



MTG

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INS.3.4.2

STARMET Corner Wear Cap ML

Installation procedure

DISCLAIMER

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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.



LIFTING LUG

Make sure that the chain is not damaged and that the load is always balanced.

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
	EN ISO 14341-A G42X	E70C-X ACCORDING TO A5.18 OR EQUIVALENT UNDER A5.28
GMAW	EN ISO 14341-A G46X	E70S-X ACCORDING TO A5.18 OR EQUIVALENT UNDER A5.28
	EN ISO 16834-A T42X	E7XT-X ACCORDING TO A5.20 OR EQUIVALENT UNDER A5.29
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
	ER307T-X ACCORDING TO A5.22
GMAW	ER307 ACCORDING TO A5.9
	307-X ACCORDING TO A5.22
FCAW	307-X ACCORDING TO A5.22

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

3. IMPORTANT

Read the full document prior to start any operation since there may be some steps which may require previous verifications/operations.

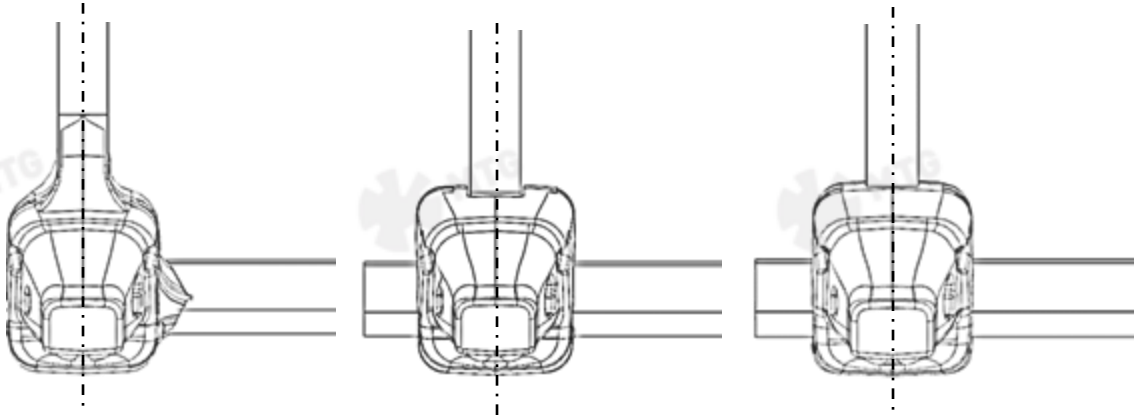


4. PREVIOUS STEPS BEFORE INSTALLATION

NOTE: This corner wear cap is suitable for its installation in conjunction with cast corners, straddle and central adapters at corner positions. Before starting with the installation, it is necessary to consider the following steps:



- 4.1** Before the welding of the adapter, it is necessary to verify that the cheek plates are aligned to the adapter. By doing so, we will avoid mounting problems not expected before welding.

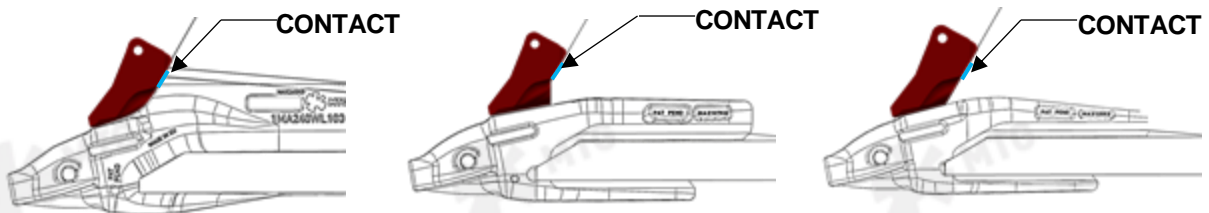


CAST CORNER

**STRADDLE
ADAPTER**

**CENTRAL
ADAPTER**

- 4.2** The corner wear cap, when is fully introduced into its housing on the adapter, must be in frontal contact with the cheek plate. Thus, before the adapter's welding (except into the cast corner) it would be necessary to adapt (cut or add material) the cheek plate to the wear cap position to ensure that proper contact.



CAST CORNER

**STRADDLE
ADAPTER**

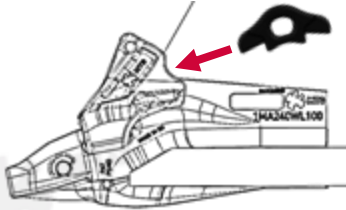
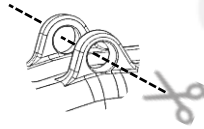
**CENTRAL
ADAPTER**

- 4.3** If it is expected to install the corner wear cap in conjunction with the ProMet wing shrouds, it is necessary to complete the lower corner wear cap installation before to the wing shrouds one.

