



MARINE

FRICION MATERIAL & TRANSMISSION PARTS



PLEASURE | WORK BOATS | FISHING | PLEASURE | WORK BOATS | FISHING | PLEASURE | WORK BOATS | FISHING |



ALTO PRODUCTS CORP.

MARINE FRICTION MATERIAL & TRANSMISSION PARTS

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VELVET DRIVE® S5000, S5000 "V" Drive

ALTO NO.	OEM NO.	DESCRIPTION	USAGE	NOTES
KITS				
340800	2001-410-001	OVERHAUL KIT S5000 Includes Gaskets, Orings, Metal Clad Seals and Sealing Rings	1	
340800V	2002-410-001	OVERHAUL KIT S5000 V Drive Includes Gaskets, Orings, Metal Clad Seals and Sealing Rings	1	
340901	NL	MASTER OVERHAUL KIT S5000 Includes Overhaul Kit, Bronze Plates and Steel Plates	1	
340901V	NL	MASTER OVERHAUL KIT S5000 V Drive Includes Overhaul Kit, Bronze Plates and Steel Plates	1	
340750	NL	CLUTCH PLATE MODULE Includes 16 Bronze Plates and 18 Steel Plates	1	
CLUTCHES				
340702	2001-666-001	Friction - Drive	16	Bronze .066
340703	2001-166-002	Steel - Drive	14	Flat .077
340705	2001-062-002	Steel	4	Flat .044
023186	2001-062-003	Steel - Backing clutch outer	1	Flat .197
MISC. PARTS				
340020	2001-045-005	Gasket - Front Pump S5000 & V Drive	1	
340021	2001-045-003	Gasket - Valve Housing S5000 & V Drive	1	
340021V	2002-045-002	Gasket - Adapter - V Drive	1	
018101	2000-016-050	Sealing Ring - Pinion Carrier	AR	S5000 1Pc,V Drive 4 Pcs
340101	1000-016-021	Sealing Ring - In Shaft	AR	S5000 1Pc,V Drive 2 Pcs
340420	1000-044-065	Metal Clad Seal - Adapter S5000 & V Drive	2	
340421	1000-044-066	Metal Clad Seal - Coupling S5000	1	
340422	2000-044-003	Metal Clad Seal - Output Shaft Side V Drive	1	
340423	2000-044-004	Metal Clad Seal - Output Flange Side V Drive	1	
010045	1000-141-045	Oring - Piston	2	
010123	1000-141-123	Oring - Control Valve	1	
010130	1000-141-130	Oring - Clutch Piston	2	
010214	1000-141-214	Oring - Tube Assembly	1	
010241	1000-141-241	Oring - Clutch Piston	2	
340051	1000-016-020	Seal - Piston In	2	
340052	1000-016-019	Seal - Piston Out	2	
340251	1000-139-069	Snap Ring	2	
340252	1000-139-071	Snap Ring	1	
340253	1000-139-068	Snap Ring	5	
099328	1000-640-004	Neutral Safety Switch	1	
023320	1000-149-034	Nut - Output Shaft with Washer	1	
340321	2001-031-001	Output Flange	1	
340940	2001-238-001	Filter - Oil Screen	1	

VELVET DRIVE® 71 & 72

ALTO NO.	OEM NO.	DESCRIPTION	USAGE	NOTES
KITS				
023801	10-17-410-002	GASKET SET (Includes Rubber Parts)	1	
023801B	A4867HA	OVERHAUL KIT (Includes Gasket Set)	1	
023901LS	NL	BANNER KIT Includes Overhaul Kit and Bronze Plates	1	
023901	NL	MASTER OVERHAUL KIT Includes Overhaul Kit, Bronze Plates and Steel Plates	1	
023750D	NL	CLUTCH PLATE MODULE Includes 10 Bronze Plates and 6 Steel Plates	1	
023750H	NL	CLUTCH PLATE MODULE - VD71 Only Includes 7 Bronze Plates and 5 Steel Plates	1	
023752D	NL	FRICITION PLATE MODULE Includes 10 Bronze Plates	1	
023755	A4867AE	10-17 FORWARD CLUTCH PACK Only Includes Forward Clutch Bronze Plates, Steel Plates and Front & Rear Pressure Plates	1	
023755A	A4867AB	10-18 FORWARD CLUTCH PACK Only Includes Forward Clutch Bronze Plates, Steel Plates and Front & Rear Pressure Plates	1	
CLUTCHES				
049722	W-1597A	Friction Forward Small K2 (Grooved)	5-7	HEG .063
049700BR	5C-A66A	Friction Forward Small	5-7	Bronze .060
023701	3-176	Steel Forward Small	4-6	Flat .068
023701A	10-16-166-001	Steel Forward Small (3 Teeth missing)	4-6	Flat .068
023701-120	NL	Steel Forward Small - Hi-Performance	AR	Flat .047
023701-140	NL	Steel Forward Small - Hi-Performance	AR	Flat .058
023703	3-65	Steel Forward - MODEL 73 Only		Dish .068
023760	5C-175A	Pressure Plate Forward/ Front	1	
023761	5L-67	Pressure Plate Forward/Rear	1	
023738	10-17-666-001	Friction Reverse Large	1-3	Fiber .115
023738BR	72-A66B	Friction Reverse Large	1-3	Bronze .115
023738BR155	72-A66	Friction Reverse Large	2	Bronze .061
023739	72-176	Steel Reverse Large	0-2	Flat .070
023767	3-37	Steel Forward Belleville Spring	1	Dish
MISC. PARTS				
023020	71-144B	Gasket - Forward/Reverse Adapter	1	
023021	L4-145	Gasket - Front Adapter	1	
023022	71-14	Gasket - Valve Cover	1	
023023	L4-146	Gasket - Rear Adapter	1	
023024	L4-147	Gasket - Rear Retainer - Reduction Early	1	
023025	71-147	Gasket - Rear Retainer - MODEL 10-17	1	
023026	72-147	Gasket - Rear Retainer - MODEL 10-18	1	
023002	3-61	Seal - Front Pump	1	
A38001	4805A	Seal - Reverse Clutch Outer	1	
023054A	5L-36	Seal - Forward Clutch Outer	1	
010210A	4804H	Oring - Control Valve	1	
010226B	5M122	Oring - Forward Clutch Inner	1	

