



REVERSE PLATE COMPACTOR

ITEM: 61012



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



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.

SAFETY

WARNING DO NOT use this product or any available optional equipment without first completely reading and understanding these instructions and any additional instructional material such as owner's manuals, service manuals or instruction sheets supplied with this product or optional equipment. When using an electrical appliance, basic precautions **MUST** be followed to reduce the risk of fire, electric shock and personal injury.

- **DANGER: CARBON MONOXIDE** Using a plate compactor indoors **CAN KILL YOU IN MINUTES**. Engine exhaust contains carbon monoxide (CO). This is a poison gas you cannot see or smell. If you can smell the engine exhaust, you are breathing CO. Even if you cannot smell the exhaust, you could be breathing CO.
- **NEVER** use a plate compactor inside homes, garages, crawl spaces, or other partially/fully enclosed areas. Deadly levels of carbon monoxide can build up in these areas. Using a fan or opening windows and doors does **NOT** supply enough fresh air. **ONLY** use outside and far away from windows, doors, and vents. These openings can pull in engine exhaust.
- **WARNING:** The exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.
- **WARNING:** This engine may emit highly flammable and explosive gasoline vapors, which can cause severe burns or even death if ignited. A nearby open flame can lead to explosion even if it isn't directly in contact with gasoline.
- **DO NOT** operate near an open flame.
- **DO NOT** smoke near the plate compactor.
- **ALWAYS** turn the plate compactor off before refuelling, allow it to cool for at least 2 minutes before removing the fuel cap. Loosen the cap slowly to relieve pressure in the tank.
- **DO NOT** overfill the tank. Gasoline may need to expand during operation. **DO NOT** fill to the top of the tank, allow for expansion.
- **ALWAYS** wipe up spilled fuel before operating.
- Empty the fuel tank before storing or transporting the plate compactor.
- **DO NOT** use the plate compactor in wet conditions.
- **DO NOT** allow children or non-qualified persons to operate the plate compactor.
- **DO NOT** touch hot surfaces. Pay attention to warning labels on the machine identifying hot parts.
- Allow the unit to cool down after use before touching the engine or areas of the plate compactor that become hot during use.
- Only use the compactor for intended purposes.
- **KEEP** hands and feet clear of rotating and moving parts as they will cause injury if contacted.

- Operate the plate compactor on flat, level surfaces only.
- Turn the engine OFF when the compactor is not in use.
- **DO NOT** operate or service this machine before reading this entire manual.
- Never operate this equipment without proper protective clothing, shatter proof ANSI-approved glasses, steel-toed boots, and other protective job site devices.
- **NEVER** operate the equipment while under the influence of medication, drugs or alcohol.
- **ALWAYS** check the machine for loosened bolts and threads **BEFORE** every use.
- **ALWAYS** wear proper respiratory, hearing and eye protection during operation.
- The Manufacturer does not assume responsibility for any accident due to equipment modifications and will also void the warranty.
- **NEVER** use accessories or attachments that are not recommended by STARK for this model of plate compactor.
- **DO NOT** add fuel to the plate compactor if it placed on top of a plastic surface such as a pickup truck bed with a plastic liner. This creates the possibility of ignition or explosion due to static electricity build up.
- **ALWAYS** refuel in a well ventilated area. **NEVER** operate near open flames, sparks or other item that could cause the gas fumes to ignite.
- Before performing compacting work near buildings or above pipelines, check the effect of the vibrations on the buildings and pipelines. If necessary, immediately stop the compacting work.
- **WARNING:** This unit produces heat when running. Temperatures near exhaust can exceed 150 F (65 C).
- **NOTE:** We suggest running the plate compactor engine at least once a month in order to maximize the lifespan of the machine.
- Plate compactors are heavy units and should be positioned by two people of appropriate strength. Using the lifting handles provided on the machine, along with correct lifting techniques.
- **DO NOT** operate the machine unless all protective guards are in place.
- **ENSURE** that the walls of a trench are stable and will not collapse due to the action of the vibration, prior to commencing compaction.
- **ENSURE** that the area to be compacted does not contain any “live” electrical cables, gas, water or communication services which may be damaged by the action of the vibration.
- **EXERCISE CARE** when operating unit. Exposure to vibration or repetitive work actions may be harmful to hands and arms.
- **DO NOT** increase the governed no-load motor speed above 3,500 r/min. Any increase may result in personal injury and damage to the machine. **BE CAREFUL** not to come in contact with the muffler when the engine is hot, since it can cause severe burns.
- **FIRE & EXPLOSION HAZARDS: PETROL** is extremely flammable and explosive under certain conditions. **ENSURE** that petrol is only stored in an approved storage container. **DO NOT** refuel the motor while it is in operation or hot.
- **EMERGENCY SHUTDOWN:** Move throttle lever to “OFF” position and also turn stop switch to “OFF”

