

Replacement Units & Parts

# GENUINE METARIS PTO CATALOG

Your Source for High Quality PTOs,  
PTO Parts and PTO Accessories



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## PTO & Pump Information

### PTO Questions

Transmission Make & Model: \_\_\_\_\_

PTO Mounting Side:      Left Hand       Right Hand       Bottom

PTO/Pump Mounting Options:      Remote       Direct Mount

PTO Shifting Options:      Cable Shift       Air Shift

Need Cab Controller:      Yes       No

Duty Application:      Dump       Walking Floor       Tanker       Other

### Pump Questions

Dump Pump       Other Gear Pump       Piston       Vane

Air on Dump Pump:      Yes       No

Pump Specs:      GPM: \_\_\_\_\_      System Pressure: \_\_\_\_\_      RPMs: \_\_\_\_\_

### Hydraulic Tanks

Hydraulic Tank Option:      Side Mount       Upright

Steel       Aluminum       Plastic

### PTO & Pump Control Valves

Dual w/ Kick Out       Dual w/o Kick Out       Feathering Valve

Control Tower 8"  10"  12"       Additional Hose Kit:      Yes       No

Representative: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

Model Code

# Genuine Metaris PTO

## MH6 Series - Six Bolt Standard Duty

**MH6 - S - B - 01 - X - A - 1 - RA**

**Series**

**Mounting Options**

- S = Standard Mount
- D = Deep Mount
- N = Standard Mount Less Stud Kit
- M = Deep Mount Less Stud Kit
- G = Standard Mount with Metric Studs

**Gear Ratio**

- B
- C
- E
- J
- O
- R
- S
- T

**Input Gear**

01	27
02	28
05	30
06	33
08	34
11	42
17	50
18	52
21	60
24	

**Option Lube**

- X = No Lube
- P = Pressure Lube
- C = (PPV) Valve

**Output Options**

- DA = DIN 5462 8T
- GA = Rotatable/Greasable SAE "B" 2/4 Bolt 7/8" 13T
- GB = Rotatable/Greasable SAE "BB" 2/4 Bolt 1" 15T
- GC = Rotatable/Greasable SAE "B" 2 Bolt 7/8" 13T
- GD = Rotatable/Greasable SAE "BB" 2 Bolt 1" 15T
- RA = Rotatable SAE "B" 2/4 Bolt 7/8" 13T
- RB = Rotatable SAE "BB" 2/4 Bolt 1" 15T
- RC = Rotatable SAE "B" 2/4 Bolt 1 1/4" 14T
- SB = Rotatable SAE "BB" 2 Bolt 1" 15T
- SD = Rotatable SAE "B" 2 Bolt 7/8" 13T
- SE = 1 1/4" Round Shaft
- SF = SAE "A" 2 Bolt 5/8" 9T
- TP = Chelsea Special - 7/8" 13T

**Assembly Arrangement**

- 1
- 2
- 3
- 4

**Shift Option**

- A = Air Shift
- N = Air Shift Less Installation Kit
- S = Combo Valve - PTO & Pump with Kick Out
- T = Combo Valve - PTO & Pump without Kick Out
- L = Lever
- M = Constant Mesh
- P = 12V Electric Over Air
- W = Wire

Model Code

# Genuine Metaris PTO MH8 Series - Eight Bolt Standard Duty

**MH8 - S - B - 01 - X - A - 1 - RA**

**Series**

**Mounting Options**

- S = Standard Mount
- D = Deep Mount
- J = Standard Mount with Metric Studs
- N = Standard Mount Less Stud Kit
- M = Deep Mount Less Stud Kit
- G = Standard Mount with Metric Cap Screws

**Gear Ratio**

- A
- B
- C
- E
- J
- O
- R
- S
- T

**Input Gear**

01	27
02	28
05	30
06	33
08	34
11	42
17	50
18	52
21	60
24	

**Option Lube**

- X = No Lube
- P = Pressure Lube
- C = (PPV) Valve

**Output Options**

- DA = DIN 5462 8T
- GA = Rotatable/Greasable SAE "B" 2/4 Bolt 7/8" 13T
- GB = Rotatable/Greasable SAE "BB" 2/4 Bolt 1" 15T
- GC = Rotatable/Greasable SAE "B" 2 Bolt 7/8" 13T
- GD = Rotatable/Greasable SAE "BB" 2 Bolt 1" 15T
- RA = Rotatable SAE "B" 2/4 Bolt 7/8" 13T
- RB = Rotatable SAE "BB" 2/4 Bolt 1" 15T
- RC = Rotatable SAE "B" 2/4 Bolt 1 1/4" 14T
- SB = Rotatable SAE "BB" 2 Bolt 1" 15T
- SD = Rotatable SAE "B" 2 Bolt 7/8" 13T
- SE = 1 1/4" Round Shaft
- SF = SAE "A" 2 Bolt 5/8" 9T
- TP = Chelsea Special - 7/8" 13T

**Assembly Arrangement**

- 1
- 2
- 3
- 4

**Shift Option**

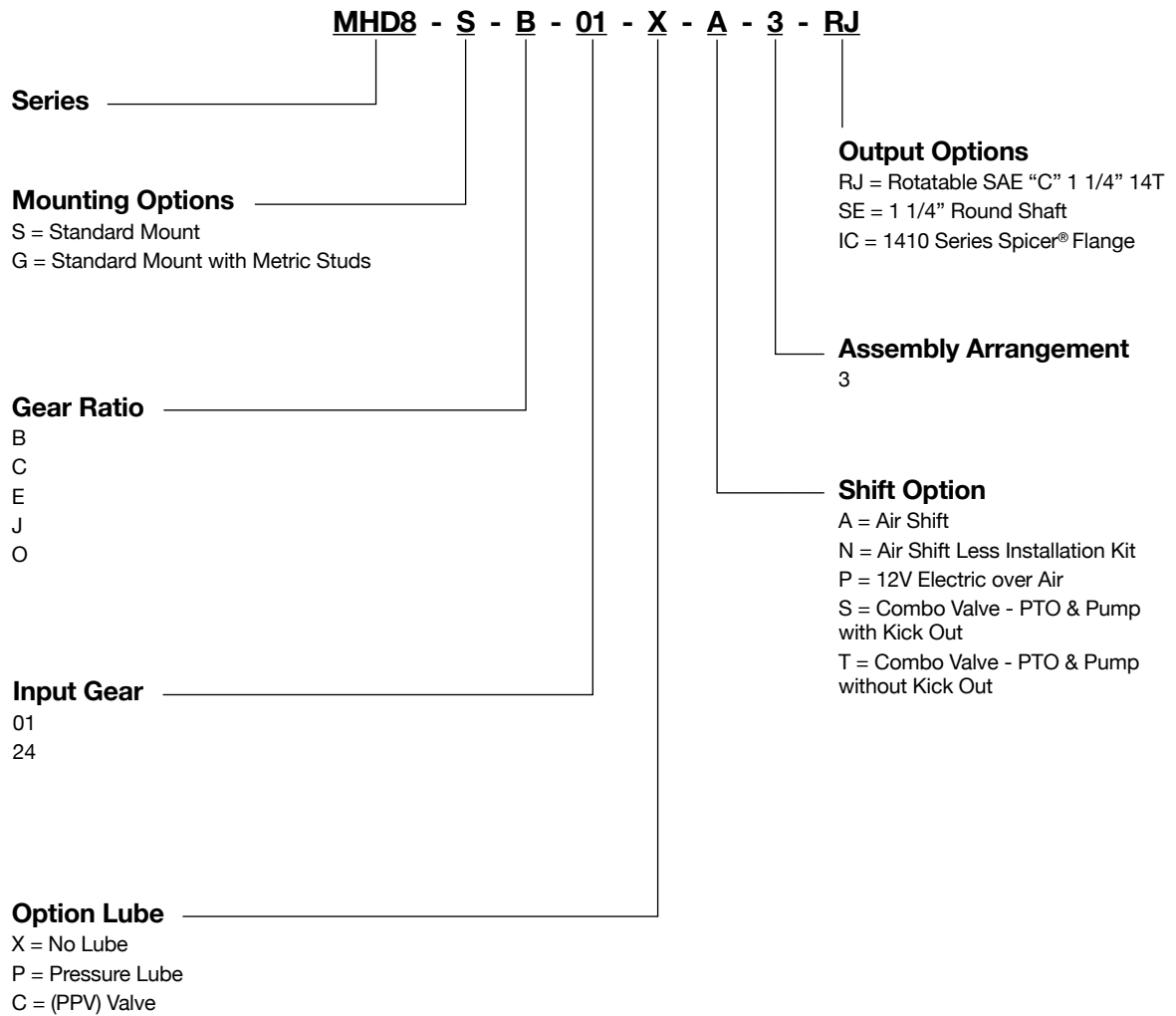
- A = Air Shift
- N = Air Shift Less Installation Kit
- S = Combo Valve - PTO & Pump with Kick Out
- T = Combo Valve - PTO & Pump without Kick Out
- L = Lever
- M = Constant Mesh
- P = 12V Electric Over Air
- W = Wire



Model Code

# Genuine Metaris PTO

## MHD8 Series - Eight Bolt Heavy Duty



General

# Genuine Metaris PTO Assembly Arrangements

1

Metaris	1
PTO®	1
Chelsea®	3
Muncie®	1

2

Metaris	2
PTO®	2
Chelsea®	4
Muncie®	2

3

Metaris	3
PTO®	3
Chelsea®	5
Muncie®	3

4

Metaris	4
PTO®	4
Chelsea®	6
Muncie®	4

**Rules of Arrangement:**

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

General

## Air Controller Kits

Contents		Description	P-49-0202 (MPN600202)	P-49-0503 (MPN600503)	P-49-0203 (MPN600203)	P-49-0204 (MPN600204)	P-49- (MPN600)
Metaris #	Alternate #		Single Controller Air Kit	Single Controller ONLY	Dual Controller Air Kit W/ Kickout	Dual Controller Air Kit W/O Kickout	Single Controller Air Kit W/ Protection Valve
P-53-0177	MPN600177	Name cover Plate for Controller	1	1			1
P-17-0008	MPN600008	Single Air Controller	1	1			1
P-17-0022	MPN600022	Dual Controller W/ Kickout			1		
P-17-0023	MPN600023	Dual Controller W/O Kickout				1	
P-51-0165	MPN600165	Hose 15' Long	15 Feet				15 Feet
P-51-0165	MPN600165	Hose 30' Long			30 Feet	30 Feet	
P-24-0178	MPN600178	Inline Fuse	1		1	1	1
P-24-0658	MPN600658	Indicator Light	1	1			1
P-41-0174	MPN600174	1/8 NPT X 1/4 Tube 180° Fitting	2		5	5	2
P-42-0183	MPN600183	10-24 X 5/8" Machine Screw	4	4			4
P-40-0184	MPN600184	10-24 Machine Screw Nut	4	4			4
P-39-0185	MPN600185	#10 Lock Washer	4	4			4
P-24-0579	MPN600579	Spade Connector	2	0	0	0	2
P-24-0353	MPN600353	Splice Connector	1	1	1	1	1
P-24-0351	MPN600351	Butt Connector	2	2	2	2	2
P-17-0007	MPN600007	Air Protection Valve					1
P-41-0171	MPN600171	1/4 NPT X 1/4 NPT 180° Fitting					1
P-41-0174	MPN600174	1/8 NPT X 1/4 Tube 180° Fitting					1

General

## Air Protection Valve Kit **P-49-0205** (MPN600205)

P-17-0007	*MPN600007	Air Protection Valve	1		1	1
P-41-0171	*MPN600171	1/4 NPT X 1/4 NPT 180° Fitting	1		1	1
P-41-0174	*MPN600174	1/8 NPT X 1/4 Tube 180° Fitting	1		1	1

*\*These parts are recommended, but optional with these Air Kits.*

General

## Feathering Valve (Only)

Contents		Description	P-17-0507 (MPN600507)
Metaris #	Alternate #		
P-17-0507	MPN600507	Feathering Valve	1

## Feathering Valve Installation Kit

Contents		Description	P-49-0637 (MPN600637)
Metaris #	Alternate #		
P-41-0174	MPN600174	1/8 NPT X 1/4 Tube 180° Fitting	2
P-41-0634	MPN600634	1/8 NPT X 1/4 Tube 90° Fitting	2
P-30-0349	MPN600349	Pipe Plug	2
P-51-0165	MPN600165	Hose 15' Long	15 Feet

## Single Controller Adapter Kit

Contents		Description	P-49-0307 (MPN600307)
Metaris #	Alternate #		
P-50-0304	MPN600304	Single Controller Adapter Plate	1
P-42-0306	MPN600306	Mounting Screw	4
P-42-0305	MPN600305	Mounting Screw	2

Mounting  
 Gaskets & Shims

## 6 Bolt Mounting Gaskets & Steel Shims

Metaris #	Alternate #	Thickness
P-19-0002	MPN600002	.010 GASKET
P-19-0003	MPN600003	.015 GASKET
P-19-0004	MPN600004	.032 GASKET
P-31-6062	M6062	.062 STEEL
P-31-6093	M6093	.093 STEEL
P-31-6125	M6125	.125 STEEL
P-31-6140	M6140	.140 STEEL
P-31-6165	M6165	.165 STEEL
P-31-6187	M6187	.187 STEEL
P-31-6200	M6200	.200 STEEL
P-31-6240	M6240	.240 STEEL
P-31-6270	M6270	.270 STEEL
P-31-6300	M6300	.300 STEEL
P-31-6400	M6400	.400 STEEL
P-31-6450	M6450	.450 STEEL
P-31-6500	M6500	.500 STEEL
P-31-6550	M6550	.550 STEEL
P-31-6562	M6562	.562 STEEL
P-31-6800	M6800	.800 STEEL

## 8 Bolt Mounting Gaskets & Steel Shims

Metaris #	Alternate #	Thickness
P-19-0050	MPN600050	.010 GASKET
P-19-0051	MPN600051	.015 GASKET
P-19-0052	MPN600052	.032 GASKET
P-31-8062	M8062	.062 STEEL
P-31-8093	M8093	.093 STEEL
P-31-8165	M8165	.165 STEEL
P-31-0285	MPN600285	.196 STEEL
P-31-8248	M8248	.248 STEEL
P-31-8295	M8295	.295 STEEL
P-31-8375	M8375	.375 STEEL
P-31-8600	M8600	.600 STEEL
P-31-8700	M8700	.700 STEEL
P-31-1005	M81005	.1005 STEEL

General **PTO Input Gear Kits**

Input Gear Kit	Input Gear	O-Ring (OLD Idler Pin)	O-Ring (NEW Idler Pin)	Preload Nut	Snap Ring
P-05-0484 (MPN600484)	P-02-0061 (MPN600061) (01)	P-21-0100 (MPN600100) (2)	P-21-0609 (MPN600609) (2)	P-23-112 (MPN600112)	P-22-0132 (MPN600132)
P-05-0485 (MPN600485)	P-02-0067 (MPN600067) (02)	P-21-0100 (MPN600100) (2)	P-21-0609 (MPN600609) (2)	P-23-112 (MPN600112)	P-22-0132 (MPN600132)
P-05-0486 (MPN600486)	P-02-0063 (MPN600063) (05)	P-21-0100 (MPN600100) (2)	P-21-0609 (MPN600609) (2)	P-23-112 (MPN600112)	P-22-0132 (MPN600132)
P-05-0487 (MPN600487)	P-02-0064 (MPN600064) (06)	P-21-0100 (MPN600100) (2)	P-21-0609 (MPN600609) (2)	P-23-112 (MPN600112)	P-22-0132 (MPN600132)
P-05-0488 (MPN600488)	P-02-0066 (MPN600066) (08)	P-21-0100 (MPN600100) (2)	P-21-0609 (MPN600609) (2)	P-23-112 (MPN600112)	P-22-0132 (MPN600132)
P-05-0489 (MPN600489)	P-02-0075 (MPN600075) (11)	P-21-0100 (MPN600100) (2)	P-21-0609 (MPN600609) (2)	P-23-112 (MPN600112)	P-22-0132 (MPN600132)
P-05-0490 (MPN600490)	P-02-0066 (MPN600066) (17)	P-21-0100 (MPN600100) (2)	P-21-0609 (MPN600609) (2)	P-23-112 (MPN600112)	P-22-0132 (MPN600132)
P-05-0563 (MPN600563)	P-02-0328 (MPN600328) (18)	P-21-0100 (MPN600100) (2)	P-21-0609 (MPN600609) (2)	P-23-112 (MPN600112)	P-22-0132 (MPN600132)
P-05-0491 (MPN600491)	P-02-0062 (MPN600062) (21)	P-21-0100 (MPN600100) (2)	P-21-0609 (MPN600609) (2)	P-23-112 (MPN600112)	P-22-0132 (MPN600132)
P-05-0492 (MPN600492)	P-02-0072 (MPN600072) (24)	P-21-0100 (MPN600100) (2)	P-21-0609 (MPN600609) (2)	P-23-112 (MPN600112)	P-22-0132 (MPN600132)
P-05-0493 (MPN600493)	P-02-0070 (MPN600070) (27)	P-21-0100 (MPN600100) (2)	P-21-0609 (MPN600609) (2)	P-23-112 (MPN600112)	P-22-0132 (MPN600132)
P-05-0494 (MPN600494)	P-02-0086 (MPN600086) (28)	P-21-0100 (MPN600100) (2)	P-21-0609 (MPN600609) (2)	P-23-112 (MPN600112)	P-22-0132 (MPN600132)
P-05-684 (MPN600684)	P-02-0590 (MPN600590) (30)	P-21-0100 (MPN600100) (2)	P-21-0609 (MPN600609) (2)	P-23-112 (MPN600112)	P-22-0132 (MPN600132)
P-05-0495 (MPN600495)	P-02-0074 (MPN600074) (33)	P-21-0100 (MPN600100) (2)	P-21-0609 (MPN600609) (2)	P-23-112 (MPN600112)	P-22-0132 (MPN600132)
P-05-0496 (MPN600496)	P-02-0073 (MPN600073) (34)	P-21-0100 (MPN600100) (2)	P-21-0609 (MPN600609) (2)	P-23-112 (MPN600112)	P-22-0132 (MPN600132)
P-05-0510 (MPN600510)	P-02-0191 (MPN600191)(42)	P-21-0100 (MPN600100) (2)	P-21-0609 (MPN600609) (2)	P-23-112 (MPN600112)	P-22-0132 (MPN600132)
P-05-0497 (MPN600497)	P-02-0071 (MPN600071) (50)	P-21-0100 (MPN600100) (2)	P-21-0609 (MPN600609) (2)	P-23-112 (MPN600112)	P-22-0132 (MPN600132)
P-05-0498 (MPN600498)	P-02-0076 (MPN600076) (52)	P-21-0100 (MPN600100) (2)	P-21-0609 (MPN600609) (2)	P-23-112 (MPN600112)	P-22-0132 (MPN600132)
P-05-0511 (MPN600511)	P-02-0192 (MPN600192) (60)	P-21-0100 (MPN600100) (2)	P-21-0609 (MPN600609) (2)	P-23-112 (MPN600112)	P-22-0132 (MPN600132)

General

## PTO Shifter Kits

Contents		Description	P-12-0499 (MPN600499)	P-12-0500 (MPN600500)	P-12-0501 (MPN600501)	P-12-0502 (MPN600502)
Metaris #	Alternate #		Air Shifter Kit 1-4	Air Shifter Kit 2-3	Mechanical Shifter Kit 1-4	Mechanical Shifter Kit 2-3
P-10-0010	MPN600010	Air Shift Top 1-4	1			
P-10-0012	MPN600012	Air Shift Top 2-3		1		
P-10-0009	MPN600009	Mech. Shift Top 1-4			1	
P-10-0011	MPN600011	Mech. Shift Top 2-3				1
P-36-0019	MPN600019	Allen Bolt	4	4	4	4
P-19-0049	MPN600049	Gasket	1	1	1	1
P-24-0333	MPN600333	Wiring Harness	1	1	1	1
P-18-0334	MPN600334	Sending Unit	1	1	1	1
P-41-0041	MPN600041	Straight Fitting	1	1		
P-10-0217	MPN600217	Wire Assembly Kit			1	1

PTO Shifter Kits

## Air Shifter Kits

Air Shifters	Metaris #	Alternate #
1 & 4 POSITION	P-10-0010	MPN600010
2 & 3 POSITION	P-10-0012	MPN600012

PTO Shifter Kits

## Mechanical Shifter Kits

Mechanical Shifters	Metaris #	Alternate #
1 & 4 POSITION	P-10-0009	MPN600009
2 & 3 POSITION	P-10-0011	MPN600011

**PTO Shifter  
 Seal Kits**

## Air Shifter Seal Kit

Contents		Description	P-46-0736 (MPN100736)
Metaris #	Alternate #		Air Shifter Seal Kit
P-20-0024	MPN600024	CUP SEAL	1
P-21-0102	MPN600102	O-RING	1
P-21-0101	MPN600101	O-RING	1
P-19-0049	MPN600049	SHIFTER GASKET	1

**PTO Sending  
 Unit Kits**

## Sending Unit Kit

Contents		Description	P-18-0553 (MPN600553)
Metaris #	Alternate #		Sending Unit Kit
P-24-0333	MPN600333	WIRING HARNESS	1
P-18-0334	MPN600334	SENDING UNIT	1



PTO Stud Kits

## Standard Mounting Kits

Series	Standard (S)	Deep Mount (D)	Metric (G)	Deep Mount Metric
MH6	P-45-0237 (MPN600237) (MH8170-76X)	P-45-0240 (MPN600240) (MH8170-77X)	P-45-0249 (MPN600249) (MH170-78X)	
MH8	P-45-0214 (MPN600214) (MH8170-200X)	P-45-0215 (MPN600215) (MH8170-201X)	P-45-0216 (MPN600216) (MH170-68X)	
MHD8	P-45-0475 (MPN600475) (MH8170-202X)	P-45-0619 (MPN600619) (MH8170-195X)	P-45-0259 (MPN600259) (MH8170-203X)	
MHS6	P-45-0518 (MPN600518) (MH8170-101X)		P-45-0519 (MPN600519) (MH170-103X)	
MHS10	P-45-0522 (MPN600522) (MH170-86X)			

PTO Stud Kits

## Mounting Kit Parts List

Kit #	Stud	Capscrew	Washer	Nut
P-45-0241 (MPN600241) (MH170-2X)	P-38-0399 (MPN600399) (6)			P-40-0550 (MPN600550) (6)
P-45-0242 (MPN600242) (MH170-3X)	P-38-0195 (MPN600195) (6)			P-40-0550 (MPN600550) (6)
P-45-0243 (MPN600243) (MH170-4X)	P-38-0196 (MPN600196) (6)			P-40-0550 (MPN600550) (6)
P-45-0244 (MPN600244) (MH170-5X)	P-38-0197 (MPN600197) (6)			P-40-0550 (MPN600550) (6)
P-45-0245 (MPN600245) (MH170-6X)	P-38-0198 (MPN600198) (6)			P-40-0550 (MPN600550) (6)
P-45-0246 (MPN600246) (MH170-7X)	P-38-0199 (MPN600199) (6)			P-40-0550 (MPN600550) (6)
P-45-0247 (MPN600247) (MH170-8X)	P-38-0200 (MPN600200) (6)			P-40-0550 (MPN600550) (6)
P-45-0248 (MPN600248) (MH170-9X)	P-38-0201 (MPN600201) (6)			P-40-0550 (MPN600550) (6)
P-45-0322 (MPN600322) (MH170-16X)	P-38-0321 (MPN600321) (6)			P-40-0550 (MPN600550) (6)