VELVET DRIVE® 71 & 72

ALTO NO.	OEM NO.	DESCRIPTION	USAGE	NOTES
MISC. PARTS (Continued)				
010226B	4804G	Oring - Reverse Inner	1	
023941	1000-238-002 72C-98	Filter - Oil	1	
099328	1000-640-004	Neutral Safety Switch	1	
099329	1000-140-004	Switch - Oil Temperature 190°	1	
099329A	87-88031	Switch - Oil Temperature 230°	1	
099329B	1000-140-002	Switch - Oil Temperature 260°	1	
018101	4806B TAW-408	Sealing Ring - Pinion Carrier	4	2.0 x .0935 HJ
038105	4806J TAW-1320	Sealing Ring - Drive Gear	2	1.7465 x .0935 HJ
023420	1000-044-014 UE-0282E	Metal Clad Seal - Front Pump		OD: 53mm/2.08"
023422	1000-044-017 UH-0049E	Metal Clad Seal - Coupling		OD: 83mm/3.271" Late Type Reduction
023421	71C-110 UH-0341E	Metal Clad Seal - Coupling		OD: 68mm/2.69" Early Type Reduction
023320	1000-149-034	Output Shaft Nut - Coupling Nut with Washer		All Late Reduction Units
023321	4775L	Nut - Ouput Shaft Coupling (Fits 4" & 5" couplings)	1	
023604	NL	Sealing Ring Kit : Contains 4 Pc 018101, 2 Pc. 038105		
023252	4822	Snap Ring - Reverse Gear	1	
023253	R6A-7-1/2	Snap Ring - Drive Gear Large MODEL 10-17 Only	1	
023255	4734	Snap Ring - Drive Gear Small MODEL 10-17 Only	2	
023258	1000-139-048	Snap Ring - Ring Gear Yellow MODEL 10-17	1	.033-.037
023258-130	1000-139-049	Snap Ring - Ring Gear Pink MODEL 10-17	1	.050-.054
023258A130	4768	Snap Ring - Ring Gear Green MODEL 10-18	2	.050-.054
023258A160	1000-139-018	Snap Ring - Ring Gear Purple MODEL 10-18	1	.062-.066
023259	4495	Snap Ring - Drive Gear Assembly	1	
023276	71-97	Spring - Reverse Pressure Plate	11	
023338	5C-33 1000-139-101	Bearing Ring VD72 Forward Clutch Shuttle		
023350A	71CA60	Oil Pump	1	
023322	4840D	Needle Bearing - Forward & Reverse Adapter	1	
023247	71-28C (4867VVKIT)	Bushing - Case Housing Forward/Reverse	2	
023248	71-9C (4867DDKIT)	Bushing - Carrier Assembly	2	
023323	4547AY	Coupling 5 - MODEL 10-18 Only	1	
023324	4547BA	Coupling 4 - MODEL 10-17 Only	1	
023327	1000-031-001	Coupling - Current Reduction	1	Fine Spline
023328	4912	Coupling - Early Reduction	1	Fine Spline
023196	71-17	Thrust Washer	1	
023187	1016-193-001	Washer	1	
023188	71-15B	Washer	1	
023189	73C-15	Thrust Washer	1	

VELVET DRIVE® 71 & 72 "V" Drive

ALTO NO.	OEM NO.	DESCRIPTION	USAGE	NOTES
KITS				
023801CB	1308-410-001	OVERHAUL KIT Includes Gasket Set, Orings, Metal Clad Seals and Nut	1	
MISC. PARTS				
023027	1308-045-001	Gasket - V DRIVE Housing Up to 1991	1	
023028	1308-045-004	Gasket - V DRIVE Housing 1992-On	1	
023029	1308-045-002	Gasket - V DRIVE Trans	1	
023030	1308-045-003	Gasket	1	
010235B	1000-141-235	Oring - Pre-Load Cap	2	
023421	71C-110	Metal Clad Oil Seal - Output UP to 1989	1	
023422	1000-044-017	Metal Clad Oil Seal - Output 1990-On	1	
023320	1000-149-034	Nut - Output Shaft	1	
023335	1308-410-015	Flange Kit - V DRIVE Conversion Kit	1	
023332	1308-027-005	Flange - Housing	1	
023333	942-1652	Bolt - Flange Housing	6	
023335	1308-410-015 25662	Flange Kit - V DRIVE Conversion Kit HEAVY DUTY	1	

