COLLISION AND FIELD REPAIR
FUSION ARC WELDING PROCEDURE SPECIFICATIONS

COMPONENT PARTS	TRUCK FRAME		BODYSHELL EXTERIOR & UNDERBODY PANELS			
Material Type	Chrysler MS 264 (High Strength and Structural Quality Steels which includes HSLA, Martensitic, and Dual Phase materials) Chrysler MS 6000 (Zinc and Zinc Iron Alloy coated sheet steels)					
Material Thickness Range	2 mm - 4 mm		0.6 mm - 1.02 mm		>1.02 mm - 3.0 mm	
WELDING PROCESS	GAS METAL ARC (Note: 1)	FLUX CORED ARC	GAS METAL ARC (Note: 1)	MIG BRAZE (Note: 2)	GAS METAL ARC (Note: 1)	FLUX CORED ARC
ELECTRODE TYPE (AWS SPEC. A5.18)	AWS CLASS. ER70S-6	AWS CLASS. E71T-11 (Note 3)	AWS CLASS. ER70S-6	AWS CLASS. ERCuSi - A Silicon Bronze	AWS CLASS. ER70S-6	AWS CLASS. E71T-11 (Note 3)
ELECTRODE SIZE	0.035	0.045	0.023 - 0.025	0.035	0.035	0.045
ELECTRODE MAKER	Lincoln	Lincoln NR-211-MP	Lincoln		Lincoln	Lincoln NR-211-MP
WIRE FEED SPEED (in/min)	245-250 Vertical Down 70-90 Flat & Horizontal	110 Vertical Down 70-90 Flat & Horizontal	95-115 All Welds	150-155 Flat & Horizontal	245-250 Vertical Down 70-90 Flat & Horizontal	110 Vertical Down 70-90 Flat & Horizontal
TRAVEL SPEED (in/min)			10			
VOLTAGE	19-20	15-18	16-19	18-19	19-20	15-18
POLARITY	DCEP	DCEN	DCEP	DCEP	DCEP	DCEN
GAS FLOW (cfh)	25-35	N/A	25-35	25-35	25-35	N/A
ELECTRICAL STICKOUT (in)	1/2 - 5/8	3/8 - 1/2	1/2 - 5/8	5/8 - 3/4	1/2- 5/8	3/8 - 1/2
GAS TYPE	75% Ar 25% CO2	N/A	75% Ar 25% CO2	100% Ar	75% Ar 25% CO2	N/A
TYPE OF ARC TRANSFER	Short Circuit		Short Circuit	Spray	Short Circuit	

NOTES:

Caution: All welds should conform to the Chrysler vehicle engineering process standard PS 9472

These Procedure Specifications are appropriate as of this publication date 8/1/2007. Procedures may be superceeded with new spec's at a later date.

Always process to the thinner material thickness (TMT)

All persons performing welding must be qualified to weld in all positions.

(1) Must remove Zinc Coating on both sides of metal at the weld zone.

(2) MIG Braze welding process requires use of Pulse Arc or STT welding machine.

(3) Must use Lincoln product since E 71T-11 product differs from other suppliers.

Additional Information and Guidelines

- Chrysler highly recommends all repairers obtain weld training and demonstrate weld proficiency through testing programs such as I-CAR or the American Welding Society (AWS).

- As vehicle designs incorporate increasing amounts of advanced high strength steel (AHSS), at thinner thicknesses to reduce vehicle weight, engineers are in effect designing to the limits of the base materials and electrodes. The repairer's job increases in importance when performing panel replacements where the repair weld differs from the production weld (resistance weld versus fusion weld). For this reason it is imperitive that the technician not only be highly trained, and be able to demonstrate this ability and follow both the original equipment manufacturer's and weld equipment manufacturer's recommendations, but also be provided with quality welding equipment and consumables. Ensure that all electrodes purchased meet AWS specifications and that there is a certification program in place to guarantee their quality. Cheap, inferior electrodes will compromise the weldment, and the repair.

- Additional welding information may be obtained from:
    - AWS (http://www.aws.org/w/a/)
    - Lincoln Equipment (http://www.lincolnelectric.com/)
    - Miller Equipment (http://www.millerwelds.com/)
    - ESAB (http://www.esabna.com/us/en/)
    - Local welding and trade schools
    - Public and university libraries
    - Many other sources