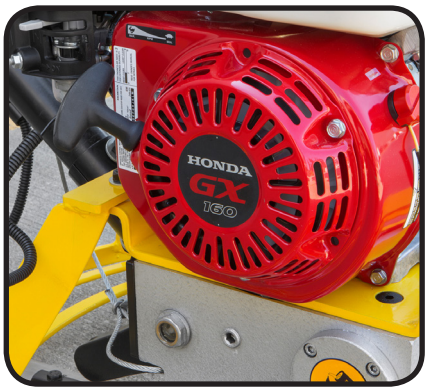
36” WALK BEHIND POWER TROWEL

ITEM: 61024 (5.5HP) & 61025 (6.5HP)



OWNER’S MANUAL AND SAFETY INSTRUCTIONS

SAVE THIS MANUAL: KEEP THIS MANUAL FOR SAFETY WARNINGS, PRECAUTIONS, ASSEMBLY, OPERATING, INSPECTION, MAINTENANCE AND CLEANING PROCEDURES. WRITE THE PRODUCT’S SERIAL NUMBER ON THE BACK OF THE MANUAL NEAR THE ASSEMBLY DIAGRAM (OR MONTH AND YEAR OF PURCHASE IF PRODUCT HAS NO NUMBER).

FOR QUESTIONS PLEASE CALL OUR CUSTOMER SUPPORT: (909) 628 4900 MON-FRI 9AM TO 3PM PST

WARNING

GENERAL SAFETY WARNINGS

Read all safety warnings and instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury. Save all warnings and instructions for future reference.

The warnings, precautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator. Read carefully and understand all ASSEMBLY AND OPERATION INSTRUCTIONS before operating. Failure to follow the safety rules and other basic safety precautions may result in serious personal injury.

- **Read and understand all instructions.** Failure to follow all instructions may result in serious injury or property damage.
- **DO NOT** allow persons to operate or assemble the product until they have read this manual and have developed a thorough understanding of how it works.
- **DO NOT modify this product in any way.** Unauthorized modification may impair the function and/or safety and could affect the life of the product. There are specific applications for which the product was designed.
- **Use the right tool for the job. DO NOT** attempt to force small equipment to do the work of larger industrial equipment. There are certain applications for which this equipment was designed. This product will be safer and do a better job at the capacity for which it was intended. **DO NOT** use this equipment for a purpose for which it was not intended.
- I**nspect the work area before each use**. Keep work area clean, dry, free of clutter, and well-lit. Cluttered, wet, or dark work areas can result in injury.
- **NEVER** operate the machine with the belt guard missing. Exposed drive belt and pulleys create potentially dangerous hazards that can cause serious injuries.
- **NEVER** use the trowel around pop-ups in the concrete that are lower than the lowest ring on the ring guard.
- **Keep children and bystanders away from the work area while operating the tool. DO NOT** allow children to handle the product.
- **ALWAYS** close fuel valve on engines equipped with one when machine is not being operated.
- **ALWAYS** operate machine with all safety devices and guards in place and in working order. **DO NOT** modify or defeat safety devices. **DO NOT** operate machine if any safety devices or guards are missing or inoperative.
- Stay alert, watch what you are doing, and use common sense when operating the tool. **DO NOT** use the tool while you are tired or under the influence of drugs, alcohol, or medication.

IMPORTANT SAFETY INFORMATION

- **Dress properly. DO NOT** wear loose clothing, dangling objects, or jewelery. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelery, or long hair can be caught in moving parts.

- **Wear the proper personal protective equipment when necessary.** Use ANSI Z87.1 compliant safety goggles (not safety glasses) with side shields, or when needed, a face shield. Use a dust mask in dusty work conditions. Also use non-skid safety shoes, hard-hat, gloves, dust collection systems, and hearing protection when appropriate. This applies to all persons in the work area.

- **Always** test the function of the engine control module before operating the trowel. **DO NOT** operate the trowel if the engine control module is not functioning properly.

- **DANGER:** Internal combustion engines present special hazards during operation and fueling. Read and follow the warning instructions in the engine owner's manual and the safety guidelines below. Failure to follow the warnings and safety guidelines could result in severe injury or death.

- **Check for damaged parts before each use.** Carefully check that the product will operate properly and perform its intended function. Replace damaged or worn parts immediately. Never operate the product with a damaged part.

- **DO NOT** run the machine indoors or in an enclosed area such as a deep trench unless adequate ventilation, through such items as exhaust fans or hoses, is provided. Exhaust gas from the engine contains poisonous carbon monoxide gas; exposure to carbon monoxide can cause loss of consciousness and may lead to death.

- **WARNING:** Poorly maintained equipment can become a safety hazard! In order for the equipment to operate safely and properly over a long period of time, periodic maintenance and occasional repairs are necessary.