Velvet Drive is a registered trademark of Borg Warner Corporation

VELVET DRIVE® 71 & 72 Damper Assemblies

DAMPER ASSEMBLIES				
DA-101	1004-650-001	13" x 7/8" Diameter, 8 bolt, 10 springs	1	26 Teeth
DA-102	1004-650-002 AS4-K1C	6.18" OD, 1.353 Spline	1	26 Teeth
DA-103	1004-650-003	8.0" OD, 1.35 Spline (8 Equally Spaced Holes)	1	26 Teeth
DA-106	1004-650-006 AS4-K2C	6.66" RAD (Triangle), 1.353 Spline	1	26 Teeth
DA-106A	120-8-1446 AS8-K2C	6.66" RAD Same as DA-106 except with Cut Off Rounded Ears	1	26 Teeth
DA-107	1004-650-007 AS7-K2C	13.25" OD Fits Engines up to 430 C.U. 1.353 spline	1	26 Teeth Purple Spring
DA-108	1004-650-008 AS5-K2C	13.25: OD Fits Engines up to 370 C.U.	1	White Spring
DA-302	2301-650-001	152mm x 123mm 10/23/29 Teeth DIN 5464 with Dowel Pin Holes	1	45 Degree x 8

Velvet Drive is a registered trademark of Borg Warner Corporation

PRM-NEWAGE Model 175-750

CLUTCHES				
326700BR	MT731	FR NEWAGE INNER DRIVE PLATE BRONZE	7	Brz Spiral 1.55mm/.061" 24 Teeth

BORG WARNER (CR-2) / VELVET DRIVE
1013/14 DROP CENTER

ALTO NO.	OEM NO.	DESCRIPTION	USAGE	NOTES
KITS				
023801DB	1013-410-001	OVERHAUL KIT Includes Gaskets, Metal Clad Seals and Sealing Rings	1	
023901B	NL	MASTER OVERHAUL KIT Includes Overhaul Kit, Bronze Plates and Steel Plates	1	
023901BLS	NL	BANNER KIT Includes Overhaul Kit and Bronze Plates	1	
023750D	NL	CLUTCH PLATE MODULE Includes 10 Bronze Plates and 6 Steel Plates	1	
CLUTCHES				
049700BR	5C-A66A	Friction Forward	5-7	Bronze .060
023738BR	72A-66B	Friction Reverse	1-3	Bronze .115
023701	3-176	Steel Forward	4-6	Flat .068
023739	72-176	Steel Reverse	1-2	Flat .070
MISC. PARTS				
A38001	4805A	Seal - Reverse Clutch Outer	1	
023054A	5L-36	Seal - Forward Clutch Outer	1	
023002	3-61	Seal - Front Pump	1	
023020	71-144B	Gasket - Case & Adapter	1	
023022	71-14	Gasket - Valve Cover	1	
023041	1013-045-002	Gasket - Reduction Housing	1	
023042	1013-045-001	Gasket - Adapter	1	
010210A	4804H	Oring - Control Valve		
010226B	5M-122	Oring - Forward Clutch Inner		
010226B	4804G	Oring - Reverse Clutch Inner		
023420	1000-044-014	Metal Clad Seal - Front Pump		
023428	1000-044-003	Metal Clad Seal - Coupling		
023111	4806S 4806L	Sealing Ring - Teflon	2	
038105	4806J	Sealing Ring	5	

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VELVET DRIVE ® S500

CLUTCHES				
044700	1023-666-001	Friction Forward/Reverse	7	Fiber .090
044701	1023-166-001	Steel Forward/Reverse	7	Flat .071

Velvet Drive is a registered trademark of Borg Warner Corporation

VELVET DRIVE ® 1500

ALTO NO.	OEM NO.	DESCRIPTION	USAGE	NOTES
CLUTCHES				
027700	1023-666-003	Friction Forward/Reverse	7	Fiber .086
027701	1023-166-002	Steel Forward	7	Flat .068

VELVET DRIVE ® 7000

CLUTCHES				
023748	1026-666-001	Friction Forward/Reverse	15	Fiber .061
023749	1026-166-001	Steel Forward/Reverse	15	Flat .068

Velvet Drive is a registered trademark of Borg Warner Corporation

PARAGON MODELS P21, P31, OW1 (SN5M-P)

KITS				
023809DB	Z-7601	OVERHAUL KIT Includes Gaskets, Orings, Metal Clad Seals and Sealing Rings	1	Combo Fits SN5M-5P & 6A & Later
023909D	NL	MASTER OVERHAUL KIT Includes Overhaul Kit, Bronze Plates and Steel Plates	1	Combo Fits SN5M-5P & 6A & Later
023750E	KN-10031X	CLUTCH PLATE MODULE Includes 6 Bronze Plates and 7 Steel Plates	1	
CLUTCHES				
049700BR	11759	Friction	6	Bronze .060
023751	11758	Steel	7	Flat .060
MISC. PARTS				
023031	12640	Gasket - Front	1	
023032	12227	Gasket - Cover	1	SN5M-5P
023034	11083	Gasket - Rear	1	
010320B	16196	Oring	1	
010256B	10280	Oring - Outer	1	
010223A	11352	Oring - Forward & Rear Coupling	2	
010236B	12221	Oring - Reverse Piston	1	
010116B	12222	Oring - Piston	1	
010028A	11769	Oring - Control Valve	1	
010114B	11779	Oring - Relief Valve	1	
010019B	11683	Oring	2	
023425	11791	Metal Clad Seal - Front Pump	1	
023427	2XE-446A	Metal Clad Seal - Rear	1	
023110	HF-1094	Sealing Ring - Collar	2	
023099	11573	Washer - Seal	1	
023501	11240	Clip	2	
023502	11237	Lock Screw	2	

PARAGON MODELS P32A-P35B, P22-P25, OW2-OW5
(SN5M-5P & 6A & LATER)

