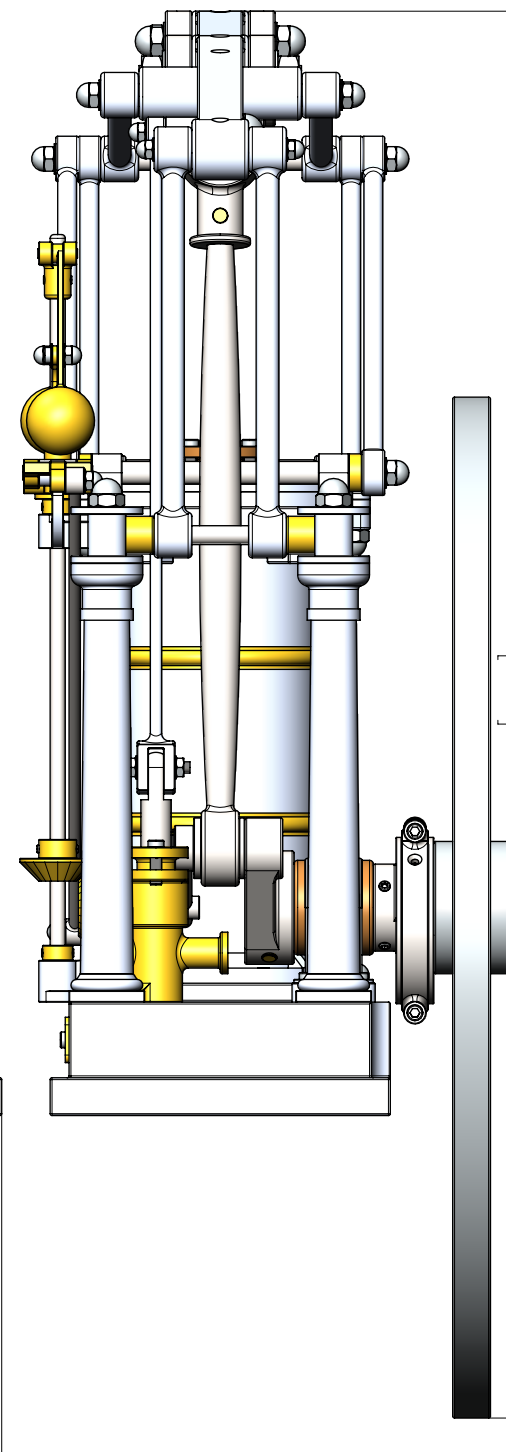
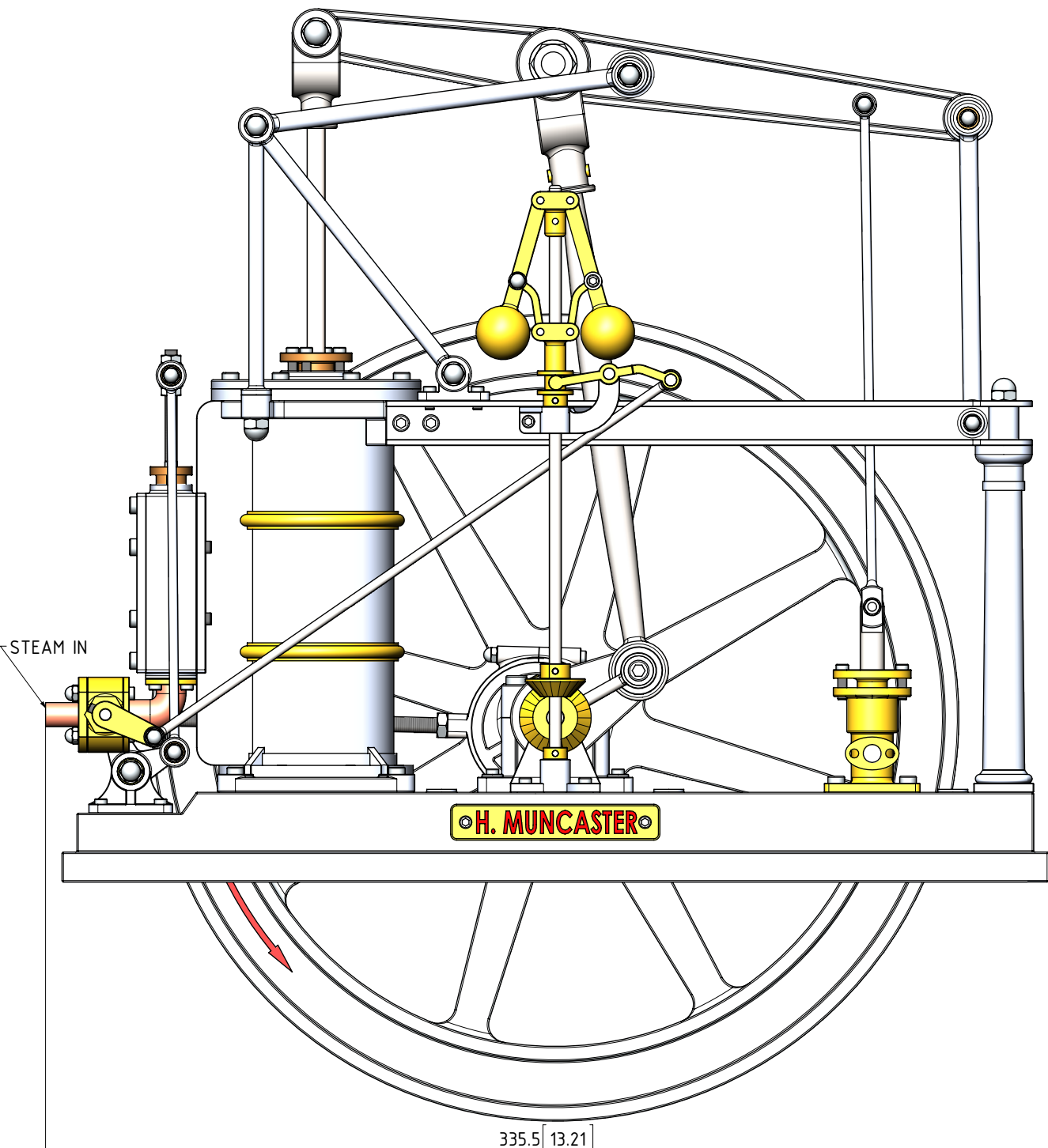
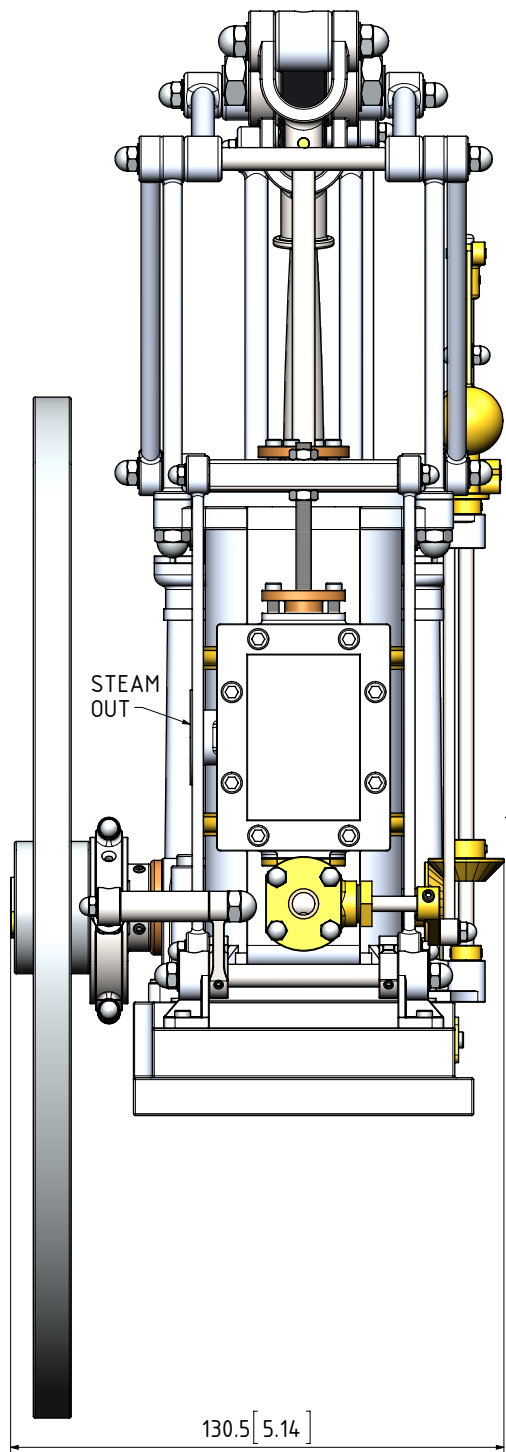
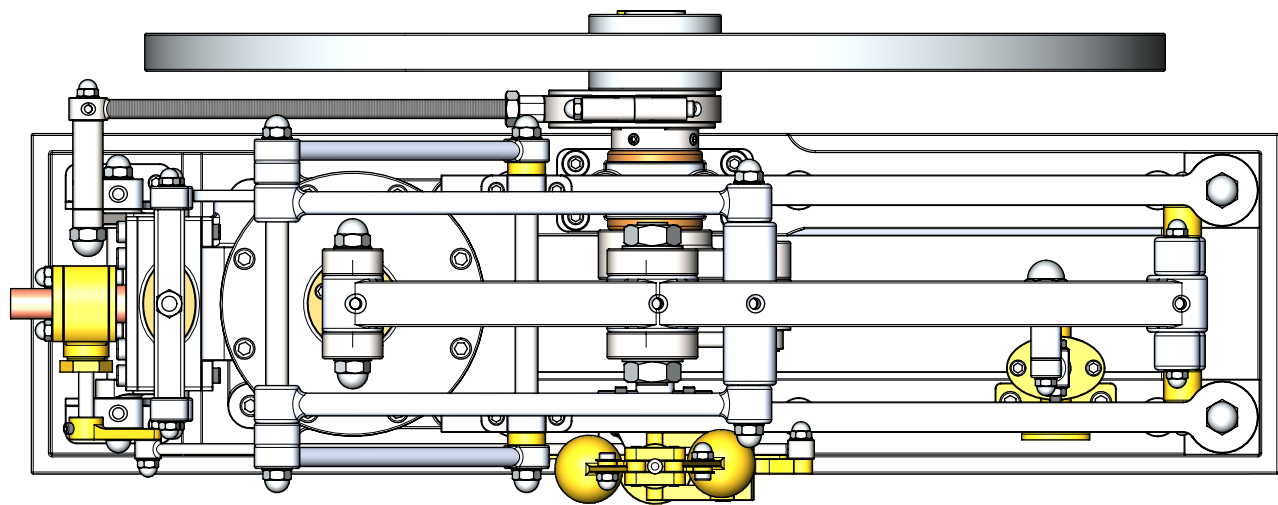




QTY.	PART NUMBER
1	MUNCASTER10.1-1-01-BASE BED PLATE
1	MUNCASTER10.1-1-02-MAIN BEARING BLOCK
2	MUNCASTER10.1-1-03-SUPPORT COLUMN
1	MUNCASTER10.1-1-04-GOVERNOR GEAR BEARING BRACKET
1	MUNCASTER10.1-1-05A-CYLINDER BASE PLATE
1	MUNCASTER10.1-1-05B-CYLINDER
1	MUNCASTER10.1-1-05C-CYLINDER PORT BLOCK
2	MUNCASTER10.1-1-05D-CYLINDER TIE RING
1	MUNCASTER10.1-1-06-CYLINDER BEAM MOUNTING BRACKET
1	MUNCASTER10.1-1-07-VALVE CHEST
1	MUNCASTER10.1-1-08-VALVE ROD GLAND
1	MUNCASTER10.1-1-09-INPUT STEAM REGULATOR HOUSING
2	MUNCASTER10.1-1-10-ECC STRAP BEARING BRACKET
1	MUNCASTER10.1-1-11-U-BEAM
1	MUNCASTER10.1-1-11-U-BEAM
2	MUNCASTER10.1-1-12-FIXED TOP STAY-1
2	MUNCASTER10.1-1-13-STAY-2 MOUNTING BLOCK
2	MUNCASTER10.1-1-14-FIXED STAY-2
1	MUNCASTER10.1-1-15-STAY-2 LOWER CROSS SHAFT