PTO Stud Kits

## Mounting Kit Parts List Cont.

Kit #	Stud	Capscrew	Washer	Nut
P-45-0216 (MPN600216) (MH170-68X)		P-37-0156 (MPN600156) (8)	P-39-0255 (MPN600255) (8)	
P-45-0686 (MPN600686) (MH170-69X)	P-38-0617 (MPN600617) (8)			P-40-0603 (MPN600603) (8)
P-45-0249 (MPN600249) (MH170-78X)	P-38-0515 (MPN600515) (6)			P-40-0550 (MPN600550) (6)
P-45-0522 (MPN600522) (MH170-86X)	P-38-0419 (MPN600419) (2)	P-37-0454 (MPN600454) (10)		
P-45-0606 (MPN600606) (MH170-89X)	P-38-0604 (MPN600604) (6)			P-40-0550 (MPN600550) (6)
P-45-0238 (MPN600238) (MH170-96X)	P-38-0209 (MPN600209) (6)			P-40-0550 (MPN600550) (6)
P-45-0519 (MPN600519) (MH170-103X)	P-38-0514 (MPN600514) (3) P-38-0515 (MPN600515) (2)	P-37-0516 (MPN600516) (1)	P-39-0162 (MPN600162) (1)	P-17-0550 (MPN600550) (6)
P-45-0254 (MPN600254) (MH8170-7X)		P-37-0232 (MPN600232) (8)	P-39-0210 (MPN600210) (6)	
P-45-0251 (MPN600251) (MH8170-8X)	P-38-0594 (MPN600594) (8)			P-40-0603 (MPN600603) (8)
P-45-0613 (MPN600613) (MH8170-14X)		P-37-0234 (MPN600234) (8)	P-39-0210 (MPN600210) (6)	
P-45-0252 (MPN600252) (MH8170-15X)		P-37-0235 (MPN600235) (8)	P-39-0210 (MPN600210) (6)	
P-45-0618 (MPN600618) (MH8170-18X)	P-38-0615 (MPN600615) (8)			P-40-0603 (MPN600603) (8)
P-45-0237 (MPN600237) (MH8170-76X)	P-38-0170 (MPN600170) (6)			P-40-0550 (MPN600550) (6)
P-45-0240 (MPN600240) (MH8170-77X)	P-38-0193 (MPN600193) (6)			P-40-0550 (MPN600550) (6)
P-45-0605 (MPN600605) (MH8170-95X)	P-38-0193 (MPN600193) (6)		MWA-224	P-40-0218 (MPN600218) (6)
P-45-0518 (MPN600518) (MH8170-101X)	P-38-0400 (MPN600400) (1) P-38-0194 (MPN600194) (2) P-38-0398 (MPN600398) (2)	P-37-0343 (MPN600343) (1)	P-39-0162 (MPN600162) (1)	P-40-0550 (MPN600550) (6)

PTO Stud Kits

## Mounting Kit Parts List Cont.

Kit #	Stud	Capscrew	Washer	Nut
P-45-0250 (MPN600250) (MH8170-129X)		P-37-0236 (MPN600236) (8)	P-39-0210 (MPN600210) (6)	
P-45-0253 (MPN600253) (MH8170-131X)		P-37-0234 (MPN600234) (8)	P-39-0210 (MPN600210) (6)	
P-45-0595 (MPN600595) (MH8170-190X)	P-38-0593 (MPN600593) (8)			P-40-0603 (MPN600603) (8)
P-45-0614 (MPN600614) (MH8170-179X)	P-38-0594 (MPN600594) (8)			P-40-0603 (MPN600603) (8)
P-45-0214 (MPN600214) (MH8170-200X)	P-38-0175 (MPN600175) (2)	P-37-0155 (MPN600155) (6)	P-39-0210 (MPN600210) (6)	P-40-0603 (MPN600603) (2)
P-45-0215 (MPN600215) (MH8170-201X)		P-37-0157 (MPN600157) (8)	P-39-0210 (MPN600210) (8)	
P-45-0475 (MPN600475) (MH8170-202X)	P-38-0175 (MPN600175) (8)	P-37-0524 (MPN600524) (8)	P-39-0210 (MPN600210) (8)	P-40-0603 (MPN600603) (8)
P-45-0619 (MPN600619) (MH8170-195X)	P-38-0175 (MPN600175) (2) P-38-0594 (MPN600594) (6)			P-40-0603 (MPN600603) (8)
P-45-0259 (MPN600259) (MH8170-203X)		P-37-0525 (MPN600525) (8)	P-39-0210 (MPN600210) (8)	

Crossover  
 Information

## 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.

<b>Metaris</b>	Model	Ratio Gear	Input	Opt. Lube	Shifter	Assembly	Output
	MH8S	B	01	X	A	1	SE
<b>Chelsea®</b>	Model	Ratio Gear	Input	Opt. Lube	Shifter	Assembly	Output
	489X	F	AH	X	A	3	XD
<b>PTO, Inc®</b>	Model	Opt. Lube	Ratio Gear	Shifter	Input	Assembly	Output
	2000	X	B	A	01	1	SE
<b>Muncie®</b>	Model	Input	Ratio Gear	Shifter	Assembly	Output	Opt. Lube
	TG8S	U68	08	A	1	B	X

**MH6 & MH8 PTO  
 Crossover Info**

## MH6 & MH8 Base Model

Model			
Metaris	Chelsea®	Muncie®	PTO, Inc®
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			
Metaris	Chelsea®	Muncie®	PTO, Inc®
A	C	04	A
B	F	06	B
C	L	07	C
E	Q	09	E
J	R	10	J
O	S	12	O
R	U	14	R
S	NONE	15	S
T	W	17	T

**MH6 & MH8 PTO  
 Crossover Info**

## MH6 & MH8 Base Model

Input Gears			
Metaris	Chelsea®	Muncie®	PTO, Inc®
01	AH (5-P-1004)	U68/X68	01
02	AB (5-P-1001)	U57	02
05	AR (5-P-1008)	S60	05
06	AX (5-P-1010)	C60	06
08	BG (5-P-1015)	S70	08
11	BQ (5-P-1023)	G73	11
17	ES (5-P-1059)	F63	17
18	EW (5-P-1061)	F61	18
21	GS (5-P-1152)	Z98	21
24	DA (5-P-1037)	M65*	24
27	EV (5-P-1060)	F11	27
28	JK (5-P-1261)	F70	28
33	AP (5-P-1006)	S61	33
34	FN (5-P-1070)	S71	34
42	JW (5-P-1319)	F66	42
50	HY (5-P-1237)	Z92	50
52	ED (5-P-1056)	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.*

Lube Options			
Metaris	Chelsea®	Muncie®	PTO, Inc®
X = NONE	X = NONE	X = NONE	X = NONE
N/A	P = Pressure Lube	P = Pressure Lube	P = Pressure Lube

G = Greaseable

**MH6 & MH8 PTO  
 Crossover Info**

**MH6 & MH8 Base Model**

Shifter Type Options			
Metaris	Chelsea®	Muncie®	PTO, Inc®
A	A	A	A
L	NONE	L	L
M	M	M	M
N	V	P	N
P	P	N/A	N/A
S	S	NONE	S
T	T	NONE	T
W	W	C	W

Assembly Arrangement			
Metaris	Chelsea®	Muncie®	PTO, Inc®
1	3	1	1
2	4	2	2
3	5	3	3
4	6	4	4

Output Options			
Metaris	Chelsea®	Muncie®	PTO, Inc®
DA	XY	I	DA
GA	GK, GP, GQ, GB	KG	N/A
GB	GF	PG	N/A
GC	GA	N/A	N/A
GD	GH	N/A	N/A
RA	XK, RB, XQ, SQ	K	RA
RB	AF, RE,	P	RB
RC	AZ	Z	SG
SD	AK, RF	S	SD
SE	XD	B	SE
SF	XE	R	SF
TP	XR	G	TP

**MHD8 PTO  
 Crossover Info**

## MHD8 Base Model

Model			
Metaris	Chelsea®	Muncie®	PTO, Inc®
MHD8S	880X	828S	4000
MHD8D	880Z	828D	4000
MHD8G	880G	828B	4000

Gear Ratio			
Metaris	Chelsea®	Muncie®	PTO, Inc®
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 and percentage of engine speed.

Input Gears			
Metaris	Chelsea®	Muncie®	PTO, Inc®
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 PTO**  
 Crossover Info

## MHD8 Base Model

Lube Options			
Metaris	Chelsea®	Muncie®	PTO, Inc®
X = NONE	X = NONE	X = NONE	X = NONE
N/A	P = Pressure Lube	P = Pressure Lube	P = Pressure Lube

Shifter Type Options			
Metaris	Chelsea®	Muncie®	PTO, Inc®
A	A	A	A
N	V	P	N
S	U	NONE	S
T	T	NONE	T

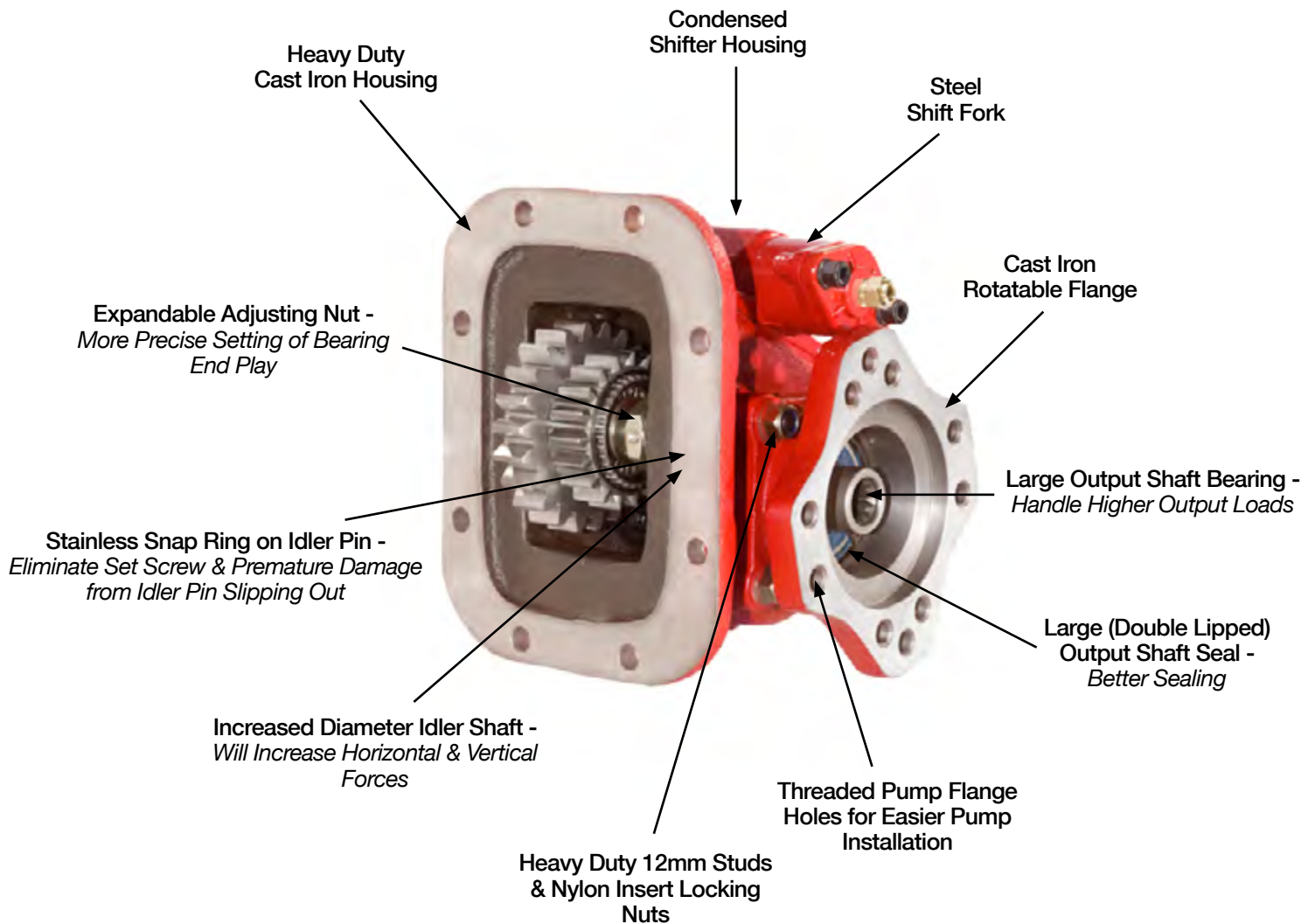
Assembly Arrangement			
Metaris	Chelsea®	Muncie®	PTO, Inc®
3	5	3	3

Output Options			
Metaris	Chelsea®	Muncie®	PTO, Inc®
RJ*	XS*	E*	RJ*
SE	N/A	N/A	SE
IC	XV	C	IC

\* 'RJ' - 4 Bolt "C" Flange Only  
 \* 'XS' - 2/4 Bolt "C" Flange  
 \* 'E' - 2/4 Bolt "C" Flange

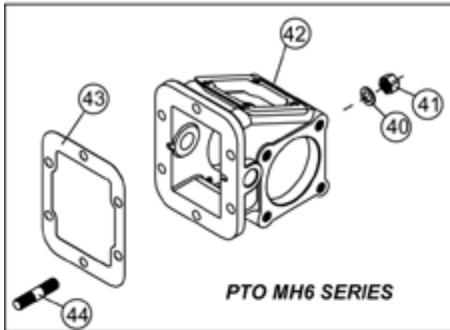
**Features and Benefits**

# Features and Benefits of Our PTOs

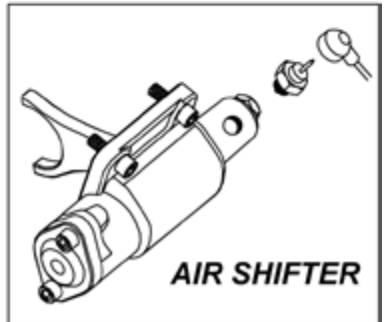
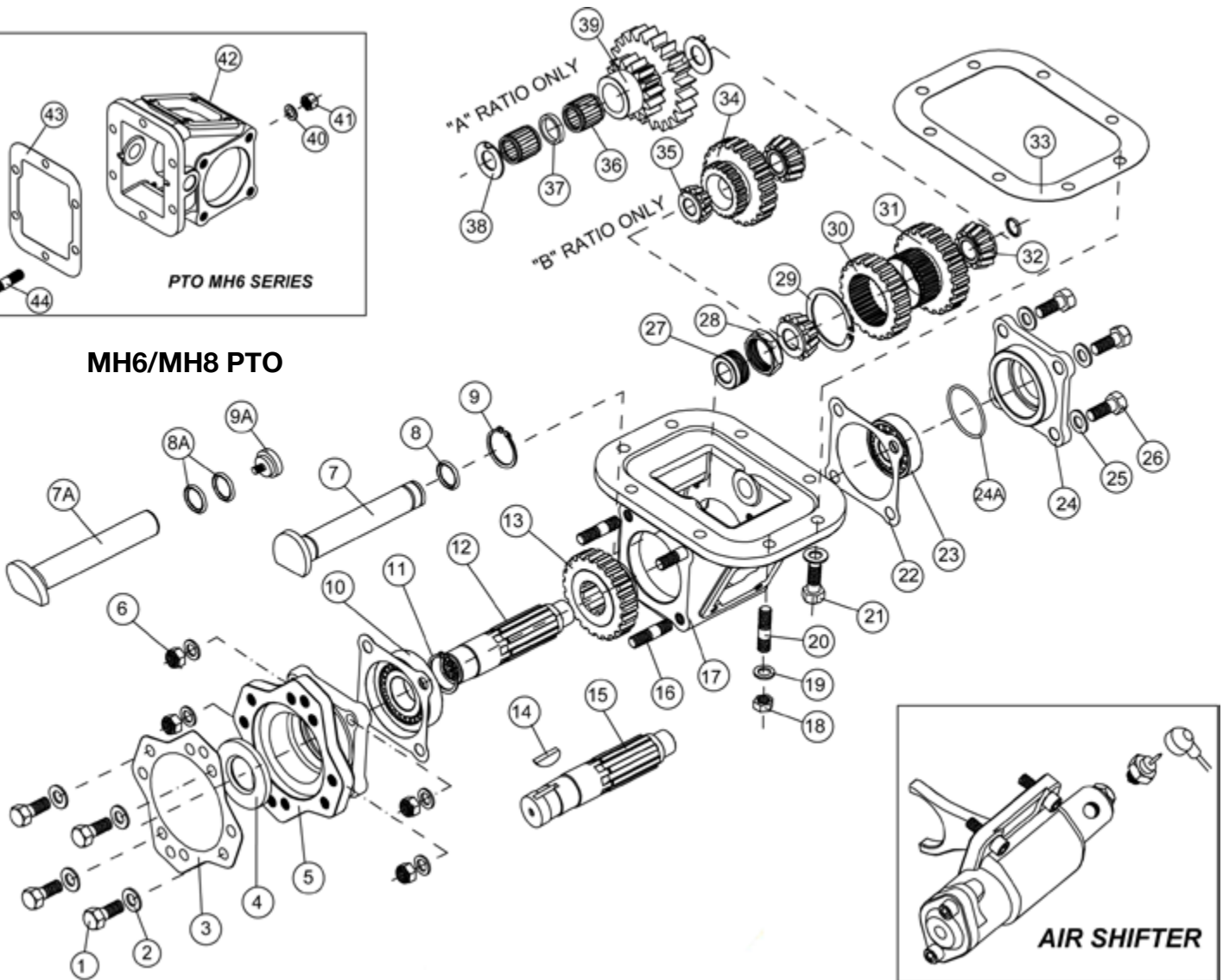


Drawings &  
 Parts Lists

# MH6/MH8 PTO Drawing



**MH6/MH8 PTO**



**AIR SHIFTER**

Drawings &  
 Parts Lists

## MH6/MH8 PTO Parts List

Item	Part Number	Alternate #	Description	Quantity	
				MH6	MH8
1	P-37-0036	MPN600036	PUMP TO FLANGE CAP SCREW	4	4
2	P-39-0635	MPN600635	PUMP TO FLANGE WASHER	4	4
3	P-19-0045	MPN600045	PUMP TO FLANGE GASKET	1	1
4	P-20-0121	MPN600121	OUTPUT SHAFT SEAL	1	1
5	P-08-0044	MPN600044	OUTPUT FLANGE HOUSING	1	1
5A NS.	P-22-0134	MPN600134	FLANGE SEAL SNAP RING	1	1
6	P-40-0094	MPN600094	NYLOCK FLANGE NUT	4	4
7	P-13-0091	MPN600091	IDLER PIN	1	1
7A	P-13-0585	MPN600585	(NEW STYLE) IDLER PIN	1	1
8	P-21-0100	MPN600100	IDLER PIN O-RING	2	2
8A N.S.	P-21-0609	MPN600609	(NEW STYLE) IDLER PIN PLUG O-RING	2	2
9	P-22-0213	MPN600213	IDLER PIN SNAP RING	1	1
9A N.S.	P-30-0586	MPN600586	(NEW STYLE) IDLER PIN PLUG	1	1
10	P-14-0115	MPN600115	OUTPUT SHAFT BEARING	1	1
11	P-22-0133	MPN600133	OUTPUT SHAFT SNAP RING	1	1
12	SEE CHART #1		OUTPUT SHAFT	1	1
13	SEE CHART #2		OUTPUT RATIO GEAR	1	1
14	P-44-0151	MPN600151	WOODRUFF KEY	1	1
15	SEE CHART #1		OUTPUT SHAFT	1	1
16	P-38-0136	MPN600136	FLANGE STUD	4	4
17	P-01-0089	MPN600089	8 BOLT HOUSING		1
	P-01-0090	MPN600090	8 BOLT DEEP MOUNT HOUSING		1
17A	P-01-0584	MPN600584	(NEW STYLE) 8 BOLT HOUSING		1
18	P-40-0301	MPN600301	NUT FOR MOUNTING STUD		2
19	P-39-0210	MPN600210	8 BOLT MOUNTING WASHER		8
	P-39-0255	MPN600255	8 BOLT METRIC MOUNTING WASHER		8
20	P-38-0175	MPN600175	STD. STUD		2
21	P-37-0155	MPN600155	STD. MOUNT CAP SCREW		6
	P-37-0157	MPN600157	DEEP MOUNT CAP SCREW		8
	P-37-0156	MPN600156	METRIC MOUNT CAP SCREW		8
22	P-19-0048	MPN600048-(.015)	END CAP COVER GASKET	2	2
	P-19-0189	MPN600189-(.010)	END CAP COVER GASKET		
	P-19-0542	MPN600542-(.020)	END CAP COVER GASKET		
23	P-14-0114	MPN600114	OUTPUT BEARING NON-THRUST	1	1
24	P-09-0039	MPN600039	CLOSED END COVER CAP	1	1

Drawings &  
 Parts Lists

## MH6/MH8 PTO Parts List Cont.

Item	Part Number	Alternate #	Description	Quantity	
				MH6	MH8
24A	P-21-0103	MPN600103	END CAP O-RING	1	1
25	P-39-0146	MPN600146	END CAP WASHER	8	8
26	P-37-0035	MPN600035	END COVER CAP SCREW	4	4
27 & 28	P-23-0112	MPN600112	ADJUSTING BUSHING& NUT	1	1
29	P-22-0132	MPN600132	INPUT GEAR SNAP RING	1	1
30	SEE CHART #2		INPUT RATIO GEAR	1	1
31	SEE CHART #3		INPUT GEAR	1	1
32	P-14-0117	MPN600117	INPUT GEAR BEARINGS	2	2
33	P-19-0050	MPN600050	8 BOLT MOUNTING GASKET		1
	P-19-0051	MPN600051	8 BOLT MOUNTING GASKET		1
	P-19-0052	MPN600052	8 BOLT MOUNTING GASKET		1
34	SEE CHART #3		"B" RATIO INPUT UNIGEAR	1	1
35	P-14-0118	MPN600118	INPUT BEARING FOR "B" RATIO	1	1
36	P-14-0090	MPN600190	INPUT BEARING FOR "A" RATIO		2
37	P-31-0131	MPN600131	BEARING SPACER FOR "A" RATIO		1
38	P-39-0150	MPN600150	ANTI-FRICTION WASHER "A" RATIO		2
39	SEE CHART #3		"A" RATIO INPUT UNIGEAR		1
40	P-39-0162	MPN600162	MOUNTING WASHER	6	
41	P-40-0550	MPN600550	MOUNTING FLANGE NUTS	6	
42	P-01-0005	MPN600005	6 BOLT HOUSING	1	
	P-01-0006	MPN600006	6 BOLT DEEP MOUNT HOUSING	1	
43	P-19-0002	MPN600002	6 BOLT MOUNTING GASKET	1	
	P-19-0003	MPN600003	6 BOLT MOUNTING GASKET	1	
	P-19-0004	MPN600004	6 BOLT MOUNTING GASKET	1	
44	P-38-0170	MPN600170	6 BOLT STD. MOUNTING STUD	6	
	P-38-0193	MPN600193	6 BOLT DEEP MOUNTING STUD	6	
	P-38-0208	MPN600208	6 BOLT METRIC MOUNTING STUD	6	

Drawings &  
 Parts Lists

## MH6/MH8 Output Shafts List - Chart #1

Part Number	Alternate #	Description	Quantity	
			MH6	MH8
P-07-0106	MPN600106	1 1/4" ROUND OUTPUT SHAFT	1	1
P-07-0107	MPN600107	7/8" 13 SPLINE OUTPUT SHAFT	1	1
P-07-0108	MPN600108	1" 15 SPLINE OUTPUT SHAFT	1	1
P-07-0531	MPN600531	1 1/4" 14 SPLINE OUTPUT SHAFT	1	1
P-07-0578	MPN600578	DIN 5462 8 SPLINE OUTPUT SHAFT	1	1
P-07-0196	MPN100196	Greaseable 7/8" 13 SPLINE OUTPUT SHAFT	1	1
P-07-0219	MPN100219	Greaseable 1" 15 SPLINE OUTPUT SHAFT	1	1

