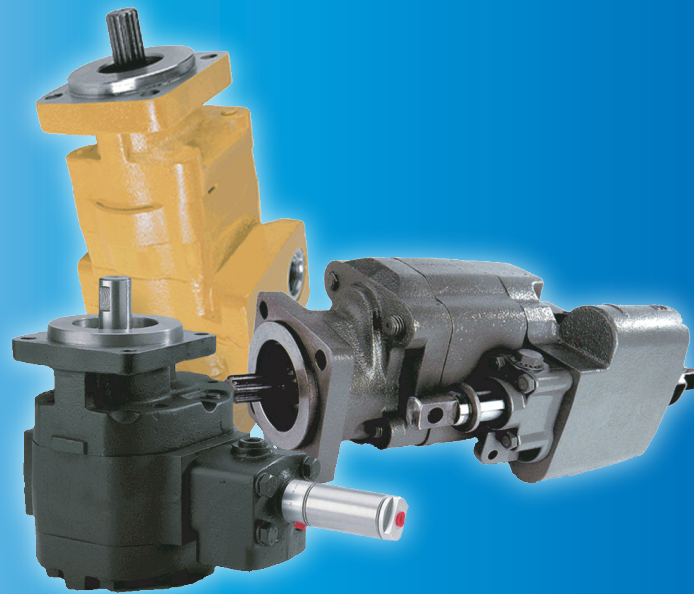


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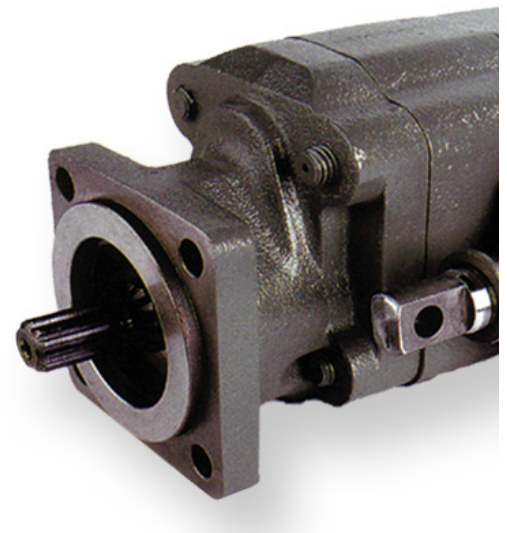
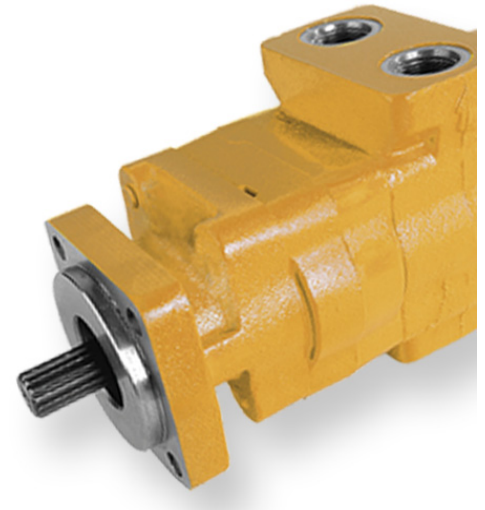
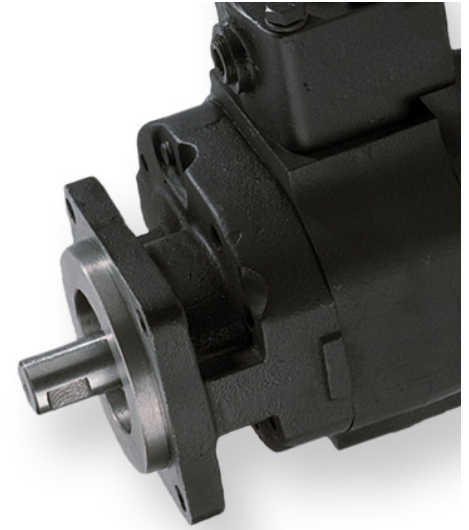
THIS CATALOG REPLACES ALL OF OUR PREVIOUS GEAR CATALOGS OTHER THAN THE METARIS GEAR CODE BOOK #M5B-6002. ALL PREVIOUS METARIS GEAR CATALOGS IN YOUR POSSESSION SHOULD BE DESTROYED.

2007

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All items listed are Metaris manufactured; OEM and reference part numbers are displayed for reference purposes only.

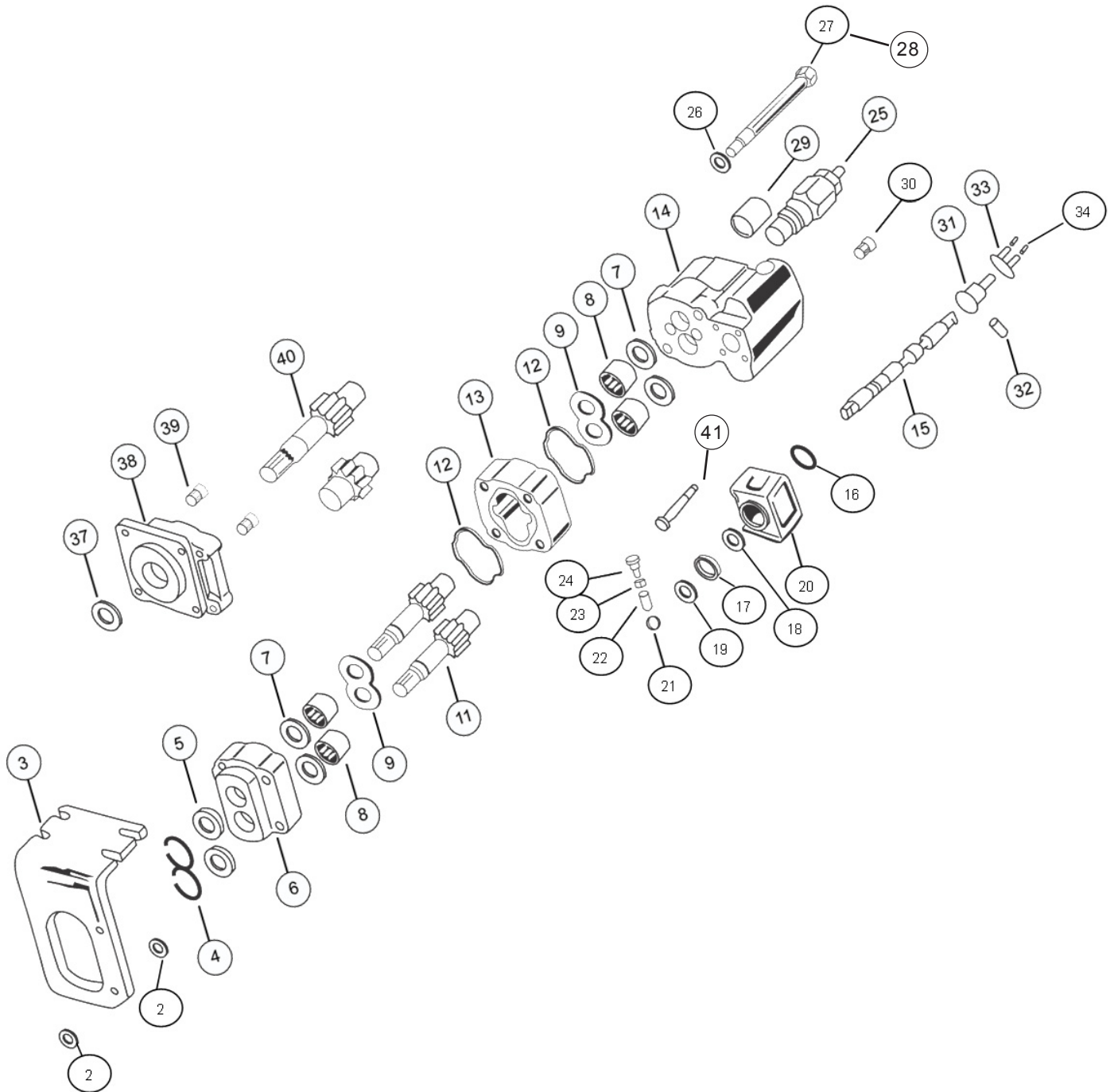
MH 101 / 102



PICK THE CORRECT SERIES		MHG SERIES		MHC SERIES	
DRW. NO.	DESCRIPTION	METARIS NO.	ALTERNATIVE NO.	METARIS NO.	ALTERNATIVE NO.
Not Shown	MHC ONLY HEX NUT	N/A	N/A	X42-11-16000	391-1451-076
2	MHC ONLY WASHER	N/A	N/A	X45-10-17005	391-3784-028
3	MHC 101 BRACKET OPTIONAL	N/A	N/A	A11-96-39999	314-0100-005
4	MH 101 SNAP RING	X05-01-45080	391-2681-487	X05-03-50120	391-2681-493
5	MH 101 LIP SEAL	X83-36-02709	391-2883-119	X83-36-03009	391-2883-096
6	MH 101 SHAFT END COVER	A13-10-21100	308-5016-201	A11-10-21100	314-5039-201
7	RING SEAL	X81-76-02706	391-2585-006	X81-76-03305	391-2585-009
8	ROLLER BRG.	X03-25-12743	391-0381-068	X03-25-13349	391-0381-059
9	THRUST PLATE	A30-70-10000	391-2185-013	A25-70-10000	391-2185-012
Not Shown	POCKET SEAL	X85-11-00002	391-2882-086	X85-11-00002	391-2882-050
11	MH 101 SHAFT & GEAR SET	A13-50-XX221	312-29XX-842	A11-50-XX131	314-29XX-640
12	GEAR HOUSING GASKET	X85-11-09203	391-2884-019	X85-11-10803	391-2884-021
13	GEAR HOUSING	A13-32-XX000	308-80XX-901	A11-32-XX000	314-80XX-100
14 a	MHG 101 PORT END COVER	SPECIAL ORDER	308-3910-902	A11-22-01431	314-3910-903
14 b	MHG 102 PORT END COVER	SPECIAL ORDER	308-3910-901	A12-22-01431	314-3910-904
15	SPOOL VALVE	A13-75-15000	308-4000-001	A11-75-15000	314-4000-001
16	QUAD RING	X86-11-01903	391-1985-014	X81-11-02504	391-2881-103
17	WIPER RING	X83-11-02804	391-2883-147	X83-11-02804	391-2883-147
18	MHC ONLY RETAINER RING	N/A	N/A	X45-19-26003	391-3782-126
19	MHC ONLY SNAP RING	N/A	N/A	X05-04-24160	391-2688-003
20	DETENT CAP	A13-96-14176	308-4000-102	A11-96-14891	314-0100-003
21	DETENT BALL	X03-90-10008	391-0282-009	X03-90-10008	391-0282-009
22	DETENT SPRING	A13-95-00000	391-3581-383	A13-95-00000	391-3581-383
23	LOCK WASHER	X45-17-15004	391-3788-002	X45-17-15004	391-3788-002
24	DETENT RETAINER	A11-60-40000	391-2583-079	A11-60-40000	391-2583-079
25	RELIEF VALVE	A13-75-13000	355-9001-197	A11-75-13000	355-9001-067
26	WASHER	X45-19-15005	391-3782-146	X45-19-17005	391-3784-029
27 a	CAP SCREW / MH101-20	X41-11-XXXXX	391-1401-382	X41-11-XXXXX	391-1401-111
27 b	CAP SCREW / MH101-25	N/A	N/A	X41-11-16191	391-1401-110
28 a	CAP SCREW / MH102 -20	X41-12-06019	391-1401-382	SPECIAL ORDER	391-1425-433
28 b	CAP SCREW / MH102 -25	N/A	N/A	SPECIAL ORDER	391-1425-432
29	OPTIONAL SLEEVE	A11-92-32370	391-3283-052	A11-92-32370	391-3283-052
30	PIPE PLUG	X02-02-23190	391-2282-003	X02-02-23250	391-2282-006
31	SPOOL END CAP	A13-96-23249	391-1881-072	A11-96-23869	391-1881-073
32	SPIRAL PIN	A00-94-30525	391-2085-009	A00-94-30525	391-2085-009
33	BRACKET	A13-96-34168	391-0981-007	A11-96-34884	391-0981-010
34	S.H.C.SCREW	X41-22-06010	391-1402-063	X41-22-06010	391-1402-063
Not Shown	MH 102 SNAP RING	X05-03-56200	391-2686-063	X05-03-77250	391-2686-065
Not Shown	MH 102 SEAL RETAINER	A20-60-10000	391-3381-040	A50-60-10000	391-3383-087
36	MH 102 SPACER	A30-92-38520	391-3383-069	A30-92-38520	N/A
37	MH 102 LIP SEAL	X83-36-02709	391-2883-119	X83-36-03309	391-2883-115
38	MH 102 SHAFT END COVER	A20-10-21420	308-5030-201	A50-10-21420	313-5033-201
39	CHECK VALVES	A00-75-11000	391-3681-001	A00-75-11000	391-3681-001
40	MH 102 SHAFT & GEAR SET 7/8" x 13 tooth spline	A30-50-XX221	312-29XX-130	A50-50-XX221	314-29XX-130
41 a	CAP SCREW / MH101-102	X41-12-06019	391-1433-020	X41-11-08044	391-1401-082
Not Shown	SHAFT KEY	X01-01-61032	391-1781-021	X01-01-61032	391-1781-021
Not Shown	SEAL RETAINER	A13-60-10000	391-2183-124	N/A	N/A

NOTE The **XX** shown in the part number is in place of the size the true value must be placed into the part number when ordering parts.
(eg.) Gear set no. A13-50-XX221 changes to A13-50-15221 for 1.5" gear size
Housing no. A13-32-XX000 changes to A13-32-15000 for a 1.5" housing size
No porting sizes have been indicated all porting must be specified when ordering parts.

MH 101 / 102 CONTINUED



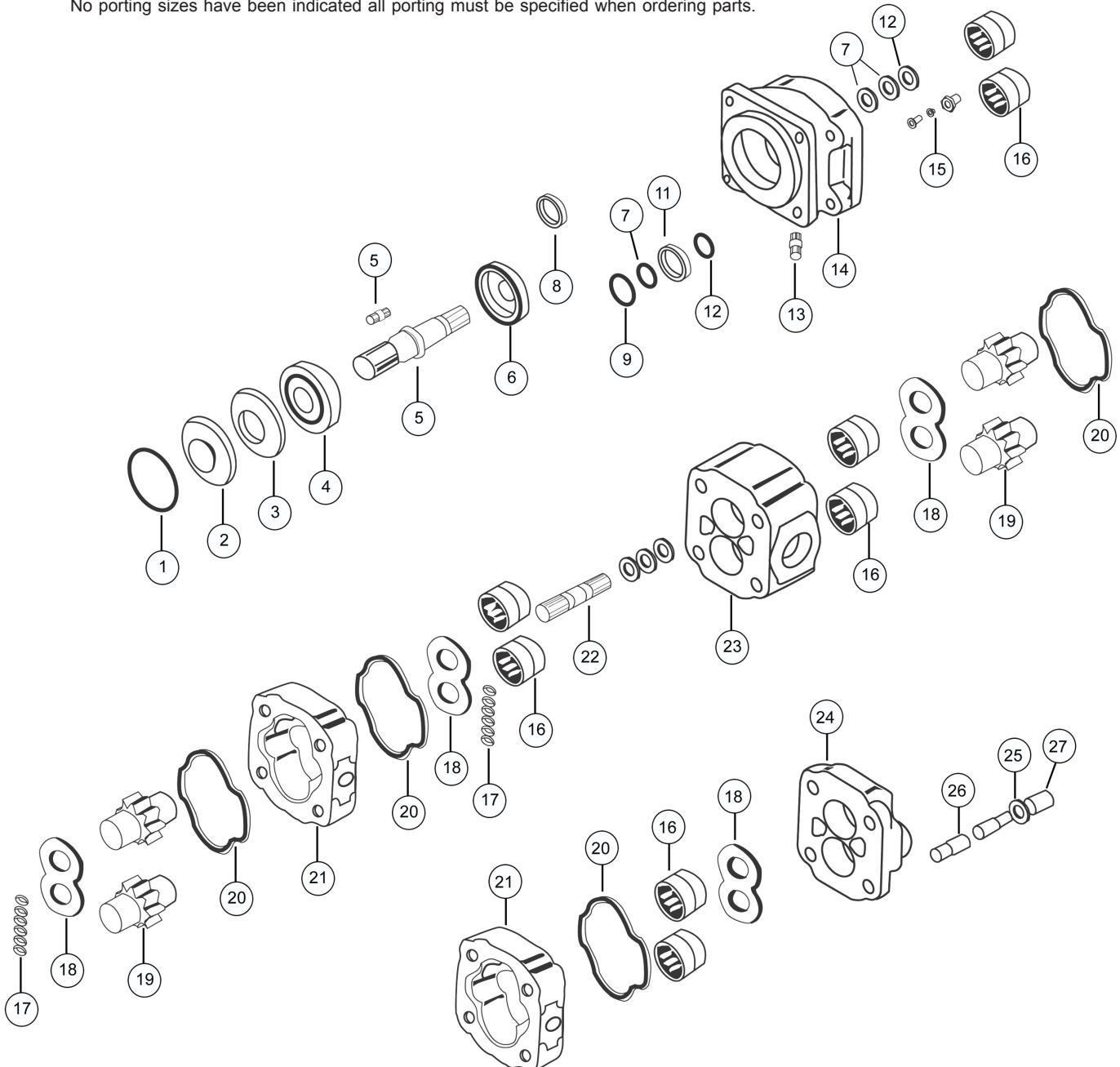
DRW. NO.	DESCRIPTION	METARIS NO.	ALTERNATIVE NO.
1	SPIROL LOCK	X05-03-56200	391-2686-063
2 a	BEARING SEAL	SPECIAL ORDER	391-3181-003
2 b	BEARING SEAL	SPECIAL ORDER	391-3181-009
3 a	BEARING RETAINER	X89-86-02803	391-2687-001
3 b	BEARING RETAINER	X89-86-03003	391-2687-002
4 a	SHAFT BEARING	X03-17-12552	391-0381-045
4 b	SHAFT BEARING	X03-17-12562	391-0381-051
5 a	SHAFT DRIVE KEY	X01-01-61044	391-1781-020
5 b	SHAFT DRIVE KEY	X01-01-61032	391-1781-021
5 c	SHAFT DRIVE KEY	X01-01-61025	391-1781-025
5 d	SHAFT DRIVE KEY	X01-01-81238	391-1781-045
6 a	0.875" DIA. KEYED SHAFT (1/4" x 1/4" x 1") (TYPE 2)	A15-50-00121	302-1134-016
6 b	6 TOOTH SPLINE 0.987" DIA (TYPE 3)	A15-50-00731	302-1134-020
6 c	6 TOOTH SPLINE 0.997" DIA. Long. (TYPE 9)	SPECIAL ORDER	302-1134-023
6 d	1" KEYED SHAFT (1/4" x 3/8 x 1") (TYPE 11)	A15-50-00131	302-1134-026
6 e	0.875" KEYED SHAFT (1/4" X 3/8" X 1-1/4") (TYPE 8)	A15-50-00129	302-1134-021
6 f	0.625" KEYED SHAFT (5/32" x 15/64" x 3/4") (TYPE 13)	A15-50-00111	302-1134-019
6 g	0.875" KEYED SHAFT MALE THREADED END (1/4" x 3/8" x 7/8") (TYPE 15)	A15-50-00127	302-1134-025
6 h	0.875" DIA. 13 TOOTH SPLINE (TYPE 16)	A15-50-00221	302-1134-028
6 i	0.750" DIA. KEYED SHAFT (3/16" x 9/32" x 7/8") (TYPE 17)	A15-50-00169	302-1134-004
6 j	0.999" KEYED SHAFT (1/4" x 3/8" 2 1/4") (TYPE 18)	A15-50-00134	302-1134-027
6 k	1,250" DIA.14 TOOTH SPLINE SHAFT (TYPE 19)	A15-50-00249	302-1134-002
6 L	0.750" DIA. KEYED SHAFT (1/4" x 3/8" x 2") (TYPE 20)	A15-50-00161	302-1134-005
6 m	1.250" KEYED SHAFT (5/16" x 15/32" x 1 3/8") (TYPE 25)	A15-50-00141	302-1134-009
6 n	0.875" DIA. KEYED SHAFT 1/4" x 3/8" x 1 1/4" (TYPE 31)	SPECIAL ORDER	302-1134-022
6 o	0.750" DIA. KEYED SHAFT (3/16" x 3/16" x 2") (TYPE 32)	A15-50-00164	302-1134-013
6 p	0.874" DIA KEYED SHAFT (3/16" X 9/32" X 1-1/4") (TYPE 37)	A15-50-00124	302-1134-032
6 q	0.625" DIA. 9 TOOTH SPLINE SHAFT (TYPE 96)	A15-50-00211	302-1134-039
7 a	BEARING SPACER	A15-92-28520	391-3181-001
7 b	BEARING SPACER	A15-92-38800	391-3181-007
7 c	BEARING SPACER	A15-92-22620	391-3181-012
7 d	BEARING SPACER	A15-92-22520	391-3181-020
8	PUMP SHAFT SEAL	X83-11-02108	391-2883-048
9	O RING SEAL	X81-11-03102	391-2881-215
10	SHAFT O-RING BACKUP RING	A15-82-36020	391-2681-247
11	SEAL RETAINER	A15-60-10000	391-2584-020
12	SHAFT SEAL O RING	X81-15-02204	391-2881-260
13 a	GREASE FITTING STR.	X02-09-22030	391-1281-005
13 b	GREASE FITTING 45 DEG.	SPECIAL ORDER	391-1281-012
14 a	PAD MOUNT S.E.C.	A15-10-21100	302-5095-201
14 b	2 BOLT B PILOT S.E.C. (4" or 101,6 mm pilot)	A15-10-21221	302-5025-202
14 c	4 BOLT B PILOT S.E.C. (4" or 101,6 mm pilot)	A15-10-21420	302-5035-201
14 d	6 BOLT ROUND S.E.C.	A15-10-21650	302-5045-201
14 e	2 BOLT A PILOT S.E.C. (3 1/4" or 82,55 mm pilot)	A15-10-21210	302-5025-201
14 f	4 BOLT ROUND S.E.C.	A15-10-21450	302-5045-202
15	CHECK VALVE	A00-75-11000	391-3681-001
16	NEEDLE BEARING (Ø 1.625" O.D.)	X03-25-12841	391-0381-062
17	THRUST PLATE POCKET SEAL	X85-11-00002	391-2882-050
18	THRUST PLATE	A15-70-10000	391-2185-007
19	GEAR SET ONLY	A15-50-XX000	302-28XX-000
20	BODY GASKET	X85-11-09203	391-2884-019

MH 15 CONTINUED



DRW. NO.	DESCRIPTION	METARIS NO.	ALTERNATIVE NO.
21	PUMP & MOTOR GEAR HOUSING	A15-32-XX000	302-80XX-100
22	CONNECTING SHAFT	A15-50-00500	302-1133-001
23	BLANK BEARING CARRIER	A15-40-00000	302-7300-100
24	PORT END COVER	A15-22-00000	302-3100-100
25	FLAT WASHER (1/2")	X45-19-13005	391-3784-027
26	BOLT (1/2"-UNC)	See page	Fasteners
27	NUTS (1/2"-UNC)	X42-11-13011	391-1471-051
Not Shown	DRAIN PIPE PLUG	X02-03-32110	391-2286-004

NOTE The **XX** shown in the part number is in place of the size the true value must be placed into the part number when ordering parts.
(eg.) Gear set no. A15-50-XX000 changes to A15-50-15000 for 1.5" gear size
 Housing no. A15-32-XX000 changes to 0A15-32-15000 for a 1.5" housing size
 No porting sizes have been indicated all porting must be specified when ordering parts.



