

Part #20652

#10/12 CUP TIG GAS LENS KIT INSTRUCTIONS



The **EASTWOOD GAS LENS KIT** contains all the common consumable parts in both 1/16" [1.6mm] & 3/32" [2.4mm] sizes. These parts will also fit other brands of size 17, 18 & 26 torches.

INCLUDES

- (2) Gas Lens Body, 1/16" [1.6mm] (A)
- (2) Gas Lens Body, 3/32" [2.4mm] (A)
- (2) Collet, 1/16" [1.6mm] (B)
- (2) Collet, 3/32" [2.4mm] (B)
- (2) Gas Nozzle, 5/8" [#10] (C)
- (2) Gas Nozzle, 3/4" [#12] (C)
- (1) Gas Nozzle Reduction Collar (D)
- (1) Partitioned Plastic Case



SAFETY INFORMATION

Welding can be dangerous to you and other persons in the work area. Read and understand this instruction manual before using your Eastwood welding machine. Injury or death can occur if safe welding practices are not followed. Safety information is set forth below and throughout this manual.

To learn more about welding safety, read OSHA Title 29 CFR 1910, available at **www.osha.gov**; ANSI Z49.1, "Safety in Welding, Cutting and Allied Processes," available at **www.aws.org**; and the consumable manufacturer's Safety Data Sheet.

The following explanations are displayed in this manual, on the labeling, and on all other information provided with this product:

A DANGER

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

A WARNING

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

A CAUTION

CAUTION used with the safety alert symbol, indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

A NOTICE

NOTICE is used to address practices not related to personal injury.

SAFETY INFORMATION





A DANGER

ELECTRIC SHOCK CAN CAUSE INJURY OR DEATH!

- Improper use of an electric Welder can cause electric shock, injury and death!
 Read all precautions described in the Welder Manual to reduce the possibility of electric shock.
- Disconnect Welder from power supply before assembly, disassembly or maintenance of the torch, contact tip and when installing or removing nozzles.
- Always wear dry, protective clothing and leather welding gloves and insulated footwear. Use suitable clothing made from durable flame-resistant material to protect your skin.
- If other persons or pets are in the area of welding, use welding screens to protect bystanders from sparks and arc rays.
- Always operate the Welder in a clean, dry, well ventilated area. Do not operate
 the Welder in humid, wet, rainy or poorly ventilated areas.
- The electrode and work (or ground) circuits are electrically "hot" when the Welder is on. Do not allow these "hot" parts to come in contact with your bare skin or wet clothing.
- Separate yourself from the welding circuit by using insulating mats to prevent contact from the work surface.
- Be sure that the work piece is properly supported and grounded prior to beginning an electric welding operation.
- Always attach the ground clamp to the piece to be welded and as close to the weld area as possible. This will give the least resistance and best weld.



A DANGER

WELDING SPARKS CAN CAUSE FIRE OR EXPLOSION!

- Electric welding produces sparks which can be discharged considerable distances at high velocity igniting flammable or exploding vapors and materials.
 DO NOT operate electric arc Welder in areas where flammable or explosive vapors are present.
 - **DO NOT** use near combustible surfaces. Remove all flammable items <u>from the</u> work area where welding sparks can reach (minimum of 35 feet).
- Always keep a fire extinguisher nearby while welding.
- Use welding blankets to protect painted and or flammable surfaces; rubber weather-stripping, dash boards, engines, etc.
- Ensure power supply has properly rated wiring to handle power usage.

SAFETY INFORMATION



A WARNING ELECTROMAGNETIC FIELDS CAN BE A HEALTH HAZARD!

- The electromagnetic field that is generated during arc welding may interfere
 with various electrical and electronic devices such as cardiac pacemakers.
 Anyone using such devices should consult with their physician prior
 to performing any electric welding operations.
- Exposure to electromagnetic fields while welding may have other health effects which are not known.

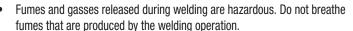


A WARNING ARC RAYS CAN INJURE EYES AND BURN!

- Arc rays produce intense ultraviolet radiation which can burn exposed skin
 and cause eye damage. Use a shield with the proper filter (a minimum of
 #11) to protect your eyes from sparks and the rays of the arc when welding
 or when observing open arc welding (see ANSI Z49.1 and Z87.1 for safety
 standards).
- Use suitable clothing made from durable flame-resistant material to protect your skin.
- If other persons or pets are in the area of welding, use welding screens to protect bystanders from sparks and arc rays.



