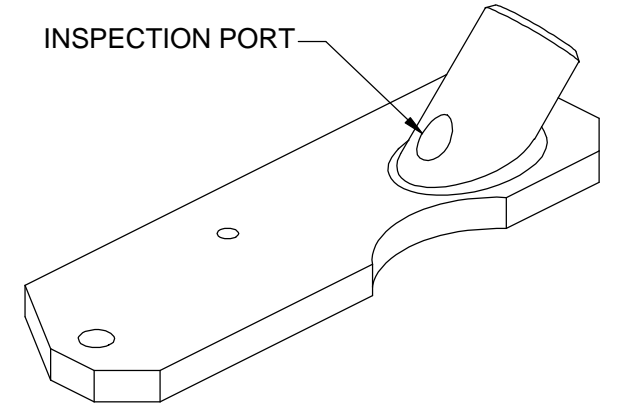
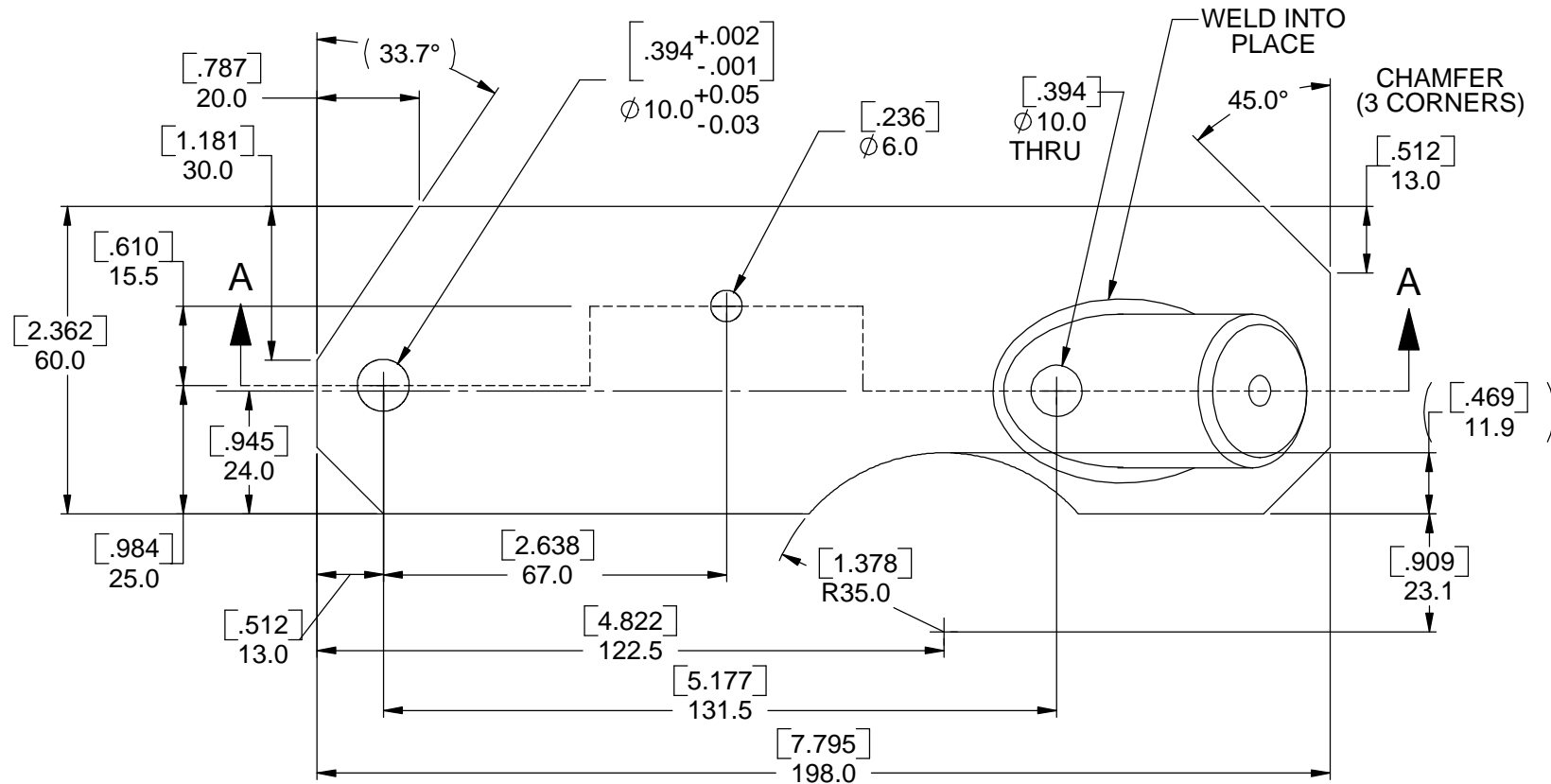