Drawings &  
 Parts Lists

## MH6/MH8 Gear Ratio Sets - Chart #2

Ratio	Item #30 Input Ratio Gear Metaris #	Alternate # & Tooth Count	Item #13 Output Ratio Gear Metaris #	Alternate # & Tooth Count
RATIO "A" - 01	P-04-0084	MPN600084 (15)	P-03-0083	MPN600083 (30)
RATIO "B" - 01	P-04-0078	MPN600078 (16)	P-03-0077	MPN600077 (29)
RATIO "B" - 24	P-04-0085	MPN600085 (16)	P-03-0077	MPN600077 (29)
RATIO "C"	P-03-0068	MPN600068 (19)	P-03-0069	MPN600069 (26)
RATIO "E"	P-03-0053	MPN600053 (21)	P-03-0054	MPN600054 (24)
RATIO "J"	P-03-0055	MPN600055 (22)	P-03-0056	MPN600056 (23)
RATIO "O"	P-03-0057	MPN600057 (25)	P-03-0058	MPN600058 (20)
RATIO "R"	P-03-0079	MPN600079 (26)	P-03-0080	MPN600080 (19)
RATIO "S"	P-03-0081	MPN600081 (27)	P-03-0082	MPN600082 (18)
RATIO "T"	P-03-0059	MPN600059 (28)	P-03-0060	MPN600060 (17)

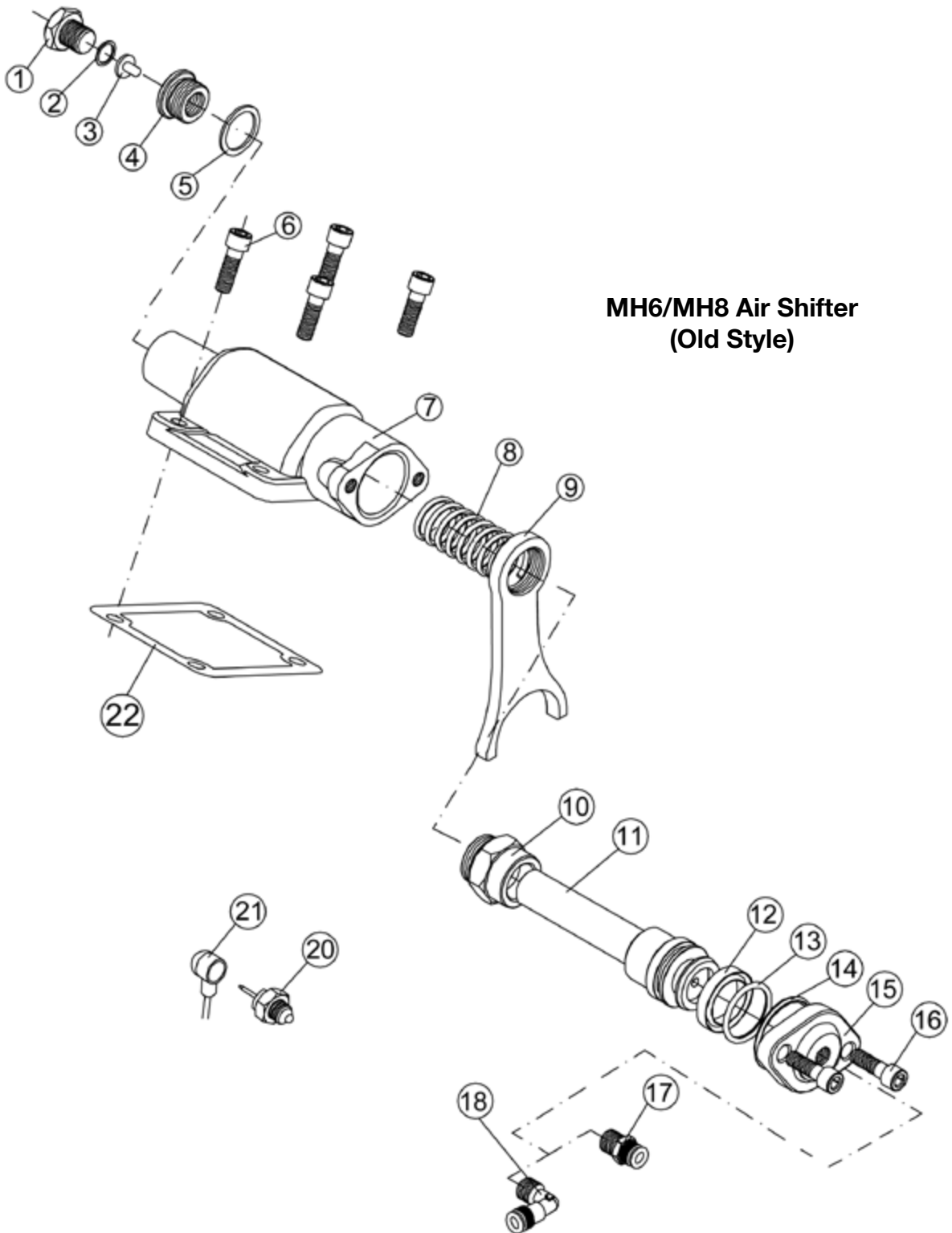
Drawings &  
 Parts Lists

## MH6/MH8 Input Gears - Chart #3

Input Gear	Metaris #	Alternate #	# of Teeth	Application	Transmission Gear Specs
01	P-02-0061	MPN600061	22	EATON/FULLER	6/8 PITCH 20° Spur
02	P-02-0067	MPN600067	19	SPICER	5/7 Pitch 20° Spur
05	P-02-0063	MPN600063	21	SPICER	6 Pitch 17.5° PA 26° 10'37" RH Helix
06	P-02-0064	MPN600064	22	SPICER	6.10 Pitch 25° PA 18° 40'48" LH Helix
08	P-02-0066	MPN600066	24	SPICER	7 Pitch 17.5° PA 28° 4'23" RH Helix
11	P-02-0075	MPN600075	25	SPICER	7.34 Pitch 20° PA 24° RH Helix
17	P-02-0065	MPN600065	22	EATON/FULLER	6.35 Pitch 20° PA 22° RH Helix
18	P-02-0328	MPN600328	19	EATON/FULLER	6.100 Pitch Helix
21	P-02-0062	MPN600062	29	ZED/F	9.96 Pitch 20° PA 28.5° RH Helix
24	P-02-0072	MPN600072	23	MACK	6.48 Pitch 17.65° PA SPUR
27	P-02-0070	MPN600070	40	EATON/FULLER	10.1 Pitch 21.5° PA SPUR
28	P-02-0086	MPN600086	24	EATON/FULLER	7.0 Pitch 23° PA 26° RH Helix
30	P-02-0590	MPN600590	22	EATON/FULLER	7P25° PA30° 46' 48' LH HELIX
33	P-02-0074	MPN600074	21	SPICER	6 Pitch 17.5° PA 22.25° RH Helix
34	P-02-0073	MPN600073	26	SPICER	7 Pitch 17.5° PA 18° RH Helix
42	P-02-0191	MPN600191	23	FULLER	6.65 Pitch 20° PA 21.5° RH
50	P-02-0071	MPN600071	26	ZED/F	9.23 Pitch 20° PA 36° RH Helix
52	P-02-0076	MPN600076	34	ZED/F	9.96 Pitch 20° PA 28.5° RH Helix
60	P-02-0192	MPN600192	24	ALLISON	6 Pitch 20° Spur, Full Addendum

Drawings &  
Parts Lists

## MH6/MH8 Air Shifter (Old Style) Drawing



**MH6/MH8 Air Shifter  
(Old Style)**



Drawings &  
 Parts Lists

## MH6/MH8 Air Shifter (Old Style) Parts List

Item	Part Number	Alternate #	Description	Quantity
1	P-30-0013	MPN600013	End Plug	1
2	P-39-0142	MPN600142	Washer	1
3	P-33-0212	MPN600212	Sensor Pin	1
4	P-30-0180	MPN600180	Sensor Adapter Plug	1
5	P-39-0143	MPN600143	Washer	1
6	P-36-0019	MPN600019	Shifter Cap Allen Screw	4
7	P-28-0126	MPN600126	Air Shifter Top Housing	1
8	P-28-0129	MPN600129	Spring for Piston	1
9	P-27-0124	MPN600124	Shifter Fork	1
10	P-29-0025	MPN600025	Fork Spacer	1
11	P-26-0120	MPN600120	Piston	1
12	P-20-0024	MPN600024	Rubber Seal	1
13	P-21-0102	MPN600102	O'Ring	1
14	P-21-0101	MPN600101	Piston Cap O'Ring	1
15	P-09-0110	MPN600110	Piston Cap	1
16	P-36-0018	MPN600018	Piston Cap Screws	2
17	P-41-0041	MPN600041	180° Quick Connect Air Fitting	1
18	P-41-0040	MPN600040	90° Quick Connect Air Fitting	1
20	P-18-0334	MPN600334	Sending Sensor Unit	1
	P-18-0138	MPN600138	Old Sending Sensor Unit	
21	P-24-0333	MPN600333	Sensor Wiring Harness	1
	P-24-0140	MPN600140	Old Sensor Wiring Harness	
22	P-19-0049	MPN600049	Shifter Mounting Gasket	1

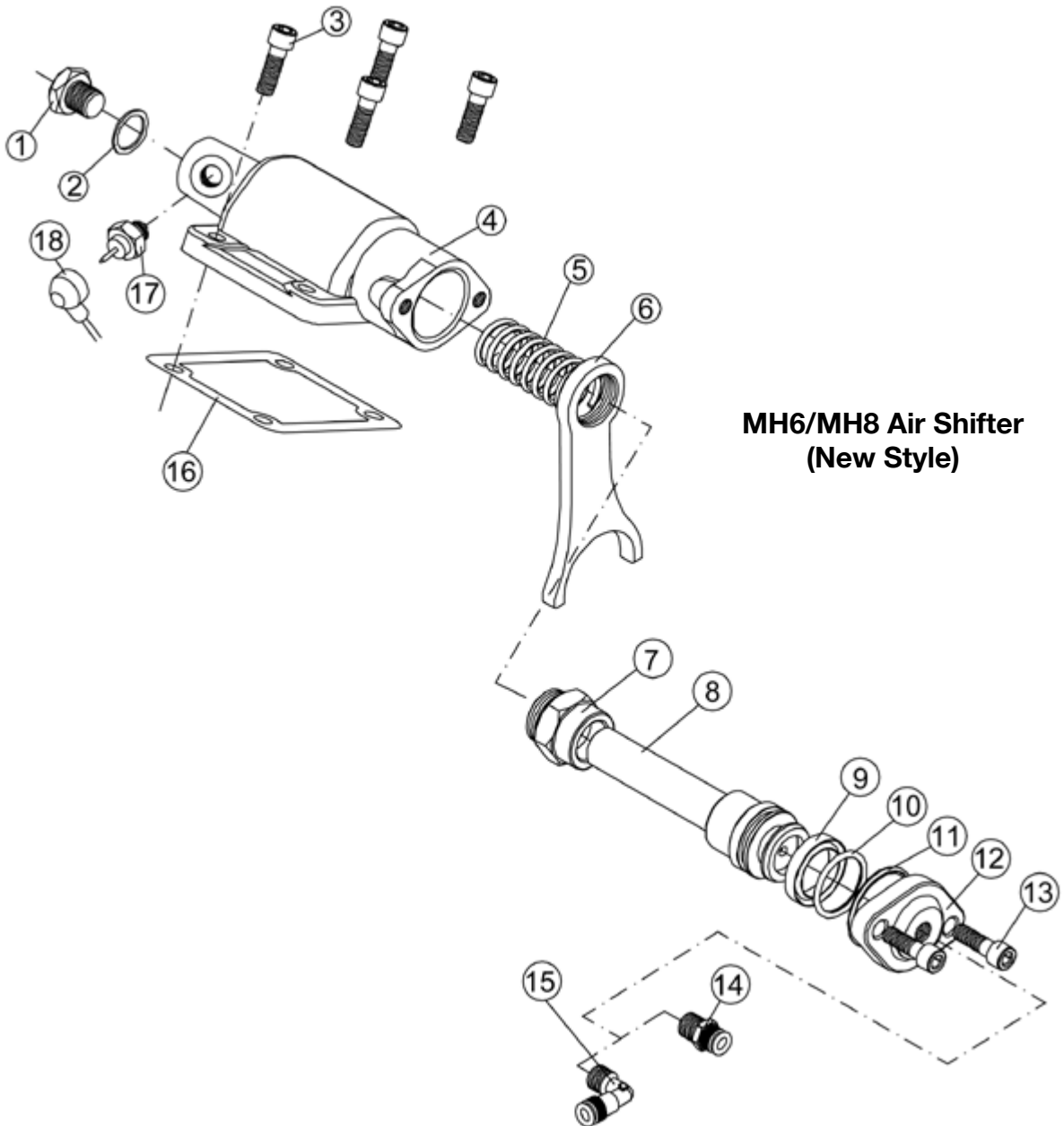
Drawings &  
 Parts Lists

## MH6/MH8 Air Shifter (Old Style) Assemblies

Item	Part Number	Alternate #	Description	Quantity
	P-10-0010	MPN600010	1 & 4 POSITION	1
	P-10-0012	MPN600012	2 & 3 POSITION	1

Drawings &  
Parts Lists

## MH6/MH8 Air Shifter (New Style) Drawing



**MH6/MH8 Air Shifter  
(New Style)**

Drawings &  
 Parts Lists

## MH6/MH8 Air Shifter (New Style) Parts List

Item	Part Number	Alternate #	Description	Quantity
1	P-30-0013	MPN600013	End Plug	1
2	P-39-0143	MPN600143	Washer	1
3	P-36-0019	MPN600019	Shifter Cap Allen Screw	4
4	P-28-0126	MPN600126	Air Shifter Top Housing	1
5	P-28-0129	MPN600129	Spring for Piston	1
6	P-27-0124	MPN600124	Shifter Fork	1
7	P-29-0025	MPN600025	Fork Spacer	1
8	P-26-0120	MPN600120	Piston	1
9	P-20-0024	MPN600024	Rubber Seal	1
10	P-21-0102	MPN600102	O'Ring	1
11	P-21-0101	MPN600101	Piston Cap O'Ring	1
12	P-09-0110	MPN600110	Piston Cap	1
13	P-36-0018	MPN600018	Piston Cap Screws	2
14	P-41-0041	MPN600041	180° Quick Connect Air Fitting	1
15	P-41-0040	MPN600040	90° Quick Connect Air Fitting	1
16	P-19-0049	MPN600049	Shifter Mounting Gasket	1
17	P-18-0334	MPN600334	Sending Sensor Unit	1
	P-18-0138	MPN600138	Old Sending Sensor Unit	
18	P-24-0333	MPN600333	Sensor Wiring Harness	1
	P-24-0140	MPN600140	Old Sensor Wiring Harness	

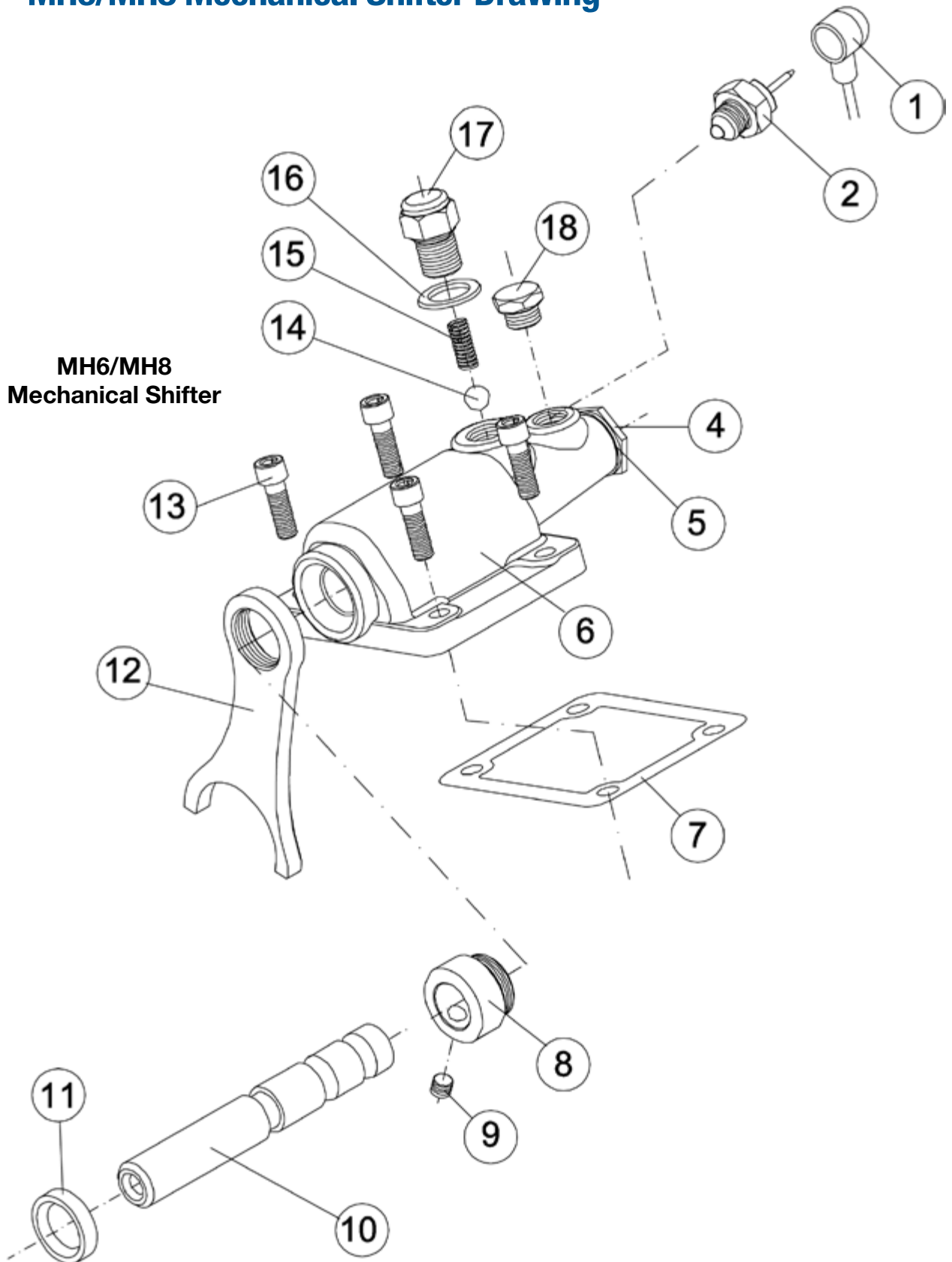
Drawings &  
 Parts Lists

## MH6/MH8 Air Shifter (New Style) Assemblies

Item	Part Number	Alternate #	Description	Quantity
	P-10-0010	MPN600010	1 & 4 POSITION	1
	P-10-0012	MPN600012	2 & 3 POSITION	1

Drawings &  
Parts Lists

## MH6/MH8 Mechanical Shifter Drawing



Drawings &  
 Parts Lists

## MH6/MH8 Mechanical Shifter Parts List

Item	Part Number	Alternate #	Description	Quantity
1	P-24-0333	MPN600333	Sensor Wiring Harness	1
2	P-18-0334	MPN600334	Sending Sensor Unit	1
4	P-30-0015	MPN600015	PLUG	1
5	P-39-0143	MPN600143	ALUMINUM WASHER	1
6	P-01-0127	MPN600127	SHIFTER HOUSING	1
7	P-19-0049	MPN600049	Shifter Mounting Gasket	1
8	P-29-0029	MPN600029	FORK BUSHING	1
9	P-43-0135	MPN600135	SET SCREW	1
10	P-26-0119	MPN600119	SHIFTING SHAFT	1
11	P-20-0123	MPN600123	SHAFT SEAL	1
12	P-27-0124	MPN600124	Shifter Fork	1
13	P-36-0019	MPN600019	SHIFTER HOUSING BOLTS	4
14	P-34-0109	MPN600109	POPPET BALL	1
15	P-28-0128	MPN600128	POPPET SPRING	1
16	P-39-0147	MPN600147	ALUMINUM WASHER	1
17	P-35-0034	MPN600034	POPPET CAP	1
18	P-30-0015	MPN600033	SWITCH PLUG	1

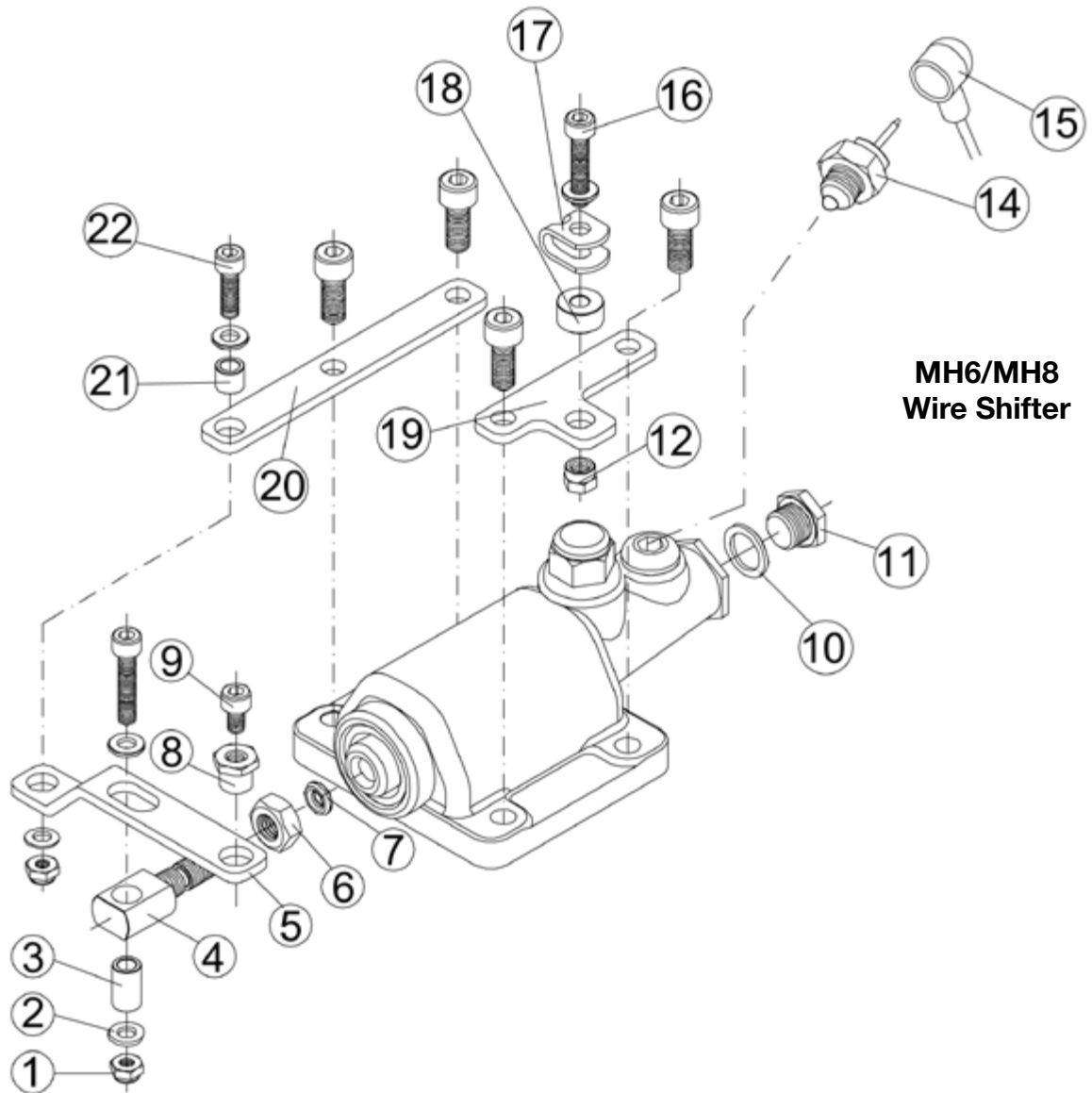
Drawings &  
 Parts Lists

## MH6/MH8 Mechanical Shifter Assemblies

Item	Part Number	Alternate #	Description	Quantity
	P-10-0009	MPN600009	1 & 4 POSITION	1
	P-10-0011	MPN600011	2 & 3 POSITION	1

