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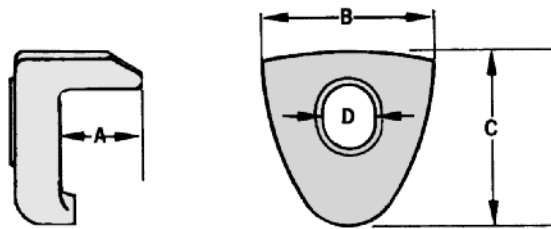
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# DAYTON WHEEL CLAMPS

## For Dayton Cast Spoke Truck and Trailer Wheels

Use These Dimensions for Measuring Clamps



### Dayton "F" Style Wheel Clamps



BWP NO.	REPLACES		A	B	C	D	SPACER BAND WIDTH
	DAYTON	NWRA					
<b>FOR 5/8" WHEEL STUDS</b>							
<b>M-1</b>	09-541417	W-90	1"	2-7/8"	2-1/2"	5/8"	4"
<b>M-2</b>	09-658417	W-93	1-3/8"	2-7/8"	2-1/2"	5/8"	3-5/8"
<b>M-7</b>	09-604017	W-91	1-5/8"	2-7/8"	2-1/2"	5/8"	3-3/8"
<b>M-1126</b>	09-604317	W-92	2"	2-7/8"	2-1/2"	5/8"	3"
<b>FOR 3/4" WHEEL STUDS</b>							
<b>M-3</b>	09-612317	W-96	1-1/8"	2-7/8"	2-1/2"	3/4"	4"
<b>M-1123</b>	09-870817	W-103	1-1/4"	2-7/8"	2-1/2"	3/4"	4"
<b>M-8</b>	09-699317	W-98	1-1/2"	2-7/8"	2-1/2"	3/4"	3-5/8"
<b>M-4</b>	09-623517	W-97	1-3/4"	2-7/8"	2-1/2"	3/4"	3-5/8"
<b>M-3600</b>	09-851817	W-101	1-7/8"	2-7/8"	2-1/2"	3/4"	
<b>M-1124</b>	09-870917	W-104	2"	2-7/8"	2-1/2"	3/4"	3-3/8"
<b>M-1125</b>	09-705317	W-99	2-1/8"	2-7/8"	2-1/2"	3/4"	3"

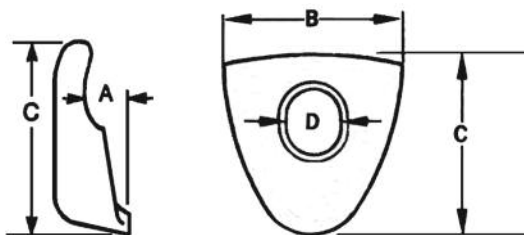
### Dayton Clamps for Cast and Aluminum Wheels



BWP NO.	REPLACES		A	B	C	D	SPACER BAND WIDTH
	DAYTON	NWRA					
<b>FOR 5/8" WHEEL STUDS</b>							
<b>M-1101</b>	5414*	— —	1"	2-1/2"	2-1/2"	5/8"	4"
<b>M-6</b>	09-717510	W-94	1"	3"	2-1/2"	5/8"	4"
<b>FOR 3/4" WHEEL STUDS</b>							
<b>M-5</b>	09-717110	W-100	1"	3"	2-1/2"	3/4"	4"
<b>M-1103</b>	6123*	— —	1"	2-1/2"	2-1/2"	3/4"	4"
<b>M-1104</b>	6235*	— —	1-5/8"	2-5/8"	2-1/2"	3/4"	3-3/8"

\*INDICATES EARLY STYLE CLAMP

## Dayton Front Wheel Clamps



BWP NO.	REPLACES		A	B	C	D
	DAYTON	NWRA				
<b>FOR 5/8" WHEEL STUDS</b>						
<b>M-27</b>	09-839910	W-84	1/2"	2"	2"	5/8"
<b>FOR 3/4" WHEEL STUDS</b>						
<b>M-1122</b>	09-885310	W-85	1/2"	2"	2"	3/4"

BWP NO.	REPLACES		A	B	C	D
	DAYTON	NWRA				
<b>FOR 5/8" WHEEL STUDS</b>						
<b>M-30A</b>	09-008422	W-86	1/4"	3-1/8"	2-5/8"	5/8"
<b>FOR 3/4" WHEEL STUDS</b>						
<b>M-30B</b>	09-729514	W-87	3/16"	2-5/8"	2-5/8"	3/4"

BWP NO.	REPLACES	A	B	C	D
<b>M-3213</b>	09-001422 MACK 15QJ251	15/16"	2-1/2"	2-5/8"	13/16"

## Dayton Clamps for Dual Rear Wheels



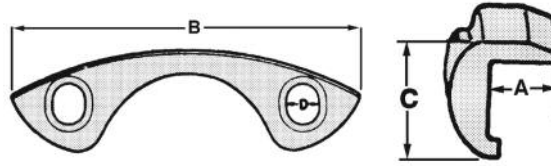
BWP NO.	REPLACES		A	B	C	D	SPACER BAND WIDTH
	DAYTON-MACK	NWRA					
<b>FOR 3/4" WHEEL STUDS</b>							
<b>M-1141</b>	09-006256 15QJ16	W-112	1-1/8"	6"	2-7/16"	3/4"	4"
<b>M-2500</b>	15QJ16P3	— —	1-5/16"	6"	2-1/2"	3/4"	4"
<b>M-1105</b>	09-006302	W-114	1-7/16"	6-7/8"	2-7/16"	3/4"	4"
<b>M-1142</b>	09-006257 15QJ17P1	W-113	1-13/16"	6"	2-7/16"	3/4"	3-3/8"
<b>FOR 5/8" WHEEL STUDS</b>							
<b>M-10</b>	09-005822 15QJ149P1	W-110	1-3/4"	6"	2-1/2"	5/8"	3-3/8"

NOTE: M-10 NO DRIVE LUGS

# DAYTON WHEEL CLAMPS

WHEEL PARTS

Use These Dimensions for  
Measuring All Three  
Spoke Clamps



## Dayton Three Spoke Wheel Clamps



BWP NO.	REPLACES		A	B	C	D	WHEEL DIA.
	DAYTON	NWRA					
FOR 3/4" WHEEL STUDS							
<b>M-1131</b>	09-008629	— —	1"	9-7/16"	3"	3/4"	20"
<b>M-1132</b>	09-008630	W-80	1"	10-3/16"	3-1/4"	3/4"	22"



BWP NO.	REPLACES		A	B	C	D	WHEEL DIA.
	DAYTON	NWRA					
FOR 3/4" WHEEL STUDS							
<b>M-1138</b>	09-008621	W-77	1"	10-3/16"	3-1/4"	3/4"	22"
<b>M-1139</b>	09-008622	— —	1"	9-7/16"	3"	3/4"	20"

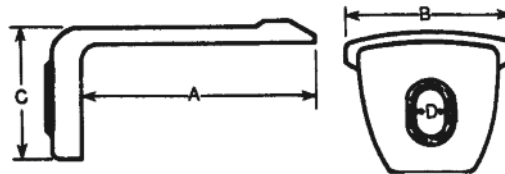


BWP NO.	REPLACES		A	B	C	D	WHEEL DIA.
	DAYTON	NWRA					
FOR 3/4" WHEEL STUDS							
<b>M-1140</b>	09-001228	— —	1-1/16"	9-1/4"	2-1/2"	3/4"	20"



BWP NO.	REPLACES		A	B	C	D	WHEEL DIA.
	DAYTON	NWRA					
FOR 3/4" WHEEL STUDS							
<b>M-3601</b>	09-001229	— —	1-1/8"	6-13/16"	1-3/4"	3/4"	15"

## Dayton Single Wheel Mount to Replace Dual Wheels

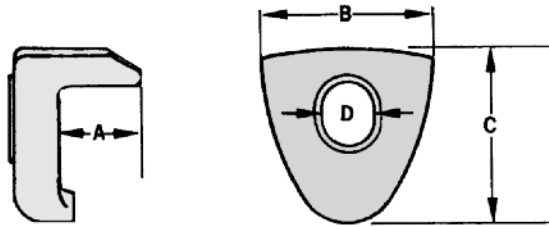


Not Recommended for Off Highway  
Applications or Severe Service



BWP NO.	REPLACES	A	B	C	D
<b>M-3212</b>	DAYTON 09-007564 WEBB 3350	5-3/4"	4-3/4"	2-1/16"	3/4"

# ERIE AND GOODYEAR WHEEL CLAMPS



## Erie Wheel Clamps

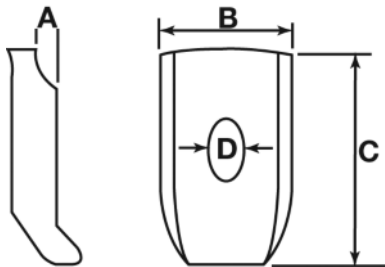


BWP NO.	REPLACES		A	B	C	D	SPACER BAND WIDTH
	ERIE	NWRA					
<b>FOR 5/8" WHEEL BOLTS</b>							
<b>M-11</b>	W-55K	W-55K	1-1/8"	3-1/2"	2-3/8"	3/4"	4"
<b>M-12</b>	W-56X	W-56X	1-1/4"	3-1/2"	2-1/4"	3/4"	4"
<b>FOR 3/4" WHEEL BOLTS AND STUDS</b>							
<b>M-1143</b>	H	W-57H	1-1/8"	3-1/2"	2-1/4"	3/4"	4"
<b>M-1258</b>	B	W-66B	1-3/16"	2-13/16"	2-1/8"	3/4"	4"
<b>M-1259</b>	B-2	W-105	1-7/8"	2-13/16"	2-1/8"	3/4"	3-3/8"

## Goodyear Wheel Clamps

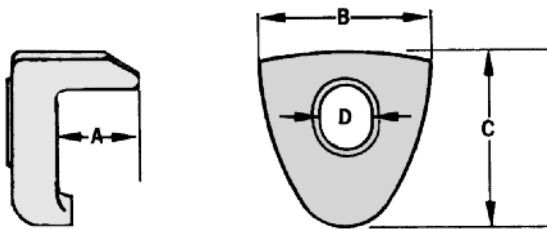


BWP NO.	REPLACES		A	B	C	D	NOTE
	GOODYEAR	NWRA					
<b>FOR 3/4" WHEEL STUDS</b>							
<b>M-1282</b>	CL-1008	---	1-3/16"	2-1/2"	2-7/16"	3/4"	REAR WHEELS
<b>FOR 1/2" WHEEL STUDS</b>							
<b>M-3602</b>	GY-562	---	1-1/16"	2-1/8"	1-13/16"	9/16"	REAR WHEELS



BWP NO.	REPLACES		A	B	C	D	APPLICATION
	GOODYEAR	NWRA					
<b>FOR 3/4" WHEEL STUDS</b>							
<b>M-3603</b>	CL-1022	---	3/8"	2-1/2"	3-13/32"	3/4"	VARIOUS TOW TRUCKS FORK LIFTS

# GUNITE WHEEL CLAMPS



## Gunite Wheel Clamps



CAST SHOWN

BWP NO.	REPLACES		A	B	C	D	SPACER BAND WIDTH
	GUNITE	NWRA					
<b>M-1242</b>	W-1138 CAST W-846 FORGE	W-255 W-242	1-3/8"	2-7/8"	2-3/8"	3/4"	4"
<b>M-1243</b>	W-1110 CAST W-858 FORGE	W-256 W-241	1-3/16"	2-7/8"	2-3/8"	3/4"	4"



FORGED SHOWN

BWP NO.	REPLACES		A	B	C	D	SPACER BAND WIDTH
	GUNITE	NWRA					
<b>M-1244</b>	W-866	W-239	1-3/4"	2-5/16"	2-5/16"	3/4"	3-5/8"



HEEL TYPE

BWP NO.	REPLACES		A	B	C	D	SPACER BAND WIDTH
	GUNITE	NWRA					
<b>FOR 5/8" WHEEL STUDS</b>							
<b>M-1137</b>	WP-367	— —	1-1/8"	2-7/8"	2"	5/8"	4"
<b>M-23</b>	WP-193	W-184	1-1/8"	2-7/8"	2-3/8"	5/8"	4"
<b>M-17</b>	WP-9	W-182	1-3/8"	3-1/2"	2-3/8"	5/8"	4"
<b>M-22</b>	WP-166	W-185	1-1/2"	2-7/8"	2-3/8"	5/8"	3-5/8"
<b>M-20</b>	WP-65	W-188	1-5/8"	3-1/2"	2-3/8"	5/8"	3-5/8"



BWP NO.	REPLACES		A	B	C	D
	GUNITE	NWRA				
<b>FOR 5/8" WHEEL STUDS</b>						
<b>M-1133</b>	WP-259 WP-455	C-230	5/8"	2"	2-1/4"	5/8"



HEEL TYPE

BWP NO.	REPLACES		A	B	C	D	SPACER BAND WIDTH
	GUNITE	NWRA					
<b>FOR 9/16" WHEEL STUDS</b>							
<b>M-21</b>	WP-142	W-189	1"	2"	2"	9/16"	4"
<b>FOR 5/8" WHEEL STUDS</b>							
<b>M-18</b>	WP-17	W-186	1-3/8"	2-3/8"	2-3/8"	5/8"	4"
<b>FOR 3/4" WHEEL STUDS</b>							
<b>M-1147</b>	WP-318	W-190	1"	2-5/8"	2-3/8"	3/4"	4"
<b>M-1148</b>	WP-383	W-194	1-1/4"	2-5/8"	2-3/8"	3/4"	4"
<b>M-1261</b>	WP-433	W-196	1-1/4"	3-1/2"	2-7/16"	3/4"	4"
<b>M-1262</b>	WP-682	W-118	1-7/16"	2-1/2"	2-3/8"	3/4"	3-5/8"
<b>M-1149</b>	WP-384	W-195	1-5/8"	2-5/8"	2-3/8"	3/4"	3-5/8"



HEEL-LESS

BWP NO.	REPLACES		A	B	C	D	SPACER BAND WIDTH
	GUNITE	NWRA					
<b>FOR 3/4" WHEEL STUDS</b>							
<b>M-1134</b>	WP-267	W-227	1"	2-3/8"	1-3/4"	3/4"	4"
<b>M-1130*</b>	WP-368	W-228	1-5/16"	2-1/4"	1-13/16"	3/4"	4"
<b>M-1136</b>	WP-344	W-191	1-1/2"	2-3/8"	1-3/4"	3/4"	3-5/8"
<b>M-1135</b>	WP-398	W-240	1-3/4"	2-3/8"	1-3/4"	3/4"	3-5/8"

\*NOTE: M-1130 ALSO REPLACES IHC 868368-R1

## Gunite Front Wheel Clamps

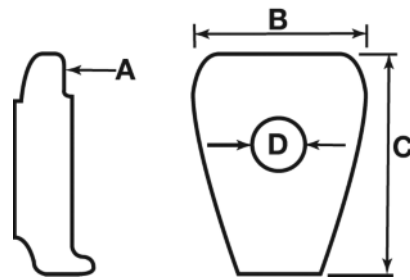


BWP NO.	REPLACES		A	B	C	D
	GUNITE	NWRA				
<b>FOR 3/4" WHEEL STUDS</b>						
<b>M-2460</b>	WP-722	W-243	1/2"	2-1/2"	3-3/8"	3/4"
<b>M-2461</b>	WP-725	W-244	5/8"	2-1/2"	3-3/8"	3/4"



BWP NO.	REPLACES		A	B	C	D
	GUNITE	NWRA				
<b>FOR 5/8" WHEEL STUDS</b>						
<b>M-28</b>	WP-80	C-18	5/8"	2-1/16"	2-1/2"	5/8"
<b>FOR 3/4" WHEEL STUDS</b>						
<b>M-1188</b>	WP-515	C-232	1/2"	2"	2-1/4"	3/4"
<b>M-1173</b>	WP-544	C-233	1/2"	2"	2-1/4"	3/4"
<b>M-1189</b>	WP-545	C-234	1/2"	2"	2-1/4"	3/4"

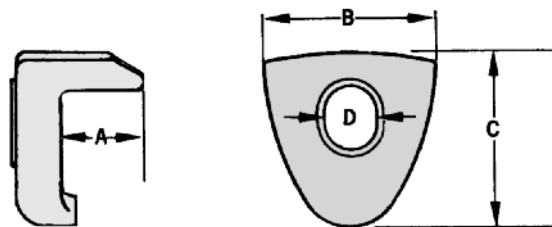
# MACK WHEEL CLAMPS



## Mack Front Wheel Clamp



BWP NO.	REPLACES		A	B	C	D
	MACK	NWRA				
FOR 3/4" WHEEL STUDS						
<b>M-3213</b>	15QJ251	W-263	5/16"	2-1/2"	2-5/8"	13/16"



## Mack Rear Wheel Clamps



BWP NO.	REPLACES		A	B	C	D
	MACK	NWRA				
FOR 3/4" WHEEL STUDS						
<b>M-1245</b>	15QJ223BP1 15QJ223CP1	— —	7/8"	2-1/2"	2-1/2"	3/4"
<b>M-1246</b>	15QJ223BP4 15QJ223CP4	W-189	1"	2-1/2"	2-1/2"	3/4"
<b>M-1247</b>	15QJ223BP5 15QJ223CP5	W-252	1-3/8"	2-1/2"	2-1/2"	3/4"
<b>M-1248</b>	15QJ223BP2 15QJ223CP2	— —	1-5/8"	2-1/2"	2-1/2"	3/4"
<b>M-26</b>	15QJ223AP	— —	1-3/4"	2-5/8"	2-1/2"	3/4"
<b>M-1175</b>	15QJ223BP8 15QJ223CP8	W-98	1-7/8"	2-1/2"	2-1/2"	3/4"
<b>M-1249</b>	15QJ223BP3 15QJ223CP3	W-97	2"	2-1/2"	2-1/2"	3/4"
<b>M-1127</b>	15QJ223BP6 15QJ223CP6	W-104	2-3/8"	2-1/2"	2-1/2"	3/4"



## Navistar (IHC) Rear Wheel Clamps



BWP NO.	REPLACES		A	B	C	D
	IHC	NWRA				
<b>FOR 5/8" WHEEL STUDS</b>						
<b>M-1174</b>	171194-R3	— —	1-1/8"	3"	2-7/16"	5/8"
<b>M-25</b>	66091R1	W-164	1-3/8"	2-1/2"	2-3/8"	5/8"
<b>FOR 3/4" WHEEL STUDS</b>						
<b>M-1260</b>	189898R1	— —	1-7/16"	3"	2-7/16"	3/4"



BWP NO.	REPLACES		A	B	C	D
	IHC	NWRA				
<b>FOR 3/4" WHEEL STUDS</b>						
<b>M-1130</b>	868368-R1	W-228	1-5/16"	2-1/4"	1-13/16"	3/4"

NOTE: M-1130 ALSO REPLACES GUNITE WP-368

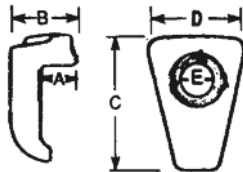
## Navistar (IHC) Front Wheel Clamps



BWP NO.	REPLACES		A	B	C	D
	IHC	NWRA				
<b>FOR 5/8" WHEEL STUDS</b>						
<b>M-30</b>	19488-HB	C-162	1-1/8"	3-1/2"	2-3/4"	5/8"



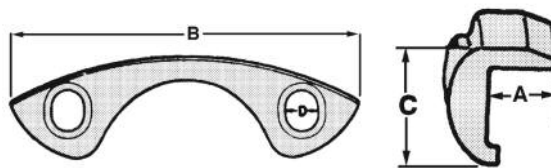
BWP NO.	REPLACES		A	B	C	D
	IHC	NWRA				
<b>FOR 1/2" WHEEL STUDS</b>						
<b>M-29</b>	27194-H	C-160	3/4"	1-3/4"	1-9/16"	1/2"



BWP NO.	REPLACES	A	C	D	E
<b>M-3214</b>	NAVISTAR 452010C1	1/2"	3-7/16"	2"	13/16"

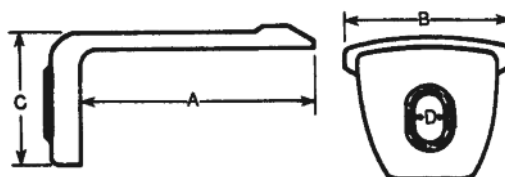
# WEBB WHEEL CLAMPS

## Webb Three Spoke Clamps



BWP NO.	REPLACES		A	B	C	D	WHEEL DIA.
	WEBB	NWRA					
<b>M-1129</b>	3322	W-74	1-1/16"	12-1/4"	2-1/8"	3/4"	22"
<b>M-1183</b>	3314	W-68	1-1/4"	7-3/4"	1-5/8"	3/4"	15"

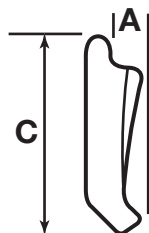
## Webb Three Spoke Clamp (Single Wheel Duplex Rim)



NOTE:  
Not Advised for Severe Service  
Off Highway Use.

