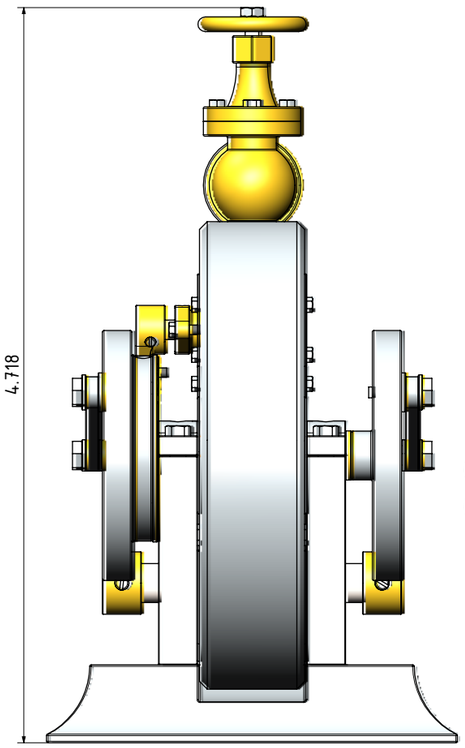
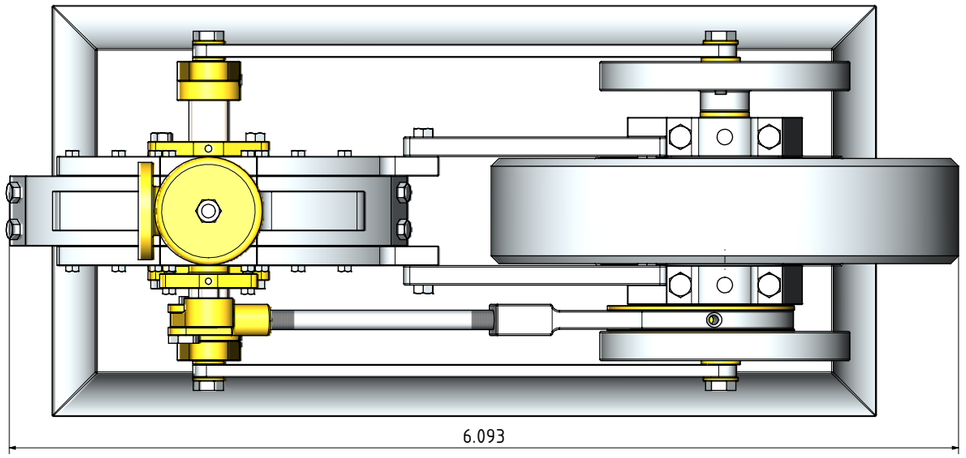
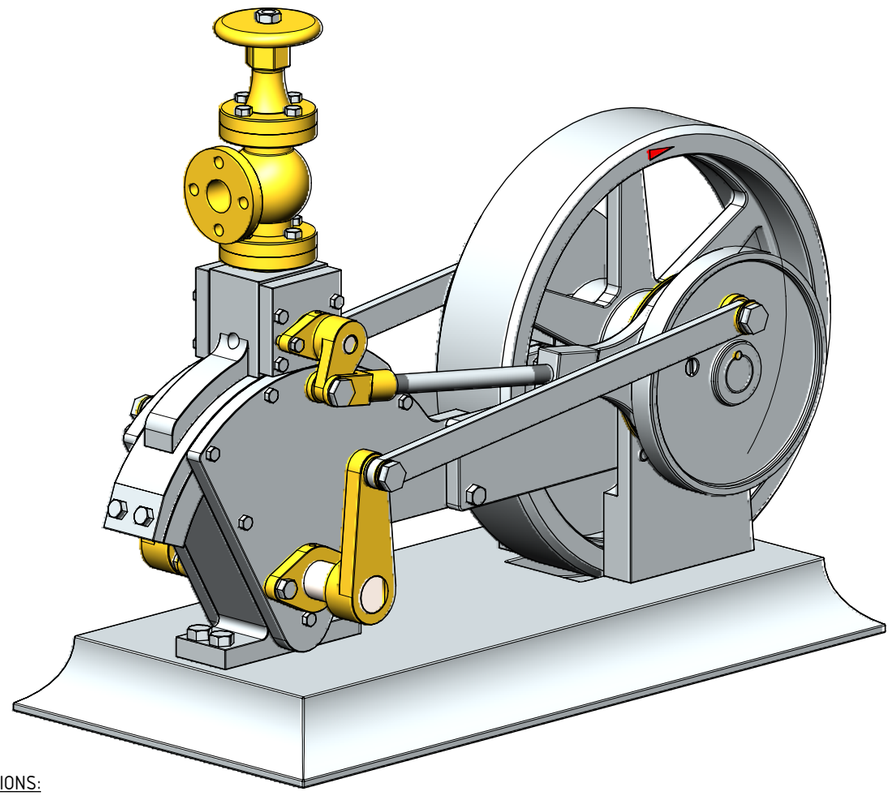
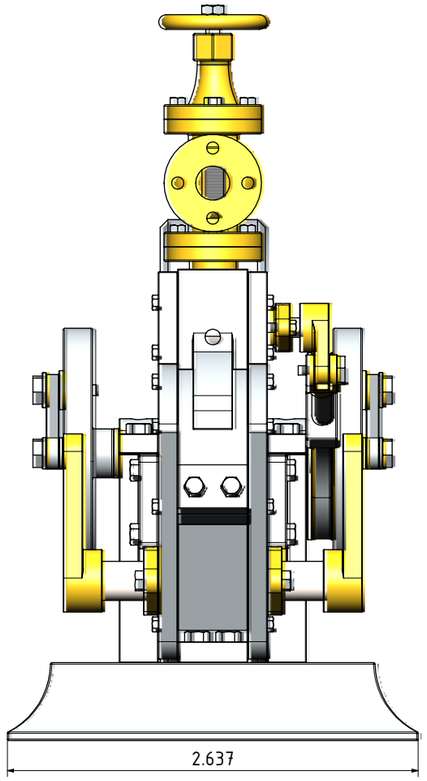
QTY.	PART NUMBER
1	KIMBLE-1-01-BASE PLATE
1	KIMBLE-1-02-CRANKSHAFT BEARING
1	KIMBLE-1-02-CRANKSHAFT BEARING
1	KIMBLE-1-03-CYLINDER FRAME
2	KIMBLE-1-04-CYLINDER SIDE PLATE
2	KIMBLE-1-05-CYLINDER TIE PLATE
1	KIMBLE-1-06-VALVE CHAMBER BLIND PLATE
1	KIMBLE-1-07-VALVE CHAMBER SHAFT PLATE
1	KIMBLE-1-08-VALVE SHAFT GLAND
2	KIMBLE-1-09-ROCKING PISTON SHAFT GLAND
1	KIMBLE-1-10-STEAM SUPPLY VALE BODY
1	KIMBLE-2-01-ROCKING PISTON
1	KIMBLE-2-02-CRANKSHAFT+FLYWHEEL
1	KIMBLE-2-03-ECCENTRIC SHEAVE
1	KIMBLE-2-04-ROCKNIG VALVE
2	KIMBLE-2-05-CON ROD
1	KIMBLE-2-06-ECCENTRIC STRAP