- **DO NOT** attempt to clean or service the machine while it is running. Rotating parts can cause severe injury.

- **DO NOT** crank a flooded engine with the spark plug removed on gasoline-powered engines. Fuel trapped in the cylinder will squirt out the spark plug opening.

- **DO NOT** test for spark on gasoline-powered engines if the engine is flooded or the smell of gasoline is present. A stray spark could ignite the fumes.

- **DO NOT** use gasoline or other types of fuels or flammable solvents to clean parts, especially in enclosed areas. Fumes from fuels and solvents can become explosive.

- **DO NOT** remove blades while the machine is hanging overhead.

- **ALWAYS** support the machine securely before changing blades.

- **ALWAYS** disconnect the spark plug on machines equipped with gasoline engines, before servicing, to avoid accidental start-up.

- **ALWAYS** keep the machine clean and labels legible. Replace all missing and hard-to-read labels. Labels provide important operating instructions and warn of dangers and hazards.

- **ALWAYS** handle blades carefully. The blades can develop sharp edges which can cause serious cuts.

PARTS

Part #1

Part #2

Part #3

Part #4

Part #5

Part #6

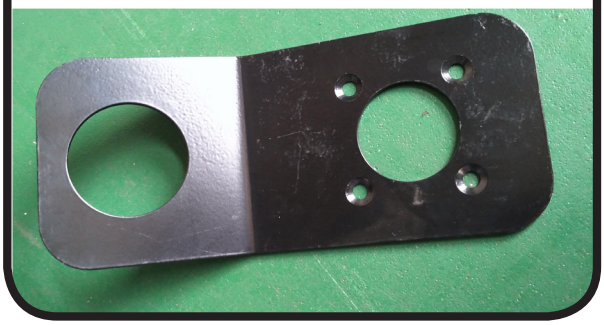
Part #7

Part #8

Part #9

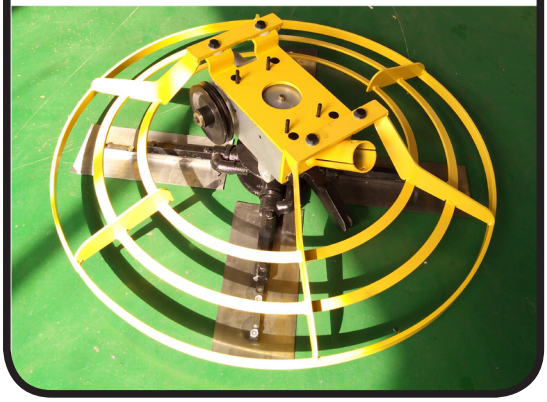
Part #11

Part #12



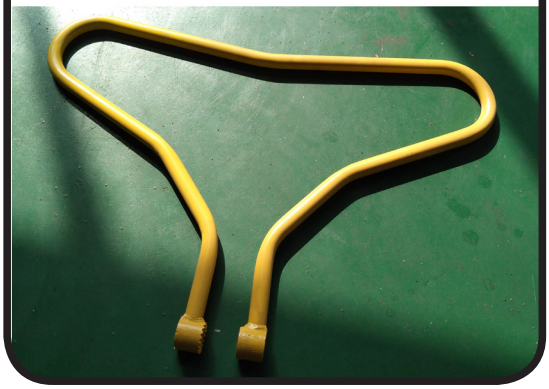
Part #13

Part #14

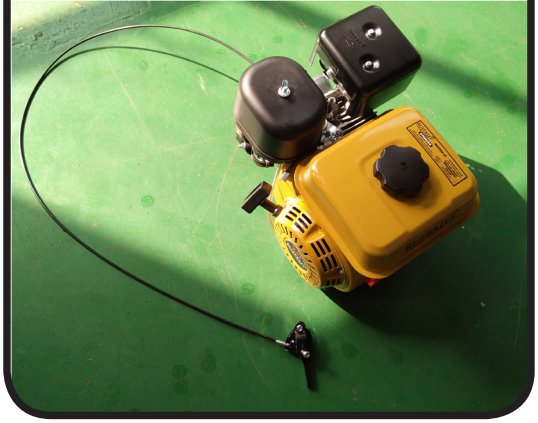


Part #15

Part #16



Part #17



ASSEMBLY

STEP 1: Put #15 into the #14 hole. Make sure all the holes, including steel rope bracket hole of the long handle and joint pipe hole.

STEP 2: Use two M10*80 retaining bolts (including #15) to lock the #15 onto the tube.

STEP 3: Put black limit bolt (including #15) to the bottom of “U” groove to make sure the steel rope (including #15) as long as it can be.

