CFA ASSET PROTECTION UNIT

ASSET PROTECTION SPECIALIST
FIELD HANDBOOK

EDITION 2 2026

SIZE UP

1. **AIM:** WHAT YOU HAVE TO DO

2. **FACTORS.**

CONSIDER HOW EACH OF THE FOLLOWING FACTORS AFFECTS WHAT YOU HAVE TO DO

A. OUTCOME
B. OWN MEMBERS
C. GROUND
D. TIME AND SPACE
E. ASSESSMENT OF TASKS
F. COURSES OPEN THAT COULD WORK AGAINST ACHIEVING THE OUTCOME

3. **COURSES**.

EXAMINE COURSES THAT COULD WORK AGAINST ACHIEVING THE OUTCOME AND THEN WORK OUT FROM THESE, AND THE FACTORS, THE WAYS BY WHICH YOU CAN ACHIEVE YOUR OUTCOME AND SELECT THE BEST OPTION.

4. **PLAN.**

BASED ON THE SELECTED BEST COURSE.

Closed Circuit Water Relay

1. BASE PUMP DELIVERS AT 500KPA
2. BOOST PUMP DELIVERS AT 500KPA
3. BASE PUMP INCREASES TO 700KPA
4. BOOST PUMP INCREASES TO 700KPA

PUMPS MUST MAINTAIN 100KPA ON INLET GAUGE OR FOR PORTABLE PUMPS MAINTAIN HOSE SHAPE
BOOST PUMPS OPEN UNUSED DELIVERY TO EXPEL AIR FROM LINES
BASE PUMP IS THE LAST PUMP TO SHUT DOWN

Calculating distance between pumps

LENGTHS OF HOSE = 600KPA + OR – STATIC HEAD
FRICTION LOSS PER 30M

Friction Loss (64mm Hose)

Loss per 30m length of hose

Flow LPM	Single	Twin
UP TO 500	50KPA	12KPA
500 - 1000	100KPA	25KPA
1000 - 1500	150KPA	37KPA
1500 - 2000	200KPA	50KPA
2000 - 2500	250KPA	62KPA
2500 - 3000	300KPA	75KPA

RESIDUAL FLOW

To calculate when in boost, inlet pressure before delivery, inlet pressure after delivery

Inlet pressure before delivery	Inlet pressure after delivery
Up to 10% drop	3 times existing flow added
Up to 15% drop	2 times existing flow added
Up to 25% drop	1 times existing flow added
Over 25% drop	Less than existing flow added or use smaller nozzle

PUMP DUTY POINT

3m lift = rated capacity (700kpa)

4.5m lift = one seventh loss of capacity

6m lift = one-third loss of capacity

7m lift = one-half loss of capacity

7.5m lift = two-thirds loss of capacity

Equipment Trailer

TRAILER EQUIPTMENT	
RAKEHOE-MCLEOD, C/W WOODEN HANDLE	2
CHAPS - CHAINSAW - Long (105cm)	2
CHAPS - CHAINSAW - Regular (100cm)	1
WHEEL CHOCK - RUBBER 26cmx16cmx19cm	4

Equipment Shipping Container 1

PUMPS	
PUMP- Portable GAAM MK4QF	1
PUMP - Single Fire Fighting GX160 5.5HP	4
SPRINKLER KITS (5 X HOSE - CANVAS 38mm 5mtr, 5 X WATER THIEF, 5 X SPRINKLER, 5 x STAR PICKETS)	
Sprinkler Kit	15
TOOLS	
HOSE KEY - MFB	2
SPANNER - STORZ	2
SPANNER - EXTERNAL LUG 38mm	2
SPANNER - STORZ/ EXLUG/ L KEY COMBO	4
HYDRANT-STANDPIPE TWIN HEAD	1
BAG - TOOLS	1
STAR PICKETS	70
STAR PICKET DRIVER	1
STAR PICKET REMOVER	1

