prestolite®

SERVICE PARTS LIST

MHB-4000 SERIES

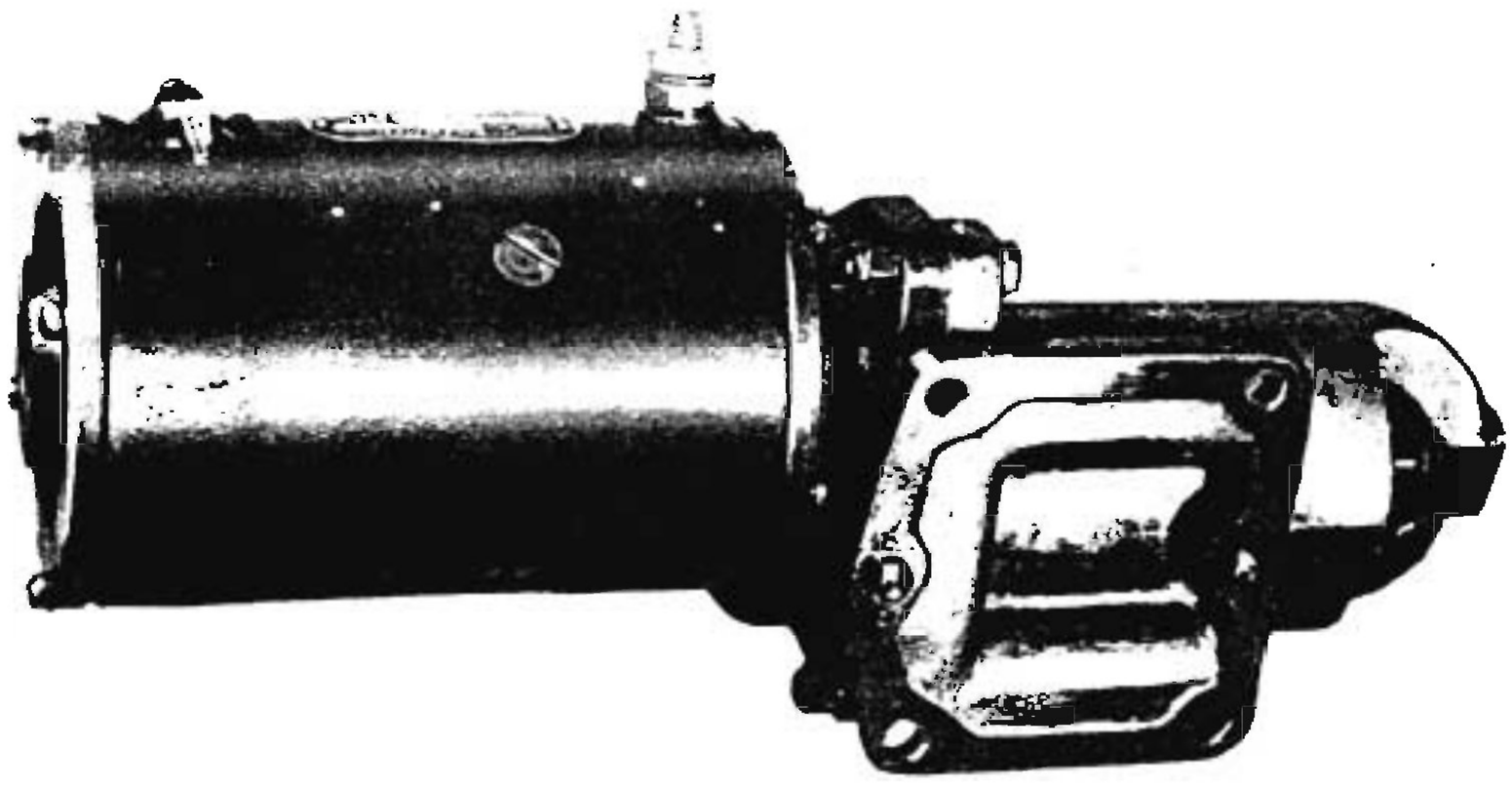
STARTING MOTORS

ISSUED: 6-18-85 (Rev.)

