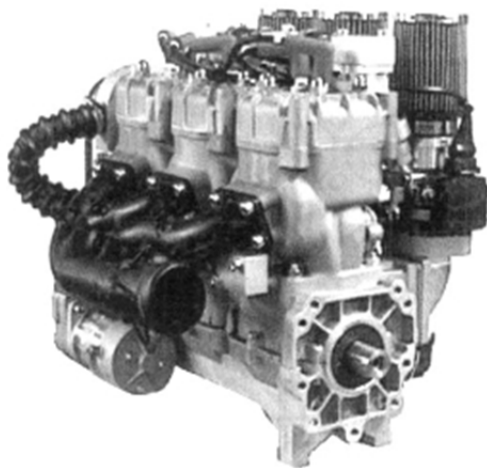




3701- engine shown with dual ignition and 90 degree exhaust manifold

The 3701 is Hirth's first offering of a water-cooled engine for the aircraft market.

A narrow profile and single tuned exhaust used for a113 cylinders allows the 3701 to be used in compact engine compartments. Pistons fire 120 degrees apart resulting in very quiet & smooth operations.

3701 incorporates Al-Nikasil coated cylinders for superior performance and reliability. Nikasil provides for a super low coefficient of friction, reducing engine heat and wear. The pistons and cylinders expand at the same rate thus providing for a seizure resistant engine. 3701 crankshaft is 4130 chromemolly steel. Heads, cylinders, rings, block casting, connecting rods and associated components are all of the highest grade alloys available today.

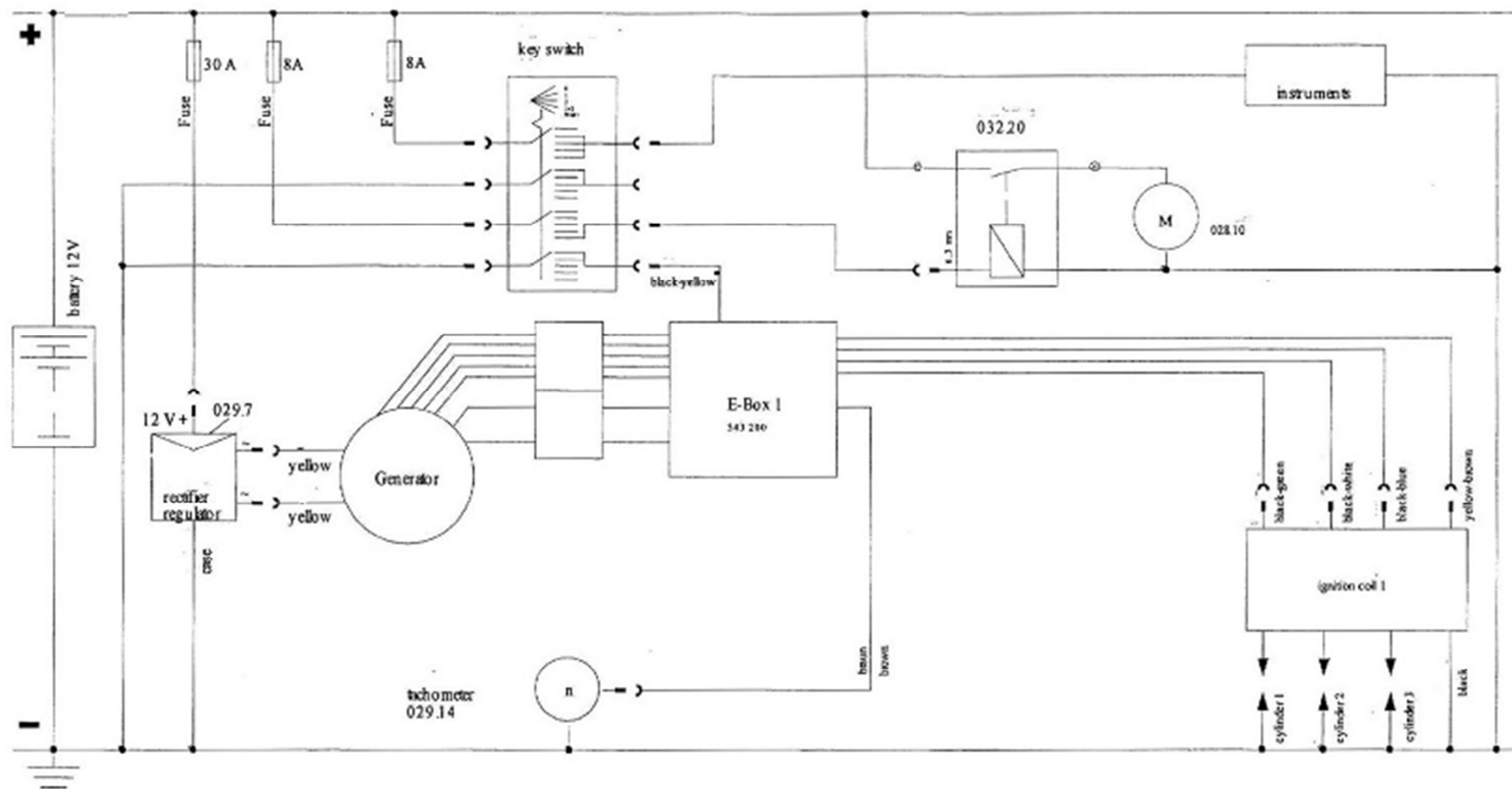
Technical Data:

Model: 3701 - 2 cycle, three cylinder inline
Reed valve induction.
Bore: 76 mm
Stroke: 69 mm
Displacement: 939 cc
Compression: 9.5 : 1
HP Output: 100hp @ 6000 rpm
Peak Torque: 88 ft. lbs. @ 5500 rpm
Ignition: Single CDI (Capacitive Discharge Ignition)
TBO 1,000 Hrs. Rated at 75% power

Carburetion: Electronic suction pipe fuel injection
Fuel Pump: 90 PST 12VDC electric fuel pump.
Lubrication: Premix -40:1 or optional oil injection
Rotation: Counter clockwise, viewed from output end
Starter: 12 VDC electric / 240 watt generator
Cooling: Liquid cooled.
Weight: 108 lbs, including complete exhaust & starter.
Spark Plugs NKG BR9HS

3701 TECHNICAL DATA

Fuel Injected Engine	3701S--100Hp	Carbureted Engine	
Ign.Timing@2000 - Fuel injected	18°	Ign. Timing@2000	16°
Spark Plug Heat VI.	280	No. of Carburetors	3
Spark Plug Gap	.020-.024	Carburetor ID #	Dellorto PHBE 34 BD8
No. of Injectors	Three	Main Jet	165
Do Not Exceed RPM	6300	Idle Jet	50
Peak HP RPM	6000	Needle Jet	AB 265
HP @ Peak RPM	100	Needle Position	#1 Top
Peak Torque RPM	5500	Needle #	K43
Peak Torque Ft.Lb.	85	Float	8.5
Maximum CHT	390°F		
Maximum EGT @ full power	1150°F		
Maximum EGT @ cruise power	1230°F		
Maximum coolant temperature	220°F		
Minimum coolant temperature	160°F		



This wiring diagram is to be considered as a proposal for wiring

General size of line wire: 1,5 mm²

Size of line from/to E-Starter: 16 mm²

Rectifier-regulator mount on cooling body (ca. 250x200x5mm)

* Minimum distance to other current wires: 100 mm (4 in.)

f						Tag	Name
e						03.07.01	Rögele
d						03.07.01	Rögele
c						Wiring diagram CDI - single ignition PVL	
b							
a							
				Tag	Name	3701	
						Nr.	



Spare part list

Engine

3701

100 HP

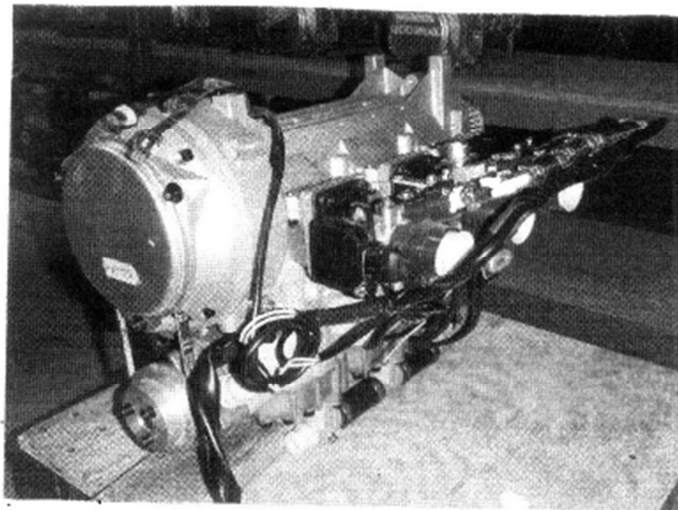
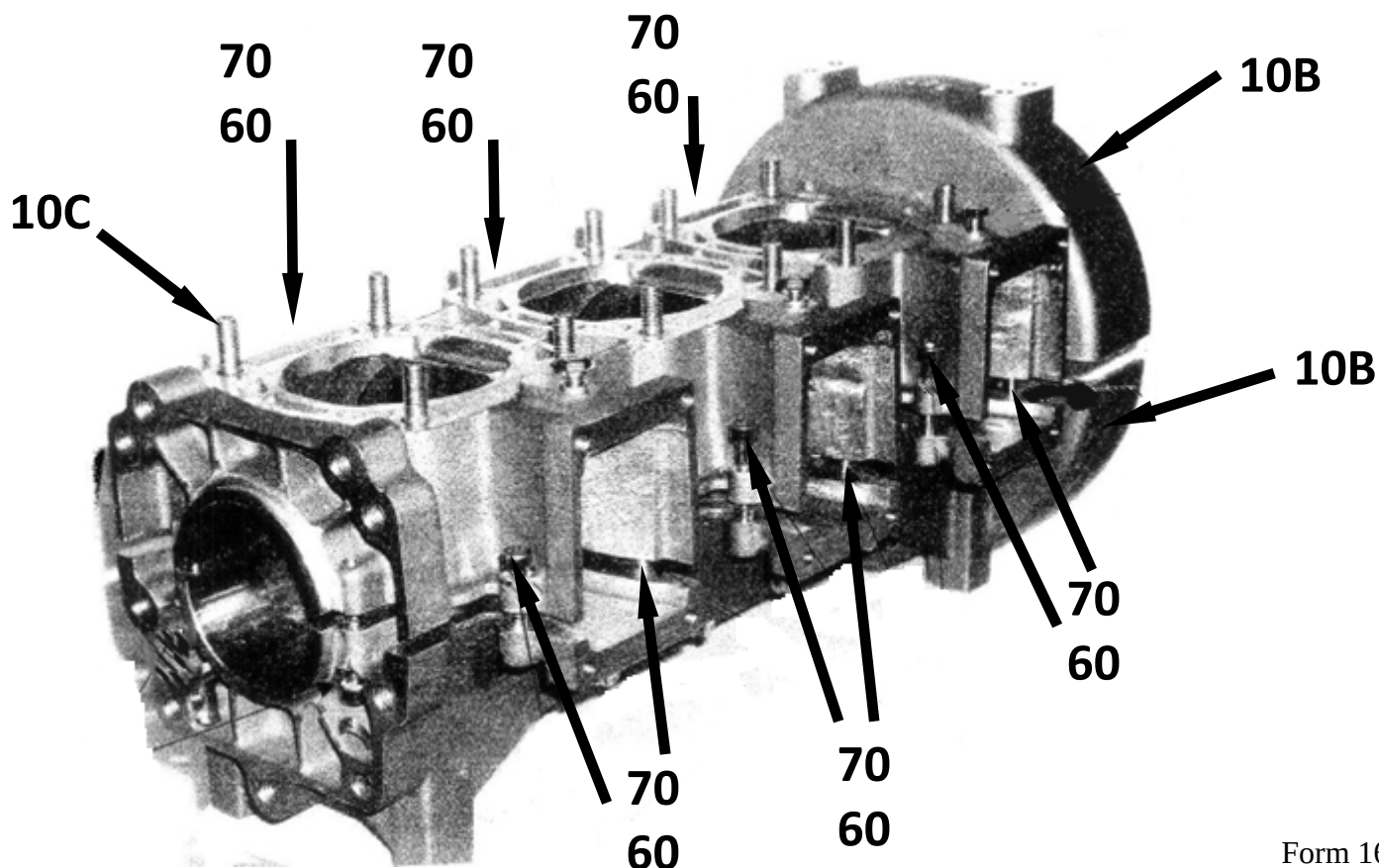


Fig. No.	Quantity.	Designation	Neoteric Part No	
10	1	Crankcase, complete	7160	Incl. 10a-10c
10a	1	Crankcase, downside	7161	
10b	1	Crankcase, upside	7162	
10c	12	Stud screw	7163	
20	3	Hexagon head screw	6927	
30	3	Sealing ring, aluminum	5629	
40	8	Hexagon head screw	7165	
50	8	Washer	7166	
60	11	Serrated lock washer	6902	
70	5	Cylinder screw	6901	
80	2	Cylinder screw	2289	
90	4	Cylinder screw	6911	



