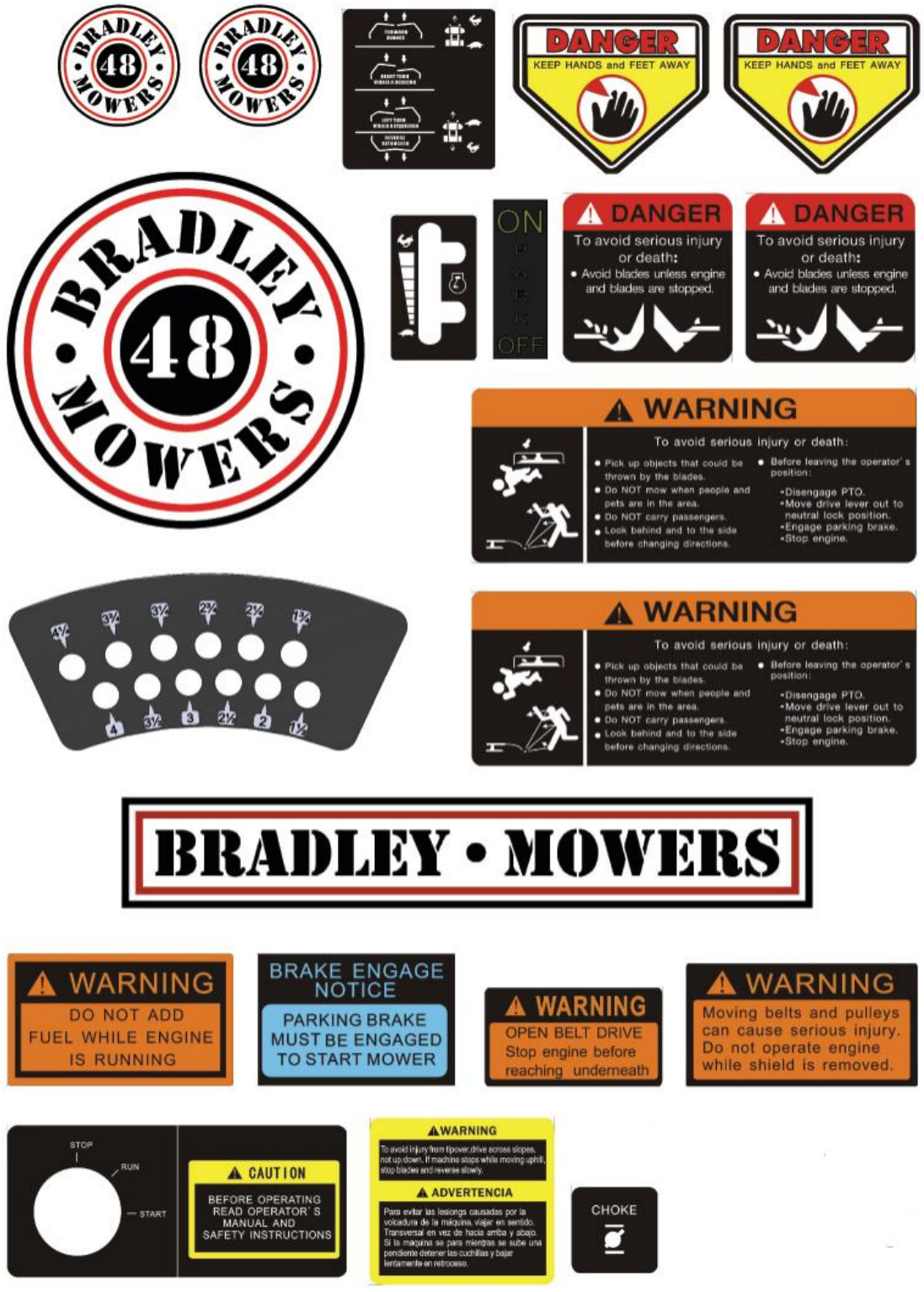
| ITEM | PART NO. | DESCRIPTION | QTY |
|---|---|---|---|
| 1 | 601-109 | Fuel Return Line (BRIGGS & STRATTON) | 1 |
| | 601-109A | Fuel Return Line (HONDA) | 1 |
| 2 | 601-110 | Fuel Line (BRIGGS & STRATTON) | 1 |
| | 601-110A | Fuel Line (HONDA) | 1 |
| 3 | 601-111 | Fuel Line Clamp | 2 |
| 4 | 601-226 | Cable II ( connect with the engine ) | 1 |
| 5 | 601-113 | Fuel Tank | 1 |
| 6 | 601-114 | Fuel Tank Strap | 2 |
| 7 | 600-001-0645 | Bolt M6-1x45 GB5782 | 2 |
| 8 | 600-301-0006 | Plain Washer 6 GB95 | 4 |
| 9 | 600-201-0006 | Nylon Nut M6 GB889.1 | 2 |
| 10 | 601-115 | Tank Pad | 2 |
| 11 | 601-305 | Battery protection rubber plate | 2 |
| 12 | 601-117 | The Battery Holder | 1 |
| 13 | 600-201-0008 | Nylon Nut M8 GB889.1 | 4 |
| 14 | 600-302-0008 | Plain Washer 8 GB95 | 2 |
| 15 | 601-118 | Battery Clamp Rod | 2 |
