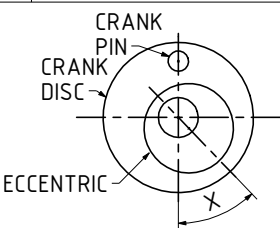


QTY.	PART NUMBER	QTY.	PART NUMBER
1	COFFEEPOT-1-01-UNDER FRAME	10	COFFEEPOT-M3 NUT
1	COFFEEPOT-1-02-R-H MAIN BEARING	10	COFFEEPOT-M3 WASHER
1	COFFEEPOT-1-03-L-H MAIN BEARING	4	COFFEEPOT-M3x8 A-K CYL HEAD SCREW
1	COFFEEPOT-1-04-GEAR SHAFT SUPPORT BRACKET	8	COFFEEPOT-M4 NUT-BRASS
1	COFFEEPOT-1-05-DRIVERS SEAT	22	COFFEEPOT-M4 NUT-STEEL
1	COFFEEPOT-1-06-DRIVERS STEP	1	COFFEEPOT-M4 WASHER
1	COFFEEPOT-1-07-WATERTANK	1	COFFEEPOT-M4 WING NUT
4	COFFEEPOT-1-08-WATERTANK NIPPLE+NUT	2	COFFEEPOT-M4x10 A-K C-SINK SCREW
1	COFFEEPOT-1-09-WATERTANK FILLER CAP	5	COFFEEPOT-M4x10 A-K GRUB SCREW
2	COFFEEPOT-1-10-WATERTANK STOP NUT	4	COFFEEPOT-M4x10 C-SINK SCREW-BRASS
2	COFFEEPOT-1-11-WATERTANK PIPE NUT	2	COFFEEPOT-M4x14 A-K CYL HEAD SCREW
1	COFFEEPOT-1-12-COAL BUNKER	2	COFFEEPOT-M4x20 A-K C-SINK SCREW
1	COFFEEPOT-1-13-COAL BUNKER SUPPORT LEG	2	COFFEEPOT-M4x22 A-K CYL HEAD SCREW
1	COFFEEPOT-1-14-WATER HAND PUMP HOUSING	6	COFFEEPOT-M4x38 STUD
1	COFFEEPOT-1-15-WATER HAND PUMP PISTON	2	COFFEEPOT-M4x42 STUD
1	COFFEEPOT-1-16-WATER HAND PUMP HANDLE	26	COFFEEPOT-M5 NUT
2	COFFEEPOT-1-17-WATER HAND PUMP LINK	4	COFFEEPOT-M5 WASHER
1	COFFEEPOT-1-18-ASHPAN	4	COFFEEPOT-M5x8 PAN HEAD SCREW-BRASS
1	COFFEEPOT-1-19-MECH. WATER PUMP HOUSING	9	COFFEEPOT-M5x10 A-K CYL HEAD SCREW
1	COFFEEPOT-1-20-WATER BYPASS VALVE	17	COFFEEPOT-M5x12 A-K CYL HEAD SCREW
1	COFFEEPOT-1-21-WATER HAND PUMP PIPE-1	12	COFFEEPOT-M5x16 A-K CYL HEAD SCREW
1	COFFEEPOT-1-22-MECH PUMP WATER SUPPLY PIPE	10	COFFEEPOT-M5x24 A-K CYL HEAD SCREW
2	COFFEEPOT-1-23-STEERING SPINDLE BEARING BRACKET	4	COFFEEPOT-M5x32 A-K CYL HEAD SCREW
1	COFFEEPOT-2-01-BOILER SHELL	19	COFFEEPOT-M6 NUT
1	COFFEEPOT-2-02-FIRE BOX DOOR	2	COFFEEPOT-M6 WASHER
12	COFFEEPOT-2-03-BOILER NIPPLE	17	COFFEEPOT-M6x14 A-K CYL HEAD SCREW
2	COFFEEPOT-2-03-BOILER NIPPLE	17	COFFEEPOT-M6x16 A-K CYL HEAD SCREW
21	COFFEEPOT-2-04-BOILER TUBE	4	COFFEEPOT-M6x20 A-K CYL HEAD SCREW
1	COFFEEPOT-2-05-BLOWN DOWN VALVE	6	COFFEEPOT-M6x24 A-K CYL HEAD SCREW
2	COFFEEPOT-2-06-NON RETURN VALVE	3	COFFEEPOT-M6x30 A-K CYL HEAD SCREW
2	COFFEEPOT-2-07-SAFETY VALVE	3	COFFEEPOT-M8 NUT
1	COFFEEPOT-2-08-WATER LEVEL GAUGE	1	COFFEEPOT-M8 WASHER
1	COFFEEPOT-2-09--PRESSURE GAUGE	1	COFFEEPOT-M8x16 A-K CYL HEAD SCREW
1	COFFEEPOT-2-10-STEAM SUPPLY MANIFOLD		
3	COFFEEPOT-2-11-STEAM SUPPLY VALVE		
1	COFFEEPOT-2-12-BYPASS PIPE-1		
1	COFFEEPOT-2-13-BYPASS PIPE-2		
1	COFFEEPOT-2-14-HAND PUMP DELIVERY PIPE		
5	COFFEEPOT-2-15-BOILER PLUG		
1	COFFEEPOT-2-16-BLOWER PIPE		
1	COFFEEPOT-2-17-LUBRICATOR		
1	COFFEEPOT-3-01-ENGINE FRAME WORK		
2	COFFEEPOT-3-02-CROSSHEAD GUIDE		
2	COFFEEPOT-3-03-CRANK SHAFT BEARING		
1	COFFEEPOT-3-04-CYLINDER+VALVE CHEST		
1	COFFEEPOT-3-04-CYLINDER+VALVE CHEST		
2	COFFEEPOT-3-05-CYLINDER TOP COVER		
2	COFFEEPOT-3-06-CYLINDER BOTTOM COVER		
6	COFFEEPOT-3-07-CYLINDER DRAIN VALVE PLUG		
2	COFFEEPOT-3-08-CYLINDER EXHAUST PLUG		
2	COFFEEPOT-3-10-VALVE CHEST STEAM INLET NIPPLE		
1	COFFEEPOT-3-11-REVERSING SHAFT BRACKET		
1	COFFEEPOT-3-12-LH-CYLINDER STEAM EXHAUST PIPE		
1	COFFEEPOT-3-13-RH-CYLINDER STEAM EXHAUST PIPE		
1	COFFEEPOT-3-14-CYLINDERS STEM SUPPLY PIPE-1		
1	COFFEEPOT-3-15-REVERSING HANDLE GUIDE PLATE		
1	COFFEEPOT-4-01-STEERING ROLLER FRAME		
2	COFFEEPOT-4-02-STEERING ROLLER DRUM		
1	COFFEEPOT-4-03-STEERING SHAFT		
1	COFFEEPOT-4-04-STEERING WHEEL+SPINDLE		
1	COFFEEPOT-4-05-FRONT ROLLER DRUM+SHAFT		
1	COFFEEPOT-4-06-INTERMEDIATE GEAR SHAFT		
1	COFFEEPOT-4-07-CRANKSHAFT		
2	COFFEEPOT-4-08-PISTON+CROSSHEAD		
2	COFFEEPOT-4-09-CON-ROD		
2	COFFEEPOT-4-10-ECCENTRIC SHEAVE		
2	COFFEEPOT-4-10-ECCENTRIC SHEAVE		
2	COFFEEPOT-4-11-SLIDE VALVE+ SPINDLE		
2	COFFEEPOT-4-12-ECCENTRIC STRAP		
2	COFFEEPOT-4-12-ECCENTRIC STRAP		
2	COFFEEPOT-4-13-EXPANSION LINK		
2	COFFEEPOT-4-14-EXPANSION LINK DIE BLOCK		
1	COFFEEPOT-4-15-REVERSER LEVER+SHAFT		
2	COFFEEPOT-4-16-REVERSER LEVER LINK		
1	COFFEEPOT-4-17-MECH WATER PUMP PISTON		
1	COFFEEPOT-4-18-MECH. WTR. PMP.ECCENTRIC SHEAVE		
1	COFFEEPOT-4-19-MECH. WTR. PMP.ECCENTRIC STRAP		