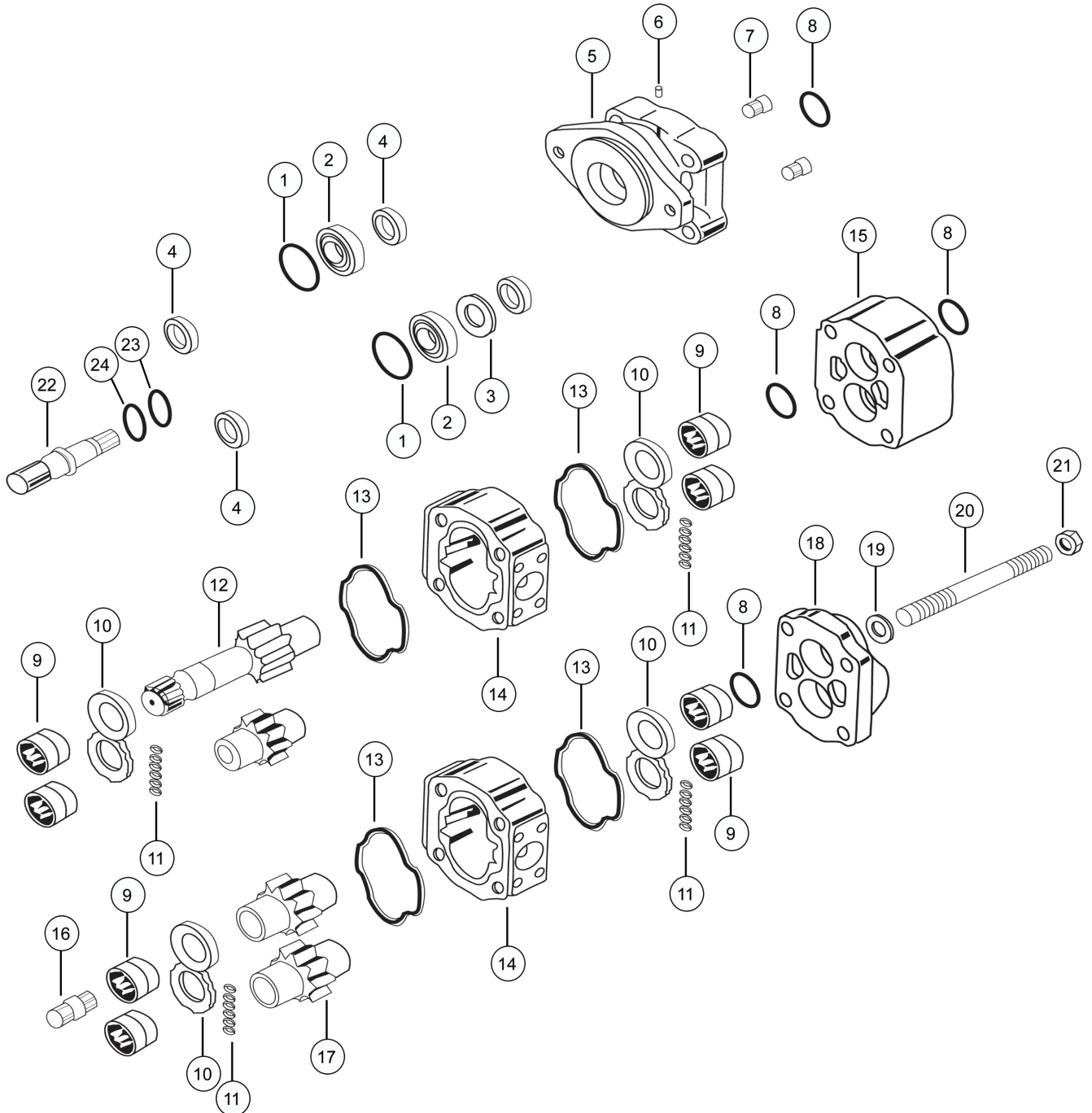
DRW. NO.	DESCRIPTION	METARIS NO.	ALTERNATIVE NO.
1	SHAFT BEARING SNAP RING	X05-03-56200	391-2686-063
2 a	BEARING SPACER (IN PLACE OF SHAFT BEARING)	A30-92-38520	391-3383-069
2 b	INPUT SHAFT BEARING	X03-16-12552	391-0381-040
3	MOTOR SEAL RETAINER USED WITH SHAFT BEARING OR SPACER	A20-60-10000	391-3381-040
4 a	PUMP LIP SEAL FOR CONTINENTAL SHAFT ONLY	X89-11-02508	391-2883-107
4 b	MOTOR LIP SEAL FOR CONTINENTAL SHAFT ONLY	X83-36-02509	391-2883-126
4 c	PUMP LIP SEAL FOR SHAFT END COVER	X83-11-02708	391-2883-058
4 d	MOTOR LIP SEAL	X83-36-02709	391-2883-119
5 a	20 6 BOLT ROUND WITH 2.625" OR 66,67 mm PILOT PUMP S.E.C. TYPE 05	A20-10-21650	308-5043-201
5 b	20 PAD PILOT PUMP TYPE 2 S.E.C. TYPE 10	A20-10-22100	308-5016-203
5 c	20 4 BOLT CLOVERLEAF PILOT TYPE 2 PUMP S.E.C. TYPE 27	A20-10-22460	308-5036-201
5 d	20 4 BOLT B PILOT PUMP S.E.C. TYPE 42 (4" or 101,6 mm pilot)	A20-10-21420	308-5030-201
5 e	20 2/4 BOLT B PILOT PUMP S.E.C. TYPE 46 (4" or 101,6 mm pilot)	A20-10-21320	308-5053-202
5 f	20 2 BOLT A PILOT PUMP S.E.C. TYPE 94 (3 1/4" or 82,55 mm pilot)	A20-10-21210	308-5020-204
5 g	20 2 BOLT B PILOT PUMP S.E.C. TYPE 97 (4" or 101,6 mm pilot)	A20-10-21220	308-5020-201
5 h	20 2 BOLT B PILOT TYPE 2 PUMP S.E.C. TYPE 96 (4" or 101,6 mm pilot)	A20-10-22220	308-5029-205
5 i	20 6 BOLT ROUND WITH 2.625" or 66,67 mm PILOT MOTOR S.E.C. TYPE 05	A20-10-41650	308-5043-401
5 j	20 4 BOLT B PILOT MOTOR S.E.C. TYPE 42 (4" or 101,6 mm pilot)	A20-10-41420	308-5030-401
5 k	20 2/4 BOLT B PILOT MOTOR S.E.C. TYPE 46 (4" or 101,6 mm pilot)	A20-10-41320	308-5053-402
5 L	20 2 BOLT A PILOT MOTOR S.E.C. TYPE 94 (3 1/4" or 82,55 mm pilot)	A20-10-41210	308-5020-404
5 m	20 2 BOLT B PILOT MOTOR S.E.C. TYPE 97 (4" or 101,6 mm pilot)	A20-10-41220	308-5020-401
6	CASE DRAIN PLUG	X02-03-22060	391-2282-056
7 a	CHECK VALVE MOTOR	A00-75-11000	391-3681-001
7 b	PRESSURE PLUG PUMP	X02-03-32110	391-2286-004
8	RING SEAL	X81-76-02706	391-2585-006
9	ROLLER BEARING (Ø 1.687" O.D.)	X03-25-12743	391-0381-068
10	PUMP & MOTOR THRUST PLATE	A30-70-10000	391-2185-013
11	POCKET SEAL	X85-11-00002	391-2882-086
12 a	SHAFT & GEAR TYPE 30 (0.875" Ø x 1/4" x 3/8" x 1" key)	A30-50-XX125	312-29XX-730
12 b	SHAFT & GEAR TYPE 25 (0.875" Ø - 13-Tooth spline)	A30-50-XX225	312-29XX-230
12 c	SHAFT & GEAR TYPE 43 (1.00" Ø x 1/4" x 3/8" x 1 1/4" key)	A30-50-XX135	312-29XX-740
12 d	SHAFT & GEAR TYPE 67 TYPE 2 (0.875" Ø x 1/4" x 3/8" x 1" key)	A30-50-XX132	312-29XX-940
12 e	SHAFT & GEAR TYPE 66 TYPE 2 (0.875" Ø x 1/4" x 3/8" x 1" key)	A30-50-XX126	312-29XX-930
12 f	SHAFT & GEAR TYPE 65 TYPE 2 (0.875" Ø - 13-Tooth spline)	A30-50-XX226	312-29XX-430
13	PUMP & MOTOR HOUSING GASKET	X85-11-09203	391-2884-019
14	PUMP & MOTOR GEAR HOUSING	A20-32-XX000	308-80XX-100
15 a	20 MOTOR BEARING CARRIER BLANK	A20-40-00000	308-7300-100
15 b	20 PUMP BEARING CARRIER WITH COMMON PASSAGE	A20-40-20000	308-7363-100
16	CONNECTING SHAFT	A30-50-00500	312-1133-001
17	GEAR SET ONLY	A30-50-XX000	312-28XX-000
18	20 PUMP & MOTOR PORT END COVER	A20-22-00000	308-3100-100
19	FLAT WASHER (9/16")	X45-19-15005	391-3782-146
20	BOLTS / STUDS (9/16" UNC)	See page	Fasteners
21	HEX NUT (9/16" UNC)	X42-11-14012	391-1451-115
22 a	CONTINENTAL SHAFT TYPE 30 (0.875" Ø x 1/4" x 3/8" x 1" key)	A30-50-00121	312-1500-300
22 b	CONTINENTAL SHAFT TYPE 30 Long (0.875" Ø x 1/4" x 3/8" x 1" key)	A30-50-00124	312-1135-192
22 c	CONTINENTAL SHAFT TYPE 7 (1.250" Ø - 14-tooth spline, Continental only)	A30-50-00241	312-1135-133
22 d	CONTINENTAL SHAFT TYPE 25 (0.875" Ø - 13-Tooth spline)	A30-50-00221	312-1135-138
22 e	CONTINENTAL SHAFT TAPERED TYPE 32 (Clutch pump shaft with woodruff key)	SPECIAL ORDER	312-1500-001
22 f	CONTINENTAL SHAFT TYPE 43 (1.00" Ø x 1/4" x 3/8" x 1 1/4" key)	A30-50-00131	312-1500-400
22 g	CONTINENTAL SHAFT TYPE 43 Long (1.00" Ø x 1/4" x 3/8" x 1 1/4" key)	A30-50-00134	312-1135-193
22 h	CONTINENTAL SHAFT TYPE 12 (0.750" Ø x 3/16" x 3/16" 1 9/16" key)	A30-50-00169	312-1135-152
22 i	CONTINENTAL SHAFT THREADED & KEYED END TYPE 15 (5/8"-18UNF+1/4"x3/8"x7/8"key)	A30-50-00127	312-1135-171
22 j	CONTINENTAL SHAFT TYPE 95 (0.625" Ø x 9-tooth spline)	A30-50-00211	312-1000-200
23	CONTINENTAL SHAFT BRG. RETAINER SNAP RING	X05-02-28110	391-2685-011
24	CONTINENTAL SHAFT BRG. RETAINER	A20-60-20000	312-0100-002

MH 20 CONTINUED



DRW. NO.	DESCRIPTION	METARIS NO.	ALTERNATIVE NO.
Not Shown	SHAFT KEY FOR TYPE 12 SHAFT	X01-02-50540	391-1781-075
Not Shown	SHAFT KEY FOR TYPE 43 & 67 SHAFT	X01-01-61032	391-1781-021
Not Shown	SHAFT KEY FOR TYPE 30 & 66 SHAFT	X01-01-61025	391-1781-025
Not Shown	SHAFT KEY FOR TYPE Spl. SHAFT	X01-01-61044	391-1781-020

NOTE The **XX** shown in the part number is in place of the size the true value must be placed into the part number when ordering parts.
(eg.) Gear set no. A30-50-XX000 changes to A30-50-15000 for 1.5" gear size
 Housing no. A20-32-XX000 changes to A20-32-15000 for a 1.5" housing size
 No porting sizes have been indicated all porting must be specified when ordering parts.



DRW. NO.	DESCRIPTION	METARIS NO.	ALTERNATIVE NO.
1 a	RETAINER RING	A25-60-50002	391-2581-009
1 b	RETAINER RING	A25-60-30001	391-2581-003
2	SEAL RETAINER	A25-60-10001	391-2584-016
3 a	DOUBLE LIP PUMP SEAL (FOR TYPE 1 S.E.C.)	X83-11-03008	391-2883-055
3 b	HI PRESSURE SHAFT SEAL (FOR TYPE 1 S.E.C.)	X83-36-03009	391-2883-096
3 c	PUMP LIP SEAL (FOR TYPE 2 S.E.C.)	X83-11-02508	391-2883-057
3 d	DOUBLE LIP PUMP SEAL TYPE 3 TYPE	X83-11-03508	391-2883-052
3 e	MOTOR SHAFT SEAL FOR TYPE 1 S.E.C.)	X83-36-03510	391-2883-094
4	O RING	X81-11-05704	391-2881-120
5	RETAINER RING TYPE 3 TYPE	A25-60-50001	391-2581-001
7	O RING (L 3006-47)	X81-11-06304	391-2881-141
8 a	BEARING SLEEVE	A25-60-30003	391-3281-004
8 b	BEARING SLEEVE	A25-60-30002	391-2584-024
9	SHAFT ROLLER BEARING	X03-24-12541	391-0381-058
10	SHAFT SEAL BACK UP RING	A25-82-46020	391-2681-248
11	SHAFT SEAL O RING	X81-15-02704	391-2881-261
12	RETAINING RING TYPE 2 TYPE	X05-03-56200	391-2686-063
13	SHAFT BEARING RACE	X03-40-12552	391-0383-001
14	SHAFT ROLLER BEARING	X03-40-12552	391-0383-002
15	TAPER ROLLER BEARING	X03-33-13064	391-0384-008
Not Shown	TAPERED ROLLER BEARING SPACER TYPE 3 TYPE	A25-92-51640	391-3381-007
16	BEARING SLEEVE O RING	X81-11-04403	391-2881-203
17 a	DRIVE KEY TYPE 30 & 70 SHAFT	X01-01-61025	391-1781-025
17 b	DRIVE KEY TYPE 2 & 84 SHAFT	X01-01-61044	391-1781-020
17 c	DRIVE KEY TYPE 20 & 43 & 47 & 52 SHAFT	X01-01-61032	391-1781-021
17 d	DRIVE KEY TYPE 38 & 39 & 45 SHAFT	X01-01-50732	391-1781-027
17 e	DRIVE KEY TYPE 11& 61 & 101 SHAFT	X01-01-81238	391-1781-045
17 f	DRIVE KEY TYPE 58 SHAFT	X01-01-50719	391-1781-032
17 g	DRIVE KEY TYPE 73 SHAFT	X01-01-81257	391-1781-008
17 h	DRIVE KEY TYPE 76 SHAFT	X01-01-61038	391-1781-019
Not Shown	0.133" THICK SPACER FOR TYPE 3 SHAFTS	A25-92-25392	391-3383-016
Not Shown	0.128" THICK SPACER FOR TYPE 3 SHAFTS	A25-92-25391	391-3383-015
Not Shown	SHAFT BEARING RETAINING RING	X05-02-28110	391-2685-011
18 a	13 Tooth spline 0.873" dia. 16/32 pitch (TYPE 25) TYPE 1	A25-50-00221	303-1135-028
18 b	SAE B KEYED 7/8" dia. (KEY SIZE 0.25" W X 1" L) (TYPE 30) TYPE 1	A25-50-00121	303-1135-001
18 c	KEYED 1.1247" dia.(KEY SIZE 1/4" X 3/8" X 1 3/4") (TYPE 2) TYPE 1	A25-50-00151	303-1135-032
18 d	6 Tooth Spline 1.109" dia. .275" tooth (TYPE 3) TYPE 1	A25-50-00791	303-1135-002
18 e	6 Tooth Spline 1.120" dia. .275" tooth (TYPE 6) TYPE 1	A25-50-00751	303-1135-035
18 f	6 Tooth Spline 1.120" dia. grooved .275" tooth (TYPE 19) TYPE 1	A25-50-00759	303-1135-057
18 g	KEYED 0.9846" dia.(KEY SIZE 1/4" X 3/8" X 1 1/4") (TYPE 20) TYPE 1	A25-50-00174	303-1135-010
18 h	KEYED 0.8745" dia.(KEY SIZE 3/16" X 9/32" X 1 1/4") (TYPE 38) TYPE 1	A25-50-00124	303-1135-030
18 i	KEYED 0.8745" dia.(KEY SIZE 3/16" X 9/32" X 1 1/4") (TYPE 39) TYPE 1	A25-50-00129	303-1135-031
18 j	6 Tooth Spline 0.8730" dia. .214" tooth (TYPE 40) TYPE 1	A25-50-00721	303-1135-006
18 j	6 Tooth Spline 0.9846" dia. .246" tooth (TYPE 42) TYPE 1	SPECIAL ORDER	303-1135-037
18 k	KEYED .9996" dia.(KEY SIZE 1/4" X 3/8" X 1 1/4") (TYPE 43) TYPE 1	A25-50-00131	303-1135-012
18 L	14 Tooth Spline 1.228" dia. 12/24 pitch -SAE C Spline (TYPE 7) TYPE 1	A25-50-00241	303-1135-021
18 m	KEYED 1.249" dia.(KEY SIZE 5/16" X 15/32" X 1 1/2") (TYPE 11) TYPE 1	A25-50-00141	303-1135-023
18 n	17 Tooth Spline 1.249" dia. 16/32 pitch (TYPE 49) TYPE 1	SPECIAL ORDER	303-1135-014
18 o	KEYED 0.9846" dia.(KEY SIZE 1/4" X 3/8" X 1 1/4") (TYPE 52) TYPE 1	A25-50-00171	303-1135-009
18 p	6 Tooth Spline 1.248" dia. .236" tooth (TYPE 63) TYPE 1	A25-50-00741	303-1135-033
18 q	6 Tooth Spline 0.9997" dia. .248" tooth (TYPE 94) TYPE 1	A25-50-00731	303-1135-058
18 r	KEYED 0.8745" dia.(KEY SIZE 3/16" X 9/32" X 1 1/4") (TYPE 45) TYPE 2	A25-50-00122	303-1135-015
18 s	6 Tooth Spline 0.9846" dia. .246" tooth (TYPE 46) TYPE 2	A25-50-00772	303-1135-013

MH 25 CONTINUED



DRW. NO.	DESCRIPTION	METARIS NO.	ALTERNATIVE NO.
18 t	KEYED 0.9996" dia.(KEY SIZE 1/4" X 3/8" X 1 1/4") (TYPE 47) TYPE 2	A25-50-00132	303-1135-011
18 u	13 Tooth spline 0.873" dia. 16/32 pitch (TYPE 48) TYPE 2	A25-50-00222	303-1135-004
18 v	14 Tooth Spline 1.248" dia. 12/24 pitch -SAE C Spline (TYPE 53) TYPE 2	A25-50-00242	303-1135-062
18 w	14 Tooth Spline 1.248" dia. 12/24 pitch (TYPE 55) TYPE 2	A25-50-00249	303-1135-007
18 x	KEYED 0.7495" dia.(KEY SIZE 3/16" X 9/32" X 7/8") (TYPE 58) TYPE 2	A25-50-00162	303-1135-022
18 y	KEYED 1.250" dia.(KEY SIZE 5/16" X 15/32" X 1 1/2") (TYPE 61) TYPE 2	A25-50-00142	303-1135-029
18 z	KEYED 0.9846" dia.(KEY SIZE 1/4" X 3/8" X 1") (TYPE 70) TYPE 2	A25-50-00172	303-1135-040
18 aa	6 Tooth Spline 0.8730" dia. .214" tooth (TYPE 99) TYPE 2	A25-50-00722	303-1135-072
18 bb	KEYED 1.250" dia. + Int. Thread 1/2" -13 Thd (double brg.) (TYPE 73) TYPE 3	A25-50-00143	303-1135-049
18 cc	KEYED 0.999" dia. grooved (KEY SIZE 1/4" X 3/8" X 1 1/2") (TYPE 76) TYPE 3	A25-50-00133	303-1135-019
18 dd	6 Tooth Spline 1.1235" dia. grooved .277" tooth (TYPE 82) TYPE 3	SPECIAL ORDER	303-1135-041
18 ee	KEYED 0.8745" dia. Grooved (KEY SIZE .311" X .124" X 1.187") (TYPE 83) TYPE 3	SPECIAL ORDER	303-1135-038
18 ff	KEYED 1.1247" dia.(KEY SIZE 1/4" X 3/8" X 1 3/4") (TYPE 84) TYPE 3	A25-50-00153	303-1135-047
18 gg	KEYED 1.250" dia.(KEY SIZE .31" X .47" X 1.50") (TYPE 101) TYPE 3	SPECIAL ORDER	303-1500-501
19 a	25 S.E.C. PAD MOUNT PUMP TYPE 1 TYPE 100 / 200 / 300	A25-10-21100	303-5011-202
19 b	25 S.E.C. MODIFIED PAD MOUNT PUMP TYPE 1 TYPE 101 / 201 / 301	A25-10-41101	303-5011-401
19 c	25 S.E.C. 2 BOLT B MOUNT (SPL.) TYPE 1 TYPE 102 / 202 / 302 (4" or 101,6 mm pilot)	A25-10-21222	303-5021-205
19 d	25 S.E.C. 6 BOLT ROUND 3.148" PILOT TYPE 1 TYPE 103 / 203 / 303	A25-10-21650	303-5041-201
19 e	25 S.E.C. 4 BOLT SQ 4.748" PILOT TYPE 1 TYPE 106 /206 / 306	SPECIAL ORDER	303-5031-203
19 f	25 S.E.C. 4 BOLT SQ 3.249" PILOT TYPE 1 TYPE 140 / 240 / 340	SPECIAL ORDER	303-5031-406
19 g	25 S.E.C. 4 BOLT SQ 3.748 PILOT TYPE 1 TYPE 141 / 241 / 341	SPECIAL ORDER	303-5031-402
19 h	25 S.E.C. 4 BOLT B MOUNT TYPE 1 TYPE 142 / 241 / 342 (4" or 101,6 mm pilot)	A25-10-21420	303-5031-201
19 i	25 S.E.C. 4 BOLT C MOUNT TYPE 1 TYPE 178 / 278 / 378 (5" or 127 mm pilot)	A25-10-21430	303-5031-202
19 j	25 S.E.C. 2 BOLT B MOUNT TYPE 1 TYPE 197 / 297 / 397 (4" or 101,6 mm pilot)	A25-10-21221	303-5021-203
19 j	25 S.E.C. 2 BOLT C MOUNT TYPE 1 TYPE 198 / 298 / 398 (5" or 127 mm pilot)	A25-10-21231	303-5021-204
19 k	25 S.E.C. PAD MOUNT PUMP WITH DRAIN TYPE 1 TYPE 700	A25-10-41102	303-5011-404
19 L	25 S.E.C. MODIFIED PAD MOUNT PUMP WITH DRAIN TYPE 1 TYPE 701	SPECIAL ORDER	303-5011-403
19 m	25 S.E.C. 4 BOLT B MOUNT WITH DRAIN TYPE 1 TYPE 742 (4" or 101,6 mm pilot)	A25-10-41422	303-5031-407
19 n	25 S.E.C. 4 BOLT C MOUNT WITH DRAIN TYPE 1 TYPE 778 (5" or 127 mm pilot)	A25-10-41430	303-5031-403
19 o	25 S.E.C. 2 BOLT B MOUNT WITH DRAIN TYPE 1 TYPE 797 (4" or 101,6 mm pilot)	A25-10-41222	303-5021-403
19 p	25 S.E.C. 2 BOLT C MOUNT WITH DRAIN TYPE 1 TYPE 798 (5" or 127 mm pilot)	A25-10-41232	303-5021-405
19 q	25 S.E.C. PAD MOUNT PUMP WITH DRAIN TYPE 1 TYPE 900	A25-10-21100	303-5011-202
19 r	25 S.E.C. MODIFIED PAD MOUNT PUMP WITH DRAIN TYPE 1 TYPE 901	A25-10-41101	303-5011-401
19 s	25 S.E.C. 2 BOLT B MOUNT (SPL.) WITH DRAIN TYPE 1 TYPE 902	A25-10-21222	303-5021-205
19 t	25 S.E.C. 6 BOLT ROUND 3.148" PILOT WITH DRAIN TYPE 1 TYPE 903	A25-10-21650	303-5041-201
19 u	25 S.E.C. 4 BOLT SQ 4.748" PILOT WITH DRAIN TYPE 1 TYPE 906	SPECIAL ORDER	303-5031-203
19 v	25 S.E.C. 4 BOLT SQ 3.748" PILOT WITH DRAIN TYPE 1 TYPE 941	SPECIAL ORDER	303-5031-402
19 w	25 S.E.C. 4 BOLT B MOUNT WITH DRAIN TYPE 1 TYPE 942 (4" or 101,6 mm pilot)	A25-10-21420	303-5031-201
19 x	25 S.E.C. 4 BOLT C MOUNT WITH DRAIN TYPE 1 TYPE 978 (5" or 127 mm pilot)	A25-10-21430	303-5031-202
19 y	25 S.E.C. 2 BOLT C WITH 2 DRAINS TYPE 1 TYPE 993 (5" or 127 mm pilot)	A25-10-41231	303-5021-404
19 z	25 S.E.C. 2 BOLT B WITH 2 DRAINS TYPE 1 TYPE 995 (4" or 101,6 mm pilot)	A25-10-41221	303-5021-402
19 aa	25 S.E.C. 2 BOLT B MOUNT WITH DRAIN TYPE 1 TYPE 997 (4" or 101,6 mm pilot)	A25-10-21221	303-5021-203
19 bb	25 S.E.C. 2 BOLT C MOUNT WITH DRAIN TYPE 1 TYPE 998 (5" or 127 mm pilot)	A25-10-21231	303-5021-204
19 cc	25 S.E.C. 6 BOLT ROUND 2.625" PILOT TYPE 2 TYPE 305	A25-10-22650	303-5043-202
19 dd	25 S.E.C. 4 BOLT ROUND 2.883" PILOT TYPE 2 TYPE 304	A25-10-22452	303-5043-204
19 ee	25 S.E.C. 4 BOLT ROUND 2.883" PILOT TYPE 2 TYPE 307(53 25 SHAFT)	A25-10-22451	303-5043-203
19 ff	25 S.E.C. 6 BOLT ROUND 2.625" WITH DRAIN PILOT TYPE 2 TYPE 705	A25-10-42650	303-5043-404
19 gg	25 S.E.C. 6 BOLT ROUND 2.625" PILOT WITH DRAIN TYPE 2 TYPE 905	A25-10-22650	303-5043-202
19 hh	25 S.E.C. 4 BOLT ROUND 2.883" PILOT WITH DRAIN TYPE 2 TYPE 904	A25-10-22452	303-5043-204
19 ii	25 S.E.C. 4 BOLT ROUND 2.883" PILOT WITH DRAIN TYPE 2 TYPE 907	A25-10-22451	303-5043-203
19 jj	25 S.E.C. PAD MOUNT PUMP WITH DRAIN TYPE 3 TYPE 600 / 800	A25-10-23100	303-5012-201
19 kk	25 S.E.C. 4 BOLT C MOUNT WITH DRAIN TYPE 3 TYPE 678 / 878 (5" or 127 mm pilot)	A25-10-23430	303-5039-204
19 LL	25 S.E.C. 2 BOLT B MOUNT WITH DRAIN TYPE 3 TYPE 697 / 897 (4" or 101,6 mm pilot)	A25-10-23220	303-5022-202

