

METARIS P.T.O. REFERENCE MANUAL



I. General Information

P.T.O. and Pump Information	5
Six Bolt P.T.O. - MH6 Model	6
Eight Bolt P.T.O. - MH8 Model	7
Eight Bolt P.T.O. - MHD8 Model	8
Ten Bolt Clutch Shift P.T.O. - MHS10 Model	9
P.T.O. Assembly Arrangements	10
Air Controller Kits	11
Air Protection Valve Kit - MPN600205 (M118365X)	12
6 Bolt Gasket & Shims	13
8 Bolt Gasket & Shims	13
P.T.O. Input Gear Kits	14
P.T.O. Shifter Kits	15
Air Shifter Seal Kits	16
Sending Unit Kits	16
P.T.O. Stud Kits - Standard Mounting Kits	17
Mounting Kits Parts List	17

II. Crossover Information

Example Crossover Chart	20
MH6 & MH8 P.T.O Crossover	21
MH6 & MH8 Base Model	21
MH6 & MH8 Gear Ratio	21
MH6 & MH8 Input Gears	22
MH6 & MH8 Lube Options	23
MH6 & MH8 Shifter Type Options	23
MH6 & MH8 Assembly Arrangements	23
MH6 & MH8 Output Options	24
MHD8 P.T.O. Crossover	25
MHD8 Base Model	25
MHD8 Gear Ratio	25
MHD8 Input Gears	25
MHD8 Lube Options	26
MHD8 Shifter Type Options	26
MHD8 Assembly Arrangements	26
MHD8 Output Options	26
MHS10 P.T.O. Crossover	27
MHS10 Base Model	27
MHS10 Gear Ratio	27
	27

MHS10 Input Gears	27
MHS10 Lube Options	27
MHS10 Shifter Type Options	28
MHS10 Assembly Arrangements	28
MHS10 Output Options	28

III. Features & Benefits

MH8 Features & Benefits	29
MH6 Features & Benefits	30
General Features & Benefits	31

IV. Parts List

MH6 & MH8 P.T.O. Parts List	34
MH6 & MH8 Output Shafts	37
MH6 & MH8 Ratio Gear Sets	38
MH6 & MH8 Input Gears	39
MH6 & MH8 Air Shifter	40
MH6 & MH8 Mechanical Shift	42
MH6 & MH8 Wire Shifter	44
MH6 & MH8 1 1/4" Round Shaft	46
"SB" Flange 1" 15 Spline - SAE "BB" 2 Bolt	48
MH6 & MH8 5/8" 9 Spline Output Flange	49
"SD" Flange 7/8" 13 Spline - SAE "B" 2 Bolt	50
"SF" Flange 5/8" 9 Spline - SAE "A" 2 Bolt	52
"TP" Flange 7/8" 13 Spline For Chelsea Pumps	54
1 1/4" 14 Spline "RC" Flange	56
MH6 & MH8 ISO 4 Bolt - DIN 5462 "DA" Flange	58
MHD8 SAE "C" 4 Bolt	60
MHD8 Parts List	61
MHD8 Output Shaft	63
IC 1410 Flange	65
MHS10 Installation	67
MHS10 Parts List	70

V. MH6 & MH8 Flange Conversion Kits

"RA" Conversion for MH6 & MH8	73
"SE" Conversion for MH6 & MH8	74
"RB" Conversion for MH6 & MH8	75
"TP" Conversion for MH6 & MH8	76
Constant Mesh Conversion for MH6 & MH8	77
"SF" Conversion for MH6 & MH8	78

“RC” Conversion for MH6 & MH8 Series	79
“DA” Conversion for MH6 & MH8 Series	80
7/8” - 13 Spline “Greaseable Shaft” Conversion for MH6 & MH8	81
1” - 13 Spline “Greaseable Shaft” Conversion for MH6 & MH8	82

VI. MH6 & MH8 Seal Kits

MH6 Model - MSK-001X for “RA” & “RB” Output	83
MH6 Model - MSK-002X for “SE” Output	84
MH6 Model - MSK-003X for “TP” Output	85
MH6 Model - MSK-004X for “SF” Output	86
MH8 Model - MSK-005X for “RA” & “RB” Output	87
MH8 Model - MSK-006X for “SE” Output	88
MH8 Model - MSK-007X for “SF” Output	89
MH8 Model - MSK-008X for “TP” Output	90
MHD8 Model - MSK-009X for “RJ” Output	91
MHD8 Model - MSK-010X for “SE” Output	92
MHS10 Model - MSK-012X Seal Kit	93

VII. MH6 & MH* Overhaul Kits

MH6 Model - MOK-001X for “RA” & “RB” Output	94
MH6 Model - MOK-002X for “SE” Output	95
MH6 Model - MOK-003X for “TP” Output	96
MH6 Model - MOK-004X for “SF” Output	97
MH8 Model - MOK-005X for “RA” & “RB” Output	98
MH8 Model - MOK-006X for “SE” Output	99
MH8 Model - MOK-007X for “SF” Output	100
MH8 Model - MOK-008X for “SE” Output	101

VIII. Gear Adapter Parts List

MAD 626 & 726 Geared Adapter	102
MAD 626 & 726 (180° 6 Bolt Adapter Gear)	104
MAD 645 & 745 Geared Adapter	105
MAD 530-1X “MACK” Geared Adapter	106

IX. New Product Bulletins

Metaris Control Towers - MH-102405	108
Metaris Wet Line Hose Kits - MH-102505	109

X. Installation Drawings

Air & Electric Installation for Single Controller	111
Air & Electric Installation for Dual Controller	112
MHS10 Installation	113

P.T.O. & PUMP INFORMATION

P.T.O. Questions:

Transmission Make & Model: _____

P.T.O. Mounting Side: LH _____ RH _____ Bottom _____

P.T.O. Mounting Options: Remote: _____ Direct Mount: _____

P.T.O. Shifting Options: Cable Shift: _____ Air Shift: _____

Need Cab Controller: Yes: _____ No: _____

Duty Application: Dump _____ Walking Floor _____ Tanker _____ Other _____

PUMP Questions:

Dump Pump: Direct Mount (on PTO) _____

Remote Mount (on truck frame) _____

Air on Dump Pump: Yes _____ No _____

Hydraulic Tank:

Hydraulic Tank Option: Side Mount / Upright (Steel / Aluminum / Plastic)

P.T.O. & Pump Control Valves:

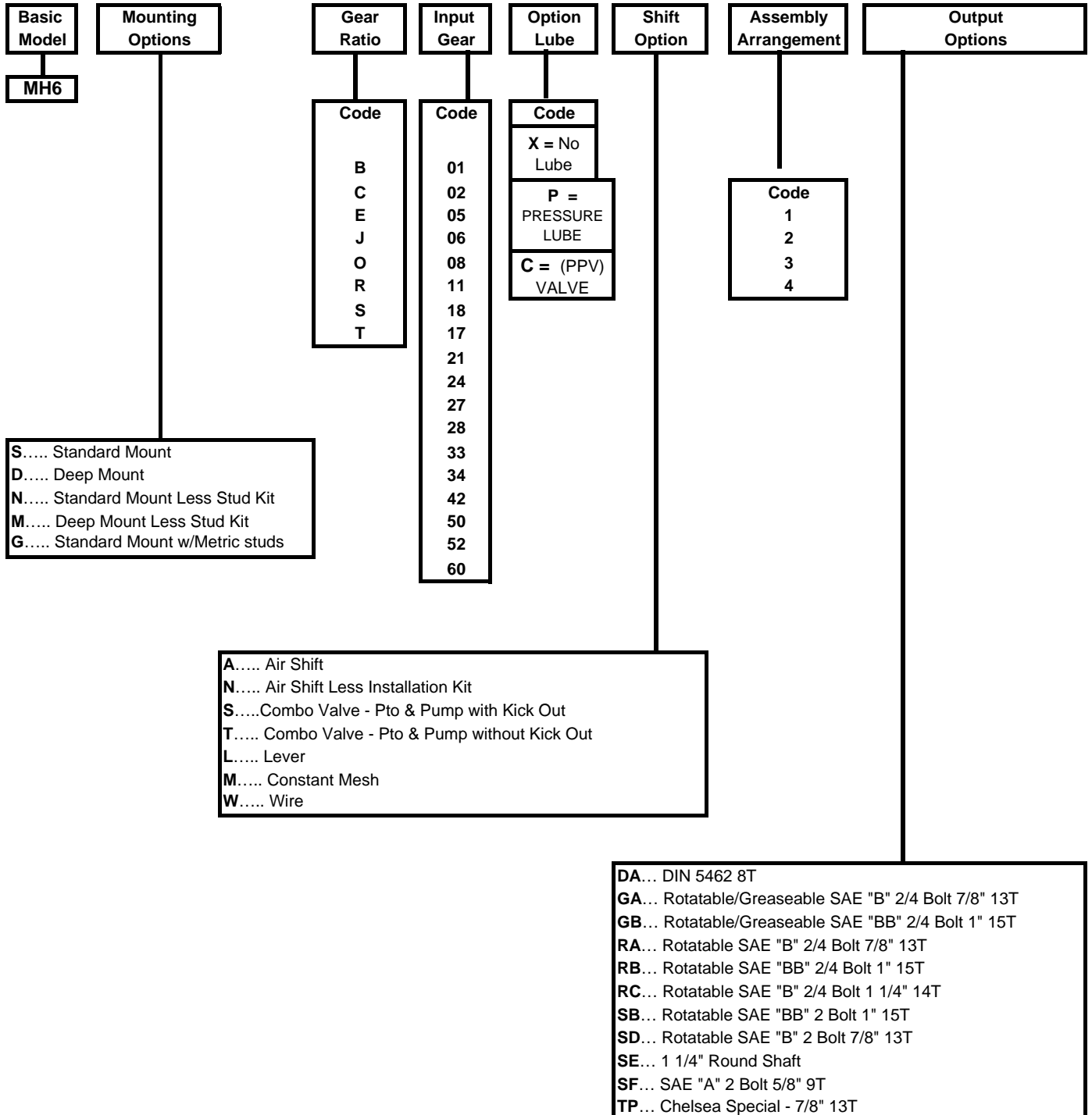
	Dual W/Kick Out	Dual WO/ Kick Out	Control Tower (8"/10"/12")
Additions:	Hose Kits		

Representative: _____

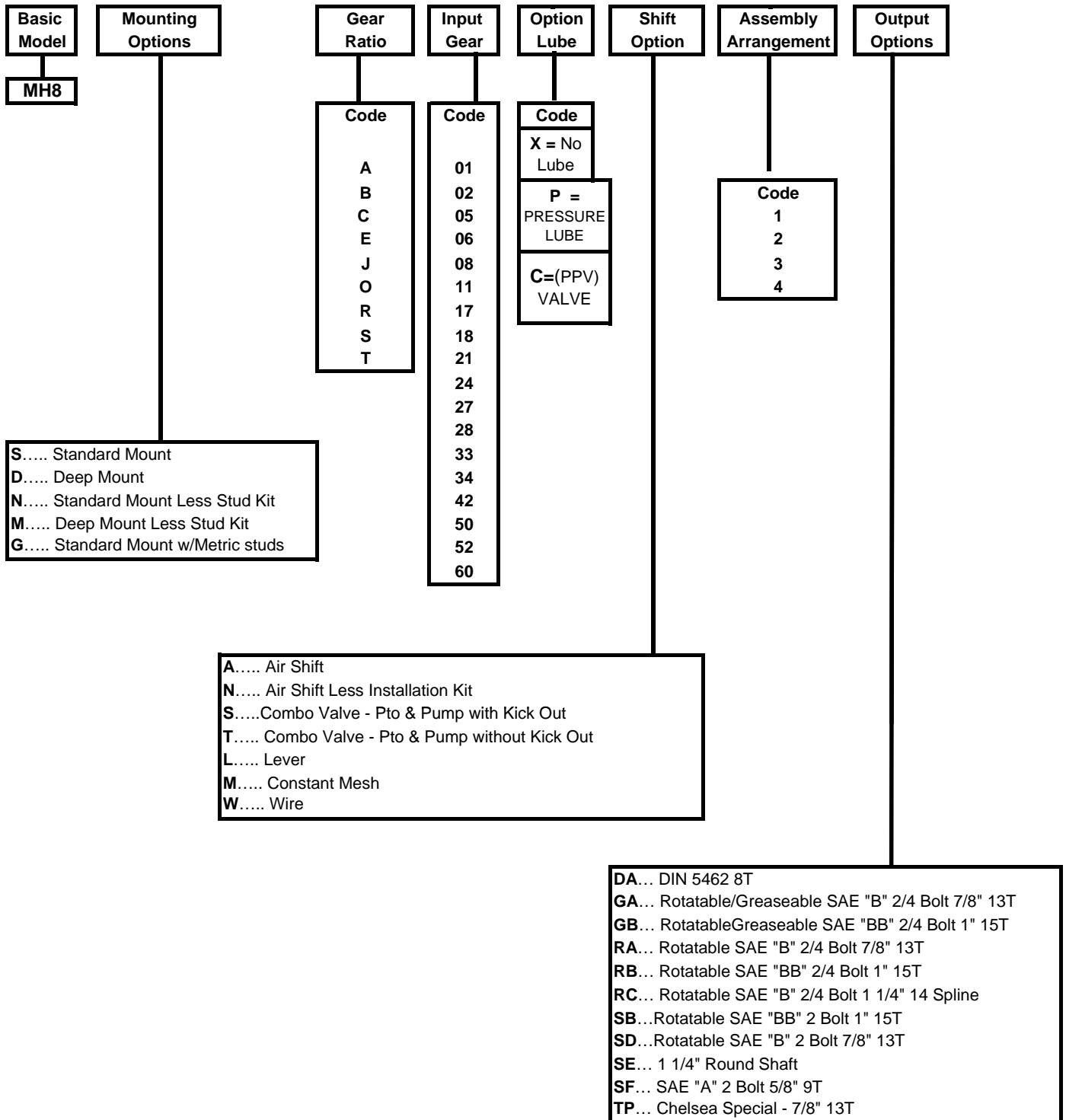
Phone: _____

Fax: _____

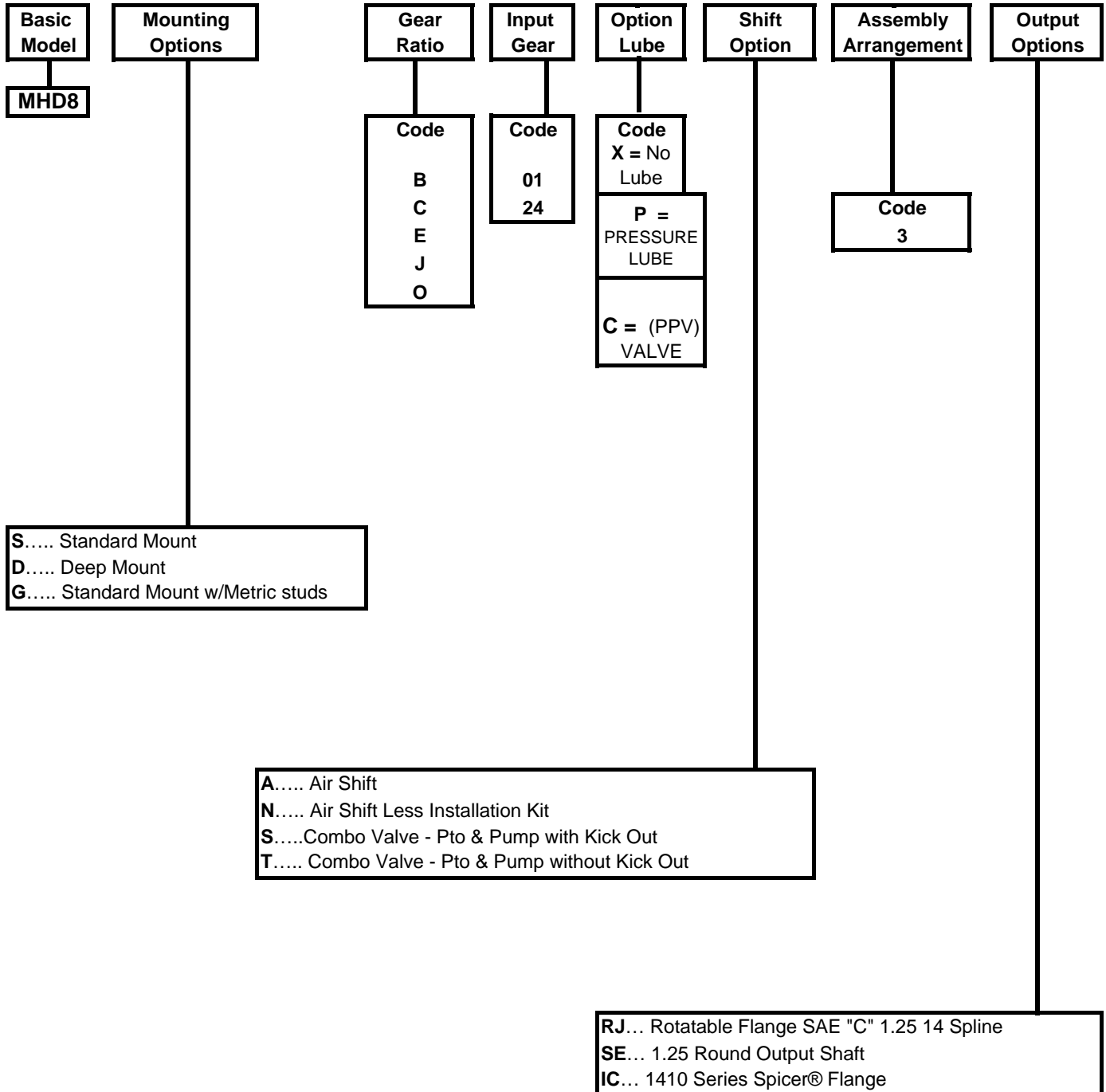
SIX BOLT P.T.O. MH6 MODEL



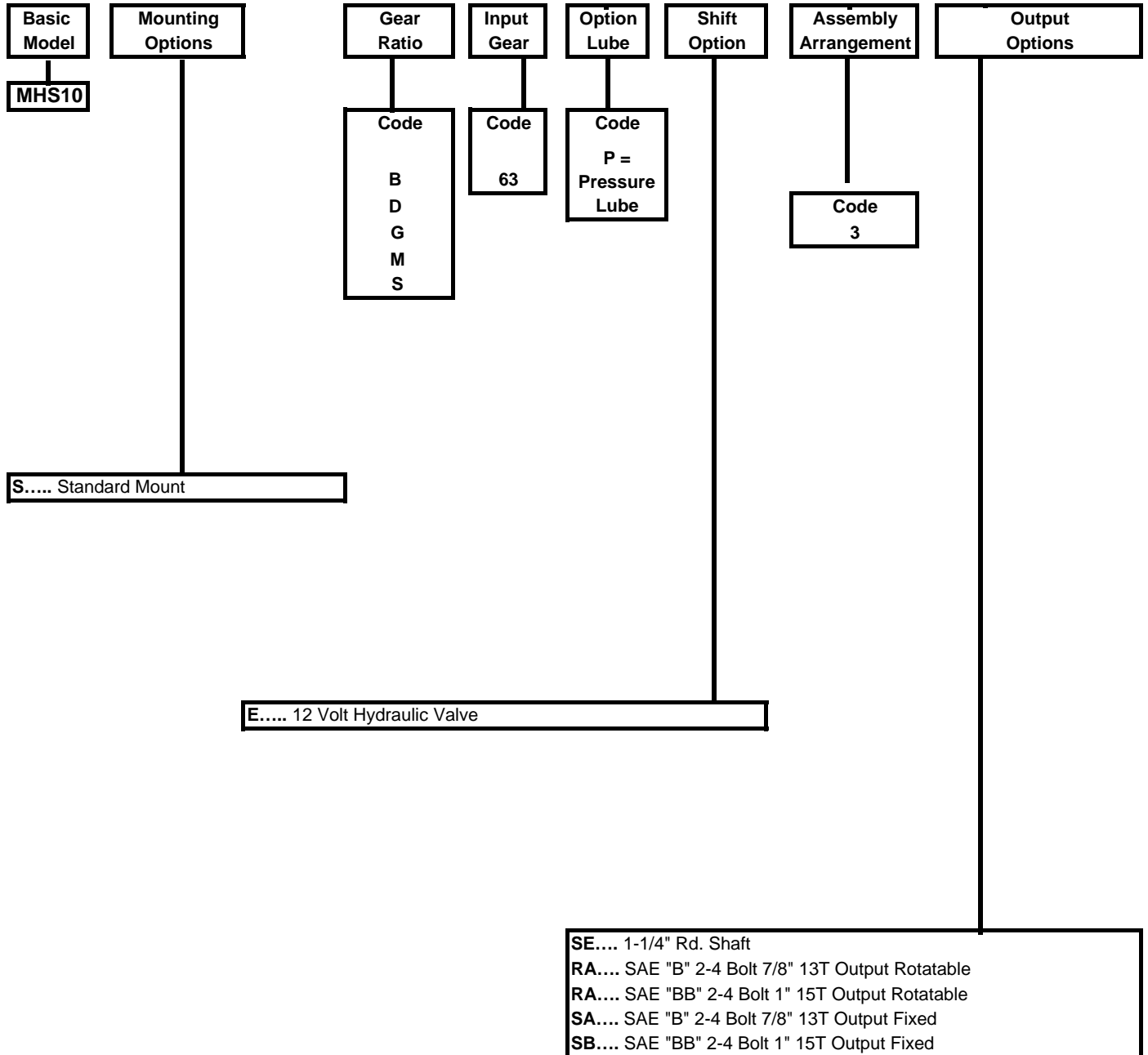
EIGHT BOLT P.T.O. MH8 MODEL



Eight Bolt P.T.O. MHD8 Model



TEN BOLT CLUTCH SHIFT P.T.O. MHS10 MODEL



P.T.O ASSEMBLY ARRANGEMENTS

Metaris 1	2	3	4
PTO 1	2	3	4
Chelsea® 3	4	5	6
Muncie® 1	2	3	4

Rules of Arrangement:

1. Gears must be facing you.
2. Shifter cover must be on top of P.T.O.
3. What side is the input on?
4. What side is the output shaft on?
5. Match to picture above.

AIR CONTROLLER KITS

Effective: 1-1-2007
Supersedes:

Contents		Description	MPN600202 (MH101X)	MPN600503 (MH103X)	MPN600203 (MH201X)	MPN600204 (MH202X)
Metaris #	Alternate #		Single Controller Air Kit	Single Controller <u>ONLY</u>	Dual Controller Air Kit W/ Kickout	Dual Controller Air Kit W/O Kickout
MPN600177	CP-021	Name cover Plate for Controller	1	1		
MPN600008	M118373	Single Air Controller	1	1		
MPN600022	MAV295	Dual Controller W/Kickout			1	
MPN600023	MAV295M	Dual Controller W/O Kickout				1
MPN600165	MHO-1004-15'	Hose 15' Long	15 Feet			
MPN600165	MHO-1004-30'	Hose 30' Long			30 Feet	30 Feet
MPN600178	MFH-12A	Inline Fuse	1		1	1
MPN600179	MLI-750	Indicator Light	1	1		
MPN600174	MFI-24T	1/8 NPT X 1/4 Tube 180° Fitting	2			
MPN600183	MMS-463	10-24 X 5/8" Machine Screw	4	4		
MPN600184	MNU-6028	10-24 Machine Screw Nut	4	4		
MPN600185	MWA-614	#10 Lock Washer	4	4		

AIR PROTECTION VALVE KIT (MPN600205) (M118365X)

(*)MPN600007	(*)M118365	Air Protection Valve	1		1	1
(*)MPN600171	(*)MFI-44N	1/4 NPT X 1/4 NPT 180° Fitting	1		1	1
(*)MPN600174	(*)MFI-24T	1/8 NPT X 1/4 Tube 180° Fitting	1		1	1

(*) These parts are recommended; but optional with these Air Kits.