QTY.	PART NUMBER
10	COFFEEPOT-M3 NUT
10	COFFEEPOT-M3 WASHER
4	COFFEEPOT-M3x8 A-K CYL HEAD SCREW
8	COFFEEPOT-M4 NUT-BRASS
22	COFFEEPOT-M4 NUT-STEEL
1	COFFEEPOT-M4 WASHER
1	COFFEEPOT-M4 WING NUT
2	COFFEEPOT-M4x10 A-K C-SINK SCREW
5	COFFEEPOT-M4x10 A-K GRUB SCREW
4	COFFEEPOT-M4x10 C-SINK SCREW-BRASS
2	COFFEEPOT-M4x14 A-K CYL HEAD SCREW
2	COFFEEPOT-M4x20 A-K C-SINK SCREW
2	COFFEEPOT-M4x22 A-K CYL HEAD SCREW
6	COFFEEPOT-M4x38 STUD
2	COFFEEPOT-M4x42 STUD
26	COFFEEPOT-M5 NUT
4	COFFEEPOT-M5 WASHER
4	COFFEEPOT-M5x8 PAN HEAD SCREW-BRASS
9	COFFEEPOT-M5x10 A-K CYL HEAD SCREW
17	COFFEEPOT-M5x12 A-K CYL HEAD SCREW
12	COFFEEPOT-M5x16 A-K CYL HEAD SCREW
10	COFFEEPOT-M5x24 A-K CYL HEAD SCREW
4	COFFEEPOT-M5x32 A-K CYL HEAD SCREW
19	COFFEEPOT-M6 NUT
2	COFFEEPOT-M6 WASHER
17	COFFEEPOT-M6x14 A-K CYL HEAD SCREW
17	COFFEEPOT-M6x16 A-K CYL HEAD SCREW
4	COFFEEPOT-M6x20 A-K CYL HEAD SCREW
6	COFFEEPOT-M6x24 A-K CYL HEAD SCREW
3	COFFEEPOT-M6x30 A-K CYL HEAD SCREW
3	COFFEEPOT-M8 NUT
1	COFFEEPOT-M8 WASHER
1	COFFEEPOT-M8x16 A-K CYL HEAD SCREW