STEP 4: Let the steel rope screw (including in #15) go through the shift lever (including in #14) whole and use the nut to lock it, make sure the nut has been thoroughly tightened.

STEP 5: Use M10*120 external hexagon bolt (including in #15) and the locked aluminum nut (including in #15) to lock #16 onto #15.

STEP 6: Take off 4 sets of flange nuts which have been installed on #14.

STEP 7: Install #17 to the #14 by using the M8 flange nuts.

STEP 8: Use #3 to lock #12 on the engine side cover (upper two holes).

STEP 9: Use #4 to lock #8 and #12 together onto the engine side cover (lower two holes).

STEP 10: Put #6 onto the engine shaft.

STEP 11: Knock #5 into engine shaft.

STEP 12: Put #9 onto the engine shaft, make sure it is aligned with the key.

STEP 13: Use #7 to lock #9.

STEP 14: Install #11 into the #9 belt groove.

STEP 15: Use #1 and #2 to lock #13 onto #8.

STEP 16: Unplug the engine’s switch line.

STEP 17: Connect one of #10 wires with long handle flame-out wire (including in #15).

STEP 18: Connect another wire of #10 with engine’s switch line.

STEP 19: Connect another long handle flame-out wire (including in #15) with the engine’s body.

STEP 20: Lock the throttle lever assembly (including in #17) onto the right handle.

ASSEMBLY

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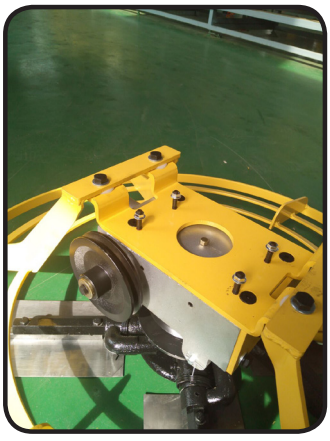
STEP 6:



STEP 6: Take off 4 sets of flange nuts which have been installed on #14.

STEP 7:

STEP 7: Install #17 to the #14 by using the M8 flange nuts.

STEP 8:

STEP 8: Use #3 to lock #12 on the engine side cover (upper two holes).

STEP 9:

STEP 9: Use #4 to lock #8 and #12 together onto the engine side cover (lower two holes).

STEP 10:

STEP 10: Put #6 onto the engine shaft.

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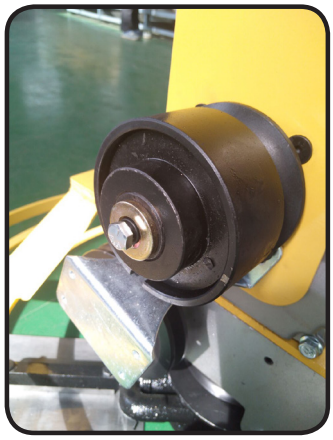
STEP 11: Knock #5 into engine shaft.

STEP 12:

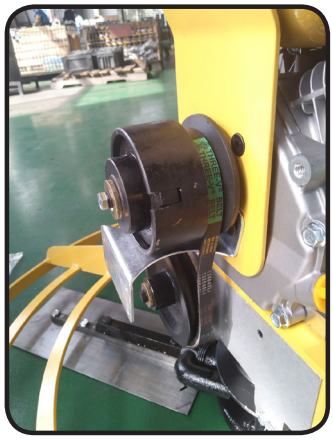
STEP 12: Put #9 onto the engine shaft, make sure it is aligned with the key.

STEP 13:



STEP 13: Use #7 to lock #9.

STEP 14:



STEP 14: Install #11 into the #9 belt groove.

STEP 15:

STEP 15: Use #1 and #2 to lock #13 onto #8.

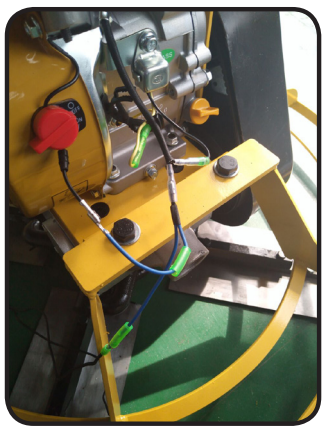
STEP 16:

STEP 16: Unplug the engine's switch line.

STEP 17:

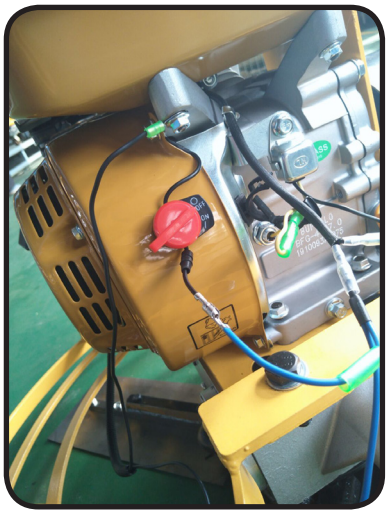
STEP 17: Connect one of #10 wires with long handle flame-out wire (including in #15).