1	MUNCASTER10.1-1-16-STAY-1 UPPER CROSS SHAFT
1	MUNCASTER10.1-1-17-CYLINDER TOP COVER
1	MUNCASTER10.1-1-18-GOVERNOR UPPER BEARING BRACKET
1	MUNCASTER10.1-1-19-REAR STAY CROSS SHAFT
1	MUNCASTER10.1-1-20-NAME PLATE
1	MUNCASTER10.1-1-21-DUMMY PUMP
1	MUNCASTER10.1-2-01-CRANK SHAFT
1	MUNCASTER10.1-2-02-ECCENTRIC SHEAVE
1	MUNCASTER10.1-2-03-FLYWHEEL
1	MUNCASTER10.1-2-04-PISTON+ROD
1	MUNCASTER10.1-2-05-CON ROD
2	MUNCASTER10.1-2-06-BALANCE BEAM MOVABLE END STAY
1	MUNCASTER10.1-2-07-BALANCE BEAM
2	MUNCASTER10.1-2-08-BALANCE BEAM MOVABLE MID STAY
1	MUNCASTER10.1-2-09-BALANCE BEAM END STAY ROD
1	MUNCASTER10.1-2-10-BALANCE BEAM MID STAY ROD
1	MUNCASTER10.1-2-11-ECCENTRIC STRAP
1	MUNCASTER10.1-2-12-VALVE ROD ROCKING SHAFT
1	MUNCASTER10.1-2-13-SLIDE VALVE+ROD
2	MUNCASTER10.1-2-14-SLIDE VALVE CON-ROD
1	MUNCASTER10.1-2-15-DUMMY PUMP PLUNGER
1	MUNCASTER10.1-2-16-DUMMY PUMP CON-ROD
1	MUNCASTER10.1-2-17-GOVERNOR DRIVEN SHAFT+GEAR
1	MUNCASTER10.1-2-18-GOVERNOR CRANK