Contents		Description	MPN600307 (MH102X)
Metaris #	Alternate #		Single Controller Adapter Kit
MPN600304	MCP-833	Single Controller Adapter Plate	1
MPN600306	MSC-306	Mounting Screw	4
MPN600305	MSC-119	Mounting Screw	2

**AIR PROTECTION VALVE KIT
MPN600205 (M118365X)**

Effective: 1-1-2007

Supersedes:

QUAN.	METARIS PART #	ALTERNATE PART #	DESCRIPTION
1	MPN600007	M118365	AIR PROTECTION VALVE
1	MPN600171	MFI-44N	1/4 NPT X 1/4 NPT NIPPLE
1	MPN600174	MFI-24T	1/8 NPT X 1/4 TUBE STRAIGHT FITTING

GASKETS & STEEL SHIMS

Effective: 1-1-2007

Supersedes:

6 BOLT GASKETS & SHIMS

Metaris #	Alternate #	THICKNESS
MPN600002	MGA6010	.010 GASKET
MPN600003	MGA6015	.015 GASKET
MPN600004	MGA6032	.032 GASKET
M6062	M6062	.062 STEEL
M6093	M6093	.093 STEEL
M6125	M6125	.125 STEEL
M6140	M6140	.140 STEEL
M6165	M6165	.165 STEEL
M6187	M6187	.187 STEEL
M6200	M6200	.200 STEEL
M6240	M6240	.240 STEEL
M6270	M6270	.270 STEEL
M6300	M6300	.300 STEEL
M6400	M6400	.400 STEEL
M6450	M6450	.450 STEEL
M6500	M6500	.500 STEEL
M6550	M6550	.550 STEEL
M6562	M6562	.562 STEEL
M6800	M6800	.800 STEEL

8 BOLT GASKETS & SHIMS

Metaris #	Alternate #	THICKNESS
MPN600050	MGA8010	.010 GASKET
MPN600051	MGA8015	.015 GASKET
MPN600052	MGA8032	.032 GASKET
M8062	M8062	.062 STEEL
M8093	M8093	.093 STEEL
M8165	M8165	.165 STEEL
MPN600285	M8196	.196 STEEL
M8248	M8248	.248 STEEL
M8295	M8295	.295 STEEL
M8375	M8375	.375 STEEL
M8600	M8600	.600 STEEL
M8700	M8700	.700 STEEL
M81005	M81005	.1005 STEEL

PTO INPUT GEAR KITS

Effective: 1-1-2007

Supersedes:

INPUT GEAR KIT	INPUT GEAR	"O"RING	PRELOAD NUT	SNAP RING
MPN600484 (01X)	MPN600061 (MR675)	MPN600100 (MOR-022) (2)	MPN600112 (MPN841/851)	MPN600132 (MSR-001)
MPN600485 (02X)	MPN600067 (MR683)	MPN600100 (MOR-022) (2)	MPN600112 (MPN841/851)	MPN600132 (MSR-001)
MPN600486 (05X)	MPN600063 (MR677)	MPN600100 (MOR-022) (2)	MPN600112 (MPN841/851)	MPN600132 (MSR-001)
MPN600487 (06X)	MPN600064 (MR679)	MPN600100 (MOR-022) (2)	MPN600112 (MPN841/851)	MPN600132 (MSR-001)
MPN600488 (08X)	MPN600066 (MR682)	MPN600100 (MOR-022) (2)	MPN600112 (MPN841/851)	MPN600132 (MSR-001)
MPN600489 (11X)	MPN600075 (MR699)	MPN600100 (MOR-022) (2)	MPN600112 (MPN841/851)	MPN600132 (MSR-001)
MPN600490 (17X)	MPN600065 (MR680)	MPN600100 (MOR-022) (2)	MPN600112 (MPN841/851)	MPN600132 (MSR-001)
MPN600563 (18X)	MPN600328 (MR681)	MPN600100 (MOR-022) (2)	MPN600112 (MPN841/851)	MPN600132 (MSR-001)
MPN600491 (21X)	MPN600062 (MR676)	MPN600100 (MOR-022) (2)	MPN600112 (MPN841/851)	MPN600132 (MSR-001)
MPN600492 (24X)	MPN600072 (MR695)	MPN600100 (MOR-022) (2)	MPN600112 (MPN841/851)	MPN600132 (MSR-001)
MPN600493 (27X)	MPN600070 (MR692)	MPN600100 (MOR-022) (2)	MPN600112 (MPN841/851)	MPN600132 (MSR-001)
MPN600494 (28X)	MPN600086 (MR771)	MPN600100 (MOR-022) (2)	MPN600112 (MPN841/851)	MPN600132 (MSR-001)
MPN600495 (33X)	MPN600074 (MR697)	MPN600100 (MOR-022) (2)	MPN600112 (MPN841/851)	MPN600132 (MSR-001)
MPN600496 (34X)	MPN600073 (MR696)	MPN600100 (MOR-022) (2)	MPN600112 (MPN841/851)	MPN600132 (MSR-001)
MPN600510 (42X)	MPN600191 (MR66)	MPN600100 (MOR-022) (2)	MPN600112 (MPN841/851)	MPN600132 (MSR-001)
MPN600497 (50X)	MPN600071 (MR694)	MPN600100 (MOR-022) (2)	MPN600112 (MPN841/851)	MPN600132 (MSR-001)
MPN600498 (52X)	MPN600076 (MR700)	MPN600100 (MOR-022) (2)	MPN600112 (MPN841/851)	MPN600132 (MSR-001)
MPN600511 (60X)	MPN600192 (MR60)	MPN600100 (MOR-022) (2)	MPN600112 (MPN841/851)	MPN600132 (MSR-001)

PTO SHIFTER KITS

Effective: 1-1-2007

Supersedes:

Contents			M902299X (MPN600499)	M903899X (MPN600500)	M902099X (MPN600501)	M903599X (MPN600502)
Metaris Part #	Alternate Part #	Description	Air Shifter Kit 1-4	Air Shifter Kit 2-3	Mechanical Shifter Kit 1-4	Mechanical Shifter Kit 2-3
MPN600010	M902299	Air Shift Top 1-4	1			
MPN600012	M903899	Air Shift Top 2-3		1		
MPN600009	M902099	Mech. Shift Top 1-4			1	
MPN600011	M903599	Mech. Shift Top 2-3				1
MPN600019	MAS-009	Allen Bolt	4	4	4	4
MPN600049	MGA4015SC	Gasket	1	1	1	1
MPN600333	MSWK-699	Wiring Harness	1	1	1	1
MPN600334	MSW-003	Sending Unit	1	1	1	1
MPN600181	MOR-090	O-Ring	1	1	1	1
MPN600041	MFI-216-S	Straight Fitting	1	1		
MPN600040	MFI-216-E	Elbow Fitting	1	1		
MPN600217	M9013799	Wire Assembly Kit			1	1

PTO SHIFTER KITS

Effective: 1-1-2007

Supersedes:

Air Shifter	Metaris Part #	Alternate Part #
1 & 4 POSITION	MPN600010	M902299
2 & 3 POSITION	MPN600012	M903899

MECHANICAL SHIFTERS

1 & 4 POSITION	MPN600009	M902099
2 & 3 POSITION	MPN600011	M903599

Air Shifter Seal Kit

Metaris #	Alternate #	Description	MPN100736 (MSK-011X)
			Air Shifter Seal Kit
MPN600024	MBU-009	CUP SEAL	1
MPN600102	MOR-045	O-RING	1
MPN600101	MOR-029	O-RING	1
MPN600049	MGA4015SC	SHIFTER GASKET	1

Sending Unit Kit

Metaris #	Alternate #	Description	MPN600553 (MSUK-01X)
			Sending Unit Kit
MPN600333	MSWK-699	WIRING HARNESS	1
MPN600334	MSW-003	SENDING UNIT	1

PTO STUD KITS

Effective: 1-1-2007

Supersedes:

Standard Mounting Kits

Series	Standard (X)	Deep Mount (D)	Metric (G)	Deep Mount Metric
MH6	MPN600237 (MH8170-76X)	MPN600240 (MH8170-77X)	MPN600249 (MH170-78X)	
MH8	MPN600214 (MH8170-200X)	MPN600215 (MH8170-201X)	MPN600216 (MH170-68X)	
HD8	MPN600475 (MH8170-202X)	MPN600475 (MH8170-195X)	MPN600529 (MH8170-203X)	
MHS6	MPN600518 (MH8170-101X)		MPN600519 (MH170-103X)	
MHS10	MPN600522 (MH170-86X)			

Mounting Kit Parts List

Kit #	Stud	Capscrew	Washer	Nut
MPN600241 (MH170-2X)	MPN600399 MST-423-16 (6)			MPN600550 MFN-099 (6)
MPN600242 (MH170-3X)	MPN600195 MST-423-18 (6)			MPN600550 MFN-099 (6)
MPN600243 (MH170-4X)	MPN600196 MST-423-20 (6)			MPN600550 MFN-099 (6)
MPN600244 (MH170-5X)	MPN600197 MST-423-22 (6)			MPN600550 MFN-099 (6)
MPN600245 (MH170-6X)	MPN600198 MST-423-24 (6)			MPN600550 MFN-099 (6)
MPN600246 (MH170-7X)	MPN600199 MST-423-26 (6)			MPN600550 MFN-099 (6)
MPN600247 (MH170-8X)	MPN600200 MST-423-28 (6)			MPN600550 MFN-099 (6)
MPN600248 (MH170-9X)	MPN600201 MST-423-30 (6)			MPN600550 MFN-099 (6)
MPN600322 (MH170-16X)	MPN600321 MST-423-44 (6)			MPN600550 MFN-099 (6)

Mounting Kit Parts List

Kit #	Stud	Capscrew	Washer	Nut
MPN600216 (MH170-68X)		MPN600156 MCS-021 (8)	MPN600255 MWA-019 (8)	
MPN600249 (MH170-78X)	MPN600515 MST-428-16 (6)			MPN600550 MFN-099 (6)
MPN600522 (MH170-86X)	MPN600419 MST-451 (2)	MPN600454 MCS-453-10 (8)		
MPN600606 MH170-89X	MPN600604 MST-293-14 (6)			MPN600550 MFN-099 (6)
MPN600238 MH170-96X	MPN600209 MST-293-8 (6)			MPN600550 MFN-099 (6)
MPN600519 MH170-103X	MPN600514 MST-428-14 (3) MPN600515 MST-428-16 (2)	MPN600516 MCS-445-1 (1)	MPN600162 MWA-020 (1)	MPN600550 MFN-099 (5)
MPN600254 MH8170-7X		MPN600232 MCS-424-34 (8)	MPN600210 MWA-018 (8)	
MPN600251 MH8170-8X	MPN600594 MST- 424-21			MPN600603 MNU-603 (8)
MPN600613 MH8170-14X		MPN600234 MCS-424-29 (8)	MPN600210 MWA-018 (8)	
MPN600252 MH8170-15X		MPN600235 MCS-424-24 (8)	MPN600210 MWA-018 (8)	
MPN600618 MH8170-18X	MPN600615 MST-424-36 (8)			MPN600603 MNU-603 (8)
MPN600237 MH8170-76X	MPN600170 MST-423-15 (6)			MPN600550 MFN-099 (6)
MPN600240 MH8170-77X	MPN600193 MST-423-12 (6)			MPN600550 MFN-099 (6)
MPN600605 MH8170-95X	MPN600193 MST-423-12 (6)		MWA-224	MPN600218 MNU-075 (6)
MPN600518 MH8170-101X	MPN600400 MST-457-13 (1) MPN600194 MST-426-16 (2) MPN600398 MST-423-14 (2)	MPN600343 MCS-935 (1)	MPN600162 MWA-020 (1)	MPN600550 MFN-099 (5)
MPN600250 MH8170-129X		MPN600236 MCS-287-18 (8)	MPN600210 MWA-018 (8)	

Mounting Kit Parts List

Kit #	Stud	Capscrew	Washer	Nut
MPN600253 MH8170-131X		MPN600234 MCS-424-29 (8)	MPN600210 MWA-018 (8)	
MPN600595 MH8170-190X	MPN600593 MST-536 (8)			MPN600603 MNU-603 (8)
MPN600614 MH8170-179X	MPN600594 MST-424-21 (8)			MPN600603 MNU-603 (8)
MPN600214 MH8170-200X	MPN600175 MST-424-18 (2)	MPN600155 MCS-020 (6)	MPN600210 MWA-018 (6)	MPN600603 MNU-603 (2)
MPN600215 MH8170-201X		MPN600157 MCS-029 (8)	MPN600210 MWA-018 (8)	
MPN600475 MH8170-202X	MPN600175 MST-424-18 (8)	MPN600524 MCS-022 (8)	MPN600210 MWA-018 (8)	MPN600603 MNU-603 (8)
MPN600619 MH8170-195X	MPN600175 MST-424-18 (2) MPN600616 MST-424-22 (6)			MPN600603 MNU-603 (8)
MPN600620 MH8170-203X	MPN600617 MST-429-18 (8)			MPN600603 MNU-603 (8)

EXAMPLE CROSSOVER CHART

THE FOLLOWING EXAMPLES GIVE YOU A **COLOR** COMPARISON OF PART NUMBERS AND HOW TO CROSSOVER FROM ONE TO ANOTHER. ON THE NEXT SEVERAL PAGES YOU WILL FIND A MORE DETAILED CROSSOVER CHART.

	MODEL	RATIO GEAR	INPUT	OPT. LUBE	SHIFTER	ASSEMBLY	OUTPUT
METARIS	MH8S	B	01	X	A	1	SE
CHELSEA	489X	F	AH	X	A	3	XD
	MODEL	OPT. LUBE	RATIO GEAR	SHIFTER	INPUT	ASSEMBLY	OUTPUT
PTO, INC	2000	X	B	A	01	1	SE
	MODEL	INPUT	RATIO GEAR	SHIFTER	ASSEMBLY	OUTPUT	OPT.LUBE
MUNCIE	TG8S	U68	08	A	1	B	X

MH 6 & 8 P.T.O. CROSSOVER

MH 6 & 8 BASE MODEL

<u>METARIS</u>	<u>CHELSEA</u>	<u>MUNCIE</u>	<u>PTO</u>
MH6S	420X / 440X / 441X / 442X	TG6S	1000
MH6D	420Z / 440Z / 441Z / 442Z	TG6D	1010
MH6G	420G / 440G / 441G / 442G	TG6B	
MH6N	420K / 440K / 441K / 442K		
MH6M	420L / 440L / 441L / 442L		
MH8S	488X or 489X or 488W	TG8S	2000
MH8D	488Z or 489Z	TG8D	2010
MH8G	488G or 489G	TG8B	
MH8N	488K or 489K		
MH8M	488L or 489L		

GEAR RATIO

<u>METARIS</u>	<u>CHELSEA</u>	<u>MUNCIE</u>	<u>PTO</u>
A	C	05	A
B	F	05	B
C	L	07	C
E	Q	09	E
J	R	09	J
O	S	12	O
R	U	14	R
S	NONE	15	S
T	W	17	T

MH 6 & 8 P.T.O. CROSSOVER

INPUT GEARS

METARIS	CHELSEA	MUNCIE	PTO
01	AH	U68/X68	01
02	AB	U57	02
05	AR	S60	05
06	AX	C60	06
08	BG	S70	08
11	BQ	G73	11
17	ES	F63	17
18	EW	F61	18
21	GS	Z98	21
24	DA	M65*	24
27	EV	F11	27
28	JK	F70	28
33	AP	S61	33
34	FN	S71	34
42	JW	F66	42
50	HY	Z92	50
52	ED	Z98	52
60	N/A	U60	60

NOTE: ANY MUNCIE WITH A M65 INPUT GEAR HAS TO USE OUR DEEP MOUNT CASE. NOT OUR STANDARD CASE LIKE THE CHANGEOVER WILL CALL FOR.

MH 6 & 8 P.T.O. CROSSOVER

LUBE OPTIONS

<u>METARIS</u>	<u>CHELSEA</u>	<u>MUNCIE</u>	<u>PTO</u>
X-NONE	X-NONE	X-NONE	X-NONE
N/A	P-PRESSURE LUBE	P-PRESSURE LUBE	P-PRESSURE LUBE
			G=Greaseable

SHIFTER TYPE OPTIONS

<u>METARIS</u>	<u>CHELSEA</u>	<u>MUNCIE</u>	<u>PTO</u>
A	A	A	A
L	NONE	L	L
M	M	M	M
N	V	P	N
S	S	NONE	S
T	T	NONE	T
W	W	C	W

ASSEMBLY ARRANGEMENT

<u>METARIS</u>	<u>CHELSEA</u>	<u>MUNCIE</u>	<u>PTO</u>
1	3	1	1
2	4	2	2
3	5	3	3
4	6	4	4

MH 6 & 8 P.T.O. CROSSOVER**OUTPUT OPTIONS**

<u>METARIS</u>	<u>CHELSEA</u>	<u>MUNCIE</u>	<u>PTO</u>
DA	XY	I	DA
GA	GA	N/A	N/A
GB	GB	N/A	N/A
RA	XK,RB	K	RA
RB	AF	P	RB
RC	AZ	Z	SG
SD	AK	S	SD
SE	XD	B	SE
SF	XE	R	SF
TP	XR	G	TP

MHD8 P.T.O. CROSSOVER

MHD8 BASE MODEL

<u>METARIS</u>	<u>CHELSEA</u>	<u>MUNCIE</u>	<u>PTO</u>
MHD8S	880X	828S	4000
MHD8D	880Z	828D	4000
MHD8G	880G	828B	4000

GEAR RATIO

<u>METARIS</u>	<u>CHELSEA</u>	<u>MUNCIE</u>	<u>PTO</u>
B	J	09	B
C	M	12	C
E	Q	13	E
J	R	15	J
O	T	19	O

SEE APPLICATION PAGE FOR EXACT RATIO & PERCENTAGE OF ENGINE SPEED.

INPUT GEARS

<u>METARIS</u>	<u>CHELSEA</u>	<u>MUNCIE</u>	<u>PTO</u>
01	AH	U68	01
24	DA	M65*	24

NOTE:* ANY MUNCIE WITH A M65 INPUT GEAR HAS TO USE OUR DEEP MOUNT CASE. NOT OUR STANDARD CASE LIKE THE CHANGEOVER WILL CALL FOR.

MHD8 P.T.O. CROSSOVER

LUBE OPTIONS

<u>METARIS</u>	<u>CHELSEA</u>	<u>MUNCIE</u>	<u>PTO</u>
X-NONE	X-NONE	X-NONE	X-NONE
N/A	P-PRESSURE LUBE	P-PRESSURE LUBE	P-PRESSURE LUBE

SHIFTER TYPE OPTIONS

<u>METARIS</u>	<u>CHELSEA</u>	<u>MUNCIE</u>	<u>PTO</u>
A	A	A	A
N	V	P	N
S	U	NONE	S
T	T	NONE	T

ASSEMBLY ARRANGEMENT

<u>METARIS</u>	<u>CHELSEA</u>	<u>MUNCIE</u>	<u>PTO</u>
3	5	3	3

OUTPUT OPTIONS

<u>METARIS</u>	<u>CHELSEA</u>	<u>MUNCIE</u>	<u>PTO</u>
RJ	XS	E	RJ
SE	N/A	N/A	SE
IC	XV	C	IC

MHS10 P.T.O. CROSSOVER

MHS10 BASE MODEL

<u>METARIS</u>	<u>CHELSEA</u>	<u>MUNCIE</u>	<u>PTO</u>
MHS10S	277X	CS20	3100

GEAR RATIO

<u>METARIS</u>	<u>CHELSEA</u>	<u>MUNCIE</u>	<u>PTO</u>
B	B	05	B
D	D	06	C
G	G	07	G
M	M	10	M
S	S	12	O

SEE APPLICATION PAGE FOR EXACT RATIO & PERCENTAGE OF ENGINE SPEED.

INPUT GEARS

<u>METARIS</u>	<u>CHELSEA</u>	<u>MUNCIE</u>	<u>PTO</u>
63	FJ	A10	63

NOTE:* ANY MUNCIE WITH A M65 INPUT GEAR HAS TO US OUR DEEP MOUNT CASE. NOT OUR STANDARD CASE LIKE THE CHANGEOVER WILL CALL FOR.

LUBE OPTIONS

<u>METARIS</u>	<u>CHELSEA</u>	<u>MUNCIE</u>	<u>PTO</u>
P-PRESSURE LUBE	P-PRESSURE LUBE	P-PRESSURE LUBE	P-PRESSURE LUBE

MHS10 P.T.O. CROSSOVER

SHIFTER TYPE OPTIONS

<u>METARIS</u>	<u>CHELSEA</u>	<u>MUNCIE</u>	<u>PTO</u>
E	B	H	E

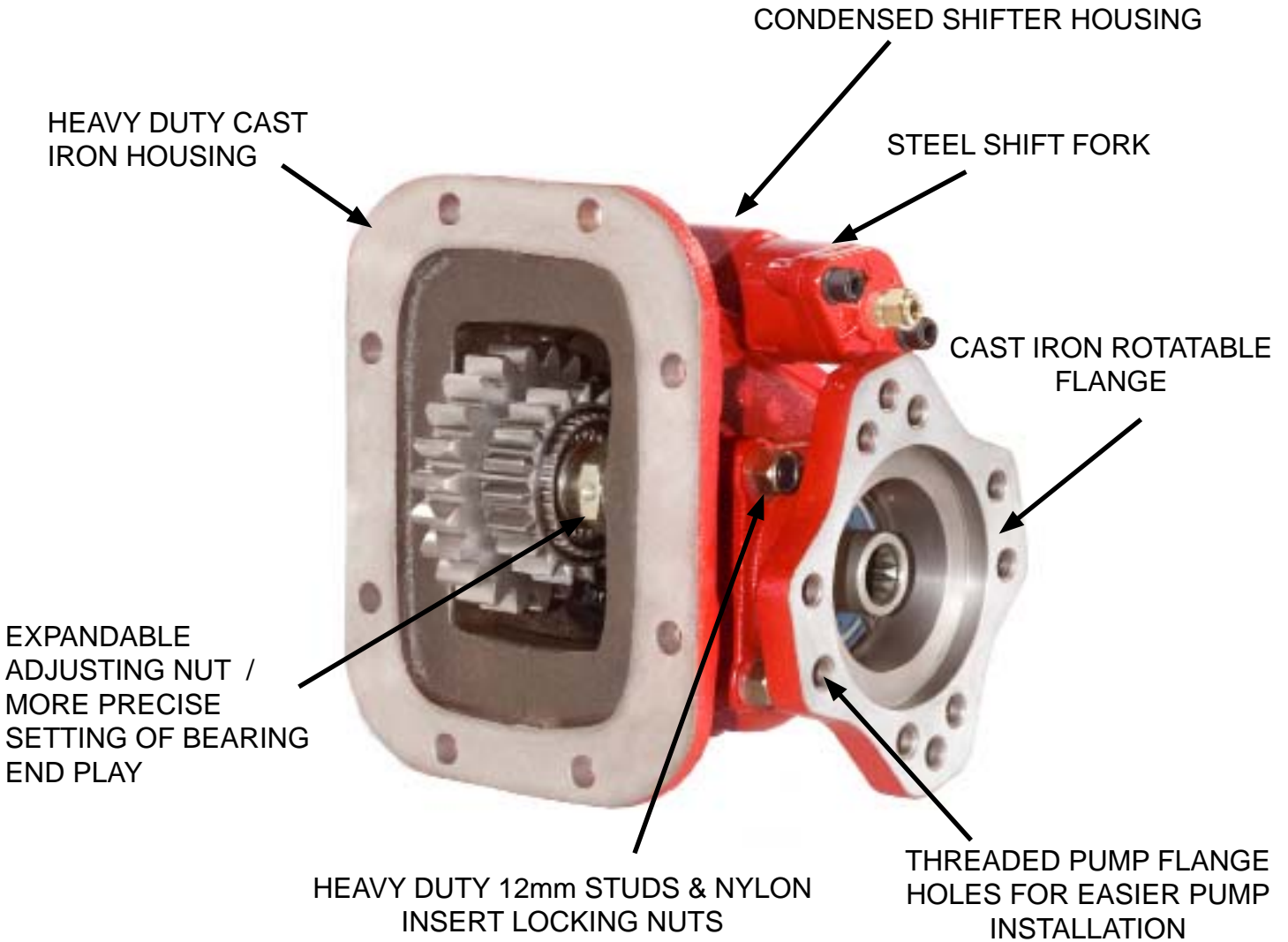
ASSEMBLY ARRANGEMENT

<u>METARIS</u>	<u>CHELSEA</u>	<u>MUNCIE</u>	<u>PTO</u>
3	5	3	3

OUTPUT OPTIONS

<u>METARIS</u>	<u>CHELSEA</u>	<u>MUNCIE</u>	<u>PTO</u>
RA	RA or RB	N/A	RA
RB	RF	N/A	RB
SB	AF	P	SB
SE	XD	B	SE
SA	XK	K	SA

FEATURES AND BENEFITS OF OUR PTO'S



MH8

Internal Ratio	(A)	(B)	(C)	(E)	(J)	(O)	(R)	(S)	(T)
Torque Intermittent Service (Lbs.ft.)	250	250	250	225	225	200	200	190	175
Torque Intermittent (N.m.)	339	339	339	305	305	271	264	251	237
(HP/Rating) Intermittent Service @ 500 R.P.M.	24	24	24	22	22	19	19	18	17
(HP/Rating) Intermittent Service @ 1000 R.P.M.	48	48	48	44	44	38	38	36	34
(KW/Rating) Intermittent Service @ 500 R.P.M.	18	18	18	16	16	14	14	14	12
(KW/Rating) Intermittent Service @ 1000 R.P.M.	36	36	36	32	32	28	28	28	25

FEATURES AND BENEFITS OF OUR PTO'S

STAINLESS SNAP RING ON IDLER PIN / ELIMINATE SET SCREW & PREMATURE DAMAGE FROM IDLER PIN SLIPPING OUT

LARGE OUTPUT SHAFT BEARING / HANDLE HIGHER OUTPUT LOADS

INCREASED DIAMETER IDLER SHAFT / WILL INCREASE HORIZONTAL & VERTICAL FORCES

LARGE (DOUBLE LIPPED) OUTPUT SHAFT SEAL / BETTER SEALING



FEATURES AND BENEFITS OF OUR PTO'S



Our Housing is a Heavy Duty Cast Iron. Muncie is Aluminum & Chelsea is Cast Iron.

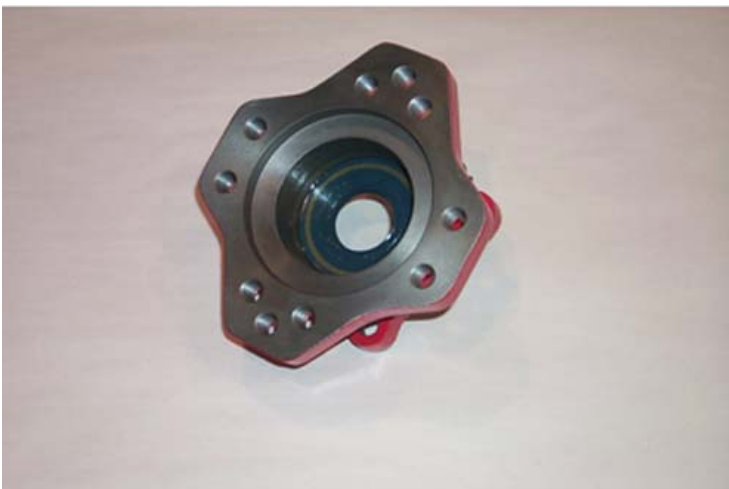
Aluminum will not take the punishment that cast Iron will.



We use Large Tapered bearing on the load side of the output shaft.

Chelsea uses small bearings on both sides.

Muncie uses Roller Bearings not Tapered Bearings.



We use a cast Iron Rotatable Flange with a double lip seal.

Chelsea & Muncie uses a Aluminum Flange

FEATURES AND BENEFITS OF OUR PTO'S



We use 12mm studs to hold our flange on.

We also use Ny-Lock nuts.

Chelsea uses 3/8 Allen head bolts. (Much smaller bolt than ours)



We have a steel fork. Will not break when shifting problems occur.

Chelsea uses Aluminum Fork. (Breaks Easy)

Muncie uses a steel fork.