STEP 18:



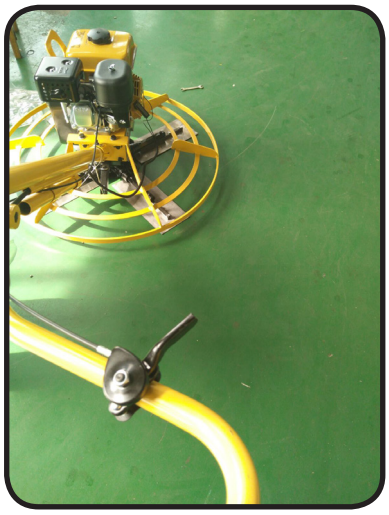
STEP 18: Connect another wire of #10 with engine's switch line.

STEP 19:



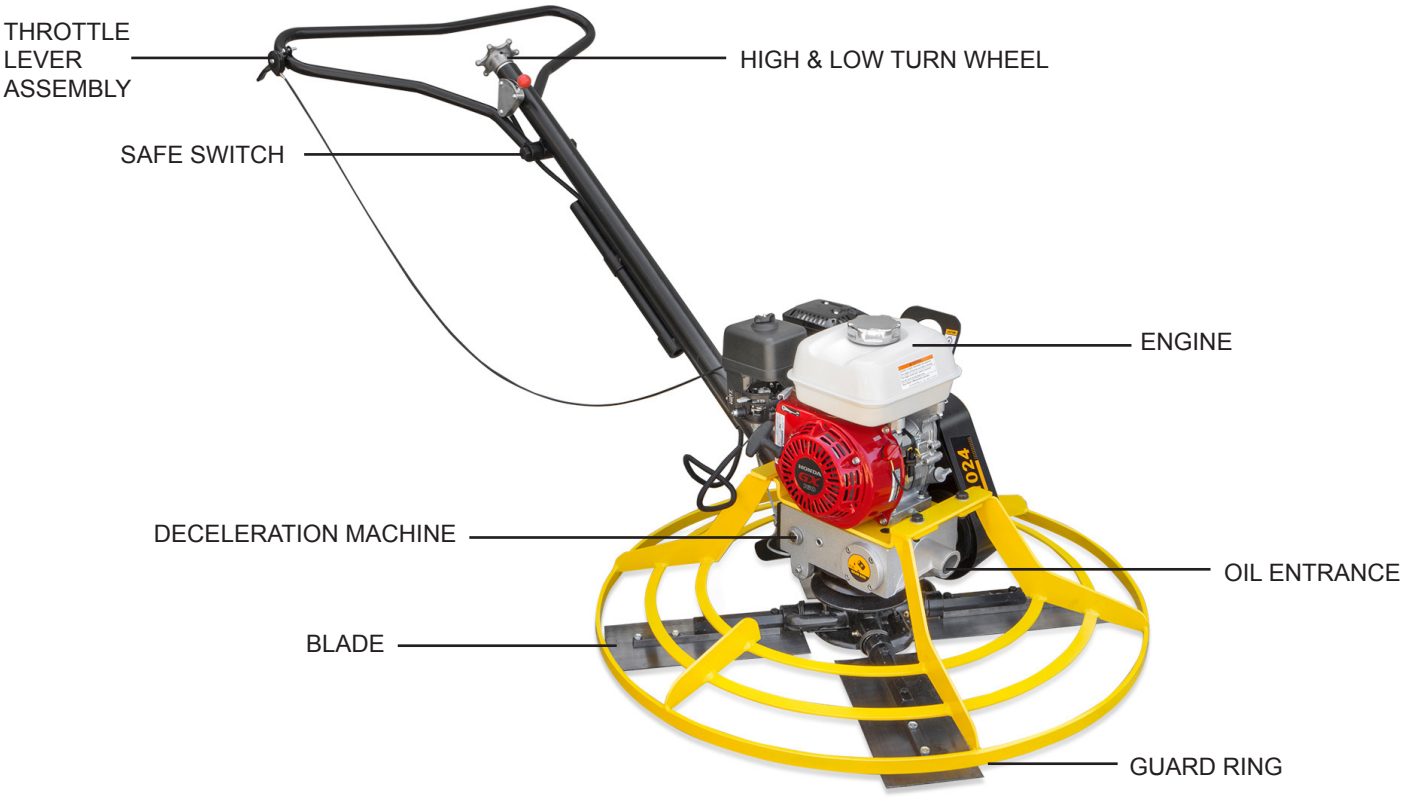
STEP 19: Connect another long handle flame-out wire (including in #15) with the engine's body.

