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13

14

15

16

ITEM

PART

DESCRIPTION

QTY.

BRONZE P/N

COMMENTS

1

217-3360-00-0

EXPANSION PLUG

1

2

088-0040-00-0

1/2 NPT TO 1/2 TUBE CONNECTOR BRASS

3

3

250-0308-32-0

308J BEARING (1304-405)

2

4

DRIVE GEAR

DRIVE GEAR

1

5

097-0810-01-0

WASHER-5/16 STL ZINC PL FLAT

12

6

018-1404-02-0

CSW HH 5/16-18 X 0.50 G5Z

12

7

007-00137-000

TUBE, COOLING, 1/2" O.D., STRT

1

8

046-5270-01-0

GASKET, COVER, DRIVE UNIT

1

9

044-0840-00-0

COVER, DRIVE UNIT

1

10

017-0300-00-0

SSA-95XD KEY

1

11

296-2810-00-0

OIL SEAL

1

12

077-1500-05-0

RETAINING RING

1

13

037-2222-00-0

DRIVE SHAFT, HG GEARBOX

1

14

115-1710-00-0

1410, 1510, 1610 COMPANION FLANGE

1

OPTIONAL

15

097-0890-03-0

IMPELLER WASHER

1

16

018-2412-02-0

SCREW-5/8-11 X 1-1/4

1

17

017-0300-02-0

KEY

1

18

250-5210-20-0

BEARING, 2510W

1

19

077-3540-00-0

RETAINING RING

2

20

046-0050-00-0

GASKET 46DW 115

1

21

008-0930-00-0

CAP, REAR BRG, HG

1

22

110-6110-08-0

F-110(110-08)10MP SVC REPAIR

1

23

097-3170-08-0

317-08 WASHER-10MP SERVICE REP

1

24

018-2012-02-0

CSW HH 1/2-13 X 1.25 ZINC

4

25

017-5030-50-0

PINION KEY

1

26

PINION GEAR

PINION GEAR

1

SEE TABLE "C"

27

159-1690-00-0

PSD-HG BEARING SPACER

1

28

082-0415-00-0

NIPPLE, 1/2 NPT X 2"

1

29

082-0412-00-0

ELBOW, 1/2 FNPT

1

30

082-0414-00-0

ELBOW, M X F 1/2 NPT

1

31

044-0310-00-0

AIR VENT

1

32

101-2210-00-0

NAMEPLATE

1

33

018-5002-00-0

SCREW #4 X ¼ UNC PLATED

2

34

046-6770-00-0

GASKET INBOARD HEAD FOR HG

1

35

250-5308-00-0

BEARING, ANGULAR CONTACT, DOUBLE ROW

1

36

296-3000-00-0

OIL SEAL

1

37

002-0690-00-0

HEAD, INBOARD

1

002-0690-01-0

INCLUDES ROLL PIN 064-0408-02-0

38

046-1640-00-0

GASKET

2

39

040-4490-00-0

O-RING, Ø9.975 X 0.275"

2

40

018-1812-25-0

SCREW, 7/16-14 X 1.25, GR8

24

41

CLEARANCE RING

CLEARANCE RING

2

SEE TABLE "E"

42

296-5312-03-0

MECHANICAL SEAL

1

43

037-5130-03-0

IMPELLER SHAFT

1

44

064-5070-01-0

PIN-5/32X2L SST COTTER

1

45

110-7040-00-0

ZS-274 NUT-IMPELLER

1

46

017-0110-00-0

IMPELLER KEY

2

47

SUCTION HEAD

SUCTION HEAD 6IN VICT

1

SEE TABLE "E"

SEE TABLE "E"

48

INDUCER

INDUCER

1

SEE TABLE "F"

49

IMPELLER

QFLO/DSI IMPELLER

1

SEE TABLE "F"

50

004-0581-00-0

HG GEARBOX

1

51

217-0501-00-0

PLUG-3/4 NPT M.I.

