

QTY.	PART NUMBER
2	TOBY-89-M-1-01-SIDE FRAME PLATE
1	TOBY-89-M-1-02-FRONT BUFFER BEAM
1	TOBY-89-M-1-03-REAR BUFFER BEAM
1	TOBY-89-M-1-04-REAR FRAME SPACER
1	TOBY-89-M-1-05-MID FRAME PLATE SPACER
4	TOBY-89-M-1-06-AXLE BOX KEEPER
4	TOBY-89-M-1-07-AXLE BOX
2	TOBY-89-M-1-08-PULLING COUPLING
2	TOBY-89-M-1-09-CYLINDER BLOCK
2	TOBY-89-M-1-10-CYLINDER FRONT COVER
1	TOBY-89-M-1-11A-LH-CYLINDER REAR COVER
1	TOBY-89-M-1-11B-RH-CYLINDER REAR COVER
2	TOBY-89-M-1-12-PISTON ROD GLAND
2	TOBY-89-M-1-13-CROSS HEAD SLIDE BAR
2	TOBY-89-M-1-14-CROSS HEAD SLIDE BAR BRACKET
4	TOBY-89-M-1-15-CYLINDER AUTO DRAINCOCK HOUSING
4	TOBY-89-M-1-16-CYLINDER AUTO DRAINCOCK VALVE
4	TOBY-89-M-1-17-CYLINDER AUTO DRAINCOCK CAP
2	TOBY-89-M-1-18-STEAM VALVE CHEST
2	TOBY-89-M-1-19-STEAM VALVE CHEST COVER
2	TOBY-89-M-1-20-VALVE SPINDLE GLAND
2	TOBY-89-M-1-21-SNIFFER BODY
2	TOBY-89-M-1-22-SNIFFER BALL VALVE
2	TOBY-89-M-1-23-SNIFFER VALVE CAP
1	TOBY-89-M-1-24-WATER FEED PUMP BODY
1	TOBY-89-M-1-25-WATER FEED PUMP TOP FITTING
1	TOBY-89-M-1-26-WATER FEED PUMP BOTTOM FITTING
2	TOBY-89-M-1-27-WATER FEED PUMP BALL VALVE
1	TOBY-89-M-1-28-STEAM INLET MANIFOLD
2	TOBY-89-M-1-29A-STEAM INLET BANJO FITTING
2	TOBY-89-M-1-29B-STEAM EXHAUST BANJO FITTING
1	TOBY-89-M-1-30-STEAM EXHAUST MANIFOLD
1	TOBY-89-M-1-31A-TRAILING TRUCK PIVOT PIN
2	TOBY-89-M-1-31B-TRAILING TRUCK SPRING PILLAR
2	TOBY-89-M-1-32-TRAILING TRUCK SPRING
1	TOBY-89-M-1-33-PULL LINK
4	TOBY-89-M-1-34-COUPLING LINK PIN
4	TOBY-89-M-1-35-PIPE NUT M8x6
1	TOBY-89-M-1-36-LH--FEED WATER SUPPLY PIPE
1	TOBY-89-M-1-36-LH--FEED WATER SUPPLY PIPE
1	TOBY-89-M-1-37-FEED WATER NIPPLE
1	TOBY-89-M-1-39-PIPE STOP NUT M8
2	TOBY-89-M-1-40-ASH TRAY HAND RAIL POST
1	TOBY-89-M-1-41-ASH TRAY HAND RAIL
1	TOBY-89-M-1-42-ASH TRAY
2	TOBY-89-M-2-01-WHEEL AXLE
2	TOBY-89-M-2-02-LEADING WHEEL
2	TOBY-89-M-2-03-DRIVING WHEEL
2	TOBY-89-M-2-04-LEADING WHEEL CRANK PIN
2	TOBY-89-M-2-05-DRIVING WHEEL CRANK PIN
1	TOBY-89-M-2-06-WATER FEED PUMP ECCENTRIC