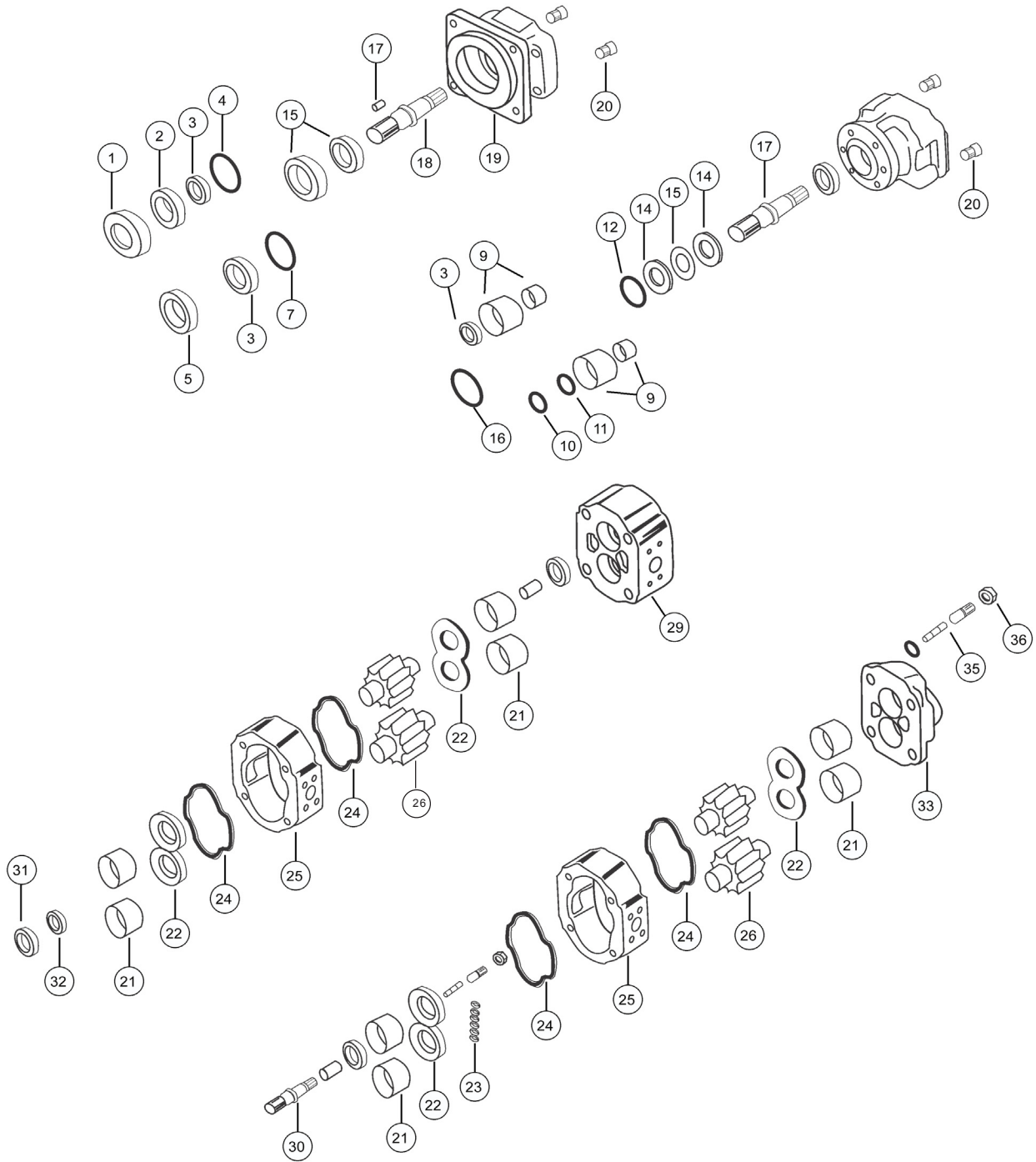
MH 25 CONTINUED



DRW. NO.	DESCRIPTION	METARIS NO.	ALTERNATIVE NO.
19 mm	25 S.E.C. 4 BOLT B MOUNT WITH DRAIN TYPE 3 TYPE 842 (4" or 101,6 mm pilot)	A25-10-23420	303-5022-201
19 nn	25 S.E.C. 4 BOLT B MOUNT WITH 2 DRAINS TYPE 3 TYPE 843 (4" or 101,6 mm pilot)	A25-10-41421	303-5022-401
19 oo	25 S.E.C. 4 BOLT B MOUNT WITH DRAIN TYPE 3 TYPE 642 (4" or 101,6 mm pilot)	A25-10-23420	303-5022-201
20 a	CHECK VALVE	A00-75-11000	391-3681-001
20 b	PRESSURE PLUG	X02-03-32110	391-2286-004
21	ROLLER BEARING (Ø1.625" O.D.)	X03-25-13349	391-0381-059
22	PUMP & MOTOR THRUST PLATE	A25-70-10000	391-2185-012
23	POCKET SEAL	X85-11-00002	391-2882-050
24	PUMP & MOTOR HOUSING GASKET	X85-11-10803	391-2884-021
25	PUMP & MOTOR GEAR HOUSING	A25-32-XX000	303-80XX-100
26	GEAR SET ONLY	A25-50-XX000	303-28XX-000
27	ROLL PIN	A00-94-30310	391-2084-020
28	SHAFT BUSHING TYPE 3 TYPE	X03-00-32531	391-0481-003
29 a	PUMP BEARING CARRIER WITH COMMON PASSAGE	A25-40-20000	303-7383-100
29 b	MOTOR BEARING CARRIER BLANK	A25-40-00000	303-7300-100
30	CONNECTING SHAFT	A25-50-00500	303-1133-001
31	SHAFT BUSHING	X03-00-32532	391-0481-002
32	CONICAL SPRING	A25-95-00000	391-3581-176
33	PUMP & MOTOR PORT END COVER	A25-22-00000	303-3100-100
34	FLAT WASHER (5/8")	X45-10-17005	391-3784-028
35	BOLT & STUDS (5/8"-UNC)	See page	Fasteners
36	HEX NUT (5/8"-UNC)	X42-11-16000	391-1451-076
Not Shown	CASE DRAIN PLUG 1/4" NPT	X02-03-22060	391-2282-056
Not Shown	INPUT SHAFT SNAP RING FOR TYPE 2 SHAFTS	X05-04-23170	391-2688-012
Not Shown	INPUT SHAFT THRUST WASHER USED WITH TYPE 2 SHAFTS	X45-10-27002	391-3785-005
Not Shown	INPUT SHAFT RETAINER RING FOR TYPE 2 SHAFTS	A25-60-20000	391-2585-001

NOTE The **XX** shown in the part number is in place of the size the true value must be placed into the part number when ordering parts.
(eg.) Gear set no. A25-50-XX000 changes to A25-50-15000 for 1.5" gear size
Housing no. A25-32-XX000 changes to A25-32-15000 for a 1.5" housing size
No porting sizes have been indicated all porting must be specified when ordering parts.

MH 25 CONTINUED



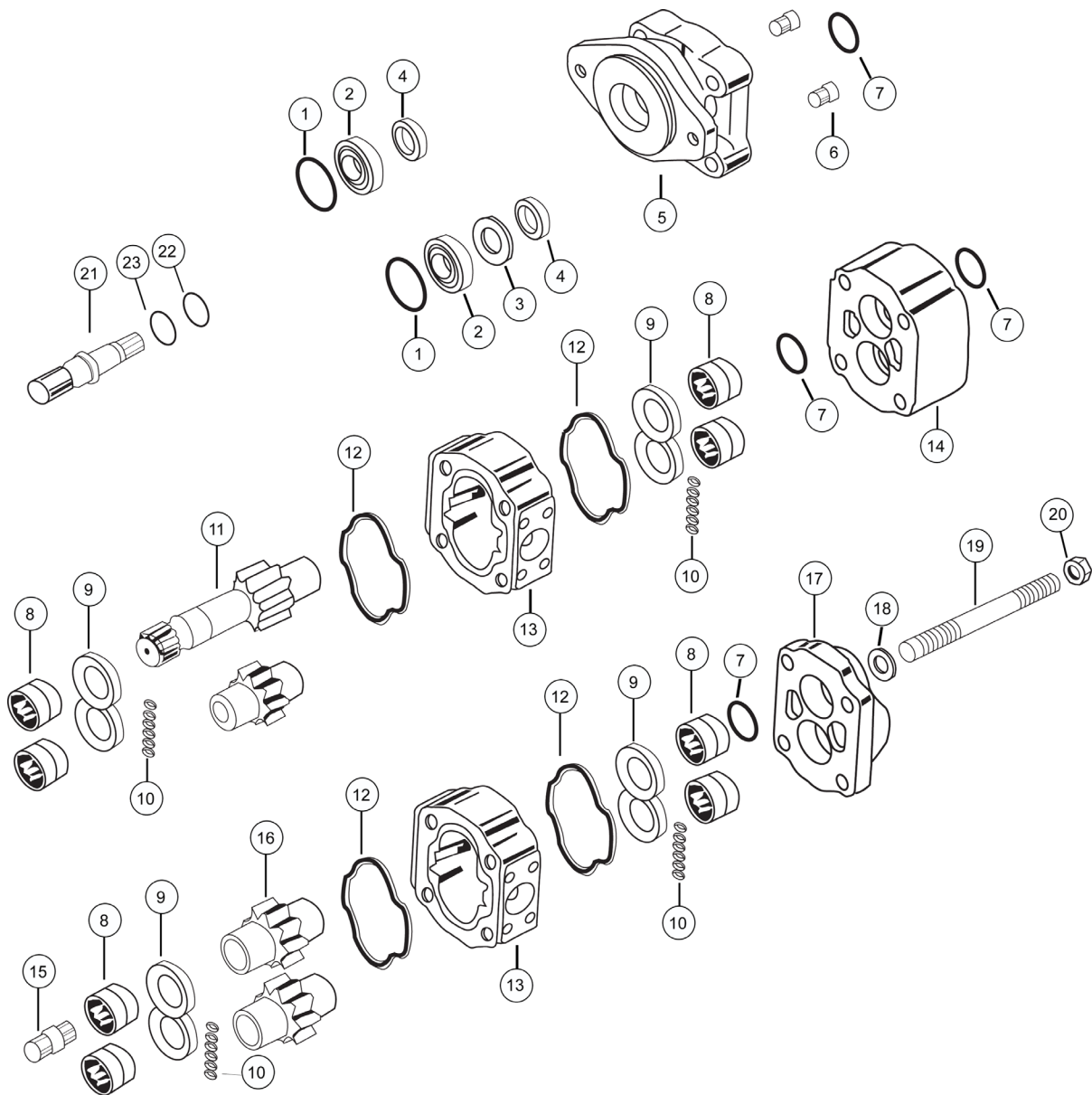
DRW. NO.	DESCRIPTION	METARIS NO.	ALTERNATIVE NO.
1	SHAFT BEARING SNAP RING	X05-03-56200	391-2686-063
2 a	INPUT SHAFT BEARING	X03-16-12552	391-0381-040
2 b	BEARING SPACER (IN PLACE OF SHAFT BEARING)	A30-92-38520	391-3383-069
3	MOTOR SEAL RETAINER USED WITH SHAFT BEARING OR SPACER	A20-60-10000	391-3381-040
4 a	PUMP LIP SEAL FOR CONTINENTAL SHAFT ONLY	X89-11-02508	391-2883-107
4 b	PUMP LIP SEAL FOR PIGGY BACK 76/31 SHAFT END COVER	X83-11-03308	391-2883-103
4 c	MOTOR LIP SEAL	X83-36-02709	391-2883-119
4 d	MOTOR LIP SEAL FOR CONTINENTAL SHAFT ONLY	X83-36-02509	391-2883-126
5 a	30 PAD PILOT PUMP S.E.C. TYPE 00	A30-10-21100	312-5013-201
5 b	30 6 BOLT ROUND WITH 2.625" or 66.67 mm PILOT PUMP S.E.C. TYPE 05	A30-10-21651	312-5043-201
5 c	30 4 BOLT B PILOT PUMP S.E.C. TYPE 42 (4" or 101,6 mm pilot)	A30-10-21420	312-5033-201
5 d	30 4 BOLT C PILOT PUMP S.E.C. TYPE 78 (5" or 127 mm pilot)	A30-10-21430	312-5033-202
5 e	30 2 BOLT A PILOT PUMP S.E.C. TYPE 94 (3 1/4" or 82,55 mm pilot)	A30-10-21210	312-5023-205
5 f	30 2 BOLT B PILOT PUMP S.E.C. TYPE 97 (4" or 101,6 mm pilot)	A30-10-21220	312-5023-202
5 g	30 2 BOLT B (TYPE 2) PILOT PUMP S.E.C. TYPE 96 (4" or 101,6 mm pilot)	A30-10-22220	312-5029-201
5 h	30/50 SHAFT END COVER FOR PIGGYBACK UNITS TYPE 91	A02-10-21500	312-5029-210
5 i	75/30 SHAFT END COVER FOR PIGGYBACK UNITS TYPE 92	A03-10-21500	312-5026-204
5 j	30 2/4 BOLT B PILOT PUMP S.E.C. TYPE 46 (4" or 101,6 mm pilot)	A30-10-21320	312-5053-202
5 k	30 PAD PILOT MOTOR S.E.C. TYPE 00	A30-10-41100	312-5013-401
5 L	30 6 BOLT ROUND WITH 2.625" or 66.67 mm PILOT MOTOR S.E.C. TYPE 05	A30-10-41650	312-5043-601
5 m	30 4 BOLT B PILOT MOTOR S.E.C. TYPE 42 (4" or 101,6 mm pilot)	A30-10-41420	312-5033-601
5 n	30 4 BOLT C PILOT MOTOR S.E.C. TYPE 78 (5" or 127 mm pilot)	A30-10-41430	312-5033-402
5 o	30 2 BOLT A PILOT MOTOR S.E.C. TYPE 94 (3 1/4" or 82,55 mm pilot)	A30-10-41210	312-5023-405
5 p	30 2 BOLT B PILOT MOTOR S.E.C. TYPE 97 (4" or 101,6 mm pilot)	A30-10-41220	312-5023-402
5 q	30 2/4 BOLT B PILOT MOTOR S.E.C. TYPE 46 (4" or 101,6 mm pilot)	A30-10-41320	312-5053-402
6 a	CHECK VALVE MOTOR	A00-75-11000	391-3681-001
6 b	PRESSURE PLUG PUMP	X02-03-32110	391-2286-004
7	RING SEAL	X81-76-02706	391-2585-006
8	ROLLER BEARING (Ø1.687" O.D.)	X03-25-12743	391-0381-068
9	PUMP & MOTOR THRUST PLATE	A30-70-10000	391-2185-013
10	POCKET SEAL	X85-11-00002	391-2882-086
11 a	SHAFT & GEAR TYPE 30 (0.875" Ø x 1/4" x 3/8" x 1" key)	A30-50-XX125	312-29XX-730
11 b	SHAFT & GEAR TYPE 25 (0.875" Ø - 13-Tooth spline)	A30-50-XX225	312-29XX-230
11 c	SHAFT & GEAR TYPE 43 (1.00" Ø x 1/4" x 3/8" x 1 1/4" key)	A30-50-XX135	312-29XX-740
11 d	SHAFT & GEAR TYPE 66 TYPE 2 (0.875" Ø x 1/4" x 3/8" x 1" key)	A30-50-XX126	312-29XX-930
11 e	SHAFT & GEAR TYPE 65 TYPE 2 (0.875" Ø - 13-Tooth spline)	A30-50-XX226	312-29XX-430
12	PUMP & MOTOR HOUSING GASKET	X85-11-10104	391-2884-050
13	PUMP & MOTOR GEAR HOUSING	A31-32-XX000	312-80XX-100
14 a	MOTOR BEARING CARRIER BLANK	A30-40-00000	312-7300-100
14 b	PUMP BEARING CARRIER WITH COMMON PASSAGE	A30-40-20000	312-7373-100
15	CONNECTING SHAFT	A30-50-00500	312-1133-001
16	GEAR SET ONLY	A30-50-XX000	312-28XX-000
17 a	PUMP & MOTOR PORT END COVER	A30-22-00000	312-3200-100
17 b	30 PUMP & MOTOR PORT END COVER LARGER PORTING	A30-27-00000	312-3400-100
17 c	30/30 PIGGY BACK PORT END COVER	A01-22-03000	312-5029-213
18	FLAT WASHER	X45-10-17005	391-3784-028
19	BOLTS / STUDS	See page	Fasteners
20	HEX NUT	X42-11-16000	391-1451-076
21 a	CONTINENTAL SHAFT TYPE 30 (0.875" Ø x 1/4" x 3/8" x 1" key)	A30-50-00121	312-1500-300
21 b	CONTINENTAL SHAFT TYPE 30 Long (0.875" Ø x 1/4" x 3/8" x 1" key)	A30-50-00124	312-1135-192
21 c	CONTINENTAL SHAFT TYPE 7 (1.250" Ø - 14-tooth spline, Continental only)	A30-50-00241	312-1135-133
21 d	CONTINENTAL SHAFT TYPE 25 (0.875" Ø - 13-Tooth spline)	A30-50-00221	312-1135-138
21 e	CONTINENTAL SHAFT TAPERED TYPE 32 (Clutch pump shaft with woodruff key)	SPECIAL ORDER	312-1500-001
21 f	CONTINENTAL SHAFT TYPE 43 (1.00" Ø x 1/4" x 3/8" x 1 1/4" key)	A30-50-00131	312-1500-400
21 g	CONTINENTAL SHAFT TYPE 43 Long (1.00" Ø x 1/4" x 3/8" x 1 1/4" key)	A30-50-00134	312-1135-193
21 h	CONTINENTAL SHAFT TYPE 12 (0.750" Ø x 3/16" x 3/16" 1 9/16" key)	A30-50-00169	312-1135-152
21 i	CONTINENTAL SHAFT THREADED & KEYED END TYPE 15 (5/8"-18UNF + 1/4" x 3/8" x 7/8"key)	A30-50-00127	312-1135-171
21 j	CONTINENTAL SHAFT TYPE 95 (0.625" Ø x 9-tooth spline)	A30-50-00211	312-1000-200
22	CONTINENTAL SHAFT BRG. RETAINER SNAP RING	X05-02-28110	391-2685-011
23	CONTINENTAL SHAFT BRG. RETAINER	A20-60-20000	312-0100-002
Not Shown	SEAL RETAINER FOR 50/50& 30/50 PIGGY BACK PUMP S.E.C.	A30-60-10001	391-2584-063
Not Shown	SEAL RETAINER O RING FOR PIGGY BACK PUMP S.E.C.	X81-11-04704	391-2881-124
Not Shown	SEAL RETAINER O RING FOR PIGGY BACK PUMP S.E.C.	X81-11-05704	391-2881-120

MH 30 CONTINUED



DRW. NO.	DESCRIPTION	METARIS NO.	ALTERNATIVE NO.
Not Shown	SEAL RETAINER FOR 75/50 & 75/30 PIGGY BACK PUMP S.E.C.	A50-60-10003	391-2585-013
Not Shown	CASE DRAIN PLUG	X02-03-22060	391-2282-056
Not Shown	PUMP & PIGGY BACK 31/31 S.E.C.LIP SEAL	X83-11-02708	391-2883-058
Not Shown	SHAFT KEY FOR TYPE 12 SHAFT	X01-02-50540	391-1781-075
Not Shown	SHAFT KEY FOR TYPE 43 & 67 SHAFT	X01-01-61032	391-1781-021
Not Shown	SHAFT KEY FOR TYPE 30 & 66 SHAFT	X01-01-61025	391-1781-025
Not Shown	SHAFT KEY FOR TYPE Spl. SHAFT	X01-01-61044	391-1781-020
Not Shown	30/30 PIGGY BACK CONNECTING SHAFT	A01-50-00400	312-1133-002
Not Shown	50/30 PIGGY BACK CONNECTING SHAFT	A02-50-00400	312-1133-003
Not Shown	75/30 PIGGY BACK CONNECTING SHAFT	A03-50-00400	316-1133-003

NOTE (eg.) The **XX** shown in the part number is in place of the size the true value must be placed into the part number when ordering parts.
 Gear set no. A30-50-XX000 changes to A30-50-15000 for 1.5" gear size
 Housing no. A31-32-XX000 changes to A31-32-15000 for a 1.5" housing size
 No porting sizes have been indicated all porting must be specified when ordering parts.



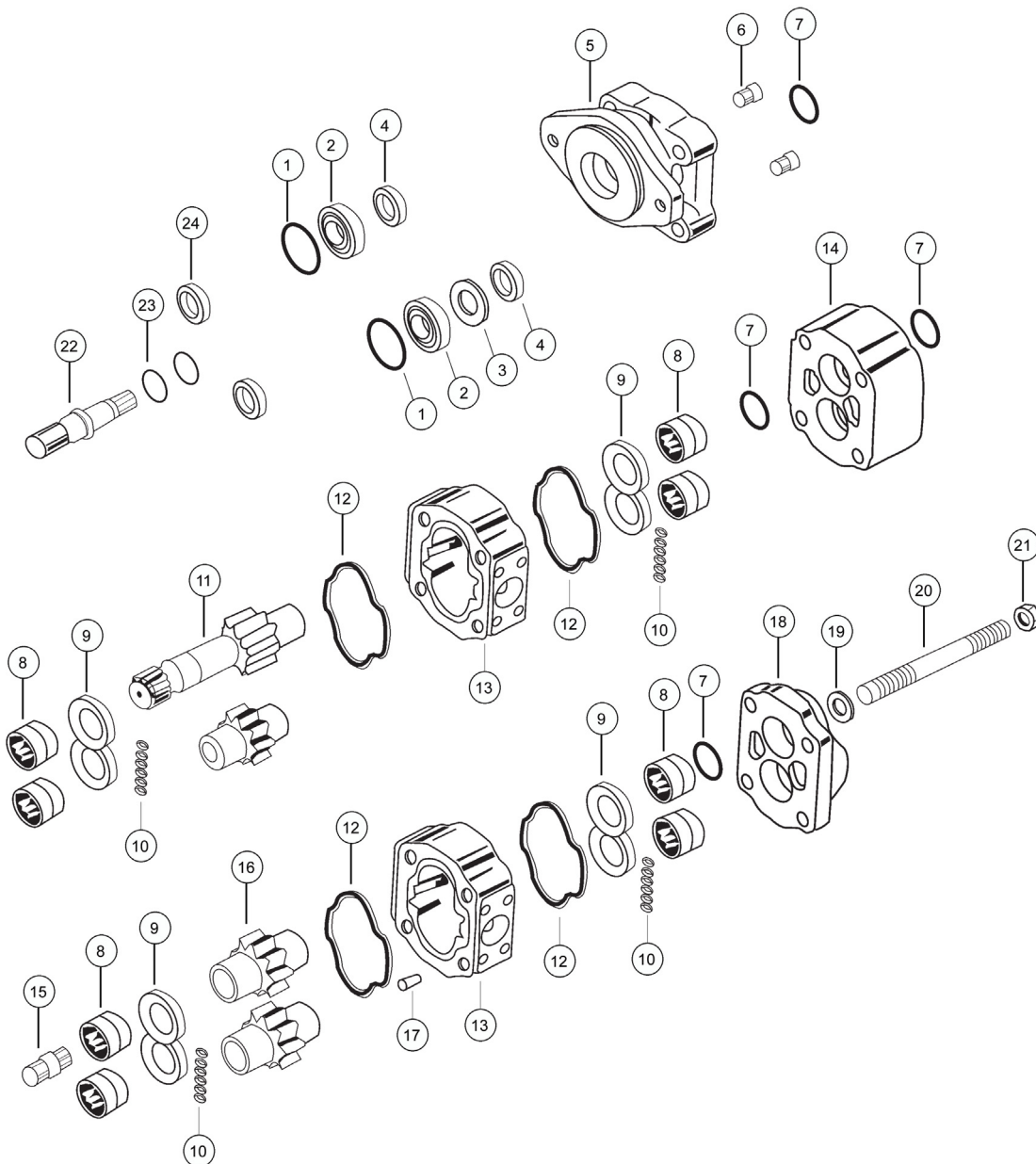
DRW. NO.	DESCRIPTION	METARIS NO.	ALTERNATIVE NO.
1	SHAFT BEARING SNAP RING	X05-03-56200	391-2686-063
2 a	INPUT SHAFT BEARING	X03-16-12552	391-0381-040
2 b	BEARING SPACER (IN PLACE OF SHAFT BEARING)	A30-92-38520	391-3383-069
3	MOTOR SEAL RETAINER USED WITH SHAFT BEARING OR SPACER	A20-60-10000	391-3381-040
4 a	PUMP LIP SEAL FOR CONTINENTAL SHAFT ONLY	X89-11-02508	391-2883-107
4 b	PUMP LIP SEAL FOR PIGGY BACK 76/31 SHAFT END COVER	X83-11-03308	391-2883-103
4 c	MOTOR LIP SEAL	X83-36-02709	391-2883-119
4 d	MOTOR LIP SEAL FOR CONTINENTAL SHAFT ONLY	X83-36-02509	391-2883-126
5 a	31 PAD PILOT PUMP S.E.C. TYPE 00	A31-10-21100	312-5017-201
5 b	31 6 BOLT ROUND WITH 2.625" or 66.67 mm PILOT PUMP S.E.C. TYPE 05	A31-10-21650	312-5047-201
5 c	31 4 BOLT B PILOT PUMP S.E.C. TYPE 42 (4" or 101.6 mm pilot)	A31-10-21420	312-5037-201
5 d	31 4 BOLT C PILOT PUMP S.E.C. TYPE 78 (5" or 127 mm pilot)	A31-10-21430	312-5037-202
5 e	31 2 BOLT A PILOT PUMP S.E.C. TYPE 94 (3 1/4" or 82.55 mm pilot)	A31-10-21210	312-5027-204
5 f	31 2 BOLT B PILOT PUMP S.E.C. TYPE 97 (4" or 101.6 mm pilot)	A31-10-21220	312-5027-201
5 g	31 2 BOLT B (TYPE 2) PILOT PUMP S.E.C. TYPE 96 (4" or 101.6 mm pilot)	A31-10-22220	312-5027-205
5 h	31/51 SHAFT END COVER FOR PIGGYBACK UNITS TYPE 91	A05-10-21500	312-5027-208
5 i	76/31 SHAFT END COVER FOR PIGGYBACK UNITS TYPE 92	A06-10-21500	312-5027-209
5 j	31 2/4 BOLT B PILOT PUMP S.E.C. TYPE 46 (4" or 101.6 mm pilot)	A30-10-21320	312-5053-202
5 k	31 PAD PILOT MOTOR S.E.C. TYPE 00	A31-10-41100	312-5017-401
5 L	31 6 BOLT ROUND WITH 2.625" or 66.67 mm PILOT MOTOR S.E.C. TYPE 05	A31-10-41650	312-5047-401
5 m	31 4 BOLT B PILOT MOTOR S.E.C. TYPE 42 (4" or 101.6 mm pilot)	A31-10-41420	312-5037-401
5 n	31 4 BOLT C PILOT MOTOR S.E.C. TYPE 78 (5" or 127 mm pilot)	A31-10-41430	312-5037-402
5 o	31 2 BOLT A PILOT MOTOR S.E.C. TYPE 94 (3 1/4" or 82.55 mm pilot)	A31-10-41210	312-5027-404
5 p	31 2 BOLT B PILOT MOTOR S.E.C. TYPE 97 (4" or 101.6 mm pilot)	A31-10-41220	312-5027-401
5 q	31 2/4 BOLT B PILOT MOTOR S.E.C. TYPE 46 (4" or 101.6 mm pilot)	A30-10-41320	312-5053-402
6 a	CHECK VALVE MOTOR	A00-75-11000	391-3681-001
6 b	PRESSURE PLUG PUMP	X02-03-32110	391-2286-004
7	RING SEAL	X81-76-02706	391-2585-006
8	ROLLER BEARING (Ø1.687" O.D.)	X03-25-12743	391-0381-068
9 a	PUMP THRUST PLATE	A31-70-20000	391-2185-031
9 b	MOTOR THRUST PLATE	A30-70-10000	391-2185-013
10	POCKET SEAL	X85-11-00002	391-2882-086
11 a	SHAFT & GEAR TYPE 30 (0.875" Ø x 1/4" x 3/8" x 1" key)	A30-50-XX125	312-29XX-730
11 b	SHAFT & GEAR TYPE 25 (0.875" Ø - 13-Tooth spline)	A30-50-XX225	312-29XX-230
11 c	SHAFT & GEAR TYPE 43 (1.00" Ø x 1/4" x 1/4" x 1 1/4" key)	A30-50-XX135	312-29XX-740
11 d	SHAFT & GEAR TYPE 66 TYPE 2 (0.875" Ø x 1/4" x 3/8" x 1" key)	A30-50-XX126	312-29XX-930
11 e	SHAFT & GEAR TYPE 65 TYPE 2 (0.875" Ø - 13-Tooth spline)	A30-50-XX226	312-29XX-430
12	PUMP & MOTOR HOUSING GASKET	X85-11-10104	391-2884-050
13	PUMP & MOTOR GEAR HOUSING	A31-32-XX000	312-82XX-100
14 a	31 MOTOR BEARING CARRIER BLANK	A31-40-00000	312-7740-100
14 b	31 PUMP BEARING CARRIER WITH COMMON PASSAGE	A31-40-20000	312-7723-100
15	CONNECTING SHAFT	A30-50-00500	312-1133-001
16	GEAR SET ONLY	A30-50-XX000	312-28XX-000
17	GEAR HOUSING DOWEL PIN	A00-94-11025	391-2082-032
18 a	31 PUMP & MOTOR PORT END COVER	A31-22-00000	312-3120-100
18 b	31 PUMP & MOTOR PORT END COVER LARGER PORTING	A31-27-00000	312-3420-100
18 c	31/31 PIGGY BACK PORT END COVER	A04-22-03000	312-5027-212
19	FLAT WASHER	X45-10-17005	391-3784-028
20	BOLTS / STUDS (5/8" UNC)	See page	Fasteners
21	HEX NUT (5/8" UNC)	X42-11-16000	391-1451-076
22 a	CONTINENTAL SHAFT TYPE 30 (0.875" Ø x 1/4" x 3/8" x 1" key)	A30-50-00121	312-1500-300
22 b	CONTINENTAL SHAFT TYPE 30 Long (0.875" Ø x 1/4" x 3/8" x 1" key)	A30-50-00124	312-1135-192
22 c	CONTINENTAL SHAFT TYPE 7 (1.250" Ø - 14-tooth spline, Continental only)	A30-50-00241	312-1135-133
22 d	CONTINENTAL SHAFT TYPE 25 (0.875" Ø - 13-Tooth spline)	A30-50-00221	312-1135-138
22 e	CONTINENTAL SHAFT TAPERED TYPE 32 (Clutch pump shaft with woodruff key)	SPECIAL ORDER	312-1500-001
22 f	CONTINENTAL SHAFT TYPE 43 (1.00" Ø x 1/4" x 3/8" x 1 1/4" key)	A30-50-00131	312-1500-400
22 g	CONTINENTAL SHAFT TYPE 43 Long (1.00" Ø x 1/4" x 3/8" x 1 1/4" key)	A30-50-00134	312-1135-193
22 h	CONTINENTAL SHAFT TYPE 12 (0.750" Ø x 3/16" x 3/16" 1 9/16" key)	A30-50-00169	312-1135-152
22 i	CONTINENTAL SHAFT THREADED & KEYED END TYPE 15 (5/8"-18UNF + 1/4" x 3/8" x 7/8"key)	A30-50-00127	312-1135-171
22 j	CONTINENTAL SHAFT TYPE 95 (0.625" Ø x 9-tooth spline)	A30-50-00211	312-1000-200
23	CONTINENTAL SHAFT BRG. RETAINER	A20-60-20000	312-0100-002
24	CONTINENTAL SHAFT BRG. RETAINER SNAP RING	X05-02-28110	391-2685-011
Not Shown	PUMP & PIGGY BACK 31/31 S.E.C.LIP SEAL	X83-11-02708	391-2883-058
Not Shown	SEAL RETAINER FOR 51/51& 31/51 PIGGY BACK PUMP S.E.C.	A30-60-10001	391-2584-063
Not Shown	SEAL RETAINER O RING FOR PIGGY BACK PUMP S.E.C.	X81-11-04704	391-2881-124
Not Shown	SEAL RETAINER O RING FOR PIGGY BACK PUMP S.E.C.	X81-11-05704	391-2881-120