We use an expandable nut for adjusting the input gear. This provides a slight preload on the bearings for better wear.

Chelsea uses shims that take two or three times to install.

FEATURES AND BENEFITS OF OUR PTO'S

Coming Soon!

We have a idle pin that uses no set screw. It is also thicker than Chelsea's and Muncie's.

PTO Ltd. Still uses a set screw that falls out and can ruin a transmission by losing all the oil out of it.



We use 12mm Cap Screws to attach our end cover.

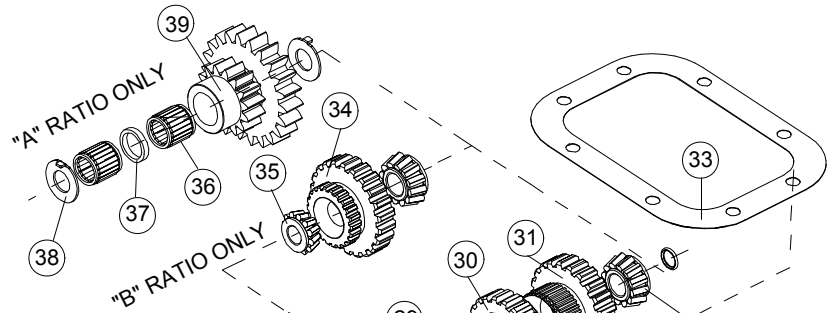
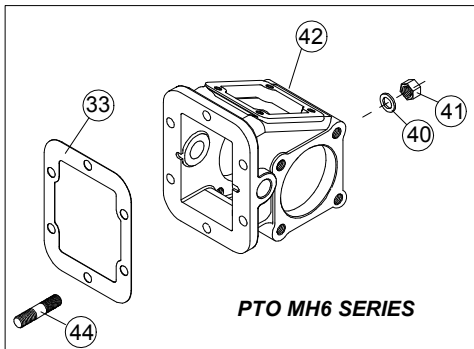
Chelsea uses 3/8 Cap Screws.



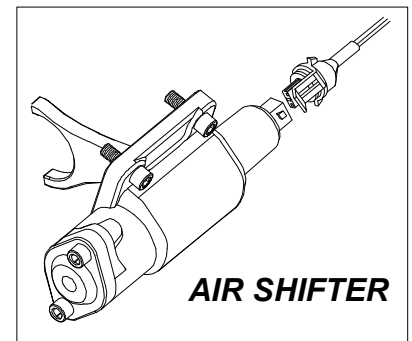
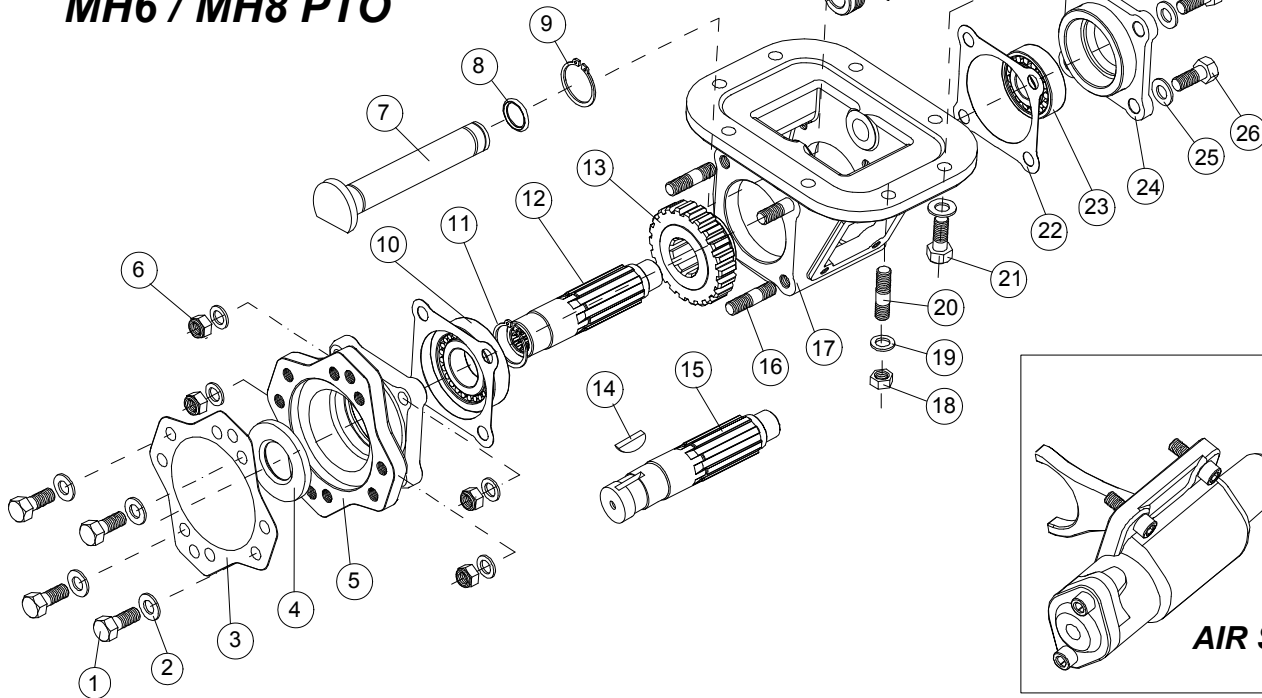
We use Ny-Lock nuts for our Flange. We also use a gasket on our output flange.

No one else does this.

MH6 / MH8 PTO



MH6 / MH8 PTO



MH6 / MH8 PTO

Item	Part Number	Alternate Number	Description	Quantity	
				MH6	MH8
1	MPN600036	MCS-025	PUMP TO FLANGE CAP SCREW	4	4
2	X45-19-13005	MWA-012	PUMP TO FLANGE WASHER	4	4
3	MPN600045	MGA-091	PUMP TO FLANGE GASKET	1	1
4	MPN600121	MSE-007	OUTPUT SHAFT SEAL	1	1
5	MPN600044	MFL-911	OUTPUT FLANGE HOUSING	1	1
5A N.S.	MPN600134	MSR-013	FLANGE SEAL SNAP RING	1	1
6	MPN600094	MNU-003	NYLOCK FLANGE NUT	4	4
7	MPN600091	MIP-531	IDLER PIN	1	1
7A	MPN600585	MIP-585	(NEW STYLE) IDLER PIN		1
8	MPN600100	MOR-022	IDLER PIN O-RING	2	2
8A N.S.	MPN600609	MOR-609	(NEW STYLE) IDLER PIN PLUG O-RING		1
9	MPN600213	MSR-099	IDLER PIN SNAP RING	1	1
9A N.S.	MPN600586	MPL-586	(NEW STYLE) IDLER PIN PLUG		1
10	MPN600115	MRB-004	OUTPUT SHAFT BEARING	1	1
11	MPN600133	MSR-005	OUTPUT SHAFT SNAP RING	1	1
12	SEE CHART # 1		OUTPUT SHAFT	1	1
13	SEE CHART # 2		OUTPUT RATIO GEAR	1	1
14	MPN600151	MWK-516	WOODRUFF KEY	1	1
15	SEE CHART # 1		OUTPUT SHAFT	1	1
16	MPN600136	MST-026	FLANGE STUD	4	4
17	MPN600089	MHS-2000	8 BOLT HOUSING		1
	MPN600090	MHS-2010	8 BOLT DEEP MOUNT HOUSING		1
17A	MPN600584	MHS-584	(NEW STYLE) 8 BOLT HOUSING		1
18	MPN600301	MNU-006	NUT FOR MOUNTING STUD		2
19	MPN600210	MWA-018	8 BOLT MOUNTING WASHER		8
	MPN600255	MWA-019	8 BOLT METRIC MOUNTING WASHER		8
20	MPN600175	MST-084	STD. STUD		2
21	MPN600155	MCS-020	STD. MOUNT CAP SCREW		6
	MPN600157	MCS-029	DEEP MOUNT CAP SCREW		8
	MPN600156	MCS-021	METRIC MOUNT CAP SCREW		8
22	MPN600048	MGA4015EC	END CAP COVER GASKET	2	2
23	MPN600114	MRB-003	OUTPUT BEARING NON-THRUST	1	1
24	MPN600039	MEC-931	CLOSED END COVER CAP	1	1
25	MPN600146	MWA-009	END CAP WASHER	8	8
26	MPN600035	MCS-011	END COVER CAP SCREW	4	4
27&28	MPN600112	MPN-841&851	ADJUSTING BUSHING& NUT	1	1
29	MPN600132	MSR-001	INPUT GEAR SNAP RING	1	1
30	SEE CHART # 2		INPUT RATIO GEAR	1	1
31	SEE CHART #3		INPUT GEAR	1	1
32	MPN600117	MRB-023	INPUT GEAR BEARINGS	2	2
33	MPN600050	MGA-8010	8 BOLT MOUNTING GASKET		1
	MPN600051	MGA-8015	8 BOLT MOUNTING GASKET		1
	MPN600052	MGA-8032	8 BOLT MOUNTING GASKET		1
34	SEE CHART # 3		"B" RATIO INPUT UNIGEAR	1	1
35	MPN600118	MRB-035	INPUT BEARING FOR "B" RATIO	1	1

MH6 / MH8 PTO

Item	Part Number	Alternate Number	Description	Quantity	
				MH6	MH8
36	MPN600190	MRB-005	INPUT BEARING FOR "A" RATIO		2
37	MPN600131	MSP-491	BEARING SPACER FOR "A" RATIO		1
38	MPN600150	MWA-431	ANTI-FRICTION WASHER "A" RATIO		2
39	SEE CHART # 3		"A" RATIO INPUT UNIGEAR		1
40	MPN600162	MWA-020	MOUNTING WASHER	6	
41	MPN600218	MNU-075	MOUNTING NUTS	6	
42	MPN600005	MHS-1000	6 BOLT HOUSING	1	
	MPN600006	MHS-1010	6 BOLT DEEP MOUNT HOUSING	1	
43	MPN600002	MGA-6010	6 BOLT MOUNTING GASKET	1	
	MPN600003	MGA-6015	6 BOLT MOUNTING GASKET	1	
	MPN600004	MGA-6032	6 BOLT MOUNTING GASKET	1	
44	MPN600170	MST-094	6 BOLT STD. MOUNTING STUD	6	
	MPN600193	MST423-12	6 BOLT DEEP MOUNTING STUD	6	
	MPN600208	MST428-16	6 BOLT METRIC MOUNTING STUD	6	

MH6 / MH8 OUTPUT SHAFTS

Part Number	Alternate Number	Description	Quantity	
			MH6	MH8
MPN600106	MOS-235	1 1/4" ROUND OUTPUT SHAFT	1	1
MPN600107	MOS-791	7/8" 13 SPLINE OUTPUT SHAFT	1	1
MPN600108	MOS-861	1" 15 SPLINE OUTPUT SHAFT	1	1
MPN600531	MOS-531	1 1/4" 14 SPLINE OUTPUT SHAFT	1	1
MPN600578	MOS-578	DIN 5462 8 SPLINE OUTPUT SHAFT	1	1
MPN100196	MOSG-171	Greaseable 7/8" 13 SPLINE OUTPUT SHAFT	1	1
MPN100219	MOSG-241	Greaseable 1" 15 SPLINE OUTPUT SHAFT	1	1

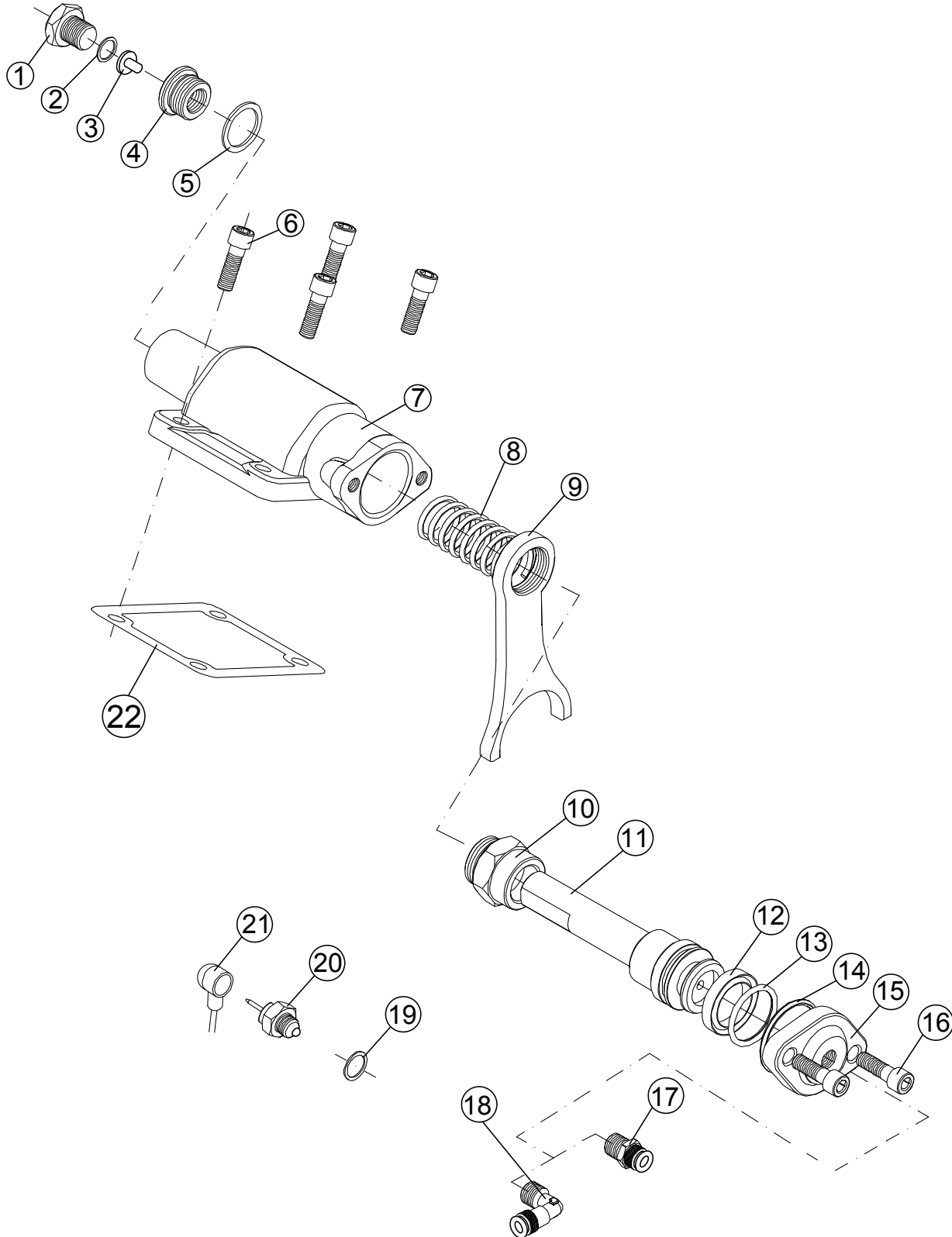
MH6 / MH8 RATIO GEAR SETS

RATIO	ITEM #30 INPUT RATIO GEAR METARIS #	ALTERNATE # & TOOTH COUNT	ITEM #13 OUTPUT RATIO GEAR METARIS #	ALTERNATE # & TOOTH COUNT
RATIO "A" - 01	MPN600084	MR735 (15)	MPN600083	MR734 (30)
RATIO "B" - 01	MPN600078	MR706 (16)	MPN600077	MR705 (29)
RATIO "B" - 24	MPN600085	MR756 (16)	MPN600077	MR705 (29)
RATIO "C"	MPN600069	MR687 (26)	MPN600068	MR686 (19)
RATIO "E"	MPN600054	MR654 (24)	MPN600053	MR653 (21)
RATIO "J"	MPN600056	MR656 (23)	MPN600055	MR655 (22)
RATIO "O"	MPN600058	MR658 (20)	MPN600057	MR657 (25)
RATIO "R"	MPN600080	MR730 (19)	MPN600079	MR729 (26)
RATIO "S"	MPN600082	MR732 (18)	MPN600081	MR731 (27)
RATIO "T"	MPN600060	MR660 (17)	MPN600059	MR659 (28)

MH6 / MH8 INPUT GEARS

INPUT GEAR	METARIS PART#	ALTERNATE PART #	# OF TEETH	APPLICATION	TRANSMISSION GEAR SPECS.
01	MPN600061	MR675	22	EATON/FULLER	6/8 PITCH 20° Spur
02	MPN600067	MR683	19	SPICER	5/7 Pitch 20° Spur
05	MPN600063	MR677	21	SPICER	6 Pitch 17.5° PA 26° 10'37" RH Helix
06	MPN600064	MR679	22	SPICER	6.10 Pitch 25° PA 18° 40'48" LH Helix
08	MPN600066	MR682	24	EATON/FULLER	7 Pitch 17.5° PA 28° 4'23" RH Helix
11	MPN600075	MR699	25	SPICER	7.34 Pitch 20° PA 24° RH Helix
17	MPN600065	MR680	22	EATON/FULLER	6.35 Pitch 20° PA 22° RH Helix
18	MPN600328	MR681	19	EATON/FULLER	6.100 Pitch Helix
21	MPN600062	MR676	29	ZED/F	9.96 Pitch 20° PA 28.5° RH Helix
24	MPN600072	MR695	23	MACK	6.48 Pitch 17.65° PA SPUR
27	MPN600070	MR692	40	EATON/FULLER	10.1 Pitch 21.5° PA SPUR
28	MPN600086	MR771	24	EATON/FULLER	7.0 Pitch 23° PA 26° RH Helix
33	MPN600074	MR697	21	SPICER	6 Pitch 17.5° PA 22.25° RH Helix
34	MPN600073	MR696	26	SPICER	7 Pitch 17.5° PA 18° RH Helix
42	MPN600191	MR66	24	FULLER	6.65 Pitch 20° PA 21.5° RH
50	MPN600071	MR694	26	ZED/F	9.23 Pitch 20° PA 36° RH Helix
52	MPN600076	MR700	34	ZED/F	9.96 Pitch 20° PA 28.5° RH Helix
60	MPN600192	MR60	24	ALLISON	6 Pitch 20° Spur, Full Addendum

MH6 / MH8 SERIES - AIR SHIFTER



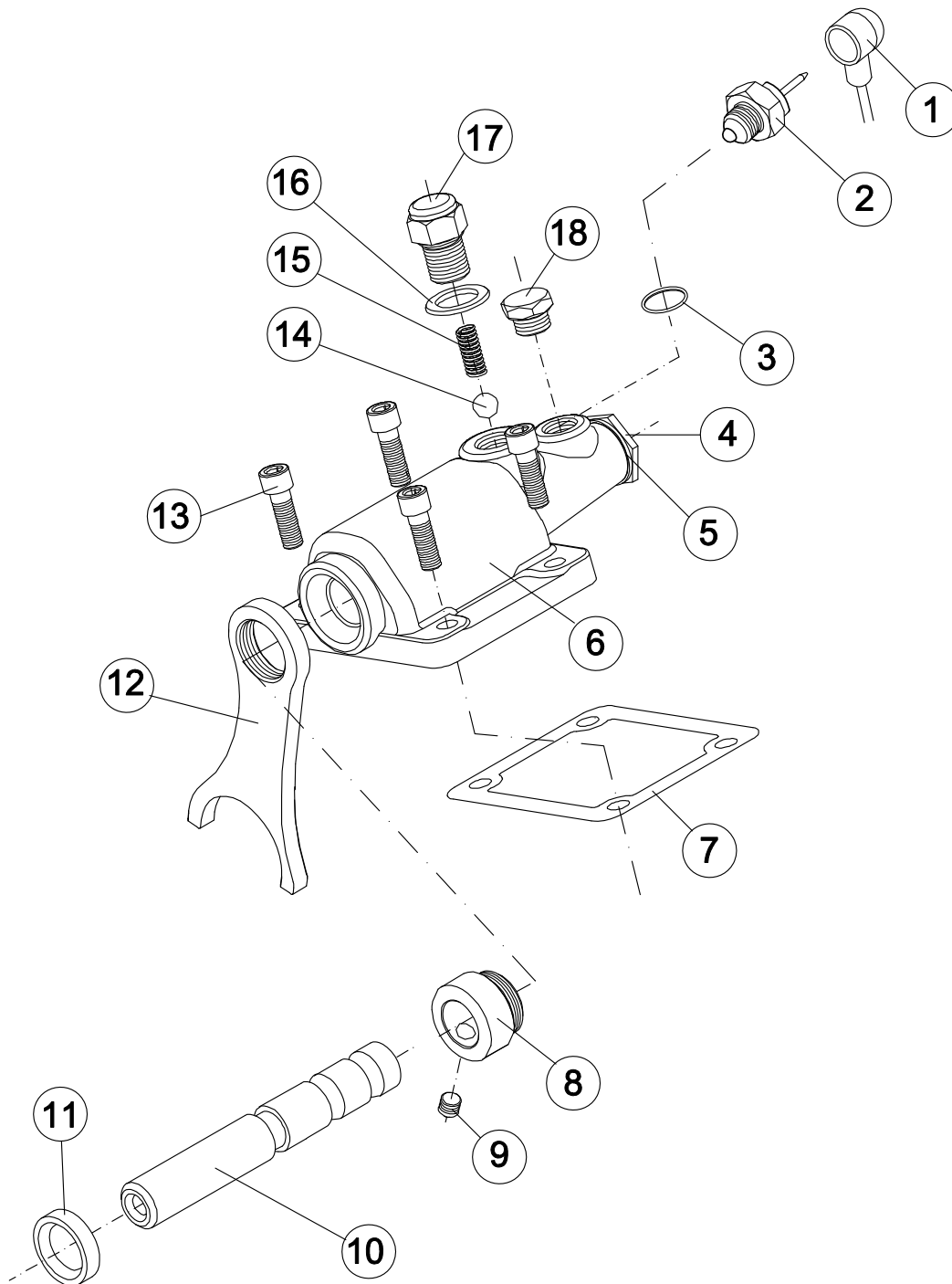
MH6 / MH8 SERIES - AIR SHIFTER PART LIST

Item	Part Number	Alternate Number	Description	Quantity
1	MPN600013	MAP-002	End Plug	1
2	MPN600142	MWA-002	Washer	1
3	MPN600212	MAP-145	Sensor Pin	1
4	MPN600180	MAP-144	Sensor Adapter Plug	1
5	MPN600143	MWA-003	Washer	1
6	MPN600019	MAS-009	Shifter Cap Allen Screw	4
7	MPN600128	MSH-371	Air Shifter Top Housing	1
8	MPN600129	MSP-056	Spring for Piston	1
9	MPN600124	MSF-631	Shifter Fork	1
10	MPN600025	MBU-321	Fork Spacer	1
11	MPN600120	MSB-251	Piston	1
12	MPN600024	MBU-009	Rubber Seal	1
13	MPN600102	MOR-045	O'Ring	1
14	MPN600101	MOR-029	Piston Cap O'Ring	1
15	MPN600110	MPC-701	Piston Cap	1
16	MPN600018	MAS-008	Piston Cap Screws	2
17	MPN600041	MFI-216-S	180° Quick Connect Air Fitting	1
18	MPN600040	MFI-216-E	90° Quick Connect Air Fitting	1
19	MPN600181	MOR-090	Sensor O'Ring	1
20	MPN600334	MSW-003	Sending Sensor Unit	1
21	MPN600333	MSWK-699	Sensor Wiring Harness	1
22	MPN600049	MGA4015-SC	Shifter Mounting Gasket	1