| 16 | 601-119 | Battery SP-30R(Please purchase from local Interstate Battery) | 1 |
| 17 | 601-120 | Tank Bracket | 1 |
| 18 | 600-101-0520 | Screws M5-0.8x20 GB818 | 2 |
| 19 | 601-121 | Switch | 1 |
| 20 | 600-301-0005 | Plain Washer 5 GB95 | 2 |
| 21 | 600-201-0005 | Nylon Nut M5 GB889.1 | 2 |
| 22 | 601-122 | Tank Baffle | 1 |
| 23 | 600-301-0010 | Plain Washer 10 GB95 | 2 |
| 24 | 600-201-0010 | Nylon Nut M10 GB889.1 | 6 |
| 25 | 600-003-1020 | Bolt M10-1.5x20 GB801 | 4 |
| 26 | 601-123 | Parking Linkage | 1 |
| 27 | 600-301-0008 | Plain Washer 8 GB95 | 12 |
| 28 | 600-403-0220 | Cotter pin 2*20 | 4 |
| 29 | 601-125 | Hair Pin Cotter | 2 |
| 30 | 601-126 | Nylon Bushing | 2 |
| 31 | 600-405-0824 | Clevis Pin 8*24 GB882 | 2 |
| 32 | 601-127 | Yoke | 2 |
| 33 | 600-203-0008 | Nut M8 GB6170 | 4 |
| 34 | 601-128 | Reverse Linkage | 2 |
| 35 | 600-202-0008 | Nut Flange M8 QC/T864 | 2 |

