TMG INDUSTRIAL®

TMG-GCV50
PRODUCT MANUAL
v.2026.10.21

2 HP Concrete Vibrator 2" (0.05m) Head



⚠ WARNING



Please read and understand the product manual completely before assembly
- Check the parts list to make sure all parts are received.
- Wear safety goggles or other protective gear while assembling.
- Do not return products to dealers, who are not equipped to handle returns.

Missing parts or questions about assembly?
Email: cs@tmgindustrial.com
Or visit: tmgindustrial.com

Table of Contents

1. Preface 2

2. Specifications 2

3. General Safety Rules and Precautions 3

4. Tool Use and Care 3

5. Service 4

6. Specific Safety Rules and Precautions 4

7. Fire and Explosion Precautions 5

8. Mechanical Precautions 5

9. Pre-operating Instructions 8

10. Trouble Shooting 9

11. Inspection, Maintenance, and Cleaning 10

12. Exploded View and Parts List 11

1. Preface

Thanks for selecting our vibrators. The handheld engine poker with an eccentric vibrator head is an important tool for concrete construction, especially in DIY applications. It is widely used for vibrating slabs, footings, stairways and footpaths to consolidate and compact concrete. Be sure to carefully read through this OPERATION MANUAL in order to correctly select and use the vibrators.

2. Specifications

Features:

- 2 in. diameter head mounted on straight, flexible handle
- Throttle controls at the operator's fingertips
- 9000 VPM frequency with 2.8 mm amplitude provides efficient concrete vibration
- Easily portable at 24 lb. so the operator can easily keep up with the pour
- 4 stroke engine delivers stable power with reduced noise
- Cordless design for better portability around job sites

Specifications:

1. Amplitude: 2.8mm
2. Vibrations per minute: 9000 VPM
3. Shaft length: 22" (560 mm)
4. 2" diameter head
5. Net weight: 24 lb (11 kg)

Engine Information:

Model: KASEI 140FA

- Single-cylinder, 4-stroke, forced-air-cooled
- Displacement: 37.7 cc
- Max. output power: 1.2 kW/1.63HP
- Starting mode: Recoil
- Fuel tank capacity: 0.65 L
- Oil capacity: 80ml
- Engine oil type: SAE 10W-30

3. General Safety Rules and Precautions

Warning! read and understand all instructions.
Failure to follow all instructions listed below may result in fire, and/or serious personal injury. save these instructions.

Work Area

1. Keep your work area clean and well lit. cluttered benches and dark areas invite accidents.
2. Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust. Power tools create sparks which may ignite the dust or fumes.
3. Keep bystanders, children, and visitors away while operating a power tool. Distractions can cause you to lose control. Protect others in the work area from debris such as chips and sparks. Provide barriers or shields as needed.

Personal Safety

1. Stay alert. Watch what you are doing, and use common sense when operating a power tool. Do not use a power tool while tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating power tools may result in serious personal injury.
2. Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts.
3. Avoid accidental starting. Be sure the Gasoline Engine's Power Switch is in its "OFF" position before moving the Concrete Vibrator and before performing any service, maintenance, or cleaning procedures on the unit.
4. Remove adjusting keys or wrenches before turning the Concrete Vibrator on. A wrench or a key that is left attached to a rotating part of the machine may result in personal injury.
5. Do not overreach. Keep proper footing and balance at all times. Proper footing and balance enables better control of the power tool in unexpected situations.
6. Use safety equipment. Always wear eye protection.

4. Tool Use and Care

1. Do not force the tool. Use the correct tool for your application. The correct tool will do the job better and safer at the rate for which it is designed.
2. Do not use the Concrete Vibrator if the Gasoline Engine's Power Switch does not turn it on or off. Any tool that cannot be controlled with its power switch is dangerous and must be replaced.
3. Store idle tools out of reach of children and other untrained persons. Tools are dangerous in the hands of untrained users.
4. Maintain tools with care. Properly maintained tools and equipment are less likely to bind and are easier to control. Do not use a damaged tool. Tag damaged tools "Do not use" until repaired.
5. Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tool's operation. If damaged, have the tool serviced before using. Many accidents are caused by poorly maintained tools.
6. Use only accessories that are recommended by the manufacturer for your model. Accessories that may be suitable for one tool may become hazardous when used on another tool.