TOTAL AIR SHIFTER ASSEMBLIES

	MPN600010	M902299	1 & 4 POSITION	1
	MPN600012	M903899	2 & 3 POSITION	1

MH6 / MH8 SERIES - MECHANICAL SHIFT



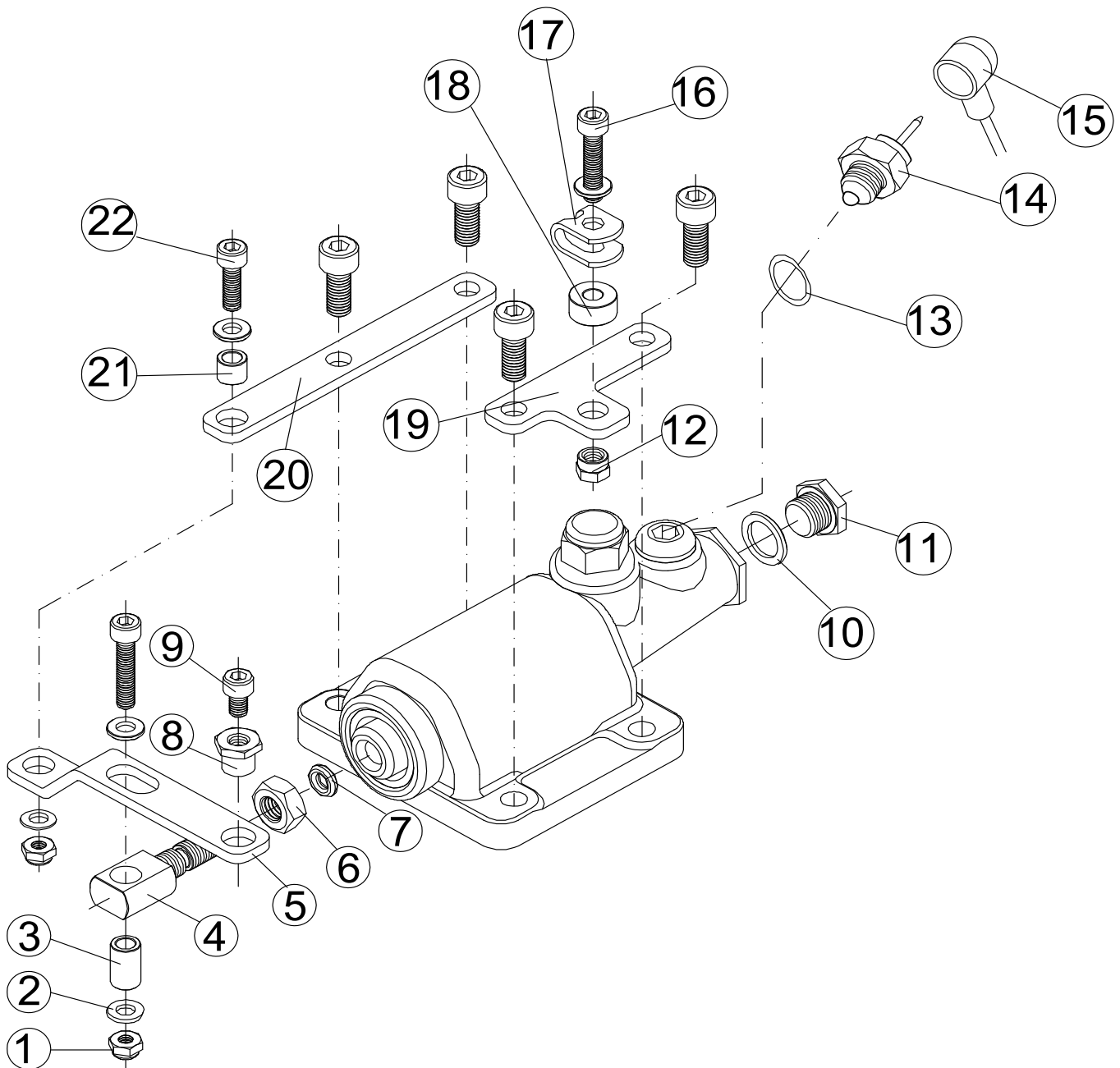
MH6 / MH8 SERIES - MECHANICAL SHIFT

Item	Part Number	Alternate Number	Description	Quantity
1	MPN600333	MSWK-699	Sensor Wiring Harness	1
2	MPN600334	MSW-003	Sending Sensor Unit	1
3	MPN600181	MOR-090	Sensor O'Ring	1
4	MPN600015	MAP-131	PLUG	1
5	MPN600143	MWA-003	ALUMINUM WASHER	1
6	MPN600127	MSH391	SHIFTER HOUSING	1
7	MPN600049	MGA4015-SC	Shifter Mounting Gasket	1
8	MPN600029	MBU-981	FORK BUSHING	1
9	MPN600135	MSS-005	SET SCREW	1
10	MPN600119	MSB-072	SHIFTING SHAFT	1
11	MPN600123	MSE-017	SHAFT SEAL	1
12	MPN600124	MSF-931	Shifter Fork	1
13	MPN600019	MAS-009	SHIFTER HOUSING BOLTS	4
14	MPN600109	MPB-001	POPPET BALL	1
15	MPN600128	MSP-019	POPPET SPRING	1
16	MPN600147	MWA-010	ALUMINUM WASHER	1
17	MPN600034	MCP-151	POPPET CAP	1
18	MPN600033	MCP-022	SWITCH PLUG	1

TOTAL MECHANICAL SHIFTER ASSEMBLIES

	MPN600009	M902099	1 & 4 POSITION	1
	MPN600011	M903599	2 & 3 POSITION	1

MH6 / MH8 SERIES - WIRE SHIFTER

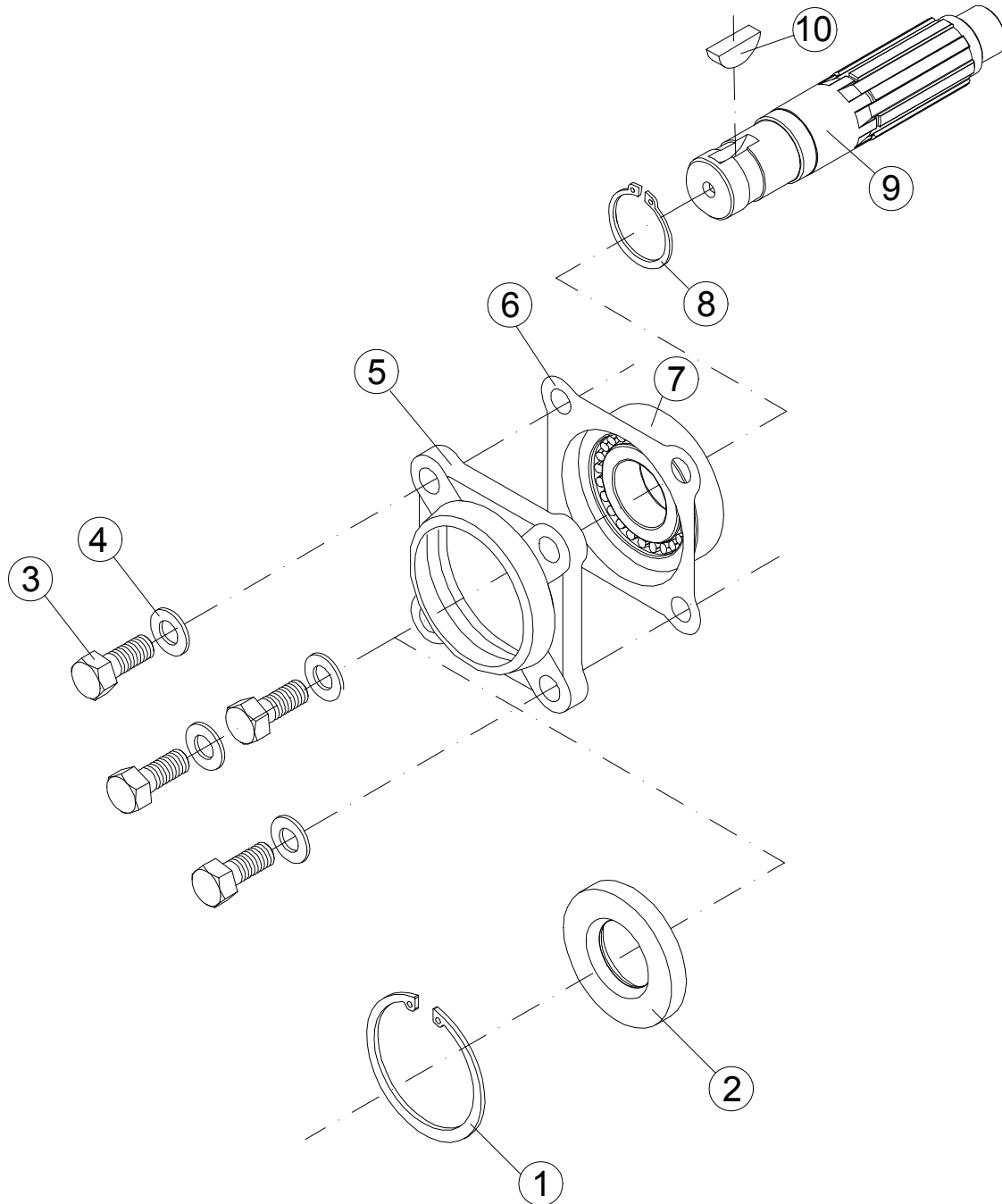


MH6 / MH8 SERIES - WIRE SHIFTER

Item	Part Number	Alternate Number	Description	Quantity
1	MPN600096	MNU-008	NYLOCK NUT	2
2	MPN600144	MWA-004	WASHER	5
3	MPN600027	MBU-611	BUSHING	1
4	MPN600130	MSP-131	ROD SPACER	1
5	MPN600093	MLV-341	LEVER	1
6	MPN600095	MNU-004	JAM NUT	1
7	MPN600104	MOR-122	O-RING	1
8	MPN600098	MNU-491	CLAMPING NUT FOR WIRE	1
9	MPN600021	MAS-099	ALLEN HEAD SCREW	1
10	MPN600149	MWA-016	ALUMINUM WASHER	1
11	MPN600111	MPL-025	PLUG	1
12	MPN600097	MNU-481	WIRE CLIP NUT	1
13	MPN600181	MOR-090	SENDING UNIT O-RING	1
14	MPN600334	MSW-003	SENDING SENSOR UNIT	1
15	MPN600333	MSWK-699	SENSOR WIRING HARNESS	1
16	MPN600017	MAS-004	ALLEN HEAD SCREW	1
17	MPN600031	MCC-471	WIRE HOLDING CLIP	1
18	MPN600028	MBU-761	BUSHING	1
19	MPN600030	MCB-331	CABLE BRACKET	1
20	MPN600092	MLV-321	LEVER BRACKET	1
21	MPN600026	MBU-601	BUSHING	1
22	MPN600016	MAS-003	ALLEN HEAD SCREW	1

TOTAL WIRE ASSEMBLY KIT				
	MPN600217	M9013799	WIRE KIT ASSEMBLY	1

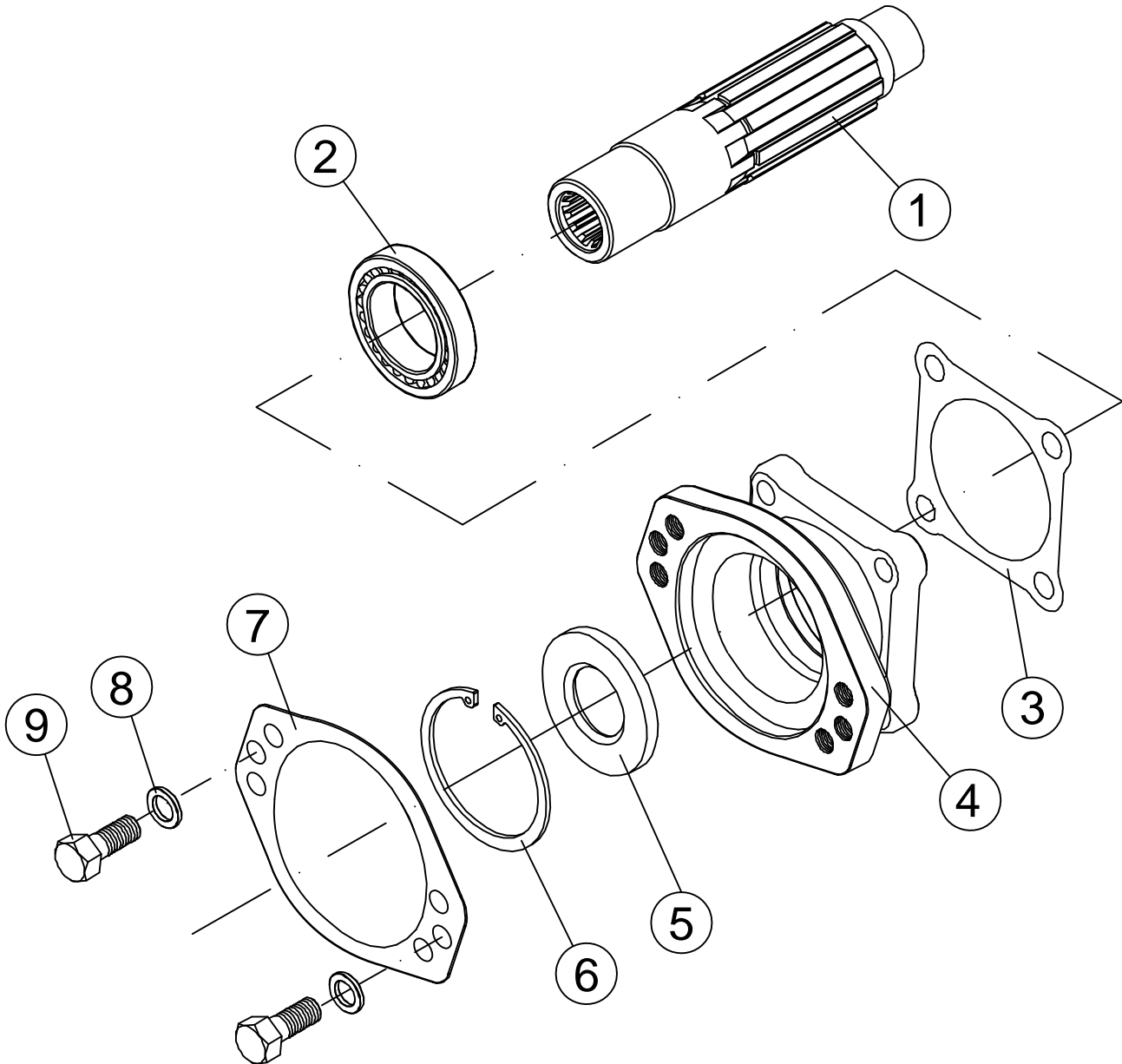
MH6 / MH8 SERIES - 1 1/4" ROUND SHAFT



MH6 / MH8 SERIES - 1 1/4" ROUND SHAFT

Item	Part Number	Alternate Number	Description	Quantity
1	MPN600134	MSR-013	SNAP RING	1
2	MPN600121	MSE-007	OUTPUT SHAFT SEAL	1
3	MPN600035	MCS-011	OPEN END CAP BOLT	4
4	MPN600148	MWA-009	WASHER	4
5	MPN600099	MOC-662	OPEN END CAP	1
6	MPN600048	MGA4015EC	GASKET	1
7	MPN600115	MRB-004	OUTPUT SHAFT BEARING	1
8	MPN600133	MSR-005	OUTPUT SHAFT SNAP RING	1
9	MPN600106	MOS-235	OUTPUT SHAFT	1
10	MPN600151	MWK-516	5/16" WOODRUFF KEY	1

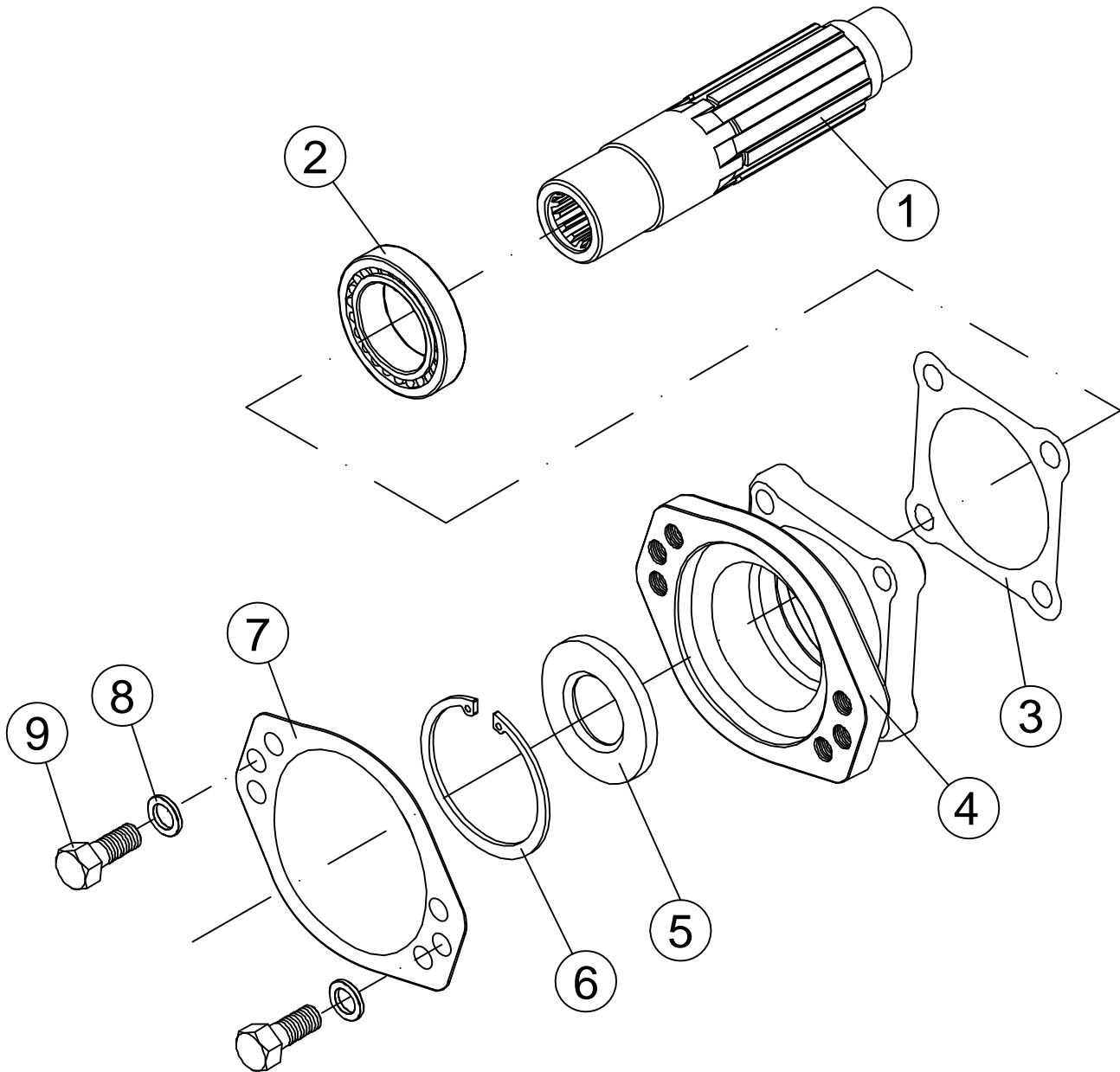
**“SB” FLANGE 1” 15 SPLINE
SAE “BB” 2 BOLT**



MH6 / MH8 SERIES 5/8" 9 SPLINE OUTPUT FLANGE

Item	Part Number	Alternate Number	Description	Quantity
1	MPN600108	MOS-861	Output Shaft	1
2	MPN600115	MRB-004	Output Shaft Bearing	1
3	MPN600048	MGA4015EC	End Cap Cover Gasket	1
4	MPN600530	MFL-530	Output Flange	1
5	MPN600121	MSE-007	Output Shaft Seal	1
6	MPN600134	MSR-013	Flange Seal Snap Ring	1
7	MPN600628	MGA-092	Pump to Flange Gasket	1
8	X45-19-13005	MWA-012	Pump to Flange Washer	2
9	MPN600036	MCS-025	Pump to Flange Cap Screw	2

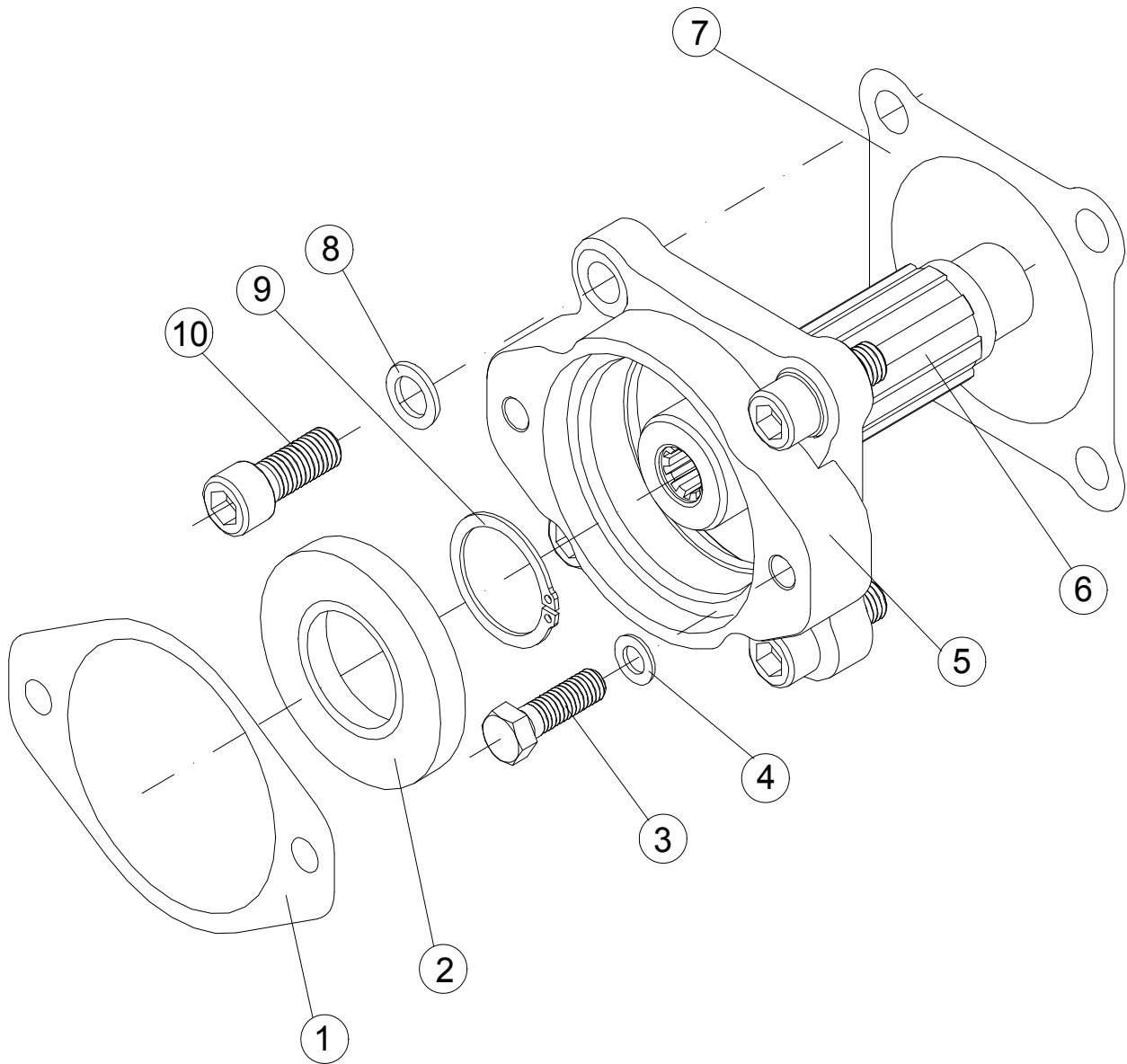
**“SD” FLANGE 7/8” 13 SPLINE
SAE “B” 2 BOLT**



“SD” FLANGE 7/8” 13 SPLINE SAE “B” 2 BOLT

Item	Part Number	Alternate Number	Description	Quantity
1	MPN600107	MOS-791	Output Shaft	1
2	MPN600115	MRB-004	Output Shaft Bearing	1
3	MPN600048	MGA4015EC	End Cap Cover Gasket	1
4	MPN600530	MFL-530	Output Flange	1
5	MPN600121	MSE-007	Output Shaft Seal	1
6	MPN600134	MSR-013	Flange Seal Snap Ring	1
7	MPN600628	MGA-092	Pump to Flange Gasket	1
8	X45-19-13005	MWA-012	Pump to Flange Washer	2
9	MPN600036	MCS-025	Pump to Flange Cap Screw	2

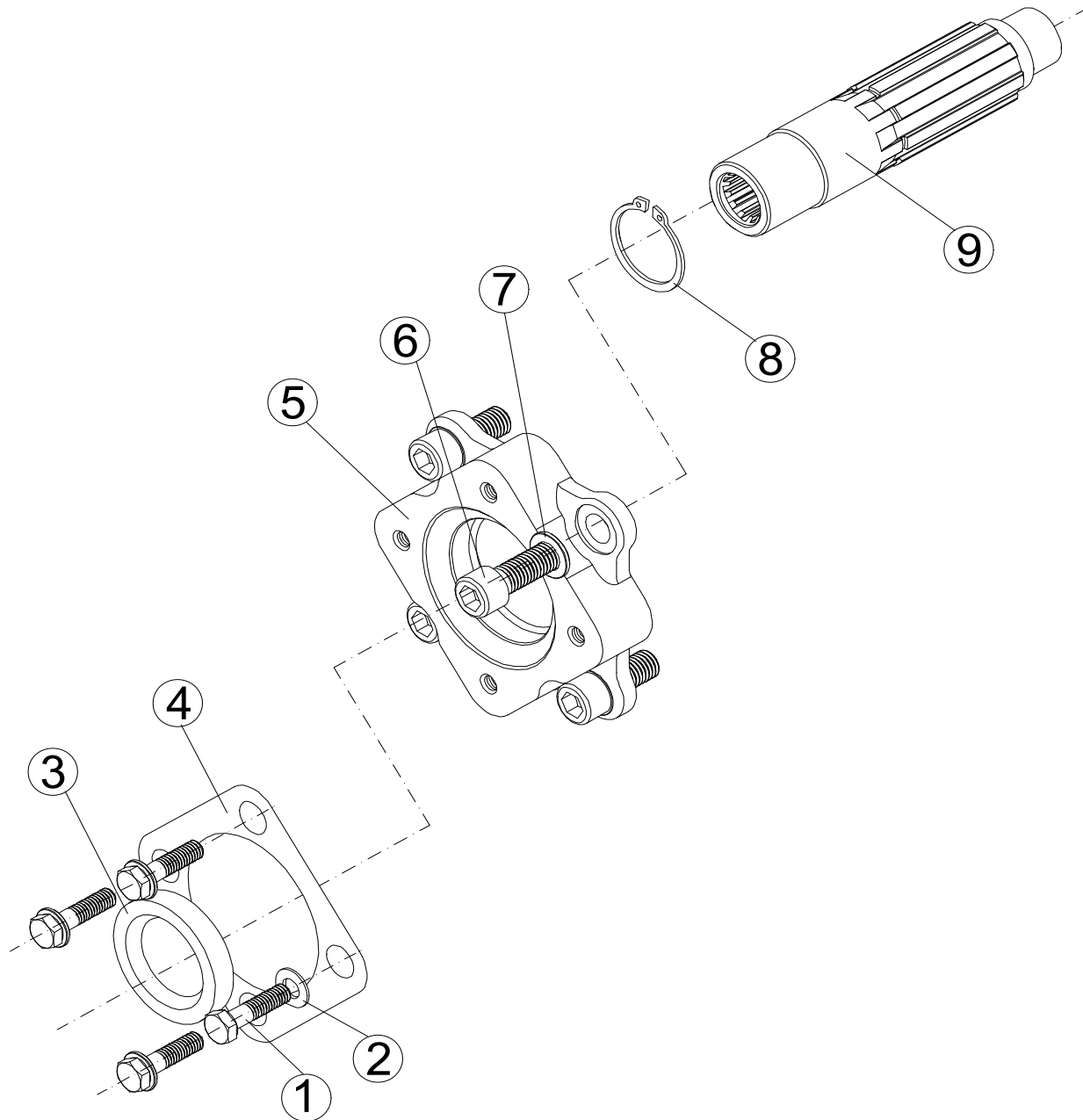
**“SF” FLANGE 5/8” 9 SPLINE
SAE “A” 2 BOLT**



