

This document describes how to modify the trailing arms of a 1972 Volvo 1800E to allow mounting of the '72 rear axle into a '66 Volvo 122s. This allows the earlier car to be converted to 4 wheel disc brakes. This setup makes no changes to the axle or brakes themselves, and retains all factory bushings.

There may be variations in the parts by model year that aren't covered here. There also may be unfavorable variations in pinion angle based on the chosen ride height of the car when using the measurements described here. The drawings describe what worked for a specific scenario with the parts on hand. They should be adequate to allow any fabrication shop to successfully make them, for those without welding and machining equipment.

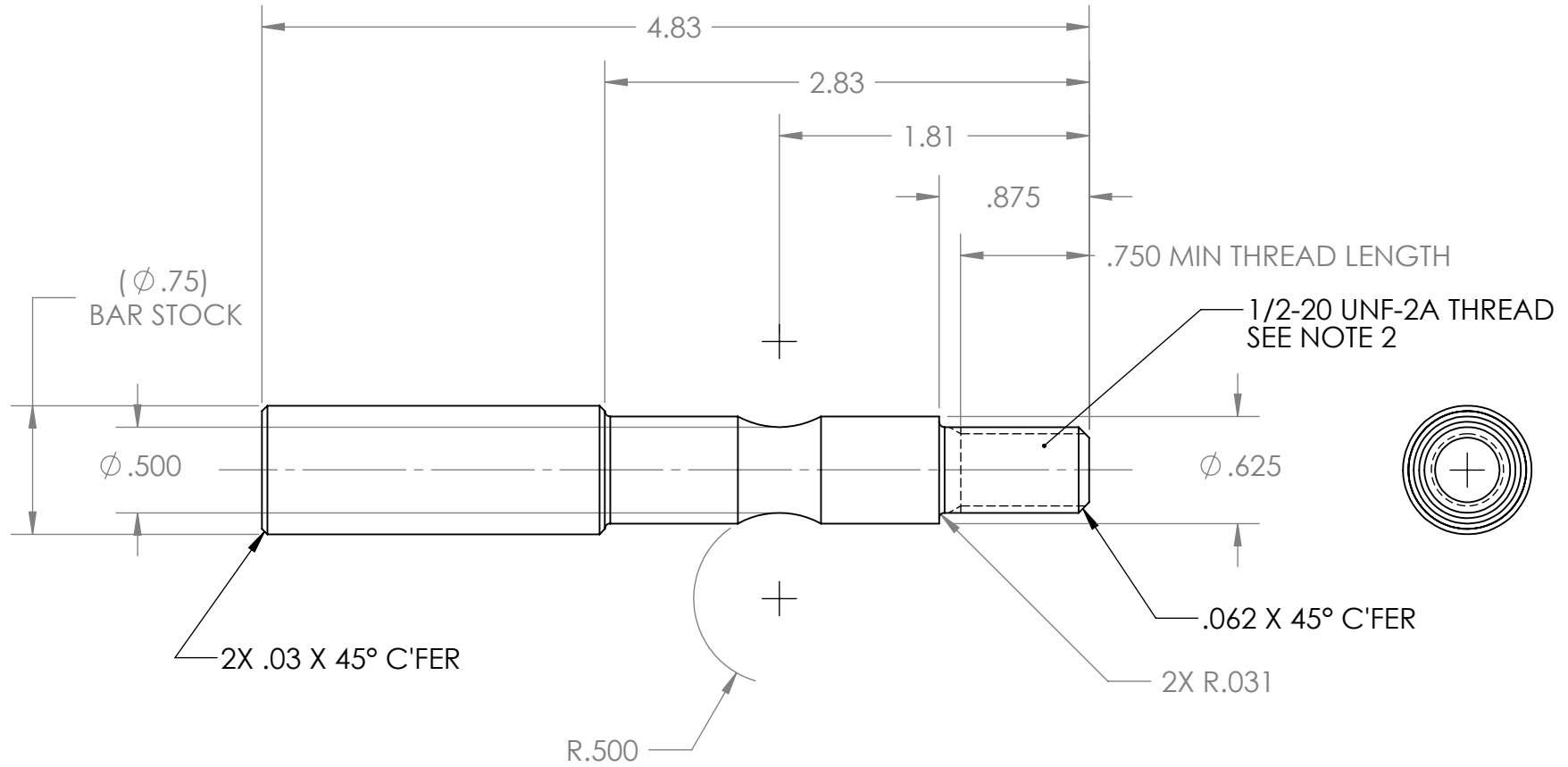
The intention of sharing this is to help other hobbyists who want to modify their own cars in the same way. That said, there are no guarantees as to whether the parts as detailed will work in all situations a shade tree mechanic will encounter using parts from various years of the vehicles mentioned. It is highly recommend to source extra parts and thoroughly measure your own setup before cutting and final welding, to ensure the axle ends up in the desired position and alignment.

