TMG INDUSTRIAL®

TMG-GGT17

PRODUCTMANUAL

v.2026.07.01

Belt-Drive Tiller



⚠ 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 have questions on assembly?
Email: cs@tmgindustrial.com
Or visit: tmgindustrial.com

FORWARD

Thank you for choosing our mini tiller.

·This manual contains about operation and maintenance of 450 mini tillers.

·All contents in this manual are based on the latest information when the manual is printed.

·The manufacturer has the right to revise the manual without any prior notice and willnot bear any legal responsibility.

·None parts in this manual can be copied without formal approval.

·This manual should be regarded as apart of the tillers,so it should be handed over when resold or lent.

SAFETY INFORMATION

Your and others'safety are very important.We show important safety information on manual and machine.Please carefully learn them.

Safety information will inform you potential dangerous,and we use words Adangerous,warning,and notice to show them.

◇Pay attention to following information:

!Dangerous:If not following manual,maybe cause people body hurt or death.

Warning:If not following manual,possible cause machine broken or people death.

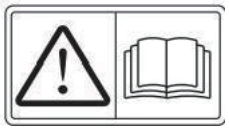
Notice: **If not following manual,**possible cause machine broken and people body hurt.

Avoid broken information:

You willsee other important information.

Notice: If not following manual, possible cause machine broken and people body hurt.

Safety instruction



◆If following manual to operate machine,it will work properly and safely.Before use tiller,please learn the manual,or will cause machine body hut or machine broken.

SAFETY ISSUE

·When start engine,clutch rod must be released,and flameout switch should at ON.

·When machine work,take care safety.

● Take knives hurt body.

·Use qualified fuel,and keep fuel clean.

·When stop use tiller,turn flameout switch to OFF.

·Gasoline is easily get fired.

◇Because machine is always improved,so photo in the manual maybe different with machine which you have.

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1、Safety issue instruction and warning

◆1.Training

a)Carefully learn the manual,know how to properly use machine.Know how to stop machine and fast release clutch.

b)Don't allow children to use machine.Don't allow adults who not read manual to use machine.

c)Keep away children and pets from working field.

◆2.Preparation

a)Check the whole working field,take away all sundries.

b)Check the whole working field,take away all sundries.

c)Wearing proper working clothes,wearing antiskid shoe.

d)Take care fuel,they are easily get fired

1)Use proper container to storage fuel.

2)When engine is working or hot,don't add fuel.

3)Add fuel outdoor,never indoor.

4)Before starttension fuel tank cap.

e)When engine is work,don't do any adjustment of machine.(Unless these allowed by manufacture.)

f) Do any operation,such as preparation,working or service,wearing glasses.

◆3.Operation

a)Hands or feet can't be close to knives or under knives.

b)When pass road,footpath,take care very much.Don't allow to load people.

c)When machine hit something,stop engine.And check if machine is broken.If machine is broken,repair it first.

d)Always take care your feet,don't slide.

e)When tiller have abnormal noise,stop engine to check reason.Strange shaken usually means troubles.

f)Stop engine when do following work:leave machine,clean knives,do repair work,adjust machine.

g)When no people work on tiller,engine must be stopped,tiller at neutral gear,clutch disengage.

h)When clean,repair or check tiller,must stop engine first,and make sure whole machine is stopped.

I)Engine exhaust gas is poisonous,don't work indoor.

j)When protect cover not on machine,not use tiller.

k)Keep away from children and pets.

I)Don't make machine overload for too deep working depth.

m)Don't work on easy slip road.When reverse machine,take care, n)Don't let stander-by come close the machine.

o)Just use the manufacture allowed accessories.

p)When no light or at dark place,not use tiller.

q)When do tilling work,knives may be hooked on filed and push tiller forward.At this situation,release tiller,don't try to control machine.

r)Tiller not work on sharp slope.

s)When tiller go up or go down slope,take care and not to slip.

◆4 .Service and storage

a)Keep tiller,accessories at safety working situation.

b)After some time work,check all bolts and nuts,keep they are tighten,

c)Tiller should be storage indoor,and keep away from fire.Before storage in door,keep engine cooling.

d)If tiller need to do long time storage,keep manual at meantime.

e)Don't repair machine if you don't have proper tools and equipment.

