

PARTS LIST

WESTERBEKE

90A Four

Marine Diesel Engine

32.0 BEDA - 60 Hz

25.0 BEDA - 50 Hz

Marine Diesel Generators

Publication # 041512

Edition Three

July 2001



PARTS LIST

WESTERBEKE

90A Four

Marine Diesel Engine

32.0 BEDA - 60 Hz

25.0 BEDA - 50 Hz

Marine Diesel Generators

Publication # 041512

Edition Three

July 2001



IMPORTANT

PRODUCT SOFTWARE DISCLAIMER

Product software of all kinds such as brochures, drawings, technical data, operator's and workshop manuals, parts lists and parts price lists, and other information, instructions and specifications provided from sources other than Westerbeke, is not within Westerbeke's control and, accordingly, is provided to Westerbeke customers only as a courtesy and service. **Westerbeke cannot be responsible for the content of such software, makes no warranties or representations with respect thereto, including the accuracy, timeliness or completeness thereof, and will in no event be liable for any type of damages or injury incurred in connection with, or arising out of, the furnishing or use of such software.**

For example, components and subassemblies incorporated in Westerbeke's products and supplied by others (such as engine blocks, fuel systems and components, transmissions, electrical components, pumps and other products) are generally supported by their manufacturers with their own software, and Westerbeke must depend on such software for the design of Westerbeke's own product software. Such software may be outdated and no longer accurate. Routine changes made by Westerbeke's suppliers, of which Westerbeke rarely has notice in advance, are frequently not reflected in the supplier's software until after such changes take place.

Westerbeke customers should also keep in mind the time span between printings of Westerbeke product software, and the unavoidable existence of earlier, non-current Westerbeke software editions in the field. Additionally, most Westerbeke products include customer-requested special features that frequently do not include complete documentation.

In summation, product software provided with Westerbeke products, whether from Westerbeke or other suppliers, must not and cannot be relied upon exclusively as the definitive authority on the respective product. It not only makes good sense but is imperative that appropriate representatives of Westerbeke or the supplier in question be consulted to determine the accuracy and currency of the product software being consulted by the customer.

90A FOUR PROPULSION ENGINE

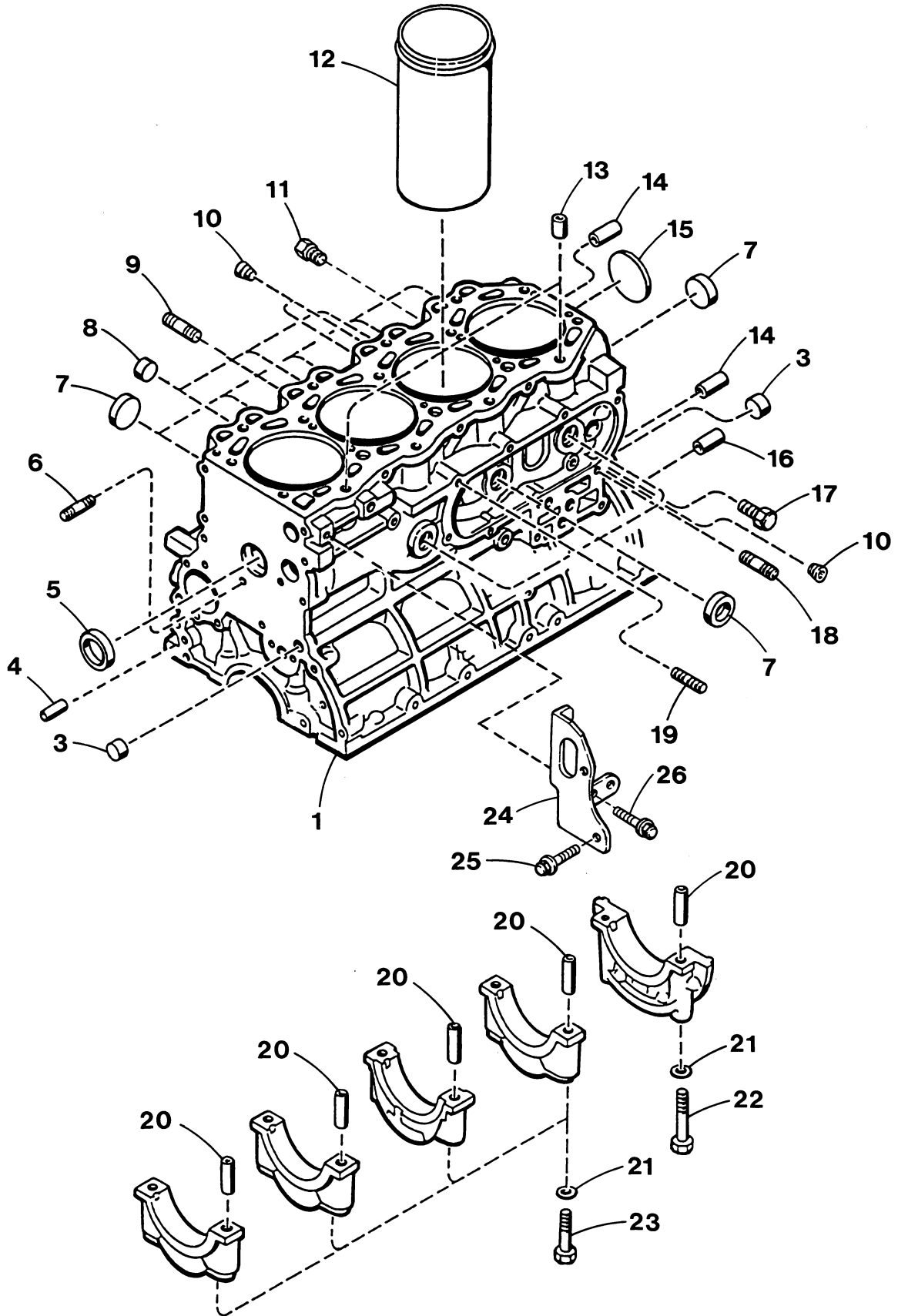
32.0 BEDA GENERATOR - 60 HERTZ

25.0 BEDA GENERATOR - 50 HERTZ

TABLE OF CONTENTS

PAGE	DESCRIPTION
100	CYLINDER BLOCK
102	CYLINDER HEAD - ROCKER COVER
104	CRANKSHAFT - PISTONS
106	VALVES - ROCKER SHAFT - CAMSHAFT
108	TIMING GEAR COVER
110	LUBE OIL SUMP
114	INTAKE MANIFOLD
116	LUBE OIL FILTER AND PUMP
118	FRESH WATER COOLING SYSTEM - FRONT
120	COOLING SYSTEM - REAR
122	FRONT OPENING EXHAUST MANIFOLD
124	SEA WATER SYSTEM AND ALTERNATOR
128	SEA WATER PUMP
130	FRESH WATER PUMP
132	FUEL SYSTEM
136	FUEL FILTER
138	PROPULSION BACK END - MOUNTING SYSTEM
140	MODEL HBW 250 TRANSMISSION
142	MODEL HSW 450 - 630 TRANSMISSION
144	WARNER HYDRAULIC TRANSMISSION
146	GENSET MOUNTING SYSTEM
148	GENSET BACK END - GENERATOR
152	GENSET AC OUTPUT AND REGULATOR
154	GENSET AC OUTPUT 1 PHASE CIRCUIT BREAKER
156	FUEL SOLENOID & GOVERNOR ACTUATOR
158	GENSET BELT GUARD
160	PROPULSION ELECTRICAL SYSTEM
162	GENSET ELECTRICAL SYSTEM
166	PROPULSION INSTRUMENT PANELS
168	GENSET CONTROL PANEL
172	GENSET CONTROL PANEL WITH REMOTE CONNECTOR
174	COMPRESSOR MOUNTING BRACKET
176	GENSET SOUND GUARD
178	GENSET SOUND GUARD WITH METAL BASE
180	MISCELLANEOUS

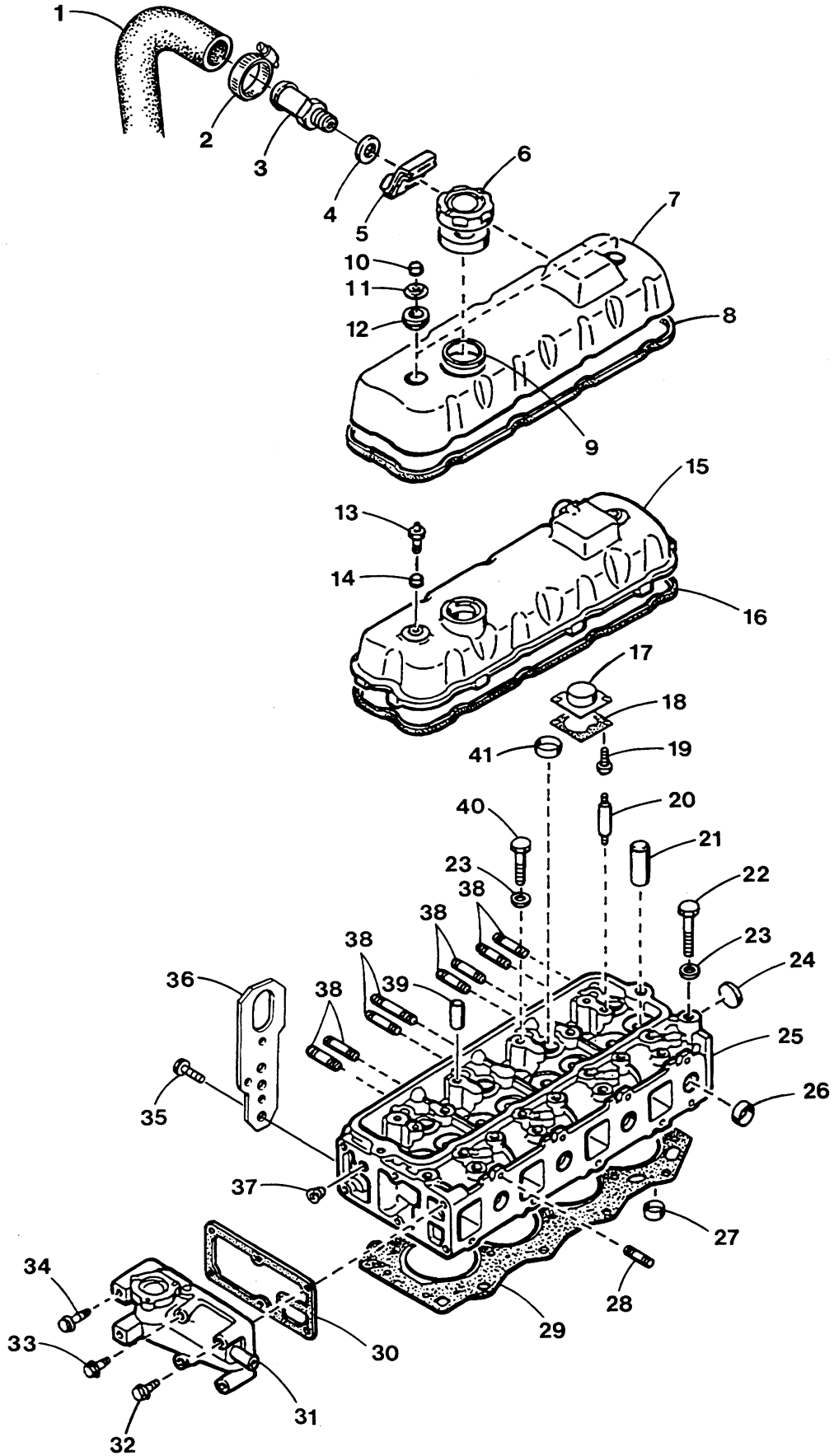
WESTERBEKE 90A - 32.0 BEDA - CYLINDER BLOCK



WESTERBEKE 90A - 32.0 BEDA - CYLINDER BLOCK

REF	PN	NAME	REMARKS	QUAN
1	041300	BLOCK	ASSEMBLY	1
3	034119	PLUG	EXPANSION	2
4	033676	DOWEL	TUBULAR 12MM DIA X 12MM LG	1
5	040255	PLUG		1
6	041436	STUD	M 8 X 68 DIN 939	1
7	024374	PLUG	EXPANSION 30MM DIN 443	7
8	024373	PLUG	EXPANSION 25MM DIN 443	3
9	033678	STUD	M 8 X 12 DIN 939	1
10	030711	PLUG	1/8BSPT DIN 906	4
11	030712	PLUG	1/4BSPT DIN 906	1
12-1	040252	LINER	CYLINDER MARK A	4
12-2	040253	LINER	CYLINDER MARK B	4
13	033656	DOWEL	TUBULAR 16MM DIA X 18MM LG	2
14	031154	DOWEL	STEP	2
15	024379	PLUG	CAMSHAFT	1
16	024393	DOWEL		
17	040254	PLUG		1
18	031281	STUD	M 8 X 40 DIN 939	1
19	015831	STUD	M 8 X 32 DIN 939	1
20	032804	DOWEL	TUBULAR	10
21	032635	WASHER	FLAT	10
22	032643	BOLT	MAIN BEARING CAP-REAR	2
23	032642	BOLT	MAIN BEARING CAP	8
24	040279	EYE	LIFTING	1
25		CAPSCREW	M12 X 1.5 X 20 JIS-FLANGE	1
26-1	017196	CAPSCREW	M 8 X 20 DIN 933 PROPULSION	1
26-2	013619	CAPSCREW	M 8 X 30 DIN 933 GENSET	1

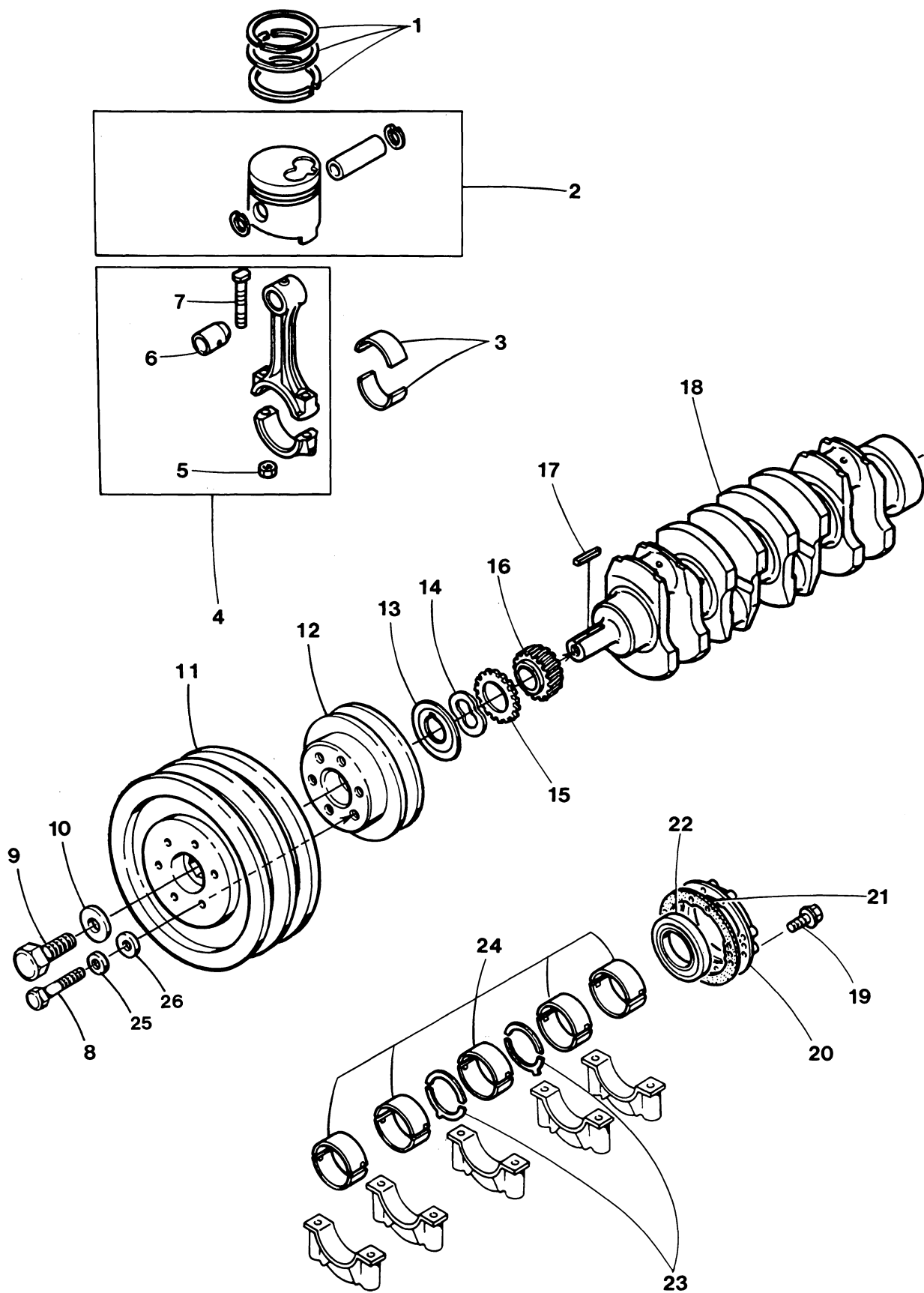
WESTERBEKE 90A - 32.0 BEDA - CYLINDER HEAD



WESTERBEKE 90A - 32.0 BEDA - CYLINDER HEAD

REF	PN	NAME	REMARKS	QUAN
1	200429	HOSE	BREATHER	1
2	301083	CLAMP	HOSE 10	1
3	040240	CONNECTOR	BREATHER	1
4	041421	WASHER	M22	1
5	040245	SEAL	ROCKER COVER	1
6	040151	CAP	OIL FILL	1
7	040241	COVER	ROCKER COVER	1
8	040242	GASKET	ROCKER COVER OUTER	1
9	040243	SEAL	ROCKER COVER	1
10	036211	NUT	M 6 JIS-FLANGE	2
11	040247	SPACER	ROCKER COVER	2
12	040246	SEAL	ROCKER COVER STUD	2
13	040248	STUD	ROCKER COVER	2
14	030985	SEAL	ROCKER COVER STUD	2
15	040239	COVER	ROCKER	1
16	040244	GASKET	ROCKER COVER	1
17	032740	PLATE	BAFFLE-BREATHER	1
18	032741	PLATE	BREATHER OIL BAFFLE	1
19	034172	SCREW	M 4 X 8 RH	4
20	033661	STUD	M 8 X 48 DIN 939	2
21	040251	GUIDE	VALVE	8
22	040234	BOLT	CYLINDER HEAD	11
23	032635	WASHER	FLAT-CYLINDER HEAD BOLTS	10
24	024378	PLUG	EXPANSION 50MM DIN 443	1
25	040232	HEAD	CYLINDER	1
26	024374	PLUG	EXPANSION 30MM DIN 443	4
27	024373	PLUG	EXPANSION 25MM DIN 443	3
28	015830	STUD	M 8 X 25 DIN 939	2
29	040250	GASKET	CYLINDER HEAD	1
30	040237	GASKET	LOWER THERMOSTAT HOUSING	1
31	041198	HOUSING	LOWER THERMOSTAT	1
32	041432	CAPSCREW	M10 X 1.25 X 70 JIS-FLANGE	2
33	041427	CAPSCREW	M 8 X 70 JIS-FLANGE	2
34	041428	CAPSCREW	M 8 X 90 JIS-FLANGE	2
35	033651	CAPSCREW	M10 X 1.25 X 20 JIS-FLANGE	2
36	030131	EYE	LIFTING	1
37	030711	PLUG	1/8BSPT DIN 906	1
38	015831	STUD	M 8 X 32 DIN 939	8
39	040233	CAP	WATER JET	4
40	040235	BOLT	CYLINDER HEAD	7
41	024374	PLUG	EXPANSION 30MM DIN 443	4

WESTERBEKE 90A - 32.0 BEDA - CRANKSHAFT - PISTONS



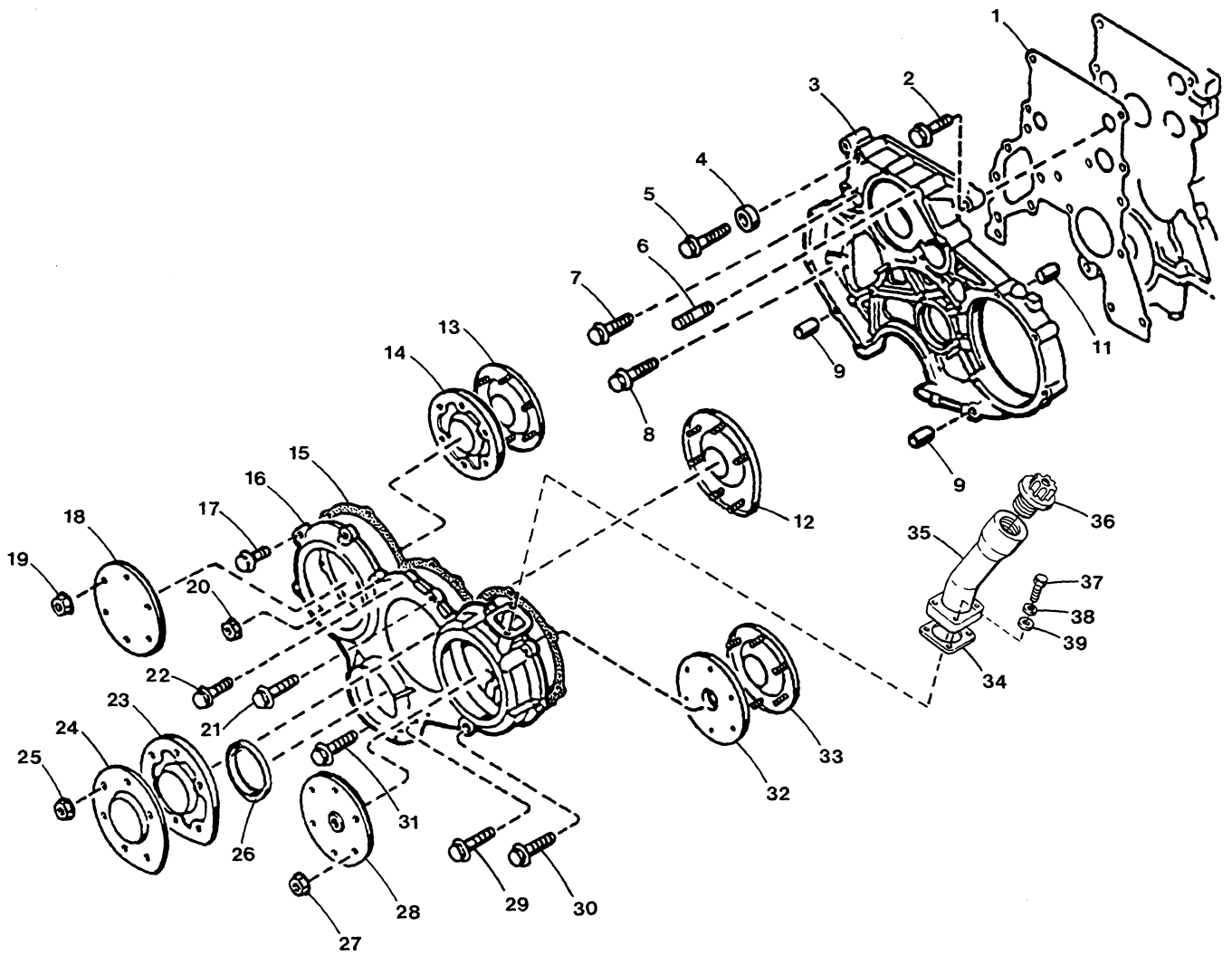
WESTERBEKE 90A - 32.0 BEDA - CRANKSHAFT - PISTONS

REF	PN	NAME	REMARKS	QUAN
1	040375	RING SET	STD-ENGINE SET	1
2	040374	PISTON	STD	4
3-1	040370	BEARING	SET CONNECTING ROD STD	1
3-2	040371	BEARING	SET CONNECTING ROD 0.25MM	1
3-3	040372	BEARING	SET CONNECTING ROD 0.50MM	1
3-4	040373	BEARING	SET CONNECTING ROD 0.76MM	1
4	040294	ROD	CONNECTING	4
5	032659	NUT	CONNECTING ROD BOLT	8
6	040295	BUSHING	CONNECTING ROD	4
7	040296	BOLT	CONNECTING ROD	8
8	013619	CAPSCREW	M 8 X 30 DIN 933	6
9	032662	BOLT	CRANKSHAFT PULLEY	1
10	032663	WASHER	CRANKSHAFT PULLEY	1
11	038786	PULLEY	CRANKSHAFT 2 GROOVE	1
12	040190	PULLEY	CRANKSHAFT 1 GROOVE	1
13	040299	SLINGER	CRANKSHAFT FRONT	1
14	040301	SPRING	FRICTION GEAR	1
15	040302	GEAR	FRICTION	1
16	040303	GEAR	CRANKSHAFT	1
17	032903	KEY	CRANKSHAFT GEAR	1
18	040297	CRANKSHAFT		1
19	033644	CAPSCREW	M 8 X 35 JIS-FLANGE	8
20	040298	FLANGE	OIL SEAL CRANKSHAFT REAR INCL SEAL	1
21	040300	GASKET	CRANKSHAFT OIL SEAL FLANGE	1
22	040304	SEAL	OIL CRANKSHAFT REAR	1
23-1	032881	WASHER	THRUST SET STD	1
23-2	032882	WASHER	THRUST SET U/S	1
24-1	040376	BEARING	SET MAIN STD	1
24-2	040377	BEARING	SET MAIN 0.25MM	1
24-3	040378	BEARING	SET MAIN 0.50MM	1
24-4	040379	BEARING	SET MAIN 0.76MM	1
25	031786	LOCKWASHER	M 8 DIN 127	6
26	031787	WASHER	M 8 DIN 125	6

WESTERBEKE 90A - 32.0 BEDA - VALVES - ROCKER SHAFT - CAMSHAFT

REF	PN	NAME	REMARKS	QUAN
1	032909	NUT		8
2	040312	SCREW	ROCKER ADJUSTING	8
3	040311	BUSHING	ROCKER	8
4	041422	CIRCLIP		2
5	040316	WASHER	ROCKER SHAFT	2
6	040310	ROCKER	INCLUDING BUSHING, SCREW, LOCKNUT	8
7	032384	PIN	TAPER	1
8	033661	STUD	M 8 X 48 DIN 939	2
9	032682	NUT	PILLAR	2
10	040315	SPRING	ROCKER SHAFT	6
11	040314	BRACKET	ROCKER SHAFT	3
12	040318	BRACKET	ROCKER SHAFT	2
13	040317	BRACKET	ROCKER SHAFT	1
14	040313	SHAFT	ROCKER INCLUDING PLUGS	1
15	040319	BRACKET	ROCKER SHAFT	1
16		PLUG	ROCKER SHAFT END	2
17	032672	CAP	VALVE STEM	8
18	040307	COTTER	VALVE	16
19	032669	SEAT	VALVE SPRING UPPER	8
20	033660	SEAL	VALVE STEM OIL INTAKE	4
21	040306	SPRING	VALVE OUTER	8
22	040308	SPRING	VALVE INNER	8
23	032671	SEAT	VALVE SPRING LOWER	8
24	040305	VALVE	INTAKE	4
25	040309	VALVE	EXHAUST	4
26	040320	PUSHROD		8
27	030966	TAPPET		8
28	040322	HUB	IDLER GEAR	1
29	032810	BUSHING	IDLER GEAR	1
30	040321	GEAR	IDLER INCLUDING BUSHING	1
31	040323	PLATE	IDLER GEAR	1
32	033647	CAPSCREW	M 8 X 50 JIS-FLANGE	2
33	033647	CAPSCREW	M 8 X 50 JIS-FLANGE	1
35	031014	PLATE	LOCK CAMSHAFT GEAR	1
36	031015	GEAR	FRICITION	1
37	040324	GEAR	CAMSHAFT	1
38	033641	CAPSCREW	M 8 X 16 JIS-FLANGE	2
39	024446	PLATE	CAMSHAFT RETAINING	1
40	024445	KEY	WOODRUFF	1
41	040325	CAMSHAFT		1
42	040238	SEAL	VALVE STEM OIL EXHAUST	4

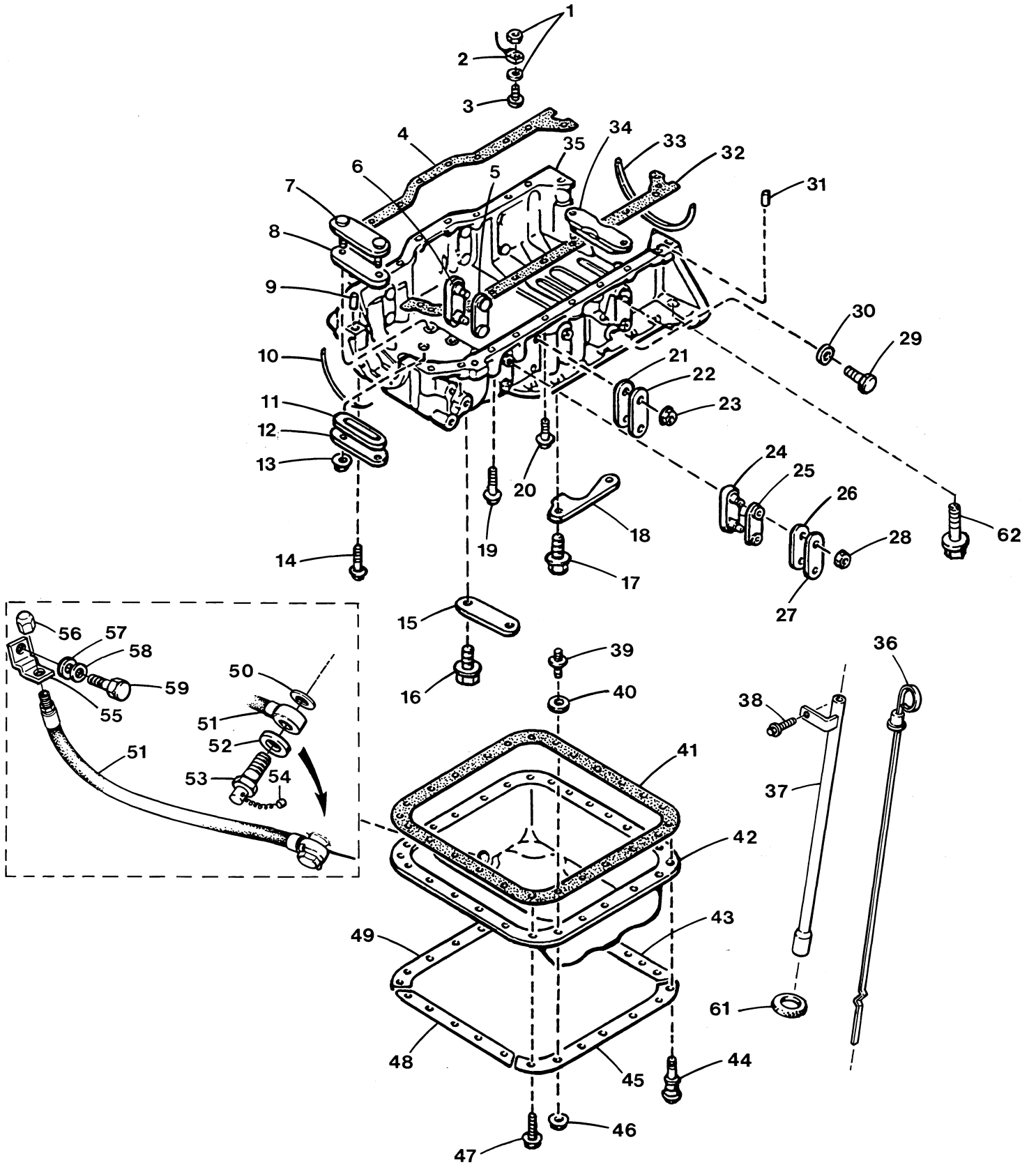
WESTERBEKE 90A - 32.0 BEDA - TIMING GEAR COVER



WESTERBEKE 90A - 32.0 BEDA - TIMING GEAR COVER

REF	PN	NAME	REMARKS	QUAN
1	040282	GASKET	BLOCK TO TIMING CASE	1
2	033644	CAPSCREW	M 8 X 35 JIS-FLANGE	
3	040280	CASE	TIMING	1
4		SPACER	24MM OD, 8.5MM ID, 4MM THICK	1
5	033648	CAPSCREW	M 8 X 55 JIS-FLANGE	
6	015831	STUD	M 8 X 32 DIN 939	1
7	033647	CAPSCREW	M 8 X 50 JIS-FLANGE	
8	033654	CAPSCREW	M 8 X 20 JIS-FLANGE	
9	033676	DOWEL	TUBULAR 12MM DIA X 12MM LONG	2
11	041417	DOWEL	6MM X 14MM DIN 6325	
12	040285	PLATE	TO U1048	1
13	040288	PLATE		1
14	040291	SEAL		1
15	040290	GASKET	TIMING COVER	1
16-1	040289	COVER	TIMING INCL PLATES AND SEALS TO U1048	1
16-2	042105	COVER	TIMING INCL PLATES AND SEALS FROM U1049	1
17	033644	CAPSCREW	M 8 X 35 JIS-FLANGE	2
18	040292	PLATE		1
19	036211	NUT	M 6 JIS-FLANGE	6
20	033668	NUT	M 8 JIS-FLANGE	1
21	033649	CAPSCREW	M 6 X 65 JIS-FLANGE	2
22	041426	CAPSCREW	M 6 X 30 JIS-FLANGE	1
23	040286	SEAL	TO U1048	1
24	040287	PLATE	TO U1048	1
25	036211	NUT	M 6 JIS-FLANGE TO U1048	6
26	040281	SEAL	OIL	1
27	036211	NUT	M 6 JIS-FLANGE	6
28	040284	PLATE		1
29-1	041427	CAPSCREW	M 8 X 70 JIS-FLANGE	3
29-2	042106	CAPSCREW	M 8 X 75 JIS-FLANGE	1
30	034477	CAPSCREW	M 8 X 60 JIS-FLANGE	6
31	033654	CAPSCREW	M 8 X 20 JIS-FLANGE	1
32	040283	SEAL		1
33	040288	PLATE		1
34	040131	GASKET		1
35-1	040028	NECK	OIL FILL INCLUDING CAP	1
35-2	046410	COVER	WHEN NECK NOT INSTALLED	1
36	038980	CAP	OIL FILL	1
37-1	020628	CAPSCREW	M 6 X 25 DIN 933	2
37-2	031810	CAPSCREW	M 6 X 14 DIN 933 COVER 46410	2
38	031783	LOCKWASHER	M 6 DIN 127	2
39	031784	WASHER	M 6 DIN 125	2