The early brake lines were able to be bent into a shape that functions with the later caliper, but the proportioning valve may need to be adjusted as needed once the conversion is complete.

The parking brake is not covered here, but the best solution appears to be splicing the two systems together. Front half of 122 cables, rear half of 1800 cables.

REVISIONS

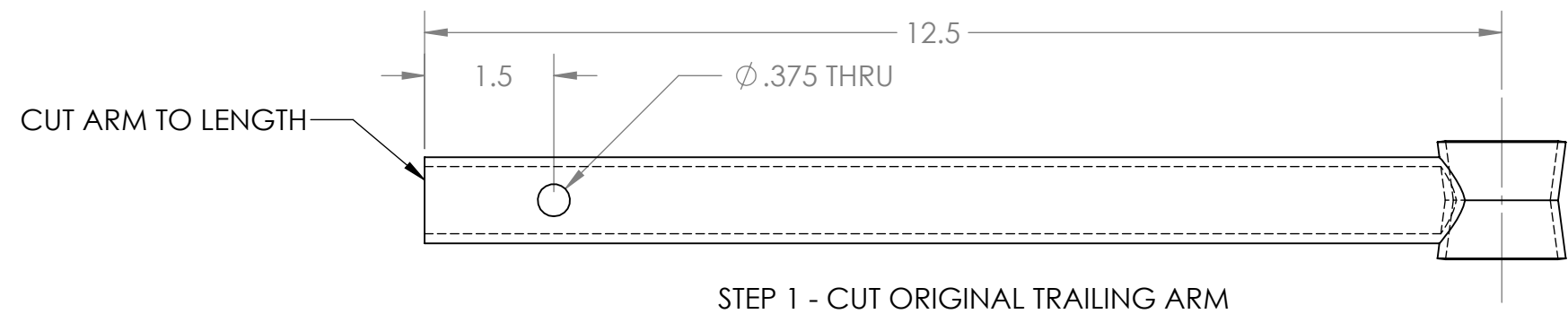
REV.	DESCRIPTION	BY	DATE
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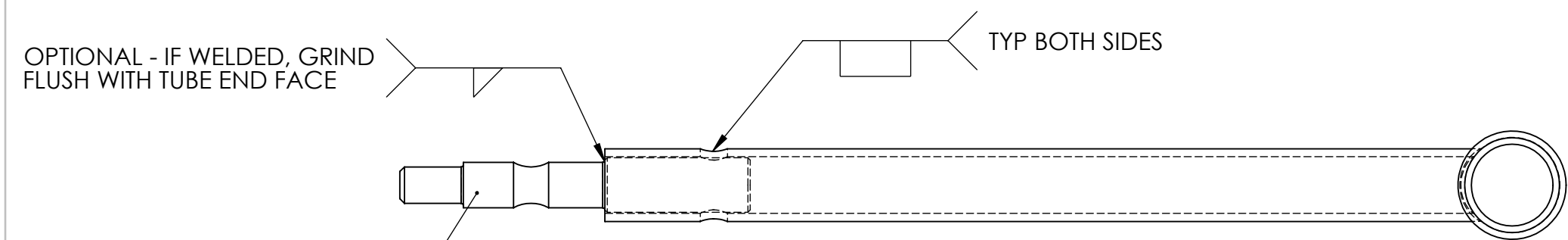
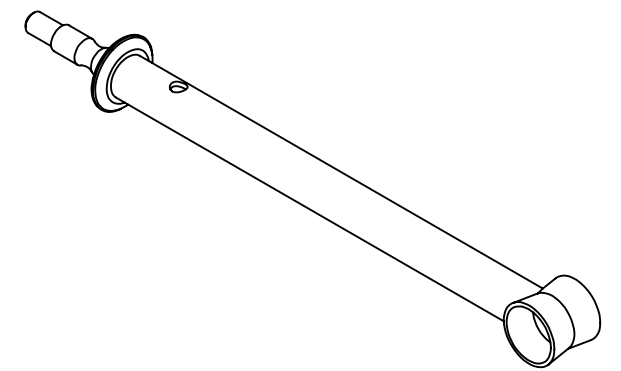
- NOTES:
 1) THOROUGHLY DEBURR AND BREAK ALL SHARP EDGES
 2) FACTORY THREADS ARE 1/2-13 UNC-2A, IF STANDARD HARDWARE IS TO BE USED, CUT COARSE THREADS