Crankshaft 3701

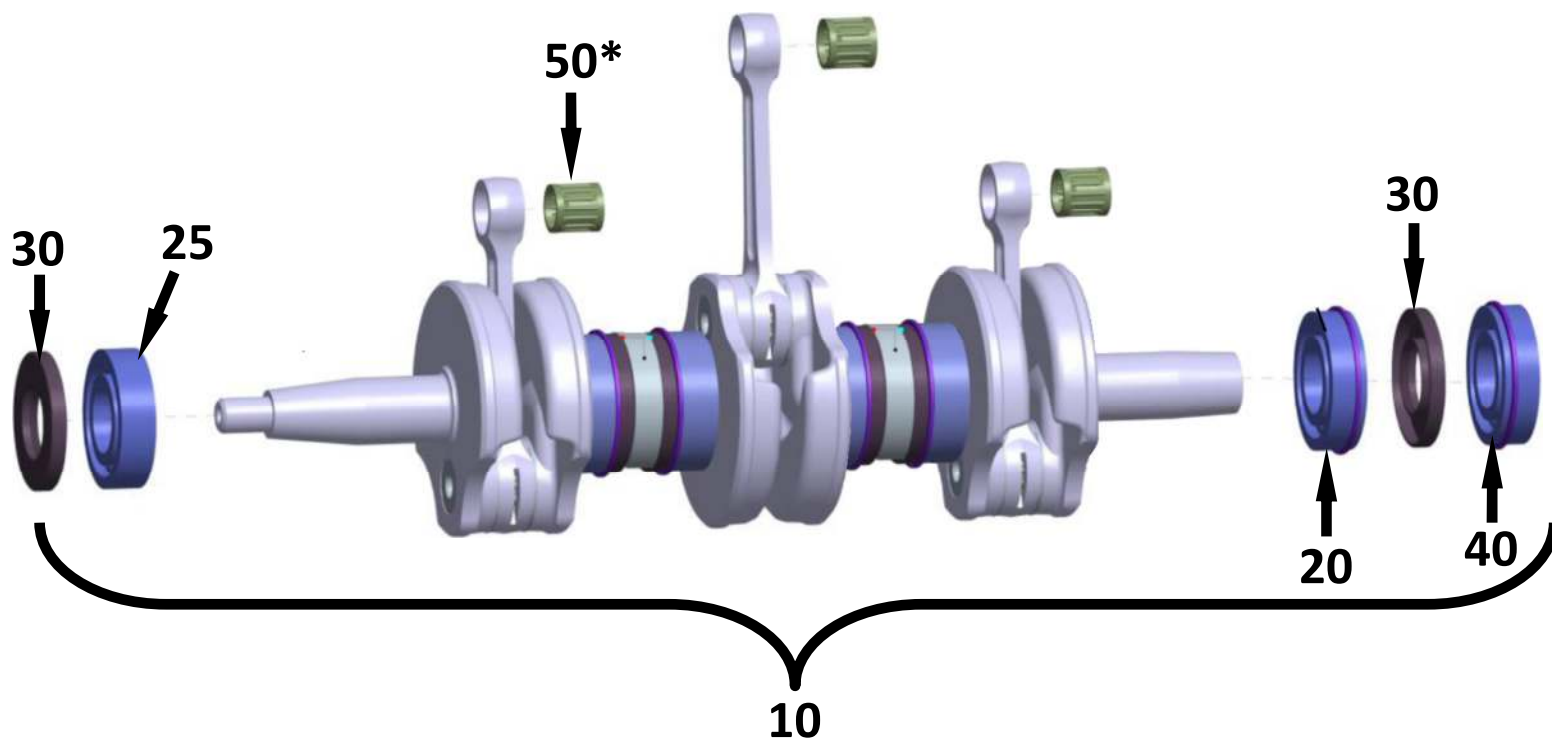
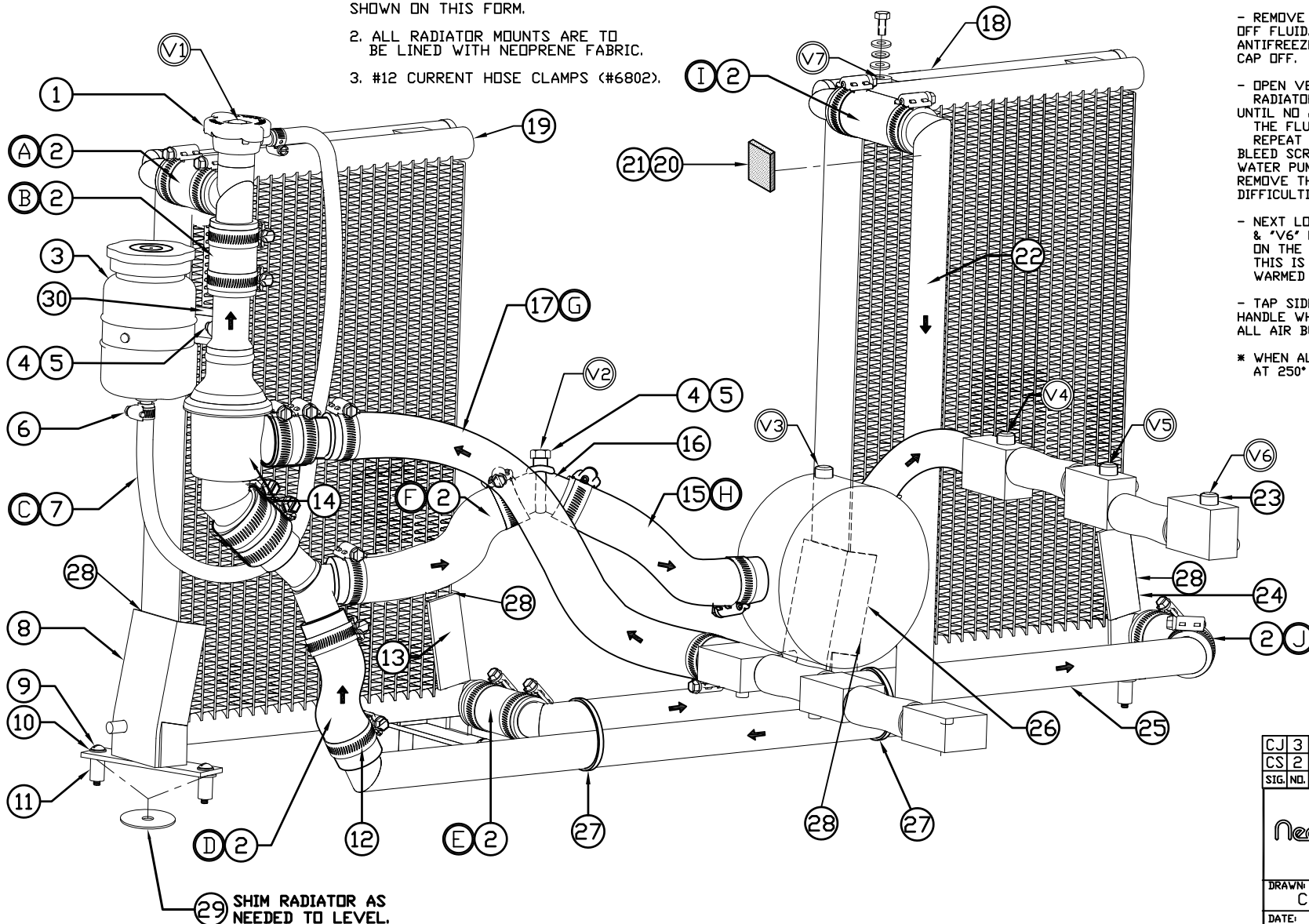


Fig. No.	Qty.	Description	Neoteric Part #	Remark / Notes
10	1	Crankshaft	7167	Includes items 20 - 40
20	1	Deep groove ball bearing	7168	
25	1	Deep groove ball bearing	7169	
30	2	Shaft sealing ring	5453	
40	1	Deep groove ball bearing	7170	
50	3	Needle Bearing, Blue dot (#1)	7909	* Connecting Rods are Color-Coded with a Paint Dot on the Piston end.
		Needle Bearing, Yellow dot (#2)	6082	Engines built from 2010 onward also include a Number Code next to the Paint Dot. The coding corresponds to the correct Needle bearing size. (Approx 0.0003" [0.008mm] graduation between each size)
		Needle Bearing, Red dot (#3)	6083	
		Needle Bearing, White dot (#4)	5464	Blue (#1) is the smallest and Green (#5) is the largest. Connecting rods with a Red (#3) dot are most common.
		Needle Bearing, Green dot (#5)	7910	If the paint dot is missing and no number code can be found, all bearings must be tried for the best fit.

PARTS LIST			PARTS LIST		
REF.	PART #	DESCRIPTION	REF.	PART #	DESCRIPTION
1	5941	HIRTH RADIATOR CAP, MODIFIED	12	5961	HOSE CLAMP, SS (OLD STYLE)
2	5954	1.00 ID RADIATOR HOSE	12	6802	HOSE CLAMP, SS (CURRENT)
3	5948	HIRTH RADIATOR OVERFLOW BOTTLE	13	5964	HIRTH RADIATOR INSIDE MOUNT, PORT COATED
4	2451	HEX NUT, SS	14	5802	HIRTH RADIATOR THERMOSTAT, MODIFIED
5	2230	BOLT, HEX HD SS	15	5953	RADIATOR HOSE
6	2203	SCREW/BAND HOSE CLAMP, SS	16	6098	HIRTH RADIATOR LINE BLEED TUBE
7	2697	PVC HOSE, CLEAR	17	6576	1.00 ID RADIATOR HOSE, 90 DEG BEND
8	5975	HIRTH RADIATOR OUTSIDE MOUNT, PORT COATED	18	6412	STARBOARD RADIATOR
9	2266	MACH SCREW, ROUND HD SS	19	6411	PORT RADIATOR
10	2362	WASHER, SS	20	2957	NEOPRENE SHEET, BLACK
11	2552	WELL NUT	21	3185	NEOPRENE ADHESIVE
22	5979	HIRTH RADIATOR, UPPER PIPE			
23	2469	CAP SCREW, SOCKET HD SS			
24	5965	HIRTH RADIATOR OUTSIDE MOUNT, STAR. COATED			
25	5980	HIRTH RADIATOR, LOWER PIPE			
26	5976	HIRTH RADIATOR INSIDE MOUNT, STAR. COATED			
27	2371	NYLON WIRE TIE, BLACK			
28	3108	NEOPRENE FABRIC, BLACK			
29	2516	SHIM WASHER, SS			
30	5968	OVERFLOW BOTTLE MOUNT			

NOTES:

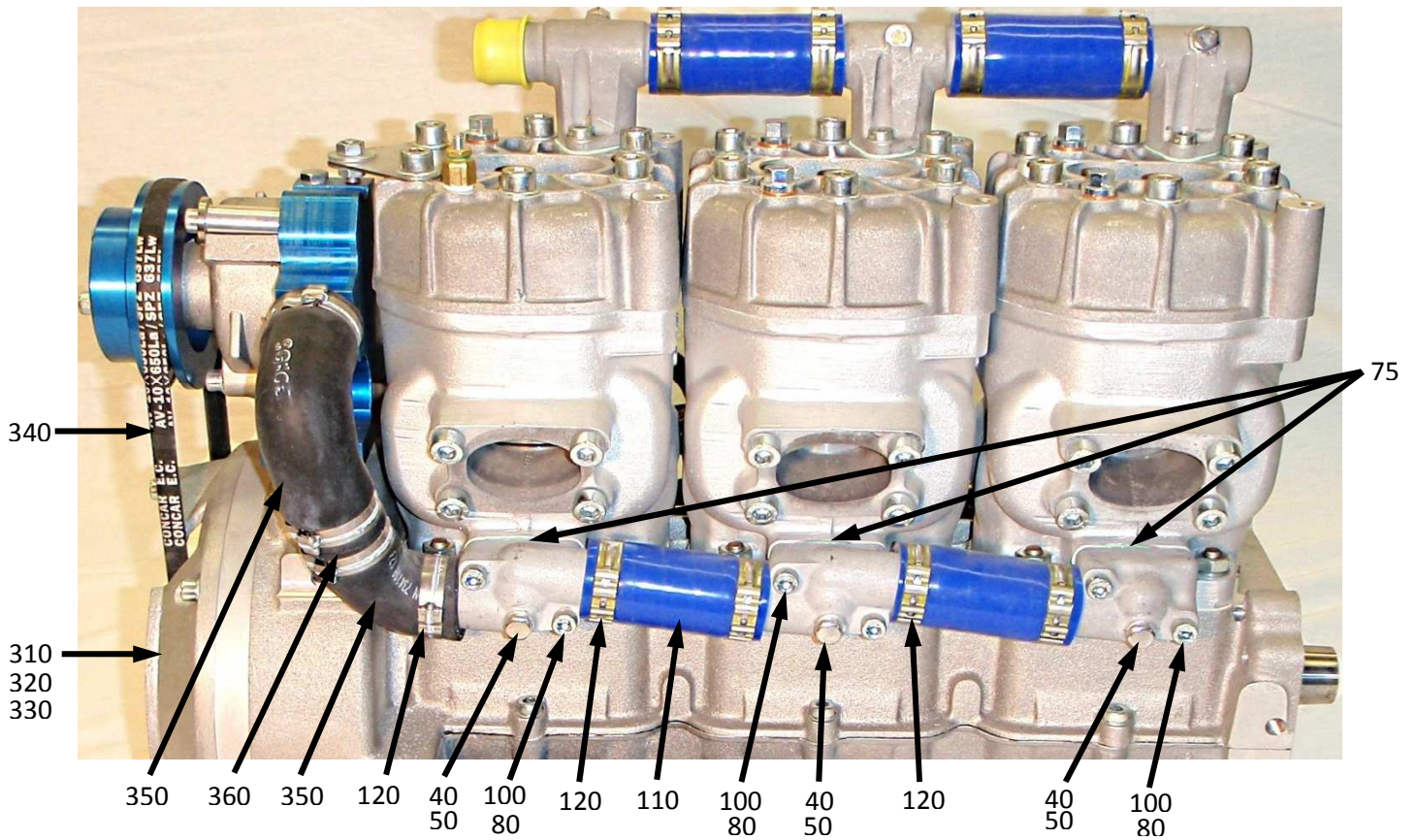
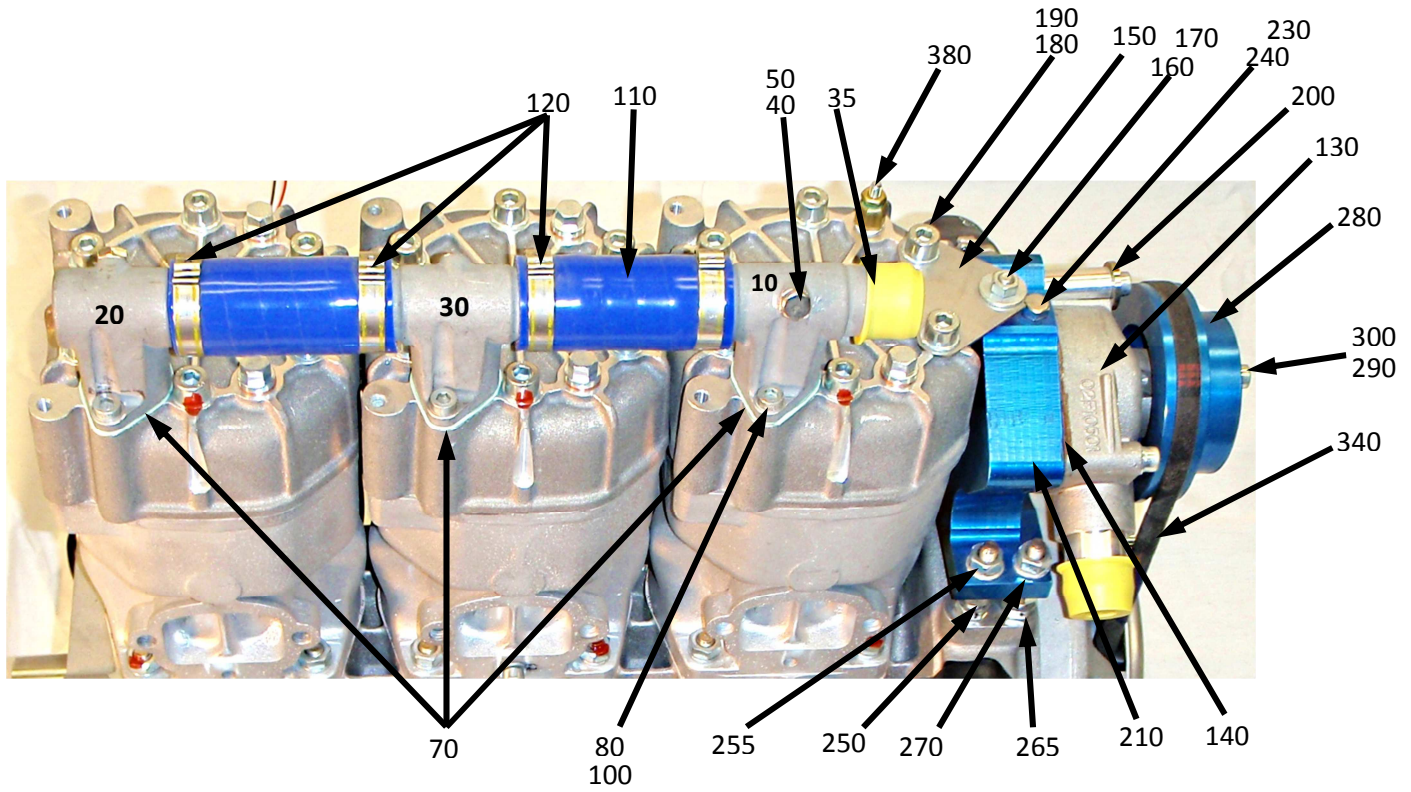
1. POSITION ALL HOSE CLAMPS AS SHOWN ON THIS FORM.
2. ALL RADIATOR MOUNTS ARE TO BE LINED WITH NEOPRENE FABRIC.
3. #12 CURRENT HOSE CLAMPS (#6802).