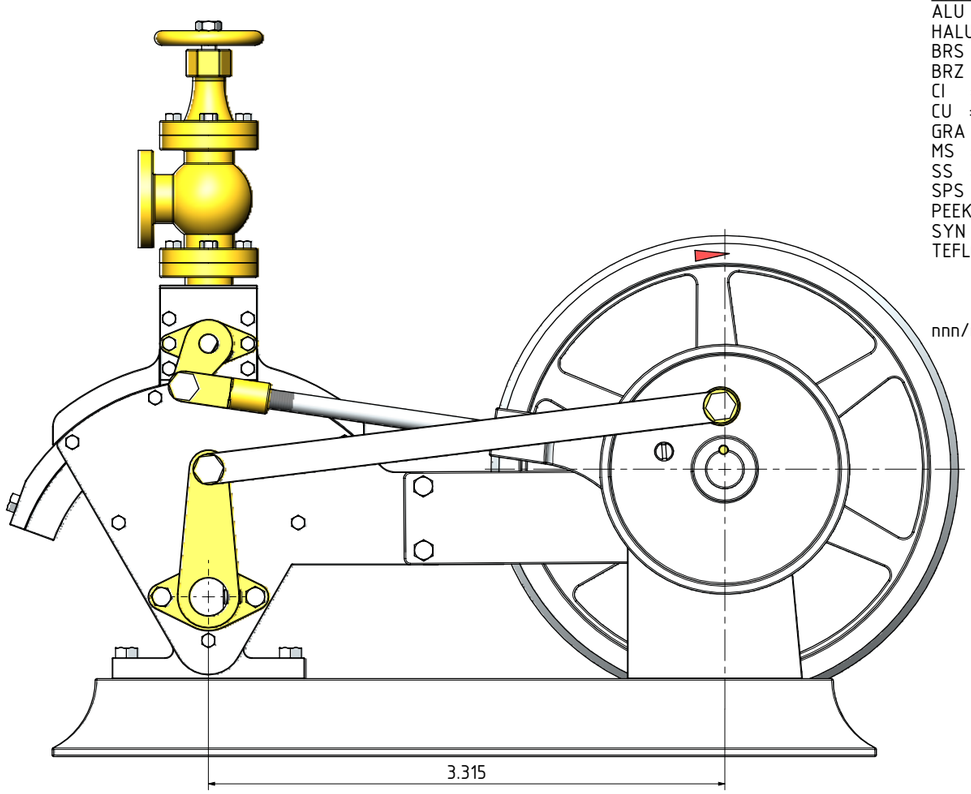
QTY.	PART NUMBER
22	KIMBLE-#1-72UNFx0.22 HEX BOLT
2	KIMBLE-#1-72UNFx0.25 HEX BOLT
1	KIMBLE-#2-62UNFx0.11 GRUB SREW
8	KIMBLE-#2-64UNFx0.188 HEX BOLT
1	KIMBLE-#2-64UNFx0.30 HEX BOLT
4	KIMBLE-#3-65UNFx0.31 HEX BOLT
1	KIMBLE-#4-40UNC NUT
8	KIMBLE-#4-40UNCx0.25 HEX BOLT
4	KIMBLE-#4-40UNCx0.40 HEX BOLT
2	KIMBLE-#4-48UNFx0.10 GRUB SREW
4	KIMBLE-#5-40UNC NUT
4	KIMBLE-#5-40UNCx0.31 HEX BOLT
8	KIMBLE-#5-40UNCx0.50 HEX BOLT
2	KIMBLE-IMP-1-16x0.16 C-SINK SCREW
1	KIMBLE-IMP-1-16x0.31 C-SINK SCREW