ORIG.EQUIP.MOTOR ENG. NUMBER		SERVICE MOTOR ENG. NUMBER	SALES NUMBER	VOLTS: 24 APPLICATION
MHB-4001,R	USE	MHB-4016R	46-2395	Lycoming (Aircraft)
MHB-4002,R	USE	MHB-4017R	46-2396	Lycoming (Aircraft)
MHB-4003,R	USE	MHB-4020R	46-2606	Lycoming (Aircraft)
MHB-4004		MHB-4004	46-877	Franklin Eng. (Aircraft)
MHB-4005,R		[*]	[*]	Lycoming (Aircraft)
MHB-4006		MHB-4006	46-2004	Continental (Aircraft)
MHB-4007,R	USE	MHB-4018R	46-2397	Lycoming (Aircraft)
MHB-4008,R	USE	MHB-4008R	46-2071	Lycoming (Aircraft)
MHB-4009,R	USE	MHB-4014R	46-2268	Lycoming (Aircraft)
MHB-4010,R	USE	MHB-4016R	46-2395	Lycoming (Aircraft)
MHB-4011,R	USE	MHB-4017R	46-2396	Lycoming (Aircraft)
MHB-4012,R	USE	MHB-4020R	46-2606	Lycoming (Aircraft)
MHB-4013,R	USE	MHB-4018R	46-2397	Lycoming (Aircraft)
MHB-4014,R	USE	MHB-4014R	46-2268	Lycoming (Aircraft)
MHB-4015,R	USE	MMU-4001R	46-2442	Lycoming (Aircraft)
MHB-4016,R	USE	MHB-4016R	46-2395	Lycoming (Aircraft)
MHB-4017,R	USE	MHB-4017R	46-2396	Lycoming (Aircraft)
MHB-4018,R	USE	MHB-4018R	46-2397	Lycoming (Aircraft)
MHB-4019,A,R	USE	MHB-4020R	46-2606	Lycoming (Aircraft)
MHB-4020,R	USE	MHB-4020R	46-2606	Lycoming (Aircraft)

NOTE: SEE CHART FOR MOTOR BEING SERVICED WHEN PARTS ARE REQUIRED.

[*] Available thru Lycoming only.



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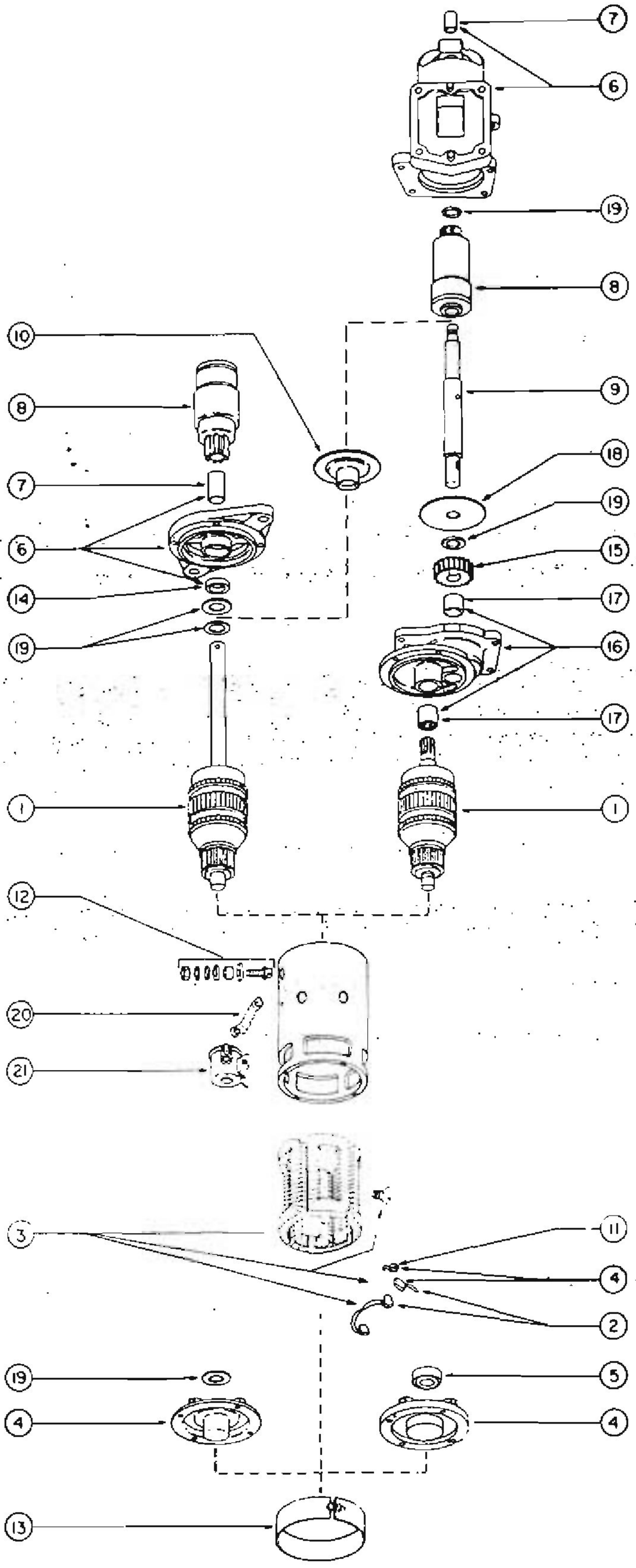
File in the **OE-92 PARTS BINDER**