ALTO NO.	OEM NO.	DESCRIPTION	USAGE	NOTES
KITS				
023809	NL	GASKET SET Includes Paper and Rubber Parts Only	1	
023809B	Z-7988 Z-7603	OVERHAUL KIT Includes Gaskets, Orings, Metal Clad Seals and Sealing Rings	1	Combo Fits SN5M-5P & 6A & Later
023909	NL	MASTER OVERHAUL KIT Includes Overhaul Kit, Bronze Plates and Steel Plates	1	Combo Fits SN5M-5P & 6A & Later
023750G	KN-10031	CLUTCH PLATE MODULE Includes 8 Bronze Plates, 9 Steel Plates, 2 Clips and 2 Screws	1	
CLUTCHES				
049700BR	11759	Friction	6-8	Bronze .060
023751	11758	Steel	7-9	Flat .060
MISC. PARTS				
023031	12640	Gasket - Front	1	
023032	12227	Gasket - Cover	1	SN5M-5P
023032A	12576	Gasket - Cover	1	SN6A & Later
023034	11083	Gasket - Rear	1	
023039	RA20-15A	Gasket - Reduction	1	1.5:1 & 2:1 Only
023040	RB20-15A	Gasket - Reduction	1	2.5:1 & 3:1 Only
023321	13000	Nut - Ouput Shaft Coupling (Fits 4" & 5" couplings)	1	
010256B	10280	Oring - Outer	1	
010223A	11352	Oring - Forward & Rear Coupling	2	
010236B	12221	Oring - Reverse Piston	1	
010116B	12222	Oring - Piston	1	
010028A	11769	Oring - Control Valve	1	
010114B	11779	Oring - Relief Valve	1	
010019B	11683	Oring	2	
023425	11791	Metal Clad Seal - Front Pump	1	
023423	11518	Metal Clad Seal - Coupling	1	
023110	HF-1094	Sealing Ring - Collar	2	
023099	11573	Washer - Seal	1	
023501	11240	Clip	2	
023502	11237	Lock Screw	2	

PARAGON MODELS P34-P35, P42-P45
(SN5M-5P & 6A & LATER)

ALTO NO.	OEM NO.	DESCRIPTION	USAGE	NOTES
KITS				
023809A	NL	GASKET SET Includes Paper and Rubber Parts Only	1	
023809AB	Z-7989 Z-7604	OVERHAUL KIT Includes Gaskets, Orings, Metal Clad Seals & Sealing Rings	1	Combo Fits SN5M-5P & 6A & Later
023909A	NL	MASTER OVERHAUL KIT Includes Overhaul Kit, Bronze Plates and Steel Plates	1	Combo Fits SN5M-5P & 6A & Later
023750G	KN-10031	CLUTCH PLATE MODULE Includes 8 Bronze Plates, 9 Steel Plates, 2 Clips & 2 Screws	1	
CLUTCHES				
049700BR	11759	Friction	6-8	Bronze .060
023751	11758	Steel	7-9	Flat .060
MISC. PARTS				
023031	12640	Gasket - Front	1	
023032	12227	Gasket - Cover	1	SN5M-5P
023032A	12576	Gasket - Cover	1	SN6A & Later
023034	11083	Gasket - Rear	1	
023035	RC20-15A	Gasket - Reduction	1	
023036	P11397	Gasket - Reverse-Gear Ring	1	
023040	RB20-15A	Gasket - Reduction	1	2.5:1 & 3:1 Only
023321	13000	Nut - Ouput Shaft Coupling (Fits 4" & 5" couplings)	1	
010256B	10280	Oring - Outer	1	
010223A	11352	Oring - Forward & Rear Coupling	2	
010236B	12221	Oring - Reverse Piston	1	
010116B	12222	Oring - Piston	1	
010028A	11769	Oring - Control Valve	1	
010114B	11779	Oring - Relief Valve	1	
010019B	11683	Oring	2	
023425	11791	Metal Clad Seal - Front Pump	1	
023423	11518	Metal Clad Seal - Coupling	1	
023424	12316	Metal Clad Seal - Coupling	1	
023110	HF-1094	Sealing Ring - Collar	2	
023099	11573	Washer - Seal	1	
023501	11240	Clip	2	
023502	11237	Lock Screw	2	

PARAGON MODEL P41
(SN5M-5P & 6A & LATER)

ALTO NO.	OEM NO.	DESCRIPTION	USAGE	NOTES
KITS				
023809EB	Z-7802 Z-7987	OVERHAUL KIT Includes Gaskets, Orings, Metal Clad Seals & Sealing Rings	1	Combo Fits SN5M-5P & 6A & Later
023909E	NL	MASTER OVERHAUL KIT Includes Overhaul Kit, Bronze Plates and Steel Plates	1	SN5M-5P
023909F	NL	MASTER OVERHAUL KIT Includes Overhaul Kit, Bronze Plates and Steel Plates	1	SN6A & Later
023750J	NL	CLUTCH PLATE MODULE Includes 7 Bronze Plates, 8 Steel Plates, 2 Clips and 2 Screws	1	
CLUTCHES				
049700BR	11759	Friction	7-8	Bronze .060
023751	11758	Steel	8-9	Flat .060
MISC. PARTS				
023031	12640	Gasket - Front	1	
023032	12227	Gasket - Cover	1	SN5M-5P
023032A	12576	Gasket - Cover	1	SN6A & Later
023036	P11397	Gasket - Reverse-Gear Ring	1	
023321	13000	Nut - Ouput Shaft Coupling (Fits 4" & 5" couplings)	1	
010256B	10280	Oring - Outer	1	
010223A	11352	Oring - Forward & Rear Coupling	2	
010236B	12221	Oring - Reverse Piston	1	
010116B	12222	Oring - Piston	1	
010028A	11769	Oring - Control Valve	1	
010114B	11779	Oring - Relief Valve	1	
010019B	11683	Oring	2	
023425	11791	Metal Clad Seal - Front Pump	1	
023426	RB446	Metal Clad Seal - Coupling	1	
023110	HF-1094	Sealing Ring - Collar	2	
023099	11573	Washer - Seal	1	
023501	11240	Clip	2	
023502	11237	Lock Screw	2	