Equipment Shipping Container 1

DRAFTING EQUIPTMENT	
SUCTION HOSE KIT (6m x 75mm & suction strainer, Wire Mesh Strainer, Float & Rope)	1
SUCTION HOSE KIT (5m x 64mm & suction strainer, Wire Mesh Strainer, Float, Rope and Folding Bucket for pump fill)	4
FLOATING COLLAR TANK	
12000Lt Floating collar Tank	1

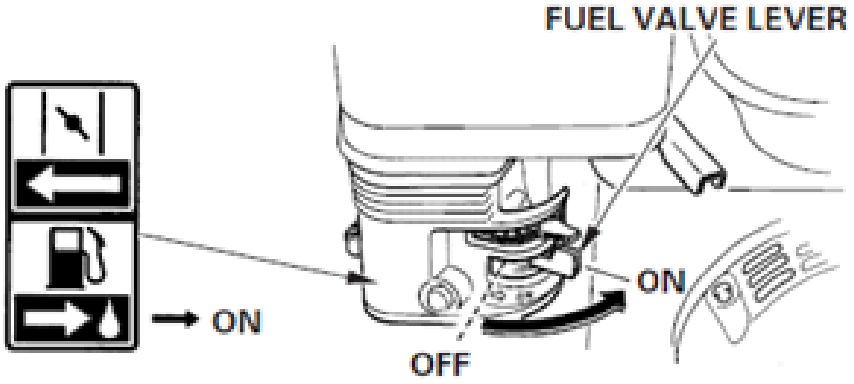
ADAPTORS	
ADAPTOR-STORZ 65mm TO 38mm ULC, exlug.(complete - GAAM)	11
ADAPTOR 64mm Female 3TPI to 65mm Storz	3
ADAPTOR 65mm Stortz to 70mm Storz	3
ADAPTOR 64mm Female 3TPI to 70mm Storz	1
ADAPTOR 64mm 5TPI to Storz Adaptor	1
ADAPTOR-STORZ 65mm TO 38mm MALE BSP (GAAM)	1
ADAPTOR-STORZ 65mm TO 38mm FEMALE BSP (GAAM)	1
ADAPTOR-STORZ 65mm TO 50mm FEMALE BSP (GAAM)	1
ADAPTOR-STORZ 65mm TO 50mm MALE BSP (GAAM)	1
ADAPTOR-STORZ 65mm TO 64mm MALE BSP (GAAM)	1
ADAPTOR-STORZ 65mm TO 64mm FEMALE BSP (GAAM)	1
ADAPTOR - 38MM EXTL LUG TO 38MM FEM BSP	2
ADAPTOR - 38MM EXTL LUG TO 38MM MALE BSP	2
ADAPTOR - 38MM EXTL LUG TO 25MM MALE BSP	1
COUPLING-DIV. BREACH"Y"STORZ 65mm (controlled) with Ball Valves	6
WASHERS - ASSORTED	mixed
65MM BLANK CAP	2

Honda Portable Engines (Quick fill pumps)