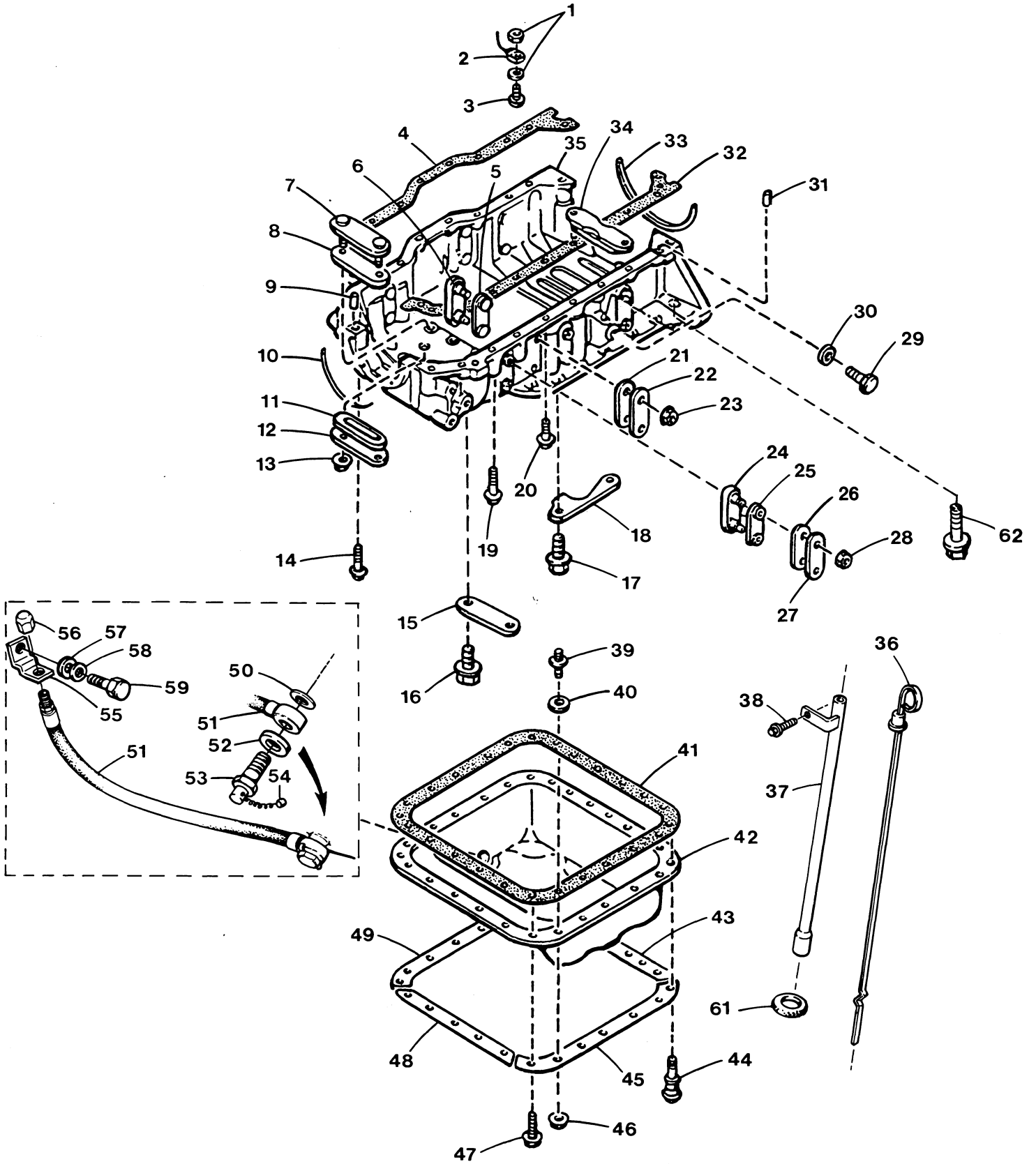
WESTERBEKE 90A - 32.0 BEDA - LUBE OIL SUMP



WESTERBEKE 90A - 32.0 BEDA - LUBE OIL SUMP

REF	PN	NAME	REMARKS	QUAN
1	032654	WASHER	OIL JET	8
2	040293	JET	OIL	4
3	032655	VALVE	OIL JET	4
4	041440	GASKET	BLOCK TO LOWER BLOCK RIGHT	1
5	040263	SEAL		6
6	040261	SEAL		6
7	040257	PLATE		1
8	040259	SEAL		1
9	041418	DOWEL	8MM X 18MM DIN 6325	2
10	041441	GASKET	BLOCK TO LOWER BLOCK FRONT	1
11	040260	SEAL		1
12	040258	PLATE		1
13	036211	NUT	M 6 JIS-FLANGE	2
14	041434	CAPSCREW	M 8 X 130 JIS-FLANGE	3
15	040358	BRACKET	OIL STRAINER	1
16	033654	CAPSCREW	M 8 X 20 JIS-FLANGE	2
17	041433	CAPSCREW	M 8 X 110 JIS-FLANGE	7
18	040357	BRACKET	OIL LINE	1
19	033647	CAPSCREW	M 8 X 50 JIS-FLANGE	4
20	033642	CAPSCREW	M 8 X 25 JIS-FLANGE	8
21	040264	SEAL		6
22	040262	PLATE		6
23	036211	NUT	M 6 JIS-FLANGE	12
24	040266	PLATE		2
25	040268	SEAL		2
26	040269	SEAL		2
27	040267	PLATE		2
28	036211	NUT	M 6 JIS-FLANGE	4
29	032905	PLUG		1
30	024498	WASHER	M12	1
31	033656	DOWEL	TUBULAR	2
32	041439	GASKET	BLOCK TO LOWER BLOCK LEFT	1
33	041442	GASKET	BLOCK TO LOWER BLOCK REAR	1
34	040265	SEAL		2
35-1	040256	BLOCK	LOWER TO U1050	1
35-2	042101	BLOCK	LOWER FROM U1051	1

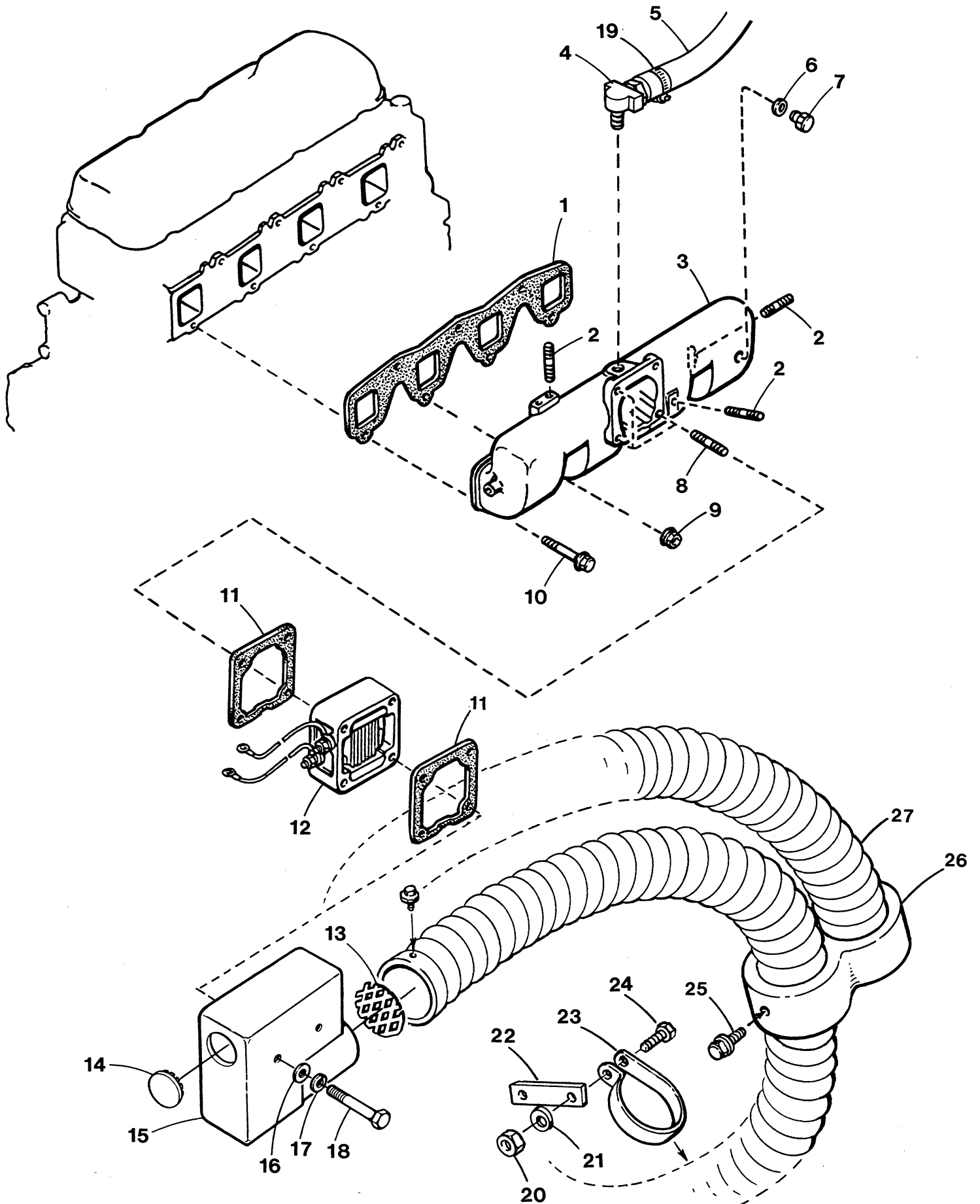
WESTERBEKE 90A - 32.0 BEDA - LUBE OIL SUMP



WESTERBEKE 90A - 32.0 BEDA - LUBE OIL SUMP

REF	PN	NAME	REMARKS	QUAN
36	040042	DIPSTICK		1
37	040041	TUBE	DIPSTICK	1
38-1	017012	CAPSCREW	M 6 X 16 DIN 933	1
38-2	031783	LOCKWASHER	M 6 DIN 127	1
38-3	031753	WASHER	1/4 FLAT	1
39-1	040271	STUD	SUMP TO U1006	6
39-2	042102	STUD	SUMP FROM U1007	6
40	040381	O-RING		6
41-1	040276	GASKET	SUMP TO U1006	2
41-2	040276	GASKET	SUMP FROM U1007	1
42	040270	SUMP	LUBE OIL	1
43	040273	STIFFENER	SUMP TO U1006	1
44-1	040278	BOLT	SUMP TO U1006	2
44-2	042104	BOLT	SUMP FROM U1007	2
45	040274	STIFFENER	SUMP TO U1006	1
46	033668	NUT	M 8 JIS-FLANGE	6
47-1	040277	BOLT	SUMP TO U1006	15
47-2	042103	BOLT	SUMP FROM U1007	15
48	040272	STIFFENER	SUMP TO U1006	1
49	040275	STIFFENER	SUMP TO U1006	1
50	030291	WASHER	BANJO M14	1
51	030848	HOSE	SUMP DRAIN	1
52	036493	WASHER	SUMP DRAIN BANJO	1
53	036821	BOLT	BANJO-SUMP DRAIN	1
54	037393	SEAL	LEAD WIRE	1
55	024922	BRACKET	SUMP DRAIN HOSE	1
56	024905	CAP	SUMP DRAIN HOSE	1
57	031789	WASHER	M10 DIN 125	1
58	019262	LOCKWASHER	M10 DIN 127	1
59	031083	CAPSCREW	M10 X 1.25 X 30 JIS	1
60	024523	PLUG	1/8NPT SOCKET	1
61	040382	O-RING	DIPSTICK TUBE	1
62		CAPSCREW	M 8 X 125 JIS-FLANGE	2
63	041448	SEAL SET	LOWER BLOCK PLATES TO U1050	1

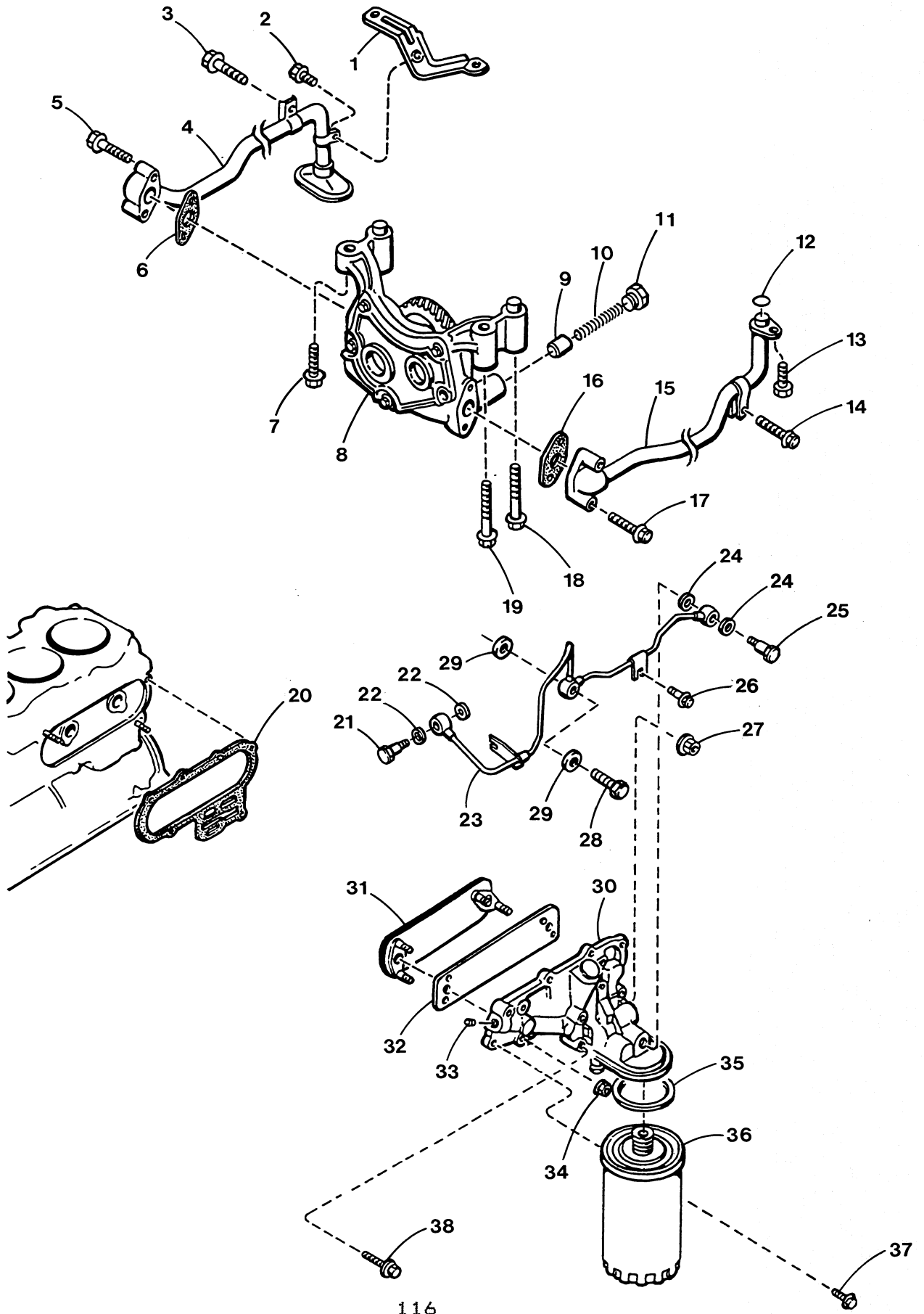
WESTERBEKE 90A - 32.0 BEDA - INTAKE MANIFOLD



WESTERBEKE 90A - 32.0 BEDA - INTAKE MANIFOLD

REF	PN	NAME	REMARKS	QUAN
1	040327	GASKET	INTAKE MANIFOLD TO HEAD	1
2	038909	STUD	FUEL LINE CLAMPS M 5	4
3	040231	MANIFOLD	INTAKE	1
4	299814	ELBOW	MALE 3/8NPT TO 5/8 HOSE	1
5	200429	HOSE	BREATHER	1
6	011944	WASHER	BANJO M10	1
7	041420	PLUG	M10 X 1.25	1
8	041435	STUD	M 8 X 60 DIN 939	3
9	033668	NUT	M 8 JIS-FLANGE	2
10	033642	CAPSCREW	M 8 X 25 JIS-FLANGE	5
11	040349	GASKET	INTAKE HEATER	2
12-1	040368	HEATER	AIR INTAKE 12 VDC	1
12-2	041063	HEATER	AIR INTAKE 24 VDC	1
13	030167	SCREEN	AIR INTAKE SILENCER PROPULSION	1
14	031145	PLUG	BUTTON 1-3/8	1
15-1	042582	SILENCER	AIR INTAKE INCL REF 14 GENSET	1
15-2	042146	SILENCER	AIR INTAKE INCL REF 13-14 PROPULSION	1
16	031787	WASHER	M 8 DIN 125	4
17	031786	LOCKWASHER	M 8 DIN 127	4
18	036729	CAPSCREW	M 8 X 120 DIN 931	4
19	301083	CLAMP	HOSE 10	1
20	018242	NUT	M 8 DIN 934	1
21	031786	LOCKWASHER	M 8 DIN 127	1
22	042613	BRACKET	SUPPORT TUNED HOSE	1
23	039949	CLAMP	SUPPORT HOSE	1
24	013630	CAPSCREW	M 8 X 25 DIN 933	1
25	042916	SCREW	10-16 X 3/4 TAPPING	1
26	042614	BRACKET	TUNED HOSE GENSET	1
27	042592	HOSE	1-3/4 ID WIRE INSERTED - INCHES REQUIRED	73

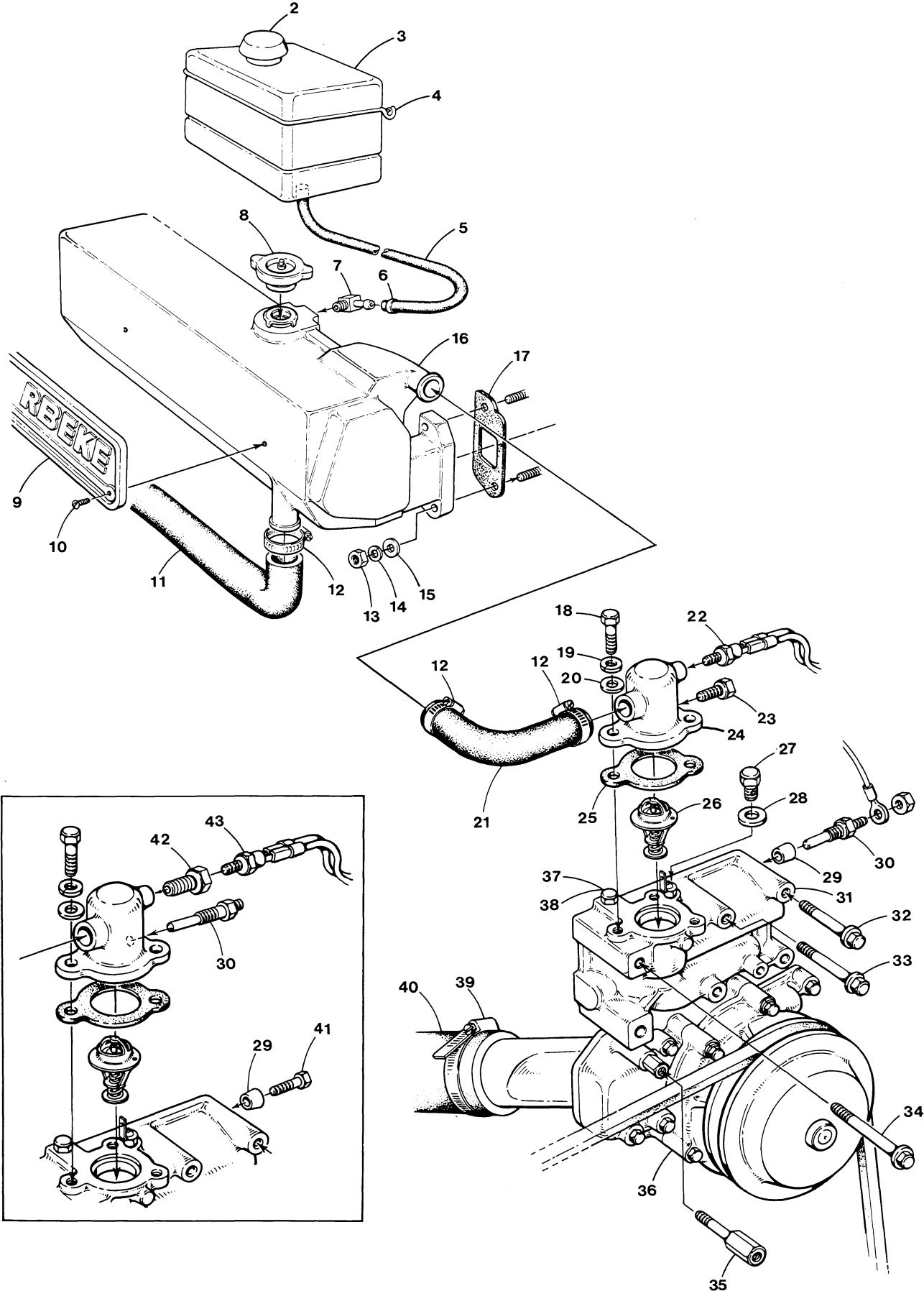
WESTERBEKE 90A - 32.0 BEDA - LUBE OIL FILTER AND PUMP



WESTERBEKE 90A - 32.0 BEDA - LUBE OIL FILTER AND PUMP

REF	PN	NAME	REMARKS	QUAN
1	040356	BRACKET	OIL STRAINER	1
2	041425	CAPSCREW	M 8 X 20 JIS-FLANGE DOG POINT	1
3	041424	CAPSCREW	M 6 X 25 JIS-FLANGE DOG POINT	1
4	040354	STRAINER	OIL PUMP	1
5	041426	CAPSCREW	M 6 X 30 JIS-FLANGE	2
6	040355	GASKET	STRAINER TO PUMP	1
7	033622	CAPSCREW	M10 X 1.25 X 35 JIS-FLANGE	1
8	040350	PUMP	LUBE OIL INCLUDING REF 9, 10, 11	1
9	024470	PLUNGER	OIL RELIEF VALVE	1
10	032702	SPRING	OIL RELIEF VALVE	1
11	040351	PLUG	OIL RELIEF VALVE	1
12	032907	O-RING		1
13	033654	CAPSCREW	M 8 X 20 JIS-FLANGE	1
14	041424	CAPSCREW	M 6 X 25 JIS-FLANGE DOG POINT	1
15	040352	LINE	OIL PUMP TO BLOCK	1
16	040353	GASKET	OIL PUMP TO LINE	1
17	041426	CAPSCREW	M 6 X 30 JIS-FLANGE	2
18	041431	CAPSCREW	M10 X 1.25 X 60 JIS-FLANGE	2
19	041430	CAPSCREW	M10 X 1.25 X 50 JIS-FLANGE	1
20	040361	GASKET	OIL FILTER HOUSING TO BLOCK	1
21	041419	BOLT	BANJO OIL LINE TO TIMING COVER	1
22	034448	WASHER	BANJO M10	2
23	040360	LINE	OIL	1
24	034449	WASHER	BANJO M14	2
25	024984	BOLT	BANJO	1
26	034565	CAPSCREW	M 6 X 10 JIS-FLANGE	1
27	033668	NUT	M 8 JIS-FLANGE	2
28	024503	BOLT	BANJO OIL LINE TO INJECTION PUMP	1
29	034448	WASHER	BANJO M10	2
30	040380	HOUSING	OIL FILTER	1
31	040367	COOLER	LUBE OIL	1
32	040359	GASKET	OIL COOLER TO FILTER HOUSING	1
33	034171	PLUG	SOCKET HEAD	1
34	041438	NUT	M10 X 1.25 JIS-FLANGE	4
35		GASKET	INCLUDED WITH OIL FILTER	1
36	040154	FILTER	LUBE OIL INCLUDING GASKET	1
37	033654	CAPSCREW	M 8 X 20 JIS-FLANGE	5
38	033645	CAPSCREW	M 8 X 40 JIS-FLANGE	3

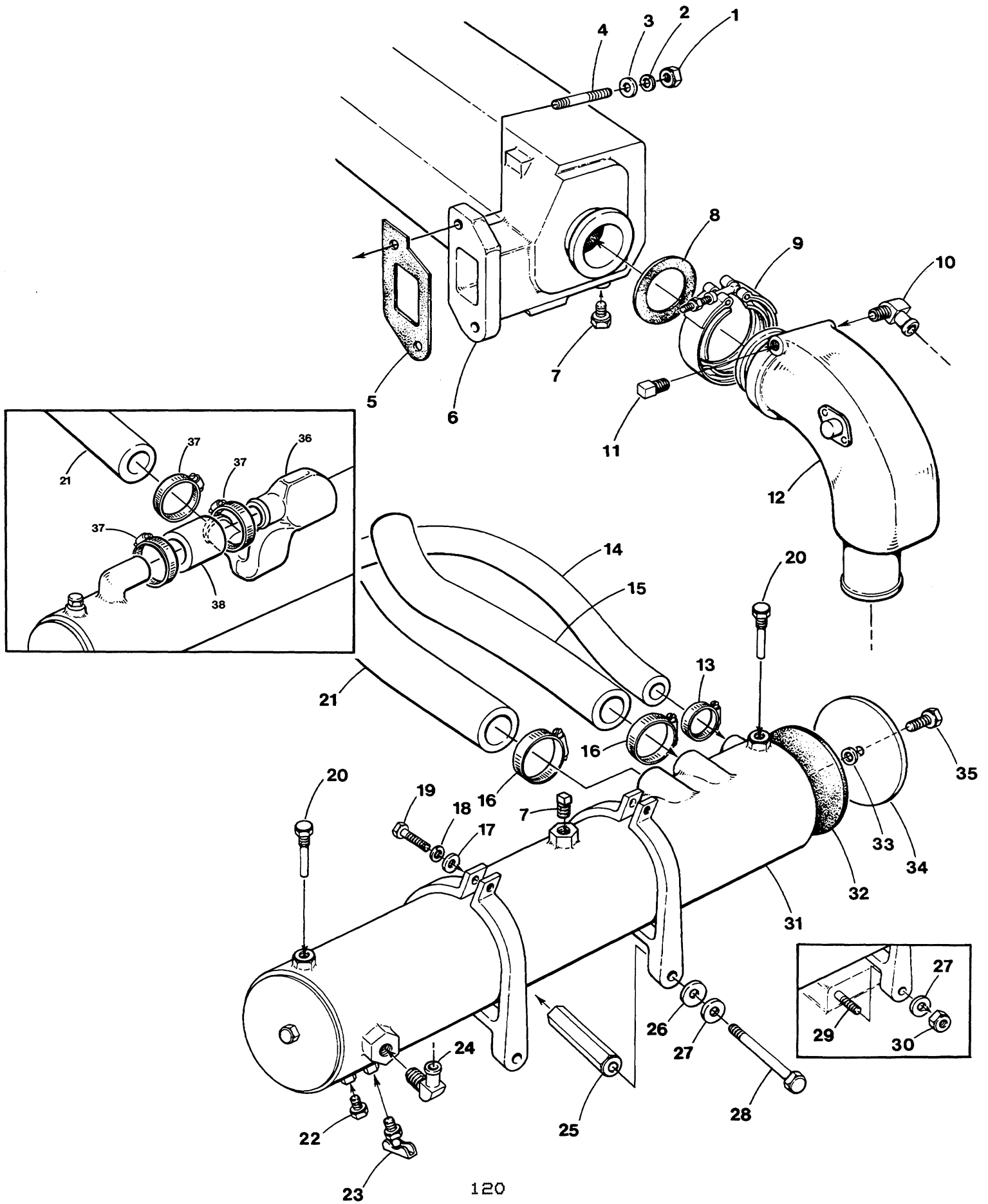
WESTERBEKE 90A - 32.0 BEDA - FRESH WATER COOLING SYSTEM - FRONT



WESTERBEKE 90A - 32.0 BEDA - FRESH WATER COOLING SYSTEM - FRONT

REF	PN	NAME	REMARKS	QUAN
1	024977	TANK KIT	COOLANT RECOVERY INCL REF 2 THRU 6	1
2	024858	CAP	COOLANT RECOVERY TANK	1
3	024704	TANK	COOLANT RECOVERY	1
4	024786	STRAP	COOLANT RECOVERY TANK MOUNTING	1
5	024637	TUBING	MANIFOLD TO TANK - INCHES REQUIRED	72
6	024906	CLAMP	HOSE	2
7	024907	ELBOW	MANIFOLD TO RECOVERY TANK HOSE	1
8	024306	CAP	PRESSURE	1
9	035411	NAMEPLATE		1
10	031935	SCREW	8-32 X 1/4 SS OVAL HEAD	2
11	040163	HOSE	MANIFOLD TO EXCHANGER	1
12	038193	CLAMP	HOSE 28	3
13	018242	NUT	M 8 DIN 934	8
14	031786	LOCKWASHER	M 8 DIN 127	8
15	031787	WASHER	M 8 DIN 125	8
16	037305	MANIFOLD	EXHAUST INCLUDING CAP	1
17	037745	GASKET	EXHAUST MANIFOLD TO HEAD	4
18	018804	CAPSCREW	M 6 X 20 DIN 933	3
19	031783	LOCKWASHER	M 6 DIN 127	3
20	031784	WASHER	M 6 DIN 125	3
21	038233	HOSE	THERMOSTAT TO MANIFOLD	1
22	039550	SWITCH	WATER TEMPERATURE-GENSET	1
23-1	019369	PLUG	1/8NPT HEX HEAD BRASS	1
23-2	039317	SWITCH	WATER TEMPERATURE-MED COACH GENSET ALARM	1
24	039652	HOUSING	THERMOSTAT	1
25	039651	GASKET	THERMOSTAT	1
26	024690	THERMOSTAT		1
27	022205	PLUG	M16 X 1.5 DIN 910	1
28	034178	WASHER	M16	1
29	024672	BUSHING	HOUSING TO 1/8NPT	1
30	035109	SENDER	WATER TEMPERATURE	1
31	041198	HOUSING	LOWER THERMOSTAT	1
32	041432	CAPSCREW	M10 X 1.25 X 70 JIS-FLANGE	2
33	041427	CAPSCREW	M 8 X 70 JIS-FLANGE	2
34	041428	CAPSCREW	M 8 X 90 JIS-FLANGE	2
35	040026	STANDOFF	ADJUSTING STRAP RADIATOR GENSET	1
36		PUMP	FRESH WATER - REFER TO SEPARATE PAGE	1
37	034567	PLUG	M 8 X 0.75	1
38	030289	WASHER	M 8	1
39	021122	CLAMP	HOSE 24	2
40	040162	HOSE	EXCHANGER TO FRESH WATER PUMP	1
41	019369	PLUG	1/8NPT HEX HEAD BRASS-PROPULSION	1
42	037453	BUSHING	1/4NPT TO 1/8NPT-PROPULSION	1
43	030125	SWITCH	WATER TEMPERATURE-PROPULSION	1

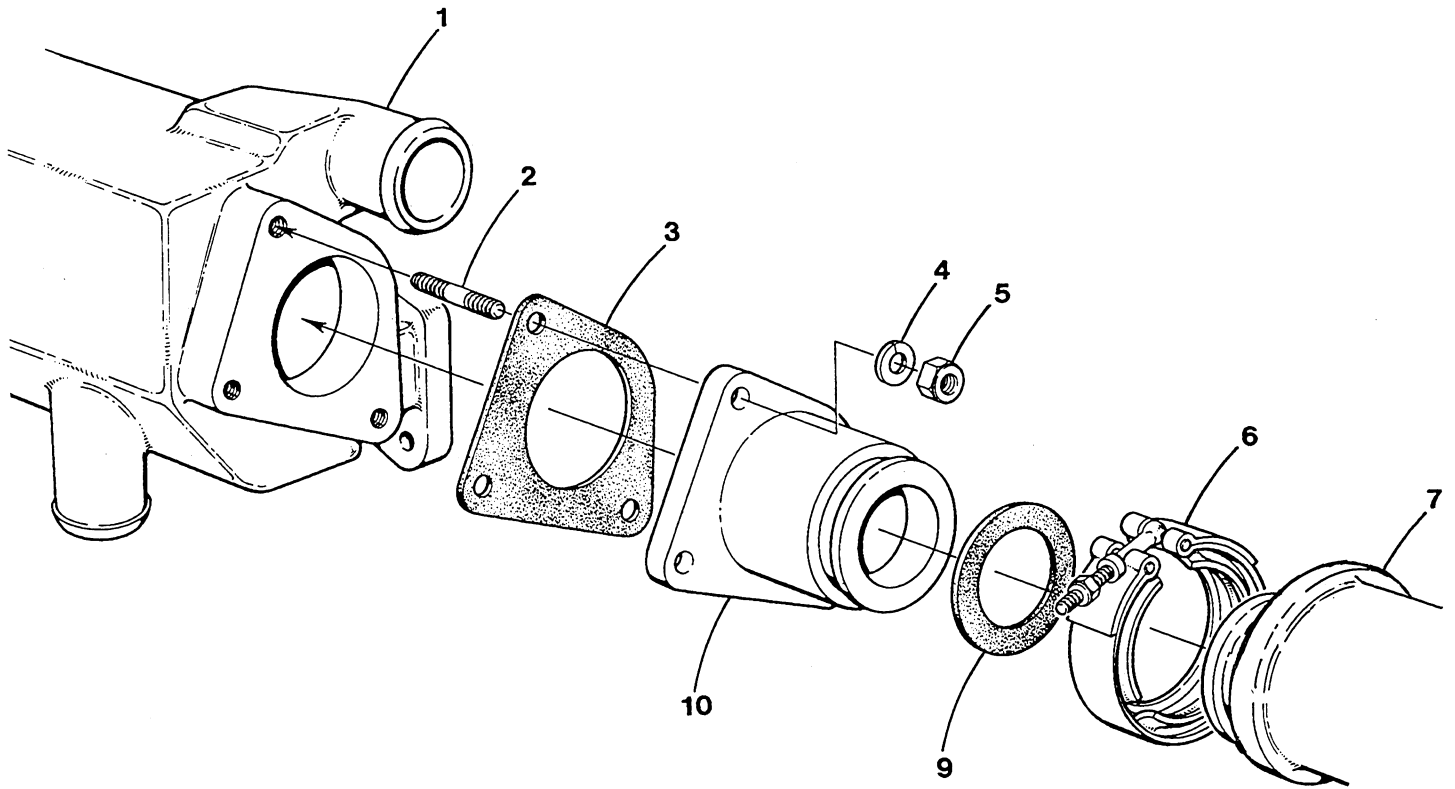
WESTERBEKE 90A - 32.0 BEDA - COOLING SYSTEM - REAR