PARAGON MODEL P200, 300, 400

CLUTCHES				
049700BR	11759	Friction Forward	6-8	Bronze .060
023751	11758	Steel Forward	7-9	Flat .060

PARAGON MODEL HF7 (Direct Drive)

ALTO NO.	OEM NO.	DESCRIPTION	USAGE	NOTES
KITS				
023809CB	Z-7279	OVERHAUL KIT Includes Gaskets, Orings, Metal Clad Seals and Sealing Rings	1	
023911B	NL	MASTER OVERHAUL KIT Includes Overhaul Kit, Bronze Plates and Steel Plates	1	
023750E	KN-10031X	CLUTCH PLATE MODULE Includes 6 Bronze Plates, 7 Steel Plates, 2 Clips& 2 Screws	1	
CLUTCHES				
049700BR	11759	Friction	6	Bronze .060
023751	11758	Steel	7	Flat .060
MISC. PARTS				
023033	11736	Gasket - Front Housing	1	
023034	Y-11083	Gasket - Rear Housing	1	
023037	Y-11767	Gasket - Cover Housing	1	
023321	13000	Nut - Ouput Shaft Coupling (Fits 4" & 5" couplings)	1	
010019B	X-11683	Oring	1	
010028A	X-11769	Oring - Control Valve	1	
010114B	X-11779	Oring - Relief Valve	1	
010148B	X-11777	Oring	1	
010223A	X-11352	Oring - Coupling	1	
010256B	X-10280	Oring - Outer	1	
010320B	X-16196	Oring	1	
023425	X-11791	Metal Clad Seal - Front	1	
023427	2X3-446A	Metal Clad Seal - Rear	1	
023096	X-11726	Seal - Washer	1	
023098	X-11353	Seal - Washer	12	
023099	11573	Washer - Seal	1	
023110	HF-1094	Sealing Ring - Oil Dist.	2	
023501	112409	Clip	2	
023502	11237	Lock Screw	2	

PARAGON MODEL HJ7

ALTO NO.	OEM NO.	DESCRIPTION	USAGE	NOTES
KITS				
023809BB	Z-7401	OVERHAUL KIT Includes Gaskets, Orings, Metal Clad Seals & Sealing Rings	1	
023911	NL	MASTER OVERHAUL KIT Includes Overhaul Kit, Bronze Plates and Steel Plates	1	
023750J	NL	CLUTCH PLATE MODULE Includes 7 Bronze Plates, 8 Steel Plates, 2 Clips and 2 Screws	1	
CLUTCHES				
049700BR	11759	Friction	7	Bronze .060
023751	11758	Steel	8	Flat .060
MISC. PARTS				
023031	Z-12640	Gasket - Front Housing	1	
023037	Y-11767	Gasket - Cover Housing	1	
023321	13000	Nut - Ouput Shaft Coupling (Fits 4" & 5" couplings)	1	
010019B	X-11683	Oring	1	
010028A	X-11769	Oring - Control Valve	1	
010114B	X-11779	Oring - Relief Valve	1	
010148B	X-11777	Oring	1	
010223A	X-11352	Oring - Coupling	1	
010256B	X-10280	Oring - Outer	1	
023425	X-11791	Metal Clad Seal - Front	1	
023426	RB446	Metal Clad Seal - Rear	1	
023096	X-11726	Washer - Seal	1	
023097	11176	Washer - Seal	6	
023098	11353	Washer - Seal	6	
023099	11573	Washer - Seal Detent	1	
023110	HF-1094	Sealing Ring - Oil Dist.	2	
023501	112409	Clip	2	
023502	11237	Lock Screw	2	

MERCUISER II-TR, S

ALTO NO.	OEM NO.	DESCRIPTION	USAGE	NOTES
CLUTCHES				
049700-216	C9AP-7B164SEL B-62691A1-KIT	Friction Forward	1	Fiber .0876
023701	C8AZ-7B442A B-62691A1-KIT	Steel Forward	4	Flat .068
049700	E0AZ-7B164A C9AZ-7B164A B6AZ-7B164R B5AZ-7B164B 3193139 3186574	Friction		Tan PL .061
049700BR	5C-A66A B5AZ-7B164A B6AZ-7B164A	Friction		Bronze .061
049700BR235	NL	Friction		Bronze .093
023738BR	72-A66B	Friction		Bronze .115
023739	72-176	Steel		Flat

CAPITOL HYDRASMOOTH

CLUTCHES				
087700	17-80032	Friction Direct Small	9	Fiber .072
087701	17-80029	Steel Direct Small	AR	Flat .071
087711	17-80029	Steel Direct Small	AR	Flat .061
087702	17-80031	Friction Reverse Large	5	Fiber .092

CAPITOL MARINE

HY400, 6900, HY7700, 24000, 25000

CLUTCHES				
305700	1-00230-4900	Friction	12-14	Bronze .155
305701	1-00233-1200	Steel	12-14	Flat .091