Drawings &  
Parts Lists

## MH6/MH8 Wire Shifter Drawing



Drawings &  
 Parts Lists

## MH6/MH8 Wire Shifter Parts List

Item	Part Number	Alternate #	Description	Quantity
1	P-40-0096	MPN600096	NYLOCK NUT	2
2	P-39-0144	MPN600144	WASHER	5
3	P-29-0027	MPN600027	BUSHING	1
4	P-50-0130	MPN600130	ROD SPACER	1
5	P-50-0093	MPN600093	LEVER	1
6	P-40-0095	MPN600095	JAM NUT	1
7	P-21-0104	MPN600104	O-RING	1
8	P-40-0098	MPN600098	CLAMPING NUT FOR WIRE	1
9	P-36-0021	MPN600021	ALLEN HEAD SCREW	1
10	P-39-0149	MPN600149	ALUMINUM WASHER	1
11	P-30-0111	MPN600111	PLUG	1
12	P-40-0097	MPN600097	WIRE CLIP NUT	1
14	P-18-0334	MPN600334	SENDING SENSOR UNIT	1
15	P-24-0333	MPN600333	SENSOR WIRING HARNESS	1
16	P-36-0017	MPN600017	ALLEN HEAD SCREW	1
17	P-50-0031	MPN600031	WIRE HOLDING CLIP	1
18	P-29-0028	MPN600028	BUSHING	1
19	P-50-0030	MPN600030	CABLE BRACKET	1
20	P-50-0092	MPN600092	LEVER BRACKET	1
21	P-29-0026	MPN600026	BUSHING	1
22	P-36-0016	MPN600016	ALLEN HEAD SCREW	1

Drawings &  
 Parts Lists

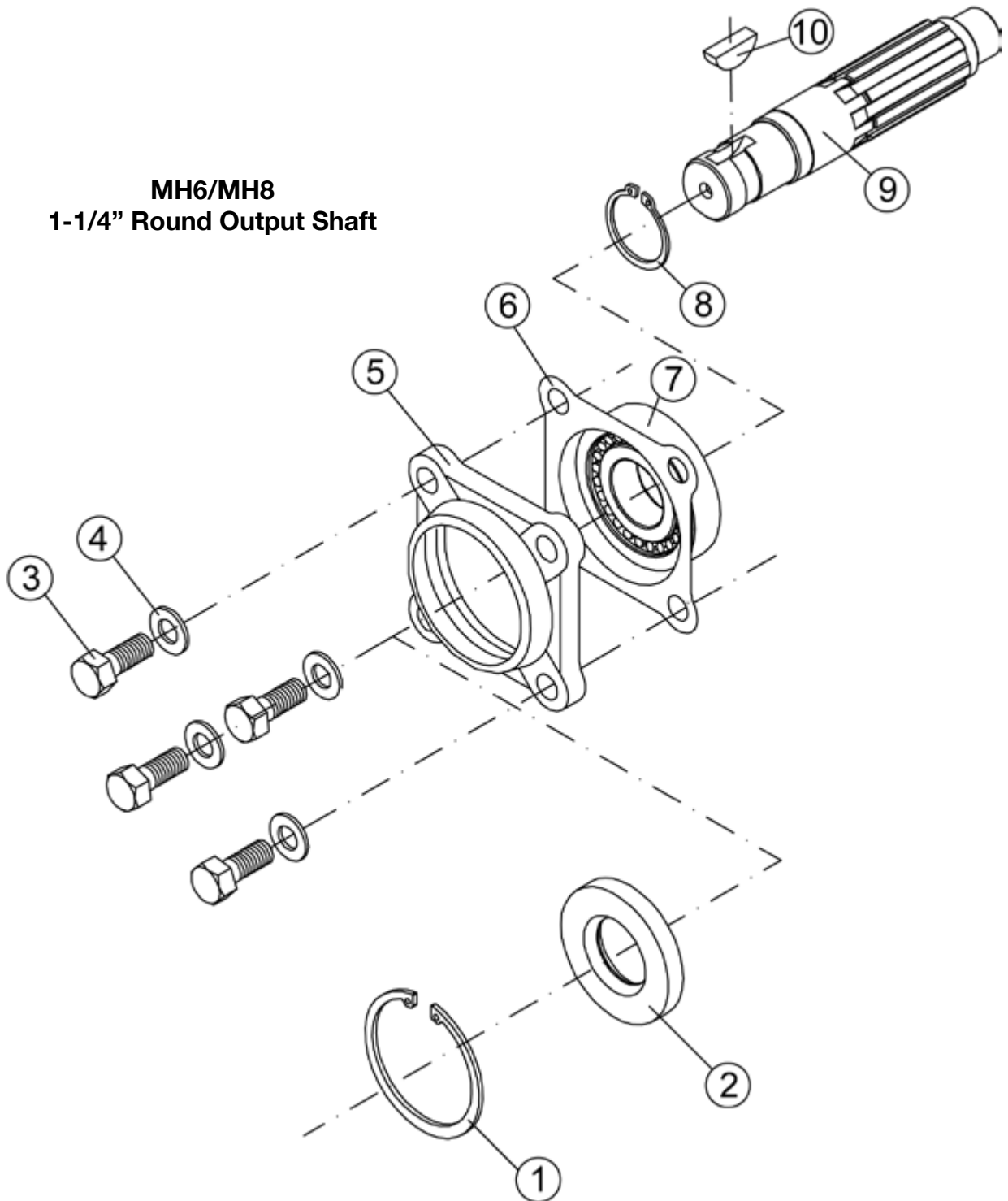
## MH6/MH8 Wire Shifter Assemblies

Item	Part Number	Alternate #	Description	Quantity
	P-10-0217	MPN600217	WIRE KIT ASSEMBLY	1

Drawings &  
Parts Lists

## MH6/MH8 1-1/4" Round Output Shaft Drawing

### MH6/MH8 1-1/4" Round Output Shaft





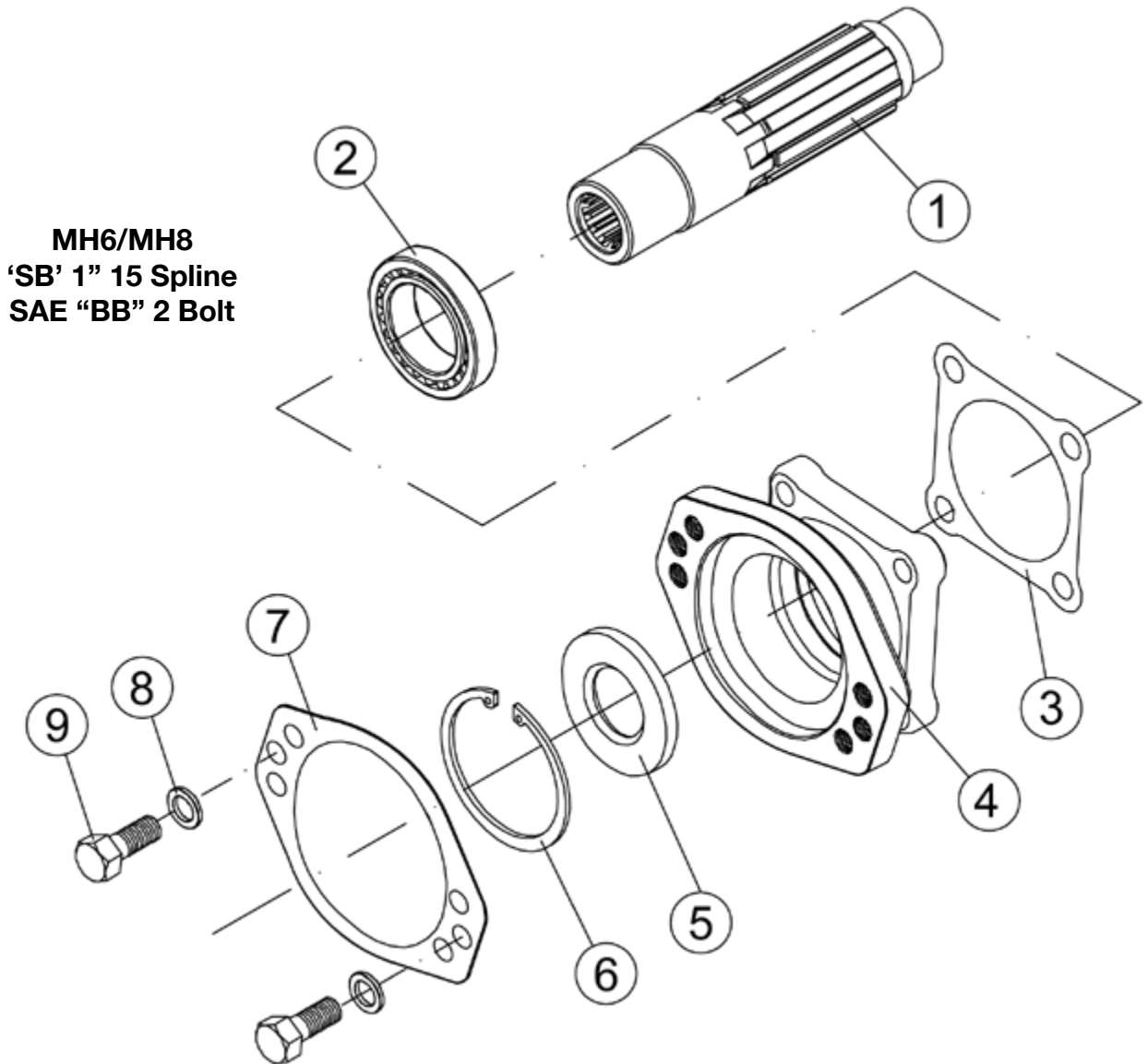
**Drawings &  
 Parts Lists**

## MH6/MH8 1-1/4" Round Output Shaft Parts List

Item	Part Number	Alternate #	Description	Quantity
1	P-22-0134	MPN600134	SNAP RING	1
2	P-20-0121	MPN600121	OUTPUT SHAFT SEAL	1
3	P-37-0705	MPN600705	OPEN END CAP BOLT	4
4	P-39-0146	MPN600146	WASHER	4
5	P-09-0099	MPN600099	OPEN END CAP	1
6	P-19-0048	MPN600048	GASKET	1
7	P-14-0115	MPN600115	OUTPUT SHAFT BEARING	1
8	P-22-0133	MPN600133	OUTPUT SHAFT SNAP RING	1
9	P-07-0106	MPN600106	OUTPUT SHAFT	1
10	P-44-0151	MPN600151	5/16" WOODRUFF KEY	1

Drawings &  
Parts Lists

## MH6/MH8 'SB' 1" 15 Spline SAE "BB" 2 Bolt Output Flange Drawing



Drawings &  
 Parts Lists

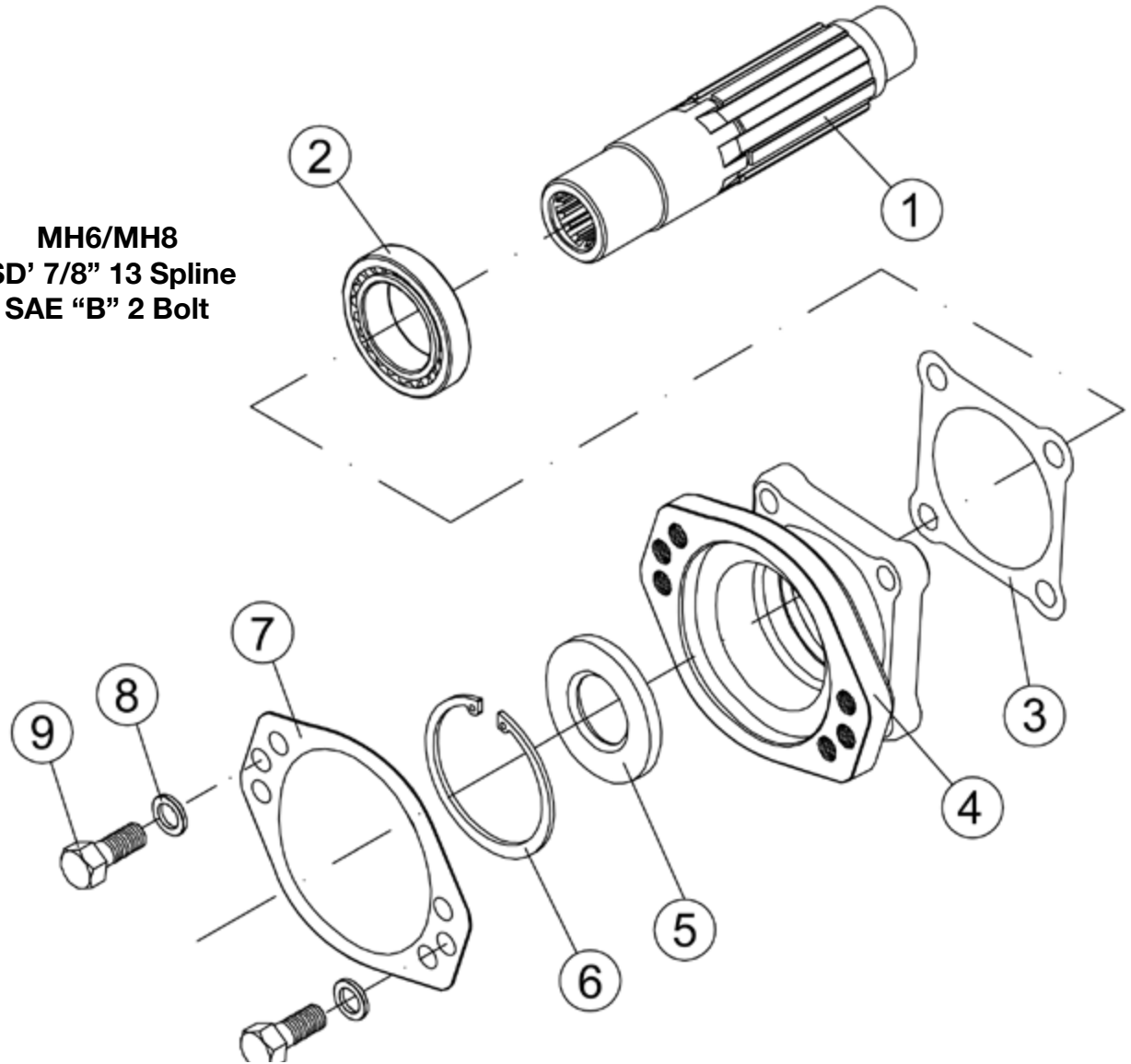
## MH6/MH8 'SB' 1" 15 Spline SAE "BB" 2 Bolt Output Flange Parts List

Item	Part Number	Alternate #	Description	Quantity
1	P-07-0108	MPN600108	Output Shaft	1
2	P-14-0115	MPN600115	Output Shaft Bearing	1
3	P-19-0048	MPN600048	End Cap Cover Gasket	1
4	P-08-0530	MPN600530	Output Flange	1
5	P-20-0121	MPN600121	Output Shaft Seal	1
6	P-22-0134	MPN600134	Flange Seal Snap Ring	1
7	P-19-0628	MPN600628	Pump to Flange Gasket	1
8	P-39-0635	MPN600635	Pump to Flange Washer	2
9	P-37-0036	MPN600036	Pump to Flange Cap Screw	2

Drawings &  
Parts Lists

## MH6/MH8 'SD' 7/8" 13 Spline SAE "B" 2 Bolt Output Flange Drawing

**MH6/MH8  
'SD' 7/8" 13 Spline  
SAE "B" 2 Bolt**



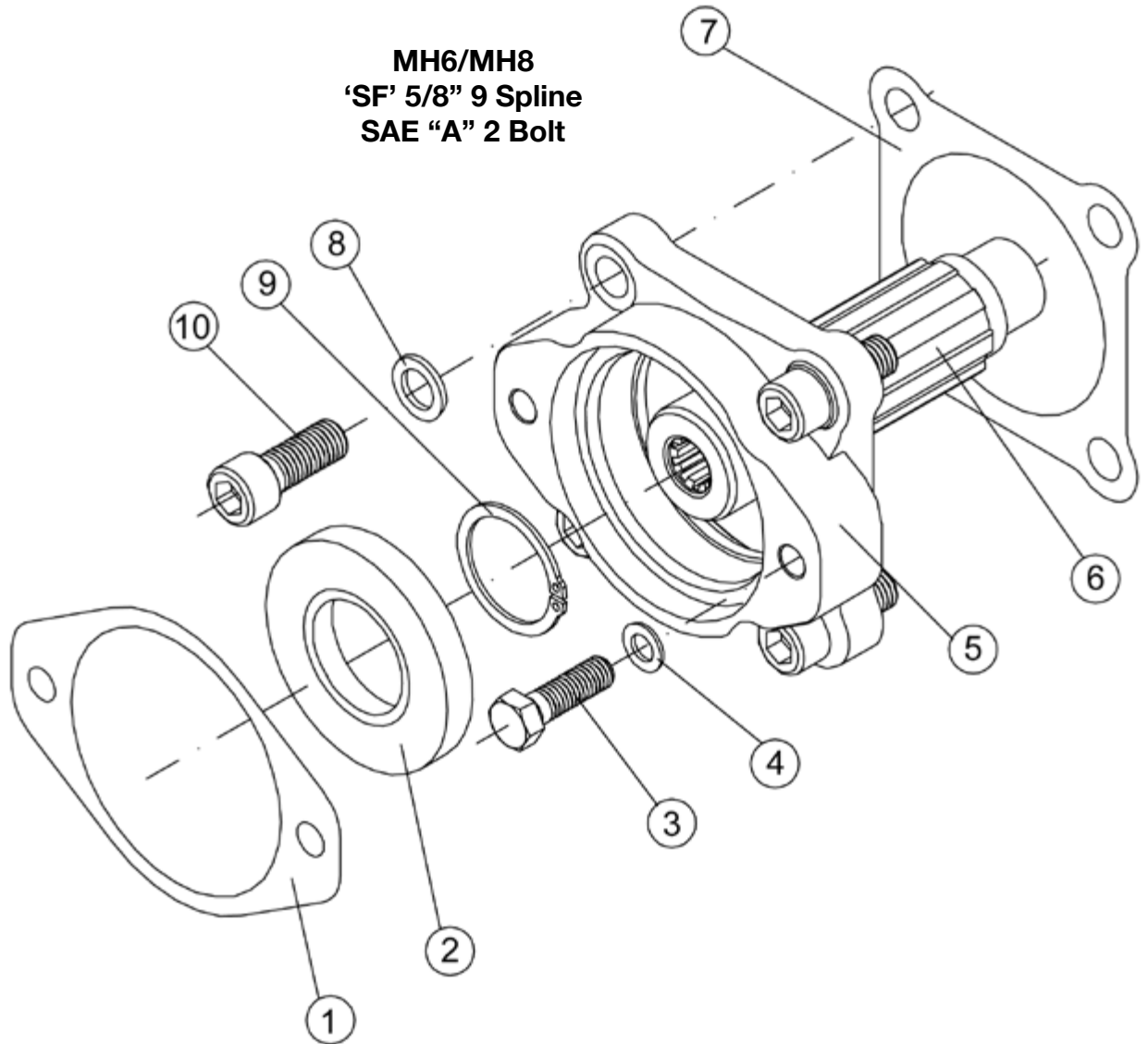
Drawings &  
 Parts Lists

## MH6/MH8 'SD' 7/8" 13 Spline SAE "B" 2 Bolt Output Flange Parts List

Item	Part Number	Alternate #	Description	Quantity
1	P-07-0107	MPN600107	Output Shaft	1
2	P-14-0115	MPN600115	Output Shaft Bearing	1
3	P-19-0048	MPN600048	End Cap Cover Gasket	1
4	P-08-0530	MPN600530	Output Flange	1
5	P-20-0121	MPN600121	Output Shaft Seal	1
6	P-22-0134	MPN600134	Flange Seal Snap Ring	1
7	P-19-0628	MPN600628	Pump to Flange Gasket	1
8	P-39-0635	MPN600635	Pump to Flange Washer	2
9	P-37-0036	MPN600036	Pump to Flange Cap Screw	2

Drawings &  
Parts Lists

## MH6/MH8 'SF' 5/8" 9 Spline SAE "A" 2 Bolt Output Flange Drawing



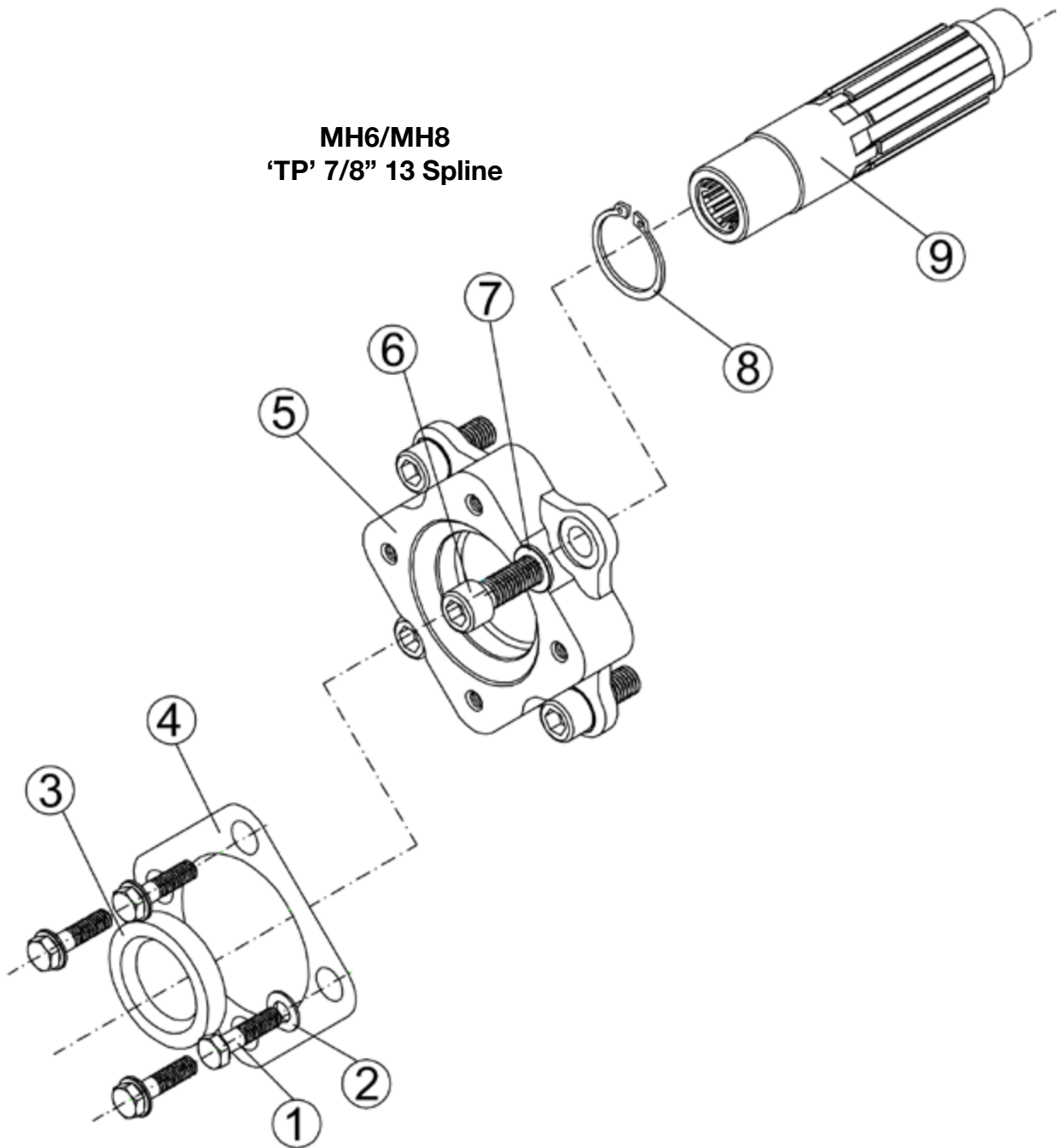
Drawings &  
 Parts Lists

**MH6/MH8 'SF' 5/8" 9 Spline  
 SAE "A" 2 Bolt Output Flange Parts List**

Item	Part Number	Alternate #	Description	Quantity
1	P-19-0047	MPN600047	PUMP TO FLANGE GASKET	1
2	P-20-0121	MPN600121	OUTPUT SHAFT SEAL	1
3	P-37-0037	MPN600037	PUMP TO FLANGE MOUNTING BOLT	2
4	P-39-0141	MPN600141	WASHER	2
5	P-08-0042	MPN600042	FLANGE HOUSING	1
6	P-07-0105	MPN600105	OUTPUT SHAFT	1
7	P-19-0048	MPN600048	FLANGE GASKET	1
8	P-39-0146	MPN600146	WASHER	4
9	P-22-0133	MPN600133	OUTPUT SHAFT SNAP RING	1
10	P-36-0020	MPN600020	FLANGE MOUNTING ALLEN HEAD BOLT	4