5. Service

1. Tool service must be performed only by qualified repair personnel. Service or maintenance performed by unqualified personnel could result in a risk of injury.
2. When servicing a tool, use only identical replacement parts. Follow instructions in the “Inspection, Maintenance, And Cleaning” section of this manual. Use of unauthorized parts or failure to follow maintenance instructions may create a risk of fire or injury.

6. Specific Safety Rules and Precautions

1. WARNING! Your Warranty is voided if:

   A. You do not put engine oil in the Engine’s crankcase prior to its first use. Before each use, check the oil level. Never run the Engine with low or no engine oil. Running the Engine with low or no oil will permanently damage the unit. Refer to the Engine manufacturer’s product manual (included) for complete Engine service and maintenance instructions.

2. This Concrete Vibrator is designed for use only Concrete Vibrator Head and Hose. Do not attempt to use the Concrete Vibrator with any other type of Head and Hose.

3. Maintain labels and nameplates on the Concrete Vibrator. These carry important information. If unreadable or missing, contact distributor for a replacement.

4. Never leave the Concrete Vibrator unattended when its Engine is running. Turn off the Engine, and wait until it completely stops rotating before leaving

5. Do not allow children and other unauthorized people to handle or play with the Concrete Vibrator.

6. DANGER! This Concrete Vibrator is designed for outdoor use only. Do not operate the Vibrator in a closed area or in a poorly ventilated area. When running, the Engine of this Vibrator produces carbon monoxide, a colorless, odorless, toxic fume that, when inhaled, can cause serious personal injury or death. Whenever possible, use a carbon monoxide detector (not included) to detect excessive carbon monoxide fumes in the work area and in the surrounding area.

7. Do not force the Concrete Vibrator. This machine will do the work better and safer at the speed and capacity for which it was designed.

8. Never stand on the Concrete Vibrator. Standing on the Vibrator could tip the tool, possibly causing personal injury and/or property damage.

9. Use the right tool for the job. Do not attempt to force small tools and equipment to do the work of larger industrial tools and equipment. There are certain applications for which this tool was designed. It will do the job better and more safely at the rate for which it was intended. Do not modify this tool, and do not use this tool for a purpose for which it was not intended.

10. Store idle tools and equipment. When not in use, the Concrete Vibrator must be stored in a dry location to inhibit rust. Always lock up the tool and keep out of reach of children and other unauthorized people.

11. Do not operate this tool if under the influence of alcohol or drugs. Read warning labels if taking prescription medicine to determine if your judgment or reflexes are impaired while taking drugs. If there is any doubt, do not operate the tool.

12. WARNING! People with pacemakers should consult their physician(s) before using this product. Operation of electrical equipment in close proximity to a heart pacemaker could cause interference to or failure of the pacemaker.

13. WARNING! The warnings and precautions discussed in this 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.

7. Fire and Explosion Precautions

1. Gasoline fuel and fumes are flammable, and potentially explosive. Use proper fuel storage and handling procedures. Always have a Class ABC-rated fire extinguisher nearby.
2. Keep the Concrete Vibrator and surrounding areas clean at all times.
3. When spills of fuel or oil occur, they must be cleaned up immediately.

   Dispose of fluids and cleaning materials as per any local, state, or federal codes and regulations. Store oil rags in a covered metal container.
4. Never store fuel or other flammable materials near the Concrete Vibrator.
5. Do not smoke, or allow sparks, flames, or other sources of ignition around the Concrete Vibrator.
6. Keep grounded conductive objects, such as tools, away from exposed, live electrical parts and connections to avoid sparking or arcing. These events could ignite fumes or vapors.
7. Do not refill the Fuel Tank while the Engine is running or while the

   Engine is still hot. Do not operate the Concrete Vibrator with known leaks in the fuel system.
8. Use only Engine manufacturer recommended fuel and oil.