MOTOR SECTION

MHB-4000 Series Parts List



Exploded View of Typical MHB Motor

Assembly	Armature (1)	Brush Set (2)	Field Coil Package (3)	Comm.End Head Assembly (4)	C.E. Bearing (5)	D.E.Head or Pinion Hsg. (6)	D.E. Bearing (7)
MHB-4001,R (46-819)	16-867 (MHB-2399S)	17-126 (MHB-2012S)	20-371 (MHB-3005S)	19-182 (MHB-2400)	25-68 (X-3991)	[a]	[a]
MHB-4002,R (46-847)	"	"	"	"	"	[b]	[b]
MHB-4003,R (46-822)	"	"	"	"	"	[c]	[c]
MHB-4004 (46-877)	16-377 (MHB-2383)	17-135 (MHB-2012AS)	[NA]	19-201 (MBP-2002CS)	[NA]	22-85 (MZ-1147)	24-22 (MZ-46A)
MHB-4005,R [*]	16-867 (MHB-2399S)	"	20-400 (MHB-3005BS)	19-240 (MHB-2400A)	25-68 (X-3991)	[NR]	[NR]
MHB-4006 (46-2004)	16-454 (MHB-2420)	17-126 (MHB-2012S)	[NA]	19-201 (MBP-2002CS)	[NA]	22-182[e] (MHB-2137)	90-2118[f]
MHB-4007,R (46-2070)	16-867 (MHB-2399S)	"	20-371 (MHB-3005S)	19-182 (MHB-2400)	25-68 (X-3991)	[d]	[d]
MHB-4008,R (46-2071)	"	"	"	"	"	[NR]	[NR]
MHB-4009,R (46-2090)	"	17-135 (MHB-2012AS)	20-400 (MHB-3005RS)	"	"	[d]	[d]
MHB-4010,R (46-2264)	"	17-126 (MHB-2012S)	20-371 (MHB-3005S)	"	"	21-419 (PS-1432C)	24-82 (MZ-298)
MHB-4011,R (46-2265)	"	"	"	"	"	21-434 (PS-1437B)	"
MHB-4012,R (46-2266)	"	"	"	"	"	21-423 (PS-2432B)	"
MHB-4013,R (46-2267)	"	"	"	"	"	21-421 (PS-1432E)	"
MHB-4014,R (46-2268)	"	17-135 (MHB-2012AS)	20-400 (MHB-3005BS)	"	"	"	"
MHB-4015,R (46-2372)	16-870 (MMU-2386S)	"	20-372 (MHB-3005AS)	19-336 (MBP-2002D)	[NA]	21-342 (PS-1435)	24-23 (MG-77A)
MHB-4016,R (46-2395)	16-867 (MHB-2399S)	17-126 (MHB-2012S)	20-371 (MHB-3005S)	19-182 (MHB-2400)	25-68 (X-3991)	21-419 (PS-1432C)	24-82 (MZ-298)
MHB-4017,R (46-2396)	"	"	"	"	"	21-434 (PS-1437B)	"
MHB-4018,R (46-2397)	"	"	"	"	"	21-421 (PS-1432E)	"
MHB-4019,R (46-2398)	"	"	"	"	"	21-423 (PS-2432B)	"
MHB-4020,R (46-2606)	"	"	"	"	"	"	"