STEP 20:



STEP 20: Lock the throttle lever assembly (including in #17) onto the right handle.

FINISHED ASSEMBLY SHOULD LOOK LIKE THIS.



BEFORE STARTING check the following:

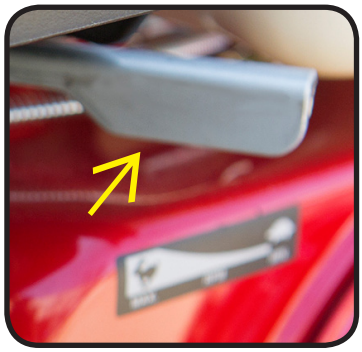
- Oil level in engine
- Oil level in gearbox
- Fuel level
- Condition of air filter
- Condition of fuel lines
- Condition of trowel arms and blades
- Condition of ring guards
- Label descriptions
- Handle height to suit operator

To prevent uncontrolled spinning of the trowel, the engine control module is designed to shut off the engine under certain conditions. For example, if the operator loses his/her grip on the trowel, the engine control module will sense that the machine is spinning and shut off the engine.

WARNING: **DO NOT** lift the trowel overhead with a float pan attached, as the pan could fall off and strike personnel working in the vicinity.

START UP

1. Open the Flameout switch.



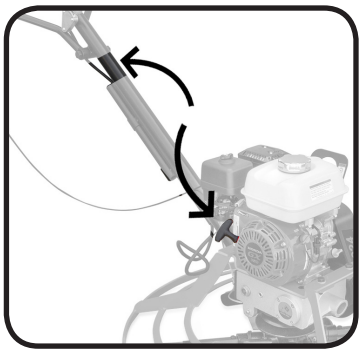
2. Open the Safe Switch to “ON”

3. Open the Fuel Switch

4. Close the Block Wind Door

5. Put the Oil Door Switch in the middle position

6. With one hand on the buttress handle, draw the engine handle with the other.



7. Warm up the engine for three to five minutes first, then open the block wind door.

8. Adjust the blades to the proper height.

9. With both hands hold the handle, then adjust the switch of the Oil Door to the proper running sped for operation.

10. To turn off, put the switch of the Oil Door to “L”. Put the Safe Switch to “Close”, then put the blades to level position.

WARNING: ALWAYS test the function of the engine control module before operating the trowel. **DO NOT** operate the trowel if the engine control module is not functioning properly.

Choose correct blade type and attach blades to trowel arms. Do not mix float or finish blades with combination blades.

CAUTION: DO NOT attempt to adjust handle height on the trowel while it is running.

WARNING: Allow the muffler to cool before cleaning or servicing the machine. A hot muffler could ignite the fuel and start a fire.

WARNING: Personnel other than the trowel operator should not be allowed in the work area, as severe injury can occur from contact with operating trowel blades.

MAINTENANCE The chart below lists basic machine and engine maintenance.

	Daily	After first 20 hrs.	Every 50 hrs.	Every 100 hrs.	Every 300 hrs.
Check fuel level.	•				
Check engine oil level.	•				
Inspect fuel lines.	•				
Inspect air filter. Replace as needed.	•				
Check external hardware.	•				
Clean trowel after each use to remove concrete splatter.	•				
Clean air cleaner elements.			•		
Change engine oil.		•		•	
Check drive belt.				•	
Clean sediment cup.				•	
Check and clean spark plug.				•	
Check and adjust valve clearances.					•

Perform initially after first 20 hours of operation.

In the interests of environmental protection, place a plastic sheet and a container under the machine to collect any liquid which drains off. Dispose of this liquid in accordance with environmental protection legislation.

MAINTENANCE

ENGINE OIL:

- Drain oil while the engine is still warm.
- Remove the oil fill plug and drain cap to drain oil.
- Install drain cap.
- Fill the engine crankcase with recommended oil up to the level of the plug opening.

AIR CLEANER:

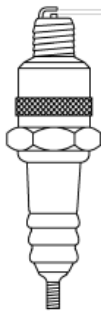
Service air cleaner frequently to prevent carburetor malfunction. **NEVER** run engine without air cleaner. Severe engine damage will occur. **NEVER** use gasoline or other types of low flash point solvents for cleaning the air cleaner. A fire or explosion could result.

- Remove air cleaner cover. Remove both elements and inspect them for holes or tears. Replace damaged elements.
- Wash foam element (b) in solution of mild detergent and warm water. Rinse thoroughly in clean water. Allow element to dry thoroughly. Soak element in clean engine oil and squeeze out excess oil.
- Tap paper element lightly to remove excess dirt. Replace paper element if it appears heavily soiled.