BWP NO.	REPLACES		A	B	C	D STUD DIA.
	WEBB	NWRA				
<b>FOR 3/4" WHEEL STUDS</b>						
<b>M-3212</b>	3350	— —	5-3/4"	4-3/4"	2-1/16"	3/4"

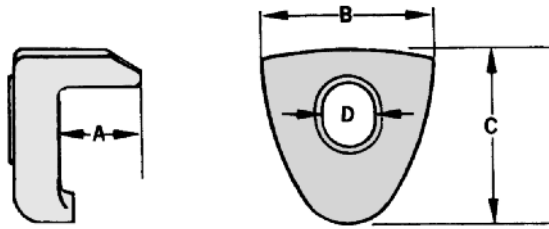
## Webb Front Wheel Clamps



BWP NO.	REPLACES	A	B	C	D STUD. DIA.
<b>M-3604</b>	WEBB 16175 16177	11/32"	2-5/8"	2-3/4"	3/4"
<b>M-3605</b>	WEBB 16185 16187	19/32"	2-5/8"	2-13/16"	3/4"

Check out the "Specials" tab on our website frequently for current Internet Only special offers





## Webb Spoke Wheels



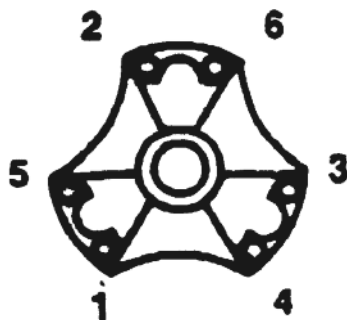
BWP NO.	REPLACES	A	B	C	D	SPACER WIDTH
<b>M-1</b>	WEBB 15414	1"	2-7/8"	2-1/2"	5/8"	4"
<b>M-3</b>	WEBB 16123	1-1/8"	2-7/8"	2-1/2"	3/4"	4"
<b>M-8</b>	WEBB 16129	1-1/2"	2-7/8"	2-1/2"	3/4"	3-5/8"
<b>M-3600</b>	WEBB 16124	1-7/8"	2-7/8"	2-1/2"	3/4"	

## SPOKE WHEEL INSTALLATION AND MAINTENANCE

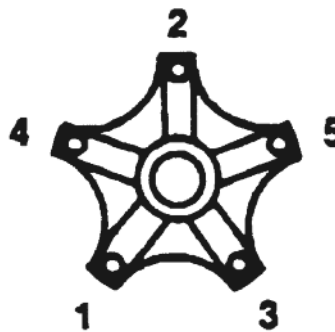
### Rim Mounting Instructions

Rims must be correctly assembled, rim clamps must match the rim spacer width and rim clamp nuts must be correctly tightened to assure maximum service life and maximum safety.

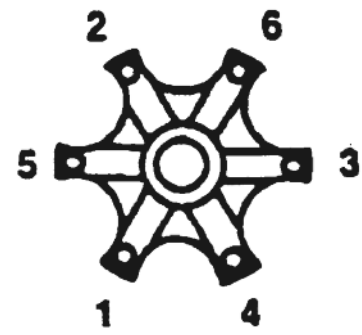
1. All parts must be clean, free of rust, dirt or paint.
2. Slide the inside rim over the wheel so the 28° mounting surfaces mate. Be sure the valve stem is pointing out and is centered between two spokes.
3. Slide the rim spacer over the wheel and against the inner rim.
4. Slide the outer rim over the wheel. Be sure the valve stem is pointing in and is centered between the same spokes as the inner valve stem.
5. Install the rim clamps and nuts. Lightly tighten the rim nuts while rotating the wheel.
6. Tighten the rim nuts a quarter turn at a time in order shown until tightened to the correct torque.



**3 SPOKE**



**5 SPOKE**

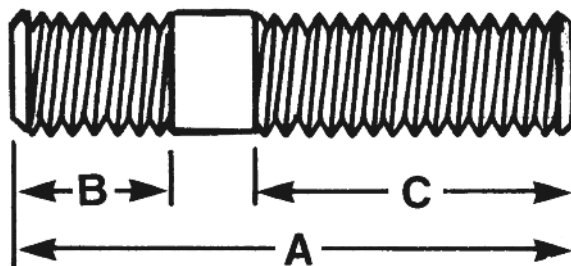


**6 SPOKE**

**RECOMMENDED TORQUE 200 to 250 ft. lb.**

# CAST SPOKE WHEEL STUDS

Use These Dimensions  
for Measuring All  
Wheel Studs



## Dayton Wheel Studs



BWP NO.	REPLACES		DIA. THREAD	A	B	C	USE BWP NUT NO.
	DAYTON	NWRA					
<b>M-37</b>	08-005148	B-600	5/8"-11	2-3/8"	7/8"	1-3/8"	M-43
<b>M-38</b>	08-006654	B-601	5/8"-11	2-3/4"	1"	1-1/2"	M-43
<b>M-39</b>	08-005715	B-602	3/4"-10	3"	1-1/16"	1-3/4"	M-45
<b>M-1102</b>	08-008411	B-612	3/4"-10	3-1/8"	1"	1-7/8"	M-45
<b>M-40</b>	08-034396	B-605	3/4"-10	3-9/16"	1-5/8"	1-5/8"	M-45

## Goodyear Wheel Studs



BWP NO.	REPLACES		DIA. THREAD	A	B	C	USE BWP NUT NO.
	GOODYEAR	NWRA					
<b>M-1263</b>	ST-178	— —	5/8"-11	3-1/4"	7/8"	1-7/8"	M-43
<b>M-1264</b>	ST-770	X-1730	3/4"-10	3-5/8"	1-1/16"	2-3/8"	M-45
<b>M-1265</b>	ST-570	— —	3/4"-10	4"	1-1/16"	2-3/4"	M-45

## Mack Wheel Studs



BWP NO.	REPLACES		DIA. THREAD	A	B	C	USE BWP NUT NO.
	MACK	NWRA					
<b>M-35</b>	18-AX-405	B-606	3/4"-10 3/4"-16	2-7/8"	7/8"	1-3/8"	M-45



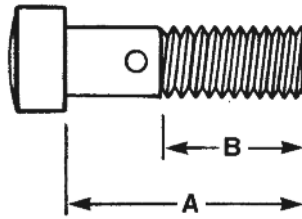
<b>M-2462</b>	18-AX-970	— —	5/8"-18	3"	1-3/16"	13/16"	— —
<b>M-2465</b>	18-AX-971	— —	5/8"-18	3-1/2"	1-7/16"	13/16"	— —

## Aluminum Wheel Studs



BWP NO.	REPLACES		DIA. THREAD	A	B	C	USE BWP NUT NO.
	OEM	NWRA					
<b>M-1269</b>	ALCOA B-5795 GUNITE WP-395	B-609	3/4"-10	3-21/32"	1-3/4"	1-3/4"	M-45

Use These Dimensions for Measuring all Wheel Bolts



## Erie Wheel Bolts



BWP NO.	REPLACES		DIA. THREAD	A	B	C	USE BWP NUT NO.
	ERIE	NWRA					
<b>M-31</b>	5095	B-610	5/8"-11	2"	1-5/16"	— —	M-44

<b>M-1144</b>	5247	B-607	3/4"-10	2-1/4"	1-3/8"	— —	M-1145
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## Gunite Wheel Bolts



BWP NO.	REPLACES		DIA. THREAD	A	B	C	USE BWP NUT NO.
	GUNITE	NWRA					
<b>M-41</b>	WP-1	B-604	5/8"-11	2-1/16"	1-3/16"	— —	M-43
<b>M-1100</b>	— —	— —	3/4"-10	2-1/8"	1-3/16"		M-45

<b>M-36</b>	WP-165	— —	9/16"-12	2-1/8"	11/16"	— —	M-36A
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## Navistar Wheel Bolts



BWP NO.	REPLACES		DIA. THREAD	A	B	USE BWP NUT NO.
	IHC	NWRA				
<b>M-32</b>	68333H	B-467	5/8"-11	2"	1-3/16"	M-43

<b>M-3606</b>	172052R1 172746R1	— —	5/8"-18	2"	1"	M-1455
<b>M-34</b>	75887H	N-3324	5/8"-11	2"	1-1/8"	M-43

## Brake Drum Bolts



BWP NO.	REPLACES			THREAD SIZE	LENGTH UNDER HEAD	USE BWP NUT NO.
	DAYTON	GUNITE	WEBB			
<b>M-2454</b>	08-201140	WP-185	8622	5/8"-18	2"	M-2457
<b>M-2455</b>	— —	— —	87521	3/4"-10	2"	M-2458
<b>M-2456</b>	08-201500	W-845	— —	3/4"-16	2"	M-2459

## Brake Drum Attaching Screw for Out Board Mounting



BWP NO.	REPLACES	THREAD SIZE	LENGTH
<b>M-1285</b>	BUDD 59891 FORD 355816-57	N.W. 87133 R.S. S-788-5	1/2"-13 1"

# SPOKE WHEEL AND LIGHT TRUCK DISC WHEEL NUTS

## Dayton Style - Chamfered - Spoke Wheel Nuts



BWP NO.	REPLACES					THREAD	HEX
	DAYTON	ERIE	GUNITE	WEBB	NWRA		
<b>M-43</b>	08-005149	5270	WP-2	74611	N-26	5/8"-11	1-1/16"
<b>M-45</b>	08-005716	5260	WP-148	74710	N-40	3/4"-10	1-1/4"

## Erie Style - Ball Face - Spoke Wheel Nuts



BWP NO.	REPLACES			THREAD	HEX
	DAYTON	ERIE	NWRA		
<b>M-42</b>	08-005354	— —	N-17	1/2"-13	7/8"
<b>M-44</b>	08-005265	538-U	N-42	5/8"-11	1-1/16"
<b>M-1145</b>	— —	5248-U	N-43	3/4"-10	1-1/4"

## Lock Nuts for Brake Drum Bolts



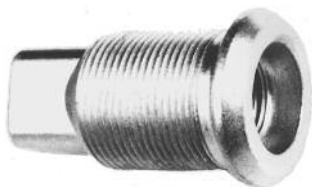
BWP NO.	REPLACES		THREAD SIZE	HEX	HEIGHT	USE WITH BOLT NO.
	DAYTON	GUNITE				
<b>M-2823</b>	— —	— —	5/8"-11	15/16"	35/64"	— —
<b>M-2457</b>	08-201931	— —	5/8"-18	15/16"	3/4"	M-2454
<b>M-2458</b>	— —	— —	3/4"-10	1-1/8"	3/4"	M-2455
<b>M-2459</b>	08-201932	W-823	3/4"-16	1-1/8"	21/32"	M-2456

## Light Truck Cap Nuts - 60° and 90° Conical Taper



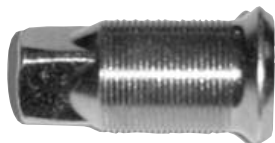
BWP NO.	REPLACES		THREAD	HEX	HT	TYPE	TAPER	
	OEM	NWRA						
<b>M-207</b>	K-15085	N-10R	R/H	7/16"-20	3/4"	9/16"	CONICAL	60°
<b>M-1201</b>	K-21245	N-10L	L/H					
<b>M-230</b>	B-40417	X-1138	R/H	1/2"-20	3/4"	9/16"	CONICAL	60°
<b>M-231</b>	B-40418	X-1139	L/H					
<b>M-212</b>	K-30040	— —	R/H	1/2"-20	3/4"	5/8"	CONICAL	60°
<b>M-203</b>	B-39388	X-1023R	R/H	1/2"-20	13/16"	5/8"	CONICAL	60°
<b>M-204</b>	B-39389	X-1023L	L/H					
<b>M-236</b>	B-64186	X-1140	R/H	9/16"-18	7/8"	5/8"	CONICAL	60°
<b>M-237</b>	B-64187	X-1141	L/H					
<b>M-242</b>	B-38594	X-1142	R/H	9/16"-18	7/8"	5/8"	BALL	— —
<b>M-243</b>	B-38595	X-1143	L/H					
<b>M-256</b>	B-41233	X-1146	R/H	9/16"-18	1"	11/16"	CONICAL	90°
<b>M-257</b>	B-41234	X-1147	L/H					
<b>M-3656</b>	C7TZ-1120A	X-2067	R/H	9/16"-18	1-1/16"	5/8"	CONICAL	90°
<b>M-3657</b>	C7TZ-1121A	X-2068	L/H					
<b>M-248</b>	B-67147	X-1148	R/H	5/8"-18	1"	21/32"	CONICAL	90°
<b>M-249</b>	B-67148	X-1149	L/H					
<b>M-248A</b>	B-47147	— —	R/H	5/8"-18	1-1/16"	21/32"	CONICAL	90°
<b>M-249A</b>	B-47148	— —	L/H					

## Standard Inner Cap Nut – Steel Wheels



BWP NO.	REPLACES		OUTER THREAD	INNER THREAD	LENGTH	SQUARE HEAD	GRADE MATERIALS	
	BUDD	NWRA						
<b>M-128</b>	10708	X-1828	R/H	1-1/8"-16	3/4"-16	2-1/8"	13/16"	8
<b>M-129</b>	10709	X-1829	L/H					
<b>M-3396</b>	3203403	— —	R/H	USE M-128				
<b>M-3397</b>	3203404	— —	L/H	USE M-129				

## Metric Inner Disc Wheel Nuts



BWP NO	REPLACES		OUTER THREAD	INNER THREAD	OVERALL LENGTH	INNER DEPTH	THREAD
<b>M-3982</b>	HINO	9004-23101	M30X1.5	M20X1.5	2-7/16"	1-3/16"	RH
	NAVISTAR	43212Z5025R					
	IZUZU	1-42335-005-OR					
	GMC	94039630					
<b>M-3983</b>	HINO	9004-24101	M30X1.5	M20X1.5	2-7/16"	1-3/16"	LH
	NAVISTAR	43212Z5025R					
	IZUZU	1-42336-005-OL					
	GMC	94039631					

## Extra Length Inner Cap Nuts – Steel Wheels



BWP NO.	REPLACES		OUTER THREAD	INNER THREAD	LENGTH	SQUARE HEAD	GRADE MATERIALS	
	BUDD	NWRA						
<b>M-130</b>	35336	X-1835	R/H	1-1/8"-16	3/4"-16	2-9/16"	13/16"	8
<b>M-131</b>	35337	X-1836	L/H					
<b>M-132</b>	22621	X-1407	R/H	1-1/8"-16	3/4"-16	3-1/16"	13/16"	
<b>M-133</b>	22622	X-1408	L/H					

## Heavy Duty Off-Highway Inner Nuts



BWP NO.	REPLACES		OUTER THREAD	INNER THREAD	LENGTH	SQUARE HEAD	GRADE MATERIALS	
	BUDD	NWRA						
<b>M-140A</b>	49414	X-1411	R/H	1-5/16"-12	15/16"-12	3"	15/16"	8
<b>M-140B</b>	49415	X-1412	L/H					

## Standard Inner Cap Nuts – Aluminum Wheels



BWP NO.	REPLACES		OUTER THREAD	INNER THREAD	LENGTH	SQUARE HEAD	GRADE MATERIALS	
	BUDD	NWRA						
<b>M-136</b>	70611	X1801	R/H	1-1/8"-16	3/4"-16	2-5/8"	13/16"	8
<b>M-137</b>	70612	X-1802	L/H					

## Extra Length Inner Cap Nuts Grade 8 – Aluminum Wheels



BWP NO.	REPLACES		OUTER THREAD	INNER THREAD	LENGTH	SQUARE HEAD	GRADE MATERIALS	
	ALCOA	NWRA						
<b>M-2400</b>	5988R	X-1873	R/H	1-1/8"-16	3/4"-16	2-15/16"	13/16"	8
<b>M-2401</b>	5988L	X-1874	L/H					

NOTE: ALSO AVAILABLE WITH FULL INNER THREAD. ORDER AS "M-2400 FULL THREAD ONLY"

## V-Belt Drive Inner Cap Nuts – Aluminum Wheels



BWP NO.	REPLACES		OUTER THREAD	INNER THREAD	LENGTH	SQUARE HEAD	GRADE MATERIALS	
	ALCOA	NWRA						
<b>M-1160</b>	5567R	X-2023	R/H	NO LONGER AVAILABLE				
<b>M-1161</b>	5567L	X-2024	L/H	1-1/8"-16	3/4"-16	3-1/4"	13/16"	5

NOTE: M-1161 LIMITED QUANTITY AVAILABLE

# DISC WHEEL OUTER AND FRONT NUTS

## Standard Outer Cap Nuts



BWP NO.	REPLACES		THREAD	HEX	HT.	MAT'L GRADE	GENERAL INFORMATION
	BUDD	NWRA					
<b>M-126</b>	37891	X-1831	R/H	1-1/8"-16	1-1/2"	7/8"	STANDARD FOR STEEL & ALUMINUM DUAL WHEELS AND SINGLE WHEELS WITH 1-1/8" DIA. STUDS
<b>M-127</b>	37892	X-1832	L/H				
<b>M-3394</b>	ALCOA		R/H	USE M-126			
	5977R						
<b>M-3395</b>	ALCOA		L/H	USE M-127			
	5977L						

NOTE: FOR HEAVY DUTY APPLICATIONS USE M-166 & M-167

## Metric Outer Disc Wheel Nuts



BWP NO.	REPLACES		THREAD	HEX	HT.	GENERAL INFORMATION
<b>M-3980</b>	HINO	9004-21112	RH	M30 x 1.5	41mm	1"
	NAVISTAR	433241Z5025R				
	IZUZU	1-42333-023-OR				
<b>M-3981</b>	HINO	9004-22104	LH	M30 x 1.5	41mm	1"
	NAVISTAR	433241Z5025L				
	IZUZU	1-42334-023-OL				

## Outer Cap Nuts – Wide Base Aluminum Wheels



BWP NO.	REPLACES	THREAD	HEX	HT.	GENERAL INFORMATION
<b>M-3210</b>	ALCOA 5996R	R/H	1-1/8"-16	1-1/2"	USED WITH WIDE BASED ALUMINUM WHEELS COUNTERBORE ON I.D.
<b>M-3211</b>	ALCOA 5996L	L/H	1-1/8"-16	1-1/2"	

## Outer Cap Nuts – Wide Base Aluminum Wheels



BWP NO.	REPLACES	THREAD	HEX	HT.	GENERAL INFORMATION
<b>M-3208</b>	ALCOA 5995R	R/H	3/4"-16	1-1/2"	USED WITH WIDE BASED ALUMINUM WHEELS
<b>M-3209</b>	ALCOA 5995L	L/H	3/4"-16	1-1/2"	

## Standard Outer Cap Nuts – Single Wheels



BWP NO.	REPLACES		THREAD	HEX	HT.	GENERAL INFORMATION
	BUDD	NWRA				
<b>M-124</b>	37888	X-1803	R/H	3/4"-16	1-1/2"	7/8"
<b>M-125</b>	37889	X-1804	L/H			