CAPITOL MARINE

5HD-200, HE 10200, 10700, 11200, 11720

CLUTCHES				
305702	1-00230-2000	Friction	12-14	Bronze .135
305703	1-00233-0070	Steel	12-14	Flat .095
305703-390	1-00229-1700	Steel	1	Flat .155

CAPITOL MARINE
M105, 125

ALTO NO.	OEM NO.	DESCRIPTION	USAGE	NOTES
CLUTCHES				
305704	1-14186-0000	Friction	12	Bronze .125
305705	1-14185-0000	Steel	12	Flat .065

TWIN DISC MG-502

ALTO NO.	OEM NO.	DESCRIPTION	USAGE	NOTES
CLUTCHES				
332701	B3337	Steel Forward/Reverse	18	52 Teeth Flat .051
332700	B3336A	Friction Forward/Reverse	16	79 Teeth Bronze .085

TWIN DISC MG-506

ALTO NO.	OEM NO.	DESCRIPTION	USAGE	NOTES
CLUTCHES				
332703	204097	Steel Forward/Reverse	18	42 Teeth Flat .061
332702	B3060B	Friction Forward/Reverse	16	Bronze .085

TWIN DISC MG-509-512

ALTO NO.	OEM NO.	DESCRIPTION	USAGE	NOTES
CLUTCHES				
332705	A-4939 P-4371	Steel Forward/Reverse - MG-509 Only	14	45 Teeth Flat .062
332705-200	4720762	Steel Forward/Reverse - MG-509 Only 2.mm	14	45 Teeth Flat .079
332704	A-4480A,B,M P-4251A,B,C	Friction Forward/Reverse - MG-509 & MG-512	14	Bronze .112

TWIN DISC MG-514A, B, C

ALTO NO.	OEM NO.	DESCRIPTION	USAGE	NOTES
CLUTCHES				
332709	A-6567E	Steel MG-514A, MG-514B - Late		Step .091
332709	A-6567E	Steel MG-514C		Step .091
332706	A-6566E	Friction - All Models	14	Bronze .122

TWIN DISC (Various)

ALTO NO.	OEM NO.	DESCRIPTION	USAGE	NOTES
CLUTCHES				
332708	206177M	Friction		
332711-228	215736	Steel - MG-518		Flat .090
332712	206106X	Friction - MG-518		Grn WF .125
MISC. PARTS				
332502UP26	B3073C	Drive Block, Rubber - Large (Pack of 26 Pcs.)	26	
332503UP26	A3905E	Drive Block, Rubber - Small (Pack of 26 Pcs.)	26	

HURTH MARINE HBW 5, 50, 100

ALTO NO.	OEM NO.	DESCRIPTION	USAGE	NOTES
KITS				
316801B	500427	GASKET SET Includes Paper and Rubber Parts Only	1	
316901	500437	MASTER OVERHAUL KIT Includes Overhaul Kit, Bronze Plates and Steel Plates	1	
316750	NL	CLUTCH PLATE MODULE Includes 8 Bronze Plates, 6 Steel Plates	1	
CLUTCHES				
316700	288757	Friction	8	Bronze .063
316701	288758	Steel	6	Flat .056
MISC. PARTS				
316003	288739	Gasket	4	
316005	254716	Gasket - Shift Cover	1	
316410	106864	Metal Seal - Lever	1	OD: 26mm ID: 20mm
316401	280135	Metal Seal	1	OD: 37mm ID: 27mm
316402	105153	Metal Seal	1	OD: 45mm ID: 32mm
2000950	105524	Oring - Shift Shaft HBW-50	1	
2401230	105679	Oring - Intermediate Shaft HBW-100	1	
316187-396	288748	Thrust Washer (OE Design)	2	
316645		Shim Kit - Bearing (Contains 1 Each Shim)	1	

HURTH MARINE HBW 10, 150

KITS				
316803B	500428	GASKET SET Includes Gaskets, Orings and Metal Clad Seals	1	
316903	500438	MASTER OVERHAUL KIT Includes Overhaul Kit, Bronze Plates and Steel Plates	1	
316903A	NL	MASTER OVERHAUL KIT - LATE Includes Overhaul Kit, Bronze Plates and Steel Plates	1	
316750A	NL	CLUTCH PLATE MODULE Includes 8 Bronze Plates, 6 Steel Plates	1	
316750E	NL	CLUTCH PLATE MODULE - LATE Includes 8 Bronze Plates, 8 Steel Plates	1	
CLUTCHES				
316702	288912	Friction	8	Bronze .063
316703	187872	Steel	6	Flat .056
316703-100	NL	Steel - Thin	8	Flat .039
MISC. PARTS				
316002	254715	Gasket	4	
316005	254716	Gasket - Shift Cover	1	
316410	106864	Metal Clad Seal - Lever	1	OD: 26mm ID: 20mm
316403	215875	Metal Clad Seal - Front	1	OD: 52mm ID: 30mm
316404	105159	Metal Clad Seal - Rear	1	OD: 52mm ID: 40mm
3001400	105530	Oring - Intermediate Shaft HBW 150	1	
316188	344787	Thrust Washer	2	