TOLERANCES EXCEPT AS NOTED .X ± .030 .XX ± .010 .XXX ± .005 ANGLES ± .5° BENDS ± 3°		TITLE TRAILING ARM END	
MATERIAL 1018 CRS OR BETTER			
DRAWN CDG	DATE 9/14/10	SIZE A	DWG NO.
CHECKED	DATE	SCALE: 1:1	UNITS INCH
		REV A	
		SHEET 1 OF 1	

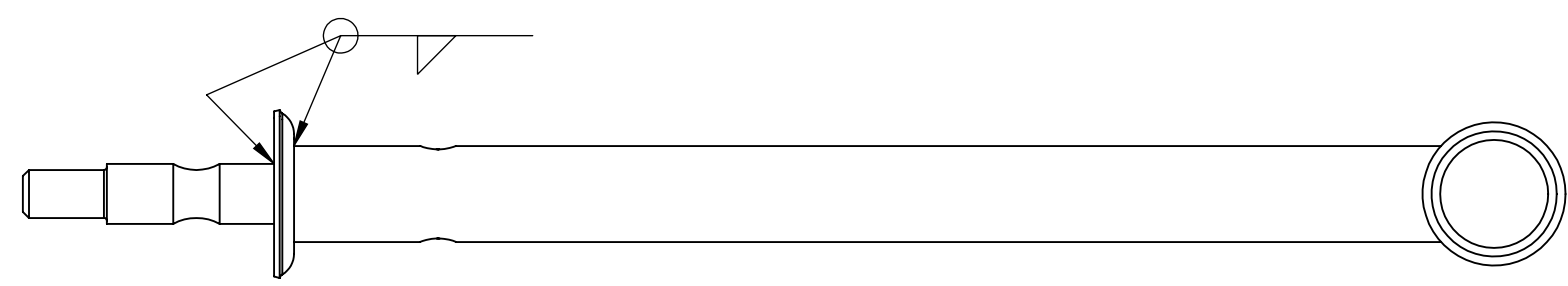
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STEP 1 - CUT ORIGINAL TRAILING ARM