PRODUCT INFORMATION

STRUCTURE: The upper part is made up of Power source, Handle, Belt Cover and Guard hook which are fixed by Engine base. The Engine base is fixed on Vibrating Plate by Shock absorbing Rubber. The lower part is made up of Vibrating plate and Vibrator until that has an Eccentric rotary shaft built in. The power source is transmitted from the centrifugal clutch on engine output shaft to the Eccentric rotary shaft via V-belt.

POWER TRANSFER: The Air-cooled Single cylinder Engine is mounted as power source and Centrifugal Clutch is fixed on engine output shaft. Petrol Engine (2 cycle, 4 cycle) and Diesel Gasoline Engine can be mounted as option. Centrifugal Clutch engages by running up the engine and engine R.P.M. is reduced to suitable number for compacting. The rotation of engine is transmitted from V-pulley integrated with Clutch drum to Vibrator pulley through V-belt. Vibrator Pulley rotates Eccentric rotor shaft that is contained in Vibrator case. The generated vibration created from eccentric rotor is transmitted to Compaction with the weight of the machine makes the compaction of the ground possible.

MOTOR: The motor is controlled by an ON/OFF switch or push button which is mounted on the motor below the fuel tank. The motor speed is controlled by a remote throttle lever which is mounted on the machine handle. Honda and Kama motors are fitted with an oil alert device which will stop the motor or prevent starting when the crankcase oil level falls below a safe level.

DRIVE BELT: The Tension of the drive belt is adjustable. Loosen the four nuts on the bolts which secure the motor to the base plate, Adjust the set screws which bear against the motor crankcase to achieve the required belt tension. Ensure that the four nuts and the set screw lock nuts are tightened after adjustment.

ACCESSORIES: The Transport Trolley-facilitates handling. Hooks into the base-plate. Fitted with 200mm rubber tires.

SPECIFICATIONS

ENGINE	Air-cooled, 4-cycle, single cylinder
ENGINE TYPE	Petrol, Loncin 200F
POWER HP	4.7
WEIGHT LG	180
FREQUENCY VPM	4600
CENTRIFUGAL FORCE	22
COMPACTION DEPTH	50
TRAVEL SPEED	20
EFFICIENCY M ² /HR	450
PLATE SIZE CM	66X38
DIMENSIONS CM	82X44.5X100

- Max Power: 4.7KW (6.5HP)
- Fuel Type: Gasoline
- Starting Type: Recoil
- Blows Per Minute: 3600
- Engine Torque (ft.-lb.): 6.9
- Fuel Tank Capacity: 0.96gal
- Effective Base Area: 26"(L) x 15"(W)
- Compacting Force (lb.): 4950
- Forward Speed (Soil): up to 40 ft./minute
- Compliant: CARB and EPA