**“SF” FLANGE 5/8” 9 SPLINE
SAE “A” 2 BOLT**

Item	Part Number	Alternate Number	Description	Quantity
1	MPN600047	MGA-291	PUMP TO FLANGE GASKET	1
2	MPN600121	MSE-007	OUTPUT SHAFT SEAL	1
3	MPN600037	MCS-035	PUMP TO FLANGE MOUNTING BOLT	2
4	MPN600141	MWA-001	WASHER	2
5	MPN600042	MFL-451	FLANGE HOUSING	1
6	MPN600105	MOS-071	OUTPUT SHAFT	1
7	MPN600048	MGA4015EC	FLANGE GASKET	1
8	MPN600146	MWA-009	WASHER	4
9	MPN600133	MSR-005	OUTPUT SHAFT SNAP RING	1
10	MPN600020	MAS-030	FLANGE MOUNTING ALLEN HEAD BOLT	4

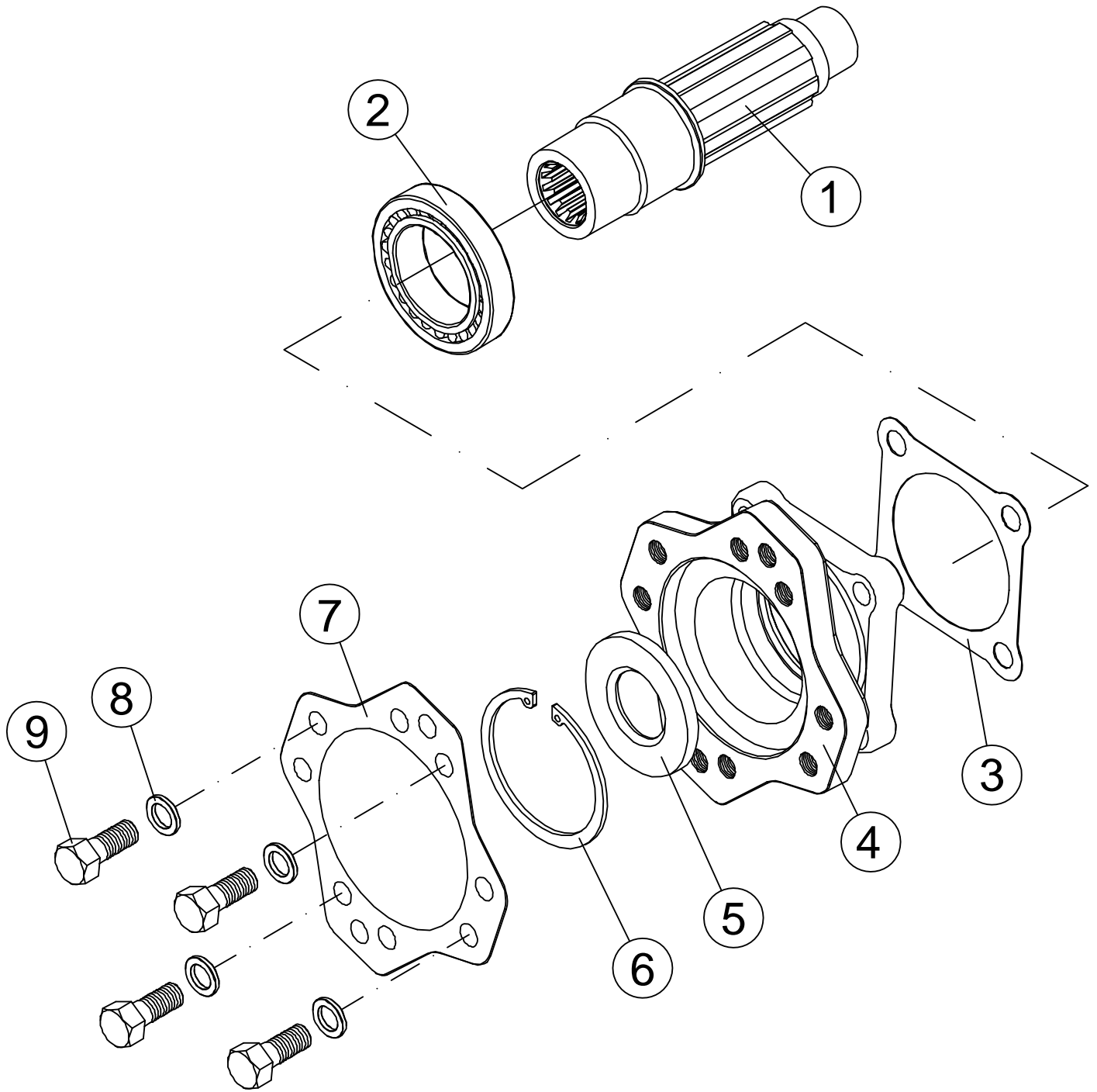
**“TP” FLANGE 7/8” 13 SPLINE
FOR CHELSEA PUMPS**



**“TP” FLANGE 7/8” 13 SPLINE
FOR CHELSEA PUMPS**

Item	Part Number	Alternate Number	Description	Quantity
1	MPN600152	MAS-042	PUMP TO FLANGE CAP SCREW	4
2	MPN600145	MWA-005	PUMP TO FLANGE WASHER	4
3	MPN600122	MSE-016	OUTPUT SHAFT SEAL	1
4	MPN600046	MGA-130	PUMP TO FLANGE GASKET	1
5	MPN600043	MFL-491	FLANGE HOUSING	1
6	MPN600020	MAS-030	FLANGE CAP SCREW	4
7	MPN600146	MWA-009	FLANGE WASHER	4
8	MPN600133	MSR-005	OUTPUT SHAFT SNAP RING	1
9	MPN600160	MOS-091	OUTPUT SHAFT	1

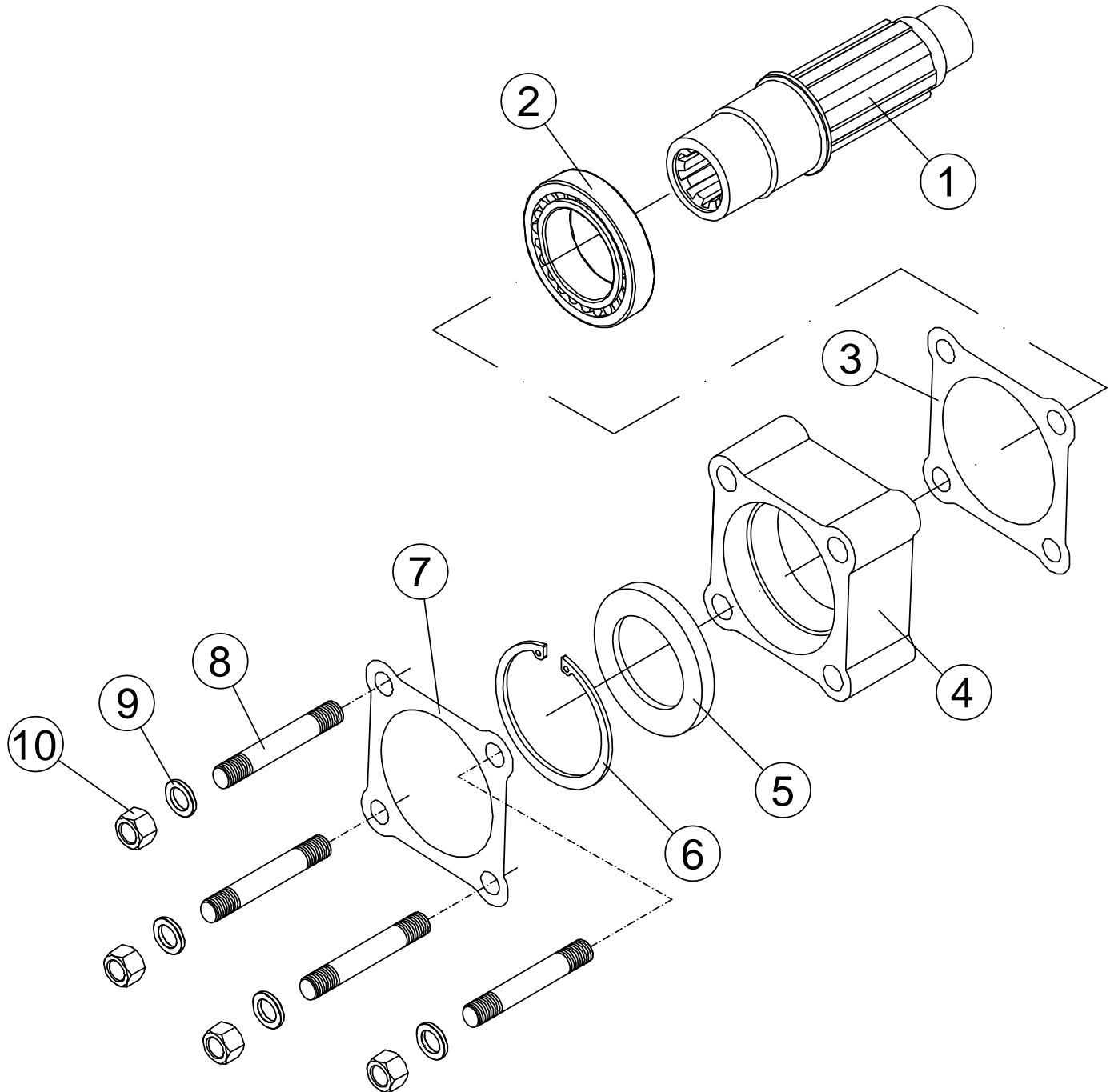
1 1/4" 14 SPLINE "RC" FLANGE



1 1/4" 14 SPLINE "RC" FLANGE

Item	Part Number	Alternate Number	Description	Quantity
1	MPN600531	MOS-531	Output Shaft	1
2	MPN600279	MRB-279	Output Shaft Bearing	1
3	MPN600048	MGA4015EC	End Cap Cover Gasket	1
4	MPN600044	MFL-911	Output Flange	1
5	MPN600587	MSE-587	Output Shaft Seal 50x72x10	1
6	MPN600134	MSR-013	Flange Seal Snap Ring	1
7	MPN600045	MGA-091	Pump to Flange Gasket	1
8	M4023782132	MWA-012	Pump to Flange Washer	4
9	MPN600036	MCS-025	Pump to Flange Cap Screw	4

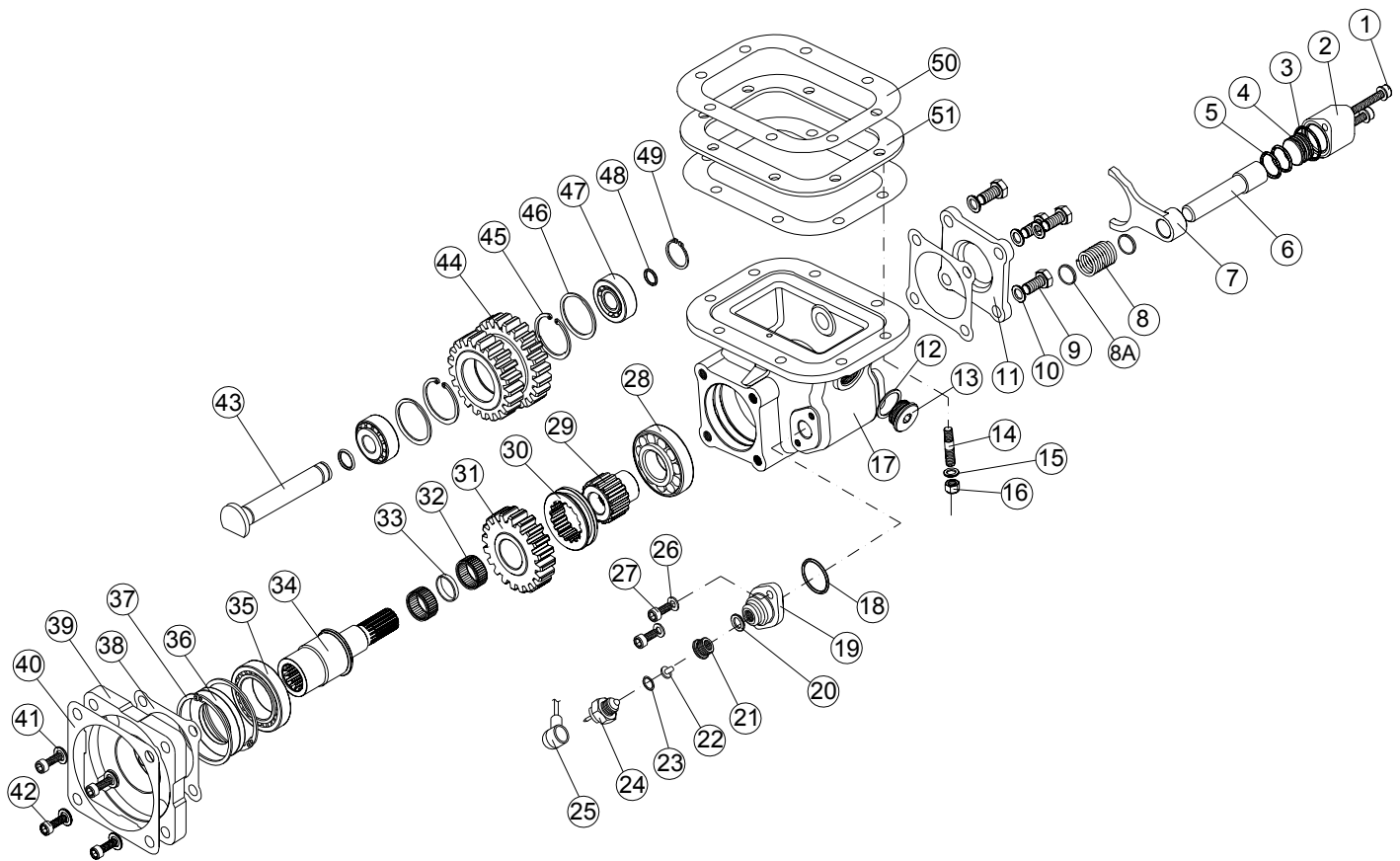
MH6 / MH8 ISO 4 BOLT DIN 5462 "DA" FLANGE



**MH6 / MH8 ISO 4 BOLT
DIN 5462 “DA” FLANGE**

Item	Part Number	Alternate Number	Description	Quantity
1	MPN600578	MOS-578	Output Shaft	1
2	MPN600279	MRB-279	Output Bearing	1
3	MPN600048	MGA4015EC	End Cap Cover Gasket	1
4	MPN600623	MFL-623	ISO 4 Bolt Flange	1
5	MPN600602	MSE-602	Output Shaft Seal 50x75x10	1
6	MPN600134	MSR-013	Flange Seal Snap Ring	1
7	MPN600048	MGA4015EC	End Cap Cover Gasket	1
8	MPN600624	MST-624	Flange Stud	4
9	MPN600146	MWA-009	Nuts	4
10	MPN600301	MNU-003	Mounting Nut	4

MHD8 SERIES SAE "C" 4 BOLT



MHD8 SERIES PARTS LIST

Item	Part Number	Alternate Number	Description	Quantity
				MHD8
1	MPN600290	MAS-087	ALLEN HEAD BOLT	2
2	MPN600275	MPC-573	PISTON CARRIER COVER	1
3	MPN600273	MOR-004	O-RING (VITON)	1
4	MPN600276	MPI-531	SHIFTER PISTON	1
5	MPN600274	MOR-005	O-RING (VITON)	2
6	MPN600280	MSB-431	SHIFTER SHAFT	1
7	MPN600300	MSF434	SHIFTER FORK	1
8	MPN600284	MSP-031	SHIFTER SHAFT SPRING	1
8A	MPN600281	MSH-011	SHIM FOR SHAFT SPRING	2
9	MPN600035	MCS-011	END COVER CAP SCREW	4
10	MPN600148	MWA-009	WASHER	4
11	MPN600272	MEC-711	END CAP	1
12	MPN600288	MWA-013	SEALING WASHER	1
13	MPN600277	MPL-731	BACKLASH PLUG	1
14	MPN600175	MST-084	STANDARD MOUNTING STUD	8
	MPN600157	MCS-029	DEEP MOUNT MOUNTING CAP SCREW	8
	MPN600156	MCS-021	METRIC MOUNTING CAP SCREW	8
15	MPN600210	MWA-018	MOUNTING WASHER	8
	MPN600255	MWA-019	METRIC MOUNTING WASHER	8
16	MPN600301	MNU-006	MOUNTING TOP LOCK NUT	8
17	MPN600261	MHS-633	HD8 HOUSING	1
18	MPN600101	MOR-029	O-RING (VITON)	1
19	MPN600320	MEC-581	SENDING UNIT COVER	1
20	MPN600523	MWA-002	SEALING WASHER	1
21	MPN600211	MAP-144	SENSOR ADAPTER	1
22	MPN600212	MAP-145	SENSOR PIN	1
23	MPN600181	MOR-090	O-RING	1
24	MPN600334	MSW-003	SENDING UNIT SINGLE POLE	1
25	MPN600333	MSWK-699	WIRING HARNESS SINGLE POLE	1
26	MPN600145	MWA-005	WASHER	2
27	MPN600018	MAS-008	ALLEN HEAD BOLT	2
28	MPN600115	MRB-004	NON-LOAD SIDE BEARING	1
29	MPN600260	MGB-901	GEAR BUSHING	1
30	MPN600259	MCC-321	CLUTCH COLLAR	1
31		SEE CHART #1	OUTPUT RATIO GEAR	1
32	MPN600278	MRB-011	NEEDLE BEARINGS	2
33	MPN600289	MWA-452	ANTI-FRICTION SPACER	1
34		SEE CHART # 2	OUTPUT SHAFT	1
35	MPN600279	MRB-021	OUTPUT SHAFT LOAD BEARING	1
36	MPN600291	MSE-013	OUTPUT SHAFT SEAL	1
37	MPN600287	MSR-015	OUTPUT SHAFT SEAL SNAP RING	2
38	MPN600189	MGA-4015EC	END COVER GASKET	2
39	MPN600318	MFL-191	OUTPUT FLANGE	1

MHD8 SERIES PARTS LIST

Item	Part Number	Alternate Number	Description	Quantity
				MHD8
40	MPN600323	MGA-129	FLANGE GASKET	1
41	MPN600481	MWA-008	WASHER	4
42	MPN600308	MAS-061	FLANGE ALLEN HEAD BOLTS	4
43	MPN600091	MIP-531	IDLER PIN	1
44		SEE CHART #1	INPUT DOUBLE UPPER GEAR	1
45	MPN600286	MSR-007	INPUT GEAR SNAP RING	2
46	MPN600282	MSH-051	INPUT BEARING SHIMS	2
47	MPN600117	MRB-023	INPUT GEAR BEARINGS CONE	2
47A	MPN600611	MRB-611	INPUT GEAR BEARINGS CUP	2
47B	MPN600612	MRB-612	INPUT GEAR BEARING (CUP & CONE)	2
48	MPN600100	MOR-022	IDLER PIN O-RINGS	2
49	MPN600213	MSR-099	IDLER PIN SNAP RING	1
50	MPN600050	MGA-8010	8 BOLT MOUNTING GASKET .010	2
	MPN600051	MGA-8015	8 BOLT MOUNTING GASKET .015	2
	MPN600052	MGA-8032	8 BOLT MOUNTING GASKET .032	2
51	MPN600285	MSP-082	MOUNTING SPACER	1

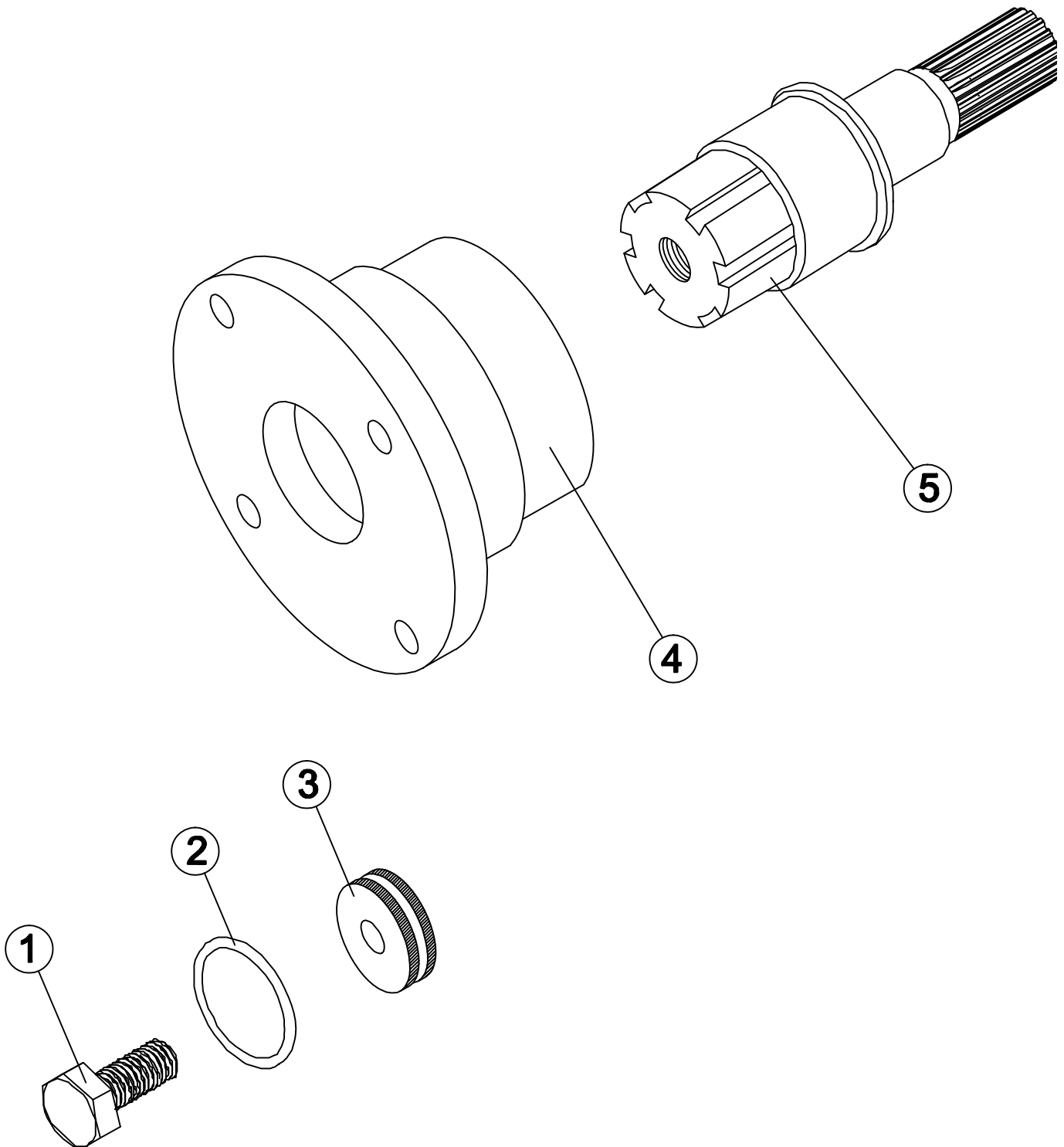
MHD8 SERIES OUTPUT SHAFT CHART

Part Number	Alternate Number	Description	Quantity
			MHD8
MPN600257	MOS-456	1 1/4" ROUND OUTPUT SHAFT WITH 1 1/8" X 5/16" KEY (KEY # MPN600151 or MWK-002)	1
MPN600319	MOS-521	1 1/4" 14 SPLINE OUTPUT SHAFT	1
MPN100193	MOS-621	1410 SPICER FLANGE	1

MHD8 SERIES OUTPUT SHAFT CHART

Large Input & Ratio Gear					
RATIO	ITEM #44 SMALL INPUT RATIO GEAR METARIS #	ALTERNATE # & TOOTH COUNT	ITEM #44 LARGE INPUT GEAR TOOTH COUNT	ITEM #31 OUTPUT RATIO GEAR METARIS #	ALTERNATE # & TOOTH COUNT
RATIO "B" - 01	MPN600313	MR-782 (15T)	(23T)	MPN600315	MR-783 (26T)
RATIO "B" - 24	MPN600592	MR-835 (15T)	(25T)	MPN600315	MR-783 (26T)
RATIO "C" - 01	MPN600541	MR-784 (17T)	(23T)	MPN600540	MR-785 (24T)
RATIO "C" - 24	MPN600589	MR-834 (17T)	(25T)	MPN600540	MR-785 (24T)
RATIO "E" - 01	MPN600256	MR-577 (19T)	(23T)	MPN600258	MR-578 (22T)
RATIO "E" - 24	MPN600317	MR-614 (19T)	(25T)	MPN600258	MR-578 (22T)
RATIO "J" - 01	MPN600314	MR-786 (21T)	(23T)	MPN600316	MR-787 (20T)
RATIO "O" - 01	MPN100192	MR-791 (23T)	(23T)	MPN100191	MR-792 (18T)