NOTE: FOR HEAVY DUTY APPLICATIONS USE M-164 & M-165

## Standard Front or Single Rear Aluminum Wheel Nuts



BWP NO.	REPLACES		THREAD	HEX	HT.	GENERAL INFORMATION
	BUDD	NWRA				
<b>M-134</b>	70613	X-1807	R/H	3/4"-16	1-1/2"	1"
<b>M-135</b>	70614	X-1808	L/H			



# DISC WHEEL OUTER AND FRONT NUTS

## Heavy Duty Off-Highway Outer or Single Cap Nuts



BWP NO.	REPLACES		THREAD	HEX	GENERAL INFORMATION	
	BUDD	NWRA				
<b>M-140C</b>	48051	X-1414	R/H	1-3/16"-12	1-3/4"	FOR HEAVY DUTY OPERATIONS WITH EXTREME LOADS
<b>M-140D</b>	48052	X-1415	L/H			
<b>M-140E</b>	49416	X-1416	R/H	1-5/16"-12	1-3/4"	USE WITH M-140A & M-140B INNER NUTS
<b>M-140F</b>	49417	X-1417	L/H			

## Heavy Duty Off-Highway Outer or Single Cap Nuts



BWP NO.	REPLACES		THREAD	HEX	GENERAL INFORMATION	
	BUDD	NWRA				
<b>M-140G</b>	67011	X-1362	R/H	1-1/8"-16	1-3/4"	TO ADAPT HEAVY DUTY MOUNTING TO 1-1/8" STUDS
<b>M-140H</b>	67012	X-1363	L/H			
<b>M-140J</b>	76635	X-1644	R/H	15/16"-12	1-3/4"	FOR HEAVY DUTY OPERATIONS WITH EXTREME LOADS
<b>M-140K</b>	76636	X-1645	L/H			

## DISC WHEEL FLANGE NUTS

### Metric Sleeved Flange Nuts 22x1.5



BWP NO.	DESCRIPTION	APPLICATION
<b>M-4214</b>	6mm SLEEVE	STEER - STEEL WHEELS
<b>M-4215</b>	19mm SLEEVE	ALUMINUM STEERS / STEEL / STEEL DRIVES or STEEL outer / ALUMINUM inner DRIVE Combination
<b>M-4216</b>	28mm SLEEVE	HD ALUMINUM & SUPER SINGLE - WIDE BASE ALUMINUM outer / STEEL inner
<b>M-4217</b>	39mm SLEEVE	DRIVE AXLE Wheels Dual ALUMINUM

# DISC WHEEL FLANGE NUTS

## Flanged Outer Cap Nuts – Heavy Duty



BWP NO.	REPLACES		THREAD	HEX	GENERAL INFORMATION	
	BUDD	NWRA				
<b>M-166</b>	69912	X-1420	R/H	1-1/8"-16	1-1/2"	HEAVY DUTY VERSION OF M-126, M-127 USED FOR SEVERE SERVICE
<b>M-167</b>	69913	X-1421	L/H			

## Flanged Outer Cap Nuts – Single Wheels



BWP NO.	REPLACES		THREAD	HEX	GENERAL INFORMATION	
	BUDD	NWRA				
<b>M-164</b>	77136	X-1418	R/H	3/4"-16	1-1/2"	HEAVY DUTY VERSION OF M-124, M-125 USED FOR SEVERE SERVICE
<b>M-165</b>	71737	X-1419	L/H			

## Flanged Nuts



BWP NO.	REPLACES		THREAD	HEX	HEIGHT	GENERAL INFORMATION
	BUDD	NWRA				
<b>M-1254</b>	GMC 3988631	X-1470	9/16"-18 RH	7/8"	1/2"	FOR CHEV. & GMC 3/4 & 1 TON TRUCKS
<b>M-1266</b>	95188 3637720	X-1837	5/8"-18 RH	1-1/8"	1-1/16"	FOR DODGE TRUCKS WITH 1 TON DUALS
<b>M-1267</b>	95189 3637719	X-1838	5/8"-18 LH	1-1/8"	1-1/16"	
<b>M-157</b>	81269 GMC 3771410	X-1110	11/16"-16 RH	1-1/8"		USE WITH M-158 & M-159 STUDS
<b>M-1153</b>	84608 FORD C3TZ-1120A	X-1342	3/4"-16 RH	1-1/8"	1-1/16"	USE WITH M-1151, M-1152 & M-1284 STUDS

## Motor Wheel Cone Lock Nuts – Floating Flange



BWP NO.	REPLACES		THREAD	HEX	HEIGHT	GENERAL INFORMATION
	MW	NWRA				
<b>M-142</b>	08434	X-1164	3/4"-16	1-3/16"	1-1/8"	THE CONE LOCK NUT IDENTIFIES THE MOTOR WHEEL MOUNTING. THEY ARE FOR "SINGLE NUT" APPLICATIONS ONLY.
<b>M-144</b>	07652	X-1687	7/8"-14	1-1/2"	7/8"	
<b>M-145</b>	07669	X-1818	7/8"-14	1-1/2"	1-5/16"	

## Metric 2-Piece Teflon Coated Flange Nut



BWP NO.	REPLACES	THREAD	HEX	HEIGHT	GENERAL INFORMATION
<b>M-4115</b>	EUCLID E-10235 FORD E6HZ1102B GM 15642921 MERITOR R0010235 VOLVO 947971-8 WEBB 179920	M20x1.5	30mm	32mm	2-PIECE TEFLON COATED FLANGE NUT

## Budd Metric Flange Nut



BWP NO.	REPLACES BUDD	THREAD	HEX	HEIGHT	APPLICATION
<b>M-3203</b>	106333	M22X1.5	1-1/4" (31.75mm)	1-7/32" (31mm)	BUDD UNMOUNT 10 WHEEL STUDS

NOTE: USE M-3269 WRENCH

## Metform/Securex Metric Flange Nut



BWP NO.	REPLACES	THREAD	HEX	HEIGHT	APPLICATION
<b>M-3979</b>	METFORM/SECUREX 39701/627 ALCOA 39691/39949 FORD E6HZ1120A NAVISTAR 1649492C1	M22X1.5	1-3/10" (33mm)	1-1/32" (26mm)	ALCOA HUB PILOTED WHEELS

## Motor Wheel Metric Flange Nut



BWP NO.	REPLACES MOTOR WHEEL	THREAD	HEX	HEIGHT	APPLICATION
<b>M-3207</b>	88881	M22X1.5	1-1/2" (38mm)	1-3/8" (34.9mm)	MOTOR WHEEL 8 STUD WHEELS

# WHEEL NUTS AND FLANGE

## Back Nuts



BWP NO.	REPLACES		THREAD	HEX	HEIGHT	APPLICATION
	BUDD	NWRA				
<b>M-2459</b>	41073-7 47693-7	X-1068 X-1432	3/4"-16	1-1/16"	11/16"	HEAT TREATED LOCKNUTS
<b>M-2031</b>	41073-8 47693-8	X-1431	7/8"-14	1-5/16"	27/32"	
<b>M-1889</b>	44672-9	X-1445	1"-14	1-7/16"	11/16"	

## Flat Wheel Nuts



BWP NO.	REPLACES		THREAD	HEX	HEIGHT	REPLACES OEM NO.
	KELSEY	NWRA				
<b>M-220</b>	K43935	X-1124	1/2"-20	7/8"	1/2"	CHEV. 3726212
<b>M-140</b>	K38604	X-1430	5/8"-18	1-1/16"	39/64"	GMC 3724246



BWP NO.	REPLACES		THREAD	HEX	HEIGHT	REPLACES OEM NO.
	KELSEY	NWRA				
<b>M-215</b>	K34435	X-1122	1/2"-20	3/4"	7/16"	M.W. 86897

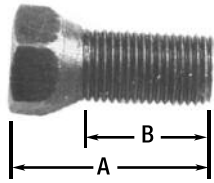
## Reinforcing Flange – For Off-Highway Inner Nuts



BWP NO.	REPLACES BUDD	I.D.	O.D.	GENERAL INFORMATION
<b>M-168</b>	71551	1-3/8"	2-1/2"	USED WITH M-140A, B, E & F HEAVY DUTY NUTS. TWICE THE EFFECTIVE PRESSURE AREA IS PROVIDED INCREASING MOUNTING STRENGTH.

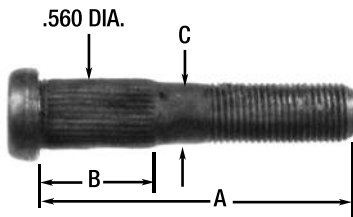
# DISC WHEEL STUDS – LIGHT TRUCK

## 3/4" Hex Head Wheel Studs



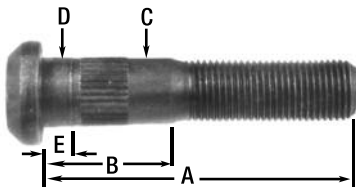
BWP NO.	REPLACES		THREAD	A	B
	DODGE	NWRA			
<b>M-225</b>	393984	X-1064	1/2"-20 RH	1-1/2"	7/8"
<b>M-226</b>	856981	X-1065	1/2"-20 LH		
<b>M-200</b>	386985 M.W. 05163	X-1092	9/16"-18 RH	1-1/2"	7/8"
<b>M-227</b>	856982	X-1093	9/16"-18 LH		

## 1/2"- 20 Thread – Kelsey-GMC Studs



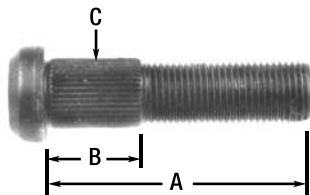
BWP NO.	REPLACES			A	B	C
	KELSEY	GM	NWRA			
<b>M-210</b>	30019	— —	X-1236	1-3/4"	11/16"	9/16"
<b>M-219</b>	43936	— —	X-1241	2-5/16"	15/16"	9/16"
<b>M-214</b>	43941	— —	X-1242	2-1/2"	15/16"	9/16"
<b>M-214A</b>	— —	3819780	— —	2-7/8"	15/16"	9/16"

## 9/16"-18 Thread – Shoulder Under Head – Ford Truck



BWP NO.	REPLACES FORD	THREAD	A	B	C	D	E	USE BWP NUT NO.
<b>M-1270</b>	DOTZ-1107A	R/H	2-13/16"	1-1/8"	19/32"	5/8"	9/32"	M-256
<b>M-1271</b>	DOTZ-1119A	L/H						M-257

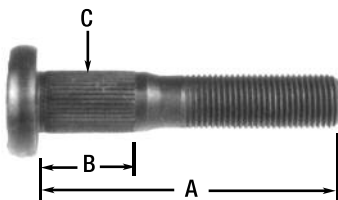
## 9/16"-18 Thread – Budd, Motor Wheel



BWP NO.	REPLACES			A	B	C
	M.W.	BUDD	NWRA			
<b>M-1163</b>	81109	— —	X-1198	1-5/8"	5/8"	5/8"
<b>M-1172</b>	81118	— —	X-1196	2-5/16"	13/16"	5/8"
<b>M-90</b>	— —	31439	— —	3-1/4"	1-19/64"	19/32"

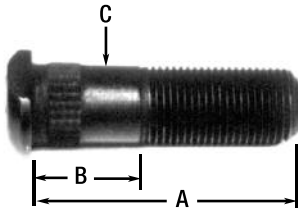
ALL RH STUDS

## 9/16"-18 Thread – Chevrolet Truck



BWP NO.	REPLACES		A	B	C
	CHEV. TRUCK	NWRA			
<b>M-1276</b>	3988538	X-1473	3"	1-1/16"	5/8"
<b>M-1277</b>	3993579	— —	3-3/16"	1-3/4"	5/8"
<b>M-1278</b>	334386	— —	3-1/2"	1-1/16"	5/8"
<b>M-1279</b>	355815	— —	3-9/16"	1-5/16"	5/8"

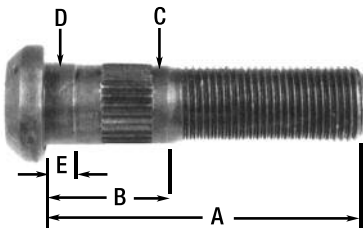
## 5/8"-18 Thread – Clipped Head – Budd, Kelsey



BWP NO.	REPLACES			THREAD	A	B	C
	BUDD	KELSEY	NWRA				
<b>M-92</b>	67458	36733	X-1184 X-1286	R/H	2-1/8"	13/16"	5/8"
<b>M-93</b>	67459	36734	X-1185 X-1287	L/H			
<b>M-94</b>	67461	37555	X-1190 X-1250	R/H	2-7/16"	13/16"	5/8"
<b>M-95</b>	67462	37556	X-1191 X-1251	L/H			

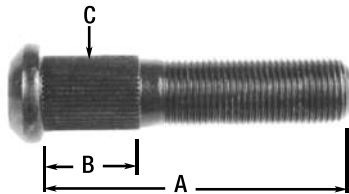
BODY DIA. = .624

## 5/8"-18 Thread – Shoulder Under Head – Budd



BWP NO.	REPLACES			THD.	A	B	C	D	E	USE BWP NUT
	BUDD	STD. FG. DODGE								
<b>M-1280</b>	92176	301123		R/H	2-9/16"	15/16"	5/8"	21/32"	1/4"	M-248
<b>M-1281</b>	92177	301124		L/H						M-249
<b>M-1272</b>	98348	3637878		R/H	2-15/16"	15/16"	5/8"	21/32"	1/4"	M-1266
<b>M-1273</b>	98349	3637879		L/H						M-1267

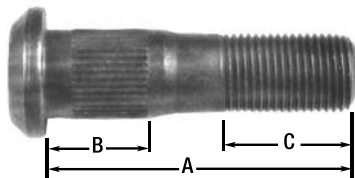
## 5/8"-18 Thread – Kelsey Studs



BWP NO.	REPLACES		A	B	C
	KELSEY	GMC			
<b>M-100</b>	K-38606	3707583	1-11/16"	9/16"	11/16"
<b>M-91</b>	K-30020	3682387	2"	9/16"	11/16"
<b>M-96</b>	K-30021	3682389	2-13/16"	7/8"	11/16"
<b>M-101</b>	K-38605	3707585	2-27/32"	1"	11/16"
<b>M-97</b>	K-34460	3694508	2-15/16"	3/4"	11/16"
<b>M-99</b>	K-31104	3682153	3-3/64"	1-7/64"	11/16"
<b>M-98</b>	K-43939	3697043	3-3/16"	1"	11/16"

BODY DIA. = .685 - .689 ALL RH STUDS

## 11/16" Thread – Budd, GMC

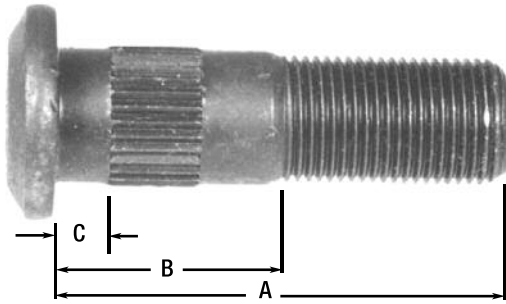


BWP NO.	REPLACES			A	B	C	NOTE
	BUDD	GMC	NWRA				
<b>M-158</b>	82525	3763619	X-1108	2-5/8"	1"	1-1/8"	FRONT WHEELS USE M-157 NUT
<b>M-159</b>	82526	3765876	X-1109	3-1/4"	1"	1-27/64"	REAR WHEELS USE M-157 NUT
<b>M-1283</b>	83172	S.F. 301112-1	—	3-1/4"	1-21/64"	1-3/8"	USE M-157 NUT

BODY DIA. = .728 - .732 ALL RH STUDS

# HEADED DISC WHEEL STUDS

## 3/4"-16 Thread - Serrated Body



Grade 8

Body Dia. .783 - .786

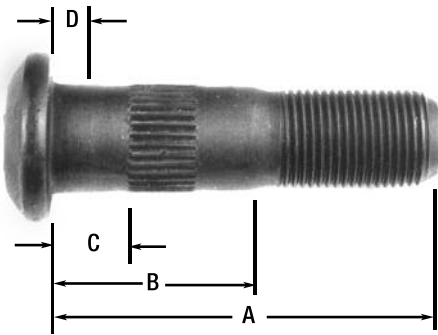
Serrated Dia .810 - .820

①• = Body Dia. .778 - .781

②• = Body Dia. .783 - .789

BWP NO.		REPLACES				A	B	C
		MFG. NO.		NWRA				
R/H	L/H	R/H	L/H	R/H	L/H			
<b>M-72</b>	<b>M-73</b>	BUDD 59364	BUDD 59365	X-1858	X-1859	2-1/8"	3/4"	1/4"
<b>M-74</b>	<b>M-75</b>	BUDD 59191 WEBB 159190	BUDD 59192 WEBB 159191	X-1080	X-1081	2-3/8"	1"	1/4"
<b>M-1286</b>	<b>M-1287</b>	M.W. 87319 ①•	M.W. 87320 ①•	X-1768	X1769	2-15/32"	15/16"	5/16"
<b>M-3926</b>	<b>M-3927</b>	GUNITE W1091R	GUNITE W1091L	---	---	2-1/2"	3/4"	1/4"
<b>M-76</b>	<b>M-77</b>	BUDD 59263 TRAILMOBILE 50-33A-29	BUDD 59264 TRAILMOBILE 50-33A-30	X-1712	X-1713	2-5/8"	1-1/4"	5/16"
<b>M-3928</b>	<b>M-3929</b>	GUNITE WP465 & 6R	GUNITE WP465 & 6L	---	---	2-5/8"	1-11/32"	1/4"
<b>M-3930</b>	<b>M-3931</b>	GUNITE W1170R	GUNITE W1170L	---	---	2-11/16"	31/32"	1/4"
<b>M-3648</b>	<b>M-3649</b>	CONMET 102192 WEBB 102192	CONMET 102191 WEBB 102191	---	---	2-25/32"	1-1/16"	1/8"
<b>M-78</b>	<b>M-79</b>	BUDD 61968 MERITOR 20X1576 G.M. 3723968	BUDD 61969 MERITOR 20X1575 G.M. 3723969	X-1823	X-1824	2-7/8"	1-1/2"	1/4"
<b>M-3954</b>	<b>M-3955</b>	MERITOR 20X1812	MERITOR 20X1811	---	---	2-29/32"	1-1/16"	1/2"
<b>M-3608</b>	<b>M-3609</b>	BUDD 100145 WEBB 159184	BUDD 100146 WEBB 159183	---	---	2-31/32"	1-13/32"	1/2"
<b>M-3610</b>	<b>M-3611</b>	GUNITE W-981R G.M. 15580830	GUNITE W-981L G.M. 15580833	---	---	2-15/16"	1-5/16"	1/4"
<b>M-3932</b>	<b>M-3933</b>	GUNITE W1064R	GUNITE W1064L	---	---	3"	1-21/32"	1/4"
<b>M-3612</b>	<b>M-3613</b>	GUNITE W-1166R	GUNITE W-1166L	---	---	3-1/8"	1-11/32"	1/4"
<b>M-3650</b>	<b>M-3651</b>	CONMET 102278 WEBB 102278	CONMET 102277 WEBB 102277	---	---	3-5/32"	1-7/16"	1/8"
<b>M-3614</b>	<b>M-3615</b>	GUNITE W-980R	GUNITE W-980L	---	---	3-3/16"	1-13/32"	1/4"
<b>M-3934</b>	<b>M-3935</b>	GUNITE W1006R	GUNITE W1006L	---	---	3-1/4"	1-3/4"	1/4"
<b>M-3241</b>	<b>M-3242</b>	GUNITE W-1133R W-992R	GUNITE W-1133L W-992L	---	---	3-11/32"	1-9/32"	1/4"
<b>M-3616</b>	<b>M-3617</b>	WEBB 100164 ②•	WEBB 100163 ②•	---	---	3-12/32"	1-13/32"	1/2"
<b>M-3652</b>	<b>M-3653</b>	CONMET 102280 WEBB 102280	CONMET 102279 WEBB 102279	---	---	3-13/32"	1-7/16"	1/8"
<b>M-3936</b>	<b>M-3937</b>	GUNITE W1033R	GUNITE W1033L	---	---	3-3/8"	1-29/32"	1/4"
<b>M-3654</b>	<b>M-3655</b>	CONMET 102282 WEBB 102282	CONMET 102281 WEBB 102281	---	---	3-25/32"	1-7/16"	1/8"

