

INS.3.5.2 Bottom Leg + Lateral Wear Plate for Corner Adapter

Installation procedure



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1. SAFETY

The practices described in this manual can be taken as guidelines for operating safely in many conditions and in addition to the safety standards that are current and enforceable in your area or region.

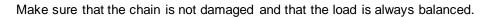
Your safety and the safety of third parties is the result of putting into practice your knowledge of the correct operational procedures.

Attention, when performing the work described in these instructions, always work safely and use the personal protection elements required to minimize or avoid injury. Always wear:



To avoid eye injury, always wear safety goggles or a protective mask when using any equipment, hammer or similar tool. When equipment is under pressure or when objects are struck, chips or other debris can be thrown out. Make sure no one gets hurt by the debris that is fired before applying pressure or hitting an object. Wear eye protection that complies with ANSI Z87.1 and OSHA standards. Also wear hearing protection and gloves.

Lifting a heavy object can cause serious or fatal injury. DO NOT exceed the maximum rated capacity of lifting and positioning devices: Stay away from the area under a suspended load.









2. WELDING

Following is a quick reference on consumables that can be used to weld MTG products. For a complete reference on welding procedures, refer to the document entitled "General welding recommendations".

WELDING UNALLOYED FILLER CONSUMABLES

PROCESS	EN CLASS	AWS CLASS
SMAW	EN ISO 2560-S E42X	E70X ACCORDING TO A5.1 OR EQUIVALENT UNDER A5.5
GMAW	EN ISO 14341-A G42X	E70C-X ACCORDING TO A5.18 OR EQUIVALENT UNDER A5.28
	EN ISO 14341-A G46X	E70S-X ACCORDING TO A5.18 OR EQUIVALENT UNDER A5.28
FCAW	EN ISO 16834-A T42X	E7XT-X ACCORDING TO A5.20 OR EQUIVALENT UNDER A5.29

WELDING AUSTENITIC STAINLESS FILLER CONSUMABLES

PROCESS	AWS CLASS
SMAW	E307-X ACCORDING TO A5.4
GMAW	ER307T-X ACCORDING TO A5.22
	ER307 ACCORDING TO A5.9
FCAW	307-X ACCORDING TO A5.22

NOTE: "X" MAY STAND FOR ONE OR SEVERAL CHARACTERS

3. IMPORTANT

Please read the entire document before starting any operation as there may be some steps that require prior checks/operations.



Weld-on bottom and lateral protectors for cast corner adapters have been designed for installation on NEW adapters, although in some cases, if wear is not too pronounced, it may be possible to install them once correct positioning/feasibility is assured.

These instructions are a generic procedure for weld-on lateral and bottom protectors on all MTG cast corner adapters regardless of the tooth system they use.



4. INSTALLATION PROCEDURE

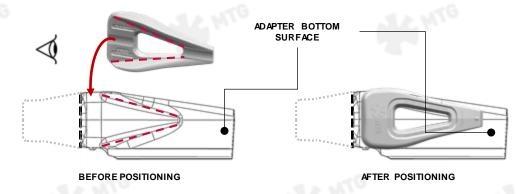
4.1 BOTTOM PROTECTOR

4.1.1 Clean the surfaces adjacent to the welding areas, both on the adapter and on the protector, within a radius of 12.5mm / 0.5 in. Remove paint, grease, rust and other elements that can cause hydrogen. Cleaning can be done using a wire brush, light grinding, shot blasting or machining. The presence of pores, sand or other visible defects on the welding surfaces must be removed by grinding.



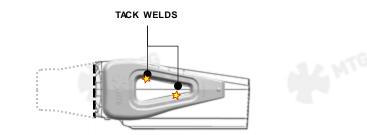
4.1.4

Place the protector on the bottom surface of the cast corner sliding it until the geometry of the adapter fits correctly with the geometry of the protector.