8. Mechanical Precautions

1. Prior to performing service, maintenance, or cleaning procedures, always make sure the Gasoline Engine's Power Switch is in its "OFF" position. Allow the Engine to completely cool. Then, remove the spark plug from the Engine.
2. Do not alter or adjust any part of the Concrete Vibrator or Engine that is assembled and supplied by the manufacturer.
3. Always follow and complete the scheduled maintenance procedures recommended by the Concrete Vibrator or Engine manufacturer.

Chemical Precautions

1. Avoid contact with hot fuel, oil, exhaust fumes, and solid surfaces.
2. Avoid body contact with fuels, oils, and lubricants used in the Concrete Vibrator and Engine. If swallowed, seek medical treatment immediately. Do not induce vomiting if fuel is swallowed. For skin contact, immediately wash with soap and water. For eye contact, immediately flush eyes with clean water.

Noise Precautions

Prolonged exposure to noise levels above 85 dB(A) is hazardous to hearing. Always wear hearing protection when operating or working around the Concrete Vibrator when it is running.

Unpacking

When unpacking, check to make sure all the parts shown in the Parts List (pages 12–13 of this manual) are included. If any parts are missing or broken, please call DISTRIBUTOR at the number shown on the cover of this manual as soon as possible.

Assembly Instructions

To Attach the Head, Controller and Engine to the Concrete Vibrator:

1. NOTE: This Concrete Vibrator is designed for use only Concrete Vibrator Head. Do not attempt to use the Concrete Vibrator with any other type of head.
2. Take out the Engine (1), the Portable Controller and the Vibrator Head from the Packing.
3. Insert the Clutch Coupling (2) into the Engine (1), then tighten them with the Bolt (5).

   (See Figure A)

