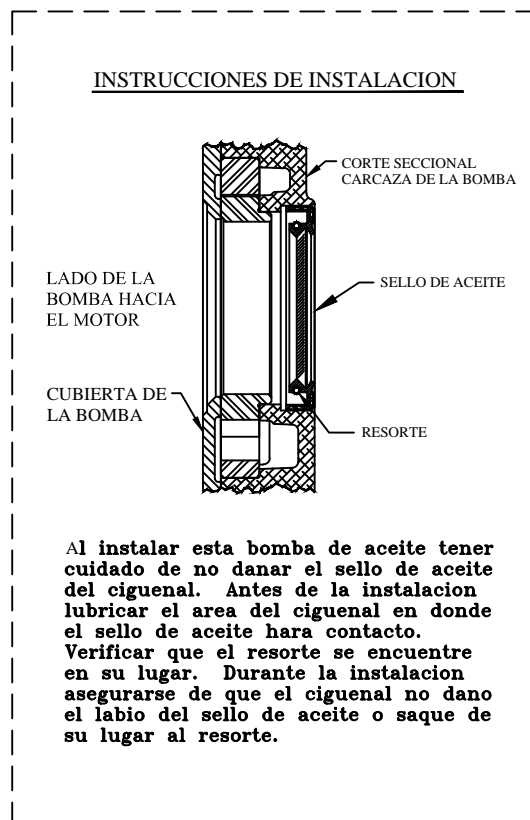


When installing this oil pump take care not to damage the crankshaft oil seal. Before installation lubricate the area of the crankshaft where the oil seal will make contact. Verify that the garter spring is in place. During installation make sure the crankshaft does not damage the oil seal lip or dislodge the garter spring.

FRONT



Al instalar esta bomba de aceite tener cuidado de no danar el sello de aceite del ciguenal. Antes de la instalacion lubricar el area del ciguenal en donde el sello de aceite hara contacto. Verificar que el resorte se encuentre en su lugar. Durante la instalacion asegurarse de que el ciguenal no dano el labio del sello de aceite o saque de su lugar al resorte.

BACK

SUPERSEDES ALL PRINTS PRIOR TO THIS DATE: _____

ENGINEERING APPROVAL OF FIRST PRODUCTION SHIPMENT FROM EACH SUPPLIER IS REQUIRED PRIOR TO AUTHORIZATION FOR USE ON MELLING PRODUCTION. NEW SAMPLES REQUIRED BEFORE ANY CHANGE IN PRODUCTION PROCESSING FOR ENGINEERING FUNCTIONAL TEST AND APPROVAL.

DO NOT SCALE DRAWING

UNLESS OTHERWISE SPECIFIED THE FOLLOWING TOLERANCES APPLY:

METRIC DIMENSIONS

±.25 ALLOWED ON ONE PLACE DECIMALS
±.13 ALLOWED ON TWO PLACE DECIMALS
±.013 ALLOWED ON THREE PLACE DECIMALS
±0°30' ON ANGULAR DIMENSIONS.

ENGLISH DIMENSIONS

±.015 ALLOWED ON ONE PLACE DECIMALS
±.010 ALLOWED ON TWO PLACE DECIMALS
±.005 ALLOWED ON THREE PLACE DECIMALS
±.0005 ALLOWED ON FOUR PLACE DECIMALS
±0°30' ON ANGULAR DIMENSIONS.

MATERIAL:
White Paper: 2.75" Wide x 4.24" High

C	3/19/14	WAS 4.25" x 5.50"	4023	--
B	10/13/03	REMOVED TEXT	2904	--
A	3/25/03	CORRECTED SPANISH VERSION	2688	--
-	11/22/99	NEW RELEASE	2257	--
LTR	DATE	REVISION	ECR	LOC

THE FOLLOWING ITEMS APPLY UNLESS OTHERWISE SPECIFIED: FOR FEATURES OF SIZE, PERFECT STRAIGHTNESS NOT REQUIRED AT MMC. FOR DIAMETRAL FEATURES, ROUNDNESS, MUST BE WITHIN THE MMC. AND LMC(LEAST MATERIAL CONDITION) BOUNDARY. TRUE POSITION TOLERANCES, AND RELATED DATUMS(EXCEPT PLANE SURFACES), APPLY AT MMC. OTHER GEOMETRIC TOLERANCES, AND RELATED DATUMS, APPLY AT RFS. SEPARATE TRUE POSITION CALLOUTS MAY BE GAGED SEPARATELY, REGARDLESS OF DATUM REFERENCE.

GEOMETRIC DRAWING SYMBOLS

≡ FLAT	⊕ TRUE POSITION	○ ROUND	∠ CYLINDRICAL
— STRAIGHT	↗ RUNOUT	∠ ANGULAR	⊙ CONCENTRIC
⊥ SQUARE	∅ DIAMETER	≡ SYMMETRICAL	— PROFILE OF A LINE
// PARALLEL	△ PROFILE OF SURFACE	Ⓜ MAXIMUM MATERIAL CONDITION(MMC)	Ⓧ BASIC DIMENSION
Ⓜ MAXIMUM MATERIAL CONDITION(MMC)	Ⓧ BASIC DIMENSION	Ⓡ REGARDLESS OF FEATURE SIZE	(xxx) REFERENCE
Ⓡ REGARDLESS OF FEATURE SIZE	Ⓧ BASIC DIMENSION	Ⓢ PROJECTED TOLERANCE ZONE	

MELLING TOOL COMPANY

P.O. BOX 1188, JACKSON, MICHIGAN 49204



ENGINE COMPONENTS
PRODUCT ENGINEERING



REF. M191	SHT. 1 OF 1
DRAWN BY MJO	COMPLETED 11/22/99
CHECKED KDS	APPROVED 11/22/99
SCALE DO NOT SCALE	TOLERANCES NOT OTHERWISE SPECIFIED
	MACHINED DIM.±
	ANGULAR DIM.±
MATERIAL	APP. MJO
SEE NOTE	DATE 10/20/03
NAME SHEET-INSTALLATION	
PART NO. M19115	