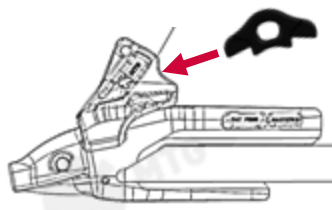
Once these previous steps have been verified the adapter's welding completion can be done. The rest of the corner wear cap installation is common as follows:

5. WELD-ON BASE INSTALLATION PROCEDURE

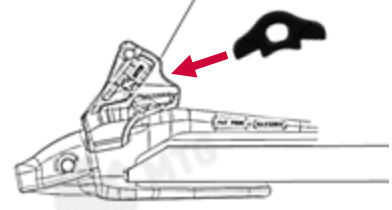
- 5.1** Introduce the wear cap fully into its position and place the stoppers. On straddle adapters it will be necessary to cut both lifting lugs before proceeding.



CAST CORNER



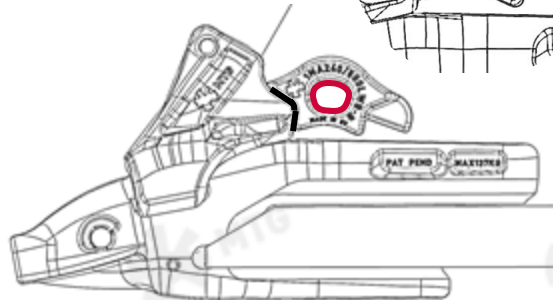
STRADDLE ADAPTER



CENTRAL ADAPTER

- 5.2** Pre-heat cheek and stoppers to the recommended temperatures (between 175°C and 200°C – 347°F and 392 °F) and tack weld the outside of bucket stopper only on the designated area to assure its position. On cast corner adapters, the welding of the stopper must be performed out of the welding joint between the cast corner and the cheek plate.

- **WELDING AREA**
- **CONTACT AREA**

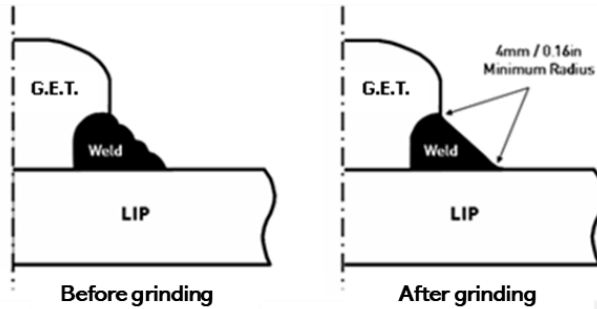


CAST CORNER

- 5.3** Proceed with the welding of each stopper on the designated welding area being sure that entire bottom surface of the stopper maintains contact with the cheek plate during the entire welding process.

5.4 All welds must be grinded. After grinding the surface must be free of rough areas and undulations associated with the arrangement of the weld beads.

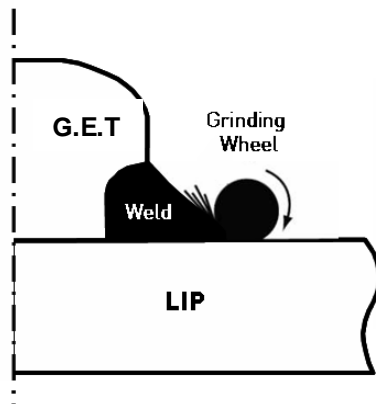
The welding edge must be regularly and progressively attached to the lip and to the G.E.T with a minimum radius of 4mm (5/32").



Grinding must be by using electric or pneumatic grinders with discs up to 50mm (2") in diameter recommended. **HEADS OR ANGULAR GRINDERS ARE NOT RECOMMENDED FOR THIS TYPE OF WORK.**

The grinding should be carried out with the outside of the disc and not with the central part of the disc.