OPERATION

PRIOR TO OPERATION

- Make sure that all dirt,mud,etc.,are thoroughly removed from the unit prior to operation. Special effort should be given to the bottom face of the vibrating plate and those areas adjacent to the cooling air inlet of engine,carburetor,and air cleaner.
- Check all bolts and screws for tightness and make sure all bolts and screws are securely tightened. Loose bolts and screws may cause damage to the unit.
- Check the V-belt for tightness. The normal slack should be approximately 10-15mm (1/2") when the belts are forcibly depressed in the middle position between the two sheaves. If there is excess belt play,there could be a decrease in the impact force or erratic vibration, causing machine damage.
- Check the engine oil level and if the engine oil level is low, it should be refilled. Use the proper motor oil as suggested in the table below.

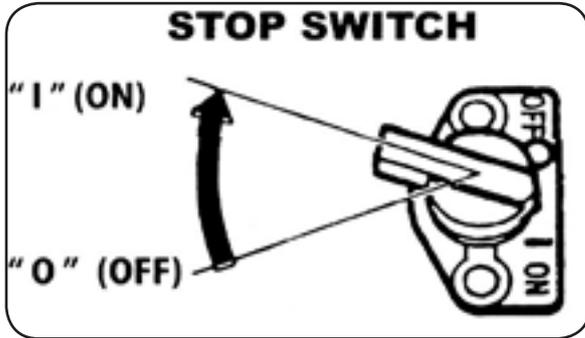
Season Temperature	Grad of Motor oil (higher than MS class)
Spring Summer or Autumn +120° F to +40° F	SAE 30
Winter +40° F to +15° F	SAE 20
Below+15° F	SAE 10W-30

- Remove the oil plug in the vibrator assembly and check the oil level. Make sure the compactor is level when checking. The oil level should be up to the oil plug. Every month or every 200 hours of operation, replace the oil.
- **IMPORTANT:** Use the motor oil SAE When changing the oil,the old oil can be drained by tipping the unit. The oil will drain easily while it is hot.
- A regular grade gasoline should be used in the engine. When filling the fuel tank, make sure the fuel filter is used.
- Be careful with the operating place and ventilation. Avoid operating the machine in a closed room, tunnel,or other badly ventilated places, since its exhaust contains deadly poisonous carbon monoxide. If the machine is employed unavoidable operated in such a place, discharge the exhaust out side the room by a suitable means.
- Be careful with the hot members. Mufflers and other hot members are dangerous. **DO NOT** touch them with unprepared hand.
- Observe with the following cautions when transporting. Clamp fuel tank cap securely and turn the fuel valve OFF at the source during Drain gasoline from fuel tank before transporting over a long distance or on rough roads.
- Stop engine without fail before replenishing fuel tank. Never replenish gasoline while the engine is running or remains hot otherwise spilled or evaporated fuel is liable to catch fire from engine sparks or muffler heat. Wipe off spilled fuel,if any, before starting engine. Be careful not to Spill fuel.
- Keep flammables away from the vicinity of the exhaust port. Be careful with gasoline match,straw and other inflammables,since the exhaust port is subjected to a high temperature.

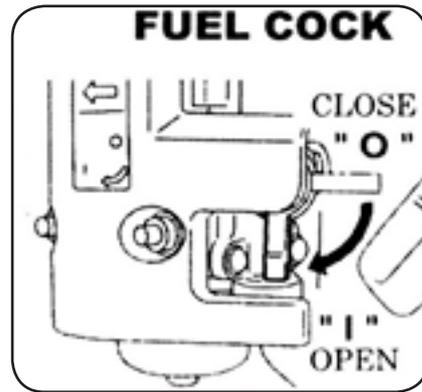
OPERATION

GASOLINE ENGINE

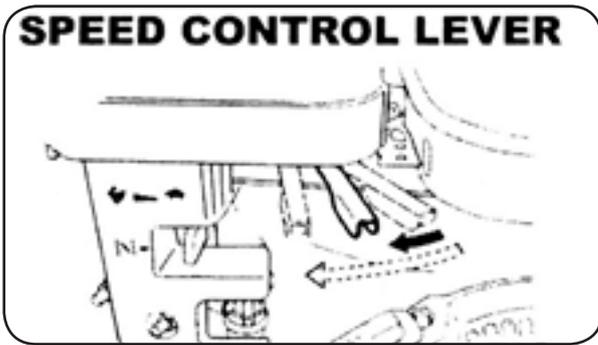
1. Turn the STOP SWITCH clock-wise to the position "1"(ON).