Drawings &  
Parts Lists

# MH6/MH8 'TP' 7/8" 13 Spline Output Flange (For Chelsea® Pumps) Drawing



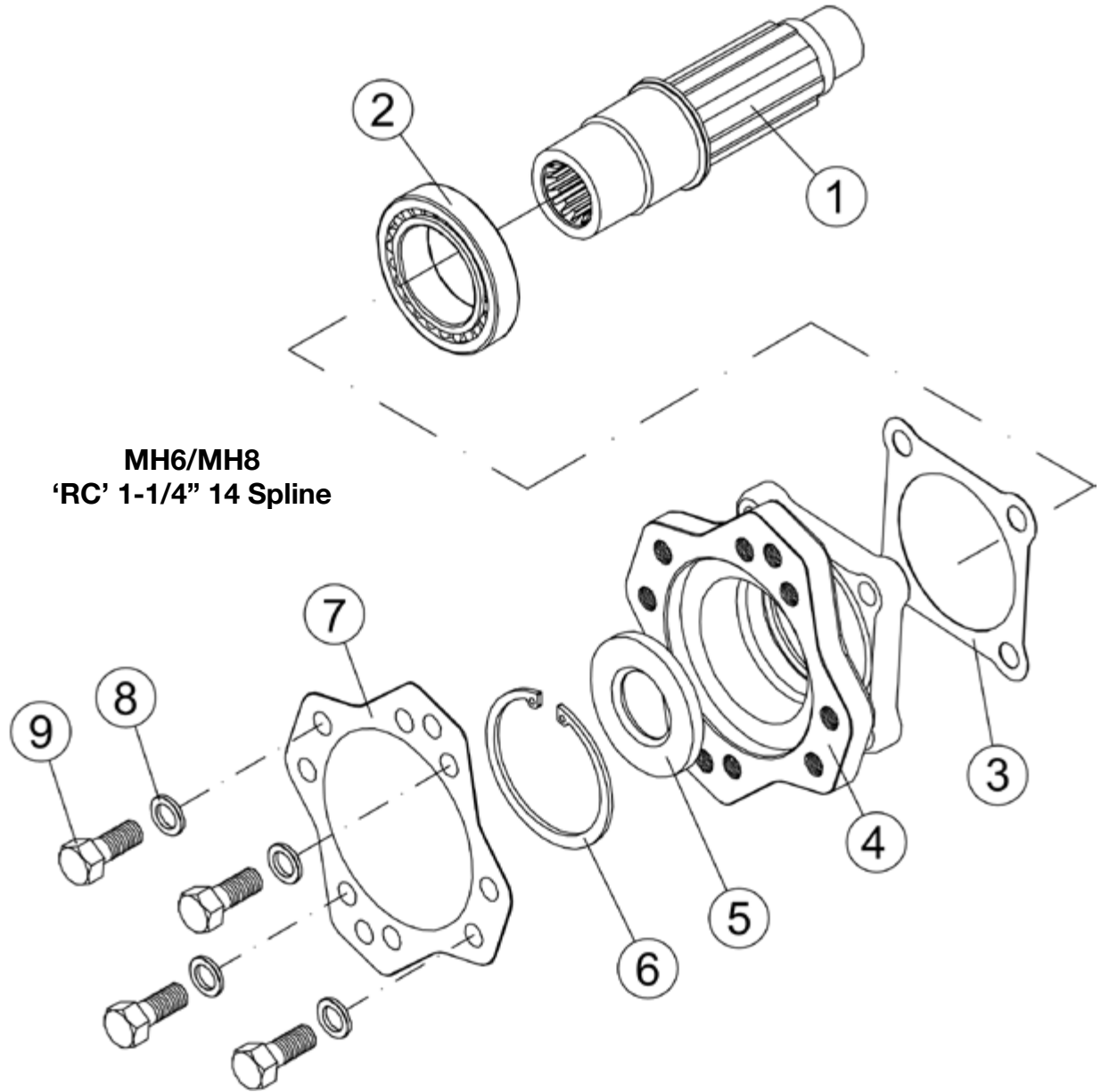


## MH6/MH8 'TP' 7/8" 13 Spline Output Flange (For Chelsea® Pumps) Parts List

Item	Part Number	Alternate #	Description	Quantity
1	P-37-0152	MPN600152	PUMP TO FLANGE CAP SCREW	4
2	P-39-0145	MPN600145	PUMP TO FLANGE WASHER	4
3	P-20-0122	MPN600122	OUTPUT SHAFT SEAL	1
4	P-19-0046	MPN600046	PUMP TO FLANGE GASKET	1
5	P-08-0043	MPN600043	FLANGE HOUSING	1
6	P-36-0020	MPN600020	FLANGE CAP SCREW	4
7	P-39-0146	MPN600146	FLANGE WASHER	4
8	P-22-0133	MPN600133	OUTPUT SHAFT SNAP RING	1
9	P-07-0160	MPN600160	OUTPUT SHAFT	1

Drawings &  
Parts Lists

## MH6/MH8 'RC' 1-1/4" 14 Spline Output Flange Drawing



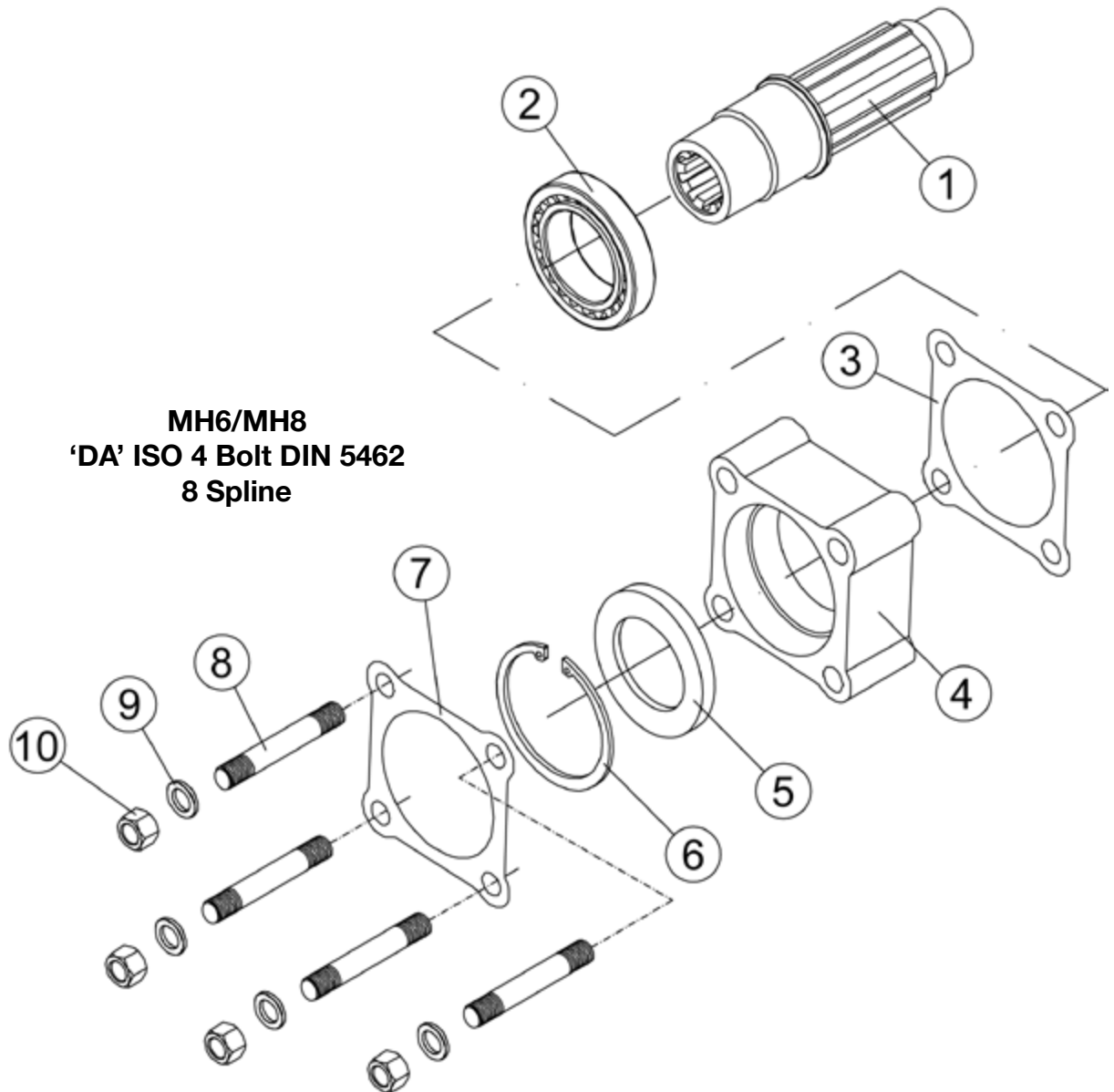
Drawings &  
 Parts Lists

## MH6/MH8 'RC' 1-1/4" 14 Spline Output Flange Parts List

Item	Part Number	Alternate #	Description	Quantity
1	P-07-0531	MPN600531	Output Shaft	1
2	P-14-0279	MPN600279	Output Shaft Bearing	1
3	P-19-0048	MPN600048	End Cap Cover Gasket	1
4	P-08-0044	MPN600044	Output Flange	1
5	P-20-0587	MPN600587	Output Shaft Seal 50x72x10	1
6	P-22-0134	MPN600134	Flange Seal Snap Ring	1
7	P-19-0045	MPN600045	Pump to Flange Gasket	1
8	P-39-0635	MPN600635	Pump to Flange Washer	4
9	P-37-0036	MPN600036	Pump to Flange Cap Screw	4

Drawings &  
Parts Lists

## MH6/MH8 'DA' ISO 4 Bolt DIN 5462 8 Spline Output Flange Drawing



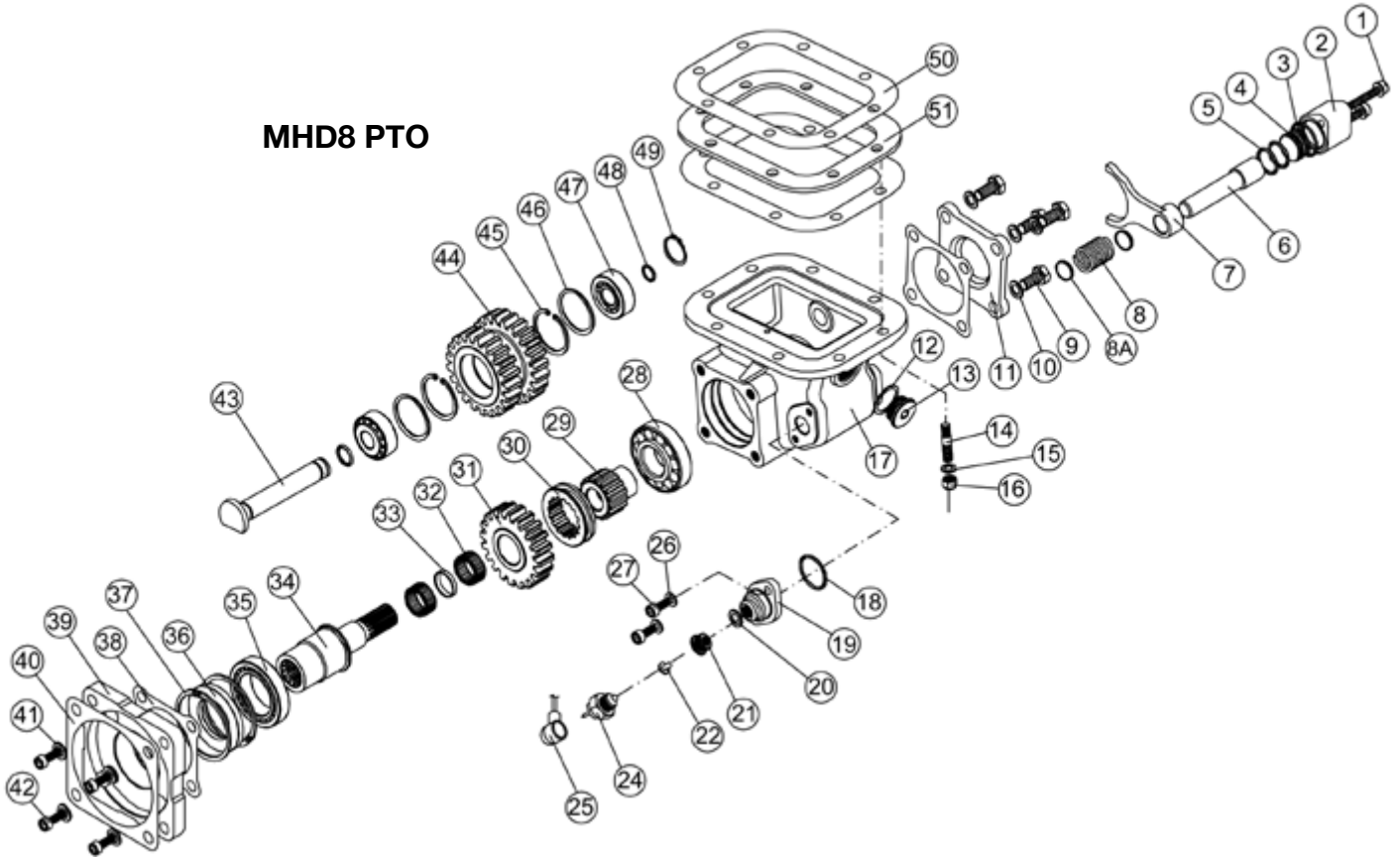
Drawings &  
 Parts Lists

## MH6/MH8 'DA' ISO 4 Bolt DIN 5462 8 Spline Output Flange Parts List

Item	Part Number	Alternate #	Description	Quantity
1	P-07-0578	MPN600578	Output Shaft	1
2	P-14-0279	MPN600279	Output Bearing	1
3	P-19-0048	MPN600048	End Cap Cover Gasket	1
4	P-08-0623	MPN600623	ISO 4 Bolt Flange	1
5	P-20-0602	MPN600602	Output Shaft Seal 50x75x10	1
6	P-22-0626	MPN600626	Flange Seal Snap Ring	1
7	P-19-0048	MPN600048	End Cap Cover Gasket	1
8	P-38-0624	MPN600624	Flange Stud	4
9	P-39-0146	MPN600146	Washer	4
10	P-40-0094	MPN600094	Mounting Nut	4

# MHD8 PTO Drawing

**MHD8 PTO**



Drawings &  
 Parts Lists

## MHD8 PTO Parts List

Item	Part Number	Alternate #	Description	Quantity
				MHD8
1	P-36-0290	MPN600290	ALLEN HEAD BOLT	2
2	P-09-0275	MPN600275	PISTON CARRIER COVER	1
3	P-21-0273	MPN600273	O-RING (VITON)	1
4	P-26-0276	MPN600276	SHIFTER PISTON	1
5	P-21-0274	MPN600274	O-RING (VITON)	2
6	P-26-0280	MPN600280	SHIFTER SHAFT	1
7	P-27-0300	MPN600300	SHIFTER FORK	1
8	P-28-0284	MPN600284	SHIFTER SHAFT SPRING	1
8A	P-32-0281	MPN600281	SHIM FOR SHAFT SPRING	2
9	P-37-0035	MPN600035	END COVER CAP SCREW	4
10	P-39-0146	MPN600146	WASHER	4
11	P-09-0272	MPN600272	END CAP	1
12	P-39-0288	MPN600288	SEALING WASHER	1
13	P-30-0277	MPN600277	BACKLASH PLUG	1
14	P-38-0175	MPN600175	STANDARD MOUNTING STUD	8
	P-37-0157	MPN600157	DEEP MOUNT MOUNTING CAP SCREW	8
	P-37-0156	MPN600156	METRIC MOUNTING CAP SCREW	8
15	P-39-0210	MPN600210	MOUNTING WASHER	8
	P-39-0255	MPN600255	METRIC MOUNTING WASHER	8
16	P-40-0301	MPN600301	MOUNTING TOP LOCK NUT	8
17	P-01-0633	MPN600261	HD8 HOUSING	1
18	P-21-0101	MPN600101	O-RING (VITON)	1
19	P-09-0320	MPN600320	SENDING UNIT COVER	1
20	P-39-0523	MPN600523	SEALING WASHER	1
21	P-29-0211	MPN600211	SENSOR ADAPTER	1
22	P-33-0212	MPN600212	SENSOR PIN	1
23	P-21-0181	MPN600181	O-RING	1
24	P-18-0334	MPN600334	SENDING UNIT SINGLE POLE	1
25	P-24-0333	MPN600333	WIRING HARNESS SINGLE POLE	1
26	P-39-0145	MPN600145	WASHER	2
27	P-36-0018	MPN600018	ALLEN HEAD BOLT	2
28	P-14-0115	MPN600115	NON-LOAD SIDE BEARING	1
29	P-29-0260	MPN600260	GEAR BUSHING	1
30	P-15-0259	MPN600259	CLUTCH COLLAR	1
31		SEE CHART #1	OUTPUT RATIO GEAR	1

Drawings &  
 Parts Lists

## MHD8 PTO Parts List Cont.

Item	Part Number	Alternate #	Description	Quantity
				MHD8
32	P-14-0278	MPN600278	NEEDLE BEARINGS	1
33	P-14-0661	MPN600661	NEEDLE BEARING	1
34		SEE CHART #2	OUTPUT SHAFT	1
35	P-14-0279	MPN600279	OUTPUT SHAFT LOAD BEARING	1
36	P-20-0291	MPN600291	OUTPUT SHAFT SEAL	1
37	P-22-0287	MPN600287	OUTPUT SHAFT SEAL SNAP RING	2
38	P-19-0189	MPN600189	END COVER GASKET	2
39	P-08-0318	MPN600318	OUTPUT FLANGE	1
40	P-19-0323	MPN600323	FLANGE GASKET	1
41	P-39-0481	MPN600481	WASHER	4
42	P-36-0308	MPN600308	FLANGE ALLEN HEAD BOLTS	4
43	P-13-0091	MPN600091	IDLER PIN	1
44		SEE CHART #1	INPUT DOUBLE UPPER GEAR	1
45	P-22-0286	MPN600286	INPUT GEAR SNAP RING	2
46	P-32-0282	MPN600282	INPUT BEARING SHIMS	2
47	P-14-0117	MPN600117	INPUT GEAR BEARINGS CONE	2
47A	P-14-0611	MPN600611	INPUT GEAR BEARINGS CUP	2
47B	P-14-0612	MPN600612	INPUT GEAR BEARING (CUP & CONE)	2
48	P-21-0100	MPN600100	IDLER PIN O-RINGS	2
49	P-22-0213	MPN600213	IDLER PIN SNAP RING	1
50	P-19-0050	MPN600050	8 BOLT MOUNTING GASKET .010	2
	P-19-0051	MPN600051	8 BOLT MOUNTING GASKET .015	2
	P-19-0052	MPN600052	8 BOLT MOUNTING GASKET .032	2
51	P-31-8196	MPN600285	MOUNTING SPACER	1



Drawings &  
 Parts Lists

## MHD8 Output Shafts List - Chart #2

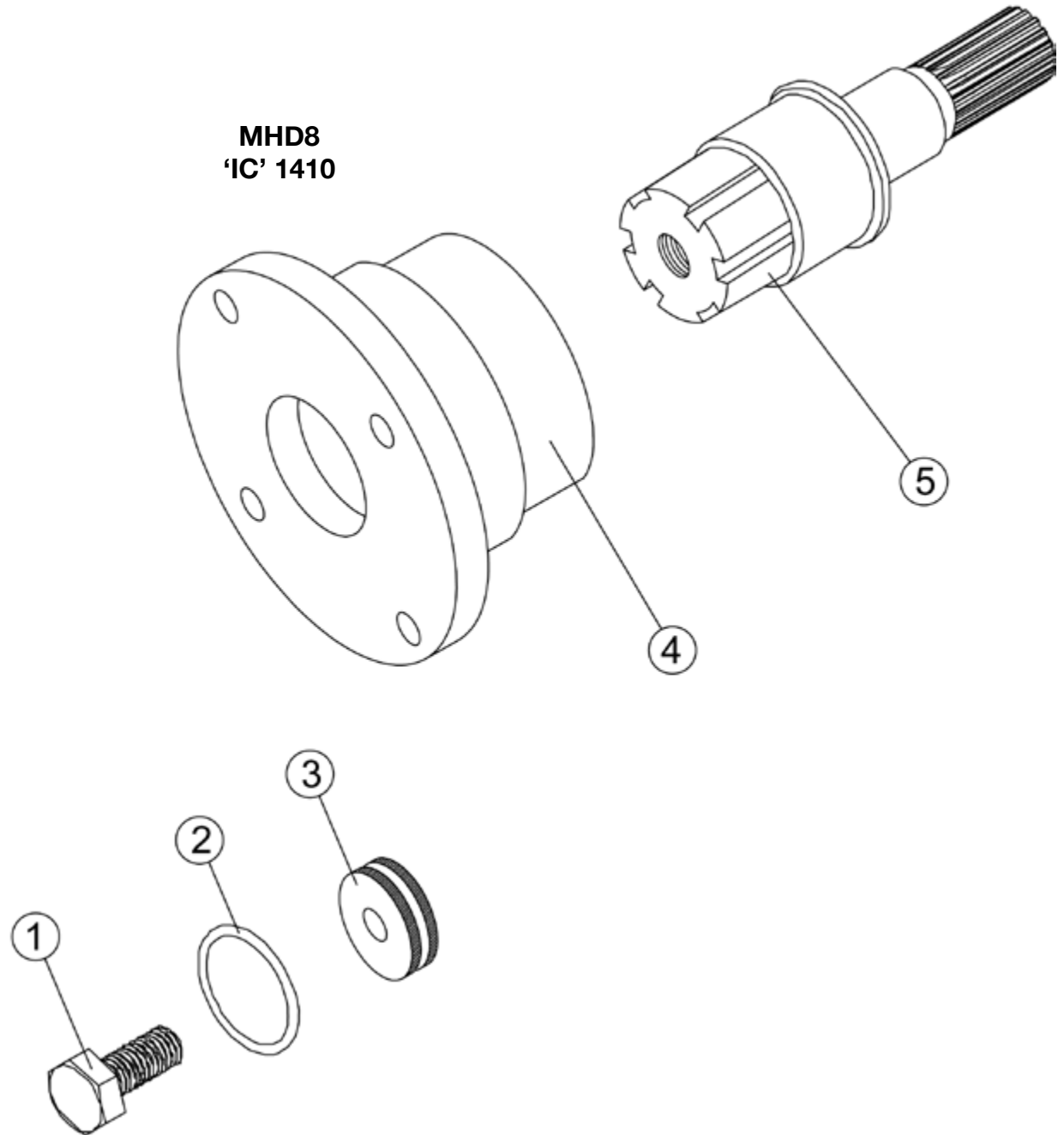
Part Number	Alternate #	Description	Quantity
			MHD8
P-07-0257	MPN600257	1 1/4" ROUND OUTPUT SHAFT WITH 1 1/8" X 5/16" KEY (KEY # MPN600151 or MWK-002)	1
P-07-0319	MPN600319	1 1/4" 14 SPLINE OUTPUT SHAFT	1
P-38-0193	MPN100193	1410 SPICER FLANGE	1