## 3/4"-16 Thread – Serrated Body with Raised Shoulder



Grade 8

Body Dia. .783 –.786

Serrated Dia .810 –.820

Raised Shoulder Dia. .798 –.808

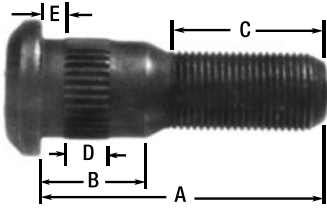
BWP NO.		REPLACES				A	B	C	D
		MFG. NO.		NWRA					
R/H	L/H	R/H	L/H	R/H	L/H				
<b>M-1206</b>	<b>M-1207</b>	BUDD 90553	BUDD 90554	X-1688	X-1689	2-3/8"	1"	3/8"	3/16"
<b>M-1208</b>	<b>M-1209</b>	BUDD 90513	BUDD 90514	X-1693	X-1694	2-5/8"	1-1/4"	7/16"	3/16"
<b>M-1151</b>	— —	BUDD 85108 FORD C3T2-1118A	— —	— —	— —	2-3/4"	1-3/8"	1/2"	1/4"
<b>M-80</b>	<b>M-81</b>	BUDD 49851 TRAILMOBILE 50-33A-25 WHITE 6043825 MERITOR 20X996 WEBB 198510	BUDD 49852 TRAILMOBILE 50-33A-26 WHITE 6043826 MERITOR 20X997 WEBB 198511	X-1384	X-1385	2-7/8"	1-1/2"	1/2"	5/16"
<b>M-1284</b>	— —	BUDD 85141 FORD CTZ-1119A	— —	X-1700	— —	3"	1-9/16"	1/2"	5/16"
<b>M-82</b>	<b>M-83</b>	BUDD 59183 FREHAUF 582886	BUDD 59184 FRUEHAUF 582887	X-1386	X-1387	3-1/8"	1-3/4"	9/16"	5/16"
<b>M-1152</b>	— —	BUDD 85106 FORD CTZ-1119A	— —	X-1701	— —	3-3/8"	1-13/16"	1/2"	5/16"
<b>M-1120</b>	<b>M-1121</b>	BUDD 84097	BUDD 84098	X-1702	X-1703	3-3/8"	2"	3/8"	3/16"
<b>M-1110</b>	<b>M-1111</b>	BUDD 59066	BUDD 59067	X-1704	X-1705	3-3/8"	2"	9/16"	5/16"
<b>M-1112</b>	<b>M-1113</b>	BUDD 59375	BUDD 59376	X-1706	X-1707	3-5/8"	2-1/4"	9/16"	5/16"
<b>M-1176</b>	<b>M-1177</b>	BUDD 59373	BUDD 59374	X-1708	X-1709	3-7/8"	2-1/2"	9/16"	5/16"
<b>M-1210</b>	<b>M-1211</b>	BUDD 59371	BUDD 59372	X-1710	X-1711	4-1/8"	2-3/4"	9/16"	5/16"

# HEADED DISC WHEEL STUDS

## Budd Unimount Wheel Stud

### 3/4"-16 Thread – Serrated Body

- Body Dia. .900 –.906
- Grade 8
- Serrated Dia. .935 –.942



BWP NO.		REPLACES MFG. NO.		A	B	C	D	E
R/H	L/H	R/H	L/H					
<b>M-3218</b>	<b>M-3219</b>	BUDD 106201	BUDD 106202	2-19/32"	1"	1-1/4"	13/32"	6/32"

### 11/16"-16 Thread – Serrated Body

Body Dia. .747 –.749    Serrated Dia. .761 –.767



BWP NO.		REPLACES MFG. NO.		A	B	C	D
<b>M-3956</b>	RH	GMC 3874369	RH	3-1/4"	1-1/8"	1-27/32"	5/8"
<b>M-3957</b>	RH	GMC 704173	RH	3-5/8"	1-5/16"	1-31/32"	1/2"

### 3/4"-16 Thread – "D" Head Studs for Dura-Light Hubs

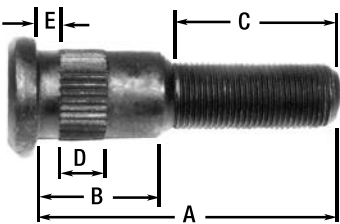
Body Dia. .888



BWP NO.		REPLACES MFG. NO.		A	B	C	D
R/H	L/H	R/H	L/H				
<b>M-3958</b>	<b>M-3959</b>	WALTHER EMC 02-00031	WALTHER EMC 02-00032	2-1/16"	5/8"	1-1/8"	5/16"
<b>M-3960</b>	<b>M-3961</b>	WALTHER EMC 02-00027	WALTHER EMC 02-00028	2-11/32"	5/8"	1-3/8"	5/16"

### 3/4"-16 Thread – Serrated Body

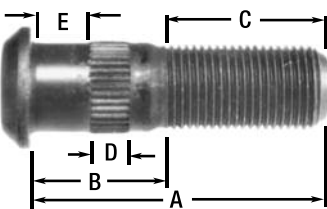
- Body Dia. .971 –.975
- Grade 8
- Serrated Dia. .998 –.1006



BWP NO.		REPLACES MFG. NO.		A	B	C	D	E
R/H	L/H	R/H	L/H					
<b>M-3618</b>	<b>M-3619</b>	WEBB 101172	WEBB 101173	2-7/8"	13/16"	1-1/8"	3/8"	1/4"
<b>M-3620</b>	<b>M-3621</b>	GUNITE W-1199R	GUNITE W-1199L	3-3/8"	1-3/8"	1-13/16"	1/2"	1/4"
<b>M-3622</b>	<b>M-3623</b> ★	MERITOR 20X348	MERITOR 20X349	3-5/8"	13/16"	1-1/8"	7/16"	1/8"
<b>M-3624</b>	<b>M-3625</b>	GUNITE W985R	GUNITE W-985L	3-7/16"	1-15/16"	1-5/16"	3/4"	1"

• LIMITED QUANTITY AVAILABLE    ★ DISCONTINUED

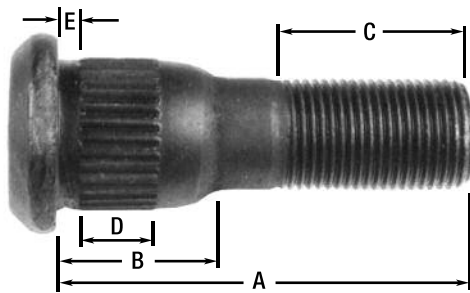
### 15/16"-12 Thread – Serrated Body    Body Dia. .971 –.975    Grade 8    Serrated Dia. .998 –.1005



BWP NO.		REPLACES MFG. NO.		A	B	C	D	E
R/H	L/H	R/H	L/H					
<b>M-1296</b>	<b>M-1297</b>	MERITOR 20X804	MERITOR 20X803	3-3/16"	1-1/2"	1-5/8"	3/8"	5/8"
<b>M-1298</b>	<b>M-1299</b>	MERITOR 20X512	MERITOR 20X511	3-7/8"	1-3/16"	1-7/8"	1/2"	5/8"



## 3/4"-16 Thread - Serrated Body



Body Dia. .973 -. 977  
Serrated Body Dia .998 - .1006

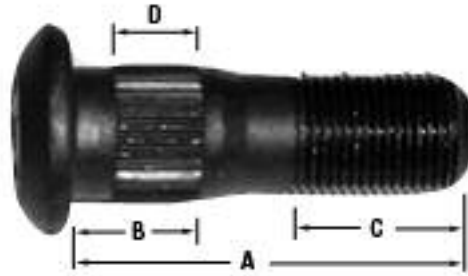
① = Use in place of M-1288 R & L for Cast Drums

BWP NO.		REPLACES				A	B	C	D	E
		MFG. NO.		NWRA						
R/H	L/H	R/H	L/H	R/H	L/H					
<b>M-84</b>	<b>M-85</b>	BUDD 63625-2 MERITOR 20X208	BUDD 63626-2 MERITOR 20X209	X-1833	X-1834	2-3/8"	13/16"	1-5/32"	7/16"	1/8"
<b>M-86</b>	<b>M-87</b>	BUDD 63625-3 MERITOR 20X210	BUDD 63626-3 MERITOR 20X211	X-1391	X-1392	2-9/16"	13/16"	1-5/32"	5/8"	1/8"
<b>M-88</b>	<b>M-89</b>	BUDD 63625-1 MERITOR 20X206	BUDD 63626-1 MERITOR 20X207	X-1393	X-1394	2-23/32"	13/16"	1-5/32"	7/16"	1/8"
<b>M-2432</b>	<b>M-2433</b>	MERITOR 20X402	MERITOR 20X403	X-1884	X-1885	2-9/16"	15/16"	1-1/4"	7/16"	9/32"
<b>M-2434</b>	<b>M-2435</b>	MERITOR 20X831	MERITOR 20X832	X-1905	X-1906	2-11/16"	13/16"	1-7/16"	7/16"	1/8"
<b>M-1106</b>	<b>M-1107</b>	BUDD 82578 MERITOR 20X404	BUDD 82579 MERITOR 20X405	X-1843	X-1844	2-13/16"	1-3/16"	1-3/16"	1/2"	3/8"
<b>M-1288</b>	<b>M-1289</b>	NW 86797 NAVISTAR 472008C	NW86798 NAVISTAR 472007C1	X-1762	X-1763	2-15/16"	1-1/4"	1-1/4"	1"	1/16"
<b>M-2436</b>	<b>M-2437</b>	MERITOR 20X344	MERITOR 20X345	X-1888	X-1889	3-1/16"	13/16"	1-1/2"	7/16"	1/8"
<b>M-1212</b>	<b>M-1213</b>	MERITOR 20X481	MERITOR 20X482	X-1861	X-1862	3-3/32"	1-3/8"	1-1/4"	1-1/8"	3/16"
<b>M-3950</b>	<b>M-3951</b>	WEBB 101174	WEBB 101175	— —	— —	3-3/16"	25/32"	1-19/32"	1/2"	3/8"
① <b>M-3626</b>	<b>M-3627</b>	MW 90801	MW 90802	— —	— —	3-3/16"	1-3/16"	1-5/32"	1"	1/16"
<b>M-2438</b>	<b>M-2439</b>	PETERBILT 03-02207 KENWORTH 233-2871R	PETERBILT 03-02208 KENWORTH 233-2871L	X-1935	X-1936	3-5/16"	1-7/16"	1-3/32"	1"	5/16"
<b>M-3952</b>	<b>M-3953</b>	WEBB 101178	WEBB 101179	— —	— —	3-11/32"	25/32"	1-27/32"	1/2"	3/8"
<b>M-1290</b>	<b>M-1291</b>	MERITOR 20X852	MERITOR 20X853	X-1893	X-1894	3-11/32"	1-27/32"	1-1/4"	1/2"	3/8"
<b>M-1292</b>	<b>M-1293</b>	MERITOR 20X1284	MERITOR 20X1285	X-1895	X-1896	3-21/32"	2-7/32"	1-1/16"	1"	13/32"
<b>M-2466</b>	<b>M-2467</b>	PETERBILT 03-02852 KENWORTH 12452-001R	PETERBILT 03-02853 KENWORTH 122452-001L	X-2131	X-2132	3-3/4"	1-3/8"	1-7/8"	1-1/16"	3/16"

# HEADED DISC WHEEL STUDS

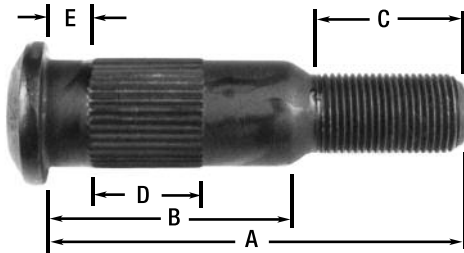
## 3/4"-16 Thread – Serrated Body

- Body Dia. .772 –.784



BWP NO.		REPLACES				A	B	C	D
		MFG. NO.		NWRA					
R/H	L/H	R/H	L/H	R/H	L/H				
<b>M-3938</b>	<b>M-3939</b>	WEBB 159190	WEBB 159191	---	---	2-3/8"	7/8"	1-1/16"	1/2"
<b>M-3940</b>	<b>M-3941</b>	DAYTON 09-861902	DAYTON 09-861901	---	---	2-7/8"	1-1/2"	1-3/16"	1/2"
<b>M-3942</b>	<b>M-3943</b>	DAYTON 09-001484	DAYTON 09-001485	---	---	3-3/8"	1-9/32"	1-15/16"	1/2"
<b>M-3944</b>	<b>M-3945</b>	GUNITE W1073R	GUNITE W1073L	---	---	3-13/32"	1-29/32"	1-7/32"	1/2"
<b>M-3946</b>	<b>M-3947</b>	DAYTON 09-001588	DAYTON 09-001589	---	---	3-1/2"	1-25/32"	1-9/32"	1/2"
<b>M-3948</b>	<b>M-3949</b>	DAYTON 09-001326	DAYTON 09-001327	---	---	3-27/32"	2-11/32"	1-9/32"	1/2"
<b>M-3628</b>	<b>M-3629</b>	GUNITE W1061R	GUNITE W1061L	---	---	3-7/8"	2-1/16"	1-11/16"	1/2"

## 3/4"-16 Thread – Serrated Body

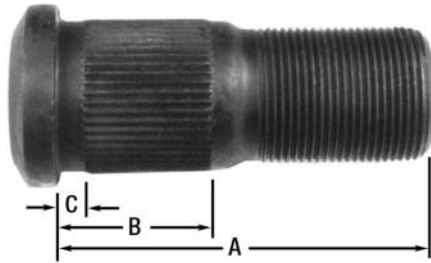


Body Dia. .973 - .977  
 Grade 8  
 Serrated Body Dia .998 - .1006

BWP NO.		REPLACES				A	B	C	D	E
		MFG. NO.		NWRA						
R/H	L/H	R/H	L/H	R/H	L/H					
<b>M-2440★</b>	<b>M-2441•</b>	---	MERITOR 20X781	---	X-1883	3-3/4"	2"	---	1"	7/16"
<b>M-1214</b>	<b>M-1215</b>	MERITOR 20X488	MERITOR 20X487	X-1907	X-1908	3-25/32"	2-7/32"	1-3/16"	1"	5/16"
<b>M-1294</b>	<b>M-1295</b>	MERITOR 20X1282	MERITOR 20X1283	X-1897	X-1898	3-7/8"	2-7/16"	1-1/16"	1-1/16"	5/8"
<b>M-1108</b>	<b>M-1109★</b>	BUDD 83851	BUDD 83852	X-1378	X-1379	4"	2-7/16"	1-3/16"	1"	5/8"
<b>M-2442</b>	<b>M-2443</b>	MERITOR 20X408	MERITOR 20X409	X-2027	X-2028	4-3/16"	2-11/16"	1-1/4"	1/2"	3/8"

★ DISCONTINUED      • LIMITED QUANTITY AVAILABLE

## 1-1/8"-16 Thread – Serrated Body Front Wheel Studs



Body Dia. 1.218 - 1.222  
Grade 8  
Serrated Body Dia 1.244 - 1.252

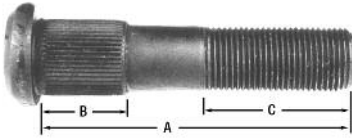
BWP NO.		REPLACES				A	B	C
		MFG. NO.		NWRA				
R/H	L/H	R/H	L/H	R/H	L/H			
<b>M-1114</b>	<b>M-1115</b>	BUDD 82573 MERITOR 20X370	BUDD 82574 MERITOR 20X369	X-1718	X-1719	2-13/32"	7/8"	3/16"
<b>M-1216</b>	<b>M-1217</b>	BUDD 83814 MERITOR 20X368	BUDD 83185 MERITOR 20X367	X-1721	X-1722	2-19/32"	7/8"	3/16"
<b>M-1218</b>	<b>M-1219</b>	BUDD 83818 MERITOR 20X378	BUDD 83819 MERITOR 20X377	X-1723	X-1724	2-21/32"	7/8"	3/16"
<b>M-1116</b>	<b>M-1117</b>	BUDD 82575 MERITOR 20X372	BUDD 82576 MERITOR 20X371	X-1725	X-1726	2-13/16"	7/8"	3/16"
<b>M-2468</b>	<b>M-2469</b>	MERITOR 20X676	MERITOR 20X675	X-1925	X-1926	2-27/32"	1-5/16"	9/16"
<b>M-2470</b>	<b>M-2471</b>	MERITOR 20X582	MERITOR 20X583	X-2033	X-2034	2-29/32"	1-3/8"	1/4"
<b>M-3630</b>	<b>M-3631</b>	NW 88108 WEBB 188108	NW 88109 WEBB 188109	X-1983	X-1984	2-31/32"	3/4"	1/8"
<b>M-1118</b>	<b>M-1119</b>	BUDD 83853 MERITOR 20X584	BUDD 83854 MERITOR 20X585	X-1727	X-1728	3"	1-3/8"	1/4"
<b>M-1204</b>	<b>M-1205</b>	MERITOR 20X746	MERITOR 20X747	X-1927	X-1928	3-5/32"	1-5/16"	9/16"
<b>M-1250</b>	<b>M-1251</b>	MERITOR 20X588 GUNITE W-1148R	MERITOR 20X589 GUNITE W-1148L	X-1931	X-1932	3-3/16"	1-3/8"	1/4"
<b>M-2472</b>	<b>M-2473</b>	NW 88291	NW 88292	X-1991	X-1992	3-1/4"	3/4"	1/8"
<b>M-2474</b>	<b>M-2475</b>	MERITOR 20X1356	MERITOR 20X1357	X-2037	X-2038	3-15/32"	7/8"	1/8"
<b>M-3632</b>	<b>M-3633</b>	GUNITE W-988R W-1118R NAVISTAR 593096C1	GUNITE W988L W1118L NAVISTAR 593097C1	— —	— —	3-1/2"	1-3/16"	1/4"
<b>M-2476</b>	<b>M-2477</b>	MW 87142	MW 87143	X-1766	X-1767	3-1/2"	1-1/2"	5/16"
<b>M-3910</b>	<b>M-3911</b>	GUNITE W890R	GUNITE W890L	— —	— —	3-9/16"	1-9/16"	3/16"
<b>M-3912</b>	<b>M-3913</b>	GUNITE W1203R	GUNITE W1203L	— —	— —	3-13/16"	1-3/16"	3/16"
<b>M-3916</b>	<b>M-3917</b>	WEBB 100170	WEBB 100181	— —	— —	3-5/8"	1-3/4"	3/16"
<b>M-2428</b>	<b>M-2429</b>	BUDD 85381 99616 PETERBILT 02-00573 WEBB 133610	BUDD 85382 99617 PETERBILT 02-00572 WEBB 133609	X-1731	X-1732	3-5/8"	1-13/16"	9/16"
<b>M-2430</b>	<b>M-2431</b>	KW 233B359R PETERBILT 02-00772	KW 233B359L PETERBILT 02-00771	X-2133	X-2134	3-3/4"	1-7/32"	1/8"
<b>M-2478</b>	<b>M-2479</b>	MERITOR 20X1476	MERITOR 20X1475	X-2111	X-2112	3-3/4"	1-3/8"	5/8"
<b>M-2480</b>	<b>M-2481</b>	MERITOR 20X586	MERITOR 20X587	X-2113	X-2114	3-25/32"	1-3/8"	7/32"
<b>M-3914</b>	<b>M-3915</b>	KW K233C372R	KW K233C372L	— —	— —	4"	1-5/16"	3/16"