THE OFF SET ANGLE OF THE ECCENTRIC IN RELATION TO THE CRANK AXIS TO BE EXPERIMENTALLY DETERMINED FOR THE SMOOTH RUNNING OF THE ENGINE AND SATISFACTION OF THE BUILDER

#### NOTES:

- ALL DRAWINGS ARE IN METRIC MEASUREMENTS
- ALL ENGINEERING PRACTICES SHALL BE APPLIED WITH REGARDS TO HOLE AND SHAFT TOLERANCES.
- WHERE SCREWS OR BOLTS ARE USED THE CLEARANCE HOLES SHALL BE APPROXIMATELY 5% TO 8% LARGER THAN THE MATCHING TAPPED HOLE.
- PREFERABLY ALL TAPPED HOLES AND MATCHING SCREWS AND/OR BOLTS TO BE METRIC FINE (MF)
- MATERIALS SPECIFIED ON THE DRAWINGS ARE INDICATIVE ONLY. THE BUILDER CAN MAKE HIS/HER OWN MATERIAL CHOICE.
- ALL CONNECTIONS/JOINTS WHICH HAVE STEAM PRESSURE APPLIED TO IT SHALL BE SILVER/HARD SOLDERED.
- COMPRESSION SPRINGS ARE DRAWN IN COMPRESSED STATE (CP), UNCOMPRESSED STATE IS APPROX 40% TO 60% LONGER THEN COMPRESSED STATE.
- 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.
- 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.
- THE ORDER IN WHICH THE PARTS/COMPONENTS ARE MANUFACTURED AND THE MODEL IS ASSEMBLED IS ENTIRELY LEFT TO THE BUILDER/MODEL MAKER.
- A COLOUR SCHEME FOR THIS PROJECT IS ENTIRELY LEFT UP TO THE MODEL MAKER.
- THE MANNER IN WHICH THE PARTS/COMPONENTS ARE MANUFACTURED IS ENTIRELY LEFT UP TO THE BUILDER.
- USE LOCTITE, ON SCREW OR PRESS FIT CONNECTIONS OR SURFACES, WERE DEEMED NECESSARY TO PREVENT PARTS FROM LOOSENING.
- WASHERS AND/OR SPRING WASHERS SHALL BE USED WHERE DEEMED NECESSARY.
- INQUIRE AT THE APPROPRIATE AUTHORITIES WHETHER OR NOT THIS BOILER REQUIRE A PRESSURE TEST CERTIFICATE.
- XX. ERRORS AND/OR OMISSIONS MAY OCCUR IN THE DRAWINGS, DO NOT HESITATE TO CONTACT ME SO THAT THE ERRORS/OMISSIONS CAN BE RECTIFIED.

#### IMPORTANT NOTE:

**BEFORE STARTING: IT IS STRONGLY ADVISED THAT THE BOILER AS SHOWN ON THESE DRAWINGS SHOULD BE INSPECTED BY AN AUTHORISED PROFESSIONAL ENGINEER AND THE WORKING AND MAXIMUM BOILER PRESSURE TO BE CALCULATED.**

**MAKE SURE THE BOILER FULLY COMPLIES WITH THE LOCAL RULES AND REGULATIONS OF MODEL BOILERS.**  
**A COMPLIANCE AND SAFETY/TEST CERTIFICATE SHOULD BE OBTAINED.**

#### 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: THIS DESIGN IS LOOSELY BASED ON DRAWINGS AND ARTICLE WHICH I FOUND A LONG TIME AGO IN ONE OF THE "MODELBOUWER" MAGAZINES 4(2002) ALSO FOUND SOME PRINTS AND PICTURES ON THE INTERNET. THE ORIGINAL DESIGN WAS BY Mr BILL HARRIS. (USA)

TITLE  
**A MODEL OF A COAL FIRED TANDEM STEAM ROLLER (ALSO CALLED "COFFEEPOT")**

DRAWING CONTENTS  
**ISOMETRIC VIEWS, NOTES AND BILL OF MATERIALS**

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PROJECTION  
DATE OCTOBER 2018  
SHEET: 02 OF 10  
JDWDS  
Copyright © J.A.M. DE WAAL PAKAPURA NZ  
A3  
No: 08-12-00-SHT02

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