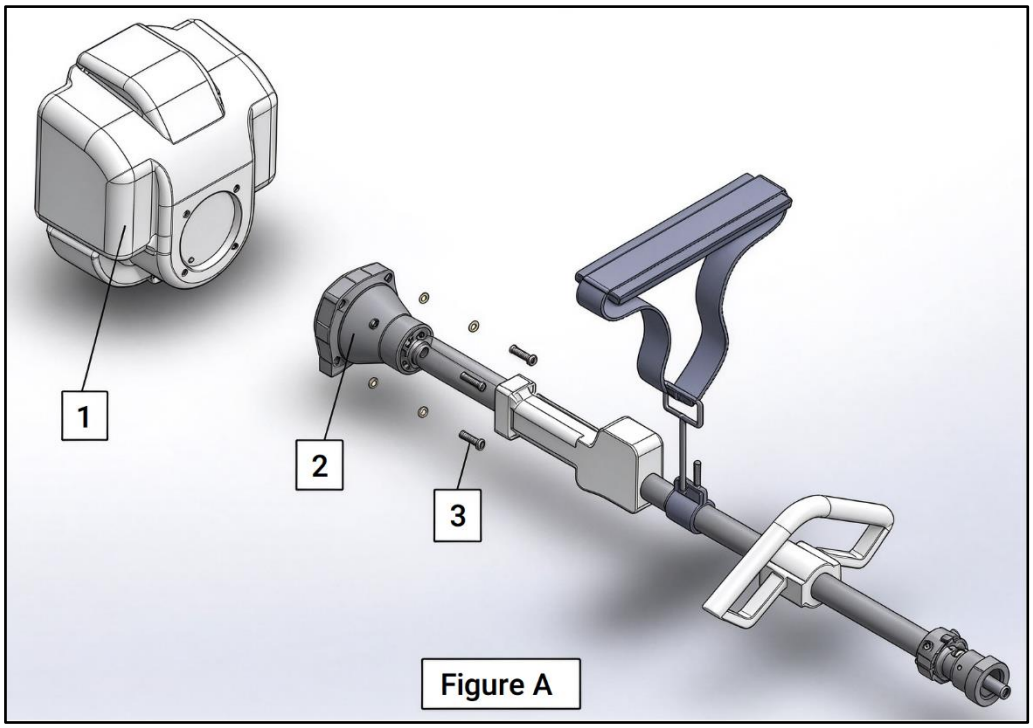
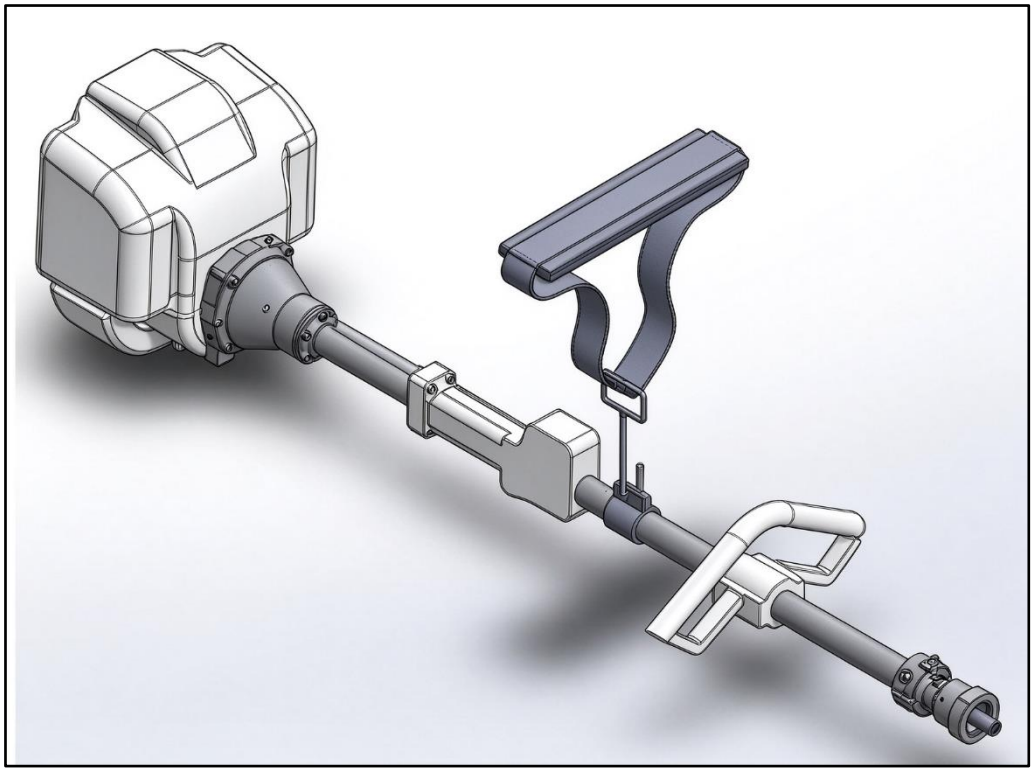


Figure A

4. Make sure the Assembly is good. (See Figure B).



5. Connect the Pipe Adaptor (6) to the Rod Adaptor (A21), then install and tighten the Shaft Adaptor (A22) securely. (See Figure C).