◆5.Safety stickers





A1Knives protector and safety sticker.　　A2Biggest noise sticker



A3Keep away from high heat

◆6.Safety sticker places





2、Main specification and structure

◆1.Main specification

Item			**Data**
Engine	Engine model		156F/P-M gasoline engine
	Max power(kW)		1.4
	Rated power(kW)		1.1
	Rated speed(r/min)		2900
Tiller	Dimension(LXWXH)(mm)		1100×450×900
	Weight(kg)		29
	Transmission		Chain
	Connections		V belt,tension pulley
	Knives	Designed speed(r/min)	Front gear:134
		Max returning radius(mm)	120
		Knives quantity	24
	Tiling width(cm)		42
	Tilling depth(cm)		⩾10
	Working speed(m/s)		0.21
	Working productivity(m/h)		⩾400
	Fuel consumption(kg/hm)		⩽1.4

Sheet 1

※Specification may be changed because of tiller design changed.
Only for reference,not using for gist of inspection.

◆2.Structure



1.Handle bar
2.Clutch rod
3.Handle connect bending pipe
4.156F/P-M engine
5.Engine frame
6.Flameout switch
7.Belt cover
8.Dust fender
9.Knives
10.Walking wheels
11.Resistance rod

Drawing 1

3、USAGE SCOP

◆Tilling

Use for personal garden,sand earth,for short time work.

Standard knives	Knives setting	3 groups
		4 pieces
	Knives quantity	4×3
	Tilling width	420mm

Sheet 2



Drawing 2

4、ASSEMBLING

◆1.Assembling after open carton

◇1.1 Take out tiller and accessories.

〇1.2 Put resistance rod and engine frame,and use pin 8X40 to fix it.

01.3 Put walking wheel on resistance rod,and then use clip pin to fix.

◇1.4 Assemble handle connect bending pipe on engine frame,and use bolt M8X70 to fix.

◇1.5 Assemble handle bar on handle connect bending pipe,and use bolt M8X45 to fix.

〇1.6 Check whole machine,and see if tool box have other parts left.

5、OPERATION

Before tiller leave factory,we already do adjustment.But before using machine,should check,adjust and make machine at better working situation.

◆1.Daily checking

◇1.1 Check engine oil

!Notice

Engine oil is 0.35L,when oil lower than this number,use engine will cause engine serious broken.

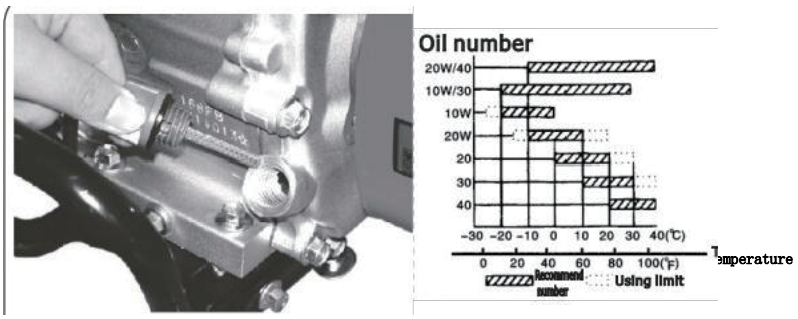
●Put engine at horizontal place. Put oil ruler atfilling hole.

●Take out oil ruler,check if oil at right place.

●Engine oil should be SAE10W-30 or better oil.

! Notice

Please use good,clean 4 stroke engine oil.If use bad or unclean oil,will reduce usage life of engine.



Drawing 3 Sheet 3

!Notice

Don't start engine when no airfilter,or engine will be worn out very quickly.

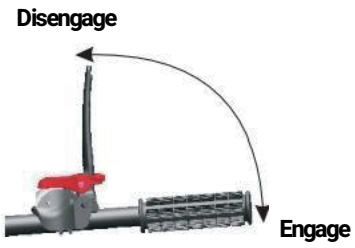
◆2.Tiller situation adjustment

02.1 Use and adjust of clutch

●Engage and disengage clutch can control output of engine.

eWhen hold on clutch,tension pulley will be tensioned.Engine power will transfer to tiller,knives will work.See drawing 4.

eWhen disengage clutch rod,tension pulley will become loose.Engine will stop to offer power to tiller,knives willstop work.See drawing 4.