# HEADED DISC WHEEL STUDS

WHEEL PARTS

## 3/4"-16 Thread – Fully Serrated Body

- Body Dia. .742 –.749
- Serrated Body Dia. .875



BWP NO.		REPLACES MOTOR WHEEL		A	B	C
RH	LH	RH	LH			
<b>M-189</b>	<b>M-190</b>	82017	82018	2-15/32"	29/32"	1-5/32"
<b>M-191</b>	<b>M-192</b>	84155	84156	2-5/8"	29/32"	1-5/32"
<b>M-193</b>	<b>M-194</b>	84986	84987	2-13/16"	29/32"	1-5/32"
<b>M-195</b>	<b>M-196</b>	82095	82096	2-31/32"	15/16"	1-5/32"
<b>M-187</b>	— —	84935	— —	3-1/8"	1-1/8"	1-3/4"
<b>M-197</b>	<b>M-198</b>	82842	82843	3-1/4"	1-1/8"	1-5/32"
<b>M-186</b>	— —	08003	— —	3-1/2"	1-1/32"	1-1/2"
<b>M-185</b>	— —	07778	— —	3-9/16"	27/32"	1-1/2"

## Front Wheel Studs for Aluminum Disc Wheels

- 1-1/8"-16 Thread
- Body Dia. 1.220



BWP NO.		REPLACES CONMET		A	B	C
RH	LH	RH	LH			
<b>M-3918</b>	<b>M-3919</b>	103190	103189	3-3/32"	1-5/32"	1-15/32"
<b>M-3920</b>	<b>M-3921</b>	102085	102084	3-13/32"	1-17/32"	1-15/32"
<b>M-3922</b>	<b>M-3923</b>	103192	103191	3-9/16"	1-5/32"	1-15/16"
<b>M-3924</b>	<b>M-3925</b>	101874	101873	3-7/8"	1-17/32"	1-29/32"

# CLIPPED HEAD WHEEL STUDS

## Clipped Head Studs

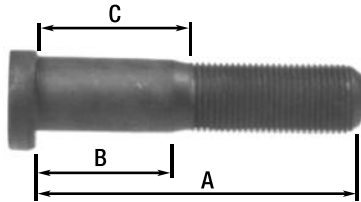
- 3/4"-16 Thread
- Body Dia. .910



BWP NO.	REPLACES	THREAD	A	B	C
<b>M-3962</b>	CONMET 101774	R/H	3-5/32"	1-3/16"	1-1/4"
<b>M-3963</b>	CONMET 101773	L/H			

## Con-Met Drive and Trailer Aluminum Hubs

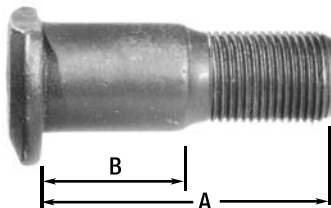
- 3/4"-16 Thread
- Body Dia. .783-.786
- Grade 8



BWP NO.	REPLACES	THREAD	A	B	C
<b>M-3964</b>	PACCAR K01	R/H	2-11/16"	1-1/8"	15/16"
<b>M-3965</b>	PACCAR K02	L/H			
<b>M-3966</b>	PACCAR K03	R/H	2-15/16"	1-1/8"	15/16"
<b>M-3967</b>	PACCAR K04	L/H			
<b>M-3220</b>	100013	R/H	3-5/32"	1-13/32"	1-23/32"
<b>M-3221</b>	100012	L/H			
<b>M-3222</b>	100369	R/H	3-1/4"	1-17/32"	1-7/8"
<b>M-3223</b>	100368	L/H			
<b>M-3968</b>	PACCAR K06	R/H	3-5/16"	15/16"	1-3/4"
<b>M-3969</b>	PACCAR K05	L/H			
<b>M-3224</b>	100255	R/H	3-13/32"	1-13/32"	1-3/4"
<b>M-3225</b>	100254	L/H			
<b>M-3226</b>	100371	R/H	3-17/32"	1-9/16"	1-29/32"
<b>M-3227</b>	100370	L/H			
<b>M-3228</b>	100373	R/H	3-25/32"	1-9/16"	1-3/4"
<b>M-3229</b>	100372	L/H			

## Budd 3/4"-16 Thread

- Body Dia. .875 - .879



BWP NO.		REPLACES				A	B
		BUDD-MERITOR		NWRA			
RH	LH	RH	LH	RH	LH		
<b>M-260</b>	<b>M-261</b>	35786	35787	X-1395	X-1396	2"	3/4"
<b>M-102</b>	<b>M-103</b>	40336 20X655	40337 20X656	X-1050	X-1051	2-1/4"	1-3/64"
<b>M-104</b>	<b>M-105</b>	40338	40339	X-1397	X-1398	2-3/8"	1-3/16"
<b>M-258</b>	<b>M-259</b>	59536 20X120	59537 20X121	X-1666	X-1667	2-39/64"	1-9/32"

### APPLICABLE NUTS FOR ALL ABOVE STUDS

SINGLE WHEEL	M-124 RH	M-125 LH
DUAL WHEEL INNER NUTS	M-128 RH	M-129 LH
DUAL WHEEL OUTER NUTS	M-126 RH	M-127 LH

## Con-Met Aluminum Front Hub

- 1-1/8" -16 Thread
- Body Dia. 1.223 - 1.227
- Grade 8

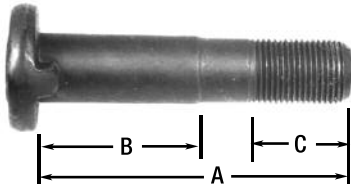


BWP NO.	REPLACES	THREAD	A	B	C
<b>M-3230</b>	100265	R/H	3-23/32"	1-9/16"	1-3/4"
<b>M-3231</b>	100264	L/H			

# WEDGE HEAD WHEEL STUDS

## Meritor Studs for Aluminum Hubs

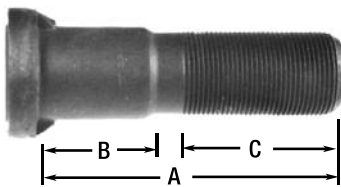
- 3/4" -16 Thread
- Body Dia. .786 - .789
- Underhead Dia. .790 - .795
- Grade 8



BWP NO.		REPLACES				A	B	C
		MERITOR		NWRA				
RH	LH	RH	LH	RH	LH			
<b>M-3634</b>	<b>M-3635</b>	20X2089	20X2088	— —	— —	2-5/8"	15/16"	1-9/32"
<b>M-3636</b>	<b>M-3637</b>	20X1980	20X1979	— —	— —	3-1/8"	1-13/32"	1-3/8"
<b>M-2420</b>	<b>M-2421</b>	20X1335 20X1464	20X1334 20X1463	X-1913	X-1914	3-3/8"	1-13/32"	1-3/32"
<b>M-2422</b>	<b>M-2423</b>	20X1312 20X1460	20X1311 20X1459	X-1915	X-1916	3-17/32"	1-3/4"	1-3/32"
<b>M-2482</b>	<b>M-2483</b>	20X1306	20X1305	X-1921	X-1922	3-21/32"	1-13/16"	1-3/32"
<b>M-3638</b>	<b>M-3639</b>	20X1472	20X1471	— —	— —	3-3/4"	1-7/16"	1-11/16"
<b>M-2424</b>	<b>M-2425</b>	20X1310 20X1458	20X1309 20X1457	X-1917	X-1918	3-3/4"	1-13/16"	1-3/32"
<b>M-2484</b>	<b>M-2485</b>	20X1308	20X1307	X-2043	X-2044	4"	1-7/16"	2"

## Meritor Studs for Aluminum Hubs

- 1-1/8" -16 Thread
- Body Dia. 1.226 - 1.229
- Underhead Dia. 1.231 - 1.234
- Grade 8

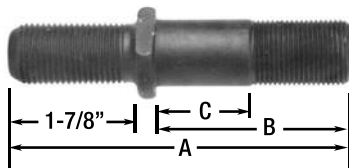


BWP NO.		REPLACES				A	B	C
		MERITOR		NWRA				
RH	LH	RH	LH	RH	LH			
<b>M-2426</b>	<b>M-2427</b>	20X1380	20X1381	— —	— —	3-3/4"	1-7/16"	2-1/4"

# OFF HIGHWAY SHOULDER STUDS

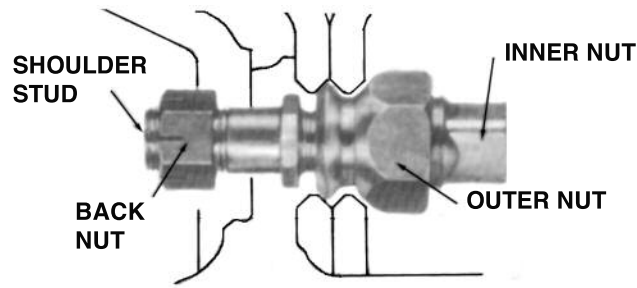
## Off-Highway Shoulder Studs with Flats

- 1" -14 Thread Hub End
- 15/16" -12 Thread Wheel End
- Body Dia. 1.010 - 1.013
- Grade 8



BWP NO.		REPLACES				A	B	C
		BUDD - MERITOR		NWRA				
RH	LH	RH	LH	RH	LH			
<b>M-1226</b>	<b>M-1227</b>	49541 20X446	49542 20X447	X-1632	X-1633	5"	2-7/8"	1-13/32"
<b>M-1228</b>	<b>M-1229</b>	63341	63342	X-1636	X-1637	5-5/8"	3-1/2"	1-7/8"
<b>M-2486</b>	<b>M-2487</b>	20X460	20X461	X-1933	X-1934	5-7/8"	3-11/16"	2-3/8"
<b>M-2488</b>	<b>M-2489</b>	63866 20X468	63867 20X469	X-1642	X-1643	7"	4-7/8"	3-5/32"

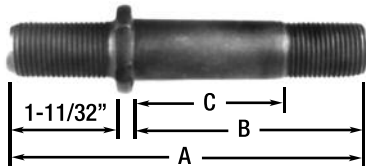
# SHOULDER STUDS FOR DISC WHEELS



	BACK NUT	SHOULDER STUD	INNER NUT	OUTER NUT
STANDARD MOUNTING	M-2459 3/4"-16	M-46 THRU M-71	M-128 RH M-129 LH	M-126 RH M-127 LH
HEAVY DUTY OFF HIGHWAY MOUNTING	M-1255 7/8"-14 M-1268 1"-14	M-1224 THRU M-1231 M-2486 THRU M-2489	M-140A RH M-140B LH	M-140E RH M-140F LH

## 3/4"-16 Thread Both Ends — Flats on Shoulder

- Body Dia. .783 - .786
- Grade 8

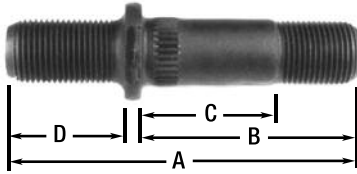


BWP NO.		REPLACES				A	B	C
		BUDD		NWRA				
RH	LH	RH	LH	RH	LH			
<b>M-46</b>	<b>M-47</b>	12247	12248	X-1554	X-1555	3-1/8"	1-19/32"	5/8"
<b>M-48</b>	<b>M-49</b>	13096	13097	X-1558	X-1559	3-19/32"	2-1/16"	7/8"
<b>M-50</b>	<b>M-51</b>	13988	13989	X-1562	X-1563	3-23/32"	2-3/16"	1-1/16"
<b>M-52</b>	<b>M-53</b>	13990	13991	X-1568	X-1569	3-31/32"	2-7/16"	1-5/32"
<b>M-54</b>	<b>M-55</b>	19004	19005	X-1572	X-1573	4-1/32"	2-1/2"	1-9/32"
<b>M-56</b>	<b>M-57</b>	17123	17124	X-1574	X-1575	4-7/32"	2-11/16"	1-7/16"
<b>M-58</b>	<b>M-59</b>	22005	22006	X-1578	X-1579	4-11/32"	2-13/16"	1-25/32"
<b>M-3900</b>	<b>M-3901</b>	CONMET 100329	CONMET 100330	---	---	4-17/32"	3"	1-9/16"
<b>M-60</b>	<b>M-61</b>	16271	16272	X-1580	X-1581	4-17/32"	3"	1-29/32"
<b>M-3640</b>	<b>M-3641</b>	18309	18310	X-1584	X-1585	4-23/32"	3-3/16"	2-5/16"
<b>M-3642</b>	<b>M-3643</b>	21942 CONMET 100118	21943 CONMET 100117	X-1586	X-1587	4-27/32"	3-5/16"	1-11/16"
<b>M-3644</b>	<b>M-3645</b>	FRT. 11-9714-5 CONMET 100525	FRT. 11-9714-4 CONMET 100524	---	---	4-29/32"	3-3/8"	2-1/32"
<b>M-62</b>	<b>M-63</b>	16003	16004	X-1588	X-1589	5-1/32"	3-1/2"	2-15/32"
<b>M-64</b>	<b>M-65</b>	16856	16857	X-1590	X-1591	5-7/32"	3-11/16"	2-21/32"
<b>M-3902</b>	<b>M-3903</b>	CONMET 100256	CONMET 100257	---	---	5-1/4"	3-5/16"	1-21/32"
<b>M-66</b>	<b>M-67</b>	33792	33793	X-1863	X-1864	5-17/32"	4"	3"
<b>M-68</b>	<b>M-69</b>	39677	39678	---	---	5-23/32"	4-3/16"	3-3/16"
<b>M-70</b>	<b>M-71</b>	24100	24101	X-1594	X-1595	6-1/32"	4-1/2"	3-13/32"

# SHOULDER STUDS FOR DISC WHEELS

## Flats on Shoulder — Serrations Under Shoulder for Mack

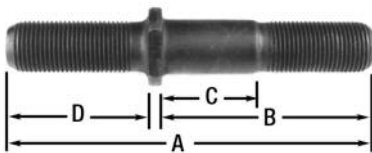
- 3/4"-16 Thread Both Ends
- Body Dia. .783 –.786



BWP NO.		REPLACES MACK		A	B	C	D
RH	LH	RH	LH				
<b>M-2490</b>	<b>M-2491</b>	18AX926	18AX927	4-1/16"	2-9/16"	1-1/2"	1-11/32"

## Flats on Shoulder — Longer Cap Nut End for Aluminum Wheels

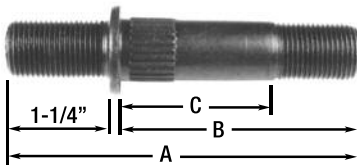
- 3/4"-16 Thread Both Ends
- Body Dia. .783 –.786



BWP NO.		REPLACES				A	B	C	D
		FREIGHTLINER		BUDD/NWRA					
RH	LH	RH	LH	RH	LH				
<b>M-2402</b>	<b>M-2403</b>	11-9714-3	11-9714-2	95693	95694	4 1/4"	2 3/8"	1 1/16"	1 5/8"
<b>M-2404</b>	<b>M-2405</b>	11-9714-12	11-9714-11	X-2053	X-2054	4 1/2"	2 3/8"	1 1/32"	1 15/16"
<b>M-3904</b>	<b>M-3905</b>	WEBB 183102	WEBB 183101	---	---	4 29/32"	3 3/8"	1 55/64"	1 23/64"
<b>M-2406</b>	<b>M-2407</b>	11-9714-16	11-9714-15	X-2055	X-2056	5 5/16"	3"	1 1/16"	2"
<b>M-2408</b>	<b>M-2409</b>	11-9714-1	11-9714-0	95691 X-1592	95692 X-1593	5 1/4"	2 7/8"	1 3/8"	2 1/4"
<b>M-2410</b>	<b>M-2411</b>	11-9714-14	11-9714-13	X-2057	X-2058	5 5/16"	3 3/8"	1 3/4"	2"
<b>M-2412</b>	<b>M-2413</b>	11-9714-18	11-9714-17	X-2061	X-2062	5 1/16"	2 3/4"	1 1/16"	2 3/4"

## Round Shoulder — Serrations Under Shoulder

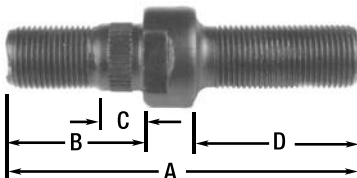
- 3/4"-16 Thread Both Ends
- Body Dia. .783 –.786



BWP NO.		REPLACES				A	B	C
		BUDD		NWRA				
RH	LH	RH	LH	RH	LH			
<b>M-1164</b>	<b>M-1165</b>	75931	75932	X-1606	X-1607	3-13/32"	2-1/16"	27/32"
<b>M-1166</b>	<b>M-1167</b>	82581	82582	X-1608	X-1609	3-5/8"	2-9/32"	1-1/16"
<b>M-2492</b>	<b>M-2493</b>	93295	93296	---	---	3-23/32"	2-3/8"	1-5/32"
<b>M-2494</b>	<b>M-2495</b>	63385	63386	X-1612	X-1613	4"	2-9/16"	1-5/16"
<b>M-1168</b>	<b>M-1169</b>	80697	80698	X-1614	X-1615	4-11/32"	3"	1-29/32"
<b>M-2496</b>	<b>M-2497</b>	69205	69206	---	---	4-17/32"	3"	1-15/16"
<b>M-1170</b>	<b>M-1171</b>	83812	83813	X-1616	X-1617	4-5/8"	3-9/32"	2"
<b>M-2498</b>	<b>M-2499</b>	101321	101322	FRUEHAUF ACD-7629-4, -3		4-7/8"	3-17/32"	2"

## Demountable Drum Type Studs

- 3/4"-16 Thread Both Ends
- Body Dia. .783 –.786



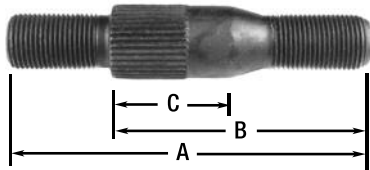
BWP NO.		REPLACES				A	B	C	D
		BUDD-MERITOR		NWRA					
RH	LH	RH	LH	RH	LH				
<b>M-2510</b>	<b>M-2511</b>	36412 20X88	36413 20X87	X-1951	X-1952	3 19/32"	1 9/16"	29/32"	1 15/32"
<b>M-2512</b>	<b>M-2513</b>	66068	60069	X-1600	X-1601	4 1/32"	1 9/16"	15/32"	1 29/32"
<b>M-2514</b>	<b>M-2515</b>	49301 20X366	49302 20X365	X-1598	X-1599	4 1/32"	2 1/16"	27/32"	1 11/32"

NOTE: M-2512 AND M-2513 ARE SERRATED ON BODY.