1	MUNCASTER10.1-2-19-GOVERNOR VERTICAL SPINDLE
1	MUNCASTER10.1-2-20-GOVERNOR SLIDING COLLAR
2	MUNCASTER10.1-2-21-GOVERNOR UPPER FLYWEIGHT ARM
2	MUNCASTER10.1-2-22-GOVERNOR LOWER FLYWEIGHT ARM
1	MUNCASTER10.1-2-23-GOVERNOR CONTROL YOKE
1	MUNCASTER10.1-2-24-STEAM SUPPLY CONTROL VALVE
1	MUNCASTER10.1-2-25-STEAM SUPPLY CONTROL ROD
2	MUNCASTER10.1-M2.5x12 A-K GRUB SCREW
21	MUNCASTER10.1-M3 DOME NUT
4	MUNCASTER10.1-M3 NUT
18	MUNCASTER10.1-M3 WASHER
5	MUNCASTER10.1-M3x4 A-K GRUB SCREW
8	MUNCASTER10.1-M3x6 A-K CYL HEAD SCREW
2	MUNCASTER10.1-M3x8 A-K CYL HEAD SCREW
8	MUNCASTER10.1-M3x9 A-K C-SINK SCREW
12	MUNCASTER10.1-M3x10 A-K CYL HEAD SCREW
10	MUNCASTER10.1-M3x14 A-K CYL HEAD SCREW
5	MUNCASTER10.1-M3x20 A-K CYL HEAD SCREW
2	MUNCASTER10.1-M3x32 A-K CYL HEAD SCREW
8	MUNCASTER10.1-M4 DOME NUT
2	MUNCASTER10.1-M4 NUT
8	MUNCASTER10.1-M4 WASHER
4	MUNCASTER10.1-M4x8 A-K CYL HEAD SCREW
4	MUNCASTER10.1-M4x10 A-K CYL HEAD SCREW
