



JABIRU ENGINE PARTS BOOK



5100 SERIES

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Please fill in your engine and aircraft details for future reference.

Engine Serial #:

Aircraft Type:

Model:

Serial #:

Registration #:

Note:

1. Not all parts are illustrated
2. All efforts are made to ensure accuracy at the time of publication, if you find any discrepancies, or have any questions about the contents of this publication please contact Jabiru Aircraft Pty Ltd.
3. All quantities are per engine unless stated otherwise.
4. When ordering parts always quote engine serial number and any upgrades carried out on the engine, as well as item number, part number and description.

Support for the Jabiru 5100 Engine

- It should be noted that the Jabiru 5100 engine is no longer in production and is no longer considered to be 'actively supported' for spare parts or service.
- Furthermore this manual (JEM5102) is similarly no longer 'actively maintained'. Parts shown throughout this manual may no longer be available.
- In some instances parts used on the contemporary 'mainline' of Jabiru engines (i.e. the Jabiru 2200 and 3300) may be available as substitute.
- However many of the major parts unique to the Jabiru 5100 engine are no longer kept in active stock and are therefore generally not available.



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Note:

Refer to Installation Manual for details of parts used in engine installation

Refer to Installation Manual for data & installation details on engine cooling ducts

ITEM	PART NUMBER	DESCRIPTION	QTY
1	4832003-15	CAMSHAFT 8 CYL	1
2	4834002	CRANKCASE L.S. (6L)	1
3	4835002	CRANKCASE R.S. (6L)	1
4	4957022-12	CRANKSHAFT 5.1L 85 STROKE	1
5	4862014-2	STUD LONG - BARREL (6L)	16
6	4347054-9	DOWEL CRANK CASE 2.2L	18
7	MS21042-6	NUT REDUCED WEIGHT	36
8	4861014-2	STUD SHORT- BARREL (6L)	2
9	4860014-2	STUD CRANKCASE FRONT (6L)	2
10	PH4A006N-1	WELSH PLUG 50mm CUP TYPE	1
11	PH4A007N-1	GRUB SCREW 1/4" NPS (8 CYL OIL GALLERY STOPPER)	2
12	4859014-3	HOUSING FRONT SEAL (6L)	1
13	PG4A000N-1	SEAL CRANK FRONT - 8 CYL (100 x 80 x 10)	1
14	PH0555N	5/16" x 3/4" UNC CAP SCREW	4
15	4A005A0D-4	MOUNT ADAPTOR FILLER BREATHER	1
16	PG10042N-1	BS114V O RING	16
17	PG92324-1	LIFTER VALVE	16

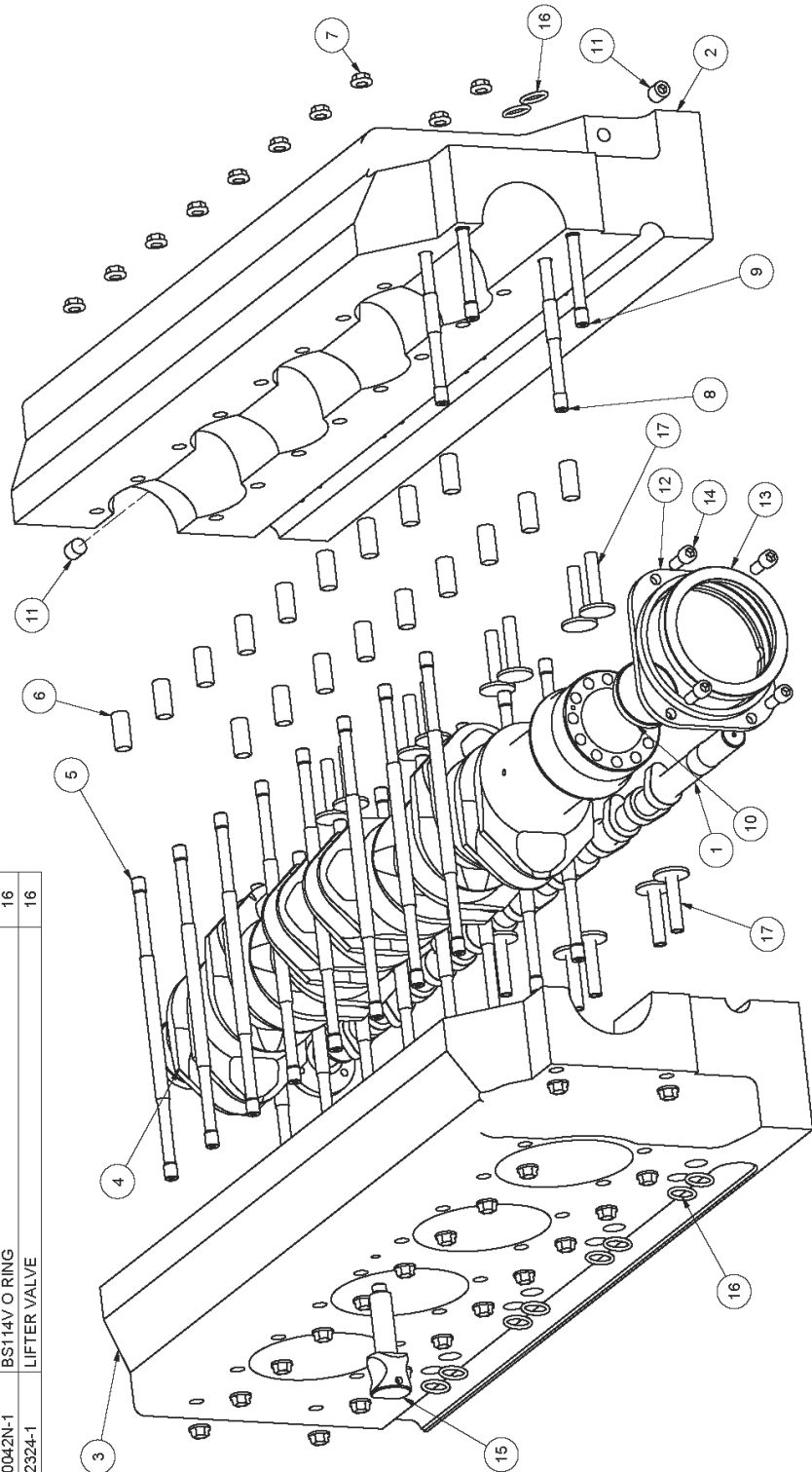


Figure 1 – Crank & Crankcase Assembly

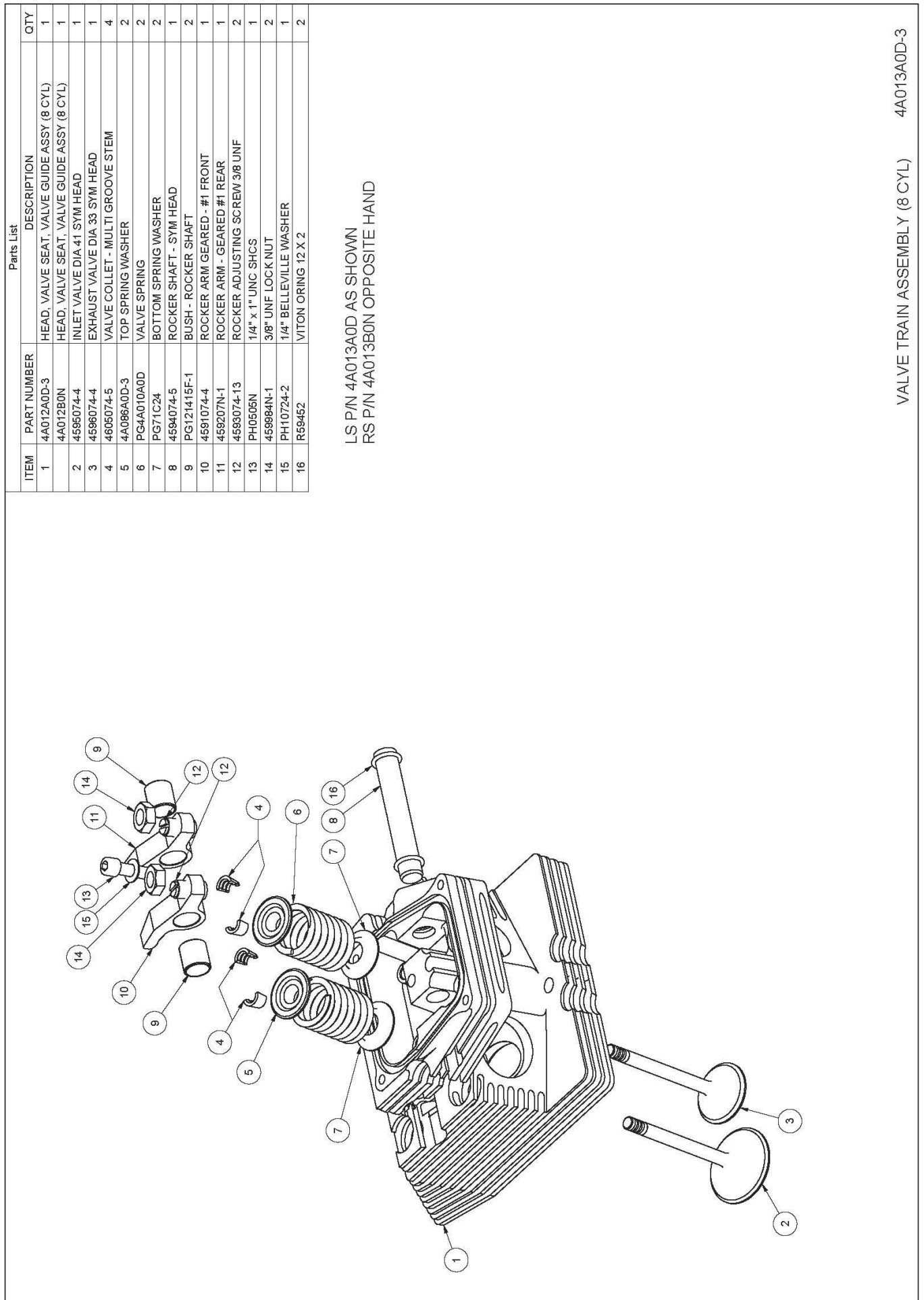


Figure 2 – Valve Train Assembly to S/N 33

ITEM	PART NUMBER	DESCRIPTION	QTY
1	4595074-4	INLET VALVE DIA 41 SYM HEAD	1
2	4596074-4	EXHAUST VALVE DIA 33 SYM HEAD	1
3	4605074-5	VALVE COLLET - MULTI GROOVE STEM	4
4	4A086A0D-3	TOP SPRING WASHER	2
5	PG4A010A0D	VALVE SPRING	2
6	PG71C24	BOTTOM SPRING WASHER	2
7	4594074-5	ROCKER SHAFT - SYM HEAD	1
8	PG121415F-1	BUSH - ROCKER SHAFT	2
9	4591074-4	ROCKER ARM GEARED - #1 FRONT	1
10	459207N-1	ROCKER ARM - GEARED #1 REAR	1
11	4593074-13	ROCKER ADJUSTING SCREW 3/8 UNF	2
12	PH0505N	1/4" x 1" UNC SHCS	1
13	459984N-1	3/8" UNF LOCK NUT	2
14	PH10724-2	1/4" BELLEVILLE WASHER	1
15	R59452	VITON ORING 12 X 2	2
16	4A466A0D-1	HEAD ASY 8 CYL - GUIDES & SEATS NARROW FINS LS	1
	4A46BON	HEAD ASY 8 CYL - GUIDES & SEATS NARROW FINS RS	1