WESTERBEKE 90A - 32.0 BEDA - COOLING SYSTEM - REAR

REF	PN	NAME	REMARKS	QUAN
1	018242	NUT	M 8 DIN 934	8
2	031786	LOCKWASHER	M 8 DIN 127	8
3	031787	WASHER	M 8 DIN 125	8
4	015831	STUD	M 8 X 32 DIN 939	8
5	037745	GASKET	EXHAUST MANIFOLD TO HEAD	4
6	037305	MANIFOLD	EXHAUST INCLUDING CAP	1
7	035747	PLUG	1/2NPT BRASS SQUARE HEAD	2
8	038221	GASKET	EXHAUST ELBOW TO MANIFOLD	1
9	038153	CLAMP	EXHAUST ELBOW TO MANIFOLD	1
10	036614	ELBOW	3/4NPT TO 1" HOSE	1
11	036849	PLUG	3/4 NPT BRASS SQUARE HEAD	1
12-1	039334	ELBOW KIT	70 DEG WATER INJECTED INCL REF 8-12	1
12-2	044876	ELBOW KIT	45 DEG WATER INJECTED INCL REF 8-12	1
13	011405	CLAMP	HOSE 16	2
14-1	011779	HOSE	1" ID WIRE INSERTED - INCHES REQD GENSET	23
14-2	011779	HOSE	1" ID WIRE INSERTED - INCHES REQD PROP	32
15	040163	HOSE	MANIFOLD TO EXCHANGER	1
16	038193	CLAMP	HOSE 28	2
17	031753	WASHER	1/4 FLAT	2
18	031752	LOCKWASHER	1/4	2
19	031506	CAPSCREW	1/4NC X 1-1/4	2
20	011885	ZINC		2
21	040162	HOSE	EXCHANGER TO FRESH WATER PUMP	1
22	019369	PLUG	1/8NPT HEX HEAD BRASS	1
23	011471	PETCOCK	1/8NPT	1
24-1	036614	ELBOW	3/4NPT TO 1" HOSE GENSET	1
24-2	036622	NIPPLE	3/4NPT TO 1" HOSE PROPULSION	1
25	039076	SPACER	EXCHANGER MOUNT-GENSET	2
26	031787	WASHER	M 8 DIN 125	2
27	031786	LOCKWASHER	M 8 DIN 127	2
28	013619	CAPSCREW	M 8 X 30 DIN 933 GENSET	2
29	015830	STUD	M 8 X 25 DIN 939 PROPULSION	2
30	018242	NUT	M 8 DIN 934 PROPULSION	2
31-1	040164	EXCHANGER	HEAT GENSET	1
31-2	041164	EXCHANGER	HEAT CU-NI GENSET	1
31-3	042209	EXCHANGER	HEAT PROPULSION	1
32-1	022851	GASKET	EXCHANGER END COVER GENSET	2
32-2	033300	GASKET	EXCHANGER END COVER PROPULSION	2
33	019321	O-RING	EXCHANGER END COVER	2
34-1	022850	COVER	EXCHANGER END GENSET	2
34-2	033299	COVER	EXCHANGER END PROPULSION	2
35	022852	CAPSCREW	3/8NC X 1/2 BRASS	2
36	041778	ELBOW	HOSE CONNECTOR PROPULSION	1
37	038193	CLAMP	HOSE 28	2
38	039919	HOSE	EXCHANGER TO ELBOW	1

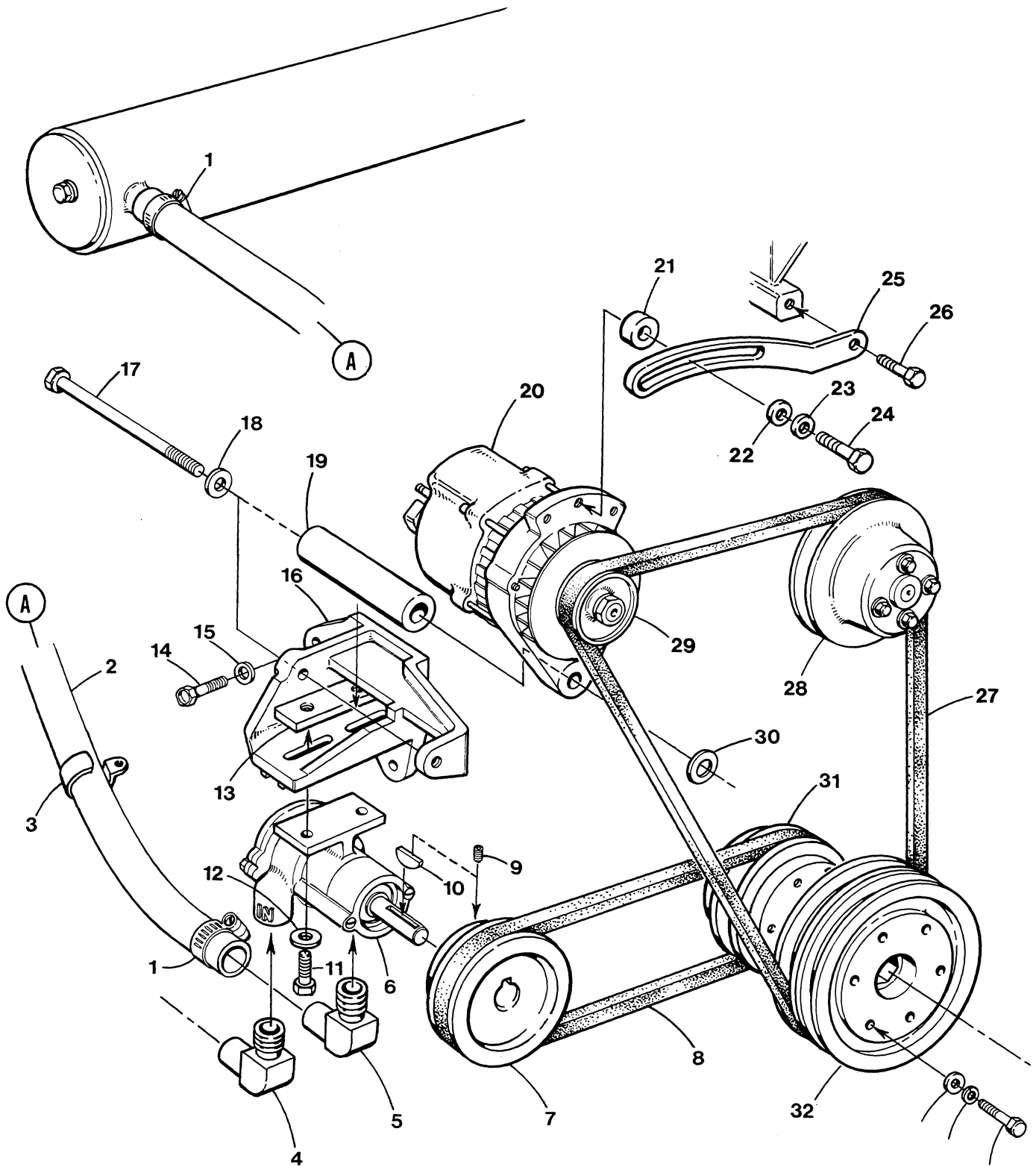
WESTERBEKE 90A FOUR - FRONT OPENING EXHAUST MANIFOLD



WESTERBEKE 90A FOUR - FRONT OPENING EXHAUST MANIFOLD

REF	PN	NAME	REMARKS	QUAN
1	039628	MANIFOLD	FRONT EXHAUST	1
2	037821	STUD	M10 X 30 DIN 939	3
3	037347	GASKET	MANIFOLD TO FLANGE	1
4	019262	LOCKWASHER	M10 DIN 127	3
5	015887	NUT	M10 DIN 934	3
6	038153	CLAMP	EXHAUST ELBOW TO FLANGE	1
7		ADAPTER	V-CLAMP TO PIPE THREAD	1
9	038221	GASKET	EXHAUST FLANGE TO ADAPTER	1
10	038862	FLANGE	MANIFOLD TO EXHAUST ADAPTER	1

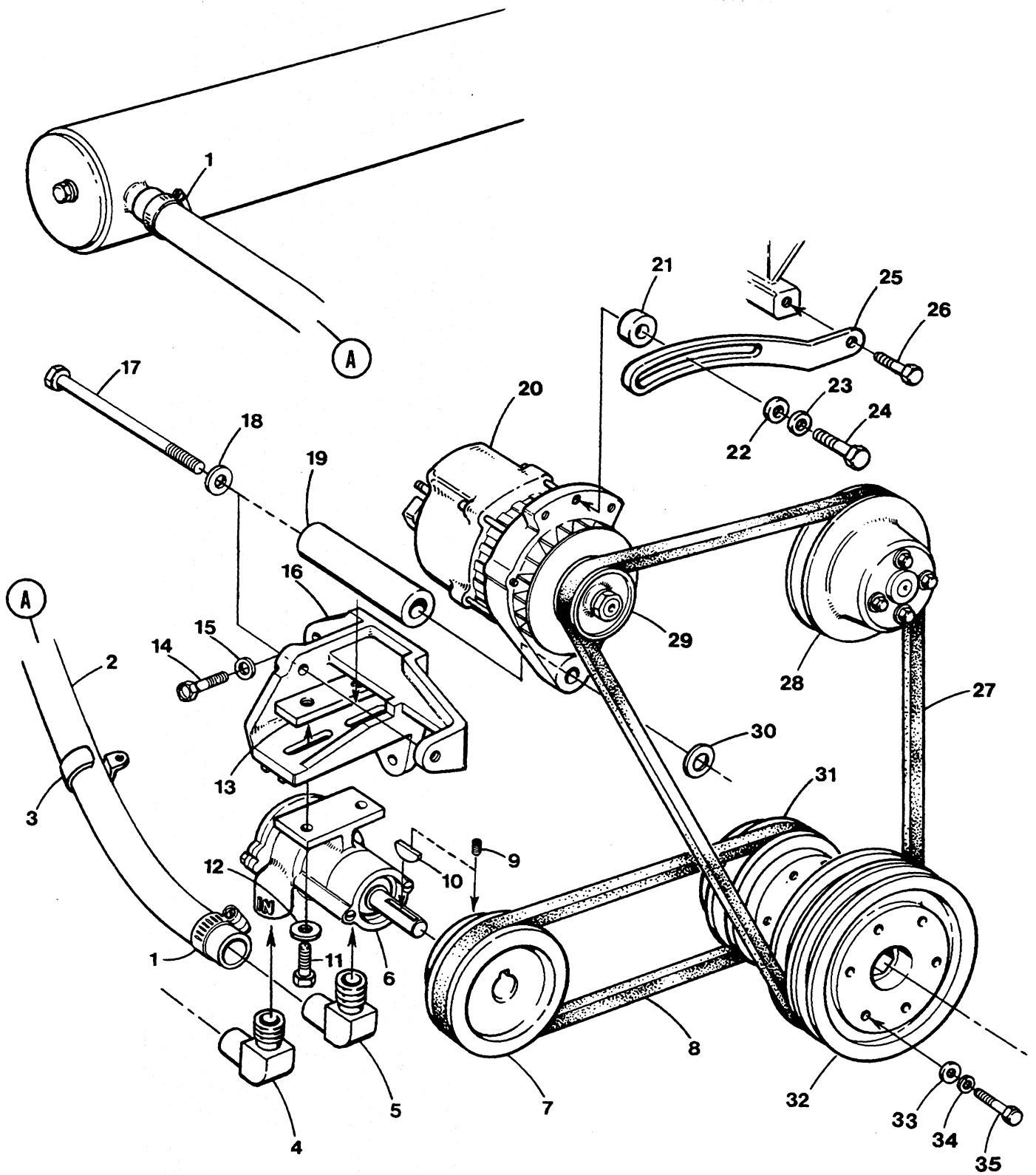
WESTERBEKE 90A - 32.0 BEDA - SEA WATER SYSTEM AND ALTERNATOR



WESTERBEKE 90A - 32.0 BEDA - SEA WATER SYSTEM AND ALTERNATOR

REF	PN	NAME	REMARKS	QUAN
1	011405	CLAMP	HOSE 16	2
2	011779	HOSE	1" ID WIRE INSERTED - INCHES REQUIRED	AR
3	013741	CLAMP	SUPPORT HOSE-PROPULSION	1
4	036614	ELBOW	3/4NPT TO 1" HOSE	1
5-1	036622	NIPPLE	3/4NPT TO 1" HOSE-PROPULSION	1
5-2	036614	ELBOW	3/4NPT TO 1" HOSE-GENSET	1
6	038445	PUMP	SEA WATER	1
7-1	011371	PULLEY	SEA WATER PUMP DRIVE-PROPULSION	1
7-2	038865	PULLEY	SEA WATER PUMP DRIVE-GENSET	1
8-1	013810	BELT	SEA WATER PUMP-PROPULSION	1
8-2	031152	BELT	SEA WATER PUMP-GENSET	1
9	011357	SETSCREW	PULLEY RETAINING	1
10	022392	KEY	SEA WATER PUMP SHAFT TO PULLEY	1
11	031631	CAPSCREW	3/8NF X 1-1/4	2
12-1	031764	LOCKWASHER	3/8	2
12-2	031765	WASHER	3/8 FLAT	4
13	038435	PLATE	SEA WATER PUMP ADJUSTING	1
14	031083	CAPSCREW	M10 X 1.25 X 30 JIS	3
15	019262	LOCKWASHER	M10 DIN 127	3
16-1	040400	BRACKET	SEA WATER PUMP & 50 AMP ALTERNATOR	1
16-2	041029	BRACKET	SEA WATER PUMP & 90-190 AMP ALTERNATOR	1
17-1	031724	CAPSCREW	1/2NC X 5-3/4 50 AMP ALTERNATOR	1
17-2	031624	CAPSCREW	3/8NC X 5-3/4 90-190 AMP ALTERNATOR	1
18-1	031776	LOCKWASHER	1/2 50 AMP ALTERNATOR	1
18-2	031764	LOCKWASHER	3/8 135-190 AMP ALTERNATOR	1
19-1	040193	SPACER	50 AMP ALTERNATOR	1
19-2	039889	SPACER	90 AMP ALTERNATOR	1
20- 1	039790	ALTERNATOR	50 AMP 12 VDC INCLUDING REGULATOR	1
20- 2	030735	ALTERNATOR	90 AMP 12 VDC	1
20- 3	038792	ALTERNATOR	135 AMP 12 VDC	1
20- 4	038891	REGULATOR	135 AMP ALTERNATOR	1
20- 5	038793	ALTERNATOR	160 AMP 12 VDC	1
20- 6	038794	ALTERNATOR	190 AMP 12 VDC	1
20- 7	038892	REGULATOR	160-190 AMP ALTERNATOR	1
20- 8	038530	ALTERNATOR	42 AMP 24 VDC WITH REGULATOR	1
20- 9	034922	ALTERNATOR	51 AMP 12 VDC UNGROUNDED	1
20-10	021566	ALTERNATOR	35 AMP 24 VDC UNGROUNDED	1
20-11	021611	REGULATOR	ALTERNATOR 21566	1
21	023413	SPACER		1
22	033381	WASHER	ADJUSTING STRAP	1
23	031758	LOCKWASHER	5/16	1
24	031555	CAPSCREW	5/16NC X 1	1
25	040030	STRAP	51 AMP ALTERNATOR ADJUSTING	1
26-1	018812	CAPSCREW	M 8 X 70 DIN 931	1
26-2	031786	LOCKWASHER	M 8 DIN 127	1

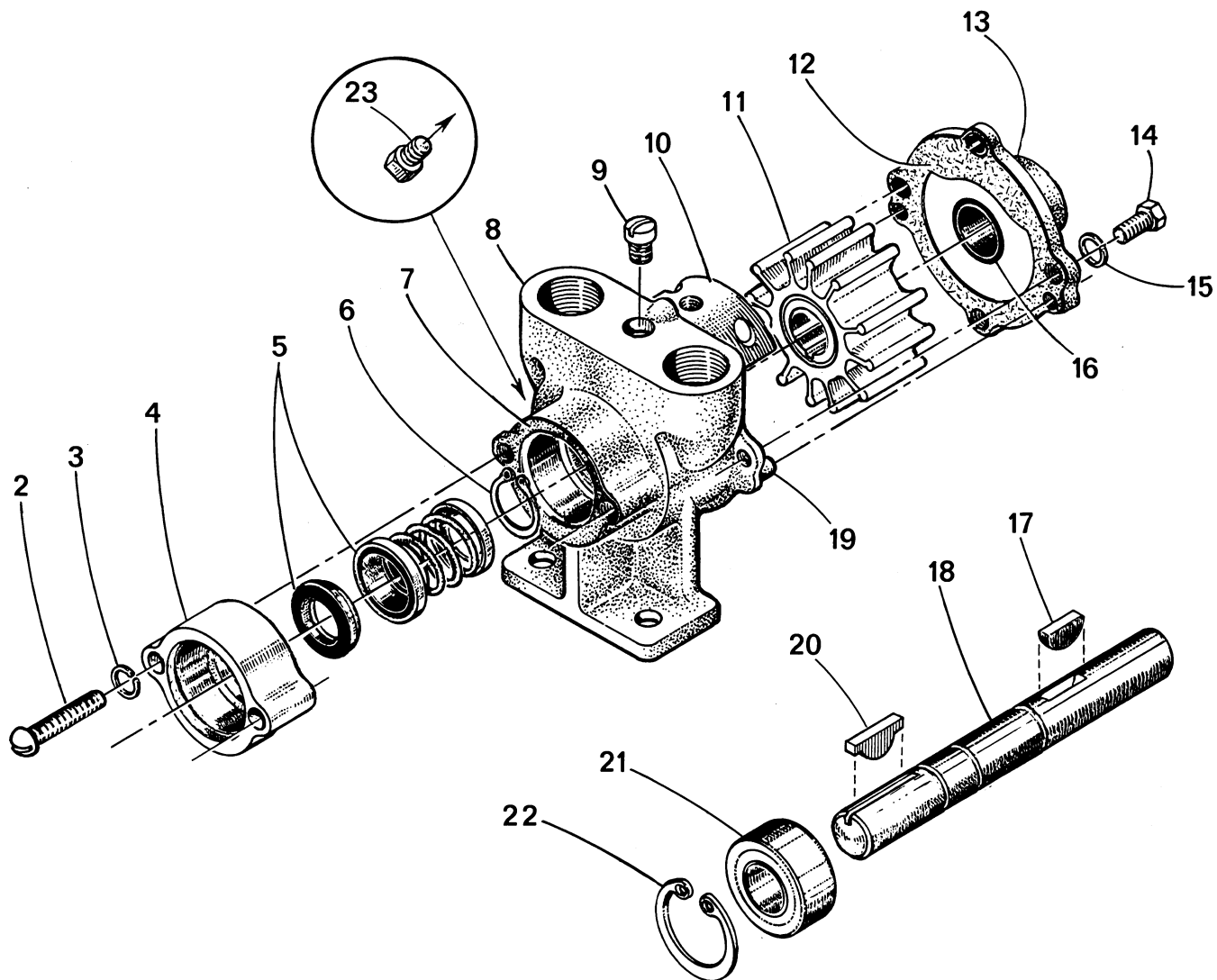
WESTERBEKE 90A - 32.0 BEDA - SEA WATER SYSTEM AND ALTERNATOR



WESTERBEKE 90A - 32.0 BEDA - SEA WATER SYSTEM AND ALTERNATOR

REF	PN	NAME	REMARKS	QUAN
27-1	039181	BELT	50 AMP ALTERNATOR & FRESH WATER PUMP	1
27-2		BELT	135 AMP ALTERNATOR & FRESH WATER PUMP	2
27-3	041048	BELT	160-190 AMP ALTERNATOR & FRESH WATER PMP	2
27-4	039181	BELT	90 AMP ALTERNATOR & FRESH WATER PUMP	2
27-5	039181	BELT	ALTERNATOR 21566-34922-38530	1
28-1	040365	PULLEY	FRESH WATER PUMP 1 GROOVE	1
28-2	041039	PULLEY	FRESH WATER PUMP 4 GROOVE	1
28-3	031110	PULLEY	FRESH WATER PUMP 2 GROOVE	1
29-1	045019	PULLEY	50 AMP ALTERNATOR	1
29-2	038440	PULLEY	135-190 AMP ALTERNATOR	1
29-3	031168	PULLEY	90 AMP ALTERNATOR	1
29-4	011548	PULLEY	ALTERNATOR 21566-34922-38530	1
30	030168	SPACER	51 AMP ALTERNATOR	3
31	040190	PULLEY	CRANKSHAFT 1 GROOVE	1
32	038786	PULLEY	CRANKSHAFT 2 GROOVE	1
33	031787	WASHER	M 8 DIN 125	6
34	031786	LOCKWASHER	M 8 DIN 127	6
35	013619	CAPSCREW	M 8 X 30 DIN 933	6

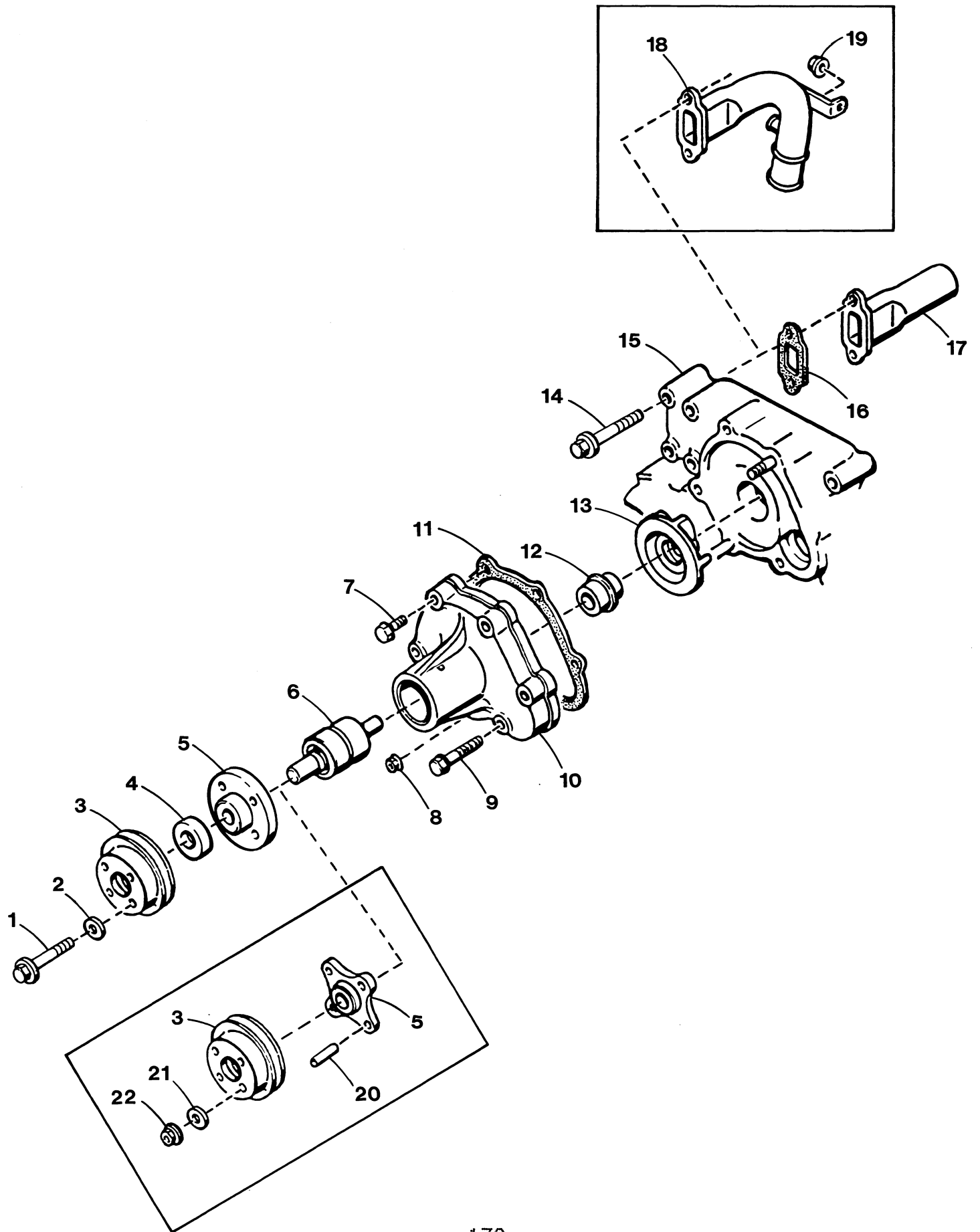
WESTERBEKE 90A - 32.0 BEDA - SEA WATER PUMP



WESTERBEKE 90A - 32.0 BEDA - SEA WATER PUMP

REF	PN	NAME	REMARKS	QUAN
1	038445	PUMP	SEA WATER	1
2	018147	SCREW	BEARING HOUSING TO PUMP	2
3	032183	LOCKWASHER		2
4	018180	HOUSING	BEARING	1
5	014774	SEAL	INCLUDING SEAT	1
6	018145	RING	RETAINING	3
7	018154	GASKET	BEARING HOUSING TO PUMP HOUSING	1
8	039867	HOUSING	PUMP BODY	1
9	018151	SCREW	PUMP HOUSING TO CAM	1
10	018152	CAM		1
11	011907	IMPELLER	INCLUDING GASKET	1
12	011419	GASKET	IMPELLER COVER	1
13	018153	COVER	IMPELLER INCLUDING BUSHING	1
14	018143	CAPSCREW		4
15	032183	LOCKWASHER		4
16	018149	BUSHING	SHAFT END	1
17	018148	KEY	IMPELLER TO SHAFT	1
18	018164	SHAFT		1
19	018142	DOWEL	COVER TO PUMP HOUSING	2
20	022392	KEY	SEA WATER PUMP SHAFT TO PULLEY	1
21	018144	BEARING		1
22	018146	RING	RETAINING	1
23	019369	PLUG	1/8NPT HEX HEAD BRASS	1
24	033329	KIT	PUMP REPAIR INCL 6, 7, 9, 10, 11, 12, 16, 21, 22	1

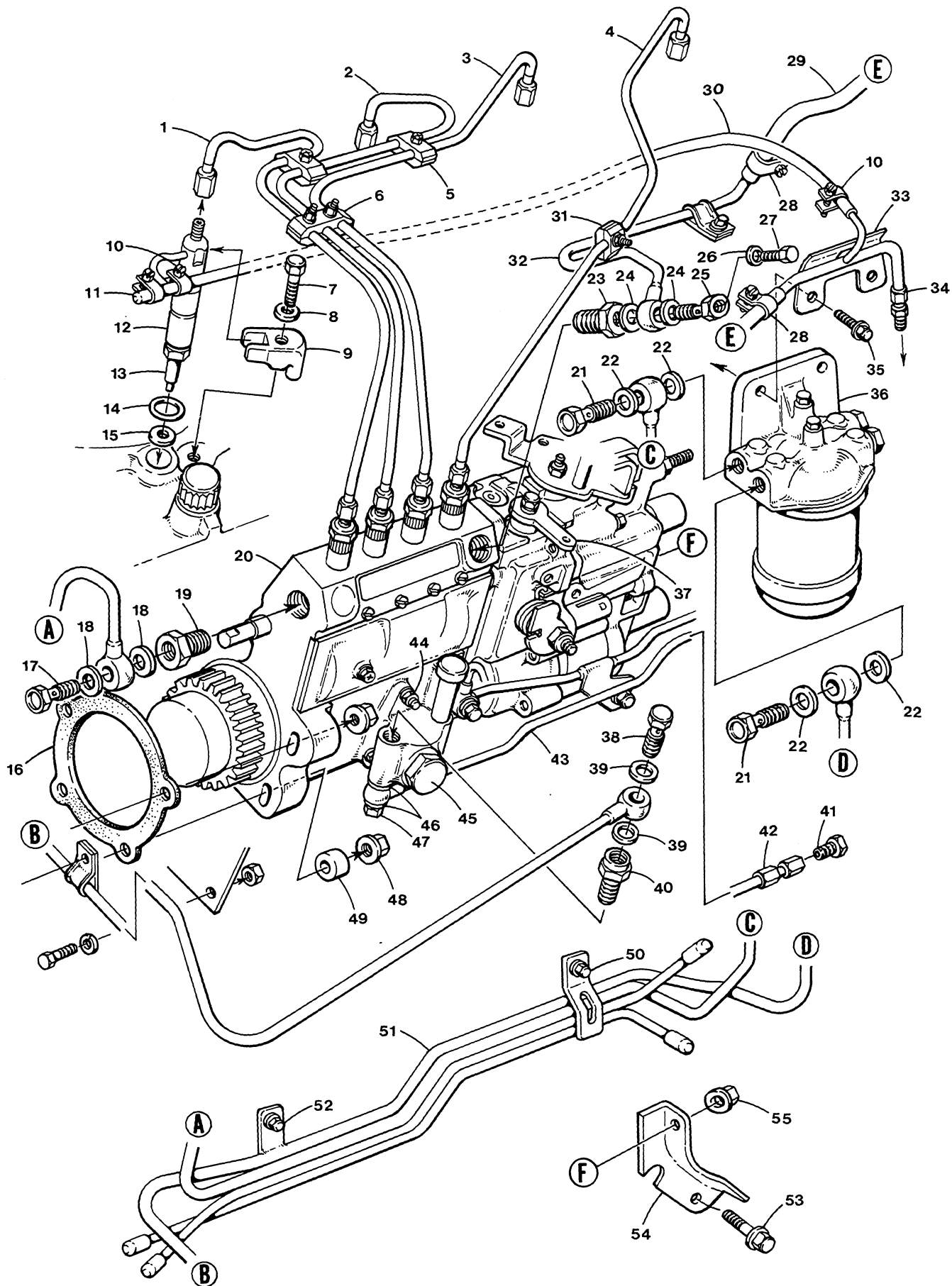
WESTERBEKE 90A - 32.0 BEDA - FRESH WATER PUMP



WESTERBEKE 90A - 32.0 BEDA - FRESH WATER PUMP

REF	PN	NAME	REMARKS	QUAN
1-1	013630	CAPSCREW	M 8 X 25 DIN 933	4
1-2	013619	CAPSCREW	M 8 X 30 DIN 933 PULLEY 41039	4
2	031786	LOCKWASHER	M 8 DIN 127	4
3-1	040365	PULLEY	1 GROOVE	1
3-2	031110	PULLEY	2 GROOVE	1
3-3	041039	PULLEY	4 GROOVE	1
4	040191	SPACER	FRESH WATER PUMP PULLEY	1
5		FLANGE	WATER PUMP PULLEY - SEE REF 10	1
6		SHAFT	SEE REF 10	1
7	033644	CAPSCREW	M 8 X 35 JIS-FLANGE	3
8	033668	NUT	M 8 JIS-FLANGE	1
9	041427	CAPSCREW	M 8 X 70 JIS-FLANGE	2
10	040362	HOUSING	BEARING ASSEMBLY INCL 5, 6, 10, 11, 12, 13	1
11	040363	GASKET	HOUSING TO TIMING CASE	1
12	040364	SEAL		1
13		IMPELLER	SEE REF 10	1
14	033648	CAPSCREW	M 8 X 55 JIS-FLANGE	2
15		CASE	TIMING	1
16	040200	GASKET	CONNECTOR	1
17	040194	CONNECTOR	WATER PUMP	1
18	040229	CONNECTOR	WATER PUMP RADIATOR GENSET	1
19	033668	NUT	M 8 JIS-FLANGE RADIATOR GENSET	1
20		STUD	M 8 X 18 DIN 939 RADIATOR GENSET	4
21		WASHER		4
22	033668	NUT	M 8 JIS-FLANGE RADIATOR GENSET	4