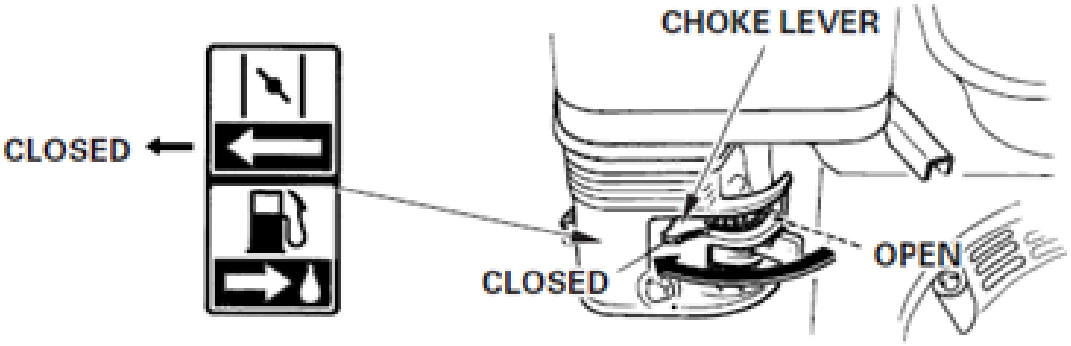
STARTING GUIDE

STARTING THE ENGINE

1. Move the fuel valve lever to the ON position.

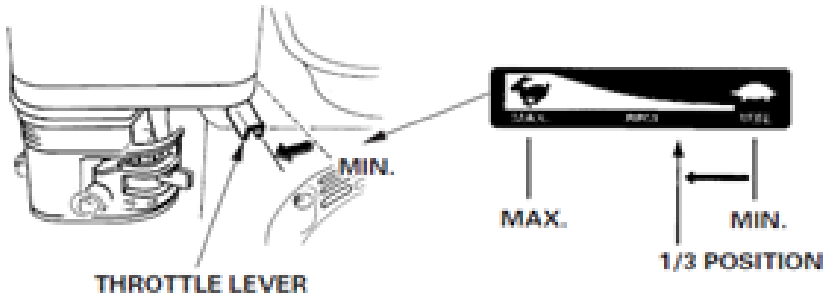


2. To start a cold engine, move the choke lever to the CLOSED position.



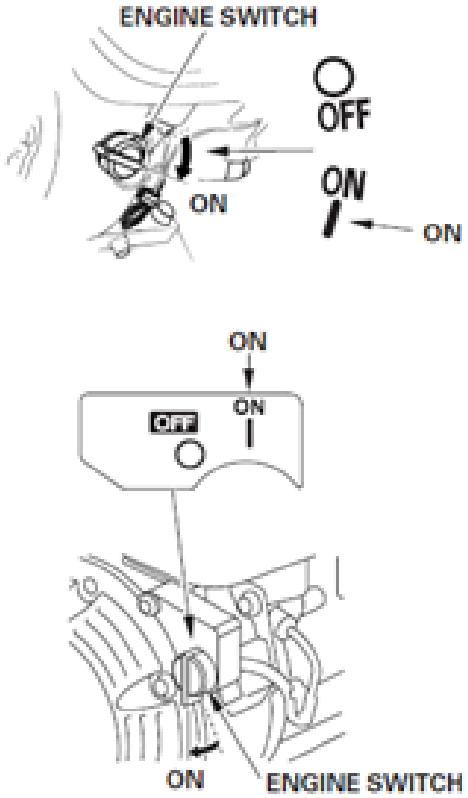
To restart a warm engine, leave the choke lever in the OPEN position.

3. Move the throttle lever away from the MIN. position, about 1/3 of the way toward the MAX. position.

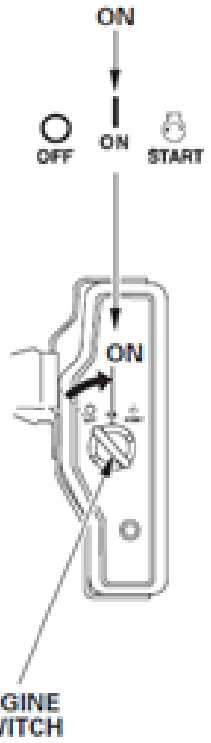


4. Turn the engine switch to the ON position.

EXCEPT ELECTRIC STARTER TYPES



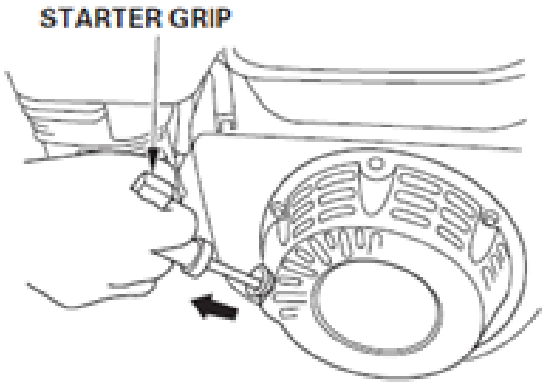
ELECTRIC STARTER TYPES



5. Operate the starter.

RECOIL STARTER:

Pull the starter grip lightly until you feel resistance, then pull briskly. Return the starter grip gently.