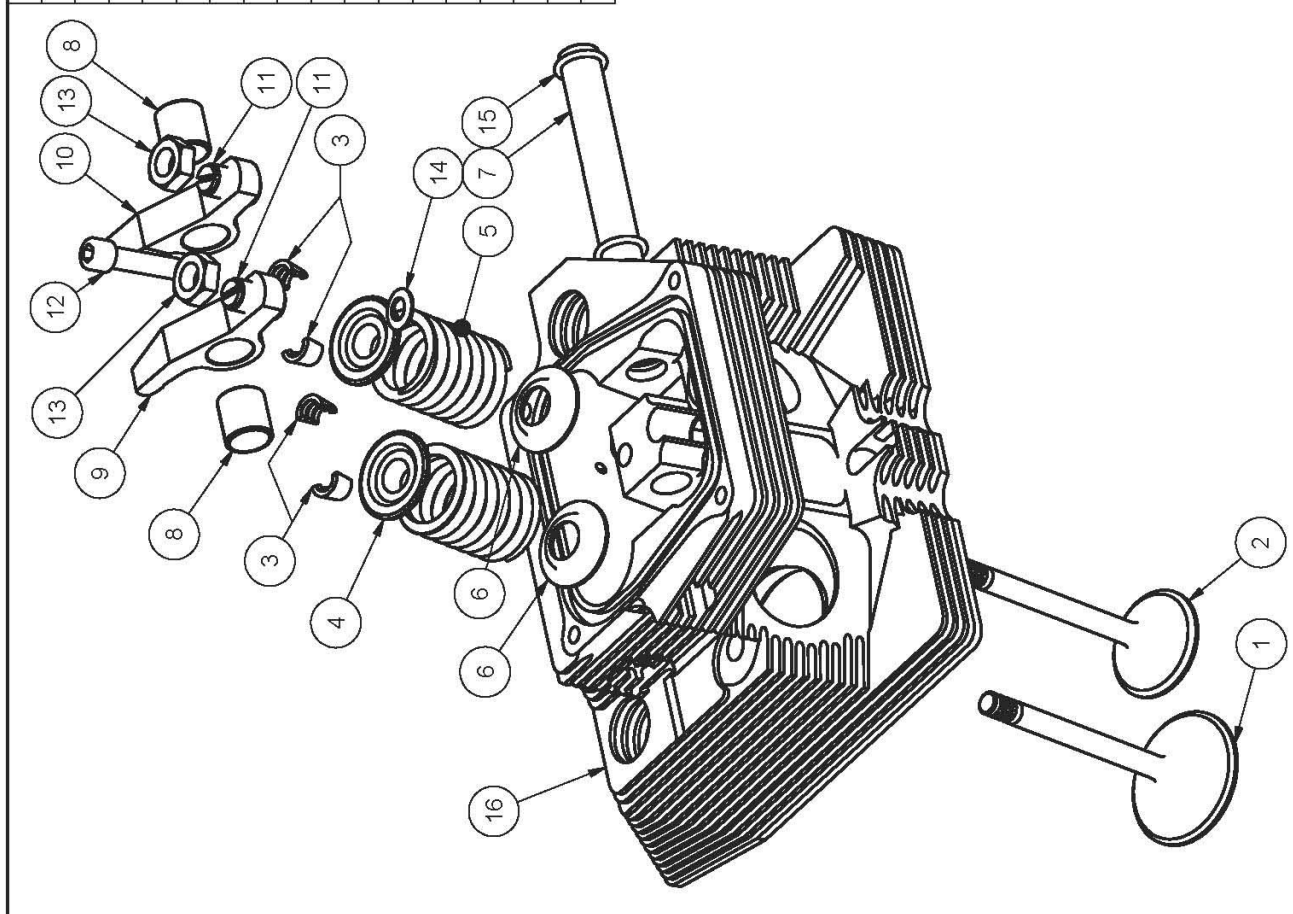


Figure 3 – Valve Train Assembly (Narrow Fins) S/N 34 on

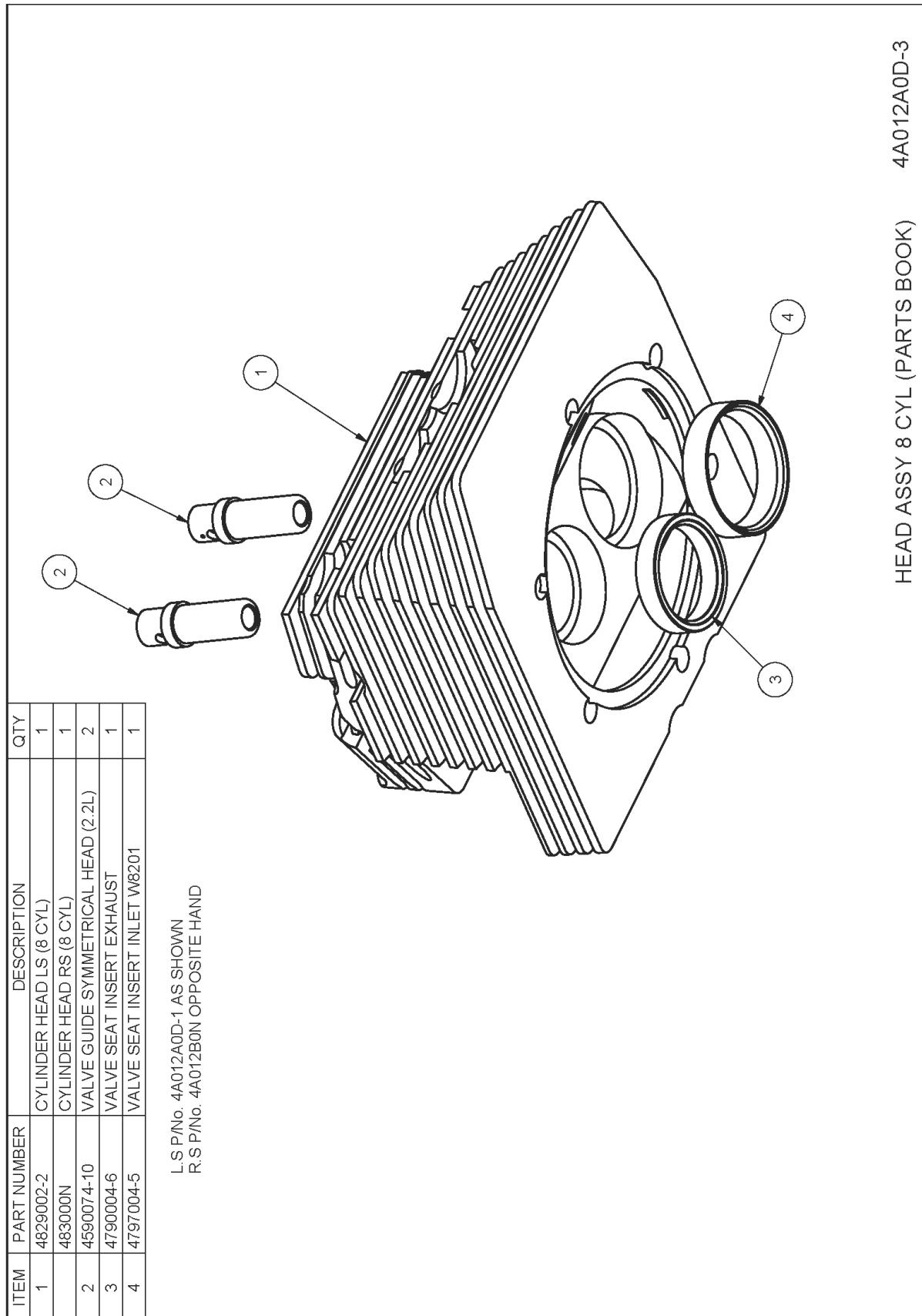


Figure 4 – Head, Valve Guides & Seats Assembly to S/N 33

Note:

Oversize valve guides available, use std P/N & specify 0.05, 0.10, 0.15 Oversize. Identification is by 1, 2 or 3 dimples on exposed diameter when Fitted to assembled head

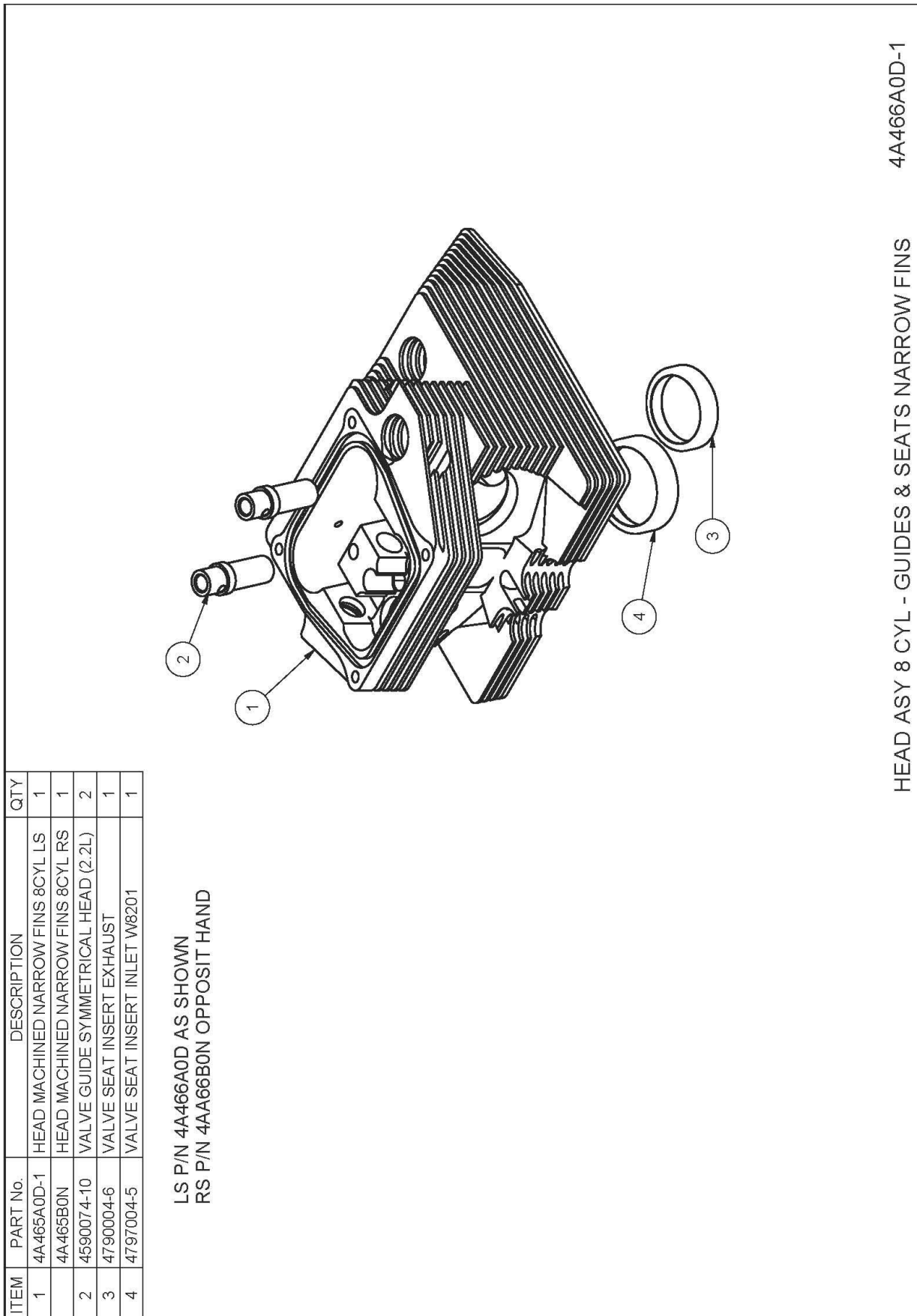


Figure 5 – Head, Valve Guides & Seats Assembly Narrow Fins S/N 34 on

Note:

Oversize valve guides available, use std P/N & specify 0.05, 0.10, 0.15 Oversize. Identification is by 1, 2 or 3 dimples on exposed diameter when Fitted to assembled head