PROPRIETARY NOTICE

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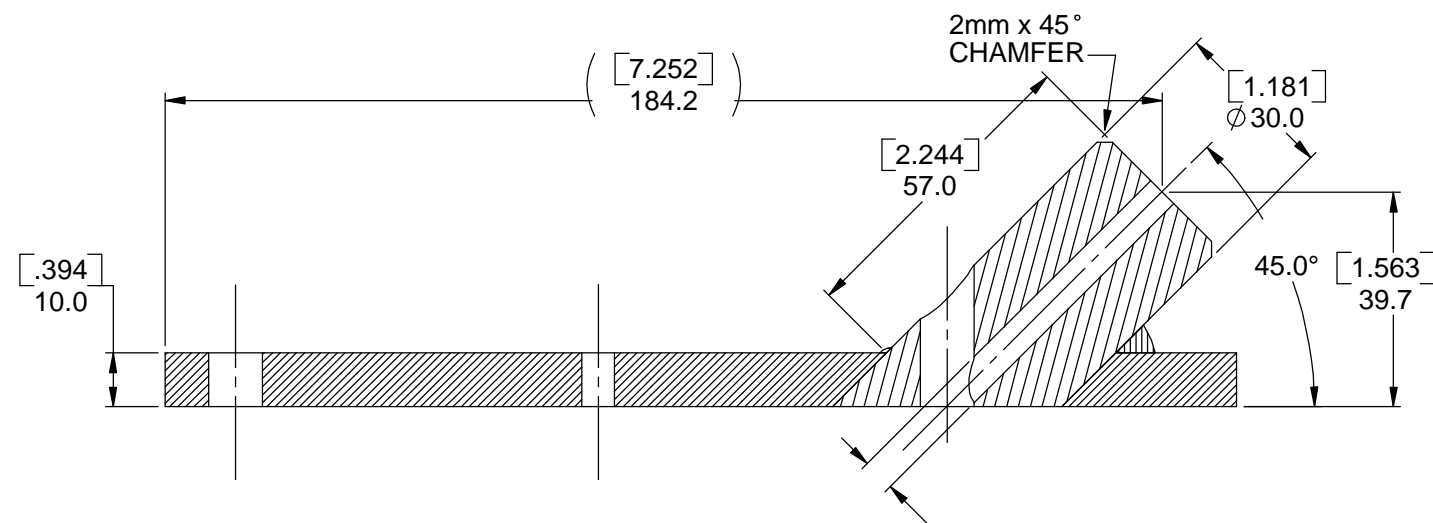
REVISION HISTORY

REV	LOC	DESCRIPTION	DATE	APPROVED



NOTES:

- 1) THIS DRAWING IS PROVIDED AS A COURTESY TO CITROEN OWNERS AND IS A DIRECT COPY OF AN ORIGINAL FACTORY DOCUMENT.
- 2) THIS TOOL IS INTENDED FOR USE ON CITROEN-MASERATI ENGINE BLOCKS WHICH HAVE NO OILING HOLE LOCATED AT THE BACK OF THE BLOCK - TO ALLOW DIRECT OILING TO THE MAIN CHAIN. THIS IS A FACTORY REQUIRED MODIFICATION. IF A HOLE EXISTS (COULD BE SMALLER THAN 1.0mm) DO NOT PERFORM THIS OPERATION.
- 3) DIMENSIONS IN INCHES ARE SHOWN IN [BRACKETS] AND ASSUME A TOLERANCE OF +/- .010"
- 4) YOU MAY CHOOSE TO CONSTRUCT THE TOOL WITH DIFFERENT MATERIALS AND TECHNIQUES THAN SHOWN (i.e. COULD MAKE TOOL FROM ALUMINIUM, AND USE A HARDENED DRILL BUSH) BASED ON MATERIALS AND TOOLING ON HAND.
- 5) NOTE THAT THERE ARE TWO PAGES FOR THIS SPECIFICATION.
- 6) IF YOU ARE NOT ABLE TO CONSTRUCT THIS TOOL, YOU MAY CONTACT DESIGN MASSIF AT THE ADDRESS BELOW FOR RENTAL OR PURCHASE.



SECTION A-A

METRIC DRAWING

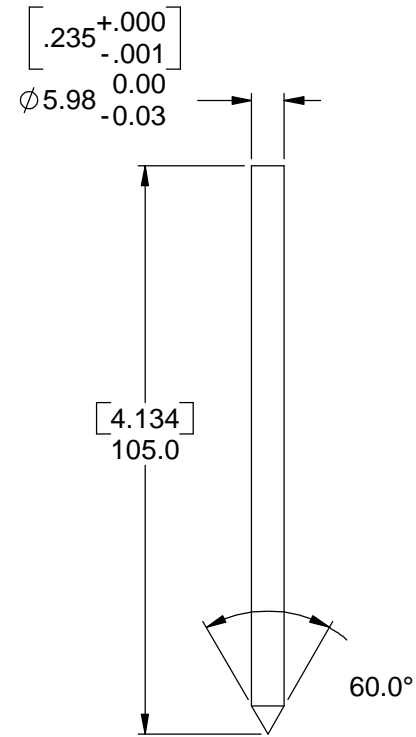
MATERIAL: MILD STEEL	FINISH: 0.80 um	HEAT TREAT: NONE	WEIGHT:
		Manufacturing Solutions Product Design Prototypes P.O. Box 800 - Mt. Aukum - CA 95656 (530) 620-6402 ph - (530) 620-6403 fax massif@designmassif.com	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS TOLERANCES ARE:	APPROVALS	DATE	TITLE
FRACTIONS DECIMALS ANGLES	DRAWN <i>AWR</i>	Nov-2003	Drill Jig, SM Crankcase
.X = ± .25 ± 0° 30"	CHECKED		
CAD GENERATED DRAWING, DO NOT MANUALLY UPDATE	DO NOT SCALE DRAWING	SCALE 3:4	REV A0
			SHEET 1 OF 2

PROPRIETARY NOTICE

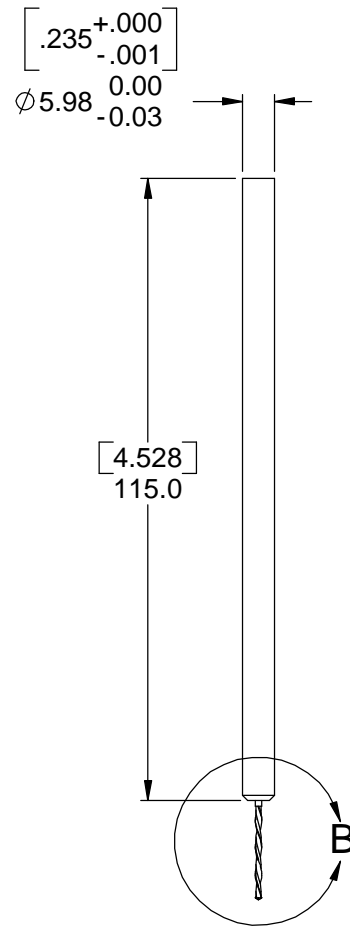
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REVISION HISTORY