Drawings &  
 Parts Lists

## MHD8 Gear Ratio Sets - Chart #1

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	P-04-0313	MPN600313 (15T)	(23T)	P-03-0315	MPN600315 (26T)
RATIO "B" - 24	P-04-0592	MPN600592 (15T)	(25T)	P-03-0315	MPN600315 (26T)
RATIO "C" - 01	P-04-0541	MPN600541 (17T)	(23T)	P-03-0540	MPN600540 (24T)
RATIO "C" - 24	P-04-0589	MPN600589 (17T)	(25T)	P-03-0540	MPN600540 (24T)
RATIO "E" - 01	P-04-0256	MPN600256 (19T)	(23T)	P-03-0258	MPN600258 (22T)
RATIO "E" - 24	P-04-0317	MPN600317 (19T)	(25T)	P-03-0258	MPN600258 (22T)
RATIO "J" - 01	P-04-0314	MPN600314 (21T)	(23T)	P-03-0316	MPN600316 (20T)
RATIO "O" - 01	P-04-0192	MPN100192 (23T)	(23T)	P-03-0191	MPN100191 (18T)

## MHD8 'IC' 1410 Output Flange Drawing

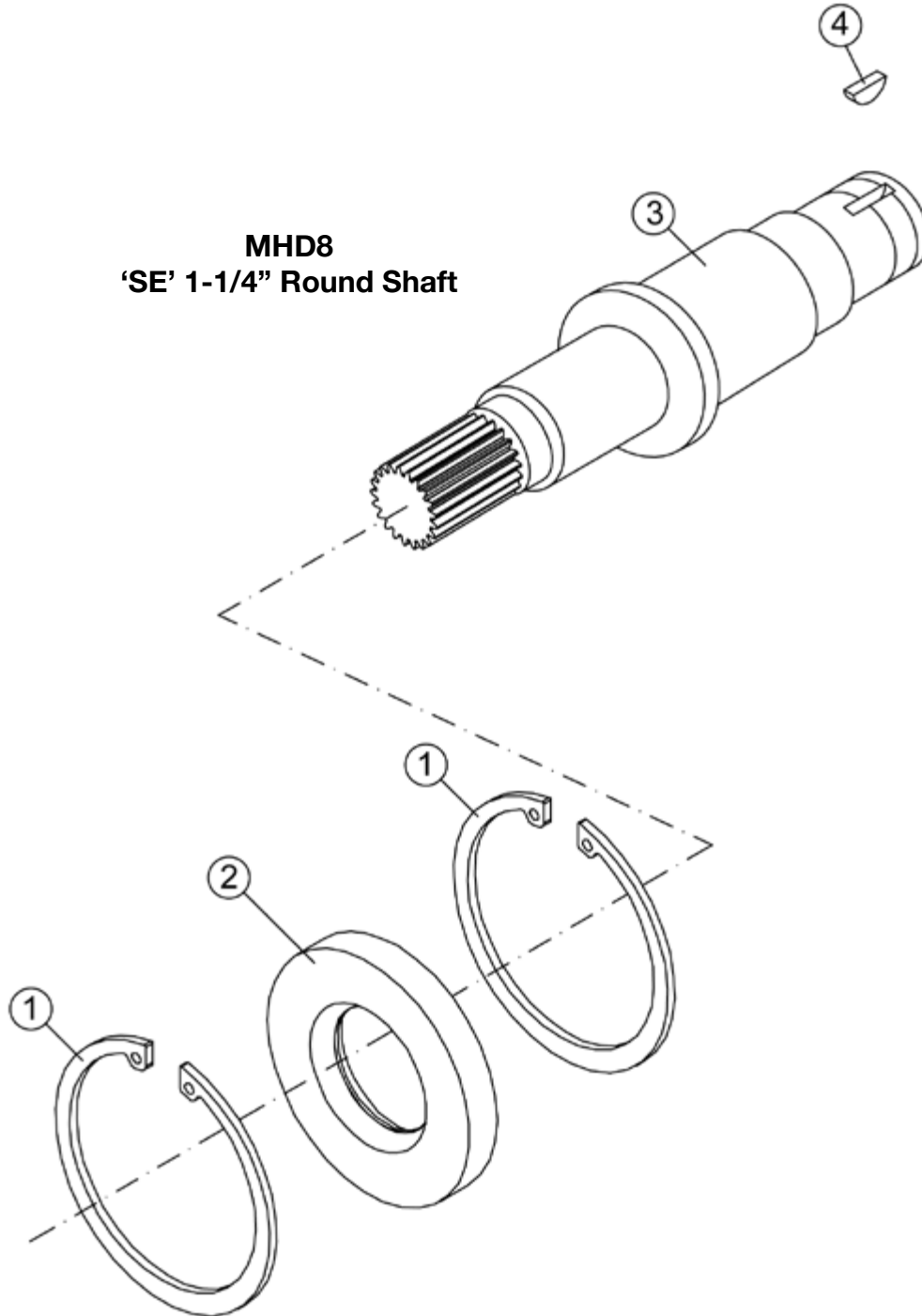


**Drawings &  
Parts Lists**

## MHD8 'IC' 1410 Output Flange Parts List

Item	Part Number	Alternate #	Description	Quantity
1	P-37-0035	MPN600035	Capscrew	1
2	P-21-0101	MPN600101	O-Ring	1
3	P-39-0195	MPN100195	Washer	1
4	P-08-0194	MPN100194	Flange	1
5	P-07-0193	MPN100193	Output Shaft	1

## MHD8 'SE' 1-1/4" Round Shaft Output Flange Drawing



**Drawings &  
Parts Lists**

## MHD8 'SE' 1-1/4" Round Shaft Parts List

Item	Part Number	Alternate #	Description	Quantity
1	P-22-0287	MPN600287	OUTPUT SHAFT SEAL SNAP RING	2
2	P-20-0291	MPN600291	OUTPUT SHAFT SEAL	1
3	P-07-0257	MPN600257	1 1/4" ROUND OUTPUT SHAFT	1
4	P-44-0151	MPN600151	1 1/8" X 5/16" WOODRUFF KEY	1

Flange  
 Conversion Kits  
 for MH6/MH8  
 Series

**RA - Flange P-47-0227 (MPN600227)**  
**“RA” Conversion for MH6 & MH8 Series**

Metaris #	Alternate #	Description	Quantity
P-08-0044	MPN600044	ROTATABLE FLANGE	1
P-18-0134	MPN600134	FLANGE SEAL SNAP RING	1
P-20-0121	MPN600121	OUTPUT SHAFT SEAL	1
P-19-0048	MPN600048	END COVER GASKET	1
P-19-0045	MPN600045	FLANGE GASKET	1
P-07-0107	MPN600107	7/8" 13 SPLINE OUTPUT SHAFT	1
P-22-0133	MPN600133	OUTPUT SHAFT SNAP RING	1
P-39-0146	MPN600146	END CAP WASHER	4
P-40-0094	MPN600094	NYLOCK NUTS	4
P-38-0136	MPN600136	FLANGE STUDS	4
P-39-0635	MPN600635	PUMP TO FLANGE WASHERS	4
P-37-0036	MPN600036	PUMP TO FLANGE CAP SCREWS	4

Flange  
 Conversion Kits  
 for MH6/MH8  
 Series

**SE - Flange P-47-0231 (MPN600231)**  
**“SE” Conversion for MH6 & MH8 Series**

Metaris #	Alternate #	Description	Quantity
P-09-0099	MPN600099	OPEN END COVER	1
P-20-0121	MPN600121	OUTPUT SHAFT SEAL	1
P-19-0048	MPN600048	END COVER GASKET	1
P-22-0134	MPN600134	OPEN END CAP SNAP RING	1
P-07-0106	MPN600106	1 1/4" OUTPUT SHAFT	1
P-37-0035	MPN600035	END COVER CAP SCREWS	4
P-39-0146	MPN600146	END CAP WASHERS	4
P-44-0151	MPN600151	5/16" Woodruff Key	1

Flange  
 Conversion Kits  
 for MH6/MH8  
 Series

**RB - Flange P-47-0229 (MPN600229)**  
**“RB” Conversion for MH6 & MH8 Series**

Metaris #	Alternate #	Description	Quantity
P-08-0044	MPN600044	ROTATABLE FLANGE	1
P-22-0134	MPN600134	FLANGE SEAL SNAP RING	1
P-20-0121	MPN600121	OUTPUT SHAFT SEAL	1
P-19-0048	MPN600048	END COVER GASKET	1
P-19-0045	MPN600045	FLANGE GASKET	1
P-07-0108	MPN600108	1" 15 SPLINE OUTPUT SHAFT	1
P-22-0133	MPN600133	OUTPUT SHAFT SNAP RING	1
P-39-0146	MPN600146	END CAP WASHER	4
P-40-0094	MPN600094	NYLOCK NUTS	4
P-38-0136	MPN600136	FLANGE STUDS	4
P-39-0635	MPN600635	PUMP TO FLANGE WASHERS	4
P-37-0036	MPN600036	PUMP TO FLANGE CAP SCREWS	4

Flange  
 Conversion Kits  
 for MH6/MH8  
 Series

**TP - “Tyrone” Flange P-47-0230 (MPN600230)**  
**“TP” Conversion for MH6 & MH8 Series**

Metaris #	Alternate #	Description	Quantity
P-07-0160	MPN600160	7/8" 13 SPLINE "TP" OUTPUT SHAFT	1
P-22-0133	MPN600133	OUTPUT SHAFT SNAP RING	1
P-39-0146	MPN600146	END CAP ALUMINUM WASHER	4
P-36-0020	MPN600020	ALLEN HEAD SCREW M12x30	4
P-08-0043	MPN600043	TYRONE FLANGE HOUSING	1
P-19-0046	MPN600046	FLANGE TO PUMP GASKET	1
P-19-0048	MPN600048	END COVER GASKET	1
P-20-0122	MPN600122	"TP" FLANGE OUTPUT SEAL	1
P-37-0152	MPN600152	CAP SCREWS 5/16 UNC X 30	4
P-39-0145	MPN600145	PUMP TO FLANGE WASHER 9.9	4

Flange  
 Conversion Kits  
 for MH6/MH8  
 Series

**SF - Flange P-47-0224 (MPN600224)**  
**"SF" Conversion for MH6 & MH8 Series**

Metaris #	Alternate #	Description	Quantity
P-36-0020	MPN600020	ALLEN HEAD SCREW M12x30	4
P-22-0133	MPN600133	OUTPUT SHAFT SNAP RING	1
P-39-0146	MPN600146	END CAP ALUMINUM WASHER	4
P-08-0042	MPN600042	"SF" FLANGE HOUSING	1
P-19-0048	MPN600048	END COVER GASKET	1
P-07-0105	MPN600105	5/8" 9 SPLINE OUTPUT SHAFT	1
P-39-0141	MPN600141	FLANGE WASHER	2
P-37-0037	MPN600037	PUMP TO FLANGE CAP SCREW	2
P-20-0121	MPN600121	OUTPUT SHAFT SEAL	1
P-19-0047	MPN600047	FLANGE GASKET	1

Flange  
 Conversion Kits  
 for MH6/MH8  
 Series

**DA - Flange P-47-0648 (MPN600648)**  
**"DA" Conversion for MH6 & MH8 Series**

Metaris #	Alternate #	Description	Quantity
P-07-0578	MPN600578	OUTPUT SHAFT SEAL	1
P-14-0279	MPN600279	OUTPUT BEARING	1
P-19-0048	MPN600048	END COVER GASKET	2
P-08-0623	MPN600623	ISO 4 BOLT FLANGE	1
P-20-0602	MPN600602	OUTPUT SHAFT SEAL	1
P-22-0626	MPN600626	FLANGE SEAL SNAP RING	1
P-38-0624	MPN600624	FLANGE STUD	4
P-39-0146	MPN600146	WASHER	4
P-40-0094	MPN600094	MOUNTING NUT	4



Flange  
 Conversion Kits  
 for MH6/MH8  
 Series

**RC - Flange P-47-0649 (MPN600649)**  
**“RC” Conversion for MH6 & MH8 Series**

Metaris #	Alternate #	Description	Quantity
P-07-0531	MPN600531	OUTPUT SHAFT	1
P-14-0279	MPN600279	OUTPUT SHAFT BEARING	1
P-19-0048	MPN600048	END CAP COVER GASKET	1
P-08-0044	MPN600044	OUTPUT FLANGE	1
P-20-0587	MPN600587	OUTPUT SHAFT SEAL	1
P-22-0134	MPN600134	FLANGE SEAL SNAP RING	1
P-19-0045	MPN600045	PUMP TO FLANGE GASKET	1
P-39-0635	MPN600635	PUMP TO FLANGE WASHER	4
P-37-0036	MPN600036	PUMP TO FLANGE CAP SCREW	4

Flange  
 Conversion Kits  
 for MH6/MH8  
 Series

**GA - Flange P-47-0544 (MPN600544)**  
**“GA” Greasable Shaft Conversion for MH6 & MH8 Series**

Metaris #	Alternate #	Description	Quantity
P-04-0078	MPN100078	GREASABLE END COVER	1
P-20-0504	MPN600504	GREASABLE END COVER SEAL	1
P-19-0048	MPN600048	END COVER GASKET	1
P-07-0196	MPN100196	7/8" 13 SPLINE GREASABLE SHAFT W / GREASE FITTING	1
P-37-0035	MPN600035	END COVER CAP SCREWS	4
P-39-0146	MPN600146	END CAP WASHERS	4

Flange  
 Conversion Kits  
 for MH6/MH8  
 Series

**GB - Flange P-47-0545 (MPN600545)**  
**“GB” Greasable Shaft Conversion for MH6 & MH8 Series**

Metaris #	Alternate #	Description	Quantity
P-04-0078	MPN100078	GREASABLE END COVER	1
P-20-0504	MPN600504	GREASABLE END COVER SEAL	1
P-19-0048	MPN600048	END COVER GASKET	1
P-07-0219	MPN100219	1" 15 SPLINE GREASABLE SHAFT W / GREASE FITTING	1
P-37-0035	MPN600035	END COVER CAP SCREWS	4
P-39-0146	MPN600146	END CAP WASHERS	4

Flange  
 Conversion Kits  
 for MH6/MH8  
 Series

**Constant Mesh Kit P-47-0032 (MPN600032)**  
**Constant Mesh Conversion for MH6 & MH8 Series**

Metaris #	Alternate #	Description	Quantity
P-10-0153	MPN600153	CONSTANT MESH COVER	1
P-29-0001	MPN600001	CONSTANT MESH BUSHING LARGE	1
P-29-0000	MPN600000	CONSTANT MESH BUSHING SMALL	1
P-19-0049	MPN600049	SHIFTER COVER GASKET	1
P-36-0019	MPN600019	ALLEN SCREW SHIFTER COVER	4

MH6 Seal Kits

**MH6 Seal Kit P-46-0264 (MPN600264)**  
 For "RA" & "RB" Output

Metaris #	Alternate #	Description	Quantity
P-22-0213	MPN600213	IDLER PIN SNAP RING	1
P-20-0121	MPN600121	OUTPUT SHAFT SEAL	1
P-21-0100	MPN600100	IDLER PIN O-RING	2
P-21-0609	MPN600609	IDLER PIN PLUG O-RING	2*
P-19-0048	MPN600048	END COVER GASKET	2
P-19-0049	MPN600049	SHIFTER COVER GASKET	1
P-19-0045	MPN600045	FLANGE GASKET	1
P-19-0002	MPN600002	.010" MOUNTING GASKET	1
P-19-0003	MPN600003	.015" MOUNTING GASKET	1
P-19-0004	MPN600004	.032" MOUNTING GASKET	1
P-21-0103	MPN600103	O-RING GASKET	1

\* This O-ring is for new style idler pin.

MH6 Seal Kits

**MH6 Seal Kit P-46-0265 (MPN600265)**  
 For "SE" Output

Metaris #	Alternate #	Description	Quantity
P-22-0213	MPN600213	IDLER PIN SNAP RING	1
P-20-0121	MPN600121	OUTPUT SHAFT SEAL	1
P-21-0100	MPN600100	IDLER PIN O-RING	2
P-21-0609	MPN600609	IDLER PIN PLUG O-RING	2*
P-19-0048	MPN600048	END COVER GASKET	2
P-19-0049	MPN600049	SHIFTER COVER GASKET	1
P-44-0151	MPN600151	5/16" KEY	1
P-19-0002	MPN600002	.010" MOUNTING GASKET	1
P-19-0003	MPN600003	.015" MOUNTING GASKET	1
P-19-0004	MPN600004	.032" MOUNTING GASKET	1
P-21-0103	MPN600103	O-RING GASKET	1

\* This O-ring is for new style idler pin.

MH6 Seal Kits

**MH6 Seal Kit** **P-46-0266** (MPN600266)  
 For "TP" Output

Metaris #	Alternate #	Description	Quantity
P-22-0213	MPN600213	IDLER PIN SNAP RING	1
P-20-0122	MPN600122	OUTPUT SHAFT SEAL	1
P-21-0100	MPN600100	IDLER PIN O-RING	2
P-21-0609	MPN600609	IDLER PIN PLUG O-RING	2*
P-19-0048	MPN600048	END COVER GASKET	2
P-19-0049	MPN600049	SHIFTER COVER GASKET	1
P-19-0046	MPN600046	FLANGE TO PUMP GASKET	1
P-19-0002	MPN600002	.010" MOUNTING GASKET	1
P-19-0003	MPN600003	.015" MOUNTING GASKET	1
P-19-0004	MPN600004	.032" MOUNTING GASKET	1
P-21-0103	MPN600103	O-RING GASKET	1

\* This O-ring is for new style idler pin.

MH6 Seal Kits

**MH6 Seal Kit** **P-46-0267** (MPN600267)  
 For "SF" Output

Metaris #	Alternate #	Description	Quantity
P-22-0213	MPN600213	IDLER PIN SNAP RING	1
P-20-0121	MPN600121	OUTPUT SHAFT SEAL	1
P-21-0100	MPN600100	IDLER PIN O-RING	2
P-21-0609	MPN600609	IDLER PIN PLUG O-RING	2*
P-19-0048	MPN600048	END COVER GASKET	2
P-19-0049	MPN600049	SHIFTER COVER GASKET	1
P-19-0047	MPN600047	FLANGE TO PUMP GASKET	1
P-19-0002	MPN600002	.010" MOUNTING GASKET	1
P-19-0003	MPN600003	.015" MOUNTING GASKET	1
P-19-0004	MPN600004	.032" MOUNTING GASKET	1
P-21-0103	MPN600103	O-RING GASKET	1

\* This O-ring is for new style idler pin.

MH8 Seal Kits

**MH8 Seal Kit P-46-0268 (MPN600268)**  
 For "RA" & "RB" Output

Metaris #	Alternate #	Description	Quantity
P-22-0213	MPN600213	IDLER PIN SNAP RING	1
P-20-0121	MPN600121	OUTPUT SHAFT SEAL	1
P-21-0100	MPN600100	IDLER PIN O-RING	2
P-21-0609	MPN600609	IDLER PIN PLUG O-RING	2*
P-19-0048	MPN600048	END COVER GASKET	2
P-19-0049	MPN600049	SHIFTER COVER GASKET	1
P-19-0045	MPN600045	FLANGE GASKET	1
P-19-0050	MPN600050	.010" MOUNTING GASKET	1
P-19-0051	MPN600051	.015" MOUNTING GASKET	1
P-19-0052	MPN600052	.032" MOUNTING GASKET	1
P-21-0103	MPN600103	O-RING GASKET	1

\* This O-ring is for new style idler pin.

MH8 Seal Kits

**MH8 Seal Kit P-46-0269 (MPN600269)**  
 For "SE" Output

Metaris #	Alternate #	Description	Quantity
P-22-0213	MPN600213	IDLER PIN SNAP RING	1
P-20-0121	MPN600121	OUTPUT SHAFT SEAL	1
P-21-0100	MPN600100	IDLER PIN O-RING	2
P-21-0609	MPN600609	IDLER PIN PLUG O-RING	2*
P-19-0048	MPN600048	END COVER GASKET	2
P-19-0049	MPN600049	SHIFTER COVER GASKET	1
P-44-0151	MPN600151	5/16" KEY	1
P-19-0050	MPN600050	.010" MOUNTING GASKET	1
P-19-0051	MPN600051	.015" MOUNTING GASKET	1
P-19-0052	MPN600052	.032" MOUNTING GASKET	1
P-21-0103	MPN600103	O-RING GASKET	1

\* This O-ring is for new style idler pin.

MH8 Seal Kits

**MH8 Seal Kit** **P-46-0270** (MPN600270)  
 For "SF" Output

Metaris #	Alternate #	Description	Quantity
P-22-0213	MPN600213	IDLER PIN SNAP RING	1
P-20-0121	MPN600121	OUTPUT SHAFT SEAL	1
P-21-0100	MPN600100	IDLER PIN O-RING	2
P-21-0609	MPN600609	IDLER PIN PLUG O-RING	2*
P-19-0048	MPN600048	END COVER GASKET	2
P-19-0049	MPN600049	SHIFTER COVER GASKET	1
P-19-0047	MPN600047	FLANGE TO PUMP GASKET	1
P-19-0050	MPN600050	.010" MOUNTING GASKET	1
P-19-0051	MPN600051	.015" MOUNTING GASKET	1
P-19-0052	MPN600052	.032" MOUNTING GASKET	1
P-21-0103	MPN600103	O-RING GASKET	1

\* This O-ring is for new style idler pin.

MH8 Seal Kits

**MH8 Seal Kit** **P-46-0271** (MPN600271)  
 For "TP" Output

Metaris #	Alternate #	Description	Quantity
P-22-0213	MPN600213	IDLER PIN SNAP RING	1
P-20-0122	MPN600122	OUTPUT SHAFT SEAL	1
P-21-0100	MPN600100	IDLER PIN O-RING	2
P-21-0609	MPN600609	IDLER PIN PLUG O-RING	2*
P-19-0048	MPN600048	END COVER GASKET	2
P-19-0049	MPN600049	SHIFTER COVER GASKET	1
P-19-0046	MPN600046	FLANGE TO PUMP GASKET	1
P-19-0050	MPN600050	.010" MOUNTING GASKET	1
P-19-0051	MPN600051	.015" MOUNTING GASKET	1
P-19-0052	MPN600052	.032" MOUNTING GASKET	1
P-21-0103	MPN600103	O-RING GASKET	1

\* This O-ring is for new style idler pin.