1	TOBY-89-M-2-07-WATER FEED PUMP ECCENTRIC STRAP
1	TOBY-89-M-2-08-WATER FEED PUMP PLUNGER
2	TOBY-89-M-2-09-COUPLING ROD
2	TOBY-89-M-2-10-COUPLING ROD FRONT BUSH
2	TOBY-89-M-2-11-COUPLING ROD REAR BUSH
2	TOBY-89-M-2-12-CON-ROD
2	TOBY-89-M-2-13-CON-ROD FRONT BUSH
2	TOBY-89-M-2-14-CON-ROD REAR BUSH
2	TOBY-89-M-2-15-PISTON
2	TOBY-89-M-2-16-PISTON ROD
1	TOBY-89-M-2-17-CROSSHEAD
1	TOBY-89-M-2-17-CROSSHEAD
2	TOBY-89-M-2-18-CROSSHEAD PIVOT PIN
2	TOBY-89-M-2-19-SLIDE VALVE
2	TOBY-89-M-2-20-SLIDE VALVE NUT
2	TOBY-89-M-2-21-SLIDE VALVE SPINDLE
2	TOBY-89-M-2-22-SLIDE VALVE ECCENTRIC STRAP
2	TOBY-89-M-2-23-SLIDE VALVE ECEN. STRAP ROD
2	TOBY-89-M-2-24-SLIDE VALVE ECCENTRIC
2	TOBY-89-M-2-25-SLIDE VALVE ECCENTRIC STOP COLLAR
1	TOBY-89-M-2-26-TRAILING TRUCK FRAME PLATE
1	TOBY-89-M-2-27-TRAILING TRUCK AXLE BRACKET
2	TOBY-89-M-2-28-TRAILING TRUCK BEARING BUSH
1	TOBY-89-M-2-30-TRAILING TRUCK WHEEL AXLE
2	TOBY-89-M-2-31-TRAILING TRUCK WHEEL
2	TOBY-89-M-2-32-VALVE SPINDLE SCREW

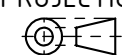
QTY.	PART NUMBER
1	TOBY-89-M-3-01-FOOTPLATE
1	TOBY-89-M-3-02-SMOKEBOX FRONT PLATE
1	TOBY-89-M-3-03-SMOKEBOX SHELL
1	TOBY-89-M-3-04-SMOKEBOX DOOR
2	TOBY-89-M-3-05-SMOKEBOX DOOR HINGE
2	TOBY-89-M-3-06-SMOKEBOX HINGE
1	TOBY-89-M-3-07-SMOKEBOX DOOR SCREW
1	TOBY-89-M-3-08-CHIMNEY BASE RING
1	TOBY-89-M-3-09-CHIMNEY FLUE
1	TOBY-89-M-3-10-CHIMNEY CROWN
1	TOBY-89-M-3-11-INTERNAL FLUE BASE
1	TOBY-89-M-3-12-WATER TANK
1	TOBY-89-M-3-12-WATER TANK
2	TOBY-89-M-3-13-WATER TANK TOP PLATE
2	TOBY-89-M-3-14-WATER TANK TOP FILLER COVER
6	TOBY-89-M-3-15-WATER TANK HAND RAIL POST
2	TOBY-89-M-3-16-WATER TANK HAND RAIL
2	TOBY-89-M-3-17-WATER TANK SUPORT PILLAR
1	TOBY-89-M-3-18-BLOWER ELBOW
1	TOBY-89-M-3-19-BLOWER ELBOW LOCK NUT
1	TOBY-89-M-3-20-BLOWER BLOW PIPE
1	TOBY-89-M-3-21-BLOWER ELBOW NOZZLE
4	TOBY-89-M-3-22-SIDE STEP
1	TOBY-89-M-3-23-OIL TANK HOUSING
1	TOBY-89-M-3-24-OIL TANK TOP
1	TOBY-89-M-3-25-OIL TANK BOTTOM
2	TOBY-89-M-3-26-OIL TANK NIPPLE