# FUEL TANK & BATTERY ASSEMBLY

| ITEM | PART NO. | DESCRIPTION | QTY |
|---|---|---|---|
| 36 | 601-129 | Reverse Spring | 4 |
| 37 | 601-130 | Joint | 2 |
| 38 | 601-221 | Black Battery Cable | 1 |
| 39 | 601-222 | Black Terminal Protector | 1 |
| 40 | 601-223 | Red Terminal Protector | 1 |
| 41 | 601-224 | Red Battery Cable | 1 |
| 42 | 601-021 | Solenoid | 1 |
| 43 | 600-302-0006 | Plain Washer 6 | 2 |
| 44 | 200-036 | Bolt M6-1x20 GB5783 | 2 |

# 48SC SAFETY AND INFORMATION DECALS

| ITEM | PART NO. | DESCRIPTION | QTY |
|---|---|---|---|
| 1 | 601-227 | 48SC decal | 1 |

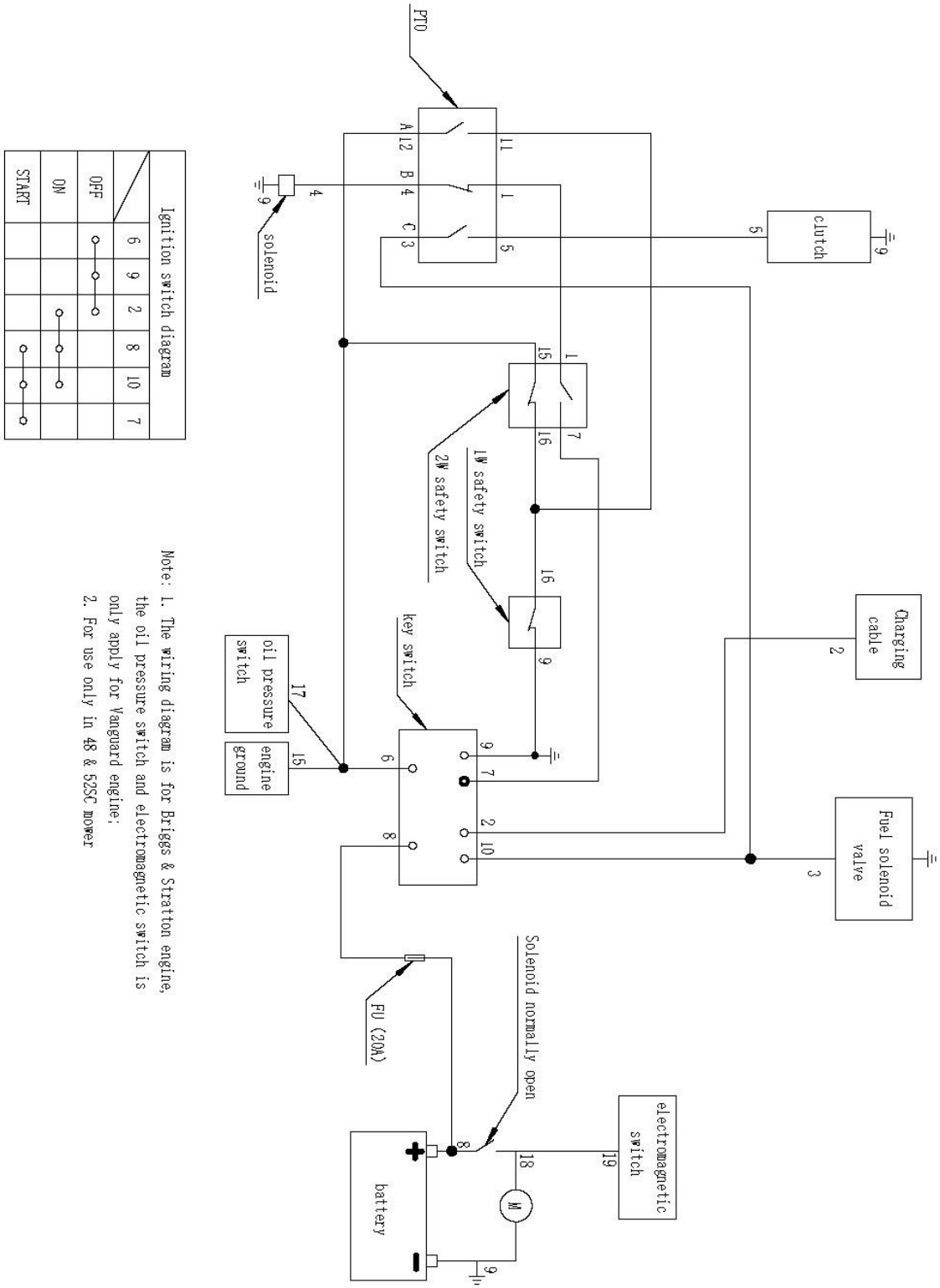


# 52SC SAFETY AND INFORMATION DECALS

| ITEM | PART NO. | DESCRIPTION | QTY |
|---|---|---|---|
| | 601-227A | SC52 decal | 1 |

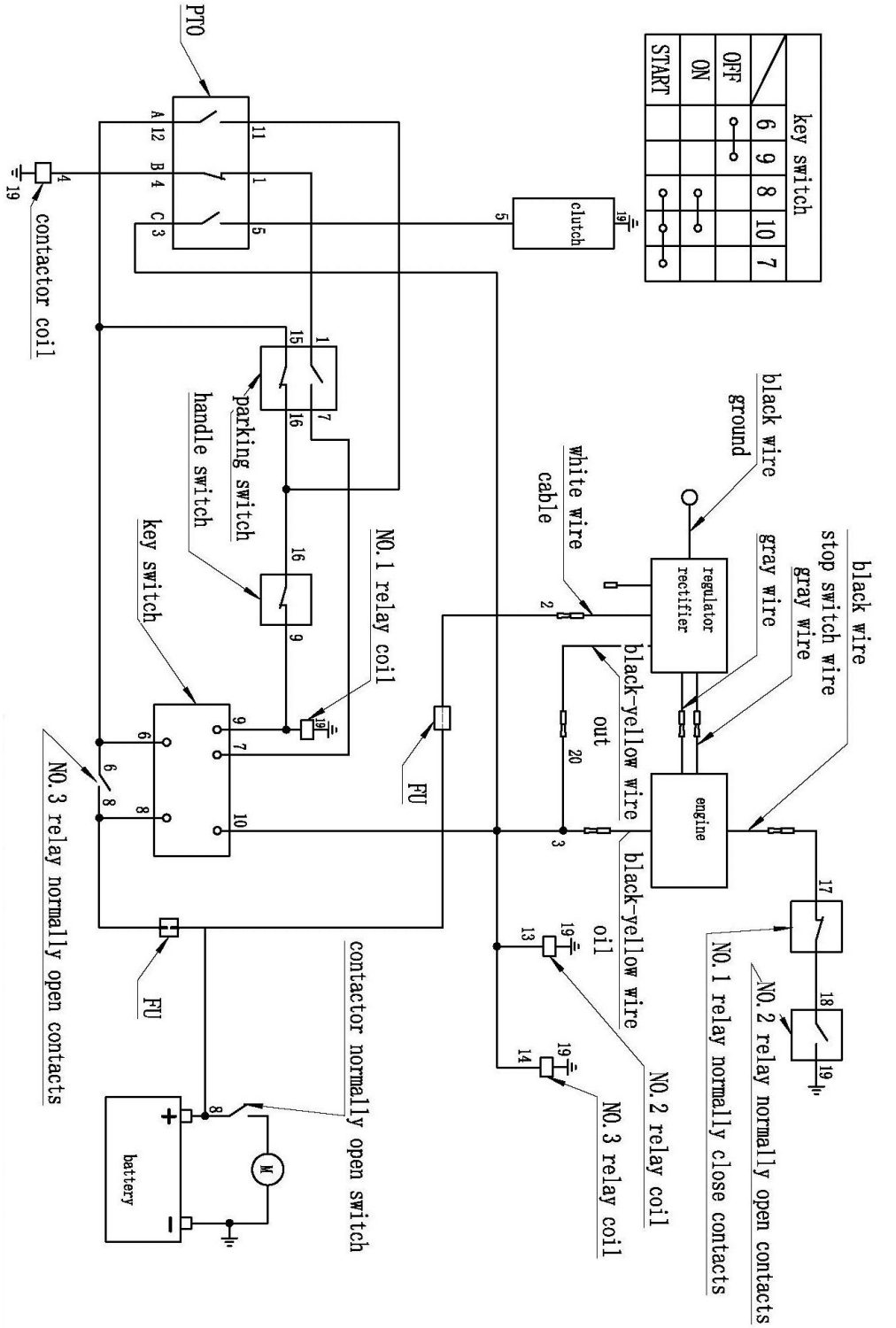
# BRIGGS & STRATTON WIRING DIAGRAM

| ITEM | PART NO. | DESCRIPTION | QTY |
|---|---|---|---|
| | 601-172 | BS wire harness | 1 |



# HONDA WIRING DIAGRAM

| ITEM | PART NO. | DESCRIPTION | QTY |
|---|---|---|---|
| | 601-172A | Honda wire harness | 1 |



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## BRADLEY MOWERS PRODUCT REGISTRATION

**CUSTOMER INFORMATION**

Name:_____

Business Name:_____

Address: _____

City:_____ State:_____ Zip:_____

Phone Number:_____ Fax Number:_____

Email Address: _____

**DEALER INFORMATION(place of purchase) *required**

Dealer's Name:_____

Dealer's Address: _____

City:_____ State:_____ Zip:_____

Phone Number:_____

(The remaining dealer information will help you get warranty service faster should you need it.)

**PRODUCT INFORMATION**

Product Name and Model Number: _____

Serial Number:_____

Engine/Motor Brand and Size: _____

Engine Serial Number: _____

Engines hydraulic pumps, and batteries are warranted through their respective manufacturers. Please contact the manufacturer for mare details.

Signature_____Date of Purchase:_____

KEEP YOUR RECEIPT WITH A COPY OF THIS REGISTRATION FORM

Mail your completed form to:
Havener Enterprises, Inc.
368 S. Michigan Ave.
Bradley, IL 60915

Email your completed form to:
info@bradleymowers.com

Fax your completed form to:
888.785.1348

Complete your registration form online at www.bradleymowers.com

Warranties should be performed by an authorized Bradley Mowers dealer. All other warranty service requires prior approval.

Your product warranty is only valid if this file is completed signed, and returned to Havener Enterprises, Inc. within two weeks of product purchase. See the warranty statement for more details.

Your information may be collected but never shared outside of Havener Enterprises, Inc. and its subs subsidiaries