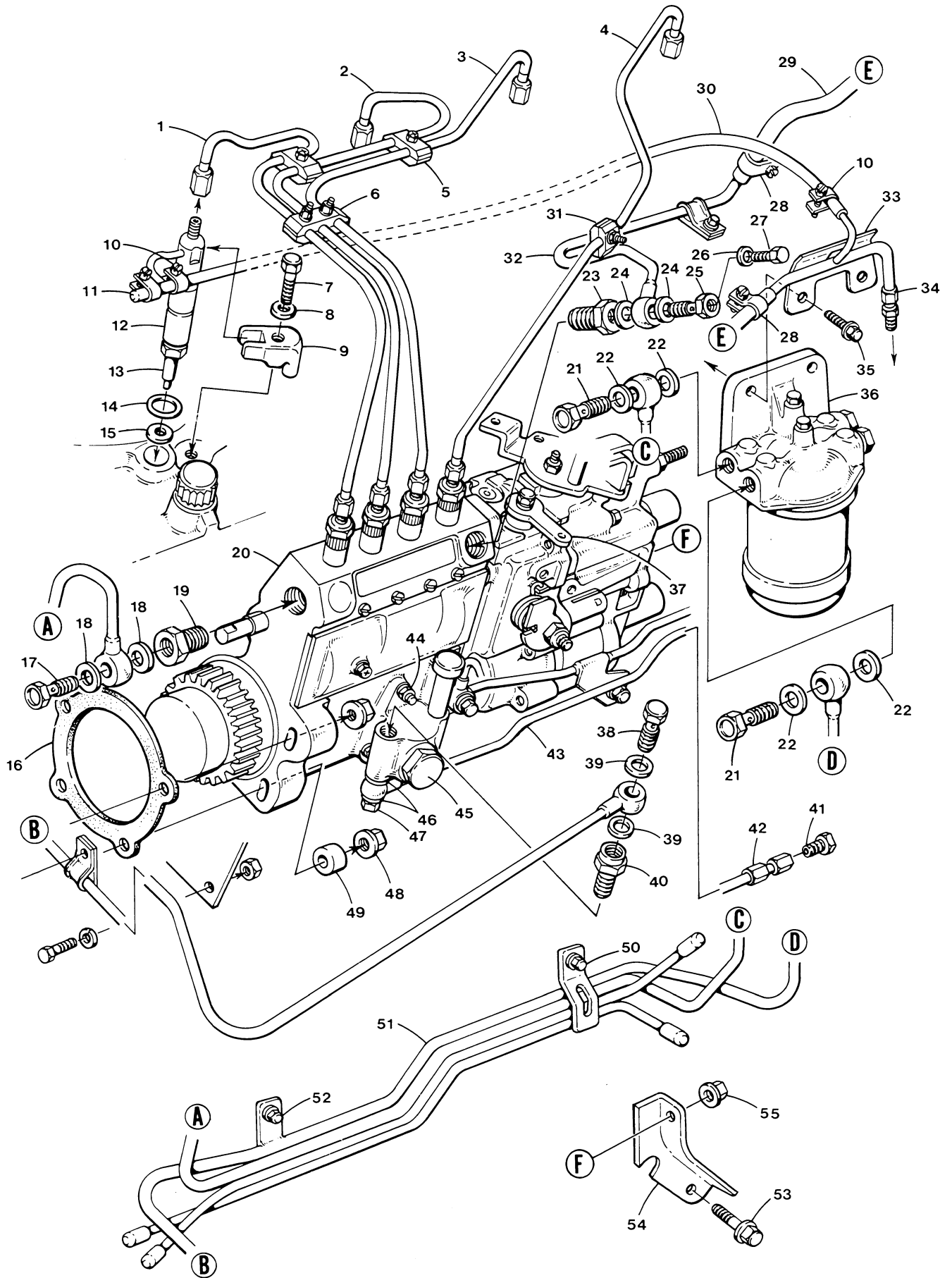
WESTERBEKE 90A - 32.0 BEDA - FUEL SYSTEM



WESTERBEKE 90A - 32.0 BEDA - FUEL SYSTEM

REF	PN	NAME	REMARKS	QUAN
1	040336	LINE	INJECTOR 1	1
2	040337	LINE	INJECTOR 2	1
3	040338	LINE	INJECTOR 3	1
4	040339	LINE	INJECTOR 4	1
5-1	038910	CLAMP	FUEL LINE	2
5-2	038911	CLAMP	FUEL LINE THREADED	2
5-3	038914	SCREW	M 5 X 25 DIN 84A PHILLIPS HEAD	2
6-1	040340	CLAMP	FUEL LINE	2
6-2	041437	NUT	M 5 JIS-FLANGE	2
7	041423	CAPSCREW	M10 X 1.25 X 45 JIS-FLANGE 8T	4
8	040335	WASHER	INJECTOR BRACKET	4
9	040334	BRACKET	INJECTOR	4
10	040384	CLAMP	HOSE MINI	9
11	040333	CAP	LEAK-OFF LINE	1
12	040330	INJECTOR	INCLUDING NOZZLE	4
13	040331	NOZZLE	INJECTOR	4
14	040383	O-RING	INJECTOR	4
15	040332	GASKET	INJECTOR	4
16	040343	GASKET	INJECTION PUMP MOUNTING	1
17	024984	BOLT	BANJO	1
18	034449	WASHER	BANJO M14	2
19	041414	ADAPTER	INJECTION PUMP INLET	1
20	040342	PUMP	FUEL INJECTION	1
21	024984	BOLT	BANJO	2
22	034449	WASHER	BANJO M14	4
23	041409	ADAPTER	INJECTION PUMP OUTLET	1
24	034449	WASHER	BANJO M14	2
25	041411	VALVE	INJECTION PUMP FUEL RETURN	1
26	034448	WASHER	BANJO M10	1
27		BOLT	PART OF REFERENCE 25	1
28	040389	CLAMP	HOSE MINI	2
29	039140	HOSE	FUEL 5/16ID - INCHES REQUIRED	10
30	036869	HOSE	FUEL 3/16ID - INCHES REQUIRED	20
31-1	040341	CLAMP	FUEL LINE	4
31-2	041437	NUT	M 5 JIS-FLANGE	2
32	041449	LINE	INJECTION PUMP FUEL RETURN	1
33	040346	LINE	FUEL RETURN	1
34	024633	UNION		1
35	041429	CAPSCREW	M10 X 1.25 X 30 JIS-FLANGE	2

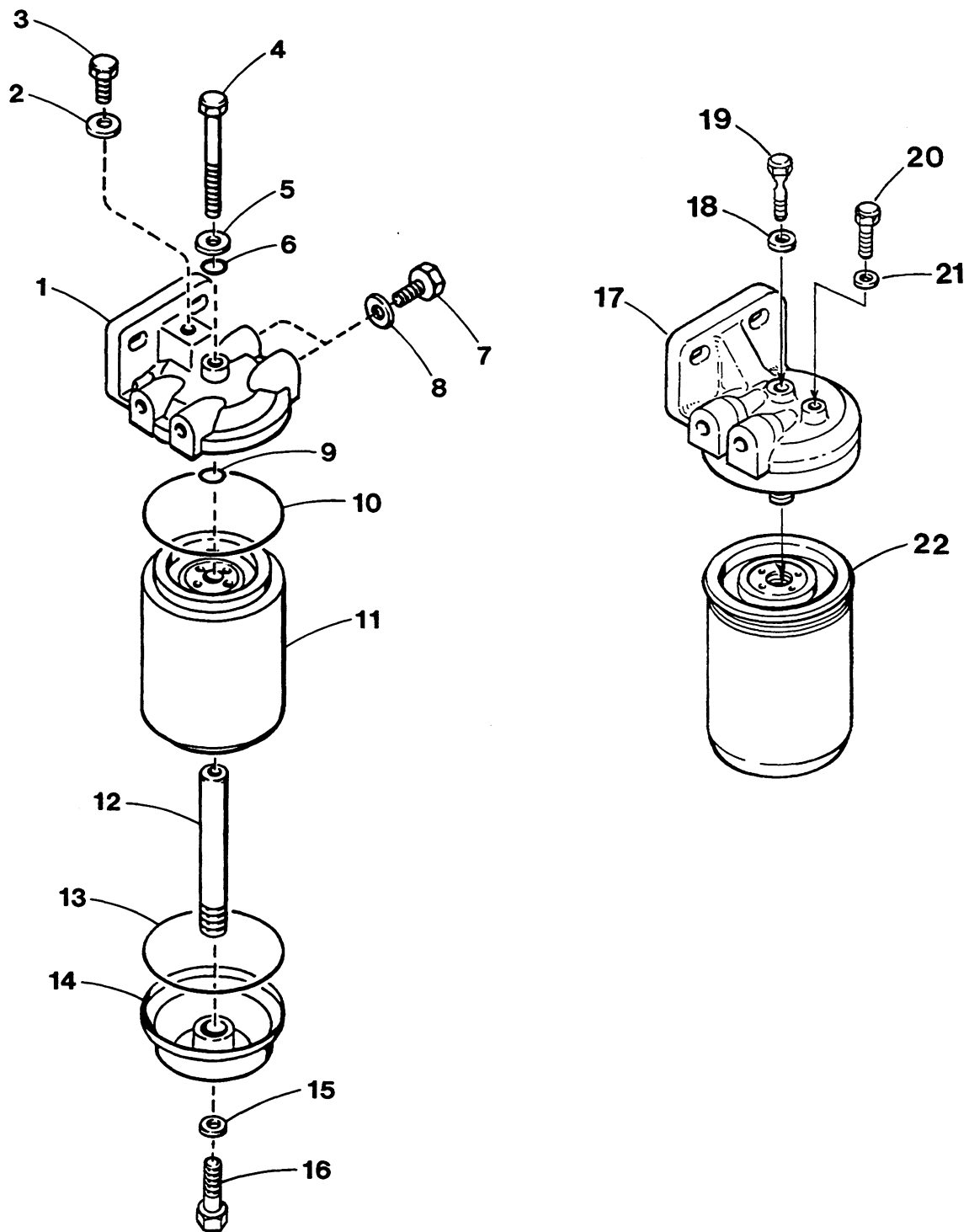
WESTERBEKE 90A - 32.0 BEDA - FUEL SYSTEM



WESTERBEKE 90A - 32.0 BEDA - FUEL SYSTEM

REF	PN	NAME	REMARKS	QUAN
36		FILTER	FUEL REFER TO NEXT PAGE	1
37		LEVER	REFER TO FUEL SHUT-OFF PAGE	1
38	024984	BOLT	BANJO	1
39	034449	WASHER	BANJO M14	2
40		ADAPTER	LIFT PUMP OUTLET - SEE REF 45	1
41	015289	CONNECTOR	MALE 1/8NPT TO 5/16IFL	1
42	024634	CONNECTOR	FEMALE 1/8NPT TO 5/16 COMPRESSION	1
43	040329	LINE	FUEL SUPPLY TO LIFT PUMP	1
44	036211	NUT	M 6 JIS-FLANGE	3
45-1	041443	PUMP	FUEL LIFT	1
45-2	041410	O-RING	FUEL LIFT PUMP MOUNTING	1
46	034449	WASHER	BANJO M14	2
47	041413	BOLT	BANJO	1
48	041438	NUT	M10 X 1.25 JIS-FLANGE	4
49	041412	SPACER		2
50	033654	CAPSCREW	M 8 X 20 JIS-FLANGE	1
51	040347	LINE	ASSEMBLY	1
52	034565	CAPSCREW	M 6 X 10 JIS-FLANGE	
53	033651	CAPSCREW	M10 X 1.25 X 20 JIS-FLANGE	1
54	040348	BRACKET	INJECTION PUMP SUPPORT	1
55		NUT		1

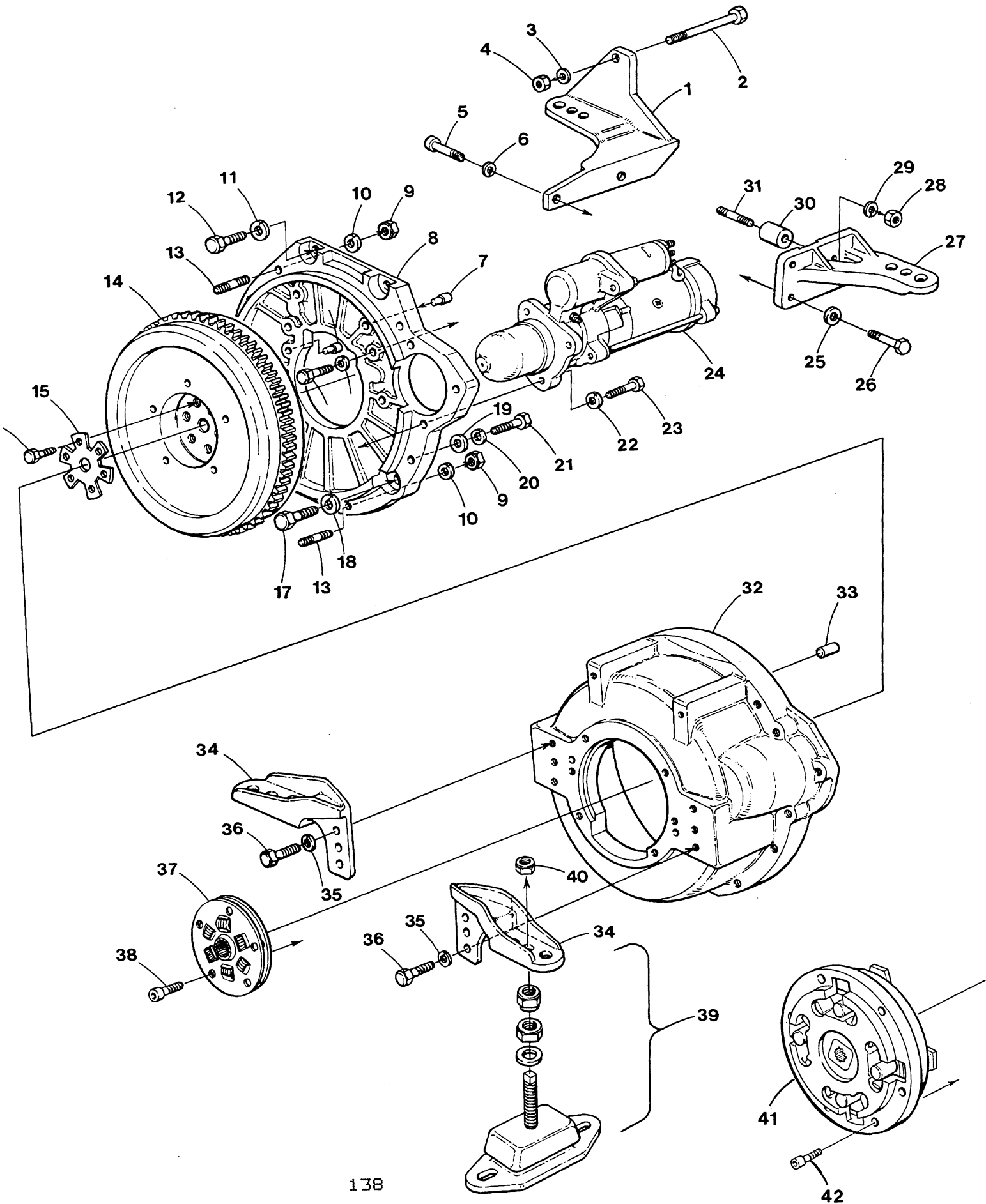
WESTERBEKE 90A - 32.0 BEDA - FUEL FILTER



WESTERBEKE 90A - 32.0 BEDA - FUEL FILTER

REF	PN	NAME	REMARKS	QUAN
1	040344	FILTER	FUEL COMPLETE ASSEMBLY	1
2	034448	WASHER	BANJO M10	1
3	015102	SCREW	FILTER BLEED	1
4	031506	CAPSCREW	1/4NC X 1-1/4	1
5	019442	WASHER	BANJO	1
6	041416	O-RING		1
7	041415	PLUG	M14 X 1.5	2
8	034449	WASHER	BANJO M14	2
9		O-RING	SEE REF 11	1
10		GASKET	FILTER UPPER SEE REF 11	1
11	014776	ELEMENT	FUEL INCLUDING REF 9, 10, 13	1
12		STUD	SEE REF 1	1
13		GASKET	FILTER LOWER SEE REF 11	1
14		BASE	SEE REF 1	1
15	030289	WASHER	BANJO M 8	1
16	031551	CAPSCREW	5/16NC X 1/2	1
17	046404	FILTER	FUEL COMPLETE ASSEMBLY	1
18	046409	O-RING		1
19	046408	PLUG		1
20	046406	SCREW	FILTER BLEED	1
21	046407	GASKET	BLEED SCREW	1
22	045278	FILTER	FUEL	1

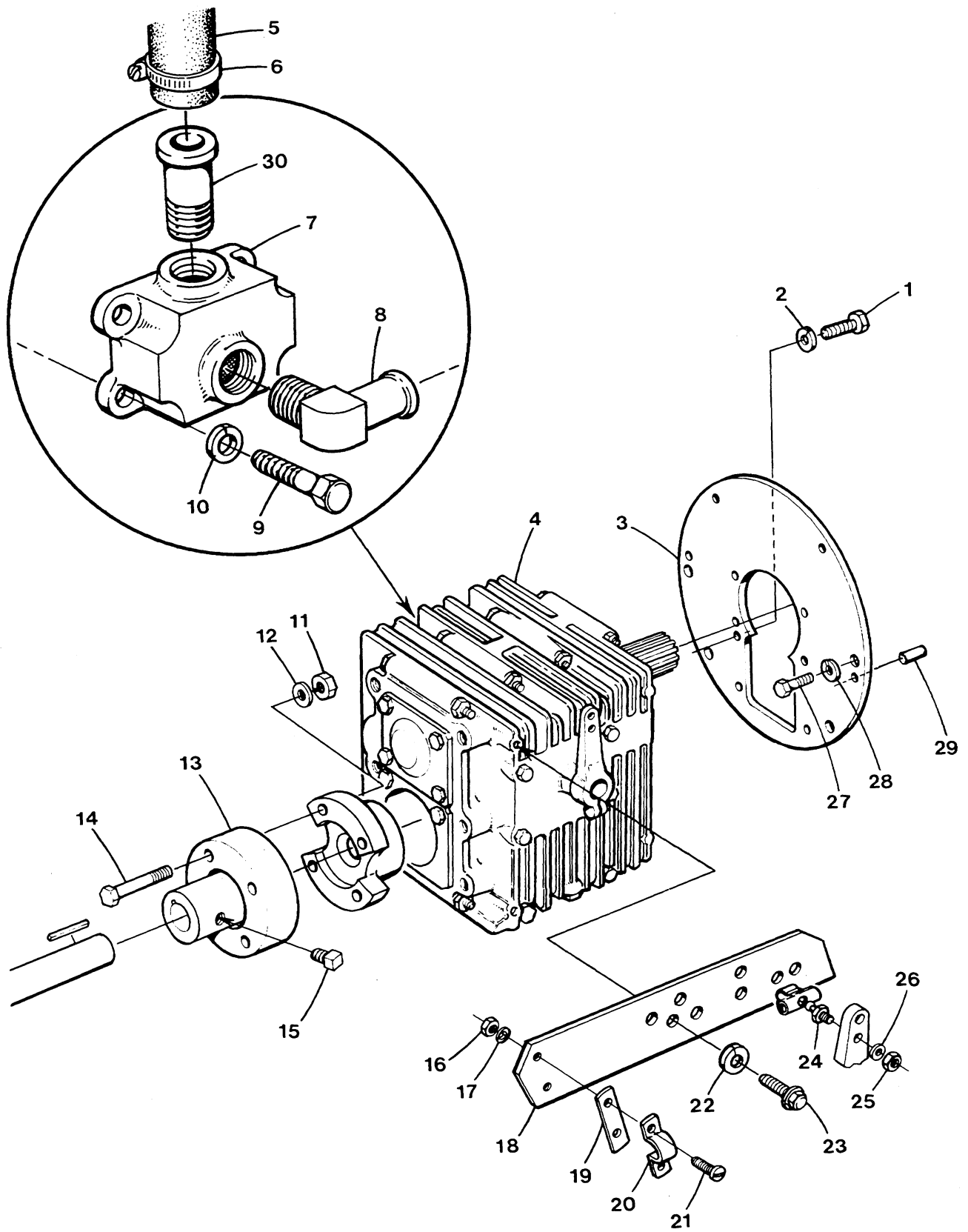
WESTERBEKE 90A FOUR - BACK END - MOUNTING SYSTEM



WESTERBEKE 90A FOUR - BACK END - MOUNTING SYSTEM

REF	PN	NAME	REMARKS	QUAN
1	041729	MOUNT	FRONT LEFT	1
2	031814	CAPSCREW	M 8 X 85 DIN 931	1
3	031786	LOCKWASHER	M 8 DIN 127	1
4	018242	NUT	M 8 DIN 934	1
5	031083	CAPSCREW	M10 X 1.25 X 30 JIS	2
6	019262	LOCKWASHER	M10 DIN 127	2
7	031154	DOWEL	STEP-BLOCK TO BACKPLATE	2
8	038296	BACKPLATE		1
9	015887	NUT	M10 DIN 934	3
10	019262	LOCKWASHER	M10 DIN 127	3
11	031797	LOCKWASHER	M14 DIN 127	4
12	031223	CAPSCREW	M14 X 1.5 X 30 DIN 961	4
13	037821	STUD	M10 X 30 DIN 939	3
14-1	039089	FLYWHEEL	INCLUDING RING GEAR	1
14-2	038392	GEAR	RING	1
15	036206	TABWASHER		1
16	036138	BOLT	FLYWHEEL M15	6
17	024953	CAPSCREW	M10 X 1.25 X 35 DIN 961	6
18	019262	LOCKWASHER	M10 DIN 127	6
19	031789	WASHER	M10 DIN 125	10
20	019262	LOCKWASHER	M10 DIN 127	4
21	034470	CAPSCREW	M10 X 45 DIN 931	4
22	019262	LOCKWASHER	M10 DIN 127	3
23	013631	CAPSCREW	M10 X 55 DIN 933	3
24	038384	MOTOR	STARTER 12 VDC	1
25	019262	LOCKWASHER	M10 DIN 127	2
26	031083	CAPSCREW	M10 X 1.25 X 30 JIS	2
27	041713	MOUNT	FRONT RIGHT	1
28	031795	NUT	M12 X 1.5 DIN 934	1
29	031792	LOCKWASHER	M12 DIN 127	1
30	040544	SPACER		1
31	032916	STUD	M12 X 1.5 X 48	1
32	038376	HOUSING	FLYWHEEL	1
33	019039	DOWEL	3/8 X 3/4	2
34	041719	MOUNT	REAR	2
35	019262	LOCKWASHER	M10 DIN 127	6
36	034589	CAPSCREW	M10 X 30 DIN 933	6
37	011618	DAMPER	HBW250 OR WARNER	1
38	024778	CAPSCREW	DAMPER TO FLYWHEEL	5
39	040513	ISOLATOR		4
40	040966	NUT	M16 JAM SELF-LOCKING	4
41	042107	DAMPER	HSW450-630	1
42-1	013630	CAPSCREW	M 8 X 25 DIN 933	6
42-2	031786	LOCKWASHER	M 8 DIN 127	6
42-3	031787	WASHER	M 8 DIN 125	6

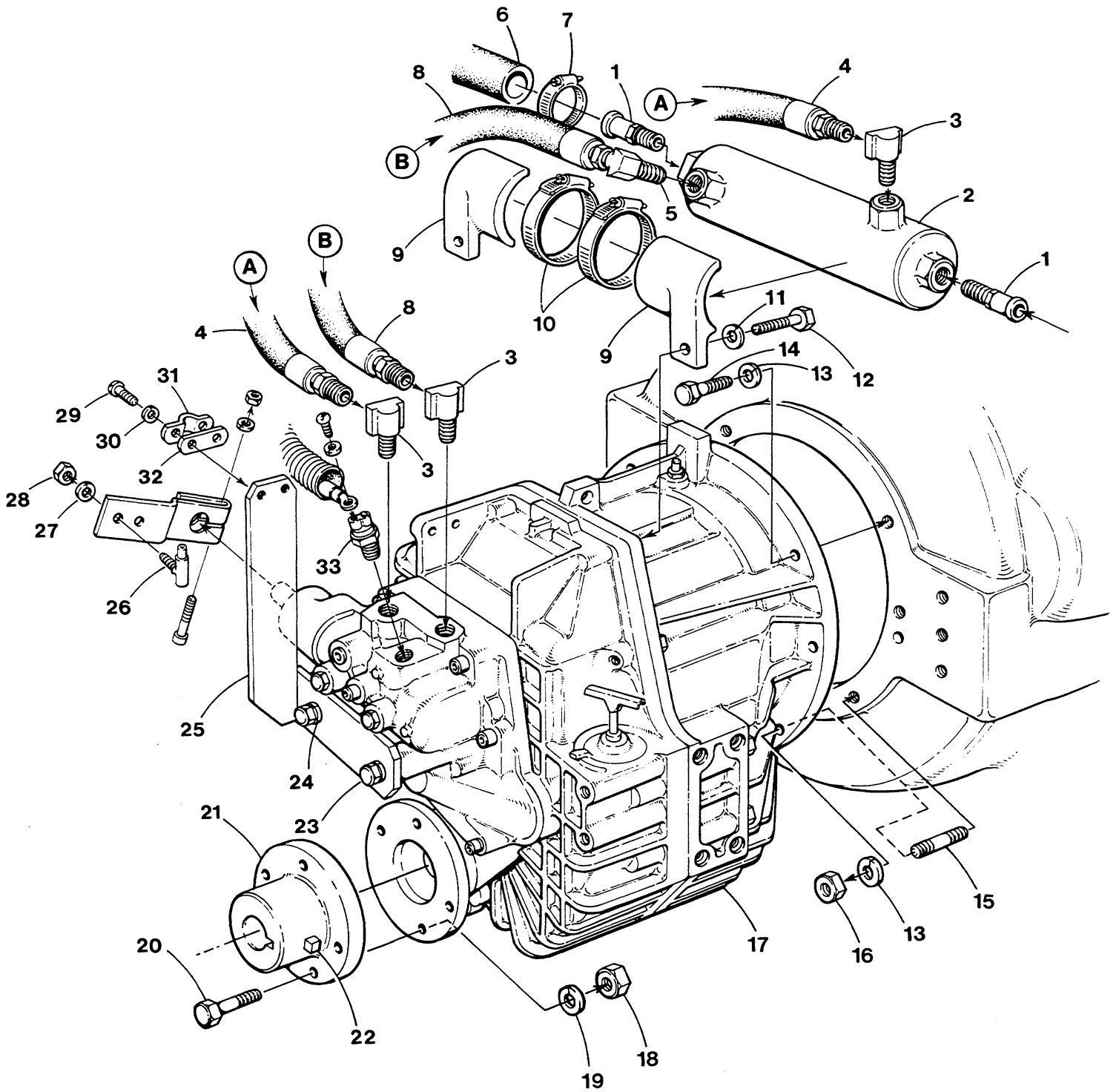
WESTERBEKE 90A FOUR - MODEL HBW 250 TRANSMISSION



WESTERBEKE 90A FOUR - MODEL HBW 250 TRANSMISSION

REF	PN	NAME	REMARKS	QUAN
1	018813	CAPSCREW	M10 X 20 DIN 933	6
2	019262	LOCKWASHER	M10 DIN 127	6
3	038442	ADAPTER	HBW 250 GEAR TO HOUSING	1
4-1	032564	GEAR	HBW 250 1.5:1	1
4-2	032565	GEAR	HBW 250 1.9:1	1
4-3	032566	GEAR	HBW 250 2.7:1	1
5	011779	HOSE	1" ID WIRE INSERTED - INCHES REQUIRED	24
6	011405	CLAMP	HOSE 16	2
7	040036	COOLER	HBW TRANSMISSION	1
8	036614	ELBOW	3/4NPT TO 1" HOSE	1
9	017196	CAPSCREW	M 8 X 20 DIN 933	4
10	031786	LOCKWASHER	M 8 DIN 127	4
11	024950	NUT	M10 X 1.25 DIN 934	4
12	019262	LOCKWASHER	M10 DIN 127	4
13-1	023706	COUPLING	HBW 0.75 IN BORE	1
13-2	023707	COUPLING	HBW 0.875 IN BORE	1
13-3	023708	COUPLING	HBW 1.0 IN BORE	1
13-4	023709	COUPLING	HBW 1.125 IN BORE	1
13-5	023710	COUPLING	HBW 1.25 IN BORE	1
13-6	023711	COUPLING	HBW 1.375 IN BORE	1
13-7	023712	COUPLING	HBW 1.5 IN BORE	1
14	031228	CAPSCREW	M10 X 1.25 X 30 DIN 961	4
15-1	023651	SETSCREW	COUPLING 3/8NC X 3/4	2
15-2	023652	SETSCREW	COUPLING 3/8NC X 1	2
16	031847	NUT	10-32 HEX SS	2
17	031849	LOCKWASHER	10 SS	2
18	032161	BRACKET	SHIFT CABLE	1
19	013870	SHIM	SHIFT CABLE	1
20	013325	CLAMP	SHIFT CABLE	1
21	031873	SCREW	10-32 X 5/8 SS BINDING HEAD	2
22	031786	LOCKWASHER	M 8 DIN 127	2
23	020650	CAPSCREW	M 8 X 18 DIN 933	2
24	033482	BALLJOINT	SHIFT CABLE	1
25	031754	NUT	1/4NF	1
26	031752	LOCKWASHER	1/4	1
27	031656	CAPSCREW	7/16NC X 1-1/4	6
28	031770	LOCKWASHER	7/16	6
29	013919	DOWEL	ADAPTER TO HOUSING	2
30	036622	NIPPLE	3/4NPT TO 1" HOSE	1

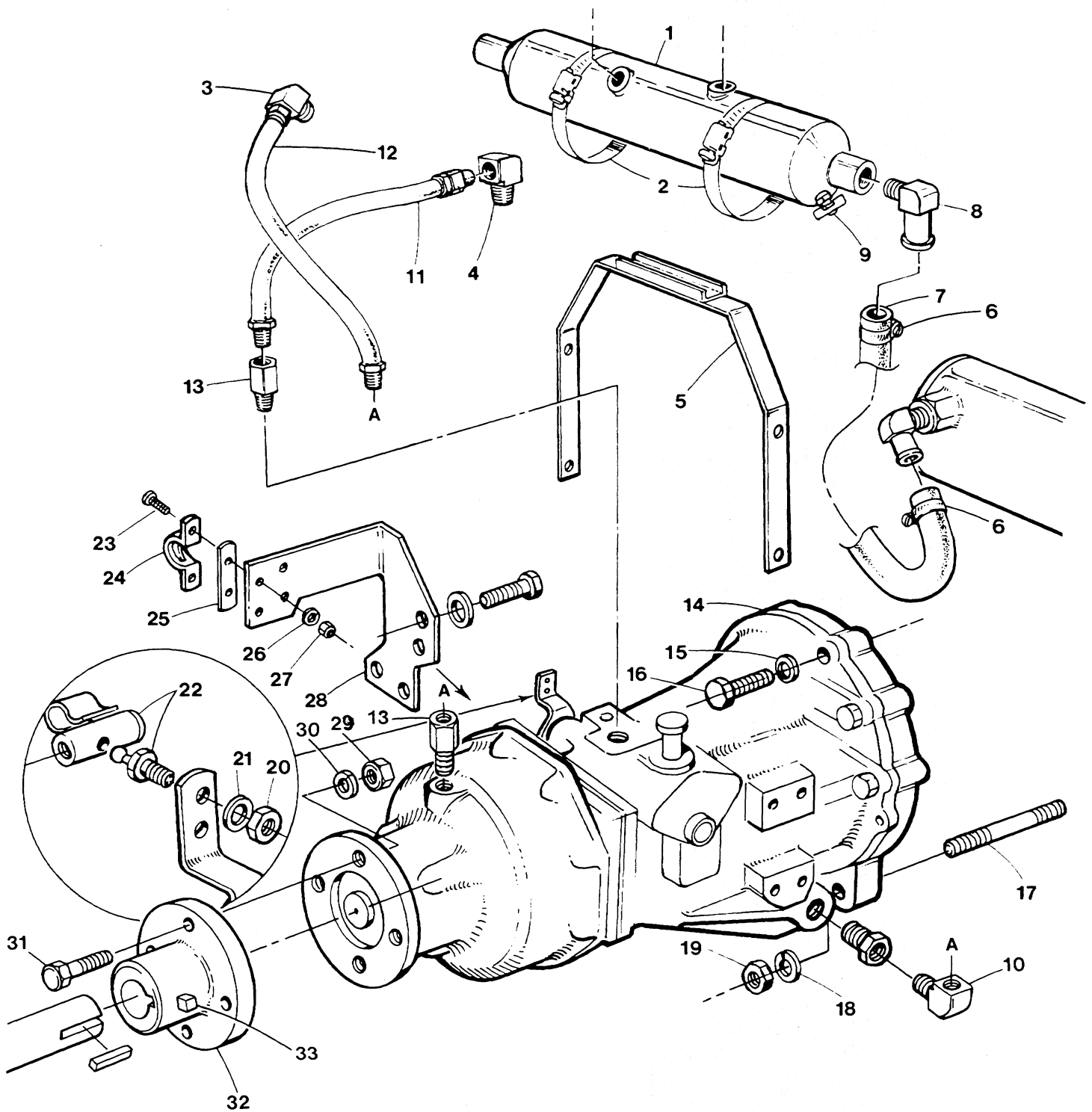
WESTERBEKE 90A FOUR - MODEL HSW 450-630 TRANSMISSION