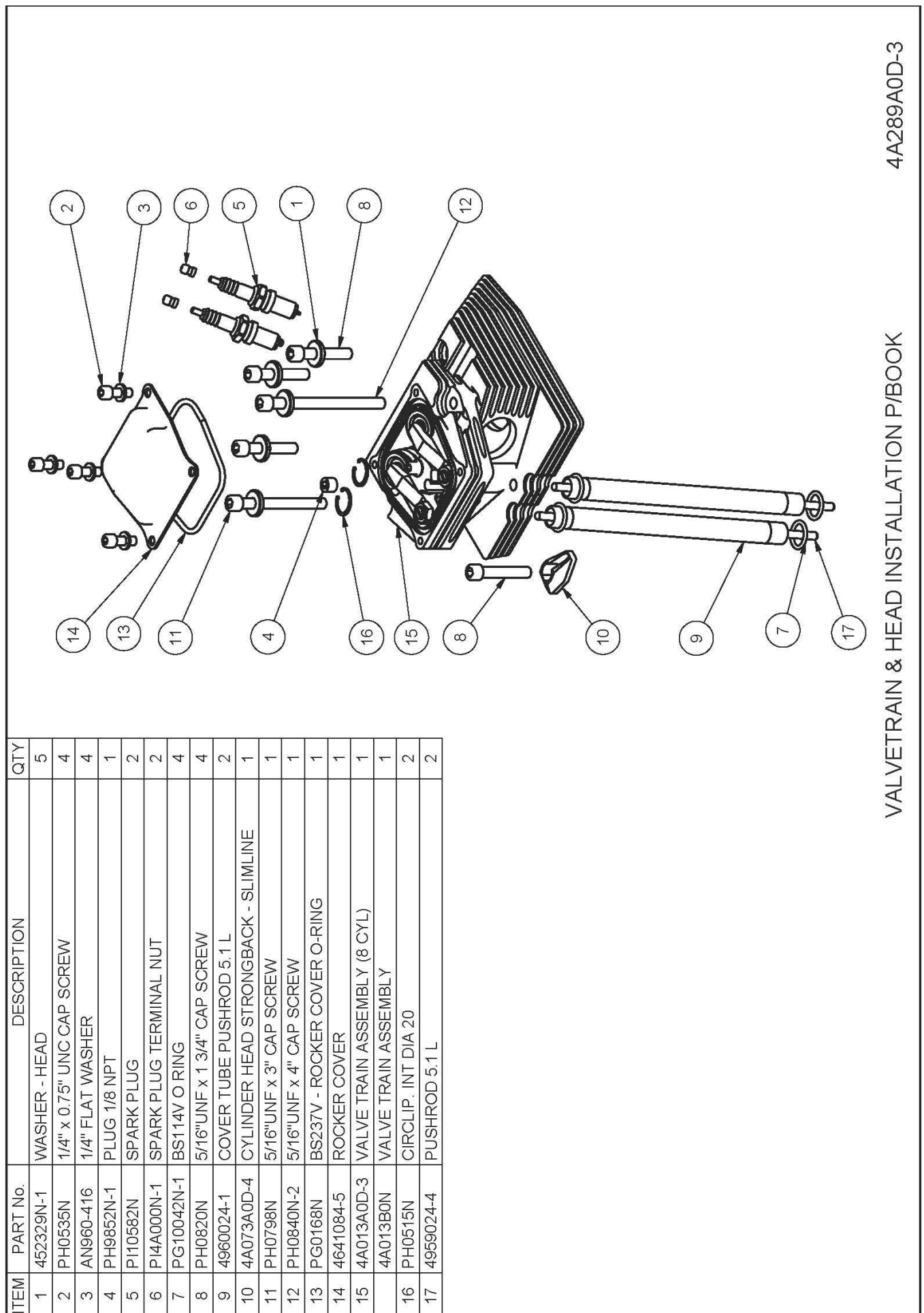
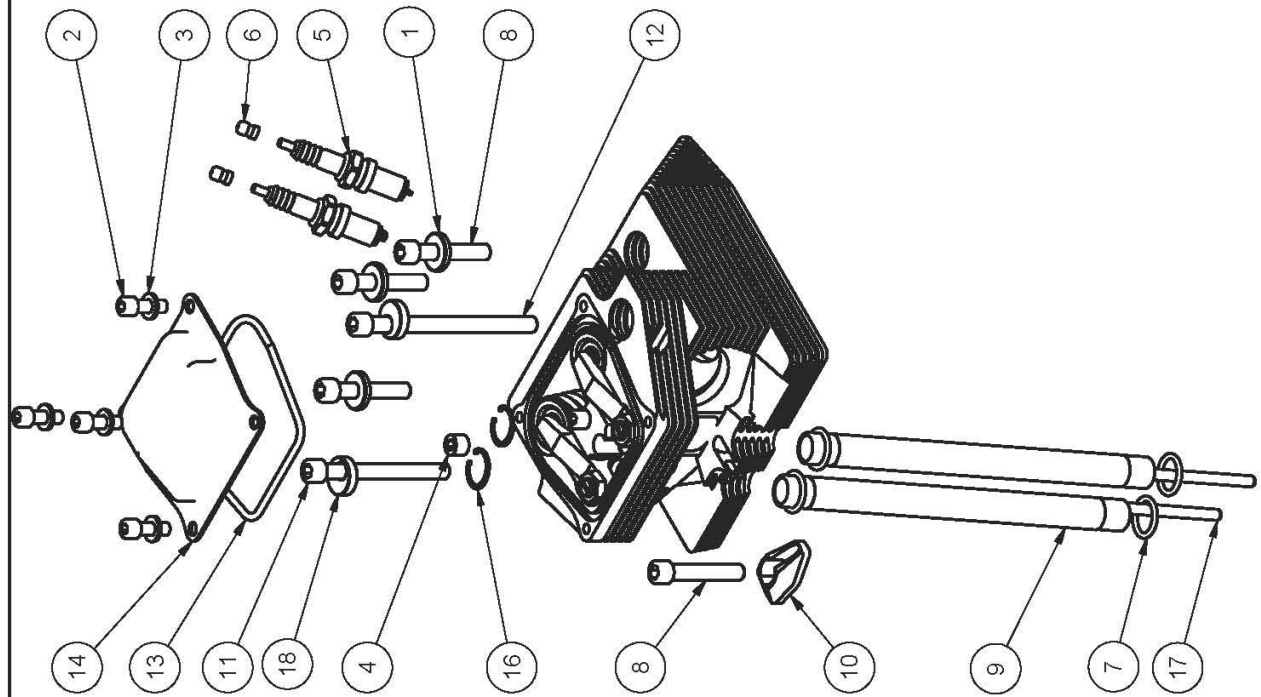


Figure 6– Head Mounting & Pushrod Assembly to S/N 33



ITEM	PART No.	DESCRIPTION	QTY
1	452329N-1	WASHER - HEAD	3
2	PH0535N	1/4" x 0.75" UNC CAP SCREW	4
3	AN960-416	1/4" FLAT WASHER	4
4	PH9852N-1	PLUG 1/8 NPT	1
5	PI10582N	SPARK PLUG	2
6	PI4A000N-1	SPARK PLUG TERMINAL NUT	2
7	PG10042N-1	BS114V O RING	4
8	PH0820N	5/16"UNF x 1 3/4" CAP SCREW	4
9	4960024-1	COVER TUBE PUSHROD 5.1 L	2
10	4A073A0D-4	CYLINDER HEAD STRONGBACK - SLIMLINE	1
11	PH0798N	5/16"UNF x 3" CAP SCREW	1
12	PH0840N-2	5/16"UNF x 4" CAP SCREW	1
13	PG4A028N	ROCKER COVER O-RING BS238V	1
14	4A231A0D-1	ROCKER COVER NARROW FINS	1
15	4A467A0D-1	VALVE TRAIN ASSEMBLY (8 CYL) NARROW FINS	1
16	PH0515N	CIRCLIP. INT DIA 20	2
17	4959024-4	PUSHROD 5.1 L	2
18	4A240A0D-3	HEAD WASHER OFFSET	2

Figure 7– Head Mounting & Pushrod Assembly (Narrow Fins) S/N 34 on

ITEM	PART No.	DESCRIPTION	QTY
1	4958022-7	BARREL 5.1 L	1
2	4831204-2	CONROD CAP (8 CYL)	1
3	PB4A000-1	CONROD BIG END BEARING (8 CYL)	2
4	PH72E24	5/16" x 1" UNC CAP SCREW	2
5	PH1033N-1	DOWEL PIN DIA 3x14	2
6	4831103-2	CONROD MACHINED (8 CYL)	1
7	PG02400	RING SET	1
8	4891013	PISTON	1
9	4299054-9	GUIDGEON PIN REWORKED (2.2L)	1
10	PG02204-4	CIRCLIP GUIDGEON PIN *EN 182	2
11	PG0025N-1	BS155 O RING	1

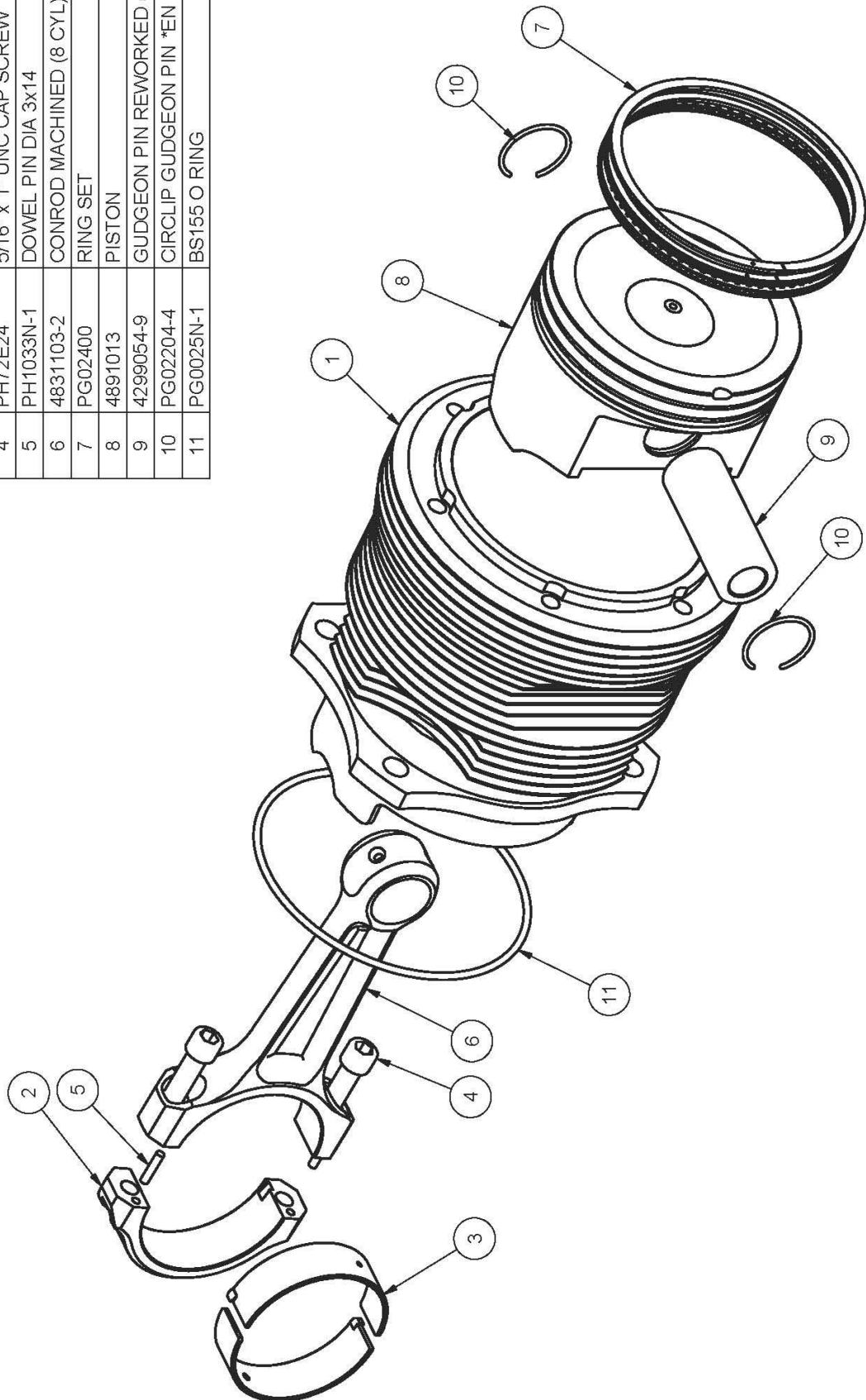
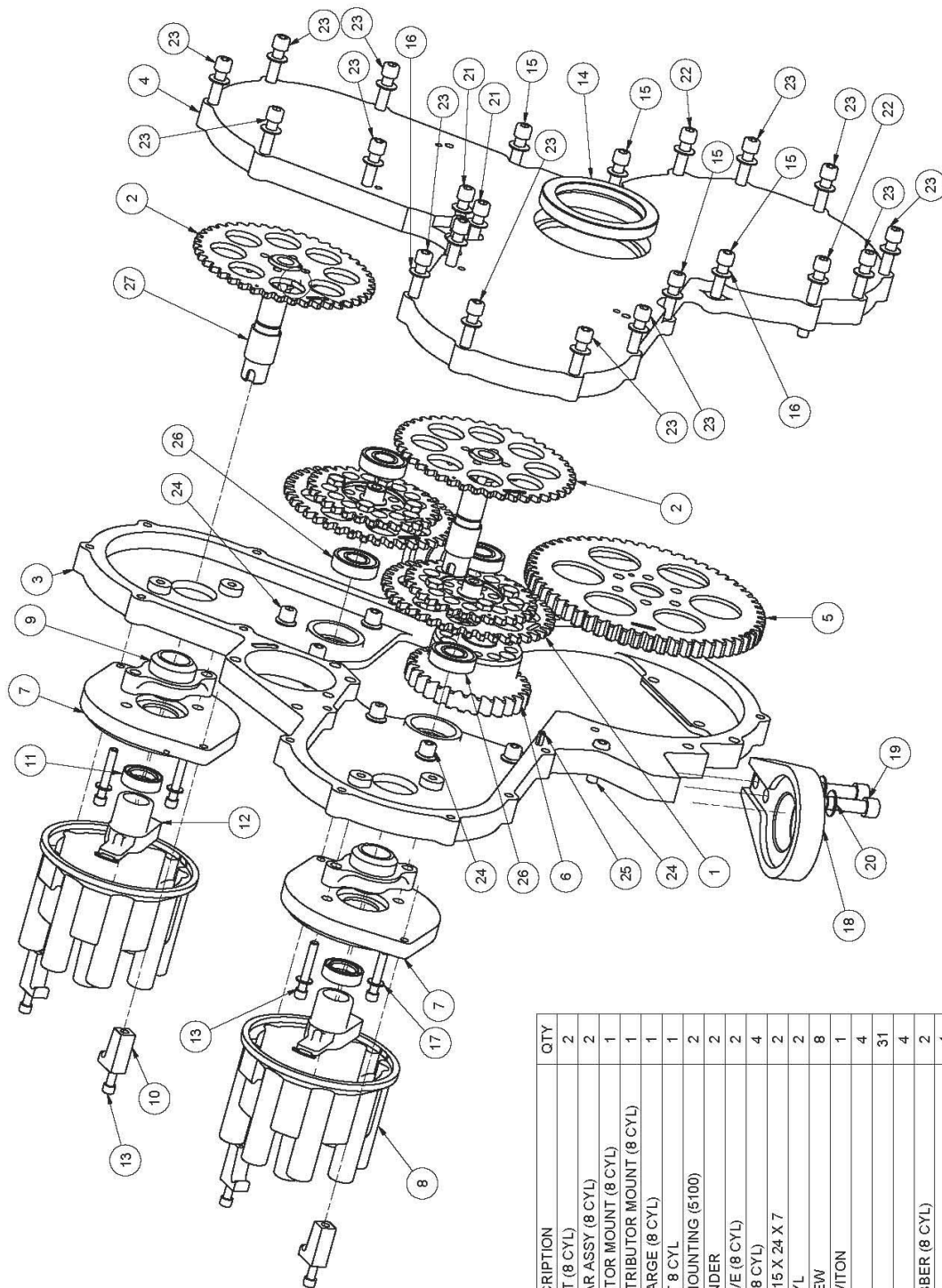