ELECTRIC STARTER (applicable types):

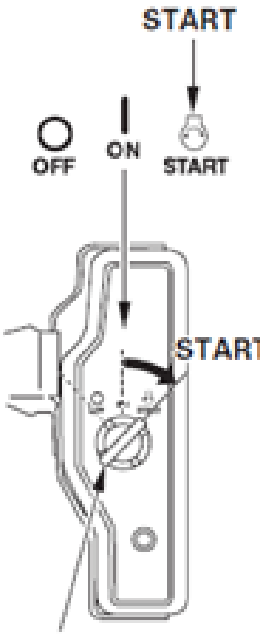
Turn the key to the START position, and hold it there until the engine starts.

If the engine fails to start within 5 seconds, release the key, and wait at least 10 seconds before operating the starter again.

NOTICE

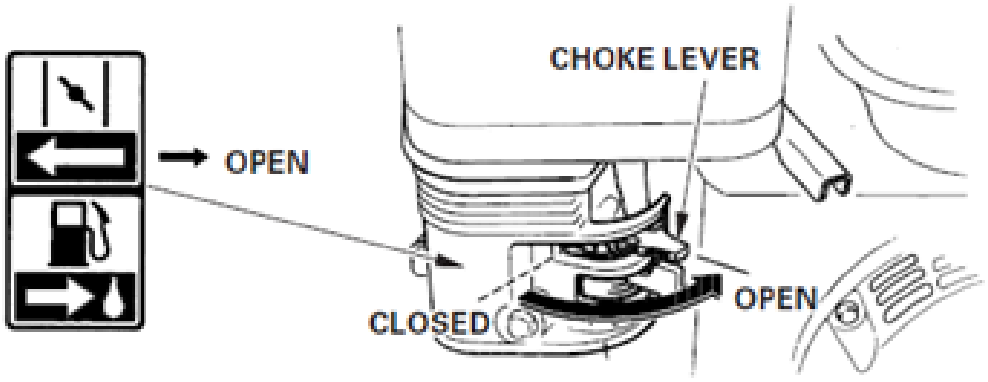
Using the electric starter for more than 5 seconds at a time will overheat the starter motor and can damage it.

When the engine starts, release the key, allowing it to return to the ON position.



ENGINE SWITCH (applicable types)

6. If the choke lever has been moved to the CLOSED position to start the engine, gradually move it to the OPEN position as the engine warms up.