WESTERBEKE 90A FOUR - MODEL HSW 450-630 TRANSMISSION

REF	PN	NAME	REMARKS	QUAN
1	036622	NIPPLE	3/4NPT TO 1" HOSE	2
2	036650	COOLER	OIL	1
3	013330	ELBOW	MALE 3/8 NPT 90 TO HOSE	3
4	023567	HOSE	OIL	1
5	013331	ELBOW	MALE 3/8NPT 45 TO HOSE	1
6	011779	HOSE	1" ID WIRE INSERTED - INCHES REQUIRED	12
7	011405	CLAMP	HOSE 16	2
8	036121	HOSE	OIL	1
9	039155	BRACKET	COOLER - SET	1
10	011411	CLAMP	HOSE 32	2
11	019262	LOCKWASHER	M10 DIN 127	2
12	034590	CAPSCREW	M10 X 40 DIN 933	2
13	031770	LOCKWASHER	7/16	6
14	031656	CAPSCREW	7/16NC X 1-1/4	4
15	039276	STUD	7/16NC X 1-3/4	2
16	031768	NUT	7/16NC	2
17- 1	038608	GEAR	HSW 630H 2: 1	1
17- 2	039789	GEAR	HSW 630H 2.5: 1	1
17- 3	038609	GEAR	HSW 630H 2.8: 1	1
17- 4	038610	GEAR	HSW 630A 2: 1	1
17- 5	038611	GEAR	HSW 630A 2.5: 1	1
17- 6	038132	GEAR	HSW 630V 2: 1	1
17- 7	040444	GEAR	HSW 630V 2.5: 1	1
17- 8	044882	GEAR	HSW 450A 2: 1	1
17- 9	042011	GEAR	HSW 450A 2.4: 1	1
18	031772	NUT	7/16NF	4
19	031770	LOCKWASHER	7/16	4
20	031682	CAPSCREW	7/16NF X 1-1/2	4
21-1	011961	COUPLING	1.0 IN BORE	1
21-2	011962	COUPLING	1.125 IN BORE	1
21-3	011963	COUPLING	1.25 IN BORE	1
21-4	011964	COUPLING	1.375 IN BORE	1
21-5	023609	COUPLING	1.5 IN BORE	1
21-6	039323	COUPLING	1.75 IN BORE	1
22	023653	SETSCREW	COUPLING 3/8NC X 1-1/4	2
23	031603	CAPSCREW	3/8NC X 3/4	2
24	031764	LOCKWASHER	3/8	2
25	039154	BRACKET	SHIFT CABLE	1
26	033482	BALLJOINT	SHIFT CABLE	1
27	031752	LOCKWASHER	1/4	1
28	031754	NUT	1/4NF	1
29	031873	SCREW	10-32 X 5/8 SS BINDING HEAD	2
30	031849	LOCKWASHER	10 SS	2
31	013325	CLAMP	SHIFT CABLE	1
32	013870	SHIM	SHIFT CABLE	1
33		SWITCH	NEUTRAL SAFETY	1

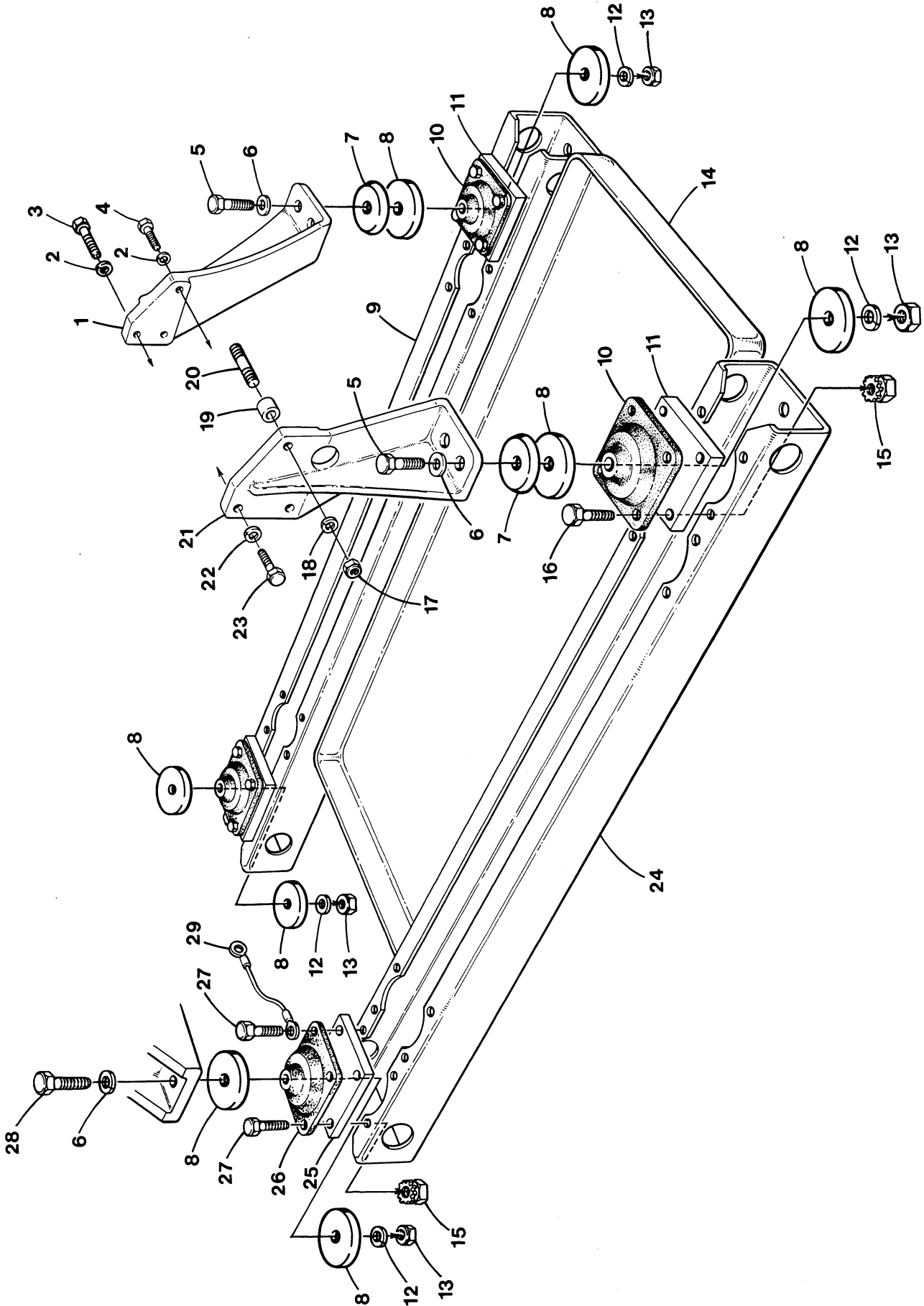
WESTERBEKE 90A FOUR - WARNER TRANSMISSION



WESTERBEKE 90A FOUR - WARNER TRANSMISSION

REF	FN	NAME	REMARKS	QUAN
1	036650	COOLER	OIL	1
2	011411	CLAMP	HOSE 32	2
3	013330	ELBOW	COOLER TO HOSE	1
4	013338	ELBOW	3/8NPT STREET 90 BRASS	1
5	013057	BRACKET	COOLER MOUNT TO TRANSMISSION	1
6	011405	CLAMP	HOSE 16	2
7	011779	HOSE	1" ID WIRE INSERTED - INCHES REQUIRED	16
8	036614	ELBOW	3/4NPT TO 1' HOSE	2
9	011471	PETCOCK	1/8NPT	1
10	013330	ELBOW	HOSE TO TRANSMISSION	1
11	011921	HOSE	OIL	1
12-1	022114	HOSE	OIL - 1:1 AND 2:1 TRANSMISSION	1
12-2	023567	HOSE	OIL - REDUCTION TRANSMISSION EXCEPT 2:1	1
13-1	013348	CONNECTOR	HOSE TO TRANSMISSION EXCEPT 2:1	1
13-2	013348	CONNECTOR	HOSE TO 2:1 TRANSMISSION	2
14-1	011630	GEAR	71C HYDRAULIC 1:1	1
14-2	011631	GEAR	71C HYDRAULIC 1.5:1	1
14-3	019047	GEAR	72C HYDRAULIC 1.9:1 OPPOSITE ROTATION	1
14-4	019044	GEAR	72C HYDRAULIC 2:1	1
14-5	019045	GEAR	72C HYDRAULIC 2.5:1	1
14-6	019046	GEAR	72C HYDRAULIC 3:1	1
15	031770	LOCKWASHER	7/16	4
16	031665	CAPSCREW	7/16NC X 3-1/2	4
17	023467	STUD	7/16NC X 4	2
18	031770	LOCKWASHER	7/16	2
19	031768	NUT	7/16NC	2
20	031754	NUT	1/4NF	1
21	031752	LOCKWASHER	1/4	1
22	033482	BALLJOINT	SHIFT CABLE	1
23	031873	SCREW	10-32 X 5/8 SS BINDING HEAD	2
24	013325	CLAMP	SHIFT CABLE	1
25	013870	SHIM	SHIFT CABLE	1
26	031849	LOCKWASHER	10 SS	2
27	031847	NUT	10-32 HEX SS	2
28	032315	BRACKET	SHIFT CABLE	1
29	031768	NUT	7/16NC	4
30	031770	LOCKWASHER	7/16	4
31	031655	CAPSCREW	7/16NC X 1	4
32- 1	023706	COUPLING	DIRECT DRIVE 0.75 IN BORE	1
32- 2	023707	COUPLING	DIRECT DRIVE 0.875 IN BORE	1
32- 3	023708	COUPLING	DIRECT DRIVE 1.0 IN BORE	1
32- 4	023709	COUPLING	DIRECT DRIVE 1.125 IN BORE	1
32- 5	023710	COUPLING	DIRECT DRIVE 1.25 IN BORE	1
32- 6	023711	COUPLING	DIRECT DRIVE 1.375 IN BORE	1
32- 7	023712	COUPLING	DIRECT DRIVE 1.5 IN BORE	1
32- 8	011961	COUPLING	REDUCTION 1.0 IN BORE	1
32- 9	011962	COUPLING	REDUCTION 1.125 IN BORE	1
32-10	011963	COUPLING	REDUCTION 1.25 IN BORE	1
32-11	011964	COUPLING	REDUCTION 1.375 IN BORE	1
32-12	023609	COUPLING	REDUCTION 1.5 IN BORE	1
32-13	032923	COUPLING	REDUCTION 1.75 IN BORE	1
32-2	023652	SETSCREW	COUPLING 3/8NC X 1	2
33-1	023651	SETSCREW	COUPLING 3/8NC X 3/4	2
33-3	023653	SETSCREW	COUPLING 3/8NC X 1-1/4	2

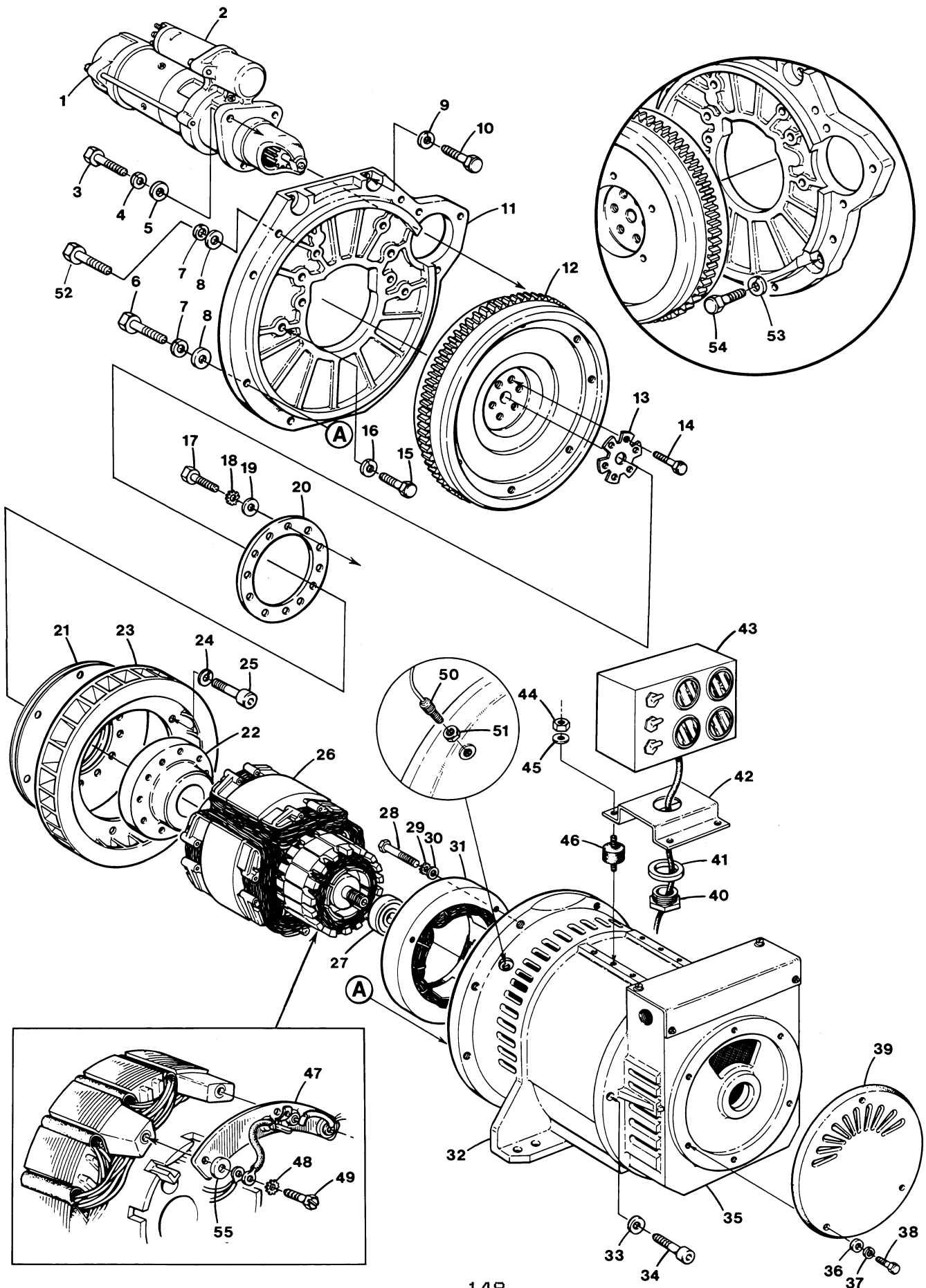
WESTERBEKE 32.0 BEDA - MOUNTING SYSTEM



WESTERBEKE 32.0 BEDA - MOUNTING SYSTEM

REF	PN	NAME	REMARKS	QUAN
1	038682	MOUNT	FRONT LEFT	1
2	019262	LOCKWASHER	M10 DIN 127	3
3	024953	CAPSCREW	M10 X 1.25 X 35 DIN 961	1
4	031083	CAPSCREW	M10 X 1.25 X 30 JIS	2
5	031714	CAPSCREW	1/2NC X 3-1/4	2
6	031777	WASHER	1/2 FLAT	4
7	033530	SHIELD	ISOLATOR	2
8	024674	WASHER	ISOLATOR SNUBBING	8
9	024701	RAIL	LEFT	1
10	301136	ISOLATOR	FRONT	2
11	037792	SPACER	ISOLATOR TO RAIL	2
12	031776	LOCKWASHER	1/2	4
13	031774	NUT	1/2NC	4
14	038698	DRIPTRAY		1
15	200127	NUT	5/16NC KEPS	16
16	031559	CAPSCREW	5/16NC X 2	8
17	031795	NUT	M12 X 1.5 DIN 934	1
18	031792	LOCKWASHER	M12 DIN 127	1
19	040544	SPACER		1
20	032916	STUD	M12 X 1.5 X 48	1
21	038684	MOUNT	FRONT RIGHT	1
22	019262	LOCKWASHER	M10 DIN 127	2
23	031083	CAPSCREW	M10 X 1.25 X 30 JIS	2
24	024701	RAIL	RIGHT	1
25	035271	SPACER	ISOLATOR TO RAIL	2
26	015239	ISOLATOR	REAR	2
27	031557	CAPSCREW	5/16NC X 1-1/2	8
28	031718	CAPSCREW	1/2NC X 4-1/4	2
29	034713	STRAP	GROUND RAIL TO GENSET	1

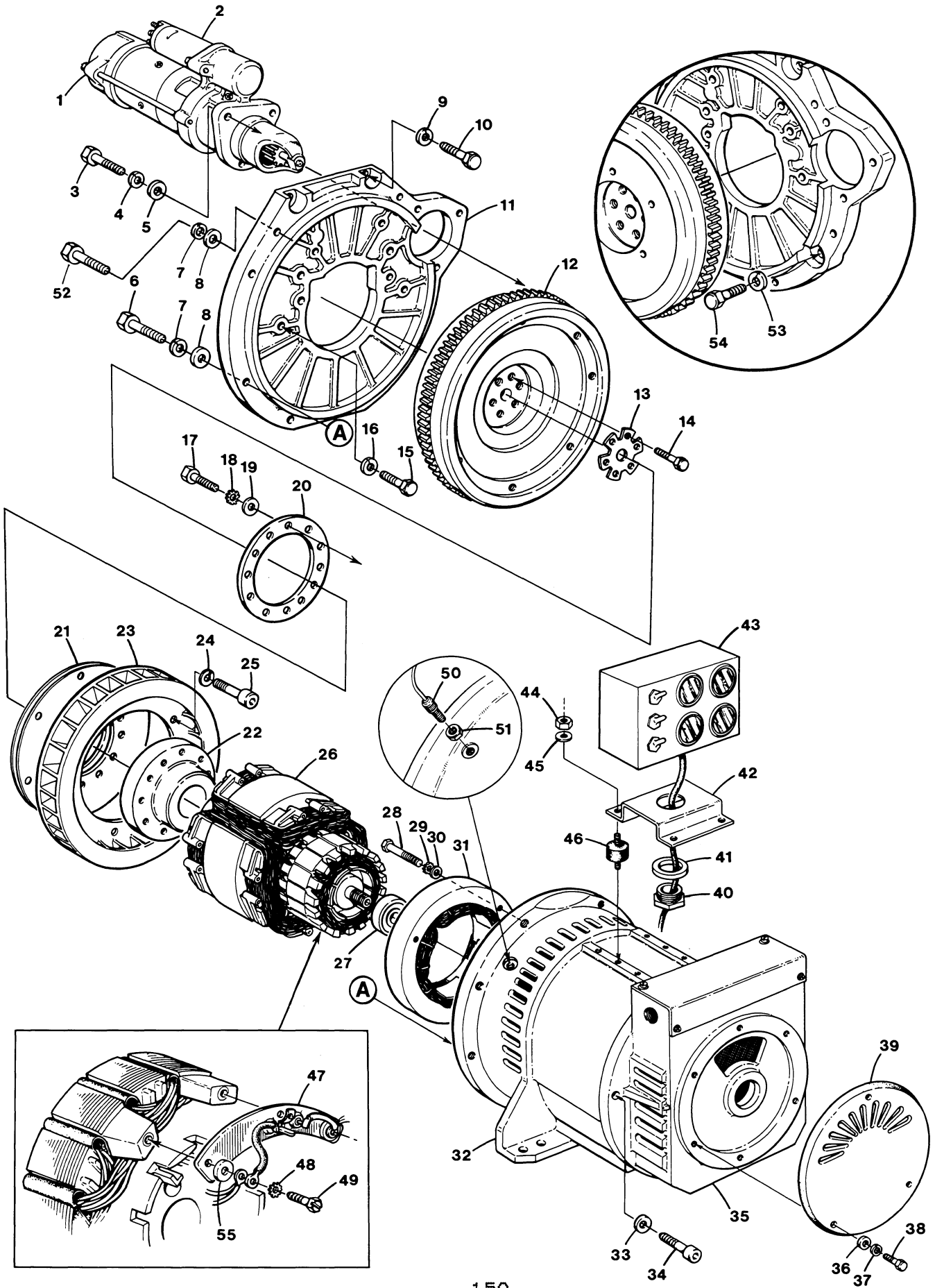
WESTERBEKE 32.0 BEDA - BACK END - GENERATOR



WESTERBEKE 32.0 BEDA - BACK END - GENERATOR

REF	PN	NAME	REMARKS	QUAN
1	038384	MOTOR	STARTER 12 VDC	1
2	039523	SOLENOID	STARTER MOTOR 38384 12 VDC	1
3	013631	CAPSCREW	M10 X 55 DIN 933	3
4	019262	LOCKWASHER	M10 DIN 127	3
5	031789	WASHER	M10 DIN 125	4
6	034470	CAPSCREW	M10 X 45 DIN 931	4
7	019262	LOCKWASHER	M10 DIN 127	7
8	031789	WASHER	M10 DIN 125	7
9	031797	LOCKWASHER	M14 DIN 127	4
10	031223	CAPSCREW	M14 X 1.5 X 30 DIN 961	4
11	038296	BACKPLATE		1
12-1	038395	FLYWHEEL	INCLUDING RING GEAR	1
12-2	038392	GEAR	RING	1
13	036206	WASHER	FLYWHEEL	1
14	036138	BOLT	FLYWHEEL M15	6
15	024953	CAPSCREW	M10 X 1.25 X 35 DIN 961	6
16	019262	LOCKWASHER	M10 DIN 127	6
17	013629	CAPSCREW	M10 X 25 DIN 933	10
18	019262	LOCKWASHER	M10 DIN 127	10
19	031789	WASHER	M10 DIN 125	10
20	039869	PLATE	DRIVE DISC TO HUB	1
21	039785	DISC	DRIVE	4
22	039668	HUB	DRIVE	1
23	039637	FAN		1
24	019262	LOCKWASHER	M10 DIN 127	8
25	039318	CAPSCREW	M10 X 25 DIN 912	8
26	039784	ARMATURE		1
27	039638	BEARING	BALL	1
28	030146	CAPSCREW	M 6 X 55 DIN 931	3
29	031783	LOCKWASHER	M 6 DIN 127	3
30	031784	WASHER	M 6 DIN 125	3
31	039639	STATOR	EXCITER	1
32-1	039782	GENERATOR	1 PHASE	1
32-2	039783	STATOR	1 PHASE	1
32-3	040564	STATOR	INCLUDING HOUSING 1 PHASE	1
32-4	039868	GENERATOR	3 PHASE	1
32-5	039870	STATOR	3 PHASE	1
32-6	039873	STATOR	INCLUDING HOUSING 3 PHASE	1
33	031915	LOCKWASHER	M10 DIN 6797A	3
34	039871	CAPSCREW	M10 X 35 DIN 912	3
35	039669	HOUSING	GENERATOR END	1

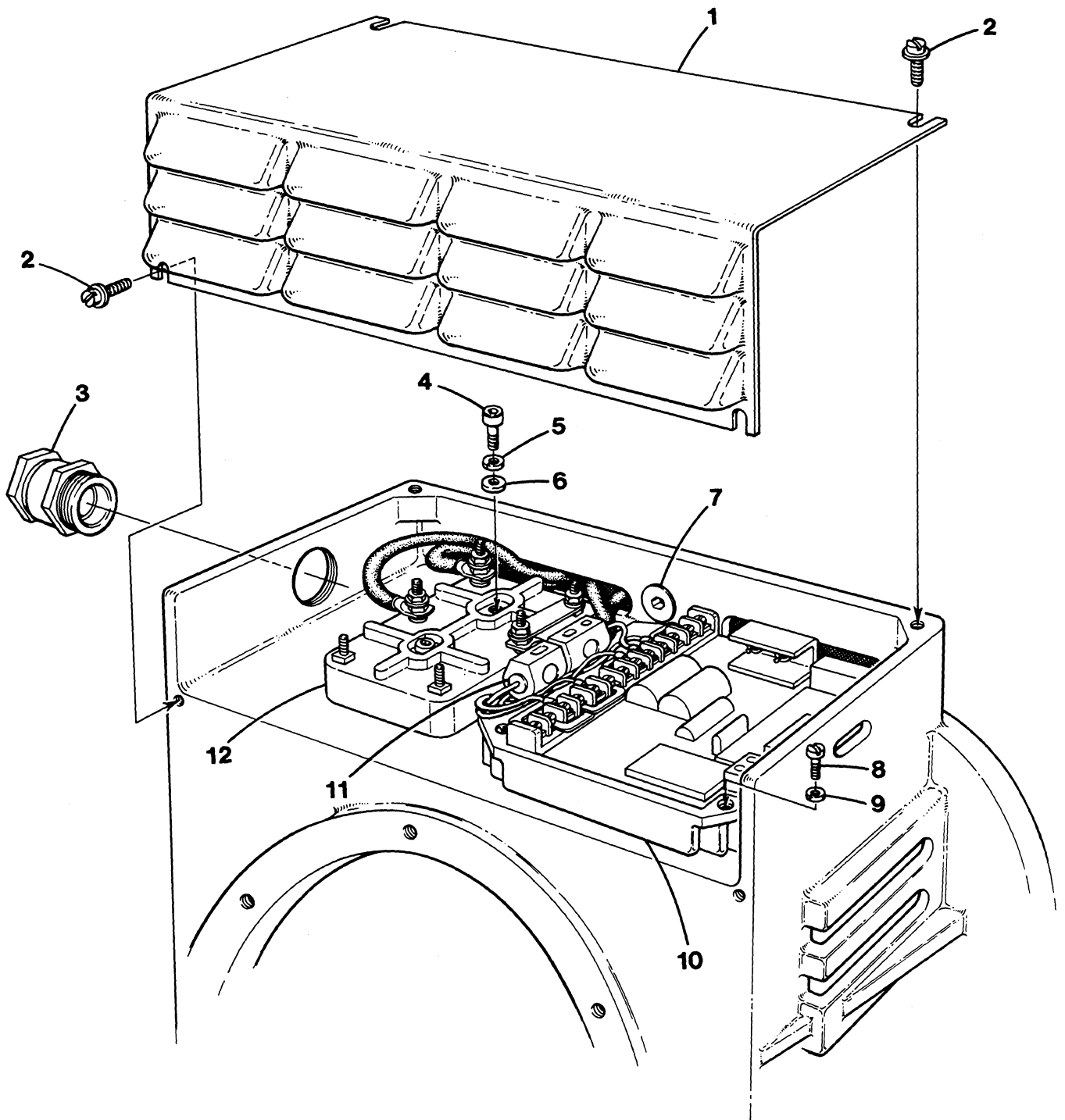
WESTERBEKE 32.0 BEDA - BACK END - GENERATOR



WESTERBEKE 32.0 BEDA - BACK END - GENERATOR

REF	PN	NAME	REMARKS	QUAN
36	031789	WASHER	M10 DIN 125	3
37	019262	LOCKWASHER	M10 DIN 127	3
38	013629	CAPSCREW	M10 X 25 DIN 933	3
39	039074	COVER	PTO	1
40	036464	NIPPLE	CHASE INCLUDED WITH PANEL BOX ASSEMBLY	1
41	036492	RING	SEALING INCLUDED WITH PANEL BOX ASSEMBLY	1
42	036730	BRACKET	PANEL MOUNT INCLUDED WITH PANEL BOX ASSY	1
43		PANEL	REFER TO PANEL PAGE	1
44	015812	NUT	M 6 DIN 934	4
45	031783	LOCKWASHER	M 6 DIN 127	4
46-1	036652	ISOLATOR	PANEL MOUNT TO SEPT 97	4
46-2	034731	ISOLATOR	PANEL MOUNT FROM SEPT 97	4
46-3	024836	SPACER	PANEL ISOLATOR FROM SEPT 97	8
47	039666	DIODE	ASSEMBLY	3
48	031914	LOCKWASHER	M 5 DIN 6797A	9
49	031931	SCREW	M 5 X 16 DIN 84A	9
50	039172	SENSOR	MAGNETIC	1
51		NUT		1
52	037821	STUD	M10 X 30 DIN 939	3
53	019262	LOCKWASHER	M10 DIN 127	3
54	015887	NUT	M10 DIN 934	3
55	042089	WASHER	INSULATING	9

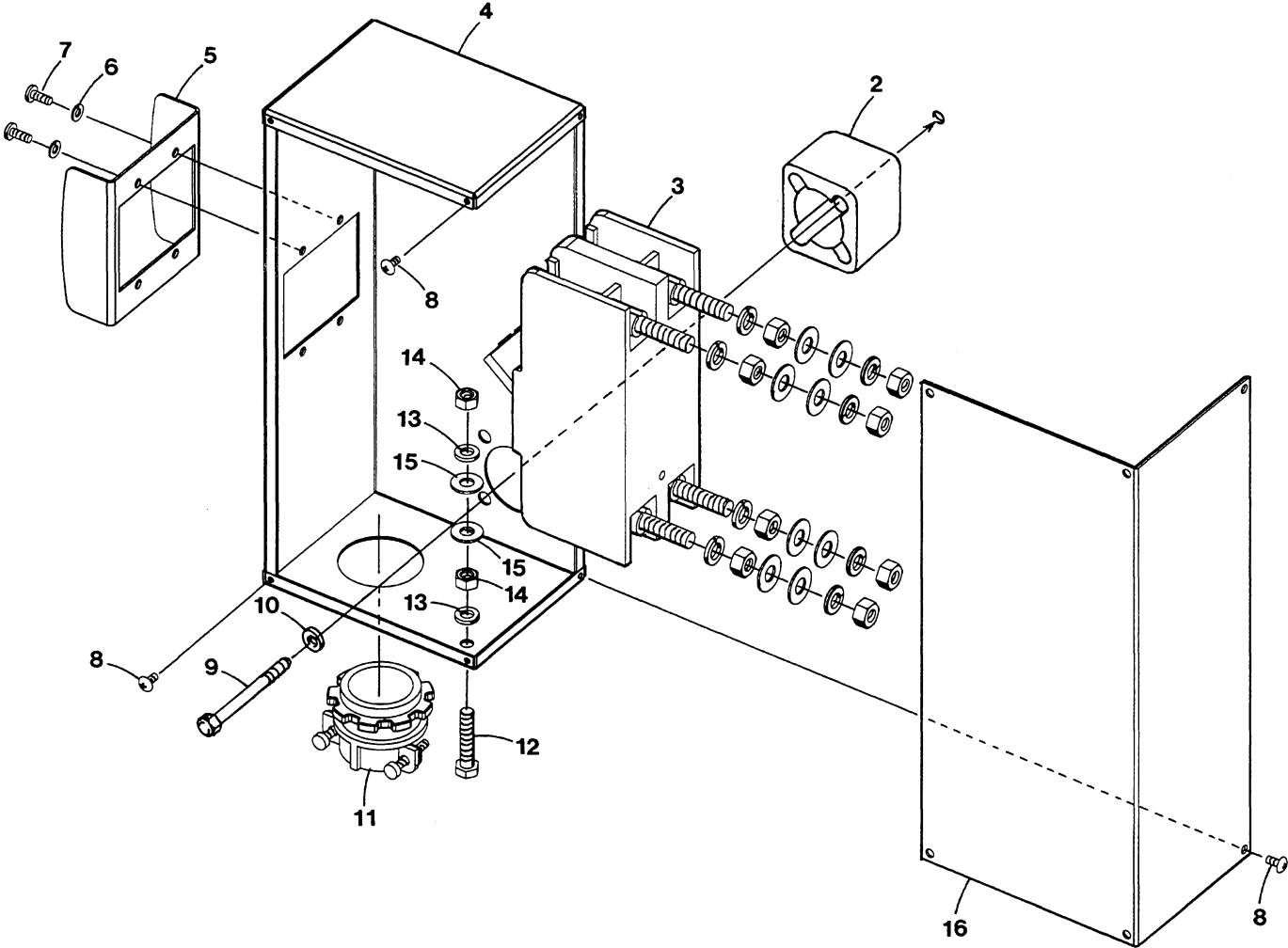
WESTERBEKE 32.0 BEDA - AC OUTPUT AND REGULATOR



WESTERBEKE 32.0 BEDA - AC OUTPUT AND REGULATOR

REF	PN	NAME	REMARKS	QUAN
1	038985	COVER	AC OUTPUT	1
2	031918	SCREW	M 5 X 10 DIN 84A	4
3	036737	CONNECTOR	BOX 1-1/2 - AC OUTPUT LEADS	1
4	039874	CAPSCREW	M 6 X 20 DIN 912	2
5	031783	LOCKWASHER	M 6 DIN 127	2
6	031784	WASHER	M 6 DIN 125	2
7	039872	CAPSCREW	M10 X 35 DIN 7991	1
8	039875	SCREW	M 4 X 25 DIN 84A	4
9	031917	LOCKWASHER	M 4 DIN 6797A	4
10	042336	REGULATOR	VOLTAGE	1
11-1	039667	HOLDER	FUSE	1
11-2	038471	FUSE		1
12-1	039632	BLOCK	TERMINAL AC OUTPUT	1
12-2	039633	BAR	BUSS	AR
12-3	039634	NUT	M 8 BRASS	AR
13-1	039306	LABEL	AC OUTPUT 1 PHASE	1
13-2	039686	LABEL	AC OUTPUT 3 PHASE	1

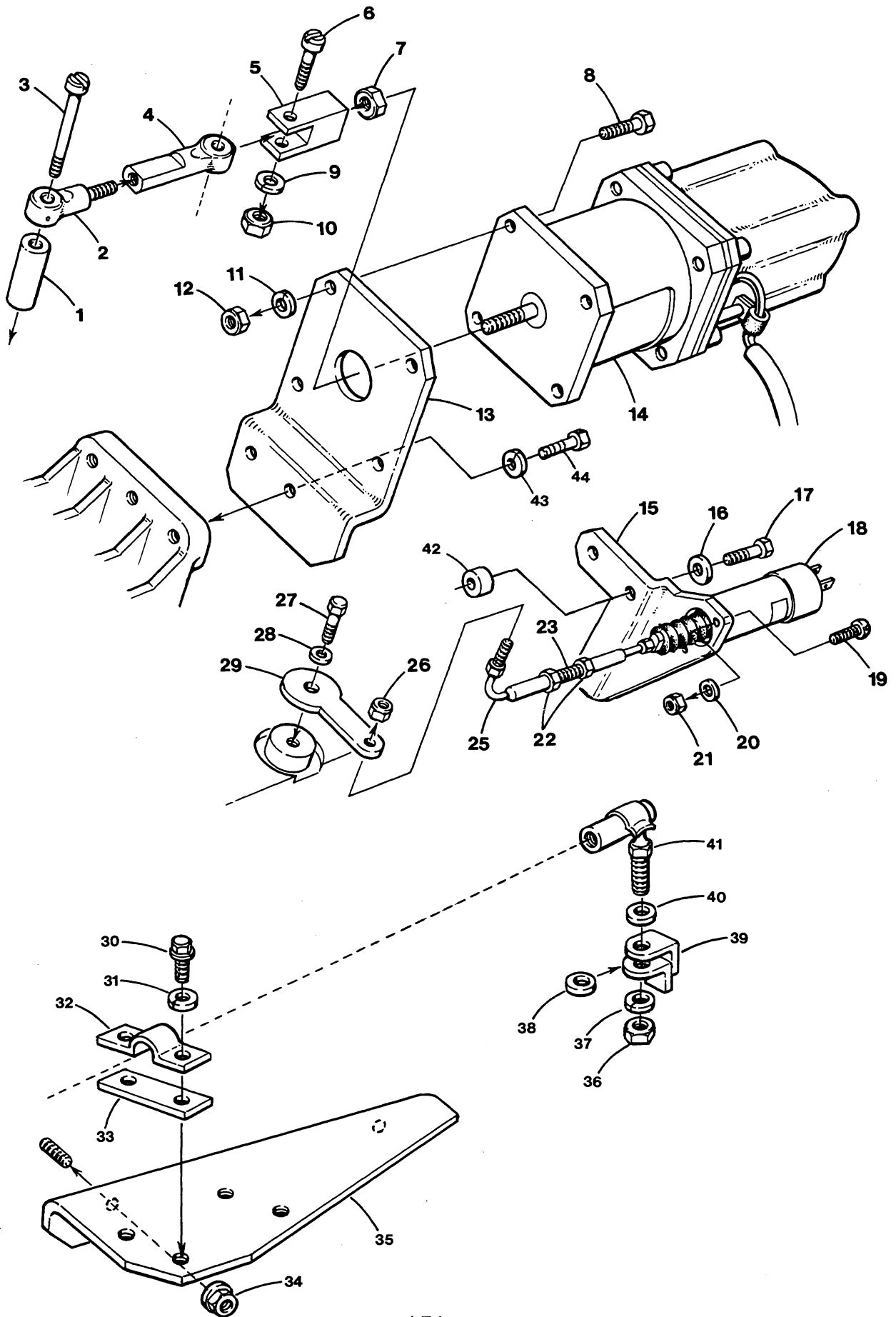
WESTERBEKE 32.0 BEDA - AC OUTPUT 1 PHASE CIRCUIT BREAKER