Figure 8 – Piston, Rod, Barrel & Ring Assembly



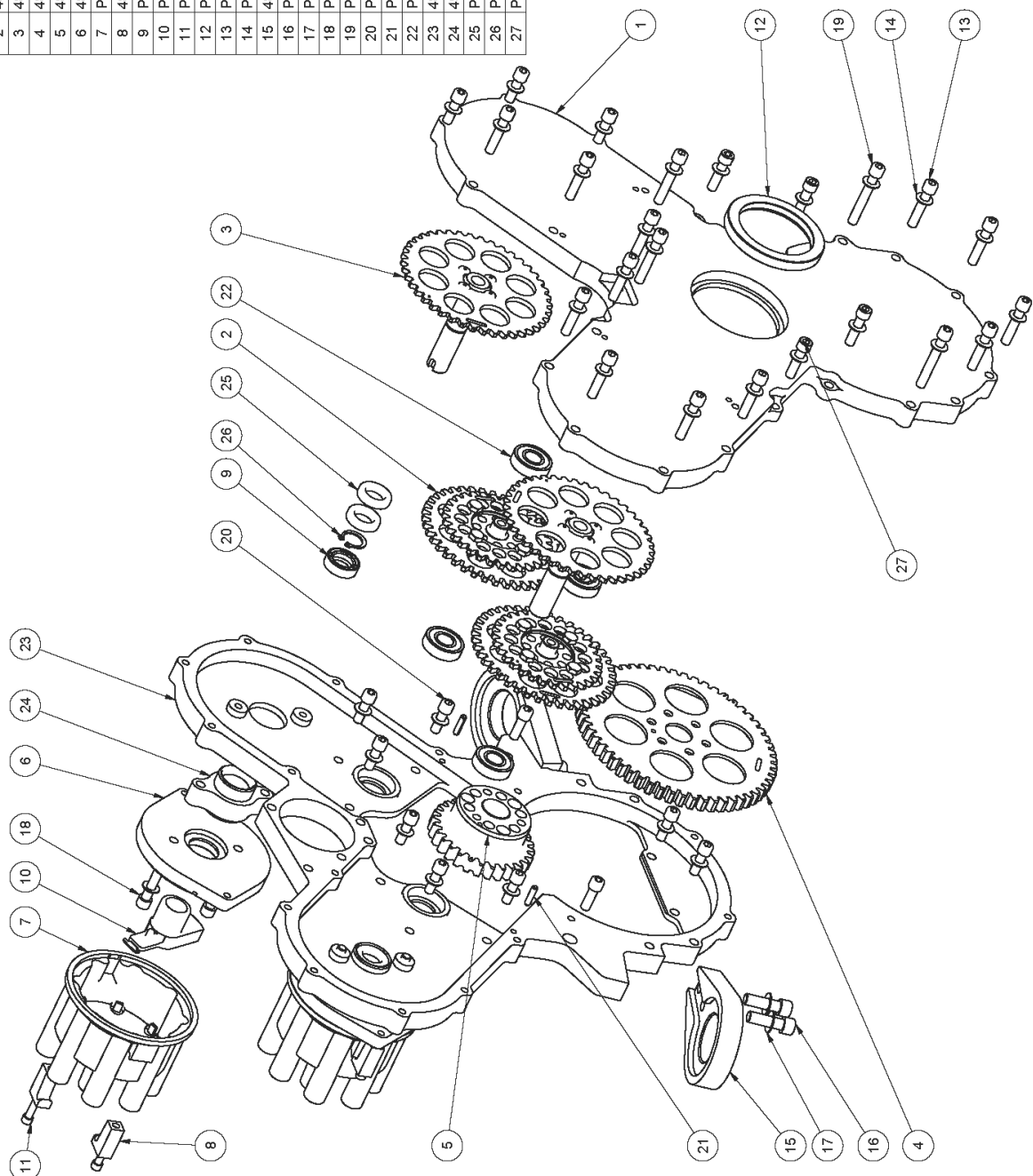
ITEM	PART NUMBER	DESCRIPTION	QTY
1	4898014	IDLER GEAR ASSY 40T & 30T (8 CYL)	2
2	4898014	DISTRIBUTOR SHAFT & GEAR ASSY (8 CYL)	2
3	4894013	REAR PLATE TOP DISTRIBUTOR MOUNT (8 CYL)	1
4	4895013	COVER GEAR BOX TOP DISTRIBUTOR MOUNT (8 CYL)	1
5	4842014	GEAR TIMING CAMSHAFT LARGE (8 CYL)	1
6	4841014	GEAR TIMING CRANKSHAFT 8 CYL	1
7	4855014	PLATE DISTRIBUTOR CAP MOUNTING (5100)	2
8	PG02304	DISTRIBUTOR CAP - 8 CYLINDER	2
9	4900014	SPACER DISTRIBUTOR DRIVE (8 CYL)	2
10	4856014	CLAMP DISTRIBUTOR CAP (8 CYL)	4
11	PG10622N	SEAL DISTRIBUTOR SHAFT 15 X 24 X 7	2
12	PE4A002N	DISTRIBUTOR ROTOR - 8 CYL	2
13		3/16" x 1 1/4" UNC CAP SCREW	8
14	PG9872N	OIL SEAL 55 X 72 X 8 TC/V1 VITON	1
15		1/4" x 1" UNC CAP SCREW	4
16	PH10724	1/4" BELLEVILLE WASHER	31
17	PH4A003N	3/16" BELLEVILLE WASHER	4
18	4840014	PLATE ENGINE MOUNT RUBBER (8 CYL)	2
19	PH72E24	5/16" x 1" UNC CAP SCREW	4
20	PH10624	5/16" BELLEVILLE WASHER	4
21		1/4" x 1 1/2" UNC CAP SCREW	3
22		1/4" x 1 3/4" UNC CAP SCREW	2
23		1/4" x 1 1/4" UNC CAP SCREW	14
24		1/4" x 0.75" UNC CAP SCREW	8
25	PH4A009N	ROLL PIN, 4 x 16 LONG.	4
26	PB4A002N	BEARING - DISTRIBUTOR IDLER GEAR, 12 x 28 x 8	4
27	PB4A003N	BUSH DISTRIBUTOR SHAFT - 8 CYL (16 x 18 x 19 LONG)	2

4A063A0D-1

GEARBOX ASSEMBLY 8 CYL

Figure 9 – Timing and Distributor Assembly up to S/N 33

ITEM	PART No.	DESCRIPTION	QTY
1	4895013-7	COVER GEAR BOX TOP DISTRIBUTOR MOUNT	1
2	4898014-3	IDLER GEAR ASSY 40T & 30T (8 CYL)	2
3	4899014-3	DISTRIBUTOR SHAFT & GEAR ASSY (8 CYL)	2
4	4842014-4	GEAR TIMING CAMSHAFT LARGE (8 CYL)	1
5	4841014-4	GEAR TIMING CRANKSHAFT 8 CYL	1
6	4855014-9	PLATE DISTRIBUTOR CAP MOUNTING (5100)	2
7	PG02304-1	DISTRIBUTOR CAP - 8 CYLINDER	2
8	4856014-2	CLAMP DISTRIBUTOR CAP (8 CYL)	4
9	PG10622N-1	SEAL DISTRIBUTOR SHAFT 15 X 24 X 7	2
10	PE4A002N-1	DISTRIBUTOR ROTOR - 8 CYL	2
11	PH72B24	3/16" x 1 1/4" UNC CAP SCREW	4
12	PG9872N-1	OIL SEAL 55 X 72 X 8 TCV1 VITON	1
13	PH15434	1/4" x 1 1/4" UNC CAP SCREW	14
14	PH10724-2	1/4" BELLEVILLE WASHER	35
15	4840014-2	PLATE ENGINE MOUNT RUBBER (8 CYL)	2
16	PH72E24	5/16" x 1" UNC CAP SCREW	4
17	PH10624-2	5/16" BELLEVILLE WASHER	4
18	PH0595N	1/4" x 1 1/2" UNC CAP SCREW	7
19	PH06050N	1/4" x 1 3/4" UNC CAP SCREW	2
20	PH0535N	1/4" x 0.75" UNC CAP SCREW	10
21	PH4A009N-1	ROLL PIN 4 x 16 LONG	4
22	PB4A002N-1	BEARING DISTRIBUTOR IDLER GEAR 12 x 28 x 8	4
23	4894013-7	REAR PLATE TOP DISTRIBUTOR MOUNT (8 CYL)	1
24	4900014-4	SPACER DISTRIBUTOR DRIVE (8 CYL)	2
25	PB4A004N	BEARING 61802	4
26	PH3A002N-1	EXTERNAL CIRCLIP 15MM SHAFT	2
27	PH0505N	SOCKET HD SCREW 1/4 UNC X 1	4