2. Open the fuel cock.



3. Set the speed control lever 1/3 to 1/2 of the way towards the high speed position.



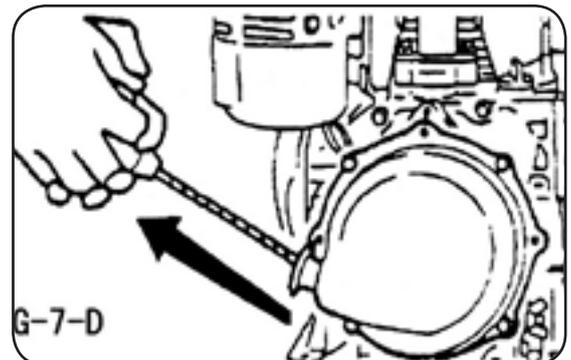
4. Close the choke lever. If the engine is warm or the ambient temperature is high, open the choke lever half-way, or keep it fully open. If the engine is cold or the ambient temperature is low. Close the choke lever fully.



5. Pull the starter handle slowly until resistance is felt. This is the "compression" point. Return the handle to its original position and pull swiftly.



6. **DO NOT** pull out the rope all the way. After starting the engine, allow the starter handle to return to its original position while still holding the handle.

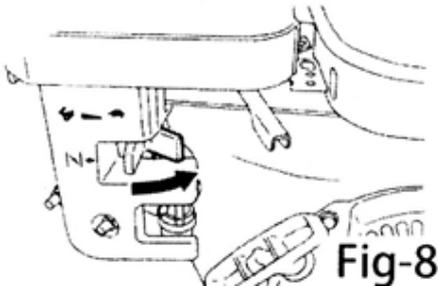


OPERATION

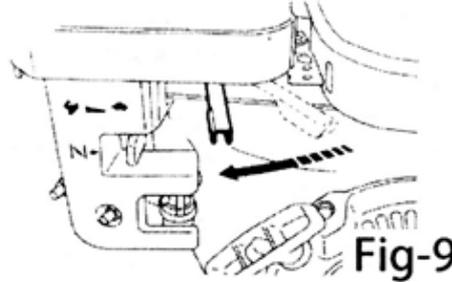
1. As the engine warms up, gradually move the choke lever to the OPEN position.

2. Move the speed control lever from the LOW to the HIGH position. When the engine speed reaches approximately 2,300-2,600 RPM, the centrifugal clutch engages. If the engine speed increased very slowly, it is possible that the clutch can slip. Do not operate the speed control lever slowly.

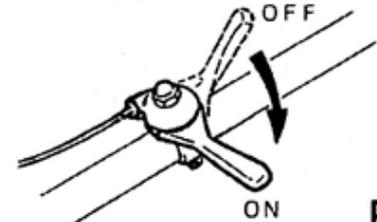
CHOKE LEVER



SPEED CONTROL LEVER



SPEED CONTROL LEVER at handle



OIL ALERT SYSTEM: The Oil Alert System is designed to prevent engine damage caused by an insufficient amount of oil in the crankcase. Before the oil level in the crankcase can fall below a safe limit the Oil Alert System will automatically stop the engine (the engine switch will remain in the ON position).

