



## INSTALLATION INSTRUCTIONS Brackets and Tabs

Ballistic Fabrication produces products for custom vehicles. Many products require general welding and fabrication skills. Welding should only be done by a competent welder. Ballistic Fabrication is not liable for improper installation. Check with local laws if your vehicle is driven on the street as some Ballistic Products may not be street legal in all states.

## Preparation

- Grind the surface smooth where the Bracket or Tab will mount. Ensure the surface is free from rust, paint, oil, or any other contaminates.
- Ensure proper fitment and position of Bracket or Tab.
- If welding a double shear mount, bolt a spacer between the tabs to ensure proper fitment after welding.
- If Bracket or Tab is to be welded in a "T" configuration, a bevel at the weld joint will help ensure proper weld penetration.



• A butt weld is also used in many Ballistic applications, such as welding tubing adapters to tubing. This weld joint also requires a bevel to ensure proper penetration.



• A corner weld joint is used for many Ballistic products and should be set up per the following illustration.



• A lap weld joint may also be used for some Ballistic products and should be set up per the following illustration.



## Welding of Bracket or Tab to Mild Steel

- Weld the Bracket or tab in place. MIG welding is the most common welding method, but TIG or even Stick welding can be used.
- Whichever welding method is used, ensure that the settings are appropriate and that proper penetration is achieved.
- Ballistic products are for suspension components, roll cages, recovery points, and many other critical safety components. If you are not absolutely confident in your welding skills, seek help from a qualified welder.

## Welding of Bracket or Tab to Cast Steel

- ER70 or ER80 welding wire is recommended
- Pre-heat the Cast Steel with a rose bud torch until it is approximately 400 degrees. (Temperature marker can be used to indicate temp. You should not see a cherry color. If you do it is too hot.)
- Weld the Bracket or Tab to the cast Steel while maintaining consistent heat. Use a chipping hammer or a needle scaler (preferred) to relieve the weld and material while maintaining heat as best as possible. Do this until the entire area has been relieved.
- Re-heat if necessary until welding is complete. Repeat needle scale and heat as necessary.
- Apply heat blanket and let cool as slowly as possible.