



# 70 INCH TOPSOIL VIBRATING ROCK SCREEN







- Please read and understand the product manual completely before assembly
- Check against the parts list to make sure all parts are received
- Wear proper safety goggles or other protective gears while in assembly
- Do not return the product to dealer. They are not equipped to handle your requests.

Missing parts or have questions on assembly? Please call: 1-877-761-2819 or email: cs@tmgindustrial.com

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# **1. PREFACE**

Thank you very much that you have purchased the products.

This operation manual will tell you how to correctly operate and maintain your machine. Before using the machine, please read the operation manual thoroughly to guarantee the correct operation. Following the operation requirements in the operation manual will make that your machine is in the best operation state so as to extend the life of the set. For you own safety and protection injury, carefully read, understand and observe the safety instructions described in this manual.

Keep this manual or a copy of it with the machine. This machine is built with user safety in mind; however, it can present hazards if improperly operate and serviced. Follow operating instructions carefully!

With the increasing improvement and enhance of the products made by the company, there may be some differences between the contents described in the operation manual and the practical products, it is our desire that the users will pay attention to the differences.

# 2. SAFETY ALERTS

In order to operate the machine safely, it is very necessary to maintain the machine regularly. Please read the Safety alerts carefully to master the skills of maintenance and operation.

#### **3. DRIVING QUALIFICATION**

#### QUALIFIED STAFFS ARE ALLOWED TO OPERATE THE MACHINE

1. Screening task

Operator should get training on the aspects of screening before operating the machine.

2. Loading and unloading the machine

Operator should get training on the aspects of Loading and unloading the machine.

#### **4. SAFETY PRECAUTIONS**

#### **4.1 GENERAL PRECAUTIONS**

- Read the Manual carefully to understand and master the operating methods and functions, know the operation device and meanings of labels.
- Comply with the rules
- Be familiar with the working site in advance.
- Be familiar with the functions of the machine.
- Please operate the machine within the allowed range.
- Check the machine before operating. Make sure the functions of the machine are sound.
- Pay attention to the bystanders during working.

- Do not touch fire components.
- Pay attention to fireproof.

Fuel and oil catch fire easily, do not smoking and using match and lighter. The engine should be turned off the engine before filling fuel and far from open fire.

# 4.2 PREPARATIONS FOR SAFETY OPERATION

- Cleaning the machine.
- Check the machine before operation. Make sure the functions of the machine are sound.
- Check and make sure the enough level of all the liquid.
- Check and make sure no leaking of oil and fuel.

# **4.3 ATTENTIONS BEFORE STARTING UP ENGINE**

- Ensure safety around the machine before starting up engine.
- Be care of ventilate.
- It is danger to inhale the exhaust gas, ensure enough ventilate during working.
- Do not near exhaust pipe.
- The exhaust gas is poisonous.

# **4.4 ATTENTIONS AFTER STARTING UP ENGINE**

- Preheat the machine.
- Idle the machine several minutes after starting up the engine. Do not operate the machine in high speed at the beginning of operating. Those will avoid damaging the machine, and prolong the life of machine,
- Trial run
- Trial operate the machine and check if every function are sound.

# 4.5 ATTENTIONS DURING WORKING

- Avoid operation errors.
- Focus on operation, and pay attention to bystanders.
- Be careful of bystanders during operating.
- Repair the machine at once when meeting shortcomings.

# 4.6 ATTENTION OF LOADING AND UNLOADING THE MACHINE

- Use the hard climbing board with appropriate width, length and thickness for safe loading and unloading
- Don't use redirector on the climbing board.
- Use the rope with the adequate strength to lifting the machine
- Please vertical lifting the machine
- After loading, the machine firmly fixed. Then inset the block under the double side of drums

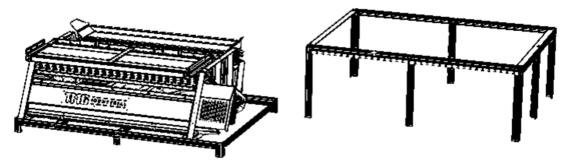
# **4.7 ATTENTION OF THE MAINTENANCE**

Keep the machine clean

- Be Careful of the hot components
- Engine oil and oil in reduction system will be hot after the machine has run for a few minutes, don't do the repair until the machine become cool.
- Disposal of the waste oil.
- Discharge the oil into a suitable container instead of draining the waste oil to the river and sewer. Attention to protect environment.

# 5. SET-UP FOR FIRST USE.

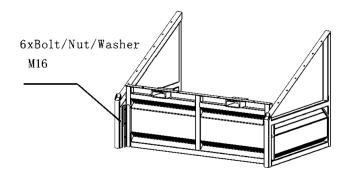
# 5.1 UNPACK THE PACKAGE.



- Check against the parts list to make sure all parts are received.
- Take out all components from package.