MATERIAL ABBREVIATIONS:
ALU = ALUMINIUM
HALU= HARD ALUMINIUM
BRS = BRASS
BRZ = BRONZE OR GUNMETAL (BRZ/GM)
CI = CAST IRON
CU = COPPER
GRA = GRAPHITE
MS = MILD STEEL/BRIGHT MILD STEEL
SS = SILVER STEEL OR STAINLESS STEEL
SPS = SPRING STEEL
PEEK= POLYETHER ETHER KETONE
SYN = SYNTHETIC MATERIAL SUCH AS VETON, NYLON, TEFLON OR RUBBER
IN GENERAL SYNTHETIC MATERIALS SOULD BE ABLE TO WITHSTAND THE HEAT AND PRESSURE(S) APPLIED TO THEM.
nnn/nnn MEANS THAT EITHER MATERIAL CAN BE USED

OTHER ABBREVIATIONS
DP = DEEP
DAA= DRILL AFTER ASSEMBLY
D&TAA= DRILL AND TAP AFTER ASSEMBLY
CF = CLOSE FIT (SIZE FOR SIZE)
PF = PRESS FIT
PFAA= PRESS FIT AFTER ASSEMBLY
PCD = PITCH CIRCLE DIAMETER
RM = REAM
HEX = HEXACON, 6SIDED
CP = COMPRESSED
KNL = KNURLED
CSK = COUNTERSINK
PL = PLACES
DWL= DOWEL
SPF= SPOTFACE
(T)HESOP=(TAPPED)HOLES EQUALLY SPACED ON PCD
(T)HESOC=(TAPPED)HOLES EQUALLY SPACED ON CIRCUMFERENCE
SA-xxx = SUB ASSEMBLY-xxx