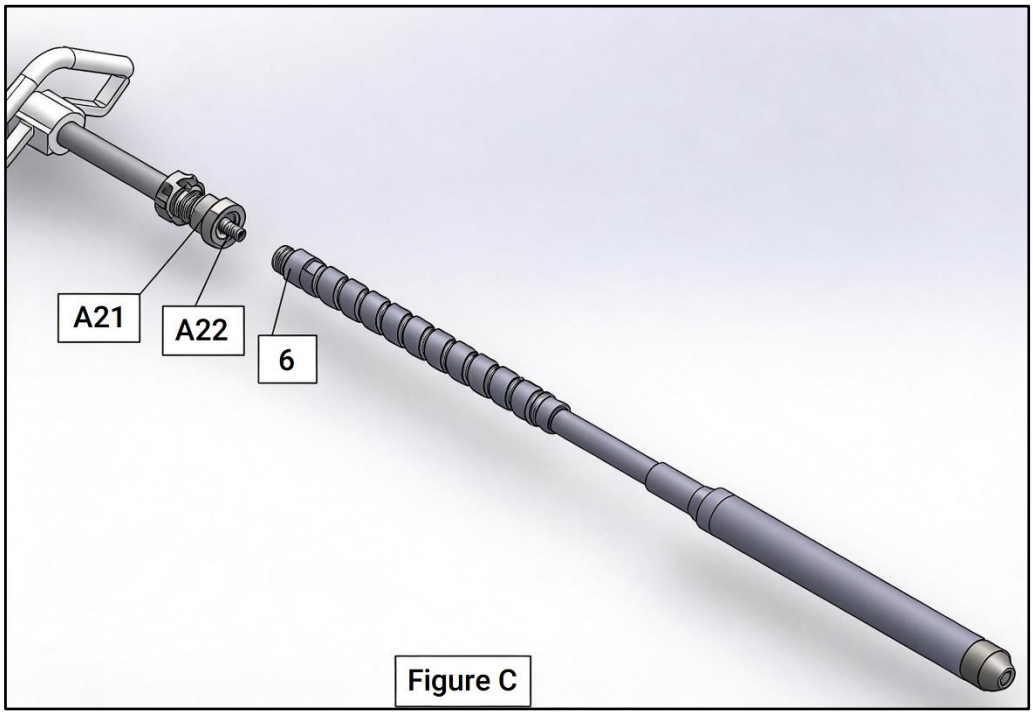


Figure C

9. Pre-operating Instructions

WARNING! Always make sure the Engine's Power Switch is in its "OFF" position prior to performing any service, maintenance, or cleaning of the Concrete Vibrator. To Add Engine Oil:

1. IMPORTANT! Prior to first using the Concrete Vibrator, the Engine MUST be filled with a high quality SAE 10W-30 engine oil.

   (See Engine manufacturer's manual for complete instructions.)

2. To do so, unscrew and remove the Engine Oil Dipstick. Pour approximately 2.7 fl oz (80 mL) of engine oil into the Dipstick Hole. Do not overfill.

3. Clean the Oil Dipstick. Then screw the Dipstick fully back into the Dipstick Hole. Unscrew and remove the Oil Dipstick again, and observe the level of engine oil on the Dipstick. The oil level should appear between the "MINIMUM" and "MAXIMUM" indicator marks on the Oil Dipstick.

4. If necessary, continue adding engine oil, while re-checking the Oil Dipstick, until the oil level reaches the "MAXIMUM" indicator on the Oil Dipstick. Do not exceed the "MAXIMUM" indicator mark on the Oil Dipstick.

5. When finished adding engine oil, carefully screw the Oil Dipstick back into the Dipstick Hole.

To Fill the Fuel Tank:

1. Prior to first using the Concrete Vibrator, the Engine's Fuel Tank MUST be filled with unleaded gasoline.
   (See Engine manufacturer's manual for complete instructions.)

2. To do so, remove the Fuel Tank Cap and fill the Fuel Tank with unleaded gasoline. Then, replace the Fuel Tank Cap Thereafter, check the Fuel Tank for the amount of unleaded gasoline. When necessary, refill the Fuel tank. (See Engine manufacturer's manual for complete instructions.)

Operating Instructions

1. With assistance, carry the Concrete Vibrator by its Handle (A16), with the Belt(A12) in your shoulder, to where the cement is being poured.

2. After pouring the concrete, grip the Vibrator Head and Flexible Hose by its Casing. Then, start the Engine (1) of the Concrete Vibrator.

   (See Engine manufacturer's manual for complete instructions.)

3. The Vibrator Head should begin to move. If it does not move, tap it until the vibration begins.

4. Insert the Vibrator Head and Flexible Hose assembly into the concrete.

5. Move the Vibrator Head up and down in the concrete to remove air bubbles.

6. IMPORTANT: Never allow concrete to enter the Vibrator Head assembly, as this could damage the bearings inside the Head.

7. When finished using the Concrete Vibrator, remove the Vibrator Head assembly from the concrete. Turn off the Engine (1) of the unit. Disconnect the Vibrator Head and Flexible Hose from the Concrete Vibrator, and use a garden hose to clean the Vibrator Head and Flexible Hose of all concrete and debris.