[a] 21-418(PS-1432CS)Housing & Shaft Pkg. must be used at time of first repair. Individual Components-
21-419(PS-1432C) Pinion Hsg.,24-82(MZ-298) Bearing, 36-976(MZ-326) Bendix Drive Shaft may be replaced thereafter.
[b] 21-435(PS-1437BS)Housing & Shaft Pkg. must be used at time of first repair. Individual Components-
21-434(PS-1437B)Pinion Hsg.,24-82(MZ-298)Bearing,36-976(MZ-326)Bendix Drive Shaft may be replaced thereafter.
[c] 21-422(PS-2432BS)Housing & Shaft Pkg. must be used at time of first repair. Individual Components-
21-423(PS-2432B)Pinion Hsg.,24-82(MZ-298)Bearing,36-976(MZ-326)Bendix Drive Shaft may be replaced thereafter.
[d] 21-420(PS-1432ES)Housing & Shaft Pkg. must be used at time of first repair. Individual Components-
21-421(PS-1432E)Pinion Hsg.,24-82(MZ-298)Bearing,36-976(MZ-326)Bendix Drive Shaft may be replaced thereafter.
[e] 36-815(MZ-414S) D.E.Mtg.Screw Gasket Pkg.(10Pcs.) & 90-2191 D.E.Hd.Mtg.Screw Pkg.(20Pcs.)also available.
[f] Bearing & Seal Pkg.
[*] Available thru Lycoming only.
[NR] Not required.
[NA] Not available.

MHB-4000 SERIES

Assembly	Bendix Drive (8)	Bendix Drive Shaft (9)	Intermed. Bearing Assembly (10)	Brush Spring Set (11)	Terminal Stud Package (12)	Cover Band (13)	Oil Seal (14)
MHB-4001,R (46-B19)	59-174[g][+] (EBB-75A)	[a][+]	[NR]	50-263 (MZ-19S)	90-2502	36-321 (MZ-24A)	[NR]
MHB-4002,R (46-B47)	"	[b]	[NR]	"	"	"	[NR]
MHB-4003,R (46-B22)	"	[c]	[NR]	"	"	"	[NR]
MHB-4004 (46-877)	59-161[h] (EBB-133)	[NR]	[NR]	"	"	"	36-507 (XA-560)
MHB-4005,R [*]	[NR]	[NR]	[NR]	"	"	"	[NR]
MHB-4006 (46-2004)	[NR]	[NR]	[NR]	"	"	"	90-2118[f]
MHB-4007,R (46-2070)	59-174[g][+] (EBB-75A)	[d][+]	[NR]	"	"	"	[NR]
MHB-4008,R (46-2071)	[NR]	[NR]	[NR]	"	"	"	[NR]
MHB-4009,R (46-2090)	59-204[g][+] (EBB-142A)	[d][+]	[NR]	"	"	"	[NR]
MHB-4010,R (46-2264)	59-174[g][+] (EBB-75A)	36-976 [+] (MZ-326)	[NR]	"	"	"	[NR]
MHB-4011,R (46-2265)	"	"	[NR]	"	"	"	[NR]
MHB-4012,R (46-2266)	"	"	[NR]	"	"	"	[NR]
MHB-4013,R (46-2267)	"	"	[NR]	"	"	"	[NR]
MHB-4014,R (46-2268)	59-204[g][+] (EBB-142A)	"	[NR]	"	"	"	[NR]
MHB-4015,R (46-2372)	59-177[h] (EBB-124A)	[NR]	36-15[j] (MZ-1236)	"	"	"	[NR]
MHB-4016,R (46-2395)	59-182[h][+] (EBB-131A)	36-1052[+] (MZ-326A)	[NR]	"	"	"	[NR]
MHB-4017,R (46-2396)	"	"	[NR]	"	"	"	[NR]
MHB-4018,R (46-2397)	"	"	[NR]	"	"	"	[NR]
MHB-4019,A,R (46-2398)	"	"	[NR]	"	"	"	[NR]
MHB-4020,R (46-2606)	"	"	[NR]	"	"	"	[NR]