NOTES:
0. ALL DRAWINGS ARE IN IMPERIAL MEASUREMENTS
1. ALL ENGINEERING PRACTICES SHALL BE APPLIED WITH REGARDS TO HOLE AND SHAFT TOLERANCES.
2. WHERE SCREWS OR BOLTS ARE USED THE CLEARANCE HOLES SHALL BE APPROXIMATELY 5% TO 8% LARGER THAN THE MATCHING TAPPED HOLE.
3. PREFERABLY ALL TAPPED HOLES AND MATCHING SCREWS AND/OR BOLTS TO BE FINE THREAD
4. MATERIALS SPECIFIED ON THE DRAWINGS ARE INDICATIVE ONLY. THE BUILDER CAN MAKE HIS/HER OWN MATERIAL CHOICE.
5. ALL CONNECTIONS/JOINTS WHICH HAVE STEAM PRESSURE APPLIED TO IT SHALL BE SILVER/HARD SOLDERED.
6. COMPRESSION SPRINGS ARE DRAWN IN COMPRESSED STATE (CP), UNCOMPRESSED STATE IS APPROX 40% TO 60% LONGER THEN COMPRESSED STATE.
7. WHERE PREFERRED SCREW OR RIVETED CONNECTIONS CAN BE OMITTED AND PARTS CAN BE BONDED TOGETHER BY USING EITHER HIGH STRENGTH GLUE, EPOXY RESIN, OR SOLDER.
8. PARTS WHICH ARE DIRECTLY EXPOSED TO STEAM AND/OR WATER SHOULD BE CONSTRUCTED USING NON-FERROUS OR NON CORROSIVE MATERIAL SUCH AS BRASS, BRONZE, GUNMETAL, STAINLESS STEEL, COPPER OR MONEL.
9. THE ORDER IN WHICH THE PARTS/COMPONENTS ARE MANUFACTURED AND THE MODEL IS ASSEMBLED IS ENTIRELY LEFT TO THE BUILDER/MODEL MAKER.
10. A COLOUR SCHEME FOR THIS PROJECT IS ENTIRELY LEFT UP TO THE MODEL MAKER.
11. THE MANNER IN WHICH THE PARTS/COMPONENTS ARE MANUFACTURED IS ENTIRELY LEFT UP TO THE BUILDER.
12. USE LOCTITE, ON SCREW OR PRESS FIT CONNECTIONS OR SURFACES, WERE DEEMED NECESSARY TO PREVENT PARTS FROM LOOSENING.
13. WASHERS AND/OR SPRINGWASHERS SHALL BE USED WHERE DEEMED NECESSARY.
XX. ERRORS AND/OR OMISSIONS MAY OCCUR IN THE DRAWINGS, DO NOT HESITATE TO CONTACT ME SO THAT THE ERRORS/OMISSIONS CAN BE RECTIFIED.

NOTES: THIS DESIGN IS BASED ON DRAWINGS WHICH WERE GIVEN TO ME. THE ORIGINAL DRAWINGS WERE BY Mr. JERRY PONTIUS, DEADWOOD, SOUTH DAKOTA.

TITLE
A MODEL OF A KIMBLE TYPE STEAM ENGINE BY JERRY PONTIUS, DEADWOOD, SOUTH DAKOTA

DRAWING CONTENTS
GENERAL ARRANGEMENT, ISOMETRIC VIEW, BOM, AND NOTES

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E-MAIL: dewaal@xtra.co.nz.

PROJECT No 09E-29-00
PROJECTION
JDWDS
DATE OCTOBER 2018
MODEL SCALE: 1:1
DWG SCALE: 1:1 @A3 OR AS SHOWN

SHEET: 01 OF 03
A3
No: 09E-29-00-SHT01