BLEEDING THE COOLING SYSTEM

- REMOVE RADIATOR PRESSURE CAP AND TOP OFF FLUID. ITS BEST TO USE A 50/50 ANTIFREEZE (GLYCOL) / WATER MIX. LEAVE CAP OFF.
- OPEN VENT "V7" ON TOP OF THE STARBOARD RADIATOR AND ALLOW FLUID TO FLOW OUT UNTIL NO AIR IS PRESENT. KEEP TOPPING OFF THE FLUID THROUGH RADIATOR PRESSURE CAP. REPEAT THIS PROCESS FOR EACH OF THE BLEED SCREWS. **THE BLEED SCREW IN THE WATER PUMP IS TRICKY. TRY NOT TO REMOVE THIS SCREW ALL THE WAY DUE TO DIFFICULTIES REINSTALLING.
- NEXT LOOSEN AND BLEED SCREWS "V4", "V5", & "V6" ONE AT A TIME. THESE ARE LOCATED ON THE STARBOARD SIDE OF ENGINE. WHEN THIS IS DONE RUN THE ENGINE UNTIL IT IS WARMED UP THEN REPEAT THE ABOVE.
- TAP SIDE OF THERMOSTAT WITH WOODEN HANDLE WHILE CAP "V1" IS REMOVED UNTIL ALL AIR BUBBLES DISAPPEAR.
- * WHEN ALL AIR IS REMOVED, CHT SHOULD RUN AT 250° F MAX.

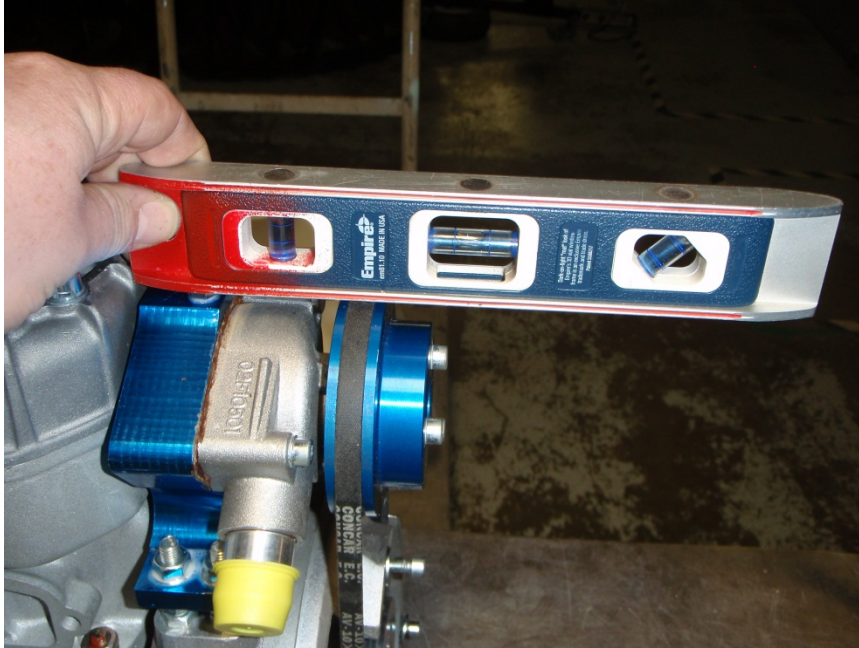
CJ	3	UPDATED HOSE CLAMPS AND THERMOSTAT	13 MAR, 2018
CS	2	UPDATED TO STD II, REMOVED DESCRIPTIONS	3 JUN 2014
SIG. NO.		REVISION	DATE
			
1649 TIPPECANOE STREET TERRE HAUTE, INDIANA, U.S.A. 47807-2394 TELEPHONE (812) 234-1120 FAX (812) 234-3217			
DRAWN:	C. STEIMEL	NAME:	100HP HIRTH COOLING SYSTEM
DATE:	14 JUL, 2009	NUMBER:	17114
		REV.	3



Cooling system 3701

Fig. No.	Quantity	Designation	Neoteric Part No	
10	2	Inlet intermediate piece	7171	
20	2	Inlet end piece	7172	
30	2	Inlet intermediate piece	7173	
35	2	Plug	7174	
40	6	Hexagon head screw	6927	Loctite 242
50	6	Sealing ring, aluminum	5629	
65	6	Cylinder screw	2292	
70	3	Sealing joint Gasket	6095	
75	3	Sealing joint Gasket	6095	
80	12	Cylinder screw	6911	Loctite 242
100	18	Locking washer	6902	
110	4	Coolant hose	7176	
120	12	Hose clamp	6802	
	1	Water pump and housing	7178	Contains Pos. 130-240
130	1	Water pump	7179	
140	1	Sealing joint f. water pump	7180	
150	1	Holder for water pump clamping	7181	
160	1	Cylinder screw	7182	Loctite 242
170	1	Washer	6936	
180	3	Cylinder screw	7183	Loctite 242
190	2	Washer	6916	
200	1	Washer	5996	
210	1	Casing for water pump	7184	
230	1	Hexagon head screw	6927	Loctite 242
240	1	Sealing ring, aluminum	5629	
250	4	Stay bolt	7185	Loctite 242
255	4	Hexagon head nut	7186	Loctite 242
265	8	Hexagon head nut	6233	
270	12	Washer	6162	Loctite 242
280	1	Water Pump Pulley	6645	
280	1	Water Pump Pulley SS	7613	
290	3	Cylinder screw	7189	
300	3	Washer	6916	
310	1	Driver Pulley	6646	
310	1	Driver Pulley SS	7612	
320	4	Cylinder screw	7189	
330	4	Locking washer	6902	
340	1	V-Belt	6104	
350	2	Coolant hose 90°	7190	
360	1	Connection tube	7191	
380	1	Water Temp Sender	6277	

100HP Water Pump Belt Tension



1. Make sure Water Pump & Housing Assy is level.
2. Failure to do this will give an inaccurate tension reading and premature wear of #6104 Metric V-Belt.
3. Attach a rope to Metric V-Belt in a loop.
4. Attach other end to a pull scale.



5. Pull 1.5 lbs on scale, Metric V-Belt should travel direction you are pulling 3 to 5 mm.
6. Find a point to measure from so your readings are accurate.
7. Continue to raise Water Pump & Housing Assy until tension is achieved.

Hirth 100HP Ignition System

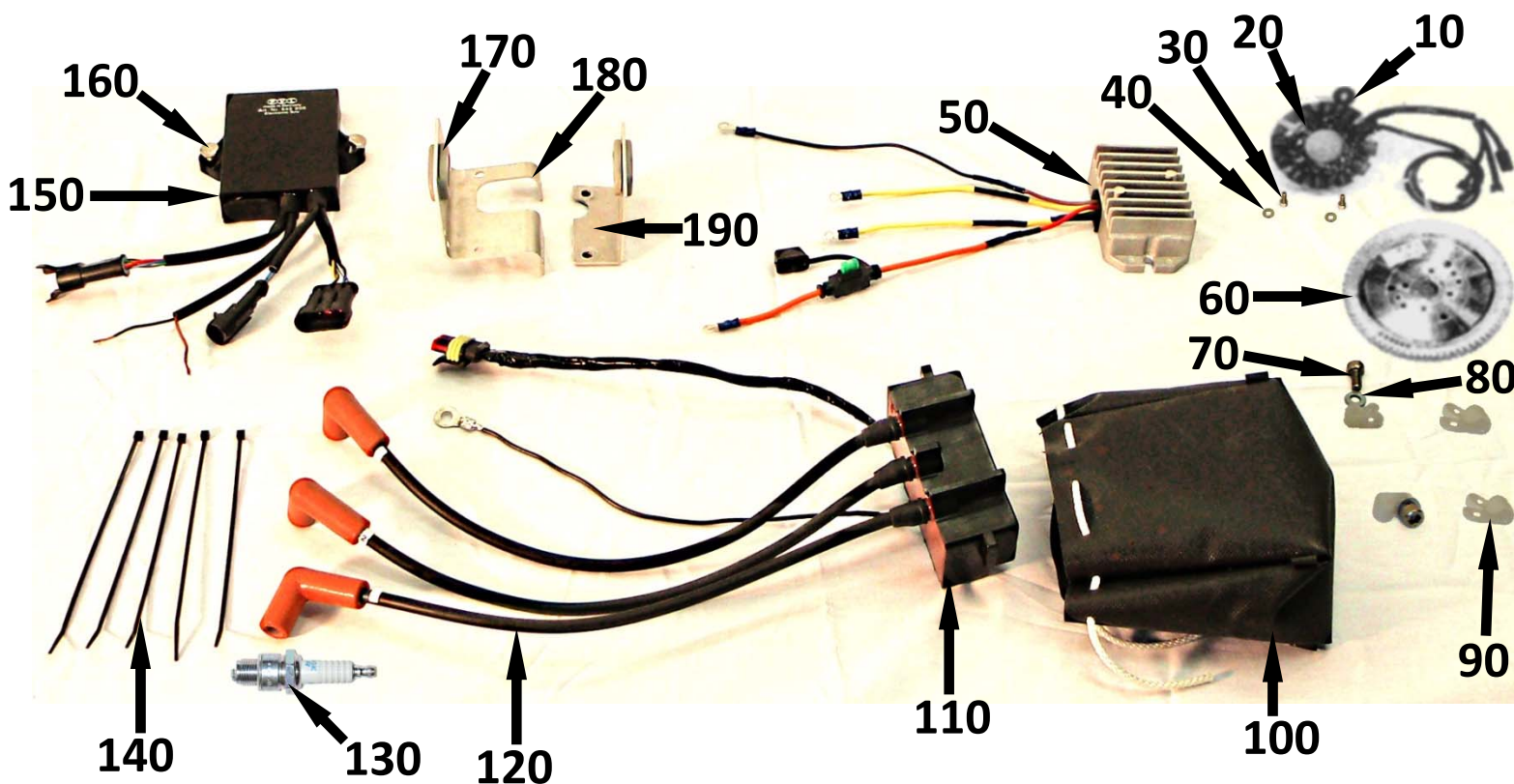
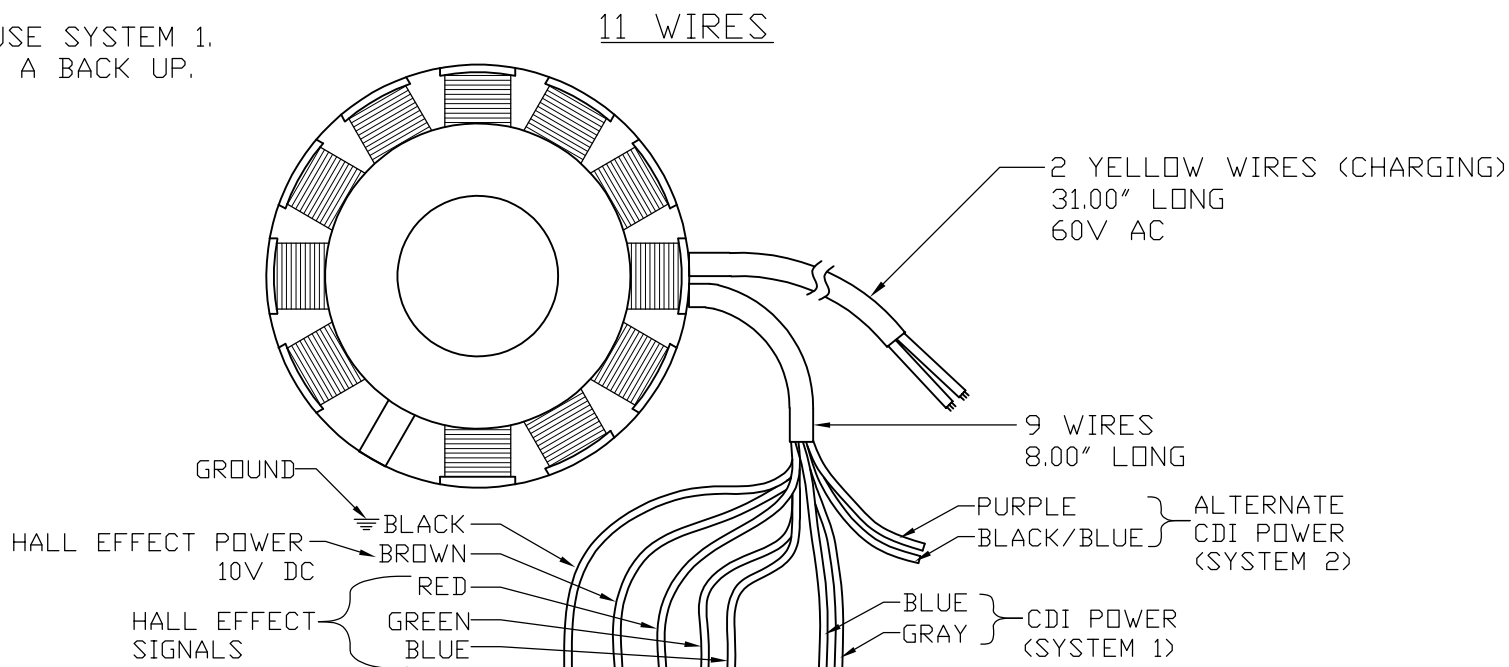