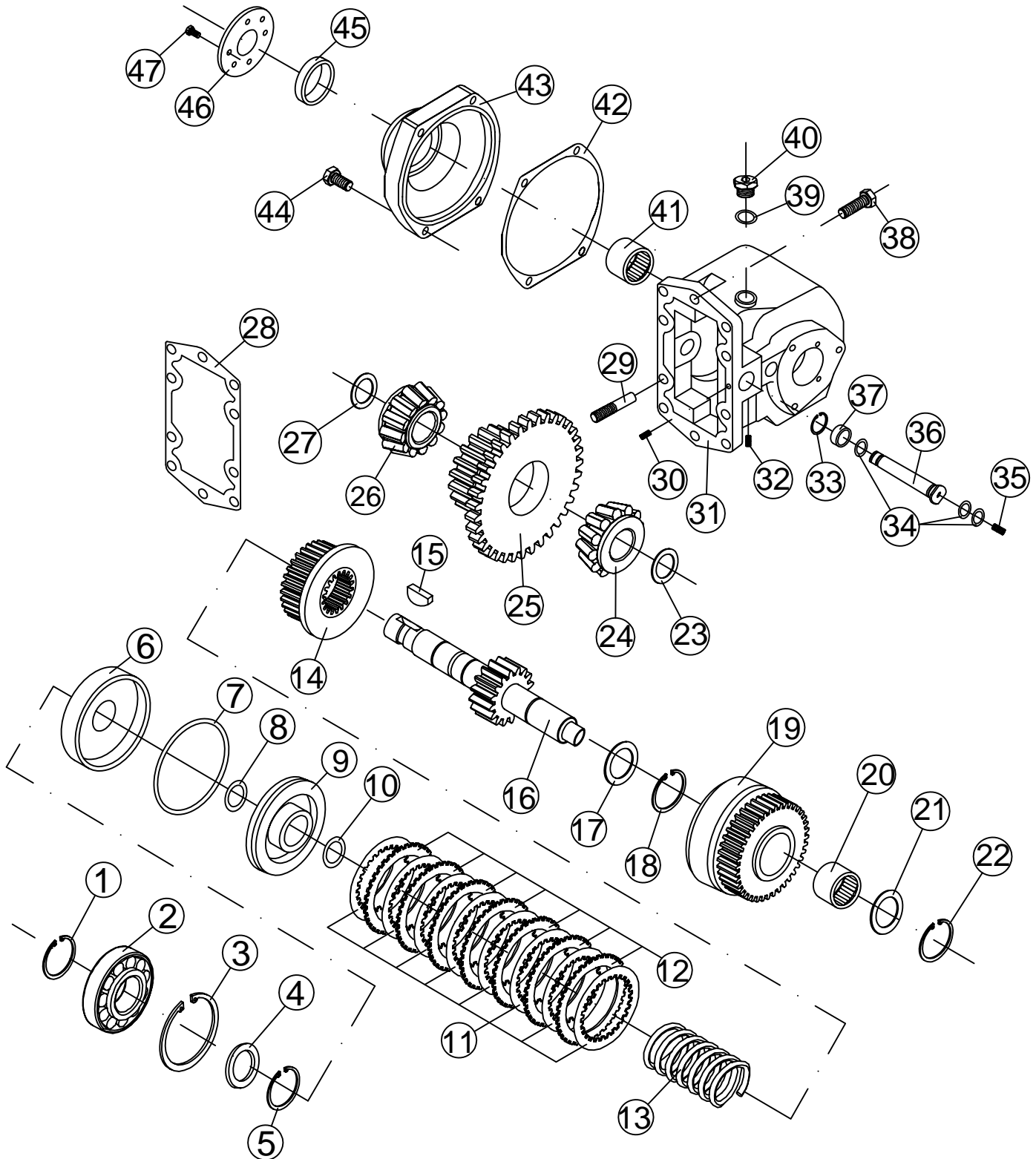
**IC 1410
FLANGE**



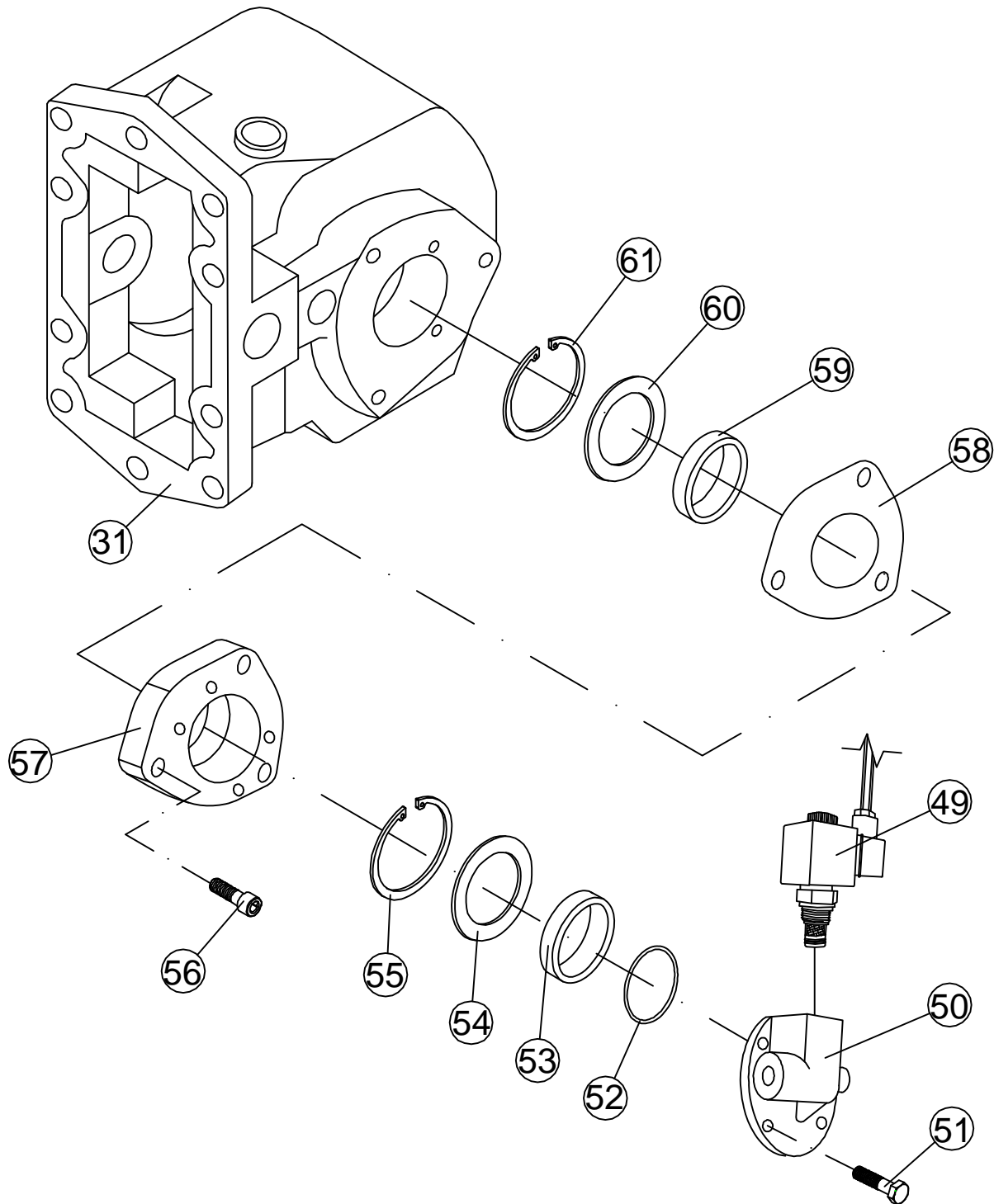
IC 1410 FLANGE OUTPUT

Item	Materis Part #	Alternate Number	Description	Quantity
1	MPN600035	MCS-011	Capscrew	1
2	MPN600101	MOR-029	O-Ring	1
3	MPN100195	MWA-195	Washer	1
4	MPN100194	MFL-194	Flange	1
5	MPN100193	MOS621	Output Shaft	1

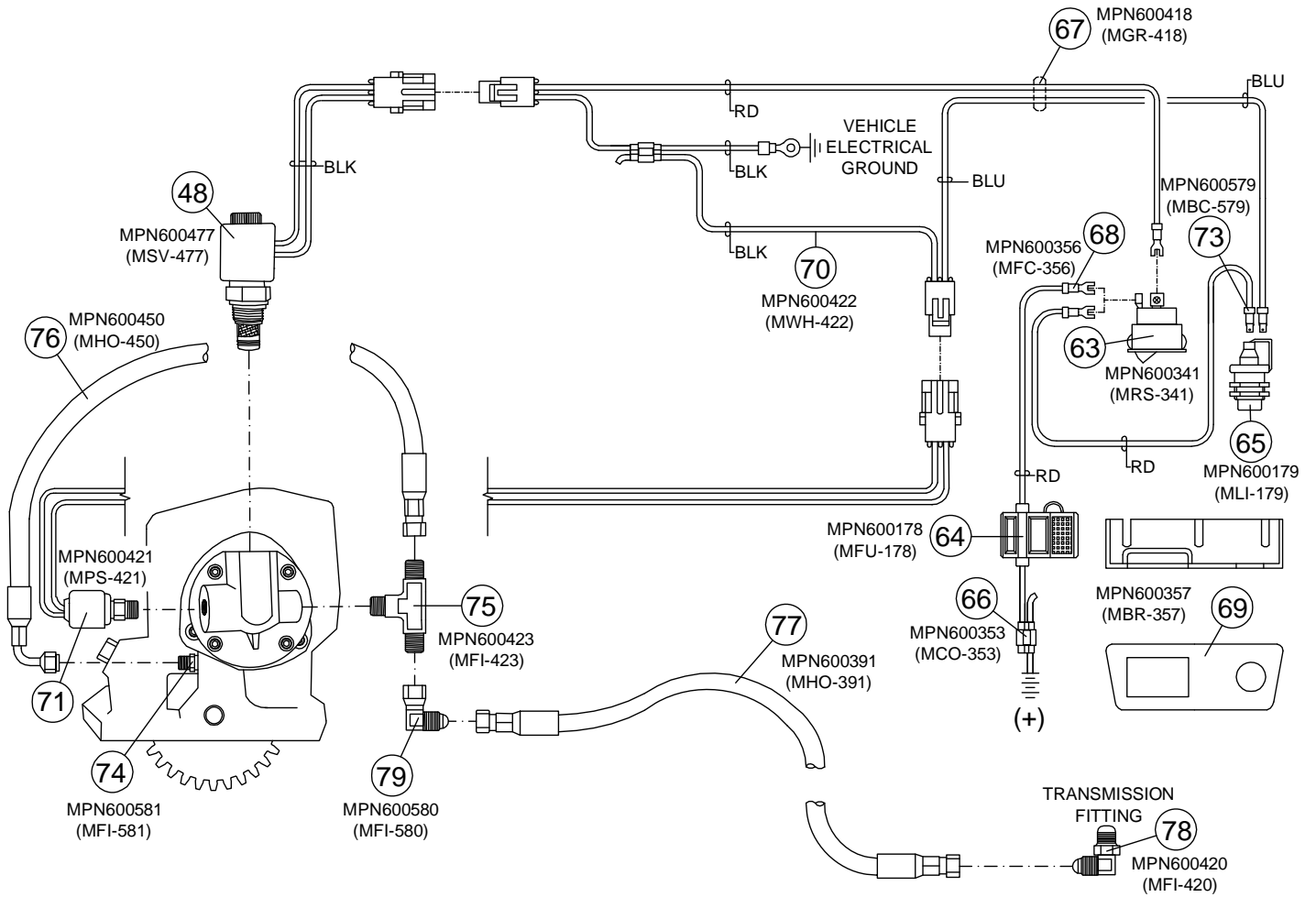
MHS10 SERIES



MHS10 SERIES INSTALLATION



MHS10 SERIES INSTALLATION



MHS10 SERIES

Item	Part Number	Alternate Number	Description	Quantity
				MHS10
1	MPN600335	MSR-335	SNAP RING	1
2	MPN600363	MRB-363	BALL BEARING	1
3	MPN600520	MSR-520	RETAINING SNAP RING	1
4	MPN600460	MSP-460	SPACER (DRIVESHAFT)	1
5	MPN600335	MSR-335	SNAP RING	1
6	MPN600337	MCL-337	CLUTCH BACKUP CYLINDER	1
7	MPN005345	MOR-345	CLUTCH CYL. O-RING	1
8	MPN600383	MOR-383	O-RING	1
9	MPN600347	MPI-347	PISTON	1
10	MPN600383	MOR-383	O-RING	1
11	MPN600359	MFD-359	FRICTION DISCS	8
12	MPN600361	MCP-361	CLUTCH PLATES	7
13	MPN600402	MSP-402	RETURN SPRING	1
14	MPN600384	MCG-384	CLUTCH GEAR	1
15	MPN600151	MWK-461	5/16" WOODRUFF KEY	1
16			OUTPUT SHAFT	1
	MPN600455	MOS-455	"SE" 1.250 RD.	
	MPN600456	MOS-460	"SA" 2/4 BOLT 7/8" 13 SPLINE FIXED	
	MPN600457	MOS-457	"RA" 2/4 BOLT 7/8" 13 SPLINE ROTATABLE	
	MPN600458	MOS-458	"SB" 2/4 BOLT 1" 15 SPLINE FIXED	
	MPN600458	MOS-458	"RB" 2/4 BOLT 1" 15 SPLINE ROTATABLE	
17	MPN600367	MSP-367	SPACER (DRIVESHAFT)	1
18	MPN600336	MSR-336	SNAP RING	1
19			OUTPUT GEAR	1
	MPN600447	MR-447	"B" RATIO (47 TEETH)	
	MPN600446	MR-446	"D" RATIO (44 TEETH)	
	MPN600445	MR-445	"G" RATIO (41 TEETH)	
	MPN600444	MR444	"M" RATIO (37 TEETH)	
	MPN600448	MR-448	"S" RATIO (33 TEETH)	
20	MPN600427	MBR-427	NEEDLE BEARING	1
21	MPN600449	MWA-449	THRUST WASHER	1
22	MPN600336	MSR-336	SNAP RING	1
23			INPUT GEAR SHIMS	A.R
	MPN600428	MSH-428	SPACER SHIMS (.112-.114)	A.R
	MPN600429	MSH-429	SPACER SHIMS (.115-.117)	A.R
	MPN600430	MSH-430	SPACER SHIMS (.118-.120)	A.R
	MPN600431	MSH-431	SPACER SHIMS (.121-.123)	A.R
	MPN600432	MSH-432	SPACER SHIMS (.124-.126)	A.R
24	MPN600426	MRB-426	IDLER SHAFT BEARING	1
25			INPUT GEAR	1
	MPN600463	MR-463	"B63" INPUT/RATIO (25 TEETH)	
	MPN600464	MR-464	"D63" INPUT/RATIO (28 TEETH)	
	MPN600465	MR-465	"G63" INPUT/RATIO (31 TEETH)	
	MPN600466	MR-466	"M63" INPUT/RATIO (35 TEETH)	
	MPN600462	MR-462	"S63" INPUT/RATIO (39 TEETH)	
26	MPN600426	MRB-426	IDLER SHAFT BEARING	1
27	MPN600467	MWA-467	THRUST WASHER	1

MHS10 SERIES

Item	Part Number	Alternate Number	Description	Quantity
				MHS10
28			MOUNTING GASKET	
	MPN600536	MGA-7410	(.010) MOUNTING GASKET	1
	MPN600537	MGA-7415	(.015) MOUNTING GASKET	1
	MPN600538	MGA-7420	(.020) MOUNTING GASKET	1
29	MPN600419	MGS-419	GUIDE SCREW	2
30	MPN600610	MPP-610	PIPE PLUG	1
31	MPN600433	MHS-433	STANDARD HOUSING	1
32	MPN600349	MFI-349	ALLEN PLUG	1
33	MPN600564	MSR-078	IDLER PIN SNAP RING	1
34	MPN600443	MOR-443	IDLER SHAFT O-RING	3
35	MPN600607	MFI-607	IDLER PIN PLUG	1
36	MPN600468	MIP-468	IDLER PIN	1
37	MPN600608	MSP-608	IDLER PIN SPACER	1
38	MPN600454	MCS-453-10	FERRY HEAD SCREW	8
39	MPN600381	MOR-381	O-RING	1
40	MPN600424	MPL-424	PLUG	1
41	MPN600427	MNB-427	NEEDLE BEARING	1
42	MPN600378	MGA-101	BEARING END COVER GASKET	1
43			BEARING CAP/ PUMP FLANGE	1
	MPN600434	MFL-434	BEARING CAP FOR "SE" CONFIG.	
	MPN600440	MFL-440	BEARING CAP FOR "SA & SB" CONFIG.	
	MPN600509	MFL-509	BEARING CAP FOR "RA & RB" CONFIG.	
	MPN600436	MBC-436		
44	MPN600453	MCS-453	OUTPUT FLANGE CAP SCREW (.312"-18 x 1.500")	4
45	MPN600382	MSE-382	OUTPUT SEAL	1
46	MPN600437	MRR-437	"XD" SEAL RETAINER	1
47	MPN600573	MCS-573	BUTTON HEAD SCREW FOR SEAL RETAINER	6
49	MPN600477	MSV-477	SOLENOID VALVE	1
50	MPN600478	MSH-478	SOLENOID ADAPTER	1
51	MPN600572	MAS-572	SOLENOID ADAPTER HOUSING SCREW	4
52	MPN600565	MOR-565	O-RING	1
53	MPN600600	MSE-600	SEAL	1
54	MPN600599	MSH-599	SHIM 20 X 28MM	1
55	MPN600598	MSR-598	SNAP RING	1
56	MPN600452	MAS-452	ALLEN HEAD SCREWS	3
57	MPN600547	MSS-547	SOLENOID ADAPTER SPACER	1
58	MPN600569	MGA-442	SOLENOID ADAPTER SPACER GASKET	1
59	MPN600379	MSE-379	OIL SEAL	1
60	MPN600338	MWA-338	WASHER	1
61	MPN600339	MSR-339	SNAP RING	1
			SMALL PARTS	
63	MPN600341	MRS-341	ROCKER SWITCH	1
64	MPN600178	MFU-178	FUSE/9 AMP	1
65	MPN600179	MLI-750	12 VOLT INDICATOR LIGHT	1
66	MPN600353	MCO-353	SPLICE CONNECTOR	2
67	MPN600418	MGR-418	GROMMET	1
68	MPN600356	MFC-356	FORK CONNECTORS	3

MHS10 SERIES

Item	Part	Alternate	Description	Quantity
	Number	Number		MHS10
69	MPN600357	MBR-357	BRACKET	1
70	MPN600422	MWH-422	WIRING HARNESS	1
71	MPN600421	MPS-421	PRESSURE SWITCH	1
72 N.S.	MPN600346	MWT-346	WIRE TIES	6
73	MPN600579	MBC-579	SPADE CONNECTOR	2
74	MPN600581	MFI-581	STRAIGHT FITTING	1
75	MPN600423	MFI-423	TEE FITTING	1
76	MPN600450	MHO-450	PRESSURE HOSE	1
77	MPN600391	MHO-391	TRANSMISSION PRESSURE HOSE	1
78	MPN600420	MFI-420	TRANSMISSION FITTING	1
79	MPN600580	MFI-580	90 DEGREE FITTING	1
	MPN600522	MH170-86X	COMPLETE STUD KIT	
			CONSIST OF:	
	MPN600419	MGS-419	GUIDE SCREW	2
	MPN600454	MCS-453-10	FERRY HEAD SCREW	8

**MCK-001X (RA - FLANGE)
(MPN600227)
“RA” Conversion for MH6 & MH8 Series**

QUANTITY	METARIS PART #	ALTERNATE PART #	DESCRIPTION
1	MPN600044	MFL-911	ROTATABLE FLANGE
1	MPN600134	MSR-013	FLANGE SEAL SNAP RING
1	MPN600121	MSE-007	OUTPUT SHAFT SEAL
1	MPN600048	MGA-4015EC	END COVER GASKET
1	MPN600045	MGA-091	FLANGE GASKET
1	MPN600107	MOS-791	7/8" 13 SPLINE OUTPUT SHAFT
1	MPN600133	MSR-005	OUTPUT SHAFT SNAP RING
4	MPN600146	MWA-009	END CAP WASHER
4	MPN600094	MNU-003	NYLOCK NUTS
4	MPN600136	MST-026	FLANGE STUDS
4	X45-19-13005	MWA-012	PUMP TO FLANGE WASHERS
4	MPN600036	MCS-025	PUMP TO FLANGE CAP SCREWS

**MCK-002X (SE - 1 1/4" RD. SHAFT)
(MPN600231)
"SE" Conversion for MH6 & MH8 Series**

QUANTITY	METARIS PART #	ALTERNATE PART #	DESCRIPTION
1	MPN600099	MOC-662	OPEN END COVER
1	MPN600121	MSE-007	OUTPUT SHAFT SEAL
1	MPN600048	MGA-4015EC	END COVER GASKET
1	MPN600134	MSR-013	OPEN END CAP SNAP RING
1	MPN600106	MOS-235	1 1/4" OUTPUT SHAFT
4	MPN600035	MCS-011	END COVER CAP SCREWS
4	MPN600146	MWA-009	END CAP WASHERS
1	MPN600151	MWK-516	5/16" Woodruff Key

**MCK-003X (RB - FLANGE)
(MPN600229)
“RB” Conversion for MH6 & MH8 Series**

QUANTITY	METARIS PART #	ALTERNATE PART #	DESCRIPTION
1	MPN600044	MFL-911	ROTATABLE FLANGE
1	MPN600134	MSR-013	FLANGE SEAL SNAP RING
1	MPN600121	MSE-007	OUTPUT SHAFT SEAL
1	MPN600048	MGA-4015EC	END COVER GASKET
1	MPN600045	MGA-091	FLANGE GASKET
1	MPN600108	MOS-861	1" 15 SPLINE OUTPUT SHAFT
1	MPN600133	MSR-005	OUTPUT SHAFT SNAP RING
4	MPN600146	MWA-009	END CAP WASHER
4	MPN600094	MNU-003	NYLOCK NUTS
4	MPN600136	MST-026	FLANGE STUDS
4	X45-19-13005	MWA-012	PUMP TO FLANGE WASHERS
4	MPN600036	MCS-025	PUMP TO FLANGE CAP SCREWS

**MCK-004X (“TP” TYRONE - FLANGE)
(MPN600230)
“TP” Conversion for MH6 & MH8 Series**

QUANTITY	METARIS PART #	ALTERNATE PART #	DESCRIPTION
1	MPN600160	MOS-091	7/8" 13 SPLINE "TP" OUTPUT SHAFT
1	MPN600133	MSR-005	OUTPUT SHAFT SNAP RING
4	MPN600146	MWA-009	END CAP ALUMINUM WASHER
4	MPN600020	MAS-030	ALLEN HEAD SCREW M12x30
1	MPN600043	MFL-491	TYRONE FLANGE HOUSING
1	MPN600046	MGA-130	FLANGE TO PUMP GASKET
1	MPN600048	MGA-4015EC	END COVER GASKET
1	MPN600122	MSE-016	"TP" FLANGE OUTPUT SEAL
4	MPN600152	MAS-042	CAP SCREWS 5/16 UNC X 30
4	MPN600145	MWA-005	PUMP TO FLANGE WASHER 9.9

**MCK-005X (CONSTANT MESH KIT)
(MPN600032)
Constant Mesh Conversion for MH6 & MH8 Series**

QUANTITY	METARIS PART #	ALTERNATE PART #	DESCRIPTION
1	MPN600153	MCM-399	CONSTANT MESH COVER
1	MPN600001	MBU-211	CONSTANT MESH BUSHING LARGE
1	MPN600000	MBU-221	CONSTANT MESH BUSHING SMALL
1	MPN600049	MGA-4015SC	SHIFTER COVER GASKET
4	MPN600019	MAS-009	ALLEN SCREW SHIFTER COVER

**MCK-006X (SF CONVERSION KIT)
(MPN600224)
“SF” Conversion for MH6 & MH8 Series**

QUANTITY	METARIS PART #	ALTERNATE PART #	DESCRIPTION
4	MPN600020	MAS-030	ALLEN HEAD SCREW M12x30
1	MPN600133	MSR-005	OUTPUT SHAFT SNAP RING
4	MPN600146	MWA-009	END CAP ALUMINUM WASHER
1	MPN600042	MFL-451	"SF" FLANGE HOUSING
1	MPN600048	MGA-4015EC	END COVER GASKET
1	MPN600105	MOS-071	5/8" 9 SPLINE OUTPUT SHAFT
2	MPN600141	MWA-001	FLANGE WASHER
2	MPN600037	MCS-035	PUMP TO FLANGE CAP SCREW
1	MPN600121	MSE-007	OUTPUT SHAFT SEAL
1	MPN600047	MGA-291	FLANGE GASKET

**MCK-007X (7/8 - 13 Spline)
(Greaseable Shaft Conversion Kit)
(MPN600544)**

“Greaseable Shaft” Conversion for MH6 & MH8 Series

QUANTITY	METARIS PART #	ALTERNATE PART #	DESCRIPTION
1	MPN100078	MECG-931	GREASABLE END COVER
1	MPN600504	MSE-004	GREASABLE END COVER SEAL
1	MPN600048	MGA-4015EC	END COVER GASKET
1	MPN100196	MOSG-171	7/8" 13 SPLINE GREASABLE SHAFT W / GREASE FITTING
4	MPN600035	MCS-011	END COVER CAP SCREWS
4	MPN600146	MWA-009	END CAP WASHERS

**MCK-008X (1" - 15 Spline)
(Greaseable Shaft Conversion Kit)
(MPN600545)**

“Greaseable Shaft” Conversion for MH6 & MH8 Series

QUANTITY	METARIS PART #	ALTERNATE PART #	DESCRIPTION
1	MPN100078	MECG-931	GREASABLE END COVER
1	MPN600504	MSE-004	GREASABLE END COVER SEAL
1	MPN600048	MGA-4015EC	END COVER GASKET
1	MPN100219	MOSG-241	1" 15 SPLINE GREASABLE SHAFT W / GREASE FITTING
4	MPN600035	MCS-011	END COVER CAP SCREWS
4	MPN600146	MWA-009	END CAP WASHERS

**MCK-009X (DA - FLANGE)
(MPN600648)
“DA” Conversion for MH6 & MH8 Series**

QUANTITY	METARIS PART #	ALTERNATE PART #	DESCRIPTION
1	MPN600578	MOS-578	OUTPUT SHAFT SEAL
1	MPN600279	MRB-279	OUTPUT BEARING
2	MPN600048	MGA4015EC	END COVER GASKET
1	MPN600623	MFL-623	ISO 4 BOLT FLANGE
1	MPN600602	MSE-602	OUTPUT SHAFT SEAL
1	MPN600626	MSR-626	FLANGE SEAL SNAP RING
4	MPN600624	MST-624	FLANGE STUD
4	MPN600148	MWA-009	WASHER
4	MPN600094	MNU-003	MOUNTING NUT

**MCK-009X (DA - FLANGE)
(MPN600649)
“RC” Conversion for MH6 & MH8 Series**

QUANTITY	METARIS PART #	ALTERNATE PART #	DESCRIPTION
1	MPN600531	MOS-531	OUTPUT SHAFT
1	MPN600279	MRB-279	OUTPUT SHAFT BEARING
1	MPN600048	MGA4015EC	END CAP COVER GASKET
1	MPN600044	MFL-911	OUTPUT FLANGE
1	MPN600587	MSE-587	OUTPUT SHAFT SEAL
1	MPN600134	MSR-013	FLANGE SEAL SNAP RING
1	MPN600045	MGA-091	PUMP TO FLANGE GASKET
4	MPN600637	MWA-012	PUMP TO FLANGE WASHER
4	MPN600036	MCS-025	PUMP TO FLANGE CAP SCREW

**MSK-001X (SEAL KIT) (MPN600264)
MH6 - MODEL
FOR "RA" & "RB" OUTPUT**

QUANTITY	METARIS PART #	ALTERNATE PART #	DESCRIPTION
1	MPN600213	MSR-099	IDLER PIN SNAP RING
1	MPN600121	MSE-007	OUTPUT SHAFT SEAL
2	MPN600100	MOR-022	IDLER PIN O-RING
2*	MPN600609	MOR-609	IDLER PIN PLUG O-RING
2	MPN600048	MGA-4015EC	END COVER GASKET
1	MPN600049	MGA-4015SC	SHIFTER COVER GASKET
1	MPN600045	MGA-091	FLANGE GASKET
1	MPN600002	MGA-6010	.010" MOUNTING GASKET
1	MPN600003	MGA-6015	.015" MOUNTING GASKET
1	MPN600004	MGA-6032	.032" MOUNTING GASKET

This o-ring is for new style idler pin.