MH 31 CONTINUED



DRW. NO.	DESCRIPTION	METARIS NO.	ALTERNATIVE NO.
Not Shown	SEAL RETAINER FOR 76/51 & 76/31 PIGGY BACK PUMP S.E.C.	A50-60-10003	391-2585-013
Not Shown	CASE DRAIN PLUG	X02-03-22060	391-2282-056
Not Shown	SHAFT KEY FOR TYPE 12 SHAFT	X01-02-50540	391-1781-075
Not Shown	SHAFT KEY FOR TYPE 43 & 67 SHAFT	X01-01-61032	391-1781-021
Not Shown	SHAFT KEY FOR TYPE 30 & 66 SHAFT	X01-01-61025	391-1781-025
Not Shown	SHAFT KEY FOR TYPE Spl. SHAFT	X01-01-61044	391-1781-020
Not Shown	30/30 PIGGY BACK CONNECTING SHAFT	A01-50-00400	312-1133-002
Not Shown	50/30 PIGGY BACK CONNECTING SHAFT	A02-50-00400	312-1133-003
Not Shown	75/30 PIGGY BACK CONNECTING SHAFT	A03-50-00400	316-1133-003

NOTE The **XX** shown in the part number is in place of the size the true value must be placed into the part number when ordering parts.
(eg.) Gear set no. A30-50-XX000 changes to A30-50-15000 for 1.5" gear size
Housing no. A31-32-XX000 changes to A31-32-15000 for a 1.5" housing size
No porting sizes have been indicated all porting must be specified when ordering parts.



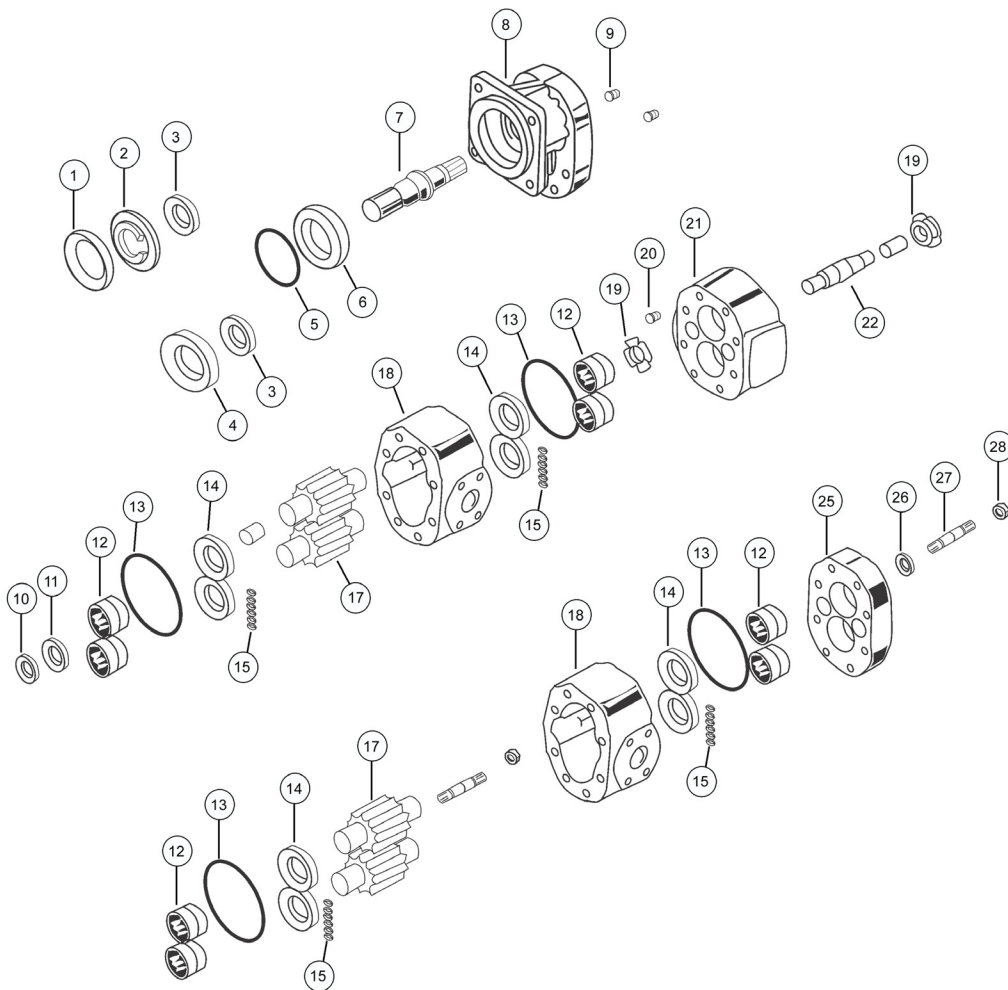
DRW. NO.	DESCRIPTION	METARIS NO.	ALTERNATIVE NO.
1	RETAINER RING	A37-60-50000	391-2581-008
2a	SHAFT SEAL RETAINER	A37-60-10000	391-2584-015
2 b	SEAL RETAINER	A37-60-30002	391-2581-004
3a	DOUBLE LIP SEAL (PUMP)	X83-11-03508	391-2883-052
3 b	MOTOR SHAFT SEAL	X83-36-03510	391-2883-094
4	SEAL AND BEARING RETAINER RING	A37-60-30001	391-2581-002
5 a	SHAFT SEAL RETAINER O RING	X81-15-06904	391-2881-098
5 b	SHAFT SEAL RETAINER O RING	X81-15-06904	391-2881-127
6	TAPERED ROLLER BEARING	X03-33-13576	391-0384-006
Not Shown	TAPERED BEARING SPACER	A37-92-59760	391-3381-008
7 a	KEYED 1.1247" dia.(KEY SIZE 1/4 X 3/8 X 1 3/4) (TYPE 2) TYPE 1	A37-50-00151	305-1134-003
7 b	6 Tooth Spline 1.109" dia. .275" tooth (TYPE 3) TYPE 1	A37-50-00791	305-1135-004
7 c	KEYED .996" dia.(KEY SIZE 1/4" X 3/8" X 1 3/4") MALE THREAD (TYPE 4) TYPE 1	SPECIAL ORDER	305-1134-026
7 d	6 Tooth Spline 1.120" dia. .275" tooth (TYPE 6) TYPE 1	SPECIAL ORDER	305-1134-005
7 e	14-Tooth Spline 1.228" dia. 12/24 pitch -SAE C Spline (TYPE 7) TYPE 1	A37-50-00241	305-1134-001
7 f	KEYED 1.125" dia.(KEY SIZE 1/4" X 3/8" X 1 3/4") (TYPE 8) TYPE1	A37-50-00144	305-1134-007
7 g	KEYED 1.125" dia.(KEY SIZE 1/4" X 3/8" X 1 3/4") (TYPE 9) TYPE1	SPECIAL ORDER	305-1134-025
7 h	6 Tooth Spline 1.1235" dia. .275" tooth GROOVED (TYPE 10) TYPE 1	SPECIAL ORDER	305-1134-022
7 i	KEYED 1.249" dia.(KEY SIZE 5/16" X 15/32" X 1 1/2") (TYPE 11) TYPE 1	A37-50-00141	305-1134-008
7 j	13 Tooth .858" dia. 16/32 pitch -SAE B Spline (TYPE 25) TYPE 1	A37-50-00221	305-1134-010
7 k	KEYED 1.250" dia.THREADED END (KEY SIZE 5/16" X 15/32" X 1 1/2") (TYPE 27) TYPE 1	A37-50-00147	305-1134-012
7 L	SAE B KEYED 0.875" dia. (KEY SIZE 0.25" x 0.375" X 1" L) (TYPE 30) TYPE 1	SPECIAL ORDER	305-1134-013
7 m	6 Tooth Spline 1.1248" dia. .309" tooth (TYPE 31) TYPE 1	SPECIAL ORDER	305-1134-021
7 n	KEYED 1.249" dia. .250" hole (KEY 5/16" X 15/32" X 1 1/2") (TYPE 35) TYPE 1	A37-50-00149	305-1134-019
7 o	12 Tooth Spline 1.0818" dia. (TYPE 36) TYPE 1	SPECIAL ORDER	305-1134-020
7 p	8 Tooth Spline 1.641" dia. (TYPE 37) TYPE 2	SPECIAL ORDER	305-1134-024
7 q	KEYED 1.25" dia. + Int. Thread 1/2" -13 Thd (double brg.) (TYPE 73) TYPE 2	A37-50-00142	305-1134-031
7 r	1 1/4"-14 Tooth Spline -SAE C Spline (TYPE 75) TYPE 1	SPECIAL ORDER	305-1134-033
7 s	Tang Drive 1.250" dia. (TYPE 78) TYPE 1	SPECIAL ORDER	305-1134-042
7 t	KEYED 1.0937" dia. threaded (KEY SIZE 0.25"sq X 2"L) double brg.(TYPE 79) TYPE 2	SPECIAL ORDER	305-1134-037
7 u	14 Tooth Spline 1.248" dia. 12/24 pitch (TYPE 85) TYPE 1	A37-50-00244	305-1134-039
7 v	KEYED 1.125" dia.(KEY SIZE 1/4" X 1 3/4") (TYPE 86) TYPE 1	SPECIAL ORDER	305-1134-029
7 w	KEYED 1.25" dia. + Int. Thread 1/2" -13 Thd (double brg.)(TYPE 87) TYPE 2	SPECIAL ORDER	305-1134-043
8 a	37 S.E.C. PAD MOUNT PUMP TYPE 1 TYPE 111 / 211 / 311 / 911	A37-10-21100	305-5012-201
8 b	37 S.E.C. 4 BOLT B MOUNT TYPE 1 TYPE 142 / 242 / 342 (4" or 101.6 mm pilot)	A37-10-21420	305-5031-204
8 c	37 S.E.C. 4 BOLT SQUARE 3.999" PILOT TYPE 1 TYPE 177 / 277 / 377	SPECIAL ORDER	305-5031-206
8 d	37 S.E.C. 4 BOLT C MOUNT TYPE 1 TYPE 178 / 278 / 378 / 978 (5" or 127 mm pilot)	A37-10-21430	305-5031-201
8 e	37 S.E.C. 6 BOLT ROUND 3.999" PILOT TYPE 1 TYPE 181 / 281 / 381 / 981	A37-10-21650	305-5041-201
8 f	37 S.E.C. 2 BOLT C MOUNT TYPE 1 TYPE 198 / 298 / 398 / 998 (5" or 127 mm pilot)	A37-10-21230	305-5021-201
8 g	37 S.E.C. PAD MOUNT WITH DRAIN @ 3 O'CLOCK TYPE 2 TYPE 411 / 511 / 611 / 811	A37-10-22100	305-5012-202
8 h	37 S.E.C. 4 BOLT B 3.999" PILOT DRAIN @ 3 O'CLOCK TYPE 2 TYPE 442 / 542 / 642 / 842 (4" or 101.6 mm pilot)	A37-10-22420	305-5032-202
8 i	37 S.E.C. 4 BOLT C PILOT WITH DRAIN @ 3 O'CLOCK TYPE 2 TYPE 478 / 578 / 678 / 878 (5" or 127 mm pilot)	A37-10-22430	305-5032-203
8 j	37 S.E.C. 4 BOLT B PILOT DRAIN @ 2 O'CLOCK TYPE 1 TYPE 942 (4" or 101.6 mm pilot)	A37-10-21420	305-5031-204
8 k	37 S.E.C. 4 BOLT B MOUNT DRAIN @ 12 O'CLOCK TYPE 1 TYPE 745 (4" or 101.6 mm pilot)	A37-10-41422	305-5032-413
8 l	37 S.E.C. 4 BOLT C PILOT DRAIN @ 2 O'CLOCK TYPE 1 TYPE 778 (5" or 127 mm pilot)	A37-10-41430	305-5031-403
8 m	37 S.E.C. 2 BOLT C PILOT DRAIN @ 2 O'CLOCK TYPE 1TYPE 798 (5" or 127 mm pilot)	A37-10-41230	305-5021-401
8 n	37 S.E.C. PAD MOUNT DRAIN @ 4 O'CLOCK TYPE 1 TYPE 711	A37-10-41100	305-5012-406
8 o	37 S.E.C. 4 BOLT B MOUNT DRAIN @ 2 O'CLOCK TYPE 1 TYPE 742 (4" or 101.6 mm pilot)	A37-10-41421	305-5031-406
9 a	CHECK VALVE	A00-75-11000	391-3681-001
9 b	PRESSURE PLUG PUMP	X02-03-32110	391-2286-004
10	SHAFT BUSHING	X03-00-32835	391-0481-001
11	CONICAL SPRING	A37-95-00000	391-3581-172
Not Shown	CASE DRAIN PIPE PLUG	X02-03-22060	391-2282-056
12	ROLLER BEARING (Ø 2.322" O.D.)	X03-25-13859	391-0381-060
13	GEAR HOUSING GASKET	X85-11-12303	391-2884-023
14	BI-ROTATIONAL THRUST PLATE	A37-70-10000	391-2185-009
15	POCKET SEAL	X85-11-00002	391-2882-023
16	GEAR SPACER	N/A	391-3383-XXX
17	GEAR SET ONLY	A37-50-XX000	305-28XX-000
18	PUMP & MOTOR GEAR HOUSING	A37-32-XX000	305-80XX-100
19	BUSHING	X03-00-32836	391-0481-004
20	ROLL PIN	A00-94-30310	391-2084-020
21 a	COMMON PASSAGE BEARING CARRIER	A37-40-20000	305-7000-100
21 b	BLANK BEARING CARRIER	A37-40-00000	305-7300-100

MH 37 CONTINUED



DRW. NO.	DESCRIPTION	METARIS NO.	ALTERNATIVE NO.
22	CONNECT SHAFT	A37-50-00500	305-1133-001
23	TIE ROD	N/A	AS REQ.
25	PORT END COVER	A37-22-00000	305-3000-100
26	FLAT WASHER (1/2")	X45-19-13005	391-3784-027
27	BOLTS / STUDS (1/2"-UNC)	See page	Fasteners
28	HEX NUT (1/2"-UNC)	X42-11-13011	391-1451-051
Not Shown	SHAFT RET. SNAP RING	X05-02-31130	391-2685-012
Not Shown	.187" THICK SPACER FOR TYPE 2 SHAFTS	A37-92-28441	391-3383-012
Not Shown	.194" THICK SPACER FOR TYPE 2 SHAFTS	A37-92-28442	391-3383-013
Not Shown	DRIVE KEY TYPE 2 & 4 & 8 & 86 & 87 SHAFT	X01-01-61044	391-1781-020
Not Shown	DRIVE KEY TYPE 9 SHAFT	X01-01-61032	391-1781-021
Not Shown	DRIVE KEY TYPE 11 & 27 & 35 SHAFT	X01-01-81238	391-1781-045
Not Shown	DRIVE KEY TYPE 30 SHAFT	X01-01-61025	391-1781-025
Not Shown	DRIVE KEY TYPE 73 SHAFT	X01-01-81257	391-1781-008
Not Shown	DRIVE KEY TYPE 79 SHAFT	X01-02-60651	391-1781-037

NOTE The **XX** shown in the part number is in place of the size the true value must be placed into the part number when ordering parts.
(eg.) Gear set no. A37-50-XX000 changes to A37-50-15000 for 1.5" gear size
Housing no. A37-32-XX000 changes to A37-32-15000 for a 1.5" housing size
No porting sizes have been indicated all porting must be specified when ordering parts.



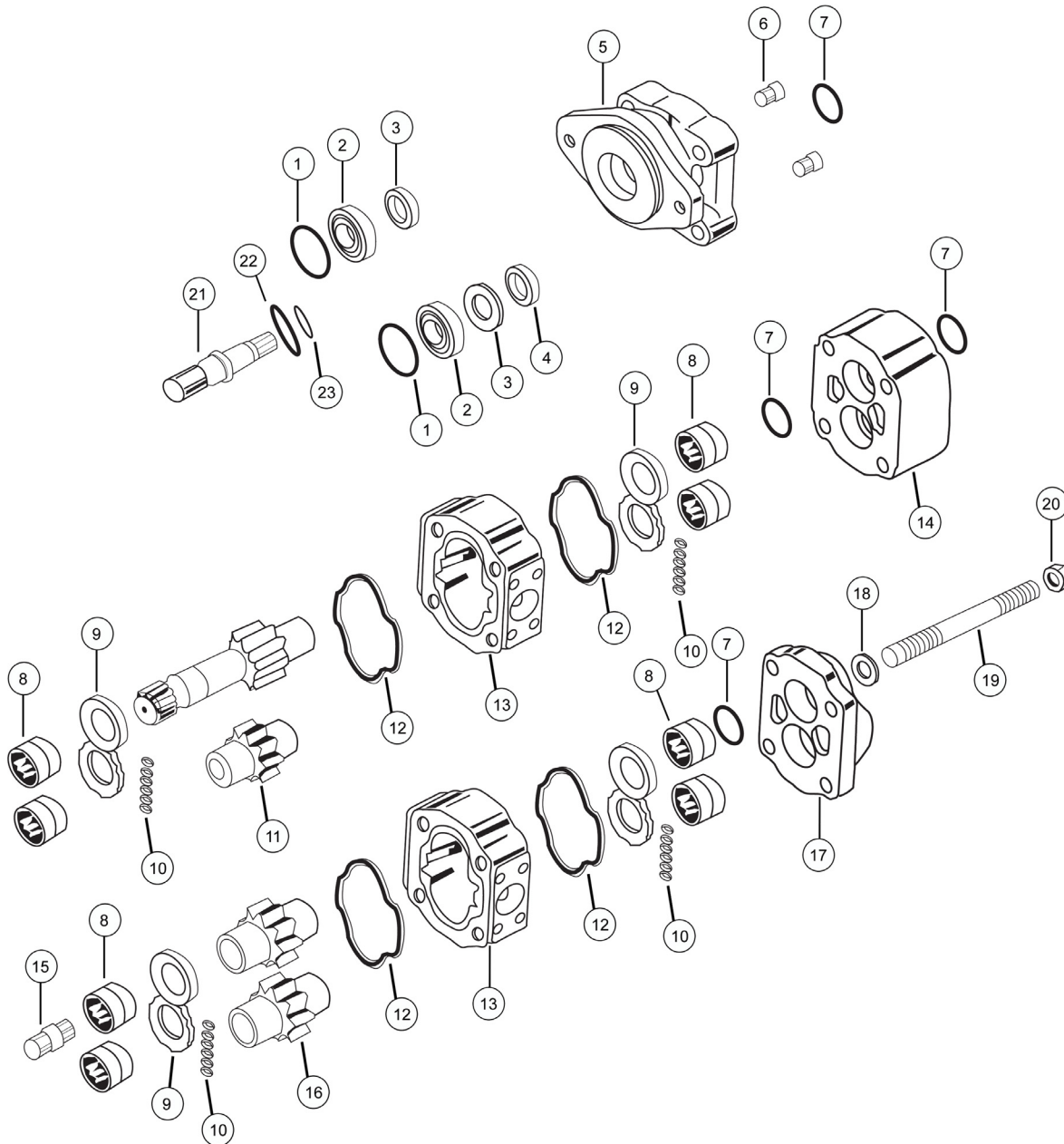
DRW. NO.	DESCRIPTION	METARIS NO.	ALTERNATIVE NO.
1	SHAFT BRG. SNAP RING	X05-03-77250	391-2686-065
2 a	BEARING SPACER & SEAL RETAINER FOR MOTORS	A50-60-10000	391-3383-087
2 b	INPUT SHAFT BEARING	X03-16-13272	391-0381-077
3	MOTOR SEAL RETAINER USED WITH SHAFT BEARING	A50-60-30000	391-3383-020
4 a	PUMP LIP SEAL	X83-11-03308	391-2883-103
4 b	MOTOR LIP SEAL	X83-36-03309	391-2883-115
4 c	PUMP LIP SEAL FOR CONTINENTIAL SHAFT ONLY	X89-11-03308	391-2883-133
5 a	50 PAD PILOT PUMP SHAFT END COVER TYPE 00	A50-10-21100	313-5013-201
5 b	50 4 BOLT B PILOT PUMP SHAFT END COVER TYPE 42 (4" or 101,6 mm pilot)	A50-10-21420	313-5033-201
5 c	50 4 BOLT C PILOT PUMP SHAFT END COVER TYPE 78 (5" or 127 mm pilot)	A50-10-21430	313-5033-202
5 d	50 2 BOLT B PILOT PUMP SHAFT END COVER TYPE 97 (4" or 101,6 mm pilot)	A50-10-21220	313-5023-204
5 e	50 2 BOLT C PILOT PUMP SHAFT END COVER TYPE 98 (5" or 127 mm pilot)	A50-10-21230	313-5023-203
5 f	50 2 BOLT B (TYPE 2) PILOT PUMP SHAFT END COVER TYPE 96 (4" or 101,6 mm pilot)	A50-10-22220	313-5029-201
5 g	50 2 BOLT C (TYPE 2) PILOT PUMP SHAFT END COVER TYPE 99 (5" or 127 mm pilot)	A50-10-22230	313-5029-202
5 h	50/50 SHAFT END COVER FOR PIGGYBACK UNITS TYPE 91	A41-10-21500	313-5029-206
5 i	75/50 SHAFT END COVER FOR PIGGYBACK UNITS TYPE 92	A42-10-21500	313-5029-207
5 j	50 PAD PILOT MOTOR SHAFT END COVER TYPE 00	A50-10-41100	313-5013-202
5 k	50 4 BOLT B PILOT MOTOR SHAFT END COVER TYPE 42 (4" or 101,6 mm pilot)	A50-10-41420	313-5033-405
5 L	50 4 BOLT C PILOT MOTOR SHAFT END COVER TYPE 78 (5" or 127 mm pilot)	A50-10-41430	313-5033-403
5 m	50 2 BOLT B PILOT MOTOR SHAFT END COVER TYPE 97 (4" or 101,6 mm pilot)	A50-10-41220	313-5023-206
5 n	50 2 BOLT C PILOT MOTOR SHAFT END COVER TYPE 98 (5" or 127 mm pilot)	A50-10-41230	313-5023-205
6 a	CHECK VALVE MOTOR	A00-75-11000	391-3681-001
6 b	PRESSURE PLUG PUMP	X02-03-32110	391-2286-004
7	RING SEAL	X81-76-03305	391-2585-009
8	ROLLER BEARING (Ø 1.937" O.D.)	X03-25-13349	391-0381-059
9 a	PUMP & MOTOR THRUST PLATE	A25-70-10000	391-2185-012
9 b	DRY VALVE THRUST PLATE	A50-70-10000	391-2185-041
10	POCKET SEAL	X85-11-00002	391-2882-050
11 a	SHAFT & GEAR 14 TOOTH SPLINE 1.228" maj. dia. TYPE 7	A50-50-XX245	313-29XX-250
11 b	SHAFT & GEAR 1.250" KEYED (5/16") TYPE 11	A50-50-XX145	313-29XX-750
11 c	SHAFT & GEAR SET 13 TOOTH SPLINE 0.858" maj. dia. TYPE 25	A50-50-XX225	313-29XX-230
11 d	SHAFT & GEAR SET 0.9984" dia. KEYED (1/4" x 3/8" x 1 1/4") TYPE 43	A50-50-XX135	313-29XX-740
11 e	SHAFT & GEAR 14 TOOTH SPLINE 1.228" maj. dia. TYPE 53 TYPE 2	A50-50-XX246	313-29XX-450
11 f	SHAFT & GEAR SET 13 TOOTH SPLINE 0.858" maj. dia. TYPE 65 TYPE 2	A50-50-XX226	313-29XX-430
12	PUMP & MOTOR HOUSING GASKET	X85-11-10803	391-2884-021
13	PUMP & MOTOR GEAR HOUSING	A25-32-XX000	303-80XX-100
14 a	50 MOTOR BEARING CARRIER BLANK	A50-40-00000	313-7300-100
14 b	50 PUMP BEARING CARRIER WITH COMMON PASSAGE	A50-40-20000	313-7363-100
15	CONNECTING SHAFT	A50-50-00500	313-1133-001
16	GEAR SET ONLY	A50-50-XX000	313-28XX-000
17 a	50 PUMP & MOTOR PORT END COVER	A50-22-00000	313-3100-100
17 b	50 PUMP & MOTOR PORT END COVER SPECIAL LARGER PORTING	A50-27-00000	313-3400-100
17 c	50 PIGGY BACK REAR PORT END COVER	A50-22-03000	313-5029-205
18	FLAT WASHER (5/8")	X45-10-17005	391-3784-028
19	BOLTS / STUDS (5/8"-UNC)	See page	Fasteners
20	HEX NUT (5/8"-UNC)	X42-11-16000	391-1451-076
21 a	CONTINENTAL SHAFT TYPE 11 (1 1/4" Ø KEYED 5/16")	A50-50-00141	313-1500-500
21 b	CONTINENTAL SHAFT TYPE 7 (1.250" Ø - 14 TOOTH SPLINE)	A50-50-00241	313-1135-194
21 c	CONTINENTAL SHAFT TYPE 25 (0.875" Ø - 13 TOOTH SPLINE)	A50-50-00221	313-1000-300
21 d	CONTINENTAL SHAFT TYPE 43 (1.00" Ø x 1/4" x 3/8" x 1 1/4" key)	A50-50-00131	313-1500-400
21 e	CONTINENTAL SHAFT TYPE 73 LONG (1 1/4" Ø KEYED 5/16")	A50-50-00147	313-1500-502
21 f	CONTINENTAL SHAFT TYPE 98 - SPLINED - SAE BB 15T	A50-50-00231	313-1000-400
22	CONTINENTAL SHAFT BRG. RETAINER (MAY NOT BE REQUIRED)	A50-60-20000	391-3381-046
23	CONTINENTAL SHAFT BRG. RETAINER SNAP RING (MAY NOT BE REQUIRED)	X05-02-35120	391-2685-040
Not Shown	SEAL RETAINER FOR 51/51 PIGGY BACK PUMP S.E.C.	A30-60-10001	391-2584-063
Not Shown	SEAL RETAINER O RING FOR PIGGY BACK PUMP S.E.C.	X81-11-04704	391-2881-124
Not Shown	SEAL RETAINER O RING FOR PIGGY BACK PUMP S.E.C.	X81-11-05704	391-2881-120