10	MUNCASTER10.1-M4x13 A-K CYL HEAD SCREW
8	MUNCASTER10.1-M4x25 A-K CYL HEAD SCREW
7	MUNCASTER10.1-M5 DOME NUT
1	MUNCASTER10.1-M5 NUT
3	MUNCASTER10.1-M5 WASHER
1	MUNCASTER10.1-M5x12 A-K CYL HEAD SCREW
2	MUNCASTER10.1-M5x20 A-K CYL HEAD SCREW
2	MUNCASTER10.1-M6 DOME NUT
2	MUNCASTER10.1-M8 NUT
2	MUNCASTER10.1-M8 WASHER

NOTES: THE ORIGINAL DRAWINGS WERE PUBLISHED IN THE "MODEL ENGINEER" MAGAZINE OF FEBTUARY 1957 UNDER THE HEADING OF "THE MUNCASTER STEAM-ENGINE MODELS".

TITLE
1 CYLINDER STEAM ENGINE KNOWN AS A
"GRASSHOPPER" ENGINE BY H.MUNCASTER.

DRAWING CONTENTS
GENERAL ARRANGEMENT AND BILL
OF MATERIALS

PROJECT No 11-10-01
JDW DRAUGHTING SERVICES
J.A.M. DE WAAL, 12 BRIGHTWELL STREET PAPA KURA 2110.
NEW ZEALAND. PHONE: 0064 09 2988815. MOB: 0211791000
E-MAIL: dewaal@xtra.co.nz.

PROJECTION
DATE JULY-2017
SHEET: 01 OF 05
MODEL SCALE: 1:1
DWG SCALE: 1:1 @A3 OR AS SHOWN
Copyright © J.A.M. DE WAAL PAPA KURA NZ
A3 No:MUNCASTER10.1-1