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Cut Off Saw

TS35520 TS35523

To Be Your Exclusive Helper







# TECHNICAL SPECIFICATION

Model	TS35520	TS35523
Rated voltage	220V	220V
Rated frequency	50Hz	50Hz
Rated input power	2000W	2300W
Blade diameter	355mm	355mm
No-load speed	3800r/min	3800r/min

# **COMPONENTS AND ACCESSORIES**



#### Accessories included:

- 1 instruction manual
- 1 cutting disc: 355mm
- 1 wrench
- 2 spare carbon brushes



## SAFETY INSTRUCTIONS

## WARNING A

Read all instructions. Failure to follow all instructions listed below may result in electric shock, fire and/or other serious injury. The term "power tools" in all of the warnings listed below refers to mains-operated (corded) power tool or battery operated (cordless) power tool.

#### WORK AREA

- a) Keep work area clean and well lit. Cluttered and dark areas invite accidents.
- b) 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.
- c) Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

#### **ELECTRICAL SAFETY**

- a) Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.
- b) Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.
- c) Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock,
- d) Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tools. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increases the risk of electric shock.



e) When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.

#### PERSONAL SAFETY

- a) Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
- b) Use safety equipment. Always wear eye protection. Safety equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce the risk of personal injuries.
- c) Avoid accidental starting. Ensure the switch is in the off-position before plugging in. Carrying
  power tools with your finger on the switch or plugging in the power tools that have the switch on
  invites accidents.
- d) Remove any adjusting key or wrench before turning the power tool on. A wrench or a key to a rotating part of the power tool may result in personal injury.
- e) Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- f) Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.
- g) If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of these devices can reduce dust related hazards.

#### POWER TOOL USE AND CARE

- a) Do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed.
- b) Do not use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- c) Disconnect the plug from the power source before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.



- d) Store idle power tools out of the reach of children and do not allow persons unfamiliar with power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.
- e) Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts, breakage or parts and any other condition that may affect the power tools operations. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
- f) Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- g) Use the power tool, accessories and tool bits etc., in accordance with these instructions and in the manner intended for the particular type of power tool, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from intended could result in a hazardous situation.

#### **SERVICE**

- a) Tool service must performed only by qualified personnel. Service or maintenance performed by unqualified personnel could result in risk of injury.
- b) When servicing a tool, use only identical replacement parts. This will ensure that the safety of the power tool is maintained.

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#### ADDITIONAL SAFETY INSTRUCTIONS FOR CUT OFF SAW

- 1. Wear hearing protection during extended periods of operation.
- 2. Use only wheels having a maximum operating speed at least as high as "No Load RPM"marked on the tool's nameplate. Use only fiber-glass-reintorced cut-off wheels,
- 3. Check the wheel carefully for cracks or damage before operation. Replace cracked or damaged wheel immediately.
- 4. Secure the wheel carefully
- 5. Use only flanges specified for this tool.
- 6. Be careful not to damage the spindle, flanges(especially the installing surface) or bolt, or the wheel itself might break,
- 7. Keep guards in place and in working order.
- 8. Hold the handle firmly.
- 9. Keep hands away from rotating parts.
- 10. Make sure the wheel is not contacting the workpiece before the switch is turned on.
- 11. Before using the tool on an actual workpiece, let it simply run for several minutes first. Watch for flutter or excessive vibration that might be caused by poor installation or poorly balanced wheel.
- 12. Watch out for flying sparks when operating, They can cause injury or ignite combustible materials,
- 13 Remove material or debris from the area that might be ignited by sparks.

Be sure that others are not in the path of the sparks. Keep a proper, charged fire extinguisher closely available.

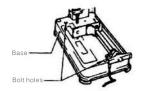
- 14. Use the cutting edge of the wheel only. Never use side surface.
- 15. Do not attempt to keep the trigger in the On position.
- 16. If the wheel stops during the operation, makes an odd noise or begins to vibrate, switch off the tool immediately.
- 17. Always switch off and wait for the wheel to come to a complete stop before removing, securing workpiece, working vise, changing work position, angle or the wheel itself
- 18 Do not touch the workpiece immediately after operation, it is extremely hot and could burn your skin.
- 19. Store wheels in a dry location only.