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DRW. NO.	DESCRIPTION	METARIS NO.	ALTERNATIVE NO.
Not Shown	SEAL RETAINER FOR 76/51 PIGGY BACK PUMP S.E.C.	A50-60-10003	391-2585-013
Not Shown	DRY VALVE SEAL RETAINER	A50-60-10001	391-2584-050
Not Shown	CASE DRAIN PLUG	X02-03-22060	391-2282-056
Not Shown	PUMP LIP SEAL FOR PIGGY BACK S.E.C. & P.E.C.	X83-11-02708	391-2883-058
Not Shown	SHAFT KEY FOR TYPE 73 SHAFT	X01-01-81257	391-1781-008
Not Shown	SHAFT KEY FOR TYPE 43 SHAFT	X01-01-61032	391-1781-021
Not Shown	SHAFT KEY FOR TYPE 11 SHAFT	X01-01-81238	391-1781-045
Not Shown	50/50 PIGGY BACK CONNECTING SHAFT	A41-50-00400	313-1133-004
Not Shown	75/50 PIGGY BACK CONNECTING SHAFT	A42-50-00400	313-1133-003

NOTE The **XX** shown in the part number is in place of the size the true value must be placed into the part number when ordering parts.
(eg.) Gear set no. A50-50-XX000 changes to A50-50-15000 for 1.5" gear size
 Housing no. A25-32-XX000 changes to A25-32-15000 for a 1.5" housing size
 No porting sizes have been indicated all porting must be specified when ordering parts.



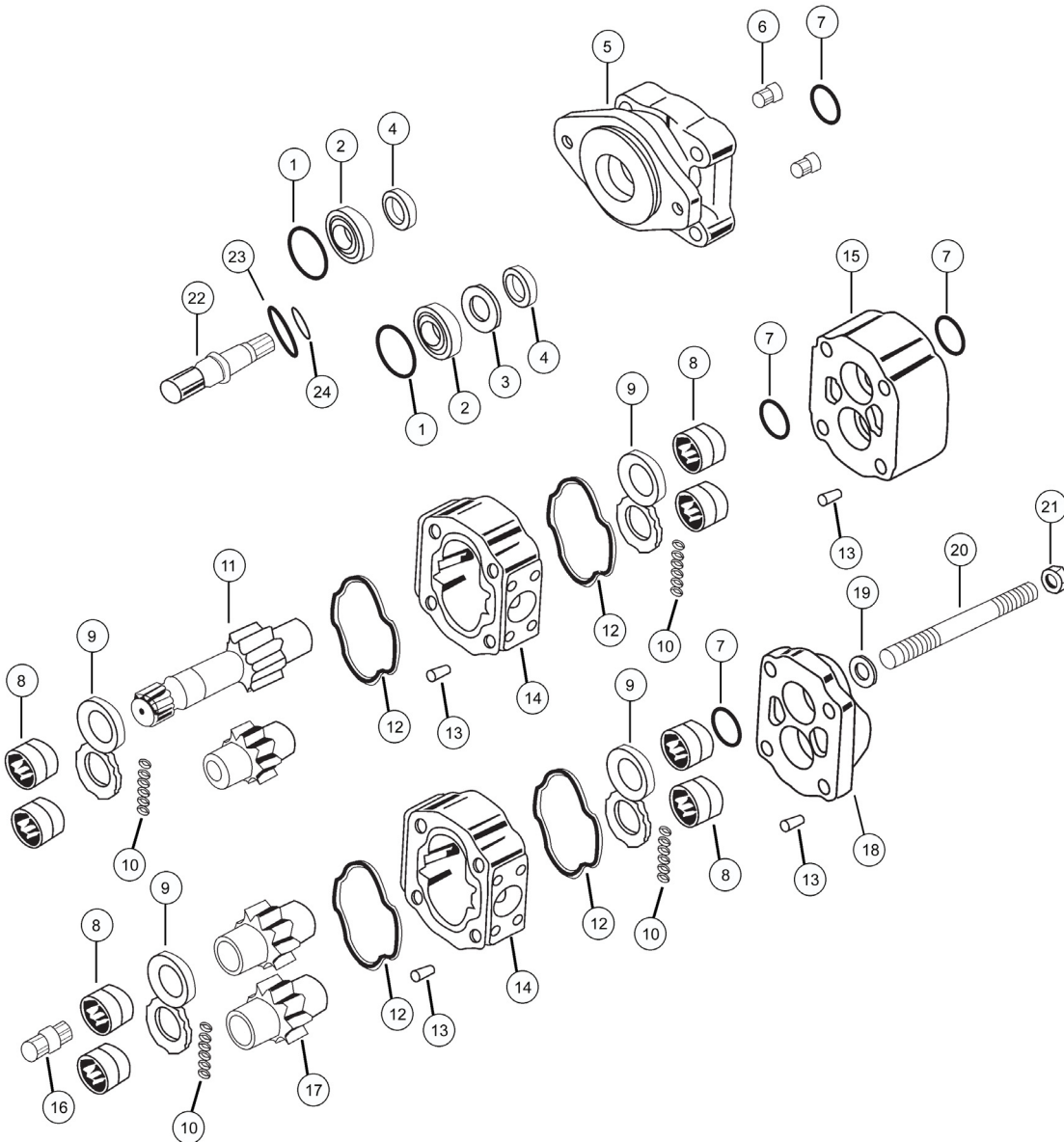
DRW. NO.	DESCRIPTION	METARIS NO.	ALTERNATIVE NO.
1	SHAFT BRG. SNAP RING	X05-03-77250	391-2686-065
2 a	BEARING SPACER & SEAL RETAINER FOR MOTORS	A50-60-10000	391-3383-087
2 b	INPUT SHAFT BEARING	X03-16-13272	391-0381-077
3	MOTOR SEAL RETAINER USED WITH SHAFT BEARING	A50-60-30000	391-3383-020
4 a	PUMP LIP SEAL	X83-11-03308	391-2883-103
4 b	MOTOR LIP SEAL	X83-36-03309	391-2883-115
4 c	PUMP LIP SEAL FOR CONTINENTIAL SHAFT ONLY	X89-11-03308	391-2883-133
5 a	51 PAD PILOT PUMP SHAFT END COVER TYPE 00	A51-10-21100	313-5017-201
5 b	51 4 BOLT B PILOT PUMP SHAFT END COVER TYPE 42 (4" or 101,6 mm pilot)	A51-10-21420	313-5037-201
5 c	51 4 BOLT C PILOT PUMP SHAFT END COVER TYPE 78 (5" or 127 mm pilot)	A51-10-21430	313-5037-202
5 d	51 2 BOLT B PILOT PUMP SHAFT END COVER TYPE 97 (4" or 101,6 mm pilot)	A51-10-21220	313-5027-201
5 e	51 2 BOLT C PILOT PUMP SHAFT END COVER TYPE 98 (5" or 127 mm pilot)	A51-10-21230	313-5027-202
5 f	51 2 BOLT B (TYPE 2) PILOT PUMP SHAFT END COVER TYPE 96 (4" or 101,6 mm pilot)	A51-10-22220	313-5027-205
5 g	51 2 BOLT C (TYPE 2) PILOT PUMP SHAFT END COVER TYPE 99 (5" or 127 mm pilot)	A51-10-22230	313-5027-206
5 h	51/51 SHAFT END COVER FOR PIGGYBACK UNITS TYPE 91	A43-10-21500	313-5027-208
5 i	76/51 SHAFT END COVER FOR PIGGYBACK UNITS TYPE 92	A44-10-21500	313-5027-209
5 j	51 PAD PILOT MOTOR SHAFT END COVER TYPE 00	A51-10-41100	313-5017-401
5 k	51 4 BOLT B PILOT MOTOR SHAFT END COVER TYPE 42 (4" or 101,6 mm pilot)	A51-10-41420	313-5037-401
5 L	51 4 BOLT C PILOT MOTOR SHAFT END COVER TYPE 78 (5" or 127 mm pilot)	A51-10-41430	313-5037-402
5 m	51 2 BOLT B PILOT MOTOR SHAFT END COVER TYPE 97 (4" or 101,6 mm pilot)	A51-10-41220	313-5027-401
5 n	51 2 BOLT C PILOT MOTOR SHAFT END COVER TYPE 98 (5" or 127 mm pilot)	A51-10-41230	313-5027-402
6 a	CHECK VALVE MOTOR	A00-75-11000	391-3681-001
6 b	PRESSURE PLUG PUMP	X02-03-32110	391-2286-004
7	RING SEAL	X81-76-03305	391-2585-009
8	ROLLER BEARING (Ø 1.937" O.D.)	X03-25-13349	391-0381-059
9 a	PUMP THRUST PLATE	A51-70-20000	391-2185-029
9 b	MOTOR THRUST PLATE	A25-70-10000	391-2185-012
9 c	DRY VALVE THRUST PLATE	A50-70-10000	391-2185-041
10	POCKET SEAL	X85-11-00002	391-2882-050
11 a	SHAFT & GEAR 14 TOOTH SPLINE 1.228" maj. dia. TYPE 7	A50-50-XX245	313-29XX-250
11 b	SHAFT & GEAR 1.250" KEYED (5/16") TYPE 11	A50-50-XX145	313-29XX-750
11 c	SHAFT & GEAR SET 13 TOOTH SPLINE 0.858" maj. dia. TYPE 25	A50-50-XX225	313-29XX-230
11 d	SHAFT & GEAR SET 0.9984" dia. KEYED (1/4" x 3/8" x 1 1/4") TYPE 43	A50-50-XX135	313-29XX-740
11 e	SHAFT & GEAR 14 TOOTH SPLINE 1.228" maj. dia. TYPE 53 TYPE 2	A50-50-XX246	313-29XX-450
11 f	SHAFT & GEAR SET 13 TOOTH SPLINE 0.858" maj. dia. TYPE 65 TYPE 2	A50-50-XX226	313-29XX-430
12	PUMP & MOTOR HOUSING GASKET	X85-11-10803	391-2884-021
13	HOUSING DOWELL PIN	A00-94-11025	391-2082-032
14	PUMP & MOTOR GEAR HOUSING	A51-32-XX000	313-82XX-100
15 a	51 MOTOR BEARING CARRIER BLANK	A51-40-00000	313-7740-100
15 b	51 PUMP BEARING CARRIER WITH COMMON PASSAGE	A51-40-20000	313-7723-100
16	CONNECTING SHAFT	A50-50-00500	313-1133-001
17	GEAR SET ONLY	A50-50-XX000	313-28XX-000
18 a	51 PUMP & MOTOR PORT END COVER	A51-22-00000	313-3120-100
18 b	51 PUMP & MOTOR PORT END COVER SPECIAL LARGER PORTING	A51-27-00000	313-3420-100
18 c	51 PIGGY BACK REAR PORT END COVER	A51-22-03000	313-5027-212
19	FLAT WASHER (5/8")	X45-10-17005	391-3784-028
20	BOLTS / STUDS (5/8"-UNC)	See page	Fasteners
21	HEX NUT (5/8"-UNC)	X42-11-16000	391-1451-076
22 a	CONTINENTAL SHAFT TYPE 11 (1.250" Ø KEYED 5/16")	A50-50-00141	313-1500-500
22 b	CONTINENTAL SHAFT TYPE 7 (1.250" Ø - 14 TOOTH SPLINE)	A50-50-00241	313-1135-194
22 c	CONTINENTAL SHAFT TYPE 25 (0.875" Ø- 13 TOOTH SPLINE)	A50-50-00221	313-1000-300
22 d	CONTINENTAL SHAFT TYPE 43 (1.00" Ø x 1/4" x 3/8" x 1 1/4" key)	A50-50-00131	313-1500-400
22 e	CONTINENTAL SHAFT TYPE 73 LONG (1.250" Ø KEYED 5/16")	A50-50-00147	313-1500-502
23	CONTINENTAL SHAFT BRG. RETAINER (MAY NOT BE REQUIRED)	A50-60-20000	391-3381-046
24	CONTINENTAL SHAFT BRG. RETAINER SNAP RING (MAY NOT BE REQ)	X05-02-35120	391-2685-040
Not Shown	SEAL RETAINER FOR 51/51 PIGGY BACK PUMP S.E.C.	A30-60-10001	391-2584-063
Not Shown	SEAL RETAINER O RING FOR PIGGY BACK PUMP S.E.C.	X81-11-04704	391-2881-124

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DRW. NO.	DESCRIPTION	METARIS NO.	ALTERNATIVE NO.
Not Shown	SEAL RETAINER O RING FOR PIGGY BACK PUMP S.E.C.	X81-11-05704	391-2881-120
Not Shown	SEAL RETAINER FOR 76/51 PIGGY BACK PUMP S.E.C.	A50-60-10003	391-2585-013
Not Shown	CASE DRAIN PLUG	X02-03-22060	391-2282-056
Not Shown	DRY VALVE SEAL RETAINER	A50-60-10001	391-2584-050
Not Shown	PUMP LIP SEAL FOR PIGGY BACK S.E.C.& P.E.C.	X83-11-02708	391-2883-058
Not Shown	SHAFT KEY FOR TYPE 73 SHAFT	X01-01-81257	391-1781-008
Not Shown	SHAFT KEY FOR TYPE 43 SHAFT	X01-01-61032	391-1781-021
Not Shown	SHAFT KEY FOR TYPE 11 SHAFT	X01-01-81238	391-1781-045
Not Shown	50/50 PIGGY BACK CONNECTING SHAFT	A41-50-00400	313-1133-004
Not Shown	75/50 PIGGY BACK CONNECTING SHAFT	A42-50-00400	313-1133-003

NOTE The **XX** shown in the part number is in place of the size the true value must be placed into the part number when ordering parts.
(eg.) Gear set no. A50-50-XX000 changes to A50-50-15000 for 1.5" gear size
Housing no. A51-32-XX000 changes to A51-32-15000 for a 1.5" housing size
No porting sizes have been indicated all porting must be specified when ordering parts.



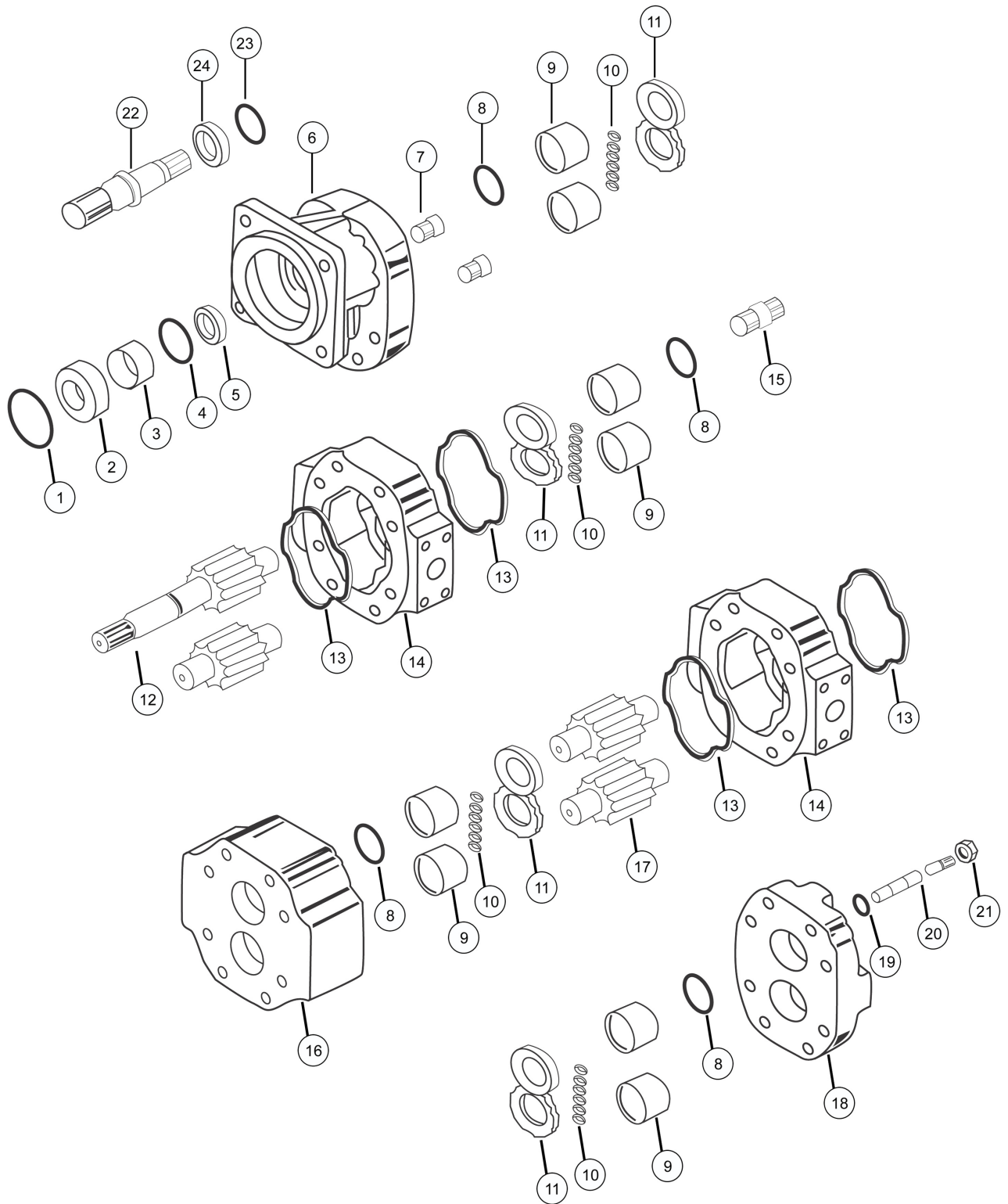
MH 75



DRW. NO.	DESCRIPTION	METARIS NO.	ALTERNATIVE NO.
1	SHAFT BRG. SNAP RING	X05-01-88280	391-2686-025
2 a	INPUT SHAFT BRG.	X03-16-13580	391-0381-078
2 b	SPACER TO REPLACE SHAFT BEARING	A75-92-64800	391-3383-018
3 a	SEAL RETAINER FOR PUMPS	A75-60-10000	391-2584-082
3 b	SEAL RETAINER FOR MOTORS	A75-60-10000	391-2584-051
4	SEAL RETAINER O RING	X81-11-06603	391-2881-457
5 a	PUMP LIP SEAL	X83-11-03508	391-2883-052
5 b	MOTOR LIP SEAL	X83-36-03510	391-2883-094
5 c	75 4 BOLT B PILOT PUMP S.E.C. TYPE 42 (4" or 101,6 mm pilot)	A75-10-21420	316-5033-201
6 b	75 4 BOLT C PILOT PUMP S.E.C. TYPE 78 (5" or 127 mm pilot)	A75-10-21430	316-5033-202
6 c	75 4 BOLT D PILOT PUMP S.E.C. TYPE 80 (6" or 152,4 mm pilot)	A75-10-21440	316-5033-203
6 d	75 2 BOLT C PILOT PUMP S.E.C. TYPE 98 (5" or 127 mm pilot)	A75-10-41230	316-5023-201
6 e	75 4 BOLT B PILOT MOTOR S.E.C. TYPE 42 (4" or 101,6 mm pilot)	A75-10-41420	316-5033-408
6 f	75 4 BOLT C PILOT MOTOR S.E.C. TYPE 78 (5" or 127 mm pilot)	A75-10-41430	316-5033-402
6 g	75 4 BOLT D PILOT MOTOR S.E.C. TYPE 80 (6" or 152,4 mm pilot)	A75-10-41440	316-5033-403
6 h	75 2 BOLT C PILOT MOTOR S.E.C. TYPE 98 (5" or 127 mm pilot)	A75-10-41230	316-5023-202
7 a	CHECK VALVE MOTOR	A00-75-11000	391-3681-001
7 b	PRESSURE PLUG PUMP	X02-03-32110	391-2286-004
8	RING SEAL	X81-76-03809	391-2585-011
9	ROLLER BEARING (Ø 2.322" O.D.)	X03-25-13859	391-0381-060
10	POCKET SEAL	X85-11-00003	391-2882-052
11 a	MOTOR & PUMP THRUST PLATE	A75-70-10000	391-2185-020
11 b	DRY VALVE THRUST PLATE	A75-70-21000	391-2185-072
Not Shown	DRY VALVE THRUST PLATE SEAL	A75-82-96010	391-2885-040
12 a	SHAFT & GEAR 14 TOOTH SPLINE 1.228" maj. dia. TYPE 7	A75-50-XX245	316-29XX-250
12 b	SHAFT & GEAR 1.250" KEYED (5/16") TYPE 11	A75-50-10145	316-29XX-750
13	PUMP & MOTOR HOUSING GASKET	X85-11-13303	391-2884-024
14	PUMP & MOTOR GEAR HOUSING	A75-32-XX000	316-80XX-100
15	CONNECTING SHAFT	A75-50-00500	316-1133-001
16 a	75 MOTOR BEARING CARRIER BLANK	A75-40-00000	316-7300-100
16 b	75 PUMP BEARING CARRIER WITH COMMON PASSAGE	A75-40-20000	316-7363-100
17	GEAR SET ONLY	A75-50-XX000	316-28XX-000
18	75 PUMP & MOTOR PORT END COVER	A75-22-00000	316-3100-100
19	FLAT WASHER (5/8")	X45-10-17005	391-3784-028
20	BOLTS / STUDS (5/8"-UNC)	See page	Fasteners
21	HEX NUT (5/8"-UNC)	X42-11-16000	391-1451-076
22 a	CONTINENTAL SHAFT 14 TOOTH SPLINE 1.228" maj. dia. TYPE 7	A75-50-00241	316-1135-148
22 b	CONTINENTAL SHAFT 1.250" KEYED (5/16") TYPE 11	A75-50-00141	316-1135-147
22 c	CONTINENTAL SHAFT 14 TOOTH SPLINE 1.228". Dia. TYPE 7 Long	A75-50-00244	316-1500-502
22 d	CONTINENTAL SHAFT 1.250" KEYED (5/16") TYPE 11 Long	A75-50-00144	316-1500-501
23	CONTINENTAL SHAFT BRG. RETAINER SNAP RING	X05-02-38130	391-2685-029
24	CONTINENTAL SHAFT BRG. RETAINER	A75-60-20000	391-3381-039
Not Shown	PUMP LIP SEAL FOR PIGGY BACK P.E.C.	X83-11-03308	391-2883-103
Not Shown	PIGGY BACK CONNECTING SHAFT	A03-50-00400	316-1133-003
Not Shown	75 PIGGY BACK REAR PORT END COVER	A75-22-03000	316-5026-203
Not Shown	DRIVE KEY FOR TYPE 11 SHAFT	X01-01-81238	391-1781-045
Not Shown	SHAFT KEY FOR TYPE 11 SHAFT	X01-01-81238	391-1781-045
Not Shown	DRY VALVE ASSEMBLY 1 1/2" CONNECTION	A00-75-12150	316- PMV-24
Not Shown	DRY VALVE ASSEMBLY 2" CONNECTION	A00-75-12200	316- PMV-32

NOTE The **XX** shown in the part number is in place of the size the true value must be placed into the part number when ordering parts.
(eg.) Gear set no. A75-50-XX000 changes to A75-50-15000 for 1.5" gear size
Housing no. A75-32-XX000 changes to A75-32-15000 for a 1.5" housing size
No porting sizes have been indicated all porting must be specified when ordering parts.