[a] 21-418(PS-1432CS)Housing & Shaft Pkg. must be used at time of first repair. Individual Components-
21-419(PS-1432C)Pinion Hsg.,24-82(MZ-298)Bearing,36-976(MZ-326)Bendix Drive Shaft may be replaced thereafter.
[b] 21-435(PS-14378S)Housing & Shaft Pkg. must be used at time of first repair. Individual Components-
21-434(PS-1437B)Pinion Hsg.,24-82(MZ-298)Bearing,36-976(MZ-326)Bendix Drive Shaft may be replaced thereafter.
[c] 21-422(PS-2432BS)Housing & Shaft Pkg.must be used at time of first repair. Individual Components-
21-423(PS-2432B)Pinion Hsg.,24-82(MZ-298)Bearing,36-976(MZ-326)Bendix Drive Shaft may be replaced thereafter.
[d] 21-420(PS-1432ES)Housing & Shaft Pkg. must be used at time of first repair. Individual Components-
21-421(PS-1432E)Pinion Hsg.,24-82(MZ-298)Bearing,36-976(MZ-326) Bendix Drive Shaft may be replaced thereafter.
[f] Bearing & Seal Pkg.
[g] 90-2140 Bendix Pin Pkg.(25Pcs.)also available.
[h] 90-2139 Bendix Pin Pkg.(25Pcs.)also available.
[j] 24-51(MZ-339)Bushing also available.
[*] Available thru Lycoming only.
[NR] Not required.
[+] 90-2860 Bendix Drive Shaft Key Package(25Pcs.) also available.

Assembly	Gear (15)	Gear Housing Assembly (16)	Needle Bearing (17)	Retainer Plate (18)	Thrust Washer Package (19)	Switch Connector (20)	Switch (21)
MHB-4001,R (46-819)	30-75 (MZ-396)	36-711 (MZ-1390)	[k]	36-709 (MZ-393)	90-601	[NR]	[NR]
MHB-4002,R (46-847)	"	"	[k]	"	"	[NR]	[NR]
MHB-4003,R (46-822)	"	"	[k]	"	"	[NR]	[NR]
MHB-4004 (46-877)	[NR]	[NR]	[NR]	[NR]	90-2677	26-189 (MZ-144)	[**]
MHB-4005,R [*]	[NR]	[*]	[k]	[NR]	90-601	[NR]	[NR]
MHB-4006 (46-2004)	[NR]	[NR]	[NR]	[NR]	90-2232	[NR]	[NR]
MHB-4007,R (46-2070)	30-75 (MZ-396)	36-711 (MZ-1390)	[k]	36-709 (MZ-393)	90-601	[NR]	[NR]
MHB-4008,R (46-2071)	[NR]	"	[k]	[NR]	"	[NR]	[NR]
MHB-4009,R (46-2090)	30-75 (MZ-396)	"	[k]	36-709 (MZ-393)	"	[NR]	[NR]
MHB-4010,R (46-2264)	"	"	[k]	"	"	[NR]	[NR]
MHB-4011,R (46-2265)	"	"	[k]	"	"	[NR]	[NR]
MHB-4012,R (46-2266)	"	"	[k]	"	"	[NR]	[NR]
MHB-4013,R (46-2267)	"	"	[k]	"	"	[NR]	[NR]
MHB-4014,R (46-2268)	"	"	[k]	"	"	[NR]	[NR]
MHB-4015,R (46-2372)	[NR]	[NR]	[NR]	[NR]	90-2677	[NR]	[NR]
MHB-4016,R (46-2395)	30-75 (MZ-396)	36-711 (MZ-1390)	[k]	36-709 (MZ-393)	90-601	[NR]	[NR]
MHB-4017,R (46-2396)	"	"	[k]	"	"	[NR]	[NR]
MHB-4018,R (46-2397)	"	"	[k]	"	"	[NR]	[NR]
MHB-4019,A,R (46-2398)	"	"	[k]	"	"	[NR]	[NR]
MHB-4020,R (46-2605)	"	"	[k]	"	"	[NR]	[NR]

[k] Two used. 24-67(XA-997) is 1/2" I.D. and 24-68(XA-998) is 13/16" I.D.
[*] Available thru Lycoming only.
[**] No longer available.
[NR] Not required.