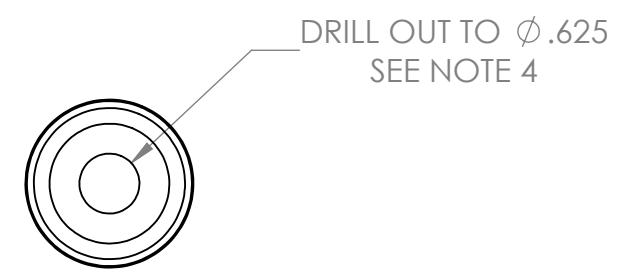


STEP 2 - WELD END INTO ARM



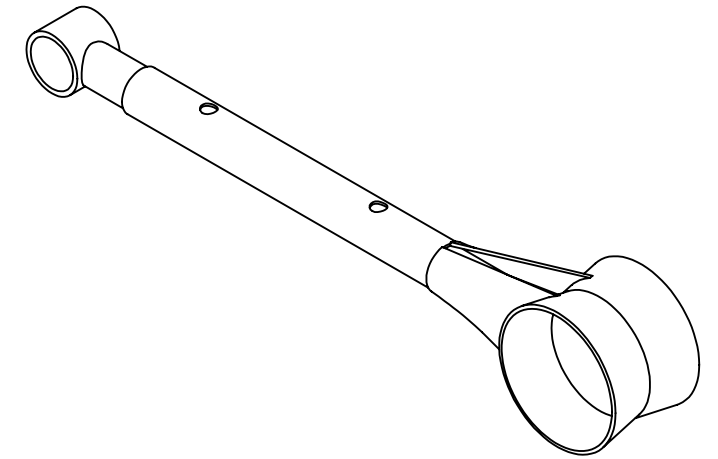
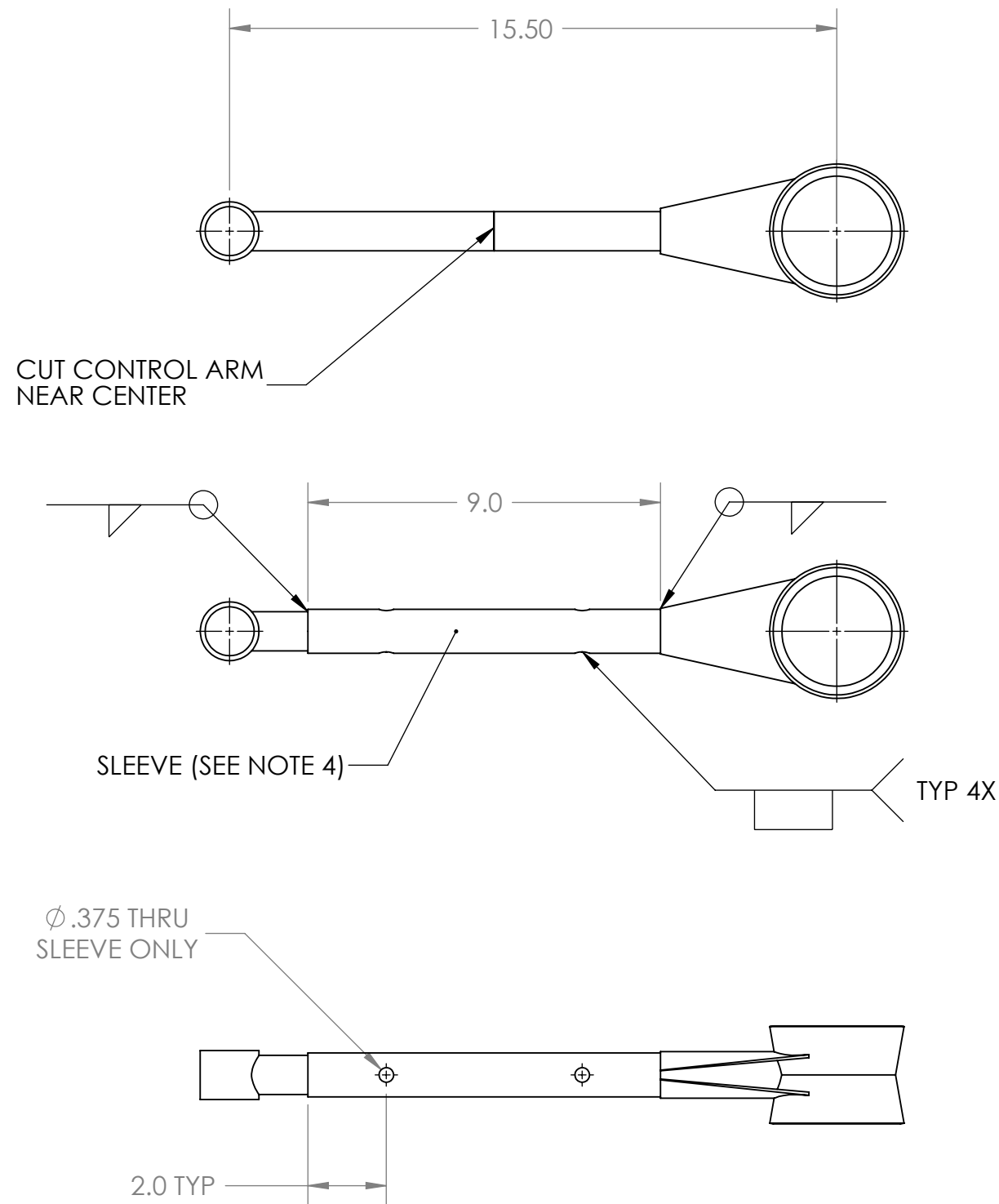
STEP 3 - WELD FLANGE ON TO ARM