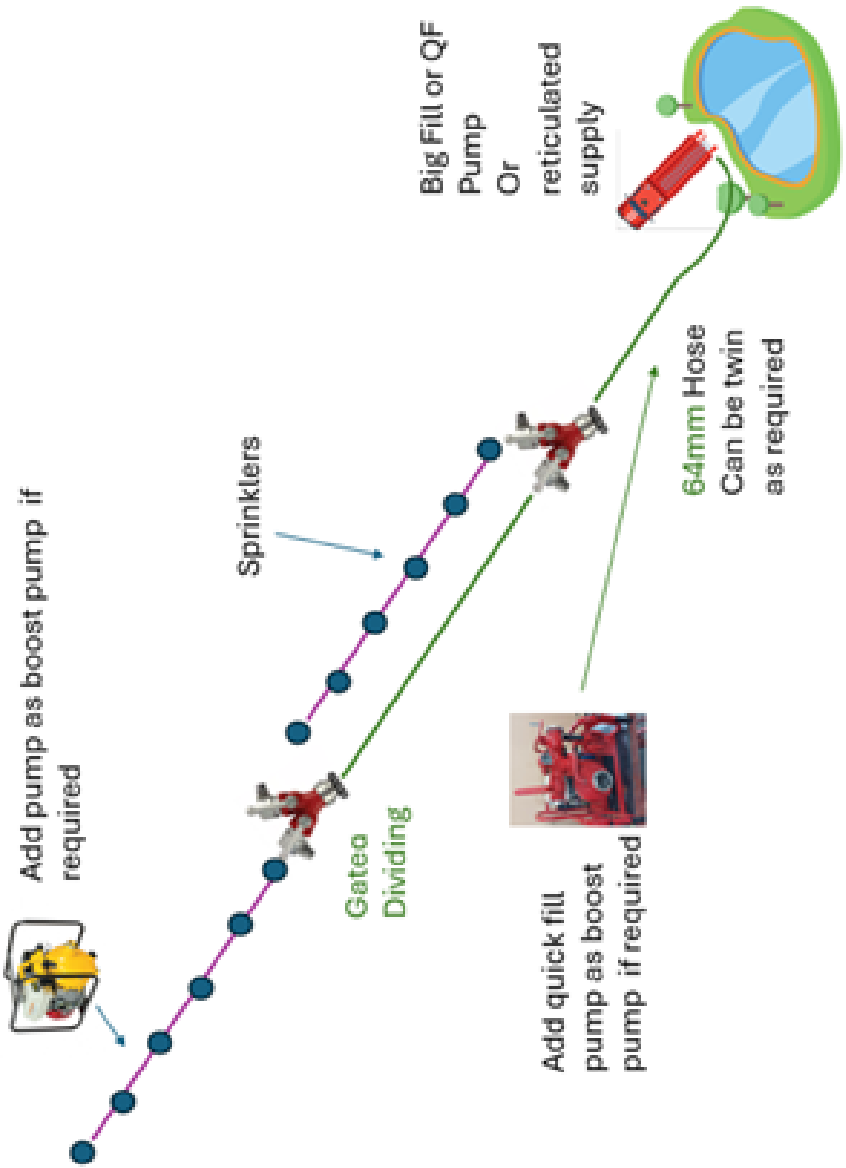
Stopping the Engine

- Adjust the throttle to the minimum position
- Switch the toggle or key to the off position
- Close off fuel switch