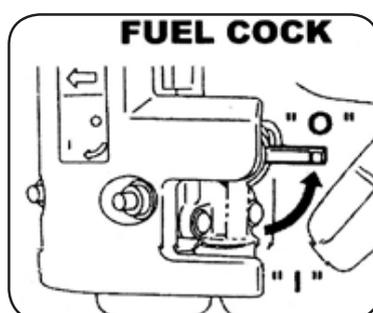
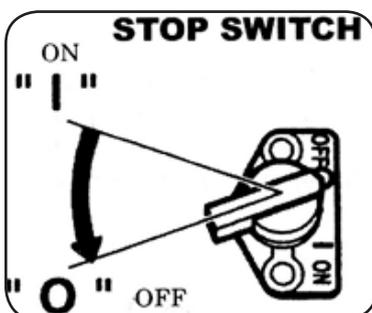
- When compacting asphalt, it is advisable to paint the bottom face of the vibrating plate with diesel fuel. This will assist in preventing the plate from sticking to the asphalt.
- When shutting off the vibrator, turn the speed control lever from the HIGH to LOW position. **DO NOT** move the speed control lever slowly.

TRANSPORTATION

- Be sure to stop the engine while transporting. Screw up the fuel tank cap securely and close the fuel valve to avoid fuel leaking.
- If transporting by car, fix machine securely not to move nor to fall down. In case of driving for long distance or at off-road, tank out fuel from tank.

SHUTDOWN

- Set the speed control lever at the low speed position and allow the engine to run at low speed for 2 or 3 minutes before stopping.
- Turn the stop switch to the OFF position. Close the fuel cock.



STORAGE AND MAINTENANCE

STORAGE

FLAMMABLE LIQUID: Stop engine and do not smoke or allow work in immediate area when refuelling. Fire or explosion could result from flames or sparks.

MOVING PARTS: Shutdown engine before performing service or maintenance. Contact with moving parts can cause serious injuries.

HIGH TEMPERATURES: Allow machine and engine to Cool before performing service or maintenance. Contact with hot components can cause serious burns.

- When storing the compactor for long periods after operation.
- Thoroughly drain the fuel from the fuel tank fuel pipe and carburetor.
- Pour a few drops of motor Oil into the cylinder by removing the spark plug. Rotate the engine several times by hand so that the cylinder interior is covered with oil.
- Clean the outer surface of the machine with an oil moistened cloth. Cover the unit and store in a humidity-free, dust-free area.

MAINTENANCE

EVERY USE: Remove mud, dirt, etc., from the unit. Clean bottom face of the vibrating plate. Check the air cleaner element and clean if necessary. Check all nuts, bolts, and screws for tightness and re-tighten as necessary.

WEEKLY MAINTENANCE

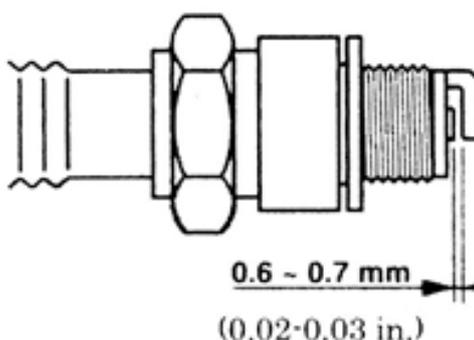
AIR CLEANER SERVICE: Dirty air cleaner element will cause starting difficulty, power loss, engine malfunctions, and shorten engine life extremely. Keep the air cleaner element clean.

URETHANE FOAM ELEMENT: Remove the element and wash it in kerosene or diesel fuel. Then saturate it in a mixture of 3 parts kerosene or diesel fuel and 1 part engine oil. Squeeze the element to remove the mixture and install it in the air cleaner.