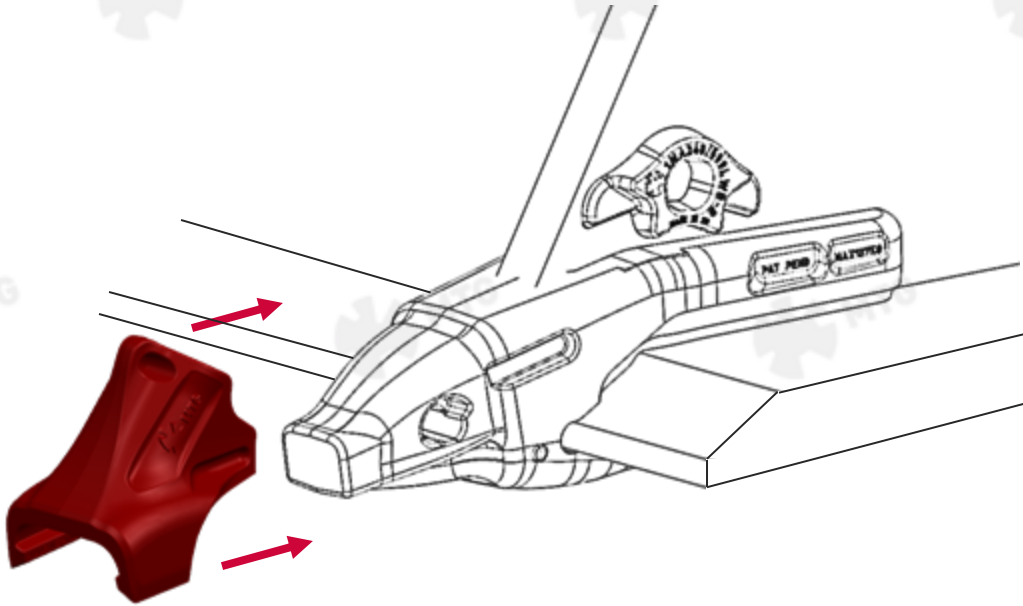
The direction of grinding must be perpendicular to the ends of the weld beads as shown in the figure.



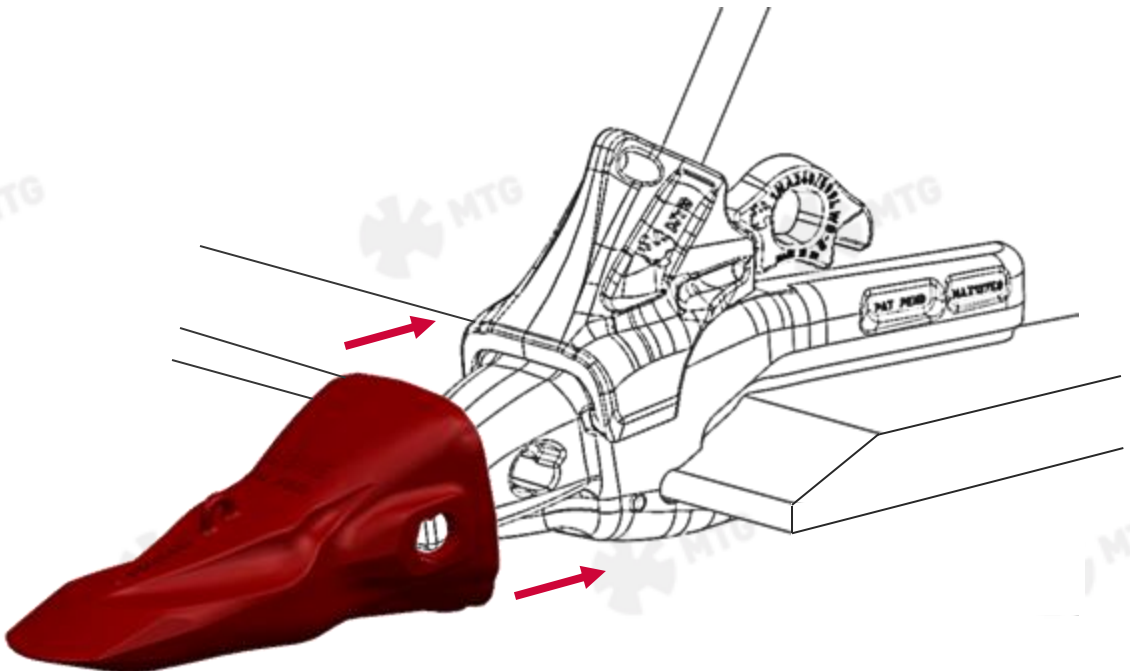
Appropriate grinding directions: For grinding weld ends it is recommended to use conical grinding wheels. To ensure a good finish the refining grain should not exceed 24 grit.