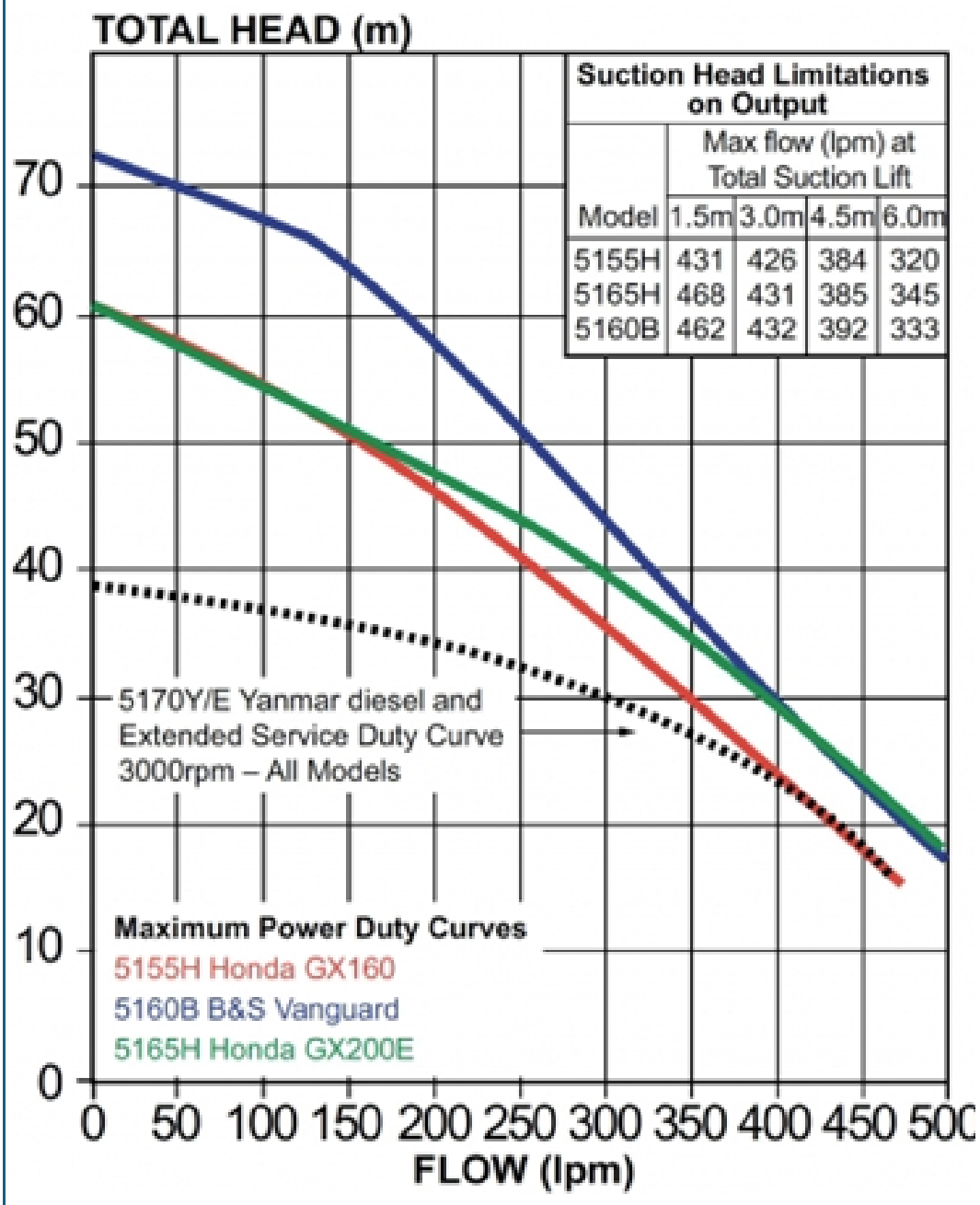
Performance Table for Wetta 8034PC

Nozzle mm	Pressure kPa	Flow LPM	Diameter m
4.4	170	19.0	25.6
4.4	206	20.8	26.2
4.4	240	22.6	26.8
4.4	275	24.1	27.4
4.4	310	25.6	28.0
4.4	345	27.3	28.6
4.4	380	28.3	28.6
4.4	413	29.5	29.2