**MSK-002X (SEAL KIT) (MPN600265)
MH6 - MODEL
FOR "SE" OUTPUT**

QUANTITY	METARIS PART #	ALTERNATE PART #	DESCRIPTION
1	MPN600213	MSR-099	IDLER PIN SNAP RING
1	MPN600121	MSE-007	OUTPUT SHAFT SEAL
2	MPN600100	MOR-022	IDLER PIN O-RING
2*	MPN600609	MOR-609	IDLER PIN PLUG O-RING
2	MPN600048	MGA-4015EC	END COVER GASKET
1	MPN600049	MGA-4015SC	SHIFTER COVER GASKET
1	MPN600151	MWK-516	5/16" KEY
1	MPN600002	MGA-6010	.010" MOUNTING GASKET
1	MPN600003	MGA-6015	.015" MOUNTING GASKET
1	MPN600004	MGA-6032	.032" MOUNTING GASKET

* This o-ring is for new style idler pin.

**MSK-003X (SEAL KIT) (MPN600267)
MH6 - MODEL
FOR "TP" OUTPUT**

QUANTITY	METARIS PART #	ALTERNATE PART #	DESCRIPTION
1	MPN600213	MSR-099	IDLER PIN SNAP RING
1	MPN600122	MSE-016	OUTPUT SHAFT SEAL
2	MPN600100	MOR-022	IDLER PIN O-RING
2*	MPN600609	MOR-609	IDLER PIN PLUG O-RING
2	MPN600048	MGA-4015EC	END COVER GASKET
1	MPN600049	MGA-4015SC	SHIFTER COVER GASKET
1	MPN600046	MGA-130	FLANGE TO PUMP GASKET
1	MPN600002	MGA-6010	.010" MOUNTING GASKET
1	MPN600003	MGA-6015	.015" MOUNTING GASKET
1	MPN600004	MGA-6032	.032" MOUNTING GASKET

This o-ring is for new style idler pin.

**MSK-004X (SEAL KIT) (MPN600266)
MH6 - MODEL
FOR "SF" OUTPUT**

QUANTITY	METARIS PART #	ALTERNATE PART #	DESCRIPTION
1	MPN600213	MSR-099	IDLER PIN SNAP RING
1	MPN600121	MSE-007	OUTPUT SHAFT SEAL
2	MPN600100	MOR-022	IDLER PIN O-RING
2*	MPN600609	MOR-609	IDLER PIN PLUG O-RING
2	MPN600048	MGA-4015EC	END COVER GASKET
1	MPN600049	MGA-4015SC	SHIFTER COVER GASKET
1	MPN600047	MGA-291	FLANGE TO PUMP GASKET
1	MPN600002	MGA-6010	.010" MOUNTING GASKET
1	MPN600003	MGA-6015	.015" MOUNTING GASKET
1	MPN600004	MGA-6032	.032" MOUNTING GASKET

* This o-ring is for new style idler pin.

**MSK-005X (SEAL KIT) (MPN600268)
MH8 - MODEL
FOR “RA” & “RB” OUTPUT**

QUANTITY	METARIS PART #	ALTERNATE PART #	DESCRIPTION
1	MPN600213	MSR-099	IDLER PIN SNAP RING
1	MPN600121	MSE-007	OUTPUT SHAFT SEAL
2	MPN600100	MOR-022	IDLER PIN O-RING
2*	MPN600609	MOR-609	IDLER PIN PLUG O-RING
2	MPN600048	MGA-4015EC	END COVER GASKET
1	MPN600049	MGA-4015SC	SHIFTER COVER GASKET
1	MPN600045	MGA-091	FLANGE GASKET
1	MPN600050	MGA-8010	.010" MOUNTING GASKET
1	MPN600051	MGA-8015	.015" MOUNTING GASKET
1	MPN600052	MGA-8032	.032" MOUNTING GASKET

* This o-ring is for new style idler pin.

**MSK-006X (SEAL KIT) (MPN600269)
MH8 - MODEL
FOR "SE" OUTPUT**

QUANTITY	METARIS PART #	ALTERNATE PART #	DESCRIPTION
1	MPN600213	MSR-099	IDLER PIN SNAP RING
1	MPN600121	MSE-007	OUTPUT SHAFT SEAL
2	MPN600100	MOR-022	IDLER PIN O-RING
2*	MPN600609	MOR-609	IDLER PIN PLUG O-RING
2	MPN600048	MGA-4015EC	END COVER GASKET
1	MPN600049	MGA-4015SC	SHIFTER COVER GASKET
1	MPN600151	MWK-516	5/16" KEY
1	MPN600050	MGA-8010	.010" MOUNTING GASKET
1	MPN600051	MGA-8015	.015" MOUNTING GASKET
1	MPN600052	MGA-8032	.032" MOUNTING GASKET

* This o-ring is for new style idler pin.

**MSK-007X (SEAL KIT) (MPN600270)
MH8 - MODEL
FOR "SF" OUTPUT**

QUANTITY	METARIS PART #	ALTERNATE PART #	DESCRIPTION
1	MPN600213	MSR-099	IDLER PIN SNAP RING
1	MPN600121	MSE-007	OUTPUT SHAFT SEAL
2	MPN600100	MOR-022	IDLER PIN O-RING
2*	MPN600609	MOR-609	IDLER PIN PLUG O-RING
2	MPN600048	MGA-4015EC	END COVER GASKET
1	MPN600049	MGA-4015SC	SHIFTER COVER GASKET
1	MPN600047	MGA-291	FLANGE TO PUMP GASKET
1	MPN600050	MGA-8010	.010" MOUNTING GASKET
1	MPN600051	MGA-8015	.015" MOUNTING GASKET
1	MPN600052	MGA-8032	.032" MOUNTING GASKET

*This o-ring is for new style idler pin.

**MSK-008X (SEAL KIT) (MPN600271)
MH8 - MODEL
FOR "TP" OUTPUT**

QUANTITY	METARIS PART #	ALTERNATE PART #	DESCRIPTION
1	MPN600213	MSR-099	IDLER PIN SNAP RING
1	MPN600122	MSE-016	OUTPUT SHAFT SEAL
2	MPN600100	MOR-022	IDLER PIN O-RING
2	MPN600048	MGA-4015EC	END COVER GASKET
1	MPN600049	MGA-4015SC	SHIFTER COVER GASKET
1	MPN600046	MGA-130	FLANGE TO PUMP GASKET
1	MPN600050	MGA-8010	.010" MOUNTING GASKET
1	MPN600051	MGA-8015	.015" MOUNTING GASKET
1	MPN600052	MGA-8032	.032" MOUNTING GASKET

**MSK-009X (SEAL KIT) (MPN600526)
MHD8 - MODEL
FOR "RJ" OUTPUT**

QUANTITY	METARIS PART #	ALTERNATE PART #	DESCRIPTION
1	MPN600213	MSR-099	IDLER PIN SNAP RING
1	MPN600273	MOR-004	O-RING (VITON)
2	MPN600100	MOR-022	IDLER PIN O-RING
2	MPN600048	MGA-4015EC	END COVER GASKET
2	MPN600274	MOR-005	O-RING (VITON)
1	MPN600101	MOR-029	O-RING (VITON)
1	MPN600181	MOR-090	O-RING
1	MPN600323	MGA-129	FLANGE GASKET
1	MPN600291	MSE-013	OUTPUT SHAFT SEAL
1	MPN600050	MGA-8010	.010" MOUNTING GASKET
1	MPN600051	MGA-8015	.015" MOUNTING GASKET
1	MPN600052	MGA-8032	.032" MOUNTING GASKET

**MSK-010X (SEAL KIT) (MPN600527)
MHD8 - MODEL
FOR "SE" OUTPUT**

QUANTITY	METARIS PART #	ALTERNATE PART #	DESCRIPTION
1	MPN600213	MSR-099	IDLER PIN SNAP RING
1	MPN600273	MOR-004	O-RING (VITON)
2	MPN600100	MOR-022	IDLER PIN O-RING
2	MPN600048	MGA-4015EC	END COVER GASKET
2	MPN600274	MOR-005	O-RING (VITON)
1	MPN600101	MOR-029	O-RING (VITON)
1	MPN600181	MOR-090	O-RING
1	MPN600151	MWK-002	1 1/8" x 5/16" KEY
1	MPN600291	MSE-013	OUTPUT SHAFT SEAL
1	MPN600050	MGA-8010	.010" MOUNTING GASKET
1	MPN600051	MGA-8015	.015" MOUNTING GASKET
1	MPN600052	MGA-8032	.032" MOUNTING GASKET

**MSK-012X (SEAL KIT) (MPN600650)
MHS10 - MODEL**

QUAN.	METARIS PART #	ALTERNATE PART #	DESCRIPTION
2	MPN600383	MOR-383	O-RING
1	X81-22-09804	MOR-345	CLUTCH CYL. O-RING
1	MPN600536	MGA-7410	(.010) MOUNTING GASKET
1	MPN600537	MGA-7415	(.015) MOUNTING GASKET
1	MPN600538	MGA-7420	(.020) MOUNTING GASKET
3	MPN600443	MOR-443	IDLER SHAFT O-RING
1	MPN600378	MGA-101	BEARING COVER GASKET
1	MPN600382	MSE-382	OUTPUT SHAFT SEAL
1	MPN600565	MOR565	O-RING
1	MPN600569	MGA-442	GASKET
1	MPN600600	MSE-600	SEAL
1	MPN600379	MSE-379	OIL SEAL
1	MPN600381	MOR-381	O-RING (EOC) PORT PLUG

**MOK-001X (OVERHAUL KIT)(MPN600642)
MH6 - MODEL (AIR SHIFT ONLY)
FOR "RA" & "RB" OUTPUT**

QUANTITY	METARIS PART #	ALTERNATE PART #	DESCRIPTION
1	MPN600213	MSR-099	IDLER PIN SNAP RING
1	MPN600121	MSE-007	OUTPUT SHAFT SEAL
2	MPN600100	MOR-022	IDLER PIN O-RING
2*	MPN600609	MOR-609	IDLER PIN PLUG O-RING
1	MPN600024	MBU-009	CUP-SEAL/SHIFTER
1	MPN600102	MOR-045	O-RING/SHIFTER
1	MPN600101	MOR-029	O-RING/SHIFTER
1	MPN600112	MPN-841/851	PRELOAD NUT
2	MPN600117	MRB-035	INPUT GEAR BEARING
1	MPN600114	MRB-003	NON-THRUST BEARING
1	MPN600115	MRB-004	OUTPUT THRUST BEARING
2	MPN600048	MGA-4015EC	END COVER GASKET
1	MPN600049	MGA-4015SC	SHIFTER COVER GASKET
1	MPN600045	MGA-091	FLANGE GASKET
1	MPN600002	MGA-6010	.010" MOUNTING GASKET
1	MPN600003	MGA-6015	.015" MOUNTING GASKET
1	MPN600004	MGA-6032	.032" MOUNTING GASKET

This o-ring is for new style idler pin.

**MOK-002X (OVERHAUL KIT)(MPN600643)
MH6 - MODEL (AIR SHIFT ONLY)
FOR "SE" OUTPUT**

QUANTITY	METARIS PART #	ALTERNATE PART #	DESCRIPTION
1	MPN600213	MSR-099	IDLER PIN SNAP RING
1	MPN600121	MSE-007	OUTPUT SHAFT SEAL
2	MPN600100	MOR-022	IDLER PIN O-RING
2*	MPN600609	MOR-609	IDLER PIN PLUG O-RING
1	MPN600024	MBU-009	CUP-SEAL/SHIFTER
1	MPN600102	MOR-045	O-RING/SHIFTER
1	MPN600101	MOR-029	O-RING/SHIFTER
1	MPN600112	MPN-841/851	PRELOAD NUT
2	MPN600117	MRB-035	INPUT GEAR BEARING
1	MPN600114	MRB-003	NON-THRUST BEARING
1	MPN600115	MRB-004	OUTPUT THRUST BEARING
2	MPN600048	MGA-4015EC	END COVER GASKET
1	MPN600049	MGA-4015SC	SHIFTER COVER GASKET
1	MPN600151	MWK-516	5/16" KEY
1	MPN600002	MGA-6010	.010" MOUNTING GASKET
1	MPN600003	MGA-6015	.015" MOUNTING GASKET
1	MPN600004	MGA-6032	.032" MOUNTING GASKET

* This o-ring is for new style idler pin.

**MOK-003X (OVERHAUL KIT)(MPN600640)
MH6 - MODEL (AIR SHIFT ONLY)
FOR "TP" OUTPUT**

QUANTITY	METARIS PART #	ALTERNATE PART #	DESCRIPTION
1	MPN600213	MSR-099	IDLER PIN SNAP RING
1	MPN600122	MSE-016	OUTPUT SHAFT SEAL
2	MPN600100	MOR-022	IDLER PIN O-RING
2*	MPN600609	MOR-609	IDLER PIN PLUG O-RING
1	MPN600024	MBU-009	CUP-SEAL/SHIFTER
1	MPN600102	MOR-045	O-RING/SHIFTER
1	MPN600101	MOR-029	O-RING/SHIFTER
1	MPN600112	MPN-841/851	PRELOAD NUT
2	MPN600117	MRB-035	INPUT GEAR BEARING
1	MPN600114	MRB-003	NON-THRUST BEARING
1	MPN600115	MRB-004	OUTPUT THRUST BEARING
2	MPN600048	MGA-4015EC	END COVER GASKET
1	MPN600049	MGA-4015SC	SHIFTER COVER GASKET
1	MPN600046	MGA-130	FLANGE TO PUMP GASKET
1	MPN600002	MGA-6010	.010" MOUNTING GASKET
1	MPN600003	MGA-6015	.015" MOUNTING GASKET
1	MPN600004	MGA-6032	.032" MOUNTING GASKET

This o-ring is for new style idler pin.

**MOK-004X (OVERHAUL KIT)(MPN600639)
MH6 - MODEL (AIR SHIFT ONLY)
FOR "SF" OUTPUT**

QUANTITY	METARIS PART #	ALTERNATE PART #	DESCRIPTION
1	MPN600213	MSR-099	IDLER PIN SNAP RING
1	MPN600121	MSE-007	OUTPUT SHAFT SEAL
2	MPN600100	MOR-022	IDLER PIN O-RING
2*	MPN600609	MOR-609	IDLER PIN PLUG O-RING
1	MPN600024	MBU-009	CUP-SEAL/SHIFTER
1	MPN600102	MOR-045	O-RING/SHIFTER
1	MPN600101	MOR-029	O-RING/SHIFTER
1	MPN600112	MPN-841/851	PRELOAD NUT
2	MPN600117	MRB-035	INPUT GEAR BEARING
1	MPN600114	MRB-003	NON-THRUST BEARING
1	MPN600115	MRB-004	OUTPUT THRUST BEARING
2	MPN600048	MGA-4015EC	END COVER GASKET
1	MPN600049	MGA-4015SC	SHIFTER COVER GASKET
1	MPN600047	MGA-291	FLANGE TO PUMP GASKET
1	MPN600002	MGA-6010	.010" MOUNTING GASKET
1	MPN600003	MGA-6015	.015" MOUNTING GASKET
1	MPN600004	MGA-6032	.032" MOUNTING GASKET

* This o-ring is for new style idler pin.

**MOK-005X (OVERHAUL KIT)(MPN600644)
MH8 - MODEL (AIR SHIFT ONLY)
FOR “RA” & “RB” OUTPUT**

QUANTITY	METARIS PART #	ALTERNATE PART #	DESCRIPTION
1	MPN600213	MSR-099	IDLER PIN SNAP RING
1	MPN600121	MSE-007	OUTPUT SHAFT SEAL
2	MPN600100	MOR-022	IDLER PIN O-RING
2*	MPN600609	MOR-609	IDLER PIN PLUG O-RING
1	MPN600024	MBU-009	CUP-SEAL/SHIFTER
1	MPN600102	MOR-045	O-RING/SHIFTER
1	MPN600101	MOR-029	O-RING/SHIFTER
1	MPN600112	MPN-841/851	PRELOAD NUT
2	MPN600117	MRB-035	INPUT GEAR BEARING
1	MPN600114	MRB-003	NON-THRUST BEARING
1	MPN600115	MRB-004	OUTPUT THRUST BEARING
2	MPN600048	MGA-4015EC	END COVER GASKET
1	MPN600049	MGA-4015SC	SHIFTER COVER GASKET
1	MPN600045	MGA-091	FLANGE TO PUMP GASKET
1	MPN600050	MGA-8010	.010" MOUNTING GASKET
1	MPN600051	MGA-8015	.015" MOUNTING GASKET
1	MPN600052	MGA-8032	.032" MOUNTING GASKET

* This o-ring is for new style idler pin.

**MOK-006X (OVERHAUL KIT)(MPN600641)
MH8 - MODEL (AIR SHIFT ONLY)
FOR "SE" OUTPUT**

QUANTITY	METARIS PART #	ALTERNATE PART #	DESCRIPTION
1	MPN600213	MSR-099	IDLER PIN SNAP RING
1	MPN600121	MSE-007	OUTPUT SHAFT SEAL
2	MPN600100	MOR-022	IDLER PIN O-RING
2*	MPN600609	MOR-609	IDLER PIN PLUG O-RING
1	MPN600024	MBU-009	CUP-SEAL/SHIFTER
1	MPN600102	MOR-045	O-RING/SHIFTER
1	MPN600101	MOR-029	O-RING/SHIFTER
1	MPN600112	MPN-841/851	PRELOAD NUT
2	MPN600117	MRB-035	INPUT GEAR BEARING
1	MPN600114	MRB-003	NON-THRUST BEARING
1	MPN600115	MRB-004	OUTPUT THRUST BEARING
2	MPN600048	MGA-4015EC	END COVER GASKET
1	MPN600049	MGA-4015SC	SHIFTER COVER GASKET
1	MPN600151	MWK-516	5/16" KEY
1	MPN600050	MGA-8010	.010" MOUNTING GASKET
1	MPN600051	MGA-8015	.015" MOUNTING GASKET
1	MPN600052	MGA-8032	.032" MOUNTING GASKET

* This o-ring is for new style idler pin.

**MOK-007X (OVERHAUL KIT)(MPN600645)
MH8 - MODEL (AIR SHIFT ONLY)
FOR "SF" OUTPUT**

QUANTITY	METARIS PART #	ALTERNATE PART #	DESCRIPTION
1	MPN600213	MSR-099	IDLER PIN SNAP RING
1	MPN600121	MSE-007	OUTPUT SHAFT SEAL
2	MPN600100	MOR-022	IDLER PIN O-RING
2*	MPN600609	MOR-609	IDLER PIN PLUG O-RING
1	MPN600024	MBU-009	CUP-SEAL/SHIFTER
1	MPN600102	MOR-045	O-RING/SHIFTER
1	MPN600101	MOR-029	O-RING/SHIFTER
1	MPN600112	MPN-841/851	PRELOAD NUT
2	MPN600117	MRB-035	INPUT GEAR BEARING
1	MPN600114	MRB-003	NON-THRUST BEARING
1	MPN600115	MRB-004	OUTPUT THRUST BEARING
2	MPN600048	MGA-4015EC	END COVER GASKET
1	MPN600049	MGA-4015SC	SHIFTER COVER GASKET
1	MPN600047	MGA-291	FLANGE TO PUMP GASKET
1	MPN600050	MGA-8010	.010" MOUNTING GASKET
1	MPN600051	MGA-8015	.015" MOUNTING GASKET
1	MPN600052	MGA-8032	.032" MOUNTING GASKET

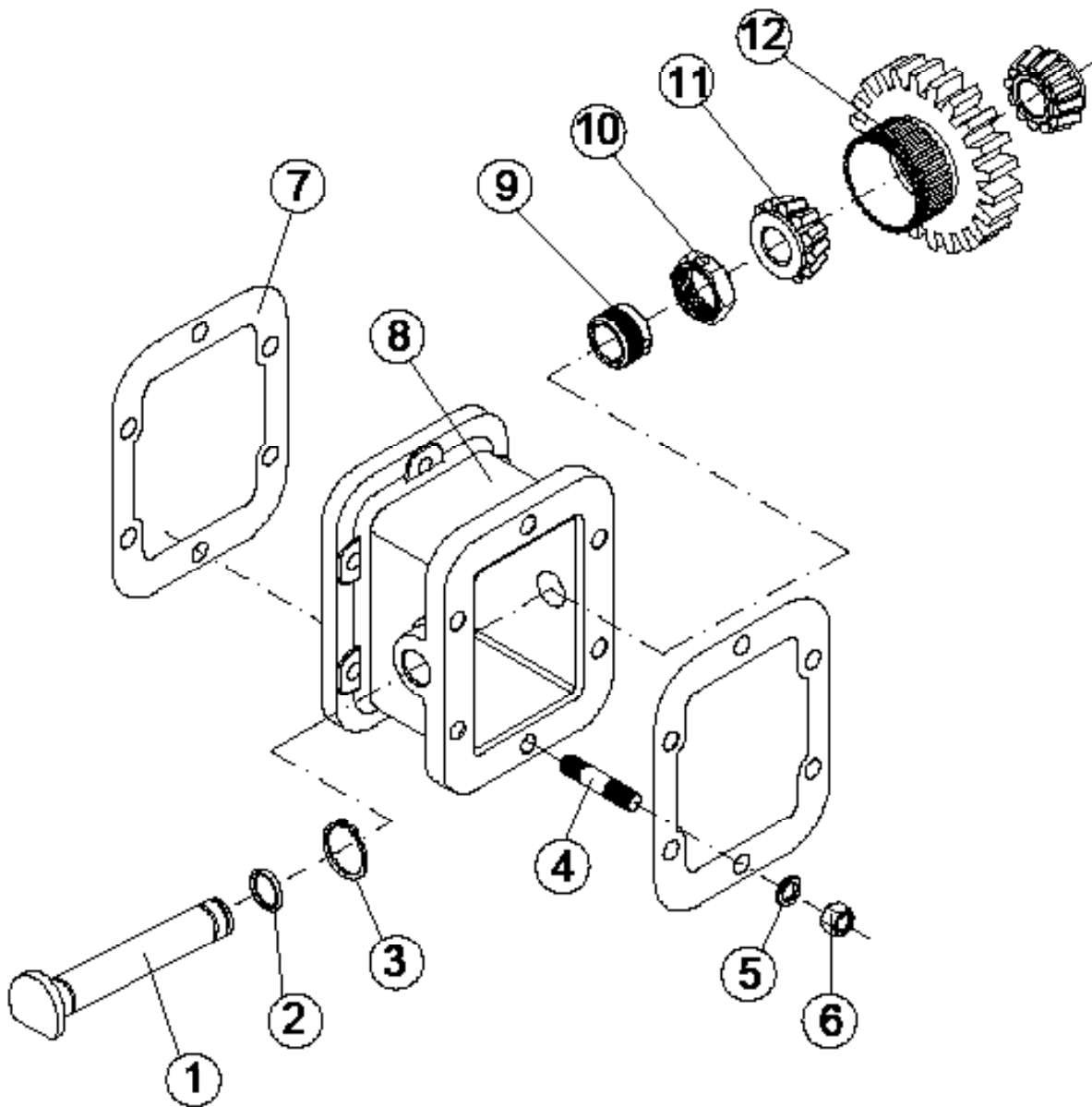
* This o-ring is for new style idler pin.

**MOK-008X (OVERHAUL KIT)(MPN600638)
MH8 - MODEL (AIR SHIFT ONLY)
FOR "TP" OUTPUT**

QUAN.	METARIS PART #	ALTERNATE PART #	DESCRIPTION
1	MPN600213	MSR-099	IDLER PIN SNAP RING
1	MPN600122	MSE-016	OUTPUT SHAFT SEAL
2	MPN600100	MOR-022	IDLER PIN O-RING
2*	MPN600609	MOR-609	IDLER PIN PLUG O-RING
1	MPN600024	MBU-009	CUP-SEAL/SHIFTER
1	MPN600102	MOR-045	O-RING/SHIFTER
1	MPN600101	MOR-029	O-RING/SHIFTER
1	MPN600112	MPN-841/851	PRELOAD NUT
2	MPN600117	MRB-035	INPUT GEAR BEARING
1	MPN600114	MRB-003	NON-THRUST BEARING
1	MPN600115	MRB-004	OUTPUT THRUST BEARING
2	MPN600048	MGA-4015EC	END COVER GASKET
1	MPN600049	MGA-4015SC	SHIFTER COVER GASKET
1	MPN600046	MGA-130	FLANGE TO PUMP GASKET
1	MPN600050	MGA-8010	.010" MOUNTING GASKET
1	MPN600051	MGA-8015	.015" MOUNTING GASKET
1	MPN600051	MGA-8032	.032" MOUNTING GASKET

* This o-ring is for new style idler pin.