Drawing 4

! Notice

If clutch cable not adjust well,willaffect work of tiller.

eWhen necessary,start engine to check if clutch can work properly.

◆3.Tilling working attention

A Notice

◇3.1When working,need take care each part working situation,check ifeverything connect well.Don't allow any place loosen,If find any problem,stop tiller and check.

◇3.2When engine is cold,after start,not allowed immediately do heavy loadwork, especially for new machine ormachine is after big repair.

◇3.3Check engine oil,if lack of oil,add it.

○3.4Not allow puring water to cool down engine.

○3.5When do tilling work,avoid machine fallen down.

●3.6Don't allow tiller to walk on hard road when knives are assembled.It will broke knives.

○3.7After using tiller,clean grass,earth and oil on machine,keep it clean.

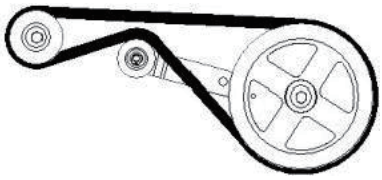
◇3.8Usually clean element in airfilter.

6、ADJUSTMENT

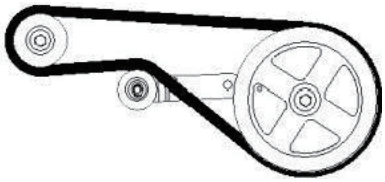
◆1.Adjustment of belt tension

○1.1 Belt tension value is about 65mm.When hold on clutch rod,tension pulley move up and press belt,thus offer power transmission.When release clutch,tension pulley move down,belt become loose,and engine stop to offer power to gear box.See drawing 5.

◆1.2 If belt not at right tension value,need adjustment.First loose 4 engine fix bolts. If belt too loose, move engine forward.If belt too tight,move engine backward.When find belt is at proper value,tight engine fix bolts.



Belt is pressed



Belt is loosed

Drawing 5

+2.Cable assemble and adjust

◇2.1 Cable adjustment(Drawing 6)

①Assemble front gear cable on front gear clutch rod.Adjust clearance bolt comp to the middle place.



Drawing 6

◇2.1 Flameout switch adjustment

①Connect flameout switch with engine flameout wire.

②Turn flameout switch to OFF,engine can stop immediately

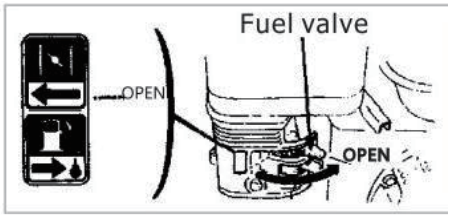
7、START ENGINE

◆1.Start steps

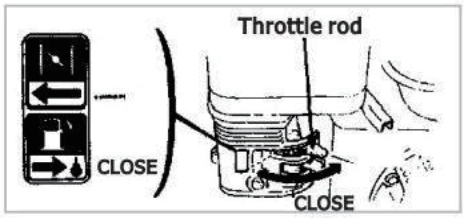
!Warning

Before start engine,clutch rod must be released.

◇1.1 Turn fuel valve to place of ON.

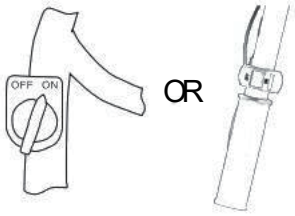


◇1.2 Turn throttle rod to CLOSE



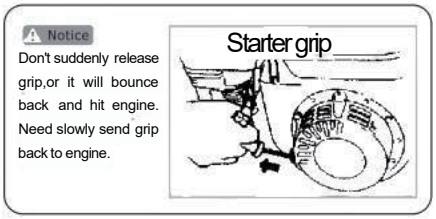
◇1.3 Turn valve rod to left a little(if have this part).For this machine,this part is on the handle.(Oil switch)

◇1.4 Turn engine switch to ON.If on handle there is flameout switch, directly push it to place of ON is OK.