2	TOBY-89-M-3-27-OIL TANK PLUG
1	TOBY-89-M-3-28-OIL TANK NUT
1	TOBY-89-M-3-29-SMOKEBOX HINGE PIN
1	TOBY-89-M-3-30-BLOWER PIPE PART-1
1	TOBY-89-M-3-31-BLOWER PIPE PART-2
2	TOBY-89-M-3-32-WATER TANK SUPPLY NIPPLE
4	TOBY-89-M-3-33-PIPE NUT M8x6
1	TOBY-89-M-3-34-OILTANK STEAM TUBE
1	TOBY-89-M-4-01-BOILER SHELL
1	TOBY-89-M-4-02-BOILER FRONT TUBE PLATE
1	TOBY-89-M-4-03-FIRE BOX SHELL
1	TOBY-89-M-4-04-FIRE BOX FRONT TUBE PLATE
1	TOBY-89-M-4-05-BOILER TUBE 18MM
15	TOBY-89-M-4-06-BOILER TUBE 13MM
1	TOBY-89-M-4-07-BOILER THROAT PLATE
1	TOBY-89-M-4-08-BOILER BACK HEAD PLATE
1	TOBY-89-M-4-09-BOILER BACK SHELL
2	TOBY-89-M-4-10-BOILER BUSH M6x9x11
4	TOBY-89-M-4-12-BOILER BUSH M14x18x22.5
1	TOBY-89-M-4-13-BOILER BUSH 31x38x48
1	TOBY-89-M-4-14-STEAM COLECTOR DOME
2	TOBY-89-M-4-15-CHECK VALVE BODY
2	TOBY-89-M-4-16-CHECK VALVE BALL VALVE
2	TOBY-89-M-4-17-CHECK VALVE TOP SCREW
1	TOBY-89-M-4-18-CHECK VALVE MANIFOLD
1	TOBY-89-M-4-19-BOILER INSULATION BLANKET
1	TOBY-89-M-4-20-BOILER CLADDING
1	TOBY-89-M-4-21-CHECK VALVE DOME
1	TOBY-89-M-4-22-REGULATOR BODY
1	TOBY-89-M-4-23-REGULATOR SCREW VALVE
1	TOBY-89-M-4-24-REGULATOR SPINDLE NUT
1	TOBY-89-M-4-25-REGULATOR STEAM PIPE
1	TOBY-89-M-4-26-SUPER HEATER PIPE END-1
1	TOBY-89-M-4-27-SUPER HEATER PIPE END-2
1	TOBY-89-M-4-28-SUPER HEATER PIPE
2	TOBY-89-M-4-29-PIPE NUT M12x8
1	TOBY-89-M-4-30-STEAM MANIFOLD
1	TOBY-89-M-4-31-FIRE DOOR MOUTING PLATE
1	TOBY-89-M-4-32-FIRE DOOR
2	TOBY-89-M-4-33-FIRE DOOR HINGE STRAP
1	TOBY-89-M-4-34-FIRE DOOR HINGE
2	TOBY-89-M-4-35-AIR GAP SPACER
1	TOBY-89-M-4-36-FIRE BOX BAFFLE PLATE
2	TOBY-89-M-4-37-GRATE SUPPORT BAR
1	TOBY-89-M-4-38-REAR BAFFLE PLATE
12	TOBY-89-M-4-42-GRATE BAR
33	TOBY-89-M-4-43-GRATE SPACER
2	TOBY-89-M-4-44-FIRE DOOR REST-HANDLE
3	TOBY-89-M-4-45-GRATE TIE ROD
2	TOBY-89-M-4-46-BOILER BUSH M8x15.5x18
1	TOBY-89-M-4-47-BOILER DRAIN SCREW PLUG
1	TOBY-89-M-4-48-SAFETY VALVE BODY

QTY.	PART NUMBER
1	TOBY-89-M-4-49-SAFETY VALVE BALL VALVE
1	TOBY-89-M-4-50-SAFETY VALVE STEM