Fig. No.	Qty	Description	Neoteric Part #	Remark / Notes
10	1	Grommet	7194	Not to Scale
20	1	Armature plate, complete	6564	Not to Scale
30	2	Cylinder screw	7182	Torque = 4 - 4.5 Nm (3 - 3.3 ft-lb) & Loctite 243
40	2	Washer	6936	
50	1	Voltage Regulator	5338	
60	1	Magnet flywheel, complete	7195	Not to Scale
70	4	Cylinder Screw	6901	
80	4	Lock Washer	6902	
90	4	Plastic P-Clip	2192	
100	1	Coil Bag	6705	
110	1	100HP Ignition Coil	7053	
120	1	Spark Plug Lead Set	7056	Must be purchased as a set (contains black boots; not shown)
120	-	Spark Plug Lead, Old Style	7343*	*No longer available; Must purchase set 7056 (contains red boots as shown above)
130	3	Spark Plug	5606	
140	1	Nylon Wire Tie	2372	
150	1	100HP Modified CDI	7814	
160	2	Hex Bolt	2230	
170	2	Mount Plate Grommet	6806	No Longer Used
180	2	Outer Coil Mount Plate	5883	No Longer Used
190	3	Inner Coil Mount Plate	7197	No Longer Used

NOTES:

- 1) 3 HALL EFFECT SENSORS ON PLATE GENERATE TIMING PULSE.
- 2) HALL EFFECT POWER 10V DC.
- 3) ALWAYS USE SYSTEM 1. SYSTEM 2 IS A BACK UP.

BILL OF MATERIAL			
REF.	PART #	DESCRIPTION	QTY.
	6564	100HP ARMATURE STATOR PLATE COMPLETE	1



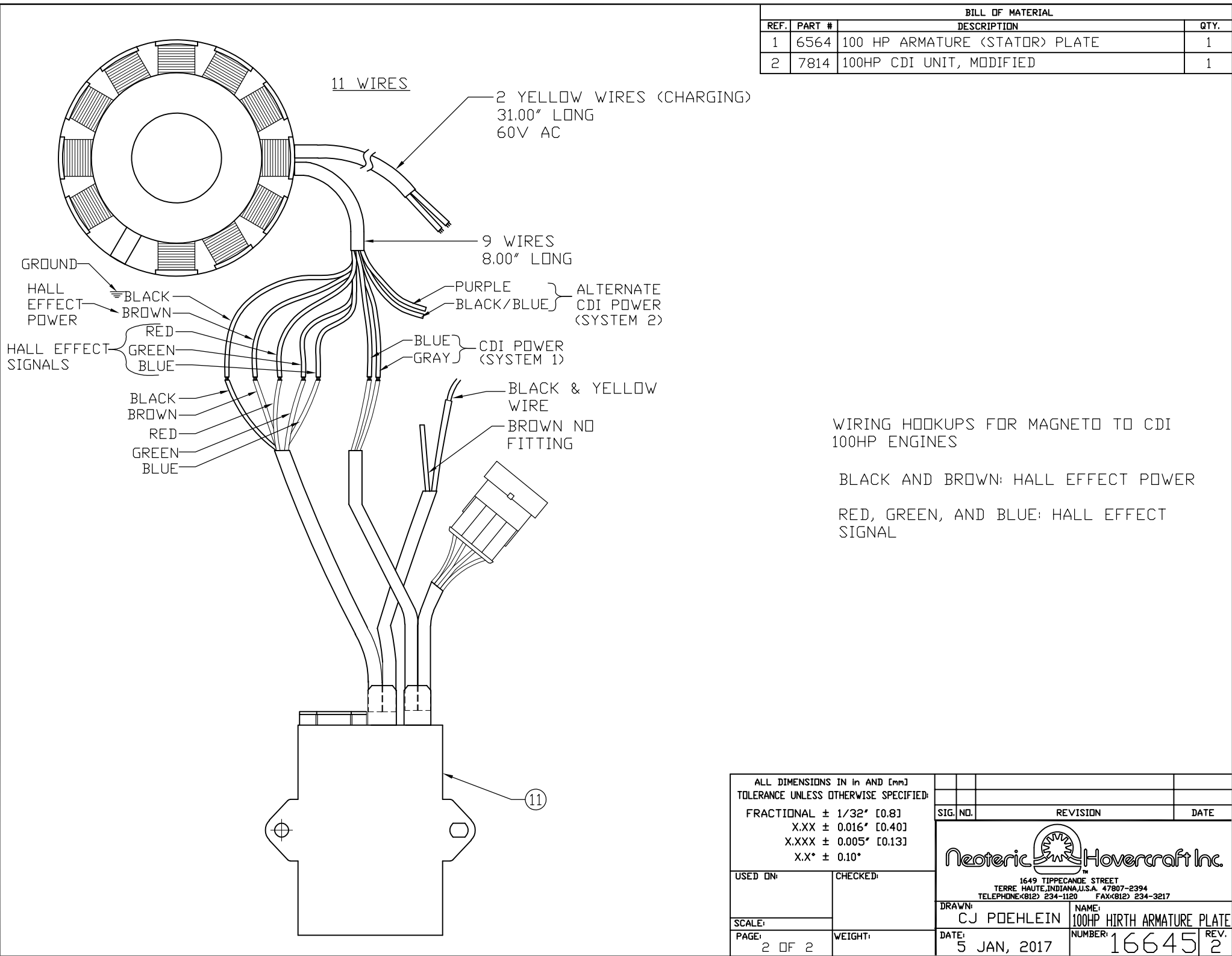
OHM VALUES

YELLOW & YELLOW: 0.08 ohm
 YELLOW TO GROUND: 3M ohm
 PURPLE TO BLACK & BLUE: 8.76 ohm
 PURPLE TO GROUND: 3M ohm
 BLACK & BLUE TO GROUND: 3M ohm.
 BLUE TO GRAY: 8.87 ohm.
 BLUE TO GROUND: 3M ohm.
 GRAY TO GROUND: 3M ohm.

BLACK AND BROWN: HALL EFFECT POWER
 RED, GREEN, AND BLUE: HALL EFFECT SIGNAL

DISCONNECT KILL SWITCH (BLUE OR BLACK) 250DC MEASURE.

ALL DIMENSIONS IN IN AND [mm] TOLERANCE UNLESS OTHERWISE SPECIFIED: FRACTIONAL $\pm 1/32"$ [0.8] X.XX $\pm 0.016"$ [0.40] X.XXX $\pm 0.005"$ [0.13] X.X* $\pm 0.10"$		SIG. NO.		REVISION		DATE	
USED ON:		CHECKED:		 Neoteric Hovercraft Inc. 1649 TIPPECANOE STREET TERRE HAUTE, INDIANA, U.S.A. 47807-2394 TELEPHONE (812) 234-1120 FAX (812) 234-3217			
SCALE:		WEIGHT:					
PAGE: 1 OF 2							
DRAWN: CJ POEHLEIN		NAME: 100HP HIRTH ARMATURE PLATE		DATE: 5 JAN, 2017		NUMBER: 16645	
						REV. 2	



BILL OF MATERIAL			
REF.	PART #	DESCRIPTION	QTY.
1	6564	100 HP ARMATURE (STATOR) PLATE	1
2	7814	100HP CDI UNIT, MODIFIED	1

WIRING HOOKUPS FOR MAGNETO TO CDI
100HP ENGINES

BLACK AND BROWN: HALL EFFECT POWER

RED, GREEN, AND BLUE: HALL EFFECT
SIGNAL

ALL DIMENSIONS IN IN AND [mm] TOLERANCE UNLESS OTHERWISE SPECIFIED: FRACTIONAL $\pm 1/32"$ [0.8] X.XX $\pm 0.016"$ [0.40] X.XXX $\pm 0.005"$ [0.13] X.X° $\pm 0.10^\circ$		SIG.	NO.	REVISION	DATE
USED ON:	CHECKED:	 Neoteric Hovercraft Inc. 1649 TIPPECANOE STREET TERRE HAUTE, INDIANA, U.S.A. 47807-2394 TELEPHONE (812) 234-1120 FAX (812) 234-3217			
SCALE:	WEIGHT:				
PAGE: 2 OF 2		DRAWN: CJ POEHLEIN	NAME: 100HP HIRTH ARMATURE PLATE	DATE: 5 JAN, 2017	NUMBER: 16645 REV. 2