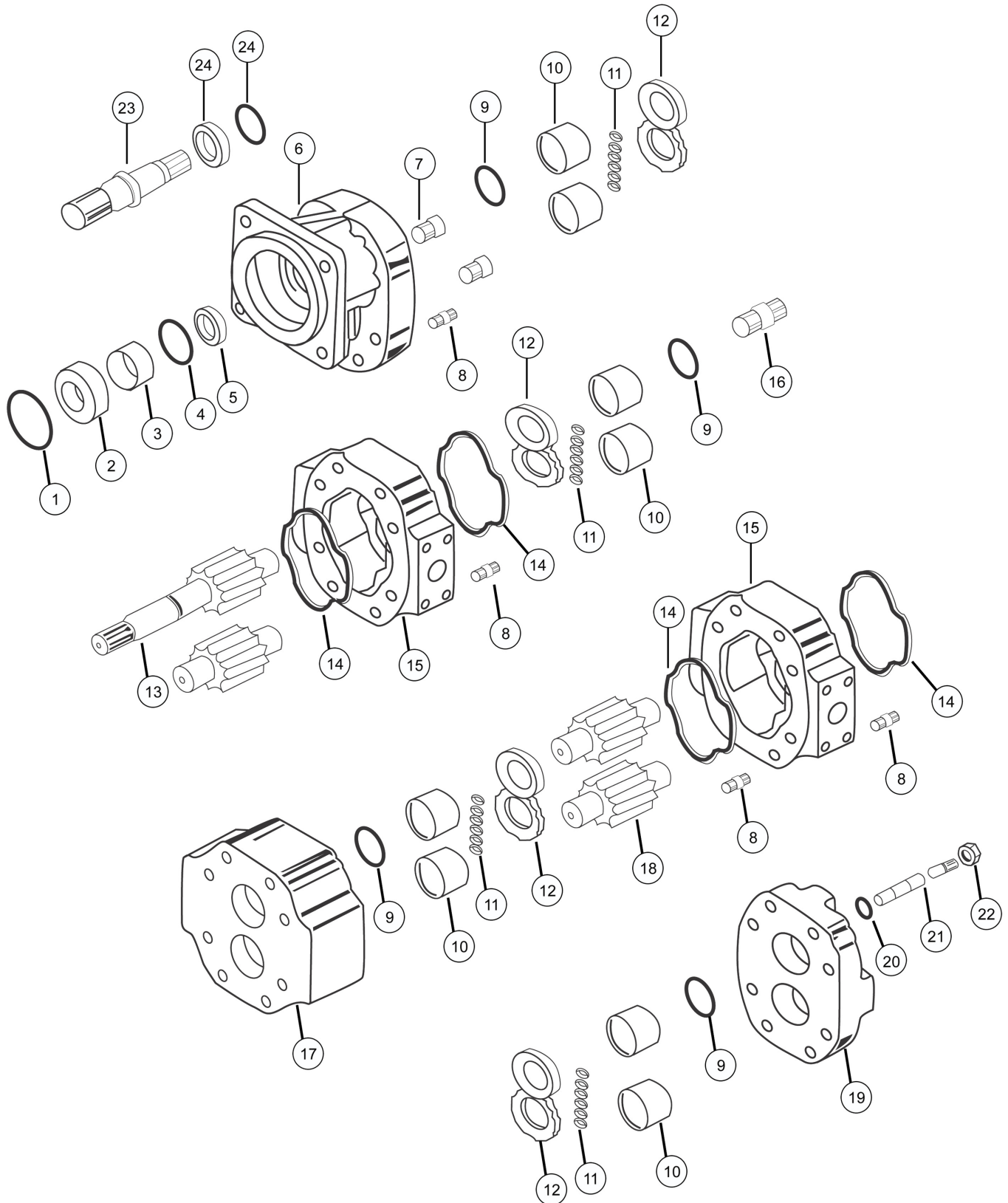
MH 75 CONTINUED



DRW. NO.	DESCRIPTION	METARIS NO.	ALTERNATIVE NO.
1	SHAFT BRG. SNAP RING	X05-01-88280	391-2686-025
2 a	INPUT SHAFT BRG.	X03-16-13580	391-0381-078
2 b	SPACER TO REPLACE SHAFT BEARING	A75-92-64800	391-3383-018
3 a	SEAL RETAINER FOR PUMPS	A75-60-10000	391-2584-082
3 b	SEAL RETAINER FOR MOTORS	A75-60-10000	391-2584-051
4	SEAL RETAINER O RING	X81-11-06603	391-2881-457
5 a	PUMP LIP SEAL	X83-11-03508	391-2883-052
5 b	MOTOR LIP SEAL	X83-36-03510	391-2883-094
6 a	76 4 BOLT B PILOT PUMP S.E.C. TYPE 42 (4" or 101,6 mm pilot)	A76-10-21420	316-5037-201
6 b	76 4 BOLT C PILOT PUMP S.E.C. TYPE 78 (5" or 127 mm pilot)	A76-10-21430	316-5037-202
6 c	76 4 BOLT D PILOT PUMP S.E.C. TYPE 80 (6" or 152,4 mm pilot)	A76-10-21440	316-5037-203
6 d	76 2 BOLT C PILOT PUMP S.E.C. TYPE 98 (5" or 127 mm pilot)	A76-10-21230	316-5027-202
6 e	76 4 BOLT B PILOT MOTOR S.E.C. TYPE 42 (4" or 101,6 mm pilot)	A76-10-41420	316-5037-401
6 f	76 4 BOLT C PILOT MOTOR S.E.C. TYPE 78 (5" or 127 mm pilot)	A76-10-41430	316-5037-402
6 g	76 4 BOLT D PILOT MOTOR S.E.C. TYPE 80 (6" or 152,4 mm pilot)	A76-10-41440	316-5037-403
6 h	76 2 BOLT C PILOT MOTOR S.E.C. TYPE 98 (5" or 127 mm pilot)	A76-10-41230	316-5027-402
7 a	CHECK VALVE MOTOR	A00-75-11000	391-3681-001
7 b	PRESSURE PLUG PUMP	X02-03-32110	391-2286-004
8	DOWEL PIN	A00-94-11638	391-2082-033
9	RING SEAL	X81-76-03809	391-2585-011
10	ROLLER BEARING (Ø 2.322" O.D.)	X03-25-13859	391-0381-060
11	POCKET SEAL	X85-11-00003	391-2882-052
12 a	PUMP THRUST PLATE	A76-70-20000	391-2185-026
12 b	MOTOR THRUST PLATE	A75-70-10000	391-2185-020
12 c	DRY VALVE THRUST PLATE	A75-70-21000	391-2185-072
Not Shown	DRY VALVE THRUST PLATE SEAL	A75-82-96010	391-2885-040
13 a	SHAFT & GEAR 14 TOOTH SPLINE 1.228" maj. dia. TYPE 7	A75-50-XX245	316-29XX-250
13 b	SHAFT & GEAR 1.250" KEYED (5/16") TYPE 11	A75-50-XX145	316-29XX-750
14	PUMP & MOTOR HOUSING GASKET	X85-11-13303	391-2884-024
15	PUMP & MOTOR GEAR HOUSING	A76-32-XX000	316-82XX-100
16	CONNECTING SHAFT	A75-50-00500	316-1133-001
17 a	76 MOTOR BEARING CARRIER BLANK	A76-40-00000	316-7740-100
17 b	76 PUMP BEARING CARRIER WITH COMMON PASSAGE	A76-40-20000	316-7723-100
18	GEAR SET ONLY	A75-50-XX000	316-28XX-000
19	76 PUMP & MOTOR PORT END COVER	A76-22-00000	316-3120-100
20	FLAT WASHER (5/8")	X45-10-17005	391-3784-028
21	BOLTS / STUDS (5/8"-UNC)	See page	Fasteners
22	HEX NUT (5/8"-UNC)	X42-11-16000	391-1451-076
23 a	CONTINENTAL SHAFT 14 TOOTH SPLINE 1.228" maj. dia. TYPE 7	A75-50-00241	316-1135-148
23 b	CONTINENTAL SHAFT 1.250" KEYED (5/16") TYPE 11	A75-50-00141	316-1135-147
23 c	CONTINENTAL SHAFT 14 TOOTH SPLINE 1.228". Dia. TYPE 7 Long	A75-50-00244	316-1500-502
23 d	CONTINENTAL SHAFT 1.250" KEYED (5/16") TYPE 11 Long	A75-50-00144	316-1500-501
24	CONTINENTAL SHAFT BRG. RETAINER	A75-60-20000	391-3381-039
25	CONTINENTAL SHAFT BRG. RETAINER SNAP RING	X05-02-38130	391-2685-029
Not Shown	PIGGY BACK CONNECTING SHAFT	A03-50-00400	316-1133-003
Not Shown	PUMP LIP SEAL FOR PIGGY BACK P.E.C.	X83-11-03308	391-2883-103
Not Shown	76 PIGGY BACK REAR PORT END COVER	A76-22-03000	316-5027-213
Not Shown	DRIVE KEY FOR TYPE 11 SHAFT	X01-01-81238	391-1781-045
Not Shown	DRY VALVE ASSEMBLY 1 1/2" CONNECTION	A00-75-12150	316- PMV-24
Not Shown	DRY VALVE ASSEMBLY 2" CONNECTION	A00-75-12200	316- PMV-32

NOTE The **XX** shown in the part number is in place of the size the true value must be placed into the part number when ordering parts.
(eg.) Gear set no. A75-50-XX000 changes to A75-50-15000 for 1.5" gear size
Housing no. A76-32-XX000 changes to A76-32-15000 for a 1.5" housing size
No porting sizes have been indicated all porting must be specified when ordering parts.

MH 76 CONTINUED



MH 315



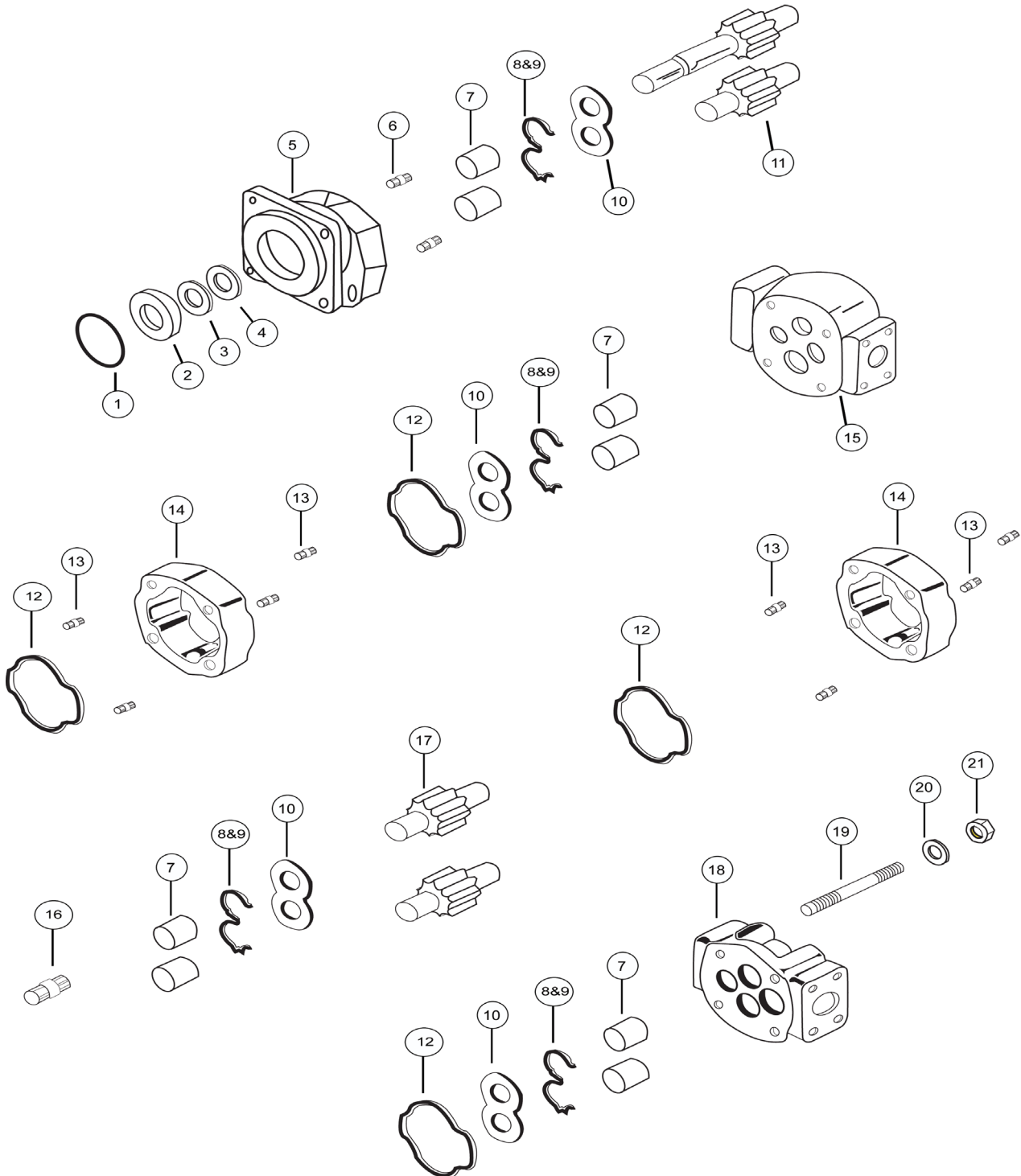
DRW. NO.	DESCRIPTION	METARIS NO.	ALTERNATIVE NO.
1	SEAL RETAINER SNAP RING MOTOR ONLY	X05-01-56190	391-2686-016
2	SHAFT BEARING (USED IN TYPE * 90 S.E.C.)	X03-16-12251	391-0381-105
3	SEAL RETAINER FOR MOTORS ONLY	A32-60-10000	391-3384-313
4 a	PUMP LIP SEAL	X83-11-02406	391-2883-151
4 b	MOTOR LIP SEAL	X83-36-02406	391-2883-156
5 a	2 BOLT A PILOT PUMP S.E.C. WITHOUT BUSHING TYPE 93 (3 1/4" or 82,55 mm pilot)	A32-10-21211	326-5029-204
5 b	2 BOLT A PILOT PUMP S.E.C. WITH BUSHING TYPE 93 (3 1/4" or 82,55 mm pilot)	A32-10-21212	326-5129-204
5 c	2 BOLT B PILOT PUMP S.E.C. WITHOUT BUSHING TYPE 96 (4" or 101,6 mm pilot)	A32-10-21221	326-5029-203
5 d	2 BOLT B PILOT PUMP S.E.C. WITH BUSHING TYPE 96 (4" or 101,6 mm pilot)	A32-10-21222	326-5129-203
5 e	2 BOLT A PILOT MOTOR S.E.C. WITHOUT BUSHING TYPE 93 (3 1/4" or 82,55 mm pilot)	A32-10-41211	326-5029-404
5 f	2 BOLT A PILOT MOTOR S.E.C. WITH BUSHING TYPE 93 (3 1/4" or 82,55 mm pilot)	A32-10-41213	326-5129-404
5 g	2 BOLT B PILOT MOTOR S.E.C. WITHOUT BUSHING TYPE 96 (4" or 101,6 mm pilot)	A32-10-41221	326-5029-403
5 h	2 BOLT B PILOT MOTOR S.E.C. WITH BUSHING TYPE 96 (4" or 101,6 mm pilot)	A32-10-41222	326-5129-403
5 i	4 BOLT 72 X 100 mm / 80mm PILOT WITHOUT BUSHING TYPE 90	A32-10-21491	326-5033-205
5 j	4 BOLT 72 X 100 mm / 80mm PILOT WITH BUSHING TYPE 90	A32-10-21492	326-5133-205
5 k	PAD MOUNT WITHOUT BUSHING TYPE 95	N/A	326-5016-202
5 L	PAD MOUNT WITH BUSHING TYPE 95	N/A	326-5116-202
5 m	2 BOLT A PILOT SEC TYPE 89 W/ SNAP RING	A32-10-41212	326-5029-426
6 a	CHECK VALVE MOTOR	A00-75-11000	391-3681-001
6 b	PRESSURE PLUG PUMP (may not be required)	X02-03-32110	391-2286-004
8	PUMP BUNA SEAL	A32-82-11030	391-2883-168
9	PUMP NYLON BACKUP SEAL	A32-82-46010	391-2883-169
Not Shown	MOTOR NYLON BACKUP SEAL	A32-82-46030	391-2881-995
Not Shown	MOTOR THRUST PLATE SIDE SEAL	A32-82-14022	391-2881-997
Not Shown	MOTOR THRUST PLATE END SEAL	A32-82-14021	391-2881-996
10 a	PUMP THRUST PLATE	A32-70-20000	391-2185-063
10 b	MOTOR THRUST PLATE	A32-70-10000	391-2185-070
11 a	SHAFT & GEAR SAE "A" 0.625" dia. KEYED TYPE 97	A32-50-XX111	326-29XX-920
11 b	SHAFT & GEAR SAE " A" 9 TOOTH SPLINE 0.609" maj. dia. TYPE 96	A32-50-XX211	326-29XX-420
11 c	SHAFT & GEAR SAE "B" 0.875" dia. KEYED TYPE 66	A32-50-XX126	326-29XX-930
11 d	SHAFT & GEAR SAE " B" 13-TOOTH SPLINE 0.858" maj. dia. TYPE 65	A32-50-05226	326-29XX-430
11 e	SHAFT & GEAR TAPERED M12 X 1.5 THD & 3X5 KEYED TYPE 60	N/A	326-29XX-701
11 f	SHAFT & GEAR TAPERED 5/16 INTERNAL THD #6 WDF KEY TYPE 56	N/A	326-29XX-604
12 a	PUMP HOUSING GASKET	X85-11-08203	391-2881-968
12 b	MOTOR HOUSING GASKET	X85-11-08903	391-2881-429
13	HOUSING DOWELL PIN	A00-94-10616	391-2082-071
14 a	PUMP GEAR HOUSING	A32-33-XX000	326-81XX-100
14 b	MOTOR GEAR HOUSING	A32-32-XX000	326-82XX-100
15 a	315 BEARING CARRIER 1 OUTLET WITHOUT BUSHING	A32-40-21000	326-7100-100
15 b	315 BEARING CARRIER 1 OUTLET WITH BUSHING	A32-40-31000	326-7600-100
15 c	315 BEARING CARRIER 2 OUTLET WITHOUT BUSHING	A32-40-22000	326-7300-100
15 d	315 BEARING CARRIER 2 OUTLET WITH BUSHING	A32-40-32000	326-7800-100
16	CONNECTING SHAFT	A32-50-00500	326-1133-001
17	GEAR SET ONLY	A32-50-XX000	326-28XX-000
18 a	315 PUMP P.E.C. NO PORTING WITHOUT BUSHING	A32-23-00000	326-3000-100
18 b	315 PUMP P.E.C. NO PORTING WITH BUSHING	A32-23-10000	326-3100-100
18 c	315 PUMP P.E.C. SIDE PORTING TYPE WITHOUT BUSHING	A32-23-01000	326-3030-100
18 d	315 PUMP P.E.C. SIDE PORTING TYPE WITH BUSHING	A32-23-11000	326-3130-100
18 e	315 PUMP P.E.C. SIDE & REAR PORTING TYPE WITHOUT BUSHING	A32-26-18000	326-3133-100
18 f	315 PUMP P.E.C. SIDE & REAR PORTING TYPE WITH BUSHING	A32-23-08000	326-3033-100
18 g	315 MOTOR P.E.C. PORTING TYPE WITHOUT BUSHING	A32-22-02000	326-3020-100
18 h	315 MOTOR P.E.C. PORTING TYPE WITH BUSHING	A32-22-12000	326-3120-100
19	BOLTS / STUDS (1/2"-UNC)	See page	Fasteners
20	FLAT WASHER (1/2")	X45-19-13005	391-3782-132
21	HEX NUT (1/2"-UNC)	X42-11-13011	391-1451-051

MH 315 CONTINUED



DRW. NO.	DESCRIPTION	METARIS NO.	ALTERNATIVE NO.
Not Shown	CASE DRAIN PLUG	X02-03-12060	391-2281-010
Not Shown	DRIVE KEY FOR TYPE 97 SHAFT	X01-02-40419	391-1781-091
Not Shown	DRIVE KEY FOR TYPE 66 SHAFT	X01-02-60625	391-1781-085

NOTE (eg.) The **XX** shown in the part number is in place of the size the true value must be placed into the part number when ordering parts.
 Gear set no. A32-50-XX000 changes to A32-50-15000 for 1.5" gear size
 Housing no. A32-33-XX000 changes to A32-33-15000 for a 1.5" housing size
 No porting sizes have been indicated all porting must be specified when ordering parts.