# **OPERATION INSTRUCTION**

#### SECURING CUT-OFF

The cut-off may be bolted (2 bolts) down to a level location using the bolt holes in the base.



#### REMOVING OR INSTALLING CUT-OFF WHEEL

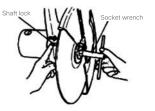
# CAUTION A

Always be sure that the tool is switched off and unplugged before removing or installing the wheel.

To remove the wheel, raise the safety guide. Press the shaft lock so that the wheel cannot revolve and use the socket wrench to loosen the hex bolt by turning it counterclockwise.

Then remove the hex bolt, outer flange and wheel. (Note: Do not remove the inner flange, ring and O-ring.)

To install the wheel, follow the removal procedures in reverse.



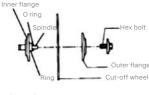


# CAUTION A

Be sure to tighten the hex bolt securely. Insufficient tightening of the hex bolt may result.

Always use only the proper inner and outer flanges which are provided with this tool.

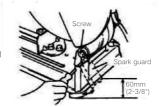
Always lower the safety guide after replacing the wheel.



### SPARK GUARD

The spark guard is factory-installed with its lower edge contacting the base. Before operation, loosen the screw and raise the spark guard so that its lower edge will be positioned approx. 60mm (2-3/8") above the workbench or floor surface.

Otherwise sparks may fly around operation area.



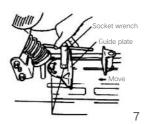
#### INTERVAL BETWEEN VISE AND GUIDE PLATE

The original spacing or interval between the vise and the guide plate is 0-170mm (0-6-11/16"). If your work requires wider spacing or interval, proceed as follows to change the spacing or interval.

Remove the two hex bolts which secure the guide plate, Move the guide plate as shown in the figure and secure it using the hex bolts. The following interval settings are possible:

35- 205 mm (1-3/8"- 8-1/16")

70- 240 mm (2-3/4"-9-7/16")



Remember that narrow work pieces may not be secured safely when using the two, wider interval settings.

#### SETTING FOR DESIRED CUTTING ANGLE

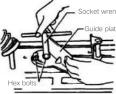
To change the cutting angle, loosen the two hex bolts which secure the guide plate. Move the guide plate to the desired angle (0' - 45')and tighten the hex bolts securely.



# CAUTION A

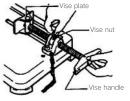
CAUTION A

Never perform miter cuts when the guide plate is set at the 35.205mm(1-3/8"-8-1/16") or 70-240 mm (2-3/4"-9-7/16") position.



#### SECURING WORKPIECES

By turning the vise handle counterclockwise and then flipping the vise nut to the left, the vise is released from the shaft threads and can be moved rapidly in and out. To grip workpiece, push the vise handle until the vise plate contact the workpiece. Flip the vise nut to the right and then turn the vise handle clockwise to securely retain the workpiece.

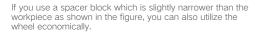




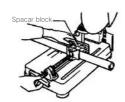


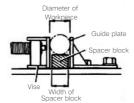
# CAUTION A

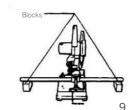
Always set the vise nut to the right fully when securing the workpiece. Failure to do so may result in insufficient securing of the workpiece. This could cause the workpiece to be ejected or cause a dangerous breakage of the wheel. When the cut-off wheel has worn down considerably, use a spacer block of sturdy, non-flammable material behind the workpiece as shown in the figure. You can more efficiently utilize the worn wheel by using the mid point on the periphery of the wheel to cut the workpiece.



Long workpiece must be supported by blocks of nonflammable material on either side so that it will be level with the base top.





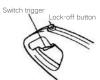




#### SWITCH ACTION

To prevent the trigger from being accidentally pulled, a lockoff button is provided as a safety feature.

To start the tool, press in the lock-off button and pull the trigger, Release the trigger to stop.



# CAUTION A

Before plugging in the tool, always check to see that the switch trigger actuates properly When not using the tool, remove the lock-off button and store it in a secure place. This and returns to the "OFF" position when released. prevents unauthorized operation.