MHD8 Seal Kits

**MHD8 Seal Kit**      **P-46-0526**      (MPN600526)  
 For "RJ" Output

Metaris #	Alternate #	Description	Quantity
P-22-0213	MPN600213	IDLER PIN SNAP RING	1
P-21-0273	MPN600273	O-RING (VITON)	1
P-21-0100	MPN600100	IDLER PIN O-RING	2
P-19-0048	MPN600048	END COVER GASKET	2
P-21-0274	MPN600274	O-RING (VITON)	2
P-21-0101	MPN600101	O-RING (VITON)	1
P-21-0181	MPN600181	O-RING	1
P-19-0323	MPN600323	FLANGE GASKET	1
P-20-0291	MPN600291	OUTPUT SHAFT SEAL	1
P-19-0050	MPN600050	.010" MOUNTING GASKET	1
P-19-0051	MPN600051	.015" MOUNTING GASKET	1
P-19-0052	MPN600052	.032" MOUNTING GASKET	1

MHD8 Seal Kits

**MHD8 Seal Kit**      **P-46-0527**      (MPN600527)  
 For "SE" Output

Metaris #	Alternate #	Description	Quantity
P-22-0213	MPN600213	IDLER PIN SNAP RING	1
P-21-0273	MPN600273	O-RING (VITON)	1
P-21-0100	MPN600100	IDLER PIN O-RING	2
P-19-0048	MPN600048	END COVER GASKET	2
P-21-0274	MPN600274	O-RING (VITON)	2
P-21-0101	MPN600101	O-RING (VITON)	1
P-21-0181	MPN600181	O-RING	1
P-44-0151	MPN600151	1 1/8" x 5/16" KEY	1
P-20-0291	MPN600291	OUTPUT SHAFT SEAL	1
P-19-0050	MPN600050	.010" MOUNTING GASKET	1
P-19-0051	MPN600051	.015" MOUNTING GASKET	1
P-19-0052	MPN600052	.032" MOUNTING GASKET	1



MH6 Overhaul  
 Kits

**MH6 (Air Shift Only) Overhaul Kit**  
 For "RA" & "RB" Output

**P-48-0642 (MPN600642)**

Metaris #	Alternate #	Description	Quantity
P-22-0213	MPN600213	IDLER PIN SNAP RING	1
P-20-0121	MPN600121	OUTPUT SHAFT SEAL	1
P-21-0100	MPN600100	IDLER PIN O-RING	2
P-21-0609	MPN600609	IDLER PIN PLUG O-RING	2*
P-20-0024	MPN600024	CUP-SEAL/SHIFTER	1
P-21-0102	MPN600102	O-RING/SHIFTER	1
P-21-0101	MPN600101	O-RING/SHIFTER	1
P-23-0112	MPN600112	PRELOAD NUT	1
P-14-0117	MPN600117	INPUT GEAR BEARING	2
P-14-0114	MPN600114	NON-THRUST BEARING	1
P-14-0115	MPN600115	OUTPUT THRUST BEARING	1
P-19-0048	MPN600048	END COVER GASKET	2
P-19-0049	MPN600049	SHIFTER COVER GASKET	1
P-19-0045	MPN600045	FLANGE GASKET	1
P-19-0002	MPN600002	.010" MOUNTING GASKET	1
P-19-0003	MPN600003	.015" MOUNTING GASKET	1
P-19-0004	MPN600004	.032" MOUNTING GASKET	1
P-21-0103	MPN600103	O-RING GASKET	1

\* This O-ring is for new style idler pin.

MH6 Overhaul  
 Kits

## MH6 (Air Shift Only) Overhaul Kit For "SE" Output

**P-48-0643 (MPN600643)**

Metaris #	Alternate #	Description	Quantity
P-22-0213	MPN600213	IDLER PIN SNAP RING	1
P-20-0121	MPN600121	OUTPUT SHAFT SEAL	1
P-21-0100	MPN600100	IDLER PIN O-RING	2
P-21-0609	MPN600609	IDLER PIN PLUG O-RING	2*
P-20-0024	MPN600024	CUP-SEAL/SHIFTER	1
P-21-0102	MPN600102	O-RING/SHIFTER	1
P-21-0101	MPN600101	O-RING/SHIFTER	1
P-23-0112	MPN600112	PRELOAD NUT	1
P-14-0117	MPN600117	INPUT GEAR BEARING	2
P-14-0114	MPN600114	NON-THRUST BEARING	1
P-14-0115	MPN600115	OUTPUT THRUST BEARING	1
P-19-0048	MPN600048	END COVER GASKET	2
P-19-0049	MPN600049	SHIFTER COVER GASKET	1
P-44-0151	MPN600151	5/16" KEY	1
P-19-0002	MPN600002	.010" MOUNTING GASKET	1
P-19-0003	MPN600003	.015" MOUNTING GASKET	1
P-19-0004	MPN600004	.032" MOUNTING GASKET	1
P-21-0103	MPN600103	O-RING GASKET	1

\* This O-ring is for new style idler pin.

MH6 Overhaul  
 Kits

**MH6 (Air Shift Only) Overhaul Kit**  
 For "TP" Output

**P-48-0640 (MPN600640)**

Metaris #	Alternate #	Description	Quantity
P-22-0213	MPN600213	IDLER PIN SNAP RING	1
P-13-0122	MPN600122	OUTPUT SHAFT SEAL	1
P-21-0100	MPN600100	IDLER PIN O-RING	2
P-21-0609	MPN600609	IDLER PIN PLUG O-RING	2*
P-20-0024	MPN600024	CUP-SEAL/SHIFTER	1
P-21-0102	MPN600102	O-RING/SHIFTER	1
P-21-0101	MPN600101	O-RING/SHIFTER	1
P-23-0112	MPN600112	PRELOAD NUT	1
P-14-0117	MPN600117	INPUT GEAR BEARING	2
P-14-0114	MPN600114	NON-THRUST BEARING	1
P-14-0115	MPN600115	OUTPUT THRUST BEARING	1
P-19-0048	MPN600048	END COVER GASKET	2
P-19-0049	MPN600049	SHIFTER COVER GASKET	1
P-19-0046	MPN600046	FLANGE TO PUMP GASKET	1
P-19-0002	MPN600002	.010" MOUNTING GASKET	1
P-19-0003	MPN600003	.015" MOUNTING GASKET	1
P-19-0004	MPN600004	.032" MOUNTING GASKET	1
P-21-0103	MPN600103	O-RING GASKET	1

\* This O-ring is for new style idler pin.

MH6 Overhaul  
 Kits

**MH6 (Air Shift Only) Overhaul Kit**  
 For "SF" Output

**P-48-0639 (MPN600639)**

Metaris #	Alternate #	Description	Quantity
P-22-0213	MPN600213	IDLER PIN SNAP RING	1
P-20-0121	MPN600121	OUTPUT SHAFT SEAL	1
P-21-0100	MPN600100	IDLER PIN O-RING	2
P-21-0609	MPN600609	IDLER PIN PLUG O-RING	2*
P-20-0024	MPN600024	CUP-SEAL/SHIFTER	1
P-21-0102	MPN600102	O-RING/SHIFTER	1
P-21-0101	MPN600101	O-RING/SHIFTER	1
P-23-0112	MPN600112	PRELOAD NUT	1
P-14-0117	MPN600117	INPUT GEAR BEARING	2
P-14-0114	MPN600114	NON-THRUST BEARING	1
P-14-0115	MPN600115	OUTPUT THRUST BEARING	1
P-19-0048	MPN600048	END COVER GASKET	2
P-19-0049	MPN600049	SHIFTER COVER GASKET	1
P-19-0047	MPN600047	FLANGE TO PUMP GASKET	1
P-19-0002	MPN600002	.010" MOUNTING GASKET	1
P-19-0003	MPN600003	.015" MOUNTING GASKET	1
P-19-0004	MPN600004	.032" MOUNTING GASKET	1
P-21-0103	MPN600103	O-RING GASKET	1

\* This O-ring is for new style idler pin.

MH8 Overhaul  
 Kits

**MH8 (Air Shift Only) Overhaul Kit**  
 For "RA" & "RB" Output

**P-48-0644 (MPN600644)**

Metaris #	Alternate #	Description	Quantity
P-22-0213	MPN600213	IDLER PIN SNAP RING	1
P-20-0121	MPN600121	OUTPUT SHAFT SEAL	1
P-21-0100	MPN600100	IDLER PIN O-RING	2
P-21-0609	MPN600609	IDLER PIN PLUG O-RING	2*
P-20-0024	MPN600024	CUP-SEAL/SHIFTER	1
P-21-0102	MPN600102	O-RING/SHIFTER	1
P-21-0101	MPN600101	O-RING/SHIFTER	1
P-23-0112	MPN600112	PRELOAD NUT	1
P-14-0117	MPN600117	INPUT GEAR BEARING	2
P-14-0114	MPN600114	NON-THRUST BEARING	1
P-14-0115	MPN600115	OUTPUT THRUST BEARING	1
P-19-0048	MPN600048	END COVER GASKET	2
P-19-0049	MPN600049	SHIFTER COVER GASKET	1
P-19-0045	MPN600045	FLANGE TO PUMP GASKET	1
P-19-0050	MPN600050	.010" MOUNTING GASKET	1
P-19-0051	MPN600051	.015" MOUNTING GASKET	1
P-19-0052	MPN600052	.032" MOUNTING GASKET	1
P-21-0103	MPN600103	O-RING GASKET	1

\* This O-ring is for new style idler pin.

MH8 Overhaul  
 Kits

**MH8 (Air Shift Only) Overhaul Kit**  
 For "SE" Output

**P-48-0641 (MPN600641)**

Metaris #	Alternate #	Description	Quantity
P-22-0213	MPN600213	IDLER PIN SNAP RING	1
P-20-0121	MPN600121	OUTPUT SHAFT SEAL	1
P-21-0100	MPN600100	IDLER PIN O-RING	2
P-21-0609	MPN600609	IDLER PIN PLUG O-RING	2*
P-20-0024	MPN600024	CUP-SEAL/SHIFTER	1
P-21-0102	MPN600102	O-RING/SHIFTER	1
P-21-0101	MPN600101	O-RING/SHIFTER	1
P-23-0112	MPN600112	PRELOAD NUT	1
P-14-0117	MPN600117	INPUT GEAR BEARING	2
P-14-0114	MPN600114	NON-THRUST BEARING	1
P-14-0115	MPN600115	OUTPUT THRUST BEARING	1
P-19-0048	MPN600048	END COVER GASKET	2
P-19-0049	MPN600049	SHIFTER COVER GASKET	1
P-44-0151	MPN600151	5/16" KEY	1
P-19-0050	MPN600050	.010" MOUNTING GASKET	1
P-19-0051	MPN600051	.015" MOUNTING GASKET	1
P-19-0052	MPN600052	.032" MOUNTING GASKET	1
P-21-0103	MPN600103	O-RING GASKET	1

\* This O-ring is for new style idler pin.

MH8 Overhaul  
 Kits

## MH8 (Air Shift Only) Overhaul Kit For "SF" Output

**P-48-0645** (MPN600645)

Metaris #	Alternate #	Description	Quantity
P-22-0213	MPN600213	IDLER PIN SNAP RING	1
P-20-0121	MPN600121	OUTPUT SHAFT SEAL	1
P-21-0100	MPN600100	IDLER PIN O-RING	2
P-21-0609	MPN600609	IDLER PIN PLUG O-RING	2*
P-20-0024	MPN600024	CUP-SEAL/SHIFTER	1
P-21-0102	MPN600102	O-RING/SHIFTER	1
P-21-0101	MPN600101	O-RING/SHIFTER	1
P-23-0112	MPN600112	PRELOAD NUT	1
P-14-0117	MPN600117	INPUT GEAR BEARING	2
P-14-0114	MPN600114	NON-THRUST BEARING	1
P-14-0115	MPN600115	OUTPUT THRUST BEARING	1
P-19-0048	MPN600048	END COVER GASKET	2
P-19-0049	MPN600049	SHIFTER COVER GASKET	1
P-19-0047	MPN600047	FLANGE TO PUMP GASKET	1
P-19-0050	MPN600050	.010" MOUNTING GASKET	1
P-19-0051	MPN600051	.015" MOUNTING GASKET	1
P-19-0052	MPN600052	.032" MOUNTING GASKET	1
P-21-0103	MPN600103	O-RING GASKET	1

\* This O-ring is for new style idler pin.

MH8 Overhaul  
 Kits

**MH8 (Air Shift Only) Overhaul Kit**  
 For "TP" Output

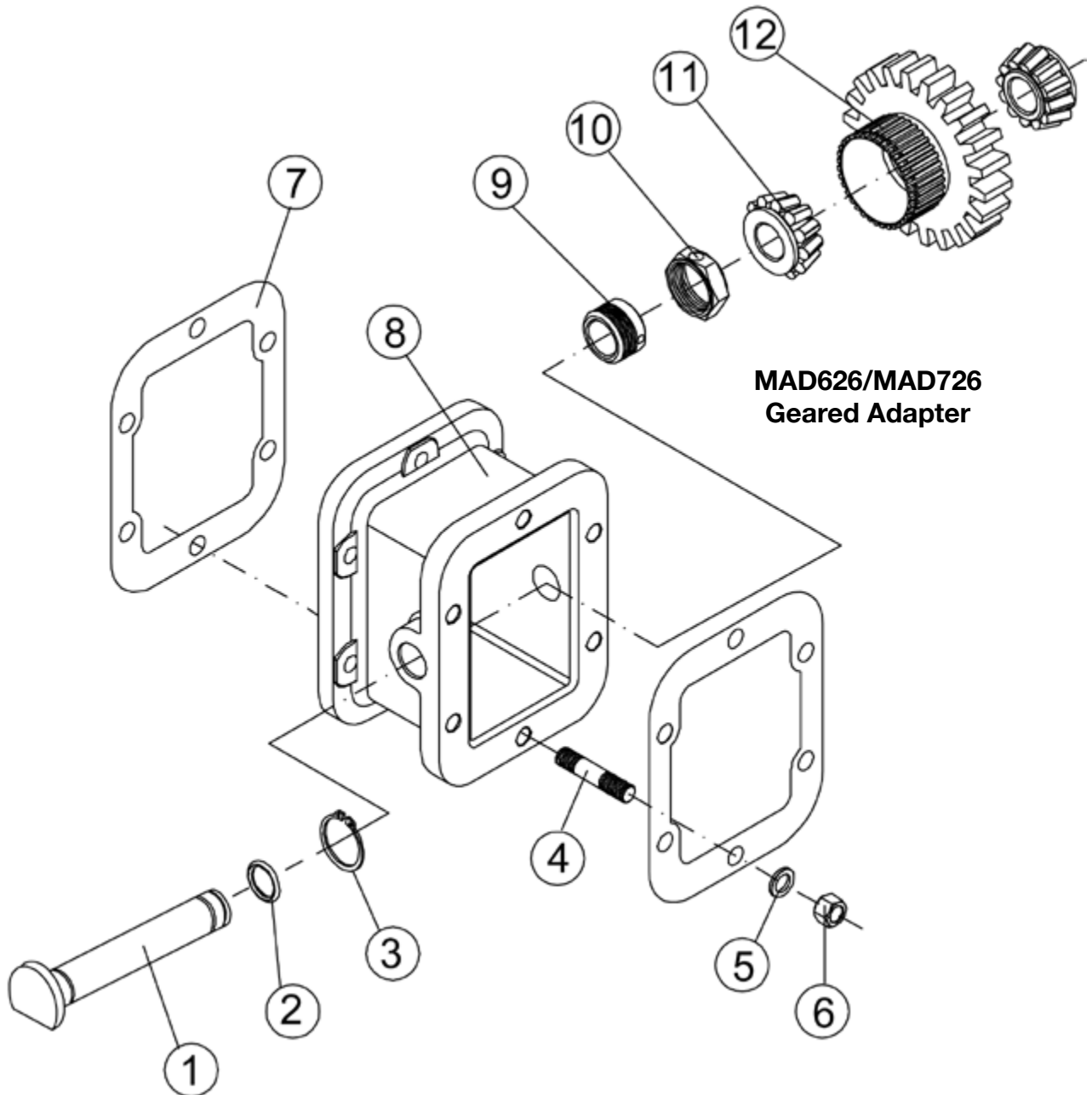
**P-48-0638 (MPN600638)**

Metaris #	Alternate #	Description	Quantity
P-22-0213	MPN600213	IDLER PIN SNAP RING	1
P-20-0122	MPN600122	OUTPUT SHAFT SEAL	1
P-21-0100	MPN600100	IDLER PIN O-RING	2
P-21-0609	MPN600609	IDLER PIN PLUG O-RING	2*
P-20-0024	MPN600024	CUP-SEAL/SHIFTER	1
P-21-0102	MPN600102	O-RING/SHIFTER	1
P-21-0101	MPN600101	O-RING/SHIFTER	1
P-23-0112	MPN600112	PRELOAD NUT	1
P-14-0117	MPN600117	INPUT GEAR BEARING	2
P-14-0114	MPN600114	NON-THRUST BEARING	1
P-14-0115	MPN600115	OUTPUT THRUST BEARING	1
P-19-0048	MPN600048	END COVER GASKET	2
P-19-0049	MPN600049	SHIFTER COVER GASKET	1
P-19-0046	MPN600046	FLANGE TO PUMP GASKET	1
P-19-0050	MPN600050	.010" MOUNTING GASKET	1
P-19-0051	MPN600051	.015" MOUNTING GASKET	1
P-19-0052	MPN600052	.032" MOUNTING GASKET	1
P-21-0103	MPN600103	O-RING GASKET	1

\* This O-ring is for new style idler pin.



## MAD626/MAD726 Series Geared Adapter Drawing



Drawings &  
 Parts Lists

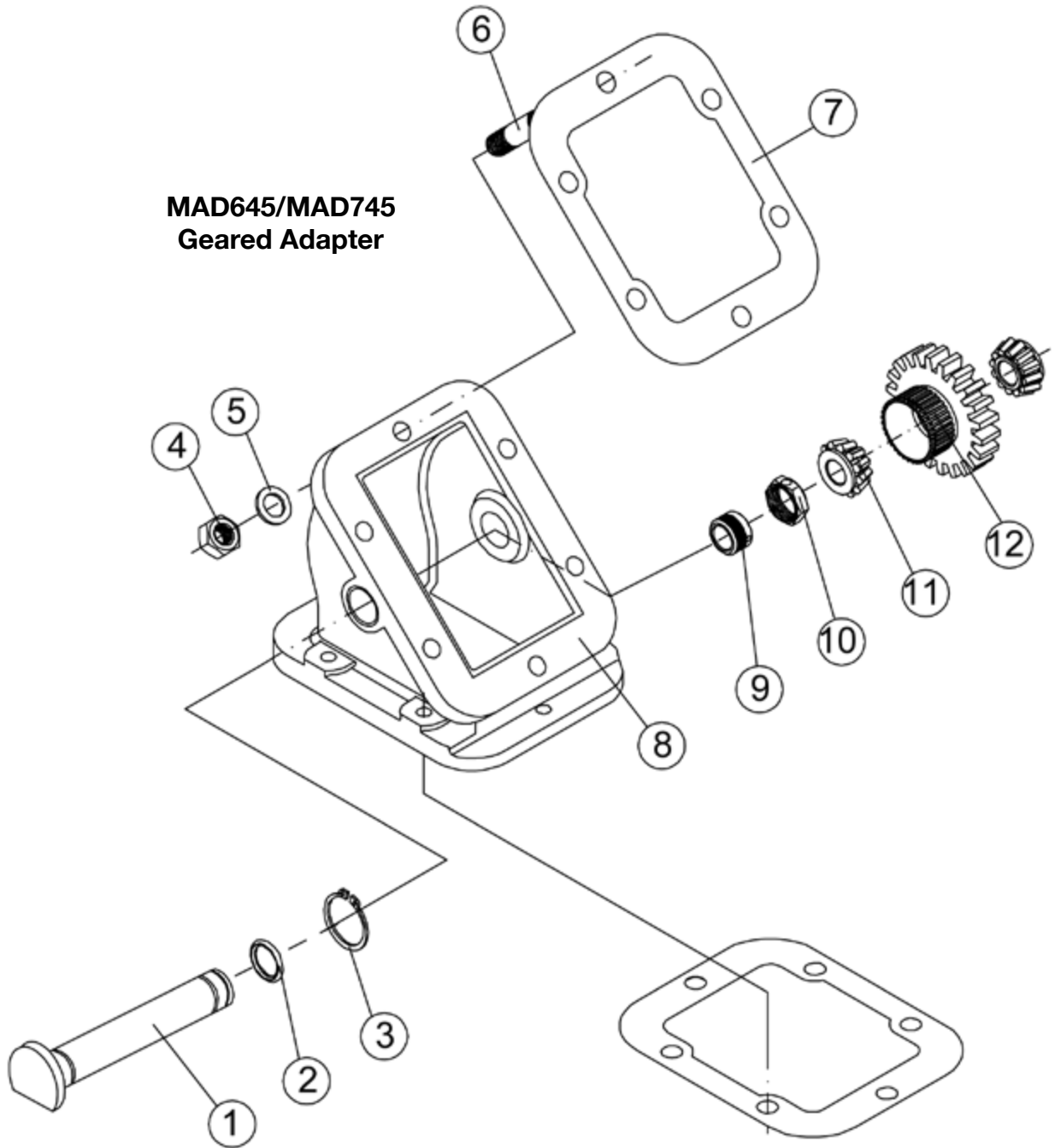
## MAD626 & MAD726 180° 6 Bolt Geared Adapter P-06-0302 & 0473 - MAD626 (Standard) & MAD726 (Deep Mount)

Item	Part Number	Alternate #	Description	Quantity	
				626	726
1	P-13-0091	MPN600091	IDLER PIN	1	1
2	P-21-0100	MPN600100	IDLER PIN O-RINGS	2	2
3	P-22-0213	MPN600213	IDLER PIN SNAP RING	1	1
4	P-38-0170	MPN600170	MOUNTING STUD	6	
	P-38-0193	MPN600193	DEEP MOUNT STUD		6
5	P-39-0162	MPN600162	MOUNTING WASHER	6	6
6	P-40-0218	MPN600218	MOUNTING NUT	6	6
7	P-19-0002	MPN600002	6 BOLT MOUNTING GASKET	1	1
	P-19-0003	MPN600003	6 BOLT MOUNTING GASKET	1	1
	P-19-0004	MPN600004	6 BOLT MOUNTING GASKET	1	1
8	P-01-0159	MPN600159	180° STD. ADAPTER HOUSING	1	
		MHS-642	180° DEEP MOUNT ADAPTER HOUSING		1
9	P-23-0112	MPN600112	ADJUSTING BUSHING	1	1
10	P-23-0112	MPN600112	ADJUSTING NUT	1	1
11	P-14-0117	MPN600117	INPUT GEAR BEARINGS	2	2
12	P-02-0061	MPN600061	"01" ADAPTER INPUT GEAR	1	1
13	*P-31-6140	*M6140	6 BOLT .140 THICK SPACER	1	1

\* Not Shown on Diagram.