## Serrated Studs for Aluminum Hubs

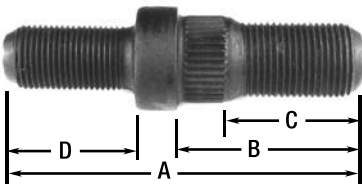
- 3/4"-16 Thread Both Ends
- Body Dia. .971-.975



BWP NO.		REPLACES				A	B	C
		MERITOR		NWRA				
RH	LH	RH	LH	RH	LH			
<b>M-1220</b>	<b>M-1221</b>	20X244	20X245	X-1955	X-1956	4-21/32"	3-5/16"	1-15/32"
<b>M-1222</b>	<b>M-1223</b>	20X242	20X243	X-1957	X-1958	4-13/16"	3-15/32"	1-15/32"
<b>M-1224</b>	<b>M-1225</b>	20X234	20X235	---	---	5-5/16"	3-31/32"	1-15/16"

## Serrated Studs for Bus and Front End

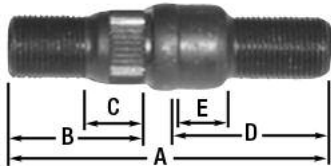
- 3/4"-16 Thread Wheel End
- 7/8"-14 Thread Hub End
- Body Dia. .971-.975



BWP NO.		REPLACES				A	B	C	D
		MERITOR		NWRA					
RH	LH	RH	LH	RH	LH				
<b>M-2448</b>	<b>M-2449</b>	20X1228	20X1227	X-1941	X-1942	4"	2 <sup>3</sup> / <sub>32</sub> "	1 <sup>1</sup> / <sub>4</sub> "	1 <sup>1</sup> / <sub>16</sub> "
<b>M-2450</b>	<b>M-2451</b>	20X436	20X437	X-1943	X-1944	4 <sup>1</sup> / <sub>4</sub> "	2 <sup>13</sup> / <sub>32</sub> "	1 <sup>1</sup> / <sub>16</sub> "	1 <sup>1</sup> / <sub>16</sub> "
<b>M-2452</b>	<b>M-2453</b>	20X1234	20X1233	X-1945	X-1946	4 <sup>15</sup> / <sub>16</sub> "	3 <sup>3</sup> / <sub>32</sub> "	1 <sup>13</sup> / <sub>16</sub> "	1 <sup>1</sup> / <sub>16</sub> "

## Serrated Studs for Bus and Front End

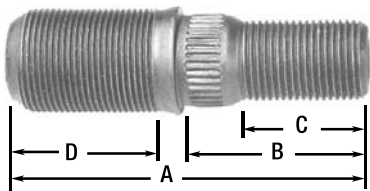
- 7/8"-14 Thread Both Ends
- Body Dia. .973



BWP NO.	REPLACES MERITOR	A	B	C	D	E
<b>M-3906</b>	20X2128	4-1/4"	1-7/8"	15/16"	2-1/16"	7/16"
<b>M-3907</b>	20X2144	5-5/8"	1-7/8"	15/16"	3-7/16"	1-1/4"

## Serrated Studs for Bus and Front End

- 1-1/8"-16 Thread Wheel End
- 7/8"-14 Thread Hub End
- Body Dia. .971-.975



BWP NO.		REPLACES				A	B	C	D
		MERITOR		NWRA					
RH	LH	RH	LH	RH	LH				
<b>M-2444</b>	<b>M-2445</b>	20X1240	20X1239	X-1937	X-1938	3 <sup>3</sup> / <sub>8</sub> "	1 <sup>7</sup> / <sub>8</sub> "	1 <sup>1</sup> / <sub>16</sub> "	1 <sup>15</sup> / <sub>32</sub> "
<b>M-2446</b>	<b>M-2447</b>	20X1242	20X1241	X-1947	X-1948	4"	2"	1 <sup>1</sup> / <sub>16</sub> "	1 <sup>1</sup> / <sub>4</sub> "

## Serrated Studs for Bus and Front End

- 1-1/8"-16 Thread Wheel End
- 3/4"-16 Thread Hub End
- Body Dia. 1.220

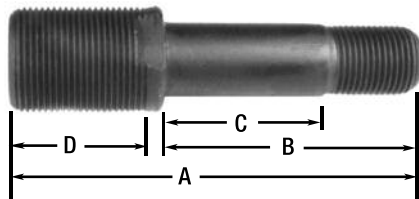


BWP NO.	REPLACES GUNITE/MERITOR	A	B	C	D	E
<b>M-3908</b>	W1060R/20X1760	5-5/16"	3-5/8"	2-5/8"	2-3/32"	1-11/16"
<b>M-3909</b>	W1060L/20X1761	5-5/16"	3-5/8"	2-5/8"	2-3/32"	1-11/16"

# SHOULDER STUDS FOR DISC WHEELS

## Bus Type Shoulder Studs with Flats

- 1-1/8"-16 Thread Wheel End
- 3/4"-16 Thread Hub End
- Body Dia. .783-.786
- Grade 8

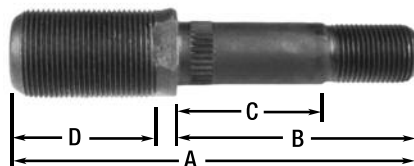


BWP NO.		REPLACES				A	B	C	D
		MFG'R NO		NWRA NO.					
RH	LH	RH	LH	RH	LH				
<b>M-108</b>	<b>M-109</b>	BUDD 32309 MACK 11AX1130	BUDD 32310 MACK 11AX1131	X-1512	X-1513	3-3/16"	1-19/32"	17/32"	1-13/32"
<b>M-112</b>	<b>M-113</b>	BUDD 31783	BUDD 31784	---	---	3-15/32"	1-7/8"	7/8"	1-13/32"
<b>M-116</b>	<b>M-117</b>	BUDD 31703	BUDD 31704	X-1514	X-1515	3-21/32"	2-1/16"	31/32"	1-13/32"
● <b>M-2414</b>	<b>M-2415</b>	BUDD 95711	BUDD 95712	X-1516	X-1517	3-3/4"	1-7/8"	25/32"	1-11/16"
<b>M-106</b>	<b>M-107</b>	BUDD 31781	BUDD 31782	X-1518	X-1519	3-29/32"	2-5/16"	1-5/32"	1-13/32"
● <b>M-2416</b>	<b>M-2417</b>	BUDD 95707	BUDD 95708	X-1520	X-1521	3-15/16"	2-1/16"	31/32"	1-11/16"
<b>M-114</b>	<b>M-115</b>	BUDD 45631	BUDD 45632	---	---	4-1/32"	2-7/16"	1-5/16"	1-13/32"
● <b>M-2418</b>	<b>M-2419</b>	BUDD 90217	BUDD 90218	X-1522	X-1523	4-1/4"	2-7/16"	1-7/32"	1-5/8"
<b>M-110</b>	<b>M-111</b>	BUDD 35089	BUDD 35090	X-1524	X-1525	4-11/32"	2-3/4"	1-23/32"	1-13/32"
● <b>M-3234</b>	<b>M-3235</b>	FREIGHTLINER 10-9607-0	FREIGHTLINER 10-9607-1	---	---	4-9/16"	2-3/4"	1-37/64"	1-1/2"
<b>M-118</b>	<b>M-119</b>	BUDD 36757	BUDD 36758	---	---	5-15/32"	3-7/8"	2-7/8"	1-13/32"

● = FOR ALUMINUM WHEELS

## Bus Type Shoulder Studs with Flats – Serrations on Body

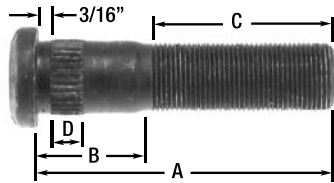
- 1-1/8"-16 Thread Wheel End
- 3/4"-16 Thread End
- Serrated Dia. .810-.820
- Body Dia. .783-.786
- Grade 8



BWP NO.		REPLACES				A	B	C	D
		MFG'R NO		NWRA NO.					
RH	LH	RH	LH	RH	LH				
<b>M-3646</b>	<b>M-3647</b>	CONMET 100344	CONMET 100343	---	---	4-9/16"	2-3/4"	1-17/32"	1-13/16"
<b>M-2516</b>	<b>M-2517</b>	MACK 18X924	MACK 18X925	X-2045	X-2046	5"	3"	1-7/8"	1-3/4"
<b>M-2518</b>	<b>M-2519</b>	MACK 18X952	MACK 18X953	X-2047	X-2048	5-1/2"	3-9/16"	2-3/8"	1-3/4"

## Budd Unimount System – Headed Stud with Serrated Body

- Metric M22X1.5 Thread
- Body Dia. .900–.903
- Serrated Dia. .935–.944
- Grade 10.9

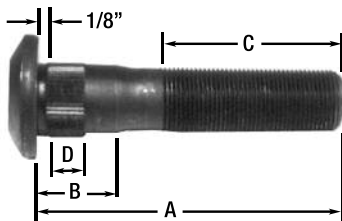


BWP NO.	REPLACES BUDD	A	B	C	D
<b>M-3200</b>	106377	3-5/32"	1-7/32"	1-5/8"	13/32"
<b>M-3201</b>	106216	3-21/32"	1-7/32"	2-1/8"	13/32"
<b>M-3202</b>	106397	4-29/64"	1-7/32"	2-29/32"	13/32"

USE METRIC NUT M-3203

## Con-Met Aluminum Hub – Headed Stud with Serrated Body

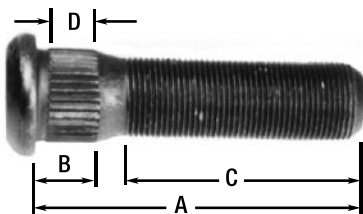
- Metric M22X1.5 Thread
- Body Dia. .908–.912
- Serrated Dia. .929–.937
- Grade 10.9



BWP NO.	REPLACES CON-MET	A	B	C	D
<b>M-3972</b>	103193	3-21/32"	1-7/32"	2-3/32"	1/2"
<b>M-3973</b>	102033	3-31/32"	1-9/16"	2-1/16"	1/2"
<b>M-3658</b>	102188	4-3/32"	1-1/16"	2-11/32"	1/2"
<b>M-3974</b>	103431	4-5/32"	1-9/16"	2-1/4"	1/2"
<b>M-3659</b>	102290	4-1/2"	1-9/16"	2-19/32"	1/2"
<b>M-3660</b>	102189	4-9/16"	1-1/16"	2-26/32"	1/2"
<b>M-3661</b>	102190	4-15/16"	1-1/16"	3-6/32"	1/2"
<b>M-3662</b>	102291	5"	1-9/16"	3-3/32"	1/2"
<b>M-3663</b>	102292	5-5/16"	1-9/16"	3-13/32"	1/2"

## Gunite – Headed Stud with Serrated Body

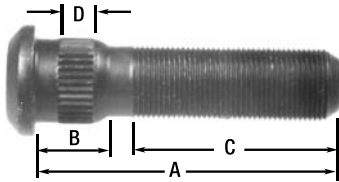
- Metric M22X1.5 Thread
- Body Dia. .971–.975
- Serrated Dia. 1.001–1.005
- Grade 10.9



BWP NO.	REPLACES GUNITE	A	B	C	D
<b>M-3664</b>	W-1324	3-1/2"	2-1/32"	2-5/8"	1/2"
<b>M-3665</b>	W-1246	3-11/16"	7/8"	2-11/32"	1/2"
<b>M-3666</b>	W-1164	4"	3/4"	2-7/8"	1/2"
<b>M-3667</b>	W-1249	4-1/4"	1-1/16"	2-7/8"	1/2"
<b>M-3668</b>	W-1327	4-1/4"	21/32"	3-1/4"	1/2"
<b>M-3976</b>	KW K233-468	4-3/8"	1-3/8"	2-3/8"	1"
<b>M-3669</b>	W-1160	5-3/32"	7/8"	3-3/4"	1/2"
<b>M-3670</b>	W-1211	5-3/16"	1-1/16"	3-23/32"	1/2"

## Webb – Headed Stud with Serrated Body

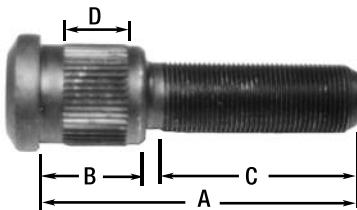
- Metric M22X1.5 Thread
- Body Dia. .973–.977
- Serrated Body Dia. 1.000–1.015
- Grade 10.9



BWP NO.	REPLACES WEBB	A	B	C	D
<b>M-3671</b>	101166	2-9/16"	23/32"	1-11/16"	3/8"
<b>M-3975</b>	101191	2-29/32"	23/32"	1-21/32"	3/8"
<b>M-3215</b>	101164	3-1/2"	23/32"	2-1/4"	3/8"
<b>M-3216</b>	101162	3-15/16"	23/32"	2-11/16"	3/8"
<b>M-3672</b>	101161	4-5/16"	23/32"	3-1/16"	3/8"
<b>M-3217</b>	101160	4-25/32"	23/32"	3-17/32"	3/8"

## Metric Headed Studs with Serrated Body

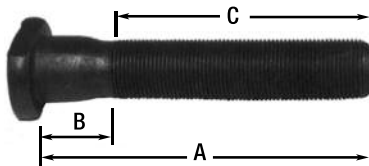
- Metric M22X1.5 Thread
- Body Dia. 1.218–1.222
- Serrated Dia. 1.244–1.252
- Grade 10.9



BWP NO.	REPLACES MFG. NO	A	B	C	D	NOTE:
<b>M-3673</b>	GUNITE W-1202	3-7/8"	1-3/16"	2-11/32"	3/4"	
<b>M-3674</b>	PACCAR 12452-106	3-7/8"	1-5/16"	2-1/16"	1/2"	USED PILOT MOUNT AND STUD MOUNT
<b>M-3675</b>	PACCAR 02-02145	4"	1-3/16"	2-1/4"	1/2"	
<b>M-3677</b>	GUNITE W-1205	4-13/32"	1-3/16"	2-7/8"	3/4"	
<b>M-3678</b>	PACCAR 12452-102	4-9/16"	1-5/16"	3"	1/2"	USED PILOT & STUD MOUNT

## Metric Clipped Head Studs

- Metric M22X1.5 Thread
- Body Dia. .908–.912
- Grade 10.9



BWP NO.	REPLACES	A	B	C
<b>M-3679</b>	CONMET 101151 WEBB 89983	4-3/8"	1-19/64"	2-1/2"
<b>M-3232</b>	MOTORWHEEL 89774 CONMET 101171	4-31/32"	1-19/64"	3-1/4"
<b>M-3681</b>	CONMET 101150	5-1/4"	1-19/64"	3-11/32"

USE METRIC NUT M-3207



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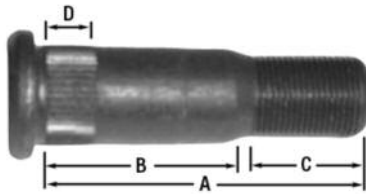
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## Serrated Wheel Studs

- Metric M22X1.5 Thread
- Body Dia. .982

- Serrated Dia. 1.001
- Grade 10.9

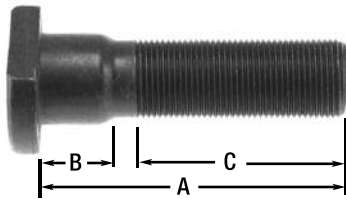


BWP NO.	REPLACES	A	B	C	D
<b>M-3970</b>	FORD CARGO E6HZ1107A	3-7/16"	2"	1"	1/2"
<b>M-3971</b>	MACK MID-LINER 5000-438684	3-15/32"	1-13/16"	1-3/32"	11/32"

## Motor Wheel

- Metric M22X1.5 Thread
- Clipped Head Studs

- Body Dia. .980-.983
- Grade 10.9



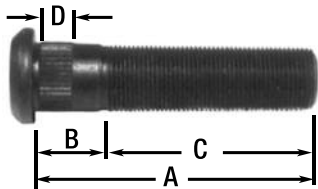
BWP NO.	REPLACES MOTOR WHEEL	A	B	C
<b>M-3204</b>	88808	3-1/4"	43/64"	2-1/4"
<b>M-3205</b>	88836	3-7/16"	23/32"	2-7/16"
<b>M-3206</b>	88799	4-1/8"	23/32"	3-1/16"
<b>M-3680</b>	89620	4-25/32"	5/8"	3-3/4"

USE METRIC NUT M-3207

## Dayton – Headed Stud with Serrated Body

- Metric M22X1.5 Thread
- Body Dia. .887-.890

- Serrated Dia. .904-.908
- Grade 10.9

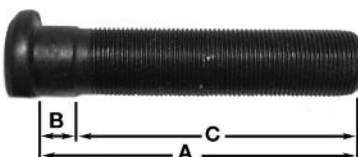


BWP NO.	REPLACES DAYTON	A	B	C	D
<b>M-3266</b>	09-001740	3-5/8"	7/8"	2-5/8"	3/8"
<b>M-3267</b>	09-001862	4-7/8"	7/8"	3-3/4"	3/8"

M-3266 USED UTILITY STEEL WHEELS  
M-3267 USED UTILITY ALUMINUM WHEELS

## Walther EMC – Metric "D" Head Clipped Studs

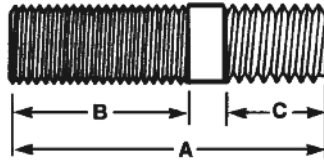
- Metric M22X1.5 Thread
- Body Dia. .888
- Grade 10.9



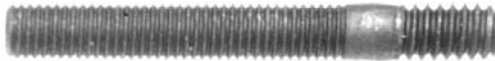
BWP NO.	REPLACES	A	B	C
<b>M-3977</b>	WALTHER EMC 02-00010	3-3/8"	1/2"	2-1/2"
<b>M-3978</b>	WALTHER EMC 02-00014	4-3/16"	1/2"	3-5/16"

# GENERAL PURPOSE HIGH TENSILE STUDS

USE THESE DIMENSIONS  
FOR MEASURING ALL STUDS



## 1/4" x 1/4" Dia. Studs



BWP NO.	A	B		C	
	OVERALL	THREAD	LGTH	THREAD	LGTH
<b>M-900</b>	1"	1/4"-28	3/8"	1/4"-20	7/16"
<b>M-901</b>	1-1/4"	1/4"-28	1/2"	1/4"-20	1/2"
<b>M-902</b>	1-1/2"	1/4"-28	13/16"	1/4"-20	3/8"
<b>M-903</b>	2"	1/4"-28	15/16"	1/4"-20	3/8"
<b>M-904</b>	2-1/2"	1/4"-28	1-7/8"	1/4"-20	3/8"

## 1/4" x 5/16" Dia. Studs



<b>M-905</b>	1"	1/4"-28	3/8"	5/16"-18	3/8"
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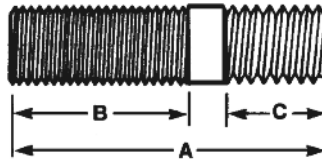
## 5/16" x 5/16" Dia. Studs



<b>M-906</b>	1"	5/16"-24	7/16"	5/16"-18	3/8"
<b>M-907</b>	1-1/4"	5/16"-24	5/8"	5/16"-18	1/2"
<b>M-908</b>	1-1/2"	5/16"-24	3/4"	5/16"-18	9/16"
<b>M-914</b>	1-1/2"	5/16"-18	7/8"	5/16"-18	7/16"
<b>M-909</b>	1-3/4"	5/16"-24	7/8"	5/16"-18	5/8"
<b>M-915</b>	1-3/4"	5/16"-18	15/16"	5/16"-18	1/2"
<b>M-910</b>	2"	5/16"-24	1"	5/16"-18	9/16"
<b>M-916</b>	2"	5/16"-18	1-1/16"	5/16"-18	7/16"
<b>M-911</b>	2-1/2"	5/16"-24	1-9/16"	5/16"-18	1/2"
<b>M-912</b>	2-1/2"	5/16"-18	1-1/2"	5/16"-18	1/2"
<b>M-913</b>	3"	5/16"-24	1-9/16"	5/16"-18	5/8"

# GENERAL PURPOSE HIGH TENSILE STUDS

USE THESE DIMENSIONS  
FOR MEASURING ALL STUDS



## 5/16" x 3/8" Dia. Studs



BWP NO.	A	B		C	
	OVERALL	THREAD	LGTH	THREAD	LGTH
<b>M-917</b>	1-1/4"	1/4"-24	5/8"	3/8"-16	7/16"

## 3/8" x 3/8" Dia. Studs



<b>M-918</b>	1-1/2"	3/8"-24	3/4"	3/8"-16	1/2"
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<b>M-919</b>	1-3/4"	3/8"-24	7/8"	3/8"-16	1/2"
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<b>M-927</b>	1-1/2"	3/8"-16	1-1/16"	3/8"-16	9/16"
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<b>M-928</b>	1-3/4"	3/8"-16	7/8"	3/8"-16	5/8"
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<b>M-920</b>	2"	3/8"-24	1-1/16"	3/8"-16	11/16"
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<b>M-929</b>	2"	3/8"-16	1"	3/8"-16	3/4"
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<b>M-921</b>	2-3/8"	3/8"-24	1-5/16"	3/8"-16	11/16"
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<b>M-922</b>	2-3/4"	3/8"-24	1-11/16"	3/8"-16	5/8"
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<b>M-923</b>	3"	3/8"-24	2"	3/8"-16	11/16"
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<b>M-930</b>	3"	3/8"-16	2"	3/8"-16	11/16"
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<b>M-931</b>	4"	3/8"-16	1-15/16"	3/8"-16	3/4"
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<b>M-924</b>	4"	3/8"-24	1-15/16"	3/8"-16	9/16"
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## 3/8" x 7/16" Dia. Studs



