

QTY.	PART NUMBER
1	09E-54-01-1-01-BASE PLATE+ENGINE PLATFORM
6	09E-54-01-1-02-PILLAR
1	09E-54-01-1-03-BEAM BEARING PLATFORM
2	09E-54-01-1-04-CRANKSHAFT BEARING)
1	09E-54-01-1-05-CYLINDER-PUMP MOUNTING FRAME
1	09E-54-01-1-06-CYLINDER
1	09E-54-01-1-07-WATER PUMP BODY
1	09E-54-01-1-08-WATER PUMP AIR VESSEL
1	09E-54-01-1-09-WATER BY-PASS VALVE
1	09E-54-01-1-10-STEAM INLET VALVE
1	09E-54-01-1-11-GOVERNOR BASE BODY
1	09E-54-01-1-12-GOVERNOR DRIVE BELT BRACKET
1	09E-54-01-1-13-GOVERNOR DRIVE BELT IDLER BRACKET
1	09E-54-01-1-14-PARALLEL LINK BEARING
2	09E-54-01-1-15-BEAM BEARING
1	09E-54-01-2-01-CRANKSHAFT+FLYWHEEL
1	09E-54-01-2-02-ECCENTRIC
1	09E-54-01-2-03-BALANCED BEAM
1	09E-54-01-2-04-CON-ROD
2	09E-54-01-2-05-PARALLEL ROD
1	09E-54-01-2-06-PARALLEL LINK
1	09E-54-01-2-07-PISTON+CROSSHEAD
2	09E-54-01-2-08-CROSSHEAD LINK
1	09E-54-01-2-09-SLIDE VALVE
1	09E-54-01-2-10-ECCENTRIC STRAP
1	09E-54-01-2-11-VALVE ROCKER SHAFT
2	09E-54-01-2-12-VALVE LINK ROD
1	09E-54-01-2-13-GOVERNOR DRIVING SHAFT
2	09E-54-01-2-14-GOVERNOR DRIVING IDLER SHEAVE
1	09E-54-01-2-15-DRIVING BELT
1	09E-54-01-2-16-GOVERNOR DRIVEN SHAFT
2	09E-54-01-2-17-GOVERNOR FLY WEIGHT
1	09E-54-01-2-18-GOVERNOR MOVING COLLAR
2	09E-54-01-2-19-GOVERNOR COLLAR LINK
1	09E-54-01-2-20-GOVERNOR CONTROL SHAFT
1	09E-54-01-2-21-STEAM CONTROL FLAP
1	09E-54-01-2-22-CONTROL LINK ROD
1	09E-54-01-2-23-LINK ELBOW

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. ALL TAPPED HOLES AND MATCHING SCREWS AND/OR BOLTS TO BE DETERMINED BY THE BUILDER (BA, UNC, UNF)
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.
ADDITIONAL NOTES ABOUT THESE DRAWINGS:
1) NO MATERIALS HAVE BEEN SPECIFIED ON THESE DRAWINGS. THE BUILDER TO CHOOSE ITS OWN PREFERRED MATERIAL FOR THE PARTS/COMPONENTS. THE FOLLOWING COLOURS ON THE DRAWINGS INDICATES POSSIBLE MATERIALS WHICH CAN BE USED FOR PARTS: THE COLOURED COMPONENTS COULD BE ALUMINIUM OR MILD STEEL, YELLOW=BRASS, LIGHT GREY=ALUMINIUM OR MILD STEEL, REDDISH BROWN=COPPER, DARK BROWN=BRONZE OR GUN METAL, WHITISH-SILVER STEEL OR STAINLESS STEEL
2) THE THREAD OF THE TAPPED HOLES AND SHAFTS TO BE DETERMINED BY THE BUILDER. TAPPED HOLES AND THREADED SHAFT ARE INDICATED BY THE LETTER "T"

NOTES: FOUND A SINGLE DRAWING OF THIS ENGINE AND SOME PICTURES ON THE INTERNET. SOME PICTURES WERE PUBLISHED ON THE "MODELENGINEERINGWEBSITE" WEBSITE

TITLE
1 CYLINDER NON REVERSING BALANCED BEAM PUMPING ENGINE NAMED "LADY STEPHANIE"

DRAWING CONTENTS
ISOMETRIC VIEW, PARTS AND ASSEMBLIES, NOTES, B.O.M.

PROJECT No 09E-54-01
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PROJECTION	JDWDS	MODEL SCALE: 1:1
DATE	OCTOBER 2021	DWG SCALE: 1:1 @A3 OR AS SHOWN
SHEET: 02 OF 07	A3	Copyright © J.A.M. DE WAAL PAKAPURA NZ
No: 09E-54-01-SHT02		

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