100HP Carbureted Engine

Offered Jan 2016

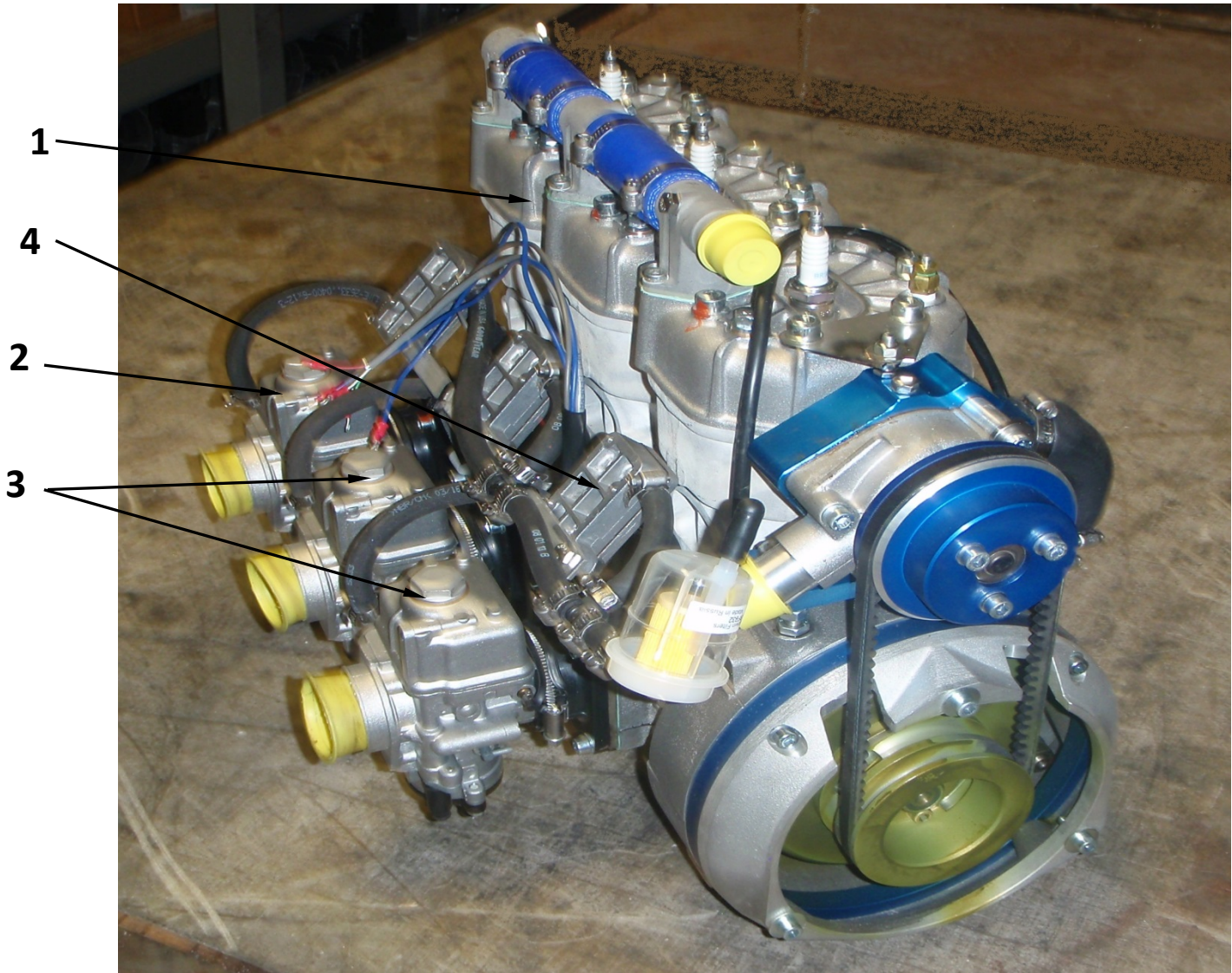
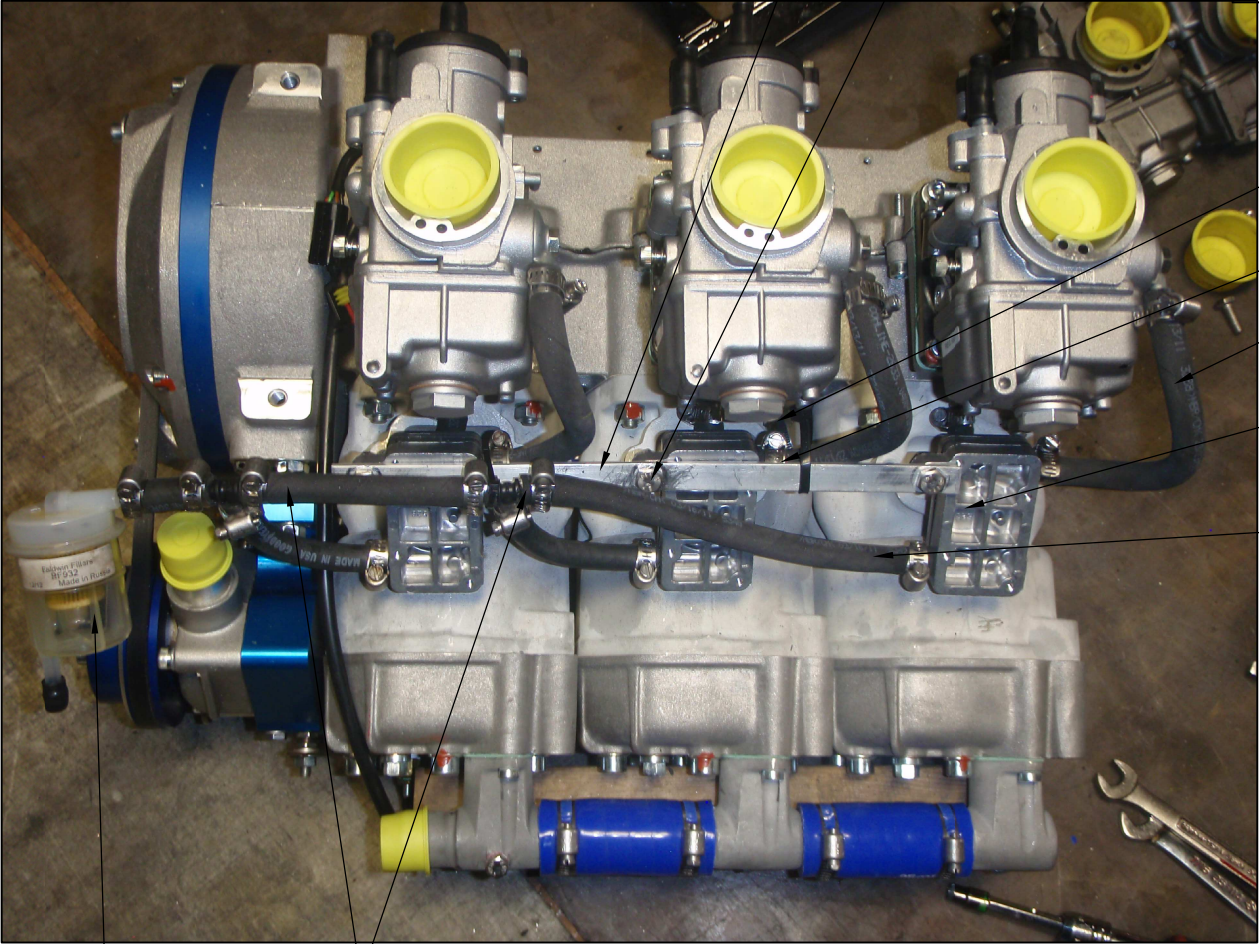


Fig No.	Quantity	Description	Neoteric Part No.	Notes
1	1	100HP Carbureted Engine	9219	Offered June 2016
2	1	Carburetor (left)	9266	
3	2	Carburetor (right)	9267	Only for 100HP Carb.
4	1	100HP Carb Fuel System	7211	Only for 100HP Carb.

BILL OF MATERIAL			
REF.	PART #	DESCRIPTION	QTY.
1	2192	NYLON P-CLIP	1
2	2371	NYLON WIRE TIE, BLACK	2
3	1302	FUEL FILTER	1
4	3000	FUEL HOSE, BLACK	41.25
5	9149	SINGLE FEED FUEL PUMP	3
6	2203	WORM-GEAR HOSE CLAMP, SS	22
7	2391	HEX BOLT, SS	3
8	2451	HEX NUT, SS	3
9	3188	THREAD LOCK ADHESIVE, RED	2
10	3397	ALUMINUM PLATE	10.50
11	5427	FUEL TEE FITTING	2



SIG.	NO.	REVISION	DATE
 Neoteric Hovercraft Inc. 1649 TIPPECANOE STREET TERRE HAUTE, INDIANA, U.S.A. 47807-2394 TELEPHONE (812) 234-1120 FAX (812) 234-3217			
DRAWN: CJ POEHLEIN		NAME: 100HP CARBURETED FUEL SYSTEM	
DATE: 10 JUNE, 2016		NUMBER: 16674	
USED ON: 		CHECKED: 	
SCALE: 		WEIGHT: 	
PAGE: 1 OF 1		REV. 2	

**65HP Hirth Carburetor / Fuel mixture
(3203)**

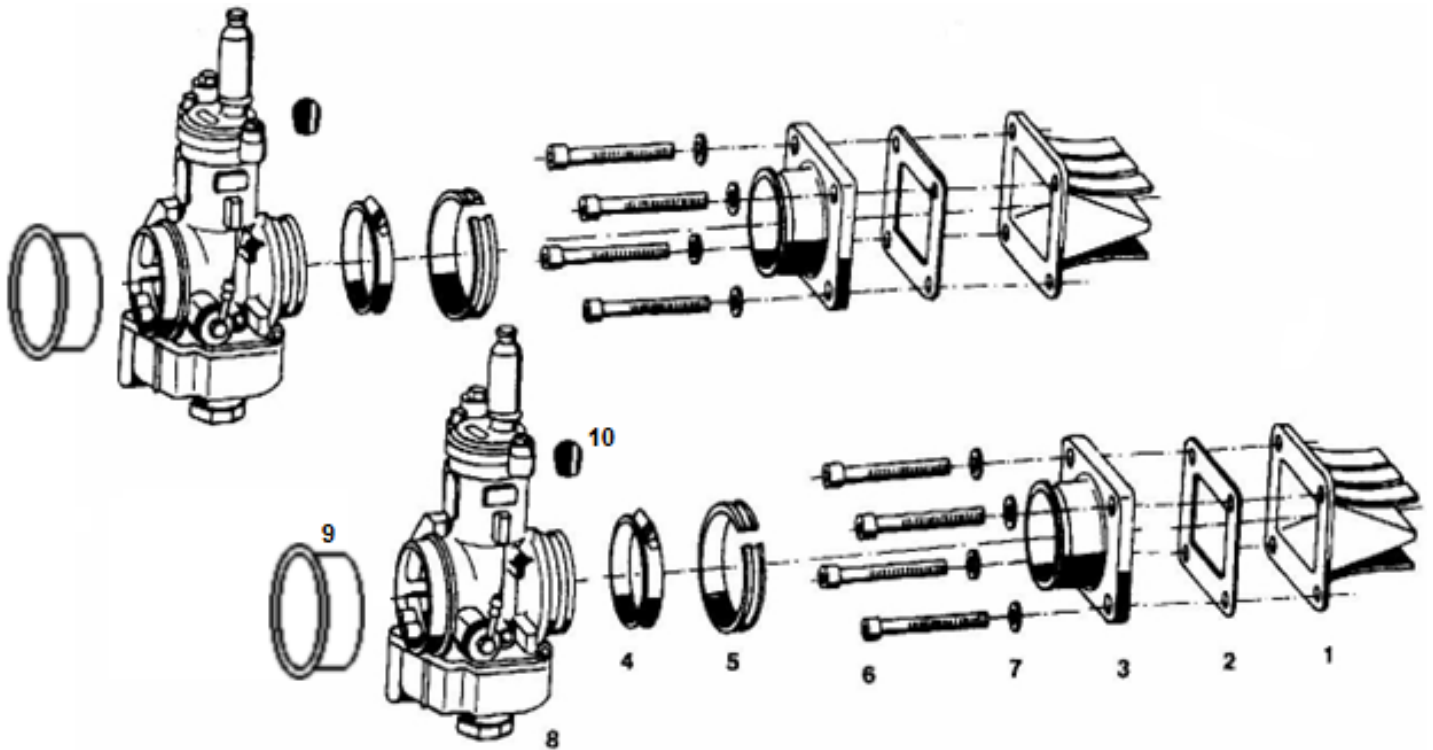
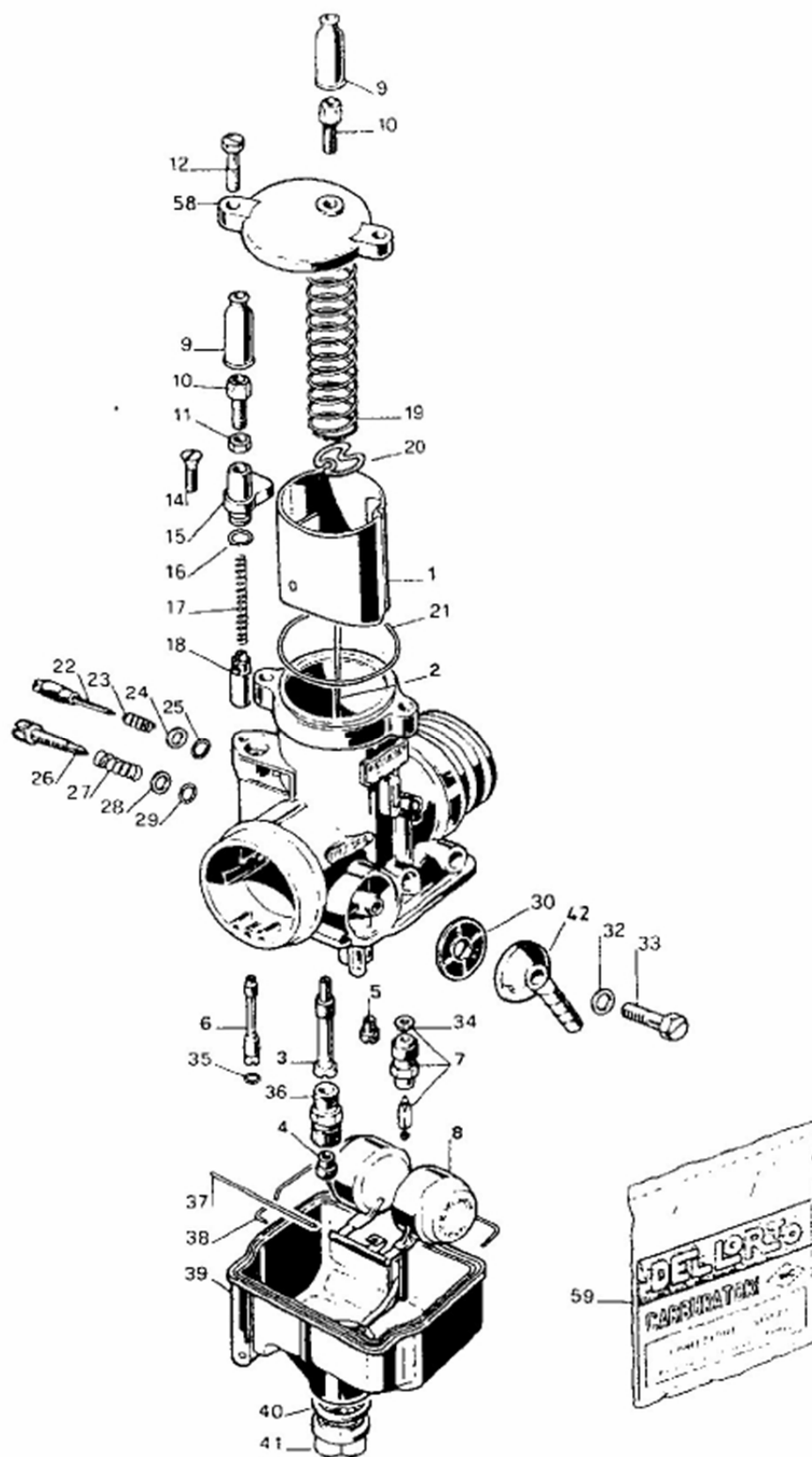