1

217-0501-01-0

52

082-0425-00-0

ELBOW, 1/2" COMP X 3/8" COMP

1

53

340-0490-00-0

BRAIDED HOSE ASSEMBLY, 14.5"

1

54

001-5132-00-0

BODY, VOLUTE, DSD/RSD

1

001-5132-01-0

55

142-0390-00-0

SEAL RING, SQUARE

1

56

FLANGE

FLANGE

1

57

082-0203-02-0

ELBOW 1/4 NPT x 3/8 COMPRESSION - 90°

1

58

SCREW, 7/16-14

SCREW, 7/16-14

4

SEE TABLE "D"

SEE TABLE "D"

59

217-0201-00-0

1/4 NPT SQUARE HEAD STEEL PLUG

2

60

082-0614-00-0

BUSHING, 1 NPT X 1/2 NPT

2

61

082-3028-00-0

FITTING 3/8 HOSE BARB x 3/8 TUBE

4

62

340-0490-00-0

BRAIDED HOSE ASSEMBLY, 22"

1

63

217-0401-00-0

PLUG, SQU, 1/2 NPT

5

64

217-0301-00-0

PLUG-3/8 NPT SQUARE HEAD

2

217-0301-01-0

65

082-0303-02-0

ELBOW, 3/8" COMP X 3/8 MNPT

1

66

082-90400-102

TEE, 1/2" FPT X 3/8" COMP

1

67

018-2012-25-0

SCRW, 1/2-13x1.25,GR8,ZINC PL

6

68

217-0501-03-0

PLUG, 3/4 NPT

2

69

217-0401-08-0

PLUG-1/2 NPT M.I. MAGNETIC

2

ITEM

PART

DESCRIPTION

QTY.

COMMENTS

1

082-0318-02-0

ELBOW, 3/8 COMP X 3/8 COMP, 90 DEG

1

2

082-0557-02-0

ADAPTER, 3/4 NPT X 3/8 COMPRESSION

1

3

217-0601-00-0

PLUG, SQU, 1NPT

2

4

082-0203-02-0

ELBOW 1/4 NPT x 3/8 COMPRESSION - 90°

1

5

007-3710-00-0

COOLING TUBE

1

6

082-3071-02-0

TEE, 3/8 CPRSN UNION

1

7

142-0520-00-0

SEAL RING

1

8

007-3730-01-0

ADAPTER, FLYWHEEL HOUSING

1

SAE #3 & #4

9

018-1612-02-0

SCREW-3/8-16 X 1-1/4 ZINC PL

12

USE (12) 218-1015-02-0 FOR SAE METRIC FLANGES

10

097-0140-01-0

WASHER, LOCK SPLIT 0.38 ZINC

12

11

018-1607-25-0

CSW HH 3/8-16x0.88 GR8

8

WASHERS INCLUDED WITH COUPLING

12

005-1281-00-0

10" ELASTOMERIC COUPLING

1

13

005-1291-00-0

11.5" ELASTOMERIC COUPLING

1

14

296-3540-00-0

OIL SEAL

1

15

077-1500-05-0

RETAINING RING

1

USE WITH #4 BELLHOUSING ONLY. DO NOT USE WITH #3 BELL HOUSING

16

097-0580-00-0

WASHER LOCK 1/2" STEEL ZINC

8

17

018-2020-02-0

1/2-13 X 2.00 HEX HEAD CAP SCREW

4

18

018-2024-02-0

SCREW, 1/2-13 X 2.5"

4

19

044-0310-00-0

AIR VENT

1

20

082-0414-00-0

ELBOW, M X F 1/2 NPT

1

21

082-0412-00-0

ELBOW, 1/2 FNPT

1

22

082-0415-00-0

NIPPLE, 1/2 NPT X 2"

1

23

008-0070-00-0

SPEEDOMETER DUST CAP

1

24

048-0090-00-0

TACH PANEL ADAPTER

1

SAE 13/64 WITH 7/8-18 THREAD

25

013-0010-00-0

TACH/FLEX SHAFT

1

26

007-0940-00-0

RATIO ADAPTER

1

27

007-0070-00-0

ADAPTER

1

28

064-1236-00-0

SPRING PIN 3/8 X 2-1/4 LG

1

29

008-0930-01-0

CAP, REAR BRG, HG

1

30

046-0050-00-0

GASKET 46DW 115

1

31

082-0303-02-0

ELBOW, 3/8" COMP X 3/8 MNPT

1

78

217-0401-08-0

PLUG-1/2 NPT M.I. MAGNETIC

2

HALE TYPE RSD SERIES PUMP ASSEMBLY

PROJECTION:

TABLE "C" - DRIVE AND PINION GEARS

	DRIVE GEAR	PINION GEAR		
PUMP MODEL	GEAR PART NO.	NO. OF TEETH	GEAR PART NO.	NO. OF TEETH
RSD-23	031-1460-00-0	71	031-5240-00-0	30
RSD-21	031-1610-00-0	69	031-5220-00-0	32
RSD-20	031-1470-00-0	67	031-1440-00-0	34
RSD-18	031-1480-00-0	65	031-5200-00-0	36
RSD-15	031-1490-00-0	62	031-5180-00-0	39
RSD-14	031-1500-00-0	59	031-5160-00-0	42
RSD-12	031-1510-00-0	56	031-1520-00-0	45

NOTES:

1.

ALL FASTENERS SHALL BE INSTALLED WITH A THREAD LOCKING ANAEROBIC ADHESIVE/SEALANT: LOCTITE #243 HIGH TEMPERATURE THREADLOCKER OR EQUIVALENT.

2.

CAUTION: ALL FASTENERS ON THIS UNIT HAVE BEEN SELECTED PER THEIR APPLICATION. HALE PRODUCTS DOES NOT RECOMMEND REPLACING FASTENERS WITH ANYTHING OTHER THAN HALE PART NUMBERS PROVIDED. REPLACING WITH A WEAKER ALTERNATIVE POSES A SAFETY RISK.

3.

MECHANICAL SEALS ARE TO BE INSTALLED USING PAC-EASE RUBBER LUBRICANT EMULSION OR EQUIVALENT, A SOFT, CLEAN PUSHER TUBE, AND A SEAL RAMP.

4.

FOR MOUNTING DIMENSIONS, SUCTION/DISCHARGE OPTIONS AND ANODE/THERMAL RELIEF VALVE OPTIONS, REFER TO LATEST REVISION OF PL1091.

5.

FOR BRONZE VERSION PART NUMBERS, SEE TABLES "A", "D" AND "E".

6.

FOR VOLUTE ORIENTATIONS AND INSTALLATION INFORMATION, SEE PL1091.

7.

ANODE REQUIRES SPACER 159-0010-01-0 (IRON) OR 159-0010-21-0 (BRONZE).

8.

WHEN USING ALTERNATE COOLER, SYSTEM MUST BE EQUIPPED WITH AIR BLOWOUT.

TABLE "D" - 'K' PORT FLANGE OPTIONS

	IRON	BRONZE		
FLANGE TYPE	FLANGE P/N	HARDWARE (QTY 4)	FLANGE P/N	HARDWARE (QTY 4)
BLANK (STANDARD)	115-0050-00-0	018-1812-25-0	115-0050-01-0	018-1812-05-0
1-1/4" NPT	115-1260-00-0	018-1812-25-0	115-1260-01-0	018-1812-05-0
2" NPT	115-0060-00-0	018-1812-25-0	115-0060-02-0	018-1812-05-0
2-1/2" NPT	115-0070-00-0	018-1822-25-0	115-0070-01-0	018-1822-05-0
3" NPT	115-0080-00-0	018-1824-25-0	115-0080-01-0	018-1824-05-0
TRV & TRV-L (SEE PL729)	115-1260-00-0	018-1812-25-0	115-1260-01-0	018-1812-05-0

ALLOY OR MAGNESIUM ANODE (SEE NOTE 7)

SEE PLATE 869

018-1820-25-0

SEE PLATE 869

018-1820-05-0

TABLE "E" - SUCTION HEAD & CLEARANCE RING

	750 - 1250 GPM	1500 GPM
6" VIC SUCTION HEAD - IRON	002-5181-00-0	002-5401-00-0
6" VIC SUCTION HEAD - BRONZE	002-5181-01-0	002-5401-01-0
CLEARANCE RING	321-5080-00-0	321-0040-00-0

18

1

19

1

20

1

21

1

25

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26

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27

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19

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28

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