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GEARBOX ASSY 8CYL

Figure 10 – Timing and Distributor Assembly S/N 34 on

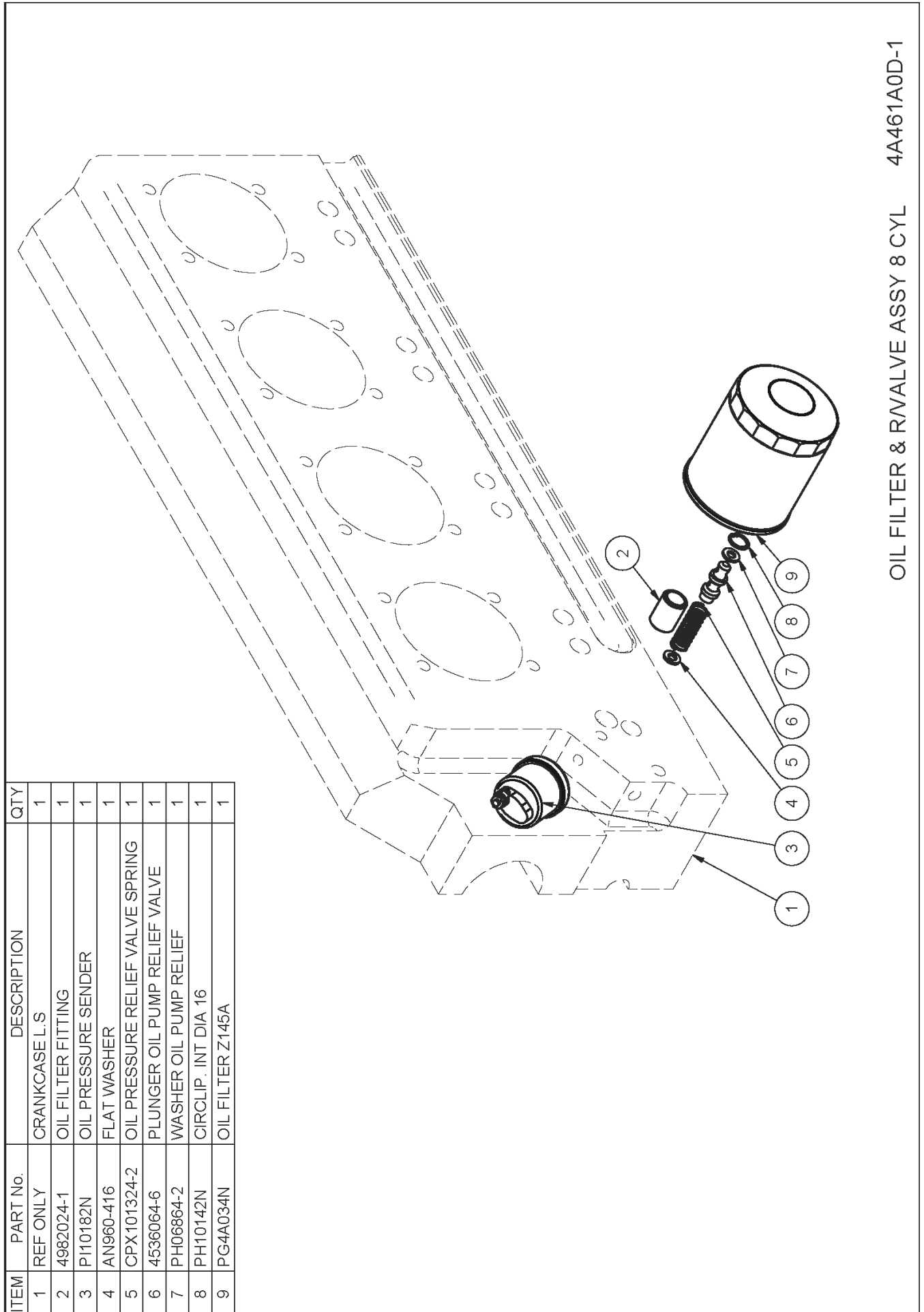
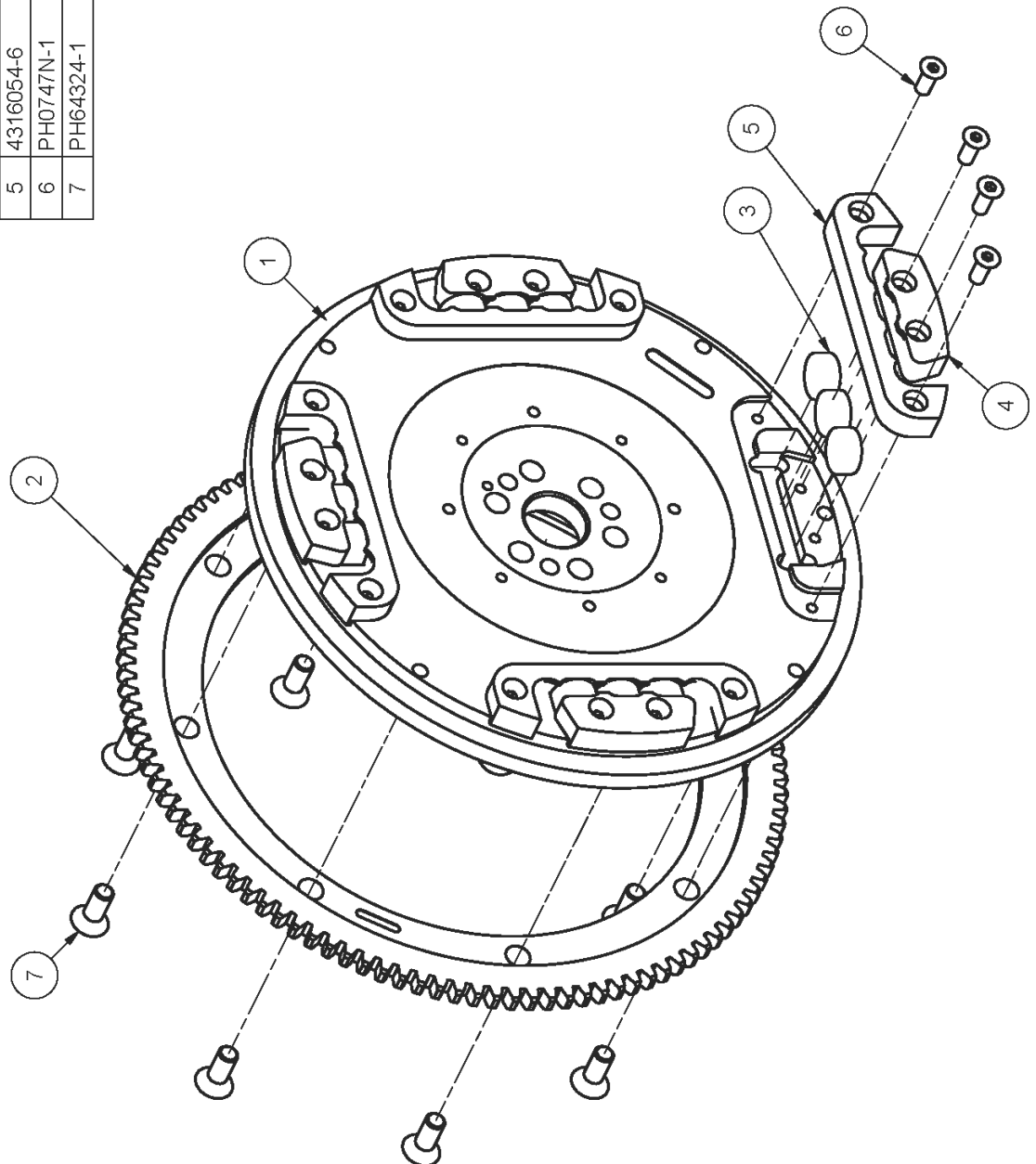


Figure 11 – Oil Relief Valve Assembly & Oil Filter

ITEM	PART NUMBER	DESCRIPTION	QTY
1	4846113-8	FLYWHEEL - 8 CYLINDER	1
2	4846213-4	STARTER RING GEAR	1
3	PM0065N	MAGNET 15 DIA X 7 RARE EARTH	12
4	4315054-8	POLE PLATE CENTRE (2.2L)	4
5	4316054-6	POLE PLATE OUTER (2.2L)	4
6	PH0747N-1	1/2" LONG 10-32 COUNTERSUNK SCREW	16
7	PH64324-1	C'SUNK SCREW 1/2" X 1/4" UNC	8



FLYWHEEL ASSY (8 CYL) 4846013-3

Figure 12 – Flywheel Assembly

ITEM	PART NUMBER	DESCRIPTION	QTY
1	4846013-3	FLYWHEEL ASSY (8 CYL)	1
2	4821004-2	ALTERNATOR ASSY 1 PHASE 12 MAGNETS	1
3	4865084-4	STATOR ASSY 12 POLE 3 PHASE	1
4	4896013-4	ALTERNATOR MOUNT PLATE TOP DIST.	1
5	4897014-2	POST COIL & ALT PLATE MTG (6L)	4
6	4895013-7	COVER GEAR BOX TOP DISTRIBUTOR MOUNT (8 CYL)	1
7	PH0522N	JABIRU IGNITION COIL	2
8	4847014-4	ADAPTOR STATOR-ALT MTG PLATE (8 CYL)	1
9	PH4A010N-1	ROLL PIN, 5/32 x 7/16 LONG	8
10	PH10372N-1	ROLL PIN, 1/8 x 5/8 LONG	4
11	PH4A039N	3/16" x 5/8" LONG BUTTON HEAD SCREW	4
12	PH4A003N	3/16" BELLEVILLE WASHER	4
13	MS35207-267	SCREW	4
14	PH0535N	1/4" x 0.75" UNC CAP SCREW	4
15	PH10724-2	1/4" BELLEVILLE WASHER	8
16	PH0309N	1/4" FLAT WASHER	4
17		1/4" x 3 3/4" LONG UNC BOLT	2
18	PH4A004-1	FIBRE WASHER - IGNITION COIL INSULATING	4
19		BOLT 1-4 UNC 3" LONG:ipt	2

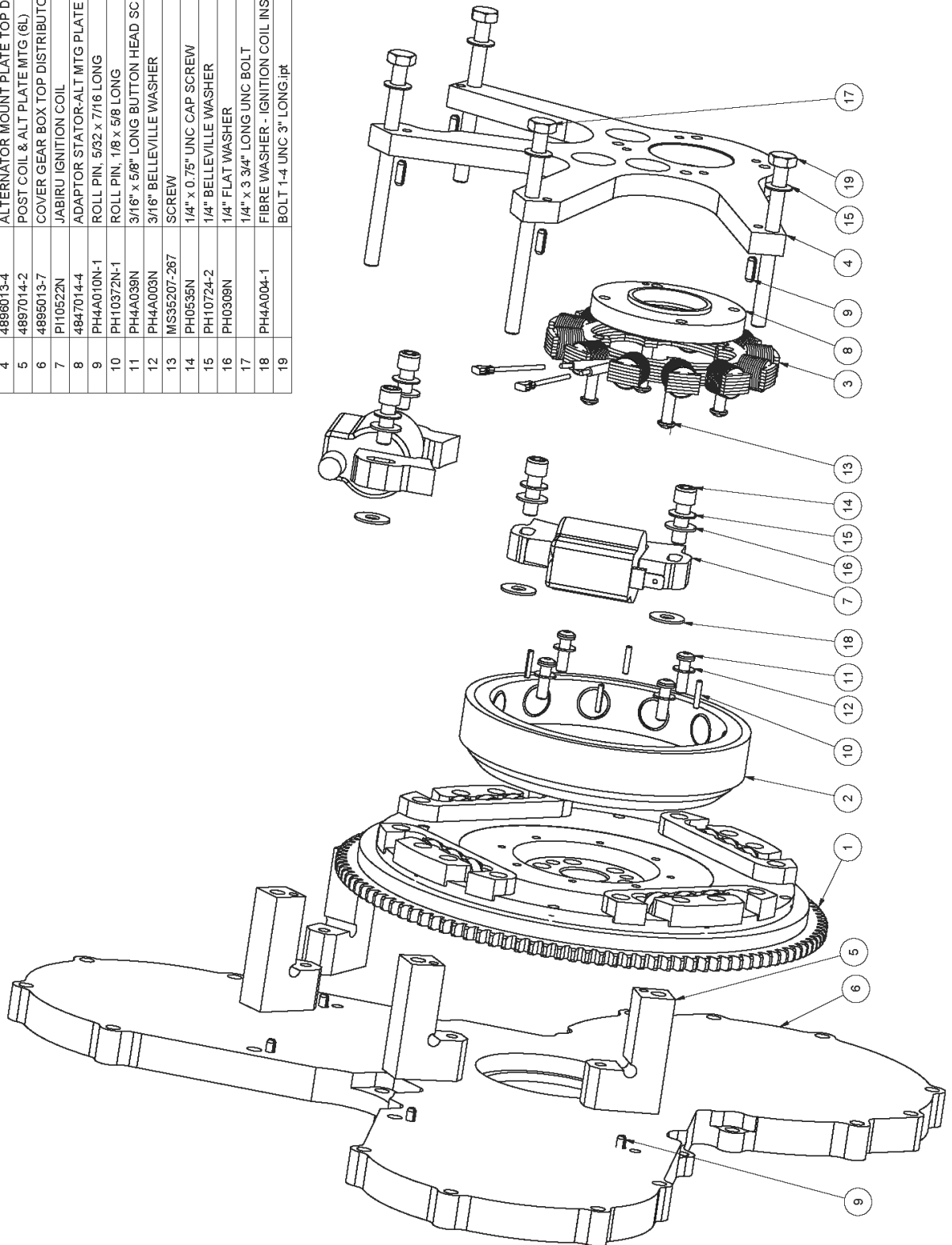
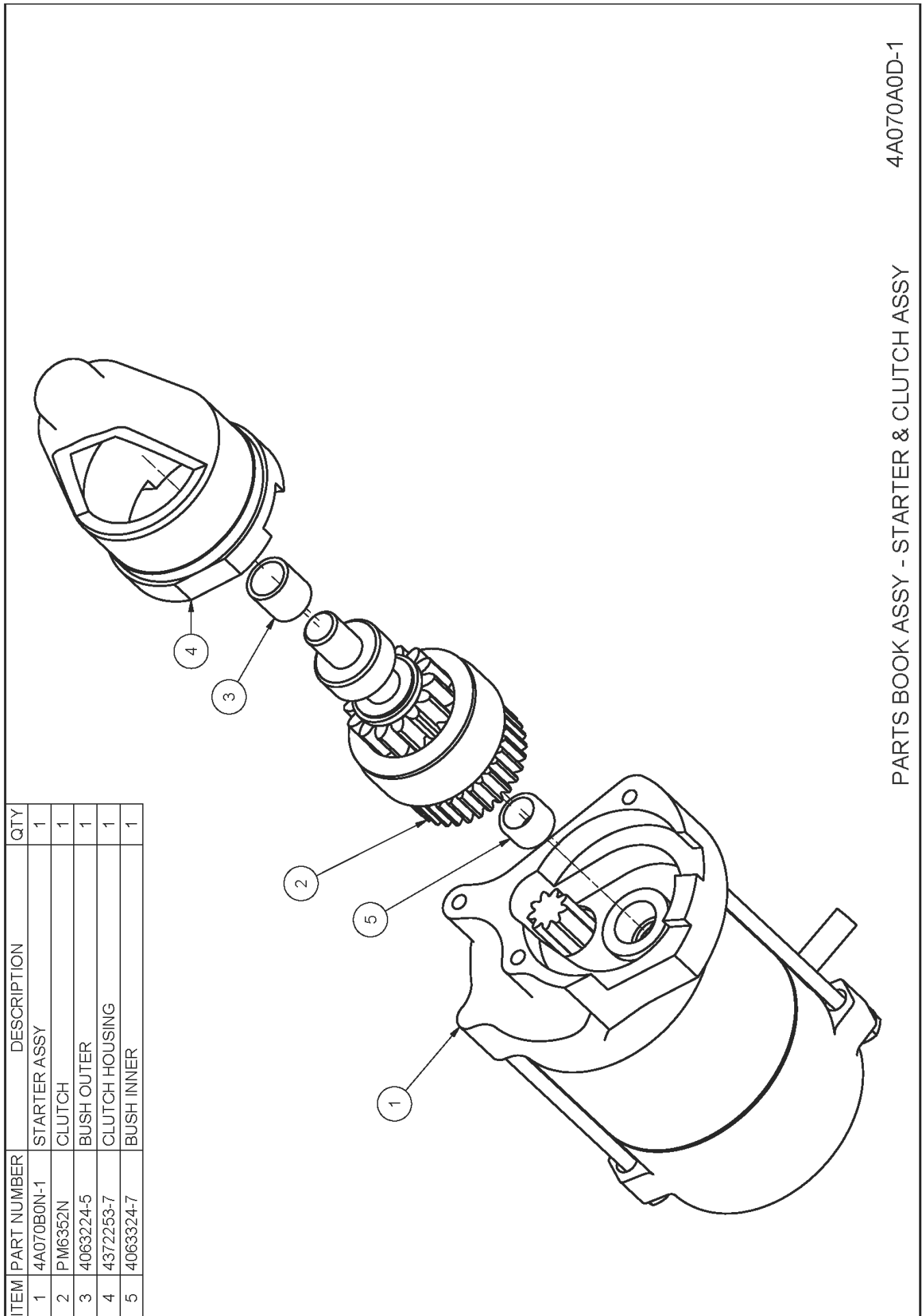