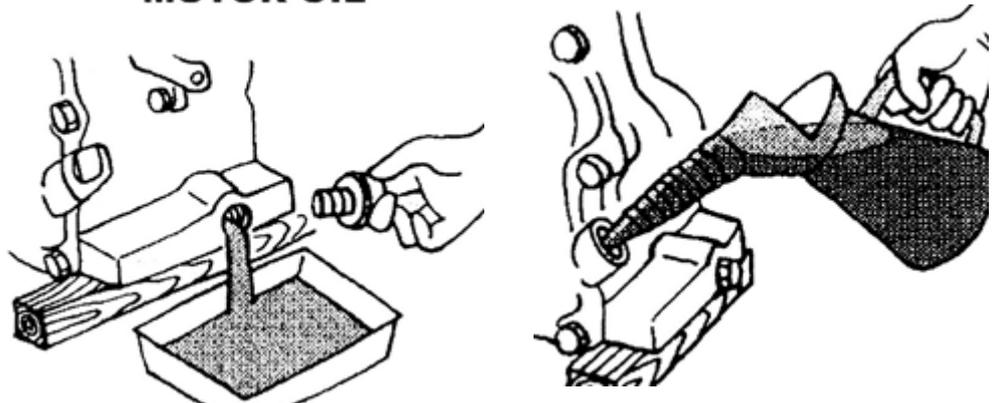
URETHANE FOAM DUAL STRUCTURE: Clean the urethane foam in the same way as described above. Wash the element in kerosene or diesel fuel. Saturate it in a mixture of 3 parts kerosene or diesel fuel and 1 part engine oil. Shake off excessive oil and re-install.

Remove spark plug, clean and adjust the spark plug gap to 0.6-0.7mm. Drain the motor oil of the engine and replace with new specified oil. **NOTE:** When the engine is new, the first oil change must be made after 20 hours of operation and replenish the oil tank before operating.

SPARK PLUG



MOTOR OIL

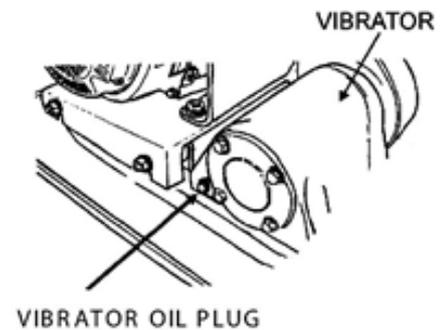


CARE AND PREVENTATIVE MAINTENANCE

- Check the oil level in the motor crankcase daily.
- Check the vibrator oil level weekly.
- Inspect the rubber anti vibration mounts for wear or deterioration
- Clean the underside of the plate regularly to prevent a build up.
- Clean the underside of the plate regularly to prevent build up.
- Change the oil in the motor crankcase regularly to minimise wear.
- Inspect, clean and/or replace the motor air cleaner regularly, particularly when operating in a dusty environment.
- Inspect, clean and/or replace the spark plug regularly.
- Check all fasteners for tightness as the machine is subject to vibration.
- Check “V” belt tension. Wear and that it is running well, adjust or replace as required.

VIBRATOR OIL CHECK

1. Place the plate compactor horizontally on a flat surface. Make sure the compactor is level when checking the oil in the vibrator assembly.
2. Check vibrator oil level by removing the plug (vibrator oil gauge).
3. When changing the vibrator oil, remove the drain plug, and simply tip the compactor to drain the oil. Note that the oil will drain more easily while it is hot. Inspection and other services should always be carried out on hard and level ground with the engine shutdown.



INSPECTION AND MAINTENANCE SERVICE TABLES

To make sure your plate compactor is always in good working condition before using □ carry out the maintenance inspection in accordance with Tables 1 through 3

MACHINE INSPECTION SCHEDULE

ITEM	HOURS OF OPERATION
Loose or Missing Screws	Every 8 hours (every day)
Damaged Parts	Every 8 hours (every day)
Function of Controlling System Part	Every 8 hours (every day)
Vibrator Oil Check	Every 100 hours
Vibrator Oil Replacement	Every 300 hours
V-belt (clutch) Check	Every 200 hours
Battery Check	Every 100 hours

MAINTENANCE

MACHINE INSPECTION SCHEDULE

ITEM	HOURS OF OPERATION
Oil or Fuel Leak	Every 8 hours (every day)
Tightness of Fastening Threads	Every 8 hours (every day)
Engine Oil Check and Replenishment	Every 8 hours (every day) (Replenish to specified maximum level)
Engine Oil Replacement	After first 25 hours then every 50 to 100 hours
Air Filter Cleaning	Every 100 hours

TIGHTENING TORQUE

TABLE 3.