MH 330



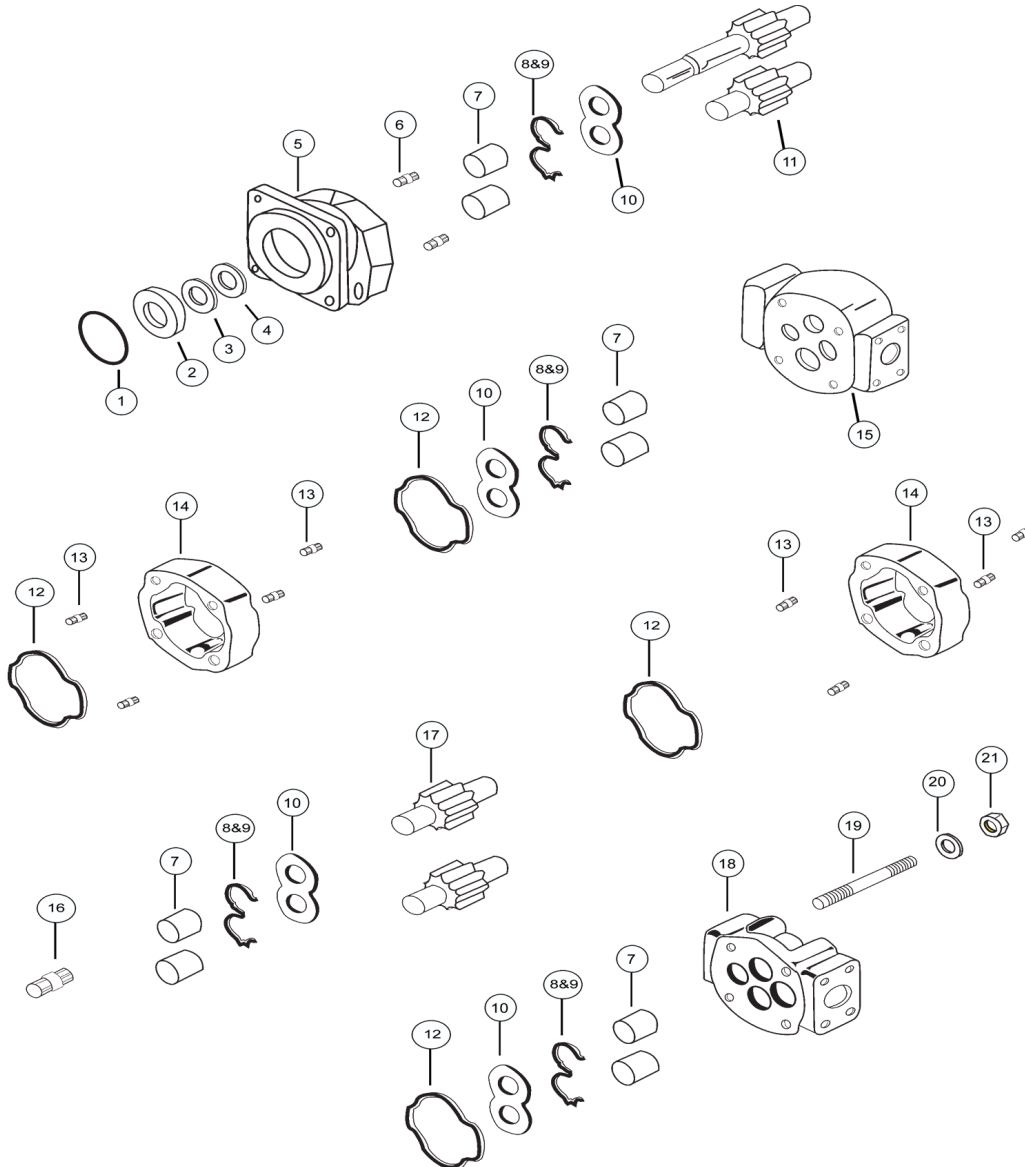
DRW. NO.	DESCRIPTION	METARIS NO.	ALTERNATIVE NO.
1	SHAFT BRG. SNAP RING	X05-03-56200	391-2686-063
2 a	INPUT SHAFT BRG.	X03-16-12552	391-0381-040
2 b	SPACER IN PLACE OF SHAFT BEARING	A30-92-38520	391-3383-069
3	SEAL RETAINER FOR MOTORS ONLY	A20-60-10000	391-3381-040
4 a	PUMP LIP SEAL	X83-11-02708	391-2883-058
4 b	MOTOR LIP SEAL	X83-36-02709	391-2883-119
4 c	PUMP LIP SEAL FOR CONTINENTAL SHAFT ONLY	X89-11-02508	391-2883-107
4 d	MOTOR LIP SEAL FOR CONTINENTAL SHAFT ONLY	X83-36-02509	391-2883-126
5 a	4 BOLT B PILOT PUMP S.E.C. WITHOUT BUSHING TYPE 42 (4" or 101,6 mm pilot)	A33-10-21421	324-5033-201
5 b	4 BOLT B PILOT PUMP S.E.C. WITH BUSHING TYPE 42 (4" or 101,6 mm pilot)	A33-10-21422	324-5133-201
5 c	4 BOLT C PILOT PUMP S.E.C. WITHOUT BUSHING TYPE 78 (5" or 127 mm pilot)	A33-10-21431	324-5033-202
5 d	4 BOLT C PILOT PUMP S.E.C. WITH BUSHING TYPE 78 (5" or 127 mm pilot)	A33-10-21432	324-5133-202
5 e	2 BOLT B PILOT PUMP S.E.C. WITHOUT BUSHING TYPE 97 (4" or 101,6 mm pilot)	A33-10-21221	324-5023-201
5 f	2 BOLT B PILOT PUMP S.E.C. WITH BUSHING TYPE 97 (4" or 101,6 mm pilot)	A33-10-21222	324-5123-201
5 g	2 & 4 BOLT B PILOT PUMP S.E.C. WITHOUT BUSHING TYPE 46 (4" or 101,6 mm pilot)	A33-10-21321	324-5053-201
5 h	2 & 4 BOLT B PILOT PUMP S.E.C. WITH BUSHING TYPE 46 (4" or 101,6 mm pilot)	A33-10-21322	324-5153-201
5 i	4 BOLT B PILOT MOTOR S.E.C. WITHOUT BUSHING TYPE 42 (4" or 101,6 mm pilot)	A33-10-41421	324-5033-401
5 j	4 BOLT B PILOT MOTOR S.E.C. WITH BUSHING TYPE 42 (4" or 101,6 mm pilot)	A33-10-41422	324-5133-401
5 k	4 BOLT C PILOT MOTOR S.E.C. WITHOUT BUSHING TYPE 78 (5" or 127 mm pilot)	A33-10-41431	324-5033-402
5 L	4 BOLT C PILOT MOTOR S.E.C. WITH BUSHING TYPE 78 (5" or 127 mm pilot)	A33-10-41432	324-5133-402
5 m	2 BOLT B PILOT MOTOR S.E.C. WITHOUT BUSHING TYPE 97 (4" or 101,6 mm pilot)	A33-10-41221	324-5023-401
5 n	2 BOLT B PILOT MOTOR S.E.C. WITH BUSHING TYPE 97 (4" or 101,6 mm pilot)	A33-10-41222	324-5123-401
5 o	2 & 4 BOLT B PILOT MOTOR S.E.C. WITHOUT BUSHING TYPE 46 (4" or 101,6 mm pilot)	A33-10-41320	324-5053-401
5 p	2 & 4 BOLT B PILOT MOTOR S.E.C. WITH BUSHING TYPE 46 (4" or 101,6 mm pilot)	A33-10-41322	324-5153-401
6 a	CHECK VALVE MOTOR	A00-75-11000	391-3681-001
6 b	PRESSURE PLUG PUMP (may not be required)	X02-03-32110	391-2286-004
7	SHAFT BUSHING	X03-00-32730	391-0482-306
8	PUMP BUNA SEAL	A33-82-11030	391-2883-166
9	PUMP NYLON BACKUP SEAL	A33-82-46010	391-2883-167
Not Shown	MOTOR NYLON BACKUP SEAL	A33-82-46030	391-2881-929
Not Shown	MOTOR THRUST PLATE SIDE SEAL	A33-82-14022	391-2881-931
Not Shown	MOTOR THRUST PLATE END SEAL	A33-82-14021	391-2881-930
10 a	PUMP THRUST PLATE	A33-70-20000	391-2185-056
10 b	MOTOR THRUST PLATE	A33-70-10000	391-2185-065
11 a	SHAFT & GEAR SET 13 TOOTH SPLINE 0.858" maj. dia TYPE 25	A33-50-XX225	324-29XX-230
11 b	SHAFT & GEAR SET 0.9984" dia. KEYED (1/4" x 3/8" x 1 1/4") TYPE 43	A33-50-XX135	324-29XX-740
11 c	SHAFT & GEAR SET 15 TOOTH SPLINE 0.983" maj. dia TYPE 98	A33-50-XX231	324-29XX-240
12 a	PUMP HOUSING GASKET	X85-11-10104	391-2884-050
12 b	MOTOR HOUSING GASKET	X85-11-09803	391-2884-076
13	HOUSING DOWELL PIN	A00-94-11025	391-2082-032
14 a	PUMP GEAR HOUSING	A33-33-XX000	324-81XX-100
14 b	MOTOR GEAR HOUSING	A33-32-XX000	324-82XX-100
15 a	330 BEARING CARRIER BLANK WITHOUT BUSHING	A33-40-00000	324-7200-100
15 b	330 BEARING CARRIER BLANK WITH BUSHING	A33-40-10000	324-7700-100
15 c	330 BEARING CARRIER 1 OUTLET WITHOUT BUSHING	A33-40-21000	324-7100-100
15 d	330 BEARING CARRIER 1 OUTLET WITH BUSHING	A33-40-31000	324-7600-100
15 e	330 BEARING CARRIER 2 OUTLET WITHOUT BUSHING	A33-40-22000	324-7300-100
15 f	330 BEARING CARRIER 2 OUTLET WITH BUSHING	A33-40-32000	324-7800-100
15 g	330/315 BEARING CARRIER CW WITHOUT BUSHING	A33-40-23000	324-3050-100
15 h	330/315 BEARING CARRIER CW WITH BUSHING	A33-40-33000	324-3150-100
15 i	330/315 BEARING CARRIER CCW WITHOUT BUSHING	A33-40-24000	324-3060-100
15 j	330/315 BEARING CARRIER CCW WITH BUSHING	A33-40-34000	324-3160-100
16 a	CONNECTING SHAFT	A33-50-00500	324-1133-001
16 b	PIGGYBACK CONNECTING SHAFT PHASE 2	A81-50-00500	324-1133-004
17	GEAR SET ONLY	A33-50-XX000	324-28XX-000
18 a	330 PUMP P.E.C. NO PORTING WITHOUT BUSHING	A33-23-00000	324-3000-100
18 b	330 PUMP P.E.C. NO PORTING WITH BUSHING	A33-23-10000	324-3100-100
18 c	330 P.E.C. NO PORTING WITHOUT BUSHING CHECK VALVE REQ.	A33-25-00000	324-3000-101
18 d	330 P.E.C. NO PORTING WITH BUSHING CHECK VALVE REQ.	A33-25-10000	324-3100-101
18 e	330 PUMP P.E.C. PORTING TYPE WITHOUT BUSHING	A33-23-02000	324-3010-100
18 f	330 PUMP P.E.C. PORTING TYPE WITH BUSHING	A33-23-12000	324-3110-100

MH 330 CONTINUED



DRW. NO.	DESCRIPTION	METARIS NO.	ALTERNATIVE NO.
18 g	330 MOTOR P.E.C. PORTING TYPE WITHOUT BUSHING	A33-22-02000	324-3020-100
18 h	330 MOTOR P.E.C. PORTING TYPE WITH BUSHING	A33-22-12000	324-3120-100
19	BOLTS / STUDS (5/8"-UNC)	See page	Fasteners
20	FLAT WASHER (5/8")	X45-10-17005	391-3784-028
21	HEX NUT (5/8"-UNC)	X42-11-16000	391-1451-076
Not Shown	CONTINENTAL SHAFT 14 TOOTH SPLINE 1.223" maj. dia. TYPE 7	A33-50-00241	324-1000-500
Not Shown	CONTINENTAL SHAFT 13 TOOTH SPLINE 0.858" maj. dia. TYPE 25	A33-50-00221	324-1000-300
Not Shown	CONTINENTAL SHAFT 0.9984" dia. KEYED (1/4" x 3/8" x 1 1/4") TYPE 43	A33-50-00131	324-1500-400
Not Shown	CONTINENTAL SHAFT 15 TOOTH SPLINE 0.983" maj. dia. TYPE 98	A33-50-00239	324-1200-400
Not Shown	CONTINENTAL SHAFT 0.875" dia. KEYED (1/4" x 3/8" x 1") TYPE 30	A33-50-00121	324-1500-300
Not Shown	DRIVE KEY FOR TYPE 43 SHAFT	X01-02-60632	391-1781-082
Not Shown	DRIVE KEY FOR TYPE 30 SHAFT	X01-02-60625	391-1781-085
Not Shown	CONTINENTAL SHAFT BRG. RETAINER	A20-60-20000	312-0100-002
Not Shown	CONTINENTAL SHAFT BRG. RETAINER SNAP RING	X05-02-28110	391-2685-011

NOTE The **XX** shown in the part number is in place of the size the true value must be placed into the part number when ordering parts.
(eg.) Gear set no. A33-50-XX000 changes to A33-50-15000 for 1.5" gear size
 Housing no. A33-33-XX000 changes to A33-33-15000 for a 1.5" housing size
 No porting sizes have been indicated all porting must be specified when ordering parts.



MH 350

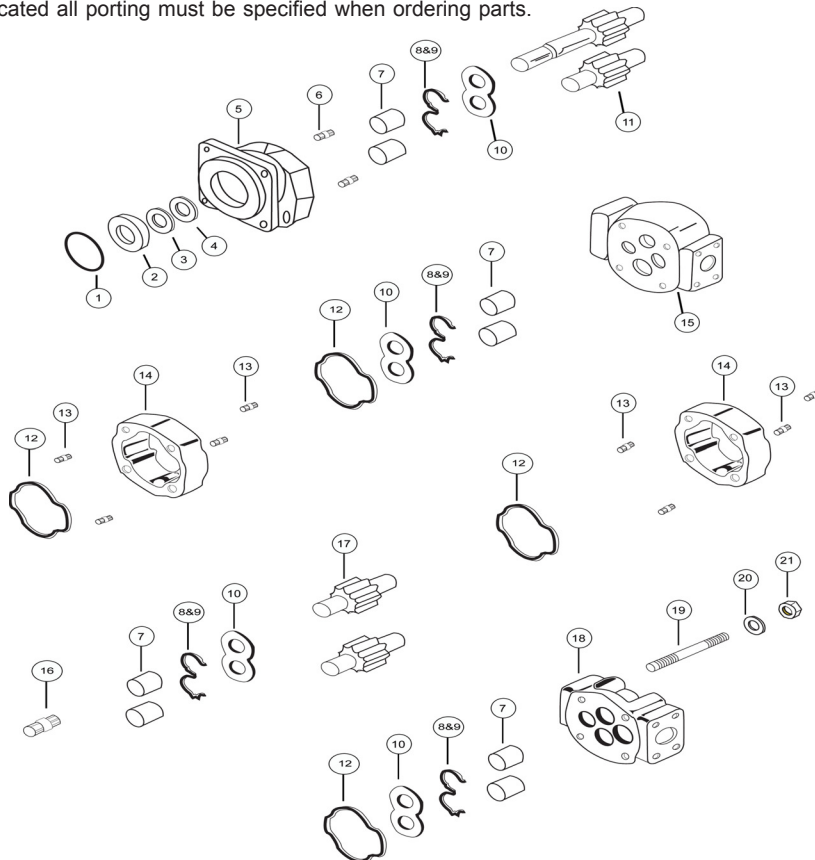


DRW. NO.	DESCRIPTION	METARIS NO.	ALTERNATIVE NO.
1	SHAFT BRG. SNAP RING	X05-03-77250	391-2686-065
2 a	INPUT SHAFT BRG.	X03-16-13272	391-0381-077
2 b	SEAL RETAINER & SPACER IN PLACE OF SHAFT BRG.	A50-60-10000	391-3383-087
3	SEAL RETAINER FOR MOTORS ONLY	A50-60-30000	391-3383-020
4 a	PUMP LIP SEAL	X83-11-03308	391-2883-103
4 b	MOTOR LIP SEAL	X83-36-03309	391-2883-115
4 c	SEAL FOR CONTINENTAL SHAFT	X89-11-03308	391-2883-133
5 a	4 BOLT B MOUNT PUMP S.E.C. WITHOUT BUSHING TYPE 42 (4" or 101,6 mm pilot)	A35-10-21421	323-5033-201
5 b	4 BOLT B MOUNT PUMP S.E.C. WITH BUSHING TYPE 42 (4" or 101,6 mm pilot)	A35-10-21422	323-5133-201
5 c	2/4 BOLT B MOUNT PUMP S.E.C. WITHOUT BUSHING TYPE 46 (4" or 101,6 mm pilot)	A35-10-21321	323-5053-201
5 d	2/4 BOLT B MOUNT PUMP S.E.C. WITH BUSHING TYPE 46 (4" or 101,6 mm pilot)	A35-10-21322	323-5153-201
5 e	4 BOLT C MOUNT PUMP S.E.C. WITHOUT BUSHING TYPE 78 (5" or 127 mm pilot)	A35-10-21431	323-5033-202
5 f	4 BOLT C MOUNT PUMP S.E.C. WITH BUSHING TYPE 78 (5" or 127 mm pilot)	A35-10-21432	323-5133-202
5 g	2 BOLT B MOUNT PUMP S.E.C. WITHOUT BUSHING TYPE 97 (4" or 101,6 mm pilot)	A35-10-21221	323-5023-201
5 h	2 BOLT B MOUNT PUMP S.E.C. WITH BUSHING TYPE 97 (4" or 101,6 mm pilot)	A35-10-21222	323-5123-201
5 i	2 BOLT C MOUNT PUMP S.E.C. WITHOUT BUSHING TYPE 98 (5" or 127 mm pilot)	A35-10-21231	323-5023-202
5 j	2 BOLT C MOUNT PUMP S.E.C. WITH BUSHING TYPE 98 (5" or 127 mm pilot)	A35-10-21232	323-5123-202
5 k	4 BOLT B MOUNT MOTOR S.E.C. WITHOUT BUSHING TYPE 42 (4" or 101,6 mm pilot)	A35-10-41421	323-5033-401
5 L	4 BOLT B MOUNT MOTOR S.E.C. WITH BUSHING TYPE 42 (4" or 101,6 mm pilot)	A35-10-41422	323-5133-401
5 m	2/4 BOLT B MOUNT MOTOR S.E.C. WITHOUT BUSHING TYPE 46 (4" or 101,6 mm pilot)	A35-10-41321	323-5053-401
5 n	2/4 BOLT B MOUNT MOTOR S.E.C. WITH BUSHING TYPE 46 (4" or 101,6 mm pilot)	A35-10-41322	323-5153-401
5 o	4 BOLT C MOUNT MOTOR S.E.C. WITHOUT BUSHING TYPE 78 (5" or 127 mm pilot)	A35-10-41431	323-5033-402
5 p	4 BOLT C MOUNT MOTOR S.E.C. WITH BUSHING TYPE 78 (5" or 127 mm pilot)	A35-10-41432	323-5133-402
5 q	2 BOLT B MOUNT MOTOR S.E.C. WITHOUT BUSHING TYPE 97 (4" or 101,6 mm pilot)	A35-10-41221	323-5023-401
5 r	2 BOLT B MOUNT MOTOR S.E.C. WITH BUSHING TYPE 97 (4" or 101,6 mm pilot)	A35-10-41222	323-5123-401
5 s	2 BOLT C MOUNT MOTOR S.E.C. WITHOUT BUSHING TYPE 98 (5" or 127 mm pilot)	A35-10-41231	323-5023-402
5 t	2 BOLT C MOUNT MOTOR S.E.C. WITH BUSHING TYPE 98 (5" or 127 mm pilot)	A35-10-41232	323-5123-402
6 a	CHECK VALVE MOTOR	A00-75-11000	391-3681-001
6 b	PRESSURE PLUG PUMP	X02-03-32110	391-2286-004
7	SHAFT BUSHING	X03-00-33337	391-0482-308
8	PUMP BUNA SEAL	A35-82-11050	391-2883-140
9	PUMP NYLON BACKUP SEAL	A35-82-46010	391-2883-139
10 a	PUMP THRUST PLATE	A35-70-20000	391-2185-057
10 b	MOTOR THRUST PLATE	A35-70-10000	391-2185-068
Not Shown	MOTOR NYLON BACKUP SEAL	A35-82-46030	391-2885-075
Not Shown	MOTOR THRUST PLATE SIDE SEAL	A35-82-14021	391-2885-073
Not Shown	MOTOR THRUST PLATE END SEAL	A35-82-14020	391-2885-074
11 a	SHAFT & GEAR 14 TOOTH SPLINE 1.228" maj. dia. TYPE 7	A35-50-XX245	323-29XX-250
11 b	SHAFT & GEAR 1.250" KEYED (5/16") TYPE 11	A35-50-XX145	323-29XX-750
11 c	SHAFT & GEAR SET 13 TOOTH SPLINE 0.858" maj. dia TYPE 25	A35-50-XX225	323-29XX-230
11 d	SHAFT & GEAR SET 0.9984" dia. KEYED (1/4" x 3/8" x 1 1/4") TYPE 43	A35-50-XX135	323-29XX-740
11 e	SHAFT & GEAR 15 TOOTH SPLINE 0,980" maj. dia. TYPE 98	A35-50-XX231	323-29XX-240
11 f	SHAFT & GEAR 1.250" dia. KEYED (5/16" x 5/16" x 2 1/4") TYPE 73	SPECIAL ORDER	323-29XX-752
12 a	PUMP HOUSING GASKET	X85-11-11403	391-2884-074
12 b	MOTOR HOUSING GASKET	X85-11-10803	391-2884-021
13	HOUSING DOWELL PIN	A00-94-11025	391-2082-032
14 a	PUMP GEAR HOUSING	A35-33-XX000	323-81XX-100
14 b	MOTOR GEAR HOUSING	A35-32-XX000	323-82XX-100
15 a	350 BEARING CARRIER BLANK WITHOUT BUSHING	A35-40-00000	323-7200-100
15 b	350 BEARING CARRIER BLANK WITH BUSHING	A35-40-10000	323-7700-100
15 c	350 BEARING CARRIER 1 OUTLET WITHOUT BUSHING	A35-40-21000	323-7100-100
15 d	350 BEARING CARRIER 1 OUTLET WITH BUSHING	A35-40-31000	323-7600-100
15 e	350 BEARING CARRIER 2 OUTLET WITHOUT BUSHING	A35-40-22000	323-7300-100
15 f	350 BEARING CARRIER 2 OUTLET WITH BUSHING	A35-40-32000	323-7800-100
15 g	350/315 BEARING CARRIER CW WITHOUT BUSHING	A35-40-23000	323-3050-100
15 h	350/315 BEARING CARRIER CW WITH BUSHING	A35-40-33000	323-3150-100
15 i	350/315 BEARING CARRIER CCW WITHOUT BUSHING	A35-40-24000	323-3060-100
15 j	350/315 BEARING CARRIER CCW WITH BUSHING	A35-40-34000	323-3160-100
16 a	CONNECTING SHAFT	A35-50-00500	323-1133-001
16 b	PIGGYBACK CONNECTING SHAFT PHASE 2	A82-50-00500	323-1133-006
16 c	PIGGY BACK CONNECTING SHAFT BEARING SNAP RING	X05-01-61200	391-2686-019
16 d	PIGGY BACK CONNECTING SHAFT BEARING	X03-16-13055	391-0381-099
16 e	PIGGY BACK CONNECTING SHAFT SAE "B" SPLINE	A35-50-00620	323-1133-003
16 f	PIGGY BACK CONNECTING SHAFT SAE "A" SPLINE	A35-50-00610	323-1133-002

MH 350 CONTINUED

DRW. NO.	DESCRIPTION	METARIS NO.	ALTERNATIVE NO.
17	GEAR SET ONLY	A35-50-XX000	323-28XX-000
18 a	350 PUMP & MOTOR P.E.C. WITHOUT BUSHING NO PORTING	A35-23-00000	323-3000-100
18 b	350 PUMP & MOTOR P.E.C. WITH BUSHING NO PORTING	A35-23-10000	323-3100-100
18 c	350 PUMP P.E.C. PORTING TYPE WITHOUT BUSHING	A35-23-02000	323-3010-100
18 d	350 PUMP P.E.C. PORTING TYPE WITH BUSHING	A35-23-12000	323-3110-100
18 e	350 MOTOR P.E.C. PORTING TYPE WITHOUT BUSHING	A35-22-02000	323-3020-100
18 f	350 MOTOR P.E.C. PORTING TYPE WITH BUSHING	A35-22-12000	323-3120-100
18 g	350 P.E.C. TO S.A.E. "A" PILOT CW WITHOUT BUSHING	A35-23-04000	323-3054-099
18 h	350 P.E.C. TO S.A.E. "A" PILOT CW WITH BUSHING	A35-23-14000	323-3154-099
18 i	350 P.E.C. TO S.A.E. "A" PILOT CCW WITHOUT BUSHING	A35-23-05000	323-3064-099
18 j	350 P.E.C. TO S.A.E. "A" PILOT CCW WITH BUSHING	A35-23-15000	323-3164-099
18 k	350 P.E.C. TO S.A.E. "B" PILOT CW WITHOUT BUSHING	A35-23-06000	323-3054-100
18 L	350 P.E.C. TO S.A.E. "B" PILOT CW WITH BUSHING	A35-23-16000	323-3154-100
18 m	350 P.E.C. TO S.A.E. "B" PILOT CCW WITHOUT BUSHING	A35-23-07000	323-3064-100
18 n	350 P.E.C. TO S.A.E. "B" PILOT CCW WITH BUSHING	A35-23-17000	323-3164-100
19	BOLTS / STUDS (5/8"-UNC)	See page	Fasteners
20	FLAT WASHER (5/8")	X45-10-17005	391-3784-028
21	HEX NUT (5/8"-UNC)	X42-11-16000	391-1451-076
Not Shown	CONTINENTAL SHAFT 1.250" KEYED (5/16") TYPE 11	A35-50-00141	323-1500-500
Not Shown	CONTINENTAL SHAFT TYPE 25 (0.875" Ø- 13 TOOTH SPLINE)	A35-50-00221	323-1000-300
Not Shown	CONTINENTAL SHAFT TYPE 73 LONG (1 1/4" Ø KEYED 5/16")	A35-50-00147	323-1500-502
Not Shown	CONTINENTAL SHAFT 14 TOOTH SPLINE 1.228" maj. dia. TYPE 7	A35-50-00241	323-1135-194
Not Shown	CONTINENTAL SHAFT TYPE 43 (1.00" Ø x 1/4" x 3/8" x 1 1/4" key)	A35-50-00131	323-1500-400
Not Shown	DRIVE KEY FOR TYPE 11 SHAFT	X01-02-80838	391-1781-083
Not Shown	DRIVE KEY FOR TYPE 43 SHAFT	X01-02-60632	391-1781-082
Not Shown	DRIVE KEY FOR TYPE 73 SHAFT	SPECIAL ORDER	391-1781-088
Not Shown	CONTINENTAL SHAFT BRG. RETAINER	A50-60-20000	391-3381-046
Not Shown	CONTINENTAL SHAFT BRG. RETAINER SNAP RING	X05-02-35120	391-2685-040
Not Shown	CASE DRAIN PLUG	X02-03-12060	391-2281-010

NOTE The **XX** shown in the part number is in place of the size the true value must be placed into the part number when ordering parts.
(eg.) Gear set no. A35-50-XX000 changes to A35-50-15000 for 1.5" gear size
Housing no. A35-33-XX000 changes to A35-33-15000 for a 1.5" housing size
No porting sizes have been indicated all porting must be specified when ordering parts.