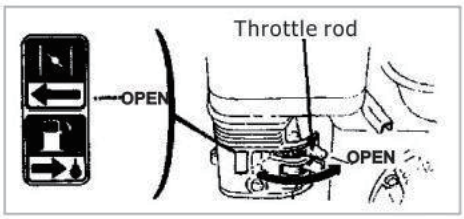


Flameout switch on handle

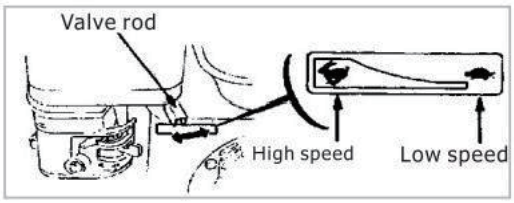
Slowly pull starter until feel resistance,
and then fast pull it.



○1.5 When engine become hot,slowly turn throttle rod to place of OPEN



○1.6 Use oil switch on tiller or valve rod to adjust engine speed.

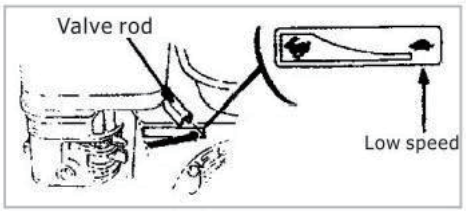


◆2.Close engine

◎When at urgent situation,directly turn flameout switch to OFF

◎When at usually situation,take following steps

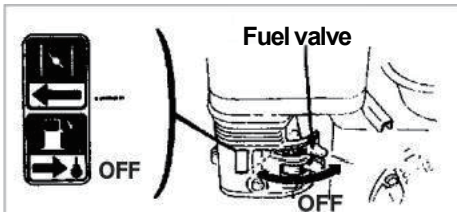
◆2.1 Turn oil switch anticlock to min.(or turn valve rod to the most right)



◇2.2 Turn engine switch to OFF place.



◇2.3 Turn fuel vave to OFF



8、MAINTENANCE

Tiller can't avoid have problems after some times work because of loading,friction and so on.The problems maybe bolts and nuts loosen, some parts worn out,engine power reduction and so on.Thus,in order to reduce these problems,must do maintenance regularly,and longer tiller usage life.

◆1.Brake-in

◆1.1 New machine or machine just after big repair,first should work without load for 1 hour.And then let tiller work in low load for 5 hours.When machine is hot,drain out all oil in engine gear box.Stop engine,and add suitable gasoline,pull recoil starter 5-10 times to clean engine crank case.At last,add clean and qualified oil.Then your tiller can be used.

◆2.Tiller maintenance

◇2.1 Every time check(Before and after work)

①Hear if any abnormal noise,or bolts and nuts loosen.

②Check if any oil drain out from engine crank case and tiller gear box.

③Check if enough engine oil.

④Check if any grass,dust and oil on machine,clean them.

⑤Do record

⑥If find any broken parts like knives,bolts and nuts,repair them

◆3.Tiller maintenance time table.(With V mark means need do the work)

Time / Content	Every day	Half load work 8 hours	1st month or every 20 hours	3rd months and every 150 hours	Every year or 1000 hours	Every year or 2000 hours
Check and tight bolts and nuts	√					
Check and add oil	√					
Clean and change oil		√ First time	√ Second time	√ Third time and then every 3 months or 150 hours		
Check if oil leak out	√					
Clean grass,dust, and oil,keep clean	√					
Troubleshooting	√					
Adjust controlling parts	√					
Tight belt	√					
Gear and bearing					√	

◆4.Engine long time storage

! Warning

In cause of be hurt by high heat or fire,let engine cooling,and then store tiller.

04.1.Storage preparation

Proper storage is the key reason to reduce engine problems.Make sure no rust on engine,will make engine next time better work situation

4.2.Clean

If engine just stop,must let engine cool down half hour,and then clean it.Clean all out appearance,and daub all anti-rust oil to allneeded places.

!Warning

Can't use water to wash engine!Or water willgo into airfilter and muffler,and then will cause engine broken.

◇4.3 Fuel Gasoline is easily get metamorphose,and block fuel system.If gasoline get metamorphose,it will brake carburetor and other parts.So if the storage date is longer than 30 days,drain out all full in carburetor and fuel tank.

4.3.1 When oil switch is on,take off deposit cup,let gasoline drain off to a certain fuel container.After allgasoline drain out,assemble back deposit cup.

4.3.2 Push insurance button,and meantime turn carburetor rod to drain fuel place.After all gasoline drain off,turn carburetor rod to normal place.