Figure 13 – Flywheel Coils & Alternator Assembly



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PARTS BOOK ASSY - STARTER & CLUTCH ASSY

Figure 14 – Starter Motor

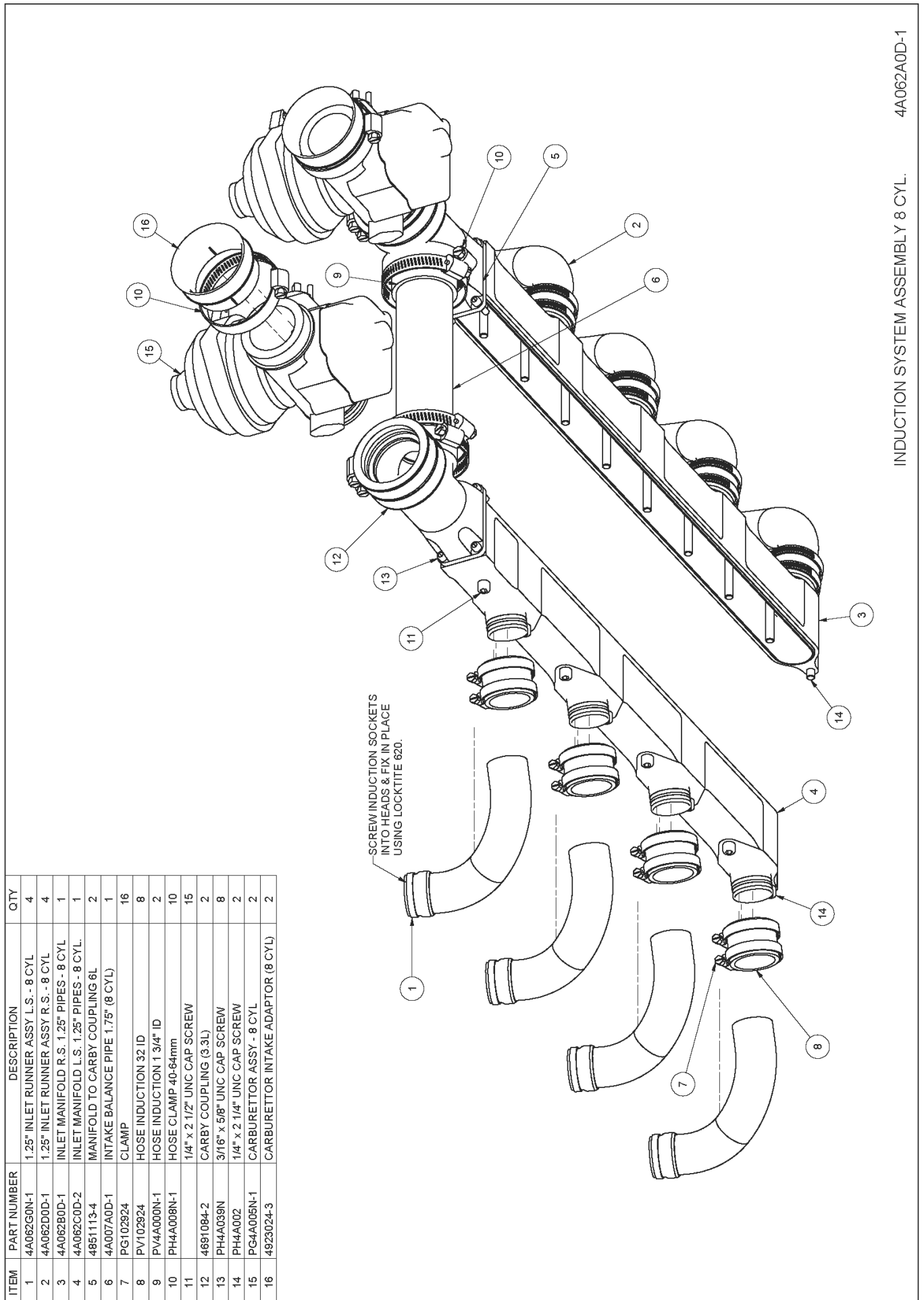
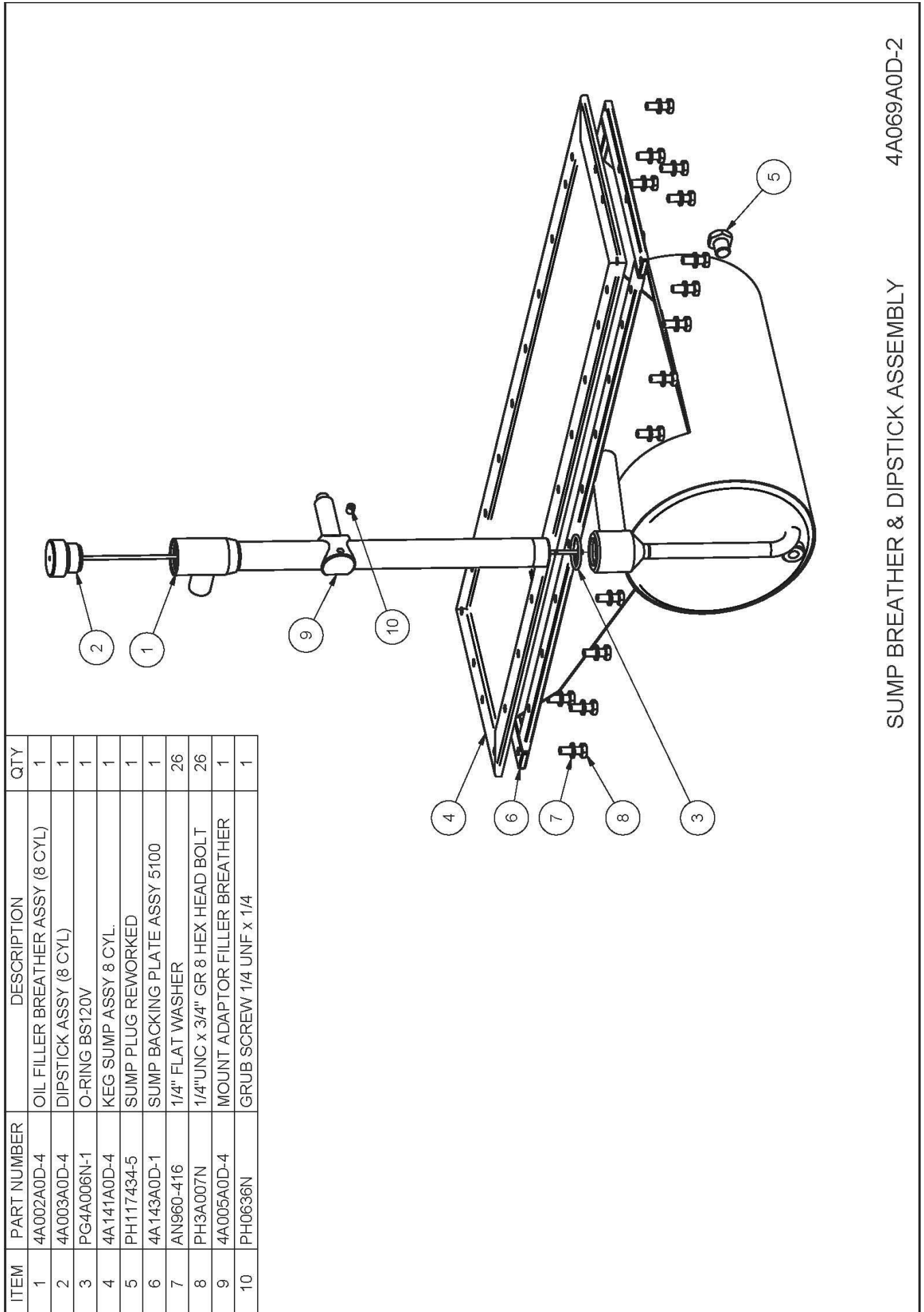


Figure 15 – Induction System Assembly

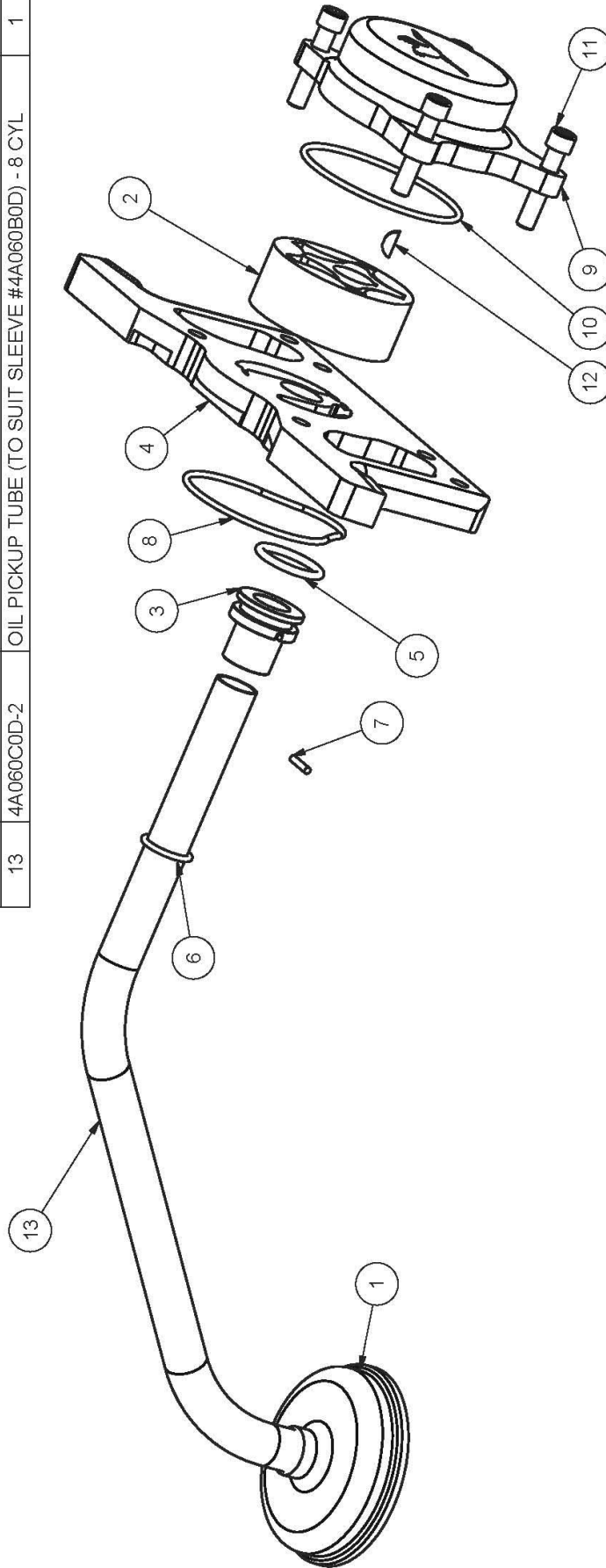


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SUMP BREATHER & DIPSTICK ASSEMBLY