TIGHTENING TORQUE(in.kg/cm) Diameter

Material	6mm	8mm	10mm	12mm	14mm	16mm	18mm	20mm
4T	70	150	300	500	750	1,100	1,400	2,000
6- 8T	100	250	500	800	1,300	2,000	2,700	3,800
11T	150	400	800	1,200	2,000	2,900	4,200	5,600
*	100	300~ 350	650~ 700					

*(In case counter-part is of aluminum)

(Threads in use with this machine are all right handed)

Material and quality of material is marked on each bolt, and screw.

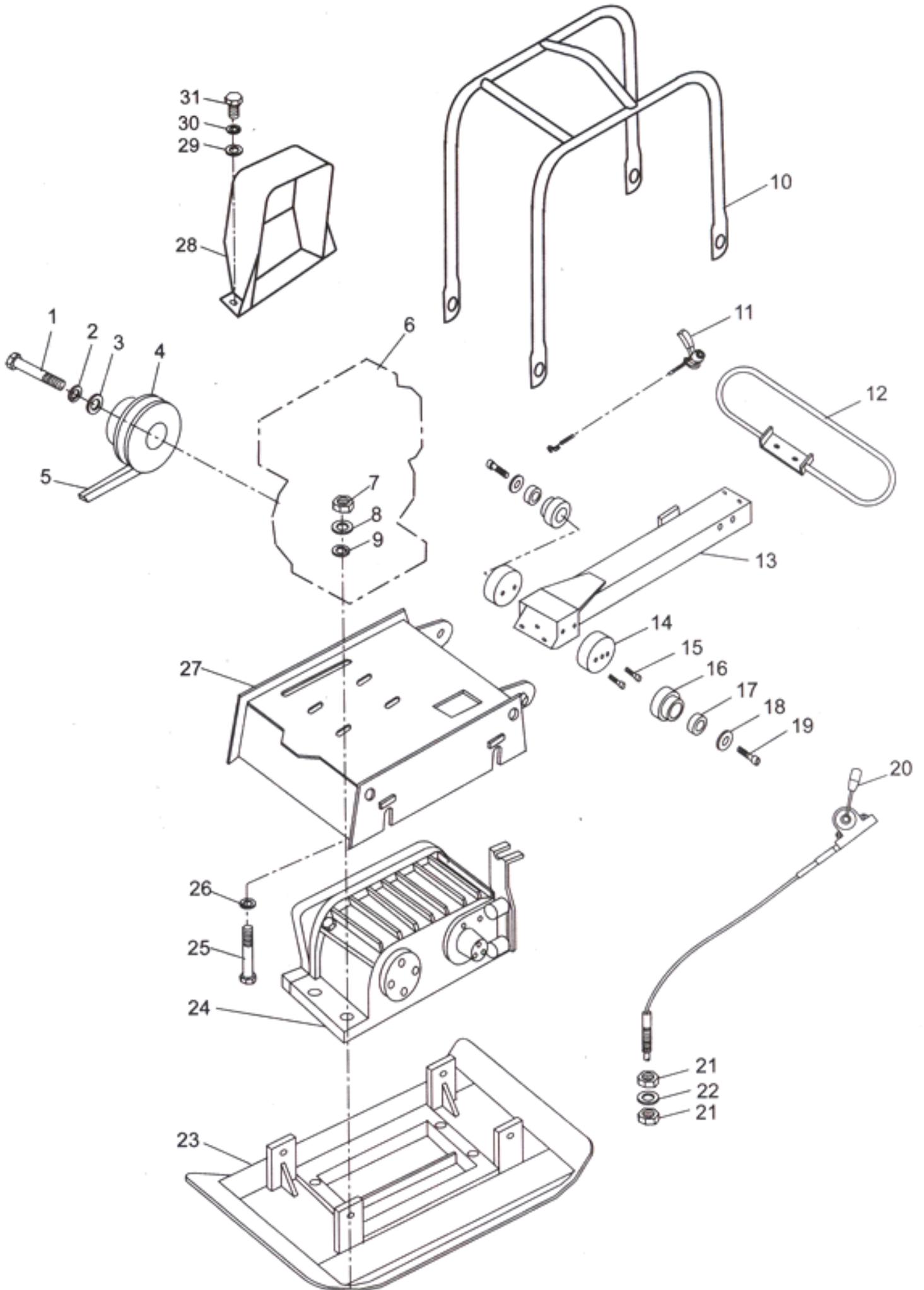
The following bearings are sealed: Centrifugal clutch-grease lubricated and Vibrator-oil bath lubricated.