- NOTES:
- 1) THIS DRAWING DESCRIBES MODIFYING A '67 AND UP TRAILING ARM TO MOUNT A '67 AND UP REAR AXLE INTO A PRE-'67 VOLVO 122S.
 - 2) GRIND OR SANDBLAST TO REMOVE ALL PAINT IN THE WELD AREAS BEFORE WELDING
 - 3) THE LENGTH SHOWN WILL PLACE THE AXLE IN THE CENTER OF THE WHEEL WELL, IF DIFFERENT POSITIONING IS DESIRED BOTH THIS AND THE CONTROL ARM LENGTHS SHOULD BE MODIFIED.
 - 4) THE FLANGE SHOWN IS THE SAME AS THE WASHER USED UNDER THE NUT ON THE ORIGINAL TRAILING ARM, WITH THE CENTER DRILLED OUT AS SHOWN.
 - 5) SEE SEPARATE DRAWING FOR TRAILING ARM END



TOLERANCES EXCEPT AS NOTED				TITLE	
.X	± .100			TRAILING ARM MODIFIED	
.XX	± .030				
.XXX	± .010				
ANGLES	± .5°				
BENDS	± 3°				
MATERIAL					
SEE NOTES					
DRAWN BY:	DATE	SIZE	DWG NO.	REV	
CDG	11/22/11	B		A	
CHECKED	DATE	SCALE: 1:2		UNITS	SHEET 1 OF 1
				INCH	

REVISIONS			
REV.	DESCRIPTION	BY	DATE



NOTES:

- 1) THIS DRAWING DESCRIBES MODIFYING A '67 AND UP CONTROL ARM TO MOUNT A '67 AND UP REAR AXLE INTO A PRE-'67 VOLVO 122S. THE ORIGINAL LENGTH OF THE CONTROL ARM IS APPROXIMATELY 18 INCHES BETWEEN BUSHING CENTERS
- 2) GRIND OR SANDBLAST TO REMOVE ALL PAINT IN THE WELD AREAS BEFORE WELDING
- 3) CONTROL ARM MAY BE CUT SHORTER THAN 15.50 AND ADJUSTED TO LENGTH USING SLEEVE; LENGTH SHOWN IS FOR A 14" RIDE HEIGHT FROM WHEEL CENTER TO FENDER LIP. OTHER RIDE HEIGHTS MAY REQUIRE A DIFFERENT DIMENSION TO OBTAIN THE CORRECT PINION ANGLE
- 4) SLEEVE MATERIAL: 4130 TUBING, 1" ID, 1/16 MINIMUM WALL THICKNESS - McMASTER 89955K65 RECOMMENDED
- 5) FIXTURE ARM AS NEEDED TO KEEP BUSHING CENTERLINES PARALLEL DURING WELDING

TOLERANCES EXCEPT AS NOTED .X ± .100 .XX ± .030 .XXX ± .010 ANGLES ± .5° BENDS ± 3°		TITLE CONTROL ARM MODIFIED	
MATERIAL SEE NOTES		SIZE B	REV A
DRAWN BY: CDG	DATE 11/22/11	DWG NO.	
CHECKED	DATE	SCALE: 1:4	UNITS INCH SHEET 1 OF 1