<b>M-925</b>	1-7/8"	3/8"-24	13/16"	7/16"-14	7/8"
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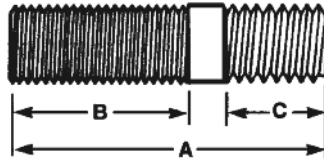
<b>M-932</b>	2"	3/8"-16	3/4"	7/16"-14	1"
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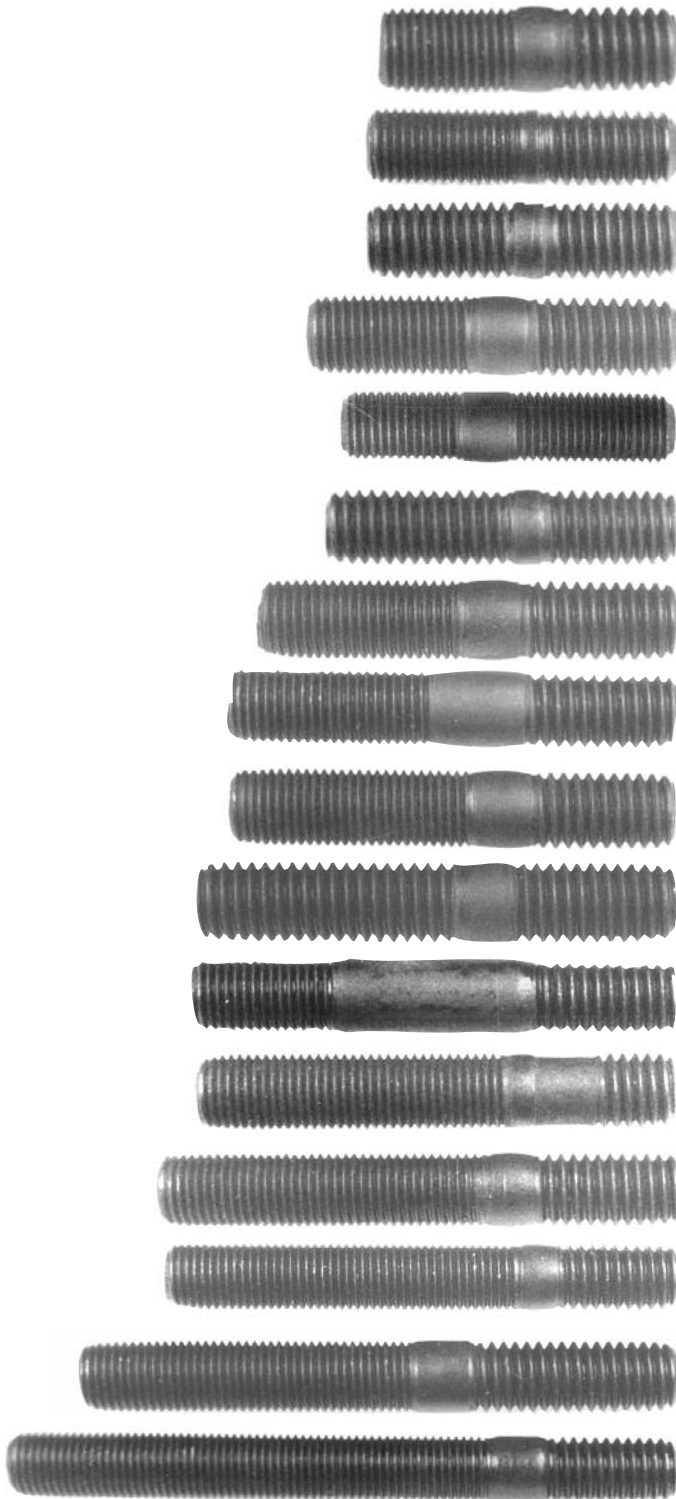
<b>M-926</b>	2-1/2"	3/8"-24	1-5/16"	7/16"-14	7/8"
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# GENERAL PURPOSE HIGH TENSILE STUDS

USE THESE DIMENSIONS  
FOR MEASURING ALL STUDS



## 7/16" x 7/16" Dia. Studs

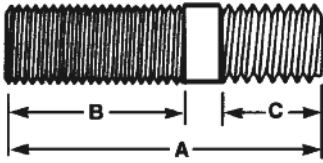


BWP NO.	A OVERALL	B		C	
		THREAD	LGTH	THREAD	LGTH
<b>M-933</b>	1-1/2"	7/16"-20	11/16"	7/16"-14	5/8"
<b>M-934</b>	1-3/4"	7/16"-20	7/8"	7/16"-14	3/4"
<b>M-935</b>	1-3/4"	7/16"-14	13/16"	7/16"-14	11/16"
<b>M-936</b>	2"	7/16"-20	7/8"	7/16"-14	3/4"
<b>M-946</b>	2"	7/16"-20	15/16"	7/16"-20	11/16"
<b>M-947</b>	2"	7/16"-14	1"	7/16"-14	3/4"
<b>M-937</b>	2-1/4"	7/16"-20	1-1/16"	7/16"-14	13/16"
<b>M-938</b>	2-1/2"	7/16"-20	1"	7/16"-14	13/16"
<b>M-939</b>	2-1/2"	7/16"-20	1-3/8"	7/16"-14	3/4"
<b>M-948</b>	2-1/2"	7/16"-14	1-3/16"	7/16"-14	13/16"
<b>M-940</b>	2-3/4"	7/16"-20	13/16"	7/16"-14	13/16"
<b>M-941</b>	2-3/4"	7/16"-20	1-3/4"	7/16"-14	3/4"
<b>M-942</b>	3"	7/16"-20	1-13/16"	7/16"-14	13/16"
<b>M-943</b>	3-1/4"	7/16"-20	2-3/16"	7/16"-14	3/4"
<b>M-944</b>	3-5/8"	7/16"-20	2"	7/16"-14	1-3/16"
<b>M-945</b>	4-3/8"	7/16"-20	3-1/8"	7/16"-14	13/16"



# GENERAL PURPOSE HIGH TENSILE STUDS

USE THESE DIMENSIONS  
FOR MEASURING ALL STUDS



## 7/16" x 1/2" Dia. Studs



BWP NO.	A	B		C	
	OVERALL	THREAD	LGTH	THREAD	LGTH
<b>M-949</b>	2"	7/16"-20	15/16"	1/2"-13	3/4"
<b>M-950</b>	2-1/4"	7/16"-20	15/16"	1/2"-13	3/4"
<b>M-952</b>	3"	7/16"-20	1-13/16"	1/2"-13	11/16"
<b>M-953</b>	4"	7/16"-20	2-1/2"	1/2"-13	13/16"

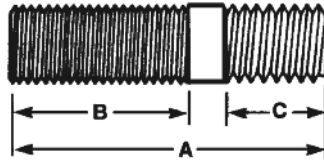
## 1/2" x 1/2" Dia. Studs



<b>M-955</b>	1-1/2"	1/2"-20	5/8"	1/2"-13	9/16"
<b>M-956</b>	1-3/4"	1/2"-20	7/8"	1/2"-13	3/4"
<b>M-957</b>	2"	1/2"-20	15/16"	1/2"-13	13/16"
<b>M-958</b>	2-1/4"	1/2"-20	1"	1/2"-13	3/4"
<b>M-959</b>	2-1/4"	1/2"-13	1-5/16"	1/2"-13	11/16"
<b>M-960</b>	2-1/2"	1/2"-20	1-1/8"	1/2"-13	3/4"
<b>M-961</b>	2-3/4"	1/2"-20	1-5/8"	1/2"-13	3/4"
<b>M-962</b>	3"	1/2"-20	2"	1/2"-13	11/16"
<b>M-963</b>	3"	1/2"-13	1-7/8"	1/2"-13	5/8"
<b>M-964</b>	3-1/2"	1/2"-20	2-1/4"	1/2"-13	15/16"

# GENERAL PURPOSE HIGH TENSILE STUDS

USE THESE DIMENSIONS  
FOR MEASURING ALL STUDS



## 1/2" x 9/16" Dia. Studs



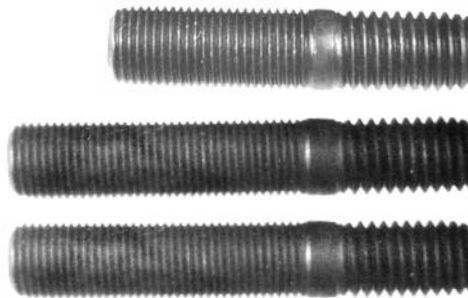
BWP NO.	A	B		C	
	OVERALL	THREAD	LGTH	THREAD	LGTH
<b>M-965</b>	2-3/8"	1/2"-20	1-1/16"	9/16"-12	3/4"
<b>M-966</b>	3"	1/2"-20	1-7/8"	9/16"-12	5/8"

## 1/2" x 5/8" Dia. Studs



<b>M-967</b>	3"	1/2"-20	1-5/8"	5/8"-11	1"
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## 9/16" x 9/16" Dia. Studs



<b>M-968</b>	2-1/2"	9/16"-18	1-3/8"	9/16"-12	15/16"
<b>M-969</b>	2-1/2"	9/16"-18	1-9/16"	9/16"-12	13/16"
<b>M-971</b>	3-1/4"	9/16"-18	2"	9/16"-12	7/8"

## 9/16" x 5/8" Dia. Studs



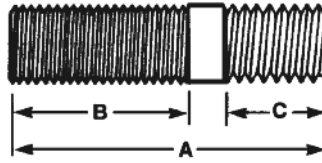
<b>M-970</b>	3"	9/16"-18	1-5/8"	5/8"-11	13/16"
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## 5/8" x 5/8" Dia. Studs



<b>M-973</b>	2-1/2"	5/8"-11	1-1/4"	5/8"-11	3/4"
<b>M-974</b>	2-5/8"	5/8"-18	1-3/16"	5/8"-11	1"
<b>M-975</b>	2-3/4"	5/8" 1	1-1/2"	5/8"-11	15/16"
<b>M-976</b>	3"	5/8"-18	1-3/4"	5/8"-11	15/16"
<b>M-977</b>	3-1/2"	5/8"-18	1-11/16"	5/8"-11	1"

USE THESE DIMENSIONS  
FOR MEASURING ALL STUDS



## 5/8" x 3/4" Dia. Studs



BWP NO.	A OVERALL	B		C	
		THREAD	LGTH	THREAD	LGTH
<b>M-978</b>	3-1/2"	5/8"-18	1-11/16"	3/4"-10	7/8"

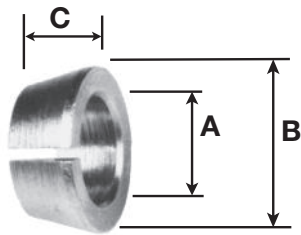
## 3/4" x 3/4" Dia. Studs



<b>M-979</b> USE M-39	2-3/4"	3/4"-10	1-1/2"	3/4"-10	1"
<b>M-980</b>	3-1/4"	3/4"-16	1-7/8"	3/4"-10	1"

# DRIVE FLANGE WEDGES

## Drive Flange Wedges – Cones



BWP NO.	A	B	C	REPLACES		
				GMC	IHC	MERITOR
<b>M-2527</b>	7/16"	11/16"	13/32"	— —	72342R1	1246-Z-234
<b>M-981</b>	7/16"	3/4"	5/16"	— —	— —	— —
<b>M-982</b>	7/16"	3/4"	13/32"	2124231	974272R1	1246-X-232
<b>M-983</b>	7/16"	13/16"	11/32"	3651372	— —	— —
<b>M-984</b>	1/2"	13/16"	5/16"	— —	— —	— —
<b>M-985</b>	1/2"	13/16"	13/32"	— —	972423R1	1246-T-306
<b>M-2528</b>	1/2"	7/8"	15/32"	652328	40377-V	1246-B-28
<b>M-986</b>	9/16"	7/8"	3/8"	— —	— —	— —
<b>M-987</b>	5/8"	1"	15/32"	2019573	141316H	1246-Y-233
<b>M-2529</b>	5/8"	1"	9/16"	2231319	54700R1	1246-D-290

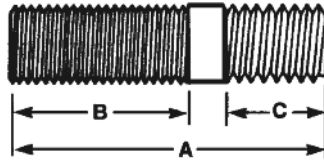
## Axle Stud Cone Plier



BWP NO.	GENERAL INFORMATION
<b>M-2547</b>	A SPECIALLY DESIGNED CONE PLIER TO GIVE THE LEVERAGE NEEDED TO EXPAND AND REMOVE THE TAPERED CONE FROM REAR AXLE STUDS WITHOUT DAMAGING THE STUD THREADS

# DRIVE FLANGE WEDGES

USE THESE DIMENSIONS  
FOR MEASURING ALL STUDS

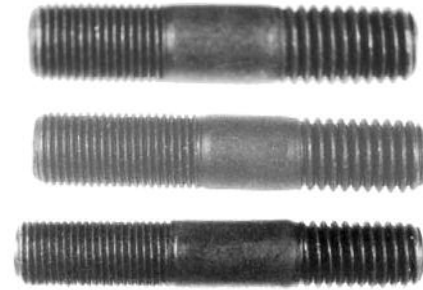


## 7/16" Drive Flange Studs



BWP NO.	A OVERALL	B		C		REPLACES
		THREAD	LGTH	THREAD	LGTH	
<b>M-2463</b>	2"	7/16"-20	5/8"	7/16"-14	1/2"	BUDD 18560
<b>M-2464</b>	2 3/16"	7/16"-20	15/16"	7/16"-14	9/16"	BUDD 42793 DAYTON 08-007358 KELSEY WP-28 MERITOR SC-718

## 1/2" Drive Flange Studs



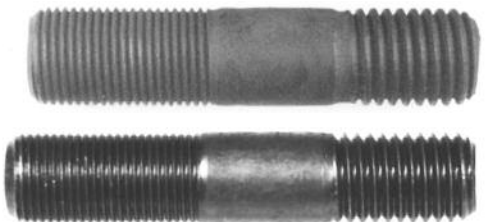
<b>M-2520</b>	2 3/8"	1/2"-20	13/16"	1/2"-13	7/16"	BUDD 37181, 44577 MERITOR SC-819
<b>M-2521</b>	2 9/16"	1/2"-20	15/16"	1/2"-13	1 1/16"	DAYTON 08-004350 KELSEY WP-81 WEBB 152026
<b>M-2522</b>	2 7/8"	1/2"-20	15/16"	1/2"-13	7/8"	DAYTON 08-008134 GMC 2216914 M-W 85521

## 5/8" Drive Flange Studs



<b>M-2523</b>	2 3/4"	5/8"-18	1"	5/8"-11	1"	BUDD 63606 DAYTON 08-007775 IHC 119345H KELSEY WP-174
<b>M-2462</b>	3"	5/8"-18	7/8"	5/8"-18	1 1/2"	MACK 18AX970
<b>M-2509</b>	3 1/16"	5/8"-18	1 1/16"	5/8"-11	1 1/8"	BUDD 48966
<b>M-2465</b>	3 1/2"	5/8"-18	7/8"	5/8"-18	1 1/16"	MACK 18AX971
<b>M-2524</b>	3 1/16"	5/8"-18	1 1/8"	5/8"-11	1 1/16"	N-W 86478 MERITOR 4X1027

## 3/4" Drive Flange Studs



<b>M-2525</b>	3 3/16"	3/4"-16	1 1/8"	3/4"-10	1"	DAYTON 08-007471 IHC 61142H
<b>M-2526</b>	3 3/4"	3/4"-16	1 1/4"	3/4"-10	1 1/8"	BUDD 37179, 49321 IHC 55585H KELSEY WP-39 MERITOR 4X1207

## 5/8" and 3/4" Wheel Stud Setters



1-1/4" HEX

BWP NO.	APPLICATION	NOTE
<b>M-1179</b>	3/4"-10 WHEEL STUDS	FOR INSTALLING 3/4" AND 5/8" WHEEL STUDS WITH EITHER 4-WAY WRENCH OR IMPACT WRENCH. SCREW STUD INTO TOOL AND THEN INTO WHEEL. REVERSE AND THE CHROME BALL ALLOWS EASY TOOL REMOVAL.
<b>M-1180</b>	5/8"-11 WHEEL STUDS	

## 5/8" and 3/4" Wheel Stud Removers



1-1/4" HEX

BWP NO.	APPLICATION	NOTE
<b>M-1181</b>	3/4" WHEEL STUDS	REMOVES FULL OR BROKEN STUDS. ONLY 3/16" PROJECTION REQUIRED. THE BEST MATERIAL AND HEAT TREATING AVAILABLE IS USED TO MANUFACTURE THESE TOOLS, AFTER A FEW USES (3 TO 4) TOOL WILL DESTROY ITS SELF-TAPPING SPLINES AND MUST BE REPLACED. DO NOT USE WITH IMPACK WRENCH. SAFETY GLASSES RECOMMENDED.
<b>M-1182</b>	5/8" WHEEL STUDS	

## Inner Budd Nut Remover



BWP NO.	APPLICATION	NOTE
<b>M-1190</b>	BUDD INNER NUTS	REMOVES BROKEN BUDD WHEEL NUTS. DRIVE THE M-1190 FIRMLY OVER BROKEN NUT AND BACK BROKEN PART OUT. THE BEST MATERIAL AND HEAT TREATING AVAILABLE IS USED TO MANUFACTURE THE M-1190, AFTER A FEW USES (3 TO 4) THE TOOL WILL DESTROY ITS SELF-TAPPING SPLINES AND MUST BE REPLACED. DO NOT USE WITH IMPACT WRENCH. SAFETY GLASSES RECOMMENDED.

## Budd Nut & Wheel Stud Remover



BWP NO.	GENERAL INFORMATION
<b>M-4900</b>	REMOVER SET includes Case with M-4901, M-4902, M-4903, M-4904
<b>M-4901</b>	WHEEL STUD TOOL - 5/8"
<b>M-4902</b>	WHEEL STUD TOOL - 3/4"
<b>M-4903</b>	BUDD NUT REMOVER - LH THREAD
<b>M-4904</b>	BUDD NUT REMOVER - RH THREAD

# VALVE STEM LOCKS

## Valve Stem Lock



BWP NO.	APPLICATION	NOTE
<b>M-1313</b>	TRUCK, TRAILER, TRACTOR TIRES	AN INEXPENSIVE WAY TO SAVE TIRES AND TUBES WHEN BLOW OUTS OCCUR. SIMPLE TO INSTALL ON STRAIGHT OR BENT VALVE STEMS.