# 5.2 ASSEMBLE THE THREE LOWER SIDE PANELS (2,3,4)

Bolt on but don't tighten at this step.



# 5.3 ASSEMBLE THE MAIN BODY.

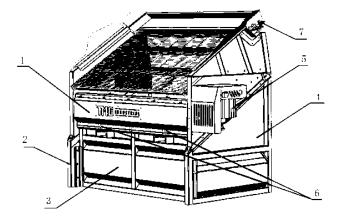
- Lifting the machine main body(1) and sit on the lower panels.
- Use the eye-bolts to lift the machine main body by a proper lifting device.

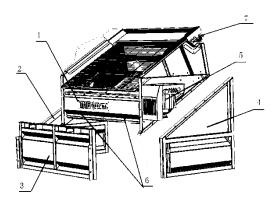
# 5.4 TIGHTEN ALL BOLTS.

Adjust and make sure all components are in right position and then tighten all bolts.

# **5.5 CHECK AND TRIAL RUN**

- Fill oil and fuel into the engine(5).
- Fill oil to gear box.
- Grease the bearings ( 6 ) .
- Machine was pre greased at factory, just to do a check.
- Check and tension the mesh by tightening the bolts (7).
- Trial running.





Number	Name
1	Main body
2	Lower side panel-Left
3	Lower side panel-Front
4	Lower side panel-Right
5	Engine
6	Grease nipple
7	Mesh tension bolt

# 6. OPERATION.

# 6.1 INSPECTION BEFORE OPERATION

Ensure the machine is level and siting in a hard ground stably.

## **6.2 START UP THE ENGINE**

1) Turn fuel shut-off valve to the "ON" position (if equipped).

2) Start engine as follows:

Cold engine: Place throttle control midway between SLOW and FAST position. Place choke control into ON position.

Warm engine: Place throttle control midway between SLOW and FAST position. Return choke to OFF position as soon as engine starts. A warm engine usually does not require choke on.



3) Retractable start: Slowly pull starter handle until just past compression-STOP! Return starter handle, firmly pull straight out to avoid excessive rope wear from starter guide.

4) Gradually return choke control to OFF position after engine starts and warm up.

5) Ensure that the exhaust color normal, no unusual sounds and smells.

#### **6.3 MACHINE RUNNING**

Attention: Before running the machine, please ensure that there is no person and obstacles nearby.

Adjust the "Throttle level handle" to Fast to make screen working in proper speed.

Attention: Should gentle push "Throttle level handle", not too fast.

#### **6.4 MACHINE STOPPING**

- 1) The Engine runs 2 to 3 minutes under the idle situation.
- 2) Engine will stop when the throttle switch is pushed to the bottom position.
- 3) Remove dirt and water on the machine.
- 4) Two holes in the front of the machine can be sued for forklift, easy movement.

5) If long-term storage is needed, please start the machine regularly to prevent corrosion. Start the machine at least one time per month to prevent the oil layer deteriorates, and charge at the same time.

# **6.6 MACHINE MOVEMENT**

Using a forklift, adjust the width of folk arm to fit the distance of holes in the front of the machine.



# 6.6 OPERATION UNDER THE LOW TEMPERATURE.

Use the fuel and oil of low viscosity to prevent the faults occurring in the low temperature.

# **7 REGULAR MAINTENANCE**

# 7.1 MAINTENANCE AND REPAIRS EVERY 10 HOURS

1) Engine oil

Put the engine in the horizontal position, check the oil level.

If the oil level is not within the scale of oil level indicator, please add. 2

2) Reduction box oil Tank

If the oil level is not within the scale of oil level indicator, please add.  $(\!1\!)$ 



# 7.2 MAINTENANCE AND REPAIRS EVERY 50 HOURS

1) Inject the grease to the bearings.





2) Change oil in 2:1 with Clutch Reduction System.

# 7.3 MAINTENANCE AND REPAIRS EVERY 100 HOURS

1) Change the engine oil.

Open the oil plug and discharge the engine oil when the oil is still warm.

Tighten the drain plug; inject the engine oil though the oil filling port.

- 2) Clean the fuel filters.
- 3) Clean the air filters

# 7.4 MAINTENANCE AND REPAIRS EVERY 300 HOURS

- 1) Replace air cleaner element.
- 2) Check the fuel filters and clean or replace if needed.
- 3) Check and adjust valve clearance when engine is cold.

# 7.5 MAINTENANCE AND REPAIRS EVERY 500 HOURS

1) Replace spark plug and set gap.