SPARK PLUG:

Clean or replace the spark plug as needed to ensure proper operation. **CAUTION** A loose spark plug can become very hot and may cause engine damage.

- Remove the spark plug and inspect it.
- Replace the spark plug if the insulator is cracked or chipped.
- Clean the spark plug electrodes with a wire brush.
- Set the electrode gap.
- Tighten the spark plug securely.



CLEANING SEDIMENT CUP:

- Turn the fuel valve off.
- Remove the sediment cup and the O-ring.
- Wash both thoroughly in a non-flammable solvent. Dry and reinstall them.
- Turn the fuel valve on and check for leaks.

ADJUSTING IDLE SPEED:

WARNING: Remove the drive belt before making any adjustment to the carburetor. The blades will engage unless the belt is removed from the machine.

- Start the engine and allow it to warm up to normal operating temperature.
- Turn the throttle stop screw in to increase speed, out to decrease speed. Make sure the throttle lever is touching the stop screw before measuring rpm.

BELT REPLACEMENT:

The trowel is equipped with a self-adjusting clutch. This clutch automatically tightens the belt and compensates for belt wear. Replace the belt if the clutch can no longer tighten belt enough to engage gearbox without slipping. To replace the drive belt:

- Disconnect the spark plug lead. WARNING: To avoid accidental starting of the engine, always disconnect the spark plug lead before working on machine.
- Loosen the screws and remove the belt guard.
- Slowly turn the pulley and roll the belt off.
- Install the new belt.
- Reattach the belt guard with washers and screws.

STORAGE:

If trowel is being stored for more than 30 days:

- Change engine oil.
- Drain fuel from engine.
- Remove spark plug and pour 15 ml (½ ounce) of SAE 30 engine oil into the cylinder. Replace spark plug and crank engine to distribute oil.
- Clean dirt from cylinder, cylinder head fins, blower housing, rotating screen, and muffler areas.
- Cover trowel and engine and store in a clean, dry area.

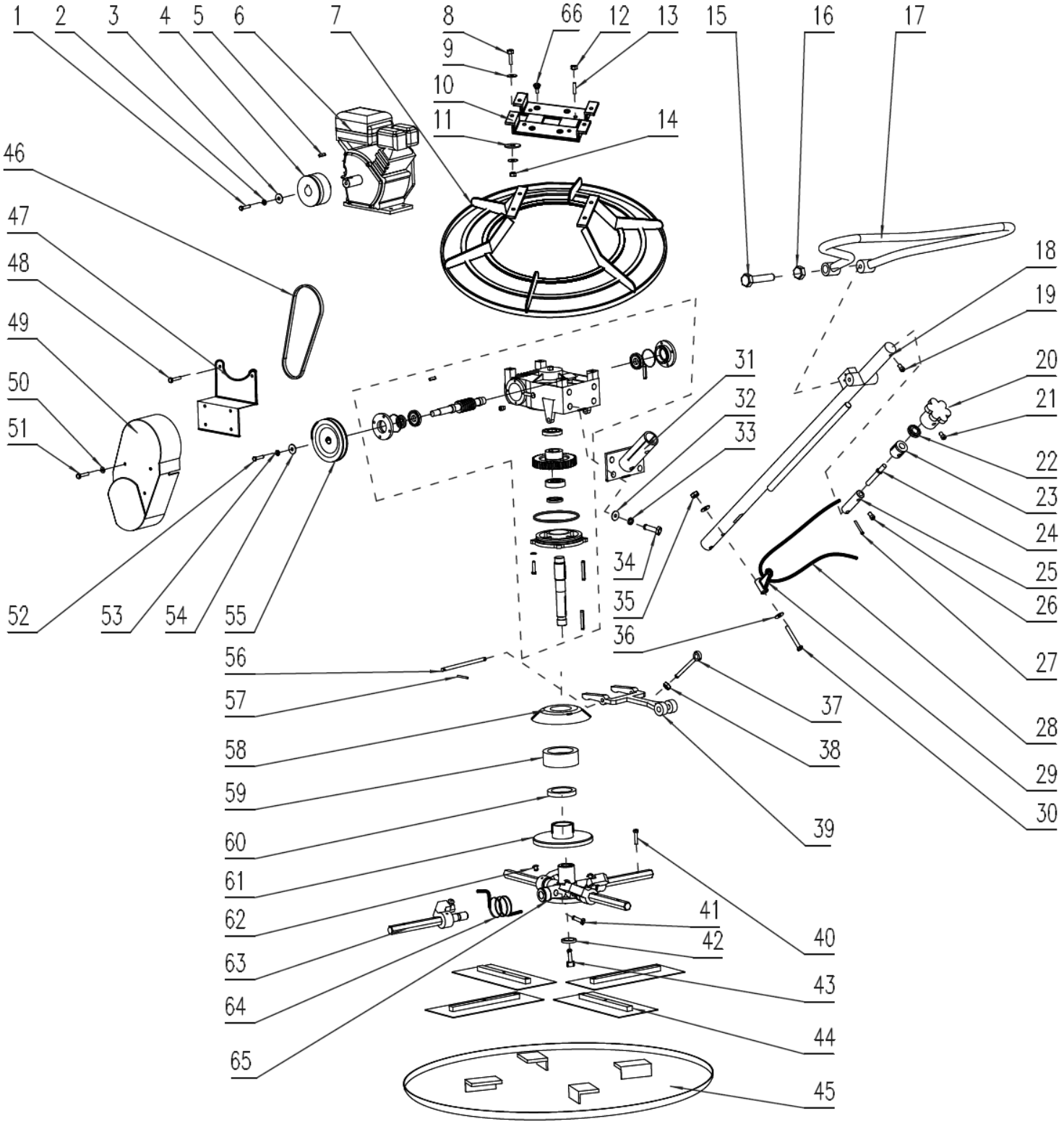
Problem / Symptom	Reason / Remedy
Trowel does not develop full speed.	• Remove deposits built up in engine cylinder and engine head. • Engine speed too low. Adjust speed. • Clean or replace air filter. • Clean debris from moving parts and trowel blades. • In cold weather, warm engine in idle 3 or 4 minutes. • Check throttle lever and cable for proper operation.
Engine runs; poor trowel operation.	• Check belt for wear or damage. • Check clutch for wear or damage. • Clean debris from moving parts and trowel arms.
Engine does not start or runs erratically.	• Check fuel level. Open fuel valve. • Clean air filter. • Check/replace spark plug. • Check in-line fuel filter. • Check engine oil level. • Check engine switch handle to stop position. • Check that throttle is in idle position when starting machine.
Trowel handle tends to rotate when idling.	• Check engine idle speed. It may be too high. • Belt alignment may be off.