# MAD645/MAD745 Series Geared Adapter Drawing

**MAD645/MAD745  
Geared Adapter**



Drawings &  
 Parts Lists

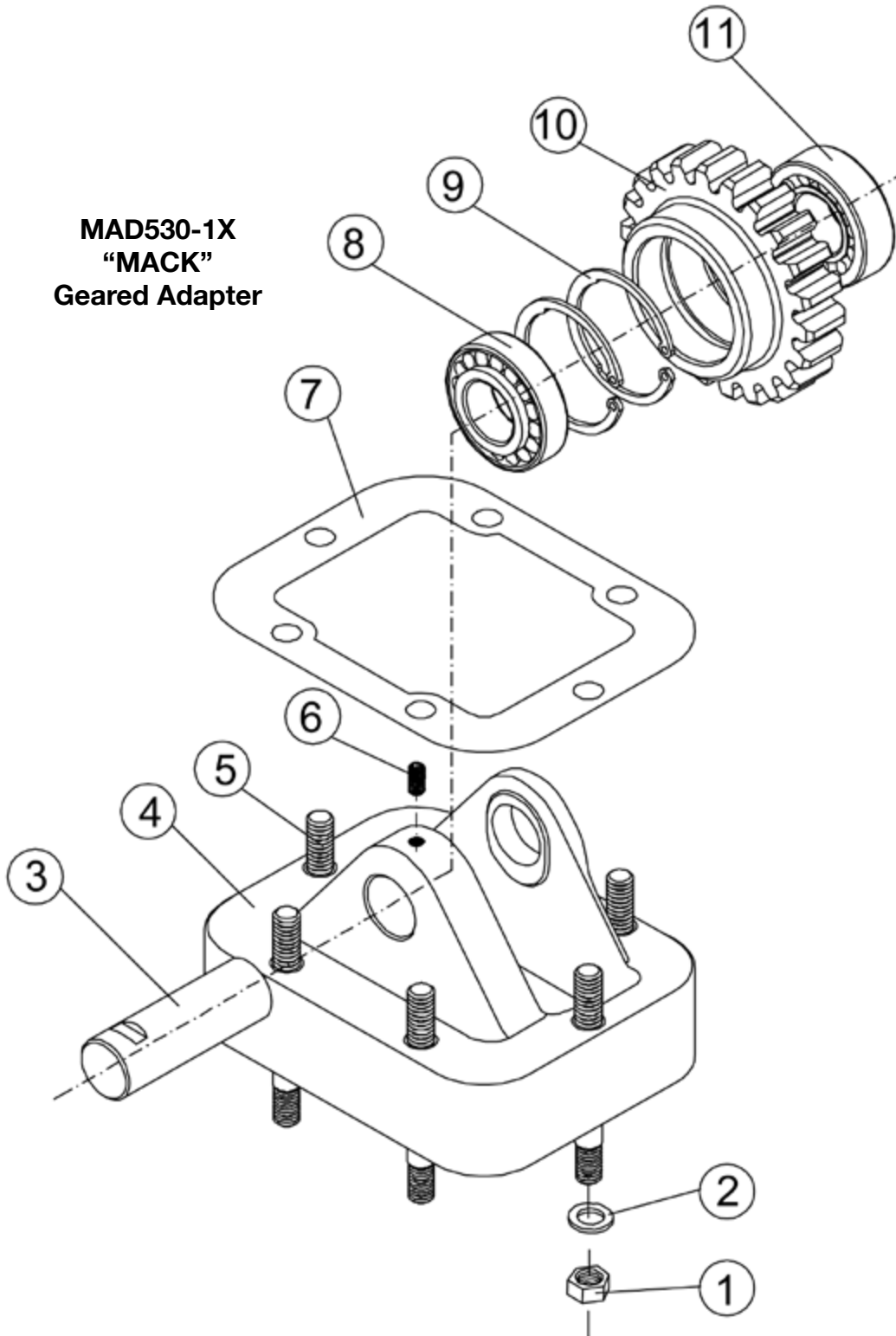
## MAD645 & MAD745 45° 6 Bolt Geared Adapter P-06-0302 & 0474 - MAD645 (Standard) & MAD745 (Deep Mount)

Item	Part Number	Alternate #	Description	Quantity	
				645	745
1	P-13-0091	MPN600091	IDLER PIN	1	1
2	P-21-0100	MPN600100	IDLER PIN O-RINGS	2	2
3	P-22-0213	MPN600213	IDLER PIN SNAP RING	1	1
4	P-40-0218	MPN600218	MOUNTING NUT	6	6
5	P-39-0162	MPN600162	MOUNTING WASHER	6	6
6	P-38-0170	MPN600170	MOUNTING STUD	6	
	P-38-0193	MPN600193	DEEP MOUNT STUD		6
7	P-19-0002	MPN600002	6 BOLT MOUNTING GASKET	1	1
	P-19-0003	MPN600003	6 BOLT MOUNTING GASKET	1	1
	P-19-0004	MPN600004	6 BOLT MOUNTING GASKET	1	1
8	P-01-0166	MPN600166	45° STD. ADAPTER HOUSING	1	
		MHS-622	45° DEEP MOUNT ADAPTER HOUSING		1
9	P-23-0112	MPN600112	ADJUSTING BUSHING	1	1
10	P-23-0112	MPN600112	ADJUSTING NUT	1	1
11	P-14-0117	MPN600117	INPUT GEAR BEARINGS	2	2
12	P-02-0061	MPN600061	"01" ADAPTER INPUT GEAR	1	1
13	*P-31-6140	(*) M6140	6 BOLT .140 THICK SPACER	1	1

\* Not Shown on Diagram.

# MAD530-1X Series "MACK" Geared Adapter Drawing

**MAD530-1X  
"MACK"  
Geared Adapter**



Drawings &  
 Parts Lists

## MAD530-1X “MACK” 6 Bolt Geared Adapter P-06-0324 (MPN600324)

Item	Part Number	Alternate #	Description	Quantity
				530
1	P-40-0218	MPN600218	MOUNTING NUT	6
2	P-39-0162	MPN600162	MOUNTING WASHER	6
3	P-13-9006	MPN099006	IDLER PIN	1
4	P-01-0325	MPN600325	ADAPTER HOUSING	1
5	P-38-0321	MPN600321	MOUNTING STUDS	6
6	P-43-9011	MPN099011	SET SCREW	1
7	P-19-0002	MPN600002	6 BOLT MOUNTING GASKET	1
	P-19-0003	MPN600003	6 BOLT MOUNTING GASKET	1
	P-19-0004	MPN600004	6 BOLT MOUNTING GASKET	1
8	P-14-0167	MPN600167	IDLER BEARING	1
9	P-22-0286	MPN600286	SNAP RING	2
10	P-02-9005	MPN099005	ADAPTER INPUT GEAR	1
11	P-14-9012	MPN600168	IDLER BEARING	1

PTO  
 Accessories

## PTO Hydraulic Tanks



### Hydraulic Tanks

Metaris tank options include Polyethylene Upright, Steel and Aluminum Upright and Steel and Aluminum Saddle Mount. Available in the most popular gallon sizes and includes all mounting hardware. Hose kits are available in 8 different setup configurations.

Metaris #	Alternate #	Description	Dimensions	Lbs.
MPN098708	MHA-2000	50 gal. Poly Upright Tank	35" X 16" X 26"	80#
MPN098709	MHA-3000-2	50 gal. Steel Upright Tank 2" Ports	34" X 13" X 36"	150#
MPN102532	MHA-3000-2-STG	50 gal. Steel Upright Tank 2" Ports		
MPN099295	MHA-30100ST	100 gal. Steel Upright Tank 2" Ports	48" X 16" X 30"	248#
MPN098710	MHA-3070-2	70 gal. Steel Upright Tank 2" Ports	46.5" X 13" X 26"	135#
MPN099313	MHA-3100	10 gal. Steel Sidemount	12" X 14" X 14"	45#
MPN099312	MHA-3107	7 gal. Steel Sidemount	12" X 12" X 12"	40#
MPN099251	MHA-3150	15 gal. Steel Sidemount 2" Suction	16" X 14" X 16"	62#
MPN099252	MHA-3250	25 gal. Steel Sidemount 2" Suction	20" X 15" X 20"	84#
MPN099253	MHA-3300	30 gal. Steel Sidemount 2" Suction	24" X 15" X 20"	98#
MPN099254	MHA-3400	40 gal. Steel Sidemount 2" Suction	32" X 15" X 20"	126#
MPN098711	MHA-3500-2	50 gal. Steel Saddlemount Tank 2" Ports	24" Dia. X 27" Long	44#
MPN099306	MHA-35100ST	100 gal. Steel Saddlemount Tank 2" Ports	24" Dia. X 51" Long	138#
MPN099302	MHA-3525-2ST	25 gal. Steel Saddlemount Tank 2" Ports	24" Dia. X 15" Long	57#
MPN099303	MHA-3535-2ST	35 gal. Steel Saddlemount Tank 2" Ports	24" Dia. X 19" Long	62#
MPN099304	MHA-3560-2ST	60 gal. Steel Saddlemount Tank 2" Ports		
MPN099305	MHA-3575-2	75 gal. Steel Saddlemount Tank 2" Ports	24" Dia. X 39" Long	115#
MPN098712	MHA-4000-2	50 gal. Upright Aluminum Tank 2" Ports	34" X 13" X 26"	77#
MPN099297	MHA-4035ST	35 gal. Upright Aluminum Tank		
MPN107357	MHA-4070-2-SS*	70 gal. Upright Aluminum Tank 2" Ports & SS Straps	46.5" X 13" X 26"	
MPN098713	MHA-4070-2	70 gal. Upright Aluminum Tank 2" Ports	46.5" X 13" X 26"	52#
MPN099314	MHA-4150	15 gal. Aluminum Sidemount	16" X 14" X 16"	31#
MPN098714	MHA-4500-2	50 gal. Aluminum Saddlemount Tank 2" Ports	24" Dia. X 27" Long	40#
MPN100622	MHA-4500-2-ST-SS*	50 gal. Aluminum Saddlemount Tank 2" Ports w/ SS Straps & ST	24" Dia. X 27" Long	40#
MPN098715	MHA-4500-2SS*	50 gal. Aluminum Saddlemount Tank 2" Ports w/ SS Straps	24" Dia. X 27" Long	40#
MPN099311	MHA-45-100ST	100 gal. Aluminum Saddlemount Tank 2" Ports	24" Dia. X 51" Long	92#

PTO  
 Accessories

## PTO Hydraulic Tanks Cont.

Metaris #	Alternate #	Description	Dimensions	Lbs.
MPN099250	MHA-45100ST-SS*	100 gal. Aluminum Saddlemount Tank 2" Ports w/ SS Straps & ST	24" Dia. X 51" Long	92#
MPN099307	MHA-4525-2ST	25 gal. Aluminum Saddlemount Tank 2" Ports w/ST	24" Dia. X 15" Long	29#
MPN099104	MHA-4525-2ST-SS*	25 gal. Aluminum Saddlemount Tank 2" Ports w/ SS Straps & ST	24" Dia. X 15" Long	29#
MPN099308	MHA-4535-2ST	35 gal. Aluminum Saddlemount Tank 2" Ports w/ST	24" Dia. X 19" Long	32#
MPN099389	MHA-4535-2ST-SS*	35 gal. Aluminum Saddlemount Tank 2" Ports w/ SS Straps & ST	24" Dia. X 19" Long	32#
MPN099309	MHA-4560-2ST	60 gal. Aluminum Saddlemount Tank 2" Ports w/ ST	24" Dia. X 32" Long	44#
MPN099020	MHA-4560-2ST-SS*	60 gal. Aluminum Saddlemount Tank 2" Ports w/ SS Straps & ST	24" Dia. X 32" Long	44#
MPN099310	MHA-4575-2	75 gal. Aluminum Saddlemount Tank 2" Ports	24" Dia. X 39" Long	55#
MPN107356	MHA-4575-2-SS*	75 gal. Aluminum Saddlemount Tank 2" Ports w/ SS Straps	24" Dia. X 39" Long	55#
MPN600559	MHJM3401	40 gal. Steel Sidemount		
MPN600560	MHJM3402	40 gal. Steel Sidemount		
MPN100982	MHJM3525-2ST	25 gal. Steel Saddlemount Tank		
MPN600546	MHJM3535-2ST	35 gal. Steel Saddlemount Tank		
MPN600532	AMK624C	2 Carbon Strap Kit		
MPN600533	AMK624C-3	3 Carbon Strap Kit		
MPN099054	AMK624S	2 Stainless Strap Kit		
MPN600647	AMK624S-3	3 Stainless Strap Kit		
MPN103306	ASG-105	Sight & Temperature Gauge		

\*These tanks include Stainless Straps

### Options:

The below options are available for additional cost (if not included with tank)

- Stainless Strap Option available for 25, 35, 50, 60, 75 and 100 gallon tanks.



**PTO  
 Accessories**

## PTO Accessories

At Metaris we carry a wide variety of PTO accessories: Control Towers, Air Controllers, Feathering Valves, Shifters, Hose Kits and Dump Pump Brackets.



### Control Towers

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.

MTO-08 (8")	MTO-10 (10")	MTO-12 (12")
MPN600221	MPN600222	MPN600223



### Feathering Valves

Metaris now offers a MH787F valve which is a more defined 3 position, 4 way feathering valve. This valve features precise control and feathering while dumping a load of stone or asphalt. It comes with a heavy duty body and control lever. It is also equipped with a safety lockout device to prevent unintentional lever movement. Metaris also has available, an installation kit for our 8", 10" and 12" towers.

Metaris #	Alternate #	Description
MPN600507	MFV-507	FEATHERING VALVE

PTO  
 Accessories

## PTO Accessories Cont.



### Hose Kits

Introducing Metaris Wet-Line Hose Kits. We are now offering 8 different wet-line hose kits for dump and general applications.

### Hose Kits

Metaris #	Alternate #	Description
MPN600295	MHK-12-6-2L	2 LINE - HOSE KIT
MPN600296	MHK-14-8-2L	2 LINE - HOSE KIT
MPN600297	MHK-16-8-2L	2 LINE - HOSE KIT
MPN600298	MHK-20-12-2L	2 LINE - HOSE KIT
MPN600293	MHK-09-08-3L	3 LINE - HOSE KIT
MPN600292	MHK-12-12-3L	3 LINE - HOSE KIT
MPN600294	MHK-16-24-3L	3 LINE - HOSE KIT
MPN600299	MHK-20-24-3L	3 LINE - HOSE KIT

### Kit Contents: 2 Line & 3 Line Systems

Qty	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

Qty	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

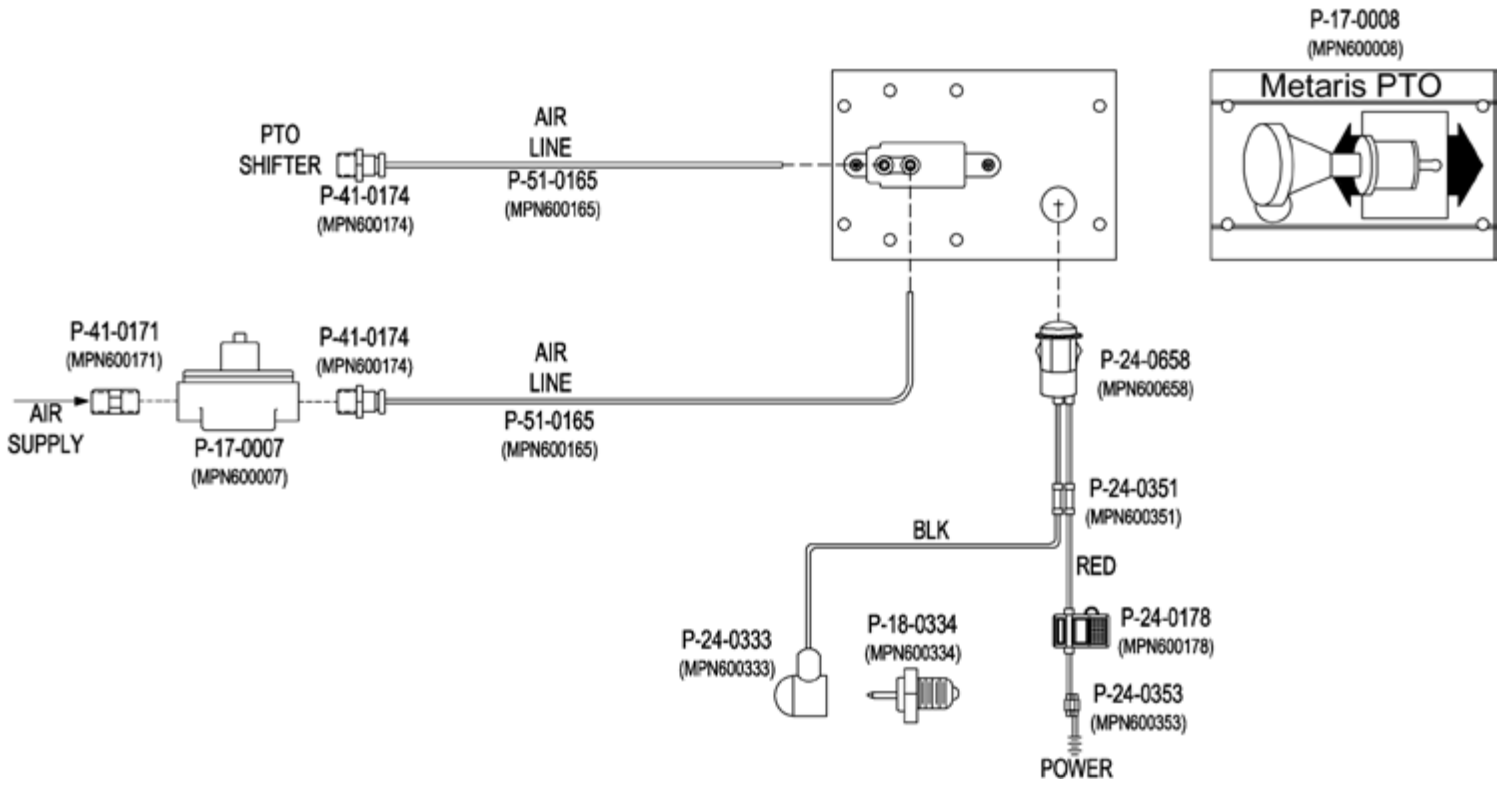


### Dump Pump Brackets

Metaris pump bracket support kits (PBK-1000) are designed to prevent hydraulic pumps from distributing too much hanging weight on the PTO flange. It also assists in stabilizing the yawing action (Twisting force) from the pump on start up and puts less stress on the PTO and transmission.

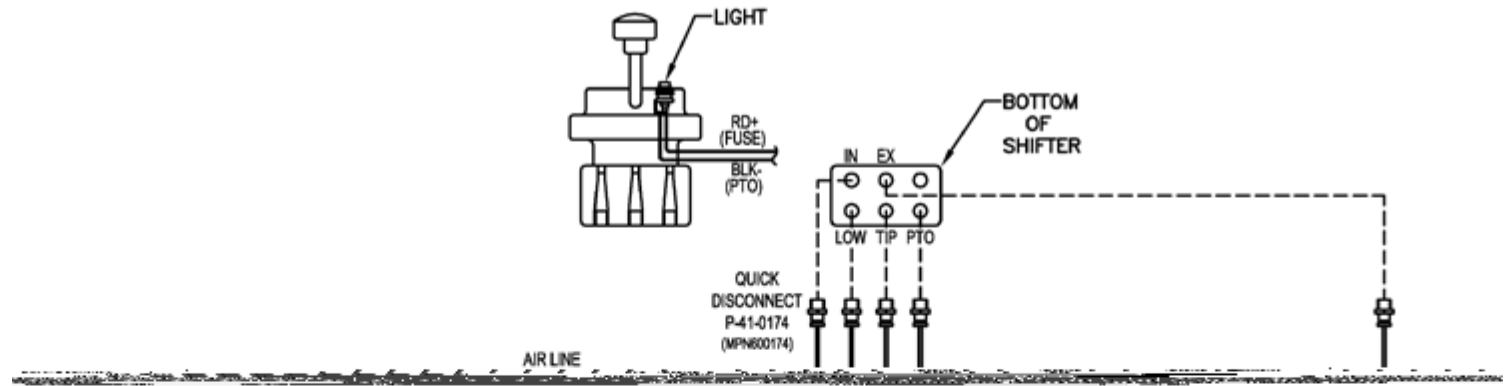
Installation  
 Drawings

**MH6, MH8 & MHD8**  
**Air & Electric Installation for Single Controller Drawing**



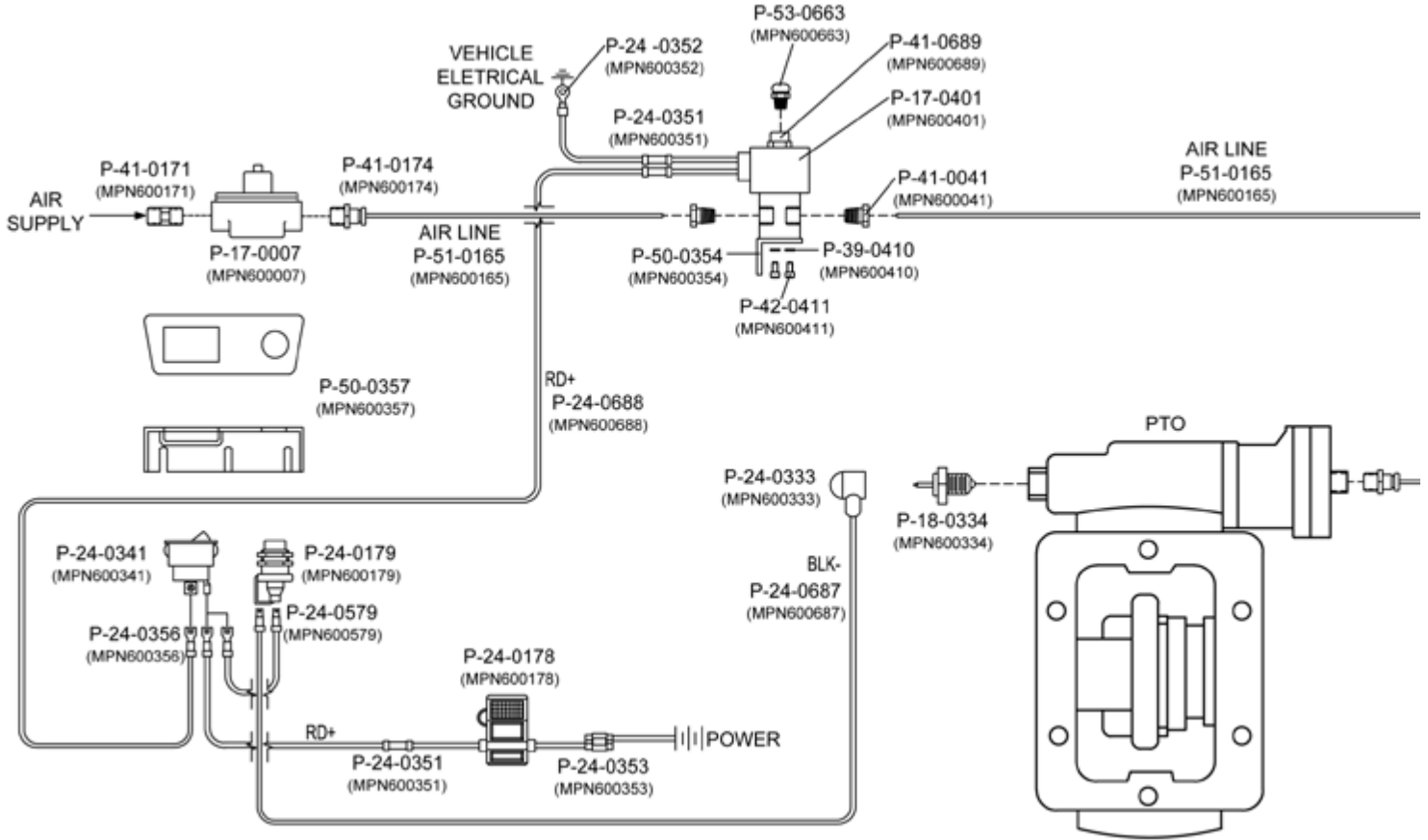
Installation  
Drawings

# MH6, MH8 & MHD8 Air & Electric Installation for Dual Controller Drawing



Installation  
 Drawings

**MH6, MH8 & MHD8  
 Electric Over Air (EOA) Installation Drawing**



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## Products We Offer

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- Axial Piston Motors
- High Speed Motors
- Servo Motors
- Orbital Motors
- Directional Valves
- Flow Control Valves
- Pressure Control Valves
- Relief Valves
- Check Valves
- Stack Valves
- Servo Valves
- Proportional Valves
- PTOs (Power Take-offs)
- Cylinders



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