Finish: The machine is finished in gold equipment enamel, the handle in black baked enamel. Exposed metal surfaces are zinc electroplated for corrosion protection.



SAVE THESE INSTRUCTIONS.

PARTS DIAGRAM



PARTS LIST

ITEM NO.	PART NO.	DESCRIPTION	QUANTITY
1	300001	Hexagonal bolt M8x25	1
2	300002	Washer, lock M8	1
3	300003	Washer, plat M8	1
4	300004	Clutch assembly	1
5	300005	V-belt	1
6	300006	Engine	1
7	300007	Nut M10	4
8	300008	Washer, lock M10	4
9	300009	Washer, plat M10	4
10	300010	Guard hook	1
11	300011	Throttle lever	1
12	300012	Grip	1
13	300013	Handle	1
14	300014	Shock absorber	2
15	300015	Hexagonal bolt M8x25	4
16	300016	Rubber coupling	2
17	300017	Rubber	2
18	300018	Washer, plat 12.5x40x2.5	2
19	300019	Hexagonal bolt M12x65	2
20	300020	Vibrator control	1
21	300021	Nut M14x1.5x7	4
22	300022	Washer, plat M14	2
23	300023	Vibrating plate	1
24	300024	Vibrator assembly	1
25	300025	Hexagonal bolt M10x45	4
26	300026	Washer, plat M10	4
27	300027	Base	1
28	300028	Belt cover(upper)	1
29	300029	Washer, plat M8	2
30	300030	Washer, lock M8	2
31	300031	Hexagonal bolt M8 x 20	2

TROUBLESHOOTING / WARRANTY

ISSUE	POSSIBLE CAUSE AND CORRECTION
Motor will not start	Check the ON/OFF switch to ensure that it is switched ON -Check the fuel supply -If a motor is fitted check the crankcase oil level as an oil sensor device is fitted to the motor which prevents starting and stops the motor when the oil level is low -Ensure the spark plug ignition lead is connected -Check the carburettor jet and bowl to ensure they are clean
Motor stops	Check the fuel supply -Check that the fuel cock is turned ON -Check the condition of the air filter
Petrol Motor lacks power	Check the condition of the air filter -Check the condition of the spark plug
Insufficient vibration	Check for a slipping or a missing v belt -Check that the motor governed speed is 3,500 r/min
Machine is not moving freely	Check the underside of the plate for a build up of material

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.

Questions, Problems or Missing Parts?



Before returning to a retailer, our exceptional customer service is available to help.

Call Us: 909.628.4900

Hours of Operation: 9 to 4pm PST, Monday - Friday

Email: info@starktoolsusa.com

PRODUCT MADE IN CHINA