1	TOBY-89-M-4-51-SAFETY VALVE SPRING
1	TOBY-89-M-4-52-SAFETY VALVE PRESSURE PLATE
1	TOBY-89-M-4-53-WTR LVL IND BOTTOM HOUSING
1	TOBY-89-M-4-54-WTR LVL IND TOP HOUSING
1	TOBY-89-M-4-55-WTR LVL IND TOP SCREW
1	TOBY-89-M-4-56-WTR LVL IND GLASS TUBE
2	TOBY-89-M-4-57-WTR LVL IND GLASS TUBE NUT
1	TOBY-89-M-4-58-WTR LVL IND SPINDLE NUT
1	TOBY-89-M-4-59-WTR LVL IND SPINDLE
1	TOBY-89-M-4-60-WTR LVL IND SPILL PIPE
1	TOBY-89-M-4-61-WTR LVL IND SPILL PIPE NUT
1	TOBY-89-M-4-62-BANJO FITTING SCREW
1	TOBY-89-M-4-63-PRESSURE GAUGE BANJO FITTING
1	TOBY-89-M-4-64-PRESSURE GAUGE
1	TOBY-89-M-4-65-PRESSURE GAUGE PIPE NUT
4	TOBY-89-M-4-66-GENERAL ON-OFF VALVE BODY
4	TOBY-89-M-4-67-GENERAL ON-OFF SPINDLE
4	TOBY-89-M-4-68-GENERAL ON-OFF VALVE SPINDLE NUT
1	TOBY-89-M-4-69-WHISTLE BASE
1	TOBY-89-M-4-70-WHISTLE TUBE
1	TOBY-89-M-4-71-WHISTLE TUBE CAP
2	TOBY-89-M-4-72-PIPE NUT M8x6
1	TOBY-89-M-4-73-WHISTLE PIPING
1	TOBY-89-M-4-74-FEED WATER PIPE-1
1	TOBY-89-M-4-75-FEED WATER PIPE-2
5	TOBY-89-M-4-76-PIPE NUT M8x5
1	TOBY-89-M-6-01-CABIN SHELL
2	TOBY-89-M-6-02-WINDOW RIM
1	TOBY-89-M-6-03-CABIN ROOF TRUSS-1
1	TOBY-89-M-6-04-LH ROOF BEAM
1	TOBY-89-M-6-04-LH ROOF BEAM
1	TOBY-89-M-6-05-CABIN REAR POST
1	TOBY-89-M-6-05-CABIN REAR POST
1	TOBY-89-M-6-06-CABIN ROOF TRUSS-2
1	TOBY-89-M-6-07-CABIN ROOF
2	TOBY-89-M-7-01-TNDR SIDE FRAME
4	TOBY-89-M-7-02-TNDR SIDE FRAME ANGLE BRACKET
1	TOBY-89-M-7-03-TNDR FRONT BUFFER BEAM
1	TOBY-89-M-7-04-TNDR REAR BUFFER BEAM
2	TOBY-89-M-7-05-TNDR PULLING COUPLING
1	TOBY-89-M-7-06-TNDR SIDE FRAME STAY
4	TOBY-89-M-7-07-TNDR AXLE BOX HORN
4	TOBY-89-M-7-08-TNDR AXLE BOX LEAF SPRING
4	TOBY-89-M-7-09-TNDR AXLE BLOCK
4	TOBY-89-M-7-10-TNDR AXLE BOX SPRING
2	TOBY-89-M-7-11-TNDR WHEEL AXLE
4	TOBY-89-M-7-12-TNDR WHEEL
1	TOBY-89-M-7-13-TNDR BOTTOM PLATE
1	TOBY-89-M-7-14-TNDR UPPER BODY OUTER SHELL
1	TOBY-89-M-7-15-TNDR COAL BUNKER PLATE
1	TOBY-89-M-7-16-TNDR TOP ACCES HATCH PLATE
1	TOBY-89-M-7-17-TNDR ACCES HATCH
1	TOBY-89-M-7-20-WATER HAND PUMP MOUTING BRACKET