WESTERBEKE 32.0 BEDA - AC OUTPUT 1 PHASE CIRCUIT BREAKER

REF	PN	NAME	REMARKS	QUAN
1-1	041136	BREAKER	KIT 60HZ THERMAL	1
1-2	044899	BREAKER	KIT 60HZ MAGNETIC	1
1-3	043272	BREAKER	KIT 50HZ THERMAL	1
2	044343	SPACER		1
3-1	042703	BREAKER	AC CIRCUIT 150AMP 60HZ THERMAL	1
3-2	045011	BREAKER	AC CIRCUIT 150 AMP 60HZ MAGNETIC	1
3-3	043271	BREAKER	AC CIRCUIT 125 AMP 50HZ THERMAL	1
4-1	043726	BOX	AC BREAKER 45011-43271	1
4-2	044730	BOX	AC BREAKER 42703	1
5-1	042898	GUARD	BREAKER HANDLE BOX 43726	1
5-2	044762	GUARD	BREAKER HANDLE BOX 44730	1
6	031849	LOCKWASHER	10 SS	AR
7-1	043286	SCREW	10-32 X 3-1/2 SS PAN PHILLIPS HEAD	2
7-2	031872	SCREW	10-32 X 1/2 SS BINDING HEAD	4
8	031891	SCREW	8-32 X 3/8 SS TRUSS HEAD	6
9	031812	CAPSCREW	M 8 X 65 DIN 931	4
10	031786	LOCKWASHER	M 8 DIN 127	4
11	041462	CONNECTOR	BOX 1-1/2	1
12	041194	CAPSCREW	5/16NC X 1-1/2 BRASS FULL THREAD	1
13	020274	LOCKWASHER	5/16 BRONZE	2
14	020272	NUT	5/16NC BRASS	2
15	020273	WASHER	FLAT 5/16 BRASS	2
16	041133	COVER		1
17-1	041192	WIRE	WHITE 60HZ	1
17-2	044097	WIRE	WHITE 50HZ	1
18-1	041193	WIRE	BLACK 60HZ BREAKER 42703	2
18-2	044079	WIRE	BLACK 60HZ BREAKER 45011	2
18-3	041193	WIRE	BLACK 50HZ BREAKER 43271	1
19	042719	DIAGRAM	WIRE BREAKERS	1

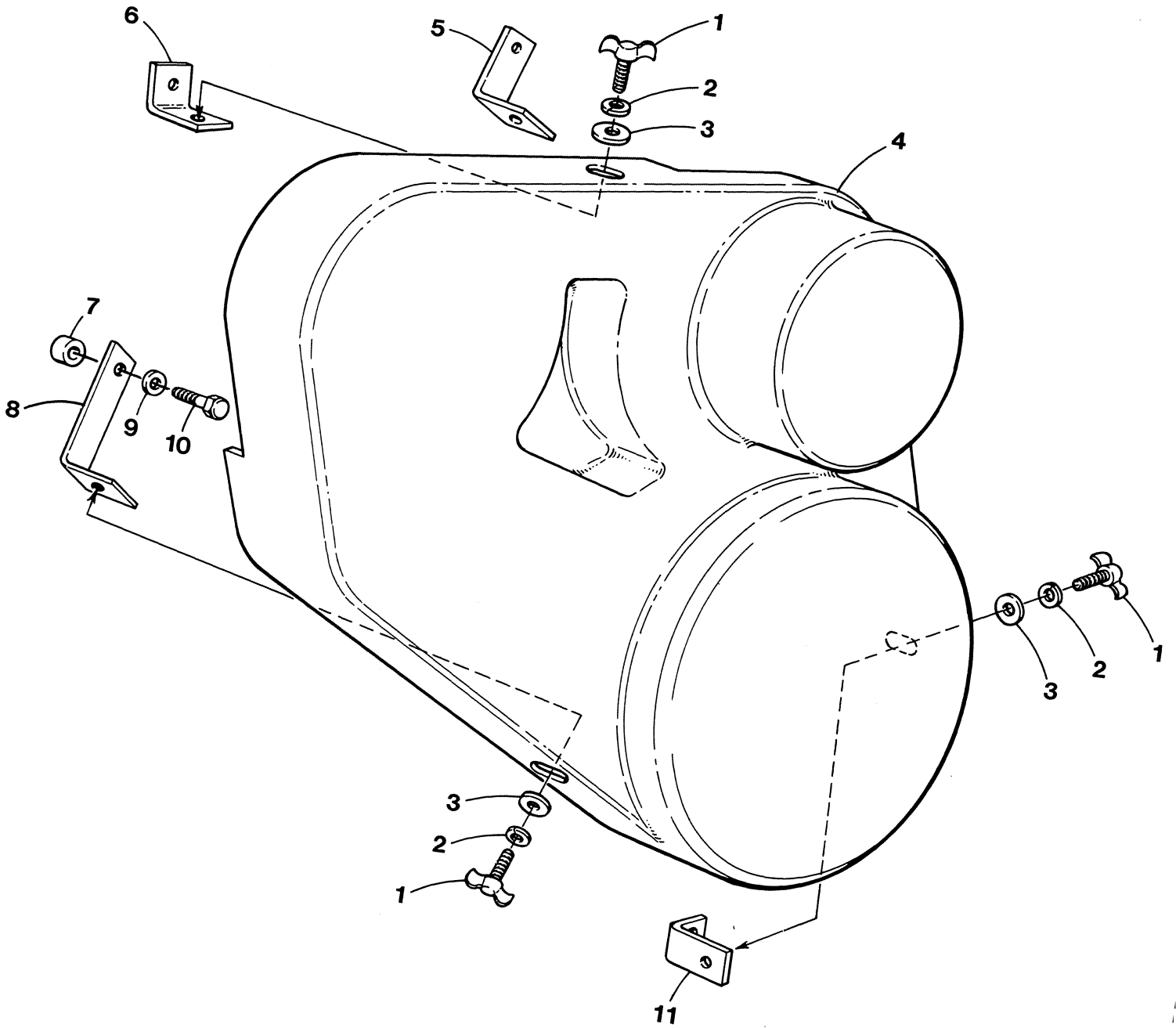
WESTERBEKE 90A - 32.0 BEDA - FUEL SOLENOID & GOVERNOR ACTUATOR



WESTERBEKE 90A - 32.0 BEDA - FUEL SOLENOID & GOVERNOR ACTUATOR

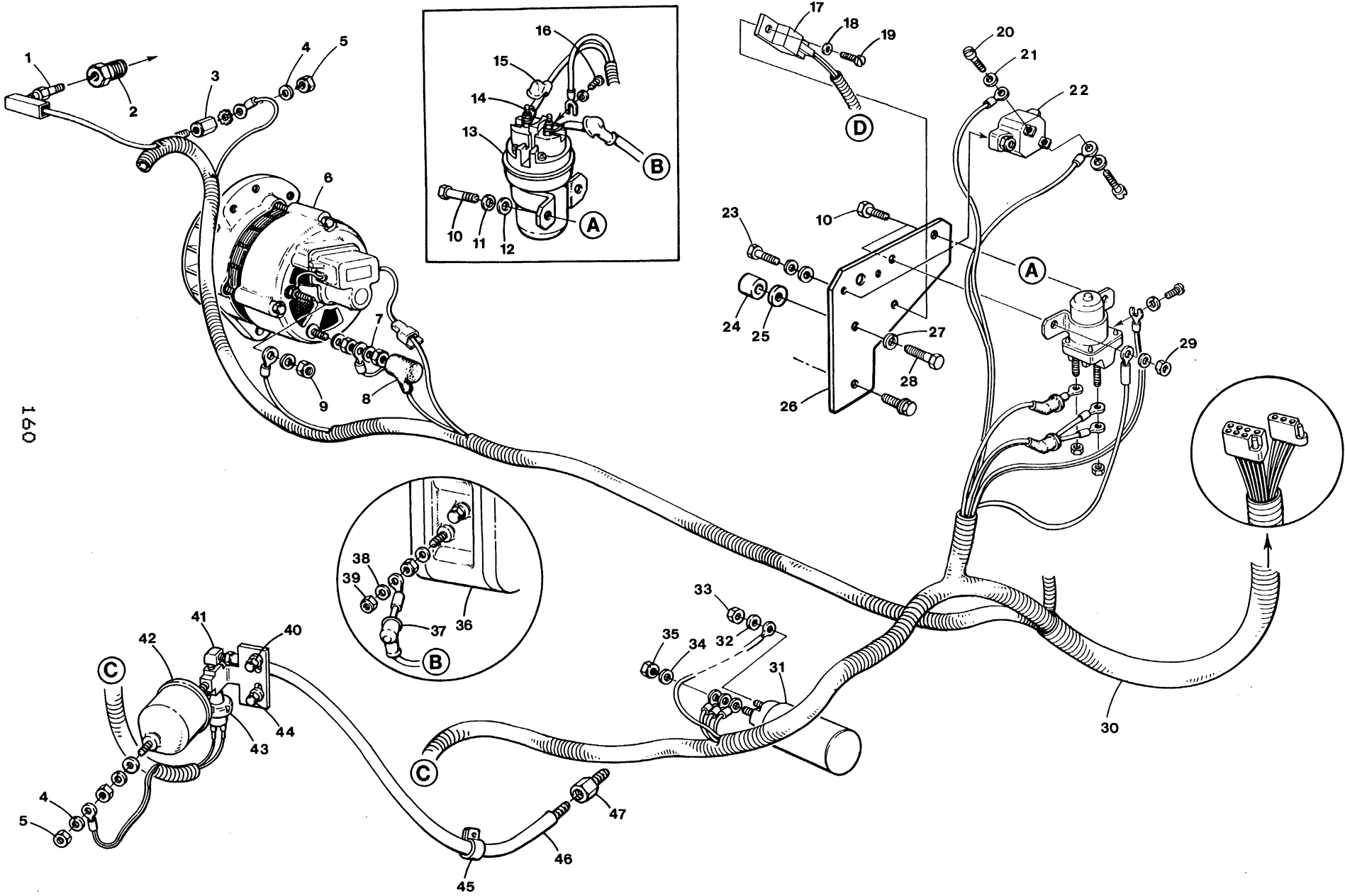
REF	PN	NAME	REMARKS	QUAN
1	039355	SPACER		1
2	039390	BALLJOINT		1
3	039470	SCREW	10-32 X 1-3/4 SS BINDING HEAD	1
4	303012	BALLJOINT		1
5	303009	CLEVIS	ACTUATOR	1
6	031875	SCREW	10-32 X 7/8 SS BINDING HEAD	1
7	031801	NUT	M 6 DIN 439 JAM	1
8	018804	CAPSCREW	M 6 X 20 DIN 933	4
9	031849	LOCKWASHER	10 SS	2
10	031847	NUT	10-32 HEX SS	2
11	031783	LOCKWASHER	M 6 DIN 127	4
12	015812	NUT	M 6 DIN 934	4
13	040032	BRACKET	GENSET GOVERNOR ACTUATOR	1
14-1	303007	ACTUATOR	GOVERNOR 12 VDC	1
14-2	039746	ACTUATOR	GOVERNOR 24 VDC	1
15	041018	BRACKET	FUEL SHUT-OFF SOLENOID	1
16	031783	LOCKWASHER	M 6 DIN 127	3
17	017012	CAPSCREW	M 6 X 16 DIN 933	3
18-1	023041	SOLENOID	FUEL SHUT-OFF 12 VDC	1
18-2	019348	SOLENOID	FUEL SHUT-OFF 24 VDC	1
19	031873	SCREW	10-32 X 5/8 SS BINDING HEAD	2
20	031849	LOCKWASHER	10 SS	2
21	031847	NUT	10-32 HEX SS	2
22	015225	BALLJOINT		1
23	023476	ROD	THREADED 1/4NF X 1-1/4	1
24	015534	NUT		2
25	015232	BALLJOINT		1
26-1	031754	NUT	1/4NF	1
26-2	031752	LOCKWASHER	1/4	1
27		CAPSCREW		1
28		LOCKWASHER		1
29	040033	LEVER	STOP	1
30	031873	SCREW	10-32 X 5/8 SS BINDING HEAD	2
31	031849	LOCKWASHER	10 SS	2
32	013325	CLAMP	CABLE	1
33	013870	SHIM		1
34	036211	NUT	M 6 JIS-FLANGE	2
35	041149	BRACKET	THROTTLE CABLE	1
36	031847	NUT	10-32 HEX SS	1
37	031849	LOCKWASHER	10 SS	1
38	033381	WASHER		1
39		LEVER	THROTTLE	1
40	024673	SPACER		1
41	019364	BALLJOINT		1
42	023413	SPACER		1
43	031786	LOCKWASHER	M 8 DIN 127	2
44	013630	CAPSCREW	M 8 X 25 DIN 933	2

WESTERBEKE 32.0 BEDA - BELT GUARD



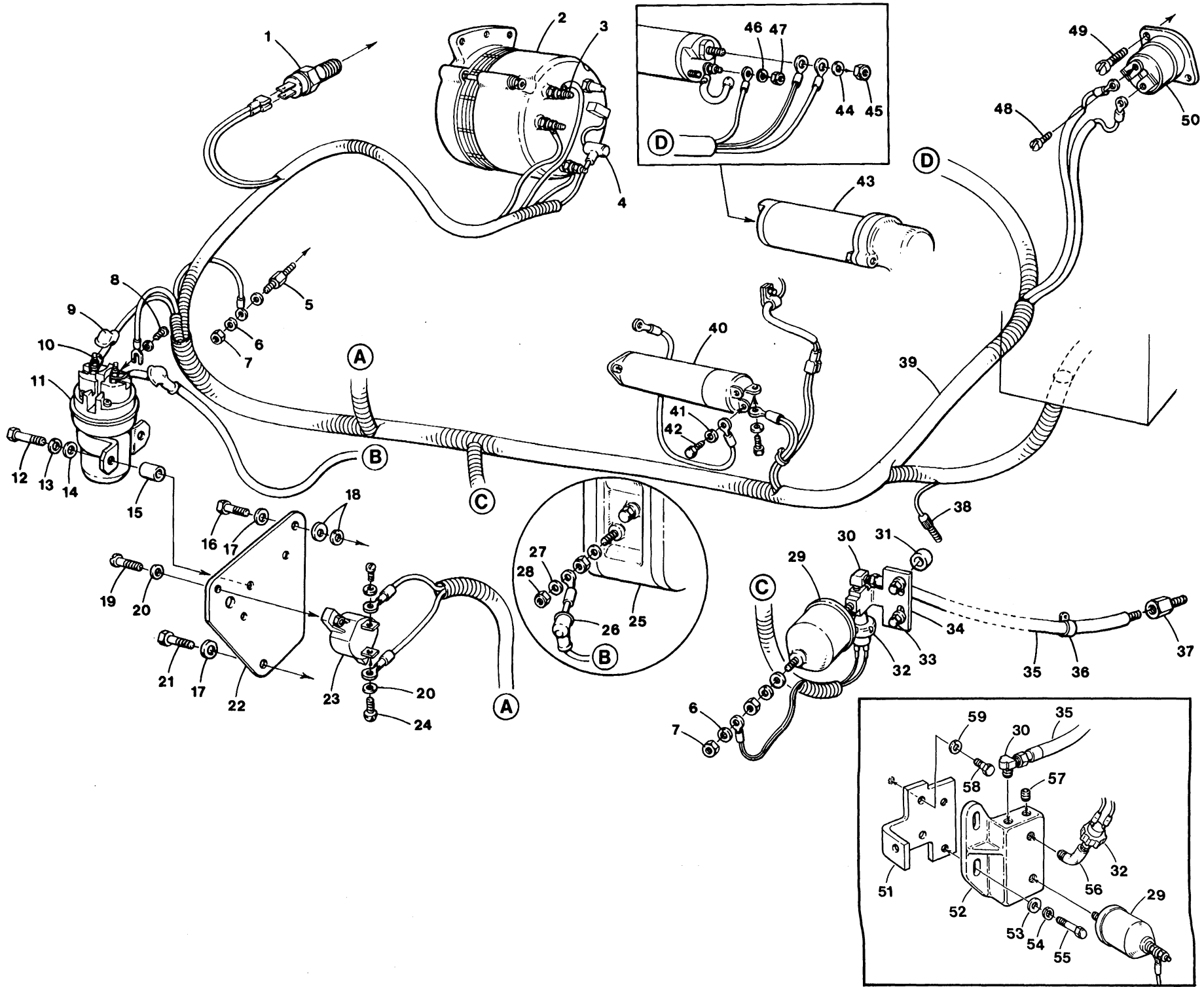
WESTERBEKE 32.0 BEDA - BELT GUARD

REF	PN	NAME	REMARKS	QUAN
1	033228	WINGSCREW	10-32 X 1/2	4
2	031849	LOCKWASHER	10 SS	4
3	033372	WASHER	FLAT	4
4	040427	GUARD	GENSET BELT	1
5	040542	BRACKET	BELT GUARD	1
6	036418	BRACKET	BELT GUARD	1
7	034616	SPACER		1
8	037148	BRACKET	BELT GUARD	1
9	031786	LOCKWASHER	M 8 DIN 127	1
10	031813	CAPSCREW	M 8 X 80 DIN 931	1
11	040543	BRACKET	BELT GUARD	1



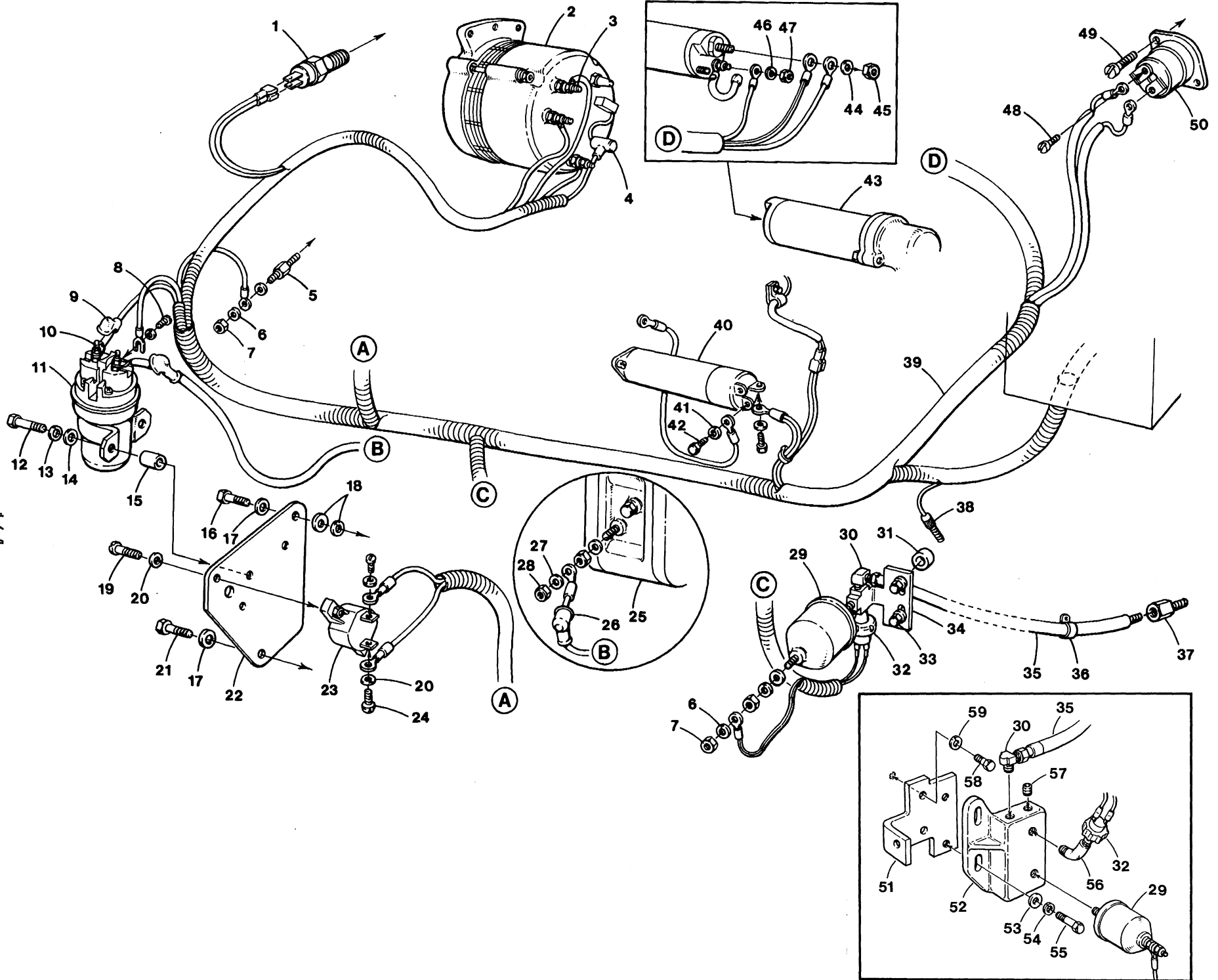
WESTERBEKE 90A FOUR - ELECTRICAL SYSTEM

REF	PN	NAME	REMARKS	QUAN
1	030125	SWITCH	WATER TEMPERATURE	1
2	037453	BUSHING	1/4NPT TO 1/8 NPT	1
3	035109	SENDER	WATER TEMPERATURE	1
4	031849	LOCKWASHER	10 SS	AR
5	031847	NUT	10-32 HEX SS	AR
6	039790	ALTERNATOR	50 AMP 12 VDC INCLUDING REGULATOR	1
7	200120	NUT	1/4NC KEPS	1
8	031086	BOOT		1
9	031904	NUT	10-24 KEPS	3
10	020628	CAPSCREW	M 6 X 25 DIN 933	2
11	031783	LOCKWASHER	M 6 DIN 127	2
12	031784	WASHER	M 6 DIN 125	2
13	040369	SOLENOID	INTAKE HEATER 12 VDC	1
14-1	015812	NUT	M 6 DIN 934	2
14-2	031783	LOCKWASHER	M 6 DIN 127	2
15	034472	BOOT		1
16		SCREW	M 4 X 5	1
17	037833	RELAY	12 VDC	1
18	031849	LOCKWASHER	10 SS	1
19	031872	SCREW	10-32 X 1/2 SS BINDING HEAD	1
20	031861	SCREW	8-32 X 1/4 SS BINDING HEAD	2
21	031844	LOCKWASHER	8 SS	2
22	024683	BREAKER	CIRCUIT 20 AMP	1
23	043480	SCREW	8-32 X 7/8 SS HEX WASHER HEAD	2
24	021885	SPACER		2
25	031789	WASHER	M10 DIN 125	2
26	032270	BRACKET	RELAY-SOLENOID-BREAKER	1
27	019262	LOCKWASHER	M10 DIN 127	2
28	031083	CAPSCREW	M10 X 1.25 X 30 JIS	2
29	015812	NUT	M 6 DIN 934	2
30	041455	HARNESS	ENGINE	1
31	038523	SOLENOID	STARTER MOTOR 38384 12 VDC	1
32	031780	LOCKWASHER	M 5 DIN 127	1
33	018241	NUT	M 5 DIN 934	1
34	034575	LOCKWASHER	M10 DIN 127B BRONZE	1
35	032438	NUT	M10 DIN 439 BRASS	1
36	040368	SOLENOID	INTAKE HEATER 12 VDC	1
37	303107	BOOT	TERMINAL	1
38	031783	LOCKWASHER	M 6 DIN 127	1
39	015812	NUT	M 6 DIN 934	1
40	031228	CAPSCREW	M10 X 1.25 X 30 DIN 961	2
40-2	019262	LOCKWASHER	M10 DIN 127	2
40-3	031789	WASHER	M10 DIN 125	1
41	013340	ELBOW	1/8NPT STREET 90 BRASS	1
42	024132	SENDER	OIL PRESSURE	1
43	037323	SWITCH	OIL PRESSURE	1
44	032480	BRACKET	OIL PRESSURE SENDER & SWITCH	1
45	013736	CLAMP	SUPPORT HOSE	1
46	039608	HOSE	OIL	1
47	024844	ADAPTER	1/8BSPT TO 1/8NPT-HOSE TO BLOCK	1



WESTERBEKE 32.0 BEDA - ELECTRICAL SYSTEM

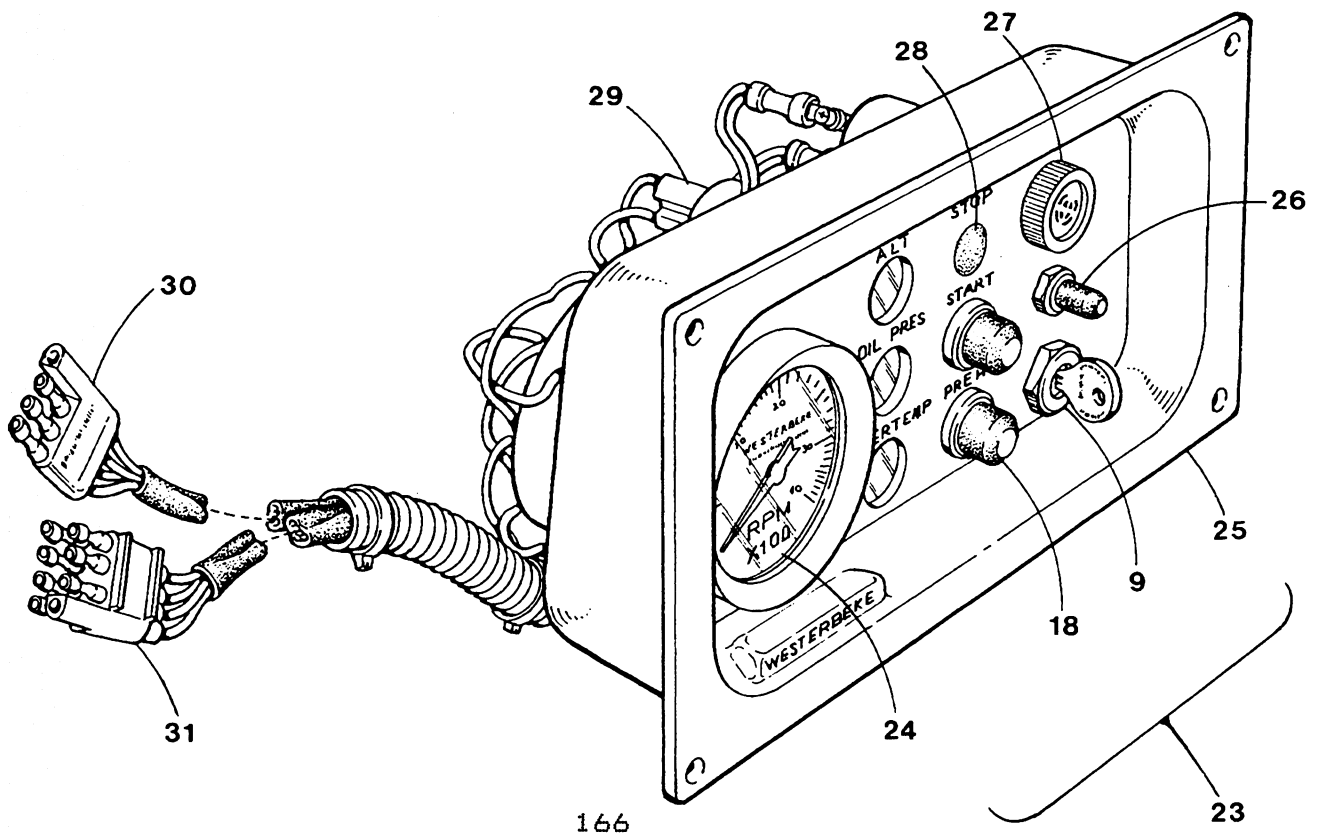
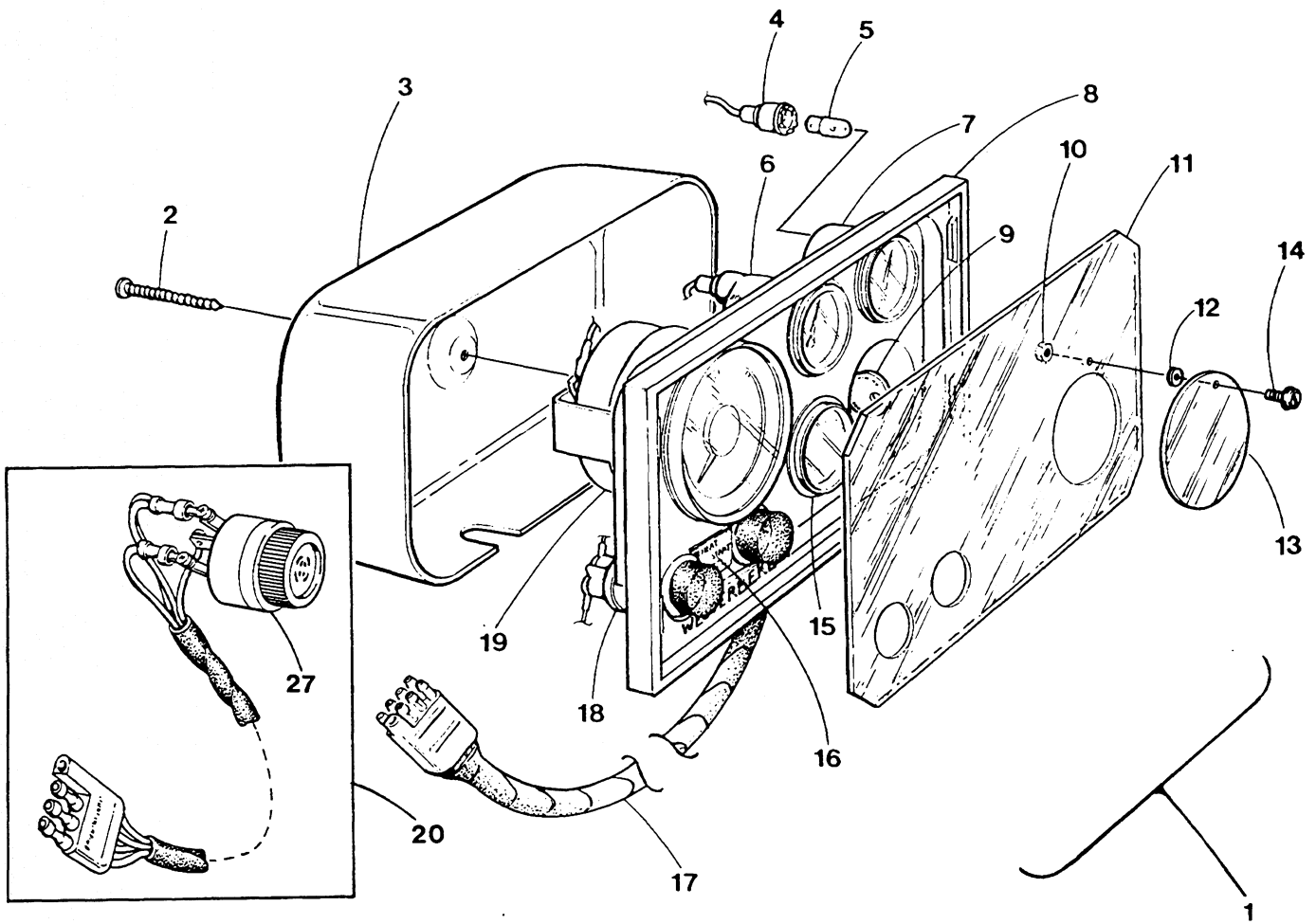
REF	PN	NAME	REMARKS	QUAN
1	039550	SWITCH	WATER TEMPERATURE	1
2	039790	ALTERNATOR	50 AMP 12 VDC INCLUDING REGULATOR	1
3	031904	NUT	10-24 KEPS	3
4-1	200120	NUT	1/4NC KEPS	1
4-2	031086	BOOT		1
5-1	035109	SENDER	WATER TEMPERATURE	1
5-2	011915	SENDER	WATER TEMPERATURE UNGROUNDED	1
6	031849	LOCKWASHER	10 SS	AR
7	031847	NUT	10-32 HEX SS	AR
8		SCREW	M 4 X 5	1
9	034472	BOOT	TERMINAL	2
10-1	015812	NUT	M 6 DIN 934	2
10-2	031783	LOCKWASHER	M 6 DIN 127	2
11-1	040369	SOLENOID	INTAKE HEATER 12 VDC	1
11-2	041064	SOLENOID	INTAKE HEATER 24 VDC	1
11-3	011489	SOLENOID	HEATER & GROUND 12 VDC UNGROUNDED SYSTEM	2
11-4	022249	SOLENOID	HEATER & GROUND 24 VDC UNGROUNDED SYSTEM	2
12	020628	CAPSCREW	M 6 X 25 DIN 933	2
13	031783	LOCKWASHER	M 6 DIN 127	2
14	031784	WASHER	M 6 DIN 125	2
15	033052	SPACER		2
16	013619	CAPSCREW	M 8 X 30 DIN 933	1
17	031786	LOCKWASHER	M 8 DIN 127	2
18	033381	SPACER		2
19	031866	SCREW	8-32 X 7/8 SS BINDING HEAD	2
20	031844	LOCKWASHER	8 SS	2
21	013630	CAPSCREW	M 8 X 25 DIN 933	1
22	040034	BRACKET	PREHEAT SOLENOID-CIRCUIT BREAKER	1
23	024683	BREAKER	CIRCUIT 20 AMP	1
24	031861	SCREW	8-32 X 1/4 SS BINDING HEAD	2
25-1	040368	HEATER	AIR INTAKE 12 VDC	1
25-2	041063	HEATER	AIR INTAKE 24 VDC	1
26	303107	BOOT	TERMINAL	1
27	031783	LOCKWASHER	M 6 DIN 127	1
28	015812	NUT	M 6 DIN 934	1
29-1	024132	SENDER	OIL PRESSURE 12 VDC 100 PSI	1
29-2	042161	SENDER	OIL PRESSURE 24 VDC 80 PSI	1
29-3	011916	SENDER	OIL PRESSURE 12 VDC UNGROUNDED 150 PSI	1
29-4	039848	SENDER	OIL PRESSURE 24 VDC UNGROUNDED 80 PSI	1
30	013340	ELBOW	1/8NPT STREET 90 BRASS	1
31	021885	SPACER		2
32	037323	SWITCH	OIL PRESSURE	1
33-1	031228	CAPSCREW	M10 X 1.25 X 30 DIN 961	2
33-2	019262	LOCKWASHER	M10 DIN 127	2
33-3	031789	WASHER	M10 DIN 125 TOP	1
34	032480	BRACKET	OIL PRESSURE SENDER & SWITCH TO FEB 2001	1
35	039608	HOSE	OIL	1
36	013736	CLAMP	SUPPORT HOSE	1
37	024844	ADAPTER	1/8BSPT TO 1/8NPT-HOSE TO BLOCK	1