MAINTENANCE AND TROUBLESHOOTING

ISSUE	POSSIBLE CAUSE	POSSIBLE SOLUTION
ENGINE WON'T START	Flameout Switch of engine is off	Turn it on
	Saftey switch in handle is off	Turn it on
	Block wind door switch is off	Open it
	Fuel switch is closed	Open it
	Lack of fuel	Add fuel
	Air colander is dirty	Clean it
	Carbon in spark plug	Clean it
	Spark plug gap is incorrect	Adjust to 0.6-0.8mm
	Spark plug type is incorrect	Change to correct plug
	Spark plug is wet	Clean it a nd draw numerous times
TOO MUCH EXERTION NEEDED ON START UP HANDLE	Gasoline door line is in the wrong position	Adjust the gasoline door
	The speed of the engine is too high	Adjust the engine speed
	Clutch issues	Check or change
IMPROPER BLADE ANGLE	Tight wire of handle is loose	Tighten the wire or change it out
	the blade rests inccorectly	Maintain or change
	The platen runs incorrectly	Maintain or change
IMPROPER MACHINE CONTROL	Blade position is incorrect	Fix them
	The blades are leaning	Straighten them
	Blades are uneven	Change them or fix

PRECAUTIONS

- The trowel manufacturer has no direct control over machine application, operation, inspection, lubrication, or maintenance. Therefore, it is your responsibility to use good safety practices in these areas.
- **DO NOT** use the trowel for any purpose other than its intended purposes or applications.
- Know the capabilities and limitations of the trowel.
- Walk around the trowel. Carefully inspect for evidence of physical damage, such as cracks, bends, or deformation of plates and welds. Check for loose, broken or missing parts on the trowel, including brackets, vibration isolators, nuts and bolts. Hardware should be replaced with original equipment manufacturer's (OEM) parts, and should be properly tightened to the manufacturer's recommendations.
- **NEVER** check for hydraulic leaks with your hand. Hydraulic systems are under high pressure and leaks in these systems can penetrate the skin which can result in serious injury or even death. **ALWAYS** use a piece of cardboard or wood when looking for hydraulic leaks.
- Exhaust from the engine contains poisonous carbon monoxide gas that is not easily detected as it is colorless and odorless. Exposure to carbon monoxide can cause loss of consciousness and may lead to death! **DO NOT** operate your trowel indoors or in an enclosed area unless adequate ventilation is provided. Ensure that permissible carbon monoxide levels are monitored and not exceeded.
- The muffler, exhaust pipes and other engine parts will become hot during operation and will remain hot for a while after shut down. **DO NOT** touch until allowed to sufficiently cool. **DO NOT** allow debris, rags, paper, or leaves to accumulate around these areas.
- **NEVER** operate a trowel with a damaged or worn electrical cord. When using an extension cord, be sure to use one heavy enough to carry the current load. When trowel is used outdoors, use only extension cords that are marked for outdoor use.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61024/61025EXPLODING DRAWING