8. Allow the Engine (1) of the Concrete Vibrator to completely cool. Then store the Concrete Vibrator, Vibrator, Head, and Flexible Hose in a clean, dry, safe location out of reach of children and other unauthorized people.

10. Trouble Shooting

Concrete Vibrator

Engine Start Difficulty or Lack of Power	Cause	Solution
Fuel System	Insufficient fuel.	Add fuel.
	Fuel filter requires cleaning or replacement.	Clean the fuel filter or replace with a new fuel filter.
	Fuel is contaminated.	Replace fuel in both fuel tank and carburetor.
Control System	Ignition switch (equipment side) is at “OFF” position.	Turn the ignition switch to “ON”.
	Choke is at "CLOSED" position when the engine is warm.	Turn the choke lever to "OPEN" position.
Ignition System	Spark plug faulty fouled or improperly gapped.	Clean or replace spark plug.
	Spark plug covered with too much gasoline.	Dry the spark plug and restart the engine.
Other	Many possibilities.	Take the engine to a qualified service technician.

Vibrator Head

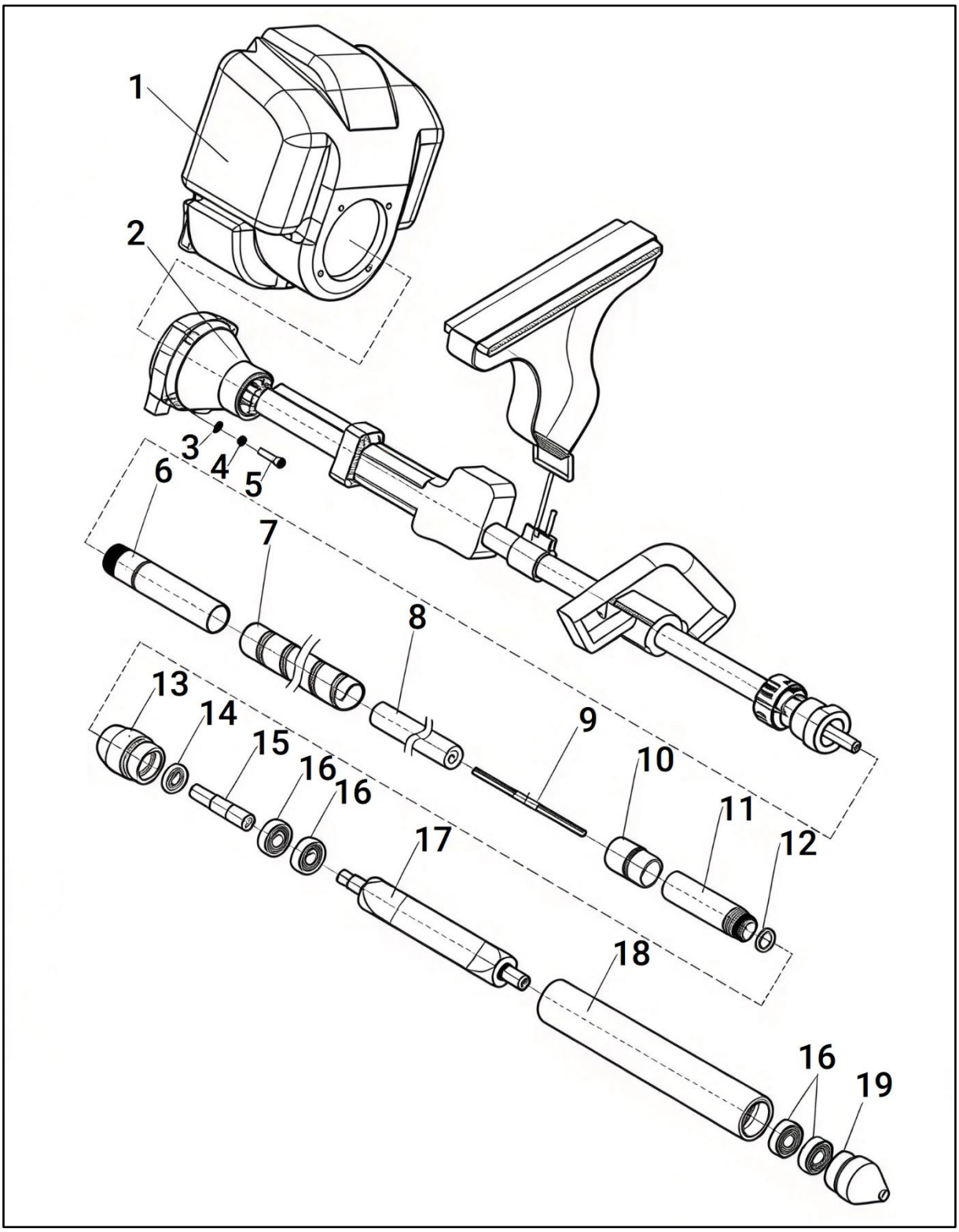
Problem	Cause	Solution
Engine runs, but Vibrator Head will not vibrate.	1. Excessive dried concrete or debris on Vibrator Head. 2. Excessive kinks inflexible Hose. 3. Poker clutch and/or Connector not properly connected to coupler on concrete vibrator unit. 4. Bearings within Vibrator Head damaged.	1. Tap Vibrator Head Until it begins to vibrate. 2. Straighten flexible hose to remove kinks. 3. Shut down Engine, and properly reconnect Poker clutch and Connector to Coupler on Concrete Vibrator. 4. Take the Vibrator Head and Flexible Hose to a qualified service technician for repair or replacement.