WESTERBEKE 32.0 BEDA - ELECTRICAL SYSTEM

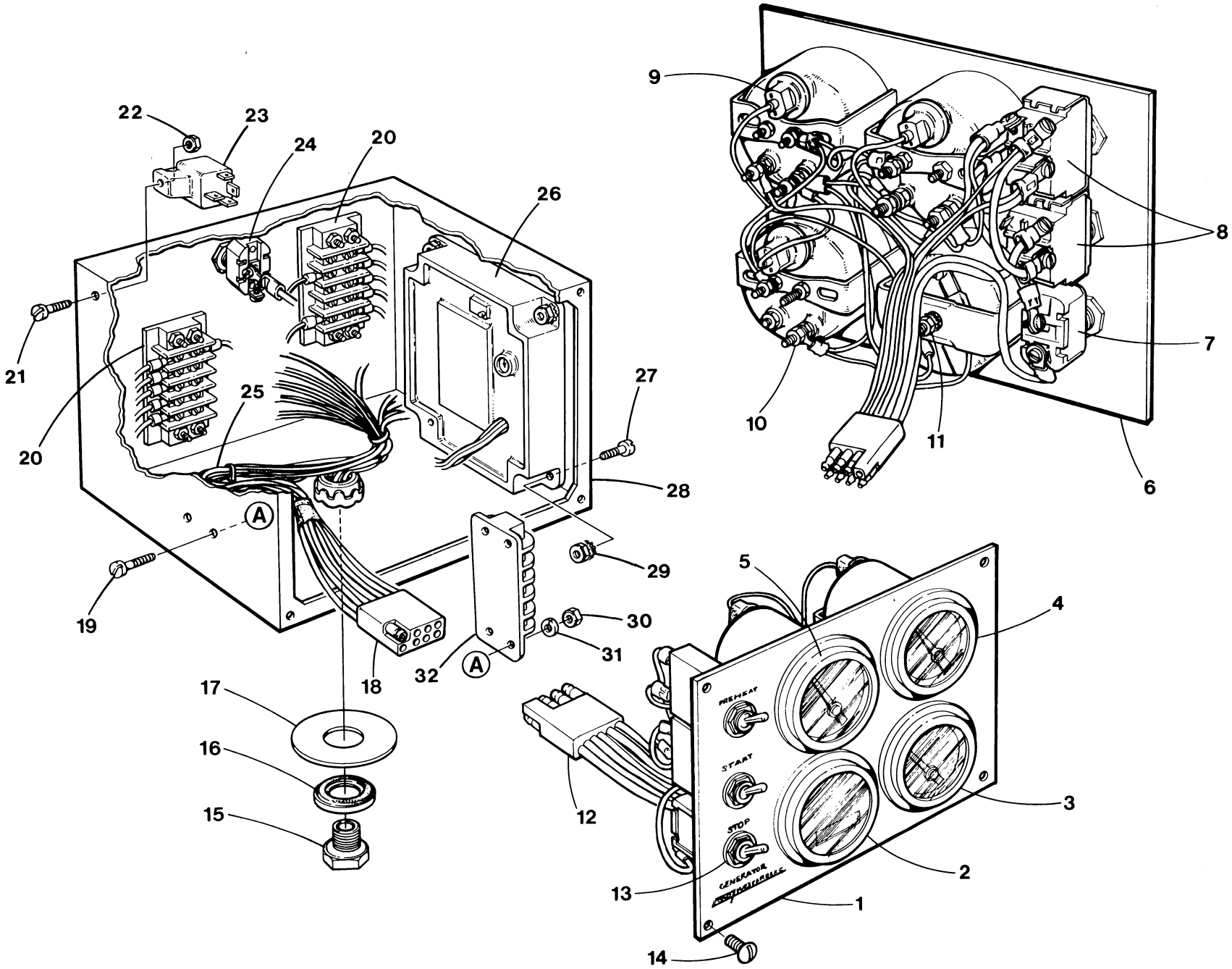
REF	PN	NAME	REMARKS	QUAN
38	039172	SENSOR	MAGNETIC	1
39-1	040426	HARNESS	GENSET INCLUDED IN PANEL-HARNESS ASSY	1
39-2	043803	HARNESS	GENSET UNGROUNDED SYSTEM	1
39-3	044766	HARNESS	GENSET WITH REMOTE CONNECTOR	1
40-1	023041	SOLENOID	FUEL SHUT-OFF 12 VDC	1
40-2	019348	SOLENOID	FUEL SHUT-OFF 24 VDC	1
41	031844	LOCKWASHER	8 SS	3
42	031861	SCREW	8-32 X 1/4 SS BINDING HEAD	3
43	039523	SOLENOID	STARTER MOTOR 38384 12 VDC	1
44	034575	LOCKWASHER	M10 DIN 127B BRONZE	1
45	032438	NUT	M10 DIN 439 BRASS	1
46	031780	LOCKWASHER	M 5 DIN 127	1
47	018241	NUT	M 5 DIN 934	1
48	031911	SCREW	8-32 X 1/4 BRASS	2
49	035711	SCREW	6-32 X 1/4 TAPPING	2
50	032923	SWITCH	EXHAUST TEMPERATURE	1
51	044845	BRACKET	OIL HEADER FEB 2001 ON	1
52	043902	HEADER	OIL FROM FEB 2001	1
53	031789	WASHER	M10 DIN 125	2
54	019262	LOCKWASHER	M10 DIN 127	2
55	018813	CAPSCREW	M10 X 20 DIN 933	2
56	015122	ELBOW	1/8NPT STREET 45	1
57-1	019369	PLUG	1/8NPT HEX HEAD BRASS	1
57-2	024523	PLUG	1/8NPT SOCKET	1
58	024953	CAPSCREW	M10 X 1.25 X 35 DIN 961	2
59	019262	LOCKWASHER	M10 DIN 127	2
60	011552	SWITCH	OIL PRESSURE NC - AUXILIARY	1
61-1	040425	DIAGRAM	GENSET WIRING	1
61-2	041486	DIAGRAM	GENSET WIRING UNGROUNDED SYSTEM	1
61-3	044737	DIAGRAM	GENSET WIRING WITH REMOTE CONNECTOR	1

WESTERBEKE 90A FOUR - PROPULSION INSTRUMENT PANELS



WESTERBEKE 90A FOUR - PROPULSION INSTRUMENT PANELS

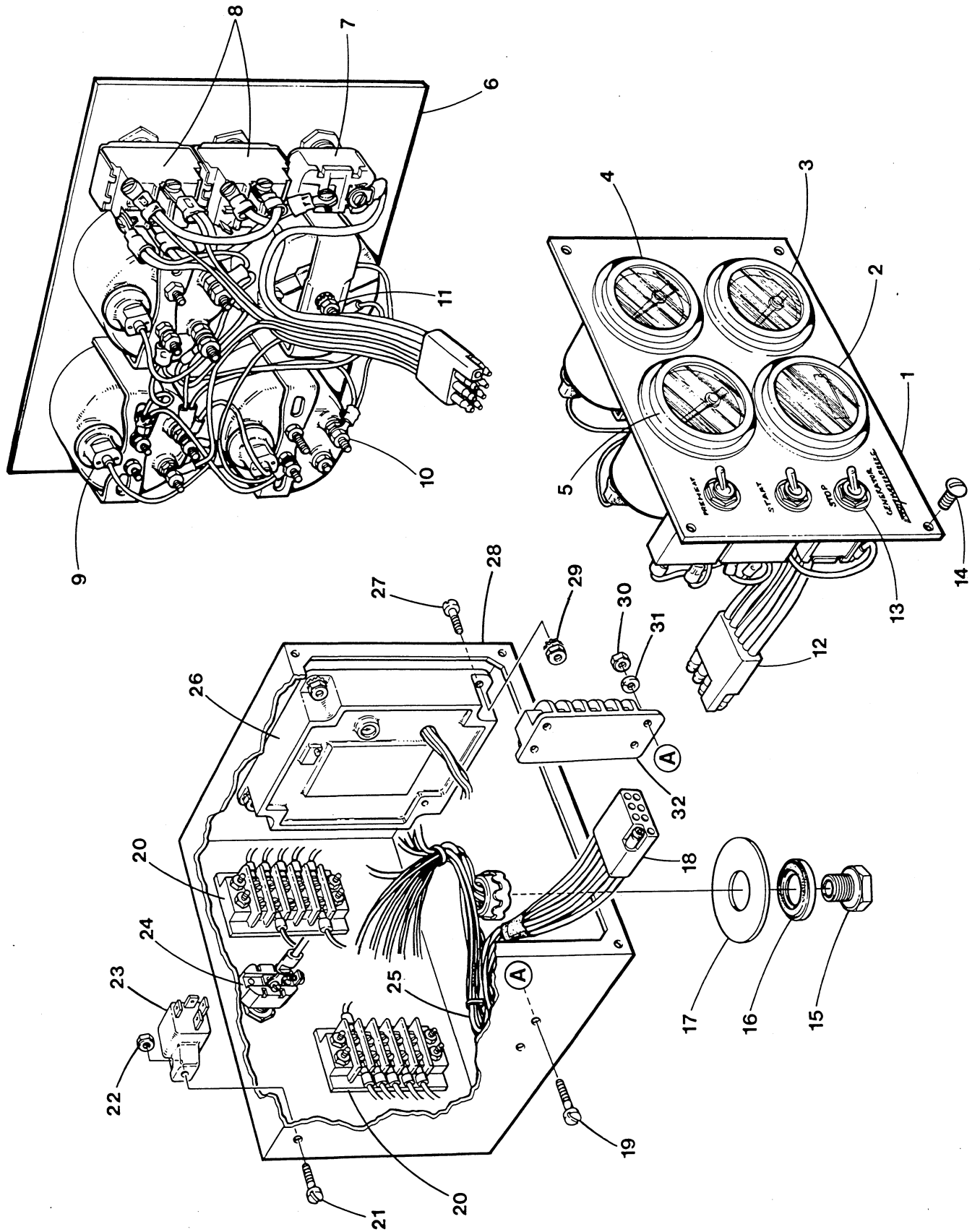
REF	PN	NAME	REMARKS	QUAN
1	036842	PANEL	ADMIRAL INCLUDING ALARM	1
2	030913	SCREW		1
3	030119	COVER	PANEL REAR	1
4		HOLDER	LAMP SEE REF 5	3
5	042893	LAMP	INCLUDING HOLDER 12 VDC	3
6	037601	METER	WATER TEMPERATURE	1
7	037603	METER	OIL PRESSURE 100 PSI	1
8	033865	PANEL	PLATE	1
9	033693	KEYSWITCH	OFF-ON	1
10	030003	NUT	NYLON LOCKING 6-32	1
11	033684	COVER	FACEPLATE	1
12	030002	SPACER	NYLON	1
13	024966	WINDOW	KEYSWITCH COVER	1
14	030001	SCREW	NYLON 6-32 X 1/2 WASHER HEAD	1
15	037605	VOLTMETER	12 VDC	1
16	033682	DECAL	SWITCH IDENTIFICATION	1
17	030148	CABLE	PANEL TO ENGINE 8 PIN	1
18-1	033764	SWITCH	PUSHBUTTON START/PREHEAT	2
18-2	019031	CAP	SWITCH COVER REPLACEMENT	2
19	011917	METER	TACHOMETER-HOUR	1
20	036829	ALARM	ASSEMBLY	1
21	035825	WIRE	LAMP POWER CONNECTION	3
22	039144	DIAGRAM	ENGINE WIRING	1
23	036473	PANEL	CAPTAIN	1
24	036590	METER	TACHOMETER	1
25	036043	PANEL	PLATE	1
26-1	036479	SWITCH	TEST	1
26-2	036490	CAP	SWITCH	1
27	013355	BUZZER	ALARM	1
28	030946	PLUG	NYLON	1
29-1	024947	LAMP	12 VDC	3
29-2	036483	HOLDER	LAMP	3
30	036626	HARNESS	PANEL TO ENGINE 4 PIN	1
31	036627	HARNESS	PANEL TO ENGINE 8 PIN	1
32	036477	ASSEMBLY	TERMINAL-DIODE	1
33	036544	SPACER	TERMINAL-DIODE ASSEMBLY	2
34	036545	SCREW	6-32 X 3/4 TAPPING SS	2
35	036630	DRAWING	TEMPLATE TO INSTALL EITHER PANEL	1



WESTERBEKE 32.0 BEDA - GENERATOR CONTROL PANEL

REF	PN	NAME	REMARKS	QUAN
1-1	036539	PANEL	GENSET CONTROL 12 VDC REF 2 THRU 13	1
1-2	042162	PANEL	GENSET CONTROL 24 VDC	1
1-3	039330	PANEL	GENSET CONTROL 12 VDC UNGROUNDED	1
1-4	039460	PANEL	GENSET CONTROL 24 VDC UNGROUNDED	1
2-1	036192	HOURLMETER		1
2-2	042159	HOURLMETER	PANEL 42162	1
3-1	037605	VOLTMETER	12 VDC	1
3-2	042156	VOLTMETER	24 VDC	1
4-1	037603	METER	OIL PRESSURE 12 VDC 100 PSI	1
4-2	042157	METER	OIL PRESSURE 24 VDC 80 PSI	1
4-3	011914	METER	OIL PRESSURE 12 VDC UNGROUNDED 150 PSI	1
4-4	039846	METER	OIL PRESSURE 24 VDC UNGROUNDED 80 PSI	1
5-1	037601	METER	WATER TEMPERATURE 12 VDC	1
5-2	042158	METER	WATER TEMPERATURE 24 VDC	1
5-3	011913	METER	WATER TEMPERATURE 12 VDC UNGROUNDED	1
5-4	039847	METER	WATER TEMPERATURE 24 VDC UNGROUNDED	1
6-1	034485	PANEL	PLATE	1
6-2	035303	COVER	BOX WHEN PANEL IS REMOTE MOUNTED	1
7	024731	SWITCH	STOP	1
8	024732	SWITCH	PREHEAT-START	2
9-1	042893	LAMP	INSTRUMENT WEDGE BASE 12 VDC W/HOLDER	3
9-2	035825	WIRE	LAMP POWER CONNECTION	3
9-3	045094	LAMP KIT	24 VDC	3
10-1	031897	NUT	8-32 BRASS	AR
10-2	031899	LOCKWASHER	8 BRONZE	AR
11-1	031842	NUT	8-32 HEX SS	5
11-2	031844	LOCKWASHER	8 SS	2
12	036538	HARNESS	PANEL	1
13-1	031999	LOCKRING	TOGGLE SWITCH MOUNT	3
13-2	038042	NUT	TOGGLE SWITCH	3
14	034421	SCREW	8-32 X 3/8 TRUSS HEAD BLACK SS	4
15	036464	NIPPLE	CHASE WITH BUSHING TO MARCH 2000	1
16	036492	RING	SEALING TO MARCH 2000	1
17	036837	WASHER	REDUCER TO MARCH 2000	1
18-1	040426	HARNESS	ENGINE	1
18-2	043803	HARNESS	ENGINE UNGROUNDED SYSTEM	1
19	031855	SCREW	6-32 X 5/8 SS BINDING HEAD	12
20-1	039928	BLOCK	TERMINAL 10 POSITION	2
20-2	039929	MARKER	TERMINAL BLOCK	2
20-3	015222	PLATE	SCREW-TERMINAL BLOCK	6
21	031872	SCREW	10-32 X 1/2 SS BINDING HEAD	2
22	200125	NUT	10-32 KEPS	2
23-1	037833	RELAY	12 VDC	2
23-2	039858	RELAY	24 VDC	2
24-1	033259	SWITCH	EMERGENCY STOP	1
24-2	033258	BOOT	EMERGENCY STOP SWITCH	1
24-3	033251	LABEL	EMERGENCY STOP SWITCH	1

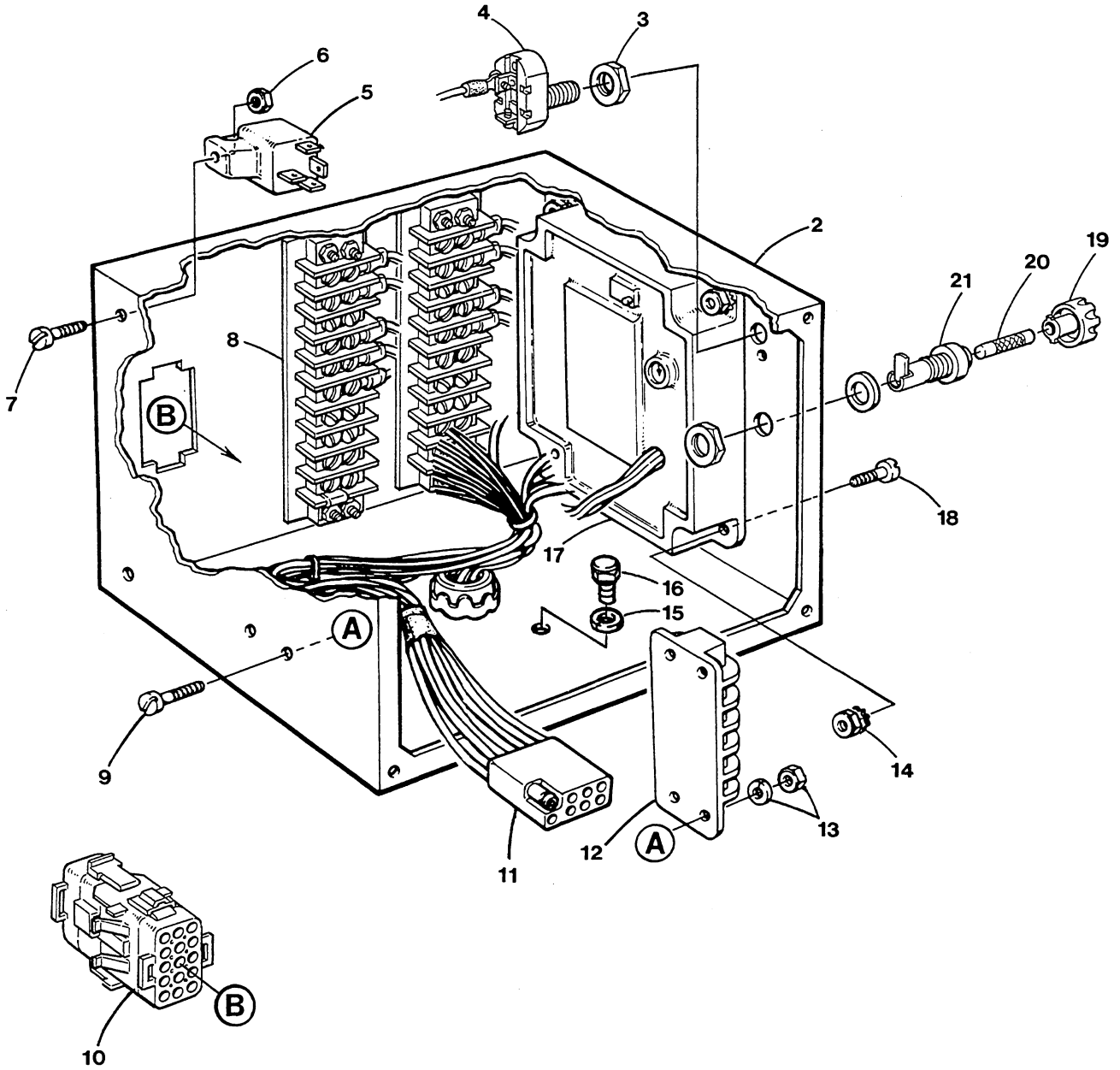
WESTERBEKE 32.0 BEDA - GENERATOR CONTROL PANEL



WESTERBEKE 32.0 BEDA - GENERATOR CONTROL PANEL

REF	PN	NAME	REMARKS	QUAN
25	036232	HARNESS	PANEL BOX	1
26-1	303008	CONTROLLER	GOVERNOR 12 VDC	1
26-2	039747	CONTROLLER	GOVERNOR 24 VDC	1
27	031872	SCREW	10-32 X 1/2 SS BINDING HEAD	4
28-1	040226	ASSEMBLY	BOX AND HARNESS 12 VDC	1
28-2	043840	BOX	GENERATOR CONTROL PANEL	1
28-3	040185	COVER	PANEL BOX	1
28-4	041068	ASSEMBLY	BOX AND HARNESS 24 VDC	1
28-5	044123	ASSEMBLY	BOX AND HARNESS 12 VDC UNGROUNDED	1
28-6	046236	ASSEMBLY	BOX AND HARNESS 24 VDC UNGROUNDED	1
29	200125	NUT	10-32 KEPS	4
30	050234	NUT	6-32 KEPS	12
32-1	050201	BLOCK	TERMINAL	1
32-2	050374	MARKER	TERMINAL BLOCK	1
33	024968	DECAL	GENSET OPERATING INSTRUCTIONS	1
34	041081	DIODE		1
35	045098	SUPPRESSOR	TRANSIENT	1

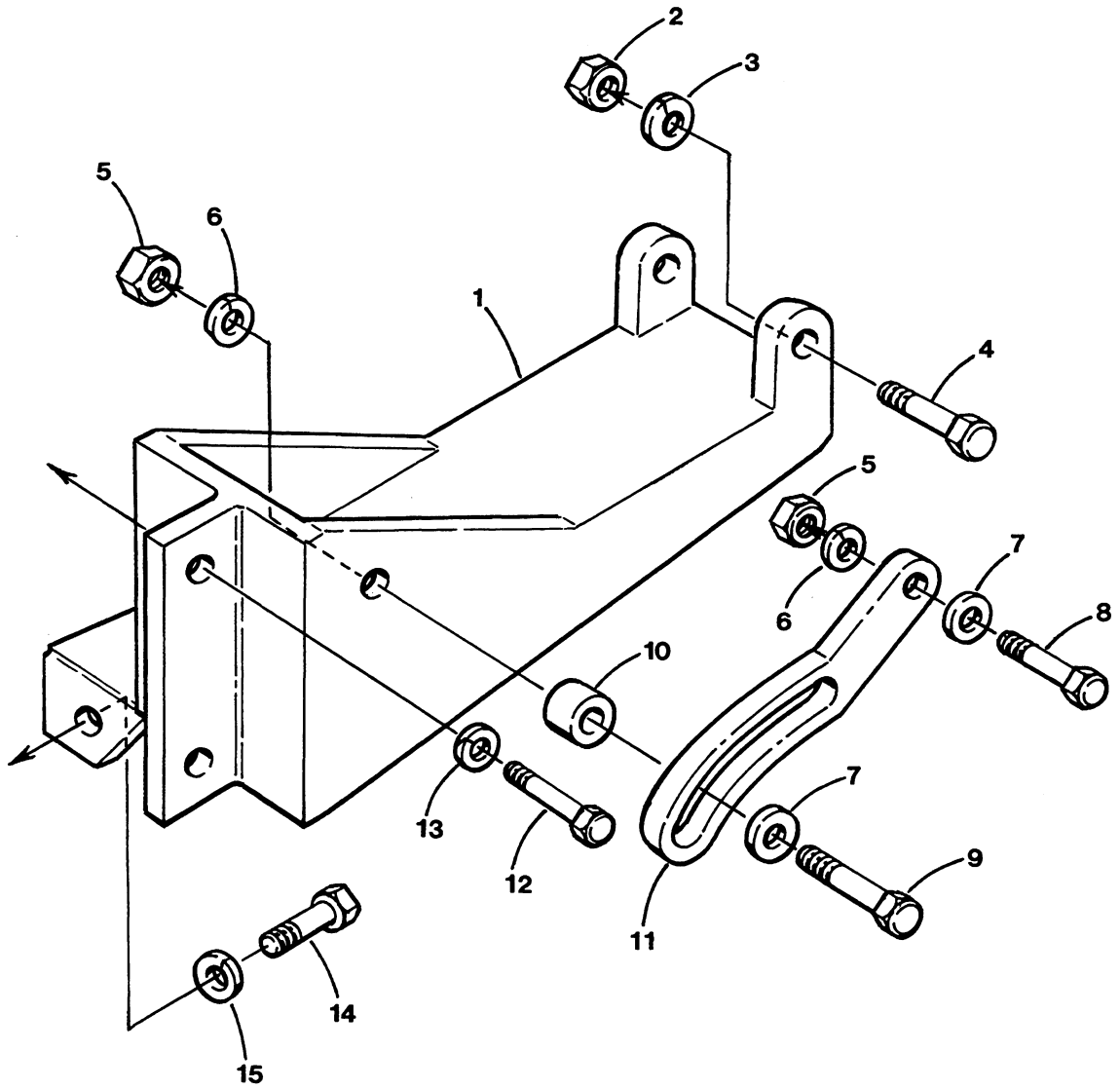
WESTERBEKE 32.0 BEDA - GENERATOR CONTROL PANEL WITH REMOTE CONNECTOR



WESTERBEKE 32.0 BEDA - GENERATOR CONTROL PANEL WITH REMOTE CONNECTOR

REF	PN	NAME	REMARKS	QUAN
1-1	044620	ASSEMBLY	BOX & HARNESS 12 VDC	1
1-2	044765	ASSEMBLY	BOX & HARNESS 24 VDC	1
1-3	044820	ASSEMBLY	BOX & HARNESS 24 VDC VIKING	1
2-1	043840	BOX	GENSET CONTROL	1
2-2	040185	COVER	GENSET CONTROL BOX	1
3	038042	NUT	TOGGLE SWITCH	1
4	033259	SWITCH	EMERGENCY STOP	1
5-1	037833	RELAY	12 VDC	2
5-2	039858	RELAY	24 VDC	2
6	200125	NUT	10-32 KEPS	2
7	031872	SCREW	10-32 X 1/2 SS BINDING HEAD	2
8-1	039928	BLOCK	TERMINAL 10 POSITION	2
8-2	039929	MARKER	TERMINAL BLOCK	2
8-3	015222	PLATE	SCREW-TERMINAL BLOCK	4
9-1	031855	SCREW	6-32 X 5/8 SS BINDING HEAD	11
9-2	031857	SCREW	6-32 X 7/8 SS BINDING HEAD	1
10-1	043746	CONNECTOR	REMOTE PANEL	1
10-2	043818	CONNECTOR	MALE JUMPER-IF NO REMOTE PANEL INSTALLED	1
11-1	043737	HARNESS	PANEL	1
11-2	044766	HARNESS	ENGINE	1
12-1	050201	BLOCK	TERMINAL	1
12-2	050374	MARKER	TERMINAL BLOCK	1
12-3	015222	PLATE	SCREW-TERMINAL BLOCK	2
13	050234	NUT	6-32 KEPS	12
14	200125	NUT	10-32 KEPS	4
15	031783	LOCKWASHER	M 6 DIN 127	4
16	017012	CAPSCREW	M 6 X 16 DIN 933	4
17-1	303008	CONTROLLER	GOVERNOR 12 VDC	1
17-2	039747	CONTROLLER	GOVERNOR 24 VDC	1
18	031872	SCREW	10-32 X 1/2 SS BINDING HEAD	4
19		CAP	SEE REF 21	1
20	033769	FUSE		1
21	043747	HOLDER	FUSE INCL NUT & CAP	1
22	041081	DIODE		1
23-1	045098	SUPPRESSOR	TRANSIENT 12 VDC	1
23-2	045099	SUPPRESSOR	TRANSIENT 24 VDC	1

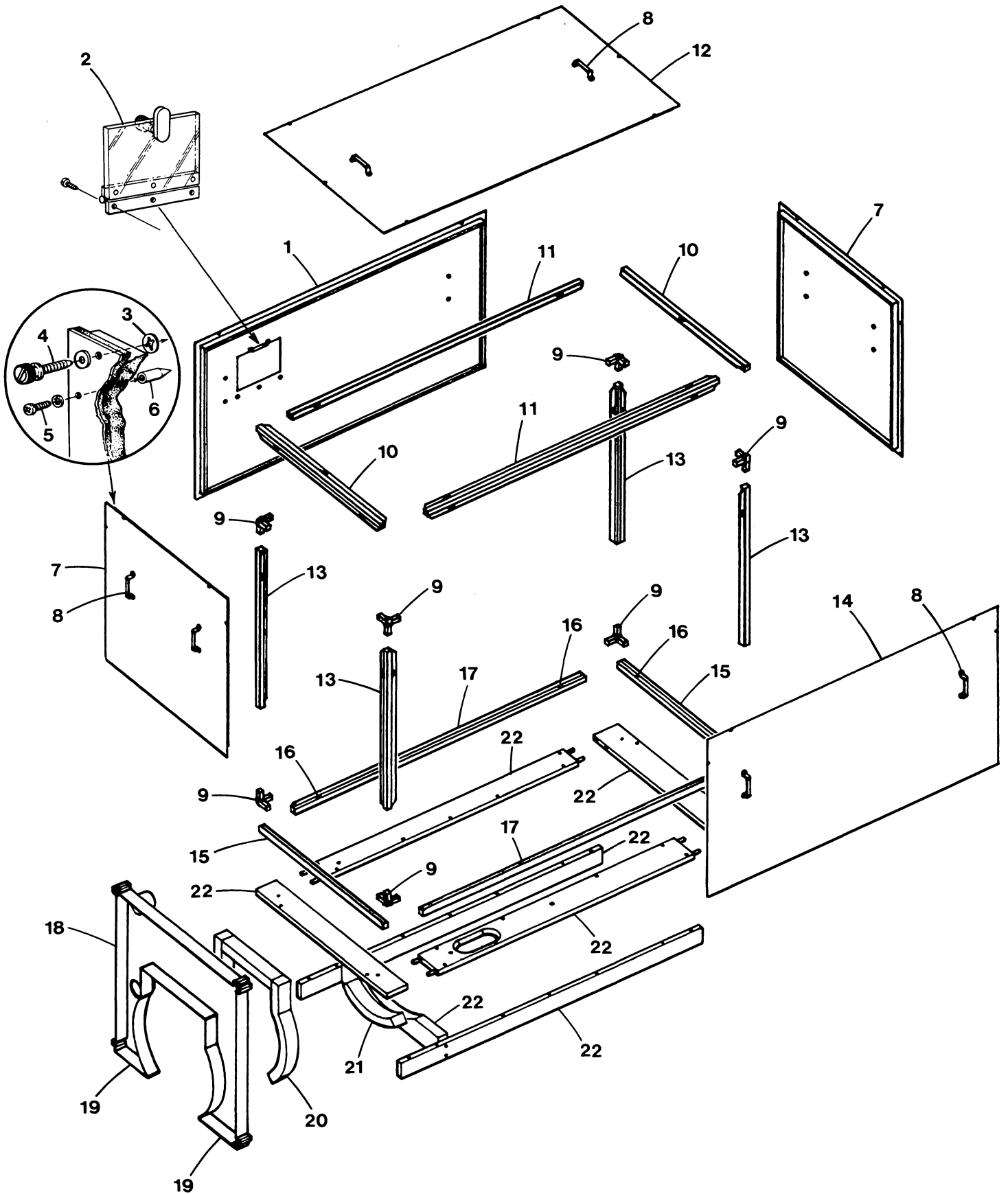
WESTERBEKE 90A FOUR - COMPRESSOR MOUNTING BRACKET



WESTERBEKE 90A FOUR - COMPRESSOR MOUNTING BRACKET

REF	PN	NAME	REMARKS	QUAN
1	041046	BRACKET	COMPRESSOR	1
2	031768	NUT	7/16NC	2
3	031770	LOCKWASHER	7/16	2
4	031658	CAPSCREW	7/16NC X 1-3/4	2
5	031762	NUT	3/8NC	2
6	031764	LOCKWASHER	3/8	2
7	031765	WASHER	3/8 FLAT	2
8	031607	CAPSCREW	3/8NC X 1-1/2	1
9	031606	CAPSCREW	3/8NC X 1-1/4	1
10	021885	SPACER		1
11	040030	STRAP	ADJUSTING	1
12	031823	CAPSCREW	M10 X 1.25 X 80 DIN 961	2
13	019262	LOCKWASHER	M10 DIN 127	2
14	033347	CAPSCREW	M12 X 1.5 X 25 DIN 961	1
15	031792	LOCKWASHER	M12 DIN 127	1
16	011686	BELT	COMPRESSOR	2

