

TEST SPECIFICATION - AIR BOX LIMITS
PRECISION AIRMOTIVE LLC - MARYSVILLE, WASHINGTON

30072-09

10-19-09

ENGINEERING SPECIFICATION: PES-4500

MODEL: RSA-5AD1

SERIAL NUMBER: 70022909

OPERATOR: James

DATE: 1-27-11

INSTALLATION PARTS LIST: 2576536-2

BASIC PARTS LIST: 2576535

INTERNAL CHANGE: 48

CUSTOMER: TEXTRON LYCOMING

CUSTOMER TEST SPEC: 13070-F

AIRFLOW: STANDARD (29.92"Hg @ 59°F)

FUEL: PES-2010 or PES-2150

AIR BOX NUMBER: 11005

FUEL TEMP. 759 °F

BAROMETRIC PRESSURE 30.15 "Hg @ 71.64 °F

TEST POINT NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
AIRFLOW (LBS/HR)	0	0	100	100	A/R*	300	400	900	900	1075	1400	0
CARB LOSS ("Hg)	W/O	W/O	15.6	15.6	A/R*	13.4	W/O	W/O	W/O	W/O	W/O	W/O
FUEL INLET PRESS	20 ± 1	20 ± 1	20 ± 1	45 ± 5	20 ± 1	20 ± 1	20 ± 1	20 ± 1	20 ± 1 40°	20 ± 1	20 ± 1	20 ± 1
MIXTURE CONTROL	RICH	ICO	RICH	RICH	RICH	RICH	RICH	RICH	FROM RICH	RICH	RICH	RICH

FLOWMETER LIMITS

MINIMUM	22.0	0.0	6.0	± 0.5	*CLOSE THROTTLE TO 4.0 LBS/HR	20.5	30.0	69.0	85.5	112.0	± 5.0
OBSERVED (LBS/HR)	<u>27.0</u>	<u>0</u>	<u>96/7.0</u>	<u>47/7.1</u>		<u>26.1</u>	<u>34.1</u>	<u>74.4</u>	<u>88.4</u>	<u>115.6</u>	<u>17.5</u>
MAXIMUM	28.0	0.5	7.0	MAX CHANGE	FUEL FLOW	25.0	34.5	75.0	89.0	117.0	MAX CHANGE
				FROM TP 3							FROM TP 1

METERING SUCTION

AVERAGE VALUE

OBSERVED ("H₂O)

METERING HEAD

AVERAGE VALUE

OBSERVED
("STODDARD)

REGULATOR SETTINGS

PREFLOW (LBS/HR)
8 MIN / 18 MAX

NULL
(TURNS OUT)

EFFORT
SPRING COLOR

INNER NUT
TURNS OUT

HEAD SPRING
COLOR

OUTER NUT
TURNS OUT

HEAD SPRING SHIMS
(NUMBER)

EXTERNAL LEAKAGE
NONE PERMITTED