A WARNING FUMES AND WELDING GASES CAN BE A HEALTH HAZARD!





- Prolonged inhalation of welding fumes above safety exposure limits can injure the lungs and other organs.
- Use enough ventilation and/or exhaust at the arc to keep fumes and gases from your breathing area.
- Use an OSHA approved respirator when welding in confined spaces or where there is inadequate ventilation.
- Never weld coated materials including but not limited to: cadmium plated, galvanized, lead based paints.

SAFETY INFORMATION



A CAUTION HOT METAL AND TOOLS WILL BURN!

- Electric welding heats metal and tools to temperatures that will cause severe burns!
- Use protective, heat resistant gloves and clothing when using Eastwood or any other welding equipment. Never touch welded work surface, torch tip or nozzle until they have completely cooled.



A CAUTION FLYING METAL CHIPS CAN CAUSE INJURY!

- Grinding and sanding will eject metal chips, dust, debris and sparks at high velocity. To prevent eye injury wear approved safety glasses.
- Wear an OSHA-approved respirator when grinding or sanding.
- Read all manuals included with specific grinders, sanders or other power tools used before and after the welding process. Be aware of all power tool safety warnings.



A NOTICE FIRST AID

- If exposed to excessive fumes move to an area with fresh air. Follow safety information on manufacturer's Safety Data Sheet.
- For other injuries follow basic first aid techniques and call a physician or emergency medical personnel.

TORCH DISASSEMBLY

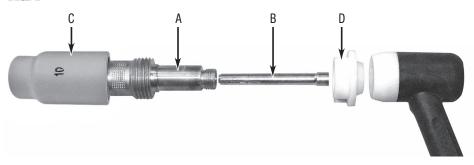
- **1.** Be sure the welder is turned off and unplugged before beginning.
- 2. Remove the Rear Cap form the Torch.
- **3.** If a tungsten is in place, pull it out from the *front* of the Torch.
- 4. Slide the Collet out of the Torch.
- **5.** Unscrew the Gas Nozzle.
- 6. Unscrew the Collet Body.

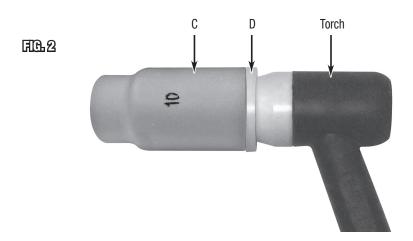
TORCH ASSEMBLY

REFERENCE FIG 1 & 2

- 1. Choose the size Gas Lens (FIG 1-A) that fits your selected tungsten diameter.
- 2. Place the white plastic Gas Nozzle Reduction Collar (FIG 1-D) with the beveled side facing towards the Torch onto the Gas Lens Body (FIG 1-A) then thread the Gas Lens onto the Torch making sure that the new Gas Nozzle Reduction Collar seats correctly against the original Gas Nozzle Reduction Collar.
- Choose the selected Gas Nozzle (FIG 1-C) and install it on the front of the Gas Lens (FIG 1-A) making sure that it seats correctly against the Gas Nozzle Reduction Collar (FIG 1-D).
 NOTICE: The Gas Nozzles are made of a ceramic material and may shatter if dropped.
- **4.** Choose the correct size Collet **(FIG)** that fits your tungsten diameter, slide the tungsten into it then place the Collet and insert the assembly into the Torch from the rear.
- 5. Install the Rear Cap but leave the Cap slightly loose to allow for adjustment of the distance the Tungsten Rod protrudes out of the Gas Nozzle (FIG 1-C).
- **6.** When the desired protrusion of the Tungsten Rod is achieved, tighten the Rear Cap to secure the Tungsten Rod in place. The assembly is now complete.

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ADDITIONAL ITEMS

#20653	#6 (3/8") Gas Lens Nozzles (10pk)
#20654	#8 (1/2") Gas Lens Nozzles (10pk)
#20655	#10 (5/8") Gas Lens Nozzles (10pk)
#20658	#12 (3/4") Gas Lens Nozzles (10pk)
#12822	1/16" Collet

#12824 3/32" Collet

If you have any questions about the use of this product, please contact

The Eastwood Technical Assistance Service Department: 800.544.5118 >> email: techelp@eastwood.com
PDF version of this manual is available online >> eastwood.com/20652manual
The Eastwood Company 263 Shoemaker Road, Pottstown, PA 19464, USA
US and Canada: 800.345.1178 Outside US: 610.718.8335

Fax: 610.323.6268 eastwood.com