Fig No.	Qty.	Description	Neoteric Part #	Remark/Note
1	2	Reed valve	7203	
2	2	Gasket	5463	
3	2	Intake manifold/carb flange	6568	
4	2	Hose clamp	9018	
5	8	Rubber	9019	
6	8	Cylinder screw	7183	Torque = 9.6 - 11 Nm (7.1 - 8.1 ft-lb) Loctite 243
7	2	Washer	6916	
8	2	Dellorto Carburetor	5355	See Form 17754 / 17755 for Carb Parts
9	2	Protective stopper	7207	
10		Hirth Rubber Socket	7208	

Carburetor (Dellorto) PHBE 34



Carburetor (Dellorto) F 33 A (PHBE 34 BD 6832)

Fig. No.	Qty.	Description	Neoteric Part #	Remark/Note
1	1	Throttle slide	9022	
2	1	Jet needle, K36	6563	
3	1	Needle jet	-	
4	1	Main jet	-	See Form # 17367 for all Dellorto Jets
5	1	Idle jet, 65	9023	
6	1	Cold start / Choke jet	7788	
7	1	Float valve	9024	
8	1	Float	6909	
9	2	Rubber cap	6113	*Included in 7828 Kit
10	1	Choke Cable Adjustment	7828	*Must Purchase 7828 Kit
11	1	Choke Cable Adjustment Locknut	7828	*Must Purchase 7828 Kit
12	2	Top Cover Screw	9027	
14	1	Choke Support Screw	9028	*Must Purchase 7828 Kit
15	1	Choke Support Casting	9029	*Must Purchase 7828 Kit
16	1	Choke Support O-ring	7828	Included in Pos. 59
17	1	Choke Valve Spring	9030	*Must Purchase 7828 Kit
18	1	Choke valve	7828	*Must Purchase 7828 Kit
19	1	Throttle Slide Spring	9025	
20	1	Bracket plate	6973	
21	1	Top Cover O-Ring	9026	Included in Pos. 59
22	1	Mixture Adjustment Screw	9031	
23	1	Mixture Adjustment Spring	9032	
24	1	Mixture Adjustment Washer	9033	
25	1	Mixture Adjustment O-ring	-	Included in pos. 59
26	1	Idle Adjustment Screw	9034	
27	1	Idle Adjustment Spring	9035	
28	1	Idle Adjustment Washer	9036	
29	1	Idle Adjustment O-ring	-	Included in Pos. 59
30	1	Fuel Inlet Filter	9037	
32	1	Fuel Inlet O-ring	-	Included in Pos. 59
33	1	Fuel Inlet Screw	9038	
34	1	Needle Valve Gasket Washer	-	Included in Pos. 59
35	1	Cold Start / Choke O-ring	-	Included in Pos. 59
36	1	Main jet holding screw	9039	
37	1	Float Pivot Pin	9040	
38	1	Sealing for float chamber	9296	Included in Pos. 59
39	1	Float Bowl	9041	
40	1	Float Bowl Gasket Washer	7213	Included in Pos. 59
40	1	Float Bowl Gasket O-Ring	2739	Optional Replacement For Washer
41	1	Float Bowl Nut	9042	
42	1	Fuel Inlet Nipple	6114	
58	1	Carburetor Top Cover	9043	
59	1	Gasket set	5468	Includes Pos. 16,21,25,29,32,34,35,38,40

**65HP (PHBE) Dellorto Carb Jets
Parts List**

Qty.	Description	Neoteric Part #	Remark / Note
1	Main Jet, 155	5443	
	Main Jet, 142	5444	
	Main Jet, 145	5467	
	Main Jet, 160	5863	
	Main Jet, 150	9294	
	Main Jet, 158	6193	
1	Idle Jet, 65	9023	
1	Cold Start / Choke Jet, 90	7788	
1	Atomizer / Needle Jet, AB/266	5726	
	Atomizer / Needle Jet, AB/262	5760	
	Atomizer / Needle Jet, AB/268	6194	
1	Jet Needle, K36	6563	

100HP Carbureted Engine Saltwater Package

Offered Jan 2016

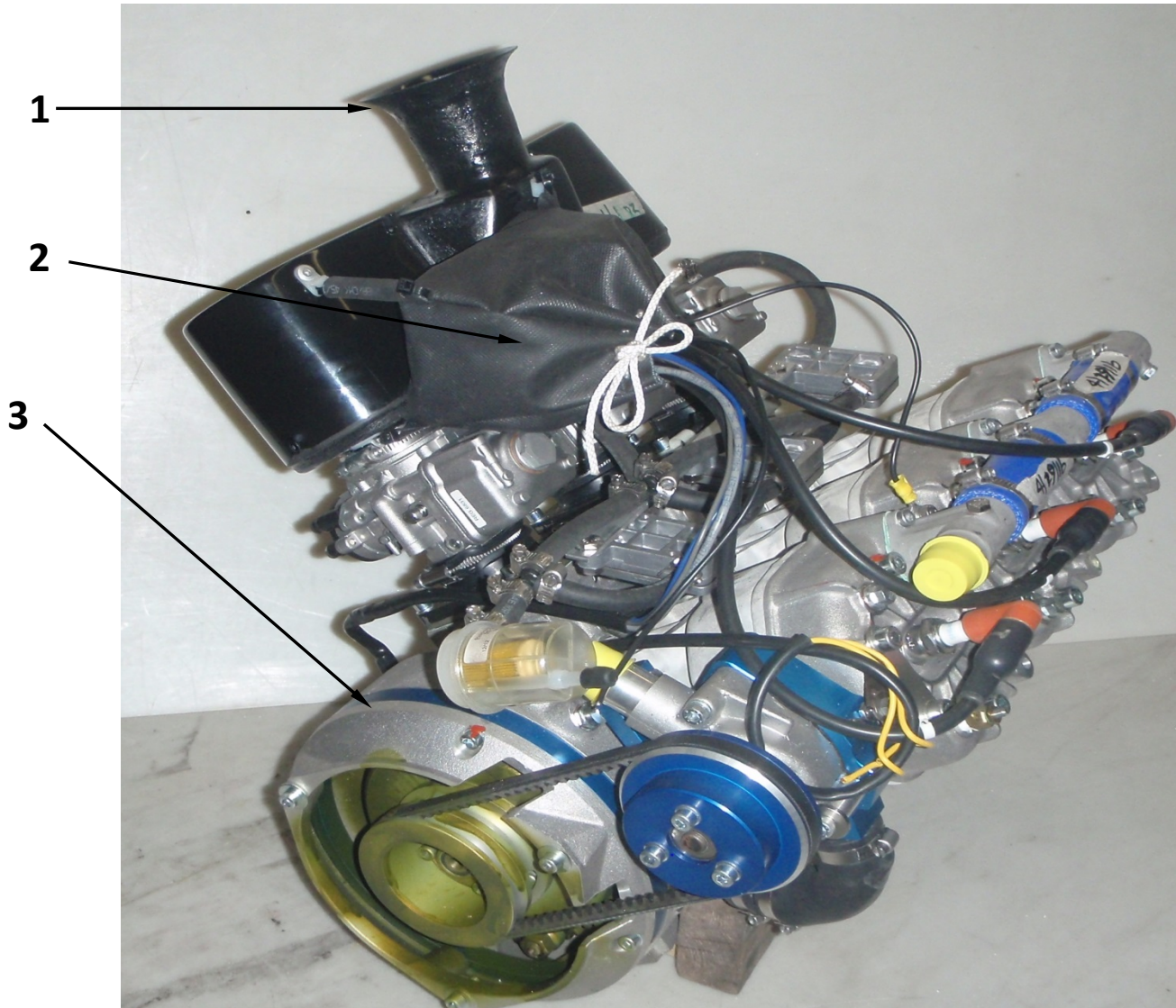


Fig No.	Quantity	Description	Neoteric Part No.	Notes
1	1	HT6 Saltwater Air Intake Filter Box Assembly	6703	
2	1	100HP Coil & CDI Assembly	9157	
3	1	100HP Carbureted Engine Modified	9219	Offered June 2016

3-Cylinder Fuel Injection Electrical System

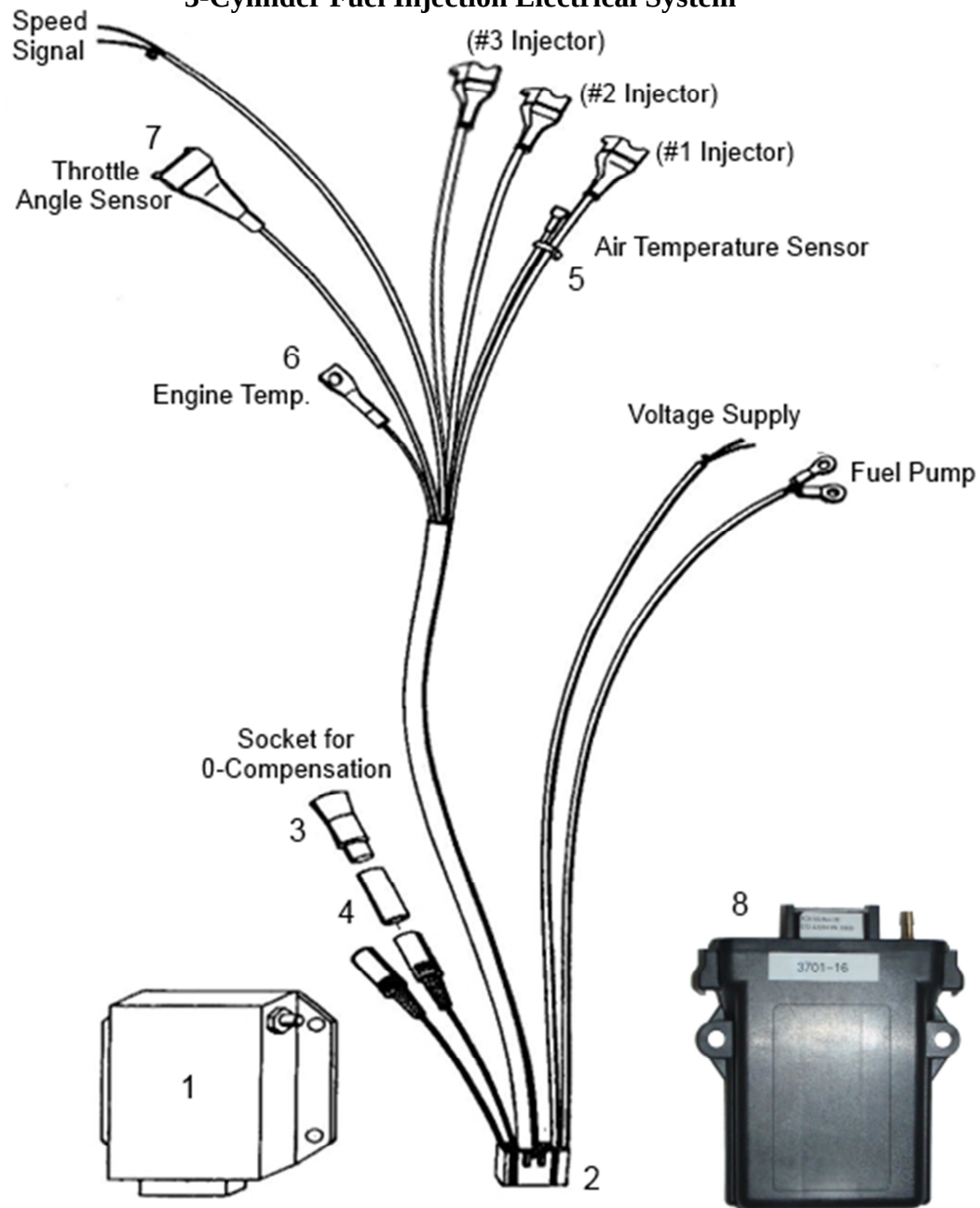


Fig.No.	Qty	Description	Neoteric Part #	Note
1	1	Red Computer Box	5616	Used on Early HoverTrek Models
2	1	Cable harness, Red	6453	Harness for Red Computer Box
2	1	Cable harness, Black	6210	Harness for Black Computer Box
3	1	0-compensation plug	7205	Used when optional manual enrichment device not used -
4	1	Shrink tube	3192	Place on plug with 3 wires (cable colors red, blue, black) 60 denotes length in mm
5	1	Air Temp Sensor	7525	
6	1	Engine Temp Sensor	7526	Attached to Cylinder Head
7	1	Throttle Pos. Sensor	7567	
8	1	Black Computer Box	6383	Used on Current HoverTrek Models

Fuel injection horizontal 3701



Fig. No.	Quantity	Description	Neoteric Part #	Remark note
1	3	Reed valve assembly	7203	
2	3	Gasket	5463	
3	12	Cylinder screw	2289	
4	12	Washer	6916	
5	3	Rubber carburetor flange	6568	
6	3	Rubber socket	7208	
7	1	Ground cable	6454	
8	1	Cable clip	7206	
9	1	Throttle manifold	6182	