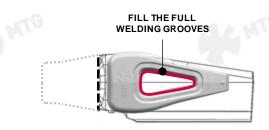


4.1.3 Preheat protector and adapter to a temperature between 175°C and 200°C (347°F and 392°F) in a radius of 100mm (4") around the area to be welded.

Fix the protector applying some tack welds as indicated in the following image.



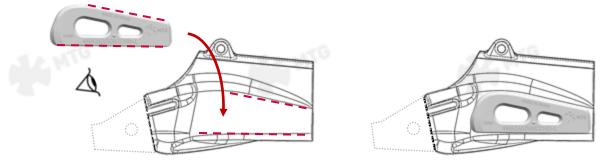
4.1.5 Proceed with the welding of the protector to the bottom surface of the adapter by filling all the available welding grooves. Ensure the full contact of the protector and the adapter throughout the entire welding process.





4.2 LATERAL PROTECTOR

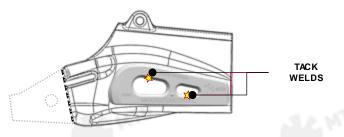
- 4.2.1 Clean the surfaces adjacent to the welding areas, both on the adapter and on the protector, within a radius of 12.5mm / 0.5 in. Remove paint, grease, rust and other elements that can cause hydrogen. Cleaning can be done using a wire brush, light grinding, shot blasting or machining. The presence of pores, sand or other visible defects on the welding surfaces must be removed by grinding.
- 4.2.2 Place the protector on the lateral of the adapter, placing it in such a way that the protector is aligned with the geometry of the adapter as shown in the image.



BEFORE POSITIONING

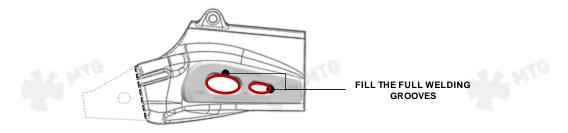
AFTER POSITIONING

- Preheat protector and adapter to a temperature between 175°C and 200°C (347°F and 392°F) in a radius of 100mm (4") around the area to be welded.
- Fix the protector applying some tack welds as indicated in the following image.



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1.2.5 Proceed with the welding of the protector to the side surface of the adapter by filling all the available welding grooves. Ensure the full contact of the protector and the adapter throughout the entire welding process.



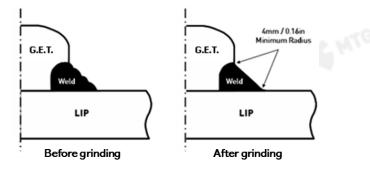


4.3 WELDING FINISHING

- 3.1 Make sure that the welding technique complies with what is stated in the document entitled: "General welding recommendations".
- 4.3.2 All welding should be ground.

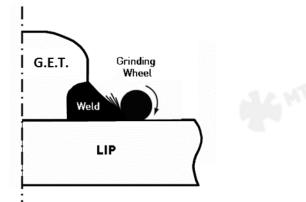
Grinding shall produce a smooth surface free of roughness and unevenness associated with the weld beads.

The toes of the welds shall merge smoothly with the lip and the adapter with a minimum radius of 4mm - 5/32 in.



4.3.3 Grinding shall be done using high speed electric or pneumatic grinders with grinding wheels no larger than 50mm - 2 in. in diameter. ANGLE HEAD OR DISK GRINDERS ARE NOT ALLOWED FOR THIS WORK.

Grinding shall be done with the perimeter of the wheel and not the face. The grinding direction must be perpendicular to the toes of the welds as in the illustration.



Grinding the radio at the toes of the welds is facilitated using cone-shaped grinding wheels. For final grinding, the abrasive may be no coarser than 24 Grit.

4.3.4

After completion of welding, all welds shall be subjected to visual and magnetic particle inspection, as described in the document "General welding recommendations". Any detected welding crack must be cleaned and repaired.



Service Instructions

The latest welding recommendations and assembly / disassembly instructions can be found online: www.mtgcorp.com/manuals

Please contact Technical Services in case of questions: technical.services@mtg.es



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