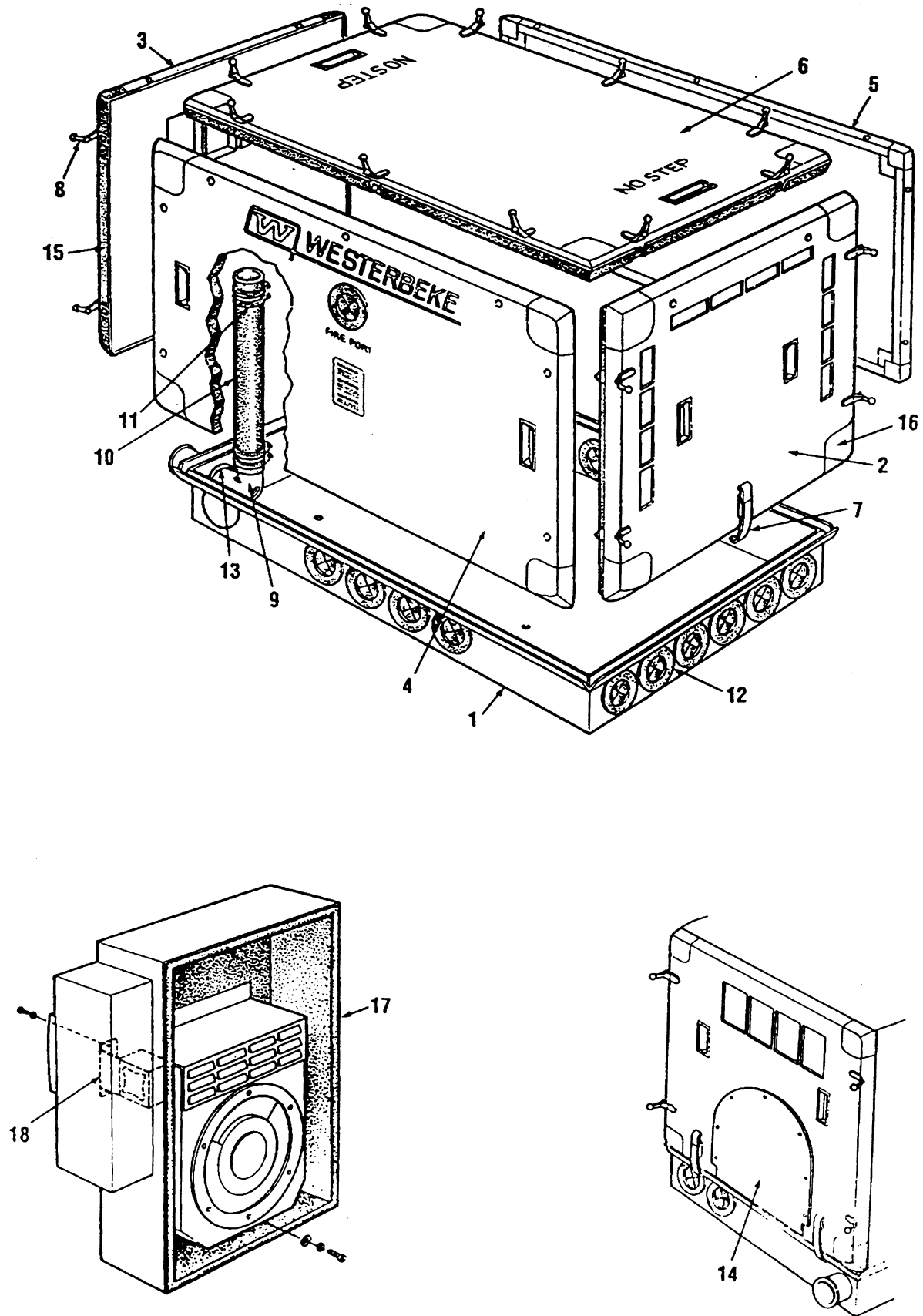
WESTERBEKE 32.0 BEDA - GENERATOR SOUND GUARD



WESTERBEKE 32.0 BEDA - GENERATOR SOUND GUARD

REF	PN	NAME	REMARKS	QUAN
1	041476	PANEL	SIDE WITH WINDOW	1
2	037417	WINDOW	ASSEMBLY	1
3	030896	RETAINER	QUICK OPENING SCREW	AR
4	030895	SCREW	QUICK OPENING	AR
5	031940	SCREW	6-32 X 3/8 SEMS PHIL HEAD	AR
6	030775	GUIDE	PANEL ALIGNMENT	AR
7-1	041474	PANEL	FRONT AND REAR TO MAY 97	2
7-2	043708	PANEL	FRONT FROM MAY 97	1
7-3	042589	PANEL	REAR FROM MAY 97	1
8-1	035720	HANDLE		10
8-2	031937	SCREW	8-32 X 3/8 SEMS PHIL HEAD	20
9	024057	CORNER		8
10	039364	RAIL	END	2
11	039361	RAIL	SIDE	2
12	041477	PANEL	TOP	1
13	039365	POST	CORNER	4
14	041475	PANEL	SIDE	1
15	038969	SKIRT	END	2
16-1	039470	SCREW	10-32 X 1-3/4 SS BINDING HEAD	8
16-2	031848	WASHER	10 FLAT SS	8
16-3	031907	NUT	10-32 STOP SS	8
17	038968	SKIRT	SIDE	2
18	039356	AIR DAM		1
19-1	039471	SCREW	8 X 1/2 WOOD ROUND HEAD	2
19-2	031843	WASHER	8 FLAT SS	2
20	039408	FOAM	UPPER AIR SEAL - INCHES REQUIRED	48
21	039408	FOAM	LOWER AIR SEAL - INCHES REQUIRED	12
22-1	038967	BASE	ASSEMBLY TO MAY 97	1
22-2	042588	BASE	ASSEMBLY FROM MAY 97	1
23	039425	SCREW	8 X 1-3/4 WOOD FLAT HEAD SS	10
24	039426	SCREW	14 X 4 WOOD FLAT HEAD SS	8
25	030902	HOSE	2-1/2" ID AIR INTAKE - INCHES REQUIRED	25
26	022559	CLAMP	HOSE 40	2

WESTERBEKE 32.0 BEDA - GENERATOR SOUND GUARD WITH METAL BASE



WESTERBEKE 32.0 BEDA - GENERATOR SOUND GUARD WITH METAL BASE

REF	PN	NAME	REMARKS	QUAN
1	043536	BASE	ASSEMBLY	1
2	043537	PANEL	FRONT	1
3	043538	PANEL	REAR	1
4	043539	PANEL	SIDE RIGHT	1
5	043539	PANEL	SIDE LEFT	1
6	043540	PANEL	TOP	1
7	044080	CLASP		AR
8	043775	LATCH	NEOPRENE	AR
9	043676	ELBOW	EXHAUST OUTLET 3"	1
10	044639	HOSE	3" ID SOFT WALL - INCHES REQUIRED	24
11	011501	CLAMP	HOSE 48	4
12	039498	BUSHING	2.5" HOLE	16
13-1	043223	GROMMET	EXHAUST ELBOW 3"	2
13-2	045010	GROMMET	3.5" HOLE	1
14	043907	COVER	PTO INCLUDED IN REF 3	1
15	043248	GASKET	PANEL EDGE SEAL	AR
16	042638	CORNER	PANEL	AR
17	043541	AIR DAM	ASSEMBLY	1
18	043668	COVER	AIR DAM INCLUDED IN REF 17	1
19	042630	HANDLE		AR

WESTERBEKE 90A - 32.0 BEDA - MISCELLANEOUS

REF	PN	NAME	REMARKS	QUAN
1-1	042627	KIT A	SPARE PARTS PROPULSION	1
1-2	040387	KIT A	SPARE PARTS GENSET	1
2	040388	KIT B	SPARE PARTS EXTENDED CRUISING GEN & PROP	1
3	040385	GASKET SET	UPPER	1
4	040386	GASKET SET	COMPLETE	1
5	032974	FILTER	PRIMARY FUEL SEPARATOR	1
6	015010	STRAINER	SEA WATER	1
7	033327	VALVE	ANTI-SIPHON	1
8-1	013758	PAINT	RED AEROSOL SPRAY CAN	1
8-2	042307	PAINT	WHITE AEROSOL SPRAY CAN	1
9	020654	SPLITTER	ALTERNATOR OUTPUT	1
10-1	030760	HARNESS	15 FOOT PANEL EXTENSION 8 PIN	1
10-2	036557	HARNESS	15 FOOT PANEL EXTENSION 4 PIN	1
10-3	044347	HARNESS	15 FOOT EXTENSION REMOTE CONNECTOR	1
11	032973	FILTER KIT	REMOTE LUBE OIL	1
12	040390	KIT	FUEL HARDWARE	1
13-1	043502	MANUAL	OPERATOR PROPULSION	1
13-2	039685	MANUAL	OPERATOR GENSET	1
14	043750	MANUAL	SERVICE	1
15	044642	MUFFLER	HYDRO-HUSH FIBREGLASS	1
16	024177	KIT	REMOTE FRESH WATER SURGE TANK	1

PART NO	PAGE	REF	PART NO	PAGE	REF	PART NO	PAGE	REF
011357	125	9	013619	101	26-2	017196	141	9
011371	125	7-1	013619	105	8	018142	129	19
011405	121	13	013619	121	28	018143	129	14
011405	125	1	013619	127	35	018144	129	21
011405	141	6	013619	131	1-2	018145	129	6
011405	143	7	013619	163	16	018146	129	22
011405	145	6	013629	149	17	018147	129	2
011411	143	10	013629	151	38	018148	129	17
011411	145	2	013630	115	24	018149	129	16
011419	129	12	013630	131	1-1	018151	129	9
011471	121	23	013630	139	42-1	018152	129	10
011471	145	9	013630	157	44	018153	129	13
011489	163	11-3	013630	163	21	018154	129	7
011501	179	11	013631	139	23	018164	129	18
011548	127	29-4	013631	149	3	018180	129	4
011552	165	60	013736	161	45	018241	161	33
011618	139	37	013736	163	36	018241	165	47
011630	145	14-1	013741	125	3	018242	115	20
011631	145	14-2	013758	180	8-1	018242	119	13
011686	175	16	013810	125	8-1	018242	121	1
011779	121	14-1	013870	141	19	018242	121	30
011779	121	14-2	013870	143	32	018242	139	4
011779	125	2	013870	145	25	018804	119	18
011779	141	5	013870	157	33	018804	157	8
011779	143	6	013919	141	29	018812	125	26-1
011779	145	7	014774	129	5	018813	141	1
011885	121	20	014776	137	11	018813	165	55
011907	129	11	015010	180	6	019031	167	18-2
011913	169	5-3	015102	137	3	019039	139	33
011914	169	4-3	015122	165	56	019044	145	14-4
011915	163	5-2	015222	169	20-3	019045	145	14-5
011916	163	29-3	015222	173	8-3	019046	145	14-6
011917	167	19	015222	173	12-3	019047	145	14-3
011921	145	11	015225	157	22	019262	113	58
011944	115	6	015232	157	25	019262	123	4
011961	143	21-1	015239	147	26	019262	125	15
011961	145	32- 8	015289	135	41	019262	139	6
011962	143	21-2	015534	157	24	019262	139	10
011962	145	32- 9	015812	151	44	019262	139	18
011963	143	21-3	015812	157	12	019262	139	20
011963	145	32-10	015812	161	14-1	019262	139	22
011964	143	21-4	015812	161	29	019262	139	25
011964	145	32-11	015812	161	39	019262	139	35
013057	145	5	015812	163	10-1	019262	141	2
013325	141	20	015812	163	28	019262	141	12
013325	143	31	015830	103	28	019262	143	11
013325	145	24	015830	121	29	019262	147	2
013325	157	32	015831	101	19	019262	147	22
013330	143	3	015831	103	38	019262	149	4
013330	145	3	015831	109	6	019262	149	7
013330	145	10	015831	121	4	019262	149	16
013331	143	5	015887	123	5	019262	149	18
013338	145	4	015887	139	9	019262	149	24
013340	161	41	015887	151	54	019262	151	37
013340	163	30	017012	113	38-1	019262	151	53
013348	145	13-1	017012	157	17	019262	161	27
013348	145	13-2	017012	173	16	019262	161	40-2
013355	167	27	017196	101	26-1	019262	163	33-2

PART NO	PAGE	REF	PART NO	PAGE	REF	PART NO	PAGE	REF
019262	165	54	023709	141	13-4	024966	167	13
019262	165	59	023709	145	32-4	024968	171	33
019262	175	13	023710	141	13-5	024977	119	1
019321	121	33	023710	145	32-5	024984	117	25
019348	157	18-2	023711	141	13-6	024984	133	17
019348	165	40-2	023711	145	32-6	024984	133	21
019364	157	41	023712	141	13-7	024984	135	38
019369	119	23-1	023712	145	32-7	030001	167	14
019369	119	41	024057	177	9	030002	167	12
019369	121	22	024132	161	42	030003	167	10
019369	129	23	024132	163	29-1	030119	167	3
019369	165	57-1	024177	180	16	030125	119	43
019442	137	5	024306	119	8	030125	161	1
020272	155	14	024373	101	8	030131	103	36
020273	155	15	024373	103	27	030146	149	28
020274	155	13	024374	101	7	030148	167	17
020628	109	37-1	024374	103	26	030167	115	13
020628	161	10	024374	103	41	030168	127	30
020628	163	12	024378	103	24	030289	119	38
020650	141	23	024379	101	15	030289	137	15
020654	180	9	024393	101	16	030291	113	50
021122	119	39	024445	107	40	030711	101	10
021566	125	20-10	024446	107	39	030711	103	37
021611	125	20-11	024470	117	9	030712	101	11
021885	161	24	024498	111	30	030735	125	20-2
021885	163	31	024503	117	28	030760	180	10-1
021885	175	10	024523	113	60	030775	177	6
022114	145	12-1	024523	165	57-2	030848	113	51
022205	119	27	024633	133	34	030895	177	4
022249	163	11-4	024634	135	42	030896	177	3
022392	125	10	024637	119	5	030902	177	25
022392	129	20	024672	119	29	030913	167	2
022559	177	26	024673	157	40	030946	167	28
022850	121	34-1	024674	147	8	030966	107	27
022851	121	32-1	024683	161	22	030985	103	14
022852	121	35	024683	163	23	031014	107	35
023041	157	18-1	024690	119	26	031015	107	36
023041	165	40-1	024701	147	9	031083	113	59
023413	125	21	024701	147	24	031083	125	14
023413	157	42	024704	119	3	031083	139	5
023467	145	17	024731	169	7	031083	139	26
023476	157	23	024732	169	8	031083	147	4
023567	143	4	024778	139	38	031083	147	23
023567	145	12-2	024786	119	4	031083	161	28
023609	143	21-5	024836	151	46-3	031086	161	8
023609	145	32-12	024844	161	47	031086	163	4-2
023651	141	15-1	024844	163	37	031110	127	28-3
023651	145	33-1	024858	119	2	031110	131	3-2
023652	141	15-2	024905	113	56	031145	115	14
023652	145	32-2	024906	119	6	031152	125	8-2
023653	143	22	024907	119	7	031154	101	14
023653	145	33-3	024922	113	55	031154	139	7
023706	141	13-1	024947	167	29-1	031168	127	29-3
023706	145	32-1	024950	141	11	031223	139	12
023707	141	13-2	024953	139	17	031223	149	10
023707	145	32-2	024953	147	3	031228	141	14
023708	141	13-3	024953	149	15	031228	161	40
023708	145	32-3	024953	165	58	031228	163	33-1

PART NO	PAGE	REF	PART NO	PAGE	REF	PART NO	PAGE	REF
031281	101	18	031783	109	38	031795	139	28
031506	121	19	031783	113	38-2	031795	147	17
031506	137	4	031783	119	19	031797	139	11
031551	137	16	031783	149	29	031797	149	9
031555	125	24	031783	151	45	031801	157	7
031557	147	27	031783	153	5	031810	109	37-2
031559	147	16	031783	157	11	031812	155	9
031603	143	23	031783	157	16	031813	159	10
031606	175	9	031783	161	11	031814	139	2
031607	175	8	031783	161	14-2	031823	175	12
031624	125	17-2	031783	161	38	031842	169	11-1
031631	125	11	031783	163	10-2	031843	177	19-2
031655	145	31	031783	163	13	031844	161	21
031656	141	27	031783	163	27	031844	163	20
031656	143	14	031783	173	15	031844	165	41
031658	175	4	031784	109	39	031844	169	11-2
031665	145	16	031784	119	20	031847	141	16
031682	143	20	031784	149	30	031847	145	27
031714	147	5	031784	153	6	031847	157	10
031718	147	28	031784	161	12	031847	157	21
031724	125	17-1	031784	163	14	031847	157	36
031752	121	18	031786	105	25	031847	161	5
031752	141	26	031786	115	17	031847	163	7
031752	143	27	031786	115	21	031848	177	16-2
031752	145	21	031786	119	14	031849	141	17
031752	157	26-2	031786	121	2	031849	143	30
031753	113	38-3	031786	121	27	031849	145	26
031753	121	17	031786	125	26-2	031849	155	6
031754	141	25	031786	127	34	031849	157	9
031754	143	28	031786	131	2	031849	157	20
031754	145	20	031786	139	3	031849	157	31
031754	157	26-1	031786	139	42-2	031849	157	37
031758	125	23	031786	141	10	031849	159	2
031762	175	5	031786	141	22	031849	161	4
031764	125	12-1	031786	155	10	031849	161	18
031764	125	18-2	031786	157	43	031849	163	6
031764	143	24	031786	159	9	031855	169	19
031764	175	6	031786	163	17	031855	173	9-1
031765	125	12-2	031787	105	26	031857	173	9-2
031765	175	7	031787	115	16	031861	161	20
031768	143	16	031787	119	15	031861	163	24
031768	145	19	031787	121	3	031861	165	42
031768	145	29	031787	121	26	031866	163	19
031768	175	2	031787	127	33	031872	155	7-2
031770	141	28	031787	139	42-3	031872	161	19
031770	143	13	031789	113	57	031872	169	21
031770	143	19	031789	139	19	031872	171	27
031770	145	15	031789	149	5	031872	173	7
031770	145	18	031789	149	8	031872	173	18
031770	145	30	031789	149	19	031873	141	21
031770	175	3	031789	151	36	031873	143	29
031772	143	18	031789	161	25	031873	145	23
031774	147	13	031789	161	40-3	031873	157	19
031776	125	18-1	031789	163	33-3	031873	157	30
031776	147	12	031789	165	53	031875	157	6
031777	147	6	031792	139	29	031891	155	8
031780	161	32	031792	147	18	031897	169	10-1
031780	165	46	031792	175	15	031899	169	10-2

PART NO	PAGE	REF	PART NO	PAGE	REF	PART NO	PAGE	REF
031904	161	9	033251	169	24-3	033693	167	9
031904	163	3	033258	169	24-2	033764	167	18-1
031907	177	16-3	033259	169	24-1	033769	173	20
031911	165	48	033259	173	4	033865	167	8
031914	151	48	033299	121	34-2	034119	101	3
031915	149	33	033300	121	32-2	034171	117	33
031917	153	9	033327	180	7	034172	103	19
031918	153	2	033329	129	24	034178	119	28
031931	151	49	033347	175	14	034421	169	14
031935	119	10	033372	159	3	034448	117	22
031937	177	8-2	033381	125	22	034448	117	29
031940	177	5	033381	157	38	034448	133	26
031999	169	13-1	033381	163	18	034448	137	2
032161	141	18	033482	141	24	034449	117	24
032183	129	3	033482	143	26	034449	133	18
032183	129	15	033482	145	22	034449	133	22
032270	161	26	033530	147	7	034449	133	24
032315	145	28	033622	117	7	034449	135	39
032384	107	7	033641	107	38	034449	135	46
032438	161	35	033642	111	20	034449	137	8
032438	165	45	033642	115	10	034470	139	21
032480	161	44	033644	105	19	034470	149	6
032480	163	34	033644	109	2	034472	161	15
032564	141	4-1	033644	109	17	034472	163	9
032565	141	4-2	033644	131	7	034477	109	30
032566	141	4-3	033645	117	38	034485	169	6-1
032635	101	21	033647	107	32	034565	117	26
032635	103	23	033647	107	33	034565	135	52
032642	101	23	033647	109	7	034567	119	37
032643	101	22	033647	111	19	034575	161	34
032654	111	1	033648	109	5	034575	165	44
032655	111	3	033648	131	14	034589	139	36
032659	105	5	033649	109	21	034590	143	12
032662	105	9	033651	103	35	034616	159	7
032663	105	10	033651	135	53	034713	147	29
032669	107	19	033654	109	8	034731	151	46-2
032671	107	23	033654	109	31	034922	125	20-9
032672	107	17	033654	111	16	035109	119	30
032682	107	9	033654	117	13	035109	161	3
032702	117	10	033654	117	37	035109	163	5-1
032740	103	17	033654	135	50	035271	147	25
032741	103	18	033656	101	13	035303	169	6-2
032804	101	20	033656	111	31	035411	119	9
032810	107	29	033660	107	20	035711	165	49
032881	105	23-1	033661	103	20	035720	177	8-1
032882	105	23-2	033661	107	8	035747	121	7
032903	105	17	033668	109	20	035825	167	21
032905	111	29	033668	113	46	035825	169	9-2
032907	117	12	033668	115	9	036043	167	25
032909	107	1	033668	117	27	036121	143	8
032916	139	31	033668	131	8	036138	139	16
032916	147	20	033668	131	19	036138	149	14
032923	145	32-13	033668	131	22	036192	169	2-1
032923	165	50	033676	101	4	036206	139	15
032973	180	11	033676	109	9	036206	149	13
032974	180	5	033678	101	9	036211	103	10
033052	163	15	033682	167	16	036211	109	19
033228	159	1	033684	167	11	036211	109	25

PART NO	PAGE	REF	PART NO	PAGE	REF	PART NO	PAGE	REF
036211	109	27	037453	161	2	038892	125	20- 7
036211	111	13	037601	167	6	038909	115	2
036211	111	23	037601	169	5-1	038910	133	5-1
036211	111	28	037603	167	7	038911	133	5-2
036211	135	44	037603	169	4-1	038914	133	5-3
036211	157	34	037605	167	15	038967	177	22-1
036232	171	25	037605	169	3-1	038968	177	17
036418	159	6	037745	119	17	038969	177	15
036464	151	40	037745	121	5	038980	109	36
036464	169	15	037792	147	11	038985	153	1
036473	167	23	037821	123	2	039074	151	39
036477	167	32	037821	139	13	039076	121	25
036479	167	26-1	037821	151	52	039089	139	14-1
036483	167	29-2	037833	161	17	039140	133	29
036490	167	26-2	037833	169	23-1	039144	167	22
036492	151	41	037833	173	5-1	039154	143	25
036492	169	16	038042	169	13-2	039155	143	9
036493	113	52	038042	173	3	039172	151	50
036538	169	12	038132	143	17- 6	039172	165	38
036539	169	1-1	038153	121	9	039181	127	27-1
036544	167	33	038153	123	6	039181	127	27-4
036545	167	34	038193	119	12	039181	127	27-5
036557	180	10-2	038193	121	16	039276	143	15
036590	167	24	038193	121	37	039306	153	13-1
036614	121	10	038221	121	8	039317	119	23-2
036614	121	24-1	038221	123	9	039318	149	25
036614	125	4	038233	119	21	039323	143	21-6
036614	125	5-2	038296	139	8	039330	169	1-3
036614	141	8	038296	149	11	039334	121	12-1
036614	145	8	038376	139	32	039355	157	1
036622	121	24-2	038384	139	24	039356	177	18
036622	125	5-1	038384	149	1	039361	177	11
036622	141	30	038392	139	14-2	039364	177	10
036622	143	1	038392	149	12-2	039365	177	13
036626	167	30	038395	149	12-1	039390	157	2
036627	167	31	038435	125	13	039408	177	20
036630	167	35	038440	127	29-2	039408	177	21
036650	143	2	038442	141	3	039425	177	23
036650	145	1	038445	125	6	039426	177	24
036652	151	46-1	038445	129	1	039460	169	1-4
036729	115	18	038471	153	11-2	039470	157	3
036730	151	42	038523	161	31	039470	177	16-1
036737	153	3	038530	125	20- 8	039471	177	19-1
036821	113	53	038608	143	17- 1	039498	179	12
036829	167	20	038609	143	17- 3	039523	149	2
036837	169	17	038610	143	17- 4	039523	165	43
036842	167	1	038611	143	17- 5	039550	119	22
036849	121	11	038682	147	1	039550	163	1
036869	133	30	038684	147	21	039608	161	46
037148	159	8	038698	147	14	039608	163	35
037305	119	16	038786	105	11	039628	123	1
037305	121	6	038786	127	32	039632	153	12-1
037323	161	43	038792	125	20- 3	039633	153	12-2
037323	163	32	038793	125	20- 5	039634	153	12-3
037347	123	3	038794	125	20- 6	039637	149	23
037393	113	54	038862	123	10	039638	149	27
037417	177	2	038865	125	7-2	039639	149	31
037453	119	42	038891	125	20- 4	039651	119	25

PART NO	PAGE	REF	PART NO	PAGE	REF	PART NO	PAGE	REF
039652	119	24	040185	173	2-2	040281	109	26
039666	151	47	040190	105	12	040282	109	1
039667	153	11-1	040190	127	31	040283	109	32
039668	149	22	040191	131	4	040284	109	28
039669	149	35	040193	125	19-1	040285	109	12
039685	180	13-2	040194	131	17	040286	109	23
039686	153	13-2	040200	131	16	040287	109	24
039746	157	14-2	040226	171	28-1	040288	109	13
039747	171	26-2	040229	131	18	040288	109	33
039747	173	17-2	040231	115	3	040289	109	16-1
039782	149	32-1	040232	103	25	040290	109	15
039783	149	32-2	040233	103	39	040291	109	14
039784	149	26	040234	103	22	040292	109	18
039785	149	21	040235	103	40	040293	111	2
039789	143	17- 2	040237	103	30	040294	105	4
039790	125	20- 1	040238	107	42	040295	105	6
039790	161	6	040239	103	15	040296	105	7
039790	163	2	040240	103	3	040297	105	18
039846	169	4-4	040241	103	7	040298	105	20
039847	169	5-4	040242	103	8	040299	105	13
039848	163	29-4	040243	103	9	040300	105	21
039858	169	23-2	040244	103	16	040301	105	14
039858	173	5-2	040245	103	5	040302	105	15
039867	129	8	040246	103	12	040303	105	16
039868	149	32-4	040247	103	11	040304	105	22
039869	149	20	040248	103	13	040305	107	24
039870	149	32-5	040250	103	29	040306	107	21
039871	149	34	040251	103	21	040307	107	18
039872	153	7	040252	101	12-1	040308	107	22
039873	149	32-6	040253	101	12-2	040309	107	25
039874	153	4	040254	101	17	040310	107	6
039875	153	8	040255	101	5	040311	107	3
039889	125	19-2	040256	111	35-1	040312	107	2
039919	121	38	040257	111	7	040313	107	14
039928	169	20-1	040258	111	12	040314	107	11
039928	173	8-1	040259	111	8	040315	107	10
039929	169	20-2	040260	111	11	040316	107	5
039929	173	8-2	040261	111	6	040317	107	13
039949	115	23	040262	111	22	040318	107	12
040026	119	35	040263	111	5	040319	107	15
040028	109	35-1	040264	111	21	040320	107	26
040030	125	25	040265	111	34	040321	107	30
040030	175	11	040266	111	24	040322	107	28
040032	157	13	040267	111	27	040323	107	31
040033	157	29	040268	111	25	040324	107	37
040034	163	22	040269	111	26	040325	107	41
040036	141	7	040270	113	42	040327	115	1
040041	113	37	040271	113	39-1	040329	135	43
040042	113	36	040272	113	48	040330	133	12
040131	109	34	040273	113	43	040331	133	13
040151	103	6	040274	113	45	040332	133	15
040154	117	36	040275	113	49	040333	133	11
040162	119	40	040276	113	41-1	040334	133	9
040162	121	21	040276	113	41-2	040335	133	8
040163	119	11	040277	113	47-1	040336	133	1
040163	121	15	040278	113	44-1	040337	133	2
040164	121	31-1	040279	101	24	040338	133	3
040185	171	28-3	040280	109	3	040339	133	4

PART NO	PAGE	REF	PART NO	PAGE	REF	PART NO	PAGE	REF
040340	133	6-1	040444	143	17- 7	041429	133	35
040341	133	31-1	040513	139	39	041430	117	19
040342	133	20	040542	159	5	041431	117	18
040343	133	16	040543	159	11	041432	103	32
040344	137	1	040544	139	30	041432	119	32
040346	133	33	040544	147	19	041433	111	17
040347	135	51	040564	149	32-3	041434	111	14
040348	135	54	040966	139	40	041435	115	8
040349	115	11	041018	157	15	041436	101	6
040350	117	8	041029	125	16-2	041437	133	6-2
040351	117	11	041039	127	28-2	041437	133	31-2
040352	117	15	041039	131	3-3	041438	117	34
040353	117	16	041046	175	1	041438	135	48
040354	117	4	041048	127	27-3	041439	111	32
040355	117	6	041063	115	12-2	041440	111	4
040356	117	1	041063	163	25-2	041441	111	10
040357	111	18	041064	163	11-2	041442	111	33
040358	111	15	041068	171	28-4	041443	135	45-1
040359	117	32	041081	171	34	041448	113	63
040360	117	23	041081	173	22	041449	133	32
040361	117	20	041133	155	16	041455	161	30
040362	131	10	041136	155	1-1	041462	155	11
040363	131	11	041149	157	35	041474	177	7-1
040364	131	12	041164	121	31-2	041475	177	14
040365	127	28-1	041192	155	17-1	041476	177	1
040365	131	3-1	041193	155	18-1	041477	177	12
040367	117	31	041193	155	18-3	041486	165	61-2
040368	115	12-1	041194	155	12	041713	139	27
040368	161	36	041198	103	31	041719	139	34
040368	163	25-1	041198	119	31	041729	139	1
040369	161	13	041300	101	1	041778	121	36
040369	163	11-1	041409	133	23	042011	143	17- 9
040370	105	3-1	041410	135	45-2	042089	151	55
040371	105	3-2	041411	133	25	042101	111	35-2
040372	105	3-3	041412	135	49	042102	113	39-2
040373	105	3-4	041413	135	47	042103	113	47-2
040374	105	2	041414	133	19	042104	113	44-2
040375	105	1	041415	137	7	042105	109	16-2
040376	105	24-1	041416	137	6	042106	109	29-2
040377	105	24-2	041417	109	11	042107	139	41
040378	105	24-3	041418	111	9	042146	115	15-2
040379	105	24-4	041419	117	21	042156	169	3-2
040380	117	30	041420	115	7	042157	169	4-2
040381	113	40	041421	103	4	042158	169	5-2
040382	113	61	041422	107	4	042159	169	2-2
040383	133	14	041423	133	7	042161	163	29-2
040384	133	10	041424	117	3	042162	169	1-2
040385	180	3	041424	117	14	042209	121	31-3
040386	180	4	041425	117	2	042307	180	8-2
040387	180	1-2	041426	109	22	042336	153	10
040388	180	2	041426	117	5	042582	115	15-1
040389	133	28	041426	117	17	042588	177	22-2
040390	180	12	041427	103	33	042589	177	7-3
040400	125	16-1	041427	109	29-1	042592	115	27
040425	165	61-1	041427	119	33	042613	115	22
040426	165	39-1	041427	131	9	042614	115	26
040426	169	18-1	041428	103	34	042627	180	1-1
040427	159	4	041428	119	34	042630	179	19

PART NO	PAGE	REF
042638	179	16
042703	155	3-1
042719	155	19
042893	167	5
042893	169	9-1
042898	155	5-1
042916	115	25
043223	179	13-1
043248	179	15
043271	155	3-3
043272	155	1-3
043286	155	7-1
043480	161	23
043502	180	13-1
043536	179	1
043537	179	2
043538	179	3
043539	179	4
043539	179	5
043540	179	6
043541	179	17
043668	179	18
043676	179	9
043708	177	7-2
043726	155	4-1
043737	173	11-1
043746	173	10-1
043747	173	21
043750	180	14
043775	179	8
043803	165	39-2
043803	169	18-2
043818	173	10-2
043840	171	28-2
043840	173	2-1
043902	165	52
043907	179	14
044079	155	18-2
044080	179	7
044097	155	17-2
044123	171	28-5
044343	155	2
044347	180	10-3
044620	173	1-1
044639	179	10
044642	180	15
044730	155	4-2
044737	165	61-3
044762	155	5-2
044765	173	1-2
044766	165	39-3
044766	173	11-2
044820	173	1-3
044845	165	51
044876	121	12-2
044882	143	17- 8
044899	155	1-2
045010	179	13-2

PART NO	PAGE	REF
045011	155	3-2
045019	127	29-1
045094	169	9-3
045098	171	35
045098	173	23-1
045099	173	23-2
045278	137	22
046236	171	28-6
046404	137	17
046406	137	20
046407	137	21
046408	137	19
046409	137	18
046410	109	35-2
050201	171	32-1
050201	173	12-1
050234	171	30
050234	173	13
050374	171	32-2
050374	173	12-2
200120	161	7
200120	163	4-1
200125	169	22
200125	171	29
200125	173	6
200125	173	14
200127	147	15
200429	103	1
200429	115	5
299814	115	4
301083	103	2
301083	115	19
301136	147	10
303007	157	14-1
303008	171	26-1
303008	173	17-1
303009	157	5
303012	157	4
303107	161	37
303107	163	26