MAD 626 & 726 SERIES GEARED ADAPTER

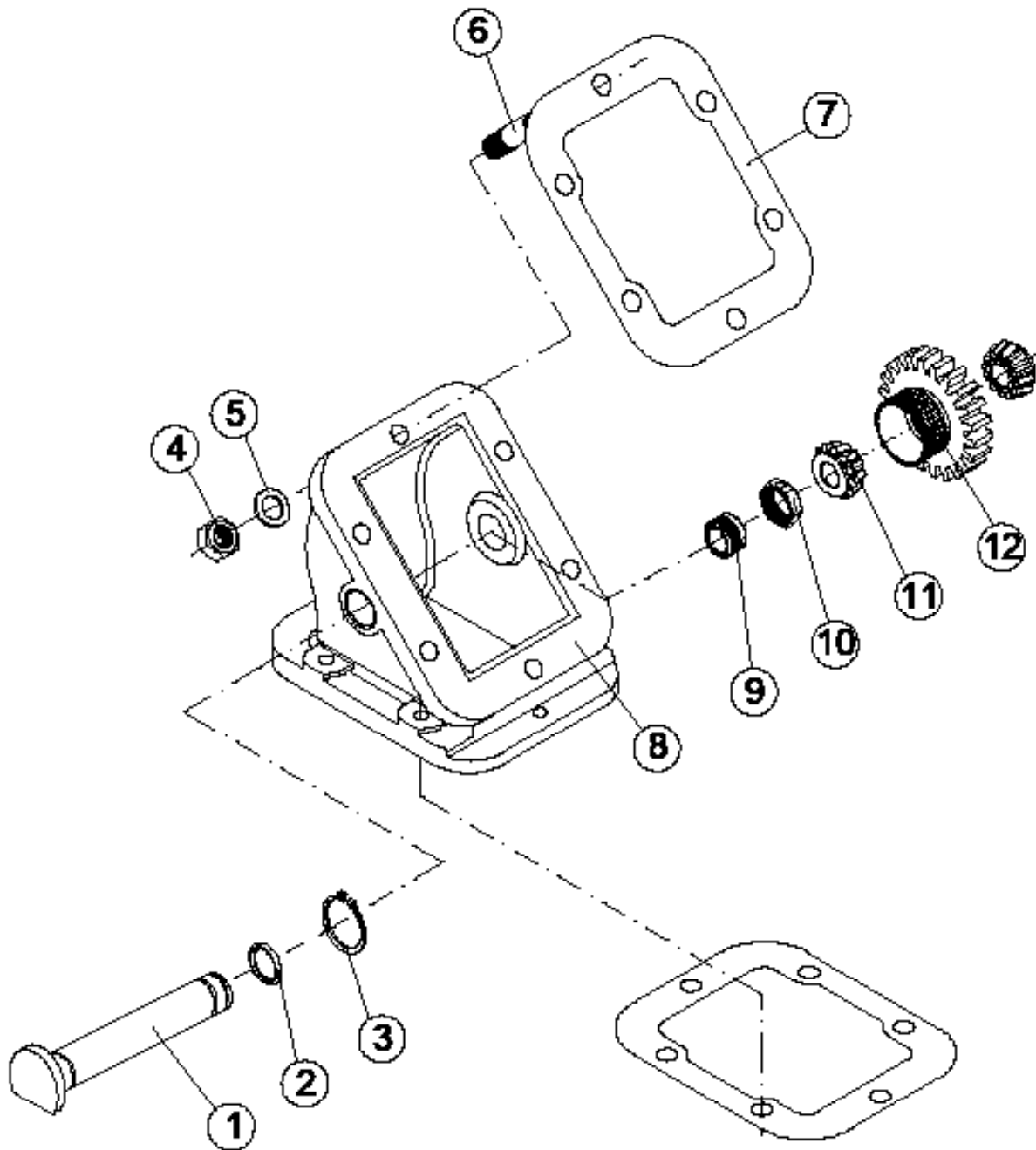


**MAD626 & MAD726 (180° 6 BOLT ADAPTER GEAR)
MAD626 (STD) MAD726 (DEEP MOUNT)**

Item	Part Number	Alternate Number	Description	Quantity	
				MAD626	MAD726
1	MPN600091	MIP-531	IDLER PIN	1	1
2	MPN600100	MOR-022	IDLER PIN O-RINGS	2	2
3	MPN600213	MSR-099	IDLER PIN SNAP RING	1	1
4	MPN600170	MST-094	MOUNTING STUD	6	
	MPN600193	MST-423-12	DEEP MOUNT STUD		6
5	MPN600162	MWA-020	MOUNTING WASHER	6	6
6	MPN600218	MNU-075	MOUNTING NUT	6	6
7	MPN600002	MGA-6010	6 BOLT MOUNTING GASKET	1	1
	MPN600003	MGA-6015	6 BOLT MOUNTING GASKET	1	1
	MPN600004	MGA-6032	6 BOLT MOUNTING GASKET	1	1
8	MPN600159	MHS-641	180° STD. ADAPTER HOUSING	1	
	N/A	MHS-642	180° DEEP MOUNT ADAPTER HOUSING		1
9	MPN600112	MPN841	ADJUSTING BUSHING	1	1
10	MPN600113	MPN851	ADJUSTING NUT	1	1
11	MPN600117	MRB-023	INPUT GEAR BEARINGS	2	2
12	MPN600061	MR-675	"01" ADAPTER INPUT GEAR	1	1
13	M6140	(*) M6140	6 BOLT .140 THICK SPACER	1	1

* NOT SHOWN

MAD 645 & 745 SERIES GEARED ADAPTER

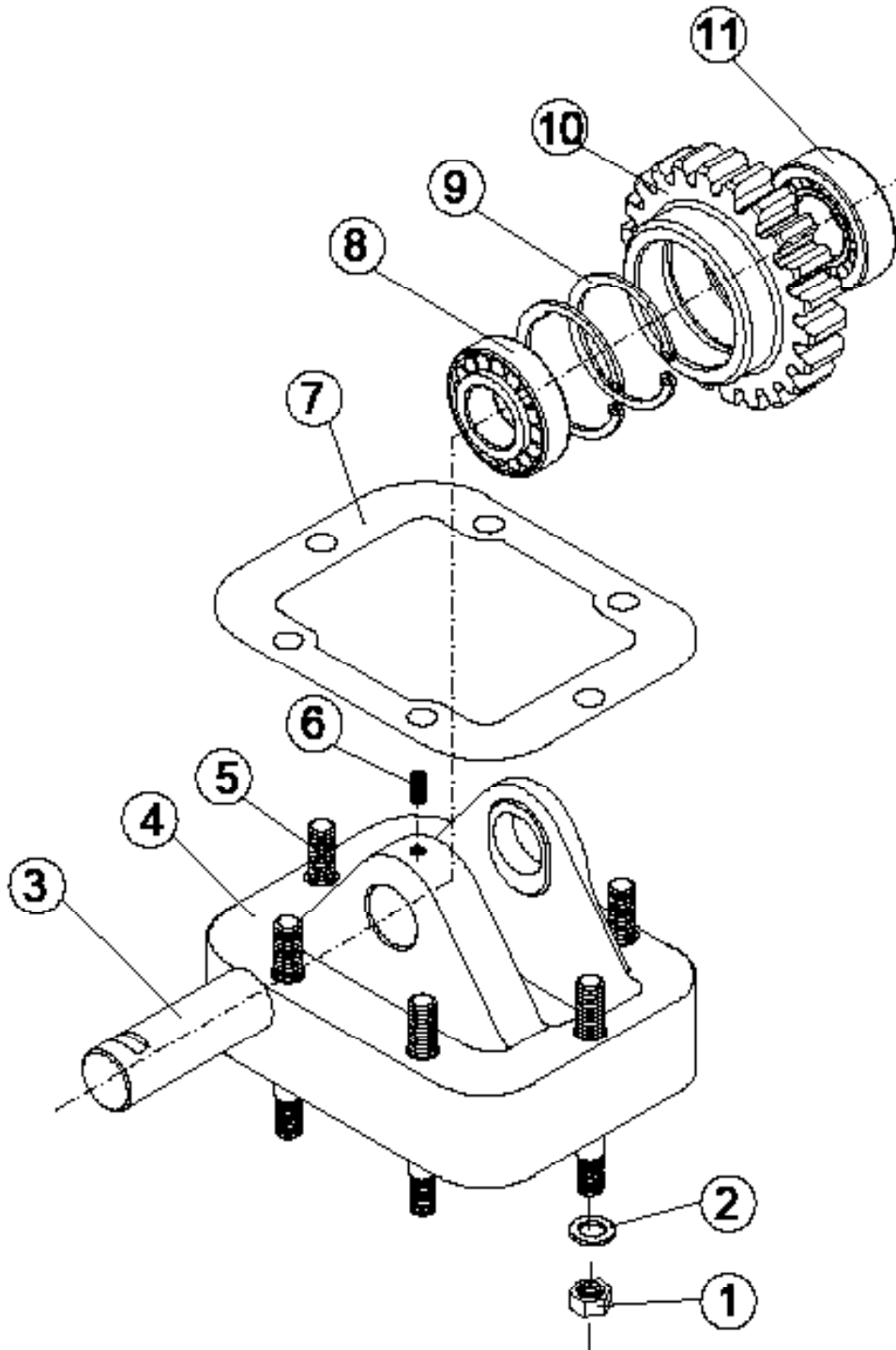


MAD 645 & 745 SERIES GEARED ADAPTER

Item	Part Number	Alternate Number	Description	Quantity	
				MAD645	MAD745
1	MPN600091	MIP-531	IDLER PIN	1	1
2	MPN600100	MOR-022	IDLER PIN O-RINGS	2	2
3	MPN600213	MSR-099	IDLER PIN SNAP RING	1	1
4	MPN600218	MNU-075	MOUNTING NUT	6	6
5	MPN600162	MWA-020	MOUNTING WASHER	6	6
6	MPN600170	MST-094	MOUNTING STUD	6	
	MPN600193	MST-423-12	DEEP MOUNT STUD		6
7	MPN600002	MGA-6010	6 BOLT MOUNTING GASKET	1	1
	MPN600003	MGA-6015	6 BOLT MOUNTING GASKET	1	1
	MPN600004	MGA-6032	6 BOLT MOUNTING GASKET	1	1
8	MPN600166	MHS-651	45° STD. ADAPTER HOUSING	1	
	N/A	MHS-622	45° DEEP MOUNT ADAPTER HOUSING		1
9	MPN600112	MPN841	ADJUSTING BUSHING	1	1
10	MPN600113	MPN851	ADJUSTING NUT	1	1
11	MPN600117	MRB-023	INPUT GEAR BEARINGS	2	2
12	MPN600061	MR-675	"01" ADAPTER INPUT GEAR	1	1
13	(*) M6140	(*) M6140	6 BOLT .140 THICK SPACER	1	1

* NOT SHOWN

MAD 530-1X SERIES “MACK” GEARED ADAPTER



**MAD530-1X (MACK 6 BOLT ADAPTER GEAR)
(MPN600324)**

Item	Part Number	Alternate Number	Description	Quantity
				MAD530
1	MPN600218	MNU-075	MOUNTING NUT	6
2	MPN600162	MWA-020	MOUNTING WASHER	6
3	MPN099006	MIP-611	IDLER PIN	1
4	MPN600325	MHS-211	ADAPTER HOUSING	1
5	MPN600321	MST-423-44	MOUNTING STUDS	6
6	MPN099011	MSS-009	SET SCREW	1
7	MPN600002	MGA-6010	6 BOLT MOUNTING GASKET	1
	MPN600003	MGA-6015	6 BOLT MOUNTING GASKET	1
	MPN600004	MGA-6032	6 BOLT MOUNTING GASKET	1
8	MPN600167	MRB-001	IDLER BEARING	1
9	MPN600286	MSR-007	SNAP RING	2
10	MPN099005	MR-798	ADAPTER INPUT GEAR	1
11	MPN099012	MRB-022	IDLER BEARING	1

PRODUCT SALES BULLETIN MH-102405

***** **NEW** *****

Introducing Metaris Control Towers. These Control Towers come in 8", 10" and 12" heights. Their base dimension is 4 1/2" x 5" to center of bolt hole. These towers will accommodate our current dual controllers. Sturdy steel construction. Stocked in Forest Location.

Part Numbers

MTO - 8 (8")
(MPN600221)

MTO - 10 (10")
(MPN600222)

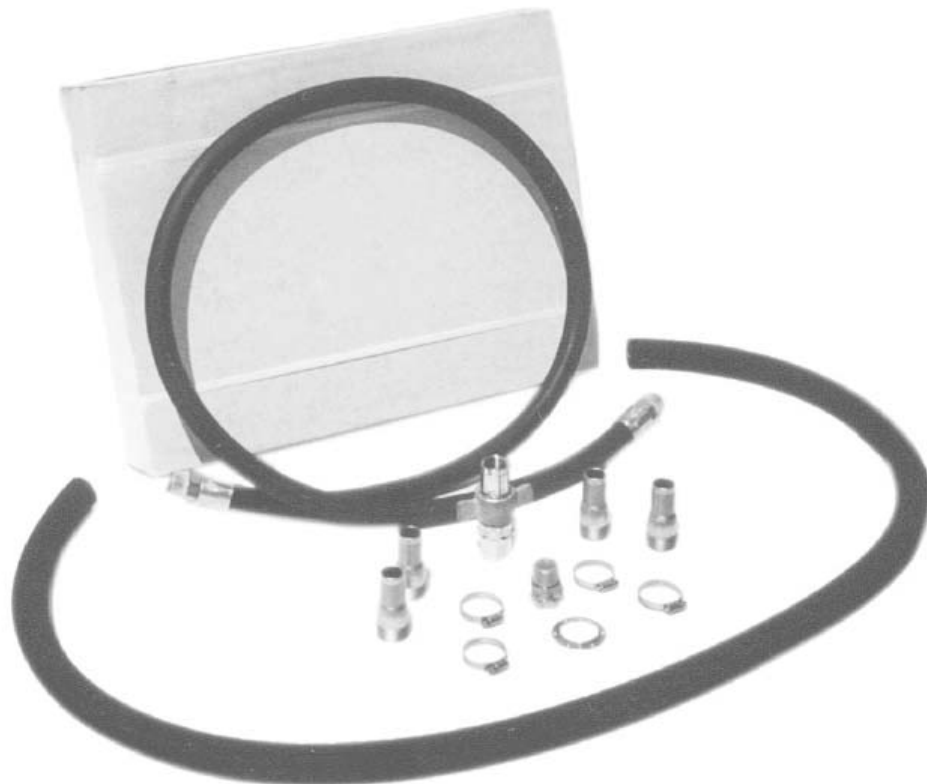
MTO - 12 (12")
(MPN600223)



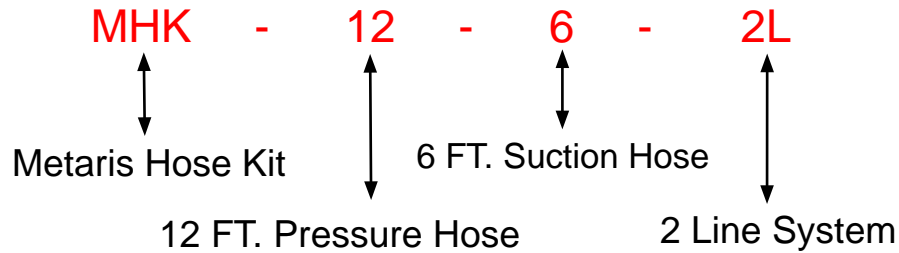
PRODUCT SALES BULLETIN MH-102505

***** **NEW** *****

Introducing Metaris Wet-Line Hose Kits. We are now offering 8 different wet-line hose kits for dump and general applications. The number breakdown and contents of the kits are on the reverse side of this bulletin. Stocked in Forest Location.



HYDRAULIC HOSE KITS



Hose Kits

Our #	Alternative #	Description
MPN600295	MHK-12-6-2L	HOSE KIT - 2 LINE
MPN600296	MHK-14-8-2L	HOSE KIT - 2 LINE
MPN600997	MHK-16-8-2L	HOSE KIT - 2 LINE
MPN600998	MHK-20-12-2L	HOSE KIT - 2 LINE
MPN600293	MHK-09-08-3L	HOSE KIT - 3 LINE
MPN600292	MHK-12-12-3L	HOSE KIT - 3 LINE
MPN600294	MHK-16-24-3L	HOSE KIT - 3 LINE
MPN600299	MHK-20-24-3L	HOSE KIT - 3 LINE

KIT CONTENTS (2 LINE SYSTEM)

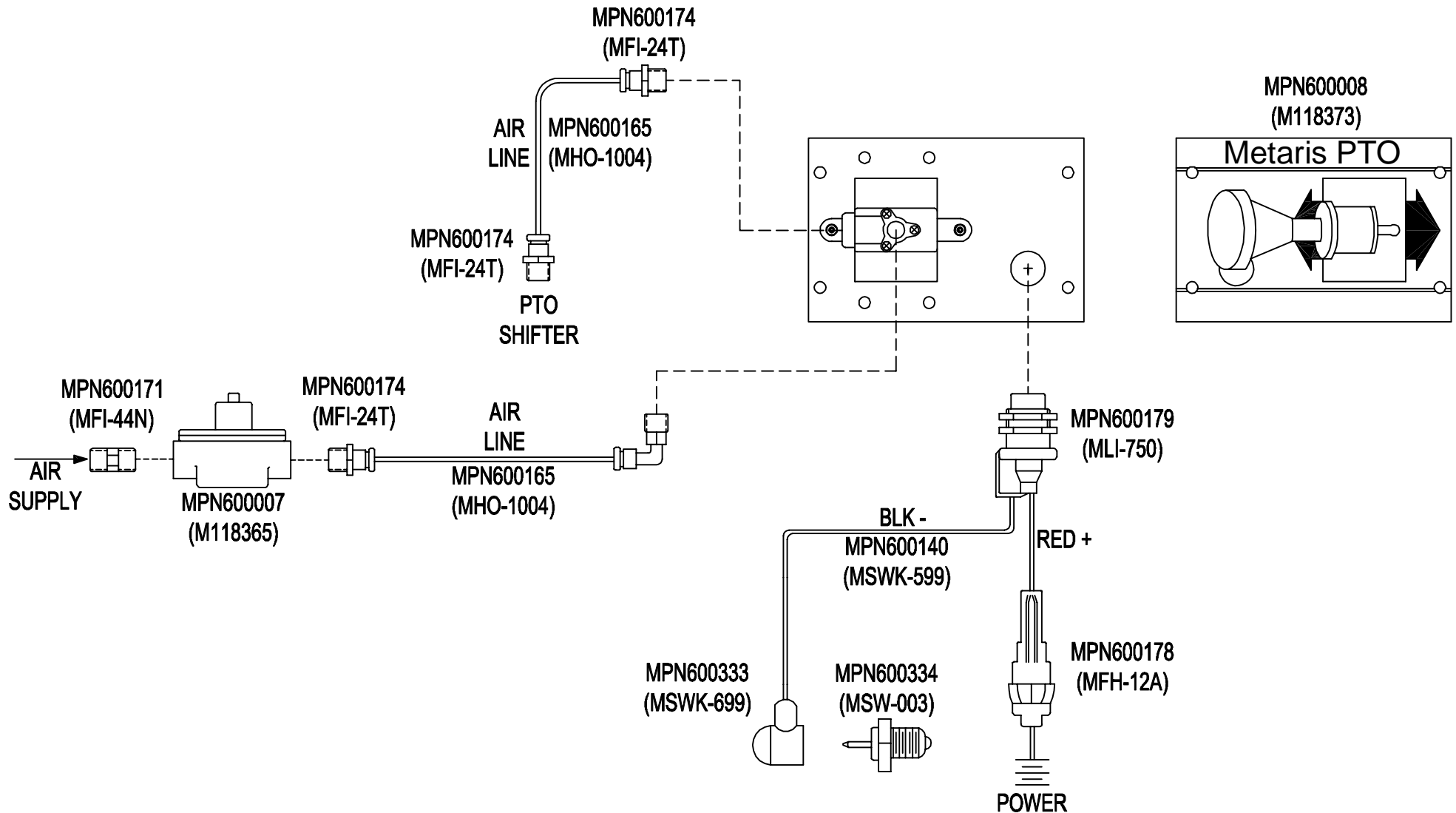
Quantity	Description
1	1" Quick Disconnect-Complete
2	1" Male Crimp Fittings
1	1" Male to 1-1/4" Female Swivel
2	1-1/4" NPT Male Hose Barb
2	Hose Clamp Worm Drive
See Kit	1" SAE 100 R2 Pressure Hose
See Kit	1-1/4" SAE 100 R4 Suction Hose

KIT CONTENTS (3 LINE SYSTEM)

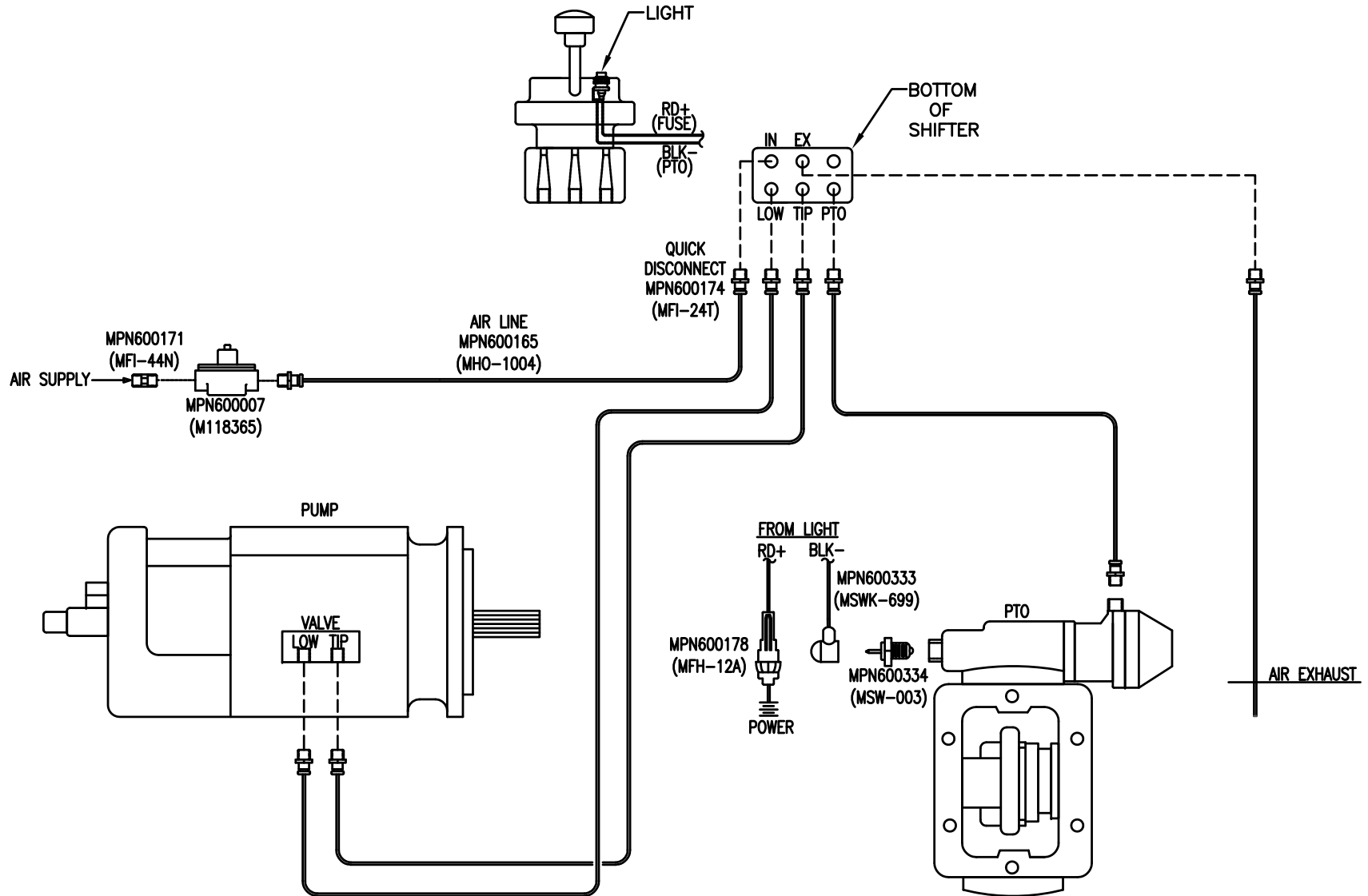
Quantity	Description
1	1" Quick Disconnect-Complete
2	1" Male Crimp Fittings
1	1" Male to 1-1/4" Female Swivel
4	1-1/4" NPT Male Hose Barb
4	Hose Clamp Worm Drive
See Kit	1" SAE 100 R2 Pressure Hose
See Kit	1-1/4" SAE 100 R4 Suction Hose



AIR & ELECTRIC INSTALLATION FOR SINGLE CONTROLLER



AIR & ELECTRIC INSTALLATION FOR DUAL CONTROLLER





METARIS BRAND REPLACEMENT PARTS

Our extensive inventory assures you of prompt shipping of pumps and parts anywhere in the world.

Our parts are 100% interchangeable with OEM products. We are committed to high quality, zero defects, and getting your orders out correctly and on time.

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WE WANT TO BE THE SUPPLIER FOR ALL YOUR P.T.O. PRODUCT NEEDS.



Metaris Corporation

1519 Hwy 35 North, Forest, Mississippi 39074
Tel: (601) 469-1987 | Toll Free: 1-800-962-2703
Fax: (601) 469-2120 | Toll Free: 1-800-654-5083
E-mail: sales@metarisusa.com

Metaris Inc.

1120 Lodestar Road, Toronto, Ontario M3J 2Z4
Tel: (416) 638-6000 | Toll Free: 1-888-477-2737
Fax: (416) 638-9365 | Toll Free: 1-866-638-9365
E-mail: sales@metaris.com