1	TOBY-89-M-7-21-WATER HAND PUMP CYLINDER INSERT
1	TOBY-89-M-7-22-WATER HAND PUMP BODY
1	TOBY-89-M-7-23-WATER HAND PUMP TOP DELIVERY NIPPLE
2	TOBY-89-M-7-24-WATER HAND PUMP VALVE
1	TOBY-89-M-7-25-WATER HAND PUMP INLET PLUG
1	TOBY-89-M-7-26-WATER HAND PUMP PISTON
1	TOBY-89-M-7-27-WATER HAND PUMP PIVOT BRACKET
2	TOBY-89-M-7-28-WATER HAND PUMP LINK BRACKET
1	TOBY-89-M-7-29-WATER HAND PUMP HANDLE
1	TOBY-89-M-7-30-PIPE NUT M8x6
1	TOBY-89-M-7-31-WATER TANK SUPPLY NIPPLE
1	TOBY-89-M-7-32-HAND PUMP DISCHARGE PIPE
1	TOBY-89-M-7-33-FLEXIBLE COUPLING HOSE
2	TOBY-89-M-7-34-PIPE NUT M10x7

QTY.	PART NUMBER
1	TOBY-89-M-8-89mm-RAIL
82	TOBY-89-M-M3 NUT
36	TOBY-89-M-M3x6 A-K CYL HEAD SCREW
30	TOBY-89-M-M3x8 A-K CYL HEAD SCREW
4	TOBY-89-M-M3x11 THREADED ROD
10	TOBY-89-M-M3x14 A-K CYL HEAD SCREW
16	TOBY-89-M-M3x43 THREADED ROD
40	TOBY-89-M-M4 NUT
29	TOBY-89-M-M4x8 A-K CYL HEAD SCREW
2	TOBY-89-M-M4x8 A-K GRUB SCREW
3	TOBY-89-M-M4x10 A-K C-SINK SCREW
2	TOBY-89-M-M4x12 A-K C-SINK SCREW
83	TOBY-89-M-M4x12 A-K CYL HEAD SCREW
22	TOBY-89-M-M4x16 A-K CYL HEAD SCREW
1	TOBY-89-M-M4x24 A-K GRUB SCREW
4	TOBY-89-M-M5 NUT
2	TOBY-89-M-M5x12 A-K C-SINK SCREW
1	TOBY-89-M-M6 DOME NUT
7	TOBY-89-M-M6 NUT
5	TOBY-89-M-M6 WASHER
2	TOBY-89-M-M6x16 A-K C-SINK SCREW
16	TOBY-89-M-M6x16 A-K CYL HEAD SCREW
2	TOBY-89-M-M6x28 A-K CYL HEAD SCREW
1	TOBY-89-M-M6x35 THREADED ROD
1	TOBY-89-M-M8 NUT

PLEASE NOTE THIS IS AN A2 SHEET SIZE

NOTES: THE ORIGINAL DESIGN AND BUILT OF THIS LOCO IS BY Mr. STEVE EATON (s.eaton@talk21.com) THE DRAWINGS SUPPLIED TO ME WERE DATED FROM 1999 TO 2003

TITLE	DRAWING CONTENTS	PROJECT No: 7B-15-00	PROJECTION	JDWDS	MODEL SCALE: 1:1
MODEL OF A NARROW GAUGE STEAM LOCOMOTIVE FOR 3.5inch (89mm) GAUGE CALLED "TOBY".	BILL OF MATERIALS	JDW DRAUGHTING SERVICES			DWG SCALE:1:1 @ A2 OR AS SHOWN
		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.	DATE: JANUARY 2018	Copyright © J.A.M. DE WAAL PAPA KURA NZ	
			SHEET: 03 OF 12	A2	No:TOBY-89-M-03