HURTH MARINE HBW 150V

ALTO NO.	OEM NO.	DESCRIPTION	USAGE	NOTES
KITS				
316803VB	500429	GASKET SET Includes Gaskets, Orings, Metal Clad Seals, Sealing Rings	1	
316903V	500439	MASTER OVERHAUL KIT Includes Overhaul Kit, Bronze Plates and Steel Plates	1	
316903VA	NL	MASTER OVERHAUL KIT - LATE Includes Overhaul Kit, Bronze Plates and Steel Plates	1	
316750A	NL	CLUTCH PLATE MODULE Includes 8 Bronze Plates, 6 Steel Plates	1	
316750E	NL	CLUTCH PLATE MODULE - LATE Includes 8 Bronze Plates, 8 Steel Plates	1	
CLUTCHES				
316702	288912	Friction	8	Bronze .063
316703	187872	Steel	6	Flat .056
316703-100	NL	Steel - Thin	8	Flat .039
MISC. PARTS				
316002	254715	Gasket	2	
316005	254716	Gasket - Shift Cover	1	
316410	106864	Metal Clad Seal - Lever	1	OD: 26mm ID: 20mm
316403	215875	Metal Clad Seal - Front	1	OD: 52mm ID: 30mm
316406	401647	Metal Clad Seal - Rear	2	OD: 90mm ID: 65mm
A10030B	105590	Oring	1	
A10029A	291618	Oring	2	

HURTH MARINE HBW 20, 220, 250

KITS				
316805B	500430	OVERHAUL KIT Includes Gaskets, Orings, Metal Clad Seals, Sealing Rings	1	
316905	500440	MASTER OVERHAUL KIT Includes Overhaul Kit, Bronze Plates and Steel Plates	1	
316750B	NL	CLUTCH PLATE MODULE Includes 10 Bronze Plates, 8 Steel Plates	1	
CLUTCHES				
316704	288889	Friction	10	Bronze .063
316705	206026	Steel	8	Flat .056
MISC. PARTS				
316001	274251	Gasket	4	
316410	106864	Metal Clad Seal - Lever	1	OD: 26mm ID: 20mm
316404	105159	Metal Clad Seal	1	OD: 52mm ID: 40mm
316405	284260	Metal Clad Seal	1	OD: 90mm ID: 65mm
316189	327395 277109	Oring	1	

HURTH MARINE Damper Assemblies

ALTO NO.	OEM NO.	DESCRIPTION	USAGE	NOTES
DAMPER ASSEMBLIES				
DA-301	947-77-601-02 254750	121.5mm X 100mm 10/23/29 Teeth DIN 5464	1	45 Degree x 8
DA-302	947-44-601-03 254762	152mm x 123mm 10/23/29 Teeth DIN 5464 w/DOWEL PIN HOLES	1	45 Degree x 8
DA-303	288240	157mm X 123mm 10/23/29 Teeth DIN 5464	1	72 Degree x 5

HURTH MARINE HSW 800 SERIES (Reduction) & V DRIVE

KITS				
316807CB	NA	OVERHAUL KIT - (800 REDUCTION) Includes Gaskets, Orings, Metal Clad Seals, Sealing Rings	1	
316807BB	NL	OVERHAUL KIT - (V DRIVE) Includes Gaskets, Orings, Metal Clad Seals, Sealing Rings	1	
316907A	500435	MASTER OVERHAUL KIT - (800 REDUCTION) Includes Overhaul Kit, Bronze Plates and Steel Plates	1	
316907AV	NL	MASTER OVERHAUL KIT - (V DRIVE) Includes Overhaul Kit, Bronze Plates and Steel Plates	1	
316750D	NL	CLUTCH PLATE MODULE - (800 REDUCTION AND V DRIVE) Includes 10 Bronze Plates and 12 Steel Plates	1	
CLUTCHES				
316708	97827315013 455-786 813319	Friction	10	Bronze .079
316709	97827314013 455-787 813320	Steel	12	Wave .067
MISC. PARTS				
316004	27-813301 408-388	Gasket - Shift Cover	1	
316405	26-813286 413-883	Metal Clad Seal - Input	1	OD: 52mm ID: 35mm
316407A	634319104	Metal Clad Seal - Output - REDUCTION	1	OD: 95mm ID: 73mm
316408A	105-113	Seal - Output V DRIVE	1	105 X 130 X 12
316409A	480-762	Seal - Output V DRIVE	1	80 X 100 X 10
316940A	438337	Filter	1	
FK316940	463772	Filter Kit - Includes Filter & 2 Orings		
010614A	25-813406 105-542	Oring - Inner Filter Cover	1	
A10046A	25-813407 442-731	Oring - Outer Filter Cover	1	
1581496	25-813329 105-571	Oring - Output Flange	1	
010611A	NL	Oring - Control Valve	2	
316102	53-813312 447-038	Sealing Ring - Shaft	3	