11. Inspection, Maintenance, and Cleaning

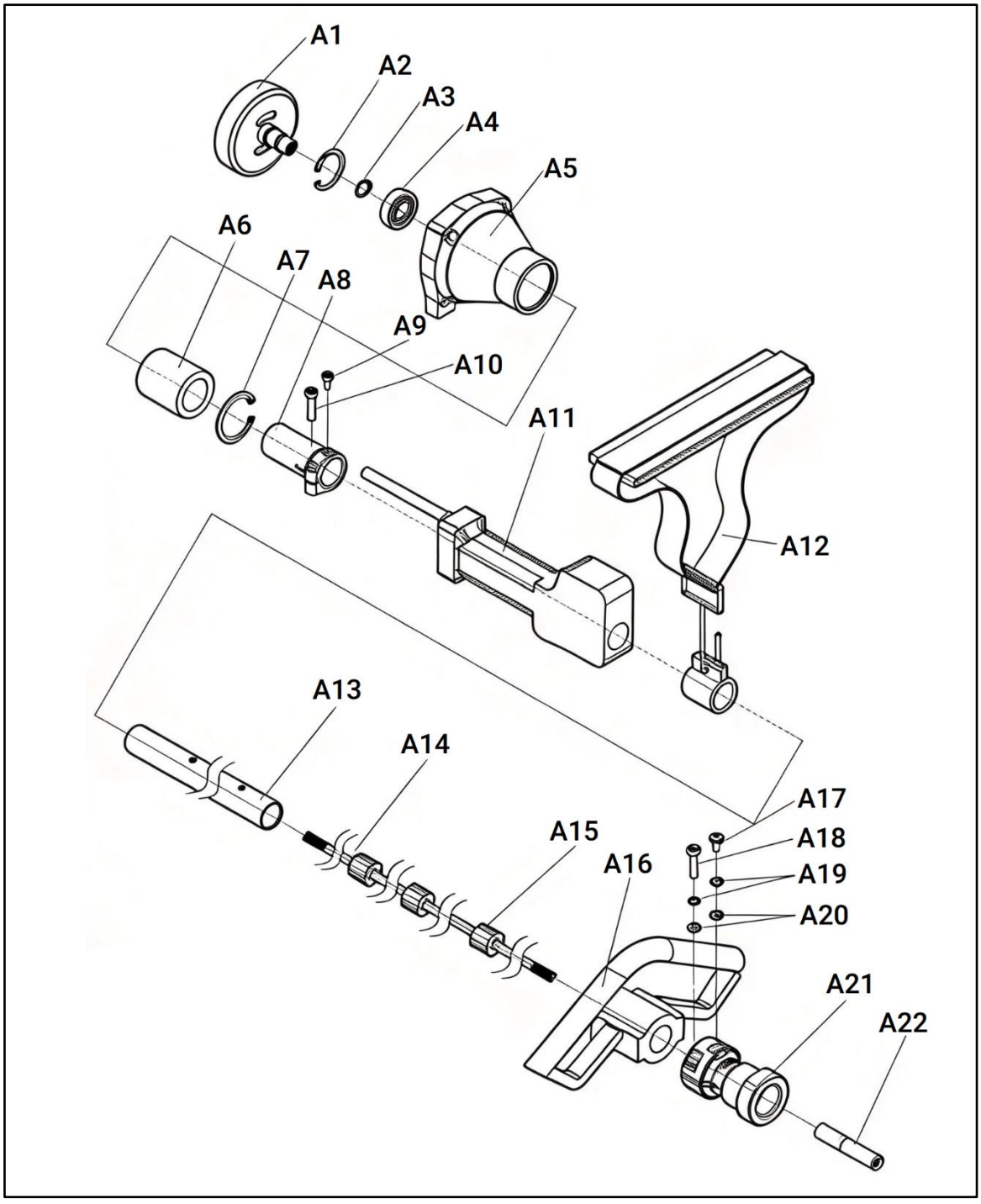
1. DANGER! Make sure the Engine's Power Switch of the Concrete Vibrator is in its "OFF" position prior to performing any inspection, maintenance, or cleaning of the machine.
2. Before each use, inspect the general condition of the Concrete Vibrator. Check for loose screws, misalignment or binding of moving parts, cracked or broken parts, damaged electrical wiring, and any other condition that may affect the safe operation of the Concrete Vibrator. If abnormal noise occurs, have the problem corrected before further use.