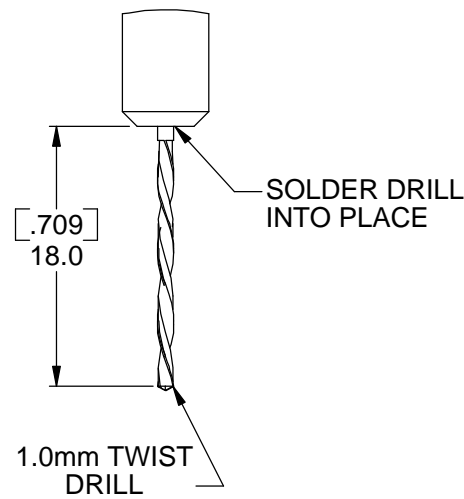
REV	LOC	DESCRIPTION	DATE	APPROVED



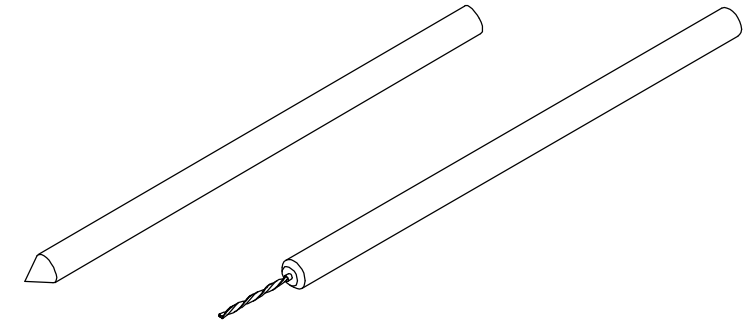
**PUNCH TOOL
(HARDENED)**



**DRILL IN
HOLDER**



**DETAIL B
SCALE 2 : 1**



NOTES:

- PLEASE REFER TO SHEET 1 FOR MAIN NOTES
- USE PUNCH TOOL GENTLY TO ALLOW FOR A SUITABLE STARTING PLACE TO DRILL, AS WORKING AT SUCH A STEEP ANGLE CAN BE PROBLEMATIC.
- THE SPEC'D DRILL SIZE IS VERY SMALL - TAKE GREAT CARE WHEN DRILLING, AS IT IS VERY EASY TO BREAK A DRILL BIT OF THIS SMALL SIZE. USE A HIGH SPEED DRILL, OR IT IS POSSIBLE TO DRILL THE HOLE BY HAND IN APPROX 10 MINUTES.
- TOTAL DRILL DISTANCE TO BREAK THRU POINT INTO OIL GALLEY IS APPROX 7 to 9mm.
- IF PERFORMING MODIFICATION TO A BUILT-UP ENGINE, CARE SHOULD BE TAKEN TO CONTAIN ANY SWARF/CHIPS CREATED BY THE DRILLING PROCESS. DRILL PART WAY, THEN GREASE THE DRILL BIT SO THAT SWARF WILL STICK TO IT. ANOTHER POSSIBILITY IS TO REMOVE THE INTER-SHAFT AND PLACE A SOME TISSUE INTO THE OIL GALLEY, THEN DRILL THE HOLE, THEN REMOVE THE TISSUE, EFFECTIVELY CLEANING THE OIL GALLEY.
- USE SAFETY GLASSES!!!

METRIC DRAWING

MATERIAL: AS SHOWN	FINISH: 0.80 um	HEAT TREAT: NONE	WEIGHT:
		Manufacturing Solutions Product Design Prototypes P.O. Box 800 - Mt. Aukum - CA 95656 (530) 620-6402 ph - (530) 620-6403 fax massif@designmassif.com	
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.X = ± .25 ± 0°30"	CHECKED		
CAD GENERATED DRAWING, DO NOT MANUALLY UPDATE	QUAL ENG		
DO NOT SCALE DRAWING	SCALE 3 : 4	DWG. MR630-67	REV A0
		SHEET 2 OF 2	