Figure 16 – Sump Breather & Dipstick Assembly

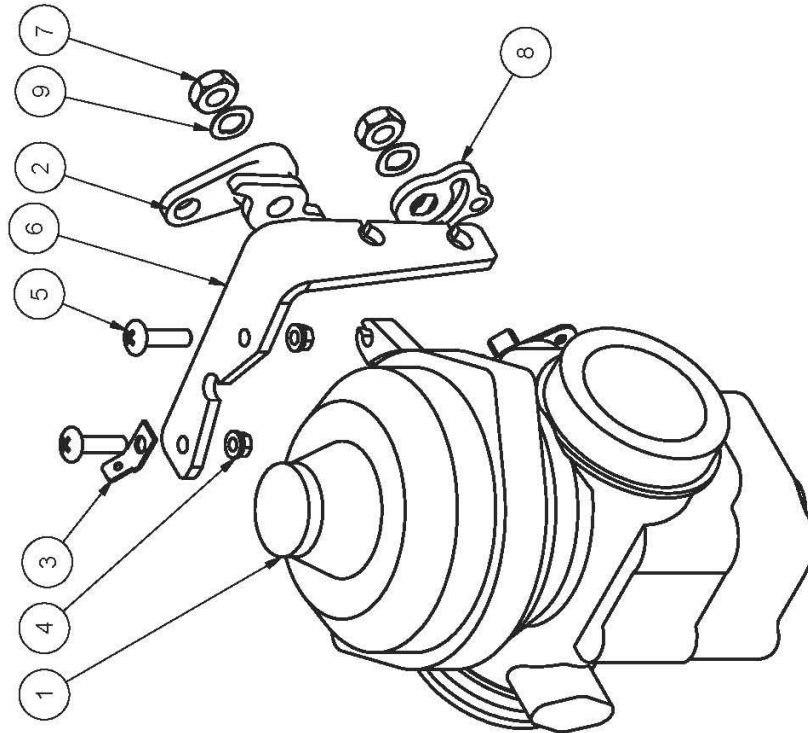
ITEM	PART NUMBER	DESCRIPTION	QTY
1	4875014-5	OIL PICKUP STRAINER ASSY - 8 CYL.	1
3	4A060B0D-2	OIL PICKUP TUBE SLEEVE - 8 CYL.	1
4	4A060D0D-2	OIL PUMP PORT PLATE (SUITS SLEEVED PICKUP) - 8 CYL.	1
5	PG4A002N-1	RV0214 O-RING	1
6	PG0148N-1	BS116 VITON O'RING	1
7	PH1033N-1	DOWEL PIN DIA 3x14	1
2	4963024-2	OIL PUMP GEAR SET	1
8	PG4A007N-BENT	BS0148 O'RING	1
9	4964024-4	GEAR HOUSING *OP327C (5.1L)	1
10	PG4A007N-1	BS148 VITON O'RING	1
11	PH4A001N	5/16" UNC x 1.5" CAP SCREW	4
12	PH115334-1	DRIVE - OIL PUMP 1/8" X 1/2"DIA WOODRUF	1
13	4A060C0D-2	OIL PICKUP TUBE (TO SUIT SLEEVE #4A060B0D) - 8 CYL	1



OIL PICKUP ASSY 8 CYL 4A060A0D-3

Figure 17 – Oil Pickup & Pump Assembly 8 cyl

ITEM	PART No.	DESCRIPTION	QTY
1	PG0108N	CARBY BING 40 DIA	1
2	4720094-6	CARBY THROTTLE LINK	1
3	DT145	BRASS SPADE TERMINAL	1
4	MS21042-3	NUT REDUCED WEIGHT	2
5	MS27039-1-11	SCREW	2
6	4116834-10	MOUNT CARBY CABLES	1
7	AN316-5	LOCK NUT	2
8	4A155A0D-3	MACHINED CHOKE ARM, 40mm BING CARBY.	1
9	PG01081N-1	BING SHAKE-PROOF WASHER (SUPPLIED WITH CARBY)	2
10	PG4A032N	NEEDLE JET 290 (NOT ILLUSTRATED)	1
11	PG4A021N	MAIN JET 250 (NOT ILLUSTRATED)	1
12	PG4A016N	IDLE JET 35 (NOT ILLUSTRATED)	1
13	4A140A0D	NEEDLE (NOT ILLUSTRATED)	1

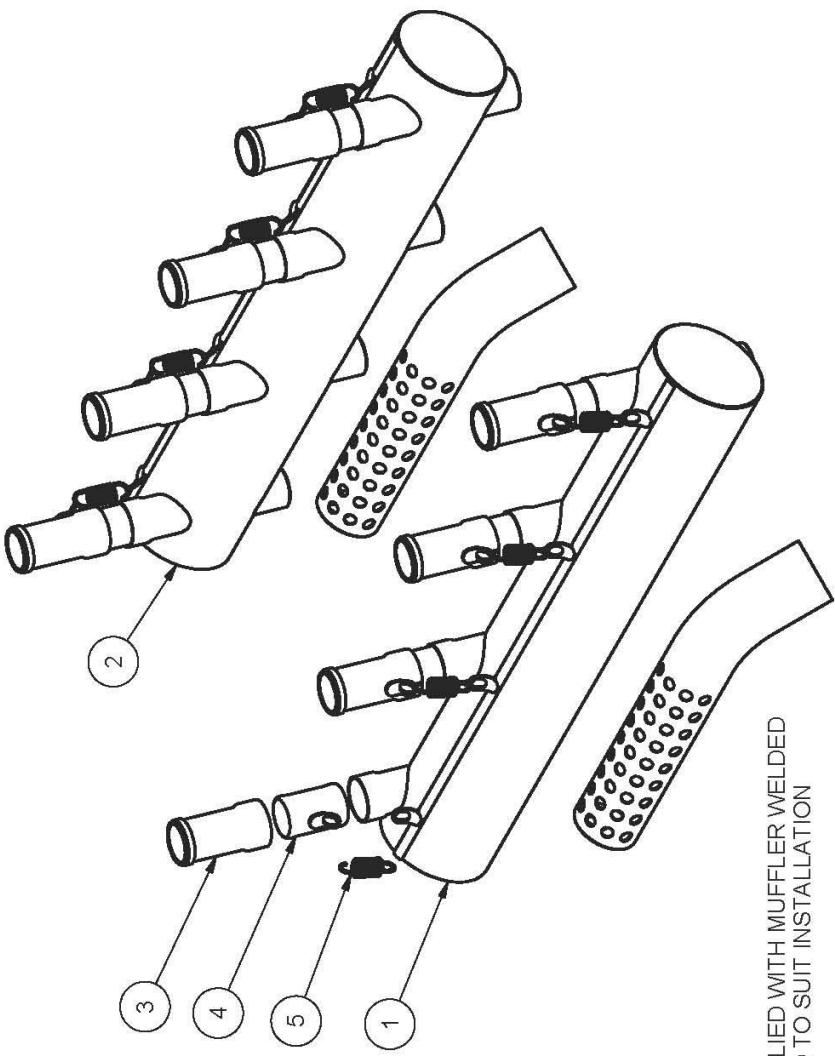


CARBY ASSY

PG4A005N

Figure 18 – Carby Assembly

ITEM	PART No.	DESCRIPTION	QTY
1	4A129A0D-1	MUFFLER ASSY LS (5.1L) SPHERICAL CONNECTION	1
2	4A130A0D-1	MUFFLER ASSY RS (5.1L) SPHERICAL CONNECTION	1
3	4A131A0D-1	STUB ASSY 8 CYL SPHERICAL	8
4	4A132A0D-2	SPHERICAL CONNECTOR 8 CYL MUFFLER	8
5	PE4A003A0D-2	SPRING EXHAUST RETAINER 8 CYL	8



NOTE:
MUFFLER OUTLETS SUPPLIED WITH MUFFLER WELDED ASSEMBLY, TO BE FITTED TO SUIT INSTALLATION

4A462A0D-1

EXHAUST ASSEMBLY 8 CYL

Figure 19 – Exhaust Assembly

ITEM	PART No.	DESCRIPTION	QTY
1	4722094	T MOULDED ROCKER LUBE	6
2	4A004A0D	RETAINING WASHER	6
3	BS011	ORING BS011	6
4	PH72624	1/4" x 1/2" UNC CAP SCREW	6
5	PV0059N	HOSE CLAMP	18
6	4A269A0D	ROCKER OIL FEED LINE ASSY	6