HURTH MARINE HSW 630 (Hydraulic) & 630 V DRIVE

ALTO NO.	OEM NO.	DESCRIPTION	USAGE	NOTES
KITS				
316807B	NL	OVERHAUL KIT - (630 HYDRAULIC) Includes Gaskets, Orings, Metal Clad Seals & Sealing Rings	1	
316807AB	500-423	OVERHAUL KIT - (630 V DRIVE) Includes Gaskets, Orings, Metal Clad Seals & Sealing Rings	1	
316907	NL	MASTER OVERHAUL KIT - (630 HYDRAULIC) Includes Overhaul Kit, Bronze Plates and Steel Plates	1	
316907V	NL	MASTER OVERHAUL KIT - (630 V DRIVE) Includes Overhaul Kit, Bronze Plates and Steel Plates	1	
316750C	NL	CLUTCH PLATE MODULE - (630 HYD & 630 V DRIVE) Includes 8 Bronze Plates and 10 Steel Plates	1	
CLUTCHES				
316708	97827315013 455-786 813319	Friction	8	Bronze 2.0mm / .079 OD: 134mm / 5.27 36 Teeth
316709	97827314013 455-787 813320	Steel	10	Wave 1.77mm / .067 ID: 96.5mm / 3.8
MISC. PARTS				
316004	27-813301 408-388	Gasket - Shift Cover	1	
316405	26-813286 413883	Metal Clad Seal - Input	1	OD: 52mm ID: 35mm
316407	26-813292 442-135	Metal Clad Seal - Output	1	OD: 72mm ID: 55mm
316940A	438337	Filter	1	
FK316940	463772	Filter Kit - Includes Filter & 2 Orings	1	
010614A	25-813406 105-542	Oring - Inner Filter Cover	1	
A10046A	25-813407 442-731	Oring - Outer Filter Cover	1	
1581496	25-813329 105571	Oring - Output Flange	1	
010611A	101-101	Oring - Control Valve	2	
316102	53-813312 447-038	Sealing Ring - Shaft	3	
316408	444-070	Seal - Output V DRIVE	1	85 x 110 x 12
316409	444-071	Seal - Output V DRIVE	1	65 x 85 x 12

HURTH MARINE HSW 450A-2

ALTO NO.	OEM NO.	DESCRIPTION	USAGE	NOTES
KITS				
315800	NL	OVERHAUL KIT Includes Gaskets, Orings, Metal Clad Seals & Sealing Rings	1	
315900	NL	MASTER OVERHAUL KIT Includes Overhaul Kit, Bronze Plates and Steel Plates	1	
315750	NL	CLUTCH PLATE MODULE Includes 8 Bronze Plates, 10 Steel Plates	1	
CLUTCHES				
315700BR	489120	Friction	8	Bronze 1.7mm / .066 OD: 110mm / 4.325 27 Teeth
315701	489119	Steel	10	Wave 1.5mm / .059 ID: 85mm / 3.335 6 Teeth
MISC. PARTS				
316004	408388	Gasket - Control Block	1	
315401	374056	Metal Clad Seal - Output Shaft	1	45 x 62 x 8
315402	500065	Metal Clad Seal - Dist. Shaft	1	30 x 43 x 8/9.5
316405	413883	Metal Clad Seal - Input Shaft	1	52 x 35 x 8
1581181	105559	Oring - Output Shaft	1	
315251	393124	Snap Ring	2	
316940A	438337	Filter	1	
FK316940	463772	Filter Kit - Includes Filter & 2 Orings	1	

HURTH MARINE / ZF IRM 220, 220A

KITS				
322800	3205199501	OVERHAUL KIT Includes Gaskets, Orings, Metal Clad Seals & Sealing Rings	1	
CLUTCHES				
322700-220	3205302057	Friction Forward & Reverse	22	Bronze .087
322701-140	3205302062	Steel Forward & Reverse	24	Waved .055
311702	3201303017	Friction	45	Bronze .080
TBA	3201302008	Steel		
MISC. PARTS				
322100	0634402538 03380100	Ring, Sealing Lock	4	
322400	0634319110	Metal Clad Seal - Input	1	
322402	063400069	Metal Clad Seal - Output	1	

MARINE DAMPER ASSEMBLIES

VELVET DRIVE ®

ALTO NO.	OEM NO.	DESCRIPTION	USAGE	NOTES
DAMPER ASSEMBLIES				
DA-101	1004-650-001	13" x 7/8" Diameter, 8 bolt, 10 springs	1	26 Teeth
DA-102	1004-650-002 AS4-K1C BBD3108UL	6.18" OD, 1.353 Spline	1	26 Teeth Red Spring
DA-103	1004-650-003	8.0" OD, 1.35 Spline (8 Equally Spaced Holes)	1	26 Teeth
DA-106	1004-650-006 AS4-K2C BBD0107UL	6.66" RAD (Triangle), 1.353 Spline	1	26 Teeth Red Spring
DA-106A	120-8-1446	6.66" RAD Same as DA-106 except with Cut Off Rounded Ears	1	26 Teeth
DA-107	1004-650-007 AS7-K2C BBD3131UL	13.25" OD Fits Engines up to 430 C.U. 1.353 spline	1	26 Teeth Purple Spring
DA-108	1004-650-008 BBD3132UL	13.25: OD Fits Engines up to 370 C.U.	1	26 Teeth White Spring

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VOLVO PENTA

DAMPER ASSEMBLIES				
DA-302	2301-650-001	152mm x 123mm 10/23/29 Teeth DIN 5464 with Dowel Pin Holes	1	45 Degree x 8
DA-201	841893-1 1866-018-131	B30, D21, D40 ENG. 287mm x 123mm	1	6 Teeth
DA-203	841894-9 1866-026-131	MD21, MD32 ENG. 287mm x 133mm	1	26 Teeth
DA-204	841892-3 1866-039-001	MD21/RB ENG 267mm x 123mm	1	10 Teeth
DA-205	855617-7 1866-118-031	TAM D41 ENG 287mm x 159mm	1	26 Teeth
DA-206	855389-3 1866-032-231	B21, B21 ENG	1	

HURTH MARINE

DAMPER ASSEMBLIES				
DA-301	947-77-601-02 254750 1866-050-002	121.5mm X 100mm 10/23/29 Teeth DIN 5464	1	45 Degree x 8
DA-302	947-44-601-03 254762 1866-052-001	152mm x 123mm 10/23/29 Teeth DIN 5464 w/DOWEL PIN HOLES	1	45 Degree x 8
DA-303	288240 1866-061-001	157mm X 123mm 10/23/29 Teeth DIN 5464	1	72 Degree x 5

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