#### **OPERATION**

Hold the handle firmly, Switch on the tool and wait until the wheel attains full speed before lowering gently into the cut. When the wheel contact the workpiece, gradually bear down on the handle to perform the cut. When the cut is completed, switch off the tool and WAIT UNTIL THE WHEEL HAS COME TO A COMPLETE STOP before returning the handle to the fully elevated position.



# CAUTION A

Proper handle pressure during cutting and maximum cutting efficiency can be determined by the amount of sparks that is produced while cutting. Your pressure on the handle should be adjusted to produce the maximum amount of sparks. Do not force the cut by applying excessive pressure on the handle. Reduced cutting efficiency, premature wheel wear, as well as, possible damage to the tool, cut-off wheel or workpiece may result.

#### CUTTING CAPACITY

Max. cutting capacity varies depending upon the cutting angle and workpiece shape.

Workpiece shape Cutting angle	<u>ø</u>			
90 °	115mm (4-1/2")	120mm (4-23/32")	115mm *142mm (4-1/2"*5 -5/8") 102mm * 197mm (4"* 7 -3/4")	139mm (5-1/2")
45 °	115mm (4-1/2")	106mm (4-3/16")	70mm * 240mm (2-3/4" * 9-7/16") 115mm * 102mm (4-1/2" *4")	100mm (3-15/16")

#### TOOL HAND SLIDE SYSTEM

The tool head slides back toward you approx. 17 mm( 12/32") when you pull the handle.

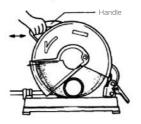
This system is convenient for the following applications.

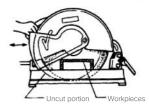
1. When cutting thick pipes or bars;

Move the handle back and forth to slide the tool head. This will help increase cutting efficiency and prevent wheel loading.

2. When cutting channels or angles:

If a portion of the workpiece near you is left uncut, pull the handle, The tool head slides back and the wheel cuts the remaining uncut portion. If the uncut portion cannot be cut even by using this method, use a spacer block as explained above.





### CARRYING THE TOOL

Fold down the tool head to the position where you can attach the chain to the hook on the handle.





# **MAINTENANCE**

# CAUTION A

Always be sure that the tool is switched off and unplugged before attempting to perform inspection or maintenance.

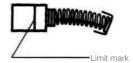
#### REPLACING CARBON BRUSHES

Remove and check the carbon brushes regularly.

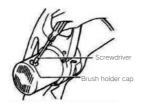
Replace when they wear down to the limit mark. Keep the carbon brushes clean and free to slip in the holders. Both carbon brushes should be replaced at the same time.

Use only identical carbon brushes.

Use a screwdriver to remove the brush holder caps. Take out the worn carbon brushes, insert the new ones and secure the brush holder caps.



To maintain product SAFETY and RELIABILITY, repairs, any other maintenance or adjustment should be performed by TEH Authorized or Factory Service Centers, always using TEH replacement parts.





# WARRANTY CARD

Dear customers, the warranty service for purchasing TEH products is as follows:

Under normal use, the wear of the rotor steering gear is less than 0.2 mm within three months from the date of purchase. It is guaranteed that the damage is caused by the quality of the tool.

The following conditions occur during the warranty period, not covered by the warranty:

- a. Any valid legal document (single ticket) certifying the date of purchase
- b. Any damage caused by natural wear and overload
- c. Any damage caused by the use of low-priced inferior accessories
- d. Any damage caused by improper carrying, transportation or storage
- e. Any product that has been opened, repaired, replaced, or modified by itself
- f. Any damage caused by misuse, beyond the scope of use of the tool, and failure to use and maintain in accordance with the instructions.

adies/gentlemen:	employer:
contact number:	fax number:
contact address:	
varranty record:	
post code:	

#### IMPORTANT NOTE

- 1. The invoice and warranty card must be presented at the time of warranty.
- 2. The fuselage number on the invoice is the same as the fuselage number on the warranty card.
- 3. Once this warranty card is issued, if it is lost, it will not be reissued. Please keep it properly.

Note: The company reserves the right to amend the above provisions and has the final interpretation right in the case that the warranty service does not violate national laws.

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