Hirth Fuel System

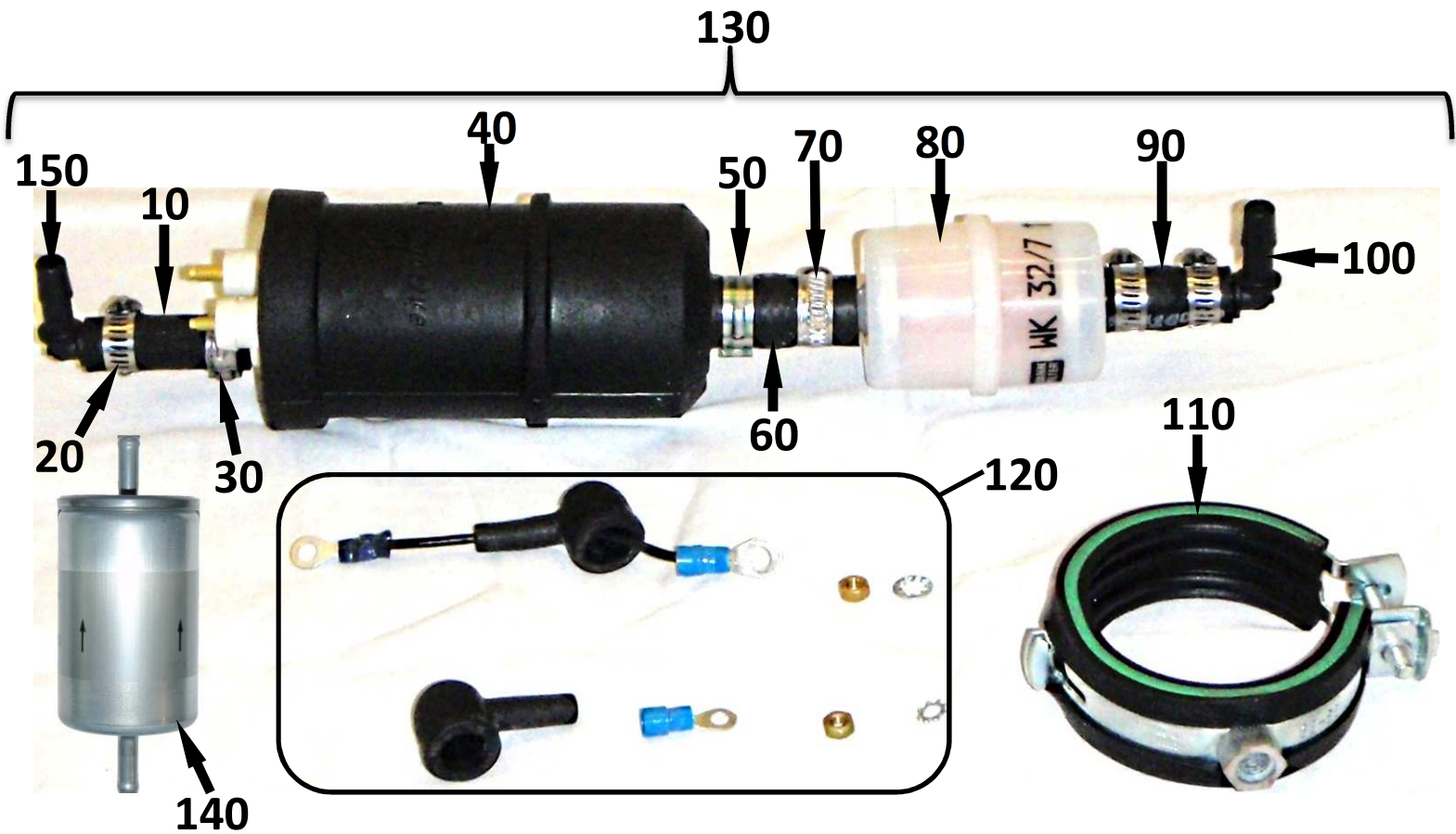


Fig. No.	Qty.	Description	Neoteric Part #	Remark / Notes
10	1	Fuel Line	6335	
20	3	Screw/Band Hose Clamp	2203	
30	1	Pinch Hose Clamp, Sm	5993	
40	1	Electric Fuel Pump	6414	
50	1	Pinch Hose Clamp, Lg	5986	
60	1	Fuel Line	6334	
70	1	Gapless Hose Clamp	6943	
80	1	Fuel Filter	5372	
90	3"	Fuel Line	3193	
100	1	Large Elbow	2674	
110	1	Fuel Pump Holder	6336	
120	1	Fuel Pump Connection Kit	6628	
130	-	Fuel Pump Assy	6666	Includes Fig No. 10 - 120
140	1	Micro Fuel Filter	5373	
150	1	Small Elbow	2438	

Starter / Flywheel Cover

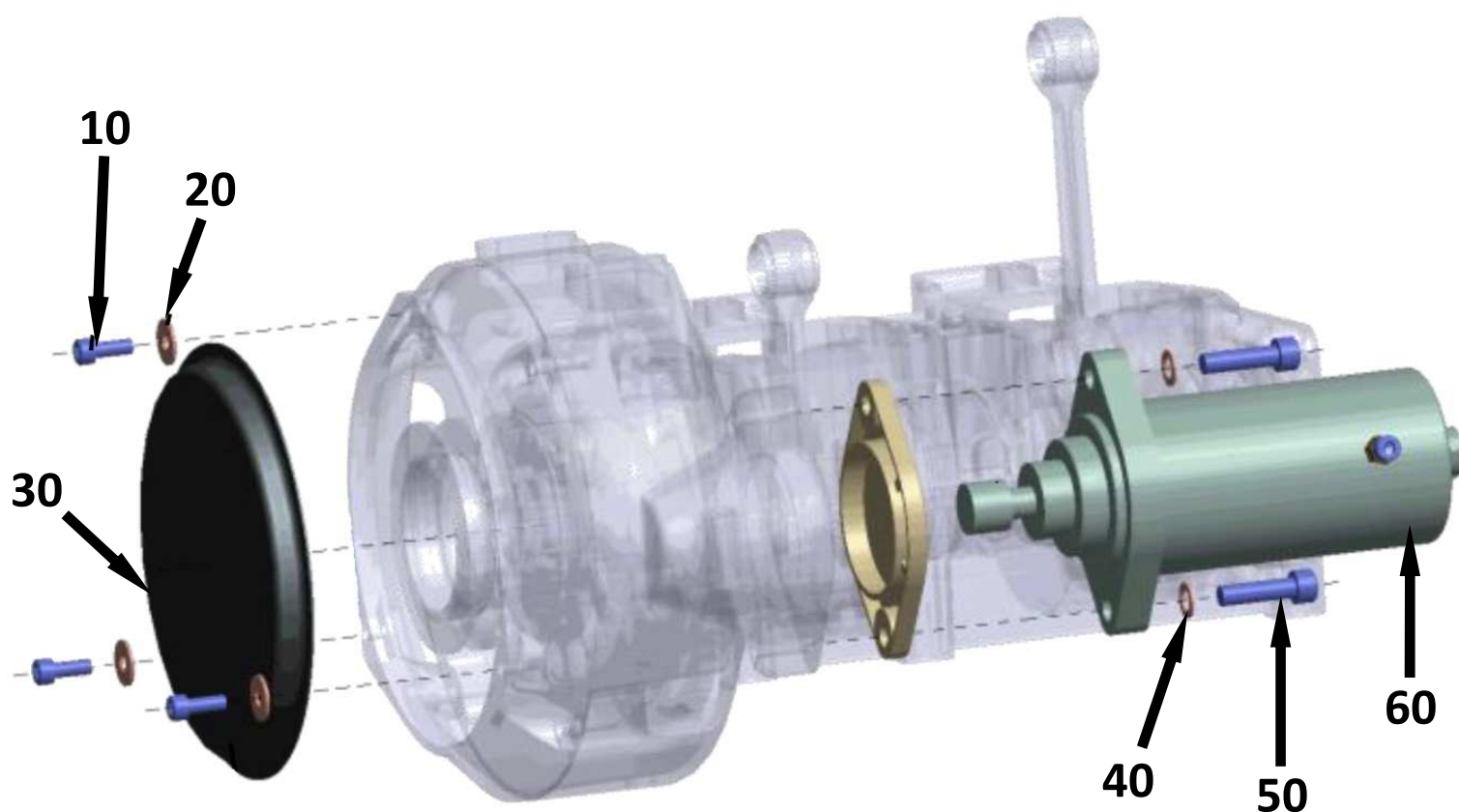
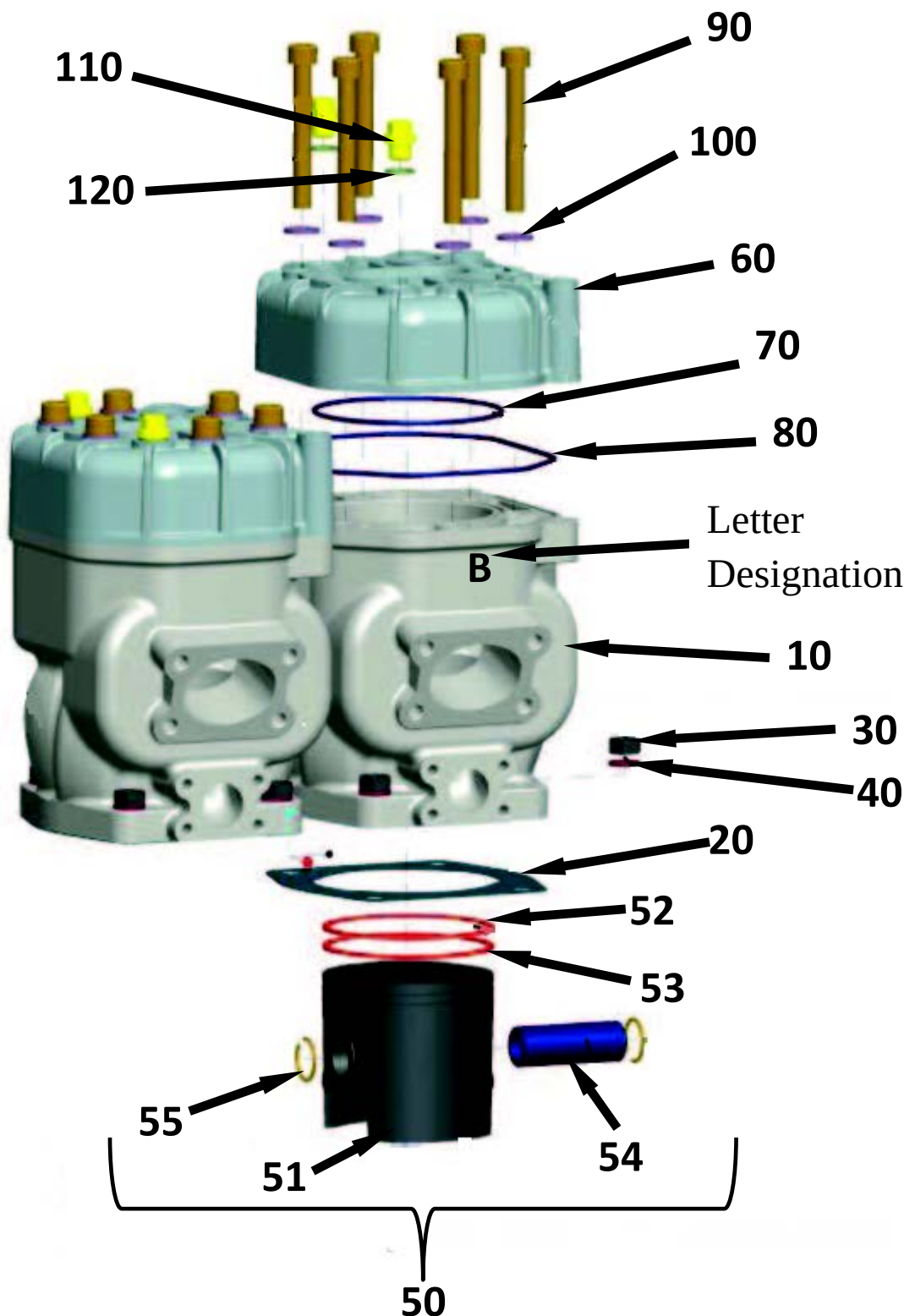


Fig. No.	Qty.	Description	Neoteric Part #	Remark / Notes
10	3	Cylinder Screw	9074	
20	3	Flat Washer	5996	
30	1	Flywheel Housing Cover Plate	9075	
35	1	Fiberglass Water Pump Cover	9073	Replaced housing cover plate, 2015
40	2	Serrated Lock Washer	5995	
50	2	Cylinder Screw	2348	
60	1	Electric Starter (OEM)	6982	Shown Above
60	-	Electric Starter (Replacement)	7563	Not Shown

Hirth 100HP Cylinder Parts Drawing



Note: 3rd Cylinder
Not Shown in
Drawing

Cyl. Marked with
Letters A, B, or C.
Piston Marked with
corresponding Letter.
Note proper Cyl. Letter
when ordering.