## Valve Stem Lock



BWP NO.	APPLICATION	NOTE
<b>M-1314</b>	TRUCK, TRAILER, TRACTOR TIRES	MADE OF LONG LASTING NEOPRENE RUBBER. THE M-1314 INCLUDES SPEED NUT TO LOCK ONTO STEM

# TORQUE CHART — CAST SPOKE AND DISC WHEEL

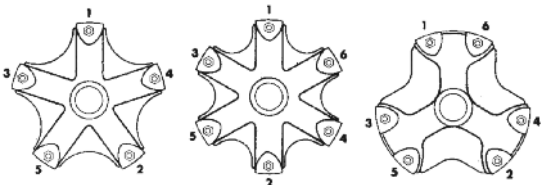
APPLICATION	STUD OR BOLT SIZE AND THREAD	RECOMMENDED TORQUE IN FOOT POUNDS	
<b>LIGHT TRUCKS</b> With disc over .150-in. thick alternate in-and-out coined wheels	7/16"-20	75-85	
	1/2"-20	75-85	
	9/16"-18	175-200	
	5/8"-18	175-200	
	5/8"-18 11/16"-16	275-325 (Flanged Cap Nut) 250-300	
<b>HIGHWAY VEHICLES— TRUCK-TRAILER-BUS WITH DISC WHEELS</b> Standard Budd-Double Cap Nut Mounting With countersunk holes—aluminum & steel disc Motor Wheel studs Motor Wheel spoke steel studs—straight stud hole Motor Wheel bus—front wheels and single rear Motor Wheel bus—dual rear wheels Back nuts—on inner end of wheel stud Back nuts—on inner end of wheel stud	3/4"-16	450-500	
	1-1/8"-16	450-500	
	9/16"-18	175-225	
	3/4"-16	300-350	
	7/8"-14	325-375	
	7/8"-14	350-400	
	7/8"-14	175-200	
	3/4"-16	175-200	
	7/8"-14	175-200	
	<b>WITH CAST WHEELS</b>		90
	1/2"-13	150-175	
	5/8"-11	175-200 (w/Channel Spacer)	
	3/4"-10	240-260 (w/Corrugated Spacer)	
	3/4"-10	240-260 (w/Corrugated Spacer)	
	<b>OFF THE ROAD VEHICLES WITH CAST WHEELS</b>		
Budd standard mounting, countersunk holes	3/4"-16	450-500	
Budd studs—that use black nuts	1-1/8"-16	450-500	
Budd studs—with heads—no back nuts	1-1/8"-16	650-750	
Budd heavy-duty mounting	1-1/8"-16	650-750	
Budd heavy-duty mounting	1-5/16"-12	750-900	
Back nuts on inner end of wheel stud	1-5/16"-12	750-900	
back nuts on inner end of wheel stud	7/8"-14	175-200	
	1"-14	175-200	
<b>WITH CAST WHEELS</b>			
With cast wheels—demountable rims	3/4"-10	225	
With cast wheels—demountable rims	1"-8	450	
With cast wheels—demountable rims	1"-14	450	

## Torque Recommendations for Rim and Wheel Nuts and Bolts

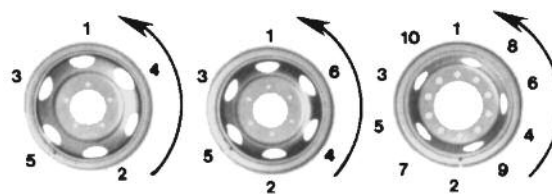
- Use the correct torque in foot pounds.
- Do not lubricate—the threads of wheels and rims, studs, bolts and nuts and the bearing surface should be clean, dry, and free from oil or grease when torqued to specific foot pounds.
- Frequent checks should be made, especially after every change in wheel or rim mounting.
- Replace both studs on either side of a broken stud; they have been weakened by overloading.
- Periodically check air wrenches, to determine the amount of torque delivered; this must be an accurate measurement with no room for error.
- Tighten all nuts too 50 Ft. Lbs. using respective sequence illustration shown below. Using same sequence, tighten all nuts in increments of 50 Ft. Lbs. to recommended torque shown above.

### Correct Sequence for Tightening Nuts

#### SPOKE WHEELS



#### DISC WHEELS



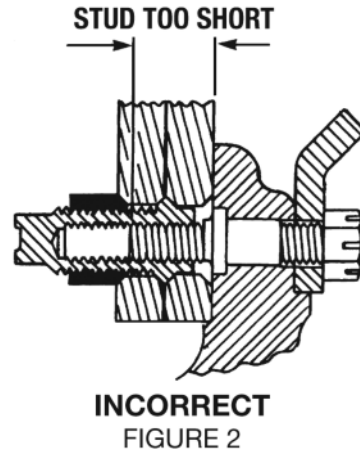
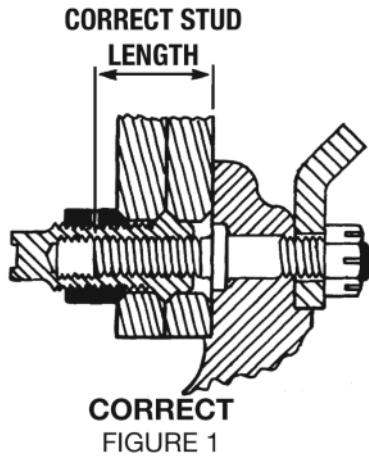
## Metric Chart

MOUNTING TYPE	NUT THREAD	TORQUE LEVEL
Hub-piloted with flange nut	11/16" - 16	300-400 ft. lbs. (oiled)*
	M20 x 1.5	280-330 ft. lbs. (oiled)*
	M22 x 1.5	450-500 ft. lbs. (oiled)*

\* For nuts used on hub-piloted wheels, apply two drops of oil to a point between the nuts and flanges and two drops to the last 2 or 3 threads at the end of each stud. Also, lightly lubricate the pilots on the hub to ease wheel installation and removal. Do not get lubricant on the mounting face of the drum or wheel.

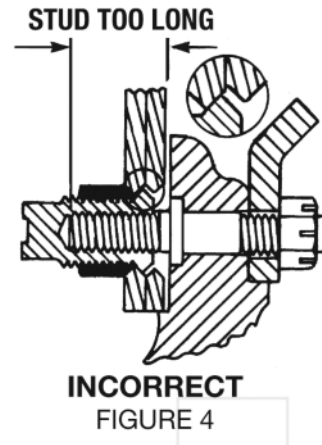
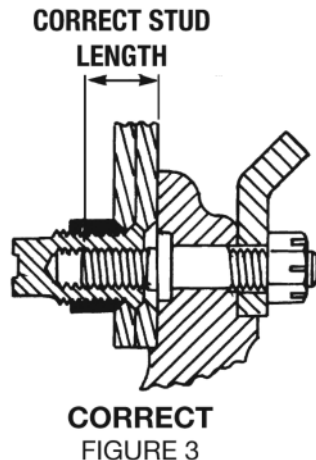
## Aluminum Wheel Mounting

Shown below in Figure 1 is the correct mounting of aluminum disc wheels. Note the length of the stud extending through the outer wheel giving it the necessary support. Illustrated in Figure 2 is the incorrect mounting of aluminum wheels. The stud used on this application is too short, causing the outer wheel to be insufficiently supported.



## Steel Wheel Mounting

The same application principal also applies to steel wheels. Stud stand-out must extend beyond both wheels by at least 5/16" (see Fig. 3). You must insure that the stud is not too long because it could "bottom out" in the inner nut. This condition (see Fig. 4) will prevent the inner nut from properly holding the wheel even though the recommended torque procedures were followed.



Below are seven recommended procedures which will help prolong the life of wheels and attaching parts.

## Recommended Procedures

1. When replacing a broken stud, the studs on each side of it should be replaced. If more than one stud is broken, all studs in the wheel should be replaced.
2. Verify the studs being used are the correct length for the type of wheels used. Stud stand-out must extend beyond both wheels as shown above.
3. Check the inner cap nuts to be sure they are correct for the type of wheels. Make sure the stud does not "bottom out" in the inner nut.
4. Follow the recommended torque and tightening procedures.
5. Inspect studs, nuts and wheels at regular maintenance intervals.
6. Replace broken studs immediately.
7. Correct stud length is critical.

## Broken Studs



Broken studs are generally caused by loose cap nuts or vehicle overloading.

Replace studs on either side of broken stud as they likely have been overloaded. If more than two studs are broken, replace entire set.

Use torque recommended in the chart and maintain periodic checks.

## Stripped or Mutilated Threads

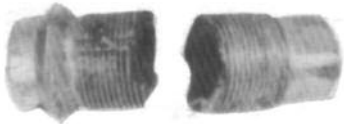


Stripped threads are generally caused by either excessive torque or sliding wheel across studs during wheel assembly.

Replace stripped studs (with correct size studs).

Always follow correct torque recommendations.

## Inner Nut Failure



Inner nuts may fail due to extremely rough service or use of incorrect studs (length).

Using studs with the correct length will eliminate nut failure in most cases. Correct stud length is critical.

## Corroded, Frozen Inner Cap Nuts



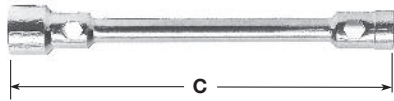
If corrosion is slight, wire brushing may be sufficient.

If corrosion is excessive, replace studs and nuts. If condition persists, lubricate first three threads of each stud with a graphite-base lubricant.

*Do not permit lubricant to get on ball seals of stud holes or on ball face of cap nuts.*



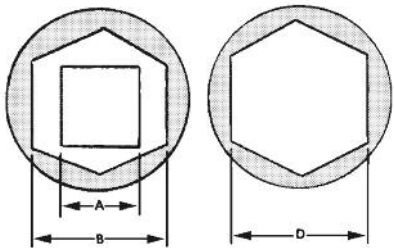
## Double End Truck Wrenches



BWP NO.	A SQUARE SOCKET	B HEX SOCKET	C LENGTH	D HEX SOCKET	USE BWP BAR NO.	APPLICATION
<b>M-149</b>	13/16"	1-1/8"	16"	1-1/2"	<b>M-154</b>	BUDD WHEEL NUTS AND CHEV. & FORD FLANGED NUTS.
<b>M-150</b>	5/8"	1"	16"	1-1/4"	<b>M-154</b>	CHEVROLET AND GMC DUAL WHEELS



BWP NO.	DESCRIPTION	KEN TOOL NO.
<b>M-4186</b>	TR10 HEAVY DUTY TRUCK WRENCH Use for off the road Budd-Type wheels	34401
<b>M-4187</b>	TR11 Leverage Bar For use with TR10 Wrench	34402



<b>M-153</b>	— —	1-1/16"	16"	1-1/4"	<b>M-154</b>	DAYTON-GUNITE-ERIE-WEBB SPOKE WHEELS
<b>M-3268</b>	13/16"	— —	16"	1-1/2"	<b>M-154</b>	
<b>M-3269</b>	— —	24MM	16"	33MM	<b>M-154</b>	METRIC ENDS HUB PILOT WHEELS

## Wrench Handle



BWP NO.	OVERALL LENGTH	DIAMETER OR HEX	APPLICATION
<b>M-154</b>	22"	3/4" HEX	USED WITH M-149, M-150, M-153, M-WRENCHES

## Budd Outer Nut Wrench



BWP NO.	DESCRIPTION	KEN TOOL NO.
<b>M-155</b>	TX9® BUDD NUT WRENCH Wrench holds outer cap nut on dual wheels while the inner nut is turned. Lip fits in hole to secure wrench in place	30609
<b>M-155-A</b>	TX10® 35mm BUDD NUT WRENCH	30610
<b>M-155-B</b>	TX12® 41mm BUDD NUT WENCH	30612

## Budd Nut Power Wrench



BWP NO.	APPLICATION
<b>M-156</b>	FOR BUDD DUAL WHEEL INNER AND OUTER NUTS. CONSISTS OF A 3 TO 1 RATIO GEAR TYPE POWER WRENCH AND ONE SOLID BAR AND ONE TUBE TYPE BAR.

## Heavy-Duty 4-Way Truck Wrenches



BWP NO.	ARM LENGTH	SOCKET SIZES		HEX	SQUARE	NOTE
		HEX	HEX			
<b>M-1252</b>	27-1/2"	1-1/16"	1-1/2"	1-1/2"	13/16"	1" STOCK WITH CENTER HOLE FOR LEVERAGE BAR
<b>M-1253</b>	27-1/2"	1-1/16"	1-1/4"	1-1/2"	13/16"	1" STOCK NO CENTER HOLE
<b>M-3270</b>	27-1/2"	24, 27, 30, 33MM				METRIC 4-WAY WRENCH



BWP NO.	DESCRIPTION	KEN TOOL NO.
<b>M-4202</b>	TC95 4-WAY LUG WRENCH Socket sizes 1-1/2", 13/16" square, 30, 33mm Length 27-1/2" 14.2 LBS	35595



BWP NO.	DESCRIPTION	KEN TOOL NO.
<b>M-4203</b>	LIGHT TRUCK 4-WAY Socket sizes 22mm(7/8"), 24mm(15/16"), 25mm(1"), 27mm(1-1/16") Length 23"(58cm) 11/16" (17.5mm) Stock MADE IN USA	35638



BWP NO.	DESCRIPTION	KEN TOOL NO.
<b>M-4204</b>	4 WAY WRENCH-TRUCK Light truck 7/8" deep well, 15/16", 1", 1-1/16", 25" length, 3/4" stock	35690

## Fiberglass Wedge Hammers



BWP NO.	GENERAL INFORMATION	
<b>M-3271</b>	18" LENGTH	4-3/4 lbs. HEAD WT.
<b>M-3272</b>	32" LENGTH	8-1/2 lbs. HEAD WT.

Check out the "Specials" tab on our website frequently for current Internet Only special offers



## Replacement Handles



BWP NO.	GENERAL INFORMATION
<b>M-3273</b>	17" LENGTH (HICKORY WOOD)
<b>M-3274</b>	30" LENGTH (HICKORY WOOD)
<b>M-3275</b>	18" LENGTH (FIBERGLASS)

## Tire Irons for Tubeless Truck Tires (Straight Mount/Demount)



BWP NO.	GENERAL INFORMATION
<b>M-1235</b>	37" LENGTH 3/4" STOCK
<b>M-3276</b>	41" LENGTH 7/8" STOCK
<b>M-3277</b>	52" LENGTH 1" STOCK

## Wheel Protector



BWP NO.	DESCRIPTION	KEN TOOL NO.
<b>M-4184</b>	ALUMINUM WHEEL PROTECTOR Protects expensive rims from damage during manual tire changing. Prevents tools from marring or scratching aluminum or steel rims when using Ken-Tool's manual tire changing tools.	31810

## Super Single Tire Mount/Demount Tools



BWP NO.	GENERAL INFORMATION
<b>M-3278</b>	50" LENGTH 7/8" STOCK USE ON 16.5" X 22.5" DUPLEX AND REAR TRACTOR TIRES

BWP NO.	GENERAL INFORMATION
<b>M-3279</b>	51" LENGTH 7/8" STOCK USE ON 16.5" X 22.5" DUPLEX AND 25" SOLID WHEEL LOADER TIRES.

NOTE: M-3278 AND M-3279 ARE USED TOGETHER

## Curved Tire Spoons



BWP NO.	GENERAL INFORMATION
<b>M-3280</b>	24" LONG 11/16" STOCK USE LIGHT TRUCK
<b>M-3281</b>	30" LONG 11/16" STOCK USE FOR HEAVY DUTY
<b>M-3282</b>	30" LONG 7/8" STOCK

## Straight Tire Spoons



BWP NO.	GENERAL INFORMATION
<b>M-3283</b>	24" LONG 11/16" STOCK USE LIGHT TRUCK
<b>M-3284</b>	30" LONG 11/16" STOCK USE FOR HEAVY DUTY
<b>M-3285</b>	30" LONG 7/8" STOCK

## Wheel Lifting Bar



BWP NO.	DESCRIPTION	KEN TOOL NO.
<b>M-4198</b>	IRONMAN™ WHEEL LIFTING BAR Ergonomic Wheel lifting bar / Reduces risk of back strain & injury	34950

## Lock Ring Tools



BWP NO.	GENERAL INFORMATION		
<b>M-1233</b>	30" LONG	11/16" STOCK	LOCK RING REMOVER FIRESTONE RH AND RI RIMS
<b>M-3286</b>	23-1/2" LONG	11/16" STOCK	FLAT TAPERED END FOR ALL ROUND RING TRIM WORK
<b>M-1234</b>	18" LONG	5/8" STOCK	5° WIDE BASE RIMS

## Heavy-Duty Lock Ring Tool

BWP NO.	GENERAL INFORMATION	
<b>M-3287</b>	37" LONG 3/4" STOCK	USED ON HUB TYPE WITH MULTI-PIECE WHEELS



## Demounting Tools



BWP NO.	DESCRIPTION	KEN TOOL NO.
<b>M-4200</b>	BLUE COBRA TRUCK TIRE DEMOUNT TOOL - Quickly demount nearly any 22.5" and 24.5" tubeless truck tire, up to 13" wide .Aluminum bead support to grab the top bead of Super Singles and Super Wide Tires. 54" Long 22 LBS	35440

## Bead Breaker



BWP NO.	DESCRIPTION	KEN TOOL NO.
<b>M-4206</b>	T26B H.D. IMPACT BEAD BREAKER TOOL Bead breaker has spring action design to reduce user fatigue associated with hammer kickback 50" length, 80" extended, 23 lbs.	35926

## Roller Repair Kit

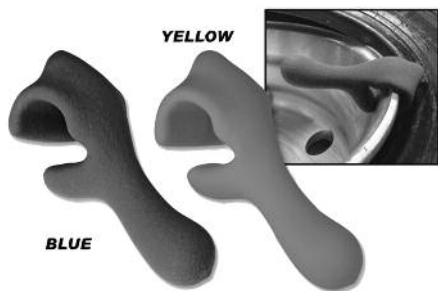


BWP NO.	DESCRIPTION	KEN TOOL NO.
<b>M-4201</b>	BLUE COBRA ROLLER REPAIR KIT	35441

## Bead Holders



BWP NO.	DESCRIPTION	KEN TOOL NO.
<b>M-4179</b>	BRASS BEAD HOLDING DEVICE Reliable brass design won't slip or mar expensive painted or alloy truck wheels	31710



BWP NO.	DESCRIPTION	KEN TOOL NO.
<b>M-4180</b>	YELLOW COATED STEEL BEAD HOLDING DEVICE FOR STANDARD WHEEL Polymer Coated to reduce slippage and damage 1/2" opening for steel wheels	31711
<b>M-4181</b>	BLUE COATED STEEL BEAD HOLDING DEVICE FOR ALUMINUM WHEELS Polymer Coated to reduce slippage and damage 5/8" opening for aluminum wheels	31712



BWP NO.	DESCRIPTION	KEN TOOL NO.
<b>M-4182</b>	ALUMINUM BEAD HOLDER FOR ALUMINUM, ALLOY & STEEL WHEELS Special C-LOK™ shape fits nearly all passenger, light truck, agriculture and truck wheels without slipping off. Great for super singles and super wide wheels	31713



BWP NO.	DESCRIPTION	KEN TOOL NO.
<b>M-4183</b>	PAIR OF 31713 ALUMINUM BEAD HOLDERS W/CABLES	31714

## Tire Mounting/Demounting Tools



BWP NO.	DESCRIPTION	KEN TOOL NO.
<b>M-4188</b>	NINETEEN-FIVE™ MOUNTING/DEMOUNTING 5 PC SET Contains 2 Tire Mounting/Demounting Tool, 1 Bead Holder for 19.5" Aluminum Wheels, 1 Bead Holder for Steel wheels – Solid Brass, 1 Aluminum Wheel Protector - Leather	33195



BWP NO.	DESCRIPTION	KEN TOOL NO.
<b>M-4189</b>	NINETEEN-FIVE™ BEAD HOLDER FOR 19.5" ALUMINUM WHEELS - 7.5" Length	33196

## Tire Mounting/Demounting Tools



BWP NO.	DESCRIPTION	KEN TOOL NO.
<b>M-4190</b>	NINETEEN-FIVE™ MOUNTING/DEMOUNTING BAR 38" Length	33199



BWP NO.	DESCRIPTION	KEN TOOL NO.
<b>M-4192</b>	T19A TIRE IRON Straight Spoon 30" (76cm) - 11/16" (17.5mm) Stock	33219



BWP NO.	DESCRIPTION	KEN TOOL NO.
<b>M-4207</b>	T34B 27" VALVE BREAKER Quickly & easily removes valves from wheels 27" Length	35934



BWP NO.	DESCRIPTION	KEN TOOL NO.
<b>M-4208</b>	VALVE BREAKER PARTS KIT Tip repair kit for Valve Breaker	35935



BWP NO.	DESCRIPTION	KEN TOOL NO.
<b>M-4209</b>	T34B 45" VALVE BREAKER 45" Length	35936

## Tire Rotator



BWP NO.	DESCRIPTION	KEN TOOL NO.
<b>M-4210</b>	EZ TIRE ROTATOR	36014

## Vise



BWP NO.	DESCRIPTION	KEN TOOL NO.
<b>M-4211</b>	6-1/2" PROFESSIONAL REVERSIBLE MECHANIC'S VISE	64650