#### 7.6 RECOMMENDED LUBRICANT

- 1) Engine oil in low temperature SAE 10W-30
  - in high temperature SAE 40
- 2) Reduction oil 20W-40
- 3) Lubricating grease Heat-resistant lithium saponify
- 4) Fuel oil Gasoline oil (meet national standard)

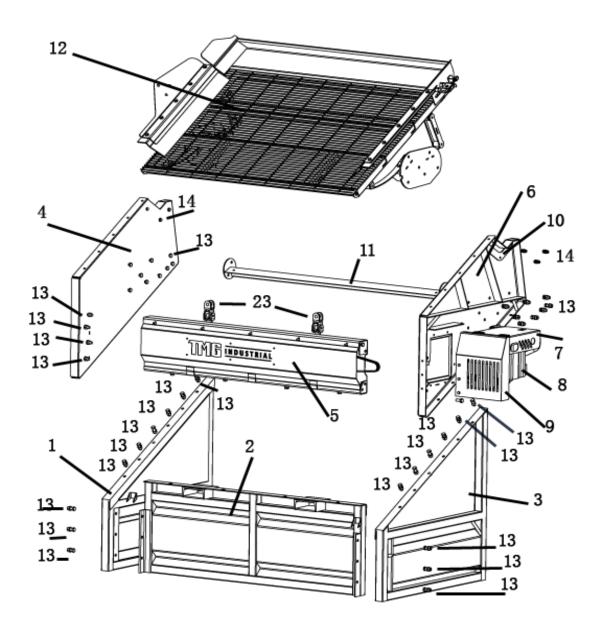
# 8. MAIN TECHNICAL PARAMETERS

	TECHNICAL SPECIFICATIONS
Application	Topsoil, Compost, Drainage Rock, Pea Gravel, Sand, Bark, Site Clearance, Groundworks
KEY SPECIFICATIONS	DATA
Capacity	60 TPH
Fuel Consumption	0.8 L/h
Fuel Tank Capacity	2.6 Liters
Length	1250 mm
Width	2320 mm
Height	1940 mm
Number of Screen Deck	Single
Screen Deck Dimensions	1730 mm x 1388 mm
Angle of Screen Deck	30 Degree
Mesh Size	1720 mm x 1230 mm
Screen Mesh Quick-Change	End-Tensioning Quick-Mount, Bolt tighten.
Load Height	1.96 m
Maximum Bucket Width Recovery	1800 mm
Maximum Single Load	0.7-1 m <sup>3</sup>
Average Load Cycle Time:	12 Seconds
Working Amplitude	20 mm
RPM Operating Range	400-600 RPM

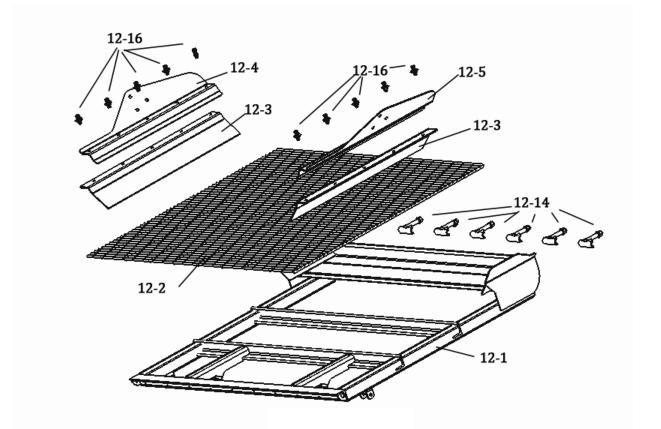
Engine Manufacturer	KOHLER	
Model	Command PRO CH255 with reduction system	
Number of Cylinders	Single	
Power	5.5 HP (4kW)	
Starter	Retractable Starter	
Displacement	177 cc	
Oil Capacity	0.6 L	
Cooling	Air Cooling	
Weight	650 kgs	
Packing size	2230 mm x 1690 mm x 840 mm	
Shipping Weight	820 kgs	