Hirth 100HP Cylinder Parts List

Fig. No.	Qty	Description	Neoteric Part #	Remark note
10	3	Cylinder	6090	Cylinders Marked w/ Letter A, B, or C. If no Letter it is a B cyl. Ensure to check cylinder & order proper replacement. Cyl marked toward top, Letter is by itself.
20	3	Cylinder base gasket	5455	
30	12	Hexagon head nut	6233	
40	12	Washer	6234	
50	3	Piston set	5450	Contains Fig. 51-55
51	1	Piston	7210	Piston Marke w/ Letter corresponding to cylinder. A, B, or C. Marked on top of piston.
52	1	Piston ring	5452	
53	1	Piston ring	5451	
54	1	Piston pin	5972	
55	2	Circle clip	6301	
60	3	Cylinder head	6089	Specify Single Ignition
70	3	O-Ring	5892	
80	3	O-Ring	5893	
90	18	Cylinder screw	6408	
100	18	Washer	6407	
110	6	Bleed screw	6409	
120	6	Sealing ring	6410	

Hirth HT6 Air Box Assembly

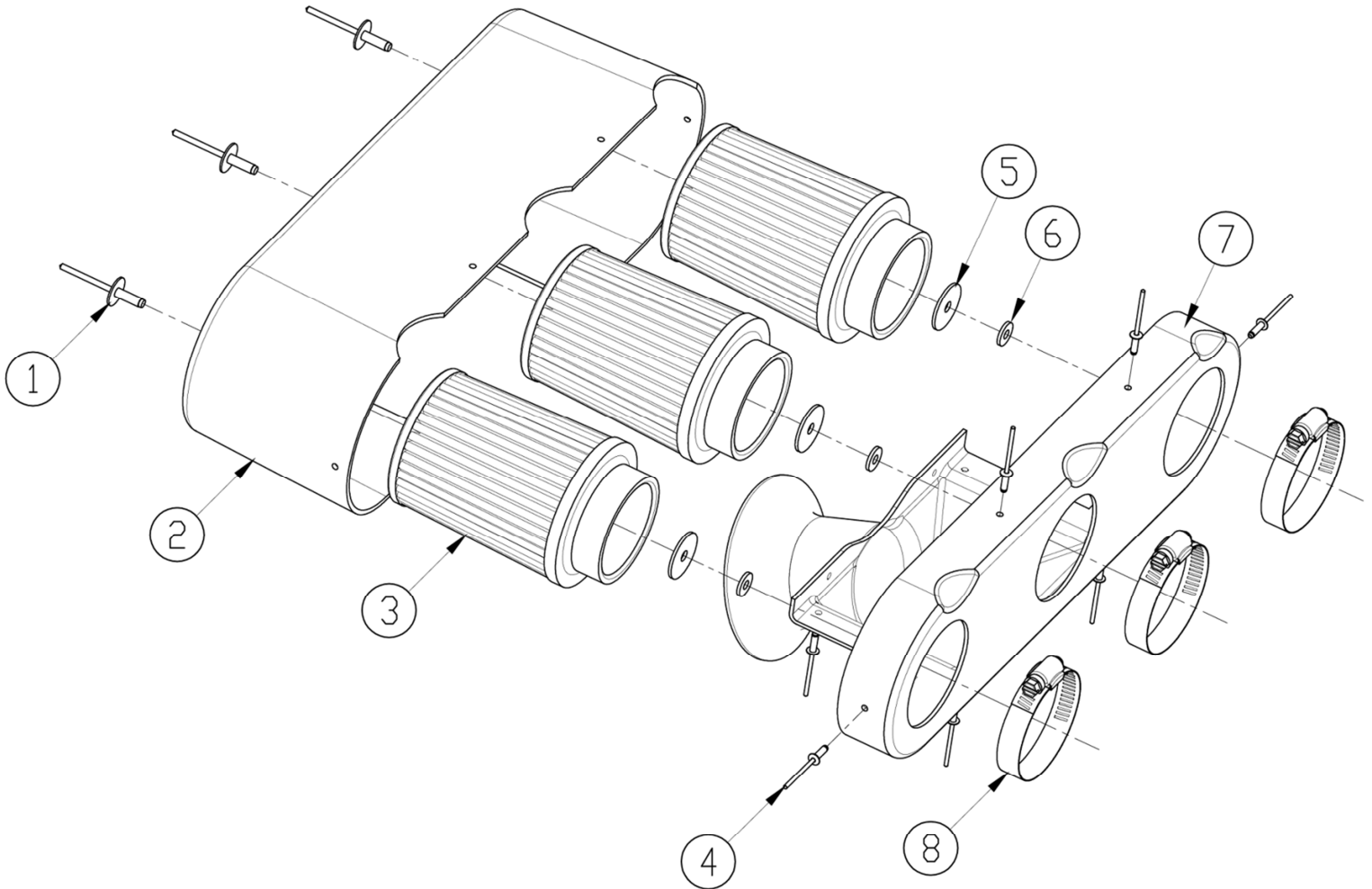
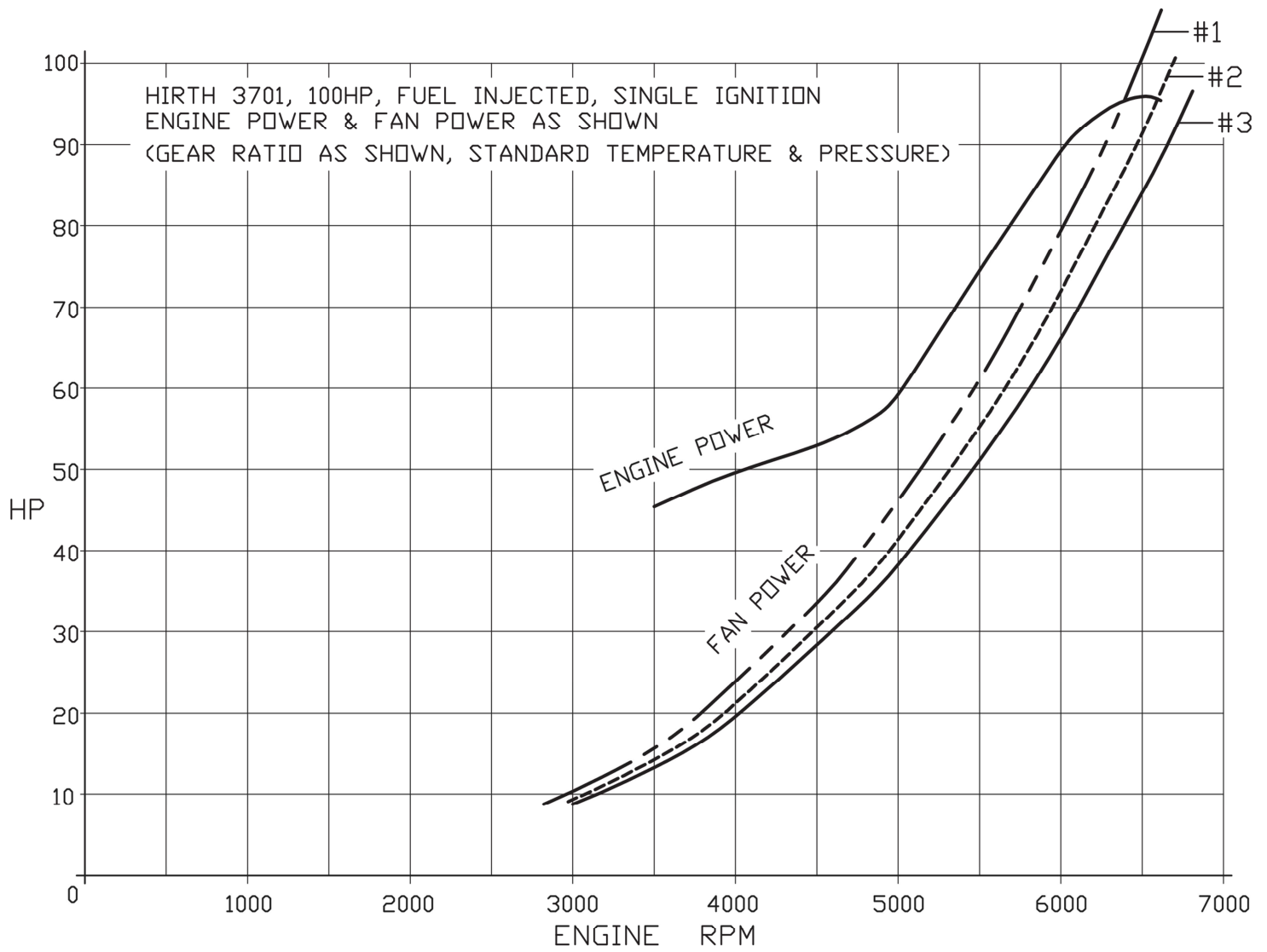


Fig. No.	Qty	Designation	Neoteric Part #	Remark
1	3	Rivet	2156	
2	1	Fiberglass Air Box	5652	
3	3	Air Filter	6622	Includes item 4
4	10	Rivet	2058	
5	3	Large Washer	2516	
6	3	Small Washer	2352	
7	1	Air Collector	6913	
8	3	Hose Clamp	2201	
-	-	Polyurethane Sealant	2378	Not Shown
-	-	Sealed Air Box Assembly	6703	Includes item 1 - 8 as shown above *Entered Service in Late 2010 - Current
-		Unsealed Air Box (Old Style)	5653	Includes item 1, 2, 3, 4, 6, 7 *Used on Craft Produce Before Late 2010

Hirth 100HP Exhaust Header Parts



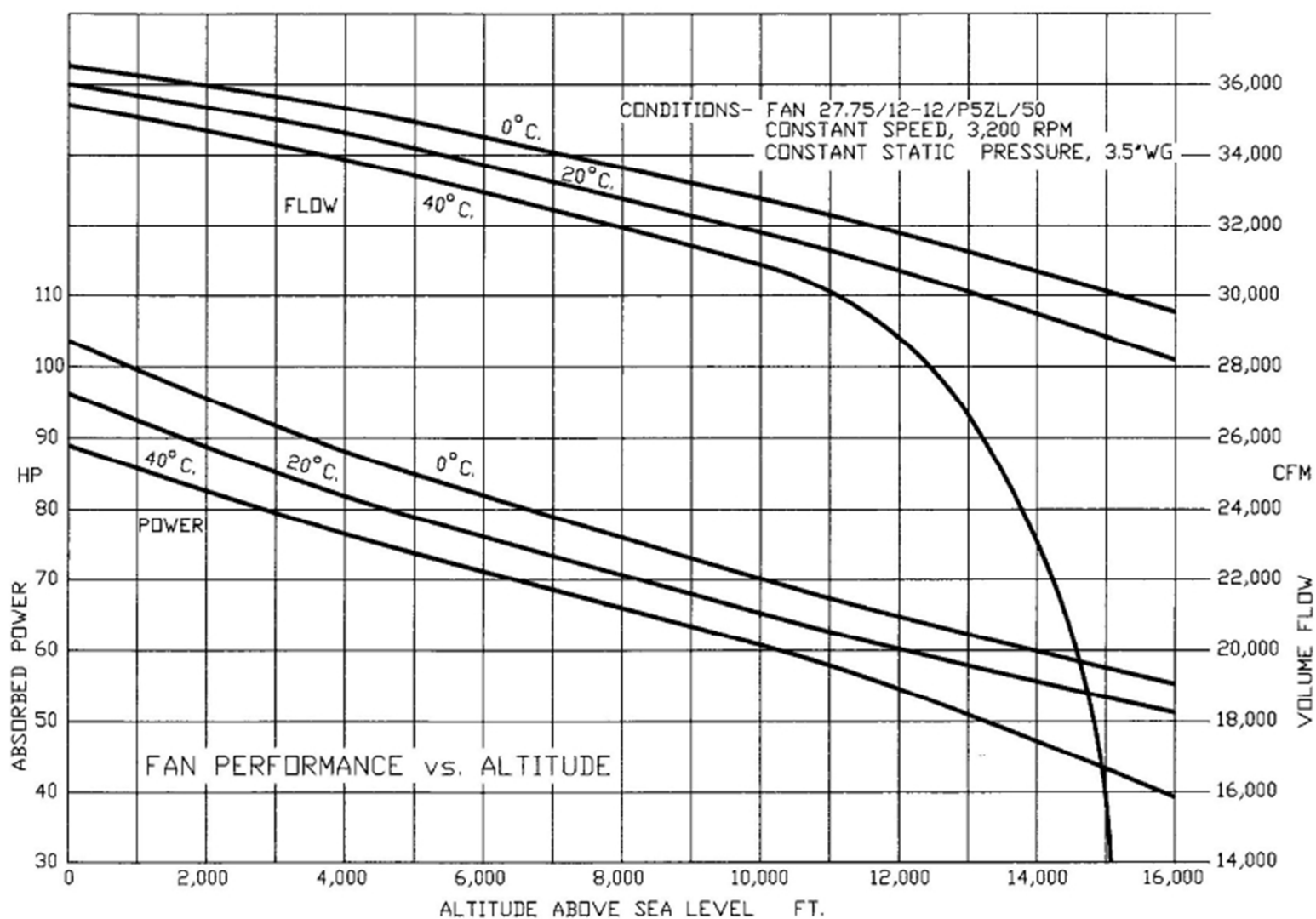
Fig. No.	Qty.	Designation	Neoteric Part No.	Remark note
10	1	Outlet Manifold	5601	
20	3	Outlet gasket	5914	
30	12	Cylinder Screw	6932	
40	4	Exhaust Spring	5421	



#1 FAN POWER: 28"/12-12/5Z/45°; Ratio 34/63

#2 FAN POWER 28"/12-12/5Z/6x45-6x50° (6X 45° & 6X 50° BLADES); Ratio 32/63

#3 FAN POWER: 28"/12-12/5Z/45°; Ratio 32/63



HIRTH ELECTRICAL COMPONENT RESISTANCE VALUES					
Volt Meter Terminal 1 (Red Lead)	Volt Meter Terminal 2 (Black Lead)	Value	Unit	Part	Notes
Yellow Wire	Yellow Wire	0.080	Ohm	5591 - 55/65Hp Stator Coil (Magneto)	
Yellow Wire	Mount Plate	450000000 - 550000000	Ohm		
Primary 1	Primary 2	0.351 - 0.429	Ohm	5682 - 55/65Hp Ignition Coil	See Figure "A"
Primary	Secondary	450000000 - 550000000	Ohm		
Secondary 1	Secondary 2	2699.1 - 3298.9	Ohm		
Black & Green Wire	Black & White Wire	0.396 - 0.484	Ohm	6097 - 100Hp Ignition Coil	See Figure "B"
Yellow & Brown Wire	Black & White Wire	0.405 - 0.495	Ohm		
Black & Blue Wire	Black & White Wire	0.387 - 0.473	Ohm		
Ground	Black & White Wire	450000000 - 550000000	Ohm		
Secondary 1	Ground	1385.1 - 1747.9	Ohm		
Secondary 2	Ground	1386 - 1694	Ohm		
Secondary 3	Ground	1386 - 1694	Ohm		
Yellow Wire	Yellow Wire	0.100	Ohm	6564 - 100Hp Stator Coil (Magneto)	
Black	Red	2.950	Volts (DC)	5338 - Hirth Voltage Regulator	* Must have a multi-meter with a diode test to diagnose voltage regulator
Red	Black	> 5.000	Volts (DC)		
Yellow	Yellow	2.300	Volts (DC)		