◇4.4.Lubricant oil

4.4.1 Change oil into new oil after storage

4.4.2 Use special sleeve spanner to take off spark plug.Add clean lubricant oil to cylinder head.Turn engine some around to spread oil,and then assemble back spark plug

◇4.5 Engine inside anti-rust

Slowly pull starter rod,until passed resistance.At this place,inlet and outlet valve are close,more better for anti-rust.

◇4.6 Storage safety rules

4.6.1 If engine have gasoline when storage,must put it at the place where is ventilation.And keep machine away from fire

4.6.2 Don't storage machine at heavy humidity place,avoid rust.

4.6.3 Keep engine horizontal,avoid fuel and oil leak out.

4.6.4 Close fuel switch

4.6.5 After engine become cool,use cover to cover engine.But not use plastic cover.

◇4.7 Take out and use engine

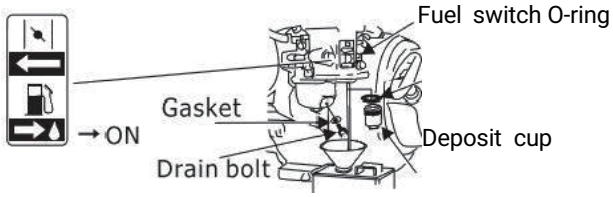
4.7.1 Use method before mentioned to check engine.

4.7.2 If all gasoline disappear,add new gasoline.And please note long time no use gasoline will cause engine hard to start.

4.7.3 Because on cylinder head has some anti-rust oil.So when engine just start will have some black smoke.It is natural

!Dangerous

Gasoline is easy to exploded.Not allow smoke and other fire in storage place.



◆5.Tiller long time storage

If tiller need long time storage,need od anti-rust work. ◇5.1

Clean dust and dirty on tiller.

◇5.2 Drain out old oil from gear box,and add new oil.

◇5.3 Paint lubricant oil on place which is not aluminium alloy. ◇5.4

Keep machine at dry,ventilation place

◇5.5 Also safety keep tools,manuals and so on

9、TROUBLESHOOTING

◆1.Engine troubleshooting

When recoil starter can't start engine.

◇1.1 Check if engine switch is at place of ON.

○1.2 Check if enough lubricant oil.

01.3 Check if fuel valve is ON.

○1.4 Check if there is gasoline in fuel tank

○1.5 Check if fuel arrive carburetor,can loose carburetor drain bolt to check.

Drain bolt



!Warning

If gasoline fly out,must clean all of them.After they are all disappear,and then clean them.Or maybe cause big fire!

◆1.6 Check spark plug have fire?

a、Take off spark plug cap,clean dust,and take off spark plug.

b、plug cap back to spark plug.Put spark

c、Put spark plug at any ground place of engine.Pull recoil starter,check if any spark.

d、If no spark plug,change it.

If have spark plug,reassemble it on engine.

○1.7 If stillcan't start engine,send to dealer for service.

◆2.Tiller troubleshooting sheet:

Problem	Reason	**Troubleshooting**
Clutch not work or not work well	Belt is too tight	Adjust engine position,make belt more loose
	Belt is tight when tension pulley is already loose.	Adjust clutch cable,make tension pulley move down,and just contact with belt.
When belt is tight, tilling work no power	Belt too loose.	Move engine position, make belt tight
	When tension pulley is loose,it have distance with belt	Adjust clutch cable,make tension puiley move up,and just contact with belt.
Engine frame broken.	Quality problem	Change
Knives rub transmission bpx	Not add fixed pin and clip.	Add
	Knives have quality problem.	Change
Knives not work	Knives assemble have problem	Make all knives blades to the direction of tiller go forward
	Engine cylinder head has lubricant oil	Change one of them
Engine have black smoke	Left and Right knives assemble the same	Run more time,burnt the mixed oil.Reduce tiller angle.

10、EASILY BROEKN PARTS LIST

NO.	Name	Belong to
1	Clutch cable	Handle bar comp
2	Flameout switch	Handle bar comp
3	Handle rubber	Handle bar comp
4	Engine easily broken parts	Refer to engine manual

11、ACCESSORIES LIST

NO.	**Name**	Qty	Pair	Usage	**Note**
1	4 pcs 3 groups knives	2	Unit	Tilling	Standard
2	Resistance rod	1	piece	Harder field	
3	Walking wheels	1	piece	Walking and tilling	

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**