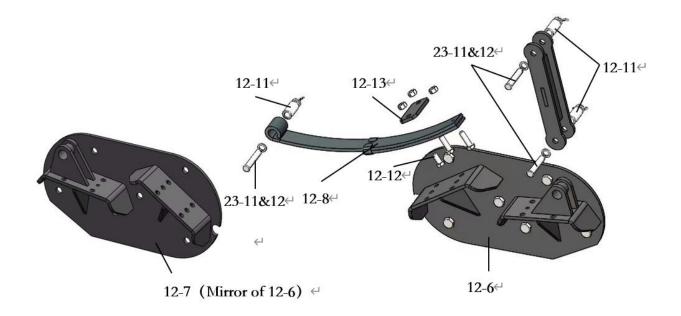
# 9. PART LIST

# PART OF MACHINE



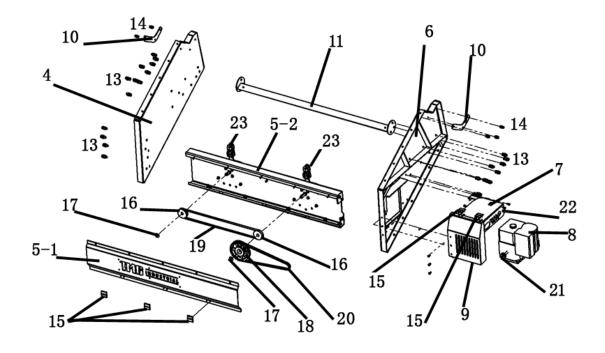
# PART OF SCREEN DECK

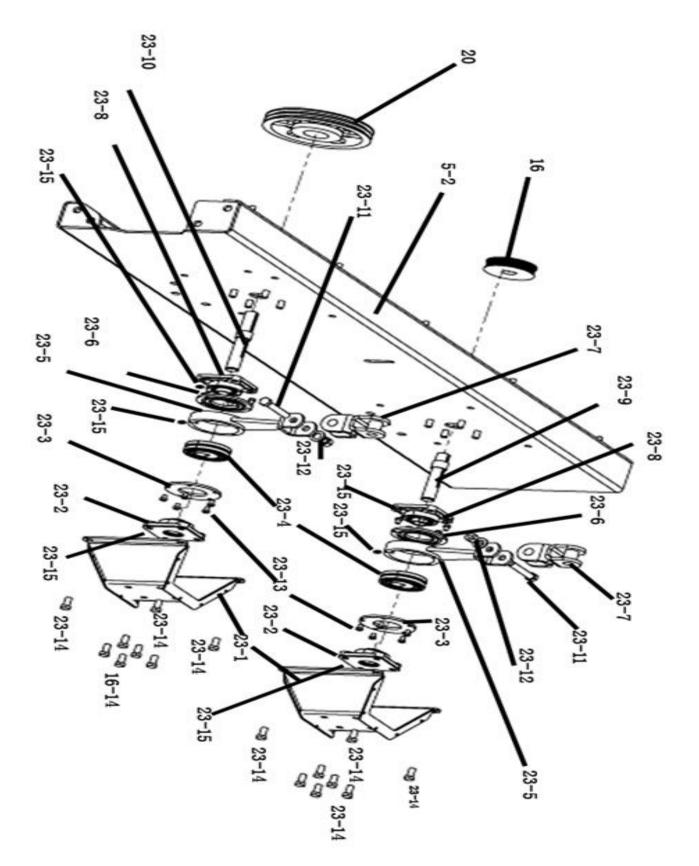




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# PART OF MAIN BODY





# PART LIST

PART	NAME	SPC	QTY
1	Below panel left		1
2	Below panel front		1
3	Below panel right		1
4	Upper panel left		1
5	Upper panel front		1
5-1	Pulley box cover		1
5-2	Pulley box		1
6	Upper panel right		1
7	Engine guard cover		1
8	Engine /Reduction	CH255	1
9	Engine guard		1
10	L plate		2
11	Beam		1
12	Screen deck		1
12-1	Mesh Deck	1700*1260	1
12-2	Mesh	AP100*20	1
12-3	Skirt rubber	5MM	2
12-4	Rubber clip left		1
12-5	Rubber clip right		1
12-6	Spring base left		1
12-7	Spring base right		1
12-8	Front leaf spring unit	45-8MM/2	2
12-9	Support arm		2
12-10			
12-11	Nylon bush		8
12-12	Rear spring Bolt/Nut/Washer	M12*50	6
12-13	Spring clamping plate		4
12-14	Mesh tensioner		6

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12-15	U bolt/washer/nut	M12*49*60	4
12-16	Bolt/Nut/Washer	M12*45	10
13	Bolt/Nut/Washer	M16*40	44
14	Bolt/Nut/Washer	M10*20	6
15	Hinge	CL218-1A	5
16	Timing pulley	5M-60Z-N25	2
17	Shaft-end plate/bolt	M8*15	2
18	Idle pulley	SPZ190-2	1
19	Timing belt	5M-2060-20	1
20	V-Belt	SPZ1675La	2
21	Drive pulley	SPZ63-2	1
22	Engine guard handrail		1
23	Vibratory set		2
23-1	Bearing house		2
23-2	Bearing UCF205	UCF205	2
23-3	Bearing cover		4
23-4	Bearing	22210E	2
23-5	Bearing holder	22210E	2
23-6	Bearing Seal	3*50	4
23-7	Connector		2
23-8	Bearing UCF205	UCF205	2
23-9	Short shaft	25*140	1
23-10	Long shaft	25*172	1
23-11	Bolt M14x80	M14*80	10
23-12	Nut/Washer M14	M14	8
23-13	Bearing cover screw	M5*10	20
23-14	Bolt/Nut/Washer M12	M12*30	24
23-15	Greaser M6/M10	M6/8	6