NO.		SIZE	QTY	NO.		SIZE	QTY
1	External Hexagon Bolt	M8*40	1PC	39	Shift Lever		1PC
2	Spring Gasket	Ø8	1PC	40	External Hexagon Bolt	M8*40	8PCS
3	Tapered Flat Gasket	Ø8*30	1PC	41	External hexagon bolt	M10*25	4PCS
4	Clutch Assembly		1PC	42	Gasket		1PC
5	Key	5*50	1PC	43	Inner Hexagon Bolt	M12*30	1PC
6	Engine		1PC	44	Blade		4PCS
7	Boot Cap		1PC	45	Disc Pan		1PC
8	External Hexagon Bolt	M12*40	4PCS	46	Belt		1PC
9	Flat Gasket	Ø12	8PCS	47	Belt Cover Bracket		1PC
10	Supporting Seat		1PC	48	Round Head Bolt	M8*16	2PCS
11	Gasket	M12*40*4	4PCS	49	Belt Cover		1PC
12	Non-slip Nuts	M8	4PCS	50	Flat Gasket	Ø6	4PCS
13	Bolt	M8*40	4PCS	51	Inner Hexagon Bolt	M6*16	4PCS
14	Locked Nut	M12	4PCS	52	Inner Hexagon Bolt	M8*20	1PC
15	External Hexagon Bolt	M16*120	1PC	53	Spring Gasket	Ø8	1PC
16	Nut	M16	2PCS	54	Enlarged Flat Gasket	Ø8*30	1PC
17	Handle		1PC	55	Pulley		1PC
18	Control Lever		1PC	56	Gear Shift Lever		1PC
19	Inner Hexagon bolt	M8*10	1PC	57	Cotter	Ø3*30	2PCS
20	Hand Wheel		1PC	58	Salver		1PC
21	Locked Bolt	M8*12	1PC	59	Bearing Location Ring		1PC
22	Gear	51204	1PC	60	Plane Bearing	51209	1PC
23	Gear Sheath		1PC	61	Sliding Plate		1PC
24	Adjust Screw		1PC	62	Intake Oil Hole		4PCS
25	Adjust Nut		1PC	63	Blade Shaft and The Elbow		4PCS
26	Inner Hexagon Bolt	M8*10	2PCS	64	Torsional Spring		4PCS
27	Pin	Ø6*40	1PC	65	Cross Shaft		1PC
28	Cable Accelerator		1PC	66	Countersunk Head Bolt	M10*20	4PCS
29	Cable Bracket		1PC	A	Gear Box		1PC
30	External Hexagon Bolt	M10*80	2PCS				
31	Intubation Seat		1PC				
32	Flat Gasket	Ø10	4PCS				
33	Spring Gasket	Ø10	4PCS				
34	External Hexagon Bolt	M10*25	4PCS				
35	Nut	M10	2PCS				
36	Flat Gasket	Ø10	4PCS				
37	Swing Bolt	M10*90	1PC				
38	Nut	M10	1PC				

DISCLAIMER

- Batteries produce explosive gases. Keep open flame or sparks away. See the manufacturer's instructions when servicing the batteries, when using jumper cables, or when using a battery charger. Use a flashlight to check battery electrolyte level. **ALWAYS** check with engine stopped. Battery electrolyte is poisonous. It is strong enough to burn your skin, eat holes in clothing, and can cause blindness if splashed into eyes. Always wear eye and face protection.
- Be sure the trowel is properly lubricated. See that the fuel, lubricating oil, coolant and hydraulic reservoirs are filled to the proper levels with the correct fluids.
- **NEVER** overfill fuel tanks or fluid reservoirs. In the event of a fuel spill, **DO NOT** attempt to start the engine until the fuel residue has been completely wiped up, and the area surrounding the engine is dry. Replace fuel cap securely after refuelling.

PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT, OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS, AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

Record Product's Serial Number Here: _____

Note: If product has no serial number, record month and year of purchase instead.

Note: Some parts are listed and shown for illustration purposes only and are not available individually as replacement parts.

SAVE THESE INSTRUCTIONS.

Questions, problems, missing parts?

CALL US

Before returning to your retailer, our exceptional customer service is here to help.

Call Us: 909.628.4900
Email Us: info@starktoolsusa.com
Hours of Operation: 9am - 4pm (Monday - Friday)

PRODUCT MADE IN CHINA