   Do not use damaged equipment.
3. Before each use, check the Engine oil level. If necessary, fill the crankcase of the Engine with the proper amount and type of engine oil. Refer to the Engine manufacturer's manual for all inspection, maintenance, and cleaning instructions.
4. NOTE: Always dispose of old engine oil in accordance with local, state, and federal regulations.
5. To clean, use a clean cloth with a mild detergent. Do not introduce water into the carburetor or other open orifices of the Engine. Also, use compressed air to blow off excessive dirt and debris.
6. CAUTION! All maintenance, service, or repairs not mentioned in this manual must only be performed by a qualified service technician.

12. Exploded View and Parts List



No.	Description	Qty
1	Engine KASEI 140FA	1
2	Portable Controller	1
3	Washer	4
4	Elastic Washer	4
5	Bolt	4
6	Adaptor	1
7	Hose Protector	1
8	Flexible Pipe	1
9	Flexible Shaft	1
10	Stop Ring	1
11	Pipe Adaptor	1
12	O-Ring	1
13	Casing Adaptor	1
14	Oil Seal	1
15	Square Adaptor	1
16	Bearing	4
17	Eccentrical Shaft	1
18	Casing	1
19	Cone	1


A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
A11
A12
A13
A14
A15
A16
A17
A18
A19
A20
A21
A22

No.	Description	Qty
A1	Clutch Drum	1
A2	Circlip for Hole	1
A3	Bearing	1
A4	Circlip for Shaft	1
A5	Clutch Coupling	1
A6	Vibration-Isolated Rubber	1
A7	Circlip for Hole	1
A8	Locking Sleeve	1
A9	Bolt	1
A10	Bolt	1
A11	Switch	1
A12	Belt	1
A13	Long Rod	1
A14	Transmission Shaft	1
A15	Sliding Bearing	3
A16	Handle	1
A17	Bolt	1
A18	Bolt	2
A19	Elastic Washer	3
A20	Plain Washer	3
A21	Rod Adaptor	1
A22	Shaft Adaptor	1

WARRANTY INFORMATION:
Please refer to our website for detailed warranty conditions and coverage.
For the most up-to-date and comprehensive warranty information, visit **www.tmgindustrial.com**