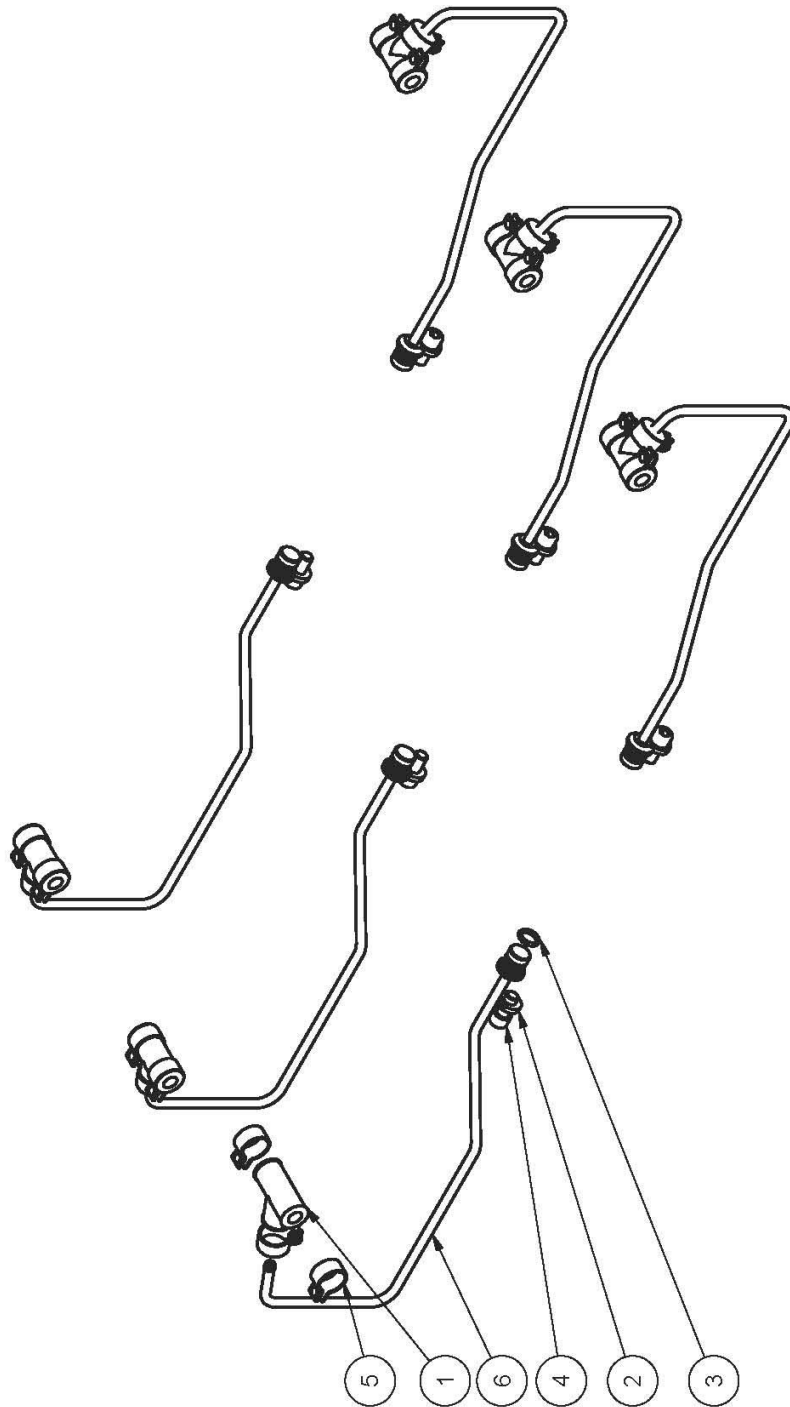


Figure 20 – Rocker Oil Lube Supply

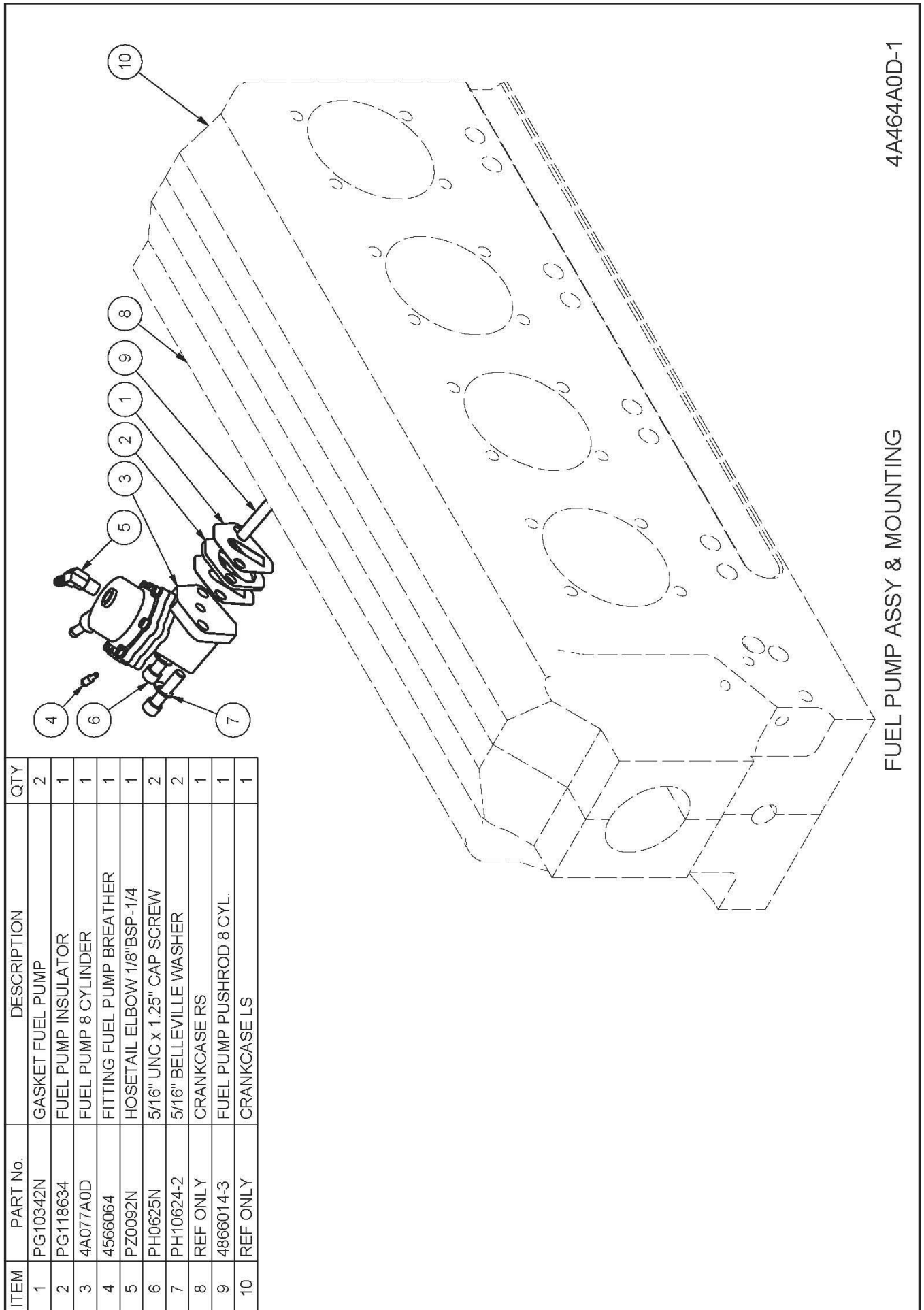


Figure 21 – Fuel Pump Assembly & Mounting

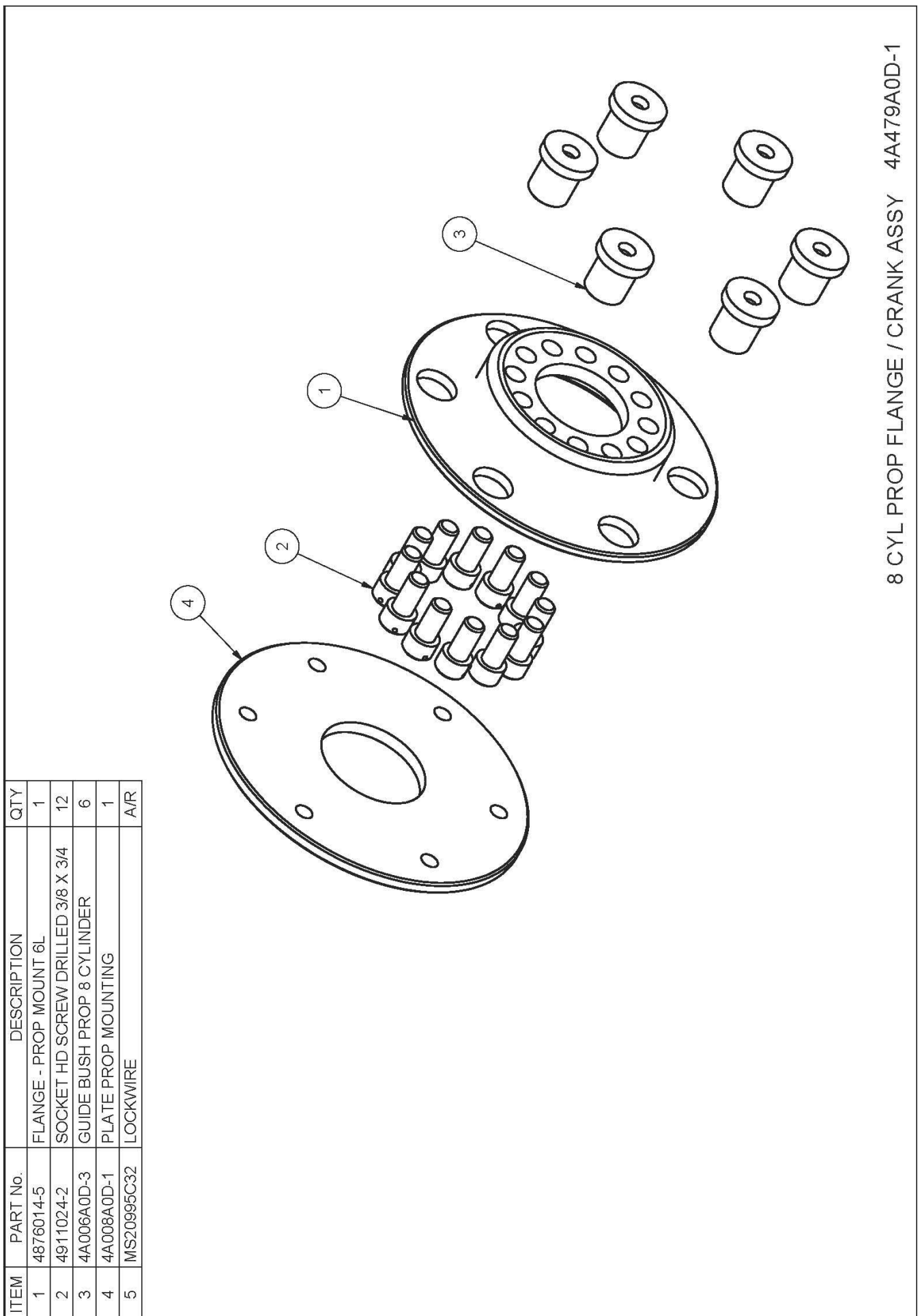


Figure 22 – Prop Flange Assembly

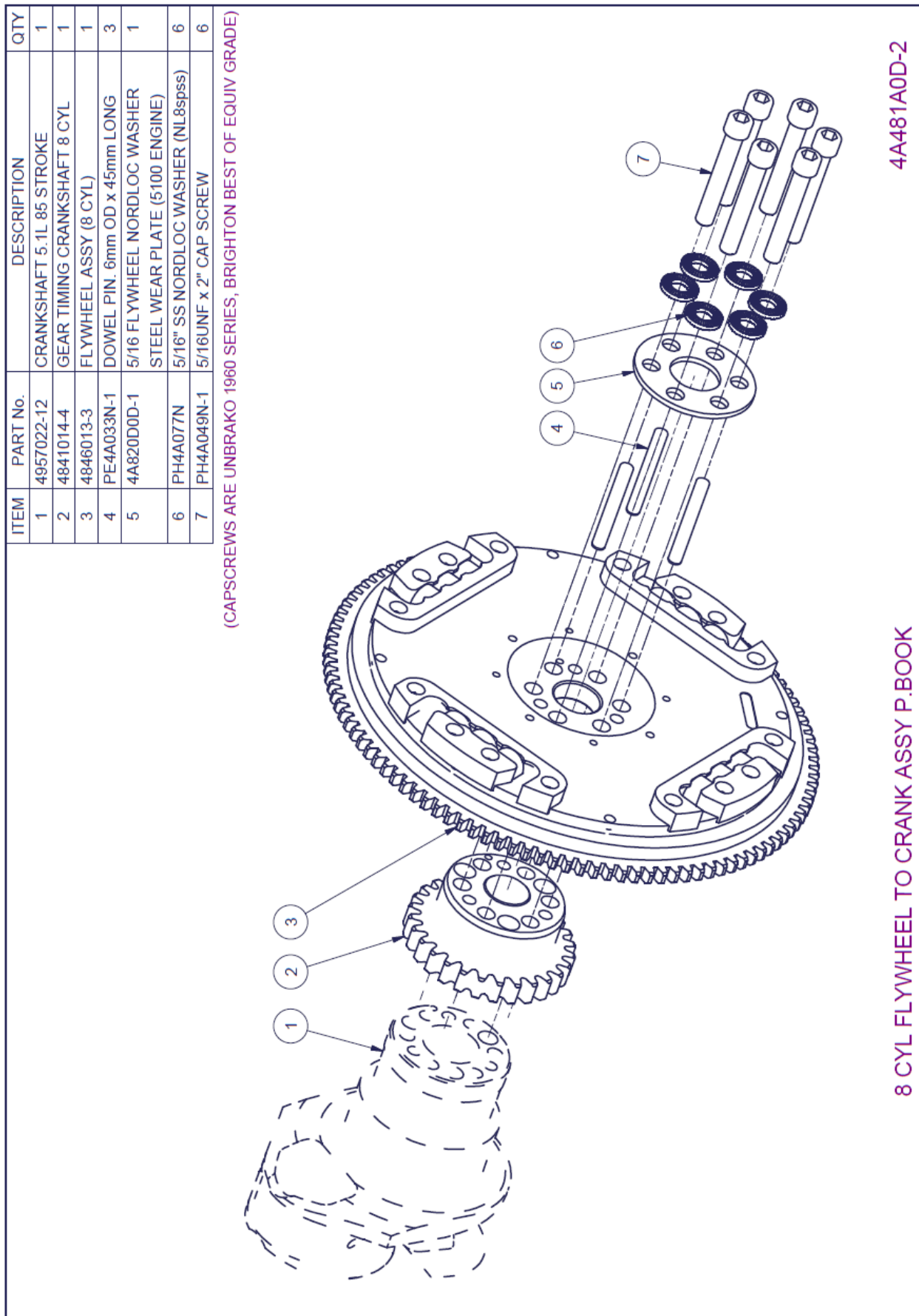


Figure 23 – Crankshaft and Flywheel Assembly

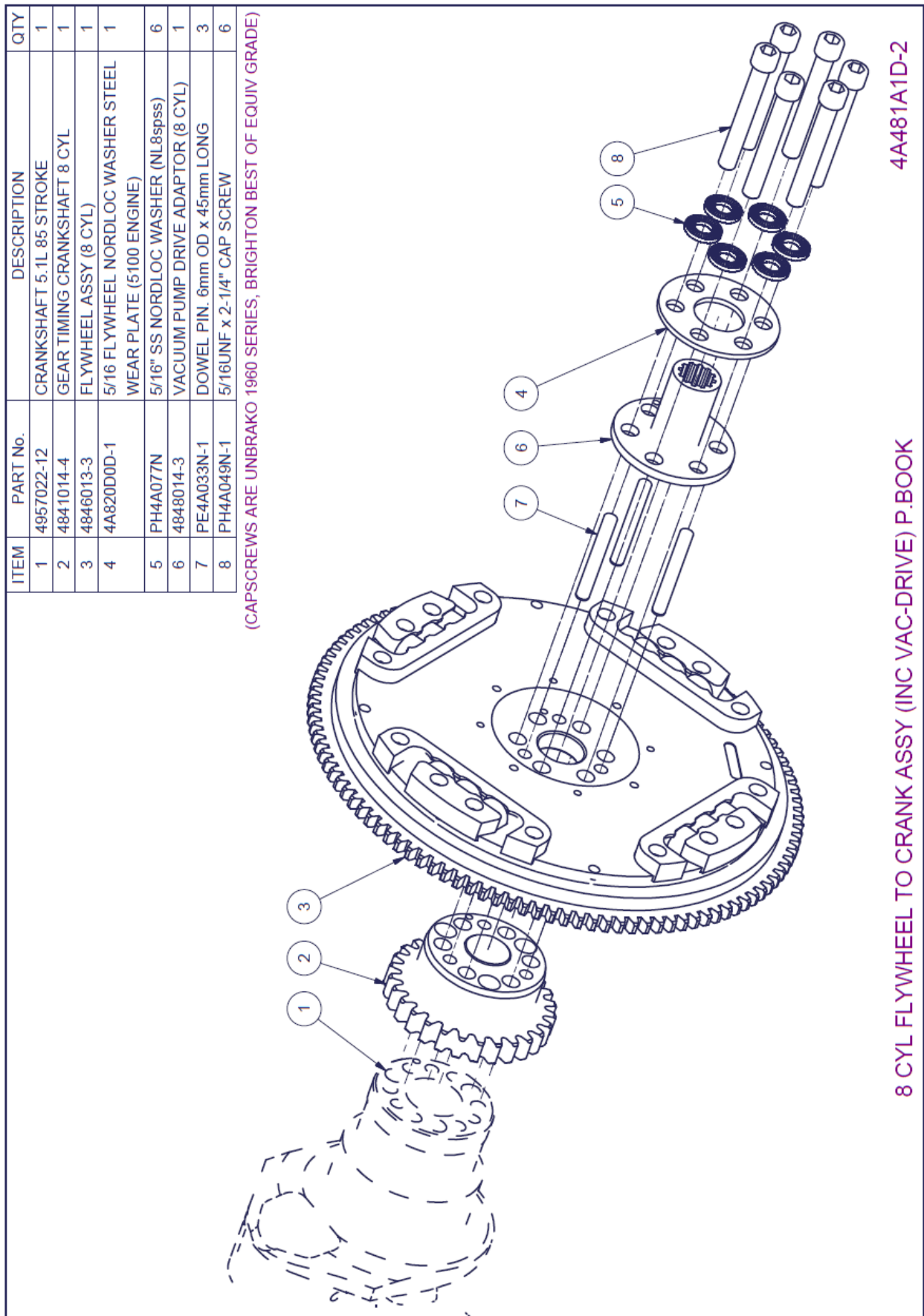


Figure 24 - Crankshaft and Flywheel Assembly (with Vac-drive installed)