6. CORNER WEAR CAP INSTALLATION PROCEDURE

6.1 Fully introduce the wear cap into its station assuring its frontal contact.

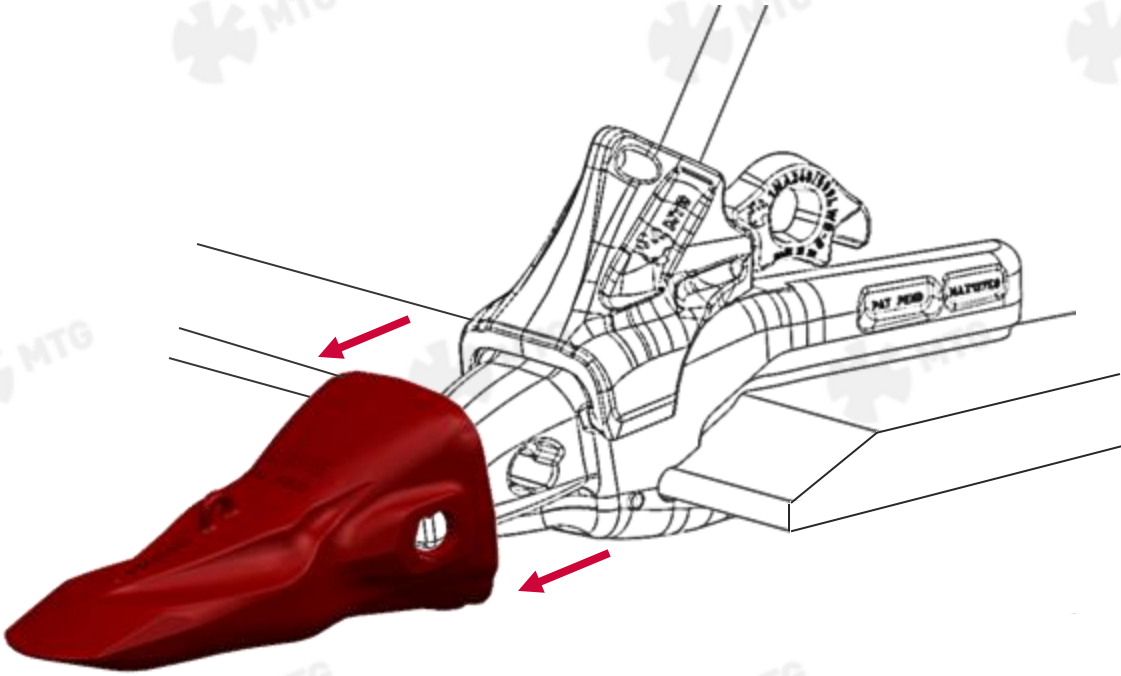


6.2 Install the tooth, then insert the pin and lock.

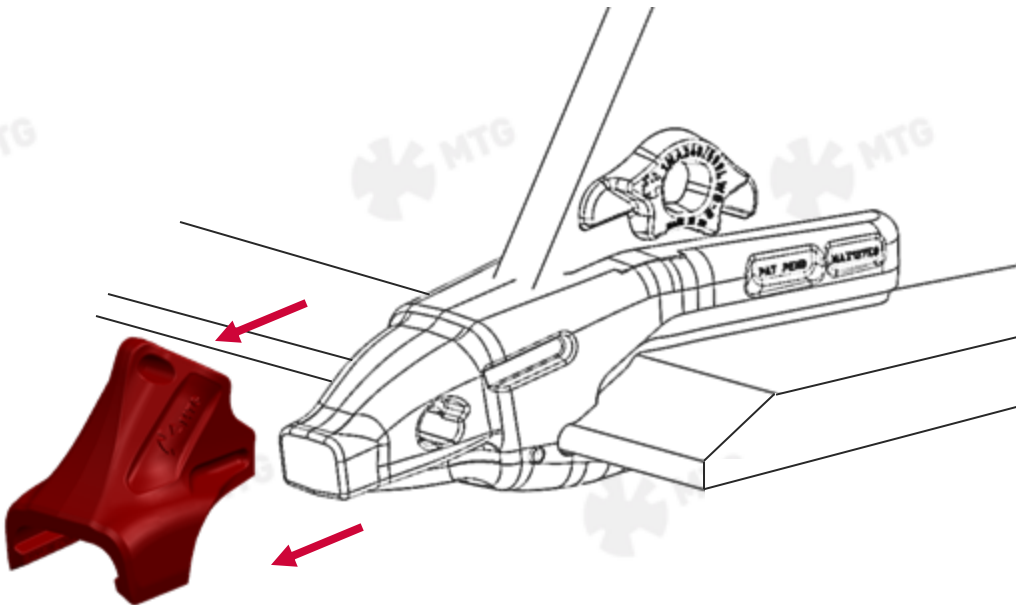


7. CORNER WEAR CAP REMOVAL PROCEDURE

- 7.1** Remove all the fines stuck at the pin square hole and unlock it. Then remove the tooth.



- 7.2** Remove the wear cap by pulling it towards outside.





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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