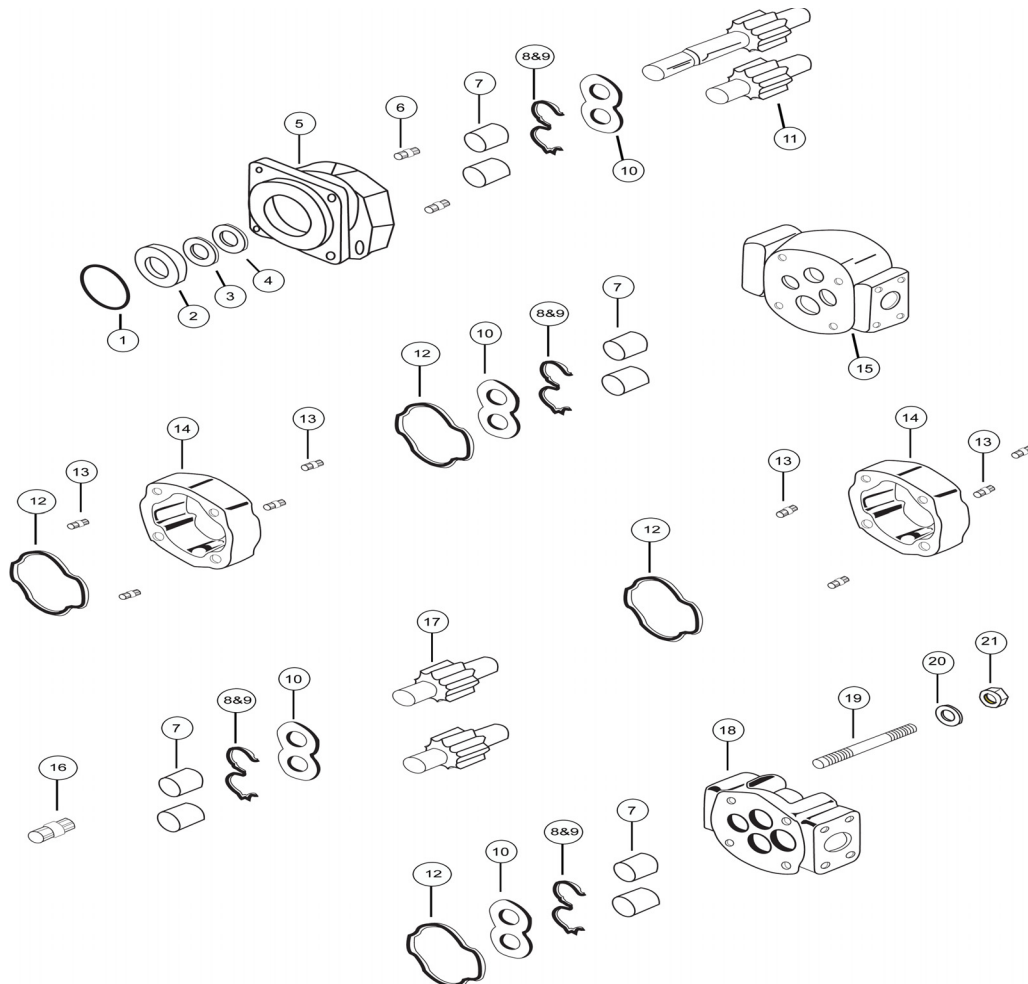
DRW. NO.	DESCRIPTION	METARIS NO.	ALTERNATIVE NO.
1	SHAFT BRG. SNAP RING	X05-01-88280	391-2686-025
2 a	INPUT SHAFT BRG.	X03-16-13580	391-0381-078
2 b	SEAL RETAINER & SPACER IN PLACE OF SHAFT BRG.	A36-60-10002	391-3383-099
3	SEAL RETAINER FOR MOTORS ONLY	A36-60-10001	391-2584-119
4 a	PUMP LIP SEAL	X83-11-03508	391-2883-052
4 b	MOTOR LIP SEAL	X83-36-03510	391-2883-094
5 a	4 BOLT B MOUNT PUMP S.E.C. WITHOUT BUSHING TYPE 42 (4" or 101,6 mm pilot)	A36-10-21421	322-5033-201
5 b	4 BOLT B MOUNT PUMP S.E.C. WITH BUSHING TYPE 42 (4" or 101,6 mm pilot)	A36-10-21422	322-5133-201
5 c	4 BOLT C MOUNT PUMP S.E.C. WITHOUT BUSHING TYPE 78 (5" or 127 mm pilot)	A36-10-21431	322-5033-202
5 d	4 BOLT C MOUNT PUMP S.E.C. WITH BUSHING TYPE 78 (5" or 127 mm pilot)	A36-10-21432	322-5133-202
5 e	2 BOLT B MOUNT PUMP S.E.C. WITHOUT BUSHING TYPE 97 (4" or 101,6 mm pilot)	A36-10-21221	322-5023-201
5 f	2 BOLT B MOUNT PUMP S.E.C. WITH BUSHING TYPE 97 (4" or 101,6 mm pilot)	A36-10-21222	322-5123-201
5 g	2 BOLT C MOUNT PUMP S.E.C. WITHOUT BUSHING TYPE 98 (5" or 127 mm pilot)	A36-10-21231	322-5023-202
5 h	2 BOLT C MOUNT PUMP S.E.C. WITH BUSHING TYPE 98 (5" or 127 mm pilot)	A36-10-21232	322-5123-202
5 i	4 BOLT B MOUNT MOTOR S.E.C. WITHOUT BUSHING TYPE 42 (4" or 101,6 mm pilot)	A36-10-41421	322-5033-401
5 j	4 BOLT B MOUNT MOTOR S.E.C. WITH BUSHING TYPE 42 (4" or 101,6 mm pilot)	A36-10-41422	322-5133-401
5 k	4 BOLT C MOUNT MOTOR S.E.C. WITHOUT BUSHING TYPE 78 (5" or 127 mm pilot)	A36-10-41431	322-5033-402
5 L	4 BOLT C MOUNT MOTOR S.E.C. WITH BUSHING TYPE 78 (5" or 127 mm pilot)	A36-10-41432	322-5133-402
5 m	2 BOLT B MOUNT MOTOR S.E.C. WITHOUT BUSHING TYPE 97 (4" or 101,6 mm pilot)	A36-10-41221	322-5023-401
5 n	2 BOLT B MOUNT MOTOR S.E.C. WITH BUSHING TYPE 97 (4" or 101,6 mm pilot)	A36-10-41222	322-5123-401
5 o	2 BOLT C MOUNT MOTOR S.E.C. WITHOUT BUSHING TYPE 98 (5" or 127 mm pilot)	A36-10-41231	322-5023-402
5 p	2 BOLT C MOUNT MOTOR S.E.C. WITH BUSHING TYPE 98 (5" or 127 mm pilot)	A36-10-41232	322-5123-402
6 a	CHECK VALVE MOTOR (Not required on all models)	A00-75-11000	391-3681-001
6 b	PRESSURE PLUG PUMP (Not required on all models)	X02-03-32110	391-2286-004
7	SHAFT BUSHING	X03-00-33842	391-0482-307
8	PUMP BUNA SEAL	A36-82-13050	391-2883-176
9	PUMP NYLON BACKUP SEAL	A36-82-46020	391-2883-177
Not Shown	MOTOR NYLON BACKUP SEAL	A36-82-46030	391-2885-071
Not Shown	MOTOR THRUST PLATE SIDE SEAL	A36-82-14021	391-2885-069
Not Shown	MOTOR THRUST PLATE END SEAL	A36-82-14022	391-2885-070
10 a	PUMP THRUST PLATE	A36-70-20000	391-2185-055
10 b	MOTOR THRUST PLATE	A36-70-10000	391-2185-060
11 a	SHAFT & GEAR 14 TOOTH SPLINE 1.228" maj. dia. TYPE 7	A36-50-XX245	322-29XX-250
11 b	SHAFT & GEAR 1.250" KEYED (5/16") TYPE 11	A36-50-XX145	322-29XX-750
11 c	SHAFT & GEAR SET 13 TOOTH SPLINE 0.858" maj. dia TYPE 25	A36-50-XX225	322-29XX-230
12 a	PUMP HOUSING GASKET	X85-11-12703	391-2884-052
12 b	MOTOR HOUSING GASKET	X85-11-12303	391-2884-023
13 a	PUMP HOUSING DOWELL PIN	A00-94-22119	391-2082-062
13 b	MOTOR HOUSING DOWELL PIN	A00-94-22408	391-2082-069
14 a	PUMP GEAR HOUSING	A36-33-XX000	322-81XX-100
14 b	MOTOR GEAR HOUSING	A36-32-XX000	322-82XX-100
15 a	365 BEARING CARRIER 1 OUTLET WITHOUT BUSHING	A36-40-21000	322-7100-100
15 b	365 BEARING CARRIER 1 OUTLET WITH BUSHING	A36-40-31000	322-7600-100
15 c	365 BEARING CARRIER 2 OUTLET WITHOUT BUSHING	A36-40-22000	322-7300-100
15 d	365 BEARING CARRIER 2 OUTLET WITH BUSHING	A36-40-32000	322-7800-100
15 e	365 MOTOR BEARING CARRIER BLANK WITHOUT BUSHING	A36-40-00000	322-7200-100
15 f	365 MOTOR BEARING CARRIER BLANK WITH BUSHING	A36-40-10000	322-7700-100
15 g	365/330 BEARING CARRIER CW WITHOUT BUSHING	A36-40-23000	322-3050-100
15 h	365/330 BEARING CARRIER CW WITH BUSHING	A36-40-33000	322-3150-100
15 i	365/330 BEARING CARRIER CCW WITHOUT BUSHING	A36-40-24000	322-3060-100
15 j	365/330 BEARING CARRIER CCW WITH BUSHING	A36-40-34000	322-3160-100
16 a	CONNECTING SHAFT	A36-50-00500	322-1133-001
16 b	PIGGYBACK CONNECTING SHAFT 365/330	A83-50-00500	322-1133-002
17	GEAR SET ONLY	A36-50-XX000	322-28XX-000
18 a	365 PUMP PORT END COVER WITHOUT BUSHING NO PORTING	A36-23-00000	322-3000-100
18 b	365 PUMP PORT END COVER WITH BUSHING NO PORTING	A36-23-10000	322-3100-100
18 c	365 PUMP PORT END COVER WITHOUT BUSHING PORTING TYPE	A36-23-02000	322-3010-100
18 d	365 PUMP PORT END COVER WITH BUSHING PORTING TYPE	A36-23-12000	322-3110-100
18 e	365 MOTOR PORT END COVER WITHOUT BUSHING NO PORTING	A36-22-00000	322-3000-099
18 f	365 MOTOR PORT END COVER WITH BUSHING NO PORTING	A36-22-10000	322-3100-099
18 g	365 MOTOR PORT END COVER WITHOUT BUSHING PORTING TYPE	A36-22-02000	322-3020-100
18 h	365 MOTOR PORT END COVER WITH BUSHING PORTING TYPE	A36-22-12000	322-3120-100

MH 365 CONTINUED



DRW. NO.	DESCRIPTION	METARIS NO.	ALTERNATIVE NO.
18 i	365 P.E.C. TO S.A.E. "A" PILOT CW WITHOUT BUSHING	A36-22-04000	322-3054-099
18 j	365 P.E.C. TO S.A.E. "A" PILOT CW WITH BUSHING	A36-22-14000	322-3154-099
18 k	365 P.E.C. TO S.A.E. "A" PILOT CCW WITHOUT BUSHING	A36-22-05000	322-3064-099
18 L	365 P.E.C. TO S.A.E. "A" PILOT CCW WITH BUSHING	A36-22-17000	322-3164-099
18 m	365 P.E.C. TO S.A.E. "B" PILOT CW WITHOUT BUSHING	A36-23-06000	322-3054-100
18 n	365 P.E.C. TO S.A.E. "B" PILOT CW WITH BUSHING	A36-23-16000	322-3154-100
18 o	365 P.E.C. TO S.A.E. "B" PILOT CCW WITHOUT BUSHING	A36-23-07000	322-3064-100
18 p	365 P.E.C. TO S.A.E. "B" PILOT CCW WITH BUSHING	A36-23-17000	322-3164-100
19	BOLTS / STUDS	See page	Fasteners
20 a	MOTOR FLAT WASHER	X45-10-21004	391-3782-114
20 b	PUMP FLAT WASHER	X45-10-17005	391-3784-028
21 a	PUMP HEX NUT	X42-11-16000	391-1451-076
21 b	MOTOR HEX NUT	X42-11-19016	391-1451-086
Not Shown	CONTINENTAL SHAFT 1.250" KEYED (5/16") TYPE 11	A36-50-00141	322-1500-500
Not Shown	CONTINENTAL SHAFT 14 TOOTH SPLINE 1.228" maj. dia. TYPE 7	A36-50-00241	322-1000-500
Not Shown	CONTINENTAL SHAFT BRG. RETAINER	X45-19-35002	391-3782-158
Not Shown	CONTINENTAL SHAFT BRG. RETAINER SNAP RING	X05-02-38130	391-2685-029
Not Shown	SHAFT KEY FOR TYPE 11 SHAFT	X01-02-80838	391-1781-083
Not Shown	PIGGYBACK CONNECTING SHAFT BEARING	X03-16-13055	391-0381-099
Not Shown	PIGGYBACK CONNECTING SHAFT LIP SEAL	X83-11-03308	391-2883-103
Not Shown	PIGGYBACK CONNECTING SHAFT BEARING SNAP RING	X05-01-61200	391-2686-019
Not Shown	1/4" ORB DRAIN PLUG	X02-03-12060	391-2281-010

NOTE The **XX** shown in the part number is in place of the size the true value must be placed into the part number when ordering parts.
(eg.) Gear set no. A36-50-XX000 changes to A36-50-15000 for 1.5" gear size
Housing no. A36-33-XX000 changes to A36-33-15000 for a 1.5" housing size
No porting sizes have been indicated all porting must be specified when ordering parts.



SEAL KITS



This is a list of seal kits each kit will work for a motor or pump. For multiple section units you add the second kit

- e.g. For a single MH30/31 unit use SK30-1
 If the unit is a 2 section unit use SK30-1 + SK30-2
 If the unit is a 3 section unit use SK30-1 + SK30-2 + SK30-2
 If the unit is a 4 section unit use SK30-1 + SK30-2 + SK30-2 + SK30-2

SINGLE UNIT	QTY	SK20 1 A20-80-31100		SK25 1 A25-80-31100		SK30 1 A30-80-31100	
		METARIS #	ALTERNATIVE #	METARIS #	ALTERNATIVE #	METARIS #	ALTERNATIVE #
SHAFT SEAL INTERGAL	1	X83-11-02708	391-2883-058	N/A	N/A	X83-11-02708	391-2883-058
SHAFT SEAL CONTINENTAL	1	X89-11-02508	391-2883-107	X83-11-03008	391-2883-055	X89-11-02508	391-2883-107
SHAFT SEAL CONTINENTAL TYPE 2	1	N/A	N/A	X83-11-02508	391-2883-057	N/A	N/A
SHAFT SEAL INTERGAL MOTOR	1	X83-36-02709	391-2883-119	X83-36-03009	391-2883-096	X83-36-02709	391-2883-119
SHAFT SEAL CONTINENTAL MOTOR	1	X83-36-02509	391-2883-126	X83-36-03510	391-2883-094	X83-36-02509	391-2883-126
HOUSING GASKET SEAL	2	X85-11-09203	391-2884-019	X85-11-10803	391-2884-021	X85-11-10104	391-2884-050
POCKET SEAL (2" STRIP)	1	X85-11-00002	391-2882-086	X85-11-00002	391-2882-050	X85-11-00002	391-2882-086
RING SEAL FOR TYPE 1	2	N/A	N/A	X03-00-32532	391-0481-002	N/A	N/A
SEAL RET. "O" RING	2	N/A	N/A	X81-11-05704	391-2881-120	N/A	N/A
SPRING	1	N/A	N/A	A25-95-00000	391-3581-176	N/A	N/A
RING SEAL FOR TYPE 2	1	N/A	N/A	X03-00-32531	391-0481-003	N/A	N/A
SEAL RET. "O" RING	1	N/A	N/A	X81-11-04403	391-2881-203	N/A	N/A
SEAL RET. "O" RING	1	N/A	N/A	X81-11-06304	391-2881-141	N/A	N/A
SHAFT SEAL BACK UP RING	1	N/A	N/A	A25-82-46020	391-2681-248	N/A	N/A
SHAFT SEAL "O" RING	1	N/A	N/A	X81-15-02704	391-2881-261	N/A	N/A

SINGLE UNIT	QTY	SK50 1 A50-80-31100		SK37 1 A37-80-31100		SK75 1 A75-80-31100	
		METARIS #	ALTERNATIVE #	METARIS #	ALTERNATIVE #	METARIS #	ALTERNATIVE #
SHAFT SEAL INTERGAL	1	X83-11-03308	391-2883-103	N/A	N/A	X83-11-03508	391-2883-052
SHAFT SEAL CONTINENTAL	1	X89-11-03308	391-2883-133	X83-11-03508	391-2883-052	N/A	N/A
SHAFT SEAL CONTINENTAL TYPE 2	1	N/A	N/A	N/A	N/A	N/A	N/A
SHAFT SEAL INTERGAL MOTOR	1	X83-36-03309	391-2883-115	N/A	N/A	X83-36-03510	391-2883-094
SHAFT SEAL CONTINENTAL MOTOR	1	N/A	N/A	X83-36-03510	391-2883-094	N/A	N/A
HOUSING GASKET SEAL	2	X85-11-10803	391-2884-021	X85-11-12303	391-2884-023	X85-11-13303	391-2884-024
POCKET SEAL (2" STRIP)	1	X85-11-00002	391-2882-050	X85-11-00002	391-2882-023	X85-11-00003	391-2882-052
RING SEAL FOR TYPE 1	2	X81-76-03305	391-2585-009	X03-00-32835	391-0481-001	X81-76-03809	391-2585-011
SEAL RET. "O" RING	2	N/A	N/A	X81-15-06904	391-2881-127	X81-11-06603	391-2881-457
SPRING	1	N/A	N/A	A37-95-00000	391-3581-172	N/A	N/A
RING SEAL FOR TYPE 2	1	N/A	N/A	X03-00-32836	391-0481-004	N/A	N/A
SEAL RET. "O" RING	1	N/A	N/A	X81-15-06904	391-2881-098	N/A	N/A
SEAL RET. "O" RING	1	N/A	N/A	N/A	N/A	N/A	N/A
SHAFT SEAL BACK UP RING	1	N/A	N/A	N/A	N/A	N/A	N/A
SHAFT SEAL "O" RING	1	N/A	N/A	N/A	N/A	N/A	N/A

SEAL KITS



SINGLE UNIT	QTY	SK315 1 A32-80-31100		SK330 1 A33-80-31100	
		METARIS #	ALTERNATIVE #	METARIS #	ALTERNATIVE #
SHAFT SEAL INTERGAL	1	X83-11-02406	391-2883-151	X83-11-02708	391-2883-058
SHAFT SEAL CONTINENTAL	1	N/A	N/A	X89-11-02508	391-2883-107
SHAFT SEAL INTERGAL MOTOR	1	X83-36-02406	391-2883-156	X83-36-02709	391-2883-119
SHAFT SEAL CONTINENTAL MOTOR	1	N/A	N/A	X83-36-02509	391-2883-126
PUMP HOUSING GASKET SEAL	2	X85-11-08203	391-2881-968	X85-11-10104	391-2884-050
MOTOR HOUSING GASKET SEAL	2	X85-11-08903	391-2881-429	X85-11-09803	391-2884-076
THRUST PLATE PUMP SEAL (CHANNEL)	2	A32-82-11030	391-2883-168	A33-82-11030	391-2883-166
THRUST PLATE PUMP SEAL (BACK-UP)	2	A32-82-46010	391-2883-169	A33-82-46010	391-2883-167
THRUST PLATE MOTOR SEAL (BACK-UP)	2	A32-82-46030	391-2881-995	A33-82-46030	391-2881-929
THRUST PLATE MOTOR SEAL (SEAL END)	4	A32-82-14021	391-2881-996	A33-82-14021	391-2881-930
THRUST PLATE MOTOR SEAL (SEAL SIDE)	4	A32-82-14022	391-2881-997	A33-82-14022	391-2881-931

SINGLE UNIT	QTY	SK350 1 A35-80-3100		SK365 1 A36-80-31100	
		METARIS #	ALTERNATIVE #	METARIS #	ALTERNATIVE #
SHAFT SEAL INTERGAL	1	X83-11-03308	391-2883-103	X83-11-03508	391-2883-052
SHAFT SEAL CONTINENTAL	1	N/A	N/A	N/A	N/A
SHAFT SEAL INTERGAL MOTOR	1	X83-36-03309	391-2883-115	X83-36-03510	391-2883-094
SHAFT SEAL CONTINENTAL MOTOR	1	N/A	N/A	N/A	N/A
PUMP HOUSING GASKET SEAL	2	X85-11-11403	391-2884-074	X85-11-12703	391-2884-052
MOTOR HOUSING GASKET SEAL	2	X85-11-10803	391-2884-021	X85-11-12303	391-2884-023
THRUST PLATE PUMP SEAL (CHANNEL)	2	A35-82-11050	391-2882-140	A36-82-46020	391-2883-177
THRUST PLATE PUMP SEAL (BACK-UP)	2	A35-82-46010	391-2882-139	A36-82-13050	391-2883-176
THRUST PLATE MOTOR SEAL (BACK-UP)	2	A35-82-46030	391-2885-075	A36-82-46030	391-2885-071
THRUST PLATE MOTOR SEAL (SEAL END)	4	A35-82-14020	391-2885-074	A36-82-14022	391-2885-070
THRUST PLATE MOTOR SEAL (SEAL SIDE)	4	A35-82-14021	391-2885-073	A36-82-14021	391-2885-069

SEAL KITS



This is a list of seal kits each kit will work for a motor or pump. For multiple section units you add the second kit

- e.g. For a single MH30/31 unit use SK30-1
 If the unit is a 2 section unit use SK30-1 + SK30-2
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 If the unit is a 4 section unit use SK30-1 + SK30-2 + SK30-2 + SK30-2

MULTIPLE SECTION	QTY	SK20 2 A20-80-32100		SK25 2 A25-80-32100		SK30 2 A30-80-32100	
		METARIS #	ALTERNATIVE #	METARIS #	ALTERNATIVE #	METARIS #	ALTERNATIVE #
HOUSING GASKET SEAL	2	X85-11-09203	391-2884-019	X85-11-10803	391-2884-021	X85-11-10104	391-2884-050
POCKET SEAL (2" STRIP)	1	X85-11-00002	391-2882-086	X85-11-00002	391-2882-050	X85-11-00002	391-2882-086
RING SEAL	2	X81-76-02706	391-2585-006	X03-00-32531	391-0481-003	X81-76-02706	391-2585-006

MULTIPLE SECTION	QTY	SK37 2 A37-80-32100		SK50 2 A50-80-32100		SK75 2 A75-80-32100	
		METARIS #	ALTERNATIVE #	METARIS #	ALTERNATIVE #	METARIS #	ALTERNATIVE #
HOUSING GASKET SEAL	2	X85-11-12303	391-2884-023	X85-11-10803	391-2884-021	X85-11-13303	391-2884-024
POCKET SEAL (2" STRIP)	1	X85-11-00002	391-2882-023	X85-11-00002	391-2882-050	X85-11-00003	391-2882-052
RING SEAL	2	X03-00-32836	391-0481-004	X81-76-03305	391-2585-009	X81-76-03809	391-2585-011

MULTIPLE SECTION	QTY	SK315 2 A32-80-32100		SK330 2 A33-80-32100	
		METARIS #	ALTERNATIVE #	METARIS #	ALTERNATIVE #
PUMP HOUSING GASKET SEAL	2	X85-11-08203	391-2881-968	X85-11-10104	391-2884-050
MOTOR HOUSING GASKET SEAL	2	X85-11-08903	391-2881-429	X85-11-09803	391-2884-076
THRUST PLATE PUMP SEAL (CHANNEL)	2	A32-82-11030	391-2883-168	A33-82-11030	391-2883-166
THRUST PLATE PUMP SEAL (BACK-UP)	2	A32-82-46010	391-2883-169	A33-82-46010	391-2883-167
THRUST PLATE MOTOR SEAL (BACK-UP)	2	A32-82-46030	391-2881-995	A33-82-46030	391-2881-929
THRUST PLATE MOTOR SEAL (SEAL END)	4	A32-82-14021	391-2881-996	A33-82-14021	391-2881-930
THRUST PLATE MOTOR SEAL (SEAL SIDE)	4	A32-82-14022	391-2881-997	A33-82-14022	391-2881-931

MULTIPLE SECTION	QTY	SK350 2 A35-80-32100		SK365 2 A36-80-32100	
		METARIS #	ALTERNATIVE #	METARIS #	ALTERNATIVE #
PUMP HOUSING GASKET SEAL	2	X85-11-11403	391-2884-074	X85-11-12703	391-2884-052
MOTOR HOUSING GASKET SEAL	2	X85-11-10803	391-2884-021	X85-11-12303	391-2884-023
THRUST PLATE PUMP SEAL (CHANNEL)	2	A35-82-11050	391-2882-140	A36-82-46020	391-2883-177
THRUST PLATE PUMP SEAL (BACK-UP)	2	A35-82-46010	391-2882-139	A36-82-13050	391-2883-176
THRUST PLATE MOTOR SEAL (BACK-UP)	2	A35-82-46030	391-2885-075	A36-82-46030	391-2885-071
THRUST PLATE MOTOR SEAL (SEAL END)	4	A35-82-14020	391-2885-074	A36-82-14022	391-2885-070
THRUST PLATE MOTOR SEAL (SEAL SIDE)	4	A35-82-14021	391-2885-073	A36-82-14021	391-2885-069

FASTENERS



SINGLE UNITS												
Model	Gear Code											Bolt Dia.
	5	7	10	12	15	17	20	22	25	27	30	
MH15	4"	4.25"	4.5"	4.5"	5"	5"	5.5"					1/2" NC
MH20	4"	4.25"	4.5"	4.5"	5"	5"	5.5"					9/16" NC
MH25	3.75"	4"	4.25"	4.5"	4.75"	5"	5.25"	5.5"	5.75"			5/8" NC
MH30/31	3.75"	4"	4.25"	4.5"	4.75"	5"	5.25"	5.5"	5.75"			5/8" NC
MH37	4.75"	5"	5.25"	5.5"	5.75"	6"	6.5"	6.5"	6.75"	7"	7.25"	1/2" NC
MH50/51	3.75"	4"	4.25"	4.5"	4.75"	5"	5.25"	5.5"	5.75"			5/8" NC
MH75/76		4.5"	4.75"	5"	5.25"	5.5"	5.75"	6"	6.5"	6.5"	6.75"	5/8" NC
MH315	2.75"	3"	3.25"	3.5"	3.75"	4"	4.25"					1/2" NC
MH330	3.75"	4"	4.25"	4.5"	4.75"	5"	5.25"					5/8" NC
MH350	5.25"	5.5"	5.75"	6"	6.5"	6.5"	6.75"	7"	7.5"			5/8" NC
MHP365		4.5"	5"	5"	5.5"	5.5"	6"	6"	6.5			5/8" NC
MHM365			5"	5"	5.5"	5.5"	6"	6"	6.5			3/4" NC

MULTIPLE UNITS												
Model	Gear Length											
	.5"	.75"	1"	1.25"	1.5"	1.75"	2"	2.25"	2.5"	2.75"	3"	
MH15	$4.125 + (N * 3.25) + (TGS) = L$				<p>N = number of bearing carriers TGS = Total gear width - width is achieved by adding all gear sets together L = Rod Length e.g. To built a triple MH350 unit with gear sets (1st section 2", 2nd section 1.5", 3rd section 1")</p> <p>Rod Length = $5.5 + (N * 4) + (TGS)$ Rod Length = $5.5" + (2 * 4) + (2"+1.5"+1")$ Rod Length = $5.5" + (8) + (4.5")$ Rod Length = 18"</p>							
MH20	$4.25 + (N * 3.25) + (TGS) = L$											
MH25	$4 + (N * 3.625) + (TGS) = L$											
MH30/31	$4 + (N * 3.25) + (TGS) = L$											
MH37	$4.875 + (N * 4) + (TGS) = L$											
MH50/51	$4 + (N * 3.625) + (TGS) = L$											
MH75/76	$4.5 + (N * 4) + (TGS) = L$											
MH315	$2.875 + (N * 3) + (TGS) = L$											
MH330	$4 + (N * 4) + (TGS) = L$											
MH350	$5.5 + (N * 4) + (TGS) = L$											
MHP365	$4.75 + (N * 4.5) + (TGS) = L$											
MHM365	$5 + (N * 4.5) + (TGS) = L$											

WARRANTY POLICY AND PROCEDURES



WARRANTY

Metaris Inc. and Metaris Corp. hereinafter “Metaris”, warrants all of its product to be free from defects in material and workmanship under normal operating conditions and proper application in accordance with the specifications for operation as described by the manufacturer for the period of twelve (12) months in service.

LIMITATIONS ON WARRANTY

This warranty is expressly in lieu of any other warranties expressed or implied. Buyers sole and exclusive remedy under this Warranty shall be limited to the repair, replacement or exchange of warranted products at our option, F.O.B. our factory, or designated service center.

No special, incidental, consequential or other damage shall be recoverable. Metaris shall not be liable for consequential damages or contingent liabilities including, but not limited to, loss of life, personal injury, loss of crops, loss due to water or fire damage, loss of business income, down time costs and trade or other commercial loss arising out of failure of the product. Metaris will in no event be liable for any sum in excess of the price received by it for the product for which liability is claimed or asserted.

No products shall be returned without prior authorization from Metaris. Buyers and their Agents shall prepay all transportation charges for the return of such products to a Metaris location or designated service center. There will be no acceptance of any charges for labor and/or parts incidental to the removal or remounting of products repaired or replaced under Warranty.

The above Warranty does not cover conditions over which Metaris has no control, including, without limitation, contamination, pressure in excess of recommended maximum, products damaged or subject to accident abuse or misuse after shipment from our factory, products altered or repaired by anyone other than Metaris personnel, authorized Metaris factory personnel or persons so designated in writing by Metaris prior to commencement of said work.

A return goods authorization number must be obtained from Metaris or a Metaris authorized service center, or a Metaris authorized agent prior to any products being returned for Warranty.