General Layout



Pump Curve

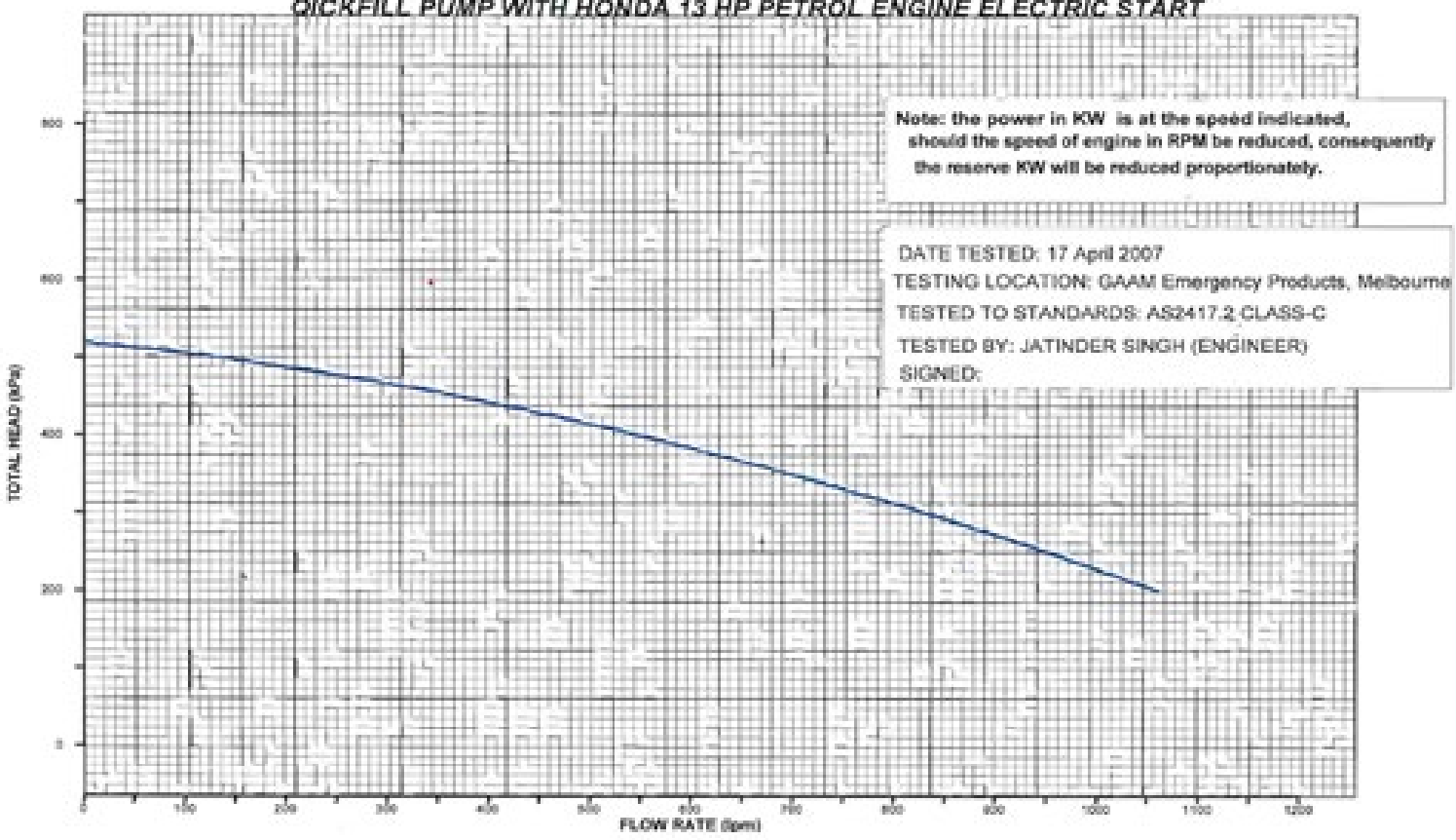


Suction Head Limitations on Output

Model	Max flow (lpm) at Total Suction Lift			
	1.5m	3.0m	4.5m	6.0m
5155H	431	426	384	320
5165H	468	431	385	345
5160B	462	432	392	333

Pump Performance Curve

QICKFILL PUMP WITH HONDA 13 HP PETROL ENGINE ELECTRIC START



Note: the power in KW is at the speed indicated, should the speed of engine in RPM be reduced, consequently the reserve KW will be reduced proportionately.

DATE TESTED: 17 April 2007

TESTING LOCATION: GAAM Emergency Products, Melbourne

TESTED TO STANDARDS: AS2417.2 CLASS-C

TESTED BY: JATINDER SINGH (ENGINEER)

SIGNED:

Davey 5155H Single Impeller Firefighter with Honda GX160 5.5Hpa

Uses

Direct supply to sprinklers from collar tank or static water source

Boost pump used inline (Max pressure 1000kpa)

Supplied with suction hose, strainer, basket float and hose line

MK4 QF
13HP Honda GX390

Uses

Direct supply to sprinklers from collar tank or static water source

Boost pump used inline (Max pressure 1000kpa)

Supplied with suction hose, strainer, basket float and hose line